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EXPLORATION LICENCE NO. 4/73 - STERLING VALLEY

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ANNUAL REPORT ON EXPLORATION ACTIVITY

2ND MAY, 1984 TO 6TH MARCH, 1985.

I.R. McDONALD,  
MARCH, 1985.

E.Z. REPORT No. T202.

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LIST OF PLANS

<u>Plan No.</u>	<u>Scale</u>	<u>Title</u>
A4-526-0042	1:50,000	Work Completed.
AO-526-0037	1:5,000	Dighem E.M. Anomalies & Resistivity Contours.
AO-526-0036	"	Dighem Aeromagnetic Contours.
AO-526-0043	"	Geology
A3-526-0041	1:2,500	Mapping Traverses in S.W. E.L. 4/73.

## 1. INTRODUCTION

This is an Annual Report for E.L. 4/73 covering work undertaken up to the Licence renewal date of 6th March, 1985. The report covers work undertaken by Electrolytic Zinc Co. of A'Asia Ltd. and Getty Oil Development Co. Ltd., on behalf of a Joint Venture between E.Z., G.O.D.C., and Aberfoyle Exploration Pty. Ltd., who are the holders of the Licence.

## 2. PREVIOUS EXPLORATION

Previous exploration on E.L. 4/73 is detailed in E.Z. Report No's 133 (1980), 143 (1981), 146 (1981), 150 (1982), 154 (1982), 161 (1983), 167 (1983) and T 181 (1984).

## 3. EXPLORATION ACTIVITY COMPLETED 2ND MAY, 1984 TO 6TH MARCH, 1985

### 3.1. Airborne Geophysics

Almost all of E.L. 4/73, west of the former Murchison River was covered by a DIGHEM survey. This was flown by Getty Oil Development Co. as part of a larger survey covering a large area of adjacent E.L. 1/62. Lines were flown in an east west direction with a nominal 200m line spacing.

### 3.2. Geological Mapping

A limited amount of check mapping was undertaken, mainly with the specific aim of more closely locating the trace of the Henty Fault on the ground. Outcrops and areas of float were remapped and sampled on grid lines 3860N, 3740N and 3440N. The track under the E.S.E. trending powerline over Sterling Saddle was remapped and sampled from the 5000E baseline at 2480N to the edge of the E.L. at about 2120N, 4350E. Mapping traverses were undertaken up the Sterling River from about 2400N to about 2070N, and down a tributary creek from its intersection with the Sterling Valley Mine access track at 1960N, 4900E to its conjunction with the Sterling River at 2070N 4590E. These were undertaken to try and locate the Henty Fault trace and to sample rock types in the vicinity.

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A creek traverse was mapped from the Sterling Saddle powerline at 2170N 4440E northwards to 2420N 4330E. This was undertaken to check a previous mapping reference to "strongly oxidised ? barite" and to follow up mapping of siltstone float and of bedded tuff in the same general area. The possibility of a stratiform submarine horizon within the volcanics associated with barite could have been very significant.

### 3.3. Rock Chip Geochemistry

Forty three rock samples were submitted to Analabs Pty. Ltd and analysed for Au by 30 gram fire assay, for As by AAS after nitric-perchloric acid digestion and vapour hydride generation and for Cu, Pb, Zn, Ag by AAS after nitric-perchloric acid digestion. These rocks comprised six grab samples from the costean on line 3260N at 4750E; six grab samples from the costean on line 3260N between 4570E and 4660E (refer to E.Z. Report No. 154 for details), three samples from old Sterling Valley drill holes STP 105 and STP 98, and twenty eight samples collected from mapping traverses carried out mainly in the south-western corner of E.L. 4/73. Location details are given on the data sheets in Appendix 2.

### 3.4. Thin Section Petrology

Twenty-one samples were submitted to Central Mineralogical Services for thin section identification and description. The samples were collected from the mapping traverses, from the costean on line 3260N and from the relogged old drill core. Location details are contained in the rock ledger sheets in Appendix 2.

### 3.5. Drill Core Re-Logging

During the years 1959 to 1963 five diamond drill holes were completed by E.Z. Co. as an investigation of the Sterling Valley Mine mineralisation and of geophysical targets along strike to the north. DDH STP 96, STP 98, STP 100 were drilled under the Sterling Valley Mine. STP 98 was relogged and STP 100 briefly re-examined to compare rock types. DDH STP 101 and STP 105 were

drilled under geophysical targets respectively 1,050m and 1,400m north of the old mine adit. Both holes were relogged. Seven very short diamond holes were drilled in 1947 by E.Z. under the Sterling Valley Mine workings. These holes were not re-examined because inspection of the old logs revealed that average core recovery for these holes was about 20%. Core recovery was also a problem for the later deeper holes, especially in the Sterling Vally Mine lode zone. The combination of strongly cleaved veined mudstone and small core size used in the drilling gave poor recovery through the zones of greatest interest. Original split sampling has resulted in very little core left for some sections. For this reason systematic resampling for assay was not attempted. Some spot samples were taken for analyses or thin section petrology.

### 3.6. Drill Core Geochemistry

Extensive resampling and reassaying for gold was carried out on pre-existing drill core from holes in the north-western part of E.L. 4/73. Where previous split core sample pulps were recoverable, these were reassayed. Where pulps were not recovered the remaining  $\frac{1}{2}$  core was resplit and a  $\frac{1}{4}$  core sampled on the old intervals and assayed. Any drill core which had not been previously split, but contained weakly anomalous As or Cu values, or in which alteration or veining or pyrite had been observed, was split, sampled and analysed. All analyses for Au were carried out by Analabs Pty. Ltd. using a 30 gram fire assay. Details of the sampling are as follows.

<u>Drill Hole</u>	<u>No. of Pulps Reanalysed</u>	<u>No. of New Split Core Analysed</u>
STP 217	30	51
STP 218		51
STP 220		53
STP 231	52	
STP 232 A	4	
STP 232 A1	9	
STP 234	12	116

The 116 new split samples from DDH STP 234 were also analysed for Cu, Pb, Zn, Ag, Fe, Mn, Bi by AAS after nitric perchloric leach and vapour hydride generation, and for Sn, W, Sb, Te by X.R.F.

### 3.7. Soil Sample Geochemistry

An orientation soil sampling exercise was carried out in the area of the coastline on line 3,260N between 4,580E and 4,650E. Soil samples were collected by hand auger from the base of the C horizon (taken as the point at which the auger will no longer penetrate) at 10m intervals along the bank above the coastline. Where the sample depth was in excess of 0.7m a second sample was collected at half the original depth. All samples were split to produce a total soil fraction sample for analysis. The remaining split was sieved to produce -10 +40 mesh; -40 +80 mesh; and -80 mesh fractions. All sub-samples (total 48) were analysed by Analabs Pty. Ltd. for Ag, Bi, Mo, Cu, Pb, Zn, Fe, Mn by A.A.S. after nitric-perchloric acid digestion, for As by A.A.S. after vapour hydride generation, Sb, Ba, W by X.R.F., and for Au by 30 gram fire assay. In twelve of the sub-samples there was insufficient material recovered to carry out the fire assay for Au, and one sample had insufficient material for the X.R.F. analyses. This was despite the collection of much larger than routine samples, specifically to overcome the potential problem of insufficient sample after sieving.

## 4. RESULTS RECEIVED 2ND MAY, 1984 TO 6TH MARCH, 1985.

### 4.1. Airborne Geophysics

Appendix 1 contains an extract from Dighem Ltd. Report No. 367. The full report contains the results from the entire Dighem survey which covered principally E.L. 1/62 and part of E.L. 9/66 as well as part of E.L. 4/73. The extract contains all the E.M. anomalies in E.L. 4/73 and the immediately surrounding parts of E.L. 1/62. The E.M. conductor anomalies, together with the Dighem resistivity contours are shown on plan No. AO-526-0037. The aeromagnetic contours from the survey are shown on plan No. AO-526-0036.

No outstanding E.M. anomalies were produced by the Dighem survey. The highest grade conductor within E.L. 4/73 is No. 16, the only grade 3 response (best possible is grade 6). A grade 4 anomaly, No. 27, occurs outside the E.L. but is attributed to a cultural source. Most significantly, the Dighem failed to respond to the massive pyrrhotite-arsenopyrite mineralisation intersected in

DDH STP 217 and STP 221 (originally reported in E.Z. Reports No.'s 133 and 143), even although a flight line ran directly over these boreholes. DDH STP 221 intersected massive pyrrhotite at 30m depth under a cover of 15 to 20m of glacial till. Fresh massive sulphides must sub-crop at the base of the glacial till. The drill intersections lie 170m west of anomaly No. 17. Ground location cannot be a significant factor as the flight line has location fixes 250m west on the highway and 300m east on the powerline track.

The drill hole sulphide zone is picked out by a local low in the resistivity contours but whether this is due to the sulphides or to the scree cover is open to question. The resistivity mapping was undertaken using a 7200Hz channel. The depth penetration of such a high frequency would not be expected to be very great. The resistivity contour map seems to confirm this. The resistivity contours outline, fairly clearly, Lake Rosebery and the known areas of glacial till cover extending up the Sterling River Valley. The isolated area of glacial scree cover west of the Sterling Valley Mine is also picked out by a resistivity low.

A comparison of the 7200Hz response with the equivalent co-planar 900Hz response (see Table Appendix 1.) suggests that the depth penetration of the lower frequency has also been not very great. In all cases the 7200Hz response is greater than the 900Hz response. This is as it should be if both channels are responding to the same source. The 900Hz channel should, in theory, be capable of responding to conductors buried below the penetration limit of the 7200Hz channel. Any such conductor should give a 900Hz response and a negligible 7200Hz response. No conductors with these characteristics were interpreted by Dighem in the area of E.L. 4/73. This suggests that the DDH STP 221 sulphides are below the penetration limit of the 900Hz channel and that the resistivity low is probably a function of weakly conductive glacial cover. A clay rich fluvioglacial horizon could easily provide a conductive source. This also implies that in areas of weakly conductive cover the depth penetration of the Dighem system is only about 20m.

The effect of cover on Dighem response is further evidenced by the anomaly trend No. 1 to No. 21, which lies just east of the Sterling Valley powerline. This corresponds to a horizon of black slaty mudstone with variable disseminated pyrite and pyrrhotite content. The horizon was drilled by DDH STP 220 (see E.Z. Report No. 143) and it outcrops sporadically, particularly towards the southern end of the E.M. trend. Northwards the horizon disappears under glacial cover.

The northern end of the trend is made up of grade 1 anomalies while the southern end of the trend contains the grade 3, and two grade 2 anomalies. It looks very much like an increasing E.M. response to decreasing cover.

The Henty Fault structure appears to have very little E.M. expression. E.M. responses are mostly limited to the Farrell Slates east of the fault. On the northern boundary of the E.L. the anomaly trend No. 2 - No. 13 appears to lie almost along the trace of the Henty Fault as it is known from drilling. Each of the anomalies in this trend is interpreted as a half-space anomaly which is supposedly due to broad shallow conductors or conductive overburden. Possibly the trend is only picking up a thicker glacial or fluvioglacial profile where the old Sterling River Valley has been infilled. Co-incidence of trend No. 2 - No. 13 with the Henty Fault may be fortuitous, or perhaps it is a reflection of pre-glacial geological controls on weathering.

In fairness to the Dighem technique it should be pointed out that the Sterling Valley area represents far from ideal conditions for airborne E.M. surveys. The area contains both steep dipping pyritic black slates and a flat cover of variable thickness glacial and fluvioglacial deposits. Both of these lithologic conductors are traversed by a high tension powerline. As well as being an E.M. conductor in itself, the powerline generates an E.M. signal capable of energising any other conductors in the near vicinity. This has two effects. It creates a lot of background E.M. noise which makes detection of weak (or buried) conductors more difficult. It also means that an anomaly near the powerline may not be due to the line itself, but could be an in-ground conductor energised by the powerline signal. The response from such a conductor may be enhanced or diminished depending on how the powerline and Dighem signals interfere with one another. Despite these "mitigating circumstances", it still seems strange that the Dighem survey failed to respond to the best massive pyrrhotite intersection known from E.L. 4/73.

All the above arguments indicate that it is very difficult to assess the significance of any E.M. conductor in the area. Anomaly No. 16 would suggest that DDH STP 220, which was drilled approximately under anomaly No. 20, did not test the anomaly trend No. 1 - No. 21, in the most conductive part, and that another test 500m to the north is warranted. The grade ratings of anomalies 16 and 20, however, may not be reflecting respective concentrations of conductive material but may be a compounded result of intrinsic conductivity, cover effects, and powerline effects. Grade 1 and even possible grade anomalies may be



very significant. The Sterling Valley Mine lode zone, which sub-crops under a thin soil cover, responds with Dighem anomalies No. 31 and No. 29; a grade 1 and a possible grade anomaly. Another similar grade 1 and possible response is seen in the anomaly pair No. 15 - No. 17. This pair lie under glacial cover, parallel the strike of the Henty Fault, and occur approximately 200m across strike from the pyrrhotite hosted As ± Ag, Au, Cu, Sn mineralisation drilled in holes STP 217, 221, 231, 234 (refer E.Z. Report No. T181). Although low in grade, this might be the most significant anomaly turned up by the Dighem survey. } see 83-2185

The aeromagnetic portion of the Dighem survey is far less problematic than the E.M. portion. This is partly because the data is not really new. The area has been previously covered by aeromagnetics and by extensive ground magnetics. The survey clearly shows that the Eastern Volcanics have a higher and more active magnetic signature than the western Mt. Black Volcanics. The dominantly rhyolitic sequence of the Eastern Volcanics is known to contain accessory magnetite and is often haematite stained in outcrop. The prominent magnetic anomalies, over the DDH STP 221 sulphide zone, and over the area of basaltic ?intrusive and granite, have been well defined previously. This survey however does highlight that the peak of the sulphide magnetic anomaly stretches between DDH STP 221 and Dighem E.M. anomaly No. 17. This may enhance the prospectivity of the E.M. anomaly. } see 83-2185

#### 4.2. Geology

The mapping traverses and creek mapping carried out was unsuccessful in locating any surface expression of the Henty Fault. In every instance, the area where the fault trace might outcrop is covered by transported scree. Plan no. A3-526-0041 shows the powerline and creek traverses mapped in the south western part of E.L. 4/73. The plan shows, that on the powerline traverse, phyllitic schist and strongly cleaved black mudstone outcrop just east of a small creek situated at 4,985 grid east. From this creek, westwards to the Sterling River at 4,730E, the track runs over glacial scree full of boulders and pebbles of Owen Conglomerate and quartzite. In the Sterling River, very strongly cleaved chloritised andesitic volcanics outcrop. The Henty Fault must lie somewhere between the creek and the river. On the track, at about 4,960E, there exists, what is most probably a large buried boulder, of a cleaved quartzose and volcanoclastic breccia, which was identified as Jukes Breccia (pers. comm. K.D. Corbett). At about

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4,905E on the track, there occurs, what is again most probably large buried boulders, of cleaved intermediate volcanics. At both these occurrences, however, the cleavage in the exposed rock is aligned parallel to the regional cleavage. It is probably just fortuitous accident, but if one, or both, of these exposures should be bedrock, then it places the Henty Fault to within 25m either side of 4,930E.

The traverse down the W.N.W. flowing creek commencing at the mine access track at 1,960N 4,900E, and running into the Sterling River at 4,070N 4,590E, should also have crossed the Henty Fault trace. The creek is a small meandering creek, falling gently over a muddy and pebbly bed, through an area devoid of outcrop. The pebbles are all quartzite and look like Owen scree. At 2,000N 4,715E and at 2,060N 4,660E, there occur, in the creek bed, exposures of a very strongly cleaved porphyroblastic rock identified in thin section (sample no. 64338 Appendix 2 and 3) as a mylonitized metaquartzite. Once again these rocks are probably large floaters, but if they should be outcrop they again limit the location of the Henty Fault trace to around 4,630E at 2,060N. This location and the powerline location at 4,930E cannot both be correct as they imply a strike for the fault which has far too much easterly component. In most probability both sets of location indicators are false.

All the rocks mapped on plan A3-526-0041 are cleaved to some degree. The intensity of the cleavage and the degree of shearing in the andesites is greatest in the outcrops in the Sterling River near the powerline track. These outcrops are also very strongly chloritised. This suggests that these outcrops might be quite close to the trace of the fault zone. This is consistent with a change in resistivity located at about 4,750E on line 2,360N (refer to I.P. pseudo sections in E.Z. Report No. 133), which might reflect the fault location.

The creek traverse running north from the powerline track near the western edge of the E.L. was slightly more successful in achieving its aims. Fine grained bedded tuffaceous siltstone was mapped in the creek (samples 64312 and 64317 in Appendix 2 and 3). The sample 64317 outcrop lies adjacent to a dolerite so it may be only a xenolith. It does demonstrate that, in-situ or disrupted, there does exist a stratiform sediment horizon located in this part of the andesitic pile. The attempt to confirm the possible barite occurrence, reported on the old Mt. Black line 372,500N, succeeded only in finding quartz veins in a strongly oxidised andesite (sample 64313 Appendix 2). A primary volcanic foliation, based on flow

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alignment of lithic fragments in an andesitic ashflow, was mapped along this creek traverse. The flow foliation has a strike of  $31^{\circ}$  A.M.G. and dips at  $82^{\circ}$  N.W. No facing could be determined. In the same creek an andesitic agglomerate containing lithic fragments of fine grained sediment outcrops S.E. of the tuffaceous siltstone. If the lithic fragments relate to the siltstone horizon, this would indicate a S.E. facing and imply that the andesite sequence is slightly overturned. Further evidence of sediment horizons in the volcanic pile comes from sample 64309 on the powerline track. This was identified in thin section (Appendix 3) as a veined and brecciated tuffaceous phyllite.

The check mapping carried out on lines further north along the Sterling Valley grid, together with the thin section report on a sample collected in the 'granite' costean, have resulted in some changes to the previously reported geology of the area. These are shown on plan AO-504-0022. On line 3,860N the eastern limit of andesite was determined by float occurrences at 4,855E (refer to geology plan in E.Z. Report No. 150). Since that mapping a large tree has fallen over and exposed definite andesitic bedrock under its roots at 4,830E (Sample 61295 Appendix 2 and 3). On line 3,740N there was previously reported float of a basaltic volcanic at 4,890E. A re-inspection of this location revealed a typical rainforest floor with a thick cover of decomposed vegetation underfoot. Small pieces of float were found in the roots of a tree at 4,890E. This float was composed of typical Farrell Slates lithologies; dark grey phyllitic mudstone and medium-grained micaceous greywacke (sample 61296 Appendix 2). These two mapping occurrences limit the location of the Henty Fault in the vicinity of 3,800N to about 4,870E to 4,880E.

On line 3,440N at 4850E an outcrop of green strongly cleaved strongly chloritised rock outcrops under the bank of the Sterling River. This was previously mapped as a basaltic rock. Resampling of this outcrop (sample no. 61297 Appendix 2 and 3) and submission for thin section description has shown it to be a trachy-andesitic tuff. The extremely cleaved and chloritised nature of the outcrop suggests it is very close to the Henty Fault contact. This is consistent with the location at about 4,870E implied above and the approximate grid north strike of the fault. The reclassification of this outcrop also reduces the areal extent of the "basaltic intrusive" interpreted from previous mapping.

Several samples were collected from the costeans on line 3,260N (samples no's 64320 to 64331 Appendix 2). These were collected primarily for geochemical analyses in order to establish a larger gold assay data base for the area. One sample (no. 64327) of quartz veined, pyritic, strongly brecciated, fine grained, green rock was submitted for thin section. The report (Appendix 3) describes the green breccia clasts as vaguely tuffaceous altered slate and not as basaltic intrusive as previously ascribed to the country rock in the costean.

A check of E.Z. Reports No's 154 and 161 confirmed that the only other material from the costeans which had been submitted for sectioning were five samples of vein material submitted to determine the sulphide assemblage present in the veins. (E.Z. Report No. 161 Appendix 1 - C.M.S. Report 82/9/12.) This mineragraphic report however describes:

Sample 48701 as containing "ill defined intraclasts of thoroughly silicified sericitic pelite."

Sample 48073A has "variably silicified breccia with clasts of sericitic pelite".

Sample 48073B "gangue is partly recognisable as clays (?sericitie)".

Sample 48075 is "Essentially a mineralised breccia with clasts of vein type quartz and quartz-schorl rock (?altered psammopelite)."

Sample 48076, the final sample describes only vein quartz and sulphide phases.

It would seem that the previous designation of the host rock to the quartz-sulphide veining in the line 3,260N costean as a basaltic intrusive was quite erroneous. The host to the mineralisation appears to be an extremely altered and brecciated sediment. The area of "basaltic intrusive" is therefore further reduced from that indicated by previous mapping.

Apart from samples No's 61300, 64315 and 64318 (Appendix 2 and 3) which are described from thin section as microgabbro in this report, the only other rocks on the Sterling Valley grid positively identified as mafic from thin section are:

Sample No. 48308; 2,480N 4,380E - a uralitised basalt.

Sample No. 48339; 3,320N 4,905E - a picritic microgabbro

Sample No. 48361; 3,740N 4,600E - an altered brecciated basalt lava.

(For these samples refer to E.Z. Report No. 150, Appendix 1 - C.M.S. Report 82/2/16)

Sample No. 48429 was taken from DDH STP 234 at 117.8m and is described in C.M.S. Report 81/12/18 (E.Z. Report No. 146) as a sheared spillite of suspected

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original andesitic to basaltic composition. DDH STP 234 contained several narrow bands of this type of rock. It is proposed that the large "basaltic intrusive", previously interpreted for the central Sterling Valley grid area, probably does not exist. The body was interpreted from a few outcrops, some of which now have been positively re-identified, and a lot of scattered float. It is believed that the area more probably contains some thin spillite horizons and thin fine grained tuffaceous sedimentary horizons interbedded with the andesite lavas and pyroclastics, and some intrusive microgabbro dykes and/or sills. If this interpretation is correct it carries with it the implication that the aeromagnetic and ground magnetic anomaly in this part of Sterling Valley cannot be written off as being due to a basaltic intrusive body.

#### 4.3. Rock Chip Geochemistry

The results of geochemical analyses of rock samples are presented in Appendix 2. The most significant samples are those collected from the line 3,260N costeans (sample no's 64320-64331). The only significant gold values reported came from quartz-sulphide veined and brecciated rocks from both eastern and western costeans. The best value was 2.01 g/t Au from Sample No. 64325. This sample is also very high in arsenic at 18.0% As. All the gold bearing samples are high in arsenic. Those from the eastern costean are also elevated in lead and silver. The best example is No. 64322 with 0.99 g/t Au, 8.55% As, 124 g/t Ag, 0.60% Pb. The samples from the western costean are less lead-silver rich, e.g. Sample No. 64328 with 1.63 g/t Au, 3.85% As, 4 g/t Ag, 180 ppm Pb. The precious (and base) metals are very strongly associated with sulphides. Samples of the granite contain no anomalous metal values and neither do non-sulphide country rock such as Sample No. 64329.

The remainder of the rock samples mostly reflect background levels for the elements analysed. Dolerite samples No's 64315 and 64318 contain slightly elevated Cu values reflecting the more basic composition of these rocks. The rhyolite samples from the Eastern Volcanics, No's 64339, 64340, 64343, display lower Zn values reflecting their acid composition.

Two samples collected along the powerline traverse returned anomalous geochemistry. No. 64307, a strongly oxidised andesitic ashflow agglomerate returned 0.16 g/t Au, and No. 64309, a quartz-veined, brecciated, tuffaceous sediment with minor pre-brecciation syngenetic pyrite in the clasts, returned 2,200 ppm As. These

samples lie approximately 100m apart and are almost directly along strike from the costeans on line 3,260N 1km to the north. This raises the possibility that a brecciated stratiform horizon may exist for over 1km of strike through this part of the grid.

#### 4.4. Drill Core Relogging

The relogging of the old drill core was originally undertaken with the aim of controlling a core resampling programme for gold. This aim was not achieved due to poor core recovery and small core size preventing a systematic resampling of the core. Invariably the best mineralisation, veining or alteration occurred in the zones of poorest recovery. The original logs and the relogs are presented in Appendix 4. All of the old holes lie east of the Henty Fault in Farrell Slates and Eastern Volcanics. The relogging provided a better understanding of the lithologies and associations of these two rock units and of some of the controls on the mineralisation in the Farrell Slates. The main points to arise from the relogging, and a concomitant reappraisal of the available mapping in the area of the drill holes are:-

1. The Eastern Volcanics are an acid felsic sequence, being characteristically cleaved quartz phyric rhyolites. Thin section (Appx. 3) describe the rocks as sericitised devitrified lavas and attribute the vague pyroclastic textures entirely to shearing effects.
2. Quartz + sericite ± carbonate alteration of varying intensity occurs very frequently throughout the volcanics. The origin of the alteration is obscure. It may be entirely a regional metamorphism effect, or it may be related to the process of devitrification, or it may be a hydrothermal alteration. In STP 105 the more strongly sericitised volcanics contain disseminated pyrite and traces of galena, chalcopyrite and sphalerite, suggesting that the sericitisation may be related to a weak sulphide mineralisation system.
3. The Farrell Slates contain as much acid volcanic and felsic tuff material as 'slate'. The supposedly typical, strongly cleaved phyllitic black mudstones are a minority lithology amongst greywackes, tuffaceous wackes, reworked felsic tuffs and occasional rhyolites.

4. The Farrell Slates pass eastwards gradationally into, and probably inter-finger with the Eastern Volcanics. The sequence faces west with the Farrell Slates conformable on the Eastern Volcanics.
5. Significant mineralisation in the Farrell Slates all appears to be epigenetic in type and associated with veins, fracturing and brecciation zones. It can, nevertheless, be regarded as stratabound because almost all the significant mineralisation is very strongly associated with the black mudstone units. Perhaps some component of the mineralisation, such as the source of the sulphur is syngenetic and has only been very locally remobilised.

#### 4.5. Drill Core Geochemistry

The results of reassaying drill core for gold are contained in data sheets in Appendix 5. The results fall into three groups. The first group contains the bulk of the data and consists of six holes drilled into the Henty Fault. These are DDH STP 217, STP 231, STP 234, STP 232A and STP 232 A1 plus STP 221 which was not reassayed but has complete gold assay data from original aqua regia/A.A.S. assay. Comments on the data sheets regarding Arsenic zones 'A' 'B' 'C' 'D' refer to the zones of +1% As mineralisation as defined in E.Z. Report No. T181. Appendix 5 also contains data sheets showing all the gold values from this group of holes greater than 0.1 g/t Au listed in descending order. Twelve samples returned above 1 g/t Au with the highest intersection being:-

STP 234, 313.25-313.85m; 0.60m @ 5.00 g/t Au.

A further 54 samples returned values above 0.1 g/t Au. The following points arise from the assay data on this group of holes.

1. Many gold values are associated with high arsenic and copper but the correlation is not complete; e.g. STP 221 185.5m, 2.08 g/t Au is associated with only 70 ppm As, 250 ppm Cu. This appears to be because the gold distribution is wider than the distribution of the semi-massive sulphides which host the high arsenic zones.
2. The gold is related to sulphide mineralisation but is not proportional to the amount of sulphide present, e.g. in STP 221, at 34.7m, within Arsenic Zone A, high sulphide content containing 10.0% As contains only 0.072 g/t Au while at 52.8m minor sulphide veins containing only 70 ppm As, contains 2.08 g/t Au.

- 016
3. Both STP 221 and 234 contain a low grade gold zone lying between Arsenic Zones 'A' and 'B' which has no base metal correlations.
  4. There appears to be no correlation between gold and tin mineralisation.
  5. DDH STP 231 split samples have been analysed for gold by both Fire Assay and Aqua Regia dissolution. In every case where gold reports above 0.1 g/t Au, the Fire Assay method gives a higher assay. In some cases the difference is large, e.g. at 56.7m Fire Assay gives 1.29 g.t Au while Aqua Regia gives only 0.276 g/t Au. It is probable that the gold content of STP 221, for which Aqua Regia values only are available, could be much higher.
  6. DDH STP 234 contains more +1 g/t Au and more +0.1 g/t Au values than any other hole. This may be just a function of STP 234 being the longest hole drilled, or it may be an indication of a strengthening of gold mineralisation to the north of the zone. STP 234 also contains the highest single assay returned.
  7. DDH STP 232A and 232A1 did not properly test the Henty Fault Zone due to unexpectedly deep glacial cover. The holes did not contain any significant Arsenic Zones. Gold, however, reports in both holes with four values above 0.1 g/t Au and a peak of 0.76 g/t Au. This extends the Zone of gold potential 300m north of the arsenic cut-off at STP 234.
  8. A gold content for the Sterling River Area Arsenic Zones was calculated using the arsenic "ore reserve" intersections presented in E.Z. Report T181. This gives an ore estimate of:

479,920 tonnes @ 5.02% As, 0.84 g/t Au.

The second group of reanalyses comes from DDH STP 218. This hole was drilled in the N.W. corner of E.L. 4/73 on an I.P. anomaly in the Mt. Black Volcanics. Extensive resampling and reassay failed to return any really significant gold values. Two zones are weakly anomalous in gold:-

42.0-45.0m; 3.0m @ 0.2 g/t Au.

82.0-84.0m; 2.0m @ 0.12 g/t Au.

outside E.T.A 4/74

Both these zones are associated with thin (about 8mm) fracture-fill veins of carbonate-quartz-epidote-fluorite containing a sulphide assemblage of pyrite, chalcopyrite, arsenopyrite, pyrrhotite (originally reported in E.Z. Report No. 133).

The third group of reanalysis comes from DDH STP 220 which was a hole drilled into a magnetic anomaly in the Farrell Slates. Two weakly anomalous gold values were returned.

89.2-90.2m; 1.0m @ 0.133 g/t Au.

94.7-95.75m; 1.05m @ 0.30 g/t Au.

Both these intervals are associated with pyrite veins with locally minor pyrrhotite, galena and chalcopyrite. Both intervals had been previously split and analysed for gold by aqua regia/A.A.S. and returned values of 0.032 g/t Au and 0.064 g/t Au respectively (originally reported in E.Z. Report No. 143). This hole also bears out the pattern of consistently higher results from fire assay as evidenced by DDH STP 231. The interval of greatest sulphide content and highest base metal assays returned from the original sampling of STP 231 was:

138.0-138.7m; 0.7m @ 3.25% Pb, 3.2% Zn, 0.49% Cu, 0.2% As, 0.15% Sn,  
81 g/t Ag.

This interval only returned 0.05 g/t Au on resampling. The original aqua regia gold value was below detection limit (0.008 g/t Au).

#### 4.6. Soil Sample Orientation Geochemistry

An orientation soil sampling exercise was undertaken in the area of the line 3,260N costean. Gold mineralisation had been demonstrated from quartz-sulphide veins in the costean. The results of the sampling are contained in data sheets in Appendix 6. It was hoped that a particular soil horizon or soil size fraction might have an optimum association with gold or a closely associated indicator element. The survey was largely unsuccessful in these aims. The main problem was that too few samples reported any gold content, and the range of gold values which were reported was very low. The inability to produce sufficient sample for a gold assay in some of the fine size fractions further reduced the possibility of finding correlations with gold.

018

Arsenic shows the best correlation with gold, being very strongly elevated at sample sites which report gold values. The highest value of 0.05 g/t Au also reports the highest arsenic value of 9,300 ppm As. Lead, zinc, copper and iron also report elevated values in sample sites which report gold. In this respect the soils appear to be faithfully reflecting the strong sulphide association of gold as seen in rock sampling from the costean (section 4.3. above). Antimony shows a weak correlation with gold, but along with molybdenum, bismuth, silver and tungsten, it reports values too low to allow any significant correlations to be made. Barium and manganese show no correlations with gold.

The soil profile in the sample area is not well differentiated. A fairly uniform orange-brown, clay rich, soil is developed over the bedrock. Sampling of distinct A, B or C horizons was not possible as these are not developed. Taking a sample at half depth in the thicker soil profiles was the only attempt made to determine vertical dispersion patterns through the soil profile. The results of this trial were inconclusive. For example, at 4,580E higher values of gold and arsenic reported from the sample at 0.60m depth than from the sample at the base of the profile at 1.25m depth, whereas in the adjacent site at 4,590E the opposite situation prevailed with higher gold and arsenic values reporting from the bottom sample at 0.9m.

The different size-fraction sub-samples show a remarkable uniformity in geochemical response at any one sample site. None of the metals analysed show any preferred partitioning into any particular size fraction. This feature, together with the inability of some samples to provide sufficient fine fraction material for a fire assay, suggests that sampling for gold in soils should analyse the -10 mesh fraction instead of the traditional -80 mesh fraction. It is not known how successfully this might be applied across a wider range of soil types.

AN EXTRACT COVERING THE AREA OF E.L. 4/73

OF

DIGHEM III SURVEY OF THE

ROSEBERY EAST AREA, TASMANIA

FOR

GETTY OIL DEVELOPMENT COMPANY LIMITED

BY

DIGHEM LIMITED

TORONTO, CANADA  
1984.

Z. DVORAK,  
VICE PRESIDENT.

CONDUCTORS IN THE SURVEY AREA

- Anomaly 1 - 21**  
15 - 17
- A pair of well defined bedrock conductors is indicated by these grade 1 to 3 anomalies. The conductors have produced a narrow conductive zone correlating with a narrow magnetic anomaly. The data suggests that the conductive horizon may extend further north.
- Anomaly 24**
- This grade 1 anomaly reflects about 1.7% concentration of magnetite. A weak bedrock conductor may exist at this location which is being masked by magnetite. If real, it may extend further north toward 23.
- Anomaly 25, 26**
- These grade 1 anomalies were classified by the symbol L because they correlate with a road and powerline. However, their EM signatures are quite different from the other responses further north and south. This is well demonstrated by the resistivity patterns at the corresponding locations. The anomalies may reflect the combined effects of culture and bedrock conductor. They should be checked on the ground.
- Anomaly 29 - 31**
- A weak bedrock conductor is indicated by this grade 1 anomaly. The resistivity patterns suggest that the conductor may extend further south. It is surmized that 29 - 31 reflects a conductive horizon which may also contain anomalies 25 and 26.
- Anomaly 32**
- A weak bedrock conductor is indicated by this grade 1 anomaly.

## DIGHEM ANOMALIES E.L. 4/73

Refer to plan No. AO-526-0037

(Extract from Report No. 367 by  
Z. Dvorak, Dighem Limited, 1984)

Anomaly Location											Vertical Dyke		Horizontal Sheet		Conductive Earth	
No.	A.M.G. Co-ords		Interp Symbol	+ Grade	Co-Axial 900hz		Co-Planar 900hz		Co-Planar 7.200hz		Conductivity MHOS	Depth* Metres	Conductivity MHOS	Depth Metres	Resistivity OHM-M	Depth Metres
	N	E			REAL ppm	Quad.ppm	Real ppm	Quad ppm	Real ppm	Quad ppm						
1.	5,375,550	384,960	B?	2	2	2	5	3	9	5	8	28	2	141	39	103
2.	5,320	4,560	H	1	1	3	1	3	10	20	1	0	1	45	434	15
3.	5,310	4,640	L?	X												
4.	5,280	4,970	B	1	9	19	9	21	53	67	4	7	1	46	265	7
5.	5,160	4,520	H	1	1	3	1	3	8	15	1	10	1	55	429	25
6.	5,180	4,980	B	1	5	9	4	7	20	17	4	0	1	86	253	30
7.	4,990	4,500	H	1	1	2	1	2	8	18	1	0	1	44	474	14
8.	4,950	4,960	B	1	2	7	1	3	17	15	2	5	1	113	626	15
9.	4,920	3,030	E	X												
10.	4,770	4,410	H?	1	2	3	2	4	16	20	1	0	1	45	274	18
11.	4,840	4,910	B	1	2	5	4	4	12	10	3	13	1	97	1035	0
12.	4,780	2,580	H	X												
13.	4,740	4,390	H?	1	1	3	0	6	26	37	1	1	1	42	230	18
14.	4,550	4,180	E	X												
15.	4,550	4,540	B	1	5	12	1	8	10	4	3	0	2	142	61	99
16.	4,550	4,830	B	3	9	2	4	8	10	6	19	17	1	177	77	73
17.	4,370	4,470	B	X												
18.	4,370	4,620	L	X												
19.	4,370	4,770	B	2	4	7	7	9	18	17	5	17	1	94	127	49
20.	4,220	4,670	B?	2	17	20	2	8	13	16	7	0	1	48	324	0
21.	4,040	4,570	B?	1	0	4	2	6	8	13	1	2	1	68	586	32
22.	3,830	4,440	L	2	4	3	1	2	3	2	8	45	1	189	866	39
23.	3,500	5,140	E?	X												
24.	3,370	5,090	B?	1	1	2	0	2	0	10	1	12	1	74	6434	8
25.	3,170	4,270	L	1	2	8	1	4	7	7	1	19	1	111	393	74
26.	3,000	4,200	L	1	0	4	0	4	5	6	1	12	1	88	850	43
27.	2,460	2,600	L?	4	2	1	4	1	2	2	24	76	3	201	16	170
28.	2,320	2,560	L	2	1	1	3	0	2	2	8	93	2	214	56	167
29.	2,070	3,870	B?	X												
30.	2,030	5,750	L	X												
31.	1,830	3,840	B	1	3	6	1	3	4	5	3	35	1	136	90	91
32.	1,200	3,020	B?	1	1	3	3	3	8	14	1	22	1	81	761	43
33.	0,690	2,890	?	X												

+ For explanation of Interpretation Symbol and Grade refer to the Legend on Plan No. AO-526-0037.

\* Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

APPENDIX 2.

Rock Sample Data Sheets.

Sample Number	A.M.G. Co-ordinates		Sample Type	Geological Description	Metal Content (p.p.m. unless specified)						Metal Content (p.p.m. unless specified)						
	N	E			Au	Ag	As	Cu	Pb	Zn			Thin Section				
61295	5,373,915	384,325	Grab	Green strongly cleaved and chloritized Andesitic lithic ashflow from Sta. V grid line 3860N at 4830E	x	x	32	20	20	260					✓		
61296	5,373,785	384,345	"	Float in tree roots on rainforest floor Dark grey phyllitic mudstone and grey mg micaceous wacke From Sta. V. grid line 3740N at 4890E	x	x	26	15	65	35							
61297	5,373,500	384,210	"	Strongly sheared and chloritized andesitic volcanic from outcrop on bank of Sterling River on grid line 3440N at 4850E	x	x	44	110	55	240					✓		
61298	5,372,545	384,035		Probably float. Possibly outcrop in an area of scree under the Sterling saddle powerline. Gray strongly cleaved volcaniclastic granule breccia. Foliate volcanic and quartz clasts. (Juhos Breccia - per comm K. Conzett)	x	x	2	5	45	140							
61299	5,372,525	383,975		Probably float. Possibly outcrop in an area of scree under powerline. Green cleaved chloritized feldspar phytic Andesitic ashflow. Poor flow banded lava.	x	x	9	50	35	260					✓		
61300	5,372,480	383,760		Outcrop on powerline track. Green f.g. non-perphyritic Dolomite intrusive	x	x	5	10	30	210					✓		
64305	5,372,475	383,740		Mafic to intermediate volcanic. Looks like a feldspar phytic andesite lava but has large ? xenolith of f.g. ? dolomite in it. Float under powerline. Thin Section identifies rock as a diorite.	x	x	3	10	50	170					✓		

Sample Number	A.M.G. Co-ordinates		Sample Type	Geological Description	Metal Content (p.p.m. unless specified)						Metal Content (p.p.m. unless specified)			
	N	E			Au	Ag	As	Cu	Pb	Zn			Thin Section	
64306	5,372,465	383,695	Rock grab	Manganese oxide stained gossans quartz veins. Float from Powerline track	x	1.0	18	135	60	185				
64307	5,372,465	383,690	"	Outcrop strongly oxidised Andesitic ashflow agglomerate. Lith up to 50mm long. From Powerline track	0.16	1.0	4	35	40	170				
64308	5,372,460N	383,675E		White oxidised outcrop phytic chloritised Andesite lava. from Powerline track	x	x	x	15	40	210				✓
64309	5,372,450N	383,600		Quartz sand brecciated chloritic tuffaceous phyllite minor quartz in quartz veins. from powerline track	x	1.5	2200	140	360	190				✓
64310	5,372,430	383,530		White massive quartz vein from Powerline track.	x	x	3	10	30	x				
64311	5,372,420	383,470		Pink/green Andesitic lithic ashflow agglomerate from Powerline track.	x	x	3	10	45	145				✓
64312	5,372,530	383,475		Pale green banded fig. banded lithic tuffaceous greywacke float in creek	x	x	25	110	50	190				✓
64313	5,372,535N	383,400		Strongly oxidised andesitic ashflow with massive white quartz veins from line 372500N at 383410E Mt. Salegrid	x	1.5	x	15	40	55				
64314	5,372,550	383,425		c.g. Andesitic ashflow agglomerate with black fig sediment and pink quartz, phytic rhyolite lithic fragments	x	x	7	55	45	335				✓
64315	5,372,575	383,405		green fig. Dolomite in creek.	x	x	10	200	80	155				✓

Electrolytic Zinc Co. of A'asia Ltd. Rosebery, Tas.			ROCK SAMPLE LEDGER				PROJECT: Sterling Valley E-L 4/73 LOCALITY: Sterling River area		COLLECTED BY: I. McDonald		DATE: Dec. 1984 - FEB 1985		
Sample Number	A.M.G. Co-ordinates		Sample Type	Geological Description	Metal Content (p.p.m. unless specified)						Metal Content (p.p.m. unless specified)		
	N	E			Au	Ag	As	Cu	Pb	Zn	Thin Section		
64316	5,372,590	383,385	Rocky	Pink green chlorite altered andesitic lithic lapilli ashflow - outcrop on creek	X	X	1	35	65	165		✓	
64317	5,372,595	383,380	"	green-grey banded fg. lithic intrusive bedded ash buff. with fg dissemination pyrite and minor arsenopyrite. On edge of dolomite outcrop so possibly a xenolith.	X	0.5	43	165	90	205		✓	
64318	5,372,600	383,375	"	Grey-green fg. massive dolomite or microgabbro intrusive.	X	0.5	5	155	30	130		✓	
64319	5,372,605	383,375	"	Dolomite with white quartz veins	X	X	5	20	50	205			
Sample Nos 64320 - 64325 all come from the caldera on Sterling Valley grid line 3260N at 4750E													
64320	5,373,370	384,075	"	Pyritic, veined brecciated ? basaltic rock.	X	4.0	3.00%	65	3250	95			
64321	"	"	"	Pale clay material after ? oxidized granite vein	X	1.0	410	165	905	260			
64322	"	"	"	Sulphide veined ? basaltic rock.	0.99	124.0	8.55%	420	0.60%	170			
64323	"	"	"	Pink and green granite possibly with associated country rock component.	X	2.0	70	35	145	200			
64324	"	"	"	Green chlorite altered granite	X	2.0	430	20	195	150			
64325	"	"	"	Quartz veined sulphate rich ? basaltic rock	2.01	72.0	18.0%	380	3400	110			

Electrolytic Zinc Co. of Asia Ltd. Rosebery, Tas.	<b>ROCK SAMPLE LEDGER</b>	PROJECT: Sterling Valley E.L. 4/73 LOCALITY: Sterling River area COLLECTED BY: I. McDONALD DATE: DEC 1986 - 1 FEB 1985
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Sample Number	A.M.G. Co-ordinates		Sample Type	Geological Description	Metal Content (p.p.m. unless specified)						Thin Section		
	N	E			Au	Ag	As	Cu	Pb	Zn			
				Sample Nos 64326 - 64331 all come from the contact on Sterling Valley grid line 3260N between 4570E and 4610E									
64326	5,373,410	383,945	Rocky	Quartz - (pyrite) veins mineral from 4618E	0.18	1.0	1000	65	x	40			
64327	"	"	"	Quartz veins, strongly brecciated pyritic mafic pelitic tuff rock from 4615E	0.09	2.5	1000	170	30	225		✓	
64328	"	"	"	Sheared sulphide? basaltic rock from about 4620E	1.63	4.0	3.85%	1100	180	200			
64329	5,373,420	383,910	"	Strongly sheared basaltic rock from contact with granite seen at 4575E	x	0.5	x	35	20	210			
64330	"	"	"	Quartz - (pyrite) veins from near granite seen at 4575E	x	2.5	550	625	x	30			
64331	"	"	"	Altered granite from vein at 4575E	x	1.0	95	45	35	70			
64332	5,372,540	383,785	"	Green altered chloritised weakly feldspar phytic mafic to intermediate lava. From Sterling River.	x	2.0	32	50	15	395		✓	
64333	5,372,495	383,775	"	Green altered strongly chloritised mafic to intermediate lava or fig intrusive	x	1.5	23	10	x	255			
64334	5,372,460	383,770	"	Pink/green altered chloritised weakly feldspar phytic andesite lava.	x	2.0	8	55	x	465			

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Electrolytic Zinc Co. of A'asia Ltd.  
Rosebery, Tas.

**ROCK SAMPLE LEDGER**

PROJECT: Sterling Valley E.L. 4173 LOCALITY: Sterling River area  
COLLECTED BY: J. McDONALD DATE: Dec 1964 - Feb 1965

Sample Number	A.M.G. Co-ordinates		Sample Type	Geological Description	Metal Content (p.p.m. unless specified)						Metal Content (p.p.m. unless specified)	
	N	E			Au	Ag	As	Cu	Pb	Zn	Thin Section	
64 335	5,372,430	383,770	Rock grab	green non porphyritic, chloritized, weakly biotitized f.g. Dolerite.	x	1.0	16	150	x	235		
64 336	5,372,410	383,765	"	green sheared chloritic mafic to intermediate lava or f.g. intrusive with traces of pyrite and arsenopyrite	x	0.5	26	15	30	170		
64 337	5,372,375	383,735	"	green cleaved chloritic very weakly feldspar phytic mafic to intermediate lava or f.g. intrusive	x	1.5	5	10	15	165		✓
64 338	5,372,180	383,660	"	gray strongly sheared porphyroblastic meta-quartzite. Mylonitization of the rock gives a pseudo-quartz porphyritic texture. Probably Fluvata	0.01	x	52	10	70	40		✓
64 339			"core	DDH STP 105 @ 382 ft depth. gray/white banded pyritic quartz-arsenite ocher after acid release.	0.08	2.5	86	35	215	40		
64 340			"core	DDH STP 105 @ 420 ft depth. finely laminated micaceous and ultramylonitic matrix with minor pyrite.	x	1.0	22	40	45	80		
64 341			"	DDH STP 101 @ 167 ft depth. sheared banded quartz rich sericitic lava - Thin Section only.								✓
64 342			"	DDH STP 101 @ 306 ft depth. shaly banded sheared quartz phytic sericitic lava - Thin Section.								✓
64 343			"	DDH STP 99 @ 243 ft depth. sheared strongly sericitic altered felsic lava.	x	1.0	8	5	40	40		

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APPENDIX 3.

Rock Sample Thin Section Descriptions.

C.M.S. Report 85/2/19.

REPORT CMS 85/2/19

Twenty-one rock chip and drill core samples from the Sterling Valley area were received for petrological examination. Representative thin-sections were prepared and examined together with their respective cobaltinitrite-stained offcuts, with carbonate stain tests performed as warranted. Attached tabulated descriptions summarise the microscopic data, and include interpretative comments.

Summary

This suite is a composite of altered and sheared felsic intermediate to acid volcanics, microgabbroic and sedimentary rocks.

Volcanics include andesitic-trachyandesitic and rhyolitic types, characterised by chloritic (+ epidote) and sericitic (+ quartz, calcite) alteration assemblages respectively. Lava-like facies (including minor intrusives?) predominate, but pyroclastics are also present, and a few rocks exhibit shear-related boudinaging effects ("pseudofragmentals"). Volcanics are typically unmineralised to weakly pyritic.

Sediments include labile (volcanomict) turbiditic types, possibly intercalated with the altered intermediate volcanics on the basis of gross compositional similarities and exhibiting essentially similar alteration patterns.

Vaguely tuffaceous altered pelites appear as clasts in quartz-healed breccias. A single example of mylonitically sheared quartzose psammopelite may be contrasted with the labile turbiditic and tuffaceous pelitic facies.

Microgabbros reflect uralitic alteration and, locally, shear-related "retrograde" chloritisation. These basics include amygdaloidal types and, whilst medium-grained, may represent core zones of thick flows, dependent on field evidence.

D. Cowan, B. Sc.

Sample no.	Classification - Composition	Fabric	Accessories	Comments
5 295 (T.S. 62655)	<u>Andesitic ?Tuff.</u> Frequent albitised/chlorite-stained plagioclase, minor chloritised ferromag phenocrysts in a chloritised/weakly epidote-stained feldspar-microlitic matrix. Sporadic intracrysts of vein-quartz.	Sheared breccia-like with millimetric, angular lava clasts, chlorite matrix. Vague relict lithic fragmental.	Rare quartz-pseudomorphed K-feldspar microphenocrysts. Ultrafine leucoxenitic semi-opaques.	Andesitic lithic tuff or lava-breccia (tuff lava), quartz-veined/chloritised subsequently moderately sheared and brecciated.
61297	<u>Trachyandesitic Tuff.</u> Chloritic/variably epidote-stained lava clasts, "megacrysts" in a chlorite-matrixed psammitic fragmental comprising sericitised plagioclase, minor K-feldspar grains, lava clasts.	Phyllitic, with sporadic grit- to pebble-sized angular lava clasts, sheared angular fine to medium sandy matrix.	Minor sheared epidote veinlets. Thinly disseminated leucoxenised opaques (clastic).	Altered/sheared "andesitic" tuff, distinctly K-feldspathic in comparison with 61295, similarly altered. Subaqueous(?), psammitic with sporadic lapilli.
61299	<u>Andesite.</u> Chlorite with pervasive fine albitised plagioclase laths, conspicuous albitised plagioclase phenocrysts/phenocrystal clusters. Disseminated cloudy microcrystalline epidote.	Phyllitic/incipiently crenulated. Relict glomeroporphyritic "andesitic". Weakly (flow-)banded.	Minor microcrystalline quartz, boudinaged quartz veinlets. Fine leucoxenitic semi-opaques, trace degraded pyrite.	Chloritised/epidote-stained and relatively sheared andesitic lava, boudinaged on a microscale ("pseudofragmental"), incipiently oxidised-pyritic.
61300	<u>Microgabbro.</u> Albitised/chlorite-stained plagioclase laths with a mesostasis of chlorite, including minor chlorite-semipseudomorphed ?pyroxene laths, granules, conspicuous fine magnetite.	Weakly plagioclase-porphyritic, medium-grained "basaltic". Moderately sheared.	Traces of epidote, minor sheared discontinuous epidote-, chlorite-quartz veinlets.	Basic minor intrusive or core zone of relatively thick flow, dependent on field evidence. Alteration, shearing pattern analogous to 61295 etc.
64305	<u>"Dacitic" Tuff.</u> Sericite-pseudomorphed feldspar, minor recrystallized quartz, chloritised ferromag crystals/fragments, sporadic chloritised lithic clasts in a matrix of sericitic/chloritic microgranular quartz.	Loose, poorly sorted fragmental with a vaguely relict eutaxitic matrix. Mildly sheared.	Conspicuous leucoxenitic semi-opaques, traces variably degraded magnetite.	Silicified-sericitised-chloritised, mildly sheared quartz andesitic-dacitic fragmental. Relict features consistent with an ignimbritic lithic-vitric-crystal tuff.
64308	<u>Trachyandesitic Tuff.</u> Variably sericite-pseudomorphed plagioclase and K-feldspar crystals, fragments, clusters, minor chloritised "trachytic" lava clasts in a matrix of sericitic-chloritic microcrystalline quartz of feldspathic material.	Poorly sorted psammitic fragmental with a vaguely relict shaly matrix. Mildly sheared.	Minor chloritised pumiceous lava clasts. Semi-pervasive fine epidote. Conspicuous leucoxenised opaques.	Crystal-rich trachyandesitic fragmental (lithic-vitric-crystal tuff), poorly diagnostic in terms of subaqueous or subaerial mode of deposition.
64309	<u>Silicified Breccia.</u> Clasts of chloritic muscovite- and muscovite-quartz phyllite in a matrix of fine- to medium-grained vein-type quartz.	Random angular, submillimetric to centimetric clasts. Crudely crustiform, unstressed matrix.	Oxidised fine-grained pyrite in clasts, matrix. Minor phyllite pseudomorphous sericitic quartz aggregates.	Quartz-matrixed breccia, tectonic characteristics. Phyllite clasts include vaguely tuffaceous sandy pelitic types. Pyrite is prebrecciation ("syngenetic") in part.
64311	<u>Trachyandesite.</u> Frequent albitised/epidote-stained plagioclase, subordinate sanidine-anorthoclase phenocrysts/phenocrystal clusters in a microcrystalline alkali feldspathic to thoroughly chloritised/epidote-stained groundmass.	Tuff lava-like composite of chloritic and feldspathic porphyritic lavas.	Leucoxenised opaques. Disseminated single to loosely clustered oxidised pyrite anhedral.	Relict features consistent with a trachyandesitic agglomeratic lava (flow-)breccia, probable flow-marginal facies. Relatively altered, weakly stressed.

180  
729813

Sample No.	Classification - Composition	Fabric	Accessories	Comments
64312	<u>Tuffaceous Siltstone</u> . Framework of silt- to (minor) fine sand-sized, ultrafinely epidote-stained basic-intermediate lava clasts, subordinate feldspar, minor quartz grains. Saussuritic indeterminate matrix.	Variably graded turbiditic silty clastic banded on sub- to millimetric scale. Incipient high-angle cleavage.	Disseminated fine "syngenetic", genetic" pyrite. Minor discontinuous veinlets of cloudy epidote, albite, quartz.	Turbiditic labile volcanomict siltstone ("tuffaceous greywacke"). Finer detail obscured by "saussuritic" (cloudy, ultrafine) epidote alteration.
64314	<u>Lithic Tuff</u> . Framework of angular to platy, variably chloritised/epidote-stained trachyandesitic-trachytic lava clasts. Sparse epidote-stained chloritic matrix. Patchy corroded relics of actinolite in clasts, matrix.	Poorly sorted, variably moulded lithic fragmental with a weakly crenulated phyllitic overprint.	Minor leucoxenised opaques, minor traces of oxidised pyrite.	Felsic-intermediate ("trachytic") lithic tuff ("lapilli tuff") with partly moulded clasts, suggestive of subaerial deposition. Extensively altered, moderately sheared.
64315	<u>Uralitised Microgabbro</u> . Albitised/weakly epidote-stained plagioclase laths and intergrown to interstitial actinolite-pseudomorphed pyroxene with conspicuous fine magnetite. Minor discontinuous epidote veinlets.	Weakly plagioclase-porphyrritic, medium-grained, subophitic ("doleritic"). Weakly stressed.	Minor chlorite amygdaloids, epidote disseminations, actinolite-replacive chlorite aggregates.	Uralitised-saussuritised, weakly porphyritic/amygdaloidal microgabbro with close affinities to 61300; interrelation similarly dependent on field evidence.
64316	<u>Lithic Tuff</u> . Angular to platy clasts of trachybasaltic to trachytic, variably chloritised lava; subordinate to minor alkali feldspar grains. Chloritic-feldspathic-tuffaceous siltstone/fine sandstone matrix.	Poorly sorted silt- to sand-supported angular clastic. Sheared (phyllitic).	Patchy cloudy microcrystalline epidote stainings, rare clots of prehnite, clastic leucoxenitic opaques.	Affinities with conceivably a weakly subaqueously reworked variant of 64314. Includes minor clots, sheared veinlets of ankeritic carbonate.
64317	<u>Tuffaceous Siltstone</u> . Framework of silt- to (minor) fine sand-sized saussuritic/poorly defined lava clasts, subordinate to minor feldspar grains, minor prehnitised mica flakes. Cloudy saussuritic indeterminate matrix.	Closely analogous to 64312.	Thinly disseminated fine to ultrafine "syngenetic" pyrite. Minor pyritic epidote-chlorite-albite veinlets.	Close affinities with 64312, slightly relatively K-feldspathic in comparison; similarly altered, but essentially unshaped.
64318	<u>Uralitised Microgabbro</u> . Albitised plagioclase laths and actinolite-pseudomorphed intergrown to interstitial pyroxene with sporadic veinlets, minor amygdaloids of epidote, quartz, actinolite.	Analogous to 64315, slightly finer-grained. Mildly stressed.	Fine-grained magnetite (primary).	Close affinities with 61300 and particularly 64315. Weakly glomeroporphyritic with composite clusters of albitised plagioclase, uralitised pyroxene phenocrysts.
64327	<u>Breccia</u> . Vein-type quartz with interspersed clots, vermiform inclusions, millimetric aggregates of chlorite. Interspersed clasts, zones of variably chloritised, locally silicified sericitic slate.	Quartz-veined to brecciated/quartz-healed slate. Restressed.	Thinly disseminated variably oxidised chalcopryrite in vein, replacive chlorite, fine leucoxenitic opaques in clasts.	Close affinities with 64309. Clasts are similarly vaguely tuffaceous; relatively altered (chloritised/locally silicified).
64332	<u>Trachyandesite</u> . Phenocrysts of albitised plagioclase, subordinate sanidine-anorthoclase, minor chloritised pyroxene. Chlorite groundmass with pervasive albite microlaths.	Phyllitic/relict, weakly glomeroporphyritic, "andesitic".	Traces of cloudy microcrystalline epidote. Minor traces oxidised fine to ultrafine pyrite.	Close affinities with 64311 and related trachyandesitic fragmentals. Typically altered (chloritised, weakly epidotised) and mildly sheared.

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Sample No.	Classification - Composition	Fabric	Accessories	Comments
64337	Andesitic ?Tuff Lava. Sericitic, albitised to sericite-pseudomorphed plagioclase phenocrysts, minor chloritised ferromags in an extensively sericitised-chloritised microcrystalline to felsitic-perlitic felsic groundmass.	Phyllitic, with secondary boudinaged-fragmental features. Relict andesitic/vaguely xenolithic, flow-brecciated.	Evenly disseminated leucoxenised opaques. Frequent sheared chlorite films. Disseminations variably oxidised pyrite.	Relatively altered and sheared andesitic ?tuff lava with marked "pseudofragmental" features, reflecting shear-boudinaged perlitic devitrification structures.
64338	"Metaquartzite". Pervasively stressed microcrystalline to medium-grained quartz with interspersed foliae of sericite, semi-pervasive fine to ultrafine variably degraded hematite, ferruginised mica (biotite?) flakes.	Semi-mylonitic. Relict fine to medium sub-angular, shale-parted, sandy clastic.	Traces of relict detrital tourmaline (schorl), rare rounded zircons.	Thoroughly sheared ("mylonitised") quartzose psammopelite. Reflects quartz-hematite alteration of shaly bands, partings (pre-shearing).
64341	Biotite Rhyolite. Disseminated quartz, subordinate sericitised biotite, sericite-calcite stained albite, minor K-feldspar phenocrysts in a pervasively sericitic microcrystalline quartzofeldspathic groundmass.	Phyllitic, relict strongly porphyritic, weakly banded, perlitic-felsitic.	Rare zircons, minor traces of apatite.	Sericite(-calcite-quartz)-altered/sheared porphyritic biotite rhyolite, conceivably a semi-chilled minor intrusive, dependent on field evidence.
64342	Biotite Rhyolite. Frequent relict quartz, subordinate sericitised biotite and sericite (+ quartz, carbonate) semi-pseudomorphed feldspar phenocrysts; sericite/microcrystalline quartz groundmass.	Phyllitic, relict coarsely-evenly porphyritic/vaguely flow-banded.	Minor cleavage-concordant weakly stressed veinlets of quartz, calcite with disseminated dark red sphalerite.	Close affinities with 64341, relatively coarsely porphyritic, sericitised, sheared in comparison. Veinlets are broadly syntectonic; cleavage-controlled.
64344 (T.S. 52675)	Biotite Rhyolite. Disseminated quartz, sericitic albite, subordinate silicified ?K-feldspar, sericitised-chloritised biotite phenocrysts. Extensively sericitised felsitic groundmass. Sporadic clots, impregnations of quartz, calcite.	Finely porphyritic, incipiently banded, felsitic; weakly quartz-calcite amygdaloidal, mildly sheared.	Sparse leucoxenitic semi-opaques. Rare fine-grained pyrite.	Affinities with 64341, 64342, similarly altered, but relatively mildly sheared. Amygdale quartz, calcite possibly mobilised into veinlets (64342).

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APPENDIX 4.

Diamond Drill Hole Logs.

Original Logs	STP 96
	STP 98
	STP 100
	STP 101
	STP 105

Re-logs	STP 98
	STP 101
	STP 105

# Electrolytic Zinc Company of Australasia Limited

WEST COAST DEPARTMENT

Hole No. STP96

035

A 90027

## RECORD OF DIAMOND DRILL CORE

Sheet No. 1

SPECIFICATIONS				SURVEY DATA						OBJECT:	PLOTTED
Mine: <b>STERLING MINE</b>	Length: <b>785'</b>			Footage	Dir'tion	Angle	Footage	Dir'tion	Angle	To test the Sterling Valley Mine line of lode approximately 450' below surface at the mine workings.  RESULT: Hole intersected 10' width of average ore at 600 ft. below surface	40 Plan Xs. X0147d LP. VO11 100 Plan S. LP.
Location: <b>Surface</b>	Size Hole: <b>AX</b>			0	298°	81	600		59½		
N. Coord.: <b>8119N</b>				100	Local	78	700		56½		
E. Coord.: <b>5259E</b>				200	Grid	76					
R.L. <b>725</b>				300		73					
Direction: <b>298° StM Grid</b>				400		67½					
Angle: <b>-81°</b>				500		62½					

1959 PROGRESS				DESCRIPTION				ANALYTICAL DATA								DIPS		
Date	Depth	Advance	Amount of Core	To From	To	ROCK TYPE	From	To	Amount of Core	Pb %	Zn %	Cu %	Ag. oz.	Ag. dwts.	Fe %	Footage	Angle	
May				0	16½	Fine grained sericitic tuff.												
14	10	10	-	16½	24	Tuff with haematite staining.	693	703	1'6"	2.3	2.2	0.07	1.2	<0.1	8.6	12sh	32	
15	22	12	-	24	27	Tuff.	703	708	2'7"	10.9	8.0	0.20	6.0	0.8	14.0	24sh	27	
18	39	17	12	27	35	Tuff with haematite staining	708	712	3'6"	15.3	8.3	0.35	8.3	0.6	13.6	39sh	20	
19	90	51	26	35	44	Sericitic tuff	712	721	5'8"	4.7	3.6	0.35	3.3	0.4	16.0	39½b	15	
20	105	15	1'6"	44	76	Haematite stained tuff										70sh	32	
21	110	5	5'	76	79	Tuff	Average Assays Empirically Reduced for core recovery										88sh	29
26	115	5	1'6"	79	124	Haematite stained tuff										143sh	33	
27	125	10	2'6"	124	126	Tuff well sheared	703	712	6'1"	11.2	6.9	0.23	6.1	0.6	11.7	170sh	25	
28	155	30	18'	126	170	Altered and haematized tuff	703	721	11'9"	7.5	4.9	0.26	4.4	0.5	12.4	203sh	30	
29	173	18	6'6"			coarser grained with feldspar phenocrysts and resembles massive pyroclastics more than tuff.										211sh	27½	
June																236c	16½	
1	184	11	3'6"													236b	9	
2	211	27	7'3"													245b	26	
3	241	30	17'6"	170	174	Medium grained tuff.										294c	22	
4	271	30	22'10"	174	175	Haematized zone										294b	16	
5	281	10	-	175	177	Medium grained tuff.										322c	23	
9	321	40	28'	177	209	Haematized medium grained tuff.										322b	21	
10	361	40	30'													362½	18	
11	384	23	14'3"	209	231	Fine to medium grained weakly sheared sericitic tuff with haematite staining in blebs and along veinlets.										b=c		
12	414	30	9'													391	19	
17	434	20	10'													b=c		
18	447	13	6'													413sh	17	
19	455	8	2'													444sh	21	
25	466	11	8'													452	22	
26	471	5	3'	231	246	Grey fine to medium grained tuff, weakly sheared and with patches of decomposed tuff.										b=c		
29	476	5	2'													449	19	
30	484	8	7'													b=c		
July				246	271	Grey medium grained tuff with chloritic streaks and blebs.										500	21	
1	495	11	4'													b=c		
2	505	10	4'													525	20	
3	510	5	-	271	353	Greenish grey slightly chloritic tuff.										b=c		
7	525	15	4'													536		
8	530	5	2'	353	362	Medium grained tuff with												

Form No. WCD 8

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PROGRESS				DESCRIPTION			DIPS		DESCRIPTION				DIPS	
Date	Depth	Advance	Amount of Core	From	To	ROCK TYPE	Footage	Angle	From	To	ROCK TYPE	Footage	Angle	
July						carbonate blebs.			767	785	Some slate fragments in beginning but predominantly shattered massive pyroclastics	536 b=c	15	
9	537	7	3'	362	403	Grey fine grained slightly chloritic tuff becoming more sheared and sericitic.					Hole branched 777'	545c	26	
10	541	4	2'								Broken massive pyroclastics.	551 b=c	22	
14	546	5	2'	403	449	Grey green somewhat chloritic fine grained tuff well sheared			777	784	This massive pyroclastic slate banding is definitely faulted.	563 sh	20½	
15	553	7	2'											
16	558	5	1'	449	498	Sericitic medium grained tuff fairly well sheared.								
20	561	3	0'3"											
21	566	5		498	503	Interbedded tuff and slates								
23	568	2		503	548	Black slate								
31	570	2				537-548 highly sheared			0	126	<u>MINERALISATION</u> Unaltered rock shows traces disseminated fine grained pyrite 89-105 Zone of quartz veins up to 3" wide (poor core recovery)	723b 727b 737b	24 45 43	
Aug 4	572	2	2'	548	566	Black slate								
5	574	2	2"			563-566 Badly broken								
6	581	7	4"			553-558 No core recovered								
11	584	3		558	573	Grey slaty tuff well bedded and strongly parted on bedding planes.			209	231	Disseminated fine grained pyrite in unaltered tuff.			
12	591	7	6"								at 232½ leached quartz carbonate vein with traces semi massive fine grained pyrite.			
13	598	7									at 246, 270, 271½ quartz carbonate veinlets.			
14	601	3	6"	573	645	Black slate highly cleaved and shattered.					at 273 quartz carbonate veinlets with traces disseminated fine grained pyrite and sphalerite.			
18	604	3									Quartz carbonate and chlorite gangue with broken tuff throughout - no visible sulphides.			
19	611	7	3"	645	668	Contorted black slate not so badly broken.					Quartz carbonate and chlorite gangue with broken tuff throughout - no visible sulphides.			
20	614	3	3'								Quartz carbonate gangue.			
28	620	6		668	703	Fairly broken black slate - more chunky and not so highly cleaved.					Quartz vein at 535 traces disseminated medium grained sphalerite, pyrite and galena			
31	622	2	3"								9" core fault zone.			
Sept. 1	630	8	2"	703	712	Isolated fragments of slate in mineralised zone.					at 537 2" quartz and coarse grained pyrite and chalcopryrite in faulted slates, remaining 7" black slate with			
2	634	4	6"											
3	639	5	3'	712	721	Slates more or less replaced by mineralisation.			273½	277				
4	642	3												
14	644	2	2	721	738	Broken and contorted black slates.								
15	649	5	4											
16	652	3	3	738	746	No core recovered			281	283				
17	657	5	3	746	750	Broken and contorted black slate becoming decomposed as hole approached 750'								
18	662	5	2'6"											
21	665	3	1						375	376				
22	673	8	2	750	755	No core - presumably a large fault zone.			443	443½				
23	683	10	3											
24	693	10	4	755	766½	Broken and decomposed massive Pyroclastics some slaty fragments included.								
25	699	6												
30	701	2	1'6"						537	541				
Oct 1	705	4	3"	766½	778	Broken tuff massive pyroclastics. Hole branched 767'								
2	708	3	2½'											
13	711	3												

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PROGRESS				DESCRIPTION		DIPS		DESCRIPTION		DIPS		
Date	Depth	Advance	Amount of Core	From	To	MINERALISATION	Footage	Angle	From	To	Footage	Angle
Oct.												
14	713	2				seams and blebs of quartz with fine and coarse grained pyrite.						
15	716	3	3									
16	721	5										
20	723	2	3	693	703	at 562 Quartz vein 1/2" Disseminated to semi massive fine medium grained pyrite throughout - veinlets and blebs of quartz gangue with coarse grained galena and sphalerite traces only.						
21	724	1	1									
22	727	3	1'6"									
27	731	4	2'6"									
28	733	2	2'									
29	736	3	1									
30	738	2	1	703	708	Quartz carbonate gangue with semi massive fine to coarse grained low grade ore.						
Nov.												
4	743	5	Nil	708	712	Quartz carbonate gangue with semi massive coarse grained galena - average high grade ore.						
1960												
March												
15	746	3	Nil									
16	750	4	3'0"									
17	755	5	Nil	712	721	Shattered slates and quartz carbonate gangue with semi massive pyrite and traces of galena and sphalerite						
18	760	5	2									
18	765	5				average minor mineralisation						
May												
12	768	3	-	755	778	Quartz veins						
24	773	5	0	767	772	Quartz veins						
25	778	5	1	782	784	Quartz carbonate.						
31	779	9	1									
June												
1	785	6	4									
Hole	branched at 777'											
2	784	7	2'6"									

LOGGED BY ISG:JG  
 Dist: Mine 1.  
 Geol 1. ✓  
 File 1.  
 Dept. of Mines 1.

038

# Electrolytic Zinc Company of Australasia Limited

WEST COAST DEPARTMENT

Hole No. STP98

1

A 90027

## RECORD OF DIAMOND DRILL CORE

Sheet No. \_\_\_\_\_

SPECIFICATIONS				SURVEY DATA						OBJECT:						PLOTTED		
Mine: Sterling Valley		Length: 878		Footage	Dir'tion	Angle	Footage	Dir'tion	Angle	To test the Sterling Mine mineralisation approximately 450' below surface and 300' south of the STP96 intersection.  RESULT: Sterling Mine mineralised zone was intersected from 663-691 as infilling of a shatter zone with quartz carbonate gangue with splashes of pyrite and minor galena and sphalerite.						40 Plan X.S. X0154 L.P. VO11  100 Plan S. L.P.		
Location: Sterling Mine		Size Hole: Bx		0		-57	600		30*									
N. Coord.: 8098N				100		-56½	700		36*									
E. Coord.: 4503E				200		-56½	800		33*									
R.L. 611'				300		-51½	* Extrapolated											
Direction: 118° S.T.M. Grid				400		-45½												
Angle: -57°				500		-42												
PROGRESS				DESCRIPTION						ANALYTICAL DATA						DIPS		
Date 1950	Depth	Advance	Amount of Core	To From	From To	ROCK TYPE	From	To	Amount of Core	Pb %	Zn %	Cu %	Ag. oz.	Ag. dwts.	Fe %	Footage	Angle	
July 18	3	3	-	0	31	Glacial wash.	46	56	Sludge	0.3	0.4	0.10	0.15	Nil	7.6			
19	8	5	1"	31	41	Decomposed black slates.	56	66	"	0.4	0.4	0.07	0.1	Nil	8.0			
20	13	5	10"	41	200	Fairly well sheared black slate.	56	76	"	0.3	0.3	0.05	0.1	Nil	5.9			
21	23	10	1"	200	210	Well sheared tuff MP with chloritic seams.	76	86	"	0.3	0.4	0.07	Tr.	Nil	6.9			
27	31	8	1"	210	248	Tuffy MP becoming more massive and less well sheared and tuffy but still with chloritic seams.	86	96	"	0.3	0.5	0.07	0.1	0.1	6.7			
Aug. 3	41	10	4"	210	248	Tuffy MP becoming more massive and less well sheared and tuffy but still with chloritic seams.	645	656	"	0.2	0.1	0.05	Tr.	Nil	6.0			
4	51	10	2"				656	666	"	0.15	0.1	0.10	Tr.	Nil	5.6			
15	56	5	-				666	676	"	0.10	0.1	0.10	0.08	Nil	6.5			
16	66	10	1'6"	248	288	Fairly coarse tuff with some thin slate bands.	676	686	"	0.15	0.1	0.10	0.13	Nil	8.9			
17	96	30	0'7"	288	341	Dark grey slaty tuff.	686	691	"	0.10	0.1	0.10	0.10	Nil	8.6			
25	106	10	-	341	486	Coarse grey tuff with thin black slate bands.	691	695	"	0.15	0.1	0.1	0.07	Nil	8.8			
31	116	10	-	486	569	Dark grey tuff with thin interbeds of black slate.	695	705	"	0.15	0.7	0.12	0.38	Nil	9.3			
Sept. 7	136	20	4	569	705	Black slate becoming highly contorted from 660' onward.	785	795	"	0.20	0.7	0.07	0.03	Nil	2.8			
9	156	20	-	705	815	Black slate - well sheared.	795	805	"	0.15	0.1	0.07	0.08	Nil	2.3			
Oct. 12	171	15	-	815	878	Tuffaceous MP.												
13	201	30	-															
14	211	10	-															
15	231	20	20															
1951 Jan 17	285	8	8															
18	295	10	3															
19	301	6	5	191	200	Broken core with limenitic slates.												
20	321	20	10.6	at	227	Quartz 3" with traces disseminated coarse grained galena.												
Feb. 5	361	20	-	at	235	Quartz 6"												
6	391	30	-	at	262	Quartz 2"												
7	431	40	-	at	272	Quartz 2"												
8	441	10	-															
10	461	20	10															
							<u>CORE ASSAYS</u>											
							<u>AVERAGE</u>											
							663	666	1'6"	3.0	9.4	1.03	21.0	2.0	37.2			
							666	676	2'9"	0.1	0.5	0.18	0.2	Nil	20.8			
							676	682	2'4"	0.15	2.0	0.18	0.6	Nil	18.1			
							682	686	2'	0.25	1.8	0.13	0.6	Nil	11.5			
							686	691	2'	0.10	1.6	0.10	0.7	Nil	10.0			
							663	666	4'3"	2.3	7.2	0.79	16.2	1.5	28.6			

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PROGRESS				DESCRIPTION			DIPS		DESCRIPTION				DIPS	
Date	Depth	Advance	Amount of Core	From	To	MINERALISATION.	Footage	Angle	From	To	MINERALISATION	Footage	Angle	
Mar.									790	795				
1	466	5	2'6"	295	302	Zone of quartz carbonate blebs and veinlets.					Quartz carbonate and pyrite blebs with traces of disseminated coarse grained galena and sphalerite.			
2	486	20	11'6"	at	398	Quartz carbonate and chloritic veins with traces of disseminated fine grained pyrite.								
3	496	10	5											
8	516	20	14											
9	528	12	6	463	466	Zone of quartz carbonate veinlets up to 1/2" wide.								
10	536	8	8											
13	546	10	-	at	557 1/2	Quartz carbonate vein 1".								
14	566	20	20	569	664	Thin carbonate veinlets in slates with isolated traces of pyrite.								
15	586	20	4											
16	606	20	5											
22	616	10	2'4"	664	664 1/2	Veinlets and splashes of disseminated to semi massive medium grained pyrite.								
24	626	10	2'											
April														
5	679	13	5	666	676	Veinlets and splashes of semi massive medium grained pyrite and 2% iron.								
6	691	12	6											
12	705	14	8											
13	715	10	2	676	682	As above but with traces of galena. Sphalerite 681-682.								
17	719	4	-											
18	735	16	-	682	686	Pyrite as above but with occasional flecks of galena and sphalerite.								
19	755	20	1											
20	775	20	2											
21	785	10	-	686	691	Flecks and veinlets of pyrite and quartz carbonate gangue in semi massive fine grained.								
May														
2	795	10	1'6"											
3	805	10	1'	691	695	Blebs of pyrite in quartz carbonate veinlets - traces of galena and sphalerite.								
4	815	10	1'5"											
8	821	6	-											
9	841	20	2'	695	696	Disseminated to semi massive coarse grained pyrite, sphalerite and galena probably minor mineralisation.								
10	861	20	7'6"											
11	878	17	5'											
				696	705	Veinlets of semi massive pyrite and chalcopyrite with traces of galena and sphalerite semi massive coarse grained.								
				705	790	Quartz carbonate veinlets through-out with disseminated medium grained pyrite - would probably average 1% pyrite.								

LOGGED BY ISG:JMc

Dist: Geol. 1. ✓  
 Mine 1.  
 File 1.  
 Dir. of Mines 1.

040

Electrolytic Zinc Company of Australasia Limited  
WEST COAST DEPARTMENT

Hole No. STP100

A 90027

RECORD OF DIAMOND DRILL CORE

Sheet No. 1

SPECIFICATIONS				SURVEY DATA			OBJECT: To test the Sterling Valley mine mineralisation approximately 400' north of STP96 intersected at 450' below surface on the IP and Em anomalies.	PLOTTED 40 Plan XSV015 LPV011 100 Plan S. L.P.
Mine: Sterling Valley.	Length: 716'	Footage	Dir'tion	Angle	Footage	Dir'tion		
Location: Sterling Mine	Size Hole: Bx.	0	119°0'	57°	600		29½°	
N. Coord.: 8877N		100		55½°	700		28°	
E. Coord.: 4783E		200		52½°				
R.L. 582'		300		48½°				
Direction: 119°0'		400		40½°				
Angle: -57°		500		34½°				

1961 PROGRESS				DESCRIPTION			ANALYTICAL DATA										DIPS	
Date	Depth	Advance	Amount of Core	From	To	Rock Type.	From	To	Amount of Core	Pb %	Zn %	Cu %	Ag. oz.	Au dwts.	Fe %	PecO <sub>3</sub>	Footage	Angle
June 28	38	34	3	0	98	Glacial wash - boulders of Owen & Jukesf.	237	244½	7'3"	1.9	0.2	0.12	1.1	20.1	15.0		124c	27°
30	40	2	-	98	110	Tuff MP - some fine grained black patches.	528	545	3'6½"	0.1	0.2	0.05	1.0	0.2	9.5	4.6	132c	31°
July 31	69	8	-	100	212	Dark grey tuff slate.											140	40°
Aug. 1	84	15	-	212	252	Black slate crumpled and fractured particularly in zone 230 - 252.											b = c	60°
8	114	20	1'6"	252	342	Well cherted black slate cleavage = bedding.											162	33°
9	124	10	6"	342	348	Coarse grained tuff.											200b	18°
10	132	8	4	348	354	Black slate.											229b	38°
11	137	5	3	354	355	Coarse grained tuff.											252b	42°
14	142	5	3'6"	355	373	Black slate.											294b	46°
30	172	30	5	373	450	Grey slates, tuff tending towards MP.											318b	40°
31	235	63	25	450	528	Slightly sheared fractured coarse tuff MP.											339b	48°
Sept. 1	249	14	12'8"	528	545	Broken and contorted black slates.											358b	48°
4	264	15	8	545	560	Broken and contorted black slates, faulted boundary.											393b	52°
5	284	20	4	560	650	Medium grained relatively unshered tuff.											402b	52°
6	304	20	4	650	716	Massive pyroclastics.											441b	60°
7	314	10	2'8"	716													495b	75°
8	324	10	3'6"														527b	62°
11	334	10	3'														560sb	58°
12	364	30	17'														650sb	48°
13	384	20	7'6"														680sb	70°
14	434	50	26'6"														706sb	65°
18	455	21	-														715sb	
19	485	30	-	212	237	Mineralisation. Traces of disseminated fine grained pyrite or bedding planes @ 233 quartz 2".												

218041

A 85493

PROGRESS				DESCRIPTION		DIPS		DESCRIPTION		DIPS	
Date	Depth	Advance	Amount of Core	From	To	Footage	Angle	From	To	Footage	Angle
<b>Mineralisation.</b>											
Sept				237	244½						
20	505	20	13								
21	515	10	-								
26	528	13	-								
27	540	12	3								
28	545	5	8	251	252						
Oct.											
2	552	7	6								
4	571	19	3'6"	264	280						
5	590	19	8'								
6	600	10	3								
11	610	10	2	292	293						
12	620	10	1'6"								
16	640	20	6								
17	656	16	45	528	545						
24	660	4	2'6"								
25	690	30	19								
26	706	16	9								
27	716	10	7								
Logged by: IG/DY.				At	559						
DIST:	Mine.		1	695	701						
	Geology.		1								
	File.		1								
	Dept. of Mines.		1								

042

# Electrolytic Zinc Company of Australasia Limited

WEST COAST DEPARTMENT

Hole No. StP101

A 90027

## RECORD OF DIAMOND DRILL CORE

Sheet No. 1

SPECIFICATIONS				SURVEY DATA						OBJECT: To test the Rio Geophysical Anomalies at their maximum development on the Sterling Valley grid on line 32S at approx 500' below surface.				PLOTTED				
Mine: Sterling Valley	Length: 870'	Location: Surface	Size Hole: BX-AX	Footage	Dir'tion	Angle	Footage	Dir'tion	Angle	RESULT: Hole explained wide anomalies by intersecting three pyritic zones in slates 300' below surface no economic mineralisation was encountered.				400 Plan ✓	S.			
N. Coord.: 7867S	0-644 BX	E. Coord.: 15630E	644-870 AX	0'	301°	-47°	500		-13°					100'				L.P.
R.L. 708				200		-44°	600		-9°					300				100 Plan
Direction: 301°	Rosebery Grid			400		-32°	700		-6°									X s.yo254
Angle: -47°						-25°												L.P.

1961 PROGRESS				DESCRIPTION				ANALYTICAL DATA										DIPS	
Date	Depth	Advance	Amount of Core	To	From	ROCK TYPE	From	To	Amount of Core	Pb %	Zn %	Cu %	Ag. oz.	64 Ag dwts.	Fe %	Py%	Footage	Angle	
<u>Dec</u>																			
19	7	7	2'6"	0	15	Weathered MP.	344'	351	1'3"	1.0	2.8	0.25	0.4	<0.1	17.0	5.1	150Sh	35°	
20	13	6	4	15	153	Fairly coarse tuffy MP.	351	371	5'4"	0.3	0.6	0.10	0.25	<0.1	11.0	9.8	161Sh	39°	
21	33	20	19	153	163	Sheared coarse grained tuffy MP.	437	444	2'1"	0.2	0.4	0.67	0.15	<0.1	6.0	5.1	171Sh	45°	
22	50½	17½	17	163	170	Finer grained less sheared MP - texture about that of a coarse tuff.	444	447	1'3"	0.1	0.2	0.22	2.50	0.4	26.5	35.4	188Sh	52°	
29	70	20	19			MP - texture about that of a coarse tuff.	447	456	3'1"	0.1	0.1	0.02	0.25	<0.1	6.9	5.1	201Sh	47°	
<u>1962</u>																			
<u>Jan.</u>																			
3	90	20	20	170	186	Grey somewhat sheared tuffaceous MP.	456	463	3'6"	0.1	0.1	0.01	0.25	<0.1	7.6	2.9	245Sh	48°	
4	130	40	39	186	216	Coarser grained more sheared chloritic MP.	638	644	2'6"	0.15	0.1	0.10	0.05	Nil	13.3	16.8	292Sh	43°	
5	150	20	20			chloritic MP.	644	654	2'9"	0.1	0.1	0.17	0.40	Nil	11.8	20.2	292Sh	43°	
15	156	6	6	216	230	Grey siliceous MP.	654	664	4'7"	0.1	0.1	0.10	0.20	Nil	10.4	13.7	310Sh	42°	
17	198	42	42	230	301½	Coarse grained tuffy MP. - slightly sheared - with chloritic seams and carbonate blebs.	664	674	4'4"	0.1	0.2	0.20	0.15	Nil	12.1	13.9	331Sh	55°	
18	216	18	12			slightly sheared - with chloritic seams and carbonate blebs.	674	684	2'6"	0.1	0.1	0.07	0.15	Nil	7.8	10.1	381Sh	67°	
22	221	5	2			slightly sheared - with chloritic seams and carbonate blebs.	684	694	2'0"	0.1	0.1	0.20	0.20	Nil	9.0	14.6	401Sh	68°	
23	248	27	22	301½	321	Slaty tuff - somewhat chloritic.	694	705	0'9"	0.15	0.1	0.55	0.40	Nil	8.0	12.4	418Sh	63°	
24	278	30	29			AVERAGES.													
25	288	10	10	321	386	Broken and contorted black slates with interbedded tuffs.	344	371	6'7"	0.48	0.17	0.15	0.29	<0.1	12.56	8.5	568b	50°	
29	303	15	15	321	386	Broken and contorted black slates with interbedded tuffs.	437	463	9'11"	0.13	0.19	0.23	0.48	0.13	9.88	8.0	625	50°	
30	311	8	8	386	421	Sheared coarse tuffs with thin black slates interbeds.	638	705	19'5"	0.10	0.10	0.21	0.23	Nil	10.1	14.2	669	47°	
<u>Feb.</u>																			
15	341	30	9	421	478	Broken and contorted black slaty tuffs.													
16	351	10	2			Broken and contorted black slaty tuffs.													
19	361	10	3	478	560	Fine to medium grained tuffs - fairly well sheared.													
20	381	20	5			Fine to medium grained tuffs - fairly well sheared.													
21	411	30	19	560	580	Black slates.													
22	436	25	9	580	638	Medium grained tuffs - fairly well sheared and becoming contorted from 625 onward.													
23	446	10	-			Medium grained tuffs - fairly well sheared and becoming contorted from 625 onward.													
27	468	22	8			Broken and contorted black slates.													
28	498	30	18	638	705	Broken and contorted black slates.													
<u>Mar. 1</u>	518	20	9			638-644 Broken slates													
						664-689 Contorted "													
						689-705 Broken "													

Geol. 1.

218043

043

A 8089

1962 PROGRESS				DESCRIPTION			DIPS		DESCRIPTION			DIPS	
Date	Depth	Advance	Amount of Core	From	To	ROCK TYPE	Footage	Angle	From	To	MINERALISATION	Footage	Angle
Mar. 2	531	13	4	705	715	3" core only - Grey medium grained tuff with slatey streaks.			437	440	Veinlets of massive pyrite with traces of pyrrhotite & chalcopyrite.		
7	537	6	3	715	755	Interbedded grey tuff & black slates.			440	442	Quartz carbonate veinlets with traces pyrite chalcopyrite & chlorite.		
8	560	23	5										
12	570	10	3	755	765	Medium grained tuff with slatey beds.			442	444	Traces semi massive fine grained pyrite in gangue veinlets and slates.		
13	590	20	4										
14	620	30	7	765	819	Coarse grained tuff.			444	447	Carbonate gangue with semi-massive to massive fine grained pyrite.		
15	638	18	5	819	841	Medium grained tuff.							
19	644	6	3	841	879	Fine grained tuff with interbedded slates.			447	453	Visible fine grained pyrite in thin seams and films on slates		
23	664	20	-	30	156	<b>MINERALISATION</b>							
28	684	20	11			Occasional quartz carbonate veins up to 1/2" thick.			453	479	Traces pyrite in thin seams & films.		
29	690	6	2	at 171	174	Qtz carbonate vein 1"							
April 2	694	4	2"	at 174	175	" " " " " 1" with traces galena and pyrite.			479	531	Zone of thin veinlets of carbonate gangue with occasional specks & blebs of fine grained pyrite & traces of chalcopyrite.		
3	715	21	6"										
4	725	10	2'6"	at 176 1/2	179	1" Quartz Carbonate vein.							
5	745	20	9	at 179		1/2" veinlet of pyrite with chalcopyrite and traces galena.			531	539	Veinlets of quartz - siderite chlorite gangue with traces of Pyrite.		
6	755	10	7	at 179 1/2	200 1/2	1" Quartz carbonate vein							
10	785	30	14	at 200 1/2	219	1" " " "			539	587	Isolated veinlets and splashes of fine grained pyrite in semi massive form pyrite less than 1/2% of total core.		
11	795	10	12	at 219	227	Isolated quartz veins up to 1/2" wide.							
12	805	10	13										
13	815	10	-										
17	819	4	6	at 243	243 1/2	Quartz vein 1".			638	705	Splashes & blebs of pyrite & pyrrhotite with traces of chalcopyrite in broken slates - veinlets in contorted slates with quartz chlorite and siderite gangue.		
May 9	839	20	10	at 243 1/2	246	Quartz veinlet and traces of chalcopyrite.							
10	860	21	14	at 246	305	Quartz vein 1".							
11	870	10	10	at 305	316	1/2" seam - semi massive fine grained galena, sphalerite & pyrite in quartz.							
				at 316	344	1/4 veinlet of siderite, pyrite chalcopyrite and pyrrhotite.			at 705	715	Quartz siderite - chlorite veinlets with traces of fine grained pyrite.		
				344	351	Zone of veinlets & blebs of fine grained massive to semi massive pyrite with traces of galena and sphalerite.			at 715	731	Zone of quartz chlorite veinlets with blebs & seams of massive fine grained pyrite.		
				351	371	Country rock is broken, contorted and in filled with quartz, chlorite and siderite gangue in 1/2" to 3" veins, carrying semi massive pyrite & pyrrhotite with traces of chalcopyrite. Sphalerite & galena are notably absent.			731	735	Traces only of fine grained pyrite in thin quartz-siderite-chlorite veinlets		
									735	755	Thin quartz veinlets only.		
									755	765			

218044

044

Hoie No. StP101

Sheet No. 3

A 8089

PROGRESS				DESCRIPTION			DIPS		DESCRIPTION			DIPS	
Date	Depth	Advance	Amount of Core	From	To		Footage	Angle	From	To	MINERALISATION	Footage	Angle
									765	860	Carbonate blebs throughout isolated quartz & carbonate veinlets up to 1/4" thick at 838 2" zone of thin seams of massive fine grained sphalerite in siderite gangue.		

Form No. W.C.D. 111

218045

Electrolytic Zinc Company of Australasia Limited

WEST COAST DEPARTMENT

Hole No. SEP 105

A 90027

RECORD OF DIAMOND DRILL CORE

Sheet No. 1

SPECIFICATIONS		SURVEY DATA			OBJECT: Hole to test the IP, EM, SP, and gravity anomalies in this area.		PLOTTED	
Mine: Sterling Valley Length: 1062		Footage	Direction	Angle	Footage	Direction	Angle	40 Plan
Location: Line 20S Rio Grid Size Hole: BX		0'	300°R	-53°	500'			S.
N. Coord.: 6926 S ) Rby. Grid.		100'	287.5°	-53°	600'			LP.
E. Coord.: 17560 E ) S, 373,164N		200'	414°	-49°	700'			100 Plan
R.L. 700' S, 373,164N		300'		-41.5°	800'			S. ✓
Direction: 300° Rby Grid - 289.5° A119.		400'		-35.0°	900'			K0254.1P.
Angle: -53°					1000'			

1962 PROGRESS				DESCRIPTION		ANALYTICAL DATA										DIPS		
Date	Depth	Advance	Amount of Core	XDG From	XDGM To	ROCK TYPE	From	To	Amount of Core	Pb %	Zn %	Cu %	Ag. oz.	Avg dwts.	Fe %	Total Sulphides	Footage	Angle
Jul. 26	38	38	16	0	26'4"	White and grey sheared	327'3"	337'0"	95%	0.2	0.2	0.05	0.02	NIL	5.8	7.2	150c1	7°
27	53	15	13			Massive pyroclastics	337	342	95%	0.1	0.2	0.05	0.10	NIL	8.7	12.9	30b	20
30	63	10	4			with grit sized	342	350	94%	0.1	0.2	0.03	0.06	NIL	5.2	3.6	45ba	17
31	87	24	24			Phenocrysts of quartz and	350	358	93%	0.1	0.2	0.05	0.26	NIL	5.7	7.5	50ba	17
Aug. 1	108	21	20			plagioclase in finer											62ba	10
2	118	10	8			matrix, chlorite is	568	588	18'5"	-0.1	-0.1	0.10	0.4	-0.1	8.4	4.7	76b	8
3	122	4	-			streaked out along	763	763'6"	5"	-0.1	-0.1	0.10	0.3	1.4	23.7	1.4	87ba	15
6	132	10	10			cleavage surfaces.	789'	794'6"	4'10"	-0.1	-0.1	0.10	0.3	-0.1	9.5	6.1	1076ba	25
7	156	24	15	26'4"	33	Light grey siliceous	855	862	3'	-0.1	0.1	0.02	0.2	NIL	3.2	2.5	150Sh	27
16	171	15	15			massive pyroclastics with	862	863'6"	1'5"	0.1	1.1	0.20	1.35	-0.1	25.2	18.2	163Sh	26
17	181	10	8			dark grey band and	863'6"	867	3'	0.1	0.2	0.02	0.1	NIL	2.4	3.6	175Sh	20
						some agglomeritic material.											or ba	
21	201	20	-			There is a tendency towards	867	870	3'	0.1	0.1	0.07	0.2	NIL	6.2	4.6	202ba	25
22	203	2	-			segregation of chloritic	870	875'6"	5'6"	0.1	-0.1	0.05	NIL	NIL	6.0	3.1	225ba	28
24	221	18	9			zones, feldspar phenocrysts	812'6"	814	1'6"	0.20	0.1	0.07	0.2	NIL	6.0	3.1	250b	30
27	227	6	6			predominate.											or flow	
28	231	4	-														bedding	
29	241	10	10	33	38	Siliceous medium grey											225ba	28
30	248	7	5			mottled massive											2 50b	30
Sep. 5	256	8	10			pyroclastic with quartz chlor-											or flow	
6	266	10	10			ite streaking along cleavage,											bedding	
Oct 3	286	20	20			quartz phenocrysts predominate,											270ba	27
4	296	10	10			agglomeritic around 37'											290fba	30
8	306	10	9	38'	42'	Siliceous light grey massive											310b	22
9	326	20	19			pyroclastics with some											325b	37
10	358	32	30			quartz chlorite streaks.											341ba	33
15	368	10	10	42'	53'	Banded tuff and light grey											349b	45
16	398	30	30			massive pyroclastics. High											358ba	33
17	428	30	30			proportion sand size grains											388Sh	
25	434	6	1			in matrix. Banding reflects												
26	438	4	1			minor chlorite content.												

Form No

# Electrolytic Zinc Company of Australasia Limited

Hole No. STP 105

Sheet No. 1

046

Hole No. STP 105

Sheet No. 2

A 16011

1  
22  
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Sep. 5  
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Oct 3  
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1962				PROGRESS		DESCRIPTION		DIPS		DESCRIPTION		DIPS	
Date	Depth	Advance	Amount of Core	From	To	ROCK TYPE	Footage	Angle	From	To		Footage	Angle
29	446	8	2	53'	63'	White and grey sheared pyroclastics with more carbonate than chlorite in general, and some darker bands, poor core recovery.	9C.	38°	231	256	Very sheared massive pyroclastics comprising interbedded flows and agglomerates at 231' - 232', there is strong banding due to segregation of chlorite and carbonate content parallel to shearing. In general there is a fair amount of replacement by quartz and carbonate. The shearing is less intense between 241' and 256'.		
30	458	12	-				460C	31					
31	478	20	12				469Sh	36					
Nov. 1	498	20	16				493C	58					
6	508	10	7				538C	55					
7	518	10	7	63'	80'	Siliceous light grey to pink massive pyroclastics with quite fine matrix. Contains dark bands up to 1" where matrix replaced by glass (or densely packed shards). In places appears to possess flow banding. Very small fault zones at 66'.	573C	48					
8	528	10	5				610C.	43					
9	538	10	-				640C	61					
12	548	10	20				658C	70					
13	553	5	-				701C	59					
14	568	15	17				745Sh	56					
15	588	20	18						256	266	Green and yellow tuffaceous and agglomeritic massive pyroclastics with high degree of carbonate chlorite replacement. Moderate shearing is somewhat healed.		
16	598	10	9										
19	608	10	2										
20	628	20	16	80'	201'	Massive pyroclastics comprising interbedded flows, agglomerates and crystal vitric tuffs. The tuffs are very dark grey with feldspar phenocrysts, shearing is moderate to strong.			266	308	Grey, mottled grey and (buff) massive pyroclastics comprising flows, coarse crystal tuffs and some agglomerates. From 290' - 308' there is a considerable quantity of injected quartz carbonate material accompanied by irregular blebs of pyrite and galena and minor sphalerite and chalcopyrite (sulphides -1%).		
21	648	20	-										
26	654	6	15										
Dec. 7	664	10	4										
11	682	18	13										
12	692	10	9										
13	700	8	5	201	209	Light grey and yellow grey massive pyroclastics, banded in parts. This is a moderately sheared quartz feldspar porphyry volcanic, with blebs. and streaks of carbonate (siderite).							
18	710	10	10										
19	722	12	12										
20	742	20	20										
21	752	10	-										
24	757	5	5										
26	762	5	5										
27	772	10	10	209	221	Light grey tuffaceous massive pyroclastics, parts strongly sheared. Minor streaking of chlorite on shears, together with streaks and small blebs of carbonate. Texture is often quite coarse.			308	327	Massive pyroclastics comprising green and dark grey feldspathic crystal lithic tuffs. These are predominately coarse grained but there is a finer grained banded phase at 325'. Subordinate agglomerate members occur. There is some		
28	782	10	10										
1963													
Jan. 3	792	10	10										
9	822	20	10										
10	832	10	10										
11	842	10	10										
14	852	10	10	221	231	Interbedded flow and tuff type. Massive pyroclastics with carbonate occurring as replacement as well as blebs.							
15	862	10	5										
16	872	10	10										
17	882	10	10										

218047



17/10/1957  
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PROGRESS				DESCRIPTION			DIPS		DESCRIPTION				DIPS	
Date	Depth	Advance	Amount of Core	From	To	ROCK TYPE	Footage	Angle	From	To	ROCK TYPE MINERALISATION	Footage	Angle	
				880	978	Interbedded black slates and tuffs.			221	231	Minor occurrence of carbonate as blebs and as replacement.			
				893	895	Crumpled zone of tuffy rock with some slate fragments. Rocks gently folded from 912 onwards.			231	256	Replacement by quartz carbonate together with minor chlorite carbonate.			
				978	980	Medium grained sericitic tuff.			256	266	Fair amount of chlorite carbonate replacement.			
				980	985	Interbedded fine grained grey and black slate from 947-978 core in highly sheared and crumpled recovery good.			290	308	Injections of quartz carbonate with minor amount of sulphides Sulphides -1%.			
				985	1040	Medium grained sericitic tuff slightly siliceous black slate band 1024 - 1024'6".			308	327	Chlorite and pyrite chalcopyrite smeared on cleavage and blebs and injections of quartz carbonate and chlorite +1% sulphides.			
				1040	1062	Fine grained banded black slate.			327	358	Replacement by pyrite and chalcopryite, galena and sphalerite with small 1" richer patches occasionally. Estimated sulphide 5%.			
						<u>MINERALISATION</u>								
				0	26'4"	Streaks of chlorite								
				26'4"	33	Some chlorite rich zones.			380	398	Disseminated fine to medium grained pyrite approximately 2% of core.			
				33	38	Streaks of quartz chlorite smeared on cleavage.								
				38	42	Smears of quartz chlorite.			466½	467½	Quartz chlorite gangue traces of pyrite fine grained and disseminated.			
				42	53	Minor chlorite.								
				53	63	Carbonate and chlorite in minor content.			509	509½	Quartz siderite veins.			
				63	66	Chlorite and carbonate in small fault zones.			528	598	Specks and blebs of disseminated medium grained pyrite on bedding planes at 529½, 537, 540, 543, 544, 570½.			
				66	127	Thin veins and blebs of galena and sphalerite up to ½".								
				127	129	Veins and off-shoots of chalcopyrite and sphalerite up to ½" over 1" zone.								
				201	209	Sporadic blebs and streaks of siderite.								
				209	221	Minor streaks and blebs of carbonate.								

cc	Amount of Core	DESCRIPTION			DIPS		DESCRIPTION			DIPS	
		From	To		Footage	Angle	From	To		Footage	Angle
		696½	697	½" Quartz veinlets with semi massive fine grained pyrite.			900	903	Narrow veinlets of pyrite and chalcopyrite 15% sulphides.		
		697	700	Occasional narrow veinlets of siderite and pyrite at 763½. 6" seam of mixed siderite and pyrite.			903	913½	Finely disseminated pyrite in blebs and veinlets with some carbonate veinlets from 880 - 906 content of pyrite is greater in the black slate bands.		
		789	794½	Pyrite becomes now abundant 6% of core.			913½	922	Narrow veinlets of pyrite 5% sulphides.		
		812½	814	Disseminated pyrite and siderite veinlets.			922	937½	Quartz veins up to 1' with some veinlets of pyrite.		
		814	830	1" seam of carbonate gangue, sphalerite, galena and pyrite.			937½	942	Veinlets of pyrite 8% sulphides.		
		830	841	1" Veinlet of flourite? with quartz carbonate gangue, pyrrhotite, pyrite.			947	978	Pyrite and pyrrhotite veinlets 15 - 20% sulphides, numerous carbonate veinlets.		
		855	862	Narrow veinlets of pyrite 5% sulphides.			978	981	Isolated traces of pyrite.		
		862	863½	Massive - semi massive pyrite and pyrrhotite with some quartz carbonate blebs 70% sulphides.			981	985	Veinlets of pyrite 8% sulphides.		
		863½	867	Veinlets of pyrite and pyrrhotite 8% sulphides.			985	1040	Occasional veinlets of pyrite and odd blebs of fine grained sphalerite.		
		867	870	Veinlets and splashes of pyrite and pyrrhotite with some siderite veinlets 18% sulphides.			1040	1062	Disseminated veinlets of fine grained pyrite.		
		870	875	Isolated traces and veinlets of pyrite and pyrrhotite 4% sulphides.			LOGGED BY: PSL, ISG, JGD/RJH				
		875	882	Veinlets of pyrites 8% sulphides.			DISTRIBUTION: Dept. of Mines 1. Mines 1. Geology 1. File 1.				
		882	886½	Isolated veinlets of pyrite at 884. 6" quartz vein with some siderite.							
		886½	900	Isolated specks of pyrite and some carbonate gangue veinlets.							

ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
 MINERAL RESOURCES DIVISION - TASMANIA  
**DIAMOND DRILL CORE RECORD**  
 HOLE No. STP 98  
 SHEET No. 1.

PROJECT: <u>BL. 4/73 STERLING VALLEY J.V.</u> LOCALITY: OBJECTIVE: <u>Relog of old hole.</u> RESULT:	GRID CO-ORDS: A.M.G. CO-ORDS: <u>S. 371, 930mN 303, 730mE</u> COLLAR R.L.: COLLAR DIP: <u>-57°</u> AZIMUTH: <u>116° ANG.</u> TOTAL DEPTH: <u>878 FT</u>	HOLE SIZE: CASING: COMMENCED: COMPLETED: LOGGED BY: <u>J. R. DONALD</u>	Depth (m) Azimuth (°a.m.g.) Dip Depth (m) Azimuth (°a.m.g.) Dip

DEPTH FT		ROCK DESCRIPTION	MINERALISATION			CORE REC'D	
From	To					Run	Short
65	200	Broken core. Poor recovery. Dark grey to black mudstone and wacke. Typical fine grained to mixed facies Farrell Slates.					
200	248	Rhyolite lava. Wackily banded; accentuated by shearing which gives a pseudo-clastic texture. Variably sericitised.					
	235-248	Increasingly strong sericitisation; possibly hydrothermal alteration, or possibly a reaction of glassy lava to regional metamorphism.					
248	572	Dominantly felsic volcanic wacke with some more tuffaceous bands and some more quartz-rich greywacke bands. Essentially all a coarse-grained facies Farrell Slates unit. Variably sheared but not very strong.					
572	815	Dominantly black mudstones cleaved. Core very broken recovery very poor. A strongly fractured section of typical fine-grained Farrell Slates.					
815	841	Felsic volcanic wacke. Sheared and broken.					
841	878	Strongly altered sericitised Rhyolitic volcanic difficult to classify as an ashflow or a sheared pseudo-clastic lava because core is very broken and recovery is very poor. Probably a unit of the "Eastern Volcanics".					

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ELECTROLYTIC ZINC COMPANY OF ASIA LTD. DIAMOND DRILL CORE RECORD HOLE No. STP 101  
 MINERAL RESOURCES DIVISION - TASMANIA SHEET No. 1.

PROJECT: <u>E.L. 4/73 STERLING VALLEY J.V.</u> LOCALITY: OBJECTIVE: <u>Relog of old hole</u> RESULT:	GRID CO-ORDS: A.M.G. CO-ORDS: <u>5, 372, 800 mN</u> <u>384, 355 mE</u> COLLAR R.L.: COLLAR DIP: <u>-47°</u> AZIMUTH: <u>290° MAG.</u> TOTAL DEPTH: <u>870 ft.</u>	HOLE SIZE: CASING: COMMENCED: COMPLETED: LOGGED BY: <u>I McDONALD</u>	Depth (m)	Azimuth (°m.g.)	Dip	Depth (m)	Azimuth (°m.g.)	Dip
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DEPTH (ft)		ROCK DESCRIPTION	MINERALISATION				CORE REC'D	
From	To		Run	Short	Run	Short		
0	153	Porphyritic sheared rhyolite lavas. Possibly some ignimbrite ash-flow units but most of apparent clastic texture is due to shearing effects on the lavas - Typical Eastern Volcanics.						
153	163	Weakly banded rhyolite lava. More sheared and sericitic than above.						
163	170	Quartz rich rhyolitic lava, strongly sericitised and sheared. Shearing induces a banding and a pseudo clastic texture.						
170	186	Sheared sericitic rhyolite lava.						
186	301	Rhyolitic ashflow pyroclastic chloritic patches are crushed pumice fragments. Variesly sheared.						
301	321	Weakly banded quartz-phitic sheared sericitic rhyolite lava.						
321	386	Interbedded volcanoclastic sediments and dark grey Mudstones. Typical of the mixed facies Farrell slates but the coarser units have more primary tuffaceous texture than the typical Farrell volcanic rocks.						
386	421	Sheared. Felsic Tuffs with thin mudstone partings. Possibly waterlain ashflows.						
421	478	Felsic Tuffs. Poor core recovery of broken sheared and mineralised						

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

**DIAMOND DRILL CORE RECORD**

HOLE No. STP 105  
SHEET No. 1.

PROJECT: E.L. 4/73 STERLING VALLEY J.V.  
LOCALITY:  
OBJECTIVE: Re-log of old hole.  
RESULT:

GRID CO-ORDS:  
A.M.G. CO-ORDS: S. 373,210 m N  
384,515 m E  
COLLAR R.L.:  
COLLAR DIP: -53°  
AZIMUTH: 290° ANG.  
TOTAL DEPTH: 1062 ft.

HOLE SIZE:  
CASING:  
COMMENCED:  
COMPLETED:  
LOGGED BY: I McDONALD

Depth (m)	Azimuth (°a.m.g.)	Dip	Depth (m)	Azimuth (°a.m.g.)	Dip

DEPTH ft.		ROCK DESCRIPTION	MINERALISATION		CORE REC'D	
From	To		Run	Short	Run	Short
0	327	Rhyolite lava generally well sheared which imparts a pseudo-clastic texture. Typical "Eastern Volcanics"				
327	418	Finer grained less "clastic looking" rhyolite lava Strongly sheared and variably silicified and sericitised - Possibly only regional metamorphism but the unit has the impression of a weakly developed hydrothermal alteration system.	Moderate disseminated pyrite and traces of chalcopyrite, galena and sphalerite.			
418	462	Laminated. Volcanoclastic sediments and Mudstones Cleavage parallel to ? bedding				
	428-441	Possible Fault. The only evidence is poor core recovery and contortion of bedding	Minor blebby carbonate-pyrite.			
462	520	Weakly bedded volcanoclastic sediment. Texture is primarily tuffaceous rather than volcanic lithic matrix				
520	607	Black to dark grey cleaved weakly pyritic Mudstones 595-607. Interbeds of tuffaceous colored Volcanoclastic sediment. Typical fine-grained "Fossiliferous Farrell Slates" unit.				
607	690	Felsic ashflow pyroclastics. containing accidental mudstone clasts. Some banding is probably primary flow-banding but much of the foliation is due to shearing and cleavage development.				
690	790	Felsic ashflow pyroclastics with mixed lithic clasts				



## APPENDIX 5.

## Drill Core Geochemical Data Sheets.

DDH STP 217  
STP 221  
STP 231  
STP 234  
STP 231A  
STP 232A1  
STP 218  
STP 220

ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD. MINERAL RESOURCES DIVISION - TASMANIA						DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD											HOLE No. <u>S.T.P. VARIOUS</u> SHEET No. 1					
LABORATORY ANALYTICAL TECHNIQUE DETECTION LIMIT						ANALABS															GRID CO-ORDS: Sterling Valley A.M.G. CO-ORDS: Drill holes COLLAR R.L.: Gold Assays COLLAR DIP: greater than 0.1g/t Au AZIMUTH: TOTAL DEPTH:	
						309	APHA Requin	109	114	119	402	109	109	109	109	109	402	109	402			
						FIRE ASSAY	AAS	AAS	AAS	AAS	XRF	AAS	AAS	AAS	AAS	AAS	XRF	AAS	XRF			
DETECTION LIMIT						0.008	0.008	0.5	1	1	3	5	5	5	5	5	5	3	10	3		
Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)															COMMENTS	
						Au	Ag	As	Sn	Sb	Cu	Pb	Zn	Fe%	Mn	Sb	Bi	Te				
48427	SPLIT	313.25	313.85	100%	0.60	5.00		29.5	9.00%		X	1.15%	505	50	3.15	290					STP 234. Arsenic Zone 'D'	
33074	"	99.65	100.70	"	1.05	4.01		4.3	15.00%	2000	1550	2250	140	125							STP 217 Arsenic Zone 'A'	
48487	"	185.2	185.5	"	0.30	3.25		11.0	4		150	550	203	32.33%	1150	1550	33	X	14		STP 234 Possibly related to Zone 'A'	
48417	"	190.0	191.0	"	1.00	2.92		29.5	4.00%		X	4850	310	415	9.10	11.50					STP 236 Arsenic Zone 'A'	
33079	"	104.55	105.45	"	0.90	2.26		1.0	9.40	1120	1500	515	45	130							STP 217 Related to Arsenic Zone 'A'	
40540	"	51.8	52.8	"	0.10		2.08	X	70		15	250	40	140	6.70	1850					STP 221 Related to Arsenic Zone 'A'	
48418	"	191.0	191.5	"	0.50	1.96		20.5	5.30%		X	4300	195	285	1.95	625					STP 234 Arsenic Zone 'A'	
48416	"	189.0	190.0	"	1.00	1.95		16.5	3.20%		X	7100	130	1050	13.50	1900					STP 236 Arsenic Zone 'A'	
39270	"	56.2	56.7	"	0.50	1.29	0.276	20.0	15.00%	160		2250	200	2000	9.10	780					STP 231 Arsenic Zone 'C'	
39276	"	78.3	78.8	"	0.50	1.22	0.744	3.0	9.80%	5600		1150	60	70	5.80	660					STP 231 Arsenic Zone 'A'	
37952	"	232.1	233.1	"	1.00	1.04		2.0	36	4		135	25	140							STP 217 Possibly related to Zone 'D'	
39273	"	57.7	58.3	"	0.60	1.01	0.436	10.0	8.10%	600		6750	75	190	7.20	465					STP 231 Arsenic Zone 'C'	
37932	"	159.6	160.6	"	1.00	0.95		2.0	4.40	14	20	700	10	95							STP 217 Related to Arsenic Zone 'B'	
48420	"	261.0	262.0	"	1.00	0.92		2.0	5.20%		1150	2150	30	125	6.00	1350					STP 234 Arsenic Zone B	
33073	"	98.65	99.65	"	1.00	0.91		4.5	6.00%	3300	3700	2360	40	115							STP 217 Arsenic Zone A	
39266	"	53.8	53.9	90%	0.10	0.90	0.008	9.5	17.00%	17		850	235	80	11.00	550					STP 231 Arsenic Zone C	
48421	"	262.0	263.0	100%	1.00	0.85		2.0	3.50%		X	2350	50	200	6.55	1400					STP 234 Arsenic Zone B	
48406	"	67.7	68.1	"	0.40	0.76		1.5	21	3		490	10	55	5.75	1050					STP 232A Unrelated Zone Top of Farrell Shales	
40547	"	58.1	59.1	"	1.00		0.704	0.5	47		40	220	25	325	8.25	2350					STP 221 Unrelated between Zones A and B	
48401	"	66.7	67.7	"	1.00	0.63		0.5	28		3600	355	95	375	3.75	1508					STP 232A Unrelated Zone Top of Farrell Shales	
39272	"	57.2	57.7	"	0.50	0.62	X	4.0	3.80%	10		2200	60	40	11.00	275					STP 231 Arsenic Zone 'C'	
39285	"	85.2	85.5	"	0.30	0.58	0.376	5.5	9.00%	6		170	140	155	7.80	520					STP 231 Arsenic Zone A	
48424	"	253.0	254.1	"	1.10	0.56		0.5	60		4200	250	10	125	13.50	3450					STP 234 Possibly related to Zone 'B'	
33078	"	103.55	104.55	"	1.00	0.52		X	6000	920	1050	230	15	130							STP 217 Related to Zone A	
40546	CHIP	57.1	58.1	"	1.00		0.512	0.5	47		110	290	25	140	8.00	2000					STP 221 Unrelated between Zones A and B	
39271	SPLIT	56.7	57.2	"	0.50	0.47	X	6.0	8.50%	22		2500	65	70	12.50	595					STP 231 Arsenic Zone 'C'	
40539	"	50.8	51.8	"	1.00		0.456	X	200			25	230	30	175	7.50	2200				STP 221 Possibly related to Zone A	

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. STP VARIOUS  
SHEET No. 2

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)													COMMENTS	
						Au	Ag	As	Sn	Sb	Cu	Pb	Zn	Fe %	Mn	Sb	Bi	Te		
40516	SPLIT	32.6	33.15	100%	0.55		0.412	28.5	3.20%		25	1350	135	165	2450	1450				STP221 Arsenic Zone A
48423	"	252.0	253.0	"	1.00	0.40		0.5	3800		3000	865	25	95	7.00	1450				STP234 Possibly related to Zone B
37951	"	233.1	234.1	"	1.00	0.36		0.9	18	X		80	20	95						STP217 Possibly related to Zone D
40538	"	49.8	50.8	"	1.00		0.352	1.0	1600		35	153	185	410	12.50	2650				STP221 Related to Arsenic Zone A
39269	"	55.6	56.2	"	0.60	0.39	0.042	11.0	3.90%	X		1750	95	285	9.70	1200				STP231 Arsenic Zone C
61245	"	209.0	209.0	"	1.00	0.30		0.5	66		78	185	75	1550	9.85	2200	3	X	X	STP234 Unrelated between Zones A and B
40537	"	48.8	49.8	"	1.00		0.296	X	1300		10	205	30	245	11.00	2250				STP221 Related to Zone A
37949	"	225.1	226.1	"	1.00	0.29		2.0	1160	X		280	15	90						STP217 Possibly related to Zone D
40526	"	38.8	39.5	"	0.70		0.288	4.5	4.30%		3950	1300	15	85	14.00	900				STP221 Arsenic Zone A
39267	"	53.9	54.9	"	1.00	0.27	0.216	8.5	4.00%	X		735	90	110	6.60	1150				STP231 Arsenic Zone C
61242	"	205.0	206.0	"	1.00	0.26		X	68		52	195	45	190	7.65	1400	7	X	X	STP234 Unrelated between Zones A and B
48494	"	194.0	195.0	"	1.00	0.25		X	75		52	150	175	630	5.85	1750	X	X	X	STP234 Related to Arsenic Zone A
33076	"	101.65	102.55	"	0.90	0.25		3.0	3.50%	1700	1500	1200	20	1050						STP217 Arsenic Zone A
40524	"	36.9	37.9	"	1.00		0.240	40.0	3.50%		30	3400	335	235	35.00	465				STP 221 Arsenic Zone A
48497	"	197.0	198.0	"	1.00	0.23		X	25		21	155	25	430	7.35	2150	X	X	X	STP 234 Possibly related to Zone A
61244	"	207.0	208.0	"	1.00	0.23		0.5	100		105	185	80	220	7.65	1750	X	X	X	STP234 Unrelated between Zones A and B
33067	"	92.35	93.35	80%	1.00	0.21		3.5	1.80%	6400	4950	1550	535	440						STP217 Arsenic Zone A
48404	"	67.0	68.0	100%	1.00	0.21		1.0	31	3100		325	15	80	5.05	875				STP 232A-1 Unrelated. Top of Farrell States
33066	"	90.65	92.35	76%	1.70	0.18		0.5	136	9	X	470	5	130						STP217 Arsenic Zone A
37933	"	160.6	162.1	100%	1.50	0.18		2.0	7800	27	150	1300	10	110						STP217 Related to Zone B.
40551	"	65.6	66.6	100%	1.00		0.176	1.5	8000		660	355	40	140	7.55	2100				STP221 Unrelated between Zones A and B
37950	"	234.1	235.1	"	1.00	0.17		0.5	40	X		90	25	135						STP217 Possibly related to Zone D.
61263	"	267.0	268.0	"	1.00	0.17		24.0	1.05%		1740	6000	950	385	4.30	1850	20	970	X	STP234 Possibly related to Zone B
61262	"	266.0	267.0	"	1.00	0.16		7.5	9600		1100	4250	125	190	4.00	885	10	250	X	" " " " " "
37929	"	156.6	157.6	"	1.00	0.16		1.5	1.40%	X		525	20	145						STP217 Arsenic Zone B.
40525	"	37.8	38.8	"	1.00		0.152	10.0	8.80%		2650	3050	35	70	15.00	450				STP221 Arsenic Zone A
39390	Grnd	60.0	65.0	"	5.00	0.15		X	900	20		140	170	835	6.30	1550				STP231 Related to Zone C.
39277	SPLIT	78.8	79.5	"	0.70	0.14	0.104	4.5	2800	3000		2150	50	100	7.30	1400				STP231 Related to Zone A
48415	"	188.3	189.0	"	0.70	0.14		1.0	430		52	610	20	360	13.50	2750				STP234 Arsenic Zone A
37948	"	224.1	225.1	"	1.00	0.14		X	114	X		225	10	85						STP217 Possibly related to Zone D
40532	"	43.8	44.8	"	1.00		0.120	7.5	55		40	215	80	410	13.50	2850				STP221 Related to Zone A.
48493	"	193.0	194.0	"	1.00	0.12		X	64		71	70	160	965	5.05	1650	X	X	4	STP234 Related to Zone A
48458	"	156.0	157.0	"	1.00	0.12		14.0	1300		127	450	635	1.01%	6.85	2750	X	40	X	STP 234 Possibly Arsenic Zone C

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 217

SHEET No. 1

GRID CO-ORDS: 4280 N ; 4505E Stg V.  
A.M.G. CO-ORDS: 5, 374 393 m N  
384 190 m E  
COLLAR R.L.: 176 m  
COLLAR DIP: -60°  
AZIMUTH: 108°  
TOTAL DEPTH: 249.1 m

LABORATORY ANALYTICAL TECHNIQUE						ANALABS												COMMENTS	
DETECTION LIMIT						309	108	114	118	FUSION	108	108	108						
						FIRE ASSAY	AAS	AAS	AAS	XRF	AAS	AAS	AAS						
						0.008	0.5	1	1	10	5	5	5						
Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)												COMMENTS	
						Au	Ag	As	Sb	Sn	Cu	Pb	Zn						
33081	CHIP	0.	5.0	2.7	5.0		X	8	9		25	10	30						
82	"	5.0	10.0	0.4	5.0		X	10	1		5	15	30						
83	"	10.0	15.0	0.1	5.0		1.0	16	9		5	10	25						
84	"	15.0	20.0	0.1	5.0		X	46	1		30	50	165						
85	"	20.0	25.0	0.2	5.0		X	10	9		25	15	125						
86	"	25.0	30.0	3.3	5.0		X	7	2		115	10	140						
87	"	30.0	35.0	3.1	5.0		X	10	1		80	10	105						
88	"	35.0	40.0	3.0	5.0		0.5	4	1		80	5	140						
89	"	40.0	45.0	4.5	5.0		1.0	15	2		50	15	125						
33090	"	45.0	50.0	5.0	5.0		X	7	4		200	10	135						
91	"	50.0	55.0	5.0	5.0		X	6	2		145	15	115						
33092	"	55.0	60.0	4.8	5.0		X	6	5		305	10	180						
37954	SPLIT	60.0	61.0	0.8	1.0	0.02	X	10	2		140	5	145						
55	"	61.0	62.0	0.9	1.0	0.01	1.0	10	2		60	X	150						
56	"	62.0	63.0	0.9	1.0	X	1.0	13	210	490	35	X	150						
57	"	63.0	64.0	1.0	1.0	X	X	3	3		55	X	140						
58	"	64.0	65.0	1.0	1.0	X	0.5	4	4		105	20	130						
59	"	65.0	66.0	1.0	1.0	X	X	4	6		220	10	105						
37960	"	66.0	67.0	1.0	1.0	X	X	2	5		110	10	160						
61	"	67.0	68.0	1.0	1.0	X	X	4	8		65	15	215						
62	"	68.0	69.0	1.0	1.0	X	X	3	4		160	20	140						
63	"	69.0	70.0	1.0	1.0	X	X	8	4		10	20	105						
64	"	70.0	71.0	0.7	1.0	0.02	2.5	620	1500	2000	1600	40	175						
65	"	71.0	72.0	0.4	1.0	0.02	X	20	10		30	15	160						
66	"	72.0	73.0	0.5	1.0	X	X	21	11		70	15	165						
67	"	73.0	74.0	1.0	1.0	0.02	0.5	44	4		40	10	215						
68	"	74.0	75.0	1.0	1.0	0.02	1.0	4	6		80	25	170						
37969	"	75.0	76.0	0.9	1.0	X	1.0	4000	520	860	150	50	180						

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 217  
SHEET No. 2

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)										COMMENTS
						Au	Ag	As	Sb	Sn	Cu	Pb	Zn			
37970	SPLIT	76.0	77.0	0.9	1.0	X	X	24	18	45	50	10	155			} ? Arsenic Zone 'C'
71	"	77.0	78.0	0.9	1.0	X	0.5	24	112	270	90	30	180			
72	"	78.0	79.0	0.9	1.0	X	1.5	4000	760	1000	155	20	100			
73	"	79.0	80.0	0.9	1.0	0.03	2.5	70	40	X	310	30	600			
74	"	80.0	81.0	1.0	1.0	0.01	1.3	12	18	25	100	35	185			
75	"	81.0	82.0	1.0	1.0	X	1.5	14	76	270	40	30	200			
76	"	82.0	83.0	1.0	1.0	X	1.0	4	2	X	15	10	110			
77	"	83.0	84.0	1.0	1.0	X	1.5	10	34	80	25	20	135			
78	"	84.0	85.0	1.0	1.0	X	1.0	8	88	310	45	50	230			
79	"	85.0	86.0	1.0	1.0	X	X	22	200	630	180	40	300			
37980	"	86.0	87.0	1.0	1.0	X	0.5	12	68	330	100	20	180			
81	"	87.0	88.0	1.0	1.0	X	X	5	X	15	20	135				
37982	"	88.0	89.0	1.0	1.0	0.01	X	4	X	20	15	110				
33089	"	89.0	90.0	1.0	1.0	0.02	X	580	5	420	25	185				
33100	"	90.0	90.65	0.65	0.65	X	1.0	8	1	70	20	230				
33066	"	90.65	92.35	1.3	1.70	0.18	0.5	136	9	X	470	5	130			
67	"	92.35	93.35	0.8	1.0	0.21	3.5	180 <sup>g</sup>	6400	4950	1550	535	440			Arsenic Zone 'A'
68	"	93.35	94.35	1.0	1.0	X	1.0	305	42	60	900	35	165			
69	"	94.35	95.35	1.0	1.0	X	0.5	160	58	170	325	5	200			
33070	"	95.35	96.35	1.0	1.0	X	X	112	22	60	400	10	210			
71	"	96.35	97.35	1.0	1.0	X	X	76	10	30	350	15	155			
72	"	97.35	98.65	1.3	1.30	0.01	0.5	920	450	360	380	5	155			
73	"	98.65	99.65	1.0	1.0	0.91	4.5	600%	3300	3700	2360	40	115			
74	"	99.65	100.70	1.05	1.05	4.01	4.5	1500%	2000	1580	2250	140	125			Gold in Polished Sections
75	"	100.70	101.65	0.95	0.95	0.09	1.5	2700	270	360	465	25	170			Arsenic Zone 'A'
76	"	101.65	102.55	0.90	0.90	0.25	3.0	350%	1700	1500	1200	20	1050			
77	"	102.55	103.55	1.0	1.0	0.03	X	560	108	170	285	5	170			
78	"	103.55	104.55	1.0	1.0	0.52	X	6000	920	1050	230	15	130			
79	"	104.55	105.45	0.9	0.9	2.26	1.0	9400	1120	1500	515	45	130			Related to Arsenic Zone 'A'
33080	SPLIT	105.45	106.45	1.0	1.0	0.09	X	250	12	45	40	10	190			
37983	CHIP	106.45	110.0	3.55	3.55		X	6	X		10	20	185			
84	"	110.0	115.0	5.0	5.0		1.0	4	X		100	10	150			
37985	CHIP	115.0	121.0	6.0	6.0		X	14	108	390	60	20	200			

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 217  
SHEET No. 3

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)											COMMENTS			
						Au	Ag	As	Sn	Sb	Cu	Pb	Zn							
37910	SPLIT	121.0	122.0	1.0	1.0		X	27	3	X	145	15	175							
911	"	122.0	123.6	1.6	1.6		X	8000	610	1200	900	20	160							
37912	SPLIT	123.6	124.6	1.0	1.0		X	23	6	6	5	25	130							
37986	CHIP	124.6	130.0	5.3	5.4		1.5	8	26	140	95	10	155							
987	"	130.0	135.0	4.9	5.0		2.0	8	100	340	75	220	710							
37988	CHIP	135.0	140.1	5.1	5.1		0.5	4	92		145	70	190							
37913	SPLIT	140.1	141.1	1.0	1.0		X	10	1		30	10	125							
14	"	141.1	142.1	1.0	1.0		X	230	31	200	355	15	105							
15	"	142.1	143.1	1.0	1.0		X	680	21	70	340	5	85							
16	"	143.1	144.1	1.0	1.0		X	14	3	15	45	10	95							
17	"	144.1	145.1	1.0	1.0		1.5	46	26	130	180	10	170							
18	"	145.1	146.6	1.6	1.6		2.5	6	220	440	140	140	370							
19	"	146.6	147.6	1.0	1.0	0.05	2.5	960	330	920	670	80	275							
37920	"	147.6	148.6	1.0	1.0	X	1.5	9	400	740	100	150	400							
21	"	148.6	149.6	1.0	1.0	X	1.0	4	150	470	230	5	170							
22	"	149.6	150.6	1.0	1.0	0.05	10	7400	2800	3950	410	10	70							
23	"	150.6	151.6	1.0	1.0	X	10	500	920	2250	360	20	180							
24	"	151.6	152.6	1.0	1.0	X	0.5	20	2		5	5	120							
25	"	152.6	153.6	1.0	1.0	X	1.0	18	6		275	15	165							
26	"	153.6	154.6	1.0	1.0	0.01	3.0	940	4		1000	10	360							
27	"	154.6	155.6	1.0	1.0	0.02	3.0	140%	X		900	15	150							
28	"	155.6	156.6	1.0	1.0	0.11	2.5	560%	X		900	20	120							Arsenic Zone 'B'
29	"	156.6	157.6	1.0	1.0	0.16	1.5	140%	X		525	20	145							
37930	"	157.6	158.6	1.0	1.0	0.02	0.5	7600	56	490	210	5	130							
31	"	158.6	159.6	1.0	1.0	0.02	0.5	5200	36	75	320	5	180							
32	"	159.6	160.6	1.0	1.0	0.95	2.0	4400	14	20	700	10	95							Related to Arsenic Zone 'B'
33	"	160.6	162.1	1.5	1.5	0.18	2.0	7800	27	150	1300	10	110							
37934	SPLIT	162.1	163.1	1.0	1.0	X	0.5	180	8	X	50	10	220							
37989	CHIP	163.1	165.0	1.9	1.9		0.5	4	X		15	25	150							
37990	"	165.0	170.0	5.0	5.0		X	2	X		5	10	150							
91	"	170.0	175.0	5.0	5.0		0.5	16	X		10	20	180							
37992	CHIP	175.0	179.3	4.2	4.3		2.5	10	22		15	330	190							
37935	SPLIT	179.3	180.3	1.0	1.0	X	1.0	90	180	650	205	260	560							



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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 221

SHEET No. 1

GRID CO-ORDS: 4320 N; 4635 E  
A.M.G. CO-ORDS: 5,374, 399m N  
384, 271m E  
COLLAR R.L.: 174m  
COLLAR DIP: -60°  
AZIMUTH: 76° A114  
TOTAL DEPTH: 203.3

LABORATORY ANALYTICAL TECHNIQUE						ANALABS										COMMENTS				
DETECTION LIMIT						AQA	108	114	118	402	109	108	108	109	108					
						AAS	AAS	AAS	AAS	XRF	AAS	AAS	AAS	AAS	AAS					
						0.008	0.5	1	1	3	5	5	5	50	5					
Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)														
						Au	Ag	As	Sn	Cu	Pb	Zn	Fe%	Mn						
40501	SPLIT	10.5	11.5	0.8	1.0	0.284	1.0	1.00%		310	480	70	295	20.00	3150					
02	"	11.5	12.5	1.0	1.0	X	X	1600		410	100	X	175	19.00	2850					
03	"	12.5	13.5	0.9	1.0	X	X	2100		220	250	10	265	15.00	3100					
04	"	13.5	14.5	1.0	1.0	0.040	X	65		20	130	X	290	7.25	2050					
05	"	14.5	15.0	0.5	0.5	X	1.5	1700		520	205	470	1150	17.20	4150					
06	SPLIT	15.0	16.0	0.9	1.0	X	0.5	40		40	60	75	405	11.00	2450					
07	CHIP	16.0	18.0	1.9	2.0	X	X	60		40	35	X	250	11.00	2400					
08	"	18.0	22.0	3.6	4.0	X	0.5	75		30	25	X	240	7.40	1650					
09	CHIP	22.0	26.0	3.9	4.0	X	0.5	50		3	40	X	180	6.50	1950					
40510	SPLIT	26.0	27.0	0.9	1.0	X	X	14		4	15	X	160	4.60	1100					
11	"	27.0	28.0	1.0	1.0	X	X	20		4	20	X	190	4.50	1500					
12	"	28.0	28.8	0.8	0.8	X	1.5	28		20	205	5	260	12.50	1850					
13	"	28.8	30.8	0.5	2.0	X	8.5	9000		15	1500	110	150	18.00	320					
14	"	30.8	31.6	0.2	0.8	X	43.0	3700		85	1500	1400	240	27.00	645					
15	"	31.6	32.6	0.8	1.0	0.032	4.5	3000		35	730	5	205	10.00	1900					
16	"	32.6	33.15	0.55	0.55	0.412	28.5	3.20%		25	1350	135	165	24.50	1450					
17	"	33.15	33.7	0.55	0.55	0.032	6.5	8000		60	650	5	115	15.00	1300					
18	"	33.7	34.7	1.0	1.0	0.048	42.0	10.00%		40	2250	365	55	35.00	285					
40520	"	34.7	35.2	0.5	0.5	0.072	10.0	4.5%		120	1300	90	180	26.50	1050					
21	"	35.2	35.5	0.3	0.3	0.024	11.0	1.5%		70	1550	75	3350	37.00	675					Arsenic Zone A
22	"	35.5	35.8	0.3	0.3	0.112	14.0	7000		100	1800	60	135	19.50	530					
23	"	35.8	36.3	1.0	1.0	0.072	19.0	13.00%		460	2250	155	2500	36.50	545					
24	"	36.3	37.8	1.0	1.0	0.240	40.0	3.50%		30	3400	335	235	35.00	465					
25	"	37.8	38.8	1.0	1.0	0.152	10.0	8.80%		2650	3050	35	70	15.00	450					
26	"	38.8	39.5	0.7	0.7	0.288	4.5	4.30%		3950	1300	15	85	14.00	900					
27	"	39.5	40.0	0.5	0.5	0.024	0.5	2500		45	90	440	1300	16.50	2000					
28	"	40.0	40.8	0.8	0.8	0.016	2.0	6000		50	205	635	1550	14.00	3050					
40529	"	40.8	41.8	1.0	1.0	X	1.5	45		40	115	300	740	9.75	1950					

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

## DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 221

SHEET No. 2

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)											COMMENTS	
						Au	Ag	As	Sn	Sn	Cu	Pb	Zn	Fe %	Mn			
40530	SPLIT	41.8	42.8	1.0	1.0	X	3.0	4.0		7.0	30.0	7.60	36.50	10.50	18.00			
31	"	42.8	43.8	1.0	1.0	N.A.	1.0	5.5	2.0	10.0	1.40	5.10	12.00	3.50				
32	"	43.8	44.8	1.0	1.0	0.120	1.5	5.5		4.0	2.15	8.0	4.10	13.50	2.850			
33	"	44.8	45.8	1.0	1.0	0.080	1.5	2.30		5.0	2.20	8.0	4.55	12.00	2.350			
34	"	45.8	46.8	1.0	1.0	0.083	2.0	4.500		5.0	2.25	1.45	2.65	12.50	2.700			
35	"	46.8	47.8	1.0	1.0	0.080	2.5	2.000		7.0	1.50	2.35	12.50	11.50	2.600			
36	"	47.8	48.8	1.0	1.0	X	0.5	4.5		5.0	1.40	2.40	12.65	9.60	3.100			
37	"	48.8	49.8	1.0	1.0	0.296	X	13.00		1.0	2.05	3.0	2.45	11.00	2.250			
38	"	49.8	50.8	1.0	1.0	0.352	1.0	16.00		3.5	1.55	1.85	4.10	12.50	2.650			
39	"	50.8	51.8	1.0	1.0	0.436	X	2.00		2.5	2.30	3.0	1.75	7.50	2.200			
40540	"	51.8	52.8	1.0	1.0	2.08	X	7.0		1.5	2.50	4.0	1.40	6.70	1.850		Minor sulphide veins ? related to Zone 'A'	
41	"	52.8	53.8	1.0	1.0	0.016	X	2.0		2.0	8.0	3	1.50	6.25	2.550			
42	"	53.8	54.4	0.6	0.6	N.A.	0.5	2.0	3.6		6.5	7.5	1.85	5.90	1.800			
43	"	54.4	54.8	0.4	0.4	X	0.5	1.1		X	3.5	2.0	1.50	4.75	1.500			
44	SPLIT	54.8	55.8	1.0	1.0	X	X	2.5		4	7.0	5	1.45	3.90	1.300			
45	CHIP	55.8	57.1	1.3	1.3	N.A.	X	2.0	3.0		1.45	1.0	1.85	6.00	2.000			
46	CHIP	57.1	58.1	1.0	1.0	0.512	0.5	4.7		1.10	2.90	2.5	1.40	8.00	3.000		minor veins Po + Py	
47	SPLIT	58.1	59.1	1.0	1.0	0.704	0.5	4.7		4.0	2.20	2.5	3.25	8.25	2.350			
48	SPLIT	59.1	59.6	0.5	0.5	0.104	X	4.7		6.0	2.30	2.0	1.50	9.00	1.850			
49	CHIP	59.6	64.6	5.0	5.0	N.A.	1.0	5.50	3.4		7.0	2.0	1.75	8.10	1.950			
40550	SPLIT	64.6	65.6	1.0	1.0	X	X	1.7		1.0	2.25	1.0	1.05	5.70	1.450			
51	"	65.6	66.6	1.0	1.0	0.176	1.5	8.000		6.60	3.55	4.0	1.40	7.55	2.100			
52	SPLIT	66.6	67.6	1.0	1.0	X	0.5	2.00		8.0	6.5	1.75	3.40	6.05	3.600			
53	CHIP	67.6	72.6	5.0	5.0		1.5	3.50	8.8		2.15	7.0	4.60	8.00	2.350			
54	"	72.6	77.0	4.4	4.4		0.5	2.20	1.10		1.25	3.5	1.70	9.00	2.600			
55	"	77.0	82.0	5.0	5.0		X	1.0	3.3		5.5	1.0	1.30	5.35	1.700			
56	"	82.0	87.0	5.0	5.0		X	1.0	7.2		3.0	1.0	1.20	5.15	1.600			
57	"	87.0	92.0	5.0	5.0		X	8	6.0		4.5	1.5	1.05	4.55	1.850			
58	"	92.0	97.0	5.0	5.0		X	1.2	6.6		1.25	8.0	2.00	7.70	3.250			
59	"	97.0	102.0	5.0	5.0		X	5.0	6.2		2.0	4.5	1.55	6.50	1.700			
40560	CHIP	102.0	107.0	4.9	5.0		X	33.00	2.00		2.0	4.0	1.35	5.50	1.850			
61	SPLIT	107.0	108.0	0.9	1.0		X	1.0	5.4		1.0	1.95	3.60	4.30	2.900			
40562	"	108.0	109.0	0.9	1.0		X	0.5	7	4.0		1.0	1.5	9.5	3.60	1.500		

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 221  
SHEET No. 3

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)											COMMENTS
						Au	Ag	As	Sn	Sb	Cu	Pb	Zn	Fe%	Mn		
40563	SPLIT	109.0	110.0	0.9	1.0	x	x	7	42		5	x	110	4.40	1300		
64	"	110.0	112.8	0.2	2.8	x	x	39	110		15	40	175	4.60	1450		
65	"	112.8	113.65	0.05	0.85	0.032	0.5	12	64		10	30	150	3.20	2600		
66	"	113.65	114.5	0.15	0.85	x	x	56	64		15	115	1000	2.50	2500		
67	"	114.5	115.5	0.4	1.0	0.032	1.0	100	84		20	350	640	4.00	2950		
68	"	115.5	116.5	0.7	1.0	0.024	0.5	70	74		30	45	200	6.00	2850		
69	"	116.5	117.5	0.8	1.0	x	x	210	60		15	40	170	5.25	3450		
40570	"	117.5	118.5	0.7	1.0	0.016	x	55	88		90	30	160	7.40	2700		
71	"	118.5	119.5	0.7	1.0	0.016	3.0	1.30%	38		695	60	115	9.50	1050		Arsenic Zone 'B'
72	"	119.5	120.5	0.8	1.0	x	0.5	140	48		150	20	40	3.70	700		
73	"	120.5	121.5	0.9	1.0	x	0.5	47	58		50	100	230	4.27	1200		
74	"	121.5	122.5	0.4	1.0	0.040	0.5	39	58		185	70	125	6.10	1850		
75	"	122.5	123.5	0.9	1.0	0.008	x	30	52		20	20	50	2.40	1350		
76	SPLIT	123.5	124.5	0.9	1.0	0.016	x	30	56		10	20	40	2.05	950		
77	CHIP	124.5	129.5	4.9	5.0	0.016	x	25	68		15	25	50	2.33	800		
78	CHIP	129.5	132.8	3.1	3.3	0.032	x	25	60		20	15	45	2.90	750		
79	SPLIT	132.8	133.8	1.0	1.0	0.040	1.0	10	44		480	15	50	15.50	790		
40580	SPLIT	133.8	134.8	1.0	1.0	0.024	0.5	35	46		250	25	35	7.60	600		
81	CHIP	134.8	139.8	5.0	5.0	0.008	0.5	180	44		80	30	50	5.56	700		
82	"	139.8	144.8	5.0	5.0	0.008	0.5	27	48		25	55	100	2.80	950		
83	"	144.8	149.8	5.0	5.0	0.008	x	27	62		20	15	65	2.30	630		
84	"	149.8	154.8	5.0	5.0	0.016	0.5	3900	36		140	50	80	5.50	660		
85	"	154.8	159.8	5.0	5.0	0.032	0.5	110	44		130	70	325	4.20	900		
86	CHIP	159.8	164.8	5.0	5.0	0.040	10.0	4000	44		400	145	210	7.80	850		
87	SPLIT	164.8	165.8	1.0	1.0	0.016	1.0	2000	38		245	30	85	5.70	750		
88	"	165.8	166.8	0.9	1.0	0.024	2.5	110	39		260	210	490	13.50	1000		
89	SPLIT	166.8	167.8	1.0	1.0	0.072	23.5	1.00%	34		2200	930	1050	13.50	950		Arsenic Zone 'D'
40590	CHIP	167.8	172.8	4.8	5.0	0.016	0.5	5500	46		260	50	105	6.10	950		
91	"	172.8	177.8	5.0	5.0	x	x	110	38		55	15	90	3.80	800		
92	"	177.8	182.8	5.0	5.0	0.016	x	42	64		30	55	90	3.20	1500		
93	"	182.8	187.8	5.0	5.0	0.032	0.5	38	120		25	305	340	3.46	2150		
94	"	187.8	192.8	5.0	5.0	0.008	0.5	56	38		35	90	315	3.90	8000		
40595	"	192.8	197.8	5.0	5.0	0.016	x	52	52		50	15	125	2.70	1550		

218066



067

ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. JDH STP 231

SHEET No. 1

GRID CO-ORDS: 4160N; 4625E. 51g. Vall.  
A.M.G. CO-ORDS: S, 374 267 mN  
COLLAR R.L.: 384 216 m E  
COLLAR DIP: -60°  
AZIMUTH: 108° A.M.G.  
TOTAL DEPTH: 150.6m

LABORATORY						ANALAYS										COMMENTS			
ANALYTICAL TECHNIQUE						309	APHA REGIA	108	114	118		108	108	108	108		108		
DETECTION LIMIT						FIRE ASSAY	AAS	AAS	AAS	AAS		AAS	AAS	AAS	AAS		AAS		
DETECTION LIMIT						0.008	0.008	0.5	1	1		5	5	5	50		5		
Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)										COMMENTS			
						Au	Au	Ag	As	Sn		Cu	Pb	Zn	Fe%		Mn		
39379	CHIP	13.30	15.0	0.70	1.7	X		X	46	X		30	70	275	3.40	940			
39380	"	15.0	20.0	2.1	5.0	X		X	92.0	8		65	70	220	4.40	2250			
81	"	20.0	25.0	4.7	5.0	X		X	1000	X		170	35	210	5.50	1000			
82	"	25.0	30.0	5.0	5.0	X		X	70	X		255	20	170	5.50	1100			
83	"	30.0	35.0	4.9	5.0	X		0.5	220	X		455	1000	270	5.20	1200			
84	"	35.0	40.0	4.0	5.0	X		X	340	X		245	230	360	4.40	1200			
85	"	40.0	45.0	3.3	5.0	0.01		X	35	X		60	35	280	5.90	1700			
86	"	45.0	50.0	5.0	5.0	X		X	32	X		105	10	185	6.00	1400			
39387	CHIP	50.0	53.0	3.0	3.0	X		X	30	X		25	45	250	6.80	1300			
39264	SPLIT	52.1	53.1	1.0	1.0	0.02	0.008	X	170	20		45	190	170	6.70	1850			
65	"	53.1	53.8	0.7	0.7	X	0.016	1	1500	X		140	100	180	6.70	1350			
66	"	53.8	53.9	0.09	0.1	0.90	0.008	9.5	17.0%	17		850	235	80	11.00	550			
67	"	53.9	54.9	1.0	1.0	0.27	0.216	8.5	4.0%	X		735	90	110	6.60	1150			
68	"	54.9	55.6	0.7	0.7	X	0.024	2.0	1600	130		450	75	115	7.20	1600			
69	"	55.6	56.2	0.6	0.6	0.35	0.024	11.0	3.8%	X		1750	95	285	9.70	1200			
39270	"	56.2	56.7	0.5	0.5	1.29	0.276	20.0	15.0%	160		2250	200	2000	9.10	780		Arsenic Zone 'c'	
71	"	56.7	57.2	0.5	0.5	0.47	X	6.0	8.5%	22		2500	65	70	12.50	595			
72	"	57.2	57.7	0.5	0.5	0.62	X	4.0	3.8%	10		2200	60	40	11.00	275			
73	"	57.7	58.3	0.6	0.6	1.01	0.436	10.0	8.1%	600		6750	75	190	7.20	465			
39274	SPLIT	58.3	59.3	1.0	1.0	X	0.008	0.5	900	520		130	35	105	6.20	1500			
39389	Grnd	55.0	60.0	5.0	5.0	0.35		7.5	3.9%	5		2500	65	185	10.70	850			
390	"	60.0	65.0	5.0	5.0	0.15		X	900	20		140	170	835	6.30	1550			
391	"	65.0	70.0	5.0	5.0	0.04		X	680	X		70	45	260	5.70	1200			
392	"	70.0	75.0	4.7	5.0	0.02		X	1000	20		75	35	750	6.10	1500			
39393	Grnd	75.0	80.0	5.0	5.0	0.11		X	3800	1100		515	55	240	6.60	1650			

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 231  
SHEET No. 2

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)												COMMENTS
						Al	AU	Ag	As	Sn		Cu	Pb	Zn	Fe %	Mn		
39275	SPLIT	77.3	78.3	1.0	1.0	x	0.032	0.5	700	1800		75	10	190	8.00	2250	-	
76	"	78.3	78.8	0.5	0.5	1.22	0.766	3.0	930 <sup>g</sup>	5600		1150	60	70	5.80	660	-	Arsenic Zone A
77	"	78.8	79.5	0.7	0.7	0.16	0.104	4.5	2800	3000		2150	50	100	7.30	1400	-	
78	"	79.5	80.5	1.0	1.0	0.05	0.080	1.0	2900	180		155	190	1400	7.10	2050		
79	"	80.5	81.5	1.0	1.0	x	0.032	2.0	600	20		60	1000	5550	5.80	4300		
39280	"	81.5	82.2	0.7	0.7	x	x	2.0	1600	4		80	525	2450	6.60	3150		
81	"	82.2	82.6	0.4	0.4	0.03	0.008	2.5	1200	10		225	175	710	5.70	1250		
82	"	82.6	83.6	1.0	1.0	0.01	0.024	2.5	230	2		140	360	815	6.60	1450		
83	"	83.6	84.6	1.0	1.0	0.01	0.016	1.0	500	8		120	75	370	6.20	1400		
84	"	84.6	85.2	0.6	0.6	x	0.016	0.5	4900	6		160	70	100	6.00	1450		
85	"	85.2	85.5	0.3	0.3	0.58	0.376	5.5	9.00 <sup>g</sup>	6		170	140	155	7.80	520	-	Arsenic Zone A
86	"	85.5	86.5	1.0	1.0	x	0.032	0.5	1600	x		20	30	285	4.70	1750		
87	"	86.5	87.5	1.0	1.0	x	0.016	0.5	70	46		15	35	170	4.75	1650		
88	"	87.5	88.0	0.5	0.5	0.02	0.024	1.0	90	28		390	30	175	8.90	2250		
39289	SPLIT	88.0	89.0	1.0	1.0	0.01	x	1.0	70	x		15	35	160	4.40	1500		
39395	GRIND	85.0	90.0	5.0	5.0	0.03		x	3500	12		155	35	210	7.30	1250		
96	GRIND	90.0	95.0	5.0	5.0	x		x	12	x		20	60	140	3.90	1800		
97	CHIP	95.0	100.0	4.9	5.0	x		x	620	42		50	30	270	7.40	3550		
98	"	100.0	105.0	4.1	5.0	x		x	18	x		15	60	540	5.80	1250		
99	"	105.0	110.0	4.5	5.0	x		x	54	x		5	25	465	4.40	1000		
39400	"	110.0	115.0	5.0	5.0	x		x	61	x		x	25	175	5.40	1000		
41851	"	115.0	120.0	5.0	5.0	x		x	37	x		20	15	160	5.20	1400		
52	"	120.0	125.0	5.0	5.0	x		x	31	x		55	35	175	7.30	2000		
53	"	125.0	130.0	4.7	5.0	x		x	20	x		x	5	145	5.40	1050		
54	"	130.0	135.0	4.3	5.0	x		x	16	x		5	35	160	4.90	960		
55	"	135.0	140.0	5.0	5.0	x		x	69	x		30	25	205	5.20	1400		
56	"	140.0	145.0	5.0	5.0													SAMPLE LOST
41857	CHIP	145.0	150.6	5.0	5.0	x		x	27	x		5	100	465	8.70	3900		

ELECTROLYTIC ZINC COMPANY OF ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. 2DH STP 234  
SHEET No. 1

GRID CO-ORDS: 4340 N; 4477 E. Sg. Vall.  
A.M.G. CO-ORDS: S.374 400 m N  
384 413 m E  
COLLAR R.L.: 176 m  
COLLAR DIP: -70°  
AZIMUTH: 108° ANQ  
TOTAL DEPTH: 362.5 m.

LABORATORY ANALYTICAL TECHNIQUE DETECTION LIMIT	ANALABS														
	309		108	114		402	108	108	108	108	108	402	108	402	W
	File Assay		AAS	AAS		XRF	AAS	AAS	AAS	AAS	AAS	XRF	AAS	XRF	XRF
	0.008		0.5	1		3	5	5	5	50	5	3	10	3	10

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)											COMMENTS			
						Au	Ag	As	Sn	Cu	Pb	Zn	Fe%	Mn	Sb	Bi		Te	W	
41687	Grnd	20.0	25.0	100%	5.0		X	13		16	95	30	150	6.00	1650					
88	"	25.0	30.0	"	5.0		X	26		6	65	20	150	5.85	1750					
89	"	30.0	35.0	"	5.0		X	7		14	105	20	185	7.15	2100					
41690	"	35.0	40.0	"	5.0		X	7		X	70	10	145	6.00	1500					
91	"	40.0	45.0	"	5.0		X	9		X	55	15	175	6.50	1600					
92	"	45.0	50.0	"	5.0		X	10		10	80	20	155	6.15	1450					
93	"	50.0	55.0	"	5.0		X	15		8	105	10	125	5.50	1200					
94	"	55.0	60.0	"	5.0		X	15		22	60	25	190	7.60	1950					
95	"	60.0	65.0	"	5.0		X	17		10	130	15	150	6.30	1950					
96	"	65.0	70.0	"	5.0		X	11		X	160	20	160	5.65	965					
97	"	70.0	75.0	"	5.0		X	7		6	100	5	125	5.95	1300					
98	"	75.0	80.0	"	5.0		X	6		X	85	10	160	7.55	1700					
99	"	80.0	85.0	"	5.0		X	6		4	85	15	135	5.50	1400					
41700	"	85.0	90.0	"	5.0		X	2		X	60	15	135	5.90	1600					
45801	"	90.0	95.0	"	5.0		X	1		X	25	10	155	5.65	1750					
02	"	95.0	100.0	"	5.0		X	4		26	30	15	160	8.15	2400					
03	"	100.0	105.0	"	5.0		X	2		X	25	20	145	5.70	1750					
04	"	105.0	110.0	"	5.0		X	2		X	40	10	160	5.30	1550					
05	"	110.0	115.0	"	5.0		X	9		X	65	15	195	5.55	1450					
06	"	115.0	120.0	"	5.0		X	3		X	60	20	305	6.95	2100					
07	"	120.0	125.0	"	5.0		X	3		X	50	30	275	6.65	2300					
45808	Grnd	125.0	130.0	"	5.0		X	4		X	75	5	165	6.65	2050					
48432	SPHT	130.0	131.0	"	1.0	X	X	10		X	90	10	150	4.90	1500	X	X	X	X	
33	"	131.0	132.0	"	1.0	X	X	4		X	85	5	145	4.90	1950	X	X	X	X	
34	"	132.0	133.0	"	1.0	X	X	5		X	115	X	165	5.60	1850	X	X	X	X	
35	"	133.0	134.0	"	1.0	X	X	6		X	95	10	155	5.15	1850	X	X	X	X	
36	"	134.0	135.0	"	1.0	X	X	11		265	520	X	205	9.25	2750	X	X	X	X	
48437	SPHT	135.0	136.0	"	1.0	X	X	900		433	195	X	215	16.00	2950	X	X	X	26	

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.						DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD														HOLE No. <u>DDH STP 234</u>	
MINERAL RESOURCES DIVISION - TASMANIA																				SHEET No. <u>2</u>	
Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)														COMMENTS	
						Al	Ag	As	Sn	Cu	Pb	Zn	Fe %	Mn	Sb	Bi	Te	W			
48438	SPLIT	136.0	137.0	100%	1.0	X	X	4	X	20	5	165	5.30	1900	X	X	23	X			
39	"	137.0	138.0	"	1.0	X	X	4	X	5	5	200	5.75	2200	X	X	X	15			
48440	"	138.0	139.0	"	1.0	X	X	4	87	40	X	205	8.35	3150	X	X	13	X			
41	"	139.0	140.0	"	1.0	X	X	10	19	165	10	180	6.53	2550	X	X	X	X			
42	"	140.0	141.0	"	1.0	X	X	72	474	245	35	265	12.50	3300	X	X	X	20			
43	"	141.0	142.0	"	1.0	X	X	12	13	145	10	155	5.25	2150	3	X	X	X			
44	"	142.0	143.0	"	1.0	X	X	400	730	70	15	120	5.30	2100	X	X	X	10			
45	"	143.0	144.0	"	1.0	X	X	8	30	15	30	155	4.80	1950	X	X	X	23			
46	"	144.0	145.0	"	1.0	X	X	4	18	10	X	175	4.70	1700	X	X	X	X			
47	"	145.0	146.0	"	1.0	X	X	86	147	75	X	305	7.65	2400	X	X	X	15			
48	"	146.0	147.0	"	1.0	X	X	1000	286	5	X	135	6.70	1950	X	X	X	20			
49	"	147.0	148.0	"	1.0	X	X	75	87	10	30	225	4.25	3250	X	X	X	11			
48450	"	148.0	149.0	"	1.0	X	X	8	10	5	5	145	5.50	1700	X	X	X	11			
51	"	149.0	150.0	"	1.0	X	X	10	66	25	10	175	7.70	2500	X	X	18	15			
52	"	150.0	151.0	"	1.0	X	X	8	126	10	20	190	5.90	3000	X	X	X	20			
53	"	151.0	152.0	"	1.0	X	X	1900	612	170	15	805	8.25	3100	X	X	X	16			
54	"	152.0	153.0	"	1.0	X	X	98	91	40	10	290	7.20	5750	X	X	X	X			
55	"	153.0	154.0	"	1.0	X	X	17	63	40	50	285	8.90	3500	6	X	X	15			
56	"	154.0	155.0	"	1.0	X	X	5	23	45	10	175	5.25	2600	X	X	X	X			
57	"	155.0	156.0	"	1.0	X	X	8	3	9	X	160	5.60	2000	X	X	X	X			
58	"	156.0	157.0	"	1.0	0.12	1100	1300	127	450	635	1.01%	6.85	2750	X	40	X	X	Possibly Arsenic Zone 'C'		
59	"	157.0	158.0	"	1.0	X	X	9	48	10	5	150	4.10	2600	X	X	X	X			
48460	"	158.0	159.0	"	1.0	X	X	7	X	10	X	175	4.85	2100	X	X	X	X			
61	"	159.0	160.0	"	1.0	X	X	4	X	5	X	155	4.90	1800	X	X	X	X			
62	"	160.0	161.0	"	1.0	X	X	4	X	5	X	150	4.70	1900	X	X	X	X			
63	"	161.0	162.0	"	1.0	X	X	7	16	10	5	175	7.50	2330	X	X	X	15			
64	"	162.0	163.0	"	1.0	X	X	7	49	35	20	240	8.05	2500	X	X	X	X			
65	"	163.0	164.0	"	1.0	X	X	4	X	20	X	175	5.75	1700	X	X	X	X			
66	"	164.0	165.0	"	1.0	X	X	3	X	35	5	160	4.75	1900	X	X	X	X			
67	"	165.0	166.0	"	1.0	X	X	4	X	10	X	190	5.90	2200	X	X	33	X			
68	"	166.0	167.0	"	1.0	X	X	3	X	5	15	205	5.95	2200	X	X	23	X			
69	"	167.0	168.0	"	1.0	X	X	3	X	10	X	190	5.60	1850	X	X	X	X			
48470	SPLIT	168.0	169.0	"	1.0	X	X	3	X	10	X	155	4.80	1650	X	X	5	X			

218071

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ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 234

SHEET No. 3

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)													COMMENTS
						Au	Ag	As	Sn	Cu	Pb	Zn	Fe%	Mn	Sb	Bi	Te	W	
48471	SPLIT	169.0	170.0	100%	1.0	x	x	1400	318	30	10	180	9.00	2700	x	x	x	10	
72	"	170.0	171.0	"	1.0	x	x	7	11	5	x	180	6.15	2150	x	x	x	x	
73	"	171.0	172.0	"	1.0	x	x	520	5	10	5	200	6.80	2250	x	x	x	x	
74	"	172.0	173.0	"	1.0	x	x	12	x	10	5	190	6.15	2300	x	x	23	x	
75	"	173.0	174.0	"	1.0	x	x	10	103	5	x	210	6.80	2100	x	x	x	36	
76	"	176.0	175.0	"	1.0	x	x	100	207	25	10	175	9.45	2400	4	x	8	42	
77	"	175.0	176.0	"	1.0	x	x	13	39	5	x	205	7.45	2300	x	x	x	16	
78	"	176.0	177.0	"	1.0	x	x	26	21	5	x	180	7.15	2100	x	x	7	36	
79	"	177.0	178.0	"	1.0	x	0.5	570	169	10	45	205	7.75	2150	x	x	x	26	
48480	"	178.0	179.0	"	1.0	x	x	12	9	10	x	145	5.10	1750	x	x	x	x	
81	"	179.0	180.0	"	1.0	x	x	16	16	10	20	190	6.15	1950	x	x	x	x	
82	"	180.0	181.0	"	1.0	x	x	12	375	5	5	205	7.85	2250	x	x	x	x	
83	"	181.0	182.0	"	1.0	x	x	77	417	7.5	x	125	6.80	2700	x	x	x	17	
84	"	182.0	183.0	"	1.0	x	x	17	739	7.5	110	385	7.20	2450	x	x	x	x	
85	"	183.0	184.0	"	1.0	x	x	18	82	10	x	210	8.45	2750	x	x	x	x	
86	"	184.0	185.2	"	1.2	x	x	30	164	3.5	x	350	8.95	2750	x	x	8	x	
87	"	185.2	185.5	"	0.3	3.25	11.0	4	150	550	205	32.33%	11.50	1550	33	x	14	x	? related to Arsenic Zone 'A'
88	"	185.5	186.5	"	1.0	0.03	0.5	18	148	110	40	6400	9.55	3050	x	x	x	12	
89	"	186.5	187.5	"	1.0	0.06	2.5	1200	250	608	60	3000	13.50	2850	x	x	8	33	
48490	"	187.5	188.3	"	0.8	x	x	17	123	85	65	425	13.00	3650	x	x	x	12	
48415	"	188.3	189.0	"	0.7	0.14	1.0	430	52	610	20	360	13.50	2750					
16	"	189.0	190.0	"	1.0	1.95	16.5	320%	x	7100	130	1050	13.50	1900					Arsenic Zone 'A'
17	"	190.0	191.0	"	1.0	2.92	29.5	400%	x	4850	310	415	9.10	1150					Gold in Polished Section.
48418	"	191.0	191.5	"	0.5	1.96	20.5	530%	x	4300	185	285	1.95	625					2.5m @ 2.34g/t Au
48491	"	191.5	192.0	"	0.5	0.02	x	100	45	245	5	400	4.85	1550	x	x	x	x	
92	"	192.0	193.0	"	1.0	0.04	x	13	14	45	50	360	4.40	1800	x	x	x	x	
93	"	193.0	194.0	"	1.0	0.12	x	64	71	70	160	965	5.05	1650	x	x	4	21	
94	"	194.0	195.0	"	1.0	0.25	x	75	52	150	175	630	5.85	1750	x	x	x	12	? related to Arsenic Zone 'A'
95	"	195.0	196.0	"	1.0	x	x	14	5	15	15	115	4.25	1550	x	x	8	13	
96	"	196.0	197.0	"	1.0	0.03	0.5	13	61	105	90	4200	7.00	2200	x	x	x	x	
97	"	197.0	198.0	"	1.0	0.23	x	25	21	155	25	430	7.35	2150	x	x	x	13	
98	"	198.0	199.0	"	1.0	0.07	x	16	35	85	55	465	5.10	1850	x	x	10	10	
48499	SPLIT	199.0	200.0	"	1.0	x	x	11	9	95	x	215	3.75	1450	x	x	3	13	

218072

0372

ELECTROLYTIC ZINC COMPANY OF ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 234

SHEET No. 4

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)														COMMENTS
						Au	Ag	As	Sn	Cu	Pb	Zn	Fe%	Mn	Sb	Bi	Te	W		
48500	SPLIT	200.0	201.0	100%	1.0	X	X	7	X	25	X	105	3.25	1250	X	X	17	X		
61238	"	201.0	202.0	"	1.0	X	X	8	X	85	X	105	3.65	1800	X	X	3	X		
39	"	202.0	203.0	"	1.0	X	X	7	X	65	X	90	3.10	1200	X	X	X	X		
61240	"	203.0	204.0	"	1.0	X	X	7	X	25	X	110	3.80	1200	X	X	X	X		
41	"	204.0	205.0	"	1.0	X	X	13	X	15	10	110	4.25	1500	X	X	X	11		
42	"	205.0	206.0	"	1.0	0.26	X	68	52	195	45	190	7.65	1400	7	X	X	12		
43	"	206.0	207.0	"	1.0	0.04	0.5	54	89	115	70	800	6.75	1500	X	X	X	25		
44	"	207.0	208.0	"	1.0	0.23	0.5	100	105	195	80	220	7.65	1750	X	X	X	31		
45	"	208.0	209.0	"	1.0	0.30	0.5	66	78	185	75	1550	9.85	2200	3	X	X	44		
61246	SPLIT	209.0	210.0	"	1.0	X	X	16	13	60	25	275	6.65	2150	X	X	X	X		
45825	Grind	210.0	215.0	"	5.0		X	23	6	75	35	175	5.60	1800						
26	"	215.0	220.0	"	5.0		X	14	6	55	90	240	6.35	2250						
27	"	220.0	225.0	"	5.0		X	20	8	25	5	165	7.20	1800						
28	"	225.0	230.0	"	5.0		X	6	8	35	5	125	5.85	1800						
29	"	230.0	235.0	"	5.0		X	4	X	25	10	130	6.30	1650						
45830	"	235.0	240.0	"	5.0		X	3	X	100	10	175	7.20	2000						
45831	"	240.0	245.0	"	5.0		X	3	32	85	20	205	8.20	2200						
61247	SPLIT	245.0	246.0	"	1.0	X	X	6	X	5	X	135	3.90	1650	X	X	X	X		
48	"	246.0	247.0	"	1.0	0.06	X	3	X	20	X	140	3.70	1400	X	X	X	40		
49	"	247.0	248.0	"	1.0	X	X	6	X	5	X	140	4.25	805	X	X	12	63		
61250	"	248.0	249.0	"	1.0	0.02	1.0	19	678	60	10	155	7.50	1700	X	X	X	42		
51	"	249.0	250.0	"	1.0	0.11	2.0	900	2840	80	110	215	9.15	2150	X	100	X	33		
52	"	250.0	251.0	"	1.0	X	1.0	11	355	80	40	280	9.85	2350	X	X	X	29		
61253	"	251.0	252.0	"	1.0	0.02	1.5	1100	2470	515	15	140	9.35	2050	X	X	X	56		
48423	"	252.0	253.0	"	1.0	0.40	0.5	3800	3000	865	25	95	7.00	1450					} ? related to Arsenic Zone B	
48424	"	253.0	254.1	"	1.1	0.56	0.5	60	4200	250	10	125	13.50	3458						
61254	"	254.1	255.0	"	0.9	X	X	12	23	10	25	200	4.65	2000	5	X	X	13		
55	"	255.0	256.0	"	1.0	X	1.0	17	413	100	40	115	9.50	2200	X	X	9	37		
56	"	256.0	257.0	"	1.0	0.01	1.5	12	102	125	85	210	6.95	1750	3	X	11	13		
57	"	257.0	258.0	"	1.0	0.05	X	8	5	5	X	110	3.00	1150	3	X	X	11		
58	"	258.0	259.0	"	1.0	X	X	8	X	5	5	110	2.85	780	4	X	X	X		
61259	"	259.0	260.0	"	1.0	X	0.5	15	7	135	5	195	6.45	1650	X	X	18	X		
48419	SPLIT	260.0	261.0	"	1.0	0.04	0.5	1100	10	2150	10	140	6.55	1358						

218073







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ELECTROLYTIC ZINC COMPANY OF ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 232A-1  
SHEET No. 1

LABORATORY		ANALABS											GRID CO-ORDS:				
ANALYTICAL TECHNIQUE		309	APVA AGIA	108	114	118		108	108	108	108	108			A.M.G. CO-ORDS: S 376,728.5mN 384,395.8mE		
DETECTION LIMIT		0.008	0.008	0.5	1	1		5	5	5	50	5			COLLAR R.L.: 174m		
Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)										COMMENTS	
						AU	AU	Ag	As	Sn		Cu	Pb	Zn	Fe %		Mn
41626	Grind	63.0	65.0	2.0	2.0		x	0.5	58	x		25	435	100	2.00	560	
41625	Grind	65.0	70.0	5.0	5.0		x	3.5	92	x		130	605	510	6.20	2250	
48404	SPLIT	67.0	68.0	1.0	1.0	0.21		1.0	31	3100		325	15	80	5.05	875	Stringers of Po + Py
41626	Grind	70.0	75.0	5.0	5.0		x	3.0	240	68		180	280	1850	6.50	2750	
41627	Grind	75.0	80.0	5.0	5.0		x	1.0	47	x		200	5	145	7.10	1850	
48405	SPLIT	76.7	75.7	1.0	1.0	0.01		1.5	16	5		370	30	210	5.50	855	
48407	SPLIT	75.7	76.7	1.0	1.0	0.02		2.0	200	45		485	15	105	6.45	825	
48408	SPLIT	76.7	77.7	1.0	1.0	0.03		1.5	14	10		365	5	85	6.70	730	
48409	SPLIT	77.7	78.7	1.0	1.0	0.01		0.5	6	18		325	10	80	5.85	710	
41628	Grind	80.0	85.0	5.0	5.0		x	0.5	210	x		20	30	120	3.50	2550	
29	Grind	85.0	90.0	5.0	5.0		x	1.0	86	10		40	90	215	5.30	1400	
30	Grind	90.0	95.0	5.0	5.0		x	0.5	38	x		20	30	70	3.05	1300	
41631	Grind	95.0	100.0	5.0	5.0		x	1.0	68	x		45	50	120	4.58	2650	
48410	SPLIT	98.9	99.9	1.0	1.0	0.05		0.5	44	30		125	25	135	8.90	1200	
48411	SPLIT	99.9	100.9	1.0	1.0	0.02		0.5	35	x		75	35	135	9.80	1600	
48412	Grind	100.0	105.0	5.0	5.0		x	2.0	1500	x		85	50	110	5.20	1050	
48412	SPLIT	104.6	104.9	0.3	0.3	0.05		14.5	4.5%	x		845	365	115	5.55	685	50% Stringers Po + Py + Asp
4863	Grind	105.0	110.0	5.0	5.0		x	0.5	80	x		20	35	150	2.85	1750	
4863	Grind	110.0	115.0	5.0	5.0		x	1.0	280	x		25	200	630	4.75	2350	

218077

0174

ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD.  
MINERAL RESOURCES DIVISION - TASMANIA

DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD

HOLE No. DDH STP 232 A1  
SHEET No. 2

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)										COMMENTS	
						Au	Au	Ag	As	Sn		Cu	Pb	Zn	Fe%		Mn
48643	SPLIT	112.0	113.2	1.2	1.2	0.12		1.5	520	1		160	100	190	4.90	1550	
48635	Grind	115.0	120.0	5.0	5.0		0.008	0.5	160	10		55	145	2250	6.0	2650	Blebs and wispy stringers sph. py
36	"	120.0	125.0	5.0	5.0		X	X	39	X		10	15	160	5.0	1500	
37	"	125.0	130.0	5.0	5.0		0.008	X	58	X		20	220	2000	3.0	1450	
38	"	130.0	135.0	5.0	5.0		X	X	74	X		20	65	185	2.85	1900	
39	"	135.0	140.0	5.0	5.0		X	X	24	X		10	20	35	2.10	705	
48640	"	140.0	145.0	5.0	5.0		X	X	37	X		40	75	105	3.50	2200	
41	"	145.0	150.0	5.0	5.0		X	X	47	X		45	20	30	3.26	1700	
42	"	150.0	155.0	5.0	5.0		0.008	X	49	X		35	45	90	3.75	3100	
43	"	155.0	160.0	5.0	5.0		X	X	41	X		35	105	195	3.10	2200	
44	"	160.0	165.0	5.0	5.0		X	X	26	X		35	25	55	2.6	1100	
45	"	165.0	170.0	5.0	5.0		X	X	7	X		35	45	180	2.30	755	
46	"	170.0	175.0	5.0	5.0		X	X	21	X		25	55	100	1.95	590	
47	"	175.0	180.0	5.0	5.0		X	0.5	21	X		25	20	25	1.85	565	
48	"	180.0	185.0	5.0	5.0		X	X	41	X		65	25	365	3.05	1000	
49	"	185.0	190.0	5.0	5.0		X	X	22	X		230	20	35	2.50	1000	
48650	"	190.0	195.0	5.0	5.0		X	X	73	X		70	195	415	2.90	1400	
48651	Grind	195.0	198.2	3.2	3.2		X	X	20	X		70	30	25	2.20	500	

218078

078

ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD. DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD HOLE No. STP 218  
 MINERAL RESOURCES DIVISION - TASMANIA SHEET No. 1

LABORATORY											GRID CO-ORDS: A.M.G. CO-ORDS: COLLAR R.L.: COLLAR DIP: AZIMUTH: TOTAL DEPTH:	
ANALYTICAL TECHNIQUE	309											
DETECTION LIMIT	Fire Assay											
	0.008											

Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)										COMMENTS	
						Au											
64201	1/2 core	24.0	25.0		1.0	x											
02	"	25.0	26.0		1.0	x											
03	"	26.0	27.0		1.0	x											
04	"	27.0	28.0		1.0	x											
05	"	28.0	29.0		1.0	x											
06	"	29.0	30.0		1.0	x											
07	"	30.0	31.0		1.0	x											
08	"	31.0	32.0		1.0	0.017											
09	"	32.0	33.0		1.0	0.017											
64210	"	33.0	34.0		1.0	x											
11	"	34.0	35.0		1.0	0.017											
12	"	35.0	36.0		1.0	0.008											
13	"	36.0	37.0		1.0	x											
14	"	37.0	38.0		1.0	0.032											
15	"	38.0	39.0		1.0	0.017											
16	"	39.0	40.0		1.0	0.032											
17	"	40.0	41.0		1.0	0.025											
18	"	41.0	42.0		1.0	0.008											
19	"	42.0	43.0		1.0	0.125											
64220	"	43.0	44.0		1.0	0.258											Calcite-quartz-epidote-fluorite-pyrite -chalcopyrite ± pyrrhotite ± arsenic- pyrite arsenic
21	"	44.0	45.0		1.0	0.217											
64222	"	45.0	46.0		1.0	0.082											
64223	1/2 core	78.0	79.0		1.0	0.017											
24	"	79.0	80.0		1.0	0.017											
25	"	80.0	81.0		1.0	0.017											
64226	"	81.0	82.0		1.0	0.067											

218079



ELECTROLYTIC ZINC COMPANY OF A'ASIA LTD. MINERAL RESOURCES DIVISION - TASMANIA						DIAMOND DRILL CORE GEOCHEMICAL ANALYSES RECORD										HOLE No. <u>STP 22D</u> SHEET No. 1							
LABORATORY ANALYTICAL TECHNIQUE						Analabs										GRID CO-ORDS: A.M.G. CO-ORDS: COLLAR R.L.: COLLAR DIP: AZIMUTH: TOTAL DEPTH:							
DETECTION LIMIT						300																	
						Fire Assay																	
						0.008																	
Sample No.	Sample Type	From	To	Core Rec'd	Sample Length	METAL CONTENT (ppm unless specified)										COMMENTS							
						Au																	
64252	1/4 core	88.1	89.2		1.1	X																	
53	1/4 core	89.2	90.2		1.0	0.133																Pyrite veins with locally Po+Gr.	
54	1/2 core	90.2	91.4		1.2	0.032																	
55	"	91.4	92.5		1.1	0.050																	
56	"	92.5	93.6		1.1	0.017																	
57	"	93.6	94.7		1.1	0.108																	
58	1/4 core	94.7	95.85		1.05	0.300																Veins and dissem. of Pg ± Gpy	
59	1/4 core	95.85	96.0		0.25	0.017																	
64260	1/4 core	96.0	96.25		0.25	0.017																	
61	1/2 core	96.25	97.1		0.85	X																	
62	"	97.1	98.0		0.9	0.017																	
63	"	98.0	99.0		1.0	X																	
64	"	99.0	100.0		1.0	X																	
65	"	100.0	101.1		1.1	0.008																	
66	"	101.1	102.2		1.1	0.008																	
67	"	102.2	103.3		1.1	X																	
68	"	103.3	104.4		1.1	X																	
69	"	104.4	105.5		1.1	X																	
64270	1/2 core	105.5	106.5		1.0	X																	
71	1/4 core	106.5	107.5		1.0	X																	
64272	1/4 core	107.5	108.5		1.0	0.032																	
64273	1/4 core	137.0	138.0		1.0	X																	
74	"	138.0	138.7		0.7	0.050																	
75	"	138.7	139.7		1.0	0.017																	
76	"	139.7	140.7		1.0	0.017																	
64277	1/4 core	140.7	141.7		1.0	0.017																	



APPENDIX 6.

Soil Sample Data Sheets.

Orientation sampling on line 3,260N.

E.Z. Co. of Asia Ltd.,  
ROSEBERY, Tasmania

GEOCHEMICAL SAMPLE DATA SHEET

PROJECT: .. E.L. 4/73 ..  
LOCALITY: .. Sterling Valley Coastean ..  
GRID NAME: .. Sterling Valley ....  
NOMINAL GRID AZIMUTH: .. Grid North = 2.8° AMG.

MATERIAL: .. Soil ..  
SAMPLE METHOD: .. Hand Aved ..  
SAMPLED BY: .. W. Magle, P. Hopf, J. MFD ..  
DATE: .. 4 Dec. 1984 ..

SIZE FRACTION ANALYSED: .. Total; .. -10+40 mesh; .. -40+80 mesh; .. -80 mesh ..  
ANALYSED BY: .. Analabs ..  
METHOD: .. Au by Fire Assay; .. Sb, Ba, W by XRF; .. rest by A.A.S.

SAMPLE NUMBER	SAMPLE LOCATION DATA			SAMPLE COMPOSITION DATA							METAL CONTENT (ppm unless specified)											218084		
	GRID LINE NO.	A.H.G. CO-ORDINATES		DEPTH (cm)	COLOUR	Clay	Sand	Rock Frag.	Organic	SIZE FRACTION	Al	Ag	As	Sb	Ba	Bi	Mo	W	Cu	Pb	Zn		Fe%	Mn
	GRID EASTING	NORTHING	EASTING																					
43748	4650			0.70	OR	9.5	5			TOTAL	X	X	1560	7	1500	110	X	110	50	50	70	10.00	190	
				-10+40							X	X	580	4	1190	X	X	115	50	50	65	9.95	180	
				-40+80							X	X	490	6	240	X	X	115	50	60	70	9.30	170	
				-80							I/S	X	520	9	200	10	10	X	50	40	70	8.60	155	
43749	4650			0.35	OR	9.5	5			TOTAL	X	X	670	7	200	110	X	110	45	40	65	9.70	130	
				-10+40							X	X	570	9	165	X	X	X	40	35	60	8.25	150	
				-40+80							X	X	490	4	160	X	X	115	35	50	55	6.60	120	
				-80							X	X	440	7	160	X	X	30	35	20	50	6.35	110	
43750	4640			0.30	BR OR	7.5	10	15		TOTAL	X	X	950	4	60	X	X	110	20	35	50	11.50	90	
				-10+40							X	X	730	7	120	X	X	X	25	30	45	10.00	90	
				-40+80							I/S	X	330	4	140	X	X	35	20	45	6.65	80		
				-80							I/S	X	390	7	30	X	X	20	20	15	40	6.25	70	
43751	4630			0.50	OR	9.0	5	5		TOTAL	X	X	1100	8	180	110	X	110	35	80	65	11.50	130	
				-10+40							X	X	1100	9	90	X	X	X	35	70	60	9.05	125	
				-40+80							X	X	800	3	150	X	X	110	30	80	55	8.65	110	
				-80							X	X	1000	9	165	X	20	115	30	45	50	27.50	95	
43752	4620			0.65	OR	9.0	10			TOTAL	0.017	X	1700	15	75	130	X	110	95	115	130	18.00	600	
				-10+40							0.25	X	2200	15	65	X	X	110	100	125	145	9.55	445	
				-40+80							X	X	1700	15	180	110	X	X	95	160	135	18.00	475	
				-80							0.17	X	1400	15	165	20	X	X	25	115	130	18.50	620	
43753	4610			1.25	BR OR	7.0	15	15		TOTAL	0.017	X	1500	20	190	X	X	X	85	255	460	12.00	1800	
				-10+40							0.20	X	2200	20	120	X	X	X	90	270	495	12.50	1800	
				-40+80							0.31	X	1600	20	125	X	X	X	85	250	440	11.00	1450	
				-80							0.12	X	1500	20	130	X	X	X	80	215	410	9.50	1500	
43754	4610			0.60	OR	9.0	11			TOTAL	0.017	X	6400	55	120	X	X	X	100	430	220	17.50	190	
				-10+40							X	X	6500	70	100	X	X	X	100	430	230	17.50	190	
				-40+80							I/S	X	5000	40	140	X	X	X	95	365	185	15.00	210	
				-80							I/S	X	4600	40	110	X	X	X	85	305	160	14.00	170	
43755	4600			0.30	BR DK BR	7.0	10	15		TOTAL	X	X	1500	30	65	110	X	20	45	130	100	6.85	200	
				-10+40							X	X	1700	25	85	X	X	25	50	135	105	6.90	155	
				-40+80							I/S	X	1400	I/S	I/S	X	X	I/S	40	130	90	5.40	175	
				-80							I/S	X	800	20	25	X	X	30	30	95	65	5.15	145	

E.Z. Co. of Asia Ltd.  
ROSEBURY, Tasmania

GEOCHEMICAL SAMPLE DATA SHEET

PROJECT: .. E.L. 4/73 .....

LOCALITY: .. Sterling Valley Coastal .....

GRID NAME: .. Sterling Valley .....

NOMINAL GRID AZIMUTH: .. Grid North = 28° AMG .....

MATERIAL: .. Sp.1 .....

SAMPLE METHOD: .. Hand Assay .....

SAMPLED BY: .. W. Moyle, D. Hopton, J. McD .....

DATE: .. 4. Dec. 1984 .....

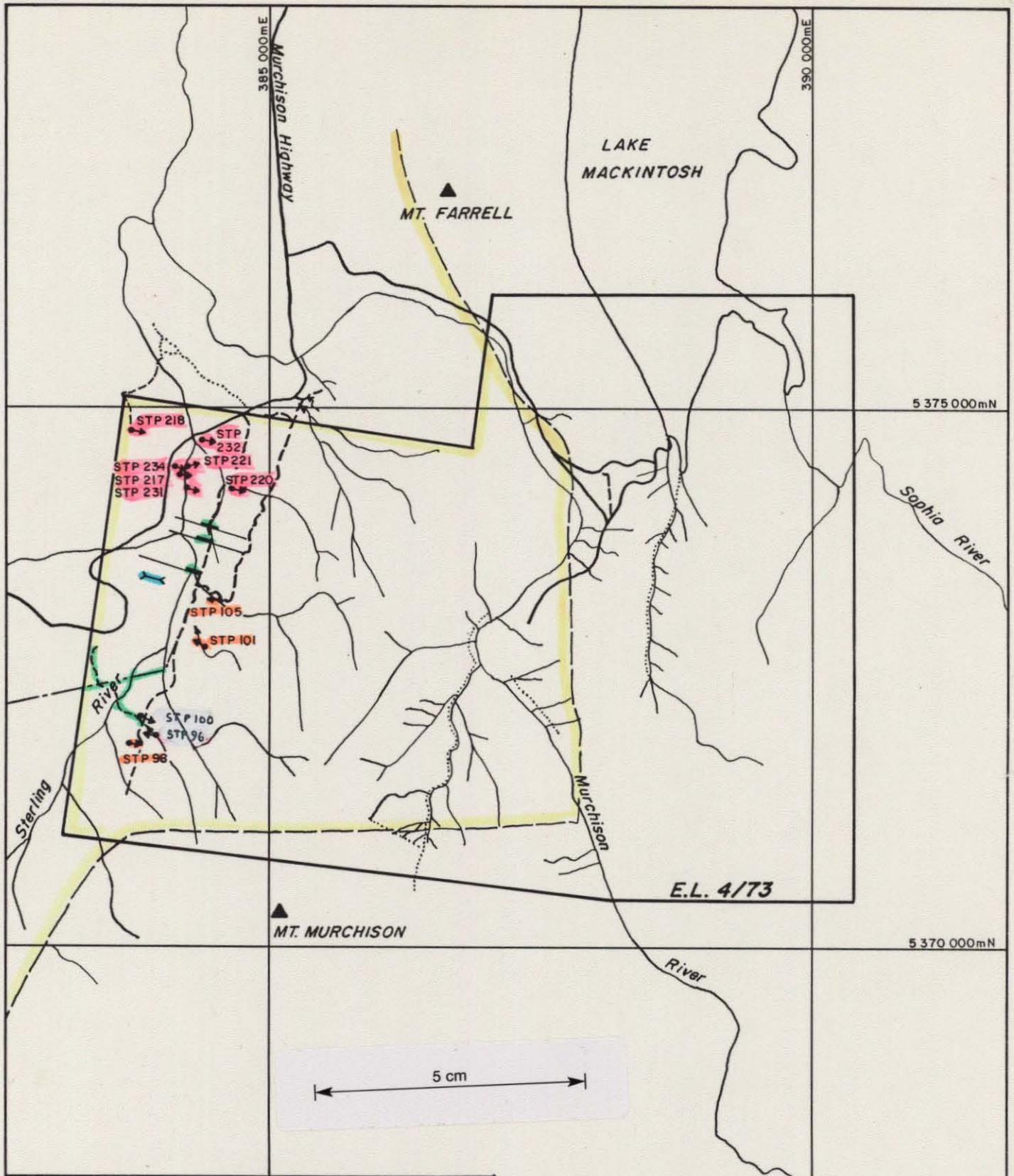
SIZE FRACTION ANALYSED: .. Total .. -10+40 mesh; .. -40+80 mesh; .. -80 mesh .....

ANALYSED BY: .. Analabs .....

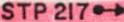
METHOD: .. Au by Fire Assay; .. Sb, Ba, W by XRF; .. rest by A.A.S. .....

218085

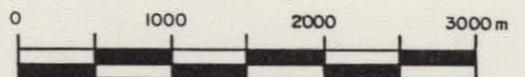
SAMPLE NUMBER	SAMPLE LOCATION DATA				SAMPLE COMPOSITION DATA				METAL CONTENT (ppm unless specified)														
	GRID LINE NO.	A.M.G. CO-ORDINATES			COLOUR	Clay	Sand	Rock Frags.	Organic	SIZE FRACTION	Au	Ag	As	Sb	Ba	Bi	Mo	W	Cu	Pb	Zn	Fe %	Mn
	3260N	NORTHING	EASTING	DEPTH (m)																			
	GRID EASTING	NORTHING	EASTING	DEPTH (m)	COLOUR	Clay	Sand	Rock Frags.	Organic	SIZE FRACTION	Au	Ag	As	Sb	Ba	Bi	Mo	W	Cu	Pb	Zn	Fe %	Mn
43756	4590			0.90	OR BR	85	10	5		TOTAL	0.0510	X	8700	15	120	X	X	X	3115	275	1130	23.00	115
										-10+40	0.0510	X	9300	15	120	20	X	X	320	275	120	23.50	110
										-40+80	1/5	X	8900	20	170	10	10	X	305	275	115	22.00	110
										-80	1/5	X	7900	15	210	X	X	X	290	245	115	23.50	120
43757	4590			0.45	BR OR	90	5	5		TOTAL	0.025	X	5300	110	45	10	X	X	115	180	1100	16.00	170
										-10+40	0.033	X	5400	115	45	10	X	X	150	155	1100	16.50	1100
										-40+80	1/5	X	4600	110	75	10	X	110	145	175	1100	16.00	175
										-80	1/5	X	4700	9	25	X	110	X	145	125	1100	15.50	220
43758	4580			1.25	GN OR	70	15	15		TOTAL	X	X	540	5	330	X	X	X	100	110	195	7.50	320
										-10+40	X	X	600	8	320	X	X	X	100	105	190	7.85	315
										-40+80	1/5	0.5	670	X	320	X	X	X	95	120	190	7.25	325
										-80	X	0.5	520	X	370	X	X	X	90	90	200	6.75	335
43759	4580			0.60	OR	99	1			TOTAL	0.117	X	2600	8	110	X	10	15	80	105	75	13.00	110
										-10+40	0.008	X	2200	7	110	X	X	X	80	90	75	13.00	95
										-40+80	X	X	2300	110	120	X	X	X	95	110	75	13.00	95
										-80	X	X	2300	6	90	X	20	X	85	90	70	13.00	95



**LEGEND**

-  Area of DIGHEM Survey.
-  STP 101 ●→ Drill Hole - Relogged.
-  STP 217 ●→ Drill Hole - Reassayed.
-  Geology Mapping Traverse.
-  Soil sample - Orientation Survey.
-  Costean.
-  Transmission Line.

218086



**E-7**

PROJECT: **STERLING VALLEY, TAS.**

**WORK COMPLETED**  
**2-5-1984 - 6-3-1985**

Compiled: I. Mc D. Date: 18-3-'85

PLAN NO

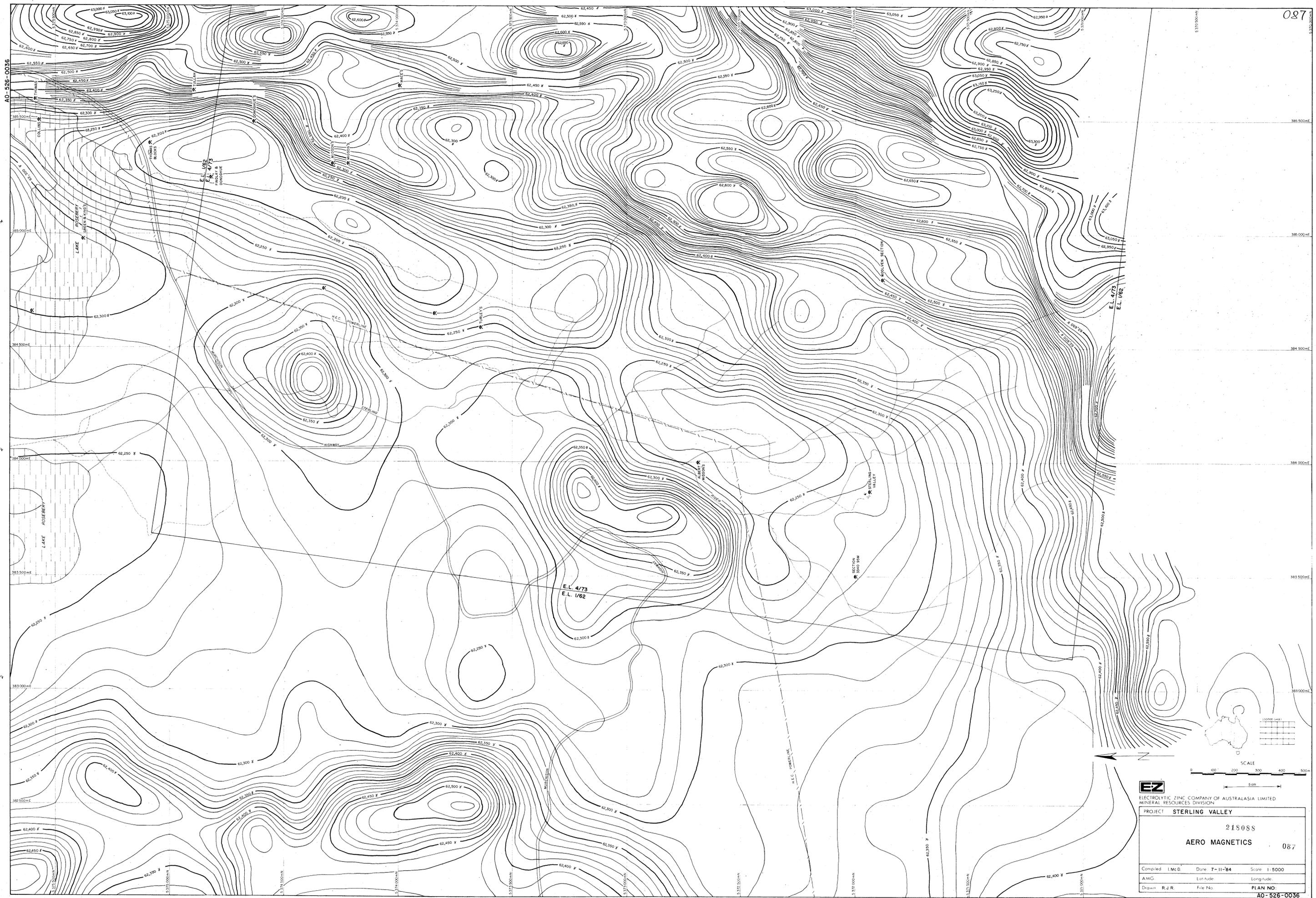
Drawn: R. J. R. Scale: 1:50,000

**A4-526-0042**

85-2347

085





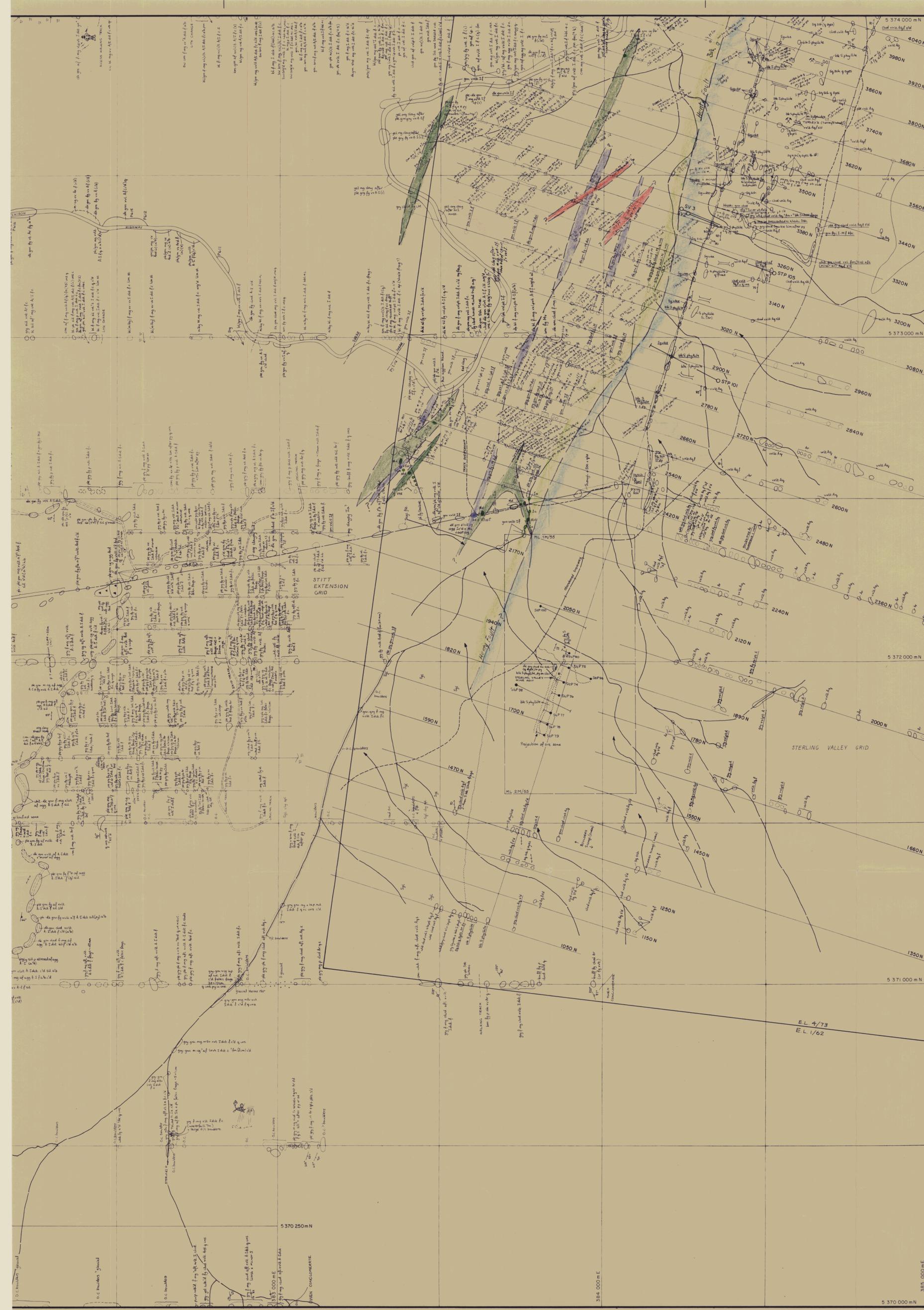
**EZ**  
ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED  
MINERAL RESOURCES DIVISION

PROJECT **STERLING VALLEY**

**218088**  
**AERO MAGNETICS**

Completed I.M.D. Date **7-11-84** Scale **1:5000**  
AMG Longitude  
Drawn **R.J.R.** File No. **PLAN NO.**

**A0-526-0036**



A	B	A	B
1		2	
D	C	D	C
A	B	A	B
3		4	
D	C	D	C
A	B	A	B
5		6	
D	C	D	C
A	B	A	B
7		8	
D	C	D	C
A	B	A	B
9		10	
D	C	D	C
A	B	A	B
11			
D	C	D	C

NOTE 1 (Sterling Valley J.V. E.L. 4/73) Underlined rock descriptions: W.S.F. opinion from tramping around out bush (also A.J.M. later)

NOTE 2 Source of further information: Asarco (Aust.) Pty Ltd. E.L. 4/73 Sterling Valley Progress Report to June 1974 by R.G. Barker

N.B. - CORRESPONDING SHEET, READ-ROSEBERRY - 40-520-0108

**ELECTROLYTIC ZINC CO. OF ASIA. LTD.**

PROJECT: MT. BLACK E.L. 1/62 TAS.

STERLING VALLEY J.V. E.L. 4/73

**GEOLOGY**

218089

5 cm

088

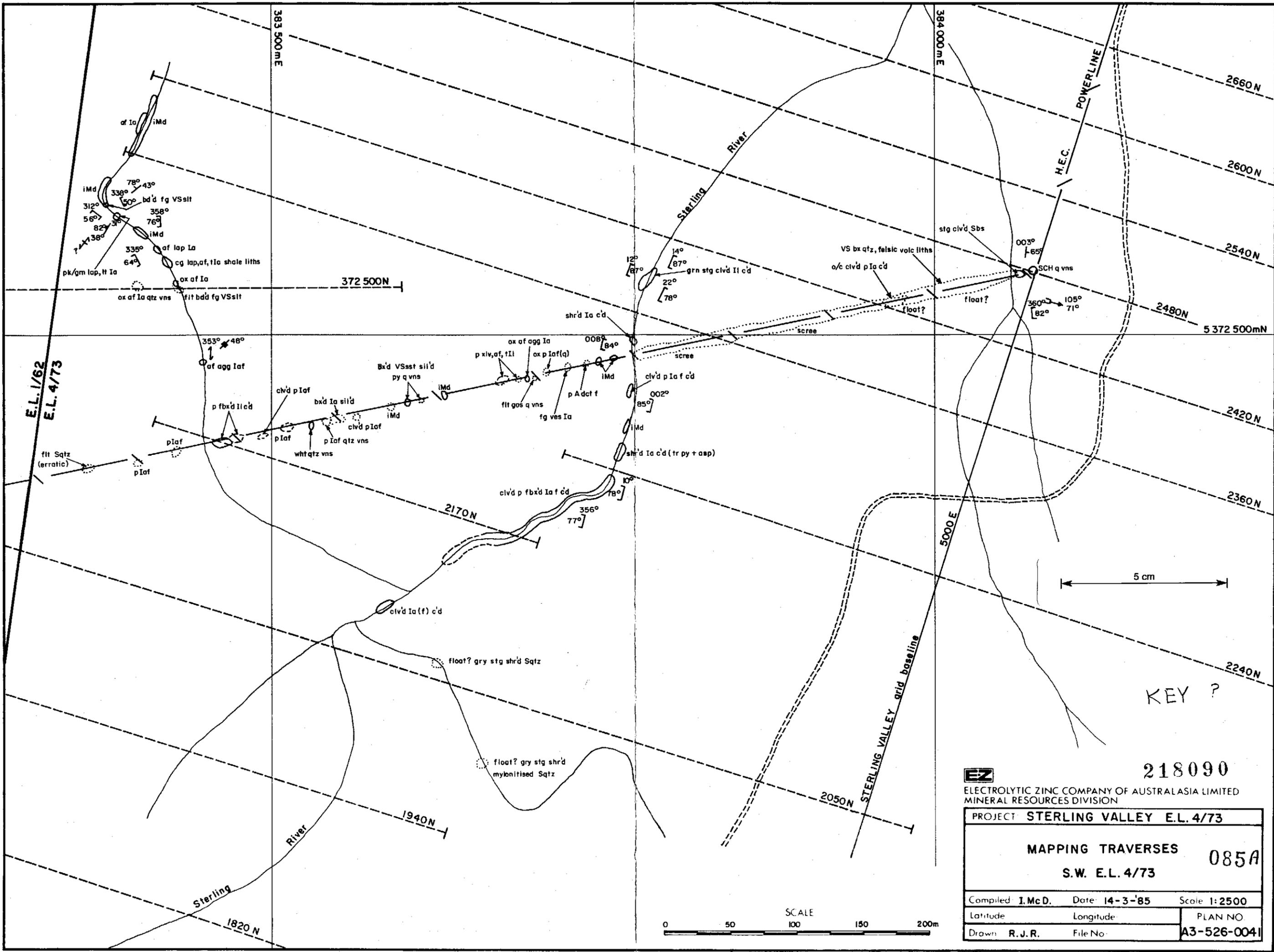
SCALE: 1:5000 Survey: P.K., W.F., A.M., G.I., R.S. Revised: 19-3-1985

Reference: Date February 1979 REF NO

Drawn: R.P.T. Checked: A0-526-0043

85-2347

A3-526-0041



KEY ?

218090

ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED  
MINERAL RESOURCES DIVISION

PROJECT STERLING VALLEY E.L. 4/73		
MAPPING TRAVERSES		085A
S.W. E.L. 4/73		
Compiled: I.McD.	Date: 14-3-85	Scale 1:2500
Latitude	Longitude	PLAN NO.
Drawn: R.J.R.	File No.	A3-526-0041