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ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED

West Coast Mines

MONTEZUMA J.V. - PART EXPLORATION LICENCE N.O. 15/76

Report on Exploration Activity

4th May, to 4th November, 1983.

Geology Department

Report No. 172MD

R.A. Sainty,

November. 1983

TABLE OF CONTENTS

LIST OF PLANS

Plate 1. ✓		Standard Symbols and Terminology.(LEGEND)
A1-527-0039 ✓		MZP 244 Summary Sheet
	-0041 ✓	MZP 245a Summary Sheet
A0-527-0043 ✓		6,070E-6,145E Costean Summary
	-0042 ✓	5,770E-5,865E Costean Summary
	-0044 ✓	1:5,000 Outcrop Geology
	-0045 ✓	1:5,000 Outcrop Geology

LIST OF APPENDICES

Appendix 1. DDH Detailed Log Sheets

Appendix 2. C.M.S. Reports 83/9/27 and 83/10/12.

1. INTRODUCTION

This report covers exploration from 4th May, 1983 to 4th November, 1983 on the Montezuma Joint Venture part of E.L. 15/76 by the Electrolytic Zinc Company of Australasia Limited acting as Manager for a Joint Venture consisting of E.Z., Getty Oil Development Co. Ltd. and C.S.R. Limited. This Joint Venture was initiated in February, 1982.

A description of the Montezuma Joint Venture part of E.L. 15/76 can be found in E.Z. Geology Department Report No. 160, December, 1982.

2. PREVIOUS EXPLORATION

Previous exploration by the present Joint Venture has been reported in E.Z. Geology Department Reports No's 160 (1982) and 166 (1983).

3. ABBREVIATIONS

Standard symbols and terminology used on geological plans and sections are detailed on Plate 1 of this report.

4. EXPLORATION UNDERTAKEN 4TH MAY TO 4TH NOVEMBER, 1983

Exploration undertaken in this six month period comprised follow-up of previously defined target areas by diamond drilling and costeaning sufficient to bring total project expenditure to $200,000. At this point C.S.R. have the right to commence contributing to the Joint Venture to maintain their equity interest.

4.1. Work Completed

4.1.1. Diamond Drill Holes (Total 680m)

Two diamond drill holes, MZP 244 and MZP 245a, were completed in the Maestries Dolomitic Conglomerate (line 18) anomaly area in the southern part of the grid. MZP 245 was abandoned at 56m depth because of excessive deflection.

Hole parameters are:

MZP 244

Target: To locate the Maestries Dolomitic Conglomerate unit down-dip from surface as pre-requisite to target the deeper DDH MZP 245.

Collar Co-Ordinates (A.M.G.):		373,027.9E 5,363,960.4N
	:	628.8 R.L.
Dip	:	-60°
Azimuth (A.M.G.)	:	240°
Total Depth	:	250.0m

MZP 245a

Target: To test the down-dip intersection of the Maestries Dolomitic Conglomerate unit with the Montezuma 'Fault' for stratabound pyrite-hosted Sn mineralisation beneath coincident EM and soil Sn geochemical anomalies.

Collar Co-Ordinates (Local) :		5000E 2960N
(A.M.G.):		373,086.5E 5,364,004.0N
Dip	:	-80°
Azimuth (A.M.G.)	:	240°
Total Depth	:	374.0m

MZP 245 had identical collar parameters to 245a except for a dip of -75°. In order to avoid similar excessive deflection (lift of 9° at 56m), MZP 245a was drilled using a chromed barrel, inverted bit and backend reamer in NQ to 84m and from 201-245m in BQ.

All core from MZP 244 and 245a was measured for magnetic susceptibility and filleted (i.e. a sliver sawn off the side) in 3m max. lengths. Samples were submitted to Analabs in Cooee and analysed for Cu, Pb, Zn, Ag, Fe and Mn by A.A.S. after nitric/perchloric acid digestion, for As by A.A.S. after vapour Hydride generation and for Sn by pressed powder XRF. Some strongly pyritic intervals returned very low Fe values and were re-assayed for Fe after nitric perchloric hydrochloric and hydrofluoric acid digestion for a total dissolution of the pyrite content.

4.1.2. Costeans (Total 175m)

Two costeans were completed on line 1A in the northernmost part of the Joint Venture area:

a) 6,070E-6,145E

This costean tested the primary target - a strong E.M. (DIGHEM and SE-88 GENIE) anomaly that occurs over lines 1, 1A and 2 which had a single elevated Sn soil value (47 ppm) on line 1A at the anomaly mid-point. A single +30 ppm Sn value had also been recorded by NCGFA in 1968. It was thought that the lack of more numerous soil Sn values could have been because the area of response is on elevated ground within a generally flat flood-plain area. Structurally-located, Sn-bearing pyrrhotite - 1.46m at 6.95% Sn is known within ML 62M/75 to the west in DDH GDK-4 by Comstaff Pty. Ltd. This Sn occurrance and known dolomite units within ML 62M/75 provided additional encouragement to test this EM anomaly.

b) 5,770E-5,865E

This costean tested the secondary target - an area at the western end of the geochemical sampling at 5,800E where the last three samples assayed 59,289 and 258 ppm Sn. Coincident with these values is a +400nT, 100m-wide, circular in plan, magnetic peak on top of the magnetic ridge which passes through this area (refer E.Z. Report 166, page 7). Old alluvial cassiterite workings (Dunn and Archer's) are known in the vicinity.

Both costeans were sampled at 10m intervals with both a bulk channel sample across the width of the floor and separate samples over 0.5m intervals up one wall. All samples were submitted to Analabs and analysed as per the core fillet samples.

4.1.3. Track Construction and Repair

A bulldozer was used to repair and clear thick snow from the access track to the line 18 drillsite. Access was constructed to a proposed drill site at line 19 (650m) and to access the line 1A area for costeaning (950m).

4.1.4. Grid Mapping

Contract geologist D. Simpson completed the grid line mapping: the newer infill lines 16.5-21.0 and 1A-2 and lines 7 and 8W.

4.2. Results Received

4.2.1. Diamond Drilling (Refer: A1-527-0039 MZP 244 Summary Sheet;
A1-527-0041 MZP 245a Summary Sheet;
Appendix 1 - DDH Detailed Log Sheets;
Appendix 2 - C.M.S. Reports 83/9/27 and 83/10/12)

A summary log for MZP 244 is as follows:

0 -139.9m DONAH FM. Black slates and grey quartzite, interbedded, laminated and frequently sheared and folded, as follows:

0 - 3.0	No core (tricone bit).
3.0 - 6.18	Black slate, indistinctly laminated.
6.18- 26.85	Interbedded distinctly laminated black slate and fine grey quartzite.
26.85- 36.25	Black slate
	26.85-32.8 Indistinctly laminated similar to 3.0-6.18.
	32.8 -36.25 Dark grey to black laminated slate.
36.25- 67.4	Interbedded distinctly laminated black slate and fine grey quartzite.
	42.4-47.25 Intense to massive quartz veining.
	38.0-38.75, 48.0-50.0 Fine and intense to semi-massive quartz veining.
67.4 - 94.8	Black laminated slate with minor quartzite intercalations.
	77.9-81.9, 85.75-92.0 Strongly sheared and brecciated.
94.8 -139.9	Black massive to only rarely laminated slate. No quartzite.

139.9 -194.0m MAESTRIES DOLOMITIC CONGLOMERATE: recrystallised dolomite-matrix-supported pebble conglomerate or pebbly dolomite.

194.0 -195.0 Laminated cherty quartz arenite.

195.0 -250.0 CONCERT GROUP 'SCHIST': Finely laminated grey to black cleaved siltstone and massive olive green 'slate'.

A summary log of MZP 245a is as follows:

0 -232.15m OONAH FM: Black slate and grey quartzite, interbedded, laminated and frequently intensely sheared and folded.
Intensely sheared, plastically deformed: 72.0-129.8; 189.0-201.0; 215.4-232.15m.
Thin pyrite veinlets abundant within 60.45-138.0m.

232.15-367.0m MAESTRIES DOLOMITIC CONGLOMERATE: Recrystallised dolomite-matrix-supported pebble conglomerate or pebbly dolomite, with intraformational silty dolomites and dolomitic siltstones and quartz arenites, as follows:

232.15-232.65 Conglomerate.
232.65-254.8 Khaki silty dolomite, grey slump-brecciated dolomite and minor white dolomitic quartz arenite.
254.8 -264.0 conglomerate.
264.0 -268.53 khaki arenaceous dolomite, slump-brecciated.
268.53-308.65 conglomerate.
308.65-343.45 silty dolomite, dolomitic arenite pyritic siltstone with narrow intervals of conglomerate.
343.45-366.1 conglomerate.
366.1 -367.0 quartz veined and pyritic dark grey arenite.

367.0 -374.0m CONCERT GROUP 'SCHIST': Dull green massive to poorly laminated 'schist'.

MZP 244 - Results:

The Maestries Dolomitic Conglomerate unit is located 139.9-194.0m down-hole, and has increased in dip from 30° at the surface to 50°, with a true width of 50m.

Within the middle of the unit, diffuse-edged py-sp-gn replacement mineralisation occurs, and assays:
167.45-171.7m 4.25m at 0.92% Pb, 0.51% Zn, 21.6% Fe, 76 ppm Sn
but does not continue down-dip to the MZP 245a intersection.

Erratic, low to elevated Sn values occur within 3.0-44.4m in the Oonah Formation slates and quartzites. Most of these Sn values are less than 100 ppm, but some range 100-300 ppm with isolated high values as follows:

6.25-9.0m	2.75m	at 0.27% Sn, 3.53% Zn, 0.36% Pb
19.0 -20.0m	1.0m	at 0.29% Sn, 4.88% Pb, 233 ppm Ag
42.5 -42.95m	0.45m	at 0.105% Sn, 2.0% As, 7.7% Fe.

Thin and polished section mineragraphy (refer 53516-53520 in C.M.S. Report 83/9/27: Appendix 2) reveals that Sn occurs as very fine-grained cassiterite (mostly 10-30μ, but up to 100μ) within veinlets of ultrafine matted tourmaline-quartz that have penetrated earlier conspicuous sphalerite (-galena)-siderite veins (6.25-8.9m) or as fine cassiterite along the edges of quartz-pyrite(-tourmaline) veinlets (19.1-19.2m).

The high assays from 6.25-9.0m are due to three narrow veinlets, up to only 15mm in width, that were intersected subparallel to core over that length. These three may even be different sections of the same veinlet. The assays are therefore artificially high over the 2.75m length.

MZP 245a - Results:

The Maestries Dolomitic Conglomerate was unmineralised over the entire intersection length.

The dolomite unit has greatly increased in thickness to about 120m true and although the upper contact has maintained the 50° east dip, the lower contact has increased in dip to 75°. The unit is now a sequence of dolomitic conglomerate (or pebbly dolomite) sensu stricto, with two major intraformational interbedded and interslumped silty dolomite beds (refer 53526-53531 in C.M.S. Report 83/10/12: Appendix 2).

Sn mineralisation is again limited to an interval within the Oonah Formation. Typical 3m-length sample assays of 100-300 ppm with occasional high 0.1%-0.3% values occur within a zone of abundant narrow pyrite veinlets 60.45-138.0m down hole. The pyrite and Sn values are coincident with a zone of intense shearing and plastic deformation of the black slates.

Specific high or elevated values are:

67.5 - 67.8	0.3m at 0.3% Sn, 12.0% Fe.
90.0 - 93.0	3.0m at 0.12% Sn, 3.55% Fe.
96.0 - 99.0	3.0m at 0.12% Sn, 3.75% Fe.
114.0 -117.0	3.0m at 939 ppm Sn.
126.0 -129.0	3.0m at 756 ppm Sn.
135.35-135.55	0.2m at 0.26% Sn, 23.0% Fe, 9.0% As.
135.55-136.15	0.6m at 820 ppm Sn, 6.0% Fe.

Thin and polished section mineragraphy (refer 53521-53523 in C.M.S. Report 83/9/27: Appendix 2) reveals that Sn occurs as very fine-grained cassiterite (either <20μ or 20-50μ, but up to 100μ) within zones of ultrafine tourmaline-quartz that flank the narrow pyrite veinlets (e.g. 67.5-67.8m) or veins of siderite-py (e.g. 90.0-93.0m). In a single unusual vein (135.35-135.55m) some of the Sn content is due to stannite, which forms part of a younger generation of sulphides veining a breccia consisting of tourmalinised rock fragments (containing fine cassiterite) within a pyrite arsenopyrite matrix.

4.2.2. [redacted] (Refer AO-527-0043 - 6070E-6145E Costean Summary,
AO-527-0042 - 5770E-5865E Costean Summary)

6070E-6145E

Aim: [redacted] tested a strong EM (DIGHEM and SE-88 GENIE) anomaly centred at 6100E on 1A which had a single elevated Sn soil value (47 ppm), located at the anomaly mid-point.

Result: The unit of sheared reddish-purple to red-brown 'siltstone' west of 6115E has elevated base metal background values (highest is Zn: 100-300 ppm, up to 560 ppm) but only 2 out of 24 samples assay for Sn above the limit of detection, namely 4 and 6 ppm Sn. There are small areas of less iron-stained, cream-coloured rock which feature small black smears and streaks. East of 6115E, the east-dipping cream-grey coloured interbedded siltstones and arenites have very low (e.g. <35 ppm Zn) base metal backgrounds and all samples assayed for Sn below the limit of detection.

It is therefore most probable that the source of the EM anomaly is a deeply weathered black shale unit. The 47 ppm soil Sn value is not explained by the bedrock geochemistry.

5770E-5865E

Aim: This [redacted] tested a coincident Sn soil geochemical anomaly and a localised, circular in plan, magnetic peak on top of the magnetic ridge.

Result: Anomalous Sn soil values are due to a surficial gossanous layer and scree. Although both this 'gossan' and some of the underlying pyritic-laminated purple siltstones are feebly magnetic, the localised magnetic high is more probably part of the response from the ultrabasic rocks which underlie the Dundas Group sediments (refer E.Z. Report 166, page 7) DDH GDK-3 by Comstaff Pty. Ltd. within ML 62M/75 intersected gabbro at 172m.

4.2.3. Geological Line Mapping (Refer AO-527-0044 - 1:5000 Outcrop Geology, AO-527-0045 - 1:5000 Outcrop Geology)

The preliminary results of the mapping on the newly cut infill lines and on 7 and 8W were discussed in E.Z. Report 166. Results are consistent with the current geological interpretation but are included in detailed form for the first time in this report.

4.3. Discussion of Drilling Results

4.3.1. Mineragraphy

In both drill holes, the cassiterite occurrence within the Donah Formation is similar to that at Queen Hill, Zeehan, where the cassiterite grain size ranges from 2-70μ with over 75% <20μ. The cassiterite occurs within siderite, fluorite and quartz gangue minerals (with lesser amounts in patches of sericitie, chlorite and carbonaceous material) rather than within the network-veining pyrite (W.M. Lutley, 1975).

However, the meaning of this similarity in a search for massive or semi-massive pyrite replacement-style mineralisation is not certain, except to demonstrate that mineralisation of this form could constitute an orebody if it developed into an intense vein-network or semi-massive form, as is possible in a carbonate replacement situation.

4.3.2. The Coincident EM Anomaly

MZP 245a was targetted on the intersection of the dolomitic unit and the soil Sn geochemistry-based Montezuma 'Fault' beneath a coincident DIGHEM and strong to extreme GENIE-EM anomaly. No massive sulphide conductor was intersected down-hole, and therefore the EM anomaly has two possible sources, either

a) The pyrite-veined black (graphitic-sericitic) slates exposed at the surface in the vicinity of the MZP 244 collar, or

b) An unseen, off-hole, massive sulphide body.

The second alternative is unlikely as a source of the observed EM anomaly. Because the dolomite unit has been found to dip at a steeper angle (50°) than was expected, any replacement sulphide would occur at too great a depth below surface to be consistant with the very large amplitude of the GENIE response. Rather, the sharp, large amplitude anomaly form suggests a near surface, highly conductive source. The pyrite-veined black slates were the only such feature intersected in the two drill holes, and these rocks also outcrop abundantly.

Additional conductors could exist at greater depth which may add to the EM response. These would not be resolvable from the surface. Down-hole EM surveys would resolve this possibility.

4.3.3. Geochemistry

The two drill holes raise questions concerning:

a) The down-hole nature, position and orientation of the Montezuma Fault.

b) The relationship between bedrock Sn and soil Sn, and

c) The association of Sn and Pb-Zn.

a) The Montezuma 'Fault':

The 'Montezuma 'Fault' is expressed solely by the discontinuous linear 5km long +30 ppm Sn soil geochemical anomaly that cross-cuts the stratigraphy. Such a geochemical pattern could also result from a fracture system, but in either case it has been envisaged as a potential Sn feeder zone capable of supplying Sn-enriched fluids to any adjacent bedded carbonate units and forming a massive or semi-massive Sn-bearing pyrrhotite or pyrite-hosted replacement deposit.

In the line 18 anomaly area the linear Sn geochemical trace of the fault is widened to an elongate 130m wide, 500m long anomaly with 76% of the +30 ppm soil values +100 ppm and with several 500-1300 ppm spot highs. This anomaly occurs east of the east-dipping Maestries Dolomitic Conglomerate unit. The soil Sn anomaly peak position on the drill section was interpreted as the locus of the Montezuma Fault.

Although both MZP 244 and 245a were collared east of the soil Sn peak position and drilled westwards so as to pass under that position, no discrete pug or quartz-filled, Sn-rich fault was intersected. The single area of Sn-enrichment in MZP 245a is the zone 60.45-138.0m of coincident pyrite (+tourmaline-cassiterite) veining and intensely sheared slates, and this most likely represents the fracture system along which Sn has arrived at the surface (i.e. the Montezuma Fault).

A somewhat similar, but lower overall, level of elevated erratic Sn values to that in MZP 245a was found in the top 44.4m of MZP 244. This interval has been indicated on the DDH Summary Sheets. It would be possible to directly correlate the two Sn-assay intervals:

0 - 44.4m in MZP 244

and 60.45-138.0m in MZP 245a to arrive at a rather shallowly-dipping (50°E) Montezuma Fault.

However, such a correlation may be argued against, and instead a zone dipping 70°E may be proposed on the following reasons:

1. The zone in MZP 245a is typified by abundant thin pyrite veinlets. By comparison, the assay zone in MZP 244 is quite barren, except for the sphalerite and galena veins near the top of the hole. The MZP 245a pyrite veining is similar to that immediately east of the MZP 244 collar, and this surface veining has assayed 0.26-0.29% Sn (refer E.Z. Report 166 page 8). A zone having a 70°E dip would result, if the surface veining is joined to the MZP 245a veining.

2. The measured orientation of the pyrite veinlet sets in MZP 245a ranges from about 10-40° to core, which is too steep when plotted to be matched directly to the MZP 244 interval.

3. The pyrite veinlets in MZP 245a are mostly hosted by a zone of intense shearing (which clearly predates the veins, because the veins are undeformed). Because MZP 244 did not intersect any comparable zone of shearing, the mineralisation and Sn assays must be projected to surface east of the MZP 244 collar (unless the zone of shearing played no part in locating the pyrite and the two are only fortuitously coincident). There is a striking lack of correlation of lithologies and mineralisation between the two drill holes.

4. The surface trace of the Montezuma 'Fault' (i.e. the soil Sn) is remarkably straight for 5km over rugged topography This requires a fracture or fault zone to be steeply dipping.

If the zone of pyrite veining dips 70°E and represents a plane of substantial upwards Sn migration then the possibility still remains for either down-dip or along strike stratabound replacement mineralisation to be developed where the shear or fault intersects the Maestries Dolomitic Conglomerate.

There is insufficient data available now, however, on the surface distribution of mineralisation in this anomaly area to be confident on the orientation of the Montezuma 'Fault'. close-spaced rock chip sampling is required before further drilling can be planned.

b) Bedrock Sn vs Soil Sn:

There is significant discrepency between the position of the Sn found in the bedrock, both down-hole and outcropping in the MZP 244 collar area, and the position of the soil Sn geochemical peak on which MZP 245a was targetted.

The soil Sn peak is 50-60m down-slope of the Sn-bearing pyrite veining to the east of the MZP 244 collar, which as discussed above, probably represents the outcrop expression of the Montezuma Fault. However, the Sn soil anomaly is sharply defined on the upslope, eastern side and it was not suspected of having been transported. The observation that the Sn soil values did not cover the upslope pyrite veining was made prior to drilling but was interpreted then as indicating a possible "greater cause" to the soil anomaly, or else a more-abundantly pyrite-veined area to the west which had been superficially covered by forest.

The existing soil assay data, therefore, is insufficiently accurate to be used to target drill holes, becuase it appears that Sn in the soil is subject to substantial down-slope creep. The coarse 20m-spaced soil sample interval may partly contribute to the apparent displacement of soil Sn from bedrock Sn. For both these reasons close-spaced rock chip sampling is required to target further drilling in this area.

c) Association of Sn and Pb-Zn:

In MZP 244 Sn-bearing tourmaline-cassiterite-pyrite veins were associated with earlier sphalerite-galena-siderite veins. The pyrite-veined interval within MZP 245a also contains thin sphalerite-siderite veinlets and numerous Pb-(Sn,As)-S ?tetrahedrite-?geocronite-type veinlets, including a vein set 80.85-81.45m assaying 24.8% Pb (+2.1% As, 525 ppm Ag). In both holes the core assay data reflects this association of Sn and Pb-Zn. A 1.3m-wide massive banded jamesonite-pyrite vein with minor tetrahedrite, covellite, pyrrhotite and cassiterite was exposed within the pyrite veining east of the MZP 244 collar by Texins Development during track construction in 1972-73. This vein assayed 1.3m at 13.7% Pb, 6.5% Sb, 3.12% As, 0.9% Cu, 0.27% Sn, 289 ppm Ag (Discala, 1973). Clearly there is an association of Pb-Zn sulphides with the Sn-bearing pyrite in the bedrock. However the 1982 grid soil sampling assays showed a distinct partitioning of Sn from all base metals in the soils (E.Z. Report 160 page 9). The Montezuma Fault Sn anomaly was one anomalous trend, the strong Pb-Zn anomaly striking 125°T west of the baseline and later identified as the Maestries Dolomitic Conglomerate, formed a second, separate trend.

It may be that the level of Pb-Zn in veins within the Montezuma Fault is insufficient to produce a substantial surface soil pattern. The Pb-Zn may be strongly leached and held in ground-water solution until movement downslope brings it into contact with the higher pH carbonate environment of the Maestries Dolomitic Conglomerate, and the scavenging properties of its FeO, MnO-rich gossanous weathering product, where it precipitates and is then able to accumulate.

5. REFERENCES

Discala, L., 1973 Progress Report 73/4 - E.L. 7/68 - West Tasmania May 7, 1973 (Appendix 4 in Geophoto Minerals Report 1974/4 Summary Review of Exploration in the Dundas Area of E.L. 7/68 August, 1968-December, 1973 by L. Discala, Feb., 1974)

Lutley, W.M., 1975 'Cassiterite-Sulphide Mineralisation at Queen Hill, Zeehan, Western Tasmania" MSc Thesis, Univeristy of Adelaide, 1975.

APPENDIX 1.

DDH Detailed Log Sheets

018

ELECTROLYTIC ZINC CO. OF A'ASIA LTD.
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

01 HOLE No. (3-7) MZP 244 1 of 6

LOCATION Montezuma J.V. Area – Part E.L. 15/76

OBJECTIVE To locate Maestries Dolomitic Conglomerate unit down-dip from surface in order to target DDH MZP 245.

RESULT Maestries Dolomitic Conglomerate is 139.9–194.0m down hole

TOTAL DEPTH 250.0m
HOLE SIZE HQ–3m; NQ–82.5m; BQ–
COMMENCED 22.6.'83
COMPLETED 5.7.'83
LOGGED BY R.A. Sainty

03

8-12 Footage (M)	13-16 Direction A.M.$_{\delta}$G.	17-18-21 Dip.
90	241	52°
130	238.5	49°
190	237	46.5°

8-12 Footage (M)	13-16 Direction A.M.$_{\delta}$G	17-18-21 Dip.
218	236°	44°
242	233°	45°

02
ORE DIP. (8-11)
COLLAR DIP. (12-15) –60°
DIRECTION (16-19) 241°
R.L. (20-23) 628.8
CO-ORDS.5,363,960.4N; 373,027.9E
LOCATION Montezuma J.V. Area

METERAGE FOOTAGE FROM	TO	ROCK DESCRIPTION	MINERALISATION	04 SAMPLE No.	8-13 FROM	14-19 TO	ASSAY DATA ppm Cu	Pb	Zn	Ag	Fe%	Mn	As	Sn	CORE REC'D RUN	SHORT
0	139.9	DONAH FORMATION black shales + quartzite, as follows:		53141	3.0	6.25	40	985	1200	7.0	2.75	1250	81	53		
				142	6.25	7.0	365	5900	4.79%	28	3.05	8800	45	2200		
				143	7.0	8.0	245	2600	3.13%	15	2.05	3900	9	3130		
0	3	No core (HQ tricone bit used)		144	8.0	9.0	230	2950	2.99%	12	2.00	3950	130	2690		
				145	9.0	12.0	25	800	1050	4.0	3.25	3400	22	57		
3	6.18	Black slate, tinged yellow (siderite weathering), finely but indistinctly laminated Common thin (1mm) siderite veins parallel to bedding/cleavage, fewer across	Tr vein py, gn, sp with siderite in gash fillings perpendicular to bedding/cleavage and within occasional quartzite bands.	146	12.0	15.0	20	235	280	X	2.95	2350	20	4		
				147	15.0	17.0	30	670	2700	2.5	2.75	1850	100	256		
				148	17.0	19.0	75	6200	1350	42	2.20	2300	140	117		
				149	19.0	20.0	370	4.88%	2300	233	2.90	565	6300	2910		
				53150	20.0	23.0	30	2425	1925	8.0	1.75	2700	87	50		
				151	23.0	26.0	55	4275	4125	14.5	2.15	4000	100	82		
6.18	26.85	Interbedded, distinctly laminated black slate and grey fine quartzite. (Laminae of quartzite 1–10mm within black slate) 6.18–10 Laminated black slate Siderite filling fine gashes perpendicular to bedding in quartzite laminae 8.25–8.45; 15.0–26.85 Rock is sheared & brecciated.	6.25–7.0 three veins, 7.2–8.0 each ≤15mm, 8.4–8.9 irregular, but sub-parallel to core. Sp-sd±py with younger tourm-qtz-cass refer 53516/17/18 CMS 83/9/27 9.9–10.8 Thin <10mm irregular sid veinlets with v. minor sp vnlets to 5mm 15.8–18.9 Thin <5mm irregular sp-py±qtz±sd vnlets 19–20.0 as follows: 1vn 19.1–19.2 of qtz-py-gn-sd-tourm-cass Refer 53519 CMS 83/9/27 with <10mm irregular vn of coarsely recrystallised gn, also <10mm quartz vns with cavity linings of py & tetrahedrite crystals 21.6–21.8 Thin 2mm sd-sp vnlts 24.0 Two <5mm sp±cb vnlts	152	26.0	29.0	50	285	165	5.5	2.30	3550	180	301		
				153	29.0	32.0	60	320	395	5.5	2.15	1750	39	14		
				154	32.0	35.0	65	115	70	8.0	1.95	1900	92	38		
				155	35.0	38.0	45	70	50	3.5	2.45	3000	37	9		
				156	38.0	40.0	40	40	40	3.0	2.05	1800	34	75		
				157	40.0	42.5	65	60	60	13.0	1.75	650	640	226		
				158	42.5	42.95	680	2700	100	9.0	7.70	75	2.0%	1050		
				159	42.95	43.6	65	75	25	11.0	1.25	110	2300	282		
				53160	43.6	44.4	230	135	110	59	1.00	1200	1000	309		
				161	44.4	45.6	10	35	85	X	3.40	5450	35	6		
				162	45.6	46.6	20	15	50	X	4.30	6800	30	6		
				163	46.6	47.2	25	60	50	1.0	4.65	8500	29	X		
				164	47.2	50.0	440	45	35	4.0	2.00	555	40	5		
				165	50.0	53.0	30	25	40	2.5	2.10	1700	44	13		
				166	53.0	56.0	30	115	75	2.5	1.90	1300	40	3		
				167	56.0	59.0	35	80	45	0.5	2.35	1300	25	3		
				168	59.0	62.0	20	10	55	1.0	2.05	860	8	X		
				169	62.0	65.0	30	65	105	1.0	2.30	640	26	4		
				53170	65.0	68.0	40	340	285	1.5	2.40	850	40	5		
				171	68.0	71.0	40	65	50	1.0	2.45	1000	55	7		
				172	71.0	74.0	35	15	35	0.5	2.70	750	17	5		
				173	74.0	77.0	30	50	40	0.5	2.75	715	20	5		
				174	77.0	80.0	30	30	35	1.0	2.50	585	20	5		
26.85	36.25	Black slate, as follows: 26.85–32.8 Black slate, tinged yellow (siderite weathering), finely but indistinctly laminated (sim to 3.0–6.8, above)		175	80.0	83.0	35	20	40	0.5	3.05	960	21	7		
				176	83.0	86.0	35	35	30	0.5	2.70	550	20	7		
				177	86.0	89.0	25	20	30	0.5	2.50	400	19	3		

A 11241

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ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 244 2 of 6

A 11241

(M) FOOTAGE FROM	TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO		ASSAY DATA Cu	Pb	Zn	Ag	Fe%	Mn	As	Sn	CORE REC'D RUN	SHORT
		V. minor siderite vns, both along and across bedding/cleavage		53178	89.0	92.0		35	15	30	X	2.60	1400	17	6		
		32.8–36.25 Distinctly laminated dk gry slate with black poorly laminated slate. Common ultrafine syngenetic py along bedding.		179	92.0	95.0		40	15	30	X	2.70	1550	26	9		
				53180	95.0	98.0		90	80	35	0.5	2.10	580	88	3		
				181	98.0	101.0		70	30	40	0.5	2.05	355	68	3		
				182	101.0	104.0		75	40	40	X	2.00	300	63	4		
				183	104.0	107.0		90	60	40	0.5	1.95	260	73	5		
				184	107.0	110.0		65	55	70	X	2.25	590	60	X		
36.25	67.4	Interbedded distinctly laminated black slate & fine grey quartzite.	41–41.5 Abundant 2mm py-ad & py-qtz vnlts. Py as 1mm crystals.	185	110.0	113.0		105	80	115	X	2.15	250	65	4		
		Qtz veining 42.4–47.25 intense to massive 38.0–38.75, 48.0–50.0; fine and intense to semi-massive. Abundant fine-grained to ultrafine syngenetic py crystals dissem within quartzite and along bedding/ cleavage in black slate, as streaks or aligned single crystals. To 10% in quartz- ite		186	113.0	116.0		100	70	45	X	2.20	245	60	X		
				187	116.0	119.0		95	65	35	X	2.10	200	46	X		
			41.85–42.1 Thin ≤5mm py-ad & py vnlts	188	119.0	121.0		105	60	85	0.5	2.15	305	48	4		
				189	121.0	124.0		100	70	50	X	2.15	260	60	3		
			42.1–42.5 Abundant 1–2mm py	53190	124.0	127.0		105	60	55	0.5	2.35	245	71	3		
			vnlts along contorted laminae	191	127.0	130.0		85	70	50	0.5	1.30	225	68	4		
			in sheared black slate–quartz-	192	130.0	133.0		35	40	40	0.5	1.00	230	42	X		
			ite with much qtz vning.	193	133.0	136.0		40	35	40	0.5	2.00	260	53	X		
			42.5–42.95 1 vn qtz-py-asp-tou-	194	136.0	138.0		45	40	40	1.0	2.00	490	77	X		
			cass. Semi-massive (in brecci-	195	138.0	140.0		105	65	80	1.0	1.00	525	95	X		
			ated black slate) to massive	196	140.0	141.0		20	15	55	X	1.80	1200	8	X		
			Sharp contacts at 70–80° c.a.	197	141.0	142.0		15	25	45	X	2.75	875	8	X		
			Refer 53520 CMS 83/9/27	198	142.0	143.0		10	25	30	X	2.70	1300	8	X		
			43–52.4 Qtz±py vning, irreg-	199	143.0	144.0		20	60	55	X	2.10	4150	48	X		
			ular, as follows:	53200	144.0	145.0		20	25	45	X	2.45	2000	15	X		
			43–43.6 Intense, semi-massive	53901	145.0	146.0		5	10	35	0.5	2.35	2950	9	X		
			qtz, py as short irregular	902	146.0	147.0		10	10	60	X	2.60	5400	58	X		
			stringers of crystalline py,	903	147.0	148.0		10	15	45	X	2.80	1650	2	X		
			some diss py crystals in the	904	148.0	149.0		10	15	45	X	2.75	1350	5	X		
			qtz and silicified quartzite.	905	149.0	150.0		5	10	45	X	2.95	1450	6	X		
			43.6–44.4 Massive qtz, contain-	906	150.0	151.0		5	10	40	X	3.05	1450	4	X		
			ing a few irregular sediment	907	151.0	152.0		5	10	40	X	2.85	1400	5	3		
			fragments, with diss py crystals	908	152.0	153.0		5	10	40	X	3.00	1450	3	X		
			0.5–1mm and clumps up to 10mm	909	153.0	154.0		5	10	45	X	3.35	1800	3	X		
			44.4–45.6 Weak qtz vning 7 at	53910	154.0	155.0		5	5	45	X	3.05	1500	3	X		
			20mm, with quartzite bands	911	155.0	156.0		10	15	40	X	3.15	1350	2	X		
			silicified.	912	156.0	157.0		10	15	45	X	3.00	1350	1	X		
			45.6–47.2 Semi-massive qtz±sd	913	157.0	158.0		5	15	40	X	2.95	1300	1	X		
			vn, no py. Massive parts	914	158.0	159.0		10	10	40	X	3.20	1500	2	X		
			contain sediment fragments	915	159.0	160.0		15	30	40	X	3.05	1400	5	X		
			47.2–52.4 Weak to intense,	916	160.0	161.0		15	15	35	X	2.85	1350	7	X		
			mostly narrow vns 1 at 10cm	917	161.0	162.0		25	20	40	X	2.90	1350	7	X		
			Minor py crystals & clumps	918	162.0	163.0		5	15	40	X	2.85	1600	1	X		
			(48.5–48.7). Similar qtz-ad	919	163.0	164.0		10	20	40	X	2.85	1550	1	X		
			vning persists downhole: 55.65–56 and 58.3–59.1	53920	164.0	165.0		5	20	65	X	2.65	1450	X	X		

020

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 244 3 of 6

A 11241

(m) FOOTAGE FROM	TO	ROCK DESCRIPTION	MINERALISATION
67.4	94.8	Black laminated slate with minor intercalated grey quartzite 77.9–81.9; 85.75–92.0: sheared, brecciated.	
94.8	139.9	Black, massive slate. Rarely laminated. No quartzite. Some is visibly tightly crenulated. Abundant syngenetic py as very fine grained layerings along cleavage/bedding	
139.9	194	MAESTRIES DOLOMITIC CONGLOMERATE	
		-recrystalised dolomite-matrix-supported pebble conglomerate. Pebbles consists of 'chert' qtz and very fine grained, sometimes laminated arenite.	
139.9		Upper contact is very sharp but irregular, typical of mass-flow deposition or soft sediment erosion. No apparent time break.	
141.8	146.4	Dark grey v. fg laminated dolomite-fr mework supported breccia 145.2–146.4 grey-green sericitic-pyritic contorted laminae.	
161.8	166.85	Recrystallised matrix (1mm crystal size) Indistinct pebble flattening or layering at 60° c.a.	
166.85	167.45	Sparcely mineralised (see opposite)	166.85–167.45 Contains diss crystals, irregular patches & blebs of gn+sp (in crystalline forms). Gn also replaces occassional small pebbles with the appearance of original gn clasts, but more commonly haloes & only partially replaces lithic pebbles. Py as single diss crystals is more abundant (0.5%) than before.

SAMPLE No.	8-13 FROM	14-19 TO	Cu	Pb	Zn	Ag	Fe%	Mn	As	Sn	CORE REC'D RUN	CORE REC'D SHORT
53921	165.0	166.0	90	45	75	X	2.95	2000	10	X		
922	166.0	167.45	45	4800	3650	4.0	8.20	4.70	40	21		
923	167.45	168.0	110	1.30%	530	42	23.0	7.40	150	66		
924	168.0	169.0	415	3.24%	1.96%	141	19.0	3.10	380	142		
925	169.0	170.0	70	1150	2050	7.5	19.0	1.15	1000	94		
926	170.0	170.8	40	465	230	4.0	26.5	3.95	1100	56		
927	170.8	172.0	60	475	850	2.0	22.0	8.60	36	25		
928	172.0	173.0	340	1150	1950	2.5	6.80	3.00	27	7		
929	173.0	174.0	2100	85	75	2.5	1.95	1550	110	X		
53930	174.0	175.0	1100	75	155	1.0	2.35	1350	80	X		
931	175.0	176.0	6500	200	130	30	2.00	3050	270	X		
932	176.0	177.0	775	45	55	1.0	3.10	1900	16	X		
933	177.0	178.0	55	30	45	X	3.10	1450	15	X		
934	178.0	179.0	95	70	40	1.0	2.50	1150	26	X		
935	179.0	180.0	645	35	80	0.5	2.85	2650	15	X		
936	180.0	181.0	95	20	70	0.5	3.30	2700	6	X		
937	181.0	182.0	55	180	200	0.5	3.55	3800	23	X		
938	182.0	183.0	55	35	45	0.5	2.90	1200	32	X		
939	183.0	184.0	40	20	35	X	2.50	960	18	X		
53940	184.0	185.0	25	15	40	X	2.90	1200	18	X		
941	185.0	186.0	40	30	50	X	2.90	1250	18	X		
942	186.0	187.0	50	30	45	X	3.00	1200	21	X		
943	187.0	188.0	35	20	40	X	2.90	1150	21	X		
944	188.0	189.0	50	30	40	0.5	2.65	1150	29	X		
945	189.0	190.0	170	45	35	2.0	1.60	805	50	X		
946	190.0	191.0	50	30	50	0.5	3.05	1200	25	X		
947	191.0	192.0	40	25	45	X	2.85	980	19	X		
948	192.0	193.0	20	5	40	X	2.80	860	3	X		
949	193.0	194.0	30	20	40	X	2.55	785	9	X		
53950	194.0	195.0	10	5	35	X	2.95	755	6	X		
951	195.0	198.0	25	5	20	0.5	2.35	650	12	X		
952	198.0	201.0	25	5	20	X	3.15	750	19	5		
953	201.0	204.0	35	X	45	X	3.35	740	11	3		
954	204.0	207.0	100	X	50	X	4.00	505	7	5		
955	207.0	210.0	75	5	50	X	4.00	245	4	X		
956	210.0	213.0	35	X	45	X	3.35	545	6	5		
957	213.0	216.0	65	X	40	X	3.15	560	10	X		
958	216.0	219.0	70	X	30	X	3.90	775	8	3		
959	291.0	222.0	50	5	30	X	3.10	735	8	X		
53960	222.0	225.0	45	10	35	0.5	2.95	895	18	X		
961	225.0	228.0	80	30	60	0.5	4.30	4100	43	3		
962	228.0	231.0	60	X	45	X	4.00	910	8	X		
963	231.0	234.0	160	X	30	X	3.90	750	11	X		

39 4021

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 244 4 of 6

A 11241

(M) FOOTAGE FROM	TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO		ASSAY DATA Cu	Pb	Zn	Ag	Fe%	Mn	As	Sn	CORE REC'D RUN	SHORT
167.45	171.7	Mineralised interval (see opposite)	167.45–171.7 as follows:	53964	234.0	237.0		85	5	35	X	4.15	830	9	4		
			167.45–168.0 *Conglomerate* is	965	237.0	240.0		85	5	40	X	3.45	845	13	X		
			charged with ultrafine py and	966	240.0	243.0		105	10	45	0.5	3.00	1200	19	X		
			contains blebs & short string-	967	243.0	245.2		40	10	55	0.5	3.25	1850	18	X		
			ers of gn + sp, freq. haloing	968	245.2	248.0		20	370	595	1.0	3.30	1750	86	8		
			or completely replacing	969	248.0	250.0		10	10	35	0.5	2.65	2200	13	X		
			lithics (to 1%)														
			168.0–170.8 Highly mineralised														
			vein py±sd, with abundant														
			scattered bleb gn+sp to 6%,														
			with occassional large sp														
			crystals, & highly charged														
			with diss py.														
			Poor core recovery – much is														
			fragmented, esp 169–170.														
			170–170.8 is most intensely														
			mineralised interval, with														
			semi-massive py as veins &														
			replacement of lithics.														
			170.8–171.7 Contains irregul-														
			ar patches of brown-stained														
			recrystallised sd														
171.7	175.7	Conglomerate has a black shale matrix, but contains 10–20cm interbeds & 5cm fragments (eg 172.9, 174.2) of dolomite-matrix conglomerate, indicating that the dolomitic conglomerate was subsequently rebrecciated & redeposited. Matrix in *some areas* consists of a grain-supported equidimensional coarse sand of ?dolomite & black shale fragments.	Minor diss chalcopyrite & lesser py as blebs & short stringers.														
178.0	179.1	Pyritic sericitic siltstone, grey (to brown on wetted surface) & finely laminated, with ultrafine py crystals along laminae. Laminae are slightly contorted but mostly 70–90° c.a. Parts have disseminated rhombic carbonate crystals, 2–3mm in size. Refer 53524 CMS 83/10/12														

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 244 5 of 6

A 11241

FOOTAGE (M) FROM	TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO	CORE REC'D	ASSAY DATA: Sample Length	20-25 Pb%	26-31 Zn%	32-37 Cu%	38-43 Ag - g/t	44-49 Au - g/t	50-55 Fe%		CORE REC'D: RUN	SHORT
179.1	181.85	Dolomitic arenite & dolomite, fine grained mottled cream to dark-grey in colour. Vaguely laminated in part (eg 181.4) Cream coloured intervals up-hole are mostly recrystallised massive dolomite.	Abundant py crystals & lesser chalcopyrite along some fracture surfaces.														
188.8	190.0	Dark grey breccia featuring framework-support with minor matrix component. Clasts 5-25mm, unidimensional, are largely laminated pyritic siltstone and fine-grained ?dolomitic arenite.															
192.4	194.0	Matrix is more coarsely recrystallised, 1mm crystal size. Layering in pebbles at 60-70° c.a.															
194.0		Lower contact is sharp but indistinct (in part because the adjoining rock types are both pale in colour), with minor irregular qtz vning. Contact does not seem to represent a major time break															
194.0	195.0	Quartz arenite, fine grained, pale greenish yellow to cream-coloured. Diffusely laminated (5-10mm intervals) to very distinctly and intensely laminated by yellow sericitic clays (tens of laminae distinct within major 5mm-spaced laminae eg at 194.65). Syngenetic pyrite crystals <0.5% in laminated area. Laminae are somewhat contorted, but average 45-60° c.a.															
195.0	250.0	CONCERT GROUP 'SCHIST'															
	T.D.	Finely laminated grey to black cleaved siltstone and massive olive green 'slate' minor laminated arenitic intercalations. Laminae are distinct but fine, with short py stringers (1-2mm) along bedding to 1%. Arenite interbeds are restricted to 10cm intervals within dark (grey to black) 'slates', contain some carbonate, and are															

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 244 6 of 6

A 11241

FOOTAGE FROM	FOOTAGE TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO	CORE REC'D	ASSAY DATA: Sample Length	20-25 Pb%	26-31 Zn%	32-37 Cu%	38-43 Ag - g/t	44-49 Au - g/t	50-55 Fe%		CORE REC'D: RUN	SHORT
		laminated. 195.0 Upper contact is marked by a 6cm wide massive quartz vein. Bedding laminae to core axis angles are as follows: 195.3 50° 197 65° 200 50° 203 45° 206 37° 209 45° 213 50° 216 70° 219 75° 221 65° 224 75° 230 70° 239 85° 241 75°														

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024

ELECTROLYTIC ZINC CO. OF A'ASIA LTD.
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

01 HOLE No. (3-7) MZP 245a 1 of 7

LOCATION Montezuma J.V. Area – Part E.L. 15/76

OBJECTIVE To test down-dip intersection of Maestries Dolomitc Conglomerate with Montezuma Fault for pyrite-hosted Sn mineralisation beneath coincident E.M. and Sn geochemical anomalies.

RESULT Pebbly dolomite unit unmineralised 0.1-0.3% max Sn associated with py-tourm veinlets 60.45-138m in Donah Slates.

TOTAL DEPTH	374.0m
HOLE SIZE	HQ-3m NQ-84m BQ-
COMMENCED	9.7.83
COMPLETED	30.7.83
LOGGED BY	R.A. Sainty

03 METRAGE A.M.G.

8-12 Footage	13-16 Direction	17-18-21 Dip.	8-12 Footage	13-16 Direction	17-18-21 Dip.
44	241°	78°	200	249.5°	60°
80	237°	78°	226	251°	59°
125	243°	73.5°	322	251°	56°
165	245°	67.5°	374	254°	52.5°

02
ORE DIP. (8-11)
COLLAR DIP. (12-15) -80°
DIRECTION (16-19) 240° A.M.G.
R.L. (20-23) 635.69
CO-ORDS. 5,364,004N 373,086.5E
LOCATION Montezuma J.V.

(M) FOOTAGE FROM	TO	ROCK DESCRIPTION	MINERALISATION
0	232.15	DONAH FORMATION black slates + grey quartzites, as follows:-	
0	3.0	No core (HQ tricone bit used)	
3.0	55.9	Black slate, intensely sheared, containing sheared/brecciated fragments and small boudin-forms of quartzite material. Abundant fine grained py along cleavage Minor fragments of py clasts are included within the sheared black slate. 13.0-14.0, 33-34.6 quartzite beds. 36.15-37 1 5cm-wide qtz-carbonate vn subparallel to core 52.0-55.9 Finely laminated, contorted and sheared black slate and grey quartzite Laminae usually <5mm	
55.9	60.45	Quartzite, massive to poorly laminated. Minor black slate as laminae.	
60.45	60.9		Py veining; set of two vns 4cm wide at 40° c.a., massive, crystalline, containing brecciated sediment frags, some of which are replaced by Pb-Sb/As-S ?tetrahedrite-type sulphide. Narrow, 2-5mm irregular webb veinlets either side of main veining.
60.9	72.0	Laminated black slate and quartzite-contorted and sheared 59.0-66.5 cleavage/bedding in cleavage is subparallel to core.	62.0 Py-qtz vn 1cm wide 20°ca 63.7-64 Two py-qtz (1+sp) 1-2 cm wide at 30° c.a. 67.5-67.8 Local concentration of typical irregular thin py veinlets.

04

SAMPLE No.	6-13 FROM	14-19 TO	ASSAY DATA Cu	Pb	Zn	Ag	Fe%	Mn	As	Sn	CORE REC'D RUN	SHORT
53971	3.0	6.0	65	130	70	1.0	2.15	1200	91	14		
972	6.0	9.0	70	75	65	X	2.60	620	100	X		
973	9.0	12.0	65	65	55	0.5	2.70	810	20	X		
974	12.0	15.0	30	45	175	X	3.05	1250	23	X		
975	15.0	18.0	25	30	80	X	3.70	1100	19	X		
976	18.0	21.0	25	110	170	X	2.20	470	21	X		
977	21.0	24.0	25	5	35	X	2.60	410	10	X		
978	24.0	27.0	30	5	30	X	2.80	390	12	X		
979	27.0	30.0	35	5	45	X	3.15	430	90	X		
53980	30.0	33.0	25	10	45	X	2.85	455	7	X		
981	33.0	36.0	25	10	60	X	2.85	500	5	X		
982	36.0	39.0	20	25	70	X	4.85	785	15	X		
983	39.0	41.0	20	20	50	X	3.00	405	14	X		
984	41.0	44.0	30	X	55	X	2.95	370	13	X		
985	44.0	47.0	30	10	75	X	3.15	415	14	X		
986	47.0	50.0	25	15	50	X	3.00	335	16	X		
987	50.0	53.0	25	15	35	X	2.95	325	20	X		
988	53.0	56.0	25	10	30	X	2.80	530	16	X		
989	56.0	59.0	20	30	80	X	2.50	865	20	X		
53990	59.0	60.1	40	120	310	2.0	2.10	630	110	10		
991	60.1	60.2	25	265	1000	3.0	20.50	350	240	6		
992	60.2	60.45	60	415	1125	5.5	2.50	800	87	47		
993	60.45	60.9	435	3600	4200	26	17.5	860	1.25%	207		
994	60.9	64.0	80	605	1500	3.5	2.00	585	105	163		
995	64.0	67.5	65	510	790	1.5	2.25	1500	64	426		
996	67.5	67.8	50	890	60	8.0	12.0	130	450	3010		
997	67.8	71.1	45	2450	1200	8.0	2.35	1800	180	181		
998	71.1	71.8	35	760	80	8.0	4.00	85	900	127		
999	71.8	75.0	55	2350	290	8.5	2.45	1550	2300	229		
54000	75.0	77.0	160	4750	265	25	2.15	1550	380	230		

A 11241

29/10/25

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 245a 2 of 7

A 11241

FOOTAGE (M) FROM	TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO		ASSAY DATA Cu	Pb	Zn	Ag	Fe%	Mn	As	Sn	CORE REC'D RUN	SHORT
			Refer 53521 CMS 83/9/27: Pyrite veins are surrounded by haloes consisting of very fine tourmaline and qtz with numerous minute (2-20μ) cassiterite crystals.	53403	77.0	78.0		120	1900	135	30	1.90	480	460	135		
				404	78.0	80.82		100	1.22	605	36	3.25	420	39	134		
				405	80.82	81.45		530	24.8	110	525	5.05	1800	2.10	174		
				406	81.45	84.0		35	150	65	4.5	2.85	800	81	228		
				407	84.0	87.0		20	105	85	0.5	2.75	1300	39	10		
				408	87.0	90.0		20	375	140	1.5	2.30	1250	100	43		
				409	90.0	93.0		220	6800	1400	34	3.55	2350	280	1220		
				53410	93.0	96.0		25	480	175	7.0	1.60	320	500	188		
				411	96.0	99.0		15	395	455	1.5	3.75	2000	1000	1190		
				412	99.0	102.0		25	765	820	3.5	3.00	2600	110	270		
				413	102.0	105.0		130	8450	890	55	2.15	3150	940	235		
				414	105.0	108.0		75	3500	820	11.0	2.45	1550	220	200		
				415	108.0	111.0		30	1850	1400	6.0	3.20	1550	230	164		
				416	111.0	114.0		25	245	500	0.5	2.90	1000	20	11		
				417	114.0	117.0		60	1550	1750	8.5	2.85	1800	5400	939		
				418	117.0	120.0		50	1200	2050	1.5	2.85	1750	100	45		
				419	120.0	123.0		50	2750	885	5.0	3.75	2500	150	412		
				53420	123.0	126.0		20	180	165	1.0	3.00	735	105	39		
				421	126.0	129.0		140	415	250	2.5	1.60	700	350	756		
				422	129.0	132.0		25	205	40	1.0	1.65	65	400	140		
				423	132.0	135.35		10	90	45	X	1.55	90	4000	280		
				424	135.35	135.55		4350	2500	5500	160	23.0	255	9.10	2600		
				425	135.55	136.15		60	235	185	6.5	6.00	185	1000	820		
				426	136.15	138.0		45	320	515	X	1.65	1700	61	32		
				427	138.0	141.0		20	90	175	X	2.60	1400	20	4		
				428	141.0	144.0		30	15	45	X	2.55	730	25	X		
				429	144.0	147.0		40	10	45	X	2.55	765	17	X		
				53430	147.0	150.0		60	10	55	X	2.60	980	20	X		
				431	150.0	153.0		40	20	80	X	2.60	520	15	X		
				432	153.0	156.0		30	60	61	X	2.60	330	26	X		
				433	156.0	159.0		35	15	65	X	2.55	370	14	X		
				434	159.0	162.0		25	10	40	X	2.60	450	13	X		
				435	162.0	165.0		30	20	45	X	3.00	380	15	X		
				436	165.0	168.0		35	20	40	X	2.80	510	22	X		
				437	168.0	171.0		35	35	85	X	2.50	575	20	X		
				438	171.0	174.0		15	10	40	X	2.05	210	10	X		
				439	174.0	177.0		10	5	30	X	1.80	350	14	X		
				53440	177.0	180.0		20	5	35	X	2.25	465	21	X		
				441	180.0	183.0		30	5	45	X	2.50	355	20	X		
				442	183.0	186.0		20	30	45	X	2.55	320	9	X		
				443	186.0	189.0		25	X	35	X	2.20	260	17	X		
				444	189.0	192.0		50	45	35	X	2.75	1600	40	X		
72.0	129.8	Intensely sheared 'crenulated-granulated' plastically deformed black slate and sandy black slate with v minor discrete, brittle-fractured quartzite frags	72.35 Two py vns: 1cm at 60° 2mm at 55° c.a.														
			78.7-81.85 Several thin (usually 2-5mm) veinlets of Pb-Sb/As-S, varying in orientation to core.														
			80.85-81.45 Two massive vns, 0.15m and 0.25m at 25-35° c.a. of Pb-Sb/As-S ?tetrahedrite-?geocronite-type sulphide, separated (0.2m) by 1-3mm irregular webbing veinlets. This bright, steel-grey sulphide has postdated & cut through earlier py veining within the black slate														
			82.6-89 Almost no vein py - Only the minor ubiquitous py replacements of angular quartzite clasts within this highly sheared rock (eg at 86.35 - partially replaced clasts).														
			90-97.0 Abundant py as thin irregular spidery veinlets & replacements of angular clasts (perhaps some original py clasts?) & recrystallised py laminae in laminated slate														
			90.7-90.95 1-2cm-wide semi massive vein at 10-15° c.a. of py-gn-Pb-Sb/As-S-sd in fine intergrowth														
		82-96.0 Shearing is subparallel to core.															
		The two elevated Sn assay values: 90.0-93.0 1220 ppm Sn 96.0-99.0 1190 ppm Sn are due to the contained veins of tourmaline-py±gn-cassiterite, rather than due directly to the py (which is not so abundant in the 96-99 interval).															

39026

026

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 245a 3 of 7

A 31241

FOOTAGE (m) FROM	TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO	ASSAY DATA Cu	Pb	Zn	Ag	Fe%	Mn	As	Sn	CORE REC'D RUN	SHORT
				534												
			91.4–91.5 5mm irregular vein at 10° c.a. of py-gn-Pb-Sb/As-S.	53445	192.0	195.0	55	70	30	X	1.85	810	40	X		
				446	195.0	198.0	50	80	35	X	2.35	1250	41	X		
				447	198.0	201.0	50	435	1700	X	3.05	1550	40	X		
				448	201.0	204.0	30	45	30	X	2.30	665	42	X		
			92.5–92.9 2cm vein at 10–15° c.a. of py-sp-Pb-Sb/As-S-sd with flanking zones of fine tourmaline-cassiterite (commonly 20–50 up to 100μ) Refer to 53522 CMS 83/9/27	449	204.0	207.0	20	30	105	X	1.95	575	21	X		
				53450	207.0	210.0	50	10	35	X	2.85	1400	24	X		
				451	210.0	213.0	25	5	30	X	2.05	650	14	X		
				452	213.0	216.0	20	20	30	X	2.00	680	32	X		
				453	216.0	219.0	35	50	55	X	3.05	1400	96	X		
				454	219.0	222.0	25	30	25	X	2.15	540	31	X		
			96.3–96.4 5cm wide webbing vein at 30° c.a. of pale green tourmaline-py+trace ?po	455	222.0	225.0	25	25	20	X	2.90	3100	32	X		
				456	225.0	227.0	70	25	45	2.0	3.25	5200	27	X		
				457	227.0	230.0	760	65	80	14.0	3.25	7700	66	X		
				458	230.0	232.15	35	5	30	X	1.90	310	21	X		
			98.6–99.5 Sd-py-sp-tourmaline vein to 1cm width & subparallel to core to 99.2, remainder as 5mm-wide veinlets along shearing at 40° c.a.	459	232.15	235.0	25	25	20	X	2.30	860	24	X		
				460	235.0	238.0	10	10	30	X	2.15	935	20	X		
				461	238.0	241.0	10	20	50	X	2.10	870	25	X		
				462	241.0	244.0	5	20	60	X	3.20	760	25	X		
				463	244.0	247.0	5	25	55	X	3.10	830	19	X		
			99.5–102.7 Very little py veining (only a few 1–2mm py vnlts	464	247.0	250.0	15	20	35	X	2.20	880	15	X		
				465	250.0	252.0	40	35	30	X	2.10	1300	41	X		
				466	252.0	254.8	30	40	70	X	2.05	1450	38	X		
			102.7–109.6 Abundant py±sd± tourmaline veining, including a prominant set to 1cm width at 25–40° c.a. Py is well crystallised	467	254.8	258.0	30	15	35	X	2.10	810	19	X		
				468	258.0	261.0	10	15	35	X	1.85	675	12	X		
				469	261.0	264.0	10	5	30	X	2.00	825	12	X		
				53470	264.0	266.0	5	10	25	X	1.25	595	11	4		
				471	266.0	268.53	10	X	25	X	1.40	600	8	X		
			109.6–116.5 Very little py veining.	472	268.53	270.0	20	30	30	X	2.15	840	8	X		
				473	270.0	273.0	135	40	35	0.5	2.20	820	20	X		
				474	273.0	276.0	330	50	40	X	2.45	820	20	X		
116.5–116.75 (opposite) appears to be the only source of the assay: 114–117m 939 Sn			116.5–116.75 3cm-wide banded vein at 15° c.a. of qtz-py-sd green tourmaline-Pb-Sb/As-S i.e. tourmaline matrix with order: py then Pb-Sb/As-S sulphide then lastly sd as cavity infilling crystals	475	276.0	279.0	35	35	25	X	1.85	660	7	X		
				476	279.0	282.0	20	30	30	X	2.40	880	4	X		
				477	282.0	285.0	25	30	30	X	2.40	905	5	X		
				478	285.0	288.0	25	X	30	X	2.50	780	16	X		
				479	288.0	291.0	25	X	30	X	2.55	945	5	X		
				53480	291.0	294.0	20	10	30	X	2.05	880	8	X		
			116.75–126.0 Very little py veining	481	294.0	297.0	25	10	30	X	2.35	855	9	X		
				482	297.0	300.0	25	30	30	X	2.30	875	13	X		
				483	300.0	303.0	20	15	35	X	2.25	960	9	X		
			126–135.35 Occasional thin ≤ 5mm py veinlets mainly 126–130: well-crystallised py±sd ±gn±green tourmaline	484	303.0	306.0	30	20	35	X	2.25	900	10	X		
				485	306.0	308.65	80	45	35	X	2.85	1050	20	X		
				486	308.65	311.0	90	30	30	X	2.95	820	20	X		
				487	311.0	314.0	30	25	35	X	1.90	645	21	X		

39 420

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 245a 4 of 7

A 11241

(M) FOOTAGE FROM	TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO	ASSAY DATA Cu	Pb	Zn	Ag	Fe%	Mn	As	Sn	CORE REC'D RUN	SHORT
129.8	138.2	Laminated, less-sheared black slate + grey quartzite, folded and contorted.	130–135.35 Highly irregular veinlets 1–2mm, 5mm of crystalline py 135.35–135.55 Py-asp with brecciated tourmalinised rock (+cass 5-50μ) later veined by ccp-stannite-tetrahedrite-tennantite-Pb sulphosalt Refer 53523 CMS 83/9/27 135.55–136.15 Semi-massive white qtz with patches + stringers of crystalline py and black slate frags 136–138.0 Narrow qtz ± py vning, as above, to 10 cm width as massive qtz, but usually ⩽10mm	53488	314.0	317.0	10	10	30	X	1.10	625	2	X		
				489	317.0	320.0	30	30	40	X	2.00	890	3	X		
				53490	320.0	323.0	10	25	40	X	2.45	930	5	X		
				491	323.0	326.0	10	20	30	X	2.05	700	5	X		
				492	326.0	329.0	55	30	50	X	2.20	655	5	X		
				493	329.0	332.0	70	30	85	X	2.50	1100	3	X		
				494	332.0	335.0	25	30	70	X	2.35	900	6	X		
				495	335.0	337.4	20	20	25	X	1.55	470	6	X		
				496	337.4	340.0	60	30	50	X	2.10	670	40	X		
				497	340.0	343.45	215	35	45	X	2.25	525	100	X		
				498	343.45	346.0	20	20	50	X	2.30	870	20	X		
				499	346.0	349.0	5	20	80	X	2.10	980	2	X		
				53500	349.0	352.0	5	20	105	X	1.95	935	2	X		
				501												
				57801	352.0	355.0	5	20	115	X	2.05	1150	2	X		
				802	355.0	358.0	5	30	105	X	2.25	1150	1	X		
				803	358.0	361.0	5	25	85	X	2.00	1250	2	X		
				804	361.0	364.0	5	25	120	X	2.25	990	X	X		
				805	364.0	366.1	10	30	110	X	2.20	950	5	X		
				806	366.1	367.0	15	25	20	X	1.85	215	12	X		
				807	367.0	371.0	5	15	40	X	2.50	360	14	X		
				808	371.0	374.0	5	5	50	X	3.55	440	6	X		
138.2	153.0	Black slate, finely but indistinctly laminated (i.e. not with quartzite laminae) Appears to be relatively little sheared. 148.5–149.2, 150.25: Ovoid 15x5mm max massive syngenetic py														
153.0	189.0	Laminated black slate and quartzite slip-sheared. Little folding – laminae appear regular 156.6 Upwards fining quartzite-slate laminae. 161.3–162, 165.8–167.6, 183.5–185.2 Intervals of massive to poorly laminated quartzite.														
189.0	201.0	Black slate, finely but indistinctly laminated (similar to 138.2–153.0 above) but strongly sheared.														
201.0	203.4	Black slate and quartzite, well laminated but relatively little sheared.														

39.1028

028

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 245a 5 of 7

A 11241

(M) FOOTAGE FROM	TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO	CORE REC'D	ASSAY DATA: Sample Length	20-25 Pb%	26-31 Zn%	32-37 Cu%	38-43 Ag - g/t	44-49 Au - g/t	50-55 Fe%		CORE REC'D: RUN	SHORT
203.4	215.4	Massive quartzite grey, micaceous 209.7-210.1 Sheared black slate 212.6-113.4 Laminated black slate and quartzite, contorted and folded.															
215.4	232.15	Intensely sheared 'granulated' and slip-sheared, plastically deformed, black slate sandy black slate and minor quartzite Some short sections are of laminated black slate-quartzite, slip-sheared.															
232.15	367.0	MAESTRIES DOLOMITIC CONGLOMERATE Recrystallised dolomite matrix – supported pebble conglomerate (or pebbly dolomite).															
232.15		Upper contact is sharp but highly irregular, with projections of dolomitic conglomerate into the Oonah slates. However, there are small angular black slate frags within the top 2cm of the conglomerate suggesting contemporaneous deposition. The contact is indicative of mass-flow deposition or soft sediment erosion, rather than any significant time break.															
232.15	232.65	Dolomitic conglomerate															
232.65	254.8	Silty dolomites, as follows:															
232.65	235.65	Khaki sericitic silty dolomite, inter-slumped, except 234.9-235.65 which appears undisturbed, with indistinct layering 10-20° to core. Minor fine grained arenites.															
235.65	237.0	Grey-white dolomitic qtz arenite medium grained Qtz grains are enlarged with over-growths, cement is of dolomite. Upper and lower contacts are sharp but irregular, devoid of qtz vning and at high angle to c.a.															

39029

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 245a 6 of 7

A 11241

(M) FOOTAGE FROM	TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO	CORE REC'D	ASSAY DATA: Sample Length	20-25 Pb%	26-31 Zn%	32-37 Cu%	38-43 Ag - g/t	44-49 Au - g/t	50-55 Fe%		CORE REC'D: RUN	SHORT
237.0	249.9	Pale yellow to khaki silty dolomite (to very fine grained arenite in sections) Brecciated and interslumped in part but otherwise massive 249.0–249.9 contains brecciated and contorted blocks of pink-tinged poorly laminated fine qtz arenite. Sparcely disseminated py crystals. Refer 53526 CMS 83/10/12.															
249.9	254.8	Grey slump-brecciated dolomite, thinly bedded and fine grained 249.9–250.6 appears gradational with overlying silty dolomite, and laminae are regular, although partially brecciated, at high angle – 45° to c.a. Laminae are sericitic silty clays with ultrafine py. 253.9–254.8 is silicified – highly qtz-veined and has a mottled to laminated appearance.															
254.8	264.0	Dolomitic Conglomerate 254.8–255.2 appears gradational from overlying unit – matrix is darker and more cherty, lower contact is sharp, at 45° c.a. with a 15mm laminated band above contact at 25° c.a.															
264.0	268.53	Khaki dolomite, arenaceous, massive slump-brecciated. Open-space fillings of blue-green ?sericite material.															
268.53	308.65	Dolomitic Conglomerate 275.75–277.1 Brecciated massive fg qtz arenite. Webbing of pale brown-green sericitic material.															394030
308.65	343.45	Dolomitic arenites and siltstones and silty dolomites as follows:															

030

ELECTROLYTIC ZINC CO OF A'ASIA LTD
ROSEBERY – TASMANIA

DIAMOND DRILL CORE RECORD

HOLE No. MZP 245a 7 of 7

A 11241

(M) FOOTAGE FROM	(M) FOOTAGE TO	ROCK DESCRIPTION	MINERALISATION	SAMPLE No.	8-13 FROM	14-19 TO	CORE REC'D	ASSAY DATA: Sample Length	20-25 Pb%	26-31 Zn%	32-37 Cu%	38-43 Ag · g/t	44-49 Au · g/t	50-55 Fe%	CORE REC'D RUN	CORE REC'D SHORT
		308.65–310.1 Sheared and brecciated grey qtz arenite veined by recrystallised dolomite (massive dolimite vein 309.15–309.5, with a fine chlorite webbing). 310.1–311.8 Khaki-grey carbonaceous pyritic siltstone, finely laminated at 20–45° c.a. Minor fine arenite Refer 53528 CMS 83/10/12 311.8–313.35 Dolomitic Conglomerate, and slump-brecciated sericitic arenite. 313.35–317.9 Cream dolomitic qtz arenite massive to poorly laminated at 80° c.a. (at 316.5). Dolomite-cemented qtz grains. 317.9–343.45 Interbedded and interslumped sequence of pale yellow, khaki to grey and pale green thinly bedded to laminated silty dolomite and argillaceous cherty dolomite, fine dolomitic qtz arenite and dolomite with narrow intervals of dolomitic conglomerate (322.05–323.0, 326.6–327.25) 330.1–331.9 pale green silty dolomite 331.9–334.0 grey laminated dolomite 334.0–337.3 grey dolomitic qtz arenite 337.3–343.6 pale yellow to yellow-grey argillaceous cherty dolomite, massive to laminated Re- CMS 83/10/12 for 53529, 331.5m;53530 338.5m	337.3–343.6 Irregular py vnlts 1–2cm max width with irregular sometimes diffuse boundaries No preferred orientation													
343.65	366.1	Dolomitic Conglomerate More completely and somewhat more coarsely recrystallised (to 2mm) dolomite matrix than similar intervals, above 358.8 flattening to 55° c.a. Refer 53531 CMS 83/10/12 :sandy pebbly dolomite.														
366.1	367.0	Strongly qtz vnd and pyritic dark grey to dark brn arenite.														
367.0	374.0	CONCERT GROUP 'SCHIST														
	TD	Dull green massive to poorly laminated schist. Laminae at 20–45° c.a.														

367.0

APPENDIX 2.

C.M.S. Reports 83/9/27 and 83/10/12

REPORT CMS 83/9/27

Eight drill core samples were received for petrological and mineragraphic examination; thin- and polished sections were prepared and are described below. In most rocks, the Sn contents are satisfactorily accounted for by cassiterite as a mineralising phase, with tourmaline, which is distinct from the sulphides except in 53521, where there is a strong link with a distinctive anisotropic pyrite as well as tourmaline.

53516/17/18 (T.S., P.S. 47295-47297) MZP 244 7·7m 8·5m 8·9m

These rocks are closely similar and are thus described as a group to minimise repetition.

The host rocks are indurated, laminated carbonaceous siltstones with good graded bedding; the laminations range from coarser, quartzose silt to finer, carbonaceous argillaceous silt which generally shows incipient slaty cleavage.

The veins are internally complex; they show sharp contacts against the host rock, with little or no effect on the siltstone and only very limited penetration of vein material along bedding planes. The veins consist mainly of coarsely crystalline siderite and well-formed crystals of sphalerite, with mineral zoning parallel to the walls. A younger vein phase has penetrated the massive sphalerite-siderite, and consists of ultrafine matted needles of pale green tourmaline with minor quartz and fine cassiterite. These veins are mainly concentrated more or less in the central portions of the host veins, but sometimes occur along selvedges and, rarely, follow bedding planes in the host rocks. There is a clearly replacive relationship, with fretting and corrosion of the sphalerite and siderite by the fine tourmaline mass.

The cassiterite is very fine-grained, ranging from 2 μ to 100 μ (mostly 10-30 μ), with occasional clusters up to 150 μ; the grains are cloudy, poorly defined and generally anhedral. Whilst most of them occur within tourmaline, some were deposited within siderite. Although the cassiterite-bearing tourmaline veins are quite thin (0.1 - 3 mm, mostly < 1 mm), the fine cassiterite within them is very abundant in places.

The polished section shows that sphaleirte is the dominant sulphide, as generally coarse crystals containing galena veinlets or lamellae; where tourmaline-cassiterite veins occur, the sphalerite is brecciated and corroded, with paler, Fe-depleted rims. Fine pyrite is scattered through the host rock (?syngenetic), and isolated coarser crystals occur in the veins, in sphalerite; these pyrite patches also contain galena veinlets, and the evidence suggests that galena is younger than sphalerite and pyrite.

53519 (T.S., P.S. 47298) MZP 244 19·2m

This is an extensively brecciated and veined, indurated, finely laminated siltstone, consisting mainly of finely granular quartz, interstitial sericite (recrystallized clays), and thin carbonaceous laminations; it is sprinkled with fine pyrite, some of which is syngenetic. The rock is deformed, fractured, and has been penetrated by quartz-sulphide veins with minor siderite and small tourmaline needles.

Cassiterite occurs as very small poorly defined cloudy grains and is difficult to detect; it was deposited mainly at the contacts between veins and host rock. Individual grains are < 30 μ in size, generally 5-20 μ. Its paragenesis is not as clear as in the previous samples, but it seems to be related to the quartz-sulphide veining; its poor development and cloudy nature suggest a low-temperature (low energy) formation.

Sulphides comprise pyrite, galena as rather ragged patches, with traces of associated and included tetrahedrite (a source of Ag), and a few sphalerite-galena intergrowths. Fine framboidal pyrite occurs in the siltstone.

53520 (T.S., P.S. 47299) MZP 244 42·8m

This is a breccia, extensively silicified and impregnated with sulphides, so that individual fragments are almost unrecognisable.

Breccia fragments include silicified carbonaceous siltstone, vein-quartz, and fine matted pale green tourmaline, all set in and pervaded by fine quartz/sulphide/tourmaline; these in turn are cut by random thin quartz veinlets.

No cassiterite was positively identified, but may be present in ultrafine form in the tourmaline fragments or in the younger quartz/tourmaline/sulphide phase.

The only sulphides detected in the polished section were small crystals of pyrite and arsenopyrite; galena is probably very sporadic, and was not seen.

53521 (T.S.,P.S. 47300) MZP 245a 67·7 m

This is a carbonaceous slate, extensively fractured, and subtly but pervasively metasomatised and mineralised.

Parts of the rock are relatively unaltered, consisting dominantly of matted-parallel sericite flakes (recrystallized clays), fine carbonaceous streaks, and minor clastic quartz and micas. Stringers and single crystals of pyrite occur throughout, and fine tourmaline needles (mostly < 20 μ long) have formed throughout. More substantial pyrite masses are surrounded by alteration zones or haloes consisting of very fine fine tourmaline and quartz with numerous minute (2-20 μ) cassiterite crystals; these zones, which extend along the direction of slaty cleavage, are bleached, i.e. devoid of carbonaceous matter. There are a few later quartz-filled microfractures.

Thus, the cassiterite is clearly related to tourmalinisation and introduction of pyrite in this rock; although cassiterite crystals are very numerous, their very small size represents only a very small volume of actual SnO_2; the cassiterite occurs in the host rock adjacent to coarser quartz-pyrite veins.

Virtually the only sulphide present is well-crystallized pyrite; it is distinctly anisotropic (?As content), and contains occasional small galena inclusions.

53522 (T.S., P.S. 47301) MZP 245a 92·8m

This is a deformed and brecciated carbonaceous slate, penetrated by coarse sulphide-siderite veins and extensively tourmalinised in places, with associated cassiterite.

The remnants of the host rock consist of folded, plastically deformed carbonaceous slate similar to 53521; more siliceous, angular fragments are also present, having yielded by brittle fracture. Wide veins of coarsely-crystalline siderite-sulphides cut the rock; these are flanked by zones of extensive tourmalinisation, in which the breccia fragments are replaced by fine matted tourmaline needles and quartz. Single crystals and clusters of cassiterite occur in these zones; the crystals are well-formed and up to 100 μ in size, though commonly in the 20-50 μ range.

The major sulphide is pyrite, as small euhedral crystals, and there are irregular patches of sphalerite. Small needles and matted masses of a sulphosalt, probably geocronite (Pb-Sb/As sulphide) also occur. Syngenetic pyrite occurs in the host rock.

53523 (T.S., P.S. 47302) MZP 245a 135-45m

This is a breccia impregnated with fine quartz-sulphide-tourmaline masses.

The breccia fragments are generally small, and consist of a completely tourmalinised rock, which was probably a fine argillaceous sediment replaced by matted tourmaline needles; some of these fragments contain very small, cloudy cassiterite grains 5-50 μ in size. Occasional carbonaceous siltstone fragments are also present. They are set in a matrix mainly composed of fine sulphides and quartz, with sporadic small siderite patches. and pale tourmaline needles.

The main sulphides are massive pyrite with embedded and intergrown small euhedral arsenopyrite crystals. A younger generation of sulphides is present, veining the others; it includes small amounts of chalcopyrite, stannite, tetrahedrite-tennantite, and a probable Pb sulphosalt. Thus, part of the Sn content is due to stannite, and this younger assemblage is similar to a Zeehan-style of mineralisation.

H.W. Fander, M. Sc.

REPORT CMS 83/10/12

D.D. Core Samples 53524 - 53531

Eight drill core samples were received for petrological study; thin-sections were prepared, and offcuts were subjected to carbonate stain tests where appropriate. The rocks are briefly described in the accompanying table.

Summary

All the rocks are sediments, indurated but not significantly metamorphosed; they comprise siltstones, shales and dolostones, and tend to be pyritic and carbonaceous. Much of the pyrite is extremely fine-grained and if dispersed (as in 53524), appears much more abundant than is actually the case - in this rock the illusion is heightened by the translucency of the matrix. Several rocks show evidence of slumping, folding and intraformational brecciation, and the more argillaceous sections have tended to develop slaty cleavage.

There is little real evidence of metasomatism except in 53531, which contains many small needles of very pale tourmaline throughout; these are more likely to be metasomatic than authigenic, but this is not certain. Some rocks are cut by epigenetic (as distinct from diagenetic) veins, and 53524 contains introduced sericite replacing carbonate rhombs and forming infillings. 53525 is cut by veins which carry a black, soft, brittle carbonaceous substance similar to anthracite and giving a weak graphite pattern.

The green colour in 53529 is due to fine magnesian chlorite, believed to represent diagenetically recrystallized magnesian clays.

H.W. Fander, M. Sc.

Sample No.	Rock Type - Composition	Fabric	Minor Minerals	Comments
53524 (T.S. 47543) 244 178.6m	Pyritic, Sericitic Siltstone. Dominantly silt-sized quartz, well-cemented with interstitial fine recrystallized clays and ultrafine pyrite Brecciated, with veins, infillings of fine sericite.	Fine bedding accentuated by thin pyrite laminations. Intraformational brecciation.	Sericite pseudomorphs after carbonate rhombs. Partly replaced, corroded carbonate crystals.	Fine grainsize of pyrite and translucency of rock together give false impression of pyrite abundance. Sericite is a hydrothermal phase.
53525 MZP 245a 4.5m	Laminated Carbonaceous Shale. Alternating thin laminae of carbonaceous recrystallized clay and silty quartz, with layers and lenses of syngenetic pyrite. Thin Mg-chlorite lenses.	Excellent laminations and very fine slaty cleavage, mostly conformable. Fractured, veined.	Veins contain quartz, ankerite/siderite, and splinters of black carbonaceous (anthracite?) material.	Indurated, perhaps incipiently metamorphosed. Black material in veins is possibly reconstituted carbon from the sediment, gives weak graphite pattern (XRD).
53526 MZP 245a 237.8m	Silty Dolostone. Dominantly composed of microcrystalline dolomite with interspersed fine clays, micas and silt-size quartz grains; diagenetic dolomite veinlets.	Very uniform, fine-grained and featureless; no bedding or laminations.	Scattered fine pyrite crystals. A few quartz and sericite veinlets.	A featureless rock; not appreciably metamorphosed. Quartz and sericite veinlets are introduced and are evidence of very weak hydrothermal activity.
53527 MZP 245a 252.0m	Dolostone Breccia. Irregular blocks of microcrystalline dolomite with bedded clays and fine quartz, thin carbonaceous-pyritic laminations; cemented by much coarser clear dolomite.	Original bedding marked by laminations and clastic grains. Intraformational becciation.	Laminae contain fibrous sericite. Chlorite-sericite-pyrite veins - these are post-brecciation.	Similar to 53526, with intraformational, pre-lithification brecciation. Little or no real evidence of metasomatism.
53528 MZP 245a 310.4m	Carbonaceous, Pyritic Siltstone. Mainly silt-size quartz grains with interstitial ultrafine clay-sericite, ragged carbonate patches; some laminations are pyritic, others carbonaceous.	Banding/lamination due to variable carbon distribution and clay content of layers. Uniform.	Crosscutting carbonate veinlets. Discontinuous fibrous sericite veinlets.	Slightly coarser, more quartzose layers tend to contain more pyrite, which is very probably diagenetic. Small-scale faulting.
53529 MZP 245a 331.5m	Silty Dolostone. Dominantly microcrystalline dolomite with intermingled silt-size quartz and greenish clays, many parallel lensoid masses of clear dolomite; silty bands.	Bedding accentuated by silty, argillaceous layers and clear, coarser dolomite lenses. Minor flexuring.	Sporadic clusters of fine framboidal pyrite and carbon streaks. Diagenetic dolomite veins.	Flexuring probably occurred before lithification, preferentially along more argillaceous (incompetent) layers. Not metamorphosed.
53530 MZP 245a 338.5m	Argillaceous, Cherty Dolostone. Very fine streaky dolomite with clastic quartz grains, lenses and thin layers of recrystallized chert, carbonaceous clay laminations and pyritic streaks.	Well-bedded and laminated; possibly slumped. Late-diagenetic or younger folding.	Late-stage quartz-sericite veins, predating the folding. Syngenetic pyrite.	Deformation and folding thought to have pre-dated complete lithificatior veins must be earlier, because affected by this event.
53531 245a (T.S. 47550) 356.0m	Sandy, Pebbly Dolostone. Sand-, gravel- and a few pebble-size grains of quartz, quartzite, dolostone, scattered through a mass of coarse dolomite with small elbaite/dravite crystals.	Most clastic components are sand-size; scattered pebbles. Crude bedding. Dolomite is coarser.	Scattered, well-defined, relatively coarse pyrite crystals.	Small pale yellow to colourless tourmaline crystals (elbaite/dravite) are metasomatic rather than authigenic, possibly related to pyrite.

037

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ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED

MINERAL RESOURCES DIVISION

MONTEZUMA JOINT VENTURE

PART EXPLORATION LICENCE NO. 15/76

REPORT ON EXPLORATION ACTIVITY
5TH NOVEMBER, 1983 TO 29TH MAY, 1984.

REPORT NO. T180MD

R.A. SAINTY,
MAY, 1984.

TABLE OF CONTENTS

LIST OF FIGURES

PLAN

1. INTRODUCTION

This report covers exploration from 5th November, 1983 to 29th May, 1984 on the Montezuma Joint Venture part of E.L. 15/76 by the Electrolytic Zinc Company of Australasia Limited acting as Manager for a Joint Venture consisting of E.Z., Getty Oil Development Co. Ltd., and C.S.R. Limited. This Joint Venture was initiated in February, 1982.

A description of the Montezuma Joint Venture part of E.L. 15/76 can be found in E.Z. Report No. 160, December, 1982.

2. PREVIOUS EXPLORATION

Previous exploration by the present Joint Venture has been reported in E.Z. Report No's 160 (1982), 166 (1983) and 172 (1983).

3. EXPLORATION UNDERTAKEN 5TH NOVEMBER, 1983 TO 29TH MAY, 1984

Exploration undertaken in this period comprised follow-up of previously defined target areas by rock chip sampling and diamond drilling. Rock chip sampling was used to both screen anomalies and locate subsequent drill holes.

3.1. Work Completed

3.1.1. TRACK SAMPLING (Total 850m)

The two tracks in the vicinity of lines 18 and 19 were chip-sampled in oder to:

1. confirm a 70°E dip on the Montezuma Fault on the MZP 244/245a section, and
2. locate the surface trace of the Montezuma Fault near line 19 so that proposed drilling there could be designed.

The continuous 3m-length samples were submitted to Analabs in Cooee and analysed for Cu, Pb, Zn, Ag, Fe and Mn by A.A.S. after nitric perchloric hydrochloric and hydrofluoric acid digestion (for total dissolution of the pyrite content), for As by vapour hydride generation, and for Sn py pressed powder XRF.

3.1.2. ANOMALY PIT SAMPLING

Five anomaly areas in the central part of the Montezuma Grid were hand-pitted and rock chip sampled. These were examined geologically before being dispatched for

analysis as per the track chip samples.

The five anomaly locations were as follows:

1.	line 19	5,235E	Sn, (EM separate)
2.	line 10	5,230-5,245E	Sn + EM
3.	line 11	5,210E	Sn + EM
4.	DIGHEM 4		EM
5.	line 14	5,050E	weak Sn + EM

These anomalies were those selected for follow-up in the previous six-monthly report, E.Z. Report No. 172, p17, Nov., 1983.

3.1.3. DRILL SITES ON LINES 9, 10 AND 19

Purton Bros., contractor, cleared two drill sites for helicopter-accessed drilling on lines 9 and 10. Both involved the construction of a helicopter landing platform and drill rig platform. An old pack track between the two sites was cleared out and walking access from Wallaces Tram upgraded.

Four days were spent in an attempt to bulldoze a track to the proposed L19 hole site in the Maestries Dolomitic Conglomerate area, off the existing track. The L19 site was required to be 200m further east than the previously constructed track. However the ridge slope steepens to the east and the Crimson Creek Fm bedrock proved unrippable. When a second, smaller bulldozer attempted to winch itself up the slope, the trees to which is was anchored slid downhill due to the lack of soil development and shallow root systems.

Consequently, Purton Bros., cleared a site for helicopter access on line 19 at 5,200E for the proposed 600m-long hole.

3.1.4. DIAMOND DRILL HOLES ON LINE 9 AND LINE 10

(Refer Figure 1 : DDH Targets)

Two drill holes, MZP 258 and MZP 261, were targeted beneath a locally wider and enhanced area of high soil and bedrock Sn (±Ag, Zn, As) values on the Montezuma Fault to test for either carbonate-hosted or structurally-located Sn.

The bedrock values obtained by hand pitting are recorded in 3.2.2. One sample from line 10 assayed 1,310 ppm Sn, 232 ppm Ag, 11.26% Zn and 5.95% As; another sample assayed 430 ppm Ag and 18.80% Zn.

MZP 261 on line 10 was still in progress at the end of the period.

Hole parameters are:

MZP 258 on line 9

Collar Co-ordinates	:	line 9 at 5,408E (approx.)
Azimuth (A.M.G.)	:	256° (Grid West)
Dip	:	-50°
Total Depth	:	272.0m

MZP 261 on line 10

Collar Co-ordinates	:	line 10 at 5,300E (approx.)
Azimuth (A.M.G.)	:	256° (Grid West)
Dip	:	-50°
Depth at 29.5.'84	:	153.0m

A Longyear Hydracore 28 rig was accessed by helicopter to the drill sites and the rig crew lived on site in a campervan trailer.

3.1.5. DDH MZP 260 ON LINE 19 (Refer Figure 1 : DDH Targets)

This short hole was designed to locate the down-dip positions of the Montezuma Fault and the top contact of the Maestries Dolomitic Conglomerate, in order to target a 600m-long hole on line 19 to test the intersection of the 'Sn-feeder' fault and dolomite unit.

Hole parameters are:

Collar Co-ordinates	:	line 19 at 4,937E (approx.)
Azimuth	:	256° (Grid West)
Dip	:	-70°
Total Depth	:	149.9m

A longyear 38 rig was accessed by bulldozer along the track to line 19, which was constructed in July, 1983.

3.1.6. DRILL CORE GEOCHEMISTRY

Mineralised intervals in MZP 258 were split in geologically-controlled lengths. Samples were submitted to Analabs in Cooee and analysed for Cu, Pb, Zn, Ag and Fe by A.A.S. after nitric perchloric hydrochloric and hydrofluoric acid digestion (for total dissolution of the pyrite contents), for As by vapour hydride generation, for Sn and Sb by pressed powder XRF and for Au by A.A.S. after 30g fire assay fusion.

3.2. Results Received

3.2.1. TRACK SAMPLE ASSAYS

1. On the DDH MZP 244/245a Section (Refer A1-527-0041: MZP 245a Summary Sheet) The sampling results between drill holes MZP 244 and 245a confirms the 70°E steep dip previously proposed for the Montezuma Fault (E.Z. Report 172, p11,14 Nov., 1983).

Therefore there is potential at depth for a Renison-style target at the intersection of the Sn feeder fault and the Maestries Dolomitic Conglomerate.

Sn values decrease gradually on the western side of the collar of MZP 244, consistent with the sporadic values obtained in the top 44m of that hole.

2. Near line 19 (Refer Figure 2: Line 18-19 area plan, 1:5,000)
The analyses from the access track to line 19 clearly define the Montezuma Fault, with an average of 400 ppm Sn across a 21m width (7 samples each 3m in length). The highest result was 1,190 ppm Sn, which is comparable with the highest values to the north near the MZP 244 collar.

3.2.2. ANOMALY PIT ASSAYS

Assays of the pit samples from the five anomaly areas in the central part of the Montezuma Grid confirm a bedrock Sn source (and its location) on lines 9, 10 and 11. Pyritic mineralisation was present in black shale or slate host rocks in these samples.

Highest results were (in ppm):

Location	Sn	Ag	Zn	As
Line 19	448	1	115	55
Line 10, 5231E	1,310	232	11.26%	5.95%
	1,170	158	10.37%	2.30%
	738	430	18.80%	3.70%
Line 11, 5290E	1,080	70	275	420
DIGHEM '4'	X	X	135	28
Line 14, 5050E	X	X	290	98

Soil sampling on line 9 had previously given 720 ppm Sn (cf 95 and 140 ppm on line 10 and line 11); it is probable that higher Sn values exist on line 9 but were not sampled by this pit.

As the mineralisation and Sn values from lines 9, 10 and 11 resemble that exposed at the MZP 244 collar area, and the soil Sn pattern is similarly broadened (refer Fig. 1) it may be inferred that the line 9 - 11 area represents another locally enhanced area of Sn on the Montezuma Fault, possibly due to deeper massive mineralisation and so warranted drill hole follow-up.

The pit sampling enabled:

1. Two of the anomaly areas (DIGHEM '4' and line 14, 5050E) to be dropped from further follow-up,

and

2. The subsequent drill holes on lines 9 and 10 to be targeted using the bedrock Sn source rather than a position given by soil values. Soil Sn values have previously been shown to be substantially displaced from the bedrock source in the line 18 area (E.Z. Report 172, p12, Nov., 1983).

The anomaly on line 11 lies within Oonah Formation black slates where a carbonate host unit is unlikely to exist. Therefore it will be drilled only if warranted by the results of those on lines 9 and 10.

3.2.3. DDH MZP 258 ON LINE 9 (Refer Figure 3: Line 9 DDH MZP 258 Section)

MZP 258 intersected a narrow mineralised shear zone that represents the Montezuma Fault 190m down-dip from surface.

The zone consists of:

162.45-165.75m 3.3m of strong (20-50%, average of 40%) narrow stringer veins of pyrite-arsenopyrite.

Assays: 3.3m @ 1130 ppm Sn, 26.9 ppm Ag, 1.17% Zn, 17.7% Fe and 7.11% A-

Including: 0.55m @ 2500 ppm Sn, 10.0% As

0.75m @ 1250 ppm Sn, 6.95% As.

and

165.75-171.50m 5.75m of disseminated (5-25%, average of 15%) bleb pyrite ± sphalerite within quartz arenite adjacent to the stringer zone.

Assays: Only significant interval is

167.4-170.0 2.6m @ 1840 ppm Sn, 4050 ppm Zn, 11.0% Fe.

The intersection occurred exactly at its projected position on a 70°E dip, which has been indicated in the line 18 area 1.9km to the south. The immediate host is an acid volcanic-rich sedimentary breccia that has been severely shattered and rehealed.

The hole was continued westwards to beyond the vertical projection of the surface indications to test for both

1. Any further mineralisation due to the Montezuma Fault, and
2. Any prospective carbonate horizon, which could intersect the fault at a deeper level.

Neither futher mineralisation nor carbonate unit was found. The Dundas Group sediments are expected to dip moderately eastwards. A pale green dolomitic quartz wacke was intersected higher in the hole at 91.7-97.0m, but this does not appear to be a suitable host lithology.

Massive sulphide mineralisation relating to the nearby No. 1 Curtin Davis Mine was intersected within the interval 46.5-58.6 and 62.3-63.1m. The mineralisation comprises short intervals of massive vein sulphide 0.3-1.0m in length separated by weak stringer-style veining or barren rock. The longest massive sulphide length is 49.6-50.6m, this and the other short lengths comprise massive pyrite and/or pyrrhotite (po: 53.2-53.5m) with associated sphalerite, galena, tetrahedrite and chalcopyrite. This mineralisation does not appear to relate directly to the Montezuma Fault as the two areas are separated by 100m of barren sediments, and all Sn assays are very low.

Assays for the principal massive sulphide zones are:

49.6-50.6m	1.0m @ 7.50% Pb, 1.95% Zn, 670 ppm Ag, 0.16% Cu, 34.5% Fe.
53.2-53.5m	0.3m @ 6.45% Pb, 0.21% Zn, 510 ppm Ag, 0.14% Sb, 43.5% Fe.

Assays for the stringer sulphide zones are:

46.5-49.6	3.1m @ 3.0% Pb, 0.8% Zn, 113 ppm Ag
50.6-53.2	2.6m @ 1.15% Pb, 0.30% Zn, 36.5 ppm Ag
53.5-55.5	2.0m @ 1.10% Pb, 0.14% Zn, 38.5 ppm Ag
55.5-58.6	3.1m @ 1.30% Pb, 1.65% Zn, 35.0 ppm Ag

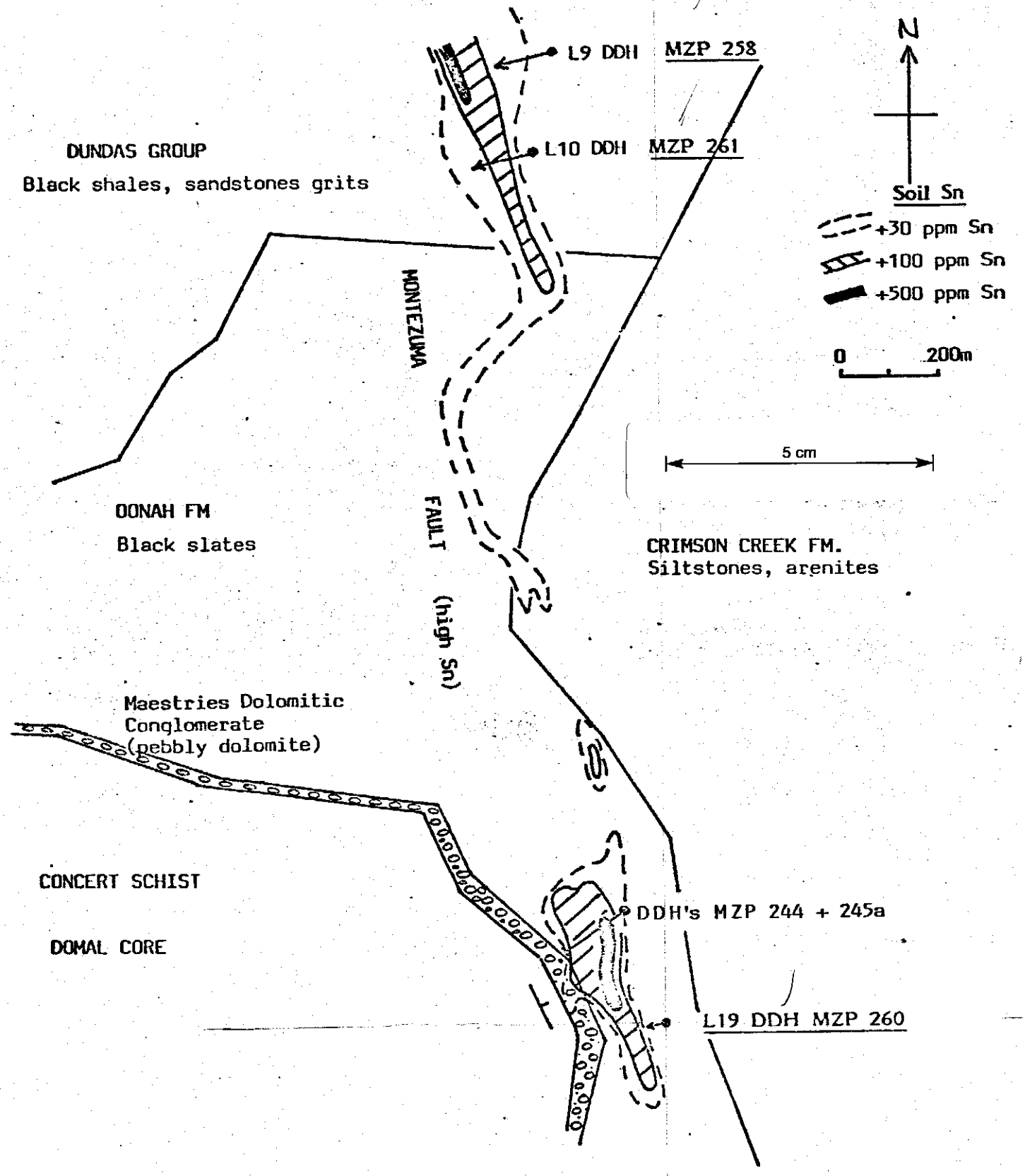
The two massive zones and the intervening stringer section bulk as follows:

49.6-53.5m	3.9m @ 3.30% Pb, 0.72% Zn, 235 ppm Ag.

TheNo. 1 Curtin Davis Mine adit is located approx. 50m north of the collar of MZP 258. The main lode worked was a 0.6-2m width of pyrite, arsenopyrite and tetrahedrite with chalcopyrite, galena and minor jamesonite and bismuthinite in a siderite gangue. The NNW-striking vein produced 37 tons of ore before 1902 assaying 10% Cu and 0.36% Ag (Blissett, 1962).

3.2.4. DDH MZP 260 ON LINE 19 (Refer Figure 2: Line 18-19 Area Plan)

This targeting hole identified only a very weak expression of the Montezuma Fault at 24-29m down hole. The upper contact of the Maestries Dolomitic Conglomerate was intersected at 139.9m down hole.



MONTEZUMA JOINT VENTURE - PART E.L. 15/76

DDH TARGETS

Fig. 1

048

394049

372,500mE

373,000mE

BASELINE 5000E

5

6

16·5

17

17·5

18

18·5

19

19·5

20

20·5

21

MZP 245a

5,364,000mN

MZP 244

MONTEZUMA FAULT

CRIMSON CREEK FORMATION

AREA OF HIGH Sn
(see box below)

MZP 260

CONCERT GROUP
Schistose Sediments

Maestries Dolomitic Conglomerate

5,363,500mN

Sample N°.	Sn (ppm)
58791	200
58792	1190
58793	551
58794	444
58795	163
58796	30
58797	205

5 cm

0 100 200 300 400m

SCALE

EZ

PROJECT: MONTEZUMA J.V.

GRID LINES 18, 19
AREA PLAN

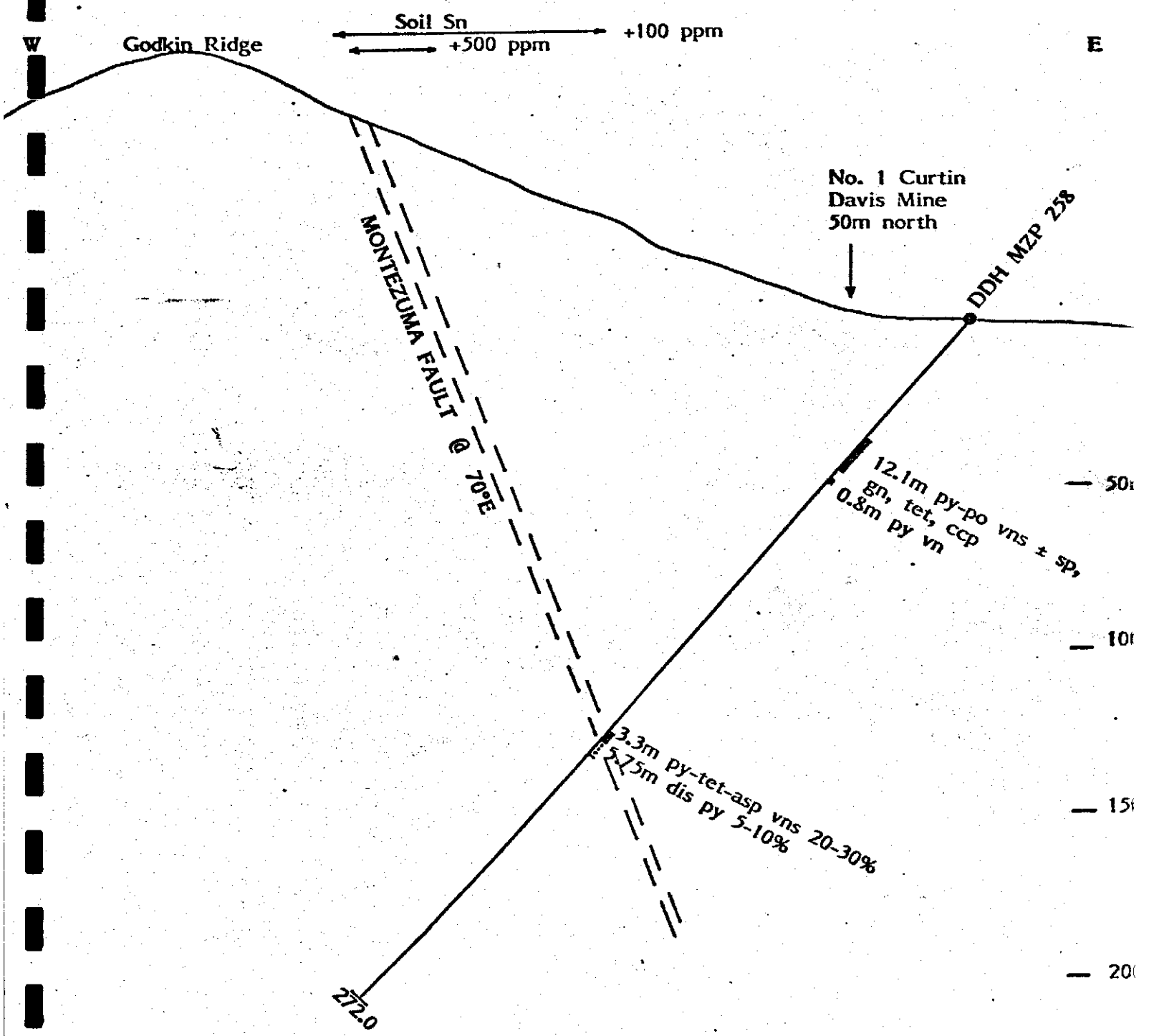
Compiled: R.A.S. Date 28/5/84

Drawn: R.J.R. Scale 1:5,000

PLAN NO
Fig. 2

049

394050

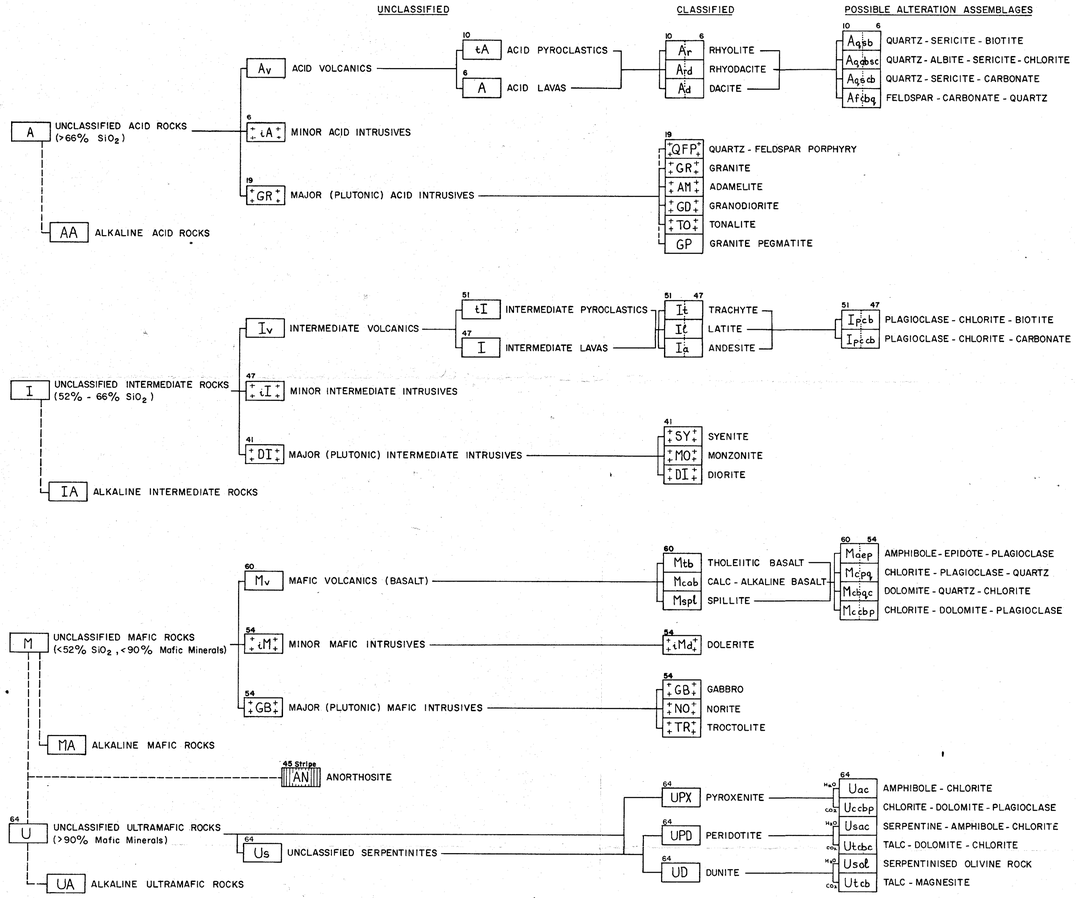


MONTEZUMA JOINT VENTURE - PART E.L. 15/76

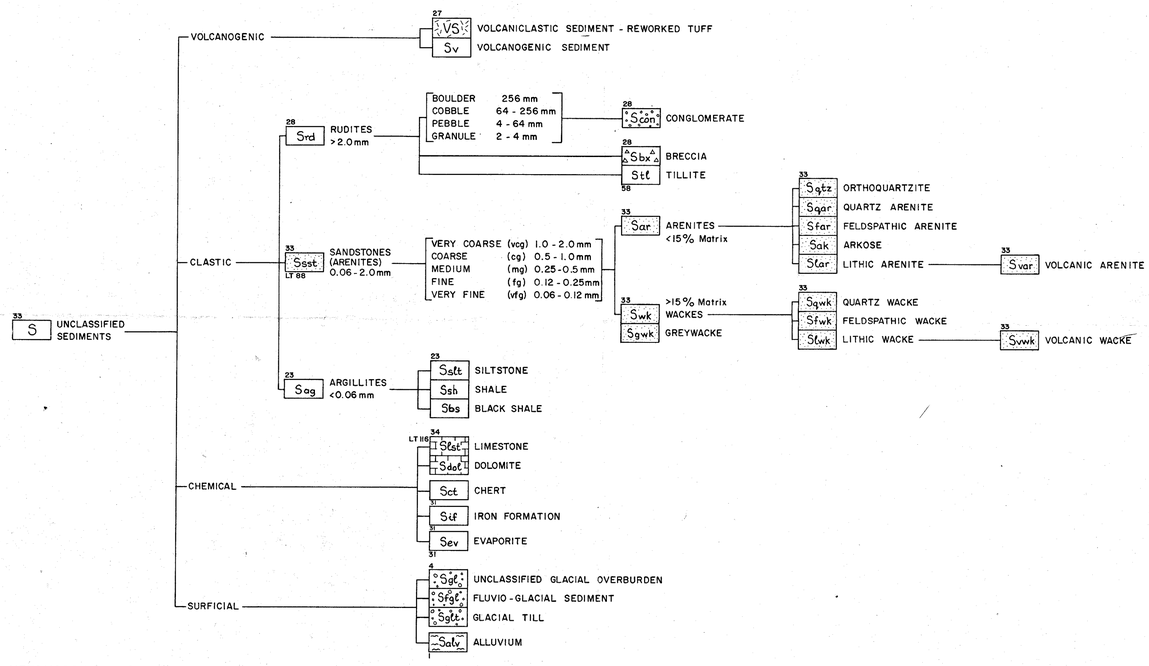
LINE 9 DDH MZP 258

Fig. 3.

IGNEOUS ROCKS



SEDIMENTARY ROCKS



METAMORPHIC ROCKS

69 (Igneous overstripe if required)

SCH UNCLASSIFIED SCHISTS

IGNEOUS GRAIN SIZE

vcg	VERY COARSE GRAINED	>5cm
cg	COARSE GRAINED	5cm - 5mm
mg	MEDIUM GRAINED	5mm - 1mm
fg	FINE GRAINED	<1mm

STRUCTURAL AND TEXTURAL SYMBOLS

LT 958			MAJOR INTRUSIVES
LT 963		ti	MINOR INTRUSIVES
LT 132		t	UNDIFFERENTIATED TUFF
LT 132		tl	LITHIC TUFF
LT 132		xt	CRYSTAL TUFF
LT 132		vt	VITRIC TUFF
LT 130		lpt	LAPILLI TUFF 4 - 32mm
LT 970		bx	PYROCLASTIC BRECCIA >32mm
LT 970		ag	AGGLOMERATE >32mm
LT 191		af	ASH FLOW
LT 132/153		ashfll	ASH FALL (AIR FALL TUFF)
LT 973			LAVA
		bm	BOMBS
		pm	PUMICE
		fm(3)	FIAMME (LENGTH IN cms)
		p	PORPHYRITIC
		a	AMYGDALOIDAL
		ves	VESICULAR
		s	SPHERULITIC
		wld	WELDED
		rwk'd	REWORKED
		Σ	ACICULAR
		oph	OPHITIC
		clt	CLOTS
		pg	PEGMATIC
		qtz eye/aug	QUARTZ EYES / AUGEN TEXTURE
		bnd	BANDING
		fb	FLOW BANDING
		fa	FLOW BRECCIA
		pil	PILLOWS (WITH FACING)
		chlmgn	CHILLED MARGIN
		vns	VEINS
LT 153		bd	BEDDED
		Xbd	CROSS BEDDED
		tkbd	THICK BEDDED
		tnbd	THIN BEDDED
		lam	LAMINATED
		gd	GRADED or DIRECTION OF DECREASING GRAIN SIZE
		lodcst	LODE CAST
		sf	SCOUR AND FILL
		m	MASSIVE
		clvd	CLEAVED
		sch	SCHISTOSE
		jt'd	JOINTED
		bx'd	BRECCIATED (TECTONIC)
		ox	OXIDISED
		L	LATERITE
		stn	STAINING
		ibd	INTERBEDDED
		hfls'd	HORNFELSED

STRUCTURAL SYMBOLS

- FAULT
- DEFINITE CONTACT or OUTCROP LIMIT
- APPROXIMATE CONTACT or RUBBLE BOUNDARY
- INTERPRETED CONTACT or FLOAT BOUNDARY
- SCHISTOSE ZONE
- UNCONFORMITY
- BEDDING
- OVERTURNED BEDDING
- CLEAVAGE
- PRIMARY FOLIATION
- JOINTING
- PLUNGE
- FOLD AXIS PLUNGE
- FACING

SULPHIDE AND OXIDE MINERALOGY

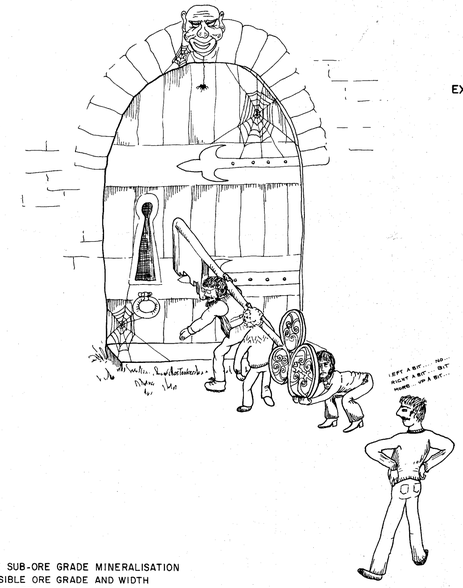
	bwk	BOXWORK
	sul.	SULPHIDES
RED INK	gos	GOSSAN
	pn	PENTLANDITE
	hm	HÆMATITE
	cc	CHALCOCITE
	cv	COVELLITE
	bn	BORNITE
	cp	CHALCOPYRITE
	sp	SPHALERITE
	gn	GALENA
	po	PYRRHOTITE
	py	PYRITE
	il	ILLMENITE
	tx	LEUCOXENE
	mag	MAGNETITE
	lim	LIMONITE
	Mn	MANGANESE OXIDES
	chr	CHROMITE

MINERALISATION

STAEDTLER 104 - 2	DISS	10% DISSEMINATED
	DISS	10 - 20% DISSEMINATED
	DISS	~25% DISSEMINATED
	STR	STRINGER
	MAS	MASSIVE

DRILL HOLE SYMBOLS

- DRILL HOLE - BARREN
- DRILL HOLE - MINOR OR POSSIBLE SUB-ORE GRADE MINERALISATION
- DRILL HOLE - SIGNIFICANT OR POSSIBLE ORE GRADE AND WIDTH
- DRILL HOLE - FAILED TO REACH TARGET



SILICATE MINERALOGY

20	q	QUARTZ
51	k	K - FELDSPAR
17	ab	ALBITE
45	p	PLAGIOCLASE
45	a	AMPHIBOLE
64	px	PYROXENE
10	b	BIOTITE
45	c	CHLORITE
55	cb	CARBONATE
31	s	SERICITE
46	e	EPIDOTE
64	t	TALC
6	ba	BARITE
45	f	FELDSPAR
45	hb	HORNBLENDE
55	sd	SIDERITE
47	to	TOURMALINE
51	ov	OLIVINE

ALTERATION MINERALOGY

17	a'b	ALBITISED
55	cb'd	CARBONATED
45	c'd	CHLORITISED
31	s'd	SERICITISED
20	SiL	SILICIFIED
45	hb'd	HORNBLENDISED
47	to'd	TOURMALINISED
27	kl'd	KAOLINISED

COLOURS

ple	PALE
dk	DARK
pk	PINK
rd	RED
org	ORANGE
yel	YELLOW
ol	OLIVE
grn	GREEN
bl	BLUE
gry	GREY
blk	BLACK
brn	BROWN
wht	WHITE
crm	CREAM
purp	PURPLE

TOPOGRAPHICAL SYMBOLS

- WATER RACE
- FENCE
- FORMED ROAD
- TRACK
- RAILWAY
- RAILWAY (ABANDONED)
- RIVER
- STREAM
- LAKE
- SWAMP
- BUILDING
- POWER LINE
- TRIG. STATION
- HILL
- SHAFTS
- ADIT
- TRENCH
- MINE OR QUARRY

OPERATION OF LEGEND

DESCRIBING ROCK UNITS

1. CAPITAL LETTER : indicates primary classification eg. S - sedimentary rocks
   A - acid igneous rocks
2. LOWER CASE LETTERS : indicates the following -
   2.1. AS PREFIXES : in progressive order
   (i) COLOURS eg. gmM : green mafic igneous rock
   pk/grn A : pink fragments or phenocrysts in an acid igneous rock with a green matrix
   (ii) STRUCTURAL or TEXTURAL FEATURES
   eg. xtA : crystal tuff of acid composition
   xbdS : cross bedded sedimentary rock
   2.2. AS SUFFIXES : in progressive order
   (i) CATEGORISED
   eg. Ar : rhyolite, Ssh : Shale
   (ii) MINERALOGY
   eg. pArf : rhyolite with feldspar phenocrysts
   Aqs : quartz sericite rock of acid igneous origin
   Ara'b : albitised rhyolite

EXAMPLE : pk/grn clvd xvt Ard ab c'd
pk/grn : (Colours) pink crystals in a green matrix
clvd : (Structural feature) cleaved
xvt : (Texture) crystal vitric tuff
A : (Primary subdivision) acid igneous rock
rd : (Categorised) rhyodacite
ab : (Primary mineralogy) albite phenocrysts
c'd : (Alteration mineralogy) chloritised

LT 132 : Code Number of LETRATONE pattern
10 : Number of CUMBERLAND DERWENT SERIES No. 19 Coloured Pencil

ELECTROLYTIC ZINC CO. OF A'ASIA. LTD.

PROJECT: TAS.

PLATE 1

GEOLOGICAL LEGEND

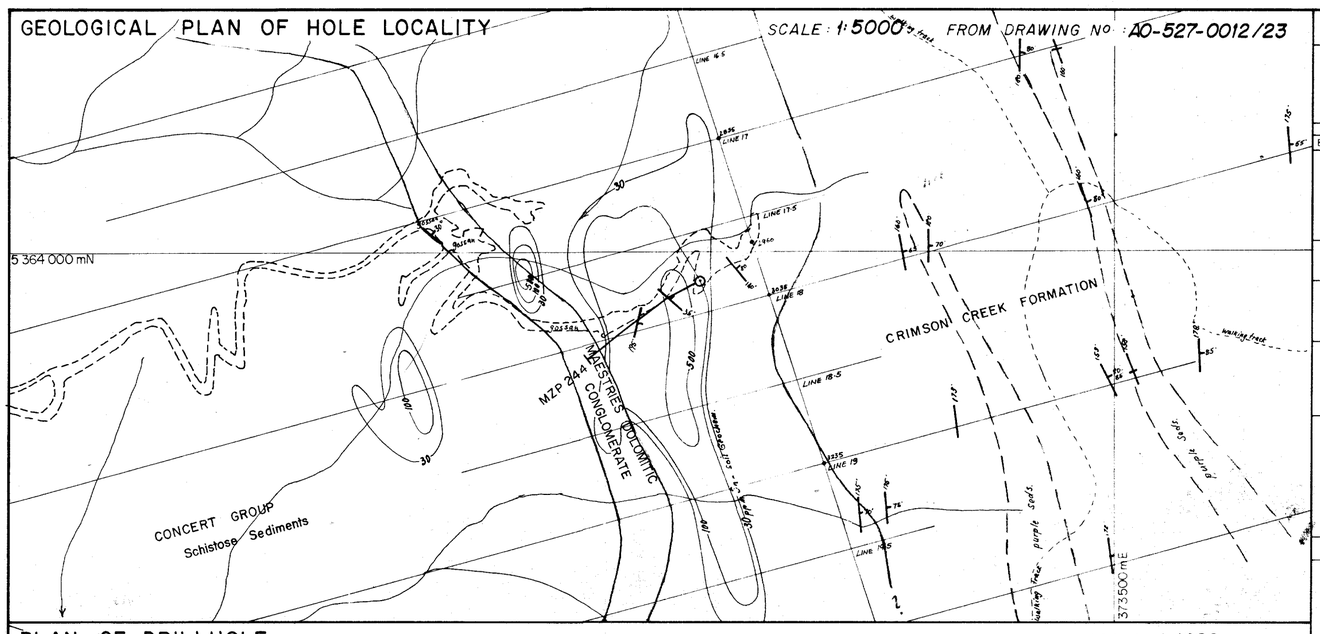
EXPLORATION 001

394051 8L-2163

SCALE:	Survey: I.R.M.	Revised:
Reference:	Date: August 1980	REF. NO.
Drawn: R.P.T.	Checked: I.R.M.	AI-504 - ORIGINAL

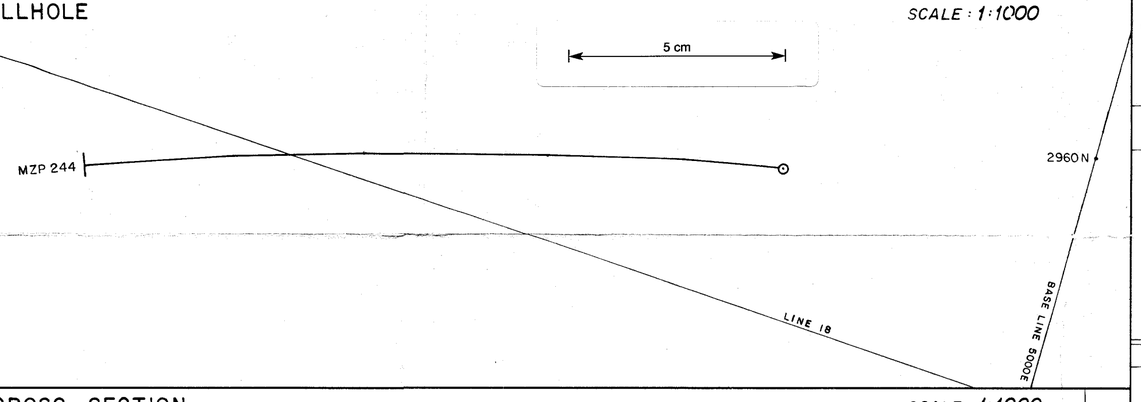
GEOLOGICAL PLAN OF HOLE LOCALITY

SCALE : 1:5000 FROM DRAWING NO : AO-527-0012/23



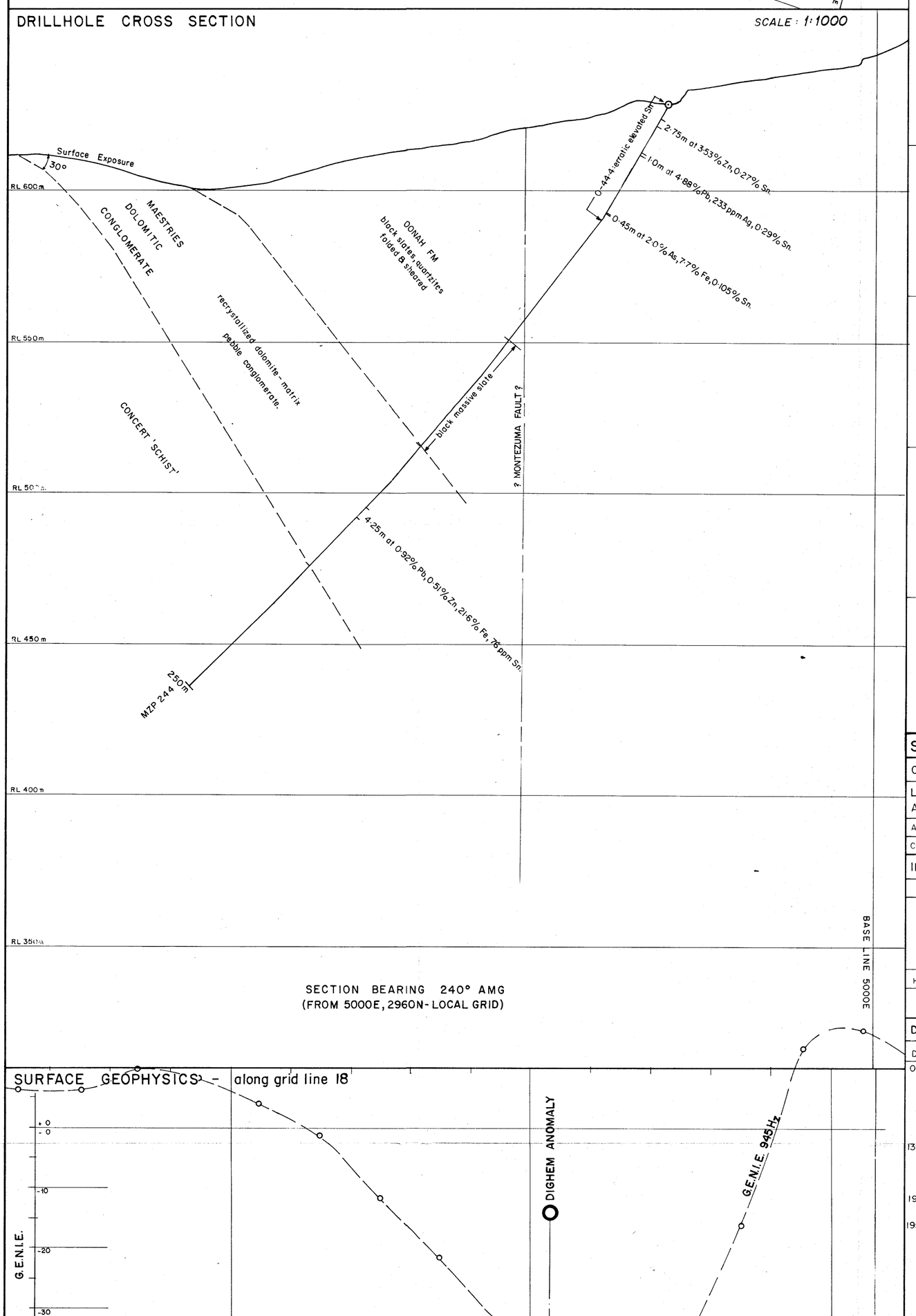
PLAN OF DRILLHOLE

SCALE : 1:1000



DRILLHOLE CROSS SECTION

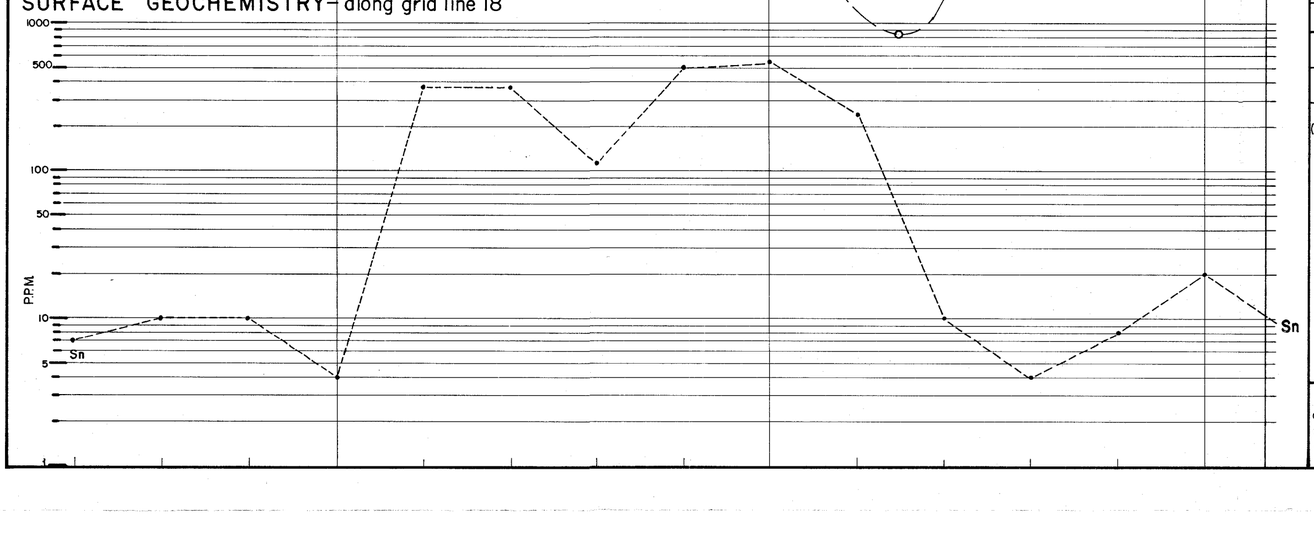
SCALE : 1:1000



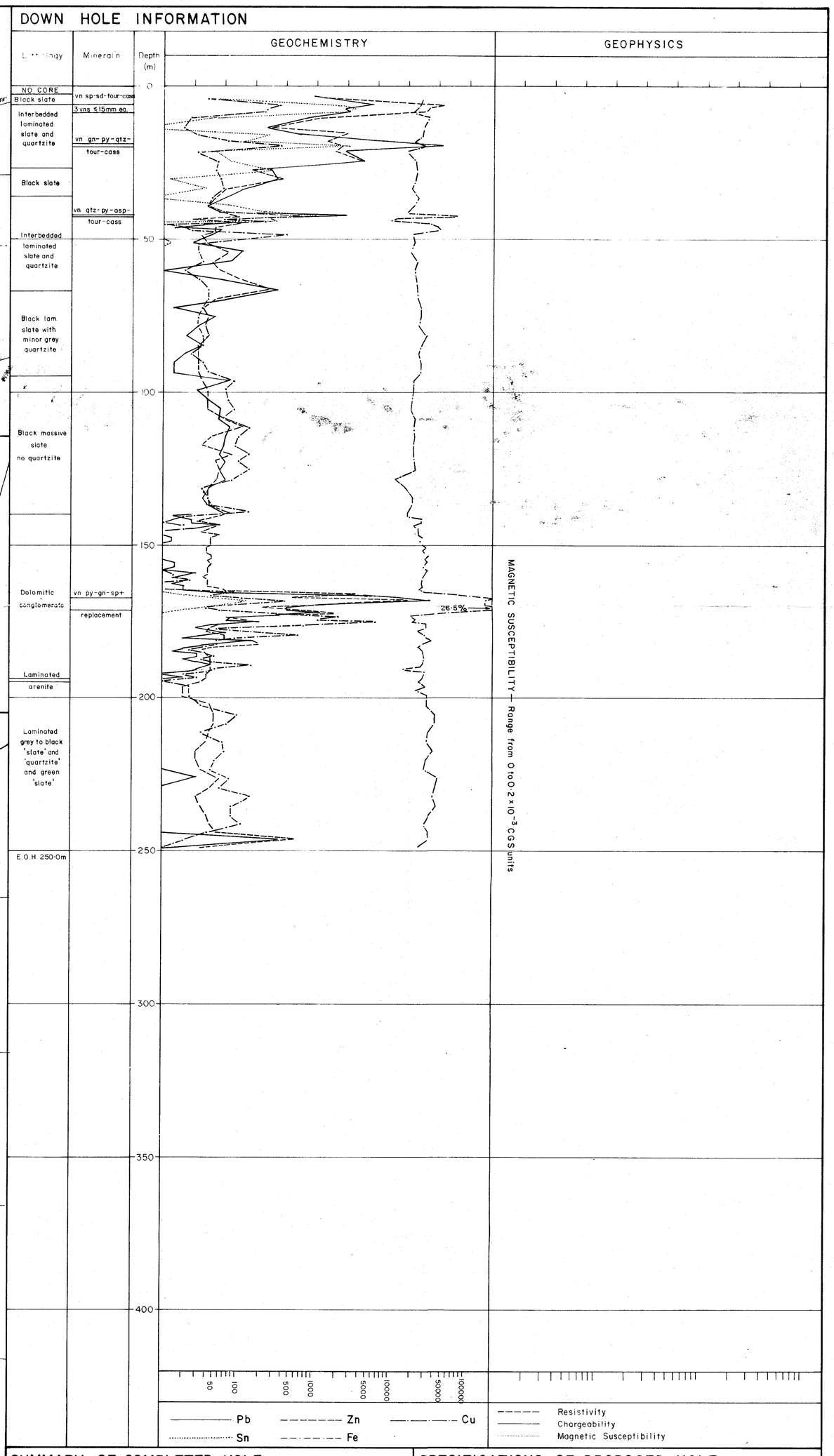
SECTION BEARING 240° AMG
(FROM 5000E, 2960N - LOCAL GRID)

SURFACE GEOPHYSICS - along grid line 18

SURFACE GEOCHEMISTRY - along grid line 18



DOWN HOLE INFORMATION



SUMMARY OF COMPLETED HOLE

CO-ORDINATES	NORTHING	EASTING	R.L.
LOCAL GRID	17·75	4930	
A.M.G.	5 363 960·4	373 027·9	628·8

AZIMUTH: 240° AMG DIP: −60° TOTAL DEPTH: 250·0m

COMMENCEMENT DATE: 22-6-'83 COMPLETION DATE: 5-7-'83

INTERNAL SURVEY INFORMATION

DEPTH	AZIMUTH	DIP	DEPTH	AZIMUTH	DIP
90m	241° AMG	52°	218m	236° AMG	44°
130m	238·5 AMG	49°	242m	233° AMG	45°
190m	237° AMG	46·5°			

HOLE SIZE	FROM	TO	HOLE SIZE	FROM	TO
TRICONE	0	3·0m	BQ	82·5m	250·0m
NQ	3·0m	82·5m			

DRILLED GEOLOGY (SUMMARISED)

DEPTH	LITHOLOGY	DEPTH	MINERALISATION AND SIGNIFICANT ASSAYS
00–139·9	Oonah FM: Black slates and grey quartzite, interbedded and laminated, freq. sheared and folded. 94·8–139·9: black massive slate; no quartzite.	6·25–7·0	1 vn } Each vein ≤15mm, irregular,
		7·2–8·0	1 vn } but subparallel to core.
		8·4–8·9	1 vn } sp-sd-tourm-cass ± py
		6·25–9·0	Assay: 2·75m at 0·36% Pb, 3·53% Zn, 18 ppm Ag, 0·27% Sn
139·9–194·0	Maestries Dolomitic Conglomerate: Recrystallized dolomite – matrix pebble conglomerate.	19·0–20·0	1 vn 19·1–19·2 of qtz-py-gn-sd-tour-cass. With irregular vein <10mm of coarsely recrystallized gn, also qtz vns <10mm with cavity linings of py and tetrah xls Assay: 1·0m at 0·29% Sn, 4·88% Pb, 233 ppm Ag.
194·0–195·0	Laminated cherty arenite.		
195·0–250·0	Concert Group 'Schist': Laminated grey and green cleaved siltstones, minor arenite.	42·5–42·95	1 vn of qtz-py-asp-tourm-cass. Assay: 0·45m at 0·105% Sn, 2·0% As
		167·45–171·7	Py-gn-sp replacement. Assays: 4·25m at 0·92% Pb, 0·51% Zn, 39 ppm Ag, 21·6% Fe, 76 ppm Sn.

LOGGED BY: Rod Sainty DATE: September 1983

SAMPLE DATA

SAMPLED INTERVAL	SAMPLE NUMBERS	SAMPLE TYPE	ELEMENTS DETERMINED	LAB. METHOD
3·0–250·0m (in 3m max. length)	53141–53200 53901–53969	fillet	Cu, Pb, Zn, Ag, Fe, Mn, As, Sn.	AAS XRF
7·7m	53516	slabbed core	C.M.S. mineragraphic description. C.M.S. report-83/9/27	thin and polished section.
8·5m	53517			
8·9m	53518			
19·2m	53519			
42·8m	53520			
178·6m	53524	split core	C.M.S. petrographic description. C.M.S. report-83/10/12	thin section

NOTES: Thin/polished section work revealed Sn occurs as very fine-grained cassiterite (mostly 10–30μ, but up to 100μ) within ultrafine matted tourmaline-qtz veinlets that replace sp-siderite veinlets (e.g. 6·25–8·9m) or along quartz-py-gn-tourmaline veinlets (e.g. 19·2m, 42·8m).

SPECIFICATIONS OF PROPOSED HOLE

CO-ORDINATES	NORTHING	EASTING	R.L.
LOCAL GRID	17·75	4930	
A.M.G.	5 363 965	373 025	631·5

AZIMUTH: 240° AMG DIP: −60° DESIGNED DEPTH: 150 m

ESTIMATED COMMENCEMENT: **June 1983**

ANTICIPATED GEOLOGY

DEPTH	LITHOLOGY	DEPTH	NATURE OF TARGET AND ANTICIPATED DEPTH
0–110m	Black slates and grey quartzite: Oonah Formation.		
110m–140m	Conglomerate: chert and quartz in recrystallized dolomite matrix. Maestries Dolomitic Conglomerate.	110m–140m	Maestries Dolomitic Conglomerate. True thickness ~ 30m.
140m–	Pale grey to olive green 'schists.' Concert Group.		

DESIGNED BY: Rod Sainty DATE: 23. 5. 1983

AIM OF HOLE:

To locate Mastries Dolomitic Conglomerate unit as prerequisite to target deeper D.D.H. MZP 245.

NOTES:

394052

ELECTROLYTIC ZINC CO. OF A'ASIA LTD.

PROJECT: MONTEZUMA J. V. TAS.

SPECIFICATIONS AND SUMMARY OF RESULTS

EXPLORATION DIAMOND DRILL HOLE No. MZP 244

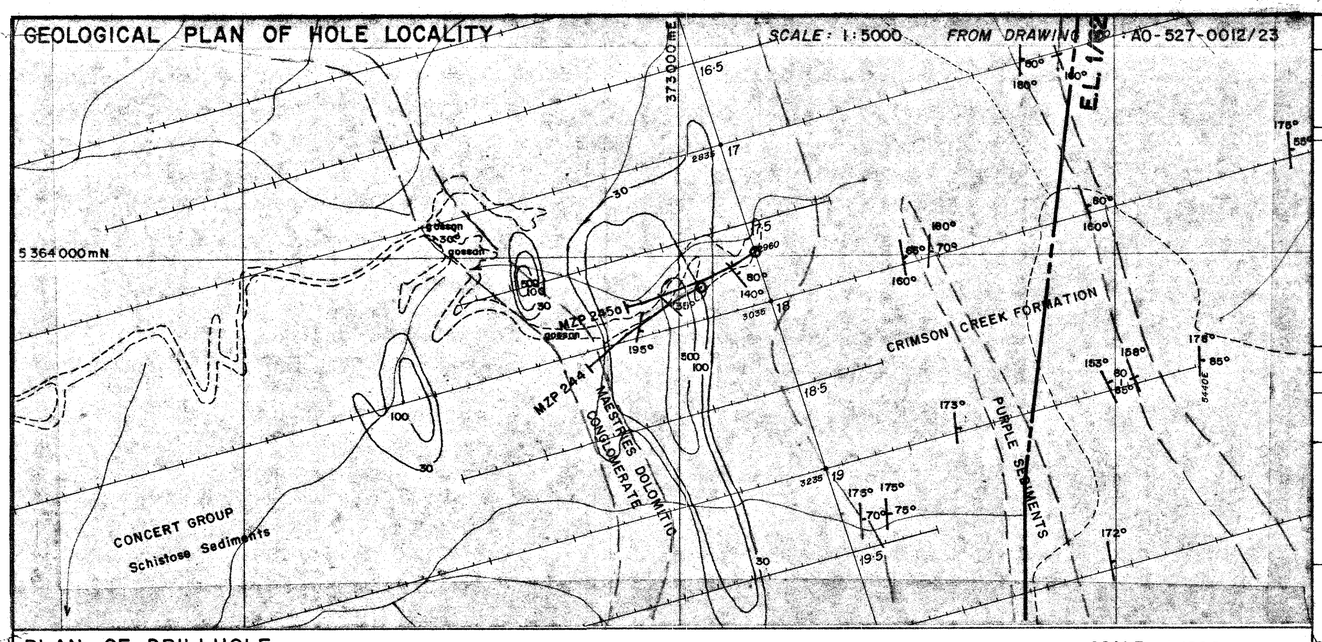
002

84-2163

SCALE: As shown	Survey: R.A.Sainty	Revised:
Reference:	Date: 5.1983	REF. No. A1-527-0039
Drawn: NIK/RJR	Checked: RASainty	

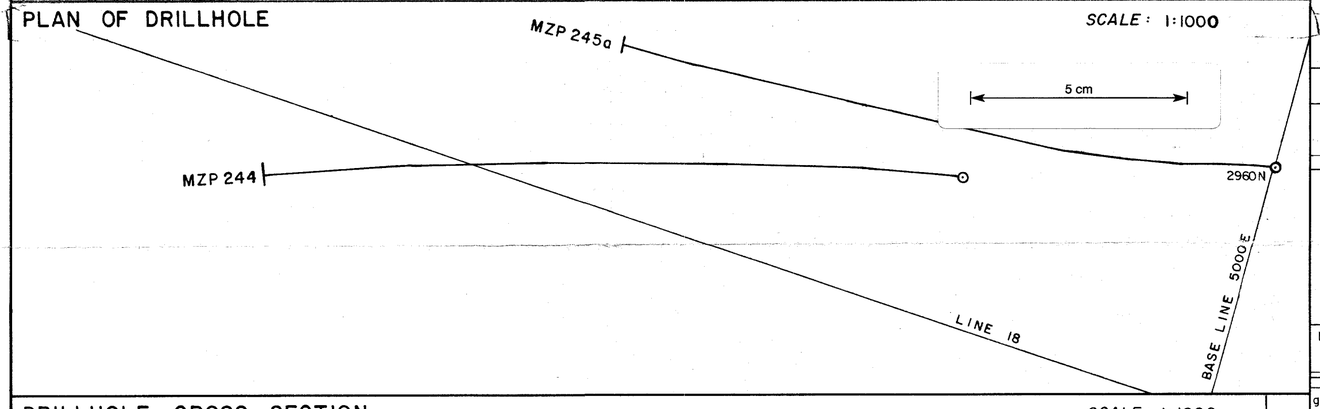
GEOLOGICAL PLAN OF HOLE LOCALITY

SCALE: 1:5000 FROM DRAWING No. A0-527-0012/23



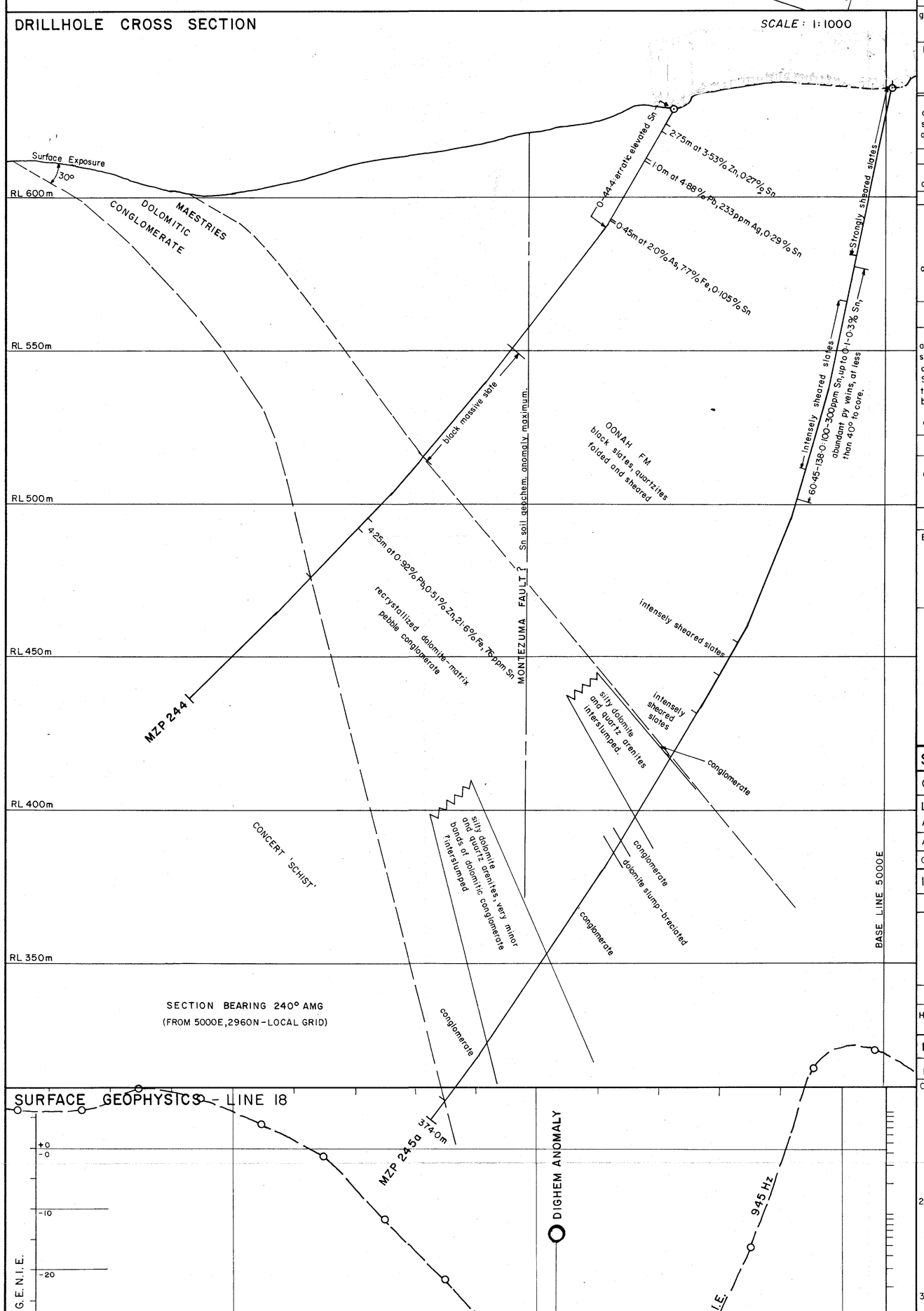
PLAN OF DRILLHOLE

SCALE: 1:1000



DRILLHOLE CROSS SECTION

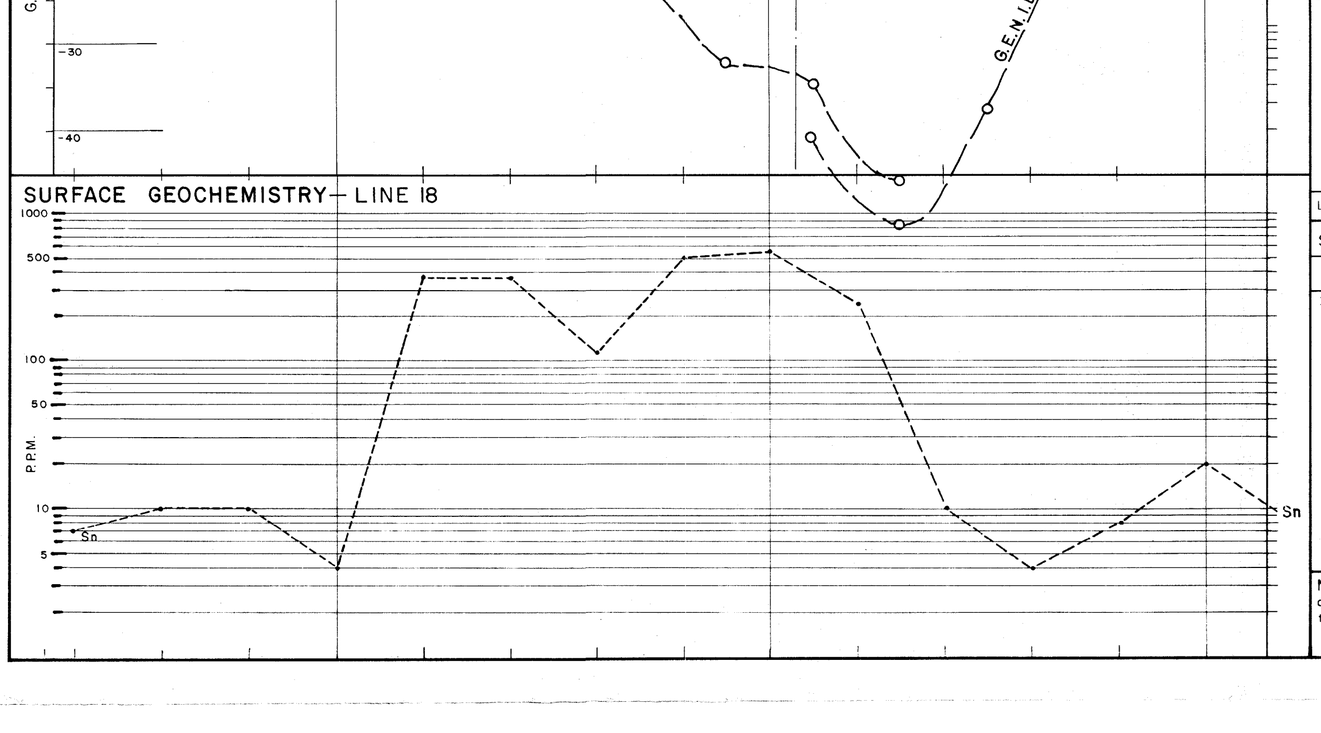
SCALE: 1:1000



SECTION BEARING 240° AMG
(FROM 5000E, 2960N – LOCAL GRID)

SURFACE GEOPHYSICS – LINE 18

SURFACE GEOCHEMISTRY – LINE 18



DOWN HOLE INFORMATION

Lithology	Mineral'n	Depth (m)
No core		0
Black slate, strongly sheared, very minor quartzite		
quartzite	60·45–138·0 irregular py veinlets	50
Intensely sheared black slate plastically deformed	abundant py veinlets 60cm Pb, Sb, Sm no vn py abundant py veinlets no vn py abundant py no vn py py, cb, tour vn no vn py some py vns	100
laminated slate and quartzite	20cm py vn qtz vns	
laminated black slate		150
laminated slate and quartzite		
black slate strongly sheared		200
grey quartzite very little slate		
black slate minor quartzite strongly sheared		
sericitic and dolomitic siltstone and qtz arenites interslumped		250
dolomitic conglomerate		
dolomite		
dolomitic conglomerate		300
sericitic and dolomitic siltstones and qtz arenites. Some pyritic thin rare bands of dolomitic conglomerate		
dolomitic conglomerate		350
green'schist'		
E.O.H 374·0m		400

GEOCHEMISTRY: 24·8% Pb; 23·0% Pb

GEOPHYSICS: MAGNETIC SUSCEPTIBILITY – Range from 0 to 0·2 × 10^{-3} CGS units

50 100 500 1000 5000 10000 50000 100000

Pb Zn Cu Sn Fe

Resistivity
Chargeability
Magnetic Susceptibility

SUMMARY OF COMPLETED HOLE

CO-ORDINATES	NORTHING	EASTING	R.L.
LOCAL GRID	2960 N	5000 E	
A.M.G.	5 364 004·0	373 086·5	635·7

AZIMUTH: 240° AMG DIP: –80° TOTAL DEPTH: 374·0 m

COMMENCEMENT DATE: 9-7-'83 COMPLETION DATE: 30-7-'83

INTERNAL SURVEY INFORMATION

DEPTH	AZIMUTH	DIP	DEPTH	AZIMUTH	DIP
44 m	241° AMG	78°	200 m	249·5°AMG	60°
80 m	237°AMG	78°	226m	251° AMG	59°
125m	243°AMG	73·5°	322m	251°AMG	56°
164m	245°AMG	67·5	374m	254°AMG	52·5°

HOLE SIZE	FROM	TO	HOLE SIZE	FROM	TO
HQ(Tricone)	0	3·0	BQ	84·0	374·0
NQ	3·0	84·0			

DRILLED GEOLOGY (SUMMARISED)

DEPTH	LITHOLOGY	DEPTH	MINERALISATION AND SIGNIFICANT ASSAYS
0–232·15	Oonah FM: Black slates and grey quartzites: interbedded, laminated and freq. intensely sheared, folded. 72·0–129·8, 189·0–201·0, 215·4–232·15 intensely sheared, plastically deformed.	60·45–138·0	Entirely within Oonah FM as follows– Abundant narrow py veinlets throughout sheared black slates, typical 3m assays: 100–300 ppm Sn. Specific elevated values:
		67·5–67·8	Py vns 3010 ppm (typical veins, but clustered set in short interval.)
		80·85–81·5	Pb-Sb-As-S ? Jamesonite – ? geocronite – type veins. 24·8% Pb, 525 ppm Ag, 5·05% Fe, 2·10% As.
232·15–367·0	Maestries Dolomitic Conglom. Recrystallized dolomite-matrix pebble conglomerate except 232·65–254·8, 264·0–268·53, 308·65–343·45 dolomitic siltstones and quartz arenites.	90·0–93·0	1220 ppm Sn
		96·0–99·0	1190 ppm Sn
		114·0–117·0	939 ppm Sn
		126·0–129·0	756 ppm Sn
367·0–374·0	Concert Group 'Schist.' Poorly laminated green schist.	135·35–135·55	2600 ppm Sn with 160 ppm Ag, 9·1% As
		135·55–136·15	820 ppm Sn

LOGGED BY: ROD SAINTY DATE: October 1983

SAMPLE DATA

SAMPLED INTERVAL	SAMPLE NUMBERS	SAMPLE TYPE	ELEMENTS DETERMINED	LAB. METHOD
3·0–374·0 in 3m max. lengths	53971–54000 53405–53500 57801–57808	Fillet but very short intervals were split.	Cu, Pb, Zn, Ag, Fe, Mn, As. Sn	AAS XRF
67·7	53521	slabbed core	C.M.S. mineragraphic description C.M.S. report 83/9/27	thin and polished section
92·8	53522			
135·45	53523			
4·5	53525	split core	C.M.S. petrographic description C.M.S. report 83/10/12	thin section
237·8	53526			
252·0	53527			
310·4	53528			
331·5	53529			
338·5	53530			
356·0	53531			

NOTES: Thin/polished section work revealed Sn occurs as very fine grained cassiterite mostly (20 μ or 20–50 μ, but up to 100 μ), within fine-grained matted tourmaline–qtz zones flanking the pyrite veinlets.

SPECIFICATIONS OF PROPOSED HOLE

CO-ORDINATES	NORTHING	EASTING	R.L.
LOCAL GRID	2960N	5000E	
A.M.G.	5 364 008	373 087	641

AZIMUTH: 240° AMG DIP: –75° DESIGNED DEPTH: 320 m

ESTIMATED COMMENCEMENT: JUNE 1983

ANTICIPATED GEOLOGY

DEPTH	LITHOLOGY	DEPTH	NATURE OF TARGET AND ANTICIPATED DEPTH
0–250	Oonah FM– Black slates and grey quartzites: interbedded and sheared.		Massive and stringer pyrite with Sn as a replacement of the dolomitic unit and within 'feeder' fault zone, between 250m–300m down hole.
250–300	Maestries Dolomitic Conglomerate.		
300–	Concert Group– Grey and green schistose siltstones.		
	The above depths are entirely dependent on any displacement on the Montezuma 'Fault.'		

DESIGNED BY: ROD SAINTY DATE: 23-5-'83

AIM OF HOLE: To test down-dip intersection of Maestries Dolomitic Conglomerate with Montezuma Fault for pyrite-hosted Sn mineralization, beneath coincident EM and soil Sn geochemical anomalies.

NOTES: Hole was collared at –75° as MZP 245 on 6-7-'83, but abandoned at 56m due to excessive deflection (lift of 9°). MZP 245a was drilled using a chromed barrel, inverted bit and backend reamer in NQ to 84m and in BQ from 201–245m to control deflection.

ELECTROLYTIC ZINC CO. OF A'ASIA LTD.

PROJECT: MONTEZUMA J.V. TAS.

SPECIFICATIONS AND SUMMARY OF RESULTS

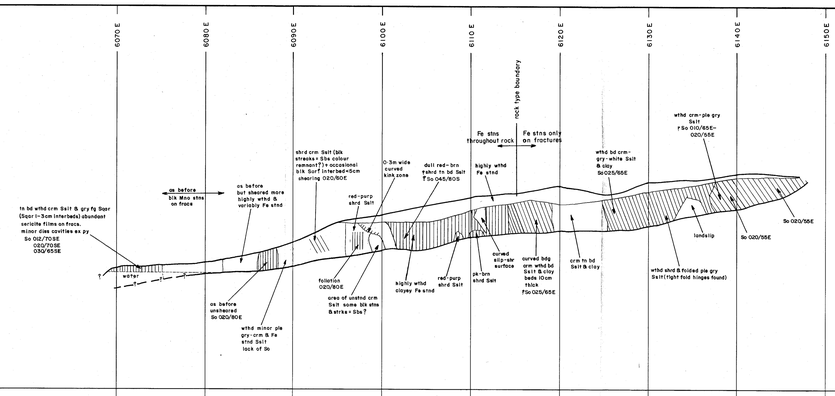
EXPLORATION DIAMOND DRILL HOLE No. MZP 245a

003

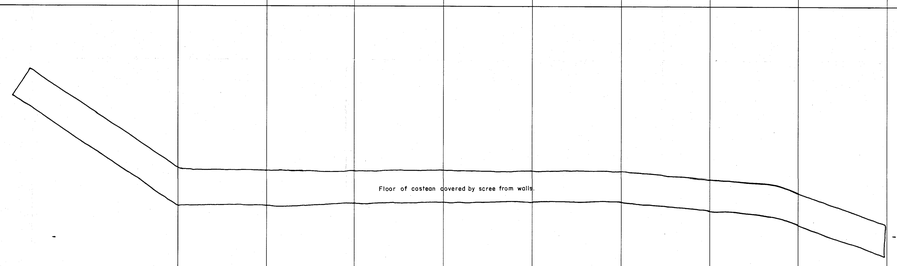
394053 84-2163

SCALE: As shown	Survey: R.A.S.	Revised:
Reference:	Date: 15-8-'83	REF. No.
Drawn: R.J.R.	Checked: R.A.S.	AI-527-0041

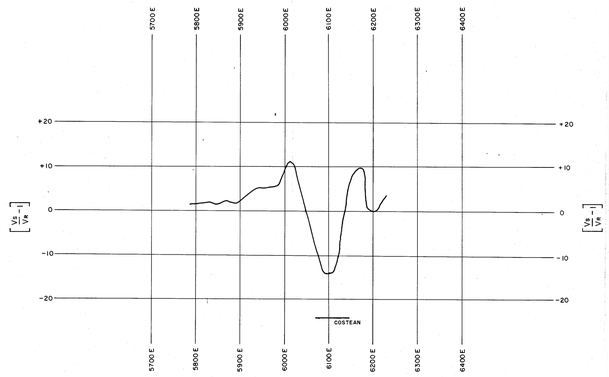
COSTEAN GEOLOGY



SECTION OF COSTEAN
Looking North
BEARING 70° A.M.G.
SCALE = 1:250



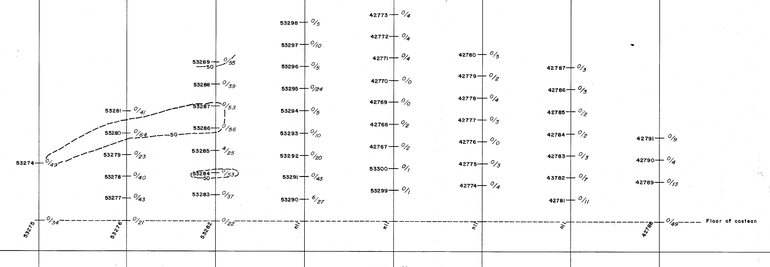
PLAN OF COSTEAN
BEARING 70° A.M.G.
SCALE = 1:250
5 cm



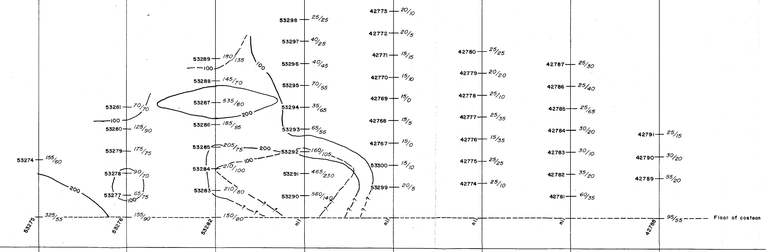
COSTEAN GEOPHYSICS
SCINTREX SE-88 GENIE EM
945 Hz
SCALE = 1:5000

COSTEAN GEOCHEMISTRY
SCALES - Hor = 1:250, Vert = 2cm = 1m

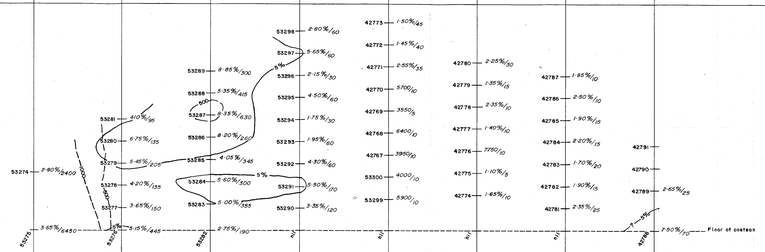
Sn/As



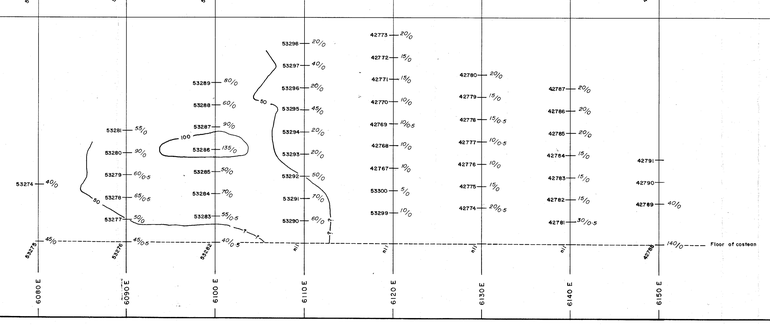
Zn/Pb



Fe/Mn



Cu/Ag



AIM: This costean tested a strong EM (DIGHEM^R and SE-88 GENIE) anomaly centred at 6100E which had a single elevated Sn soil value(47 ppm), located at the anomaly mid-point.

RESULT:

The unit of sheared reddish-purple "Siltstones" west of 6115E has elevated base metal values and contains small areas of less Fe stained, cream-coloured rock which feature small black smears and streaks.

It is therefore most probable that the source of the EM anomaly is a black shale unit. The 47 ppm soil Sn value is not explained by the bedrock geochemistry.

394054

ELECTOLYTIC ZINC CO. OF A'ASIA LTD.

PROJECT: MONTEZUMA J.V. ,TAS.

COSTEAN LINE IA
6070E-6145E
004

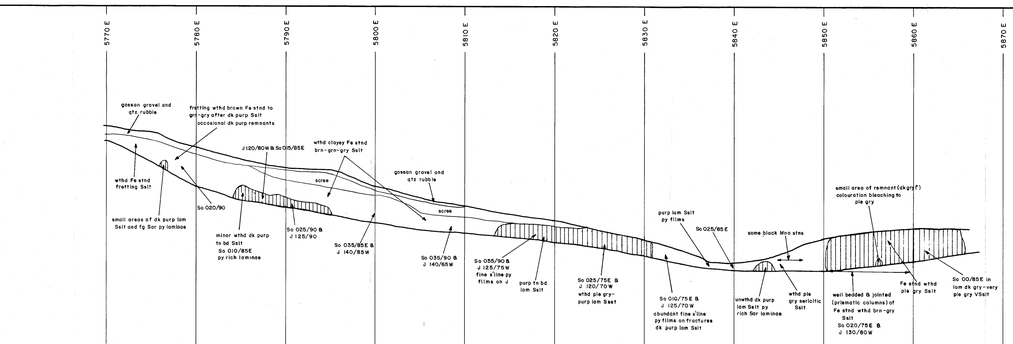
GEOLOGY, GEOCHEMISTRY, GEOPHYSICS
SUMMARY PLAN

RL-2153

Scale: as shown	Survey: R.A.S.	Revised:
Reference:	Date: 25-10-'83	Ref. No.
Drawn: R.J.R.	Checked: R.A.S.	AO-527-0043

004

COSTEAN GEOLOGY



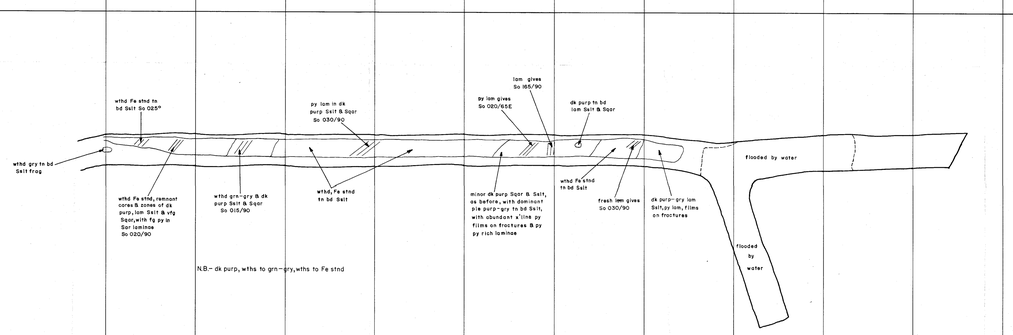
SECTION OF COSTEAN

Looking North

BEARING 70° A.M.G.

SCALE = 1:250

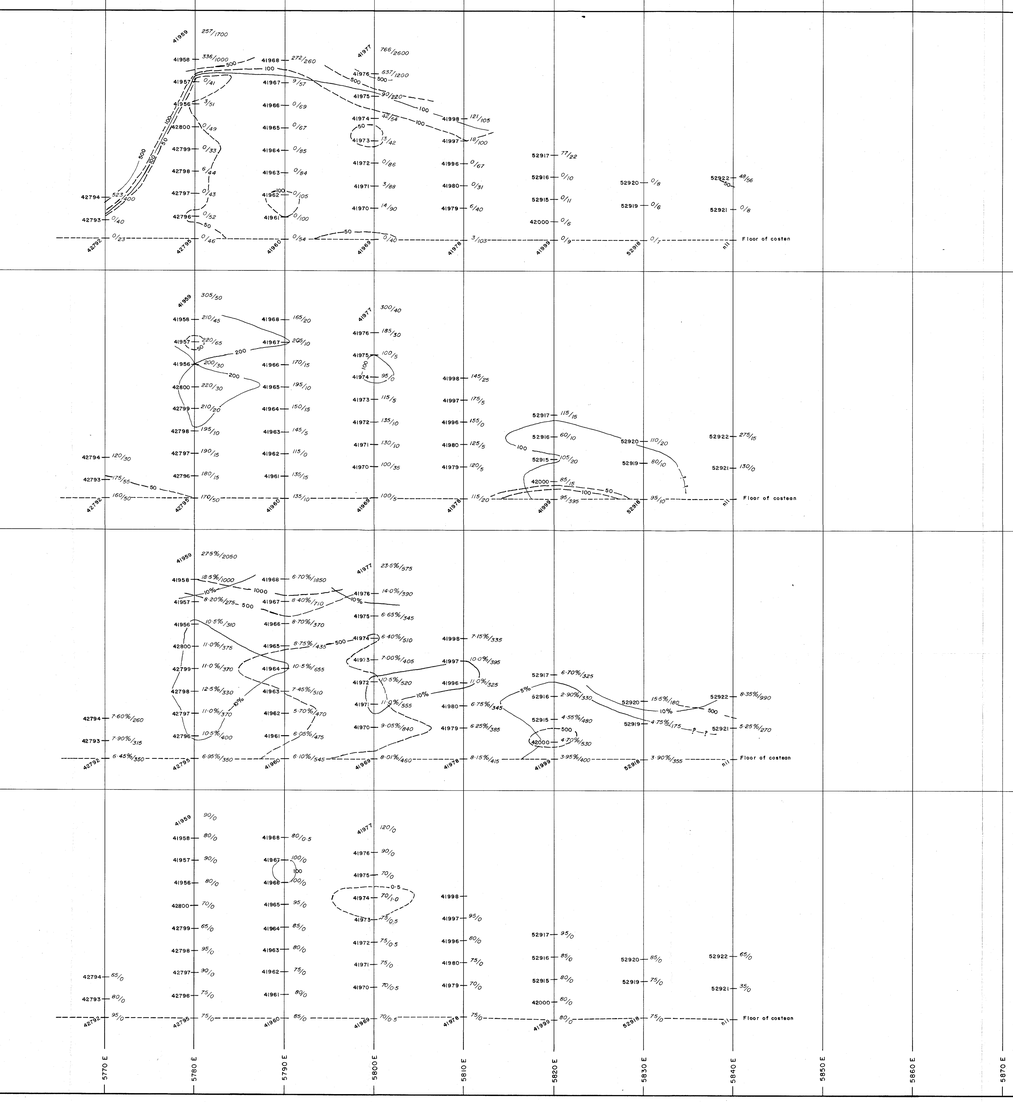
5 cm



PLAN OF COSTEAN

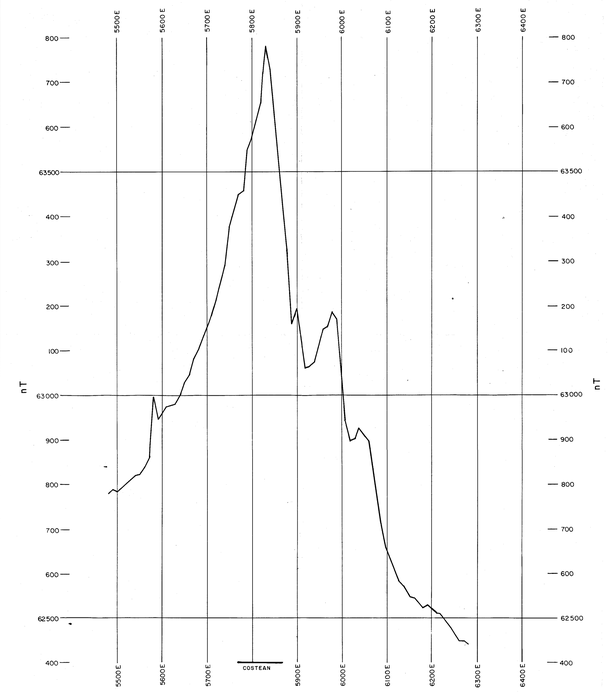
BEARING 70° A.M.G.

SCALE: 1:250



COSTEAN GEOCHEMISTRY

Scales - Hor.= 1:250, Vert.= 2cm = 1m



COSTEAN GEOPHYSICS

GROUND MAGNETICS

Scales - Hor.= 1:5000, Vert.= 2cm = 100nT

AIM:

This costean tested a coincident Sn soil geochemical anomaly and a localised circular magnetic high feature on top of the magnetic ridge.

20m spaced auger soil samples assayed:

Sample No.	Cu	Pb	Zn	Ag	Fe	Mn	As	Sn	Easting
53133	55	70	125	x	4·70%	350	170	59	5840E
53134	45	40	80	x	3·40%	255	59	289	5820E
53135	35	40	80	x	3·50%	185	180	259	5800E
53272	45	30	225	x	14·50%	550	1000	294	5780E
53273	55	5	100	x	8·65%	160	2000	864	5760E

RESULT:

Anomalous Sn soil values are due to a surficial gossanous layer and scree. Although both this "gossan" and some of the py bearing sediments are feebly magnetic, the localised magnetic high is more probably part of the response from the underlying ultrabasic rocks.

394055

ELECTOLYTIC ZINC CO. OF A'ASIA LTD.

PROJECT: MONTEZUMA J.V. ,TAS.

COSTEAN LINE IA

5770E - 5865E

005

GEOLOGY, GEOCHEMISTRY, GEOPHYSICS

SUMMARY PLAN

84-2163

Scale: as shown	Survey: R.A.S.	Revised:
Reference:	Date: 25-10-83	Ref. No.
Drawn: R.J.R.	Checked: R.A.S.	AO-527-0042

E.L.1/62

PART E.L. 15/76

BASE LINE 900SE

RING RIVER GRID

Refer to AO-527-0036 for interpretation

NOTE

Lines 01 to 13 taken from Reconnaissance Mapping by New Consolidated Gold Fields (Aust) Pty Ltd. Style-1800 ft to 1 inch, aerial 22.4.1969.

Lines 7 to 13 re-cut and partially extended in April '82, with limited ground control by W.Mayne (•).

Lines 14 to 20 newly cut in April '82 at nominal 200m spacings and nominal azimuth 75° A.M.G.

5 370 000 mN
5 369 600N
5 369 500 N
5 369 300N
5 369 100N
5 369 000 mN
5 368 900N
5 368 700N
5 368 500 N
5 368 300N
5 368 100N
5 368 000 mN
5 367 900N
5 367 700N
5 367 500N
5 367 300N
5 367 100N
5 367 000 mN
5 366 900 N
5 366 700N
5 366 500N
5 366 300N
5 366 100N
5 366 000 mN

370 000 mE
371 000 mE
372 000 mE
373 000 mE
374 000 mE

ELECTROLYTIC ZINC CO. OF A'ASIA LTD.

PROJECT: MONTEZUMA J. V. , TAS.

394056

5 cm

006

GEOLOGY

1982/83 MAPPING

BL-2163

SCALE : 1:5000	Survey : R.A.S.	Revised :	
Reference :	Date : 1-11-83	Ref No.	AO-527-0044
Drawn : Nik/RJR	Checked :		

PART E.L. 15/76

E.L. 1/82

COMET CREEK

5 366 000 mN
5 365 900 mN
5 365 700 mN
5 365 500 mN
5 365 300 mN
5 365 100 mN
5 365 000 mN
5 364 900 mN
5 364 700 mN
5 364 500 mN
5 364 000 mN
5 363 000 mN
5 362 000 mN

370 000 mE
371 000 mE
372 000 mE
373 000 mE
374 000 mE
375 000 mE

Phyllite Schist
Phyllite, Quartzite with carbonate horizons.
Schist pelitic
Schist
Carbonate Conglomerate
Greywacke Conglomerate.
Carbonate ? bonded pink/grey fine Sediment, some calcareous ?
calcareous Greywacke white/grey carbonate , cf
Siltstone
FAULT
Siltstone, with minor carbonate
Carbonate Conglomerate
fine grained thinly bedded Sediments.
limestone
carbonate Siltstone thinly bedded
black Phyllite Schist with carbonate beds.
Phyllite
Phyllite, Quartzite
Phyllite, carbonate
Siltstone Greywacke
Phyllite, Quartzite
thin bedded Quartzite

NOTE

Lines 01 to 13 taken from Reconnaissance Mapping by New Consolidated Gold Fields (Pasa) Pty Ltd. Scale 400 ft to 1 inch , dated 22.4.1969 .

Lines 7 to 13 re-cut and partially extended in April '82 , with limited ground control by W.Moyle (✓).

Lines 14 to 20 newly cut in April '82 at nominal 200m spacings and nominal azimuth 75°A.M.G. .

CREEK MAPPING BY POLTOCK BROS.

JUNE 1982

LEGEND

- DOLERITE SCREE
- CAMBRIAN – DUNDAS GROUP: GREYWACKE and SILTSTONE
- CAMBRIAN – PRECAMBRIAN: GREYWACKE and SILTSTONE, some calcareous
- GREYWACKE CONGLOMERATE and SILTSTONE
- TUFFS, acid
- BLACK SILTSTONE with CARBONATE LAMINAE
- QUARTZITE (MICACEOUS) and SILTSTONE
- PHYLLITE – SCHIST, frequently calcareous
- PHYLLITE and CARBONATE CONGLOMERATE
- SAMPLE TYPE and LOCATION (44913 Stream Sediment; 44912 Rock)
- GEOLOGICAL BOUNDARY (Fact; ····· ? interp.)
- FAULTS (Fact; –?– interp.)
- SCHISTOSITY (50°)
- PHYLLITE – SLATY CLEAVAGE (50°)

N.B.– C= CONCERT GROUP
O= OONAH FORMATION

Refer to AO-527-0036 for interpretation

ELECTROLYTIC ZINC CO. OF A'ASIA LTD.

PROJECT: MONTEZUMA J.V. , TAS.

5 cm

GEOLOGY 007

394057

1982/83 MAPPING

84-2163

SCALE : 1:5000	Survey : R.A.S.	Revised :
Reference :	Date : 1-11-83	Ref. No.
Drawn : Nik/RJR	Checked :	AO-527-0045