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MICROFILMED

PROGRESS REPORT
AND FUTURE WORK PROGRAMME

EL47/71

C.P. Barnes

12th June 1973

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PROGRESS REPORT

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AND FUTURE WORK PROGRAMME

EL47/71

JUNE 1973.

In the December report it was proposed that the company would, as far as practical, continue with a programme of work, the main paramities being to:

proclivities?

- A) search extensively for further pyritic ore bodies in the exploration area.
- B) continue drilling in order to outline further ore reserves on the Queen Hill structure.

This programme has been adhered to and an additional 250 metres of drill core has been recovered by extending and wedging from previous holes. The search for additional pyritic zones has been aided by a turair survey, the results of which have been notified to you and geological ground mapping throughout the exploration area.

Drilling:

Drilling was confined to an extension of, and wedging operations from a previous bore hole G15. This was considered to be an important target zone due to:

- a. the previous hole not having been carried far enough. (evidence G26)
- b. the mineralisation located by the original drilling was, although pyritic, largely barren of cassiterite tin. This could have been due to core loss.
- c. the necessity of showing continuity between bore holes G18 and 26.

The results of this drilling confirm that the tin mineralisation was essentially the same as recorded in G15 and the presence of two ore zones as seen in G26 did not exist in this area.

In addition to the drilling on Queen Hill, a short third hole was drilled largely for geological information under a pyritic zone adjoining the Montana area. This hole failed to locate any significant mineralisation, and the geological information was largely of a negative nature.

Geological Mapping:

during May 1973, one geologist, D. Simpson and a field assistant were engaged in geological mapping, adit mapping and follow-up of airborne geophysical (Turair) anomalies within the area of the Exploration Licence. The full report is still to be prepared, but he reports as follows:

a) Ground Follow-up of Geophysical Anomalies

An airborne Turair survey carried out earlier in the year by a contractor produced over 90 geophysical anomalies of which about 15 were regarded as being of primary interest. Most of these anomalies were visited but in areas away from the known old mine both access and outcrop are very poor. Shallow pits were sunk to about 0.5 metres or less to bedrock on about 12 of the anomalies. In most cases unaltered and unmineralised shales or quartzites were exposed, however, trenching would be required for an adequate test.

It is possible that recorded positions of anomalies may be displaced along line from their true positions. Follow-up by ground geophysics to accurately locate anomalies would be a pre-requisite to trenching.

b) Surface Geological Mapping

Geological mapping at a scale of 1:5000 was carried out over the southern and central parts of the Exploration Licence area with some traverses in the northern part.

Mapping has identified and delineated a wide belt of volcanics trending WSW from the cemetery (on the western side of Queen Hill) and a small outcrop of volcanics exposed by recent bulldozing 1000 metres to the south of Bradshaw's open cut. Although several shear zones are evident, on aerial photographs, traversing these zones of volcanics, no evidence of sulphide mineralisation was noted.

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c) Adit Mapping

Adit mapping was carried out during periods of bad weather. In all, eight adits were mapped, mostly in the "Queen Extended" and "Spray" mine areas.

Additional Promising Areas:

Following the promising results of the turair survey, additional geological mapping and sampling, the following areas are considered to be of importance and will require more detailed work.

a. Bradshaws:

This area where pyritic mineralisation is visible has been sampled and mapped initially on a scale of 1:5000. The initial samples taken at random from Bradshaws, showed a highest tin assay of 1.4%.

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When
can they
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b. Crown: (TAS. CROWN)

No drilling records
can be located.
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This area has been drilled previously by the Department of Mines, is wholly contained within the Gordon limestone sequence and in close proximity to two turair anomalies. The previous drilling which was carried out only to a depth of 50 metres showed increasing lead values towards the bottom of the holes. It is understood furthermore that poor core recovery hampered the true assessment of this area.

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c. Argent/Nike:

This area surrounding two old lead silver mines is of interest largely because samples of pyrite taken from the old dumps showed higher than average background cassiterite content.

d. EM Anomaly - North west corner Oonah lease:

A marked electro magnetic anomaly has been previously located by the Bureau of Mineral Resources within the exploration licence at this point. No further information is available at this time but it is proposed to map in detail through this area.

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e. Quigleys:

Within the area described as quigleys, there is evidence of massive sulphides. Initial sampling of this mineralisation was ^{discouraging} unencouraged. However, more detailed channel sampling should be undertaken.

f. Clarkes Extended:

This area covers the extension of Clarkes lode to the south west and will be mapped in detail with the aid of survey lines and costeans.

DISCUSSION OF TURAIR RESULTS:

A full report prepared by Sintrex Priority Ltd. which details and lists the significance of the anomalies has already been forwarded to you under separate cover. There have been detailed discussions both with Cominco Exploration Pty. Ltd. and Sintrex on the best methods of interpreting these anomalies and a possible means by which they may be located on the ground and more fully investigated. The major problem has been to decide the possible error in the positioning of the anomalies which can be as much as 200 feet along flight lines. It has been decided that the use of an SE300EM is the most suitable method.

Geologically the anomalies fall into three groups:

- a) those located in close proximity to old workings
- b) those where no details are available
- c) those where ground details are available but do not indicate any reason for the anomaly.

Each of the primary and secondary targets in groups (a) and (b) have been listed in Appendix I and given a work order priority.

PROPOSED FUTURE WORK PROGRAMME

The following report sets out in detail the work programme to be followed during the Winter and Spring months within exploration licence 47/71 and include leases, and will commence during the next fortnight. The purpose of this work is to:

Proposed Future Work Programme (Cont'd)

- A. locate accurately all primary Turair anomalies by the use of a Scintex EM300 and investigate fully by either geological mapping on the scale of 1 to 500 or if this is not possible, by costeaning.
- B. produce detailed geological maps of the significant areas outlined and to search for additional pyritic ore bodies.
- C. explore, if possible, areas already known and mapped where pyrite containing tin mineralisation is present, by a small exploratory drill. The use of this drill is conditional on the company being able to obtain sufficient information from the initial phases of the operations to justify engaging skilled drillers.

The breakdown of time and anticipated costs are listed:

STAFF

- 1 Geologist
- 1 Technician
- 2 Field Hands
- 1 Driller

INSPECTION & LOCATION OF TURAIR ANOMALIES

Line cutting.	Total (ex Argent/Nike)	
	950 metres	5 days
Location a)	Line cutting involved	7 days
	b) after line cutting	7 days
Trenching	500 metres - Hire of D4	7 days
		(incl. walking time)

DETAILED MAPPING OF AREAS

1. Argent/Nike

Line cutting - 2000 metres	10 days
Mapping and location of turair anomaly	4 days

2. Bradshaws

Line cutting - 2000 metres	10 days
Mapping	2 days

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- 3. EM/Corner of Oonah Lease
Mapping 1 day
- 4. Crown
Trenching - 1 day hire of D4 1 day
Mapping 2 days
- 5. Quigleys
Trenching ½ day Hire of D4 ½ day
Mapping 3 days
- 6. Clarkes Extended
Mapping 4 days
Line cutting - 3000 metres 15 days

COSTS:

1 Geologist for 30 days	\$1,500.00
1 Technician for 14 days	300.00
2 Field hands for 40 days	800.00
1 Field hand for 11 days	200.00

Add 50% for possible down time 1,300.00

Sub-total \$4,100.00

Hire of SE300EM 14 days @ \$15 = \$ 210.00

Add 50% for possible down time = 105.00

Sub-total \$ 315.00

Trenching, hire of D4 for 8½ days
@ \$15 per hour = \$1,020.00

Grand Total \$5,435.00

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TO RUN CONCURRENT WITH OTHER PROGRAMME

<u>Drilling'</u>	<u>Clean Adits</u>	<u>Total Cost</u>
<p>↓ Montana</p> <p>↓ Paynes</p> <p>↓ Golf course</p> <p>↓ Stormsdown</p> <p>↓ Bradshaws</p>	<p>→ 3 holes @ 300'</p> <p>→ 1 hole @ 200'</p> <p>2 Adits. Allow 2 weeks</p> <p>→ 2 holes @ 300'</p> <p>↓</p> <p>\$1,000 → 2 holes @ 200'</p> <p>→ 3 holes @ 300'</p>	<p>\$3,150.00</p> <p>\$1,000.00</p> <p>\$2,100.00</p> <p>\$1,000.00</p> <p>\$1,400.00</p> <p>\$3,150.00</p> <hr/> <p>\$11,800.00</p> <p>→ Geologist & Permanent field hand .. <u>3,680.00</u></p> <p>TOTAL.. <u>\$15,480.00</u></p>

1) Assumption, Drilling Costs, all in at \$3.50 per foot.



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APPENDIX 1

<u>Priority of Anomaly & Area</u>	<u>Location</u>	<u>Notes on work Proposed</u>
1	Argent/Nike Area	Detail mapping - sampling (channel if possible) Requires line cutting - Geophysics: SE300 EM
4	T. Anomaly 10	To be located. line cutting required. Geophysics SE300EM
3	T. Anomaly 4	Inspected at a plotted position old shafts present check location by Geophysics (SE300EM)
5	T. Anomaly 1	Occurs in Silurian sandstone - little interest at present.
4	T. Anomaly 14	Not inspected or located. Requires line cutting, location by Geophysics (SE300EM)
1	Golf course area	Mapping done. No. 15 probably due to swamp. Further test of high tin pyrite by small drill.
3	T. Anomaly 10	Locate and check - drill if not explained by geology (easy drill access)
	T. Anomaly 18	In town - leave for now.
2	T. Anomaly 21	Inspected: Shallow pits but no exposure co-incident to anomaly locate by SE300EM. Drill access easy.
2	T. Anomaly 23	Inspected - no outcrop. Locate SE300EM.
2	South Clarkes	On spilite - shale strike extension of Queen Hill body - detail mapping.
1	Queen No. 4	Old reports indicate massive pyrite below present workings - drill.

<u>Priority of Anomaly & Area</u>	<u>Location</u>	<u>Notes on work proposed</u>
1	Paynes	Mapped in detail - drill
	T. Anomaly 28	In town - leave for present
	T. Anomaly 22	In town
4	T. Anomaly 29	Probably Taylors: locate by SE300EM
1	Stormsdown	Mapped in detail - adit, continue with exploration drill (access eas
2	T. Anomaly 30	Mapped in detail near entrance to Dunkleys adit - locate by SE300M - drill access easy. Depth to interpreted top 120 metres
1	Bradshaws	Map in detail - drill
4	T. Anomaly 34	In swamp and probably due to it, however a strong broad IP anomaly access on strike surface exposure indicates pyrite graphite.
3	T. Anomaly 35	Locate over strong SP anomaly - costeanned graphitic shale - check location SE300EM.
1	T. Anomaly 32	Mapped in detail - could be related to Montana No. 2 workings however locate SE300M. Drill access easy.
1	Montana No. 2 Pyrite	Drill
	T. Anomaly No. 33	In town - leave for present.
2	T. Anomaly 36	Inspected - No outcrop locate by SE300EM and trench.
2	T. Anomaly 30	Inspected - coincides with old shaft - pyrite not evident. Detailed map available - locate an trench.
2	T. Anomaly 43	No outcrop (inspected) locate and trench or drill.

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Priority of Anomaly & Area

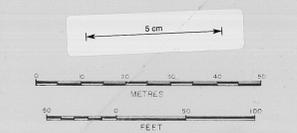
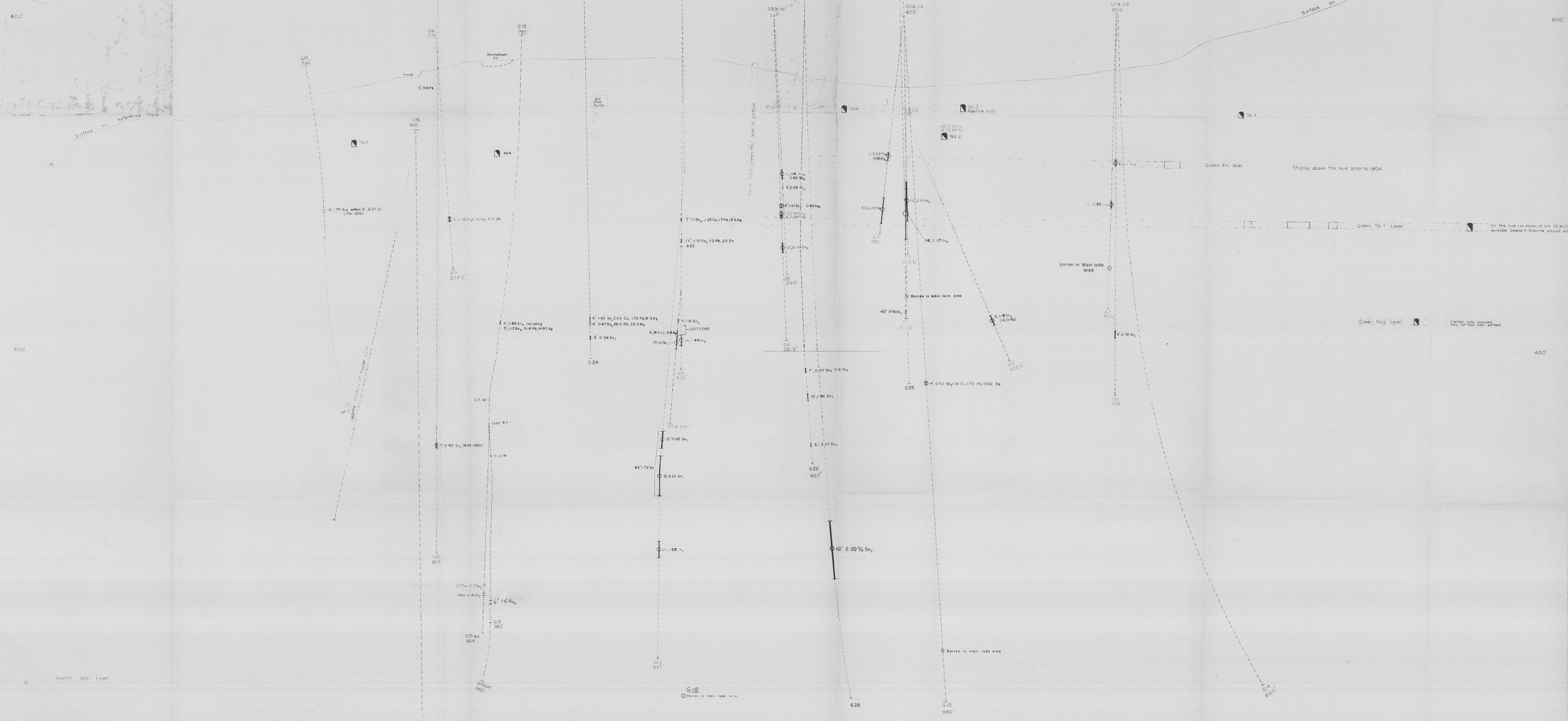
Location

Notes on work proposed

- | | | |
|---|--|---|
| 1 | T. Anomaly 44:)
48:) | Old crown prospect area -
compile data and map if necessary. |
| 3 | BMR/EM Anomaly:
NW cnr. Oonah 1
lease. | Locate and map or trench. |
| 3 | Quigleys and Assoc.
EM, SP, including
Turair anomalies
65 and 57. | Mapping and sampling and
trenching. |
| | T. Anomalies 64,
67 and 69. | In town dam - no work at present. |
| 3 | T. Anomaly 60 | Inspected: Quartzite and shales
in area. Locate GE300EM. |
| 5 | T. Anomalies 53
and 61. | Believed related to
unconformity - fault? |

LIST OF PLATES.

- 1: QUEEN HILL LONGITUDINAL PROJECTION QH 5.
- 2: QUEEN HILL TURAIR ANOMALIES QH 26a/73
- 3: QUEEN HILL TURAIR ANOMALIES QH 26b/73
- 4: QUEEN HILL GEOLOGICAL PLAN QH 8



NOTE: ELEVATIONS ASSUMED UNLESS OTHERWISE STATED ON DRAWING SHEET

Vertical Reference Plane Bearing 120°M

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COMINCO EXPLORATION PTY LTD

NORTH WEST TIN FIELD, TASMANIA

QUEEN HILL, M. 56M/62

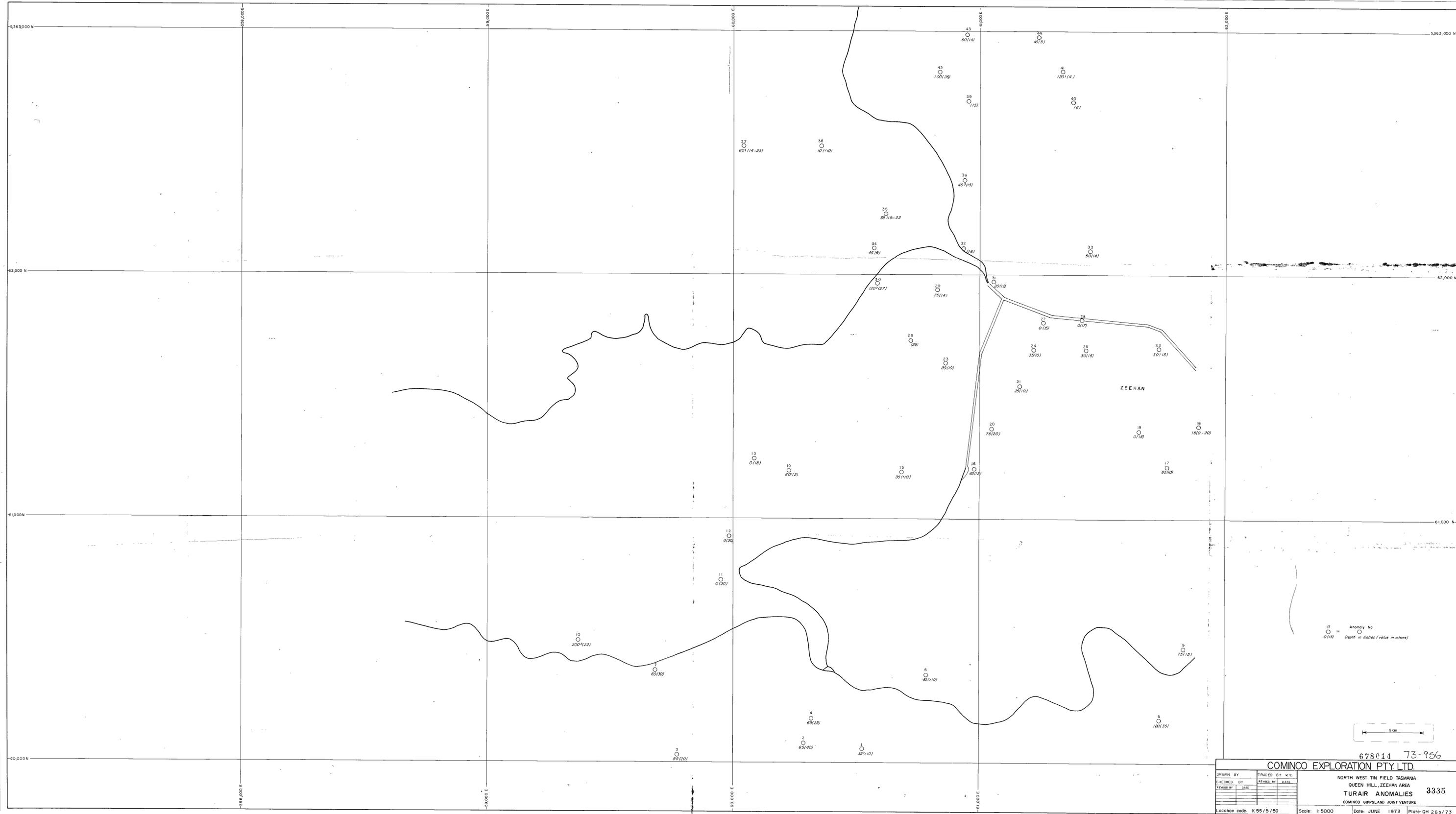
LONGITUDINAL PROJECTION

COMINCO GIPPSLAND JOINT VENTURE

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Location code K55/5750 Scale 1:600 Date SEPTEMBER 1971 Flora QH 5

DRAWN BY KWBLH	TRACED BY GER
CHECKED BY	DESIGNED BY
REVIEWED BY	



17 Anomaly No
 0(10) Depth in metres (value in meters)

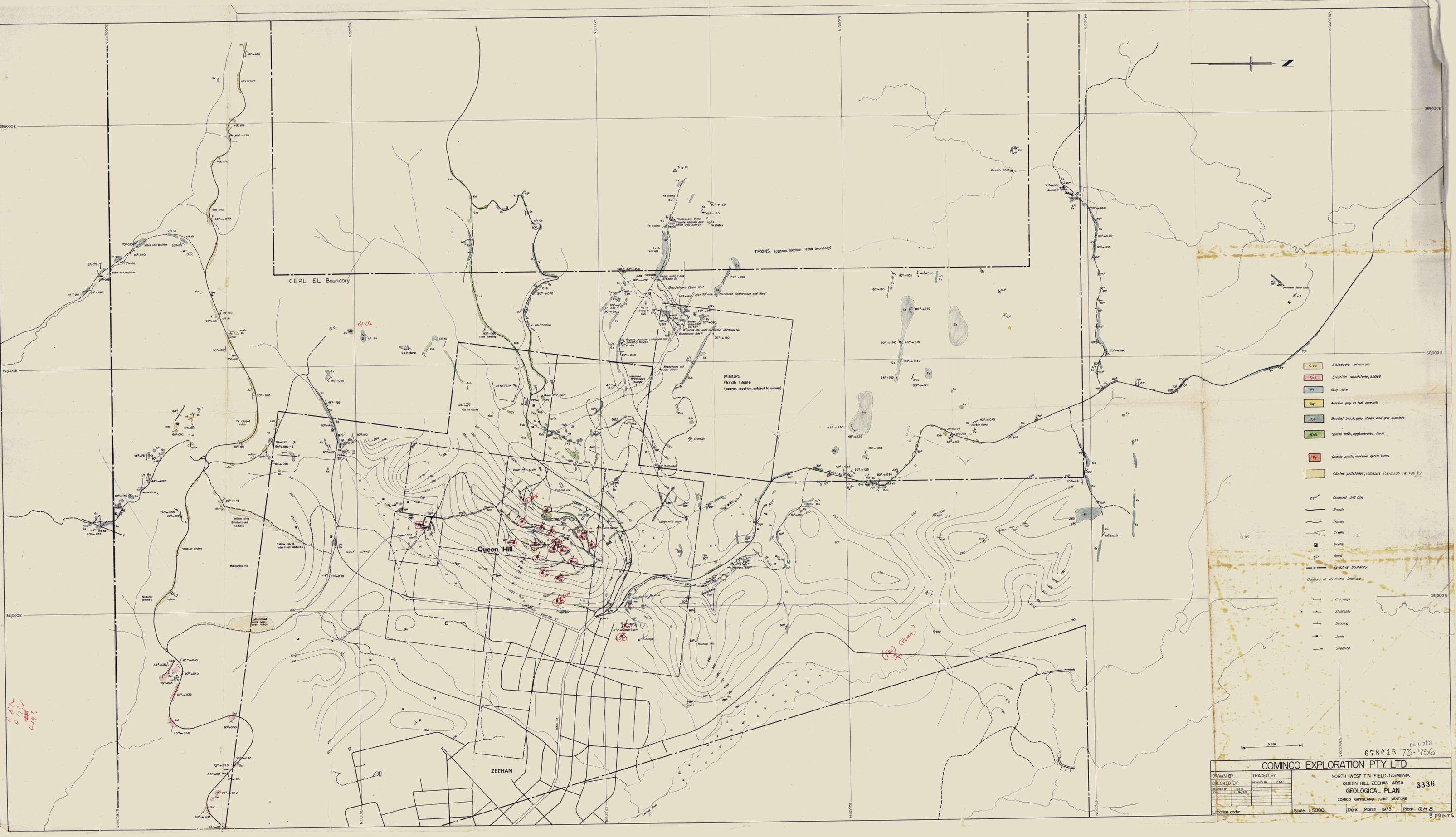


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COMINCO EXPLORATION PTY. LTD.

DRAWN BY	TRACED BY K.E.	NORTH WEST TIN FIELD TASMANIA QUEEN HILL, ZEEHAN AREA TURAIR ANOMALIES 3335 COMINCO GIPPSLAND JOINT VENTURE
CHECKED BY	RE-TRACED BY	
DATE	DATE	

Location code: K 55/5/50 Scale: 1:5000 Date: JUNE 1973 Plate QH 26b/73



- C20 Cretaceous alluvium
- S11 Silurian sandstone, shales
- P1 Grey siltstone
- E1 Massive grey to buff quartzite
- E2 Bedded black, grey shales and grey quartzite
- E3 Spillite, tuff, agglomerates, lavas
- E4 Quartz-pebbles, massive pyrite lodes
- E5 Shales, siltstones, volcanics (Crimson G4 Fm 2)
- DT Diamond drill hole
- Roads
- Tracks
- Creeks
- Shafts
- Adits
- Imagative boundary
- Contours at 10 metre intervals
- Clowage
- Shistosity
- Bedding
- Joints
- Shearing

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COMINCO EXPLORATION PTY LTD

NORTH WEST TIN FIELD, TASMANIA
QUEEN HILL, ZEEHAN AREA
GEOLOGICAL PLAN 3336
COMICO GIPPSLAND JOINT VENTURE
Date: March 1973 Plate: QH8

DRAWN BY:	TRACED BY:
CHECKED BY:	REVISION DATE
DATE:	DATE:
SCALE:	SCALE:
LOCATION CODE:	SCALE: 1:5000

3 PRINTS