

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

(INCORPORATED IN CALIFORNIA)

SUBSIDIARY OF OCCIDENTAL PETROLEUM CORPORATION - MINERALS DIVISION

14TH FLOOR, GREATER PACIFIC HOUSE
51-55 LAVENDER ST., MILSONS POINT, 2061
N.S.W., AUSTRALIA



TELEPHONE: 92 5888/92 5789

CABLE: OXYMIN SYDNEY

TELEX OXYMIN 442766

NORTHERN TERRITORY GEOLOGICAL SURVEY

PROGRESS REPORT

WATERHOUSE PROJECT, RUM JUNGLE REGION, NORTHERN TERRITORY

EXPLORATION LICENCE 1755 AND 2201

OPEN FILE

REPORT 792/2

By: N SWINGLER

JANUARY, 1980

CONTENTS

	<u>Page No.</u>
SUMMARY & CONCLUSIONS	1
1.0 INTRODUCTION	3
1.1 LOCATION & ACCESS	4
1.2 TENURE	4
1.3 PHYSIOGRAPHY	6
1.4 PREVIOUS EXPLORATION	8
1.5 CURRENT EXPLORATION	9
1.6 STATISTICS	10
2.0 REGIONAL GEOLOGY	12
3.0 RESULTS OF PROSPECTING	14
3.1 GEOLOGY	14
3.2 MINERALISATION	17
3.3 GEOCHEMISTRY	17
.31 SOIL	17
.32 TRACK ETCH	19
3.4 GROUND RADIOMETRICS	22
3.5 DISCUSSION OF RESULTS	23
4.0 ROTARY AIR BLAST DRILLING	25

FIGURES

1. LOCATION OF EXPLORATION LICENCES NO. 1755 AND 2201.
2. MINING TENEMENTS - RUM JUNGLE REGION.
3. SOLID GEOLOGY MAP OF THE RUM JUNGLE AREA.
4. LOWER PROTEROZOIC RELATIONSHIPS OF THE PINE CREEK GEOSYNCLINE.

PLATES

- I. Baseline and grid survey by Gutteridge Haskins & Davey Pty Ltd. Sheets 1-3. Scale 1:5,000
- II. Geology, Waterhouse Area, E.L. No. 1755. Scale 1:5,000
- III. Ground Radiometric Readings, Total Count. Scale 1:5,000
- IV. Geochemistry. Soil values contoured. Scale 1:5,000
- | | | |
|------------------|---|---------|
| U ₃₀₈ | - | Sheet 1 |
| Lead | - | Sheet 2 |
| Copper | - | Sheet 3 |
| Zinc | - | Sheet 4 |
| Nickel & | - | Sheet 5 |
| Cobalt | | |
| Manganese | - | Sheet 6 |
- V. Geochemical Anomalies. Scale 1:5,000
- U₃₀₈, Lead Manganese, Total Count & Track Etch - Sheet 1.
- Copper, Zinc, Nickel, Cobalt - Sheet 2.
- VI. Track Etch Results. Scale 1:5,000
- Detector Readings - Sheet 1.
- Radon contour Map - Sheet 2.
- GRID AREAS T-N AND T-S
- VII. Geology. Scale 1:2,500
- VIII. Ground Scintillometer Readings. Scale 1:2,500
- IX. Track Etch Detector Readings - Sheet 1. Scale 1:2,500
- Track Etch Radon Contour Map - Sheet 2.
- GRID AREAS L-N AND L-S
- X. Geology. Scale 1:2,500
- XI. Geochemistry, soil values.

APPENDICES

- I. PETROLOGICAL DESCRIPTION.
- II. TERRADEX CORPORATION REPORTS.
- III. R.A.B. DRILLING GEOLOGICAL LOGS.

SUMMARY & CONCLUSION

This report describes exploration for uranium and base metals in Exploration Licence No. 1755 and 2201 carried out by Occidental Minerals Corporation of Australia during the period June, 1978 to September, 1979.

The Geology within the exploration licences is comprised of Lower Proterozoic chemical-argillaceous sediments of the Namoonna, Mt Partridge and South Alligator Groups of the Pine Creek Geosyncline. Although much detailed exploration in the Rum Jungle area has occurred it was concluded after a Mines Department record search that the potential of these units for strata bound mineralisation had not been exhausted.

Using surveyed grids of lines 200 to 50 metres apart, those parts of the licences underlain by Koolpin Formation and older formations were geologically mapped, soil sampled, and radiometrically surveyed. In addition semi-reconnaissance and detailed Track Etch surveys were completed.

Soil geochemistry did not delineate any new uranium occurrences and several anomalous lead zones, proved to be a series of scattered spot-highs probably related to quartz veins intruding underlying black shales.

Ground radiometrics and Track Etch surveys delineated several small low intensity anomalies. The radiometric anomalies were associated with highly weathered amphibolite and shale in close proximity to a hematite quartz breccia unit considered to be at the base of the Koolpin Formation. The Track Etch anomalies occurred in the same general area but stratigraphically lower and over residual soils and sub-outcrop overlying shales and carbonates correlated with the upper units of the Wildman Siltstone. Although the surface dimensions and intensity of the anomalies were small their uranium potential was considered upgraded by their geological associations. Namely

favourable lithology and stratigraphical position.

Subsequently, the Track Etch anomalies were tested by shallow rotary air blast drilling; but this method for radiometric anomalies B. & C. was not practical due to steep terrain.

Generally, the drilling results were inconclusive in that although no uranium mineralisation was intersected neither was a source which would account for the anomalous Track Etch results.

It is concluded that although the source of most of the drilled Track Etch anomalies was not determined, the drilling results were not sufficiently encouraging to warrant further investigation.

Radiometric anomalies B. & C. however still warranted investigation; which should be achieved by diamond drilling. These drill sites are shown on Plate VII.

1.0 INTRODUCTION

Many small uranium and copper-lead-zinc deposits have been discovered in the Lower Proterozoic chemical sediments of the Rum Jungle area.

Up to the end of 1965 production from the area is reported as:

1540 tons contained U_3O_8
4100 tons lead
64,000 ozs silver
20,420 tons copper, and
35 oz gold (Walpole et al. 1968)

The deposits are strata-bound, generally occurring in sheared and/or folded black pyritic shale and in close proximity to underlying carbonates. Most of the deposits occur in the basal units of the Golden Dyke Formation, but some do occur in the younger Koolpin Formation. (N.B. Reclassification of the Pine Creek Geosyncline has resulted in the Golden Dyke Formation being abandoned and being replaced by the Masson Formation.)

After a record search and general study of the area it was concluded that past exploration by both private and government enterprises had not exhausted the potential of the area for new uranium deposits with possible viable reserves.

Subsequently in February, 1978 an application for ground south of the township of Batchelor was submitted. In June, 1978, Exploration Licence (E.L.) No. 1755 was granted and designated by Occidental as the Waterhouse area.

This report describes exploration carried out by Occidental in E.L. 1755 during the period June, 1978 to September, 1979. The exploration targets were strata-bound uranium-base metal deposits.

1.1 LOCATION AND ACCESS

The Waterhouse area is approximately 75 km due south of Darwin (Figure 1). On it's eastern flank is the abandoned Northern Territory Railway line and parallel unsealed Batchelor-Stapleton road. On the western flank of the area is the sealed Stuart Highway.

A few kilometres north of the area is the small township of Batchelor and an all-weather airstrip. Within this area there are several tracks built by the military during World War II. These are only trafficable with 4 wheel drive vehicles.

During the period December to March heavy tropical rains inundate swampy black soil topographic lows making most of the area inaccessible.

1.2 TENURE

Exploration Licence No. 1755 was granted on the 28th June, 1978 for a period of 12 months with an expenditure committment of A\$30,000.

The licence covers an area of approximately 7.7208 sq. miles (19.988 sq. km) and is described as follows:

Commencing at the intersection of latitude 13 degrees 04 minutes with longitude 131 degrees 04 minutes thence proceeding to the intersection of latitude 13 degrees 04 minutes with longitude 131 degrees 05 minutes thence proceeding to the intersection of latitude 13 degrees 08 minutes with longitude 131 degrees 05 minutes thence proceeding to the intersection of latitude 13 degrees 08 minutes with longitude 131 degrees 04 minutes thence proceeding to the intersection of latitude 13 degrees 07 minutes with longitude 131 degrees 04 minutes thence proceeding to the intersection of latitude 13 degrees 07

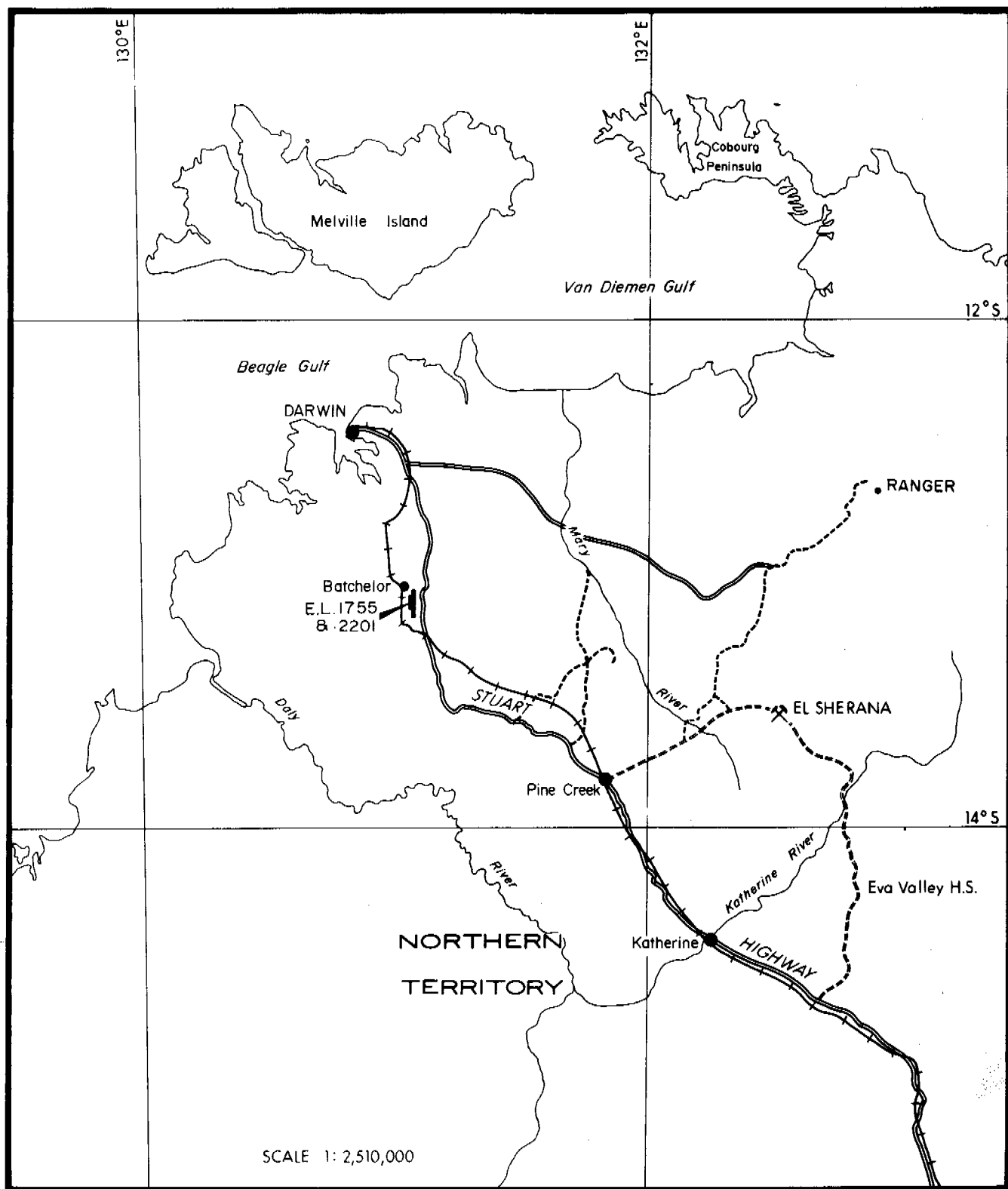


Figure 1

LOCATION OF EL's 1755 & 2201, WATERHOUSE AREA, NORTHERN TERRITORY

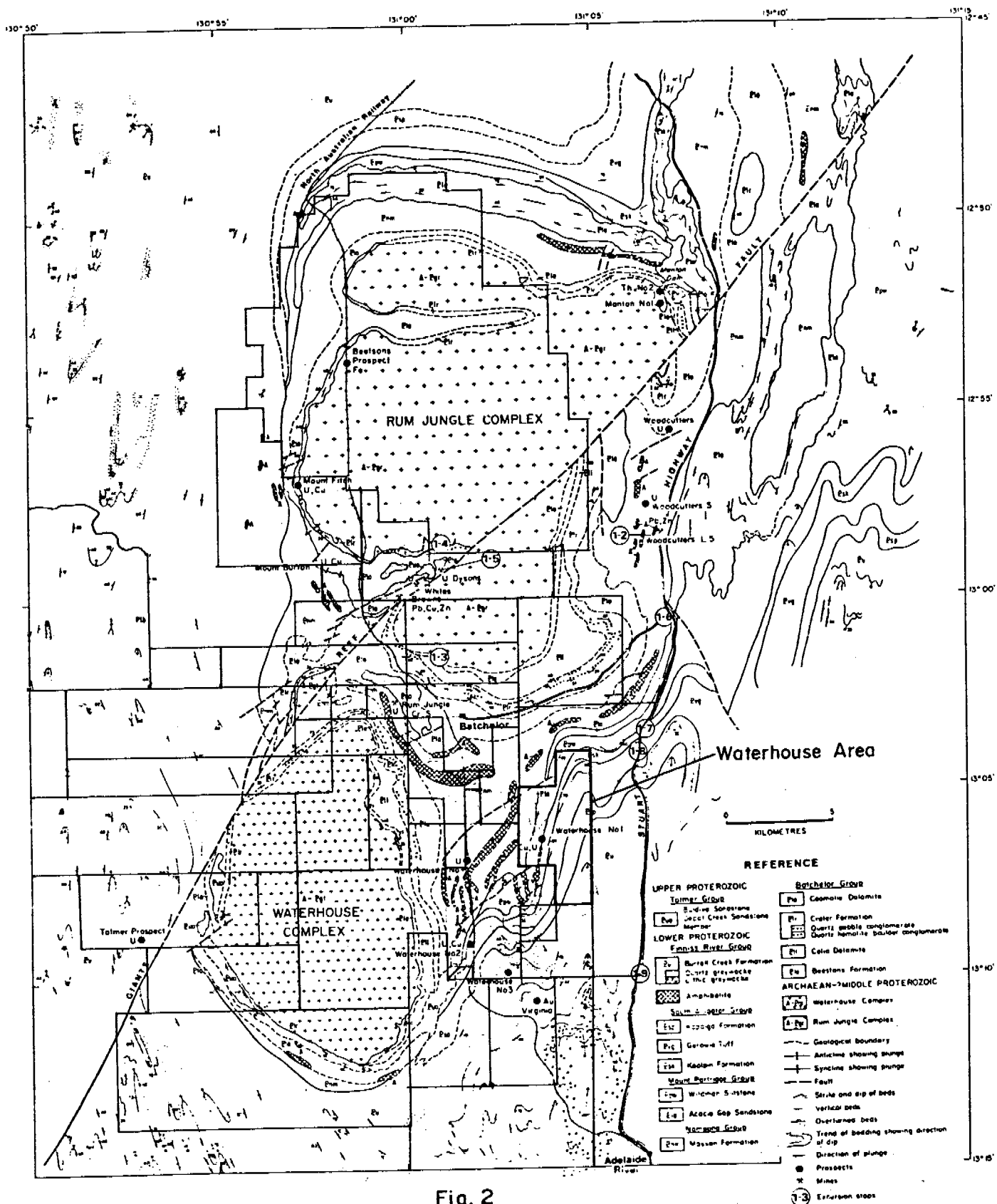
minutes with longitude 131 degrees 03 minutes thence proceeding to the intersection of latitude 13 degrees 05 minutes with longitude 131 degrees 03 minutes thence proceeding to the intersection of latitude 13 degrees 05 minutes with longitude 131 degrees 04 minutes thence proceeding to the intersection of latitude 13 degrees 04 minutes with longitude 131 degrees 04 minutes.

During 1979 the tenure of the Waterhouse area was changed to two Exploration Licences - E.L. 1755 and E.L. 2201. The area covered by these licences remained the same as that covered by the original E.L. 1755. E.L. No. 1755 was renewed on the 17th September, 1979 for a period of 12 months with an expenditure commitment of \$25,000. The licence covers an area of approximately 5.1472 square miles (13.332 sq. km) and is described as follows:

Commencing at the intersection of latitude 13 degrees 04 minutes with longitude 131 degrees 04 minutes thence proceeding to the intersection of latitude 13 degrees 04 minutes with longitude 131 degrees 05 minutes thence proceeding to the intersection of latitude 13 degrees 08 minutes with longitude 131 degrees 05 minutes thence proceeding to the intersection of latitude 13 degrees 08 minutes with longitude 131 degrees 04 minutes thence proceeding to the intersection of latitude 13 degrees 04 minutes with longitude 131 degrees 04 minutes.

E.L. No. 2201 was granted on the 17th September, 1979 for a period of 12 months with an expenditure commitment of A\$15,000. The licence covers an area of approximately 2.574 square miles (6.666 sq. km) and is described as follows:

Commencing at the intersection of latitude 13 degrees 05 minutes with longitude 131 degrees 03 minutes thence proceeding to the intersection of latitude 13 degrees 05



minutes with longitude 131 degrees 04 minutes thence proceeding to the intersection of latitude 13 degrees 07 minutes with longitude 131 degrees 04 minutes thence proceeding to the intersection of latitude 13 degrees 07 minutes with longitude 131 degrees 03 minutes thence proceeding to the intersection of latitude 13 degrees 05 minutes with longitude 131 degrees 03 minutes.

Most of the Waterhouse area occurs within a pastoral property leased by Mr Purich of Darwin. Neither exploration licence is encumbered by any ~~other~~ mining tenement.

Surrounding mining tenements are detailed in Figure 2.

1.3 PHYSIOGRAPHY

The Waterhouse area occurs in the western margin of a topographic unit designated by Noakes (1949) as "Uplands" and later renamed by Walpole et al (1968) as Central Uplands. Nearby to the west is a "Granite area" formed by the Rum Jungle and Waterhouse Granite Complexes.

Within the Waterhouse area the topography of the area generally reflects the lithology and structure of the various underlying rock units. The western third of the area is a mature topography of flat lands with a relief of approximately 350 feet and underlain by highly weathered lateritised rocks of the Namoon Group namely the Masson Formation. The soil profile is well developed and up to 30 metres thick in places.

The central third of the area consists of narrow steep sided ridges and valleys rising up to 550 feet. These are formed by the Mt Partridge Group namely the Acaccia Gap Tongue and Wildman Siltstone, and units of the overlying South Alligator and Finniss River Groups.

Generally the ridges underlain by the Namoon Group are

formed by sandstones of the Acacia Gap Tongue and shales of the Wildman Siltstone believed to be indurated by adjacent amphibolites. Centrally within this area there is a relatively broader valley characterised by "parkland" vegetation. This is underlain by carbonates and meta-dolerite, the aforementioned is tentatively assigned to the upper Wildman Siltstone. Despite the rugged topography outcrop is sparse due to rubble and/or lateritic soil cover. Generally rocks of the Namoon Group are highly weathered, in some cases totally decomposed and lateritised. Those of the South Alligator and Finnis River Group are comparatively fresh.

The eastern margin of the area is comprised of thick black soil covered flat lands underlain by units of the Finnis River Group.

Drainage of the Waterhouse area is by intermittent creeks of dendritic to trellis pattern which form part of the Adelaide River System. Several springs and soaks, possibly perennial were discovered.

Vegetation consist of thick to densely populated forests of moderately to well developed Eucalyptus such as Stringybark, Woolly Butts, Bloodwood and ironwood with prolific black boy ferns and myrtle in lateritic areas. Pandanus is common and in wet areas the vegetation is extremely dense and fig trees, bamboo and lantana are common. Fig trees and lantana in particular are prevalent along a ridge which bisects the area and is formed by hematite quartz breccia and amphibolite. This ridge forms the eastern side of the previously mentioned central broad valley.

Sorghum occurs throughout the area, and during the wet season, grows to a height of approximately 10 feet.

The climate is monsoonal, with a wet season from November

to April during which up to 80 inches of rain may occur. In the wet season the temperature is consistently above 30°C and the humidity is extremely high. The dry season is more bearable, temperatures range from 20 to 30°C, humidity is low and there are occasional showers.

1.4 PREVIOUS EXPLORATION

After the discovery of uranium-copper mineralisation by J M White in 1949 the Rum Jungle area was intensely explored by the Bureau of Mineral Resources and Territory Enterprises Pty Ltd (a joint venture between Consolidated Zinc Pty Ltd and the Commonwealth Government) up until the late 1960's.

The Waterhouse area was included in their exploration of the Gould and Mt Minza areas of Rum Jungle. This consisted of geological mapping, geochemical soil sampling, ground radiometrics, electromagnetics and self-potential surveys controlled by surveyed lines 2400 feet apart. (B.M.R. Records 1953/104, 1958/81, 1069/109, 1962/44, 1963/49, 1964/188, 1966/154 and 1967/41). These surveys lead to the discovery of the Waterhouse No. 1 Prospect (or Area 65 Prospect) which occurs in the centre of E.L. 1755. Subsequently detail surveys of the prospect on a scale of 1 inch to 200 feet were completed together with several costeans and auger holes.

In the mid 1960's, Territory Enterprises Ltd completed 6 diamond drill holes totalling 2124 feet which only intersected traces of uranium-copper mineralisation. The prospect was later abandoned.

In the early 1970's the government withdrew its ministerial reserve over the Rum Jungle area and invited private companies to further explore the area. Consolidated Zinc Rio Tinto Exploration Pty Ltd (C.R.A.E.) were granted Exploration Licence No. 610 which covered most of the southern half of the Rum Jungle area and included ground now held

by Occidental. C.R.A.E. initially carried out a reconnaissance programme of airborne radiometrics, stream sediment sampling and photo geological mapping.

Subsequently detail surveys and diamond drilling were completed but this did not occur over ground currently held by Occidental. Some of C.R.A.E. drill sites were to the south along strike of Occidental's ground and they intersected uranium mineralisation in shales below a hematite quartz breccia unit. The best intersection is reported to be in DDWH4 from 229.5 m to 299.9 m where 7.01 kg/Tonne U_3O_8 over 0.4m was encountered. This mineralisation was identified as coffinite with minor uraninite. (C.R.A.E. Internal Report 8778, G.D. Muggeridge 1976.)

1.5 CURRENT EXPLORATION

During the 1978 field season, Geometrics International Corporation were contracted to fly a high resolution fixed wing radiometric and magnetic survey of the area. Details of this survey and results are described in progress report 792/1 (February, 1979).

Concurrently, a grid of lines 200 metres apart were surveyed by Gutteridge, Haskins & Davey Pty Ltd over the western half of the exploration licence. (Plate 1, Sheet 1-3).

Subsequently the following surveys were completed:

Geological mapping
Geochemical soil sampling
Ground radiometrics, and
Track Etch

Several of the anomalies delineated by the aforementioned surveys warranted further detailed investigation. This

was carried out mainly during the 1979 field season. Lines 50m apart were surveyed (Grids T-N, T-S, L-N and L-S) over the anomalous zones and more detailed fill-in surveys of geological mapping, soil geochemistry, ground radiometrics and Track Etch followed.

Some of the anomalous zones were then tested by rotary air blast drilling (R.A.B.).

1.6 STATISTICS

Line kilometres surveyed (1978)	62.850 km
(1979)	43.050
	105.000 km
Total number of soil samples collected for geochemical analysis	2,420
Total number of rock samples collected for geochemical analysis	3
Petrological descriptions:	36
Total number of Track Etch cups used 1978	369
1979	450
	819
R.A.B. Drilling 52 holes totalling	1295.5 metres
Total area geologically mapped	11 sq. km.

Work was carried out by one geologist aided by 2 to 4 field assistants.

Total Expenditure as of the 30 September, 1979 was A\$84,681.96.

This breaks down as follows:

ADMINISTRATION	\$12,438.26
TRAVEL & ACCOMMODATION	2,606.24
FIELD SUPPLIES	3,167.72
MAPS & PHOTOCOPIES	1,181.30
OTHER OUTSIDE SERVICES	5,365.51
CLAIMS - STAKE & RECORD	15.44
DRILLING	2,656.25
SAMPLE & ASSAY	9,779.82
TEMPORARY PROJECT HELP	1,419.00
GEOPHYSICS	15,713.23
SURVEYORS	23,713.96
PETROGRAPHICS	6,625.23
TOTAL	<u>\$84,681.96</u>

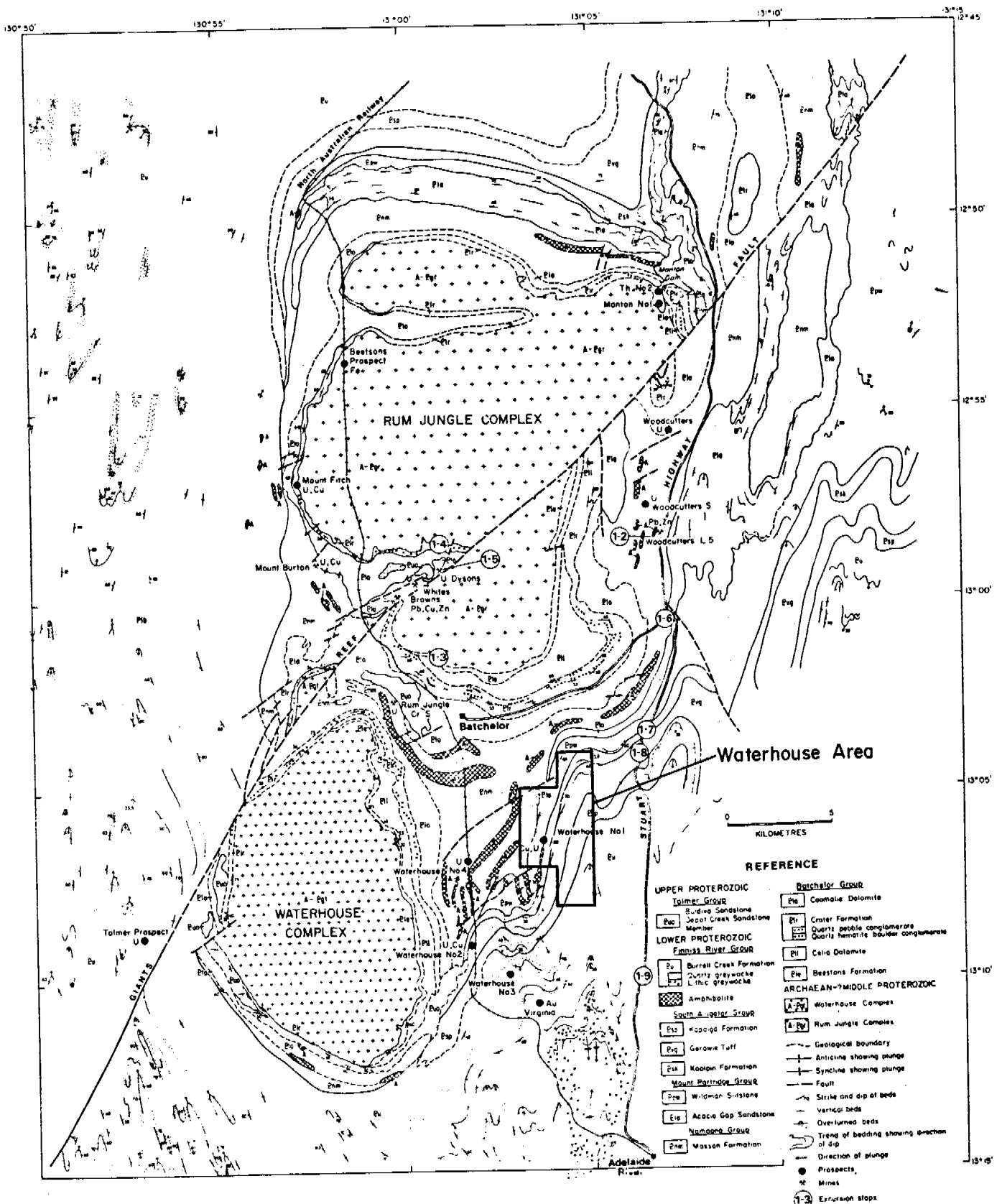


Figure 3. Solid geology map of the Rum Jungle area
(Modified from: Stephansson and Johnson, 1976)

2.0 REGIONAL GEOLOGY

The Rum Jungle area occurs in the western half of the Lower Proterozoic Pine Creek Geosyncline. This basin was originally mapped to a scale of 1:250,000 by Walpole and others. (Bureau of Mineral Resources 1968, Bulletin No. 82). Currently the basin is being re-mapped at 1:100,000 by the B.M.R. and substantial changes have been made to the original sedimentary model and lithological correlations. Walpoles "concept of a greywacke-dominated sequence with lateral facies interfingering of units deposited in a number of basins, has been replaced by one of chronostratigraphic lithologies dominated by shallow sediments which in places are evaporitic, and in which units may be traced with little facies variation through almost the entire geosyncline (Needham and others, 1979).

The revised stratigraphy of the Pine Creek Geosyncline was recently released at the "International Uranium Symposium on the Pine Creek Geosyncline" held in Sydney in 1979. This is illustrated in Tables 1 & Fig. 4 together with the position of known uranium mineralisation.

The geology of the Rum Jungle area is illustrated in Figure 3. Two elliptical shaped basement highs crop out in the area, i.e. The Rum Jungle and Waterhouse Complexes. These Archean-Lower Proterozoic units are comprised of several varieties of uraniferous granite, granite gneiss, schist and banded iron formation. Veins and dykes of pegmatite, tourmaline-quartz and amphibolite are fairly common in both complexes and surrounding Lower Proterozoic sediments.

The Lower Proterozoic Batchelor Group unconformably rests on the complexes. It is a rudaceous-carbonate-arenaceous-carbonate sequence believed to have been deposited in a fluvial-shallow near shore environment. This sequence has been subdivided as follows:

Coomalie Dolomite	-	carbonates
Crater Formation	-	greywacke

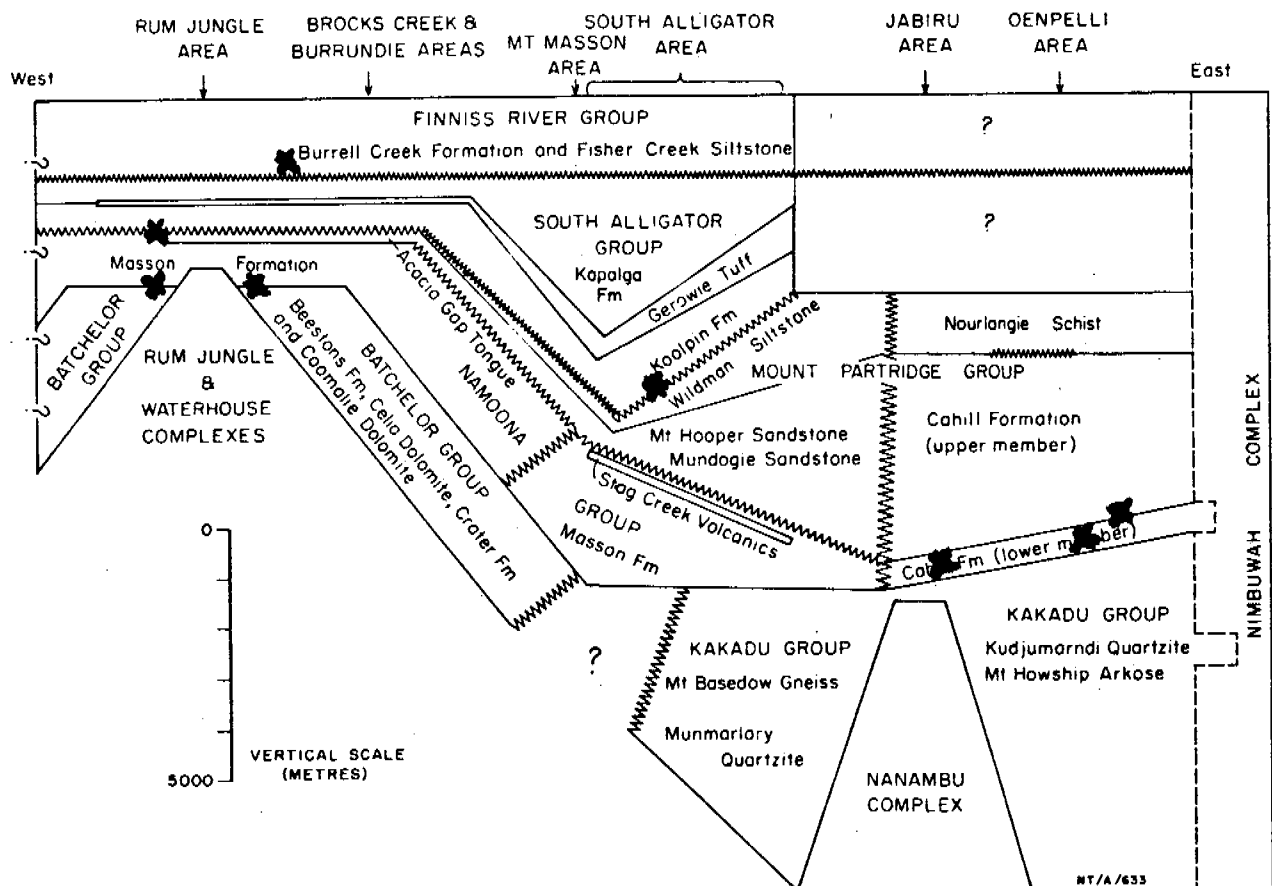


Figure 4. Lower Proterozoic relationships of the Pine Creek Geosyncline (From: Needham and others, 1979)

* Uranium

Table 1.

PINE CREEK GEOSYNCLINE 1978 REVISED STRATIGRAPHY

(WHERE CHANGED OLD NAMES APPEAR IN BRACKETS)

DEFINED BY:

1. B. Walpole et al, 1968
2. K. Johnson, 1978
3. S. Needham et al, 1974
4. S. Needham and Stuart-Smith, 1976
5. Rix, 1965
6. S. Needham, 1979

		WEST		CENTRAL	
FINNISS RIVER GROUP ¹	{	BURRELL CREEK FM. ¹ (Burrell Ck. Fm. ¹ , Noltenius Fm. ¹)		FISHER CREEK ¹ SILTSTONE (Fisher Creek Siltstone ¹)	
		KAPALGA FORMATION ⁶ (Golden Dyke Fm. ¹ , Eld ₈ ²) (Koolpin Fm. ¹)			
		GEROWIE TUFF ⁶ (Golden Dyke Fm. ¹ , Eld ₇ ²) (Gerowie Chert ¹)			
		KOOLPIN FORMATION ¹ (Golden Dyke Fm. ¹ , Eld ₆ ² , Craig Ck. mbr ¹ , Koolpin Fm. ¹)			
SOUTH ALLIGATOR GROUP ¹	{				
MOUNT PARTRIDGE GROUP ⁶	{	WILDMAN SILTSTONE ⁶ (Golden Dyke Fm. ¹ , Eld ₅ ² , Masson Fm. ¹ , Mt. Partridge Fm. ¹ , Pp ₃)			
		ACACIA GAP ⁶ SANDSTONE (Acacia Gap Tongue ¹)	MOUNT HOOPER SANDSTONE ⁶ (Mt. Partridge Fm. ¹)	MUNDOGIE ⁶ SANDSTONE (Mundogie Sst. mbr. ¹) (Mt. Partridge Fm. ¹ , Pp ₃ , ⁴) (Colwong Greywacke ¹) (Masson Fm. ¹)	
BACHELOR NAMOONA GROUP ⁶	{	STAG CREEK ¹ VOLCANICS			
		MASSON FORMATION ¹ Golden Dyke Fm. ¹ , Eld ₁₋₄ ² , Masson Fm. ¹ , Mt. Partridge Fm. ¹ , Pp ₁)			
		COOMALIE DOLOMITE ¹			
		CRATER FORMATION ¹			
		CELIA DOLOMITE ¹			
		BEESTONS FORMATION ¹			
RUM JUNGLE / WATERHOUSE COMPLEXES					

EAST

KAKADU GROUP ⁶	NOURLANGIE SCHIST ⁶ (Fisher Creek Siltstone ¹)		NIMBUWAH COMPLEX ⁵	
	CAHILL FORMATION ⁴ UPPER MEMBER (Koolpin Fm. equiv. ³)		GRANITIC CORE ³ (Nimbuwah Granite ¹)	
	? —			
	CAHILL FORMATION ⁴ LOWER MEMBER (Koolpin Fm. equiv. ³) (Myra Falls Metamorphics ¹)		NIMBUWAH COMPLEX ⁵	
	KUDJUMARNDI QUARTZITE ⁵ (Myra Falls Metamorphics ¹)		MIGMATITE ZONE ³	
	MOUNT HOWSHIP GNEISS ⁶ (Myra Falls Metamorphics ¹)		LIT PAR LIT GNEISS ³ ZONE	
	MUNMARLARY QUARTZITE ⁶		TRANSITIONAL ZONE ³	
	MOUNT BASEDOW GNEISS ⁶		(Myra Falls Metamorphics ¹)	
	NANAMBU COMPLEX (Nanambu Granite ¹)			

Celia Dolomite	-	carbonate
Beestons Formation	-	arkose, conglomerate, greywacke, siltstone

The Namoon Group overlies the Batchelor Group and is comprised of the Masson Formation. This is a relatively thick (up to 3,500m) shallow marine argillaceous-chemical sequence comprised essentially of slightly indurated finely laminated pyritic carbonaceous mudstone and siltstone with occasional carbonate units.

The Masson Formation is overlain, possibly unconformably by the Mount Partridge Group. This is a fluviatile sequence of rudaceous to argillaceous sediment which have been subdivided into the Acacia Gap Tongue and Wildman Siltstone. To the south-east of the Waterhouse complex the Acacia Gap Tongue appears to wedge out.

The South Alligator Group overlies the Wildman Siltstone probably unconformably. It is a shallow marine thick chemical volcanic sequence comprised of pyritic black shale and siltstone, chert, banded chert, modular chert and siltstone, banded iron formation and tuff. These have been subdivided into the:

Kapalga Formation
Gerowie Tuff, and
Koolpin Formation

Within the Namoon Group and the Wildman Siltstone there are several amphibolitic units. Some, if not all of these are believed to be volcanic.

Most of the significant mineralisation of the Rum Jungle area occurs in an area named the "Embayment". This consists of a folded re-entrant of Lower Proterozoic sediments in the

south-western quadrant of the Rum Jungle Complex. Both the uranium and base metal mineralisation occurs in close proximity to carbonate-shale interfaces, namely the Coomalie Dolomite-Masson Formation contact and adjacent to a major fault, the Giants Reef Fault. In places this N.E. trending fault has produced displacements of up to 5km.

3.0 RESULTS OF PROSPECTING

3.1 GEOLOGY

Only the western two thirds of the Waterhouse area warranted geological mapping. (Plate II, Scale 1:5,000). Subsequently over "target areas" more detailed mapping was completed. (Plate VII & XI, Scale 1:2,500.)

Mapping of the area was difficult because of residual soil and rubble cover. The few outcrops of the Namoonna and Mount Partridge Groups are generally extremely leached and ferruginised. Consequently, identification and delineation of lithology was highly subjective.

The Masson Formation occurs in the western margin of the mapped area and consists of finely laminated carbonaceous pyritic mudstone and siltstones with occasional well bedded to massive fine grained dark grey quartzites and minor ironstone. The quartzites are considered to be cherts. These units form flatlands and low well rounded hills which in places are covered by Cainozoic laterite up to 2m thick.

The Namoonna Group forms a range of extremely steep side ridges and valleys which trend N.N.E. through the central portion of the area. To the south the range dissipates in to low hills possibly due to the wedging out of units of the Acacia Gap Tongue.

The Acacia Gap Tongue is comprised of well bedded fine to

coarse-grained pyritic ortho quartzite and sandstone. The pyrite has been oxidised and occurs as large (up to 1m) scattered euhedral pseudomorphs. This unit is well exposed in the N.W. corner (5400N/1600E) of the mapped area, together with several narrow concordant (?) highly weathered amphibolites tentatively identified as meta-dolerites. (Appendix I, T/S 25330 and 25331.)

The Wildman Siltstone is comprised of finely laminated black carbonaceous pyritic mudstones and siltstone with minor chert and ironstone. In places there are interbeds of red to maroon mudstone some of which may represent an oxidising rather than reducing depositional environment. The upper half of the Wildman Siltstone consists essentially of black pyritic mudstone and marls with intra formational pyritic dolomite. These units form a relatively broad open valley trending through the centre of the area. Only a few narrow foliated outcrops of the metamorphosed dolomite occur (3000N/1400E) but R.A.B. drill hole intersections indicate that the dolomite unit is several 100's of metres thick. (T/S 25309 and 25312.) To the north the carbonate unit appears to pinch out.

The South Alligator Group has not been subdivided as the pyroclastic units of the Gerowie Tuff were not recognised in the field. The basal units of the Koolpin Formation were considered to be two hematite quartz breccias (HQB unit) separated by several tens of metres of siltstone and mudstone. The HQB units were interpreted as a well bedded to massive tectonically brecciated chert with zones containing magnetite laminate. Probably a true banded iron formation. The absence of carbonate inclusions in the angular quartz clasts suggests that the unit is not a silicified dolomite. (T/S 25640). Some of the brecciation is attributed to cross cutting E-W sheer zones which were accompanied by quartz veins. Weathering has resilicified the units and oxidised the magnetite to hematite.

Alternatively the HQB rock may be a regolith. These basal units of the Koolpin Formation are overlain by well bedded to massive black carbonaceous pyritic chert, interbedded with argillaceous siltstone which pass up into predominantly massive to well bedded finely laminated siltstone. Within this sequence there are several distinctive marker horizons. In close proximity to the basal HQB units there is a narrow unit up to 2 metres thick of narrow nodular chert bands. Higher up in the sequence there are two narrow units of interbedded chert and ferruginous siltstone (banded ironstone). In places these units are brecciated and highly folded suggesting that slumping has occurred. (5200N/2700E.)

Numerous amphibolites occur throughout the Masson Formation and the Namoon Group. They are narrow to thick generally concordant magnetic units which are interpreted as metamorphosed dolerites. (T/S 25315, 25329, 25639.) In places adjacent shales appear knotted, and hornfelsed. No amphibolites were recognised in the South Alligator Group suggesting that they were intruded prior to the deposition of the aforementioned group. The amphibolites may be equivalents of the Stag Creek Volcanics.

Incipient regional metamorphism has occurred throughout most of the area. Units of the Masson Formation and Mount Partridge Group have been metamorphosed to shales, argillite, slate or schists possibly to lower green schist grade. The South Alligator Group generally appears to have been only indurated.

The structure of the area appears superficially to be simple. Units dip between 45 to 80 degrees to the east and strike N to N.N.E. forming the western limb of a moderately open syncline plunging to the N.W. In the nose of the fold, N.W. to N trending photo-linears indicate axial plane shearing. Other shear zones are indicated by E-W trending photo-linears.

3.2 MINERALISATION

Except for minor traces of secondary copper staining at the Waterhouse No. 1 Prospect, no other base metal mineralisation was discovered.

Several anomalously radioactive outcrops were delineated at the Waterhouse No. 1 Prospect and along strike to the north at 5200N/2400E and 4400N/2100E (Plates III & VII). At all these localities anomalous scintillometer readings of up to 200 cps were associated with quartz veined highly ferruginised rock generally in close proximity to amphibolites and stratigraphically below the HQB unit.

Geochemical analysis by Amdel of grab samples returned significant values, but it was not possible to identify the mineralisation as the samples were highly weathered and ferruginised.

<u>Sample Mark</u>	<u>U ppm</u>	<u>Th ppm</u>
4400N/2100E	48	16
4350N/2125E	82	20
4230N/2125E	86	20
462(5200N/2375E)	95	12

The stratigraphic position of these occurrences is approximately the same as that of the South Alligator River deposits. Their potential is further enhanced by the close proximity of the HQB unit. The latter is considered to be a potential conduit and/or loci for mineralisation.

3.3 GEOCHEMISTRY

.31 SOIL

Soil samples were collected at a depth of approximately

15 cm every 25 metres along each grid line. Alluvial areas were not sampled.

The -80 mesh fraction was then analysed by AMDEL for copper, lead, zinc, cobalt, nickel and manganese using atomic absorption spectrophotometry (A.A.S.) (Method CI - acid soluble values after hot perchloric acid digestion.) Samples were also analysed for uranium by X-ray fluorescence using method BI. The detection limits and accuracy for each method of analysis are listed below.

<u>Method</u>	<u>Accuracy</u>	<u>Detection Limit (ppm)</u>	<u>U</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Ni</u>	<u>Co</u>	<u>Mn</u>
BI	± 5%	4-10,000							
CI	± 5%			2	5	2	5	5	5

Geochemical results are shown on Plate IV, Sheets 1 to 6. These sheets also include more detailed sampling completed over a radiometric anomaly at 5200N/2375E. Detailed geochemical sampling (i.e. samples collected every 25 metres along lines spaced 50 metres apart) was also completed over several lead anomalies. Grids L-N and L-S. The results for these samples are shown on Plate XIII.

Uranium values (U_3O_8) ranged from 4 to 36 ppm with a background value of approximately 8-10 ppm. (Plate IV, Sheet 1). Only one anomalous zone was delineated. This is approximately 200m long with values of up to 3 x background. (36 ppm.)

The anomaly occurs on the western scarp slope of the Waterhouse No. 1 Uranium-Copper Prospect. The soil over much of this prospect has been disturbed by road building and costeaning. It is possible that without this disturbance the prospect would not have been delineated by uranium values.

Along strike several kilometres to the north there are a

few spot-highs of up to 20 ppm U_3O_8 .

Basemetal values (Cu, Pb, Zn, Ni, Co and Mn) generally reflected the various lithologies of the area. Nickel, cobalt and copper values in particular reflected the amphibolite ridges. These values were comparatively high and corroborated petrological examinations that concluded the amphibolites were igneous. Except for several lead anomalies none of the basemetal anomalies were considered to be associated with significant mineralisation. In the western margin of the area there were several anomalous lead zones of up to 1400 ppm Pb. Using a threshold of 200 ppm the zones have strike lengths of 800 and 600 m and were centred, at 1000N/300E and 2800N/200E respectively. (Plate IV, Sheet 2.) These zones were associated with black pyritic carbonaceous shales of the Masson Formation which to the north of the exploration licence host the Woodcutters Pb-Zn deposit. The results of subsequent fill-in sampling and geological mapping are shown on Plates X and XI. This detailed work did not substantiate the hypothesis that the lead anomalies reflect strata bound mineralisation. The anomalous lead values in fact were scattered, and did not delineate any substantial strike length and were not confined to any particular bed. Generally the anomalies were in close proximity to quartz veins, which may be the source of the anomalies. No mineralisation or gossans were found in the anomalous areas.

.32 TRACK ETCH

Using the grid for control 369 Track Etch cups were installed at centres 200 metres apart. Previously dug soil sample sites were deepened and a "contact" total count radiometric reading recorded with a GR 101A scintillometer before burial of each cup. The cups were installed in September, 1978 and retrieved in October after approximately 30 days.

In June, 1979 a more detailed survey using 450 cups was

completed over the northern half of the Waterhouse area, (Grids TN & TS) in which the initial survey had delineated several anomalies (A, B, D & E). Track Etch cups were installed every 50 metres along lines 100 metres apart.

The Track Etch readings for both surveys (1978 and 1979) are tabulated in Appendix II together with a rudimentary statistical analysis of the data. Readings are also presented on Sheet 1 of Plates VI and IX together with contact total count radiometric readings recorded at each cup site. The readings were contoured by computer using a 5 pointed weighted average smoothing routine for each value. Sheet 2, Plates VI and IX.

The 1978 readings ranged from 0.7 to 96.0 Tracks/sq mm with a mean background distribution of 5.2 T/sq mm. Standard Deviation of the background mean was 3.1 T/sq mm or 60.2%. Using a threshold of 3 standard deviations (Z), 41 cups were found to have anomalous values.

<u>Range of Z</u>	<u># of Pts</u>	<u>Range of T/mm²</u>	<u>Range of Radio to Bgd</u>
2-3	26	11.6 - 14.5	2.2 - 2.8
3-4	12	14.9 - 17.6	2.9 - 3.4
4-5	6	18.1 - 19.0	3.5 - 3.7
Over 5	23	21.2 - 96.0	4.1 - 18.5

These values form five anomalies which were designated as A to E (Plate VI, Sheet 2). Except for anomaly E the anomalies are multipoint clusters, but they all have relatively low values. Anomalies A, B and D occur at approximately the same stratigraphical level, occurring over shales which to the east are overlain by amphibolites and the HQB unit. This position may correspond to that at which C.R.A.E. intersected traces of mineralisation in their Mt Minza Prospect. Anomaly A occurs in the vicinity of a small creek the head of which drains a small scintillometer anomaly centred at 5200N/2375E. The source of anomaly A may be uranium leached from the latter and

and "fixed" down stream. If this was the case the uranium would be sub-surface as neither scintillometer or soil geochemical values are anomalous in the immediate vicinity of anomaly A.

During the field season of 1979 a more detailed Track Etch survey of anomalies A, B, D and E was carried out. Reading from cups used in this survey ranged from 12.8 to 1270.6 T/sq. mm with a mean background distribution of 143.1 T/sq. mm. The readings are generally much higher than those returned by the 1978 survey but this is largely due to the use of the "Improved System" Track Etch cups. These cups have a far greater sensitivity than the original models. The standard deviation of background mean was 83.6 T/sq. mm or 58.8%. With a threshold of 3 standard deviations (Z) 32 cups were found to be anomalous, or 7.1% of the total.

<u>Range of Z</u>	<u># of Pts</u>	<u>Range of T/sq mm</u>	<u>Range of Ratio to Bgd</u>
3 - 4	13	398.3 - 465.5	2.8 - 3.3
4 - 5	11	478.6 - 559.9	3.3 - 3.9
Over 5	8	563.6 - 1270.6	3.9 - 8.9

A total of six anomalies (A to F) were delineated. Generally these confirmed the anomalies delineated in the 1978 survey and to a limited extent further delineated the possible location of their source. The survey down graded the single point anomaly E of the 1978 survey and indicated that the source of anomaly A may be surficial and to the S.W. rather than upstream to the N.E. The 1979 survey also delineated a new anomaly - E, which may extend to the north, but this area unfortunately was not tested. Anomaly E (1979) like anomaly A (1979) is associated with anomalous total count scintillometer readings suggesting that its source may be near surface. This is also probably true for anomalous values in the vicinity of anomalies D and F (1979) along lines 2500, 5500 and 5600N.

3.4 GROUND RADIOMETRICS

Total count gamma radiation readings were recorded at stations every 25 metres along lines 200m apart. A more detailed survey was completed over an anomaly centred at 5200N/2375E. These readings were recorded on a 25m square grid pattern. (Plate III.)

Radioactivity was measured with a Geometrics GR 310 spectrometer held at waist level. Between stations the instrument was constantly monitored (1 second accumulation time period) for spot highs. At each sample station the 100 second accumulation time period was used. This particular instrument is coupled with a 6.3 cubic inch NaI detector and total count energy measured is from 0.4 to 4.0 MeV.

During the 1979 field season a detailed total count radiometric survey was carried out over the northern half of the area. (i.e. Grid T-N and T-S.) Readings were taken at waist level every 25m along lines 50 metres apart. Between stations the instrument was constantly monitored. For this survey a Geometrics GR 101A scintillometer was used. This instrument is coupled with a 11.4 cubic cm NaI crystal detector and measures gamma radiation from 0.05 to approximately 3.0 MeV. The results for this survey are contoured on Plate VIII.

The initial radiometric survey (1978 field season) delineated two small anomalous zones:

i.e. Anomaly A - centered at 1800N/1550E
and B - centered at 5200N/2375E

Anomaly A is narrow approximately 2 x background zone less than 100m long and associated with the Waterhouse No. 1 U - Cu Prospect. No further detailed survey of this

prospect was warranted.

Anomaly B is a narrow zone approximately 50 metres strike length and $1\frac{1}{2}$ to 2 x background. In places readings of 3 to 4 x background were recorded and a spectral analysis indicated the source to be a Bi_{214} emitter. This was later corroborated by geochemical analysis. Unlike anomaly A, this anomaly was not detected by geochemical soil sampling or Track Etch.

The 1979 survey further delineated anomaly B and several new anomalies.

Anomaly C - centred at 4350N/2125E

Anomaly D - centred at 4800N/1900E

Anomaly C is a 2 to $2\frac{1}{2}$ x background narrow zone approximately 50m long. Downslope readings to the northwest are probably due to talus rather than extensions.

Anomaly D is comprised of two spot highs approximately 2 x background and 50 metres apart. These occur over residual soils and at depth may represent a continuous zone.

3.5 DIVISION OF RESULTS

Of all the uranium exploration techniques used in the Waterhouse Area, only ground radiometrics and Track Etch proved to be successful.

Geochemical soil sampling only delineated the already tested Waterhouse No. 1 U - Cu Prospect and several lead anomalies which proved to be too small and scattered to have any economic significance.

Ground radiometrics delineated four short (less than 100m strike length) narrow anomalous zones of 2 to 3 x background.

(Anomalies A to D). Spectral analysis indicated that the source of the anomalies B. and C. was a Bi_{214} emitter which was corroborated by geochemical analysis. (95ppm U and 12ppm Th.) Radioactivity at both anomalies B and C was associated with highly weathered ferruginised amphibolites and shale containing narrow quartz veins. Unfortunately outcrop was too weathered to allow identification of any uraniferous minerals, but it is possible that the uranium is merely surficial having been concentrated by absorption with manganese and iron oxides.

Track Etch delineated several multi point low intensity anomalies which were confirmed and further delineated by a more detailed subsequent survey. Generally all the anomalies were associated with slight increases in corresponding Total count gamma radioactivity, but with the possible exception of anomaly A (1979) and E (1979) none of them could be conclusively accounted for by surface mineralisation.

The low intensity of the anomalies suggested that their source may be deep, or if near surface, insignificant. However, the potential of anomalies A, B, D (1979) and E (1979) was enhanced by their location. Both lithologically and stratigraphically their location was considered favourable for uranium mineralisation. The anomalies were associated with sub-outcrop and/or residual soil overlying black carbonaceous pyritic shales and dolomite of the Wildman Siltstone. These are adjacent to hematite quartz breccia units considered to be basal units of the Koolpin Formation. The hematite quartz breccia is a possible conduit and/or loci for uranium mineralisation. Consequently, it was concluded that the anomalies warranted further investigation.

Radiometric anomaly B was not associated with any Track Etch anomaly, but it does occur in close proximity to the HQB unit and a cross cutting shear zone. These are

favourable structural features which warrant testing.

4. ROTARY AIR BLAST DRILLING

A total of 1295.5 metres of rotary air blast drilling (R.A.B.) comprised on 52 holes was completed. The drill holes were generally 50m apart along grid lines 100m apart. (Plate VII.) The holes were sited to test Track Etch anomalies A, B (1979) and D (1978). In addition, drill holes W.A. 17 to 26 inclusive were sited to clarify sub-surface geology to the north of anomaly D (1978). It was not practical to test radiometric anomalies B and C by R.A.B. drilling because of rugged terrain. Cuttings were geologically and radiometrically logged every 1m and bedrock samples were geochemically analysed for uranium thorium and base metals.

The drilling results were not encouraging even though they cannot be considered conclusive. None of the holes intersected uranium mineralisation or zones which may account for the Track Etch anomalies. The only exception to this was drill holes W.A. 38 and 39 which were part of a pattern sited to test Anomaly A. Drill hole W.A. 39 intersected very weathered basic rock containing flakes of biotite. Between 3 to 4m a contact radiometric Total count reading of 140 cps was recorded. This radioactivity may emanate from inclusions within the biotite and have contributed to the Track Etch anomaly. Adjacent drill hole W.A. 38 intersected black graphitic shale which in places contained earthy red hematite staining. These shales are comparatively anomalous, having radiometric total count readings of 84 to 110 cps (approximately 2 x that of adjacent holes). Geochemical analysis returned low uranium values, suggesting disequilibrium. The source of Track Etch anomaly A would therefore appear to be a narrow zone of shales intersected by drill hole W.A. 38. The hematite stains in the shale may be related to uranium mineralisation but the results of the closely spaced adjacent drill holes suggest that any mineralisation that may be present would have small reserves.

APPENDIX I

PETROLOGICAL DESCRIPTION

Central Mineralogical Services



231 Magill Road
Maylands, S.A. 5069
Telephone 42 5659

Mr. N. Swingler
Senior Geologist
Occidental Minerals Corporation
of Australia
51-55, Lavender Street
MILSONS POINT / N.S.W. 2061

21st September, 1978

REPORT CMS 78/9/9

YOUR REFERENCE: Letter dated
7th September, 1978

DATE RECEIVED: 8th September, 1978

SAMPLE NOS.: 421, 423, 426, 427, 428,
431, 433, 435, 436, 437,
439, 440, 444, 445, 447,
450, 453, 454, 455, 457,
458, 460, 463, 465, 466

SUBMITTED BY: N. Swingler

WORK REQUESTED: Petrology

H. W. Fander

H. W. Fander, M. Sc.

REPORT CMS 78/9/9

Waterhouse Area Rocks

Twenty-five rock specimens were received for brief petrological descriptions; these are presented in the attached tables.

Many of the rocks are severely altered and ferruginised, making interpretation difficult and tentative; thus the descriptions must be considered in the light of field data, and it may well be necessary to re-interpret some of the rocks on that basis.

Fine-grained carbonaceous metasediments are well-represented; many of these appear to be at least partly of chemical origin, with chert and carbonate, and are only minimally metamorphosed. The descriptions and comments are more or less self-explanatory.

Two of the rocks (433, 447), initially thought to be in the nature of laterites, were, on more detailed examination, found to contain jarosite, a sulphate mineral commonly resulting from the oxidation of pyrite; Thus these rocks are perhaps more in the nature of gossans, or oxidised pyritic sediments.

H.W. Fander, M. Sc.

Sample	Rock Type - Composition	Fabric	Minor Minerals	Comments
Details				
437 25315	Altered Igneous Rock. Quartz-clay pseudomorphs after random feldspar laths/prisms; goethite leucoxene patches. Interstitial quartz-sericite-goethite.	Variable grainsizes (pseudomorphs), but generally igneous fabric	Irregular quartz veinlets	Little doubt of igneous origin but composition speculative; possibly doleritic or microdioritic.
439	Carbonaceous Sericitic Chert. Small formless sericite aggregates (?pellets) scattered in microcrystalline quartz matrix with ultrafine carbon pigmentation.	Uniform, fine-grained, with faint nodular development.	Clear quartz veins with goethite.	Sericite ovoids may be primary clay pellets. No indication of metamorphism.
440	Quartz-Sericite Hornfels. Small aggregates of mosaic quartz, interstitial random small sericite flakes, scattered oxidised pyrite.	Faint preferred orientation but generally fine hornfelsic fabric	Fine, pale authigenic tourmaline-	Resembles 431, and is a mildly contact-metamorphosed siltstone, rather featureless.
444	Ferruginous, Crenulated Quartz-Mica Schist. Thin bands of crenulated muscovite alternating with microgranular quartz-goethite (after ?pyrite).	Fine banding, reasonable schistosity; fine-grained rock	Occasional enehedral crystals of oxidised pyrite.	Most of the goethite due to oxidation of pyrite. Probably a pyritic argillaceous siltstone; greenschist facies regional metamorphism.
445	Carbonaceous, Argillaceous Metachert. Ultrafine quartz, sericite, abundant carbon. Finely laminated, with superimposed weak schistosity at right angles.	Carbonaceous bands blurred by later schistosity	Random patches of coarser quartz with oxidised sulphides (syngenetic)	Argillaceous and carbonaceous material has responded to mild metamorphism, by re-orientation.
447	Cellular Goethite-Rock. Colloform-cellular goethite; most cells contain fine clay, some quartz (detrital). Fine jarosite aggregates common.	Cellular goethite obscures original textures. Some pseudomorphs/boxworks seen	Occasional patches of interstitial vein quartz	Jarosite indicates former sulphides. Possibly a pyritic/pyritised argillaceous siltstone or similar rock. Could be termed 'gossan'.
450	Quartz-Goethite Rock. Ferruginised schist, with fine-grained quartz, earthy and compact goethite pseudomorphs after ?micas, possible actinolite.	Vague relict schistosity strongly contorted. Medium/fine-grained	Poorly defined, microgranular leucoxene	Very poorly preserved, interpretation tentative, based on relict textures/fabric; probably quartz-mica schist, with ?amphibole.
453	Quartz-Hematite Breccia. Fragments of compact, fine hematite, quartzite, schist, sericite aggregates (?altered feldspar); cement of vein-type quartz.	Tectonic fabric, angular fragments of varying sizes.	Crosscutting, disrupted quartz veins.	Regarded as tectonic breccia with hematite-ironstone and low-grade meta-sediment fragments.
454 25315	Cellular Goethite Rock. Dominantly earthy cellular goethite; some cells contain compact goethite, others empty; small lithic and quartz fragments.	Uniform fabric, no relict textures or boxworks	Subparallel goethite - Mn O ₂ veinlets	Believed to be ferruginous laterite, incorporating some detrital components.

Central Mineralogical Services



231 Magill Road
Maylands, S.A. 5069
Telephone 42 5659

Mr. N. Swingler
Senior Geologist
Occidental Minerals Corporation
of Australia
Greater Pacific House
51-55, Lavender Street
MILSONS POINT / N.S.W. 2061

13th August, 1979

REPORT CMS 79/7/48

YOUR REFERENCE: Verbal request
DATE RECEIVED: Beginning July
SAMPLE NOS.: 79W/1, 2, 3, 5, 6,
11, 14, 16, 17,
18, 19
SUBMITTED BY: N. Swingler
WORK REQUESTED: Petrology

H.W. Fander

H.W. Fander, M. Sc.

REPORT CMS 79/7/48

The eleven rocks were thin-sectioned in the usual way, though several required impregnation because of their friability due to weathering.

All the rocks are sediments or low-grade metasediments; ferruginisation and silicification have obscured or obliterated many diagnostic features in some of the rocks, making interpretation tentative; a knowledge of the field relationships would probably resolve the problems. For instance, if 79W/16 is along strike from 79W/2 and is structurally the same unit, then it is clear that 79W/16 is merely a silicified version of 79W/2. The ferruginised, weathered schists contain features which are difficult to interpret, imposing limitations which must be accepted until fresher material is available.

Generally, the important features, however, are not in doubt:

1. The rocks are all of sedimentary origin.
2. The grade of metamorphism was low.
3. Many of the rocks are carbonaceous, and some were (or are) pyritic, thus of favourable lithology in relation to uranium.

H.W. Fander, M. Sc.

[illegible]

Sample	Rock Type - Composition	Fabric	Minor Minerals	Comments
Details				
79W/1 (T.S. 28527)	Silicified Schist. Ragged patches and shreds of altered ferruginised sericite, microgranular quartz; abundant irregular quartz patches throughout.	Relict schistose fabric but extensively disrupted by quartz.	Fine carbonate inclusions in quartz. Younger quartz veins.	Low-grade metasediment, thoroughly penetrated and disrupted by quartz; exact lithology of original rock not known.
79W/2	Carbonate Rock. Small pellets, nodules and oolites of carbonate (?dolomite), a few chlorite masses; interstitial fine chlorite and sericite flakes, leucoxenic rutile.	Close-packed, evenly-sized carbonate grains, diagenetically enlarged.	Scattered, partly oxidised small pyrite crystals.	Essentially a chemical sediment; interstitial sericite, chlorite, rutile all believed to be chemically formed. Not metamorphosed.
79W/3	Ferruginised Schist. Fine, granular quartz, fairly evenly distributed small, thoroughly ferruginised fine mica flakes; numerous white leucoxene patches.	Finely schistose, little or no banding; featureless, uniform.	-----	Leucoxene appears to be pseudomorphous, perhaps after small ?magnetite crystals. Goethite obscures most details.
79W/5	Carbonaceous Metaquartzite. Mostly fine interlocking quartz grains, thin parallel films of carbon (ultrafine ?subgraphite), small aggregates of random sericite flakes.	Appears schistose in thin-section, but sericite is random. Fine-grained.	Rare detrital zircon grains. Possible oxidised pyrite.	Sericite aggregates could represent altered feldspar. Low-grade siliceous metasediment, probably carbonaceous siltstone.
79W/6	Sericite Schist. Dominantly fine, semi-flaky sericite, occasional quartz splinters; small quartz-hematite "knots" are pseudomorphous after ?feldspar.	Good schistosity; compact, very fine-grained rock.	Occasional detrital zircon grains.	Originally a mudstone, possibly with authigenic feldspar (or ?carbonate), very mildly metamorphosed.
79W/11	Ferruginised Quartz-Sericite Schist. Finely-granular quartz, small sericite-illite flakes, heavily impregnated with very abundant goethite.	Relict schistose fabric preserved, but most textures obscured.	Fine pale rutile grains, needles relatively common.	Presence of so much ultrafine rutile suggests former presence of Ti-bearing mineral(s), e.g. biotite.
79W/14	Altered, Ferruginised Schist. Ovoid to angular patches of fine ferruginous clay (possibly altered ?chiastolite) aligned in microcrystalline quartz, abundant fine goethite.	General preferred orientation, but no micas to impart true schistosity.	Traces of graphite. Small platy pseudomorphs of microgranular rutile.	Interpreted as a graphitic quartz-mica schist with poikiloblasts of andalusite/chiastolite, but this is speculative. Greenschist facies.
79W/16	Silicified Schist. Highly irregular masses and shreds of pale chlorite, poikiloblasts and mosaics of quartz; platy leucoxene pseudomorphs	Very little original fabric has survived; mainly granular; some relict textures.	Traces of fine relict carbon. Fine carbonate inclusions in quartz. Fine rutile grains.	Broadly similar to 79W/1. Possibly a silicified carbonate-chlorite rock (i.e. like 79W/2), but schistose. Interpretation tentative.

Sample	Rock Type - Composition	Fabric	Minor Minerals	Comments
Details				
455 5326	Quartz-Sericite-Goethite Rock. Microcrystalline quartz, pseudomorphs of sericite and/or quartz after carbonate rhombs, compact and earthy goethite	Fine-grained, with vague preferred orientation	Scattered goethite pseudomorphs after pyrite cubes.	Original rock was very probably a carbonate-rich, pyritic chert; now altered, recrystallised but unmetamorphosed.
457	Carbonaceous Sericite-Quartz "Schist". Microcrystalline quartz, small hydromuscovite (sericite) flakes, streaks and ultrafine carbonaceous matter.	Schistosity not pronounced; finely crenulated. Parallel carbon streaks.	Occasional oxidised pyrite cubes.	Closely similar to 421; correlatable. Impure, argillaceous, carbonaceous chert very mildly metamorphosed.
458	Quartz-Goethite Rock. Completely silicified, ferruginised fine schist, originally with ?mica, ?actinolite and possible carbonate.	Fine-grained. Schistosity mediocre. Relict textures very poorly preserved.	Irregular to rhomb-shaped cavities after ?carbonate.	Badly preserved, severely altered; thus interpretation is tentative.
460	Tremolite-Chlorite-Magnetite Schist. Small acicular tremolite crystals, euhedral magnetite and interstitial isotropic green chlorite. Tremolite aggregates.	Broad preferred orientation but poor schistosity. Fine/medium-grained	Minor interstitial carbonate, scattered granular sphene.	Possibly fresh equivalent of 458. May be of mafic-ultramafic origin, more metasomatic than metamorphic.
463	Altered Igneous Rock. Now quartz pseudomorphs, fine quartz-hematite, leucoxene patches after oxide opaques; very poorly preserved.	Definitely igneous fabric, porphyritic/medium-grained.	Occasional ?actinolite needles preserved in quartz.	Interpretation tentative; though to be intermediate rock or perhaps granodioritic, minor intrusive.
465	Altered Igneous Rock. Quartz pseudomorphs after ?feldspar phenocrysts, interstitial quartz and hematite; leucoxenised oxide opaques.	Distinct medium-grained porphyritic igneous fabric, weak orientation	As above	Very similar to 463; equally severely altered and uninformative. Best guess is intermediate minor intrusive.
466	Carbonaceous Quartz-Sericite "Schist". Abundant fine carbon, intergrown with clay/sericite, interstitial microcrystalline quartz. Small sericite flakes.	Marked preferred orientation but schistosity poor. Very fine-grained	Minute leucoxenic rutile crystals occur throughout.	Probably an impure argillaceous, carbonaceous chert or similar rock (cherty shale?), perhaps only incipiently metamorphosed.

Sample	Rock Type - Composition	Fabric	Minor Minerals	Comments
Details				
421 (T.S.25306)	<u>Carbonaceous Sericite-Quartz Schist.</u> Small angular quartz, carbonaceous chert fragments, infine schistose carbonaceous sericite matrix.	Well-developed schistosity; fine-grained	Small goethite patches, after ?carbonate crystals or pyrite	Possibly a partly chemical, partly clastic sediment - cherty argillite? Reducing environment. Low-grade meta ~~metamorphism~~
423	<u>Carbonaceous Quartz-Sericite "Schist".</u> Finely-banded, oxidised. Alternating micaceous, quartzose bands, with carbon; goethite after ?pyrite, ?carbonate	Well-laminated but actual schistosity poor. Fine-grained	Quartz veins with oxidised pyrite, ?chalcopyrite, cutting rock	Highly carbonaceous in parts; thought to be impure laminated chert, only very mildly metamorphosed.
426	<u>Metachert.</u> Appearance of conglomerate because of chert nodules in chert matrix, metamorphosed/recrystallised, with hematite, oxidised chlorite	Definite metamorphic fabric with some schistosity in places	Goethite veins. Pyrite pseudomorphs in chert.	Conglomeratic appearance misleading; composition of nodules and matrix similar. Introduction of hematite, ~~chlorite~~
427	<u>Schistose Dolomite-Sericite Rock.</u> Mainly small rhombs of stressed dolomite, interstitial foliated sericite and minor quartz	Preferred orientation and stress; medium-grained	Conspicuous cloudy, leucoxenic rutile crystals throughout	Essentially a chemical sediment, weakly metamorphosed during or after lithification. Trace ?pyrite.
428	<u>Stressed, Ferruginised Orthoquartzite.</u> Rounded, stressed quartz grains, fine quartz matrix and cement; interstitial goethite films in parts of the rock.	Some preferred orientation due to dynamic metamorphism. Medium-grained	Rare detrital zircon, authigenic tourmaline.	Clean, well-sorted sediment with bimodal size distribution. Ferruginised after lithification and stress. Not unlike Komolgie.
431	<u>Quartz-Sericite Hornfels.</u> Fairly evenly distributed fine quartz and random small sericite flakes. Relict sedimentary features.	Some bedding/lamination survives but otherwise homogenous, fine-grained	Traces fine rutile needles; disrupted quartz veins	Originally an argillaceous siltstone, subjected to mild thermal metamorphism
433	<u>Cellular Goethite Rock.</u> Dominantly shapeless cells of compact goethite; angular and rounded grains of quartz, also interstitial quartz cement. Mica flakes.	More or less clastic textures predominate. ?Nodular bodies occur.	Small granular aggregates of <u>jarosite</u> throughout.	Presence of jarosite suggests former sulphides (?pyrite). Puzzling rock, possibly pyritic sediment (?syngenetic).
435	<u>Banded Ferruginous Chert.</u> Bands of microcrystalline quartz, with goethite patches and leach-cavities, alternating with clean quartz bands.	Typical crystallised chert; well-defined banding	Crosscutting quartz veins	Normal featureless chert; leach cavities and goethite probably due to former presence of carbonate.
436 25314	<u>Spotted Hornfels.</u> Numerous small sericitic ovoids in ultrafine quartz-sericite matrix. Ovoids may be altered ?cordierite or andalusite.	Featureless, very fine-grained. Subparallel orientation of ovoids.	Rare detrital zircon. Traces ?oxidised pyrite	Mild contact-metamorphism of argillite, subsequent sericitisation of ?cordierite

APPENDIX II

TERRADEX CORPORATION REPORTS

**TERRADEX CORPORATION**

460 N. Wiget Lane
Walnut Creek, CA 94598, U.S.A
(415) 938-2545 • Telex 33-7793

August 16, 1979

Mr. N. Swingler
Occidental Minerals Corporation of Australia
14th Floor, Greater Pacific House
51-55 Lavender St., Milsons Pt., 2061
New South Wales
Australia

Dear Mr. Swingler,

Included are the two maps from your recent 450 cup Waterhouse II survey. These maps as well as the following portion of the report were not included with the original report as we were awaiting your base map.

The Track Etch radon contour map was computer generated using a 6 point weighted average computer smoothing routine and it was drawn with 50 T/sq.mm contour intervals. (We usually pick the contour interval at 50% of the background mean.) With this technique you may find some higher contour intervals between the actual data points but this is normal since the computer attempts to interpolate intermediate values based on the general average values measured in the area. Short incomplete contour lines may appear on the map without identifying numbers but their values can usually be determined from adjacent contour values. The contour map shows small +'s at the locations where the field cups were located. Where the +'s do not appear, the Track Etch detectors were either lost or the readings were not used. Also included is a second map which shows the measured detector readings (rounded to full T/sq.mm values) at their correct relative locations with boxes around the higher readings that are at least three standard deviations above the background values. Both of these maps were drawn to the same scale as the field location map you prepared so they can be easily used by overlaying on this base map.

The maps show six major anomalies as follows:

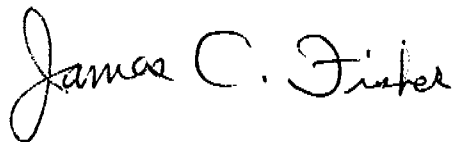
<u>Anomaly</u>	<u>High Cup Serial Number</u>	<u>Anomalous Points in Cluster</u>	<u>High Cup T/sq.mm</u>	<u>Ratio to Background</u>
A✓	34743 4800N/1900E	7-8	1270.6 ✓	8.9
B✓	34424 - 3800N/1700E	2	696.3	4.9
C✓	34727 4600N/2250E	2	654.2	4.6
D	34837 5500N/2200E	6	576.9	4.0
E✓	34715 4296N/2050E	2	563.6	3.9
F✓	34218 2496N/1550E	9	559.9	3.9

Page 2 - August 16, 1979
Mr. N. Swingler
Occidental Minerals Corporation of Aust.

These are very encouraging anomalies as compared to known successful surveys. Only drilling, of course, can establish if the origin of the radon anomaly is shallow and low grade or deep and high grade.

It has been a pleasure to work with you on this program and we look forward to serving you again in the future.

Sincerely,

A handwritten signature in cursive script that reads "James C. Fisher". The signature is written in dark ink and is positioned above the printed name and title.

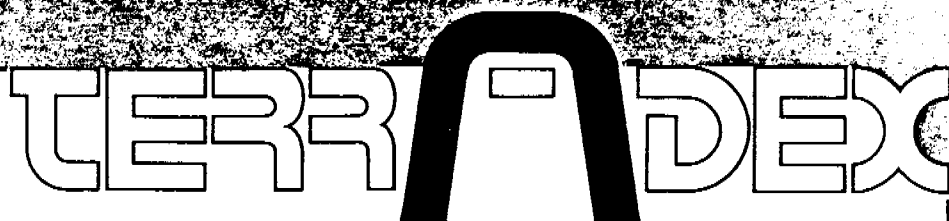
James C. Fisher
Senior Geologist

JCF/kem
Enclosures

TRACK ETCH SERVICE PROGRAM

FOR

WATERHOUSE AREA



November 14, 1978

Mr. Nick Swingler
Occidental Minerals Corp.
14th Floor, Greater Pacific House
51-55 Lavender St.
Milsons Point 2061
New South Wales, Aust.

Dear Mr. Swingler,

I am enclosing two sets of final tabulated data from your recent 369 cup Track Etch survey of the Waterhouse Area. The Track Etch readings are reported in units of tracks per square millimeter (T/sq.mm) and they are normalized to equivalent 30 day exposures. The data have been tabulated in two different ways for easy use; firstly by ascending Track Etch readings and secondly, by ascending serial numbers. The readings ranged from 0.7 to 96.0 T/sq.mm and the mean of the background distribution for the area was 5.2 T/sq.mm. The standard deviation of the background mean was 3.1 T/sq.mm or 60.2%. All statistics on the program are also included on the attached statistics sheet.

The background mean and its standard deviation are related to shallow mineralization of uranium at ppm levels in the survey area. For this survey the background mean is slightly higher than your recent Mt. Douglas survey average of 3.7 T/sq.mm.

High ranking points may be expressed in terms of "Z", the number of standard deviations above background. Rudimentary statistics imply that values with Z greater than three have a very low probability of belonging to the background distribution and hence are anomalous. The range of "Z" for the high ranking points in your survey are shown below together with the more conventional ratio to background.

<u>Range of Z</u>	<u># of Points</u>	<u>Range of T/sq.mm</u>	<u>Range of Ratio to Background</u>
2 - 3	26	11.6 - 14.5	2.2 - 2.8
3 - 4	12	14.9 - 17.6	2.9 - 3.4
4 - 5	6	18.1 - 19.0	3.5 - 3.7
over 5	23	21.2 - 96.0	4.1 - 18.5

It is highly improbable that points with Z greater than 3 are part of the background distribution; hence they are almost certainly anomalous. In this survey 41 points have a Z greater than 3, or 11.1% of the total. This, in our experience, is an above average percentage and represents a good potential for mineralization, particularly if there is strong spatial clustering of high ranking points. The slightly elevated magnitude of the high ranking points is also somewhat encouraging, particularly so if the mineralized horizon is very deep or beneath relatively gas-impermeable overburden.

Mr. Nick Swingler
Occidental Minerals Corp.
November 14, 1978

The Track Etch radon contour map was computer generated using a 5 point weighted average computer smoothing routine and it was drawn with 2 T/sq.mm contour intervals. (We usually pick the contour interval at 50% of the background mean.) With this technique you may find some higher contour intervals between the actual data points but this is normal since the computer attempts to interpolate intermediate values based on the general average values measured in the area. Short incomplete contour lines may appear on the map without identifying numbers but their values can usually be determined from adjacent contour values. The contour map shows small '+'s at the locations where the field cups were located. Where the '+'s do not appear, the Track Etch detectors were either lost or the readings were not used. Also included is a map with Track Etch readings (rounded to full T/sq.mm values) at each grid point and with squares around statistically anomalous points. Both of these maps were drawn to the same scale as the field location map you prepared so they can be easily used by overlaying on this base map.

The maps show several major anomalies as follows:

<u>Anomaly</u>	<u>High Cup Serial Number</u>	<u>Anomalous Points in Cluster</u>	<u>High Cup T/sq.mm</u>	<u>Ratio to Background</u>	<u>Sta</u>
A	76751	6	96.0	18.5	5000N/2100E
B	76673	3	52.9	10.2	4000N/1800E
C	76758	3	47.4	9.1	5400N/4450E
D	76616	3	45.1	8.7	2600N/1800E
E	76628	1	38.8	7.5	3400N/1200E

These are slightly encouraging anomalies as compared to known successful surveys. Only drilling, of course, can establish if the origin of the radon anomaly is shallow and low grade or deep and high grade.

It has been a pleasure to work with you on this program and we look forward to serving you again in the future.

Sincerely,

James C. Fisher

James C. Fisher
Senior Geologist

JCF/kem

OCCIDENTAL WATERHOUSE 11-13-78

TRACK ETCH SURVEY RESULTS AND STATISTICS

VALUES GIVEN IN T/SQ. MM. NORMALIZED TO 30 DAY EXPOSURE

NO. USEFUL PTS. : 369
HIGH (T/SQ. MM.): 96.0
LOW (T/SQ. MM.): 0.7

BACKGROUND MEAN (T/SQ. MM.): 5.2
STD. DEVIATION OF BKG. MEAN (T/SQ. MM.): 3.1
RELATIVE STD. DEVIATION (PERCENT): 60.2

HIGH RANKING POINTS

RANGE OF Z -----	NO. OF PTS. -----	RANGE OF T -----	RANGE OF RATIO TO BACKGROUND -----
2 - 3	26	11.6 - 14.5	2.2 - 2.8
3 - 4	12	14.9 - 17.6	2.9 - 3.4
4 - 5	6	18.1 - 19.0	3.5 - 3.7
OVER 5	23	21.2 - 96.0	4.1 - 18.5

NO. OF PTS. ABOVE Z = 3: 41

PERCENT OF TOTAL PTS. : 11.1

(Z IS THE NUMBER OF STD. DEVIATIONS ABOVE BKG. MEAN)

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

	76749.	2800E	5200N
0.7	6354.	1400N	1000E
0.7	6323.	800N	1400E
0.7	6365.	1600N	1000E
0.7	6398.	2200N	1200E
0.7	6395.	2200N	1800E
0.7	76620.	3000N	1500E
0.7	76686.	4400N	2100E
1.3	6279.	0N	1600E
1.3	6304.	400N	2000E
1.3	6317.	800N	200E
1.3	6362.	1600N	350E
1.3	6353.	1400N	1200E
1.3	6358.	1400N	200E
1.3	6409.	2400N	800E
1.3	6414.	2400N	1800E
1.3	6405.	2400N	000E
1.3	6392.	2000N	1800E
1.3	6391.	2000N	1600E
1.3	6468.	3400N	2400E
1.3	6442.	3000N	2400E
1.3	6454.	3000N	000E
1.4	76639.	3600N	800E
1.4	76659.	3800N	600E
1.4	76654.	3800N	1600E
1.4	76604.	1400N	1300E
1.4	76710.	3600E	5400N
1.4	76606.	1600N	1100E
1.6	76740.	5200N	2200E
1.9	6303.	400N	1800E
1.9	6297.	400N	800E
1.9	6275.	0N	800E
1.9	6293.	400N	0E
1.9	6315.	600N	0E
1.9	6277.	0N	1200E
1.9	6280.	0N	1800E
1.9	6314.	600N	200E
1.9	6278.	0N	1400E
2.0	6343.	1200N	1000E
2.0	6321.	800N	1000E
2.0	6371.	1800N	2000E
2.0	6360.	1600N	000E
2.0	6361.	1600N	200E
2.0	6324.	800N	1600E
2.0	6339.	1200N	200E
2.0	6338.	1200N	0E
2.0	6373.	1800N	1600E
2.0	6370.	1600N	2000E

OCCIDENTAL WATERHOUSE 11-13-78
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

2.0	6374.	1800N	1400E
2.0	6399.	2200N	1000E
2.0	6441.	2800N	2200E
2.0	6396.	2200N	1600E
2.0	6403.	2200N	200E
2.0	6402.	2200N	400E
2.2	76663.	4000N	000E
2.2	76684.	4200N	1900E
2.2	76662.	3800N	000E
2.2	76736.	5400N	2400E
2.4	76748.	2800E	5400N
2.5	6273.	0N	400E
2.5	6289.	200N	600E
2.5	6316.	800N	0E
2.5	6282.	200N	2000E
2.5	6274.	0N	600E
2.5	6318.	800N	400E
2.5	6302.	400N	1600E
2.6	6363.	1600N	600E
2.6	6325.	800N	1800E
2.6	6411.	2400N	1200E
2.6	6337.	1000N	0E
2.6	6357.	1400N	400E
2.6	6352.	1400N	1400E
2.6	6368.	1600N	1600E
2.6	6356.	1400N	600E
2.6	6366.	1600N	1200E
2.6	6326.	800N	2000E
2.6	6342.	1200N	800E
2.7	6447.	3000N	1400E
2.7	6387.	2000N	800E
2.7	6401.	2200N	600E
2.7	6449.	3000N	1000E
2.7	6448.	3000N	1200E
2.7	6394.	2200N	2000E
2.7	6450.	3000N	800E
2.7	6382.	1800N	000E
2.7	6390.	2000N	1400E
2.8	76687.	4400N	2200E
2.8	76704.	4800N	2600E
2.8	76636.	3600N	200E
2.9	76591.	200N	900E
2.9	76661.	3800N	200E
2.9	76712.	3600E	5000N
2.9	76682.	4200N	2100E
3.2	6287.	200N	1000E
3.2	6285.	200N	1400E
3.2	6307.	600N	1600E
3.2	6272.	0N	200E
3.2	6276.	0N	1000E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

3.2	6286.	200N	1200E
3.3	6329.	1000N	1600E
3.3	6367.	1600N	1400E
3.3	6413.	2400N	1600E
3.3	6415.	2400N	2000E
3.3	6355.	1400N	800E
3.3	6344.	1200N	1200E
3.3	6336.	1000N	200E
3.3	6364.	1600N	800E
3.3	6424.	2600N	800E
3.3	6372.	1800N	1800E
3.3	6393.	2000N	2000E
3.3	6461.	3200N	1200E
3.3	6455.	3200N	0E
3.3	6385.	2000N	400E
3.3	6445.	3000N	1800E
3.3	6384.	2000N	200E
3.3	6452.	3000N	400E
3.3	6400.	2200N	800E
3.3	6386.	2000N	600E
3.3	6446.	3000N	1600E
3.3	6438.	2800N	1800E
3.5	76627.	3400N	1400E
3.5	76633.	3400N	200E
3.5	76637.	3600N	400E
3.5	76690.	4400N	2600E
3.6	76756.	5400N	2500E
3.6	76675.	4000N	2000E
3.6	76707.	3800E	5400N
3.6	76603.	1400N	1100E
3.6	76709.	3600E	5600N
3.6	76706.	3800E	5200N
3.6	76678.	3600N	2400E
3.8	6271.	0N	0E
3.8	6295.	400N	400E
3.8	6319.	800N	600E
3.8	6311.	600N	800E
3.8	6291.	200N	200E
3.8	6312.	600N	600E
3.8	6300.		
3.8	6296.	400N	600E
3.8	6298.	400N	1000E
3.8	6294.	400N	200E
3.9	6333.	1000N	800E
3.9	6423.	2600N	1000E
3.9	6428.	2600N	000E
3.9	6328.	1000N	1800E
3.9	6340.	1200N	400E
3.9	6350.	1400N	1800E
3.9	6406.	2400N	200E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

4.0	6469.	3400N 2200E
4.0	6456.	3200N 200E
4.0	6404.	2200N 000E
4.2	76697.	4600N 2100E
4.2	76656.	3800N 1200E
4.2	76640.	3600N 1000E
4.2	76642.	3600N 1400E
4.2	76638.	3600N 600E
4.2	76622.	3200N 1700E
4.3	76592.	200N 1100E
4.3	76602.	1200N 1100E
4.5	6281.	0N 2000E
4.5	6299.	400N 1200E
4.5	6284.	200N 1600E
4.5	6288.	200N 800E
4.5	6320.	800N 800E
4.6	6369.	1600N 1800E
4.6	6429.	2800N 000E
4.6	6379.	1800N 600E
4.6	6331.	1000N 1200E
4.6	6322.	800N 1200E
4.6	6408.	2400N 600E
4.6	6334.	1000N 600E
4.7	6467.	3200N 2400E
4.7	6459.	3200N 800E
4.7	6388.	2000N 1000E
4.7	76741.	5200N 2400E
4.7	76743.	5000N 2600E
4.7	76742.	5200N 2600E
4.7	76744.	5000N 2400E
4.9	76647.	3600N 2000E
4.9	76635.	3600N 000E
4.9	76619.	3000N 1700E
5.1	76599.	1000N 1100E
5.1	6313.	600N 400E
5.1	6305.	600N 2000E
5.1	6310.	600N 1000E
5.1	6292.	200N 0E
5.2	6341.	1200N 600E
5.2	6375.	1800N 1200E
5.2	6359.	1400N 000E
5.2	6351.	1400N 1600E
5.2	76727.	5400N 1600E
5.2	6419.	2600N 1600E
5.2	6422.	
5.4	6389.	2000N 1200E
5.4	6437.	2800N 1600E
5.4	6451.	3000N 600E
5.4	6462.	3200N 1400E
5.4	6470.	3400N 2000E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

5.5	76746.	5000N 2000E
5.5	76750.	2800E 5000N
5.6	76641.	3600N 1200E
5.6	76631.	3400N 600E
5.6	76651.	3800N 1900E
5.6	76688.	4400N 2300E
5.6	76650.	3800N 2000E
5.7	6309.	600N 1200E
5.8	76679.	4200N 2600E
5.8	76723.	3000E 5400N
5.8	76715.	3400E 5400N
5.8	76667.	4000N 800E
5.8	76676.	4000N 2200E
5.8	76664.	4000N 200E
5.8	76680.	4200N 2400E
5.8	76666.	4000N 600E
5.9	6417.	2600N 2000E
5.9	6327.	1000N 2000E
5.9	6348.	1200N 2000E
5.9	6412.	2400N 1400E
5.9	6432.	2800N 600E
5.9	6418.	2600N 1800E
5.9	76755.	5400N 2300E
5.9	76752.	5000N 2300E
6.0	76735.	5400N 2600E
6.0	6397.	2200N 1400E
6.3	76649.	3800N 2200E
6.3	76621.	3200N 1500E
6.3	76655.	3800N 1400E
6.3	76646.	3600N 1900E
6.4	6283.	200N 1800E
6.5	6377.	1800N 800E
6.5	76665.	4000N 400E
6.5	76724.	3000E 5600N
6.5	76610.	2000N 1500E
6.5	6420.	2600N 1400E
6.5	6430.	2800N 200E
6.5	6376.	1800N 1000E
6.7	6457.	3200N 400E
6.7	6435.	2800N 1200E
6.7	76725.	5400N 2000E
6.7	76731.	5600N 2000E
6.7	76730.	5600N 1800E
7.0	6308.	600N 1400E
7.0	6306.	600N 1800E
7.1	76754.	5200N 2100E
7.2	6433.	2800N 800E
7.2	6407.	2400N 400E
7.2	6332.	1000N 1000E
7.2	6330.	1000N 1400E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

7.2	76601.	1200N 1300E
7.2	76683.	4200N 2000E
7.2	76720.	3200E 5000N
7.4	6381.	1800N 200E
7.4	6453.	3000N 200E
7.4	6463.	3200N 1600E
7.4	6443.	3000N 2200E
7.4	6460.	3200N 1000E
7.4	6458.	3200N 600E
7.8	76630.	3400N 800E
7.8	6335.	1000N 400E
8.0	76721.	3000E 5000N
8.0	76711.	3600E 5200N
8.0	76608.	1800N 1300E
8.2	76728.	5600N 1400E
8.3	6290.	200N 400E
8.3	76760.	5200N 1600E
8.5	76629.	3400N 1000E
8.5	76653.	3800N 1700E
8.5	76685.	4400N 2000E
8.5	76703.	4800N 2400E
8.5	76698.	4600N 2000E
8.5	6349.	1400N 2000E
8.5	6421.	2600N 1200E
9.1	6431.	2800N 400E
9.1	6426.	2600N 400E
9.2	76623.	3400N 1900E
9.2	76660.	3800N 400E
9.2	76699.	4800N 2000E
9.2	76632.	3400N 400E
9.2	76614.	2400N 1500E
9.4	6466.	3200N 2200E
9.4	76593.	400N 1100E
9.4	76597.	800N 1300E
9.4	76669.	4000N 1200E
9.4	76612.	2200N 1300E
9.4	76714.	3400E 5200N
9.5	76738.	5200N 1800E
9.9	76689.	4400N 2400E
9.9	76701.	4800N 2200E
9.9	76652.	3800N 1800E
9.9	76648.	3800N 2400E
9.9	76634.	3400N 000E
10.1	76671.	4000N 1600E
10.1	76595.	600N 900E
10.1	76607.	1800N 1100E
10.1	76716.	3400E 5600N
10.3	76739.	5200N 2000E
10.4	6378.	
10.6	76645.	3600N 1800E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

10. 9	76600.	1000N 1300E
11. 1	6416.	2600N 2100E
11. 3	76658.	3800N 800E
11. 4	6440.	
11. 4	6464.	3200N 1800E
11. 6	76681.	4200N 2200E
11. 6	76717.	3200E 5600N
11. 7	6346.	1200N 1600E
11. 9	76747.	2800E 5600N
11. 9	76737.	5400N 2200E
11. 9	76733.	5600N 2400E
12. 0	76643.	3600N 1600E
12. 0	76626.	3400N 1600E
12. 0	6383.	2000N 000E
12. 1	6301.	400N 1400E
12. 3	76596.	600N 1100E
12. 3	76605.	1600N 1300E
12. 4	6425.	2600N 600E
12. 7	76732.	5600N 2200E
12. 7	76694.	4600N 2400E
12. 7	76644.	3600N 1700E
13. 0	6380.	1800N 400E
13. 0	76611.	2200N 1500E
13. 0	76594.	400N 900E
13. 0	76753.	5200N 2300E
13. 4	76613.	2400N 1300E
14. 0	6444.	3000N 2000E
14. 1	76692.	4600N 2800E
14. 2	76726.	5400N 1800E
14. 5	76609.	2000N 1300E
14. 5	76670.	4000N 1400E
14. 9	76729.	5600N 1600E
15. 2	76719.	3200E 5200N
15. 9	76677.	3600N 2200E
15. 9	76598.	800N 1100E
16. 1	6436.	2800N 1400E
16. 3	6347.	1200N 1800E
16. 3	6427.	2600N 200E
16. 3	6410.	2400N 1000E
16. 7	6465.	3200N 2000E
16. 9	76700.	4800N 2100E
17. 4	6434.	2800N 1000E
17. 6	76696.	4600N 2200E
18. 1	76713.	3400E 5000N
18. 1	76718.	3200E 5400N
18. 3	76625.	3400N 1700E
18. 3	76695.	4600N 2300E
19. 0	76691.	4400N 2800E
19. 0	76702.	4800N 2300E
21. 2	76657.	3800N 1000E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

21. 2	76615.	2600N 1700E
21. 3	76745.	5000N 2200E
21. 9	76624.	3400N 1800E
22. 5	76708.	3800E 5600N
22. 5	76705.	3800E 5000N
22. 5	76672.	4000N 1700E
23. 2	76722.	3000E 5200N
23. 5	6345.	1200N 1400E
23. 7	76757.	5600N 1250E
26. 1	76759.	5200N 1550E
27. 4	6439.	2800N 2000E
28. 2	76693.	4600N 2600E
30. 3	76618.	2800N 1700E
30. 4	76668.	4000N 1000E
33. 1	76617.	2800N 1500E
35. 8	76734.	5600N 2600E
38. 8	76628.	3400N 1200E
39. 1	76674.	4000N 1900E
45. 1	76616.	2600N 1500E
47. 4	76758.	5400N 1450E
52. 9	76673.	4000N 1800E
96. 0	76751.	5000N 2100E NOT RET

OCCIDENTAL WATERHOUSE 11-13-78
 CUP DETECTOR
 SERIAL READING
 NUMBER (T/SQ. MM.) FIELD NOTES AND DATA

6271.	3.8	0N	0E
6272.	3.2	0N	200E
6273.	2.5	0N	400E
6274.	2.5	0N	600E
6275.	1.9	0N	800E
6276.	3.2	0N	1000E
6277.	1.9	0N	1200E
6278.	1.9	0N	1400E
6279.	1.3	0N	1600E
6280.	1.9	0N	1800E
6281.	4.5	0N	2000E
6282.	2.5	200N	2000E
6283.	6.4	200N	1800E
6284.	4.5	200N	1600E
6285.	3.2	200N	1400E
6286.	3.2	200N	1200E
6287.	3.2	200N	1000E
6288.	4.5	200N	800E
6289.	2.5	200N	600E
6290.	8.3	200N	400E
6291.	3.8	200N	200E
6292.	5.1	200N	0E
6293.	1.9	400N	0E
6294.	3.8	400N	200E
6295.	3.8	400N	400E
6296.	3.8	400N	600E
6297.	1.9	400N	800E
6298.	3.8	400N	1000E
6299.	4.5	400N	1200E
6300.	3.8		
6301.	12.1	400N	1400E
6302.	2.5	400N	1600E
6303.	1.9	400N	1800E
6304.	1.3	400N	2000E
6305.	5.1	600N	2000E
6306.	7.0	600N	1800E
6307.	3.2	600N	1600E
6308.	7.0	600N	1400E
6309.	5.7	600N	1200E
6310.	5.1	600N	1000E
6311.	3.8	600N	800E
6312.	3.8	600N	600E
6313.	5.1	600N	400E
6314.	1.9	600N	200E
6315.	1.9	600N	0E
6316.	2.5	800N	0E
6317.	1.3	800N	200E
6318.	2.5	800N	400E

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

6319.	3.8	800N 600E
6320.	4.5	800N 800E
6321.	2.0	800N 1000E
6322.	4.6	800N 1200E
6323.	0.7	800N 1400E
6324.	2.0	800N 1600E
6325.	2.6	800N 1800E
6326.	2.6	800N 2000E
6327.	5.9	1000N 2000E
6328.	3.9	1000N 1800E
6329.	3.3	1000N 1600E
6330.	7.2	1000N 1400E
6331.	4.6	1000N 1200E
6332.	7.2	1000N 1000E
6333.	3.9	1000N 800E
6334.	4.6	1000N 600E
6335.	7.8	1000N 400E
6336.	3.3	1000N 200E
6337.	2.6	1000N 0E
6338.	2.0	1200N 0E
6339.	2.0	1200N 200E
6340.	3.9	1200N 400E
6341.	5.2	1200N 600E
6342.	2.6	1200N 800E
6343.	2.0	1200N 1000E
6344.	3.3	1200N 1200E
6345.	23.5	1200N 1400E
6346.	11.7	1200N 1600E
6347.	16.3	1200N 1800E
6348.	5.9	1200N 2000E
6349.	8.5	1400N 2000E
6350.	3.9	1400N 1800E
6351.	5.2	1400N 1600E
6352.	2.6	1400N 1400E
6353.	1.3	1400N 1200E
6354.	0.7	1400N 1000E
6355.	3.3	1400N 800E
6356.	2.6	1400N 600E
6357.	2.6	1400N 400E
6358.	1.3	1400N 200E
6359.	5.2	1400N 000E
6360.	2.0	1600N 000E
6361.	2.0	1600N 200E
6362.	1.3	1600N 350E
6363.	2.6	1600N 600E
6364.	3.3	1600N 800E
6365.	0.7	1600N 1000E
6366.	2.6	1600N 1200E
6367.	3.3	1600N 1400E
6368.	2.6	1600N 1600E

TRACK ETCH® SERVICE PROGRAM

FOR

WATERHOUSE II AREA

**TERRADEX CORPORATION**

460 N. Wiget Lane
Walnut Creek, CA 94598, U.S.A
(415) 938-2545 • Telex 33-7793

August 8, 1979

N. Swingler
Occidental Minerals Corporation of Australia
14th Floor, Greater Pacific House
51-55 Lavender St., Milsons Pt., 2061
New South Wales
Australia

Dear Mr. Swingler,

I am enclosing two sets of final tabulated data from your recent 450 cup Track Etch survey of the Waterhouse II Area. The Track Etch readings are reported in units of tracks per square millimeter (T/sq.mm) and they are normalized to equivalent 30 day exposures. The data have been tabulated in two different ways for easy use; firstly by ascending Track Etch readings and secondly, by ascending serial numbers. The readings ranged from 12.8 to 1270.6 T/sq.mm and the mean of the background distribution for the area was 143.1 T/sq.mm. The standard deviation of the background mean was 83.6 T/sq.mm or 58.5%. All statistics on the program are also included on the attached statistics sheet. The Improved System Track Etch cups were utilized for this survey.

The background mean and its standard deviation are related to shallow mineralization of uranium at ppm levels. For this survey the Improved System cups were used. These cups have much higher sensitivity than the original cups used in your previous Waterhouse survey. For this reason, no comparison between this survey and the original Waterhouse survey with a background mean of 5.2 T/sq.mm can be made.

High ranking points may be expressed in terms of "Z", the number of standard deviations above background. Rudimentary statistics imply that values with Z greater than three have a very low probability of belonging to the background distribution and hence are anomalous. The range of "Z" for the high ranking points in your survey are shown below together with the more conventional ratio to background.

<u>Range of Z</u>	<u># of Points</u>	<u>Range of T/sq.mm</u>	<u>Range of Ratio to Background</u>
2 - 3	26	314.2 - 391.5	2.2 - 2.7
3 - 4	13	398.3 - 465.5	2.8 - 3.3
4 - 5	11	478.6 - 559.9	3.3 - 3.9
Over 5	8	563.6 - 1270.6	3.9 - 8.9

It is highly improbable that points with Z greater than 3 are part of the background distribution; hence they are almost certainly anomalous. In this survey 32 points have a Z greater than 3, or 7.1% of the total. This, in our experience, is an above average percentage and represents

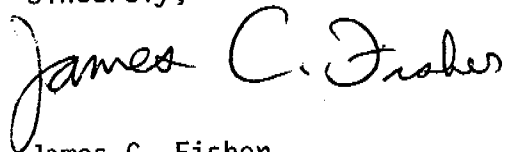
Page 2 - August 8, 1979
N. Swingler
Occidental Minerals Corp.

a good potential for mineralization, particularly if there is strong spatial clustering of high ranking points. The heightened magnitude of the high ranking points is also quite encouraging, particularly if the mineralized horizon is moderately deep.

No Track Etch contour map or location-value plot was prepared for this program as we are awaiting the base map. When the base map arrives we will prepare these maps and send them to you with an addendum to this report.

It has been a pleasure to work with you on this program and we look forward to serving you again in the future.

Sincerely,

A handwritten signature in cursive script that reads "James C. Fisher". The signature is written in dark ink and is positioned above the printed name and title.

James C. Fisher
Senior Geologist

JCF/kem
Enclosures

TRACK ETCH SURVEY RESULTS AND STATISTICS

VALUES GIVEN IN T/SQ. MM. NORMALIZED TO 30 DAY EXPOSURE

NO. USEFUL PTS. : 450
 HIGH (T/SQ. MM.): 1270.6
 LOW (T/SQ. MM.): 12.8

BACKGROUND MEAN (T/SQ. MM.): 143.1
 STD. DEVIATION OF BKG. MEAN (T/SQ. MM.): 83.6
 RELATIVE STD. DEVIATION (PERCENT): 58.5

HIGH RANKING POINTS

RANGE OF Z -----	NO. OF PTS. -----	RANGE OF T -----	RANGE OF RATIO TO BACKGROUND -----
2 - 3	26	314.2 - 391.5	2.2 - 2.7
3 - 4	13	398.3 - 465.5	2.8 - 3.3
4 - 5	11	478.6 - 559.9	3.3 - 3.9
OVER 5	8	563.6 - 1270.6	3.9 - 8.9

NO. OF PTS. ABOVE Z = 3: 32
 PERCENT OF TOTAL PTS. : 7.1

(Z IS THE NUMBER OF STD. DEVIATIONS ABOVE BKG. MEAN)

OCCIDENTAL WATERHOUSE II

8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/50 MM.)	FIELD NOTES AND DATA			
34201.	96. 2	2400N 1150E	C	75X. 1KF	
34202.	284. 2	2400N 1200E	C	72X. 1KF	
34203.	449. 6	2400N 1250E	C	83X. 1KF	
34204.	480. 8	2400N 1300E	C	78X. 1KF	
34205.	328. 0	2400N 1350E	C	10X. 3KF	
34206.	73. 5	2400N 1400E	DISTB	40X. 1KF	
34207.	67. 9	2400N 1450E	C	40X. 1KF	
34208.	209. 3	2400N 1500E	C	80X. 1KF	
34209.	96. 2	2400N 1550E	C	24X. 1KF	
34210.	22. 6	2400N 1600E	.	20X. 1KF	
34211.	33. 9	2400N 1650E	C	42X. 1KF	
34212.	130. 1	2400N 1700E	C	64X. 1KF	
34213.	118. 8	2400N 1750E	C	12X. 3K	
34214.	275. 7	2483N 1749E	C	65X. 1KF	
34215.	152. 7	2486N 1699E	C	56X. 1KF	
34216.	203. 6	2489N 1650E	C	58X. 1KF	
34217.	333. 7	2493N 1600E	C	78X. 1KF	
34218.	559. 9	2496N 1550E	C	72X. 1KF	
34219.	481. 9	2500N 1500E	C	78X. 1KF	
34220.	495. 5	2504N 1450E	C	72X. 1KF	
34221.	224. 8	2507N 1400E	C	62X. 1KF	
34222.	90. 5	2511N 1350E	C	44X. 1KF	
34223.	543. 0	2514N 1300E	C	9X. 3K	
34224.	22. 6	2517N 1251E	C	76X. 1KF	
34225.	220. 6	2521N 1201E	C	50X. 1KF	
34226.	141. 4	2524N 1151E	C	63X. 1KF	
34227.	248. 9	2600N 1150E	BRNCP	62X. 1KF	
34228.	33. 9	2600N 1200E	C	56X. 1KF	
34229.	414. 0	2600N 1250E	C	80X. 1KF	
34230.	265. 8	2600N 1300E	C	10X. 3K	
34231.	62. 2	2600N 1350E	C	10X. 3K	
34232.	164. 0	2600N 1400E	C	9X. 3K	
34233.	412. 9	2600N 1450E	C	11X. 3K	
34234.	322. 4	2600N 1500E	C	11X. 3K	
34235.	67. 9	2600N 1550E	C	78X. 1KF	
34236.	145. 9	2600N 1600E	C	70X. 1KF	
34237.	31. 1	2600N 1650E	C	40X. 1KF	
34238.	90. 5	2600N 1700E	C	50X. 1KF	
34239.	152. 7	2600N 1750E	C	50X. 1KF	
34240.	28. 3	2600N 1800E	C	78X. 1KF	
34241.	99. 1	2679N 1799E	C	40X. 1KF	
34242.	87. 4	2683N 1749E	C	58X. 1KF	
34243.	326. 3	2686N 1700E	C	48. 1KF	
34244.	238. 9	2689N 1650E	C	56. 1KF	
34245.	128. 2	2693N 1600E	C	70X. 1KF	
34246.	205. 4	2696N 1550E	C	80X. 1KF	
34247.	169. 0	2700N 1500E	C	74X. 1KF	
34248.	110. 7	2704N 1450E	C	80X. 1KF	
34249.	87. 4	2707N 1400E	C	60X. 1KF	
34250.	46. 6	2711N 1350E	C	54X. 1KF	

OCCEIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34251.	180. 6	2714N	1300E	C	75X. 1KF
34252.	169. 0	2717N	1251E	C	72X. 1KF
34253.	486. 0	2721N	1201E	C	60X. 1KF
34254.	35. 0	2800N	1200E	C	35X. 1KF
34255.	227. 3	2800N	1250E	.	65X. 1KF
34256.	122. 4	2800N	1300E	C	60X. 1KF
34257.	215. 6	2800N	1350E	C	74X. 1KF
34258.	69. 9	2800N	1400E	C	40X. 1KF
34259.	46. 6	2800N	1450E	C	80X. 1KF
34260.	180. 6	2800N	1500E	C	52X. 1KF
34261.	75. 8	2800N	1550E	C	82X. 1KF
34262.	40. 8	2800N	1600E	C	84X. 1KF
34263.	221. 4	2800N	1650E	C	82X. 1KF
34264.	303. 0	2800N	1700E	C	68X. 1KF
34265.	29. 1	2800N	1750E	C	60X. 1KF
34266.	40. 8	2800N	1800E	C	54X. 1KF
34267.	279. 7	2800N	1850E	C	10X. 3K
34268.	29. 1	3876N	1849E	C	80X. 1KF
34269.	75. 8	2879N	1799E	C	38X. 1KF
34270.	75. 8	2883N	1749E	C	11X. 3K
34271.	273. 9	2886N	1699E	C	76X. 1KF
34272.	93. 2	2889N	1650E	C	80X. 1KF
34273.	58. 3	2893N	1600E	C	80X. 1KF
34274.	204. 0	2896N	1550E	C	70X. 1KF
34275.	238. 9	2900N	1500E	C	50X. 1KF
34276.	308. 8	2904N	1450E	C	50X. 1KF
34277.	46. 6	2907N	1400E	C	60X. 1KF
34278.	93. 2	2911N	1350E	C	50X. 1KF
34279.	23. 3	2914N	1300E	C	60X. 1KF
34280.	110. 7	2917N	1251E	C	10X. 3K
34281.	138. 2	3000N	1250E	C	80X. 1KF
34282.	130. 7	3000N	1300E	C	71X. 1KF
34283.	42. 1	3000N	1350E	C	50X. 1KF
34284.	42. 1	3000N	1400E	C	52X. 1KF
34285.	66. 1	3000N	1450E	C	49X. 1KF
34286.	112. 7	3000N	1500E	C	56X. 1KF
34287.	84. 1	3000N	1550E	C	54X. 1KF
34288.	198. 3	3000N	1600E	C	58X. 1KF
34289.	126. 2	3000N	1650E	C	70X. 1KF
34290.	240. 4	3000N	1700E	C	58X. 1KF
34291.	402. 6	3000N	1750E	C	80X. 1KF
34292.	66. 1	3000N	1800E	C	68X. 1KF
34293.	72. 1	3000N	1850E	C	54X. 1KF
34294.	90. 1	3000N	1900E	C	11X. 3K
34295.	174. 3	3072N	1899E	C	12X. 3K
34296.	90. 1	3076N	1849E	C	10X. 3K
34297.	180. 3	3079N	1799E	C	10X. 3K
34298.	240. 4	3083N	1749E	C	. 9X. 3K
34299.	132. 2	3086N	1699E	C	58X. 1KF
34300.	192. 3	3089N	1650E	C	58X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34301.	84. 1	3093N	1600E	BKNCP	55X. 1KF NR
34302.	168. 3	3100N	1500E	C	60X. 1KF
34303.	96. 2	3104N	1450E	C	44X. 1KF
34304.	276. 4	3107N	1400E	C	80X. 1KF
34305.	156. 2	3107N	1400N	C	80X. 1KF
34306.	108. 2	3111N	1350E	C	64X. 1KF
34307.	133. 4	3114N	1300E	C	10X. 3K
34308.	69. 9	3200N	1050E	C	60X. 1KF
34309.	93. 2	3200N	1100E	C	76X. 1KF
34310.	198. 1	3200N	1150E	.	62X. 1KF
34311.	58. 3	3200N	1200E	C	80X. 1KF
34312.	183. 6	3200N	1250E	C	74X. 1KF
34313.	94. 4	3200N	1300E	C	48X. 1KF
34314.	151. 5	3200N	1350E	.	80X. 1KF
34315.	58. 3	3200N	1400E	.	60X. 1KF
34316.	87. 4	3200N	1450E	C	60X. 1KF
34317.	104. 9	3200N	1500E	C	58X. 1KF
34318.	122. 4	3200N	1550E	C	58X. 1KF
34319.	99. 1	3200N	1600E	C	60X. 1KF
34320.	250. 6	3200N	1650E	C	68X. 1KF
34321.	64. 1	3200N	1700E	C	60X. 1KF
34322.	308. 8	3200N	1750E	.	80X. 1KF
34323.	227. 3	3200N	1800E	C	80X. 1KF
34324.	163. 2	3200N	1850E	C	80X. 1KF
34325.	326. 3	3200N	1900E	C	76X. 1KF
34326.	294. 5	3269N	1949E	.	12X. 3K
34327.	246. 4	3272N	1899E	C	90X. 1KF
34328.	102. 2	3276N	1849E	C	90X. 1KF
34329.	189. 3	3279N	1799E	C	90X. 1KF
34330.	168. 3	3283N	1749E	FL00SE	10X. 3K
34331.	114. 2	3286N	1699E	C	78X. 1KF
34332.	174. 3	3289N	1650E	C	60X. 1KF
34333.	90. 1	3293N	1600E	C	60X. 1KF
34334.	228. 4	3296N	1550E	C	65X. 1KF
34335.	48. 1	3300N	1500E	C	50X. 1KF
34336.	30. 0	3304N	1450E	C	62X. 1KF
34337.	240. 4	3307N	1400E	C	70X. 1KF
34338.	132. 2	3311N	1350E	C	58X. 1KF
34339.	157. 7	3314N	1300E	C	80X. 1KF
34340.	126. 2	3317N	1251E	C	90X. 1KF
34341.	138. 2	3321N	1201E	C	10X. 3K
34342.	258. 4	3324N	1151E	.	11X. 3K
34343.	126. 2	3328N	1101E	C	65X. 1KF
34344.	126. 2	3331N	1051E	C	50X. 1KF
34345.	68. 2	3400N	1050E	C	
34346.	111. 7	3400N	1100E	C	58X. 1KF
34347.	80. 6	3400N	1150E	C	60X. 1KF
34348.	62. 0	3400N	1200E	C	90X. 1KF
34349.	117. 9	3400N	1250E	C	75X. 1KF
34350.	80. 6	3400N	1300E	C	80X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79
 CUP DETECTOR
 SERIAL READING
 NUMBER (T/SQ. MM.) FIELD NOTES AND DATA

34351.	167. 5	3400N 1350E	C	75X. 1KF
34352.	74. 4	3400N 1400E	C	68X. 1KF
34353.	86. 8	3400N 1450E	C	55X. 1KF
34354.	310. 2	3400N 1500E	C	62X. 1KF
34355.	55. 8	3400N 1550E	C	60X. 1KF
34356.	111. 7	3400N 1600E	C	60X. 1KF
34357.	80. 6	3400N 1650E	C	52X. 1KF
34358.	86. 8	3400N 1700E	C	75X. 1KF
34359.	62. 0	3400N 1750E	C	70X. 1KF
34360.	93. 0	3400N 1800E	C	80X. 1KF
34361.	105. 5	3400N 1850E	C	80X. 1KF
34362.	124. 1	3400N 1900E	C	90X. 1KF
34363.	167. 5	3400N 1950E	C	11X. 3K
34364.	99. 3	3400N 2000E	C	12X. 3K
34365.	111. 7	3400N 2050E	.	10X. 3K
34366.	64. 1	3462N 2049E	C	90X. 1KF
34367.	147. 4	3465N 1999E	C	75X. 1KF
34368.	102. 6	3469N 1949E	C	11X. 3K
34369.	230. 8	3472N 1899E	C	14X. 3K
34370.	128. 2	3476N 1849E	.	12X. 3K
34371.	102. 6	3479N 1799E	C	80X. 1KF
34372.	211. 5	3483N 1749E	C	80X. 1KF
34373.	192. 3	3486N 1699E	C	85X. 1KF
34374.	25. 6	3489N 1650E	C	60X. 1KF
34375.	44. 9	3493N 1600E	C	40X. 1KF
34376.	12. 8	3496N 1550E	C	45X. 1KF
34377.	70. 5	3500N 1500E	C	42X. 1KF
34378.	51. 3	3504N 1450E	C	60X. 1KF
34379.	83. 3	3507N 1400E	C	70X. 1KF
34380.	44. 9	3511N 1350E	C	80X. 1KF
34381.	32. 1	3514N 1300E	C	65X. 1KF
34382.	115. 4	3517N 1251E	C	11X. 3K
34383.	294. 9	3521N 1201E	.	11X. 3K
34384.	134. 6	3524N 1151E	C	80X. 1KF
34385.	89. 7	3528N 1101E	C	85X. 1KF
34386.	76. 9	3531N 1051E	C	60X. 1KF
34387.	106. 1	3600N 1050E	C	60X. 1KF
34388.	112. 7	3600N 1100E	C	52X. 1KF
34389.	119. 4	3600N 1150E	C	74X. 1KF
34390.	89. 5	3600N 1200E	C	44X. 1KF
34391.	39. 8	3600N 1250E	C	60X. 1KF
34392.	106. 1	3600N 1300E	C	10X. 3K
34393.	232. 1	3600N 1350E	C	72X. 1KF
34394.	26. 5	3600N 1400E	C	68X. 1KF
34395.	126. 0	3600N 1450E	C	60X. 1KF
34396.	86. 2	3600N 1500E	C	60X. 1KF
34397.	79. 6	3600N 1550E	C	55X. 1KF
34398.	103. 0	3600N 1600E	C	65X. 1KF
34399.	68. 7	3600N 1650E	C	70X. 1KF
34400.	13. 7	3600N 1700E	C	70X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34401.	121. 8	3600N	1750E	C	80X. 1KF
34402.	83. 3	3600N	1800E	C	90X. 1KF
34403.	102. 6	3600N	1850E	C	68X. 1KF
34404.	120. 2	3600N	1900E	C	85X. 1KF
34405.	173. 1	3600N	1950E	C	80X. 1KF
34406.	89. 7	3600N	2000E	C	11X. 3K
34407.	250. 0	3600N	2050E	C	12X. 3K
34408.	119. 4	3662N	2049E	C	66X. 1KF
34409.	79. 6	3665N	1999E	C	60X. 1KF
34410.	159. 1	3669N	1949E	C	42X. 1KF
34411.	112. 7	3672N	1899E	C	78X. 1KF
34412.	258. 6	3676N	1849E	C	10X. 3K
34413.	99. 5	3679N	1799E	C	10X. 3K
34414.	145. 9	3683N	1749E	C	11X. 3K
34415.	59. 7	3686N	1699E	C	88X. 1KF
34416.	106. 1	3689N	1650E	C	58X. 1KF
34417.	53. 0	3693N	1600E	C	58X. 1KF
34418.	238. 7	3696N	1550E	C	52X. 1KF
34419.	72. 9	3700N	1500E	C	52X. 1KF
34420.	218. 8	3800N	1500E	C	56X. 1KF
34421.	139. 3	3800N	1550E	C	50X. 1KF
34422.	59. 7	3800N	1600E	C	48X. 1KF
34423.	79. 6	3800N	1650E	C	50X. 1KF
34424.	696. 3	3800N	1700E	C	10X. 3K
34425.	238. 7	3800N	1750E	C	66X. 1KF
34426.	59. 7	3800N	1800E	C	62X. 1KF
34427.	225. 5	3800N	1850E	C	11X. 3K
34428.	132. 6	3800N	1900E	C	70X. 1KF
34429.	92. 8	3800N	1950E	C	50X. 1KF
34430.	114. 4	3800N	2000E	C	72X. 1KF
34431.	39. 8	3800N	2050E	C	10X. 3K
34432.	206. 0	3883N	2049E	C	72X. 1KF
34433.	27. 5	3886N	1999E	C	54X. 1KF
34434.	192. 3	3889N	1950E	C	44X. 1KF
34435.	68. 7	3893N	1900E	C	50X. 1KF
34436.	336. 5	3897N	1850E	C	50X. 1KF
34437.	137. 4	3900N	1800E	C	58X. 1KF
34438.	629. 9	4000N	1800E	C	80X. 1KF
34439.	391. 2	4000N	1850E	C	74X. 1KF
34440.	72. 9	4000N	1900E	C	60X. 1KF
34441.	92. 8	4000N	1940E	C	62X. 1KF
34442.	112. 7	4000N	2000E	C	68X. 1KF
34443.	72. 9	4000N	2050E	C	32X. 1KF
34444.	53. 0	4000N	2100E	C	74X. 1KF
34445.	106. 1	4093N	2100E	C	80X. 1KF
34446.	66. 3	4096N	2050E	C	54X. 1KF
34447.	39. 8	4100N	2000E	C	44X. 1KF
34448.	291. 8	4104N	1950E	.	42X. 1KF
34449.	198. 9	4107N	1900E	C	78X. 1KF
34450.	79. 6	4111N	1850E	C	76X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34701.	278. 5	4114N	1800E	C	78X. 1KF
34702.	46. 4	4200N	1800E	C	64X. 1KF
34703.	119. 4	4200N	1850E	C	68X. 1KF
34704.	285. 1	4200N	1900E	C	74X. 1KF
34705.	66. 3	4200N	1900E	C	74X. 1KF
34706.	318. 3	4200N	1950E	C	62X. 1KF
34707.	238. 7	4200N	2000E	C	50X. 1KF
34708.	119. 4	4200N	2050E	C	28X. 1KF
34709.	53. 0	4200N	2100E	C	36X. 1KF
34710.	225. 5	4200N	2150E	C	74X. 1KF
34711.	106. 1	4200N	2200E	C	72X. 1KF
34712.	126. 0	4286N	2200E	C	70X. 1KF
34713.	245. 3	4289N	2150E	C	78X. 1KF
34714.	159. 1	4293N	2100E	C	34X. 1KF
34715.	563. 6	4296N	2050E	C	58X. 1KF
34716.	444. 3	4300N	2000E	C	84X. 1KF
34717.	132. 6	4304N	1950E	C	78X. 1KF
34718.	99. 5	4307N	1900E	C	60X. 1KF
34719.	152. 5	4311N	1850E	C	74X. 1KF
34720.	265. 2	4314N	1800E	C	74X. 1KF
34721.	362. 1	4314N	1800E	C	74X. 1KF
34722.	199. 2	4600N	2000E	C	85X. 1KF
34723.	439. 5	4600N	2050E	C	92X. 1KF
34724.	178. 6	4600N	2100E	C	80X. 1KF
34725.	211. 2	4600N	2150E	C	70X. 1KF
34726.	432. 7	4600N	2200E	C	60X. 1KF
34727.	654. 2	4600N	2250E	C	64X. 1KF
34728.	89. 3	4600N	2300E	C	72X. 1KF
34729.	82. 4	4600N	2350E	C	80X. 1KF
34730.	103. 0	4600N	2400E	C	9X. 3K
34731.	309. 1	4800N	2500E	C	84X. 1KF
34732.	158. 0	4800N	2450E	C	78X. 1KF
34733.	219. 8	4800N	2400E	C	80X. 1KF
34734.	103. 0	4800N	2350E	C	40X. 1KF
34735.	295. 3	4800N	2300E	C	44X. 1KF
34736.	240. 4	4800N	2250E	C	50X. 1KF
34737.	48. 1	4800N	2200E	C	52X. 1KF
34738.	314. 2	4800N	2150E	C	44X. 1KF
34739.	398. 3	4800N	2100E	C	79X. 1KF
34740.	274. 7	4800N	2050E	C	70X. 1KF
34741.	233. 5	4800N	2000E	C	85X. 1KF
34742.	158. 0	4800N	1950E	C	75X. 1KF
34743.	1270. 6	4800N	1900E	C	14X. 3K
34744.	309. 1	4800N	1850E	C	58X. 1KF
34745.	96. 2	4800N	1800E	C	80X. 1KF
34746.	592. 4	4900N	1800E	C	64X. 1KF
34747.	576. 9	4900N	1850E	C	60X. 1KF
34748.	61. 8	4900N	1900E	C	58X. 1KF
34749.	460. 1	4900N	1950E	C	65X. 1KF
34750.	549. 4	4900N	2000E	C	64X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34751.	34. 3	4900N 2050E	C	60X. 1KF	
34752.	242. 1	4900N 2100E	C	41X. 1KF	
34753.	226. 6	4900N 2150E	C	40X. 1KF	
34754.	54. 9	4900N 2200E	C	36X. 1KF	
34755.	68. 7	4900N 2250E	C	40X. 1KF	
34756.	109. 9	4900N 2300E	.	46X. 1KF	
34757.	185. 4	4900N 2350E	C	40X. 1KF	
34758.	219. 8	4900N 2400E	C	60X. 1KF	
34759.	41. 2	4900N 2450E	C	62X. 1KF	
34760.	68. 7	4900N 2500E	C	78X. 1KF	
34761.	109. 9	5000N 2550E	C	77X. 1KF	
34762.	61. 8	5000N 2500E	C	74X. 1KF	
34763.	137. 4	5000N 2450E	C	74X. 1KF	
34764.	82. 4	5000N 2400E	C	40X. 1KF	
34765.	261. 0	5000N 2350E	C	42X. 1KF	
34766.	89. 3	5000N 2300E	C	32X. 1KF	
34767.	103. 0	5000N 2250E	C	38X. 1KF	
34768.	139. 1	5000N 2200E	C	38X. 1KF	
34769.	261. 0	5000N 2150E	C	60X. 1KF	
34770.	370. 9	5000N 2100E	C	10X. 3K	
34771.	240. 4	5000N 2050E	C	58X. 1KF	
34772.	68. 7	5000N 2000E	C	58X. 1KF	
34773.	501. 4	5000N 1950E	C	58X. 1KF	
34774.	123. 6	5000N 1900E	C	66X. 1KF	
34775.	137. 4	5000N 1850E	C	88X. 1KF	
34776.	219. 8	5000N 1800E	C	76X. 1KF	
34777.	226. 6	5100N 1800E	C	78X. 1KF	
34778.	226. 6	5100N 1850E	C	76X. 1KF	
34779.	61. 8	5100N 1900E	C	73X. 1KF	
34780.	97. 9	5100N 1950E	C	10X. 3K	
34781.	216. 3	5100N 2000E	C	10X. 3K	
34782.	27. 5	5100N 2050E	C	76X. 1KF	
34783.	92. 7	5100N 2100E	C	90X. 1KF	
34784.	97. 9	5100N 2150E	C	56X. 1KF	
34785.	130. 5	5100N 2200E	C	10X. 3K	
34786.	103. 0	5100N 2250E	C	71X. 1KF	
34787.	164. 8	5100N 2300E	C	11X. 3K	
34788.	144. 2	5100N 2350E	C	80X. 1KF	
34789.	159. 7	5100N 2400E	C	86X. 1KF	
34790.	109. 9	5100N 2450E	C	90X. 1KF	
34791.	212. 9	5100N 2500E	C	90X. 1KF	
34792.	123. 6	5100N 2550E	C	86X. 1KF	
34793.	82. 4	5200N 2550E	C	92X. 1KF	
34794.	309. 1	5200N 2500E	C	54X. 1KF	
34795.	329. 7	5200N 2450E	C	13X. 3K	
34796.	130. 5	5200N 2400E	C	19X. 3K	
34797.	116. 8	5200N 2350E	C	10X. 3K	
34798.	144. 2	5200N 2300E	C	78X. 1KF	
34799.	329. 7	5200N 2250E	C	65X. 1KF	
34800.	113. 3	5200N 2200E	C	10X. 3K	

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34801.	89. 3	5200N	2150E	C	9X. 3K
34802.	171. 7	5200N	2100E	C	10X. 3K
34803.	247. 2	5200N	2050E	C	9X. 3K
34804.	322. 8	5200N	2000E	C	9X. 3K
34805.	164. 8	5200N	1950E	C	90X. 1KF
34806.	54. 9	5200N	1900E	C	83X. 1KF
34807.	68. 7	5200N	1850E	C	70X. 1KF
34808.	137. 4	5200N	1800E	C	10X. 3K
34809.	164. 8	5300N	2000E	C	60X. 1KF
34810.	27. 5	5300N	2050E	C	65X. 1KF
34811.	199. 2	5300N	2100E	C	70X. 1KF
34812.	82. 4	5300N	2150E	C	79X. 1KF
34813.	123. 6	5300N	2200E	C	76X. 1KF
34814.	96. 2	5300N	2250E	C	76X. 1KF
34815.	48. 1	5300N	2300E	C	74X. 1KF
34816.	144. 2	5300N	2350E	C	81X. 1KF
34817.	343. 4	5300N	2400E	C	82X. 1KF
34818.	226. 6	5300N	2450E	C	86X. 1KF
34819.	61. 8	5300N	2500E	C	84X. 1KF
34820.	309. 1	5300N	2550E	C	54X. 1KF
34821.	391. 5	5400N	2550E	C	73X. 1KF
34822.	405. 2	5400N	2500E	C	10X. 3K
34823.	48. 1	5400N	2450E	C	64X. 1KF
34824.	479. 0	5400N	2400E	C	80X. 1KF
34825.	384. 6	5400N	2350E	C	54X. 1KF
34826.	425. 8	5400N	2300E	C	82X. 1KF
34827.	137. 4	5400N	2250E	C	79X. 1KF
34828.	247. 2	5400N	2200E	C	80X. 1KF
34829.	508. 2	5400N	2150E	C	76X. 1KF
34830.	109. 9	5400N	2100E	C	54X. 1KF
34831.	82. 4	5400N	2050E	C	80X. 1KF
34832.	75. 5	5400N	2000E	C	54X. 1KF
34833.	116. 8	5500N	2000E	C	78X. 1KF
34834.	68. 7	5500N	2050E	C	80X. 1KF
34835.	164. 8	5500N	2100E	C	84X. 1KF
34836.	405. 2	5500N	2150E	C	84X. 1KF
34837.	576. 9	5500N	2200E	C	10X. 3K
34838.	75. 5	5500N	2250E	C	78X. 1KF
34839.	185. 4	5500N	2300E	C	51X. 1KF
34840.	20. 6	5500N	2350E	C	78X. 1KF
34841.	357. 1	5500N	2400E	C	78X. 1KF
34842.	61. 8	5500N	2450E	C	69X. 1KF
34843.	96. 2	5500N	2500E	C	70X. 1KF
34844.	103. 0	5500N	2550E	C	50X. 1KF
34845.	185. 4	5500N	2600E	C	82X. 1KF
34846.	329. 7	5500N	2650E	C	78X. 1KF
34847.	274. 7	5500N	2700E	C	48X. 1KF
34848.	185. 4	5500N	2750E	C	76X. 1KF
34849.	261. 0	5500N	2800E	C	65X. 1KF
34850.	78. 3	5600N	2900E	C	80X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34851.	213. 7	5600N	2850E	C	10X. 3K
34852.	235. 0	5600N	2800E	C	89X. 1KF
34853.	78. 3	5600N	2750E	C	90X. 1KF
34854.	213. 7	5600N	2700E	C	9X. 3K
34855.	156. 7	5600N	2650E	C	12X. 3K
34856.	220. 8	5600N	2600E	C	11X. 3K
34857.	80. 1	5600E	2550E	C	80X. 1KF
34858.	142. 4	5600N	2500E	C	88X. 1KF
34859.	156. 7	5600N	2450E	C	81X. 1KF
34860.	78. 3	5600N	2400E	C	88X. 1KF
34861.	49. 9	5600N	2350E	C	10X. 3K
34862.	135. 3	5600N	2300E	C	11X. 3K
34863.	42. 7	5600N	2250E	C	10X. 3K
34864.	373. 9	5600N	2200E	C	12X. 3K
34865.	64. 1	5600N	2150E	C	60X. 1KF
34866.	106. 8	5600N	2100E		11X. 3K
34867.	78. 3	5600N	2050E	C	12X. 3K
34868.	135. 3	5600N	2000E	C	9X. 3K
34869.	148. 6	4700N	1800E	C	60X. 1KF
34870.	478. 6	4700N	1850E	C	9X. 3K
34871.	87. 4	4700N	1900E	C	78X. 1KF
34872.	137. 7	4700N	1950E	C	60X. 1KF
34873.	346. 1	4700N	2000E	C	66X. 1KF
34874.	222. 9	4950N	1900E	C	74X. 1KF
34875.	166. 1	4950N	1950E	C	54X. 1KF
34876.	340. 9	4950N	2000E	C	72X. 1KF
34877.	375. 9	4950N	2050E	C	9X. 3K
34878.	334. 3	4950N	2100E	C	62X. 1KF
34879.	122. 4	4950N	2150E	C	40X. 1KF
34880.	26. 2	4950N	2200E	C	38X. 1KF
34881.	96. 2	4950N	2250E	C	46X. 1KF
34882.	297. 2	4950N	2300E		42X. 1KF
34883.	131. 1	5050N	2300E	C	50X. 1KF
34884.	78. 7	5050N	2250E	C	44X. 1KF
34885.	157. 3	5050N	2200E	C	84X. 1KF
34886.	139. 9	5050N	2150E	C	60X. 1KF
34887.	358. 4	5050N	2100E	C	10X. 3K
34888.	113. 6	5050N	2050E	C	66X. 1KF
34889.	113. 6	5050N	2000E	C	54X. 1KF
34890.	157. 3	5050N	1950E	C	62X. 1KF
34891.	244. 7	5050N	1900E	C	74X. 1KF
34892.	192. 3	5150N	2250E	C	70X. 1KF
34893.	26. 2	5150N	2300E	C	66X. 1KF
34894.	122. 4	5150N	2350E	C	10X. 3K
34895.	174. 8	5150N	2400E	C	11X. 3K
34896.	465. 5	5150N	2450E	C	10X. 3K
34897.	218. 5	5150N	2500E	C	80X. 1KF
34898.	354. 0	5250N	2540E	C	90X. 1KF
34899.	183. 6	5250N	2400E	C	10X. 3K
34900.	166. 1	5250N	2350E	C	88X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

12. 8	34376.	3496N	1550E	C	45X. 1KF
13. 7	34400.	3600N	1700E	C	70X. 1KF
20. 6	34840.	5500N	2350E	C	78X. 1KF
22. 6	34210.	2400N	1600E	.	20X. 1KF
22. 6	34224.	2517N	1251E	C	76X. 1KF
23. 3	34279.	2914N	1300E	C	60X. 1KF
25. 6	34374.	3489N	1650E	C	60X. 1KF
26. 2	34893.	5150N	2300E	C	66X. 1KF
26. 2	34880.	4950N	2200E	C	38X. 1KF
26. 5	34394.	3600N	1400E	C	68X. 1KF
27. 5	34433.	3886N	1999E	C	54X. 1KF
27. 5	34782.	5100N	2050E	C	76X. 1KF
27. 5	34810.	5300N	2050E	C	65X. 1KF
28. 3	34240.	2600N	1800E	C	78X. 1KF
29. 1	34265.	2800N	1750E	C	60X. 1KF
29. 1	34268.	3876N	1849E	C	80X. 1KF
30. 0	34336.	3304N	1450E	C	62X. 1KF
31. 1	34237.	2600N	1650E	C	40X. 1KF
32. 1	34381.	3514N	1300E	C	65X. 1KF
33. 9	34211.	2400N	1650E	C	42X. 1KF
33. 9	34228.	2600N	1200E	C	56X. 1KF
34. 3	34751.	4900N	2050E	C	60X. 1KF
35. 0	34254.	2800N	1200E	C	35X. 1KF
39. 8	34431.	3800N	2050E	C	10X. 3K
39. 8	34447.	4100N	2000E	C	44X. 1KF
39. 8	34391.	3600N	1250E	C	60X. 1KF
40. 8	34266.	2800N	1800E	C	54X. 1KF
40. 8	34262.	2800N	1600E	C	84X. 1KF
41. 2	34759.	4900N	2450E	C	62X. 1KF
42. 1	34283.	3000N	1350E	C	50X. 1KF
42. 1	34284.	3000N	1400E	C	52X. 1KF
42. 7	34863.	5600N	2250E	C	10X. 3K
44. 9	34375.	3493N	1600E	C	40X. 1KF
44. 9	34380.	3511N	1350E	C	80X. 1KF
46. 4	34702.	4200N	1800E	C	64X. 1KF
46. 6	34277.	2907N	1400E	C	60X. 1KF
46. 6	34259.	2800N	1450E	C	80X. 1KF
46. 6	34250.	2711N	1350E	C	54X. 1KF
48. 1	34823.	5400N	2450E	C	64X. 1KF
48. 1	34815.	5300N	2300E	C	74X. 1KF
48. 1	34335.	3300N	1500E	C	50X. 1KF
48. 1	34737.	4800N	2200E	C	52X. 1KF
49. 9	34861.	5600N	2350E	C	10X. 3K
51. 3	34378.	3504N	1450E	C	60X. 1KF
53. 0	34417.	3693N	1600E	C	58X. 1KF
53. 0	34444.	4000N	2100E	C	74X. 1KF
53. 0	34709.	4200N	2100E	C	36X. 1KF
54. 9	34754.	4900N	2200E	C	36X. 1KF
54. 9	34806.	5200N	1900E	C	83X. 1KF
55. 8	34355.	3400N	1550E	C	60X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

58.3	34273.	2893N 1600E	C	80X. 1KF
58.3	34315.	3200N 1400E	.	60X. 1KF
58.3	34311.	3200N 1200E	C	80X. 1KF
59.7	34426.	3800N 1800E	C	62X. 1KF
59.7	34422.	3800N 1600E	C	48X. 1KF
59.7	34415.	3686N 1699E	C	88X. 1KF
61.8	34748.	4900N 1900E	C	58X. 1KF
61.8	34762.	5000N 2500E	C	74X. 1KF
61.8	34819.	5300N 2500E	C	84X. 1KF
61.8	34842.	5500N 2450E	C	69X. 1KF
61.8	34779.	5100N 1900E	C	73X. 1KF
62.0	34348.	3400N 1200E	C	90X. 1KF
62.0	34359.	3400N 1750E	C	70X. 1KF
62.2	34231.	2600N 1350E	C	10X. 3K
64.1	34366.	3462N 2049E	C	90X. 1KF
64.1	34321.	3200N 1700E	C	60X. 1KF
64.1	34865.	5600N 2150E	C	60X. 1KF
66.1	34292.	3000N 1800E	C	68X. 1KF
66.1	34285.	3000N 1450E	C	49X. 1KF
66.3	34446.	4096N 2050E	C	54X. 1KF
66.3	34705.	4200N 1900E	C	74X. 1KF
67.9	34235.	2600N 1550E	C	78X. 1KF
67.9	34207.	2400N 1450E	C	40X. 1KF
68.2	34345.	3400N 1050E	C	
68.7	34772.	5000N 2000E	C	58X. 1KF
68.7	34760.	4900N 2500E	C	78X. 1KF
68.7	34834.	5500N 2050E	C	80X. 1KF
68.7	34755.	4900N 2250E	C	40X. 1KF
68.7	34807.	5200N 1850E	C	70X. 1KF
68.7	34435.	3893N 1900E	C	50X. 1KF
68.7	34399.	3600N 1650E	C	70X. 1KF
69.9	34258.	2800N 1400E	C	40X. 1KF
69.9	34308.	3200N 1050E	C	60X. 1KF
70.5	34377.	3500N 1500E	C	42X. 1KF
72.1	34293.	3000N 1850E	C	54X. 1KF
72.9	34440.	4000N 1900E	C	60X. 1KF
72.9	34443.	4000N 2050E	C	32X. 1KF
72.9	34419.	3700N 1500E	C	52X. 1KF
73.5	34206.	2400N 1400E	DISTB	40X. 1KF
74.4	34352.	3400N 1400E	C	68X. 1KF
75.5	34832.	5400N 2000E	C	54X. 1KF
75.5	34838.	5500N 2250E	C	78X. 1KF
75.8	34270.	2883N 1749E	C	11X. 3K
75.8	34261.	2800N 1550E	C	82X. 1KF
75.8	34269.	2879N 1799E	C	38X. 1KF
76.9	34386.	3531N 1051E	C	60X. 1KF
78.3	34860.	5600N 2400E	C	88X. 1KF
78.3	34850.	5600N 2900E	C	80X. 1KF
78.3	34867.	5600N 2050E	C	12X. 3K
78.3	34853.	5600N 2750E	C	90X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

78.7	34884.	5050N 2250E	C	44X. 1KF	
79.6	34450.	4111N 1850E	C	76X. 1KF	
79.6	34409.	3665N 1999E	C	60X. 1KF	
79.6	34397.	3600N 1550E	C	55X. 1KF	
79.6	34423.	3800N 1650E	C	50X. 1KF	
80.1	34857.	5600E 2550E	C	80X. 1KF	
80.6	34350.	3400N 1300E	C	80X. 1KF	
80.6	34357.	3400N 1650E	C	52X. 1KF	
80.6	34347.	3400N 1150E	C	60X. 1KF	
82.4	34812.	5300N 2150E	C	79X. 1KF	
82.4	34764.	5000N 2400E	C	40X. 1KF	
82.4	34831.	5400N 2050E	C	80X. 1KF	
82.4	34729.	4600N 2350E	C	80X. 1KF	
82.4	34793.	5200N 2550E	C	92X. 1KF	
83.3	34402.	3600N 1800E	C	90X. 1KF	
83.3	34379.	3507N 1400E	C	70X. 1KF	
84.1	34301.	3093N 1600E	BKNCP	55X. 1KF	NR
84.1	34287.	3000N 1550E	C	54X. 1KF	
86.2	34396.	3600N 1500E	C	60X. 1KF	
86.8	34358.	3400N 1700E	C	75X. 1KF	
86.8	34353.	3400N 1450E	C	55X. 1KF	
87.4	34316.	3200N 1450E	C	60X. 1KF	
87.4	34242.	2683N 1749E	C	58X. 1KF	
87.4	34249.	2707N 1400E	C	60X. 1KF	
87.4	34871.	4700N 1900E	C	78X. 1KF	
89.3	34766.	5000N 2300E	C	32X. 1KF	
89.3	34728.	4600N 2300E	C	72X. 1KF	
89.3	34801.	5200N 2150E	C	9X. 3K	
89.5	34390.	3600N 1200E	C	44X. 1KF	
89.7	34406.	3600N 2000E	C	11X. 3K	
89.7	34385.	3528N 1101E	C	85X. 1KF	
90.1	34296.	3076N 1849E	C	10X. 3K	
90.1	34294.	3000N 1900E	C	11X. 3K	
90.1	34333.	3293N 1600E	C	60X. 1KF	
90.5	34238.	2600N 1700E	C	50X. 1KF	
90.5	34222.	2511N 1350E	C	44X. 1KF	
92.7	34783.	5100N 2100E	C	90X. 1KF	
92.8	34441.	4000N 1940E	C	62X. 1KF	
92.8	34429.	3800N 1950E	C	50X. 1KF	
93.0	34360.	3400N 1800E	C	80X. 1KF	
93.2	34272.	2889N 1650E	C	80X. 1KF	
93.2	34278.	2911N 1350E	C	50X. 1KF	
93.2	34309.	3200N 1100E	C	76X. 1KF	
94.4	34313.	3200N 1300E	C	48X. 1KF	
96.2	34209.	2400N 1550E	C	24X. 1KF	
96.2	34201.	2400N 1150E	C	75X. 1KF	
96.2	34814.	5300N 2250E	C	76X. 1KF	
96.2	34745.	4800N 1800E	C	80X. 1KF	
96.2	34303.	3104N 1450E	C	44X. 1KF	
96.2	34881.	4950N 2250E	C	46X. 1KF	

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

96.2	34843.	5500N 2500E	C	70X. 1KF
97.9	34780.	5100N 1950E	C	10X. 3K
97.9	34784.	5100N 2150E	C	56X. 1KF
99.1	34319.	3200N 1600E	C	60X. 1KF
99.1	34241.	2679N 1799E	C	40X. 1KF
99.3	34364.	3400N 2000E	C	12X. 3K
99.5	34718.	4307N 1900E	C	60X. 1KF
99.5	34413.	3679N 1799E	C	10X. 3K
102.2	34328.	3276N 1849E	C	90X. 1KF
102.6	34368.	3469N 1949E	C	11X. 3K
102.6	34403.	3600N 1850E	C	68X. 1KF
102.6	34371.	3479N 1799E	C	80X. 1KF
103.0	34734.	4800N 2350E	C	40X. 1KF
103.0	34786.	5100N 2250E	C	71X. 1KF
103.0	34730.	4600N 2400E	C	9X. 3K
103.0	34844.	5500N 2550E	C	50X. 1KF
103.0	34398.	3600N 1600E	C	65X. 1KF
103.0	34767.	5000N 2250E	C	38X. 1KF
104.9	34317.	3200N 1500E	C	58X. 1KF
105.5	34361.	3400N 1850E	C	80X. 1KF
106.1	34392.	3600N 1300E	C	10X. 3K
106.1	34416.	3689N 1650E	C	58X. 1KF
106.1	34387.	3600N 1050E	C	60X. 1KF
106.1	34445.	4093N 2100E	C	80X. 1KF
106.1	34711.	4200N 2200E	C	72X. 1KF
106.8	34866.	5600N 2100E	.	11X. 3K
108.2	34306.	3111N 1350E	C	64X. 1KF
109.9	34830.	5400N 2100E	C	54X. 1KF
109.9	34756.	4900N 2300E	.	46X. 1KF
109.9	34790.	5100N 2450E	C	90X. 1KF
109.9	34761.	5000N 2550E	C	77X. 1KF
110.7	34280.	2917N 1251E	C	10X. 3K
110.7	34248.	2704N 1450E	C	80X. 1KF
111.7	34346.	3400N 1100E	C	58X. 1KF
111.7	34356.	3400N 1600E	C	60X. 1KF
111.7	34365.	3400N 2050E	.	10X. 3K
112.7	34286.	3000N 1500E	C	56X. 1KF
112.7	34442.	4000N 2000E	C	68X. 1KF
112.7	34411.	3672N 1899E	C	78X. 1KF
112.7	34388.	3600N 1100E	C	52X. 1KF
113.3	34800.	5200N 2200E	C	10X. 3K
113.6	34889.	5050N 2000E	C	54X. 1KF
113.6	34888.	5050N 2050E	C	66X. 1KF
114.2	34331.	3286N 1699E	C	78X. 1KF
114.4	34430.	3800N 2000E	C	72X. 1KF
115.4	34382.	3517N 1251E	C	11X. 3K
116.8	34797.	5200N 2350E	C	10X. 3K
116.8	34833.	5500N 2000E	C	78X. 1KF
117.9	34349.	3400N 1250E	C	75X. 1KF
118.8	34213.	2400N 1750E	C	12X. 3K

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/50. MM.) NUMBER FIELD NOTES AND DATA

119. 4	34408.	3662N 2049E	C	66X. 1KF
119. 4	34708.	4200N 2050E	C	28X. 1KF
119. 4	34703.	4200N 1850E	C	68X. 1KF
119. 4	34389.	3600N 1150E	C	74X. 1KF
120. 2	34404.	3600N 1900E	C	85X. 1KF
121. 8	34401.	3600N 1750E	C	80X. 1KF
122. 4	34256.	2800N 1300E	C	60X. 1KF
122. 4	34318.	3200N 1550E	C	58X. 1KF
122. 4	34879.	4950N 2150E	C	40X. 1KF
122. 4	34894.	5150N 2350E	C	10X. 3K
123. 6	34813.	5300N 2200E	C	76X. 1KF
123. 6	34774.	5000N 1900E	C	66X. 1KF
123. 6	34792.	5100N 2550E	C	86X. 1KF
124. 1	34362.	3400N 1900E	C	90X. 1KF
126. 0	34395.	3600N 1450E	C	60X. 1KF
126. 0	34712.	4286N 2200E	C	70X. 1KF
126. 2	34343.	3328N 1101E	C	65X. 1KF
126. 2	34289.	3000N 1650E	C	70X. 1KF
126. 2	34340.	3317N 1251E	C	90X. 1KF
126. 2	34344.	3331N 1051E	C	50X. 1KF
128. 2	34245.	2693N 1600E	C	70X. 1KF
128. 2	34370.	3476N 1849E	.	12X. 3K
130. 1	34212.	2400N 1700E	C	64X. 1KF
130. 5	34785.	5100N 2200E	C	10X. 3K
130. 5	34796.	5200N 2400E	C	19X. 3K
130. 7	34282.	3000N 1300E	C	71X. 1KF
131. 1	34883.	5050N 2300E	C	50X. 1KF
132. 2	34299.	3086N 1699E	C	58X. 1KF
132. 2	34338.	3311N 1350E	C	58X. 1KF
132. 6	34717.	4304N 1950E	C	78X. 1KF
132. 6	34428.	3800N 1900E	C	70X. 1KF
133. 4	34307.	3114N 1300E	C	10X. 3K
134. 6	34384.	3524N 1151E	C	80X. 1KF
135. 3	34862.	5600N 2300E	C	11X. 3K
135. 3	34868.	5600N 2000E	C	9X. 3K
137. 4	34763.	5000N 2450E	C	74X. 1KF
137. 4	34827.	5400N 2250E	C	79X. 1KF
137. 4	34437.	3900N 1800E	C	58X. 1KF
137. 4	34775.	5000N 1850E	C	88X. 1KF
137. 4	34808.	5200N 1800E	C	10X. 3K
137. 7	34872.	4700N 1950E	C	60X. 1KF
138. 2	34281.	3000N 1250E	C	80X. 1KF
138. 2	34341.	3321N 1201E	C	10X. 3K
139. 1	34768.	5000N 2200E	C	38X. 1KF
139. 3	34421.	3800N 1550E	C	50X. 1KF
139. 9	34886.	5050N 2150E	C	60X. 1KF
141. 4	34226.	2524N 1151E	C	63X. 1KF
142. 4	34858.	5600N 2500E	C	88X. 1KF
144. 2	34798.	5200N 2300E	C	78X. 1KF
144. 2	34788.	5100N 2350E	C	80X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

144.2	34816.	5300N 2350E	C	81X. 1KF
145.9	34414.	3683N 1749E	C	11X. 3K
145.9	34236.	2600N 1600E	C	70X. 1KF
147.4	34367.	3465N 1999E	C	75X. 1KF
148.6	34869.	4700N 1800E	C	60X. 1KF
151.5	34314.	3200N 1350E	.	80X. 1KF
152.5	34719.	4311N 1850E	C	74X. 1KF
152.7	34215.	2486N 1699E	C	56X. 1KF
152.7	34239.	2600N 1750E	C	50X. 1KF
156.2	34305.	3107N 1400N	C	80X. 1KF
156.7	34859.	5600N 2450E	C	81X. 1KF
156.7	34855.	5600N 2650E	C	12X. 3K
157.3	34885.	5050N 2200E	C	84X. 1KF
157.3	34890.	5050N 1950E	C	62X. 1KF
157.7	34339.	3314N 1300E	C	80X. 1KF
158.0	34742.	4800N 1950E	C	75X. 1KF
158.0	34732.	4800N 2450E	C	78X. 1KF
159.1	34714.	4293N 2100E	C	34X. 1KF
159.1	34410.	3669N 1949E	C	42X. 1KF
159.7	34789.	5100N 2400E	C	86X. 1KF
163.2	34324.	3200N 1850E	C	80X. 1KF
164.0	34232.	2600N 1400E	C	9X. 3K
164.8	34805.	5200N 1950E	C	90X. 1KF
164.8	34809.	5300N 2000E	C	60X. 1KF
164.8	34835.	5500N 2100E	C	84X. 1KF
164.8	34787.	5100N 2300E	C	11X. 3K
166.1	34875.	4950N 1950E	C	54X. 1KF
166.1	34900.	5250N 2350E	C	88X. 1KF
167.5	34363.	3400N 1950E	C	11X. 3K
167.5	34351.	3400N 1350E	C	75X. 1KF
168.3	34330.	3283N 1749E	FLOOSE	10X. 3K
168.3	34302.	3100N 1500E	C	60X. 1KF
169.0	34247.	2700N 1500E	C	74X. 1KF
169.0	34252.	2717N 1251E	C	72X. 1KF
171.7	34802.	5200N 2100E	C	10X. 3K
173.1	34405.	3600N 1950E	C	80X. 1KF
174.3	34295.	3072N 1899E	C	12X. 3K
174.3	34332.	3289N 1650E	C	60X. 1KF
174.8	34895.	5150N 2400E	C	11X. 3K
178.6	34724.	4600N 2100E	C	80X. 1KF
180.3	34297.	3079N 1799E	C	10X. 3K
180.6	34251.	2714N 1300E	C	75X. 1KF
180.6	34260.	2800N 1500E	C	52X. 1KF
183.6	34899.	5250N 2400E	C	10X. 3K
183.6	34312.	3200N 1250E	C	74X. 1KF
185.4	34845.	5500N 2600E	C	82X. 1KF
185.4	34757.	4900N 2350E	C	40X. 1KF
185.4	34848.	5500N 2750E	C	76X. 1KF
185.4	34839.	5500N 2300E	C	51X. 1KF
189.3	34329.	3279N 1799E	C	90X. 1KF

OCCIDENTAL DETECTOR READING (T/SQ. MM.)	WATERHOUSE II CUP SERIAL NUMBER	8-08-79 FIELD NOTES AND DATA
--	--	---------------------------------

192.3	34300.	3089N 1650E	C	58X. 1KF
192.3	34892.	5150N 2250E	C	70X. 1KF
192.3	34373.	3486N 1699E	C	85X. 1KF
192.3	34434.	3889N 1950E	C	44X. 1KF
198.1	34310.	3200N 1150E	.	62X. 1KF
198.3	34288.	3000N 1600E	C	58X. 1KF
198.9	34449.	4107N 1900E	C	78X. 1KF
199.2	34811.	5300N 2100E	C	70X. 1KF
199.2	34722.	4600N 2000E	C	85X. 1KF
203.6	34216.	2489N 1650E	C	58X. 1KF
204.0	34274.	2896N 1550E	C	70X. 1KF
205.4	34246.	2696N 1550E	C	80X. 1KF
206.0	34432.	3883N 2049E	C	72X. 1KF
209.3	34208.	2400N 1500E	C	80X. 1KF
211.2	34725.	4600N 2150E	C	70X. 1KF
211.5	34372.	3483N 1749E	C	80X. 1KF
212.9	34791.	5100N 2500E	C	90X. 1KF
213.7	34851.	5600N 2850E	C	10X. 3K
213.7	34854.	5600N 2700E	C	9X. 3K
215.6	34257.	2800N 1350E	C	74X. 1KF
216.3	34781.	5100N 2000E	C	10X. 3K
218.5	34897.	5150N 2500E	C	80X. 1KF
218.8	34420.	3800N 1500E	C	56X. 1KF
219.8	34733.	4800N 2400E	C	80X. 1KF
219.8	34776.	5000N 1800E	C	76X. 1KF
219.8	34758.	4900N 2400E	C	60X. 1KF
220.6	34225.	2521N 1201E	C	50X. 1KF
220.8	34856.	5600N 2600E	C	11X. 3K
221.4	34263.	2800N 1650E	C	82X. 1KF
222.9	34874.	4950N 1900E	C	74X. 1KF
224.8	34221.	2507N 1400E	C	62X. 1KF
225.5	34427.	3800N 1850E	C	11X. 3K
225.5	34710.	4200N 2150E	C	74X. 1KF
226.6	34777.	5100N 1800E	C	78X. 1KF
226.6	34753.	4900N 2150E	C	40X. 1KF
226.6	34818.	5300N 2450E	C	86X. 1KF
226.6	34778.	5100N 1850E	C	76X. 1KF
227.3	34323.	3200N 1800E	C	80X. 1KF
227.3	34255.	2800N 1250E	.	65X. 1KF
228.4	34334.	3296N 1550E	C	65X. 1KF
230.8	34369.	3472N 1899E	C	14X. 3K
232.1	34393.	3600N 1350E	C	72X. 1KF
233.5	34741.	4800N 2000E	C	85X. 1KF
235.0	34852.	5600N 2800E	C	89X. 1KF
238.7	34425.	3800N 1750E	C	66X. 1KF
238.7	34418.	3696N 1550E	C	52X. 1KF
238.7	34707.	4200N 2000E	.	50X. 1KF
238.9	34244.	2689N 1650E	C	56. . 1KF
238.9	34275.	2900N 1500E	C	50X. 1KF
240.4	34298.	3083N 1749E	C	. 9X. 3K

OCCIDENTAL	WATERHOUSE II	8-08-79
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

240. 4	34337.	3307N 1400E	C	70X. 1KF
240. 4	34290.	3000N 1700E	C	58X. 1KF
240. 4	34771.	5000N 2050E	C	58X. 1KF
240. 4	34736.	4800N 2250E	.	50X. 1KF
242. 1	34752.	4900N 2100E	C	41X. 1KF
244. 7	34891.	5050N 1900E	C	74X. 1KF
245. 3	34713.	4289N 2150E	C	78X. 1KF
246. 4	34327.	3272N 1899E	C	90X. 1KF
247. 2	34828.	5400N 2200E	C	80X. 1KF
247. 2	34803.	5200N 2050E	C	9X. 3K
248. 9	34227.	2600N 1150E	BRNCP	62X. 1KF
250. 0	34407.	3600N 2050E	C	12X. 3K
250. 6	34320.	3200N 1650E	C	68X. 1KF
258. 4	34342.	3324N 1151E	.	11X. 3K
258. 6	34412.	3676N 1849E	C	10X. 3K
261. 0	34765.	5000N 2350E	C	42X. 1KF
261. 0	34849.	5500N 2800E	C	65X. 1KF
261. 0	34769.	5000N 2150E	C	60X. 1KF
265. 2	34720.	4314N 1800E	C	74X. 1KF
265. 8	34230.	2600N 1300E	C	10X. 3K
273. 9	34271.	2886N 1699E	C	76X. 1KF
274. 7	34740.	4800N 2050E	C	70X. 1KF
274. 7	34847.	5500N 2700E	C	48X. 1KF
275. 7	34214.	2483N 1749E	C	65X. 1KF
276. 4	34304.	3107N 1400E	C	80X. 1KF
278. 5	34701.	4114N 1800E	C	78X. 1KF
279. 7	34267.	2800N 1850E	C	10X. 3K
284. 2	34202.	2400N 1200E	C	72X. 1KF
285. 1	34704.	4200N 1900E	C	74X. 1KF
291. 8	34448.	4104N 1950E	.	42X. 1KF
294. 5	34326.	3269N 1949E	.	12X. 3K
294. 9	34383.	3521N 1201E	.	11X. 3K
295. 3	34735.	4800N 2300E	C	44X. 1KF
297. 2	34882.	4950N 2300E	.	42X. 1KF
303. 0	34264.	2800N 1700E	C	68X. 1KF
308. 8	34276.	2904N 1450E	C	50X. 1KF
308. 8	34322.	3200N 1750E	.	80X. 1KF
309. 1	34731.	4800N 2500E	C	84X. 1KF
309. 1	34794.	5200N 2500E	C	54X. 1KF
309. 1	34820.	5300N 2550E	C	54X. 1KF
309. 1	34744.	4800N 1850E	C	58X. 1KF
310. 2	34354.	3400N 1500E	C	62X. 1KF
314. 2	34738.	4800N 2150E	C	44X. 1KF
318. 3	34706.	4200N 1950E	C	62X. 1KF
322. 4	34234.	2600N 1500E	C	11X. 3K
322. 8	34804.	5200N 2000E	C	9X. 3K
326. 3	34243.	2686N 1700E	C	48. 1KF
326. 3	34325.	3200N 1900E	C	76X. 1KF
328. 0	34205.	2400N 1350E	C	10X. 3KF
329. 7	34795.	5200N 2450E	C	13X. 3K

OCCIDENTAL DETECTOR READING (T/SQ. MM.)	WATERHOUSE II CUP SERIAL NUMBER	8-08-79 FIELD NOTES AND DATA
---	--	---------------------------------

329. 7	34799.	5200N 2250E	C	65X. 1KF
329. 7	34846.	5500N 2650E	C	78X. 1KF
333. 7	34217.	2493N 1600E	C	78X. 1KF
334. 3	34878.	4950N 2100E	C	62X. 1KF
336. 5	34436.	3897N 1850E	C	50X. 1KF
340. 9	34876.	4950N 2000E	C	72X. 1KF
343. 4	34817.	5300N 2400E	C	82X. 1KF
346. 1	34873.	4700N 2000E	C	66X. 1KF
354. 0	34898.	5250N 2540E	C	90X. 1KF
357. 1	34841.	5500N 2400E	C	78X. 1KF
358. 4	34887.	5050N 2100E	C	10X. 3K
362. 1	34721.	4314N 1800E	C	74X. 1KF
370. 9	34770.	5000N 2100E	C	10X. 3K
373. 9	34864.	5600N 2200E	C	12X. 3K
375. 9	34877.	4950N 2050E	C	9X. 3K
384. 6	34825.	5400N 2350E	C	54X. 1KF
391. 2	34439.	4000N 1850E	C	74X. 1KF
391. 5	34821.	5400N 2550E	C	73X. 1KF
398. 3	34739.	4800N 2100E	C	79X. 1KF
402. 6	34291.	3000N 1750E	C	80X. 1KF
405. 2	34822.	5400N 2500E	C	10X. 3K
405. 2	34836.	5500N 2150E	C	84X. 1KF
412. 9	34233.	2600N 1450E	C	11X. 3K
414. 0	34229.	2600N 1250E	C	80X. 1KF
425. 8	34826.	5400N 2300E	C	82X. 1KF
432. 7	34726.	4600N 2200E	C	60X. 1KF
439. 5	34723.	4600N 2050E	C	92X. 1KF
444. 3	34716.	4300N 2000E	C	84X. 1KF
449. 6	34203.	2400N 1250E	C	83X. 1KF
460. 1	34749.	4900N 1950E	C	65X. 1KF
465. 5	34896.	5150N 2450E	C	10X. 3K
478. 6	34870.	4700N 1850E	C	9X. 3K
479. 0	34824.	5400N 2400E	C	80X. 1KF
480. 8	34204.	2400N 1300E	C	78X. 1KF
481. 9	34219.	2500N 1500E	C	78X. 1KF
486. 0	34253.	2721N 1201E	C	60X. 1KF
495. 5	34220.	2504N 1450E	C	72X. 1KF
501. 4	34773.	5000N 1950E	C	58X. 1KF
508. 2	34829.	5400N 2150E	.	76X. 1KF
543. 0	34223.	2514N 1300E	C	9X. 3K
549. 4	34750.	4900N 2000E	C	64X. 1KF
559. 9	34218.	2496N 1550E	C	72X. 1KF
563. 6	34715.	4296N 2050E	C	58X. 1KF
576. 9	34747.	4900N 1850E	C	60X. 1KF
576. 9	34837.	5500N 2200E	C	10X. 3K
592. 4	34746.	4900N 1800E	C	64X. 1KF
629. 9	34438.	4000N 1800E	C	80X. 1KF
654. 2	34727.	4600N 2250E	C	64X. 1KF
696. 3	34424.	3800N 1700E	C	10X. 3K
1270. 6	34743.	4800N 1900E	C	14X. 3K

TRACK ETCH SURVEY RESULTS AND STATISTICS

VALUES GIVEN IN T/SQ. MM. NORMALIZED TO 30 DAY EXPOSURE

NO. USEFUL PTS. : 450
 HIGH (T/SQ. MM.): 1270.6
 LOW (T/SQ. MM.): 12.8

BACKGROUND MEAN (T/SQ. MM.): 143.1
 STD. DEVIATION OF BKG. MEAN (T/SQ. MM.): 83.6
 RELATIVE STD. DEVIATION (PERCENT): 58.5

HIGH RANKING POINTS

RANGE OF Z -----	NO. OF PTS. -----	RANGE OF T -----	RANGE OF RATIO TO BACKGROUND -----
2 - 3	26	314.2 - 391.5	2.2 - 2.7
3 - 4	13	398.3 - 465.5	2.8 - 3.3
4 - 5	11	478.6 - 559.9	3.3 - 3.9
OVER 5	8	563.6 - 1270.6	3.9 - 8.9

NO. OF PTS. ABOVE Z = 3: 32
 PERCENT OF TOTAL PTS. : 7.1

(Z IS THE NUMBER OF STD. DEVIATIONS ABOVE BKG. MEAN)

OCCIDENTAL WATERHOUSE 11 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34201.	96. 2	2400N	1150E	C	75X. 1KF
34202.	284. 2	2400N	1200E	C	72X. 1KF
34203.	449. 6	2400N	1250E	C	83X. 1KF
34204.	480. 8	2400N	1300E	C	78X. 1KF
34205.	328. 0	2400N	1350E	C	10X. 3KF
34206.	73. 5	2400N	1400E	DISTB	40X. 1KF
34207.	67. 9	2400N	1450E	C	40X. 1KF
34208.	209. 3	2400N	1500E	C	80X. 1KF
34209.	96. 2	2400N	1550E	C	24X. 1KF
34210.	22. 6	2400N	1600E	.	20X. 1KF
34211.	33. 9	2400N	1650E	C	42X. 1KF
34212.	130. 1	2400N	1700E	C	64X. 1KF
34213.	118. 8	2400N	1750E	C	12X. 3K
34214.	275. 7	2483N	1749E	C	65X. 1KF
34215.	152. 7	2486N	1699E	C	56X. 1KF
34216.	203. 6	2489N	1650E	C	58X. 1KF
34217.	333. 7	2493N	1600E	C	78X. 1KF
34218.	559. 9	2496N	1550E	C	72X. 1KF
34219.	481. 9	2500N	1500E	C	78X. 1KF
34220.	495. 5	2504N	1450E	C	72X. 1KF
34221.	224. 8	2507N	1400E	C	62X. 1KF
34222.	90. 5	2511N	1350E	C	44X. 1KF
34223.	543. 0	2514N	1300E	C	9X. 3K
34224.	22. 6	2517N	1251E	C	76X. 1KF
34225.	220. 6	2521N	1201E	C	50X. 1KF
34226.	141. 4	2524N	1151E	C	63X. 1KF
34227.	248. 9	2600N	1150E	BRNCP	62X. 1KF
34228.	33. 9	2600N	1200E	C	56X. 1KF
34229.	414. 0	2600N	1250E	C	80X. 1KF
34230.	265. 8	2600N	1300E	C	10X. 3K
34231.	62. 2	2600N	1350E	C	10X. 3K
34232.	164. 0	2600N	1400E	C	9X. 3K
34233.	412. 9	2600N	1450E	C	11X. 3K
34234.	322. 4	2600N	1500E	C	11X. 3K
34235.	67. 9	2600N	1550E	C	78X. 1KF
34236.	145. 9	2600N	1600E	C	70X. 1KF
34237.	31. 1	2600N	1650E	C	40X. 1KF
34238.	90. 5	2600N	1700E	C	50X. 1KF
34239.	152. 7	2600N	1750E	C	50X. 1KF
34240.	28. 3	2600N	1800E	C	78X. 1KF
34241.	99. 1	2679N	1799E	C	40X. 1KF
34242.	87. 4	2683N	1749E	C	58X. 1KF
34243.	326. 3	2686N	1700E	C	48. 1KF
34244.	238. 9	2689N	1650E	C	56. 1KF
34245.	128. 2	2693N	1600E	C	70X. 1KF
34246.	205. 4	2696N	1550E	C	80X. 1KF
34247.	169. 0	2700N	1500E	C	74X. 1KF
34248.	110. 7	2704N	1450E	C	80X. 1KF
34249.	87. 4	2707N	1400E	C	60X. 1KF
34250.	46. 6	2711N	1350E	C	54X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34251.	180. 6	2714N	1300E	C	75X. 1KF
34252.	169. 0	2717N	1251E	C	72X. 1KF
34253.	486. 0	2721N	1201E	C	60X. 1KF
34254.	35. 0	2800N	1200E	C	35X. 1KF
34255.	227. 3	2800N	1250E	.	65X. 1KF
34256.	122. 4	2800N	1300E	C	60X. 1KF
34257.	215. 6	2800N	1350E	C	74X. 1KF
34258.	69. 9	2800N	1400E	C	40X. 1KF
34259.	46. 6	2800N	1450E	C	80X. 1KF
34260.	180. 6	2800N	1500E	C	52X. 1KF
34261.	75. 8	2800N	1550E	C	82X. 1KF
34262.	40. 8	2800N	1600E	C	84X. 1KF
34263.	221. 4	2800N	1650E	C	82X. 1KF
34264.	303. 0	2800N	1700E	C	68X. 1KF
34265.	29. 1	2800N	1750E	C	60X. 1KF
34266.	40. 8	2800N	1800E	C	54X. 1KF
34267.	279. 7	2800N	1850E	C	10X. 3K
34268.	29. 1	3876N	1849E	C	80X. 1KF
34269.	75. 8	2879N	1799E	C	38X. 1KF
34270.	75. 8	2883N	1749E	C	11X. 3K
34271.	273. 9	2886N	1699E	C	76X. 1KF
34272.	93. 2	2889N	1650E	C	80X. 1KF
34273.	58. 3	2893N	1600E	C	80X. 1KF
34274.	204. 0	2896N	1550E	C	70X. 1KF
34275.	238. 9	2900N	1500E	C	50X. 1KF
34276.	308. 8	2904N	1450E	C	50X. 1KF
34277.	46. 6	2907N	1400E	C	60X. 1KF
34278.	93. 2	2911N	1350E	C	50X. 1KF
34279.	23. 3	2914N	1300E	C	60X. 1KF
34280.	110. 7	2917N	1251E	C	10X. 3K
34281.	138. 2	3000N	1250E	C	80X. 1KF
34282.	130. 7	3000N	1300E	C	71X. 1KF
34283.	42. 1	3000N	1350E	C	50X. 1KF
34284.	42. 1	3000N	1400E	C	52X. 1KF
34285.	66. 1	3000N	1450E	C	49X. 1KF
34286.	112. 7	3000N	1500E	C	56X. 1KF
34287.	84. 1	3000N	1550E	C	54X. 1KF
34288.	198. 3	3000N	1600E	C	58X. 1KF
34289.	126. 2	3000N	1650E	C	70X. 1KF
34290.	240. 4	3000N	1700E	C	58X. 1KF
34291.	402. 6	3000N	1750E	C	80X. 1KF
34292.	66. 1	3000N	1800E	C	68X. 1KF
34293.	72. 1	3000N	1850E	C	54X. 1KF
34294.	90. 1	3000N	1900E	C	11X. 3K
34295.	174. 3	3072N	1899E	C	12X. 3K
34296.	90. 1	3076N	1849E	C	10X. 3K
34297.	180. 3	3079N	1799E	C	10X. 3K
34298.	240. 4	3083N	1749E	C	. 9X. 3K
34299.	132. 2	3086N	1699E	C	58X. 1KF
34300.	192. 3	3089N	1650E	C	58X. 1KF

OCCEIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA				
34301.	84. 1	3093N	1600E	BKNCP	55X. 1KF	NR
34302.	168. 3	3100N	1500E	C	60X. 1KF	
34303.	96. 2	3104N	1450E	C	44X. 1KF	
34304.	276. 4	3107N	1400E	C	80X. 1KF	
34305.	156. 2	3107N	1400N	C	80X. 1KF	
34306.	108. 2	3111N	1350E	C	64X. 1KF	
34307.	133. 4	3114N	1300E	C	10X. 3K	
34308.	69. 9	3200N	1050E	C	60X. 1KF	
34309.	93. 2	3200N	1100E	C	76X. 1KF	
34310.	198. 1	3200N	1150E	.	62X. 1KF	
34311.	58. 3	3200N	1200E	C	80X. 1KF	
34312.	183. 6	3200N	1250E	C	74X. 1KF	
34313.	94. 4	3200N	1300E	C	48X. 1KF	
34314.	151. 5	3200N	1350E	.	80X. 1KF	
34315.	58. 3	3200N	1400E	.	60X. 1KF	
34316.	87. 4	3200N	1450E	C	60X. 1KF	
34317.	104. 9	3200N	1500E	C	58X. 1KF	
34318.	122. 4	3200N	1550E	C	58X. 1KF	
34319.	99. 1	3200N	1600E	C	60X. 1KF	
34320.	250. 6	3200N	1650E	C	68X. 1KF	
34321.	64. 1	3200N	1700E	C	60X. 1KF	
34322.	308. 8	3200N	1750E	.	80X. 1KF	
34323.	227. 3	3200N	1800E	C	80X. 1KF	
34324.	163. 2	3200N	1850E	C	80X. 1KF	
34325.	326. 3	3200N	1900E	C	76X. 1KF	
34326.	294. 5	3269N	1949E	.	12X. 3K	
34327.	246. 4	3272N	1899E	C	90X. 1KF	
34328.	102. 2	3276N	1849E	C	90X. 1KF	
34329.	189. 3	3279N	1799E	C	90X. 1KF	
34330.	168. 3	3283N	1749E	FLOOSE	10X. 3K	
34331.	114. 2	3286N	1699E	C	78X. 1KF	
34332.	174. 3	3289N	1650E	C	60X. 1KF	
34333.	90. 1	3293N	1600E	C	60X. 1KF	
34334.	228. 4	3296N	1550E	C	65X. 1KF	
34335.	48. 1	3300N	1500E	C	50X. 1KF	
34336.	30. 0	3304N	1450E	C	62X. 1KF	
34337.	240. 4	3307N	1400E	C	70X. 1KF	
34338.	132. 2	3311N	1350E	C	58X. 1KF	
34339.	157. 7	3314N	1300E	C	80X. 1KF	
34340.	126. 2	3317N	1251E	C	90X. 1KF	
34341.	138. 2	3321N	1201E	C	10X. 3K	
34342.	258. 4	3324N	1151E	.	11X. 3K	
34343.	126. 2	3328N	1101E	C	65X. 1KF	
34344.	126. 2	3331N	1051E	C	50X. 1KF	
34345.	68. 2	3400N	1050E	C		
34346.	111. 7	3400N	1100E	C	58X. 1KF	
34347.	80. 6	3400N	1150E	C	60X. 1KF	
34348.	62. 0	3400N	1200E	C	90X. 1KF	
34349.	117. 9	3400N	1250E	C	75X. 1KF	
34350.	80. 6	3400N	1300E	C	80X. 1KF	

OCCIDENTAL WATERHOUSE II

8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/50. MM.)	FIELD NOTES AND DATA
34351.	167. 5	3400N 1350E C 75X. 1KF
34352.	74. 4	3400N 1400E C 68X. 1KF
34353.	86. 8	3400N 1450E C 55X. 1KF
34354.	310. 2	3400N 1500E C 62X. 1KF
34355.	55. 8	3400N 1550E C 60X. 1KF
34356.	111. 7	3400N 1600E C 60X. 1KF
34357.	80. 6	3400N 1650E C 52X. 1KF
34358.	86. 8	3400N 1700E C 75X. 1KF
34359.	62. 0	3400N 1750E C 70X. 1KF
34360.	93. 0	3400N 1800E C 80X. 1KF
34361.	105. 5	3400N 1850E C 80X. 1KF
34362.	124. 1	3400N 1900E C 90X. 1KF
34363.	167. 5	3400N 1950E C 11X. 3K
34364.	99. 3	3400N 2000E C 12X. 3K
34365.	111. 7	3400N 2050E . 10X. 3K
34366.	64. 1	3462N 2049E C 90X. 1KF
34367.	147. 4	3465N 1999E C 75X. 1KF
34368.	102. 6	3469N 1949E C 11X. 3K
34369.	230. 8	3472N 1899E C 14X. 3K
34370.	128. 2	3476N 1849E . 12X. 3K
34371.	102. 6	3479N 1799E C 80X. 1KF
34372.	211. 5	3483N 1749E C 80X. 1KF
34373.	192. 3	3486N 1699E C 85X. 1KF
34374.	25. 6	3489N 1650E C 60X. 1KF
34375.	44. 9	3493N 1600E C 40X. 1KF
34376.	12. 8	3496N 1550E C 45X. 1KF
34377.	70. 5	3500N 1500E C 42X. 1KF
34378.	51. 3	3504N 1450E C 60X. 1KF
34379.	83. 3	3507N 1400E C 70X. 1KF
34380.	44. 9	3511N 1350E C 80X. 1KF
34381.	32. 1	3514N 1300E C 65X. 1KF
34382.	115. 4	3517N 1251E C 11X. 3K
34383.	294. 9	3521N 1201E . 11X. 3K
34384.	134. 6	3524N 1151E C 80X. 1KF
34385.	89. 7	3528N 1101E C 85X. 1KF
34386.	76. 9	3531N 1051E C 60X. 1KF
34387.	106. 1	3600N 1050E C 60X. 1KF
34388.	112. 7	3600N 1100E C 52X. 1KF
34389.	119. 4	3600N 1150E C 74X. 1KF
34390.	89. 5	3600N 1200E C 44X. 1KF
34391.	39. 8	3600N 1250E C 60X. 1KF
34392.	106. 1	3600N 1300E C 10X. 3K
34393.	232. 1	3600N 1350E C 72X. 1KF
34394.	26. 5	3600N 1400E C 68X. 1KF
34395.	126. 0	3600N 1450E C 60X. 1KF
34396.	86. 2	3600N 1500E C 60X. 1KF
34397.	79. 6	3600N 1550E C 55X. 1KF
34398.	103. 0	3600N 1600E C 65X. 1KF
34399.	68. 7	3600N 1650E C 70X. 1KF
34400.	13. 7	3600N 1700E C 70X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34401.	121. 8	3600N 1750E	C	80X. 1KF	
34402.	83. 3	3600N 1800E	C	90X. 1KF	
34403.	102. 6	3600N 1850E	C	68X. 1KF	
34404.	120. 2	3600N 1900E	C	85X. 1KF	
34405.	173. 1	3600N 1950E	C	80X. 1KF	
34406.	89. 7	3600N 2000E	C	11X. 3K	
34407.	250. 0	3600N 2050E	C	12X. 3K	
34408.	119. 4	3662N 2049E	C	66X. 1KF	
34409.	79. 6	3665N 1999E	C	60X. 1KF	
34410.	159. 1	3669N 1949E	C	42X. 1KF	
34411.	112. 7	3672N 1899E	C	78X. 1KF	
34412.	258. 6	3676N 1849E	C	10X. 3K	
34413.	99. 5	3679N 1799E	C	10X. 3K	
34414.	145. 9	3683N 1749E	C	11X. 3K	
34415.	59. 7	3686N 1699E	C	88X. 1KF	
34416.	106. 1	3689N 1650E	C	58X. 1KF	
34417.	53. 0	3693N 1600E	C	58X. 1KF	
34418.	238. 7	3696N 1550E	C	52X. 1KF	
34419.	72. 9	3700N 1500E	C	52X. 1KF	
34420.	218. 8	3800N 1500E	C	56X. 1KF	
34421.	139. 3	3800N 1550E	C	50X. 1KF	
34422.	59. 7	3800N 1600E	C	48X. 1KF	
34423.	79. 6	3800N 1650E	C	50X. 1KF	
34424.	696. 3	3800N 1700E	C	10X. 3K	
34425.	238. 7	3800N 1750E	C	66X. 1KF	
34426.	59. 7	3800N 1800E	C	62X. 1KF	
34427.	225. 5	3800N 1850E	C	11X. 3K	
34428.	132. 6	3800N 1900E	C	70X. 1KF	
34429.	92. 8	3800N 1950E	C	50X. 1KF	
34430.	114. 4	3800N 2000E	C	72X. 1KF	
34431.	39. 8	3800N 2050E	C	10X. 3K	
34432.	206. 0	3883N 2049E	C	72X. 1KF	
34433.	27. 5	3886N 1999E	C	54X. 1KF	
34434.	192. 3	3889N 1950E	C	44X. 1KF	
34435.	68. 7	3893N 1900E	C	50X. 1KF	
34436.	336. 5	3897N 1850E	C	50X. 1KF	
34437.	137. 4	3900N 1800E	C	58X. 1KF	
34438.	629. 9	4000N 1800E	C	80X. 1KF	
34439.	391. 2	4000N 1850E	C	74X. 1KF	
34440.	72. 9	4000N 1900E	C	60X. 1KF	
34441.	92. 8	4000N 1940E	C	62X. 1KF	
34442.	112. 7	4000N 2000E	C	68X. 1KF	
34443.	72. 9	4000N 2050E	C	32X. 1KF	
34444.	53. 0	4000N 2100E	C	74X. 1KF	
34445.	106. 1	4093N 2100E	C	80X. 1KF	
34446.	66. 3	4096N 2050E	C	54X. 1KF	
34447.	39. 8	4100N 2000E	C	44X. 1KF	
34448.	291. 8	4104N 1950E	.	42X. 1KF	
34449.	198. 9	4107N 1900E	C	78X. 1KF	
34450.	79. 6	4111N 1850E	C	76X. 1KF	

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34701.	278. 5	4114N	1800E	C	78X. 1KF
34702.	46. 4	4200N	1800E	C	64X. 1KF
34703.	119. 4	4200N	1850E	C	68X. 1KF
34704.	285. 1	4200N	1900E	C	74X. 1KF
34705.	66. 3	4200N	1900E	C	74X. 1KF
34706.	318. 3	4200N	1950E	C	62X. 1KF
34707.	238. 7	4200N	2000E	.	58X. 1KF
34708.	119. 4	4200N	2050E	C	28X. 1KF
34709.	53. 0	4200N	2100E	C	36X. 1KF
34710.	225. 5	4200N	2150E	C	74X. 1KF
34711.	106. 1	4200N	2200E	C	72X. 1KF
34712.	126. 0	4286N	2200E	C	70X. 1KF
34713.	245. 3	4289N	2150E	C	78X. 1KF
34714.	159. 1	4293N	2100E	C	34X. 1KF
34715.	563. 6	4296N	2050E	C	58X. 1KF
34716.	444. 3	4300N	2000E	C	84X. 1KF
34717.	132. 6	4304N	1950E	C	78X. 1KF
34718.	99. 5	4307N	1900E	C	60X. 1KF
34719.	152. 5	4311N	1850E	C	74X. 1KF
34720.	265. 2	4314N	1800E	C	74X. 1KF
34721.	362. 1	4314N	1800E	C	74X. 1KF
34722.	199. 2	4600N	2000E	C	85X. 1KF
34723.	439. 5	4600N	2050E	C	92X. 1KF
34724.	178. 6	4600N	2100E	C	80X. 1KF
34725.	211. 2	4600N	2150E	C	70X. 1KF
34726.	432. 7	4600N	2200E	C	60X. 1KF
34727.	654. 2	4600N	2250E	C	64X. 1KF
34728.	89. 3	4600N	2300E	C	72X. 1KF
34729.	82. 4	4600N	2350E	C	80X. 1KF
34730.	103. 0	4600N	2400E	C	9X. 3K
34731.	309. 1	4800N	2500E	C	84X. 1KF
34732.	158. 0	4800N	2450E	C	78X. 1KF
34733.	219. 8	4800N	2400E	C	80X. 1KF
34734.	103. 0	4800N	2350E	C	40X. 1KF
34735.	295. 3	4800N	2300E	C	44X. 1KF
34736.	240. 4	4800N	2250E	.	50X. 1KF
34737.	48. 1	4800N	2200E	C	52X. 1KF
34738.	314. 2	4800N	2150E	C	44X. 1KF
34739.	398. 3	4800N	2100E	C	79X. 1KF
34740.	274. 7	4800N	2050E	C	70X. 1KF
34741.	233. 5	4800N	2000E	C	85X. 1KF
34742.	158. 0	4800N	1950E	C	75X. 1KF
34743.	1270. 6	4800N	1900E	C	14X. 3K
34744.	309. 1	4800N	1850E	C	58X. 1KF
34745.	96. 2	4800N	1800E	C	80X. 1KF
34746.	592. 4	4900N	1800E	C	64X. 1KF
34747.	576. 9	4900N	1850E	C	60X. 1KF
34748.	61. 8	4900N	1900E	C	58X. 1KF
34749.	460. 1	4900N	1950E	C	65X. 1KF
34750.	549. 4	4900N	2000E	C	64X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
34751.	34. 3	4900N	2050E	C	60X. 1KF
34752.	242. 1	4900N	2100E	C	41X. 1KF
34753.	226. 6	4900N	2150E	C	40X. 1KF
34754.	54. 9	4900N	2200E	C	36X. 1KF
34755.	68. 7	4900N	2250E	C	40X. 1KF
34756.	109. 9	4900N	2300E	.	46X. 1KF
34757.	185. 4	4900N	2350E	C	40X. 1KF
34758.	219. 8	4900N	2400E	C	60X. 1KF
34759.	41. 2	4900N	2450E	C	62X. 1KF
34760.	68. 7	4900N	2500E	C	78X. 1KF
34761.	109. 9	5000N	2550E	C	77X. 1KF
34762.	61. 8	5000N	2500E	C	74X. 1KF
34763.	137. 4	5000N	2450E	C	74X. 1KF
34764.	82. 4	5000N	2400E	C	40X. 1KF
34765.	261. 0	5000N	2350E	C	42X. 1KF
34766.	89. 3	5000N	2300E	C	32X. 1KF
34767.	103. 0	5000N	2250E	C	38X. 1KF
34768.	139. 1	5000N	2200E	C	38X. 1KF
34769.	261. 0	5000N	2150E	C	60X. 1KF
34770.	370. 9	5000N	2100E	C	10X. 3K
34771.	240. 4	5000N	2050E	C	58X. 1KF
34772.	68. 7	5000N	2000E	C	58X. 1KF
34773.	501. 4	5000N	1950E	C	58X. 1KF
34774.	123. 6	5000N	1900E	C	66X. 1KF
34775.	137. 4	5000N	1850E	C	88X. 1KF
34776.	219. 8	5000N	1800E	C	76X. 1KF
34777.	226. 6	5100N	1800E	C	78X. 1KF
34778.	226. 6	5100N	1850E	C	76X. 1KF
34779.	61. 8	5100N	1900E	C	73X. 1KF
34780.	97. 9	5100N	1950E	C	10X. 3K
34781.	216. 3	5100N	2000E	C	10X. 3K
34782.	27. 5	5100N	2050E	C	76X. 1KF
34783.	92. 7	5100N	2100E	C	90X. 1KF
34784.	97. 9	5100N	2150E	C	56X. 1KF
34785.	130. 5	5100N	2200E	C	10X. 3K
34786.	103. 0	5100N	2250E	C	71X. 1KF
34787.	164. 8	5100N	2300E	C	11X. 3K
34788.	144. 2	5100N	2350E	C	80X. 1KF
34789.	159. 7	5100N	2400E	C	86X. 1KF
34790.	109. 9	5100N	2450E	C	90X. 1KF
34791.	212. 9	5100N	2500E	C	90X. 1KF
34792.	123. 6	5100N	2550E	C	86X. 1KF
34793.	82. 4	5200N	2550E	C	92X. 1KF
34794.	309. 1	5200N	2500E	C	54X. 1KF
34795.	329. 7	5200N	2450E	C	13X. 3K
34796.	130. 5	5200N	2400E	C	19X. 3K
34797.	116. 8	5200N	2350E	C	10X. 3K
34798.	144. 2	5200N	2300E	C	78X. 1KF
34799.	329. 7	5200N	2250E	C	65X. 1KF
34800.	113. 3	5200N	2200E	C	10X. 3K

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
-----	-----	-----			
34801.	89. 3	5200N	2150E	C	9X. 3K
34802.	171. 7	5200N	2100E	C	10X. 3K
34803.	247. 2	5200N	2050E	C	9X. 3K
34804.	322. 8	5200N	2000E	C	9X. 3K
34805.	164. 8	5200N	1950E	C	90X. 1KF
34806.	54. 9	5200N	1900E	C	83X. 1KF
34807.	68. 7	5200N	1850E	C	70X. 1KF
34808.	137. 4	5200N	1800E	C	10X. 3K
34809.	164. 8	5300N	2000E	C	60X. 1KF
34810.	27. 5	5300N	2050E	C	65X. 1KF
34811.	199. 2	5300N	2100E	C	70X. 1KF
34812.	82. 4	5300N	2150E	C	79X. 1KF
34813.	123. 6	5300N	2200E	C	76X. 1KF
34814.	96. 2	5300N	2250E	C	76X. 1KF
34815.	48. 1	5300N	2300E	C	74X. 1KF
34816.	144. 2	5300N	2350E	C	81X. 1KF
34817.	343. 4	5300N	2400E	C	82X. 1KF
34818.	226. 6	5300N	2450E	C	86X. 1KF
34819.	61. 8	5300N	2500E	C	84X. 1KF
34820.	309. 1	5300N	2550E	C	54X. 1KF
34821.	391. 5	5400N	2550E	C	73X. 1KF
34822.	405. 2	5400N	2500E	C	10X. 3K
34823.	48. 1	5400N	2450E	C	64X. 1KF
34824.	479. 0	5400N	2400E	C	80X. 1KF
34825.	384. 6	5400N	2350E	C	54X. 1KF
34826.	425. 8	5400N	2300E	C	82X. 1KF
34827.	137. 4	5400N	2250E	C	79X. 1KF
34828.	247. 2	5400N	2200E	C	80X. 1KF
34829.	508. 2	5400N	2150E	C	76X. 1KF
34830.	109. 9	5400N	2100E	C	54X. 1KF
34831.	82. 4	5400N	2050E	C	80X. 1KF
34832.	75. 5	5400N	2000E	C	54X. 1KF
34833.	116. 8	5500N	2000E	C	78X. 1KF
34834.	68. 7	5500N	2050E	C	80X. 1KF
34835.	164. 8	5500N	2100E	C	84X. 1KF
34836.	405. 2	5500N	2150E	C	84X. 1KF
34837.	576. 9	5500N	2200E	C	10X. 3K
34838.	75. 5	5500N	2250E	C	78X. 1KF
34839.	185. 4	5500N	2300E	C	51X. 1KF
34840.	20. 6	5500N	2350E	C	78X. 1KF
34841.	357. 1	5500N	2400E	C	78X. 1KF
34842.	61. 8	5500N	2450E	C	69X. 1KF
34843.	96. 2	5500N	2500E	C	70X. 1KF
34844.	103. 0	5500N	2550E	C	50X. 1KF
34845.	185. 4	5500N	2600E	C	82X. 1KF
34846.	329. 7	5500N	2650E	C	78X. 1KF
34847.	274. 7	5500N	2700E	C	48X. 1KF
34848.	185. 4	5500N	2750E	C	76X. 1KF
34849.	261. 0	5500N	2800E	C	65X. 1KF
34850.	78. 3	5600N	2900E	C	80X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA			
-----	-----	-----			
34851.	213. 7	5600N	2850E	C	10X. 3K
34852.	235. 0	5600N	2800E	C	89X. 1KF
34853.	78. 3	5600N	2750E	C	90X. 1KF
34854.	213. 7	5600N	2700E	C	9X. 3K
34855.	156. 7	5600N	2650E	C	12X. 3K
34856.	220. 8	5600N	2600E	C	11X. 3K
34857.	80. 1	5600E	2550E	C	80X. 1KF
34858.	142. 4	5600N	2500E	C	88X. 1KF
34859.	156. 7	5600N	2450E	C	81X. 1KF
34860.	78. 3	5600N	2400E	C	88X. 1KF
34861.	49. 9	5600N	2350E	C	10X. 3K
34862.	135. 3	5600N	2300E	C	11X. 3K
34863.	42. 7	5600N	2250E	C	10X. 3K
34864.	373. 9	5600N	2200E	C	12X. 3K
34865.	64. 1	5600N	2150E	C	60X. 1KF
34866.	106. 8	5600N	2100E	.	11X. 3K
34867.	78. 3	5600N	2050E	C	12X. 3K
34868.	135. 3	5600N	2000E	C	9X. 3K
34869.	148. 6	4700N	1800E	C	60X. 1KF
34870.	478. 6	4700N	1850E	C	9X. 3K
34871.	87. 4	4700N	1900E	C	78X. 1KF
34872.	137. 7	4700N	1950E	C	60X. 1KF
34873.	346. 1	4700N	2000E	C	66X. 1KF
34874.	222. 9	4950N	1900E	C	74X. 1KF
34875.	166. 1	4950N	1950E	C	54X. 1KF
34876.	340. 9	4950N	2000E	C	72X. 1KF
34877.	375. 9	4950N	2050E	C	9X. 3K
34878.	334. 3	4950N	2100E	C	62X. 1KF
34879.	122. 4	4950N	2150E	C	40X. 1KF
34880.	26. 2	4950N	2200E	C	38X. 1KF
34881.	96. 2	4950N	2250E	C	46X. 1KF
34882.	297. 2	4950N	2300E	.	42X. 1KF
34883.	131. 1	5050N	2300E	C	50X. 1KF
34884.	78. 7	5050N	2250E	C	44X. 1KF
34885.	157. 3	5050N	2200E	C	84X. 1KF
34886.	139. 9	5050N	2150E	C	60X. 1KF
34887.	358. 4	5050N	2100E	C	10X. 3K
34888.	113. 6	5050N	2050E	C	66X. 1KF
34889.	113. 6	5050N	2000E	C	54X. 1KF
34890.	157. 3	5050N	1950E	C	62X. 1KF
34891.	244. 7	5050N	1900E	C	74X. 1KF
34892.	192. 3	5150N	2250E	C	70X. 1KF
34893.	26. 2	5150N	2300E	C	66X. 1KF
34894.	122. 4	5150N	2350E	C	10X. 3K
34895.	174. 8	5150N	2400E	C	11X. 3K
34896.	465. 5	5150N	2450E	C	10X. 3K
34897.	218. 5	5150N	2500E	C	80X. 1KF
34898.	354. 0	5250N	2540E	C	90X. 1KF
34899.	183. 6	5250N	2400E	C	10X. 3K
34900.	166. 1	5250N	2350E	C	88X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

12. 8	34376.	3496N 1550E	C	45X. 1KF
13. 7	34400.	3600N 1700E	C	70X. 1KF
20. 6	34840.	5500N 2350E	C	78X. 1KF
22. 6	34210.	2400N 1600E	.	20X. 1KF
22. 6	34224.	2517N 1251E	C	76X. 1KF
23. 3	34279.	2914N 1300E	C	60X. 1KF
25. 6	34374.	3489N 1650E	C	60X. 1KF
26. 2	34893.	5150N 2300E	C	66X. 1KF
26. 2	34880.	4950N 2200E	C	38X. 1KF
26. 5	34394.	3600N 1400E	C	68X. 1KF
27. 5	34433.	3886N 1999E	C	54X. 1KF
27. 5	34782.	5100N 2050E	C	76X. 1KF
27. 5	34810.	5300N 2050E	C	65X. 1KF
28. 3	34240.	2600N 1800E	C	78X. 1KF
29. 1	34265.	2800N 1750E	C	60X. 1KF
29. 1	34268.	3876N 1849E	C	80X. 1KF
30. 0	34336.	3304N 1450E	C	62X. 1KF
31. 1	34237.	2600N 1650E	C	40X. 1KF
32. 1	34381.	3514N 1300E	C	65X. 1KF
33. 9	34211.	2400N 1650E	C	42X. 1KF
33. 9	34228.	2600N 1200E	C	56X. 1KF
34. 3	34751.	4900N 2050E	C	60X. 1KF
35. 0	34254.	2800N 1200E	C	35X. 1KF
39. 8	34431.	3800N 2050E	C	10X. 3K
39. 8	34447.	4100N 2000E	C	44X. 1KF
39. 8	34391.	3600N 1250E	C	60X. 1KF
40. 8	34266.	2800N 1800E	C	54X. 1KF
40. 8	34262.	2800N 1600E	C	84X. 1KF
41. 2	34759.	4900N 2450E	C	62X. 1KF
42. 1	34283.	3000N 1350E	C	50X. 1KF
42. 1	34284.	3000N 1400E	C	52X. 1KF
42. 7	34863.	5600N 2250E	C	10X. 3K
44. 9	34375.	3493N 1600E	C	40X. 1KF
44. 9	34380.	3511N 1350E	C	80X. 1KF
46. 4	34702.	4200N 1800E	C	64X. 1KF
46. 6	34277.	2907N 1400E	C	60X. 1KF
46. 6	34259.	2800N 1450E	C	80X. 1KF
46. 6	34250.	2711N 1350E	C	54X. 1KF
48. 1	34823.	5400N 2450E	C	64X. 1KF
48. 1	34815.	5300N 2300E	C	74X. 1KF
48. 1	34335.	3300N 1500E	C	50X. 1KF
48. 1	34737.	4800N 2200E	C	52X. 1KF
49. 9	34861.	5600N 2350E	C	10X. 3K
51. 3	34378.	3504N 1450E	C	60X. 1KF
53. 0	34417.	3693N 1600E	C	58X. 1KF
53. 0	34444.	4000N 2100E	C	74X. 1KF
53. 0	34709.	4200N 2100E	C	36X. 1KF
54. 9	34754.	4900N 2200E	C	36X. 1KF
54. 9	34806.	5200N 1900E	C	83X. 1KF
55. 8	34355.	3400N 1550E	C	60X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79

DETECTOR READING (1/SQ. MM.)	CUP SERIAL NUMBER	FIELD NOTES AND DATA
-------------------------------------	-------------------------	----------------------

58.3	34273.	2893N 1600E C 80X. 1KF
58.3	34315.	3200N 1400E . 60X. 1KF
58.3	34311.	3200N 1200E C 80X. 1KF
59.7	34426.	3800N 1800E C 62X. 1KF
59.7	34422.	3800N 1600E C 48X. 1KF
59.7	34415.	3686N 1699E C 88X. 1KF
61.8	34748.	4900N 1900E C 58X. 1KF
61.8	34762.	5000N 2500E C 74X. 1KF
61.8	34819.	5300N 2500E C 84X. 1KF
61.8	34842.	5500N 2450E C 69X. 1KF
61.8	34779.	5100N 1900E C 73X. 1KF
62.0	34348.	3400N 1200E C 90X. 1KF
62.0	34359.	3400N 1750E C 70X. 1KF
62.2	34231.	2600N 1350E C 10X. 3K
64.1	34366.	3462N 2049E C 90X. 1KF
64.1	34321.	3200N 1700E C 60X. 1KF
64.1	34865.	5600N 2150E C 60X. 1KF
66.1	34292.	3000N 1800E C 68X. 1KF
66.1	34285.	3000N 1450E C 49X. 1KF
66.3	34446.	4096N 2050E C 54X. 1KF
66.3	34705.	4200N 1900E C 74X. 1KF
67.9	34235.	2600N 1550E C 78X. 1KF
67.9	34207.	2400N 1450E C 40X. 1KF
68.2	34345.	3400N 1050E C
68.7	34772.	5000N 2000E C 58X. 1KF
68.7	34760.	4900N 2500E C 78X. 1KF
68.7	34834.	5500N 2050E C 80X. 1KF
68.7	34755.	4900N 2250E C 40X. 1KF
68.7	34807.	5200N 1850E C 70X. 1KF
68.7	34435.	3893N 1900E C 50X. 1KF
68.7	34399.	3600N 1650E C 70X. 1KF
69.9	34258.	2800N 1400E C 40X. 1KF
69.9	34308.	3200N 1050E C 60X. 1KF
70.5	34377.	3500N 1500E C 42X. 1KF
72.1	34293.	3000N 1850E C 54X. 1KF
72.9	34440.	4000N 1900E C 60X. 1KF
72.9	34443.	4000N 2050E C 32X. 1KF
72.9	34419.	3700N 1500E C 52X. 1KF
73.5	34206.	2400N 1400E DISTB 40X. 1KF
74.4	34352.	3400N 1400E C 68X. 1KF
75.5	34832.	5400N 2000E C 54X. 1KF
75.5	34838.	5500N 2250E C 78X. 1KF
75.8	34270.	2883N 1749E C 11X. 3K
75.8	34261.	2800N 1550E C 82X. 1KF
75.8	34269.	2879N 1799E C 38X. 1KF
76.9	34386.	3531N 1051E C 60X. 1KF
78.3	34860.	5600N 2400E C 88X. 1KF
78.3	34850.	5600N 2900E C 80X. 1KF
78.3	34867.	5600N 2050E C 12X. 3K
78.3	34853.	5600N 2750E C 90X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

78.7	34884.	5050N 2250E	C	44X. 1KF
79.6	34450.	4111N 1850E	C	76X. 1KF
79.6	34409.	3665N 1999E	C	60X. 1KF
79.6	34397.	3600N 1550E	C	55X. 1KF
79.6	34423.	3800N 1650E	C	50X. 1KF
80.1	34857.	5600E 2550E	C	80X. 1KF
80.6	34350.	3400N 1300E	C	80X. 1KF
80.6	34357.	3400N 1650E	C	52X. 1KF
80.6	34347.	3400N 1150E	C	60X. 1KF
82.4	34812.	5300N 2150E	C	79X. 1KF
82.4	34764.	5000N 2400E	C	40X. 1KF
82.4	34831.	5400N 2050E	C	80X. 1KF
82.4	34729.	4600N 2350E	C	80X. 1KF
82.4	34793.	5200N 2550E	C	92X. 1KF
83.3	34402.	3600N 1800E	C	90X. 1KF
83.3	34379.	3507N 1400E	C	70X. 1KF
84.1	34301.	3093N 1600E	BKNCP	55X. 1KF NR
84.1	34287.	3000N 1550E	C	54X. 1KF
86.2	34396.	3600N 1500E	C	60X. 1KF
86.8	34358.	3400N 1700E	C	75X. 1KF
86.8	34353.	3400N 1450E	C	55X. 1KF
87.4	34316.	3200N 1450E	C	60X. 1KF
87.4	34242.	2683N 1749E	C	58X. 1KF
87.4	34249.	2707N 1400E	C	60X. 1KF
87.4	34871.	4700N 1900E	C	78X. 1KF
89.3	34766.	5000N 2300E	C	32X. 1KF
89.3	34728.	4600N 2300E	C	72X. 1KF
89.3	34801.	5200N 2150E	C	9X. 3K
89.5	34390.	3600N 1200E	C	44X. 1KF
89.7	34406.	3600N 2000E	C	11X. 3K
89.7	34385.	3528N 1101E	C	85X. 1KF
90.1	34296.	3076N 1849E	C	10X. 3K
90.1	34294.	3000N 1900E	C	11X. 3K
90.1	34333.	3293N 1600E	C	60X. 1KF
90.5	34238.	2600N 1700E	C	50X. 1KF
90.5	34222.	2511N 1350E	C	44X. 1KF
92.7	34783.	5100N 2100E	C	90X. 1KF
92.8	34441.	4000N 1940E	C	62X. 1KF
92.8	34429.	3800N 1950E	C	50X. 1KF
93.0	34360.	3400N 1800E	C	80X. 1KF
93.2	34272.	2889N 1650E	C	80X. 1KF
93.2	34278.	2911N 1350E	C	50X. 1KF
93.2	34309.	3200N 1100E	C	76X. 1KF
94.4	34313.	3200N 1300E	C	48X. 1KF
96.2	34209.	2400N 1550E	C	24X. 1KF
96.2	34201.	2400N 1150E	C	75X. 1KF
96.2	34814.	5300N 2250E	C	76X. 1KF
96.2	34745.	4800N 1800E	C	80X. 1KF
96.2	34303.	3104N 1450E	C	44X. 1KF
96.2	34881.	4950N 2250E	C	46X. 1KF

OCCIDENTAL WATERHOUSE II 8-00-79
 DETECTOR CUP
 READING SERIAL
 (T/SO MM.) NUMBER FIELD NOTES AND DATA

96.2	34843.	5500N 2500E	C	70X. 1KF
97.9	34780.	5100N 1950E	C	10X. 3K
97.9	34784.	5100N 2150E	C	56X. 1KF
99.1	34319.	3200N 1600E	C	60X. 1KF
99.1	34241.	2679N 1799E	C	40X. 1KF
99.3	34364.	3400N 2000E	C	12X. 3K
99.5	34718.	4307N 1900E	C	60X. 1KF
99.5	34413.	3679N 1799E	C	10X. 3K
102.2	34328.	3276N 1849E	C	90X. 1KF
102.6	34368.	3469N 1949E	C	11X. 3K
102.6	34403.	3600N 1850E	C	68X. 1KF
102.6	34371.	3479N 1799E	C	80X. 1KF
103.0	34734.	4800N 2350E	C	40X. 1KF
103.0	34786.	5100N 2250E	C	71X. 1KF
103.0	34730.	4600N 2400E	C	9X. 3K
103.0	34844.	5500N 2550E	C	50X. 1KF
103.0	34398.	3600N 1600E	C	65X. 1KF
103.0	34767.	5000N 2250E	C	38X. 1KF
104.9	34317.	3200N 1500E	C	58X. 1KF
105.5	34361.	3400N 1850E	C	80X. 1KF
106.1	34392.	3600N 1300E	C	10X. 3K
106.1	34416.	3689N 1650E	C	58X. 1KF
106.1	34387.	3600N 1050E	C	60X. 1KF
106.1	34445.	4093N 2100E	C	80X. 1KF
106.1	34711.	4200N 2200E	C	72X. 1KF
106.8	34866.	5600N 2100E		11X. 3K
108.2	34306.	3111N 1350E	C	64X. 1KF
109.9	34830.	5400N 2100E	C	54X. 1KF
109.9	34756.	4900N 2300E		46X. 1KF
109.9	34790.	5100N 2450E	C	90X. 1KF
109.9	34761.	5000N 2550E	C	77X. 1KF
110.7	34280.	2917N 1251E	C	10X. 3K
110.7	34248.	2704N 1450E	C	80X. 1KF
111.7	34346.	3400N 1100E	C	58X. 1KF
111.7	34356.	3400N 1600E	C	60X. 1KF
111.7	34365.	3400N 2050E		10X. 3K
112.7	34286.	3000N 1500E	C	56X. 1KF
112.7	34442.	4000N 2000E	C	68X. 1KF
112.7	34411.	3672N 1899E	C	78X. 1KF
112.7	34388.	3600N 1100E	C	52X. 1KF
113.3	34800.	5200N 2200E	C	10X. 3K
113.6	34889.	5050N 2000E	C	54X. 1KF
113.6	34888.	5050N 2050E	C	66X. 1KF
114.2	34331.	3286N 1699E	C	78X. 1KF
114.4	34430.	3800N 2000E	C	72X. 1KF
115.4	34382.	3517N 1251E	C	11X. 3K
116.8	34797.	5200N 2350E	C	10X. 3K
116.8	34833.	5500N 2000E	C	78X. 1KF
117.9	34349.	3400N 1250E	C	75X. 1KF
118.8	34213.	2400N 1750E	C	12X. 3K

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

119.4	34408.	3662N 2049E	C	66X. 1KF
119.4	34708.	4200N 2050E	C	28X. 1KF
119.4	34703.	4200N 1850E	C	68X. 1KF
119.4	34389.	3600N 1150E	C	74X. 1KF
120.2	34404.	3600N 1900E	C	85X. 1KF
121.8	34401.	3600N 1750E	C	80X. 1KF
122.4	34256.	2800N 1300E	C	60X. 1KF
122.4	34318.	3200N 1550E	C	58X. 1KF
122.4	34879.	4950N 2150E	C	40X. 1KF
122.4	34894.	5150N 2350E	C	10X. 3K
123.6	34813.	5300N 2200E	C	76X. 1KF
123.6	34774.	5000N 1900E	C	66X. 1KF
123.6	34792.	5100N 2550E	C	86X. 1KF
124.1	34362.	3400N 1900E	C	90X. 1KF
126.0	34395.	3600N 1450E	C	60X. 1KF
126.0	34712.	4286N 2200E	C	70X. 1KF
126.2	34343.	3328N 1101E	C	65X. 1KF
126.2	34289.	3000N 1650E	C	70X. 1KF
126.2	34340.	3317N 1251E	C	90X. 1KF
126.2	34344.	3331N 1051E	C	50X. 1KF
128.2	34245.	2693N 1600E	C	70X. 1KF
128.2	34370.	3476N 1849E	.	12X. 3K
130.1	34212.	2400N 1700E	C	64X. 1KF
130.5	34785.	5100N 2200E	C	10X. 3K
130.5	34796.	5200N 2400E	C	19X. 3K
130.7	34282.	3000N 1300E	C	71X. 1KF
131.1	34883.	5050N 2300E	C	50X. 1KF
132.2	34299.	3086N 1699E	C	58X. 1KF
132.2	34338.	3311N 1350E	C	58X. 1KF
132.6	34717.	4304N 1950E	C	78X. 1KF
132.6	34428.	3800N 1900E	C	70X. 1KF
133.4	34307.	3114N 1300E	C	10X. 3K
134.6	34384.	3524N 1151E	C	80X. 1KF
135.3	34862.	5600N 2300E	C	11X. 3K
135.3	34868.	5600N 2000E	C	9X. 3K
137.4	34763.	5000N 2450E	C	74X. 1KF
137.4	34827.	5400N 2250E	C	79X. 1KF
137.4	34437.	3900N 1800E	C	58X. 1KF
137.4	34775.	5000N 1850E	C	88X. 1KF
137.4	34808.	5200N 1800E	C	10X. 3K
137.7	34872.	4700N 1950E	C	60X. 1KF
138.2	34281.	3000N 1250E	C	80X. 1KF
138.2	34341.	3321N 1201E	C	10X. 3K
139.1	34768.	5000N 2200E	C	38X. 1KF
139.3	34421.	3800N 1550E	C	50X. 1KF
139.9	34886.	5050N 2150E	C	60X. 1KF
141.4	34226.	2524N 1151E	C	63X. 1KF
142.4	34858.	5600N 2500E	C	88X. 1KF
144.2	34798.	5200N 2300E	C	78X. 1KF
144.2	34788.	5100N 2350E	C	80X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

144.2	34816.	5300N	2350E	C	81X. 1KF
145.9	34414.	3683N	1749E	C	11X. 3K
145.9	34236.	2600N	1600E	C	70X. 1KF
147.4	34367.	3465N	1999E	C	75X. 1KF
148.6	34869.	4700N	1800E	C	60X. 1KF
151.5	34314.	3200N	1350E	.	80X. 1KF
152.5	34719.	4311N	1850E	C	74X. 1KF
152.7	34215.	2486N	1699E	C	56X. 1KF
152.7	34239.	2600N	1750E	C	50X. 1KF
156.2	34305.	3107N	1400N	C	80X. 1KF
156.7	34859.	5600N	2450E	C	81X. 1KF
156.7	34855.	5600N	2650E	C	12X. 3K
157.3	34885.	5050N	2200E	C	84X. 1KF
157.3	34890.	5050N	1950E	C	62X. 1KF
157.7	34339.	3314N	1300E	C	80X. 1KF
158.0	34742.	4800N	1950E	C	75X. 1KF
158.0	34732.	4800N	2450E	C	78X. 1KF
159.1	34714.	4293N	2100E	C	34X. 1KF
159.1	34410.	3669N	1949E	C	42X. 1KF
159.7	34789.	5100N	2400E	C	86X. 1KF
163.2	34324.	3200N	1850E	C	80X. 1KF
164.0	34232.	2600N	1400E	C	9X. 3K
164.8	34805.	5200N	1950E	C	90X. 1KF
164.8	34809.	5300N	2000E	C	60X. 1KF
164.8	34835.	5500N	2100E	C	84X. 1KF
164.8	34787.	5100N	2300E	C	11X. 3K
166.1	34875.	4950N	1950E	C	54X. 1KF
166.1	34900.	5250N	2350E	C	88X. 1KF
167.5	34363.	3400N	1950E	C	11X. 3K
167.5	34351.	3400N	1350E	C	75X. 1KF
168.3	34330.	3283N	1749E	FLOOSE	10X. 3K
168.3	34302.	3100N	1500E	C	60X. 1KF
169.0	34247.	2700N	1500E	C	74X. 1KF
169.0	34252.	2717N	1251E	C	72X. 1KF
171.7	34802.	5200N	2100E	C	10X. 3K
173.1	34405.	3600N	1950E	C	80X. 1KF
174.3	34295.	3072N	1899E	C	12X. 3K
174.3	34332.	3289N	1650E	C	60X. 1KF
174.8	34895.	5150N	2400E	C	11X. 3K
178.6	34724.	4600N	2100E	C	80X. 1KF
180.3	34297.	3079N	1799E	C	10X. 3K
180.6	34251.	2714N	1300E	C	75X. 1KF
180.6	34260.	2800N	1500E	C	52X. 1KF
183.6	34899.	5250N	2400E	C	10X. 3K
183.6	34312.	3200N	1250E	C	74X. 1KF
185.4	34845.	5500N	2600E	C	82X. 1KF
185.4	34757.	4900N	2350E	C	40X. 1KF
185.4	34848.	5500N	2750E	C	76X. 1KF
185.4	34839.	5500N	2300E	C	51X. 1KF
189.3	34329.	3279N	1799E	C	90X. 1KF

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

192.3	34300.	3089N 1650E	C	58X. 1KF
192.3	34892.	5150N 2250E	C	70X. 1KF
192.3	34373.	3486N 1699E	C	85X. 1KF
192.3	34434.	3889N 1950E	C	44X. 1KF
198.1	34310.	3200N 1150E	.	62X. 1KF
198.3	34288.	3000N 1600E	C	58X. 1KF
198.9	34449.	4107N 1900E	C	78X. 1KF
199.2	34811.	5300N 2100E	C	70X. 1KF
199.2	34722.	4600N 2000E	C	85X. 1KF
203.6	34216.	2489N 1650E	C	58X. 1KF
204.0	34274.	2896N 1550E	C	70X. 1KF
205.4	34246.	2696N 1550E	C	80X. 1KF
206.0	34432.	3883N 2049E	C	72X. 1KF
209.3	34208.	2400N 1500E	C	80X. 1KF
211.2	34725.	4600N 2150E	C	70X. 1KF
211.5	34372.	3483N 1749E	C	80X. 1KF
212.9	34791.	5100N 2500E	C	90X. 1KF
213.7	34851.	5600N 2850E	C	10X. 3K
213.7	34854.	5600N 2700E	C	9X. 3K
215.6	34257.	2800N 1350E	C	74X. 1KF
216.3	34781.	5100N 2000E	C	10X. 3K
218.5	34897.	5150N 2500E	C	80X. 1KF
218.8	34420.	3800N 1500E	C	56X. 1KF
219.8	34733.	4800N 2400E	C	80X. 1KF
219.8	34776.	5000N 1800E	C	76X. 1KF
219.8	34758.	4900N 2400E	C	60X. 1KF
220.6	34225.	2521N 1201E	C	50X. 1KF
220.8	34856.	5600N 2600E	C	11X. 3K
221.4	34263.	2800N 1650E	C	82X. 1KF
222.9	34874.	4950N 1900E	C	74X. 1KF
224.8	34221.	2507N 1400E	C	62X. 1KF
225.5	34427.	3800N 1850E	C	11X. 3K
225.5	34710.	4200N 2150E	C	74X. 1KF
226.6	34777.	5100N 1800E	C	78X. 1KF
226.6	34753.	4900N 2150E	C	40X. 1KF
226.6	34818.	5300N 2450E	C	86X. 1KF
226.6	34778.	5100N 1850E	C	76X. 1KF
227.3	34323.	3200N 1800E	C	80X. 1KF
227.3	34255.	2800N 1250E	.	65X. 1KF
228.4	34334.	3296N 1550E	C	65X. 1KF
230.8	34369.	3472N 1899E	C	14X. 3K
232.1	34393.	3600N 1350E	C	72X. 1KF
233.5	34741.	4800N 2000E	C	85X. 1KF
235.0	34852.	5600N 2800E	C	89X. 1KF
238.7	34425.	3800N 1750E	C	66X. 1KF
238.7	34418.	3696N 1550E	C	52X. 1KF
238.7	34707.	4200N 2000E	.	50X. 1KF
238.9	34244.	2689N 1650E	C	56. 1KF
238.9	34275.	2900N 1500E	C	50X. 1KF
240.4	34298.	3083N 1749E	C	. 9X. 3K

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

240. 4	34337.	3307N 1400E	C	70X. 1KF
240. 4	34290.	3000N 1700E	C	58X. 1KF
240. 4	34771.	5000N 2050E	C	58X. 1KF
240. 4	34736.	4800N 2250E	.	50X. 1KF
242. 1	34752.	4900N 2100E	C	41X. 1KF
244. 7	34891.	5050N 1900E	C	74X. 1KF
245. 3	34713.	4289N 2150E	C	78X. 1KF
246. 4	34327.	3272N 1899E	C	90X. 1KF
247. 2	34828.	5400N 2200E	C	80X. 1KF
247. 2	34803.	5200N 2050E	C	9X. 3K
248. 9	34227.	2600N 1150E	BRNCP	62X. 1KF
250. 0	34407.	3600N 2050E	C	12X. 3K
250. 6	34320.	3200N 1650E	C	68X. 1KF
258. 4	34342.	3324N 1151E	.	11X. 3K
258. 6	34412.	3676N 1849E	C	10X. 3K
261. 0	34765.	5000N 2350E	C	42X. 1KF
261. 0	34849.	5500N 2800E	C	65X. 1KF
261. 0	34769.	5000N 2150E	C	60X. 1KF
265. 2	34720.	4314N 1800E	C	74X. 1KF
265. 8	34230.	2600N 1300E	C	10X. 3K
273. 9	34271.	2886N 1699E	C	76X. 1KF
274. 7	34740.	4800N 2050E	C	70X. 1KF
274. 7	34847.	5500N 2700E	C	48X. 1KF
275. 7	34214.	2483N 1749E	C	65X. 1KF
276. 4	34304.	3107N 1400E	C	80X. 1KF
278. 5	34701.	4114N 1800E	C	78X. 1KF
279. 7	34267.	2800N 1850E	C	10X. 3K
284. 2	34202.	2400N 1200E	C	72X. 1KF
285. 1	34704.	4200N 1900E	C	74X. 1KF
291. 8	34448.	4104N 1950E	.	42X. 1KF
294. 5	34326.	3269N 1949E	.	12X. 3K
294. 9	34383.	3521N 1201E	.	11X. 3K
295. 3	34735.	4800N 2300E	C	44X. 1KF
297. 2	34802.	4950N 2300E	.	42X. 1KF
303. 0	34264.	2800N 1700E	C	68X. 1KF
308. 8	34276.	2904N 1450E	C	50X. 1KF
308. 8	34322.	3200N 1750E	.	80X. 1KF
309. 1	34731.	4800N 2500E	C	84X. 1KF
309. 1	34794.	5200N 2500E	C	54X. 1KF
309. 1	34820.	5300N 2550E	C	54X. 1KF
309. 1	34744.	4800N 1850E	C	58X. 1KF
310. 2	34354.	3400N 1500E	C	62X. 1KF
314. 2	34738.	4800N 2150E	C	44X. 1KF
318. 3	34706.	4200N 1950E	C	62X. 1KF
322. 4	34234.	2600N 1500E	C	11X. 3K
322. 8	34804.	5200N 2000E	C	9X. 3K
326. 3	34243.	2686N 1700E	C	48. 1KF
326. 3	34325.	3200N 1900E	C	76X. 1KF
328. 0	34205.	2400N 1350E	C	10X. 3KF
329. 7	34795.	5200N 2450E	C	13X. 3K

OCCIDENTAL WATERHOUSE II 8-08-79
 DETECTOR CUP
 READING SERIAL
 (T/SQ. MM.) NUMBER FIELD NOTES AND DATA

329.7	34799.	5200N	2250E	C	65X. 1KF
329.7	34846.	5500N	2650E	C	78X. 1KF
333.7	34217.	2493N	1600E	C	78X. 1KF
334.3	34878.	4950N	2100E	C	62X. 1KF
336.5	34436.	3897N	1850E	C	50X. 1KF
340.9	34876.	4950N	2000E	C	72X. 1KF
343.4	34817.	5300N	2400E	C	82X. 1KF
346.1	34873.	4700N	2000E	C	66X. 1KF
354.0	34898.	5250N	2540E	C	90X. 1KF
357.1	34841.	5500N	2400E	C	78X. 1KF
358.4	34887.	5050N	2100E	C	10X. 3K
362.1	34721.	4314N	1800E	C	74X. 1KF
370.9	34770.	5000N	2100E	C	10X. 3K
373.9	34864.	5600N	2200E	C	12X. 3K
375.9	34877.	4950N	2050E	C	9X. 3K
384.6	34825.	5400N	2350E	C	54X. 1KF
391.2	34439.	4000N	1850E	C	74X. 1KF
391.5	34821.	5400N	2550E	C	73X. 1KF
398.3	34739.	4800N	2100E	C	79X. 1KF
402.6	34291.	3000N	1750E	C	80X. 1KF
405.2	34822.	5400N	2500E	C	10X. 3K
405.2	34836.	5500N	2150E	C	84X. 1KF
412.9	34233.	2600N	1450E	C	11X. 3K
414.0	34229.	2600N	1250E	C	80X. 1KF
425.8	34826.	5400N	2300E	C	82X. 1KF
432.7	34726.	4600N	2200E	C	60X. 1KF
439.5	34723.	4600N	2050E	C	92X. 1KF
444.3	34716.	4300N	2000E	C	84X. 1KF
449.6	34203.	2400N	1250E	C	83X. 1KF
460.1	34749.	4900N	1950E	C	65X. 1KF
465.5	34896.	5150N	2450E	C	10X. 3K
478.6	34870.	4700N	1850E	C	9X. 3K
479.0	34824.	5400N	2400E	C	80X. 1KF
480.8	34204.	2400N	1300E	C	78X. 1KF
481.9	34219.	2500N	1500E	C	78X. 1KF
486.0	34253.	2721N	1201E	C	60X. 1KF
495.5	34220.	2504N	1450E	C	72X. 1KF
501.4	34773.	5000N	1950E	C	58X. 1KF
508.2	34829.	5400N	2150E	C	76X. 1KF
543.0	34223.	2514N	1300E	C	9X. 3K
549.4	34750.	4900N	2000E	C	64X. 1KF
559.9	34218.	2496N	1550E	C	72X. 1KF
563.6	34715.	4296N	2050E	C	58X. 1KF
576.9	34747.	4900N	1850E	C	60X. 1KF
576.9	34837.	5500N	2200E	C	10X. 3K
592.4	34746.	4900N	1800E	C	64X. 1KF
629.9	34438.	4000N	1800E	C	80X. 1KF
654.2	34727.	4600N	2250E	C	64X. 1KF
696.3	34424.	3800N	1700E	C	10X. 3K
1270.6	34743.	4800N	1900E	C	14X. 3K

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

6369.	4. 6	1600N 1800E
6370.	2. 0	1600N 2000E
6371.	2. 0	1800N 2000E
6372.	3. 3	1800N 1800E
6373.	2. 0	1800N 1600E
6374.	2. 0	1800N 1400E
6375.	5. 2	1800N 1200E
6376.	6. 5	1800N 1000E
6377.	6. 5	1800N 800E
6378.	10. 4	
6379.	4. 6	1800N 600E
6380.	13. 0	1800N 400E
6381.	7. 4	1800N 200E
6382.	2. 7	1800N 000E
6383.	12. 0	2000N 000E
6384.	3. 3	2000N 200E
6385.	3. 3	2000N 400E
6386.	3. 3	2000N 600E
6387.	2. 7	2000N 800E
6388.	4. 7	2000N 1000E
6389.	5. 4	2000N 1200E
6390.	2. 7	2000N 1400E
6391.	1. 3	2000N 1600E
6392.	1. 3	2000N 1800E
6393.	3. 3	2000N 2000E
6394.	2. 7	2200N 2000E
6395.	0. 7	2200N 1800E
6396.	2. 0	2200N 1600E
6397.	6. 0	2200N 1400E
6398.	0. 7	2200N 1200E
6399.	2. 0	2200N 1000E
6400.	3. 3	2200N 800E
6401.	2. 7	2200N 600E
6402.	2. 0	2200N 400E
6403.	2. 0	2200N 200E
6404.	4. 0	2200N 000E
6405.	1. 3	2400N 000E
6406.	3. 9	2400N 200E
6407.	7. 2	2400N 400E
6408.	4. 6	2400N 600E
6409.	1. 3	2400N 800E
6410.	16. 3	2400N 1000E
6411.	2. 6	2400N 1200E
6412.	5. 9	2400N 1400E
6413.	3. 3	2400N 1600E
6414.	1. 3	2400N 1800E
6415.	3. 3	2400N 2000E
6416.	11. 1	2600N 2100E
6417.	5. 9	2600N 2000E
6418.	5. 9	2600N 1800E

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

6419.	5.2	2600N 1600E
6420.	6.5	2600N 1400E
6421.	8.5	2600N 1200E
6422.	5.2	
6423.	3.9	2600N 1000E
6424.	3.3	2600N 800E
6425.	12.4	2600N 600E
6426.	9.1	2600N 400E
6427.	16.3	2600N 200E
6428.	3.9	2600N 000E
6429.	4.6	2800N 000E
6430.	6.5	2800N 200E
6431.	9.1	2800N 400E
6432.	5.9	2800N 600E
6433.	7.2	2800N 800E
6434.	17.4	2800N 1000E
6435.	6.7	2800N 1200E
6436.	16.1	2800N 1400E
6437.	5.4	2800N 1600E
6438.	3.3	2800N 1800E
6439.	27.4	2800N 2000E
6440.	11.4	
6441.	2.0	2800N 2200E
6442.	1.3	3000N 2400E
6443.	7.4	3000N 2200E
6444.	14.0	3000N 2000E
6445.	3.3	3000N 1800E
6446.	3.3	3000N 1600E
6447.	2.7	3000N 1400E
6448.	2.7	3000N 1200E
6449.	2.7	3000N 1000E
6450.	2.7	3000N 800E
6451.	5.4	3000N 600E
6452.	3.3	3000N 400E
6453.	7.4	3000N 200E
6454.	1.3	3000N 000E
6455.	3.3	3200N 0E
6456.	4.0	3200N 200E
6457.	6.7	3200N 400E
6458.	7.4	3200N 600E
6459.	4.7	3200N 800E
6460.	7.4	3200N 1000E
6461.	3.3	3200N 1200E
6462.	5.4	3200N 1400E
6463.	7.4	3200N 1600E
6464.	11.4	3200N 1800E
6465.	16.7	3200N 2000E
6466.	9.4	3200N 2200E
6467.	4.7	3200N 2400E
6468.	1.3	3400N 2400E

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

6469.	4. 0	3400N 2200E
6470.	5. 4	3400N 2000E
76591.	2. 9	200N 900E
76592.	4. 3	200N 1100E
76593.	9. 4	400N 1100E
76594.	13. 0	400N 900E
76595.	10. 1	600N 900E
76596.	12. 3	600N 1100E
76597.	9. 4	800N 1300E
76598.	15. 9	800N 1100E
76599.	5. 1	1000N 1100E
76600.	10. 9	1000N 1300E
76601.	7. 2	1200N 1300E
76602.	4. 3	1200N 1100E
76603.	3. 6	1400N 1100E
76604.	1. 4	1400N 1300E
76605.	12. 3	1600N 1300E
76606.	1. 4	1600N 1100E
76607.	10. 1	1800N 1100E
76608.	8. 0	1800N 1300E
76609.	14. 5	2000N 1300E
76610.	6. 5	2000N 1500E
76611.	13. 0	2200N 1500E
76612.	9. 4	2200N 1300E
76613.	13. 4	2400N 1300E
76614.	9. 2	2400N 1500E
76615.	21. 2	2600N 1700E
76616.	45. 1	2600N 1500E
76617.	33. 1	2800N 1500E
76618.	30. 3	2800N 1700E
76619.	4. 9	3000N 1700E
76620.	0. 7	3000N 1500E
76621.	6. 3	3200N 1500E
76622.	4. 2	3200N 1700E
76623.	9. 2	3400N 1900E
76624.	21. 9	3400N 1800E
76625.	18. 3	3400N 1700E
76626.	12. 0	3400N 1600E
76627.	3. 5	3400N 1400E
76628.	38. 8	3400N 1200E
76629.	8. 5	3400N 1000E
76630.	7. 8	3400N 800E
76631.	5. 6	3400N 600E
76632.	9. 2	3400N 400E
76633.	3. 5	3400N 200E
76634.	9. 9	3400N 000E
76635.	4. 9	3600N 000E
76636.	2. 8	3600N 200E
76637.	3. 5	3600N 400E
76638.	4. 2	3600N 600E

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

76639.	1. 4	3600N 800E
76640.	4. 2	3600N 1000E
76641.	5. 6	3600N 1200E
76642.	4. 2	3600N 1400E
76643.	12. 0	3600N 1600E
76644.	12. 7	3600N 1700E
76645.	10. 6	3600N 1800E
76646.	6. 3	3600N 1900E
76647.	4. 9	3600N 2000E
76648.	9. 9	3800N 2400E
76649.	6. 3	3800N 2200E
76650.	5. 6	3800N 2000E
76651.	5. 6	3800N 1900E
76652.	9. 9	3800N 1800E
76653.	8. 5	3800N 1700E
76654.	1. 4	3800N 1600E
76655.	6. 3	3800N 1400E
76656.	4. 2	3800N 1200E
76657.	21. 2	3800N 1000E
76658.	11. 3	3800N 800E
76659.	1. 4	3800N 600E
76660.	9. 2	3800N 400E
76661.	2. 9	3800N 200E
76662.	2. 2	3800N 000E
76663.	2. 2	4000N 000E
76664.	5. 8	4000N 200E
76665.	6. 5	4000N 400E
76666.	5. 8	4000N 600E
76667.	5. 8	4000N 800E
76668.	30. 4	4000N 1000E
76669.	9. 4	4000N 1200E
76670.	14. 5	4000N 1400E
76671.	10. 1	4000N 1600E
76672.	22. 5	4000N 1700E
76673.	52. 9	4000N 1800E
76674.	39. 1	4000N 1900E
76675.	3. 6	4000N 2000E
76676.	5. 8	4000N 2200E
76677.	15. 9	3600N 2200E
76678.	3. 6	3600N 2400E
76679.	5. 8	4200N 2600E
76680.	5. 8	4200N 2400E
76681.	11. 6	4200N 2200E
76682.	2. 9	4200N 2100E
76683.	7. 2	4200N 2000E
76684.	2. 2	4200N 1900E
76685.	8. 5	4400N 2000E
76686.	0. 7	4400N 2100E
76687.	2. 8	4400N 2200E
76688.	5. 6	4400N 2300E

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

76689.	9. 9	4400N 2400E
76690.	3. 5	4400N 2600E
76691.	19. 0	4400N 2800E
76692.	14. 1	4600N 2800E
76693.	28. 2	4600N 2600E
76694.	12. 7	4600N 2400E
76695.	18. 3	4600N 2300E
76696.	17. 6	4600N 2200E
76697.	4. 2	4600N 2100E
76698.	8. 5	4600N 2000E
76699.	9. 2	4800N 2000E
76700.	16. 9	4800N 2100E
76701.	9. 9	4800N 2200E
76702.	19. 0	4800N 2300E
76703.	8. 5	4800N 2400E
76704.	2. 8	4800N 2600E
76705.	22. 5	3800E 5000N
76706.	3. 6	3800E 5200N
76707.	3. 6	3800E 5400N
76708.	22. 5	3800E 5600N
76709.	3. 6	3600E 5600N
76710.	1. 4	3600E 5400N
76711.	8. 0	3600E 5200N
76712.	2. 9	3600E 5000N
76713.	18. 1	3400E 5000N
76714.	9. 4	3400E 5200N
76715.	5. 8	3400E 5400N
76716.	10. 1	3400E 5600N
76717.	11. 6	3200E 5600N
76718.	18. 1	3200E 5400N
76719.	15. 2	3200E 5200N
76720.	7. 2	3200E 5000N
76721.	8. 0	3000E 5000N
76722.	23. 2	3000E 5200N
76723.	5. 8	3000E 5400N
76724.	6. 5	3000E 5600N
76725.	6. 7	5400N 2000E
76726.	14. 2	5400N 1800E
76727.	5. 2	5400N 1600E
76728.	8. 2	5600N 1400E
76729.	14. 9	5600N 1600E
76730.	6. 7	5600N 1800E
76731.	6. 7	5600N 2000E
76732.	12. 7	5600N 2200E
76733.	11. 9	5600N 2400E
76734.	35. 8	5600N 2600E
76735.	6. 0	5400N 2600E
76736.	2. 2	5400N 2400E
76737.	11. 9	5400N 2200E
76738.	9. 5	5200N 1800E

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

76739.	10. 3	5200N 2000E
76740.	1. 6	5200N 2200E
76741.	4. 7	5200N 2400E
76742.	4. 7	5200N 2600E
76743.	4. 7	5000N 2600E
76744.	4. 7	5000N 2400E
76745.	21. 3	5000N 2200E
76746.	5. 5	5000N 2000E
76747.	11. 9	2800E 5600N
76748.	2. 4	2800E 5400N
76749.		2800E 5200N
76750.	5. 5	2800E 5000N
76751.	96. 0	5000N 2100E NOT RET
76752.	5. 9	5000N 2300E
76753.	13. 0	5200N 2300E
76754.	7. 1	5200N 2100E
76755.	5. 9	5400N 2300E
76756.	3. 6	5400N 2500E
76757.	23. 7	5600N 1250E
76758.	47. 4	5400N 1450E
76759.	26. 1	5200N 1550E
76760.	8. 3	5200N 1600E

OCCIDENTAL WATERHOUSE 11-13-78

TRACK ETCH SURVEY RESULTS AND STATISTICS

VALUES GIVEN IN T/SQ. MM. NORMALIZED TO 30 DAY EXPOSURE

NO. USEFUL PTS. : 369
HIGH (T/SQ. MM.): 96.0
LOW (T/SQ. MM.): 0.7

BACKGROUND MEAN (T/SQ. MM.): 5.2
STD. DEVIATION OF BKG. MEAN (T/SQ. MM.): 3.1
RELATIVE STD. DEVIATION (PERCENT): 60.2

HIGH RANKING POINTS

<u>RANGE OF Z</u>	<u>NO. OF PTS.</u>	<u>RANGE OF T</u>	<u>RANGE OF RATIO TO BACKGROUND</u>
2 - 3	26	11.6 - 14.5	2.2 - 2.8
3 - 4	12	14.9 - 17.6	2.9 - 3.4
4 - 5	6	18.1 - 19.0	3.5 - 3.7
OVER 5	23	21.2 - 96.0	4.1 - 18.5

NO. OF PTS. ABOVE Z = 3: 41
PERCENT OF TOTAL PTS. : 11.1

(Z IS THE NUMBER OF STD. DEVIATIONS ABOVE BKG. MEAN)

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

	76749.	2800E	5200N
0.7	6354.	1400N	1000E
0.7	6323.	800N	1400E
0.7	6365.	1600N	1000E
0.7	6398.	2200N	1200E
0.7	6395.	2200N	1800E
0.7	76620.	3000N	1500E
0.7	76686.	4400N	2100E
1.3	6279.	0N	1600E
1.3	6304.	400N	2000E
1.3	6317.	800N	200E
1.3	6362.	1600N	350E
1.3	6353.	1400N	1200E
1.3	6358.	1400N	200E
1.3	6409.	2400N	800E
1.3	6414.	2400N	1800E
1.3	6405.	2400N	000E
1.3	6392.	2000N	1800E
1.3	6391.	2000N	1600E
1.3	6468.	3400N	2400E
1.3	6442.	3000N	2400E
1.3	6454.	3000N	000E
1.4	76639.	3600N	800E
1.4	76659.	3800N	600E
1.4	76654.	3800N	1600E
1.4	76604.	1400N	1300E
1.4	76710.	3600E	5400N
1.4	76606.	1600N	1100E
1.6	76740.	5200N	2200E
1.9	6303.	400N	1800E
1.9	6297.	400N	800E
1.9	6275.	0N	800E
1.9	6293.	400N	0E
1.9	6315.	600N	0E
1.9	6277.	0N	1200E
1.9	6280.	0N	1800E
1.9	6314.	600N	200E
1.9	6278.	0N	1400E
2.0	6343.	1200N	1000E
2.0	6321.	800N	1000E
2.0	6371.	1800N	2000E
2.0	6360.	1600N	000E
2.0	6361.	1600N	200E
2.0	6324.	800N	1600E
2.0	6339.	1200N	200E
2.0	6338.	1200N	0E
2.0	6373.	1800N	1600E
2.0	6370.	1600N	2000E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

2.0	6374.	1800N	1400E
2.0	6399.	2200N	1000E
2.0	6441.	2800N	2200E
2.0	6396.	2200N	1600E
2.0	6403.	2200N	200E
2.0	6402.	2200N	400E
2.2	76663.	4000N	000E
2.2	76684.	4200N	1900E
2.2	76662.	3800N	000E
2.2	76736.	5400N	2400E
2.4	76748.	2800E	5400N
2.5	6273.	0N	400E
2.5	6289.	200N	600E
2.5	6316.	800N	0E
2.5	6282.	200N	2000E
2.5	6274.	0N	600E
2.5	6318.	800N	400E
2.5	6302.	400N	1600E
2.6	6363.	1600N	600E
2.6	6325.	800N	1800E
2.6	6411.	2400N	1200E
2.6	6337.	1000N	0E
2.6	6357.	1400N	400E
2.6	6352.	1400N	1400E
2.6	6368.	1600N	1600E
2.6	6356.	1400N	600E
2.6	6366.	1600N	1200E
2.6	6326.	800N	2000E
2.6	6342.	1200N	800E
2.7	6447.	3000N	1400E
2.7	6387.	2000N	800E
2.7	6401.	2200N	600E
2.7	6449.	3000N	1000E
2.7	6448.	3000N	1200E
2.7	6394.	2200N	2000E
2.7	6450.	3000N	800E
2.7	6382.	1800N	000E
2.7	6390.	2000N	1400E
2.8	76687.	4400N	2200E
2.8	76704.	4800N	2600E
2.8	76636.	3600N	200E
2.9	76591.	200N	900E
2.9	76661.	3800N	200E
2.9	76712.	3600E	5000N
2.9	76682.	4200N	2100E
3.2	6287.	200N	1000E
3.2	6285.	200N	1400E
3.2	6307.	600N	1600E
3.2	6272.	0N	200E
3.2	6276.	0N	1000E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

3. 2	6286.	200N	1200E
3. 3	6329.	1000N	1600E
3. 3	6367.	1600N	1400E
3. 3	6413.	2400N	1600E
3. 3	6415.	2400N	2000E
3. 3	6355.	1400N	800E
3. 3	6344.	1200N	1200E
3. 3	6336.	1000N	200E
3. 3	6364.	1600N	800E
3. 3	6424.	2600N	800E
3. 3	6372.	1800N	1800E
3. 3	6393.	2000N	2000E
3. 3	6461.	3200N	1200E
3. 3	6455.	3200N	0E
3. 3	6385.	2000N	400E
3. 3	6445.	3000N	1800E
3. 3	6384.	2000N	200E
3. 3	6452.	3000N	400E
3. 3	6400.	2200N	800E
3. 3	6386.	2000N	600E
3. 3	6446.	3000N	1600E
3. 3	6438.	2800N	1800E
3. 5	76627.	3400N	1400E
3. 5	76633.	3400N	200E
3. 5	76637.	3600N	400E
3. 5	76690.	4400N	2600E
3. 6	76756.	5400N	2500E
3. 6	76675.	4000N	2000E
3. 6	76707.	3800E	5400N
3. 6	76603.	1400N	1100E
3. 6	76709.	3600E	5600N
3. 6	76706.	3800E	5200N
3. 6	76678.	3600N	2400E
3. 8	6271.	0N	0E
3. 8	6295.	400N	400E
3. 8	6319.	800N	600E
3. 8	6311.	600N	800E
3. 8	6291.	200N	200E
3. 8	6312.	600N	600E
3. 8	6300.		
3. 8	6296.	400N	600E
3. 8	6298.	400N	1000E
3. 8	6294.	400N	200E
3. 9	6333.	1000N	800E
3. 9	6423.	2600N	1000E
3. 9	6428.	2600N	000E
3. 9	6328.	1000N	1800E
3. 9	6340.	1200N	400E
3. 9	6350.	1400N	1800E
3. 9	6406.	2400N	200E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

4. 0	6469.	3400N 2200E
4. 0	6456.	3200N 200E
4. 0	6404.	2200N 000E
4. 2	76697.	4600N 2100E
4. 2	76656.	3800N 1200E
4. 2	76640.	3600N 1000E
4. 2	76642.	3600N 1400E
4. 2	76638.	3600N 600E
4. 2	76622.	3200N 1700E
4. 3	76592.	200N 1100E
4. 3	76602.	1200N 1100E
4. 5	6281.	0N 2000E
4. 5	6299.	400N 1200E
4. 5	6284.	200N 1600E
4. 5	6288.	200N 800E
4. 5	6320.	800N 800E
4. 6	6369.	1600N 1800E
4. 6	6429.	2800N 000E
4. 6	6379.	1800N 600E
4. 6	6331.	1000N 1200E
4. 6	6322.	800N 1200E
4. 6	6408.	2400N 600E
4. 6	6334.	1000N 600E
4. 7	6467.	3200N 2400E
4. 7	6459.	3200N 800E
4. 7	6388.	2000N 1000E
4. 7	76741.	5200N 2400E
4. 7	76743.	5000N 2600E
4. 7	76742.	5200N 2600E
4. 7	76744.	5000N 2400E
4. 9	76647.	3600N 2000E
4. 9	76635.	3600N 000E
4. 9	76619.	3000N 1700E
5. 1	76599.	1000N 1100E
5. 1	6313.	600N 400E
5. 1	6305.	600N 2000E
5. 1	6310.	600N 1000E
5. 1	6292.	200N 0E
5. 2	6341.	1200N 600E
5. 2	6375.	1800N 1200E
5. 2	6359.	1400N 000E
5. 2	6351.	1400N 1600E
5. 2	76727.	5400N 1600E
5. 2	6419.	2600N 1600E
5. 2	6422.	
5. 4	6389.	2000N 1200E
5. 4	6437.	2800N 1600E
5. 4	6451.	3000N 600E
5. 4	6462.	3200N 1400E
5. 4	6470.	3400N 2000E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

5. 5	76746.	5000N 2000E
5. 5	76750.	2800E 5000N
5. 6	76641.	3600N 1200E
5. 6	76631.	3400N 600E
5. 6	76651.	3800N 1900E
5. 6	76688.	4400N 2300E
5. 6	76650.	3800N 2000E
5. 7	6309.	600N 1200E
5. 8	76679.	4200N 2600E
5. 8	76723.	3000E 5400N
5. 8	76715.	3400E 5400N
5. 8	76667.	4000N 800E
5. 8	76676.	4000N 2200E
5. 8	76664.	4000N 200E
5. 8	76680.	4200N 2400E
5. 8	76666.	4000N 600E
5. 9	6417.	2600N 2000E
5. 9	6327.	1000N 2000E
5. 9	6348.	1200N 2000E
5. 9	6412.	2400N 1400E
5. 9	6432.	2800N 600E
5. 9	6418.	2600N 1800E
5. 9	76755.	5400N 2300E
5. 9	76752.	5000N 2300E
6. 0	76735.	5400N 2600E
6. 0	6397.	2200N 1400E
6. 3	76649.	3800N 2200E
6. 3	76621.	3200N 1500E
6. 3	76655.	3800N 1400E
6. 3	76646.	3600N 1900E
6. 4	6283.	200N 1800E
6. 5	6377.	1800N 800E
6. 5	76665.	4000N 400E
6. 5	76724.	3000E 5600N
6. 5	76610.	2000N 1500E
6. 5	6420.	2600N 1400E
6. 5	6430.	2800N 200E
6. 5	6376.	1800N 1000E
6. 7	6457.	3200N 400E
6. 7	6435.	2800N 1200E
6. 7	76725.	5400N 2000E
6. 7	76731.	5600N 2000E
6. 7	76730.	5600N 1800E
7. 0	6308.	600N 1400E
7. 0	6306.	600N 1800E
7. 1	76754.	5200N 2100E
7. 2	6433.	2800N 800E
7. 2	6407.	2400N 400E
7. 2	6332.	1000N 1000E
7. 2	6330.	1000N 1400E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

7.2	76601.	1200N 1300E
7.2	76683.	4200N 2000E
7.2	76720.	3200E 5000N
7.4	6381.	1800N 200E
7.4	6453.	3000N 200E
7.4	6463.	3200N 1600E
7.4	6443.	3000N 2200E
7.4	6460.	3200N 1000E
7.4	6458.	3200N 600E
7.8	76630.	3400N 800E
7.8	6335.	1000N 400E
8.0	76721.	3000E 5000N
8.0	76711.	3600E 5200N
8.0	76608.	1800N 1300E
8.2	76728.	5600N 1400E
8.3	6290.	200N 400E
8.3	76760.	5200N 1600E
8.5	76629.	3400N 1000E
8.5	76653.	3800N 1700E
8.5	76685.	4400N 2000E
8.5	76703.	4800N 2400E
8.5	76698.	4600N 2000E
8.5	6349.	1400N 2000E
8.5	6421.	2600N 1200E
9.1	6431.	2800N 400E
9.1	6426.	2600N 400E
9.2	76623.	3400N 1900E
9.2	76660.	3800N 400E
9.2	76699.	4800N 2000E
9.2	76632.	3400N 400E
9.2	76614.	2400N 1500E
9.4	6466.	3200N 2200E
9.4	76593.	400N 1100E
9.4	76597.	800N 1300E
9.4	76669.	4000N 1200E
9.4	76612.	2200N 1300E
9.4	76714.	3400E 5200N
9.5	76738.	5200N 1800E
9.9	76689.	4400N 2400E
9.9	76701.	4800N 2200E
9.9	76652.	3800N 1800E
9.9	76648.	3800N 2400E
9.9	76634.	3400N 000E
10.1	76671.	4000N 1600E
10.1	76595.	600N 900E
10.1	76607.	1800N 1100E
10.1	76716.	3400E 5600N
10.3	76739.	5200N 2000E
10.4	6378.	
10.6	76645.	3600N 1800E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

10. 9	76600.	1000N 1300E
11. 1	6416.	2600N 2100E
11. 3	76658.	3800N 1800E
11. 4	6440.	
11. 4	6464.	3200N 1800E
11. 6	76681.	4200N 2200E
11. 6	76717.	3200E 5600N
11. 7	6346.	1200N 1600E
11. 9	76747.	2800E 5600N
11. 9	76737.	5400N 2200E
11. 9	76733.	5600N 2400E
12. 0	76643.	3600N 1600E
12. 0	76626.	3400N 1600E
12. 0	6383.	2000N 000E
12. 1	6301.	400N 1400E
12. 3	76596.	600N 1100E
12. 3	76605.	1600N 1300E
12. 4	6425.	2600N 600E
12. 7	76732.	5600N 2200E
12. 7	76694.	4600N 2400E
12. 7	76644.	3600N 1700E
13. 0	6380.	1800N 400E
13. 0	76611.	2200N 1500E
13. 0	76594.	400N 900E
13. 0	76753.	5200N 2300E
13. 4	76613.	2400N 1300E
14. 0	6444.	3000N 2000E
14. 1	76692.	4600N 2800E
14. 2	76726.	5400N 1800E
14. 5	76609.	2000N 1300E
14. 5	76670.	4000N 1400E
14. 9	76729.	5600N 1600E
15. 2	76719.	3200E 5200N
15. 9	76677.	3600N 2200E
15. 9	76598.	800N 1100E
16. 1	6436.	2800N 1400E
16. 3	6347.	1200N 1800E
16. 3	6427.	2600N 200E
16. 3	6410.	2400N 1000E
16. 7	6465.	3200N 2000E
16. 9	76700.	4800N 2100E
17. 4	6434.	2800N 1000E
17. 6	76696.	4600N 2200E
18. 1	76713.	3400E 5000N
18. 1	76718.	3200E 5400N
18. 3	76625.	3400N 1700E
18. 3	76695.	4600N 2300E
19. 0	76691.	4400N 2800E
19. 0	76702.	4800N 2300E
21. 2	76657.	3800N 1000E

OCCIDENTAL	WATERHOUSE	11-13-78
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA

21. 2	76615.	2600N	1700E
21. 3	76745.	5000N	2200E
21. 9	76624.	3400N	1800E
22. 5	76708.	3800E	5600N
22. 5	76705.	3800E	5000N
22. 5	76672.	4000N	1700E
23. 2	76722.	3000E	5200N
23. 5	6345.	1200N	1400E
23. 7	76757.	5600N	1250E
26. 1	76759.	5200N	1550E
27. 4	6439.	2800N	2000E
28. 2	76693.	4600N	2600E
30. 3	76618.	2800N	1700E
30. 4	76668.	4000N	1000E
33. 1	76617.	2800N	1500E
35. 8	76734.	5600N	2600E
38. 8	76628.	3400N	1200E
39. 1	76674.	4000N	1900E
45. 1	76616.	2600N	1500E
47. 4	76758.	5400N	1450E
52. 9	76673.	4000N	1800E
96. 0	76751.	5000N	2100E NOT RET

OCCIDENTAL WATERHOUSE 11-13-78
 CUP DETECTOR
 SERIAL READING
 NUMBER (T/SQ. MM.) FIELD NOTES AND DATA

6271.	3.8	0N	0E
6272.	3.2	0N	200E
6273.	2.5	0N	400E
6274.	2.5	0N	600E
6275.	1.9	0N	800E
6276.	3.2	0N	1000E
6277.	1.9	0N	1200E
6278.	1.9	0N	1400E
6279.	1.3	0N	1600E
6280.	1.9	0N	1800E
6281.	4.5	0N	2000E
6282.	2.5	200N	2000E
6283.	6.4	200N	1800E
6284.	4.5	200N	1600E
6285.	3.2	200N	1400E
6286.	3.2	200N	1200E
6287.	3.2	200N	1000E
6288.	4.5	200N	800E
6289.	2.5	200N	600E
6290.	8.3	200N	400E
6291.	3.8	200N	200E
6292.	5.1	200N	0E
6293.	1.9	400N	0E
6294.	3.8	400N	200E
6295.	3.8	400N	400E
6296.	3.8	400N	600E
6297.	1.9	400N	800E
6298.	3.8	400N	1000E
6299.	4.5	400N	1200E
6300.	3.8		
6301.	12.1	400N	1400E
6302.	2.5	400N	1600E
6303.	1.9	400N	1800E
6304.	1.3	400N	2000E
6305.	5.1	600N	2000E
6306.	7.0	600N	1800E
6307.	3.2	600N	1600E
6308.	7.0	600N	1400E
6309.	5.7	600N	1200E
6310.	5.1	600N	1000E
6311.	3.8	600N	800E
6312.	3.8	600N	600E
6313.	5.1	600N	400E
6314.	1.9	600N	200E
6315.	1.9	600N	0E
6316.	2.5	800N	0E
6317.	1.3	800N	200E
6318.	2.5	800N	400E

OCCIDENTAL WATERHOUSE 11-13-78
 CUP DETECTOR
 SERIAL READING
 NUMBER (T/SQ. MM.) FIELD NOTES AND DATA

6319.	3. 8	800N 600E
6320.	4. 5	800N 800E
6321.	2. 0	800N 1000E
6322.	4. 6	800N 1200E
6323.	0. 7	800N 1400E
6324.	2. 0	800N 1600E
6325.	2. 6	800N 1800E
6326.	2. 6	800N 2000E
6327.	5. 9	1000N 2000E
6328.	3. 9	1000N 1800E
6329.	3. 3	1000N 1600E
6330.	7. 2	1000N 1400E
6331.	4. 6	1000N 1200E
6332.	7. 2	1000N 1000E
6333.	3. 9	1000N 800E
6334.	4. 6	1000N 600E
6335.	7. 8	1000N 400E
6336.	3. 3	1000N 200E
6337.	2. 6	1000N 0E
6338.	2. 0	1200N 0E
6339.	2. 0	1200N 200E
6340.	3. 9	1200N 400E
6341.	5. 2	1200N 600E
6342.	2. 6	1200N 800E
6343.	2. 0	1200N 1000E
6344.	3. 3	1200N 1200E
6345.	23. 5	1200N 1400E
6346.	11. 7	1200N 1600E
6347.	16. 3	1200N 1800E
6348.	5. 9	1200N 2000E
6349.	8. 5	1400N 2000E
6350.	3. 9	1400N 1800E
6351.	5. 2	1400N 1600E
6352.	2. 6	1400N 1400E
6353.	1. 3	1400N 1200E
6354.	0. 7	1400N 1000E
6355.	3. 3	1400N 800E
6356.	2. 6	1400N 600E
6357.	2. 6	1400N 400E
6358.	1. 3	1400N 200E
6359.	5. 2	1400N 000E
6360.	2. 0	1600N 000E
6361.	2. 0	1600N 200E
6362.	1. 3	1600N 350E
6363.	2. 6	1600N 600E
6364.	3. 3	1600N 800E
6365.	0. 7	1600N 1000E
6366.	2. 6	1600N 1200E
6367.	3. 3	1600N 1400E
6368.	2. 6	1600N 1600E

OCCIDENTAL WATERHOUSE 11-13-78

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA
-------------------------	-------------------------------------	----------------------

6369.	4. 6	1600N 1800E
6370.	2. 0	1600N 2000E
6371.	2. 0	1800N 2000E
6372.	3. 3	1800N 1800E
6373.	2. 0	1800N 1600E
6374.	2. 0	1800N 1400E
6375.	5. 2	1800N 1200E
6376.	6. 5	1800N 1000E
6377.	6. 5	1800N 800E
6378.	10. 4	
6379.	4. 6	1800N 600E
6380.	13. 0	1800N 400E
6381.	7. 4	1800N 200E
6382.	2. 7	1800N 000E
6383.	12. 0	2000N 000E
6384.	3. 3	2000N 200E
6385.	3. 3	2000N 400E
6386.	3. 3	2000N 600E
6387.	2. 7	2000N 800E
6388.	4. 7	2000N 1000E
6389.	5. 4	2000N 1200E
6390.	2. 7	2000N 1400E
6391.	1. 3	2000N 1600E
6392.	1. 3	2000N 1800E
6393.	3. 3	2000N 2000E
6394.	2. 7	2200N 2000E
6395.	0. 7	2200N 1800E
6396.	2. 0	2200N 1600E
6397.	6. 0	2200N 1400E
6398.	0. 7	2200N 1200E
6399.	2. 0	2200N 1000E
6400.	3. 3	2200N 800E
6401.	2. 7	2200N 600E
6402.	2. 0	2200N 400E
6403.	2. 0	2200N 200E
6404.	4. 0	2200N 000E
6405.	1. 3	2400N 000E
6406.	3. 9	2400N 200E
6407.	7. 2	2400N 400E
6408.	4. 6	2400N 600E
6409.	1. 3	2400N 800E
6410.	16. 3	2400N 1000E
6411.	2. 6	2400N 1200E
6412.	5. 9	2400N 1400E
6413.	3. 3	2400N 1600E
6414.	1. 3	2400N 1800E
6415.	3. 3	2400N 2000E
6416.	11. 1	2600N 2100E
6417.	5. 9	2600N 2000E
6418.	5. 9	2600N 1800E

OCCIDENTAL WATERHOUSE 11-13-78

CUP SERIAL NUMBER	DETECTOR READING (T/SQ. MM.)	FIELD NOTES AND DATA
-------------------------	-------------------------------------	----------------------

6419.	5. 2	2600N 1600E
6420.	6. 5	2600N 1400E
6421.	8. 5	2600N 1200E
6422.	5. 2	
6423.	3. 9	2600N 1000E
6424.	3. 3	2600N 800E
6425.	12. 4	2600N 600E
6426.	9. 1	2600N 400E
6427.	16. 3	2600N 200E
6428.	3. 9	2600N 000E
6429.	4. 6	2800N 000E
6430.	6. 5	2800N 200E
6431.	9. 1	2800N 400E
6432.	5. 9	2800N 600E
6433.	7. 2	2800N 800E
6434.	17. 4	2800N 1000E
6435.	6. 7	2800N 1200E
6436.	16. 1	2800N 1400E
6437.	5. 4	2800N 1600E
6438.	3. 3	2800N 1800E
6439.	27. 4	2800N 2000E
6440.	11. 4	
6441.	2. 0	2800N 2200E
6442.	1. 3	3000N 2400E
6443.	7. 4	3000N 2200E
6444.	14. 0	3000N 2000E
6445.	3. 3	3000N 1800E
6446.	3. 3	3000N 1600E
6447.	2. 7	3000N 1400E
6448.	2. 7	3000N 1200E
6449.	2. 7	3000N 1000E
6450.	2. 7	3000N 800E
6451.	5. 4	3000N 600E
6452.	3. 3	3000N 400E
6453.	7. 4	3000N 200E
6454.	1. 3	3000N 000E
6455.	3. 3	3200N 00E
6456.	4. 0	3200N 200E
6457.	6. 7	3200N 400E
6458.	7. 4	3200N 600E
6459.	4. 7	3200N 800E
6460.	7. 4	3200N 1000E
6461.	3. 3	3200N 1200E
6462.	5. 4	3200N 1400E
6463.	7. 4	3200N 1600E
6464.	11. 4	3200N 1800E
6465.	16. 7	3200N 2000E
6466.	9. 4	3200N 2200E
6467.	4. 7	3200N 2400E
6468.	1. 3	3400N 2400E

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

6469.	4. 0	3400N 2200E
6470.	5. 4	3400N 2000E
76591.	2. 9	200N 900E
76592.	4. 3	200N 1100E
76593.	9. 4	400N 1100E
76594.	13. 0	400N 900E
76595.	10. 1	600N 900E
76596.	12. 3	600N 1100E
76597.	9. 4	800N 1300E
76598.	15. 9	800N 1100E
76599.	5. 1	1000N 1100E
76600.	10. 9	1000N 1300E
76601.	7. 2	1200N 1300E
76602.	4. 3	1200N 1100E
76603.	3. 6	1400N 1100E
76604.	1. 4	1400N 1300E
76605.	12. 3	1600N 1300E
76606.	1. 4	1600N 1100E
76607.	10. 1	1800N 1100E
76608.	8. 0	1800N 1300E
76609.	14. 5	2000N 1300E
76610.	6. 5	2000N 1500E
76611.	13. 0	2200N 1500E
76612.	9. 4	2200N 1300E
76613.	13. 4	2400N 1300E
76614.	9. 2	2400N 1500E
76615.	21. 2	2600N 1700E
76616.	45. 1	2600N 1500E
76617.	33. 1	2800N 1500E
76618.	30. 3	2800N 1700E
76619.	4. 9	3000N 1700E
76620.	0. 7	3000N 1500E
76621.	6. 3	3200N 1500E
76622.	4. 2	3200N 1700E
76623.	9. 2	3400N 1900E
76624.	21. 9	3400N 1800E
76625.	18. 3	3400N 1700E
76626.	12. 0	3400N 1600E
76627.	3. 5	3400N 1400E
76628.	38. 8	3400N 1200E
76629.	8. 5	3400N 1000E
76630.	7. 8	3400N 800E
76631.	5. 6	3400N 600E
76632.	9. 2	3400N 400E
76633.	3. 5	3400N 200E
76634.	9. 9	3400N 000E
76635.	4. 9	3600N 000E
76636.	2. 8	3600N 200E
76637.	3. 5	3600N 400E
76638.	4. 2	3600N 600E

OCCIDENTAL WATERHOUSE 11-13-78

CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

76639.	1. 4	3600N 800E
76640.	4. 2	3600N 1000E
76641.	5. 6	3600N 1200E
76642.	4. 2	3600N 1400E
76643.	12. 0	3600N 1600E
76644.	12. 7	3600N 1700E
76645.	10. 6	3600N 1800E
76646.	6. 3	3600N 1900E
76647.	4. 9	3600N 2000E
76648.	9. 9	3800N 2400E
76649.	6. 3	3800N 2200E
76650.	5. 6	3800N 2000E
76651.	5. 6	3800N 1900E
76652.	9. 9	3800N 1800E
76653.	8. 5	3800N 1700E
76654.	1. 4	3800N 1600E
76655.	6. 3	3800N 1400E
76656.	4. 2	3800N 1200E
76657.	21. 2	3800N 1000E
76658.	11. 3	3800N 800E
76659.	1. 4	3800N 600E
76660.	9. 2	3800N 400E
76661.	2. 9	3800N 200E
76662.	2. 2	3800N 000E
76663.	2. 2	4000N 000E
76664.	5. 8	4000N 200E
76665.	6. 5	4000N 400E
76666.	5. 8	4000N 600E
76667.	5. 8	4000N 800E
76668.	30. 4	4000N 1000E
76669.	9. 4	4000N 1200E
76670.	14. 5	4000N 1400E
76671.	10. 1	4000N 1600E
76672.	22. 5	4000N 1700E
76673.	52. 9	4000N 1800E
76674.	39. 1	4000N 1900E
76675.	3. 6	4000N 2000E
76676.	5. 8	4000N 2200E
76677.	15. 9	3600N 2200E
76678.	3. 6	3600N 2400E
76679.	5. 8	4200N 2600E
76680.	5. 8	4200N 2400E
76681.	11. 6	4200N 2200E
76682.	2. 9	4200N 2100E
76683.	7. 2	4200N 2000E
76684.	2. 2	4200N 1900E
76685.	8. 5	4400N 2000E
76686.	0. 7	4400N 2100E
76687.	2. 8	4400N 2200E
76688.	5. 6	4400N 2300E

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

76689.	9. 9	4400N 2400E
76690.	3. 5	4400N 2600E
76691.	19. 0	4400N 2800E
76692.	14. 1	4600N 2800E
76693.	28. 2	4600N 2600E
76694.	12. 7	4600N 2400E
76695.	18. 3	4600N 2300E
76696.	17. 6	4600N 2200E
76697.	4. 2	4600N 2100E
76698.	8. 5	4600N 2000E
76699.	9. 2	4800N 2000E
76700.	16. 9	4800N 2100E
76701.	9. 9	4800N 2200E
76702.	19. 0	4800N 2300E
76703.	8. 5	4800N 2400E
76704.	2. 8	4800N 2600E
76705.	22. 5	3800E 5000N
76706.	3. 6	3800E 5200N
76707.	3. 6	3800E 5400N
76708.	22. 5	3800E 5600N
76709.	3. 6	3600E 5600N
76710.	1. 4	3600E 5400N
76711.	8. 0	3600E 5200N
76712.	2. 9	3600E 5000N
76713.	18. 1	3400E 5000N
76714.	9. 4	3400E 5200N
76715.	5. 8	3400E 5400N
76716.	10. 1	3400E 5600N
76717.	11. 6	3200E 5600N
76718.	18. 1	3200E 5400N
76719.	15. 2	3200E 5200N
76720.	7. 2	3200E 5000N
76721.	8. 0	3000E 5000N
76722.	23. 2	3000E 5200N
76723.	5. 8	3000E 5400N
76724.	6. 5	3000E 5600N
76725.	6. 7	5400N 2000E
76726.	14. 2	5400N 1800E
76727.	5. 2	5400N 1600E
76728.	8. 2	5600N 1400E
76729.	14. 9	5600N 1600E
76730.	6. 7	5600N 1800E
76731.	6. 7	5600N 2000E
76732.	12. 7	5600N 2200E
76733.	11. 9	5600N 2400E
76734.	35. 8	5600N 2600E
76735.	6. 0	5400N 2600E
76736.	2. 2	5400N 2400E
76737.	11. 9	5400N 2200E
76738.	9. 5	5200N 1800E

OCCIDENTAL WATERHOUSE		11-13-78
CUP	DETECTOR	
SERIAL	READING	
NUMBER	(T/SQ. MM.)	FIELD NOTES AND DATA

76739.	10. 3	5200N 2000E
76740.	1. 6	5200N 2200E
76741.	4. 7	5200N 2400E
76742.	4. 7	5200N 2600E
76743.	4. 7	5000N 2600E
76744.	4. 7	5000N 2400E
76745.	21. 3	5000N 2200E
76746.	5. 5	5000N 2000E
76747.	11. 9	2800E 5600N
76748.	2. 4	2800E 5400N
76749.		2800E 5200N
76750.	5. 5	2800E 5000N
76751.	96. 0	5000N 2100E NOT RET
76752.	5. 9	5000N 2300E
76753.	13. 0	5200N 2300E
76754.	7. 1	5200N 2100E
76755.	5. 9	5400N 2300E
76756.	3. 6	5400N 2500E
76757.	23. 7	5600N 1250E
76758.	47. 4	5400N 1450E
76759.	26. 1	5200N 1550E
76760.	8. 3	5200N 1600E

APPENDIX III

R.A.B. DRILLING GEOLOGICAL LOGS

CORE DESCRIPTION

Depth 32 M
Date drilled 2nd July, 1979
Logged by N. S.
Date 2nd July, 1979

	DEPTH IN METRES	GEOLOGICAL LOG	DESCRIPTION
		Scint GR101A 56 c.p.s.	0 - 1M Ferruginised red-brown shale/argillite and quartz rubble, and lateritic clay.
	2	54	1 - 4M Greenish white to light orange brown mottled clay with occasional medium purplish grey carbonaceous pyritic? shale fragments. B - Zone
	4	52	4 - 26M Very weathered light to dark grey carbonaceous, sericitic shale/argillite. In places pyritic? C - Zone
	6	52	
	8	50	
	10	56	
	12	58	
	14	54	13M Seepage.
	16	48	
	18	50	17 - 32M Poor return of cuttings.
	20	56	20M Making water.
	22	52	
	24	54	
	26	52	26 - 32M Weathered dark grey - black to reddish brown carbonaceous shale - argillite.
	28	56	
	30	60	
30	31	56	
31	32	58	
			End of hole 32M.

CORE DESCRIPTION

Project ..WATERHOUSE EL..1755.....
 Drill Hole No...W.A.2.....
 Driller ..Stanley & Hall.....
 Core Size 4" Blade Pioneer Mole Rig..
 Loc. 5000N/2050E

Depth 21M.....
 Date drilled 2nd July, 1979.....
 Logged by ..N.S.....
 Date 2nd July, 1979.....

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GR101A 46 cps	0 - 1M Organic Soil (A zone) and creamy white to orange mottled clay (B Zone)
	2	46	
		48	
	4	46	1 - 4M Creamy white-orange-grey mottled clay, greenish tinge with depth (B Zone)
		50	
	6	48	4 - 6M Very weathered dark grey-purplish brown - light greenish grey carbonaceous shale-argillite (C Zone)
		48	
	8	46	6 - 18M Reddish brown - maroon ferruginous sericitic carbonaceous shale-argillite
		46	
	10	44	
		44	
	12	46	
		44	
	14	48	
		50	
	16	48	16M Penetration rate slow
		50	
	18	50	18-19M Bleached? Light grey sericitic shale-argillite
		48	19-21M Relatively fresh orange-brown to dark grey/black sericitic carbonaceous argillite.
	20	48	
	21	46	21M End of hole
			Making water after pull out.
			<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>
			Cu Pb Zn Co Ni Mn U Th
19	20		65 100 240 25 120 2300 10 24
20	21		85 85 450 40 210 4500 8 20

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A.3
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Loc. 5000N/2100E

Depth 12M
 Date drilled 2nd July, 1979
 Logged by N. S.
 Date 2nd July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GR101A 56 cps.	0 - 0.2M Organic soil - (A Zone)
	2	60	0.2 - 2M Light grey-orange mottled clay plus fragments of ferruginised sericitic argillite (B Zone)
	4	60	2 - 8M Purplish dark grey-light grey sericitic carbonaceous argillite (C Zone)
	6	50	
	8	55	8 - 12M Light to dark grey-maroon sericitic carbonaceous argillite with occasional band of fine grained siliceous ironstone, increasing with depth. Slow penetration rate
	10	56	End of hole 12 M. Making water.
	12	50	
		55	
GEOCHEMICAL ANALYSES (P.P.M.)			
			Cu Pb Zn Co Ni Mn U Th
10	11		90 85 95 20 40 1700 6 16
11	12		140 70 160 25 75 390 8 18

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A.4
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig.
 Loc. 5000N/2150E

Depth 19M
 Date drilled 2nd July, 1979
 Logged by N.S.
 Date 2nd July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GR101A 48 cps.	0 - 0.1M Organic soil (A Zone)
	2	48	0.1 - 2M Ferruginised light red shale/argillite and lateritic clay (B Zone)
		48	
	4	50	
		50	
	6	44	2 - 7M Light creamy grey-orange mottled clay.
		50	7 - 19M Dark gray to dull black sericitic carbonaceous shale and argillite with occasional hair size ferruginous veinlets.
	8	48	
		46	
	10	48	
		48	
	12	50	
		46	
	14	48	
		46	
	16	46	
		48	17M Penetration rate slow. Seepage.
	18	50	
	19	50	19M End of hole.
<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>			
			Cu Pb Zn Co Ni Mn U Th
17	18		110 >5 10 75 25 15 8 18
18	19		140 >0 10 75 30 20 10 18

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA
CORE DESCRIPTION

Project WATERHOUSE EL. 1755
Drill Hole No. W.A.5
Driller Stanley & Hall
Core Size 4" Blade Pioneer Mole Rig
Loc. 5000N/2200E

Depth 28M
Date drilled 2nd July, 1979
Logged by N.S.
Date 2nd July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GR101A	0 - 0.1M Organic soil
		30 cps.	
	2	36	0.1 - 6M Orange lateritic clay and ferruginised shale fragments (Talus)
		36	
	4	36	
		38	
	6	40	6 - 9M Light greenish grey-orange mottled clay and fragments of maroon sericitic carbonaceous shale
		38	
	8	40	8M Seepage
		38	
	10	38	9 - 15M Very weathered sericitic carbonaceous shale/argillite
		34	
	12	38	
		35	
	14	34	
		36	15 - 28M Maroon-chocolate brown to black sericitic pyritic carbonaceous shale-argillite with occasional silicified ironstone bands (0.4 - 0.6cm thick). Minor quartz veinlets.
	16	38	
		40	
	18	42	
		42	
	20	38	
		36	
	22	34	
		34	
	24	38	23M Making water.
		40	
	26	36	28M End of hole
			<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>
			Cu Pb Zn Co Ni Mn U Th
26	27	40	65 65 100 15 140 85 14 14
27	28	38	65 65 45 15 110 50 10 12

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 6
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 2150E/4900N

Depth 20M
 Date drilled 3rd July, 1979
 Logged by N.S.
 Date 3rd July, 1979

DEPTH IN METRES		GRAPHIC LOG	DESCRIPTION							
0		Scint GR101A	0 - 2M	Lateritic reddish brown to orange clay with ferruginised rock fragments (B Zone)						
	2	34 Cps.	2 - 11M	Greenish kharki clay - becoming greener with depth.						
		34								
		32								
	4	34								
		36								
	6	38								
		40								
	8	34	8M	Seepage						
		36								
	10	38	10M	Making water						
		38	11 - 20M	Very weathered magnetite, chlorite-quartz-feldspar mafic rock - amphibolite (Meta-dolerite?)						
	12	32								
		34								
	14	36								
		30								
	16	36								
		38								
	18	34								
		38								
	20	36	20M	End of hole						
GEOCHEMICAL ANALYSES (P.P.M.)										
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
18	19		200	40	140	180	400	8200	<4	14
19	20		200	15	130	110	350	2600	6	14

CORE DESCRIPTION

Project WATERHOUSE EL 1755 Depth 28M
 Drill Hole No. W.A.7 Date drilled 3rd July, 1979
 Driller Stanley & Hall Logged by N.S.
 Core Size 4" Blade Pioneer Mole Rig Date 3rd July, 1979
 Location 4900N/2100E

Location		4900N/2100E							
DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION							
	Scint GR101A	0 - 2M	Lateritic reddish brown-orange clay with ferruginised rock fragments						
	38 cps.								
2	36	5 - 5M	Olive-greyish green clay						
	34								
4	30								
	30	5 - 15M	Orange brown clay in places olive-greenish grey						
6	28								
	30								
8	32								
	30								
10	32								
	34								
12	34								
	34	13M	Making water						
14	32								
	36	15 - 28M	Greenish dull black to silvery black chloritic? graphitic schist. Dark reddish brown specks - hematite after mafic mineral. Possibly pyritic.						
16	34								
	38		Occasional ferruginous bands and veinlets of quartz and hematite. 15M penetration rate slow						
18	30								
	36								
20	34								
	36								
22	34								
	36								
24	40								
	38								
26	38								
	34								
28	32	28M	End of hole						
GEOCHEMICAL ANALYSES (P.P.M.)									
		Cu	Pb	Zn	Co	Ni	Mn	U	Th
	34	110	100	1700	45	230	1200	6	16
28	32	70	85	760	30	130	1200	6	14

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 8
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 4900N/2050E

Depth 28M
 Date drilled 3rd July, 1979
 Logged by N.S.
 Date 3rd July, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0	Scint GR101A 48 cps	0 - 3M Lateritic orange-brown to orange clay plus ferruginised rock fragments and quartz
2	50	
	32	3 - 11M Olive to greenish kharki mottled clays (B Zone)
4	48	
	48	
6	46	
	46	7 - 11M Clay becoming lighter in colour almost light-greyish white.
8	44	8M Seepage
	46	
10	50	10M Making water
	48	11 - 28M Very weathered ferruginised quartz mica rock with quartz veins. Trace magnetite.
12	48	Penetration rate decreasing with depth
	46	
14	46	
	44	
16	48	
	46	
18	46	Hole abandoned 25M
	48	
20	48	
	48	
22	46	
	46	
24	46	GEOCHEMICAL ANALYSES (P.P.M.)
	46	Cu Pb Zn Co Ni Mn U Th
26	44	150 5 170 85 420 3300 8 16
	48	130 10 150 85 410 5700 <4 10
28	44	

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A.9
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 4900N/2000E

Depth 18M
 Date drilled 3rd July, 1979
 Logged by N.S.
 Date 3rd July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GR101A	0 - 0.1M Organic soil
		52 cps.	
	2	50	0.1 - 2.5M Lateritic reddish brown-orange clay plus quartz and ferruginised shale and chert?
		54	2.5 - 5M Kharki-light greenish grey mottled clay
	4	52	
		52	5 - 8M Creamy white clay
	6	50	
		48	
	8	54	8 - 11.5M Dull reddish brown-maroon very weathered sericitic shale/argillite
		52	
	10	50	
		52	
	12	56	11.5 - 12M Light grey sericitic carbonaceous? shale/argillite
		52	12 - 18M Pyritic carbonaceous maroon to black shale/argillite.
	14	50	
		50	End of hole 18M
	16	52	
		50	
	18	56	
<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>			
			Cu Pb Zn Co Ni Mn U Th
16	17		110 50 250 15 75 2100 10 18
17	18		100 80 270 15 60 1500 8 20

CORE DESCRIPTION

Depth 14M
Date drilled 3rd July, 1979
Logged by N.S.
Date 3rd July, 1979

[illegible]

CORE DESCRIPTION

Project WATERHOUSE EL. 1755.....
 Drill Hole No. W.A. 11.....
 Driller Stanley & Hall.....
 Core Size 4" Blade Pioneer Mole Rig.....
 Location 3800N/1550E.....

Depth 32 M.....
 Date drilled 3rd July, 1979.....
 Logged by N.S.....
 Date 3rd July, 1979.....

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION							
0		Scint GR101A	0 - 3M	Lateritic reddish brown clay						
		40 cps.								
	2	38	3 - 8M	Light grey to orange mottled talcose?clay						
		42								
	4	40								
		38								
	6	42								
		38								
	8	42	8 - 20M	Fawn - light orange becoming olive-kharki (with depths) clay. Very weathered fragments micaceous rock						
		38								
	10	38								
		40								
	12	42								
		38								
	14	36								
		40								
	16	38								
		40								
	18	42								
		40								
	20	38	20 - 32M	Dolomite (fresh)						
		42								
	22	38		22m - Making water.						
		38								
	24	38								
		36								
	26	40								
		36								
	28	36								
		40								
	30	40	32M	End of hole						
GEOCHEMICAL ANALYSES (P.P.M.)										
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
30	31	38	85	230	410	35	140	380	4	20
31	32	40	65	160	290	35	110	480	8	20

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A.12
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 3800N/1600E

Depth 18.5M
 Date drilled 3rd July, 1979
 Logged by N.S.
 Date 3rd July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION	
0		Scint GR101A	0 - 4M	Brown red lateritic clay. Hard layer at 4M
		40 cps.		
	2	38	4 - 8M	Kharki clay
		38		
	4	36		
		34		
	6	36		
		38		
	8	36	8 - 11M	Reddish brown clay
		38		
	10	34		
		34	11 - 13M	Kharki clay
	12	36		
		36	13 - 18M	Reddish brown clay plus fragments of very ferruginised -rock - ironstone?
	14	36		
		38		
	16	36	16M	Making water
		34		
	18	36	18 - 18.5	Dolomite (fresh)
	18.5	36		End of hole 18.5M

CORE DESCRIPTION

Depth 20M
Date drilled 3rd July, 1979
Logged by N.S.
Date 3rd July, 1979

DEPTH IN METRES		GRAPHIC LOG	DESCRIPTION							
		Scint GR101A	0 - 2M	Lateritic red brown clay						
		30 cps								
2		30	2 - 20M	Very weathered greyish green-olive magnetite? - quartz-feldspar-sericite-chlorite rock, Meta-dolerite?						
		32								
4		28								
		26		Hole abandoned 20M						
6		26								
		28								
8		26								
		28								
10		28								
		28								
12		26								
		28								
14		28								
		26								
16		28								
		26								
18		28								
18	19	26								
19	20	28								
GEOCHEMICAL ANALYSES (P.P.M.)										
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
			260	<5	150	95	530	1200	4	12
			180	<5	150	100	550	1100	<4	8

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A.14
 Driller Stanley & Blake
 Core Size 4" Blade Pioneer Mole Rig
 Location 3800N/1700E

Depth 27M
 Date drilled 2nd July, 1979
 Logged by N.S.
 Date 3rd July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION								
0		Scint GR101A	0 - 2M	Lateritic clay							
		54 cps									
	2	54	2 - 4M	Olive clay							
		52									
	4	54	4 - 22M	Olive-kharki talcose clay with apple green and steel blue patches							
		52									
	6	48									
		48									
	8	52									
		50									
	10	48									
		56									
	12	50									
		50									
	14	54									
		50									
	16	50									
		52									
	18	50									
		50									
	20	50									
		48									
	22	50	22 - 27M	Dark olive green very weathered magnetite sericitic feldspar quartz mica rock							
		52									
	24	52	27M	Penetration rate very slow. Meta-dolerite (very similar to cuttings of W.A.13)							
		50		Hole abandoned 27M							
GEOCHEMICAL ANALYSES P.P.M.											
			Cu	Pb	Zn	Co	Ni	Mn	U	Th	
25	26	50	230	10	160	80	430	980	<4	16	
26	27	52	210	10	200	75	410	830	4	20	

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA
CORE DESCRIPTION

Project WATERHOUSE EL 1755
Drill Hole No. W.A.15
Driller Stanley & Hall
Core Size 4" Blade Pioneer Mole Rig
Location 3800N/1750E

Depth 20M
Date drilled 3rd July, 1979
Logged by N.S.
Date 3rd July, 1979

Location		3800N/1750E	
DEPTH IN METRES		GRAPHIC LOG	DESCRIPTION
0		Scint GR101A	0 - 3M Lateritic clay
		50 cps.	
	2	50	
		52	3 - 7M Red-maroon weathered shale
	4	56	
		48	
	6	48	
		52	7 - 9M Orangy brown-kharki shale
	8	60	
		60	9 - 16M Maroon-cherry black sericitic shale
	10	62	
		58	
	12	56	
		54	
	14	50	
		50	
	16	50	16 - 20M Purplish black pyritic carbonaceous shale
			End of hole 20M
GEOCHEMICAL ANALYSES (P.P.M.)			
			Cu Pb Zn Co Ni Mn U Th
18	19		22 30 10 <5 15 15 10 24
19	20		22 45 15 <5 15 <5 10 26

CORE DESCRIPTION

Depth 12M
 Date drilled 3rd July, 1979
 Logged by N.S.
 Date 3rd July, 1979

Location		3800N/1600E							
DEPTH IN METRES		GRAPHIC LOG	DESCRIPTION						
0		Scint GR101A	0 - 1M Lateritic clay						
		52 cps							
2		54	2 - 7M Fawn-creamy white clay plus fragments of bleached shale						
		52							
4		52							
		52							
6		54							
		52	7 - 12M Black-maroon serfictic carbonaceous shale trace pyrite						
8		48							
		48							
10		50	End of hole 12M						
		50							
12		52							
<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>									
		Cu	Pb	Zn	Co	Ni	Mn	U	Th
10	11	160	50	25	5	30	20	8	16
11	12	90	60	20	<5	25	10	10	20

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 17
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 3200N/1600E

Depth 13M
 Date drilled 3rd July, 1979
 Logged by N.S.
 Date 3rd July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GR101A	
		36 cps	0 - 3M Reddish brown lateritic clay and rubble
	2	34	
		36	3 - 10M Fawn to pinkish fawn micaceous clay
	4	36	
		32	
	6	36	
		36	
	8	34	
		32	
	10	36	10 - 13M Pyritic silicified fragments of marble and clay
		36	
	12	32	
	13	34	13M Fresh pyritic dolomite
			End hole 13M
			<u>GEOCHEMICAL ANALYSES (P.P.M)</u>
			Cu Pb Zn Co Ni Mn U Th
11	12		140 40 660 80 240 1500 4 10
12	13		100 30 280 60 190 1400 8 12

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 18
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 3200N/1650E

Depth 21M
 Date drilled 3rd July, 1979
 Logged by N.S.
 Date 3rd July, 1979

Location		5200N/1050E	
	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GR101A	
		36 cps	0 - 2M Lateritic reddish brown clay and ferricrete
	2	40	2 - 15M Red-orange-greenish white clay
		38	10M - seepage
	4	40	15M - Making water
		38	
	6	36	
		38	
	8	38	
		40	
	10	38	
		42	
	12	38	
		36	
	14	36	
		36	15 - 19M Highly ferruginised silicified rock with quartz veins
	16	36	Very slow penetration
		38	Pyritic pseudomorphs.
	18	36	
		36	19 - 21M Pyritic dolomite (fresh)
	20	34	
	21	36	Hole abandoned 21M
<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>			
			Cu Pb Zn Co Ni Mn U Th
19	20		42 40 140 140 460 1200 4 10
20	21		40 65 160 85 270 1100 10 8

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 19
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 3200N/1700E

Depth 38M
 Date drilled 3rd July, 1979
 Logged by N.S.
 Date 3rd July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GR101A	0 - 2M Lateritic clay
		36 cps	
	2	36	2 - 6M Orange-creamy grey clay
		35	
	4	38	
		40	
	6	40	6 - 7M Hard dark chocolate brown ferruginous floaters and clay.
		40	7 - 18M Orangy brown dark greenish brown micaceous clay
	8	40	
		38	
	10	36	
		36	
	12	38	
		40	
	14	36	
		36	
	16	38	
		40	
	18	36	18 - 38M Very weathered dark brown silicified ferruginous rock - ironstone
		40	
	20	36	18 M - Making water
		40	Hole abandoned 38M
	22	34	
		38	
	24	42	
		38	
	26	38	
		36	
	28	36	
		38	
	30	36	
		36	
	32	38	
		36	
	34	34	
		36	
	36	36	
36	37	36	

GEOCHEMICAL ANALYSES (P.P.M.)

Cu	Pb	Zn	Co	Ni	Mn	U	Th
220	110	330	140	380	2300	10	12
220	100	420	150	450	2300	14	10

CORE DESCRIPTION

Project WATERHOUSE EL 1755.....
 Drill Hole No..... W.A. 20.....
 Driller Stanley & Hall.....
 Core Size 4" Blade Pioneer Mole Rig.....
 Location 3200N/17500E.....

Depth 24M.....
 Date drilled 4th July, 1979.....
 Logged by N.S.....
 Date 4th July, 1979.....

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION							
0		Scint GR101A	0 - 1	Fawn clay and shale rubble						
		68 cps.								
	2	70	1 - 8M	Creamy white clay and very weathered bleached shale						
		72								
	4	72								
		68								
	6	68								
		74								
	8	70	8 - 14M	Orangy brown -brown clay and very weathered shale						
		76								
	10	78								
		76								
	12	80								
		82								
	14	72	14 - 14.5M	Creamy white bleached? shale						
		70								
	16	68	16 - 20M	Dark reddish brown sericitic shale - argillite						
		70		24M Making water						
	18	68								
		68								
	20	68	20 - 24M	Shale-argillite with occasional siliceous ferruginous rock						
		66								
	22	64		24M Hole abandoned						
		66								
	24	66								
GEOCHEMICAL ANALYSES (P.P.M.)										
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
12	13		330	55	180	85	220	960	24	16
16	17		30	10	10	<5	40	10	10	12
23	24		250	20	80	150	190	850	10	24

CORE DESCRIPTION

Depth 13M
Date drilled 4th July, 1979
Logged by N.S.
Date 4th JULY, 1979

Location 3000N/1500E

Location		3000N/1500E	
	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GR101A	
		38 Cps.	0 - 1M Lateritic clay
	2	36	1 - 3M Orangy-brown lateritic clay
		38	3 - 10M Light brown-yellowish brown mottled clay becoming olive with depth
	4	40	
		40	
	6	38	
		36	10 - 12M poor recovery
	8	34	
		34	
	10	36	10 - 12M Highly weathered silicified carbonate rock
		40	
	12	38	Penetration rate decreasing
	13	38	12 - 13M Very hard fresh pyritic dolomite
			13M hole abandoned
			<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>
			Cu Pb Zn Co Ni Mn U Th
10	11		55 100 130 50 170 1100 10 12
11	12		90 300 160 55 190 1300 6 10
	13		95 610 120 50 150 900 10 12

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 22
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 3000N/1550E

Depth 9M
 Date drilled 4th July 1979
 Logged by N.S.
 Date 4th July 1979

Location		3000N/1550E									
		DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION							
0			Scint GR101A	0 - 2M	Lateritic clay and fragments of micaceous argillite						
			36 cps.								
	2		34	2 - 3M	Light reddish brown clay						
			38	3 - 8.5M	Greenish brown clay possibly very weathered micaceous rock						
	4		34								
			38								
	6		38								
			34								
	8		36	8.5 - 9M	Very hard rock - quartzite?						
	9		34		Hole abandoned 9M						
<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>											
				Cu	Pb	Zn	Co	Ni	Mn	U	Th
6	7			55	45	150	75	210	2000	14	8
7	8			85	30	130	55	140	1500	10	12
8	9			100	20	130	60	170	1800	8	8

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 23
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 3000N/1600E

Depth 13M
 Date drilled 4th July, 1979
 Logged by N.S.
 Date 4th July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION							
0		Scint GR101A	0 - 2M	Reddish brown lateritic clay						
		34 cps.								
	2	38	2 - 7M	Light orangy-yellow brown clay						
		36		4M - seepage						
	4	38								
		36								
	6	36								
		36	7 - 12M	Dark olive clay						
	8	38								
		38								
	10	40								
		36								
	12	36	12 - 13M	Fresh pyritic dolomite, very poor penetration						
	13	36		Hole abandoned 13M.						
			<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>							
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
11	12		90	25	130	60	160	2000	4	10
	13		95	45	140	85	280	3400	12	12

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 24
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 3000N/1650E

Depth 5M
 Date drilled 4th July, 1979
 Logged by N.S.
 Date 4th July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION							
0		Scint GR101A	0 - 1M	Red lateritic clay						
		48 cps								
	2	48	1 - 4M	White clay, becoming sandy with depth						
		42								
	4	44	4 - 5M	Dull black quartzite						
	5	48		Penetration very slow						
				Hole abandoned 5M						
<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>										
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
3	4		65	30	50	10	40	410	6	8
4	8		75	25	80	10	45	430	6	4

CORE DESCRIPTION

Depth 20M
Date drilled 4th July, 1979
Logged by N.S.
Date 4th July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION	
0		Scint GR101A 46 cps.	0 - 2	Lateritic clay and ferruginised shale
	2	44	2 - 10M	Bleached shale
		44		
	4	42		
		44		
	6	46		
		42		
	8	44		
		42		
	10	44	10 - 20M	Maroon-creamy grey shale
		46		
	12	46		Penetration decreasing with depth
		42		
	14	44		16M making water
		46		
	16	46		20M Hole abandoned
		40		<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>
	18	40		Cu Pb Zn Co Ni Mn U Th
18	19	38		70 20 15 5 20 90 8 16
19	20	46		220 110 280 55 530 250 16 12

CORE DESCRIPTION

Depth 16M
Date drilled 4th July, 1979
Logged by N.S.
Date 4th July, 1979

DEPTH IN METRES		GRAPHIC LOG	DESCRIPTION							
0		Scint GR101A 50 cps	0 - 1M	Organic soil and lateritic clay						
2		48	1 - 3.5M	Shale and chert rubble						
		50								
4		48	3.5 - 4M	Light creamy grey clay						
		50	4 - 15M	Bleached sericitic carbonaceous shale						
6		50								
		50								
8		48								
		48								
10		46								
		50								
12		52								
		50								
14		50								
		50	15 - 16M	Chocolate brown sericitic carbonaceous shale						
16		50								
GEOCHEMICAL ANALYSES (P.P.M.)										
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
15			30	30	15	5	30	10	8	24
15			100	25	30	60	100	190	10	18

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 27
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 2600N/1400E

Depth 16M
 Date drilled 4th July, 1979
 Logged by N.S.
 Date 4th July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION							
0		Scint GR101A								
		50 cps.	0 - 2M	Lateritic clay						
	2	50	2 - 5M	Red - purple sericitic shale in places bleached to light grey						
		50								
	4	52								
		52	5 - 16M	Red black sericitic shale/argillite						
	6	52								
		50								
	8	52								
		50								
	10	54								
		50								
	12	52	15M	Seepage						
		54								
	14	54	End of hole 16M							
		52								
	16	50								
			<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>							
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
14	15		70	45	10	<5	15	20	8	28
15	16		65	35	5	<5	15	20	10	22

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 28
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 2600N/1450E

Depth 22M
 Date drilled 4th July, 1979
 Logged by N.S.
 Date 4th July, 1979

DEPTH IN METRES		GRAPHIC LOG	DESCRIPTION							
0		Scint GR101A	0 - 2M	Red brown lateritic clay						
		58 cps								
	2	58	2 - 3M	Orangy brown clay						
		60	3 - 8M	Olive clay with white patches.						
	4	50								
		50								
	6	50								
		50								
	8	48	8 - 14M	Olive very weathered chlorite schist						
		48		12M Seepage						
	10	50								
		50								
	12	52								
		48								
	14	48	14 - 22M	Very weathered chlorite quartz mafic rock (Meta dolerite?)						
		46								
	16	48								
		50								
	18	50		End of hole 22M						
		46		<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>						
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
	20	50								
	21	48	190	25	1000	110	1000	700	8	12
21	22	48	280	250	1200	110	970	610	10	12

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 29
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 2600N/1500E

Depth 22M
 Date drilled 4th July, 1979
 Logged by N.S.
 Date 4th July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION							
0		Scint GR101A	0 - 2M	Orangy brown clay						
		58 cps.								
	2	56	2 - 9M	Creamy white clay with fragments of chert and shale						
		54								
	4	52								
		50								
	6	50								
		52								
	8	54								
		54	9 - 15M	Very weathered sericitic carbonaceous shale fragments in brown clay						
	10	54								
		58								
	12	56								
		56								
	14	52								
		50	15 - 19M	Olive green clay						
	16	48								
		48								
	18	50								
		50	19 - 22M	Dark green chlorite quartz schist						
	20	48								
		52		End of hole 22M						
	22	52								
<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>										
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
20	21		200	15	120	80	590	320	4	8
21	22		170	10	150	85	650	300	<4	10

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 30
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 2600N/1550E

Depth 4M
 Date drilled 4th July, 1979
 Logged by N.S.
 Date 4th July, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A 52 cps	0 - 4m Gravel
2	52	
	50	
4	50	Penetration stopped. Hole abandoned 4m.
<u>GEOCHEMICAL ANALYSIS (ppm)</u>		
Cu	Pb	Zn Co Ni Mn U Th
110	70	55 15 85 150 8 18

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 31
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location 2600N/1600E

Depth 20M
 Date drilled 4th July, 1979
 Logged by N.S.
 Date 4th July, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
0		Scint GE101A 48 cps.	0 - 5M Quartz hematite breccia and shale rubble
	2	46	
		50	
	4	48	
		48	5 - 10M Light grey-olive-dark green clay with fragments of chlorite schist very similar to W.A. 29
	6	44	
		46	
	8	44	
		48	
	10	44	10 - 17.5M Chloritic rock
		40	
	12	40	
		40	
	14	40	
		40	
	16	38	
		38	17.5 - 20M Fresh chloritic quartz feldspar schistose rock
	18	38	
		38	
	20	38	End of hole 20M
			<u>GEOCHEMICAL ANALYSES (P.P.M.)</u>
			Cu Pb Zn Co Ni Mn U Th
18	19		150 10 60 45 270 990 <4 6
19	20		130 5 55 45 240 1200 <4 6

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 32
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 5000N/1950E

Depth 26M
 Date drilled 23 AUGUST, 1979
 Logged by N.S.
 Date 23 AUGUST, 1979

DEPTH IN METRES		GRAPHIC LOG	DESCRIPTION	
0		Scint GR101A c.p.s.	0 - 1m	Lateritic rubble.
	1	52	1 - 7m	Yellowish orange micaceous clay? (Very rotten rock?)
		62		
	2	56		
		58		
	4	58		
	6	56		
		52	7 - 8m	Dark brown ferruginous rock. 8 m seepage.
	8	56	8 - 13m	Light to dark brown with depth ferruginous weathered rock.
		56		
	10	52		10m - hard layer
		52		
	12	50		12m - making water
		52	13 - 14m	Dark brown siliceous ironstone
	14	50		14m - slow penetration, very hard
		52	14 - 25m	Silicified (chalcedonic) carbonate?
		50		
		52		
	25	18	46	
		50		
20		50		
		48		
22		50		
		48		
24		48		
		50	25 - 26m	Ironstone
26		48		Hole abandoned 26m.
<u>GEOCHEMICAL ANALYSIS (ppm)</u>				
24	48	Cu Pb Zn Co Ni Mn U Th		
	50	150 260 2000	14 10	
25	26	48	130 190 3500	10 10

CORE DESCRIPTION

Project WATERHOUSE E.L. 1755
 Drill Hole No. W.A. 33
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig.
 Location: 5000N/1900E

Depth 8 M
 Date drilled 23 August, 1979
 Logged by N.S.
 Date 23 August, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION	
0	1	Scint GR101A c.p.s.	0 - 8m	Very weathered red to dark brown sericitic carbonaceous pyritic (?) shale, Becoming black with depth. Penetration rapidly decreasing.
	2	56		
		52		
	4	52		
		54		
	6	58		
		52		
	7	8	52	8m - hole abandoned.
<u>GEOCHEMICAL ANALYSIS (ppm)</u>				
			Cu Pb Zn Co Ni Mn U Th	
		6 - 7m	38 30 70	8 20
		7 - 8m	40 35 70	4 18

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 34
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4900N/1800E

Depth 18 M
 Date drilled ..23 August, 1979.....
 Logged by N.S.....
 Date 23 August, 1979.....

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s.	0 - 2.5m Orangy red lateritic clay
2	52	2.5-4.5m Greyish white clay
	52	
4	52	4.5-8m Very weathered-bleached light grey shale
	50	
6	52	
	52	
8	50	8 - 18m Grey-black graphitic shale
	48	
10	48	
	48	
12	50	
	50	
14	50	
	48	
16	50	
	50	17m - seepage
18	48	18m - hole making water, hole abandoned
<u>GEOCHEMICAL ANALYSIS (ppm)</u>		
		Cu Pb Zn Co Ni Mn U Th
	15 - 16m	55 20 120 8 14
	16 - 17m	65 15 80 8 20

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 35
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4900N/1850E

Depth 20 M
 Date drilled 23 August, 1979
 Logged by N.S.
 Date 23 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s.	
2	46 44	0 - 3m Orangi red lateritised shale
	48	3 - 4m Light grey sericitic carbonaceous shale
4	44	4 - 6m Light red-pink shale
	48	4 - 11m Light to dark grey shale with occasional red zone
6	46	
	48	
8	44	
	40	
10	42	
	42	11 - 16m Reddish brown sericitic pyritic (?) shale
12	48	
	46	
14	46	
	46	
16	46	16 - 20m Black shale/slate. Heamatitic in places.
	48	Seepage 18m
18	46	
	46	
20	46	End of hole 20m.
GEOCHEMICAL ANALYSIS (ppm)		
	Cu Pb Zn Co Ni Mn U Th	
18 - 19m	35 10 40	6 18
19 - 20m	30 10 40	6 16

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 36
 Driller Stanley & Blake
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4900N/1900E

Depth 24M
 Date drilled 23 August, 1979
 Logged by N.S.
 Date 23 August, 1979

	DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION							
		Scint GR101A								
		c.p.s.	0 - 1m	Lateritic rubble and clay						
	2	46	1 - 4m	Fawn clay and fragments of shale						
		42								
		40								
	4	38	4 - 5m	Orange-yellow clay						
		48	5 - 10m	Brown-reddish brown becoming kharki with depth, clay with fragments of ironstone						
	6	46								
		42								
	8	46								
		48								
	10	46	10 m - seepage							
		46	10 - 20m	Kharki clay. Very poor recovery due to pugging						
	12	42								
		40								
	14	48								
		48								
	16	50								
		46								
	18	44								
		44								
	20	48								
		40								
	22	42	22 - 24m	Black pyritic shale/slate						
		40								
23	24	40	24m - End of hole.							
			<u>GEOCHEMICAL ANALYSIS (ppm)</u>							
			Cu	Pb	Zn	Co	Ni	Mn	U	Th
			22 - 23m	75	170	630			8	18
			23 - 24m	30	110	250			6	20

CORE DESCRIPTION

Project WATERHOUSE EL. 1755
 Drill Hole No. W.A. 37
 Driller Stanely & Hall
 Core Size 4" Blade Pioneer Mole rig
 Location: 4800N/1850E

Depth 20M
 Date drilled 23 August, 1979
 Logged by N.S.
 Date 23 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s.	
	40	0 - 2m Organic soil and orangy yellow lateritic clay
2	42	2 - 3m Pinkish red shale rubble
	42	3 - 5m Light grey clay and shale
4	40	
	40	5 - 13m Maroon sericitic carbonaceous shale
6	42	12m - seepage
	42	
8	42	
	42	
10	42	
	40	
12	42	
	38	13 - 20m Black shale/slate with pyritic bands and veinlets
14	42	
	42	15m - making water, penetration very slow.
16	44	
	38	
18	46	
	46	
20	42	20m - end of hole
GEOCHEMICAL ANALYSIS (ppm)		
	Cu Pb Zn Co Ni Mn U Th	
18 - 19m	90 40 90	6 20
19 - 20m	90 35 95	8 16

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 38
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig.
 Location: 4800N/1900E

Depth 34M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 September 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION					
	Scint GR101A	GEOCHEMICAL ANALYSIS (ppm)					
	c.p.s.	Cu	Pb	Zn	U	Th	
	110	160	85	100	12	20	0 - 1m Lateritic rubble
2	100	100	70	300	8	18	1 - 3m Mottled light grey clay with occasional fragments of very weathered shale.
	90	45	70	220	8	16	3 - 30m Grey to dark grey weathered shale / slate with earthy red hematitic staining between 18-20 & 24-27m.
4	90	100	95	530	4	16	
	86	70	100	330	8	18	
	88	85	110	308	4	22	
6	88	120	100	480	8	16	
	90	60	100	350	8	18	
	90	85	110	400	10	16	
8	90	100	120	520	8	16	
	88	80	110	290	8	16	
10	90	80	110	290	8	16	10m - Making water
	96	95	150	600	8	16	
12	92	110	120	440	12	16	
	90	110	100	260	6	16	
14	86	85	100	310	12	22	
	90	130	190	650	10	16	
16	86	130	150	470	8	18	
	86	80	90	210	10	22	
18	84	150	110	490	8	16	
	88	130	95	290	14	12	
20	80	100	65	360	12	18	
	92	240	100	840	8	16	
22	92	190	110	540	14	18	
	94	100	110	240	8	18	
24	92	75	75	150	10	18	
	90	70	90	140	10	18	
26	100	120	130	230	6	22	
	92	65	90	150	10	22	
28	88	140	90	260	10	22	
	90	120	140	150	8	14	
30	90	110	120	170	12	18	30 - 34m Black graphitic shale.
	100	60	95	80	6	16	
32	96	50	110	80	8	14	
	92	55	100	65	12	20	
34	94						34m - Hole finished.

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 39
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4800N/1950E

Depth 32m
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 August, 1979

DEPTH IN METRES		GRAPHIC LOG	DESCRIPTION									
0		Scint GR101A c.p.s.	GEOCHEMICAL ANALYSIS (ppm)									
		50	Cu	Pb	Zn	U	Th		0 - 1m	Red lateritic soil.		
1	2	50	120	60	45	12	22		1 - 2m	Fawn soil with occasional magnes:		
		140	130	85	90	8	20		2 - 4m	nodule.		
	4	48	65	40	190	4	12		4 - 6m	Light greenish grey very weather		
		46	120	30	630	10	12			basic rock - flakes biotite		
	6	48	100	45	500	6	14			probably giving high 140 cps rea		
		42	160	90	600	10	14		6 - 12m	Greenish grey mottled clay.		
	8	46	120	65	350	8	16			Reddish brown very weathered		
		50	130	80	300	6	18			schistose rock - feldspathic sha.		
	10	46	75	130	210	10	18					
		50	55	180	85	8	20					
	12	48	60	140	80	8	16					
		50	65	100	180	6	16		12 - 14m	Red very weathered micaceous roc		
	14	44	55	110	240	6	12					
		46	55	85	90	8	14		14 - 32m	14 m - making water		
	16	46	110	450	1950	6	6					
		48	120	250	900	6	12			Weathered maroon-red-purple		
	18	50	85	300	1150	10	14			sericitic shale with siliceous		
		44	60	65	85	6	14			ironstone bands and quartz veins		
	20	44	150	95	440	8	18			Traces of hematite probably afte		
		48	170	140	900	8	16			mafics.		
	22	46	110	65	170	8	14					
		50	90	70	170	10	14					
	24	48	150	100	320	10	12					
		44	110	70	210	8	10					
	26	46	90	90	180	6	12					
		44	130	85	240	10	18					
	28	44	110	95	200	4	14					
		48	95	75	160	4	16					
	30	38	120	80	340	8	20					
		36	210	65	650	6	16					
	32	48	240	120	710	10	14					
						14	26			32m - End of hole.		

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 40
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4800N/2000E

Depth 16M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GRI01A c.p.s. 44	0 - 2m Lateritised rubble
2	44	2 - 10m Kharki becoming olive very weathered mafic rock - meta-dolerite?
	42	
4	48	
	40	
6	38	
	44	
8	44	8m - seepage
	42	
10	40	10 - 16m Very weathered olive mafic rock
	40	
12	40	
	40	
14	38	
	40	
16	42	End of hole - 16m
GEOCHEMICAL ANALYSIS (ppm)		
	Cu Pb Zn Co Ni Mn U Th	
14	14 - 15m 120 <5 220	<4 8
15	15 - 16m 100 <5 190	4 14

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 41
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4750N/1925E

Depth 16M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s. 34	0 - 1m Organic soil and steel grey clay
2	30	1 - 5m Grey clay
	30	
4	30	
	32	5 - 10m Weathered mafic schistose rock - meta-dolerite?
6	32	
	32	
8	30	8m - seepage
	30	9m - making water
10	32	10 - 16m Black very fine gravel mafic rock fairly fresh and schistose - meta dolerite.
	32	
12	30	
	30	
14	28	
	32	
16	28	16m - end of hole
GEOCHEMICAL ANALYSIS (ppm)		
	Cu Pb Zn Co Ni Mn U Th	
14 - 15m	140 20 250	6 14
15 - 16m	230 150 350	8 16

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 42
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig.
 Location: 4750N/1875E

Depth 14M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s. 60	0 - 2m Laterised rubble
2	72	2 - 3m Maroon - purple weathered shale fragments and clay
	58	3 - 5m Mottled light-grey-orange clay
4	60	
	58	5 - 14m Grey to maroon sericitic shale
6	60	
	60	
8	60	8m - seepage
	52	
10	52	
	62	
12	58	
	60	
14	60	14m - end of hole
<u>GEOCHEMICAL ANALYSIS (ppm)</u>		
	Cu Pb Zn Co Ni Mn U Th	
12 - 13m	100 110 240	8 18
13 - 14m	80 120 160	12 18

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 43
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig.
 Location: 4750N/1825E

Depth 24M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s. 80	0 - 2.5m Lateritised rubble
2	78	
	72	2.5 - 5m Light creamy grey clay
4	76	
	80	5 - 14m Light grey (bleached) shale/slate with occasional dark zones.
6	80	
	80	7m - seepage
8	80	
	76	
10	82	
	78	
12	80	
	66	
14	76	14 - 19m Black shale, some bleached zone hematitic stains in places
	80	
16	76	
	76	
18	76	
	76	19 - 24m Black graphitic shale/slate
20	76	
	78	
22	76	
	76	
24	70	24m - End of hole
		<u>GEOCHEMICAL ANALYSIS (ppm)</u>
		Cu Pb Zn Co Ni Mn U Th
		22 - 23m 15 50 25 8 18
		23 - 24m 25 95 15 8 24

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 44
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4750N/1850E

Depth 13M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s.	
	78	0 - 1m Lateritised rubble
2	78	1 - 3m Light grey clay
	76	3 - 13m Bleached-light grey shale
4	70	
	70	
6	70	
	72	
8	72	
	68	9m - penetration slow due to ironstone or ferruginised
10	68	slate/shale
	68	10m - seepage
12	76	
13	68	13m - hole abandoned
GEOCHEMICAL ANALYSIS (ppm)		
	Cu Pb Zn Co Ni Mn U Th	
11 - 12m	80 110 190	8 22
12 - 13m	85 140 210	10 22

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 45
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4700N/1950E

Depth 16M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s.	
	40	0 - 2m Lateritic clay.
2	34	2 - 9m Light green to white clay becoming kharki with depth.
	36	9m - seepage.
4	34	
	36	
6	40	
	42	
8	42	
	42	9 - 16m Very weathered mafic rock - quartz biotite Muscovite (?)
10	42	- dolerite no apparent foliation.
	40	
12	42	
	40	
14	40	
		16m - End of hole.
		<u>GEOCHEMICAL ANALYSIS (ppm)</u>
		Cu Pb Zn Co Ni Mn U Th
		14 - 15m 5 5 340 10 30
		15 - 16m 10 5 230 10 24

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 46
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4700N/1900E

Depth 22M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION					
	Scint GR101A c.p.s.						
	50	0 - 2m Lateritic clay and rubble					
2	50	2 - 10m Kharki micaceous clay with bluish grey zones					
	48						
4	48						
	46						
6	46						
	48						
8	46						
	48	9m - seepage					
10	46	10 - 19m Very weathered orange mica-feldspar rock					
	46						
12	46						
	46						
14	48						
	44						
16	48						
	46						
18							
		19 - 22m Light grey - black shale/slate with occasional quartz veins.					
20	48						
	50						
22	50						
<u>GEOCHEMICAL ANALYSIS (ppm)</u>							
	Cu	Pb Zn Co Ni Mn U Th					
20 - 21m	70	85 170				8	20
21 - 22m	60	100 110				6	16

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 47
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4700N/1875E

Depth 24M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 24 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s. 80	0 - 2m Lateritised rubble
2	90	2 - 4m Orange clay
	80	
4	66	4 - 9m Light grey clay (very rotten bleached shale)
	68	
6	60	
	66	
8	66	8m - seepage
	66	9 - 12m Kharki-reddish brown leached shale. Penetration slow.
10	64	
	68	
12	70	12 - 14m Black-purple maroon carbonaceous shale
	70	
14	68	14 - 24m Reddish brown shale with occasional siltstone zone.
	66	
16	68	
	68	
18	66	
	72	
20	66	
	70	
22	70	
	72	
23	24	24m - end of hole
		<u>GEOCHEMICAL ANALYSIS (ppm)</u>
		Cu Pb Zn Co Ni Mn U Th
		22 - 23m 85 170 900 10 14
		23 - 24m 110 230 990 12 18

DECLARATIONS AND DISCLOSURES OF INTEREST

Depth 18M
Date drilled 24 August, 1979
Logged by N.S.
Date

17

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 49
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4600N/2250E

Depth 16M
 Date drilled 25 August, 1979
 Logged by N.S.
 Date

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A	
	c.p.s.	
	80	0 - 1m Lateritic clay and rubble
2	50	1 - 6m Lateritic shale
	48	
4	50	
	50	
6	50	6 - 11m Very weathered shale bleached to white-light grey
	50	
8	52	
	50	
10	50	10m - chert or quartzite. Slow penetration
	46	11 - 12m Dun-olive green fine grained foliated mafic rock -
12	46	Meta-dolerite(?)
	46	12 - 14m Red brown - light grey mottled clays
14	46	14 - 16m Very poor recovery, slow penetration possibly in black
	46	slate.
16	50	16m - end of hole
GEOCHEMICAL ANALYSIS (ppm)		
	Cu Pb Zn Co Ni Mn U Th	
14 - 15m	210 55 180	4 18
15 - 16m	150 50 150	8 12

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 50
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4625N/2200E

Depth 24M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 25 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint CR101A c.p.s.	
	58	0 - 1m Orangy-buff clay
2	58	1 - 4m Weathered shale rubble
	58	
4	58	4 - 5m Light creamy grey clay with fragments of shale
	58	5 - 20m Maroon-red sericitic carbonaceous shale/phyllite, becoming purple-black with depth
6	60	
	58	
8	60	
	58	
10	62	
	60	
12	60	
	60	
14	56	
	60	
16	56	
	56	
18	56	
	56	
20	56	20 - 24m Black graphitic shale/phyllite
	56	
22	54	
	52	
24	48	End of hole - 24m
GEOCHEMICAL ANALYSIS (ppm)		
	Cu Pb Zn Co Ni Mn U Th	
22 - 23m	130 970 65	10 22
23 - 24m	170 1400 90	8 16

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No..... W.A. 51
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4850N/1975E

Depth 10M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 25 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	SCINE GRIOTA C.P.S.	0 - 3m Lateritic clay and rubble
2	50	
	52	
	54	3 - 10m Kharki clay and shale rubble becoming light grey with depth.
4	56	
	54	
6	50	
	50	7m - seepage
8	50	Very poor recovery
	50	
10	50	10m - hole abandoned
GEOCHEMICAL ANALYSIS (ppm)		
	Cu Pb Zn Co Ni Mn U Th	
8 - 9m	150 95 640	6 10
9 - 10m	110 80 370	6 14

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 52
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4850N/1925E

Depth 16M
 Date drilled 24 August, 1979
 Logged by N.S.
 Date 25 August, 1979

DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s.	
	64	0 - 1m Lateritised rubble - shale
2	68	1 - 4.5m Light grey mottled clays.
	62	3m - Black quartzite (Chert) floater
4	60	4.5 - 8m Maroon shale (silicified?). Very slow penetration
	52	
6	62	
	68	
8	62	8 - 16m Light grey sericitic shale/phyllite
	62	
10	60	
	67	
12	64	
	62	
14	60	
	60	
16	58	16m - end of hole
		<u>GEOCHEMICAL ANALYSIS (ppm)</u>
		Cu Pb Zn Co Ni Mn U Th
		14 - 15m 110 80 370 8 18
		15 - 16m 110 80 370 8 18

CORE DESCRIPTION

Project WATERHOUSE EL 1755
 Drill Hole No. W.A. 53
 Driller Stanley & Hall
 Core Size 4" Blade Pioneer Mole Rig
 Location: 4850N/1875E

Depth 14M
 Date drilled 25 August, 1979
 Logged by N.S.
 Date 25 August, 1979

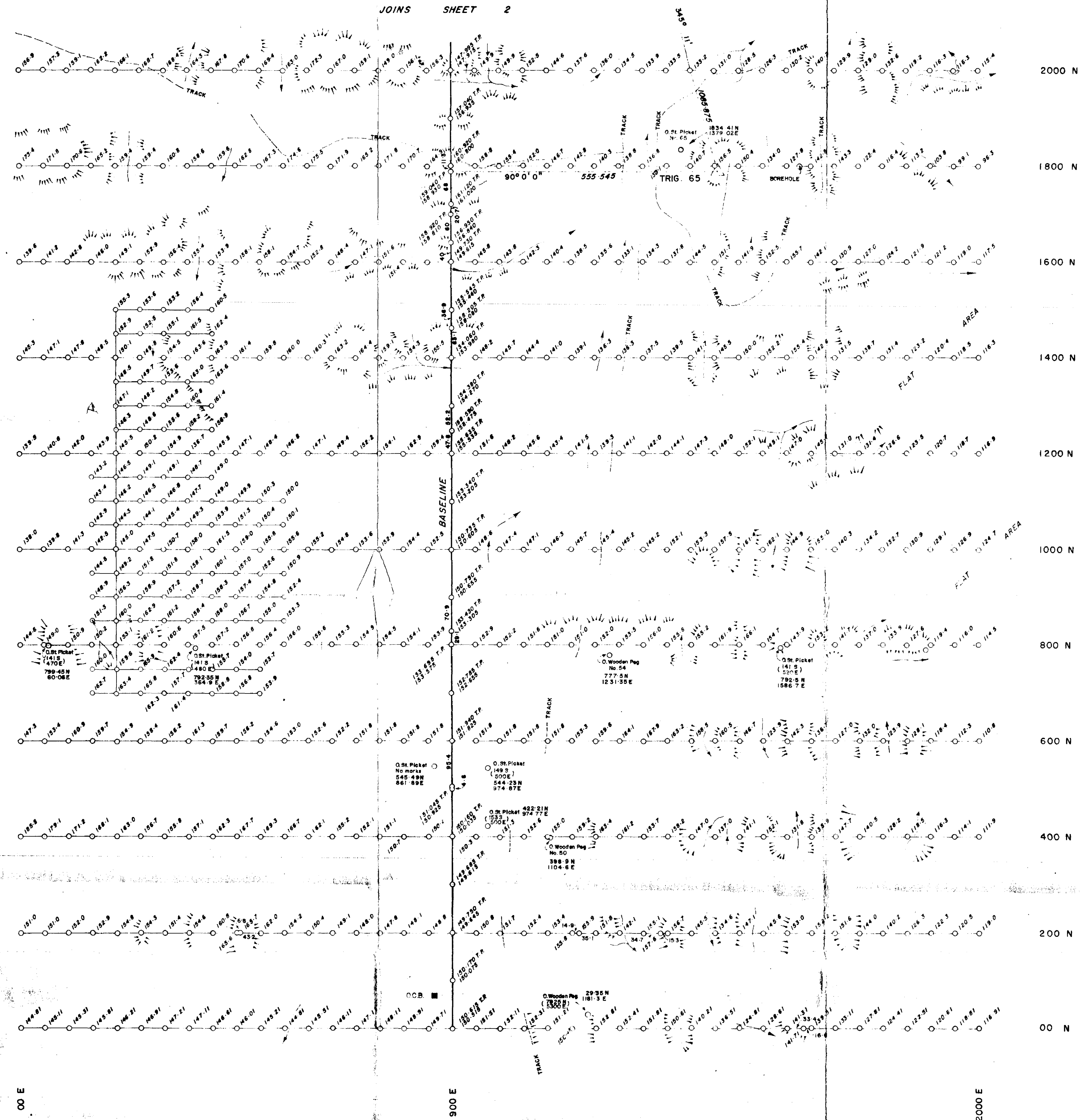
DEPTH IN METRES	GRAPHIC LOG	DESCRIPTION
	Scint GR101A c.p.s. 46	0 - 4m Lateritic clay and rubble
2	50	
	50	
4	50	4 - 9m Very weathered shale
	48	
6	40	
	48	
8	52	
	52	9 - 14m Black sericitic shale
10	54	10m - seepage
	50	
12	50	
	46	
14	50	
GEOCHEMICAL ANALYSIS (ppm)		
		Cu Pb Zn Co Ni Mn U Th
	12 - 13m	45 190 85 8 22
	13 - 14m	50 230 38 6 18

OPEN

JOINS SHEET 2

NOTE

1. All pegs are 50 mm x 50 mm wooden pegs unless shown otherwise.
2. Pegs are at 50 metre intervals on all lines, except lines 2000 E, 5000 N and the Baseline 900 E and where shown elsewhere. Lines 2000 E and 5000 N are pegged at 100 metre intervals. The Baseline 900 E is pegged at 100 metre intervals except where shown otherwise.
3. The Baseline 900 E and lines 00 N, 200 N, and 400 N accurately established with Theodolite, Level and E.D.M. Equipment. All other lines were run with Compass, Tape and Alidade.
4. Co-ordinates in brackets shown at original marks found are from a previous survey.
5. Baseline is surveyed on true north as determined from existing trig. stations nos. 65 and 65 A.
6. A.M.G. Co-ordinates for TRIG. 65 8 550 719 716 N
723 717 210 E
7. All levels shown are natural surface except where shown T.P. (Top of Peg)



Copyright - "This document is and shall remain the property of Gutteridge, Haskins & Davey Pty Ltd. The Document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited."

No.	DESCRIPTION	DATE	INITIALS



GUTTERIDGE HASKINS & DAVEY PTY LTD
ENGINEERS PLANNERS SURVEYORS
DARWIN

Also at: BRISBANE • CAIRNS • CANBERRA • GOLD COAST • HOBART • MELBOURNE • PERTH • SYDNEY

DESIGNED	TRACED
DRAWN	CHECKED
SUBMITTED	
APPROVED	
DATE 29/9/78	

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA
BASELINE AND GRID SURVEY
EXPLORATION LICENCE NUMBER 1751
WATERHOUSE AREA

SCALE 1:5000

D 3460 / 1

D 3639 / 1

SHEET 1 OF 3

NOTE See Sheet 1 for explanatory notes

East - West Grid Lines listed below about the 1500 E line on this plan surveyed in June 1979 are on 94° True instead of 90° True.

3950 N
3900 N
3850 N
3800 N
3750 N
3700 N
3650 N
3600 N
3550 N
3500 N
3450 N
3400 N
3350 N
3300 N
3250 N
3200 N
3150 N
3100 N
3050 N
3000 N
2950 N
2900 N
2850 N
2800 N
2750 N
2700 N
2650 N
2600 N
2550 N
2500 N
2450 N



Copyright - This document is and shall remain the property of Gutteridge, Haskins & Davey Pty Ltd. The Document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

No.	DESCRIPTION	DATE	INITIALS

REVISIONS



GUTTERIDGE HASKINS & DAVEY LTD
ENGINEERS PLANNERS SURVEYORS
DARWIN

Also at: BRISBANE • CAIRNS • CANBERRA • GOLD COAST • HOBART • MELBOURNE • PERTH • SYDNEY

DESIGNED	TRACED
DRAWN	CHECKED
SUBMITTED	
APPROVED	
DATE	

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

BASELINE AND GRID SURVEY
EXPLORATION LICENCE NUMBER 1751
WATERHOUSE AREA

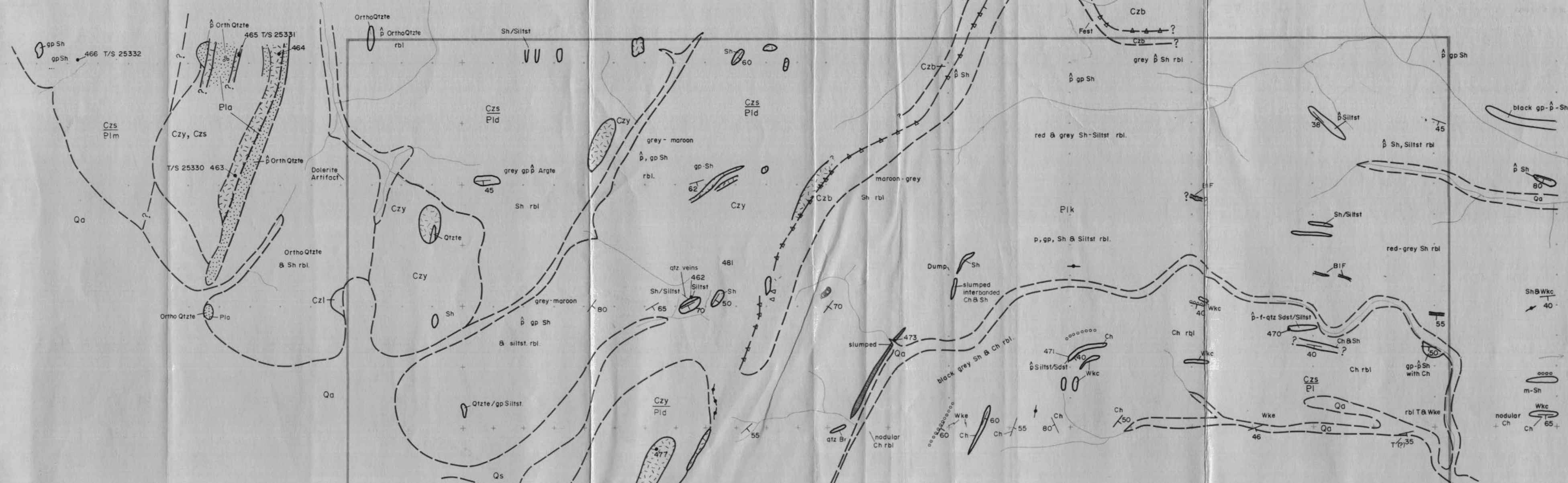
SCALE 1:5000

D 3460 / 2

D 3639 / 2

SHEET 2 OF 3

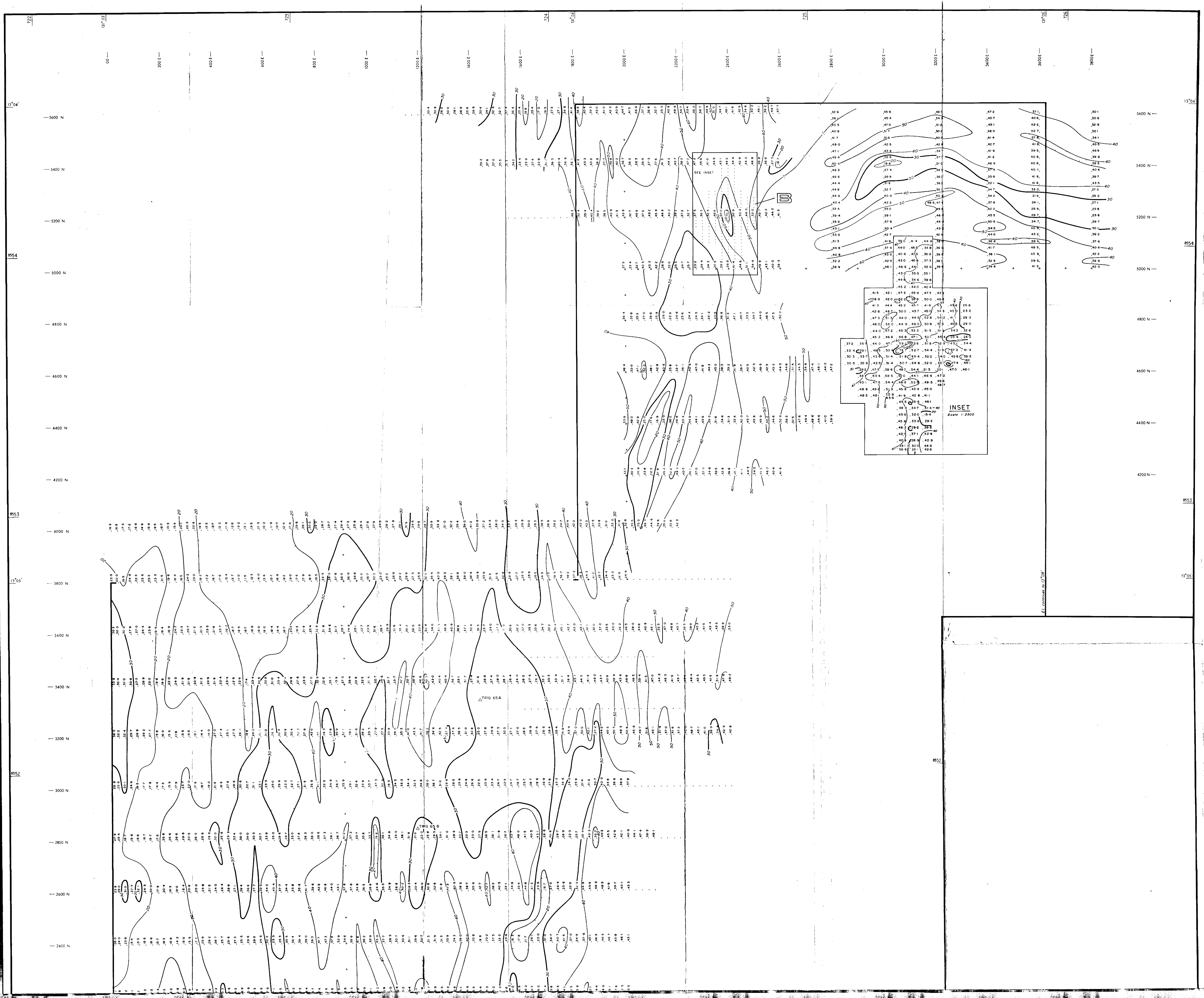
METRES 100 0 100 200 300 400 500



PHYSICAL FEATURES

SYMBOLS

ABBREVIATIONS



8551

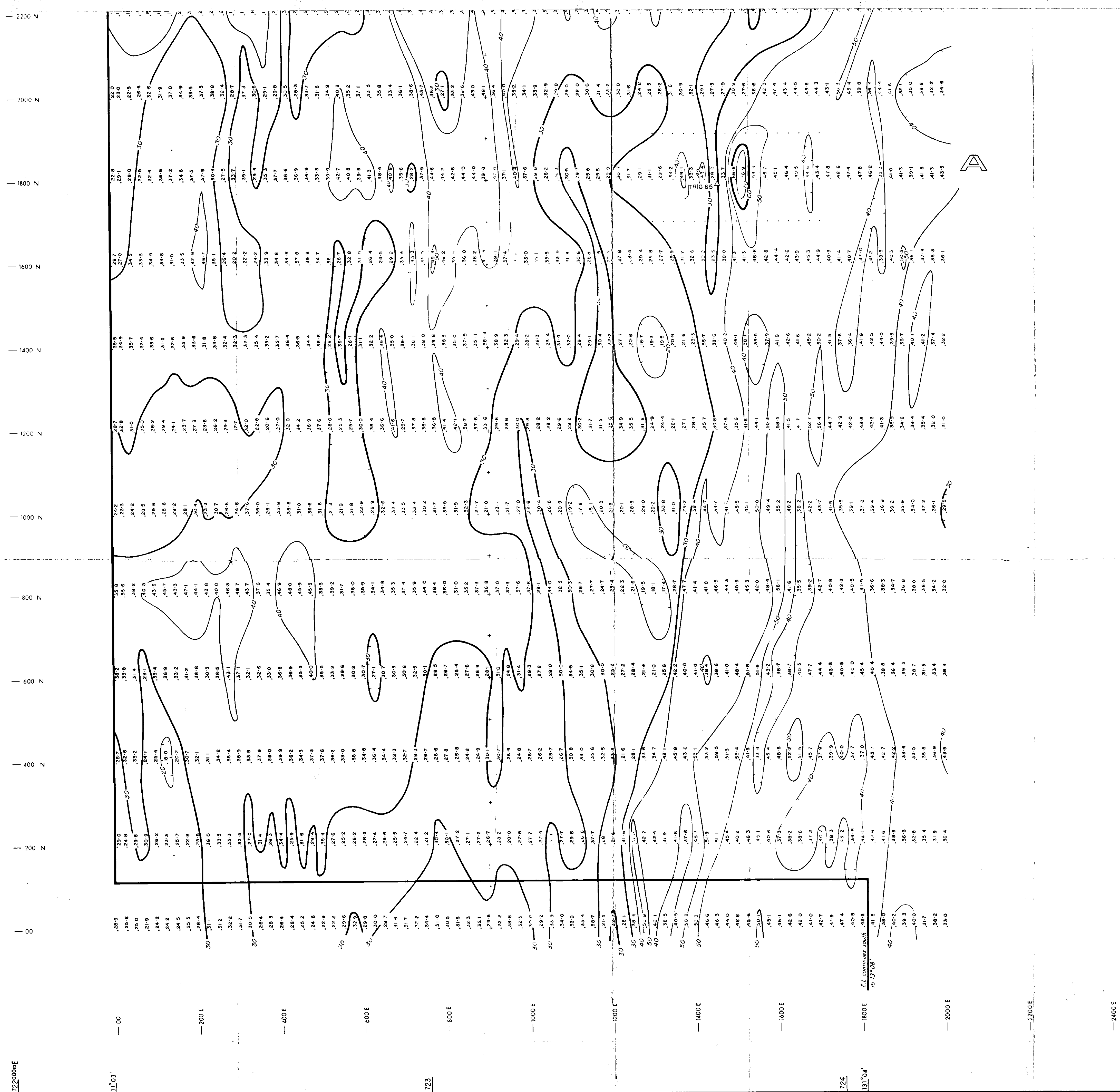
13°06'

8550

13°07'

8549000mN

722000mE



8551

13°06'

8550

13°07'

8549

Contour interval : 10 c.p.s.

SURVEY SPECIFICATION

Instrument : Geometrics differential gamma ray spectrometer

Model : GR-310

Energy Measured : All between 0.4 and 4.0 MeV (T/c)

Accumulation time period : 100 seconds

NOTE:

1. All pegs are 50mm x 50mm wooden pegs unless shown otherwise.
2. Pegs are at 50metre intervals on all lines, except lines 2000E, 5000N and the Baseline 900E and where shown elsewhere. Lines 2000E and 5000N are pegged at 100metre intervals. The Baseline 900E is pegged at 100metre intervals except where shown otherwise.
3. The Baseline 900E and the lines 00N, 200N, and 400N accurately established with Theodolite, Level and E.D.M. Equipment. All other lines were run with Compass, Tape and Alidade.
4. Co-ordinates in brackets shown at original marks found are from a previous survey.
5. Baseline is surveyed on True North as determined from existing trig stations nos. 65 and 65A.
6. A.M.G. Co-ordinates for TRIG 65 8 550 719 716 N
723 717 210 E
7. All levels shown are natural surface except where shown T.P. (Top of Peg).

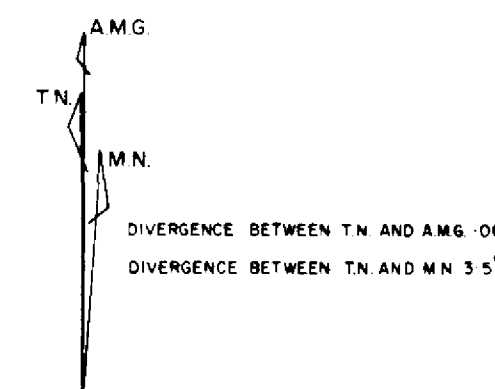


PLATE III

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT

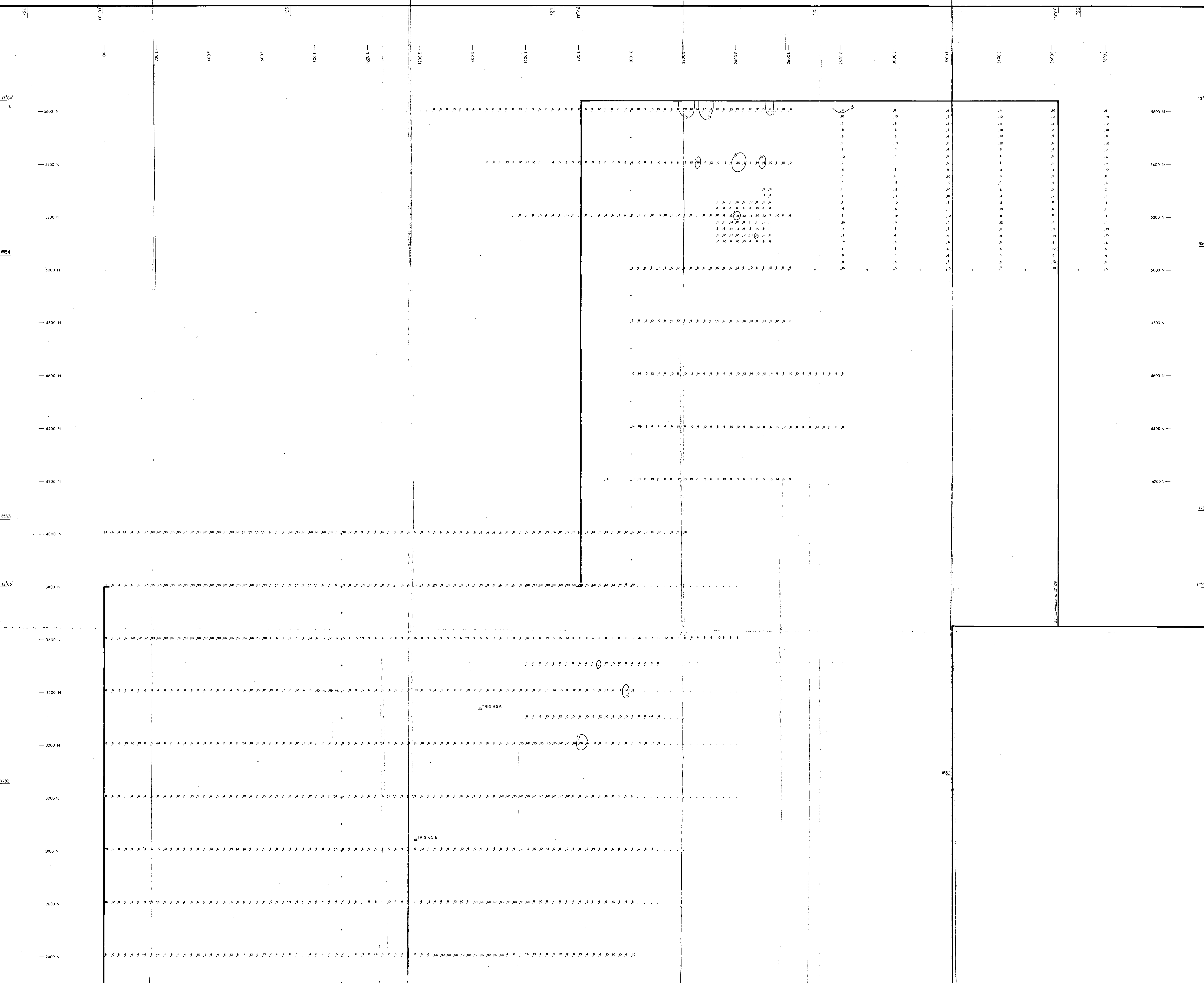
EXPLORATION LICENCE NO.1755

GROUND RADIOMETRICS
TOTAL COUNT (c.p.s.)

Scale: 1:5000



DRAWN Cartoscope



13°04'

8554

8553

13°05'

8552

13°04'

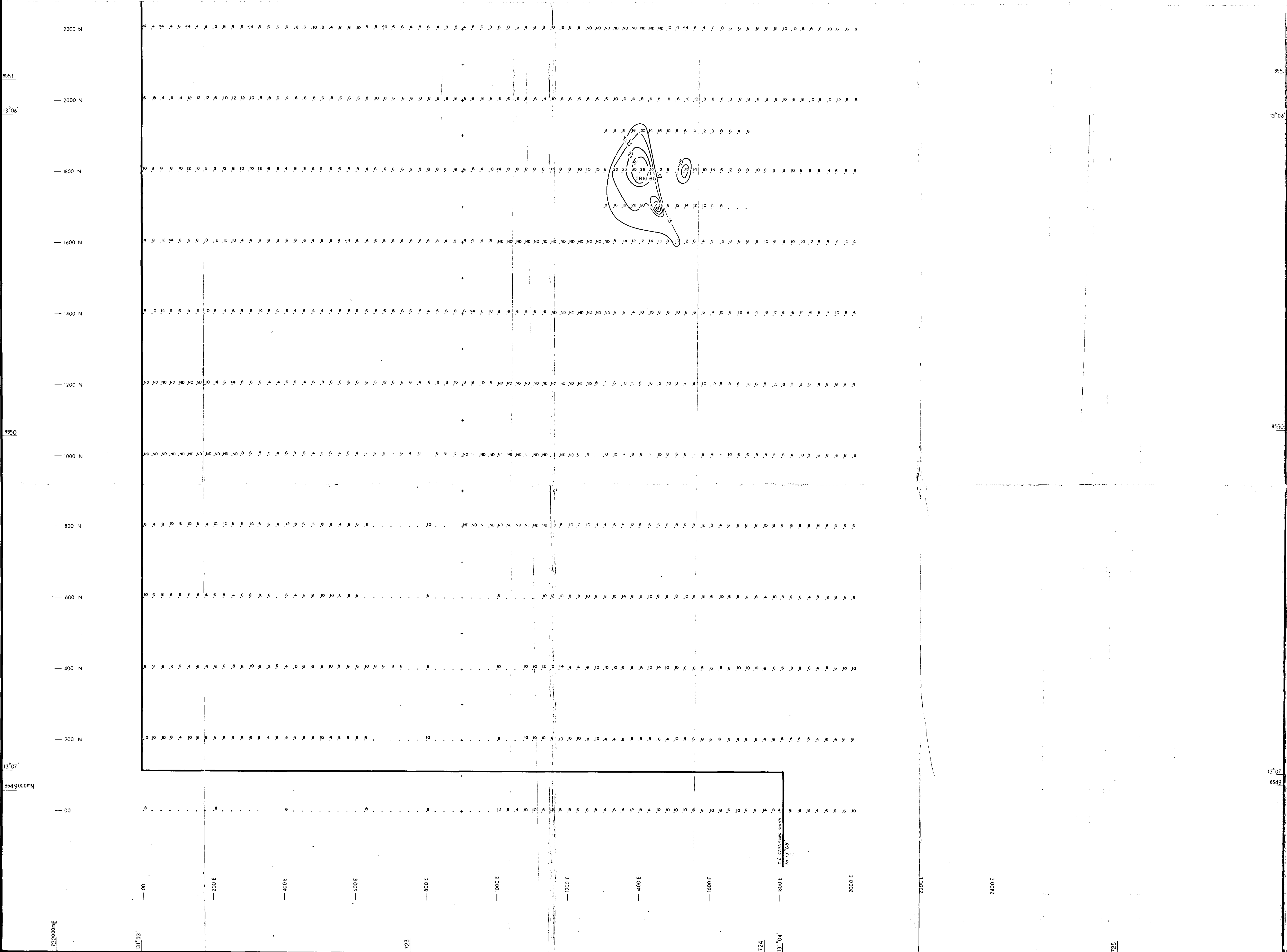
8554

8553

13°05'

8552

Continued on 17-06



- NOTE:
1. All pegs are 50mm x 50mm wooden pegs unless shown otherwise.
 2. Pegs are at 50metre intervals on all lines, except lines 2000E, 5000N and the Baseline 900E and where shown elsewhere. Lines 2000E and 5000N are pegged at 100metre intervals. The Baseline 900E is pegged at 100metre intervals except where shown otherwise.
 3. The Baseline 900E and the lines 00N, 200N and 400N accurately established with Theodolite, Level and E.D.M. Equipment. All other lines were run with Compass, Tape and Alidade.
 4. Co-ordinates in brackets shown at original marks found are from a previous survey.
 5. Baseline is surveyed on True North as determined from existing trig. stations nos. 65 and 65A.
 6. A.M.G. Co-ordinates for TRIG 65 8 550 719 716 N
723 717 210 E
 7. All levels shown are natural surface except where shown T.P. (Top of Peg).

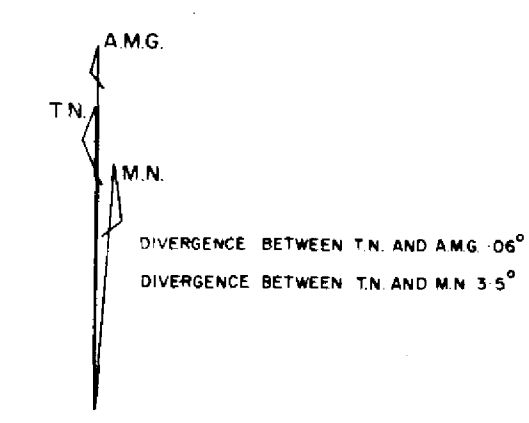


PLATE IV

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT

EXPLORATION LICENCE NO.1755

GEOCHEMISTRY

U₃O₈ Soil Values (ppm)

Scale: 1:5000

0 50 100 200 300 400 500

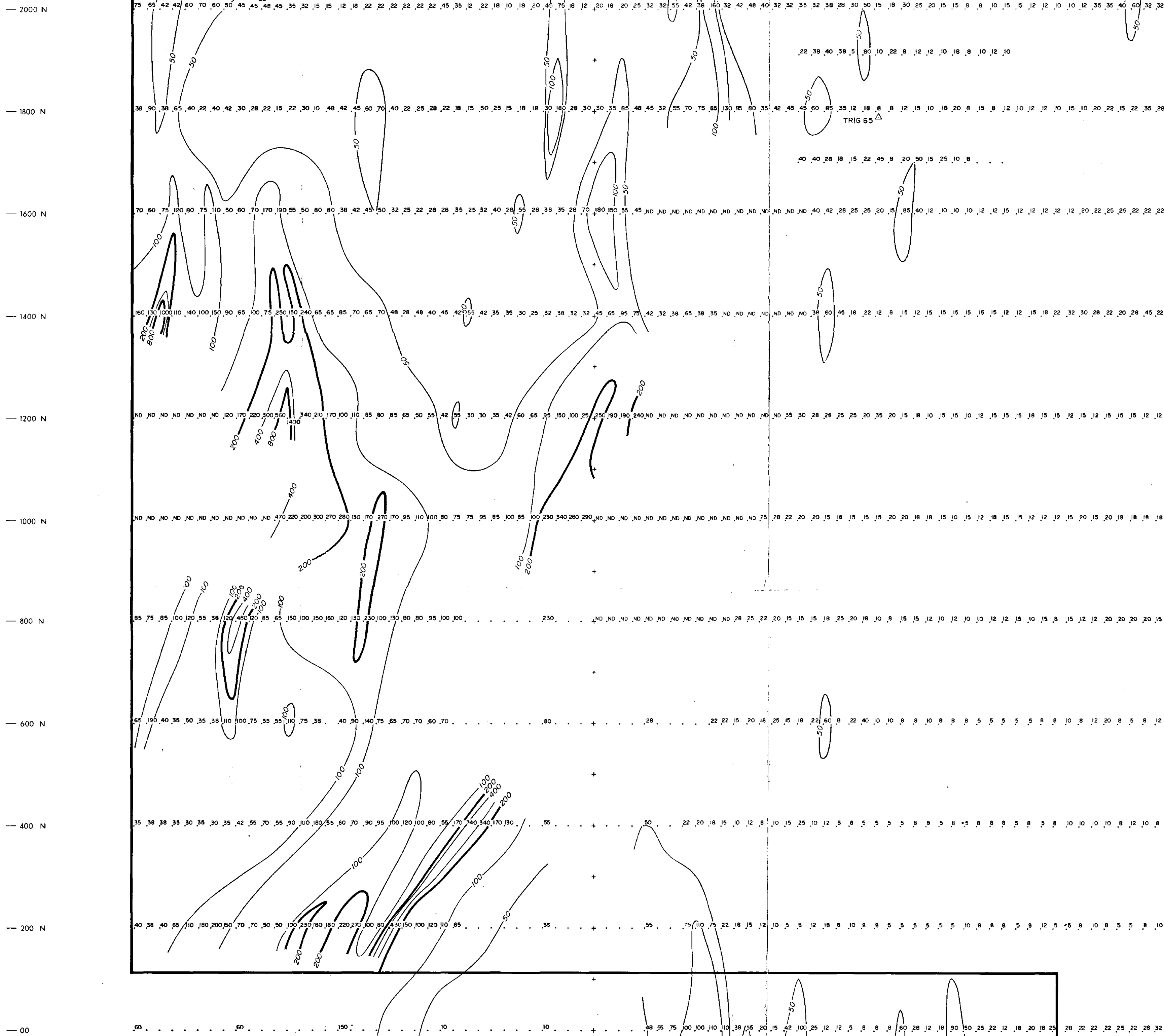
Scale in Metres



INSET									
Scale 1:2500									
50	42	40	32	42	50	38	18	25	
42	45	45	48	40	38	30	30	38	
65	38	40	58	68	50	28	42	45	
90	35	22	38	35	28	22	35	65	
60	70	25	35	30	25	38	30	30	
30	35	18	28	28	25	48	28	100	
38	25	15	20	22	22	22	28	60	

8551

13° 06'



8550

13° 07'

85490000M

00 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400

722000E

131° 03'

723

724

131° 04'

725

8551

13° 06'

8550

13° 07'

8549

- NOTE:
- All pegs are 50mm x 50mm wooden pegs unless shown otherwise.
 - Pegs are at 50metre intervals on all lines, except lines 2000E, 5000N and the Baseline 900E and where shown elsewhere. Lines 2000E and 5000N are pegged at 100metre intervals. The Baseline 900E is pegged at 100metre intervals except where shown otherwise.
 - The Baseline 900E and the lines 00N, 200N, and 400N accurately established with Theodolite, Level and E.D.M. Equipment. All other lines were run with Compass, Tape and Alidade.
 - Co-ordinates in brackets shown at original marks found are from a previous survey.
 - Baseline is surveyed on True North as determined from existing trig. stations nos. 65 and 65A.
 - A.M.G. Co-ordinates for TRIG 65 8 550 719 716 N
723 717 210 E
 - All levels shown are natural surface except where shown T.P. (Top of Peg).

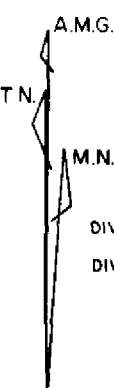


PLATE IV

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT
EXPLORATION LICENCE NO.1755

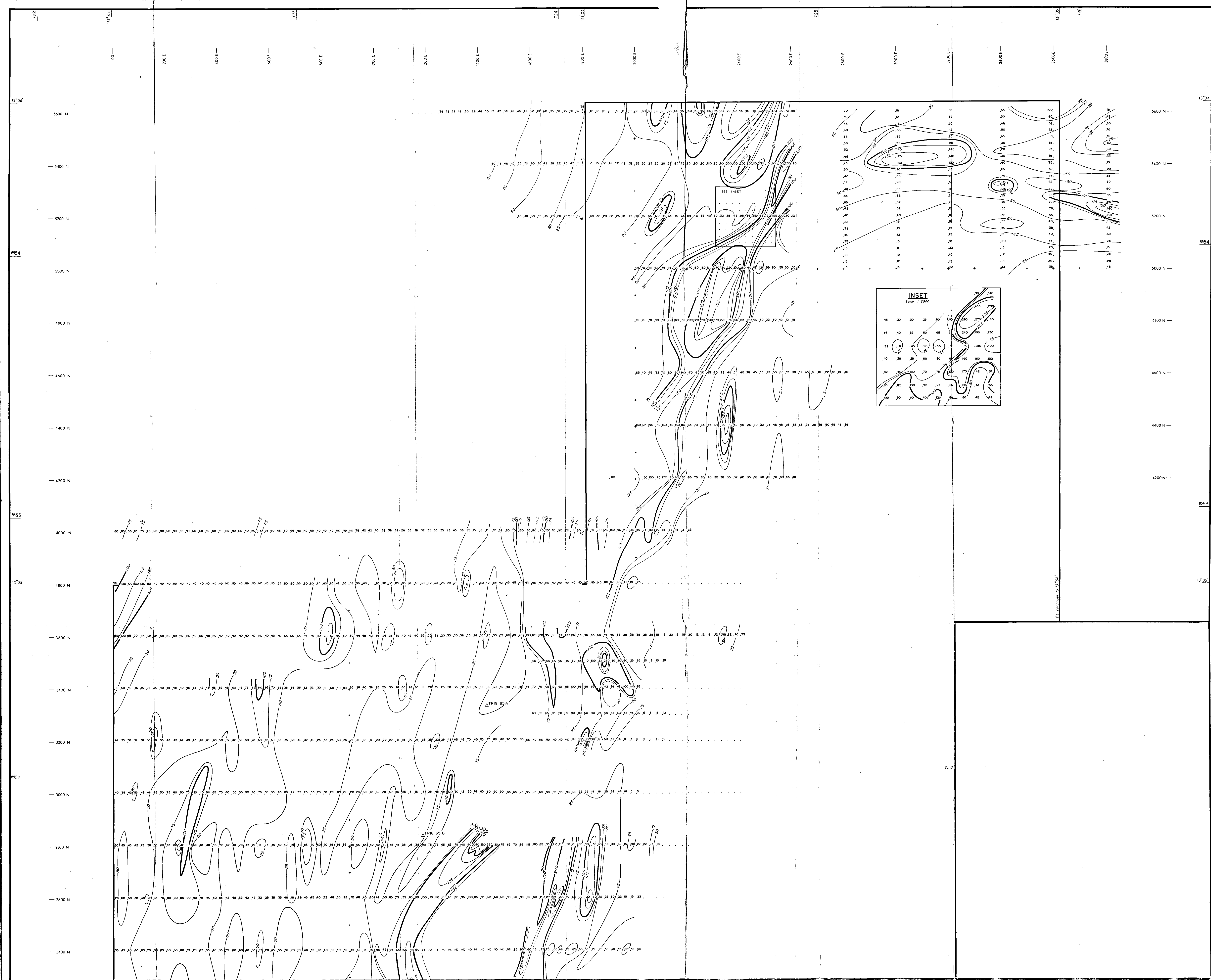
GEOCHEMISTRY
Lead Soil Values (ppm)

Scale: 1:5000



DRAWN Cartoscope

CR 80/0458



8551

13°06'

8550

13°07'

8549000mN

7220000E
131°03'

723

724

131°04'

725

8551

13°06'

8550

13°07'

8549

- NOTE:
1. All pegs are 50mm x 50mm wooden pegs unless shown otherwise.
 2. Pegs are at 50metre intervals on all lines, except lines 2000E, 5000N and the Baseline 900E and where shown elsewhere. Lines 2000E and 5000N are pegged at 100metre intervals. The Baseline 900E is pegged at 100metre intervals except where shown otherwise.
 3. The Baseline 900E and the lines 00N, 200N, and 400N accurately established with Theodolite, Level and E.D.M. Equipment. All other lines were run with Compass, Tape and Alidade.
 4. Co-ordinates in brackets shown at original marks found are from a previous survey.
 5. Baseline is surveyed on True North as determined from existing trig stations nos. 65 and 65A.
 6. A.M.G. Co-ordinates for TRIG 65 8 550 719-716 N
723 717-710 E
 7. All levels shown are natural surface except where shown T.P. (Top of Peg).

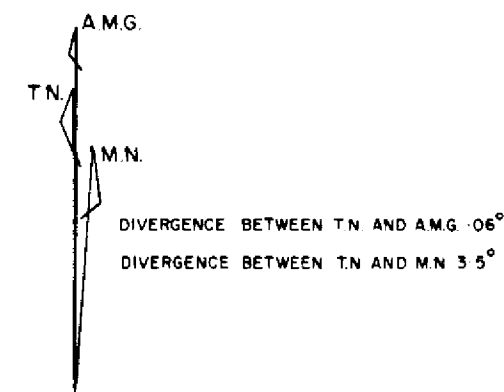


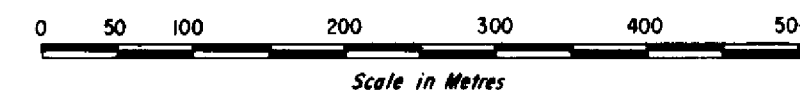
PLATE IV

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT
EXPLORATION LICENCE NO.1755

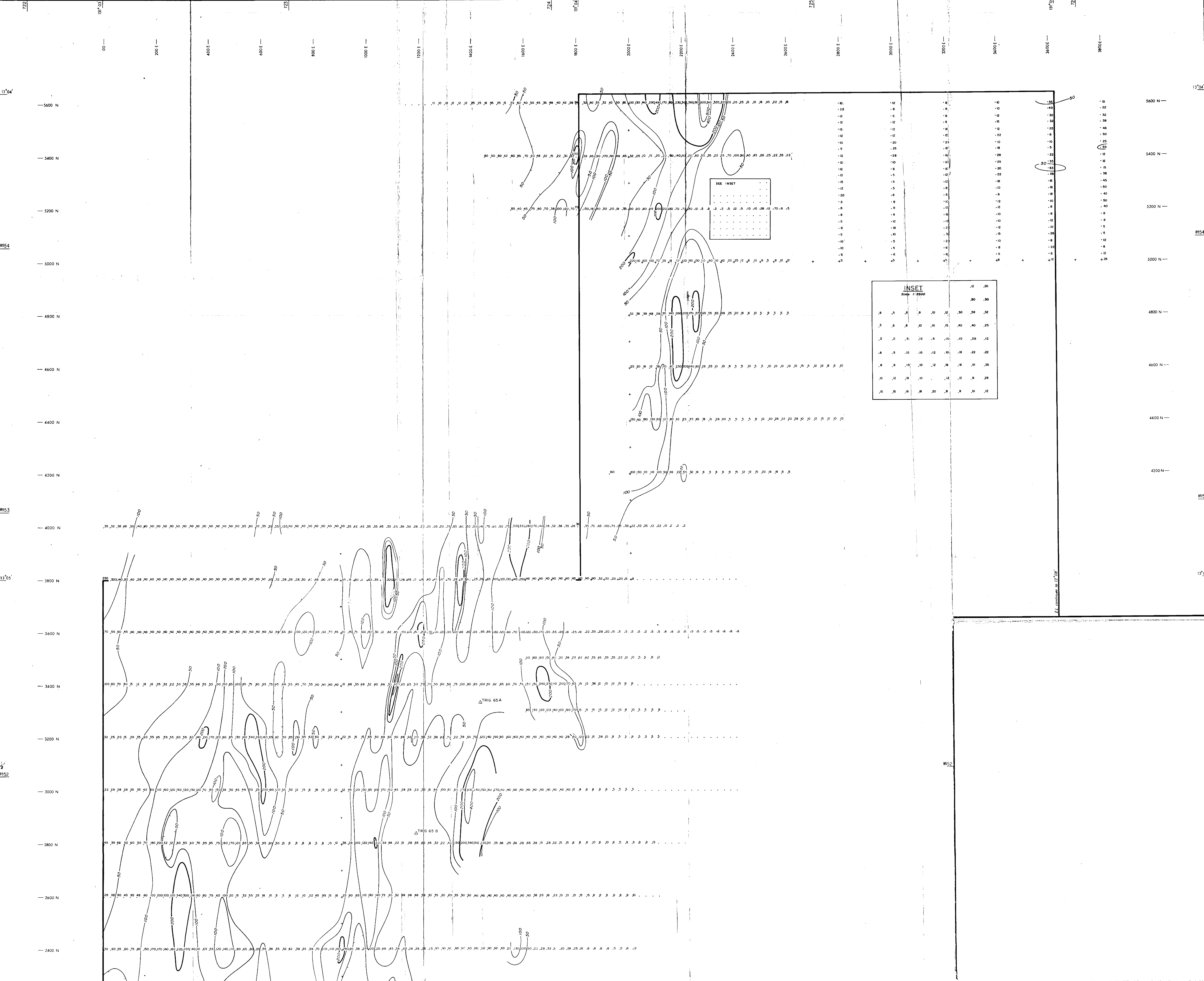
GEOCHEMISTRY
Copper Soil Values (ppm)

Scale: 1:5000



DRAWN Cartoscope

CR 8010458



8551

13°06'

8550

13°07'

8549000M

722000E
131°03'

723

724

131°04'

725

8551

13°06'

8550

13°07'

8549

DRAWN Cartoscope

Sheet 4

- NOTE:
1. All pegs are 50mm x 50mm wooden pegs unless shown otherwise.
 2. Pegs are at 50metre intervals on all lines, except lines 2000E, 5000N and the Baseline 900E and where shown elsewhere. Lines 2000E and 5000N are pegged at 100metre intervals. The Baseline 900E is pegged at 100metre intervals except where shown otherwise.
 3. The Baseline 900E and the lines 00N, 200N, and 400N accurately established with Theodolite, Level and E.D.M. Equipment. All other lines were run with Compass, Tape and Alidade.
 4. Co-ordinates in brackets shown at original marks found are from a previous survey.
 5. Baseline is surveyed on True North as determined from existing trig stations nos. 65 and 65A.
 6. A.M.G. Co-ordinates for TRIG 65 8 550 719 716 N
723 717 210 E
 7. All levels shown are natural surface except where shown T.P. (Top of Peg).

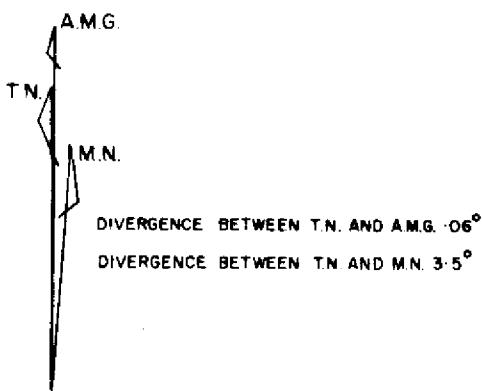


PLATE IV

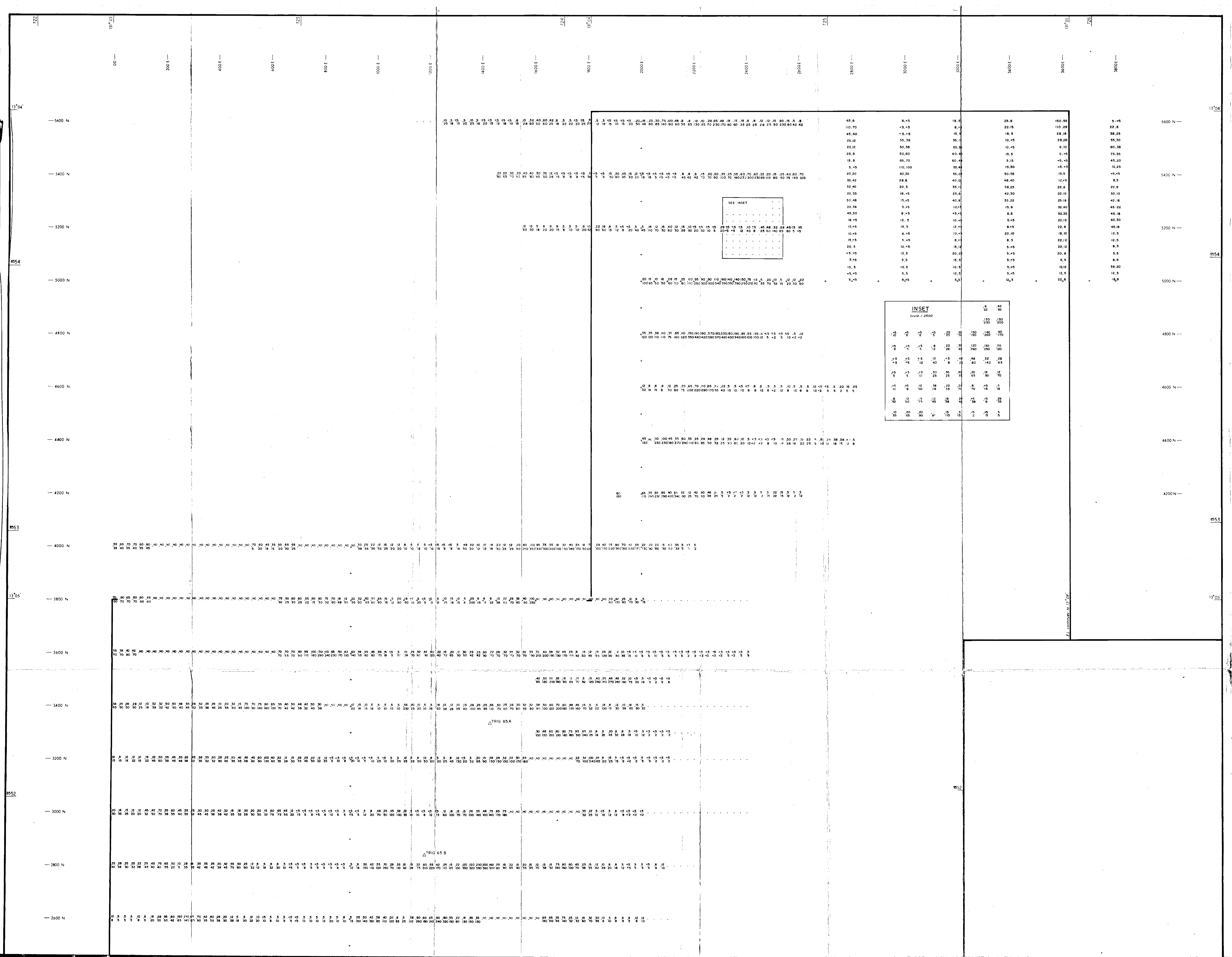
OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

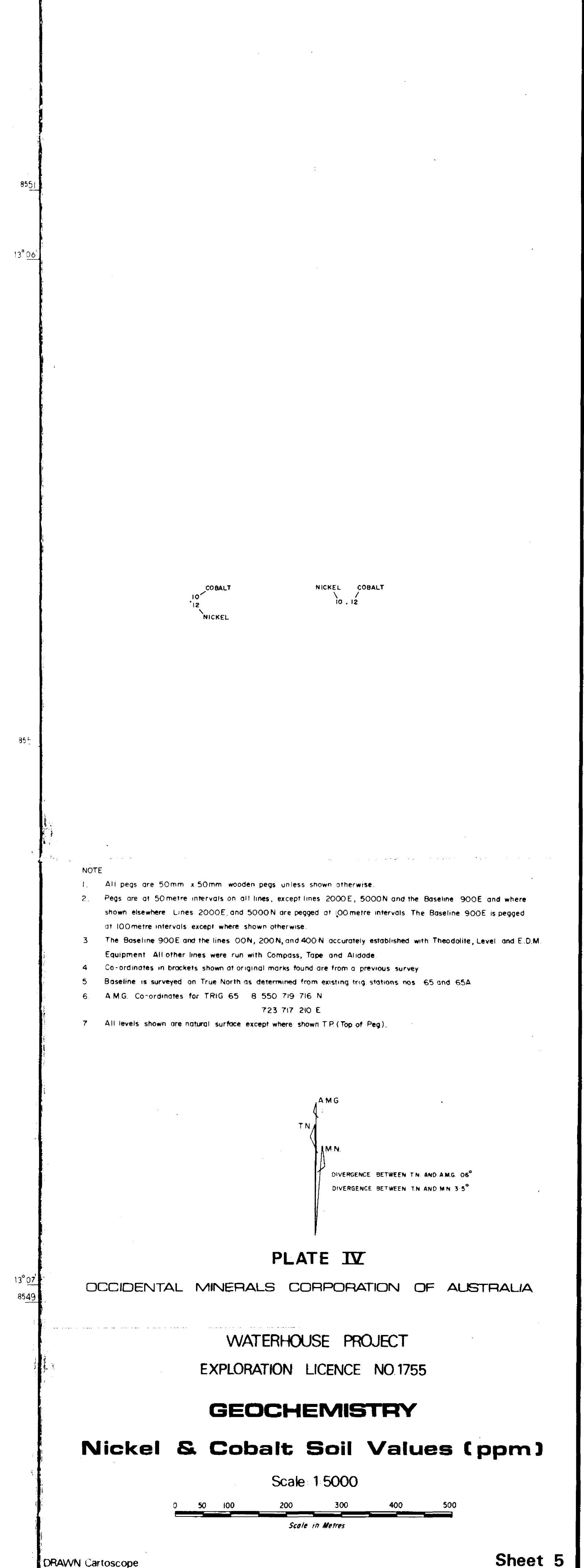
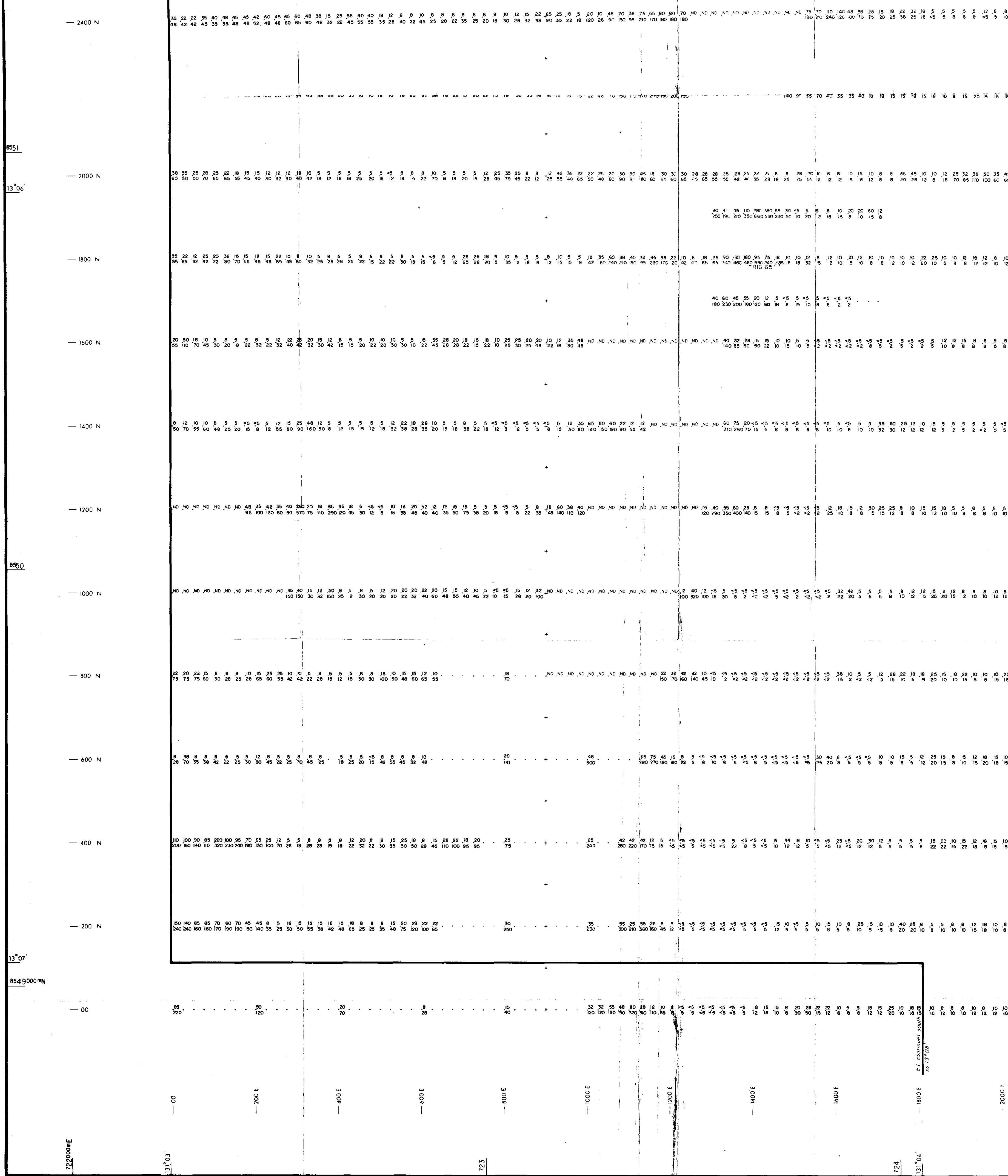
WATERHOUSE PROJECT
EXPLORATION LICENCE NO.1755

GEOCHEMISTRY
Zinc Soil Values (ppm)

Scale: 1:5000







- NOTE
1. All pegs are 50mm x 50mm wooden pegs unless shown otherwise.
 2. Pegs are at 50 metre intervals on all lines, except lines 2000E, 5000N and the Baseline 900E and where shown elsewhere. Lines 2000E and 5000N are pegged at 100 metre intervals. The Baseline 900E is pegged at 100 metre intervals except where shown otherwise.
 3. The Baseline 900E and the lines 00N, 200N and 400N accurately established with Theodolite, Level and E.D.M. Equipment. All other lines were run with Compass, Tape and Alidade.
 4. Co-ordinates in brackets shown at original marks found are from a previous survey.
 5. Baseline is surveyed on True North as determined from existing trig stations nos. 65 and 65A.
 6. AMG Co-ordinates for TRIG 65 8 550 719 716 N
723 717 210 E
 7. All levels shown are natural surface except where shown T.P. (Top of Peg).

PLATE IV

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

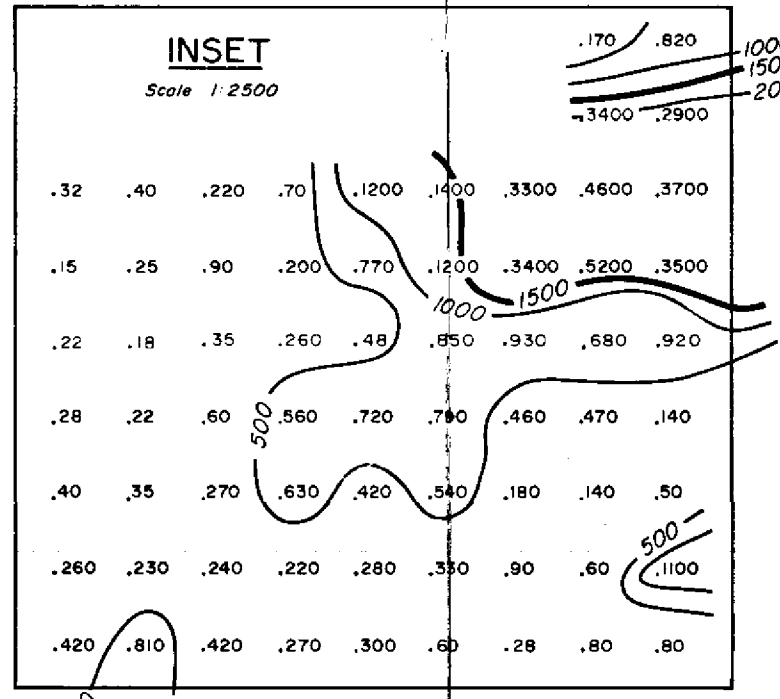
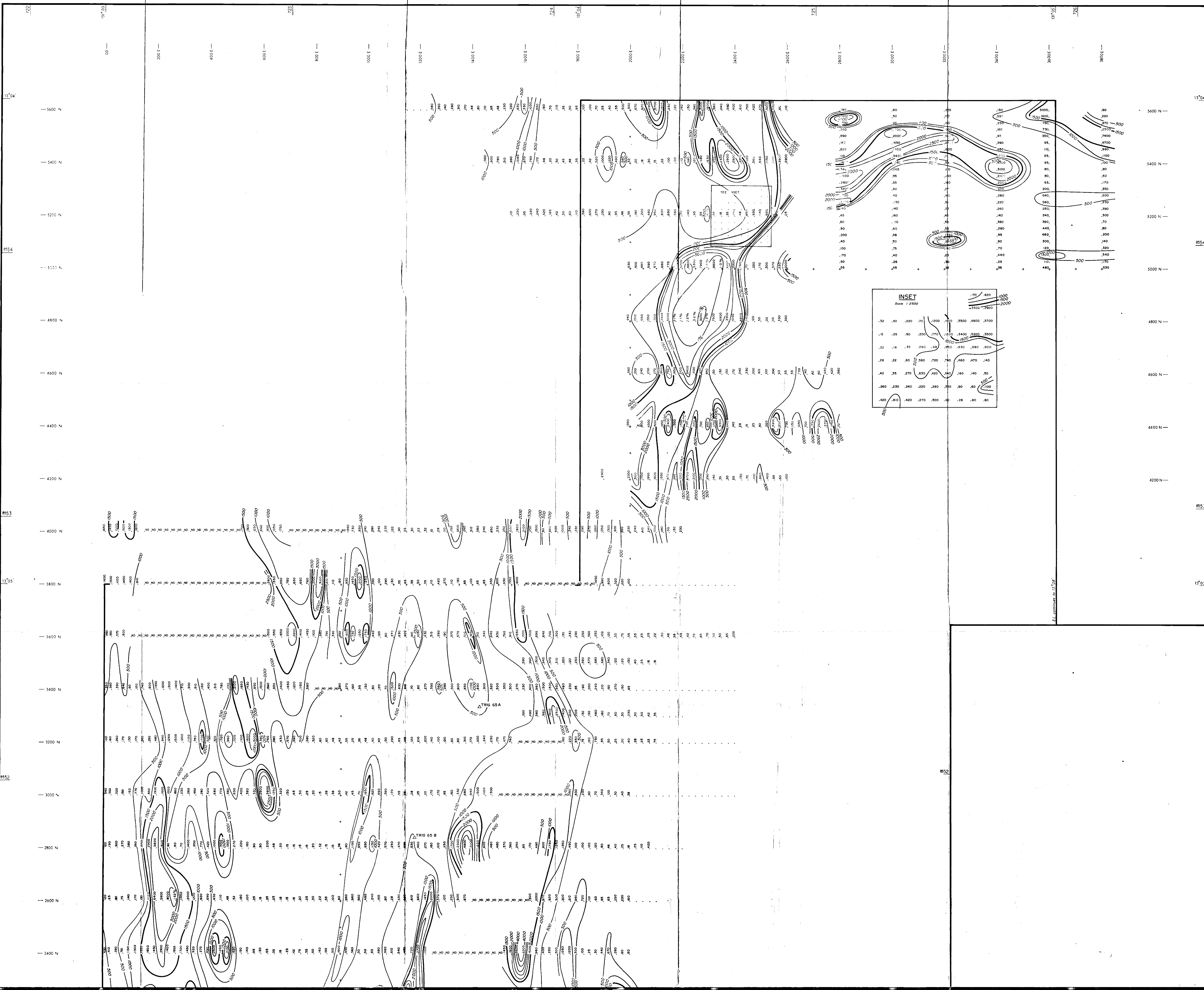
WATERHOUSE PROJECT
EXPLORATION LICENCE NO 1755

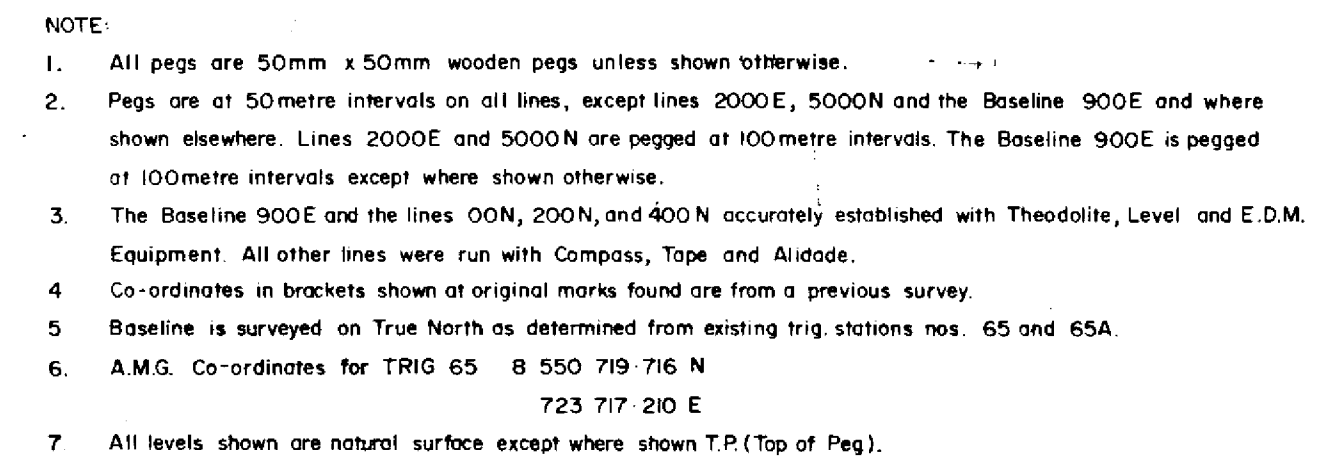
GEOCHEMISTRY
Nickel & Cobalt Soil Values (ppm)

Scale 1:5000



DRAWN Cartoscope





A vertical line has three points labeled from top to bottom: A.M.G., T.N., and I.M.N. To the right of the line, there are two horizontal lines. The upper horizontal line is at the level of A.M.G. and T.N., and the lower horizontal line is at the level of I.M.N. The angle between the vertical line and the upper horizontal line is labeled "DIVERGENCE BETWEEN T.N. AND A.M.G. 06°". The angle between the vertical line and the lower horizontal line is labeled "DIVERGENCE BETWEEN T.N. AND I.M.N. 3°".

PLATE IV

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT

EXPLORATION LICENCE NO.1755

GEOCHEMISTRY

Manganese Soil Values (ppm)

Scale: 1:5000



DRAWN Cartoscope

CR 80/045B





- LEGEND
- U₃O₈ (ppm)..... 15
 - Track Etch (T/mm²)..... 16
 - Total Count Radiometrics (cps)..... 60
 - Lead (ppm)..... 200
 - Manganese (ppm)..... 1500

Lead 630
Manganese 2000

- NOTE:
1. All pegs are 50mm x 50mm wooden pegs unless shown otherwise.
 2. Pegs are at 50 metre intervals on all lines, except lines 2000E, 5000N and the Baseline 900E and where shown elsewhere. Lines 2000E and 5000N are pegged at 100 metre intervals. The Baseline 900E is pegged at 100 metre intervals except where shown otherwise.
 3. The Baseline 900E and the lines 00N, 200N, and 400N accurately established with Theodolite, Level and E.D.M. Equipment. All other lines were run with Compass, Tape and Alidade.
 4. Co-ordinates in brackets shown at original marks found are from a previous survey.
 5. Baseline is surveyed on True North as determined from existing trig. stations nos. 65 and 65A.
 6. A.M.G. Co-ordinates for TRIG 65 8 550 719 716 N
723 717 210 E
 7. All levels shown are natural surface except where shown T.P.(Top of Peg).

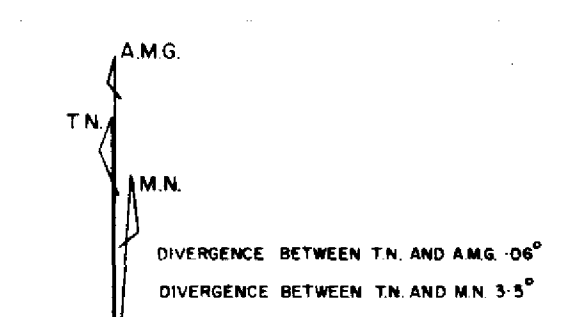


PLATE V

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT
EXPLORATION LICENCE NO.1755

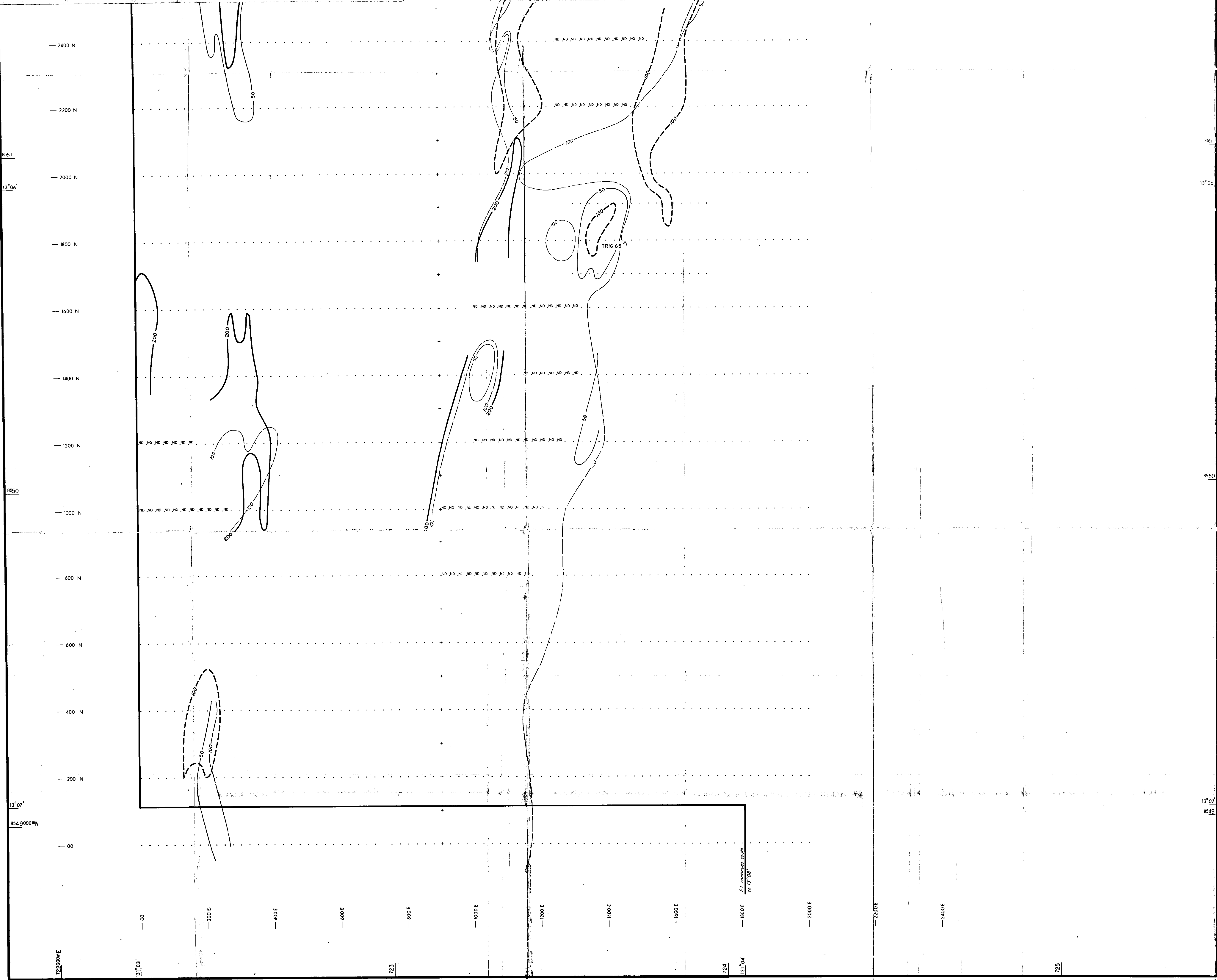
GEOCHEMICAL ANOMALIES

Scale: 1:5000



DRAWN Cartoscope





LEGEND

- Cobalt (ppm)..... 50
- Nickel (ppm)..... 100
- Zinc (ppm)..... 200
- Copper (ppm)..... 100

- NOTE:
- All pegs are 50mm x 50mm wooden pegs unless shown otherwise.
 - Pegs are at 50 metre intervals on all lines, except lines 2000E, 5000N and the Baseline 900E and where shown elsewhere. Lines 2000E and 5000N are pegged at 100 metre intervals. The Baseline 900E is pegged at 100 metre intervals except where shown otherwise.
 - The Baseline 900E and the lines 00N, 200N, and 400N accurately established with Theodolite, Level and E.D.M. Equipment. All other lines were run with Compass, Tape and Alidade.
 - Co-ordinates in brackets shown at original marks found are from a previous survey.
 - Baseline is surveyed on True North as determined from existing trig stations nos. 65 and 65A.
 - A.M.G. Co-ordinates for TRIG 65: 8 550 719 716 N 723 717 210 E
 - All levels shown are natural surface except where shown T.P. (Top of Peg).

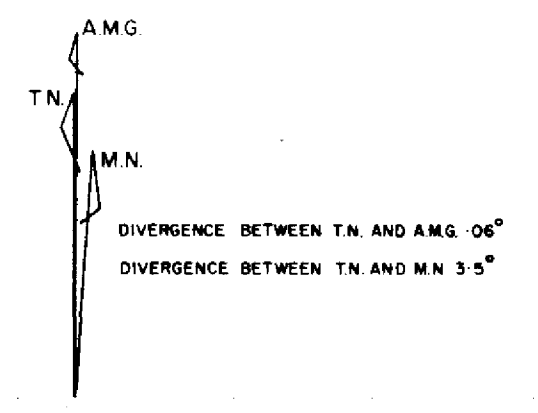


PLATE V

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT
EXPLORATION LICENCE NO.1755

GEOCHEMICAL ANOMALIES

Scale: 1:5000



DRAWN Cartoscope

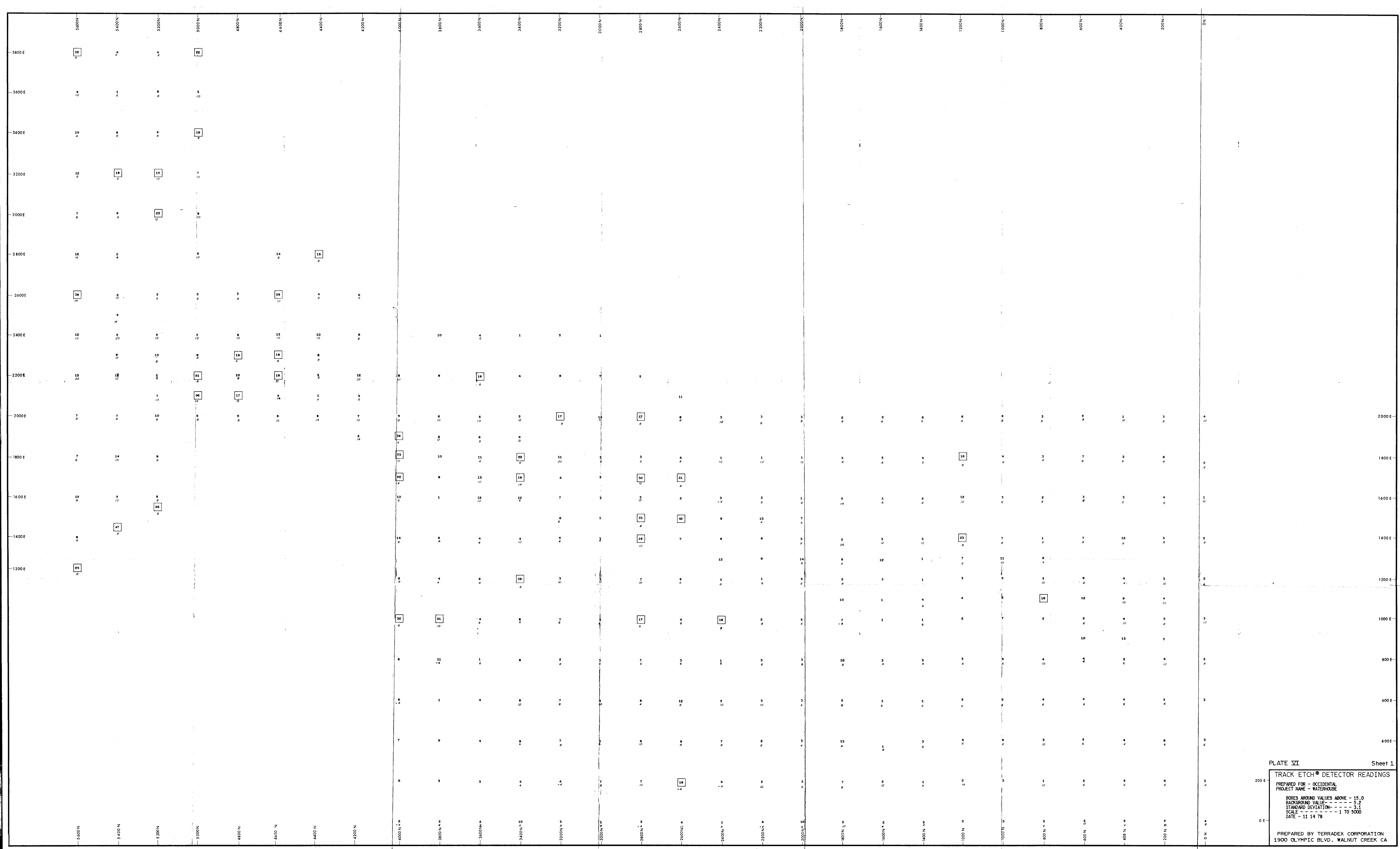


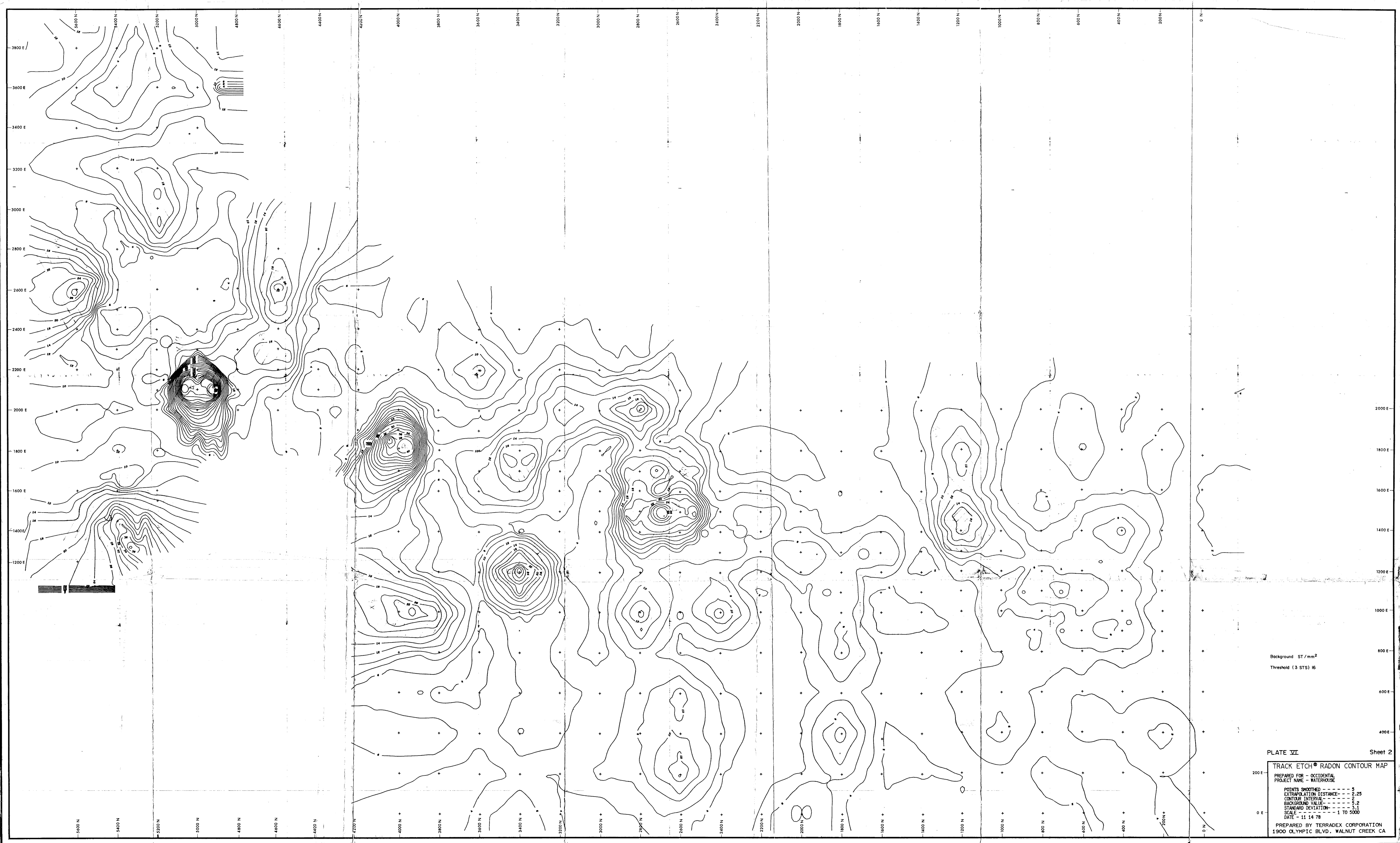
PLATE VII Sheet 1

TRACK ETCH® DETECTOR READINGS

PREPARED FOR - OCCIDENTAL
PROJECT NAME - WATERHOUSE

BOXES AROUND VALUES ABOVE - 15.0
BACKGROUND VALUE - - - - 5.2
STANDARD DEVIATION - - - - 3.1
SCALE - - - - 1 TO 5000
DATE - 11 14 78

PREPARED BY TERRADEX CORPORATION
1900 OLYMPIC BLVD., WALNUT CREEK CA

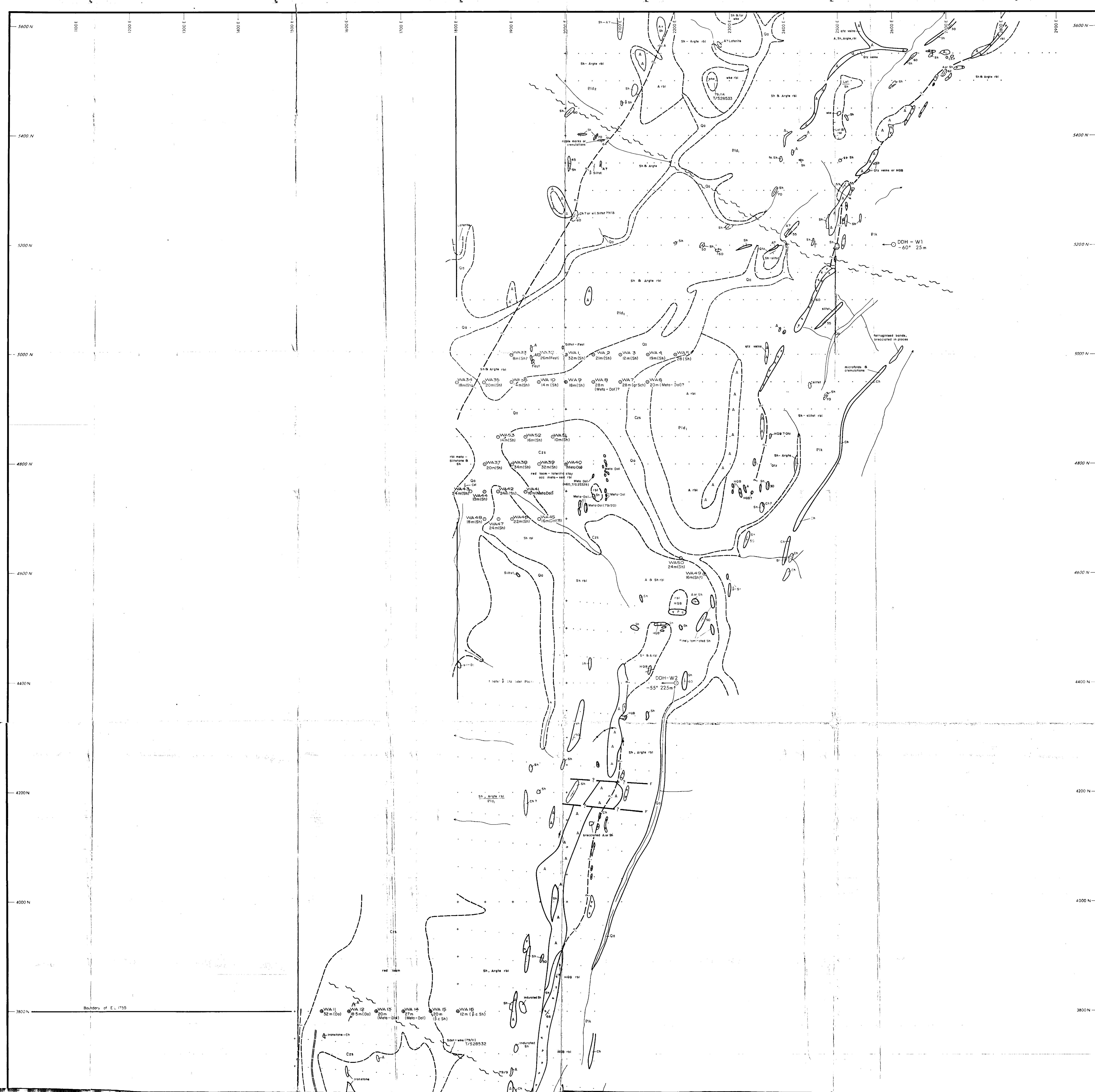


Background ST/mm²
Threshold (3 STS) 16

PLATE VI

Sheet 2

TRACK ETCH® RADON CONTOUR MAP
PREPARED FOR - OCCIDENTAL
PROJECT NAME - WATERHOUSE
POINTS SMOOTHED - - - - 5
EXTRAPOLATION DISTANCE - - - - 2.25
CONTOUR INTERVAL - - - - 2
BACKGROUND VALUE - - - - 5.2
STANDARD DEVIATION - - - - 3.1
SCALE - - - - 1 TO 5000
DATE - 11 14 78
PREPARED BY TERRADEX CORPORATION
1900 OLYMPIC BLVD. WALNUT CREEK CA



PHYSICAL FEATURES

- Intermittent Creek
Survey Peg
Survey Peg Baseline
Trig Station
Four Wheel Drive Track
2nd World War Constructions (44 gallon drums) □ □ □

GEOLOGICAL SYMBOLS

- Geological boundary
Geological boundary indicated
Geological boundary inferred
Fault
Fault indicated
Fault inferred
Photo-linear
Bedding, strike and dip
Bedding, vertical
Joint, strike and dip
Cleavage, strike and dip
Cleavage, vertical
Rotary Drill Hole and depth in metres
Unconformity
Hematite Quartz Breccia (HQB)
Nodular Chert
Dolomite
Amphibolite (para and/or ortho)
Quartz vein
Laterite terrace
Rock sample No. 79/1
Petrological Description No. T/S 29345

ABBREVIATIONS

- | | |
|------------------------------|---------------------------|
| Ironstone Fest | Chloritic C |
| Chert Ch | Pyritic p |
| Quartzite Qtzite | Graphitic gp |
| Hematite Quartz Breccia. HBQ | Ferruginous/ised. fe |
| Wacke Wke | Hematitic he |
| Sandstone Sdst | Siliceous sil |
| Siltstone Siltst | Mica m |
| Argillite Argite | Magnetite mt |
| Shale Sh | Quartz qtz |
| Schist Sch | Rubble rbl |
| Amphibolite A | Metamorphosed meta |
| Dolomite Do | |
| Dolerite Dol | |

STRATIGRAPHY

- Qa Alluvials
- Cz1 Laterite
- Cz5 Residual soils and rubble
- Czy Residual soils and rubble derived predominantly from highly ferruginised amphibolite (?) and indurated shale
- Czb Residual soil and rubble derived from hematitic quartz breccia
- Bl Undifferentiated Lower Proterozoic sediments
- BURRELL CREEK FORMATION
- Blb Maroon, purple-greenish grey shale and siltstone with occasional wacke and sandstone. Minor chert
- KOOLDIN FORMATION, GEROWIE TUFF, KAPALGA FORMATION
- Blk Black-grey pyritic and carbonaceous chert and blocky siliceous shales and siltstones, several zones of thin bedded chert with interbeds of ferruginous siltstone-ironstone (Banded Iron Formations) with intraformational breccia and folding. Minor beds of nodular chert and wacke. Basal units, hematite quartz breccias (silicified dolomite?)
- WILDMAN SANDSTONE
- Blc Black carbonaceous shale occasionally pyritic with several intraformational dolomite lens and wacke. Minor siltstone and chert. Occasional amphibolite. (para and/or ortho?)
- Blg2 Carbonaceous, pyritic shales and siltstones with several amphibolite (para or ortho?) zones. Possible minor chert. Accacia Gap Tongue (Pla) - Quartz sandstone, lithic sandstone and siltstone with large pseudomorphs after pyrite



On Grid T-S, even numbered lines (e.g. 2400, 2600, 2800 N)
are on a bearing of 90°, fill in lines (e.g. 2450, 2500, 2550 N)
are on a bearing of 94°

T-N Grid 5600 N
T-S Grid 3800 N

T.N.
↑
VII
PLATE VII

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT, N.T.
EXPLORATION LICENCE N°1755

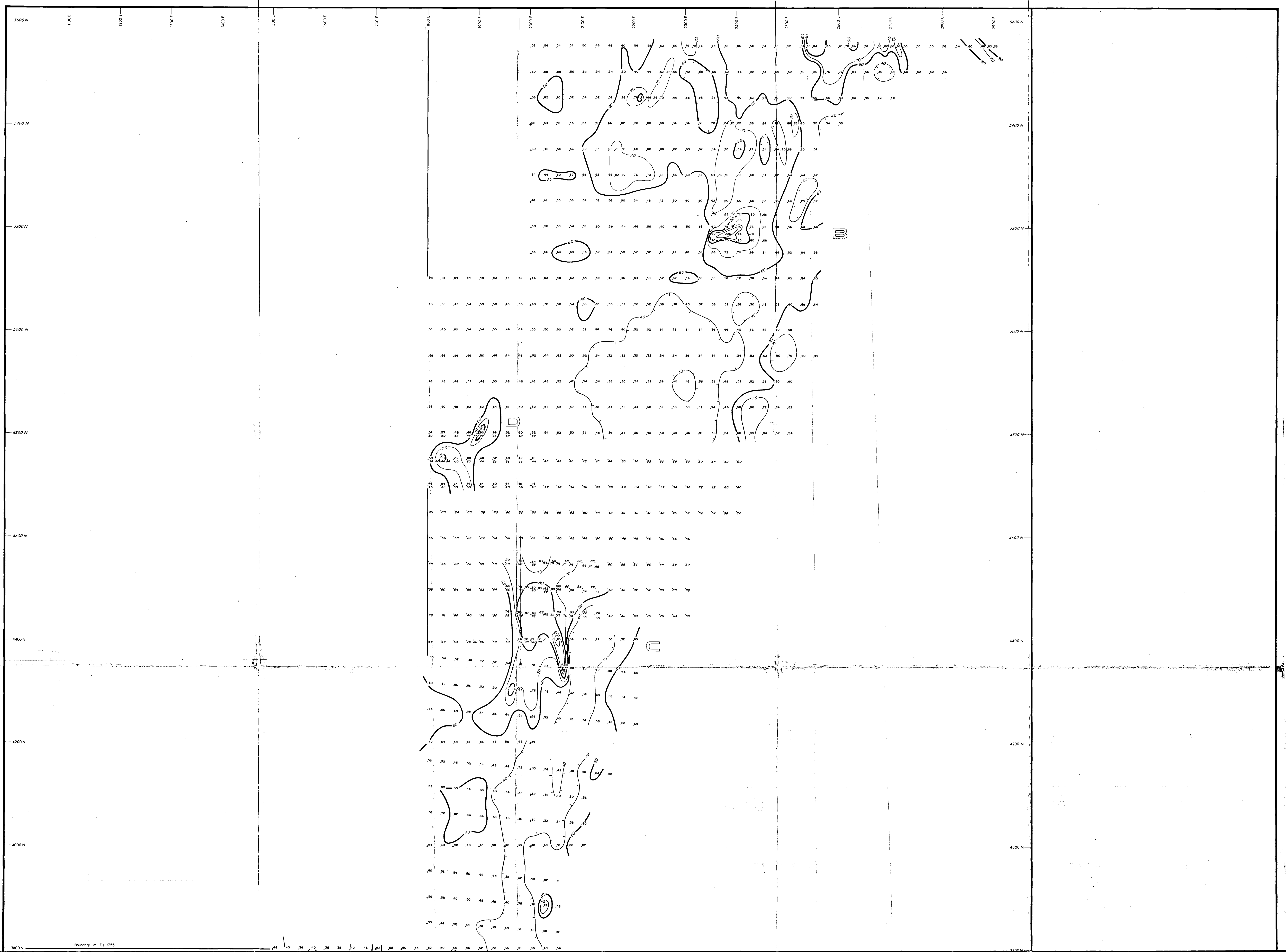
GRIDS T-N & T-S

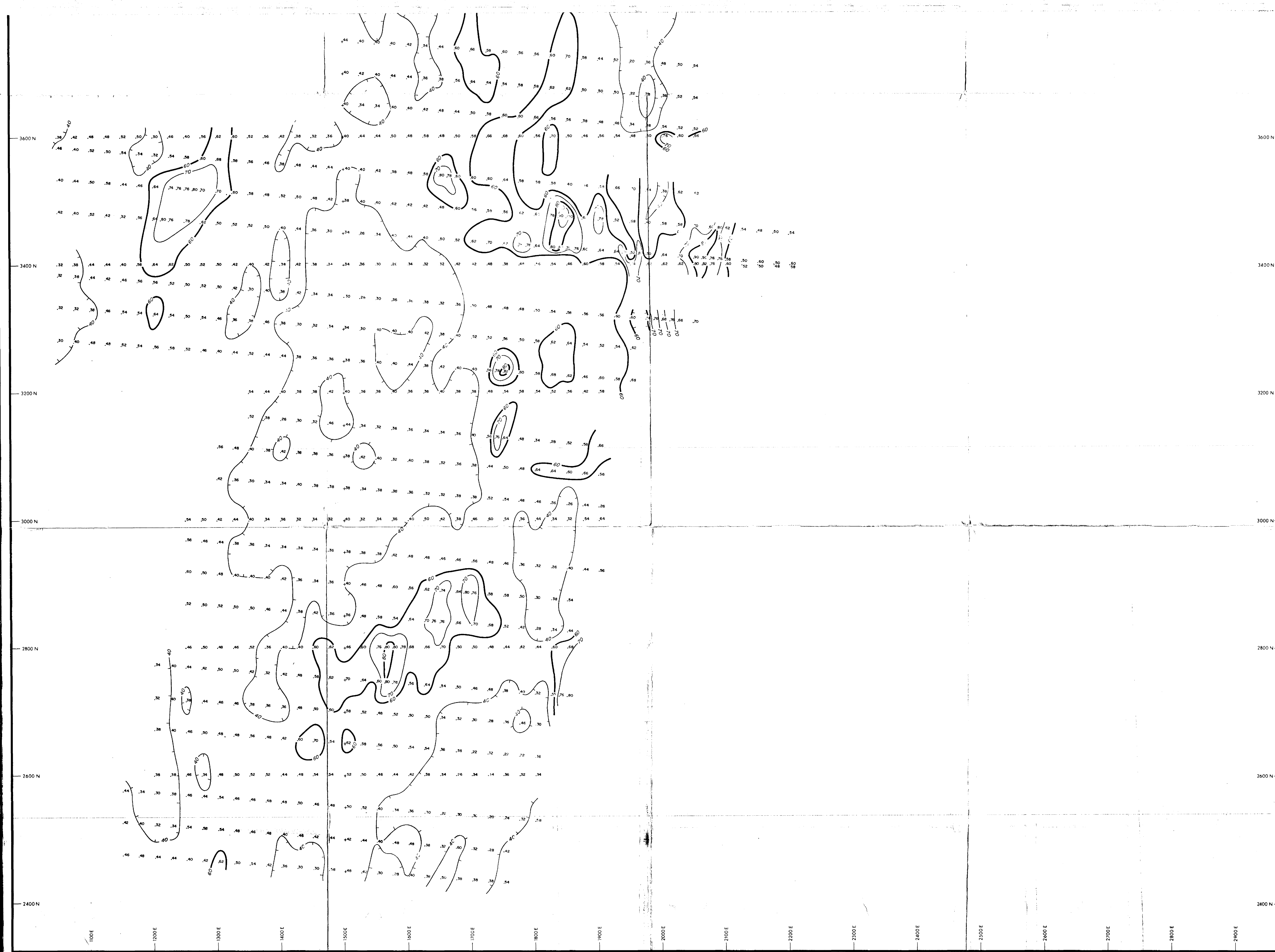
GEOLOGY

Scale 1: 2500

0 25 50 100 200 metres

DRAWN Cartoscope Date Aug. 1979 Author N.S.





Instrument Model: Geometrics - GR 101A
Serial N^o: 2831
Crystal Volume: 1.5" dia x 1.5"
Energy Width: T.C. all energy > 0.05 Mev.
Accumulation Period: Fast Scale

Scintillometer readings, August '79

On Grid T-S, even numbered lines (e.g. 2400, 2600, 2800 N)
are on a bearing of 90°, fill in lines (e.g. 2450, 2500, 2550 N)
are on a bearing of 94°.

T-N Grid 5600 N
T-S Grid 3800 N

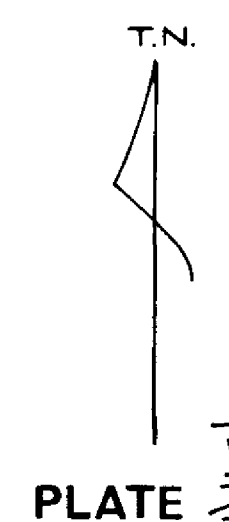


PLATE VIII
OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT, N.T.
EXPLORATION LICENCE N^o 1755

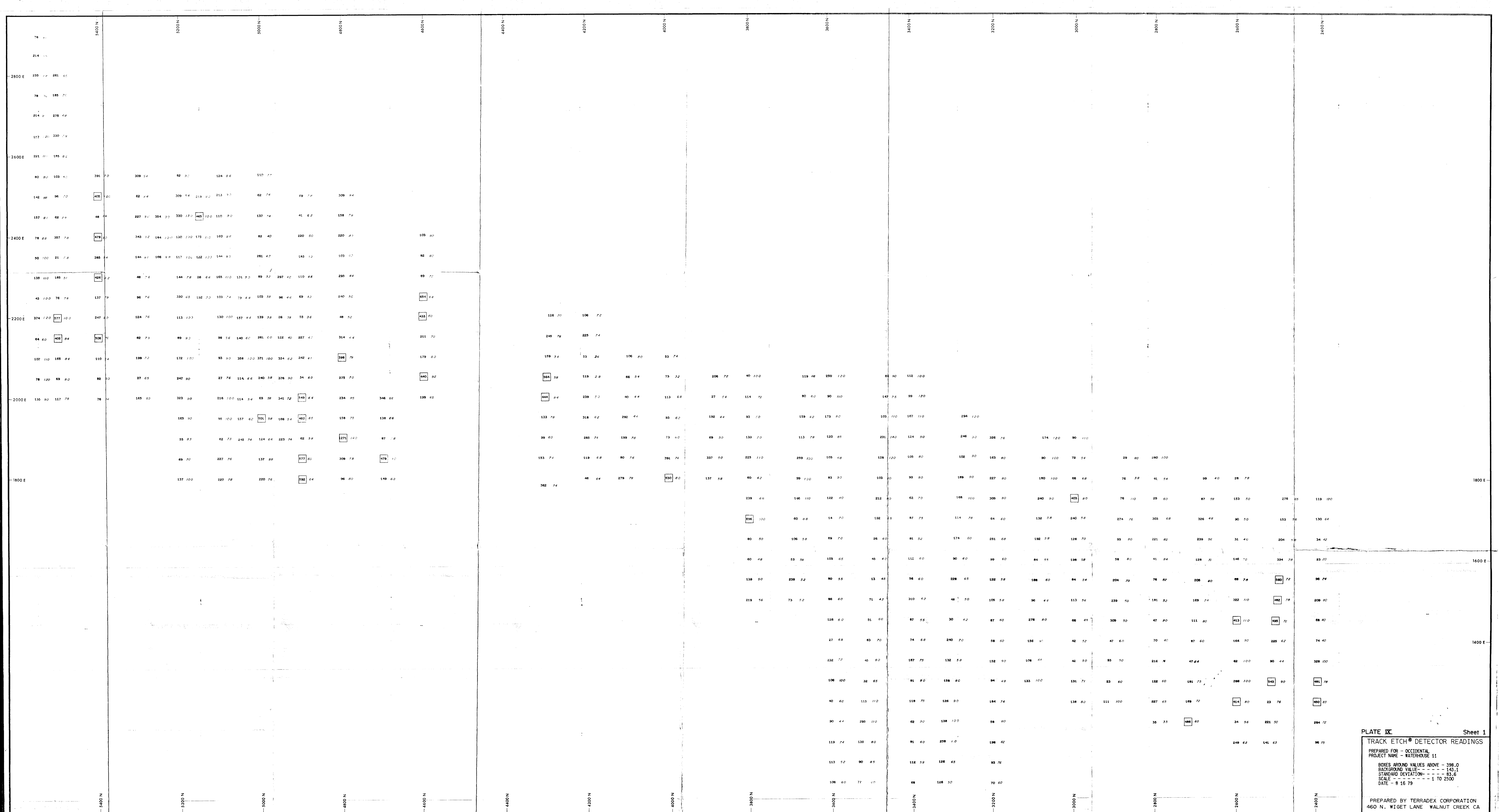
GRIDS T-N & T-S

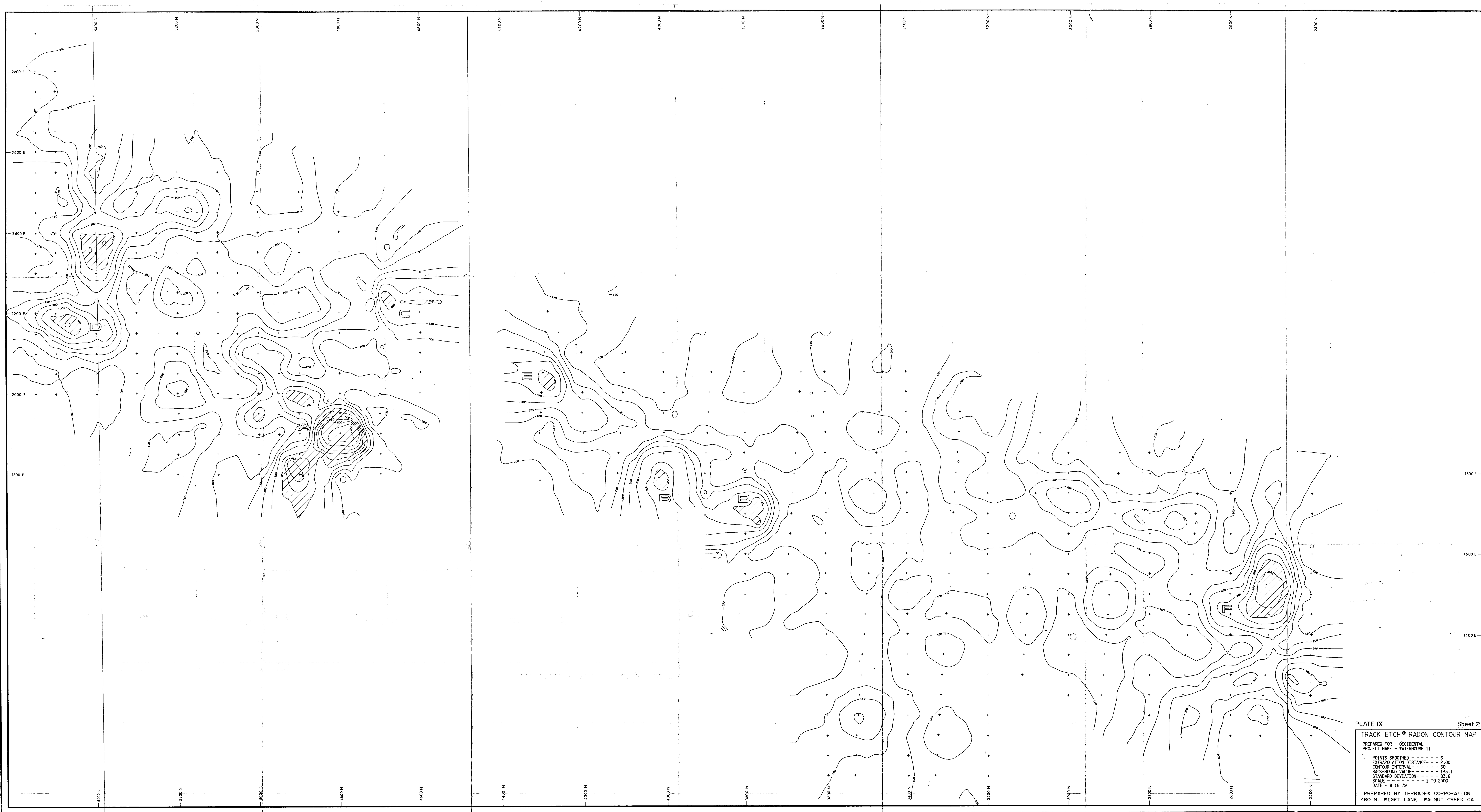
**GROUND SCINTILLOMETER
READINGS (c.p.s.)**

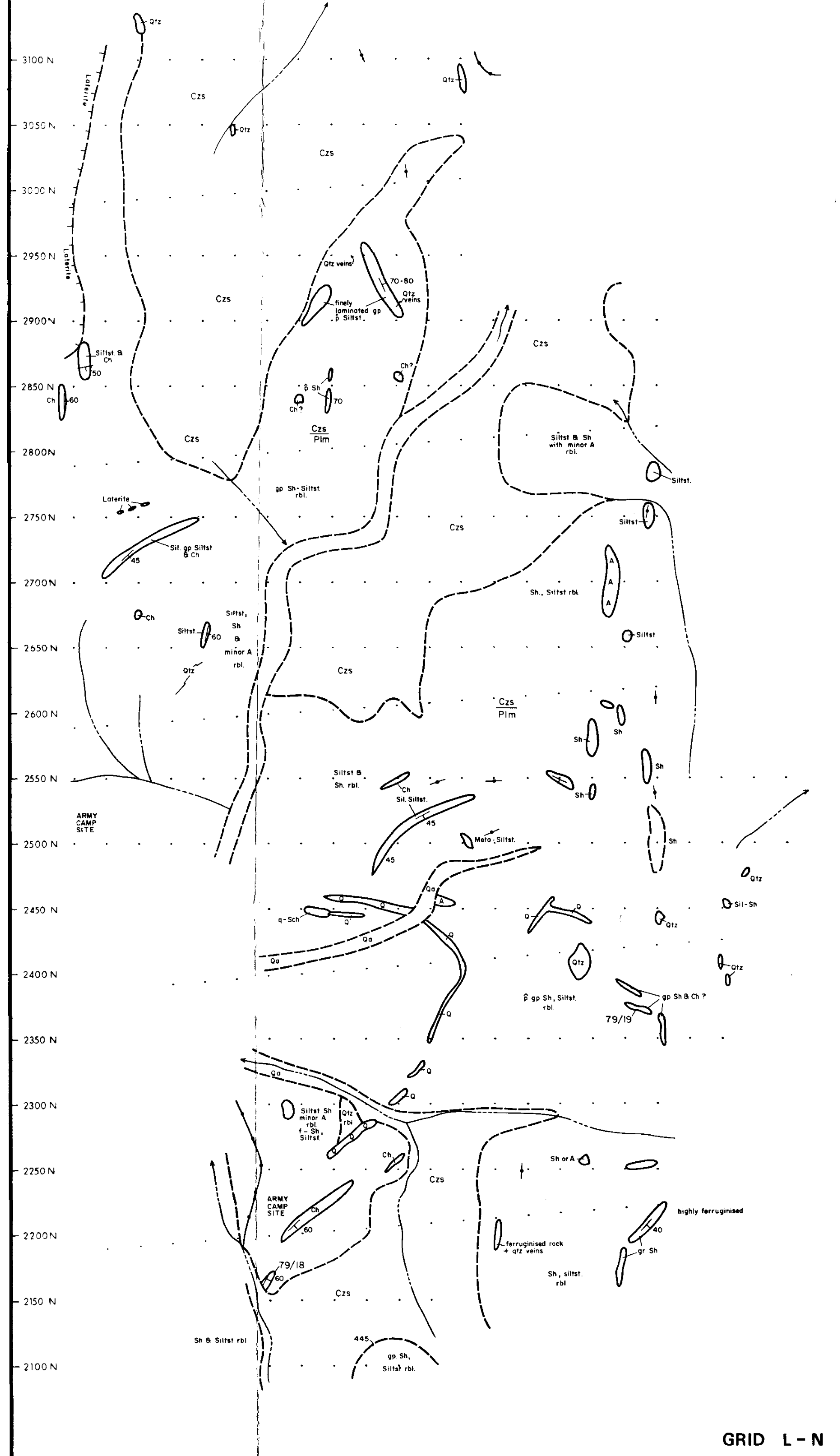
Scale 1:2500



DRAWN Cartoscope







- LEGEND
- A Amphibolite
 - Ch Chert
 - Sh Shale
 - Siltst Siltstone
 - Argite Argillite
 - P pyrite
 - gp graphite
 - qtz quartz

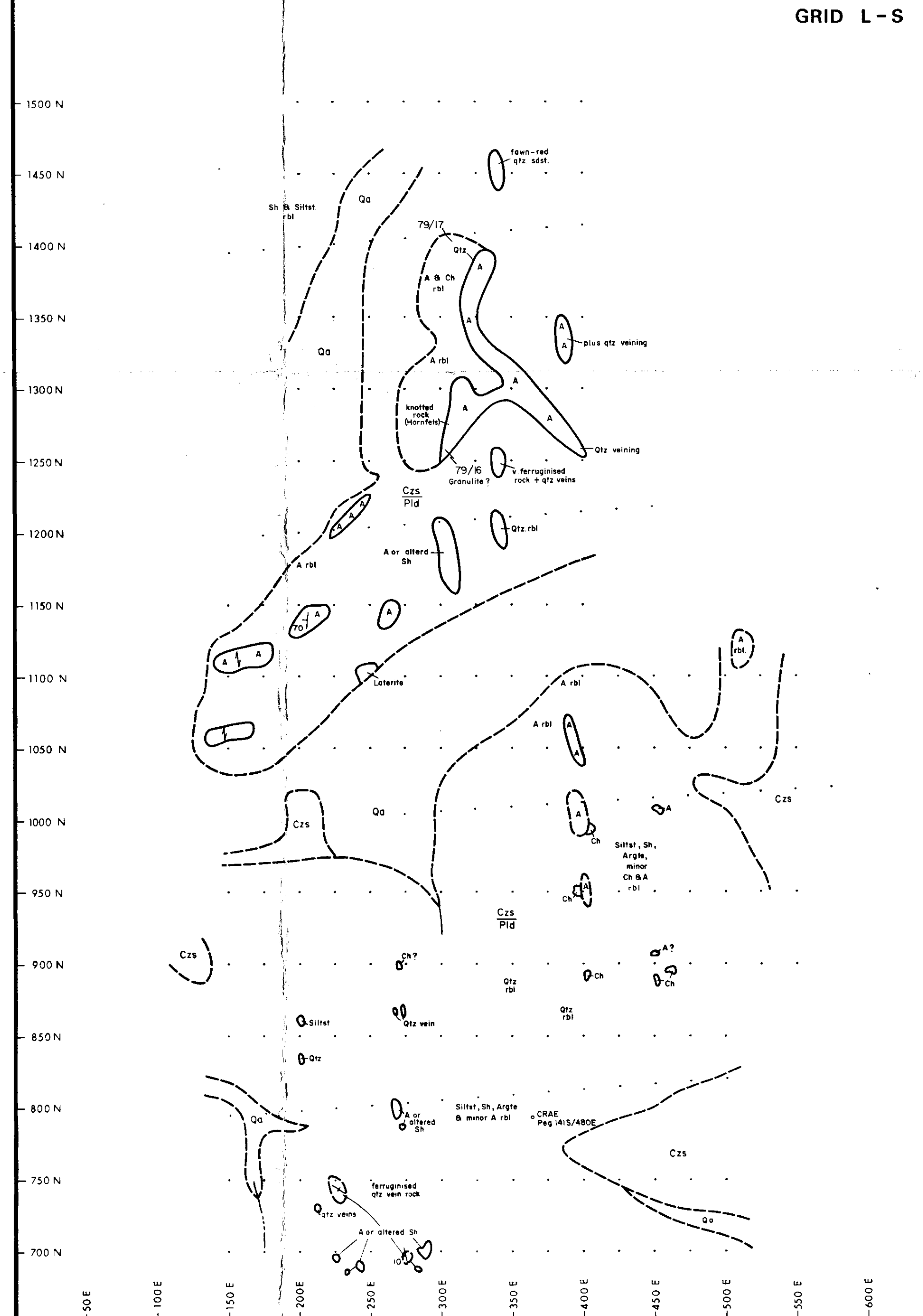


PLATE X

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT, N.T.

EXPLORATION LICENCE N91755

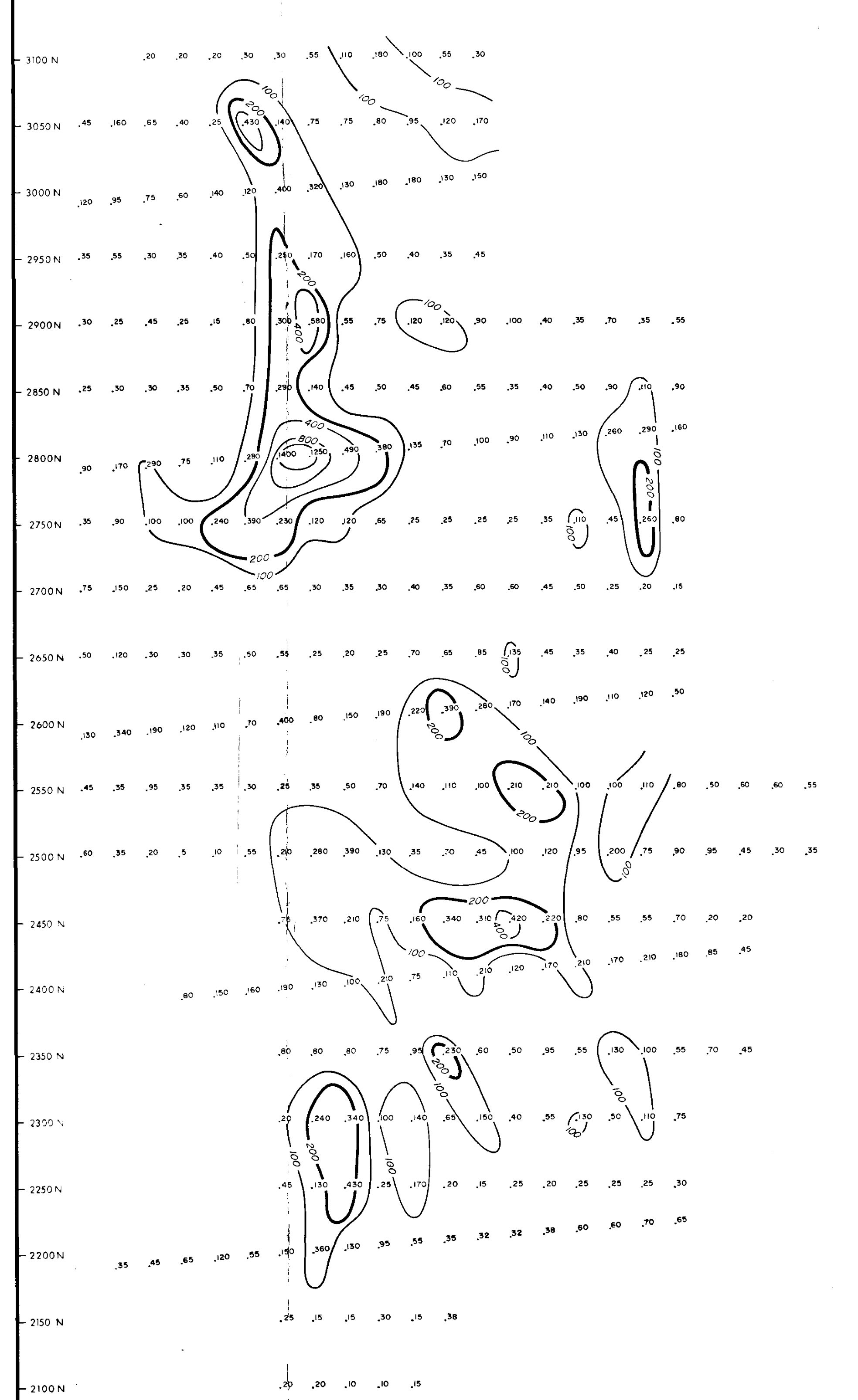
GRID L-S & L-N

GEOLOGY

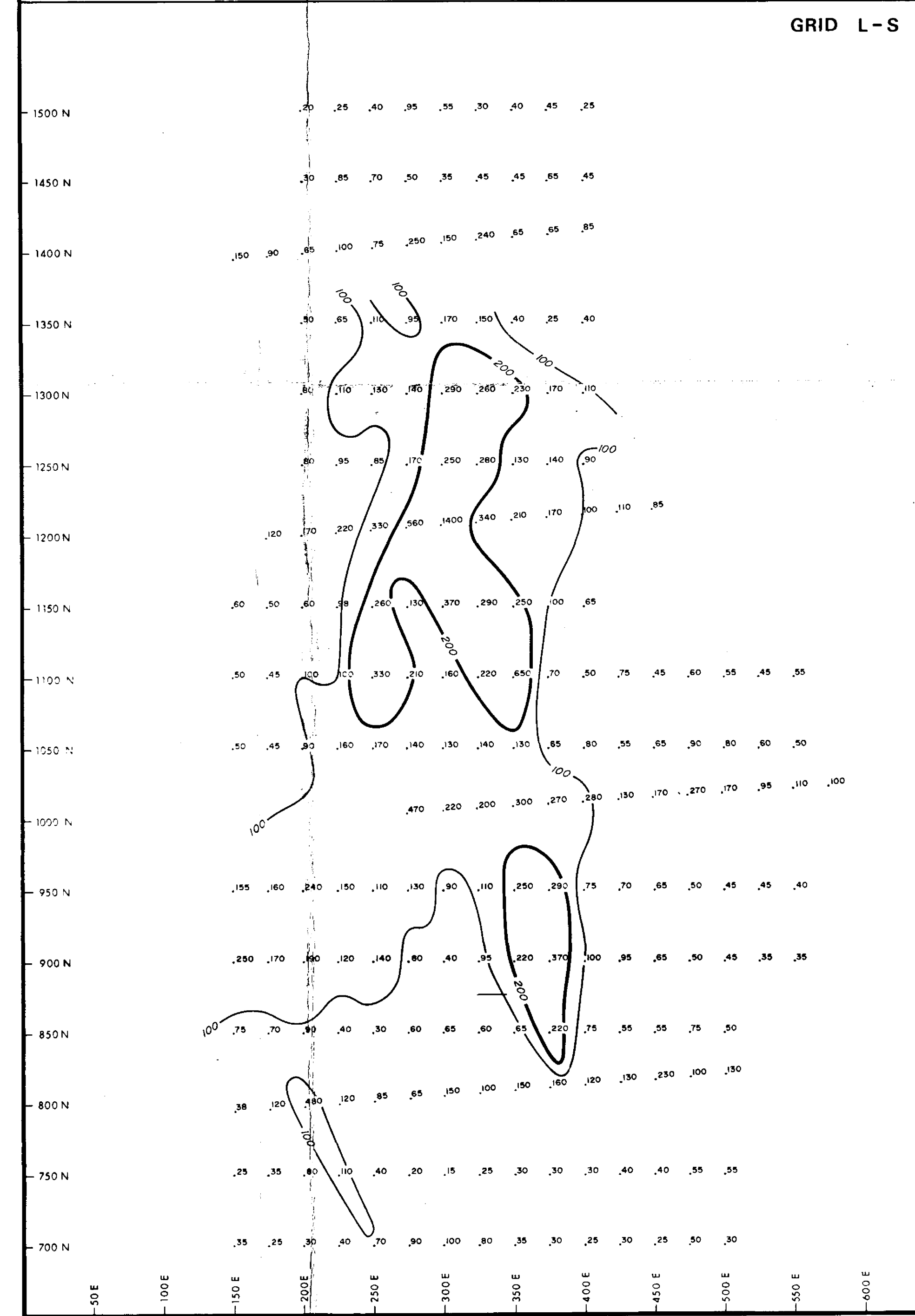
Scale 1:2500

0 25 50 100 200
Scale of Metres

DRAWN: Cartoscope Date: Author: N.S.



GRID L-N



GRID L-S



PLATE XI

OCCIDENTAL MINERALS CORPORATION OF AUSTRALIA

WATERHOUSE PROJECT, N.T.

EXPLORATION LICENCE N°1755

GRID L-S & L-N

LEAD VALUES (ppm)
SOIL GEOCHEMISTRY

Scale 1:2500

