

Mobil Energy Minerals Australia Inc.

(INCORPORATED IN DELAWARE, U.S.A. LIMITED LIABILITY)

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MOBIL-SUTTONS JOINT VENTURE
EXPLORATION LICENCE 1356 - LITCHFIELD
ANNUAL REPORT
TO
NORTHERN TERRITORY DEPARTMENT OF MINES AND ENERGY
FOR
TWELVE MONTHS ENDING AUGUST 7, 1981



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November 4th, 1981.

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SUMMARY

EL 1356 (Litchfield) was first granted to Suttons Motors (Arncliffe) Pty. Ltd, on August 8th, 1977, and has been renewed annually from that date. Area reductions took place in 1979, 1980 and 1981.

Mobil Energy Minerals Aust Inc, became a joint venture partner on August 25th 1978 and assumed operatorship of exploration on the Licence.

Exploration by Suttons/MEMA has consisted of airborne geophysics, ground radiometrics and magnetics, radon emanometry, track etch, geological mapping, auger, percussion and diamond drilling and electric logging. The target sought was stratabound uranium mineralisation similar to that found in the Alligator Rivers Uranium Field in the East Pine Creek Geosyncline.

Results were not encouraging, and the emphasis has now shifted to evaluating the Litchfield Granite as a possible uranium source rock.

This report details the results of exploration work carried out by MEMA between August 1980 and August 1981.

1. INTRODUCTION

Exploration Licence No: 1356 (Litchfield) was first granted to Suttons Motors (Arnccliffe) Pty. Ltd., for twelve months from August 8th, 1977. It has been renewed annually for further twelve months periods since that date.

In the first two years of tenure, the E.L. was granted over an area of 238.82 square miles. In August 1979, the E.L. was reduced by half to 118.14 square miles and in August 1980 it was further reduced by half to 59.06 square miles.

A joint venture between Suttons Motors and Mobil Energy Minerals Aust Inc., was signed on August 25, 1978, at which time Mobil assumed operatorship of exploration on the Licence area.

An airborne magnetic/radiometric survey was flown by Aero Exploration Pty. Ltd., for Suttons Motors between September and October 1977. Between September and November 1978 fifty-eight radiometric features picked from the airborne survey results were ground checked by MEMA. Of these anomaly 45/34A (Kilfoyle Creek Prospect) which straddles the boundary between EL 1356 and EL 1359 areas was selected for further work which for the year ended August 8th, 1979, included gridding, detailed radiometrics radon emanometry, auger and percussion drilling and ground magnetics (Cotton 1979).

During the year ended August 8th, 1980, a track etch survey, together with auger, percussion and diamond drilling programmes were carried out over the Kilfoyle Creek Prospect, while an orientation airborne INPUT survey and a detailed airborne radiometric/magnetic survey were conducted over the licence areas as a whole (Pritchard, 1980).

The exploration work at Kilfoyle Creek Project continued into the 1980-81 Licence year and comprised completion of the track etch and drilling programmes, detailed geological mapping and ground spectrometry/magnetometry.

Expenditure during the twelve month period August 8th, 1980 to August 8th, 1981 amounted to \$120,148.58.

2. LOCATION & PHYSIOGRAPHY

Exploration Licence No. 1356 (Litchfield) is one of a number of Licences held by the Suttons Group over the Tipperary Pastoral Property in the western part of the Pine Creek Geosyncline (see Fig.1). The Licence is situated on the divide section between the Daly and Reynolds River, approximately 20km north of the Daly River Mission and 120km south-west of Darwin in the Northern Territory.

The existing Licence area is bounded by 130° 40' longitude on the west side, 13° 25' latitude on the northern side, 130° 45' on the eastern side and 13° 36' on the southern side. (See Fig.1.)

Access to the main part of the Licence area is via the Litchfield Station track off the main Daly River Road. The Kilfoyle Creek Project is reached by a 4 wheel drive track off the Daly River Road in the south east corner of the Licence area.

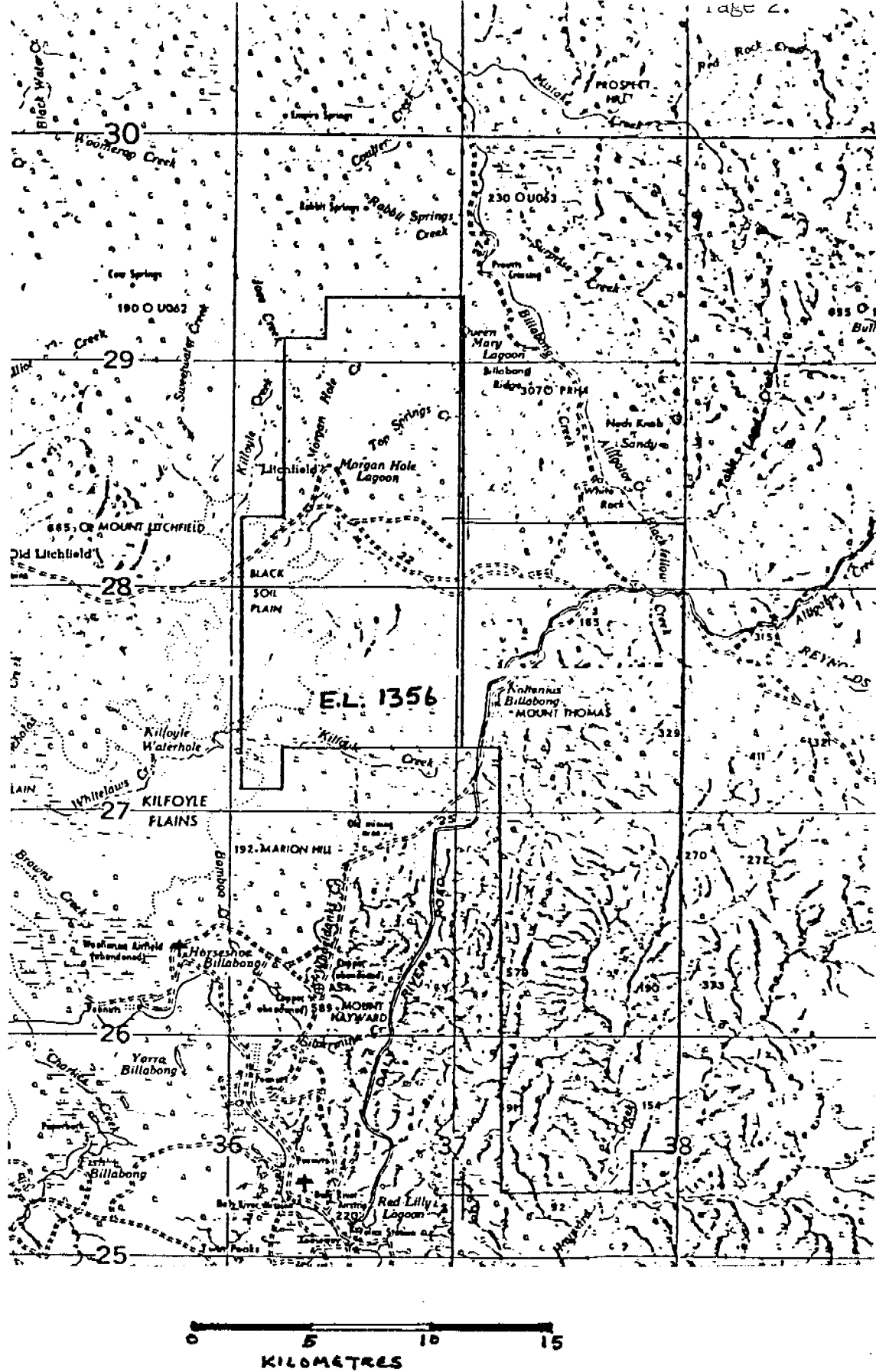


Fig.1 Location Map - E.L.1356 (Litchfield)

2. LOCATION & PHYSIOGRAPHY (Cont'd)

Creeks in the southern half of the Licence drain south and east into the Daly River, while north of the Litchfield track drainage is north and east into the Reynolds River. Black soil plains cover a large part of the Licence area. Rock outcrop in the area is minimal, and most geological boundaries have been photointerpreted, or extrapolated from drill-hole formation.

2.1 Aboriginal Sacred Sites

The joint venture initiated a comprehensive programme of meetings with representatives of the local Aboriginal Community and the Northern Land Council to inform these bodies about the exploration activities of the joint venture and to obtain advice from these bodies to ensure that the activities of the joint venture did not affect Aboriginal sacred sites. An independent consultant Mr. John Clark, has been engaged to assist with this work.

3. GEOLOGICAL SETTING

The Licence area lies within the Litchfield Block on the Western edge of the Pine Creek Geosyncline. Sediments of probable Middle Cambrian age crop out in the northern half of the Licence area, and overlie Early Proterozoic metasediments intruded by, and faulted against Lower to Middle Proterozoic granites in the southern half of the Licence area (See Fig 2).

The Cambrian sediments dip at shallow angles to the north-east, and are capped by plateau remnants of transported laterite deposits, related to the Tertiary Koolpinyah Geomorphic Surface (Cotton, 1979). A distinctive arkose is developed where Litchfield granite underlies the Cambrian. The Litchfield Granite crops out in the southern half of the Licence area where the Cambrian cover has been stripped off by the drainages of Kilfoyle Creek and Elliot Creek, a parallel tributary of the Daly River. Three granite types have been recognised in the area, (a) a foliated biotite granite (b) a characteristically unfoliated porphyritic and leucocratic granite, and (c) pegmatite veins with a preferred east-west orientation.

In the south-east corner of the Licence area metamorphosed turbidite facies sediments of the Lower Proterozoic Noltinius and Burrell Creek formations form a complex synclinal structure. These sediments have undergone metamorphism to upper greenschist/lower amphibolite grades and in places have been subjected to thermal metamorphism associated with the intrusion of late Lower to early Middle Proterozoic granites. This sequence of sediments hosts the Kilfoyle Creek Prospect.

To the west of these sediments is an area of metamorphosed, Archean or Lower Proterozoic sediments and basic and possibly ultrabasic igneous rocks. These rocks have been subjected first to prograde metamorphism to upper amphibolite and granulite grades (which has been accompanied by the formation of S type granites) and then, in some zones, to retrograde metamorphism to greenschist facies rocks (Pritchard, 1980).

4. PREVIOUS EXPLORATION

Prior to the granting of EL 1356 to Suttons Motors in 1977, a considerable amount of work was done over the south-eastern sector of the Licence area by Keewanee Aust Pty. Ltd., between 1970 and 1973. Keewanee carried out magnetics radiometrics, V.L.F. - E.M. and geological mapping over two extensive grid areas, and zones of interest were followed up by drilling using an Air track percussion rig, and a power auger.

In 1974 - 75 BHP drilled 4 rotary holes adjacent to the Litchfield Road in the course of testing the basal Cambrian for phosphate. The unconformity was not reached due to drilling difficulties.

Tipperary Land Corporation searched for bauxite and phosphate over much of the area in 1967 - 68.

5 EXPLORATION PROGRAMME 8TH AUGUST 1980 - 7TH AUGUST 1981

Exploration on the Litchfield Licence area for the year ended 7th August concentrated on the Kilfoyle Creek Prospect in the south-east corner of the Licence. The programme represented a continuation of the 1979-80 programme, and comprised completion of the track etch and drilling, detailed geological mapping and ground spectrometry/magnetometry. Much of the work relates to uranium mineralisation discovered in the adjacent Noltenius EL 1359.

5.1 Track Etch Survey

During August 1980, a track etch survey was carried out over a 900m x 350m grid centred on the Kilfoyle Creek Prospect and straddling the Litchfield and Noltenius Licences. In the Litchfield Licence three values greater than two standard deviations above the background values were recorded in the area of the main prospect (see Figs 4 and 5). A report on this survey by Terradex is included as Appendix 1.

5.2 Detailed Geology

Detailed geological mapping on the Kilfoyle Creek Prospect grid was carried out concurrently with ground spectrometry/magnetometry in August 1980. Most information was gained from EL 1359 where rock exposure is much greater than in EL 1356 (See Fig 3.).

Lower Proterozoic metasediments of the Noltenius/Burrell Creek formation crop out in the south-east corner of the Litchfield Licence, and comprise brown siliceous meta-sandstone with rare bands of carbonaceous quartz mica-chlorite schist. North-north-east striking bands of sandstone and schist have been interpreted beneath alluvial cover to the west of the outcrop from percussion drill hole data.

Uranium mineralisation is confined to EL 1359 where it is evident as pods of reddish/black hematitic uraniferous meta-sandstone. The mineralisation is proximal to a fold axis and is considered to be structurally controlled (Rose 1980). The major fold axes appear to be doubly plunging (to north and south) at relatively shallow angles.

5.3 Geophysics

The results of the ground spectrometry and magnetometry carried out over the Kilfoyle Creek Prospect grid in August 1980 are shown as stacked profiles for magnetics, total count, K, U, and Th (See Figs 6, 7, 8 9 and 10).

An overlay of the total count and U channels show a marked sympathetic relationship with the track etch contour maps and the area of known secondary mineralisation in EL 1359 stands out strongly.

5.4 Drilling

During the year ended 7th August 1981, 1 diamond drill hole (LDD6) and 21 percussion drill holes (LPD45-65) were drilled in the south-eastern corner of EL1356, searching for a repetition of the Kilfoyle Creek Prospect lithologies to the west beneath alluvial cover.

Diamond drill hole LDD6 was sited to intersect the western folded exterior of the Lithologies drilled in LDD5 to the east associated with uranium mineralisation. Vein type uranium mineralisation was intersected in shales from 130.30 - 130.31m - the interval assayed 390ppm uranium.

Percussion holes LPD45-65 were drilled to test the stratigraphy in an area of alluvial cover to the west of main Kilfoyle Creek Prospect (See Fig 3 for all drillhole positions).

Diamond drill hole LDD5 was completed prior to the year ended 7th August 1981; analytical results from this hole are included with this report.

Lithological logs, radiometric logs and analytical results from all drill holes are appended.

6. CONCLUSIONS

Geological and geophysical mapping, percussion and diamond drilling were carried out in the south east corner of the Litchfield Licence in search for repetitions of lithologies and associated uranium mineralisation discovered in the adjacent Noltenius Licence (Kilfoyle Creek Prospect). As a result of these surveys, the potential of the Litchfield Licence for vein uranium mineralisation in the Burrell Creek formation has been considerably downgraded.

Exploration in 1982 will concentrate on evaluating the Litchfield granite as a possible uranium source rock.

7. REFERENCES

- Cotton, R.E. 1979 EL 1356, Litchfield, Northern Territory.
Report for year ended 7th August 1979.
MEMA Tech. Record No: 52.
- Pritchard, P.W. 1980 Exploration Licence 1356 - Litchfield Annual
Report to the Northern Territory. Department of
Mines and Energy for Twelve months ending
August 7th, 1980.
MEMA Tech. Record No: 258
- Rose, J 1980 Kilfoyle Creek Prospect - 1980 Report.
MEMA Tech. Record No: 320

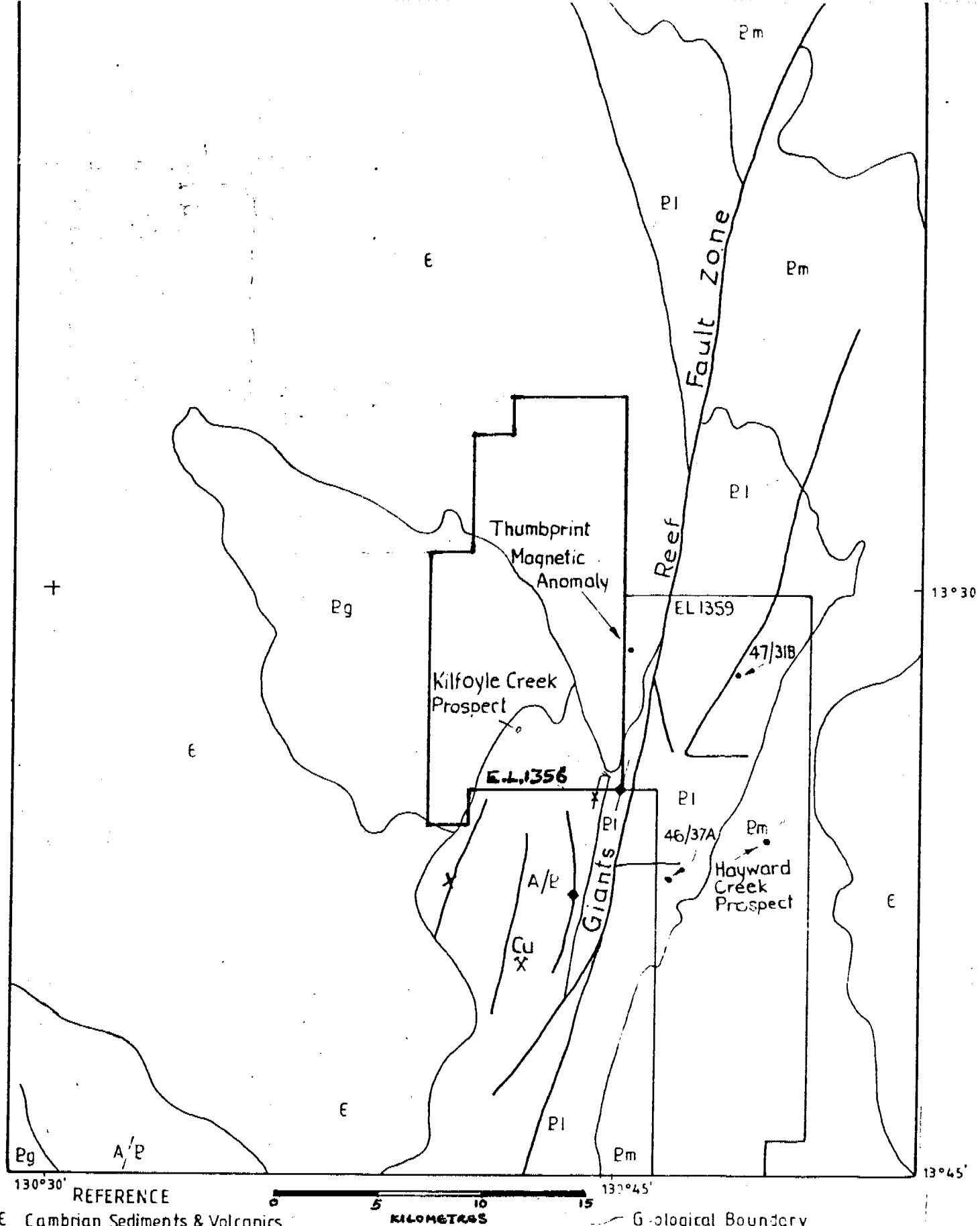


Fig.2

Fig 2. Geology of Litchfield (EL1356) and Noltens (EL1359) EL Areas

Appendix No. 1

Financial Statement

Mobil Energy Minerals Australia Inc.

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8th FLOOR, 31 QUEEN ST.,
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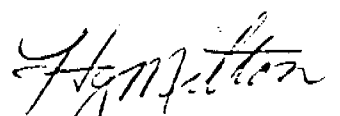
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October 1981.

STATEMENT OF EXPENDITURE FOR PERIOD
AUGUST 8, 1980 TO AUGUST 7, 1981 FOR
EXPLORATION LICENCE 1356 LITCHFIELD

Professional fees of Geologists & Consultants	15,253.10
Travel and Accommodation	6,124.70
Freight	261.62
Field Supplies	3,119.89
Equipment and Facilities	120.47
Rental of Equipment	228.51
Motor Vehicle Hire	6,108.17
Vehicle Operating Costs	1,258.15
Aircraft Hire	430.34
Drilling Contractors	48,549.40
Logging Contractors	16,118.61
Laboratory Services	2,599.15
Photogeological Study/Airborne Survey	207.00
Other Contract Services	2,170.94
Maintenance and Repairs	134.11
Motor Registration	88.46
Direct Overheads	<u>1,704.41</u>
	104,477.03
Head Office Overheads at 15% of Direct Costs	<u>15,671.55</u>
	\$ <u>120,148.58</u>


H.G. Milton
Accounting Manager.

Appendix No. 2

Track Etch survey - Report by Terradex.

**TERRADEX CORPORATION**

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

Oct. 2, 1980

Mr. P. W. Pritchard (Ops. Manager)
Mobil Energy Minerals Australia Inc.
Corner of Riverside Ave. & Southgate
South Melbourne, Victoria 3205
AUSTRALIA

Dear Mr. Pritchard:

I am enclosing two sets of final tabulated data from your recent 189 cup Thoron Filtered Track Etch survey of the Noltenius Area. The Improved System Track Etch cups were utilized for this survey. 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 74.0 to 3876.1 T/sq.mm and the mean of the background distribution for the area was 319.2 T/sq.mm. The standard deviation of the background mean was 157.6 T/sq.mm or 49.4%. 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. For this survey the background mean is considerably above (3X) your recent 610 cup survey of the Noltenius area with an average of 104.9 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	8	643.7 - 785.6	2.0 - 2.5
3 - 4	2	805.3 - 871.2	2.5 - 2.7
4 - 5	1	1032.8 - 1032.8	3.2 - 3.2
OVER 5	3	1444.9 - 3876.1	4.5 - 12.1

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 6 points have a Z greater than 3, or 3.2% of the total. This, in our experience, is a below average percentage and represents a lower overall potential for mineralization, unless there is strong spatial clustering of high ranking points. The elevated magnitude of the highest ranking points is quite encouraging, however, more so if the mineralized horizon is quite deep or beneath relatively gas-impermeable overburden.

Mr. P. W. Prithcard
Mobil Energy Minerals Australia Inc.

- 2 -

The Track Etch radon contour map was computer generated using a 5 point weighted average computer smoothing routine and it was drawn with 100 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 two 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.

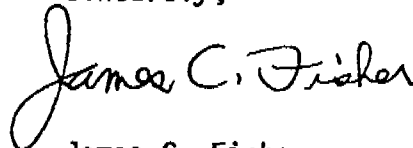
The maps show two major anomalies as follows:

<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	90591	1	3876.1	12.1
B	90975	9	2310.2	7.2

These are quite 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
Senior Geologist

JCF/bam
Enclosure

TRACK ETCH SURVEY RESULTS AND STATISTICS

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

NO. USEFUL PTS. : 189
 HIGH (T/SQ. MM.): 3876.1
 LOW (T/SQ. MM.): 74.0

BACKGROUND MEAN (T/SQ. MM.): 319.2
 STD. DEVIATION OF BKG. MEAN (T/SQ. MM.): 157.6
 RELATIVE STD. DEVIATION (PERCENT): 49.4

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	8	643.7 - 785.6	2.0 - 2.5
3 - 4	2	805.3 - 871.2	2.5 - 2.7
4 - 5	1	1032.8 - 1032.8	3.2 - 3.2
OVER 5	3	1444.9 - 3876.1	4.5 - 12.1

NO. OF PTS. ABOVE Z = 3: 6

PERCENT OF TOTAL PTS. : 3.2

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

MOBIL CUP SERIAL NUMBER	NOLTENIUS DETECTOR READING (T/SQ. MM.)	10-01-80 FIELD NOTES AND DATA
----------------------------------	--	----------------------------------

72351.	373. 5	90 7005000E
72352.	373. 5	7005050W
72353.	631. 0	60 7005100W HOLE IN FILTER
72354.	223. 1	70 7005150W
72355.	337. 4	65 7005200W
72356.	542. 4	65 7005250W
72357.	256. 1	75 7005300W
72358.	307. 6	55 7005350W
72359.	488. 9	45 7005400W WATER IN HOLE P
72360.	223. 9	50 7505400W
90491.	422. 9	60 7805100E
90492.	643. 7	65 7555100E
90499.	177. 5	50 4005100E CRACKED CUP+HEA
90500.	209. 3	45 4005050E
90501.	177. 5	40 4005000E
90502.	194. 5	50 4005050W
90503.	160. 5	20 4005100W
90504.	239. 7	35 4005150W
90505.	420. 7	25 4005200W
90506.	279. 3	30 4005250W
90507.	132. 3	30 4005300W
90508.	251. 0	25 4005350W
90509.	262. 3	25 4005400W
90510.	118. 8	20 4505400W
90511.	285. 0	50 4005500E
90512.	183. 2	30 4005450E
90513.	256. 7	55 4005400E
90514.	499. 9	45 4005350E
90515.	477. 3	70 4005300E
90516.	805. 3	70 4005250E HOLES IN FILTER
90517.	754. 4	50 4005200E HOLES IN FLTR+A
90518.	239. 7	55 4005150E HOLES IN FILTER
90519.	287. 8	65 4505500E CRACK IN CUP
90520.	221. 4	40 4505450E
90521.	299. 4	60 4505400E
90522.	608. 3	65 4505350E
90523.	334. 4	85 4505295E
90524.	497. 6	80 4505250E
90525.	625. 8	70 4505200E
90526.	462. 6	75 4505150E
90527.	299. 4	60 4455100E
90528.	223. 7	40 4425050E
90529.	212. 0	40 4555000E HOLE IN FILTER
90530.	209. 8	45 4505050W
90531.	182. 9	55 4505100W
90532.	241. 2	40 4505150W
90533.	212. 0	35 4505200W
90534.	206. 2	25 4505250W

MOBIL CUP SERIAL NUMBER	NOLTENIUS DETECTOR READING (T/SQ. MM.)	10-01-80 FIELD NOTES AND DATA
90535.	153. 7	25 450S300W
90536.	229. 5	25 450S350W
90537.	375. 2	55 500S050W
90538.	217. 8	25 500S400W
90539.	375. 2	30 500S350W
90540.	256. 4	25 500S300W
90541.	165. 4	50 500S250W
90542.	217. 8	45 500S200W
90543.	194. 5	50 500S150W
90544.	159. 6	45 500S100W
90545.	590. 8	65 500S005E HOLE IN FILTER
90546.	338. 8	40 500S050E HOLE IN FILTER
90547.	308. 8	40 500S100E
90548.	290. 8	70 500S150E
90549.	194. 6	65 500S200E HOLE IN FILTER
90550.	348. 5	55 500S250E
90551.	474. 2	55 500S300E HOLE IN FILTER
90552.	573. 3	45 500S350E
90553.	515. 0	60 500S400E
90554.	95. 5	30 500S450E
90555.	381. 0	40 500S500E
90556.	170. 6	40 550S500E
90558.	98. 5	55 550S450E
90559.	423. 0	70 500S400E
90560.	180. 3	70 550S350E
90561.	206. 6	75 550S300E
90562.	290. 8	70 550S250E
90563.	254. 7	65 550S200E
90564.	284. 7	55 550S150E
90565.	80. 4	60 550S100E
90566.	260. 7	95 550S050E
90567.	284. 7	45 550S000E
90568.	380. 9	75 550S050W
90569.	296. 8	60 550S100W
90570.	192. 3	60 550S150W
90571.	296. 8	55 550S200W
90572.	164. 6	55 550S250W
90573.	218. 6	40 550S300W
90574.	356. 9	30 550S350W
90575.	290. 8	30 550S400W
90576.	314. 2	35 600S400W
90577.	241. 3	60 600S350W
90578.	320. 8	45 600S300W WATER IN HOLE P
90579.	261. 2	50 600S250W
90580.	338. 2	60 600S200W
90581.	433. 6	65 600S250W
90582.	360. 6	40 600S100W
90583.	339. 2	60 600S050W
90584.	504. 0	75 600S000E CRACK IN CUP
90585.	565. 8	85 600S050E

MOBIL CUP SERIAL NUMBER	NOLTENIUS DETECTOR READING (T/SQ. MM.)	10-01-80 FIELD NOTES AND DATA
90586.	325. 4	70 600S100E
90587.	352. 9	70 600S150E
90588.	311. 7	40 600S200E
90589.	469. 7	85 600S250E
90590.	212. 9	90 600S300E
90591.	3876. 1	160 600S350E
90592.	387. 2	60 600S400E
90593.	174. 3	60 600S450E
90594.	284. 2	95 600S500E
90595.	141. 8	85 700S500E
90596.	148. 4	90 700S450E
90597.	871. 2	100 700S400E
90598.	473. 3	80 700S350E
90599.	201. 5	85 700S300E
90600.	741. 7	125 700S050E HOLE IN FILTER
90723.	284. 2	80 750S350W
90724.	442. 2	70 750S300W
90725.	222. 4	60 750S250W
90726.	243. 0	70 750S200W
90727.	428. 4	70 750S150W
90728.	304. 8	60 750S100W
90729.	517. 7	80 750S050W
90730.	151. 1	70 750S 00E
90731.	208. 1	80 650S000E HOLE IN FILTER
90732.	208. 1	65 645S050W HOLES IN FILTER
90733.	294. 3	60 650S100W
90734.	287. 7	50 650S150W
90735.	314. 2	55 650S200W
90736.	102. 0	60 650S250W
90737.	115. 3	45 650S300W
90738.	221. 4	55 650S350W
90739.	161. 7	65 650S400W
90740.	563. 2	75 650S050E
90741.	146. 9	60 650S100E
90742.	483. 4	55 650S150E
90743.	311. 7	55 650S205E
90744.	346. 0	65 650S250E RING 2FLTR LOOS
90745.	497. 1	85 650S300E RING 2FLTR LOOS
90746.	339. 2	65 650S350E
90747.	91. 9	60 650S400E
90748.	133. 1	70 650S450E RING 2FLTR LOOS
90749.	167. 5	60 650S500E
90750.	179. 0	75 750S500E HOLE IN FILTER
90783.	146. 9	90 750S450E
90784.	325. 4	70 750S400E
90785.	249. 9	65 750S350E
90786.	112. 5	75 750S300E
90787.	449. 0	85 750S050E
90788.	524. 6	125 780S050E
90789.	346. 0	75 780S000E

MOBIL CUP SERIAL NUMBER	NOLTENIUS DETECTOR READING (T/SQ. MM.)	10-01-80 FIELD NOTES AND DATA
90790.	271. 9	100 780S050W
90791.	545. 2	90 780S100W
90792.	497. 1	75 780S150W
90793.	380. 4	70 780S200W HOLE IN FILTER
90794.	442. 2	50 780S250W
90795.	236. 1	70 780S300W
90796.	98. 8	80 780S350W
90797.	153. 7	70 780S400W
90798.	74. 0	55 730S100E
90799.	351. 7	50 705S100E CRACKED CUP
90800.	406. 0	50 680S100E
90951.	146. 9	40 680S250E
90952.	304. 8	50 705S250E
90953.	188. 1	70 730S250E
90954.	352. 9	75 755S250E
90955.	277. 4	75 780S250E
90956.	140. 0	50 780S225E
90957.	188. 1	45 755S225E
90958.	188. 1	60 730S225E
90959.	236. 1	50 705S225E
90960.	226. 6	75 680S225E CRACKED CUP
90961.	696. 3	50 680S200E
90962.	668. 8	40 705S200E
90963.	449. 0	50 730S200E
90964.	476. 5	50 755S200E HOLE IN FILTER
90965.	785. 6	65 780S200E
90966.	140. 0	75 780S175E
90967.	524. 6	85 755S175E
90968.	558. 9	60 730S175E
90969.	689. 4	60 705S175E
90970.	439. 5	70 680S175E
90971.	243. 0	65 680S150E
90972.	325. 4	50 705S150E
90973.	1444. 9	65 730S150E
90974.	1032. 8	100 755S150E
90975.	2310. 2	110 780S150E HOLE IN FILTER
90976.	751. 2	80 780S125E HOLE IN FILTER
90977.	401. 0	60 755S125E
90978.	167. 5	60 730S125E
90979.	291. 1	60 705S125E
90980.	329. 7	50 680S125E

MOBIL NOLTENIUS 10-01-80

DETECTOR READING (T/SQ. MM.)	CUP SERIAL NUMBER	FIELD NOTES AND DATA
74. 0	90798.	55 730S100E
80. 4	90565.	60 550S100E
91. 9	90747.	60 650S400E
95. 5	90554.	30 500S450E
98. 5	90558.	55 550S450E
98. 8	90796.	80 780S350W
102. 0	90736.	60 650S250W
112. 5	90786.	75 750S300E
115. 3	90737.	45 650S300W
118. 8	90510.	20 450S400W
132. 3	90507.	30 400S300W
133. 1	90748.	70 650S450E RING 2FLTR LOOS
140. 0	90956.	50 780S225E
140. 0	90966.	75 780S175E
141. 8	90595.	85 700S500E
146. 9	90783.	90 750S450E
146. 9	90741.	60 650S100E
146. 9	90951.	40 680S250E
148. 4	90596.	90 700S450E
151. 1	90730.	70 750S 00E
153. 7	90797.	70 780S400W
153. 7	90535.	25 450S300W
159. 6	90544.	45 500S100W
160. 5	90503.	20 400S100W
161. 7	90739.	65 650S400W
164. 6	90572.	55 550S250W
165. 4	90541.	50 500S250W
167. 5	90749.	60 650S500E
167. 5	90978.	60 730S125E
170. 6	90556.	40 550S500E
174. 3	90593.	60 600S450E
177. 5	90501.	40 400S000E
177. 5	90499.	50 400S100E CRACKED CUP+HEA
179. 0	90750.	75 750S500E HOLE IN FILTER
180. 3	90560.	70 550S350E
182. 9	90531.	55 450S100W
183. 2	90512.	30 400S450E
188. 1	90957.	45 755S225E
188. 1	90953.	70 730S250E
188. 1	90958.	60 730S225E
192. 3	90570.	60 550S150W
194. 5	90502.	50 400S050W
194. 5	90543.	50 500S150W
194. 6	90549.	65 500S200E HOLE IN FILTER
201. 5	90599.	85 700S300E
206. 2	90534.	25 450S250W
206. 6	90561.	75 550S300E
208. 1	90731.	80 650S000E HOLE IN FILTER

MOBIL NOLTENIUS 10-01-80

DETECTOR READING (T/SQ. MM.)	CUP SERIAL NUMBER	FIELD NOTES AND DATA
208.1	90732.	65 645S050W HOLES IN FILTER
209.3	90500.	45 400S050E
209.8	90530.	45 450S050W
212.0	90529.	40 455S000E HOLE IN FILTER
212.0	90533.	35 450S200W
212.9	90590.	90 600S300E
217.8	90538.	25 500S400W
217.8	90542.	45 500S200W
218.6	90573.	40 550S300W
221.4	90738.	55 650S350W
221.4	90520.	40 450S450E
222.4	90725.	60 750S250W
223.1	72354.	70 700S150W
223.7	90528.	40 442S050E
223.9	72360.	50 750S400W
226.6	90960.	75 680S225E CRACKED CUP
229.5	90536.	25 450S350W
236.1	90959.	50 705S225E
236.1	90795.	70 780S300W
239.7	90518.	55 400S150E HOLES IN FILTER
239.7	90504.	35 400S150W
241.2	90532.	40 450S150W
241.3	90577.	60 600S350W
243.0	90726.	70 750S200W
243.0	90971.	65 680S150E
249.9	90785.	65 750S350E
251.0	90508.	25 400S350W
254.7	90563.	65 550S200E
256.1	72357.	75 700S300W
256.4	90540.	25 500S300W
256.7	90513.	55 400S400E
260.7	90566.	95 550S050E
261.2	90579.	50 600S250W
262.3	90509.	25 400S400W
271.9	90790.	100 780S050W
277.4	90955.	75 780S250E
279.3	90506.	30 400S250W
284.2	90594.	95 600S500E
284.2	90723.	80 750S350W
284.7	90564.	55 550S150E
284.7	90567.	45 550S000E
285.0	90511.	50 400S500E
287.7	90734.	50 650S150W
287.8	90519.	65 450S500E CRACK IN CUP
290.8	90562.	70 550S250E
290.8	90548.	70 500S150E
290.8	90575.	30 550S400W
291.1	90979.	60 705S125E
294.3	90733.	60 650S100W
296.8	90569.	60 550S100W

MOBIL NOLTENIUS 10-01-80

DETECTOR READING (T/SQ. MM.)	CUP SERIAL NUMBER	FIELD NOTES AND DATA
296. 8	90571.	55 5505200W
299. 4	90521.	60 4505400E
299. 4	90527.	60 4455100E
304. 8	90728.	60 7505100W
304. 8	90952.	50 7055250E
307. 6	72358.	55 7005350W
308. 8	90547.	40 5005100E
311. 7	90588.	40 6005200E
311. 7	90743.	55 6505205E
314. 2	90576.	35 6005400W
314. 2	90735.	55 6505200W
320. 8	90578.	45 6005300W WATER IN HOLE P
325. 4	90586.	70 6005100E
325. 4	90784.	70 7505400E
325. 4	90972.	50 7055150E
329. 7	90980.	50 6805125E
334. 4	90523.	85 4505295E
337. 4	72355.	65 7005200W
338. 2	90580.	60 6005200W
338. 8	90546.	40 5005050E HOLE IN FILTER
339. 2	90746.	65 6505350E
339. 2	90583.	60 6005050W
346. 0	90744.	65 6505250E RING 2FLTR LOOS
346. 0	90789.	75 7805000E
348. 5	90550.	55 5005250E
351. 7	90799.	50 7055100E CRACKED CUP
352. 9	90954.	75 7555250E
352. 9	90587.	70 6005150E
356. 9	90574.	30 5505350W
360. 6	90582.	40 6005100W
373. 5	72351.	90 7005000E
373. 5	72352.	7005050W
375. 2	90537.	55 5005050W
375. 2	90539.	30 5005350W
380. 4	90793.	70 7805200W HOLE IN FILTER
380. 9	90568.	75 5505050W
381. 0	90555.	40 5005500E
387. 2	90592.	60 6005400E
401. 0	90977.	60 7555125E
406. 0	90800.	50 6805100E
420. 7	90505.	25 4005200W
422. 9	90491.	60 7805100E
423. 0	90559.	70 5005400E
428. 4	90727.	70 7505150W
433. 6	90581.	65 6005250W
439. 5	90970.	70 6805175E
442. 2	90724.	70 7505300W
442. 2	90794.	50 7805250W
449. 0	90787.	85 7505050E
449. 0	90963.	50 7305200E

MOBIL NOLTENIUS 10-01-80

DETECTOR READING (T/SQ. MM.)	CUP SERIAL NUMBER	FIELD NOTES AND DATA
462.6	90526.	75 450S150E
469.7	90589.	85 600S250E
473.3	90598.	80 700S350E
474.2	90551.	55 500S300E HOLE IN FILTER
476.5	90964.	50 755S200E HOLE IN FILTER
477.3	90515.	70 400S300E
483.4	90742.	55 650S150E
488.9	72359.	45 700S400W WATER IN HOLE P
497.1	90745.	85 650S300E RING 2FLTR LOOS
497.1	90792.	75 780S150W
497.6	90524.	80 450S250E
499.9	90514.	45 400S350E
504.0	90584.	75 600S000E CRACK IN CUP
515.0	90553.	60 500S400E
517.7	90729.	80 750S050W
524.6	90967.	85 755S175E
524.6	90788.	125 780S050E
542.4	72356.	65 700S250W
545.2	90791.	90 780S100W
558.9	90968.	60 730S175E
563.2	90740.	75 650S050E
565.8	90585.	85 600S050E
573.3	90552.	45 500S350E
590.0	90545.	65 500S005E HOLE IN FILTER
608.3	90522.	65 450S350E
625.8	90525.	70 450S200E
631.0	72353.	60 700S100W HOLE IN FILTER
643.7	90492.	65 755S100E
668.8	90962.	40 705S200E
689.4	90969.	60 705S175E
696.3	90961.	50 600S200E
741.7	90600.	125 700S050E HOLE IN FILTER
751.2	90976.	80 780S125E HOLE IN FILTER
754.4	90517.	50 400S200E HOLES IN FLTR+H
785.6	90965.	65 780S200E
805.3	90516.	70 400S250E HOLES IN FILTER
871.2	90597.	100 700S400E
1032.8	90974.	100 755S150E
1444.9	90973.	65 730S150E
2310.2	90975.	110 780S150E HOLE IN FILTER
3876.1	90591.	160 600S350E

MOBIL CUP SERIAL NUMBER	NOLTENIUS DETECTOR READING (T/SQ. MM.)	10-01-00 FIELD NOTES AND DATA
72351.	373. 5	90 7005000E
72352.	373. 5	7005050W
72353.	631. 0	60 7005100W HOLE IN FILTER
72354.	223. 1	70 7005150W
72355.	337. 4	65 7005200W
72356.	542. 4	65 7005250W
72357.	256. 1	75 7005300W
72358.	307. 6	55 7005350W
72359.	488. 9	45 7005400W WATER IN HOLE P
72360.	223. 9	50 7505400W
90491.	422. 9	60 7805100E
90492.	643. 7	65 7555100E
90499.	177. 5	50 4005100E CRACKED CUP+HEA
90500.	209. 3	45 4005050E
90501.	177. 5	40 4005000E
90502.	194. 5	50 4005050W
90503.	160. 5	20 4005100W
90504.	239. 7	35 4005150W
90505.	420. 7	25 4005200W
90506.	279. 3	30 4005250W
90507.	132. 3	30 4005300W
90508.	251. 0	25 4005350W
90509.	262. 3	25 4005400W
90510.	118. 8	20 4505400W
90511.	285. 0	50 4005500E
90512.	183. 2	30 4005450E
90513.	256. 7	55 4005400E
90514.	499. 9	45 4005350E
90515.	477. 1	70 4005300E
90516.	805. 3	70 4005250E HOLES IN FILTER
90517.	754. 4	50 4005200E HOLES IN FLTR+A
90518.	239. 7	55 4005150E HOLES IN FILTER
90519.	287. 8	65 4505500E CRACK IN CUP
90520.	221. 4	40 4505450E
90521.	299. 4	60 4505400E
90522.	608. 3	65 4505350E
90523.	334. 4	85 4505295E
90524.	497. 6	80 4505250E
90525.	625. 8	70 4505200E
90526.	462. 6	75 4505150E
90527.	299. 4	60 4455100E
90528.	223. 7	40 4425050E
90529.	212. 0	40 4555000E HOLE IN FILTER
90530.	209. 8	45 4505050W
90531.	182. 9	55 4505100W
90532.	241. 2	40 4505150W
90533.	212. 0	35 4505200W
90534.	206. 2	25 4505250W

MOBIL CUP SERIAL NUMBER	NOLTENIUS DETECTOR READING (T/50. MM.)	10-01-80 FIELD NOTES AND DATA
90535.	153. 7	25 450S300W
90536.	229. 5	25 450S350W
90537.	375. 2	55 500S050W
90538.	217. 8	25 500S400W
90539.	375. 2	30 500S350W
90540.	256. 4	25 500S300W
90541.	165. 4	50 500S250W
90542.	217. 8	45 500S200W
90543.	194. 5	50 500S150W
90544.	159. 6	45 500S100W
90545.	590. 8	65 500S005E HOLE IN FILTER
90546.	338. 8	40 500S050E HOLE IN FILTER
90547.	308. 8	40 500S100E
90548.	290. 8	70 500S150E
90549.	194. 6	65 500S200E HOLE IN FILTER
90550.	348. 5	55 500S250E
90551.	474. 2	55 500S300E HOLE IN FILTER
90552.	573. 3	45 500S350E
90553.	515. 0	60 500S400E
90554.	95. 5	30 500S450E
90555.	381. 0	40 500S500E
90556.	170. 6	40 550S500E
90558.	98. 5	55 550S450E
90559.	423. 0	70 500S400E
90560.	180. 3	70 550S350E
90561.	206. 6	75 550S300E
90562.	290. 0	70 550S250E
90563.	254. 7	65 550S200E
90564.	284. 7	55 550S150E
90565.	80. 4	60 550S100E
90566.	260. 7	95 550S050E
90567.	284. 7	45 550S000E
90568.	380. 9	75 550S050W
90569.	296. 8	60 550S100W
90570.	192. 3	60 550S150W
90571.	296. 8	55 550S200W
90572.	164. 6	55 550S250W
90573.	218. 6	40 550S300W
90574.	356. 9	30 550S350W
90575.	290. 8	30 550S400W
90576.	314. 2	35 600S400W
90577.	241. 3	60 600S350W
90578.	320. 8	45 600S300W WATER IN HOLE P
90579.	261. 2	50 600S250W
90580.	338. 2	60 600S200W
90581.	433. 6	65 600S250W
90582.	360. 6	40 600S100W
90583.	339. 2	60 600S050W
90584.	504. 0	75 600S000E CRACK IN CUP
90585.	565. 8	85 600S050E

MOBIL CUP SERIAL NUMBER	NOLTENIUS DETECTOR READING (T/SQ. MM.)	10-01-80 FIELD NOTES AND DATA
90586.	325. 4	70 600S100E
90587.	352. 9	70 600S150E
90588.	311. 7	40 600S200E
90589.	469. 7	85 600S250E
90590.	212. 9	90 600S300E
90591.	3876. 1	160 600S350E
90592.	387. 2	60 600S400E
90593.	174. 3	60 600S450E
90594.	284. 2	95 600S500E
90595.	141. 8	85 700S500E
90596.	148. 4	90 700S450E
90597.	871. 2	100 700S400E
90598.	473. 3	80 700S350E
90599.	201. 5	85 700S300E
90600.	741. 7	125 700S050E HOLE IN FILTER
90723.	284. 2	80 750S350W
90724.	442. 2	70 750S300W
90725.	222. 4	60 750S250W
90726.	243. 0	70 750S200W
90727.	428. 4	70 750S150W
90728.	304. 8	60 750S100W
90729.	517. 7	80 750S050W
90730.	151. 1	70 750S 00E
90731.	208. 1	80 650S000E HOLE IN FILTER
90732.	208. 1	65 645S050W HOLES IN FILTER
90733.	294. 3	60 650S100W
90734.	287. 7	50 650S150W
90735.	314. 2	55 650S200W
90736.	102. 0	60 650S250W
90737.	115. 3	45 650S300W
90738.	221. 4	55 650S350W
90739.	161. 7	65 650S400W
90740.	563. 2	75 650S050E
90741.	146. 9	60 650S100E
90742.	483. 4	55 650S150E
90743.	311. 7	55 650S205E
90744.	346. 0	65 650S250E RING 2FLTR LOOS
90745.	497. 1	85 650S300E RING 2FLTR LOOS
90746.	339. 2	65 650S350E
90747.	91. 9	60 650S400E
90748.	133. 1	70 650S450E RING 2FLTR LOOS
90749.	167. 5	60 650S500E
90750.	179. 0	75 750S500E HOLE IN FILTER
90783.	146. 9	90 750S450E
90784.	325. 4	70 750S400E
90785.	249. 9	65 750S350E
90786.	112. 5	75 750S300E
90787.	449. 0	85 750S050E
90788.	524. 6	125 780S050E
90789.	346. 0	75 780S000E

MOBIL CUP SERIAL NUMBER	NOLTENIUS DETECTOR READING (T/50. MM.)	10-01-80 FIELD NOTES AND DATA
90790.	271. 9	100 780S050W
90791.	545. 2	90 780S100W
90792.	497. 1	75 780S150W
90793.	380. 4	70 780S200W HOLE IN FILTER
90794.	442. 2	50 780S250W
90795.	236. 1	70 780S300W
90796.	98. 8	80 780S350W
90797.	153. 7	70 780S400W
90798.	74. 0	55 730S100E
90799.	351. 7	50 705S100E CRACKED CUP
90800.	406. 0	50 680S100E
90951.	146. 9	40 680S250E
90952.	304. 8	50 705S250E
90953.	188. 1	70 730S250E
90954.	352. 9	75 755S250E
90955.	277. 4	75 780S250E
90956.	140. 0	50 780S225E
90957.	188. 1	45 755S225E
90958.	188. 1	60 730S225E
90959.	236. 1	50 705S225E
90960.	226. 6	75 680S225E CRACKED CUP
90961.	696. 3	50 680S200E
90962.	668. 8	40 705S200E
90963.	449. 0	50 730S200E
90964.	476. 5	50 755S200E HOLE IN FILTER
90965.	785. 6	65 780S200E
90966.	140. 0	75 780S175E
90967.	524. 6	85 755S175E
90968.	558. 9	60 730S175E
90969.	689. 4	60 705S175E
90970.	439. 5	70 680S175E
90971.	243. 0	65 680S150E
90972.	325. 4	50 705S150E
90973.	1444. 9	65 730S150E
90974.	1032. 8	100 755S150E
90975.	2310. 2	110 780S150E HOLE IN FILTER
90976.	751. 2	80 780S125E HOLE IN FILTER
90977.	401. 0	60 755S125E
90978.	167. 5	60 730S125E
90979.	291. 1	60 705S125E
90980.	329. 7	50 680S125E

TRACK ETCH SURVEY RESULTS AND STATISTICS

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

NO. USEFUL PTS. : 189
 HIGH (T/SQ. MM.): 3876.1
 LOW (T/SQ. MM.): 74.0

BACKGROUND MEAN (T/SQ. MM.): 319.2
 STD. DEVIATION OF BKG. MEAN (T/SQ. MM.): 157.6
 RELATIVE STD. DEVIATION (PERCENT): 49.4

HIGH RANKING POINTS

RANGE OF Z -----	NO. OF PTS. -----	RANGE OF T -----	RANGE OF RATIO TO BACKGROUND -----
2 - 3	8	643.7 - 785.6	2.0 - 2.5
3 - 4	2	805.3 - 871.2	2.5 - 2.7
4 - 5	1	1032.8 - 1032.8	3.2 - 3.2
OVER 5	3	1444.9 - 3876.1	4.5 - 12.1

NO. OF PTS. ABOVE Z = 3: 6

PERCENT OF TOTAL PTS. : 3.2

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

MOBIL NOLTENIUS 10-01-80

DETECTOR READING (T/SQ. MM.)	CUP SERIAL NUMBER	FIELD NOTES AND DATA
74. 0	90798.	55 7305100E
80. 4	90565.	60 5505100E
91. 9	90747.	60 6505400E
95. 5	90554.	30 5005450E
98. 5	90558.	55 5505450E
98. 8	90796.	80 7005350W
102. 0	90736.	60 6505250W
112. 5	90786.	75 7505300E
115. 3	90737.	45 6505300W
118. 8	90510.	20 4505400W
132. 3	90507.	30 4005300W
133. 1	90748.	70 6505450E RING 2FLTR LOOS
140. 0	90956.	50 7005225E
140. 0	90966.	75 7005175E
141. 8	90595.	85 7005500E
146. 9	90783.	90 7505450E
146. 9	90741.	60 6505100E
146. 9	90951.	40 6805250E
148. 4	90596.	90 7005450E
151. 1	90730.	70 7505 00E
153. 7	90797.	70 7005400W
153. 7	90535.	25 4505300W
159. 6	90544.	45 5005100W
160. 5	90503.	20 4005100W
161. 7	90739.	65 6505400W
164. 6	90572.	55 5505250W
165. 4	90541.	50 5005250W
167. 5	90749.	60 6505500E
167. 5	90978.	60 7305125E
170. 6	90556.	40 5505500E
174. 3	90593.	60 6005450E
177. 5	90501.	40 4005000E
177. 5	90499.	50 4005100E CRACKED CUP+HEA
179. 0	90750.	75 7505500E HOLE IN FILTER
180. 3	90560.	70 5505350E
182. 9	90531.	55 4505100W
183. 2	90512.	30 4005450E
188. 1	90957.	45 7555225E
188. 1	90953.	70 7305250E
188. 1	90958.	60 7305225E
192. 3	90570.	60 5505150W
194. 5	90502.	50 4005050W
194. 5	90543.	50 5005150W
194. 6	90549.	65 5005200E HOLE IN FILTER
201. 5	90599.	85 7005300E
206. 2	90534.	25 4505250W
206. 6	90561.	75 5505300E
208. 1	90731.	80 6505000E HOLE IN FILTER

MOBIL NOLTENIUS 10-01-80

DETECTOR READING (T/SQ. MM.)	CUP SERIAL NUMBER	FIELD NOTES AND DATA
208.1	90732.	65 6455050W HOLES IN FILTER
209.3	90500.	45 4005050E
209.8	90530.	45 4505050W
212.0	90529.	40 4555000E HOLE IN FILTER
212.0	90533.	35 4505200W
212.9	90590.	90 6005300E
217.8	90538.	25 5005400W
217.8	90542.	45 5005200W
218.6	90573.	40 5505300W
221.4	90738.	55 6505350W
221.4	90520.	40 4505450E
222.4	90725.	60 7505250W
223.1	72354.	70 7005150W
223.7	90528.	40 4425050E
223.9	72360.	50 7505400W
226.6	90960.	75 6805225E CRACKED CUP
229.5	90536.	25 4505350W
236.1	90959.	50 7055225E
236.1	90795.	70 7805300W
239.7	90518.	55 4005150E HOLES IN FILTER
239.7	90504.	35 4005150W
241.2	90532.	40 4505150W
241.3	90577.	60 6005350W
243.0	90726.	70 7505200W
243.0	90971.	65 6805150E
249.9	90785.	65 7505350E
251.0	90508.	25 4005350W
254.7	90563.	65 5505200E
256.1	72357.	75 7005300W
256.4	90540.	25 5005300W
256.7	90513.	55 4005400E
260.7	90566.	95 5505050E
261.2	90579.	50 6005250W
262.3	90509.	25 4005400W
271.9	90790.	100 7805050W
277.4	90955.	75 7805250E
279.3	90506.	30 4005250W
284.2	90594.	95 6005500E
284.2	90723.	80 7505350W
284.7	90564.	55 5505150E
284.7	90567.	45 5505000E
285.0	90511.	50 4005500E
287.7	90734.	50 6505150W
287.8	90519.	65 4505500E CRACK IN CUP
290.8	90562.	70 5505250E
290.8	90548.	70 5005150E
290.8	90575.	30 5505400W
291.1	90979.	60 7055125E
294.3	90733.	60 6505100W
296.8	90569.	60 5505100W

MOBIL NOLTENIUS 10-01-80		
DETECTOR	CUP	
READING	SERIAL	
(T/SQ. MM.)	NUMBER	FIELD NOTES AND DATA
296.8	90571.	55 550S200W
299.4	90521.	60 450S400E
299.4	90527.	60 445S100E
304.8	90728.	60 750S100W
304.8	90952.	50 705S250E
307.6	72358.	55 700S350W
308.8	90547.	40 500S100E
311.7	90588.	40 600S200E
311.7	90743.	55 650S205E
314.2	90576.	35 600S400W
314.2	90735.	55 650S200W
320.8	90578.	45 600S300W WATER IN HOLE P
325.4	90586.	70 600S100E
325.4	90784.	70 750S400E
325.4	90972.	50 705S150E
329.7	90980.	50 680S125E
334.4	90523.	85 450S295E
337.4	72355.	65 700S200W
338.2	90580.	60 600S200W
338.8	90546.	40 500S050E HOLE IN FILTER
339.2	90746.	65 650S350E
339.2	90583.	60 600S050W
346.0	90744.	65 650S250E RING 2FLTR LOOS
346.0	90789.	75 780S000E
348.5	90550.	55 500S250E
351.7	90799.	50 705S100E CRACKED CUP
352.9	90954.	75 755S250E
352.9	90587.	70 600S150E
356.9	90574.	30 550S350W
360.6	90582.	40 600S100W
373.5	72351.	90 700S000E
373.5	72352.	700S050W
375.2	90537.	55 500S050W
375.2	90539.	30 500S350W
380.4	90793.	70 780S200W HOLE IN FILTER
380.9	90568.	75 550S050W
381.0	90555.	40 500S500E
387.2	90592.	60 600S400E
401.0	90977.	60 755S125E
406.0	90800.	50 680S100E
420.7	90505.	25 400S200W
422.9	90491.	60 780S100E
423.0	90559.	70 500S400E
428.4	90727.	70 750S150W
433.6	90581.	65 600S250W
439.5	90970.	70 680S175E
442.2	90724.	70 750S300W
442.2	90794.	50 780S250W
449.0	90787.	65 750S050E
449.0	90963.	50 730S200E

MOBIL NOLTENIUS 10-01-80

DETECTOR READING (T/SQ. MM.)	CUP SERIAL NUMBER	FIELD NOTES AND DATA
462.6	90526.	75 4505150E
469.7	90589.	85 6005250E
473.3	90598.	80 7005350E
474.2	90551.	55 5005300E HOLE IN FILTER
476.5	90964.	50 7555200E HOLE IN FILTER
477.3	90515.	70 4005300E
483.4	90742.	55 6505150E
488.9	72359.	45 7005400W WATER IN HOLE P
497.1	90745.	85 6505300E RING 2FLTR LOOS
497.1	90792.	75 7805150W
497.6	90524.	80 4505250E
499.9	90514.	45 4005350E
504.0	90584.	75 6005000E CRACK IN CUP
515.0	90553.	60 5005400E
517.7	90729.	80 7505050W
524.6	90967.	85 7555175E
524.6	90788.	125 7805050E
542.4	72356.	65 7005250W
545.2	90791.	90 7805100W
558.9	90968.	60 7305175E
563.2	90740.	75 6505050E
565.8	90585.	85 6005050E
573.3	90552.	45 5005350E
590.8	90545.	65 5005005E HOLE IN FILTER
608.3	90522.	65 4505350E
625.8	90525.	70 4505200E
631.0	72353.	60 7005100W HOLE IN FILTER
643.7	90492.	65 7555100E
668.8	90962.	40 7055200E
689.4	90969.	60 7055175E
696.3	90961.	50 6805200E
741.7	90600.	125 7805050E HOLE IN FILTER
751.2	90976.	80 7805125E HOLE IN FILTER
754.4	90517.	50 4005200E HOLES IN FLTR+A
785.6	90965.	65 7805200E
805.3	90516.	70 4005250E HOLES IN FILTER
871.2	90597.	100 7005400E
1032.8	90974.	100 7555150E
1444.9	90973.	65 7305150E
2310.2	90975.	110 7805150E HOLE IN FILTER
3876.1	90591.	160 6005350E

Appendix No. 3

Percussion and Diamond Drill hole Lithological
Logs, Radiometric Logs and Analyses.

PROJECT: SUNSHINE

BIT SIZE: 5 3/4"

SHEET 1 OF 2

DRILLED BY: L. NORRIS DATE: 6-9-90

TENEMENT: LITCHFIELD

DRILLING FLUID:

AIR



WATER



MUD



LOGGED BY: L. NORRIS DATE: 6-9-90

PROSPECT: (600N 6500W)

CASING TO: 7m

WATER LEVEL: 14m

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION
0-2		M	Orange clay
		M	
2-4		M	Pale yellow clay, carbonate concretions
		M	
4-6		M	Red brown clay, 1/2 sand & rounded pebbles
		M	
6-8		M	" " "
		M	
8-10		M	" " "
		M	
10-12		M	" " "
		M	
12-14		M	" " "
		M	

PROJECT: LT015BIT SIZE: 6 1/2"SHEET 1 OF 4DRILLED BY: LCW/DRILL DATE: 20/8/80TENEMENT: LITENTILLD

DRILLING FLUID:

AIR



WATER



MUD

LOGGED BY: K. HILLDATE: 20/8/80PROSPECT: NOLTONUS 7705CASING TO: 1mWATER LEVEL: 12m

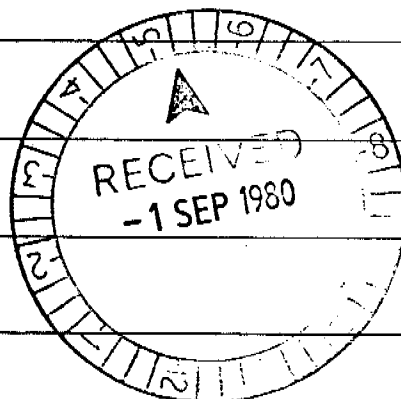
DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOGANGLE: 60° TO VERTICAL
BEARING: 890

SAMPLE DESCRIPTION

Pale yellow-brown clay 0-1.0

Fr. sh strongly weathered hematitic sandy schist 1.0-6.0

V.F.g. red-grey Hem. - ser. schist, pervasive hematitization
of chlorite 4.0-21.0

SHEET 2 OF 4

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)
CORE
RECOVERY
GRAPHIC
LOG

Fresh grey-pg v.f. sh. Sev. siltst at 27.5

27.0 - 29.0 Abundant w/ T. V. 17

SHEET 3 OF 4

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)
CORE
RECOVERY
GRAPHIC
LOG

30

35

40

45

v.f.g. Ser-Chl schist + f-mg yr ss, hem-ser.chl
w. pale grey green, moderate, foliated, some
hematitic alteration of chl → pale pink colour

as above, no ser-chl schist

SHEET 4 OF 4

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOG

45

20 - 49.5 pale green sst - f-mg, v. siliceous,
Ssn chl matrix, ? epidote

50

F.g. dark grey-green siliceous sst, v. chloritic
matrix, schistose in part

55

BOH 59M

DRILL HOLE No: LFD 4.7

PROJECT: SUTTONS BIT SIZE: 1/4"

DRILLED BY: LEONDRILL DATE: 14-8-7

TENEMENT: LATCHFIELD

DRILLING FLUID:

AIR

☒

WATER

11

LOGGED BY: K. HILL DATE 11-6-82

PROSPECT: NOLTONIUS (700S 200W) CASING TO: 1m WATER LEVEL: ---

[illegible]

SHEET 1 OF 1PROJECT: SUTT NGBIT SIZE: 1 1/2"DRILLED BY: LEE N DREW DATE: 14.8.92TENEMENT: LOT 145 LD

DRILLING FLUID:

AIR



WATER



MUD

LOGGED BY: K. HILL DATE: 16.8.92PROSPECT: (N) LOT 145 (790550 W)CASING TO: 1 mWATER LEVEL: —

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION
0-1		~	Pale yellow clay
1-2		~	Orange brown clay
2-3		~	" " "
3-4		⊙	Orange-brown clay + weathered f.g. sericite schist, minor white gr
4-5		⊙	white clay, soil carbonate + weathered schist
5-6		-	grey-red v.f.g. sericite schist, low gr, hematite streaked
6-7		-	
7-8		-	
8-9		-	
9-10		-	
10-11		-	
11-12		-	
12-13		-	
			BOH: 13 m

SHEET 1 OF 2

PROJECT: SUTTONSBIT SIZE: 3 3/4 / 4 1/2DRILLED BY: LENDRIK DATE: 14.8.92TENEMENT: 1-100 FIELD

DRILLING FLUID:

AIR ☒WATER ☐MUD ☐LOGGED BY: K. HILLDATE: 14.8.92PROSPECT: NOLTEINIUS (700S 400W)CASING TO: 1mWATER LEVEL: 10m

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION
0-2		3	Orange-brown clay
2-4		3	" " " , chips of white v. in qz.
4-6		3	Friable brown clay
6-8		3	" " "
8-10		3	Brown clay, chips of v. weathered rock - NO pz, ? mafic schist (foliated)
10-12		3	" " "
12-14		3	" " "

SHEET 2 OF 2

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
14-16		①	"
		7	
16-18		②	"
		~	
		9	
18-20		~	"
		②	
20-22		~	Brown clay, weathered qz. fss rock, weathered felspar particles
		②	
		~	
22-24		②	"
		~	"
24-26		9	
		~	"
26-27		-v	As above (? down hole contamination), chips of fresh, grey, black felspar - ? chlorite - ? amphibole & rock - mafic arkose - ^{meta basalt} amphibolite
		v	
27-28		-v	" 7 " " "
			BOH 28 m

BIL ENERGY MINERALS AUSTRALIA

DRILL HOLE No: LPDS

ECT: SUTTONS

BIT SIZE: 4 1/2"

SHEET 1 OF 4

DRILLED BY: LEON DRILL DATE: 22/1

EMENT: LITCHFIELD

DRILLING FLUID:

AIR



WATER



MUD



LOGGED BY: D. POYNTER DATE: 2/1

ANGLED 30° TO VERTICAL (EAST)

SPECT: NO LITCHFIELD

CASING TO: -

WATER LEVEL: DRY

DIP 60° DIP DIRECTION N 090

SAMPLE DESCRIPTION

No 2 Schist
Range 0.1 K

CORE
RECOVERY

GRAPHIC
LOG

3

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

Yellowish brown clay 0-2.0 m

32

Strongly weathered semi-hematite
2.0 - 4.0 m

37

Very fine grained hematite
Oolite extensively fractured hematite 4.0 - 11.5 m

38

fg. sandstone (or siltstone) with hematite
schistose matrix - moderately schistose
11.5 m - 30 m

PROJECT: SUTTONSBIT SIZE: 4 1/2SHEET 2 OF 4DRILLED BY: L. J. JONES DATE: 24/11TENEMENT: LITCHFIELDDRILLING FLUID: AIR ☒WATER ☐MUD ☐LOGGED BY: D. P. JONES DATE: 26/11PROSPECT: NOLTEWINDCASING TO: — WATER LEVEL: 124

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE

RECOVERY

GRAPHIC
LOG

42

40

4

31

26

4

42

38

36

38

35

42

minor qtz veining 27.0 - 37.0m

f-m sst, qtz-rich, lacking schistosity etc.
--- () --- minor content 29.0 - 30.0m

PROJECT: SUTTONSBIT SIZE: 4 1/2SHEET 3 OF 4DRILLED BY: ... DATE: 22/1TENEMENT: LITCHFIELDDRILLING FLUID: ☒ AIR ☐ WATER ☐ MUDLOGGED BY: J. P. ... DATE: 26/5PROSPECT: NOLTEMIUSCASING TO: — WATER LEVEL: DRY

SAMPLE DESCRIPTION

Fresh ~~off~~ t.g. $\frac{1}{2}$ - ssT (or siltst) with chlorite
- sericite matrix and moderate schistosity

40

30

32

35

30

38

35

38

37

34

34

36

42

PROJECT: TTONSBIT SIZE: 4 1/2SHEET 4 OF 4DRILLED BY: LENNIS DATE: 22/7TENEMENT: LITCHFIELDDRILLING FLUID: ☒ AIR ☐ WATER ☐ MUDLOGGED BY: D.P. VADIA DATE: 21/7PROSPECT: NOLTENIUSCASING TO: WATER LEVEL: DRY

SAMPLE DESCRIPTION

No. 2 S.

Range

0.11

v.f.g. grey-green chlorite-sericite-gz phyllite 40

in matrix to strong schistosity

45.5 - 49.0 m

40

38

44

f-m.g. grey g2 sst with chlorite-sericite
matrix with weak schistosity 49 - 51.5 40

46

v.f.g. grey chlorite-sericite phyllite slate
(~~thin~~ by change) 51.5 - 59.0 m 41

42

40

38

39

40

3

50.11 - 59.0 m

40

PROJECT: 3000NS BIT SIZE: 5 1/4"SHEET 1 OF 1DRILLED BY: LE... DATE: 21/11TENEMENT: LITCHFIELDDRILLING FLUID: AIR ☒ WATER ☐ MUD ☐LOGGED BY: D. P... DATE: 21/11PROSPECT: MOLTENOUSCASING TO: 11 m WATER LEVEL: 10 m

SAMPLE DESCRIPTION

DEPTH (meters)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION
0-3 m		M	Yellow brown clay 0-3 m 31
3-6 m		M	33
6-9 m		M	28
9-14 m		M	Yellow-brown clay with fragments of weathered v.f.g. red brown hematite-sericite phyllite 3-6 m 30
14-17 m		M	26
17-20 m		M	27
20-23 m		M	weathered v.f.g. red brown hematite-sericite phyllite 6-9 m, cleavage moderate 31
23-26 m		M	(Soil carbonate common) 6-9 m 28
26-29 m		M	31
29-32 m		M	v.f.g. red-brown hematite-sericite-chlorite phyllite 9-14 m cleavage moderate 29
32-35 m		M	to strong 30
35-38 m		M	31
38-41 m		M	31
41-44 m		M	33
44-47 m		M	

PROJECT: SUTTONSBIT SIZE: 5" / 4 1/2"SHEET 1 OF 2DRILLED BY: LEONARD DATE: 2/8/81TENEMENT: LITCHFIELDDRILLING FLUID: ☒ AIR ☐ WATER ☐ MUDLOGGED BY: D. P. W. R. DATE: 28/8PROSPECT: NORTH N 65CASING TO: 13WATER LEVEL: 10 m

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION	Scintillometer 2 c/s Range 0.1K
		M	Pale yellow clay 0.0 - 1.0	20
		M	Yellow brown clay 1.0 - 2.0	20
		M	brown friable clay 2.0 - 3.0	21
		M	brown friable clay with fragments of white quartz and v.f.g. red brown hematite	25
		M	Some phyllite - strongly weathered	23
		M	3.0 - 6.0	22
		M	white clay 6.0 - 7.0	21
		M	white clay with fragments of fine grained quartzite? (see p. 2?)	21
		M	pale brown clay with fragments weathered brown f-m g. grey wacke (weakly schistose) with hematite matrix and lesser fragments of f.g. phyllite	27
		M	pale brown clay, high proportion of fragments weathered phyllitic rock. Fragments as above with sst predominant 10.0 - 13.0 m	25
		M		27
		M		25
		M	brown clay with fragments of quartzite and	20
		M	6.0	22

PROJECT: SUTTONSBIT SIZE: 5/4 1/2SHEET 2 OF 2DRILLED BY: LEON DRILL DATE: 2/1TENEMENT: LIT

DRILLING FLUID:

AIR ☒WATER ☐MUD ☐LOGGED BY: D. PRATER DATE: 2/1PROSPECT: NOLTECASING TO: 13mWATER LEVEL:

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOG

SAMPLE DESCRIPTION

22

D

22

D

22

D

22

D

22

D

22

D

22

D

22

D

22

D

22

D

22

D

Brown clay with weathered fragments
as above Phylitic fragments becoming
less common

16-22.0m

chunks of ~~green~~ f-m g, green black
bimodal ~~granite~~ gta: sst clasts of rounded blue
detrital gta: visible ≤ 0.2 mm supported by chlorite-sericite
matrix

B.O.H. 24m

PROJECT: SUTTONS BIT SIZE: 4 1/2SHEET 1 OF 2DRILLED BY: L. C. ... DATE: 28/1TENEMENT: 2.10.1.1.3DRILLING FLUID: AIR ☒ WATER ☐ MUD ☐LOGGED BY: J. ... DATE: 28/1PROSPECT: NCLT. N. 1.5CASING TO: 13 m WATER LEVEL: 10 m

SAMPLE DESCRIPTION

Suttons No 2
c/s
Range 0.1 K

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	DESCRIPTION	
		M	Orange clay	0-2 m
		M		18
		M		19
		M	Pale brown clay with small proportion of highly weathered chert rock	20
		M	~~matrix of calcareous sandstone~~	21
		M	- fragments are fine-grained sandstone with clasts ≤ 0.5 mm + weathered out feldspar and matrix of calcareous claystone altered to iron	22
		M	weathered (Fe nodules) and fine qtz fraction	20
		M	ARKOSIC 2.0 - ~~12 m~~ 12 m	22
		M	As above only lacking sand carbonate	22
		M	Foliation possibly enhanced by weathering	22
		M		22
		M		23
		M		20
		M		19
		M	Brown clay with higher proportion of rock fragments as above.	19
		M		12-13 m
		M	Brown sand-clay with fragments of highly weathered greenish feldspar arkose (greenish)	20
		M	as above	13-20 m
		M		23

DRILLED BY: _____ DATE: _____

AIR ☐WATER ☐MUD ☐

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

[illegible]

DRILL HOLE No: 56

BIT SIZE:

SHEET 1 OF 1

DRILLED BY: Lemmill DATE 10/9/80

DRILLING FLUID:

AIR

WATER

MUD

LOGGED BY: MJB

DATE 10/1/80

CASING TO:

WATER LEVEL: dry

RECEIVED
16 SEP 1980

PROJECT: SUTTONS

BIT SIZE: $4\frac{3}{4}"/4\frac{1}{2}"$ SHEET 1 OF 2 10/9 and

DRILLED BY: LEON DRIH DATE: 1/9/80

TENEMENT: LITCHFIELD

DRILLING FLUID:

AIR

☒

WATER

☐

MUD

☐

LOGGED BY: D. POYNTER

DATE: 1/9/80

PROSPECT: NOLTENUS

CASING TO: 4m

WATER LEVEL: 11m

Vertical (500 S 100 W)

SAMPLE DESCRIPTION

Sheet No 2

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG		
0			Yellow clay 0.0 - 1.0	25
			Brown clay 1.0 - 3.0	25
				25
			Brown clay with moderate proportion of f-mg red brown qtz sandst. with hem-sericite matrix. Hematite after chlorite. 3.0 - 5.0	25
5			Fine red-brown soil (not clayey) with low proportion of fine grained qtz sandstone and hem-chlor-sericite phyllite fragments	35
			TRANSPORTED ALLUVIA! 5.0 - 11.0m	25
				30
				30
				30
10				30
			Fragments of weathered qtz sst and vein qtz 11.0 - 12.0	25
			Fragment of weathered m.g. red-brown bi-modal qtz sandstone with hematite sericite matrix 12.0 - 16.0	30
				30
				25

RECEIVED

16 SEP 1980

DRILL HOLE No: LPD 57

BIT SIZE: $\frac{1\frac{1}{2}}{4\frac{1}{2}}$ SHEET 2 OF 2 10/9 and
DRILLED BY: LEON DRILL DATE: 11/9

DRILLING FLUID: AIR ☒ WATER ☐ MUD ☐ LOGGED BY: D. POYNTER DATE: 11/9/80

CASING TO: 4m WATER LEVEL: 11m

RECEIVED
16 SEP 1980

PROJECT: SUTTONSBIT SIZE: 6 1/2" / 4 1/2"SHEET 1 OF 1DRILLED BY: LEON GILL DATE: 11/9/80TENEMENT: LITCHFIELD

DRILLING FLUID:

AIR

WATER

MUD

LOGGED BY: D. POYNTER DATE: 11/9/80PROSPECT: NOLTEWUSCASING TO: 6mWATER LEVEL: DRY

SAMPLE DESCRIPTION

Scrit. No 2

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG		
9			Pale yellow clay 0.0 - 2.0 m	32
				30
			Yellow brown clay 2.0 - 3.0 m	25
			Yellow brown clay, water worn sst pebbles + soil carbonate	25
			3.0 - 4.0	
5			Brown clay and weathered hem. chlor, sericite phyllite	30
			4.0 - 5.0	
			st. fig. red brown hematite sericite phyllite	30
			or slate N.B. Hematite after chlorite.	
			5.0 - 10.0 m	25
				30
				30
10			B.C.H. st. fig. red brown hem-sericite phyllite.	30

RECEIVED

116 SEP 1980

DRILL HOLE No: LPD 59

BIT SIZE: 6 $\frac{1}{2}$ " / 4 $\frac{1}{2}$ "

SHEET 1 OF 2

DRILLED BY: WEN DEW DATE: 4/9/80

DRILLING FLUID:

AIR

WATER

MUD

LOGGED BY: D. Poynter DATE: 4/9/80

CASING TO:

7m

WATER LEVEL: 15m

[illegible]

DRILL HOLE No: WAD 59

BIT SIZE: $6\frac{1}{2}$ / $8\frac{1}{2}$ SHEET 2 OF 2
DRILLED BY: LEONIDEA DATE: 11/9/81

DRILLING FLUID: AIR ☒ WATER ☐ MUD ☐ LOGGED BY: D POYNTER DATE: 11/9/80

CASING TO: 7 WATER LEVEL: 15

RECEIVED
116 SEP 1980

PROJECT: BUTTONE

BIT SIZE: $\frac{1}{2}$ " / $\frac{1}{4}$ "

SHEET 1 OF 2

DRILLED BY: L. G. WILSON DATE: 12/4/82

TENEMENT: LITCHFIELD

DRILLING FLUID:

AIR



WATER



MUD



LOGGED BY: D. G. WILSON DATE: 14/4/82

PROSPECT: No. 1 LITCHFIELD

CASING TO: 11 m

WATER LEVEL: 9 m

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION	
			VERTICAL (500 S 400 W)	
			Orange-brown clay 0.0 - 2.0 m	20
				20
			Pale brown clay 2.0 - 6.0	20
				25
				30
				25
			Clay and heavily weathered transported basic schist 6.0 - 11.0	25
				25
				30
				25
				30
			Weathered bedrock — basic schist 11.0 - 17.0	25
				25
				20
				20

PROJECT:

SCOTT'S

BIT SIZE:

6 3/4"

SHEET

1

OF 2

DRILLED BY:

L. J. J. J.

DATE:

11/5/80

TENEMENT:

LITCHFIELD

DRILLING FLUID:

AIR

☒

WATER

☐

MUD

☐

LOGGED BY:

D. J. J. J.

DATE:

11/9/80

PROSPECT:

NORTENUS

CASING TO:

11m

WATER LEVEL:

9m

DEPTH (Metres)

CORE

RECOVERY

GRAPHIC

LOG

VERTICAL (SCCS 4000)

SAMPLE DESCRIPTION

Seal No 2

20

20

Moderately fresh bedrock - basic rock

f.c. actinolite-albite chlorite greenschist,

20

schistose, minor Qtz?

? Cr - metamorphosed basic igneous

20

mafic siltstone.

15

B.C.H.

DRILL HOLE No: LAD(1)

BIT SIZE: 42"

SHEET 1 OF 1

DRILLED BY: J. C. ALXILL DATE: 11/9/80

DRILLING FLUID: AIR ☒
WATER ☐
MUD ☐

LOGGED BY: D. PYNTER DATE: 16/9/80

CASING TO: 1m

WATER LEVEL: DRY

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	VERTICAL (400 S OOE)	SAMPLE DESCRIPTION	Scint No. 2
		✓		Pale yellow clay 0.0 - 2.0 m	30
		✓			30
		✓		Yellow-brown clay	30
		✓			25
		✓		Weathered red-brown v.f.g. hematite-sericite phyllite; good slaty cleavage; hematite after chlorite 4.0 - 6.0	30
		✓		Weathered red grey v.f.g. hematite-chlorite sericite phyllite; less weathered than above 6.0 - 9.0 m	35
		✓		(Vain qtz 8.0 - 9.5 m)	30
		✓		Grey brown, moderately fresh v.f.g. chlorite-hematite sericite phyllite with strong slaty cleavage 9.0 - 11.0 m	30
		✓		B.G.M.	30

SHEET 1 OF 2

PROJECT: SUTTONS

BIT SIZE: 4 1/2"

DRILLED BY: LE GANDILL DATE: 16/9/80

TENEMENT: LITCHFIELD

DRILLING FLUID:

AIR

WATER

MUD

☒☐☐

LOGGED BY: D. POYNTER

DATE: 16/9/80

PROSPECT: NOLTEMIUS

CASING TO: 1m

WATER LEVEL: 9m

VERTICAL (400S 100W)
SAMPLE DESCRIPTION

Saint No 2.

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG		
			Yellow-brown clay C.O.-4.0m	20
				15
				25
				20
5			Yellow brown clay and fragments of transported hematite-sericite phyllite 4.0-6.0	20
				25
			Yellow brown clay and transported river sands 6.0-9.0m	25
				20
				25
10			Clay and transported g+2 - gravel fraction 9.0-10.0m	20
			Clay and transported river sands 10.0-12.0m	25
				25
			Weathered hematite sericite phyllite 12.0-14.0m	25
				25
15			Moderately fresh f.g. hem-sericite-g+2 siltstone 14.0-16.0m	25

DRILL HOLE No: LPD 62

PROJECT: Suttons

BIT SIZE:

DRILLED BY: LEONARD DATE: 16/9/81

TENEMENT: LITCHFIELD

DRILLING FLUID:

AIR	☒
WATER	☐
MUD	☐

LOGGED BY: D. POYNTER DATE: 16/9/8

PROSPECT: NOLTE, J. S.

CASING TO: 100

WATER LEVEL: 9

[illegible]

PROJECT: SCOTLANDBIT SIZE: 6 1/4"SHEET 1 OF 2DRILLED BY: LEON KILL DATE: 16/9/80TENEMENT: LITCHFIELD

DRILLING FLUID:

AIR

WATER

MUD

LOGGED BY: D. G. WIER DATE: 16/9/80PROSPECT: UGLTERNIUSCASING TO: 6mWATER LEVEL: 21m

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOG

VERTICAL (7005 200W)

SAMPLE DESCRIPTION

Scint No 2

Pale yellow white clay 0.0 - 1.0 20

Orange-brown clay 1.0 - 4.6 20

Weathered v.f.g. red brown hematite - sericite
phyllite; strong fissility 4.6 - 27.0 m 20
Hematite after chlorite 20

OXIDATION ZONE

PROJECT: SuttonsBIT SIZE: 6" / 4"SHEET 1 OF 2DRILLED BY: LENNI DATE: 16/9/80TENEMENT: Litchfield

DRILLING FLUID:

AIR



WATER



MUD

LOGGED BY: D. POWELL DATE: 16/9/80PROSPECT: NoltensCASING TO: 6mWATER LEVEL: 2'm

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOGvertical (400 S 200 W)

SAMPLE DESCRIPTION

Sant No 2.252020202025202525202025

Fresh grey-green v.l.g. chlorite - sericite
phyllite, minor hematite; good fissility
27°C - 30°C

202020B.C.H.

PROJECT: SOUTHERNBIT SIZE: 6 1/4"SHEET 1 OF 2DRILLED BY: W. J. ... DATE: 14/12TENEMENT: Witchfield

DRILLING FLUID:

AIR

WATER

MUD

☒☐☐LOGGED BY: D. ... DATE: 16/12PROSPECT: NetheringCASING TO: 6mWATER LEVEL: 1.5m

Vertical (4005 3000)

SAMPLE DESCRIPTION

Sheet No 2

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG		
		✓	Yellow-brown clay 0.0 - 1.0	10
		✓	Red-brown clay 1.0 - 3.0	15
		✓		18
		✓	Red brown-red clay with fragments of transported f.g. red gts-hematite sandst	15
		✓	Weak foliation 3.0 - 6.0	15
		✓		15
		✓	Yellow-brown clay with transported river sands 6.0 - 10.0	15
		✓		20
		✓		20
		✓		20
		✓	Yellow clay with fragments of transported f.m.g. gts-hematite-sandst	15
		✓	10.0 - 26.0	20
		✓		20
		✓		20
		✓		20

PROJECT: SUTTONSBIT SIZE: 6 1/4"SHEET 2 OF 2DRILLED BY: SEAN DATE: 16/8/80TENEMENT: LITCHFIELD

DRILLING FLUID:

AIR ☒WATER ☐MUD ☐LOGGED BY: D. P. ... DATE: 16/8/80PROSPECT: NALTEHUSCASING TO: 6mWATER LEVEL: 1.5m

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION	
15		✓	Vertical (400's 300's)	15
		✓		20
		✓		20
		✓		20
		✓		20
		✓	As above, veins abundant	20
		✓		20
		✓		20
		✓		20
		✓		20
		✓	As above veins abundant	20
		✓		15
		✓	Fresh chips of f.g. green-grey recrystallized	20
		✓	carbonate/quartzite at crest. 26.6-30.0	20
		✓	Prominent downhole contamination	20
		✓		20
		✓		15
		✓	B.O.H.	

DRILL HOLE No: 17048

BIT SIZE: 6 1/4"

SHEET 1 OF 2

DRILLED BY: LENNARD DATE: 11/9/80

DRILLING FLUID: WATER

AIR ☒

WATER

MUD

LOGGED BY: D. ROYTER DATE: 7/9/80

CASING TO: 15.4

WATER LEVEL: 1 cm

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION	Sait No2
		{	Brown clay c.c - 1.0	15
		{	Red hematitic clay l.c - 2.0	15
		{	Yellowish brown clay + soil carbonate	15
		{	Clay and transported fragments of weathered m.g. brown basic schist; soil carbonate	10
		{	3.0 - 15.0 m	15
		{		18
		{		15
		{		15
		{		15
		{		15
		{		15
		{		15
		{		15
		{		10
		{		10

PROJECT: SuttonBIT SIZE: 1 1/2SHEET 2 OF 2DRILLED BY: LEGUARD DATE: 17/9/82TENEMENT: Litchfield

DRILLING FLUID:

AIR ☐WATER ☐MUD ☐LOGGED BY: D. PINTER DATE: 17/9/82PROSPECT: NelsonCASING TO: 15mWATER LEVEL: 10m

SAMPLE DESCRIPTION

Sect No 2

DEPTH (Metres)

CORE

RECOVERY

GRAPHIC

LOG

15

Moderately weathered bedrock, basic schist
15-21.0 10

15

20

Fresh bedrock (e.g. green black
actinolite chlorite albite ± qtz schist?)Possibly mafic arkose or metamorphosed
basal intrusion (greenschist facies.)
~~thin sulphides~~

25

minor specular hematite

30

PROJECT: SUTTONSBIT SIZE: HQ/NQSHEET 1 OF 10DRILLED BY: FA Kew DATE: 24 Ju
312TENEMENT: LITCHFIELDDRILLING FLUID: AIR ☐ WATER ☒ MUD ☐LOGGED BY: KHillDATE: 28 J
24wPROSPECT: NOLTEINIUSCASING TO: 3m

WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOG

1-78

F-m.g. (42mm) qz sandstone, coarser in patches (~5mm), white mica ~ matrix. laminated pelitic bands to 20 cm. Ext. red ~ weathered zone, grading through red/green mottling 8-13 m, then predominantly grey green.

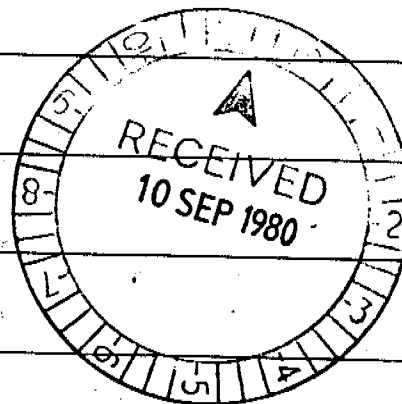
3-0

1-80

Pelitic lenses pale grey to grey-green, some with red hematitic bands. Scattered qz vng (6cm wide, approx 1/40cm) //45° Scattered fracturing, irregular angle, chlorite in fill

4-9

2-87



7-9

2-72

0-10

//40°

10-9

2-96

13-9

13-1-13-3 pelitic lens, grey green with red hematitic bands

fractured mica ~ 1cm wide, specular hematite in fill, vng to 1cm

15-15

SHEET 2 OF 10

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
15	2.96		
16.9			
17.0	2.80		17.0-18.0 Several strongly chloritic pelite bands ~ 20cm, 1150° interbanded grey-green sst.
19.9			
20	3.05		
22.9			grey-green pelite, abundant chlorite, sericite. Scattered f.g. sst lenses ~ 25cm, Fewer qz vns.
25	3.10		
26.9			Slightly coarser grained from 25.0 (pale grey f.g. sst) scattered fracturing, irregular angles, chlorite in fill
28.9	3.16		
30			

SHEET 3 OF 10

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
30	3.02		
31.9	2.98		Red f.g. hematitic sst. Finely-laminated grey green chloritic pelite 33.1-33.25 white qz vein, minor hem + chlorite 1145°
35.9	3.10		F.g. sst. Red, hematitic matrix, interbanded with chert pelite, 35.4-35.8, 36.0-36.4, 36.9-37.4
37.9	2.90		1155°
40			Pale grey-green sst, chert - sericite matrix chlorite on fracture surfaces fracturing at irregular angles
42.9	2.85		
43.9	2.70		
45			50cm chloritic sst/pelite

SHEET 4 OF 10

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
			Pale grey-green sst, chlorite matrix
			1160°
46.9	2.58		F-mg sst, reddish-brown hematitic matrix, hematitic schist interbedded 45.6 - 50.4
			Hematitic schist
49.9	2.94		F-mg grey-green sst, chloritic matrix 50.4 - 51.8
52.9	2.95		Q2 Fg. chl. musc. schist, pale to dark green, interbedded with Q2 1125° red-brown hematite schist 51.8 - 56.0 chlorite + hematite on fracture surfaces
55.9	2.84		1130° F-mg grey-green sst, chloritic matrix, banded red-brown hematitic matrix 56.0 - 59.6
58.9			gradational contact

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
0	3.00	• •	Qz pebble cgl, pebbles to 1 cm. blue to milky qz, matrix supported, chlorite - muscovite matrix 59.5-71.0 scattered pelitic lenses
61.9	2.99	• •	Hematite + chlorite on fracture surfaces, fractures sparse, irregular angles
65.1649	3.04	• •	1175°
67.9	3.09	• •	
70.9	2.98	• •	sharp contact, abrupt change in lithology Fg. pale-dark green chloritic schists, abundant drag folding 71.0 - Some grey-black ?graphitic bands, minor pyrite in fractures ± chl & lens
73.9		• •	1170°

PROJECT: _____ BIT SIZE: _____ SHEET 6 OF 10
DRILLED BY: _____ DATE: _____TENEMENT: _____ DRILLING FLUID: AIR ☐ WATER ☐ LOGGED BY: _____ DATE: _____
MUD ☐

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG
5	3.00	145°
76.9	3.02	
80	3.09	1170°
		Pale, slightly coarser, minor fq sst 81.2-83.3
82.9	2.97	
5		
85.9	3.00	Grey-black, possibly graphitic, minor pyrite in fractures 85.1-86.4
88.9	3.03	1175° Grey-black to silty graphitic, minor pyrite + chalcopyrite(?) on cleavage, ? syngenetic bands of pyrite 88.8-89.5
10		

SHEET 7 OF 10

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: AIR ☐ WATER ☐ LOGGED BY: _____ DATE: _____MUD ☐

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
			pale grey-green, chloritic, with pale siliceous bands 89.5 - 96.7 (?) bedding
91.9	2.96		
96.9	3.00		
			96.7-96.75 5 cm black graphitic band, up to 20% pyrite, substantially replaced by hematite prominent light + dark banding - chloritic / siliceous bands 0.2-1 cm
97.9	2.89		97.2 - 104.0 hematite-chlorite on joint + cleavage facies strongly foliated (slaty cleavage), some secondary deformation (kinking of cleavage).
100.9	3.05		
103.9	3.00		
			20 cm grey vein f.chl. + hematite 104.9-105.0

SHEET 8 OF 10

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ LOGGED BY: _____ DATE: _____
MUD ☐

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)
CORE
RECOVERY
GRAPHIC
LOG

Pale, siliceous, prominent secondary hematite
infiltration along cleavage 104.0 - 110.3

106.9
2.80

109.9
2.91

c.g. siliceous cst, chlorite-sericite-hematite matrix,
pebbles to 1 cm, grading to finer cst downwards

hard f.g. siliceous cst, chloritic matrix, scattered
thin (<10 cm) pelitic bands, now chloritic
c.g. 112.5-113.0, grading finer down hole

112.9
3.03

115.9
3.00

V. coarse, pebbles to 1 cm, matrix supported siliceous
cst, chlorite-sericite matrix, grading ^{finer} down hole
f.g. chloritic band 116.7-116.8, 118-118.3
Qz-chlorite-hematite vein 116.5-116.5

118.9
2.92

SHEET 9 OF 10

PROJECT: _____ BIT SIZE: _____

DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
			Secondary hematite along foliation 120.5 - 121.0
121.9	2.79		F.g. strongly foliated chloritic schist, fine sst banding and Hematitic bands 121.2 - 121.7
124.9	3.02		124.6 10m sheared + brecciated
127.9	2.95		1190°
			124.2 - 130.2 scattered qz grains to 5mm in f.g. chloritic sst - pelite matrix
130.9	2.85		
			132.0 5m sheared + brecciated - hematite + qz infill
			132.2 - 132.7 hematitic chlorite schist
133.9	2.80		1190°
			132.7 - 140.0 - interbedded light (siliceous) + dark (chloritic) bands + 5mm dark (graphitic) in part, scattered secondary hematite along foliation

SHEET 10 OF 10

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
			1185°
136.9	3.10		
139.9	3.00		F.g. grey-green qz sst, chlorite - sericite matrix, scattered thin pelitic bands, minor thin (43mm) qz veins. chlorite on joint faces
142.9	3.00		
145.9	2.95		145.9 - 146.0 qz veining, hematitic infill 146.6 - 146.6 banded sst/pelite, bands to 1cm
			1190°
148.9	1.10		148.6 - 149.8 f.g. sst, pelitic bands to 1cm
150.00			
BOH 150 m.			Total core recovered = 146.57m = 97.7%

DRILL HOLE No: LDD6

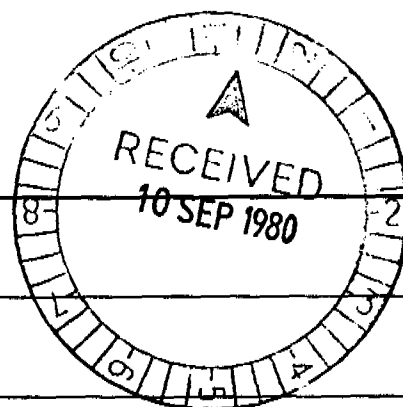
SHEET 1 OF 14

DRILLED BY: F.A. KELLY DATE: 2 Aug
→ 20 Aug

PROSPECT: NORTENIUS 7705290 CASING TO: 2m. WATER LEVEL: _____

ANGLE: 30° TO VERTICAL
BEARING: 090

SAMPLE DESCRIPTION



DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION
0	0-65	M	Alluvium 0-5.5
		M	
		M	
		M	
5		M	m-cg matrix supported qz pebbles sst - quartz, clasts to 5mm. strongly hematitic matrix, probably secondary.
7.50	0.35	.	v. strongly sheared throughout, up to 2:1 elongation of 1/75 qz pebbles
		.	Scattered fig hematite schist (pelitic) bands, 5-30cm thick
		.	
10.80	1.60	.	
		.	
		.	
		.	
14.75		.	1/60
		.	
5		.	

ANGLE: 30° TO VERTICAL
BEARING: 090

SHEET 2 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

DEPTH (Metres)
CORE
RECOVERY
GRAPHIC
LOG

SAMPLE DESCRIPTION

15
1.83c.g. qz 15.0-15.8
brecciated, qz vng, specular hematite 15.8-16.1

16.60

3.12

// 60°

19.60

2.50

19.8-21.3 f.g. sst, pelitic bands

22.60

2.24

22.4 - 23.4 c.g. qz to 5 mm

25.00

3.73

// 60°

28.60

2.95

30

SHEET 3 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ LOGGED BY: _____ DATE: _____MUD ☐

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE

RECOVERY

GRAPHIC
LOG

31.60

2.97

Limit of pervasive secondary hematitic alteration 32.0 m.
F.m.g, occasional c.g. gss, chlorite-sericite matrix,
clasts + matrix strongly sheared, minor chlorite on
joint faces
1/55

34.60

2.05

37.60

2.84

34.5-39.6 intraformational breccia, clasts now sheared 2/1

40.60

2.96

8 g laminated chlorite-sericite schist, specular hematite
on fractures 40.6-41.5
41.5-42.5 sheared intraformational breccia

43.60

2.93

1/50

~~8 g laminated~~

SHEET 4 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: WATER ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

	DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION
45			-	f.g. laminated chlorite - sericite schist, polar siliceous bands to 20 cm, minor brecciation + qz in fill,
	46.60	3.10	-	bands of hematite after pyrite, hematite + chlorite on //45 fracture surfaces
			-	
			=	48.7-49.6 hematite-qz rich band (hem. possibly after sulphide)
	49.60	2.90	-	
			-	
			=	51.2-51.4 brecciated, qz-hem in Cll.
	52.60	3.05	-	
			=	53.2-53.4 red hematite after sulphides, minor remnant pyrite; strong brecciation + qz vng.
55			-	
	55.60	2.90	-	
			=	56.0-56.1 qz vng, hem after py.
			-	
			-	
	58.60	2.35	-	//45
			-	
60			-	

SHEET 5 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOG61.60

2.95

66.60

2.88

67.60

3.12

70.60

2.80

73.60

3.10

= 63.6-63.5 Py rich band + Qz + chl. ? syngenetic
// 40°

v. dark, possibly graphitic

pale, more siliceous to fine sat.

= 69.60-69.80 massive white qz vein

= 69.92 meta sls - chlorite sericite matrix 70.50-71.1

Fig ss interbedded with pelitic layers 71.60-72.60

72.0 graded bedding, facing up → top of hole

// 30°

SHEET 6 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOG

75

76.60

2.97

Or. Veno ± chlorite, orange-red alkali feldspar 76.00-76.05, 76.30-76.50
1140°

Siliceous meta-pelite, abundant chlorite 72.40-82.40

79.60

3.00

82.60

2.68

Chlorite-schist (meta-pelite) 82.40-118.40,
minor variation in silica content and colour
banding (? bedding) throughout. scattered pyrite replaced by
strongly fractured 83.00-83.70 hematite.85
85.60

2.94

1155°

88.60

2.99

Strongly sheared 88.40-97.60

SHEET 7 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: AIR ☐ WATER ☐ LOGGED BY: _____ DATE: _____MUD ☐

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOG

90

(91.60)

2.95

(94.60)

3.15

1160

(97.60)

2.94

99.20-99.60 f-mg qz cat

100

(100.60)

3.10

101.0-102.8, 102.7-103.3 prominent fracturing

(103.60)

2.93

1160

105

SHEET 9 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE

RECOVERY

GRAPHIC

LOG

105

106.60

3.06

109.60

2.99

1165°

112.60

2.95

115

115.60

3.04

114.9-115.1 Hem-replacing py in chlorite schist

1170°

118.60

3.05

118.25-118.40 white yz vein

118.40-119.0 fine yz sst.

SHEET 9 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: AIR ☐ WATER ☐ LOGGED BY: _____ DATE: _____MUD ☐

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
120			
			120.3-120.6 pelitic band
(121.60)	3.20		120.6-120.8 f. ng qz set, chloritic matrix, frequent pelitic bands (chlorite schist). strongly fractured, chlorite, minor qz + pyrite on fracture surfaces
(124.60)	3.05		pelitic band 124.2-124.9
			125.9-126.2 pelitic band
(127.60)	3.05		127.2-127.6 pelitic band
130			129.2-140.6 F.g. chloritic schist, strongly altered + qz veined in places, scattered sulphides, chlorite + pyrite on joint faces, scattered set bands
(130.60)	3.06		1160°
			130.3-131.4 set band
			132.4-132.5 set band
(133.60)	2.99		131.7-135.7 strong shearing + qz veining to 1 cm wide

SHEET 10 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	SAMPLE DESCRIPTION
135			
136.60	3.06		
		Q	137.2-137.6 white qz vein
			138.5-141.0 numerous drag folds
139.60	3.00		1175°
140			140.0 graded bedding, facing up → bottom of hole
			141.0-143.5 f. ang of 2 sst, black siliceous matrix
142.60	2.94		
143.5-146.6			siliceous chlorite-schist, f. ang. sst band to 5.0 cm wide, prominent drag folding scattered fractures, chlorite + pyrite on surface
145.60	3.00		
146.60	3.02		146.6 - f. ang qz sst, scattered pelitic bands 1m - siliceous-chlorite matrix, v. siliceous - in parts
150			

SHEET 11 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE

RECOVERY

GRAPHIC
LOG

150

151.60

3.01

151.60 - 152.00 sheared + brecciated pelitic sand - white gr. Vug
- 3 cm wide

154.70

2.92

154.7 - 155.1 pelitic band

157.60

2.90

1165

154.5 - 155.9 pelitic band

160

160.00

2.99

163.60

3.05

163.4 - 164.0 strongly fractured, chl + py on fractures

165

SHEET 12 OF 14

PROJECT: _____ BIT SIZE: _____

DRILLED BY: _____ DATE: _____

TENEMENT: _____

DRILLING FLUID: _____

AIR ☐WATER ☐MUD ☐

LOGGED BY: _____ DATE: _____

PROSPECT: _____

CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOG

165

166.60

2.90

170

169.60

3.10

169.7 - 169.5 pelitic bands

169.7 - 169.9 pelitic bands

1700 graded bedding facing up → bottom of hole

173.0 - 172.1 siliceous pelitic bands

1160° (Bedding)

172.60

2.88

173.2 - 176.6 siliceous pelitic bands, interbedded pelitic & f.g. ss, bands to 15cm. scattered fractures chl + py on surfaces

175

175.60

3.05

176.6 - 180.6 v. siliceous f.g. ss, siliceous scattered fractures, chl + py on faces, closely interbedded with thin pelitic bands, graded bedding & bottom structure prominent, facing up → B.O.H.

178.60

3.06

1160° (Bedding)

180

SHEET 13 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ MUD ☐ LOGGED BY: _____ DATE: _____

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)	CORE RECOVERY	GRAPHIC LOG	
80			
			180.60-200.00 Massive, hard siliceous f-mg pale grey-green sst, matrix supported, chl-sar matrix, scattered py on fracture, Asp. in framework, interbedded pelitic bands to 0.5m, prominent cross bedding and broken structure, facing up → B.O.L., Acetabularia fractures, ch. py coatings.
121.50	2.16		
135			
144.60	2.98		
			146.90-146.00 pelitic band
147.60	2.99		
			147.50-148.10 pelitic band
			148.60-149.10 thin interbedded sst/pelite (bands to 5cm)
			1155° (bedding)
90			
190.60	3.03		
			190.00-194.70 interbedded pelite/sst, bands to 20 cm
193.60	2.96		
95			

SHEET 14 OF 14

PROJECT: _____ BIT SIZE: _____ DRILLED BY: _____ DATE: _____

TENEMENT: _____ DRILLING FLUID: ☐ AIR ☐ WATER ☐ LOGGED BY: _____ DATE: _____MUD ☐

PROSPECT: _____ CASING TO: _____ WATER LEVEL: _____

SAMPLE DESCRIPTION

DEPTH (Metres)

CORE
RECOVERYGRAPHIC
LOG

195 194.70 - 199.50 t-cg. hard siliceous sst, chl. ss. matrix
115° (bedding)

196.60

3.00

199.50

200.00

0.57

199.50 - 200.00 thinly interbedded pelite/sst

ROH 200.00 m.



Pilbara Laboratories Pty. Ltd.



4 MacAdam Place,
Balcatta,
Western Australia, 6021

Analytical Report

Telephone: (09) 344 2411
Telex: AA 93837
Cables: Pilbaralab — Perth

Cover Sheet

RECEIVED

- 6 OCT 1980

MOBIL ENERGY MINERALS AUSTRALIA

Submission Date: September 16, 1980

Report Code: B 2668

Clients Order: Submission 4021-25

Report Date: September 30, 1980

Project: SUTTONS

Report Comprises: 20 data sheets

Locality: Drill Dust

 Distribution: Melbourne Office
M. Binns, Adelaide River

 THIS COVERSHEET AND THE ACCOMPANYING DATA COMPRISING THE
REPORT DOCUMENT MAY NOT BE REPRODUCED EXCEPT IN FULL.

DETERMINATION	ANALYTICAL TECHNIQUE	PRECISION — ACCURACY	DETECTION LIMIT	KEY
Cu Zn Ce Nb Mo	ICP	prec. $\pm$ 10%	2,2,2,5,2	ICP: INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY
Co Ni Fe	ICP	prec. $\pm$ 10%	5,5,50	AAS: ATOMIC ABSORPTION SPECTROPHOTOMETRY
Pb As	AAS	prec. $\pm$ 10%	5,2	UV-VIS: UV-VISIBLE SPECTROPHOTOMETRY
U	F	prec. $\pm$ 10%	1	COL: COLORIMETRY
				F: FLUORIMETRY
				L: LECO FURNACE ANALYSIS
				SIE: SPECIFIC ION ELECTRODE ANALYSIS
				PT: PRECISE TITRATION INSTRUMENTATION
				CCA: CLASSICAL CHEMICAL ANALYSIS
				FA: FIRE ASSAY
				SNR: SAMPLE NOT RECEIVED
				—: ANALYSIS NOT REQUESTED
				IS: INSUFFICIENT SAMPLE
				DTF: DATA TO FOLLOW
				DSP: DATA SENT PREVIOUS

COMMENT: Data in ppm unless otherwise stated.

THIS LABORATORY IS REGISTERED BY THE NATIONAL
ASSOCIATION OF TESTING AUTHORITIES AUSTRALIA.
THE TESTS REPORTED HEREIN HAVE BEEN PERFORMED IN
ACCORDANCE WITH ITS TERMS OF REGISTRATION.

REGISTERED LABORATORY NUMBER 1076

NATA SIGNATORY

Don Mac...



Analytical Report

Report Code: B 2668

Data Sheet

Page: 7 of 20

Report Date: September 30, 1980

Sample Prefix: LPD

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Fe%	Co	Ni	Cu	Zn	As
15 11-10	3.32	15	36	6	44	17
46 9-10	2.10	6	23	9	37	20
47 9-10	3.32	10	41	<2	42	9
48 12-13	3.21	14	43	10	56	140
49 27-28	6.06	35	40	14	58	97
51 6-7	2.80	13	36	3	65	13
52 13-14	5.40	16	52	5	57	25
53 23-24	2.40	12	31	8	41	200
54 29-30	3.28	16	39	10	43	30
56 5-6	2.72	15	42	4	53	6
57 19-20	2.42	11	34	4	26	18
58 9-10	4.72	14	25	11	77	64
59 20-21	4.54	7	19	6	74	47



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Report Code: B 2668

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REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

Report Date: September 30, 1980

Sample Prefix: LPD

SAMPLE	Nb	Mo	Ce	Pb	U
15 11-10	8	2	34	29	12
46 9-10	6	<2	29	22	29
47 9-10	11	2	6	18	<1
48 12-13	15	3	66	20	<1
49 27-28	16	5	15	25	<1
51 6-7	16	2	50	18	<1
52 13-14	17	5	17	21	<1
53 23-24	16	2	57	18	<1
54 29-30	21	5	67	23	<1
56 5-6	21	3	35	15	3
57 19-20	16	3	54	13	<1
58 9-10	10	3	87	21	1
59 20-21	13	4	61	22	1



Analytical Report

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Report Code: B 2668

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REGISTERED LABORATORY

NUMBER 1076

Report Date: September 30, 1980

Sample Prefix: LPD 45

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Fe%	Co	Ni	Cu	Zn	As
0-2	4.77	5	15	4	21	5
2-4	4.87	13	15	9	48	6
4-6	4.42	11	21	15	65	5
6-8	4.80	17	24	2	70	9
8-10	4.05	11	15	<2	47	5
10-12	4.48	9	22	2	54	9
12-14	4.09	9	22	4	63	9
14-16	3.56	7	17	2	62	7
16-18	5.07	10	21	<2	80	7
18-20	5.99	8	15	3	103	9
20-22	5.25	13	34	4	84	5
22-24	5.07	13	28	<2	93	2
24-26	5.24	10	30	2	101	6
26-28	3.83	11	19	3	65	3
28-30	3.27	12	19	<2	52	<2
30-32	2.47	7	10	<2	38	3
32-34	2.54	8	18	<2	39	3
34-36	2.69	8	18	<2	38	<2
36-38	2.80	<5	7	<2	46	3
38-40	2.47	8	8	<2	49	<2



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REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

Report Date: September 30, 1980

Sample Prefix: LPD 45

SAMPLE	Nb	Mo	Ce	Pb	U
0-2	14	3	66	13	4
2-4	11	3	108	20	5
4-6	14	3	87	17	3
6-8	14	4	87	15	3
8-10	14	3	85	13	4
10-12	13	3	93	20	6
12-14	12	3	75	14	4
14-16	12	3	89	17	3
16-18	12	4	77	20	4
18-20	11	4	110	24	5
20-22	11	3	61	21	5
22-24	13	4	92	19	3
24-26	13	4	76	20	4
26-28	9	3	74	19	3
28-30	14	4	96	13	2
30-32	13	3	82	16	3
32-34	14	3	86	21	2
34-36	14	3	107	17	3
36-38	10	2	96	14	2
38-40	12	3	105	16	3



Analytical Report

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Report Date: September 30, 1980

Sample Prefix: LPD 45

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balclutha,
Western Australia, 6021

SAMPLE	Fe%	Co	Ni	Cu	Zn	As
40-42	1.96	<5	<5	<2	38	<2
42-44	1.82	5	<5	<2	36	<2
44-46	1.67	<5	<5	<2	31	<2
46-48	1.39	<5	<5	<2	23	<2
48-50	1.67	<5	7	<2	35	<2
50-52	1.91	<5	5	<2	51	<2
52-54	2.33	<5	5	<2	57	<2
54-56	2.69	<5	<5	<2	50	<2
56-59	2.77	<5	<5	<2	44	<2



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Report Date: September 30, 1980

Sample Prefix: LPD 45

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Nb	Mo	Ce	Pb	U
40-42	7	<2	93	13	2
42-44	9	2	94	12	2
44-46	7	2	96	11	4
46-48	<5	<2	82	9	22
48-50	10	<2	83	12	25
50-52	12	2	60	15	36
52-54	14	3	82	15	3
54-56	15	2	94	15	3
56-59	12	2	89	16	3



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REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

Report Date: September 30, 1980

Sample Prefix: LPD 50

SAMPLE	Fe	Co	Ni	Cu	Zn	As
0-2	2.47	<5	<5	2	27	8
2-4	5.18	7	16	5	32	16
4-6	4.48	6	9	7	83	17
6-8	4.30	<5	8	7	86	17
8-10	5.04	6	13	14	95	46
10-12	4.05	10	17	14	74	22
12-14	3.17	10	12	5	43	17
14-16	2.93	5	<5	7	31	22
16-18	2.53	<5	8	7	31	48
18-20	2.94	11	12	12	43	41
20-22	3.20	6	8	8	47	7
22-24	3.68	6	6	12	37	55
24-26	3.30	7	6	8	50	46
26-28	3.11	7	8	16	50	80
28-30	2.82	<5	<5	37	38	160
30-32	2.05	6	6	22	30	48
32-34	1.68	7	<5	8	23	42
34-36	1.74	<5	<5	4	22	18
36-38	2.40	8	<5	5	31	22
38-40	2.92	6	8	4	42	16
40-42	2.05	8	6	6	35	16
42-44	1.44	8	<5	2	35	12
44-46	2.43	<5	<5	2	39	12
46-48	3.59	6	17	8	53	8
48-50	3.36	6	8	59	53	28



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REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

Report Date: September 30, 1980

Sample Prefix: LPD 50

SAMPLE	Nb	Mo	Ce	Pb	U
0-2	6	<2	82	17	2
2-4	12	3	78	20	3
4-6	7	2	77	24	3
6-8	10	2	69	21	3
8-10	13	3	67	23	3
10-12	13	2	76	24	3
12-14	16	2	67	13	2
14-16	13	2	74	16	4
16-18	12	3	83	15	3
18-20	14	2	90	20	3
20-22	15	3	96	16	4
22-24	15	3	81	19	4
24-26	15	3	79	21	3
26-28	14	3	77	22	5
28-30	12	2	75	20	4
30-32	12	2	83	12	3
32-34	7	<2	62	14	2
34-36	11	<2	92	11	2
36-38	13	2	77	14	4
38-40	15	3	79	10	<1
40-42	10	2	84	11	3
42-44	7	<2	99	13	2
44-46	9	2	99	10	3
46-48	16	3	89	16	4
48-50	14	2	78	17	5



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Report Date: September 30, 1980

Sample Prefix: LPD 50

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Fe	Co	Ni	Cu	Zn	As
50-52	3.10	13	12	25	42	39
52-54	2.59	9	17	24	40	33
54-56	3.19	6	12	16	51	5
56-59	3.38	12	22	20	52	33



Pilbara Laboratories Pty Ltd



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Report Date: September 30, 1980

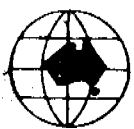
Sample Prefix: LPD 50

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Nb	Mo	Ce	Pb	U
50-52	16	2	66	20	5
52-54	17	3	52	19	5
54-56	14	3	73	18	5
56-59	17	3	79	15	4



Analytical Report

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Report Code: B 2668

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REGISTERED LABORATORY

NUMBER 1076

Report Date: September 30, 1980

Sample Prefix: LDD 5

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Fe	Co	Ni	Cu	Zn	As
12.5-15	2.21	14	250	1230	933	5
15-20	1.61	11	128	600	479	3
20-21	1.76	7	93	443	357	3
21-22	2.04	6	39	163	164	3
22-23	3.55	14	78	93	191	6
23-24	2.64	14	69	<2	141	<2
24-25	1.72	<5	28	<2	89	2
25-26	1.17	10	101	189	260	2
26-27	1.01	6	62	29	97	2
27-28	1.61	<5	36	167	152	<2
28-29	1.82	5	79	353	295	<2
29-29.5	2.07	6	14	10	52	<2
29.5-30	2.18	<5	9	2	43	<2
30-30.5	2.02	6	23	7	47	<2
30.5-31	1.58	<5	5	3	41	<2
31-32	1.81	<5	40	170	175	3
85.1-86.4	2.54	6	35	70	133	2
86.4-87	2.77	6	16	55	76	<2
87-88	2.71	6	16	16	58	2
88-88.8	4.05	12	27	29	121	<2
88.8-89.5	3.66	514	39	42	89	<2
89.5-90	3.28	10	22	37	83	4
90-91	2.45	8	18	21	69	<2
91-92	2.26	5	11	37	79	3
92-93	2.78	<5	6	13	69	3



Analytical Report

Data Sheet

Report Code: B 2668

Page: 18 of 20

Report Date: September 30, 1980

Sample Prefix: LDD 5

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Nb	Mo	Ce	Pb	U
12.5-15	9	4	103	16	7
15-20	12	3	94	14	3
20-21	8	3	91	15	2
21-22	16	3	109	18	4
22-23	25	6	163	30	2
23-24	30	6	145	30	3
24-25	26	3	<2	36	6
25-26	14	5	68	49	15
26-27	19	3	27	44	16
27-28	5	2	4	28	30
28-29	6	3	10	23	8
29-29.5	17	3	18	31	6
29.5-30	15	2	8	34	9
30-30.5	21	3	16	41	20
30.5-31	15	<2	<2	35	20
31-32	9	2	6	30	33
85.1-86.4	6	2	13	24	5
86.4-87	7	2	<2	32	5
87-88	11	2	3	36	7
88-88.8	14	2	<2	29	6
88.8-89.5	14	3	13	65	230
89.5-90	10	3	3	38	9
90-91	13	2	6	26	7
91-92	9	<2	<2	33	7
92-93	8	2	<2	29	3



Analytical Report

Report Code: B 2668

Data Sheet

Page: 19 of 20

Report Date: September 30, 1980

Sample Prefix: LDD 5

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Fe%	Co	Ni	Cu	Zn	As
93-94	2.86	<5	<5	4	55	2
94-95	2.92	8	18	25	77	<2
120-121	1.48	7	26	64	59	4
121-121.5	4.45	<5	42	136	122	3
121.5-122	2.79	<5	10	10	20	2
122-122.5	1.19	<5	14	13	16	11
122.5-123	1.80	6	45	134	118	3
123-123.5	1.72	<5	29	132	107	6
123.5-124	1.46	6	29	45	59	4
124-125	3.25	9	49	164	151	6
145-148	1.80	6	37	163	135	3
148-149	1.10	7	66	306	229	6
149-150	1.47	<5	14	46	63	6



Analytical Report

Data Sheet

Report Code: B 2668

Page: 20 of 20

Report Date: September 30, 1980

Sample Prefix: LDD 5

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Nb	Mo	Ce	Eu	U
93-94	7	2	13	32	3
94-95	14	3	19	28	3
120-121	13	2	34	24	4
121-121.5	13	5	13	39	6
121.5-122	16	2	15	31	7
122-122.5	15	2	29	20	8
122.5-123	18	3	24	24	13
123-123.5	10	3	14	18	19
123.5-124	16	3	<2	24	3
124-125	14	3	7	19	5
145-148	10	3	26	15	3
148-149	10	3	41	16	8
149-150	20	3	27	23	6

NDD 6, NPD 55, LPD 60-65

Pilbara Laboratories Pty Ltd



4 MacAdam Place,
Balcatta,
Western Australia, 6021

Analytical Report

Telephone: (09) 344 2411
Telex: AA 93837
Cables: Pilbaralab — Perth

Cover Sheet

MOBIL ENERGY MINERALS AUSTRALIA

Submission Date: September 24, 1980

Report Code: B 2725

Order: Submission 4026-28

Report Date: October 17, 1980

Project: SUTTONS

Report Comprises: 6 data sheets

Location: LITCHFIELD

Sample Type: Drill Dust

Distribution:

Melbourne Office

M. Binns, Adelaide River

THIS COVER SHEET AND THE ACCOMPANYING DATA COMPRISING THE
REPORT DOCUMENT MAY NOT BE REPRODUCED EXCEPT IN FULL.

DETERMINATION	ANALYTICAL TECHNIQUE	PRECISION — ACCURACY	DETECTION LIMIT	KEY
Fe	ICP	prec. $\pm$ 10%	0.01%	ICP: INDUCTIVELY COUPLED PLASMA EMISSION SPECTROSCOPY
Cu Zn Ce Nb	ICP	prec. $\pm$ 10%	2,2,2,5	AAS: ATOMIC ABSORPTION SPECTROPHOTOMETRY
Mo Co Ni	ICP	prec. $\pm$ 10%	2,5,5	UV-VIS: UV-VISIBLE SPECTROPHOTOMETRY
Pb As	AAS	prec. $\pm$ 10%	5,2	COL: COLORIMETRY
U	F	prec. $\pm$ 10%	1	F: FLUORIMETRY
				L: LECO FURNACE ANALYSIS
				SIE: SPECIFIC ION ELECTRODE ANALYSIS
				PT: PRECISE TITRATION INSTRUMENTATION
				CCA: CLASSICAL CHEMICAL ANALYSIS
				FA: FIRE ASSAY
				SNR: SAMPLE NOT RECEIVED
				—: ANALYSIS NOT REQUESTED
				IS: INSUFFICIENT SAMPLE
				DTF: DATA TO FOLLOW
				DSP: DATA SENT PREVIOUS

COMMENT: Data in ppm unless otherwise stated.

THIS LABORATORY IS REGISTERED BY THE NATIONAL
ASSOCIATION OF TESTING AUTHORITIES AUSTRALIA.
THE TESTS REPORTED HEREIN HAVE BEEN PERFORMED IN
ACCORDANCE WITH ITS TERMS OF REGISTRATION.

NATA SIGNATORY



Analytical Report

Data Sheet

Report Code: B 2725

Page: 1 of 6

Report Date: October 17, 1980

Sample Prefix: LDD 6

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Fe	Co	Ni	Cu	Zn	As
100.0-101.0	3.82	11	41	98	108	15
101.0-101.8	5.61	12	53	166	172	52
101.8-102.4	3.93	13	45	156	140	46
102.4-103.0	3.77	8	23	59	85	9
105.5-106.0	3.10	10	27	13	55	6
106.0-107.0	3.46	8	23	5	53	8
107.0-108.0	3.62	5	17	12	66	10
127.0-128.0	2.83	8	30	128	114	11
128.0-129.0	2.33	<5	18	112	88	24
129.0-130.0	2.42	6	18	63	63	32
130.6-131.0	2.38	<5	13	76	68	3
131.0-131.5	2.54	<5	10	34	43	36
131.5-132.0	2.30	<5	13	50	50	11
132.0-133.0	2.65	7	26	88	88	13
133.0-134.0	2.65	8	13	44	64	6
134.0-135.0	2.71	5	20	114	107	4

Pilbara Laboratories Pty Ltd



Analytical Report

Data Sheet

Report Code: B 2725

Page: 2 of 6

Report Date: October 17, 1980

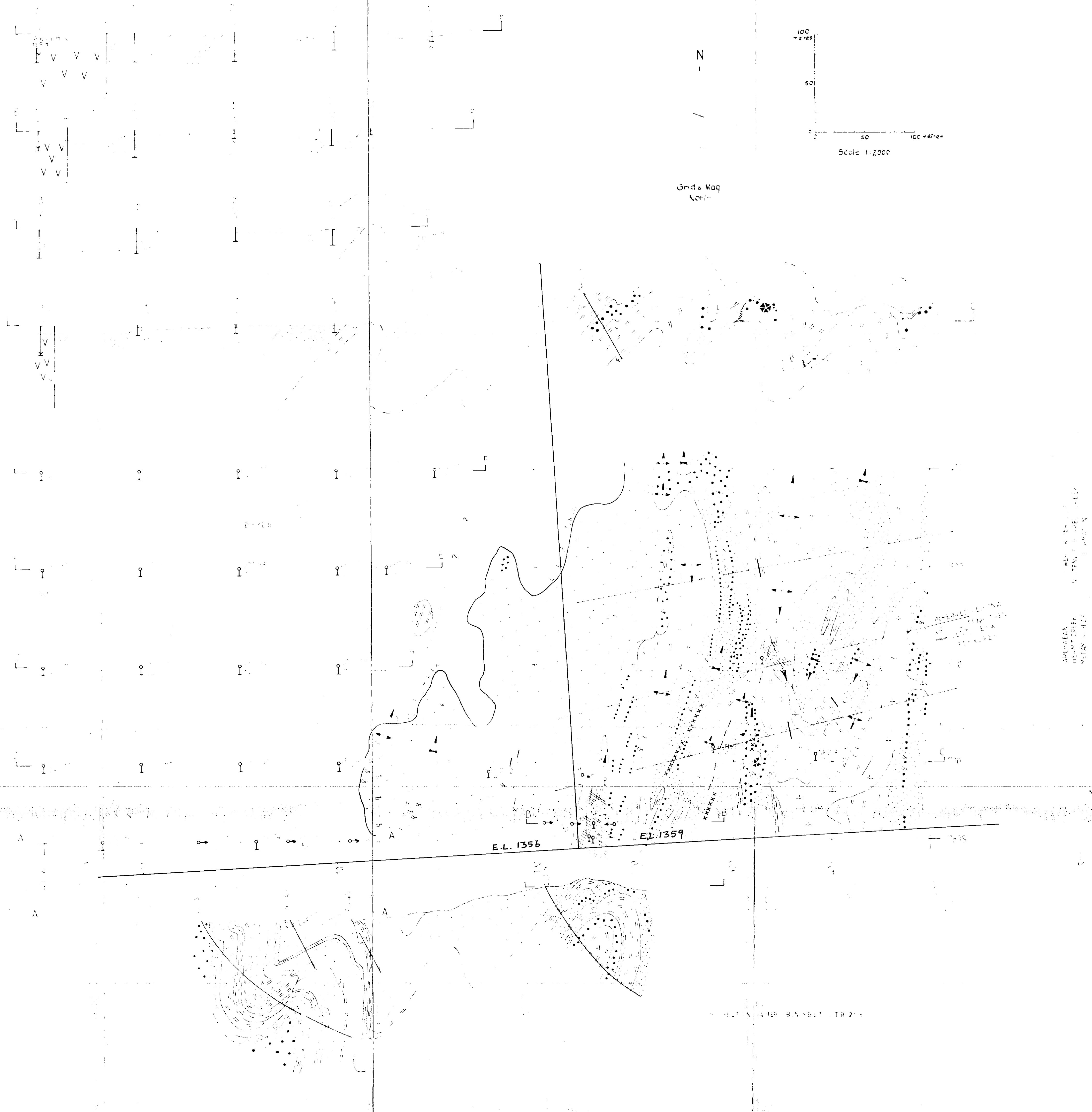
Sample Prefix: LDD 6

REGISTERED LABORATORY

NUMBER 1076

4 MacAdam Place, Balcatta,
Western Australia, 6021

SAMPLE	Nb	Mo	Ce	Pb	U
100.0-101.0	12	8	39	7	5
101.0-101.8	14	11	85	30	8
101.8-102.4	12	6	172	15	14
102.4-103.0	11	2	80	53	5
105.5-106.0	15	9	38	49	6
106.0-107.0	16	7	64	29	6
107.0-108.0	14	14	82	63	2
127.0-128.0	19	12	117	14	8
128.0-129.0	10	5	62	26	6
129.0-130.0	20	8	101	19	14
130.6-131.0	14	11	93	22	16
131.0-131.5	14	12	242	28	51
131.5-132.0	13	<2	50	30	13
132.0-133.0	17	8	110	14	8
133.0-134.0	16	11	174	23	8
134.0-135.0	14	8	165	6	17



- Alluvium
- Qtz-mica-chlorite ± carbonaceous ± Ht schist (m-sist & shale)
- Qtz-mica-chl-Ht schist (fine-med m-s/s)
- Qtz-mica-chl-Ht schist (coarse m-s/s - some granules-pebbles)
- Qtzite
- Very siliceous, brown m-s/s
- Quartz - minor breccia Unconformity
- Meta-basic rocks
- Unconformity (under cover)
- Lithological boundary
- Plunging folds
- Anomalous radiometric zones
- Diamond drill holes - angle & depth
- Percussion drill holes - angle & depth
- Trend lines - plan and sections

Fig. 3

MOBIL ENERGY MINERALS AUSTRALIA					
PROJECT SUTTONS PROJECT					
KILFOYLE CREEK PROSPECT					
NOLTENIUS E.L. (1359)					
GEOLOGY AND SECTIONS					
COMPILED	DATE DEC '80	BY J.R.	ADDNS	DATE	BY
DRAWN	2 FEB '81	R.H.			
SCALE	1:2000		DWG No	3884	

262	251	132	279	421	240	161	194	178	209	178	240	754	805	477	500	257	183	285			
119	229	154	206	212	241	183	210	212	224	299	463	626	498	334	608	299	221	288			
218	375	256	165	218	195	160	375	591	339	309	291	195	349	474	573	515	95	381			
291	357	219	165	297	192	297	381	285	261	80	285	255	291	207	180	423	98	171			
314	241	321	261	338	434	361	339	504	566	325	353	312	470	213	5876	387	174	284			
162	221	115	102	314	288	294	208	208	563	147	483	312	346	497	339	92	133	167			
489	308	256	542	337	223	631	374	374	742	406	330	243	440	696	227	147					
										352	291	325	689	669	236	305	201	473	871	148	142
										74	167	1445	559	449	188	188					
224	284	442	222	243	428	305	518	151	449	644	401	1033	525	477	188	353	113	250	325	147	179
154	99	236	442	380	497	545	272	346	525	423	751	2310	140	786	140	277					

TRACK ETCH® DETECTOR READINGS

PREPARED FOR - MOBIL
PROJECT NAME - NOLTENIUS

BOXES AROUND VALUES ABOVE - 643.0
BACKGROUND VALUE- - - - - 319.2
STANDARD DEVIATION- - - - - 157.6
SCALE - - - - - 1 TO 2000
DATE - 10-02-80

PREPARED BY TERRADEx CORPORATION
460 N. WIGET LANE WALNUT CREEK CA

TR 235-2 (KILFOYLE CREEK) DRG. N°3937

Fig. 4



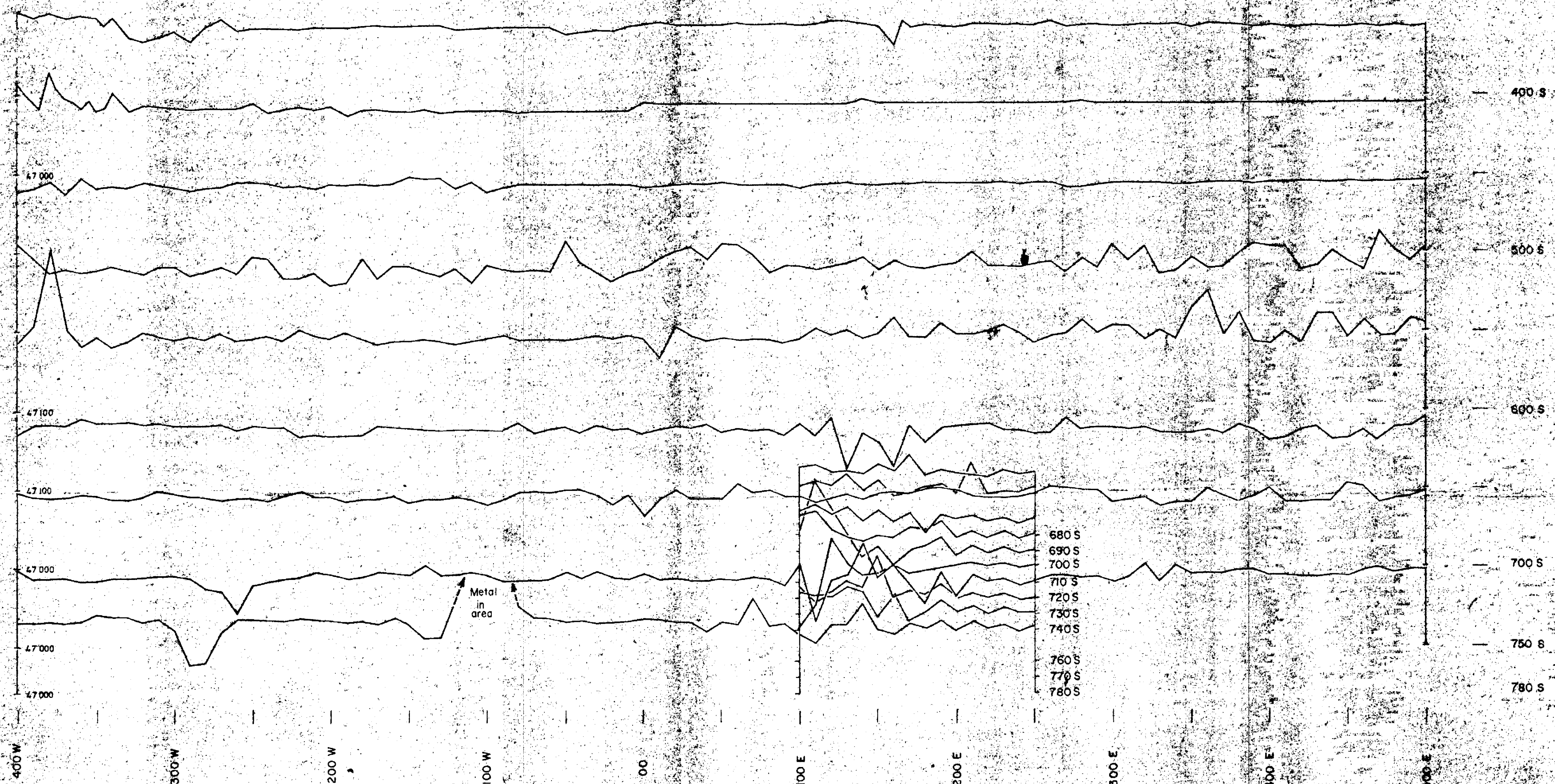
TRACK ETCH® RADON CONTOUR MAP

PREPARED FOR - MOBIL
PROJECT NAME - NOLTENIUS

POINTS SMOOTHED - - - - - 5
EXTRAPOLATION DISTANCE- - - 1.25
CONTOUR INTERVAL- - - - - 100
BACKGROUND VALUE- - - - - 319.2
STANDARD DEVIATION- - - - - 157.6
SCALE - - - - - 1 TO 2000
DATE - 10-02-80

PREPARED BY TERRADEX CORPORATION
460 N. WIGET LANE WALNUT CREEK CA

TR 235-2 (KILFOYLE CREEK) DRG. N° 3938



MAGNETIC INTENSITY (GAMMAR)

47,300

47,200

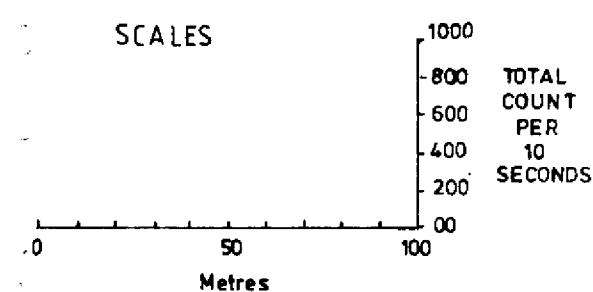
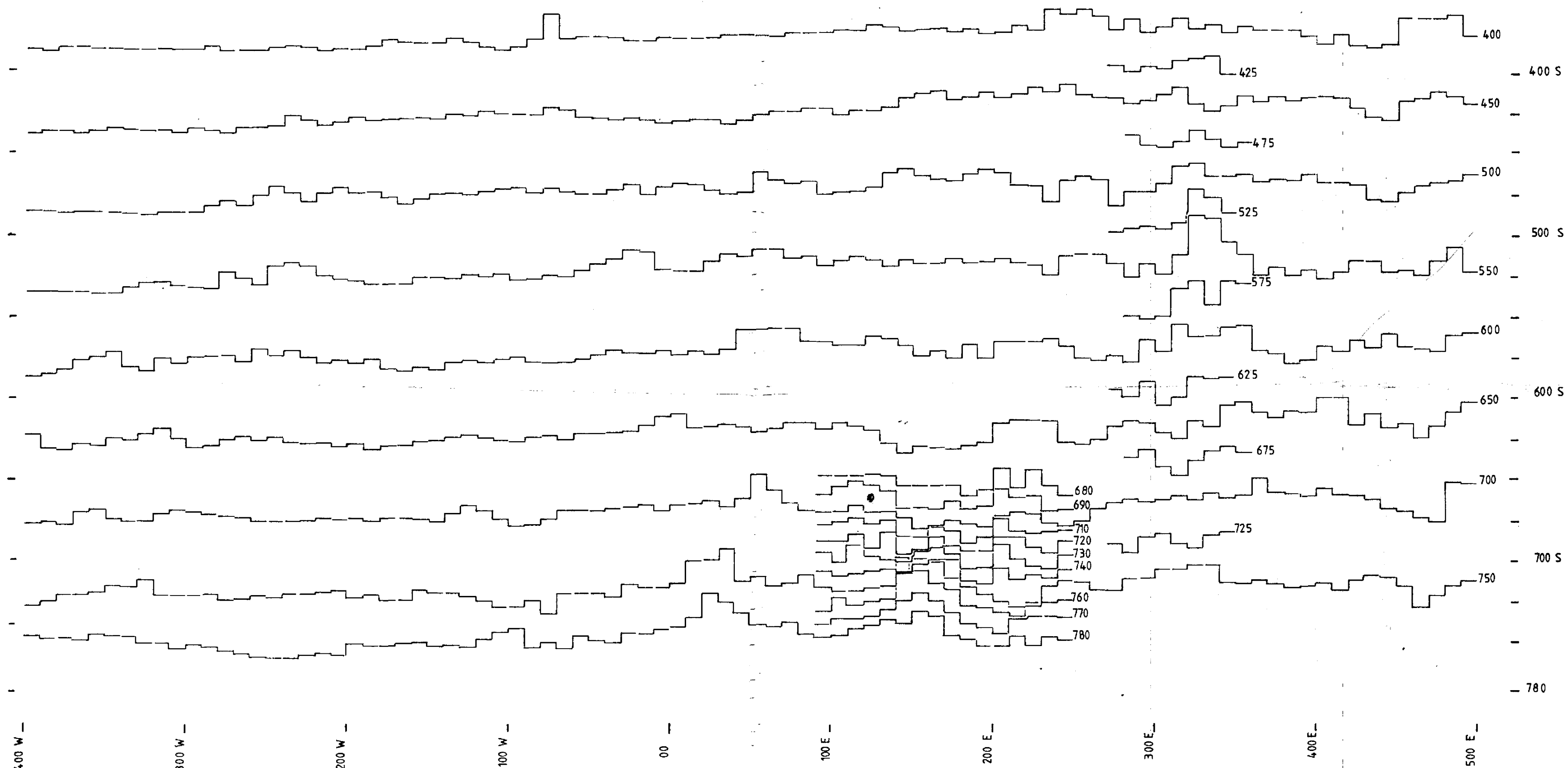
47,100

0 50 100

INSTRUMENT: Scintrex M.P.-4 Magnetometer

MOBIL ENERGY MINERALS AUSTRALIA					
PROJECT SUTTONS PROJECT					
KILFOYLE CREEK PROSPECT					
NOLTENIUS EL 1359					
MAGNETIC PROFILES					
COMPILED	DATE	BY	ADDNS	DATE	BY
DRAWN	11/1/81	J.R.			
SCALE	1:2,000	BWG No	4155		

1:250 000 REF SD 52-8



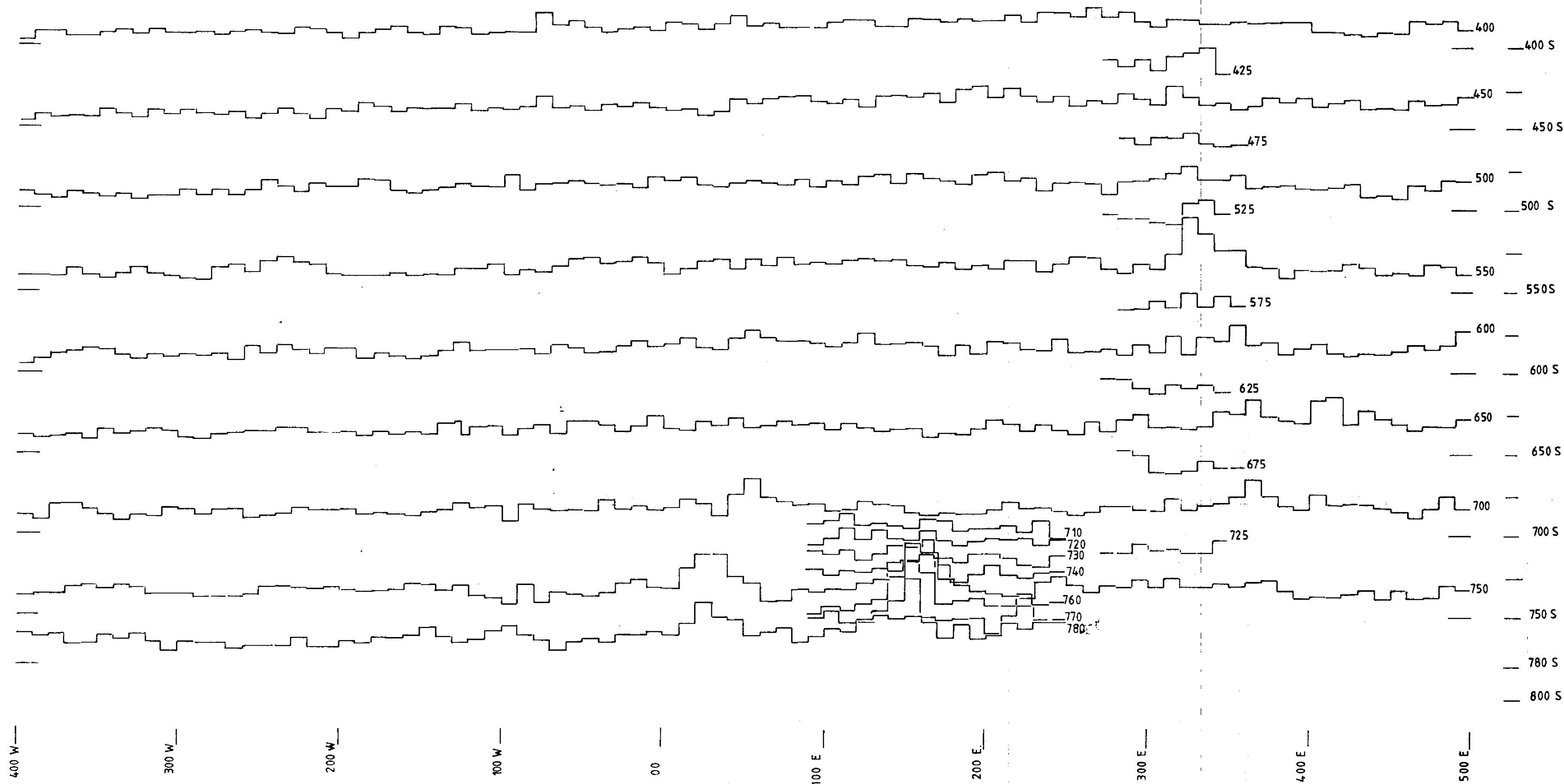
INSTRUMENT:
GEOMETRICS GAD 6 SPECTROMETER
GSP 4 SENSOR

MOBIL ENERGY MINERALS AUSTRALIA

PROJECT SUTTONS

**KILFOYLE CREEK PROSPECT
NOLTENIUS E.L.(1359)
SURFACE SPECTROMETRY
STACKED PROFILES
TOTAL COUNT CHANNEL**

COMPILED	DATE	BY	ADDNS	DATE	BY
DRAWN	29 JAN '81	R.H.			
SCALE	1 : 2000	DWG No	3879		

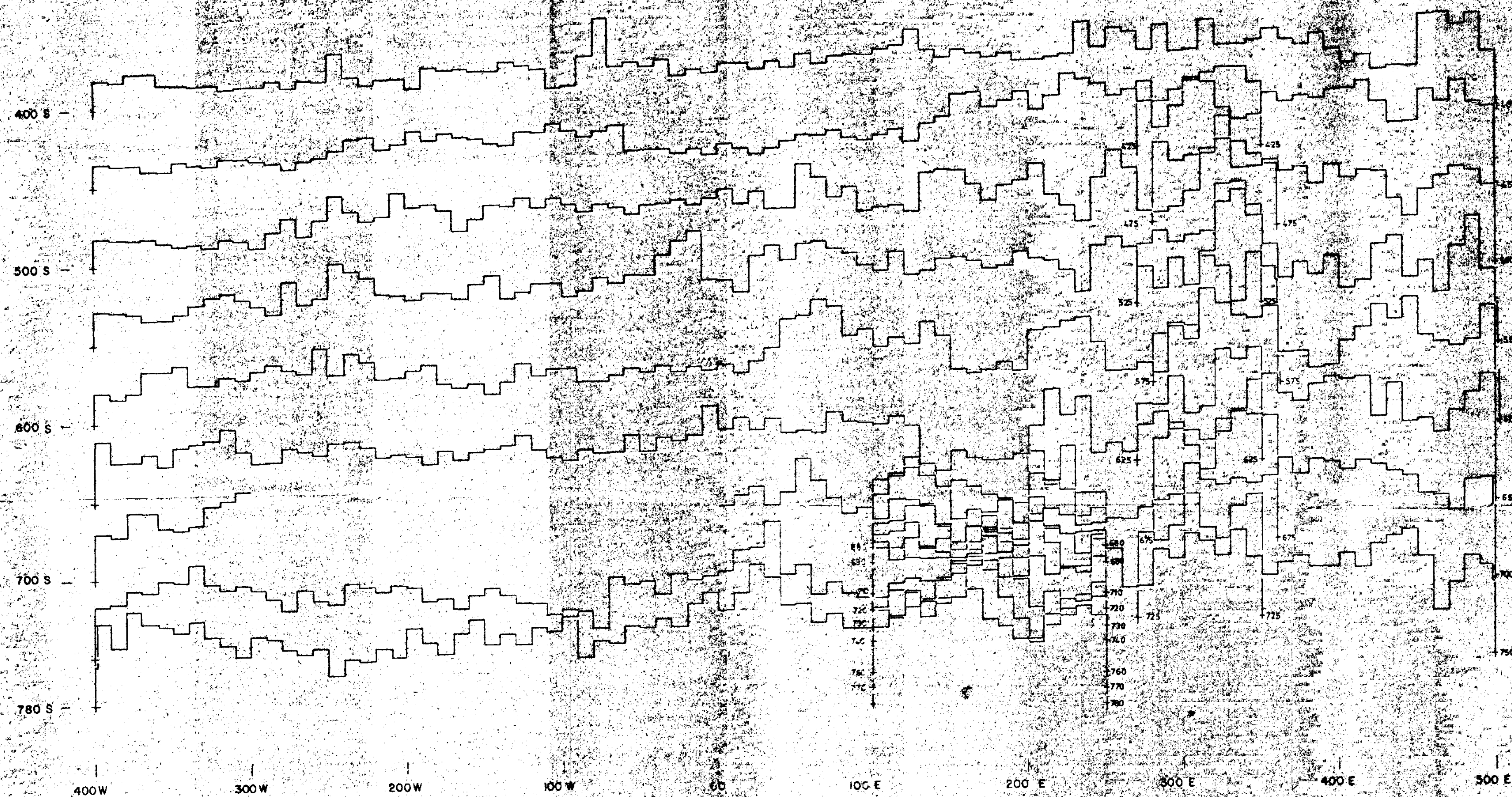


MOBIL ENERGY MINERALS AUSTRALIA

PROJECT SUTTONS

KILFOYLE CREEK PROSPECT
NOLTENIUS E.L.(1359)
SURFACE SPECTROMETRY
STACKED PROFILES
URANIUM CHANNEL

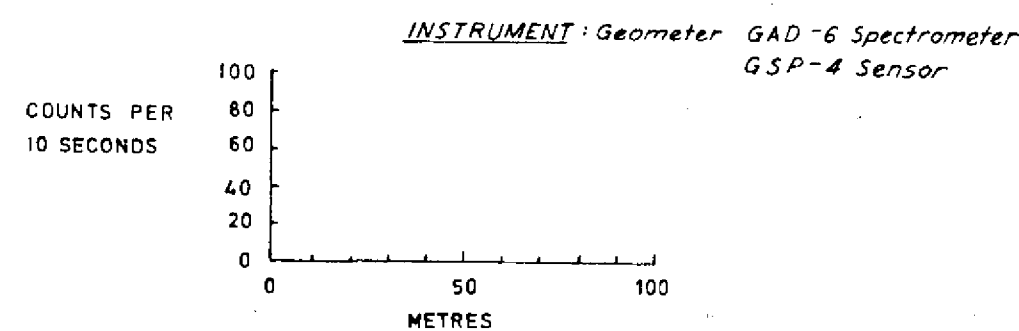
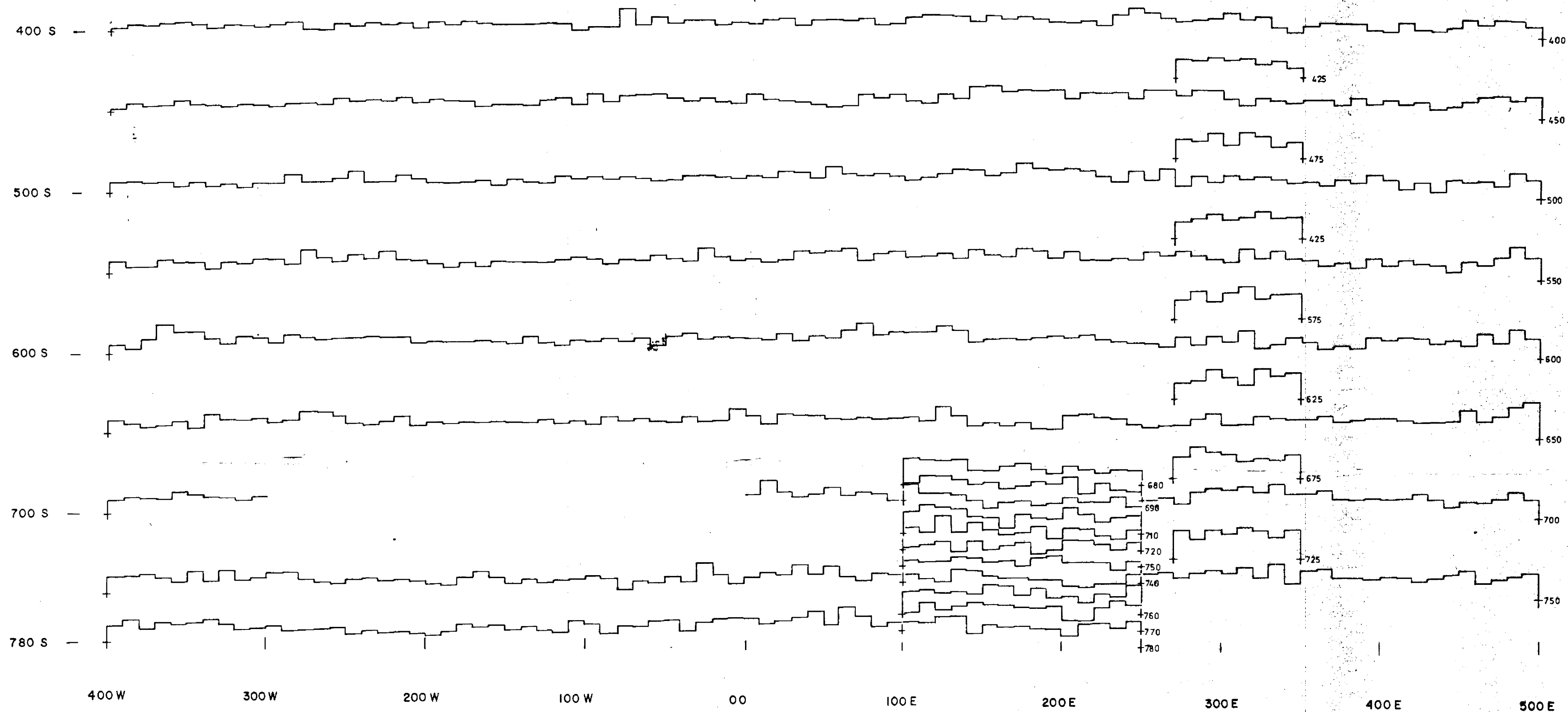
COMPILED	DATE	BY	ADDNS	DATE	BY
DRAWN	29 JAN '81	R.H.			
SCALE	1:2000	DWG No	3878		



INSTRUMENTS: Geometrics - GAD-6 Spectrometer
GSP-4 Sensor

1:250 000 REF SD 52-8

MOBIL ENERGY MINERALS AUSTRALIA					
PROJECT SUTTONS PROJECT					
KILFOYLE CREEK PROSPECT					
NOLTENIUS E.L. 1359					
SURFACE SPECTROMETRY					
STACKED PROFILES					
K CHANNEL					
COMPILED	DATE	BY	ADVIS	DATE	BY
DRAWN	MARCH 81	E.C.			
SCALE	1:2,000		DWG No	4153	



MOBIL ENERGY MINERALS AUSTRALIA

PROJECT SUTTONS PROJECT

KILFOYLE CREEK PROSPECT

NOLTENIUS E.L. 1359

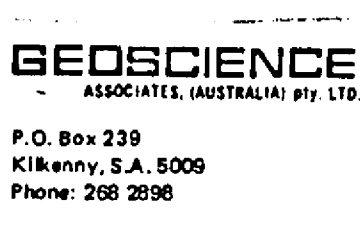
SURFACE SPECTROMETRY

STACKED PROFILES

Th CHANNEL

COMPILED	DATE FEB 81	BY J.R.	ADDNS	DATE	BY
DRAWN	MARCH 81	B.C.			
SCALE	1:2000	DWG No	4154		

1:250 000 REF SD 52-8



LPD - 46, 47, 48

Maria T. L.
 No. 320

LOGGING DATA

DATE 14-8-80

LOCATION			HOLE NUMBER:			CLIENT: MOBIL ENERGY MINERALS		
State: NORTHERN TERRITORY			Collar elev. metres			Claim:		
Area: DALY RIVER			Depth drilled: metres			Owned by:		
Project: LITCHFIELD			CASING DATA			Operated by:		
Prospect: SUTTONS			HOLE DATA			Unit Operator: BLICHFELDT		
Lat: 0° Long 0° "			Wall size in. Dia. from to			Unit No. AL-6 Office: ADLAIDE		
GAMMA RAY			Dia. (inside) in. Dia. from to			ELECTRIC		
INITIAL RUN 2 3 4			Cored hole ☐ Non-cored hole ☒			1 2 3 4		
Logged depth (ft.)			Sampled Interval Type			Logged depth		
Range (Full scale) cts 200			Totaly discussion			Resist. scale		
Time constant (Sec.) 6/50			INTERPRETATION DATA			S.P. scale		
Paper speed cm/min 1			Probe No. Standard cps K factor			Paper speed		
Logging speed m/min 6			G.P.A.-02 589 1.57 x 10 ⁻⁵			Logging speed		
Bgknd count (cps)			Probe size in			Type		
Probe No. G.P.A.-02			Bias			Bias		
Size (dia.) (in.) 4.75 mm			REMARKS			CALIPER		
Type N.I. 1 x 1			Fluid Level metres			Logged depth		
Standard (cps) 389			Dead time 2.75 4 sec.			Scale in. def.		
Amp. Gain 520			Ratemeter No.			Paper Speed		
Bore hole medium			Mud density			Logging speed		
Digital readout ~ 0.2			Time base sec 1			Arm Length in.		
Upper Disc.			Lower Disc.			Max. Def. in.		

Hole # LPD-49

14-8-80

1. *Chlorophyll a* (Chl *a*)

Scale

... ..

20

Hole # LPD-48

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	52
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AD

Hole L1D-47

6

60 80

10

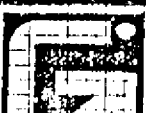
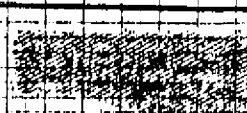
Hole LID - #6

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4

[illegible]

9

	GAMMA-RAY LOGGING CO. 1500 N. 10TH ST. S.W. ALBUQUERQUE, N.M. 87102 (505) 263-1100			
	LOGGING DATA			
	GAMMA-RAY	S.P.		RESISTIVITY
	RANGE 2-2000 F.T.	ATTEN.		ATTEN.
	R.C. 5% SIB	LOG-SPEED		DIAS
CAU. 15.20		DIAM.		
LOG-SPEED 600		LOG-SPEED		
FRS-3000-600-02				

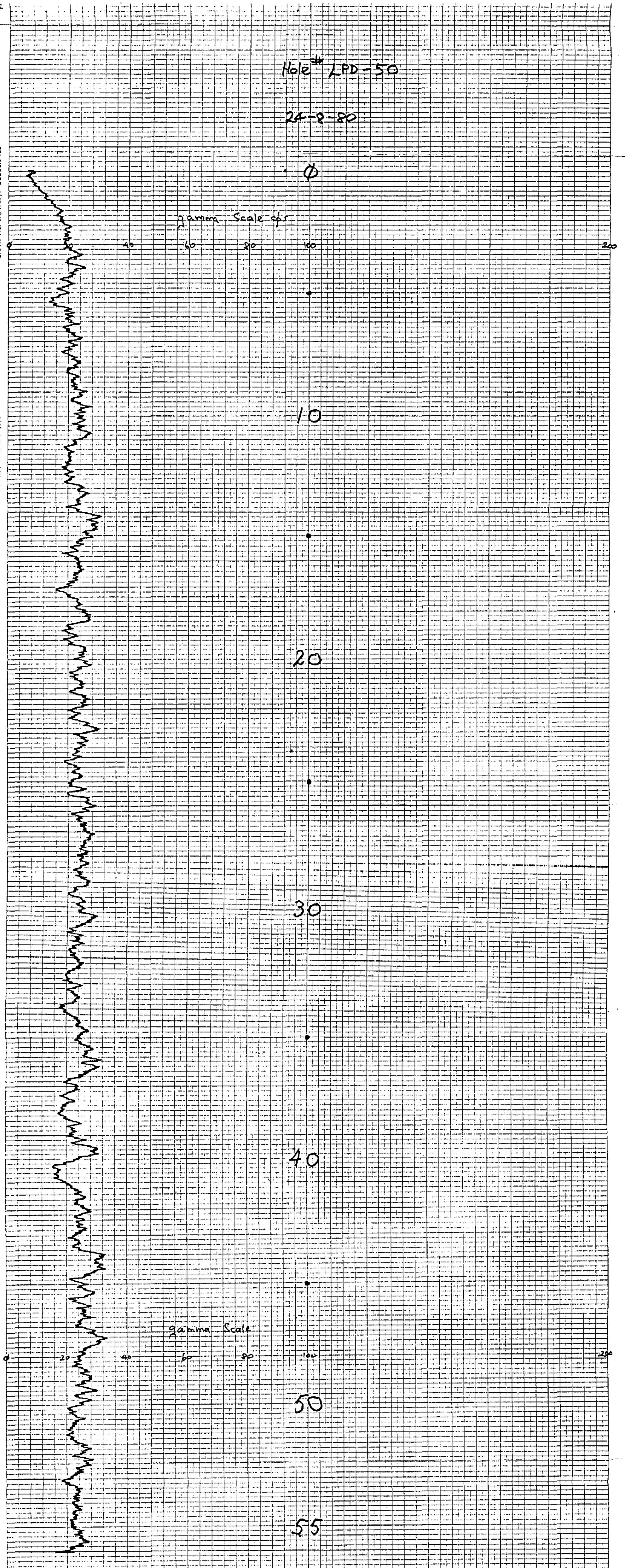


ASSOCIATES (AUSTRALIA) PTY. LTD.
P.O. Box 239
Kilkenny, S.A. 5009
Phone: 268 2898

LOGGING DATA

DATE 24-8-80

LOCATION				HOLE NUMBER: LPD-50				CLIENT: Mobil Energy Minerals			
State: Northern Territory				Collar elev. metres				Claim:			
Area: Daly River				Depth drilled: 60m metres				Owned by:			
Project: SUTTONS				CASING DATA				HOLE DATA			
Prospect: LITCHFIELD				Wall size in.				Dia. 5 1/2 from 0 to 7.0.			
Lat: 0 " " " " " "				Dia. (inside) in.				Dia. from to			
Long: 0 " " " " " "				Cased from to mtrs				Dia. from to			
GAMMA RAY				Cored hole ☐				Non-cored hole ☒			
INITIAL RUN				1				2			
2				3				4			
Logged depth (ft.)				56				Type			
Range (Full scale) cps				200				Percussion			
Time constant (sec.)				5% 5.0				S.P. scale			
Paper speed cm/m				1				Paper speed			
Logging speed m/min				6				Logging speed			
Bgnd count (cps)				7				Probe size in			
Probe No. GPA-02								Type			
Size (dia.) (in.) 40mm								Bias			
Type - NaI 2 x 1/2								REMARKS			
Standard (cps) 416								Fluid Level metres			
Dead time 1.75				4 sec.				Logged depth			
Amp. Gain 520								Scale in. def.			
Rate meter No.								Paper Speed			
Bore hole medium								Logging speed			
Mud density								Arm Length in.			
Digital readout m 0.2								Max. Def. in.			
Time base sec 1											
Upper Disc.											
Lower Disc.											



GAMMA-RAY		S.P.		RESISTIVITY	
RANGE 200 cps	ALLEN	LOG-SPEED		BIAS	
TC 5% 5.0	LOG-SPEED	BIAS		BIAS	
CAL 520	LOG-SPEED	BIAS		BIAS	
LOG-SPEED 6 m/min	LOG-SPEED	BIAS		BIAS	
PROBING GPA-02	UNIT No. BL-4	DATE 24-8-80		T.D. 56m	
K-FACTOR 1.57 x 10^-5	UNIT No. BL-4	DATE 24-8-80		T.D. 56m	
HOLE No. LPD-50	UNIT No. BL-4	DATE 24-8-80		T.D. 56m	



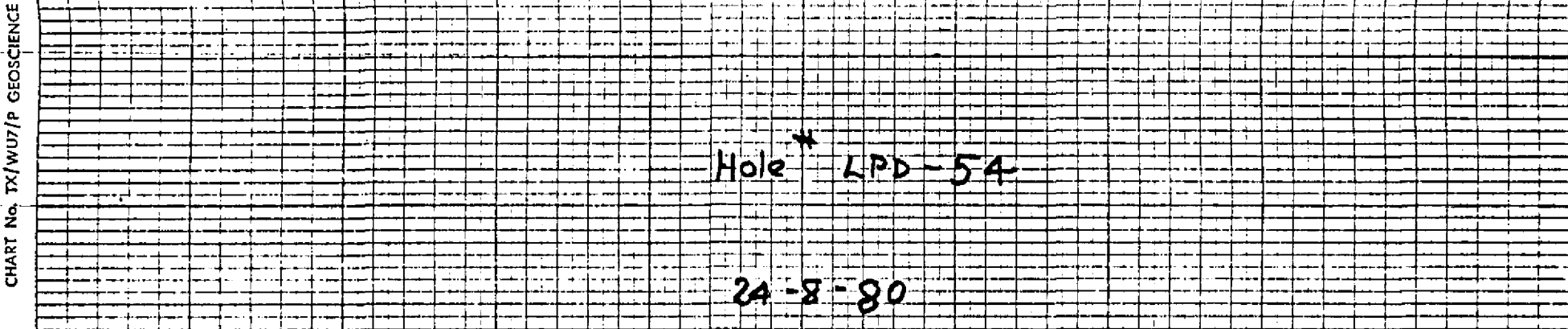
GEOSCIENCE
ASSOCIATES (AUSTRALIA) PTY. LTD.
P.O. Box 239
Kilburn, S.A. 5009
Phone: 268 2898

HOLE # LPD - 51, 52, 53, 54
LOGGING DATA

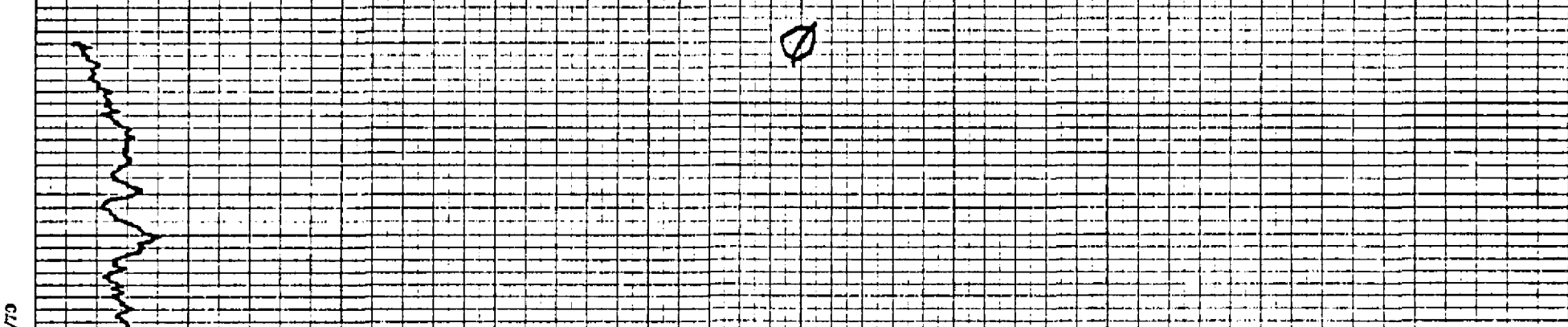
MILMA TECH. RECORD
No. 320
DATE 24-8-80

LOCATION		HOLE NUMBER:		CLIENT: Mobil Energy Minerals	
State: NORTHERN TERRITORY		Collar elev.		Claim:	
Area: DALY RIVER		Depth drilled:		Owned by:	
Project: SUTTONS		CASING DATA		HOLE DATA	
Prospect: LITCHFIELD		Wall size		in. Dia. $\frac{3}{4}$ from 0 to 7.5	
Lat: 0 " Long 0 "		Dia. (inside)		in. Dia. from 0 to	
GAMMA RAY		Cased from to mtrs		Dia. from to	
INITIAL RUN		Cored hole ☐		Non-cored hole ☒	
2		3		4	
Logged depth (ft.)		Sampled Interval		Type	
Range (Full scale) cps 200		Percussion		Logged depth	
Time constant (sec.) 57.50		Type		Resist. scale	
Paper speed cm/m 1		INTERPRETATION DATA		S.P. scale	
Logging speed m/min 6		Probe No. Standard (cps) K factor		Paper speed	
Bgnd count (cps) 1		G.P.R-02 410 1.57 x 10 ⁻⁶		Logging speed	
Probe No. G.P.A-02		Fluid Level		Probe size	
Size (dia.) (in.) 40mm		metres		Type	
Type N.T. 1/2		REMARKS		Bias	
Standard (cps) 410		Fluid Level		CALIPER	
Dead time 2.75		metres		Logged depth	
Amp. Gain 520		Type		Scale	
Rate meter No.		Type		Paper Speed	
Bore hole medium		Type		Logging speed	
Mud density		Type		Arm Length	
Digital readout		Type		Max. Def.	
Time base		Type		in.	
Upper Disc.		Type		in.	
Lower Disc.		Type		in.	

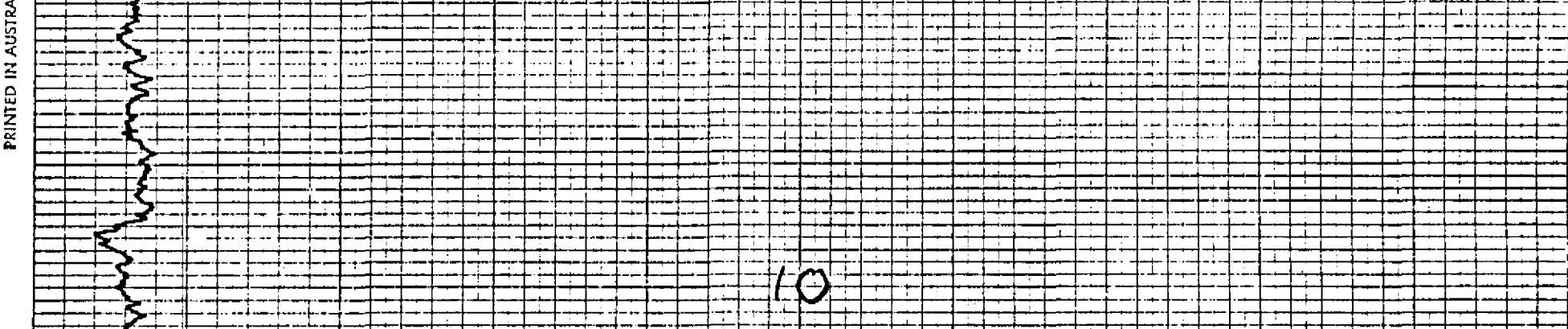
7/73



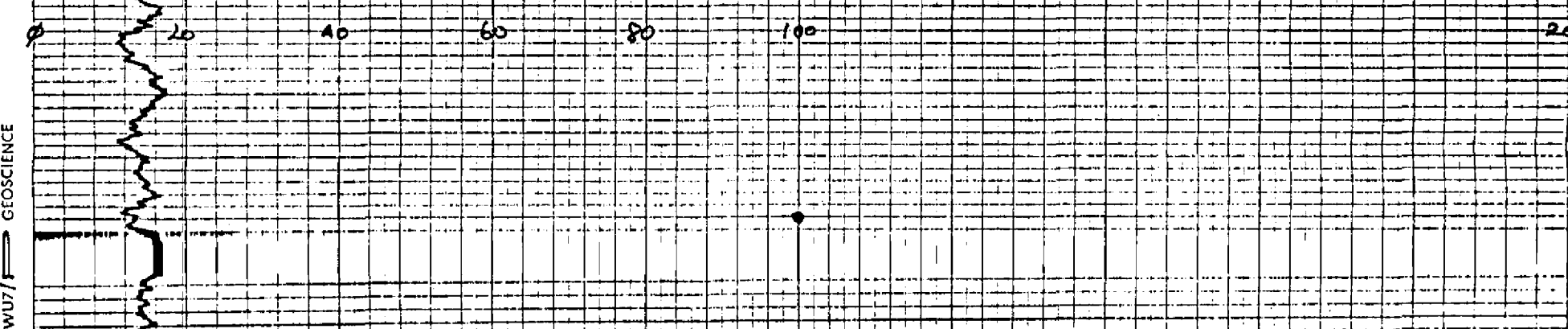
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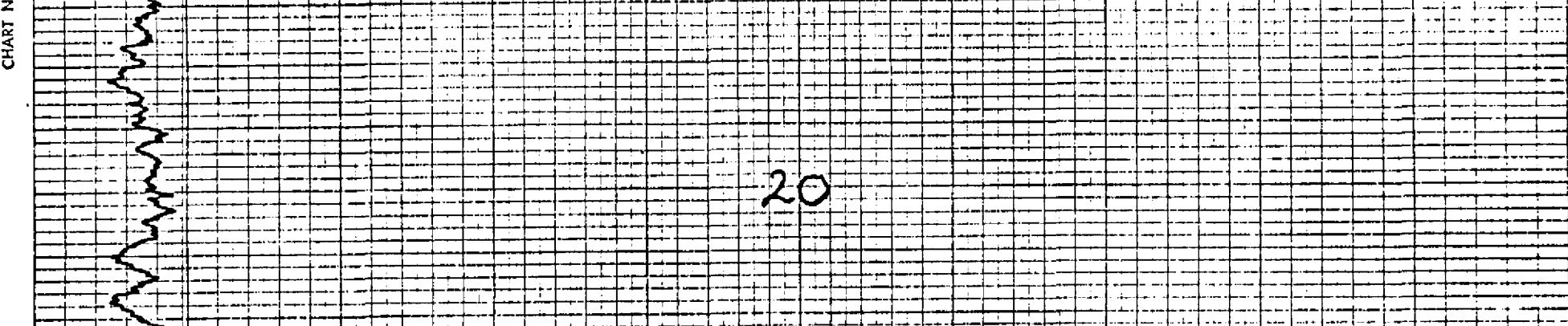
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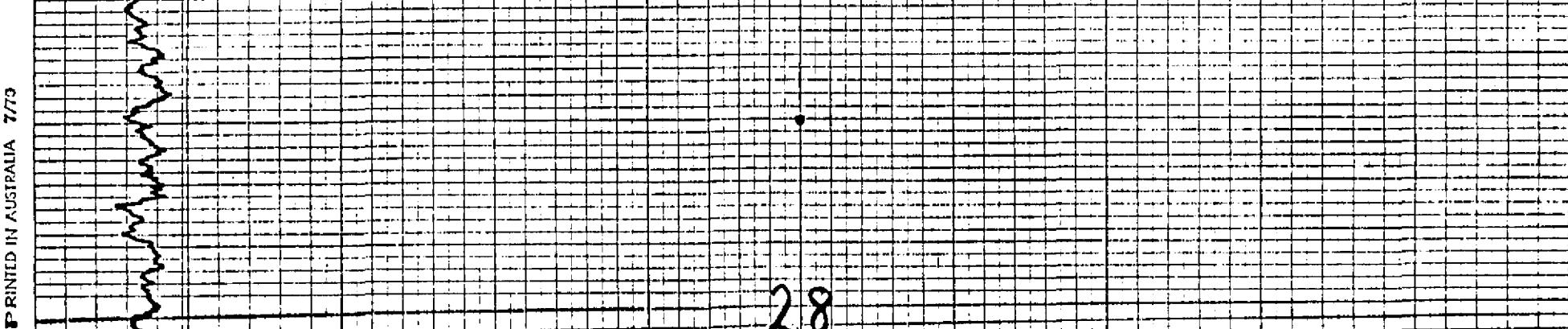
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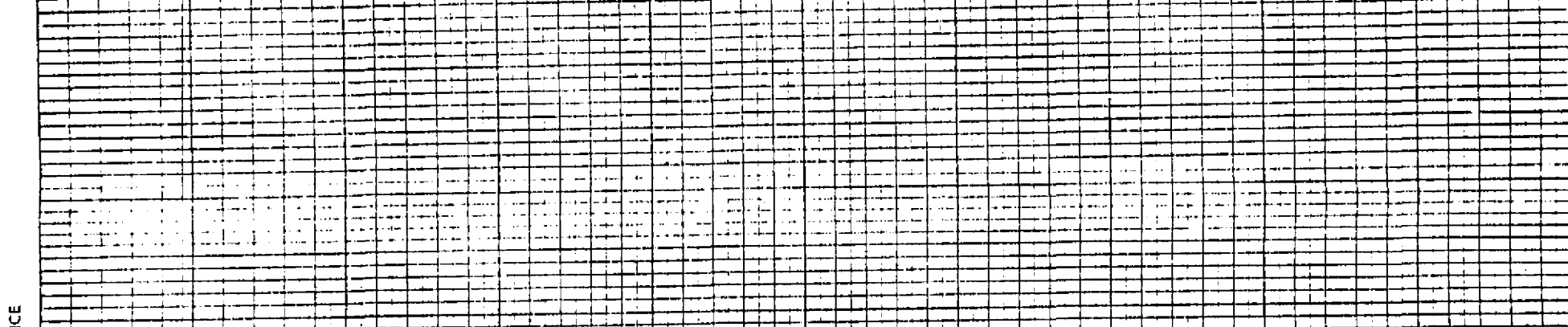
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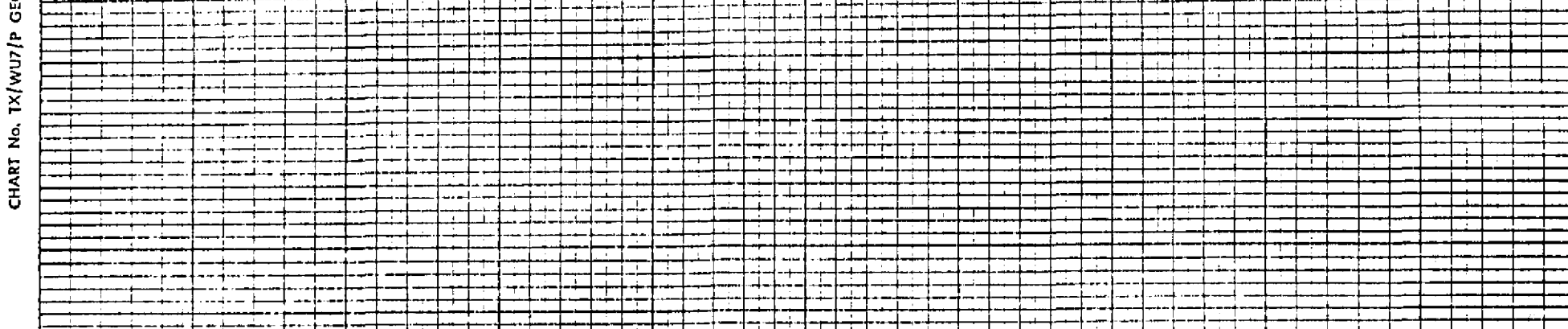
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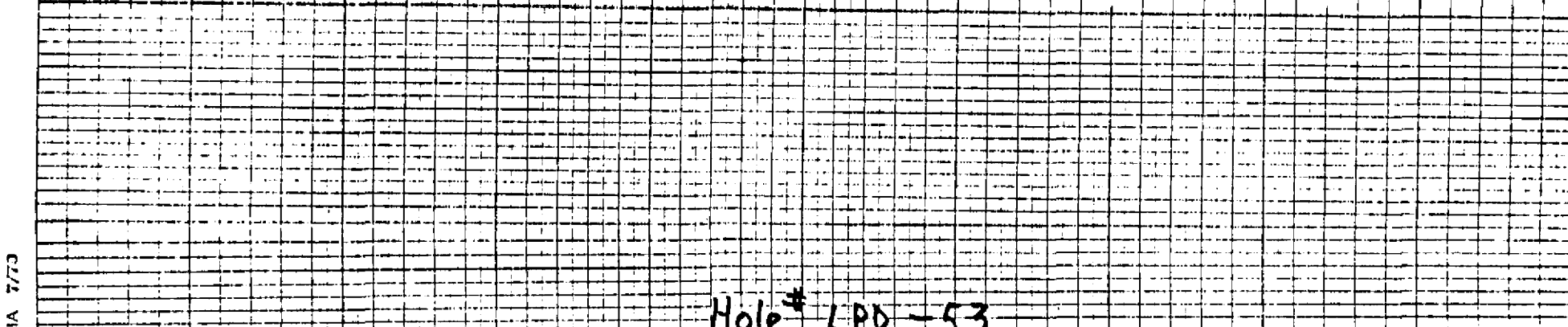
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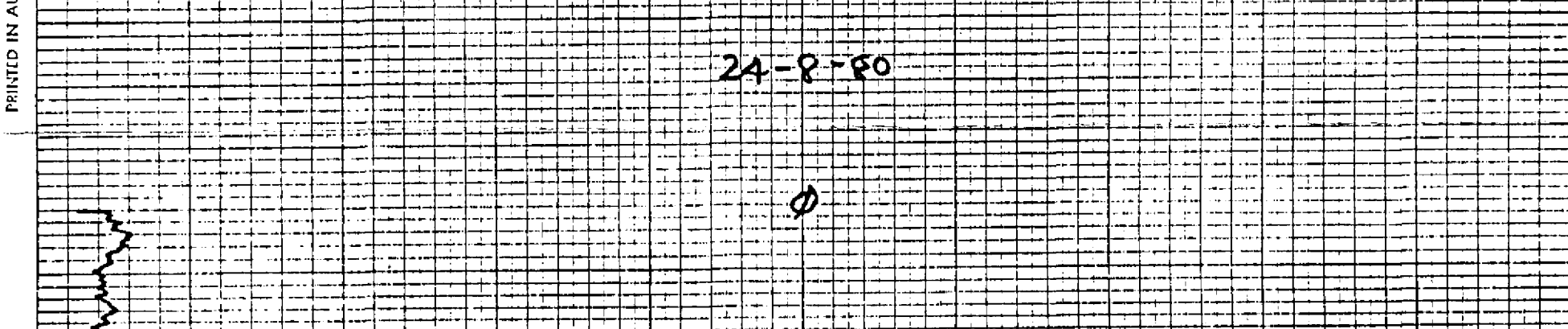
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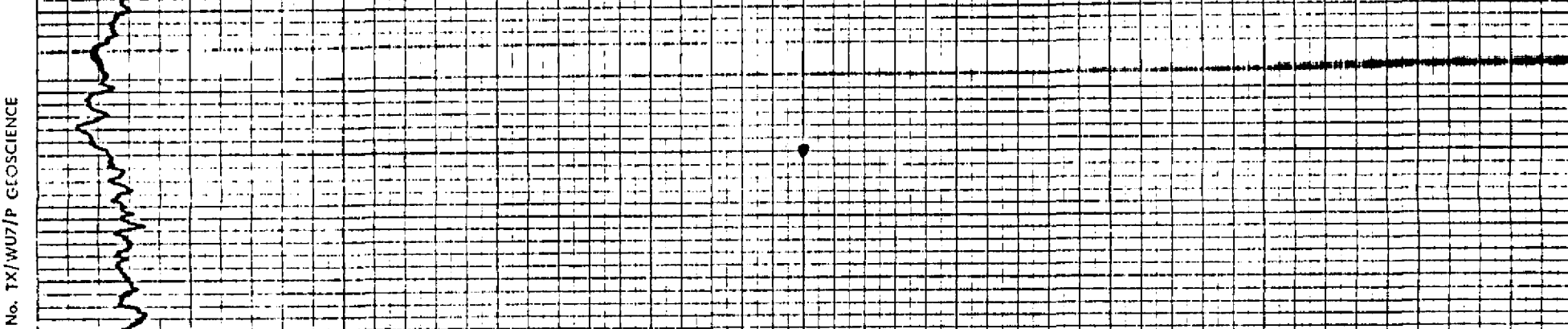
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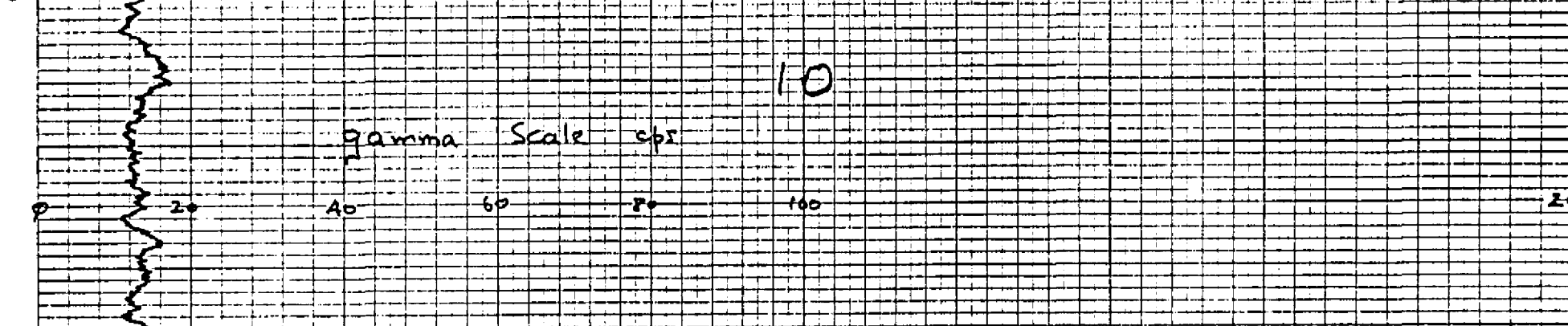
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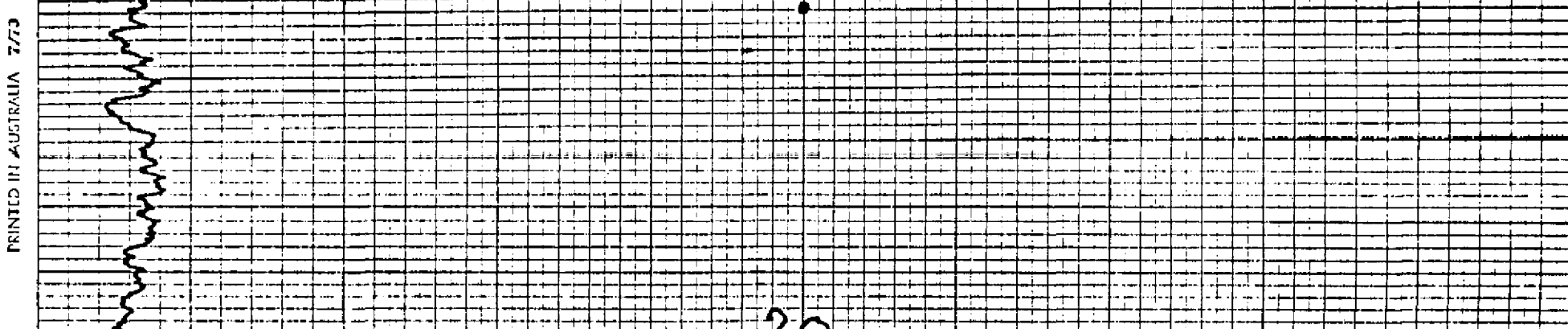
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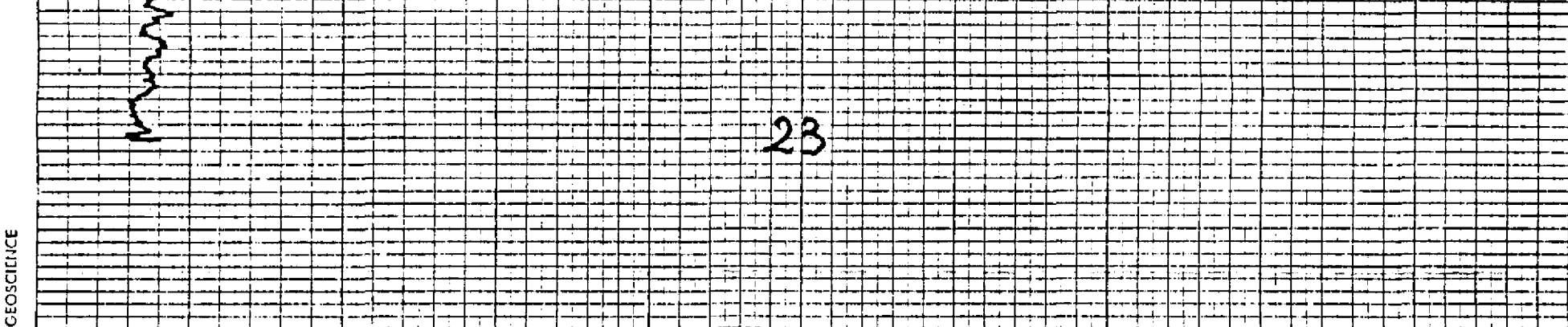
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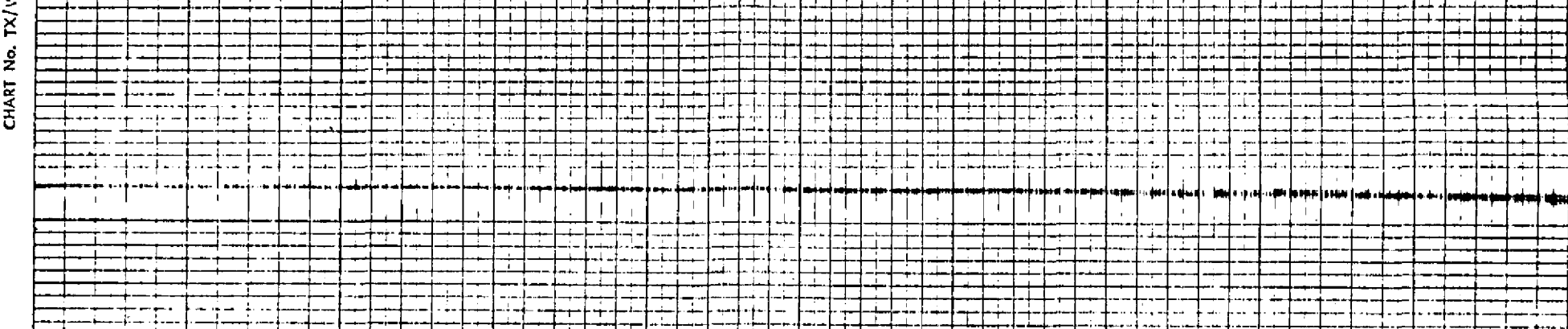
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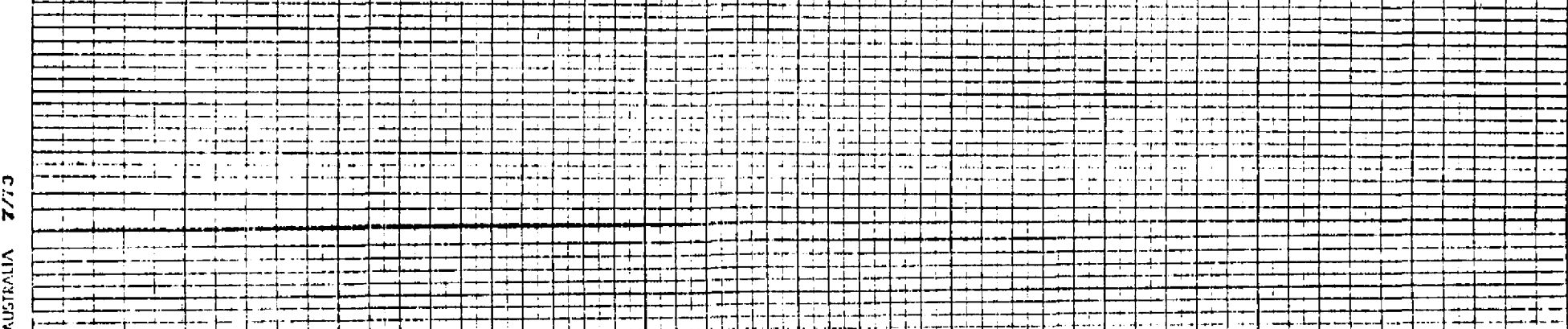
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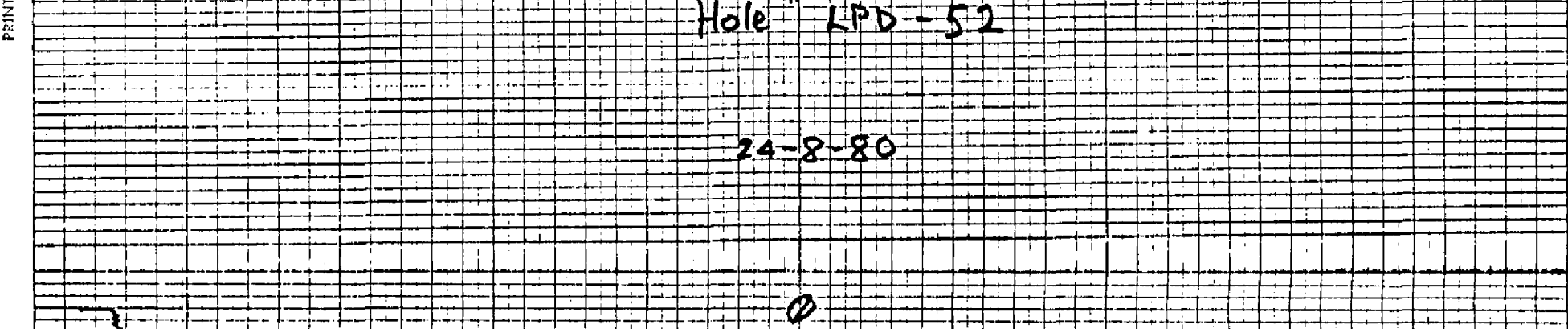
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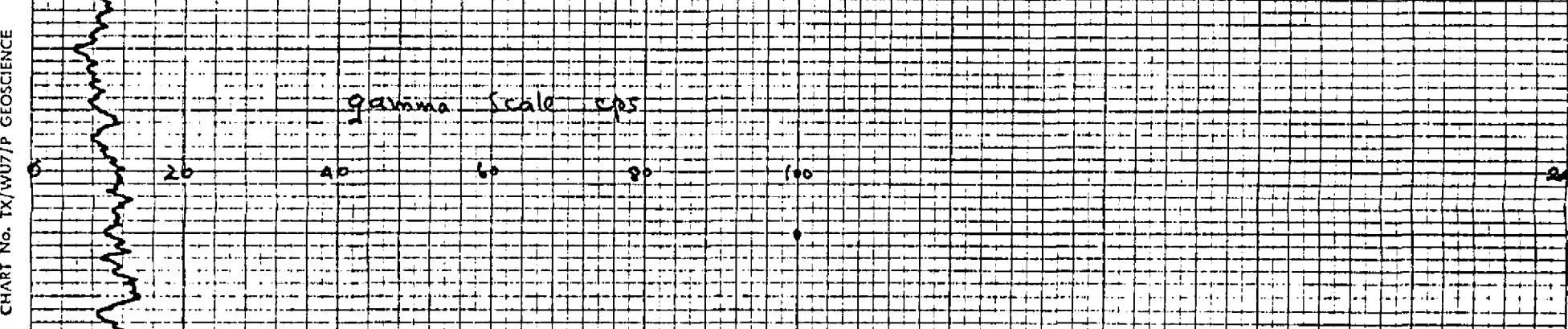
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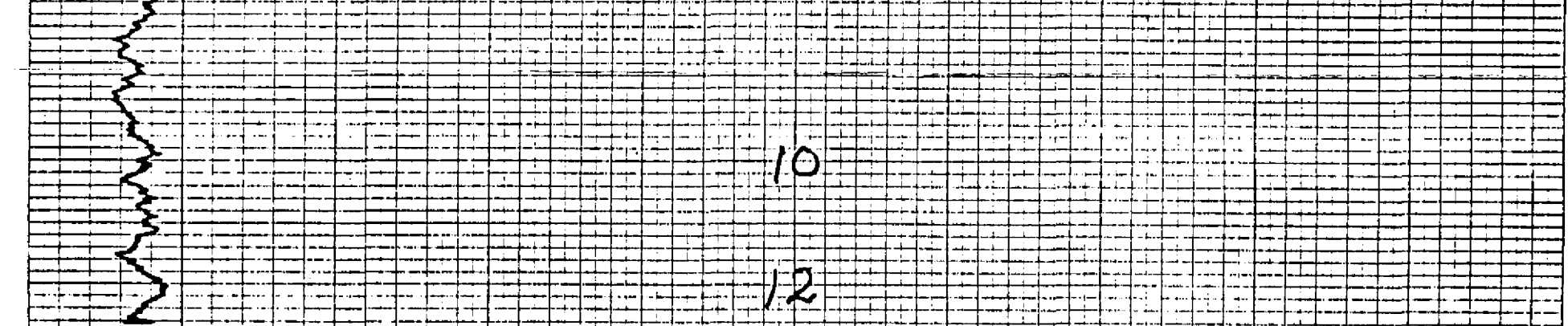
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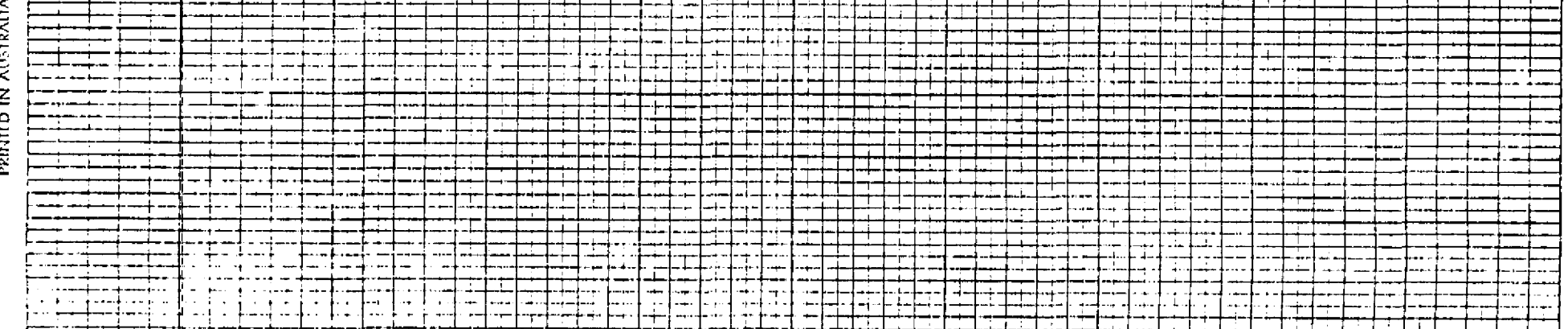
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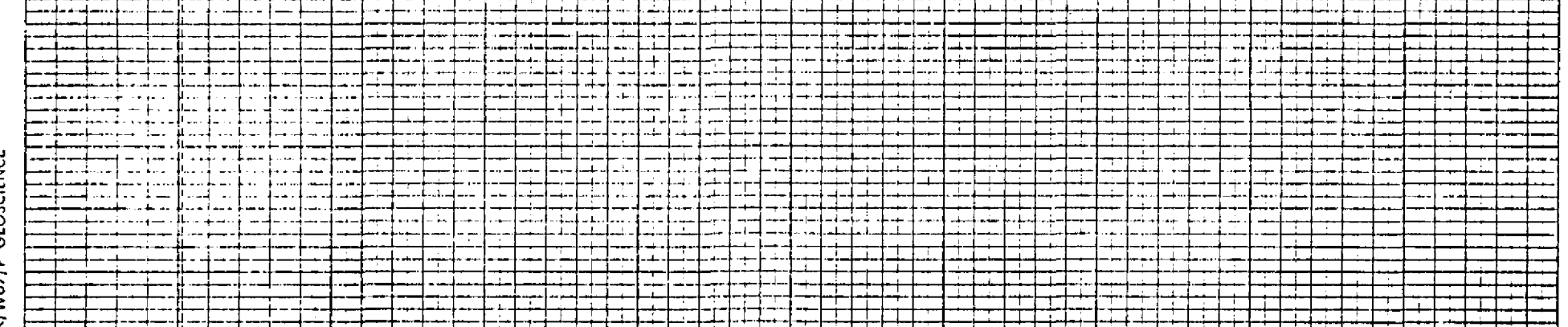
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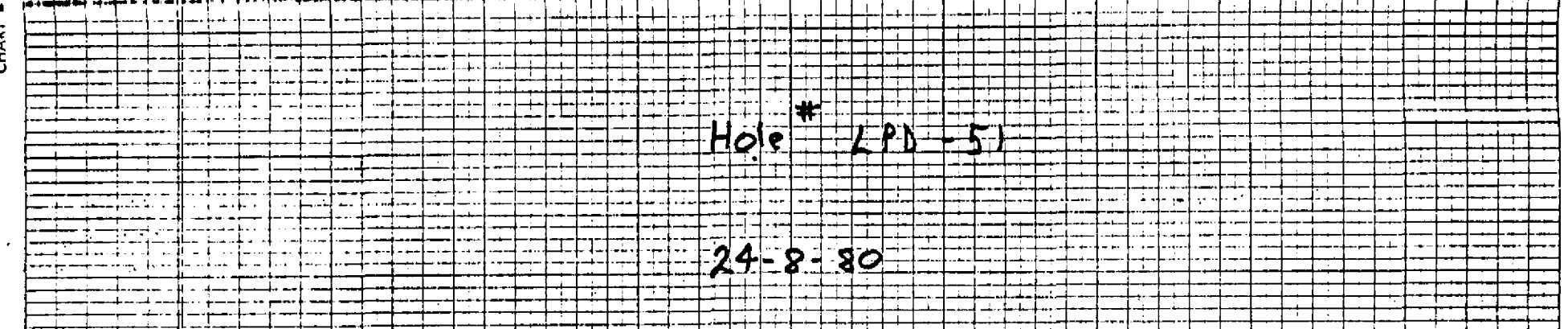
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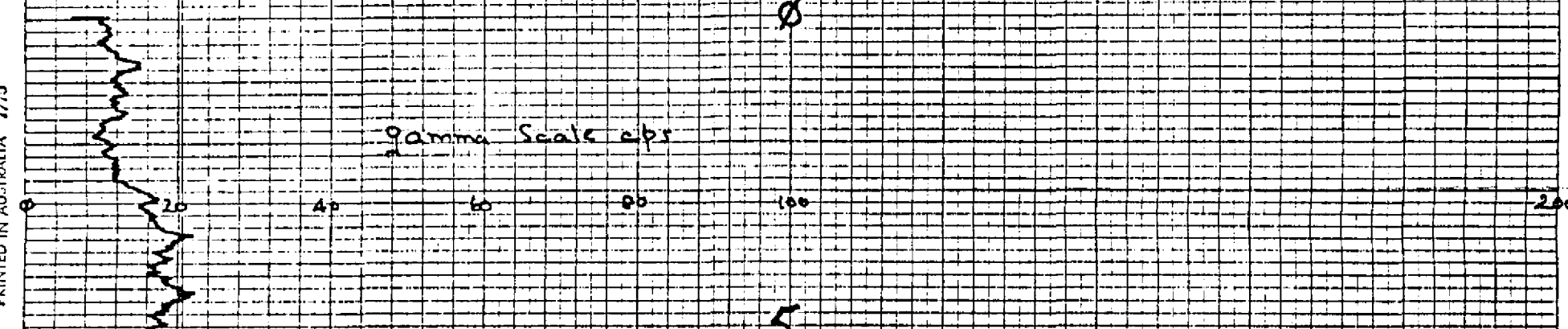
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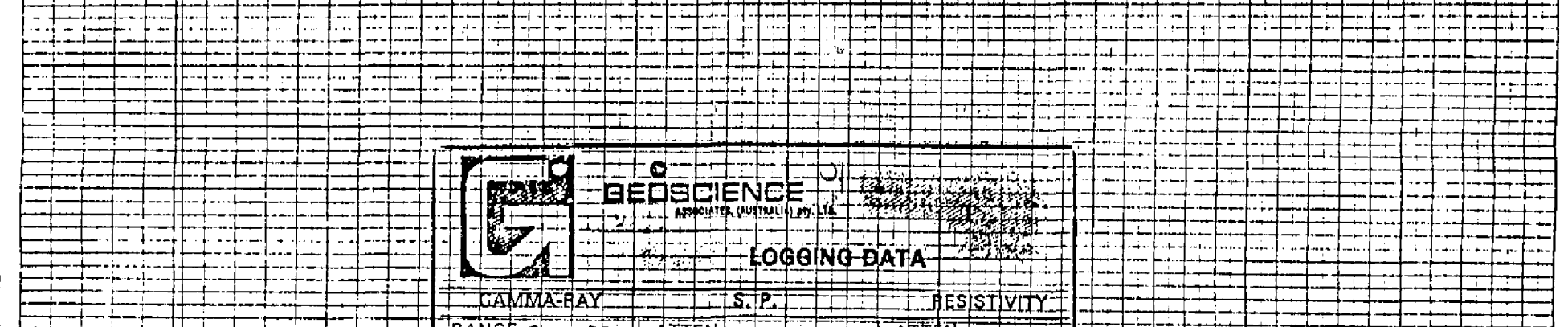
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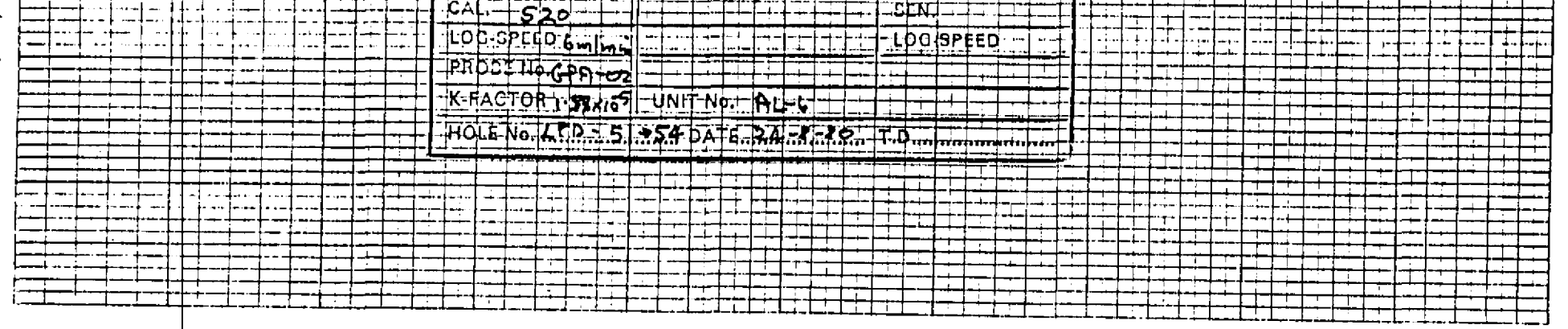
7/73



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GEOSCIENCE		LOGGING DATA	
GAMMA-RAY		S.P.	
RANGE 200cps	ATTEN.	ATTEN.	
T.G. 5" x 10"	LOG-SPEED	BIAS	
CAL. 520		DEN.	
LOG-SPEED 6 m/min		LOG-SPEED	
PROBE G.P.A-02			
K-FACTOR 1.57 x 10 ⁻⁶	UNIT No. AL-6		
HOLE No. LPD-51	DATE 24-8-80	T.D.	



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P.O. Box 339
Kilburn, S.A. 5009
Phone: 268 2898

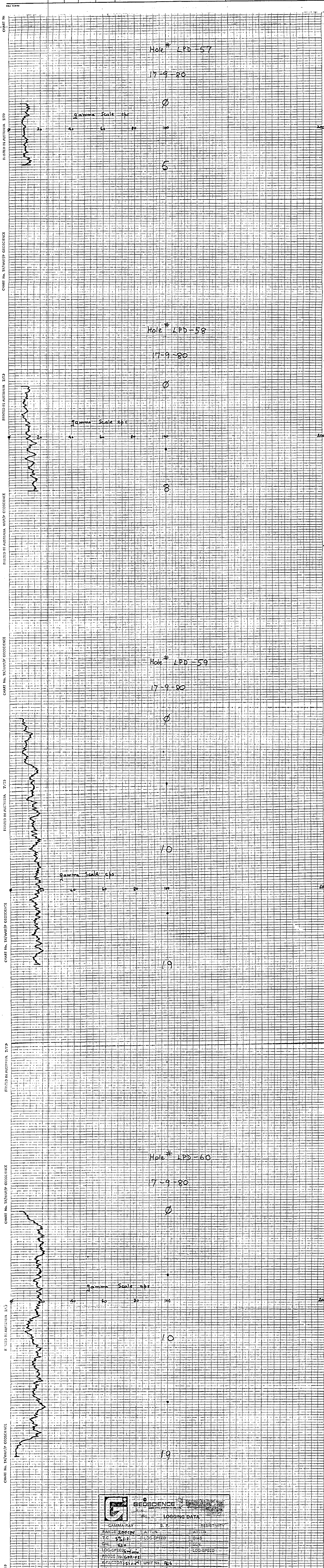
HOLE # LPD 57, 58, 59, 60

(LPD 56 caved at 2.8m)

LOGGING DATA

DATE 17-9-80

LOCATION		HOLE NUMBER:		CLIENT: Mobil Energy Minerals	
State: <u>NORTHERN TERRITORY</u>		Collar elev.:		Claim:	
Area: <u>DALY RIVER</u>		Depth drilled:		Owned by:	
Project: <u>SUTTONS</u>		CASING DATA		HOLE DATA	
Prospect: <u>LITCHFIELD</u>		Wall size in.		Dia. 4 1/2 from 0 to 7.5	
Lat: 0 " " Long 0 " "		Dia. (inside) in.		Dia. from to	
GAMMA RAY		Cased from to mtrs		Dia. from to	
INITIAL RUN		Cored hole ☐		Non-cored hole ☒	
Logged depth (ft.)		Sampled Interval		Type	
Range (Full scale) c.p.s.		1 m		per section	
Time constant (sec.)		Resist. scale		S.P. scale	
Paper speed cm/m		S.P. scale		S.P. scale	
Logging speed m/min		Probe No.		INTERPRETATION DATA	
Bgnd count (cps)		Standard		(cps) K factor	
Probe No.		GPA-02		A-22	
Size (dia.) (in.)		1.57 x 10^-5		Probe size in	
Type		REMARKS		Type	
Standard		Fluid Level		Bias	
Dead time		metres		CALIPER	
Amp. Gain		Logged depth		Scale	
Rate meter No.		Scale		Paper Speed	
Bore hole medium		Paper Speed		Logging speed	
Mud density		Logging speed		Arm Length	
Digital readout		Arm Length		Max. Def.	
Time base		Max. Def.			
Upper Disc.					
Lower Disc.					

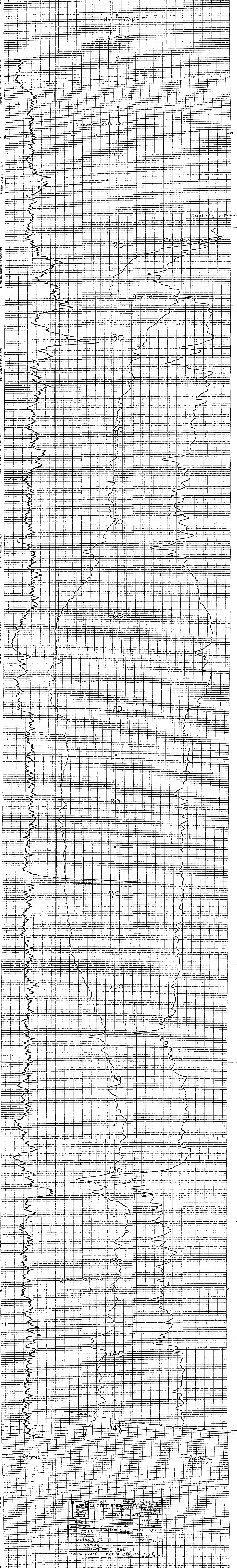


GEOSCIENCE		LOGGING DATA	
GAMMA RAY	S. P.	RESISTIVITY	
RANGE 200 cps	AT 1 m	AT 1 m	
LOG SPEED	LOG SPEED	LOG SPEED	
LOG SPEED	LOG SPEED	LOG SPEED	
PROBE No: GPA-02	UNIT No. 0-1		
REACTOR: 57.2 x 10^-5	DATE 17-9-80		
HOLE No.			

LOGGING DATA

DATE 31-7-80

LOCATION				HOLE NUMBER: LDD-5				CLIENT: Mobil Energy Minerals				
State: NORTHERN TERRITORY				Collar elev. _____ metres				Claim: _____				
Area: DALY RIVER				Depth drilled: 150 metres				Owned by: _____				
Project: SUTTON				CASING DATA				HOLE DATA				
Prospect: LITCHFIELD				Wall size in. Dia. 1/2 from 0 to 3				Operated by: _____				
Lat: 0 " " Long 0 " "				Dia. (inside) in. Dia. 1/2 from 3 to 7.2				Unit Operator: BLICHFELDT				
				Cased from to mtrs				Unit No. AL-6 Office: ADELAIDE				
GAMMA RAY								ELECTRIC				
Logged depth (ft.)	100-5	2	3	4	Cored hole ☒	Non-cored hole ☐	Logged depth	100-5	100-5	2	3	4
Range (Full scale) cps	200				Sampled interval	Type	Resist. scale	100-5	100-5			
Time constant (sec)	200				continuous	diamond	S.P. scale					
Paper speed cm/min	1						Paper speed	100-5	100-5			
Logging speed m/min	1						Logging speed	100-5	100-5			
Background count (cps)	2						Probe size	100-5	100-5			
Probe No.	600-02						Type	100-5	100-5			
Size (dia.) (in.)	1.5						Bias	100-5	100-5			
Type	W-T						REMARKS					
Standard	1.5						Fluid Level					
Dead time	2.75						metres					
Amp. Gain	52.0						Logged depth					
Rate meter No.							Scale					
Bore hole medium							Paper Speed					
Mud density							Logging speed					
Digital readout	0.2						Arm Length					
Time base	sec						Max. Def.					
Upper Disc.												
Lower Disc.												



GEOSCIENCE			
LOGGING DATA			
GAMMA RAY	S.P.	RESISTIVITY	
RANGE 200-5	100-5	100-5	
TIME 200	100-5	100-5	
PROBE 600-02	100-5	100-5	
LOGGED 150	100-5	100-5	
UNIT NO. AL-6	100-5	100-5	
HOLE NO. LDD-5	100-5	100-5	
DATE 31-7-80	100-5	100-5	

LOGGING DATA

DATE 20-8-80

LOCATION				HOLE NUMBER: LDD-6				CLIENT: MOBILE ENERGY MINERALS			
State: NORTHERN TERRITORY				Collar elev. metres				Claim:			
Area: DALY RIVER				Depth drilled: 200m metres				Owned by:			
Project: SUTTONS				CASING DATA				HOLE DATA			
Prospect: LITCHFIELD				Well size in				Dia. H _a from 0 to 2.5			
Lat: 0 " Long 0 "				Dia. (inside) in				Dia. N _G from 2.5 to 7.5			
GAMMA RAY				Cased from 0 to 2.5 mtrs				Dia. from to			
INITIAL RUN				Cored hole ☒				Non-cored hole ☐			
Logged depth (ft) 197				Sampled interval				Type			
Range (Full scale) cps 200				Continuous				diamond			
Time constant (sec) 5.0				INTERPRETATION DATA				Logged depth			
Paper speed cm/min 1				Probe No. Standard				S.P. scale			
Logging speed m/min 6				GPA-02				Paper speed			
Bgnd count (cps) 3				4.18				Logging speed			
Probe No. GPA-02				1.57 x 10 ⁻⁵				Probe size in			
Size (dia.) (in) 40mm				REMARKS				Type			
Type NaI 1/2				Fluid Level metres				Bias			
Standard (cps) 4.18				logged through drill string				CALIPER			
Dead time 2.75				4 sec.				Scale 1/4 def.			
Amp. Gain 520								Paper Speed			
Rate meter No.								Logging speed			
Bore hole medium								Arm Length in.			
Mud density								Max. Def. in.			
Digital readout m 0.2											
Time base sec 1											
Upper Disc.											
Lower Disc.											

Hole # LDD-6
20-8-80

70

80

90

100

110

120

130

140

150

160

170

180

190

197

G. M. & C. RAY		S. P.		RESISTIVITY	
H. 197		200		197	
GPA-02		4.18		1.57 x 10 ⁻⁵	
LDD-02		40mm		1/2	
K-FAC 0.157		UNIT 197		AL-6	
HOLE No. LDD-6		DATE: 20-8-80		197m	