

MIM EXPLORATION PTY LTD

TECHNICAL REPORT

No. 2520

TITLE: EXPLORATION LICENCE No. 8078
"LYNOTT" , NORTHERN TERRITORY
SECOND ANNUAL REPORT
YEAR ENDED : 5TH JANUARY 1995

**ISSUING
DEPARTMENT:** EXPLORATION

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**INVESTIGATIONS
CONDUCTED BY:** MIM EXPLORATION STAFF

DATE: FEBRUARY 1995

CR95/225

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CONTENTS

- 1. INTRODUCTION AND SUMMARY**
- 2. LOCATION AND ACCESS**
- 3. TENURE**
- 4. GEOLOGY**
- 5. WORK PROGRAMME, 1994**
 - 5.1 Drilling**
 - 5.2 Geophysics**
 - 5.2.1 DHEM Survey - LYNW4**
 - 5.2.2 Teena/Reward Prospect**
 - 5.2.2.1 Promtem Moving Loop EM**
 - 5.2.2.2 Magnetics**
 - 5.2.3 TEM Transects - South of HYC**
 - 5.3 Geochemistry**
 - 5.3.1 Soil Geochemistry**
 - 5.3.2 Resampling Drill Holes**

APPENDICES

- Appendix 1:** Drill Logs
- Appendix 2:** Assay Results for Lynott West drilling
- Appendix 3:** Assay Results and sample locations for 1994 soil sampling

FIGURES

- FIG 1:** 41896 Location
- FIG 2:** 41897 Drillholes
- FIG 3:** 41908 DHEM Loop locations
- FIG 4:** 41906 DHEM Loop 2 Profiles
- FIG 5:** 41907 DHEM LYNW4 Profiles
- FIG 6:** 41909 SIROTEM Line 1 profile, in loop
- FIG 7:** 41910 SIROTEM Line 1 profile, outer loop
- FIG 8:** 41911 SIROTEM Line 2 profile, in loop
- FIG 9:** 41912 SIROTEM Line 2 profile, outer loop
- FIG 10:** 41913 SIROTEM Line 3 profile, in loop
- FIG 11:** 41914 SIROTEM Line 3 profile, outer loop
- FIG 12:** 41898 Bald Hills Fault area, soil sampling locations

LIST OF DRAWINGS

DRAWING NO.	TITLE	SCALE
41900	Reward/Teena Protom Moving Loop TEM Profiles Sheet 2 of 3*	1 : 5 000
41901	Reward/Teena Protom Moving Loop TEM Profiles Sheet 3 of 3*	1 : 5 000
41902	Reward/Teena Loop plan	1 : 25 000
41903	SIROTEM lines location	1 : 25 000
41667	Reward/Teena Ground Magnetics	1 : 5 000

* only 2 sheets

Ranga,

Please replace ~~the~~
page in '95 annual with
the attached.

CR 95/225

CE No. 8078 "LYNOTT"

UAL REPORT

1. INTRODUCTION AND SUMMARY

Exploration Licence No. 8078, "Lynott", is located in the northeastern part of the Northern Territory, forming a crescent shape around the west of McArthur River Mine. The Licence covers approximately 196 km². "Lynott" was granted to M.I.M. Exploration (MIMEX) for six years on the 5th of January, 1993.

This report documents the work carried out in the second year of tenure. The work carried out in the first year and a review of previous exploration is contained in Williams and Harvey (1994).

This year (5th January 1994 to 5th January 1995) MIMEX has carried out drilling (5 holes, 1236m), soil sampling (9.9 line km, 205 samples), SIROTEM, ground magnetics and downhole EM (1 hole).

No significant results were returned from any of the year's work and a 50% reduction was made at the end of the year.

2. LOCATION AND ACCESS

E.L. 8078, "Lynott" is located in the northeastern part of the Northern Territory, about 200 kilometres west of the Northern Territory - Queensland border and approximately 100 kilometres south of the Gulf of Carpentaria (Fig. 1). The Licence lies on the Batten (6065), Borroloola (6165), Mallapunya (6064) and Glyde (6164) 1:100 000 topographic maps.

Access to the Licence is via the Carpentaria Highway which passes through part of the tenement.

3. TENURE

Exploration Licence No. 8078 was granted on the 5th of January, 1993, for a term of six years, following the cancellation of the northern portion of Reserve from Occupation No. 581 (Authority No. 343). The area comprises 61 one minute graticular blocks, or 196.42 square kilometres. The N.T.D.M.E. expenditure commitment for the second year was \$200 000. There are no unusual conditions or requirements attached to the Licence.

At the end of the second year a 50% reduction in the licence area was carried by the relinquishment of 30 one minute blocks (Fig. 1). Work in the remaining area from 5th January 1995 to 5th January 1996 will be the subject of the next annual report.

4. GEOLOGY

Exploration Licence 8078, "Lynott", lies immediately adjacent to the Mine Leases of McArthur River Mine. A stratigraphic sequence of Proterozoic McArthur Group rocks occurs in the E.L. area which is similar to that which occurs in the mine leases. Most of the area is covered by recent N.T.D.M.E. mapping (Pietsch et al. 1991). The oldest rocks exposed are Mara Dolomite Member and the youngest are Donnegan Member (in the extreme northwest), with a full sequence in between. The E.L. falls between the major faults of the Emu to the east and the Tawallah to the west, with neither passing through the E.L.

5. WORK PROGRAMME, 1994

5.1 Drilling

Five drillholes were completed in the Lynott area during 1994 (Fig. 2). The drill logs and assays are given in Appendices 1 and 2.

Drill Hole Lynott West 1 R (LYNW1R)

This hole was a percussion hole to 60m in search of water, but was dry. The weathered siltstones intersected were considered to be part of the Reward Dolomite (Pmx). No base metal anomalism was encountered.

Drill Hole Lynott West 2 R (LYNW2R)

This hole was a percussion hole to 60m in search of water, but was dry. The weathered siltstones intersected were considered to be part of the Barney Creek Formation (Pmq). Moderate zinc values (up to 260 ppm) were encountered.

Drill Hole Lynott West 3D (LYNW3)

Lynott West No. 3 D (LYNW3) collared in Caranbirini Member and was drilled to 396.5m through Reward, HYC Pyritic Shales, W-Fold Shale and Teena Dolomite. The HYC Shales were 25m thick and weakly to moderately pyritic. No base metal minerals were observed in this zone but sphalerite was recorded at five other depths (in metres):

288.36 - 288.76	Minor disseminated light brown sphalerite in dark grey siltstone over 4 cm.
311.85	Minor light brown sphalerite in 10mm long thin extension veins with pyrite.
348.65	Minor disseminated brown sphalerite as matrix infill.
353.27 - 353.32	5 mm interval with 1% matrix sphalerite.
353.4 - 353.6	2 cm interval of dark grey siltstone with 5-10% sphalerite at top of bed.

Assay sampling of the percussion interval (0-102m) and of diamond drill core (selected intervals mostly between 316 and 346m) showed low levels of copper, lead and zinc. Iron averaged between 2 and 4 % from 316 to 345m. One sample showed 610ppm zinc (338.5 - 340m), confirming the presence of rare minor sphalerite.

Drill Hole Lynott West 4D (LYNW4)

Lynott West No. 4 D (LYNW4)) collared in Caranbirini Member and was drilled to 344.3m through Reward, Barney Creek Formation and into Teena Dolomite. Minor sphalerite was recorded in many places in the hole (in metres):

148.3 - 148.46	rare to minor 1-2mm blebs of light brown to yellow sphalerite
160.36 - 172.0	rare <1mm disseminated blebs
176.51 - 176.66	as above.
176.66 - 184.44	common light brown blebs of sphalerite predominantly fracture associated
193.5	occasional light brown sphalerite blebs
194.7	occasional 2-3mm blebs in a 20mm x 10mm cluster
307.83	rare to minor sphalerite associated with discontinuous, thin bedding parallel pods

Sampling showed anomalous zinc from 180m: 4m @ 805ppm.

Drill Hole Lynott West 5D (LYNW5)

Lynott West No.5 D (LYNW5) collared in Hot Spring Member and was drilled to 375m through Caranbirini, Reward and into Teena Dolomite. No Barney Creek Formation was identified. Minor sphalerite was recorded in many places in the hole (in metres):

158.36-173.15	rare disseminated fine grained sphalerite throughout
188.5 - 213.66	occasional to rare light brown sphalerite in dolomite veins
226.85 - 239.4	rare minute blebs
250.55 - 260.54	rare minute blebs
261.8 - 294	minor (to .5%) minute light brown sphalerite in outer parts of dolomite veins
336.2 - 337.33	common fine light brown sphalerite in dolomite veins
338.2 - 355	rare fine grained sphalerite throughout.

Sampling showed anomalous base metals at 336m - 4090ppm zinc and 1400 ppm lead and at 164m - 940 ppm zinc and 170ppm lead.

5.2 GEOPHYSICS

5.2.1 DHEM Survey - LYNW4

Down Hole EM data was acquired down LYNW4 in September 1994. The survey parameters are provided below:

Contractor:	Solo Geophysics Pty. Ltd.
EM System:	Sirotem Mk III
Time Series:	Early Times
TX loops:	2 400x400m loops (refer to Fig. 3 for loop layout)
Sampling Delay	0 µs
Channels	1
Stacks	256
Gain:	1

Log - linear profiles for both loops of data are presented in Figs. 4 and 5 respectively. No significant off hole conductors are interpreted.

5.2.2 Teena/Reward Prospect

5.2.2.1 Protem Moving Loop EM

The Teena/Reward prospect lies approximately 1 km east of Reward and 10 km west of HYC.

In September of 1994 a moving loop survey was undertaken, with the aim of mapping pyritic stratigraphy and delineating structure (refer to Drawing No. 41902 for location and loop plan). Geoterrex Pty. Ltd. were contracted to carry out the survey, using the Geonics Protom EM system. The survey parameters are listed below:

Frequency:	25 Hz
Loop Size:	200x200m
Receiver Positions:	One in loop and two out of loop readings (Out of loop readings were taken 100 m north and south of the loop edges).
Integration Time:	2048 cycles
TX Current:	~16.3 A

Linear profiles for the in-loop readings are presented in Drawing Nos. 41900 and 41901. No localised conductivity anomalies are interpreted in the data. Generally an increase in surface conductivity is noted going from south to north.

5.2.2.2 Magnetics

Ground magnetic data was also acquired on the same grid as the TEM data. Two GEM Overhauser magnetometers were used for the survey, one for the acquisition of field data and the other to monitor diurnal variations. A diurnal correction has been applied to the field data.

Drawing No. 41667 contains a grid presentation of the data with profiles overlayed. Short wavelength or high frequency anomalies, indicative of near surface, magnetic sources dominate the response. Higher amplitude anomalies in the order of 10-20 nT occur on the western and eastern extremities of the grid, whereas the central portion of the grid is relatively flat. The higher amplitude anomalies are interpreted to be due to the increased abundance of Proterozoic outcrop, containing weakly pyritic shales and dolomites, the weathering products of which would explain the magnetic response. The magnetically flat zone encompasses an area predominantly covered by sand.

5.2.3 TEM Transects - South of HYC

Three transects of moving loop EM data were acquired south of HYC to broadly evaluate a large area covered, almost entirely, by black soil (refer to Drawing No. 41903).

The survey parameters were as follows:

Contractor:	Solo Geophysics Pty. Ltd.
EM System:	Sirotem Mk III
Time Series:	Early Times
Stacks:	128
Windows:	1-32
Tx Loop Size:	200x200m
Gains:	.1, 1 and 10

Two readings were acquired per loop, one in the centre of the loop and the other 100m outside the leading loop edge (refer to digital data). For each station six readings were taken - 2 at each gain.

Figures 6-11 contain log linear profiles of the in and out of loop readings for each of the three lines. All three lines have strong responses emanating from the conductive black soil cover. The effect of the black soil can be best seen on line 3, where a sharp change in near surface conductivity is noted between the western half of the line where black soil is dominant and the eastern half where the line passes over Mara Dolomite. The negative anomaly at approximately 1000E is interpreted to be the result of a strong 'IP effect' in the data, believed to be due to chargeable material in the near surface.

No bedrock conductivity anomalies have been interpreted in the data.

5.3 GEOCHEMISTRY

5.3.1 Soil Geochemistry

Soil sampling on Lynott in 1994 was carried out on 7 lines in the Bald Hills Fault area (Fig. 12):

EASTING	MIN NORTHING	MAX NORTHING
146800	181800	183300
147100	181800	183300
147300	181800	183300
147700	182000	183300
147900	182000	183300
148200	182000	183300
148400	182000	183500

Samples were taken at 50m along the lines and sieved to -80#. In all, there were 205 soil samples , with values generally low. Thresholds can be calculated for copper, lead and zinc by calculating the mean, and adding twice the standard deviation. These values are copper - 9 ppm, lead - 132 ppm and zinc - 109 ppm. All assays and locations are listed in Appendix 3.

Copper

All samples returned insignificant values of 12 ppm or less.

Lead

Only one lead value exceeded the threshold. This spot anomaly of 810 ppm is located near the boundary of the E.L with the McArthur Mineral Lease (Wicken's Hill).

Zinc

Several higher zinc values were returned from the southwest of the area. The maximum value is still only 240 ppm.

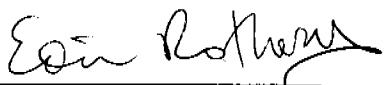
5.3.2 Resampling Drill Holes

Three samples were collected by M. McGeough and analysed from a fault zone in drillhole Teena No. 8.

From	To	Sample	Cu	Pb	Zn	Fe	Mn	Ag	As
565.8	568.3	QP111446	68	730	4140	8.78	580	1.3	280
Black carbonaceous fractured fault zone									
568.3	570.15	QP111447	60	1010	4410	10.9	550	1.1	260
Central part of fault, also black and carbonaceous									
570.15	572.4	QP111448	56	720	4700	9.98	540	1.2	280
Edge of fault and wall rock siltstones									

The analyses were carried out by Amdel (Job. No. 4DN1757) by atomic absorption and all values are in parts per million except for iron which is in percent.

All samples show similar and anomalous levels of copper (up to 68 ppm), lead (up to 1010 ppm), zinc (up to 4700 ppm) and iron (up to 10.9%).



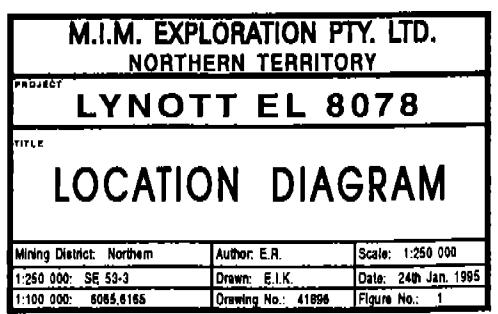
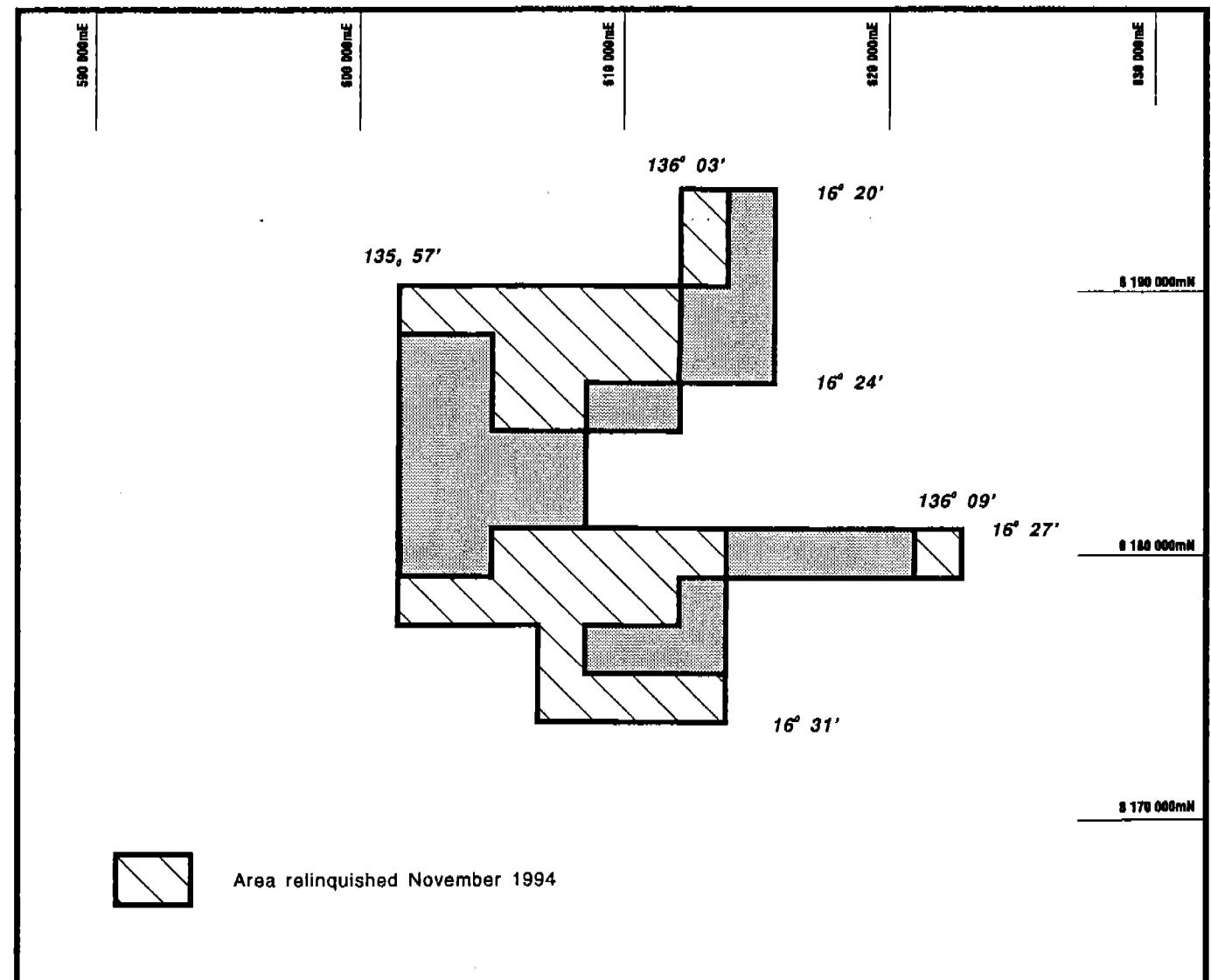
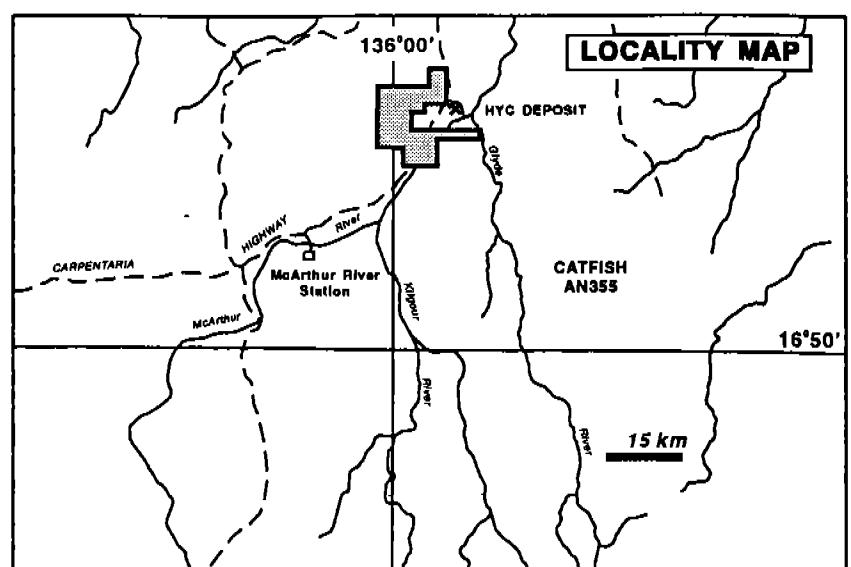
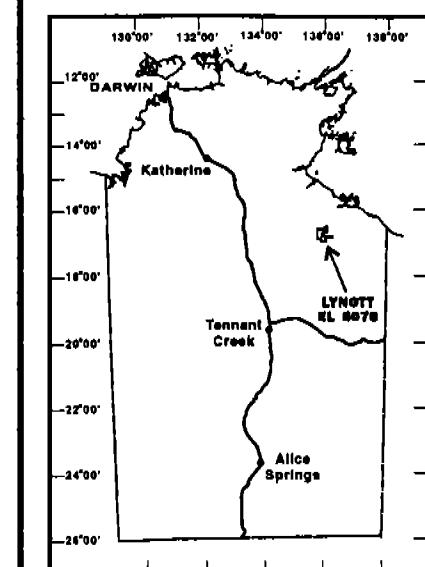
Eoin Rothery
Senior Geologist - Northern Territory

7. REFERENCES

Pietsch, B.A., Wyche, S., Rawlings, D.J., Creaser, P.M. and Findhammer, T.L.R. 1991. 1:100 000 Geological Map Series explanatory notes, McArthur River Region. Northern Territory Geological Survey.

Williams, M.T., and Harvey, T.V. 1994. Exploration Licence No. 8078, "Lynott", Northern Territory, First Annual Report, year ended 5th January, 1994.

APPENDICES



0 2 4 6 8 10km
Scale 1:250 000

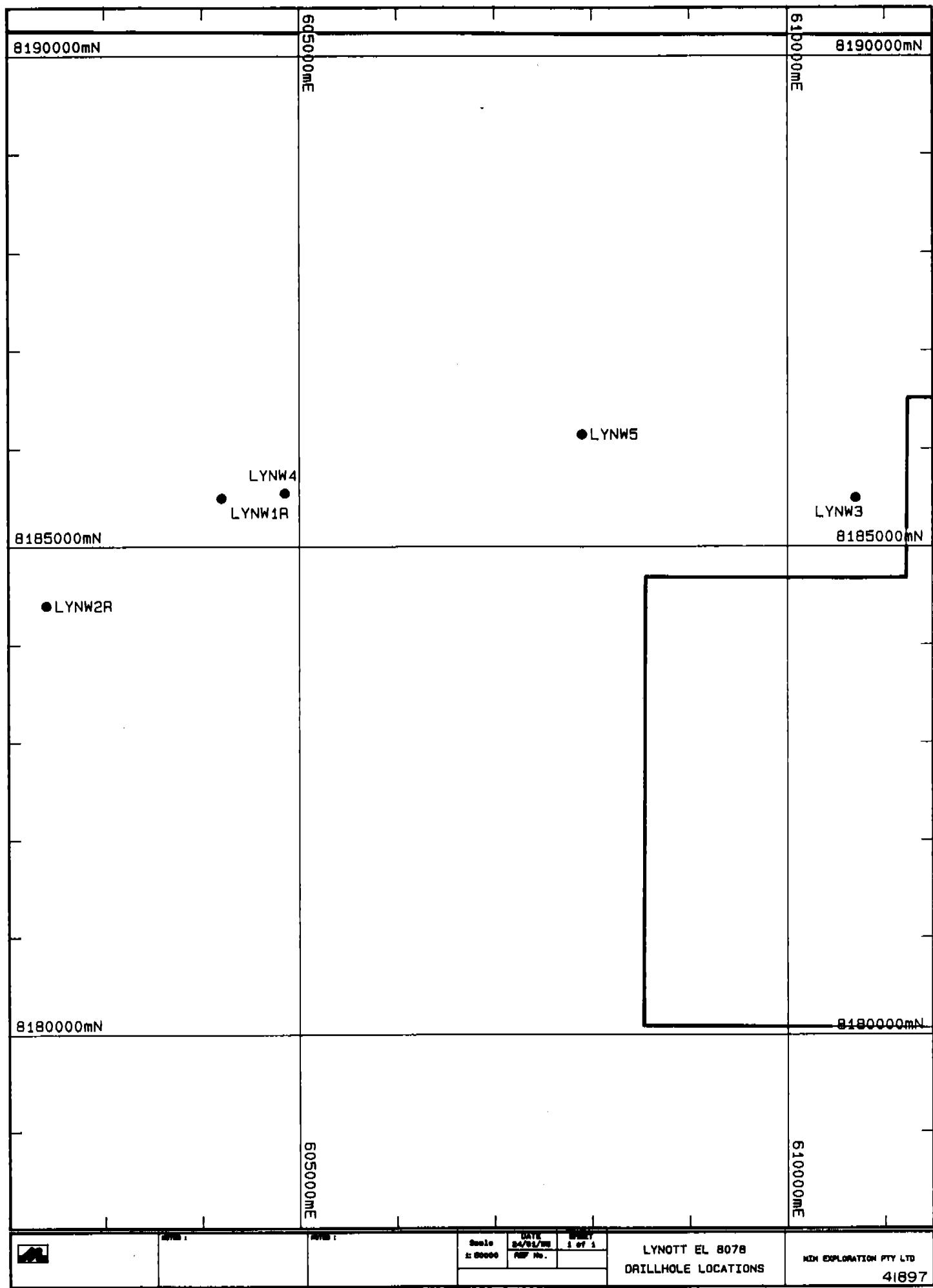
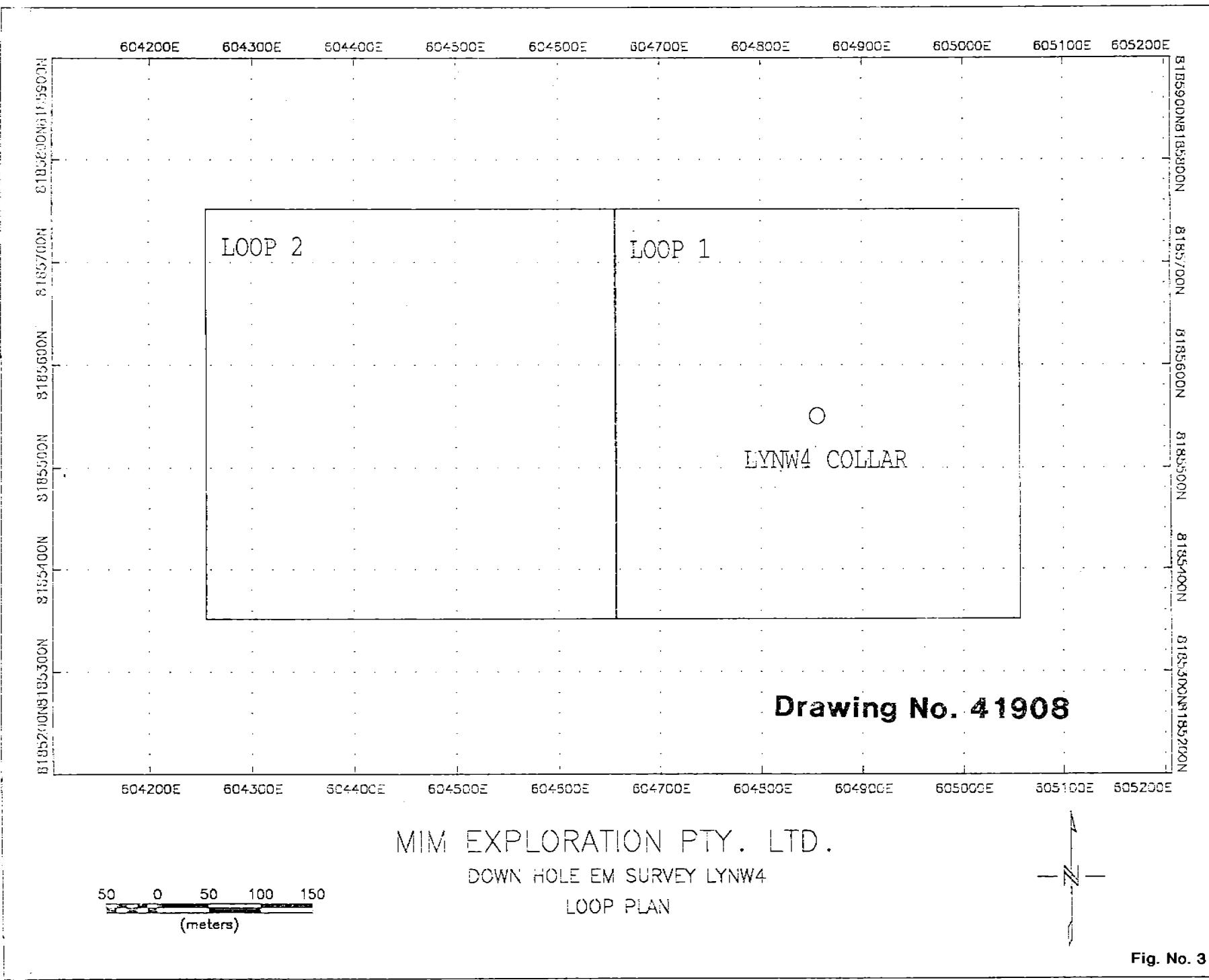
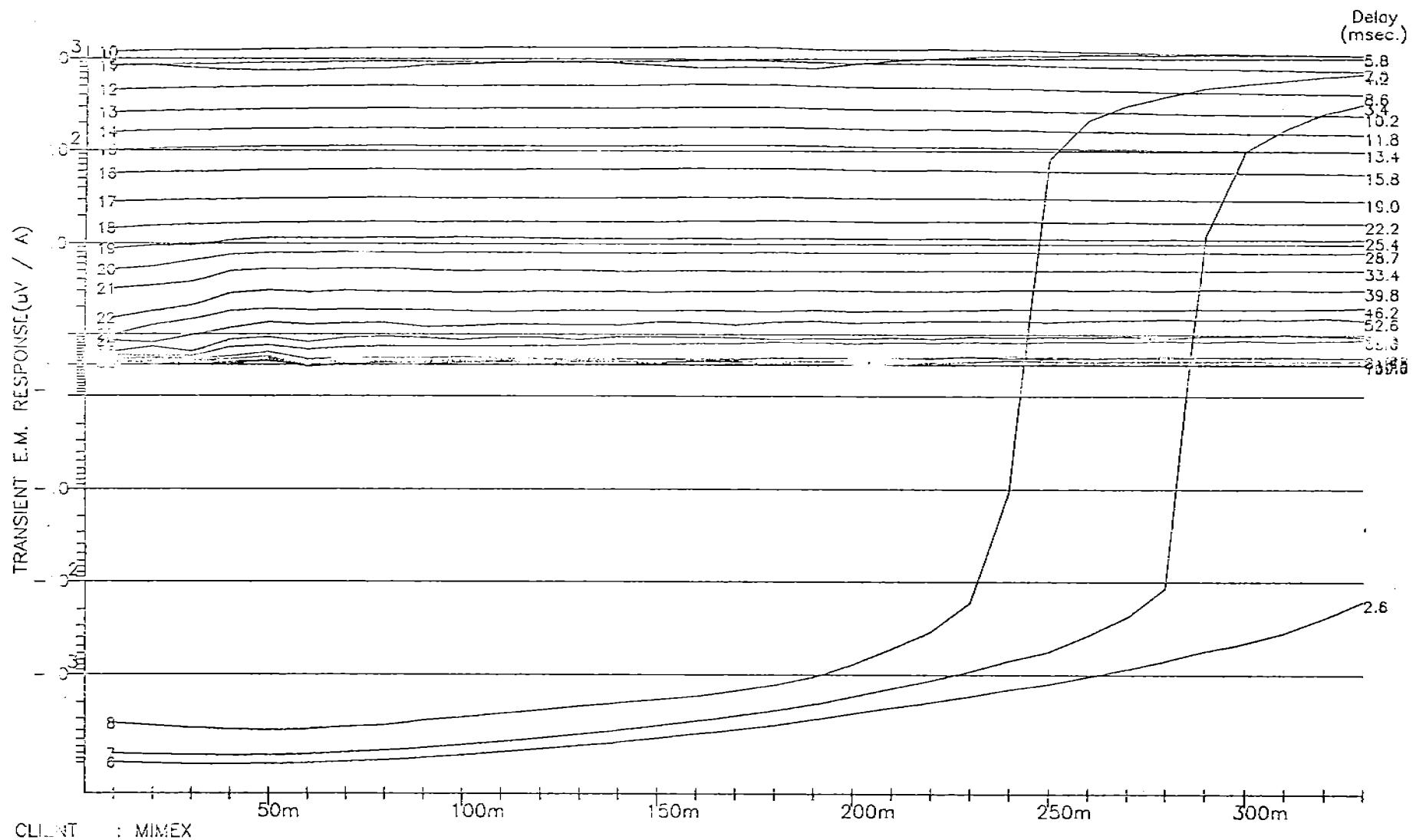


FIG. 2





CLIENT : MIMEX

AREA : MCARTHUR RIVER

GRID : LYNOTT

HOLE REF : LW4 LOOP2

SCALE 1 : 1500

SIRITEM UNIT : MARK III --- S/N 1955 --- EARLY TIMES

LOOP CONFIGURATION : Down Hole logging

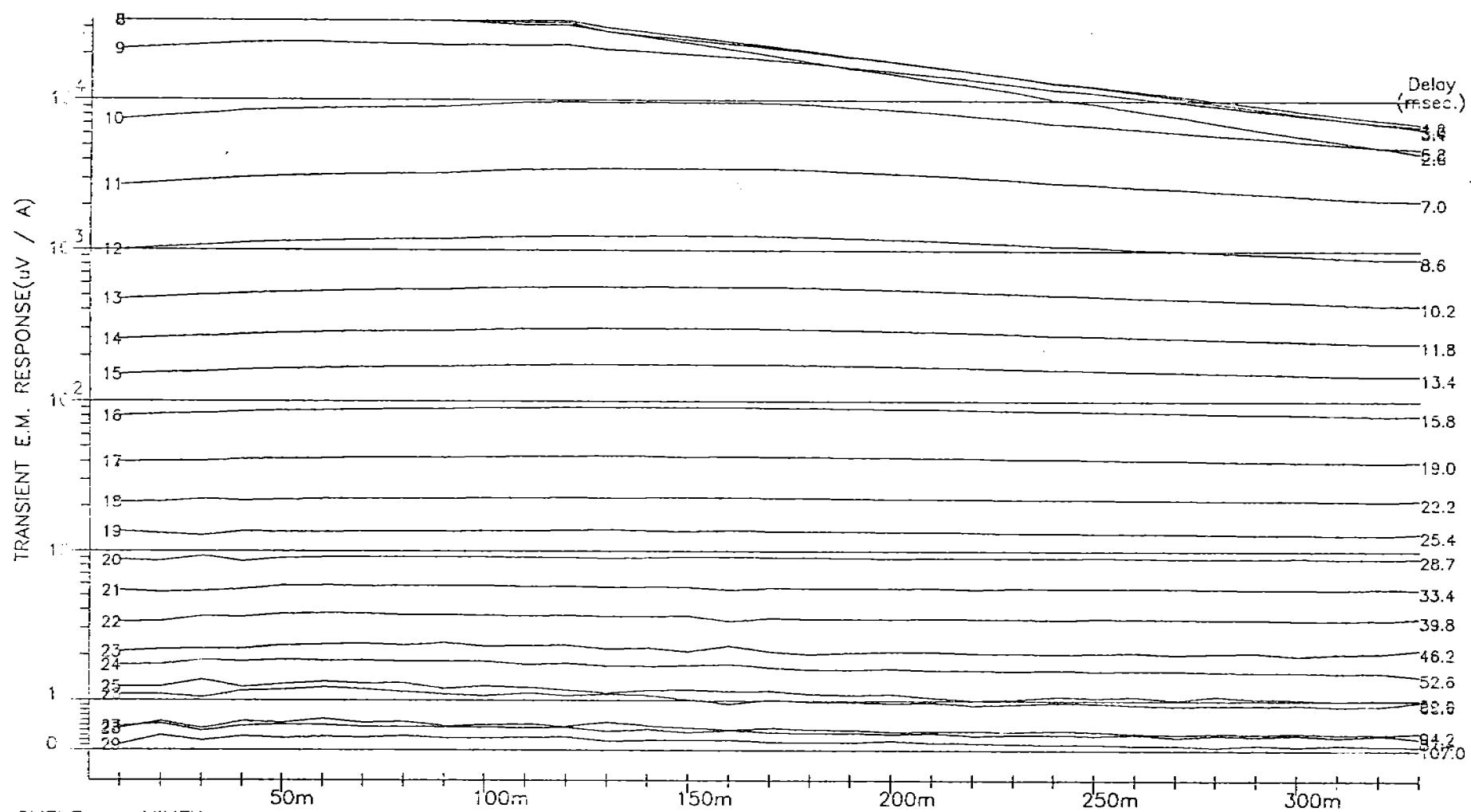
LOOP CORNERS : 400m x 400m

CHANNELS PLOTTED : 6 - 32 STACKS : 256 CURRENT : 16.0 amps

SIRITEM Survey by SOLO GEOPHYSICS & CO. --- G9-30-94

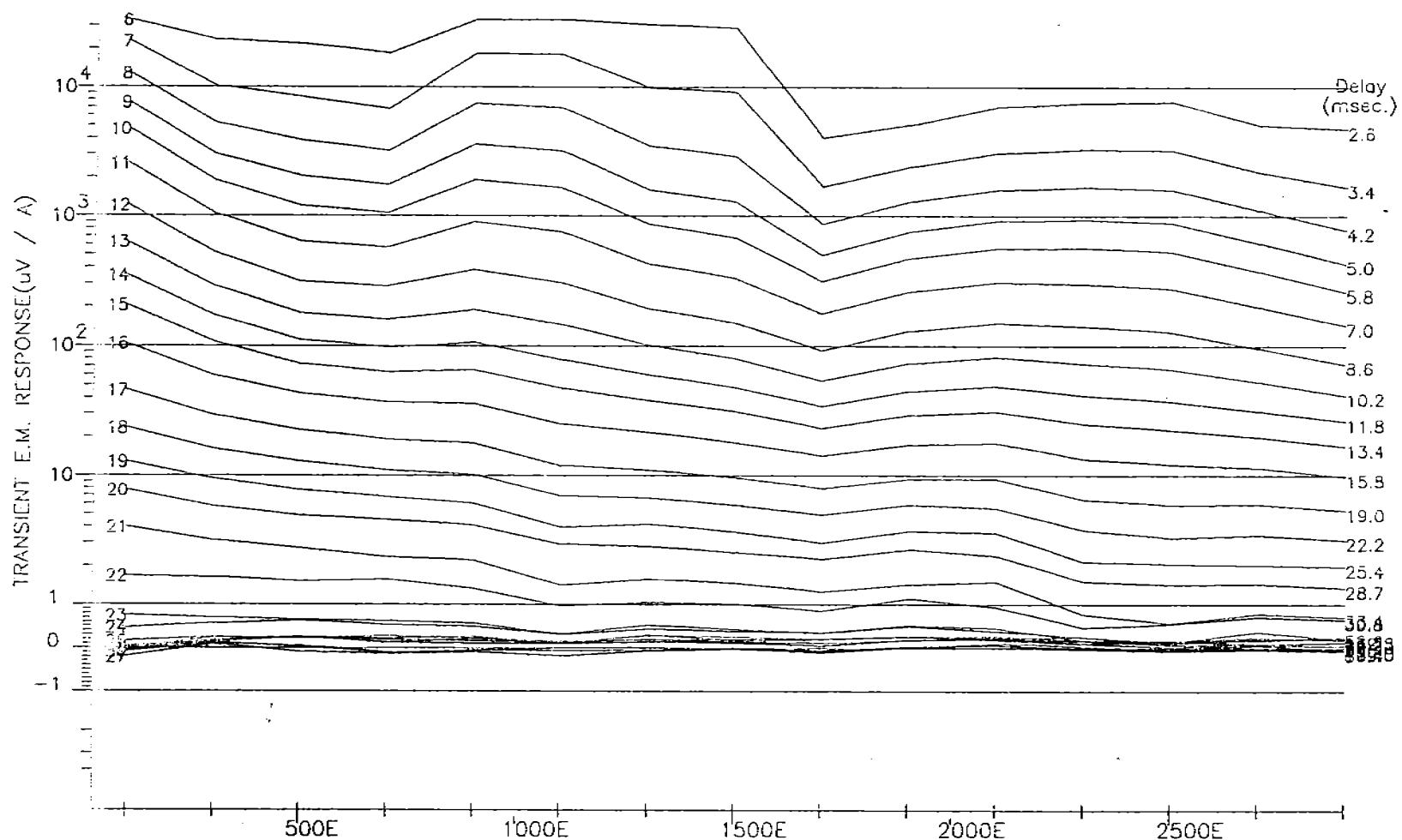
Drawing No. 41906

Fig. No. 4



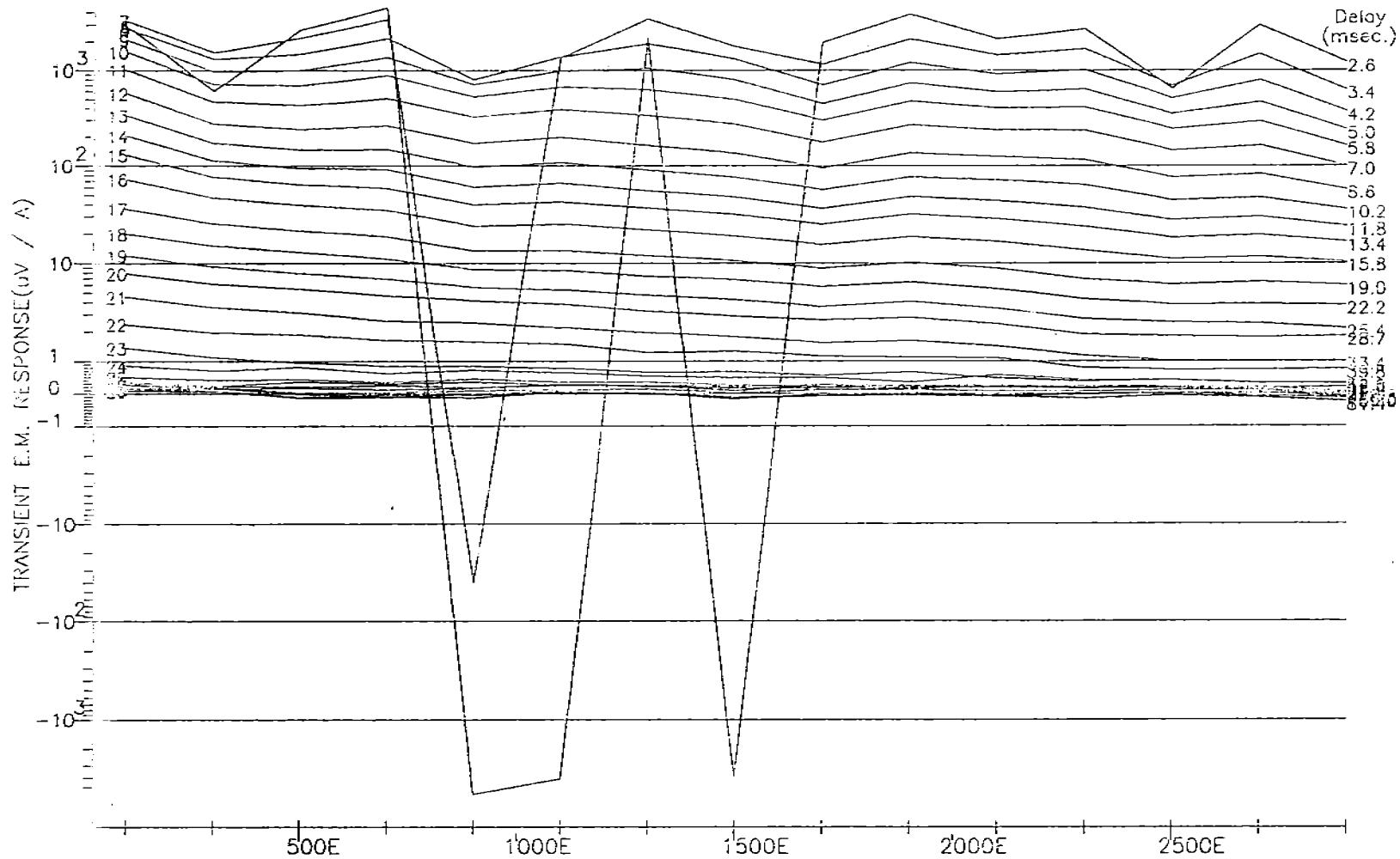
Drawing No. 41907

Fig. No. 5



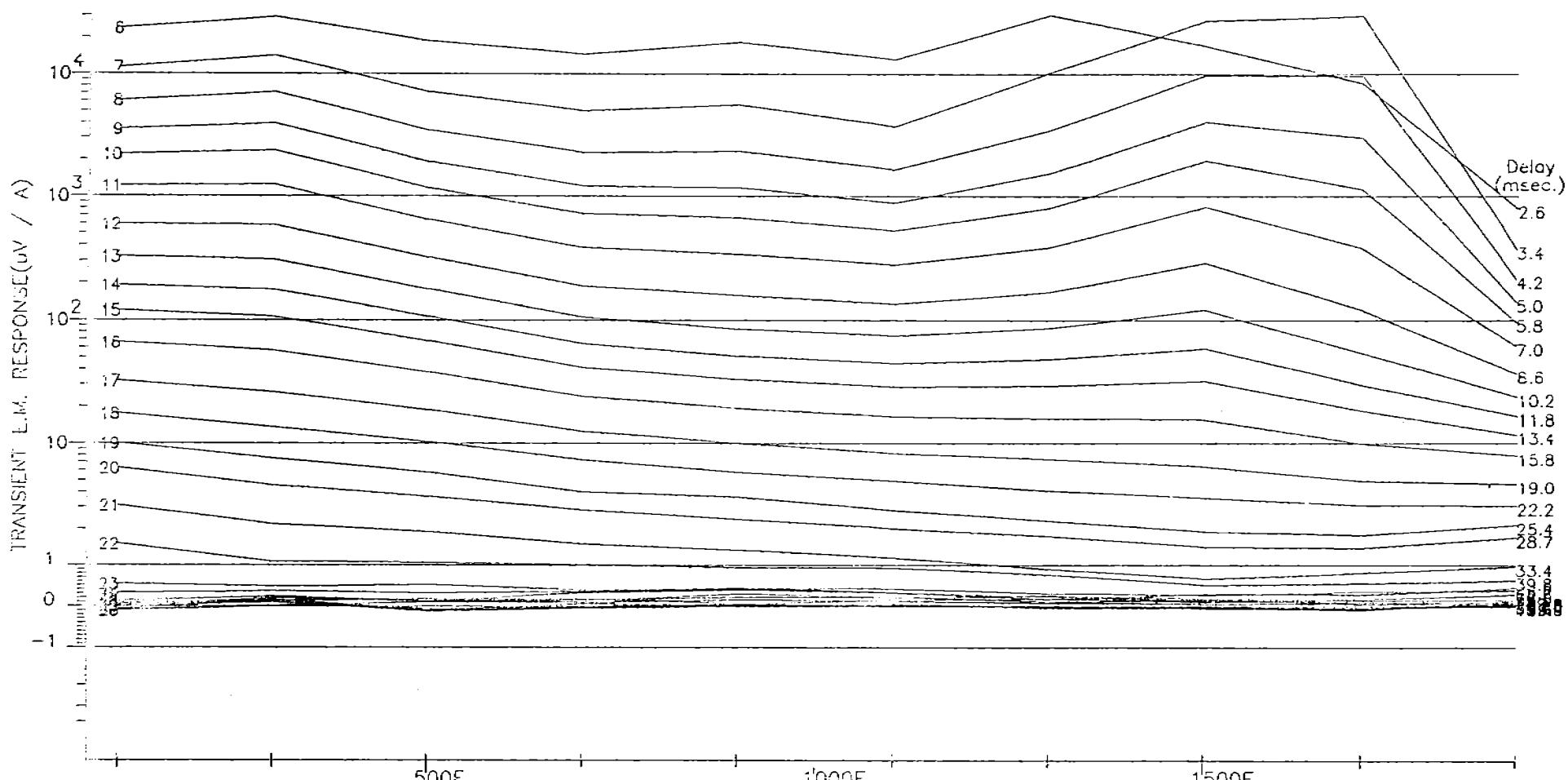
CLIENT : MIMEX
 AREA : MCARTHUR RIVER
 GRID : HYC SOUTH
 LINE REF : LINE 1 In loop reading
 SCALE 1 : 15000
 SIROTEM UNIT : MARK III --- S/N 1955 --- EARLY TIMES
 LOOP CONFIGURATION : In-loop receiver
 LOOP SIZE : 200m x 200m
 CHANNELS PLOTTED : 6 - 32 STACKS : 128 CURRENT : 16.0 amps
 SIROTEM Survey by SOLO GEOPHYSICS & CO. --- 10-02-94

MIM EXPLORATION PTY LTD LYNOTT EL 8078 LOG LINEAR PROFILES SIROTEM MK3 LINE 1 in loop reading	
Dwg. No. 41909	Fig. No. 6



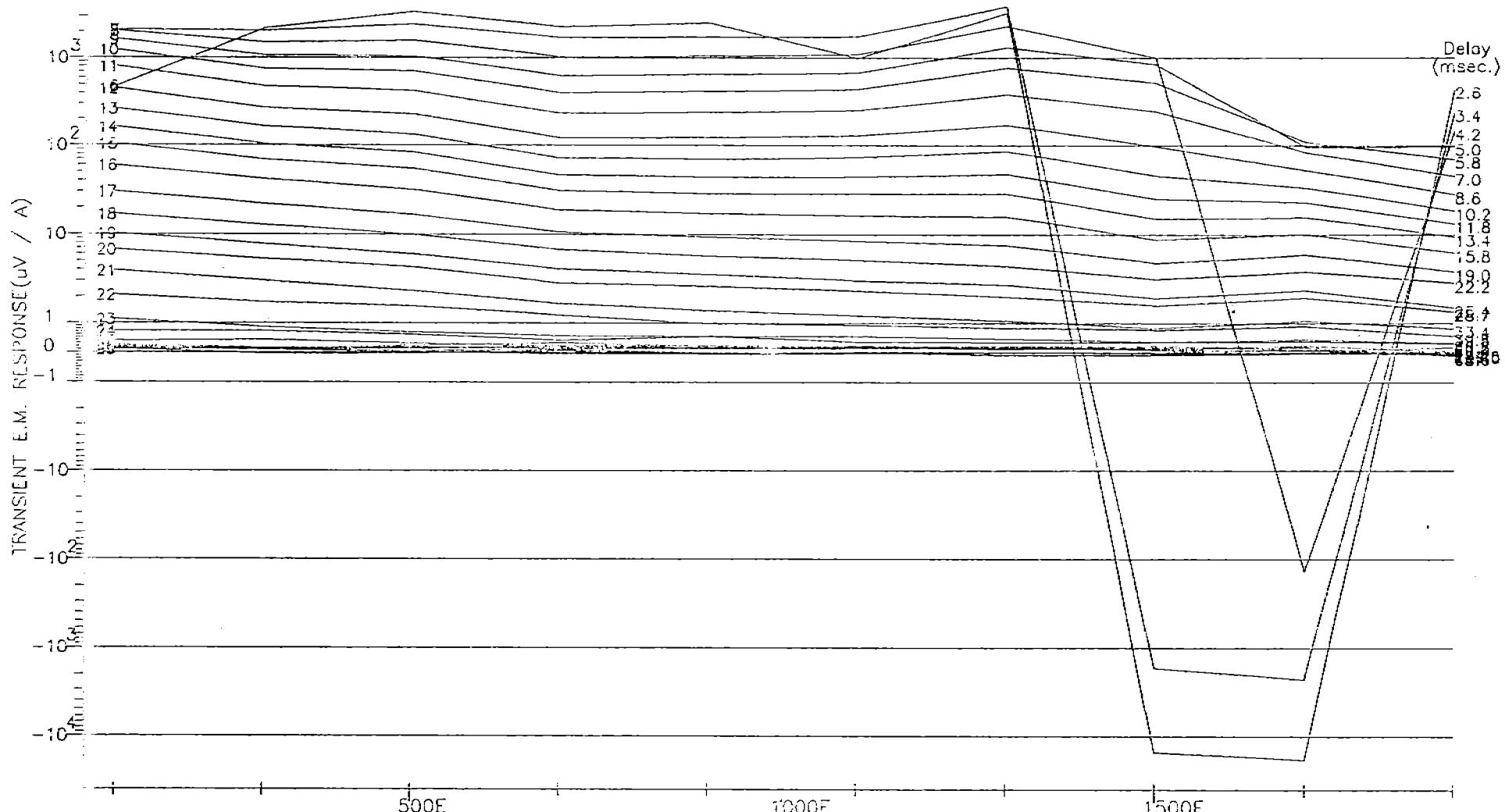
CLIENT : MIMEX
 AREA : MCARTHUR RIVER
 CRID : HYC SOUTH
 LINE REF : LINE 1 Outer loop reading
 SCALE : 1 : 15000
 SIROTE : UNIT : MARK III --- S/N 1955 --- EARLY TIMES
 LOOP CONFIGURATION : In-loop receiver
 LOOP SIZE : 200m x 200m
 CHANNELS PLOTTED : 6 - 32 STACKS : 128 CURRENT : 16.0 amps
 SIROTE : Survey by SOLO GEOPHYSICS & CO. --- 10-02-94

MIM EXPLORATION PTY LTD	
LYNOTT EL 8078	
LOG LINEAR PROFILES	
SIROTEM MK3	
LINE 1	
outer loop reading	
Dwg. No. 41910	Fig. No. 7



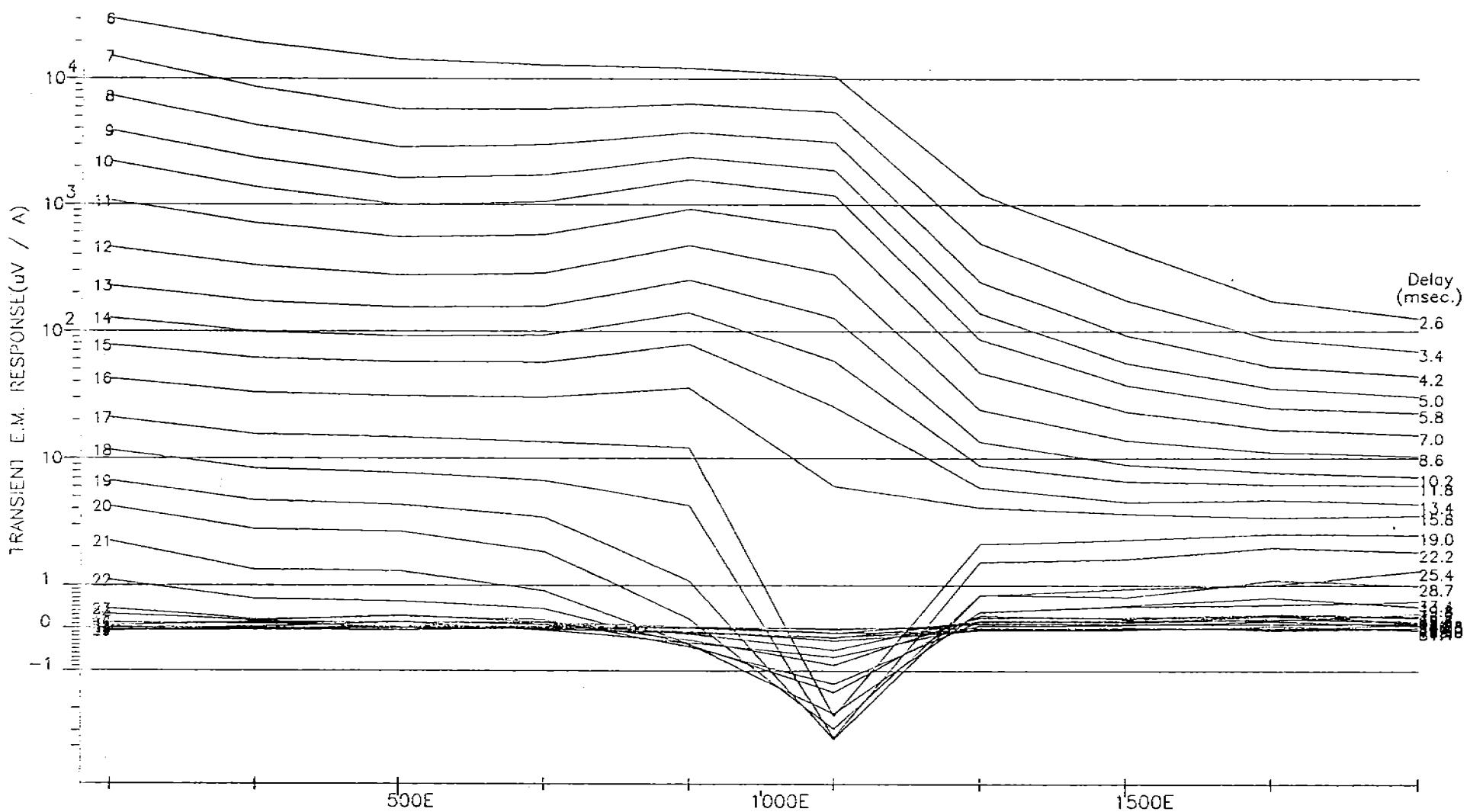
CLIENT : MIMEX
 AREA : MCARTHUR RIVER
 GRID : HYC SOUTH
 LINE REF : LINE 2 In loop reading
 SCALE 1 : 8000
 SIROTE UNIT : MARK III --- S/N 1955 --- EARLY TIMES
 LOOP CONFIGURATION : In-loop receiver
 LOOP SIZE : 200m x 200m
 CHANNELS PLOTTED : 6 - 32 STACKS : 128 CURRENT : 16.0 amps
 SIROTE Survey by SOLO GEOPHYSICS & CO. --- 10-03-94

MIM EXPLORATION PTY LTD	
LYNOTT EL 8078	
LOG LINEAR PROFILES	
SIROTEM MK3	
LINE 2 in loop reading	
Dwg. No. 41911	Fig. No. 8



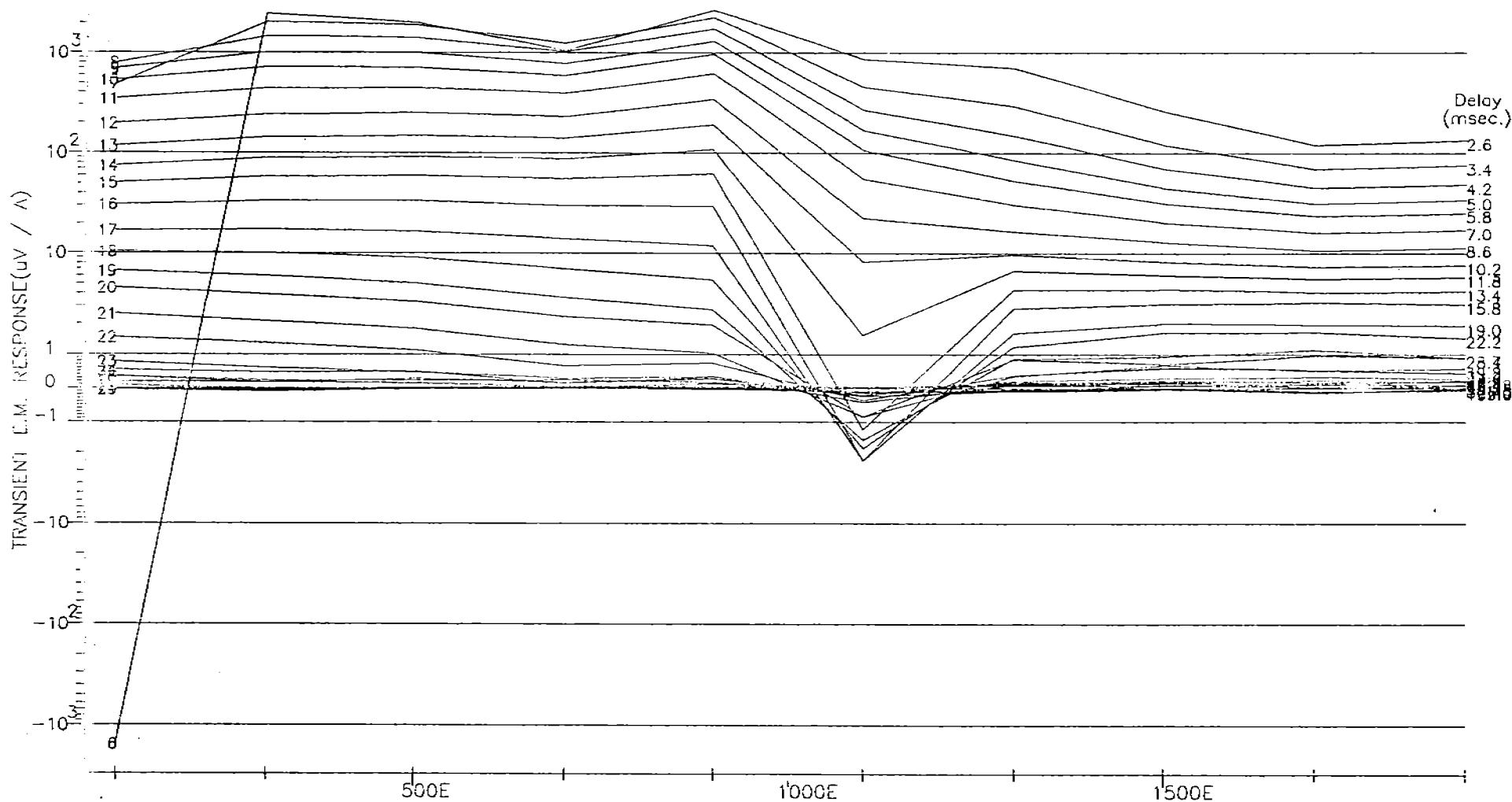
CLIENT : MIMEX
 AREA : MCARTHUR RIVER
 GRID : HYC SOUTH
 LINE REF : LINE 2 Outer loop reading
 SCALE 1 : 8000
 SIROTEK UNIT : MARK III --- S/N 1955 --- EARLY TIMES
 LOOP CONFIGURATION : In-loop receiver
 LOOP SIZE : 200m x 200m
 CHANNELS PLOTTED : 6 - 32 STACKS : 128 CURRENT : 16.0 amps
 SIROTEK Survey by SOLO GEOPHYSICS & CO. --- 10-03-94

MIM EXPLORATION PTY LTD	
LYNOTT EL 8078	
LOG LINEAR PROFILES	
SIROTEM MK3	
LINE 2	
outer loop reading	
Dwg. No. 41912	Fig. No. 9



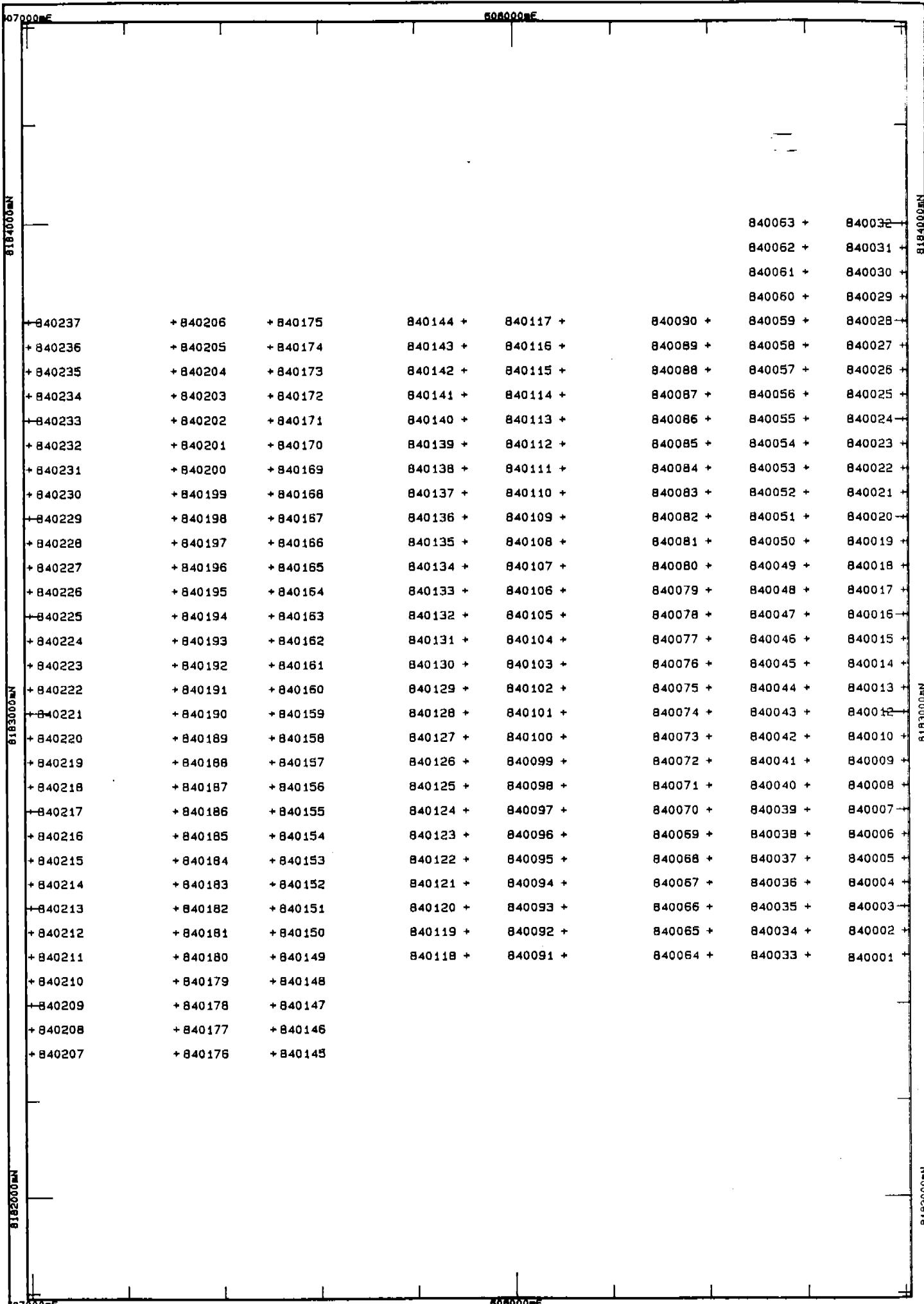
CLIENT : MIMEX
 AREA : MCARTHUR RIVER
 GRID : HYC SOUTH
 LINE REF : LINE 3 In loop reading
 SCALE 1 : 8000
 SIROTEM UNIT : MARK III --- S/N 1955 --- EARLY TIMES
 LOOP CONFIGURATION : In-loop receiver
 LOOP SIZE : 200m x 200m
 CHANNELS PLOTTED : 6 - 32 STACKS : 128 CURRENT : 16.0 cmps
 SIROTEM Survey by SOLO GEOPHYSICS & CO. --- 10-04-94

MIM EXPLORATION PTY LTD	
LYNOTT EL 8078	
LOG LINEAR PROFILES	
SIROTEM MK3	
LINE 3 in loop reading	
Dwg. No. 41913	Fig. No. 10



CLIENT : MIMEX
 AREA : MCARTHUR RIVER
 GRID : HYC SOUTH
 LINE REF : LINE 3 Outer loop reading
 SCALE 1 : 8000
 SIROTE UNIT : MARK III --- S/N 1955 --- EARLY TIMES
 LOOP CONFIGURATION : In-loop receiver
 LOOP SIZE : 200m x 200m
 CHANNELS PLOTTED : 6 - 32 STACKS : 128 CURRENT : 16.0 amps
 SIROTE Survey by SOLO GEOPHYSICS & CO. --- 10-04-94

MIM EXPLORATION PTY LTD LYNOTT EL 8078 LOG LINEAR PROFILES SIROTEM MK3 LINE 3 outer loop reading	
Dwg. No. 41914	Fig. No. 11



APPENDIX 1

DRILL LOGS

PROSPECT: "LYNOTT" CARPENTARIA EXPLORATION COMPANY PTY. LTD.
 LOCATION: E.L. 8078 ROTARY PERCUSSION DRILL HOLE LOG
 142200E HOLE CO-ORDINATES: 183900N.

HOLE NO. LYNOTT WEST
 No. 2B

ROTARY: FROM ... TO ...
 HAMMER: FROM ... 0 ... TO ... 60M

RL. COLLAR:
 INCLINATION: VERTICAL.
 DIRECTION:

SAMPLE NO. MC	ANALYSES p.p.m / %	DEPTH METRES	LOG	DESCRIPTION	REMARKS	WATER
10290				pinkish red br. + yell. w'd siltst. + soil		
91				yell. + cream w'd siltst.		
92				orange, yell. + cream w'd siltst.		
93		10	↓	yell, cream + lt. br. w'd siltst.		
94				cream, pale yell. + lt. gy w'd siltst, commonly finely lamin.		
95				" " "	"	
96				" " "	"	
97				" " "	"	
98				" " "	"	
99		20		" " "	"	
10300				lt. br., red br. + cream w'd siltst + minor lt. gy w'd siltst.		
01				" " " " " "	" "	
02				cream, lt. br., red br. w'd siltst.		
03		30	↓	" " " " + minor lt. br. clay.		
04				" " " "		
05				" " " "		
06				" " " "		
07				" " " "		
08				" " " "		
09		40		" " " "		
10310				predom. pale w'd siltst. + lt. gy clay.		
11				" " "		
12				" " "		
13				" " "		
14		50		" " "		
15				predom. br. w'd siltst. + lt. gy - lt. br. clay.		
16				" " "		
17				" " "		
18				" " "		
10319		60		predom. pale w'd siltst. + lt. gy - lt. br. clay.		
				" " " "	"	
10320	DUPLICATE OF MC 10310 40-42M.	70		E.O.H. 60M.		
				NO WATER		
		80				
		90				
		100				
		110				
		120				

REASON FOR HOLE:

FAILED. WATER BORE

OTHER DETAILS:

DRILL TYPE: WARMAN 1000

LOGGED BY: MTW

DRILLER: MONTIL

DATE DRILLED:

SCALE:

ORG/CODE NO.:

"PROSPECT LYNOTT" CARPENTARIA EXPLORATION COMPANY PTY. LTD.
LOCATION: E.L. 8078 ROTARY PERCUSSION DRILL HOLE LOG
HOLE CO-ORDINATES: 144000E 185000N

HOLE N°. LYNOTT WEST
No. 1R

ROTARY: FROM TO
HAMMER: FROM ... 0 ... TO 60 M

RL. COLLAR:
INCLINATION: VERTICAL ..
DIRECTION:

SAMPLE NO. MC	ANALYSES p.p.m / %		DEPTH METRES	LOG	DESCRIPTION	REMARKS	TESTER
	MC	ANALYSES					
10201							
02				PMX	lt.br., dk.br. + offwh. w'd siltst. c brown clay		
03					lt.br., dk.br. + offwh. w'd siltst.		
04					" " "		
05			10		" " "		
06					predom. offwh. w'd siltst.		
07					offwh. + lt.br. w'd siltst.		
08					" " "		
09					predom. offwh. w'd siltst & minor lt.br. siltst.		
10210					lt.br. + red br. w'd siltst.		
11			20		" " "		
12					offwh. + lt.br. w'd siltst. + ~50% lt.br. clay.		
13					lt.br. clay + ~30% lt.br. w'd siltst.		
14					" " "		
15			30		" ~5% "		
16					" " "		
17					" " "		
18					" " "		
19					" " "		
10220			40		" "		
21					lt.br. clay + minor off white siltst.		
22					" + ~50%	" "	
23					" + ~20%	" "	
24					" + minor lt.br. w'd siltst.		
25			50		" + rare to minor dk.br. w'd siltst.		
26					" + " H. br. "		
27					" + minor dk.br. siltst.		
10228					" + " "		
N/S					" + " "		
N/S			60		NO SAMPLE RETURN		
					NO SAMPLE RETURN		
					E.O.H. 60 M.		
			70		NO WATER.		
			80				
			90				
			100				
			110				
			120				

REASON FOR HOLE:

FAILED WATER BORE

OTHER DETAILS:

DRILL TYPE: WARMAN 1000

LOGGED BY: MTW

DRILLER: PONTIL

DATE DRILLED: 17/1/94

SCALE:

ORG / CODE NO:

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PROSPECT: "LYNOTT"

HOLE No. LYNOTT WEST No. 5B

EPM/LEASE No E.L. 8078

PAGE 1 OF 9

SURVEY DETAILS

Northing: 185650 m N End of Hole: 375.0 m

DOWNHOLE SURVEY: Method: EASTMAN CAMERA

Date: CONTINUOUS

By **FRONTIER**

Easting: 147700 M E Bearing N/T/G: 175° M

Azimuths 173°M 179°M 181°M 184°M

Collar RL: Declination: -85°

Declination -85° -85° -85° $-85\frac{1}{2}^{\circ}$

Hole size	Depth	Sample Type
<u>5 $\frac{1}{2}$"</u>	<u>0</u> to <u>114.0</u> m	<u>PERCUSSION - OPEN HOLE</u>

Core stored at: MIMEX DEPOT - McArthur River

Drill contractor: PONTIL PTY LTD.

HQ 114:0 in 240:0 m CARE

Started: 1/8/94

NQ 240.0 to 375.0 m CORE

ANSWER

Finished: 5/8/94

GEOLOGICAL SUMMARY

From	To	Description
0	26	HOT SPRING MEMBER
26	?	CARANBIRINI MEMBER
?	355.0	REWARD DOLOMITE
355.0	375.0	TEENA DOLOMITE
		E.O.H. 375.0 m.

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 2 OF 9

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 5 D.
0	26			<u>HOT SPRING MEMBER</u>
26	?			<u>CARANBIRINI MEMBER</u>
?	113.5			<u>REWARD DOLOMITE</u>
113.5	355.0?	241.5		<u>REWARD DOLOMITE</u>
113.50	115.55	2.05		Interbedded dark grey siltstone and medium grey reworked/streaky dolomitic siltstone beds.
115.55	116.35	0.80		Medium grey + dark grey dolomitic siltstone and light grey streaky/reworked dolomitic siltstone interbedded with thin olive green dolomitic? clay beds. Common streaky to disseminated white carbonate, after poorly developed nodular dolomite.
116.35	119.95	3.60		Interbedded dark grey and medium grey dolomitic siltstone with medium to light streaky/reworked dolomitic siltstone. @ 117.33 m for 10mm: olive green dolomitic siltstone bed with minor light brown disseminated sphalerite.
				118.93 - 119.26 m: common lensoid shaped arenites in a dark grey siltstone bed.
119.95	139.85	19.90		Interbedded dark grey dolomitic siltstone and medium grey streaky/reworked dolomitic siltstone with common thin laminated dolomitic siltstone zones. These laminated zones

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 3 OF 9

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 5D.
				DESCRIPTION
				vary through the interval as follows:
				119.95 - 132 m : 50-100mm thick laminated medium grey and light grey dolomitic siltstone.
				132 - 138.6 m : 50-100mm thick laminated medium grey and dark grey dolomitic siltstone.
				138.6 - 139.85 m : laminated zones as above but not just common, approximately 50/50 : laminated zones / medium bedded zones.
				Slumping and small scale faulting commences ~ 125.51 m with a light grey dolomitisation associated with some zones (particulary distorted lighter grey beds).
				@ 135.47 m :
				 10mm
				small scale slump
				After 136 m, slumping decreases although small scale faulting continues.
				between 138.77 - 139.10 m possibly weakly pyritic in a laminated zone.
139.85	143.40	3.55		Interbedded, weakly to moderately pyritic finely laminated dark grey siltstone and medium to thick (~100mm) lighter grey streaky/reworked dolomitic siltstone beds. Common medium grey (predominant) and light grey dolomitisation, moderately faulted and slumped (as previous interval), throughout. @ 142.70 m : a 50mm x 7mm dark grey concretion.
143.40	158.36	14.96		Interbedded dark grey, relatively massive siltstone and lighter grey streaky/reworked

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 4 OF 9

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE NO. LYNOTT WEST No. 5D.
				dolomitic siltstone, all medium to thickly bedded. Common medium grey (predominant) and light grey dolomitisation, moderately faulted and slumped (as previous interval) throughout. @ 146.22m for 80mm: fault zone with ~80% carbonate infill and dark grey wall rock fragments.
				between 147.5m and 149m the intensity of dolomitisation increases to moderately to strong.
158.36	173.15	14.79		Strongly pyritic dark grey siltstone with minor interbedded massive dark grey siltstone and occasional thin fine grained grit beds. Pyrite is ultra fine grained dull and ultra fine grained moderately shiny pyrite. Rare disseminated fine grained sphalerite through interval. @ 159.53m for 1mm; a very fine grained shiny pyrite laminae. @ 159.84m: minor fine grained light brown disseminated sphalerite. @ 160.24m: minor clusters of fine grained light brown sphalerite. @ 161.26m: minor clusters of fine grained light brown sphalerite. 165.0 - 166.04m: strongly distorted and faulted zone with minor disseminated light brown sphalerite (<1mm). 166.44 - 166.84m: zone of common interbedded thin light grey dolomitic siltstone beds. 167.04 - 167.63m: predominantly a massive dark grey siltstone bed, possibly overall weakly pyritic. between 167.75m and 170.35m is minor lensoid and wispy nodular dolomite infill (displacive growth?) with occasional fine grained, thin arenites. Increase in number and size of nodular dolomite towards base of interval, looking more like fenestrae towards 170.35m. At 170.14m possible pyrobitumen as cores to nodular dolomite fenestrae?

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 5 OF 9

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE NO. LYNOTT WEST No. 5D
				170.55 - 170.80 m : strongly distorted zone of predominantly fine grained arenite. 171.49 - 171.98 m : predominantly a massive dark grey siltstone bed. between 171.98m and 173.15m is a zone of interbedded dark grey siltstone, occasional pyritic siltstone and cherty/dolomitic crusts (up to 10mm thick).
173.15	180.72	7.57		Interbedded dark grey siltstone, moderately pyritic siltstone and thick light grey reworked/streaky beds. After 175.5m there is a decrease in pyrite to weak - very weakly pyritic. fine grained arenaceous beds (possibly tuffaceous?), moderately cherty/dolomitic, occur at 176.03 m for 170mm; 176.52 m for 60mm; 177.93 m for 40mm; and 178.90m for 60mm. @ 180.57 - 180.72 m : disseminated carbonate? spheroids (<1mm) occur, concentrated at base of dark grey siltstone bed.
180.72	185.10	4.38		Interbedded dark grey siltstone, light grey reworked/streaky beds and massive light grey beds (dolomitised dark grey beds?) with minor finely laminated pyritic siltstone. @ 183.64 - 184.01 m : strongly pyritic (finely laminated) dark grey siltstone zone. @ 184.01 - 185.10 m : medium bedded light grey and dark grey siltstone, being somewhat mottled (light grey dolomitisation?).
185.10	188.50	3.40		Interbedded, medium to thinly bedded, light grey massive siltstone, dark grey siltstone and common laminated medium grey and light grey siltstone. between 186.25 m to 187.60m is a gradational increase in brecciation

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 6 OF 9

GEOLOGICAL LOG				
PROSPECT: LYNOTT E.L. 8078				HOLE No. LYNOTT WEST No. 5D
from	to	length	recovery m	DESCRIPTION
				with occasional carbonate fracture infill, with strong brecciation after 187.60m to end of interval.
188.50	213.66	25.16		Clast supported sedimentary breccia (angular to sub angular clasts). Clasts consist of light grey streaky/reworked beds; finely laminated medium grey and light grey siltstone; massive light grey siltstone; massive dark grey siltstone and minor to rare pyritic siltstone clasts. Maximum clast size is approximately 100-150 mm. Occasional to minor dark grey mud matrix. Occasional carbonate infill of fractures with occasional to rare light brown sphalerite associated. Common dolomitised zones, or dolomitised clasts?
213.66	216.72	3.06		Interbedded, medium bedded, light grey siltstone and dark grey dolomitic siltstone, in places laminated, with common light grey dolomitisation?
216.72	226.85	10.13		Clast supported sedimentary breccia. Clasts consist of same as for 188.50 - 213.66m but predominantly light grey and dark grey siltstone. Dolomitisation and tectonic brecciation make this interval difficult to interpret. Some intervals of interbedded siltstone? possible example at 220.2 - 221.0 m. Minor to strong in places, carbonate veinlets and fracture infill.
226.85	239.40	12.55		Interbedded, thickly bedded, light grey and thin dark grey dolomitic siltstone. Carbonate fracture infill decreases from 226.85m - 227.40m to minor. Common brownish-light grey dolomitisation throughout, partly bedding selective. Occasional thin fine grained

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 7 OF 9

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE NO. LYNOTT WEST No. 5D
				arenites, commonly strongly soft sediment distorted. Minor to rare reworked/streaky beds, being medium bedding thickness. Rare minute blebs of light brown sphalerite throughout. @ 238.97 - 239.14 m : mottled zone , after dolomitisation?
239.40	248.20	8.80		Interbedded, medium-thickly bedded, light-medium grey reworked/streaky beds (predominant) with thickly bedded light grey and thin dark grey dolomitic siltstone.
248.20	250.30	2.10		Predominantly massive dark grey siltstone.
250.30	250.55	0.25		Matrix supported sedimentary breccia? Clasts of light-medium grey reworked/streaky beds; and light grey and dark grey dolomitic siltstone with a maximum clast size of 60mm. Matrix of dark grey mud. Disseminated rounded carbonate clasts at base.
250.55	260.54	9.99		Interbedded, thickly bedded, light grey and thin dark grey dolomitic siltstone, bedding selective (in part) brownish-light grey dolomitisation with occasional thin fine grained arenites and minor reworked/streaky beds. Rare minute blebs of light brown sphalerite throughout.
260.54	261.80	1.26		Clast supported sedimentary conglomerate with clasts as interval 250.30 - 250.55m. Some soft sediment deformed clasts, suggesting slump conglomerate?. Appears to be 1-2m above and below this interval strong bedding selective and patchy to mottled dolomitisation.

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 8 OF 9

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG	HOLE No. LYNOTT WEST No.5D
from	to	length	recovery m	DESCRIPTION	
261.80	294.0	32.2		<p>Interbedded light grey, medium grey and thin dark grey dolomitic siltstone. Thinner bedded than previous intervals, with occasional thicker massive light grey siltstone beds. Common dolomitisation throughout with strong dolomitisation in places after 265.90m, predominantly mottled style (could be after displacive evaporites in places?). Occasional poorly developed thin crusts through interval.</p> <p>@ 283.75 - 285.30m: strong carbonate fracture infill with minor to ~2% minute light brown sphalerite on wall rock sides of veinlets/infill.</p> <p>285.5 - 286.7m: thick reworked/streaky beds.</p>	
294.0	318.9	24.9		<p>Interbedded light grey, medium grey and dark grey dolomitic siltstone, thin to thickly bedded throughout. Occasional to common fine grained arenites, commonly soft sediment distorted. Occasional light grey and medium grey streaky/reworked beds, mediumly bedded. Minor thin dark grey laminated zones. Occasional patchy/mottled dolomitisation.</p>	
318.9	338.2	19.3		<p>Interbedded light grey, medium grey and dark grey dolomitic siltstone with common thin poorly developed crusts? and possible displacive evaporitic zones. Thinly bedded predominantly with thick beds in places. Occasional to common fine grained arenites and occasional light grey streaky/reworked beds. Occasional patchy/mottled dolomitisation.</p> <p>@ 325.25m for 400mm: example of displacive evaporite? or dolomitisation?</p> <p>327.00 - 327.33m: zone of thin (~2mm thick) reworked crusts, ~10-20mm long, orientated sub-parallel to bedding.</p> <p>328.29 - 328.42m: streaky conglomerate? with clasts (maximum 5x10mm)</p>	

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 9 OF 9

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 5D.
				DESCRIPTION
				orientated sub-parallel to bedding.
				336.20 - 337.33 m : moderately to strongly brecciated zone with carbonate fracture infill and common fine grained light brown sphalerite disseminated specks associated with the carbonate. There is a slight bedding parallel alignment to the brecciation.
				337.7 - 338.2 m : a thinly bedded zone with ~10mm light grey bases and ~2mm thin dark grey tops.
338.2	355.0	16.8		Thinly bedded light grey, medium grey and dark grey dolomitic siltstone, possibly weakly pyritic in places. Numerous very fine grained shiny pyrite blebs, some associated with bedding others disseminated in beds. Rare fine grained sphalerite throughout.
				358.0 - 355.0m : gradational increase in faulting and slumping?
355.0	375.0	20.0		<u>TEENA DOLOMITE</u>
				Medium (predominant) to thinly bedded dolostones. From 355.0m to 370.7m is moderate 'karst style' brecciation with associated dark grey sediment infill of fractures; and as 'veins' (?) (dolomitisation?). Occasional radiating gypsum pseudomorph throughout with numerous after 370.7m, to end of hole.
				E.O.H. 375.0m

PROSPECT "LYNOTT"

CARPENTARIA EXPLORATION COMPANY PTY. LTD.

HOLE NO. LYNOTT WEST
No. 50

LOCATION: E.L. 8078 ROTARY PERCUSSION DRILL HOLE LOG

RL. COLLAR:

HOLE CO-ORDINATES. 147700E

ROTARY FROM 0 TO 114M

INCLINATION: -85°

HOLE CO-ORDINATES. 185650N

ROTARY FROM 0 TO 114M

DIRECTION:

SAMPLE NO. MC	ANALYSES PPM/%	DEPTM METERS	LOG	DESCRIPTION	REMARKS
10405				Ht.gy + br. wld dolomitic siltst.	D
6				Ht.gy dolomitic siltst. wld br. on some surfaces.	
7				"	↓
8				" " " " + br. wld dolomitic siltst. + arenite	
9				" " " " + Ht.br. dolom. siltst. + aren.	
10410				Ht.br.-ol. dolom. siltst.	
1				" " "	
2				Ht.br. finely lamin. dolom. siltst.	
3				Ht.br. & Ht.gy dolom. siltst.	
4				Ht.gy + br. & minor Ht.br. dolom. siltst.	
5				" " + Ht.br. dolom. siltst. + aren.	
6				" " + Ht.ol.gy " " + arenite?	
7				Ht.gy + Ht.br. dolom. siltst.	
8				dk.gy siltst.	
9				" " + minor med.gy. siltst.	
10420		30		" " + med.gy siltst. & med.gy finely lamin.	
1				" " siltst.	
2				" " finely lamin. in places.	
3				" " + Ht.gy. siltst. - Ht.gy finely lamin.	
4				med.gy + Ht.gy siltst.	
5				Ht.gy + dk.gy " "	
6				dk.gy + Ht.gy "	
7				dk.gy + dk.gy "	
8				med.gy + dk.gy siltst.	
9				" " + Ht.gy siltst. & minor ol.gr. dolom. clay?	
10430		50		" " dk.gy siltst.	
1				" " + Ht.gy " "	
2				med.gy + dk.gy siltst.	
3				dk.gy. siltst. & minor med-dkgg siltst.	
4				dkgg siltst. + pale Ht.br. dolom. siltst.	
5				" " = very vfg med. shiny py	
6				" " + Ht.gy siltst. = minor ol.gr. dolom. clay?	
7				" " dk.gy siltst.	
8				" " dk.gy siltst. - finely lamin. in places.	
9				med. - dkgy siltst. = 5-10% white carbonates (lct)	
10450		70		dk.gy + med.gy siltst.	
1				" " dk.gy siltst.	
2				" " dk.gy siltst.	
3				" " dk.gy siltst. - finely lamin. in places.	
4				med. gy + minor dkgy siltst.	
5				" " " "	
6				med.gy siltst.	
7				" " " "	
8				med.gy + med.gy. siltst.	
9				dk.gy siltst.	
10460		110		" "	
10461				" "	
10462	DUPLICATE (OF MC10436)	420		END OF PRECOLLAR 114M.	D

REASON FOR HOLE:

OTHER DETAILS:

DRILL TYPE: KHRMAN1000 LOGGED BY: MTW
 DRILLER: PONTIL DATE DRILLED: 1/8/94
 SCALE: ORG CODE NO:

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PROSPECT: "LYNOTT"	HOLE No. LYNOTT WEST No. 4D	EPM/LEASE No. E.L. 8078	PAGE 1 OF 13	
SURVEY DETAILS		DOWNHOLE SURVEY: Method: EASTMAN CAMERA	Date: CONTINUOUS	
Northing: 185050 N	End of Hole: 344.3 m	Depth 140.0 242.0 344.0	By: PONTIL	
Eastng: 144650 E	Bearing M/T/G: 220°M	Azimuth 200°M 201°M 201°M		
Collar RL:	Declination: -70°	Declination -79½° -80° -79½°		
Hole size	Depth	Sample Type	Core stored at: MIMEX DEPOT - McArthur River	Drill contractor: PONTIL PTY. LTD.
5½"	0 to 126 m	PERCUSSION - OPEN HOLE	Assay rejects started at:	Started: 24/7/94
HQ	126 to 275 m	CORE	Steel casing left in hole: NIL	Finished: 31/7/94
NQ	275 to 344.3 m	CORE	PVC casing left in hole: 0 - 6 m x 150 mm	Logged by: M.T. WILLIAMS

GEOLOGICAL SUMMARY

From	To	Description
0	?	CARANBIRINI MEMBER
?	296.24	REWARD DOLOMITE
296.24	325.76	BARNEY CREEK FORMATION
325.76	328.32	TRANSITIONAL ZONE
328.32	344.3	TEENA DOLOMITE
		E.O.H. 344.3m

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 2 OF 1

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 4D
0	?			CARANBIRINI MEMBER }
?	124.9			REWARD DOLOMITE } PERCUSSION PRECOLLAR - see attached log for details.
124.9	296.24			REWARD DOLOMITE
124.9	127.37	2.47		Medium - dark grey siltstone with common thin light grey 'streaky' beds, interbedded. The medium - dark grey siltstone has a streaky / reworked texture to it.
127.37	128.73	1.36		Light grey and medium grey interbedded dolomitic siltstone. This interval also has a streaky reworked texture to it.
128.73	139.65	10.92		Medium grey and light grey 'reworked' dolomitic siltstone. Strong dolomitisation occurs in places, as a mottling to the rock as light grey, between; 128.73 - 129.20m ; 133.18 - 134.00 ; 137.47 - 137.77m ; & 138.19 - 138.35m . The interval is medium to thinly bedded. The lighter grey beds appear to be predominantly reworked.
139.65	143.35	3.70		Thinly bedded light grey and medium-dark grey siltstone. Occasional thicker light grey beds. All of the interval has a streaky / sheared appearance. 139.7 - ~142m : moderately to strongly broken core - not oxidised on fractures.

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 3 OF 1

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 4D
143.35	152.00	8.65		<p>Medium bedded light grey and medium-dark grey dolomitic siltstone, with occasional thin zones of thinly bedded soft sediment deformed (slumping) light and dark grey dolomitic siltstone. Lighter grey beds commonly have a streaky/reworked texture. Obvious dolomitisation in places, as the top bedding contacts of the lighter grey beds are strongly irregular and discordant.</p> <p>between 148.30 - 148.46 m : brownish recrystallised/nodular zone, which appears strongly distorted. Rare to minor 1-2 mm blebs of light brown to yellow sphalerite.</p>
152.00	160.36	8.36		<p>Medium bedded light grey (predominant) and medium-dark grey dolomitic siltstone, with common streaky/reworked lighter grey beds. Some of these light grey beds are up to 30 cm thick.</p>
160.36	167.44	7.08		<p>Medium bedded medium-dark grey (predominant) and light grey dolomitic siltstone, with common streaky/reworked lighter grey beds. Rare <1mm disseminated blebs of light brown sphalerite throughout interval (often in small clusters).</p> <p>@ 160.70 m : a 45 mm x 25 mm concretion occurs, with a poorly developed crust or concretion (?) above with fractures as sketched below :</p>

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 4 OF

PROSPECT: LYNOTT E.L 8078					GEOLOGICAL LOG
from	to	length	recovery	HOLE No. LYNOTT WEST NO. 4D.	DESCRIPTION
167.44	169.0	1.56			Medium bedded medium grey and medium-dark grey streaky/reworked dolomitic siltstone with rare sphalerite as 160.36 - 167.44 m.
169.0	172.0	3.0			Medium bedded light grey (predominant) and medium to dark grey streaky/reworked dolomitic siltstone with rare sphalerite as 160.36 - 167.44 m.
172.0	176.51	4.51			Medium bedded medium grey and medium-dark grey streaky/reworked dolomitic siltstone with minor lighter grey beds. Rare sphalerite as 160.36 - 167.44 m. between 175.0 - 176.51 m : gradational increase in bedded ultra fine grained dull pyrite within medium-dark grey beds, from none to moderately pyritic.
176.51	176.66	0.15			Medium bedded medium grey and dark grey siltstone with rare disseminated light brown sphalerite (<1mm blebs). Gradational increase from moderately pyritic to strongly pyritic. @ 176.51m : a fracture ~25mm long contains ~2mm blebs of light brown sphalerite.
176.66	184.44	7.78			Strongly pyritic dark grey siltstone with minor thin lighter grey siltstone beds. Pyrite is bedded ultra fine grained dull. Occasional thin very fine grained shiny bedding parallel pyritic' beds. Poorly to moderately developed crusts and concretions occur between; 180.28 - 180.36 m; 181.27 - 181.29 m, & 182.55 - 183.30 m. These zones contain common light brown sphalerite blebs associated. @ 181.75 - 181.81 m : a light brown 'dolostone' (?) bed. Could be dolomitised?, with a possible precursor of arenite??

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 5 OF 15

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery %	HOLE No. LYNOTT WEST No. 4D
				DESCRIPTION
				Light brown sphalerite blebs associated with fractures (predominantly) occur in the following zones; 180.33 - 180.36m; 181.27 - 181.29m; 182.83 - 182.87m and 183.28 - 183.30m.
				@ 184.40 - 184.44m : a nodular dolomite? zone occurs.
184.44	188.0	3.56		Weakly to moderately pyritic (overall) dark grey siltstone with common interbedded medium grey and light grey siltstone. Individual pyritic beds are still moderately to strongly pyritic. Common poorly developed crusts throughout, with possible occasional poorly developed concretions.
188.0	191.0	3.0		Interbedded medium grey and light grey siltstone with minor dark grey siltstone. Pyritic beds vary through the interval as follows: 188.0 - 188.3m : bedded pyrite decreases to weakly - very weakly pyritic. 188.3 - 189.0m : weakly to very weakly pyritic. 189.0 - 190.04m : no bedded pyrite visible. 190.04 - 190.57m : common thin very fine grained dull pyrite beds. 190.57 - 191.0m : no bedded pyrite visible. Common poorly developed crusts throughout, with possible occasional poorly developed concretions.
191.0	193.0	2.0		Medium bedded light grey (predominant) and medium grey dolomitic siltstone, with common streaky/reworked beds.

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 6 OF

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 4D.
193.0	195.8	2.8		<p>Medium bedded medium grey and medium-dark grey, streaky/reworked dolomitic siltstone with minor streaky/reworked lighter grey siltstone.</p> <p>@ 193.95 m : occasional light brown sphalerite blebs and a small shiny pyrite bleb.</p> <p>@ 194.70 m : occasional 2-3mm light brown sphalerite blebs in a 20mm x 10mm cluster</p>
195.8	210.15	14.35		<p>Medium bedded light grey (predominant) with occasional medium and medium-dark grey streaky/reworked dolomitic siltstone. Strong light grey dolomitisation in places. Common crusts and poorly developed nodular concretions? throughout. Common mottling and light brown to tan colouration, akin to near surface style weathering?? Overall interval is thinly to medium bedded.</p> <p>@ 197.66 m for 80mm : a 'reworked'? fine grained sandy bed with very 'wispy' style bedding and possibly slightly nodular?</p> <p>Three beds of very thin broken bedding parallel dolomitic crusts bet 207.23m for 15mm ; 207.29m for 20 mm & 207.38m for 15mm.</p> <p>@ 208.28 - 208.46m : occasional spheroids in core (up to 4mm diameter), don't appear bedding selective. Interval could be one bed which is broken up into smaller pseudo-beds by light grey dolomitisation?</p>
210.15	237.94	47.79		<p>Medium to thickly bedded light grey dolomitic siltstone (predominant) with common light grey to medium grey streaky/reworked dolomitic siltstone. Overall an increase in all styles of dolomitisation, especially a combination of dark grey and light brown to tan, in places associated with fractures and bedding selective, although more extensive. In places an intense spiderweb-like dolomitisation (associated with fractures?) occurs. Dolomitisation</p>

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 7 OF 1

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG HOLE NO. LYNOTT WEST No. 4D.
from	to	length	recovery m	DESCRIPTION
				varies through the interval as follows:
				210.15 - 223.71 m : very strong dolomitisation, all styles.
				223.71 - 229.4 m : strong to intense light grey (predominant), medium grey and minor dark grey dolomitisation with associated (?) strong soft sediment brecciation??
				229.4 - 235 m : decrease in brecciation and fracturing to minor-occasional, and a decrease in dolomitisation to strong.
				235 - 238 m : dolomitisation only strong in places.
				238 - 241 m : medium grey wispy/spiderweb-like dolomitisation predominant, with thin pale beds possibly being dolomitised.
				241 - 257.94 m : moderate dolomitisation (strong in places) throughout. An unusual patchy dolomitisation occurs between 244.6 - 245.5 m and 255.0 - 257.0 m, as sketched below:
				<p>APPROX 1CM</p> <p>CORE SPHEROID OF BROWN-DARK GREY DOLO</p> <p>OUTER 'SKIN' OF SPHEROID LIGHT BROWN-TAN DOLO AS HOST ROCK.</p> <p>MEDIUM GREY 'HAZY' STYLE OF DOLO</p>
				INNER 'SPHERIODS' MORE IRREGULAR THAN A SPHERE, AND ARE COMMONLY GRADUATIONALLY LIGHTER TOWARDS THE CORE.
				ALTERATION 'BLOTCHES' NOT NECESSARILY BEDDING PARALLEL ALIGNED.

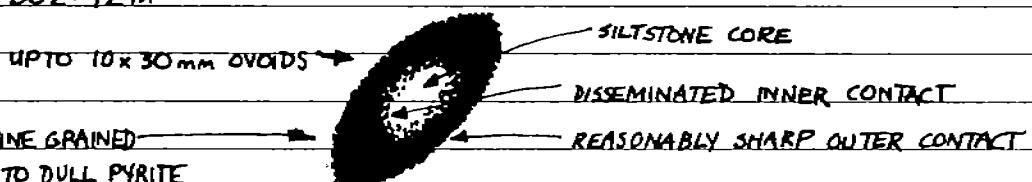
MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 8 OF 13

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 4D.
				Dolomitic siltstone beds vary through the interval as follows:
				215.04 - 215.41 m : a light grey matrix supported breccia bed? with 1mm clasts of white dolostone?
				@ 218.05m for 5mm : a white-pinkish carbonate veinlet.
				215.41 - 219.77 m : predominantly light grey streaky/reworked beds.
				223.71 - 238 m : predominantly interbedded light grey massive and streaky/reworked bed
				238 - 241 m : zone of thinner bedding.
				246.4 - 255 m : pale and medium grey 'wispy' bedding, overall thinly bedded. The wispy bedding contacts, marked by dark grey laminae - originally stylolites? Occasional more massive zones through this interval; eg: 251.0 - 252.7 m.
257.94	278.02	20.08		Intraclastic sedimentary conglomerate. Mostly clast supported with minor grey wispy carbonate matrix. Clasts consist of grey dolostone, thinly bedded (wispy) dolomitic siltstone and reworked beds, to a maximum size of 550 mm? Many clasts are deformed, particularly the edges, suggesting semi-lithification when deposited.
				@ 265.46m for 80 mm : massive dark grey siltstone (mud infill of fault or cavity ??). Occasional clasts that exhibit dolomitisation styles as recorded above. After ~275m appears to be 'shearing' or well sorting of conglomerate, sub orientating clasts to parallel to bedding.
278.02	296.24	18.22		Interbedded grey and light grey dolosiltstones and dolostones. Thinly bedded to laminated in places with very thin dark grey laminae in places. Appear to be a lot of poorly developed crusts through the interval.

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 9 OF 13

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE NO. LYNOTT WEST No. 4D.
				@ 278.91m : 10x10 mm 'bleb' of very fine grained shiny pyrite.
				278.02 - 284.5 m : minor brecciation.
				284.5 - 285.57m : strongly brecciated zone (possibly brecciated conglomerate in part?? with a ruditic? - type infilling?
				@ 290.57m for 220mm: fault breccia. Dolostone fragments in a dark grey mud infill.
296.24	325.76	29.52		<u>BARNEY CREEK FORMATION</u>
296.24	325.76	29.52		Interbedded, thinly bedded medium grey and medium - dark grey dolomitic siltstone with thin light grey dolomitic siltstone beds. <ul style="list-style-type: none"> - medium grey beds have dark, near bedding parallel, flakes through them, resulting in strong streaky/reworked beds. - when light grey beds approach thin laminae in thickness, they break up and result in streaky/reworked beds? - the precursor (suggesting dolomitisation) to the more massive light grey beds appears to be predominantly fine grained arenites? 298.81 - 299.79m : predominantly light grey, medium bedded dolomitic fine grained arenites, very similar in appearance to the H.Y.C. stylolite markers. pyrite blebs, as sketched below, occur at 300.46m, 300.90m, 301.30m, 301.70m, and 302.92m :
				

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 10 OF 13

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 4D.
				relatively common step faulted thin light grey beds commence at 305.63m, as seen within the Barney Creek Formation at H.Y.C.
				@ 307.83 m : discontinuous, very thin light grey elongate bedding parallel 'pods', which have rare to minor fine grained light brown sphalerite associated.
				308.08 - 308.12m : a 20mm thick dull ultra fine grained pyrite vein with shiny very fine grained shiny pyrite core.
				@ 310.61m for 15mm, @ 312.59m for 20mm & @ 317.07m for 160mm ; light olive green clayey beds with bedding parallel black minute specks.
				324.02 - 324.08m : a 5-10mm thick dull very fine grained pyrite vein with very fine grained shiny pyrite core.
				@ 325.33m : 20 x 10 mm moderately shiny very fine grained pyrite 'blob'.
325.76	328.32	2.56	<u>TRANSITIONAL ZONE</u>	
Interbedded, thinly bedded medium grey and medium-dark grey dolomitic siltstone with thin light grey dolomitic siltstone beds with gradually increasing thin to medium bedded dolostone beds, and decreasing very thinly bedded streaky/reworked (tuffaceous?) beds. Common shiny and dull disseminated, very fine grained blobs which appear somewhat nodular and appear to have displaced bedding.				

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 11 OF 13

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 12 OF 13

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 4D.
<u>MISCELLANEOUS & STRUCTURAL DATA</u>				
<u>1. EASTMAN CAMERA DOWNHOLE SURVEYS</u>				
<p>A complete set of the original Eastman Camera negatives is stored at McArthur River Project, MIMEX Depot, in the Lynott West No. 4D drill hole file. Following is a list of the surveys:</p> <p>140.0 m - $79\frac{1}{2}$° @ 200°M 242.0 m - 80° @ 201°M 344.0 m - $79\frac{1}{2}$° @ 201°M</p>				
<u>2. ORIENTATED DRILL CORE</u>				
<p>Drill core was orientated using a craylus. Bedding observations, selected fracture readings, and details of the orientations themselves, follow.</p>				
P.M.				

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 13 OF 13

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 4D.
				DESCRIPTION
				<u>Bedding observations:</u>
				@ 130.0m 20° dip to 350°M
				@ 172.8m 11° dip to 325°M
				@ 203.0m 10° dip to 320°M
				@ 257.0m 11° dip to 065°M
				@ 311.4m 17° dip to 020°M
				@ 327.0m 11° dip to 025°M
				<u>Step faults in Barney Creek Formation:</u>
				2 styles : 1. @ 312.68m 3mm displacement, normal faults every 10mm 50° dip to 255°M
				2. @ 315.23m <1mm displacement, normal faults every 2-3mm 45° dip to 280°M

PROSPECT "LYNOTT" CARPENTARIA EXPLORATION COMPANY PTY. LTD.
 LOCATION: E.L. 8078 ROTARY PERCUSSION DRILL HOLE LOG
 144650E HOLE CO-ORDINATES: 185050 N.

HOLE NO. LYNOTT WEST
 No. 4D

RL. COLLAR: ... m.
 INCLINATION: -70°
 DIRECTION: 220° M.

SAMPLE NO. MC	ANALYSES p.p.m / %	DEPTH METRES	LOG	DESCRIPTION	REMARKS	WATER LEVEL
10321				dk.br + lt.br. w'd siltst. finely lamin. in places.		
"				lt.br. + lt.gy. w'd siltst.		
22				lt.gy. + minor dk.gy. w'd siltst.		
23				lt.gy. + med. gy. siltst. & minor lt.br. w'd siltst.		
24		10	CARANBIRINI MEMBER	lt.br. + med. gy. siltst.		
25				lt.gy. + lt.br.-gy. "		
26				lt.br. c ~ 20% lt.gy. siltst.		
27				dk.gy. + lt.gy. siltst. finely lamin. in places		
28				med. gy. + dk.gy. siltst.		
29		20		med. gy. dk.gy. + minor lt.gy. siltst. c ~ 10% apple green dolostone		
10330				med. gy. + dk.gy. siltst. finely lamin. in places.		
31				" " " " "		
32				med. gy. dk.gy. + lt.gy. siltst. "		
33				med. gy. + minor dk.gy. siltst.		
34		30		med. gy. + lt.gy. ~ 30% finely lamin.		
35				med. gy. + lt.gy. siltst.		
36				" + minor dk.gy. siltst.		
37				" + dk.gy. siltst.		
38				dk.gy. + minor med. gy. siltst.		
39				dk.gy. siltst.		
10340		40		"		
41				"		
42				"		
43				" finely lamin. in places.		
44				dk.gy. + med. gy. siltst. finely lamin. c minor carbonate v'lets.		
45		50		dk.gy. siltst.		
46				" finely lamin. in places.		
47				"		
48				med. gy. + dk.gy. siltst. finely lamin. c ~ 10% lt.al.gr. dolomitic siltst.		
49				dk.gy. siltst. finely lamin.		
10350		60		"		
51				dk.gy. + minor lt.gy. siltst. finely lamin.		
52				dk.gy. siltst. finely lamin.		↑
53				med. gy. + dk.gy. siltst. finely lamin.		
54		70		lt.gy. + minor dk.gy. siltst.		D
55				dk.gy. + med. gy. siltst. finely lamin.		
56				lt.gy. med.gy. + minor dk.gy. siltst. finely lamin.		W
57				med. gy. + dk.gy. siltst. finely lamin.		
58				dk.gy. + minor med. gy. siltst. finely lamin.		
59				dk.gy. + lt.gy. siltst. finely lamin.		↓
10360		80		" " " in places.		
61				lt.gy. + minor dk.gy. siltst. finely lamin.		
62				dk.gy. + minor lt.gy. siltst. "		
63				med. gy. + dk.gy. siltst.		
64		90		dk.gy. + med. gy. siltst.		
65				lt.gy. med.gy. + dk.gy. siltst. finely lamin.		
66				med. gy. + lt.gy. siltst. finely lamin.		
67				med. gy. + dk.gy. "		
68				" " " "		
69				" " " "		
10370	..	100		dk.gy. + minor med. gy. siltst.		
71				" " " "		
72				lt.gy. + med. gy. siltst. finely lamin. in places.		
73				med. gy. siltst.		
74				dk.gy. + med. gy. siltst.		
75		110		dk.gy. siltst.		
76				med. gy. + lt.gy. siltst. finely lamin.		
77				dk.gy. siltst.		
78				" "		
10379		120	X	" "		

REASON FOR HOLE: OPEN HOLE PERCUSSION
 OTHER DETAILS: PRECOLLAR FOR DIAMOND TAIL

DRILL TYPE: WARMAN 1000

DRILLER: PONTIL

SCALE:

LOGGED BY: MTW

DATE DRILLED: 24/7/94

ORG/CODE NO:

PROSPECT "LYNOTT" CARPENTARIA EXPLORATION COMPANY PTY. LTD.
LOCATION E.L. 8078 ROTARY PERCUSSION DRILL HOLE LOG
144650E ROTARY FROM ... TO ...
HOLE CO-ORDINATES 185050 N HAMMER FROM 0 TO 126

HOLE N°. LYNOTT WEST
No. 4D

RL. COLLAR: m.
INCLINATION: -70°
DIRECTION: 220°M

SAMPLE NO. MC	ANALYSES ppm / %		DEPTH METRES	LOG	DESCRIPTION	REMARKS
	1	2				
10380				Pnx?	dk.gy. siltst.	
81					"	
10382					"	
10383 DUPLICATE OF MC10382			130		E.O. Percussion Precollar 126m	
124-126m.						

REASON FOR HOLE:

OTHER DETAILS:

PAGE 2 OF 2

DRILL TYPE: WARMAN 1000

DRILLER: PONTIL

SCALE I

LOGGED BY: MTW

DATE DRILLED: 24/7/94

~~DATE SERIALIZED~~
~~088-1600E AM~~

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PROSPECT: "LYNOTT"		HOLE No. LYNOTT WEST No. 3 D	EPM/LEASE No. E.L. 8078	PAGE 1 OF 12
SURVEY DETAILS		DOWNHOLE SURVEY: Method: EASTMAN CAMERA		Date: CONTINUOUS
Northing: 185000mN	End of Hole: 396.5 m	Depth	117.0 219.0 312.0 396.0	By: PONTIL
Eastling: 150500mE	Bearing M/T/G: 185°M	Azimuth	181°M 182°M 182°M 182°M	
Collar RL:	Declination: -80°	Declination	-81½° -82½° -82¼° -82°	
Hole size	Depth	Sample Type	Core stored at: MIMEX DEPOT -McArthur River	Drill contractor: PONTIL PTY LTD
5½"	0 to 101.5 m	PERCUSSION - OPEN HOLE	Assay rejects started at:	Started: 18 July 1994
HQ	101.5 to 276.0 m	CORE	Steel casing left in hole: NIL	Finished: 23 July 1994
NQ	276.0 to 396.5 m	CORE	PVC casing left in hole: 0-6m x 150mm	Logged by: M.T. WILLIAMS
GEOLOGICAL SUMMARY				
From	To	Description		
0	50 m	CARANBIRINI MEMBER		
50	316.48m	REWARD DOLOMITE		
316.48 m	342.10m	H.Y.C. PYRITIC SHALE MEMBER		
342.10 m	344.89m	W-FOLD SHALE MEMBER		
344.89m	391.73m	Karst Platform related breccia.		
391.73 m	396.5 m	TEENA DOLOMITE (H.Y.C. GRIT MARKER).		
		E.O.H. 396.5 m.		

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 2 OF 12

PROSPECT: LYNOTT E.L. 8078					GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 3D.	DESCRIPTION
0.0	50.0	50.0		CARANBIRINI MEMBER	
50.0	101.5	51.5		REWARD DOLOMITE	
101.5	316.48	214.98		REWARD DOLOMITE	
101.5	107.6	6.1			<p>Dark grey, medium to thickly bedded dolomitic siltstone with minor thin medium to dark grey interbeds and occasional thin carbonate veinlets. Thin 'grit beds'; fine grained arenites with white dolostone and black (chert?) minute clasts occur at : 101.70 m for 20 mm; 103.62 m for 20 mm; 105.36 m for 5 mm (shows irregular basal contact due to soft sediment loading?); 106.86 m for 20 mm.</p> <p>between 107.24 m - 107.60 m : is a disrupted zone (soft sediment deformation) that includes 'rip-up clasts'? of lighter zone below.</p>
107.60	108.30	0.70			<p>Predominantly medium to light grey, poorly bedded zone. Appears to be somewhat calcified: similar to zone seen at Reward Dolomite - Caranbirini Member contact. Basal 50 cm is moderately mottled? (weathering effect?).</p>
108.30	188.88	80.58			<p>Interbedded medium grey, thin dark grey and thin light grey dolomitic siltstone. Mottled zones, crusts and other variations occur throughout this interval as follows :</p> <ul style="list-style-type: none"> Mottled zones occur at ; 119.40 - 120.26 m ; 125.39 - 126.76 m ; 127.58 - 128.84 m ; 131.03 - 132.78 m ; 135.97 - 136.97 m ; 137.70 - 160.06 m ; 177.0 - 186.35 m ; these mottled

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 3 OF 12

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 3D.
				DESCRIPTION
				zones are medium bedded and interbedded with dolomitic siltstone. Most of the mottled zones appear to be related to displacive anhydrite growth, with evidence of enterolithic structures at ~132m; at the base of 135.97-136.97m zone; and between 145.15m - 146.22m.
				<ul style="list-style-type: none"> • Crusts occur through the interval, as described below: <p>115.18 - 116.84m : definite crusts visible, with some erosion of crusts in places.</p> <p>@ 146.80m for 70mm : thinly interbedded light grey crusts and dark grey siltstone, with the crusts broken in places.</p> <p>@ 147.74m for 15mm : thick light grey crust ?</p> <ul style="list-style-type: none"> • Other variations through the interval occur as follows: <p>@ 108.23m : very fine grained brassy-shiny pyrite within a thin laminae.</p> <p>@ 113.77m for 50mm & 114.00m for 20mm ; thinly bedded light grey crusts with at 114.11m for 20mm ; bedding parallel broken crusts.</p> <p>between 115.18 - 116.84m ; clearly repeating cycles of very thin dark grey siltstone mud base, medium to thickly bedded medium grey siltstone middle and a relatively thin light grey crust top, which is eroded in places. The middle, medium grey siltstone zone occasionally has associated bedding parallel, thin elongate concretions.</p> <p>an example of disrupted bedding due to compaction? :</p> <p>118.25 →</p> <p>118.29 →</p>

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 4 OF 12

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 3D.
				DESCRIPTION
				between 120.26 - 125.39m ; poor - diffuse bedding contacts.
				@ 127.29m for 10mm : light grey dolomitic siltstone bed with minor black (siltstone) clasts, 1-2mm in size.
				@ 128.04m is a similarly distorted laminae and sketched at 118.25m.
				between 137.70 - 160.06m ; some mottled zones appear to be in part related to poorly developed concretions.
				@ 150.49m for 30mm : fine sand bed with distinct cross bedding.
				between 159.86 - 160.06m : zone of poorly developed light grey concretions in a dark grey siltstone bed.
				between 186.35 - 188.88m : mottled zone, in part, related to poorly developed light grey concretions.
188.88	201.55	12.67		Interbedded light grey and medium to light grey dolomitic siltstone. sudden change to lighter grey due to weathering? Reasonably thickly bedded throughout. Fairly mottled throughout, mottling due to weathering and poorly developed concretions?
201.55	202.31	0.76		Transitional zone of ; gradational decrease in light grey siltstone beds to medium grey siltstone beds + gradational decrease in bed thickness from medium to thickly bedded to medium to thinly bedded.
202.31	226.0	23.69		Brown-grey dolomitic siltstone, medium to thinly bedded (almost laminated in places) with interbedded brown-grey mottled beds after nodular dolomite? Bedding contacts for thin beds relatively wavy (wavy contacts could be partially dolomitized - originally being stylolitic

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 5 OF 12

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG			
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 3D.			
				DESCRIPTION			
				or could be somewhat reworked whilst partly lithified). Occasional thin fine grained arenites throughout (some cross bedded). Some arenites have been considerably reworked. Appears to be a fair amount of soft sediment deformation due to loading.			
226.0	304.0	78.0		<p>Zone of thin light grey bases, medium bedded massive medium grey middle beds and poorly developed light grey thin crusts with a dark grey top. Cycles not always fully developed with a predominance of medium to thickly bedded medium grey siltstone. Light grey bases slightly coarser in places. Crusts are concentrated in top of interval, then fairly uncommon. Occasional poorly to moderately developed cross bedded fine grained arenites through interval. Variations occur as follows:</p> <ul style="list-style-type: none"> @ 227.88m for 15mm : arenite with white, grey and black clasts (< 1mm in size), not graded @ 229.05m for 15mm : small thin elongate, poorly developed, concretions? @ 246.52m for 25mm : arenite with numerous minute dark clasts (chert or pyrobitumen?) @ 253.60m ; thin, small, broken crusts stacked en echelon, through thin bed. @ 253.67m ; thin elongate concretions, aligned bedding parallel, sited in middle of medium grey bed. @ 265.31m ; thin, small, broken crusts stacked en echelon, through the bed. @ 265.72m ; thin elongate concretions, aligned bedding parallel, sited in middle of medium grey bed. @ 288.36m for 40mm : cycles of fine grained arenites and dark grey siltstone with minor disseminated very fine grained light brown sphalerite. @ 291.28m for 5mm : approximately bedding parallel disseminated very fine grained shiny pyrite concentrated along a dark grey and medium grey contact, in both beds. 			

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 6 OF 12

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 3D.
				DESCRIPTION
				between ~274m - ~288m, light grey bases occasional to minor, predominantly medium and medium to dark grey siltstone, predominantly medium bedded, dark grey beds mostly as thin beds at top of cycle.
				between ~288m - 304.0m overall more thinly bedded.
304.0	314.25	10.25		<p>Thin light grey siltstone bases with medium to dark grey siltstone tops. Common thin arenites throughout, which commonly form bases.</p> <p>@ 306.76m for 3mm: fine grained, moderately shiny pyrite as sketched below:</p> <p>@ 310.67m: fine grained shiny pyrite in fractures up to 15mm long, right angles to bedding.</p> <p>@ 311.85m: fine grained shiny pyrite & light brown sphalerite in fractures up to 10mm long, right angles to bedding.</p> <p>between 312.57 - 312.69m: interbedded arenite (predominantly) and dark grey siltstone.</p> <p>between 313.50 - 313.62m: interbedded arenite (predominantly) and dark grey siltstone.</p> <p>Weakly pyritic interbedded medium grey and medium to dark grey siltstone. The pyrite is very fine grained, dull in thin beds.</p>
314.25	316.48	2.23		

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 7 OF 12

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 3 D.
				DESCRIPTION
				between 314.39 - 315.68 m : cycles of dark grey siltstone and medium to thickly bedded matrix supported conglomerates. Clasts consist of white dolostone (< 1mm in size) 3-5% of bed in dark grey mud matrix. This appears to correlate with the sedimentary breccia at the base of Reward Dolomite, observed in Lynott No. 100 drill hole.
				@ 316.29m for 90mm ; interbedded light grey fine cherty arenite with dark grey siltstone. This could correlate with M. Newton's tuff bed, which occurs at the base of Reward Dolomite.
316.48	342.10	25.62		HYC PYRITIC SHALE MEMBER
316.48	321.94	5.46		Weakly to moderately pyritic, relatively massive (diffuse bedding contacts) dark grey siltstone with numerous concretions. Concretions are up to 35mm thick, and appear arenaceous to cherty. Occasional thin arenite beds occur through the interval.
321.94	342.10	20.16		Moderately pyritic dark grey siltstone with occasional thin fine grained arenites. Appears to have diffuse bedding contacts, tentatively the interval is moderately thickly bedded.
				@ 330.16m for 35mm : interbedded light grey fine grained arenite and dark grey siltstone. Possible cherty tuffaceous bed?
				@ 333.72m for 10mm : fissile and friable grey clayey tuffaceous bed.
				@ 335.40m for 10mm : fine grained shiny pyrite at base of bed with disseminated gradational top contact - graded?

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 8 OF 12

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG			
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 3D.			
				DESCRIPTION			
				between 336.33 - 336.38m (50mm) subrounded 1mm blebs, medium grey-brown (sideritic) disseminated in bed.			
				between 336.79 - 338.44m : average 100mm thick dark grey siltstone beds with black tops and disseminated pyrite at base.			
				between 338.44 - 342.10m : interval as follows			
				338.44 - 339.30m : gradational increase in dolomitic fine grained arenite.			
				339.30 - 341.37m : predominantly dolomitic arenaceous interbedded with dolostone			
				341.37 - 342.10m : gradational decrease in dolomite, increase in dark grey siltston			
342.10	344.89	2.79		<u>W-FOLD SHALE MEMBER</u>			
342.10	344.71	2.61		Thinly interbedded dark grey and medium grey siltstone, moderately wavy bedded, appears somewhat reworked?? Common fine grained shiny pyrite blebs throughout interval.			
344.71	344.89	0.18		As described for the interval above with a gradational increase in dolomite content.			
344.89	391.73	46.84		<u>KARST PLATFORM RELATED BRECCIA</u>			
344.89	345.52	0.63		Fairly dolomitic interval with an arenaceous to dolostone texture, similar to interval above from 339.30 - 341.37m.			
345.52	347.18	1.66		Zone of very strong carbonate veining, dolomitisation, brecciation and weathering			

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 9 OF 12

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 3D.
				DESCRIPTION
				related to cavities. Precursor is a dolostone.
				@ 346.07 m for ~350mm : thinly bedded grey dolomitic siltstone interbedded with thin dolostone beds. Bedding dips the same in this interval as in W-Fold Shale Member above.
347.18	391.73	44.55		This zone looks definitely like a sedimentary breccia. The clasts are reasonably polymitic, although all appear to be Teena Dolomite. The vast majority of the breccia is matrix supported, with the matrix being medium to medium-dark grey dolomitic mud. This zone still contains carbonate veining, dolomitisation, brecciation (ie: in situ brecciation of clasts) and weathering related to cavities. The following variations occur:
				@ 348.65m : minor disseminated brown sphalerite as matrix infill.
				between 353.27 - 353.32m : ~1% disseminated brown sphalerite as part matrix.
				@ 353.40m for 20mm: dark grey siltstone/mud infill? with ~5-10% brown sphalerite at top of bed.
				between 353-365m clasts predominantly thinly bedded dolostones. radiating gypsum pseudomorphs @ 365.82m, 368.10m & 388.09m.
				between 387.40 - 387.60m ; thinly interbedded light grey and dark grey siltstone. This interval does not appear to be a clast??
391.73	396.5	4.77		TEENA DOLOMITE
391.73	392.36	0.63		Algal-stromatolitic zone as follows:

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 10 OF 12

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
From	To	length	recovery m	HOLE No. LYNOTT WEST No. 3D.
				DESCRIPTION
				from 391.73 - 392.01 m : possible algal-stromatolitic zone.
				from 392.01 - 392.13 m : definite clonal stromatolite.
				from 392.13 - 392.36 m : possible algal-stromatolitic zone.
				this interval would appear to be the stromatolitic marker that overlies the H.Y.C. Grit Marker itself.
392.36	394.93	2.57		Reasonably thinly bedded dolostones with very strong to moderate in situ brecciation throughout.
394.93	396.5	1.57		Interbedded dolostone, doloshale and thin fine grained to very fine grained grit beds (with possible minute quartz clasts?). Reasonably thinly bedded. This interval is interpreted as the H.Y.C. Grit Marker, located towards the base of Teena Dolomite.
E.O.H. 396.5 m				11

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 11 OF 12

PROSPECT: LYNOTT E.L. 8078				GEOLOGICAL LOG
from	to	length	recovery m	HOLE No. LYNOTT WEST No. 3D.
<u>MISCELLANEOUS & STRUCTURAL DATA</u>				
<u>1. EASTMAN CAMERA DOWNHOLE SURVEYS</u>				
A complete set of the original Eastman Camera negatives is stored at McArthur River Project, MIMEX Depot, in the Lynott West No. 3D drill hole file. Following is a list of the surveys:				
117.0 m - 82° @ 181° M				
219.0 m - 82½° @ 182° M				
312.0 m - 82½° @ 182° M				
396.0 m - 82° @ 182° M				
<u>2. ORIENTATED DRILL CORE</u>				
Drill core was orientated using a cralus, and one orientation, using a weighted spear. Bedding observations, selected fracture readings, selected current directions from cross bedded arenites and details of the orientations themselves, follow.				
14				

MIM EXPLORATION PTY. LTD.
GEOLOGICAL LOG

PAGE 12 OF 12

"LYNOTT" CARPENTARIA EXPLORATION COMPANY PTY. LTD.
 LOCATION: E.L. 8078 ROTARY PERCUSSION DRILL HOLE LOG
 150500E HOLE CO-ORDINATES: 185000N

HOLE NO. LYNOTT WEST
 NO. 3D

RL. COLLAR: ... m.
 INCLINATION: -80°
 DIRECTION: ...

SAMPLE NO. MC	ANALYSES ppm/%	DEPTH METRES	LOG	DESCRIPTION	REMARKS
10229				lt. br. + dk. red. br. w'd siltst.	
30				br. + ol. br. w'd siltst. & minor lt. br. wt. siltst.	
31				" " " "	
32				as above + ~ 20% finely bedded chips.	
33				ol. br. + br. w'd siltst.	
34				" v. w'd siltst. & minor br. clay.	
35				" " " "	
36				pale yell. w'd siltst. & common Mg w'ing on surfaces.	
37				pale yell. w'd siltst + bl. finely bedded siltst.	
38		20		pale yell. to lt. br. w'd siltst. & minor bl. finely bedded siltst.	
39				yell. br. w'd siltst & rare to minor pinkish w'd siltst.	
10240				NO SAMPLE	
41				NO SAMPLE	
42				NO SAMPLE	
43				yell. br. w'd siltst.	
44		30		NO SAMPLE	
45				yell. br. w'd siltst	
46				bl. carb. siltst.	BOX
47				"	
48				"	
49		40		bl. + med. gy. siltst.	
10250				" " + rare v.f.g. dull py disse.	
51				" " + no py.	
52				med. gy + bl. siltst.	
53				" "	
54		50		lt. gy. siltst.	
55				dk. gy + bl. siltst.	
56				med. gy + bl. siltst.	
57				med. gy + minor bl. siltst.	
58				dk. gy. siltst.	
59		60		" "	
10260				lt. gy. dolomitic siltst. & rare vfg. shiny py blebs.	
61				dk. gy. siltst.	
62				" "	
63				dkgy + med-dkggy siltst. + minor carbonate chips.	
64		70		dk gy + minor med-dkggy siltst	
65				dkggy + med-dkggy siltst + ~ 30% yellow w'd siltst.	
66				" " ~ 20%	
67				" " ~ 10%	
68				" " ~ 10%	
69		80		" " ~ 10%	
10270				" " ~ 5%	
71				med. gy + minor lt. gy siltst + ~ 5%.	
72				" " " "	
73		90		" " " "	
74				" " " "	
75				" " " "	
76				" " " "	
77				med. gy + dk. gy siltst. + ~ 5%.	
10278		100		" " " "	
10279	DUPLICATE OF MC10247 36-38M.			E.O.H. 102 M.	
		110			
		120			

REASON FOR HOLE:

OTHER DETAILS:

DRILL TYPE: WARMAN 1000

LOGGED BY: MTW

DRILLER: PONTIL

DATE DRILLED: 23/7/94

SCALE:

ORG/CORE No:

APPENDIX 2

**ASSAY RESULTS
FOR LYNOTT WEST
DRILLING**

EL 8078, "Lynott". Assay Results and sample intervals for 1994 exploration drilling.

HOLE	SAMPLE	FROM	TO	AG	CU	PB	ZN	FE%	MN
LYNW1R	MC10201	0	2	-1	24	37	66	3.04	
LYNW1R	MC10202	2	4	-1	34	44	91	4.28	
LYNW1R	MC10203	4	6	-1	28	37	97	4.38	
LYNW1R	MC10204	6	8	-1	15	43	64	1.94	
LYNW1R	MC10205	8	10	-1	17	40	40	1.23	
LYNW1R	MC10206	10	12	-1	15	36	39	1.35	
LYNW1R	MC10207	12	14	-1	22	36	62	2.01	
LYNW1R	MC10208	14	16	-1	19	34	34	1.33	
LYNW1R	MC10209	16	18	-1	19	34	40	3.37	
LYNW1R	MC10210	18	20	-1	22	39	39	3.59	
LYNW1R	MC10211	20	22	-1	24	41	79	2.96	
LYNW1R	MC10212	22	24	-1	18	36	62	1.91	
LYNW1R	MC10213	24	26	-1	19	32	70	1.88	
LYNW1R	MC10214	26	28	-1	30	33	100	3.92	
LYNW1R	MC10215	28	30	-1	57	47	72	2.32	
LYNW1R	MC10216	30	32	-1	22	34	68	2.22	
LYNW1R	MC10217	32	34	-1	21	42	115	3.04	
LYNW1R	MC10218	34	36	-1	24	68	165	5.74	
LYNW1R	MC10219	36	38	-1	30	58	135	4.09	
LYNW1R	MC10220	38	40	-1	27	63	100	2.9	
LYNW1R	MC10221	40	42	-1	28	53	130	4.28	
LYNW1R	MC10222	42	44	-1	26	55	155	4.64	
LYNW1R	MC10223	44	46	-1	40	50	165	5.49	
LYNW1R	MC10224	46	48	-1	28	46	110	3.72	
LYNW1R	MC10225	48	50	-1	30	40	100	3.41	
LYNW1R	MC10226	50	52	-1	25	41	94	2.89	
LYNW1R	MC10227	52	54	-1	23	42	105	3.43	
LYNW1R	MC10228	54	56	-1	24	45	115	3.98	
LYNW1W	MC10280	0	2	-1	18	50	44	5.49	
LYNW1W	MC10281	2	4	-1	17	52	46	5.4	
LYNW1W	MC10282	4	6	-1	13	38	33	2.5	
LYNW1W	MC10283	6	8	-1	14	39	33	5.89	
LYNW1W	MC10284	8	10	-1	16	81	64	3.58	
LYNW1W	MC10285	10	12	-1	17	120	77	4.25	
LYNW1W	MC10286	12	14	-1	15	140	53	2.87	
LYNW1W	MC10287	14	16	-1	17	145	94	4.18	
LYNW1W	MC10288	16	18	-1	19	145	72	3.45	
LYNW1W	MC10289	18	20	-1	21	230	95	4.69	
LYNW2R	MC10290	0	2	-1	16	41	100	6.28	
LYNW2R	MC10291	2	4	-1	13	27	135	1.83	
LYNW2R	MC10292	4	6	-1	17	38	160	2.04	
LYNW2R	MC10293	6	8	-1	21	27	145	1.55	
LYNW2R	MC10294	8	10	-1	13	44	190	2.41	
LYNW2R	MC10295	10	12	-1	10	25	135	1.83	
LYNW2R	MC10296	12	14	-1	14	47	210	2.5	
LYNW2R	MC10297	14	16	-1	14	41	185	2.25	
LYNW2R	MC10298	16	18	-1	15	56	175	2.39	
LYNW2R	MC10299	18	20	-1	17	35	155	2.72	
LYNW2R	MC10300	20	22	-1	27	93	170	3.6	
LYNW2R	MC10301	22	24	-1	39	105	155	3.88	
LYNW2R	MC10302	24	26	-1	35	59	240	7.73	
LYNW2R	MC10303	26	28	-1	33	55	120	3.16	
LYNW2R	MC10304	28	30	-1	30	32	91	2	
LYNW2R	MC10305	30	32	-1	20	14	47	1.18	
LYNW2R	MC10306	32	34	-1	13	10	46	0.51	
LYNW2R	MC10307	34	36	-1	17	15	62	1.72	
LYNW2R	MC10308	36	38	-1	16	14	48	1.71	
LYNW2R	MC10309	38	40	-1	17	11	36	1.02	
LYNW2R	MC10310	40	42	-1	16	11	31	0.65	
LYNW2R	MC10311	42	44	-1	12	10	34	0.9	
LYNW2R	MC10312	44	46	-1	17	6	35	0.67	
LYNW2R	MC10313	46	48	-1	16	10	37	0.74	
LYNW2R	MC10314	48	50	-1	16	12	32	0.57	
LYNW2R	MC10315	50	52	-1	26	18	135	1.76	

LYNW2R	MC10316	52	54	-1	29	19	260	3.59	
LYNW2R	MC10317	54	56	-1	30	21	175	2.35	
LYNW2R	MC10318	56	58	-1	20	16	93	1.32	
LYNW2R	MC10319	58	60	-1	18	16	58	0.73	
LYNW3	MC10229	0	2		9	23	71	2.16	
LYNW3	MC10230	2	4		8	15	90	2.15	
LYNW3	MC10231	4	6		11	26	105	1.77	
LYNW3	MC10232	6	8		9	23	91	1.67	
LYNW3	MC10233	8	10		12	21	69	1.55	
LYNW3	MC10234	10	12		7	10	48	1.08	
LYNW3	MC10235	12	14		10	13	145	1.01	
LYNW3	MC10236	14	16		12	12	160	1.08	
LYNW3	MC10237	16	18		12	8	145	1.2	
LYNW3	MC10238	18	20		10	8	77	1.17	
LYNW3	MC10239	20	22		11	7	64	1.1	
LYNW3	MC10240	22	24		insufficient sample				
LYNW3	MC10241	24	26		insufficient sample				
LYNW3	MC10242	26	28		insufficient sample				
LYNW3	MC10243	28	30		insufficient sample				
LYNW3	MC10244	30	32		insufficient sample				
LYNW3	MC10245	32	34		insufficient sample				
LYNW3	MC10246	34	36		10	7	23	0.8	
LYNW3	MC10247	36	38		11	8	33	0.93	
LYNW3	MC10248	38	40		11	8	28	0.95	
LYNW3	MC10249	40	42		10	7	22	0.93	
LYNW3	MC10250	42	44		7	7	20	0.53	
LYNW3	MC10251	44	46		6	7	23	0.5	
LYNW3	MC10252	46	48		6	7	38	0.53	
LYNW3	MC10253	48	50		7	8	29	0.57	
LYNW3	MC10254	50	52		7	6	18	0.77	
LYNW3	MC10255	52	54		5	8	28	0.45	
LYNW3	MC10256	54	56		6	7	14	0.46	
LYNW3	MC10257	56	58		6	7	16	0.57	
LYNW3	MC10258	58	60		5	7	16	0.46	
LYNW3	MC10259	60	62		5	7	32	0.3	
LYNW3	MC10260	62	64		4	5	18	0.55	
LYNW3	MC10261	64	66		4	8	30	0.51	
LYNW3	MC10262	66	68		5	7	21	0.52	
LYNW3	MC10263	68	70		7	8	45	0.48	
LYNW3	MC10264	70	72		5	7	38	0.39	
LYNW3	MC10265	72	74		7	7	31	0.48	
LYNW3	MC10266	74	76		5	8	33	0.36	
LYNW3	MC10267	76	78		4	7	26	0.29	
LYNW3	MC10268	78	80		5	9	33	0.44	
LYNW3	MC10269	80	82		6	11	31	0.56	
LYNW3	MC10270	82	84		5	10	29	0.52	
LYNW3	MC10271	84	86		6	9	28	0.5	
LYNW3	MC10272	86	88		5	9	11	0.37	
LYNW3	MC10273	88	90		5	8	10	0.33	
LYNW3	MC10274	90	92		6	9	15	0.46	
LYNW3	MC10275	92	94		7	11	18	0.52	
LYNW3	MC10276	94	96		8	13	17	0.63	
LYNW3	MC10277	96	98		6	12	18	0.51	
LYNW3	MC10278	98	100		8	13	23	0.58	
LYNW3	MC10279	100	102		12	9	38	0.92	
LYNW3	MC10519	105	106		12	13	24	1	1140
LYNW3	MC10403	316	317.5		18	19	57	3.15	840
LYNW3	MC10402	317.5	319		19	21	100	3.55	1090
LYNW3	MC10401	319	320.5		18	17	42	3.36	540
LYNW3	MC10400	320.5	322		19	21	170	4.03	530
LYNW3	MC10399	322	323.5		20	22	49	4.65	440
LYNW3	MC10398	323.5	325		23	26	43	1.56	770
LYNW3	MC10397	325	326.5		17	21	21	1.97	1250
LYNW3	MC10396	326.5	328		15	24	24	3.57	1290
LYNW3	MC10395	328	329.5		12	18	9	2.79	1460
LYNW3	MC10394	329.5	331		11	21	10	2.59	2810
LYNW3	MC10393	331	332.5		14	18	18	2.04	3780
LYNW3	MC10392	332.5	334		15	20	67	1.86	3030

LYNW3	MC10391	334	335.5	16	24	220	1.79	3910
LYNW3	MC10390	335.5	337	16	29	31	1.97	4190
LYNW3	MC10389	337	338.5	39	64	110	1.68	3470
LYNW3	MC10388	338.5	340	11	44	610	0.87	1420
LYNW3	MC10387	340	341.5	7	29	15	0.83	1120
LYNW3	MC10386	341.5	343	23	59	51	1.96	440
LYNW3	MC10385	343	344.5	33	68	80	1.91	400
LYNW3	MC10384	344.5	346	17	30	110	0.9	720
LYNW4	MC10321	0	4	12	36	17	3.07	2510
LYNW4	MC10322	4	6	20	16	8	1.23	1090
LYNW4	MC10323	6	8	24	20	18	1.3	1330
LYNW4	MC10324	8	10	15	11	9	1.19	1990
LYNW4	MC10325	10	12	23	30	34	1.23	1170
LYNW4	MC10326	12	14	19	20	11	0.85	165
LYNW4	MC10327	14	16	23	33	5	0.95	99
LYNW4	MC10328	16	18	14	18	12	1.07	1210
LYNW4	MC10329	18	20	10	16	12	1.22	1940
LYNW4	MC10330	20	22	8	7	11	1.18	2500
LYNW4	MC10331	22	24	10	13	9	1.21	2310
LYNW4	MC10332	24	26	12	25	11	0.94	1341
LYNW4	MC10333	26	28	17	24	11	0.86	620
LYNW4	MC10334	28	30	9	13	6	0.91	1170
LYNW4	MC10335	30	32	7	8	6	0.84	2070
LYNW4	MC10336	32	34	11	11	21	1.1	2020
LYNW4	MC10337	34	36	13	11	13	0.92	1860
LYNW4	MC10338	36	38	9	9	14	0.87	1740
LYNW4	MC10339	38	40	13	15	19	1.46	2550
LYNW4	MC10340	40	42	21	16	17	1.07	220
LYNW4	MC10341	42	44	17	33	22	2.36	200
LYNW4	MC10342	44	46	17	32	34	1.44	860
LYNW4	MC10343	46	48	12	8	16	0.96	1690
LYNW4	MC10344	48	50	10	12	18	1.05	2060
LYNW4	MC10345	50	52	11	14	35	1.28	280
LYNW4	MC10346	52	54	8	12	14	1.02	550
LYNW4	MC10347	54	56	30	79	14	2.19	490
LYNW4	MC10348	56	58	8	11	6	0.97	1160
LYNW4	MC10349	58	60	15	9	9	1	1590
LYNW4	MC10350	60	62	36	23	9	1.68	1040
LYNW4	MC10351	62	64	42	73	12	3.17	160
LYNW4	MC10352	64	66	15	13	11	1.29	160
LYNW4	MC10353	66	68	20	27	14	1.47	1270
LYNW4	MC10354	68	70	11	13	8	0.86	1160
LYNW4	MC10355	70	72	17	21	11	1.01	1060
LYNW4	MC10356	72	74	14	21	14	1	1230
LYNW4	MC10357	74	76	13	12	8	1.04	840
LYNW4	MC10358	76	78	13	10	12	0.95	890
LYNW4	MC10359	78	80	6	9	7	0.83	900
LYNW4	MC10360	80	82	11	22	8	1.15	970
LYNW4	MC10361	82	84	8	13	13	0.98	830
LYNW4	MC10362	84	86	9	11	12	0.81	870
LYNW4	MC10363	86	88	15	28	16	1.05	670
LYNW4	MC10364	88	90	12	29	27	1.14	1320
LYNW4	MC10365	90	92	7	13	17	0.81	960
LYNW4	MC10366	92	94	6	8	17	0.69	1050
LYNW4	MC10367	94	96	9	17	17	0.88	1220
LYNW4	MC10368	96	98	7	13	24	0.9	1150
LYNW4	MC10369	98	100	9	12	17	1	1260
LYNW4	MC10370	100	102	12	22	16	1.14	1020
LYNW4	MC10371	102	104	14	49	14	1.17	1170
LYNW4	MC10372	104	106	11	26	9	1.08	1340
LYNW4	MC10373	106	108	8	14	10	0.98	1210
LYNW4	MC10374	108	110	8	13	7	1.14	1340
LYNW4	MC10375	110	112	27	18	8	1.12	1160
LYNW4	MC10376	112	114	9	12	12	1	980
LYNW4	MC10377	114	116	11	23	14	1.14	880
LYNW4	MC10378	116	118	13	35	32	1.32	920
LYNW4	MC10379	118	120	13	36	17	1.4	870
LYNW4	MC10380	120	122	13	33	15	1.52	840

LYNW4	MC10381	122	124	10	26	13	1.23	940
LYNW4	MC10382	124	126	11	27	22	1.31	790
LYNW4	MC10525	137	138	15	54	72	1.62	660
LYNW4	MC10526	148	149	9	28	61	1.14	1030
LYNW4	MC10463	170	172	20	28	15	1.41	2520
LYNW4	MC10464	172	174	17	38	30	1.52	1770
LYNW4	MC10465	174	176	15	41	22	1.62	2180
LYNW4	MC10466	176	178	22	64	360	4.77	2510
LYNW4	MC10467	178	180	21	92	165	7.23	3150
LYNW4	MC10468	180	182	17	86	910	4.82	2430
LYNW4	MC10469	182	184	15	91	700	5.29	1860
LYNW4	MC10470	184	186	15	40	100	2.65	410
LYNW4	MC10471	186	188	18	31	59	2.63	280
LYNW4	MC10472	188	190	15	28	130	1.62	240
LYNW4	MC10473	190	192	13	21	28	1.33	420
LYNW4	MC10474	192	194	14	34	21	1.18	590
LYNW4	MC10475	194	196	22	81	120	1.76	690
LYNW4	MC10476	196	198	7	24	13	0.78	730
LYNW4	MC10477	198	200	6	12	7	0.73	710
LYNW4	MC10478	200	202	6	11	32	0.67	600
LYNW4	MC10479	202	204	8	13	17	0.69	550
LYNW4	MC10480	204	206	6	13	21	0.63	580
LYNW4	MC10481	206	208	4	8	31	0.42	540
LYNW4	MC10482	208	210	9	13	57	0.51	530
LYNW4	MC10483	210	212	5	11	3	0.43	490
LYNW4	MC10484	212	214	6	10	7	0.42	510
LYNW4	MC10485	214	216	6	11	3	0.43	470
LYNW4	MC10486	216	218	8	16	11	0.59	440
LYNW4	MC10487	218	220	10	18	120	0.57	420
LYNW4	MC10488	220	222	9	19	32	0.59	410
LYNW4	MC10489	222	224	9	24	51	0.69	430
LYNW4	MC10527	265	266	6	31	7	0.59	490
LYNW4	MC10490	298	300	12	21	36	1.03	1530
LYNW4	MC10491	300	302	24	21	29	1.19	740
LYNW4	MC10492	302	304	14	17	68	1.27	500
LYNW4	MC10493	304	306	16	39	45	1.42	510
LYNW4	MC10494	306	308	17	18	62	1.4	460
LYNW4	MC10495	308	310	23	20	23	1.44	380
LYNW4	MC10496	310	312	22	15	5	1.37	460
LYNW4	MC10497	312	314	34	19	23	1.53	390
LYNW4	MC10498	314	316	35	20	22	1.51	390
LYNW4	MC10499	316	318	31	28	88	1.42	330
LYNW4	MC10500	318	320	37	32	39	1.28	360
LYNW4	MC10501	320	322	38	46	44	1.42	410
LYNW4	MC10502	322	324	38	38	26	1.33	350
LYNW4	MC10503	324	326	34	77	23	2.38	340
LYNW5	MC10405	0	2	45	19	26	2.54	1540
LYNW5	MC10406	2	4	23	14	20	1.95	870
LYNW5	MC10407	4	6	22	13	22	1.73	880
LYNW5	MC10408	6	8	29	12	40	1.49	1140
LYNW5	MC10409	8	10	34	27	36	1.49	2440
LYNW5	MC10410	10	12	23	9	27	1.16	2390
LYNW5	MC10411	12	14	27	20	27	1.57	840
LYNW5	MC10412	14	16	23	14	59	1.14	1630
LYNW5	MC10413	16	18	21	15	32	1.17	1580
LYNW5	MC10414	18	20	18	17	25	1.38	2340
LYNW5	MC10415	20	22	21	32	37	2.12	3990
LYNW5	MC10416	22	24	23	16	31	1.4	830
LYNW5	MC10417	24	26	22	19	33	1.65	1080
LYNW5	MC10418	26	28	16	22	40	1.46	1280
LYNW5	MC10419	28	30	18	15	22	1.31	1890
LYNW5	MC10420	30	32	16	18	47	1.47	1410
LYNW5	MC10421	32	34	26	24	41	1.48	120
LYNW5	MC10422	34	36	17	14	17	1.03	91
LYNW5	MC10423	36	38	21	30	37	1.37	300
LYNW5	MC10424	38	40	21	16	21	1.25	105
LYNW5	MC10425	40	42	14	7	10	1.12	2850
LYNW5	MC10426	42	44	15	17	30	1.41	2370

LYNW5	MC10427	44	46		19	14	79	1.51	1920
LYNW5	MC10428	46	48		20	19	76	1.27	510
LYNW5	MC10429	48	50		15	14	24	1.36	1900
LYNW5	MC10430	50	52		25	17	43	1.35	790
LYNW5	MC10431	52	54		21	20	280	1.25	730
LYNW5	MC10432	54	56		21	11	55	1.19	1600
LYNW5	MC10433	56	58		32	17	59	1.62	790
LYNW5	MC10434	58	60		21	27	50	2.02	1770
LYNW5	MC10435	60	62		23	24	300	2.02	410
LYNW5	MC10436	62	64		14	14	36	1.56	890
LYNW5	MC10437	64	66		14	16	84	1.66	670
LYNW5	MC10438	66	68		14	18	57	2.04	250
LYNW5	MC10439	68	70		36	20	280	2.87	220
LYNW5	MC10440	70	72		23	30	63	1.23	1150
LYNW5	MC10441	72	74		32	21	370	1.55	1070
LYNW5	MC10442	74	76		20	21	39	1.89	770
LYNW5	MC10443	76	78		16	20	20	1.09	930
LYNW5	MC10444	78	80		12	10	18	0.93	1260
LYNW5	MC10445	80	82		10	11	39	0.96	1410
LYNW5	MC10446	82	84		17	23	52	1.11	740
LYNW5	MC10447	84	86		12	13	34	0.95	1280
LYNW5	MC10448	86	88		7	6	16	0.93	1590
LYNW5	MC10449	88	90		21	24	31	1.19	990
LYNW5	MC10450	90	92		13	15	45	1.3	900
LYNW5	MC10451	92	94		13	23	30	0.98	1450
LYNW5	MC10452	94	96		17	44	110	1.32	990
LYNW5	MC10453	96	98		16	37	47	1.03	1310
LYNW5	MC10454	98	100		11	13	47	1.01	1450
LYNW5	MC10455	100	102		13	23	185	1.07	1300
LYNW5	MC10456	102	104		10	13	135	0.97	1150
LYNW5	MC10457	104	106		10	8	89	0.86	1040
LYNW5	MC10458	106	108		15	23	135	1.14	920
LYNW5	MC10459	108	110		19	13	110	1.53	940
LYNW5	MC10460	110	112		17	8	110	1.49	940
LYNW5	MC10461	112	114		14	20	44	1.2	1150
LYNW5	MC10504	158	160		34	38	140	4.17	3
LYNW5	MC10505	160	162		23	61	155	8.37	3300
LYNW5	MC10506	162	164		18	90	410	5.32	2210
LYNW5	MC10507	164	166		22	170	940	6.12	2240
LYNW5	MC10508	166	168		21	62	120	4.39	2110
LYNW5	MC10509	168	170		23	46	96	5.71	1180
LYNW5	MC10510	170	172		23	39	62	4.24	450
LYNW5	MC10520	190	191		4	7	5	0.63	980
LYNW5	MC10521	204	205		8	2	16	0.79	690
LYNW5	MC10522	222	223		3	13	71	0.86	1410
LYNW5	MC10523	336	337		7	1400	4090	1.25	1160
LYNW5	MC10524	337	338		10	69	89	1.29	960
LYNW5	MC10511	340	342		13	30	8	1.18	450
LYNW5	MC10512	342	344		18	41	5	1.48	320
LYNW5	MC10513	344	346		14	32	7	1.27	370
LYNW5	MC10514	346	348		25	49	3	1.46	310
LYNW5	MC10515	348	350		31	49	14	1.43	270
LYNW5	MC10516	350	352		21	55	2	1.59	280
LYNW5	MC10517	352	354		20	43	2	1.09	410
LYNW5	MC10518	354	356		10	27	50	0.89	570

APPENDIX 3

ASSAY RESULTS AND SAMPLE LOCATIONS FOR 1994 SOIL SAMPLING

Soil geochemistry of samples taken in EL 8078, "Lynott" 1994

Values above threshold in bold (see bottom of table)

SAMPLE	HYCE	HYCN	AMGE	AMGN	CU	PB	ZN
840207	146800	181800	607000	8182300	4	14	19
840208	146800	181850	607000	8182350	6	14	33
840209	146800	181900	607000	8182400	4	15	31
840210	146800	181950	607000	8182450	6	18	42
840211	146800	182000	607000	8182500	8	37	115
840212	146800	182050	607000	8182550	9	41	89
840213	146800	182100	607000	8182600	10	43	96
840214	146800	182150	607000	8182650	4	19	46
840215	146800	182200	607000	8182700	3	21	29
840216	146800	182250	607000	8182750	5	6	15
840217	146800	182300	607000	8182800	4	5	5
840218	146800	182350	607000	8182850	4	0	2
840219	146800	182400	607000	8182900	3	6	0
840220	146800	182450	607000	8182950	5	7	5
840221	146800	182500	607000	8183000	5	0	5
840222	146800	182550	607000	8183050	4	0	6
840223	146800	182600	607000	8183100	6	0	12
840224	146800	182650	607000	8183150	10	7	27
840225	146800	182700	607000	8183200	6	9	26
840226	146800	182750	607000	8183250	3	5	7
840227	146800	182800	607000	8183300	3	4	9
840228	146800	182850	607000	8183350	6	0	14
840229	146800	182900	607000	8183400	4	5	14
840230	146800	182950	607000	8183450	3	0	5
840231	146800	183000	607000	8183500	3	7	2
840232	146800	183050	607000	8183550	2	6	0
840233	146800	183100	607000	8183600	2	10	2
840234	146800	183150	607000	8183650	4	7	4
840235	146800	183200	607000	8183700	5	12	8
840236	146800	183250	607000	8183750	5	17	3
840237	146800	183300	607000	8183800	6	24	3
840176	147100	183300	607300	8182300	3	7	2
840177	147100	183250	607300	8182350	3	7	5
840178	147100	183200	607300	8182400	3	6	4
840179	147100	183150	607300	8182450	3	9	2
840180	147100	183100	607300	8182500	2	5	2
840181	147100	183050	607300	8182550	3	0	2
840182	147100	183000	607300	8182600	2	0	2
840183	147100	182950	607300	8182650	3	7	2
840184	147100	182900	607300	8182700	4	11	0
840185	147100	182850	607300	8182750	2	0	0
840186	147100	182800	607300	8182800	0	0	0
840187	147100	182750	607300	8182850	4	0	0
840188	147100	182700	607300	8182900	3	0	0
840189	147100	182650	607300	8182950	3	6	3
840190	147100	182600	607300	8183000	4	7	3
840191	147100	182550	607300	8183050	4	7	0
840192	147100	182500	607300	8183100	4	9	5
840193	147100	182450	607300	8183150	3	6	6
840194	147100	182400	607300	8183200	3	0	5
840195	147100	182350	607300	8183250	4	15	9
840196	147100	182300	607300	8183300	5	14	69
840197	147100	182250	607300	8183350	9	36	240
840198	147100	182200	607300	8183400	6	21	120
840199	147100	182150	607300	8183450	8	20	110
840200	147100	182100	607300	8183500	6	19	105
840201	147100	182050	607300	8183550	6	13	110
840202	147100	182000	607300	8183600	9	77	170
840203	147100	181950	607300	8183650	6	48	77
840204	147100	181900	607300	8183700	5	19	37
840205	147100	181850	607300	8183750	4	13	84
840206	147100	181800	607300	8183800	4	14	63
840145	147300	181800	607500	8182300	12	52	175
840146	147300	181850	607500	8182350	5	22	52
840147	147300	181900	607500	8182400	8	31	160
840148	147300	181950	607500	8182450	6	14	135
840149	147300	182000	607500	8182500	6	61	200
840150	147300	182050	607500	8182550	9	37	140
840151	147300	182100	607500	8182600	5	82	70

840152	147300	182150	607500	8182650	7	57	77
840153	147300	182200	607500	8182700	6	29	160
840154	147300	182250	607500	8182750	7	16	165
840155	147300	182300	607500	8182800	4	21	32
840156	147300	182350	607500	8182850	6	19	28
840157	147300	182400	607500	8182900	3	12	12
840158	147300	182450	607500	8182950	3	8	5
840159	147300	182500	607500	8183000	2	9	3
840160	147300	182550	607500	8183050	3	10	0
840161	147300	182600	607500	8183100	8	24	5
840162	147300	182650	607500	8183150	4	13	6
840163	147300	182700	607500	8183200	3	11	3
840164	147300	182750	607500	8183250	5	7	2
840165	147300	182800	607500	8183300	6	10	8
840166	147300	182850	607500	8183350	6	15	5
840167	147300	182900	607500	8183400	5	14	3
840168	147300	182950	607500	8183450	3	0	3
840169	147300	183000	607500	8183500	2	13	3
840170	147300	183050	607500	8183550	0	23	3
840171	147300	183100	607500	8183600	4	8	2
840172	147300	183150	607500	8183650	3	7	2
840173	147300	183200	607500	8183700	3	6	0
840174	147300	183250	607500	8183750	2	8	0
840175	147300	183300	607500	8183800	2	2	0
840118	147700	182000	607900	8182500	6	5	87
840119	147700	182050	607900	8182550	6	0	47
840120	147700	182100	607900	8182600	8	10	59
840121	147700	182150	607900	8182650	5	0	75
840122	147700	182200	607900	8182700	8	21	39
840123	147700	182250	607900	8182750	9	16	45
840124	147700	182300	607900	8182800	5	19	12
840125	147700	182350	607900	8182850	3	10	6
840126	147700	182400	607900	8182900	3	6	6
840127	147700	182450	607900	8182950	6	11	6
840128	147700	182500	607900	8183000	5	6	6
840129	147700	182550	607900	8183050	4	0	6
840130	147700	182600	607900	8183100	3	15	6
840131	147700	182650	607900	8183150	3	8	8
840132	147700	182700	607900	8183200	3	14	5
840133	147700	182750	607900	8183250	5	17	14
840134	147700	182800	607900	8183300	5	10	16
840135	147700	182850	607900	8183350	4	0	6
840136	147700	182900	607900	8183400	3	0	5
840137	147700	182950	607900	8183450	7	15	5
840138	147700	183000	607900	8183500	6	16	9
840139	147700	183050	607900	8183550	5	15	9
840140	147700	183100	607900	8183600	3	6	4
840141	147700	183150	607900	8183650	3	5	2
840142	147700	183200	607900	8183700	6	14	4
840143	147700	183250	607900	8183750	4	11	4
840144	147700	183300	607900	8183800	3	10	4
840091	147900	182000	608100	8182500	2	8	2
840092	147900	182050	608100	8182550	3	0	3
840093	147900	182100	608100	8182600	4	4	3
840094	147900	182150	608100	8182650	4	8	2
840095	147900	182200	608100	8182700	3	8	2
840096	147900	182250	608100	8182750	3	4	2
840097	147900	182300	608100	8182800	3	6	3
840098	147900	182350	608100	8182850	3	8	4
840099	147900	182400	608100	8182900	3	7	4
840100	147900	182450	608100	8182950	5	8	5
840101	147900	182500	608100	8183000	6	17	6
840102	147900	182550	608100	8183050	6	15	5
840103	147900	182600	608100	8183100	5	11	7
840104	147900	182650	608100	8183150	6	17	12
840105	147900	182700	608100	8183200	7	22	15
840106	147900	182750	608100	8183250	6	6	15
840107	147900	182800	608100	8183300	4	10	20
840108	147900	182850	608100	8183350	7	17	88
840109	147900	182900	608100	8183400	4	9	27
840110	147900	182950	608100	8183450	6	8	30
840111	147900	183000	608100	8183500	4	0	12

840112	147900	183050	608100	8183550	4	0	10
840113	147900	183100	608100	8183600	8	0	24
840114	147900	183150	608100	8183650	5	0	38
840115	147900	183200	608100	8183700	8	4	86
840116	147900	183250	608100	8183750	6	8	68
840117	147900	183300	608100	8183800	7	11	100
840064	148200	182000	608400	8182500	11	18	14
840065	148200	182050	608400	8182550	8	9	17
840066	148200	182100	608400	8182600	6	13	26
840067	148200	182150	608400	8182650	7	12	45
840068	148200	182200	608400	8182700	6	13	26
840069	148200	182250	608400	8182750	5	13	17
840070	148200	182300	608400	8182800	7	11	11
840071	148200	182350	608400	8182850	7	10	14
840072	148200	182400	608400	8182900	6	13	9
840073	148200	182450	608400	8182950	5	4	3
840074	148200	182500	608400	8183000	5	4	20
840075	148200	182550	608400	8183050	3	16	4
840076	148200	182600	608400	8183100	5	0	12
840077	148200	182650	608400	8183150	3	0	7
840078	148200	182700	608400	8183200	3	112	7
840079	148200	182750	608400	8183250	0	6	5
840080	148200	182800	608400	8183300	3	4	6
840081	148200	182850	608400	8183350	4	0	3
840082	148200	182900	608400	8183400	4	0	2
840083	148200	182950	608400	8183450	3	0	2
840084	148200	183000	608400	8183500	4	0	2
840085	148200	183050	608400	8183550	4	5	3
840086	148200	183100	608400	8183600	4	12	4
840087	148200	183150	608400	8183650	4	4	3
840088	148200	183200	608400	8183700	4	0	4
840089	148200	183250	608400	8183750	3	0	4
840090	148200	183300	608400	8183800	4	13	2
840033	148400	182000	608600	8182500	4	43	17
840034	148400	182050	608600	8182550	11	25	23
840035	148400	182100	608600	8182600	8	15	9
840036	148400	182150	608600	8182650	4	30	5
840037	148400	182200	608600	8182700	2	12	9
840038	148400	182250	608600	8182750	5	47	34
840039	148400	182300	608600	8182800	6	14	12
840040	148400	182350	608600	8182850	6	13	9
840041	148400	182400	608600	8182900	3	18	4
840042	148400	182450	608600	8182950	3	810	4
840043	148400	182500	608600	8183000	2	9	7
840044	148400	182550	608600	8183050	6	9	7
840045	148400	182600	608600	8183100	4	14	7
840046	148400	182650	608600	8183150	3	22	5
840047	148400	182700	608600	8183200	4	10	41
840048	148400	182750	608600	8183250	7	5	49
840049	148400	182800	608600	8183300	4	8	6
840050	148400	182850	608600	8183350	5	4	9
840051	148400	182900	608600	8183400	5	9	5
840052	148400	182950	608600	8183450	5	10	26
840053	148400	183000	608600	8183500	5	8	26
840054	148400	183050	608600	8183550	7	9	23
840055	148400	183100	608600	8183600	7	13	41
840056	148400	183150	608600	8183650	8	24	62
840057	148400	183200	608600	8183700	8	13	73
840058	148400	183250	608600	8183750	7	13	49
840059	148400	183300	608600	8183800	6	20	64
840060	148400	183350	608600	8183850	9	24	23
840061	148400	183400	608600	8183900	12	25	22
840062	148400	183450	608600	8183950	11	27	11
840063	148400	183500	608600	8184000	12	22	8

mean 4.917 17.02 26.439

std dev 2.22 57.499 41.416

threshold (mean + 2 * std dev) 9.358 132.02 109.27

DRAWINGS

