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EL 576

LYNDHURST

PROGRESS AND FINAL REPORTS TO LICENCE EXPIRY FOR THE PERIOD 16/1/1980 TO 15/1/1981

Submitted by
Dampier Mining Co. Ltd
1981

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Minerals and Energy Resources
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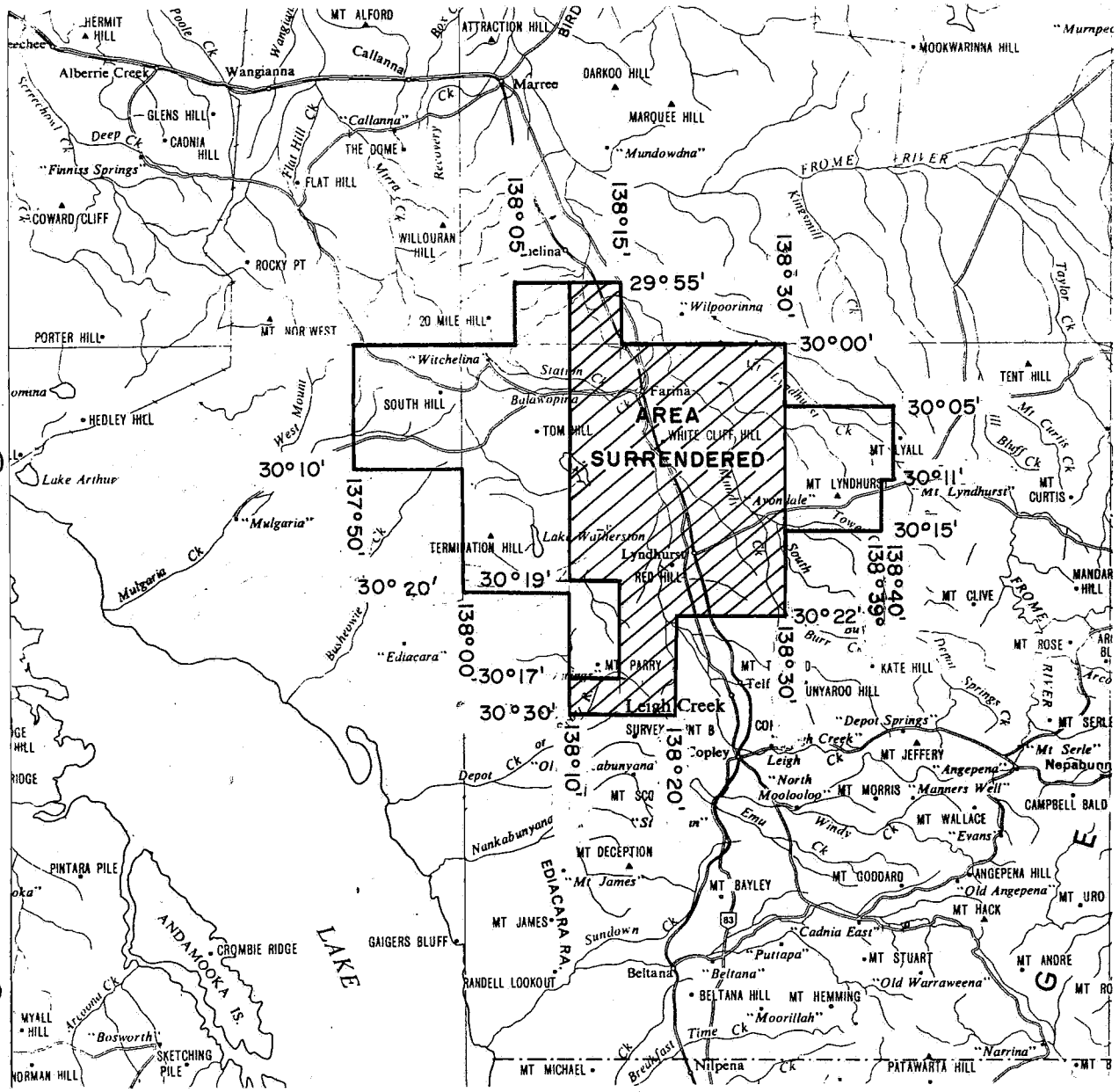
Government of South Australia
Primary Industries and Resources SA

SCHEDULE A



EXPIRED

Surrendered.

APPLICANT: DAMPIER MINING COMPANY LIMITED

DM: 458/79 AREA: 2864 square kilometres

1:250000 PLANS: ANDAMOOKA MARREE COPLEY

LOCALITY: LYNDHURST AREA — immediately north of Leigh Creek

DATE GRANTED: 16·1·80 DATE EXPIRED: ~~15·1·85~~ 15·1·81

EL No: 576

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EXPLORATION LICENCE 576

LYNDHURST, SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDED 16TH APRIL, 1980

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EXPLORATION LICENCE 576

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LYNDHURST, SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDED 16TH APRIL, 1980

1. GENERAL STATEMENT

Exploration Licence 576 was taken up primarily to test the diamond potential of the area. Subsidiary interests are the potential for base metals and coal. Exploration commenced during the quarter; methods used were gravity and ground magnetics.

2. TITLES

Exploration Licence 576, of 2,864 square kilometres, was granted to the Dampier Mining Company Limited on the 16th of January, 1980 for six months. Figure 1 shows the location of the Licence.

3. FIELD INVESTIGATIONS

3.1 Geophysics

3.1.1 Gravity Surveys

A gravity survey was carried out over two areas within Exploration Licence 576 to test for the presence of Mesozoic coal basins. The work was carried out by Solo Geophysics along east-west grid lines, spaced two kilometres apart, over the Avondale Grid area, and a further ten kilometre reconnaissance line called the Rocky Dam Line was read twenty five kilometres west of the main grid. Figure 2 shows the location of the traverse lines. Total kilometreage of gravity read is approximately sixty kilometres. The results of the gravity on the Avondale Grid are shown on Figure 3. Most significant anomalies are located on the Rocky Dam Grid line.

3.1.2 Ground Magnetics Surveys

Ground magnetic surveys to delineate anomalies from the Government Aeromagnetic Surveys on the Copley sheet possibly due to kimberlite intrusions, commenced during the quarter. Eight anomalies were initially selected to be delineated. This work was generally carried out along north-south grid lines 200 to 250 metres apart with readings every ten metres. Figure 2 shows the location of these surveys. This work is still in progress; no results are yet available.

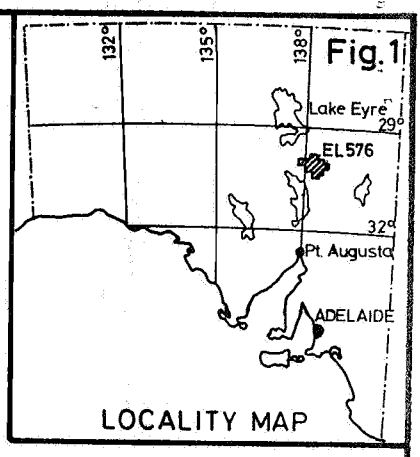
4. EXPENDITURE

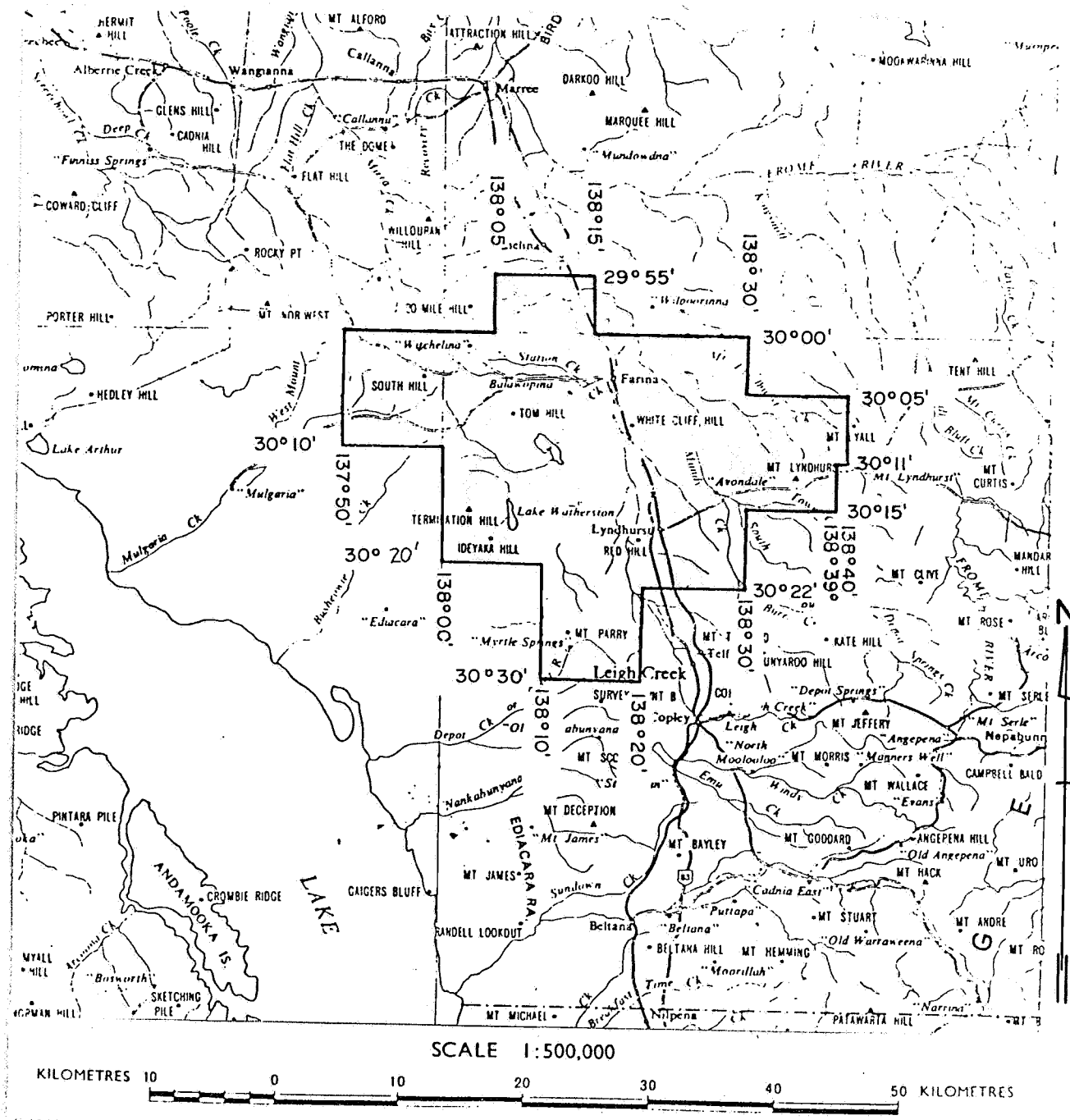
Expenditure debited to E.L. 576 to 31st March, 1980 is:

Wages and Salaries	$ 813
Messing and Accommodation	373
Fares and Mobilisation	28
Transport	134
Other Items	23
	$3,568

This report is submitted to the Department of Mines and Energy as required by Condition 4 of Exploration Licence 576.

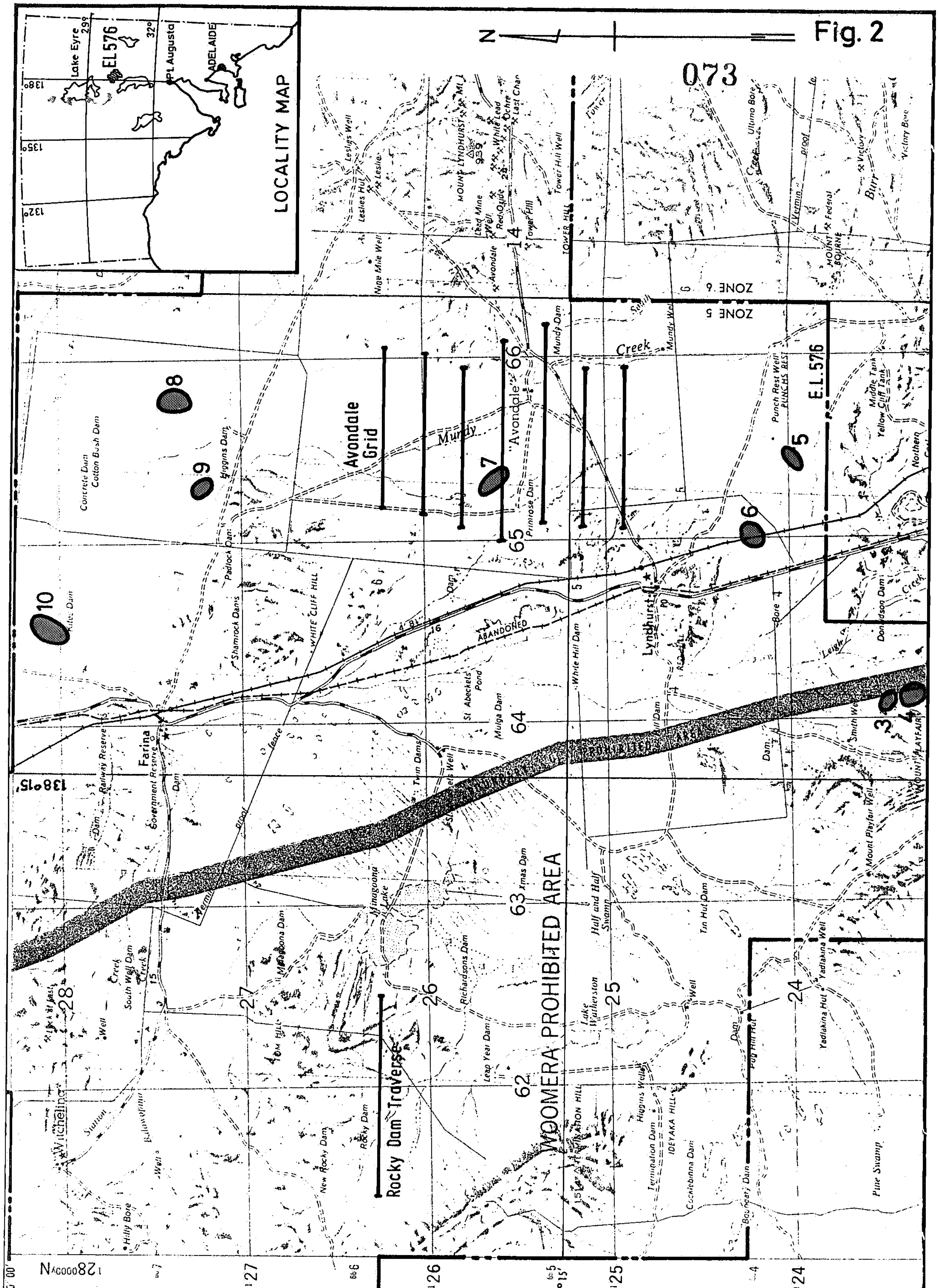
072





This map photo copied from **Schedule A**
DM 458/79

Centre: Adelaide	THE BROKEN HILL PROPRIETARY CO. LTD.	Project No 6-C650-4
Date: 8-5-80	**E.L. 576 LYNDHURST S.A.**	Drawing No A4-67
	LOCATION MAP	



Scale 1:250,000

0 5 10 15 20 25 Km.

This map photo copied from
COPLEY 1:250,000 Topo sheet

Centre: Adelaide	THE BROKEN HILL PROPRIETARY CO. LTD. E.L. 576 LYNDHURST S.A.	Project No: 6-C650-3
Date: 5-5-80	LOCATION OF GRAVITY TRAVERSES & ANOMALIES	Drawing No: A4-65

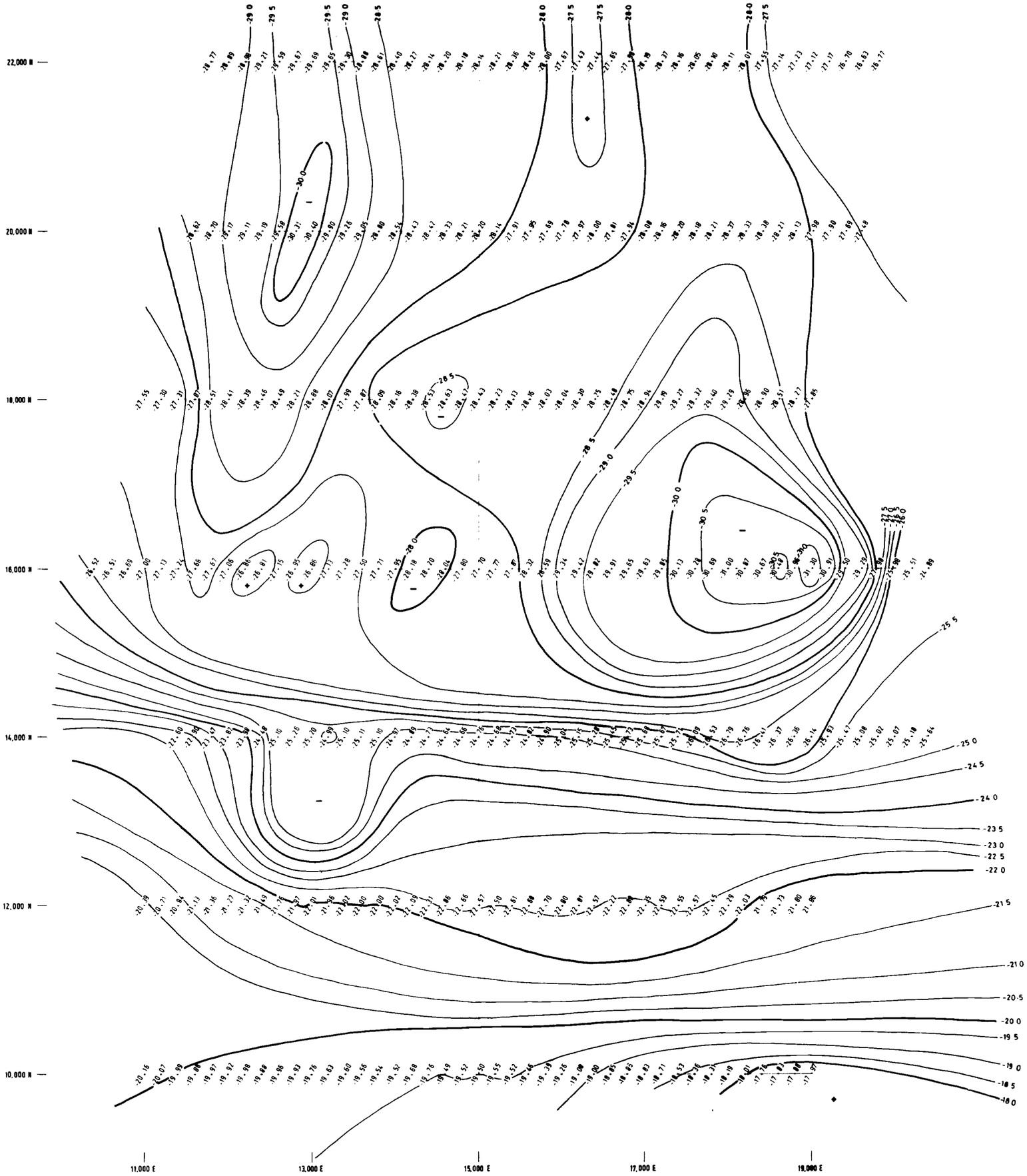
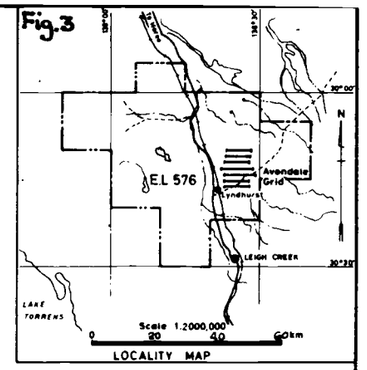


Fig.3



3766-1

LEGEND

Bouguer Gravity Centeurs
Contour interval 0 5 milligals

Scale 1 50,000

0 500 1000 1500 2000 2500 m.

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.
AVONDALE GRID
BOUGUER GRAVITY CONTOURS

Revisions			
Drawn BEP	Date 14-4-80	Centre Adelaide	
Traced RFF	Project No 6-C650-1	Drawing No A3-24	
Checked			

EXPLORATION LICENCE 576

LYNDHURST, SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDED 16th OCTOBER, 1980

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LYNDHURST, SOUTH AUSTRALIA

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REPORT FOR THE QUARTER ENDED 16th OCTOBER, 1980

1. GENERAL STATEMENT

Exploration Licence 576 was taken up primarily to test the diamond potential of the area. Subsidiary interests are the potential for base metals and coal. Exploration continued during the quarter with ground magnetics and stream sampling.

2. TITLES

Exploration Licence 576 of 2,864 square kilometres, was granted to Dampier Mining Company Limited on 16th January, 1980 for six months. Figure 1 shows its location. The exploration licence was renewed for a further six months to 16th January, 1981. It is proposed to reduce the area by 1,460 square kilometres during October, 1980.

3. FIELD INVESTIGATIONS

3.1 Geophysics

3.1.1 Ground Magnetic Surveys

Ground magnetic surveys to delineate anomalies possibly due to kimberlite intrusions from the government aeromagnetic surveys on the Copley 1:250,000 sheet area, continued during the quarter. This work was generally carried out along north-south grid lines 200-250 metres apart, with readings every 10 metres. Figure 2 shows the location of the anomalies.

3.2 Sampling

Twenty-seven stream samples were collected from the exploration licence during the quarter, using a helicopter for access. These samples were sent to our laboratory for heavy mineral concentration and for observing for kimberlite indicator minerals. Figure 3 shows sample locations.

4. PROPOSED WORK

During the next quarter, it is proposed to drill the aeromagnetic anomalies which have been delineated on the ground. Any positive indicator minerals from samples collected in the last quarter will be followed up.

5. EXPENDITURE

Expenditure debited to E.L. 576 during July, August and September, 1980, was:

Wages and Salaries	$ 2,924
Messing and Accommodation	1,506
Fares and Mobilisation	381
Drilling	1,544
Transport	856
Surveying/Aerial Photographs	68
Sample Analysis	107
Geophysics/Geochemistry	818
Occupancy/Location expenses	7
Capital Items	621
	$ 8,832

077

Total expenditure to 30th September, 1980, was $ 42,229

This report is submitted to the Department of Mines and Energy as required by Condition 4 of Exploration Licence 576.

078

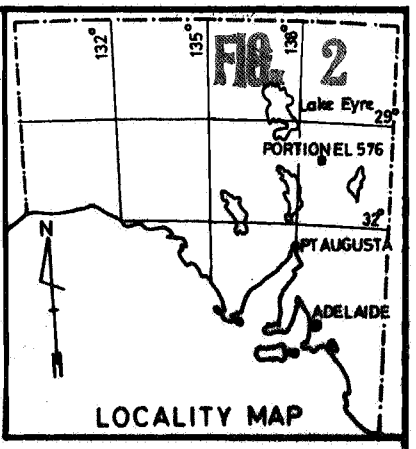
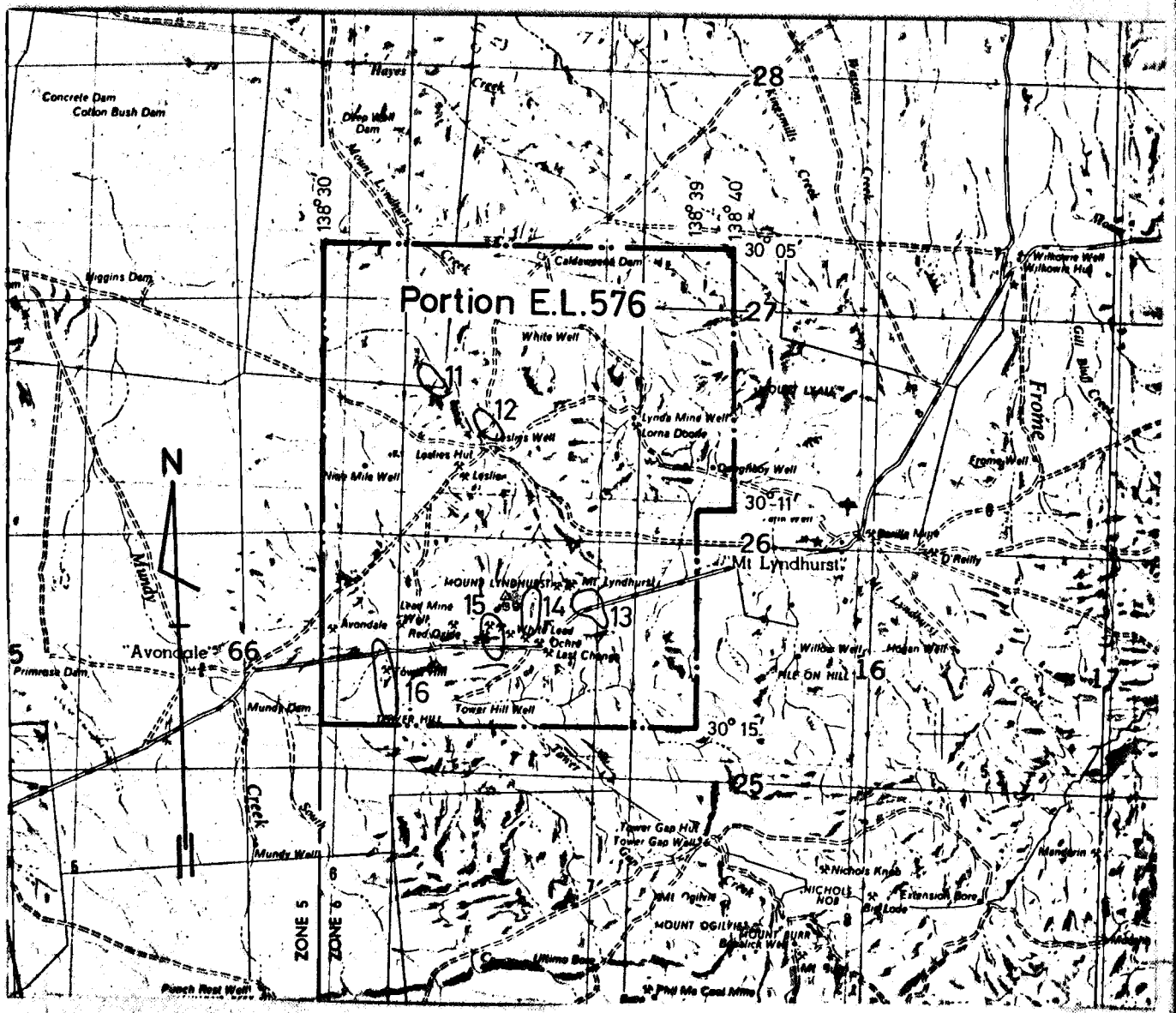


Fig. 2



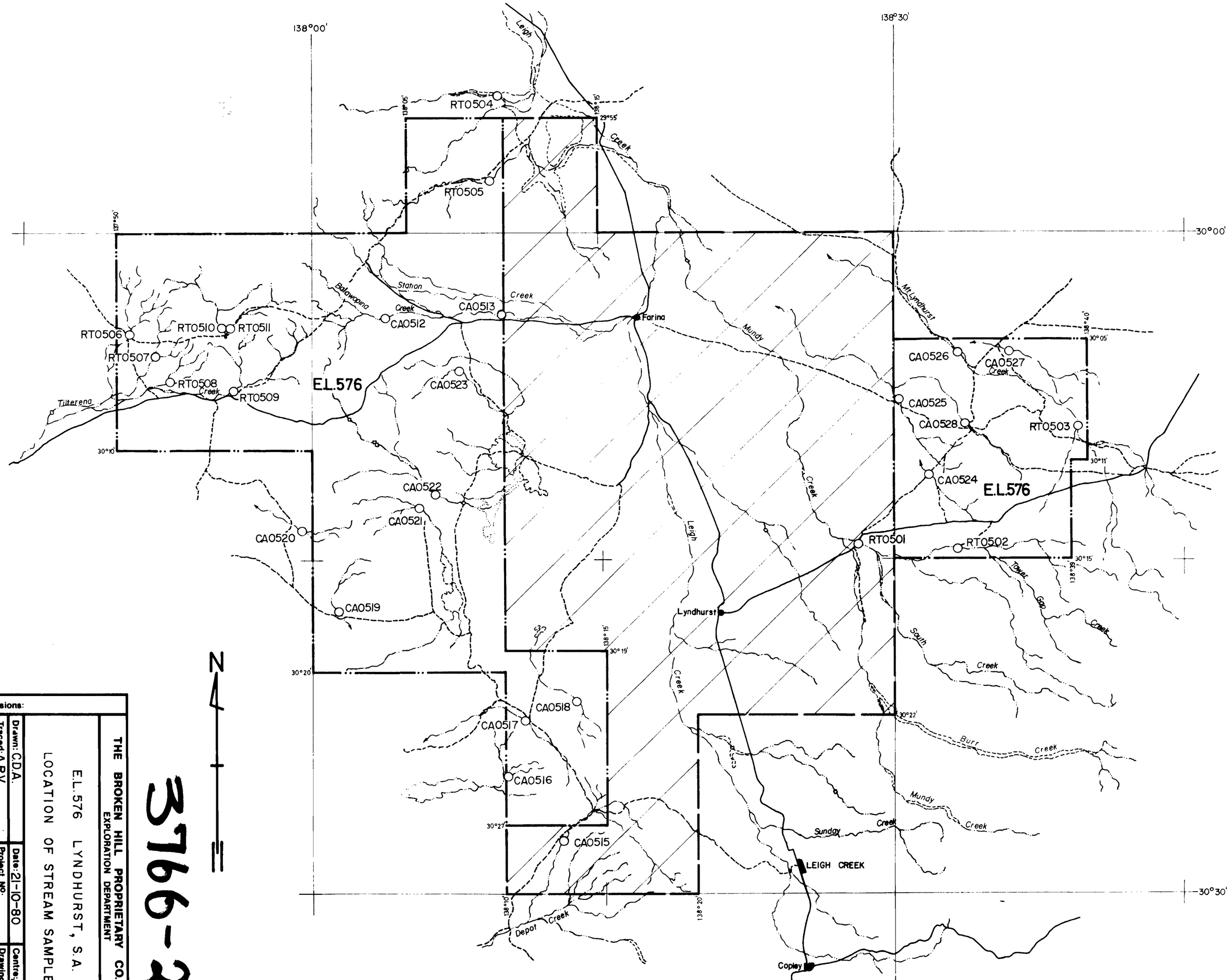
AEROMAGNETIC ANOMALY

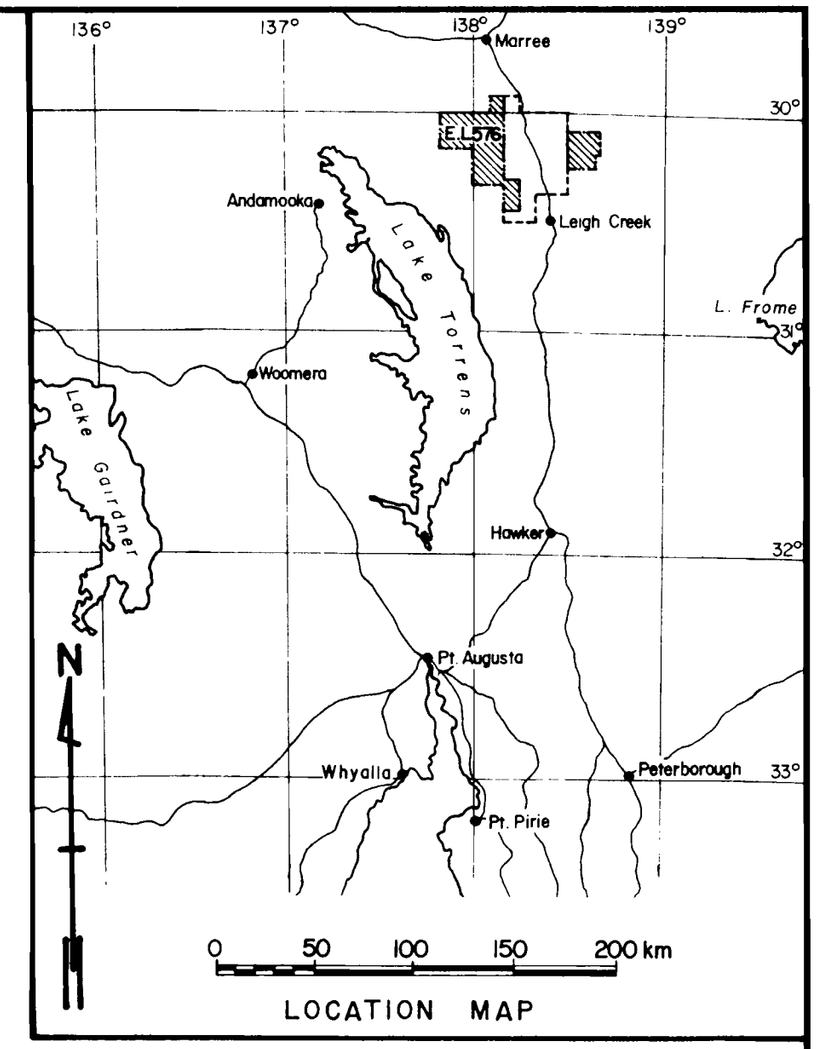
This map was copied from 1:250,000 topo
Copley SH54-9, Series R502

0 1 2 3 4 5km

SCALE 1:250,000

Centre: Adelaide	THE BROKEN HILL PROPRIETARY CO. LTD. E.L.576 LYNDHURST S.A. LOCATION OF AEROMAGNETIC ANOMALIES	Project No: 6-C650-20
Date: 11-10-80		Drawing No: A4-90





LEGEND

- Sample site
- Sample site – poor trap
- Garnet possible pyrope
- Pyrope garnet
- 22 pyrope garnets
- Possible picroilmenite
- Picroilmenite
- Chrome diopside
- Chromite
- Kimberlitic chromite
- Diamond
- Loam sample
- Bulk sample site
- Kimberlite
- Kimberlite dyke
- Carbonatite
- E.L. Boundary
- Relinquished E.L. Boundary
- Major road
- Minor road or track
- Creek

This map is traced from COPLEY SH54-9 ANDAMOOKA SH53-12 and MARREE SH54-5 1:250,000 Topo. map series, Edition 2.

Revisions:	
Checked:	Traced: A.R.V.
Drawn: C.D.A.	Date: 21-10-80
Project No: 6-C650-18	Centre: Adelaide
Drawing No: A2-94	

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L.576 LYNDHURST, S.A.

LOCATION OF STREAM SAMPLE SITES

N

3766-2

Fig. 3

EXPLORATION LICENCE 576

LYNDHURST, SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDED 16TH JULY, 1980

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LYNDHURST, SOUTH AUSTRALIA
REPORT FOR THE QUARTER ENDED 16TH JULY, 1980

1. GENERAL STATEMENT

Exploration Licence 576 was taken up primarily to test the diamond potential of the area. Subsidiary interests are the potential for base metals and coal. Exploration continued during the quarter with ground magnetics and drilling.

2. TITLES

Exploration Licence 576 of 2,864 square kilometres, was granted to Dampier Mining Company Limited on 16th January, 1980 for six months. Figure 1 shows the location of the licence.

3. FIELD INVESTIGATIONS

3.1 Geophysics

3.1.1 Ground Magnetic Surveys

Ground magnetic surveys to delineate anomalies possibly due to kimberlite intrusions from the Government aeromagnetic surveys on the Copley 1:250,000 sheet area, continued during the quarter. This work was generally carried out along north-south grid lines 200 to 250 metres apart with readings every 10 metres. Figure 2 shows the location of the anomalies.

3.2 Drilling

3.2.1 Coal Program

Following a gravity survey in the Avondale Homestead area, eleven holes were drilled and one re-drilled to test the gravity lows in the area for a possible repetition of the Leigh Creek Triassic basin. Drilling was carried out by Whiteland Drilling Pty. Ltd., of Perth, using a Bourne 1000 rig. A total of 969.55 metres was completed including 7.35 metres of coring. Figure 3 shows the location of the drill holes.

3.2.2 Kimberlite Drilling

Two of the aeromagnetic anomalies located by the ground surveys were tested by drilling. This drilling was also carried out by Whiteland Drilling using the Bourne 1000 rig. Figure 2 shows the location of these drill holes.

3.3.3 Drillhole Summary

Hole	Depth (metres)
AV 1	84
AV 2	108
AV 3	98
AV 4	72
AV 5	70
AV 6	96
AV 6A	94.8
AV 7	102
AV 8	84
AV 9	36.75
AV 10	42
AV 11	82
L 1	46
L 2	28
L 3	32
L 4	5.70
Total Drilling	1081.25

082

4. RESULTS OF INVESTIGATIONS

4.1 Geophysics

4.1.1 Ground Magnetic Surveys

The results of the ground magnetic surveys show that only two of the eight anomalies examined require drilling to explain their source.

4.2 Drilling

4.2.1 Coal Program

AV1, AV2 and AV3 were drilled on a large, roughly circular gravity low feature centred on Avondale H.S. AV1 intersected 40m of Tertiary sediments then weathered shaley sandstone. AV2 and AV3 intersected the shaley sandstone a few metres from the surface. The sandstone is thought to be of Burra age. The circular gravity low is due to an anticline of folded Burra Group sediments with a core of sandstone and an annulus of dolomite.

AV4 and AV5 were drilled on a weak north-south linear gravity low and both intersected a thick (to 70m) section of Tertiary sands and clays. AV4 intersected 4m of mildly carbonaceous siltstones and sandstones. The gravity feature is probably due to a Tertiary channel incised in the bedrock.

AV6, AV7 and AV8 were drilled to test a moderately strong north-south gravity low. Both AV6 and AV7 intersected grey to dark grey carbonaceous sandstones and siltstones at about 70m below a Tertiary section of sandstones with some coarser bands and lenses of clays and siltstones. AV8 was drilled midway between AV6 and AV7 to obtain a core of the carbonaceous sequence. However, the Tertiary sequence is much thicker, with a gravelly conglomeratic

sandstone replacing the carbonaceous sandstone. AV6A was drilled 10m from AV6 but again a Tertiary sequence filled an erosion channel in the carbonaceous sequence.

AV9, AV10 and AV11 were drilled on the same section as AV7 to delineate the shape of the channel and to obtain more information on the carbonaceous sequence. AV9 hit weathered bedrock a few metres from the surface whereas the weathered bedrock is interpreted as being at 20m in AV10. AV11 intersected almost the same sequence as AV7 (See Figure 4).

Carbonaceous material from AV6 and AV7 was sent for possible palynological examination. However the samples were highly carbonized and therefore interpreted as possibly of Cambrian age or older.

The gravity low is therefore again interpreted as being due to a channel filled with Tertiary sediments.

4.2.1 Kimberlite Drilling

L4 drilling Anomaly 1 intersected dolerite but L1, L2 and L3 drilling Anomaly 2 failed to locate a source to the anomaly.

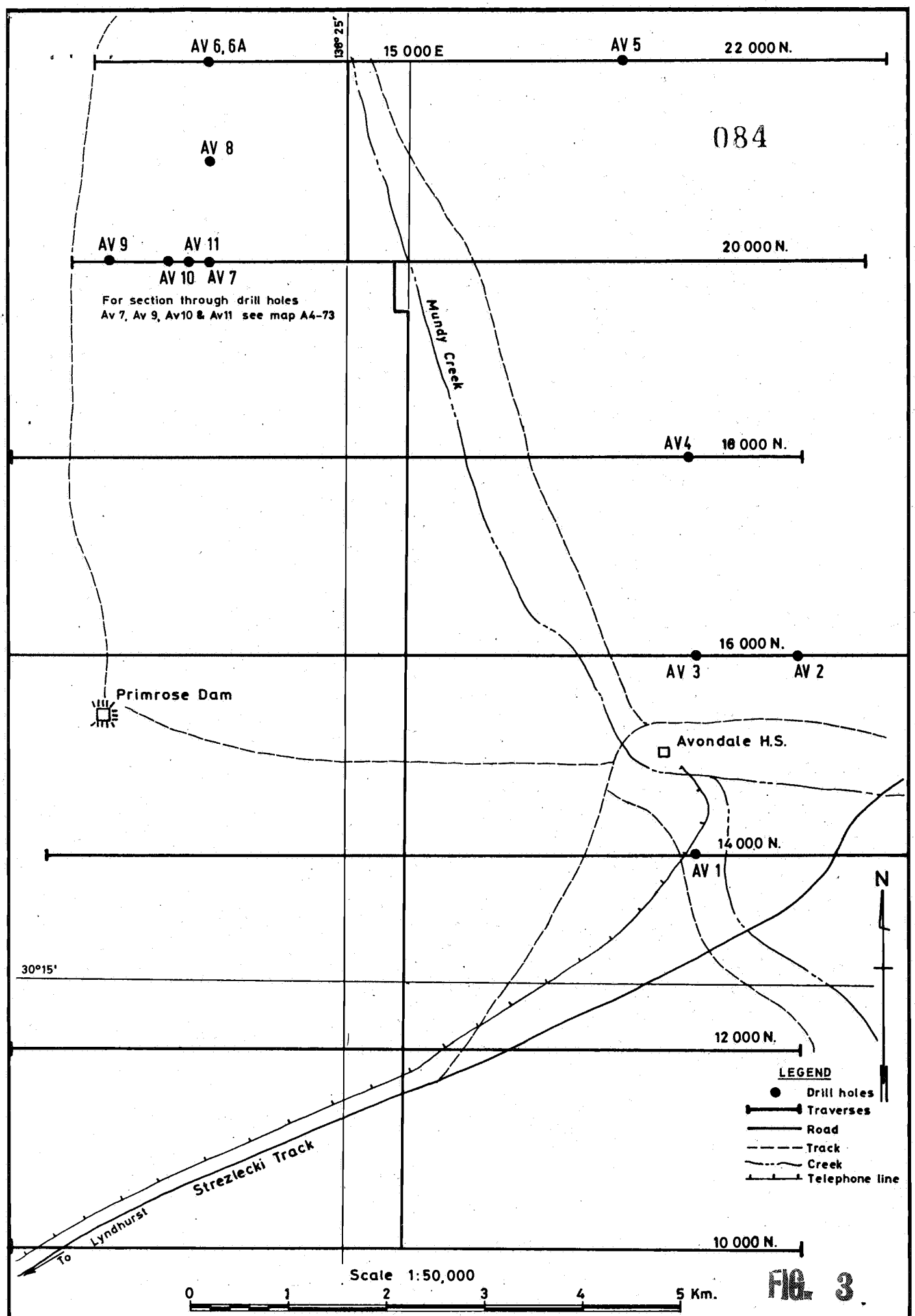
5. EXPENDITURE

Expenditure debited to E.L. 576 during the three months April, May and June, 1980, was :

Wages and Salaries	$7,302
Messing and Accommodation	829
Fares and Mobilisation	421
Drilling	9,682
Transport	1,640
Surveying/Aerial Photographs	220
Geophysics	8,196
Sample Analysis	156
Occupancy/Location Expenses	309
Capital Items	1,074
	$29,829

Total expenditure to 30th June, 1980 is $33,397.

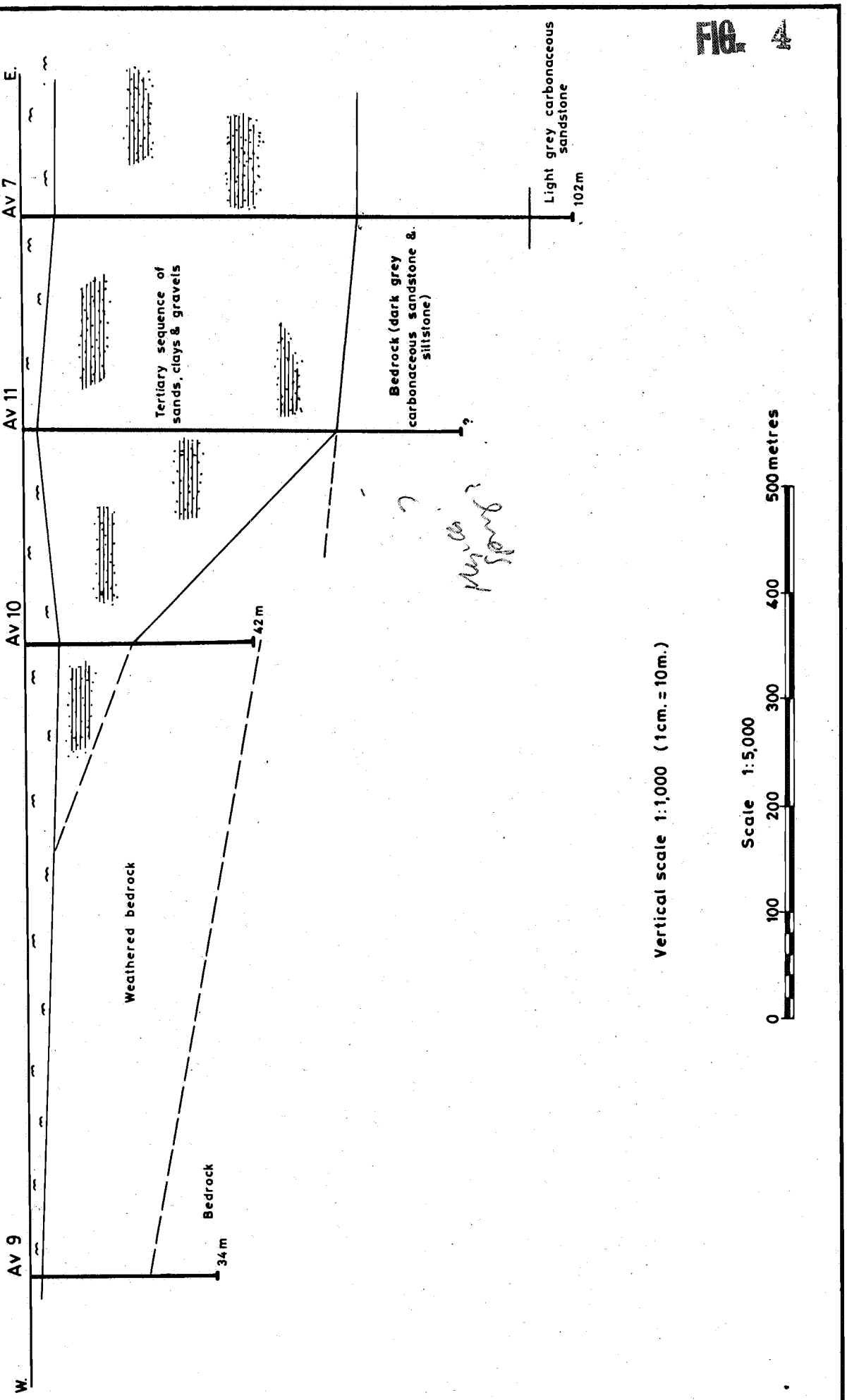
This report is submitted to the Department of Mines and Energy as required by Condition 4 of Exploration Licence 576.



Centre: Adelaide	THE BROKEN HILL PROPRIETARY CO. LTD. E.L. 576 LYNDHURST S.A. DRILL HOLE LOCATIONS-AVONDALE GRID	Project No: 6-C650-14
Date: 10-7-80		Drawing No: A4-72

FIG. 4

085



Centre: Adelaide	THE BROKEN HILL PROPRIETARY CO. LTD. E.L. 576 LYNDHURST S.A. SECTION ON TRAVERSE 20000N.-AVONDALE GRID	Project No: 6-C650-15
Date: 11-7-80		Drawing No: A4-73

EXPLORATION LICENCE 576

LYNDHURST, SOUTH AUSTRALIA

FINAL REPORT

April, 1981

CONTENTS

Appendices

Figure

(Rest of maps, see Coal exploration)

FIGURES in APPENDICES

Appendix 2

1.	EL 576 Lyndhurst, S.A. Location Map	A4-67
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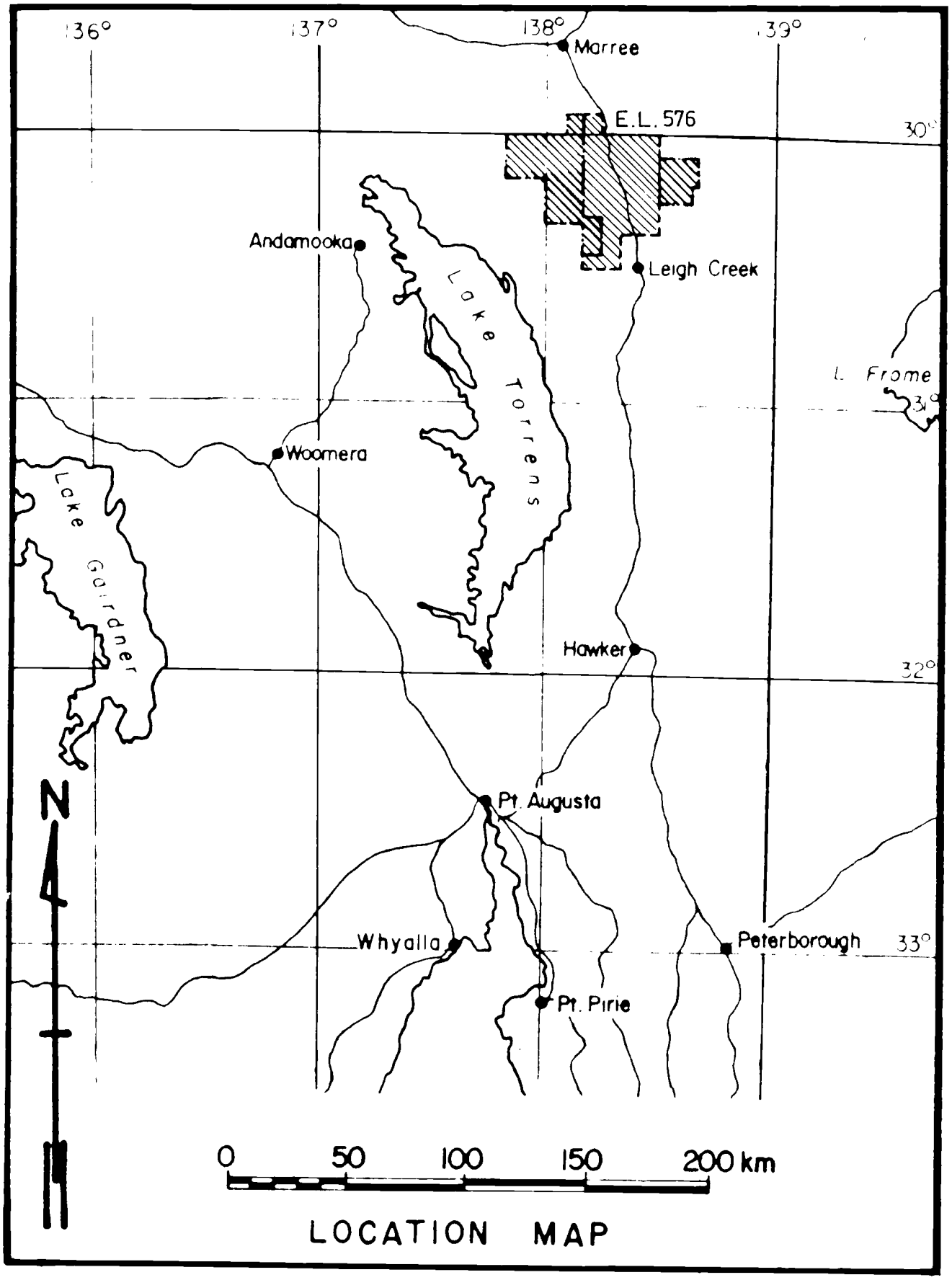
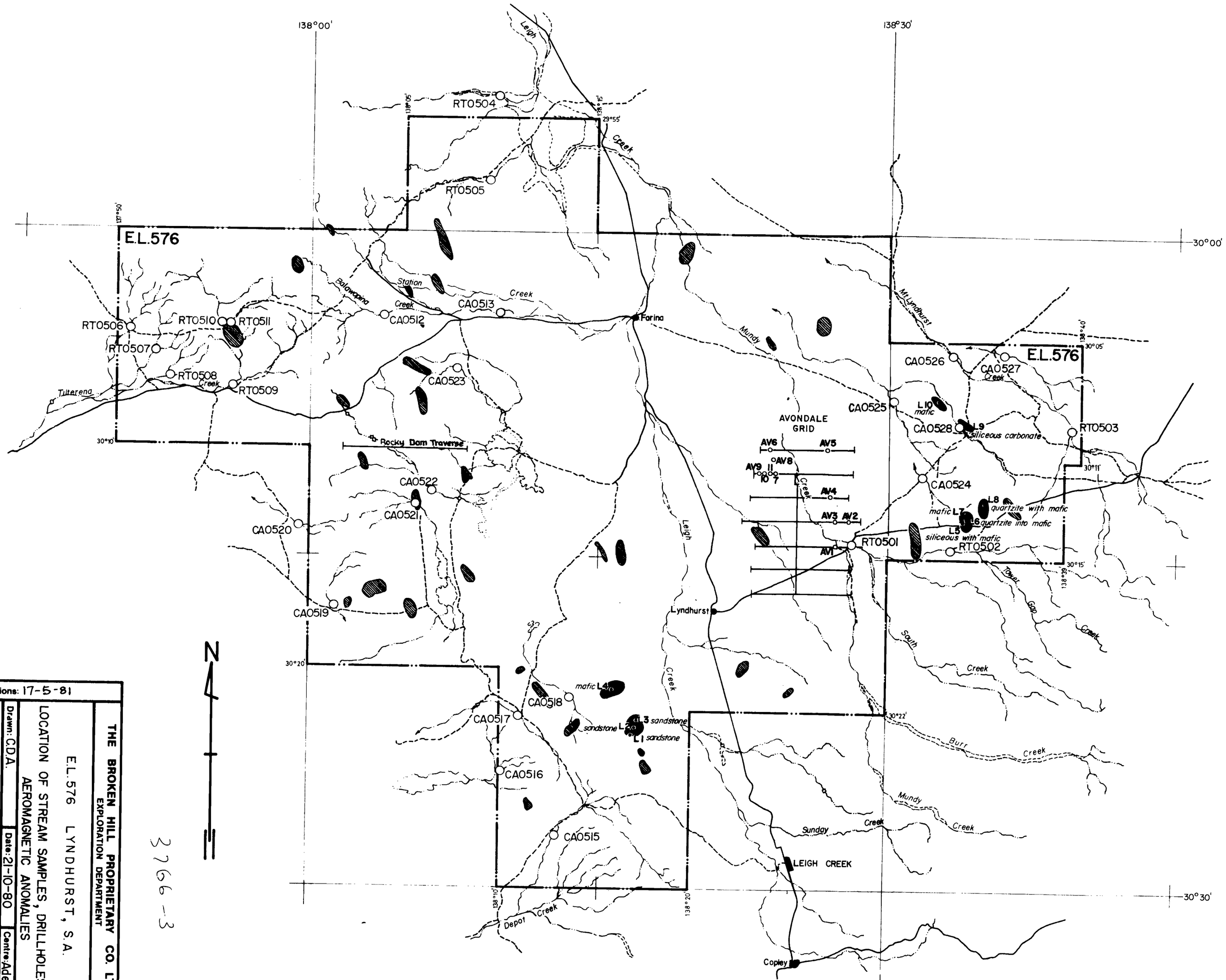
3.	Gravity Traverse and Drill Hole Location	A4-255
4.	Bore Hole Locations Bouguer Gravity Contours	A3-1569
5.	Gravity Profile and Geological Section	A4-269 ✓

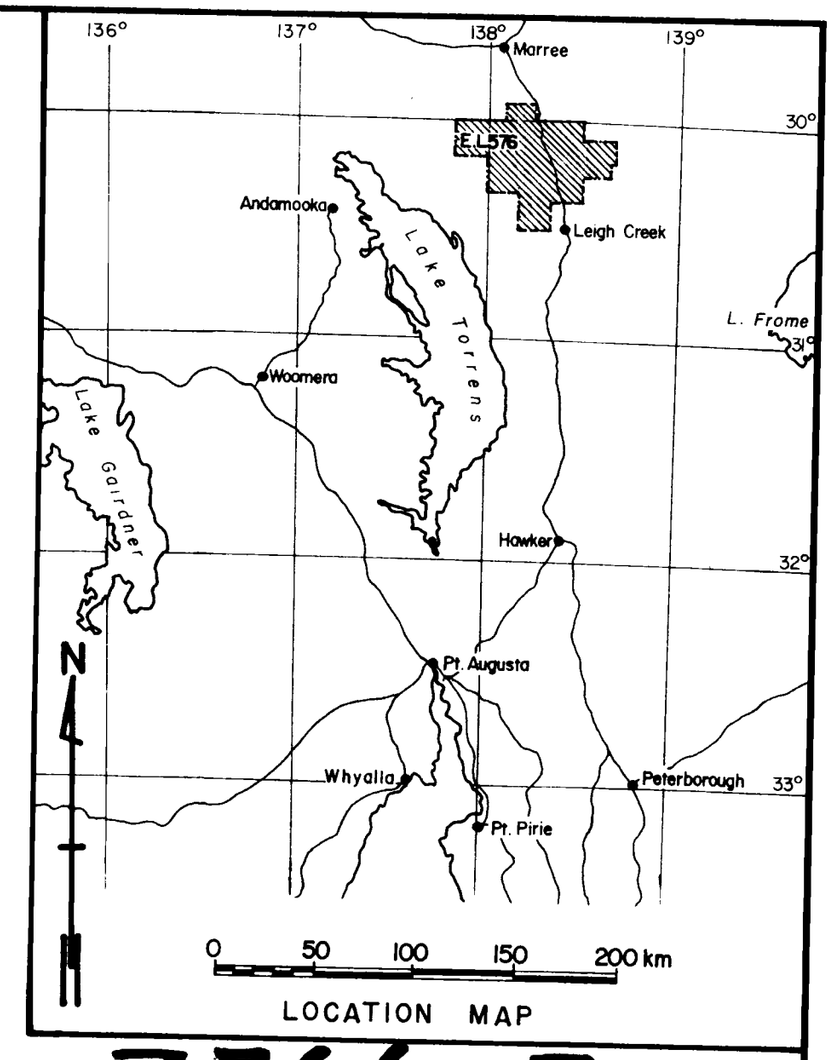
Appendix 3

1.	EL 576 Lyndhurst, S.A. Location of Gravity Traverses	A4-65
2.	Avondale Grid Bouguer Gravity Contours	A3-24 ✓



LOCATION MAP





3766-3

LEGEND

- Sample site
- Sample site – poor trap
- Garnet possible pyrope
- Pyrope garnet
- 22 pyrope garnets
- Possible picroilmenite
- Picroilmenite
- Chrome diopside
- Chromite
- Kimberlitic chromite
- Diamond
- Loam sample
- Bulk sample site
- Kimberlite
- Kimberlite dyke
- Carbonatite
- E.L. Boundary
- Major road
- Gravity traverse
- AV1-14o B.H.P. rotary drillhole
- mafic L4• B.H.P. percussion drillhole with result
- Aeromagnetic anomaly examined, drilled and eliminated
- Aeromagnetic anomaly examined on ground and eliminated

Scale 1:250,000

0 10 20 30 kilometres

This map is traced from COPLEY SH54-9 ANDAMOOKA SH53-12 and MARREE SH54-5 1:250,000 Topo. map series, Edition 2.

Revisions: 17-5-81

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L.576 LYNDHURST, S.A.

LOCATION OF STREAM SAMPLES, DRILLHOLES AND AEROMAGNETIC ANOMALIES

Drawn: C.D.A.	Date: 21-10-80	Centre: Adelaide
Traced: A.R.V.	Project No: 6-C650-18	Drawing No: A2-94
Checked:		

3766-3

Fig. 1

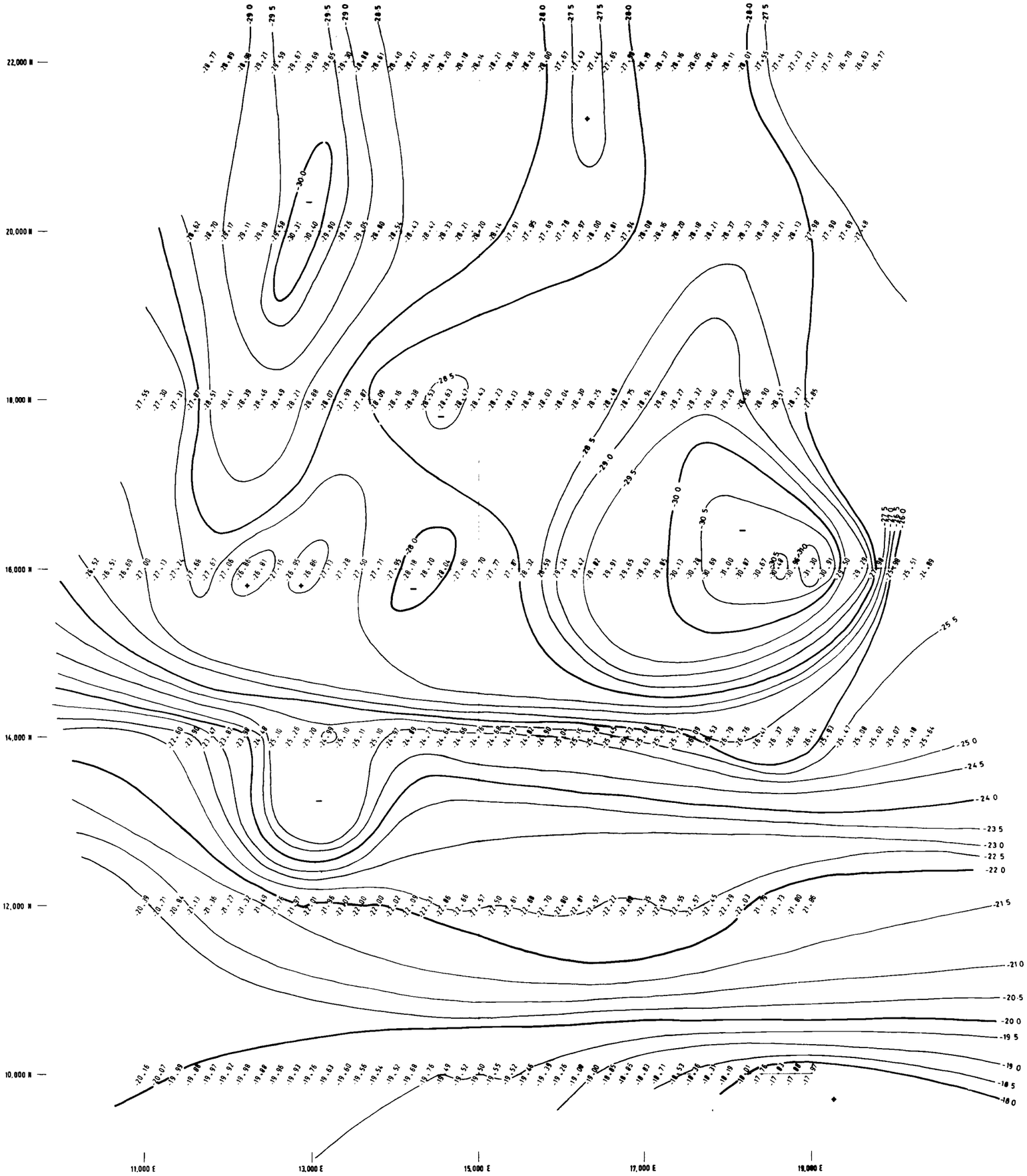
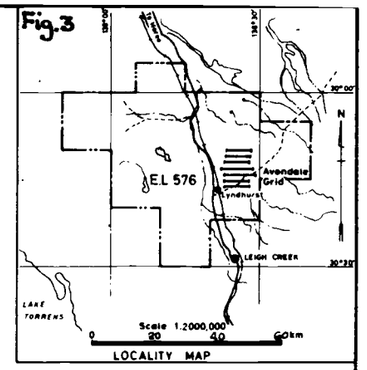


Fig.3



3766-1

LEGEND

Bouguer Gravity Centeurs
Contour interval 0 5 milligals

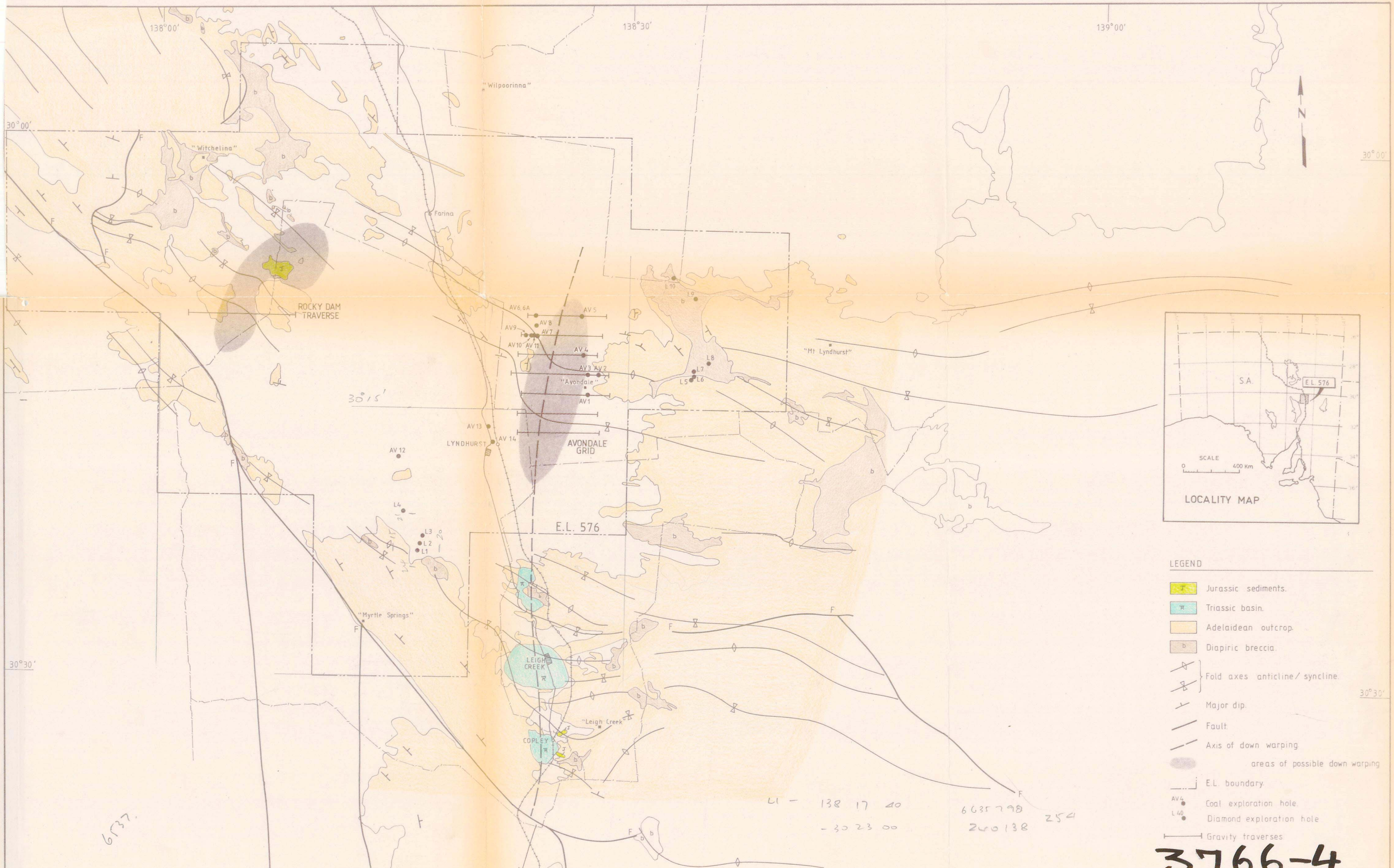
Scale 1 50,000

0 500 1000 1500 2000 2500 m.

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.
AVONDALE GRID
BOUGUER GRAVITY CONTOURS

Revisions			
Drawn BEP	Date 14-4-80	Centre Adelaide	
Traced RFF	Project No 6-C650-1	Drawing No A3-24	
Checked			


138°00'
138°30'
139°00'
30°00'
30°15'
30°30'
N
"Wilpoorinna"
"Witchelina"
Farina
ROCKY DAM TRAVERSE
AV 6,6A
AV 5
AV 8
AV 9
AV 7
AV 10
AV 11
AV 4
AV 3
AV 2
"Avondale"
AV 1
AV 13
LYNDHURST
AV 14
AV 12
AVONDALE GRID
L 10
L 9
L 8
L 7
L 5
L 6
L 4
L 3
L 2
L 1
"Mt Lyndhurst"
E.L. 576
"Myrtle Springs"
LEIGH CREEK
"Leigh Creek"
COPLEY
L1 - 138 17 40
- 30 23 00
6635798
260138
254
6537
S.A.
E.L. 576
SCALE
0
400 Km
LOCALITY MAP
LEGEND
Jurassic sediments.
Triassic basin.
Adelaidean outcrop.
Diapiric breccia.
Fold axes anticline / syncline.
Major dip.
Fault.
Axis of down warping
areas of possible down warping
E.L. boundary.
Coal exploration hole.
Diamond exploration hole
Gravity traverses
0 5 10 15 20 25 KILOMETRES
SCALE 1:250 000
Based on Copley 1:250 000 Geology Map (S.A.D.M.E.)

3766-4

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.

REGIONAL GEOLOGY, STRUCTURE AND DRILLING.

Drawn: R.M.K.	Date: NOV. '80	Centre: WHYALLA
Prepared: N. LEMON	Project No: C 650	Drawing No: A2- 1664
Checked:		

Revisions: 21-5-81

1. GENERAL STATEMENT

Exploration Licence 576 was taken up primarily to test the diamond potential of the area. Subsidiary interests were the potential for base metals and coal.

Exploration methods used were ground magnetic surveys, gravity surveys, stream sampling and drilling.

2. TITLES

Exploration Licence 576 of 2,864 square kilometres was granted to Dampier Mining Company Limited on 16th January, 1980 for six months, and was renewed for a further six months on 16th July, 1980. On 26th November, 1980, the area of the exploration licence was reduced to 1,404 square kilometres. Figure 1 shows its location. EL 576 expired on 16th January, 1981.

3. FIELD INVESTIGATIONS

3.1 Exploration for Coal

Coal exploration on EL 576 is described in detail in the report attached as Appendix 2. Fifteen holes totalling 1,112.85 metres were drilled on gravity targets to test for possible coal bearing Triassic basins. No Triassic coal was intersected.

3.2 Exploration for Diamonds

Following interpretation of the BMR aeromagnetic surveys of the Copley, Andamooka, Curdimurka and Maree 1:250,000 sheets, some forty anomalies in the exploration licence were selected as possibly due to kimberlite intrusions. These aeromagnetic anomalies were tested in two ways: (1) those anomalies which occur in areas of drainage were located by carrying out ground magnetic surveys and tested, if warranted, by drilling, and (2) those anomalies which are in areas of good drainage were tested with a stream sediment sampling programme.

3.2.1 Ground Magnetic Surveys

Ground magnetic surveys were carried out over sixteen anomalies. The surveys were carried out along north south grid lines, 200 to 250 metres apart, with readings every 10 metres. Figure 1 shows the location of these anomalies.

3.2.2 Sampling

Twenty-seven stream sediment samples were collected from the exploration licence. These samples were sent to our laboratory in Perth for heavy mineral concentration and observing for kimberlite indicator minerals. A helicopter was used to provide access. Figure 1 shows their locations.

3.2.3 Drilling

Six anomalies were tested by drilling, carried out by Preiss and Sons Pty. Ltd. using a Warman percussion rig. Ten holes (L1-L10) totalling 341.7 metres were drilled. Locations are shown on Figure 1. The holes were sampled at 2 metre intervals and the samples are stored in our core shed in Adelaide.

4. RESULTS OF INVESTIGATIONS

4.1 Drilling

The results of the drilling are summarised in Table 1. Drilling sample description sheets and analysis sheets are in Appendix 2. All the anomalies drilled can be explained by the presence of dolerite intrusions.

4.2 Sampling

No kimberlitic indicator minerals were located in the stream samples.

5. CONCLUSIONS

As the aeromagnetic anomalies selected are all due to mafic intrusions and as no Triassic coal was intersected in drilling, the exploration licence was allowed to expire on 16th January, 1981.

6. EXPENDITURE

Expenditure incurred on EL 576 was :

Wages and Salaries	$22,771
Messing and Accommodation	3,827
Fares and Mobilisation	1,799
Drilling	18,686
Transport	4,711
Surveying/Aerial Photographs	554
Geophysics	9,187
Occupancy/Location Expenses	390
Sample Analysis	1,333
Capital Items	1,695
Aircraft Charter	3,425
Plant Services	220
Tenement Fees, Licences etc.	2,201
Other Items	33
	$70,832

This report is submitted to the Department of Mines and Energy as required by Condition 4 of Exploration Licence 576.

TABLE 1

092

RESULTS OF DRILLING

Hole No.	Depth (m)	Results
L1	48.0	Sandstone
L2	28.0	Sandstone
L3	32.0	Sandstone
L4	5.7	Dolerite
L5	58.0	Muddy sandstone
L6	40.0	Quartzite
L7	14.0	Mafic
L8	48.0	Sandstone to mafic
L9	38.0	Sandstone with limestone
L10	30.0	Dolerite

APPENDIX 1

DRILLING SHEETS

PROJECT No. D 290

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING HEADER

1	2	3	SHEET No. 4	5	6	7	8	9	10	11	12	13
8	1	1	1	1	3	8	5	1	0	1	1	0

PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State SA (15 16)

Region Lyndhurst (17 18)

Zone 094 (19 20 21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22 23 24 25 26 27 28 29 30 31) 112000 E NORTHING (32 33 34 35 36 37 38 39 40 41) 7950 N Or

LONGITUDE: DEGREES (22 23 24) MINS. (25 26) SECONDS (27 28 29 30 31)

LATITUDE: DEGREES (32 33 34) MINS. (35 36) SECONDS (37 38 39 40 41)

REDUCED LEVEL (42 43 44 45 46 47 48)

Feet – F / Metres – M (Units 49): M

Grid Anomaly 2 (GRID 50 51 52)

Complete this section if borehole is a continuation of a previous borehole.

Previous borehole no. .....

Previous header sheet no. .....

DRILLING DETAILS

BOREHOLE No. (53 54 55 56 57 58 59 60): L1

SERIAL No. (61 62 63 64 65 66 67):

COMPANY (68 69 70 71 72 73 74 75 76 77): BHP

Bits used .....

Drillers names Whiteland Drilling

14 B

COMMENCED: DAY (15 16) 2 MONTH (17 18) 6 YEAR (19 20) 80

COMPLETED: DAY (21 22) 2 MONTH (23 24) 6 YEAR (25 26) 80

LOGGED BY (27 28 29 30 31 32 33 34 35 36 37 38 39): N. Lemon

Type of drilling (40): R

DRILLING UNIT (41 42 43 44 45 46 47 48 49 50): Mayhew 1000

TOTAL DEPTH (51 52 53 54 55 56): 48 00

DEPTH TO H_2O (57 58 59 60 61 62):

DEPTH OF OXIDATION (63 64 65 66 67 68):

Orientation at collar: BEARING (69 70 71): – DEP. (72 73): 90

True North – T / Magnetic North – M / Grid North – G (74): G

Survey readings taken down the borehole

14 C

BEARING (15 16 17)	DEP. (18 19)	DEPTH (20 21 22 23 24 25)	BEARING (26 27 28)	DEP. (29 30)	DEPTH (31 32 33 34 35 36)	BEARING (37 38 39)	DEP. (40 41)	DEPTH (42 43 44 45 46 47)	BEARING (48 49 50)	DEP. (51 52)	DEPTH (53 54 55 56 57 58)	BEARING (59 60 61)	DEP. (62 63)	DEPTH (64 65 66 67 68 69)

PROJECT No. D290

BOREHOLE No. Anomaly 2 - L1

THE BROKEN HILL PROPRIETARY CO. LTD.

095

1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2	1	1	3	8	5	1			1	9	2

PUNCH IN EVERY CARD

DRILLING SAMPLE DESCRIPTION

SAMPLE NUMBER			FOOTAGE		% Recovery	Information Available	Duplicate Samples	(C)ore Composite	ROCK TYPE	MINERALIZATION		Chemical Tests	SAMPLE DESCRIPTION
ALPHA PREFIX	NUMERICAL VALUE	Suf.	FROM	TO						TYPE	Amount		
15 16 17	18 19 20 21 22 23	24	25 26 27 28 29 30	31 32 33 34 35 36	37 38 39	40	41	42	43 44 45 46				
			0 00	3 00									Brown sandy soil + clay
			3 00	8 00									off white + pink sandy clays, gravel bon
			8 00	14 00									off white + pink clays, sand lensed
			14 00	16 00									White + yellow clayey sands
			16 00	20 00									Pink, orange + white sandy clays
			20 00	48 00									m. grained feldspathic sandstone, claye bands after siltstone

REMARKS –

Date..... Logged by.....

Form No. 472

SHEET No. № 69560

096

PROJECT No. D.290

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING HEADER

1	2	3	SHEET No. 4	5	6	7	8	9	10	11	12	13
8	1	1	1	1	3	8	5	2	0	1	1	0

PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State SA (16) Region Lyndhurst (18) Zone (21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22–31) 112.000 E NORTHING (32–41) 7900 N Or

LONGITUDE: DEGREES (22–24) MINS. (25–26) SECONDS (27–31)

LATITUDE: DEGREES (32–34) MINS. (35–36) SECONDS (37–41)

REDUCED LEVEL (42–48)

Feet – F / Metres – M (Units 49)

Grid Anomally 2 (GRID 50–52)

Complete this section if borehole is a continuation of a previous borehole.

Previous borehole no. .....

Previous header sheet no. .....

DRILLING DETAILS

BOREHOLE No. (53–60) L2

SERIAL No. (61–67)

COMPANY (68–77) BHP

Bits used .....

Drillers names Whiteland Drilling

14 B

COMMENCED DAY (15–16) MONTH (17–18) YEAR (19–20) 2 6 80

COMPLETED DAY (21–22) MONTH (23–24) YEAR (25–26) 2 6 80

LOGGED BY (27–39) N. Lemon

Type of drilling (40) R

DRILLING UNIT (41–50) Mayhew 1000

TOTAL DEPTH (51–56) 28

DEPTH TO H_2O (57–62)

DEPTH OF OXIDATION (63–68)

Orientation at collar: BEARING (69–71) – DEP. (72–73) 90

True North – T / Magnetic North – M / Grid North – G (74) 6

Survey readings taken down the borehole

14 C

BEARING (15–17)	DEP. (18–19)	DEPTH (20–25)	BEARING (26–28)	DEP. (29–30)	DEPTH (31–36)	BEARING (37–39)	DEP. (40–41)	DEPTH (42–47)	BEARING (48–50)	DEP. (51–52)	DEPTH (53–58)	BEARING (59–61)	DEP. (62–63)	DEPTH (64–69)

R... N... lhx...

PROJECT No. D290

BOREHOLE No. Anomaly 2 - L2

THE BROKEN HILL PROPRIETARY CO. LTD.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2	1	1	3	8	5	2			1	9	2

PUNCH IN EVERY CARD

DRILLING SAMPLE DESCRIPTION

097

SAMPLE NUMBER: ALPHA PREFIX (15 16 17)	NUMERICAL VALUE (18–23)	Suf. (24)	FOOTAGE FROM (25–30)	FOOTAGE TO (31–36)	% Recovery (37–39)	Information Available (40)	Duplicate Samples (41)	(C) If Composite (42)	ROCK TYPE (43–46)	MINERALIZATION TYPE	MINERALIZATION Amount	Chemical Tests	SAMPLE DESCRIPTION
			0.00	3.00									Brown sand soil & pebbles
			3.00	5.00									White gypsecus clay, pebbles
			5.00	14.00									White, brown, red sandy clay
			14.00	20.00									White sandy clay-bands sandstone
			20.00	26.00									Light brown sandy clay
			26.00	28.00									Pink feldspathic quartz sandstone

REMARKS –

Date........ Logged by........

Form No. 472

SHEET No. № 69561

PROJECT No. D290

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING HEADER

1	2	3	SHEET No. 4	5	6	7	8	9	10	11	12	13
8	1	1	1	1	3	8	5	3	0	1	1	0

PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State SA (State 15 16)

Region Lyndhurst (Region 17 18)

Zone (Zone 19 20 21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22 23 24 25 26 27 28 29 30 31) 112000 E NORTHING (32 33 34 35 36 37 38 39 40 41) 8000 N Or

LONGITUDE: DEGREES (22 23 24) MINS. (25 26) SECONDS (27 28 29 30 31)

LATITUDE: DEGREES (32 33 34) MINS. (35 36) SECONDS (37 38 39 40 41)

REDUCED LEVEL (42 43 44 45 46 47 48)

Feet – F / Metres – M (Units 49)

Grid Anomaly 2 (GRID 50 51 52)

Complete this section if borehole is a continuation of a previous borehole.

Previous borehole no. .....

Previous header sheet no. .....

DRILLING DETAILS

BOREHOLE No. (53 54 55 56 57 58 59 60) L3

SERIAL No. (61 62 63 64 65 66 67)

COMPANY (68 69 70 71 72 73 74 75 76 77) BHP

Bits used .....

Drillers names Whiteland Drilling

14 B

COMMENCED: DAY (15 16) 2 MONTH (17 18) 6 YEAR (19 20) 80

COMPLETED: DAY (21 22) 2 MONTH (23 24) 6 YEAR (25 26) 80

LOGGED BY (27 28 29 30 31 32 33 34 35 36 37 38 39) N Lemon

Type of drilling (40) R

DRILLING UNIT (41 42 43 44 45 46 47 48 49 50) Mayhew 1000

TOTAL DEPTH (51 52 53 54 55 56) 32

DEPTH TO H_2O (57 58 59 60 61 62)

DEPTH OF OXIDATION (63 64 65 66 67 68)

Orientation at collar: BEARING (69 70 71) — DEP. (72 73) 90

True North – T / Magnetic North – M / Grid North – G (74) 6

Survey readings taken down the borehole

14 C

BEARING (15 16 17)	DEP. (18 19)	DEPTH (20 21 22 23 24 25)	BEARING (26 27 28)	DEP. (29 30)	DEPTH (31 32 33 34 35 36)	BEARING (37 38 39)	DEP. (40 41)	DEPTH (42 43 44 45 46 47)	BEARING (48 49 50)	DEP. (51 52)	DEPTH (53 54 55 56 57 58)	BEARING (59 60 61)	DEP. (62 63)	DEPTH (64 65 66 67 68 69)

REGION [redacted]

PROJECT No. D290

BOREHOLE No. Anomaly 2 - L3

THE BROKEN HILL PROPRIETARY CO. LTD.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2	1	1	3	8	5	3			1	9	2

PUNCH IN EVERY CARD

DRILLING SAMPLE DESCRIPTION

099

SAMPLE NUMBER: ALPHA PREFIX (15-17)	NUMERICAL VALUE (18-23)	Suf. (24)	FOOTAGE FROM (25-30)	FOOTAGE TO (31-36)	% Recovery (37-39)	Information Available (40)	Duplicate Samples (41)	(C) if Composite (42)	ROCK TYPE (43-46)	MINERALIZATION TYPE	MINERALIZATION Amount	Chemical Tests	SAMPLE DESCRIPTION
			0.00	3.00									Sandy, pebbles & gypsferous clay
			3.00	6.00									Gypsferous clay, sand-pebble beds
			6.00	14.00									White sandy clay, red & orange patches
			14.00	16.00									Clay thick band red clayey sand
			16.00	18.00									Off white clay bands orange clay
			18.00	22.00									Off white, to light brown sandy clay
			22.00	26.00									Pink feldspathic sandstone, clay bands
			26.00	32.00									Pink feldspathic quartz sandstone

REMARKS –

Date.................... Logged by....................

Form No. 472

SHEET No. № 69562

PROJECT No. D290

100

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING HEADER

1	2	3	SHEET No. 4	5	6	7	8	9	10	11	12	13
8	1	1	1	1	3	8	5	4	0	1	1	0

PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State SA (15 16) Region Lyndhurst (17 18) Zone ..... (19 20 21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22 23 24 25 26 27 28 29 30 31) ..... E NORTHING (32 33 34 35 36 37 38 39 40 41) ..... N Or

LONGITUDE DEGREES (22 23 24)	MINS. (25 26)	SECONDS (27 28 29 30 31)
		.

LATITUDE DEGREES (32 33 34)	MINS. (35 36)	SECONDS (37 38 39 40 41)
		.

REDUCED LEVEL (42 43 44 45 46 47 48) .

Feet – F / Metres – M Units (49)

Grid Anomaly 1 GRID (50 51 52)

Complete this section if borehole is a continuation of a previous borehole.

Previous borehole no. .....

Previous header sheet no. .....

DRILLING DETAILS

BOREHOLE No. (53 54 55 56 57 58 59 60): L4

SERIAL No. (61 62 63 64 65 66 67):

COMPANY (68 69 70 71 72 73 74 75 76 77): BHP

Bits used .....

Drillers names Whiteland drilling

14 B

COMMENCED DAY (15 16)	MONTH (17 18)	YEAR (19 20)
	6	80

COMPLETED DAY (21 22)	MONTH (23 24)	YEAR (25 26)
	6	80

LOGGED BY (27 28 29 30 31 32 33 34 35 36 37 38 39): N. Lemon

Type of drilling (40): R

DRILLING UNIT (41 42 43 44 45 46 47 48 49 50): Mayhew 1000

TOTAL DEPTH (51 52 53 54 55 56): 5 . 70

DEPTH TO H_2O (57 58 59 60 61 62): .

DEPTH OF OXIDATION (63 64 65 66 67 68): .

Orientation at collar

BEARING (69 70 71)	DEP. (72 73)
—	90

True North – T / Magnetic North – M / Grid North – G (74): G

Survey readings taken down the borehole

14 C

BEARING (15 16 17)	DEP. (18 19)	DEPTH (20 21 22 23 24 25)
		.

BEARING (26 27 28)	DEP. (29 30)	DEPTH (31 32 33 34 35 36)
		.

BEARING (37 38 39)	DEP. (40 41)	DEPTH (42 43 44 45 46 47)
		.

BEARING (48 49 50)	DEP. (51 52)	DEPTH (53 54 55 56 57 58)
		.

BEARING (59 60 61)	DEP. (62 63)	DEPTH (64 65 66 67 68 69)
		.

RE[illegible]dl[illegible]st

PROJECT No. D290

BOREHOLE No. Anomaly 1 - L4

THE BROKEN HILL PROPRIETARY CO. LTD.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2	1	1	3	8	5	4			1	9	2

PUNCH IN EVERY CARD

101

DRILLING SAMPLE DESCRIPTION

SAMPLE NUMBER: ALPHA PREFIX (15 16 17)	SAMPLE NUMBER: NUMERICAL VALUE (18–23)	Suf. (24)	FOOTAGE: FROM (25–30)	FOOTAGE: TO (31–36)	% Recovery (37 38 39)	Information Available (40)	Duplicate Samples (41)	(C) If Composite (42)	ROCK TYPE (43 44 45 46)	MINERALIZATION: TYPE	MINERALIZATION: Amount	Chemical Tests	SAMPLE DESCRIPTION
			0.00	2.00									Sand, clay, gypsum & pebbles
			2.00	5.00									Green clay, weathered dolerite
			5.00	5.70	%100								Pale green - green weathered dolerite

REMARKS –

Date.................................... Logged by....................................

Form No. 472

SHEET No. № 69563

PROJECT No. D290

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING HEADER

1	2	3	SHEET No. 4	5	6	7	8	9	10	11	12	13
8	1	1	1	1	3	9	5	6	0	1	1	0

PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State S. AUSTRALIA (State 15 16)

Region LYNDHURST (Region 17 18)

Zone (Zone 19 20 21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22 23 24 25 26 27 28 29 30 31) 7430 E NORTHING (32 33 34 35 36 37 38 39 40 41) 10850 N Or

LONGITUDE: DEGREES (22 23 24) MINS. (25 26) SECONDS (27 28 29 30 31)

LATITUDE: DEGREES (32 33 34) MINS. (35 36) SECONDS (37 38 39 40 41)

REDUCED LEVEL (42 43 44 45 46 47 48)

Feet – F / Metres – M (Units 49)

Grid MAG ANOMALY (GRID 50 51 52)

Complete this section if borehole is a continuation of a previous borehole.

Previous borehole no.

Previous header sheet no.

DRILLING DETAILS

BOREHOLE No. (53 54 55 56 57 58 59 60) L 5

SERIAL No. (61 62 63 64 65 66 67)

COMPANY (68 69 70 71 72 73 74 75 76 77) B.H.P.

Bits used TUNGSTON PERCUSSION

Drillers names J. J. PRESSTSON

14 B

COMMENCED: DAY (15 16) 21 MONTH (17 18) 11 YEAR (19 20) 82

COMPLETED: DAY (21 22) 21 MONTH (23 24) 11 YEAR (25 26) 80

LOGGED BY (27 28 29 30 31 32 33 34 35 36 37 38 39) C. E. TAYLOR

Type of drilling (40) P

DRILLING UNIT (41 42 43 44 45 46 47 48 49 50)

TOTAL DEPTH (51 52 53 54 55 56) 55 m

DEPTH TO H_2O (57 58 59 60 61 62)

DEPTH OF OXIDATION (63 64 65 66 67 68)

Orientation at collar: BEARING (69 70 71) — DEP. (72 73) 90

True North – T / Magnetic North – M / Grid North – G (74) 1

Survey readings taken down the borehole

14 C

BEARING (15 16 17)	DEP. (18 19)	DEPTH (20 21 22 23 24 25)	BEARING (26 27 28)	DEP. (29 30)	DEPTH (31 32 33 34 35 36)	BEARING (37 38 39)	DEP. (40 41)	DEPTH (42 43 44 45 46 47)	BEARING (48 49 50)	DEP. (51 52)	DEPTH (53 54 55 56 57 58)	BEARING (59 60 61)	DEP. (62 63)	DEPTH (64 65 66 67 68 69)

REGION: LYNDHURST
PROJECT No.: D290
BOREHOLE No.: L5

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING SAMPLE DESCRIPTION

HEAD SHEET No.													
1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2	1	1	3	9	5	6			1	9	2

PUNCH IN EVERY CARD

103

SAMPLE NUMBER: ALPHA PREFIX (15–17)	NUMERICAL VALUE (18–23)	SUF (24)	FOOTAGE: FROM (25–30)	TO (31–36)	% RECOVERY (37–39)	Infom. Avail. (40)	Duplicate Samples (41)	(C) Composite (42)	ROCK TYPE (43–46)	MINERALIZATION: TYPE	AMOUNT	Chemical Tests	SAMPLE DESCRIPTION
ADL	7154		0	2 m									Surface rock – fine grained brown quartz / clay rich sst.
	7155		2	4 m									Same as other surface rock. Slight reaction with Acid but mainly a muddy sst.
	7156		4	6 m									
	7157		6	8 m									
	7158		8	10 m									
	7159		10	12 m									
	7160		12	14 m									
	7161												CONTROL.
	7162		14	16 m									
→	7163		16	18 m									
	7164		18	20 m									
	7165		20	22									
	7166		22	24									
	7167		24	26									Abrupt change to white / grey / black rock. Slight reaction with ~~Acid~~ ∴ possible dolomite
	7168		26	28									
	7169		28	30									
	7170		30	32									Fine grained muddy sst – thinly bedded. No acid reaction
	7171		32	34									
→	7172		34	36									
	7173		36	38									White / grey dolomite. Slight reaction.
	7174		38	40									
	7175		40	42									Muddy clay sediment.
	7176		42	44									

REMARKS –

Date: 21st November '86 Logged by: E.C. Taylor

Form No. 473

SHEET Nº 122802

REGION..........

PROJECT No. 270

THE BROKEN HILL PROPRIETARY CO. LTD.

HEADER SHEET No.

1	2	3	4	5	6	7	8	9	10	11	12	13
8	4	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				0

PUNCH IN EVERY CARD

ANALYSIS

14	SAMPLE NUMBER: ALPHA PREFIX (15–17)	NUMERICAL VALUE (18–23)	Suf. (24)	Cu (25–30)	Pb (31–36)	Zn (37–42)	Ni (43–48)	Co (49–54)	Nb (55–60)	ANALYSIS (61–66)	ANALYSIS (67–72)
2	ADL	7154		115	8	18	16	8	–		
2		7155		150	4	14	16	12	–		
2		7156		185	4	16	20	12	–		
2		7157		125	4	10	12	8	–		
2		7158		130	4	10	12	4	–		
2		7159		290	<4	16	28	8	–		
2		7160		230	4	18	24	8	–		
2		7161		Control							
2		7162		230	8	12	12	4	–		
2	→	7163		195	4	12	16	4	–		
2		7164		290	<4	6	20	4	–		
2		7165		270	4	10	16	4	–		
2		7166		320	4	10	24	8	–		
2		7167		34	4	<2	8	<4	–		
2		7168		18	4	<2	4	<4	–		
2		7169		20	4	<2	4	<4	–		
2		7170		90	<4	<2	4	<4	–		
2		7171		290	4	2	12	12	–		
2	→	7172		65	<4	2	8	4	–		
2		7173		14	4	<2	4	<4	–		
2		7174		75	12	2	8	4	–		
2		7175		32	4	<2	4	4	–		

14	DATE ANALYSED: Day (15 16)	Month (17 18)	Year (19 20)
1			

PLACE ANALYSED 21 22 23 24 25 26 27 28 29

PPM – M / WT % – W [30]

SAMPLING METHOD 1 2 3 [31 32 33]

SAMPLE PREPARATION 1 2 [34 35]

ANALYSIS SCHEME [36 37]

FRACTION SCHEME [38 39]

REGION [illegible]

PROJECT No. D 290

BOREHOLE No. ~~L6~~ L5

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING SAMPLE DESCRIPTION

HEADER SHEET No.													
1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2	1	1	3	9	5	6			1	9	2

PUNCH IN EVERY CARD

105

SAMPLE NUMBER ALPHA PREFIX (15 16 17)	NUMERICAL VALUE (18–23)	SUF (24)	FOOTAGE FROM (25–30)	FOOTAGE TO (31–36)	% RECOVERY (37–39)	Inform. Avail. (40)	Duplicate Samples (41)	(C) if Composite (42)	ROCK TYPE (43–46)	MINERALIZATION TYPE	MINERALIZATION AMOUNT	Chemical Tests	SAMPLE DESCRIPTION
	7177		44	46									Quartz / feldspar / clay
	7178		46	48									rich sediment.
	7179		48	50									Grey in colour / white
	7180		50	52									Slight reaction to Magnet
	7181		52	54									No reaction to HCl.
	7182		54	56									Several fragments
	7183		56	58									of quartz
	~~7184~~		~~58~~	~~60~~									High clay content.
													Drill stuck at
													58 - 60 m

REMARKS –

Date 21st November '80 Logged by C.E. Taylor

SHEET Nº 122803

Form No. 472

REGION.......

PROJECT No.......

THE BROKEN HILL PROPRIETARY CO. LTD.

HEADER SHEET No.													
1	2	3	4	5	6	7	8	9	10	11	12	13
8	4	2										0

PUNCH IN EVERY CARD

106

ANALYSIS

14	SAMPLE NUMBER: ALPHA PREFIX (15 16 17)	NUMERICAL VALUE (18–23)	Suf. (24)	Cu ANALYSIS (25–30)	Pb ANALYSIS (31–36)	Zn ANALYSIS (37–42)	Ni ANALYSIS (43–48)	Co ANALYSIS (49–54)	Nb ANALYSIS (55–60)	ANALYSIS (61–66)	ANALYSIS (67–72)
0											
2		7177		890	16	8	12	20	–		
2		7178		260	8	2	12	8	–		
2		7179		185	<4	6	24	12	–		
2		7180		150	4	10	24	16	–		
2		7181		135	4	14	44	24	–		
2		7182		370	8	50	28	16	–		
2	→	7183		105	4	24	40	24	20		
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											

14	DATE ANALYSED Day (15 16)	Month (17 18)	Year (19 20)	PLACE ANALYSED (21–29)	PPM – M / WT % – W (30)	SAMPLING METHOD 1 2 3 (31 32 33)	SAMPLE PREPARATION 1 2 (34 35)	ANALYSIS SCHEME (36 37)	FRACTION SCHEME (38 39)
1									

PROJECT No. D290

THE BROKEN HILL PROPRIETARY CO. LTD.
DRILLING HEADER

107

1	2	3	SHEET No. 4	5	6	7	8	9	10	11	12	13
8	1	1	1	1	3	9	5	7	0	1	1	0

PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State S. AUSTRALIA (State 15 16) Region LYNDHURST (Region 17 18) Zone (Zone 19 20 21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22 23 24 25 26 27 28 29 30 31) 7600 E NORTHING (32 33 34 35 36 37 38 39 40 41) 11000 N Or

LONGITUDE: DEGREES (22 23 24) MINS. (25 26) SECONDS (27 28 29 30 31)

LATITUDE: DEGREES (32 33 34) MINS. (35 36) SECONDS (37 38 39 40 41)

REDUCED LEVEL (42 43 44 45 46 47 48)

Feet – F / Metres – M (Units 49)

Grid MAG. ANOMALY (GRID 50 51 52)

Complete this section if borehole is a continuation of a previous borehole.

Previous borehole no.

Previous header sheet no.

DRILLING DETAILS

BOREHOLE No. (53 54 55 56 57 58 59 60) L 6

SERIAL No. (61 62 63 64 65 66 67)

COMPANY (68 69 70 71 72 73 74 75 76 77) B. H. P.

Bits used

Drillers names J. PRESS & SON

14 B

COMMENCED: DAY (15 16) 21 MONTH (17 18) 11 YEAR (19 20) 80

COMPLETED: DAY (21 22) 21 MONTH (23 24) 11 YEAR (25 26) 80

LOGGED BY (27 28 29 30 31 32 33 34 35 36 37 38 39) C. E. Taylor.

Type of drilling (40) P

DRILLING UNIT (41 42 43 44 45 46 47 48 49 50)

TOTAL DEPTH (51 52 53 54 55 56) 40

DEPTH TO H_2O (57 58 59 60 61 62) —

DEPTH OF OXIDATION (63 64 65 66 67 68) —

Orientation at collar: BEARING (69 70 71) — DEP. (72 73) 90

True North – T / Magnetic North – M / Grid North – G (74) T

Survey readings taken down the borehole

14 C

BEARING (15 16 17)	DEP. (18 19)	DEPTH (20 21 22 23 24 25)	BEARING (26 27 28)	DEP. (29 30)	DEPTH (31 32 33 34 35 36)	BEARING (37 38 39)	DEP. (40 41)	DEPTH (42 43 44 45 46 47)	BEARING (48 49 50)	DEP. (51 52)	DEPTH (53 54 55 56 57 58)	BEARING (59 60 61)	DEP. (62 63)	DEPTH (64 65 66 67 68 69)

REGION ... [illegible] N S W [illegible] T

PROJECT No. D290

BOREHOLE No. L6

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING SAMPLE DESCRIPTION

HEA[illegible] SHEET No.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2	1	1	3	4	5	7			1	9	2

PUNCH IN EVERY CARD

108

SAMPLE NUMBER: ALPHA PREFIX (15 16 17)	NUMERICAL VALUE (18–23)	SUF (24)	FOOTAGE FROM (25–30)	FOOTAGE TO (31–36)	% RECOVERY (37 38 39)	Inform. Avail. (40)	Duplicate Samples (41)	(C) If Composite (42)	ROCK TYPE (43–46)	MINERALIZATION TYPE	MINERALIZATION AMOUNT	Chemical Tests	SAMPLE DESCRIPTION
													Surface rock – Pink/Brown Quartzite.
	7184		0	2									Quartzite flows. Mid brown.
	7185		2	4									Quartzite – Pale brown flows.
	7186		4	6									" " " . Slight-Pink
	7187		6	8									Quartzite – Pink colour / Brown colour
	7188		8	10									" – Brown flows.
	7189		10	12									" Slight reaction to Acid
→	7190		12	14									
	7191		14	16									
	7192		16	18									Red/Brown flows. Fe rich cement
	7193		18	20									Quartzites. Brown.
	7194		20	22									
	7195		22	24									
→	7196		24	26									Quartzite + Silt – Clay
→	7197		~~26~~	~~28~~									CONTROL.
	7198		26	28									Quartzite (7198–7201)
	7199		28	30									
	7200		30	32									
	7201		32	34									
	7202		34	36									
	7203		36	38									Slight change in colour.
→	7204		38	40									More Fe content
			~~40~~	~~4[illegible]~~									

REMARKS –

Date 21st Nov. '80 Logged by C. Blaylen

Form No. 472

SHEET № 122804

REGION..

PROJECT No..

THE BROKEN HILL PROPRIETARY CO. LTD.

1	2	3	HEADER SHEET No. 4	5	6	7	8	9	10	11	12	13
8	4	2	1	1	7	9	5	–				0

PUNCH IN EVERY CARD

ANALYSIS

14	ALPHA PREFIX (15 16 17)	NUMERICAL VALUE (18–23)	Suf. (24)	Cu ANALYSIS (25–30)	Pb ANALYSIS (31–36)	Zn ANALYSIS (37–42)	Ni ANALYSIS (43–48)	Co ANALYSIS (49–54)	Nb ANALYSIS (55–60)	ANALYSIS (61–66)	ANALYSIS (67–72)
2		7184		290	12	36	24	4	–		
2		7185		270	12	32	24	8	–		
2		7186		160	12	26	12	<4	–		
2		7187		34	<4	6	4	<4	–		
2		7188		540	12	44	32	8	–		
2		7189		165	4	28	16	4	–		
2	–	7190		195	8	34	28	12	–		
2		7191		130	8	8	24	12	–		
2		7192		75	16	26	20	12	–		
2		7193		50	12	20	20	12	–		
2		7194		28	8	16	12	8	–		
2		7195		32	8	16	16	4	–		
2	–	7196		20	4	12	12	4	–		
2		7197		Control							
2		7198		14	<4	6	8	4	–		
2		7199		20	<4	6	8	<4	–		
2		7200		26	4	18	16	8	–		
2		7201		24	4	16	16	4	–		
2		7202		16	8	8	8	<4	–		
2		7203		40	16	24	20	12	–		
2	–	7204		28	16	16	24	4	12		
2											

14	DATE ANALYSED Day (15 16)	Month (17 18)	Year (19 20)	PLACE ANALYSED (21–29)	PPM – M / WT % – W (30)	SAMPLING METHOD (31 32 33)	SAMPLE PREPARATION (34 35)	ANALYSIS SCHEME (36 37)	FRACTION SCHEME (38 39)
1									

110

PROJECT No. D290

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING HEADER

1	2	3	SHEET No. 4	5	6	7	8	9	10	11	12	13
8	1	1	1	1	3	9	5	8	0	1	1	0

PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State S. AUSTRALIA (15 16)

Region LYNDHURST (17 18)

Zone (19 20 21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22 23 24 25 26 27 28 29 30 31) 7690 E NORTHING (32 33 34 35 36 37 38 39 40 41) 11150 N Or

LONGITUDE: DEGREES (22 23 24) MINS. (25 26) SECONDS (27 28 29 30 31)

LATITUDE: DEGREES (32 33 34) MINS. (35 36) SECONDS (37 38 39 40 41)

REDUCED LEVEL (42 43 44 45 46 47 48)

Feet – F / Metres – M (Units 49)

Grid MAG. ANOMALY NO. 15. (GRID 50 51 52)

Complete this section if borehole is a continuation of a previous borehole.

Previous borehole no. .....

Previous header sheet no. .....

DRILLING DETAILS

BOREHOLE No. (53 54 55 56 57 58 59 60) L7

SERIAL No. (61 62 63 64 65 66 67)

COMPANY (68 69 70 71 72 73 74 75 76 77) B. H. P.

Bits used .....

Drillers names J. REESE & SON

14 B

COMMENCED: DAY (15 16) 22 MONTH (17 18) 11 YEAR (19 20) 80

COMPLETED: DAY (21 22) 22 MONTH (23 24) 11 YEAR (25 26) 80

LOGGED BY (27 28 29 30 31 32 33 34 35 36 37 38 39) C. E. Taylor.

Type of drilling (40) P

DRILLING UNIT (41 42 43 44 45 46 47 48 49 50)

TOTAL DEPTH (51 52 53 54 55 56) 14

DEPTH TO H_2O (57 58 59 60 61 62)

DEPTH OF OXIDATION (63 64 65 66 67 68)

Orientation at collar: BEARING (69 70 71) — DEP. (72 73) 90

True North – T / Magnetic North – M / Grid North – G (74) T

Survey readings taken down the borehole

14 C

BEARING (15 16 17)	DEP. (18 19)	DEPTH (20 21 22 23 24 25)	BEARING (26 27 28)	DEP. (29 30)	DEPTH (31 32 33 34 35 36)	BEARING (37 38 39)	DEP. (40 41)	DEPTH (42 43 44 45 46 47)	BEARING (48 49 50)	DEP. (51 52)	DEPTH (53 54 55 56 57 58)	BEARING (59 60 61)	DEP. (62 63)	DEPTH (64 65 66 67 68 69)

RE[illegible] .... LY[illegible]D[illegible]RS[illegible]

PROJECT No. .... D 290.

BOREHOLE No. L7

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING SAMPLE DESCRIPTION

HEA[illegible] SHEET No.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2	1	1	3	9	5	8			1	9	2

PUNCH IN EVERY CARD

111

SAMPLE NUMBER: ALPHA PREFIX (15 16 17)	NUMERICAL VALUE (18–23)	SUF (24)	FOOTAGE FROM (25–30)	FOOTAGE TO (31–36)	% RECOVERY (37–39)	Inform. Avail. (40)	Duplicate Samples (41)	(C) If Composite (42)	ROCK TYPE (43–46)	MINERALIZATION TYPE	MINERALIZATION AMOUNT	Chemical Tests	SAMPLE DESCRIPTION
ADL	7205		0	2									Grey / green Intermediate Igneous rock. Medium grained. Quartz present
	7206		2	4									
	7207		4	6									
	7208		6	8									Grey powder highly magnetic.
	7209		8	10									
	7210		10	12									Possibly diorite.
	7211		12	14									or granodiorite.
	7212		—	—									CONTROL

REMARKS –

Date 22nd Nov. 80 Logged by C. Clayton

Form No. 472

SHEET № 122806

REGION..........

PROJECT No..........

THE BROKEN HILL PROPRIETARY CO. LTD.

112

1	2	3		4	5	6	7	8	9		10	11	12	13
8	4	2												0

HEADER SHEET No.

PUNCH IN EVERY CARD

ANALYSIS

14	SAMPLE NUMBER: ALPHA PREFIX (15 16 17)	NUMERICAL VALUE (18–23)	Suf. (24)	Cu ANALYSIS (25–30)	Pb ANALYSIS (31–36)	Zn ANALYSIS (37–42)	Ni ANALYSIS (43–48)	Co ANALYSIS (49–54)	Nb ANALYSIS (55–60)	ANALYSIS (61–66)	ANALYSIS (67–72)
2	→	7205		2600	<4	34	85	80	–		
2	→	7206		1950	4	34	95	90	–		
2		7207		780	4	30	90	105	–		
2		7208		330	<4	20	60	50	–		
2		7209		230	<4	40	120	60	–		
2		7210		210	<4	30	75	44	–		
2	—	7211		260	<4	22	55	36	22		
2		7212		Control							
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											
2											

14	DATE ANALYSED: Day (15 16)	Month (17 18)	Year (19 20)
1			

PLACE ANALYSED (21–29)

PPM – M / WT % – W (30)

SAMPLING METHOD (31 32 33)

SAMPLE PREPARATION (34 35)

ANALYSIS SCHEME (36 37)

FRACTION SCHEME (38 39)

No. 12280?

PROJECT No. 2290.

113

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING HEADER

SHEET No. 113959 | 1 2 3: 8 1 1 | 10 11 12 13: 0 1 1 0 | PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State S. AUSTRALIA (15 16) Region LYNDHURST (17 18) Zone (19 20 21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22 23 24 25 26 27 28 29 30 31) 7750 E NORTHING (32 33 34 35 36 37 38 39 40 41) 10100 N Or

LONGITUDE: DEGREES (22 23 24) MINS. (25 26) SECONDS (27 28 29 30 31)

LATITUDE: DEGREES (32 33 34) MINS. (35 36) SECONDS (37 38 39 40 41)

REDUCED LEVEL (42 43 44 45 46 47 48) Feet – F / Metres – M Units (49)

Grid MAG ANOMALY NO 14 GRID (50 51 52)

Complete this section if borehole is a continuation of a previous borehole.

Previous borehole no. .....

Previous header sheet no. .....

DRILLING DETAILS

BOREHOLE No. (53 54 55 56 57 58 59 60) L8

SERIAL No. (61 62 63 64 65 66 67)

COMPANY (68 69 70 71 72 73 74 75 76 77) B.H.P.

Bits used .....

Drillers names J. TREISS & SON.

14 B

COMMENCED: DAY (15 16) 22 MONTH (17 18) 11 YEAR (19 20) 80

COMPLETED: DAY (21 22) 22 MONTH (23 24) 11 YEAR (25 26) 80

LOGGED BY (27 28 29 30 31 32 33 34 35 36 37 38 39) C E Sayle

Type of drilling (40) 8

DRILLING UNIT (41 42 43 44 45 46 47 48 49 50)

TOTAL DEPTH (51 52 53 54 55 56) 48

DEPTH TO H_2O (57 58 59 60 61 62) —

DEPTH OF OXIDATION (63 64 65 66 67 68) —

Orientation at collar: BEARING (69 70 71) — DEP. (72 73) 90

True North – T / Magnetic North – M / Grid North – G (74) T

Survey readings taken down the borehole

14 C

BEARING (15 16 17)	DEP. (18 19)	DEPTH (20 21 22 23 24 25)	BEARING (26 27 28)	DEP. (29 30)	DEPTH (31 32 33 34 35 36)	BEARING (37 38 39)	DEP. (40 41)	DEPTH (42 43 44 45 46 47)	BEARING (48 49 50)	DEP. (51 52)	DEPTH (53 54 55 56 57 58)	BEARING (59 60 61)	DEP. (62 63)	DEPTH (64 65 66 67 68 69)

REGION LYNDHURST

PROJECT No. D290

BOREHOLE No. L8

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING SAMPLE DESCRIPTION

114

HEADER SHEET No.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
8	3	2	1	1	3	9	5	9			1	9	2	

PUNCH IN EVERY CARD

SAMPLE NUMBER			FOOTAGE		%	Inform. Avail.	Duplicate Samples	Cl. If Composite	ROCK TYPE	MINERALIZATION		Chemical Tests	SAMPLE DESCRIPTION
ALPHA PREFIX	NUMERICAL VALUE	SUF	FROM	TO	RECOVERY					TYPE	AMOUNT		
15 16 17	18 19 20 21 22 23	24	25 26 27 28 29 30	31 32 33 34 35 36	37 38 39	40	41	42	43 44 45 46				
ADL	7213		0	2									Surface thinly bedded fine siliceous ssl
	14		2	4									Pale colour, fine ssl. Thinly
	15		4	6									bedded. Nil reaction
	7216		6	8									with HCl. Acid.
	7217		8	10									Non magnetic
	7218		10	12									
	7219		12	14									
—	7220		14	16									
→	D7221												CONTROL No.
	7222		16	18									
	7223		16	20									Brown rock - softer.
	7224		20	22									Slightly magnetic.
	7225		22	24									Reacts with HCl Acid
	7226		24	26									
	7227		26	28									
	7228		28	30									
	7229		30	32									Variable variety of rock
→	7230		32	34									types. Some reacted
	7231		34	36									with acid others
	7232		36	38									were ignious.
	7233		38	40									
	7234		40	42									Very hard black fine
	7235		42	44									grained igs. rock. Highly

REMARKS —

Date 29th Nov. '80 Logged by C. Taylor

REGION.....

PROJECT No.....

THE BROKEN HILL PROPRIETARY CO. LTD.

115

HEADER SHEET No.

1	2	3	4	5	6	7	8	9	10	11	12	13
8	4	2										0

PUNCH IN EVERY CARD

ANALYSIS

14	SAMPLE NUMBER				Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis	
0	ALPHA PREFIX	NUMERICAL VALUE	Suf.		Cu		Pb		Zn		Ni		Co		Nb					
14	15 16 17	18 19 20 21 22 23	24	25 26 27	ANALYSIS 28 29 30	31 32 33	ANALYSIS 34 35 36	37 38 39	ANALYSIS 40 41 42	43 44 45	ANALYSIS 46 47 48	49 50 51	ANALYSIS 52 53 54	55 56 57	ANALYSIS 58 59 60	61 62 63	ANALYSIS 64 65 66	67 68 69	ANALYSIS 70 71 72	
2	ADL	7213		300		4		10		20		8		-						
2		7214		300		8		10		24		8		-						
2		7215		340		8		8		28		16		-						
2		7216		90		8		6		44		16		-						
2		7217		105		4		6		28		8		-						
2		7218		55		<4		2		28		8		-						
2		7219		16		<4		6		32		12		-						
2	→	7220		10		<4		6		28		16		-						
2		7221		Control																
2		7222		16		<4		4		28		16		-						
2		7223		65		4		8		36		16		-						
2		7224		170		8		12		44		16		-						
2		7225		125		4		16		40		20		-						
2		7226		38		8		8		20		12		-						
2		7227		22		8		8		16		12		-						
2		7228		18		8		6		12		8		-						
2		7229		20		8		10		16		8		-						
2	→	7230		22		8		14		16		8		-						
2		7231		34		4		18		28		8		-						
2		7232		20		8		8		20		8		-						
2		7233		20		8		10		44		24		-						
2		7234		40		4		8		36		20		-						

14	DATE ANALYSED		
1	Day	Month	Year
	15 16	17 18	19 20

PLACE ANALYSED

21 22 23 24 25 26 27 28 29

PPM – M
WT % – W

30

SAMPLING METHOD

1	2	3
31	32	33

SAMPLE PREPARATION

1	2
34	35

ANALYSIS SCHEME

36 37

FRACTION SCHEME

38 39

REGION: LYNDHURST

PROJECT No. D290.

BOREHOLE No. L8.

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING SAMPLE DESCRIPTION

HEADER SHEET No.		
1 2 3	4 5 6 7 8 9	10 11 12 13 14
8 3 2	1 1 3 9 5 9	1 9 2

PUNCH IN EVERY CARD

116

SAMPLE NUMBER – ALPHA PREFIX (15 16 17)	NUMERICAL VALUE (18–23)	SUF (24)	FOOTAGE FROM (25–30)	FOOTAGE TO (31–36)	% RECOVERY (37–39)	Infom. Avail. (40)	Duplicate Samples (41)	(C) If Composite (42)	ROCK TYPE (43–46)	MINERALIZATION TYPE	MINERALIZATION AMOUNT	Chemical Tests	SAMPLE DESCRIPTION
	7236		44	46									Very fine grained black rock.
→	37		46	48									Highly magnetic.
	~~38~~		~~48~~	~~50~~									

REMARKS –

Date 22nd Nov. 80 Logged by C. [signature]

SHEET № 122808

REGION......

PROJECT No......

THE BROKEN HILL PROPRIETARY CO. LTD.

117

1	2	3	HEADER SHEET No. 4	5	6	7	8	9	10	11	12	13
8	4	2										0

PUNCH IN EVERY CARD

ANALYSIS

14	Alpha Prefix (15–17)	Numerical Value (18–23)	Suf. (24)	Cu (25–30)	Pb (31–36)	Zn (37–42)	Ni (43–48)	Co (49–54)	Nb (55–60)	(61–66)	(67–72)
2		7236		185	<4	4	44	24	–		
2	→	7237		105	<4	2	44	28	14		
2											
2											
2											
2											
2											
2											
2											
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2											
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2											
2											
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2											
2											
2											

14	DATE ANALYSED Day (15 16)	Month (17 18)	Year (19 20)	PLACE ANALYSED (21–29)	PPM – M / WT % – W (30)	SAMPLING METHOD (31 32 33)	SAMPLE PREPARATION (34 35)	ANALYSIS SCHEME (36 37)	FRACTION SCHEME (38 39)
1									

PROJECT No. D290

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING HEADER

1	2	3	SHEET No. 4	5	6	7	8	9	10	11	12	13
8	1	1	1	1	3	9	6	0	0	1	1	0

PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State S. AUSTRALIA (15 16)

Region LYNDHURST (17 18)

118

Zone (19 20 21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22 23 24 25 26 27 28 29 30 31) 9750 E NORTHING (32 33 34 35 36 37 38 39 40 41) 10200 N Or

LONGITUDE: DEGREES (22 23 24) MINS. (25 26) SECONDS (27 28 29 30 31)

LATITUDE: DEGREES (32 33 34) MINS. (35 36) SECONDS (37 38 39 40 41)

REDUCED LEVEL (42 43 44 45 46 47 48)

Feet – F / Metres – M (Units 49)

Grid MAP ANOMALY No 12 (GRID 50 51 52)

Complete this section if borehole is a continuation of a previous borehole,

Previous borehole no. .....

Previous header sheet no. .....

DRILLING DETAILS

BOREHOLE No. (53 54 55 56 57 58 59 60) L9

SERIAL No. (61 62 63 64 65 66 67)

COMPANY (68 69 70 71 72 73 74 75 76 77) B.H.P.

Bits used .....

Drillers names J. J. PRESS & SON.

14 B

COMMENCED: DAY (15 16) 22 MONTH (17 18) 11 YEAR (19 20) 80

COMPLETED: DAY (21 22) 22 MONTH (23 24) 11 YEAR (25 26) 80

LOGGED BY (27 28 29 30 31 32 33 34 35 36 37 38 39) C. B. Taylor

Type of drilling (40) R

DRILLING UNIT (41 42 43 44 45 46 47 48 49 50)

TOTAL DEPTH (51 52 53 54 55 56) 38

DEPTH TO H_2O (57 58 59 60 61 62) 30

DEPTH OF OXIDATION (63 64 65 66 67 68)

Orientation at collar: BEARING (69 70 71) — DEP. (72 73) 90

True North – T / Magnetic North – M / Grid North – G (74) T

Survey readings taken down the borehole

14 C

BEARING (15 16 17)	DEP. (18 19)	DEPTH (20 21 22 23 24 25)	BEARING (26 27 28)	DEP. (29 30)	DEPTH (31 32 33 34 35 36)	BEARING (37 38 39)	DEP. (40 41)	DEPTH (42 43 44 45 46 47)	BEARING (48 49 50)	DEP. (51 52)	DEPTH (53 54 55 56 57 58)	BEARING (59 60 61)	DEP. (62 63)	DEPTH (64 65 66 67 68 69)

REGION [illegible]

PROJECT No. D290.

BOREHOLE No. L9

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING SAMPLE DESCRIPTION

HEADER SHEET No.													
1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2									1	9	2

PUNCH IN EVERY CARD

119

SAMPLE NUMBER: ALPHA PREFIX (15-17)	NUMERICAL VALUE (18-23)	SUF (24)	FOOTAGE FROM (25-30)	FOOTAGE TO (31-36)	% RECOVERY (37-39)	Inform. Avail. (40)	Duplicate Samples (41)	(C) if Composite (42)	ROCK TYPE (43-46)	MINERALIZATION TYPE	MINERALIZATION AMOUNT	Chemical Tests	SAMPLE DESCRIPTION
→	7238												CONTROL NO.
ADL	7239		0	2									38 m of white/grey
ADL	7240		2	4									yilr. Very evenly
"	7241		4	6									rounded grains - Medium
"	7242		6	8									Size.
"	7243		8	10									No variation in size
→	7244		10	12									or mineral.
	7245		12	14									Cementing material
	7246		14	16									contained some
	7247		16	18									calcite ∴ reacted
	7248		18	20									with dilute HCl acid
	7249		20	22									
	7250		22	24									No Magnetic reaction
→	7251		24	26									
	7252		26	28									
	7253		28	30									
	7254		30	32									
	7255		32	34									
	7256		34	36									
→	7257		36	38									H_2O ANALYZED 28/11/80 - 1925 mg/l of SOLUBLE SALTS
	~~7258~~		~~38~~	~~40~~									Unable to continue further
	~~7259~~		~~40~~	~~42~~									too much water
	~~7260~~		~~42~~	~~44~~									

REMARKS –

Date 22/11/80. Logged by [illegible]

Form No. 472

SHEET № 122809

REGION.....

PROJECT No.....

THE BROKEN HILL PROPRIETARY CO. LTD.

120

1	2	3	HEADER SHEET No. 4	5	6	7	8	9	10	11	12	13
8	4	2										0

PUNCH IN EVERY CARD

ANALYSIS

14	0	SAMPLE NUMBER ALPHA PREFIX	15 16 17	NUMERICAL VALUE	18 19 20 21 22 23	Suf. 24	Method of Analysis 25 26 27 28 29 30	Method of Analysis 31 32 33 34 35 36	Method of Analysis 37 38 39 40 41 42	Method of Analysis 43 44 45 46 47 48	Method of Analysis 49 50 51 52 53 54	Method of Analysis 55 56 57 58 59 60	Method of Analysis 61 62 63 64 65 66	Method of Analysis 67 68 69 70 71 72
							Cu	Pb	Zn	Ni	Co	Nb		
							ANALYSIS	ANALYSIS	ANALYSIS	ANALYSIS	ANALYSIS	ANALYSIS	ANALYSIS	ANALYSIS
14			15 16 17		18 19 20 21 22 23	24	25 26 27 28 29 30	31 32 33 34 35 36	37 38 39 40 41 42	43 44 45 46 47 48	49 50 51 52 53 54	55 56 57 58 59 60	61 62 63 64 65 66	67 68 69 70 71 72
2				7238			Control							
2				7239			6	8	2	8	<4	–		
2				7240			4	4	<2	8	<4	–		
2				7241			6	4	<2	8	<4	–		
2				7242			4	4	<2	4	<4	–		
2				7243			4	4	<2	4	<4	–		
2		–		7244			2	<4	<2	4	<4	–		
2				7245			4	4	<2	4	<4	–		
2				7246			4	4	<2	4	<4	–		
2				7247			4	4	2	4	<4	–		
2				7248			2	4	<2	4	<4	–		
2				7249			4	<4	<2	4	<4	–		
2				7250			6	8	2	8	<4	–		
2		–		7251			4	8	<2	4	<4	–		
2				7252			4	4	4	4	<4	–		
2				7253			4	8	2	4	<4	–		
2				7254			20	8	<2	4	<4	–		
2				7255			18	9	<2	<4	<4	–		
2				7256			16	8	<2	4	<4	–		
2		–		7257			6	4	2	<4	<4	8		
2														
2														

14	1	DATE ANALYSED Day 15 16	Month 17 18	Year 19 20

PLACE ANALYSED 21 22 23 24 25 26 27 28 29

PPM – M
WT % – W
30

SAMPLING METHOD 31 32 33

SAMPLE PREPARATION 34 35

ANALYSIS SCHEME 36 37

FRACTION SCHEME 38 39

NO. 122000

PROJECT No. 0290

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING HEADER

1	2	3	SHEET No. 4	5	6	7	8	9	10	11	12	13
8	1	1	1	1	3	9	6	1	0	1	1	0

PUNCH IN EVERY CARD

GENERAL LOCATION

14 A

State SA (State 15 16: 05) Region Lyndhurst (Region 17 18) Zone EL 576 121 (Zone 19 20 21)

SPECIFIC LOCATION OF COLLAR

Either EASTING (22–31) 10600 E NORTHING (32–41) 9975 N Or

LONGITUDE DEGREES (22–24)	MINS. (25 26)	SECONDS (27–31)

LATITUDE DEGREES (32–34)	MINS. (35 36)	SECONDS (37–41)

REDUCED LEVEL (42–48)

Feet – F / Metres – M (Units 49): M

Grid Anomaly 11 (GRID 50 51 52)

Complete this section if borehole is a continuation of a previous borehole.

Previous borehole no. .....

Previous header sheet no. .....

DRILLING DETAILS

BOREHOLE No. (53–60)	SERIAL No. (61–67)	COMPANY (68–77)
L 10		DAMCO

Bits used .....

Drillers names J. J. PREISS & Son Pty Ltd

14 B

COMMENCED DAY (15 16)	MONTH (17 18)	YEAR (19 20)
30	11	80

COMPLETED DAY (21 22)	MONTH (23 24)	YEAR (25 26)
30	11	80

LOGGED BY (27–39): C. D. ARNDT

Type of drilling (40): P

DRILLING UNIT (41–50): WAGON INJECT

TOTAL DEPTH (51–56)	DEPTH TO H_2O (57–62)	DEPTH OF OXIDATION (63–68)
300	200	2

Orientation at collar — BEARING (69 70 71): ~~0~~ — DEP. (72 73): 90

True North – T / Magnetic North – M / Grid North – G (74): T

Survey readings taken down the borehole

14 C

BEARING (15–17)	DEP. (18 19)	DEPTH (20–25)	BEARING (26–28)	DEP. (29 30)	DEPTH (31–36)	BEARING (37–39)	DEP. (40 41)	DEPTH (42–47)	BEARING (48–50)	DEP. (51 52)	DEPTH (53–58)	BEARING (59–61)	DEP. (62 63)	DEPTH (64–69)

REC ... -7 ... rs ... S

PROJECT No. D290

BOREHOLE No. L 10

THE BROKEN HILL PROPRIETARY CO. LTD.

DRILLING SAMPLE DESCRIPTION

122

1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	3	2	1	1	3	9	6	1	0	1	1	9	2

HEADER SHEET No. (4–9)

PUNCH IN EVERY CARD

SAMPLE NUMBER: ALPHA PREFIX (15 16 17)	NUMERICAL VALUE (18–23)	SUF (24)	FOOTAGE FROM (25–30)	FOOTAGE TO (31–36)	% RECOVERY (37–39)	Inform. Avail. (40)	Duplicate Samples (41)	(C) If Composite (42)	ROCK TYPE (43–46)	MINERALIZATION TYPE	MINERALIZATION AMOUNT	Chemical Tests HCO (CO_3^{2-})	SAMPLE DESCRIPTION
ADL	7258					C							CONTROL
	7259		0	2		F			ALV			✓	White and pale brown clay & quartzite sa...
	7260		2	4					CLAY			✓	Yellow and off yellow brown clay
	7261		4	6					DOL	magnetite	trace	–	Greyish green weathered dolomite
	7262		6	8								–	- - - -
—	7263		8	10								–	- - - -
	7264		10	12								–	- - - -
	7265		12	14							-5%	–	As above (Band of dark brown clay 12.8-13)
	7266		14	16								–	Dolomite - as above
	7267		16	18				D				–	but becoming fresher - darker green
—	7268		18	20								–	
	7269		20	22								–	
	7270		22	24								–	
	7271		24	26								–	
	7272		26	28								–	
—	7273		28	30								–	
	7274							D					Duplicate 16 - 18

REMARKS –

Date 30/11/80 Logged by [signature]

SHEET No 122811

REGION.....

PROJECT No.....

THE BROKEN HILL PROPRIETARY CO. LTD.

123

1	2	3	HEADER SHEET No.						10	11	12	13
8	4	2										0

PUNCH IN EVERY CARD

ANALYSIS

14	SAMPLE NUMBER				Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis		Method of Analysis	
0	ALPHA PREFIX	NUMERICAL VALUE		Suf.	Cu		Pb		Zn		Ni		Co		Nb							
14	15 16 17	18 19 20 21 22 23		24	25 26 27	28 29 30	31 32 33	34 35 36	37 38 39	40 41 42	43 44 45	46 47 48	49 50 51	52 53 54	55 56 57	58 59 60	61 62 63	64 65 66	67 68 69	70 71 72		
					ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS			
2	ADL	7258			Control																	
2		7259			30		8		28		40		20		–							
2		7260			28		4		20		95		40		–							
2		7261			12		4		12		115		55		–							
2		7262			6		4		10		70		36		–							
2	→	7263			4		4		8		60		24		–							
2		7264			4		<4		8		75		24		–							
2		7265			20		<4		12		125		44		–							
2		7266			55		<4		12		155		50		–							
2		7267			12		<4		10		135		32		–							
2	→	7268			28		<4		12		160		84		–							
2		7269			12		4		10		105		28		–							
2		7270			10		4		10		110		32		–							
2		7271			28		4		8		60		24		–							
2		7272			16		<4		10		65		24		–							
2	→	7273			14		<4		10		80		24		14							
2	—	7274			12		<4		8		140		32		–							
2																						
2																						
2																						
2																						
2																						
2																						

14	DATE ANALYSED Day	Month	Year
1	15 16	17 18	19 20

PLACE ANALYSED: 21 22 23 24 25 26 27 28 29

PPM – M
WT % – W
30

SAMPLING METHOD: 31 32 33

SAMPLE PREPARATION: 34 35

ANALYSIS SCHEME: 36 37

FRACTION SCHEME: 38 39

APPENDIX 2

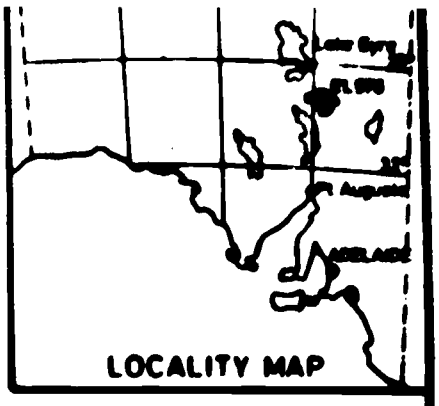
E.L. 576 LYNDHURST S.A.

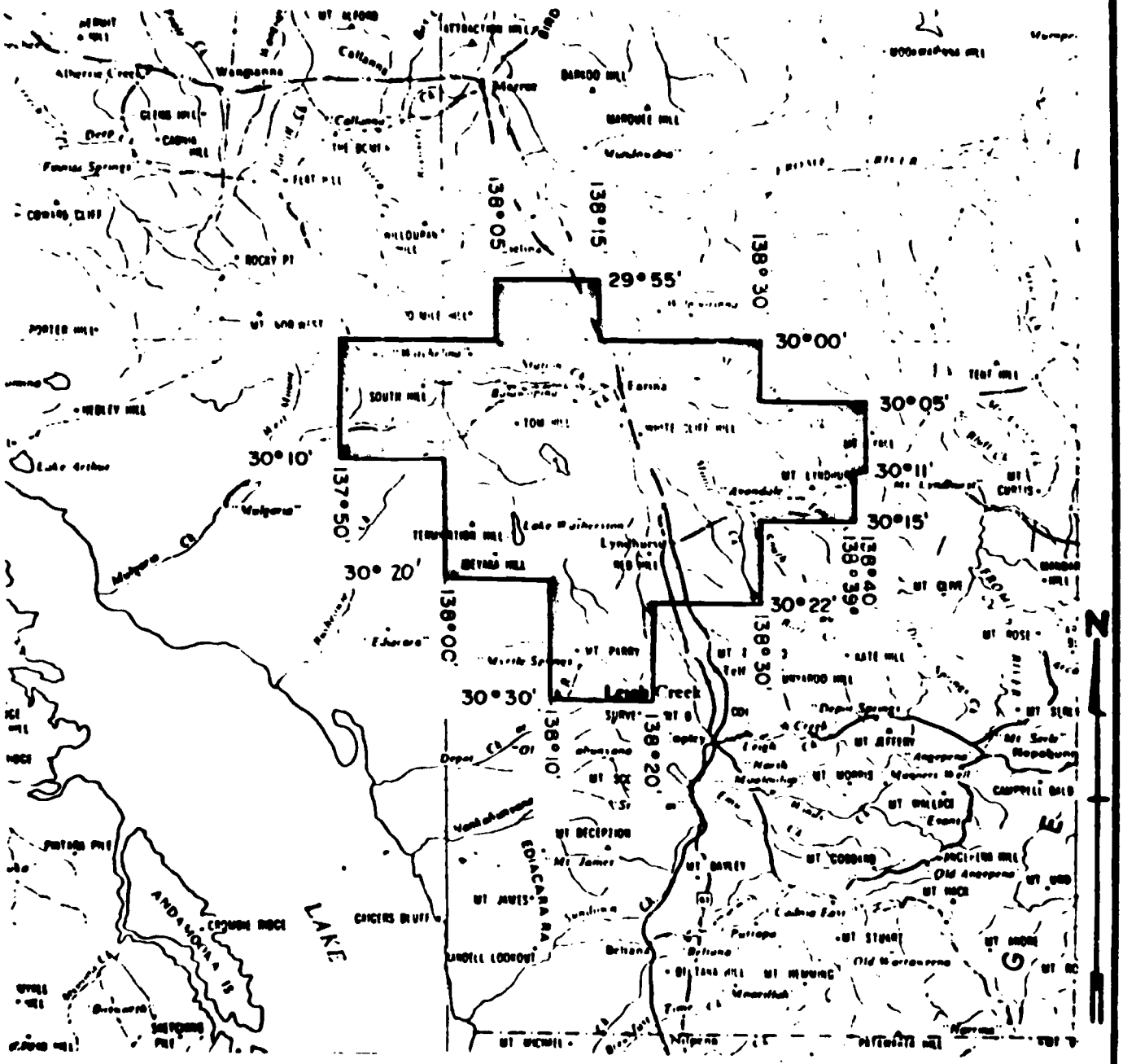
COAL EXPLORATION

CONTENTS

ABSTRACT

Fifteen holes totalling 1,112.85m were drilled in the Lyndhurst E.L. 576 on gravity targets for possible coal bearing Triassic basins. Approximately 70 line kilometres of gravity traversing with readings every 200m was done as part of the programme. The only carbonaceous material intersected proved to be of Proterozoic age and so no further work is recommended.





SCALE 1:500,000

KILOMETRES 10 0 10 20 30 40 50 KILOMETRES

This map photo copied from Schedule A
DM 458/79

Centre Adelaide	THE BROKEN HILL PROPRIETARY CO LTD E.L. 576 LYNDHURST S.A. LOCATION MAP	Drawing No. 6-C680-4
Date 8-5-80		Drawing No. AA-67

1. INTRODUCTION

E.L. 576 was initially taken out for diamond exploration. It covers a large area of little outcrop to the north, north west and north east of Leigh Creek. Four small Triassic basins containing economic coal measures are known in the Leigh Creek area. Although much of the area of E.L. 576 had been previously explored for coal by the South Australian Department of Mines and Energy (S.A.D.M.E.) on behalf of the Electricity Trust of South Australia (E.T.S.A.), some parts of E.L. 576 remained untested and the rewards of a coal deposit so close to Leigh Creek were thought sufficient to justify additional exploration.

2. GEOLOGY OF THE LEIGH CREEK COALFIELD

E.T.S.A. have been mining coal at Leigh Creek since 1948. Current production is in the order of 2 million tonnes per year and all of this is used for power generation at Port Augusta. A new power station is being constructed at Port Augusta and coal production at Leigh Creek will have to rise to 4.5 million tonnes to it and the existing power station.

The coal measures occur in four isolated basins of Triassic sediments. Initially deposition was over a wider area but the four known basins have been preserved by down warping of the underlying basement. The downwarping appears to have occurred both during and after the deposition of the coal measures.

The Triassic coal measures sit directly on folded Proterozoic (Adelaidean) sediments. The basin sediments range in age from mid Triassic to Middle Jurassic. Upper Jurassic fluvial sediments unconformably overlie the coal measures at Copley. Elsewhere Quaternary conglomerates, gravels, clay and alluvium cover the coal measures. Tertiary sediments are known further north.

Economically extractable coal occurred in B, C and D lobes with marginally economic coal in Lobe A. Lobes A and B are very deep structures whereas the coal in Lobe C is folded over a monocline. Lobe D is a very shallow basin and presented the best mining conditions. Lobe D has now been mined out with 23 million tonnes having been extracted at nearly 100% recovery.

Detailed drilling and exploration has been done over the known deposits and reasonably intensive exploration has been done to the north, north-west and north-east of Leigh Creek. A medium density gravity survey was done over the entire area, mainly on an ½ mile by ½ mile grid although the readings were "stretched" to a one mile by ½ mile grid further north.

The survey showed a distinct low over the deeper basins:- -10 milligals over Lobe B and -4 milligals over Lobe A. A much weaker anomaly of -2 milligals occurs over Lobe C. There is vertically no anomaly, just a flattening of the gradient, over Lobe D.

...3/

3. DRILL SITE LOCATION

The target in mind in this programme was a "D Lobe" type deposit, i.e. shallow, easy to mine with a low overburden to coal ratio and with a very small associated negative gravity anomaly.

The likely areas of interest were selected by structural analysis of the underlying Proterozoic rocks. It is known that the Triassic sediments are preserved in downwarped areas. This downwarping disturbed the general trend of the Delamerian age folds which affected the Proterozoic sediments. Areas of diapiric breccia were also delineated during this analysis as these may affect the orientation of fold axes as well.

Fig. 2 shows a possible axis along which downwarping occurred. This axis is coincident with the known basins and a synclinal axis west of Beltana. This axis extends northwards past Avondale H.S. which is at the limit of the previous gravity survey. This previous survey showed the beginnings of a low on the extremity of the survey. (Pegum 1961)

Another area of possible downwarping was indicated by disturbed fold areas in the vicinity of Tom Hill, about 12 kilometres south-east of Witchelina H.S. The presence of possible Jurassic sediments in this area added weight to this possibility.

Seven lines of gravity were read over the "Avondale" Grid. The lines were spaced 2 kilometres apart and readings taken every 200m along each line. One line of gravity was read near Tom Hill with readings every 200m. The data and results from this work are written up and presented separately in an accompanying report. The data from the Avondale Grid are presented in summary form as a contoured plan in Fig. 4.

The "Rocky Dam" line near Tom Hill was flat and featureless and this combined with the observation that the pebbly basal "Jurassic" sits directly on basement at Tom Hill suggested that the area was of no interest and consequently no further work was done there.

The Avondale Grid contours showed three negative gravity features worthy of testing. A large circular anomaly centred about 18000E/16000N had three holes sited on it. A weak trough lies due north from the circular feature and a further two holes were sited to test this. A more distinct trough is centred around 13000E/20000N and is aligned north-south. Two holes were planned to test this feature but eventually seven were drilled.

...4/

An additional three holes were sited on weak untested anomalies shown by the early S.A.D.M.E. gravity survey. Two were sited immediately north of the town of Lyndhurst to test a flattening of the gravity gradient and one hole sited 10 kilometres west of Lyndhurst on a small circular low.

...5/

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4. DRILLING AND RESULTS

A total of fifteen holes were drilled on E.L. 576 in the search for coal. This included the redrilling of one (No.6) to obtain core. In all 1,112.85m were drilled including 7.35m of core. A Mayhew 1000 rig was used with all holes rotary drilled. Mud circulation was used for all holes except AV12, 13 and 14 which were drilled with air circulation.

(i) Avondale Grid

An attempt was made to geophysically log each hole but caving ground prevented this in some cases. AV1, 2 and 3 were sited on the circular anomaly around Avondale H.S. The age of the rocks penetrated was difficult to determine at the time of drilling due to the extremely weathered nature of the sample. However it is now confidently proposed that each of these holes intersected weathered Burra Group Copley Quartzite equivalents from near the surface to their total depth. The circular negative gravity anomaly is therefore most likely due to an anticline in the Proterozoic sediments. A core of silty sandstone is surrounded by a rim of denser Skillogalee Dolomite.

AV4 and 5 were sited on the weak linear anomaly extending north from the circular anomaly. Both these holes penetrated a thick sequence of poorly consolidated sandy, clayey sands and minor gravels. There was a small intersection of carbonaceous material in AV4. The sequence is probably Tertiary in age and represents a stream channel fill deposit.

AV6 and 7 were sited on the stronger north south anomaly around 13000E/20000N. Both AV6 and AV7 intersected a highly carbonaceous silty very fine sandstone to medium sandstone at about 70m. The carbonaceous nature of this material and the fact that it was weathered, not like the previously intersected Proterozoic sediments, suggested the rocks may have been Triassic.

AV8 was sighted mid way between AV6 and AV7 in an attempt to get a good core of fresh carbonaceous material. A channel fill conglomerate was intersected around 60m to 70m where the carbonaceous material was expected and below this was a sandy shale and siltstone sequence.

AV6A was sited only 10 metres south of AV6 in a further attempt to get a core of carbonaceous material. The sequence remained the same as AV6 down to 70 m but from there to 94 m the AV6 sequence was eroded away and replaced by a channel fill conglomerate. The core at the bottom of the hole was of a hard light grey cross bedded fine to medium grained quartz sandstone.

...6/

A further three holes, AV9, 10 and 11 were drilled on line 20,000N to define the cause of the gravity anomaly. AV9 intersected weathered then fresh Proterozoic sandstone. AV10 was interpreted at the time of drilling as having penetrated a similar sequence although later gamma log correlations show a Tertiary sequence overlying the Proterozoic (see Fig. 5). AV11 intersected an almost identical sequence to AV7 and continuous coring was done in the carbonaceous sequence from 63.60m to 67.80m. The shallow dip and the highly carbonaceous and unweathered nature of this sequence still suggested that this sequence may have been Triassic.

Samples of the carbonaceous material from AV6 and AV7 were sent to Wayne Harris of W.M.C. for palynological examination to determine, if possible, the age of the sequence. His report is included as Appendix I. While he could find no positive evidence, the high carbonized nature of the material suggested that the carbonaceous sediments are of Proterozoic age and therefore part of the basement.

Fig. 5 shows a geological section along part of the line 20,000N compared to the gravity profile. It is obvious from this diagram that the gravity low is directly related to the depth and shape of the Tertiary channel.

(ii) S.A.D.M.E. Grid

AV12 was drilled on a small circular gravity low 10km. west of Lyndhurst. This hole intersected 44m of Recent alluvial material overlying a hard sedimentary quartzite.

AV13 and 14 were drilled immediately north of Lyndhurst on a "flat shelf" in the regional gravity. AV13 penetrated 32m of Tertiary to Recent channel fill material overlying silty shale and sandstone bedrock. Water was intersected at 14m and the sample assay appears in Appendix III. AV14 intersected multi coloured clays of probably Tertiary age overlying shale and siltstone basement. These three holes give no indication of the cause of the gravity anomaly nor did they intersect any carbonaceous material.

...7/

5. RECOMMENDATIONS

In view of the fact that no new Triassic basins were discovered in the course of this exploration drilling programme, it is recommended that the Company do no further exploration for coal in this area.

REFERENCES

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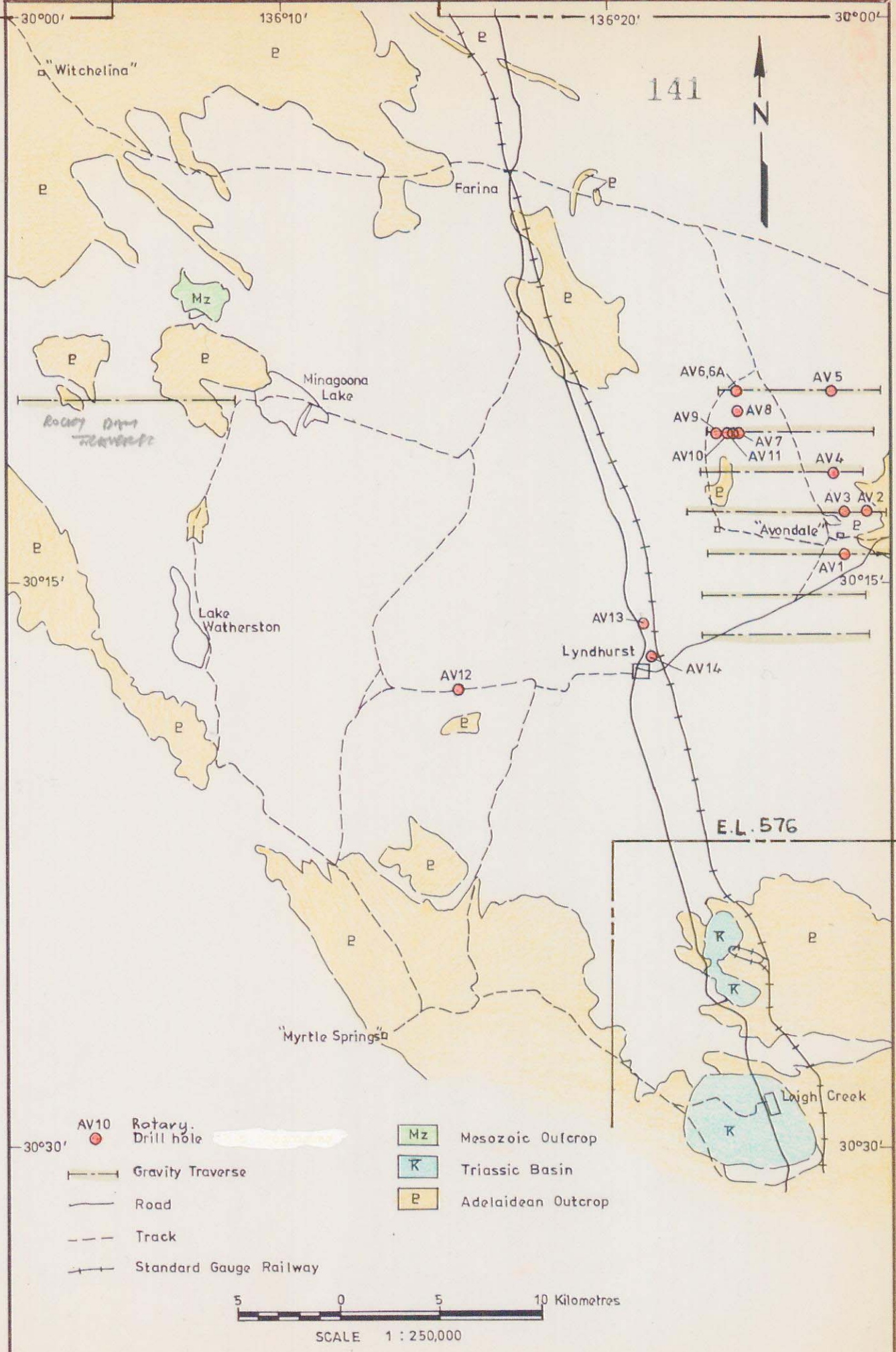
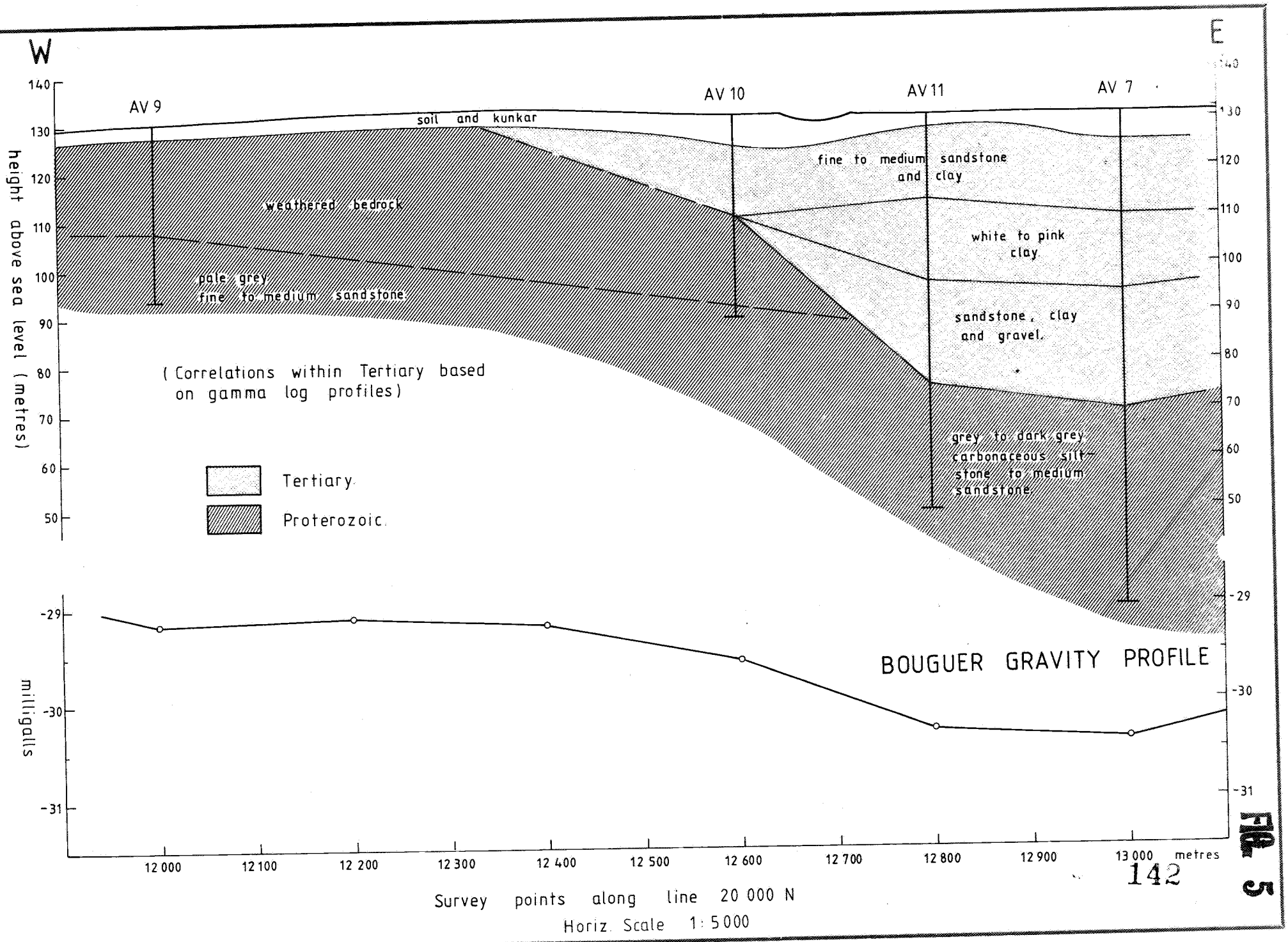
FIG. 3



Centre: Whyalla	THE BROKEN HILL PROPRIETARY CO. LTD. AVONDALE GRID GRAVITY TRAVERSE and DRILL HOLE LOCATION E.L. 576 LYNDHURST S. AUST.	Date: 1 SEPT 80
Drawn/Checked: M.B./ N.L.		Drawing No.: A4- 255



Centre: Whyalla
Date: NOV '80

GRAVITY PROFILE AND GEOLOGICAL DRILL SECTION
LINE 20 000 N, AVONDALE GRID
E.L. 576, LYNDHURST, S.A.

THE BROKEN HILL PROPRIETARY CO. LTD.

Project No. C 650
Drawing No. A4- 269

142

Fig 5

APPENDIX I

PALYNOLOGICAL EXAMINATION OF TWO SAMPLES

WESTERN MINING CORPORATION LIMITED
(INCORPORATED IN VICTORIA)
EXPLORATION DIVISION — PETROLEUM
153 GREENHILL ROAD, PARKSIDE, SOUTH AUSTRALIA 5063 * TELEPHONE 272 5544

144

25th June, 1980

Mr. C.P. Taylor
Senior Geologist Coal
B.H.P.
G.P.O. Box 86A
MELBOURNE, VIC. 3001

Dear Sir,

RE: PALYNOLOGICAL EXAMINATION OF 2 SAMPLES

Two samples labelled AV6 78-80m and AV7 68-70m as submitted by you for palynological determination of age were processed by standard techniques. Both samples failed to yield any recognisable palynomorphs. The acid insoluble residue consisted almost entirely of highly carbonised fragments. Thus there is no palynological evidence as the age of the samples.

Carbonaceous sediments of Permian or Tertiary age normally yield good assemblages provided that they have not been deeply weathered or subjected to abnormal pressures or temperatures.

The sediments do not appear to be weathered and at the depths indicated one would not expect Permian or Tertiary sediments to be carbonised by excessive heat or temperature. Whilst the evidence is negative, my feeling is that the samples are of much older age possibly Cambrian or Precambrian.

Yours sincerely,

W.K. Harris
Consulting Geologist - Palynology

APPENDIX II

DETAILED GEOLOGICAL LOGS

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

146

Bore No. AV 1
Co-Ordinates 18000E 14000N
Total Depth 84m
Operators WHITELAND DRILLING
Date Started 22.5.80
Date Completed 22.5.80

Location LYNDHURST
R.L. at Collar 148.55m
R.L. at Bottom 64.55m
Rig MAYHEW 1000
Sampling Tools SCREENS
Drilling Type ROTARY MUD

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	4	4				Brown sticky clay and sand with assorted pebbles of Adelaidean.
4	8	4				Brown pebbly sand.
8	10	2				Gravel composed mainly of rounded shale fragments with some quartzite and limestone. - Water bearing.
10	20	10				Gravel as above but with a matrix of white clay and sand.
20	34	14				White to off-white sandy clay with bands of medium to coarse sand.
34	42	8	N?			Orange and white sandy clays with some bands of well cemented, very fine to fine sandstone.
42	50	8	N			Yellow weathered interbedded very fine to fine sandstone with kaolinized shaley and silty interbeds.
50	78	28	Core?			Highly weathered off white interbedded very fine to fine sandstone and shale. Sample now in a mixture of fine sand and clay.
78	84	6				Pale green-white very fine to medium grained quartz sandstone with a clay matrix - definite Adelaidean.

DATE: MAY 1980

LOGGED BY: N.M. LEMON

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

147

Bore No. AV 2
Co-Ordinates 19000E 16000N
Total Depth 108m
Operators Whiteland Drilling
Date Started 23.5.80
Date Completed 23.5.80

Location Lyndhurst
R.L. at Collar 153.32m
R.L. at Bottom 45.32m
Rig Mayhew 1000
Sampling Tools Screens.
Drilling Type Rotary Mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	2	2	Q			Brown soil, sand and pebbles.
2	6	4				Off white weathered fine to medium
			N/Rec ?			grained micaceous quartz sandstone.
6	10	4				White sandy clay with bands of weathered
						fine to medium sandstone.
10	16	6				Pale green fine to medium sandstone with
						clay bands.
16	28	12				White sandy clay with orange iron stained
						patches.
28	64	36				Interbedded white clay and pale green
						fine to medium grained sandstone.
64	70	6				Pale green and orange fine to coarse
						sandstone with pebbly bands.
70	82	12				Pale green and orange sandy clays.
82	86	4				Off white and purple clays.
86	98	12				Brown weathered clay and siltstone with
						very fine to fine sandstone.
98	104	6				Brown fine grained sandstone with some
						white quartzite bands.
104	108	4				Off white to pale green fine to medium
						grained quartz sandstone with occasional
						clay bands.

DATE: MAY 1980

LOGGED BY: N.M. LEMON

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

148

Bore No. AV 3
Co-Ordinates 18000E 16000N
Total Depth 98m
Operators Whiteland Drilling
Date Started 23.5.80
Date Completed 24.5.80

Location Lyndhurst
R.L. at Collar 145.57m
R.L. at Bottom 47.57m
Rig Mayhew 1000
Sampling Tools Screens
Drilling Type Rotary Mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	2	2				Brown clayey soil with assorted pebbles.
2	10	8				Off white to cream clays with some calcrete content and minor gypsum near the surface.
10	98	88				Deeply weathered micaceous siltstone interbedded with shale and occasional bands of very fine to fine micaceous quartz sandstone. The deep weathering has altered this entire interval to a white to off white slightly sandy, silty clay with some patches of weak ferruginization. The less weathered siltstone near the bottom of the hole shows the original rock colour may be green.

DATE: MAY 1980

LOGGED BY: N.M. LEMON

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

149

Bore No. AV 4
Co-Ordinates 17800E 18000N
Total Depth 72m
Operators Whiteland Drilling
Date Started 24.5.80
Date Completed 24.5.80

Location Lyndhurst
R.L. at Collar 135.24m
R.L. at Bottom 63.24m
Rig Mayhew 1000
Sampling Tools Screens
Drilling Type Rotary Mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	4	4	OK			Brown clay, soil and sand with a few assorted pebbles.
4	10	6	Broken?			Brown medium to coarse sand partially cemented by carbonate and gypsum.
10	16	6				Off white pebbly and gravelly very coarse quartz sandstone with pebble bands.
16	20	4				As above with a white clay matrix.
20	42	22				Clean white medium to coarse grained quartz sand.
42	50	8				As above with white clay interbeds.
50	59	9	Fine			Fine to very coarse quartz sandstone with a pale green clay matrix.
59	64	5				Medium to very coarse grained quartz sandstone with beds of grey carbonaceous shale and occasional chips of lignitic coal.
64	72	8	Fine			Interbedded fine and coarse to very coarse quartz sands with orange clay matrix. Hole collapse from the above interval has contaminated the last sample.

DATE: MAY 1980

LOGGED BY: N.M. LEMON

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

150

Bore No. AV 5
Co-Ordinates 17200E 22000N
Total Depth 70m
Operators Whiteland Drilling
Date Started 25.5.80
Date Completed 26.5.80

Location Lyndhurst
R.L. at Collar 124.56m
R.L. at Bottom 54.56m
Rig Mayhew 1000
Sampling Tools Screens
Drilling Type Rotary Mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	4	4				Brown clay, sand and pebbles of quartzite and green shale.
4	10	6				Coarse to very coarse quartz sand with granules of shale and a matrix of brown clay.
10	14	4				Orange sandy clay with thick bands of shale pebble conglomerate.
14	24	10				Orange and white sandy clay with interbeds of off white fine grained quartz sandstone
24	28	4				Pale orange medium to very coarse sands with a clay matrix.
28	38	10				Orange and white sandy clays with interbed of pale green-white very fine to fine grained quartz sandstone.
38	42	4				Brown medium to coarse grained sands with an orange-brown clay matrix.
42	44	2				Brown, orange and white sandy clay.
44	62	18				Pale green and brown fine to medium grained quartz sandstones with interbeds of brown sandy clay with some coarse grained intervals.
62	66	4				Hard off white to pale green very fine to fine grained quartz sandstone.
66	70	4				Fine to very coarse grained quartz sands with some shale clasts and a clay matrix.

DATE: MAY 1980

LOGGED BY: N.M. LEMON

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

151

Bore No. AV 6
Co-Ordinates 13000E 22000N
Total Depth 96m
Operators Whiteland Drilling
Date Started 26.5.80
Date Completed 26.5.80

Location Lyndhurst
R.L. at Collar 125.60m
R.L. at Bottom 28.60m
Rig Mayhew 1000
Sampling Tools Screens
Drilling Type Rotary Mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	4	4				Brown sand and clay.
4	8	4				Brown carbonate cemented conglomerate of shale pebbles with some quartzite and sandstone pebbles.
8	18	10				Orange sandy clays with some sand and pebble bands.
18	30	12				Off white sandy clay with bands of very fine to medium sandstone.
30	48	18				White to off white clays and silts with bands of clayey sandstone.
48	52	4				White, red and purple clays with silt and sand bands.
52	58	6				Light brown siltstone and very fine sandstone.
58	70	12				Brown and purple very fine to fine sandstone with a clay matrix. There are occasional very coarse sand bands and some granule conglomerate.
70	72	2				As above mixed with carbonaceous shale and sandstone.
72	84	12				Grey to dark grey carbonaceous shales and very fine to medium sandstones.
84	92	8				Grey to light grey siltstone with some shale and very fine carbonaceous sandstone.
92	96	4				Light grey carbonaceous sandstone and siltstone with buff clays and hard off white fine to medium grained sandstone.

DATE: MAY 1980

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GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

152

Bore No. AV6A
Co–Ordinates 13000E 21990N
Total Depth 94.80m
Operators Whiteland Drilling
Date Started 28.5.80
Date Completed 29.5.80

Location Lyndhurst
R.L. at Collar 125.60m
R.L. at Bottom 30.80m
Rig Mayhew 1000
Sampling Tools Screens
Drilling Type Rotary-mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	84					No sample collected. The samples were the same as AV6 down to 70m but the channel fill material intersected in AV6 from 58m - 70m is thicker in AV6A.
84	94	10				Off white to yellow to brown clayey medium to very coarse lithic sandstone with granules and some pebbles of quartz quartzite shale siltstone and calcareous siltstone.
94.0	94.80	0.80				CORE RUN Grey silty very fine to fine grained carbonaceous quartz sandstone. The core shows common cross bedding and numerous thin irregular very carbonaceous dark grey silty shale partings. True dip is approximately 50°.

DATE: MAY 1980

LOGGED BY: N.M. LEMON

GEOLOGICAL DRILL HOLE LOG -- MINERALS S.A.

153

Bore No. AV 7 — Location Lyndhurst

Co-Ordinates 13000E 20000N — R.L. at Collar 131.86m

Total Depth 102m — R.L. at Bottom 29.86m

Operators Whiteland Drilling — Rig Mayhew 1000

Date Started 26.5.80 — Sampling Tools Screens

Date Completed 27.5.80 — Drilling Type Rotary-mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	2	2				Brown clay and sand with assorted silicified pebbles.
2	6	4	Arenite			Brown carbonate cemented shale and sandstone clasts with some siliceous cement.
6	22	16				White to pale grey weathered interbedded sandstone and clay.
22	40	18	Grit.			White to light pink clay with bands of sandstone and grit.
40	50	10	Arenite			White, red and orange ferruginous clays and fine to medium sandstones with some odd gravelly bands.
50	56	6				Pale brown to off white medium sandstone with some clay matrix and silty bands.
56	62	6	Fine			Off white to cream interbedded silts, clays and fine sandstone.
62	68	6				Dark grey pyritic carbonaceous fine sandstone and siltstone.
68	74	6				Grey carbonaceous sandstone, siltstone and clay.
74	82	8				Light grey very fine to medium sandstone and siltstone.
82	94	8				Grey, slightly carbonaceous pyritic, very fine to fine sandstone.
94	98	4				Grey to light grey carbonaceous, fine to medium grained sandstone becoming coarser at base of interval.

102

DATE: MAY 1980 — LOGGED BY: N.M. LEMON

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

154

Bore No. AV 7 Location

Co–Ordinates R.L. at Collar

Total Depth R.L. at Bottom

Operators Rig

Date Started Sampling Tools

Date Completed Drilling Type

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
98	100	2				Yellow to orange iron stained medium to
				Nil?		very coarse grained sandstone.
100	102	2				Pale grey, hard, well cemented, very
						fine to fine grained sandstone.

DATE: LOGGED BY:

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

155

Bore No. AV 8
Co-Ordinates 13000E 21000N
Total Depth 84m
Operators Whiteland Drilling
Date Started 27.5.80
Date Completed 28.5.80

Location Lyndhurst
R.L. at Collar 120m (approx.)
R.L. at Bottom 36m
Rig Mayhew 1000
Sampling Tools Screens
Drilling Type Rotary-mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	2	2				Brown clay and sand with assorted pebbles.
2	8	6				Brown sand, shale fragments and quartzite pebbles cemented with carbonate and some silica.
8	10	2				Conglomerate of quartzite and shale pebbles.
10	20	10				Light brown to off white sandy clay with bands of sands and pebbles.
20	42	22				Off white to light grey interbedded clay and very fine to medium sandstone. There are occasional bands of coarse sandstone.
42	50	8				Off white to yellow interbedded clays and very fine to medium sandstones.
50	54	4				Cream to light brown very fine to medium grained sandstone.
54	68	14				Green grey conglomerate of shale fragments quartzite and sandstone pebbles and pebbles of carbonaceous shale and sandstone with occasional chips of coal?
68	76	8				Hard grey to dark grey shale and siltstone with occasional sandstone layers.
76	84	8				White to pale grey claystone with very thin white laminations interbedded with light grey very fine to medium sandstone.

DATE: MAY 1980

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GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

156

Bore No. AV 9
Co-Ordinates 12000E 20000N
Total Depth 36.75m
Operators Whiteland Drilling
Date Started 31.5.80
Date Completed 31.5.80

Location Lyndhurst
R.L. at Collar 130.63m
R.L. at Bottom 93.88m
Rig Mayhew 1000
Sampling Tools Screens
Drilling Type Rotary-mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	2	2				Brown soil clay sand and assorted silicified pebbles.
2	22	20				White to pale grey weathered feldspathic fine to medium grained sandstone.
22	36	14				Pale grey feldspathic fine to medium grained sandstone with bands of yellow clay ie. weathered siltstone.
36.00	36.75					Core run.

DATE: MAY 1980

LOGGED BY: N.M. LEMON

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

157

Bore No. AV 10
Co-Ordinates 12600E 20000N
Total Depth 42m
Operators Whiteland Drilling
Date Started 31.5.80
Date Completed 31.5.80

Location Lyndhurst
R.L. at Collar 131.33m
R.L. at Bottom 89.33m
Rig Mayhew 1000
Sampling Tools Screens
Drilling Type Rotary-mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	3	3				Brown sticky clay, soil and sand.
3	6	3	Ammin			Brown to light brown carbonate cemented
						sand granules and pebbles.
6	20	14				White to off white weathered feldspathic
						fine to medium grained quartz sandstone
			pyrite spots			with occasional clay bands.
20	40	20				Off white to pale green weathered feld-
						spathic medium grained sandstone with
						bands of yellow and white clay - possibly
						after siltstone.
40	42	2				Interbedded white feldspathic sandstone
						and orange weathered siltstone.

DATE: MAY 1980

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GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

158

Bore No. AV 11
Co-Ordinates 12800E 20000N
Total Depth 82m
Operators Whiteland Drilling
Date Started 31.5.80
Date Completed 1.6.80

Location Lyndhurst
R.L. at Collar 131.23m
R.L. at Bottom 49.23m
Rig Mayhew 1000
Sampling Tools Screens
Drilling Type Rotary-mud

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	2	2				Brown sand soil and clay.
2	16	14				White to off white weathered fine to medium sandstone interbedded with siltstone and occasional shale bands.
16	30	14				Off white to light grey weathered feldspathic very fine to medium grained quartz sandstone with some coarse bands and bands of silt and shale.
30	36	6			5	Off white clay with orange patches and bands of sandstone.
36	42	6				As above with bands of white to purple clayey coarse sandstone.
42	56	14				Interbedded off white clays, red and purple clays, off white very fine to medium grained sandstone and bands of brown pebbly coarse to very coarse sandstone.
56	60	4				Interbedded off white fine to medium grained sandstone and cream coloured clays with occasional gritty layers.
60	62	61 2				Firstly orange clays and sands then grey carbonaceous sandstones and shales.
62.00	63.60	1.60	1.6			Core run - recovered 1.60m core.
62.00	62.14	0.14				Dark grey fine to medium grained finely banded carbonaceous sandstone with lenses of white medium grained quartz sandstone.
62.14	62.82	0.68				Dark grey finely banded carbonaceous

DATE: JUNE 1980

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GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

153

Bore No. AV 11 Location

Co-Ordinates R.L. at Collar

Total Depth R.L. at Bottom

Operators Rig

Date Started Sampling Tools

Date Completed Drilling Type

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
						siltstone and very fine to fine grained
						sandstone.
62.82	63.12					Interbedded grey carbonaceous siltstone
						and very fine to medium sandstone and
						thin red iron stained shale bands and 1cm
						red medium to coarse grained sandstone.
63.12	63.60					Dark grey to black carbonaceous siltstone
						and very fine grained sandstone with some
						thin bands of grey pyritic fine grained
						sandstone.
						Average Dip 0-2°
63.60	66.10	2.5				Core run - recovered 2.50m.
						Finely banded grey to dark grey carbon-
						aceous siltstone and very fine to fine
						sandstone with lenses of pyritic fine to
						medium grained sandstone. There are some
						sections containing bands of dark grey to
						black carbonaceous shale.
						Average Dip 2° - 5°
66.10	67.80	1.7				Core Run
66.10	66.90					Dark grey carbonaceous siltstone and very
						fine sandstone. There are also 1mm lenses
						of grey to light grey pyritic fine to
						medium sandstone.
						Dip average 5°-7°
66.90	67.80					Grey to light grey carbonaceous very fine
						to fine pyritic sandstone with bands of

5.30

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GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

160

Bore No. AV 11 Location _____

Co–Ordinates _____ R.L. at Collar _____

Total Depth _____ R.L. at Bottom _____

Operators _____ Rig _____

Date Started _____ Sampling Tools _____

Date Completed _____ Drilling Type _____

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
						light grey fine to medium grained sandstone
						Dip variable due to slight folding 7°–25°
68	76	8				Grey to light grey carbonaceous siltstone
				?	?	and very fine to medium grained sandstone.
76	80	4		?		Light grey to off white interbedded clayey
						shale and silty fine sandstone.
80	82	2				As above then yellow clayey sandstone
						then pale green well cemented fine to
						medium grained sandstone.

DATE: _____ LOGGED BY: _____

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

161

Bore No. AV 12
Co-Ordinates 138° 15½'E 30° 18'S
Total Depth 46.3m
Operators Whiteland Drilling
Date Started 22.7.80
Date Completed 22.7.80

Location Lyndhurst
R.L. at Collar -
R.L. at Bottom -
Rig Mayhew 1000
Sampling Tools Trays
Drilling Type Rotary - air blast

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	2	2	Qh.			Red brown clayey sandy soil with occasiona
						pebbles of iron rich quartzite.
2	6	4				Off white pebble conglomerate with a
			Tertiary			sandy clay matrix.
6	8	2				As above then brown sandy clay with
						patches of crystalline gypsum.
8	10	2				Brown and green sandy clay with white
						quartzite pebbles and patches of crystall-
						ine gypsum and patches of red ferruginous
			Weathered			clay.
10	22	12				Pale green clay with red ferruginous
						patches and patches of crystalline
						gypsum.
22	30	8				Stiff red ferruginous clay with some
						bands of grey clay.
30	32	2				Pale green clay with occasional ferruginou
						patches.
32	44	12				Pale pink and green clays with some sandy
						bands and common patches of ferruginizatio
44	46	2	N			Off white to green-yellow sandy clay and
						weathered sandstone.
46.0	46.3					Very hard pinkish white medium grained
						quartzite.

DATE: JULY 1980 LOGGED BY: N.M. LEMON

GEOL 1720

GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

162

Bore No. AV 13
Co-Ordinates 138°21¼'E 30°16'S
Total Depth 47m
Operators Whiteland Drilling
Date Started 23.7.80
Date Completed 23.7.80

Location Lyndhurst
R.L. at Collar –
R.L. at Bottom –
Rig Mayhew 1000
Sampling Tools Trays
Drilling Type Rotary-air blast

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	3	3	24			Red brown sandy clayey soil with numerous pebbles of shale, dolomite and sandstone.
3	6	3				Light green, red and purple clays.
6	10	4	Mondale			Off white and light green clays with some purple and orange patches.
10	14	4				As above with increasing sand content becoming a white sandstone with clayey bands.
		12				
						Salt water struck at 14m.
14	20	6	Tertiary			Off white fine to medium grained sands with some orange patches and a few clayey bands.
20	32	12				Yellow to green-yellow fine to medium sands with some khaki coloured clay bands and a few bands of very coarse sandstone.
32	42	10				Interbedded khaki coloured clay and yellow-green fine to coarse sands.
42	47	5				Weathered bedrock - khaki micaceous silty shale interbedded with yellow green fine to medium grained sandstone.
						Hole abandoned at 47m due to caving.

DATE: JULY 1980

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GEOLOGICAL DRILL HOLE LOG – MINERALS S.A.

163

Bore No. AV 14
Co-Ordinates 138°21½'E 30°17'S
Total Depth 50m
Operators Whiteland Drilling
Date Started 23.7.80
Date Completed 23.7.80

Location Lyndhurst
R.L. at Collar –
R.L. at Bottom –
Rig Mayhew 1000
Sampling Tools Trays
Drilling Type Rotary - air blast

Drill Intersection From	To	Interval	Recovery	Solid Core Recovery	% Recovery	GEOLOGICAL DESCRIPTION
0	12	12				Stiff green to light green clay with red
						and purple ferruginous patches.
12	18	6	Nominal			Pale green silty clay.
18	24	6				Soft white powdery clay.
24	34	10				Soft yellow-orange powdery clay.
34	38	4	N?			Orange to brick red clay.
38	42	4				Orange powdery clay.
42	48	6				Orange, khaki and brick red clay -
			N			deeply weathered siltstone.
48	50	2				Khaki to green slightly weathered
						micaceous shale and siltstone.

DATE: JULY 1980

LOGGED BY: N.M. LEMON

GEOL 1720

APPENDIX III

UNDERGROUND WATER

UNDERGROUND WATER

The majority of the holes drilled in this programme were dry.

AV1, 12 and 14 made very slow seepage. AV4, 5, 6, 6A, 7 and 8 had water in them but the amount and quality was not able to be determined due to fact that mud was used as the circulation agent and air blast development was not attempted in an effort to keep the holes open for geophysical logging. It was noted, however, that the salt content of the groundwater "soured" the mud to the extent that additional conditioning agents were required in the mud.

AV13 was drilled using air blast rotary methods and water was struck at 14m. Samples were collected and assayed at the Quality Control Laboratories of the B.H.P. Co. Ltd.'s Whyalla Works. The results are as follows.

Total dissolved salts	22,600 ppm
Na	6,300
Ca	625
Mg	810
K	32
Cl	11,195

APPENDIX IV

DOWNHOLE GEOPHYSICAL LOGS

Fig.

Density
Winding Speed 6m / min

5000

Change of scale

End of log 75·8m.

1000

0

T.C = 2 secs
Source 50 m Curies Cs 137
Source detector spacing 45 cms.

Self Potential
Winding Speed 10m / min

Water table

End of log 75·8m.

250 millivolts Full scale

Resistivity
Winding Speed 10m / min

End of log 75·8m.

25 ohm m Full scale

Gamma
Winding Speed 4 m/min

End of log 75·8m.

100

c.p.s
T.C. = 5 secs

0

Geological Log

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DRILL HOLE	Av 1
LOCATION	18 000E, 14 000N. Avondale Grid
DRILL TYPE	Mud
INCLINATION	90°
DEPTH DRILLED	84 m.
DEPTH LOGGED	75·8m.
LOGGING UNIT	SIE T450 E
DATE	May 1980

3766-14A

Fig No
To accompany
Dated

Revisions

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
Av 1

Drawn D.G.P.	Date 23-6-80	Centre: Adelaide
Traced R.F.F.	Project No 6-C650-7	Drawing No. A2-39
Checked		

Fig.

Density
Winding Speed 6 m./min

5000

Change of scale

0

1000

0

T.C. = 2 secs.
Source 50 m Curies Cs 137
Source detector spacing 45 cms.

Self Potential
Winding Speed m / min

millivolts Full scale

Resistivity
Winding Speed m / min.

ohm m Full scale

100

0

Gamma
Winding Speed 4 m/min

c p s
T C = 5secs

Geological Log

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DRILL HOLE	Av 2
LOCATION	19 000 E, 16 000 N. Avondale Grid
DRILL TYPE	Mud
INCLINATION	90°
DEPTH DRILLED	108 m.
DEPTH LOGGED	45·6 m.
LOGGING UNIT	SIE T450 E
DATE	May 1980

3766 - 6

Fig No
To accompany
Dated

Revisions

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
Av 2

Drawn: D.G.P.	Date: 23-6-80	Centre: Adelaide
Traced: R.F.F.	Project No.: 6-C650-8	Drawing No.: A2-40
Checked:		

DRILL HOLE	Av 3
LOCATION	18 000E, 16 000N. Avondale Grid
DRILL TYPE	Mud
INCLINATION	90°
DEPTH DRILLED	98 m.
DEPTH LOGGED	33·8 m.
LOGGING UNIT	SIE T450 E
DATE	May 1980

3766-1

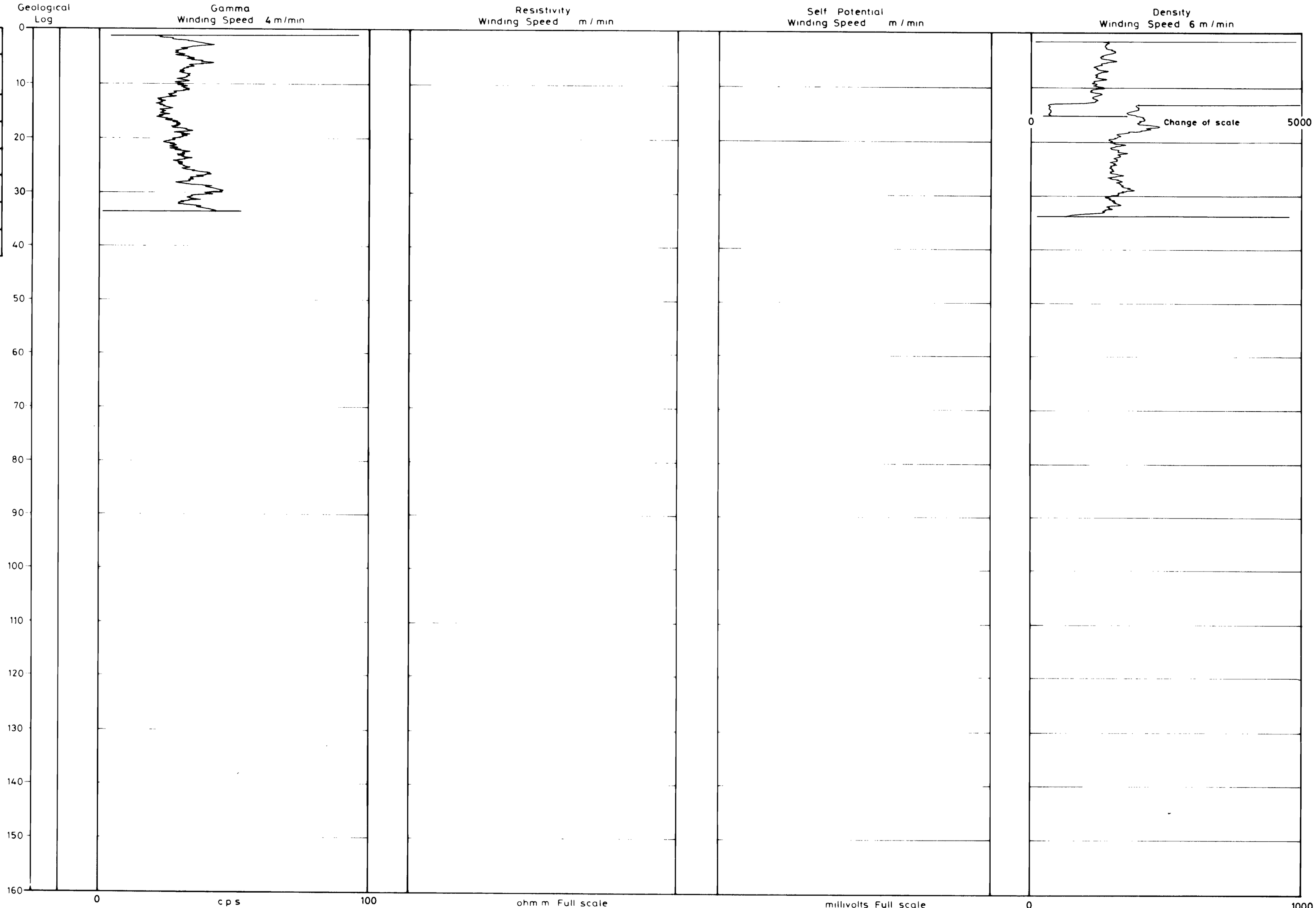

Fig No
To accompany
Dated

Fig.

Revisions

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E.L. 576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
Av 3

Drawn D.G.P.	Date 23-6-80	Centre Adelaide
Traced R.F.F.	Project No 6-C650-9	Drawing No A2-41
Checked		

DRILL HOLE	Av 6
LOCATION	13 000 E 22 000 N Avondale Grid
DRILL TYPE	Mud
INCLINATION	90°
DEPTH DRILLED	98 m.
DEPTH LOGGED	Varies
LOGGING UNIT	SIE T450 E
DATE	May 1980

3766-9

Geological Log

Gamma
Winding Speed 4 m/min

Resistivity
Winding Speed m / min

Self Potential
Winding Speed m / min

Density
Winding Speed 6 m / min

0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160

End of log 47.9 m.

Water table

0 Change of scale 5000

End of log 43.5 m.

0 100
c p s
TC = 5 secs

ohm m Full scale

millivolts Full scale

0 1000
TC = 2 secs
Source 50 m Curies Cs 137
Source detector spacing 45 cms.

Fig.

Fig No
To accompany
Dated

Revisions:

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
Av 6

Drawn D.G.P.	Date 9-6-80	Centre Adelaide	
Traced R.F.F.	Project No 6-C650-6	Drawing No A2-37	
Checked:			

DRILL HOLE	Av 6a
LOCATION	13 000E, 21 990N Avondale Grid
DRILL TYPE	Mud
INCLINATION	90°
DEPTH DRILLED	94·8m.
DEPTH LOGGED	Varies
LOGGING UNIT	SIE T450E
DATE	May 1980

3766-10

Geological Log

Gamma
Winding Speed 4 m/min

Resistivity
Winding Speed m / min

Self Potential
Winding Speed m / min

Density
Winding Speed 6 m / min

0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160

End of log 92·8m.

0 Change of scale 5000

End of log 92·7m.

0 — c p s — 100
T.C = 5 secs

ohm m Full scale

millivolts Full scale

0 — 1000
T.C = 2 secs
Source 50 m. Curies Cs 137
Source detector spacing 45 cms.

Fig.

Fig. No
To accompany
Dated

Revisions:

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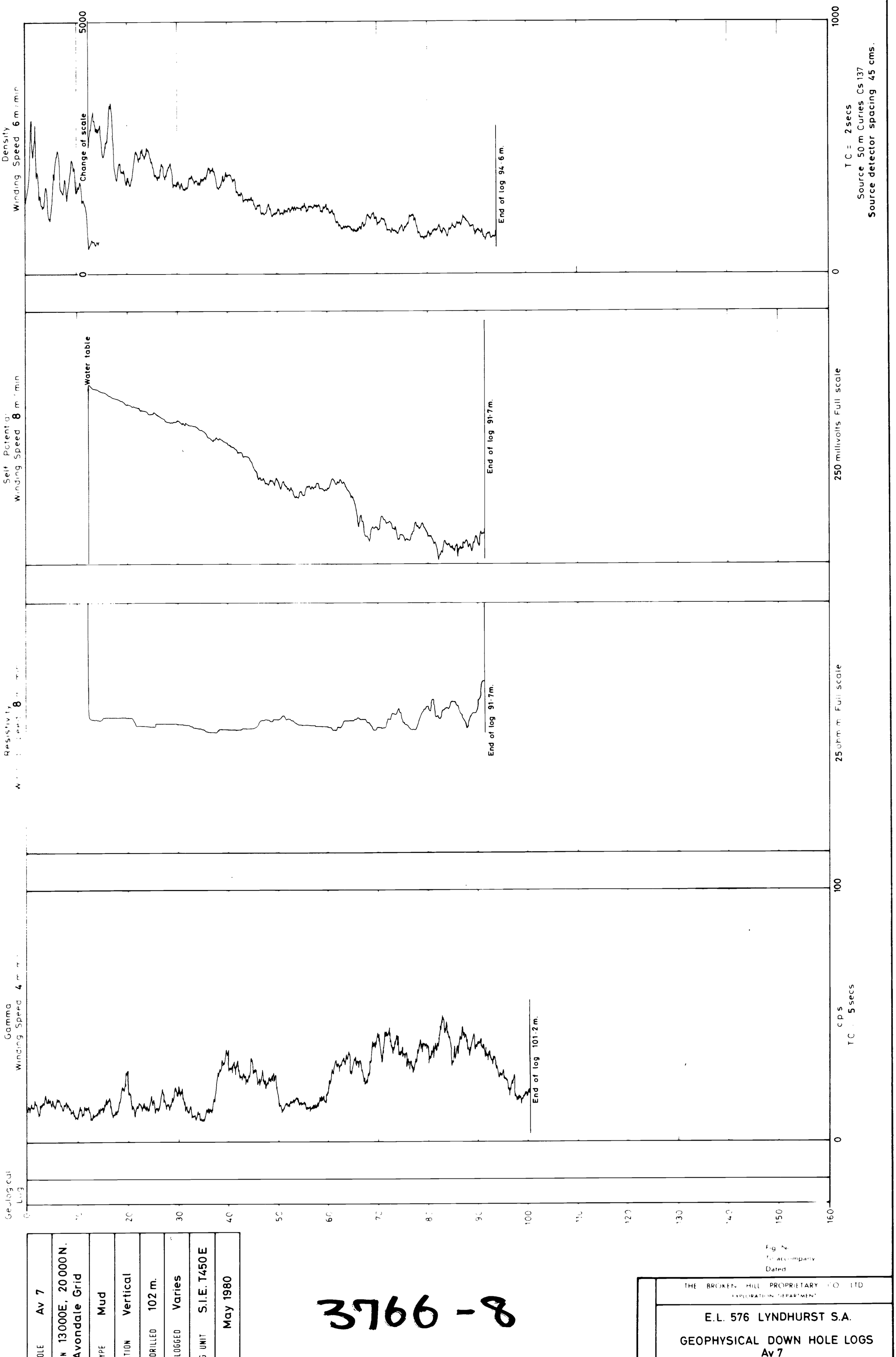
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
Av 6a

Drawn: D.G.P.	Date: 25-6-80	Centre: Adelaide
Traced: R.F.F.	Project No.:	Drawing No.:
Checked:	6-C650-13	A2-45

Fig.



DRILL HOLE	Av 7
LOCATION	13000E, 20000N. Avondale Grid
DRILL TYPE	Mud
INCLINATION	Vertical
DEPTH DRILLED	102 m.
DEPTH LOGGED	Varies
LOGGING UNIT	S.I.E. T450E
DATE	May 1980

3766 -8

Fig. No.
To accompany
Dated

Revisions

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
Av 7

Drawn D.G.P.	Date 9-6-80	Centre Adelaide
Traced R.F.F.	Project No 6-C650-5	Drawing No A2-36
Checked		

DRILL HOLE	Av 9
LOCATION	12 000E, 20 000N Avondale Grid
DRILL TYPE	Mud
INCLINATION	90°
DEPTH DRILLED	34 m.
DEPTH LOGGED	Varies
LOGGING UNIT	SIE T450 E
DATE	May 1980

3766-11

Geological Log

Gamma
Winding Speed 4 m/min

End of log 32·4 m.

Resistivity
Winding Speed m / min

Self Potential
Winding Speed m / min

Density
Winding Speed 6 m / min

0 Change of scale 5000

End of log 32·3 m.

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

0 — c p s — 100
T C = 5 secs

ohm m Full scale

millivolts Full scale

0 — 1000
T.C = 2 secs
Source 50 m Curies Cs 137
Source detector spacing 45 cms.

Fig No
To accompany
Dated

Fig.

Revisions

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
Av 9

Drawn D.G.P.	Date 23-6-80	Centre Adelaide	
Traced R.F.F.	Project No. 6-C650-10	Drawing No. A2-42	
Checked			

DRILL HOLE	Av 10
LOCATION	12 600E, 20 000N Avondale Grid
DRILL TYPE	Mud
INCLINATION	90°
DEPTH DRILLED	42 m.
DEPTH LOGGED	41·3 m.
LOGGING UNIT	SIE T450 E
DATE	May 1980

3766-12

Geological Log

Gamma
Winding Speed 4 m/min

Resistivity
Winding Speed m / min

Self Potential
Winding Speed m / min

Density
Winding Speed 6 m / min

0 Change of scale 5000

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

0 c.p.s 100
T.C. = 5 secs.

ohm m Full scale

millivolts Full scale

0 1000
T.C. = 2 secs.
Source 50 m. Curies Cs 137
Source detector spacing 45 cms.

Fig.

Fig. No.
To accompany
Dated

Revisions:

THE BROKEN HILL PROPRIETARY CO. LTD.
EXPLORATION DEPARTMENT

E. L. 576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
Av 10

Drawn: D.G.P.	Date: 25-6-80	Centre: Adelaide	
Traced: R.F.F.			
Checked:	Project No.: 6-C650-11	Drawing No.: A2-43	

Fig.

Density
Winding Speed 6 m / min

5000
Change of scale
End of log 45·7m.
0

1000
TC = 2 secs
Source 50 m Curies Cs 137
Source detector spacing 45 cms.
0

Self Potential
Winding Speed m / min

millivolts Full scale

Resistivity
Winding Speed m / min

100
ohm m Full scale
0

Gamma
Winding Speed 4 m/min

End of log 81·3m.

cps
TC = 5 secs

Geological Log

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

DRILL HOLE	Av 11
LOCATION	12 800E, 20 000N Avondale Grid
DRILL TYPE	Mud
INCLINATION	90°
DEPTH DRILLED	
DEPTH LOGGED	Varies
LOGGING UNIT	SIE T450 E
DATE	May 1980

3766-13

Fig No
To accompany
Dated

Revisions.

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
Av 11

Drawn D.G.P.	Date 25-6-80	Centre Adelaide
Traced R.F.F.	Project No 6-C650-12	Drawing No A2-44
Checked		

DRILL HOLE :	AV 12
LOCATION :	
DRILL TYPE :	Mud
CASING TYPE :	
INCLINATION :	90°
DEPTH DRILLED :	50 m.
DEPTH LOGGED :	33·4 m.
LOGGING UNIT :	S.I.E. T450E
DATE :	July 1980

Geological Log

Gamma
Winding Speed 4 m/min.

Resistivity
Winding Speed m / min.

Self Potential
Winding Speed m / min

Density
Winding Speed m./min

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

0 c.p.s 100
T.C. = 5 secs.

ohm m Full scale

millivolts Full scale

T.C = secs
Source 50 m Curies Cs 137

Fig. No.
To accompany
Dated

Fig.

Revisions:

THE BROKEN HILL PROPRIETARY CO LTD.
EXPLORATION DEPARTMENT

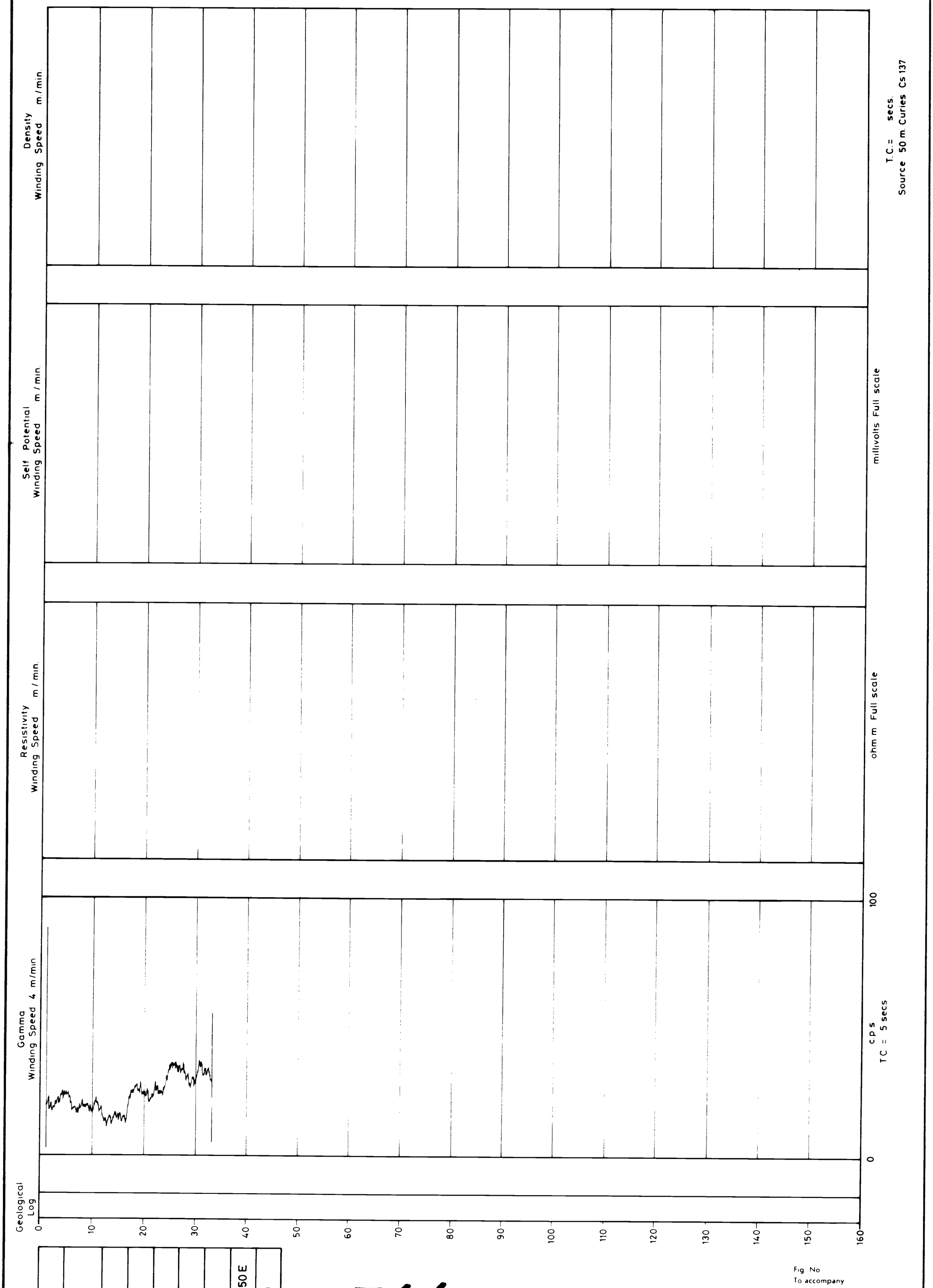
E.L.576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
AV 12

Drawn: D.G.P.	Date: 12-8-80	Centre: Adelaide	
Traced: R.F.F.	Project No.: 6-C650-17	Drawing No.: A2-66	
Checked:			

37766-H

Fig.



DRILL HOLE	AV 14
LOCATION	
DRILL TYPE	Mud
CASING TYPE	
INCLINATION	90°
DEPTH DRILLED	50 m.
DEPTH LOGGED	33.4 m.
LOGGING UNIT	S.I.E. T450E
DATE	July 1980

3766-15

Fig No
To accompany
Dated

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L.576 LYNDHURST S.A.

GEOPHYSICAL DOWN HOLE LOGS
AV 14

Drawn D G P	Date: 12-8-80	Centre Adelaide
Traced R.F.F.	Project No 6-C650-16	Drawing No A2-65
Checked		

Revisions

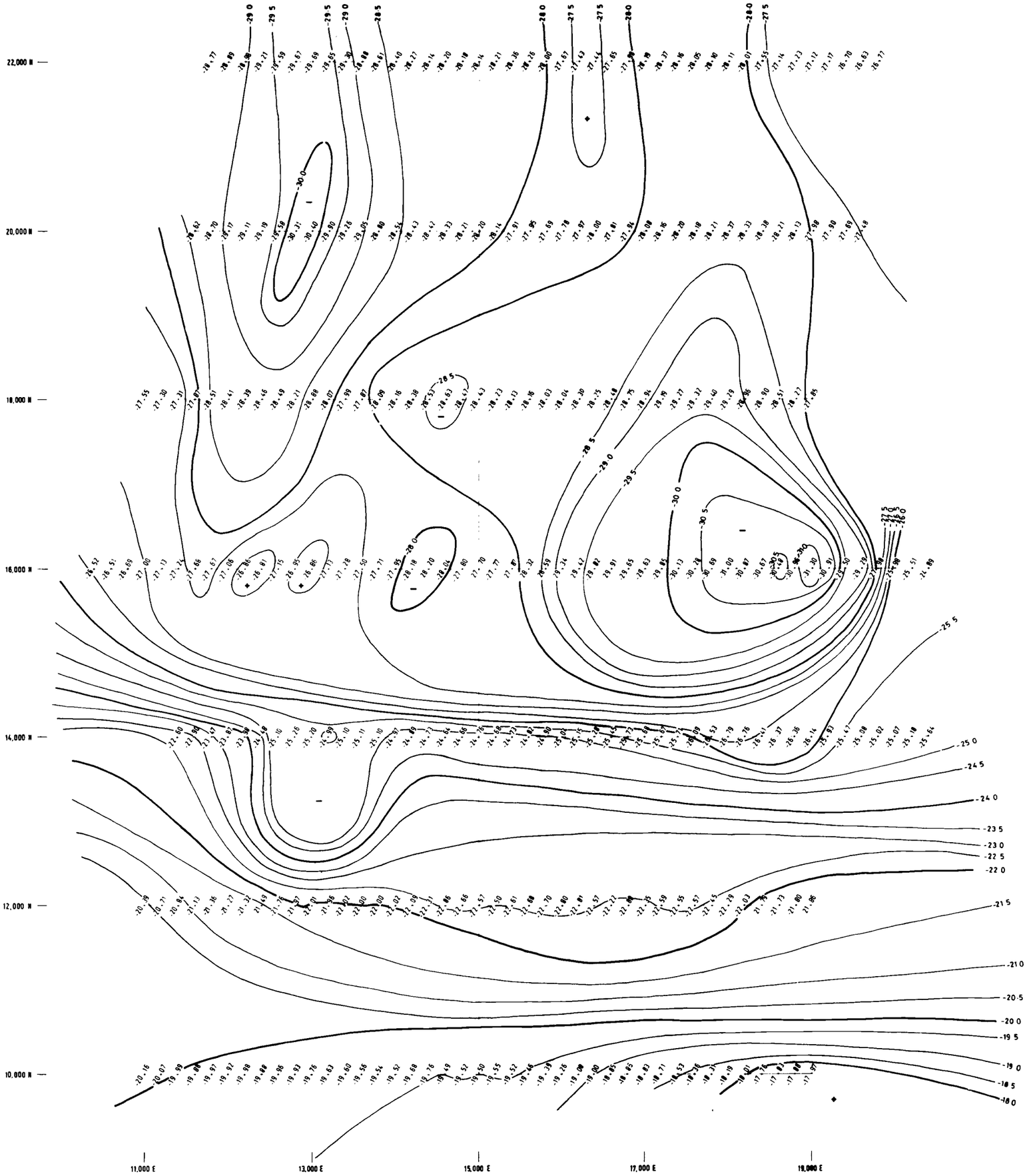
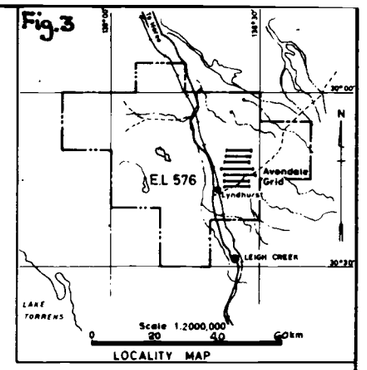


Fig.3



3766-1

LEGEND

Bouguer Gravity Centeurs
Contour interval 0 5 milligals

Scale 1 50,000

0 500 1000 1500 2000 2500 m.

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.
AVONDALE GRID
BOUGUER GRAVITY CONTOURS

Revisions			
Drawn BEP	Date 14-4-80	Centre Adelaide	
Traced RFF	Project No 6-C650-1	Drawing No A3-24	
Checked			

TABLE OF CONTENTS

List of Figures

1. SUMMARY

A gravity survey was carried out over two areas within Exploration Licence 576, Lyndhurst, S.A. to test for the presence of Mesozoic basins.

Two prospective gravity lows have been delineated and drilling is recommended.

2. INTRODUCTION

Exploration Licence 576 of 2864 square kilometres, located near Lyndhurst, 500 km north of Adelaide, was granted for 6 months on 16th January 1980. Initially, the area was applied for to test isolated aeromagnetic anomalies selected by H. Rutter as possibly due to kimberlites. Subsequently, N. Lemon proposed that Mesozoic basins may be concealed beneath recent cover in two areas delineated after an analysis of structural elements in the surrounding Adelaidean outcrop areas. Coal, similar to the Leigh Creek deposits, may be present in such basins.

A small part of the area in question had been covered by the S.A. Department of Mines during a half mile grid gravity survey. Several gravity lows outside the areas covered by this report were identified. However drilling proved these not to be due to Mesozoic sediments.

3. EXPLORATION PROGRAMME

Approximately 60 kms of gravity traversing were read by Solo Geophysics along east west lines spaced 2 km apart over the Avondale Grid area. A further 10 km reconnaissance line (called the Rocky Dam line) was read 25 km west of the main grid. Figure 1 shows the location of the traverse lines.

The survey parameters are listed in Table 1.

Gravity was chosen because a Mesozoic basin should have an associated gravity low. The basins at Leigh Creek in S.A. have the following gravity lows:-

North Basin - Lobe D	3 milligals
North Basin - Lobe C	1.5 milligals
Telford Basin	10 milligals

Discussions with A. Muir from the Electricity Trust of S.A. revealed an average S.G. for the Mesozoic sediments of 2.2 to 2.3. The surrounding Adelaidean rocks are 2.6 - 2.7. According to A. Muir the maximum thickness of Mesozoic sediments in the Telford Basin is 1100 metres, as indicated by seismic data. The shallower basins, having gentle dips, have proved more economical i.e. perhaps our best targets are gravity anomalies of 1 to 4 milligals.

Table 1

	Avondale Grid	Rocky Dam Line
Line spacing	2 km	-
Line bearing	082° (mag)	082° (mag)
Station spacing	200 m	200 m
Levelling	Optic (without closures)	Optic (without closures)
Height datum	AHD	Arbitrary
Drift control	Repeat readings approx. every 2 hours	Repeat readings approx. every 2 hours
Final reduction density	2.4	2.4

4. RESULTS

All data reductions are shown in Appendix 1, together with the profiles for both areas. The Avondale Grid data have been contoured at 0.5 milligal intervals (see Figure 2).

Avondale Grid

The gravity contours show two promising features. On the western side of the grid a N-S discontinuous low extends from line 14000N to line 22000N. The low is 1-2 milligals in magnitude. Its linearity suggests that it is derived from the basement, however we cannot over-rule the possibility of a Mesozoic basin.

On the eastern side of the grid, centred on line 16000N, a strong gravity low of 3.5 milligals outlined an area of 10 square kms.

Two explanations of the above gravity lows are proposed:

1. The low is due to lower density sandstone (an outcrop of such is mapped nearby) within predominately carbonates.
2. The low is due to a basement depression filled with lower density material, hopefully coal bearing Mesozoic sediments. Gravity modelling using densities of 2.25 for the lighter sediments and 2.6 - 2.7 for the surrounding Adelaidean indicate a possible 200-300 metres of Mesozoic sediments.

Rocky Dam Area

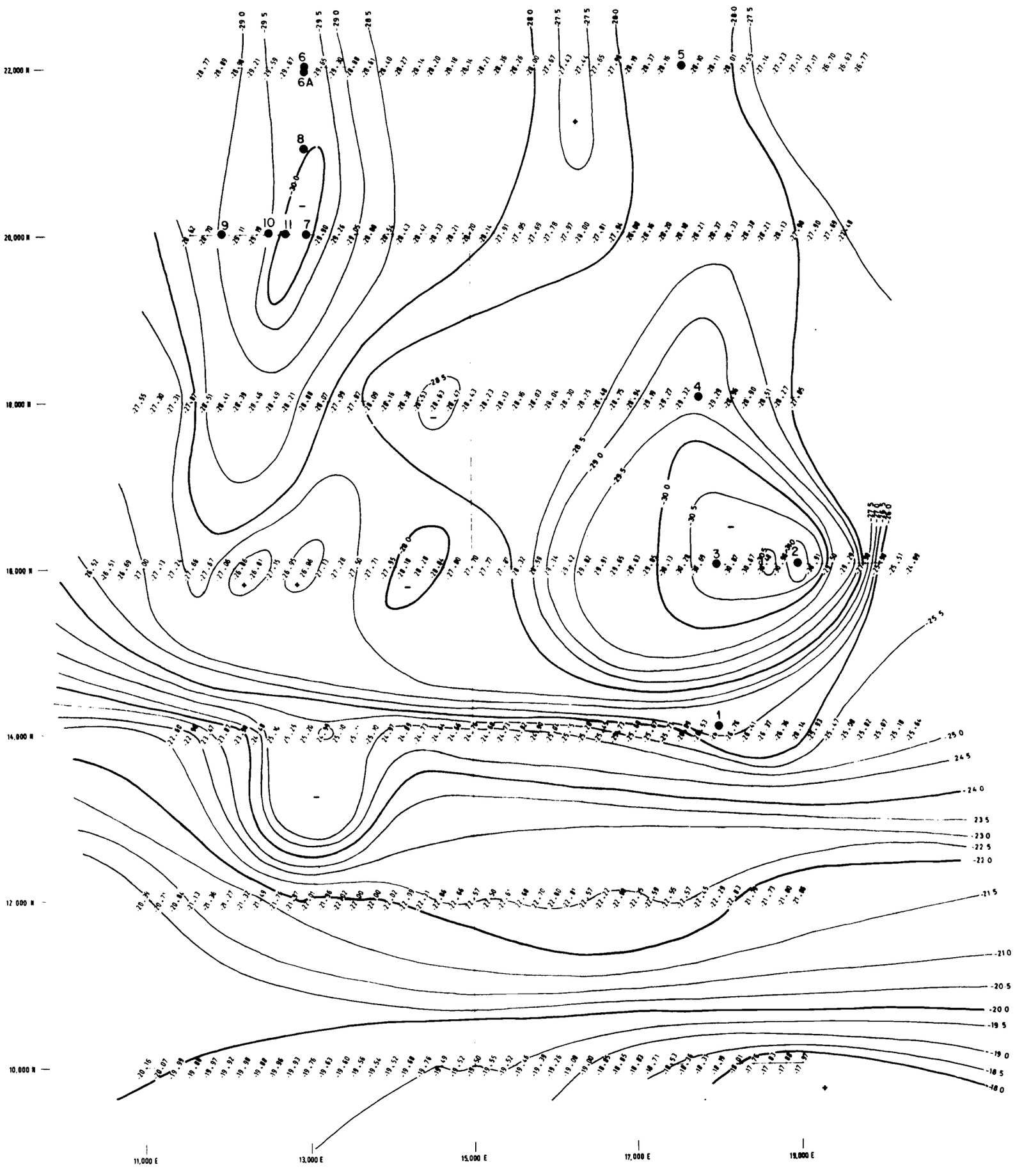
No promising gravity lows were detected in this area. A two milligal increase at the eastern end of the line is completely over outcropping Skillogalee Dolomite and is probably due to increasing thickness of the dolomite as the traverse proceeds towards the axis of the syncline.

5. RECOMMENDATIONS

Drilling will be necessary on both lows detected on the Avondale Grid. It is recommended that the drillholes continue to basement or to the limit of the Bourne 1000 rig. Further holes may be needed closer to the edge of the gravity lows depending on the results of the first holes.

Recommended drillsites

14000N / 18000E
16000N / 19000E
20000N / 13000E



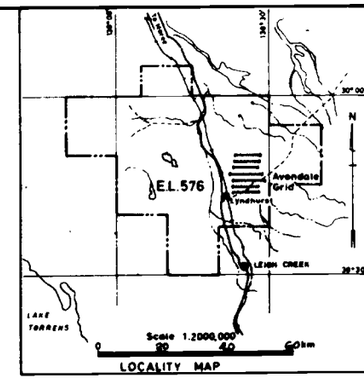


FIG. 4

3766-5

LEGEND

Bouguer Gravity Contours
Contour interval 0.5 milligals
$\rho = 2.4$

7 ● Drillhole (rotary-mud)
Numbers prefixed "AV"

Scale 1:50,000

0 500 1000 1500 2000 2500 m.

THE BROKEN HILL PROPRIETARY CO LTD
EXPLORATION DEPARTMENT

E.L. 576 LYNDHURST S.A.
AVONDALE GRID
BOUGUER GRAVITY CONTOURS

Revisions	Drawn B.G.P	Date 14-4-80	Centre Adelaide
	Traced R.F.F	Project No 6-C650-1	Drawing No A3-24
	Checked		

APPENDIX 3

E.L. 576, LYNDHURST, S.A.

GRAVITY SURVEY FOR COAL

D.G. Price
Adelaide

May 1980

LTD.

APPENDIX 1

Gravity Results, Lyndhurst Area

Solo Geophysics

CLIENT: THE B.H.P. PTY CO. LTD.

AREA: LYNDHURST S.A.

GRID: AVONDALE, ROCKY DAM

SURVEY: GRAVITY

DATE: MARCH 1980.

C O N T E N T S

G R I D L I N E S

A. ROCKY DAM — RECONNAISANCE LINE BRG 82°/262° MAGNETIC

LINE 10.000N — 10.000E to 20.000E

B. AVONDALE GRID — BRG 82°/262° MAGNETIC

LINE 10.000N	11.000E to 19.000E
12.000N	11.000E to 19.000E
14.000N	11.400E to 20.400E
16.000N	10.400E to 20.400E
18.000N	11.000E to 19.000E
20.000N	11.600E to 19.600E
22.000N	11.800E to 19.800E

-o-o-o-

LYNDHURST GRAVITY SURVEY

For: THE BROKEN HILL PROPRIETARY CO. LTD.,
41 - 47 CURRIE STREET,
ADELAIDE S.A. 5000.

Date: MARCH 1980.

The above survey was carried out on two areas near Lyndhurst, which is located near the western drainage of the Flinders Ranges and some 600 kilometres north of Adelaide. A two man crew, instruments and a four wheel drive vehicle were mobilized from Adelaide and used accomodation provided by the Lyndhurst Hotel.

GENERAL INFORMATION ABOUT THE SURVEY AREAS

a. AVONDALE GRID

This grid covers the Avondale homestead area which lies approximately 10 kilometres east of Lyndhurst. The Mundy creek system divides access to the grid as grid lines are not negotiable by vehicle across the steep creek and its dense vegetation. See grid map for access tracks when not using grid lines for access. The surface is generally flat with almost no vegetation except saltbush and bluebush. The Strezlechi Track crosses the south-eastern section of the established grid.

b. ROCKY DAM RECONNAISANCE LINE

This line lies approximately 30 kilometres north-west of Lyndhurst and just east of Minagoona Lake. It is situated on Witchelina Station property. Access was gained to the area by travelling south from the Farina to Witchelina Station road to Minagoona Dam, Minagoona Lake, across the lake if not wet and follow the fence west to the vermin fence. The intersection of these fences was the grid origin. This area has poor vehicle access due to numerous eroded creek channels crossing the survey line.

THE SURVEY

a. AVONDALE GRID

This grid was established by creating a grid origin at a point on the station track 500 metres north of Primrose Dam. This origin was called line 16.000N and 12.000E. All lines were established relative to this on a true east-west bearing and a separation of two kilometres. Magnetic variation was 8^{o}E and line bearings were $82^{o}/262^{o}$ magnetic
A base line was created at 15.000E for the purpose of tying elevations and gravity stations. Survey lines were created by using a calibrated vehicle odometer for distance, wooden survey pegs at each 200 metre station and steel pegs at one kilometre stations and tracks. Pumpy level pegs were secured at the base of each steel peg and had a permatag attached. All wooden pegs were numbered by felt pen and had a permatag also attached. Grid flagging on all pegs was red and yellow.

b. ROCKY DAM RECONNAISANCE LINE

The origin of this line bearing $82^{o}/262^{o}$ was the corner of the fence from Minagoona Lake and the vermin fence approximately 3.5 kilometres west of this lake. This origin was called 10.000N line 18.000E. No elevation tie to AHD was readily accessible in this area. An exaggerated base tie to Lyndhurst for gravity was made, and showed almost no drift.

GRAVITY AND ELEVATION MEASUREMENTS

A La Coste & Romberg temperature compensated gravity meter No. G556 was used for the survey. All readings were observed in a loop configuration from a base station. As multiple bases were required these were tied to a main base, Base 1 and then to the BMR grid. The isogal level on the railway line at Lyndhurst was used as the other bases could not be located. However, a base tie to the hotel verandah was also made so that the data could be upgraded when a better isogal station is available. All elevations for the Avondale grid were corrected to AHD values from BM 3409 = 153.48 metres on the Strezlecki Track. Optical levelling without closures was used for all station elevations. Rocky Dam reconnaissance line was at an assumed elevation and all data reductions were relative to the main base station.

DATA REDUCTIONS AND COMPUTER PRESENTATION

All field data was reduced in house on a Hewlett Packard 9845T computer using the standard International Gravity formula. Corrections were applied for elevation, latitude and calculated densities from 2.0 to 3.0 gms/c.c. Line profiles of these ten selected densities were plotted with topography to indicate a suitable density relative to the survey area. Large scale 1:25.000 computer plots were produced at 2.4 gms/c.c. for each line, and a grid contour map. All field data for each operator loop plus sorted data and associated data reductions are included in the report.

Latitudes for bases are as shown on computer sheets.

SUMMARY

Warm periods still prevailed during the survey period in late March. Temperatures in the mid 40°C. required 5 a.m. early morning starts to prevent meter overheating during the day (above 52°C. in the sun, meter drift unstable). Optical levelling was more favourable and accurate during the cool early mornings to reduce heat shimmer errors. No surface cover made the area very uncomfortable for gravity surveying during the heat of the late afternoon.

No difficulties were encountered during the survey period; property owners Greg Hoddele at Mount Lyndhurst, and Lindsay at Avondale outstation were advised of our survey intentions and received us favourably.

for SOLO GEOPHYSICS AND CO.

B. Rau.

BRIAN RAU
MANAGER

GRAVITY BASES USED ARE MARKED AS FOLLOWS ON STEEL PEGS WITH ALUMINIUM TAGS.

1. AVONDALE

a.	SOLO GEOPHYSICS GRAVITY BASE	BASE 1	MARCH 1980
b.	- " -	16.000N 12.000E	- " -

2. ROCKY DAM RECONNAISSANCE LINE 3.56 km west of Minagoona Lake

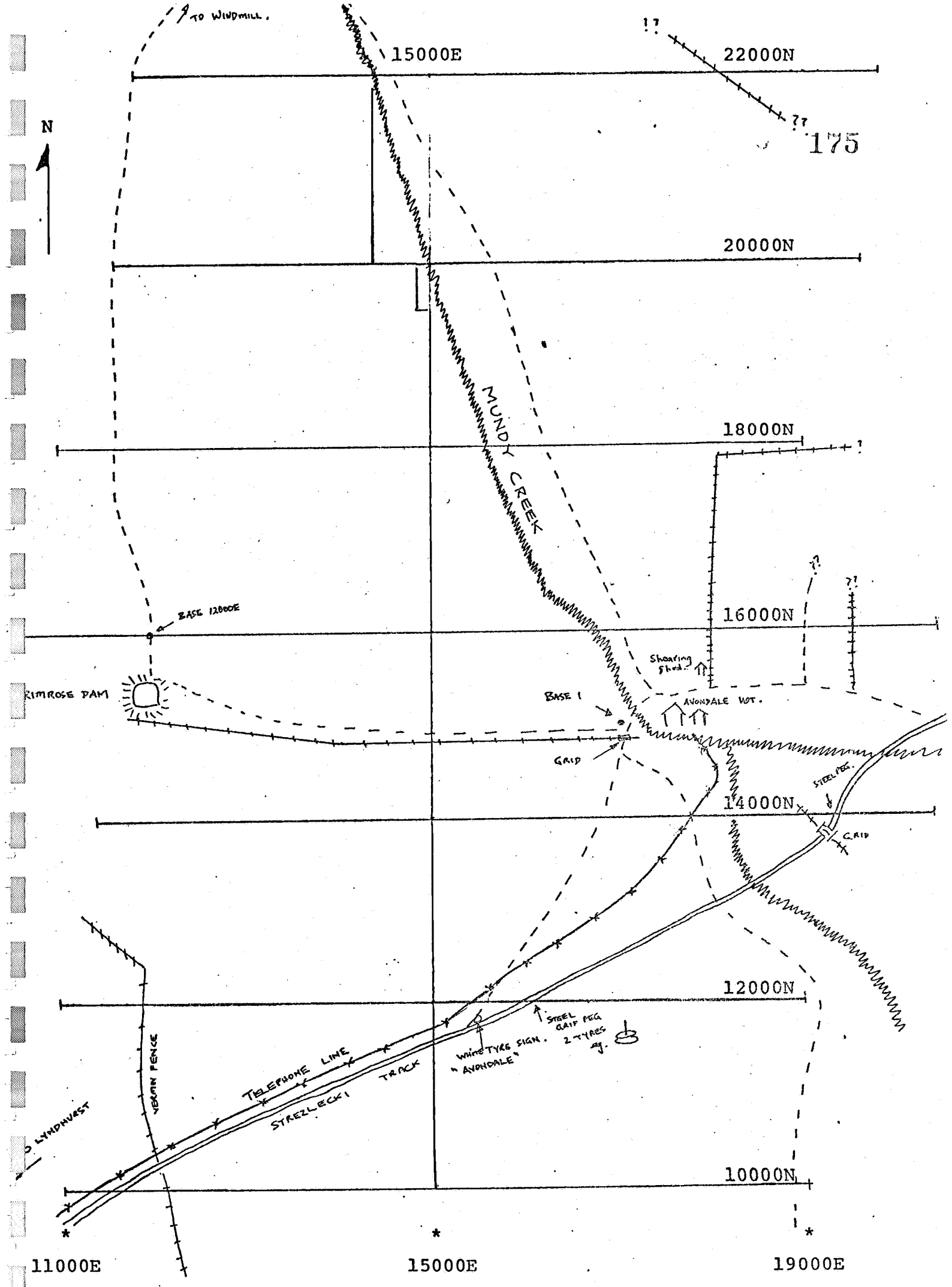
a.	- " -	10.000N 18.000E	- " -

No steel peg, sited in N.W. fence corner, tags on fence.

3. LYNDHURST

NO BASE MARK - HOTEL VERANDAH

N.E. corner, hotel front, concrete base.
Leading position 1.0 metre north of hotel wall, 1.5 metres west along verandah.



AVONDALE GRID

Scale: 1:50000

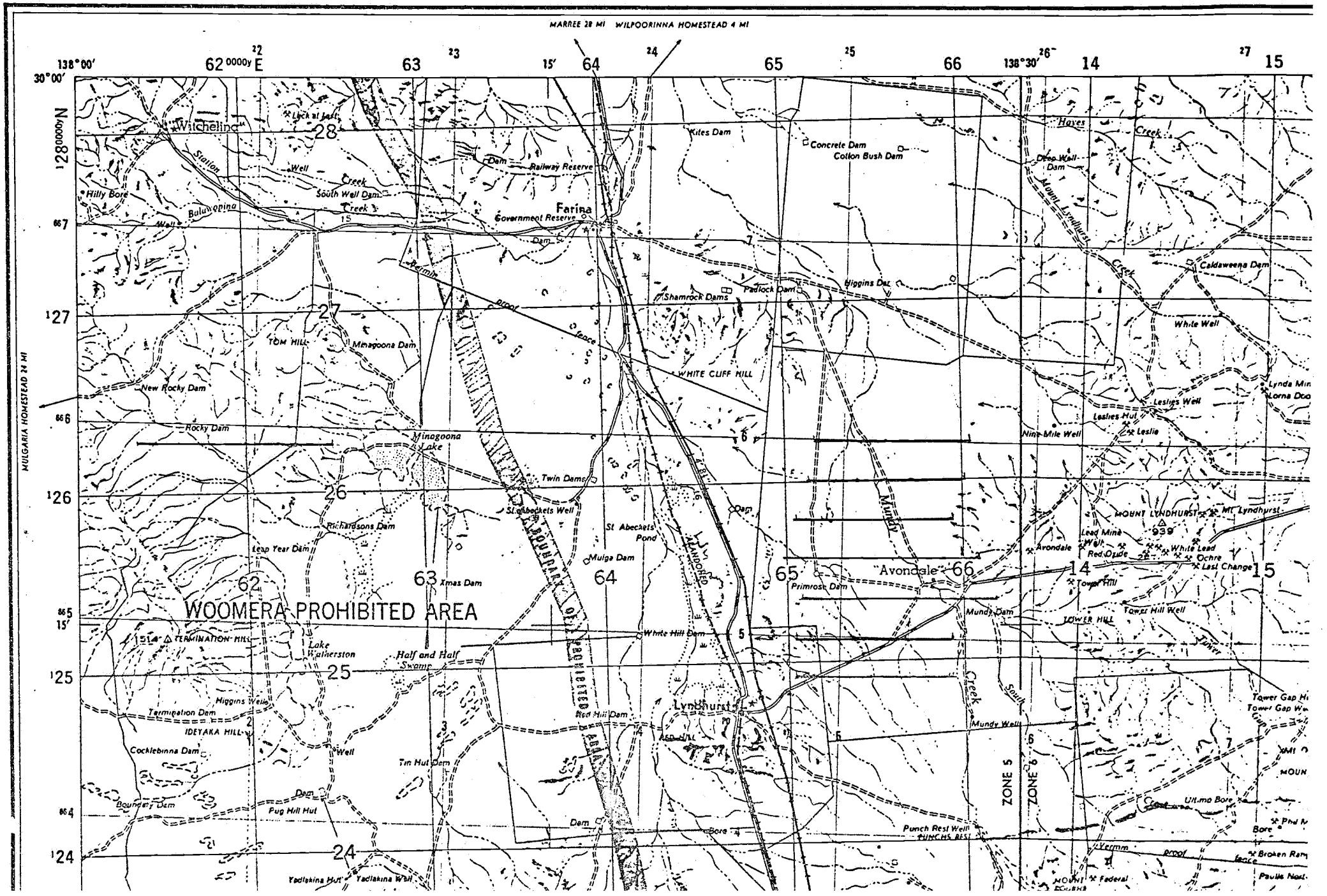

MARREE 28 MI
WILPOORINNA HOMESTEAD 4 MI
MULGARIA HOMESTEAD 24 MI
138°00'
62 0000y E
22
63
23
15'
64
24
65
25
66
138°30'
26
14
27
15
30°00'
128 0000y N
Witchelina
Lick at Last
Station Well
Creek
South Well Dam
Hilly Bore
Bulloopina Well
Creek
Farina
Government Reserve
Dam
Railway Reserve
Kites Dam
Concrete Dam
Collon Bush Dam
Hayes Creek
Deep Well Dam
Mount Lyndhurst
Creek
Caldaweena Dam
Higgins Dam
Padlock Dam
Shamrock Dams
Fence
Fence
White Well
TOM HILL
Minagoona Dam
WHITE CLIFF HILL
New Rocky Dam
Rocky Dam
Minagoona Lake
Leslies Well
Leslies Hut
Leslie
Nine Mile Well
Twin Dams
St Abecketts Well
St Abecketts Pond
Richardsons Dam
Leap Year Dam
Mulga Dam
Xmas Dam
Dam
Murdy
MOUNT LYNDHURST
Mt Lyndhurst
939
Lead Mine Well
Red Oxide
White Lead
Ochre
Last Change
Avondale
Tower Hill
Primrose Dam
Mundy Dam
TOWER HILL
Tower Hill Well
WOOMERA PROHIBITED AREA
BOUNDARY OF WOOMERA PROHIBITED AREA
ABANDONED
TERMINATION HILL
Lake Walmerston
Half and Half Swamp
White Hill Dam
Higgins Well
Termination Dam
IDEYAKA HILL
Cocklebinna Dam
Well
Tin Hut Dam
Red Hill Dam
ABD HILL
Lyndhurst
Mundy Well
South Creek
ZONE 5
ZONE 6
Tower Gap
Boundary Dam
Dam
Pug Hill Hut
Dam
Bore
Punch Rest Well
PUNCHS REST
Ultimo Bore
Fence
Broken Ram
Yadlakina Hut
Yadlakina Well
MOUNT Federal
Paulie Nest

TABLE 1

MILLIGAL VALUES FOR LACOSTE & ROMBERG, INC. MODEL G GRAVITY METER #G- 556

COUNTER READING*	VALUE IN MILLIGALS	FACTOR FOR INTERVAL	COUNTER READING*	VALUE IN MILLIGALS	FACTOR FOR INTERVAL
000	000.00	1.01384			
100	101.38	1.01364	3600	3647.79	1.01384
200	202.75	1.01350	3700	3749.18	1.01388
300	304.10	1.01339	3800	3850.57	1.01390
400	405.44	1.01329	3900	3951.96	1.01393
500	506.77	1.01322	4000	4053.35	1.01396
600	608.09	1.01316	4100	4154.74	1.01399
700	709.40	1.01311	4200	4256.14	1.01401
800	810.72	1.01308	4300	4357.54	1.01403
900	912.02	1.01305	4400	4458.95	1.01404
1000	1013.33	1.01303	4500	4560.35	1.01405
1100	1114.63	1.01302	4600	4661.76	1.01405
1200	1215.93	1.01300	4700	4763.16	1.01404
1300	1317.23	1.01300	4800	4864.57	1.01401
1400	1418.53	1.01300	4900	4965.97	1.01398
1500	1519.83	1.01300	5000	5067.36	1.01393
1600	1621.13	1.01300	5100	5168.76	1.01389
1700	1722.43	1.01301	5200	5270.15	1.01382
1800	1823.73	1.01302	5300	5371.53	1.01374
1900	1925.04	1.01303	5400	5472.90	1.01364
2000	2026.34	1.01305	5500	5574.27	1.01351
2100	2127.64	1.01308	5600	5675.62	1.01338
2200	2228.95	1.01311	5700	5776.96	1.01324
2300	2330.26	1.01315	5800	5878.28	1.01310
2400	2431.58	1.01320	5900	5979.59	1.01294
2500	2532.90	1.01325	6000	6080.88	1.01277
2600	2634.22	1.01330	6100	6182.16	1.01260
2700	2735.55	1.01336	6200	6283.42	1.01242
2800	2836.89	1.01342	6300	6384.66	1.01223
2900	2938.23	1.01350	6400	6485.89	1.01203
3000	3039.58	1.01357	6500	6587.09	1.01179
3100	3140.94	1.01362	6600	6688.27	1.01156
3200	3242.30	1.01367	6700	6789.42	1.01132
3300	3343.67	1.01372	6800	6890.56	1.01108
3400	3445.04	1.01375	6900	6991.66	1.01084
3500	3546.41	1.01379	7000	7092.75	

* Note: Right-hand wheel on counter indicates approximately 0.1 milligal.

12-10-79

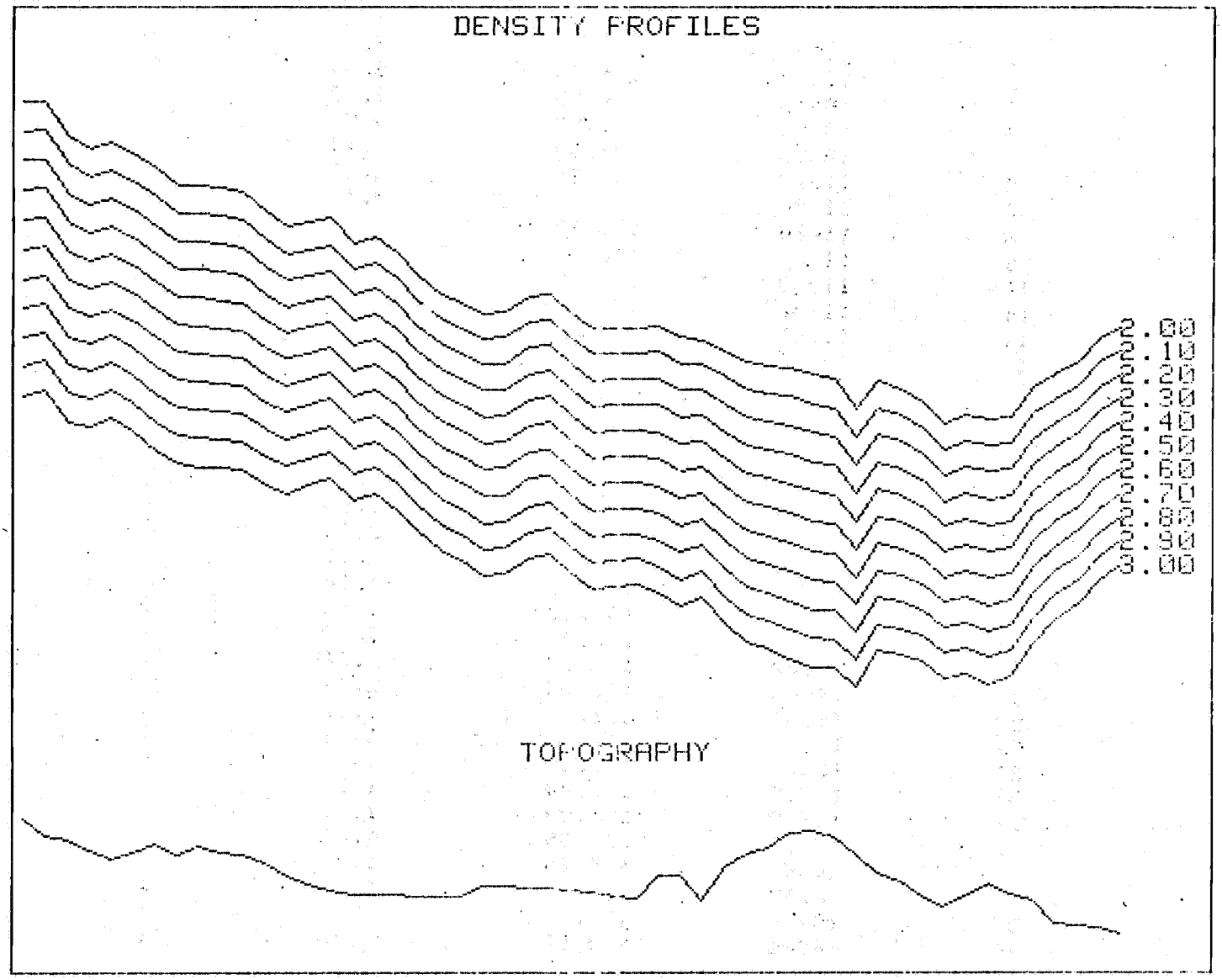
rp

LIST OF BASE STATIONS

BASE NUMBER	COORDINATES
1	Main Railway Base
2	14600N/17400E
3	16000N/12000E
4	16000N/16000E
5	14000N/18000E
6	14000N/15000E
7	14000N/13000E
8	12000N/15000E
9	10000N/15000E
11	16000N/18100E
12	16000N/15000E
13	18000N/15000E
14	20000N/14900E
15	21900N/14400E
16	22000N/14600E
17	20000N/15600E
18	18000N/16000E

GRAVITY DENSITY ANALYSIS

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: RECON LINE WEST OF LYNDHURST



****
*** LINE R10000 ***
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179A

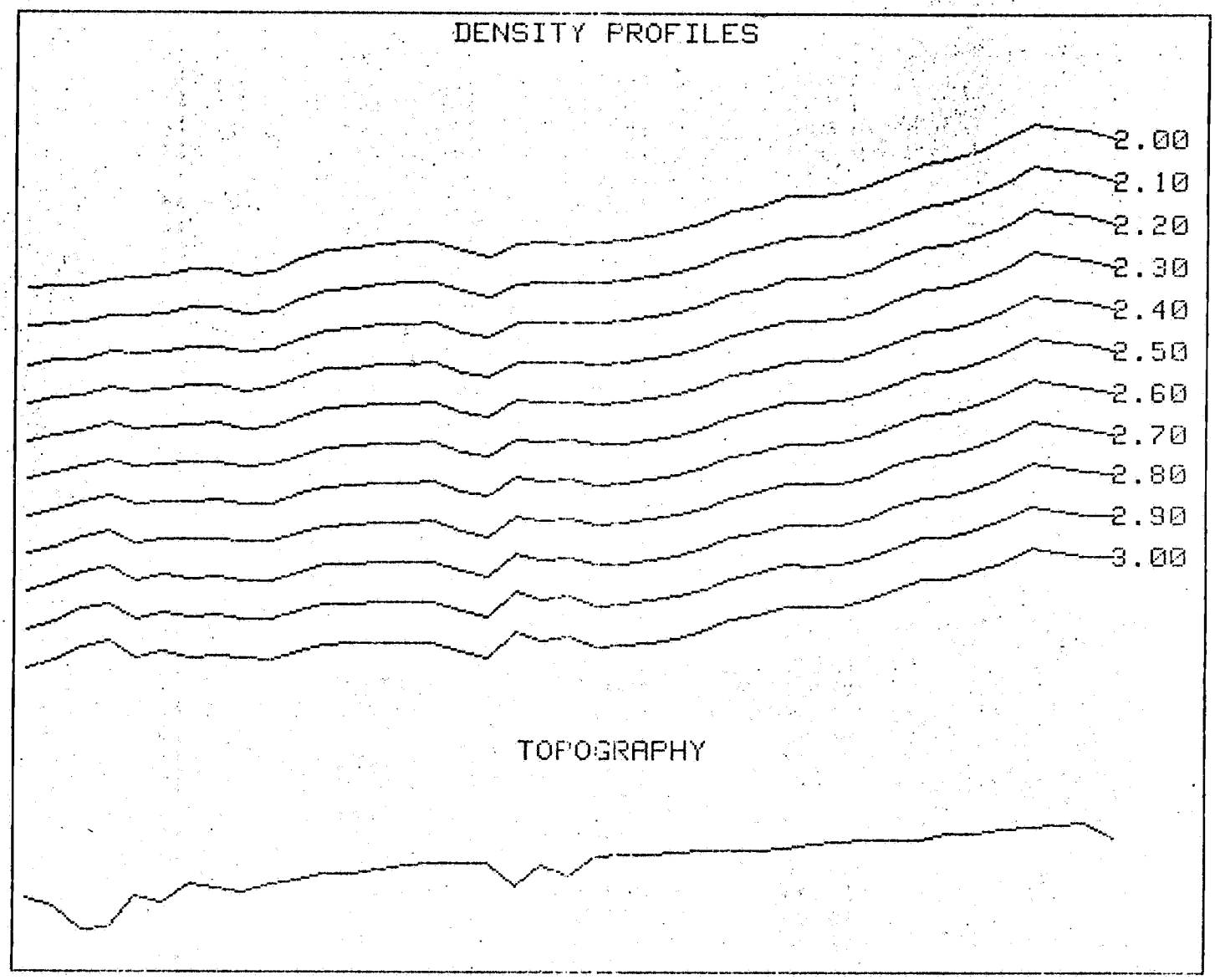
row #		STATION NUMBER	ELEVATION (meters)	BOUGUER GRAVITY ANOMALY (mgals)		Loop #
1		10000	149.78	5.86		3
2		10200	145.84	5.91		3
3		10400	144.55	5.20		3
4		10600	141.57	5.00		3
5		10800	139.38	5.14		3
6		11000	141.35	4.89		3
7		11200	143.43	4.54		3
8		11400	140.73	4.23		3
9		11600	142.91	4.20		3
10		11800	141.45	4.15		3
11		12000	140.77	4.08		3
12		12200	138.51	3.71		3
13		12400	135.17	3.45		3
14		12600	132.94	3.57		3
15		12800	131.51	3.68		3
16		13000	130.47	3.19		3
17	RPT	13000	130.47	3.19	*	2
18		13200	130.31	3.32		2
19		13400	130.15	2.98		2
20		13600	129.76	2.52		2
21		13800	129.76	2.12		2
22		14000	129.49	1.90		2
23		14200	132.68	1.65		2
24		14400	132.40	1.68		2
25		14600	132.17	2.01		2
26		14800	132.05	2.08		2
27		15000	131.44	1.67		2
28		15200	130.88	1.33		2
29		15400	129.89	1.37		2
30		15600	129.04	1.37		2
31		15800	135.09	1.33		2
32		16000	135.35	1.07		2
33	RPT	16000	135.35	1.08	*	1
34		16200	128.88	1.13		1
35		16400	137.34	.76		1
36		16600	140.57	.46		1
37		16800	142.56	.35		1
38		17000	146.30	.24		1
39		17200	146.76	.07		1
40		17400	145.20	.01		1
41		17600	140.78	-.52		1
42		17800	135.87	.13		1
43		18000	133.72	-.00		4
44	RPT	18000	133.72	-.00	*	1
45		18200	129.64	-.22		4
46		18400	127.12	-.65		4
47		18600	129.57	-.50		4
48		18800	133.12	-.63		4
49		19000	130.17	-.55		4
50		19200	128.84	.11		4
51		19400	122.69	.47		4
52		19600	121.93	.79		4
53		19800	121.56	1.27		4
54		20000	120.00	1.55		4

BOUGUER DENSITIES FOR p= 2 TO 2.9 gms/c.c. LINE 10000

ROW No.	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
1	8.37	7.74	7.11	6.48	5.86	5.23	4.60	3.97	3.35	2.72
2	8.36	7.74	7.13	6.52	5.91	5.30	4.69	4.08	3.47	2.85
3	7.62	7.02	6.41	5.80	5.20	4.59	3.99	3.38	2.78	2.17
4	7.37	6.78	6.18	5.59	5.00	4.40	3.81	3.22	2.62	2.03
5	7.48	6.89	6.31	5.73	5.14	4.56	3.97	3.39	2.80	2.22
6	7.26	6.67	6.08	5.49	4.89	4.30	3.71	3.12	2.53	1.93
7	6.94	6.34	5.74	5.14	4.54	3.94	3.34	2.74	2.14	1.53
8	6.59	6.00	5.41	4.82	4.23	3.64	3.05	2.46	1.87	1.28
9	6.60	6.00	5.40	4.80	4.20	3.60	3.00	2.41	1.81	1.21
10	6.53	5.93	5.34	4.75	4.15	3.56	2.97	2.38	1.78	1.19
11	6.44	5.85	5.26	4.67	4.08	3.49	2.90	2.31	1.72	1.13
12	6.03	5.45	4.87	4.29	3.71	3.13	2.55	1.97	1.39	.81
13	5.72	5.15	4.58	4.02	3.45	2.89	2.32	1.75	1.19	.62
14	5.80	5.24	4.68	4.12	3.57	3.01	2.45	1.90	1.34	.78
15	5.88	5.33	4.78	4.23	3.68	3.13	2.58	2.02	1.47	.92
16	5.38	4.83	4.28	3.74	3.19	2.64	2.10	1.55	1.00	.46
17	5.38	4.83	4.29	3.74	3.19	2.65	2.10	1.55	1.00	.46
18	5.51	4.96	4.42	3.87	3.32	2.78	2.23	1.68	1.14	.59
19	5.16	4.62	4.07	3.53	2.98	2.43	1.89	1.34	.80	.25
20	4.69	4.15	3.61	3.06	2.52	1.97	1.43	.89	.34	-.20
21	4.29	3.75	3.20	2.66	2.12	1.57	1.03	.48	-.06	-.60
22	4.07	3.53	2.99	2.44	1.90	1.36	.81	.27	-.27	-.81
23	3.88	3.32	2.77	2.21	1.65	1.10	.54	-.01	-.57	-1.13
24	3.90	3.34	2.79	2.23	1.68	1.12	.57	.01	-.54	-1.10
25	4.22	3.67	3.12	2.56	2.01	1.45	.90	.35	-.21	-.76
26	4.29	3.74	3.18	2.63	2.08	1.52	.97	.42	-.14	-.69
27	3.87	3.32	2.77	2.22	1.67	1.12	.57	.01	-.54	-1.09
28	3.52	2.98	2.43	1.88	1.33	.78	.23	-.32	-.86	-1.41
29	3.55	3.00	2.46	1.91	1.37	.82	.28	-.26	-.81	-1.35
30	3.53	2.99	2.45	1.91	1.37	.83	.29	-.26	-.80	-1.34
31	3.60	3.03	2.46	1.90	1.33	.77	.20	-.37	-.93	-1.50
32	3.34	2.78	2.21	1.64	1.07	.51	-.06	-.63	-1.19	-1.76
33	3.34	2.78	2.21	1.64	1.08	.51	-.06	-.63	-1.19	-1.76
34	3.29	2.75	2.21	1.67	1.13	.59	.05	-.49	-1.03	-1.57
35	3.06	2.48	1.91	1.33	.76	.18	-.40	-.97	-1.55	-2.12
36	2.82	2.23	1.64	1.05	.46	-.12	-.71	-1.30	-1.89	-2.48
37	2.74	2.14	1.55	.95	.35	-.25	-.84	-1.44	-2.04	-2.64
38	2.69	2.08	1.47	.85	.24	-.37	-.99	-1.60	-2.21	-2.83
39	2.53	1.92	1.30	.69	.07	-.54	-1.16	-1.77	-2.39	-3.00
40	2.45	1.84	1.23	.62	.01	-.60	-1.21	-1.81	-2.42	-3.03
41	1.84	1.25	.66	.07	-.52	-1.11	-1.70	-2.29	-2.88	-3.47
42	2.41	1.84	1.27	.70	.13	-.44	-1.01	-1.58	-2.15	-2.72
43	2.24	1.68	1.12	.56	-.00	-.56	-1.13	-1.69	-2.25	-2.81
44	2.24	1.68	1.12	.56	-.00	-.56	-1.13	-1.69	-2.25	-2.81
45	1.96	1.41	.87	.33	-.22	-.76	-1.30	-1.85	-2.39	-2.93
46	1.48	.95	.42	-.12	-.65	-1.18	-1.71	-2.25	-2.78	-3.31
47	1.68	1.13	.59	.05	-.50	-1.04	-1.58	-2.12	-2.67	-3.21
48	1.60	1.04	.49	-.07	-.63	-1.19	-1.74	-2.30	-2.86	-3.42
49	1.63	1.08	.54	-.01	-.55	-1.10	-1.65	-2.19	-2.74	-3.28
50	2.27	1.73	1.19	.65	.11	-.43	-.97	-1.51	-2.05	-2.59
51	2.53	2.01	1.50	.99	.47	-.04	-.56	-1.07	-1.58	-2.10
52	2.83	2.32	1.81	1.30	.79	.28	-.23	-.74	-1.25	-1.77
53	3.31	2.80	2.29	1.78	1.27	.76	.25	-.26	-.77	-1.28
54	3.56	3.06	2.56	2.06	1.55	1.05	.55	.04	-.46	-.96

GRAVITY DENSITY ANALYSIS

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.
LINE 10000



****
*** LINE L10000 ***
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181A

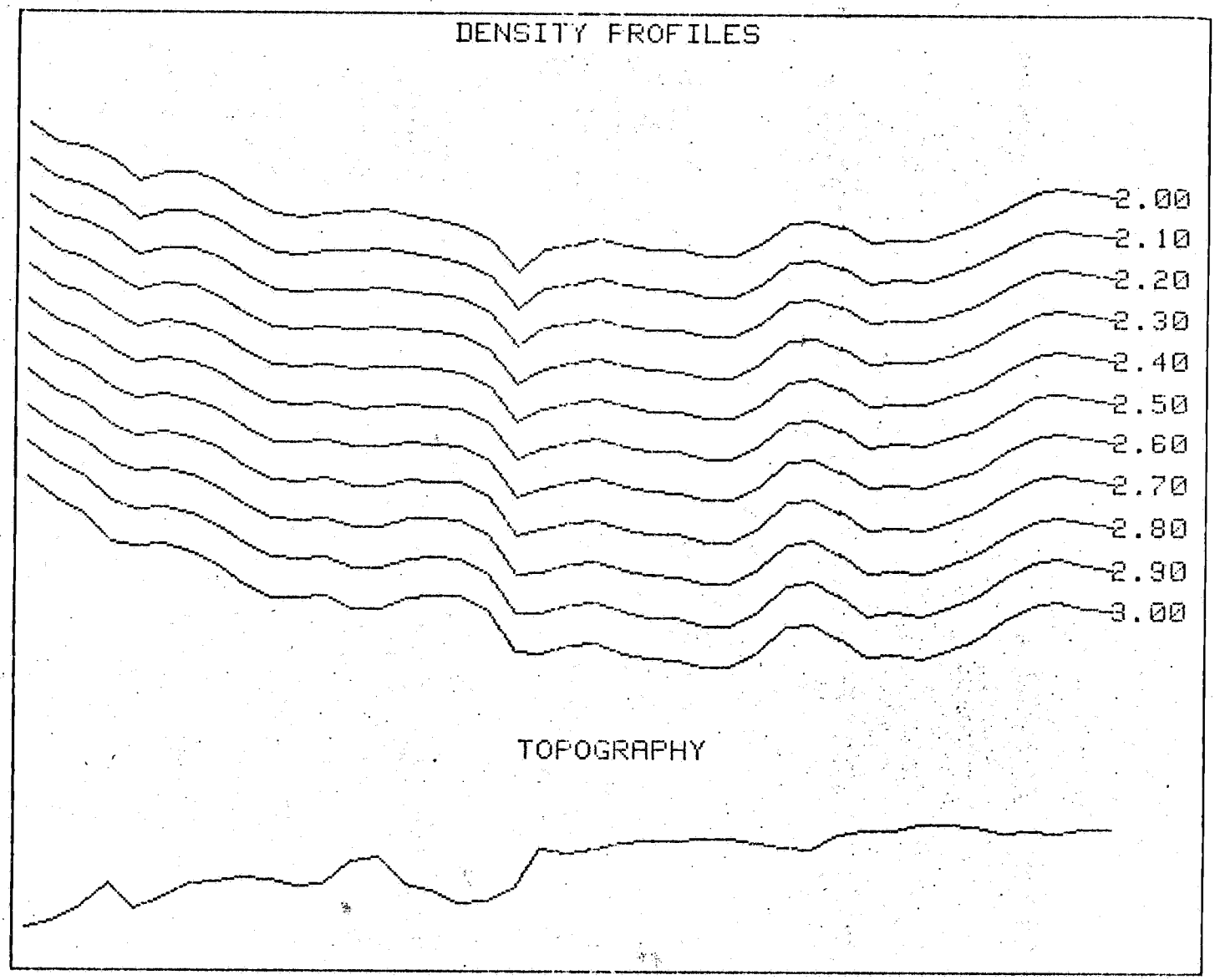
row #	STATION NUMBER	ELEVATION (meters)	BOUGUER GRAVITY ANOMALY (mgals)	Loop #
1	11000	147.70	-20.16	14
2	11200	145.60	-20.07	14
3	11400	139.83	-19.99	14
4	11600	140.59	-19.88	14
5	11800	148.09	-19.97	14
6	12000	146.47	-19.92	14
7	12200	151.18	-19.88	14
8	12400	150.24	-19.88	14
9	12600	148.83	-19.96	14
10	12800	150.86	-19.93	14
11	13000	152.31	-19.76	14
12	13200	153.52	-19.63	14
13	13400	153.85	-19.60	14
14	13600	154.77	-19.56	14
15	13800	155.54	-19.54	14
16	14000	156.13	-19.52	14
17	14200	156.14	-19.68	14
18	14400	156.10	-19.76	14
19	14600	150.57	-19.49	14
20	14800	155.50	-19.52	14
21	15000	153.14	-19.50	14
22	15200	157.71	-19.55	15
23	15400	158.02	-19.52	15
24	15600	158.27	-19.46	15
25	15800	158.69	-19.39	15
26	16000	159.06	-19.26	15
27	16200	159.20	-19.08	15
28	16400	159.06	-19.00	15
29	16600	159.80	-18.85	15
30	16800	160.68	-18.85	15
31	17000	161.15	-18.83	15
32	17200	161.69	-18.71	15
33	17400	161.52	-18.53	15
34	17600	161.97	-18.36	15
35	17800	163.36	-18.31	15
36	18000	163.43	-18.19	15
37	18200	164.21	-18.01	15
38	18400	164.84	-17.76	15
39	18600	165.21	-17.83	15
40	18800	165.81	-17.88	15
41	19000	162.37	-17.97	15

BOUGUER DENSITIES FOR p= 2 TO 2.9 gms/c.c. LINE 10000

ROW No.	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
1	-17.68	-18.30	-18.92	-19.54	-20.16	-20.78	-21.40	-22.02	-22.64	-23.26
2	-17.63	-18.24	-18.85	-19.46	-20.07	-20.68	-21.29	-21.90	-22.51	-23.12
3	-17.65	-18.24	-18.82	-19.41	-19.99	-20.58	-21.17	-21.75	-22.34	-22.92
4	-17.52	-18.11	-18.70	-19.29	-19.88	-20.47	-21.05	-21.64	-22.23	-22.82
5	-17.49	-18.11	-18.73	-19.35	-19.97	-20.59	-21.21	-21.83	-22.45	-23.07
6	-17.46	-18.08	-18.69	-19.31	-19.92	-20.53	-21.15	-21.76	-22.38	-22.99
7	-17.35	-17.98	-18.62	-19.25	-19.88	-20.52	-21.15	-21.78	-22.42	-23.05
8	-17.36	-17.99	-18.62	-19.25	-19.88	-20.50	-21.13	-21.76	-22.39	-23.02
9	-17.46	-18.08	-18.71	-19.33	-19.96	-20.58	-21.20	-21.83	-22.45	-23.07
10	-17.40	-18.03	-18.66	-19.30	-19.93	-20.56	-21.19	-21.83	-22.46	-23.09
11	-17.21	-17.84	-18.48	-19.12	-19.76	-20.40	-21.04	-21.67	-22.31	-22.95
12	-17.06	-17.70	-18.34	-18.99	-19.63	-20.27	-20.92	-21.56	-22.20	-22.85
13	-17.02	-17.67	-18.31	-18.96	-19.60	-20.25	-20.89	-21.53	-22.18	-22.82
14	-16.97	-17.62	-18.26	-18.91	-19.56	-20.21	-20.86	-21.51	-22.16	-22.80
15	-16.93	-17.58	-18.24	-18.89	-19.54	-20.19	-20.84	-21.50	-22.15	-22.80
16	-16.90	-17.56	-18.21	-18.87	-19.52	-20.18	-20.83	-21.48	-22.14	-22.79
17	-17.06	-17.72	-18.37	-19.03	-19.68	-20.34	-20.99	-21.64	-22.30	-22.95
18	-17.15	-17.80	-18.46	-19.11	-19.76	-20.42	-21.07	-21.73	-22.38	-23.04
19	-16.97	-17.60	-18.23	-18.86	-19.49	-20.12	-20.75	-21.39	-22.02	-22.65
20	-16.91	-17.57	-18.22	-18.87	-19.52	-20.17	-20.82	-21.48	-22.13	-22.78
21	-16.94	-17.58	-18.22	-18.86	-19.50	-20.15	-20.79	-21.43	-22.07	-22.71
22	-16.91	-17.57	-18.23	-18.89	-19.55	-20.21	-20.87	-21.54	-22.20	-22.86
23	-16.88	-17.54	-18.20	-18.86	-19.52	-20.19	-20.85	-21.51	-22.17	-22.84
24	-16.81	-17.47	-18.13	-18.80	-19.46	-20.12	-20.79	-21.45	-22.11	-22.78
25	-16.73	-17.39	-18.06	-18.72	-19.39	-20.05	-20.72	-21.38	-22.05	-22.71
26	-16.59	-17.26	-17.92	-18.59	-19.26	-19.92	-20.59	-21.26	-21.92	-22.59
27	-16.41	-17.08	-17.75	-18.42	-19.08	-19.75	-20.42	-21.08	-21.75	-22.42
28	-16.33	-17.00	-17.66	-18.33	-19.00	-19.66	-20.33	-21.00	-21.66	-22.33
29	-16.17	-16.84	-17.51	-18.18	-18.85	-19.52	-20.19	-20.86	-21.53	-22.20
30	-16.15	-16.83	-17.50	-18.17	-18.85	-19.52	-20.19	-20.87	-21.54	-22.21
31	-16.12	-16.80	-17.48	-18.15	-18.83	-19.50	-20.18	-20.85	-21.53	-22.20
32	-16.00	-16.68	-17.35	-18.03	-18.71	-19.39	-20.07	-20.74	-21.42	-22.10
33	-15.82	-16.50	-17.17	-17.85	-18.53	-19.21	-19.88	-20.56	-21.24	-21.91
34	-15.65	-16.32	-17.00	-17.68	-18.36	-19.04	-19.72	-20.40	-21.08	-21.76
35	-15.57	-16.26	-16.94	-17.63	-18.31	-19.00	-19.68	-20.37	-21.05	-21.73
36	-15.45	-16.14	-16.82	-17.51	-18.19	-18.88	-19.56	-20.25	-20.93	-21.62
37	-15.26	-15.94	-16.63	-17.32	-18.01	-18.70	-19.38	-20.07	-20.76	-21.45
38	-15.00	-15.69	-16.38	-17.07	-17.76	-18.45	-19.14	-19.84	-20.53	-21.22
39	-15.06	-15.75	-16.44	-17.13	-17.83	-18.52	-19.21	-19.90	-20.59	-21.29
40	-15.10	-15.79	-16.49	-17.18	-17.88	-18.57	-19.27	-19.96	-20.66	-21.35
41	-15.25	-15.93	-16.61	-17.29	-17.97	-18.65	-19.33	-20.02	-20.70	-21.38

GRAVITY DENSITY ANALYSIS

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.
LINE 12000



****
*** LINE L12000 ***
****

183 A

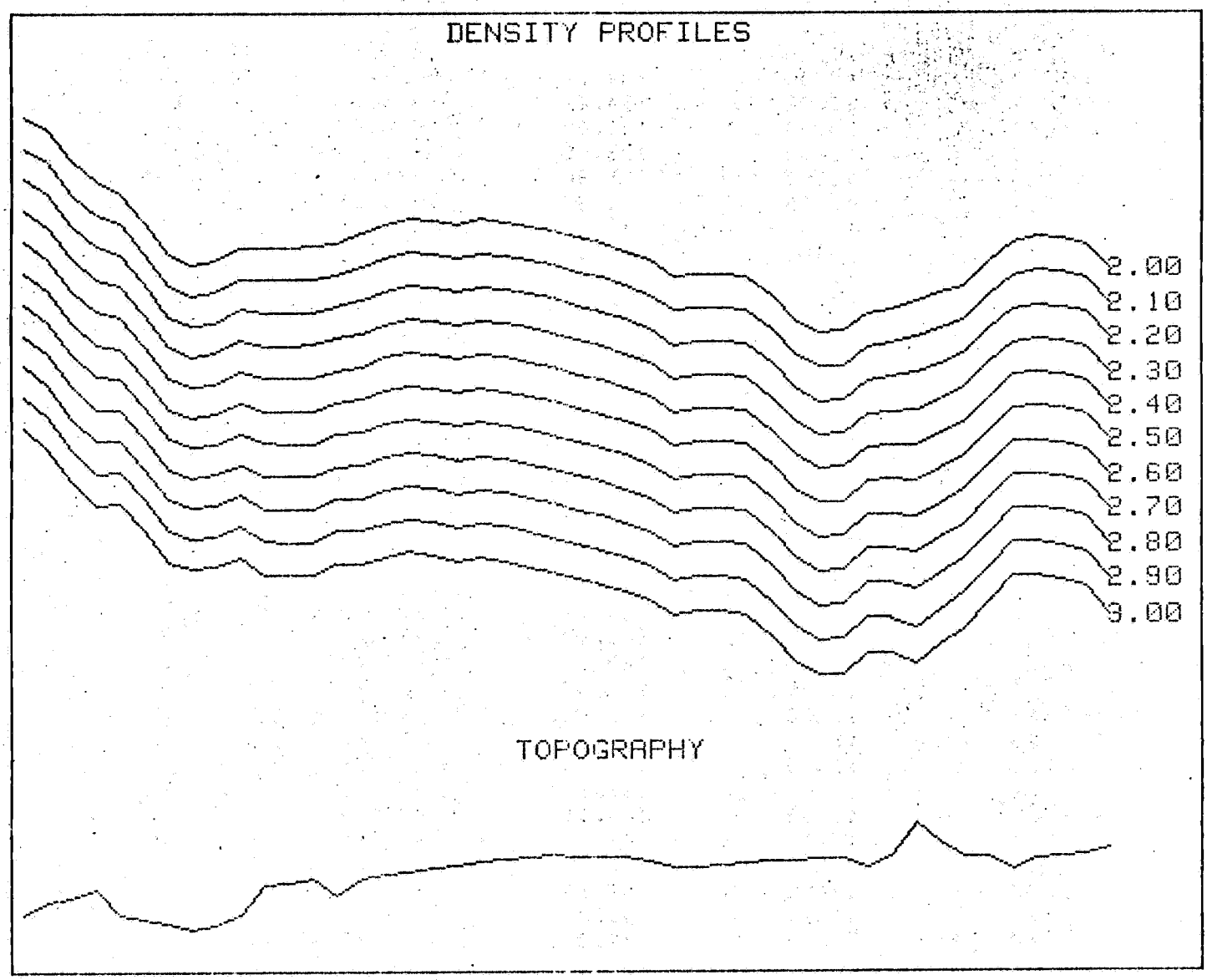
row #		STATION NUMBER	ELEVATION (meters)	BOUGUER GRAVITY ANOMALY (mgals)	Loop #
1		11000	133.37	-20.39	13
2		11200	134.46	-20.71	13
3		11400	137.93	-20.84	13
4		11600	143.55	-21.13	13
5		11800	137.58	-21.36	13
6		12000	140.08	-21.27	13
7		12200	143.25	-21.32	13
8		12400	144.01	-21.49	13
9		12600	144.83	-21.76	13
10		12800	144.17	-21.97	13
11		13000	142.69	-22.01	13
12		13200	143.52	-21.96	13
13		13400	148.76	-22.02	13
14		13600	149.55	-22.00	13
15		13800	143.45	-22.00	13
16		14000	141.92	-22.02	13
17		14200	139.23	-22.09	13
18		14400	139.73	-22.31	13
19		14600	142.65	-22.86	13
20		14800	151.59	-22.66	13
21		15000	150.77	-22.57	12
22		15200	151.85	-22.50	12
23		15400	153.31	-22.61	12
24		15600	153.49	-22.68	12
25		15800	153.67	-22.70	12
26		16000	154.01	-22.80	12
27		16200	154.14	-22.81	12
28		16400	153.16	-22.59	12
29		16600	152.04	-22.22	12
30		16800	151.87	-22.18	12
31		17000	155.04	-22.35	12
32	RPT	17000	155.04	-22.31 *	12
33		17200	156.08	-22.59	12
34		17400	156.20	-22.55	12
35		17600	157.39	-22.57	12
36		17800	157.72	-22.45	12
37		18000	157.03	-22.29	12
38		18200	155.84	-22.03	12
39		18400	155.93	-21.79	12
40		18600	155.82	-21.73	12
41		18800	156.40	-21.80	12
42		19000	156.52	-21.86	12

BOUGUER DENSITIES FOR p= 2 TO 2.9 gms/c.c. LINE 12000

ROW No.	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
1	-18.15	-18.71	-19.27	-19.83	-20.39	-20.94	-21.50	-22.06	-22.62	-23.18
2	-18.46	-19.02	-19.58	-20.15	-20.71	-21.27	-21.84	-22.40	-22.96	-23.53
3	-18.53	-19.11	-19.69	-20.26	-20.84	-21.42	-22.00	-22.58	-23.15	-23.73
4	-18.72	-19.32	-19.92	-20.52	-21.13	-21.73	-22.33	-22.93	-23.53	-24.13
5	-19.05	-19.63	-20.21	-20.78	-21.36	-21.94	-22.51	-23.09	-23.67	-24.24
6	-18.92	-19.51	-20.10	-20.68	-21.27	-21.86	-22.44	-23.03	-23.62	-24.21
7	-18.92	-19.52	-20.12	-20.72	-21.32	-21.92	-22.52	-23.12	-23.72	-24.32
8	-19.08	-19.68	-20.29	-20.89	-21.49	-22.10	-22.70	-23.30	-23.91	-24.51
9	-19.33	-19.94	-20.55	-21.15	-21.76	-22.37	-22.98	-23.58	-24.19	-24.80
10	-19.56	-20.16	-20.76	-21.37	-21.97	-22.58	-23.18	-23.79	-24.39	-24.99
11	-19.62	-20.22	-20.82	-21.41	-22.01	-22.61	-23.21	-23.81	-24.40	-25.00
12	-19.56	-20.16	-20.76	-21.36	-21.96	-22.57	-23.17	-23.77	-24.37	-24.97
13	-19.53	-20.15	-20.78	-21.40	-22.02	-22.65	-23.27	-23.89	-24.52	-25.14
14	-19.50	-20.12	-20.75	-21.38	-22.00	-22.63	-23.26	-23.88	-24.51	-25.14
15	-19.59	-20.19	-20.79	-21.39	-22.00	-22.60	-23.20	-23.80	-24.40	-25.00
16	-19.64	-20.24	-20.83	-21.43	-22.02	-22.62	-23.21	-23.81	-24.40	-25.00
17	-19.75	-20.34	-20.92	-21.50	-22.09	-22.67	-23.25	-23.84	-24.42	-25.00
18	-19.97	-20.55	-21.14	-21.73	-22.31	-22.90	-23.48	-24.07	-24.65	-25.24
19	-20.47	-21.07	-21.67	-22.26	-22.86	-23.46	-24.06	-24.66	-25.25	-25.85
20	-20.11	-20.75	-21.39	-22.02	-22.66	-23.29	-23.93	-24.56	-25.20	-25.83
21	-20.04	-20.67	-21.30	-21.93	-22.57	-23.20	-23.83	-24.46	-25.09	-25.72
22	-19.95	-20.59	-21.22	-21.86	-22.50	-23.13	-23.77	-24.40	-25.04	-25.68
23	-20.04	-20.68	-21.33	-21.97	-22.61	-23.25	-23.90	-24.54	-25.18	-25.82
24	-20.11	-20.75	-21.39	-22.04	-22.68	-23.32	-23.97	-24.61	-25.25	-25.90
25	-20.12	-20.76	-21.41	-22.05	-22.70	-23.34	-23.98	-24.63	-25.27	-25.92
26	-20.22	-20.86	-21.51	-22.16	-22.80	-23.45	-24.09	-24.74	-25.38	-26.03
27	-20.22	-20.87	-21.51	-22.16	-22.81	-23.45	-24.10	-24.74	-25.39	-26.04
28	-20.02	-20.66	-21.31	-21.95	-22.59	-23.23	-23.87	-24.52	-25.16	-25.80
29	-19.67	-20.31	-20.95	-21.58	-22.22	-22.86	-23.50	-24.13	-24.77	-25.41
30	-19.63	-20.27	-20.91	-21.54	-22.18	-22.82	-23.45	-24.09	-24.73	-25.36
31	-19.75	-20.40	-21.05	-21.70	-22.35	-23.00	-23.65	-24.30	-24.94	-25.59
32	-19.71	-20.36	-21.01	-21.66	-22.31	-22.96	-23.61	-24.26	-24.91	-25.56
33	-19.97	-20.63	-21.28	-21.94	-22.59	-23.24	-23.90	-24.55	-25.21	-25.86
34	-19.93	-20.59	-21.24	-21.89	-22.55	-23.20	-23.86	-24.51	-25.17	-25.82
35	-19.93	-20.59	-21.25	-21.91	-22.57	-23.23	-23.89	-24.55	-25.21	-25.87
36	-19.80	-20.46	-21.12	-21.78	-22.45	-23.11	-23.77	-24.43	-25.09	-25.75
37	-19.66	-20.32	-20.97	-21.63	-22.29	-22.95	-23.61	-24.26	-24.92	-25.58
38	-19.41	-20.07	-20.72	-21.37	-22.03	-22.68	-23.33	-23.99	-24.64	-25.29
39	-19.18	-19.83	-20.48	-21.14	-21.79	-22.44	-23.10	-23.75	-24.40	-25.06
40	-19.12	-19.77	-20.42	-21.07	-21.73	-22.38	-23.03	-23.69	-24.34	-24.99
41	-19.17	-19.83	-20.48	-21.14	-21.80	-22.45	-23.11	-23.76	-24.42	-25.07
42	-19.23	-19.89	-20.55	-21.20	-21.86	-22.51	-23.17	-23.83	-24.48	-25.14

GRAVITY DENSITY ANALYSIS

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.
LINE 14000



185A

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*** LINE L14000 ***
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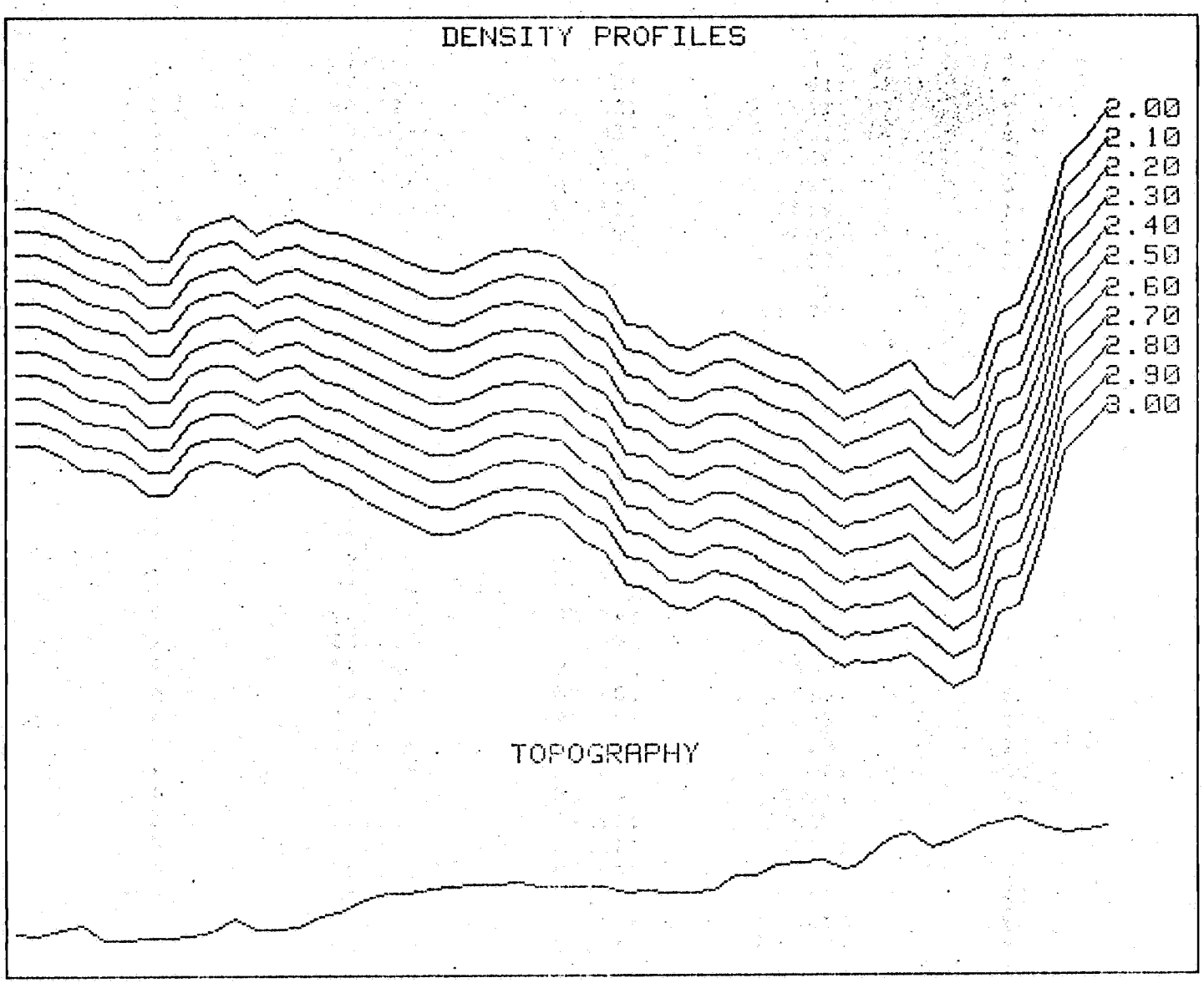
row #		STATION NUMBER	ELEVATION (meters)	BOUGUER GRAVITY ANOMALY (mgals)		Loop #
1		11400	135.80	-22.60		10
2		11600	138.85	-22.90		10
3		11800	139.92	-23.47		10
4		12000	141.91	-23.87		10
5		12200	135.68	-23.98		10
6		12400	134.74	-24.48		10
7		12600	134.04	-25.10		10
8		12800	132.68	-25.26		10
9		13000	133.48	-25.20		9
10		13200	135.86	-24.99		9
11		13400	142.95	-25.10		9
12		13600	143.49	-25.11		9
13		13800	144.11	-25.10		9
14		14000	140.28	-24.97		9
15		14200	144.44	-24.89		9
16		14400	145.13	-24.73		9
17		14600	145.78	-24.64		9
18		14800	146.59	-24.66		9
19		15000	147.30	-24.76		9
20	RPT	15000	147.30	-24.76	*	9
21	RPT	15000	147.30	-24.76	*	7
22		15200	148.12	-24.68		7
23		15400	148.52	-24.73		7
24		15600	149.22	-24.82		7
25		15800	149.66	-24.90		7
26		16000	149.06	-25.04		7
27		16200	149.01	-25.15		7
28		16400	148.90	-25.28		7
29		16600	148.36	-25.45		7
30		16800	146.87	-25.73		7
31		17000	146.92	-25.68		7
32		17200	147.31	-25.67		7
33		17400	147.66	-25.71		7
34		17600	148.02	-26.09		7
35		17800	148.31	-26.53		7
36		18000	148.55	-26.79		7
37		18200	148.70	-26.76		8
38		18400	146.88	-26.41		8
39		18600	149.23	-26.37		8
40	RPT	18600	149.23	-26.37	*	8
41		18800	157.18	-26.36		8
42		19000	152.79	-26.14		8
43		19200	149.38	-25.93		8
44		19400	148.95	-25.47		8
45		19600	146.36	-25.08		8
46		19800	148.74	-25.02		8
47		20000	149.13	-25.07		8
48		20200	149.54	-25.18		8
49		20400	150.87	-25.64		8

BOUGUER DENSITIES FOR p= 2 TO 2.9 gms/c.c. LINE 14000

ROW No.	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
1	-20.33	-20.90	-21.47	-22.04	-22.60	-23.17	-23.74	-24.31	-24.88	-25.45
2	-20.57	-21.15	-21.73	-22.32	-22.90	-23.48	-24.06	-24.64	-25.23	-25.81
3	-21.12	-21.71	-22.30	-22.88	-23.47	-24.06	-24.64	-25.23	-25.82	-26.40
4	-21.49	-22.09	-22.68	-23.28	-23.87	-24.47	-25.06	-25.66	-26.25	-26.84
5	-21.70	-22.27	-22.84	-23.41	-23.98	-24.54	-25.11	-25.68	-26.25	-26.82
6	-22.22	-22.79	-23.35	-23.91	-24.48	-25.04	-25.61	-26.17	-26.74	-27.30
7	-22.85	-23.41	-23.97	-24.53	-25.10	-25.66	-26.22	-26.78	-27.34	-27.91
8	-23.04	-23.59	-24.15	-24.71	-25.26	-25.82	-26.37	-26.93	-27.49	-28.04
9	-22.96	-23.52	-24.08	-24.64	-25.20	-25.76	-26.32	-26.88	-27.44	-28.00
10	-22.71	-23.28	-23.85	-24.42	-24.99	-25.56	-26.13	-26.70	-27.27	-27.84
11	-22.71	-23.31	-23.90	-24.50	-25.10	-25.70	-26.30	-26.90	-27.50	-28.10
12	-22.71	-23.31	-23.91	-24.51	-25.11	-25.71	-26.31	-26.91	-27.52	-28.12
13	-22.69	-23.29	-23.89	-24.50	-25.10	-25.71	-26.31	-26.91	-27.52	-28.12
14	-22.62	-23.21	-23.80	-24.39	-24.97	-25.56	-26.15	-26.74	-27.33	-27.91
15	-22.47	-23.07	-23.68	-24.28	-24.89	-25.49	-26.10	-26.70	-27.31	-27.91
16	-22.30	-22.91	-23.52	-24.12	-24.73	-25.34	-25.95	-26.56	-27.16	-27.77
17	-22.19	-22.80	-23.41	-24.02	-24.64	-25.25	-25.86	-26.47	-27.08	-27.69
18	-22.20	-22.81	-23.43	-24.04	-24.66	-25.27	-25.89	-26.50	-27.12	-27.73
19	-22.29	-22.91	-23.53	-24.15	-24.76	-25.38	-26.00	-26.61	-27.23	-27.85
20	-22.29	-22.91	-23.53	-24.14	-24.76	-25.38	-26.00	-26.61	-27.23	-27.85
21	-22.29	-22.91	-23.53	-24.15	-24.76	-25.38	-26.00	-26.61	-27.23	-27.85
22	-22.19	-22.82	-23.44	-24.06	-24.68	-25.30	-25.92	-26.54	-27.16	-27.78
23	-22.24	-22.86	-23.48	-24.11	-24.73	-25.35	-25.97	-26.60	-27.22	-27.84
24	-22.32	-22.94	-23.57	-24.19	-24.82	-25.45	-26.07	-26.70	-27.32	-27.95
25	-22.39	-23.02	-23.65	-24.28	-24.90	-25.53	-26.16	-26.79	-27.41	-28.04
26	-22.54	-23.17	-23.79	-24.42	-25.04	-25.67	-26.29	-26.92	-27.54	-28.17
27	-22.65	-23.27	-23.90	-24.52	-25.15	-25.77	-26.40	-27.02	-27.64	-28.27
28	-22.79	-23.41	-24.04	-24.66	-25.28	-25.91	-26.53	-27.16	-27.78	-28.40
29	-22.96	-23.59	-24.21	-24.83	-25.45	-26.07	-26.69	-27.32	-27.94	-28.56
30	-23.27	-23.89	-24.50	-25.12	-25.73	-26.35	-26.97	-27.58	-28.20	-28.81
31	-23.21	-23.83	-24.45	-25.06	-25.68	-26.29	-26.91	-27.52	-28.14	-28.76
32	-23.20	-23.82	-24.44	-25.05	-25.67	-26.29	-26.91	-27.52	-28.14	-28.76
33	-23.24	-23.86	-24.47	-25.09	-25.71	-26.33	-26.95	-27.57	-28.19	-28.81
34	-23.60	-24.22	-24.84	-25.46	-26.09	-26.71	-27.33	-27.95	-28.57	-29.19
35	-24.05	-24.67	-25.29	-25.91	-26.53	-27.16	-27.78	-28.40	-29.02	-29.64
36	-24.30	-24.92	-25.55	-26.17	-26.79	-27.41	-28.04	-28.66	-29.28	-29.90
37	-24.27	-24.89	-25.51	-26.14	-26.76	-27.38	-28.01	-28.63	-29.25	-29.88
38	-23.95	-24.57	-25.18	-25.80	-26.41	-27.03	-27.65	-28.26	-28.88	-29.49
39	-23.86	-24.49	-25.11	-25.74	-26.37	-26.99	-27.62	-28.24	-28.87	-29.49
40	-23.87	-24.49	-25.12	-25.74	-26.37	-26.99	-27.62	-28.24	-28.87	-29.49
41	-23.72	-24.38	-25.04	-25.70	-26.36	-27.02	-27.68	-28.33	-28.99	-29.65
42	-23.58	-24.22	-24.86	-25.50	-26.14	-26.78	-27.42	-28.06	-28.70	-29.34
43	-23.43	-24.06	-24.68	-25.31	-25.93	-26.56	-27.19	-27.81	-28.44	-29.06
44	-22.97	-23.59	-24.22	-24.84	-25.47	-26.09	-26.72	-27.34	-27.96	-28.59
45	-22.62	-23.24	-23.85	-24.46	-25.08	-25.69	-26.30	-26.92	-27.53	-28.14
46	-22.53	-23.15	-23.78	-24.40	-25.02	-25.65	-26.27	-26.89	-27.52	-28.14
47	-22.57	-23.19	-23.82	-24.44	-25.07	-25.69	-26.32	-26.94	-27.57	-28.19
48	-22.67	-23.30	-23.93	-24.55	-25.18	-25.81	-26.43	-27.06	-27.69	-28.31
49	-23.11	-23.74	-24.37	-25.00	-25.64	-26.27	-26.90	-27.53	-28.16	-28.80

GRAVITY DENSITY ANALYSIS

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.
LINE 16000



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*** LINE L16000 ***
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187A

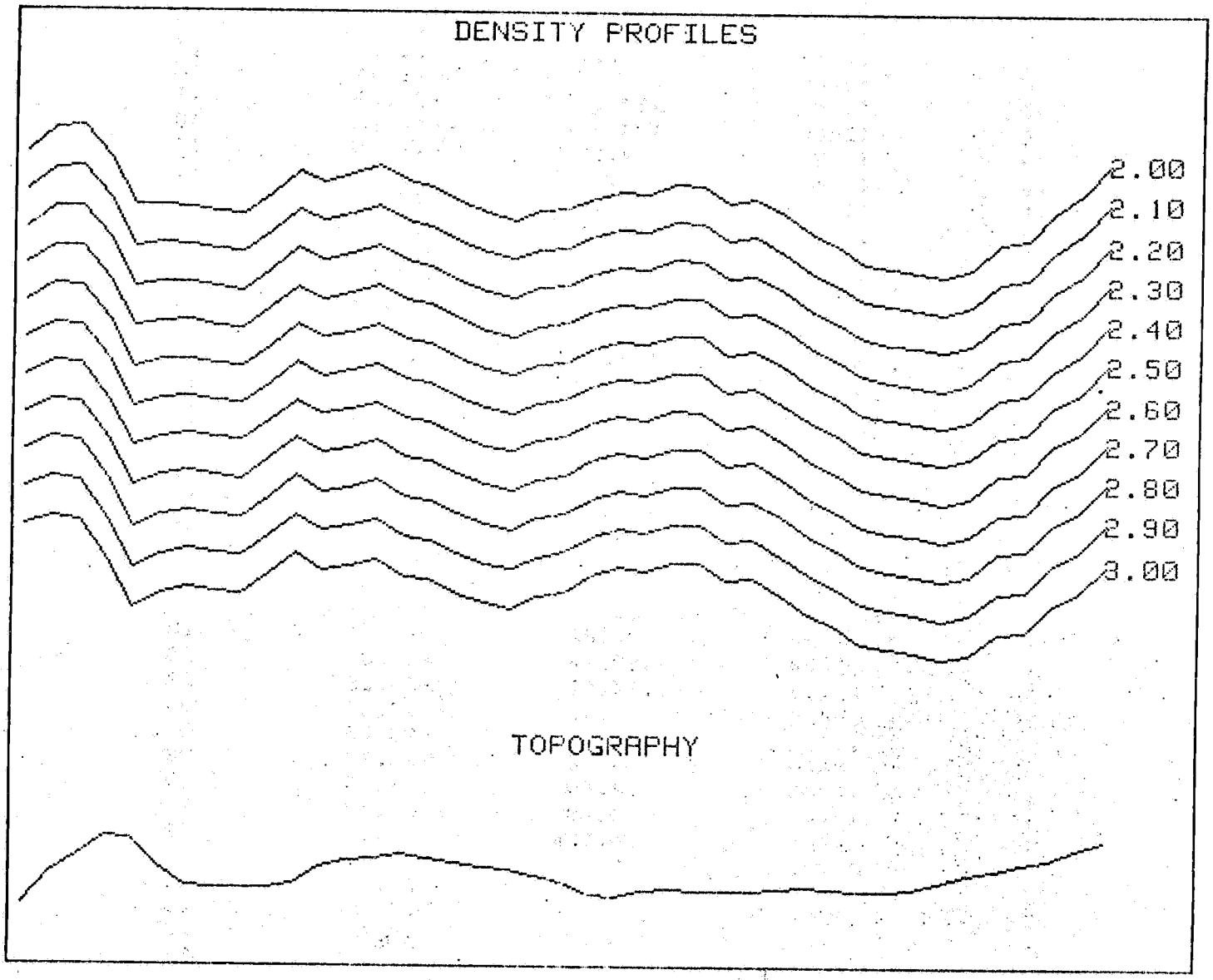
row #		STATION NUMBER	ELEVATION (meters)	BOUGUER GRAVITY ANOMALY (mgals)		Loop #
1		10400	127.27	-26.52		3
2		10600	126.92	-26.51		3
3		10800	128.70	-26.69		3
4		11000	129.97	-27.00		3
5		11200	125.44	-27.13		3
6		11400	125.50	-27.24		3
7		11600	126.16	-27.68		3
8		11800	126.47	-27.67		3
9		12000	127.12	-27.06		2
10		12200	128.16	-26.86		2
11		12400	131.79	-26.81		2
12		12600	128.98	-27.15		2
13		12800	128.89	-26.95		2
14		13000	129.36	-26.86		2
15		13200	132.29	-27.13		2
16		13400	134.24	-27.28		2
17		13600	137.37	-27.50		2
18		13800	138.80	-27.71		2
19		14000	138.71	-27.95		2
20		14200	140.36	-28.18		2
21		14400	140.63	-28.20		2
22		14600	141.11	-28.04		2
23		14800	141.52	-27.80		2
24		15000	141.74	-27.70		2
25		15200	140.87	-27.77		2
26		15400	140.47	-27.87		2
27		15600	140.50	-28.32		2
28		15800	140.63	-28.59		2
29		16000	139.18	-29.34		2
30		16200	139.26	-29.42		4
31		16400	139.18	-29.82		4
32		16600	138.89	-29.91		4
33		16800	139.42	-29.65		4
34		17000	143.85	-29.63		4
35		17200	143.70	-29.85		4
36	RPT	17200	143.70	-29.86	*	4
37	RPT	17200	143.70	-29.86	*	4
38		17400	146.49	-30.13		4
39		17600	147.51	-30.28		4
40		17800	148.10	-30.69		4
41		18000	145.57	-31.00		4
42		18100	146.13	-30.87		4
43		18200	148.34	-30.87		5
44		18400	153.95	-30.67		5
45		18600	155.96	-30.48		5
46		18800	151.51	-30.96		5
47		19000	153.32	-31.30		5
48		19200	157.05	-30.91		5
49		19400	158.88	-29.50		5
50		19600	160.11	-29.29		5
51		19800	157.78	-27.98		5
52		20000	156.04	-25.98		5
53		20200	156.42	-25.51		5
54		20400	157.85	-24.89		5

BOUGUER DENSITIES FOR p= 2 TO 2.9 gms/c.c. LINE 16000

ROW No.	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
1	-24.38	-24.92	-25.45	-25.98	-26.52	-27.05	-27.58	-28.12	-28.65	-29.18
2	-24.38	-24.91	-25.45	-25.98	-26.51	-27.04	-27.57	-28.10	-28.64	-29.17
3	-24.53	-25.07	-25.61	-26.15	-26.69	-27.23	-27.77	-28.31	-28.85	-29.39
4	-24.82	-25.37	-25.91	-26.46	-27.00	-27.55	-28.09	-28.64	-29.18	-29.73
5	-25.02	-25.55	-26.07	-26.60	-27.13	-27.65	-28.18	-28.70	-29.23	-29.75
6	-25.13	-25.66	-26.19	-26.71	-27.24	-27.77	-28.29	-28.82	-29.34	-29.87
7	-25.56	-26.09	-26.62	-27.15	-27.68	-28.21	-28.73	-29.26	-29.79	-30.32
8	-25.55	-26.08	-26.61	-27.14	-27.67	-28.20	-28.73	-29.26	-29.79	-30.32
9	-24.92	-25.46	-25.99	-26.52	-27.06	-27.59	-28.12	-28.65	-29.19	-29.72
10	-24.71	-25.25	-25.79	-26.33	-26.86	-27.40	-27.94	-28.47	-29.01	-29.55
11	-24.60	-25.15	-25.70	-26.26	-26.81	-27.36	-27.91	-28.47	-29.02	-29.57
12	-24.99	-25.53	-26.07	-26.61	-27.15	-27.70	-28.24	-28.78	-29.32	-29.86
13	-24.79	-25.33	-25.87	-26.41	-26.95	-27.49	-28.03	-28.57	-29.11	-29.65
14	-24.69	-25.23	-25.77	-26.32	-26.86	-27.40	-27.94	-28.48	-29.03	-29.57
15	-24.91	-25.47	-26.02	-26.58	-27.13	-27.68	-28.24	-28.79	-29.35	-29.90
16	-25.03	-25.59	-26.15	-26.72	-27.28	-27.84	-28.40	-28.97	-29.53	-30.09
17	-25.20	-25.78	-26.35	-26.93	-27.50	-28.08	-28.65	-29.23	-29.81	-30.38
18	-25.39	-25.97	-26.55	-27.13	-27.71	-28.30	-28.88	-29.46	-30.04	-30.62
19	-25.62	-26.20	-26.79	-27.37	-27.95	-28.53	-29.11	-29.69	-30.27	-30.86
20	-25.82	-26.41	-27.00	-27.59	-28.18	-28.77	-29.35	-29.94	-30.53	-31.12
21	-25.84	-26.43	-27.02	-27.61	-28.20	-28.78	-29.37	-29.96	-30.55	-31.14
22	-25.67	-26.26	-26.85	-27.45	-28.04	-28.63	-29.22	-29.81	-30.40	-30.99
23	-25.43	-26.02	-26.62	-27.21	-27.80	-28.40	-28.99	-29.58	-30.18	-30.77
24	-25.32	-25.92	-26.51	-27.11	-27.70	-28.29	-28.89	-29.48	-30.08	-30.67
25	-25.41	-26.00	-26.59	-27.18	-27.77	-28.36	-28.95	-29.54	-30.13	-30.72
26	-25.51	-26.10	-26.69	-27.28	-27.87	-28.46	-29.04	-29.63	-30.22	-30.81
27	-25.96	-26.55	-27.14	-27.73	-28.32	-28.91	-29.50	-30.09	-30.67	-31.26
28	-26.23	-26.82	-27.41	-28.00	-28.59	-29.18	-29.77	-30.36	-30.95	-31.54
29	-27.01	-27.59	-28.17	-28.76	-29.34	-29.92	-30.51	-31.09	-31.67	-32.26
30	-27.09	-27.67	-28.25	-28.84	-29.42	-30.00	-30.59	-31.17	-31.76	-32.34
31	-27.49	-28.07	-28.66	-29.24	-29.82	-30.41	-30.99	-31.57	-32.16	-32.74
32	-27.58	-28.16	-28.74	-29.33	-29.91	-30.49	-31.07	-31.65	-32.24	-32.82
33	-27.31	-27.89	-28.48	-29.06	-29.65	-30.23	-30.82	-31.40	-31.98	-32.57
34	-27.22	-27.82	-28.42	-29.03	-29.63	-30.23	-30.83	-31.44	-32.04	-32.64
35	-27.44	-28.05	-28.65	-29.25	-29.85	-30.46	-31.06	-31.66	-32.26	-32.86
36	-27.45	-28.05	-28.65	-29.25	-29.86	-30.46	-31.06	-31.66	-32.27	-32.87
37	-27.45	-28.06	-28.66	-29.26	-29.86	-30.46	-31.07	-31.67	-32.27	-32.87
38	-27.67	-28.29	-28.90	-29.51	-30.13	-30.74	-31.36	-31.97	-32.58	-33.20
39	-27.81	-28.43	-29.05	-29.66	-30.28	-30.90	-31.52	-32.14	-32.76	-33.37
40	-28.20	-28.83	-29.45	-30.07	-30.69	-31.31	-31.93	-32.55	-33.17	-33.79
41	-28.56	-29.17	-29.78	-30.39	-31.00	-31.61	-32.22	-32.83	-33.44	-34.05
42	-28.42	-29.03	-29.64	-30.25	-30.87	-31.48	-32.09	-32.70	-33.32	-33.93
43	-28.39	-29.01	-29.63	-30.25	-30.87	-31.49	-32.12	-32.74	-33.36	-33.98
44	-28.09	-28.74	-29.38	-30.03	-30.67	-31.32	-31.96	-32.61	-33.25	-33.90
45	-27.87	-28.52	-29.18	-29.83	-30.48	-31.14	-31.79	-32.44	-33.10	-33.75
46	-28.42	-29.05	-29.69	-30.32	-30.96	-31.59	-32.23	-32.86	-33.50	-34.13
47	-28.73	-29.38	-30.02	-30.66	-31.30	-31.95	-32.59	-33.23	-33.87	-34.52
48	-28.27	-28.93	-29.59	-30.25	-30.91	-31.56	-32.22	-32.88	-33.54	-34.20
49	-26.83	-27.50	-28.16	-28.83	-29.50	-30.16	-30.83	-31.49	-32.16	-32.83
50	-26.61	-27.28	-27.95	-28.62	-29.29	-29.96	-30.63	-31.30	-31.97	-32.65
51	-25.34	-26.00	-26.66	-27.32	-27.98	-28.65	-29.31	-29.97	-30.63	-31.29
52	-23.36	-24.02	-24.67	-25.32	-25.98	-26.63	-27.29	-27.94	-28.59	-29.25
53	-22.89	-23.54	-24.20	-24.85	-25.51	-26.16	-26.82	-27.47	-28.13	-28.79
54	-22.24	-22.91	-23.57	-24.23	-24.89	-25.55	-26.21	-26.88	-27.54	-28.20

GRAVITY DENSITY ANALYSIS

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.
LINE 18000



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*** LINE L13000 ***
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Pg 189A

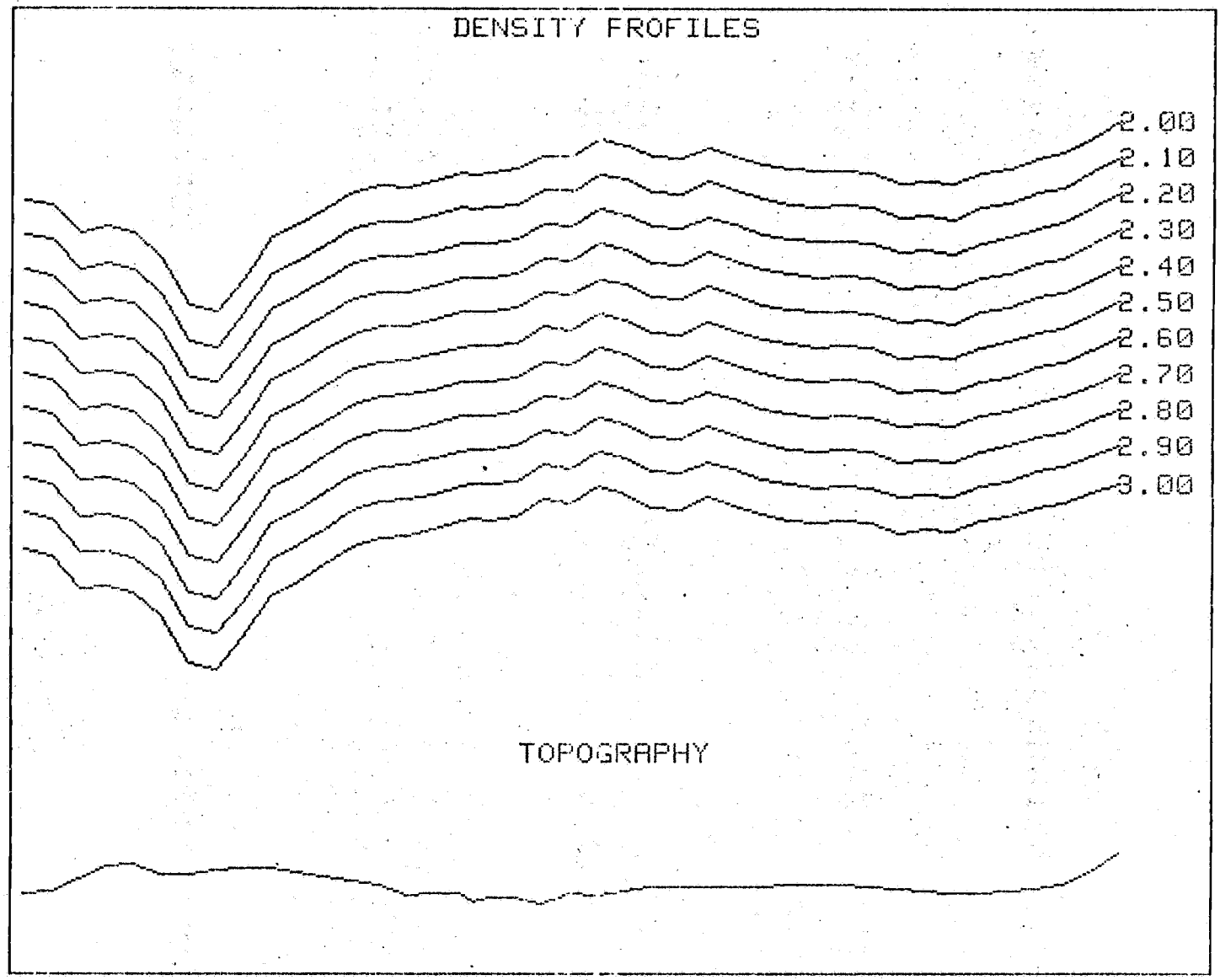
row #		STATION NUMBER	ELEVATION (meters)	BOUGUER GRAVITY ANOMALY (mgals)		Loop #
1		11000	131.78	-27.55		18
2		11200	136.55	-27.30		18
3		11400	139.39	-27.31		18
4		11600	142.56	-27.81		18
5		11800	142.20	-28.51		18
6		12000	137.66	-28.41		18
7		12200	134.62	-28.39		18
8		12400	134.16	-28.46		18
9		12600	134.22	-28.49		18
10		12800	134.32	-28.21		18
11		13000	135.16	-27.88		18
12		13200	137.55	-28.07		18
13		13400	138.56	-27.99		18
14		13600	139.05	-27.87		18
15		13800	139.68	-28.09		18
16		14000	139.19	-28.16		18
17		14200	138.50	-28.38		18
18		14400	137.74	-28.53		18
19		14600	137.27	-28.63		18
20		14800	136.40	-28.47		18
21		15000	135.24	-28.43		20
22	RPT	15000	135.24	-28.43	*	18
23		15200	133.21	-28.23		20
24		15400	132.85	-28.13		20
25		15600	133.82	-28.16		20
26		15800	134.40	-28.03		20
27		16000	133.82	-28.04		20
28	RPT	16000	133.82	-28.04	*	28
29		16200	133.92	-28.30		28
30		16400	134.08	-28.25		28
31		16600	134.49	-28.48		28
32		16800	134.50	-28.75		28
33		17000	134.30	-28.94		28
34		17200	134.09	-29.19		28
35		17400	134.08	-29.27		28
36		17600	134.32	-29.32		28
37		17800	135.24	-29.40		28
38		18000	136.63	-29.29		28
39		18200	137.42	-28.96		28
40		18400	138.37	-28.90		28
41		18600	138.99	-28.51		28
42		18800	140.66	-28.27		28
43		19000	142.10	-27.85		28

BOUGUER DENSITIES FOR p= 2 TO 2.9 gms/c.c. LINE 18000

ROW No.	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
1	-25.34	-25.89	-26.44	-27.00	-27.55	-28.10	-28.65	-29.20	-29.76	-30.31
2	-25.01	-25.59	-26.16	-26.73	-27.30	-27.88	-28.45	-29.02	-29.59	-30.16
3	-24.97	-25.56	-26.14	-26.72	-27.31	-27.89	-28.48	-29.06	-29.65	-30.23
4	-25.42	-26.02	-26.62	-27.22	-27.81	-28.41	-29.01	-29.60	-30.20	-30.80
5	-26.13	-26.72	-27.32	-27.92	-28.51	-29.11	-29.70	-30.30	-30.90	-31.49
6	-26.10	-26.68	-27.26	-27.84	-28.41	-28.99	-29.57	-30.14	-30.72	-31.30
7	-26.14	-26.70	-27.27	-27.83	-28.39	-28.96	-29.52	-30.09	-30.65	-31.21
8	-26.21	-26.77	-27.33	-27.89	-28.46	-29.02	-29.58	-30.14	-30.71	-31.27
9	-26.24	-26.81	-27.37	-27.93	-28.49	-29.06	-29.62	-30.18	-30.74	-31.31
10	-25.95	-26.52	-27.08	-27.64	-28.21	-28.77	-29.33	-29.90	-30.46	-31.02
11	-25.61	-26.18	-26.75	-27.31	-27.88	-28.44	-29.01	-29.58	-30.14	-30.71
12	-25.76	-26.34	-26.92	-27.49	-28.07	-28.64	-29.22	-29.80	-30.37	-30.95
13	-25.66	-26.25	-26.83	-27.41	-27.99	-28.57	-29.15	-29.73	-30.31	-30.89
14	-25.54	-26.12	-26.71	-27.29	-27.87	-28.46	-29.04	-29.62	-30.20	-30.79
15	-25.75	-26.34	-26.92	-27.51	-28.09	-28.68	-29.27	-29.85	-30.44	-31.02
16	-25.83	-26.41	-27.00	-27.58	-28.16	-28.75	-29.33	-29.91	-30.50	-31.08
17	-26.05	-26.63	-27.21	-27.79	-28.38	-28.96	-29.54	-30.12	-30.70	-31.28
18	-26.22	-26.80	-27.38	-27.95	-28.53	-29.11	-29.69	-30.26	-30.84	-31.42
19	-26.33	-26.90	-27.48	-28.05	-28.63	-29.20	-29.78	-30.35	-30.93	-31.50
20	-26.18	-26.76	-27.33	-27.90	-28.47	-29.04	-29.61	-30.19	-30.76	-31.33
21	-26.16	-26.73	-27.29	-27.86	-28.43	-28.99	-29.56	-30.13	-30.69	-31.26
22	-26.16	-26.73	-27.29	-27.86	-28.43	-28.99	-29.56	-30.13	-30.69	-31.26
23	-25.99	-26.55	-27.11	-27.67	-28.23	-28.78	-29.34	-29.90	-30.46	-31.02
24	-25.91	-26.46	-27.02	-27.58	-28.13	-28.69	-29.25	-29.80	-30.36	-30.92
25	-25.92	-26.48	-27.04	-27.60	-28.16	-28.72	-29.29	-29.85	-30.41	-30.97
26	-25.77	-26.34	-26.90	-27.46	-28.03	-28.59	-29.15	-29.72	-30.28	-30.84
27	-25.80	-26.36	-26.92	-27.48	-28.04	-28.60	-29.16	-29.72	-30.28	-30.85
28	-25.80	-26.36	-26.92	-27.48	-28.04	-28.60	-29.16	-29.72	-30.28	-30.85
29	-26.05	-26.61	-27.17	-27.73	-28.30	-28.86	-29.42	-29.98	-30.54	-31.10
30	-26.00	-26.56	-27.12	-27.68	-28.25	-28.81	-29.37	-29.93	-30.49	-31.05
31	-26.22	-26.79	-27.35	-27.91	-28.48	-29.04	-29.60	-30.17	-30.73	-31.29
32	-26.50	-27.06	-27.62	-28.19	-28.75	-29.31	-29.88	-30.44	-31.00	-31.57
33	-26.68	-27.25	-27.81	-28.37	-28.94	-29.50	-30.06	-30.62	-31.19	-31.75
34	-26.95	-27.51	-28.07	-28.63	-29.19	-29.76	-30.32	-30.88	-31.44	-32.00
35	-27.02	-27.58	-28.14	-28.71	-29.27	-29.83	-30.39	-30.95	-31.52	-32.08
36	-27.07	-27.63	-28.20	-28.76	-29.32	-29.88	-30.45	-31.01	-31.57	-32.14
37	-27.13	-27.70	-28.26	-28.83	-29.40	-29.96	-30.53	-31.10	-31.66	-32.23
38	-27.00	-27.57	-28.15	-28.72	-29.29	-29.86	-30.44	-31.01	-31.58	-32.15
39	-26.65	-27.23	-27.81	-28.38	-28.96	-29.53	-30.11	-30.69	-31.26	-31.84
40	-26.58	-27.16	-27.74	-28.32	-28.90	-29.48	-30.06	-30.64	-31.22	-31.80
41	-26.18	-26.77	-27.35	-27.93	-28.51	-29.10	-29.68	-30.26	-30.84	-31.43
42	-25.91	-26.50	-27.09	-27.68	-28.27	-28.86	-29.45	-30.04	-30.63	-31.22
43	-25.47	-26.06	-26.66	-27.25	-27.85	-28.45	-29.04	-29.64	-30.23	-30.83

GRAVITY DENSITY ANALYSIS

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.
LINE 20000



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*** LINE L20000 ***
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pg 191A

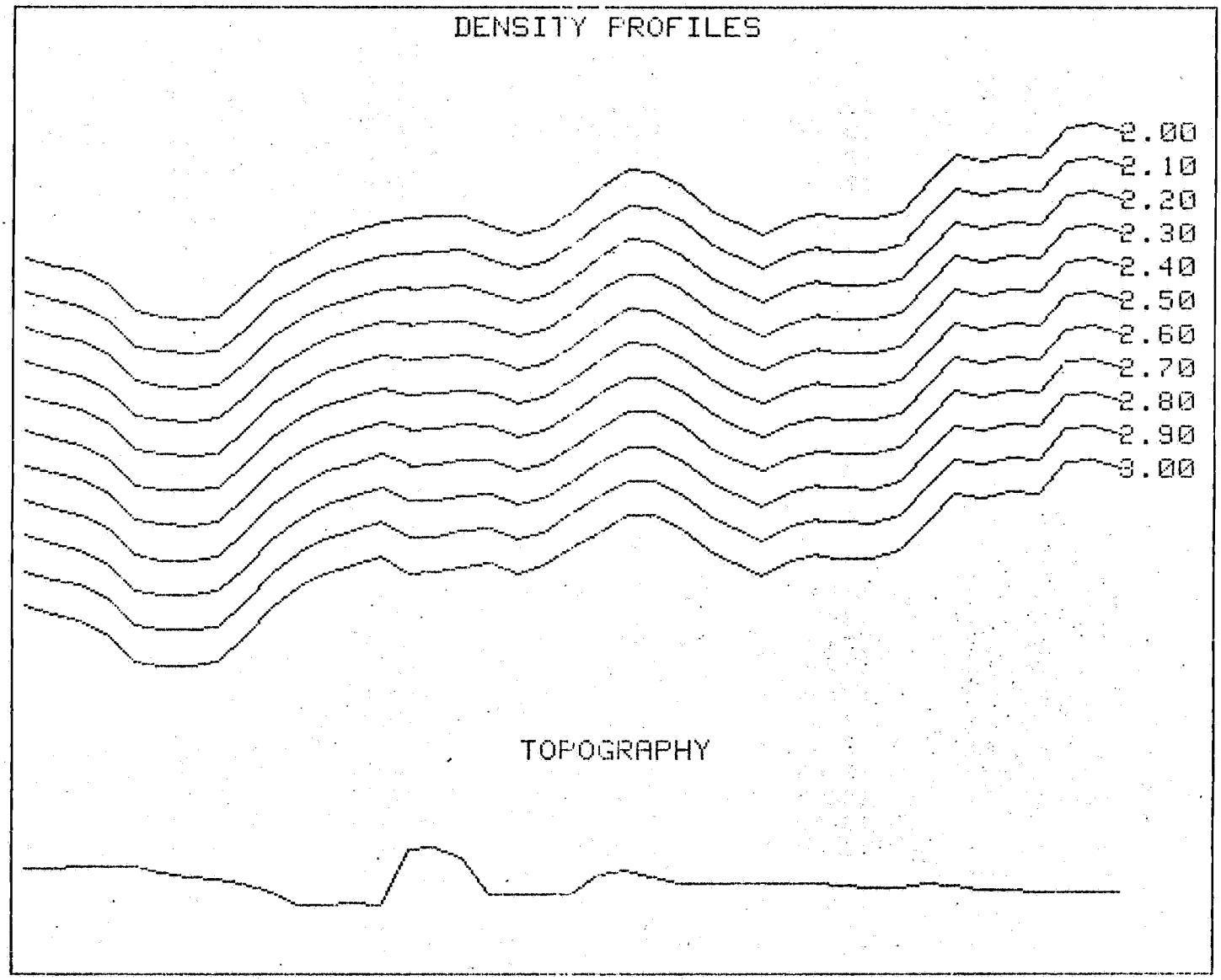
row #		STATION NUMBER	ELEVATION (meters)	BOUGUER GRAVITY ANOMALY (mgals)		Loop #
1		11600	128.52	-28.62		19
2		11800	128.95	-28.70		19
3		12000	130.63	-29.17		19
4		12200	132.25	-29.11		19
5		12400	132.81	-29.19		19
6		12600	131.33	-29.58		19
7		12800	131.23	-30.31		19
8		13000	131.86	-30.40		19
9		13200	132.06	-29.90		19
10		13400	131.99	-29.26		19
11		13600	131.60	-29.05		19
12		13800	130.90	-28.80		19
13		14000	130.21	-28.54		19
14		14200	129.60	-28.43		19
15		14400	128.29	-28.42		19
16		14600	128.57	-28.33		19
17		14800	128.45	-28.21		19
18		14900	127.46	-28.20		19
19		15000	127.89	-28.20		21
20		15200	127.81	-28.14		21
21		15400	127.15	-27.91		21
22		15600	128.46	-27.95		21
23	RPT	15600	128.46	-27.95	*	27
24		15800	128.26	-27.69		27
25		16000	128.73	-27.78		27
26		16200	129.35	-27.97		27
27		16400	129.35	-28.00		27
28		16600	129.28	-27.81		27
29		16800	129.27	-27.94		27
30		17000	129.47	-28.08		27
31		17200	129.73	-28.16		27
32		17400	129.72	-28.20		27
33		17600	129.64	-28.18		27
34		17800	129.35	-28.21		27
35		18000	129.09	-28.37		27
36		18200	128.93	-28.33		27
37		18400	128.57	-28.38		27
38		18600	128.42	-28.21		27
39		18800	128.68	-28.13		27
40		19000	129.09	-27.98		27
41		19200	129.62	-27.90		27
42		19400	131.48	-27.69		27
43		19600	134.30	-27.48		27

BOUGUER DENSITIES FOR p= 2 TO 2.9 gms/c.c. LINE 20000

ROW No.	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
1	-26.46	-27.00	-27.54	-28.08	-28.62	-29.16	-29.70	-30.23	-30.77	-31.31
2	-26.54	-27.08	-27.62	-28.16	-28.70	-29.24	-29.78	-30.32	-30.86	-31.41
3	-26.98	-27.52	-28.07	-28.62	-29.17	-29.71	-30.26	-30.81	-31.36	-31.90
4	-26.89	-27.44	-28.00	-28.55	-29.11	-29.66	-30.21	-30.77	-31.32	-31.88
5	-26.97	-27.52	-28.08	-28.64	-29.19	-29.75	-30.31	-30.86	-31.42	-31.98
6	-27.38	-27.93	-28.48	-29.03	-29.58	-30.13	-30.68	-31.24	-31.79	-32.34
7	-28.11	-28.66	-29.21	-29.76	-30.31	-30.86	-31.41	-31.96	-32.51	-33.06
8	-28.19	-28.74	-29.29	-29.85	-30.40	-30.95	-31.50	-32.06	-32.61	-33.16
9	-27.69	-28.24	-28.80	-29.35	-29.90	-30.46	-31.01	-31.56	-32.12	-32.67
10	-27.05	-27.60	-28.16	-28.71	-29.26	-29.81	-30.37	-30.92	-31.47	-32.03
11	-26.84	-27.40	-27.95	-28.50	-29.05	-29.60	-30.15	-30.71	-31.26	-31.81
12	-26.61	-27.16	-27.71	-28.25	-28.80	-29.35	-29.90	-30.45	-31.00	-31.55
13	-26.36	-26.91	-27.45	-28.00	-28.54	-29.09	-29.64	-30.18	-30.73	-31.27
14	-26.26	-26.80	-27.34	-27.89	-28.43	-28.97	-29.52	-30.06	-30.60	-31.15
15	-26.27	-26.81	-27.34	-27.88	-28.42	-28.96	-29.50	-30.03	-30.57	-31.11
16	-26.18	-26.72	-27.26	-27.79	-28.33	-28.87	-29.41	-29.95	-30.49	-31.03
17	-26.05	-26.59	-27.13	-27.67	-28.21	-28.75	-29.28	-29.82	-30.36	-30.90
18	-26.07	-26.60	-27.14	-27.67	-28.20	-28.74	-29.27	-29.81	-30.34	-30.87
19	-26.06	-26.59	-27.13	-27.67	-28.20	-28.74	-29.27	-29.81	-30.34	-30.88
20	-26.00	-26.53	-27.07	-27.61	-28.14	-28.68	-29.21	-29.75	-30.28	-30.82
21	-25.78	-26.31	-26.84	-27.38	-27.91	-28.44	-28.97	-29.51	-30.04	-30.57
22	-25.79	-26.33	-26.87	-27.41	-27.95	-28.48	-29.02	-29.56	-30.10	-30.64
23	-25.79	-26.33	-26.87	-27.41	-27.95	-28.48	-29.02	-29.56	-30.10	-30.64
24	-25.54	-26.07	-26.61	-27.15	-27.69	-28.22	-28.76	-29.30	-29.84	-30.37
25	-25.62	-26.16	-26.70	-27.24	-27.78	-28.32	-28.86	-29.40	-29.94	-30.46
26	-25.80	-26.34	-26.89	-27.43	-27.97	-28.51	-29.05	-29.60	-30.14	-30.68
27	-25.83	-26.37	-26.92	-27.46	-28.00	-28.54	-29.09	-29.63	-30.17	-30.71
28	-25.65	-26.19	-26.73	-27.27	-27.81	-28.36	-28.90	-29.44	-29.98	-30.52
29	-25.77	-26.31	-26.86	-27.40	-27.94	-28.48	-29.02	-29.56	-30.11	-30.65
30	-25.91	-26.45	-27.00	-27.54	-28.08	-28.62	-29.17	-29.71	-30.25	-30.79
31	-25.98	-26.53	-27.07	-27.62	-28.16	-28.70	-29.25	-29.79	-30.33	-30.89
32	-26.03	-26.57	-27.12	-27.66	-28.20	-28.75	-29.29	-29.83	-30.38	-30.92
33	-26.01	-26.55	-27.09	-27.64	-28.18	-28.72	-29.27	-29.81	-30.35	-30.90
34	-26.04	-26.59	-27.13	-27.67	-28.21	-28.75	-29.30	-29.84	-30.38	-30.92
35	-26.20	-26.75	-27.29	-27.83	-28.37	-28.91	-29.45	-29.99	-30.53	-31.07
36	-26.17	-26.71	-27.25	-27.79	-28.33	-28.87	-29.41	-29.95	-30.49	-31.03
37	-26.22	-26.76	-27.30	-27.84	-28.38	-28.92	-29.46	-29.99	-30.53	-31.07
38	-26.05	-26.59	-27.13	-27.67	-28.21	-28.75	-29.28	-29.82	-30.36	-30.90
39	-25.98	-26.52	-27.06	-27.59	-28.13	-28.67	-29.21	-29.75	-30.29	-30.83
40	-25.81	-26.36	-26.90	-27.44	-27.98	-28.52	-29.06	-29.60	-30.14	-30.68
41	-25.73	-26.27	-26.81	-27.36	-27.90	-28.44	-28.99	-29.53	-30.07	-30.62
42	-25.48	-26.03	-26.58	-27.14	-27.69	-28.24	-28.79	-29.34	-29.89	-30.44
43	-25.22	-25.79	-26.35	-26.91	-27.48	-28.04	-28.60	-29.16	-29.73	-30.29

GRAVITY DENSITY ANALYSIS

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.
LINE 22000



****
*** LINE L22000 ***
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193 A

row #		STATION NUMBER	ELEVATION (meters)	BOUGUER GRAVITY ANOMALY (mgals)		Loop #
1		11800	126.79	-28.77		24
2		12000	126.94	-28.89		24
3		12200	127.08	-28.98		24
4		12400	127.08	-29.21		24
5		12600	127.11	-29.59		24
6		12800	126.34	-29.67		24
7		13000	125.56	-29.69		24
8		13200	125.24	-29.65		24
9		13400	124.60	-29.30		24
10		13600	123.39	-28.88		24
11		13800	121.42	-28.61		24
12		14000	121.56	-28.40		24
13		14200	121.71	-28.27		23
14		14400	121.56	-28.14		23
15		14600	129.62	-28.20		23
16	RPT	14600	129.62	-28.21	*	25
17		14800	130.12	-28.18		25
18		15000	128.40	-28.14		25
19		15200	122.90	-28.21		25
20		15400	123.09	-28.36		25
21		15600	123.05	-28.26		25
22		15800	123.20	-28.00		25
23		16000	126.08	-27.67		25
24		16200	126.68	-27.43		25
25		16400	125.68	-27.44		25
26		16600	124.74	-27.65		25
27		16800	124.72	-27.98		25
28		17000	124.69	-28.19		25
29		17200	124.56	-28.37		25
30		17400	124.54	-28.16		25
31		17600	124.68	-28.05		25
32	RPT	17600	124.68	-28.07	*	26
33		17800	124.37	-28.10		26
34		18000	124.22	-28.11		26
35		18200	124.02	-28.01		26
36		18400	124.58	-27.55		26
37		18600	124.24	-27.14		26
38		18800	123.86	-27.23		26
39		19000	123.59	-27.12		26
40		19200	123.40	-27.17		26
41		19400	123.42	-26.70		26
42		19600	123.53	-26.63		26
43		19800	123.56	-26.77		26

BOUGUER DENSITIES FOR p= 2 TO 2.9 gms/c.c. LINE 22000

ROW No.	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
1	-26.65	-27.18	-27.71	-28.24	-28.77	-29.30	-29.84	-30.37	-30.90	-31.43
2	-26.77	-27.30	-27.83	-28.36	-28.89	-29.43	-29.96	-30.49	-31.02	-31.55
3	-26.85	-27.39	-27.92	-28.45	-28.98	-29.52	-30.05	-30.58	-31.12	-31.65
4	-27.08	-27.61	-28.14	-28.67	-29.21	-29.74	-30.27	-30.80	-31.34	-31.87
5	-27.46	-28.00	-28.53	-29.06	-29.59	-30.13	-30.66	-31.19	-31.73	-32.26
6	-27.55	-28.08	-28.61	-29.14	-29.67	-30.20	-30.73	-31.26	-31.79	-32.32
7	-27.59	-28.11	-28.64	-29.17	-29.69	-30.22	-30.74	-31.27	-31.80	-32.32
8	-27.55	-28.07	-28.60	-29.12	-29.65	-30.17	-30.70	-31.22	-31.75	-32.27
9	-27.21	-27.73	-28.26	-28.78	-29.30	-29.82	-30.35	-30.87	-31.39	-31.91
10	-26.81	-27.33	-27.85	-28.37	-28.88	-29.40	-29.92	-30.43	-30.95	-31.47
11	-26.58	-27.09	-27.59	-28.10	-28.61	-29.12	-29.63	-30.14	-30.65	-31.16
12	-26.36	-26.87	-27.38	-27.89	-28.40	-28.91	-29.42	-29.93	-30.44	-30.95
13	-26.23	-26.74	-27.25	-27.76	-28.27	-28.78	-29.29	-29.80	-30.31	-30.82
14	-26.10	-26.61	-27.12	-27.63	-28.14	-28.65	-29.16	-29.67	-30.18	-30.69
15	-26.02	-26.57	-27.11	-27.65	-28.20	-28.74	-29.28	-29.83	-30.37	-30.91
16	-26.04	-26.58	-27.12	-27.67	-28.21	-28.75	-29.30	-29.84	-30.38	-30.93
17	-26.00	-26.54	-27.09	-27.63	-28.18	-28.72	-29.27	-29.81	-30.36	-30.90
18	-25.99	-26.53	-27.06	-27.60	-28.14	-28.68	-29.22	-29.75	-30.29	-30.83
19	-26.15	-26.67	-27.18	-27.70	-28.21	-28.73	-29.25	-29.76	-30.28	-30.79
20	-26.30	-26.82	-27.33	-27.85	-28.36	-28.88	-29.40	-29.91	-30.43	-30.94
21	-26.20	-26.71	-27.23	-27.75	-28.26	-28.78	-29.29	-29.81	-30.32	-30.84
22	-25.93	-26.45	-26.96	-27.48	-28.00	-28.51	-29.03	-29.55	-30.06	-30.58
23	-25.56	-26.09	-26.62	-27.14	-27.67	-28.20	-28.73	-29.26	-29.79	-30.31
24	-25.30	-25.83	-26.36	-26.90	-27.43	-27.96	-28.49	-29.02	-29.55	-30.08
25	-25.33	-25.86	-26.39	-26.92	-27.44	-27.97	-28.50	-29.02	-29.55	-30.08
26	-25.56	-26.08	-26.60	-27.13	-27.65	-28.17	-28.69	-29.22	-29.74	-30.26
27	-25.89	-26.41	-26.93	-27.45	-27.98	-28.50	-29.02	-29.54	-30.07	-30.59
28	-26.10	-26.62	-27.14	-27.66	-28.19	-28.71	-29.23	-29.75	-30.28	-30.80
29	-26.28	-26.80	-27.32	-27.84	-28.37	-28.89	-29.41	-29.93	-30.45	-30.98
30	-26.07	-26.59	-27.11	-27.63	-28.16	-28.68	-29.20	-29.72	-30.24	-30.77
31	-25.96	-26.48	-27.00	-27.52	-28.05	-28.57	-29.09	-29.61	-30.14	-30.66
32	-25.98	-26.50	-27.02	-27.55	-28.07	-28.59	-29.11	-29.64	-30.16	-30.68
33	-26.02	-26.54	-27.06	-27.58	-28.10	-28.62	-29.14	-29.66	-30.19	-30.71
34	-26.03	-26.55	-27.07	-27.59	-28.11	-28.63	-29.15	-29.67	-30.19	-30.71
35	-25.93	-26.45	-26.97	-27.49	-28.01	-28.53	-29.05	-29.57	-30.09	-30.61
36	-25.46	-25.98	-26.50	-27.02	-27.55	-28.07	-28.59	-29.11	-29.63	-30.16
37	-25.06	-25.58	-26.10	-26.62	-27.14	-27.66	-28.18	-28.70	-29.22	-29.74
38	-25.15	-25.67	-26.19	-26.71	-27.23	-27.75	-28.27	-28.78	-29.30	-29.82
39	-25.05	-25.57	-26.08	-26.60	-27.12	-27.64	-28.16	-28.67	-29.19	-29.71
40	-25.10	-25.62	-26.13	-26.65	-27.17	-27.69	-28.20	-28.72	-29.24	-29.75
41	-24.63	-25.15	-25.66	-26.18	-26.70	-27.21	-27.73	-28.25	-28.77	-29.28
42	-24.56	-25.08	-25.60	-26.11	-26.63	-27.15	-27.67	-28.19	-28.70	-29.22
43	-24.69	-25.21	-25.73	-26.25	-26.77	-27.28	-27.80	-28.32	-28.84	-29.36

********** DATA REDUCTION PARAMETERS **********

194 A

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.

Bouguer Reduction Density is 2.4 gm/cc

Base Line Bearing is 0 degrees EAST

The Known Point of 30.2185 degrees Latitude is located
at Line Number 16000 and Station Number 12000

The Base Station Observed Gravity Values are:

BASE #	OBSERVED GRAVITY (mgals)
1	979312.5
2	979298.54
3	979301.33
4	979296.53
5	979298.55
6	979300.83
7	979303.27
8	979303.72
9	979307.7
10	979294.07
11	979293.56
12	979297.64
13	979296.86
14	979297.29
15	979297.17
16	979295.44
17	979297.34
18	979297.54

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******** CATALOG OF RAW FIELD DATA ********

LOOP# 1	BASE TIE FROM RAILWAY BASE	TO GRID BASE 1
LOOP# 2	LINE 16000N	FROM 12000E TO 16000E
	16000E Becomes Base 3	
LOOP# 3	LINE 16000N	FROM 10400E TO 11800E
LOOP# 4	LINE 16000N	FROM 16200E TO 18100E
	Creek at 17000E	
LOOP# 5	LINE 16000N	FROM 18200E TO 20400E
	Fence (no gate) at 19500E	
LOOP# 6	Base ties	
LOOP# 7	LINE 14000N	FRO 15000E TO 18000E
	Tracks at 16800 & 17300E	
LOOP# 8	LINE 14000N	FROM 18200E TO 20400E
	Strezlecki Track at 19200E	
LOOP# 9	LINE 14000N	FROM 15000E (New base) TO
	13000E	
LOOP# 10	LINE 14000N	FROM 12800E TO 11400E
LOOP# 11	Base Ties	
LOOP# 12	LINE 12000N	FROM 15000E TO 19000E
	Highway at 16000E	
LOOP# 13	LINE 12000N	FROM 14800E TO 11000E
LOOP# 14	LINE 10000N	FROM 15000E TO 11000E
	Highway at 11300E	
LOOP# 15	LINE 10000N	FROM 15200E TO 19000E
LOOP# 16	Base tie	Base 9 TO Base 10
LOOP# 17	Base tie	Base 10 TO Base 11
LOOP# 18	LINE 18000N	FROM 15000E TO 11000E
	Track at 11600E	
LOOP# 19	LINE 20000N	FROM 14900E TO 11600E
	Track near 11600E	
LOOP# 20	LINE 18000N	FROM 15000E TO 16000E
	Creek at 15600E	
LOOP# 21	LINE 20000N	FROM 15000E TO 15600E
	Creeks at 15000 & 15400E	
LOOP# 22	BASE TIE	
LOOP# 23	BASE TIES ACROSS CREEK	
LOOP# 24	LINE 22000N	FROM 14000E TO 11800E
	Track at 11800E	
LOOP# 25	LINE 22000N	FROM 14600E TO 17600E
	14800E is near a track	
LOOP# 26	LINE 22000N	FROM 17600E TO 19800E
	18200E is near a new fence	
LOOP# 27	LINE 20000N	FROM 15600E TO 19600E
LOOP# 28	LINE 18000N	FROM 16000E TO 19000E
	18200E near old fence	
LOOP# 30	BASE TIE	FROM BASE 2 TO BASE 4
LOOP# 31	BASE TIE	
LOOP# 33	BASE TIE	

****
* SOLO *
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****
LOOP NUMBER 1
****

1954

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: BASE TIE FROM RAILWAY BASE
TO GRID BASE 1

Loop Time: .40 Hours
Loop Drift: .010 Mgals
Drift Rate: .025 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 21/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 01		2774.730	1635		979312.50			
14600	17400	2760.960	1647	0100.00	979298.54	30.23110	979355.81	-36.47
BASE # 01		2774.740	1659		979312.50			

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****
* SOLO *
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****
LOOP NUMBER 2
****

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

196

Coverage: LINE 16000N
FROM 12000E TO 16000E
16000E Becomes Base 3

Loop Time: 2.07 Hours
Loop Drift: .071 Mgals
Drift Rate: .034 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 11/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 03		2762.250	1043		979301.33			
16000	12000	2762.250	1044	0127.12	979301.33	30.21850	979354.83	-27.06
16000	12200	2762.230	1050	0128.16	979301.31	30.21850	979354.83	-26.86
16000	12400	2761.540	1055	0131.79	979300.60	30.21850	979354.83	-26.81
16000	12600	2761.780	1102	0128.98	979300.84	30.21850	979354.83	-27.15
16000	12800	2762.000	1107	0128.89	979301.06	30.21850	979354.83	-26.95
16000	13000	2762.000	1112	0129.36	979301.06	30.21850	979354.83	-26.86
16000	13200	2761.130	1118	0132.29	979300.18	30.21850	979354.83	-27.13
16000	13400	2760.590	1123	0134.24	979299.62	30.21850	979354.83	-27.28
16000	13600	2759.730	1129	0137.37	979298.75	30.21850	979354.83	-27.50
16000	13800	2759.230	1135	0138.80	979298.24	30.21850	979354.83	-27.71
16000	14000	2759.020	1139	0138.71	979298.02	30.21850	979354.83	-27.95
16000	14200	2758.460	1146	0140.36	979297.45	30.21850	979354.83	-28.18
16000	14400	2758.390	1152	0140.63	979297.38	30.21850	979354.83	-28.20
16000	14600	2758.450	1156	0141.11	979297.44	30.21850	979354.83	-28.04
16000	14800	2758.600	1203	0141.52	979297.59	30.21850	979354.83	-27.80
16000	15000	2758.660	1207	0141.74	979297.64	30.21850	979354.83	-27.70
16000	15200	2758.770	1212	0140.87	979297.75	30.21850	979354.83	-27.77
16000	15400	2758.760	1216	0140.47	979297.74	30.21850	979354.83	-27.87
16000	15600	2758.310	1220	0140.50	979297.28	30.21850	979354.83	-28.32
16000	15800	2758.020	1225	0140.63	979296.99	30.21850	979354.83	-28.59
16000	16000	2757.580	1232	0139.18	979296.54	30.21850	979354.83	-29.34
BASE # 03		2762.320	1247		979301.33			

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* SOLO *
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****
LOOP NUMBER 3
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1964

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 16000N
FROM 10400E TO 11800E

Loop Time: 1.83 Hours
Loop Drift: .030 Mgals
Drift Rate: .017 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 14/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 03		2762.500	0948		979301.33			
16000	10400	2763.020	1058	0127.27	979301.84	30.21850	979354.83	-26.52
16000	10600	2763.100	1104	0126.92	979301.92	30.21850	979354.83	-26.51
16000	10800	2762.555	1108	0128.70	979301.36	30.21850	979354.83	-26.69
16000	11000	2761.990	1113	0129.97	979300.79	30.21850	979354.83	-27.00
16000	11200	2762.800	1119	0125.44	979301.61	30.21850	979354.83	-27.13
16000	11400	2762.660	1123	0125.58	979301.47	30.21850	979354.83	-27.24
16000	11600	2762.110	1129	0126.16	979300.91	30.21850	979354.83	-27.68
16000	11800	2762.050	1133	0126.47	979300.84	30.21850	979354.83	-27.67
BASE # 03		2762.530	1138		979301.33			

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* SOLO *
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****
LOOP NUMBER 4
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 16000N
FROM 16200E TO 18100E
Creek at 17000E

Loop Time: 2.17 Hours
Loop Drift: .020 Mgals
Drift Rate: .009 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 11/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 04		2757.610	1401		979296.53			
16000	16200	2757.520	1407	0139.26	979296.44	30.21850	979354.83	-29.42
16000	16400	2757.140	1412	0139.18	979296.05	30.21850	979354.83	-29.82
16000	16600	2757.120	1432	0138.89	979296.03	30.21850	979354.83	-29.91
16000	16800	2757.270	1440	0139.42	979296.18	30.21850	979354.83	-29.65
16000	17000	2756.380	1450	0143.85	979295.28	30.21850	979354.83	-29.63
16000	17200	2756.190	1457	0143.70	979295.08	30.21850	979354.83	-29.85
16000	17200	2756.190	1518	0143.70	979295.08	30.21850	979354.83	-29.86
16000	17400	2755.350	1527	0146.49	979294.23	30.21850	979354.83	-30.13
16000	17600	2754.990	1532	0147.51	979293.86	30.21850	979354.83	-30.28
16000	17800	2754.470	1537	0148.10	979293.33	30.21850	979354.83	-30.69
16000	18000	2754.680	1544	0145.57	979293.54	30.21850	979354.83	-31.00
16000	18100	2754.700	1549	0146.13	979293.56	30.21850	979354.83	-30.87
16000	17200	2756.190	1557	0143.70	979295.07	30.21850	979354.83	-29.86
BASE # 04		2757.630	1611		979296.53			

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* SOLO *
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****
LOOP NUMBER 5
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

197 A

Coverage: LINE 16000N
FROM 18200E TO 20400E
Fence (no gate) at 19500E

Loop Time: 1.97 Hours
Loop Drift: .101 Mgals
Drift Rate: .052 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 18/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 11		2755.500	1240		979293.56			
16000	18200	2755.050	1247	0148.34	979293.10	30.21850	979354.83	-30.87
16000	18400	2754.100	1252	0153.95	979292.13	30.21850	979354.83	-30.67
16000	18600	2753.880	1258	0155.96	979291.90	30.21850	979354.83	-30.48
16000	18800	2754.330	1303	0151.51	979292.35	30.21850	979354.83	-30.96
16000	19000	2753.620	1307	0153.32	979291.63	30.21850	979354.83	-31.30
16000	19200	2753.250	1312	0157.05	979291.25	30.21850	979354.83	-30.91
16000	19400	2754.270	1317	0158.88	979292.28	30.21850	979354.83	-29.50
16000	19600	2754.230	1328	0160.11	979292.23	30.21850	979354.83	-29.29
16000	19800	2756.000	1332	0157.70	979294.02	30.21850	979354.83	-27.98
16000	20000	2758.340	1336	0156.04	979296.39	30.21850	979354.83	-25.98
16000	20200	2758.730	1340	0156.42	979296.78	30.21850	979354.83	-25.51
16000	20400	2759.050	1345	0157.85	979297.10	30.21850	979354.83	-24.89
BASE # 11		2755.600	1438		979293.56			

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* SOLO *
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****
LOOP NUMBER 6
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.H.

198

Coverage: Base ties

Loop Time: .70 Hours
Loop Drift: .010 Mgals
Drift Rate: .014 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 12/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 02		2759.530	0855		979298.54			
16000	16000	2757.560	0904	0124.70	979296.54	30.21850	979354.83	-32.35
16000	15000	2758.650	0912	0127.27	979297.64	30.21850	979354.83	-30.71
14900	15000	2760.380	0927	0143.83	979299.39	30.22840	979355.60	-26.29
BASE # 02		2759.540	0937		979298.54			

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* SOLO *
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****
LOOP NUMBER 7
****

1984

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 14000N
FRO 15000E TO 18000E
Tracks at 16800 & 17800E

Loop Time: 2.03 Hours
Loop Drift: .071 Mgals
Drift Rate: .035 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 12/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 02		2759.540	0937		979298.54			
14900	15000	2760.380	0948	0143.83	979299.30	30.22840	979355.60	-26.30
14000	15000	2761.820	1004	0147.30	979300.83	30.23650	979356.24	-24.76
14000	15200	2761.740	1012	0148.12	979300.75	30.23650	979356.24	-24.68
14000	15400	2761.610	1018	0148.52	979300.61	30.23650	979356.24	-24.73
14000	15600	2761.380	1023	0149.22	979300.38	30.23650	979356.24	-24.82
14000	15800	2761.210	1028	0149.66	979300.20	30.23650	979356.24	-24.90
14000	16000	2761.200	1034	0149.06	979300.19	30.23650	979356.24	-25.04
14000	16200	2761.110	1039	0149.01	979300.09	30.23650	979356.24	-25.15
14000	16400	2761.000	1044	0148.90	979299.98	30.23650	979356.24	-25.28
14000	16600	2760.950	1050	0148.36	979299.93	30.23650	979356.24	-25.45
14000	16800	2760.980	1057	0146.87	979299.95	30.23650	979356.24	-25.73
14000	17000	2761.030	1105	0146.92	979300.00	30.23650	979356.24	-25.68
14000	17200	2760.960	1110	0147.31	979299.92	30.23650	979356.24	-25.67
14000	17400	2760.850	1115	0147.66	979299.81	30.23650	979356.24	-25.71
14000	17600	2760.410	1119	0148.02	979299.36	30.23650	979356.24	-26.09
14000	17800	2759.910	1123	0148.31	979298.85	30.23650	979356.24	-26.53
14000	18000	2759.610	1130	0148.55	979298.55	30.23650	979356.24	-26.79
BASE # 02		2759.610	1139		979298.54			

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* SOLO *
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****
LOOP NUMBER 8
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 14000N
FROM 18200E TO 20400E
Strezlecki Track at 19200E

Loop Time: 2.08 Hours
Loop Drift: .081 Mgals
Drift Rate: .039 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 12/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 05		2759.650	1234		979298.55			
14000	18200	2759.650	1239	0148.70	979298.55	30.23650	979356.24	-26.76
14000	18400	2760.370	1249	0146.88	979299.27	30.23650	979356.24	-26.41
14000	18600	2759.940	1257	0149.23	979298.83	30.23650	979356.24	-26.37
14000	18600	2759.950	1311	0149.23	979298.83	30.23650	979356.24	-26.37
14000	18800	2758.330	1317	0157.18	979297.18	30.23650	979356.24	-26.36
14000	19000	2759.450	1326	0152.79	979298.31	30.23650	979356.24	-26.14
14000	19200	2760.360	1333	0149.38	979299.23	30.23650	979356.24	-25.93
14000	19400	2760.920	1352	0148.95	979299.79	30.23650	979356.24	-25.47
14000	19600	2761.840	1358	0146.36	979300.71	30.23650	979356.24	-25.08
14000	19800	2761.410	1403	0148.74	979300.28	30.23650	979356.24	-25.02
14000	20000	2761.290	1411	0149.13	979300.15	30.23650	979356.24	-25.07
14000	20200	2761.100	1417	0149.54	979299.95	30.23650	979356.24	-25.18
14000	20400	2760.380	1423	0150.87	979299.22	30.23650	979356.24	-25.64
BASE # 05		2759.730	1439		979298.55			

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* SOLO *
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****
LOOP NUMBER 9
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199 A

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 14000N
FROM 15000E (New base) TO
13000E

Loop Time: 1.48 Hours
Loop Drift: .030 Mgals
Drift Rate: .020 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 12/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 02		2759.730	1449		979298.54			
14000	15000	2762.000	1503	0147.30	979300.84	30.23650	979356.24	-24.76
14000	14800	2762.250	1508	0146.59	979301.09	30.23650	979356.24	-24.66
14000	14600	2762.440	1514	0145.78	979301.28	30.23650	979356.24	-24.64
14000	14400	2762.480	1518	0145.13	979301.32	30.23650	979356.24	-24.73
14000	14200	2762.470	1523	0144.44	979301.30	30.23650	979356.24	-24.89
14000	14000	2763.240	1528	0140.28	979302.08	30.23650	979356.24	-24.97
14000	13800	2762.330	1534	0144.11	979301.16	30.23650	979356.24	-25.10
14000	13600	2762.450	1539	0143.49	979301.28	30.23650	979356.24	-25.11
14000	13400	2762.570	1543	0142.95	979301.40	30.23650	979356.24	-25.10
14000	13200	2764.140	1550	0135.86	979302.99	30.23650	979356.24	-24.99
14000	13000	2764.420	1555	0133.48	979303.27	30.23650	979356.24	-25.20
14000	15000	2762.020	1606	0147.30	979300.83	30.23650	979356.24	-24.76
BASE # 02		2759.760	1618		979298.54			

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* SOLO *
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****
LOOP NUMBER 10
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

200

Coverage: LINE 14000N
FROM 12800E TO 11400E

Loop Time: 1.90 Hours
Loop Drift: .111 Mgals
Drift Rate: .059 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 13/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 07		2764.400	1230		979303.27			
14000	12800	2764.510	1236	0132.68	979303.38	30.23650	979356.24	-25.26
14000	12600	2764.400	1241	0134.04	979303.26	30.23650	979356.24	-25.10
14000	12400	2764.870	1246	0134.74	979303.73	30.23650	979356.24	-24.48
14000	12200	2765.180	1252	0135.68	979304.04	30.23650	979356.24	-23.98
14000	12000	2764.010	1258	0141.91	979302.85	30.23650	979356.24	-23.87
14000	11800	2764.820	1304	0139.92	979303.66	30.23650	979356.24	-23.47
14000	11600	2765.610	1310	0138.85	979304.46	30.23650	979356.24	-22.90
14000	11400	2766.530	1315	0135.80	979305.38	30.23650	979356.24	-22.60
BASE # 07		2764.510	1424		979303.27			

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* SOLO *
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****
LOOP NUMBER 11
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

200 A

Coverage: Base Ties

Loop Time: 1.48 Hours
Loop Drift: -.081 Mgals
Drift Rate: -.055 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 15/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 06		2762.200	0721		979300.83			
12000	15000	2765.030	0747	0150.77	979303.72	30.25450	979357.65	-22.56
BASE # 06		2762.120	0850		979300.83			

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* SOLO *
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****
LOOP NUMBER 12
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 12000N
FROM 15000E TO 13000E
Highway at 16000E

Loop Time: 2.33 Hours
Loop Drift: -.132 Mgals
Drift Rate: -.056 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 15/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 08		2764.950	0905		979303.72			
12000	15000	2764.950	0906	0150.77	979303.72	30.25450	979357.65	-22.57
12000	15200	2764.790	0914	0151.85	979303.57	30.25450	979357.65	-22.50
12000	15400	2764.370	0920	0153.31	979303.15	30.25450	979357.65	-22.61
12000	15600	2764.260	0926	0153.49	979303.04	30.25450	979357.65	-22.68
12000	15800	2764.200	0933	0153.67	979302.99	30.25450	979357.65	-22.70
12000	16000	2764.020	0941	0154.01	979302.81	30.25450	979357.65	-22.80
12000	16200	2763.980	0949	0154.14	979302.78	30.25450	979357.65	-22.81
12000	16400	2764.390	0954	0153.16	979303.20	30.25450	979357.65	-22.59
12000	16600	2764.980	0959	0152.04	979303.80	30.25450	979357.65	-22.22
12000	16800	2765.050	1005	0151.87	979303.88	30.25450	979357.65	-22.18
12000	17000	2764.230	1011	0155.04	979303.05	30.25450	979357.65	-22.35
12000	17200	2763.770	1016	0156.08	979302.59	30.25450	979357.65	-22.59
12000	17400	2763.780	1023	0156.20	979302.61	30.25450	979357.65	-22.55
12000	17600	2763.510	1029	0157.39	979302.34	30.25450	979357.65	-22.57
12000	17800	2763.560	1034	0157.72	979302.40	30.25450	979357.65	-22.45
12000	18000	2763.850	1039	0157.03	979302.69	30.25450	979357.65	-22.29
12000	18200	2764.350	1045	0155.84	979303.21	30.25450	979357.65	-22.03
12000	18400	2764.560	1050	0155.93	979303.42	30.25450	979357.65	-21.79
12000	18600	2764.640	1054	0155.82	979303.51	30.25450	979357.65	-21.73
12000	18800	2764.450	1058	0156.40	979303.32	30.25450	979357.65	-21.80
12000	19000	2764.360	1103	0156.52	979303.23	30.25450	979357.65	-21.86
12000	17000	2764.210	1113	0155.04	979303.09	30.25450	979357.65	-22.31
BASE # 08		2764.820	1125		979303.72			

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* SOLO *
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****
LOOP NUMBER 13
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201A

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 12000N
FROM 14800E TO 11000E

Loop Time: 2.23 Hours
Loop Drift: .182 Mgals
Drift Rate: .082 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 15/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 08		2764.890	1210		979303.72			
12000	14800	2764.640	1215	0151.59	979303.46	30.25450	979357.65	-22.66
12000	14600	2766.280	1221	0142.65	979305.11	30.25450	979357.65	-22.86
12000	14400	2767.430	1226	0139.73	979306.27	30.25450	979357.65	-22.31
12000	14200	2767.760	1231	0139.23	979306.60	30.25450	979357.65	-22.09
12000	14000	2767.280	1237	0141.92	979306.11	30.25450	979357.65	-22.02
12000	13800	2767.000	1243	0143.45	979305.81	30.25450	979357.65	-22.00
12000	13600	2765.750	1250	0149.55	979304.54	30.25450	979357.65	-22.00
12000	13400	2765.900	1255	0148.76	979304.68	30.25450	979357.65	-22.02
12000	13200	2767.040	1300	0143.52	979305.83	30.25450	979357.65	-21.96
12000	13000	2767.170	1305	0142.69	979305.96	30.25450	979357.65	-22.01
12000	12800	2766.910	1309	0144.17	979305.69	30.25450	979357.65	-21.97
12000	12600	2766.990	1314	0144.83	979305.76	30.25450	979357.65	-21.76
12000	12400	2767.430	1319	0144.01	979306.20	30.25450	979357.65	-21.49
12000	12200	2767.760	1323	0143.25	979306.53	30.25450	979357.65	-21.32
12000	12000	2768.470	1329	0140.08	979307.24	30.25450	979357.65	-21.27
12000	11800	2768.910	1340	0137.58	979307.67	30.25450	979357.65	-21.36
12000	11600	2767.920	1344	0143.55	979306.66	30.25450	979357.65	-21.13
12000	11400	2769.360	1349	0137.93	979308.11	30.25450	979357.65	-20.84
12000	11200	2770.210	1354	0134.46	979308.97	30.25450	979357.65	-20.71
12000	11000	2770.760	1359	0133.37	979309.52	30.25450	979357.65	-20.39
BASE # 08		2765.070	1424		979303.72			

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* SOLO *
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****
LOOP NUMBER 14
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

202

Coverage: LINE 10000N
FROM 15000E TO 11000E
Highway at 11300E

Loop Time: 2.05 Hours
Loop Drift: 0.000 Mgals
Drift Rate: 0.000 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 18/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 09		2769.520	0659		979307.70			
10000	15000	2769.520	0700	0153.14	979307.70	30.27250	979359.06	-19.50
10000	14800	2769.020	0706	0155.50	979307.19	30.27250	979359.06	-19.52
10000	14600	2770.060	0713	0150.57	979308.25	30.27250	979359.06	-19.49
10000	14400	2768.640	0718	0156.18	979306.81	30.27250	979359.06	-19.76
10000	14200	2768.730	0722	0156.14	979306.90	30.27250	979359.06	-19.68
10000	14000	2768.890	0727	0156.13	979307.06	30.27250	979359.06	-19.52
10000	13800	2768.990	0732	0155.54	979307.16	30.27250	979359.06	-19.54
10000	13600	2769.130	0736	0154.77	979307.30	30.27250	979359.06	-19.56
10000	13400	2769.280	0740	0153.85	979307.46	30.27250	979359.06	-19.60
10000	13200	2769.320	0744	0153.52	979307.50	30.27250	979359.06	-19.63
10000	13000	2769.440	0749	0152.31	979307.62	30.27250	979359.06	-19.76
10000	12800	2769.570	0754	0150.86	979307.75	30.27250	979359.06	-19.93
10000	12600	2769.960	0758	0148.83	979308.15	30.27250	979359.06	-19.96
10000	12400	2769.750	0803	0150.24	979307.93	30.27250	979359.06	-19.88
10000	12200	2769.550	0808	0151.18	979307.73	30.27250	979359.06	-19.88
10000	12000	2770.480	0818	0146.47	979308.67	30.27250	979359.06	-19.92
10000	11800	2770.100	0825	0148.09	979308.29	30.27250	979359.06	-19.97
10000	11600	2771.730	0829	0140.59	979309.94	30.27250	979359.06	-19.88
10000	11400	2771.770	0836	0139.83	979309.98	30.27250	979359.06	-19.99
10000	11200	2770.510	0842	0145.60	979308.70	30.27250	979359.06	-20.07
10000	11000	2769.990	0846	0147.70	979308.18	30.27250	979359.06	-20.16
BASE # 09		2769.520	0902		979307.70			

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* SOLO *
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****
LOOP NUMBER 15
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

202A

Coverage: LINE 10000N
FROM 15200E TO 19000E

Loop Time: 1.67 Hours
Loop Drift: -.081 Mgals
Drift Rate: -.049 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 18/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 09		2769.520	0902		979307.70			
10000	15200	2768.530	0908	0157.71	979306.70	30.27250	979359.06	-19.55
10000	15400	2768.490	0913	0158.02	979306.67	30.27250	979359.06	-19.52
10000	15600	2768.500	0918	0158.27	979306.68	30.27250	979359.06	-19.46
10000	15800	2768.480	0922	0158.69	979306.66	30.27250	979359.06	-19.39
10000	16000	2768.530	0927	0159.06	979306.72	30.27250	979359.06	-19.26
10000	16200	2768.670	0931	0159.20	979306.86	30.27250	979359.06	-19.08
10000	16400	2768.780	0935	0159.06	979306.98	30.27250	979359.06	-19.00
10000	16600	2768.750	0939	0159.88	979306.95	30.27250	979359.06	-18.85
10000	16800	2768.590	0943	0160.68	979306.79	30.27250	979359.06	-18.85
10000	17000	2768.510	0947	0161.15	979306.71	30.27250	979359.06	-18.83
10000	17200	2768.510	0951	0161.69	979306.72	30.27250	979359.06	-18.71
10000	17400	2768.720	0956	0161.52	979306.93	30.27250	979359.06	-18.53
10000	17600	2768.790	1000	0161.97	979307.01	30.27250	979359.06	-18.36
10000	17800	2768.550	1004	0163.36	979306.77	30.27250	979359.06	-18.31
10000	18000	2768.650	1007	0163.43	979306.87	30.27250	979359.06	-18.19
10000	18200	2768.670	1010	0164.21	979306.89	30.27250	979359.06	-18.01
10000	18400	2768.780	1014	0164.84	979307.01	30.27250	979359.06	-17.76
10000	18600	2768.640	1017	0165.21	979306.87	30.27250	979359.06	-17.83
10000	18800	2768.460	1021	0165.81	979306.69	30.27250	979359.06	-17.88
10000	19000	2769.070	1025	0162.37	979307.31	30.27250	979359.06	-17.97
BASE # 09		2769.440	1042		979307.70			

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* SOLO *
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****
LOOP NUMBER 16
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

203

Coverage: Base tie
Base 9 TO Base 10

Loop Time: .57 Hours
Loop Drift: .030 Mgals
Drift Rate: .054 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 20/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 12		2759.930	0643		979297.64			
18000	15000	2759.170	0659	0135.24	979296.86	30.20050	979353.42	-28.43
BASE # 12		2759.960	0717		979297.64			

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* SOLO *
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****
LOOP NUMBER 17
****

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

203 A

Coverage: Base tie
Base 10 TO Base 11

Loop Time: .53 Hours
Loop Drift: 0.000 Mgals
Drift Rate: 0.000 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 20/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 13		2759.260	0930		979296.86			
20000	14900	2759.680	0950	0127.47	979297.29	30.18250	979352.01	-28.21
BASE # 13		2759.260	1002		979296.86			

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* SOLO *
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****
LOOP NUMBER 18
****

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 18000N
FROM 15000E TO 11000E
Track at 11600E

Loop Time: 2.05 Hours
Loop Drift: .051 Mgals
Drift Rate: .025 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 20/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 13		2759.210	0727		979296.86			
18000	15000	2759.210	0728	0135.24	979296.86	30.20050	979353.42	-28.49
18000	14800	2758.930	0735	0136.40	979296.57	30.20050	979353.42	-28.47
18000	14600	2758.600	0741	0137.27	979296.24	30.20050	979353.42	-28.63
18000	14400	2758.600	0746	0137.74	979296.23	30.20050	979353.42	-28.53
18000	14200	2758.600	0751	0138.50	979296.23	30.20050	979353.42	-28.38
18000	14000	2758.670	0757	0139.19	979296.30	30.20050	979353.42	-28.16
18000	13800	2758.640	0803	0139.68	979296.27	30.20050	979353.42	-28.09
18000	13600	2758.990	0808	0139.05	979296.62	30.20050	979353.42	-27.87
18000	13400	2758.980	0814	0138.56	979296.61	30.20050	979353.42	-27.99
18000	13200	2759.110	0820	0137.55	979296.74	30.20050	979353.42	-28.07
18000	13000	2759.790	0825	0135.16	979297.42	30.20050	979353.42	-27.88
18000	12800	2759.640	0829	0134.32	979297.27	30.20050	979353.42	-28.21
18000	12600	2759.380	0835	0134.22	979297.00	30.20050	979353.42	-28.49
18000	12400	2759.430	0840	0134.16	979297.05	30.20050	979353.42	-28.46
18000	12200	2759.400	0844	0134.62	979297.02	30.20050	979353.42	-28.39
18000	12000	2758.760	0850	0137.66	979296.37	30.20050	979353.42	-28.41
18000	11800	2757.730	0855	0142.21	979295.32	30.20050	979353.42	-28.51
18000	11600	2758.350	0900	0142.56	979295.95	30.20050	979353.42	-27.81
18000	11400	2759.500	0905	0139.39	979297.11	30.20050	979353.42	-27.31
18000	11200	2760.090	0909	0136.55	979297.71	30.20050	979353.42	-27.30
18000	11000	2760.830	0914	0131.78	979298.46	30.20050	979353.42	-27.55
BASE # 13		2759.260	0930		979296.86			

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* SOLO *
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****
LOOP NUMBER 19
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

204A

Coverage: LINE 20000N
FROM 14900E TO 11600E
Track near 11600E

Loop Time: 1.63 Hours
Loop Drift: -.041 Mgals
Drift Rate: -.025 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 20/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 14		2759.680	1011		979297.29			
20000	14900	2759.680	1012	0127.46	979297.29	30.18250	979352.01	-28.20
20000	14800	2759.470	1018	0128.45	979297.08	30.18250	979352.01	-28.21
20000	14600	2759.320	1023	0128.57	979296.93	30.18250	979352.01	-28.33
20000	14400	2759.290	1027	0128.29	979296.90	30.18250	979352.01	-28.42
20000	14200	2759.010	1032	0129.60	979296.62	30.18250	979352.01	-28.43
20000	14000	2758.770	1037	0130.21	979296.38	30.18250	979352.01	-28.54
20000	13800	2758.370	1042	0130.90	979295.98	30.18250	979352.01	-28.80
20000	13600	2757.980	1047	0131.60	979295.58	30.18250	979352.01	-29.05
20000	13400	2757.690	1052	0131.99	979295.29	30.18250	979352.01	-29.26
20000	13200	2757.040	1057	0132.06	979294.63	30.18250	979352.01	-29.90
20000	13000	2756.590	1102	0131.86	979294.18	30.18250	979352.01	-30.40
20000	12800	2756.810	1106	0131.23	979294.40	30.18250	979352.01	-30.31
20000	12600	2757.500	1110	0131.33	979295.11	30.18250	979352.01	-29.58
20000	12400	2757.580	1115	0132.81	979295.19	30.18250	979352.01	-29.19
20000	12200	2757.780	1119	0132.25	979295.39	30.18250	979352.01	-29.11
20000	12000	2758.050	1123	0130.63	979295.67	30.18250	979352.01	-29.17
20000	11800	2758.850	1129	0128.95	979296.48	30.18250	979352.01	-28.70
20000	11600	2759.020	1134	0128.52	979296.66	30.18250	979352.01	-28.62
BASE # 14		2759.640	1149		979297.29			

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* SOLO *
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****
LOOP NUMBER 20
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Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 18000N
FROM 15000E TO 16000E
Creek at 15600E

Loop Time: 1.03 Hours
Loop Drift: .041 Mgals
Drift Rate: .039 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 22/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 13		2759.320	0626		979296.86			
18000	15000	2759.320	0627	0135.24	979296.86	30.20050	979353.42	-28.43
18000	15200	2759.940	0636	0133.21	979297.48	30.20050	979353.42	-28.23
18000	15400	2760.110	0644	0132.85	979297.65	30.20050	979353.42	-28.13
18000	15600	2759.890	0657	0133.82	979297.42	30.20050	979353.42	-28.16
18000	15800	2759.910	0705	0134.40	979297.43	30.20050	979353.42	-28.03
18000	16000	2760.020	0712	0133.82	979297.54	30.20050	979353.42	-28.04
BASE # 13		2759.360	0728		979296.86			

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* SOLO *
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****
LOOP NUMBER 21
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205A

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 20000N
FROM 15000E TO 15600E
Creeks at 15000 & 15400E

Loop Time: .78 Hours
Loop Drift: .030 Mgals
Drift Rate: .039 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 22/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 14		2759.790	0738		979297.29			
20000	15000	2759.710	0746	0127.89	979297.20	30.18250	979352.01	-28.20
20000	15200	2759.790	0754	0127.81	979297.28	30.18250	979352.01	-28.14
20000	15400	2760.160	0801	0127.15	979297.65	30.18250	979352.01	-27.91
20000	15600	2759.860	0809	0128.46	979297.34	30.18250	979352.01	-27.95
BASE # 14		2759.820	0825		979297.29			

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* SOLO *
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****
LOOP NUMBER 22
****

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

206

Coverage: BASE TIE

Loop Time: .85 Hours
Loop Drift: -.071 Mgals
Drift Rate: -.083 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 20/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 14		2759.620	1232		979297.29			
21900	14400	2759.450	1307	0121.66	979297.17	30.16540	979350.67	-28.20
BASE # 14		2759.550	1323		979297.29			

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* SOLO *
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****
LOOP NUMBER 23
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206 A

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: BASE TIES ACROSS CREEK

Loop Time: .60 Hours
Loop Drift: .061 Mgals
Drift Rate: .101 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 22/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 15		2759.680	0839		979297.17			
22000	14400	2759.690	0845	0121.56	979297.17	30.16450	979350.60	-28.14
22000	14600	2758.000	0855	0129.62	979295.44	30.16450	979350.60	-28.20
22000	14200	2759.570	0909	0121.71	979297.01	30.16450	979350.60	-28.27
BASE # 15		2759.740	0915		979297.17			

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* SOLO *
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****
LOOP NUMBER 24
****

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

207

Coverage: LINE 22000N
FROM 14000E TO 11800E
Track at 11800E

Loop Time: 1.35 Hours
Loop Drift: .020 Mgals
Drift Rate: .015 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 22/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 15		2759.740	0915		979297.17			
22000	14000	2759.490	0926	0121.56	979296.91	30.16450	979350.60	-28.40
22000	13800	2759.310	0935	0121.42	979296.73	30.16450	979350.60	-28.61
22000	13600	2758.640	0940	0123.39	979296.05	30.16450	979350.60	-28.88
22000	13400	2757.980	0945	0124,60	979295.38	30.16450	979350.60	-29.30
22000	13200	2757.510	0950	0125.24	979294.90	30.16450	979350.60	-29.65
22000	13000	2757.400	0955	0125.56	979294.79	30.16450	979350.60	-29.69
22000	12800	2757.260	1000	0126.34	979294.65	30.16450	979350.60	-29.67
22000	12600	2757.180	1005	0127.11	979294.56	30.16450	979350.60	-29.59
22000	12400	2757.570	1009	0127.08	979294.96	30.16450	979350.60	-29.21
22000	12200	2757.790	1013	0127.08	979295.18	30.16450	979350.60	-28.98
22000	12000	2757.910	1017	0126.94	979295.30	30.16450	979350.60	-28.89
22000	11800	2758.060	1021	0126.79	979295.45	30.16450	979350.60	-28.77
BASE # 15		2759.760	1036		979297.17			

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* SOLO *
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****
LOOP NUMBER 25
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207A

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 22000N
FROM 14600E TO 17600E
14800E is near a track

Loop Time: 1.85 Hours
Loop Drift: .007 Mgals
Drift Rate: .004 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 22/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 15		2759.760	1036		979297.17			
22000	14600	2758.040	1053	0129.62	979295.43	30.16450	979350.60	-28.21
22000	14800	2757.970	1101	0130.12	979295.35	30.16450	979350.60	-28.18
22000	15000	2758.360	1107	0128.40	979295.75	30.16450	979350.60	-28.14
22000	15200	2759.400	1112	0122.98	979296.80	30.16450	979350.60	-28.21
22000	15400	2759.230	1117	0123.09	979296.63	30.16450	979350.60	-28.36
22000	15600	2759.340	1121	0123.05	979296.74	30.16450	979350.60	-28.26
22000	15800	2759.570	1127	0123.20	979296.97	30.16450	979350.60	-28.00
22000	16000	2759.300	1132	0126.00	979296.70	30.16450	979350.60	-27.67
22000	16200	2759.420	1137	0126.60	979296.82	30.16450	979350.60	-27.43
22000	16400	2759.610	1142	0125.60	979297.01	30.16450	979350.60	-27.44
22000	16600	2759.600	1148	0124.74	979297.00	30.16450	979350.60	-27.65
22000	16800	2759.280	1152	0124.72	979296.68	30.16450	979350.60	-27.98
22000	17000	2759.080	1157	0124.69	979296.48	30.16450	979350.60	-28.19
22000	17200	2758.930	1202	0124.56	979296.32	30.16450	979350.60	-28.37
22000	17400	2759.140	1207	0124.54	979296.54	30.16450	979350.60	-28.16
22000	17600	2759.220	1212	0124.68	979296.62	30.16450	979350.60	-28.05
BASE # 16		2758.060	1227		979295.44			

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* SOLO *
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LOOP NUMBER 26
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208

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: LINE 22000N
FROM 17600E TO 19800E
18200E is near a new fence

Loop Time: 2.17 Hours
Loop Drift: -.041 Mgals
Drift Rate: -.019 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 22/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 16		2758.060	1227		979295.44			
22000	17600	2759.180	1330	0124.60	979296.59	30.16450	979350.60	-28.07
22000	17800	2759.210	1336	0124.37	979296.63	30.16450	979350.60	-28.10
22000	18000	2759.230	1340	0124.22	979296.65	30.16450	979350.60	-28.11
22000	18200	2759.370	1345	0124.02	979296.79	30.16450	979350.60	-28.01
22000	18400	2759.710	1351	0124.58	979297.14	30.16450	979350.60	-27.55
22000	18600	2760.180	1355	0124.24	979297.62	30.16450	979350.60	-27.14
22000	18800	2760.170	1359	0123.86	979297.61	30.16450	979350.60	-27.23
22000	19000	2760.330	1403	0123.59	979297.77	30.16450	979350.60	-27.12
22000	19200	2760.320	1407	0123.40	979297.76	30.16450	979350.60	-27.17
22000	19400	2760.780	1411	0123.42	979298.23	30.16450	979350.60	-26.70
22000	19600	2760.820	1415	0123.53	979298.27	30.16450	979350.60	-26.63
22000	19800	2760.680	1421	0123.56	979298.13	30.16450	979350.60	-26.77
BASE # 16		2758.020	1437		979295.44			

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* SOLO *
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****
LOOP NUMBER 27
****

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

206A

Coverage: LINE 20000N
FROM 15600E TO 19600E

Loop Time: 1.80 Hours
Loop Drift: .030 Mgals
Drift Rate: .017 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 24/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 17		2759.960	0641		979297.34			
20000	15600	2759.960	0642	0128.46	979297.34	30.18250	979352.01	-27.95
20000	15800	2760.260	0649	0128.26	979297.64	30.18250	979352.01	-27.69
20000	16000	2760.070	0655	0128.70	979297.45	30.18250	979352.01	-27.78
20000	16200	2759.760	0701	0129.35	979297.13	30.18250	979352.01	-27.97
20000	16400	2759.730	0705	0129.35	979297.10	30.18250	979352.01	-28.00
20000	16600	2759.930	0709	0129.28	979297.30	30.18250	979352.01	-27.81
20000	16800	2759.810	0713	0129.27	979297.18	30.18250	979352.01	-27.94
20000	17000	2759.630	0718	0129.47	979297.00	30.18250	979352.01	-28.09
20000	17200	2759.500	0722	0129.73	979296.86	30.18250	979352.01	-28.16
20000	17400	2759.460	0726	0129.72	979296.82	30.18250	979352.01	-28.20
20000	17600	2759.500	0730	0129.64	979296.86	30.18250	979352.01	-28.18
20000	17800	2759.530	0735	0129.35	979296.89	30.18250	979352.01	-28.21
20000	18000	2759.430	0739	0129.09	979296.79	30.18250	979352.01	-28.37
20000	18200	2759.500	0742	0128.93	979296.86	30.18250	979352.01	-28.33
20000	18400	2759.530	0746	0128.57	979296.89	30.18250	979352.01	-28.38
20000	18600	2759.730	0750	0128.42	979297.09	30.18250	979352.01	-28.21
20000	18800	2759.750	0754	0128.68	979297.11	30.18250	979352.01	-28.13
20000	19000	2759.820	0758	0129.09	979297.18	30.18250	979352.01	-27.98
20000	19200	2759.790	0802	0129.62	979297.14	30.18250	979352.01	-27.90
20000	19400	2759.620	0805	0131.48	979296.97	30.18250	979352.01	-27.69
20000	19600	2759.250	0809	0134.30	979296.60	30.18250	979352.01	-27.48
BASE # 17		2759.990	0829		979297.34			

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* SOLO *
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****
LOOP NUMBER 28
****

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

209

Coverage: LINE 18000N
FROM 16000E TO 19000E
18200E near old fence

Loop Time: 1.30 Hours
Loop Drift: .041 Mgals
Drift Rate: .031 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 24/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 18		2760.200	0845		979297.54			
18000	16000	2760.200	0846	0133.82	979297.54	30.20050	979353.42	-28.04
18000	16200	2759.930	0849	0133.92	979297.26	30.20050	979353.42	-28.30
18000	16400	2759.950	0855	0134.00	979297.28	30.20050	979353.42	-28.25
18000	16600	2759.640	0859	0134.49	979296.97	30.20050	979353.42	-28.48
18000	16800	2759.370	0903	0134.50	979296.69	30.20050	979353.42	-28.75
18000	17000	2759.230	0907	0134.30	979296.55	30.20050	979353.42	-28.94
18000	17200	2759.020	0910	0134.09	979296.33	30.20050	979353.42	-29.19
18000	17400	2758.950	0914	0134.08	979296.26	30.20050	979353.42	-29.27
18000	17600	2758.850	0918	0134.32	979296.15	30.20050	979353.42	-29.32
18000	17800	2758.590	0922	0135.24	979295.89	30.20050	979353.42	-29.40
18000	18000	2758.410	0926	0136.63	979295.70	30.20050	979353.42	-29.29
18000	18200	2758.580	0931	0137.42	979295.87	30.20050	979353.42	-28.96
18000	18400	2758.440	0935	0138.37	979295.73	30.20050	979353.42	-28.90
18000	18600	2758.700	0938	0138.99	979295.99	30.20050	979353.42	-28.51
18000	18800	2758.600	0942	0140.66	979295.89	30.20050	979353.42	-28.27
18000	19000	2758.720	0947	0142.10	979296.01	30.20050	979353.42	-27.85
BASE # 18		2760.240	1003		979297.54			

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* SOLO *
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****
LOOP NUMBER 30
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209A

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: BASE TIE
FROM BASE 2 TO BASE 4

Loop Time: .30 Hours
Loop Drift: 0.000 Mgals
Drift Rate: 0.000 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 11/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 02		2759.610	1603		979298.54			
16000	16000.	2757.630	1611	0125.70	979296.53	30.21850	979354.83	-32.15
BASE # 02		2759.610	1621		979298.54			

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* SOLO *
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****
LOOP NUMBER 33
****

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

Coverage: BASE TIE

Loop Time: .60 Hours
Loop Drift: .051 Mgals
Drift Rate: .084 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 15/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 08		2765.070	1424		979303.72			
10000	15000	2769.030	1448	0153.14	979307.70	30.27250	979359.06	-19.51
BASE # 08		2765.120	1500		979303.72			

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* SOLO *
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****
LOOP NUMBER 31
****

Client: THE B.H.P. CO PTY LTD
Location: AVONDALE GRID LYNDHURST S.A.

211

Coverage: BASE TIE

Loop Time: .50 Hours
Loop Drift: 0.000 Mgals
Drift Rate: 0.000 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 11/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 04		2757.580	1232		979296.53			
16000	12000	2762.320	1247	0127.12	979301.33	30.21850	979354.83	-27.05
BASE # 04		2757.580	1302		979296.53			

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********** DATA REDUCTION PARAMETERS **********

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: RECON LINE WEST OF LYNDHURST

Bouguer Reduction Density is 2.4 gm/cc

Base Line Bearing is 0 degrees EAST

212

The Known Point of 30.167 degrees Latitude is located at Line Number 10000 and Station Number 15000

The Base Station Observed Gravity Values are:

BASE #	OBSERVED GRAVITY (mgals)
1	2799.02
2	2799.76
3	2802.89

****

******** CATALOG OF RAW FIELD DATA ********

LOOP# 1	LINE 10000N	FROM 18000E TO 16000E
	Creek at 16100E	
LOOP# 2	LINE 10000N	FROM 16000E TO 13000E
	Last Km through creek (rough)	
LOOP# 3	LINE 10000N	FROM 13000E TO 10000E
	Creek at 10800E	
LOOP# 4	LINE 10000N	FROM 18000E TO 20000E
	Along fence line	

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* SOLO *
****

****
LOOP NUMBER 1
****

214

Client: THE B.H.P. CO PTY LTD
Location: RECON LINE WEST OF LYNDHURST

Coverage: LINE 10000N
FROM 18000E TO 16000E
Creek at 16100E

Loop Time: 1.95 Hours
Loop Drift: .010 Mgals
Drift Rate: .005 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 26/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 01		2762.630	0821		2799.02			
10000	18000	2762.630	0822	0133.72	2799.02	30.16700	979350.79	-.00
10000	17800	2762.320	0828	0135.87	2798.71	30.16700	979350.79	.13
10000	17600	2760.670	0835	0140.78	2797.03	30.16700	979350.79	-.52
10000	17400	2760.290	0840	0145.20	2796.65	30.16700	979350.79	.01
10000	17200	2760.030	0845	0146.76	2796.38	30.16700	979350.79	.07
10000	17000	2760.290	0851	0146.30	2796.65	30.16700	979350.79	.24
10000	16800	2761.170	0855	0142.56	2797.54	30.16700	979350.79	.35
10000	16600	2761.690	0859	0140.57	2798.06	30.16700	979350.79	.46
10000	16400	2762.640	0904	0137.34	2799.03	30.16700	979350.79	.76
10000	16200	2764.750	1001	0128.80	2801.16	30.16700	979350.79	1.13
10000	16000	2763.370	1006	0135.35	2799.76	30.16700	979350.79	1.08
BASE # 01		2762.640	1018		2799.02			

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* SOLO *
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****
LOOP NUMBER 2
****

Client: THE B.H.P. CO PTY LTD
Location: RECON LINE WEST OF LYNDHURST

Coverage: LINE 10000N
FROM 16000E TO 13000E
Last Km through creek (rough)

215

Loop Time: 1.75 Hours
Loop Drift: .051 Mgals
Drift Rate: .029 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 26/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 02		2763.370	1031		2799.76			
10000	16000	2763.370	1032	0135.35	2799.76	30.16700	979350.79	1.07
10000	15800	2763.680	1039	0135.09	2800.07	30.16700	979350.79	1.33
10000	15600	2764.960	1045	0129.04	2801.36	30.16700	979350.79	1.37
10000	15400	2764.790	1050	0129.89	2801.19	30.16700	979350.79	1.37
10000	15200	2764.550	1054	0130.88	2800.94	30.16700	979350.79	1.33
10000	15000	2764.770	1058	0131.44	2801.17	30.16700	979350.79	1.67
10000	14800	2765.050	1102	0132.05	2801.45	30.16700	979350.79	2.08
10000	14600	2764.960	1105	0132.17	2801.35	30.16700	979350.79	2.01
10000	14400	2764.590	1110	0132.40	2800.98	30.16700	979350.79	1.68
10000	14200	2764.510	1114	0132.68	2800.89	30.16700	979350.79	1.65
10000	14000	2765.410	1119	0129.49	2801.80	30.16700	979350.79	1.90
10000	13800	2765.570	1125	0129.76	2801.96	30.16700	979350.79	2.12
10000	13600	2765.970	1131	0129.76	2802.37	30.16700	979350.79	2.52
10000	13400	2766.350	1140	0130.15	2802.75	30.16700	979350.79	2.98
10000	13200	2766.660	1148	0130.31	2803.06	30.16700	979350.79	3.32
10000	13000	2766.500	1153	0130.47	2802.89	30.16700	979350.79	3.19
BASE # 02		2763.420	1216		2799.76			

****
* SOLO *
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****
LOOP NUMBER 3
****

Client: THE B.H.P. CO PTY LTD
Location: RECON LINE WEST OF LYNDHURST

216

Coverage: LINE 10000N
FROM 13000E TO 10000E
Creek at 10800E

Loop Time: 1.53 Hours
Loop Drift: .041 Mgals
Drift Rate: .026 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 26/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 03		2766.570	1341		2802.89			
10000	13000	2766.570	1342	0130.47	2802.89	30.16700	979350.79	3.19
10000	12800	2766.840	1346	0131.51	2803.16	30.16700	979350.79	3.68
10000	12600	2766.440	1351	0132.94	2802.75	30.16700	979350.79	3.57
10000	12400	2765.870	1355	0135.17	2802.17	30.16700	979350.79	3.45
10000	12200	2765.440	1400	0138.51	2801.74	30.16700	979350.79	3.71
10000	12000	2765.340	1405	0140.77	2801.63	30.16700	979350.79	4.08
10000	11800	2765.280	1409	0141.45	2801.57	30.16700	979350.79	4.15
10000	11600	2765.030	1414	0142.91	2801.31	30.16700	979350.79	4.20
10000	11400	2765.510	1418	0140.73	2801.80	30.16700	979350.79	4.23
10000	11200	2765.260	1422	0143.43	2801.54	30.16700	979350.79	4.54
10000	11000	2766.040	1429	0141.35	2802.33	30.16700	979350.79	4.89
10000	10800	2766.690	1435	0139.38	2802.99	30.16700	979350.79	5.14
10000	10600	2766.100	1439	0141.57	2802.39	30.16700	979350.79	5.00
10000	10400	2765.690	1445	0144.55	2801.97	30.16700	979350.79	5.20
10000	10200	2766.130	1450	0145.84	2802.41	30.16700	979350.79	5.91
10000	10000	2765.270	1454	0149.78	2801.54	30.16700	979350.79	5.86
BASE # 03		2766.610	1513		2802.89			

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* SOLO *
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****
LOOP NUMBER 4
****

Client: THE B.H.P. CO PTY LTD
Location: RECON LINE WEST OF LYNDHURST

217

Coverage: LINE 10000N
FROM 18000E TO 20000E
Along fence line

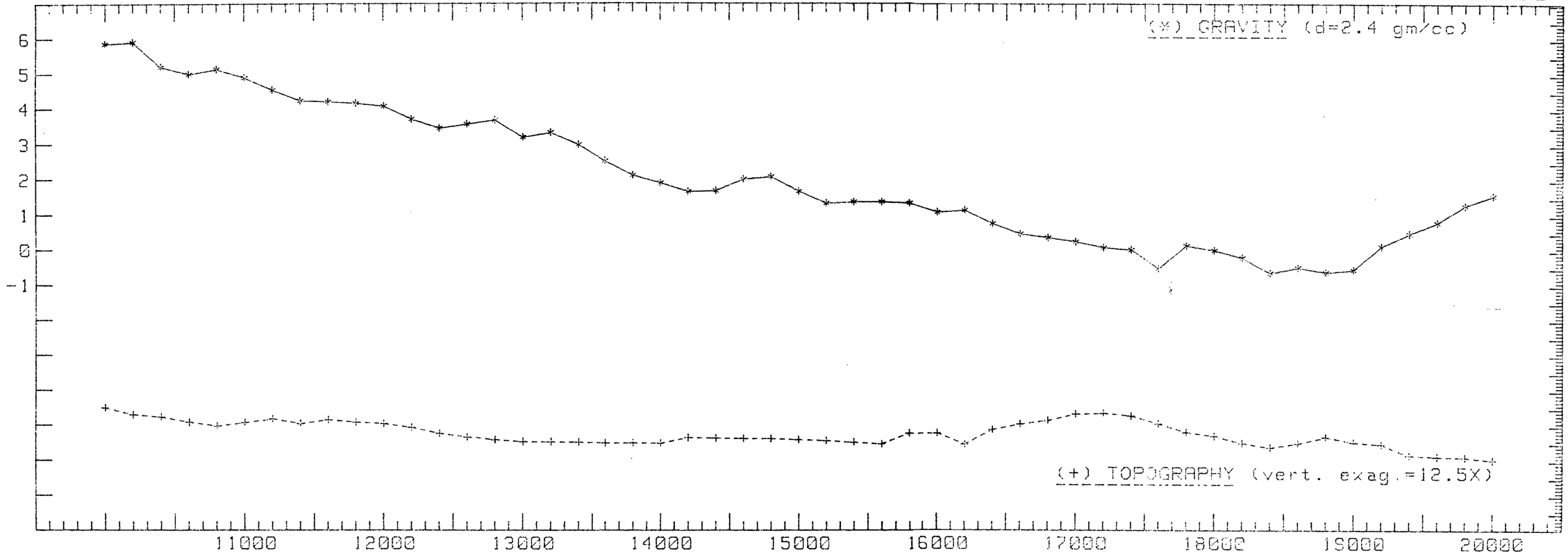
Loop Time: .92 Hours
Loop Drift: .010 Mgals
Drift Rate: .011 Mgals/Hour

Operator: B.RAU
Gravimeter: Lacoste G#556
Date: 26/03/80

LINE No.	STATION No.	METER READING	TIME	ELVN (meters)	OBSGRAV (mgals)	LATITUDE (degrees)	THGRAV (mgals)	BOUGUER D= 2.4
BASE # 01		2762.810	1544		2799.02			
10000	18000	2762.810	1545	0133.72	2799.02	30.16700	979350.79	-.00
10000	18200	2763.440	1549	0129.64	2799.66	30.16700	979350.79	-.22
10000	18400	2763.530	1554	0127.12	2799.75	30.16700	979350.79	-.65
10000	18600	2763.180	1559	0129.57	2799.39	30.16700	979350.79	-.50
10000	18800	2762.320	1603	0133.12	2798.52	30.16700	979350.79	-.63
10000	19000	2763.000	1606	0130.17	2799.21	30.16700	979350.79	-.55
10000	19200	2763.930	1612	0128.84	2800.15	30.16700	979350.79	.11
10000	19400	2765.550	1615	0122.69	2801.79	30.16700	979350.79	.47
10000	19600	2766.020	1619	0121.93	2802.27	30.16700	979350.79	.79
10000	19800	2766.570	1622	0121.56	2802.82	30.16700	979350.79	1.27
10000	20000	2767.170	1626	0120.00	2803.43	30.16700	979350.79	1.55
BASE # 01		2762.820	1639		2799.02			

LOCATION: RECON LINE WEST OF LYNDHURST

SCALE 1:25000



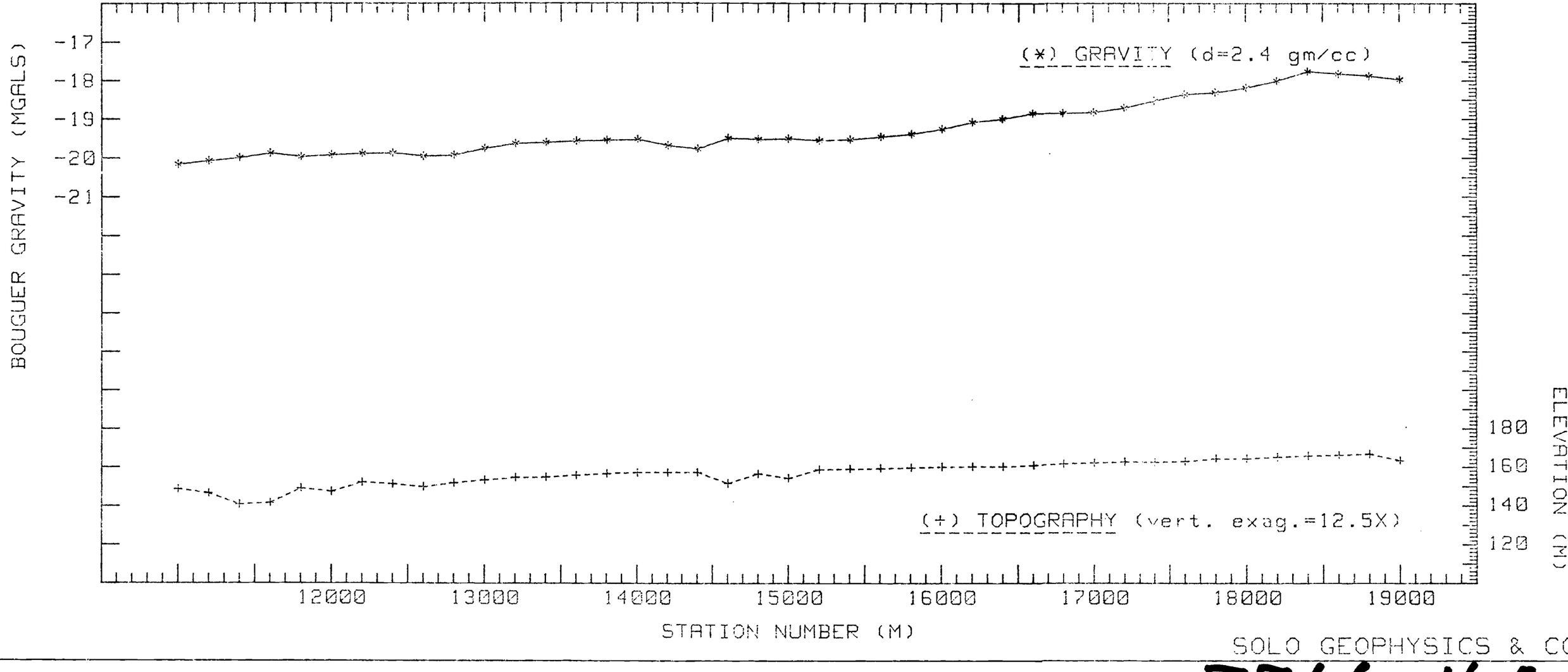
SOLO GEOPHYSICS & CO.

3766-16

LOCATION: AVONDALE GRID LYNDHURST S.A.

LINE 10000N

SCALE 1:25000



SOLO GEOPHYSICS & CO.

3766-16A

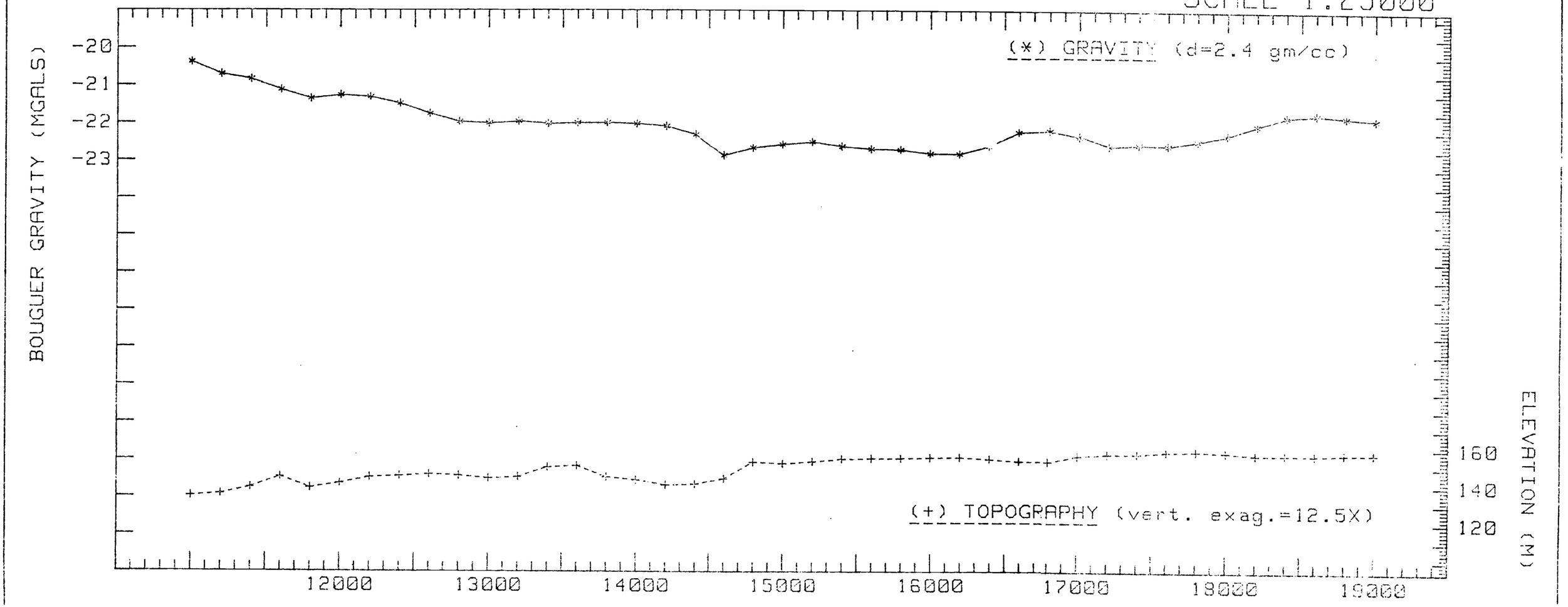
3766-17

CLIENT: THE B.H.P. CO PTY LTD

LOCATION: AVONDALE GRID LYNDHURST S.A.

LINE 12000N

SCALE 1:25000



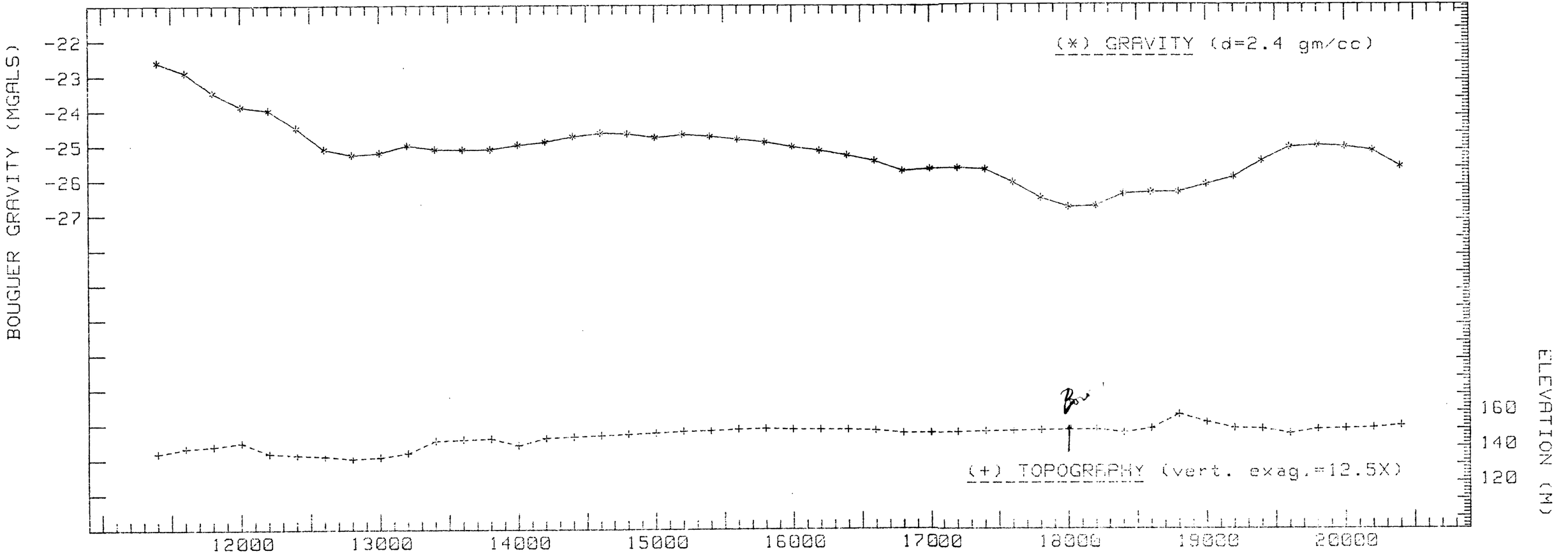
3766-18

CLIENT: THE B.H.P. CO PTY LTD

LOCATION: AVONDALE GRID LYNDHURST S.A.

LINE 14000N

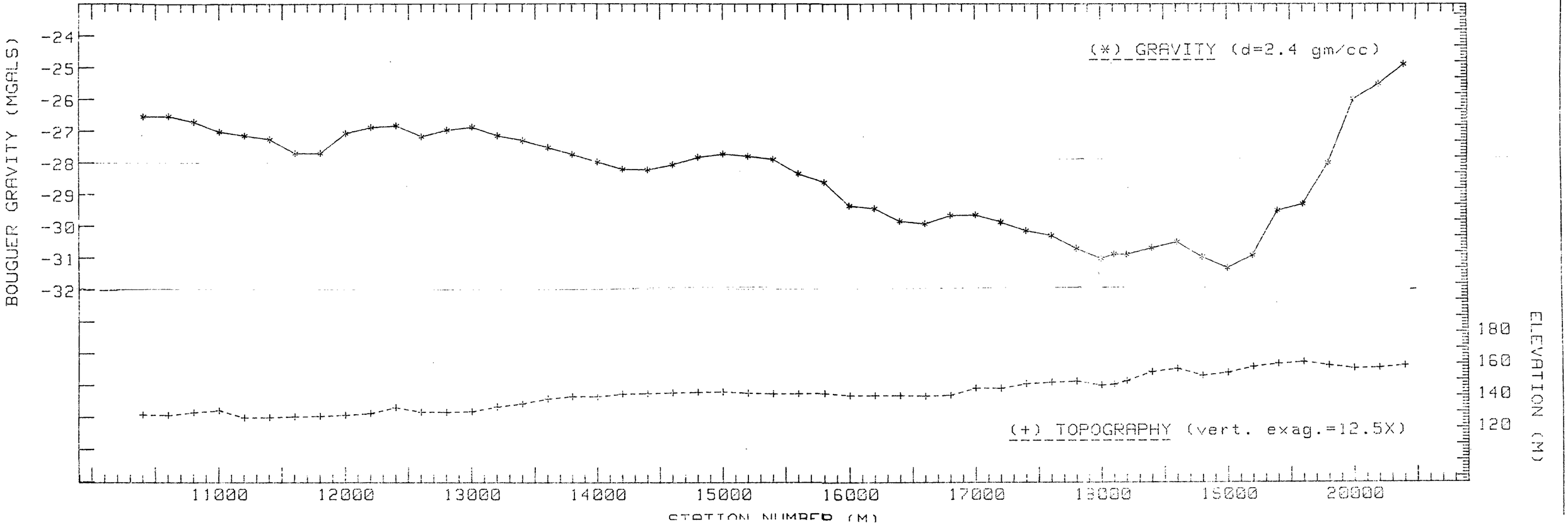
SCALE 1:25000



3766-18A

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.

LINE 16000N
SCALE 1:25000



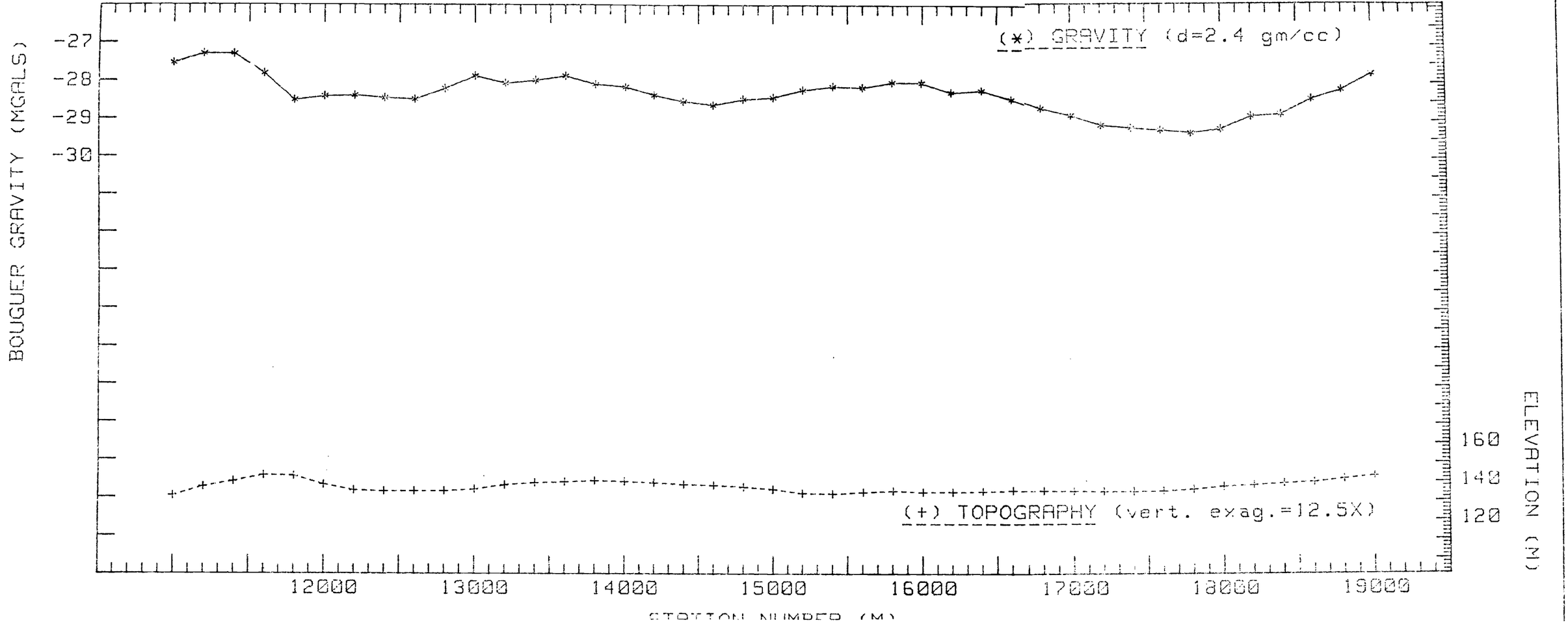
3766-19

CLIENT: THE B.H.P. CO PTY LTD

LOCATION: AVONDALE GRID LYNDHURST S.A.

LINE 18000N

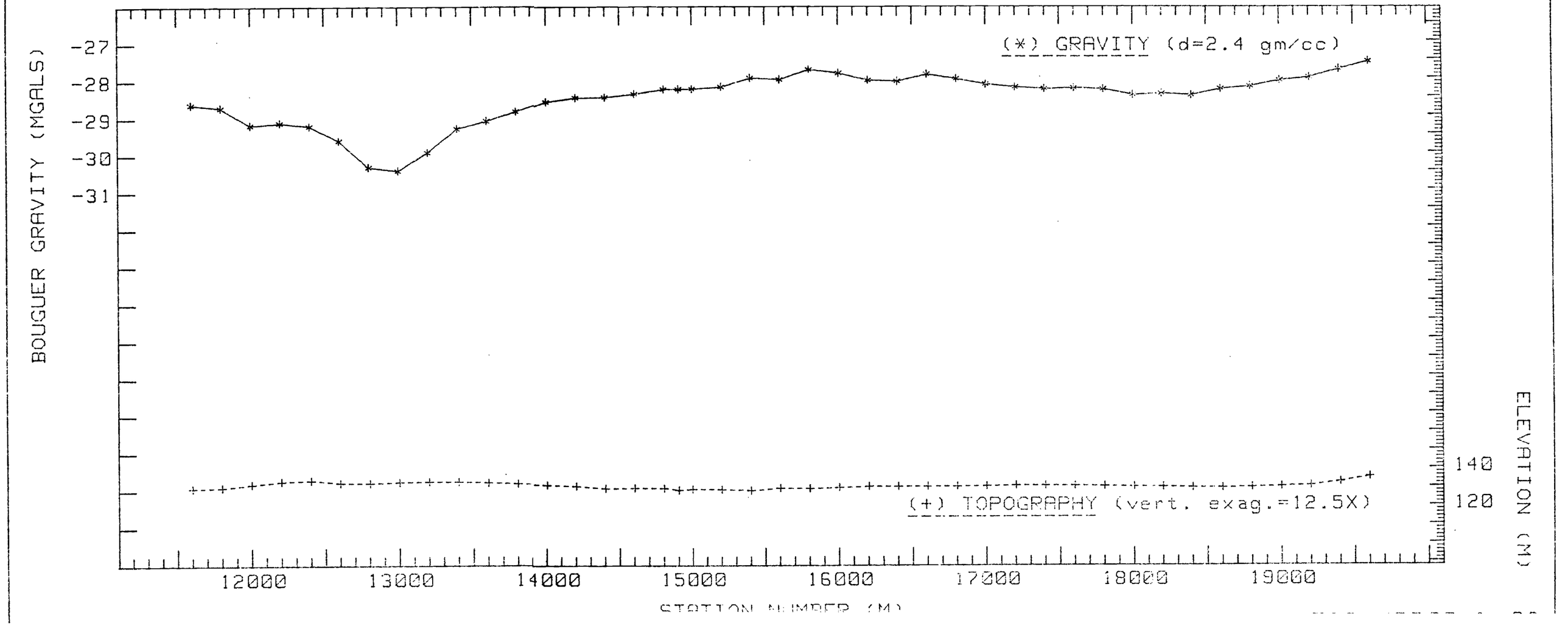
SCALE 1:25000



3766-20

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.

LINE 20000N
SCALE 1:25000



3766-21

CLIENT: THE B.H.P. CO PTY LTD
LOCATION: AVONDALE GRID LYNDHURST S.A.

LINE 22000N
SCALE 1:25000