

# Open File Envelope

## No. 2090

**SML 699**

**NULLARBOR**

**PROGRESS REPORTS TO LICENCE  
EXPIRY/SURRENDER FOR THE PERIOD  
18/5/1972 TO 17/11/1972**

Submitted by  
Dampier Mining Co. Ltd  
1973

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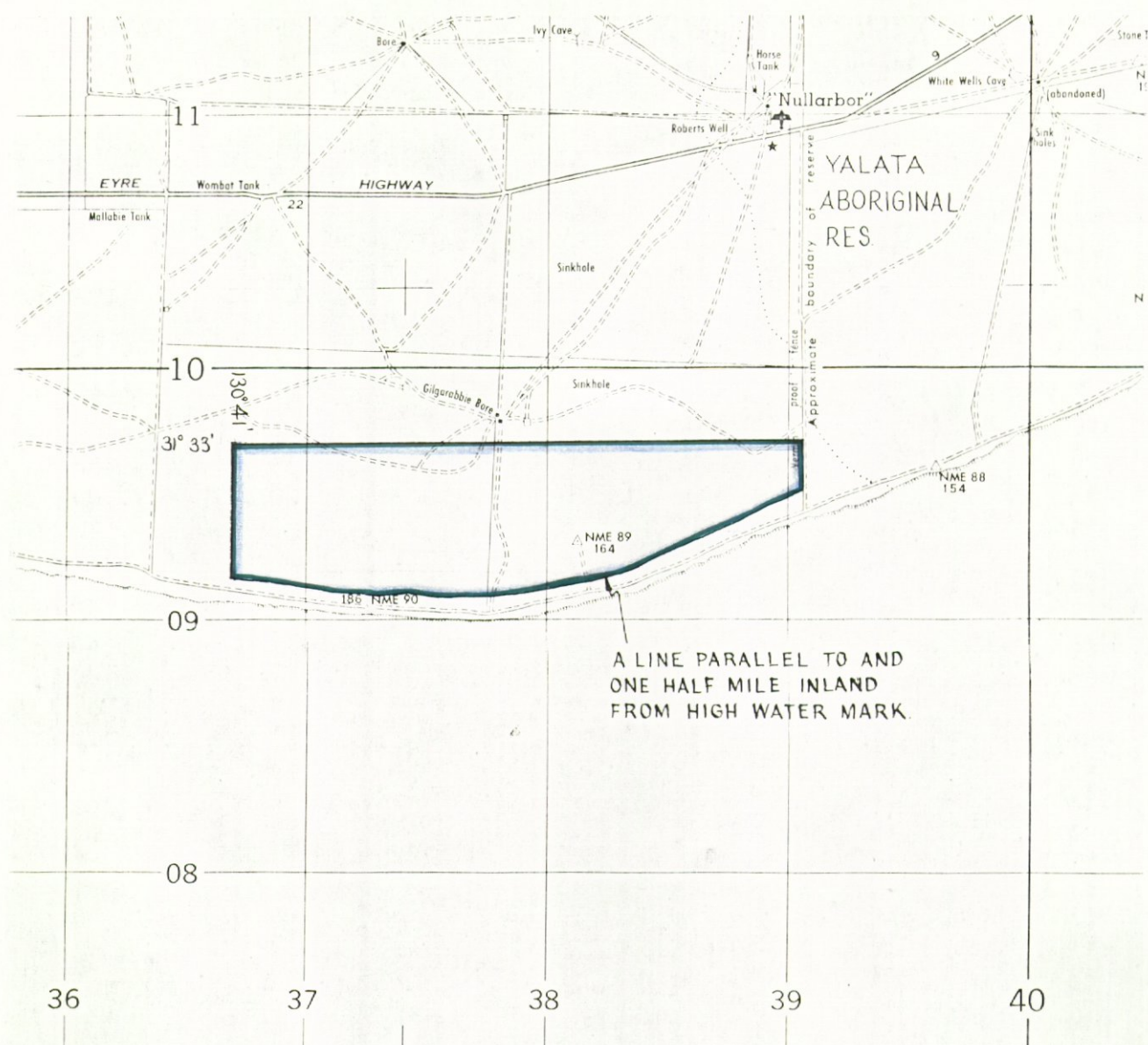
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Facsimile: (08) 8204 1880



**Government of South Australia**  
**Primary Industries and Resources SA**



SCALE 1:250000

DAMPIER MINING CO. LTD.

DOCKET DM. 391/72

AREA 40

SQ MILES

1:250000 PLANS NULLARBOR

LOCALITY NULLARBOR HOMESTEAD

S.M.L. No.

699

EXPIRY DATE

17.11.72

CONTENTS ENVELOPE 2090

TENEMENT: S.M.L. 699 - Nullarbor.

TENEMENT HOLDER: Dampier Mining Co. Ltd.

<u>REPORT</u> : Drill Logs No.s. NDH11 to 15.	Pgs. 3-7
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Cross Section.	2090-2
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SPECIAL MINING LEASE 699NULLARBOR, SOUTH AUSTRALIAREPORT FOR THE QUARTER ENDED 18TH AUGUST, 1972GENERAL STATEMENT

Exploration, consisting of a programme of drilling, continued in S.M.L. 699 during the quarter.

FIELD INVESTIGATIONSDrilling

Five drill holes totalling 189 metres were completed. Localities are shown on the attached plan A3-35.

RESULTS OF INVESTIGATIONS

Testing of samples from the drill holes is being carried out in Newcastle. Logging is in progress. Logs and analysis results will be included in the next report.

This report is submitted to the  
Mines Department as required by  
Condition 6 of S.M.L. 699

009  
REPORT FOR THE THREE MONTHS ENDED 18TH NOVEMBER, 1972

SPECIAL MINING LEASE 699

NULLARBOR, SOUTH AUSTRALIA

Core logging of the five drill holes drilled during the last period was completed.

Chemical and physical tests were carried out on drill holes Nos. NDH 11, NDH 13 and NDH 14.

RESULTS OF INVESTIGATIONS

The results of the analysis and the Geological Drill-Logs are attached.



Drill Hole No.:

NDH 11

0 03

Total Depth:

36.20 metres

Percentage Recovered:

99.2%

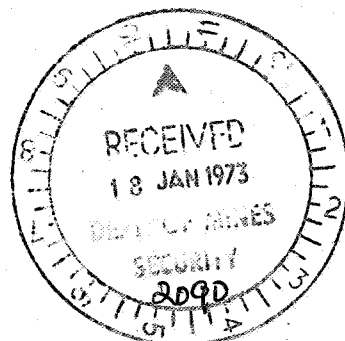
Date Commenced:

9.8.72

Date Completed:

11.8.72

Depth in Metres			Lithology	Unit	Age	Fossils
From	To	Recovery				
0	7.00	Rotary	0 - 7.00 m		Biocene - Palaeocene	
7.00	9.50	2.37	Red clay			
9.50	11.50	2.00		Nulbarbor Limestone	Lower Miocene	Pelecypoda gastropoda algal nodules
11.50	14.30	2.80	7.00 - 8.50 m			
14.30	17.10	2.80	Hard indurated calc-			
17.10	19.90	2.80	arenite fractured para-			
19.90	22.80	2.90	llel to the strike with			
22.80	25.60	2.80	thin bands of kankar			
25.60	28.40	2.80	8.50 - 31.75 m			
28.40	31.20	2.70	Hard indurated calc-			
31.20	33.50	2.30	arenite fractured para-			
33.50	36.20	2.60	llel to the strike. Minor cavities between 22.80 - 28.40 m			
			31.75 - 33.14 m Red Algal limestone	Mulla- mullang Member?		Calcareous algae?
			33.14 - 34.37 m Yellow, soft bryozoan calcareenite 34.37 - 36.20 m Fossil bed mainly Turritella aldingae Tate? Probably marking the surface of disconformity with the underlying Wilson Bluff (photograph 2).	Abrakurrie Limestone		Bryozoa pelecypoda brachiopoda



Drill Hole No.:

NDH 12

0 04

Total Depth:

35.60 m

Percentage Recovered:

92.8%

Date Commenced:

11.8.72

Date Completed:

12.8.72

Depth in Metres			Lithology	Unit	Age	Fossils
From	To	Recovery				
0	3.00	Rotary	0 - 3.30 m		Pliocene Pleistocene	
3.00	5.70	2.67	Clay containing sheet			
5.70	6.70	0.91	and nodular kankar with			
6.70	9.50	2.77	pisolitic texture.			
9.50	11.45	1.85				
11.45	14.45	3.00	3.30 - 25.30 m	Nullarbor Limestone	Lower Miocene	Pelecypoda gastropoda algal nodules
14.45	17.00	2.23	Fractured and cavernous			
17.00	19.60	2.60	calcarenite with clay			
19.60	22.50	2.84	and kankar impurities			
22.50	25.30	2.35	throughout the section.			
25.30	28.20	2.90	25.30 - 28.91 m			Calcareous algae?
28.20	31.10	2.90	Hard indurated calc-			
31.10	33.40	2.14	arenite.			
33.40	35.60	1.11				Bryozoa pelecypoda brachiopoda
			28.91 - 29.26 m	Nulla- mullang Member?	Upper Eocene	Bryozoa pelecypoda brachiopoda
			Red algal limestone			
			29.26 - 31.45 m	Abrakurrie Limestone		
			Yellow soft bryozoan calc-			
			arenite with minor clay			
			impurities			
			31.45 - 35.60 m	Wilson Bluff Limestone		
			White bryozoan calc-			
			arenite. Indurated in the			
			upper 70 cm. Red clay			
			impurities throughout			
			the section.			

Drill Hole No.:	NDH 13
Total Depth:	25.90 metres
Percentage Recovered:	88.8%
Date Commenced:	12.8.72
Date Completed:	13.8.72

Depth in Metres			Lithology	Unit	Age	Fossils
From	To	Recovery				
0	2.50	Rotary	0 - 2.50 m		Pliocene Pleistocene	
2.50	5.30	2.80	Clay containing sheet & nodular kankar with pisolitic texture			
5.30	7.30	2.00				
7.30	10.10	2.80				
10.10	12.90	2.73				
12.90	14.90	1.63	2.50 - 7.49 m	Nulbar Limestone	Lower Miocene	Pelecypoda gastropoda algal nodules
14.90	16.72	1.67	Hard indurated calc-arenite			
16.72	19.45	2.36	7.49 - 25.42 m			
19.45	20.85	1.19	Fractured and cavernous calcarenite with clay impurities throughout the section			
20.85	22.38	0.73				
22.38	22.77	0.39				
22.77	24.02	1.60				
24.02	25.27	0.93				
25.27	25.90	0.57				
			25.42 - 25.90 m	Abrakurie Limestone		Bryozoa pelecypoda brachiopoda
			Yellow, porous bryozoan calcarenite			



Drill Hole No.:

NDH 14

Total Depth:

27.10 metres

Percentage Recovered:

89.8%

Date Commenced:

14.8.72

Date Completed:

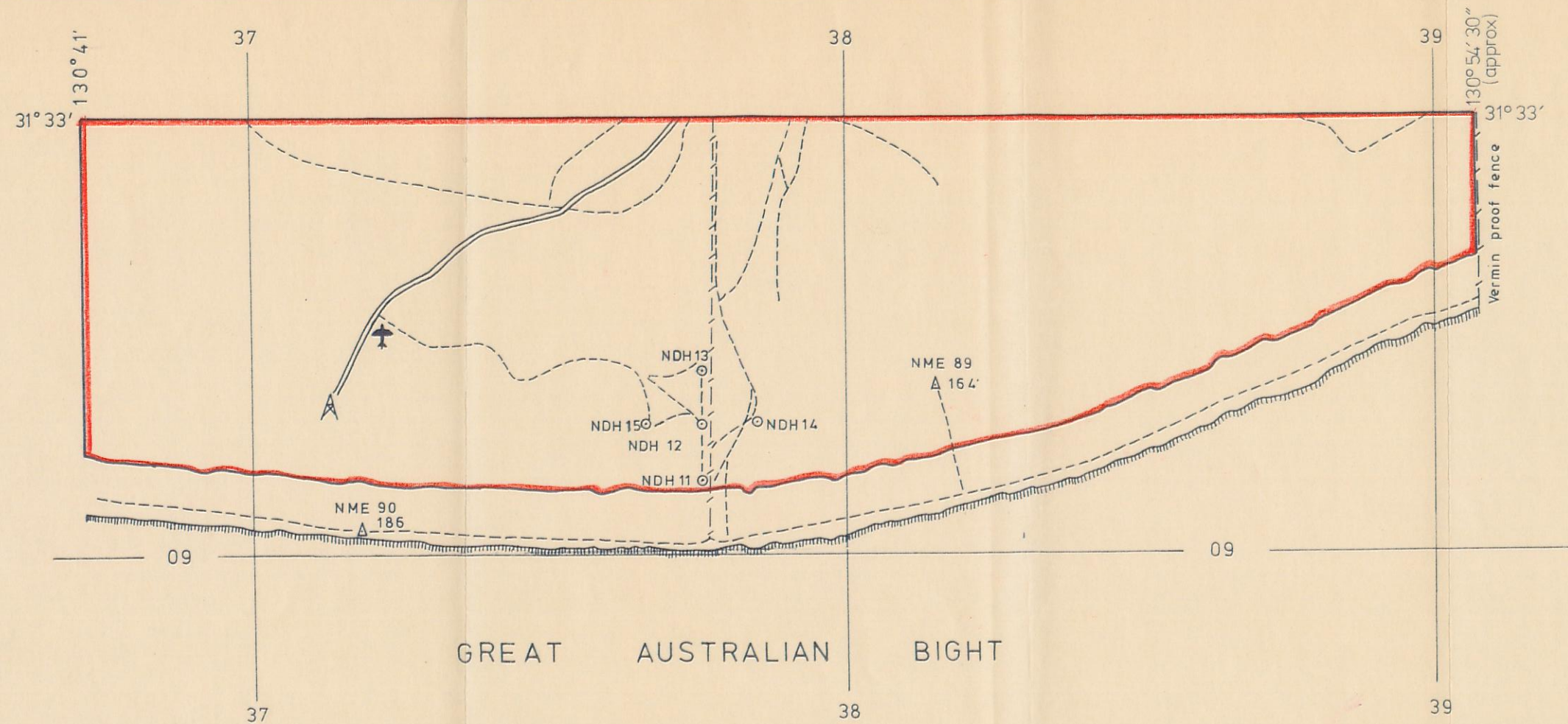
15.8.72

Depth in Metres			Lithology	Unit	Age	Fossils
From	To	Recovery				
0	2.70	Rotary	0 - 2.40 m		Pliocene Pleistocene	
2.70	5.50	2.72	Clay containing sheet			
5.50	8.30	2.85	and nodular kankar with			
8.30	10.80	2.33	pisolitic texture.			
10.80	13.60	2.75				
13.60	16.40	2.67	2.40 - 14.55 m	Nulbar Limestone	Lower Miocene	Pelecypoda gastropoda and algal nodules
16.40	19.20	1.63	Hard indurated calc-			
19.20	20.05	0.66	arenite abundant			
20.05	22.90	2.80	aragonite crystals			
22.90	24.60	1.34	in small cavities			
24.60	25.50	0.67	between 7.20 and 14.55 m			
25.50	27.10	1.50	14.55 - 24.00 m			
			Fractured and cavernous			
			calcarene with clay &			
			kankar impurities			
			24.00 - 27.10 m			
			Red clay			

Drill Hole No.: NDH 15  
 Total Depth: 32.00 metres  
 Percentage Recovered: 98.9%  
 Date Commenced: 16.8.72  
 Date Completed: 17.8.72

Depth in Metres			Lithology	Unit	Age	Fossils
From	To	Recovery				
0	4.50	Rotary	0 - 4.20 m		Pliocene Pleistocene	
4.50	7.30	2.80	Clay containing sheet & nodular kankar with pisolitic texture.			
7.30	10.10	2.80				
10.10	12.90	2.80				
12.90	15.30	2.35				
15.30	18.10	2.80	4.20 - 28.10 m	Nullarbor Limestone	Lower	Pelecypoda gastropoda algal nodules
18.10	21.00	2.90	Hard indurated calcarenite strongly fractured parallel to the strike.			
21.00	23.80	2.60				
23.80	26.60	2.76				
26.60	29.10	2.50				
29.10	32.00	2.90				
			28.10 - 29.10 m	Nulla- mullang Member?	Miocene	Calcareous algae?
			Red algal limestone			
			29.10 - 31.95 m	Abrakurrie Limestone	Miocene	Bryozoa pelecypoda brachiopoda
			Yellow, hard indurated bryozoan calcarenite			
			31.95 - 32.00 m			
			Fossil bed mainly Turritella aldingae Tate? Probably marking the surface of disconformity with the underlying Wilson Bluff Limestone.			





Black numbered lines indicate the 10,000 yard Transverse Mercator Grid, Zone 4 Australia Series

- KEY
- NDH 12 BORE HOLE.
  - ✈ LANDING GROUND.
  - △ MICROWAVE TOWER.
  - △ NME 90 MAJOR CONTROL STATION.
  - TRACK.
  - ||||| CLIFFS.
  - LEASE BOUNDARY

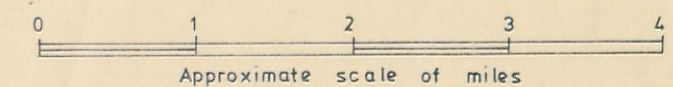
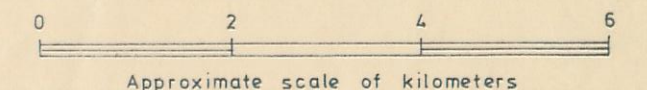


Fig No. \_\_\_\_\_  
To accompany \_\_\_\_\_  
Dated \_\_\_\_\_



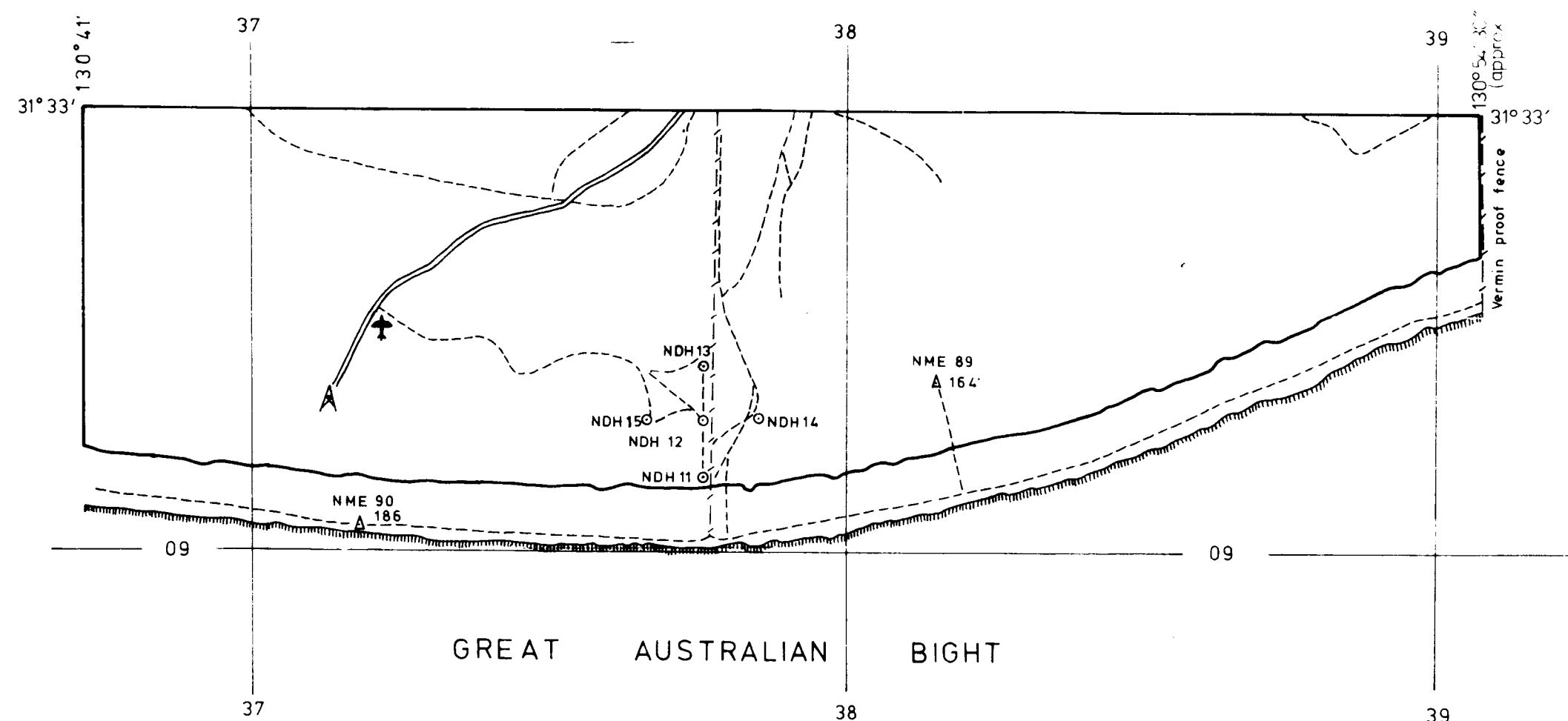
THE BROKEN HILL PROPRIETARY CO. LTD.  
EXPLORATION DEPARTMENT

DRILL HOLE LOCALITIES  
S.M.L. 699 - NULLARBOR S.A.

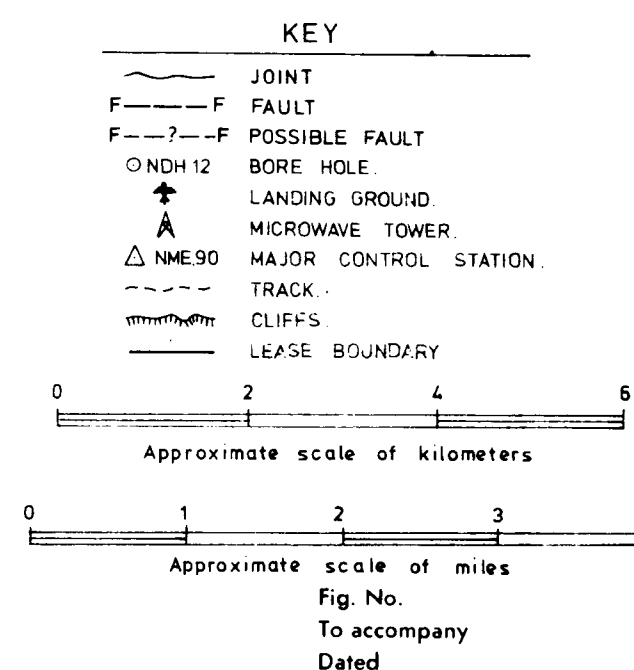
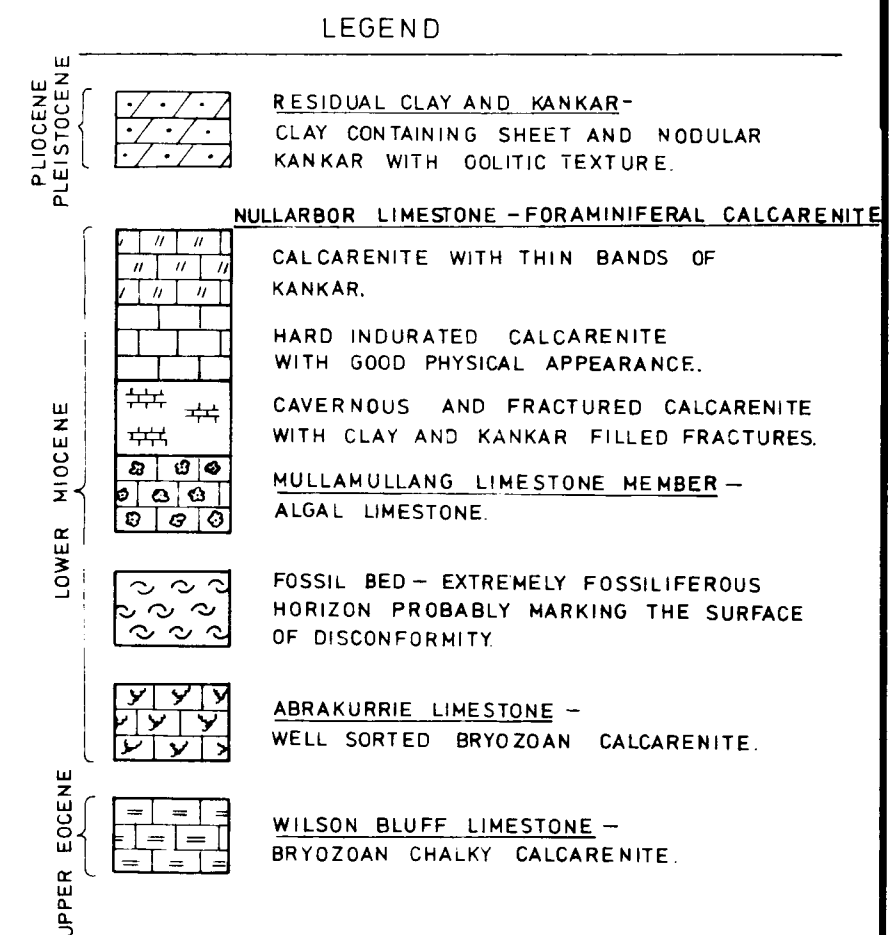
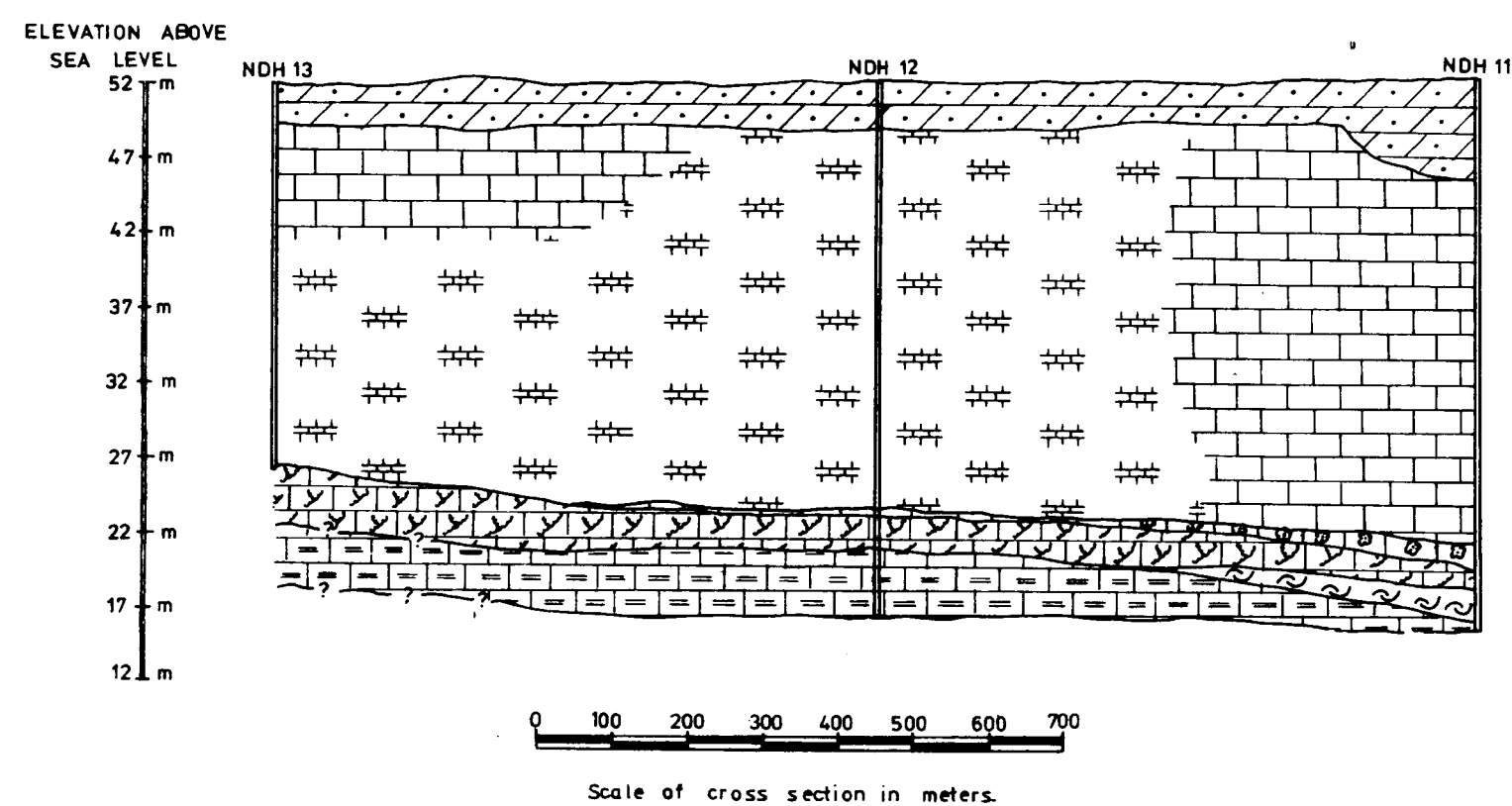
Revisions:	Prepared by: B. F.	Centre: Whyalla.
	Date: Sept. 1972.	Project No: NULLARBOR 11.
	Drawn: A. W.	Drawing No: A3- 35.

2090-1



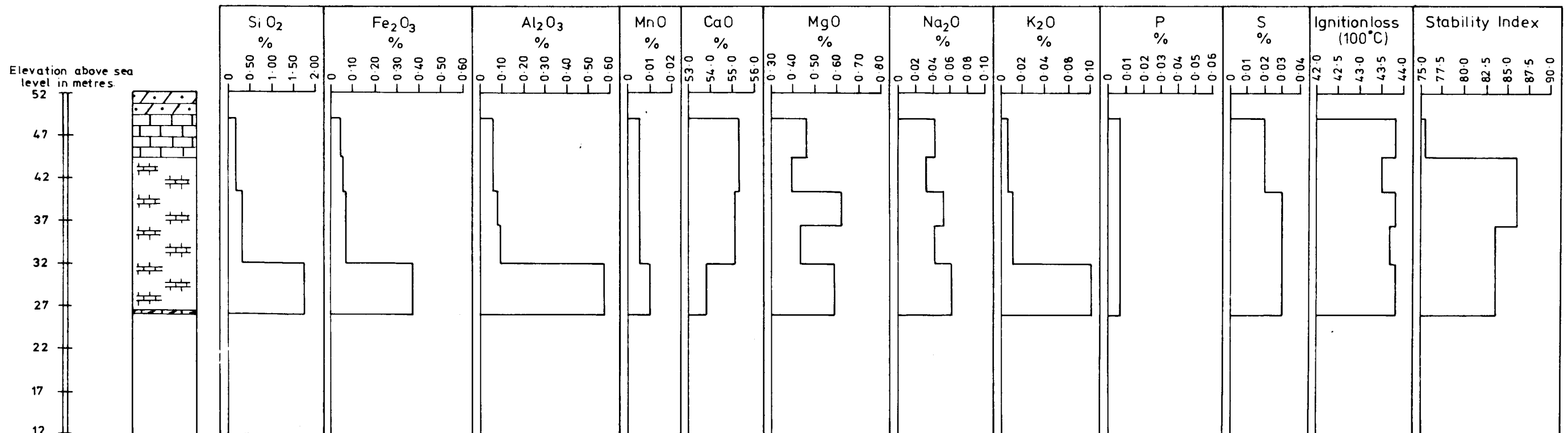


Black numbered lines indicate the 10,000 yard Transverse Mercator Grid, Zone 4 Australia Series



THE BROKEN HILL PROPRIETARY CO. LTD. EXPLORATION DEPARTMENT		
DRILL HOLE LOCALITIES AND STRATIGRAPHIC CROSS SECTION. S.M.L. 699, NULLARBOR S.A.		
Drawn: B. FAKHRY	Date: OCT. 72.	Centre: WHYALLA
Traced: A.W. & R.K.	NULLARBOR- 11	Drawing No.: A2- 35
Checked: JMC		

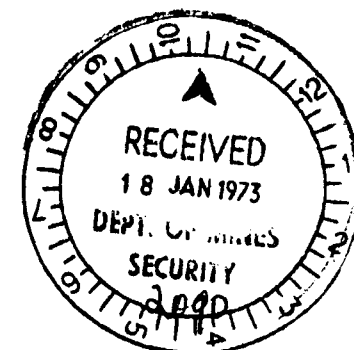
2090-2



LEGEND

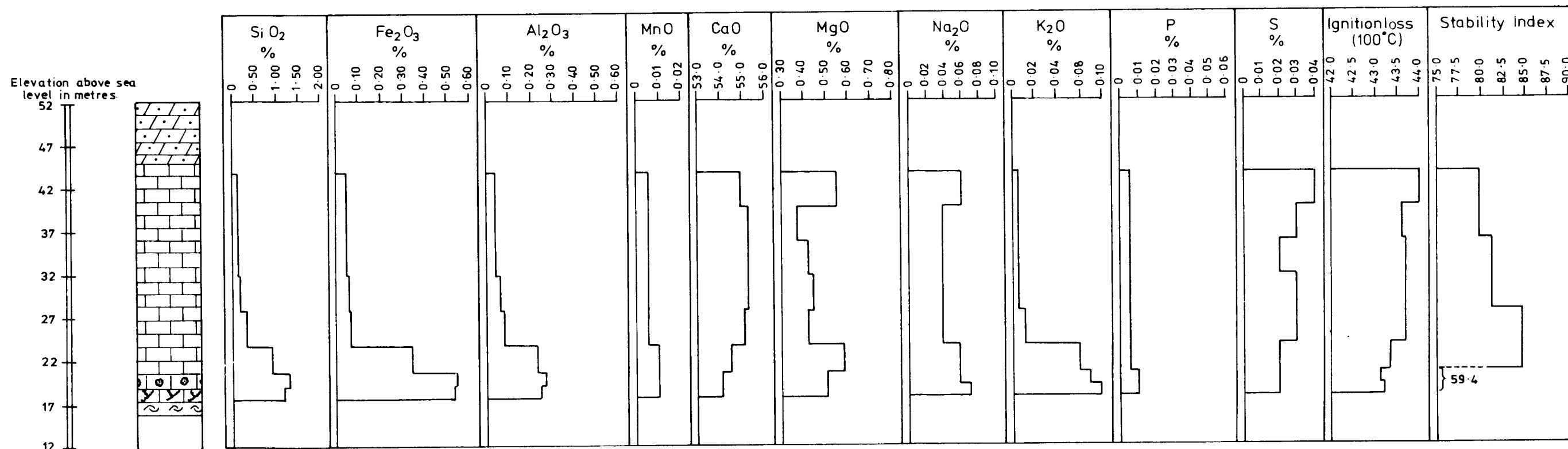
PLIOCENE PLEISTOCENE		RESIDUAL CLAY AND KANKAR - CLAY CONTAINING SHEET AND NODULAR KANKAR WITH OOLITIC TEXTURE.
		NULLARBOR LIMESTONE - FORAMINIFERAL CALCARENITE
LOWER MIOCENE		CALCARENITE WITH THIN BANDS OF KANKAR
		HARD INDURATED CALCARENITE WITH GOOD PHYSICAL APPEARANCE.
		CAVERNOUS AND FRACTURED CALCARENITE WITH CLAY AND KANKAR FILLED FRACTURES.
		MULLAMULLANG LIMESTONE MEMBER - ALGAL LIMESTONE
UPPER EOCENE		FOSSIL BED - EXTREMELY FOSSILIFEROUS HORIZON PROBABLY MARKING THE SURFACE OF DISCONFORMITY
		ABRAKURRIE LIMESTONE - WELL SORTED BRYOZOAN CALCARENITE.
		WILSON BLUFF LIMESTONE - BRYOZOAN CHALKY CALCARENITE

Fig No  
To accompany  
Dated



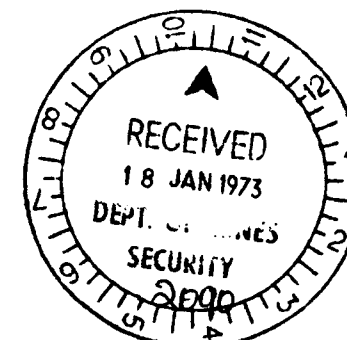
THE BROKEN HILL PROPRIETARY CO. LTD. EXPLORATION DEPARTMENT			
GEOLOGICAL LOG AND ANALYSIS RESULTS			
DRILL HOLE No. 13. S.M.L. 699.			
NULLARBOR S.A.			
Revisions:	Prepared by: B. FAKHRY	Centre: WHYALLA	
	Date: NOV. '72	Project No: NULLARBOR 19	Drawing No: A3-56
	Drawn: R.K.		

2090-3



## LEGEND

PLIOCENE PLEISTOCENE		RESIDUAL CLAY AND KANKAR - CLAY CONTAINING SHEET AND NODULAR KANKAR WITH OOLITIC TEXTURE.
		NULLARBOR LIMESTONE - FORAMINIFERAL CALCARENITE
LOWER MIOCENE		CALCARENITE WITH THIN BANDS OF KANKAR
		HARD INDURATED CALCARENITE WITH GOOD PHYSICAL APPEARANCE.
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		MULLAMULLANG LIMESTONE MEMBER - ALGAL LIMESTONE
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		ABRAKURRIE LIMESTONE - WELL SORTED BRYOZOAN CALCARENITE
		WILSON BLUFF LIMESTONE - BRYOZOAN CHALKY CALCARENITE



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EXPLORATION DEPARTMENT

GEOLOGICAL LOG AND ANALYSIS RESULTS

DRILL HOLE No. 11. S.M.L. 699.

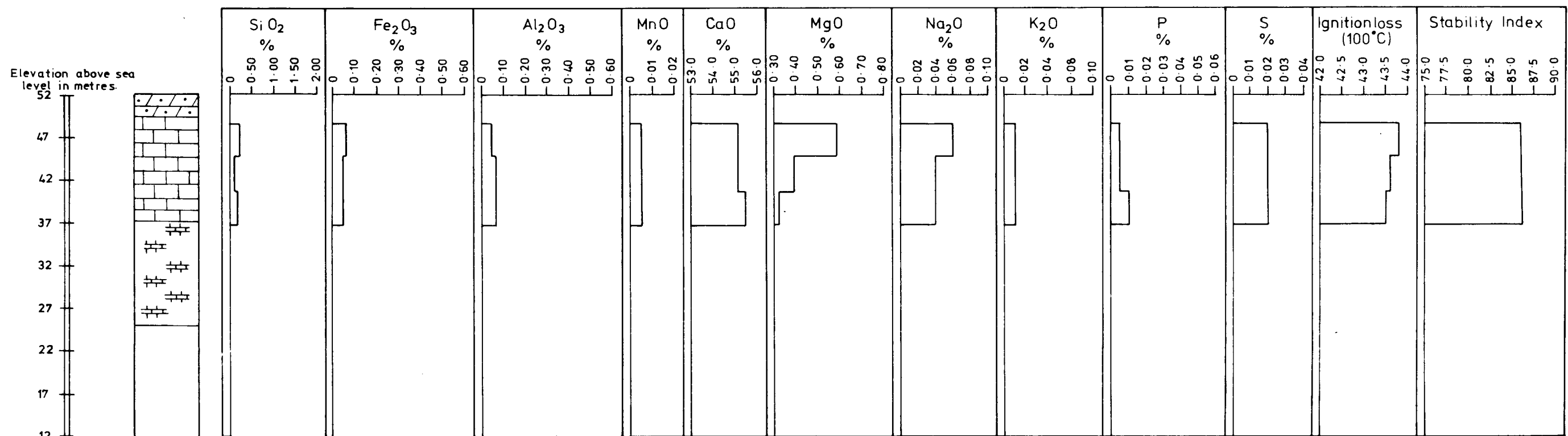
NULLARBOR S. A.

Prepared by: B. FAKHRY Centre: WHYALLA

Date: NOV. '72 Project No: NULLARBOR 18 Drawing No: A3-55

Drawn: R. K.

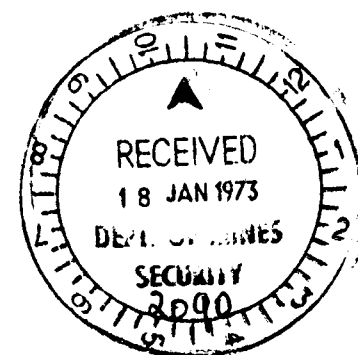
2090-4



## LEGEND

PLIOCENE PLEISTOCENE		<b>RESIDUAL CLAY AND KANKAR -</b> CLAY CONTAINING SHEET AND NODULAR KANKAR WITH OOLITIC TEXTURE.
		<b>NULLARBOR LIMESTONE - FORAMINIFERAL CALCARENITE</b>
LOWER MIOCENE		CALCARENITE WITH THIN BANDS OF KANKAR
		HARD INDURATED CALCARENITE WITH GOOD PHYSICAL APPEARANCE.
		CAVERNOUS AND FRACTURED CALCARENITE WITH CLAY AND KANKAR FILLED FRACTURES
		<b>MULLAMULLANG LIMESTONE MEMBER -</b> ALGAL LIMESTONE
UPPER EOCENE		FOSSIL BED - EXTREMELY FOSSILIFEROUS HORIZON PROBABLY MARKING THE SURFACE OF DISCONFORMITY
		<b>ABRAKURRIE LIMESTONE -</b> WELL SORTED BRYOZOAN CALCARENITE
		<b>WILSON BLUFF LIMESTONE -</b> BRYOZOAN CHALKY CALCARENITE

Fig No  
To accompany  
Dated



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EXPLORATION DEPARTMENT

GEOLOGICAL LOG AND ANALYSIS RESULTS  
DRILL HOLE No. 14, S.M.L. 699.  
NULLARBOR S.A.

Prepared by:	B. FAKHRY	Centre:	WHYALLA
Date:	NOV '72	Project No:	NULLARBOR 20
Drawn:	R.K.	Drawing No:	A3-57

2090-5