

CONTENTS ENVELOPE 5610

TENEMENT: PEL No. 23.

TENEMENT HOLDER: Comalco Aluminium Limited.

REPORT: Letter 2nd August 1984 Re Preliminary
Analytical Data Compiled For CRA Ltd.

Pgs. 3-51

PLANS: Nil.



→ DIG: 27/8/84

003

COMALCO ALUMINIUM LIMITED

RAW MATERIALS DIVISION
EXPLORATION DEPARTMENT

R3.05.04.001

2nd August, 1984

The Director General,
Department of Mines & Energy,
P.O. Box 191,
EASTWOOD. S.A. 5063

Attention: Oil and Gas Division

Dear Sir,

Re: Preliminary analytical data compiled for CRA Ltd

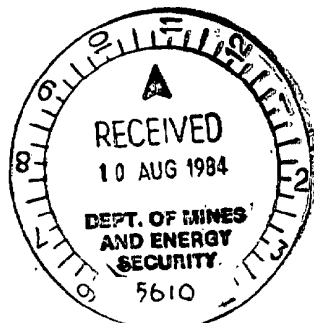
(Your reference SR 27/2/40/1 DG:DP)

Thank you for your request regarding the data on Comalco confidential drill cores Byilkaoora-2 and Byilkaoora-3. Comalco prefers the bulk mineralogy data on Byilkaoora 2 & 3 to remain confidential.

Yours faithfully, *ATTACHED*.

G. Weste,
Senior Geologist.

SR. 27/2/40/1.



ADDRESS CORRESPONDENCE TO
PO BOX 246 GLENSIDE SA 5065
TELEX 89509
TELEPHONE 79 9711

INCORPORATED IN QUEENSLAND

NOTE Spoke to G. Weste on
8/8/84 who agreed
2 pages of report
relating to Byilkaoora
2 & 3 should be
extracted & kept
in Confidential Envr.
Rest of Report to Open File.
G. Weste
8/8/84

**SOUTH AUSTRALIA DEPARTMENT OF
MINES AND ENERGY**

**Bulk Mineralogy, Clay Mineralogy,
and Total Organic Carbon of
Cores from SADME Library**

R. C. Surdam

J. E. Warme

S. W. Boese

Progress Report

Work completed through September 1, 1983

008

SADME SAMPLES
NOVEMBER-DECEMBER 1982

<u>Well</u>	<u>Basin</u>
✓Boorthanna 1	Arckaringa
Byilkaoora 2	Officer
Byilkaoora 3	Officer
✓Cootanoorina 1	Arckaringa
Denman 1	Eucla
Guinnewarra	Eucla (offshore)
Hughes Well 1	Eucla
✓Karari 1	Officer
✓Lake Frome 1	Arrowie
✓Lake Frome 2	Arrowie
✓Lake Frome 3	Arrowie
✓Lake Frome 4, Mile Creek	Arrowie
✓Lake Phillipson 1	Arckaringa
✓Lambina 1	Arckaringa
✓Mt. Willoughby 1	Arckaringa
✓Oodnadatta 1	Arckaringa
✓Stuart Range 2	Arckaringa
✓Stuart Range 6	Arckaringa
✓Stuart Range 14/2	Arckaringa
✓Warriner Creek 1	Arckaringa
✓Weedina 1	Arckaringa
✓Woomera 1	Stuart Shelf

Key to Mineral Abbreviations

A	Anhydrite
AM	Amorphous Material
C	Calcite
Ch	Chlorite
Ch/S	Chlorite-Smectite
Cl	Clinoptilolite
Cr	Cristobalite
D	Dolomite
F	Feldspar
Fl	Fluorapatite
G	Gypsum
Gr	Graphite
H	Halite
I	Illite
I/S	Illite-Smectite
K	Kaolinite
M	Muscovite
Ma	Magnesite
M/L	Mixed-Layer Clays
P	Pyrite
Q	Quartz
S	Smectite
Se	Sepiolite
Si	Siderite
T	Talc
WM	White Mica

Based on relative peak height, minerals are designated as:

XX	abundant
X	minor
tr	trace

ARCKARINGA BASIN

Drill Site: Boorthanna 1

Depths (ft)	Minerals											
	C	Ch	D	F	G	I	K	P	Q	Se	Si	S
1300	tr	X		X		X			XX			
1350	tr	X	tr	X		X	X		XX			
1400		tr		tr		tr	tr		XX	tr?	X	
1500		tr		X		tr	tr		XX			
1600	tr			tr		tr	tr		XX		tr	
1700	tr			X		tr	tr		XX		X	
1800	tr		tr	tr		X	X		XX		X	
1850	tr			tr		X	X		XX		X	
1900				tr		tr	tr	tr	XX			tr
1950			tr?		tr			tr	XX			tr
2000				tr					XX			tr
2050					tr			tr	XX			tr
2100					tr			X	XX			tr
2150					tr	tr		tr	XX		tr?	tr
2200								tr	XX			tr
2250		tr	tr	tr		tr			XX			tr
2300		tr		tr		tr			XX			tr
2350		tr		tr		tr			XX			tr
3450		tr		X		tr			XX			
3500		tr		X		tr			XX			tr
3550		tr		tr		tr			XX			
3760	tr	tr		X		tr			XX			

ARCKARINGA BASIN

Drill Site: Boorthana 1 (BOO-1)

Sample No.	Depth (ft)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	1300	X		X	X					
2	1350	X		X	X					
3	1400	XX		XX	X					
4	1500	X		X	X					
5	1600	X		X	X					
6	1700	X		XX	tr	X	X		70%	
7	1800	X		XX	tr					
8	1850	X		X	tr					
9	1900	X		X						
10	1950	X		X	tr	X	X		50%	
11	2000	tr		X	X	X	X		45%	
12	2050	tr		X		tr	tr		?	
13	2100	tr		X		tr	tr		?	
14	2150	X		X		tr	tr		30%	
15	2200	XX		XX	tr	tr	tr		?	
16	2250	XX		X	X					
17	2300	X			X					
18	2350	X			X					
19	3450	X			X					
20	3500	X			X					
21	3550	X			X					
22	3760	X			X					

ARCKARINGA BASIN

Drill Site: Boorthanna 1

Depth (ft)	Total Organic Carbon (%)
1300	0.17
1350	0.29
1400	2.24
1500	0.11
1600	1.18
1700	1.29
1800	1.44
1850	1.81
1900	5.04
1950	6.08
2000	4.70
2050	5.93
2100	4.63
2150	0.59
2200	6.64
2250	5.94
2300	0.67
2350	0.53
3450	0.48
3500	0.40
3550	0.38
3760	0.22

ARCKARINGA BASIN

010

Drill Site: Cootanoorina 1

Depths (ft)	Minerals									
	C	Ch	D	F	I	K	P	Q	Si	S
1690		X		tr	X	X		XX		-
1790				tr	tr	X		XX	X	tr
1900				tr	tr	tr		XX	X	tr
2000				tr	tr	X		XX	X	tr
2110				tr	tr	tr		XX	X	tr
2150				tr	tr	tr		XX	X	
2160				tr	tr	tr		XX	X	tr
2200				tr	tr	X	tr	XX	tr	tr
2300	X			tr	tr	tr	tr	XX	tr	tr
2400	tr		tr	tr	tr	tr		XX		
2500	tr	tr	tr	tr	tr			XX		

ARCKARINGA BASIN

Drill Site: Cootanoorina 1 (CTN-1)

Sample No.	Depth (ft)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	1690	X		XX	X	tr	tr		?	
2	1790	X		XX	X	X	X		90%	
3	1900	tr		X		X	X		90%	
4	2000	tr		X		XX	XX		90%	
5	2110	tr		X		XX	XX		85%	
6	2150	tr		X		XX	XX		85%	
7	2160	tr		X		XX	XX		80%	
8	2200	tr		X		XX	XX		75%	
9	2300	X		X	tr	XX	XX		65%	
10	2400	XX		X	XX	X	X		45%	
11	2500	XX		X	XX	X	X		35%	

ARCKARINGA BASIN

Drill Site: Cootanoorina 1

Depth (ft)	Total Organic Carbon (%)
1690	1.35
1790	2.66
1900	3.05
2000	3.03
2110	2.84
2150	2.91
2160	3.02
2200	5.88
2300	3.38
2400	1.36
2500	0.72

OFFICER BASIN

Drill Site: Karari 1

Depth (m)	Minerals		
	A	C	Q
285	XX	XX	tr

ARROWIE BASIN

014

Drill Site: Lake Frome 1

Depth (ft)	Minerals							
	C	Ch	D	F	I	K	P	Q
500			tr		tr	tr		XX
650	X		tr		tr	tr		XX
700	XX	tr			tr			XX
1000	X	tr	X	X	tr			XX
1400	XX	tr	tr		tr			X
1490	tr	X	tr	X	tr			XX
1500	XX	tr	tr		tr			XX
2000	tr	tr	tr	X	tr		tr	XX
2557		tr		X	X		tr	XX

ARROWIE BASIN

Drill Site: Lake Frome 2

Depth (ft)	Minerals					
	C	Ch	D	F	I	Q
430						XX
2515		X		X	X	XX
2040	XX	tr	X		tr	X

ARROWIE BASIN

Drill Site: Lake Frome 3

Depth (ft)	Minerals				
	Ch	D	F	I	Q
2082	X	XX	tr	X	XX
2550	tr	X	X	tr	XX

ARROWIE BASIN

Drill Site: Lake Frome 4, Mile Creek

Depth (ft)	Minerals		
	K	Q	S
373	X	X	XX
375	X	X	XX
385		X	XX

ARCKARINGA BASIN

316

Drill Site: Lake Phillipson 1

Depths (ft)	Minerals											
	AM	D	F	Fl	G	H	I	K	P	Q	Si	S
312	AM					tr	tr	tr		tr		
393	AM					tr						
472	AM		tr				tr	tr		XX		
1586	AM		X					X		XX		
1771			tr	tr			tr	tr		XX		
1946			tr				tr	tr		XX		
2160		tr	tr		tr			tr	tr	XX	X	
2177			tr		tr			tr		XX		tr
2269										X	XX	
2283			tr				tr			XX		tr
2535			tr				tr			XX		tr
2563	AM					X	tr	tr		X		

ARCKARINGA BASIN

Drill Site: Lake Phillipson 1

Depth (ft)	Total Organic Carbon (%)
312	59.91
393	58.32
472	35.86
1586	49.24
1771	4.76
1771	4.13
1946	4.58
2160	4.91
2177	6.73
2269	1.74
2283	0.39
2535	0.08
2563	51.04

ARCKARINGA BASIN

021

Drill Site: Lambina 1

Depths (ft)	Minerals							
	C	Ch	F	I	K	Q	Si	S
340			tr			XX		X
480			tr			XX		X
530			tr		tr	XX		tr
660					tr	XX	X	
860			tr		tr	XX		tr
1020	tr		X	tr	X	XX		
1130	tr	tr	tr	tr		XX		
1200	tr	tr	tr	tr		XX		tr
1290	X	tr	tr	tr		XX		
1420	tr	tr	tr	tr		XX		tr

ARCKARINGA BASIN

Drill Site: Lambina 1 (LAM-1)

Sample No.	Depth (ft)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	340	tr			tr	XX	XX		100%	
2	480					XX	XX		100%	
3	530			X		X	X		?	
4	660			X		X	X		?	
5	860			X		XX	XX		75%	
6	1020	tr		XX		X	X		?	
7	1130	X		X	X	XX	XX		65%	
8	1200	tr		X	X	XX	XX		80%*	
9	1290	X			X	X	X		50%	
10	1420	X			X	X	X		?	

* Sample contaminated by caving.

ARCKARINGA BASIN

Drill Site: Lambina 1

Depth (ft)	Total Organic Carbon (%)
340	1.07
480	1.53
530	0.76
660	0.08
860	0.78
1020	0.01
1130	0.30
1200	0.13
1290	1.03
1420	0.20

ARCKARINGA BASIN

Drill Site: Mt. Willoughby 1

Depths (ft)	Minerals								
	C	Ch	D	F	I	K	Q	Si	S
120						tr	XX		X
206							XX		X
209							XX		X
210							XX		X
270							XX		X
310						tr	XX		X
620						tr	XX		tr
860	X			tr	tr	tr	XX	X	
1140		tr		tr	tr	X	XX		
1230		tr		tr	tr	tr	XX		
1370		X		tr	X		XX		
1520	tr	X		tr	X		XX		
1670	tr	tr		tr	tr		XX		
1750	tr	tr	tr	tr	tr		XX		
1810	tr	tr	tr	tr	tr		XX		
1980	tr	tr	tr	tr	tr		XX		
2032	tr	tr	X	tr	tr		XX		
2050	tr	tr	XX	tr	tr		X		
2065	tr		XX				tr		
2072			XX	tr			XX		tr
2074	tr		XX	tr			X		

ARCKARINGA BASIN

Drill Site: Mt. Willoughby 1 (MTW-1)

Sample No.	Depth (ft)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	120			X		XX	XX		100%	
2	206					XX	XX		100%	
3	209					XX	XX		100%	
4	210					XX	XX		100%	
5	270					XX	XX		100%	
6	310	tr		X		XX	XX		100%	
7	620	tr				XX	XX		100%	
8	860	X		XX		X	X		?	
9	1140	X			X	X	X		?	
10	1230	XX	XX		XX	XX	XX		70%	
11	1370	X	X		X	XX			70%	
12	1520	X			X	X	X		?	
13	1670	X			X	X	X		45%	
14	1750	XX	XX		XX	X	X		?	
15	1810	XX	XX		XX	X	X		?	
16	1980	XX			XX	X	X		?	
17	2032	X			X	tr	tr		?	
18	2050	X			X	X	X		50%	50/50
19	2065	No clays								
20	2065	No clays			XX					
21	2072	XX			XX	XX	X		50%	50/50
22	2074	X			tr	XX			50%	50/50

ARCKARINGA BASIN

Drill Site: Mt. Willoughby 1

Depth (ft)	Total Organic Carbon (%)
120	1.09
206	1.62
209	1.93
210	1.83
270	1.23
310	1.91
620	0.42
860	1.33
1140	0.45
1230	0.47
1370	0.27
1520	0.44
1670	0.45
1750	0.16
1810	0.68
1980	0.20
2032	0.17
2050	0.60
2065	0.00
2065	0.05
2072	0.14
2074	0.70

ARCKARINGA BASIN

Drill Site: Oodnadatta 1

Depths (m)	Minerals				
	Ch	F	K	Q	S
185	tr		XX	XX	X
285	tr	X	tr	XX	X
367		X		XX	tr
433		tr	tr	XX	tr

ARCKARINGA BASIN

Drill Site: Oodnadatta 1 (OOD-1)

Sample No.	Depth (m)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	185	tr		XX		XX	XX		75%	
2	285	tr		X		XX	XX		100%*	
3	367	tr		tr		XX	XX		80%	
4	433	tr		XX		XX	XX		65%	

* Sample contaminated by caving.

ARCKARINGA BASIN

Drill Site: Oodnadatta 1

Depth (m)	Total Organic Carbon (%)
185	0.41
285	1.12
367	0.98
433	0.71

ARCKARINGA BASIN

Drill Site: Stuart Range 2

Depths (m)	Minerals					
	F	I	K	P	Q	S
112	tr		tr	X	XX	tr
115	tr	tr		tr	XX	tr
117	tr	tr	tr	tr	XX	X
118	tr		tr	X	XX	tr

ARCKARINGA BASIN

Drill Site: Stuart Range 2 (STR-2)

Sample No.	Depth (m)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	112	tr		X		XX	XX		80%	
2	115	tr		tr	tr	XX	XX		80%	
3	117	tr		tr		XX	XX		95%*	
4	118	tr		tr	tr	XX	XX		80%	

* Sample contaminated by caving.

ARCKARINGA BASIN

Drill Site: Stuart Range 2 (STR-2)

Sample No.	Depth (m)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	112	tr		X		XX	XX		80%	
2	115	tr		tr	tr	XX	XX		80%	
3	117	tr		tr		XX	XX		95%*	
4	118	tr		tr	tr	XX	XX		80%	

* Sample contaminated by caving.

ARCKARINGA BASIN

Drill Site: Stuart Range 6

Depths (m)	Minerals					
	Ch	D	F	I	P	Q
79	XX		X	XX		XX
85	XX		X	XX		XX
96	X		tr	tr	tr	XX
102	tr	tr	tr	tr	tr	XX
107	X		tr	X	tr	XX
109	X		tr	X	tr	XX
119	XX		tr	XX		XX
142	XX		tr	XX		XX
147.5	tr		tr	tr	tr	XX
148	tr			X	tr	XX
156	X	tr	tr	X	tr	XX
159.6	X		tr	X	tr	XX
169	tr		tr	X	tr	XX
176	tr		tr	X	tr	XX
180	tr	tr	tr	tr	tr	XX
187	tr		tr	tr	tr	XX
194	tr		tr	X	X	XX
204	tr	tr	tr	X	tr	XX
212	tr		tr	tr	tr	XX
518	tr	X	tr	tr		XX
529	tr	tr	tr	tr		XX
542	tr	X	tr	tr		XX
553	tr	XX	tr	tr		XX

ARCKARINGA BASIN

Drill Site: Stuart Range 6 (STR-6)

Sample No.	Depth (ft)(m)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	79	XX			X					
2	85	XX			X					
3	96	XX			X					
4	102	XX			X					
5	107	XX			X					
6	109	XX			X					
7	119	X			X					
8	142	XX			X					
9	147.5	X			X					
10	148	XX			X					
11	156	X			X					
12	159.6	XX			tr					
13	169	X			X					
14	176	X			X					
15	180	X			X					
16	187	X			tr					
17	194	X			tr					
18	204	X			X					
19	212	X			X					
20	518	X			X					
21	529	X			X					
22	542	X			X					
23	553	X			X					

ARCKARINGA BASIN

Drill Site: Stuart Range 6

Depth (m)	Total Organic Carbon (%)
79	0.40
85	0.34
96	0.12
102	0.11
107	0.14
109	0.21
119	0.23
142	0.32
147.5	0.21
148	0.26
156	0.23
159.6	0.29
169	0.31
176	0.27
180	0.23
187	0.34
194	0.26
204	0.27
212	0.25
518	0.32
529	0.36
542	0.03
553	0.00

ARCKARINGA BASIN

036

Drill Site: Stuart Range 14/2

	Minerals
Depths (m)	AM
130	AM
130.5	AM

ARCKARINGA BASIN

Drill Site: Stuart Range 14/2 (STR-14/2)

Sample No.	Depth (m)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	130	No clays extracted								
2	130.5	No clays extracted								

ARCKARINGA BASIN

Drill Site: Stuart Range 14/2

Depth (m)	Total Organic Carbon (%)
130	64.8
130.5	64.6

ARCKARINGA BASIN

Drill Site: Warriner Creek 1

Depths (m)	Minerals										
	C	Ch	D	F	I	K	P	Q	Si	S	Fl
72				tr	tr	X		XX	X		
74				tr	tr	X		XX	tr		
76				tr	tr	tr		XX	tr		
80					tr	X		XX	X		
91		tr		tr	X	X		XX	tr		
94		tr		tr	tr	tr		XX	tr		
97				tr	tr	tr		XX	X		
101				tr	tr	tr		XX	X		
105				tr	tr	tr		XX	X		
110				tr	tr	tr		XX	X		
115				tr	tr	tr		XX	X		
120		tr		tr	tr	tr		XX	X		
126	X	tr		tr	tr	tr		XX	X		
132		tr		tr	tr	tr		XX	X		
133				tr	tr	tr		XX	X		
139		tr		tr	tr	tr		XX	X		
144		tr		tr	tr	tr		XX	X		
151		tr		tr	tr	tr		XX	tr		
153		tr		tr	tr	X		XX	X		
158		tr		tr	tr	tr		XX	X		
164		tr		tr	tr	X		XX	tr		
170		tr		tr	tr	tr		XX	X		

ARCKARINGA BASIN

Drill Site: Warriner Creek 1 (continued)

Depths (m)	Minerals										
	C	Ch	D	F	I	K	P	Q	Si	S	Fl
173		tr		tr	tr	tr		XX	tr		
182		tr		tr	tr	tr		XX		tr	
187		tr		tr	tr	tr		XX		tr	
192							tr	XX		tr	
195				tr	tr	tr	tr	XX		tr	
199							X	XX		tr	
199.5											XX
200							X	XX		tr	
201											XX
201.5							X	XX		tr	
202	tr		X?		tr	tr	X	XX			
204	tr	tr	X?		tr		tr	XX			
204.5	tr	tr	X?	tr	tr			XX			
261	X		X	tr	tr			XX			
277			X	tr				XX		tr	
284			XX	tr	X		tr	XX			
285			tr	tr	X		tr	XX			
285.2	tr		XX		tr	tr		X			

ARCKARINGA BASIN

Drill Site: Warriner Creek 1 (WCR-1)

Sample No.	Depth (ft ^m)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	72	X		XX	X					
2	74	X		XX	X					
3	76	X		X	tr					
4	80	X		XX	X					
5	91	X		X	X					
6	94	X		X	X					
7	97	X		X	X					
8	101	X		X	tr					
9	105	X		XX	X					
10	110	X		XX	X					
11	115	X		X	X					
12	120	X		XX	XX					
13	126	X		XX	X					
14	132	X		XX	X					
15	133	XX		XX	X	tr	tr		?	
16	139	X		XX	X					
17	144	X		X	X					
18	151	X		XX	X					
19	153	X		XX	X					
20	158	X		XX	X					
21	164	X		X	X					
22	170	XX		XX	XX					

ARCKARINGA BASIN

Drill Site: Warriner Creek 1 (continued)

Sample No.	Depth (m)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
23	173	XX		XX	XX					
24	182	XX		XX	XX					
25	187	X			X	XX	XX		100%*	
26	192					XX	XX		100%*	
27	195	tr		tr		XX	XX		100%*	
28	199	tr				XX			85%*	
29	199.5					tr	tr		?	
30	200	tr		tr		XX	XX		100%*	
31	201					tr	tr		?	
32	201.5	tr		tr		XX	XX		100%*	
33	202 #33	tr		tr		XX	XX		75%*	
34	202 #34	X		X		X	X		55%	
35	204	X		X		X	X		50%	
36	204.5	XX		X	X	tr	tr		?	
37	261	X		tr	tr	tr	tr		?	
38	277	X		X	X	X	X		?	
39	284			XX						
40	285			XX						
41	285.2	X								

* Sample contaminated by caving.

ARCKARINGA BASIN

Drill Site: Warriner Creek 1

Depths (m)	Total Organic Carbon (%)
72	2.29
74	2.83
76	2.84
80	3.32
91	2.97
94	3.60
97	2.79
101	2.43
105	2.95
110	2.71
115	3.66
120	2.62
126	1.93
132	2.33
133	2.41
139	2.41
144	3.42
151	3.02
153	3.00
158	4.02
164	2.96
170	2.67

ARCKARINGA BASIN

Drill Site: Warriner Creek 1
(continued)

Depth (m)	Total Organic Carbon (%)
173	1.92
182	0.83
187	0.93
192	8.91
195	6.34
199	16.32
199.5	1.89
200	14.93
201	1.71
201.5	12.64
202	3.31
202	5.20
204	5.528
204.5	2.99
261	0.07
277	0.14
284	0.89
285	0.42
285.2	0.00

ARCKARINGA BASIN

Drill Site: Weedina 1

Depths (ft)	Minerals											
	C	Ch	D	F	G	I	K	Ma	P	Q	Si	S
240				X		tr	tr			XX		
270	tr			tr		tr	tr			XX		
280				tr		tr	X			XX		
320	tr			tr		tr	tr			XX		
410				tr		tr	tr		tr	XX	X	
530		tr		tr		tr	tr			XX	X	
1820		tr		tr		tr				XX		
1830	tr			tr		tr	tr			XX		
1900	X		tr	tr		tr	tr			XX		
1920	X		tr	X		tr	tr			XX		
1990	XX			tr		tr	tr			XX		
2030	tr			X		tr	tr			XX		
2080	tr			tr		tr	tr			XX		
2090					tr		tr		tr	XX		tr
2100					tr		tr			XX		
2110			tr		tr					XX		
2120		tr			tr	tr			tr	XX		
2130		tr			tr				tr	XX		
2140		tr			tr	tr			tr	XX		
2150	X		tr						tr	XX		
2160	X		tr						tr	XX		tr
2250			XX	tr		tr			tr	XX		

ARCKARINGA BASIN

Drill Site: Weedina 1 (continued)

Depths (ft)	Minerals											
	A	C	Ch	D	F	G	I	K	Ma	P	Q	Si
2350			tr	X	tr		tr			tr	XX	
2400			tr	XX	tr		tr			tr	XX	
2600				X	tr		tr	tr			XX	
2800			tr	X	tr		tr			tr	XX	
3000		X	tr	XX	X		tr				XX	
3150		tr	tr	X	X						XX	
3250		tr	tr	X	tr		tr				XX	
3300			tr	X	tr		tr				XX	
3500		X	tr	XX	X						XX	
3700		X	X	X	X			tr			XX	
3900			tr	X	tr		tr	tr			XX	
4100	X		tr	XX	tr		tr				XX	
4300				XX					X		XX	
4500				XX	tr				XX		XX	
4600				XX	tr				XX		XX	
4700			tr	XX	tr		tr		XX		XX	
4800				XX	tr		tr		XX		XX	
4900			tr	XX	X		tr		XX		XX	
4967				XX	tr		tr		XX		XX	
5000				XX	tr		tr		XX		XX	
5200			tr	X	tr		tr		tr		XX	

ARCKARINGA BASIN

Drill Site: Weedina 1 (WDA-1)

Sample No.	Depth (ft)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
1	240			X						
2	270			XX		X	X		70%	
3	280	tr		X		X	X		?	
4	320	X		XX		X	X		50%	
5	410	No clays								
6	530	X		XX		tr	tr		?	
7	1820	X		X	X	tr	tr		?	
8	1830	No clays								
9	1900	X		X						
10	1920	No clays								
11	1990	No clays								
12	2030	No clays								
13	2080	X		X		X	X		40%	
14	2090	tr		tr		X	X		?	
15	2100	No clays								
16	2110	No clays								
17	2120	tr		X		XX	XX		90%*	
18	2130	X		X		X	X		90%*	
19	2140	X		XX		X	X		95%*	
20	2150	X		X		X	X		?	
21	2160	X		X		X	X		?	
22	2250	X		X						

* Sample contaminated by caving.

ARCKARINGA BASIN

Drill Site: Weedina 1 (continued)

Sample No.	Depth (ft)	Clay Mineralogy					M/L Clays			
		I	M	K	Ch	M/L	I/S	Ch/S	% Exp	Ordering
23	2350	X		X	tr	tr	tr		?	
24	2400	XX		X	X					
25	2400	XX		X	X					
26	2600	XX		X	X					
27	2800	X			XX					
28	3000				X	X	X		?	
29	3150				X					
30	3250	X			X					
31	3300	X			X					
32	3500	tr			XX					
33	3700	tr		X	XX					
34	3900	X			X					
35	4100	X		X	XX					
36	4300					XX	XX		55%	
37	4500	X		X	X	XX	XX		?	
38	4600	X				XX	XX		50%	
39	4700	X		tr	tr	XX	XX		70%*	
40	4800	X				XX	XX		45%	
41	4900	tr			X	X	X		?	
42	4967				tr	X	X		?	
43	5000	X				XX	XX		35%?	
44	5200	XX			X	X	X		30%	

* Sample contaminated by caving.

ARCKARINGA BASIN

Drill Site: Weedina 1

Depth (ft)	Total Organic Carbon (%)
240	6.87
270	6.78
280	11.11
320	3.69
410	1.76
530	2.62
1820	0.37
1830	0.24
1900	0.25
1920	0.26
1990	0.42
2030	0.21
2080	0.85
2090	4.61
2100	4.66
2110	4.69
2120	4.65
2130	5.61
2140	5.56
2150	0.94
2160	1.10
2250	0.49

ARCKARINGA BASIN

050

Drill Site: Weedina 1
(continued)

Depth (ft)	Total Organic Carbon (%)
2350	0.48
2400	0.40
2400	0.32
2600	0.54
2800	0.31
3000	0.25
3150	0.17
3250	0.20
3300	0.13
3500	0.11
3700	0.11
3900	0.38
4100	1.65
4300	5.21
4500	0.43
4600	1.13
4700	0.92
4800	0.91
4900	0.73
4967	0.73
5000	0.98
5200	0.26

STUART SHELF

Drill Site: Woomera 1

Depth (ft)	Minerals						
	Ch	D	F	I	P	Q	S
1115	tr		tr	tr		XX	tr
1133	tr	X	tr	tr		XX	
1187	X	X	X	tr	tr	XX	
1230	tr	tr	tr	tr		XX	
1240	tr	X	X	tr		XX	
1259	tr	X	tr	tr		XX	
1284	tr	tr	tr	tr	tr	XX	
1295	tr	tr	tr	tr		XX	
1352	tr	X	tr	tr		XX	
1373	tr	tr	tr	tr	tr	XX	
1390	tr	X	X	tr	tr	XX	
1410	tr	tr	tr	tr	tr	XX	
1452	tr	X	tr	tr		XX	
1459	tr	tr	tr	tr	tr	XX	
1474	tr		X	X	tr	XX	