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#### LAKES OIL N.L.

ACN 004 247 214

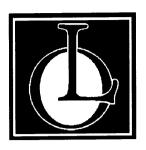
# BOUNDARY CREEK No.1 AND BOUNDARY CREEK No.1A STRATIGRAPHIC CORE HOLE

#### WELL COMPLETION REPORT

BY

J.N. MULREADY & D.R. HORNER

LAKES OIL N.L. LEVEL 11, 500 COLLINS STREET, MELBOURNE 3000 DECEMBER, 2002



# LAKES OIL N.L.

# BOUNDARY CREEK No.1 AND BOUNDARY CREEK No.1A

STRATIGRAPHIC CORE HOLE

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4 APR 2003

Petroleum Development

LAKES OIL N.L. LEVEL 11, 500 COLLINS STREET, MELBOURNE 3000 DECEMBER, 2002

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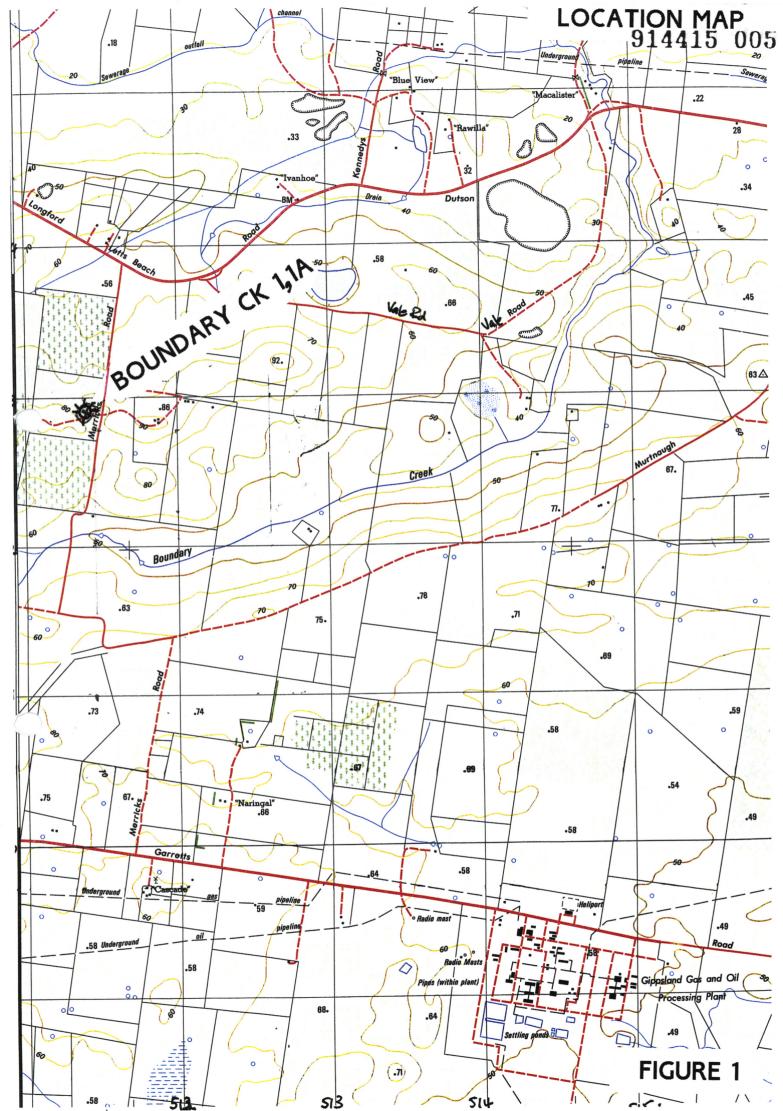
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#### 2.0 WELL HISTORY

#### 2.1 GENERAL DATA

2.1.1	Well Name and Number	Boundary Creek No.1 & 1A			

2.1.2 Location 511423 E 5772873 N

2.1.3 Elevations G.L. 75.0 m A.S.L. R.T. 76.0 m A.S.L.

Latitude: 38° 11' 30.7: S Longitude: 147° 07' 49.6: E

2.1.4 Petroleum Tenement PEP 157

2.1.5 Name of Operator LAKES OIL N.L.

A.C.N. 004 247 214

11<sup>TH</sup> Level,

500 Collins Street, Melbourne Vic. 3000

2.1.6 Other Participants None.

2.1.7 Date Drilling Commenced 12<sup>th</sup> August, 2001.

2.1.8 Date Drilling Completed 21st September, 2001.

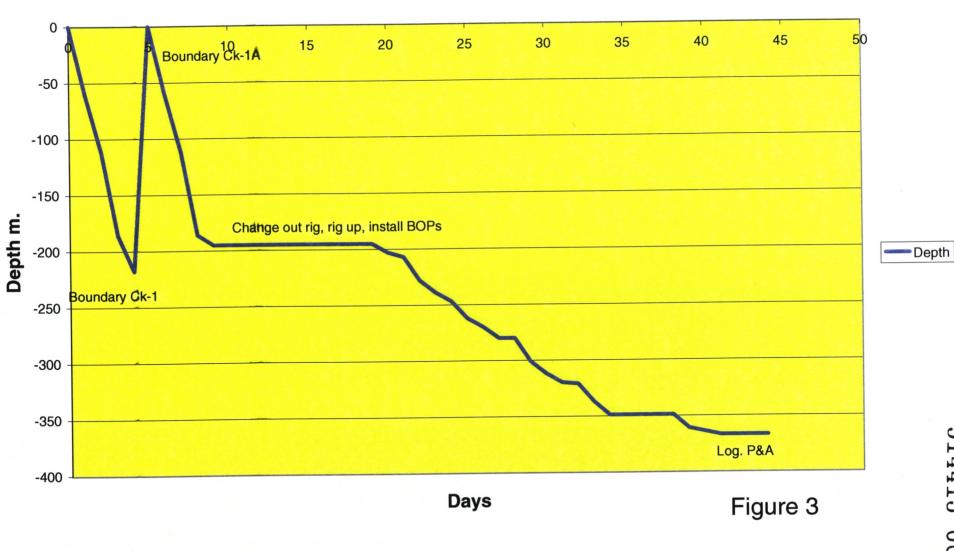
2.1.9 Date Rig Released 24<sup>th</sup> September, 2001.

2.1.10 Drilling Time to T.D. 44 days.

2.1.11 Total Depth 366.5 meters.

2.1.12 Status Plugged and Abandoned.

#### **Boundary Creek 1, 1A Time vs Depth**



#### 2.2 **RIG DATA** (**Rig 1**)

2.2.0	Drilling Contractor	Drilltech Pty Ltd Drilling Depot Rd Morwell Victoria 3168
2.2.1	Rig	Gardner Denver Mayhew model 1500W.
2.2.2	Rig Carrier	Truck Mounted.
2.2.3	Weight Indicator	Martin Decker Hydraulic Pressure
2.2.4	Power	Truck Engine
2.2.5	Rotary	Mayhew Model RT10.
2.2.6	Blocks	Two ST-15 single sheave 15 ton.
2.2.7	Pumps	Gardner Denver FD-FXX 5"X8".
2.2.8	Kelly	3.5" square X 26' 6".
2.2.9	Sump pump	Not applicable.
2.2.10	Transfer Pump	Not applicable.
2.2.11	Tubulars	Not applicable.
2.2.12	Fishing Tools	None on Site.
2.2.13	Handling Tools	BJ type 15W.
2.2.14	Stablizer	None used.
2.2.15	Spare Parts	As reasonably required to conduct operations for programmed well.
2.2.16	Personnel	Driller plus 2 crew.
	Rig Operated Daylight Hours Only.	

#### RIG DATA (Rig 2)

2.2.17	Rig	Bournedrill THD25VP.
2.2.18	Rig Carrier	Truck Mounted.
2.2.19	Weight Indicator	Hydraulic Pressure.
2.2.20	Power	Truck Engine.
2.2.21	Rotary	Top Drive.
2.2.22	Pumps	Duplex 5"X 6" double action.
2.2.23	Tubulars	PQ pipe
2.2.24	Fishing Tools	None on Site.
2.2.25	Handling Tools	Hydraulic 48" Rigid wrench.
2.2.26	Stabilizer	Not applicable.
2.2.27	Spare Parts	As reasonably required for carrying out the well programme.
2.2.28	Personnel	Driller plus 2 crew.
2.2.29	Rig Operated Daylight Hours Only.	

#### 2.3 DRILLING DATA

2.3.1 The following is the daily operations summary for Boundary Creek No.1 & 1A. It has been compiled from the daily drilling reports. Onsite drilling supervision and wellsite geology services for Lakes Oil N.L. was provided by J. Mulready. The rig operated daylight hours only.

DATE	DRILLING OPERATIONS					
12-08-2001	Set 10 inch casing at 3.5 m					
	Drilled 9.3/8 inch hole to 60 m, set 7 inch casing at 59.75 m					
	Drilled out cement					
13-08-2001	Drilled from 60 to 112 m.					
14-08-2001	Drilled from 112-132 m.					
	POH to change bit					
	RIH drilled from 132 to 186 m					
15-08-2001	Drilled from 186 - 218 m.					
16-08-2001	Rig to redrill approx 3 m lateral offset well (Boundary Creek 1A) to depth of					
to	approx 60 metres and set 7 inch casing, then drill 6 inch hole to 195 m and set 5					
26-08-2001	inch water well casing.					
	Gardner Denver rig will then move off location to be replaced by Bourne after BOP					
	installed.					
27-08-2001	Bourne Coring Drill on site, cellar in place, BOP partly installed.					
	Driller ill, no progress to p.m. 27.8.01					
	Expect replacement driller a.m. tomorrow.					
28-08-2001	Completed rigging up, including installation of BOP.					
	Tested BOP.					
	RIH, tagged top cement at approx 192 m.					
29-08-2001	Cored out cement, cored 30 cm., then casing dropped 15 cm., indicating inadequate					
	cement job.					
	POH recovered 30 cm core – soft clay with boulders.					
	Retrieved and secured casing.					
	Re-cemented with accelerant – returns to surface.					
30-08-2001	Pulled pipe free.					
	RIH tagged cement at 180 m.					
1	Cored cement to 196.5 m.					
	Hydraulic slips failed, rig shut down, p.m. 30.8.01					
31-08-2001	Repaired rig, cored to 203 m.					
01-09-2001	RIH, cored to 207.3 m.					
	Variable recovery, between 0 and 100%.					
	Core barrel parted, rig shut down.					
	Replacement core barrel to be on-site tomorrow.					
02-09-2001	Coring resumed 8.15 a.m. in steady rain.					
	Cored 207.3 to 227.7 m., mostly 100% recovery.					
03-09-2001	Cored 227.7 m 239.1 m. Gas show of 15 units, background gas 0-3 units.					
	Dropped core barrel. Unable to latch on and retrieve.					
	POH, changed bit, RIH retrieved most of core.					
	Cored ahead.					
04-09-2001	After experiencing circulation problems POH, circulation ports blocked. Changed					
	bit.					
	RIH, cored 239.1 –247 m.					
	Gas show of 15 units whilst circulating at start up, background gas 0-3 units.					
05-09-2001	RIH cored to 259					

	9 021110 010
	Experiencing problems with retrieving core.
	Cored to 262 m.
	Cable parted whilst attempting to retrieve core.
	POH recovered core.
	Background gas 0-3 units
06-09-2001	Cored to 270.2 m
00 07 2001	Background gas 4-12 units.
	Circulation gas 29 units
07-09-2001	Cored to 280 m
07 07 2001	Background gas 4-12 units.
08-09-2001	Rig shut down for Sunday break.
09-09-2001	Cored to 301 metres
09-09-2001	Background gas 2-9 units.
10-09-2001	Cored to 312 metres
10-09-2001	POH to change bit.
	Background gas 2-5 units.
11-09-2001	RIH to commence coring at 312 m
11-09-2001	Dropped core barrel whilst trying to retrieve core from first run.
	Top of barrel had unscrewed.  POH retrieved core barrel.
	1
12.00.2001	RIH resumed coring. Cored to 320 m.
12-09-2001	RIH to commence coring at 320 m
	Drill string parted. POH, replaced one rod.  RIH attempted to latch on to fish. Unsuccessful. POH
	RIH latched on to fish, restored circulation.
	<b>!</b>
12.00.2001	Resumed coring. Cored to 321 m.
13-09-2001	RIH commenced coring at 321 m.
	Cored to 336.5 m at 6 p.m. 13 <sup>th</sup> .
14.00.2001	Background gas 0-2 units.
14-09-2001	RIH commenced coring at 336.5 mm.
	Cored to 348.6 m at 6 p.m. 14 <sup>th</sup> .
15.00.2001	Background gas 0-3 units.
15-09-2001	RIH pipe parted.
	POH attached fishing tool, RIH to retrieve fish. POH with fish, RIH to retrieve base of last core to 348.6
	POH. Pipe bent, unable to resume coring.
16.00.2001	Rig shut down pending arrival of new pipe.
16-09-2001	Rig shut down pending arrival of new pipe.
17-09-2001	New pipe arrived on site  RIH Wednesday 19 <sup>th</sup> , restored circulation, reamed to bottom.
18-09-2001	
10.00.2001	Maximum gas whilst reaming 31 units (0.78%).
19-09-2001	Cored to 361.1 m.
	Gas whilst coring 1-2 units.
20-09-2001	RIH cored to 364.1 m
	Gas 1-3 units increasing to 8 units.
	POH to change bit.
21-09-2001	RIH with new bit, circulate bottoms up.
	Two trip-gas peaks of 56 & 109 units.
	Mud weight 8.6 lb/gall.
	Cored from 364.1 m to 366.5 m.
	Hole caving. Pipe backed off, POH made up fish, RIH & retrieved fish.
	РОН
22-09-2001	RIH with drill bit, circulate bottoms up, circulate hole clean.

	Gas peaks of 60 units.				
	РОН.				
	Ran Gamma Ray & CCL log.				
	Set up to run abandonment plugs.				
23-09-2001	RIH.				
	Mixed 35 sacks of cement and 3% bentonite.				
	Ran plug from TD across casing shoe. WOC				
	RIH. Tagged top of cement at 220m, c.f. calculated rise to 140m.				
	Mixed an additional 35 sacks of cement with 3% bentonite.				
	Ran plug from 220m across casing shoe a.m. 24 <sup>th</sup> . WOC				
24-09-2001	Ran surface plug. Rig released.				

#### 2.3.2 Hole sizes and depths:

9.375" (238mm) Spud to 60 meters.

6" (152mm)

60 to 195 meters.

HQ Pipe

195 to 366.5 meters.

#### 2.3.3 Casing and cementing:

#### **SURFACE**:

SIZE:	9.625" /
	244 mm
Weight:	54.5
, and the second	lb/ft/79.
	8 kg/m
Grade:	K55
Shoe	59.75 m
setting	
depth:	

#### **INTERMEDIATE:**

SIZE:	7" / 178 mm		
Weight:	23 lb/ft/33.7 kg/m		
Grade:	K55		
Shoe	195 m		
setting			
depth:			

#### 2.3.4. Deviation Surveys:

None taken.

#### 2.3.5 Drilling Fluid:

(A) Spud - 60 meters:

Type: Freshwater/Gel spud mud.

(B) 60 - 366.5 meters

KCl/Polymer/PHPA.

2.3.6 Water Supply:

Water was trucked to site from Sale.

2.3.7 Perforations:

None.

2.3.8 Plugging and Cementing:

Plug 1. 366.5 (T.D.) to 220 m 35 sx cmt

Plug 2. 220 to < 140 m

Plug 3 Surface plug

#### 2.4 LOGGING AND TESTING

#### 2.4.1 Wellsite Geologist:

J. Mulready.

#### 2.4.2 Mudlogging:

Hot wire hydrocarbon detection, depth and drill rate monitoring were provided by Denis Sisely.

#### 2.4.3 Ditch Cutting Samples:

Cuttings were collected at 3 meter intervals from spud to 218m (Boundary Creek No.1). These being 1 set 500 gm unwashed calico bag, and 1 set washed samplex tray. Unwashed cutting samples were submitted to the DNRE Core Store at Werribee.

#### 2.4.4 Coring: (Boundary Creek No. 1A)

Continuous core was taken from 195 meters to 366.5 meters (T.D.).

#### 2.4.5 Sidewall Cores:

None taken.

#### 2.4.6 Testing:

No tests were conducted.

#### 2.4.7 Wireline Logs:

A Gamma Ray and CCL log was run from 366.5 m (T.D.) to 195m in open hole and from 195m to surface through casing.

#### 2.4.8 Velocity Survey:

No velocity survey was conducted.

# CORE ANALYSES



#### **CORE LABORATORIES AUSTRALIA PTY. LTD.**

ACN 065 540 838 ABN 67 065 540 838 P.O Box 785 Cloverdale, WA 6105 Australia

Tel: (61-8) 9353 3944 Fax: (61-8) 9353 1369 Email: darryl@corelab.com.au

TO

LAKES OIL

ATTN

JACK MULREADY

FAX

(03) 9829 1624

DATE :

27 September 2001

**PAGES** 

5

(including cover page)

COPY:

FROM

DARRYL BEER

SUBJECT

**BOUNDARY CREEK 1A PLUGS** 

Jack,

Please find attached the preliminary porosity, permeability and grain density data for the majority of the Boundary Creek #1A plugs. I have also attached a porosity versus permeability cross-plot that Dennis said you may be interested in.

Now that analyses are complete, please advise if you want the plugs returned, and the delivery address you want them sent to.

Please contact us if you have any queries, or require further information.

Best regards,

: LAKES OIL : BOUNDARY CREEK IMA

# POROSITY, PERMEABILITY AND GRAIN DENSITY (Ambient)

SAMPLE	DEPTH 800psig NOB PRESSUR		SURE	GRAIN	COMMENTS	
NUMBER	(m) PERMEAE	ABILITY	POROSITY	DENSITY		
		Kinf	Kair	(%)	(g/cc)	
		(md)	(md)			
1	210.60	80.1	88.2	30.7	2.56	
2	214.20	154	165	26.4	2.64	
3	218.30	137	148	26.5	2.63	
4	220.90	88.2	98.1	28.0	2.66	
5	224.60	57.0	62.4	28.0	2.63	
6	224.90	95.0	102	29.6	2.64	
7	227.10	838	f 886 T	29.7	2.67	
8	227.65	448	461	28.6	2.67	
9	231.85	688	704	27.5	2.66	
10	233.60	602	616	30.9	2.65	
11	234.30	701	723	30.5	2.66	
12	234.65	711	740	30.2	2.65	
13	236.30	208	248	32.4	2.67	fractured
63	243.90	15.3	18.4	35.1	2.68	
14	245.05	5.00	6.58	33.3	2.68	
15	245.35	11.1	13.9	34.9	2.67	
16	252.25	0.733	1.05	30.6	2.68	
17	254.25	101	106	29.6	2.66	
18	255.15	55.2	59.4	28.2	2.65	
19	256.90	4.46	5.47	25.0	2.63	
20	259.20	95.3	99.4	27.0	2.69	
21	259.77	43.6	47.1	27.5	2.63	
22	260.55	33.0	36.5	26.7	2.62	
23	262.10	10.3	11.9	25.8	2.60	
24	262.55	63.0	67.9	27.1	2.63	
25	264.55	94.4	102	28.7	2.62	
26	265.45	136	147	30.6	2.64	
27	268.66	16.8	19.3	27.2	2.63	
28	269.60	36.8	40.2	22.9	2.65	
29	272.40	8.60	10.2	27.5	2.64	
30	278.20	13.8	14.9	28.2	2.64	
31	279.55	43.6	47.9	29.1	2.63	•
32	281.25	41.3	44.9	27.8	2.64	

# POROSITY, PERMEABILITY AND GRAIN DENSITY (Ambient)

					<del></del>	
SAMPLE	DEPTH	800psig NOB PRESSURE		SURE	GRAIN	COMMENTS
NUMBER	(m)	PERME	ABILITY	POROSITY	DENSITY	
		Kinf	Kair	(%)	(g/cc)	
		(md)	(md)			
22	282.20	99.1	106	29.8	2.64	
33	283.90	26.0	29.0	29.8	2.66	
34	285.25	61.1	65.6	31.9	2.67	
35		0.936	1.20	27.1	2.64	
36 27	297.86	15.6	17.6	28.8	2.64	
37	298.74	16.1	18.4	28.1	2.64	
38	299.76	7.12	8.15	27.0	2.65	
39	007.10	0.055	0.085	28.1	2.70	
40	303.55	0.033	0.161	26.1	2.66	
41	305.85		5.79	26.7	2.62	
42	308.85	4.72	0.988	27.0	2.66	
43	310.04	0.831	31.8	26.7	2.63	
44	311.38	29.5		27.8	2.70	
45	313.03	0.497	0.563	28.3	2.70	
46	315.03	5.03	5.58	26.4	2.66	
47	316.55	8.13	8.56	20.4	2.58	
48	318.55	6.09	7.29	25.5 25.5	2.65	
49	319.03	0.025	0.039		2.66	
50	320.54	0.037	0.055	26.5		
51	326.40	0.544	0.704	28.8	2.67	
52	327.28	0.133	0.185	26.7	2.65	
53	328.29	4.33	4.82	28.2	2.73	
54	328.88	13.2	14.9	24.4	2.59	
55	329.40	3.36	3.92	26.8	2.66	
56	331.10	25.3	28.0	26.2	2.64	
64	331.72	88.1	92.8	27.8	2.67	
57	331.93	13.8	15.2	26.2	2.65	
58	333.20	1.42	1.78	26.7	2.65	
59	333.81	2.86	3.43	26.8	2.66	
60	336.15	1.94	2.44	24.6	2.66	
61	338.13	10.1	10.7	24.5	2.66	
65	338.82	143	168	25.7	2.54	
62	340.03	7.58	8.15	25.2	2.69	
66	341.23	42.6	47.0	25.2	. 2.67	not cylindrical

WELL

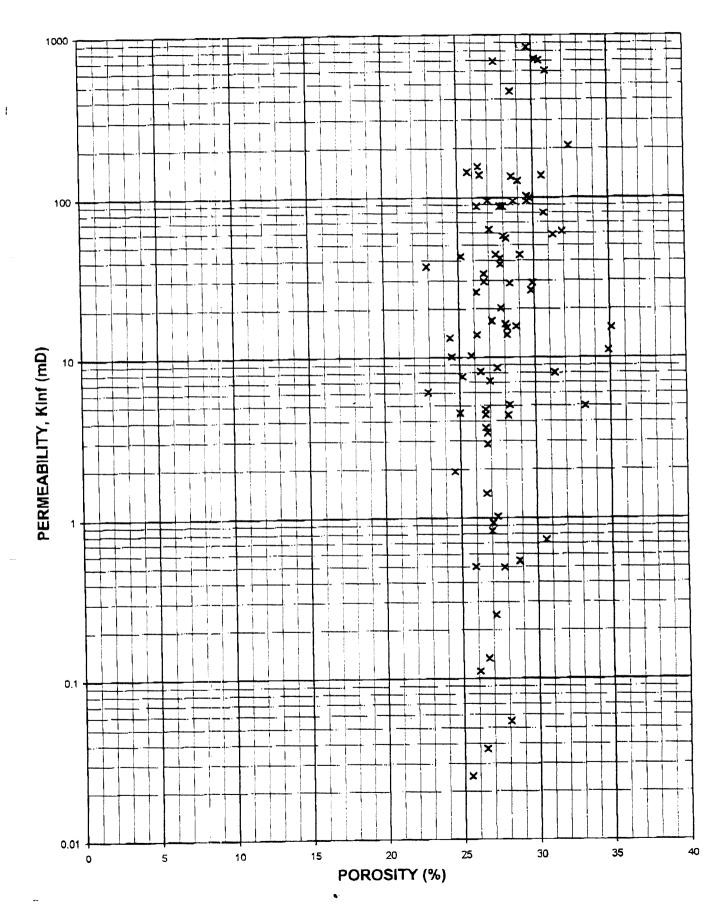
#### POROSITY, PERMEABILITY AND GRAIN DENSITY (Ambient)

SAMPLE	DEPTH	800psig NOB PRESSURE			GRAIN DENSITY	COMMENTS
NUMBER	(m)	,	ABILITY	POROSITY	1	
		Kinf	Kair	(%)	(g/cc)	
		(md)	(md)			
67	342.02	0.501	0.661	25.9	2.67	
68	342.95	4.37	5.09	26.7	2.70	
69	344.90	28.8	30.4	28.4	2.68	
70	345.41	37.9	40.2	27.8	2.68	
71	346.15	20.2	22.0	27.8	2.68	
72	348.30	3.61	4.12	26.7	2.70	
73	352.10	0.248	0.354	27.2	2.68	
74	353.30	15.3	17.0	28.2	2.70	
75	353.84	1.02	1.33	27.4	2.70	
76	356.05	88.2	92.4	26.3	2.66	
77	357.10	134	139	28.6	2.69	
78	357.87	126	133	29.0	2.70	
79	358.71	29.1	30.9	29.9	2.78	
80	361.90	58.3	63.6	31.3	2.68	
81	362.89	8.01	9.74	31.3	2.68	

COMPANY WELL : LAKES OIL

: BOUNDARY CREEK #1A

#### POROSITY VS PERMEABILITY (AT AMBIENT)



2

PETNOGRAPHY AND MATURITY
STUDY



#### **Boundary Creek-1 well, Gippsland Basin**

A petrographic and maturity study of Strzelecki Group samples

#### **Geotrack Report #825**



### An exclusive report prepared for Lakes Oil N.L.

Report prepared by: I. R. Duddy
Vitrinite Reflectance: Dr. Alan. C. Cook

FINAL REPORT April 2002

914415 033

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PALYNOLOGICAL REPORT



Palynological analysis of two composite cuttings samples from Boundary Creek No.1, onshore Gippsland Basin.

by

Alan D. Partridge

Biostrata Pty Ltd A.B.N. 39 053 800 945

Biostrata Report 2001/29 18<sup>th</sup> September 2001

#### References

- DETTMANN, M.E., 1963. Upper Mesozoic microfloras from southeastern Australia. *Proceedings Royal Society of Victoria*, vol.77, pt.1, p.1–148, pl.1–27.
- DETTMANN, M.E., 1986. Early Cretaceous palynofora of subsurface strata correlative with the Koonwarra Fossil Bed, Victoria. Association of Australasian Palaeontologists Memoir 3, p.79-110.
- HELBY, R., MORGAN, R. & PARTRIDGE, A.D., 1987. A palynological zonation of the Australian Mesozoic. In Studies in Australian Mesozoic Palynology, P.A. Jell, editor, Memoir Association Australasian Palaeontologists 4, p.1–94.
- STOVER, L.E. & PARTRIDGE, A.D., 1973. Tertiary and late Cretaceous spores and pollen from the Gippsland Basin, southeastern Australia. *Proceedings Royal Society of Victoria, vol.85*, pt.2, p.237–286.

Table 3. Tertiary species list for Boundary Creek No.1.

S	Sample Type: Depth:	Composite Cuttings 204–210m	Composite Cuttings 210–216m
SPORES-POLLEN			
Baculatisporites spp.			0.9%
Clavifera triplex			X
Conbaculites apiculatus †			X
Cyathidites paleospora			0.9%
Dicotetradites clavatus			X
Dilwynites granulatus		X	
Gleicheniidites circinidites			X
Haloragacidites harrisii			6.3%
Ischyosporites irregularis†			X
Liliacidites sp.		X	
Lygistepollenites balmei		X	
Lygistepollenites florinii		X	2.7%
Malvacipollis subtilis			3.6%
Microcachryidites antarcticus			1.8%
Nothofagidites brachyspinulosus		X	1.8%
Nothofagidites deminutus			3.6%
Nothofagidites emarcidus/heterus			20.5%
Nothofagidites goniatus			X
Parvisaccites catastus			X
Periporopollenites polyoratus		X	
Phyllocladidites mawsonii			34.8%
Podocarpidites spp.			7.1%
Proteacidites adenanthoides			X
Proteacidites annularis			2.7%
Proteacidites crassus			X
Proteacidites obscurus			0.9%
Proteacidites reticulatus			X
Proteacidites spp.		X	3.6%
Rugulatisporites mallatus		X	
Sapotaceoidaepollenites rotundus			X
Stereisporites australis			0.9%
Tricolp(or)ates spp.		X	8.0%
Tricolpites simatus			X
Tricolporites adelaidensis			X
Tricolporites leuros			X
Tricolporites paenestriatus			X
Triporopollenites ambiguus			X
Verrucosisporites kopukuensis			X
retrucosisporties nopunuerism	Total spores:		2.7%
Total C	ymnosperms:		46.4%
	Angiosperms:		50.9%
Total Spore-I			112

Table 4. Early Cretaceous species list for Boundary Creek No.1.

Sample Type:	Composite Cuttings 204–210m	Composite Cuttings 210–216m
Depth:		
SPORE-POLLEN		
Aequitriradites spinulosus	X	
Araucariacites australis	4.3%	
Arcellites reticulatus		X
Baculatisporites spp.	1.7%	
Ceratosporites equalis	0.9%	X
Coptospora paradoxa	X	
Corollina torosa	0.9%	
Crybelosporites striatus	X	X
Cyathidites australis	0.9%	X
Cyathidites minor	9.6%	X
Cycadopites nitidus	X	
Dictyophyllidites spp.	0.9%	
Dictyotosporites complex		X
Foraminisporis asymmetricus		X
Gleicheniidites circinidites	2.6%	
Laevigatosporites ovatus	X	
Microcachryidites antarcticus	14.8%	X
Nevesisporites dailyi		X
Osmundacidites wellmanii	11.3%	X
Perotrilites majus	0.9%	
Podocarpidites spp.	35.7%	X
Reticulatisporites pudens	2.6%	
Retitriletes spp.	1.7%	X
Retitriletes austroclavatidites	X	
Retitriletes eminulus	X	
Retitriletes facetus	X	
Retitriletes nodosus	X	
Ruffordiaspora australiensis	1.7%	X
Stereisporites antiquisporites	2.6%	X
Trichotomosulcites subgranulatus	1.7%	
Trilete spores undiff.	5.2%	
Triporoletes reticulatus	X	
Total Spores:	43%	
Total Gymnosperms:	5%	
Total Spore-Pollen Count:	115	
Other Palynomorphs		
Fungal spores and hyphae	6.4%	
Sigmopollis carbonis	X	
Reworked Fossils	1.6%	
Annulispora microannulata	X	
Aratrisporites spp.	X	
Horriditriletes ramosa	X	X
Microbaculispora sp.	X	
TOTAL PALYNOMORPH COUNT:	125	

#### Palynological analysis of bottom hole sample from Boundary Creek No.1A, onshore Gippsland Basin.

by

Alan D. Partridge

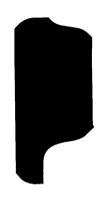
**Biostrata Pty Ltd**A.B.N. 39 053 800 945

Biostrata Report 2001/30 16<sup>th</sup> November 2001

Table 1. Species list for Boundary Creek No.1A.

S	Sample Type: Depth:	Cuttings 324m
Spore-Pollen		
Baculatisporites spp.		2.4%
Ceratosporites equalis		X
Cicatricosisporites hughesii		1.8%
Corollina torosa		1.8%
Cyathidites australis	`	4.7%
Cyathidites minor		61.8%
Dictyophyllidites spp.		X
Gleicheniidites circinidites		0.6%
Laevigatosporites ovatus		X
Matonisporites cooksoniae		X
Microcachryidites antarcticus		0.6%
Neoraistrickia truncata		X
Nevesisporites dailyi		X
Osmundacidites wellmanii		3.5%
Podocarpidites spp.		2.9%
Polycingulatisporites clavus		X
Retitriletes spp.		4.1%
Retitriletes austroclavatidites		X
Retitriletes eminulus		cf.
Retitriletes facetus		cf.
Ruffordiaspora australiensis		8.8%
Stereisporites antiquisporites		5.3%
Stereisporites pocockii		X
Trichotomosulcites subgranulatus		1.7%
Tricolpites sp.		?
Trilete spores undiff.		2.4%
	Total Spores:	93.5%
Total C	Gymnosperms:	6.5%
Total Spore-	Pollen Count:	170
Other Palynomorphs		
Fungal spores and hyphae		X
Brazilea parva		X
Sigmopollis carbonis		X
Sigmopollis hispidus		X

SITE SURVEY



#### KLUGE JACKSON CONSULTANTS PTY. LTD.

A.C.N. 004 778 947

914415 091

SURVEYORS, ENGINEERS AND ESTATE PLANNERS

Office: Our Ref: Sale 02191-01 DIRECTORS: H. Peter Kluge John Jackson

September 10<sup>th</sup>, 2002

Mr. J. Mulready, Lakes Oil N.L. Level 11, 500 Collins St, Melbourne, Vic., 3000

Dear Sir,

RE:

AMG and AHD Survey of Wells at Boundary Creek-1, <u>Deadman Hill-1 and Protea-1</u>.

We have now completed the above survey and enclose our results.

The table of results shows the co-ordinates to the centre of the sign of the well head.

The levels are as indicated on sketch attached – Levels to the top of cap could not be taken at Boundary Creek and Protea as they were covered at time of survey.

Our AMG co-ordinates have been obtained from co-ordinated marks PM 18, PM 27 (Longford) and 3GI Radio Mast. The AMG co-ordinates are unadjusted using Topcon Total Station and should be of an accuracy of  $\pm$  10cm. Latitude and Longitude have been obtained by converting AMG co-ordinates to latitude and longitude.

The AHD levels were obtained from PM 33 and are correct to  $\pm$  0.05 cm.

If you have any queries in the matter please contact the writer.

We thank you for your instructions and enclose our account.

Yours faithfully, KLUGE JACKSON CONSULTANTS PTY., LTD.,

PETER KLUGE.

the to allege

enc.

SALE
45 Macalister Street,
SALE, Vic 3850
(P.O. BOX 47)
Telephone (03) 5144 3877
Facsimile (03) 5144 6591

MAFFRA 119 Johnson Street, MAFFRA Vic 3860

Telephone (03) 5147 2126

TRARALGON
Suite 3/29 Breed Street,
TRARALGON Vic 3844
(P.O. Box 412)
Telephone (03) 5174 4808
Facsimile (03) 5174 6969

## KLUGE JACKSON CONSULTANTS PTY. LTD. A.C.N. 004 778 947

SURVEYORS, ENGINEERS AND ESTATE PLANNERS

, TOROX SIGN. PL. 77.02

914415 092

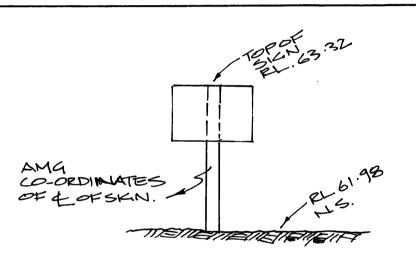
Office: Our Ref: Sale

02191-02

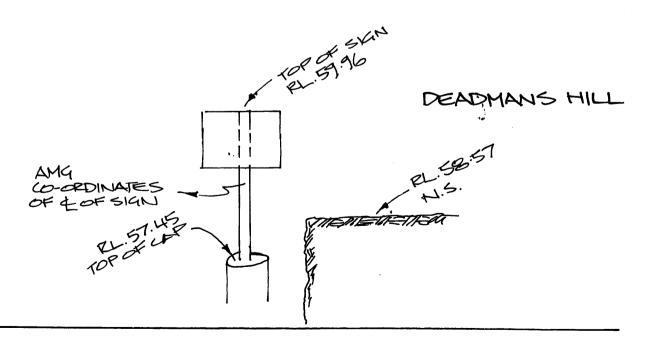
CO-ORDINATES OF 4 OF SIGN.

**DIRECTORS:** H. Peter Kluge John Jackson

BOUNDARY CREEK I-A



PROTEA-1



SALE

45 Macalister Street, SALE, Vic 3850 (P.O Box 47) Telephone (03) 5144 3877 Facsimile (03) 5144 6591

**MAFFRA** 

119 Johnson Street, MAFFRA Vic 3860

Telephone (03) 5147 2126

**TRARALGON** 

Suite 3/29 Breed Street, **TRARALGON Vic 3844** (P.O. Box 412) Telephone (03) 5174 4808 Facsimile (03) 5174 6969

### KLUGE JACKSON CONSULTANTS PTY. LTD. A.C.N. 004 778 947

SURVEYORS, ENGINEERS AND ESTATE PLANNERS

914415 093

Office: Our Ref: Sale 02191-02 - 2 -

DIRECTORS: H. Peter Kluge John Jackson

September 10<sup>th</sup>, 2002

#### TABLE OF SURVEY RESULTS

#### Boundary Creek - 1

AHD Level of Top of Sign	. 77.02	
AMG Co-ordinate of Centre of sign.	Easting 511 422.91 Northing 5 772 873.47	
Latitude	S 38°11'30.73"	
Longitude	E 147°07'49.60"	
Approximate AHD surface Level at Bore	75.02	

The AMG coordinates shown above are for Zone 55.

Coordinates are in AGD 66.

.../3

SALE
45 Macalister Street,
SALE, Vic 3850
(P.O. BOX 47)
Telephone (03) 5144 3877
Facsimile (03) 5144 6591

MAFFRA 119 Johnson Street, MAFFRA Vic 3860

Telephone (03) 5147 2126

TRARALGON
Suite 3/29 Breed Street,
TRARALGON Vic 3844
(P.O. BOX 412)
Telephone (03) 5174 4808
Facsimile (03) 5174 6969

# CUTTING DESCRIPTIONS



#### LAKES OIL NL

# Boundary Creek Stratigraphic Corehole Cuttings Descriptions

Depth	Description			
Interval m				
3	SANDSTONE: wht-clr-pl yell, vcg, occ pebbly, unconsol. qtz grns, minor			
	wht cly matrix, subang-rd.			
6	SST: a/a yell-pale brn qtz grains			
9	SST: wht-clr-pl yell brn loose qtz grns, vcg-occ pebbly, sang rd, v.minor cl			
	mtx adhering to grns			
12	SST: a/a with common aggs of lt-med org-brn sst, vfg, well cmted, possibly			
	calc.			
15	SST: a/a v.mnr aggrgs. With thin bands wht-lt gy cly, soft, sticky.			
18	SST: wht-clr, mnr pale brn, loose qtz grns, vcg-granular, occ. Pebbly, sang-rd,			
	mnr wht cly mtx adhering to grns, occ lamination of soft wht kaolin.			
21	SST: a/a			
24	SST: a/a			
27	SST: a/a mg, increased wht kaolin.			
30	80% SST: dom clr, f-mg rare cg & pebbly, unconsol. qtz grns with suspected			
	arg matx.			
	10% CLY: yellowish brn, soft			
	10% COAL: brn, soft, dull.			
33	COAL: brn, soft-firm, sub-fissile silty, scattered mnr qtz grns f-mg			
36	COAL: a/a mnr wht cly incl.			
39	COAL: brn, soft-firm, slty, subfissile, with mnr wht arg content.			
42	COAL: a/a rare blocky			
45	COAL: a/a			
48	COAL: a/a			
51	COAL: a/a			
54	COAL: a/a rare pyr.			
57	COAL: a/a becoming very silty			
60	SST: wht, clr, occ milky, translucent, c-vcg, well sorted, sang-srded, loose			
	qtz grns, rare wht cly adhering to grns, clean			
	Tr Coal: brn, firm, sl pyr, silty. <7 inch casing point>			
63	SST: wht-clr, c-vcg, pebbly, clean srded loose qtz grns.			
66	SST: a/a			
69	SST: a/a but pred vcg-pebbly. Common tr. pyr.			
72	SST: vcg-pebbly a/a Tr pyr.			
75	20% SST: wht-clr loose qtz grns a/a			
	80% SST: wh-lt gy, vf-fg sang, kaol mtx, poor vis. por. tr coal			
78	80% SST: wht-clr cg-pebbly as loose qtz grns srd			
	20% SST: wht-lt gy vfg-fg a/a			
	Tr SLTST, gy arg.sdy			
81	SST: wht-clr, cg-pebbly srded loose qtz grns			

## LAKES OIL NL

# Boundary Creek Stratigraphic Corehole

**Cuttings Descriptions** 

Cumings	Descriptions
84	SST: a/a
87	90% SST wht-clr & gy, cg-coarse pebbles, srded loose qtz rns
	10% cly, gy-brn, soft, sticky
90	SST: wht-clr & gy, m-cg loose qtz grns, qtz pebbles, srded
93	SST: wht-clr, cg-pebbly srded loose qtz grns
96	SILTST: gy-dk gy, soft, arg.
99	SST: wht-clr, cg-pebbly srded loose qtz grns Tr red staining
102	SST: wht-clr, c-vcg srded loose qtz grns
105	SST: wht-clr, cg-pebbly srded loose qtz grns
108	50% SST: a/a
	50% CLAYST: 50% cST: wh-lt gy, soft, argill.
111	CLAYST: a/a
114	SST: wht-clr, translucent, some lt gy sang-srd c-vcg-granular loose qtz
	grns,rare pyr and carb frags
117	SST: a/a
120	SSt: wht-clr, lt gy, med-vcg, occ pebbly sang-srded looseqtz grns
123	40% SST: a/a
	60% CLYST:, lt brn-wht,lt gy, soft, kaol, tr coal.
126	20% SST: a/a
	80% CLYST a/a common tr. pyr.
129	90% SST: a/a
	10% CLYST a/a
132	60% SST: a/a
	40% CLYST a/a tr. coal
135	SST: wh-lt gy, pred cg to occ vcg srd well std loose qtz grns
138	SST: wh-lt gy, pred c-vcg & pebbly, srd loose qtz grns
141	SST: a/a Tr coal
144	90% SST: wht-clr, c-vcg, pred. pebbly srded loose qtz gns.
	10% COAL: blk, firm. Tr lt brn soft clay
147	SST: wht-clr, c-vcg well sort srd loose qtz grns
1.50	Comm tr cly a/a
150	SST: wht-clr, occ gy, c-vcg, pred. pebbly srded loose qtz gns.
153	SST: a/a
156	SST: a/a
159	SST: wht-clr, occ gy, c-vcg, occ pebbly srded loose qtz gns.
162	SST: a/a
165	SST: a/a
168	SST: wht-clr, occ gy, c-vcg, pred. pebbly srded loose qtz gns.
171	SST: wht-clr, occ gy. c-vcg, occ pebbly srded loose qtz gns.
174	90% CLAYST: It brn, soft, arg.
	10% SST: as loose srd qtz pebbles
177	SST: wht-clr, c-vcg, well sort srd loose qtz grns
180	SST: a/a

### LAKES OIL NL

# Boundary Creek Stratigraphic Corehole

**Cuttings Descriptions** 

	Descriptions
183	SST: wht-clr, occ gy, c-vcg, & pebbly sang-srded loose qtz gns.
186	SST: wht-clr, occ gy, c-vcg, pred. pebbly sang-srded loose qtz gns.
189	SST: a/a
192	SST:a/a
195	SST:a/a
198	80% SST: a/a
	20% CYST: It brn soft with carb flx
	Tr pyr Rare tr coal
201	SST: wh, clr lt gy mg-vcg & pebbly sang-srd loose qtz grns
204	CLYST: lt gy-brn,soft with carb flx
207	CLYST: a/a Common tr. Pyr
210	CLYST: a/a
213	30% CLYST: a/a
	70% SST: lt gy vf-fg sang-srd qtz, fg felsp. argill. (Strzelecki FM)
	Comm Tr coal blk, dk brn, firm Tr pyr.
216	SST: lt gy-gy, a/a
218	SST: a/a TD

# CORE DESCRIPTIONS



#### LAKES OIL NL

#### **BOUNDARY CREEK 1A COREHOLE**

#### **Core Descriptions**

196.0-196.4 m (0.4 m)

Clay with connglomeratic qtz pebble bands.

Clay is lt gy, soft, plastic. Qtz pebbles are gy & milky, subrded. Pebbles and fragments range to 50 mm.

196.4-202.95 m (6.55 m)

Light grey argillaceous <u>sandstone</u> and <u>sandy claystone</u> with interbeds of conglomeratic <u>quartz</u> <u>pebbles</u>.

Sandstone is light grey, fine grained, subangular, well sorted, sl. micaceous, carbonaceous with frequent carbonaceous partings, argillaceous grading to sandy claystone.

Dip approx. 25 deg.

Pebbles and pebble fragments are quartzose, lt gy & milky, sub-rounded, up to 50 mm.

Background gas 0-3 units.

Thin interbed 197.3-197.38m of <u>sst</u>, lt gy, fg-vcg –gravel, poorly sorted, srded to rded qtz, comm. felspar in arg. matx. Good visual porosity.

202.95 – 204.4 m ? (partial recovery) (1.45 m)

Interbeds of lt gy fg sandstone light grey, fine grained, subangular, well sorted, sl. micaceous, weathered felspar, carbonaceous with frequent carbonaceous laminathions, argillaceous, and lt-md gy claystone, soft, plastic, sl mic., pyritic with nodule bands throughourt, esp 203.9, 204.2 m

Dip 20-25 deg. Background gas 0-3 units.

204.4-207.27 m (2.87 m)

Claystone, lt-md gy, soft, plastic, pyritic. Frequent pyrite nodules.

80 degree fracture in claystone with slickenslides at 205.5m.

Dip aaprox. 20 deg.

Background gas 0-3 units

207.27-207.65 m (0.38 m)

<u>Sandstone</u> soft, lt gy, fg,well sorted, subrded, mic, pyritic, carb. consisiting of lt gy felspar qand med gy tz in an argillaceous (kaol?) matrix.

Background gas 0-4 units

207.65 – 214.70 m (7.05 m)

<u>Sandstone</u>: lt-md gy, fg, well sorted, subrded cons. of qtz, felsp. mica and coal frags in an arg matx. Common carbonaceous bands and laminations, tr pyr.

Dip varies 0-25 deg with marked changes in azimuth.

Vertical to sub vertical white striations of indeterminate soft white mineral. Origin uncertain possible dewatering structure.

Also sub-horizontal fractures with slickenslides.

Background gas 1-2 units

214.70 – 214.82 m (0.82 m)

Sandstone: It brn-fawn, fg, well sorted, subrded, cons. of qtz, felsp. mica in an arg.

tuffaceous? matx.

Dip 0-12 deg

#### 214.82 – 233.10 m (18.28m)

<u>Sandstone</u>: lt-med gy f-mg well sorted, subrded cons. of qtz, felsp. mica and coal frags in an arg matx. Tr pyr. Common white subvertical striations a/a and from 222.0 - 226.65 m common sub-vertical fracturing (80 deg.). Clasts of shale at 221.75

Background gas 1-2 units, peak of 15 units at 230 m

Dip 0-12 deg

Backround gas 2-5 units, peak of 11 units at 235-236 m

#### 233.1 – 236.65 m (3.55 m)

<u>Sandstone</u>: lt-md gy, mg, subang-srded, cons of lt gy and clr qtz and wh felsp in a sparse arg matx. Mic., carb., **good visual porosity.** Band of fissile v. carb sst lt-med gy f-mg well sorted, subrded cons. of qtz, felsp. mica and abundant coal frags in an arg matx. from 233.8-233.9 m. Prob. good por. Hydrocarbon odour noted when core freshly broken.

Dip 0-12 deg

Backround gas 2-5 units, peak of 11 units at 235-236 m

#### 236.65 – 243.70 m (7.05 m)

Shale: lt-md-dk gy, firm, carb-v.carb. in part, mic. With thin interbeds of lbrn-cream tuff? & 0cc. sst interlaminations lt-md gy, fg, well sorted, subrded cons. of qtz, felsp. mica and coal frags in an arg matx. Tight.

Dip 0-12 deg

Backround gas 2-5 units, peak of 10 units at 240 m

Also 15 units of overnight gas.

#### 243.7 - 245.45 m (1.75 m)

<u>Sandstone</u>: lt-md gy, consisting of fg, sang wh felspar,gy qtz, mica and carb. frags in an argillaceous matrix. Good visual porosity.

Background gas 0-3 units.

Dip 0-12 deg

Background gas 2-3 units.

#### 245.45 – 252.13 (6.68 m)

Finely interbedded and interlaminated sandstone and shale

Sandstone is lt-md gy, firm, cos. of vf-fg sang felspar, quartz in an arg. matrix. Tight.

Shale: gy, firm, sdy grading to vfg sst. a/a

Dip 0-12 deg

Background gas 2-4 units.

#### 252.13 – 265.5 m (13.37 m)

<u>Sandstone</u>: It-md gy, consisting of f-mg, sang wh felspar, gy qtz, mica and carb. frags in an argillaceous matrix. Matrix more sparse in part, but still appears tight.

Dip 0-12 deg. High angle fracture at 263.5 m

Background gas 2-4 units

#### 265.5 - 268.6 (3.1 m)

<u>Shale:</u> gry, firm, common partings with shiny slickenslides, silty, sdy in part with nterlaminations of sandstone, lt gy, vf-fg, well sorted, subrded, cons of wh felsp. Gy qtz, mica and common coal frags in an arg. matx. Tight. Dip 0-25 deg.

Background gas 2-4 units.

268.6 – 272.8 m (4.2 m)

<u>Sandstone</u>: It gy, carb. f-mg, well sorted, sang-srded, cons of felsp. Lt gy qtz, mica and abdt coaly frags in an arg. matx. Tight.

Dip 0-10 deg

Background gas 2-4 units.

272.8 – 276.8 m (4.0 m)

<u>Shale:</u> gry, firm, sl mic. common partings with shiny slickenslides, silty, sdy in part with interlaminations of sandstone, lt gy, vf-fg, well sorted, subrded, cons of wh felsp. Gy qtz, mica and common coal frags in an arg. matx.

Dip 20 deg.

Background gas 2-4 units.

276.8 –285.41 m (8.61 m)

<u>Sandstone</u>: It gy, carb. f-mg, well sorted, sang-srded, cons of felsp. Lt gy qtz, mica and abdt coaly frags in an arg. matx. Poor - fair visual porosity throughout.

Dip 25 Deg.

Background gas 2-5 units

285.41-296.55 m (11.14 m)

Shale: It gy silty-sandy, sl mic., sl carb. with interlaminations of sst. a/a

Thin very carb band at 292.5 with coaly laminations. Coal is black, earthy.

Dip 0-20 deg.

Background gas 4-10 units

296.55 – 316.6 m (20.05 m)

<u>Sandstone</u>: It gy, silty at top but pred. It gy, mg, well sort, sang-srded, cons. of felspar, qtz and carb. frags in an arg. matrix. Fair-good porosity.

Dip 0-20 deg.

Background gas 1-9 units

316.6 - 318.4 m (1.8 m)

Shale: lt-md gy, firm, silty, sl.mic., sl.carb., more carb. in part.

Dip 0-10 deg.

Background gas 0-2 units.

318.4 - 321.1 m (2.7 m)

<u>Sandstone</u>: It gy, fg, srded, well sorted, cons. of wh felsp, lt–clr qtz, mica and carb spx in an arg matx. Rare tr poor porosity.

Interlaminations of shale a/a at top.

Dip 20 deg.

Background gas 0-2 units

321.1 - 324.68

Shale: : lt-md gy, firm, silty, sl.mic., sl.carb with occ. carb partings. Tr. pyr.

Dip 10-20 deg.

Background gas 0-2 units.

324.68 – 326.4 m (1.72 m)

<u>Sandston</u>e: It gy. Fg, well sorted, srded, cons of wh felsplt gy to clr qtz and abd carb spx in an arg matx. Tight.

Dip 10-20 deg.

Background gas 0-2 units.

326.4 - 346.35 m (19.95 m)

<u>Sandstone</u>: lt-md gy, pred mg, well sorted, sang-srded, cons of wh felsp. lt gy to clr qtz and abd carb spx in an arg sl calc.matx. Tr pyr. Fair- good visual porosity.

Dip 10-20 deg.

Background gas 1-3 units.

346.35 – 347.96 m (1.61 m)

<u>Sandstone</u>: a/a with abundant <u>shale clasts</u>, from several mm to > core diameter. Some elongate, some subrounded.

Dip 0-20 deg

Background gas 0-3 units.

347.96- 348.72 m (0.76 m)

<u>Sandstone</u>: It gy, vf-mg, mod sorted, cons of sang-srded wh felsp. Gry & clr qtz & mica in an arg. matx.. Good-excellent visual porosity.

Abundant flattened clasts of siltstone & shale.

Dip indeterminate

Background gas 0-3 units.

348.72-353.0 m (4.28 m)

<u>Sandstone</u> lt-md gy, vf-fg, consisting of sang wh. felspar, gy qtz & mica in an arg.matx, Tight. Interlaminated grey shale and siltstone. Dip to 30 deg.

353.0 – 354.18 (1.18 m)

<u>Sandstone</u>: lt-md gy, f-mg, well sorted, cons. Of sang-srded wh felsp, qtz & occ. mica in an arg. matx. Good visual porosity.

354.18-355.0 m (0.82 m)

Sandstone: a/a with large clasts of gy shale to 15 cm in length.

355.0 m- 355.18 m (0.18 m)

Shale: It gy, hard.

355.18-358.82 m (3.64 m)

<u>Sandstone</u>: It-md gy, f-mg, well sorted, cons. Of sang-srded wh felsp, qtz & occ. mica in an arg. matx. Good visual porosity.

Dip 20 deg.

358.82-361.5 m (2.68 m)

Shale: gy, firm, with high angle fracture (approx. 70 deg.) at 360.4 m

Occ. silty & sdy interlaminations & fine beds

Dip

361.5 – 363.2 m (1.7 m)

Interbedded and interlaminated <u>Shale</u> a/a & <u>Sandstone</u>: lt-md gy, fg sang-srded, sl. mic. cons. of wh felsp & qtz in an arg. matx. Tight.

363.2 – 363.44 m (0.24 m)

Sandstone: lt-md gy, fg sang-srded, sl. mic. cons. of wh felsp & qtz in an arg. matx.

Rare tr. Porosity.

363.44 – 366.5 m (TD) (3.06 m)

Shale: gy firm with high angle fractures (poor reecovery)

ENCLOSURE 1

**Enclosure 1** 

#### PE612385

This is an enclosure indicator page.

The enclosure PE612385 is enclosed within the container PE914415 at this location in this document.

The enclosure PE612385 has the following characteristics: ITEM BARCODE = PE612385 CONTAINER\_BARCODE = PE914415 NAME = Boundary Creek-1A Production Log BASIN = GIPPSLAND ONSHORE? = YDATA\_TYPE = WELL DATA\_SUB\_TYPE = WELL\_LOG DESCRIPTION = Boundary Creek-1A Memory Production Log, Scale 1:200, Enclosure 1 of Well Completion Report REMARKS = DATE WRITTEN = 22-SEP-2001 DATE\_PROCESSED = DATE\_RECEIVED = 04-APR-2003 RECEIVED\_FROM = Lakes Oil NL WELL\_NAME = Boundary Creek-1A CONTRACTOR = AUTHOR = ORIGINATOR = Lakes Oil NL TOP\_DEPTH = BOTTOM\_DEPTH =

(Inserted by DNRE - Vic Govt Mines Dept)

ROW\_CREATED\_BY = DN07\_SW

ENCLOSURE 2

Enclosure 2

#### PE914416

This is an enclosure indicator page.

The enclosure PE914416 is enclosed within the container PE914415 at this location in this document.

The enclosure PE914416 has the following characteristics: ITEM\_BARCODE = PE914416 CONTAINER\_BARCODE = PE914415 NAME = Boundary Creek-1 & -1A Mud Log BASIN = GIPPSLAND ONSHORE? = Y DATA\_TYPE = WELL DATA\_SUB\_TYPE = MUD\_LOG DESCRIPTION = Boundary Creek-1 and Boundary Creek-1A Mud Log, Scale 1:500, Enclosure 2 of Well Completion Report REMARKS = DATE\_WRITTEN = DATE\_PROCESSED = DATE\_RECEIVED = 04-APR-2003 RECEIVED\_FROM = Lakes Oil NL WELL\_NAME = Boundary Creek-1A CONTRACTOR = AUTHOR = ORIGINATOR = Lakes Oil NL  $TOP\_DEPTH = 200$ BOTTOM\_DEPTH = 366 ROW\_CREATED\_BY = DN07\_SW

(Inserted by DNRE - Vic Govt Mines Dept)

ENCLOSURE 3

#### PE914417

This is an enclosure indicator page.

The enclosure PE914417 is enclosed within the container PE914415 at this location in this document.

The enclosure PE914417 has the following characteristics:

ITEM\_BARCODE = PE914417
CONTAINER\_BARCODE = PE914415

NAME = Boundary Creek-1 Composite Log

BASIN = GIPPSLAND

ONSHORE? = Y DATA\_TYPE = WELL

DATA\_SUB\_TYPE = COMPOSITE\_LOG

DESCRIPTION = Boundary Creek-1 and Boundary Creek-1A

Composite Log, Enclosure 3 of Well

Completion Report

REMARKS =
DATE\_WRITTEN =
DATE\_PROCESSED =

DATE\_RECEIVED = 04-APR-2003 RECEIVED\_FROM = Lakes Oil NL

WELL\_NAME = Boundary Creek-1A

CONTRACTOR = AUTHOR =

ORIGINATOR = Lakes Oil NL

TOP\_DEPTH = 195 BOTTOM\_DEPTH = 366 ROW\_CREATED\_BY = DN07\_SW

(Inserted by DNRE - Vic Govt Mines Dept)