2.0 WELL HISTORY

2.1 GENERAL DATA

2.1.1	Well Name and Number	Protea No.1
2.1.2	Location	512877 E 5772884 S
2.1.3	Elevations	G.L. 50.0 m A.S.L. R.T. 51.0 m A.S.L.
2.1.4	Petroleum Tenement	PEP 157
2.1.5	Name of Operator	LAKES OIL N.L. A.C.N. 004 247 214 Level 11 500 Collins Street, Melbourne.
2.1.6	Other Participants	None
2.1.7	Date Drilling Commenced	3 June, 2002
2.1.8	Date Drilling Completed	18th June, 2002
2.1.9	Date Rig Released	19th June, 2002
2.1.10	Drilling Time to T.D.	16 days
2.1.11	Total Depth	825 m.
2.1.12	Status	Plugged and abandoned

2.2 RIG DATA

2.2.1 Drilling Contractor	Sides Engineering Pty Ltd 25 Garden Road, Clayton, Vic. 3168
2.2.2 Rig	Bourne 2000THD
2.2.3 Rig Carrier	Twin Steer Tri-axle
2.2.4 Weight Indicator	Hydraulic Pressure
2.2.5 Power	Cummins - Truck Engine
2.2.6 Rotary	Top Drive
2.2.7 Blocks	Not applicable
2.2.8 Pumps	Clarke 5.5X10 3 Cylinder Duplex
2.2.9 Mud mixing	Gardner Denver Duplex
2.2.10 Sump pump	Not applicable
2.2.11 Transfer Pump	Wreckair - Worm Drive
2.2.12 Tubulars	3.5" X 13.30 D.P.
2.2.13 Fishing Tools	None on Site
2.2.14 Handling Tools	Rented Tasman
2.2.15 Stablizer	12.25", 8.5" , 6"
2.2.16 Spare Parts	As reasonably required to conduct operations for programmed well
2.2.17 Personnel	Driller plus 4 crew
2.2.18 Drilling Hours	Rig Operated Daylight Hours Only.

2.3 DRILLING DATA

2.3.1 The following is the daily operations summary for Protea No.1. It has been compiled from the daily drilling reports. Onsite drilling supervision for Lakes Oil N.L. was provided by W. Westman. Further details are provided in the time/depth curve (Figure 4).

DATE	HOURS	OPERATION
03-06-02	0.5	Move in and rig up.
		Spud Protea No.1 at 0730 hrs 3rd June, 2002.
	1.0	Drill 12.25" (311 mm) hole to 8.5m RT.
	7.0	Cement 9.625" (244 mm) conductor at 8.4m.
	3.0	Nipple up BOP's and function test.
	1.0	Shut down for night.
04-06-02	0.5	Travel from town. Start up. Function test BOP.
	5.0	Repair hydraulics in mast.
	5.0	Drill 8.5" (216 mm) hole from 8.5 to 128m.
	1.0	Circulate clean. POOH to DC's.
	0.5	Shut down for night.
05-06-02	0.5	Travel from town. Service rig. Start up.
	1.0	RIH to bottom. No fill. Break circulation.
	8.5	Drill to 280m.
	1.5	Circulate clean. POOH to DC's.
	0.5	Shut down for night.
06-06-02	0.5	Travel from town. Service rig. Start up.
	1.0	RIH to bottom. 6m. fill. Break circulation.
	5.5	Drill 8.5" (216 mm) hole from 280 to 345m.
	0.5	Circulate clean.
	3.5	POOH. Prepare to run casing.
	0.5	Shut down for night.
07-06-02	0.5	Travel from town. Service rig. Start up.
	4.0	R/u and run 7" (178 mm) casing. Held up at 334m.
	1.5	R/u to circulate. Unable to circulate or move pipe. R/d 20 ton crane.
	1.0	Attempt to circulate. R/u 30 ton crane.
	1.5	Reciprocate casing. Unable to circulate.
	0.5	Land csg. Lift BOP. Cut casing. N/u BOP.
	2.0	RIH w/ drilling assembly to clean out casingg. Drill out float & clean out sand. No obvious obstruction.
	1.0	Establish circulation.
	0.5	Shut down for night.
08-06-02	0.5	Travel from town. Service rig. Start up.
	0.5	Check for circulation around casing annulus - OK.
	2.5	POOH. R/u to cement.
	0.5	Pump cement. Pressure increase after 5 bbls pumped. Continue with job.
	1.0	Insert top plug and begin disp. Found valve passing fluid. Cement locked up before displacement complete.
	2.0	P/test BOP while repairing pull down shaft. Pipe rams / choke manifold 200 PSI low 1000PSI high 10 mins OK.
	2.0	RIH.
	0.5	Drill out plug and cement. Drill 345 to 349.5m.
	0.5	Circulate bottoms/up 10 mins. Conduct LOT. Equivalent mud wt 9.9 lb/gal.
	1.0	POOH. Prepare to cut core #1.

	0.5	Shut down for night.
09-06-02	0.5	Travel from town. Service rig. Start up.
	1.0	POOH to core.
	2.0	P/u core barrel & RIH.
	1.0	Circulate. Wash to bottom.
	1.5	Core from 349.5 to 356m.
	1.0	POOH to csg shoe. Well seemed to be filling w/ fine running sand &
	1.0	flowing water.
	1.0	Circulate. Observe well. Losing returns.
	1.0	POOH. Core barrel plugged w/ sand.
	1.5	Attempt to recover core. Inner barrel wedged w/ sand. Lay down barel.
	0.5	RIH w/ drilling assembly. Secure well.
		Shut down for night.
10-06-02	0.5	Travel from town. Service rig. Start up.
	1.5	RIH.
	0.5	Tagged sand at 241m. Circ/wash down to 283m - sheets of sand across
	0.5	shakers.
	1.5	POOH 6 jts. Float stuck open, string sanded up. Recover core.
	4.0	POOH. 1.5 DC's full of sand.
	2.0	RIH w/ open ended pipe. Tag at 263m. Wash down to 343m.
	0.5	Circulate and wait on cement truck.
	0.5	Pump cement. Pull 20 jts. Circulate pipe clean.
	0.5	Shut down for night.
11-06-02	0.5	Travel from town. Service rig. Start up.
	1.0	POOH.
	1.0	RIH. 6.125" (156 mm) bit, 6XDC, 3.5" DP.
	8.0	Tag cement at 333m. Drill ahead to 485m.
	0.5	Circulate bottoms up.
	0.5	POOH to 321m.
	0.5	Shut down for night.
12-06-02	0.5	Travel from town. Service rig. Start up.
	0.5	RIH.
	0.5	Change hydraulic filters. Low hydraulic power.
	0.5	RIH.
	7.3	Drill ahead 485 to 609m.
	1.3	POOH.
	0.5	Maintenance.
	0.5	Shut down for night.
13-06-02	0.5	Travel from town. Service rig. Start up.
	1.5	POOH. Change BHA/bit – old bit undergauge.
	0.5	RIH.
	1.0	Safety meeting.
	0.5	RIH to shoe, condition mud.
	4.0	RIH. Fill from 450m to hard bridge at 475m.
	1.5	Ream from 450 to 609m. (Due to undergauge bit?).
	0.5	Circulate bottoms up.
	01.0	POOH.
		Shut down for night.
14-06-02	0.5	Travel from town. Service rig. Start up.
	4.5	Repair crown. Empty sump. Refuel.
	***	Wait on rig spares
15-06-02	0.5	Travel from town.
	***	Repair crown.

16-06-02	0.5 3.0 1.0 5.5 0.5 0.5 1.0 0.5	Travel from town. Service rig. Start up. Repair rig. Stand rig up. Break circulation. RIH. Hole bridged at 475 and 579m. Wash down to bottom. Drill ahead 609 to 751m. POOH. Circulate hole whilst repairing hydraulics. POOH Shut down for night.
17-06-02	12	Repair rig crown
18-06-02	0.6 2.0 1.3 0.3 3.0 4.0 0.3	Travel from town. Service Rig RIH Wash to bottom Drill to 825 m Circulate hole clean POOH to log Run Schlumberger logs Secure well for the night
19-06-02	0.6 1.3 0.3 2.0 0.3 0.3 4.3 2.0	Travel from town. Service Rig RIH to 495 m. Set 50 m balanced cement plug from 495-445 m. POOH to 360 m. Wait on cement truck Set balanced cement plug 360 to 310 m. POOH to 200 m. Circulate clean. Wait on cement. POOH. Release rig. Commence rigging down

2.3.2 Hole sizes and depths:

12.25" (311mm) Spud to 8.5m.
8.5" (216mm) 8.5 to 345m.
6.125" (156mm) 345 to 825m.

Casing and cementing:

SURFACE:

SIZE:	9.625" / 244 mm
Weight:	64.9 kg/m
Grade:	K55
Shoe setting depth:	8.4m

INTERMEDIATE:

SIZE:	7" / 178 mm
Weight:	34.2 kg/m
Grade:	K55
Shoe setting depth:	338m

2.3.3 Deviation Surveys:

None taken.

2.3.3 Drilling Fluid:

(A) Spud - 8.5 meters: Type: Freshwater/Gel spud mud.

(B) 8.5 - 825m. KCl/Polymer/PHPA.

Physical Mud Properties:

DEPTH	PPG	VIS	KCL %	PHPA LB/GAL
250	8.7	32	4	0.5
340	9	34	4	0.5
723	9.1	37		
751	9.2	35		
609	9.1	32		

2.3.5 Water Supply:

Water was trucked to site from Sale.

2.3.6 Perforation:

None.

2.3.7 Plugging and Cementing:

Plug 1. 495-445 m
Plug 2. 360 to 310 m.
Plug 3. Surface -10 m.

2.3.8 Bit Data

BIT RUN	1	2	3	4	5
Diameter	12.25"	8.5"	6.125"	6"	6.125"
Type & Manufacture	Security S33	Varel L127	Varel 117	Core Head	Varel ETD14
IADC code	114	127	117		437
Serial number	209393	537086			176346
Nozzles	Open	Open	11,11,11		11,11,11
Depth in (m)	0	9	345	350	
Depth out (m)	8.5	345	350	356	
Drilled (cum/daily)	8.5	337	5	7	
Hours (cum/daily)	1	14	0.5	1.5	
Dull grade		7.7.WT.A.O.I.TD			
Av. ROP m/hr		24		6	
WOB Klbs		5	1	2	
RPM		100	100	100	
Jet Velocity					
HHP@Bit					
BHA		Bit/2DC/4DC			

2.4 LOGGING AND TESTING

2.4.1 Wellsite Geologist:
J. Mulready (Spud to 128m) David Horner (128 to 825m T.D.)

2.4.2 Mudlogging:
Hot wire hydrocarbon detection, depth and drill rate monitoring was provided by Denis Sisely.

2.4.3 Ditch Cutting Samples:
Cuttings were collected at 5 meter intervals from spud to 345m, then at 3m intervals to 825m (T.D.)

These being 1 set 500gm unwashed calico bag, and 1 set washed samplex tray.

2.4.4 Coring:
1 X 9 m core was cut from 349.5 to 356m (0.8m recovery (12%)).
See core analysis report.

2.4.5 Sidewall Cores:
No sidewall cores were taken.

2.4.6 Testing:
No tests were conducted.

2.4.7 Wireling Logs:
DT-GR-FMI (778m to shoe at 338m) GR to surface.

2.4.8 Bottom Hole Temperature :
32° Centigrade

2.4.9 Velocity Survey:
No velocity survey was conducted.