Oil Company of Australia

OIL COMPANY OF AUSTRALIA LIMITED

MYALL CREEK 8
WELL COMPLETION REPORT

PL 174 - SURAT BASIN, QUEENSLAND

Originator:
John Hobday, Contract Wellsite Geologist
Quinton Cahill, Graduate Geologist

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Approved:
Peter Lansom, Petroleum Development Manager Queensland

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Oil Company of Australia Limited
ABN 68 001 646 331
Ground Floor, South Tower
John Oxley Centre
339 Coronation Drive
MILTON QLD 4064

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		SCALE
Enclosure 1	Composite Well Log	1:500
Enclosure 2	Composite Well Log	1:200
Enclosure 3	Geoservices Mudlog	1:500

GENERAL DATA

Location (GDA 94):	Latitude:	27°03'41.97"S	Status:	Gas Well	
	Longitude:	149°13'12.31"E			
	Station:	SP 181	Rig:	Century Rig 1	
	Line:	SH84 – 102			
			Total Depth:	Driller:	2077.0m
Elevation:	GL:	242.5 metres		Logger:	2078.0m
	RT (CDL#1):	248.0 metres			
			Plugs:	Nil	
Grid (MGA Zone 55):	Easting:	720 178.58			
	Northing:	7 004 794.26			
Date Spudded (CDL #1):	22/03/2003	2300 hours			
Date TD Reached (CDL #1):	05/04/2003	1830 hours	Casing:	Size:	Shoe:
Date Rig Released (EWS #4):	01/06/2003	1200 hours	(a) Surface	244mm	221.2m
			(b) Intermediate	178mm	2026.9m
Type Structure:	Anticline				

STRATIGRAPHIC UNITS PENETRATED

AGE	FORMATION	DEPTH (mRT)	DEPTH (mSS)	THICKNESS (m)
E. Cretaceous	Wallumbilla Fm.	5.5	248.0	305.5
E. Cretaceous	Bungil Fm.	311.0	-63.0	137.0
E. Cretaceous	Mooga Ss.	448.0	-200.0	184.0
E. Cretaceous	Orallo Fm.	632.0	-384.0	132.8
E. Cret. - L. Jura.	Gubberamunda Ss.	764.8	-516.8	134.2
L. Jurassic	Westbourne Fm.	899.0	-651.0	177.5
M. Jurassic	Walloon Coal Ms.	1076.5	-828.5	269.5
M. Jurassic	Hutton Ss.	1346.0	-1098.0	175.2
E. Jurassic	Evergreen Fm.	1521.2	-1273.2	119.0
	Boxvale Sonic Marker	1570.4	-1322.4	-
	Boxvale Ss.	1572.5	-1324.5	55.3
	base Boxvale	-	-	-
	basal Evergreen Ss.	1627.8	-1379.8	12.4
M. Triassic	Moolayember Fm.	1640.2	-1392.2	165.3
M. Triassic	Snake Creek Mudstone	1805.5	-1557.5	14.0
M. Triassic	Showgrounds Ss.	1819.5	-1571.5	13.0
E. Triassic	Rewan Fm.	1832.5	-1584.5	107.5
	basal Rewan Ss.	1933.0	-1685.0	7.0
L. Permian	Bandanna Fm.	1940.0	-1692.0	58.9
L. Permian	Black Alley Shale	1998.9	-1750.9	23.2
	Winathoola Coal Mbr.	2013.5	-1765.5	8.6
L. Permian	Tinowon Fm.	2022.1	-1774.1	55.9 +
	Wallabella Coal Mbr.	2066.6	-1818.6	11.4 +
	TD (Logs extrapolated)	**2078.0**	**-1830.0**	

WIRELINE LOGS

Type Log	Run	Interval (mD)	Max Temp Recorded
Suite 1 (KCL/PHPA mud @ 2027mD)			
DLS – MRS – CSS – SP - CAL	1	2027 - 221.2	72°C
GR to surface	1	2027 – to surface	
Suite 2 (Nitrogen at TD - 2077mD)			
TAC - AIS	1	2077 - 2027	
PDS – ENS – SGS	2	2077 – 2027	

FORMATION TESTS

Drill Stem Tests

No	Interval / Formation (metres)	Periods (mins)	EMP IP/FP (psi)	EMP FSIP (psi)	Fluid to surface (mins)	Surface Press. (max) (psi)	TC. mm.	BC. mm.	Rev. Out	Result.
	Nil									

Flow Tests

Formation	Interval	Psig	Choke	Flow Rate Mmcfd
Upper Tinowon	2027 - 2057	174	3/4"	2.65
Upper Tinowon	2027 - 2077	279	3/4"	4.13

FULL HOLE CORES

No.	Interval	Formation	Cut (m)	Rec.(m)
	Nil			

CORE ANALYSIS

Interval	Por.	Perm.	So	Sw
Nil				

Interval	Por.	Perm.	So	Sw

PERFORATIONS

Interval	Formation	Shots / ft.
(None - hole open below 2026.9m)		

Interval	Formation	Shots / ft.

LOG INTERPRETATION

Interval	Formation	Net Sand (m)	Porosity	Sw	Vsh	Net Pay (m)
None						

SIDEWALL CORES

Depth	Lithology	Palynology
	Nil SWC taken	

Depth	Lithology	Palynology

SUMMARY

Myall Creek 8 was drilled as a gas appraisal well in the southeastern portion of PL 174. Myall Creek 3 is 960m south southwest, and Noorindoo 2 lies 200m to the northeast of Myall Creek 8.

The well was designed for the upper Tinowon reservoir in the southeastern portion of PL 174. This well followed on from the successful drilling in the region, and initial production from Myall Creek 2, which indicated that the upper Tinowon reservoir is stratigraphically trapped over a structural nose trending southeast through PL 174 and PL 192. Interpretation of the seismic data supported the presence of upper Tinowon section at the location proposed for Myall Creek 8. This interpretation was based on seismic character analysis, and the mapped TWT interval thickness increase above the Wallabella Coal Member. The seismic interpretation attempted to define areas where the Upper Tinowon section was thickest. Myall Creek 8 was located within this area and it was anticipated that the upper Tinowon sandstone was developed at this location. Reservoir, in particular quality and development, was the critical risk.

Myall Creek 8 spudded on 22nd March 2003. A 311mm surface hole was drilled to 223.0m and 244mm surface casing was set at 221.2m. A 216mm hole was then mud drilled to 2027.0m and wireline logged. After setting 178mm casing at 2026.9m, air drilling operations commenced and a 156mm hole was then air drilled to a TD of 2077.0m (D), reached on 5th April 2003. While air drilling, two flow tests were conducted over the Tinowon Formation. Flow Test #1 over the interval 2027 - 2057m (D) flowed gas at 2.65 Mmcfd on a ¾" choke while Flow Test #2 over the interval 2027 - 2077m (D) flowed gas at 4.13 Mmcfd on a ¾" choke.

Reeves Wireline were mobilised to site for a programmed wireline logging survey to be run at TD. Once complete, Reeves were rigged down and 60mm (2-3/8") tubing was RIH using the primary jet and the hanger was landed.

A well control incident occurred on 7th April 2003 while rigging down the BOP's. The resultant gas release necessitated the mobilisation of well control specialists to re-establish control of the well. Once secure, EWS Workover Rig 4 was mobilised to Myall Creek 8 to fish the completion string and then re-completed the well with 60mm (2-3/8") tubing.

Wellsite Geologists:	J.A. Hobday and D.A. Short	**Card Prepared by:**	J.A. Hobday and S.F. Simeone	**Date:**	11/03

1. SUMMARY

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Myall Creek 8 Location Map

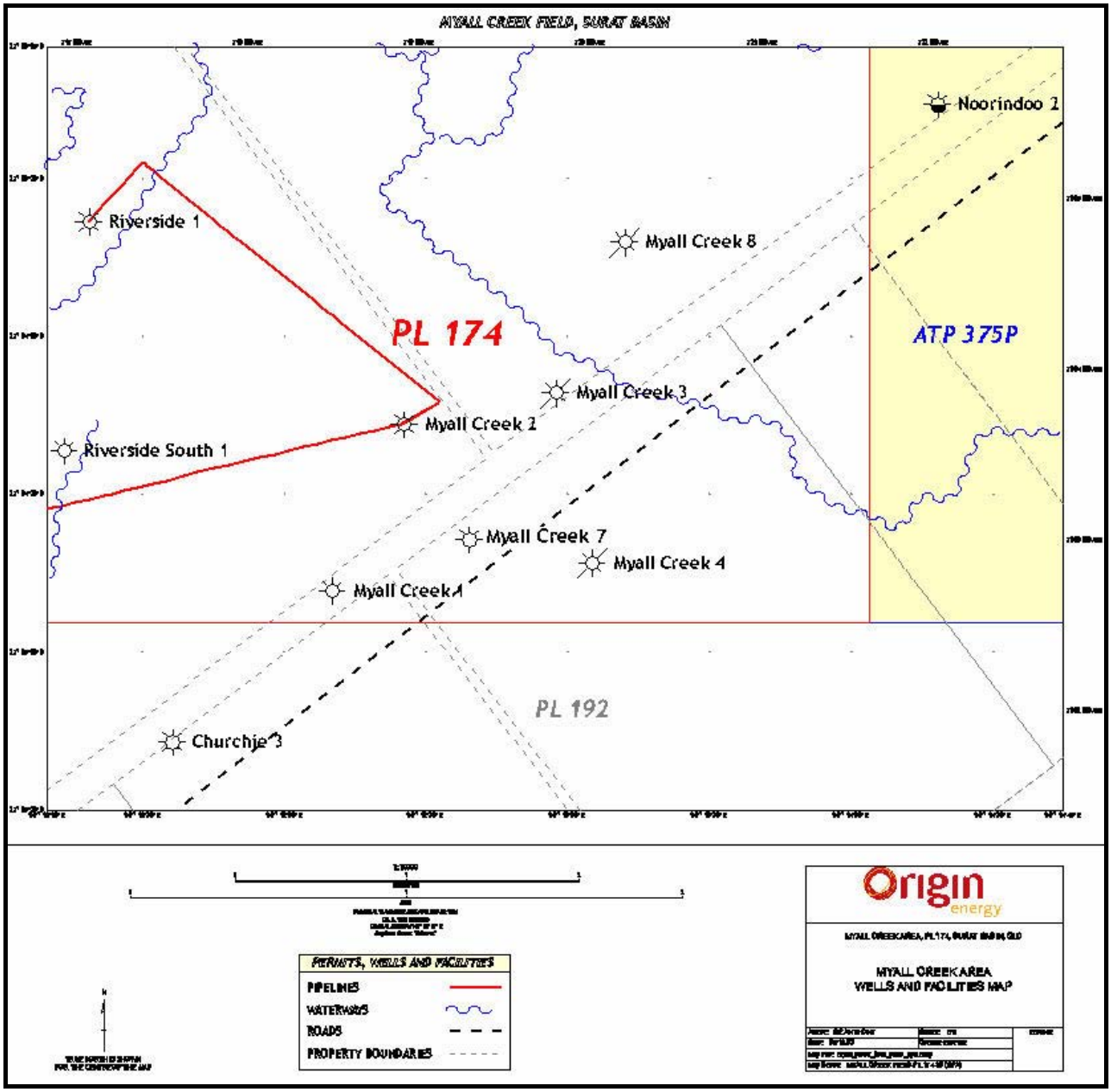


Figure 1

2. WELL HISTORY

2.1 General Data

2.1.1	**Well Name and Number**	Myall Creek 8	
2.1.2	**Location**	Latitude (GDA 94):	27°03' 41".97 S
		Longitude (GDA 94):	149°13' 12.31" E
		Easting (MGA 55):	720 178.85
		Northing (MGA 55):	7 004 794.26
		Seismic:	Line: SH84-102
			Station: SP 181
2.1.3	**Elevations**	GL:	242.5m MGA
		RT:	248.0m MGA
2.1.4	**Petroleum Tenement**	PL 174	
2.1.5	**Name of Operator**	OIL COMPANY OF AUSTRALIA LIMITED ABN 68 001 646 331 Ground Floor, South Tower John Oxley Centre 339 Coronation Drive MILTON QLD 4064	
2.1.6	**Other Participants**	None	
2.1.7	**Date Drilling Commenced**	23:00 hours, 22nd March 2003	
2.1.8	**Date TD Reached (CDL #1)**	18:30 hours, 5th April 2003	
2.1.9	**Date Rig Released (EWS #4)**	12:00 hours, 1st June 2003	
2.1.10	**Total Depth**	Driller:	2077.0m
		Logger:	2078.0m (extrapolated)
2.1.11	**Status**	Gas Well	

2.2 Rig Data

2.2.1	**Drilling Contractor**	Century Drilling Limited 357 Greenhill Road TOORAK GARDENS SA 5065
2.2.2	**Rig Details**	Number 1 Make: Ideco Hydrair H-44-CSC Ideco BIR-7585 Carrier Rated Capacity: 162,000kg / 358,000lb
2.2.3	**Draw Works**	Type: Ideco Hydrair H-44 CSC Drive System: 2 CAT. D3408DITA Transmission: Allison 5860 torquematic Drill Line Size: 28.6 mm / 1.125"
2.2.4	**Mast (Telescopic)**	Type: Ideco KM-117-358AH Height: 35.7m/ 117 ft Capacity: 162,000 kg/358,000 lb
2.2.5	**Substructure**	Floor Height: 5.2m/17 ft KB Height: 5.5m/18 ft
2.2.6	**Kelly Drive**	Type: Varco 27 HDP pin drive. Rollers for 133 & 89 mm (5.25" / 3.5") hexagonal kellies
2.2.7	**Hook Block**	Type: Ideco UTB 265 Capacity: 270 tonnes / 265 tons
2.2.8	**Swivel**	Type: Ideco TL-200
2.2.9	**Mud Pumps (2)**	Type: National 8-P-50 Liner Size / Stroke: 152mm / 216mm Power: Caterpillar D378TAC Output (95%): 11.2 l/stk / (2.97 g/stk)
2.2.10	**Mud System Tanks**	Pill: 41 Premix: 98 Suction: 172 Intermediate: 172 Desilter: 43 Desander: 43 Degasser: 64
2.2.11	**Shale Shakers**	Number: 2 Type: Brandt ATL 1000
2.2.12	**Desander**	Type: Harrisburg DSN 1000 Cones: 2 x 254 mm / 10"
2.2.13	**Desilter**	Type: Harrisburg

	Cones: 10 x 127 mm / 5"
2.2.14 Ram Type BOP	Type: Shaffer LWS Double Bore Size: 346 mm / 13.625" Rating: 35000 kPa / 5000 psi
2.2.15 Annular Type BOP	Type: Hydril GK Bore Size: 346 mm / 13.625" Rating: 35000 kPa /5000 psi
2.2.16 Accumulator	Type: Koomey Model 120LS
2.2.17 Choke Manifold	Size: 1 x 76 mm/3" manifold with 2 x 76 mm / 3" chokes (35000 kPa / 5000 psi)
2.2.18 Drill Pipe	Size: 127 mm/5" (2300m) Weight: 19.5 lb/ft / 29.0 kg/m Grade: E Connection: 114 mm/4.5" IF Size: 89 mm / 3.5" (3000m) Weight: 13.5 lb/ft / 19.8 kg/m Grade: S Connection: 89 mm/3.5" IF
2.2.19 HW Drill Pipe	Size: 127 mm / 5" (6 joints) Connection: 114 mm / 4.5" IF Size: 89 mm / 3.5" (40 joints) Connection: 89 mm / 3.5" IF
2.2.20 Drill Collars	Number: 4 Size: 203 mm / 8.00" Connection: 114 mm / 4-1/2" IF Number: 24 Size: 165 mm / 6.50" Connection: 114 mm / 4.5" IF Number: 24 Size: 121 mm / 4.75" Connection: 89 mm / 3.5" IF

2.3 Drilling Data

2.3.1 Daily Operations Summary

The following is the daily operations summary for Myall Creek 8. It has been compiled from the Tour Sheets and Daily Drilling Reports (refer to Appendix 1). Onsite drilling supervision for Oil Company of Australia Limited was provided by J Dingle and S Porter. Further details are provided in the Time/Depth Curve (Figure 2) and the Time Analysis Chart (Figure 3).

The depths in the following summary are those reached at 24:00 hours on each day with the operations given for the previous 24 hour period.

Date	Depth	Operation
22.03.03	31m	Spud well, drill 12-1/4" hole - 31m
23.03.03	223m	Drill 12 1/4" hole from 31m to 145m - Survey - Drill 12 1/4" hole to 223m- section TD - Circulate hole clean, drop survey and prepare to POH - POH and lay out bit and stabiliser - Clear work floor and rig up to run casing - Run 18 joints of 9 5/8" casing with shoe set at 221m - Circulate casing and wash to bottom - Make up cement head and lines. Hold safety meeting. - Mix and pump 81Bbls of slurry at 15.6ppg, drop plug and displaced with water. Bumped plug to 1500psi. - Wait on cement.
24.03.03	256m	Slack off casing. Lay out cement head, landing joint and riser. - Install bradden head - Nipple up and function test BOP's - Pressure test BOP's, choke manifold and kelly cocks to 2000psi / 250psi - Make up BHA and RIH to 196m - Slip drilling line - Realign derrick - Drill out float and shoe track - Change mud and drill 8 1/2" hole from 223m to 227m - Circulate hole clean and perform FIT to 20ppg EMW - Drill 8 1/2" hole to 256m
25.03.03	1117m	Drill 8 1/2" hole to 408m - Survey - Drill 8 1/2" hole to 532m - Survey - Drill 8 1/2" hole to 695m - Survey - Drill 8 1/2" hole to 829m - Survey - Drill 8 1/2" hole to 1117m
26.03.03	1645m	Drill 8 1/2" hole from 1117m to 1213m - Survey - miss run - Drill 8 1/2" hole to 1242m - Survey - Drill 8 1/2" hole to 1380m - Rig service - Drill 8 1/2" hole to 1415m - Survey - Drill 8 1/2" hole to 1568m - Survey - Drill 8 1/2" hole to 1645m
27.03.03	1875m	Drill 8 1/2" hole from 1645m to 1875m - Circulate bottoms up and prepare to POH - POH for wiper trip-

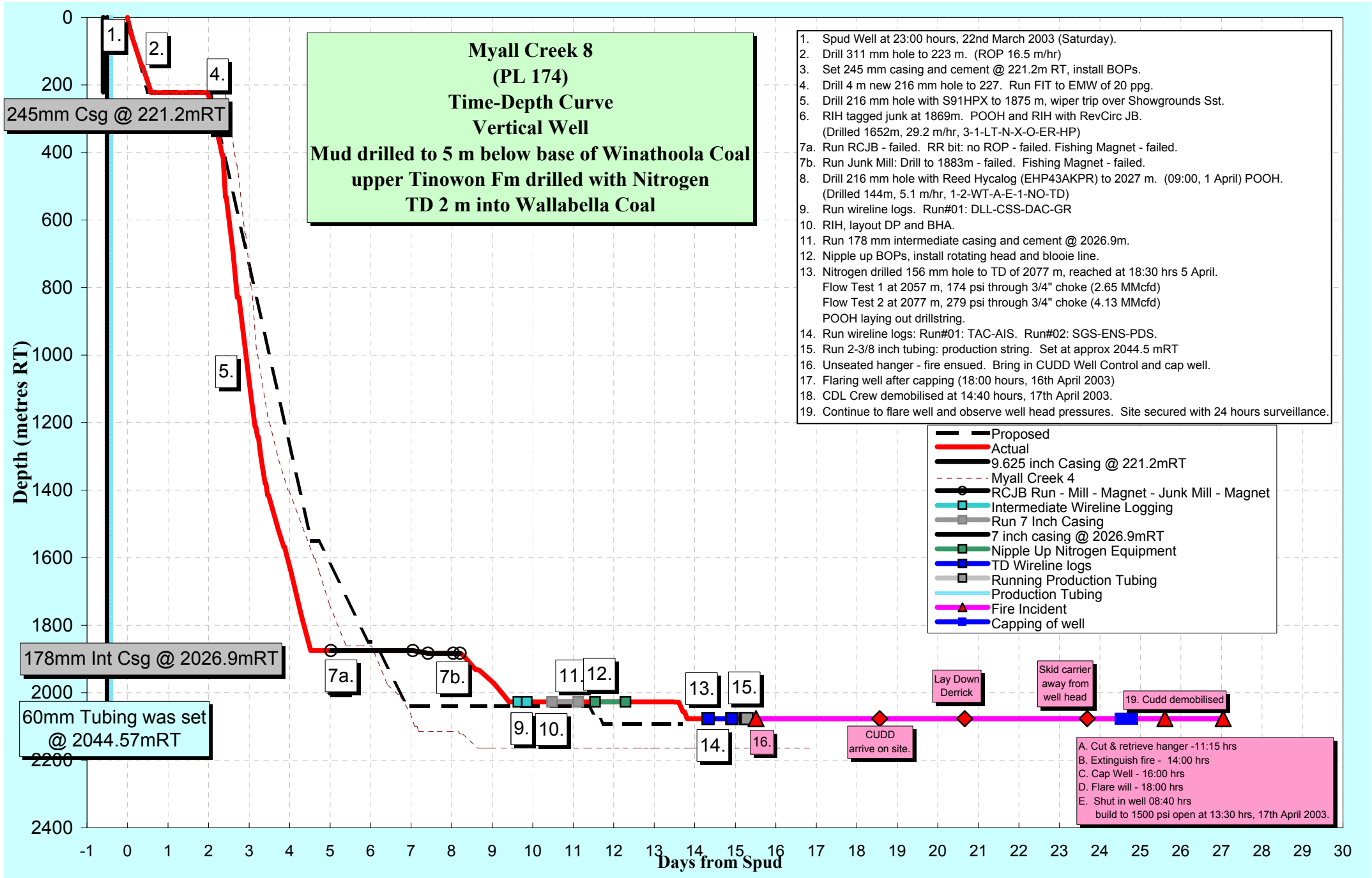

Myall Creek 8
(PL 174)
Time-Depth Curve
Vertical Well
Mud drilled to 5 m below base of Winathoola Coal
upper Tinowon Fm drilled with Nitrogen
TD 2 m into Wallabella Coal
1. Spud Well at 23:00 hours, 22nd March 2003 (Saturday).
2. Drill 311 mm hole to 223 m. (ROP 16.5 m/hr)
3. Set 245 mm casing and cement @ 221.2m RT, install BOPs.
4. Drill 4 m new 216 mm hole to 227. Run FIT to EMW of 20 ppg.
5. Drill 216 mm hole with S91HPX to 1875 m, wiper trip over Showgrounds Sst.
6. RIH tagged junk at 1869m. POOH and RIH with RevCirc JB.
(Drilled 1652m, 29.2 m/hr, 3-1-LT-N-X-O-ER-HP)
7a. Run RCJB - failed. RR bit: no ROP - failed. Fishing Magnet - failed.
7b. Run Junk Mill: Drill to 1883m - failed. Fishing Magnet - failed.
8. Drill 216 mm hole with Reed Hycalog (EHP43AKPR) to 2027 m. (09:00, 1 April) POOH.
(Drilled 144m, 5.1 m/hr, 1-2-WT-A-E-1-NO-TD)
9. Run wireline logs. Run#01: DLL-CSS-DAC-GR
10. RIH, layout DP and BHA.
11. Run 178 mm intermediate casing and cement @ 2026.9m.
12. Nipple up BOPs, install rotating head and blooie line.
13. Nitrogen drilled 156 mm hole to TD of 2077 m, reached at 18:30 hrs 5 April.
Flow Test 1 at 2057 m, 174 psi through 3/4" choke (2.65 MMcfd)
Flow Test 2 at 2077 m, 279 psi through 3/4" choke (4.13 MMcfd)
POOH laying out drillstring.
14. Run wireline logs: Run#01: TAC-AIS. Run#02: SGS-ENS-PDS.
15. Run 2-3/8 inch tubing: production string. Set at approx 2044.5 mRT
16. Unseated hanger - fire ensued. Bring in CUDD Well Control and cap well.
17. Flaring well after capping (18:00 hours, 16th April 2003)
18. CDL Crew demobilised at 14:40 hours, 17th April 2003.
19. Continue to flare well and observe well head pressures. Site secured with 24 hours surveillance.
Proposed
Actual
9.625 inch Casing @ 221.2mRT
Myall Creek 4
RCJB Run - Mill - Magnet - Junk Mill - Magnet
Intermediate Wireline Logging
Run 7 Inch Casing
7 inch casing @ 2026.9mRT
Nipple Up Nitrogen Equipment
TD Wireline logs
Running Production Tubing
Production Tubing
Fire Incident
Capping of well
245mm Csg @ 221.2mRT
178mm Int Csg @ 2026.9mRT
60mm Tubing was set @ 2044.57mRT
CUDD arrive on site.
Lay Down Derrick
Skid carrier away from well head
19. Cudd demobilised
A. Cut & retrieve hanger -11:15 hrs
B. Extinguish fire - 14:00 hrs
C. Cap Well - 16:00 hrs
D. Flare will - 18:00 hrs
E. Shut in well 08:40 hrs
build to 1500 psi open at 13:30 hrs, 17th April 2003.
Depth (metres RT)
Days from Spud

Figure 2

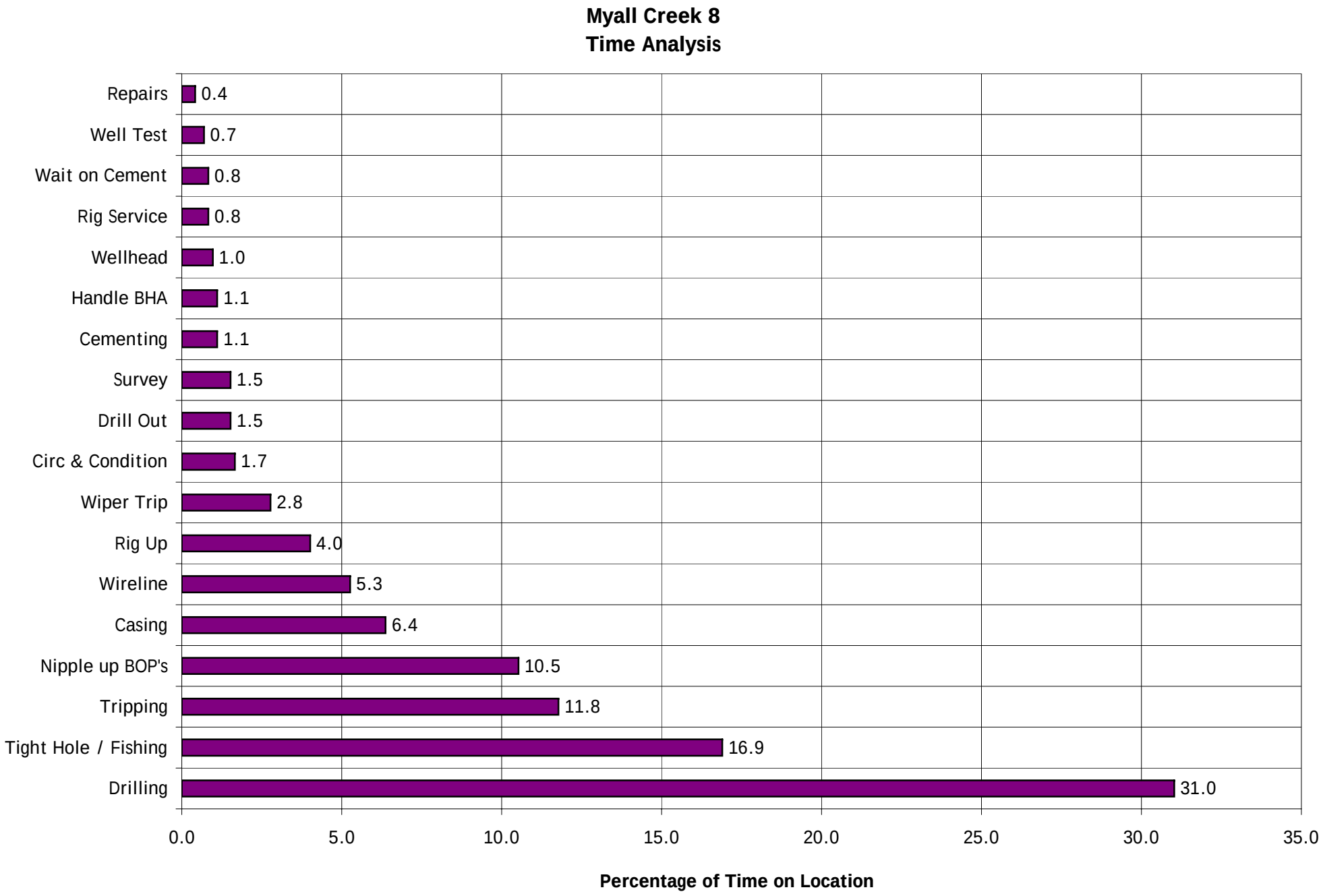

Myall Creek 8
Time Analysis
Repairs 0.4
Well Test 0.7
Wait on Cement 0.8
Rig Service 0.8
Wellhead 1.0
Handle BHA 1.1
Cementing 1.1
Survey 1.5
Drill Out 1.5
Circ & Condition 1.7
Wiper Trip 2.8
Rig Up 4.0
Wireline 5.3
Casing 6.4
Nipple up BOP's 10.5
Tripping 11.8
Tight Hole / Fishing 16.9
Drilling 31.0
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
Percentage of Time on Location

Figure 3

		work tight hole through the sands - Slip drilling line - RIH to 1863m - Pick up kelly and wash to 1869m. Tagged up on junk in the hole. - Circulate and condition hole prior to POH for fishing trip
28.03.03	1875m	POH - Pick up and dress Reverse Circulating Junk Basket - RIH and wash to bottom - Work junk sub - POH and break and lay out RCJB. Junk damage to the outer surfaces of the tool indicating the junk is not sitting on bottom. - Make up RR Bit, Junk sub and BHA including 4 extra drill collars - Slip drilling line - RIH
29.03.03	1875m	Wash to bottom and attempt to drill past junk. No success - POH and lay out bit and junk sub - Make up fishing magnet and run in hole - Work magnet ober fish – POH - no fish recovered - Make up junk mill and RIH
30.03.03	1883.0m	Wash to bottom and mill on junk and drill from 1875m to 1883m - POH and lay out junk mill - Make up fishing magnet and run in hole - Work magnet on bottom - POH- no fish recovered - Make up new bit and junk sub and RIH
31.03.03	1972.0m	Slip drilling line - Continue to RIH - Drill 8 1/2" hole from 1883m to 1931m - Survey - Drill 8 1/2" hole to 1972m
01.04.03	2027.0m	Drill 8 1/2" hole from 1972m to 2027m - Section TD - Circulate hole clean and prepare to POH - POH and lay out bit and junk sub - Hold safety meeting. Rig up REEVES and run logs- DLL, CSS, DAC, GR. Rig down loggers. - Make up BHA and RIH. Pick up kelly and wash to bottom
02.04.03	2027.0m	Circulate hole clean - Survey - POH and lay out drill pipe and BHA - Rig up to run 7" casing. Change pipe rams and pressure test ram doors - Run 162joints of 7" 23ppf casing with shoe set at 2027m - Circulate casing and wash to bottom - Make up cement head and lines. Pump 40Bbl SAPP pre-flush. Hold safety meeting. - Pump cement spacer and pressure test lines
03.04.03	2027.0m	Mix and pump 78 Bbls of lead slurry at 13ppg and 41 Bbls of tail slurry at 15.6ppg, drop plug and displaced with water. Bumped plug to 3000psi. - Drop and set casing slips with 125,000#. Pick up Stack and check slips. Rig down Halliburton. Rough cut and lay out casing. - Nipple down 13 5/8" BOP's - Dress casing stub and install B section. Energise X

		bushing and pressure test to 5000psi - Nipple up 7 1/16" BOP's, RBOP and Blooie line. Load 3 1/2" drill pipe onto racks
04.04.03	2027.0m	Load drill pipe. Nipple up blooie line - Pressure test BOP's, choke manifold and kelly hose to 4000psi / 250psi - wash pipe is leaking - Change out wash pipe. Repair pressure testing unit - Pressure test circulating lines and kelly cocks to 4000psi / 250psi - Make up air drilling BHA and RIH with 3 1/2" drill pipe.
05.04.03	2077.0m	Continue to RIH with 3 1/2" drill pipe - Slip drilling line - Load, clean and strap extra drill pipe - Continue to run in hole - Pick up kelly, install RBOP and drive bushing - Drill out float and shoe track - Drill 6 1/8" hole from 2027m to 2028m - Circulate hole clean and check bottoms up sample - Circulate hole clean. Hold pre nitrogen drilling meeting with both crews - Pressure test circulating lines to 3000psi with nitrogen - Unload and dry up well - Drill 6 1/8" hole to 2057m with nitrogen - Flow test - Drill 6 1/8" hole to 2077m- TD - Circulate hole clean - Flow test - Wash to bottom and circulate hole clean - Rack kelly and POH.
06.04.03	2077.0m	Hoist, laying out pipe - Break kelly & remove drive nut - Hoist, laying out BHA - Lay down kelly & swivel - Rig up Reeves wireline & lubricator - Wireline logging with Reeves. Run No 1, TAC-AIS, Run No 2, SGS-ENS-PDS - Rig down lubricator - Rig to run tubing, change pipe rams - Make up Tail Pipe & run in hole with 2-3/8" tubing, using primary jet.

2.3.2 Hole Sizes and Depths

12.250” / 311mm - 223.0m
8.500” / 216mm - 2027.0m
6.125” / 156mm - 2077.0m (Total Depth)

2.3.3 Casing and Cementing

Conductor

Size	- 16" / 406 mm
Weight	- 36 lb/ft 53.6 kg/m
Shoe Setting Depth	- 10m

Surface

Size	- 9.625" / 244 mm
Weight	- 36 lb/ft 53.6 kg/m
Grade	- K55 (16 joints)
Shoe Setting Depth	- 221.2m
Quantity of Cement	- 355 sacks "A" + 1% $CaCl_2$
Interval Cemented	- To surface

Intermediate

Size	- 7.0" / 178 mm
Weight	- 23 lb/ft
Grade	- N80
Shoe Setting Depth	- 2026.9m
Quantity of Cement	- Lead - 215 sacks "A" + 6% Gel + 0.5% HR7 Tail - 170 sacks "G" + 1% HALAD322
Interval Cemented	- TD

2.3.4 Deviation Surveys

Depth (metres)	Deviation (degrees)	Depth (metres)	Deviation (degrees)	Depth (metres)	Deviation (degrees)
133	0.25	660	1.0	1545	0.75
223	0.75	806	0.25	1851	0.75
396	1.0	1230	0.5	1918	0.25
520	1.0	1403	0.25	2015	0.25

2.3.5 Drilling Fluid

(a) Spud - 223.0m Fluid - Spud / Gel Mud
Additives - Caustic, Tru-Gel

(b) 223.0m – 2027.0m Fluid - KCl - Polymer
Additives – Barite, Caustic Soda, KCL Fine, JK-261, KCl Fine, Pac LV, Pac Reg, Sodium Sulphite, Xanthan Gum (P), AMC Ausgel

(c) 2027.0m - 2077.0m Fluid - Nitrogen

2.3.6 Physical Mud Properties

Date	SG	Vis.	WL	FC	pH	Sand	KCl	Solid	Cl-
22/03/03	9.0	40	-	-	-	-	-	-	-
23/03/03	9.2	40	-	-	8.0	-	-	6.5	-
24/03/03	8.6	34	n/c	-	9.5	-	3.5	0.9	17700
25/03/03	9.7	38	8.5	1	9.0	Tr	3.2	7.3	17300
26/03/03	9.7	40	6.8	1	9.5	0.20	3.4	7.6	18400
27/03/03	10.1	58	7.0	1	9.0	0.20	3.4	9.1	18400
28/03/03	10.1	58	6.8	1	8.5	0.15	3.3	9.1	17800
29/03/03	10.2	56	6.8	1	9.0	0.15	3.3	9.3	17800
30/03/03	10.2	57	6.0	1	9.5	0.10	3.3	9.1	17800
31/03/03	10.0	56	7.0	1	9.0	0.15	3.8	8.0	18000
01/04/03	10.0	58	7.6	1	9.0	0.10	3.8	8.0	18000
02/04/03	10.0	56	8.0	1	9.0	0.10	3.5	8.0	17700
03/04/03	*								
04/04/03	*								
05/04/03	*								

* Nitrogen

Chemicals Used

Product	Units		Amount	
Barytes OD (25 kg)	792	Sack	19800	kg
Caustic Soda (25 kg)	12	Drum	300	kg
Idicide-20 (20 li)	4	Drum	80	li
JK-261 (26 kg)	46	Sack	1190	kg
KCl Fine Tech- 25 (25 kg)	486	Sack	12150	kg
Pac LV (25 kg)	8	Sack	200	kg
Pac Reg (25 kg)	15	Sack	375	kg
SAPP (25 kg)	4	Sack	100	kg
Sodium Sulphite (25 kg)	25	Sack	625	kg
Xanthan Gum (P) (25 kg)	8	Sack	200	kg

2.3.7 Water Supply

Water was obtained from a bore at Myall Creek 2, near the site.

2.3.8 Perforation Record

None

2.3.9 Plugging and Cementing

None

2.4 Logging and Testing

2.4.1 Wellsite Geologist

J A Hobday and D A Short

2.4.2 Mudlogging

Mudlogging services were provided by Geoservices Overseas S.A. Cuttings gas was monitored from surface casing shoe to total depth using a FID gas chromatograph. A mudlog recording lithology, penetration rate, mud gas and other data was prepared and is an enclosure within this report.

2.4.3 Ditch Cutting Samples

Cuttings were collected from surface. 10m samples were collected from 10m to 200.0m, and at 3m samples to T.D. The cuttings samples and sets were:

Sample Type	No. Sets
Unwashed	1
Washed	2
Samplex Trays	1

2.4.4 Coring

No cores were cut at Myall Creek 8.

2.4.5 Sidewall Cores

None

2.4.6 Testing

The following table shows the Flow Tests while nitrogen drilling:

Formation	Interval (m)	Choke	psia	Q (Mmcfd)
Upper Tinowon	2027 - 2057	¾”	174	2.65
Upper Tinowon	2027 – 2077	¾”	279	4.13

Refer to Appendix 6 of this report for the Flow Charts.

2.4.7 Wireline Logs

Two suites of logs were run by Reeves Wireline. Refer to Enclosures 1 and 2 for Composite Logs.

Suite 1 (In KCL/PHPA mud filled hole @ 2027m - Driller)

Type Log		Interval
RUN 1:	DLS-MLL-CSS-SP-CAL	2027 - 221.2m
	GR	2027m - surface

Suite 2 (In nitrogen filled hole @ 2077m - Driller)

Type Log		Interval
RUN 1:	AIS–TAC	2027 - 2077m
RUN 2:	PDS-ENS-SGS	2027 - 2077m

2.4.8 Temperature Surveys

Wireline logs recorded the following maximum temperatures:

72C @ 1885 – 1990m

2.4.9 Velocity Survey

A Velocity Survey was not run at Myall Creek 8.

3. GEOLOGY

3.1 Reasons for Drilling

Myall Creek 8 was designed as an appraisal well for the upper Tinowon reservoir in the southeastern portion of PL 174. This well follows on from the successful drilling in the region, and initial production from Myall Creek 2, which indicated that the upper Tinowon reservoir is stratigraphically trapped over a structural nose trending southeast through PL 174 and PL 192.

Interpretation of the seismic data supported the presence of upper Tinowon section at the proposed Myall Creek 8 location. This interpretation was based on seismic character analysis, and the mapped TWT interval thickness increase above the Wallabella Coal Member. The seismic interpretation attempted to define areas where the Upper Tinowon section was thickest. Myall Creek 8 was located within this area and it was anticipated that the upper Tinowon sandstone was developed at this location.

Myall Creek 2 and 3 both intersected a good to very good quality upper Tinowon sandstone and lie within the interpreted upper Tinowon sandstone fairway. The upper Tinowon sandstone flowed 5.7 MMscf/d and 8.8 MMscf/d on DST from Myall Creek 2 and 3 respectively. Myall Creek 4, which lies outside the interpreted upper Tinowon sandstone fairway, intersected 3.6m of net gas pay in this unit. On DST the upper Tinowon reservoir unit flowed 3.2 MMscf/d. After completion of the well it flowed 1.8 MMscf/d (272psig on ½" choke) on cleanup. This well was mud drilled and pressure transient analysis indicates high skin damage.

3.2 Reservoir

The primary development objective of the Myall Creek 8 well is the upper Tinowon sandstone, which is the primary producing zone in Myall Creek 2, 3, and 4 and in the Churchie wells to the south. The sequence stratigraphy of the Late Permian upper Black Creek Group is under review. For this well, the upper Tinowon sandstone is defined as the sandstone unit intersected just above the Wallabella Coal Member (eg Myall Creek 3: 2056 – 2068m). The intra Tinowon is located between the Wallabella coals (eg Riverside South 1: 2041 – 2058m). The lower Tinowon sandstone is from below the basal Wallabella Coal to basement (eg Myall Creek 1: 2111 – 2153m). The Basal Rewan Sandstone is considered a weak secondary target.

3.2.1 Primary Target: Upper Tinowon Sandstone

The upper Tinowon sandstone has been intersected in numerous wells in PL174, PL192 and the eastern portion of ATP375. The complete unit was cored in Myall Creek 3 where it comprised of an erosively based (interpreted as a sequence boundary) section dominated by medium to coarse grained cross-bedded and plane-bedded sandstone interpreted to be deposited within a moderate to high energy fluvial system. Permeability within this unit ranges up to 320 mD with an average of 52 mD. Regional correlation suggests that the fluvial interval has architecture indicative of an incised valley system. Global analogues with similar such systems suggest that the upper Tinowon should be laterally extensive (several kilometres wide). The presence of coal and siltstone within the

correlative section at Noorindoo 2 (2 km northeast) may indicate more distal facies concomitant with a reduction in reservoir quality in this direction.

Several wells to the north of the Myall Creek wells have intersected associated alluvial facies such as overbank silts, sands and minor coals (Riverside 1, Mentor 1 and Gambier Park 1). High background gas readings have been noted through this section in these wells but no appreciable reservoir has been intersected.

The upper Tinowon interval is seismically mappable, but not seismically resolvable, in the Myall Creek/ Churchie/ Noorindoo areas, based on its seismic character and the increased TWT interval thickness in the section immediately overlying the Wallabella Coal Member. The top of this unit is sub-parallel to the top of the Tinowon Formation marker and onlaps/truncates on to the Wallabella Coal Member. The reflector strongly onlaps the western flank of the Riverside to Ogilvie Creek areas, then thickens to the east and south. The presence of this reflector, however, does not indicate the type of facies developed at any location.

The Myall Creek, Churchie, Noorindoo 1 and 2 and West Noorindoo 1 wells intersected the upper Tinowon sandstone with some variable results. DSTs conducted over this unit in Noorindoo 1 recorded gas flow rates between 0.36 MMscf/d to 2.14 MMscf/d. Condensate also flowed to surface at rates between 21.8 BCPD to 115 BCPD. At Myall Creek 2, DST 1 flowed gas to surface at 5.7MMscf/d. At Noorindoo 2 however, the gas flow rate was at a rate too small to measure despite measured core permeability of 62 mD. West Noorindoo 1 tested the upper Tinowon sandstone and recorded gas to surface at 0.388 MMscf/d and recovered 774 litres of condensate and gas cut mud. Myall Creek 3 intersected a well developed upper Tinowon sandstone that flowed at 8.5 MMscf/d on DST. Most recently, the Myall Creek 4 well intersected only 3.6 m upper Tinowon sandstone, but the well still flowed gas to surface at 3.2 MMscf/d on DST (cleanup flow 1.8 MMscf/d). The Churchie wells have flowed gas to surface from 1.4 MMscf/d (Churchie 1, mud drilled) up to 19 MMscf/d (Churchie 3, air drilled).

The recent results from Churchie 1A, located in PL 192, indicated that the upper Tinowon sandstone is susceptible to mud drilling induced damage. Churchie 1A was drilled underbalanced with nitrogen and has shown it to be effective in reducing drilling induced damage. Churchie 1 was drilled in July 2001 with a conventional drilling mud system and had a flow rate of 1.4 MMscf/d on DST. Churchie 1A had a reported initial rate of 5.6 MMscf/d (1" choke) on open hole flow test.

3.2.2 Secondary Target: Basal Rewan Sandstone

The Rewan Formation can be divided into an upper lithic interval, a lower mixed interval and a basal quartzose interval. The basal quartzose interval is the main reservoir within the Rewan Formation. The basal quartzose section directly overlies the top Permian unconformity. While other quartzose sections have been noted higher in the Rewan Formation, they are generally of inferior quality.

The basal quartzose sand was deposited in a braided stream system with the variable nature of the reservoir quality reflecting both channel deposits typical of this high energy environment as well as variations in sediment source. The sediments are often medium - very coarse grained and conglomeratic in part.

In ATP 375P the erosional zero edge of the Rewan Formation tracks north-south to the east of Malua 1 and the west of Bainbilla 1. Subsequent, a period of uplift and erosion during the Late Permian, the development of a south-easterly draining braided river system facilitated the development of a sheet like sand body. Contemporaneously, sediment charged streams flowing from the high to the west provided a local source of coarse grained quartzose sediments. Bainbilla-1, which recorded a moderate blow for six minutes during a DST and recovered 130 feet of gas cut muddy water, was ideally located to intersect these sediments.

The basal Rewan sandstone at Myall Creek 1 is similarly interpreted to constitute a braided stream sequence. The basal Rewan sands are medium grained to granular, poorly sorted and quartzose with some tuffaceous material. Abundant kaolin clay is present with poor porosity. Shows included spotty white fluorescence, a slight odour in sidewall cores and a gas peak of 12 units over a background of 3 units.

The poor quality of the basal Rewan sandstone at Riverside 1, Gambier Park 1 and Horseshoe 1 downgrades the prospectivity of this reservoir unit at Horseshoe 2 to secondary target status. The porous sandstone fairway at the basal Rewan level appears to extend from Bloodwood 1 in the north through Mentor 1 to Noorindoo 5 in the south along a north-south axis. However, some potential for good reservoir remains at Horseshoe 2 due to the variable nature of the sandstones and paucity of well control in the area.

3.3 Stratigraphic Prognosis

The stratigraphic prognosis was made utilising the results of nearby wells and the available extensive coverage. A comparison between prognosed and actual formation tops is given below.

FORMATION	Prognosed (mRT)	Actual (mRT)	Difference (m) H /L
Wallumbilla Fm.	5.5	5.5	-
Bungil Fm.	311.0	311.0	-
Mooga Ss.	444.0	448.0	4.0L
Orallo Fm.	631.0	632.0	1.0L
Gubberamunda Ss.	762.0	764.8	2.8L
Westbourne Fm.	885.0	899.0	14.0L
Walloon Coal Measures	1078.0	1076.5	1.5H
Hutton Ss.	1344.0	1346.0	2.0L
Evergreen Fm.	1532.0	1521.2	10.8H
- Boxvale sonic marker	1577.0	1570.4	6.6H
- Boxvale Ss.	1579.0	1572.5	6.5H
- basal Evergreen	1640.0	1627.8	12.2H
Moolayember Fm.	1649.0	1640.2	8.8H
Snake Creek Mudstone	1819.0	1805.5	13.5H
Showgrounds Ss.	1841.0	1819.5	21.5H
Rewan Fm.	1850.0	1832.5	17.5H
- basal Rewan Ss.	1944.0	1933.0	11.0H
Bandanna Fm.	1958.0	1940.0	18.0H
Black Alley Shale	2022.0	1998.9	23.1H
- Winathoola Coal Mbr.	2033.0	2013.5	19.5H
Tinowon Fm.	2045.0	2022.1	22.9H
- Wallabella Coal Mbr.	2090.0	2066.6	23.4H
Total Depth	2092.0	2078.0	14.0H

3.4 Stratigraphy

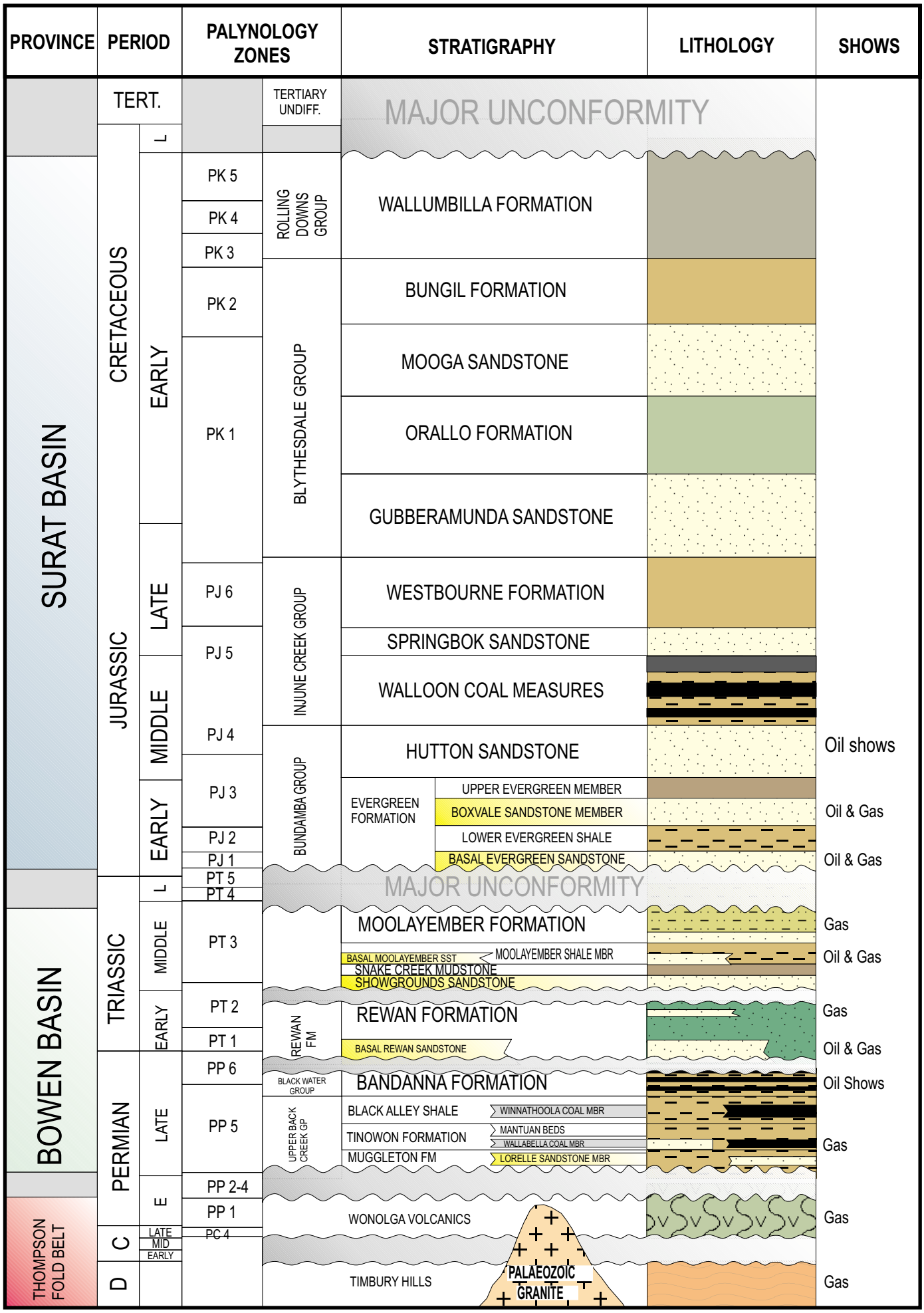
The stratigraphic section encountered in Myall Creek 8 is graphically illustrated in Figure 4 and discussed below.

WALLUMBILLA FORMATION

5.5 - 311.0m Thickness: 305.5m

221.2 - 311.0m SILTSTONE, medium to dark grey, trace grey/green, argillaceous, soft to firm, blocky to sub-blocky.

STRATIGRAPHY OF THE WESTERN SURAT/BOWEN BASINS



Oil Company of Australia

SUR-BOW STRAT.CDR
VER: 1.0 OCT 1997

Figure 4

BUNGIL FORMATION

311.0 - 448.0m Thickness: 137.0m

311.0 - 448.0m SANDSTONE with SILTSTONE interbeds.

SANDSTONE, clear to translucent, frosted, pale to off white, very fine to fine, occasionally medium grains, sub-rounded to sub-angular, rare angular grains, weak calcareous cement, white to off white siliceous matrix, trace carbonaceous specks, predominately loose, fair to good visible porosity, no fluorescence.

SILTSTONE, light grey, trace medium to dark grey, arenaceous, occasionally grading to very fine SANDSTONE, carbonaceous specks, trace micromicaceous, unconsolidated, amorphous.

MOOGA SANDSTONE

448.0 - 632.0m Thickness: 184.0m

448.0 - 632.0m SANDSTONE with interbedded SILTSTONE and trace COAL.

SANDSTONE, clear to translucent, frosted, very fine to medium, occasionally coarse and very coarse, sub-angular to sub-rounded, occasionally angular, poorly sorted, minor lithics, dispersive clay matrix, slight calcareous in part, friable to loose, fair to good visible porosity.

SILTSTONE, light grey to grey-brown, dark grey in part, argillaceous, carbonaceous specks, soft to firm, predominately sub-blocky.

COAL, very dark brown to black, lignitic and grades to carbonaceous shale.

ORALLO FORMATION

632.0 - 764.8m Thickness: 132.8m

632.0 - 764.8m SANDSTONE with SILTSTONE interbeds.

SANDSTONE, clear to translucent, pale yellow, pale grey, pale green, common grey-green to grey-black lithic/quartzite grains, very fine to medium, predominately fine, rare coarse to very coarse grains, feldspathic, trace siliceous cement, moderate to abundant dispersive clay matrix, carbonaceous specks, loose, fair inferred porosity.

SILTSTONE, light to moderate grey to grey/brown, tan, light grey in part, argillaceous, arenaceous in part, carbonaceous specks, trace micromicaceous, firm to moderate hard, sub-blocky to sub-fissile.

GUBBERAMUNDA SANDSTONE

764.8 - 899.0m Thickness: 134.2m

764.8 - 899.0m Massive SANDSTONE

SANDSTONE, clear to translucent white, pale grey, trace blue/brown, very fine to coarse, predominately medium, poor to fair sorted, sub-angular to sub-rounded, trace clay matrix, minor grey lithic/quartzite grains, rare pink-red garnet, loose quartz grains, good inferred porosity.

WESTBOURNE FORMATION

899.0 – 1076.5m Thickness: 177.5m

899.0 - 940.0m SILTSTONE with interbedded SANDSTONE.

SILTSTONE, light to moderate grey, grey/brown, occasionally dark grey, arenaceous occasionally interlaminated with very fine sandstone, argillaceous in part, common carbonaceous specks and striations, micromicaceous, soft 0 moderate hard, predominately sub-blocky, minor sub-fissile.

SANDSTONE, clear to translucent, fine to very coarse, sub-angular to sub-rounded, moderate sorted, loose quartz grains, rare pink-red garnet, good visible porosity.

940.0 – 1076.5m SANDSTONE with interbedded SILTSTONE.

SANDSTONE, translucent white, pale grey, pale brown, occasionally clear grains, fine to very coarse, predominately fine, poor to moderate sorted, trace siliceous cement, moderate to abundant dispersive white kaolinite matrix, common green and green-grey to black lithic/quartzite grains, feldspathic, rare pink-red garnet, loose, minor friable aggregates, fair to good inferred porosity, no fluorescence.

SILTSTONE, light to dark brown to grey-brown, argillaceous to very fine arenaceous, minor clay material, trace micromicaceous, carbonaceous, firm to moderate hard, sub-fissile to sub-blocky.

WALLOON COAL MEASURES

1076.5 – 1346.0m Thickness: 269.5m

1076.5 – 1346.0m SILTSTONE with interbedded SANDSTONE and minor COAL.

SILTSTONE, light to dark brown, light to dark grey, grey-brown, minor blue/grey, argillaceous occasionally grading to very fine arenaceous, carbonaceous, occasionally lithic/sandy and calcareous, dolomitic in part, moderate hard to hard, sub-fissile to sub-blocky, occasionally minor blocky.

SANDSTONE, white to pale grey, very fine to medium,

predominantly fine, sub-angular to sub-rounded, moderate sorted, lithic, feldspathic, minor to common carbonaceous material, moderate to strongly calcareous cement in part, moderate argillaceous matrix, silty in part, moderately hard, poor porosity.

COAL, very dark brown to black, dull / earthy lustre.

HUTTON SANDSTONE

1346.0 – 1521.2m Thickness: 175.2m

1346.0 - 1414.0m SANDSTONE with interbedded SILTSTONE.

SANDSTONE, frosted, pale grey, translucent white, fine to very coarse, predominantly medium, moderate sorted, sub-angular to sub-rounded, weak silica cement, minor white clay matrix, minor carbonaceous specks, trace lithic / quartzite grains, friable to loose, fair to moderate porosity.

SILTSTONE, light grey to pale brown, tan, predominately argillaceous, arenaceous grading to very fine SANDSTONE in part, trace micromicaceous, carbonaceous specks & laminations, brittle to moderate hard, sub-fissile to sub-blocky.

1414.0 - 1462.0m SANDSTONE.

SANDSTONE, clear to translucent, frosted, white to pale grey, very fine to coarse, predominately medium, weak calcareous cement, trace white argillaceous matrix, loose, good inferred porosity.

1462.0 – 1521.2m Interbedded SANDSTONE and SILTSTONE.

SANDSTONE, clear to translucent, white to pale grey, fine to very coarse, predominantly coarse, poor to moderate sorted, sub-angular to sub-rounded, weak calcareous cement, minor dispersive white clay matrix, rare lithics, friable, predominately loose quartz grains, quartz overgrowths on some grains, fair to moderate porosity.

SILTSTONE, light to dark grey-brown, firm, argillaceous, trace arenaceous grading to very fine SANDSTONE, minor carbonaceous material, moderate hard to hard, blocky to sub-blocky.

EVERGREEN FORMATION

1521.2 – 1640.2 Thickness: 119.0m

1521.2 – 1572.5 SILTSTONE with minor interbedded SANDSTONE.

SILTSTONE, medium to dark grey, grey-brown, firm, argillaceous, occasionally arenaceous grades to claystone, minor siliceous sandy / lithic / laminae, very finely dispersed carbonaceous material, micromicaceous, brittle to hard, predominately moderate hard, sub-blocky to sub-fissile.

SANDSTONE, clear to translucent, white to pale bluish grey, very fine to medium, rare coarse grains, silty, lithic, feldspathic, minor carbonaceous material and mica flakes, siliceous cement, white argillaceous matrix, moderate hard to hard, poor visible and inferred porosity.

Boxvale Sandstone Member (Thickness: 55.3m)

1572.5 – 1627.8 SILTSTONE with minor SANDSTONE.

SILTSTONE, medium to dark grey, grey-brown to grey-black, argillaceous to arenaceous in part, firm to hard, carbonaceous, micromicaceous, sub-blocky.

SANDSTONE, white to pale greenish grey, very fine to medium, silty, sub-angular to sub-rounded, moderate sorted, lithic, clay matrix, silica cement, moderately hard, very poor visible porosity. Also grey, very fine, silty, lithic feldspar, very poor inferred porosity.

basal Evergreen Formation (Thickness: 12.4m)

1627.8 – 1640.2 SANDSTONE, translucent white, fine to coarse, sub-rounded, poor to moderate sorted quartz grains, moderate dispersive white clay matrix, weak silica cement, friable to loose, good porosity.

MOOLAYEMBER FORMATION

1640.2 – 1805.5m Thickness: 165.3m

1640.2 - 1660.0m Interbedded SANDSTONE and SILTSTONE.

SANDSTONE, translucent to white, very fine to coarse, occasionally very coarse, poor sorted, angular to sub-rounded, weak siliceous cement, moderate dispersive clay matrix, trace pink/red garnet, rare lithics, friable, fair inferred porosity.

SILTSTONE, light to moderate brown, grey/brown, argillaceous, firm to hard, sub-blocky.

1660.0 – 1805.5 Interbedded SANDSTONE and SILTSTONE.

SANDSTONE, pale green to green/white, pale blue in part, translucent blue/grey, cream to light brown, frosted, very fine to fine, moderate sorted, sub-rounded, moderate siliceous cement, moderate to abundant clay matrix, friable to moderate hard, poor visible porosity

SILTSTONE, light to medium grey, grey/green, grey/brown, predominately arenaceous, minor argillaceous grading to CLAYSTONE, lithics, micromicaceous, feldspar, carbonaceous, sub-fissile to sub-blocky.

SNAKE CREEK MUDSTONE

1805.5 – 1819.5m Thickness: 14.0m

1805.5 - 1819.5m Massive SILTSTONE.

SILTSTONE, dark grey to grey/brown, argillaceous, firm, sub-fissile.

SHOWGROUNDS SANDSTONE

1819.5 – 1832.5m Thickness: 13.0m

1819.5 - 1832.5m Interbedded SILTSTONE and SANDSTONE.

SANDSTONE, clear to translucent white, very fine to medium, sub-rounded, moderate sorted, weak silica cement, minor clay matrix, minor green and grey lithic / quartzite grains, friable, fair porosity.

SILTSTONE.

REWAN FORMATION

1832.5 – 1933.0m Thickness: 100.5m

1832.5 – 1933.0m SANDSTONE with interbedded SILTSTONE.

SANDSTONE, pale grey to pale grey/green, pale brown, pale green to green, clear to translucent, frosted, very fine to medium, moderate poor sorted, sub-rounded to sub-angular, moderate siliceous cement, white to pale green argillaceous matrix, glauconite, siderite, carbonaceous specks, moderate hard to hard aggregates, predominately loose, poor visible & inferred porosity, no fluorescence.

SILTSTONE, tan to brown, brown/grey, pale grey, pale green, argillaceous, occasionally arenaceous, micromicaceous, carbonaceous specks, friable to moderate hard, sub-fissile to sub-blocky.

basal Rewan Formation (Thickness: 7.0m)

1933.0 – 1940.0m SANDSTONE, frosted, clear to translucent, minor pale green, trace pale yellow to yellow/brown, medium to very coarse, predominately coarse, fine in part, sub-rounded, occasionally sub-angular, trace weak siliceous cement, white argillaceous matrix, minor carbonaceous specks, loose, good inferred porosity. 10 – 20% moderate bright pale blue to white fluorescence with a blooming to fast cut and thick film residue.

BANDANNA FORMATION

1940.0 – 1998.9m Thickness: 58.9m

1940.0 – 1998.9m Interbedded SANDSTONE, SILTSTONE, COAL and TUFF.

SANDSTONE, white to pale grey, very fine to coarse, predominantly medium, sub-angular to sub-rounded, poor sorted, common grey, grey-green and brown lithics, trace mica flakes, minor carbonaceous cement, abundant dispersive clay matrix, moderate calcareous, friable, poor porosity.

SILTSTONE, medium to dark grey, moderate to dark brown, arenaceous, carbonaceous, mica flakes, firm, sub-fissile to sub-blocky, tuffaceous.

COAL, very dark brown to black, earthy to sub-vitreous, friable to brittle, predominately sub-fissile, occasionally sub-blocky, hackle to uneven.

TUFF, white to pale grey, pale brown, tam, waxy, soft to firm, amorphous, silty and carbonaceous in part.

BLACK ALLEY SHALE

1998.9 – 2022.1m Thickness: 23.2m

1998.9 – 2013.5m SILTSTONE with minor SANDSTONE, COAL and TUFF.

SILTSTONE, light to dark grey, predominately medium grey, grey/brown, argillaceous, trace micromicaceous, carbonaceous, brittle to moderate hard, sub-blocky to minor sub-fissile.

SANDSTONE, pale grey/brown, white, fine to med, occasionally coarse, sub-angular to sub-rounded, weak calcareous cement, common grey, green and yellow lithics, friable, tuffaceous, very poor porosity.

COAL, black, earthy to sub-vitreous, moderate hard, sub-fissile to sub-blocky, grading to carbonaceous SILTSTONE.

TUFF, white to cream, tan, very soft to firm, sandy / silty in part.

Winathoola Coal Member

2013.5 – 2022.1m (Thickness: 8.6m)

2013.5 – 2022.1m Interbedded COAL, SANDSTONE, SILTSTONE and TUFF.

COAL, black, earthy to sub-vitreous, moderate hard, sub-fissile to sub-blocky, grading to carbonaceous SILTSTONE.

SANDSTONE, clear to translucent, pale grey to grey/green, pale brown, fine to medium, occasionally coarse, sub-angular to sub-rounded, weak calcareous cement, common grey, green and yellow lithics/grains, micromicaceous, friable, poor porosity.

SILTSTONE, pale to dark grey, black, brown, argillaceous to carbonaceous, micromicaceous, moderate hard, sub-fissile to sub-blocky.

TUFF, white to cream, soft to firm.

TINOWON FORMATION

2022.1 – 2066.6m Thickness: 44.5m

2022.1 – 2066.6m SILTSTONE with interbedded SANDSTONE.

SILTSTONE, medium to dark grey, grey/brown, minor light grey, argillaceous, arenaceous in part, carbonaceous, micromicaceous, hard, sub-blocky to sub-fissile.

SANDSTONE, translucent/brown, pale brown, clear/brown, yellow/brown, orange/yellow, very fine to medium, predominately medium, moderate well sorted, sub-angular to sub-rounded, loose, fair to good inferred porosity.

Wallabella Coal Member

2066.6 – 2078.0m (Thickness: 11.4m TD)

2066.6 – 2078.0m SANDSTONE with interbedded carbonaceous SILTSTONE.

SANDSTONE, clear/yellow, yellow/brown, translucent, very fine to fine, occasionally medium grains, sub-angular to sub-rounded, loose tight inferred porosity.

SILTSTONE, black to very dark grey, very carbonaceous, micromicaceous, moderate hard to hard, blocky.

TOTAL DEPTH

Driller: 2077.0 metres

Logger: 2078.0 metres - Extrapolated

3.5 Hydrocarbon Shows

Mud Drilling

The first significant gas shows observed in the well were from sands in the Rewan Formation. The Rewan sand recorded gas readings up to 520 units but no reservoir quality flow test was conducted.

The only significant gas recorded while drilling the Bandanna Formation and Black Alley Shale came from coals.

Nitrogen Drilling

The hole was drilled using nitrogen from 2027 to 2078 metres (TD) and a strong gas flow was recorded from an intra Tinowon sand in the Wallabella Coal Measures and two flow tests were conducted.

Formation	Interval (m)	Choke	psia	Q (Mmcfd)
Upper Tinowon	2027 - 2057	¾”	174	2.65
Upper Tinowon	2027 – 2077	¾”	279	4.13

4. DISCUSSION AND CONCLUSIONS

As expected Myall Creek 8 encountered a similar section to nearby wells (Myall Creek 2, 4, 6 and 8). The upper Tinowon Formation in these wells contained good quality sandstones, which yielded good gas shows. The secondary target, the basal Rewan sandstone at Myall Creek 8 was intersected at 1933.0m and had good inferred porosity, showed fluorescence and showed moderate gas peaks on the chromatograph.

Myall Creek 4 intersected 3.6 m of net gas pay in the upper Tinowon reservoir. The well flowed 3.2 MMscf/d on DST and 1.8 MMscf/d on completion cleanup. The well was mud drilled and pressure transient analysis indicated high skin damage. This initiated the idea to enter the upper Tinowon Formation under balanced to protect the formation from drilling fluid influx and thus damaging the reservoir and decreasing flow rates from the reservoir.

Underbalanced drilling has been shown to be effective in reducing mud drilling induced damage by recent drilling results in PL 192 by Mosaic Oil N.L with the redrill of the Churchie 1 well. Churchie 1 was drilled in July 2001 with a flow rate of 1.4 MMscf/d. The Churchie 1A well was drilled with nitrogen in December 2002 with a reported initial rate of 5.6 MMscf/d (1" choke) on open hole flow test.

Myall Creek 8 was mud drilled to the top of the Tinowon Formation (~5m below the base of the Winathoola Coal), where 178mm casing was set at 2026.9 mRT. The upper Tinowon sandstone was then drilled underbalanced with nitrogen to a TD of 2077.0 mRT. Flow tests were taken at 2057.0 m (174 psi through a ¾" choke = 2.65 MMcf/d) and at 2077.0 m where 279 psi was registed through a ¾" choke transpiring to a production rate of 4.13 MMcf/d.

When comparing Myall Creek 4 and Churchie 1 flow rates (Mud drilled) with the Churchie 1A and Myall Creek 8 flow rates by drilling underbalanced, reservoir damage is kept to a minimum transpiring to increased flow rates.

5. COMPLETION

The air drilled section of the Myall Creek 8 wellbore was complete when a total depth of 2077.0m was reached at 18:30 hours on 5th April 2003. CDL #1 commenced to RIH 60mm (2-3/8") production tubing on 6th April 2003. After the tubing was run in and the tubing hanger was landed, an uncontrolled blowout occurred forcing the mobilisation of well control specialists on site. Once the well was brought under control, shut in and the site was secured, EWS Workover Rig #4 was mobilised to site to fish the tubing string, install a permanent packer, replace the tubing spool and re-complete the well.

EWS Workover Rig #4 ran the completion BHA on 60mm (2-3/8") production tubing string on 30th May 2003. Once the completion string was latched into the packer and the tubing hanger was secured, the BOP's were nippled down and a well head was installed.

Expertest Slickline were rigged up to close the sliding sleeve, pull the prong and then pull the plug located in the X nipple. Expertest were rigged down and the well was flowed to the pit. Two flow tests were made with readings of 174 psi (2.65 Mmcfd) and 279 psi (4.13 Mmcfd) respectively over the reservoir interval 2027 to 2077 metres through a ¾" choke.

EWS Workover Rig #4 was released from site at 12:00 hours on 1st June 2003. Refer to Figure 5 for the Downhole Installation Diagram.

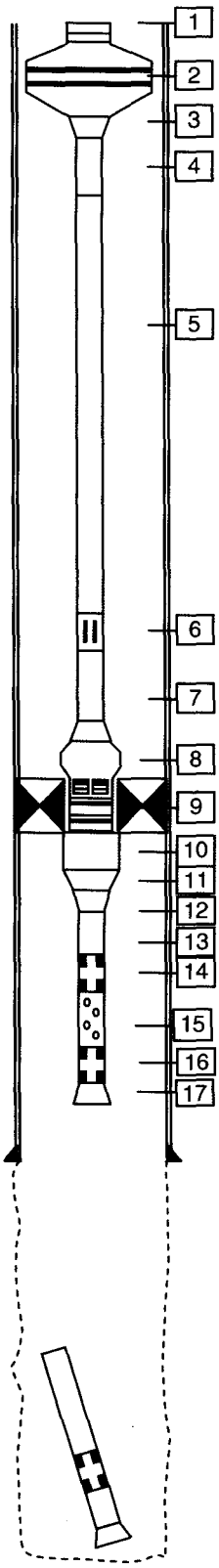
6. REFERENCES

Oil Company of Australia Limited — Drilling Program PL 174 – Myall Creek 8, unpublished report prepared for Oil Company of Australia Limited, March 2003.

Oil Company of Australia

Downhole Installation Diagram

Well: Myall Creek 08



OHTD: 2077mRT

Item No.	Description	Length (m)	Depth (m RT)	Min ID (in)
1	RT to top of Tubing Spool	4.54		
2	Tubing hanger, WGPC 6" x 2-7/8" EUE	0.30	4.54	2.400
3	2-7/8" EUE x 2-3/8"EUE crossover	0.10	4.84	1.995
4	1 x 8ft x 2-3/8" EUE 4.7lb/ft J55 pup jt	2.44	4.94	1.995
5	211jts 2-3/8" EUE 4.7lb/ft J55 R2 tubing	1998.62	7.38	1.995
6	2-3/8" EUE "XO" SSD	0.90	2006.00	1.875
7	1 x 4ft x 2-3/8" EUE 4.7lb/ft J55 pup jt	1.23	2006.90	1.995
8	BOT E-22 Anchor Tubing Seal Assembly (80-32)	0.23	2008.13	2.406
9	BOT DB Retainer Production Packer (84-32)	1.19	2008.36	3.250
10	4-1/2" LTC Millout Extension (pin x pin)	0.47	2009.55	3.750
11	4-1/2" LTC box x 2-7/8" EUE pin crossover	0.30	2010.02	1.995
12	2-7/8" EUE x 2-3/8"EUE crossover	0.15	2010.32	1.995
13	1 x 6ft x 2-3/8" EUE 4.7lb/ft J55 pup jt	1.88	2010.47	1.995
14	2-3/8" EUE X nipple 1.875" profile	0.36	2012.35	1.875
15	1 x 6ft x 2-3/8" EUE 4.7lb/ft J55 perf. pup jt	1.83	2012.71	1.995
16	2-3/8" EUE XN nipple 1.791" no go	0.31	2014.54	1.791
17	1 x 2-3/8" EUE WLRG (collar)	0.12	2014.85	
	Top of fish = 2038m			
	Tubing in 4000# compression w/- 9.0ppg brine			

PERFORATIONS		Gun		Charges			
Formation	Interval (m RT)	Size	Type	SPF	Type	Ph	gm
6-1/8" openhole from 2026.9m - 2077 mRT							

Surface Casing	9-5/8" 36ppf K55, R3, BTC @ 221.2 mRT		
Production Casing	7", 23ppf L80, R3, BTC @ 2026.9 mRT		
Cementing Details			
Remarks:			
String Weight Calculated	26,300	**Actual**	27,000

DESIGN		INSTALLATION	
Drafted by:	G Ottaviano	Rig Supervisor:	J. Dingle
Draft Approved by:	R Naumann	Date of Installation:	31/05/03
Date of Approval:	03/05/03	Checked:	RAN
		Date:	06/06/03

Figure 5

Table 1

Myall Creek 8 Stratigraphic Table RT=248.0m GL=242.5m

AGE	FORMATION	Depth (mRT)	Depth (mSS)	Thickness (m)
E. Cretaceous	Wallumbilla Fm.	5.5	248.0	305.5
E. Cretaceous	Bungil Fm.	311.0	-63.0	137.0
E. Cretaceous	Mooga Ss.	448.0	-200.0	184.0
E. Cretaceous	Orallo Fm.	632.0	-384.0	132.8
E. Cret. - L. Jura.	Gubberamunda Ss.	764.8	-516.8	134.2
L. Jurassic	Westbourne Fm.	899.0	-651.0	177.5
M. Jurassic	Walloon Coal Ms.	1076.5	-828.5	269.5
M. Jurassic	Hutton Ss.	1346.0	-1098.0	175.2
E. Jurassic	Evergreen Fm.	1521.2	-1273.2	119.0
	Boxvale Sonic Marker	1570.4	-1322.4	-
	Boxvale Ss.	1572.5	-1324.5	55.3
	base Boxvale	-	-	-
	basal Evergreen Ss.	1627.8	-1379.8	12.4
M. Triassic	Moolayember Fm.	1640.2	-1392.2	165.3
M. Triassic	Snake Creek Mudstone	1805.5	-1557.5	14.0
M. Triassic	Showgrounds Ss.	1819.5	-1571.5	13.0
E. Triassic	Rewan Fm.	1832.5	-1584.5	107.5
	basal Rewan Ss.	1933.0	-1685.0	7.0
L. Permian	Bandanna Fm.	1940.0	-1692.0	58.9
L. Permian	Black Alley Shale	1998.9	-1750.9	23.2
	Winathoola Coal Mbr.	2013.5	-1765.5	8.6
L. Permian	Tinowon Fm.	2022.1	-1774.1	55.9 +
	Wallabella Coal Mbr.	2066.6	-1818.6	11.4 +
	TD (Logs extrapolated)	**2078.0**	**-1830.0**	

APPENDIX 1

DAILY DRILLING REPORTS

DAILY DRILLING REPORT

22/03/03

REPORT # 01

WELL	**Myall Creek 8**	**24:00 DEPTH**	**31m**	**24 HR PROG**	**31m**	**CUM. COSTS**	**$232,652**
RIG	Century Drilling # 1	**FORMATION**	Wallumbilla	**PTD**	2092m	**DAILY COSTS**	$232,652.43

OP's TO 06:00 Drill ahead to 127m

REMARKS: Pre Spud meeting held with both crews. **PERSONNEL ON SITE:** 19

LAST CASING	16 "	**SET AT**	10.0m	**LOT**		**MAASP**		**BOP TEST**	NIL	**TEST DUE**	

AFD's: 154 **SAFETY** 1. Picking up the kelly; 2. General rig safety

WEATHER AM Clearing
PM Fine

BIT INFORMATION			
WOB(kLb)	5-15	**JET V(fps)**	264
RPM	140	**H S I**	1.28
BIT NUMBER		**1**	
Size (in)		12.25	
Make		VAREL	
Type		ETD1GMS	
IADC Code		117	
Serial Number		173944	
T.F.A.(")		0.589	
Depth In (m)			
Depth Out (m)		IN	
Total Meters		31	
Hours		1	
ROP		31.0	
Condition Out			

FLOW DATA	
CIRC. RATE (gpm)	484
AV - DP (fpm)	91
AV - DC (fpm)	107
SPP (psi)	200
SPP (calculated)	560

PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE	80	**RATE**	80
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"

SURVEYS	

BHA # 1	
TOOL	**LENGTH**
Varel	0.30
Bit Sub	0.90
2 x 6.25 Drill Collars	18.53
BHA LENGTH (m)	19.73
BHA WEIGHT(kLb)	4.8
STRING WT (kLb)	5.4
HOOK LOAD (kLb)	27.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	2.0
DRAG DOWN (kLb)	2.0
TORQUE ON (Amps/Rel.)	60
TORQUE OFF (Amps/Rel.)	40

ENVIRONMENTAL DATA	
FUEL ON SITE	35400 Litres
DAILY USAGE	2150 Litres
CUM. FUEL USED	2150 Litres
CUM. MUD MIXED	200 Bbls
CUM. MUD LOSSES	20 Bbls
CUM. GEL	1200 kg
CUM. BARITES	

MUD PROPERTIES	
Time	2330
Depth (m)	30
Temp (° C)	
Mud Type	Gel
Density (ppg)	8.60
ECD (ppg)	8.43
Viscosity (sec)	38
PV / YP (cp/lb)	7 / 7
Gells (s/m)	1 / 1
API Filt. (cc)	
Cake (/32")	
Solids (% Vol)	
Sand (% Vol)	
MBT	
pH (strip)	
Chlorides (mg/l)	
KCL (%)	
PHPA (ppb)	
ALC - 50 (K)	
Circ. Vol. (Bbl)	200

CHEMICAL USAGE	
Bentonite	48

OPERATION	**HRS**	**CUM**
Air Rig up		
Casing		
Cementing		
Circ & Condition		
Coring		
D/O Cement		
Drilling	1.0	1.0
Handle BHA		
LOT / FIT		
N/U & Test BOP's		
P & A		
Repairs		
Rig Service		
Safety		
Survey		
Tight hole / Fishing		
Tripping		
Wait on Cement		
Wash / Ream		
Well Control		
Well Test		
Wellhead		
Wiper Trip		
Wireline		
Other		
TOTALS	1.0	1.0

DAILY MUD COSTS	$417.60
CUM. MUD COSTS	**$417.60**
AFE COST - C&S	
AFE COST - P&A	$1,238,604
AFE COST - C&C	$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
	6:00	Wait on daylight
6:00	11:30	General rig up. Make up conductor and flow line. Pick up swivel and change out wash pipe. Make up and secure kelly hose. Mix mud.
11:30	13:00	Pre Spud safety meeting with both crews
13:00	23:00	Continue to rig up and prepare to spud well. Clean and strap BHA. Run survey and geolograph lines. Conduct final rig inspection.
23:00	0:00	Spud well, drill 12 1/4" hole to 31m

SUPERVISOR:	James Dingle	**GEOLOGIST:**		**MUD CO:**	IDFS

DAILY DRILLING REPORT

23/03/03

REPORT # 02

WELL	**Myall Creek 8**	**24:00 DEPTH**	**223m**	**24 HR PROG**	**192m**	**CUM. COSTS**	**$284,231**
RIG	Century Drilling # 1	**FORMATION**	Wallumbilla	**PTD**	2092m	**DAILY COSTS**	$51,578.60

OP's TO 06:00 Slack off casing. Lay out landing joint and riser. Make up well head. Nipple up BOP's.

REMARKS: **PERSONNEL ON SITE:** 25

LAST CASING	9 5/8"	**SET AT**	221.2m	**LOT**		**MAASP**		**BOP TEST**	NIL	**TEST DUE**	

AFD's: 155	**SAFETY**	1. Weekly meeting held	**WEATHER AM** Fine
		2. Weekly meeting held	**PM** Fine

BIT INFORMATION			
WOB(kLb)	15-25	**JET V(fps)**	396
RPM	150	**H S I**	4.64
BIT NUMBER		**1**	
Size (in)		12.25	
Make		VAREL	
Type		ETD1GMS	
IADC Code		117	
Serial Number		173944	
T.F.A.(")		0.589	
Depth In (m)			
Depth Out (m)		223	
Total Meters		223	
Hours		13.5	
ROP		16.5	
Condition Out		1 1 WT A E 0 NO TD	

FLOW DATA	
CIRC. RATE (gpm)	727
AV - DP (fpm)	137
AV - DC (fpm)	160
SPP (psi)	1500
SPP (calculated)	1650

PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE	120	**RATE**	120
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"

SURVEYS	
.25° at 133m	
.75° at 223m	

BHA # 2	
TOOL	**LENGTH**
Varel	0.30
Bit Sub	0.90
2 x 6.25 Drill Collars	18.15
Stabiliser + X/O	2.76
14 x 6.25 D/C	129.84
6 x 4.5" HWDP	54.89
BHA LENGTH (m)	206.84
BHA WEIGHT(kLb)	47.9
STRING WT (kLb)	48.8
HOOK LOAD (kLb)	70.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	2.0
DRAG DOWN (kLb)	2.0
TORQUE ON (Amps/Rel.)	60
TORQUE OFF (Amps/Rel.)	40

ENVIRONMENTAL DATA	
FUEL ON SITE	32800 Litres
DAILY USAGE	2600 Litres
CUM. FUEL USED	4750 Litres
CUM. MUD MIXED	250 Bbls
CUM. MUD LOSSES	40 Bbls
CUM. GEL	1200 kg
CUM. BARITES	

MUD PROPERTIES	
Time	1200
Depth (m)	204
Temp (° C)	
Mud Type	Gel
Density (ppg)	9.20
ECD (ppg)	9.45
Viscosity (sec)	40
PV / YP (cp/lb)	7 / 7
Gells (s/m)	1 / 1
API Filt. (cc)	
Cake (/32")	
Solids (% Vol)	6.5
Sand (% Vol)	
MBT	
pH (strip)	
Chlorides (mg/l)	
KCL (%)	
PHPA (ppb)	
ALC - 50 (K)	
Circ. Vol. (Bbl)	200

CHEMICAL USAGE	
CAUSTIC SODA	1

OPERATION	**HRS**	**CUM**
Air Rig up		
Casing	4.0	4.0
Cementing	1.5	1.5
Circ & Condition	0.5	0.5
Coring		
D/O Cement		
Drilling	12.5	13.5
Handle BHA		
LOT / FIT		
N/U & Test BOP's		
P & A		
Repairs		
Rig Service		
Safety		
Survey	0.5	0.5
Tight hole / Fishing		
Tripping	2.0	2.0
Wait on Cement	3.0	3.0
Wash / Ream		
Well Control		
Well Test		
Wellhead		
Wiper Trip		
Wireline		
Other		
TOTALS	24.0	25.0

DAILY MUD COSTS	$35.60
CUM. MUD COSTS	**$453.20**
AFE COST - C&S	
AFE COST - P&A	$1,238,604
AFE COST - C&C	$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	7:30	Drill 12 1/4" hole from 31m to 145m
7:30	8:00	Survey
8:00	13:00	Drill 12 1/4" hole to 223m- section TD
13:00	13:30	Circulate hole clean, drop survey and prepare to POH
13:30	15:30	POH and lay out bit and stabiliser
15:30	17:00	Clear work floor and rig up to run casing
17:00	19:00	Run 18 joints of 9 5/8" casing with shoe set at 221m
19:00	19:30	Circulate casing and wash to bottom
19:30	20:00	Make up cement head and lines. Hold safety meeting.
20:00	21:00	Mix and pump 81Bbls of slurry at 15.6ppg, drop plug and displaced with water. Bumped plug to 1500psi.
21:00	0:00	Wait on cement

SUPERVISOR:	James Dingle	**GEOLOGIST:**		**MUD CO:**	IDFS

Oil Company of Australia

DAILY DRILLING REPORT

24/03/03

REPORT # 03

WELL	**Myall Creek 8**	**24:00 DEPTH**	**256m**	**24 HR PROG**	**33m**	**CUM. COSTS**	**$392,808**
RIG	Century Drilling # 1	**FORMATION**	Wallumbilla	**PTD**	2092m	**DAILY COSTS**	$88,427.01
OP's TO 06:00	Drill ahead to 380m						
REMARKS:						**PERSONNEL ON SITE:**	**24**
LAST CASING	9 5/8"	**SET AT** 221.2m	**LOT** 20.5ppg	**MAASP**	**450psi**	**BOP TEST** 24/03/03	**TEST DUE** 07/04/03
AFD's: 156	**SAFETY**	1. Installing well head and nipple up BOP's 2. Running in the hole with drill collars				**WEATHER AM** Fine **PM** Fine	

BIT INFORMATION			
WOB(kLb)	10-12	**JET V(fps)**	304
RPM	150	**H S I**	4.44
BIT NUMBER		**2**	
Size (in)		8.5	
Make		SMITH	
Type		S91HPX	
IADC Code		M223	
Serial Number		JT0392	
T.F.A.(")		0.638	
Depth In (m)		223	
Depth Out (m)		IN	
Total Meters		33	
Hours		1.5	
ROP		22.0	
Condition Out			
FLOW DATA			
CIRC. RATE (gpm)		606	
AV - DP (fpm)		285	
AV - DC (fpm)		447	
SPP (psi)		900	
SPP (calculated)		960	
PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE	100	**RATE**	100
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SURVEYS			

BHA # 3	
TOOL	**LENGTH**
SMITH PDC	0.22
TRANSCO NBS	0.69
1x 6 1/4" Drill Collar	9.39
Stabiliser	1.37
15 x 6.25 D/C	138.98
6 x 4.5" HWDP	54.89
BHA LENGTH (m)	205.54
BHA WEIGHT(kLb)	47.1
STRING WT (kLb)	49.8
HOOK LOAD (kLb)	75.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	2.0
DRAG DOWN (kLb)	2.0
TORQUE ON (Amps/Rel.)	80
TORQUE OFF (Amps/Rel.)	30
ENVIRONMENTAL DATA	
FUEL ON SITE	31200 Litres
DAILY USAGE	1600 Litres
CUM. FUEL USED	6350 Litres
CUM. MUD MIXED	700 Bbls
CUM. MUD LOSSES	40 Bbls
CUM. GEL	1200 kg
CUM. BARITES	

MUD PROPERTIES	
Time	2230
Depth (m)	225
Temp (° C)	
Mud Type	KCl/PHPA
Density (ppg)	8.60
ECD (ppg)	9.22
Viscosity (sec)	34
PV / YP (cp/lb)	5 / 7
Gells (s/m)	1 / 2
API Filt. (cc)	
Cake (/32")	
Solids (% Vol)	0.9
Sand (% Vol)	
MBT	
pH (strip)	9.5
Chlorides (mg/l)	17700
KCL (%)	3.5
PHPA (ppb)	0.5
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	345
CHEMICAL USAGE	
CAUSTIC SODA	1
KCl (TECH)	126
PHPA JK-261	4
Xanthum Gum	4

OPERATION	**HRS**	**CUM**
Air Rig up		
Casing	1.0	5.0
Cementing		1.5
Circ & Condition		0.5
Coring		
D/O Cement	1.5	1.5
Drilling	1.5	15.0
Handle BHA		
LOT / FIT	0.5	0.5
N/U & Test BOP's	16.0	16.0
P & A		
Repairs	1.5	1.5
Rig Service	0.5	0.5
Safety		
Survey		0.5
Tight hole / Fishing		
Tripping	1.0	3.0
Wait on Cement		3.0
Wash / Ream		
Well Control		
Well Test		
Wellhead	0.5	0.5
Wiper Trip		
Wireline		
Other		
TOTALS	24.0	49.0
DAILY MUD COSTS		$4,107.60
CUM. MUD COSTS		**$4,560.80**
AFE COST - C&S		
AFE COST - P&A		$1,238,604
AFE COST - C&C		$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	1:00	Slack off casing. Lay out cement head, landing joint and riser.
1:00	1:30	Install bradden head
1:30	12:00	Nipple up and function test BOP's
12:00	17:30	Pressure test BOP's, choke manifold and kelly cocks to 2000psi / 250psi
17:30	18:30	Make up BHA and RIH to 196m
18:30	19:00	Slip drilling line
19:00	20:30	Re- align derrick
20:30	22:00	Drill out float and shoe track
22:00	22:30	Change mud and drill 8 1/2" hole from 223m to 227m
22:30	23:00	Circulate hole clean and perform FIT to 20ppgEMW
23:00	0:00	Drill 8 1/2" hole to 256m

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug Short	**MUD CO:**	IDFS

Oil Company of Australia

DAILY DRILLING REPORT

25/03/03

REPORT # 04

WELL	**Myall Creek 8**	**24:00 DEPTH**	**1117m**	**24 HR PROG**	**861m**	**CUM. COSTS**	**$431,418**
RIG	Century Drilling # 1	**FORMATION**	Walloons	**PTD**	2092m	**DAILY COSTS**	$38,310.32

OP's TO 06:00 Drill ahead to 1300m

REMARKS: **PERSONNEL ON SITE:** **24**

LAST CASING	9 5/8"	**SET AT**	221.2m	**LOT**	20.5ppg	**MAASP**	**408psi**	**BOP TEST**	24/03/03	**TEST DUE**	07/04/03

AFD's: 157 **SAFETY** 1. Using the rig tongs; 2. Running wireline surveys **WEATHER AM** Fine **PM** Fine

BIT INFORMATION			
WOB(kLb)	10-15	**JET V(fps)**	335
RPM	140	**H S I**	6.66
BIT NUMBER		**2**	
Size (in)		8.5	
Make		SMITH	
Type		S91HPX	
IADC Code		M223	
Serial Number		JT0392	
T.F.A.(")		0.638	
Depth In (m)		223	
Depth Out (m)		IN	
Total Meters		894	
Hours		23.5	
ROP		38.0	
Condition Out			

FLOW DATA	
CIRC. RATE (gpm)	666
AV - DP (fpm)	314
AV - DC (fpm)	492
SPP (psi)	1800
SPP (calculated)	1790

PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE	110	**RATE**	110
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SCR: 200 @ 60		SCR: 200 @ 60	

SURVEYS	
1° at 396m	.25° at 806m
1° at 520m	
1° at 660m	

BHA # 3	
TOOL	**LENGTH**
SMITH PDC	0.22
TRANSCO NBS	0.69
1x 6 1/4" Drill Collar	9.39
Stabiliser	1.37
15 x 6.25 D/C	138.98
6 x 4.5" HWDP	54.89
BHA LENGTH (m)	205.54
BHA WEIGHT(kLb)	46.2
STRING WT (kLb)	94.2
HOOK LOAD (kLb)	122.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	5.0
DRAG DOWN (kLb)	2.0
TORQUE ON (Amps/Rel.)	150
TORQUE OFF (Amps/Rel.)	20

ENVIRONMENTAL DATA	
FUEL ON SITE	39350 Litres
DAILY USAGE	3950 Litres
CUM. FUEL USED	10300 Litres
CUM. MUD MIXED	1180 Bbls
CUM. MUD LOSSES	164 Bbls
CUM. GEL	1200 kg
CUM. BARITES	8000 kg

MUD PROPERTIES	
Time	2200
Depth (m)	1050
Temp (° C)	50
Mud Type	KCl/PHPA
Density (ppg)	9.70
ECD (ppg)	10.07
Viscosity (sec)	38
PV / YP (cp/lb)	10 / 14
Gells (s/m)	5 / 6
API Filt. (cc)	8.5
Cake (/32")	1
Solids (% Vol)	7.3
Sand (% Vol)	tr
MBT	5
pH (strip)	9
Chlorides (mg/l)	17300
KCL (%)	3.2
PHPA (ppb)	1.14
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	638

CHEMICAL USAGE	
BARITE	320
CAUSTIC SODA	2
KCl (TECH)	80
PAC-R	8
PHPA JK-261	12
Sodium Sulphite	6
Xanthum Gum	4

OPERATION	**HRS**	**CUM**
Air Rig up		
Casing		5.0
Cementing		1.5
Circ & Condition		0.5
Coring		
D/O Cement		1.5
Drilling	22.0	37.0
Handle BHA		
LOT / FIT		0.5
N/U & Test BOP's		16.0
P & A		
Repairs		1.5
Rig Service		0.5
Safety		
Survey	2.0	2.5
Tight hole / Fishing		
Tripping		3.0
Wait on Cement		3.0
Wash / Ream		
Well Control		
Well Test		
Wellhead		0.5
Wiper Trip		
Wireline		
Other		
TOTALS	24.0	73.0

DAILY MUD COSTS	$8,863.32
CUM. MUD COSTS	**$13,424.12**
AFE COST - C&S	
AFE COST - P&A	$1,238,604
AFE COST - C&C	$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	7:00	Drill 8 1/2" hole to 408m
7:00	7:30	Survey
7:30	9:00	Drill 8 1/2" hole to 532m
9:00	9:30	Survey
9:30	13:30	Drill 8 1/2" hole to 695m
13:30	14:00	Survey
14:00	16:30	Drill 8 1/2" hole to 829m
16:30	17:00	Survey
17:00	0:00	Drill 8 1/2" hole to 1117m

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

Oil Company of Australia

DAILY DRILLING REPORT

26/03/03

REPORT # 05

WELL	**Myall Creek 8**	**24:00 DEPTH**	**1650m**	**24 HR PROG**	**533m**	**CUM. COSTS**	**$445,941**
RIG	Century Drilling # 1	**FORMATION**	Evergreen	**PTD**	2092m	**DAILY COSTS**	$33,096.36

OP's TO 06:00 Drill ahead to 1773m

REMARKS: Wiper trip is planned at the top of the Rewan ~1850m **PERSONNEL ON SITE:** 24

LAST CASING	9 5/8"	**SET AT**	221.2m	**LOT**	20.5ppg	**MAASP**	**408psi**	**BOP TEST**	24/03/03	**TEST DUE**	07/04/03

AFD's: 158 **SAFETY** 1. General housekeeping; 2. Horn signals **WEATHER AM** Fine **PM** Cloudy

BIT INFORMATION

WOB(kLb)	15-20	**JET V(fps)**	320
RPM	90-130	**H S I**	5.80
BIT NUMBER		**2**	
Size (in)		8.5	
Make		SMITH	
Type		S91HPX	
IADC Code		M223	
Serial Number		JT0392	
T.F.A.(")		0.638	
Depth In (m)		223	
Depth Out (m)		IN	
Total Meters		1427	
Hours		45	
ROP		31.7	
Condition Out			

FLOW DATA

CIRC. RATE (gpm)	636
AV - DP (fpm)	300
AV - DC (fpm)	470
SPP (psi)	2000
SPP (calculated)	2130

PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE	105	**RATE**	105
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SCR: 320 @ 70		SCR: 320 @ 70	

SURVEYS

.5° at 1230m	
.25° at 1403m	
.75° at 1545m	

BHA # 3

TOOL	**LENGTH**
SMITH PDC	0.22
TRANSCO NBS	0.69
1x 6 1/4" Drill Collar	9.39
Stabiliser	1.37
15 x 6.25 D/C	138.98
6 x 4.5" HWDP	54.89
BHA LENGTH (m)	205.54
BHA WEIGHT(kLb)	46.2
STRING WT (kLb)	122.2
HOOK LOAD (kLb)	150.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	5.0
DRAG DOWN (kLb)	3.0
TORQUE ON (Amps/Rel.)	130
TORQUE OFF (Amps/Rel.)	20

ENVIRONMENTAL DATA

FUEL ON SITE	32400 Litres
DAILY USAGE	6950 Litres
CUM. FUEL USED	17250 Litres
CUM. MUD MIXED	1630 Bbls
CUM. MUD LOSSES	378 Bbls
CUM. GEL	1200 kg
CUM. BARITES	8000 kg

MUD PROPERTIES

Time	2130
Depth (m)	1603
Temp (° C)	58
Mud Type	KCl/PHPA
Density (ppg)	9.70
ECD (ppg)	10.15
Viscosity (sec)	40
PV / YP (cp/lb)	18 / 22
Gells (s/m)	5 / 8
API Filt. (cc)	6.8
Cake (/32")	1
Solids (% Vol)	7.6
Sand (% Vol)	0.2
MBT	7.5
pH (strip)	9
Chlorides (mg/l)	16500
KCL (%)	3.4
PHPA (ppb)	1.2
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	720

CHEMICAL USAGE

CAUSTIC SODA	2
KCl (TECH)	80
PAC-R	6
PHPA JK-261	11
Sodium Sulphite	8

OPERATION / HRS / CUM

OPERATION	HRS	CUM
Air Rig up		
Casing		5.0
Cementing		1.5
Circ & Condition		0.5
Coring		
D/O Cement		1.5
Drilling	21.5	58.5
Handle BHA		
LOT / FIT		0.5
N/U & Test BOP's		16.0
P & A		
Repairs		1.5
Rig Service	0.5	1.0
Safety		
Survey	2.0	4.5
Tight hole / Fishing		
Tripping		3.0
Wait on Cement		3.0
Wash / Ream		
Well Control		
Well Test		
Wellhead		0.5
Wiper Trip		
Wireline		
Other		
TOTALS	24.0	97.0

DAILY MUD COSTS	$3,649.36
CUM. MUD COSTS	**$17,073.48**
AFE COST - C&S	
AFE COST - P&A	$1,238,604
AFE COST - C&C	$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	2:30	Drill 8 1/2" hole from 1117m to 1213m
2:30	3:00	Survey - miss run
3:00	4:00	Drill 8 1/2" hole to 1242m
4:00	4:30	Survey
4:30	8:30	Drill 8 1/2" hole to 1380m
8:30	9:00	Rig service
9:00	10:00	Drill 8 1/2" hole to 1415m
10:00	10:30	Survey
10:30	19:30	Drill 8 1/2" hole to 1568m
19:30	20:00	Survey
20:00	0:00	Drill 8 1/2" hole to 1645m

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

Oil Company of Australia

DAILY DRILLING REPORT

27/03/03

REPORT # 06

WELL	**Myall Creek 8**	**24:00 DEPTH**	**1875m**	**24 HR PROG**	**230m**	**CUM. COSTS**	**$479,071**
RIG	Century Drilling # 1	**FORMATION**	Rewan	**PTD**	2092m	**DAILY COSTS**	$33,130.66

OP's TO 06:00 POH- Lay out bit and stabilisers. Make up RCJB and RIH

REMARKS: Dropped junk (tong die) must have been dislodged on wiper trip **PERSONNEL ON SITE: 24**

LAST CASING	9 5/8"	**SET AT**	221.2m	**LOT**	20.5ppg	**MAASP**	**393psi**	**BOP TEST**	24/03/03	**TEST DUE**	07/04/03

AFD's: 159 **SAFETY** 1. Pulling out of the hole 2. Tripping **WEATHER AM** Cloudy **PM** Rain

BIT INFORMATION

WOB(kLb)	15-20	**JET V(fps)**	289
RPM	100-140	**H S I**	4.47
BIT NUMBER		**2**	
Size (in)		8.5	
Make		SMITH	
Type		S91HPX	
IADC Code		M223	
Serial Number		JT0392	
T.F.A.(")		0.638	
Depth In (m)		223	
Depth Out (m)		1875	
Total Meters		1652	
Hours		56.5	
ROP		29.2	
Condition Out		3 1 LT N X 0 ER HP	

FLOW DATA	
CIRC. RATE (gpm)	575
AV - DP (fpm)	271
AV - DC (fpm)	425
SPP (psi)	2000
SPP (calculated)	2110

PUMP #1		PUMP #2	
National 8-P-80		National 8-P-80	
RATE	95	**RATE**	95
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SCR: 450 @ 70		SCR: 450 @ 70	

SURVEYS
.75° at 1851m

BHA # 3

TOOL	LENGTH
SMITH PDC	0.22
TRANSCO NBS	0.69
1x 6 1/4" Drill Collar	9.39
Stabiliser	1.37
15 x 6.25 D/C	138.98
6 x 4.5" HWDP	54.89
BHA LENGTH (m)	205.54
BHA WEIGHT(kLb)	45.8
STRING WT (kLb)	133.1
HOOK LOAD (kLb)	167.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	2.0
DRAG DOWN (kLb)	3.0
TORQUE ON (Amps/Rel.)	150
TORQUE OFF (Amps/Rel.)	10

ENVIRONMENTAL DATA	
FUEL ON SITE	28000 Litres
DAILY USAGE	4400 Litres
CUM. FUEL USED	21650 Litres
CUM. MUD MIXED	1750 Bbls
CUM. MUD LOSSES	410 Bbls
CUM. GEL	1200 kg
CUM. BARITES	15000 kg

MUD PROPERTIES

Time	1200
Depth (m)	1875
Temp (° C)	62
Mud Type	KCl/PHPA
Density (ppg)	10.10
ECD (ppg)	11.01
Viscosity (sec)	58
PV / YP (cp/lb)	20 / 33
Gells (s/m)	16 / 22
API Filt. (cc)	7
Cake (/32")	1
Solids (% Vol)	9.1
Sand (% Vol)	0.2
MBT	15
pH (strip)	9
Chlorides (mg/l)	16500
KCL (%)	3.4
PHPA (ppb)	1.2
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	759

CHEMICAL USAGE	
BARITE	280
CAUSTIC SODA	1
KCl (TECH)	20
PAC-R	1
PHPA JK-261	3
Sodium Sulphite	3

OPERATION

OPERATION	HRS	CUM
Air Rig up		
Casing		5.0
Cementing		1.5
Circ & Condition	1.5	2.0
Coring		
D/O Cement		1.5
Drilling	11.5	70.0
Handle BHA		
LOT / FIT		0.5
N/U & Test BOP's		16.0
P & A		
Repairs		1.5
Rig Service	0.5	1.5
Safety		
Survey		4.5
Tight hole / Fishing		
Tripping		3.0
Wait on Cement		3.0
Wash / Ream	0.5	0.5
Well Control		
Well Test		
Wellhead		0.5
Wiper Trip	10.0	10.0
Wireline		
Other		
TOTALS	24.0	121.0

DAILY MUD COSTS	$3,683.66
CUM. MUD COSTS	**$20,757.14**
AFE COST - C&S	
AFE COST - P&A	$1,238,604
AFE COST - C&C	$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	11:30	Drill 8 1/2" hole from 1645m to 1875m
11:30	12:30	Circulate bottoms up and prepare to POH
12:30	18:30	POH for wiper trip- work tight hole through the sands
18:30	19:00	Slip drilling line
19:00	23:00	RIH to 1863m
23:00	23:30	Pick up kelly and wash to 1869m. Tagged up on junk in the hole.
23:30	0:00	Circulate and condition hole prior to POH for fishing trip

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

DAILY DRILLING REPORT

28/03/03

REPORT # 07

WELL	**Myall Creek 8**	**24:00 DEPTH**	**1875m**	**24 HR PROG**		**CUM. COSTS**	**$507,297**
RIG	Century Drilling # 1	**FORMATION**	Rewan	**PTD**	2092m	**DAILY COSTS**	$28,225.60

OP's TO 06:00 RIH and wash to bottom. Work bit and attempt to drill- high torque and no penetration. POH

REMARKS: **PERSONNEL ON SITE:** **24**

LAST CASING	9 5/8"	**SET AT**	221.2m	**LOT**	20.5ppg	**MAASP**	**393psi**	**BOP TEST**	24/03/03	**TEST DUE**	07/04/03

AFD's: 160 **SAFETY** 1. Tripping & BOP drills; 2. Correct use of the pipe spinner

WEATHER AM Cloudy
PM Cloudy

BIT INFORMATION			
WOB(kLb)		**JET V(fps)**	
RPM		**H S I**	
BIT NUMBER			
Size (in)			
Make			
Type			
IADC Code			
Serial Number			
T.F.A.(")			
Depth In (m)			
Depth Out (m)			
Total Meters			
Hours			
ROP			
Condition Out			
FLOW DATA			
CIRC. RATE (gpm)			
AV - DP (fpm)			
AV - DC (fpm)			
SPP (psi)			
SPP (calculated)			
PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE		**RATE**	
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SURVEYS			

TOOL	**LENGTH**
BHA LENGTH (m)	
BHA WEIGHT(kLb)	
STRING WT (kLb)	
HOOK LOAD (kLb)	
WT BELOW JARS (kLb)	
DRAG UP (kLb)	
DRAG DOWN (kLb)	
TORQUE ON (Amps/Rel.)	
TORQUE OFF (Amps/Rel.)	

ENVIRONMENTAL DATA	
FUEL ON SITE	26300 Litres
DAILY USAGE	1700 Litres
CUM. FUEL USED	23350 Litres
CUM. MUD MIXED	1750 Bbls
CUM. MUD LOSSES	416 Bbls
CUM. GEL	1200 kg
CUM. BARITES	15700 kg

MUD PROPERTIES	
Time	2300
Depth (m)	1875
Temp (° C)	
Mud Type	KCl/PHPA
Density (ppg)	10.10
ECD (ppg)	
Viscosity (sec)	58
PV / YP (cp/lb)	18 / 28
Gells (s/m)	11 / 18
API Filt. (cc)	6.8
Cake (/32")	1
Solids (% Vol)	9.1
Sand (% Vol)	0.15
MBT	15
pH (strip)	8.5
Chlorides (mg/l)	16000
KCL (%)	3.3
PHPA (ppb)	1.2
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	736
CHEMICAL USAGE	
BARITE	28

OPERATION	**HRS**	**CUM**
Air Rig up		
Casing		5.0
Cementing		1.5
Circ & Condition		2.0
Coring		
D/O Cement		1.5
Drilling		70.0
Handle BHA	2.0	2.0
LOT / FIT		0.5
N/U & Test BOP's		16.0
P & A		
Repairs		1.5
Rig Service		1.5
Safety		
Survey		4.5
Tight hole / Fishing	22.0	22.0
Tripping		3.0
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test		
Wellhead		0.5
Wiper Trip		10.0
Wireline		
Other		
TOTALS	24.0	145.0

DAILY MUD COSTS	$278.60
CUM. MUD COSTS	**$21,035.74**
AFE COST - C&S	
AFE COST - P&A	$1,238,604
AFE COST - C&C	$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	5:00	POH
5:00	5:30	Pick up and dress Reverse Circulating Junk Basket
5:30	10:30	RIH and wash to bottom
10:30	12:30	Work junk sub
12:30	17:30	POH and break and lay out RCJB. Junk damage to the outer surfaces of the tool indicating the junk is not sitting on bottom.
17:30	19:30	Make up RR Bit, Junk sub and BHA including 4 extra drill collars
19:30	20:00	Slip drilling line
20:00	0:00	RIH

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

DAILY DRILLING REPORT

29/03/03

REPORT # 08

WELL	**Myall Creek 8**	**24:00 DEPTH**	**1875m**	**24 HR PROG**		**CUM. COSTS**	**$536,523**
RIG	Century Drilling # 1	**FORMATION**	Rewan	**PTD**	2092m	**DAILY COSTS**	$29,226.00
OP's TO 06:00	Work mill on junk and drill / mill from 1875m to 1880m						
REMARKS:	Drilling torque has been decreasing this morning. Will POH mid morning.					**PERSONNEL ON SITE:**	**24**
LAST CASING	9 5/8"	**SET AT**	221.2m	**LOT** 20.5ppg	**MAASP** **390psi**	**BOP TEST** 24/03/03	**TEST DUE** 07/04/03
AFD's: 161	**SAFETY**	1. Running in drill pipe				**WEATHER AM**	Cloudy
		2. Running in drill pipe				**PM**	Fine

BIT INFORMATION			
WOB(kLb)		**JET V(fps)**	
RPM		**H S I**	
BIT NUMBER			
Size (in)			
Make			
Type			
IADC Code			
Serial Number			
T.F.A.(")			
Depth In (m)			
Depth Out (m)			
Total Meters			
Hours			
ROP			
Condition Out			
FLOW DATA			
CIRC. RATE (gpm)			
AV - DP (fpm)			
AV - DC (fpm)			
SPP (psi)			
SPP (calculated)			
PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE		**RATE**	
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SURVEYS			

BHA # 5	
TOOL	**LENGTH**
Junk Mill	0.53
Junk Sub	0.71
Bit Sub	0.69
20 x 6.25 D/C	185.51
6 x 4.5" HWDP	54.89
BHA LENGTH (m)	242.33
BHA WEIGHT(kLb)	51.8
STRING WT (kLb)	137.1
HOOK LOAD (kLb)	
WT BELOW JARS (kLb)	
DRAG UP (kLb)	
DRAG DOWN (kLb)	
TORQUE ON (Amps/Rel.)	
TORQUE OFF (Amps/Rel.)	
ENVIRONMENTAL DATA	
FUEL ON SITE	24500 Litres
DAILY USAGE	1800 Litres
CUM. FUEL USED	25150 Litres
CUM. MUD MIXED	1750 Bbls
CUM. MUD LOSSES	429 Bbls
CUM. GEL	1200 kg
CUM. BARITES	18000 kg

MUD PROPERTIES	
Time	1430
Depth (m)	1875
Temp (° C)	45
Mud Type	KCl/PHPA
Density (ppg)	10.20
ECD (ppg)	
Viscosity (sec)	56
PV / YP (cp/lb)	19 / 28
Gells (s/m)	13 / 18
API Filt. (cc)	6.8
Cake (/32")	1
Solids (% Vol)	9.3
Sand (% Vol)	0.15
MBT	15
pH (strip)	9
Chlorides (mg/l)	16000
KCL (%)	3.3
PHPA (ppb)	1.2
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	746
CHEMICAL USAGE	
BARITE	92
CAUSTIC SODA	1
PAC-L	2

OPERATION	**HRS**	**CUM**
Air Rig up		
Casing		5.0
Cementing		1.5
Circ & Condition		2.0
Coring		
D/O Cement		1.5
Drilling		70.0
Handle BHA		2.0
LOT / FIT		0.5
N/U & Test BOP's		16.0
P & A		
Repairs		1.5
Rig Service		1.5
Safety		
Survey		4.5
Tight hole / Fishing	24.0	46.0
Tripping		3.0
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test		
Wellhead		0.5
Wiper Trip		10.0
Wireline		
Other		
TOTALS	24.0	169.0
DAILY MUD COSTS		$1,279.00
CUM. MUD COSTS		**$22,314.74**
AFE COST - C&S		
AFE COST - P&A		$1,238,604
AFE COST - C&C		$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	3:30	Wash to bottom and attempt to drill past junk. No success
3:30	9:30	POH and lay out bit and junk sub
9:30	14:00	Make up fishing magnet and RIH
14:00	15:00	Work magnet over fish
15:00	19:30	POH- no fish recovered
19:30	0:00	Make up junk mill and RIH

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

DAILY DRILLING REPORT

30/03/03

REPORT # 09

WELL	**Myall Creek 8**	**24:00 DEPTH**	**1883m**	**24 HR PROG**	**8m**	**CUM. COSTS**	**$606,480**
RIG	Century Drilling # 1	**FORMATION**	Rewan	**PTD**	2092m	**DAILY COSTS**	$65,056.64
OP's TO 06:00	RIH and wash to bottom. Pattern new bit and drill to 1890m						
REMARKS:						**PERSONNEL ON SITE:**	**24**
LAST CASING	9 5/8"	**SET AT** 221.2m	**LOT** 20.5ppg	**MAASP**	**390psi**	**BOP TEST** 24/03/03	**TEST DUE** 07/04/03
AFD's: 162	**SAFETY**	1. Using the pipe spinner 2. Tripping				**WEATHER AM** **PM**	Cloudy Cloudy

BIT INFORMATION			
WOB(kLb)	20-40	**JET V(fps)**	51
RPM	50-100	**H S I**	0.06
BIT NUMBER		**4**	
Size (in)		8.5	
Make			
Type		Junk Mill	
IADC Code			
Serial Number			
T.F.A.(")		1.534	
Depth In (m)		1875	
Depth Out (m)		1883	
Total Meters		8	
Hours		9	
ROP		0.9	
Condition Out			
FLOW DATA			
CIRC. RATE (gpm)		242	
AV - DP (fpm)		114	
AV - DC (fpm)		179	
SPP (psi)		500	
SPP (calculated)		500	
PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE	80	**RATE**	
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SURVEYS			

BHA # 5	
TOOL	**LENGTH**
Junk Mill	0.53
Junk Sub	0.71
Bit Sub	0.69
20 x 6.25 D/C	185.51
6 x 4.5" HWDP	54.89
BHA LENGTH (m)	242.33
BHA WEIGHT(kLb)	51.8
STRING WT (kLb)	137.5
HOOK LOAD (kLb)	175.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	2.0
DRAG DOWN (kLb)	2.0
TORQUE ON (Amps/Rel.)	350
TORQUE OFF (Amps/Rel.)	20
ENVIRONMENTAL DATA	
FUEL ON SITE	22600 Litres
DAILY USAGE	1900 Litres
CUM. FUEL USED	27050 Litres
CUM. MUD MIXED	1870 Bbls
CUM. MUD LOSSES	512 Bbls
CUM. GEL	1200 kg
CUM. BARITES	19200 kg

MUD PROPERTIES	
Time	0230
Depth (m)	1883
Temp (° C)	47
Mud Type	KCl/PHPA
Density (ppg)	10.20
ECD (ppg)	10.78
Viscosity (sec)	58
PV / YP (cp/lb)	20 / 29
Gells (s/m)	10 / 16
API Filt. (cc)	6.5
Cake (/32")	1
Solids (% Vol)	9.1
Sand (% Vol)	0.1
MBT	15
pH (strip)	9.5
Chlorides (mg/l)	15600
KCL (%)	3.2
PHPA (ppb)	1.2
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	767
CHEMICAL USAGE	
BARITE	48
CAUSTIC SODA	2
KCl (TECH)	20
PAC-L	4
PHPA JK-261	3
Sodium Sulphite	4

OPERATION	HRS	CUM
Air Rig up		
Casing		5.0
Cementing		1.5
Circ & Condition		2.0
Coring		
D/O Cement		1.5
Drilling	9.0	79.0
Handle BHA		2.0
LOT / FIT		0.5
N/U & Test BOP's		16.0
P & A		
Repairs		1.5
Rig Service		1.5
Safety		
Survey		4.5
Tight hole / Fishing	15.0	61.0
Tripping		3.0
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test		
Wellhead		0.5
Wiper Trip		10.0
Wireline		
Other		
TOTALS	24.0	193.0
DAILY MUD COSTS		$1,926.88
CUM. MUD COSTS		**$24,241.62**
AFE COST - C&S		
AFE COST - P&A		$1,238,604
AFE COST - C&C		$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	9:00	Wash to bottom and mill on junk and drill from 1875m to 1883m
9:00	14:00	POH and lay out junk mill
14:00	18:00	Make up fishing magnet and RIH
18:00	18:30	Work magnet on bottom
18:30	23:00	POH- no fish recovered
23:00	0:00	Make up new bit and junk sub and RIH

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

DAILY DRILLING REPORT

31/03/03

REPORT # 10

WELL	**Myall Creek 8**	**24:00 DEPTH**	**1972m**	**24 HR PROG**	**89m**	**CUM. COSTS**	**$638,184**
RIG	Century Drilling # 1	**FORMATION**		**PTD**	2092m	**DAILY COSTS**	$31,704.68
OP's TO 06:00	Drill ahead to 2008m						
REMARKS:						**PERSONNEL ON SITE:**	**24**
LAST CASING	9 5/8"	**SET AT** 221.2m	**LOT** 20.5ppg	**MAASP**	**397psi**	**BOP TEST** 24/03/03	**TEST DUE** 07/04/03
AFD's: 163	**SAFETY**	1. Slip and cut drilling line 2. Handling tubulars				**WEATHER AM** Fine **PM** Fine	

BIT INFORMATION			
WOB(kLb)	25-35	**JET V(fps)**	323
RPM	90-130	**H S I**	4.36
BIT NUMBER		**5**	
Size (in)		8.5	
Make		REED	
Type		EHP43	
IADC Code		437	
Serial Number		M55966	
T.F.A.(")		0.451	
Depth In (m)		1883	
Depth Out (m)		IN	
Total Meters		89	
Hours		19.5	
ROP		4.6	
Condition Out			
FLOW DATA			
CIRC. RATE (gpm)		454	
AV - DP (fpm)		214	
AV - DC (fpm)		335	
SPP (psi)		1700	
SPP (calculated)		1990	
PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE	75	**RATE**	75
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SCR: 620 @ 70		SCR: 625 @ 70	
SURVEYS			
.25° at 1918m			

BHA # 5	
TOOL	**LENGTH**
Junk Mill	0.53
Junk Sub	0.71
Bit Sub	0.69
20 x 6.25 D/C	185.51
6 x 4.5" HWDP	54.89
BHA LENGTH (m)	242.33
BHA WEIGHT(kLb)	52.0
STRING WT (kLb)	142.6
HOOK LOAD (kLb)	183.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	2.0
DRAG DOWN (kLb)	3.0
TORQUE ON (Amps/Rel.)	150
TORQUE OFF (Amps/Rel.)	20
ENVIRONMENTAL DATA	
FUEL ON SITE	32800 Litres
DAILY USAGE	-10200 Litres
CUM. FUEL USED	16850 Litres
CUM. MUD MIXED	2070 Bbls
CUM. MUD LOSSES	512 Bbls
CUM. GEL	1200 kg
CUM. BARITES	19200 kg

MUD PROPERTIES	
Time	2130
Depth (m)	1996
Temp (° C)	65
Mud Type	KCl/PHPA
Density (ppg)	10.00
ECD (ppg)	10.76
Viscosity (sec)	58
PV / YP (cp/lb)	20 / 30
Gells (s/m)	12 / 20
API Filt. (cc)	7
Cake (/32")	1
Solids (% Vol)	8
Sand (% Vol)	0.15
MBT	17
pH (strip)	9
Chlorides (mg/l)	18000
KCL (%)	3.8
PHPA (ppb)	1.8
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	806
CHEMICAL USAGE	
CAUSTIC SODA	1
KCl (TECH)	100
PHPA JK-261	13
Sodium Sulphite	4

OPERATION	**HRS**	**CUM**
Air Rig up		
Casing		5.0
Cementing		1.5
Circ & Condition		2.0
Coring		
D/O Cement		1.5
Drilling	19.5	98.5
Handle BHA		2.0
LOT / FIT		0.5
N/U & Test BOP's		16.0
P & A		
Repairs		1.5
Rig Service	1.0	2.5
Safety		
Survey	0.5	5.0
Tight hole / Fishing		61.0
Tripping	3.0	6.0
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test		
Wellhead		0.5
Wiper Trip		10.0
Wireline		
Other		
TOTALS	24.0	217.0
DAILY MUD COSTS		$3,057.68
CUM. MUD COSTS		**$27,299.30**
AFE COST - C&S		
AFE COST - P&A		$1,238,604
AFE COST - C&C		$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	1:00	Slip drilling line
1:00	4:00	Continue to RIH
4:00	13:00	Drill 8 1/2" hole from 1883m to 1931m
13:00	13:30	Survey
13:30	0:00	Drill 8 1/2" hole to 1972m

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

DAILY DRILLING REPORT

01/04/03

REPORT # 11

WELL	**Myall Creek 8**	**24:00 DEPTH**	**2027m**	**24 HR PROG**	**55m**	**CUM. COSTS**	**$721,984**
RIG	Century Drilling # 1	**FORMATION**	Wallabella	**PTD**	2092m	**DAILY COSTS**	$83,799.40
OP's TO 06:00	Circulate hole clean. POH- LODP						
REMARKS:	No indication of junk on the bottom of the hole					**PERSONNEL ON SITE:**	**28**
LAST CASING	9 5/8"	**SET AT**	221.2m	**LOT** 20.5ppg	**MAASP** **397psi**	**BOP TEST** 24/03/03	**TEST DUE** 07/04/03
AFD's: 164	**SAFETY**	1. Cleaning and preparing casing				**WEATHER AM**	Fine
		2. Logging				**PM**	Fine

BIT INFORMATION			
WOB(kLb)	32-35	**JET V(fps)**	302
RPM	120-130	**H S I**	3.55
BIT NUMBER		**5**	
Size (in)		8.5	
Make		REED	
Type		EHP43	
IADC Code		437	
Serial Number		M55966	
T.F.A.(")		0.451	
Depth In (m)		1883	
Depth Out (m)		2027	
Total Meters		144	
Hours		28.5	
ROP		5.1	
Condition Out		1 2 WT A E 1 NO TD	
FLOW DATA			
CIRC. RATE (gpm)		424	
AV - DP (fpm)		200	
AV - DC (fpm)		313	
SPP (psi)		1800	
SPP (calculated)		1740	
PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE	70	**RATE**	70
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SCR: 500 @ 60		SCR: 500 @ 60	
SURVEYS			
.25° at 2015m			

BHA # 5	
TOOL	**LENGTH**
Junk Mill	0.53
Junk Sub	0.71
Bit Sub	0.69
20 x 6.25 D/C	185.51
6 x 4.5" HWDP	54.89
BHA LENGTH (m)	242.33
BHA WEIGHT(kLb)	52.0
STRING WT (kLb)	145.5
HOOK LOAD (kLb)	185.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	2.0
DRAG DOWN (kLb)	4.0
TORQUE ON (Amps/Rel.)	50
TORQUE OFF (Amps/Rel.)	20
ENVIRONMENTAL DATA	
FUEL ON SITE	25900 Litres
DAILY USAGE	6900 Litres
CUM. FUEL USED	23750 Litres
CUM. MUD MIXED	2070 Bbls
CUM. MUD LOSSES	532 Bbls
CUM. GEL	1200 kg
CUM. BARITES	19800 kg

MUD PROPERTIES	
Time	0930
Depth (m)	2027
Temp (° C)	59
Mud Type	KCl/PHPA
Density (ppg)	10.00
ECD (ppg)	10.67
Viscosity (sec)	58
PV / YP (cp/lb)	17 / 28
Gells (s/m)	11 / 15
API Filt. (cc)	7.6
Cake (/32")	1
Solids (% Vol)	8
Sand (% Vol)	0.1
MBT	17
pH (strip)	9
Chlorides (mg/l)	18000
KCL (%)	3.8
PHPA (ppb)	1.5
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	798
CHEMICAL USAGE	
BARITE	24
CAUSTIC SODA	1
KCl (TECH)	20
PAC-L	2

OPERATION	**HRS**	**CUM**
Air Rig up		
Casing		5.0
Cementing		1.5
Circ & Condition	1.0	3.0
Coring		
D/O Cement		1.5
Drilling	9.0	107.5
Handle BHA		2.0
LOT / FIT		0.5
N/U & Test BOP's		16.0
P & A		
Repairs		1.5
Rig Service		2.5
Safety		
Survey		5.0
Tight hole / Fishing		61.0
Tripping	9.0	15.0
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test		
Wellhead		0.5
Wiper Trip		10.0
Wireline	5.0	5.0
Other		
TOTALS	24.0	241.0
DAILY MUD COSTS		$922.40
CUM. MUD COSTS		**$28,221.70**
AFE COST - C&S		
AFE COST - P&A		$1,238,604
AFE COST - C&C		$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	9:00	Drill 8 1/2" hole from 1972m to 2027m - Section TD
9:00	10:00	Circulate hole clean and prepare to POH
10:00	14:30	POH and lay out bit and junk sub
14:30	19:30	Hold safety meeting. Rig up REEVES and run logs- DLL, CSS, DAC, GR. Rig down loggers.
19:30	0:00	Make up BHA and RIH. Pick up kelly and wash to bottom

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

DAILY DRILLING REPORT

02/04/03

REPORT # 12

WELL	**Myall Creek 8**	**24:00 DEPTH**	**2027m**	**24 HR PROG**		**CUM. COSTS**	**$852,329**
RIG	Century Drilling # 1	**FORMATION**	Wallabella	**PTD**	2092m	**DAILY COSTS**	$130,345.00
OP's TO 06:00	Cement casing. Set slips, pick up stack and cut casing. Nipple down BOP's.						
REMARKS:						**PERSONNEL ON SITE:**	**26**
LAST CASING	7 "	**SET AT**	2026.9m	**LOT**		**MAASP**	
BOP TEST	24/03/03	**TEST DUE**	07/04/03				
AFD's: 165	**SAFETY**	1. Laying out drill pipe 2. Running casing				**WEATHER AM**	Light rain
						PM	Heavy rain

BIT INFORMATION			
WOB(kLb)		**JET V(fps)**	
RPM		**H S I**	
BIT NUMBER			
Size (in)			
Make			
Type			
IADC Code			
Serial Number			
T.F.A.(")			
Depth In (m)			
Depth Out (m)			
Total Meters			
Hours			
ROP			
Condition Out			
FLOW DATA			
CIRC. RATE (gpm)			
AV - DP (fpm)			
AV - DC (fpm)			
SPP (psi)			
SPP (calculated)			
PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE		**RATE**	
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SURVEYS			

TOOL	**LENGTH**
BHA LENGTH (m)	
BHA WEIGHT(kLb)	
STRING WT (kLb)	
HOOK LOAD (kLb)	
WT BELOW JARS (kLb)	
DRAG UP (kLb)	
DRAG DOWN (kLb)	
TORQUE ON (Amps/Rel.)	
TORQUE OFF (Amps/Rel.)	

ENVIRONMENTAL DATA	
FUEL ON SITE	27500 Litres
DAILY USAGE	1400 Litres
CUM. FUEL USED	36170 Litres
CUM. MUD MIXED	2070 Bbls
CUM. MUD LOSSES	820 Bbls
CUM. GEL	1200 kg
CUM. BARITES	19800 kg

MUD PROPERTIES	
Time	2100
Depth (m)	2027
Temp (° C)	
Mud Type	KCl/PHPA
Density (ppg)	10.00
ECD (ppg)	
Viscosity (sec)	56
PV / YP (cp/lb)	14 / 27
Gells (s/m)	10 / 13
API Filt. (cc)	8
Cake (/32")	1
Solids (% Vol)	8
Sand (% Vol)	0.1
MBT	17
pH (strip)	9
Chlorides (mg/l)	17700
KCL (%)	3.5
PHPA (ppb)	1.3
ALC - 50 (K)	**80**
Circ. Vol. (Bbl)	430

CHEMICAL USAGE	
Bactericide (IDICIDE)	4
KCl (TECH)	40
SAPP	4

OPERATION	**HRS**	**CUM**
Air Rig up		
Casing	12.5	17.5
Cementing	1.0	2.5
Circ & Condition	1.0	4.0
Coring		
D/O Cement		1.5
Drilling		107.5
Handle BHA		2.0
LOT / FIT		0.5
N/U & Test BOP's		16.0
P & A		
Repairs		1.5
Rig Service		2.5
Safety		
Survey	0.5	5.5
Tight hole / Fishing		61.0
Tripping	9.0	24.0
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test		
Wellhead		0.5
Wiper Trip		10.0
Wireline		5.0
Other		
TOTALS	24.0	265.0

DAILY MUD COSTS	$1,258.00
CUM. MUD COSTS	**$29,479.70**
AFE COST - C&S	
AFE COST - P&A	$1,238,604
AFE COST - C&C	$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	1:00	Circulate hole clean
1:00	1:30	Survey
1:30	10:30	POH and lay out drill pipe and BHA
10:30	13:00	Rig up to run 7" casing. Change pipe rams and pressure test ram doors
13:00	22:00	Run 162joints of 7" 23ppf casing with shoe set at 2027m
22:00	23:00	Circulate casing and wash to bottom
23:00	23:30	Make up cement head and lines. Pump 40Bbl SAPP pre-flush. Hold safety meeting.
23:30	0:00	Pump cement spacer and pressure test lines

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

Oil Company of Australia

DAILY DRILLING REPORT

03/04/03

REPORT # 13

WELL	Myall Creek 8	24:00 DEPTH	2027m	24 HR PROG		CUM. COSTS	$906,944
RIG	Century Drilling # 1	FORMATION	Wallabella	PTD	2092m	DAILY COSTS	$54,615.09
OP's TO 06:00	Continue to install blooie line. Function test BOP's. Make up cup tester and pressure test BOP's and choke.						
REMARKS:	Lease is drying out slowly. Nitrogen is on site.					PERSONNEL ON SITE:	24
LAST CASING	7 "	SET AT	2026.9m	LOT		MAASP	
BOP TEST	24/03/03	TEST DUE	07/04/03				
AFD's: 166	SAFETY	1. Picking up BOP's 2. General rig safety				WEATHER AM	Cloudy
						PM	Fine

BIT INFORMATION			
WOB(kLb)		JET V(fps)	
RPM		H S I	
BIT NUMBER			
Size (in)			
Make			
Type			
IADC Code			
Serial Number			
T.F.A.(")			
Depth In (m)			
Depth Out (m)			
Total Meters			
Hours			
ROP			
Condition Out			
FLOW DATA			
CIRC. RATE (gpm)			
AV - DP (fpm)			
AV - DC (fpm)			
SPP (psi)			
SPP (calculated)			
PUMP #1		PUMP #2	
National 8-P-80		National 8-P-80	
RATE		RATE	
LINER	6.0"	LINER	6.0"
STROKE	8.5"	STROKE	8.5"
SURVEYS			

TOOL	LENGTH
BHA LENGTH (m)	
BHA WEIGHT(kLb)	
STRING WT (kLb)	
HOOK LOAD (kLb)	
WT BELOW JARS (kLb)	
DRAG UP (kLb)	
DRAG DOWN (kLb)	
TORQUE ON (Amps/Rel.)	
TORQUE OFF (Amps/Rel.)	

ENVIRONMENTAL DATA	
FUEL ON SITE	25900 Litres
DAILY USAGE	1600 Litres
CUM. FUEL USED	37770 Litres
CUM. MUD MIXED	2070 Bbls
CUM. MUD LOSSES	820 Bbls
CUM. GEL	1200 kg
CUM. BARITES	19800 kg

MUD PROPERTIES	
Time	
Depth (m)	
Temp (° C)	
Mud Type	KCl/PHPA
Density (ppg)	10.00
ECD (ppg)	
Viscosity (sec)	
PV / YP (cp/lb)	
Gells (s/m)	
API Filt. (cc)	
Cake (/32")	
Solids (% Vol)	
Sand (% Vol)	
MBT	
pH (strip)	
Chlorides (mg/l)	
KCL (%)	
PHPA (ppb)	
ALC - 50 (K)	
Circ. Vol. (Bbl)	
CHEMICAL USAGE	

OPERATION	HRS	CUM
Air Rig up	5.0	5.0
Casing	2.5	20.0
Cementing	1.5	4.0
Circ & Condition		4.0
Coring		
D/O Cement		1.5
Drilling		107.5
Handle BHA		2.0
LOT / FIT		0.5
N/U & Test BOP's	12.0	28.0
P & A		
Repairs		1.5
Rig Service		2.5
Safety		
Survey		5.5
Tight hole / Fishing		61.0
Tripping		24.0
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test		
Wellhead	3.0	3.5
Wiper Trip		10.0
Wireline		5.0
Other		
TOTALS	24.0	289.0

DAILY MUD COSTS	
CUM. MUD COSTS	$29,479.70
AFE COST - C&S	
AFE COST - P&A	$1,238,604
AFE COST - C&C	$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	1:30	Mix and pump 78 Bbls of lead slurry at 13ppg and 41 Bbls of tail slurry at 15.6ppg, drop plug and displaced with water. Bumped plug to 3000psi.
1:30	4:00	Drop and set casing slips with 125,000#. Pick up Stack and check slips. Rig down Halliburton. Rough cut and lay out casing.
4:00	9:00	Nipple down 13 5/8" BOP's
9:00	12:00	Dress casing stub and install B section. Energise X bushing and pressure test to 5000psi
12:00	0:00	Nipple up 7 1/16" BOP's, RBOP and Blooie line. Load 3 1/2" drill pipe onto racks

SUPERVISOR:	James Dingle	GEOLOGIST:	Doug & John	MUD CO:	IDFS

Oil Company of Australia

DAILY DRILLING REPORT

04/04/03

REPORT # 14

WELL	**Myall Creek 8**	**24:00 DEPTH**	**2027m**	**24 HR PROG**		**CUM. COSTS**	**$936,391**
RIG	Century Drilling # 1	**FORMATION**	Wallabella	**PTD**	2092m	**DAILY COSTS**	$29,447.00
OP's TO 06:00	RIH with drill pipe. Make up RBOP and prepare to drill out cement.						
REMARKS:	Should be drilling by ~10:00 this morning					**PERSONNEL ON SITE:**	**31**
LAST CASING	7 "	**SET AT** 2026.9m	**LOT**	**MAASP**		**BOP TEST** 04/04/03	**TEST DUE** 18/04/03
AFD's: 167	**SAFETY**	1. Pressure testing BOP's				**WEATHER AM**	Cloudy
		2. Pressure testing. Picking up 3 1/2" drill pipe.				**PM**	Fine

BIT INFORMATION			
WOB(kLb)		**JET V(fps)**	
RPM		**H S I**	
BIT NUMBER			
Size (in)			
Make			
Type			
IADC Code			
Serial Number			
T.F.A.(")			
Depth In (m)			
Depth Out (m)			
Total Meters			
Hours			
ROP			
Condition Out			
FLOW DATA			
CIRC. RATE (gpm)			
AV - DP (fpm)			
AV - DC (fpm)			
SPP (psi)			
SPP (calculated)			
PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE		**RATE**	
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SURVEYS			

BHA # 7	
TOOL	**LENGTH**
Bit	0.20
Bit Sub	0.45
Float Sub	0.31
1x 3 1/2" HWDP	9.18
X Profile Sub	0.71
28x 3 1/2" HWDP	259.56
BHA LENGTH (m)	270.41
BHA WEIGHT(kLb)	20.6
STRING WT (kLb)	105.2
HOOK LOAD (kLb)	
WT BELOW JARS (kLb)	
DRAG UP (kLb)	
DRAG DOWN (kLb)	
TORQUE ON (Amps/Rel.)	
TORQUE OFF (Amps/Rel.)	
ENVIRONMENTAL DATA	
FUEL ON SITE	24800 Litres
DAILY USAGE	1100 Litres
CUM. FUEL USED	38870 Litres
CUM. MUD MIXED	2070 Bbls
CUM. MUD LOSSES	820 Bbls
CUM. GEL	1200 kg
CUM. BARITES	19800 kg

MUD PROPERTIES	
Time	
Depth (m)	
Temp (° C)	
Mud Type	
Density (ppg)	
ECD (ppg)	
Viscosity (sec)	
PV / YP (cp/lb)	
Gells (s/m)	
API Filt. (cc)	
Cake (/32")	
Solids (% Vol)	
Sand (% Vol)	
MBT	
pH (strip)	
Chlorides (mg/l)	
KCL (%)	
PHPA (ppb)	
ALC - 50 (K)	
Circ. Vol. (Bbl)	
CHEMICAL USAGE	

OPERATION	**HRS**	**CUM**
Air Rig up	7.0	12.0
Casing		20.0
Cementing		4.0
Circ & Condition		4.0
Coring		
D/O Cement		1.5
Drilling		107.5
Handle BHA		2.0
LOT / FIT		0.5
N/U & Test BOP's	9.5	37.5
P & A		
Repairs		1.5
Rig Service		2.5
Safety		
Survey		5.5
Tight hole / Fishing		61.0
Tripping	7.5	31.5
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test		
Wellhead		3.5
Wiper Trip		10.0
Wireline		5.0
Other		
TOTALS	24.0	313.0
DAILY MUD COSTS		
CUM. MUD COSTS		**$29,479.70**
AFE COST - C&S		
AFE COST - P&A		$1,238,604
AFE COST - C&C		$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	4:30	Load drill pipe. Nipple up blooie line.
4:30	11:00	Pressure test BOP's, choke manifold and kelly hose to 4000psi / 250psi- wash pipe is leaking
11:00	13:30	Change out wash pipe. Repair pressure testing unit.
13:30	16:30	Pressure test circulating lines and kelly cocks to 4000psi / 250psi
16:30	0:00	Make up air drilling BHA and RIH with 3 1/2" drill pipe

SUPERVISOR:	James Dingle	**GEOLOGIST:**	Doug & John	**MUD CO:**	IDFS

Oil Company of Australia

DAILY DRILLING REPORT

05/04/03

REPORT # 15

WELL	Myall Creek 8	24:00 DEPTH	2077m	24 HR PROG	50m	CUM. COSTS	$1,069,697
RIG	Century Drilling # 1	FORMATION	Wallabella	PTD	2092m	DAILY COSTS	$118,306.00
OP's TO 06:00	POH and lay out drill pipe and BHA						
REMARKS:						PERSONNEL ON SITE:	38
LAST CASING	7 "	SET AT 2026.9m	LOT	MAASP		BOP TEST 04/04/03	TEST DUE 18/04/03
AFD's: 168	SAFETY	1. Nitrogen drilling operations				WEATHER AM	Fine
		2. Nitrogen drilling operations				PM	Fine

BIT INFORMATION			
WOB(kLb)	10-15	JET V(fps)	
RPM	80-90	H S I	
BIT NUMBER		6	
Size (in)		6.125	
Make		VAREL	
Type		ETD14	
IADC Code		437	
Serial Number		157204	
T.F.A.(")		2.356	
Depth In (m)		2027	
Depth Out (m)		2077	
Total Meters		50	
Hours		4.5	
ROP		11.1	
Condition Out		1 1 WT A E 1 NO TD	
FLOW DATA			
CIRC. RATE (cfm)		2000	
AV - DP (fpm)		5330	
AV - DC (fpm)		5330	
SPP (psi)		340	
MIST RATE (Bbls/hr)			
PUMP #1		PUMP #2	
National 8-P-80		National 8-P-80	
RATE		RATE	
LINER	6.0"	LINER	6.0"
STROKE	8.5"	STROKE	8.5"
SURVEYS			

BHA # 7	
TOOL	LENGTH
Bit	0.20
Bit Sub	0.45
Float Sub	0.31
1x 3 1/2" HWDP	9.18
X Profile Sub	0.71
28x 3 1/2" HWDP	259.56
BHA LENGTH (m)	270.41
BHA WEIGHT(kLb)	20.3
STRING WT (kLb)	107.3
HOOK LOAD (kLb)	160.0
WT BELOW JARS (kLb)	
DRAG UP (kLb)	2.0
DRAG DOWN (kLb)	2.0
TORQUE ON (Amps/Rel.)	50
TORQUE OFF (Amps/Rel.)	20
ENVIRONMENTAL DATA	
FUEL ON SITE	22600 Litres
DAILY USAGE	2200 Litres
CUM. FUEL USED	41070 Litres
CUM. MUD MIXED	2070 Bbls
CUM. MUD LOSSES	820 Bbls
CUM. GEL	1200 kg
CUM. BARITES	19800 kg

MUD PROPERTIES	
Time	
Depth (m)	
Temp (° C)	
Mud Type	Nitrogen
Density (ppg)	
ECD (ppg)	
Viscosity (sec)	
PV / YP (cp/lb)	
Gells (s/m)	
API Filt. (cc)	
Cake (/32")	
Solids (% Vol)	
Sand (% Vol)	
MBT	
pH (strip)	
Chlorides (mg/l)	
KCL (%)	
PHPA (ppb)	
ALC - 50 (K)	
Circ. Vol. (Bbl)	
CHEMICAL USAGE	

OPERATION	HRS	CUM
Air Rig up	2.5	14.5
Casing		20.0
Cementing		4.0
Circ & Condition	2.0	6.0
Coring		
D/O Cement	4.0	5.5
Drilling	4.5	112.0
Handle BHA		2.0
LOT / FIT		0.5
N/U & Test BOP's	0.5	38.0
P & A		
Repairs		1.5
Rig Service	0.5	3.0
Safety	0.5	0.5
Survey		5.5
Tight hole / Fishing		61.0
Tripping	6.0	37.5
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test	2.5	2.5
Wellhead		3.5
Wiper Trip		10.0
Wireline		5.0
Other	1.0	1.0
TOTALS	24.0	337.0
DAILY MUD COSTS		
CUM. MUD COSTS		$29,479.70
AFE COST - C&S		
AFE COST - P&A		$1,238,604
AFE COST - C&C		$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	2:30	Continue to RIH with 3 1/2" drill pipe
2:30	3:00	Slip drilling line
3:00	4:00	Load, clean and strap extra drill pipe
4:00	5:00	Continue to RIH
5:00	6:30	Pick up kelly, install RBOP and drive bushing
6:30	10:30	Drill out float and shoe track
10:30	11:00	Drill 6 1/8" hole from 2027m to 2028m
11:00	11:30	Circulate hole clean and check bottoms up sample
11:30	12:00	Circulate hole clean. Hold pre nitrogen drilling meeting with both crews
12:00	12:30	Pressure test circulating lines to 3000psi with nitrogen
12:30	13:30	Unload and dry up well
13:30	16:00	Drill 6 1/8" hole to 2057m with nitrogen
16:00	17:00	Flow test
17:00	18:30	Drill 6 1/8" hole to 2077m- TD
18:30	19:00	Circulate hole clean
19:00	20:30	Flow test
20:30	21:30	Wash to bottom and circulate hole clean
21:30	0:00	Rack kelly and POH

SUPERVISOR:	James & Seton	GEOLOGIST:	Doug & John	MUD CO:	IDFS

DAILY DRILLING REPORT

06/04/03

REPORT # 16

WELL	**Myall Creek 8**	**24:00 DEPTH**	**2077m**	**24 HR PROG**		**CUM. COSTS**	**$1,158,779**
RIG	Century Drilling # 1	**FORMATION**	Wallabella	**PTD**	2092m	**DAILY COSTS**	$89,082.00
OP's TO 06:00	Run 2-3/8"tubing, prepare to land tubing in hanger						
REMARKS:	Tool/software failures with Reeves logging					**PERSONNEL ON SITE:**	**30**
LAST CASING	7 "	**SET AT** 2026.9m	**LOT**	**MAASP**		**BOP TEST** 04/04/03	**TEST DUE** 18/04/03
AFD's: 169	**SAFETY**	1. Weekly safety meeting				**WEATHER AM**	Fine
		2. Weekly safety meeting				**PM**	Fine

BIT INFORMATION			
WOB(kLb)		**JET V(fps)**	
RPM		**H S I**	
BIT NUMBER			
Size (in)			
Make			
Type			
IADC Code			
Serial Number			
T.F.A.(")			
Depth In (m)			
Depth Out (m)			
Total Meters			
Hours			
ROP			
Condition Out			
FLOW DATA			
CIRC. RATE (gpm)			
AV - DP (fpm)			
AV - DC (fpm)			
SPP (psi)			
SPP (calculated)			
PUMP #1		**PUMP #2**	
National 8-P-80		**National 8-P-80**	
RATE		**RATE**	
LINER	6.0"	**LINER**	6.0"
STROKE	8.5"	**STROKE**	8.5"
SURVEYS			

TOOL	**LENGTH**
BHA LENGTH (m)	
BHA WEIGHT(kLb)	
STRING WT (kLb)	
HOOK LOAD (kLb)	
WT BELOW JARS (kLb)	
DRAG UP (kLb)	
DRAG DOWN (kLb)	
TORQUE ON (Amps/Rel.)	
TORQUE OFF (Amps/Rel.)	

ENVIRONMENTAL DATA	
FUEL ON SITE	19700 Litres
DAILY USAGE	2900 Litres
CUM. FUEL USED	43970 Litres
CUM. MUD MIXED	2070 Bbls
CUM. MUD LOSSES	820 Bbls
CUM. GEL	1200 kg
CUM. BARITES	19800 kg

MUD PROPERTIES	
Time	
Depth (m)	
Temp (° C)	
Mud Type	
Density (ppg)	
ECD (ppg)	
Viscosity (sec)	
PV / YP (cp/lb)	
Gells (s/m)	
API Filt. (cc)	
Cake (/32")	
Solids (% Vol)	
Sand (% Vol)	
MBT	
pH (strip)	
Chlorides (mg/l)	
KCL (%)	
PHPA (ppb)	
ALC - 50 (K)	
Circ. Vol. (Bbl)	
CHEMICAL USAGE	

OPERATION	**HRS**	**CUM**
Air Rig up		14.5
Casing	3.0	23.0
Cementing		4.0
Circ & Condition		6.0
Coring		
D/O Cement		5.5
Drilling		112.0
Handle BHA	2.0	4.0
LOT / FIT		0.5
N/U & Test BOP's		38.0
P & A		
Repairs		1.5
Rig Service		3.0
Safety		0.5
Survey		5.5
Tight hole / Fishing		61.0
Tripping	5.0	42.5
Wait on Cement		3.0
Wash / Ream		0.5
Well Control		
Well Test		2.5
Wellhead		3.5
Wiper Trip		10.0
Wireline	14.0	19.0
Other		1.0
TOTALS	24.0	361.0
DAILY MUD COSTS		
CUM. MUD COSTS		**$29,479.70**
AFE COST - C&S		
AFE COST - P&A		$1,238,604
AFE COST - C&C		$1,317,234

HOURLY OPERATIONS SUMMARY 0000 to 2400

From	To	Description
0:00	3:00	Hoist, laying out pipe
3:00	3:30	Break kelly & remove drive nut
3:30	5:30	Hoist, laying out BHA
5:30	7:00	Lay down kelly & swivel
7:00	9:00	Rig up Reeves wireline & lubricator
9:00	20:00	Wireline logging with Reeves. Run No 1, TAC-AIS, Run No 2, SGS-ENS-PDS
20:00	21:00	Rig down lubricator
21:00	22:30	Rig to run tubing, change pipe rams
22:30	0:00	Make up Tail Pipe & run in hole with 2-3/8"tubing, using primary jet

SUPERVISOR:	J.Dingle/S.Porter	**GEOLOGIST:**	D.Short/J.Hobday	**MUD CO:**	IDFS

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL: Myall Creek #8 **REPORT No.:** 1

DATE: 20/5/03, Tuesday. **CONTRACTOR:** EWS #4

OBJECTIVE: Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.

0700 STATUS: Spot Carrier on the pony base & Rig up.

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	10:30	Rig maintenance in Surat, load out rig equipment. 07:30 hrs checked the well SIWHP 2660psi. SISCP 1050kpa. Open well to flare on 32/64'' choke & bleed down well pressure.
10:30	11:30	Start shifting rig equipment to location.
11:30	14:00	Arrive on location. Some of the crew in Surat loading rest of the rig out. Spot Rig equipment. FWHP 230psi on 32/64'' choke. Open choke to 1''.
14:00	16:00	Rest of rig equipment arrived on location. Spot equipment. Re-spot the office shack. Tidy up wheel tracks left by the cranes with the loader.
16:00	17:30	Spot & align the pony base. Prepare to spot the carrier on the pony base. Carrier sinking in old wheel tracks. Flow Surface casing to the sump to clean up. Place fill in wheel tracks & roll with the forklift. Well continuing to flow to flare on 1'' choke at 55psi.
17:30	18:00	Drive to Surat.
18:00		S.D.F.N.

DAILY COST $A: $ 8,190

CUM. COST $A: $ 8,190

BUDGET $A: $209,000

AFE#: 277-0004

SUPERVISOR: J. Reeve.

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL: Myall Creek #8 **REPORT No.:** 2

DATE: 21/5/03 **CONTRACTOR:** EWS #4

OBJECTIVE: Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.

0700 STATUS: Continue to Mix KCL, Prepare to N/U the Hydrill

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. FWHP 55psi on 1'' choke.
06:30	06:45	Pre-work Safety, Procedure & Environment meeting. Discussion: Daily operations including working around the live wellhead.
06:45	07:00	Continue to roll & pack down approach to the pony base.
07:00	08:00	Attempt to back the carrier up onto the pony base, unsuccessful, still sinking. Place more fill in the wheel tracks, roll & pack with the forklift. Run S/Casing line to the mud tank & fill the tank. (Tank was clean prior to filling)
08:00	10:00	Back Carrier onto the pony base, no problems. R/U Carrier. Unload stores. Erect scaffolding on edge of lease for the nippling up process (scaffolding is on wheels)
10:00	13:00	Tie in Kill lines & air-lines. Tie in Choke & flare line to the Annulus. Had to make up some flow tee's & valves.
13:00	13:30	Lunch
13:30	15:00	Continue with plumbing to tie in lines. Top up mud tank. Mix KCL
15:00	16:00	TBM. Pressure test all surface lines & standpipe line to 500psi & 2500psi.
16:00	17:30	Continue to mix KCL, very slow, fluid foaming up badly. Conduct Rig Safety Inspection. Slip Drill line. Well still open to flare @ 55psi on 1'' choke.
17:30	18:00	Drive to Surat.
18:00		S.D.F.N.

DAILY COST $A: $ 11,465
CUM. COST $A: $19,655
BUDGET $A: $ 209,000
AFE#: 277-0004

SUPERVISOR: J. Reeve.

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Myall Creek #8	**REPORT No.:**	3
DATE:	22/5/03	**CONTRACTOR:**	EWS #4
OBJECTIVE:	Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.		
0700 STATUS:	Continue to nipple up annular preventer & rotating head		

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to location. Weather fine & warm.
06:30	07:00	Morning Safety, Environment & Procedure meeting.
07:00	08:00	FWHP 55psi. Continue to mix KCL. M/U Choke. Shut in well & close the 7-1/16'' master valve, change flare line over to the B section outlet. At 0744 SIWHP 510psi. Open well to flare on 32/64'' choke. Prepare annular preventer for nipple up.
08:00	09:30	Function Emergency shut downs & crown stoppers. N/D & remove flue from capping BOPs. Change out hydraulic fittings on the ODE BOP to suit the EWS Koomey hoses.
09:30	13:00	Functions test annular BOP, leaking hydraulic fluid from the lid seal. Disassemble & service. FWHP 78psi on 1'' choke.
13:00	13:30	Lunch.
13:30	16:30	Continue to service annular BOP. M/U the Primary Jet line. Prepare Blooie line for installation.
1630	17:00	Function test annular BOP – All OK.
17:00	17:30	Nipple up annular BOP.
18:00	18:30	Drive to Surat.
18:30		S.D.F.N.

DAILY COST $A:	$ 10,489
CUM. COST $A:	$ 30,144
BUDGET $A:	$ 209,000.00
AFE#:	**277-0004**

SUPERVISOR: J. Reeve.

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Myall Creek #8	**REPORT No.:**	4
DATE:	23/5/03	**CONTRACTOR:**	EWS #4
OBJECTIVE:	Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.		
0700 STATUS:	Fit the Float valve & M/U the BHA.		

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Weather Fine & Cool.
06:30	06:45	Safety, Procedure & Environment meeting.
06:45	10:00	FWHP 73psi on 1'' choke. Continue to N/U annular preventer. N/U OCA rotating head. Run compressor & Booster, function emergency shut downs including the remote for the booster, all ok. Mix the remainder of the KCL brine.
10:00	13:30	TBM. R/U Blooie line & stands (modify stands for Blooie line for additional height).
13:30	14:00	Lunch
14:00	16:00	Continue to R/U Blooie line and secure to cement anchor blocks. R/U work floor & stairs. R/U handrails for driller. R/U the Tubing tong.
16:00	17:30	Fit valve to the outlet on the blooie line for the drill rig mud return line. FWHP 73psi on 1'' choke. At 1639 hrs shut in the well at & tie in the primary jet line. Tie in the standpipe bleed down line to the Blooie line secondary jet. Spot catwalk & fit V-door. Strap & tally BHA and fishing equipment. Make up the fishing equipment to the float sub.
17:30	18:00	Crew to Surat. At 1742 hrs SIWHP 681psi, open the well to flare on 1" choke, FWHP 73psi.
18:30		S.D.F.N.

DAILY COST $A:	$ 10,548
CUM. COST $A:	$ 40,692
BUDGET $A:	$ 209,000
AFE#:	**277-0004**

Rig Rep: J. Reeve.

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Myall Creek #8	**REPORT No.:**	5
DATE:	24/5/03	**CONTRACTOR:**	EWS #4
OBJECTIVE:	Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.		
0700 STATUS:	RIH to tag fish (Latched successfully first attempt)		

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	**TO**	
06:00	06:30	Drive to Location. Weather Fine & Cool.
06:30	06:45	Safety, Environment & Procedure meeting. Check well FWHP 72psi on 1'' choke.
06:45	07:15	B/O Kelly cock. Fit check valve into the float sub & nipple up connections.
07:15	08:15	Shut in the well & rig up the auto igniter on the blooie line. Function primary jet - OK. Make up JSA for picking up drill collars & tripping in the hole on a live well.
08:15	08:30	SIWHP 658psi bleed down wellbore pressure. Change out elevators & slips to suit the drill collars. M/U Pickup sub into the fishing assembly.
08:30	09:00	Smoko. TBM. JSA for picking up drill collars & Running in the hole with the well live.
09:00	10:30	FWHP 74psi open the second 2'' line of the flare line through the secondary jet & reduce the pressure to 34psi. P/U the fishing BHA as follows; • 4-11/16" Bowen Series 150 over shot dressed with 3 3/32" basket grapple and mill control packer • 3-7/8" Bowen Lubricated Bumper Sub • 3-1/12" Reg x 2-3/8" IF 1F-2R float sub (with float) • One x 4-1/4" drill collar Fit the rotating head rubber onto the bumper sub. Lower the string into the wellhead to the blind rams. Make up the latch on the rotating head. Open the master valve slowly; bleed the well down. Unloaded a lot of condensate at 30psi (Master valve only partly open). Continue to open master valve slowly after waiting for the condensate to unload from the well. Final FWHP 0psi close the 2'' secondary jet line (flare line still open). Check rig floor with the gas sniffer, OK.
10:30	14:00	TBM. FWHP 0psi. RIH with fishing string to 38m no tag, RIH to 52m, 14.9m past the calculated tag mark, did not tag tubing. Pick back up to 35m, rotate with the tong & RIH (no drag, no torque)
14:00	16:00	Organise additional DC and crossovers from Roma.
16:00	17:00	Secure Well. Chain down fishing string. Shut down the primary jet. Leave well flowing to flare on 1" choke plus Blooie line. FWHP 0psi. Some condensate dripping from the Blooie line.
17:00	17:30	Drive to Surat.

DAILY COST $A:	$ 12,448
CUM. COST $A:	$ 53,140
BUDGET $A:	$ 209,000
AFE#:	**277-0004**

Rig Rep: J. Reeve.

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL: Myall Creek #8 **REPORT No.:** 6

DATE: 25/5/03 **CONTRACTOR:** EWS #4

OBJECTIVE: Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.

0700 STATUS: RIH with slickline tools to broach tubing.

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Weather Fine & Warm.
06:30	06:45	Safety, Environment & Procedure meeting.
06:45	07:00	Strap & tally 2-7/8'' EUE N80 6.5# J55 Tubing. Change running equipment to 2-7/8''
07:00	08:30	Lower fishing string ~ 2' & tag the fish. P/U to 59000# fish came free. S/W 38000#. Layout single. Change running equipment to suit the drill collars.
08:30	09:30	Continue to POOH to the float sub.
09:30		Check float sub for gas flow - very strong blow. Install stab valve & tie in to the standpipe line.
10:00	10:30	M/U Second pump line.
10:30	12:00	Pump 5bbls of KCL brine in to tubing @ 0psi. TBM. Pick up on string; remove rotating head rubber with the overshot. Gas & condensate leaking via overshot. RIH & re-land rotating head rubber. Shut pipe rams.
12:00	15:00	Pump further 5bbls of KCL brine in to tubing. Observe the float, still blowing. FWHP 77psi. Pump further 10bbls KCL brine & check the float, still blowing hard. Bleed off tubing pressure via the float.
15:00	15:45	Pump a further 20bbls of KCL brine, FWHP dropping from 77psi. Check float - tubing on vacuum. FWHP 57psi. POOH with fishing assembly. Break out the first single below the overshot and layout overshot with swage and first joint of tubing.
15:45	16:30	Install stab valve in to tubing, Rig up Expertest lubricator. RIH with a 1.85'' gauge ring, hung up @ 130m. POOH, RIH with 1.76'' gauge ring, hung up @ 130m. 1545hrs FWHP 44psi, 1600hrs FWHP 51psi.
16:30	18:00	RIH with 1.76'' lead impression block "LIB" to 130m. POOH no obvious impression. RIH with 1.65'' LIB to 130m. Some small scratches on the face of the LIB, looks like some junk in the tubing. 1630hrs FWHP 59psi. 1700hrs flare out, heavy mist, FWHP 79psi. 1730hrs SITHP (lubricator) 383psi, FWHP 99psi, mist 1745hrs SITHP (lubricator) 415psi FWHP 104psi, mist
18:00	18:30	Crew drive to Surat.
18:30	19:30	Continue to monitor well cleaning up. 1845hrs SITHP (lubricator) 474psi, FWHP 100psi, mist 1933hrs SITHP (lubricator) 433psi, FWHP 78psi, dry gas.

DAILY COST $A:	$ 12,598
CUM. COST $A:	$ 65,738
BUDGET $A:	$ 209,000
AFE#:	**277-0004**

Rig Rep: J. Reeve.

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL : Myall Creek #8 **REPORT No. :** 7

DATE : 26/5/03 **CONTRACTOR :** EWS #4

OBJECTIVE : Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.

0700 STATUS : Mix & Displace LCM slug.

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Weather Fine & Warm.
06:30	06:45	Safety, Environment & Procedure meeting.
06:45	08:00	Check well FCHP69psi, SITHP 380psi. Re-light the flare (still misty) Confirm ID of stabbing valve is > 1.90", RIH with 1.88'' LIB to 130m, POOH, light scratch marks up the outside only.
08:00		Shut in the Annulus. Flow the tubing wide open on 2'', pressure steadied at 34psi with light mist at the flare. Shut in tubing to continue the slickline operation.
	09:00	0838hrs SIWHP 380psi. Open the annulus to the flare. M/U the lubricator & RIH with 1.75'' pineapple tool. Suspect some junk in the hole possible small safety cable from the lights under the sub base. RIH with 1.5'' cable grab, tag at 130m-work tool unable to pass. POOH no junk, both tips burred over on the tool.
09:00	11:00	Redress the cable crab & RIH with no success. POOH. RIH with 1.5'' LIB, some light scratches up the sides. RIH with 1.25'' LIB with 5' of 1.25 bar under the jars. Tag @ 130m, jarred down hard several times, unable to pass 130m. POOH. RIH with 7' of 1.25'' weight bars under the jars, tagged at 133m, work string & jar unable to pass 133m
11:00	12:00	RIH with 1.75'' swaging tool, light tag at 129m worked down to 130m, work string & jar unable to pass corner. POOH.
12:00	12:30	SITHP 353psi, FWHP 63psi on 1'' choke. Bleed down tubing to flare settled @ 15psi with the FWHP 48psi, misty returns from tubing. Shut in to continue with wireline work
12:30	14:00	RIH with 1.9'' pineapple cutter, tag at 130m', work string & jar, made 0.15m. Unable to pass. POOH. Tool mostly worn on the 1.88'' cutter. Add extra knuckle joints & shorter weight stem to the tool assembly. RIH, work string & run to 137m with slight obstruction at 130m, work section 4 times, OK. POOH to change out tool (not wanting to run this tool further incase of debris & becoming stuck)
14:00	16:30	Change over tool string to 1.25'' (4 knuckle joints) M/U 1.36'' blind box. RIH, light tag at 175m then hung up at 200m, work string & jar. Unable to pass. Hanging up on the jars in a bend. POOH change out the jars for a short set. RIH. Work string & jar. Unable to pass 200m. POOH. Rig down Expertest lubricator.
16:30	17:00	Tie in the standpipe. SITHP 351psi, FWHP 63psi. Open tubing to the flare line on 2'' & bleed down to flare. Flow the casing on 1/4'' choke.
17:00	17:30	Drive to Camp.
17:30		S.D.F.N.

DAILY COST $A : 12,048

CUM. COST $A : 77,786

Rig Rep : J. Reeve.

BUDGET $A : 209,000.00

AFE#: 277-0004

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Myall Creek #8	**REPORT No. :**	8
DATE:	27/5/03	**CONTRACTOR :**	EWS #4
OBJECTIVE:	Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.		
0700 STATUS:	RIH with new 2-3/8" EUE tubing string to unload water from well		

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Weather Fine & Warm.
06:30	06:45	Safety, Environment & Procedure meeting.
06:45	07:00	Prepare drums for mixing LCM pill. Check well FWHP 49psi on 2'', FTHP 237psi on 16/64'' choke, both flares burning clean. Shut in the tubing, open annulus choke to 1"
07:00	08:00	Mix & pump ¼ bbl of LCM & gel, FWHP 70psi, displace with 26 bbls of KCL brine, no pressure. Breakout pump lines, observe tubing, on vacuum.
08:00	08:30	FWHP dropping to 63psi and then 42psi then started coming back up. Tubing blowing slightly
08:30	09:00	TBM. Install stripper rubber for 2-3/8" pipe. Start the primary jet. FWHP 53psi Slowly open annular BOP and divert flow to Blooie line.
09:00	09:30	Observe Tubing. Well starting to unload fluid from the blooie line. Strong southerly starting to blow. Make up 2" ball valves onto 2-3/8" x 2" swages. Flow from Blooie line too wet to flare.
09:30	12:30	TBM. POOH, place ball valve into the top each joint prior to pulling. Pup joint looks OK, all other joints bent & cork screwed. 126jts out of the hole, No straight ones yet.
12:30	13:00	Lunch. Blooie line trying to light, still a little too wet.
13:00	15:00	Continue to POOH. All joints badly bent. Recovered 209joints plus 4.18m of joint 210. Joint has folded over at right angles & broke off when we picked up the string. Close the blind rams. Well open on 1'' choke. At 1505hrs shut in the well to re-light the flare bucket. Flare burning again. (Remaining fish = WLRG + 1.2m pup joint + "X" nipple + 2 joints of tubing + 5m of snapped tubing, total length calculated at 25.8m, Top of Fish calc at 2051m)
15:00	15:45	Changeover tubing tongs and prepare to RIH
15:45	17:30	TBM. Fit stripper rubber on to pup joint and install into the rotating head. 1541hrs SIWHP 252psi. Bleed down the well via secondary jet & open the blind rams slowly. RIH with cleanout string as follows; • 2-3/8''EUE saw-tooth collar • 6' x 2-3/8'' pup joint • 2-3/8'' EUE float sub with float fitted • 1 joint of 2-3/8'' EUE tubing • 2-3/8" EUE "X" nipple • 47 joints 2-3/8'' EUE tubing. Close pipe rams & annular preventor. Install stab valve in tubing and chain down

		tubing. Leave well to flare on 1” choke.
17:30	18:00	Drive to Surat.
18:00		S.D.F.N.

DAILY COST $A: 13175
CUM. COST $A: 90961
BUDGET $A: 209,000
AFE#: 277-0004

Rig Rep: J. Reeve.

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Myall Creek #8	**REPORT No.:**	9
DATE:	28/5/03	**CONTRACTOR:**	EWS #4
OBJECTIVE:	Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.		
0700 STATUS:	Nipple down Blooie line, prepare to install logging lubricator		

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Weather Fine & Warm.
06:30	06:45	Safety, Environment & Procedure meeting. FWHP 68 psi, start primary jet and open well to Blooie line.
06:45	10:00	RIH with 212 joints 2-3/8" EUE J55 tubing.
10:00	10:1045	Pick up 3 joints x 2-7/8" EUE N80 tubing, tag top of fish at 2038 m. Attempt to work past fish, taking weight and 10K overpull to pull free.
10:45	11:30	Pick up circulating swivel and mix foam misting fluid.
11:30	14:15	TBM. Pump 5 bbls of foam and circulate with air/mist to unload and cleanup well. Unloaded small amount of water & condensate. Pump 5 bbl brine followed by dry air and blow hole until dry.
14:15	14:30	Divert air to primary jet, lay out swivel and 2-7/8" tubing.
14:30	17:30	Trip out standing tubing in derrick. Break and layout float sub and mill shoe. Close and lock blind rams and flow well to flare
17:30	18:00	Drive to Surat.
18:00		S.D.F.N.

DAILY COST $A:	$ 15,051
CUM. COST $A:	$ 103,621
BUDGET $A:	$ 209,000
AFE#:	**277-0004**

Rig Rep: J. Dingle

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Myall Creek #8	**REPORT No.:**	10
DATE:	29/5/03	**CONTRACTOR:**	EWS #4
OBJECTIVE:	Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Recomplete the well.		
0700 STATUS:	Bleed casing pressure after setting packer, prepare to RIH tubing to fill casing with brine		

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Light rain
06:30	06:45	Safety, Environment & Procedure meeting. Check well FWHP 72 psi.
06:45	09:00	Rig down tubing tong and work floor. Nipple down Blooie line and RBOP. SIWHP @ 0830 hrs SIWHP 930psi. Open well to flare
09:00	10:00	Nipple up Schlumberger adapter flange to the top of the annular BOP. Rig up work floor and stairs.
10:00	10:45	Hold safety meeting. Pick up and install Schlumberger lubricator
10:45	11:15	Close 7-1/16" master valve, open blind rams and fill lubricator with water. Pressure test to 3000psi for 15 mins- OK.
11:15	11:30	Bleed water from lubricator. Open master valve and shut well in.
11:30	13:15	RIH with GR CCL and junk basket to 2010m. Run GR correlation log back to 1900m. POH and close master valve. Bleed pressure from lubricator.
13:15	13:45	Rig down lubricator and lay out junk basket. Hold safety meeting. Make up packer and setting tool. SIWHP @ 1320 hrs = 895psi, Open well to flare.
13:45	16:15	Make up and pressure test lubricator. Shut well in at 1400 hrs, SIWHP 320psi. RIH and correlate to set packer at 2008m. Attempt to set packer- no indication of packer setting or releasing. POH, close master valve, bleed pressure off lubricator
16:15	16:45	Lay out lubricator and change Schlumberger tool configuration. SIWHP @ 1620 hrs 1160psi, open well to flare. Removed the GR and replaced it with a CCL tool. Also had to change some of the truck wiring to communicate with the different set up
16:45	18:30	Make up and pressure test lubricator. Shut well in at 1705, SIWHP 630psi. RIH and correlate and set packer at 2008m. SIWHP when packer was set at 1800 hrs 1000psi. POH and close master valve and blind rams. SIWHP at 18:30,1000psi
18:30	19:00	Drive to Surat
19:00		S.D.F.N.

DAILY COST $A:	$ 40,548
CUM. COST $A:	$ 144,160
BUDGET $A:	$ 209,000

Rig Rep: J. Dingle

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Myall Creek #8	**REPORT No.:**	11
DATE:	29/5/03	**CONTRACTOR:**	EWS #4
OBJECTIVE:	Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Re-complete the well.		
0700 STATUS:	Remove master valve before removing old tubing spool.		

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Weather Fine
06:30	06:45	Safety, Environment & Procedure meeting. SIWHP 965 psi. Open well to flare
06:45	08:00	Rig down lubricator and adapter flange. Pressure dropped to zero psi and flare went out.
08:00	10:30	Install stripping head. Make up float sub and RIH with 2 3/8" tubing to 1990m. Started pumping 9.0ppg brine into the annulus whilst running tubing.
10:30	14:00	Make up lines and circulate at 3BPM to fill the hole. Gassy returns at 1130 hrs, continue to circulate out air and gas bubbles.
14:00	16:30	POH with tubing.
16:30	17:30	Rig down work floor. Nipple down BOP's. 7-1/16" master valve and spool remain on the wellhead.
17:30	18:00	Drive to Surat
18:00		S.D.F.N.

DAILY COST $A:	$ 9,540
CUM. COST $A:	$ 154,747
BUDGET $A:	$ 209,000
AFE#:	**277-0004**

Rig Rep: J Dingle

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL: Myall Creek #8 **REPORT No.:** 12

DATE: 30/5/03 **CONTRACTOR:** EWS #4

OBJECTIVE: Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Re-complete the well.

0700 STATUS: Unload & dry up well

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Weather Fine
06:30	06:45	Safety, Environment & Procedure meeting. SIWHP 965 psi. Open well to flare
06:45	07:45	Remove master valve and remove studs from spacer spool and tubing spool
07:45	11:45	Remove spacer spool and tubing spool. Hand tubing spool over to Police. Install new tubing spool. Energise and pressure test bushing to 3000psi. Nipple up BOP's and pressure test to 3000psi
11:45	13:00	Rig up work floor and tubing handling equipment.
13:00	15:00	Make up seal assembly, pup joint and sliding sleeve and RIH. Latch into packer. Picked up to 8000# over string weight to confirm latch had engaged. Measure tubing to allow for 4000# compression. Released seal assembly and pulled back to space out.
15:00	15:30	Made up 8' pup joint, tubing hanger with check valve installed and landing joint. RIH, latch into packer and slacked off 4000# to land tubing hanger. Secure tubing hanger
15:30	17:30	Nipple down BOP's. Rig down work floor. Make up Xmas tree and pressure test bonnet to 5000psi. Pressure test tree to 3000psi. Remove check valve and rig up circulating lines and prepare to unload well
17:30	18:00	Drive to Surat
18:00		S.D.F.N.

DAILY COST $A:	$ 57,915
CUM. COST $A:	$ 212,662
BUDGET $A:	$ 209,000
AFE#:	**277-0004**

Rig Rep: J Dingle

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL:	Myall Creek #8	**REPORT No.:**	13
DATE:	31/5/03	**CONTRACTOR:**	EWS #4
OBJECTIVE:	Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Re-complete the well.		
0700 STATUS:	Pull PX plug and flow well to cleanup		

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Weather Fine
06:30	06:45	Safety, Environment & Procedure meeting.
06:45	13:00	Begin to pressure up on tubing with air pack & chase with foamy water slugs to unload 7" casing annulus. Mainly brine returns. Circulating pressure 1100psi.
13:00	14:00	Well began to unload foamy liquid. Only air pack being used to push & clean out liquid. Circulating pressure down to 400psi.
14:00	14:30	Flow dried out to a mist. Stop pumping with air & change over lines to flow air down casing annulus & up tubing
14:30	15:30	Commence flowing air down casing annulus to unload up tubing. Pressure built to 550psi & settled out to 450psi. ~2bbls of liquid returned, flow changed to mist.
15:30	16:00	Rig up Expertest slick line unit
16:00	17:00	RIH with drift to "PX" plug at 2012mRT. POOH.
17:00	17:30	RIH with shifting tool for "XO" SSD. Trouble RIH due to wellhead grease holding up the tool. RIH to 20ft & hold up. POOH - tool covered in wellhead grease. RIH & hold up again, POOH, same again. Clear grease from wellhead & reset tool to RIH tomorrow morning.
17:30	18:00	Drive to Surat
18:00		S.D.F.N.

DAILY COST $A:	$ 11,190
CUM. COST $A:	$ 223,852
BUDGET $A:	$ 209,000
AFE#:	**277-0004**

Rig Rep: J Dingle

Oil Company of Australia

PETROLEUM ENGINEERING

DAILY COMPLETION / WORKOVER REPORT

WELL: Myall Creek #8 **REPORT No.:** 14

DATE: 01/06/03 **CONTRACTOR:** EWS #4

OBJECTIVE: Fish the 2-3/8'' tubing String. Install a Permanent Packer. Recover the Tubing spool & Re-complete the well.

0700 STATUS: Job Completed - Rig Released to NR7

TIME		OPERATIONS PERFORMED PAST 24 HOURS
FROM	TO	
06:00	06:30	Drive to Location. Weather overcast & threatening rain
06:30	06:30	Safety, Environment & Procedure meeting.
06:30	07:30	RIH with shifting tool for "XO" SSD. Close SSD & POOH.
07:30	07:50	RIH with 2" SB pulling tool. Hold above prong.
07:50	08:10	Pressure tubing to 1075psi with air compressor
08:10	08:20	Pull prong & POOH slickline. Tubing equalised to 2337psi.
08:20	09:00	RIH with 2" GS tool to pull plug. Wait above plug for 10minutes to check pressure is steady (pressure = 2520psi).
09:00	09:30	POOH slickline & X lock plug.
09:30	10:00	R/D Expertest. Line up chicksans to flow well open to pit.
10:00	10:55	SITHP = 2550psi. Flow well to pit without a choke. FTHP bled to 100psi.
10:55	12:00	Install variable choke off wing valve & flow well on 32/64" orifice. FTHP pressure at end of flow period = 500psi
12:00	18:00	Carrier moving to New Royal 07. Rest of rig in Surat. SITHP at 1530hrs: 2450psi (SICHP = 0psi).

DAILY COST $A: $ 15,750

CUM. COST $A: $ 239,602

Rig Rep: G Ottaviano **BUDGET $A:** $ 209,000

AFE#: **277-0004**

APPENDIX 2

GEOLOGICAL REPORTS

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	1-3	**DAYS FROM SPUD:**	3	**DATE:**	24/03/2003
0000hrs Depth:	**256.0**	**Last Depth:**	**223.0**	**24 HR PROGRESS:**	**33.0**	**PTD:**	**2092**

0600 OPS: 25/03/03 - Drilling at 380 metres at 0600hrs, through the Bungil Formation (324m).

REMARKS: Nipple up BOP, pressure test, RIH drill to 227m, FIT, drill ahead to 256m

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0				242.5	
Bungil Fm.	324	-74.5	311.0	-60.5	13	L	-74.5	-73.6	1m L
Mooga Sst.			444.0	-193.5				-205.0	
Orallo Fm.			631.0	-380.5				-389.9	
Gubberamunda Sst.			762.0	-511.5				-520.5	
Westbourne Fm.			885.0	-634.5				-651.4	
Walloon Coal Ms.			1078.0	-827.5				-840.8	
Hutton Sst.			1344.0	-1093.5				-1094.6	
Evergreen Fm.			1532.0	-1281.5				-1282.2	
Boxvale Sonic Marker			1577.0	-1326.5				-1323.0	
Boxvale Sandstone			1579.0	-1328.5				-1325.7	
basal Evergreen Sst.			1640.0	-1389.5				-1391.6	
Moolayember Fm.			1649.0	-1398.5				-1397.7	
Snake Creek Mdst			1819.0	-1568.5				-1560.3	
Showgrounds Sst.			1841.0	-1590.5				-1581.2	
Rewan Formation			1850.0	-1599.5				-1590.8	
Basal Rewan Ss.			1944.0	-1693.5				-1685.0	
Bandanna Formation			1958.0	-1707.5				-1691.7	
Black Alley Shale			2022.0	-1771.5				-1755.8	
Winnathoola Coal Mbr			2033.0	-1782.5				-1767.1	
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite picks

Interval			ROP (ave)	Lithology Description
223.0		324.0	0.8 – 4.2 (1.8)	SILTSTONE. SILTSTONE, medium to dark grey, trace grey/green, argillaceous, trace arenaceous, soft to firm, blocky to subblocky.
Gas			**Units:**	nil **Composition (%):** / / / /
Show Details / %CO2				

325.0		370.0	0.4 – 3.9 (0.7)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, transparent, pale grey to off white, occasionally clear, very fine to fine, occasionally medium, moderately well sorted, sub-angular to sub-rounded, weak to moderately calcareous cement, white to off white argillaceous matrix, trace siderite, friable to moderate hard, fair visible porosity, no fluorescence. SILTSTONE, medium to dark grey, argillaceous, grading to arenaceous in part, soft to firm, predominantly blocky.
			Units:	nil **Composition (%):** / / / /
Show Details / %CO2				

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OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	4	**DAYS FROM SPUD:**	4	**DATE:**	25/03/2003
0000hrs Depth:	**1117.0**	**Last Depth:**	**256.0**	**24 HR PROGRESS:**	**861.0**	**PTD:**	**2092**
0600 OPS:	26/03/03 - Drilling at 1300 metres at 0600hrs, through the Walloon Coal Measures (1076m).						
REMARKS:	Drilling ahead at bit performance with surveys.						

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0				242.5	
Bungil Fm.	324	-74.5	311.0	-60.5	13	L	-74.5	-73.6	0.9m L
Mooga Sst.	454	-203.5	444.0	-193.5	10	L	-203.5	-205.0	1.5mH
Orallo Fm.	632	-381.5	631.0	-380.5	1	L	-381.5	-389.9	8.4mH
Gubberamunda Sst.	768	-517.5	762.0	-511.5	6	L	-517.5	-520.5	3mH
Westbourne Fm.	888	-637.5	885.0	-634.5	3	L	-637.5	-651.4	13.9mH
Walloon Coal Ms.	1076	-825.5	1078.0	-827.5	2	L	-825.5	-840.8	15.3mH
Hutton Sst.			1344.0	-1093.5				-1094.6	
Evergreen Fm.			1532.0	-1281.5				-1282.2	
Boxvale Sonic Marker			1577.0	-1326.5				-1323.0	
Boxvale Sandstone			1579.0	-1328.5				-1325.7	
basal Evergreen Sst.			1640.0	-1389.5				-1391.6	
Moolayember Fm.			1649.0	-1398.5				-1397.7	
Snake Creek Mdst			1819.0	-1568.5				-1560.3	
Showgrounds Sst.			1841.0	-1590.5				-1581.2	
Rewan Formation			1850.0	-1599.5				-1590.8	
Basal Rewan Ss.			1944.0	-1693.5				-1685.0	
Bandanna Formation			1958.0	-1707.5				-1691.7	
Black Alley Shale			2022.0	-1771.5				-1755.8	
Winnathoola Coal Mbr			2033.0	-1782.5				-1767.1	
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite picks

Interval			ROP (ave)	Lithology Description
325.0		454.0	0.2 - 5.6 (0.9)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, transparent, pale grey to off white, occasionally clear, very fine to fine, occasionally medium, moderately well sorted, sub-angular to sub-rounded, weak to moderately calcareous cement, white to off white argillaceous matrix, trace siderite, friable to moderate hard, fair visible porosity, no fluorescence. SILTSTONE, medium to dark grey, argillaceous, grading to arenaceous in part, soft to firm, predominantly blocky.
Gas			**Units:**	nil **Composition (%):** / / / /
Show Details / %CO2				

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453.0		632.0	0.2 – 2.7 (0.5)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, clear to translucent, frosted, very fine to medium, trace coarse grains, sub-angular to angular, sub-rounded in part, weak siliceous cement, white argillaceous matrix, rare siderite, quartz overgrowths, rare glauconite, loose, good visible porosity, no fluorescence. SILTSTONE, light grey, trace medium to dark grey, arenaceous, occasionally grading to very fine SANDSTONE, carbonaceous specks, trace micromicaceous, unconsolidated, amorphous.										
			Units:	6.9	**Composition (%):**	100%	/		/		/		/	
Show Details / %CO2														

632.0		768.0	0.3 – 1.7 (0.5)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, clear to translucent, pale yellow, pale grey, very fine to medium, predominately fine, sub-rounded to sub-angular, well sorted, weak siliceous cement, soft white argillaceous matrix, glauconite, carbonaceous specks, loose, good inferred porosity, no fluorescence. SILTSTONE, light grey, occasionally brown, argillaceous, arenaceous in part, carbonaceous specks, firm to moderate hard, sub-blocky to sub-fissile.										
			Units:	6.0	**Composition (%):**	100%	/		/		/		/	
Show Details / %CO2														

768.0		888.0	0.2 – 6.6 (0.5)	Massive SANDSTONE with trace SILTSTONE. SANDSTONE, clear to translucent, frosted, very fine to medium, sub-angular to sub-rounded, rare white argillaceous matrix, trace pink/red garnet, quartz overgrowths, loose, good inferred porosity, no fluorescence.										
			Units:	3.2	**Composition (%):**	100%	/		/		/		/	
Show Details / %CO2														

888.0		1076.0	0.3 – 7.0 (0.3)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, pale grey to pale brown, translucent, occasionally clear, frosted, very fine to fine, occasionally medium, weak siliceous cement, white argillaceous matrix, carbonaceous specks, occasionally quartz overgrowths, loose, fair to good inferred porosity, no fluorescence. SILTSTONE, medium to dark grey, grey/brown, arenaceous, occasionally argillaceous, micromicaceous, carbonaceous specks, carbonaceous striations, brittle to moderate hard, sub-blocky to sub-fissile.										
			Units:	16.1	**Composition (%):**	100%	/		/		/		/	
Show Details / %CO2														

1076.0		1300.0	N/A @ report time	SILTSTONE with interbedded SANDSTONE. SILTSTONE, moderate grey to grey-brown, firm, sub-fissile to sub-blocky, carbonaceous specks, argillaceous to very finely arenaceous; minor light to moderate yellow-brown to brown, moderately hard, sub-fissile, dolomitic. SANDSTONE, white to pale grey, very fine to fine, sub-rounded, moderate sorted, abundant clay matrix, lithic, feldspathic, carbonaceous material, slightly calcareous, moderately hard, poor porosity.										
			Units:		**Composition (%):**		/		/		/		/	
Show Details / %CO2														

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OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	5	**DAYS FROM SPUD:**	5	**DATE:**	26/03/2003
0000hrs Depth:	**1645.0**	**Last Depth:**	**1117.0**	**24 HR PROGRESS:**	**528.0**	**PTD:**	**2092**
0600 OPS:	27/03/03 - Drilling at 1773 metres at 0600hrs, through the Moolayember Formation (1649m).						
REMARKS:	Drilling ahead at bit performance with surveys.						

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0				242.5	
Bungil Fm.	324	-74.5	311.0	-60.5	13	L	-74.5	-73.6	0.9m L
Mooga Sst.	454	-203.5	444.0	-193.5	10	L	-203.5	-205.0	1.5mH
Orallo Fm.	632	-381.5	631.0	-380.5	1	L	-381.5	-389.9	8.4mH
Gubberamunda Sst.	768	-517.5	762.0	-511.5	6	L	-517.5	-520.5	3mH
Westbourne Fm.	888	-637.5	885.0	-634.5	3	L	-637.5	-651.4	13.9mH
Walloon Coal Ms.	1076	-825.5	1078.0	-827.5	2	L	-825.5	-840.8	15.3mH
Hutton Sst.	1334	-1083.5	1344.0	-1093.5	10	L	-1083.5	-1094.6	11.1mH
Evergreen Fm.	1533	-1282.5	1532.0	-1281.5	1	L	-1282.5	-1282.2	0.3mL
Boxvale Sonic Marker	-	-	1577.0	-1326.5	-	-	-	-1323.0	-
Boxvale Sandstone	1579	-1328.5	1579.0	-1328.5	0	-	-1328.5	-1325.7	2.8mL
basal Evergreen Sst.	1641	-1390.5	1640.0	-1389.5	1	L	-1390.5	-1391.6	1.1mH
Moolayember Fm.	1649	-1398.5	1649.0	-1398.5	0	-	-1398.5	-1397.7	0.8mL
Snake Creek Mdst			1819.0	-1568.5				-1560.3	
Showgrounds Sst.			1841.0	-1590.5				-1581.2	
Rewan Formation			1850.0	-1599.5				-1590.8	
Basal Rewan Ss.			1944.0	-1693.5				-1685.0	
Bandanna Formation			1958.0	-1707.5				-1691.7	
Black Alley Shale			2022.0	-1771.5				-1755.8	
Winnathoola Coal Mbr			2033.0	-1782.5				-1767.1	
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite picks

Interval			ROP (ave)	Lithology Description
1076.0		1334.0	0.5 – 5.5 (1.1)	SILTSTONE with interbedded SANDSTONE with trace COAL. SILTSTONE, moderate grey to grey-brown, firm, sub-fissile to sub-blocky, carbonaceous specks, argillaceous to very finely arenaceous; minor light to moderate yellow-brown to brown, moderately hard, sub-fissile, dolomitic. SANDSTONE, white to pale grey, very fine to fine, sub-angular to sub-rounded, moderate sorted, moderate to abundant clay matrix, slightly calcareous, lithic, feldspathic, moderately hard, poor porosity. COAL, dull black, conchoidal fracture.

Gas	**Units:**	3.1	**Composition (%):**	100%	/		/		/		/		
Show Details / %CO2													

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1334.0		1533.0	0.6 – 16.4 (2.3)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, frosted, pale grey, translucent, very fine to medium, predominately fine, moderate sorted, sub-angular to sub-rounded, weak calcareous cement, white argillaceous matrix, carbonaceous specks, trace quartz, overgrowths, loose, fair inferred porosity, no fluorescence. SILTSTONE, medium to dark grey, grey/brown in part, common very fine, arenaceous, common carbonaceous specks, micromicaceous, moderate hard to hard, blocky to sub-blocky.										
			Units:	12.4	**Composition (%):**	100%	/		/		/		/	
Show Details / %CO2														

1533.0		1579.0	0.9 – 6.9 (2.2)	SILTSTONE with interbedded SANDSTONE SANDSTONE, clear to translucent, white to pale grey, fine to medium, rare coarse grains, moderate sorted, sub-angular to sub-rounded, weak calcareous cement, common kaolinite matrix, friable, common loose, poor visible & inferred porosity, no fluorescence. SILTSTONE, medium to dark grey, grey/brown, argillaceous, occasionally arenaceous, micromicaceous, carbonaceous specks, brittle to hard, predominately moderate hard, sub-blocky to sub-fissile.										
			Units:	16.1	**Composition (%):**	100%	/		/		/		/	
Show Details / %CO2														

1579.0		1641.0	1.1 – 5.4 (2.5)	Massive SANDSTONE with trace SILTSTONE. SANDSTONE, (Boxvale Ss.) white, very fine to fine, sub-angular to sub-rounded, moderate to well sorted, moderate clay matrix, weak silica cement, friable to moderately hard, poor porosity. Also grey, very fine, silty, lithic, feldspathic, very poor porosity.										
			Units:	9.4	**Composition (%):**	100%	/		/		/		/	
Show Details / %CO2														

1641.0		1649.0	1.0 – 3.2 (1.8)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, translucent white, very fine to coarse, occasionally very coarse, angular to sub-rounded, poorly sorted, moderate dispersive clay matrix, trace pink-red garnet, rare lithics, weak silica cement, friable, fair porosity. SILTSTONE, moderate to dark grey to grey-brown, firm to hard, sub-blocky, micro-micaceous and carbonaceous in part, argillaceous to arenaceous.										
			Units:	14.5	**Composition (%):**	100%	/		/		/		/	
Show Details / %CO2														

1649.0		1773.0	0.9 – 7.2 (1.9)	SILTSTONE with interbedded SANDSTONE SILTSTONE, moderate to dark grey to grey-brown, firm to hard, sub-blocky, micro-micaceous and carbonaceous in part, argillaceous to arenaceous. SANDSTONE, light bluish grey, very fine to medium, sub-angular to sub-rounded, moderate to well sorted, moderate clay matrix, common bluish black and greenish grey lithics, minor feldspar, occasional carbonaceous laminae, calcareous in part, friable, poor to fair porosity.										
			Units:	66.5	**Composition (%):**	93	/	6	/	1	/		/	
Show Details / %CO2														

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OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	6	**DAYS FROM SPUD:**	6	**DATE:**	27/03/2003
0000hrs Depth:	**1875.0**	**Last Depth:**	**1645.0**	**24 HR PROGRESS:**	**230.0**	**PTD:**	**2092**
0600 OPS:	28/03/03 – run in hole to fish junk						
REMARKS:	Drilled ahead to 1875, conduct wiper trip, run in hole, and pull out of hole for fishing tools to retrieve junk down hole.						

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0				242.5	
Bungil Fm.	324	-74.5	311.0	-60.5	13	L	-74.5	-73.6	0.9m L
Mooga Sst.	454	-203.5	444.0	-193.5	10	L	-203.5	-205.0	1.5mH
Orallo Fm.	632	-381.5	631.0	-380.5	1	L	-381.5	-389.9	8.4mH
Gubberamunda Sst.	768	-517.5	762.0	-511.5	6	L	-517.5	-520.5	3mH
Westbourne Fm.	888	-637.5	885.0	-634.5	3	L	-637.5	-651.4	13.9mH
Walloon Coal Ms.	1076	-825.5	1078.0	-827.5	2	L	-825.5	-840.8	15.3mH
Hutton Sst.	1334	-1083.5	1344.0	-1093.5	10	L	-1083.5	-1094.6	11.1mH
Evergreen Fm.	1533	-1282.5	1532.0	-1281.5	1	L	-1282.5	-1282.2	0.3mL
Boxvale Sonic Marker	-	-	1577.0	-1326.5	-	-	-	-1323.0	-
Boxvale Sandstone	1579	-1328.5	1579.0	-1328.5	0	-	-1328.5	-1325.7	2.8mL
basal Evergreen Sst.	1641	-1390.5	1640.0	-1389.5	1	L	-1390.5	-1391.6	1.1mH
Moolayember Fm.	1649	-1398.5	1649.0	-1398.5	0	-	-1398.5	-1397.7	0.8mL
Snake Creek Mdst	1803	-1552.5	1819.0	-1568.5	16	H	-1552.5	-1560.3	7.8mH
Showgrounds Sst.	1825	-1574.5	1841.0	-1590.5	16	H	-1574.5	-1581.2	6.7mH
Rewan Formation	1834	-1583.5	1850.0	-1599.5	16	H	-1583.5	-1590.8	7.3mH
Basal Rewan Ss.			1944.0	-1693.5				-1685.0	
Bandanna Formation			1958.0	-1707.5				-1691.7	
Black Alley Shale			2022.0	-1771.5				-1755.8	
Winnathoola Coal Mbr			2033.0	-1782.5				-1767.1	
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite picks

Interval			ROP (ave)	Lithology Description
1773.0		1803.0	1.8 – 5.2 (2.7)	SILTSTONE with interbedded SANDSTONE SILTSTONE, moderate to dark grey to grey-brown, firm to hard, sub-blocky, micro-micaceous and carbonaceous in part, argillaceous to arenaceous. SANDSTONE, light bluish grey, very fine to medium, sub-angular to sub-rounded, moderate to well sorted, moderate clay matrix, common bluish black and greenish grey lithics, minor feldspar, occasional carbonaceous laminae, calcareous in part, friable, poor to fair porosity.

Gas	**Units:**	60.9	**Composition (%):**	90	/	8	/	2	/		/
Show Details / %CO2											

1803.0		1825.0	1.4 – 5.8 (2.4)	SILTSTONE with interbedded SANDSTONE SILTSTONE, medium to dark grey, trace grey/brown, argillaceous, firm, abundant very fine carbonaceous specks & mica flakes, common sandy lenses. SANDSTONE, white, very fine, argillaceous, siliceous cement, moderate hard, poor porosity.

Gas	**Units:**	85	**Composition (%):**	89	/	8	/	3	/	Tr	/
Show Details / %CO2											

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1825.0		1834.0	1.2 – 3.3 (2.0)	SANDSTONE with interbedded SILTSTONE SANDSTONE, clear to translucent, pale green to pale grey, very fine to medium, fair to good sorted, sub-angular to sub-rounded, weak siliceous cement, white argillaceous matrix, trace glauconite, rare siderite, carbonaceous specks, firm to hard, predominately moderate hard, poor visible & fair to moderate visible porosity. SILTSTONE, dark grey to grey/brown, argillaceous, firm, sub-fissile.										
Gas			**Units:**	117.8	**Composition (%):**	90	/	7	/	3	/		/	
Show Details / %CO2														

1834.0		1875.0	0.5 – 4.8 (2.6)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, pale grey to pale grey/green, pale brown, pale green to green, clear to translucent, frosted, very fine to medium, moderate poor sorted, sub-rounded to sub-angular, moderate siliceous cement, white to pale green argillaceous matrix, glauconite, siderite, carbonaceous specks, moderate hard to hard aggregates, predominately loose, poor visible & fair inferred porosity, no fluorescence. SILTSTONE, a. a. – brown/red, brown, brown/grey, pale to medium grey, orange in part, pale green, argillaceous, occasionally arenaceous, micromicaceous, carbonaceous specks, brittle to moderate hard, hard in part, sub-blocky to sub-fissile.										
Gas			**Units:**	540	**Composition (%):**	82	/	10	/	5	/	3	/	
Show Details / %CO2														

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	7	**DAYS FROM SPUD:**	7	**DATE:**	28/03/2003
0000hrs Depth:	**1875.0**	**Last Depth:**	**1875.0**	**24 HR PROGRESS:**	**0.0**	**PTD:**	**2092**
0600 OPS:	29/03/03 – pull out of hole.						
REMARKS:	Make up fishing tool; circulate bottoms up and fish for metal debris, unsuccessful. Run in hole, no continuation in drilling, pull out of hole.						

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are			**244mm Casing Shoe =**		222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE			**178mm Casing Shoe =**		xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0				242.5	
Bungil Fm.	324	-74.5	311.0	-60.5	13	L	-74.5	-73.6	0.9m L
Mooga Sst.	454	-203.5	444.0	-193.5	10	L	-203.5	-205.0	1.5mH
Orallo Fm.	632	-381.5	631.0	-380.5	1	L	-381.5	-389.9	8.4mH
Gubberamunda Sst.	768	-517.5	762.0	-511.5	6	L	-517.5	-520.5	3mH
Westbourne Fm.	888	-637.5	885.0	-634.5	3	L	-637.5	-651.4	13.9mH
Walloon Coal Ms.	1076	-825.5	1078.0	-827.5	2	L	-825.5	-840.8	15.3mH
Hutton Sst.	1334	-1083.5	1344.0	-1093.5	10	L	-1083.5	-1094.6	11.1mH
Evergreen Fm.	1533	-1282.5	1532.0	-1281.5	1	L	-1282.5	-1282.2	0.3mL
Boxvale Sonic Marker	-	-	1577.0	-1326.5	-	-	-	-1323.0	-
Boxvale Sandstone	1579	-1328.5	1579.0	-1328.5	0	-	-1328.5	-1325.7	2.8mL
basal Evergreen Sst.	1641	-1390.5	1640.0	-1389.5	1	L	-1390.5	-1391.6	1.1mH
Moolayember Fm.	1649	-1398.5	1649.0	-1398.5	0	-	-1398.5	-1397.7	0.8mL
Snake Creek Mdst	1803	-1552.5	1819.0	-1568.5	16	H	-1552.5	-1560.3	7.8mH
Showgrounds Sst.	1825	-1574.5	1841.0	-1590.5	16	H	-1574.5	-1581.2	6.7mH
Rewan Formation	1834	-1583.5	1850.0	-1599.5	16	H	-1583.5	-1590.8	7.3mH
Basal Rewan Ss.			1944.0	-1693.5				-1685.0	
Bandanna Formation			1958.0	-1707.5				-1691.7	
Black Alley Shale			2022.0	-1771.5				-1755.8	
Winnathoola Coal Mbr			2033.0	-1782.5				-1767.1	
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite picks

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	8	**DAYS FROM SPUD:**	8	**DATE:**	29/03/2003
0000hrs Depth:	**1875.0**	**Last Depth:**	**1875.0**	**24 HR PROGRESS:**	**0.0**	**PTD:**	**2092**

0600 OPS: 30/03/03 – 0600hrs; milling down hole debris, approx 5m drilled.

REMARKS: All attempts to retrieve fish have been unsuccessful.

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0				242.5	
Bungil Fm.	324	-74.5	311.0	-60.5	13	L	-74.5	-73.6	0.9m L
Mooga Sst.	454	-203.5	444.0	-193.5	10	L	-203.5	-205.0	1.5mH
Orallo Fm.	632	-381.5	631.0	-380.5	1	L	-381.5	-389.9	8.4mH
Gubberamunda Sst.	768	-517.5	762.0	-511.5	6	L	-517.5	-520.5	3mH
Westbourne Fm.	888	-637.5	885.0	-634.5	3	L	-637.5	-651.4	13.9mH
Walloon Coal Ms.	1076	-825.5	1078.0	-827.5	2	L	-825.5	-840.8	15.3mH
Hutton Sst.	1334	-1083.5	1344.0	-1093.5	10	L	-1083.5	-1094.6	11.1mH
Evergreen Fm.	1533	-1282.5	1532.0	-1281.5	1	L	-1282.5	-1282.2	0.3mL
Boxvale Sonic Marker	-	-	1577.0	-1326.5	-	-	-	-1323.0	-
Boxvale Sandstone	1579	-1328.5	1579.0	-1328.5	0	-	-1328.5	-1325.7	2.8mL
basal Evergreen Sst.	1641	-1390.5	1640.0	-1389.5	1	L	-1390.5	-1391.6	1.1mH
Moolayember Fm.	1649	-1398.5	1649.0	-1398.5	0	-	-1398.5	-1397.7	0.8mL
Snake Creek Mdst	1803	-1552.5	1819.0	-1568.5	16	H	-1552.5	-1560.3	7.8mH
Showgrounds Sst.	1825	-1574.5	1841.0	-1590.5	16	H	-1574.5	-1581.2	6.7mH
Rewan Formation	1834	-1583.5	1850.0	-1599.5	16	H	-1583.5	-1590.8	7.3mH
Basal Rewan Ss.			1944.0	-1693.5				-1685.0	
Bandanna Formation			1958.0	-1707.5				-1691.7	
Black Alley Shale			2022.0	-1771.5				-1755.8	
Winnathoola Coal Mbr			2033.0	-1782.5				-1767.1	
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite picks

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	9	**DAYS FROM SPUD:**	9	**DATE:**	30/03/2003
0000hrs Depth:	**1883.0**	**Last Depth:**	**1875.0**	**24 HR PROGRESS:**	**8.0**	**PTD:**	**2092**
0600 OPS:	31/03/03 – drilling ahead with new bit in the Rewan Formation						
REMARKS:	A ***.pdf** file will be sent when sufficient data has been collected						

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0				242.5	
Bungil Fm.	324	-74.5	311.0	-60.5	13	L	-74.5	-73.6	0.9m L
Mooga Sst.	454	-203.5	444.0	-193.5	10	L	-203.5	-205.0	1.5mH
Orallo Fm.	632	-381.5	631.0	-380.5	1	L	-381.5	-389.9	8.4mH
Gubberamunda Sst.	768	-517.5	762.0	-511.5	6	L	-517.5	-520.5	3mH
Westbourne Fm.	888	-637.5	885.0	-634.5	3	L	-637.5	-651.4	13.9mH
Walloon Coal Ms.	1076	-825.5	1078.0	-827.5	2	L	-825.5	-840.8	15.3mH
Hutton Sst.	1334	-1083.5	1344.0	-1093.5	10	L	-1083.5	-1094.6	11.1mH
Evergreen Fm.	1533	-1282.5	1532.0	-1281.5	1	L	-1282.5	-1282.2	0.3mL
Boxvale Sonic Marker	-	-	1577.0	-1326.5	-	-	-	-1323.0	-
Boxvale Sandstone	1579	-1328.5	1579.0	-1328.5	0	-	-1328.5	-1325.7	2.8mL
basal Evergreen Sst.	1641	-1390.5	1640.0	-1389.5	1	L	-1390.5	-1391.6	1.1mH
Moolayember Fm.	1649	-1398.5	1649.0	-1398.5	0	-	-1398.5	-1397.7	0.8mL
Snake Creek Mdst	1803	-1552.5	1819.0	-1568.5	16	H	-1552.5	-1560.3	7.8mH
Showgrounds Sst.	1825	-1574.5	1841.0	-1590.5	16	H	-1574.5	-1581.2	6.7mH
Rewan Formation	1834	-1583.5	1850.0	-1599.5	16	H	-1583.5	-1590.8	7.3mH
Basal Rewan Ss.			1944.0	-1693.5				-1685.0	
Bandanna Formation			1958.0	-1707.5				-1691.7	
Black Alley Shale			2022.0	-1771.5				-1755.8	
Winnathoola Coal Mbr			2033.0	-1782.5				-1767.1	
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite picks

1875.0		1883.0	6.0 – 13.8 (11.2)	SILTSTONE: with interbedded SANDSTONE. SILTSTONE: – brown/red, brown/grey, pale to medium grey, orange in part, pale green, argillaceous, occasionally arenaceous, micromicaceous, carbonaceous specks, brittle to moderate hard, hard in part, sub-blocky to sub-fissile. SANDSTONE, pale grey to pale grey/green, pale brown, pale green to green, clear to translucent, frosted, very fine to medium, moderate poor sorted, sub-rounded to sub-angular, moderate siliceous cement, white to pale green argillaceous matrix, glauconite, siderite, carbonaceous specks, moderate hard to hard aggregates, predominately loose, poor visible & fair inferred porosity, no fluorescence.

Gas	**Units:**	51	**Composition (%):**	91	/	7	/	2	/		/	
Show Details / %CO2												

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	10	**DAYS FROM SPUD:**	10	**DATE:**	31/03/2003
0000hrs Depth:	**1972.0**	**Last Depth:**	**1883.0**	**24 HR PROGRESS:**	**89.0**	**PTD:**	**2092**

0600 OPS: 01/04/03 – 0600hrs: 2008m, drilling ahead in the Black Alley Shale.

REMARKS:

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0				242.5	
Bungil Fm.	324	-74.5	311.0	-60.5	13	L	-74.5	-73.6	0.9m L
Mooga Sst.	454	-203.5	444.0	-193.5	10	L	-203.5	-205.0	1.5mH
Orallo Fm.	632	-381.5	631.0	-380.5	1	L	-381.5	-389.9	8.4mH
Gubberamunda Sst.	768	-517.5	762.0	-511.5	6	L	-517.5	-520.5	3mH
Westbourne Fm.	888	-637.5	885.0	-634.5	3	L	-637.5	-651.4	13.9mH
Walloon Coal Ms.	1076	-825.5	1078.0	-827.5	2	L	-825.5	-840.8	15.3mH
Hutton Sst.	1334	-1083.5	1344.0	-1093.5	10	L	-1083.5	-1094.6	11.1mH
Evergreen Fm.	1533	-1282.5	1532.0	-1281.5	1	L	-1282.5	-1282.2	0.3mL
Boxvale Sonic Marker	-	-	1577.0	-1326.5	-	-	-	-1323.0	-
Boxvale Sandstone	1579	-1328.5	1579.0	-1328.5	0	-	-1328.5	-1325.7	2.8mL
basal Evergreen Sst.	1641	-1390.5	1640.0	-1389.5	1	L	-1390.5	-1391.6	1.1mH
Moolayember Fm.	1649	-1398.5	1649.0	-1398.5	0	-	-1398.5	-1397.7	0.8mL
Snake Creek Mdst	1803	-1552.5	1819.0	-1568.5	16	H	-1552.5	-1560.3	7.8mH
Showgrounds Sst.	1825	-1574.5	1841.0	-1590.5	16	H	-1574.5	-1581.2	6.7mH
Rewan Formation	1834	-1583.5	1850.0	-1599.5	16	H	-1583.5	-1590.8	7.3mH
Basal Rewan Ss.	1927.5	-1677.0	1944.0	-1693.5	16.5	H	-1677.0	-1685.0	8mH
Bandanna Formation	1936.5	-1686.0	1958.0	-1707.5	21.5	H	-1686.5	-1691.7	5.2mH
Black Alley Shale	2001.0	-1750.5	2022.0	-1771.5	21.0	H	-1750.5	-1755.8	5.3mH
Winnathoola Coal Mbr			2033.0	-1782.5				-1767.1	
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite picks

1834.0		1873.0	6.5 – 13.8 (11.2)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, pale grey to pale grey/green, pale brown, pale green to green, clear to translucent, frosted, very fine to medium, moderate poor sorted, sub-rounded to sub-angular, moderate siliceous cement, white to pale green argillaceous matrix, glauconite, siderite, carbonaceous specks, moderate hard to hard aggregates, predominately loose, poor visible & fair inferred porosity, no fluorescence. SILTSTONE, a. a. – brown/red, brown, brown/grey, pale to medium grey, orange in part, pale green, argillaceous, occasionally arenaceous, micromicaceous, carbonaceous specks, brittle to moderate hard, hard in part, sub-blocky to sub-fissile.

Gas	**Units:**	50	**Composition (%):**	91	/	7	/	2	/		/	
Show Details / %CO2												

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

1875.0		1884.0	4.1 – 187 (41.4)	SILTSTONE with interbedded SANDSTONE. SILTSTONE, – brown/red, brown, brown/grey, pale to medium grey, orange in part, pale green, argillaceous, occasionally arenaceous, micromicaceous, carbonaceous specks, brittle to moderate hard, hard in part, sub-blocky to sub-fissile. SANDSTONE, pale grey to pale grey/green, pale brown, pale green to green, clear to translucent, frosted, very fine to medium, moderate poor sorted, sub-rounded to sub-angular, moderate siliceous cement, white to pale green argillaceous matrix, glauconite, siderite, carbonaceous specks, moderate hard to hard aggregates, predominately loose, poor visible & fair inferred porosity, no fluorescence.											
Gas			**Units:**	13	**Composition (%):**	97	/	3	/		/		/	
Show Details / %CO2														

1884.0		1927.5	2.1 – 17.6 (10.8)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, - translucent, milky white, pale green, pale grey, clear, fine to medium, moderate well sorted, sub-rounded to sub-angular, moderate to weak calcareous cement, white to pale grey argillaceous matrix, loose, fair inferred porosity, no fluorescence. SILTSTONE, – pale to medium grey, white, grey/brown, pale green, argillaceous, brittle to moderate hard, v soft in part, predominately sub-blocky, occasionally sub-fissile, minor amorphous.										
Gas			**Units:**	106	**Composition (%):**	91	/	6	/	2	/	1	/	
Show Details / %CO2														

1927.5		1936.5	2.9 – 27.8 (5.2)	SANDSTONE with minor interbedded SILTSTONE and trace COALS. SANDSTONE, - frosted, clear to translucent, minor pale green to green, trace pale yellow to yellow/brown, medium to very coarse, predominately coarse, fine in part, sub-rounded, occasionally sub-angular, trace weak siliceous cement, white argillaceous, matrix, minor carbonaceous specks, loose, fair to good inferred porosity, 10-30% fluorescence. SILTSTONE, – pale to medium grey, grey/brown, pale green, argillaceous, brittle to moderate hard, predominately sub-blocky, occasionally sub-fissile. COAL, - black, earthy to sub-vitreous, friable to brittle, sub-fissile, uneven.										
Gas			**Units:**	323	**Composition (%):**	85	/	10	/	3	/	2	/	
Show Details / %CO2			1938-1941m; 10-30%, moderate bright, pale blue to blue, patchy, milky blue, blooming to fast, thick film residue.											

1936.5		2001.0	0.34– 32.4 (10.8)	SANDSTONE with interbedded COALS, TUFF and trace SILTSTONE. SANDSTONE, - frosted, clear to translucent, minor pale green to green, trace pale yellow to yellow/brown, medium to very coarse, predominately coarse, fine in part, sub-rounded, occasionally sub-angular, trace weak siliceous cement, white argillaceous, matrix, minor carbonaceous specks, loose, good inferred porosity, no fluorescence. COAL, - black, dark brown, earthy to sub-vitreous, friable to brittle, predominately sub-fissile, occasionally blocky, hackle to uneven. TUFF, - pale brown/grey, tan, waxy, soft, amorphous. SILTSTONE, – pale to medium grey, grey/brown, pale green, argillaceous, brittle to moderate hard, predominately sub-blocky, occasionally sub-fissile.										
Gas			**Units:**	272	**Composition (%):**	88	/	9	/	2	/	1	/	
Show Details / %CO2														

2001.0		2008.0	10.5–17.4 (14.8)	SILTSTONE with interbedded SANDSTONE with minor COALS, TUFF SILTSTONE, – light to dark grey, predominately medium grey, grey/brown, argillaceous, trace micromicaceous, carbonaceous, brittle to moderate hard, sub-blocky to sub-fissile. SANDSTONE, - frosted, clear to translucent, minor pale green to green, trace pale yellow to yellow/brown, very fine to med, predominately fine, sub-rounded, occasionally sub-angular, trace weak siliceous cement, white argillaceous, matrix, minor carbonaceous specks, loose, good inferred porosity, no fluorescence. COAL, - black, dark brown, earthy to sub-vitreous, friable to brittle, predominately sub-fissile. TUFF, - white to pale brown/grey, tan, waxy, soft, amorphous.										
Gas			**Units:**		**Composition (%):**		/		/		/		/	
Show Details / %CO2														

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	11	**DAYS FROM SPUD:**	11	**DATE:**	01/04/2003
0000hrs Depth:	**2027.0**	**Last Depth:**	**1972.0**	**24 HR PROGRESS:**	**55.0**	**PTD:**	**2092**
0600 OPS:	02/04/03 – 0600hrs, pull out of hole and lay out sideways						
REMARKS:							

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0			245.0	242.5	2.5
Bungil Fm.	311.0	-60.5	311.0	-60.5	0.0		-60.5	-73.6	13.1
Mooga Sst.	450.0	-199.5	444.0	-193.5	-6.0	L	-199.5	-205.0	5.5
Orallo Fm.	632.0	-381.5	631.0	-380.5	-1.0	L	-381.5	-389.9	8.4
Gubberamunda Sst.	765.0	-514.5	762.0	-511.5	-3.0	L	-514.5	-520.5	6.0
Westbourne Fm.	899.0	-648.5	885.0	-634.5	-14.0	L	-648.5	-651.4	2.9
Walloon Coal Ms.	1076.5	-826.0	1078.0	-827.5	1.5	H	-826.0	-840.8	14.8
Hutton Sst.	1346.0	-1095.5	1344.0	-1093.5	-2.0	L	-1095.5	-1094.6	-0.9
Evergreen Fm.	1521.0	-1270.5	1532.0	-1281.5	11.0	H	-1270.5	-1282.2	11.7
Boxvale Sonic Marker	1571.0	-1320.5	1577.0	-1326.5	6.0	H	-1320.5	-1323.0	2.5
Boxvale Sandstone	1572.5	-1322.0	1579.0	-1328.5	6.5	H	-1322.0	-1325.7	3.7
basal Evergreen Sst.	1628.5	-1378.0	1640.0	-1389.5	11.5	H	-1378.0	-1391.6	13.6
Moolayember Fm.	1640.0	-1389.5	1649.0	-1398.5	9.0	H	-1389.5	-1397.7	8.2
Snake Creek Mdst	1805.5	-1555.0	1819.0	-1568.5	13.5	H	-1555.0	-1560.3	5.3
Showgrounds Sst.	1820.0	-1569.5	1841.0	-1590.5	21.0	H	-1569.5	-1581.2	11.7
Rewan Formation	1832.5	-1582.0	1850.0	-1599.5	17.5	H	-1582.0	-1590.8	8.8
Basal Rewan Ss.	1933.0	-1682.5	1944.0	-1693.5	11.0	H	-1682.5	-1685.0	2.5
Bandanna Formation	1940.0	-1689.5	1958.0	-1707.5	18.0	H	-1689.5	-1691.7	2.2
Black Alley Shale	1999.0	-1748.5	2022.0	-1771.5	23.0	H	-1748.5	-1755.8	7.3
Winnathoola Coal Mbr	2013.0	-1762.5	2033.0	-1782.5	20.0	H	-1762.5	-1767.1	4.6
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite log picks

2015.0		2027.0 (int. TD)	3.5 – 14.6 (8.3)	SANDSTONE with interbedded SILTSTONE, TUFF and trace COAL. SANDSTONE, pale grey to grey/brown, translucent, occasionally clear, fine to coarse, predominately medium, sub-angular to sub-rounded, poor to fair sorted, moderate siliceous cement, pale grey/brown argillaceous matrix, pyrite, carbonaceous specks, predominately loose, moderate hard to hard in part, fair to good inferred porosity. SILTSTONE, grey to grey/brown, light grey, argillaceous, occasional arenaceous, micro-micaceous, moderate hard to hard, sub-fissile to sub-blocky. TUFF, tan, pale brown, pale grey, waxy texture, soft to firm, brittle in part. COAL, black to dark grey/black, earthy to subvitreous, brittle to moderate hard, hackle to uneven.

Gas	**Units:**	377	**Composition (%):**	89	/	8	/	2	/	Tr	/	
Show Details / %CO2												

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	12	**DAYS FROM SPUD:**	12	**DATE:**	02/04/2003
0000hrs Depth:	**2027.0**	**Last Depth:**	**2027.0**	**24 HR PROGRESS:**	**0.0**	**PTD:**	**2092**

0600 OPS: 03/04/03 – 0600hrs, rigging down 8 ½" setup for 6" nitrogen session.

REMARKS: Ran in casing, cement with Halliburton, begin rigging down 8 ½" to rig up 6" for nitrogen set up.

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	2026.9	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0			245.0	242.5	2.5
Bungil Fm.	311.0	-60.5	311.0	-60.5	0.0		-60.5	-73.6	13.1
Mooga Sst.	450.0	-199.5	444.0	-193.5	-6.0	L	-199.5	-205.0	5.5
Orallo Fm.	632.0	-381.5	631.0	-380.5	-1.0	L	-381.5	-389.9	8.4
Gubberamunda Sst.	765.0	-514.5	762.0	-511.5	-3.0	L	-514.5	-520.5	6.0
Westbourne Fm.	899.0	-648.5	885.0	-634.5	-14.0	L	-648.5	-651.4	2.9
Walloon Coal Ms.	1076.5	-826.0	1078.0	-827.5	1.5	H	-826.0	-840.8	14.8
Hutton Sst.	1346.0	-1095.5	1344.0	-1093.5	-2.0	L	-1095.5	-1094.6	-0.9
Evergreen Fm.	1521.0	-1270.5	1532.0	-1281.5	11.0	H	-1270.5	-1282.2	11.7
Boxvale Sonic Marker	1571.0	-1320.5	1577.0	-1326.5	6.0	H	-1320.5	-1323.0	2.5
Boxvale Sandstone	1572.5	-1322.0	1579.0	-1328.5	6.5	H	-1322.0	-1325.7	3.7
basal Evergreen Sst.	1628.5	-1378.0	1640.0	-1389.5	11.5	H	-1378.0	-1391.6	13.6
Moolayember Fm.	1640.0	-1389.5	1649.0	-1398.5	9.0	H	-1389.5	-1397.7	8.2
Snake Creek Mdst	1805.5	-1555.0	1819.0	-1568.5	13.5	H	-1555.0	-1560.3	5.3
Showgrounds Sst.	1820.0	-1569.5	1841.0	-1590.5	21.0	H	-1569.5	-1581.2	11.7
Rewan Formation	1832.5	-1582.0	1850.0	-1599.5	17.5	H	-1582.0	-1590.8	8.8
Basal Rewan Ss.	1933.0	-1682.5	1944.0	-1693.5	11.0	H	-1682.5	-1685.0	2.5
Bandanna Formation	1940.0	-1689.5	1958.0	-1707.5	18.0	H	-1689.5	-1691.7	2.2
Black Alley Shale	1999.0	-1748.5	2022.0	-1771.5	23.0	H	-1748.5	-1755.8	7.3
Winnathoola Coal Mbr	2013.0	-1762.5	2033.0	-1782.5	20.0	H	-1762.5	-1767.1	4.6
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite log picks

2027.0		2027.0 (int. TD)		No sample, rigging up for nitrogen drilling.

Gas	**Units:**		**Composition (%):**		/		/		/		/	
Show Details / %CO2												

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	13	**DAYS FROM SPUD:**	13	**DATE:**	03/04/2003
0000hrs Depth:	**2027.0**	**Last Depth:**	**2027.0**	**24 HR PROGRESS:**	**0.0**	**PTD:**	**2092**

0600 OPS: 04/04/03 – 0600hrs, Nipple up new BOP, pressure test

REMARKS: Continue rigging up for nitrogen drilling.

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	2026.9	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0			245.0	242.5	2.5
Bungil Fm.	311.0	-60.5	311.0	-60.5	0.0		-60.5	-73.6	13.1
Mooga Sst.	450.0	-199.5	444.0	-193.5	-6.0	L	-199.5	-205.0	5.5
Orallo Fm.	632.0	-381.5	631.0	-380.5	-1.0	L	-381.5	-389.9	8.4
Gubberamunda Sst.	765.0	-514.5	762.0	-511.5	-3.0	L	-514.5	-520.5	6.0
Westbourne Fm.	899.0	-648.5	885.0	-634.5	-14.0	L	-648.5	-651.4	2.9
Walloon Coal Ms.	1076.5	-826.0	1078.0	-827.5	1.5	H	-826.0	-840.8	14.8
Hutton Sst.	1346.0	-1095.5	1344.0	-1093.5	-2.0	L	-1095.5	-1094.6	-0.9
Evergreen Fm.	1521.0	-1270.5	1532.0	-1281.5	11.0	H	-1270.5	-1282.2	11.7
Boxvale Sonic Marker	1571.0	-1320.5	1577.0	-1326.5	6.0	H	-1320.5	-1323.0	2.5
Boxvale Sandstone	1572.5	-1322.0	1579.0	-1328.5	6.5	H	-1322.0	-1325.7	3.7
basal Evergreen Sst.	1628.5	-1378.0	1640.0	-1389.5	11.5	H	-1378.0	-1391.6	13.6
Moolayember Fm.	1640.0	-1389.5	1649.0	-1398.5	9.0	H	-1389.5	-1397.7	8.2
Snake Creek Mdst	1805.5	-1555.0	1819.0	-1568.5	13.5	H	-1555.0	-1560.3	5.3
Showgrounds Sst.	1820.0	-1569.5	1841.0	-1590.5	21.0	H	-1569.5	-1581.2	11.7
Rewan Formation	1832.5	-1582.0	1850.0	-1599.5	17.5	H	-1582.0	-1590.8	8.8
Basal Rewan Ss.	1933.0	-1682.5	1944.0	-1693.5	11.0	H	-1682.5	-1685.0	2.5
Bandanna Formation	1940.0	-1689.5	1958.0	-1707.5	18.0	H	-1689.5	-1691.7	2.2
Black Alley Shale	1999.0	-1748.5	2022.0	-1771.5	23.0	H	-1748.5	-1755.8	7.3
Winnathoola Coal Mbr	2013.0	-1762.5	2033.0	-1782.5	20.0	H	-1762.5	-1767.1	4.6
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite log picks

2027.0		2027.0 (int. TD)		No sample, rigging up for nitrogen drilling.										
Gas			**Units:**		**Composition (%):**		/		/		/		/	
Show Details / %CO2														

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	14	**DAYS FROM SPUD:**	14	**DATE:**	04/04/2003
0000hrs Depth:	**2027.0**	**Last Depth:**	**2027.0**	**24 HR PROGRESS:**	**0.0**	**PTD:**	**2092**
0600 OPS:	05/04/03 – 0600hrs, run in hole, tag cement						
REMARKS:	Continue rigging up for nitrogen drilling						

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	00.xxhrs xx/03/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	xxxx.x	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0			245.0	242.5	2.5
Bungil Fm.	311.0	-60.5	311.0	-60.5	0.0		-60.5	-73.6	13.1
Mooga Sst.	450.0	-199.5	444.0	-193.5	-6.0	L	-199.5	-205.0	5.5
Orallo Fm.	632.0	-381.5	631.0	-380.5	-1.0	L	-381.5	-389.9	8.4
Gubberamunda Sst.	765.0	-514.5	762.0	-511.5	-3.0	L	-514.5	-520.5	6.0
Westbourne Fm.	899.0	-648.5	885.0	-634.5	-14.0	L	-648.5	-651.4	2.9
Walloon Coal Ms.	1076.5	-826.0	1078.0	-827.5	1.5	H	-826.0	-840.8	14.8
Hutton Sst.	1346.0	-1095.5	1344.0	-1093.5	-2.0	L	-1095.5	-1094.6	-0.9
Evergreen Fm.	1521.0	-1270.5	1532.0	-1281.5	11.0	H	-1270.5	-1282.2	11.7
Boxvale Sonic Marker	1571.0	-1320.5	1577.0	-1326.5	6.0	H	-1320.5	-1323.0	2.5
Boxvale Sandstone	1572.5	-1322.0	1579.0	-1328.5	6.5	H	-1322.0	-1325.7	3.7
basal Evergreen Sst.	1628.5	-1378.0	1640.0	-1389.5	11.5	H	-1378.0	-1391.6	13.6
Moolayember Fm.	1640.0	-1389.5	1649.0	-1398.5	9.0	H	-1389.5	-1397.7	8.2
Snake Creek Mdst	1805.5	-1555.0	1819.0	-1568.5	13.5	H	-1555.0	-1560.3	5.3
Showgrounds Sst.	1820.0	-1569.5	1841.0	-1590.5	21.0	H	-1569.5	-1581.2	11.7
Rewan Formation	1832.5	-1582.0	1850.0	-1599.5	17.5	H	-1582.0	-1590.8	8.8
Basal Rewan Ss.	1933.0	-1682.5	1944.0	-1693.5	11.0	H	-1682.5	-1685.0	2.5
Bandanna Formation	1940.0	-1689.5	1958.0	-1707.5	18.0	H	-1689.5	-1691.7	2.2
Black Alley Shale	1999.0	-1748.5	2022.0	-1771.5	23.0	H	-1748.5	-1755.8	7.3
Winnathoola Coal Mbr	2013.0	-1762.5	2033.0	-1782.5	20.0	H	-1762.5	-1767.1	4.6
Tinowon Formation			2045.0	-1794.5				-1781.7	
Wallabella CM			2090.0	-1839.5				-1821.0	
TD			2092.0	-1841.5					

Tops are wellsite log picks

2027.0		2027.0 (int. TD)		No sample, rigging up for nitrogen drilling.										
Gas			**Units:**		**Composition(%):**		/		/		/		/	
Show Details / %CO2														

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

WELL:	Myall Creek-8	**REPORT No.:**	15	**DAYS FROM SPUD:**	15	**DATE:**	05/04/2003
0000hrs Depth:	**2077.0**	**Last Depth:**	**2027.0**	**24 HR PROGRESS:**	**5.0**	**PTD:**	**2092**

0600 OPS: 06/04/03 – 0600hrs, pull out of hole, lay out sideways, rig up REEVES

REMARKS: Attachment files to follow; ASCII data, Flow test 1 & 2, MC8_2077.pdf, and 2x A.D.S.T. files

PRIMARY OBJECTIVES:	**SECONDARY OBJECTIVES:**
Tinowon Fm.	Basal Rewan Fm.

Spud Date:	23:00hrs 22/03/03	**Surface Latitude:**	27°03'42.01"	**T.D. =**		**Metres R.T.**
TD Reached Date:	18:30hrs 05/04/03	**Surface Longitude:**	149°13'12.22"	**G.L. =**	245.0	**Metres ASL**
Rig release Date:	00.xxhrs xx/04/03	**Surface E (AGD84):**	720 176.xx	**R.T. =**	250.5	**Metres ASL**
Rig	Century Rig 1	**Surface N (AGD84):**	7 004 793.xx			
Nearby Wells / Facilities are				**244mm Casing Shoe =**	222.0	**Metres R.T.**
Myall Creek-3 - 960m. SSW / Noorindoo-2 - 2.0 km. NE				**178mm Casing Shoe =**	2026.0	**Metres R.T.**

Fm. Tops (# Geophysical Picks)	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depth (mRT)	Prognosed Depth (mSS)	Diff	H/L	Sub-Sea Depth Comparisons MC#8	MC#3	
Wallumbilla Fm.	5.5	245.0	5.5	245.0			245.0	242.5	2.5
Bungil Fm.	311.0	-60.5	311.0	-60.5	0.0		-60.5	-73.6	13.1
Mooga Sst.	450.0	-199.5	444.0	-193.5	-6.0	L	-199.5	-205.0	5.5
Orallo Fm.	632.0	-381.5	631.0	-380.5	-1.0	L	-381.5	-389.9	8.4
Gubberamunda Sst.	765.0	-514.5	762.0	-511.5	-3.0	L	-514.5	-520.5	6.0
Westbourne Fm.	899.0	-648.5	885.0	-634.5	-14.0	L	-648.5	-651.4	2.9
Walloon Coal Ms.	1076.5	-826.0	1078.0	-827.5	1.5	H	-826.0	-840.8	14.8
Hutton Sst.	1346.0	-1095.5	1344.0	-1093.5	-2.0	L	-1095.5	-1094.6	-0.9
Evergreen Fm.	1521.0	-1270.5	1532.0	-1281.5	11.0	H	-1270.5	-1282.2	11.7
Boxvale Sonic Marker	1571.0	-1320.5	1577.0	-1326.5	6.0	H	-1320.5	-1323.0	2.5
Boxvale Sandstone	1572.5	-1322.0	1579.0	-1328.5	6.5	H	-1322.0	-1325.7	3.7
basal Evergreen Sst.	1628.5	-1378.0	1640.0	-1389.5	11.5	H	-1378.0	-1391.6	13.6
Moolayember Fm.	1640.0	-1389.5	1649.0	-1398.5	9.0	H	-1389.5	-1397.7	8.2
Snake Creek Mdst	1805.5	-1555.0	1819.0	-1568.5	13.5	H	-1555.0	-1560.3	5.3
Showgrounds Sst.	1820.0	-1569.5	1841.0	-1590.5	21.0	H	-1569.5	-1581.2	11.7
Rewan Formation	1832.5	-1582.0	1850.0	-1599.5	17.5	H	-1582.0	-1590.8	8.8
Basal Rewan Ss.	1933.0	-1682.5	1944.0	-1693.5	11.0	H	-1682.5	-1685.0	2.5
Bandanna Formation	1940.0	-1689.5	1958.0	-1707.5	18.0	H	-1689.5	-1691.7	2.2
Black Alley Shale	1999.0	-1748.5	2022.0	-1771.5	23.0	H	-1748.5	-1755.8	7.3
Winnathoola Coal Mbr	2013.0	-1762.5	2033.0	-1782.5	20.0	H	-1762.5	-1767.1	4.6
Tinowon Formation	2030.5	-1780.0	2045.0	-1794.5	14.5	H	-1780.0	-1781.7	1.7
Wallabella CM	2067.5	-1817.0	2090.0	-1839.5	12.5	H	-1817.0	-1821.0	-1.0
TD	2077.0	-1826.5	2092.0	-1841.5	15.0	H	-1826.5		

Tops are wellsite log picks
Tops are mudlog picks

2027.0		2050.0	3.0– 7.0 (4.0)	Massive SILTSTONE. SILTSTONE, - dark grey to grey/brown, argillaceous, carbonaceous, micro-micaceous, moderate hard to hard, sub-blocky to sub-fissile, occasional blocky.

Gas	**Units:**	10	**Composition(%):**	92	/	8	/	Tr	/		/	
Show Details / %CO2	Note: Limited gas data due to drilling safety of live hole drilling.											

DAILY GEOLOGICAL REPORT
OIL COMPANY OF AUSTRALIA LIMITED.

2050.0		2072.5	1.0– 5.6 (2.0)	SANDSTONE with interbedded SILTSTONE. SANDSTONE, - yellow/brown, translucent, brown, grey, yellow/orange, fine to very coarse grains, sub-angular, occasional sub-rounded, loose, fair inferred porosity. SILTSTONE, - dark grey to grey/brown, argillaceous, carbonaceous, micro-micaceous, moderate hard to hard, sub-blocky to sub-fissile, occasional blocky.										
Gas			**Units:**	718	**Composition(%):**	84	/	11	/	4	/	1	/	
Show Details / %CO2			Note: Limited gas data due to drilling safety of live hole drilling.											

2072.5		2077.0 (TD)	1.6 – 6.1 (4.5)	SILTSTONE with interbedded SANDSTONE. SILTSTONE, - dark grey to black, very carbonaceous, micro-micaceous, hard, blocky. SANDSTONE, - translucent yellow/brown, grey/brown, occasional clear, very fine to fine, trace medium grains, sub-angular to sub-rounded, loose, fair inferred porosity.										
Gas			**Units:**		**Composition(%):**	80	/	13	/	5	/	2	/	
Show Details / %CO2			Note: Limited gas data due to drilling safety of live hole drilling.											

Flow Test	**Interval (m)**	**Flow Gas:**
#1	2027 - 2057	2.65 MMCFD through ¾" with 174 psi
#2	2027 - 2077	4.13 MMCFD through ¾" with 279 psi

* Note: See attached Flow Test file for complete details.

APPENDIX 3

BIT RECORD

OIL COMPANY OF AUSTRALIA

BIT RECORD

Well :	**Myall Creek 8**	Basin / Area :	**Surat**	Permit :	**PL 174**	Field :	**Myall Creek**
Location : Latitude :	**27° 03' 42.01" S**			G.L.	**254.00** metres	Spud Date:	**22-Mar-03**
Longitude :	**149° 13' 12.22" E**	Well Site Supervisor:	**James & Seton**	K.B.	**259.05** metres	T.D. Date:	**5-Apr-03**
Contractor :	**Century Drilling**	Rig #:	**1**	Proposed TD:	**2092** metres	Rig Released Date:	**8-Apr-03**

PUMPS

No.	Type	Stroke (in)	Liner (in)	Output (gps)
1	National 8-P-80 Triplex	8.50	6.00	3.03
2	National 8-P-80 Triplex	8.50	6.00	3.03

MUD TYPE

Section	Dev	Interval	Type	Wt
Surface	0.75°	0m to 223m	Gel	9.20
Intermediate	0.25°	223m to 2027m	KCl/PHPA	10.00
Main	0.25°	2027m to 2077m	Nitrogen	0.00

Bit No.	Run No.	Size (in)	Make	Type	IADC Code	Serial No.	# of nozzles Size- 32nds			Motor Y / N	Shock-Sub Serial No.	Depth Out	Metres	Hours	ROP (m/hr)	Accum Hours	Bit Grading I	O	D	L	B	G	O	R	WOB Mn	WOB Mx	RPM Mn	RPM Mx	Press (psi)	Pump (gpm)
1	1	12.25	VAREL	ETD1GMS	117	173944	3					223	223	13.5	16.5	13.5	1	1	WT	A	E	0	NO	TD	5	25	80	160	1500	725
							16																							
2	2	8.5	SMITH	S91HPX	M223	JT0392	4	3				1875	1652	56.5	29.2	70	3	1	LT	N	X	0	ER	HP	5	20	90	160	2000	650
							10	12																						
3	RR3	8.5	VAREL									1875	0	0		70	3	2	BT	M	E	1	JD	TQ						
4	4	8.5		Junk Mill			5					1883	8	9	0.9	79	1	0	%		W	O	R	N						
							20																							
5	5	8.5	REED	EHP43	437	M55966	3					2027	144	28.5	5.1	107.5	1	2	WT	A	E	1	NO	TD	25	35	90	130	1800	450
							14																							
6	6	6.125	VAREL	ETD14	437	157205	3					2077	50	4.5	11.1	112	1	1	WT	A	E	1	NO	TD	10	15	80	90	340	2000
							32																							

Comments :

APPENDIX 4

DRILLING FLUID SUMMARY

(Mud Reports)

DRILLING FLUID SUMMARY

FOR: OIL COMPANY of AUSTRALIA

WELL: MYALL CREEK # 8

PL 174
SURAT BASIN

QLD.

WELL : Myall Creek # 8
RIG : Century Resources # 1
SPUD : 22nd March 2003
T. D. : 1st April 2003 (8 ½" interval)

Recap prepared by: Chris. Mahoney and Michael Bartsch, April 2003

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Operator : OCA
Well : Myall Creek #8
Rig : CDL #1
Spud : 22/03/03

SUMMARY OF OPERATIONS

HOLE SIZE : 12 ¼ "
MUD TYPE : Gel Spud Mud
INTERVAL : Surface – 223 mtrs.
CASING : 9 5/8" @ 222 mtrs.

Make up water, taken from the turkey's nest, tested as follows:

pH	:	8.0
pf / mf	:	0.3 / 1.5
Salinity	:	500 mg/l (as CL-)
Hardness	:	40 mg/l (as Ca++)
Rw @ 75° F:		5.5

200 bbls of spud mud were prepared using 15 ppb bentonite (Ausgel) in the pill and premix tanks. Caustic soda was used to raise the pH to around 10.0. The mud viscosity reached 40+ sec/qt after a short time prehydrating and, while rigging up, continued to hydrate. With the conductor and flowline in place, the gel mud was then circulated prior to spudding. The shakers were each dressed with 3 x 84 mesh screens.

The well was spudded on the 22nd March 2003, drilling 12¼" hole with bit # 1 through to a depth of 223 metres. While drilling this first interval, clays from the surficial formations contributed significantly to the maintenance of the viscosity of the fluid. The fluid kept the hole exceptionally clean and stable and the weight was controlled by additions of more drill water. While drilling, the viscosity was allowed to climb slowly by the incorporation of native clays. This removed the need to pump a high vis. pill prior to running casing. After circulating the hole clean, the pipe was pulled, and the 12 ¼" bit was laid out along with the bit-sub, stabiliser and x-overs.

The 9 5/8" casing was rigged and run successfully to set the shoe at 222 metres without incident. With the casing string in place, the mud was circulated. The cement was mixed and pumped, then displaced with water. Cement came to surface and the small amount of excess was dumped. Having waited on the cement to cure, the landing joint and the conductor were laid out and the b.o.p. stack and surface equipment were nippled up.

Operator	**:**	**OCA**
Well	**:**	**Myall Creek #8**
Rig	**:**	**CDL #1**
Spud	**:**	**22/03/03**

HOLE SIZE:	**8 1/2"**
MUD TYPE:	**3% KCl - PHPA**
INTERVAL:	**223 m. – 2027 m.**
CASING :	**7" @ 2025 m.**

While nippling up the b.o.p. stack and related surface equipment, the tanks used in the earlier 12 ¼" interval were all dumped and cleaned. A 3% KCL carrier fluid with added PHPA, Pac-R and Xanthan gum(P) (for extra viscosity) was mixed into the tanks. The PHPA concentration was begun at 0.5 ppb rather than at 1.0 plus, to ensure the fluid did not run straight off the shakers at start-up. Water was kept isolated in the pill tank and was used for the drilling out of cement, casing shoe and shoe track. Screens on the shakers were left to where both were carrying 3 x 84 mesh.

Bit # 2, an 8 ½" Smith PDC was dressed with 3 x 10 and 3 x 12 jets and run in on 6 ¼" collars and 4 ½" heavy weight drill pipe. The top of the cement was tagged and was drilled out to 227 metres, using the water from the pill tank. From this depth, a leak-off test was conducted to 440 psi or to an equivalent mud weight of 20.0 ppg. only after the cement contaminated water was displaced by the newly mixed KCL / PHPA fluid and the water was dumped to the sump. With the 8.6 ppg, 3% KCL / PHPA fluid now circulating throughout the active system, drilling of the 8 ½" interval resumed.

As drilling progressed with the 8 ½" PDC bit, it became evident that this bit would probably drill the entire hole and would do so at a fairly good rate. Hindsight, of course, shows that that was exactly how it happened. The mud engineering then was essentially a process of continually mixing premixes and transferring them to provide the volume required and weighting the system up, as and when needed, to control / overcome any water kicks as bottom hole pressures increased with depth.

And, with increased aquifer pressures in mind, plus knowing that water influxes will cut most of the mud properties ranging from pH to yield point, as has occurred on earlier wells, the system was viscosified with Xanthan Gum(P) essentially from the outset and barite was added to raise the density to around 9.0 ppg. Thus, drilling of the generally troublesome aquifers – Mooga, Orallo and Gubberamunda – was begun with some barite in the system. Still, by 690 m., while conducting a survey in the mid – lower Orallo, it was noticed that the well was flowing. Again, using barite, the system was weighted to 9.5 ppg. With continued drilling into the last of the troublesome aquifers, the Gubberamunda, the system density was raised to some 9.7 ppg as there was some evidence of 'freshwater cutting' of the mud properties while drilling this formation.

The desilter was left off so as to not strip out the added barite. Solids were essentially controlled by the changing to finer shaker screens – 3 x 110 on both shakers, running the desander continuously and regular dumping and cleaning of the possum belly and sandtrap. Drilling was essentially uneventful and was interrupted only by the running of single shot totco deviation surveys on a regular basis.

Drilled into the Rewan at around 1830 m. and simultaneously began weighting up to 10 ppg. The weighting up being required prior to conducting a wiper trip. At 1875 metres, drilling was stopped, the hole circulated clean and the pipe pulled for a wiper trip back to the 9 5/8" casing shoe. The hole was sticky and tight for most of the trip and some swabbing of the hole was noted. However, no flows of freshwater nor gas were noted as a result of this swabbing from the trip out to the shoe.

Back on bottom and unable to drill because a piece of metal, used to hammer out the tong dies, had found it's way to the bottom of the hole and was locking up the bit. Two and a half days of fishing followed using a grapple, a tri-cone bit, a magnet and finally a milling bit. This milling bit may have worn down the piece of metal junk, but more than likely ended up forcing it into the Rewan clay far enough to essentially clear it from the well bore. The mill made 8 metres of new hole from 1875 m. to 1883 m. and then it was pulled. Bit # 4, a Varel tricone, dressed with 3 x 14 jets, was then run in and drilled the rest of this interval to a total depth of 2027 metres by the 1st April 2003. From this depth, having circulated out cuttings samples, the pipe was pulled through the recently drilled hole up to 1875 m. with no difficulties and, because of all the trips in and out of the hole from this depth due to the earlier fishing efforts, the hole was considered stable enough to pull straight out and the pipe was stood back in the derrick.

Reeves wireline were rigged up and logging commenced. Only one run was conducted using a combination of tools. Upon completion of the logging, Reeves rigged down and the drillstring was run back into the hole. Having circulated the hole clean, the pipe was pulled sideways and laid out. 7" casing was rigged and run to 2025 m. The casing was circulated and that mud to be left behind in the annulus was treated with biocide. A SAPP preflush was mixed and pumped and the casing was cemented.

Saved as much of the 10.0 ppg mud system as was physically possible in all the tanks (except for the pill tank) prior to dumping the excess returns due to the cement volume being pumped down hole. This was treated with biocide and was to be kept on-site as an emergency kill mud for the drilling of the next interval with nitrogen.

The mud engineer was released as of the morning of the 3rd April 2003.

2. OBSERVATIONS, RECOMMENDATIONS AND WELL ANALYSIS

HOLE SIZE	INTERVAL	FOOTAGE	COST	COST / M
12.25”	0 – 233 m	233 m	$ 520.10	$ 2.23
8.5”	233 – 2027 m	1974 m	$ 27,768.50	$ 15.48
TOTAL DRILLING COST		***2027 m***	**$ 28,288.60**	**$ 13.96**
Post TD costs (sidetrack / logging / completion)			$ 1258.00	
TOTAL WELL COST			**$ 29,546.60**	

Knowing that an average well in this area, drilled with KCL / PHPA without having pressure nor lost circulation problems, can normally be drilled with a mud expenditure of between $10 and $15 per metre. Then it can be seen that, pressure control aside, this well’s costs fall into the lower end of that mean average.

8.5” HOLE OBSERVATIONS

DRILLING TIME

Drilling of the 8 ½” interval was a very rapid affair. The PDC bit cut from 223 m. to 1875 m. in only 56 hrs averaging some 29.5 metres per hour.

The essence of this is that the well was drilled in a minimum amount of time and this very fact undoubtedly contributed to the exceptional gauge and stability of the well bore. The performance and cost of a drilling fluid is dependant on many variables, including time and the reactivity of the formations encountered, the quality of the make-up water and even the quality of the rig crews handling the fluid.

HOLE GAUGE

And, speaking of hole gauge, based on the caliper logs from Reeves and the volumes derived therein, the hole is 21 bbl in excess which is 5 % over that calculated for an 8 ½” hole. This translates into an average hole size of 8.7 inches. Those areas of larger gauge were primarily the Rewan and to some extent, the Bandanna.

MUD PROPERTIES

On this well, as has occurred on earlier Myall Creek wells, the viscosity rose throughout the latter stages of this interval. As we drilled into the Rewan, we began almost simultaneously to weight up the mud system to 10ppg (1.2sg) not because we were in the Rewan, but because this mud weight was required for a scheduled wiper trip.

At this point, the Rewan began acting more radically than usual and we experienced a sudden increase in viscosity from the low 40's to over 60 secs. with a corresponding doubling of the system's clay content. All this occurred within a 1½ hour time frame. The viscosity increase which would have occurred anyway from the introduction of the active Rewan fines was simply exacerbated by the fact that some 22 lb/bbl of solids was introduced into the system at the same time by way of the weighting up process with barite. Plus, the desilter being left off for the greater part of the drilling of these lower formations due to the fact that barite is run in the system for weight and the desilter tends to strip out the barite very quickly. All of this combined to result in consequential higher viscosities.

Interestingly, it was an opportunity to flood the system with PHPA to establish a thinning process by encapsulation, raising the concentration levels from 1.2 ppb to 1.8 ppb (see concentration chart and note the deliberate increase in phpa). This did little to thin the fluid – in fact, what thinning did occur was a dilution effect from the solids free premix.

So, another premix was made, this time incorporating some 2 ppb Pac-LoVis with the KCL water. The response this time was marked and the viscosity was cut from around the mid 60's to mid 50's. This latter method was again used at the end of the 8 ½" interval when, by 2027 m., the viscosity had crept up to 60+ seconds, it was cut back in one circulation by the addition of the KCL / LoVis fluid to the mid 50's. Increasing PHPA did not help to alleviate the problem. KCL water and Pac LoVis seemed to be effective and this method of treatment is strongly recommended. The result of this is to query the type or level of inhibition that the PHPA actually has in these areas when drilling with a PDC bit. And of course, it is the bit itself, generating more grindings and scrapings than the type of cuttings generated by a tri-cone bit.

Program Analysis

Due to higher ROP's elevated depletion rates can be negated by starting with higher inhibition levels. To better control the Rewan fines the concentration of KCL could be increased to a background level of 5 to 6 % instead of % as programmed and keep the concentration of PHPA at around 1.2 ppb.

It would be advisable to have PAC-LV as a contingent product onsite to better control rheology when fines build in the presence of barite levels typical of 10ppg muds are used.

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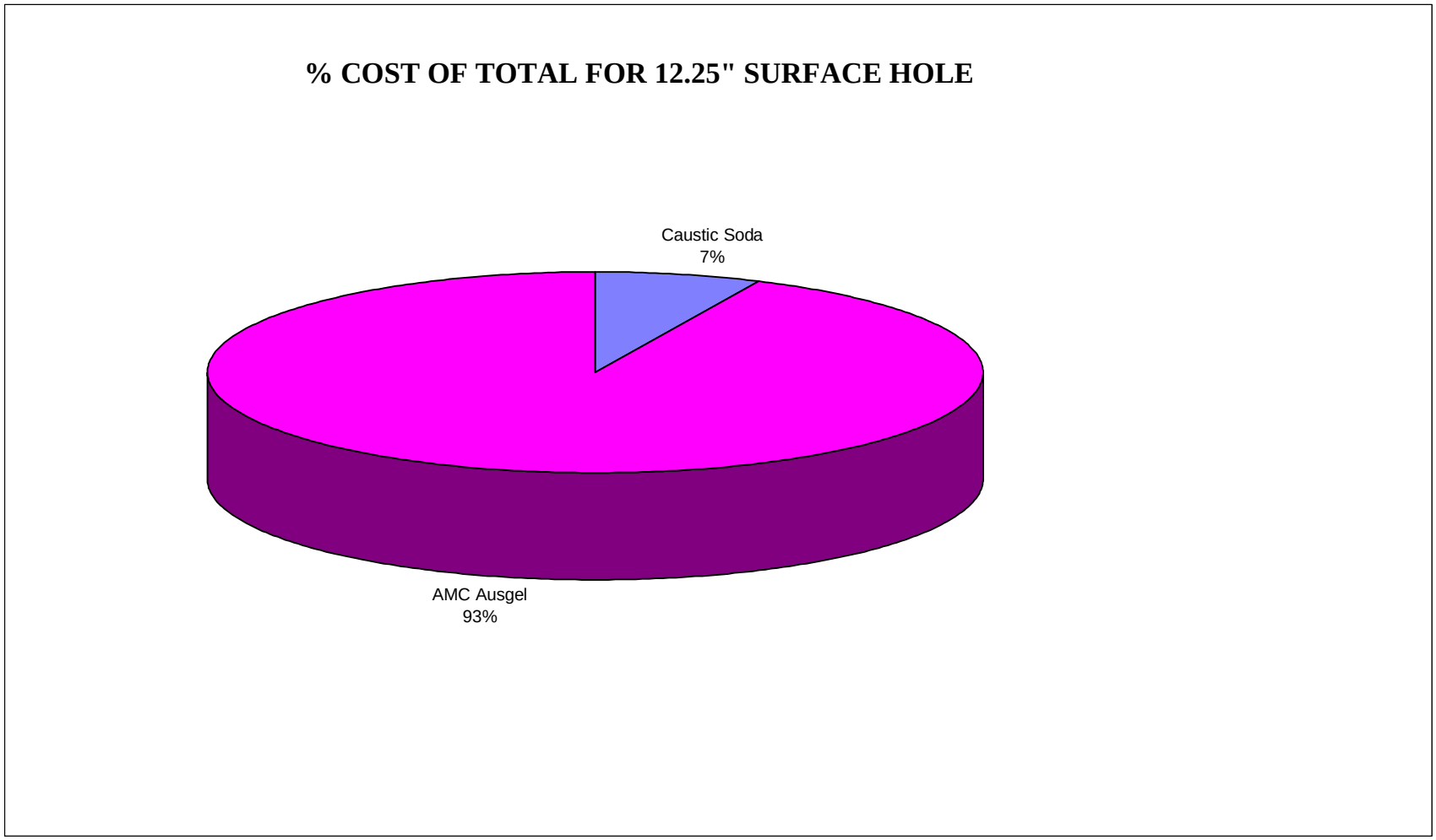
3. Interval Costs

Myall Creek # 8

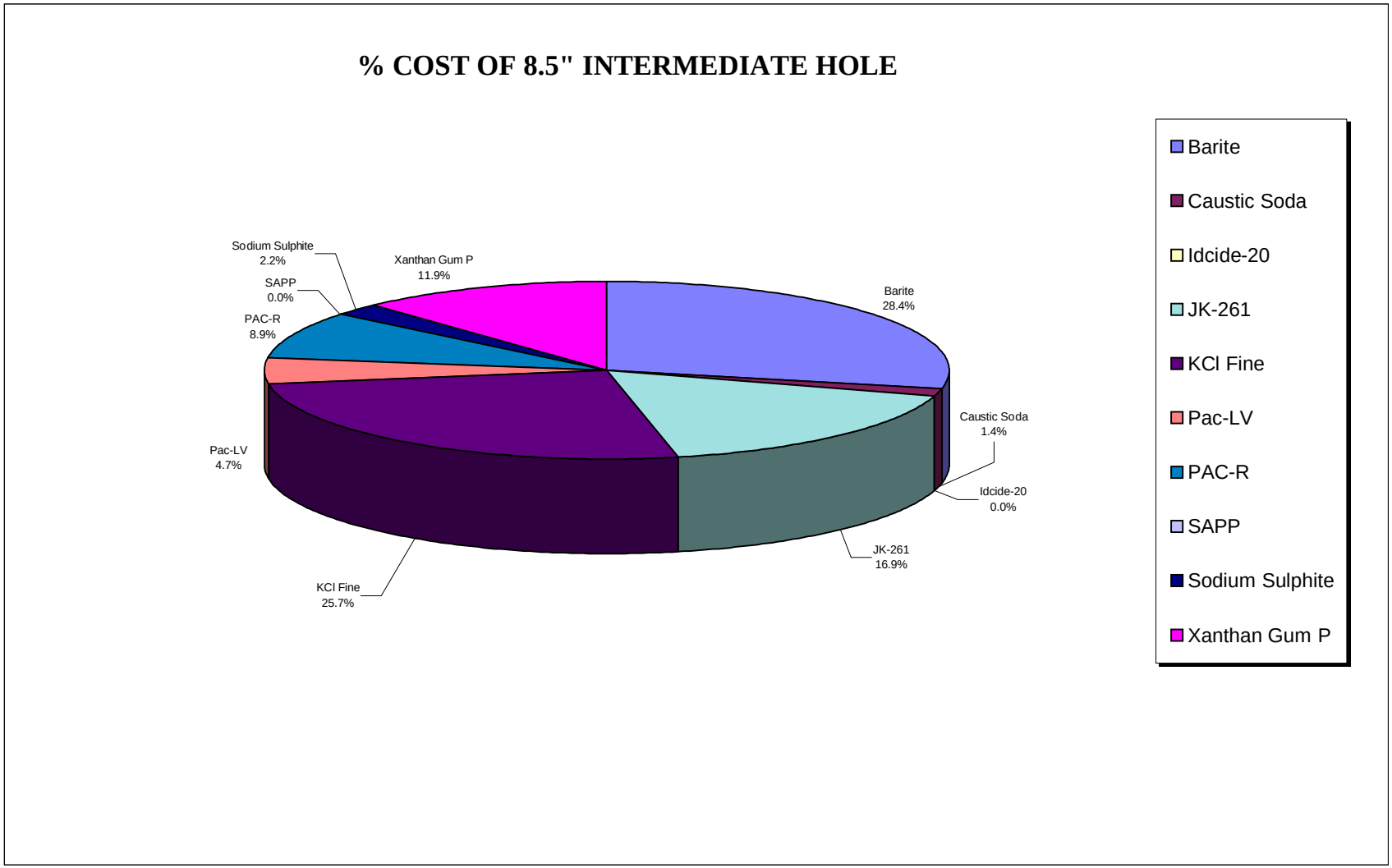
Product Name	Cost	Unit Size	12 1/4" Surface Hole Used	12 1/4" Surface Hole Cost	12 1/4" Surface Hole %Cost	8-1/2" INT. Hole Used	8-1/2" INT. Hole Cost	8-1/2" INT. Hole %Cost	Post TD Used	Post TD Cost	Post TD %Cost	Total Well Consumption Used	Total Well Consumption Cost	Total Well Consumption %Cost
		Interval :	0 - 233 metres			233 - 2027 metres						TD: 2027 metres		
Barite	$ 9.95	55 lb				792	$7,880.40	28.4%				792	$7,880.40	26.7%
Caustic Soda	$ 35.60	55 lb	1	$35.60	6.8%	11	$391.60	1.4%				12	$427.20	1.4%
Idcide-20	$ 98.50	40 lb							4	$394.00	31.3%	4	$394.00	1.3%
JK-261	$ 102.00	55 lb				46	$4,692.00	16.9%				46	$4,692.00	15.9%
KCl Fine	$ 16.00	55 lb				446	$7,136.00	25.7%	40	$640.00	50.9%	486	$7,776.00	26.3%
Pac-LV	$ 164.00	55 lb				8	$1,312.00	4.7%				8	$1,312.00	4.4%
PAC-R	$ 164.00	55 lb				15	$2,460.00	8.9%				15	$2,460.00	8.3%
SAPP	$ 56.00	55 lb							4	$224.00	17.8%	4	$224.00	0.8%
Sodium Sulphite	$ 24.02	55 lb				25	$600.50	2.2%				25	$600.50	2.0%
Xanthan Gum P	$ 412.00	55 lb				8	$3,296.00	11.9%				8	$3,296.00	11.2%
AMC Ausgel	$ 9.50	55 lb	51	$484.50	93.2%							51	$484.50	1.6%
Totals		**Totals :**		**$520.10**	**100.0%**		**$27,768.50**	**100.0%**		**$1,258.00**	**100.0%**		**$29,546.60**	**100.0%**
Costings		**Cost per meter :**		**$2.23**			**$15.48**						**$14.58**	

OCA **MYALL CREEK #8**



TOTAL MUD COST FOR SURFACE HOLE : $ 520.10

OCA **MYALL CREEK #8**



TOTAL MUD COST FOR INTERMEDIATE HOLE :$ 27,768.50

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4.0 MATERIALS RECONCILIATION

LAST WELL: **Stacked**

CURRENT WELL: **Myall Creek # 8** **TRANSFERRED TO:**

RELEASE DATE: **3rd April '03**

PRODUCT NAME	UNIT SIZE (LBS)	TRANSFER FROM PREVIOUS WELL: Stacked	DAMAGE or WRITTEN OFF	STORES ISSUE	TOTAL RECEIVED	TOTAL USED ON: Myall Creek # 8	BALANCE	UNIT PRICE	TRANSFER VALUE	WEIGHT Lbs
Airfoam	440			1	1		1	$ 460.00	$ 460.00	440
Barite	55			1280	1280	792	488	$ 9.95	$ 4,855.60	26,840
Bicarb Soda	55							$ 15.50	$ -	
Caustic Soda	55			44	44	12	32	$ 35.60	$ 1,139.20	1,760
Citric Acid	55							$ 58.00	$ -	
Cronox 2-100	440							$ 790.00	$ -	
Defoamer-L	40			5	5		5	$ 105.18	$ 525.90	200
Drillfoam	440							$ 580.00	$ -	
Enerseal C	55							$ 42.00	$ -	
Enerseal F	55							$ 42.00	$ -	
Fracseal	25							$ 58.00	$ -	
Idcide-20	40			10	10	4	6	$ 98.50	$ 591.00	240
JK-261	55			108	108	46	62	$ 102.00	$ 6,324.00	3,410
KCl Fine	55			1126	1126	486	640	$ 16.00	$ 10,240.00	35,200
Lime	44			10	10		10	$ 8.00	$ 80.00	440
Pac-LV	55			40	40	8	32	$ 164.00	$ 5,248.00	1,760
PAC-R	55			80	80	15	65	$ 164.00	$ 10,660.00	3,575
Quikseal M	40							$ 49.00	$ -	
Salt	55							$ 7.50	$ -	
Sandseal	55							$ 94.00	$ -	
SAPP	55			20	20	4	16	$ 56.00	$ 896.00	880
Soda Ash	55							$ 14.50	$ -	
Sodium Sulphite	55			80	80	25	55	$ 24.02	$ 1,321.10	3,025
Trugel-13A	55			144	144		144	$ 8.70	$ 1,252.80	7,920
Xanthan Gum P	55			20	20	8	12	$ 412.00	$ 4,944.00	660
AMC Ausgel	55			126	126	51	75	$ 9.50	$ 712.50	4,125
	TOTAL TRANSFER VALUE							$	48,537.60	

TOTAL WEIGHT	86,350 Lbs
	39.17 Tonnes

Note: The remaining AMC Ausgel product mistakingly delivered to site
was returned to stores during the well. Ausgel price charged off was not provided by IDFS.

Note: 3 pallets of AMC-KCl are inclusive of the inventory received.
These were either used during the well and have been costed at IDFS price OR still remain onsite.

This Materials Reconciliation is based on information provided from site at the time of interval TD.
Product condition is yet to be confirmed from a goods transfer and some products onsite may be damaged.

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5. Fluid Properties Summary

Myall Creek # 8

						Rheology					Fluid loss data				Solids					Water Phase Chemistry									
Date	Day	Mud Type	Temp.	Depth	Weight	Vis	PV	YP	10 sec	10 min	API	Cake	HPHT	@Temp	Solids	Water	Oil	Sand	MBT	pH	Pm	Pf	Mf	Cl-	Ca++	$SO_3^{=}$	K^+	KCl	PHPA
22-Mar-03	1	Gel Water																											
		Gel Water		31																									
23-Mar-03	2	Gel Water		223	8.6	36									2.0	98.0													
		Gel Water		223	9.2	40									6.5	93.5													
24-Mar-03	3	KCL / PHPA		223																									
		KCL / PHPA	25	223	8.6	34	5	7	1	2	n/c				0.9	99.1				9.5		1.6	2.4	17700	320		18900	3.5	0.5
25-Mar-03	4	KCL / PHPA	47	514	8.9	34	7	12	4	6	14	1			2.8	97.2		tr	3	9		0.6	0.9	17700	200	180	18900	3.5	0.8
		KCL / PHPA	50	1050	9.7	38	10	14	5	6	8.5	1			7.3	92.7		0.15	5	9		0.4	0.7	15600	120	120	17300	3.2	1.14
26-Mar-03	5	KCL / PHPA	56	1415	9.7	44	17	23	5	8	7	1			7.6	92.4		0.2	7.5	8.5		0.4	1.1	15900	160	180	17800	3.3	1.15
		KCL / PHPA	58	1603	9.7	40	18	22	5	8	6.8	1			7.6	92.4		0.2	7.5	9		0.4	0.7	16500	200	180	18400	3.4	1.2
27-Mar-03	6	KCL / PHPA	60	1827	9.7	44	17	22	6	8	6.5	1			7.6	92.4		0.2	7.5	9		0.4	0.7	16500	200	180	18400	3.4	1.2
		KCL / PHPA	62	1875	10.1	58	20	33	16	22	7	1			9.1	90.9		0.2	15	9		0.4	0.8	16500	240	180	18400	3.4	1.2
28-Mar-03	7	KCL / PHPA	51	1875	10.1	56	20	29	14	20	6.8	1			9.1	90.9		0.15	15	8.5		0.4	0.9	16000	240	120	17800	3.3	1.2
		KCL / PHPA		1875	10.1	58	18	28	11	18	6.8	1			9.1	90.9		0.15	15	8.5		0.4	0.9	16000	240	120	17800	3.3	1.2
29-Mar-03	8	KCL / PHPA	45	1875	10.2	56	19	28	13	18	6.8	1			9.3	90.7		0.15	15	9		0.5	0.9	16000	240	100	17800	3.3	1.2
30-Mar-03	9	KCL / PHPA	47	1877	10.2	58	20	29	10	16	6.5	1			9.1	90.9		0.1	15	9.5		0.4	0.6	15600	240	100	17300	3.2	1.2
		KCL / PHPA	43	1883	10.2	57	18	27	8	13	6	1			9.1	90.9		0.1	15	9.5		0.4	0.6	16000	240	180	17800	3.3	1.22
31-Mar-03	10	KCL / PHPA	52	1900	10.1	60	23	31	12	19	6.8	1			8.7	91.3		0.1	17	9		0.6	1.4	15000	160	180	16800	3.1	1.26
		KCL / PHPA	56	1966	10	58	20	30	12	20	7	1			8.0	92.0		0.15	17	9		0.7	1.8	18000	160	180	20500	3.8	1.8
1-Apr-03	11	KCL / PHPA	59	2027	10	58	17	28	11	15	7.6	1			8.0	92.0		0.1	17	9		0.8	2	18000	200	120	20500	3.8	1.5
2-Apr-03	12	KCL / PHPA		2027	10	56	14	27	10	13	8	1			8.0	92.0		0.1	17	9		0.6	1.8	17700	160	100	18900	3.5	1.3

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6.1 Mud Volume Analysis

Myall Creek # 8

12 1/4" Surface Hole

		Interval	Metres		Fluid Built & Received					Fluid Disposed						Summary			
Date	Hole Size	From	To	Mud Type	Fresh Premix	Sump Premix	Direct Recirc	Water	Other	De-sander	De-silter	Centrif uge	Down-hole	Dumped	Other	Initial	Received	Disposed	Final
22-Mar-03	12.25		31	Gel Water	200			20									220		211
				Gel Water															
23-Mar-03	12.25	31	223	Gel Water				80									80		218
				Gel Water															
Sub Total				**Gel Water**	**200**			**100**									**300**		

Dilution Factors			
	Interval Length	Dilution Vol	Dilution Factor
12 1/4" Surface Hole	233 m	100 bbls	0.4 bbls/m

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6.2 Mud Volume Analysis

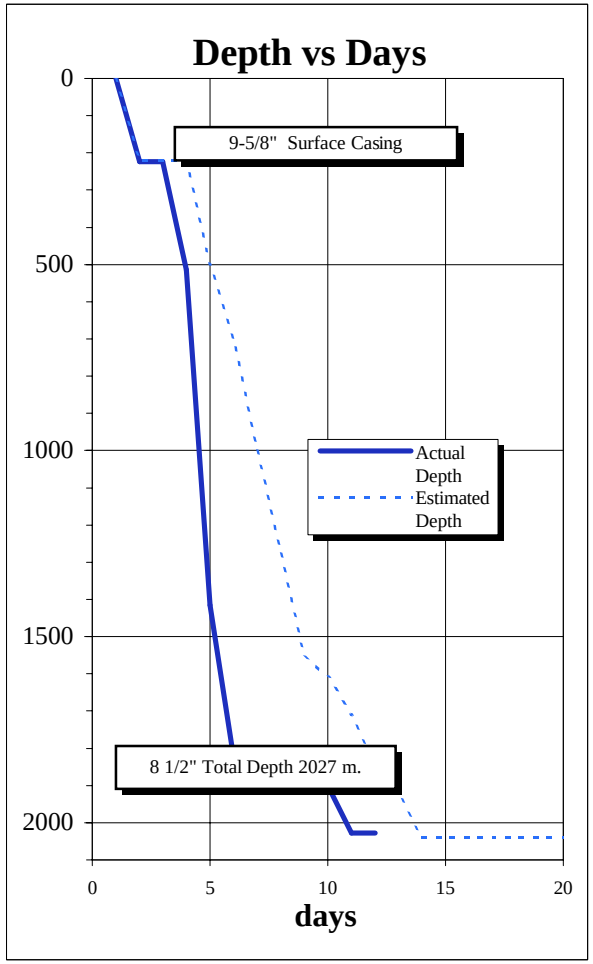
Myall Creek # 8

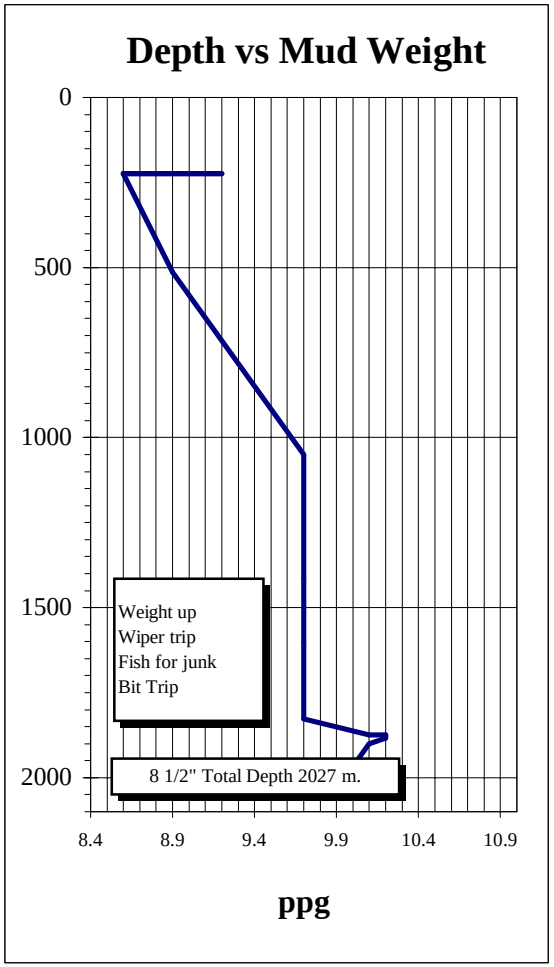
8.5 " Intermediate Hole

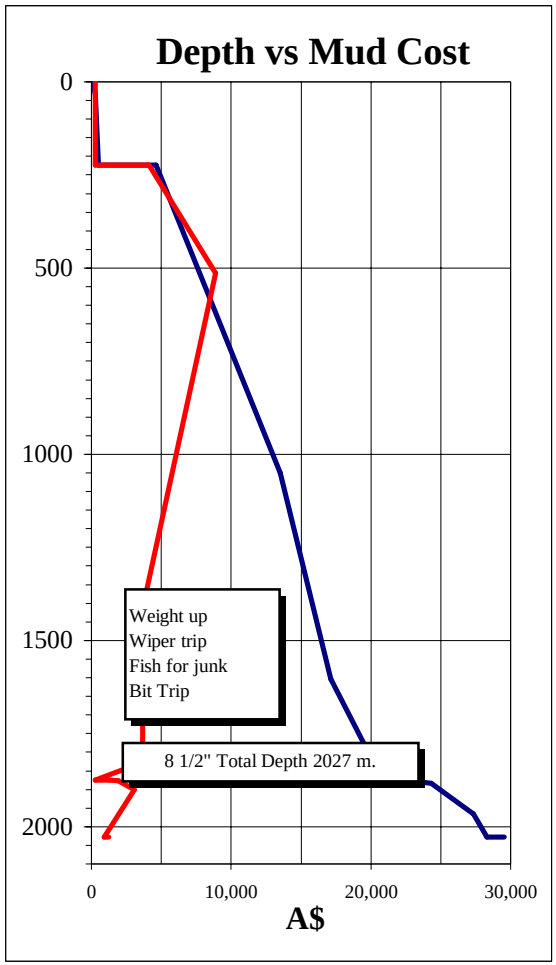
		Interval	Metres		Fluid Built & Received					Fluid Disposed						Summary			
Date	Hole Size	From	To	Mud Type	Fresh Premix	Sump Premix	Direct Recirc	Water	Other	De-sander	De-silter	Centrif uge	Down-hole	Dumped	Other	Initial	Received	Disposed	Final
24-Mar-03	8.50	223	256	KCL / PHPA	450												450		430
				KCL / PHPA															
25-Mar-03	8.50	256	1117	KCL / PHPA	480					26			124	30	12	430	480	192	718
				KCL / PHPA															
26-Mar-03	8.50	1117	1645	KCL / PHPA	450					69			214	90	25	718	450	398	770
				KCL / PHPA															
27-Mar-03	8.50	1645	1875	KCL / PHPA	120					34			32	10	15	770	120	91	799
				KCL / PHPA															
28-Mar-03	8.50	1875	1875	KCL / PHPA						3			6		15	799		23	776
				KCL / PHPA															
29-Mar-03	8.50	1875	1875	KCL / PHPA						3			13		15	776		30	746
				KCL / PHPA															
30-Mar-03	8.50	1875	1883	KCL / PHPA	120					15			83			746	120	98	767
				KCL / PHPA															
31-Mar-03	8.50	1883	1972	KCL / PHPA	220					40			21	35	15	767	220	111	876
				KCL / PHPA															
1-Apr-03	8.50	1972	2027	KCL / PHPA						20			20	23	15	876		78	798
				KCL / PHPA															
2-Apr-03		2027	2027	KCL / PHPA									288			798		288	510
				KCL / PHPA															
Sub Total				**KCL / PHPA**	**1840**					**209**			**801**	**188**	**112**		**1840**	**1310**	

Dilution Factors			
	Interval Length	Dilution Vol	Dilution Factor
8.5 " Intermediate Hole	1794 m	1840 bbls	1.0 bbls/m

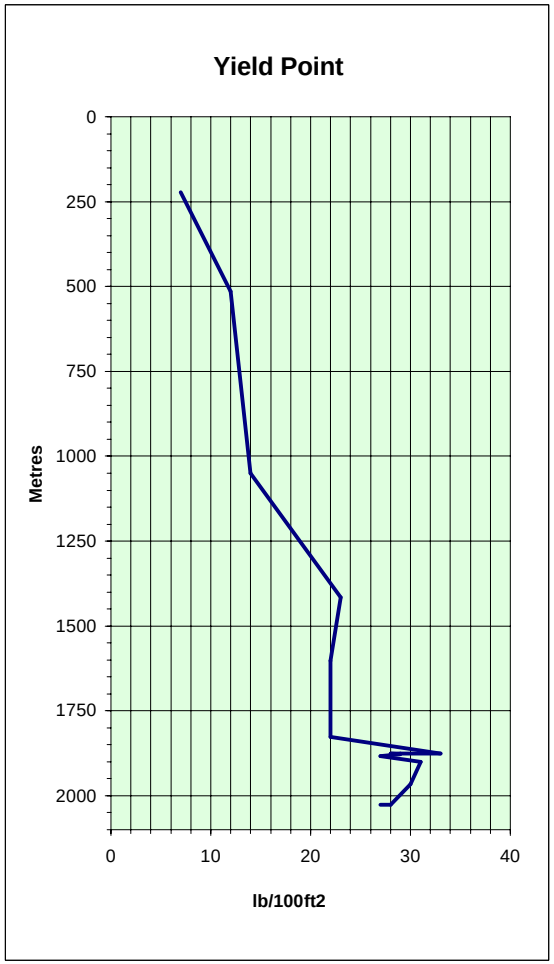
7.1 Graphs

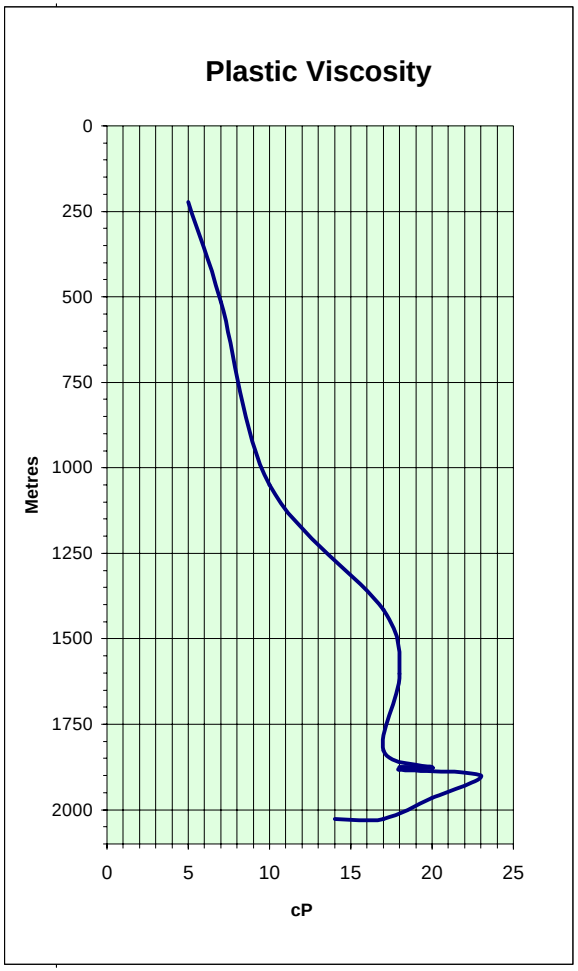

Depth vs Days
0
500
1000
1500
2000
0
5
10
15
20
days
9-5/8" Surface Casing
Actual Depth
Estimated Depth
8 1/2" Total Depth 2027 m.

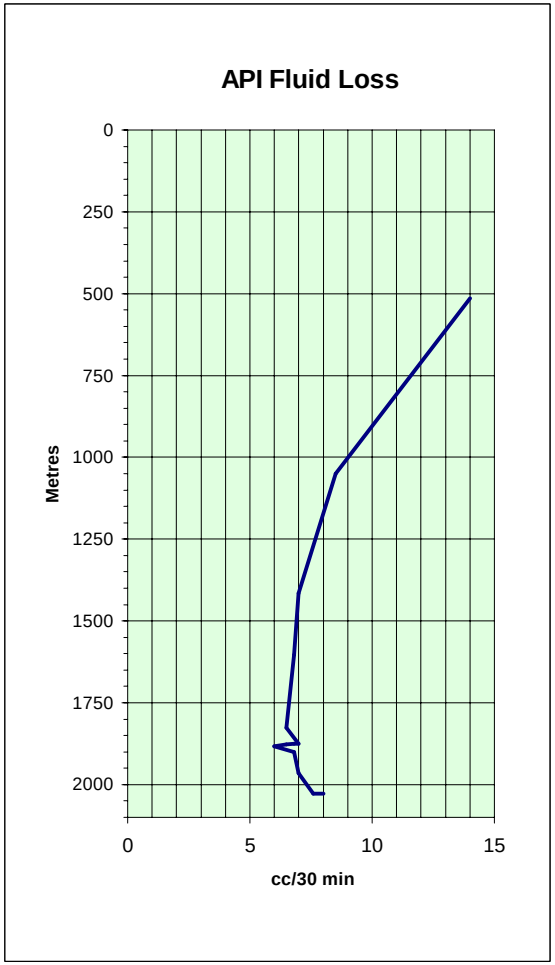

Depth vs Mud Weight
0
500
1000
1500
2000
8.4
8.9
9.4
9.9
10.4
10.9
ppg
Weight up
Wiper trip
Fish for junk
Bit Trip
8 1/2" Total Depth 2027 m.


Depth vs Mud Cost
0
500
1000
1500
2000
0
10,000
20,000
30,000
A$
Weight up
Wiper trip
Fish for junk
Bit Trip
8 1/2" Total Depth 2027 m.

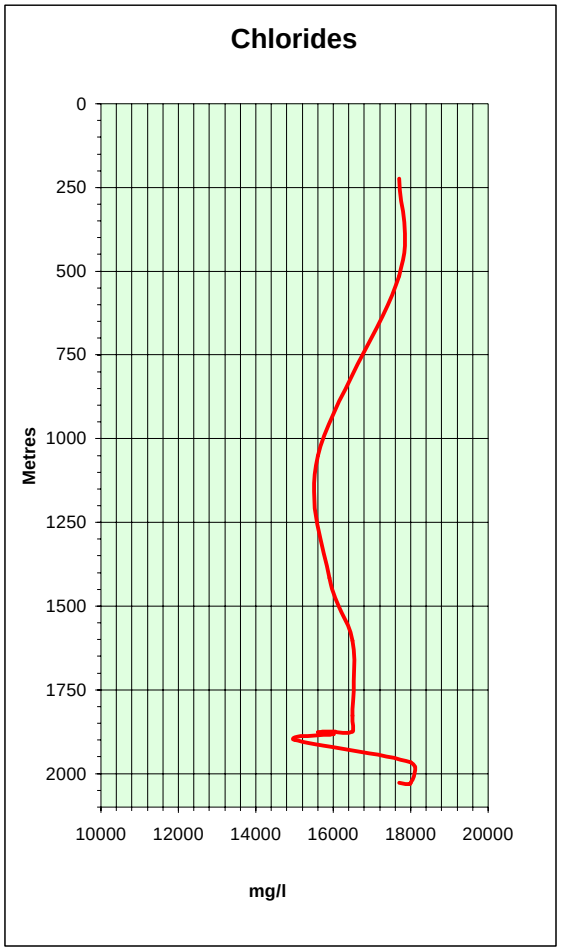
7.2 GRAPHS

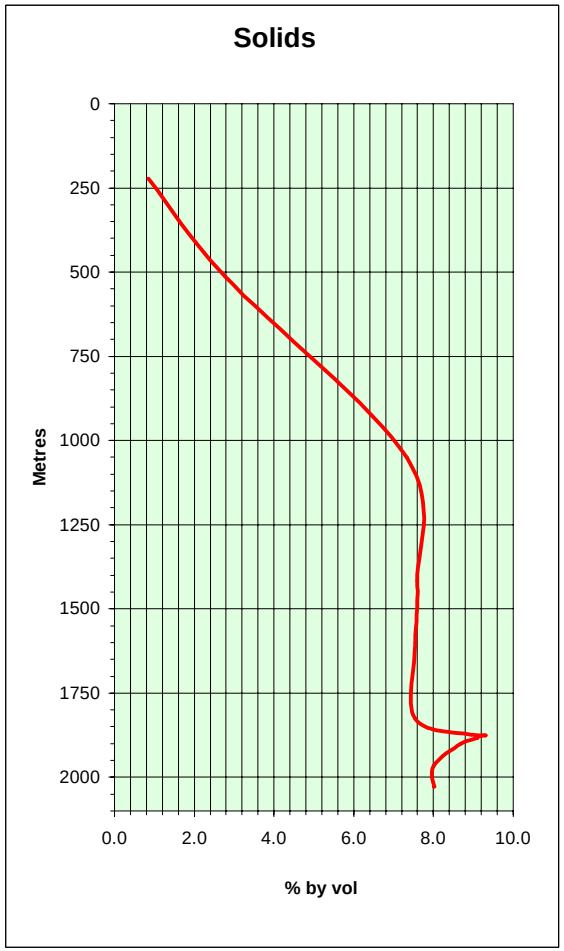

Yield Point
Metres
0
250
500
750
1000
1250
1500
1750
2000
0
10
20
30
40
lb/100ft2

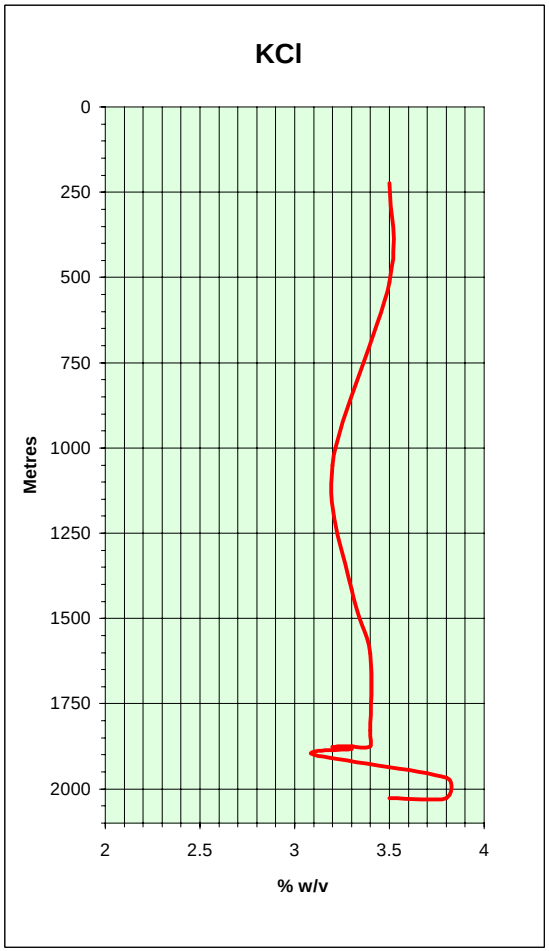

Plastic Viscosity
Metres
0
250
500
750
1000
1250
1500
1750
2000
0
5
10
15
20
25
cP


API Fluid Loss
Metres
0
250
500
750
1000
1250
1500
1750
2000
0
5
10
15
cc/30 min

7.3 GRAPHS


Chlorides
Metres
0
250
500
750
1000
1250
1500
1750
2000
10000
12000
14000
16000
18000
20000
mg/l


Solids
Metres
0
250
500
750
1000
1250
1500
1750
2000
0.0
2.0
4.0
6.0
8.0
10.0
% by vol


KCl
Metres
0
250
500
750
1000
1250
1500
1750
2000
2
2.5
3
3.5
4
% w/v

8. Bit Record

Operator : **OCA**	Well : **Myall Creek # 8**	Contractor : **Century**	Supervisors : J. Dingle
Spud Date : **22-Mar-03**	TD Date : **1st -Apr-03**	Surface Csg : **9 5/8"@ 222m**	Intermediate Csg : N/A Production Csg :

Bit #	Size (in)	Make	Type	Jets (1/32)						Reason Pulled	Depth Out	Depth Drilled	Hours	Cumm Hours	Gauge	GPM	Mud Wt	**n**	θ_{300}	Annular Flow Properties: Drill Pipe	Q CRIT dp	Flow	Drill Collars	Q CRIT dc	Flow	Jet Vel	HHP	HHP/ in^2	Impact Force
1	12.25	Varel	ETD1GMS	16	16	16				end interval	223	223	14	14	In	727	9.2			4.5		Turbulent	6.25		Turbulent	395	547	4.6	1369
2	8.50	Smith	519HPX	10	10	10	12	12	12	junk in hole	1875	1652	56	70	In	485	10.2	0.48	53	4.5	620.94	Laminar	6.25	475	Turbulent	276	198	3.5	709
3	8.50	Milling Bit	EHP43AK	20	20	20	20	20	20	end milling	1883	8	9	79	In	242	10.2	0.49	45	4.5	553.24	Laminar	6.25	426	Laminar	42	2	0.0	54
4	8.50	Varel	EHP43AK	14	14	14				total depth	2027	144	28.5	107.5	In	424	10	0.46	45	4.5	573.47	Laminar	6.25	435	Laminar	301	201	3.5	661

8a. ECD HYDRAULICS

MYALL CREEK #8

	Drilling Parameters												Fluid Properties					If Flow Laminar				If Flow Turbulent				Ann. Pressure losses	
																		psi				psi				psi	ppg
Date	Bbl/Stk @ 100%	%Eff	Total Stks	GPM	Hole Size	Casing ID	D/C size	D/P size	Depth m	TVD m	Casing Depth m	Length D/C m	Mw ppg	rpm 600	rpm 300	n	k (dynes…)	LPr. Loss (dh-dc)	LPr loss (dcas-dc)	LPr loss (dh-dp)	LPr loss (dcas-dp)	Tu Pr loss (dh-dc)	Tu Pr loss (dcas-dc)	Tu pr loss (dh-dp)	Tu pr loss (dcas-dp)	Total pr loss	**ECD**
24-Mar-03	0.0743	97	200	606	8.50	8.921	6.25	4.5	256	256	222.0	149	8.6	17	12	0.502	2.68					4.75	9.66		2.78	17.19	**8.99**
25-Mar-03	0.0743	97	220	666	8.50	8.921	6.25	4.5	1117	1117	222.0	149	9.7	34	24	0.502	5.35					32.18		41.26	8.91	82.35	**10.13**
26-Mar-03	0.0743	97	216	654	8.50	8.921	6.25	4.5	1645	1645	222.0	149	9.7	58	40	0.536	7.24					37.65		81.50	10.27	129.42	**10.16**
27-Mar-03	0.0743	97	190	575	8.50	8.921	6.25	4.5	1875	1875	222.0	149	10.1	73	53	0.462	15.22			159.49	19.14	31.59				210.21	**10.76**
28-Mar-03	0.0743	97	160	484	8.50	8.921	6.25	4.5	1875	1875	222.0	149	10.1	69	49	0.494	11.53	37.89		129.77	15.46					183.12	**10.67**
29-Mar-03	0.0743	97	90	272	8.50	8.921	6.25	4.5	1875	1875	222.0	131.21	10.2	66	47	0.490	11.34	24.20		95.61	11.26					131.07	**10.61**
30-Mar-03	0.0743	97	80	242	8.50	8.921	6.25	4.5	1883	1883	222.0	131.21	10.2	63	45	0.485	11.16	21.99		87.71	10.29					119.99	**10.57**
31-Mar-03	0.0743	97	144	436	8.50	8.921	6.25	4.5	1972	1972	222.0	131.21	10.0	70	50	0.485	12.40	32.49		137.16	15.21					184.86	**10.55**
1-Apr-03	0.0743	97	140	424	8.50	8.921	6.25	4.5	1800	1800	222.0	131.21	10.0	62	45	0.462	12.89	29.26		113.05	14.10					156.41	**10.51**

OCA

9. Solids Control Equipment

Myall Creek # 8

Date	Depth	Shaker 1		Shaker 2		Desander						Desilter						Centrifuge				Degasser	
	(m)	Screens	Hours	Screens	Hours	Cone Size	Cone Nos	Hours	OF ppg	UF ppg	GPM	Cone Size	Cone Nos	Hours	OF ppg	UF ppg	GPM	Type	Hours	UF ppg	OF ppg	Type	Hours
22-Mar-03	31	3 x 84	1	3 x 84	1																		
23-Mar-03	223	3 x 84	1	3 x 84	1																		
24-Mar-03	256	3 x 84	1	3 x 84	1																		
25-Mar-03	1117	3 x 84	24	3 x 84	24	10"	2	24	9.7	13.8	0.75	4"	10										
26-Mar-03	1645	3 x 110	24	3 x 110	24	10"	2	24	9.7	11.7	2	4"	10										
27-Mar-03	1875	3 x 110	12	3 x 110	12	10"	2	12	10.1	11.5	2	4"	10										
28-Mar-03	1875	3 x 110	3	3 x 110	3	10"	2	1	10.1	12.2	1.75	4"	10										
29-Mar-03	1875	3 x 110	3	3 x 110	3	10"	2	1	10.1	12.2	1.75	4"	10										
30-Mar-03	1883	3 x 110	10	3 x 110	10	10"	2	9	10.2	12.4	1.2	4"	10										
31-Mar-03	1972	3 x 110	20	3 x 110	20	10"	2	20	10	11.7	1.4	4"	10										
1-Apr-03	2027	3 x 110	10	3 x 110	10	10"	2	10	10	11.3	1.4	4"	10										
2-Apr-03	2027	3 x 110		3 x 110		10"	2					4"	10										

10. Hole Gauge

Myall Creek # 8

Hole Gauge by Formation Interpreted from Caliper Log Data.

Drilled Depth	2027 m	Calc OH Vol	416 bbls
Logging Depth	2027 m	Actual OH Vol	437 bbl
Bit Size	**8.50 ins.**	Volume Excess	21 bbl
CSG Size	**9 5/8"**	OH Excess %	5.0%
CSG ID	**8.921 ins.**	Average Hole Diam	8.71 ins.
CSG Shoe	222 m	CSG Volume	56 bbls
OH Logged	1805 m	Total Volume	493 bbls

FORMATION	FROM Metres	TO Metres	INTERVAL Metres	BHVol M^3	MAX OH DIAM inches	AVG DIAM inches
Wallumbilla	222	311	89	3.9	9.50	9.30
Bungil	311	450	139	5.5	9.00	8.84
Mooga	450	632	182	6.8	8.75	8.59
Orallo	632	765	133	5	8.75	8.61
Gubberamunda	765	899	134	4.7	8.50	8.32
Westbourne	899	1076	177	6.5	8.75	8.51
Walloon	1076	1346	270	10.3	8.75	8.68
Hutton	1346	1521	175	6.3	8.50	8.43
Evergreen	1521	1640	119	4.4	8.75	8.54
Moolayember	1640	1805	165	6.8	9.50	9.02
Snake Creek	1805	1820	15	0.6	9.00	8.88
Showgrounds	1820	1832	12	0.4	9.00	8.11
Rewan	1832	1940	108	5.0	10.00	9.56
Bandanna	1940	1999	59	2.3	10.50	8.77
Black Alley	1999	2013	14	0.5	9.00	8.40
Winnathoola	2013	2027	14	0.4	8.50	7.51
T.D.	2027					

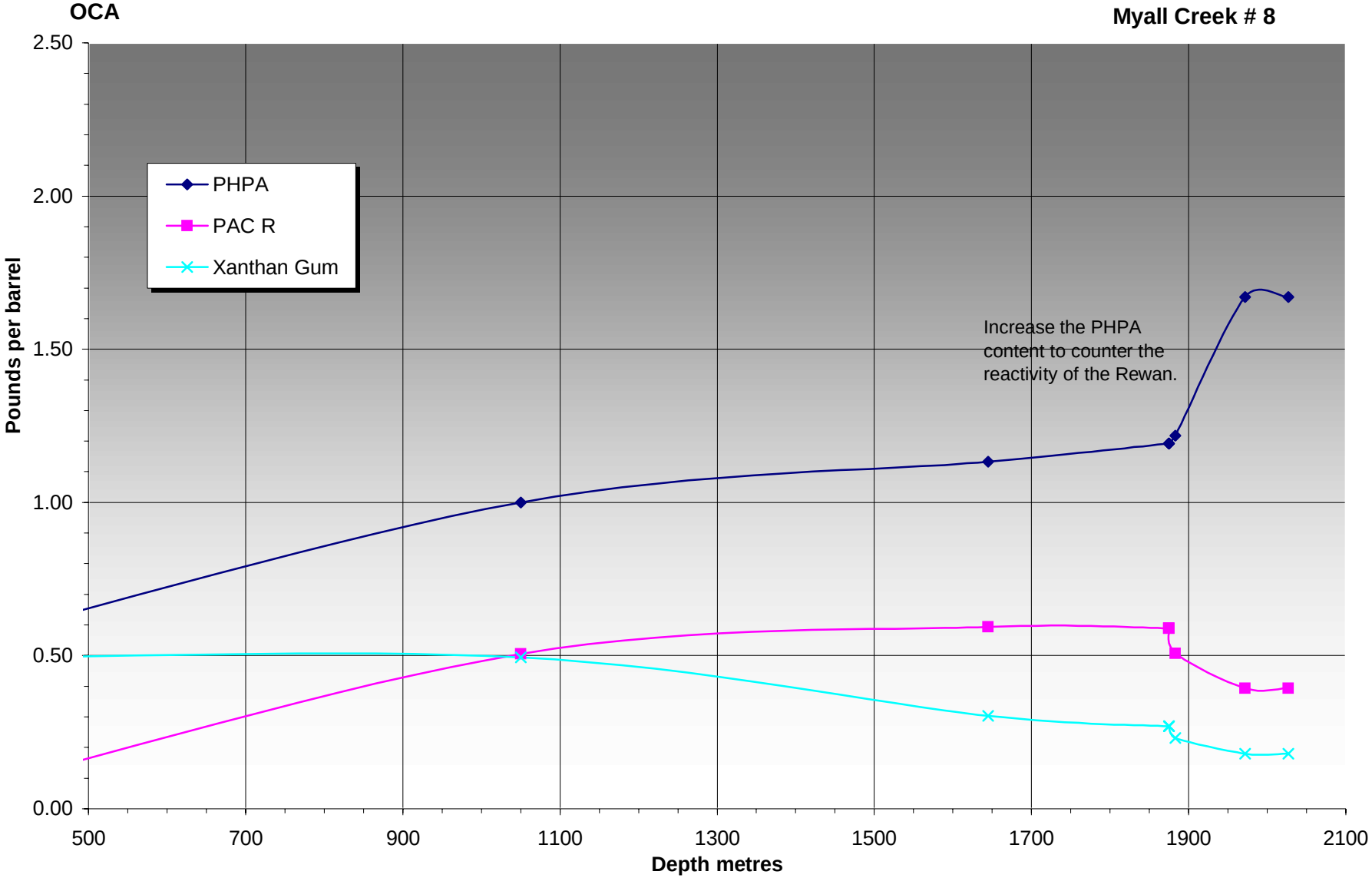
11. POLYMERS CONCENTRATION

OCA **Myall Creek # 8**

				Usage				Concentration ppb			
Date	**Depth**	**Initial Vol bbls**	**Addition bbls**	**PHPA**	**PAC R**	**PAC L**	**Xanthan Gum**	**PHPA**	**PAC R**	**PAC L**	**Xanthan Gum**
24-Mar-03	256	0	450	4			4	0.49	0.00	0.00	0.49
25-Mar-03	1050	430	440	12	8		4	1.00	0.51	0.00	0.49
26-Mar-03	1645	718	450	11	6			1.13	0.59	0.00	0.30
27-Mar-03	1875	770	100	3	1			1.19	0.59	0.00	0.27
28-Mar-03	1875	799	0					1.19	0.59	0.00	0.27
29-Mar-03	1875	776	0			2		1.19	0.59	0.14	0.27
30-Mar-03	1883	746	120	3		4		1.22	0.51	0.38	0.23
31-Mar-03	1972	767	220	13				1.67	0.39	0.29	0.18
1-Apr-03	2027	876	0			2		1.67	0.39	0.42	0.18

*** No depletion (loss to formation, cuttings, degradation, temperature etc) of Polymers has been taken into account.**

11.0 Polymer Concentration in Main Production Hole.



12.0 FIELD ENGINEERING LOG

MYALL CREEK # 8

Previous Well:	n / a
Mud Engineer(s) on Rig Move:	---

Dates of Rig Move:	n / a
Engineering Days on Rig Move:	none

Day #	Date	Engineer(s) Name
Day 1	23/03/2003	Chris. Mahoney
Day 2	24/03/2003	Chris. Mahoney
Day 3	25/03/2003	Chris. Mahoney
Day 4	26/03/2003	Chris. Mahoney
Day 5	27/03/2003	Chris. Mahoney
Day 6	28/03/2003	Chris. Mahoney
Day 7	29/03/2003	Chris. Mahoney
Day 8	30/03/2003	Chris. Mahoney
Day 9	31/03/2003	Chris. Mahoney
Day 10	1/04/2003	Chris. Mahoney
Day 11	2/04/2003	Chris. Mahoney
Day 12	3/04/2003	Chris. Mahoney
TOTAL eng. days for this well:		12 DAYS

INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report # 1	Date	22-Mar-2003	
Rig No 1	Spud Date	22-Mar-2003	
Depth 0	To	31	Metres

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 12 1/4"	ETD1GMS 0	16 16 16	SURFACE SET @ 0 ft 0 m	HOLE / PITS 0	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 0 psi
DRILL PIPE SIZE 0	TYPE 0.0	Length Mtrs	INT. SET @ 0 ft 0 m	TOTAL CIRCULATING VOL.	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) min
DRILL PIPE SIZE 0	TYPE HW	Length Mtrs	PROD. or LNR Set @ 0 ft 0 m	IN STORAGE 0	BBL/STK 0.0721; STK / MIN 160; TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (") 6 1/4		Length 31 Mtrs	MUD TYPE Gel Water		BBL/MIN 11.54; GAL / MIN 485; ANN VEL. (ft/min) DP - DCs 0

MUD PROPERTIES

SAMPLE FROM			
TIME SAMPLE TAKEN			
FLOWLINE TEMPERATURE	^{0}F		
DEPTH	Metres		
WEIGHT	ppg / SG		
FUNNEL VISCOSITY (sec/qt) API @	^{0}F		
PLASTIC VISCOSITY cP @	^{0}F		
YIELD POINT (lb/100FT2)			
GEL STRENGTH (lb/100ft2) 10 sec/10 min.			
FILTRATE API (cm3/30 min.)			
API HPHT FILTRATE (cm3/30 min.) @	^{0}F		
CAKE THICKNESS API : HPHT (32nd in)			
SOLIDS CONTENT			
LIQUID CONTENT (%by Vol.) OIL/WATER			
SAND CONTENT (% by Vol.)			
METHYLENE BLUE CAPACITY (ppb equiv.)			
PH			
ALKALINITY MUD (Pm)			
ALKALINITY FILTRATE (Pf / Mf)			
CHLORIDE (mg/L)			
TOTAL HARDNESS AS CALCIUM (mg/L)			
SULPHITE (mg/L)			
K+ (mg/L)			
KCL (% by Wt.)			
PHPA (Calc ppb)			

MUD PROPERTY SPECIFICATIONS

Mud Weight	a.l.a.p.	MBT	0	API Filtrate	
Vis		Yield Point	0	pH	9 - 10
KCl		PHPA		Sulphites	

OBSERVATIONS

OPERATIONS SUMMARY

Having rigged up over Myall Creek # 8, the spud mud was mixed and the well was spudded at 2300 hrs on the 22nd March 2003. 12 1/4" hole was made to 31 metres by midnight.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	0	Desander	0	INITIAL VOLUME	0
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole		+ Fluid Received	0
Direct Recyc fm bore	0	Dumped	0	- Fluid Lost	
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	0
		Shakers	0		
TOTAL RECEIVED	0	TOTAL LOST	0	FINAL VOLUME	

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size		Hrs	Centrifuge		Hrs
# 1	3 x 84	1	Desander	0	0	0	0	0	0
# 2	3 x 84	1	Desilter	0	0	0	Degasser	0	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	0.0	0	0.00
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Caustic Soda	$ 35.60	44		1	43	$ 35.60
AMC Ausgel	$ 9.50	126		24	102	$ 228.00

SOLIDS ANALYSIS

	%	ppb
Barite	0.0	0.0
Total LGS	0.0	0.0
Bentonite	0.0	0.0
Drilled Solids	0.0	0.0
Salt	TR	
Avg .Spec. Grav. Solids	0.00	
n @ Hrs		
K (lb/100 ft^2)		

BIT HYDRAULICS DATA

Jet Velocity	263 ft/sec
Impact force	lbs
HHP	
HSI	
Bit Press Loss	psi
ECD	.00 ppg
CSG Seat Fracture Pressure	0 psi
Equiv. Mud Wt.	0.0 ppg

DAILY COST	CUMULATIVE COST
$263.60	$263.60

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

Any opinion and/or recommendation, expressed orally or written herin, has been prepared carefully and may be used if the user so elects, however, no representation or warranty is made by ourselves or our agents as to its correctness or completeness, and no liability is assumed for any damages resulting from the use of same.

INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report # 2	Date	23-Mar-2003	
Rig No 1	Spud Date	22-Mar-2003	
Depth 31	To 223	Metres	

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 12 1/4"	ETD1GMS 0	16 16 16	9 5/8" SURFACE 728 ft; SET @ 222 m	HOLE; PITS 0	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 1500 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6	Length 19 Mtrs	INT. 0 ft; SET @ 0 m	TOTAL CIRCULATING VOL.	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft; 0 m	IN STORAGE 0	BBL/STK 0.0721; STK / MIN 240; TOTAL CIRC. TIME (min) min
DRILL COLLAR SIZE (") 6 1/4		Length 149 Mtrs	MUD TYPE Gel Water		BBL/MIN 17.31; GAL / MIN 727; ANN VEL. (ft/min) DP - DCs 0

MUD PROPERTIES

SAMPLE FROM		Pit		
TIME SAMPLE TAKEN		0300	0600	
FLOWLINE TEMPERATURE	^{0}F			
DEPTH	Metres			
WEIGHT	ppg / SG	8.60 1.03	9.20 1.10	
FUNNEL VISCOSITY (sec/qt) API @	^{0}F	36	40	
PLASTIC VISCOSITY cP @	^{0}F			
YIELD POINT (lb/100FT2)				
GEL STRENGTH (lb/100ft2) 10 sec/10 min.				
FILTRATE API (cm3/30 min.)				
API HPHT FILTRATE (cm3/30 min.) @	^{0}F			
CAKE THICKNESS API : HPHT (32nd in)				
SOLIDS CONTENT		2.0	6.5	
LIQUID CONTENT (%by Vol.) OIL/WATER		98.0		
SAND CONTENT (% by Vol.)				
METHYLENE BLUE CAPACITY (ppb equiv.)				
PH				
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)				
CHLORIDE (mg/L)				
TOTAL HARDNESS AS CALCIUM (mg/L)				
SULPHITE (mg/L)				
K+ (mg/L)				
KCL (% by Wt.)				
PHPA (Calc ppb)				

MUD PROPERTY SPECIFICATIONS

Mud Weight	a.l.a.p.	MBT	0	API Filtrate	
Vis		Yield Point	0	pH	9 - 10
KCl		PHPA		Sulphites	

OBSERVATIONS

While nippling up, dump and clean those tanks used for the 12 1/4" interval.
Began mixing the tanks with a 3% KCl / PHPA fluid.
Leave the screens the same as used in the first interval, 3 x 84's.
Will begin the new hole with 0.5 ppb PHPA to ensure no run off over the shakers when we displace to mud and start drilling.

Tested the make-up water with the following results:
pH = 8.0, pf / Mf = 0.3 / 1.5, Chlor = 500 mg/l,
Ca++ = 40 mg/l, Rw = 5.5 @ 75 deg F.

OPERATIONS SUMMARY

Drilled to 223 metres. Circulate, survey and pull out of the hole.
Rig up 9 5/8" casing and run in to set at 222 m.
Circulate and cement casing to surface.
Having waited on cement, laid out the conductor and landing joint.
Nipple up b.o.p. stack and surface equipment.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	0	Desander	0	INITIAL VOLUME	0
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole		+ Fluid Received	0
Direct Recyc fm bore	0	Dumped	0	- Fluid Lost	
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	0
		Shakers	0		
TOTAL RECEIVED	0	TOTAL LOST	0	FINAL VOLUME	

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size		Hrs	Centrifuge		Hrs
# 1	3 x 84	1	Desander	0	0	0	0	0	0
# 2	3 x 84	1	Desilter	0	0	0	Degasser	0	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	0.0	0	0.00
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
AMC Ausgel	$ 9.50	102		27	75	$ 256.50

SOLIDS ANALYSIS

	%	ppb
Barite	0.0	0.0
Total LGS	6.5	59.1
Bentonite	0.0	0.0
Drilled Solids	6.5	59.1
Salt	TR	
Avg .Spec. Grav. Solids		2.60
n @ 0600 Hrs		
K (lb/100 ft^2)		

BIT HYDRAULICS DATA

Jet Velocity	395 ft/sec
Impact force	1368 lbs
HHP	547
HSI	
Bit Press Loss	1290 psi
ECD	.00 ppg
CSG Seat Fracture Pressure	0 psi
Equiv. Mud Wt.	0.0 ppg

DAILY COST	CUMULATIVE COST
$256.50	$520.10

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

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INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report # 3	Date	24-Mar-2003	
Rig No 1	Spud Date	22-Mar-2003	
Depth 223	To 256	Metres	

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8 1/2	S19HPX 0	10 10 10 / 12 12 12	9 5/8" SURFACE 728 ft; SET @ 222 m	HOLE 45; PITS 300	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 1000 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 52 Mtrs	INT. 0 ft; SET @ 0 m	TOTAL CIRCULATING VOL. 345	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) 3 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft; 0 m	IN STORAGE 85	BBL/STK 0.0721; STK / MIN 200; TOTAL CIRC. TIME (min) 30 min
DRILL COLLAR SIZE (") 6 1/4		Length 149 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 14.42; GAL / MIN 606; ANN VEL. (ft/min) DP 285, DCs 447

MUD PROPERTIES

SAMPLE FROM		Pit	
TIME SAMPLE TAKEN		2230	
FLOWLINE TEMPERATURE	^{0}F	25	
DEPTH	Metres	223	
WEIGHT	ppg / SG	8.60	1.03
FUNNEL VISCOSITY (sec/qt) API @	23 ^{0}F	34	
PLASTIC VISCOSITY cP @	22 ^{0}F	5	
YIELD POINT (lb/100FT2)		7	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		1	2
FILTRATE API (cm3/30 min.)		n/c	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F		
CAKE THICKNESS API : HPHT (32nd in)			
SOLIDS CONTENT		0.9	
LIQUID CONTENT (%by Vol.) OIL/WATER			
SAND CONTENT (% by Vol.)			
METHYLENE BLUE CAPACITY (ppb equiv.)			
PH		9.5	
ALKALINITY MUD (Pm)			
ALKALINITY FILTRATE (Pf / Mf)		1.60	2.40
CHLORIDE (mg/L)		17,700	
TOTAL HARDNESS AS CALCIUM (mg/L)		320	
SULPHITE (mg/L)			
K+ (mg/L)		18,900	
KCL (% by Wt.)		3.5	
PHPA (Calc ppb)		0.50	

MUD PROPERTY SPECIFICATIONS

Mud Weight	8.6 - 9.3	MBT	0	API Filtrate	n/c
Vis	35 - 45	Yield Point	10 - 20	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	>100

OBSERVATIONS

Drilled out the cement and shoe with water from the pill tank.
Displaced this water and dumped it to the sump from 227 m. prior to conducting the FIT.
No losses over the shaker occurred after the new mud had been circulated .
Sodium Sulphite and Pac will be added this coming day.
The solids control equipment were started up just after midnight.

OPERATIONS SUMMARY

Nipple up b.o.p. stack and surface equipment. Pressure test same.
Make up bit # 2, a Smith PDC bit and run it in the hole on the bha.
Slip and cut line on the way in at 196 m.
Continue trip in and tag cement. Drill out through shoe to 227 metres.
Displace the water in the hole to mud and circulate the hole clean.
Conduct FIT. Resume drilling to make a midnight depth of 256 m.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	450	Desander	0	INITIAL VOLUME	0
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole		+ Fluid Received	450
Direct Recyc fm bore	0	Dumped	0	- Fluid Lost	
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	85
		Shakers	0		
TOTAL RECEIVED	450	TOTAL LOST	0	FINAL VOLUME	

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size		Hrs	Centrifuge		Hrs
# 1	3 x 84	1	Desander	0	0	0	0	0	0
# 2	3 x 84	1	Desilter	0	0	0	Degasser	0	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	0.0	0	0.00
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Caustic Soda	$ 35.60	43		1	42	$ 35.60
JK-261	$ 102.00	72		4	68	$ 408.00
KCl Fine	$ 16.00	766		126	640	$ 2,016.00
Xanthan Gum P	$ 412.00	20		4	16	$ 1,648.00

SOLIDS ANALYSIS

	%	ppb
Barite	0.0	0.0
Total LGS	0.9	7.7
Bentonite	0.0	0.0
Drilled Solids	0.9	7.7
Salt	1.1	12.8
Avg .Spec. Grav. Solids		2.60
n @ 2230 Hrs		0.50
K (lb/100 ft^2)		0.52

BIT HYDRAULICS DATA

Jet Velocity	345 ft/sec
Impact force	932 lbs
HHP	326
HSI	6
Bit Press Loss	922 psi
ECD	8.99 ppg
CSG Seat Fracture Pressure	0 psi
Equiv. Mud Wt.	0.0 ppg

DAILY COST	CUMULATIVE COST
$4,107.60	$4,627.70

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

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INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report # 4	Date	25-Mar-2003	
Rig No 1	Spud Date	22-Mar-2003	
Depth 256	To 1117	Metres	

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8 1/2	S19HPX 0	10 10 10 / 12 12 12	9 5/8" SURFACE 728 ft; SET @ 222 m	HOLE 228; PITS 410	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 1800 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 913 Mtrs	INT. 0 ft; SET @ 0 m	TOTAL CIRCULATING VOL. 638	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) 11 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft; 0 m	IN STORAGE 80	BBL/STK 0.0721; STK / MIN 220; TOTAL CIRC. TIME (min) 45 min
DRILL COLLAR SIZE (") 6 1/4		Length 149 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 15.87; GAL / MIN 666; ANN VEL. (ft/min) DP 314, DCs 492

MUD PROPERTIES

SAMPLE FROM		Pit	Pit	
TIME SAMPLE TAKEN		0930	2200	
FLOWLINE TEMPERATURE	^{0}F	47	50	
DEPTH	Metres	514	1,050	
WEIGHT	ppg / SG	8.90 / 1.07	9.70 / 1.16	
FUNNEL VISCOSITY (sec/qt) API @	46 ^{0}F	34	38	
PLASTIC VISCOSITY cP @	34 ^{0}F	7	10	
YIELD POINT (lb/100FT2)		12	14	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		4 / 6	5 / 6	
FILTRATE API (cm3/30 min.)		14	8.5	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F			
CAKE THICKNESS API : HPHT (32nd in)		1	1	
SOLIDS CONTENT		2.8	7.3	
LIQUID CONTENT (%by Vol.) OIL/WATER		97.2		
SAND CONTENT (% by Vol.)		tr		
METHYLENE BLUE CAPACITY (ppb equiv.)		3.0	5.0	
PH		9.0	9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)		0.60 / 0.90	0.40 / 0.70	
CHLORIDE (mg/L)		17,700	15,600	
TOTAL HARDNESS AS CALCIUM (mg/L)		200	120	
SULPHITE (mg/L)		180	120	
K+ (mg/L)		18,900	17,300	
KCL (% by Wt.)		3.5	3.2	
PHPA (Calc ppb)		0.80	1.14	

MUD PROPERTY SPECIFICATIONS

Mud Weight	9.5 - 10.8	MBT	0	API Filtrate	< 10
Vis	35 - 45	Yield Point	10 - 20	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	> 100

OBSERVATIONS

KCl, Pac and phpa are all added via premixes. Sulphites are added direct to the active suction as are additions of XC polymer and barite. Drilled to 690 m. into the mid - lower Orallo. Noticed while conducting a survey at this depth that the well was flowing. Using barite, the system density was raised to 9.5 ppg. Continued drilling and those flows persisted into the mid Gubberamunda and the weight was gradually brought up to 9.7 ppg. This seemed to overcome the influx from these pressured aquifers for the present.
Leave the desilter off to ensure no cutting of barite concentrations.
Some freshwater cutting is evident in the latter evening mud check.

OPERATIONS SUMMARY

Drilling all day interspersed with regular single shot wireline surveys.
Drilling through 1117 metres at midnight.
Weight up with barite while drilling to kill freshwater incursions from Orallo and Gubberamunda formations.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	480	Desander	26	INITIAL VOLUME	430
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole	124	+ Fluid Received	480
Direct Recyc fm bore	0	Dumped	30	- Fluid Lost	-192
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	80
		Shakers	12		
TOTAL RECEIVED	480	TOTAL LOST	192	FINAL VOLUME	718

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size		Hrs	Centrifuge		Hrs
# 1	3 x 84	24	Desander	2	10"	24	0	0	0
# 2	3 x 84	24	Desilter	10	4"	0	Degasser	0	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	9.7	13.8	0.75
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Barite	$ 9.95	800		320	480	$ 3,184.00
Caustic Soda	$ 35.60	42		2	40	$ 71.20
JK-261	$ 102.00	68		12	56	$ 1,224.00
KCl Fine	$ 16.00	640		80	560	$ 1,280.00
PAC-R	$ 164.00	40		8	32	$ 1,312.00
Sodium Sulphite	$ 24.02	40		6	34	$ 144.12
Xanthan Gum P	$ 412.00	16		4	12	$ 1,648.00

SOLIDS ANALYSIS

	%	ppb
Barite	2.0	29.0
Total LGS	5.4	48.8
Bentonite	0.5	5.0
Drilled Solids	4.8	43.8
Salt	0.9	10.7
Avg .Spec. Grav. Solids		3.03
n @ 2200 Hrs		0.50
K (lb/100 ft^2)		1.05

BIT HYDRAULICS DATA

Jet Velocity	380 ft/sec
Impact force	1272 lbs
HHP	489
HSI	9
Bit Press Loss	1258 psi
ECD	10.13 ppg
CSG Seat Fracture Pressure	440 psi
Equiv. Mud Wt.	20.0 ppg

DAILY COST	CUMULATIVE COST
$8,863.32	$13,491.02

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

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INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report # 5	Date	25-Mar-2003	
Rig No 1	Spud Date	22-Mar-2003	
Depth 1117	To 1645	Metres	

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8 1/2	S19HPX 0	10 10 10 / 12 12 12	9 5/8" SURFACE 728 ft; SET @ 222 m	HOLE 340; PITS 380	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 1900 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 1441 Mtrs	INT. 0 ft; SET @ 0 m	TOTAL CIRCULATING VOL. 720	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) 17 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft; 0 m	IN STORAGE 50	BBL/STK 0.0721; STK / MIN 216; TOTAL CIRC. TIME (min) 49 min
DRILL COLLAR SIZE (") 6 1/4		Length 149 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 15.58; GAL / MIN 654; ANN VEL. (ft/min) DP 308, DCs 483

MUD PROPERTIES				
SAMPLE FROM		Pit	Pit	
TIME SAMPLE TAKEN		1000	2130	
FLOWLINE TEMPERATURE	^{0}F	56	58	
DEPTH	Metres	1,415	1,603	
WEIGHT	ppg / SG	9.70 1.16	9.70 1.16	
FUNNEL VISCOSITY (sec/qt) API @	53 ^{0}F	44	40	
PLASTIC VISCOSITY cP @	40 ^{0}F	17	18	
YIELD POINT (lb/100FT2)		23	22	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		5 8	5 8	
FILTRATE API (cm3/30 min.)		7	6.8	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F			
CAKE THICKNESS API : HPHT (32nd in)		1	1	
SOLIDS CONTENT		7.6	7.6	
LIQUID CONTENT (%by Vol.) OIL/WATER		92.4	92.4	
SAND CONTENT (% by Vol.)		0.20	0.20	
METHYLENE BLUE CAPACITY (ppb equiv.)		7.5	7.5	
PH		8.5	9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)		0.40 1.10	0.40 0.70	
CHLORIDE (mg/L)		15,900	16,500	
TOTAL HARDNESS AS CALCIUM (mg/L)		160	200	
SULPHITE (mg/L)		180	180	
K+ (mg/L)		17,800	18,400	
KCL (% by Wt.)		3.3	3.4	
PHPA (Calc ppb)		1.15	1.20	

MUD PROPERTY SPECIFICATIONS

Mud Weight	9.5 - 10.8	MBT	0	API Filtrate	< 10
Vis	35 - 45	Yield Point	10 - 20	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	> 100

OBSERVATIONS

No further evidence of freshwater incursions.
Changed the screens on both shakers to 110 mesh for all.
Dump and clean sand trap twice to remove large build up of solids.

OPERATIONS SUMMARY

Drilling all day interspersed with regular single shot wireline surveys.
Drilling through 1645 metres at midnight.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	450	Desander	69	INITIAL VOLUME	718
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole	214	+ Fluid Received	450
Direct Recyc fm bore	0	Dumped	90	- Fluid Lost	-398
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	50
		Shakers	25		
TOTAL RECEIVED	450	TOTAL LOST	398	FINAL VOLUME	770

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size		Hrs	Centrifuge		Hrs
# 1	3 x 110	24	Desander	2	10"	24	0	0	0
# 2	3 x 110	24	Desilter	10	4"	0	Degasser	0	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	9.7	11.7	2.00
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Caustic Soda	$ 35.60	40		2	38	$ 71.20
JK-261	$ 102.00	56		11	45	$ 1,122.00
KCl Fine	$ 16.00	560		80	480	$ 1,280.00
PAC-R	$ 164.00	32		6	26	$ 984.00
Sodium Sulphite	$ 24.02	34		8	26	$ 192.16

SOLIDS ANALYSIS

	%	ppb
Barite	1.7	25.0
Total LGS	5.8	53.2
Bentonite	0.8	7.5
Drilled Solids	5.0	45.7
Salt	1.0	11.2
Avg .Spec. Grav. Solids		2.96
n @ 2130 Hrs		0.54
K (lb/100 ft^2)		1.42

BIT HYDRAULICS DATA

Jet Velocity	373 ft/sec
Impact force	1226 lbs
HHP	463
HSI	8
Bit Press Loss	1213 psi
ECD	10.16 ppg
CSG Seat Fracture Pressure	440 psi
Equiv. Mud Wt.	20.0 ppg

DAILY COST	CUMULATIVE COST
$3,649.36	$17,140.38

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

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INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report # 6	Date	27-Mar-2003	
Rig No 1	Spud Date	22-Mar-2003	
Depth 1645	To 1875	Metres	

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8 1/2	S19HPX 0	10 10 10 / 12 12 12	9 5/8" SURFACE 728 ft; SET @ 222 m	HOLE 389; PITS 370	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 2000 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 1671 Mtrs	INT. 0 ft; SET @ 0 m	TOTAL CIRCULATING VOL. 759	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) 22 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft; 0 m	IN STORAGE 40	BBL/STK 0.0721; STK / MIN 190; TOTAL CIRC. TIME (min) 58 min
DRILL COLLAR SIZE (") 6 1/4		Length 149 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 13.70; GAL / MIN 575; ANN VEL. (ft/min) DP 271, DCs 425

MUD PROPERTIES

SAMPLE FROM		Pit	Pit	
TIME SAMPLE TAKEN		0900	1200	
FLOWLINE TEMPERATURE	^{0}F	60	62	
DEPTH	Metres	1,827	1,875	
WEIGHT	ppg / SG	9.7 / 1.16	10.1 / 1.21	
FUNNEL VISCOSITY (sec/qt) API @	56 ^{0}F	44	58	
PLASTIC VISCOSITY cP @	44 ^{0}F	17	20	
YIELD POINT (lb/100FT2)		22	33	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		6 / 8	16 / 22	
FILTRATE API (cm3/30 min.)		6.5	7.0	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F			
CAKE THICKNESS API : HPHT (32nd in)		1	1	
SOLIDS CONTENT		7.6	9.1	
LIQUID CONTENT (%by Vol.) OIL/WATER		92.4	90.9	
SAND CONTENT (% by Vol.)		0.20	0.20	
METHYLENE BLUE CAPACITY (ppb equiv.)		7.5	15.0	
PH		9.0	9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)		0.40 / 0.70	0.40 / 0.80	
CHLORIDE (mg/L)		16,500	16,500	
TOTAL HARDNESS AS CALCIUM (mg/L)		200	240	
SULPHITE (mg/L)		180	180	
K+ (mg/L)		18,400	18,400	
KCL (% by Wt.)		3.4	3.4	
PHPA (Calc ppb)		1.20	1.20	

MUD PROPERTY SPECIFICATIONS

Mud Weight	10 - 10.8	MBT	0	API Filtrate	< 10
Vis	40 - 50	Yield Point	15 - 25	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	> 100

OBSERVATIONS

Drilled into the Rewan and simultaneously began weighting up to 10 ppg. The Rewan reacted more radically than usual & we experienced a sudden increase in viscosity from low 40's to over 60 secs with a corresponding doubling in the system's clay content. All this occurred between 10.00 and 11.30 hrs. This event was not helped by the fact that another 22 lb/bbl of solids was introduced at the same time by way of the weighting up process with barite. All this, coupled with the need to pull out for a first time wiper trip, ensured that some swabbing would take place. Back on bottom the plan will be to reduce this viscosity problem with the addition of KCl / phpa water and selective use of Pac-LV.

OPERATIONS SUMMARY

Drilled to 1875 m. by 1130 hrs.
Circulate bottoms up. Pump pill and pull out of hole for a wiper trip to the shoe. Sticky and tight for most of the trip.
Some swabbing was noted and this was somewhat exacerbated by the viscous mud. No flow resulted from the swabbing.
Slip line and run back in.
Back on bottom and circulate the hole clean. Unable to rotate.
Probable debris pushed down hole that now requires to be fished out.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	120	Desander	34	INITIAL VOLUME	770
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole	32	+ Fluid Received	120
Direct Recyc fm bore	0	Dumped	10	- Fluid Lost	-91
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	40
		Shakers	15		
TOTAL RECEIVED	120	TOTAL LOST	91	FINAL VOLUME	799

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size	Hrs	Centrifuge	Hrs
# 1	3 x 110	12	Desander	2 10"	12	0	0
# 2	3 x 110	12	Desilter	10 4"	0	Degasser	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	10.1	11.5	2.00
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Barite	$ 9.95	480		280	200	$ 2,786.00
Caustic Soda	$ 35.60	38		1	37	$ 35.60
JK-261	$ 102.00	45		3	42	$ 306.00
KCl Fine	$ 16.00	480		20	460	$ 320.00
PAC-R	$ 164.00	26		1	25	$ 164.00
Sodium Sulphite	$ 24.02	26		3	23	$ 72.06

SOLIDS ANALYSIS

	%	ppb
Barite	3.2	47.0
Total LGS	5.9	53.4
Bentonite	1.6	15.0
Drilled Solids	4.2	38.4
Salt	1.0	11.1
Avg .Spec. Grav. Solids		3.16
n @ 1200 Hrs		0.46
K (lb/100 ft^2)		2.98

BIT HYDRAULICS DATA

Jet Velocity	328 ft/sec
Impact force	988 lbs
HHP	328
HSI	6
Bit Press Loss	977 psi
ECD	10.76 ppg
CSG Seat Fracture Pressure	440 psi
Equiv. Mud Wt.	20.0 ppg

DAILY COST	CUMULATIVE COST
$3,683.66	$20,824.04

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

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INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report #	7	Date	28-Mar-2003
Rig No	1	Spud Date	22-Mar-2003
Depth	1875 To 1875		Metres

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD / LOCATION / STATE	PL 174 / Surat Basin / Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8 1/2	ETD14MPS 0	13 13 16	9 5/8" SURFACE 728 ft; SET @ 222 m	HOLE 386; PITS 350	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 2000 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 1635 Mtrs	INT. 0 ft; SET @ 0 m	TOTAL CIRCULATING VOL. 736	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) 26 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft; 0 m	IN STORAGE 40	BBL/STK 0.0721; STK / MIN 160; TOTAL CIRC. TIME (min) 67 min
DRILL COLLAR SIZE (") 6 1/4		Length 185 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 11.54; GAL / MIN 485; ANN VEL. (ft/min) DP 228, DCs 358

MUD PROPERTIES

SAMPLE FROM		Pit	Pit	
TIME SAMPLE TAKEN		1100	2300	
FLOWLINE TEMPERATURE	^{0}F	51		
DEPTH	Metres	1,875	1,875	
WEIGHT	ppg / SG	10.1 1.21	10.1 1.21	
FUNNEL VISCOSITY (sec/qt) API @	^{0}F	56	58	
PLASTIC VISCOSITY cP @	37 ^{0}F	20	18	
YIELD POINT (lb/100FT2)		29	28	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		14 20	11 18	
FILTRATE API (cm3/30 min.)		6.8	6.8	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F			
CAKE THICKNESS API : HPHT (32nd in)		1	1	
SOLIDS CONTENT		9.1	9.1	
LIQUID CONTENT (%by Vol.) OIL/WATER		90.9	90.9	
SAND CONTENT (% by Vol.)		0.15	0.15	
METHYLENE BLUE CAPACITY (ppb equiv.)		15.0	15.0	
PH		8.5	8.5	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)		0.40 0.90	0.40 0.90	
CHLORIDE (mg/L)		16,000	16,000	
TOTAL HARDNESS AS CALCIUM (mg/L)		240	240	
SULPHITE (mg/L)		120	120	
K+ (mg/L)		17,800	17,800	
KCL (% by Wt.)		3.3	3.3	
PHPA (Calc ppb)		1.20	1.20	

MUD PROPERTY SPECIFICATIONS

Mud Weight	10 - 10.8	MBT	0	API Filtrate	< 10
Vis	40 - 50	Yield Point	15 - 25	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	> 100

OBSERVATIONS

OPERATIONS SUMMARY

Make up fishing tools and ran in the hole. Circulate on bottom and fish for metal debris. Mix and pump pill and pull out of the hole. Unsuccessful in recovering the fish. Laid out fishing grapple and made up a re-run tri-cone Varel, dressed with 2 x 13 and 1 x 16 jets. Include J-sub in b.h.a. and run on in the hole.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	0	Desander	3	INITIAL VOLUME	799
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole	6	+ Fluid Received	0
Direct Recyc fm bore	0	Dumped	0	- Fluid Lost	-23
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	40
		Shakers	15		
TOTAL RECEIVED	0	TOTAL LOST	23	FINAL VOLUME	776

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size		Hrs	Centrifuge		Hrs
# 1	3 x 110	3	Desander	2	10"	1	0	0	0
# 2	3 x 110	3	Desilter	10	4"	0	Degasser	0	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	10.1	12.2	1.75
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Barite	$ 9.95	200	480	28	652	$ 278.60

SOLIDS ANALYSIS

	%	ppb
Barite	3.2	47.0
Total LGS	5.9	53.7
Bentonite	1.6	15.0
Drilled Solids	4.3	38.7
Salt	1.0	10.7
Avg .Spec. Grav. Solids		3.16
n @ 2300 Hrs		0.48
K (lb/100 ft^2)		2.36

BIT HYDRAULICS DATA

Jet Velocity	340 ft/sec
Impact force	863 lbs
HHP	297
HSI	5
Bit Press Loss	1052 psi
ECD	10.67 ppg
CSG Seat Fracture Pressure	440 psi
Equiv. Mud Wt.	20.0 ppg

DAILY COST	CUMULATIVE COST
$278.60	$21,102.64

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

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INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report # 8	Date	29-Mar-2003	
Rig No 1	Spud Date	22-Mar-2003	
Depth 1875	To 1875	Metres	

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8 1/2	Magnet 0	10 10 10 / 10 10	9 5/8" SURFACE SET @ 728 ft / 222 m	HOLE 386 / PITS 360	PUMP SIZE 6 x 8 1/2 Inches / CIRCULATION PRESS (PSI) 400 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 1635 Mtrs	INT. SET @ 0 ft / 0 m	TOTAL CIRCULATING VOL. 746	PUMP MODEL Nat 8-P-80 / ASSUMED % EFF 97 / BOTTOMS UP (min) 47 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft / 0 m	IN STORAGE 0	BBL/STK 0.0721 / STK / MIN 90 / TOTAL CIRC. TIME (min) 115 min
DRILL COLLAR SIZE (") 6 1/4		Length 185 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 6.49 / GAL / MIN 273 / ANN VEL. (ft/min) DP 128 DCs 201

MUD PROPERTIES

SAMPLE FROM		Pit	
TIME SAMPLE TAKEN		1430	
FLOWLINE TEMPERATURE	^{0}F	45	
DEPTH	Metres	1,875	
WEIGHT	ppg / SG	10.2	1.22
FUNNEL VISCOSITY (sec/qt) API @	40 ^{0}F	56	
PLASTIC VISCOSITY cP @	35 ^{0}F	19	
YIELD POINT (lb/100FT2)		28	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		13	18
FILTRATE API (cm3/30 min.)		6.8	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F		
CAKE THICKNESS API : HPHT (32nd in)		1	
SOLIDS CONTENT		9.3	
LIQUID CONTENT (%by Vol.) OIL/WATER			90.7
SAND CONTENT (% by Vol.)		0.15	
METHYLENE BLUE CAPACITY (ppb equiv.)		15.0	
PH		9.0	
ALKALINITY MUD (Pm)			
ALKALINITY FILTRATE (Pf / Mf)		0.50	0.90
CHLORIDE (mg/L)		16,000	
TOTAL HARDNESS AS CALCIUM (mg/L)		240	
SULPHITE (mg/L)		100	
K+ (mg/L)		17,800	
KCL (% by Wt.)		3.3	
PHPA (Calc ppb)		1.20	

MUD PROPERTY SPECIFICATIONS

Mud Weight	10 - 10.8	MBT	0	API Filtrate	< 10
Vis	40 - 50	Yield Point	15 - 25	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	> 100

OBSERVATIONS

Barite for making pills.
Insufficient time to properly treat the system. However, one Caustic and two Pac-LV were strung in prior to pulling out.

OPERATIONS SUMMARY

Unsuccessful attempt to drill past the fish. Pump pill and oull out.
Make up magnet, run in and tag bottom (&fish??) Again, pump a pill and pull out of the hole - no fish attached to the magnet.
Make up a milling bit and run back in.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	0	Desander	3	INITIAL VOLUME	776
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole	13	+ Fluid Received	0
Direct Recyc fm bore	0	Dumped	0	- Fluid Lost	-30
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	0
		Shakers	15		
TOTAL RECEIVED	0	TOTAL LOST	30	FINAL VOLUME	746

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size	Hrs	Centrifuge	Hrs
# 1	3 x 110	3	Desander	2 10"	1	0	0
# 2	3 x 110	3	Desilter	10 4"	0	Degasser	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	10.1	12.2	1.75
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Barite	$ 9.95	652		92	560	$ 915.40
Caustic Soda	$ 35.60	37		1	36	$ 35.60
Pac-LV	$ 164.00	40		2	38	$ 328.00

SOLIDS ANALYSIS

	%	ppb
Barite	3.7	55.0
Total LGS	5.6	50.7
Bentonite	1.6	15.0
Drilled Solids	3.9	35.7
Salt	1.0	10.7
Avg .Spec. Grav. Solids		3.24
n @ 1430 Hrs		0.49
K (lb/100 ft^2)		2.22

BIT HYDRAULICS DATA

Jet Velocity	227 ft/sec
Impact force	328 lbs
HHP	75
HSI	1
Bit Press Loss	474 psi
ECD	10.60 ppg
CSG Seat Fracture Pressure	440 psi
Equiv. Mud Wt.	20.0 ppg

DAILY COST	CUMULATIVE COST
$1,279.00	$22,381.64

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

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INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report # 9	Date	30-Mar-2003	
Rig No 1	Spud Date	22-Mar-2003	
Depth 1875	To 1883	Metres	

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8 1/2	Mill 0	20 20 20 / 20 20 20	9 5/8" SURFACE 728 ft; SET @ 222 m	HOLE 387; PITS 380	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 500 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 1643 Mtrs	INT. 0 ft; SET @ 0 m	TOTAL CIRCULATING VOL. 767	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) 53 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft; 0 m	IN STORAGE 0	BBL/STK 0.0721; STK / MIN 80; TOTAL CIRC. TIME (min) 133 min
DRILL COLLAR SIZE (") 6 1/4		Length 185 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 5.77; GAL / MIN 242; ANN VEL. (ft/min) DP 114, DCs 179

MUD PROPERTIES

SAMPLE FROM		Pit	Pit	
TIME SAMPLE TAKEN		0230	1730	
FLOWLINE TEMPERATURE	^{0}F	47	43	
DEPTH	Metres	1,877	1,883	
WEIGHT	ppg / SG	10.2 1.22	10.2 1.22	
FUNNEL VISCOSITY (sec/qt) API @	40 ^{0}F	58	57	
PLASTIC VISCOSITY cP @	34 ^{0}F	20	18	
YIELD POINT (lb/100FT2)		29	27	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		10 16	8 13	
FILTRATE API (cm3/30 min.)		6.5	6.0	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F			
CAKE THICKNESS API : HPHT (32nd in)		1	1	
SOLIDS CONTENT		9.1	9.1	
LIQUID CONTENT (%by Vol.) OIL/WATER		90.9	90.9	
SAND CONTENT (% by Vol.)		0.10	0.10	
METHYLENE BLUE CAPACITY (ppb equiv.)		15.0	15.0	
PH		9.5	9.5	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)		0.40 0.60	0.40 0.60	
CHLORIDE (mg/L)		15,600	16,000	
TOTAL HARDNESS AS CALCIUM (mg/L)		240	240	
SULPHITE (mg/L)		100	180	
K+ (mg/L)		17,300	17,800	
KCL (% by Wt.)		3.2	3.3	
PHPA (Calc ppb)		1.20	1.22	

MUD PROPERTY SPECIFICATIONS

Mud Weight	10 - 10.8	MBT	0	API Filtrate	< 10
Vis	40 - 50	Yield Point	15 - 25	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	> 100

OBSERVATIONS

The time circulating while milling was spent in treating the mud system. Caustic was strung in to raise the depleting pH back up to 9.5 and the addition of sod. sulphite raised sulphite concentration levels. Pac-low vis was added direct to the system to assist in reducing the gels, and a premix of KCl and phpa was strung in to assist, not only with the volume, but also to improve the inhibitive nature of the mud system.

OPERATIONS SUMMARY

Ran in with the 8 1/2" mill and washed to bottom. Milled on junk from 1875 m. to 1883 m. Pumped pill and pulled out of hole. Cut away skirt on magnet and re-ran this tool back into the hole. Pushed this to bottom. pumped pill and pulled out of the hole. No large pieces of metal in evidence on the magnet. Make up bit # 3 and b.h.assy. Ran in the hole - slip and cut at shoe.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	120	Desander	15	INITIAL VOLUME	746
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole	83	+ Fluid Received	120
Direct Recyc fm bore	0	Dumped	0	- Fluid Lost	-98
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	0
		Shakers	0		
TOTAL RECEIVED	120	TOTAL LOST	98	FINAL VOLUME	767

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size	Hrs	Centrifuge	Hrs
# 1	3 x 110	10	Desander	2 10"	9	0	0
# 2	3 x 110	10	Desilter	10 4"	0	Degasser	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	10.2	12.4	1.20
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Barite	$ 9.95	560		48	512	$ 477.60
Caustic Soda	$ 35.60	36		2	34	$ 71.20
JK-261	$ 102.00	78		3	75	$ 306.00
KCl Fine	$ 16.00	820		20	800	$ 320.00
Pac-LV	$ 164.00	38		4	34	$ 656.00
Sodium Sulphite	$ 24.02	63		4	59	$ 96.08

SOLIDS ANALYSIS

	%	ppb
Barite	3.9	58.0
Total LGS	5.2	46.9
Bentonite	1.6	15.0
Drilled Solids	3.5	31.9
Salt	1.0	10.7
Avg .Spec. Grav. Solids		3.29
n @ 1730 Hrs		0.49
K (lb/100 ft^2)		2.18

BIT HYDRAULICS DATA

Jet Velocity	42 ft/sec
Impact force	54 lbs
HHP	2
HSI	0
Bit Press Loss	16 psi
ECD	10.57 ppg
CSG Seat Fracture Pressure	440 psi
Equiv. Mud Wt.	20.0 ppg

DAILY COST	CUMULATIVE COST
$1,926.88	$24,308.52

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

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INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report # 10	Date	31-Mar-2003	
Rig No 1	Spud Date	22-Mar-2003	
Depth 1883	To 1972	Metres	

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8 1/2	EHP43AK 0	14 14 14	9 5/8" SURFACE 728 ft; SET @ 222 m	HOLE 406; PITS 400	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 1750 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 1732 Mtrs	INT. 0 ft; SET @ 0 m	TOTAL CIRCULATING VOL. 806	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) 31 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft; 0 m	IN STORAGE 70	BBL/STK 0.0721; STK / MIN 144; TOTAL CIRC. TIME (min) 84 min
DRILL COLLAR SIZE (") 6 1/4		Length 185 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 10.38; GAL / MIN 436; ANN VEL. (ft/min) DP 205, DCs 322

MUD PROPERTIES

SAMPLE FROM		Pit	Pit	
TIME SAMPLE TAKEN		0830	2130	
FLOWLINE TEMPERATURE	^{0}F	52	56	
DEPTH	Metres	1,900	1,966	
WEIGHT	ppg / SG	10.1 1.21	10.0 1.20	
FUNNEL VISCOSITY (sec/qt) API @	53 ^{0}F	60	58	
PLASTIC VISCOSITY cP @	49 ^{0}F	23	20	
YIELD POINT (lb/100FT2)		31	30	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		12 19	12 20	
FILTRATE API (cm3/30 min.)		6.8	7.0	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F			
CAKE THICKNESS API : HPHT (32nd in)		1	1	
SOLIDS CONTENT		8.7	8.0	
LIQUID CONTENT (%by Vol.) OIL/WATER		91.3	92.0	
SAND CONTENT (% by Vol.)		0.10	0.15	
METHYLENE BLUE CAPACITY (ppb equiv.)		17.0	17.0	
PH		9.0	9.0	
ALKALINITY MUD (Pm)				
ALKALINITY FILTRATE (Pf / Mf)		0.60 1.40	0.70 1.80	
CHLORIDE (mg/L)		15,000	18,000	
TOTAL HARDNESS AS CALCIUM (mg/L)		160	160	
SULPHITE (mg/L)		180	180	
K+ (mg/L)		16,800	20,500	
KCL (% by Wt.)		3.1	3.8	
PHPA (Calc ppb)		1.26	1.80	

MUD PROPERTY SPECIFICATIONS

Mud Weight	10 - 10.8	MBT	0	API Filtrate	< 10
Vis	40 - 50	Yield Point	15 - 25	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	> 100

OBSERVATIONS

Resumed drilling in the Rewan and almost immediately, the viscosity went on the increase along with the concentration of active clays. Raised the concentration levels of KCL and PHPA in the premixes and consequently, the active system, to overcome this reactivity.

Although this contained the amount of clays becoming entrained in the system, the viscosity levels really never came down - being held up by the higher concentrations of PHPA.

This isn't the first time that increased concentrations of PHPA had little effect on increased viscosities from the Rewan. It has been seen in past wells that premixes containing 4-5% KCL alone seemed more effective.

OPERATIONS SUMMARY

Having slipped and cut at the shoe, the bit was run in to bottom.
Drilling of 8 1/2" hole resumed at 0400 hrs.
Drilling through 1972 m. at midnight.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	200	Desander	40	INITIAL VOLUME	767
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole	-19	+ Fluid Received	200
Direct Recyc fm bore	0	Dumped	55	- Fluid Lost	-91
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	70
		Shakers	15		
TOTAL RECEIVED	200	TOTAL LOST	91	FINAL VOLUME	876

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size	Hrs	Centrifuge	Hrs
# 1	3 x 110	20	Desander	2 10"	20	0	0
# 2	3 x 110	20	Desilter	10 4"	0	Degasser	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	10.0	11.7	1.40
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Caustic Soda	$ 35.60	34		1	33	$ 35.60
JK-261	$ 102.00	75		13	62	$ 1,326.00
KCl Fine	$ 16.00	800		100	700	$ 1,600.00
Sodium Sulphite	$ 24.02	59		4	55	$ 96.08

SOLIDS ANALYSIS

	%	ppb
Barite	3.4	50.0
Total LGS	4.6	42.0
Bentonite	1.9	17.0
Drilled Solids	2.7	25.0
Salt	1.1	12.3
Avg .Spec. Grav. Solids		3.28
n @ 2130 Hrs		0.49
K (lb/100 ft^2)		2.43

BIT HYDRAULICS DATA

Jet Velocity	309 ft/sec
Impact force	699 lbs
HHP	219
HSI	4
Bit Press Loss	861 psi
ECD	10.55 ppg
CSG Seat Fracture Pressure	440 psi
Equiv. Mud Wt.	20.0 ppg

DAILY COST	CUMULATIVE COST
$3,057.68	$27,366.20

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

Any opinion and/or recommendation, expressed orally or written herin, has been prepared carefully and may be used if the user so elects, however, no representation or warranty is made by ourselves or our agents as to its correctness or completeness, and no liability is assumed for any damages resulting from the use of same.

INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report #	11	Date	1-Apr-2003
Rig No	1	Spud Date	22-Mar-2003
Depth	1972 To 2027		Metres

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD / LOCATION / STATE	PL 174 / Surat Basin / Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 8 1/2	EHP43AK 0	14 14 14	9 5/8" SURFACE SET @ 728 ft 222 m	HOLE 418 PITS 380	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 1800 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 1787 Mtrs	INT. SET @ 0 ft 0 m	TOTAL CIRCULATING VOL. 798	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) 33 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft 0 m	IN STORAGE 0	BBL/STK 0.0721; STK / MIN 140; TOTAL CIRC. TIME (min) 79 min
DRILL COLLAR SIZE (") 6 1/4		Length 185 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 10.10; GAL / MIN 424; ANN VEL. (ft/min) DP 200 DCs 313

MUD PROPERTIES

SAMPLE FROM		Pit	
TIME SAMPLE TAKEN		0930	
FLOWLINE TEMPERATURE	^{0}F	59	
DEPTH	Metres	2,027	
WEIGHT	ppg / SG	10.0	1.20
FUNNEL VISCOSITY (sec/qt) API @	55 ^{0}F	58	
PLASTIC VISCOSITY cP @	51 ^{0}F	17	
YIELD POINT (lb/100FT2)		28	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		11	15
FILTRATE API (cm3/30 min.)		7.6	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F		
CAKE THICKNESS API : HPHT (32nd in)		1	
SOLIDS CONTENT		8.0	
LIQUID CONTENT (%by Vol.) OIL/WATER			92.0
SAND CONTENT (% by Vol.)		0.10	
METHYLENE BLUE CAPACITY (ppb equiv.)		17.0	
PH		9.0	
ALKALINITY MUD (Pm)			
ALKALINITY FILTRATE (Pf / Mf)		0.80	2.00
CHLORIDE (mg/L)		18,000	
TOTAL HARDNESS AS CALCIUM (mg/L)		200	
SULPHITE (mg/L)		120	
K+ (mg/L)		20,500	
KCL (% by Wt.)		3.8	
PHPA (Calc ppb)		1.50	

MUD PROPERTY SPECIFICATIONS

Mud Weight	10 - 10.8	MBT	0	API Filtrate	< 10
Vis	40 - 50	Yield Point	15 - 25	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	> 100

OBSERVATIONS

Caliper logs demonstrated that most of the washed out areas down-hole to be across the Rewan. However this is minimal. The overall measured volume of the open hole = 437 bbls ... is only 5% overgauge relative to the calculated volume of the open hole - 416 bbls.

Interestingly, the cost of chemicals to date is some $28,288. Less the cost of barite -$7880, the balance being some $20,408 or, $10 per metre (not including uncontrollable circumstances - eg: weight up, loss of circ.) This would then be at the lower end of an average price range of $10 to $15 per metre (again, not incl. uncontrollables) for drilling with KCL / PHPA systems.

OPERATIONS SUMMARY

Drilled to this interval's total depth of 2027 metres.
Circulate the hole clean, drop survey, pump pill and pull out of the hole.
Rig up Reeves Wireline and log the hole.
Conduct one logging run and rig down wireline unit.
Run in with drillstring to bottom. Begin pulling out sideways.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	0	Desander	20	INITIAL VOLUME	876
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole	20	+ Fluid Received	0
Direct Recyc fm bore	0	Dumped	23	- Fluid Lost	-78
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	0
		Shakers	15		
TOTAL RECEIVED	0	TOTAL LOST	78	FINAL VOLUME	798

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size	Hrs	Centrifuge	Hrs
# 1	3 x 110	10	Desander	2 10"	10	0	0
# 2	3 x 110	10	Desilter	10 4"	0	Degasser	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	10.0	11.3	1.40
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Barite	$ 9.95	512		24	488	$ 238.80
Caustic Soda	$ 35.60	33		1	32	$ 35.60
KCl Fine	$ 16.00	700		20	680	$ 320.00
Pac-LV	$ 164.00	34		2	32	$ 328.00

SOLIDS ANALYSIS

	%	ppb
Barite	3.4	50.0
Total LGS	4.6	42.0
Bentonite	1.9	17.0
Drilled Solids	2.7	25.0
Salt	1.1	12.3
Avg .Spec. Grav. Solids		3.28
n @ 0930 Hrs		0.46
K (lb/100 ft^2)		2.52

BIT HYDRAULICS DATA

Jet Velocity	301 ft/sec
Impact force	661 lbs
HHP	201
HSI	4
Bit Press Loss	814 psi
ECD	10.51 ppg
CSG Seat Fracture Pressure	440 psi
Equiv. Mud Wt.	20.0 ppg

DAILY COST	CUMULATIVE COST
$922.40	$28,288.60

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

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INDEPENDENT DRILLING FLUID SERVICES

A Division of Rheochem Pty Ltd ABN 35 194 744 281

Drilling Fluid Report

Report #	12	Date	2-Apr-2003
Rig No	1	Spud Date	22-Mar-2003
Depth	2027	To 2027	Metres

OPERATOR	OCA	CONTRACTOR	Century
REPORT FOR	J. Dingle	REPORT FOR	R. Feichtner
WELL NAME AND No.	Myall Creek # 8	FIELD	PL 174
LOCATION	Surat Basin	STATE	Queensland

BHA	BIT TYPE	JET SIZE	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
BIT SIZE 0	0.00 / 0	0 0 0	9 5/8" SURFACE SET @ 728 ft / 222 m	HOLE 0 / PITS 430	PUMP SIZE 6 x 8 1/2 Inches; CIRCULATION PRESS (PSI) 0 psi
DRILL PIPE SIZE 4 1/2	TYPE 16.6 lb	Length 1787 Mtrs	INT. SET @ 0 ft / 0 m	TOTAL CIRCULATING VOL. 430	PUMP MODEL Nat 8-P-80; ASSUMED % EFF 97; BOTTOMS UP (min) 0 min
DRILL PIPE SIZE 4 1/2	TYPE HW	Length 55 Mtrs	PROD. or LNR Set @ 0 ft / 0 m	IN STORAGE 80	BBL/STK 0.0721; STK / MIN 0; TOTAL CIRC. TIME (min) 0 min
DRILL COLLAR SIZE (") 6 1/4		Length 185 Mtrs	MUD TYPE KCL / PHPA		BBL/MIN 0.00; GAL / MIN 0; ANN VEL. (ft/min) DP 0 DCs 0

MUD PROPERTIES

SAMPLE FROM			
TIME SAMPLE TAKEN		2100	
FLOWLINE TEMPERATURE	^{0}F		
DEPTH	Metres		
WEIGHT	ppg / SG	10.0	1.20
FUNNEL VISCOSITY (sec/qt) API @	^{0}F	56	
PLASTIC VISCOSITY cP @	41 ^{0}F	14	
YIELD POINT (lb/100FT2)		27	
GEL STRENGTH (lb/100ft2) 10 sec/10 min.		10	13
FILTRATE API (cm3/30 min.)		8.0	
API HPHT FILTRATE (cm3/30 min.) @	^{0}F		
CAKE THICKNESS API : HPHT (32nd in)		1	
SOLIDS CONTENT		8.0	
LIQUID CONTENT (%by Vol.) OIL/WATER			92.0
SAND CONTENT (% by Vol.)		0.10	
METHYLENE BLUE CAPACITY (ppb equiv.)		17.0	
PH		9.0	
ALKALINITY MUD (Pm)			
ALKALINITY FILTRATE (Pf / Mf)		0.60	1.80
CHLORIDE (mg/L)		17,700	
TOTAL HARDNESS AS CALCIUM (mg/L)		160	
SULPHITE (mg/L)		100	
K+ (mg/L)		18,900	
KCL (% by Wt.)		3.5	
PHPA (Calc ppb)		1.30	

MUD PROPERTY SPECIFICATIONS

Mud Weight	10 - 10.8	MBT	0	API Filtrate	< 10
Vis	40 - 50	Yield Point	15 - 25	pH	9 - 9.5
KCl	3%	PHPA	1 - 1.5	Sulphites	> 100

OBSERVATIONS

The mud to be left behind in the casing annulus is to be treated with biocide, as will be all the fluid that is caught and stored as a kill mud for the next interval of nitrogen drilling.
SAPP will be used in the cement preflush and is mixed in the pill tank.
This pill has also been weighted to 9.1 ppg with KCl.

OPERATIONS SUMMARY

Continue laying out pipe.
Rig up and run 7" intermediate casing.
Circulate casing and cement.
Save as much of the 10 ppg system in the surface tanks as possible to be used as an emergency kill mud for the next interval.

Mud engineer released as of morning 3rd April 2003.

MUD ACCOUNTING (BBLS)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix - Drill water	0	Desander	0	INITIAL VOLUME	798
Premix - Recyc fm sump	0	Desilter	0		
Drill Water	0	Downhole	288	+ Fluid Received	0
Direct Recyc fm bore	0	Dumped	0	- Fluid Lost	-288
Other (eg Diesel)	0	Centrifuge	0	Incl. Storage	80
		Shakers	0		
TOTAL RECEIVED	0	TOTAL LOST	288	FINAL VOLUME	510

SOLIDS CONTROL EQUIPMENT

SHALE SHAKERS		Hrs		Cones Size	Hrs	Centrifuge	Hrs
# 1	3 x 110	0	Desander	2 10"	0	0	0
# 2	3 x 110	0	Desilter	10 4"	0	Degasser	0	0

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Desander	0.0	0	0.00
Desilter	0.0	0	0.00
Centrifuge	0.0	0	0.00

Product	Price	Start	Received	Used	Close	Cost
Idcide-20	$ 98.50	10		4	6	$ 394.00
KCl Fine	$ 16.00	680		40	640	$ 640.00
SAPP	$ 56.00	20		4	16	$ 224.00

SOLIDS ANALYSIS

	%	ppb
Barite	3.4	50.0
Total LGS	4.6	42.1
Bentonite	1.9	17.0
Drilled Solids	2.8	25.1
Salt	1.1	11.9
Avg .Spec. Grav. Solids		3.28
n @ 2100 Hrs		0.42
K (lb/100 ft^2)		2.92

BIT HYDRAULICS DATA

Jet Velocity	
Impact force	lbs
HHP	
HSI	#DIV/0!
Bit Press Loss	psi
ECD	.00 ppg
CSG Seat Fracture Pressure	440 psi
Equiv. Mud Wt.	20.0 ppg

DAILY COST	CUMULATIVE COST
$1,258.00	$29,546.60

I.D.F.S. Engineer: C. Mahoney Office: BRISBANE Telephone: 07 3228 6562 Fax: 07 3806 0165

Any opinion and/or recommendation, expressed orally or written herin, has been prepared carefully and may be used if the user so elects, however, no representation or warranty is made by ourselves or our agents as to its correctness or completeness, and no liability is assumed for any damages resulting from the use of same.

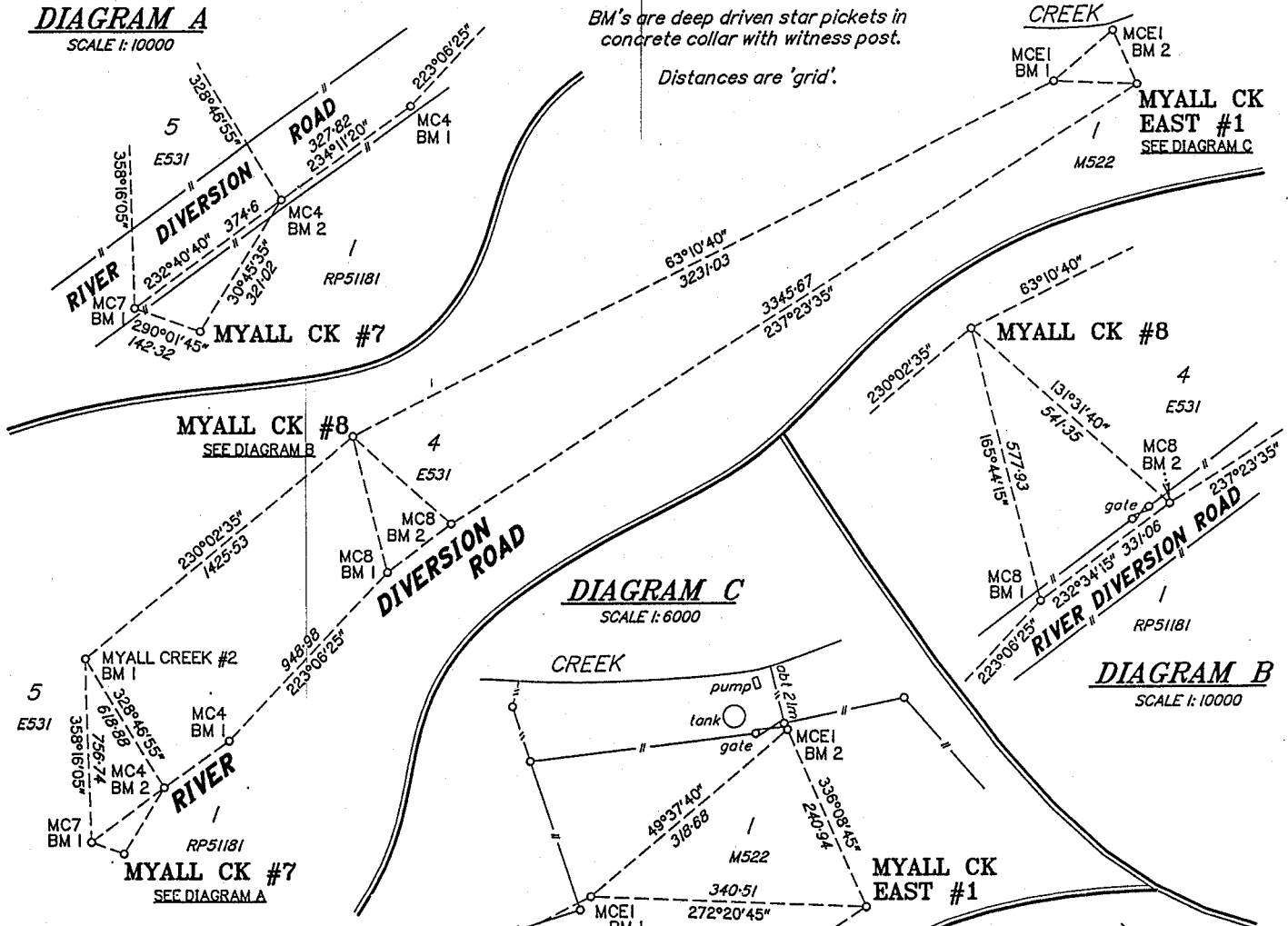
APPENDIX 5

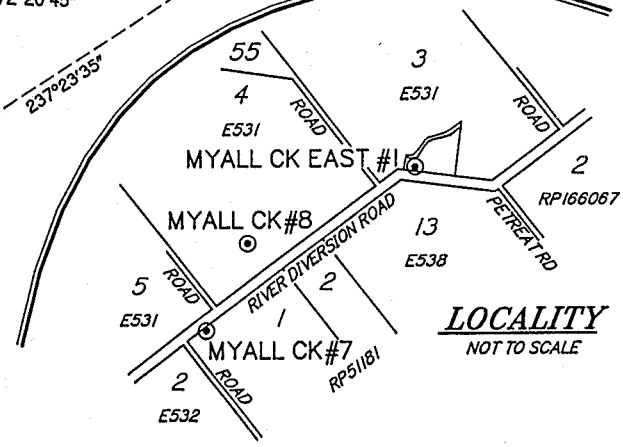
WELL LOCATION SURVEY

DIAGRAM A
SCALE 1: 10000

BM's are deep driven star pickets in concrete collar with witness post.

Distances are 'grid'.





LOCALITY
NOT TO SCALE

N

AMG CO-ORDINATES – ZONE 55

STATION	EASTING	NORTHING
MYALL CREEK EAST #1	723 288·51	7 006 055·65
MYALL CREEK #7	719 128·69	7 002 891·04
MYALL CREEK #8	720 064·85	7 004 611·67

HEIGHTS – MGA

STATION	HEIGHT	REMARKS
MYALL CREEK EAST #1	242·87	ground
MCE 1 BM 1	243·33	
MCE 1 BM 2	244·31	
MYALL CREEK #7	244·13	ground
MC 7 BM 1	243·95	
MC 4 BM 1	243·76	
MYALL CREEK 2 BM 1	243·34	
MYALL CREEK #8	242·53	ground
MC 8 BM 1	241·87	
MC 8 BM 2	243·67	

MGA CO-ORDINATES

STATION	EASTING	NORTHING	ZONE
MYALL CREEK EAST #1	723 402·22	7 006 238·22	55
MCE 1 BM 1	723 061·99	7 006 252·16	55
MCE 1 BM 2	723 304·78	7 006 458·58	55
MYALL CREEK #7	719 242·43	7 003 073·64	55
MC 7 BM 1	719 108·73	7 003 122·38	55
MC 4 BM 1	719 672·46	7 003 541·32	55
MYALL CREEK 2 BM 1	719 085·86	7 003 878·77	55
MYALL CREEK #8	720 178·58	7 004 794·26	55
MC 8 BM 1	720 320·96	7 004 234·14	55
MC 8 BM 2	720 583·85	7 004 435·35	55

ORIGIN OF CO-ORDINATES (MGA) – ZONE 55

STATION	EASTING	NORTHING	RL (AHD)
MC 4 BM 2	719 406·62	7 003 349·5	243·97

GEOGRAPHICAL CO-ORDINATES GDA 94

STATION	LATITUDE	LONGITUDE	CONVERGENCE
MYALL CREEK EAST #1	-27°02'53·2111"	149°15'08·3183"	1°01'28·70"
MYALL CREEK #7	-27°04'38·3853"	149°12'39·4478"	1°00'24·53"
MYALL CREEK #8	-27°03'41·9674"	149°13'12·3122"	1°00'37·56"

I, Frederick Mark MURRAY hereby certify that I have surveyed the location of the petroleum well as shown in this plan, that the plan is accurate, that the said survey performed in accordance with the Petroleum Act 1923 and the Petroleum Regulations (Land) 1966, and that the said survey was completed on 31/3/03

F.M. Murray ..... Licensed Surveyor

Date 28·4·03

CATALOGUED	APPROVED	REGISTERED
/ /	/ /	/ / Chief Surveyor

LOCALITY: NOORINDOO

Approx. LAT. S ° ' " LONG. E ° ' "

FIELD NOTES LODGED / /

MINING RESOURCES

PLAN OF "MYALL CREEK EAST #1", "MYALL CREEK #7" & "MYALL CREEK #8"

PARISH: NOORINDOO

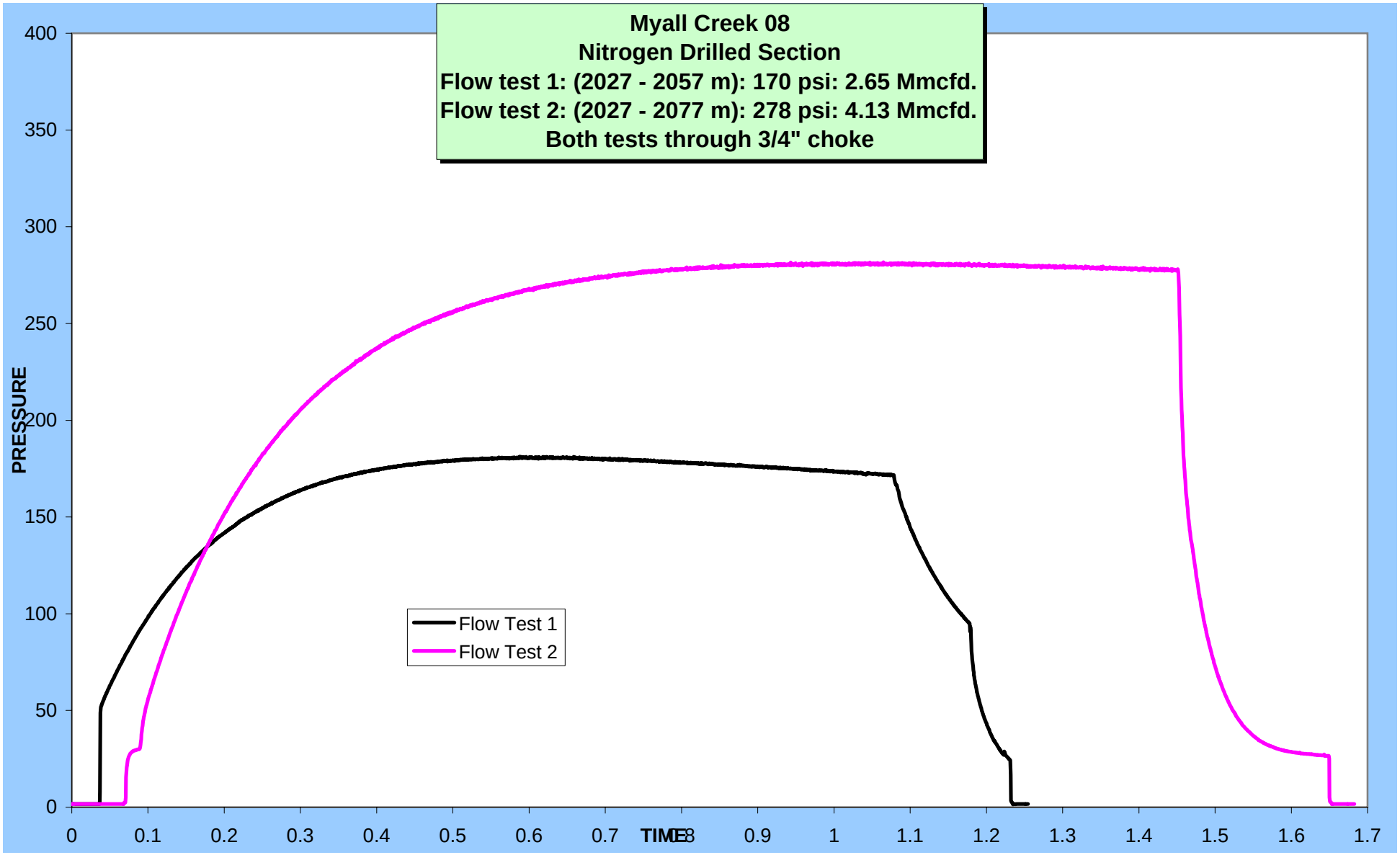
COUNTY: Elgin

MINING DISTRICT: Brisbane

DRAWN BY	MERIDIAN	SCALE	
JMD	as shown	1:20000	MP

APPENDIX 6

FLOW TEST CHARTS


Myall Creek 08
Nitrogen Drilled Section
Flow test 1: (2027 - 2057 m): 170 psi: 2.65 Mmcfd.
Flow test 2: (2027 - 2077 m): 278 psi: 4.13 Mmcfd.
Both tests through 3/4" choke
PRESSURE
TIME
Flow Test 1
Flow Test 2
0
50
100
150
200
250
300
350
400
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
1.3
1.4
1.5
1.6
1.7

APPENDIX 7

LITHOLOGICAL DESCRIPTIONS

Depth	%	Lithology	Gas
230 (2.6)	100	SILTSTONE, medium to dark grey, trace grey/green, argillaceous, soft to firm, blocky to sub-blocky.	0 No breakdown
240 (0.8)	100	SILTSTONE, a. a.	0 No breakdown
250 (0.8)	100	SILTSTONE, a. a.	0 No breakdown
260 (0.8)	100	SILTSTONE, a. a.	0 No breakdown
270 (0.8)	100	SILTSTONE, a. a.	0 No breakdown
280 (0.8)	100	SILTSTONE, moderate to dark grey, argillaceous, occasionally arenaceous, soft to firm, blocky.	0 No breakdown
290 (2.9)	100	SILTSTONE, a. a. - calcareous in part.	0 No breakdown
300 (4.4)	100	SILTSTONE, a. a.	0 No breakdown
310 (1.5)	100	SILTSTONE, a. a. - occasionally sandy	0 No breakdown
320 (2.5)	100	SILTSTONE, a. a.	0 No breakdown
330 (2.4)	60 40	SANDSTONE, translucent, pale grey to off white, occasionally clear, very fine to fine, occasionally, no fluor. medium, moderate well sorted, sub-rounded to sub-angular, wk to moderate calcareous cement, white to off white argillaceous matrix, trace siderite, friable to moderate hard, fair visible porosity SILTSTONE, medium to dark grey, argillaceous, occasionally grading to arenaceous, soft to firm, blocky.	0 No breakdown
340 (1.8)	70 30	SANDSTONE, a. a. SILTSTONE, a. a. – grading to very fine arenaceous.	0 No breakdown
350 (2.0)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	0 No breakdown
360 (0.7)	60 40	SANDSTONE, a. a. – trace siliceous cement. SILTSTONE, a. a.	0 No breakdown
370 (0.5)	70 30	SANDSTONE, clear to translucent, pale grey to off white, very fine, occasionally fine, moderate well sorted, moderate strong calcareous cement, white to off white argillaceous matrix, friable to moderate hard, fair visible porosity, no fluorescence. SILTSTONE, light to medium grey, occasionally dark grey, predominately arenaceous, argillaceous in part, firm, sub-blocky.	0 No breakdown
380 (0.6)	40 60	SANDSTONE, a. a. - calcareous in part. SILTSTONE, a. a. – occasionally trace carbonaceous specks.	0 No breakdown
390 (0.6)	40 60	SANDSTONE, a. a. SILTSTONE, a. a.	0 No breakdown
400 (0.5)	60 40	SANDSTONE, a. a. SILTSTONE, a. a.	0 No breakdown
410 (0.7)	80 20	SANDSTONE, a. a. – occasionally medium grains. SILTSTONE, a. a.	0 No breakdown
420 (0.6)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	0 No breakdown
430 (0.6)	80 20	SANDSTONE, a. a. – rare glauconite grains. SILTSTONE, a. a.	0 No breakdown
440 (0.6)	90 10	SANDSTONE, a. a. –trace carbonaceous specks and glauconite. SILTSTONE, a. a.	0 No breakdown
450 (0.5)	80 20	SANDSTONE, clear to translucent, frosted, pale to off white, very fine to fine, occasionally medium grains, sub-rounded to sub-angular, rare angular grains, weak calcareous cement, white to off white siliceous matrix, trace carbonaceous specks, predominately loose, fair to good visible porosity, no fluorescence. SILTSTONE, light grey, trace medium to dark grey, arenaceous, occasionally grading to very fine SANDSTONE, carbonaceous specks, trace micro-micaceous, unconsolidated, amorphous.	0 No breakdown
460 (0.4)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	0 No breakdown
470 (0.4)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	0 No breakdown

Depth	%	Lithology	Gas
480 (0.7)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	0 No breakdown
490 (0.5)	100	SANDSTONE, a. a.	0 No breakdown
500 (0.6)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	0 No breakdown
510 (0.6)	90 10	SANDSTONE, a. a. - slightly calcareous. SILTSTONE, a. a	0 No breakdown
520 (0.6)	90 20	SANDSTONE, a. a. SILTSTONE, a. a	0 No breakdown
530 (0.6)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	1 No breakdown
540 (0.7)	90 10	SANDSTONE, a. a. – quartz overgrowths, carbonaceous specks, rare glauconite. SILTSTONE, a. a.	2 No breakdown
550 (0.5)	90 10	SANDSTONE, a. a. – common carbonaceous specks. SILTSTONE, a. a.	3 No breakdown
560 (0.5)	90 10	SANDSTONE, a. a. SILTSTONE, a. a. - rare brown, hard, sideritic / dolomitic.	3 No breakdown
570 (0.4)	100	SANDSTONE, clear to translucent, frosted, very fine to medium, trace coarse grains, sub-angular to angular, sub-rounded in part, weak siliceous cement, white argillaceous matrix, rare siderite, rare glauconite, loose, good visible porosity, no fluorescence.	3 No breakdown
580 (0.5)	90 10	SANDSTONE, a. a. - predominantly medium. SILTSTONE, a. a.	2 No breakdown
590 (0.6)	90 10	SANDSTONE, a. a. SILTSTONE, a. a. – medium to dark grey, grey/brown in part, argillaceous, grading to arenaceous, carbonaceous specks, firm, sub-blocky.	2 No breakdown
600 (0.8)	90 10	SANDSTONE, a. a. SILTSTONE, light to moderate grey, argillaceous, firm, carbonaceous laminae, sub-fissile to sub-blocky.	2 No breakdown
610 (0.5)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	1 No breakdown
620 (0.5)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	3 No breakdown
630 (0.6)	80 20	SANDSTONE, a. a. – minor glauconite. SILTSTONE, a. a.	2 No breakdown
640 (0.6)	70 30	SANDSTONE, a. a. SILTSTONE, a. a. – light to medium grey, grey/brown, argillaceous, occasionally arenaceous, carbonaceous, friable to moderate hard.	1 No breakdown
650 (0.5)	80 20	SANDSTONE, clear to translucent, pale yellow, pale grey, very fine to medium, predominately fine, sub-rounded to sub-angular, well sorted, weak siliceous cement, soft white argillaceous matrix, glauconite, carbonaceous specks, loose, good inferred porosity, no fluorescence. SILTSTONE, light grey, occasionally brown, argillaceous, arenaceous in part, carbonaceous specks, firm to moderate hard, sub-blocky to sub-fissile.	1 No breakdown
660 (0.7)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	1 No breakdown
670 (0.4)	100 Tr	SANDSTONE, clear to white, very fine to coarse, sub-angular to sub-rounded, moderate to well sorted, common grey, grey-green and grey-black lithic / quartzite grains, friable, fair porosity, no fluorescence. SILTSTONE, a. a.	2 No breakdown
680 (0.5)	100	SANDSTONE, a. a. - fine to coarse, carbonaceous specks, fair porosity. SILTSTONE, a. a.	1 No breakdown
690 (0.4)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	2 No breakdown
700 (0.6)	100 Tr	SANDSTONE, a. a. – very argillaceous in part. SILTSTONE, a. a.	2 No breakdown
710 (0.5)	100 Tr	SANDSTONE, white to pale grey, fine to very coarse, sub-rounded, poor to moderate sorted, greenish grey and grey-black lithic / quartzite grains, minor feldspar, moderate dispersive clay matrix, friable, poor to fair porosity. SILTSTONE, a. a.	1 No breakdown
720 (0.4)	100 Tr	SANDSTONE, a. a. – medium to coarse grains. SILTSTONE, a. a.	2 No breakdown

Depth	%	Lithology	Gas
730 (0.5)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	1 No breakdown
740 (0.6)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	1 No breakdown
750 (0.5)	100 Tr	SANDSTONE, clear to translucent, frosted, pale grey, very fine to fine, moderate well sorted, sub-angular to sub-rounded, weak siliceous cement, pale grey argillaceous matrix, occasionally carbonaceous and glauconite, loose, fair to good inferred porosity, no fluorescence. SILTSTONE, a. a.	1 No breakdown
760 (0.6)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	1 No breakdown
770 (0.5)	60 40	SANDSTONE, a. a. SILTSTONE, light grey to tan to pale brown, arenaceous, argillaceous in part, micro-micaceous, firm to moderate hard, rare hard, sub-blocky to sub-fissile.	1 No breakdown
780 (0.3)	100	SANDSTONE, clear to translucent, frosted, very fine to medium, sub-angular to sub-rounded, rare white argillaceous matrix, trace pink/red garnet, quartz overgrowths, loose, good inferred porosity, no fluorescence.	1 No breakdown
790 (0.3)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	1 No breakdown
800 (0.3)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	1 No breakdown
810 (0.4)	100	SANDSTONE, clear, pale grey, trace blue/brown, very fine to medium, trace coarse, poor sorted,	2 No breakdown
820 (0.8)	100	SANDSTONE, sub-angular to sub-rounded, rare white argillaceous matrix, loose, good inferred porosity, no fluorescence.	1 No breakdown
830 (1.0)	100	SANDSTONE, a. a.	1 No breakdown
840 (0.5)	100	SANDSTONE, a. a.	1 No breakdown
850 (0.5)	100	SANDSTONE, a. a.	1 No breakdown
860 (0.5)	100	SANDSTONE, a. a.	1 No breakdown
870 (0.5)	100	SANDSTONE, a. a. - angular to sub-rounded.	1 No breakdown
880 (0.6)	100	SANDSTONE, a. a.	1 No breakdown
890 (0.6)	100	SANDSTONE, a. a.	1 No breakdown
900 (0.7)	100 Tr	SANDSTONE, a. a. SILTSTONE, light to moderate grey brown, soft to firm, argillaceous, minor coal / carbonaceous material.	1 No breakdown
910 (0.7)	60 40	SANDSTONE, a. a. SILTSTONE, pale grey, occasionally medium grey, argillaceous, trace arenaceous, carbonaceous specks, soft to firm, sub-blocky to sub-fissile.	2 No breakdown
920 (0.7)	30 70	SANDSTONE, a. a. SILTSTONE, light to dark grey, predominately medium grey, arenaceous, occasionally argillaceous, micro-micaceous, carbonaceous specks, soft to moderate hard, sub-blocky.	3 No breakdown
930 (0.6)	10 90	SANDSTONE, a. a. SILTSTONE, medium to dark grey, occasionally light grey, arenaceous, argillaceous, micro-micaceous, carbonaceous striations, carbonaceous specks, firm to moderate hard, sub-fissile to sub-blocky.	3 No breakdown
940 (0.5)	10 90	SANDSTONE, a. a. SILTSTONE, a. a.	3 No breakdown
950 (0.4)	80 20	SANDSTONE, pale grey to pale brown, translucent, occasionally clear, frosted, very fine to fine, occasionally medium, weak siliceous cement, white argillaceous matrix, carbonaceous specks, occasionally quartz overgrowths, loose, fair to good inferred porosity, no fluorescence. SILTSTONE, medium to dark grey, grey/brown, arenaceous, occasionally argillaceous, micro-micaceous, carbonaceous specks, carbonaceous striations, brittle to moderate hard, sub-blocky to sub-fissile.	5 No breakdown

Depth	%	Lithology	Gas
960 (0.5)	80 20	SANDSTONE, a. a. SILTSTONE, light to medium grey-brown, argillaceous to very finely arenaceous, minor carbonaceous material, trace micro-micaceous, firm o moderately hard, sub-fissile, dominantly sub-blocky.	3 No breakdown
970 (0.5)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	4 No breakdown
980 (0.8)	60 40	SANDSTONE, a. a. SILTSTONE, a. a.	4 No breakdown
990 (0.7)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	6 No breakdown
1000 (0.6)	80 20	SANDSTONE, pale grey, fine to medium, moderate sorted, sub-angular to sub-rounded, weak silica cement, light grey, trace carbonaceous, friable to moderately hard, occasionally loose, poor visual and fair inferred porosity. SILTSTONE, a. a.	4 No breakdown
1010 (0.5)	60 40	SANDSTONE, a. a. SILTSTONE, a. a.	6 No breakdown
1020 (0.8)	50 50	SANDSTONE, a. a. SILTSTONE, a. a.	5 No breakdown
1030 (0.7)	60 40	SANDSTONE, a. a. SILTSTONE, a. a.	5 No breakdown
1040 (0.7)	60 40	SANDSTONE, a. a. SILTSTONE, a. a.	5 No breakdown
1050 (0.7)	40 60	SANDSTONE, a. a. - common to abundant kaolin matrix. SILTSTONE, light grey, argillaceous, very finely arenaceous, trace carbonaceous specks and lithics, moderately hard to hard, sub-blocky.	7 No breakdown
1060 (1.0)	40 60	SANDSTONE, a. a. SILTSTONE, a. a.	4 No breakdown
1070 (1.4)	90 10	SANDSTONE, a. a. - trace calcareous. SILTSTONE, a. a.	5 No breakdown
1080 (1.4)	70 30	SANDSTONE, white to off-white, pale grey, predominantly very fine to medium, occasionally coarse , sub-angular to sub-rounded, moderate sorted, moderate clay matrix, moderately calcareous, minor feldspar, friable to moderately hard, poor to fair porosity. SILTSTONE, moderate to dark brown to grey-brown, firm, sub-blocky, carbonaceous, predominantly argillaceous, very fine, arenaceous in part.	22 No breakdown
1090 (0.9)	10 90	SANDSTONE, a. a. SILTSTONE, a. a.	15 No breakdown
1100 (1.3)	10 90	SANDSTONE, a. a. SILTSTONE, a. a. - also minor light brown, moderately hard to hard, sub-fissile, dolomitic.	11 No breakdown
1110 (0.9)	60 40	SANDSTONE, translucent pale grey, very fine to medium, sub-rounded, moderate to well sorted, dispersive clay matrix, trace feldspar, minor grey-black and grey-green lithics, calcareous, friable, poor inferred porosity. SILTSTONE, a. a.	12 No breakdown
1120 (0.9)	20 80	SANDSTONE, a. a. - moderately calcareous, friable to moderately hard, poor porosity. SILTSTONE, moderate grey to grey-brown, firm, sub-fissile to sub-blocky, carbonaceous specks, argillaceous to very finely arenaceous; minor light to moderate yellow-brown to brown, moderately hard, sub-fissile, dolomitic.	11 No breakdown
1130 (1.2)	10 90	SANDSTONE, a. a. SILTSTONE, a. a.	20 No breakdown
1140 (1.0)	30 80	SANDSTONE, a. a. - moderate to strongly calcareous, poor porosity. SILTSTONE, a. a. - moderate to dark grey-brown.	14 No breakdown
1150 (1.0)	10 90	SANDSTONE, a. a. SILTSTONE, a. a. - becoming very argillaceous and grades to claystone in part.	9 No breakdown
1160 (0.9)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a. - carbonaceous specks and coal fragments.	28 No breakdown
1170 (1.1)	30 70	SANDSTONE, white to pale grey, very fine to fine, sub-rounded, moderate sorted, abundant clay matrix, lithic, feldspathic, carbonaceous material, slightly calcareous, moderately hard, poor porosity. SILTSTONE, a. a.	12 No breakdown
1180 (1.2)	50 50	SANDSTONE, a. a. SILTSTONE, a. a.	9 No breakdown

Depth	%	Lithology	Gas
1190 (0.8)	70 30	SANDSTONE, a. a. - very fine to medium, sub-angular to sub-rounded, moderate to well sorted, poor porosity. SILTSTONE, a. a.	11 No breakdown
1200 (0.8)	40 60	SANDSTONE, a. a. SILTSTONE, a. a.	14 No breakdown
1210 (0.9)	10 90	SANDSTONE, a. a. SILTSTONE, a. a.	13 No breakdown
1220 (1.3)	50 50	SANDSTONE, a. a. - fine to coarse, dispersive clay matrix, poor porosity. SILTSTONE, a. a.	22 No breakdown
1230 (1.1)	20 70 10	SANDSTONE, white to pale grey, very fine to fine, sub-angular to sub-rounded, moderate sorted, moderate to abundant clay matrix, slightly calcareous, lithic, feldspathic, moderately hard, poor porosity. SILTSTONE, moderate to dark brown to grey-brown, firm to hard, sub-blocky, argillaceous and grades to claystone in part. COAL, dull black, conchoidal fracture.	24 No breakdown
1240 (1.3)	10 90	SANDSTONE, a. a. SILTSTONE, a. a.	22 No breakdown
1250 (1.1)	20 80	SANDSTONE, a. a. SILTSTONE, a. a.	12 No breakdown
1260 (1.0)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a.	11 No breakdown
1270 (1.2)	60 40	SANDSTONE, a. a. – white to pale blue/grey, very fine, occasionally coarse, dispersive clay matrix, poor porosity. SILTSTONE, light to medium brown, arenaceous, firm, carbonaceous specks.	7 No breakdown
1280 (1.0)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	7 No breakdown
1290 (0.8)	90 10	SANDSTONE, a. a. – predominately fine to medium, occasionally coarse grains, common grey to grey/green lithics SILTSTONE, a. a.	6 No breakdown
1300 (0.8)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	6 No breakdown
1310 (1.2)	50 50	SANDSTONE, a. a. SILTSTONE, a. a. – light grey, light to moderate brown, firm to hard, predominately arenaceous, minor carbonaceous specks/fragments.	5 No breakdown
1320 (1.4)	20 80	SANDSTONE, a. a. SILTSTONE, a. a. – also dark brown carbonaceous, argillaceous.	5 No breakdown
1330 (1.3)	60 40	SANDSTONE, a. a. SILTSTONE, a. a.	7 No breakdown
1340 (1.3)	90 10	SANDSTONE, frosted, pale grey, translucent, very fine to medium, predominately fine, moderate sorted, sub-angular to sub-rounded, weak calcareous cement, white argillaceous matrix, carbonaceous specks, trace quartz, overgrowths, loose, fair inferred porosity, no fluorescence. SILTSTONE, light grey to pale brown, tan, predominately argillaceous, trace micro-micaceous, carbonaceous specks, brittle to moderate hard in part, sub-fissile.	5 No breakdown
1350 (1.3)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	5 No breakdown
1360 (1.2)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	5 No breakdown
1370 (1.1)	60 40	SANDSTONE, a. a. SILTSTONE, a. a.	5 No breakdown
1380 (1.0)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	4 No breakdown
1390 (1.3)	70 30	SANDSTONE, a. a. SILTSTONE, medium grey/brown, argillaceous, arenaceous grading to, very fine SANDSTONE, common carbonaceous micro laminations, trace micro-micaceous, hard, sub-fissile to predominately sub-blocky.	3 No breakdown
1400 (1.6)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	4 No breakdown
1410 (1.5)	100	SANDSTONE, clear to translucent, frosted, white to very pale grey, very fine to coarse, predominately fine, trace white argillaceous matrix, loose, good inferred porosity, no fluorescence.	3 No breakdown

Depth	%	Lithology	Gas
1420 (1.6)	70 30	SANDSTONE, a. a. SILTSTONE, light to occasionally medium grey, trace pale grey/brown, predominately argillaceous, micro-micaceous, occasionally carbonaceous striations, brittle to moderate hard, sub-fissile, occasionally sub-blocky.	9 No breakdown
1430 (2.3)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	5 No breakdown
1440 (2.8)	80 20	SANDSTONE, a. a. – weak calcareous cement, dispersive white clay matrix. SILTSTONE, a. a.	5 No breakdown
1450 (2.4)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	5 No breakdown
1460 (2.3)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	4 No breakdown
1470 (4.3)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	6 No breakdown
1480 (2.4)	70 30	SANDSTONE, a. a. SILTSTONE, medium to dark grey, grey/brown in part, common very fine, arenaceous, common carbonaceous specks, micro-micaceous, moderate hard to hard, blocky to sub-blocky.	6 No breakdown
1490 (3.2)	50 50	SANDSTONE, clear to translucent, white to pale grey, fine to medium , rare coarse grains, moderate sorted, sub-angular to sub-rounded, weak calcareous cement, common kaolinite matrix, friable, common loose, poor visible & inferred porosity, no fluorescence. SILTSTONE, a. a.	5 No breakdown
1500 (2.9)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	7 No breakdown
1510 (4.1)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	12 No breakdown
1520 (2.4)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	12 No breakdown
1530 (2.6)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	9 No breakdown
1540 (3.4)	50 50	SANDSTONE, a. a. SILTSTONE, a. a.	7 No breakdown
1550 (2.3)	20 80	SANDSTONE, a. a. SILTSTONE, medium to dark grey, grey/brown, argillaceous, occasionally arenaceous, micro-micaceous, carbonaceous specks, brittle to hard, predominately moderate hard, sub-blocky to sub-fissile.	11 (98:2:0:0:0)
1560 (1.6)	10 90	SANDSTONE, a. a. SILTSTONE, a. a.	15 (97:3:0:0:0)
1570 (1.5)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a.	21 (97:3:0:0:0)
1580 (2.5)	40 60	SANDSTONE, a. a. SILTSTONE, a. a.	19 (97:3:0:0:0)
1590 (2.3)	30 70	SANDSTONE, (BoxvaleSs.) white, very fine to fine, sub-angular to sub-rounded, moderate to well sorted, moderate clay matrix, weak silica cement, friable to moderately hard, poor porosity. Also grey, very fine, silty, lithic, feldspathic, very poor porosity. SILTSTONE, moderate to dark grey to grey-brown, firm to hard, sub-blocky, micro-micaceous and carbonaceous in part, argillaceous to arenaceous.	16 (97:3:0:0:0)
1600 (2.6)	50 50	SANDSTONE, a. a. SILTSTONE, a. a.	17 (97:3:0:0:0)
1610 (2.2)	40 60	SANDSTONE, a. a. SILTSTONE, a. a.	22 (96:4:0:0:0)
1620 (2.1)	50 50	SANDSTONE, white to pale grey, very fine to fine, sub-angular to sub-rounded, moderate sorted, moderate clay matrix, minor lithics and feldspar, slightly calcareous, silica cement, friable to moderately hard, poor porosity. SILTSTONE, a. a.	22 (97:3:0:0:0)
1630 (2.5)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	14 (97:3:0:0:0)
1640 (3.3)	80 20	SANDSTONE, translucent white, very fine to coarse, occasionally very coarse, angular to sub-rounded, poorly sorted, moderate dispersive clay matrix, trace pink-red garnet, rare lithics, weak silica cement, friable, fair porosity. SILTSTONE, a. a.	17 (97:3:0:0:0)

Depth	%	Lithology	Gas
1650 (1.9)	50 50	SANDSTONE, a. a. SILTSTONE, light to moderate brown to grey-brown, firm to hard, sub-blocky, argillaceous.	23 (96:4:0:0:0)
1660 (1.6)	60 40	SANDSTONE, pale green to greenish white, very fine to fine, sub-rounded, moderate sorted, moderate to abundant clay matrix, lithic, feldspathic, silica cement, friable to moderately hard, poor porosity. SILTSTONE, a. a. - also pale green to grey-green, firm, arenaceous.	20 (97:3:0:0:0)
1670 (1.8)	60 40	SANDSTONE, a. a. - cream to light brown, green, bluish grey, very fine to medium, moderate to abundant clay matrix, moderate to strongly calcareous, poor porosity. SILTSTONE, a. a.	17 (96:4:0:0:0)
1680 (1.7)	20 80	SANDSTONE, a. a. - white to pale greenish grey. SILTSTONE, light to moderate grey to grey-green, grey-brown, firm, sub-fissile to blocky, predominantly arenaceous, lithic, feldspathic, carbonaceous; also minor moderate to dark brown, sub-fissile, argillaceous and grades to claystone.	26 (96:4:0:0:0)
1690 (1.6)	20 80	SANDSTONE, a. a. SILTSTONE, a. a.	29 (95:5:0:0:0)
1700 (1.8)	70 30	SANDSTONE, light bluish grey, very fine to medium, sub-angular to sub-rounded, moderate to well sorted, moderate clay matrix, common bluish black and greenish grey lithics, minor feldspar, occasional carbonaceous laminae, calcareous in part, friable, poor to fair porosity. SILTSTONE, a. a.	22 (96:4:0:0:0)
1710 (1.2)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	26 (96:4:0:0:0)
1720 (1.9)	60 40	SANDSTONE, a. a. SILTSTONE, light to dark brown to grey-brown, firm, sub-fissile to sub-blocky, arenaceous to argillaceous, very fine carbonaceous specks, micro-micaceous.	38 (94:5:1:0:0)
1730 (1.8)	30 70	SANDSTONE, a. a. - predominantly fine. SILTSTONE, a. a.	46 (94:5:1:0:0)
1740 (2.3)	40 60	SANDSTONE, a. a. SILTSTONE, a. a.	33 (94:5:1:0:0)
1750 (2.0)	60 40	SANDSTONE, a. a. SILTSTONE, a. a.	40 (95:5:0:0:0)
1760 (2.1)	80 20	SANDSTONE, a. a. – white to translucent blue/grey, fine to medium, poor to fair porosity. SILTSTONE, a. a.	38 (94:5:1:0:0)
1770 (2.3)	80 20	SANDSTONE, a. a. –sightly calcareous. SILTSTONE, a. a.	39 (95:5:0:0:0)
1780 (2.2)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	42 (93:6:1:0:0)
1790 (3.0)	30 70	SANDSTONE, white, very fine, argillaceous, siliceous cement, moderate hard, poor porosity. SILTSTONE, medium to dark grey, trace grey/brown, firm, abundant very fine carbonaceous specks & mica flakes, common sandy lenses.	41 (92:7:1:0:0)
1800 (2.6)	60 40	SANDSTONE, a. a. SILTSTONE, a. a.	45 (92:7:1:0:0)
1803 (2.7)	50 50	SANDSTONE, a. a. SILTSTONE, a. a.	48 (91:7:2:0:0)
1806 (2.4)	10 90	SANDSTONE, a. a. SILTSTONE, dark grey to grey/brown, argillaceous, firm, sub-fissile.	76 (90:8:2:0:0)
1809 (1.8)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a.	68 (90:8:2:0:0)
1812 (2.1)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a.	40 (90:8:2:0:0)
1815 (2.0)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a.	45 (89:8:3:0:0)
1818 (1.9)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a.	61 (89:8:3:0:0)
1821 (2.3)	10 90	SANDSTONE, translucent, frosted, pale grey, occasionally clear, very fine to fine, occasionally medium grains, sub-angular to sub-rounded, weak calcareous cement, pale grey argillaceous matrix, minor carbonaceous specks, brittle to moderate hard, poor visible porosity, no fluorescence. SILTSTONE, a. a.	55 (89:8:3:0:0)

Depth	%	Lithology	Gas
1824 (3.9)	20 80	SANDSTONE, a. a. SILTSTONE, a. a.	46 (89:8:3:0:0)
1827 (2.4)	50 50	SANDSTONE, a. a. SILTSTONE, a. a.	67 (92:6:2:0:0)
1830 (2.0)	70 30	SANDSTONE, a. a. increasing in pale green. SILTSTONE, a. a.	93 (92:6:2:0:0)
1833 (1.7)	80 20	SANDSTONE, clear to translucent, pale green to pale grey, very fine to medium, fair to good sorted, sub-angular to sub-rounded, weak siliceous cement, white argillaceous matrix, trace glauconite, rare siderite, carbonaceous specks, firm to hard, predominately moderate hard, poor visible & fair to moderate visible porosity. SILTSTONE, a. a.	99 (92:6:2:0:0)
1836 (2.5)	80 20	SANDSTONE, a. a. SILTSTONE, a. a. – pale green.	45 (91:7:2:0:0)
1839 (3.0)	90 10	SANDSTONE, a. a. – increase in pale green colour. SILTSTONE, a. a.	37 (87:8:4:1:0)
1842 (2.7)	90 10	SANDSTONE, pale grey to pale grey/green, pale brown, pale green to green, clear to translucent, frosted, very fine to medium, moderate poor sorted, sub-rounded to sub-angular, moderate siliceous cement, white to pale green argillaceous matrix, glauconite, siderite, carbonaceous specks, moderate hard to hard aggregates, predominately loose, poor visible & fair inferred porosity, no fluorescence. SILTSTONE, a. a.	28 (90:7:3:0:0)
1845 (2.7)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	36 (90:7:3:0:0)
1848 (2.6)	100 Tr	SANDSTONE, a. a. – including pale brown to tan in colour. SILTSTONE, a. a.	33 (90:7:3:0:0)
1851 (2.9)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	26 (91:6:3:0:0)
1854 (2.6)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	32 (93:5:2:0:0)
1857 (2.5)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	37 (90:6:3:1:0)
1860 (2.5)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	35 (92:6:2:0:0)
1863 (2.1)	100 Tr	SANDSTONE, a. a. SILTSTONE, a. a.	90 (88:7:3:2:0)
1866 (1.6)	100 Tr	SANDSTONE, a. a. – decrease in green grains SILTSTONE, a. a.	445 (83:10:4:3:0)
1869 (2.1)	90 10	SANDSTONE, a. a. – increase in clear grains SILTSTONE, a. a.	95 (84:9:4:3:0)
1872 (3.2)	50 50	SANDSTONE, a. a. SILTSTONE, a. a. –tan to brown, brown/grey, pale grey, pale green, argillaceous, occasionally arenaceous, micro-micaceous, carbonaceous specks, friable to moderate hard, sub-fissile to sub-blocky.	22 (91:6:3:0:0)
1875 (3.2)	30 70	SANDSTONE, a. a. SILTSTONE, a. a. – brown/red, brown, brown/grey, pale to medium grey, orange in part, pale green, argillaceous, occasionally arenaceous, micro-micaceous, carbonaceous specks, brittle to moderate hard, hard in part, sub-blocky to sub-fissile.	17 (91:6:3:0:0)
1878 (57.4)	30 70	SANDSTONE, a. a. SILTSTONE, a. a.	13 (96:3:1:0:0)
1881 (43.8)	20 80	SANDSTONE, a. a. SILTSTONE, a. a.	13 (97:2:1:0:0)
1884 (14.1)	10 90	SANDSTONE, a. a. SILTSTONE, a. a.	11 (98:2:0:0:0)
1887 (9.9)	70 30	SANDSTONE, -translucent, milky white, pale grey, pale green, occasionally clear grains, fine to medium, moderate well sorted, sub-rounded to sub-angular, weak to moderate calcareous cement, white to pale grey argillaceous matrix, loose, fair to moderate inferred porosity, no fluorescence. SILTSTONE, pale to medium grey, pale green, argillaceous, soft to moderate hard, predominately sub-blocky, occasionally sub-fissile, amorphous in part.	24 (93:6:1:0:0)
1890 (13.9)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	5 (94:5:1:0:0)

Depth	%	Lithology	Gas
1893 (11.4)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	8 (95:5:0:0:0)
1896 (13.6)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	5 (95:5:0:0:0)
1899 (12.2)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	6 (96:4:0:0:0)
1902 (9.3)	80 20	SANDSTONE, clear to translucent, frosted, pale green, pale grey, fine to medium, moderate well sorted, sub-rounded to sub-angular, moderate calcareous cement, white to pale grey argillaceous matrix, trace pyrite, loose, fair inferred porosity, no fluorescence. SILTSTONE, pale grey, occasionally grading to medium, pale green, argillaceous, very soft to brittle, common amorphous, occasionally sub-blocky to sub-fissile.	9 (96:4:0:0:0)
1905 (10.1)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	9 (95:5:0:0:0)
1908 (11.9)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	6 (96:4:0:0:0)
1911 (13.2)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	4 (97:3:0:0:0)
1914 (14.1)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	3 (96:4:0:0:0)
1917 (12.6)	90 10	SANDSTONE, - clear to translucent, frosted, pale grey, occasionally pale green, medium to coarse grains, occasionally grading to very coarse grains, fine in part, fair to poor sorted, weak calcareous cement, white argillaceous matrix, minor pyrite, loose, fair inferred porosity, no fluorescence. SILTSTONE, -	11 (93:6:1:0:0)
1920 (6.6)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	54 (93:6:1:0:0)
1923 (11.6)	80 20	SANDSTONE, a. a. SILTSTONE, - pale to medium grey, brown to pale brown, argillaceous, moderate hard, sub-blocky.	12 (95:5:0:0:0)
1926 (8.6)	70 30	SANDSTONE, a. a. SILTSTONE, - pale to medium grey, predominately pale grey, occasionally white, pale brown in part, argillaceous, v soft, dispersive.	35 (93:6:1:0:0)
1929 (6.5)	60 40	SANDSTONE, a. a. SILTSTONE, - white, pale grey, occasionally medium grey, pale green in part, argillaceous, v soft, dispersive.	29 (94:5:1:0:0)
1932 (8.5)	80 20	SANDSTONE, a. a. SILTSTONE, a. a.	23 (93:6:1:0:0)
1935 (8.9)	90 10	SANDSTONE, a. a. SILTSTONE, a. a.	41 (93:6:1:0:0)
1938 (5.8)	90 10	SANDSTONE, - frosted, clear to translucent, minor pale green to green, trace pale yellow to yellow/brown, medium to very coarse, predominately coarse, fine in part, sub-rounded, occasionally sub-angular, trace weak siliceous cement, white argillaceous matrix, minor carbonaceous specks, loose, good inferred porosity. <u>10 – 20% moderately bright pale blue to blue-white fluorescence with a blooming to fast cut and thick film residue.</u> SILTSTONE, a. a.	220 (89:8:2:1:0)
1941 (4.5)	90 Tr 10	SANDSTONE, a. a. <u>10 - 20% fluorescence, a.a.</u> SILTSTONE, a. a. COAL, - black, earthy to sub-vitreous, friable to brittle, predominately sub-fissile, uneven.	168 (89:8:2:1:0)
1944 (3.6)	40 Tr 60	SANDSTONE, a. a. SILTSTONE, a. a. COAL, - black, dark brown, earthy to sub-vitreous, friable to brittle, predominately sub-fissile, occasionally sub-blocky, hackle to uneven.	223 (94:6:0:0:0)
1947 (7.7)	40 Tr 20 40	SANDSTONE, a. a. <u>10% fluorescence, a.a.</u> SILTSTONE, a. a. COAL, a. a. TUFF, - pale brown/grey, tan, waxy, soft, amorphous.	81 (94:6:0:0:0)
1950 (5.1)	50 Tr 30 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	217 (91:8:1:0:0)

Depth	%	Lithology	Gas
1953 (13.4)	60 10 20 10	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	47 (90:9:1:0:0)
1956 (15.1)	80 10 10	SANDSTONE, - white, pale grey, very fine to coarse, sub-angular to sub-rounded, poor sorted, calcareous cement, common grey, green and yellow lithics/grains, micro-micaceous, friable, poor porosity. SILTSTONE, - medium to dark grey, grey/brown, arenaceous, very fine carbonaceous specks and mica flakes, firm, sub-fissile to sub-blocky. COAL, - brown/black to black, earthy to minor sub-vitreous, grading to carbonaceous shale in part.	21 (87:11:2:0:0)
1959 (12.6)	50 10 20 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, white, very soft.	72 (91:8:1:0:0)
1962 (12.1)	20 20 20 40	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, - white, brown, tan, grey, silty and carbonaceous in part, very soft.	104 (91:8:1:0:0)
1965 (10.8)	20 30 20 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	57 (90:8:2:0:0)
1968 (19.1)	50 20 10 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	16 (82:14:4:0:0)
1971 (21.0)	50 30 Tr 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	9 (84:12:4:0:0)
1974 (15.0)	40 20 10 30	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	125 (90:8:2:0:0)
1977 (9.4)	40 20 30 10	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	174 (87:11:2:0:0)
1980 (10.2)	40 10 20 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	96 (87:10:3:0:0)
1983 (5.2)	50 20 Tr 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	103 (91:7:2:0:0)
1986 (6.5)	30 10 40 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	156 (90:8:2:0:0)
1989 (13.3)	20 40 20 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	62 (89:9:2:0:0)
1992 (11.3)	30 60 10 Tr	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	0 Equipment off
1995 (7.7)	40 20 10 30	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	0 Equipment off

Depth	%	Lithology	Gas
1998 (10.3)	60 10 Tr 20	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	0 Equipment off
2001 (6.0)	10 60 20 10	SANDSTONE, a. a. SILTSTONE, - light to dark grey, predominately medium grey, grey/brown, argillaceous, trace micro-micaceous, carbonaceous, brittle to moderate hard, sub-blocky to minor sub-fissile. COAL, a. a. TUFF, a. a.	110 (87:9:3:1:0)
2004 (15.6)	40 40 10 10	SANDSTONE, a. a. SILTSTONE, - pale to medium grey, grey/brown, argillaceous. COAL, - black to dark brown/black, predominately earthy, brittle, sub-fissile. TUFF, - white to tan, very soft to firm,	89 (83:10:5:2:0)
2007 (12.6)	40 30 20 10	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a. – off white to tan.	182 (84:10:4:2:0)
2010 (11.7)	40 40 10 10	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	280 (83:10:5:2:0)
2013 (12.5)	50 30 10 10	SANDSTONE, - pale grey/brown, translucent to clear, fine to medium, occasionally coarse, sub-angular to sub-rounded, weak calcareous cement, common grey, green and yellow lithics/grains, micro-micaceous, friable, poor porosity. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	156 (86:9:4:1:0)
2016 (9.8)	60 20 20 Tr	SANDSTONE, - clear to translucent, pale grey to pale grey/green, pale brown, fine to medium, occasionally coarse, sub-angular to sub-rounded, weak calcareous cement, common grey, green and yellow lithics/grains, micro-micaceous, friable, poor porosity. SILTSTONE, - pale to dark grey, grey, black, brown, argillaceous to carbonaceous, micro-micaceous, moderate hard, sub-fissile to sub-blocky. COAL, - black, earthy to sub-vitreous, moderate hard, sub-fissile to sub-blocky, grading to carbonaceous SILTSTONE. TUFF, a. a.	219 (87:9:3:1:0)
2019 (6.2)	40 10 40 10	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	364 (83:11:4:2:0)
2022 (4.4)	10 Tr 90 Tr	SANDSTONE, a. a. SILTSTONE, a. a. COAL, - black, black/brown, earthy to sub-vitreous, brittle to moderate hard, hackly to uneven. TUFF, a. a.	332 (91:7:2:0:0)
2025 (11.6)	20 10 70 Tr	SANDSTONE, a. a. SILTSTONE, a. a. COAL, a. a. TUFF, a. a.	154 (89:8:2:1:0)
2028 (17.0)	20 50 30 Tr	SANDSTONE, - pale grey to grey/brown, translucent, occasionally clear, fine to coarse, predominately medium, sub-angular to sub-rounded, poor to fine sorted, weak siliceous cement, pale grey/brown argillaceous matrix, pyrite, carbonaceous specks, predominately loose, moderate hard to hard in part, fair to good inferred porosity. SILTSTONE, - grey/brown, light grey, argillaceous, micro-micaceous, moderate hard to hard, sub-fissile to sub-blocky. COAL, a. a. TUFF, - pale brown, pale grey, waxy texture, soft to firm, brittle in part.	56 (85:10:4:1:0)
2031 (5.0)			0 Equipment off

Depth	%	Lithology	Gas
2034 (3.6)	Tr 100	SANDSTONE, a. a. SILTSTONE, - dark grey to grey/brown, black, argillaceous, arenaceous in part, carbonaceous, micro-micaceous, hard, sub-blocky to sub-fissile, occasionally blocky.	0 Equipment off
2037 (3.0)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a.	0 Equipment off
2040 (3.2)	Tr 100	SANDSTONE, a. a. SILTSTONE, - medium grey, grey/brown, occasionally light grey, argillaceous, minor carbonaceous, micro-micaceous, hard to moderate hard, blocky to sub-blocky.	0 Equipment off
2043 (3.6)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a.	2 (97:3:0:0:0)
2046 (3.3)	Tr 100	SANDSTONE, a. a. SILTSTONE, a. a.	4 (96:4:0:0:0)
2049 (2.1)	10 90	SANDSTONE, - clear to translucent, pale brown, clear/brown, yellow/brown, very fine to medium, moderate sorted, sub-angular to sub-rounded, loose, fair to good inferred porosity. SILTSTONE, - light to medium grey, occasionally dark grey/brown, argillaceous, arenaceous in part, minor carbonaceous, micro-micaceous, sub-blocky.	6 (92:8:0:0:0)
2052 (1.4)	20 80	SANDSTONE, a. a. SILTSTONE, a. a.	8 (92:8:0:0:0)
2055 (1.2)	60 40	SANDSTONE, - translucent/brown, pale brown, clear/brown, yellow/brown, orange/yellow, very fine to medium, predominately medium, moderate well sorted, sub-angular to sub-rounded, loose, fair to good inferred porosity. SILTSTONE, - medium to dark grey/brown, argillaceous, carbonaceous, hard, sub-blocky.	330 (93:6:1:0:0)
2058 (1.3)	90 10	SANDSTONE, - translucent, yellow/brown, pale grey, clear, fine to very coarse, predominately medium/coarse, sub-angular to sub-rounded, loose, fair to good inferred porosity, SILTSTONE, - dark grey/brown, black in part, argillaceous, carbonaceous, hard, sub-blocky.	536 (84:11:4:1:0)
2061 (1.3)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	464 (86:10:3:1:0)
2064 (2.5)	80 20	SANDSTONE, a. a. – very fine to medium, occasionally coarse. SILTSTONE, a. a.	579 (83:11:4:2:0)
2067 (3.2)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	646 (82:12:4:2:0)
2070 (1.7)	80 20	SANDSTONE, a. a. SILTSTONE, - black to dark grey, carbonaceous, micro-micaceous, argillaceous, moderate hard to hard, predominately blocky.	84 (83:11:4:2:0)
2073 (2.5)	80 20	SANDSTONE, - clear/yellow, yellow/brown, translucent, very fine to fine, occasionally medium grains, sub-angular to sub-rounded, loose, ti inferred porosity. SILTSTONE, -black to very dark grey, very carbonaceous, micro-micaceous, moderate hard to hard, blocky.	0 Equipment off
2076 (5.4)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	0 Equipment off
2077 (TD)	70 30	SANDSTONE, a. a. SILTSTONE, a. a.	0 Equipment off
		Myall Creek-8 TD of 2077.0m. driller @ 18.30 hours 05 / 04 / 2003	

ENCLOSURES

Oil Company

MYALL CREEK-08

COMPOSITE WELL LOG 1:200

PROJECT		TD: 1.0	REGIONAL			GEOGRAPHIC			DATUM			REGIONAL DATUM
LOCATION: EL/PEL/LICENCE			COUNTY: NORTHERN TERRITORY			STATE: NT			DATUM:			
COUNTRY: AUSTRALIA			BASIN:			PROVINCE:			ELEVATION:			
			PROJECT:									
			PROJECTION:									

Oil Company of Australia

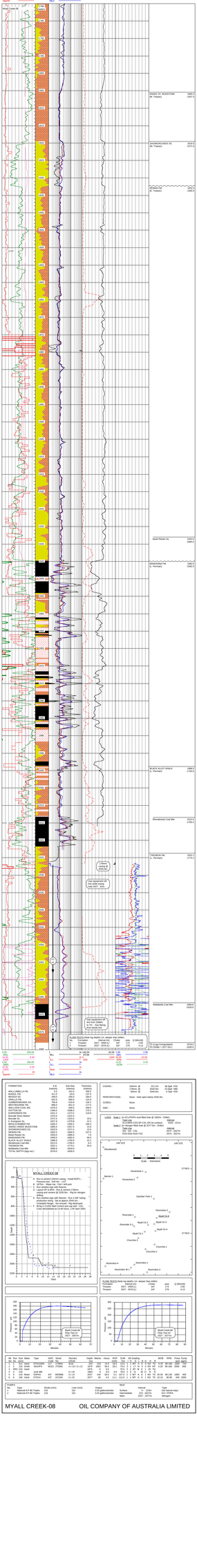
MYALL CREEK-08

COMPOSITE WELL LOG 1:200

PERMIT:	PL 174	REGION:		SURAT:	BASIN:	BOWEN / SURAT
LOCATION (Surface): Latitude: 27°02'41.96"S; Longitude: 149°13'12.312"E; GDA (55) Ref.: 715 178.588, 7 004 794.269; Seismic Location: SP 235.5, Line : SH84-104-SP		TOTAL DEPTH: Logger (extrapolated): 2227.0m; Driller: 2228.0m; Spudded: 22/03/2003; Well Secured after fire: 17/04/2003		STATUS: Gas Well	DATUM: Permanent Datum: MSL; Log Datum: R.T.; Drilling Datum: R.T.; Elevation: R.T. - 248.0m; G.L. - 242.5m;	

Drilling Co.: Century Drilling Limited; Rig #1 | Wireline Logs: Mudlogging | Reeves Geoservices | Composite Log: Website Geologist; Last Modified: D.A. Short; A. Holobay / D. Short; April 2003

Sandstone, Siltstone, Shale, Claystone, Coal, Dolomite, Conglomerate, Sandy Limestone, Limestone, Tuff / Volcanics, Metamorphics, Granite, Calcarious, Lithic, Carbonaceous, Pyrite, Glauconite, Fossils, Clast, Foliage, Plant Stem, Garnet, Chlorite, Gypsum, Fluorescence, Gas Show, Oil Show, Oil Stain, Oil Recovery, SWC Recovered, SWC Not Recovered, Depositional Stage, Mud Gas, RFT Point, Check Shot, Current Plug, Drill Stem Test, Perforations, Core


Myall Creek 08
Gwabegar Sst
Gwabegar Sst
Gwabegar Sst

Oil Company of Australia

FORMATION EVALUATION LOG
WELL : MYALL CREEK-8

COMPANY	OCA	SPUD DATE	22-03-2003
RIG	CDL-1	TD DATE	05-04-2003
AREA	SURAT BASIN / PL-174	TD DRILLER	2077.0m
STATE/COUNTRY	QLD / AUSTRALIA	TD WIRELINE	2077.0m
LOCATION	27° 03' 42.01" S 149° 13' 12.22" E	LOGGED FROM	223.0m
ELEVATION	5.5m (RT-GL)	LOGGED TO	2077.0m
ALTITUDE	245.0m (GL-MSL)	FINAL STATUS	CASED & SUSPENDED
DEPTH REF	ROTARY TABLE		

WELL CONFIGURATION

BIT SIZE (mm)	HOLE DEPTH (m)	CASING SIZE (mm)	CASING DEPTH (m)
311	223	244.5	221.2
216	2027	178	2026.9
156	2077		

LOGGING ENGINEERS

STEPHEN LONG
DANIEL DENNIS

SCALE 1/ 500

SYMBOLS

NEW BIT RUN
NEW CORE BIT RUN
CASING SHOE
DEVIATION SURVEY
LINER HANGER
Recovered SIDEWALL CORES Not Recovered
CORED INTERVAL
DST INTERVAL
FLUORESCENCE: NO SHOW, WEAK SHOW, FAIR SHOW, GOOD SHOW

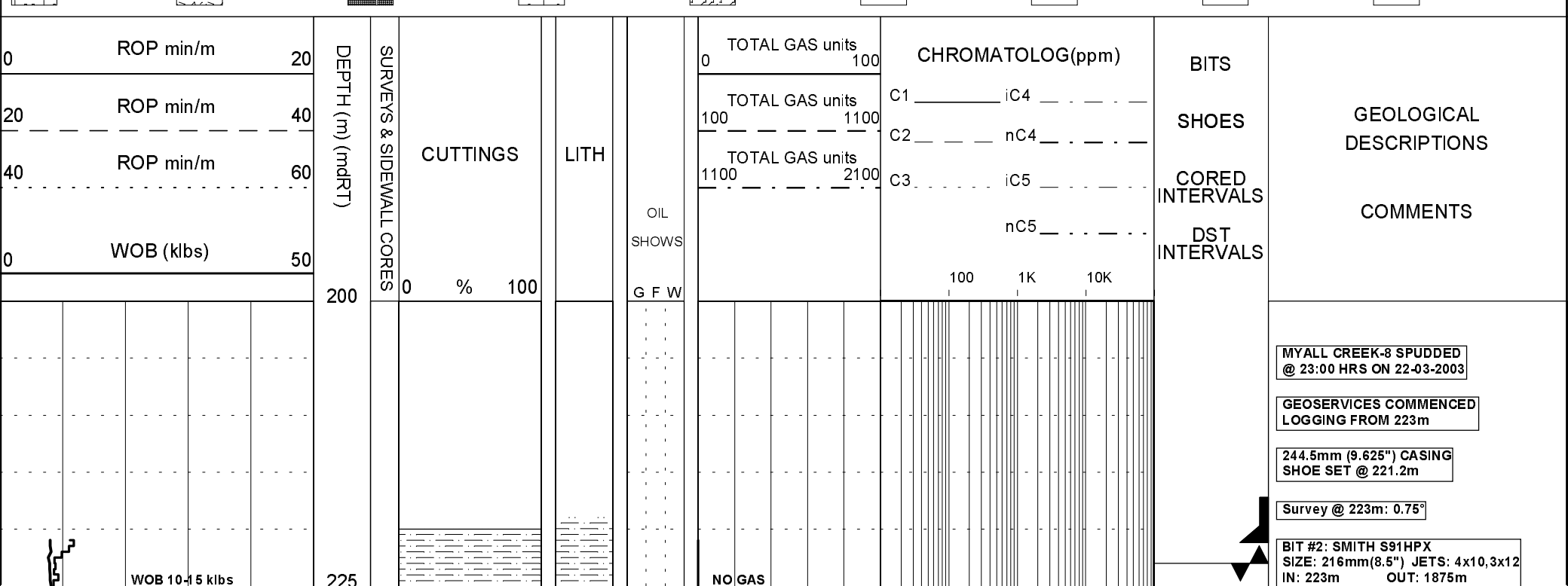
ABBREVIATIONS

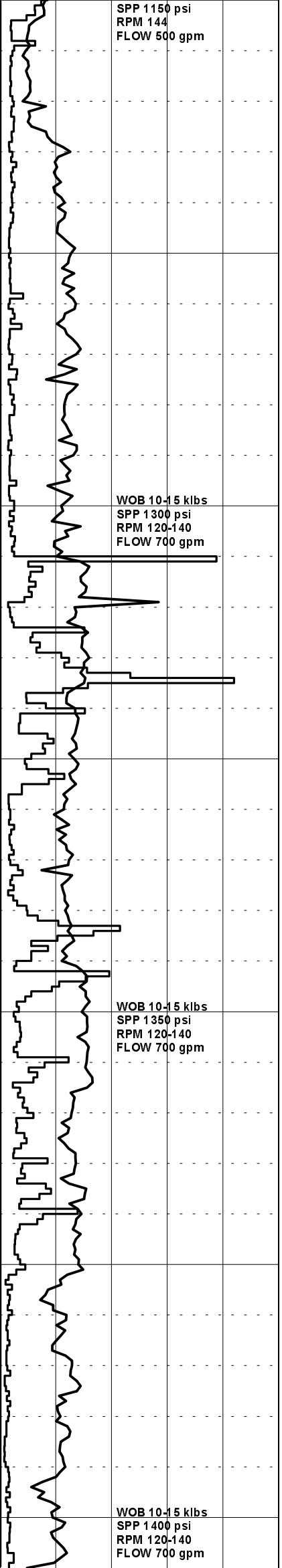
NB NEW BIT	DS DIRECTIONAL SURVEY
NCB NEW CORE BIT	WT WIPER TRIP
RRB RE-RUN BIT	POOH PULL OUT OF HOLE
CS CASING SHOE	RIH RUN IN HOLE
SWC SIDE WALL CORE	AZI AZIMUTH
EL ELECTRIC LOG	INC INCLINATION
WOB WEIGHT ON BIT	LCM LOST CIRCULATION MATERIAL
RPM REVS PER MINUTE	DC DEPTH CORRECTION
SPP STAND PIPE PRESSURE	DST DRILL STEM TEST
FLOW FLOW RATE	RMG REAMING
SPM STROKES PER MINUTE	ML MUD LOSSES
CR CIRCULATED RETURNS	FR FLOW RATE
PR POOR RETURNS	FC FLOW CHECK
NR NO RETURNS	BR BIT RUN
TG TRIP GAS	MMCFD MILLION CUBIC FT/DAY
CG CONNECTION GAS	SG SWAB GAS
WTG WIPER TRIP GAS	U UNITS OF GAS

MUD DATA

MW MUD WEIGHT	sg(kg/l)
MG MUD GRADIENT	KPA/mt
FV FLUID VISCOSITY	sec
PV PLASTIC VISCOSITY	Cp
YP YIELD POINT	lb/cf2
Gel GEL STRENGTH	lb/cf2
pH ACIDITY	
F FILTRATE	cm3/30
Ck CAKE THICKNESS	cm/32
S SALINITY	kg/m3
SD SAND CONTENT	%
O OIL CONTENT	%
WL WATER LOSS	cm3/30
Sol SOLIDS CONTENT	%
Cl CHLORIDES	
Ca CALCIUM CONTENT	
GYP GYPSUM CONTENT	lb/bbl

CLAYSTONE, MEDIUM SST, LIMESTONE, GYPSUM, TUFF, FERRUGINOUS, CALCAREOUS, GLAUCONITE, MICROFOSSILS
SILTSTONE, FINE SANDSTONE, DOLOMITIC LIMEST, HALITE, VOLCANIC ROCK, FORAMINIFERA, DOLOMITIC, MICACEOUS, FOSSILS
CONGLOMERATE, VF SANDSTONE, DOLOMITE, CEMENT, IGNEOUS ROCK, BRYOZOA, CARBONACEOUS, PYRITE, LITHICS
COARSE SST, BRECCIA, COAL, CALCARENITE, METAMORPHICS, FELDSPAR, CHERTY, BROKEN FOSSILS, SIDERITE





250

275

300

325

350

375

NO GAS

NO GAS

NO GAS

RUN: 1652m HRS: 37.7
COND: 3-1-LT-N-X-0-ER-HP

LEAK OFF TEST @ 227m:
EMW = 20 ppg

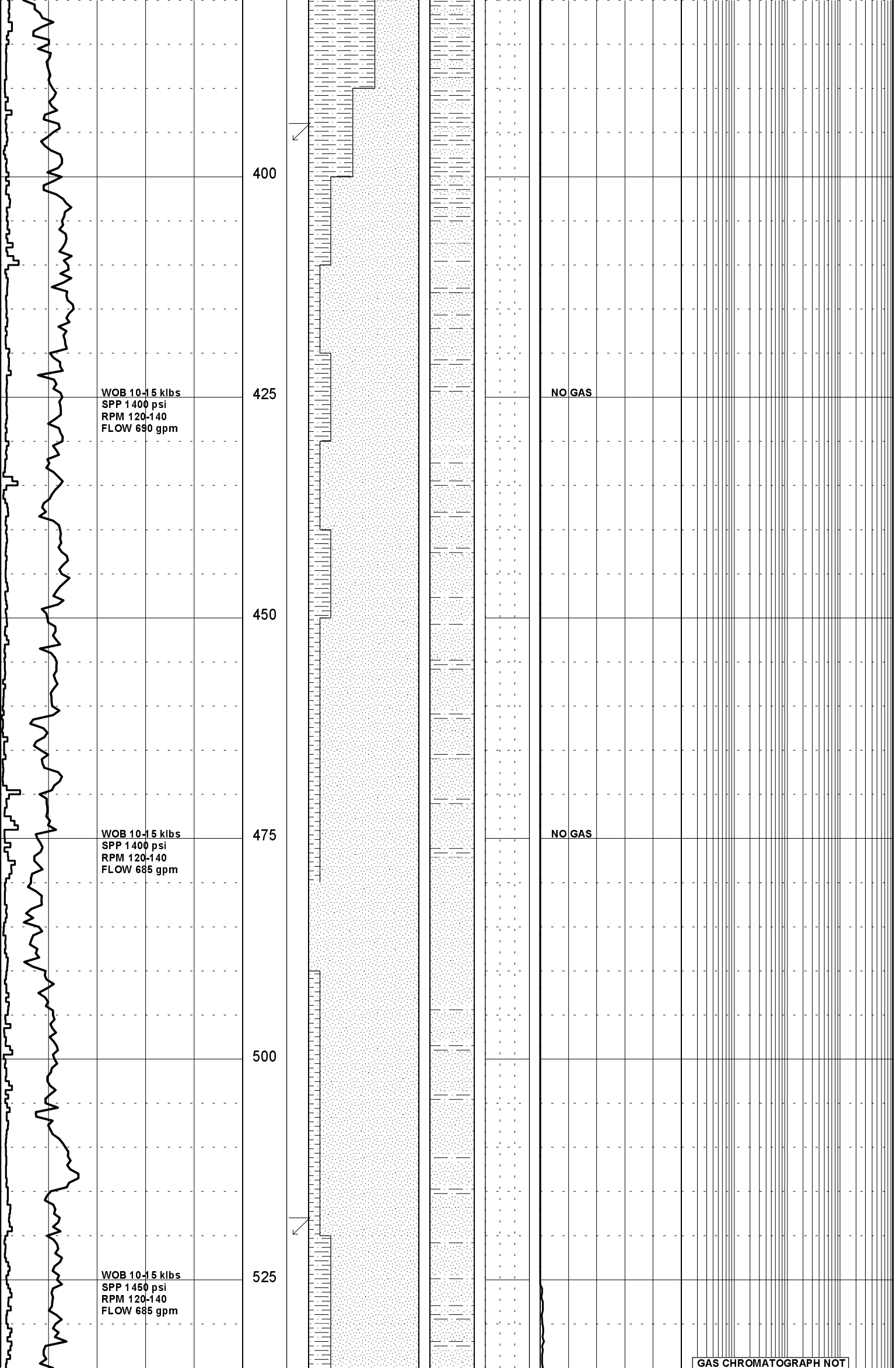
SILTSTONE:med-dk gy,tr gr/gy,tr aren,sft-frm,blky-sbblky.

SILTSTONE:med-dk gy,arg,occ aren sft-frm,blky.

SILTSTONE:med-dk gy,arg,occ aren calc i/p,sft-frm,blky-sbblky.

SANDSTONE:trnsl,pl gy-off wh,occ clr,vf-f,tr med,mod wl srt,sa-sr wk-mod calc cmt,wh-off wh arg mtx,tr sid,fri-mod hd,fr-gd vis por,no fluor.

SILTSTONE:med-dk gy,arg,g/t aren i/p,sft-frm,blky-sbblky.



SANDSTONE:trnsl,pl gy-off wh,occ clr,vf-f,occ med,mod wl srt,sa-sr,wk-mod calc cmt,wh-off wh arg mtx,tr sid,fri-mod hd,fr-gd vis por,no fluor.

Survey @ 396m: 1.00°

SILTSTONE:med-dk gy,arg,mnr aren,sft-frm,blky-sbblky.

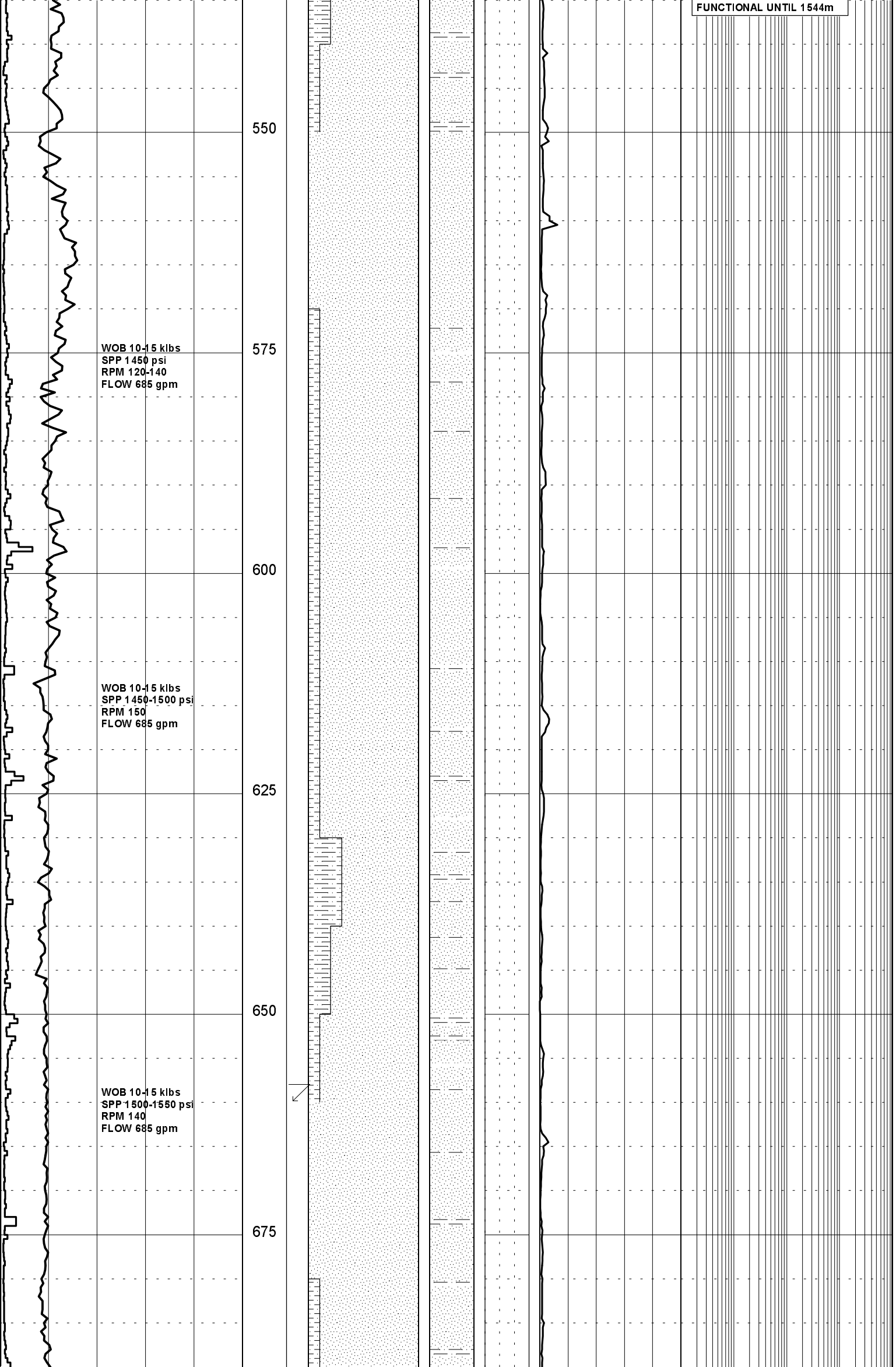
SANDSTONE:clr-trnsl,frstd,pl-off wh,vf-f,rr med,sr-sa,rr ang grns wk calc cmt,off wh slty mtx,tr carb spks,pred lse,fr-gd vis por no fluor.

SILTSTONE:lt gy,tr med-dk gy, aren occ g/t vf SST,carb spks, tr micmic,uncons,amorph.

SANDSTONE:clr-trnsl,frstd,pl-off wh,vf-f,mod wl srt,sr-sa,wk calc cmt,off wh slty mtx,tr carb spks,rr sid,pred lse,fr-gd vis por,no fluor.

SITLSTONE:lt gy,tr med-dk gy, aren occ g/t vf SST,carb spks, tr micmic,uncons,amorph.

Survey @ 520m: 1.00°



SANDSTONE:clr-trnsl,frstd,vf-med tr crs,sa-ang,sr,wk sil cmt,wh arg mtx,rr sid,rr glauc,lse,gd vis por,no fluor.

SANDSTONE:clr-trnsl,frstd,vf-med tr crs,ang-sr,wk sil cmt,tr wh arg mtx,rr sid,rr glauc,lse,gd inf por,no fluor.

SILTSTONE:med-dk gy,gy/bn i/p, arg g/t vf aren,carb spks & lith incl,frm-mod hd,sbblky.

SANDSTONE:clr-trnsl,frstd,med-v crs,occ vf-f,pr srt,ang-sr,tr wk sil cmt & kaol mtx in rr fri agg pred lse & cln,fr-gd vis & inf por,no fluor.

SILTSTONE:lt-med gy,gy/bn,arg, occ aren,carb,striat,carb spks, fri-mod hd,sbblky-sbfiss.

TUFF(tr):lt-pl bn,sft.

SANDSTONE:clr-trnsl,pl yel,pl gy vf-med,pred f,sr-sa,wl srt,wk sil cmt,sft wh arg mtx,glauc, carb spks,lse,gd inf por,no fluor.

Survey @ 660m: 1.00°

SILTSTONE:lt gy,occ bn,arg,aren i/p,carb spks,frm-mod hd,sbblky-sbfiss.

SANDSTONE:clr-trnsl,pa gy/bn,vf-crs,sa-sr,pr-mod srt,wk sil cmt, tr off wh arg mtx,tr glauc,tr liths & carb spks,pred lse,gd inf por,no fluor.

700

725

750

775

800

825

WOB 10-15 klbs
SPP 1400-1500 psi
RPM 140
FLOW 700 gpm

WOB 10-15 klbs
SPP 1400-1500 psi
RPM 140
FLOW 700 gpm

WOB 10-15 klbs
SPP 1500-1600 psi
RPM 80
FLOW 695 gpm

SANDSTONE:clr-trnsl,pl gy/bn i/p med-crs,sa-sr,mod-pr srt,tr wk sil cmt & arg mtx,tr carb spks, rr glauc,mnr fri aggs,pred lse & cln,fr vis & inf por,no fluor.

SANDSTONE:clr-trnsl,lt gy,med-crs,mod pr srt,wk sil cmt,mnr off wh arg mtx,tr carb spks,mnr fri aggs,gen lse & cln,fr inf & vis por,no fluor.

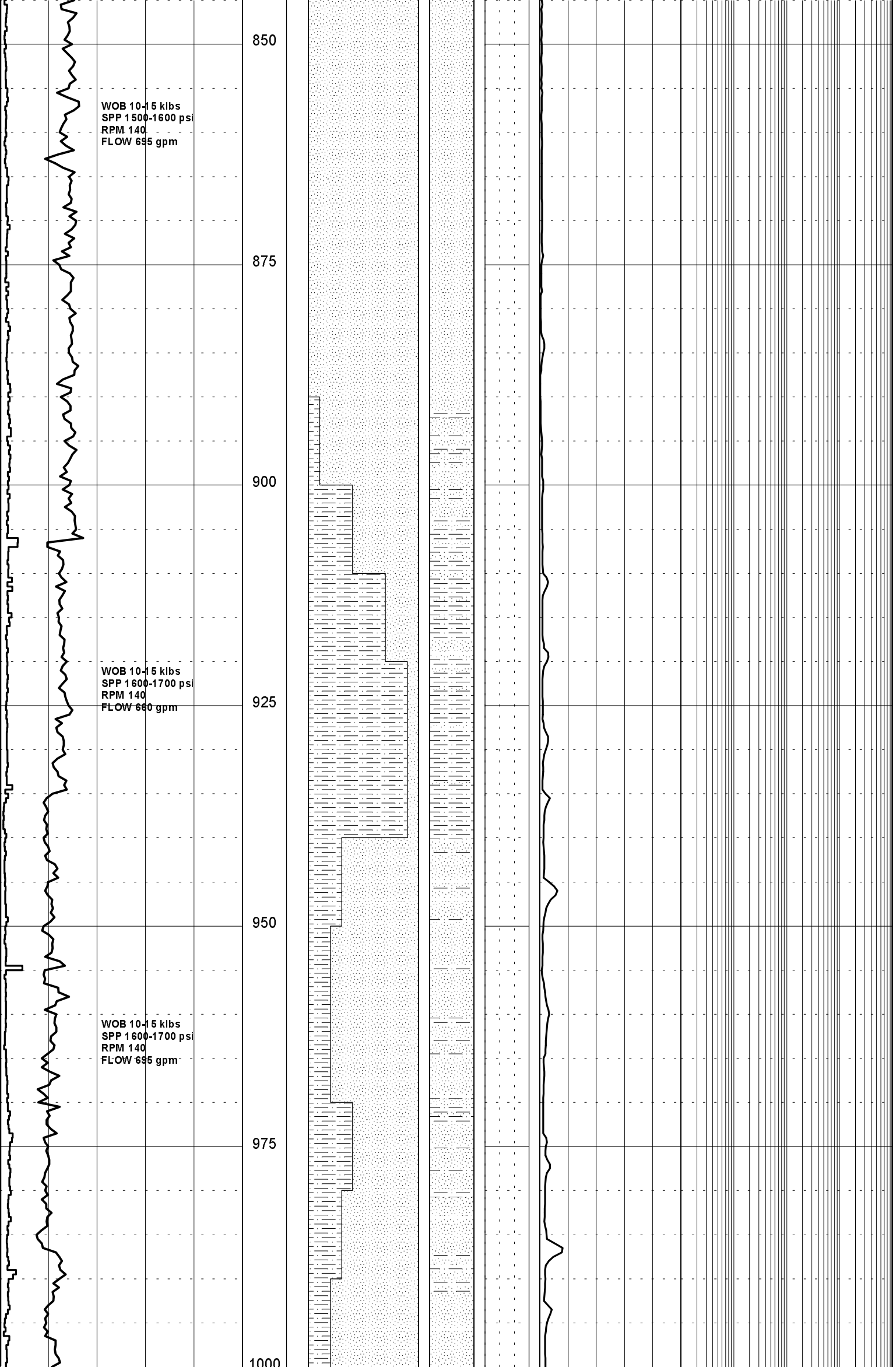
SILTSTONE:lt gy-pl tn,aren,arg i/p,tr micmic,carb spks,frm-mod hd,rr hd,sbblky-sbfiss.

SANDSTONE:clr-trnsl,frstd,vf-med sa-sr,rr wh arg mtx,tr pnk/rd garnets,qtz o/gths,lse,gd inf por,no fluor.

Survey @ 806m: 0.25°

SANDSTONE:clr-trnsl,pl gy,vf-med rr crs,pr srt,ang-sr,rr pnk garnet,tr qtz o/gths,lse & cln, gd inf por,no fluor.

SANDSTONE:clr-trnsl,pl gy,f-v crs,ang-sr,pr srt,com qtz o/gths lse & cln,fr-gd inf por,no fluor



SANDSTONE:clr-trnsl,pl gy,f-crs, pr srt,ang-sr,rr wh arg mtx,pred lse & cln,gd inf por,no fluor.

SANDSTONE:clr-trnsl,pl gy,f-crs, ang-sr,pr srt,com qtz o/gnt's,lse & cln,fr-gd inf por,no fluor.

SILTSTONE:lt-med gy,occ dk gy, pred arg,tr aren,carb spks,sft-frm,sbblky-sbfiss.

SANDSTONE:clr,pl gy,f-crs,ang-sr pr srt,com qtz o/gths,lse & cln fr-gd inf por,no fluor.

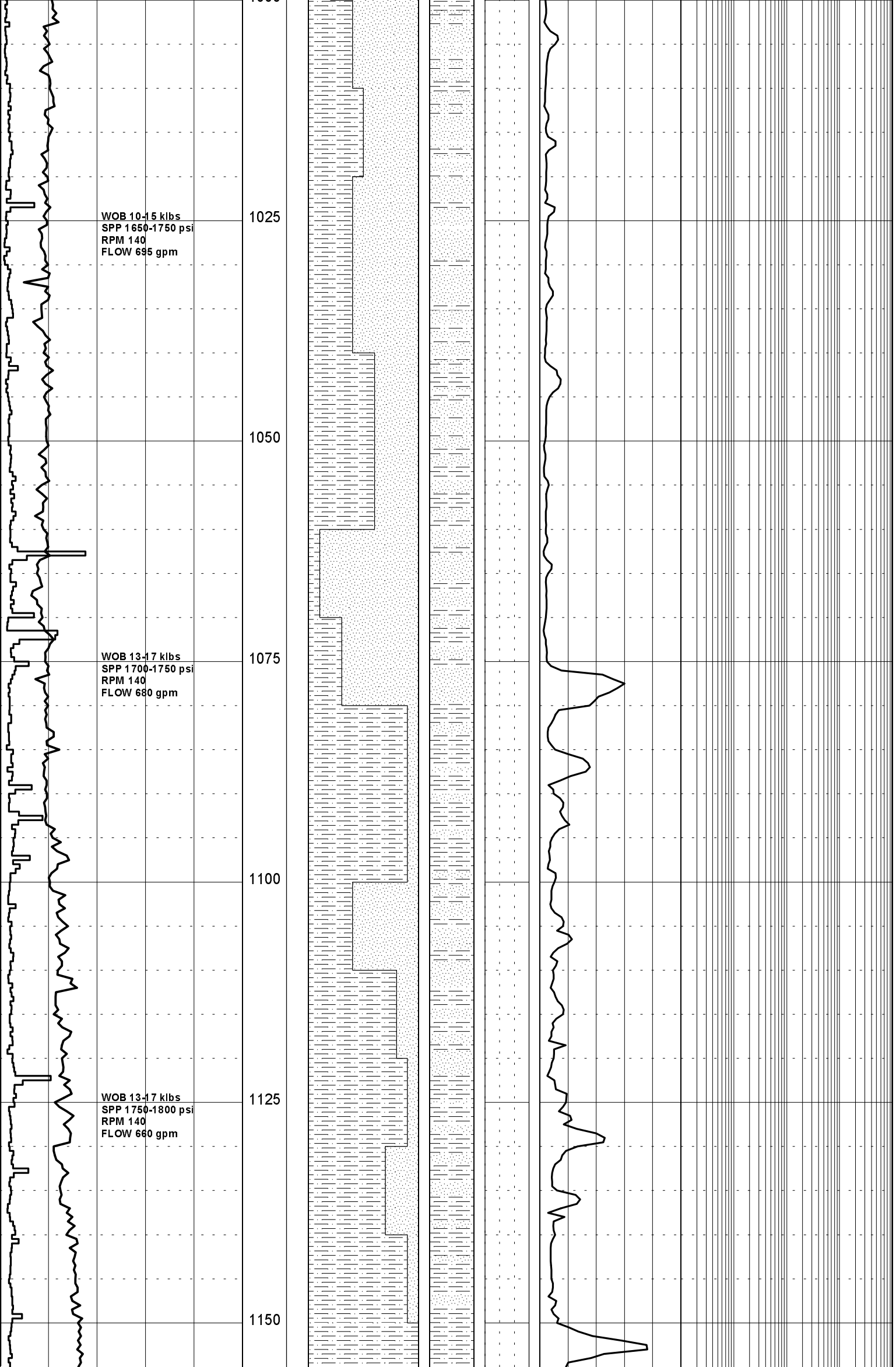
SILTSTONE:lt-dk gy,pred med gy, aren,occ arg,micmic,carb,striat carb spks,sft-frm,sbblky-sbfiss

SANDSTONE:frstd,pl gy,gy/bn,clr-trnsl,vf-f,occ med,mod srt,sa-sr wk sil cmt,wh arg mtx,carb spks, occ qtz o/gths,lse,fr-gd inf por no fluor.

Carbide Lag Check @ 954m
Theor. Open Hole Strokes: 2117
Actual Open Hole Strokes: 2214
Open Hole O.G.: 4.5 %

SILTSTONE:med-dk gy,gy/bn,aren-occ arg,micmic,carb spks,carb striats,brit-occ mod hd,sbblky-sbfiss.

SANDSTONE:pl gy/bn,clr-frstd,vf-occ med,mod srt,sa-sr,occ wk sil cmt & off wh arg mtx in rr fri aggs,com qtz o/gths,com lse,fr vis & fr-gd inf por,no fluor.



SILTSTONE:lt-med gy/bn, arg-vf aren,com carb incl,tr micmic,frm -mod hd,sbfiss-pred sbblky.

SANDSTONE:pl gy,clr-mlky,f-med, rr crs frstd frags,sa-sr,wk sil cmt,com lt gy arg mtx,tr carb spks,fri-mod hd aggs,occ lse,pr vis por,pr-fr inf por,no fluor.

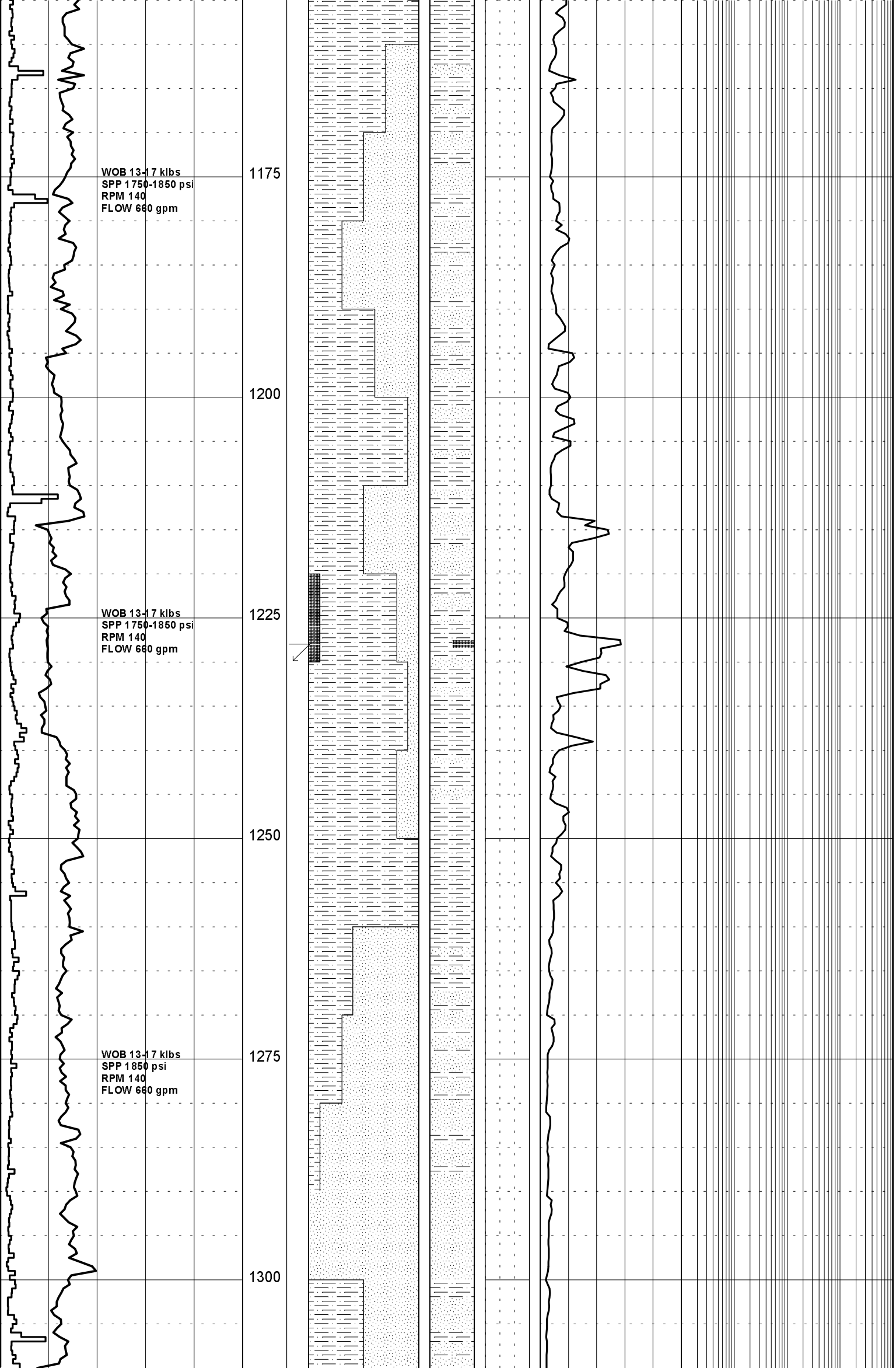
SILTSTONE:lt-med gy,arg,vf aren, tr carb spks & liths,mod hd-hd, sbblky.

SANDSTONE:wh-v lt gy,pred vf-med occ crs,sa-sr,mod srt,mod cly mtx,mod calc,mnr feld,fri-mod hd pr-fr vis por,no fluor.

SILTSTONE:lt gy,mnr dk bn,arg,vf aren,tr carb spks,dol i/p,mod hd -hd,sbfiss-sbblky.

SANDSTONE:trnsl pl gy,vf-med,sr, mod-wl srt,disp cly mtx,tr felds mnr gy blk-gy gn liths,calc,fri, pr inf por,no fluor.

SILTSTONE:med gy-gy bn,mnr lt-mod yel bn-bn,arg-vf aren,carb spks,dol,mod hd,sbfiss.



SANDSTONE:wh-pl gy,vf,sr,mod srt abdnt cly mtx,liths,feld,carb mat,sli calc,mod hd,pr vis por, no fluor.

SILTSTONE:lt-med bn-gy bn,carb spks,pred arg g/t CLYST i/p,frm, sbfiss-blky.

SANDSTONE:wh-pl gy,vf,sa-sr,mod wl srt,mod-abdnt cly mtx,sli calc,liths,feld,mod hd,pr vis por,no fluor.

COAL:blk,dll.

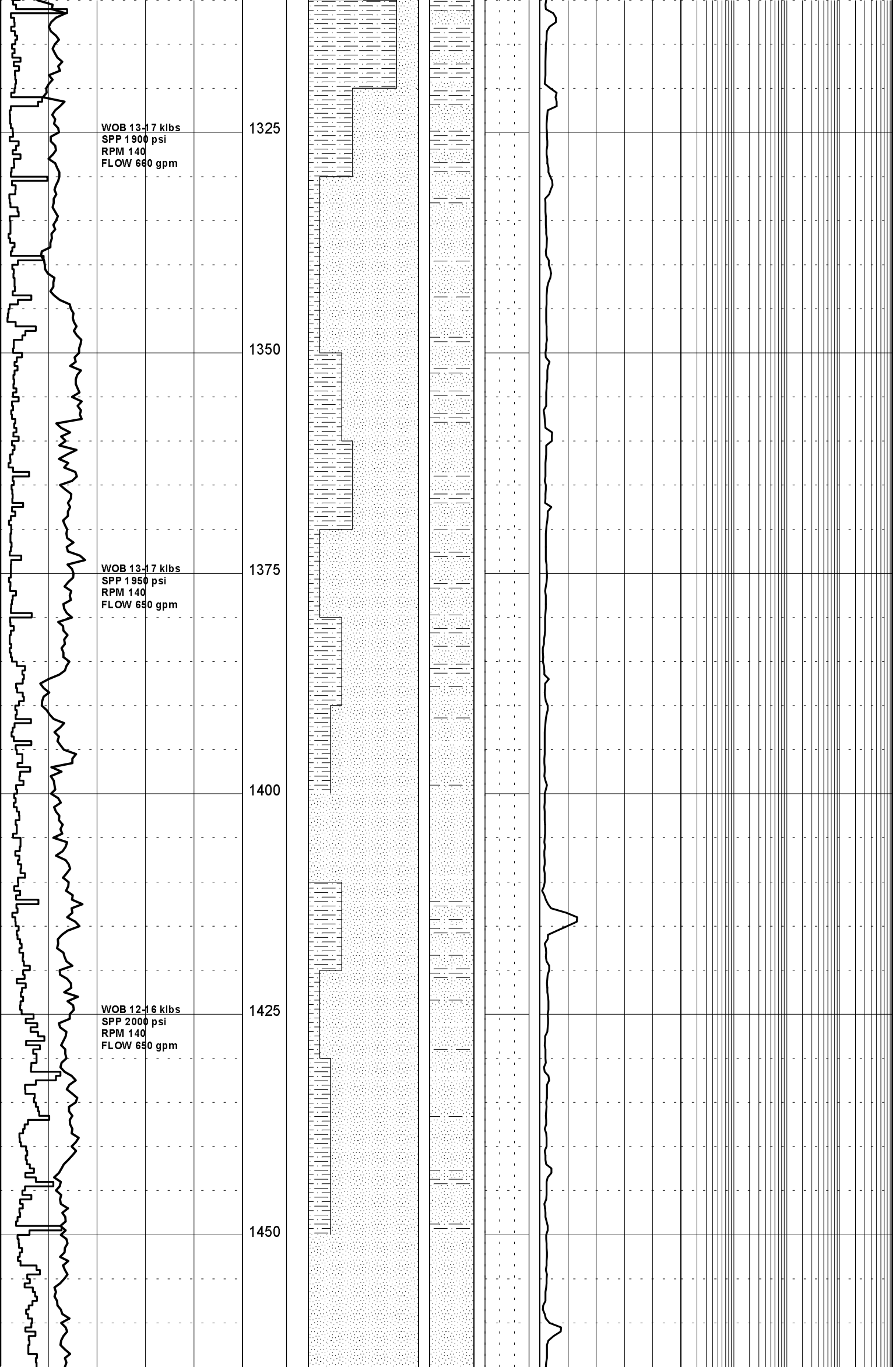
Survey @ 1230m: 0.50°

SILTSTONE:med-dk bn-gy bn,arg g/t CLYST i/p,frm-hd,sbblky.

SANDSTONE:wh-pl gy,vf-med,occ crs,sa-sr,mod pr srt,disp cly mtx,liths,pr vis por,no fluor.

SILTSTONE:lt-med bn,aren,carb spks,frm,sbblky.

SILTSTONE:lt gy,lt-med bn,pred aren,mnr carb spks & frags,frm-hd,sbblky.



SANDSTONE:wh-pl gy,trnsl-clr,vf-med,mod pr srt,sa-sr,disp cly mtx,tr liths,mod hd,pr vis por, no fluor.

Carbide Lag Check @ 1348m
Theor. Open Hole Strokes: 3021
Actual Open Hole Strokes: 3219
Open Hole O.G.: 6.2 %

SANDSTONE:clr-trnsl,wh-pl gy,vf-med,mod pr srt,sa-sr,disp cly mtx,rr liths,mod hd,pr vis por, no fluor.

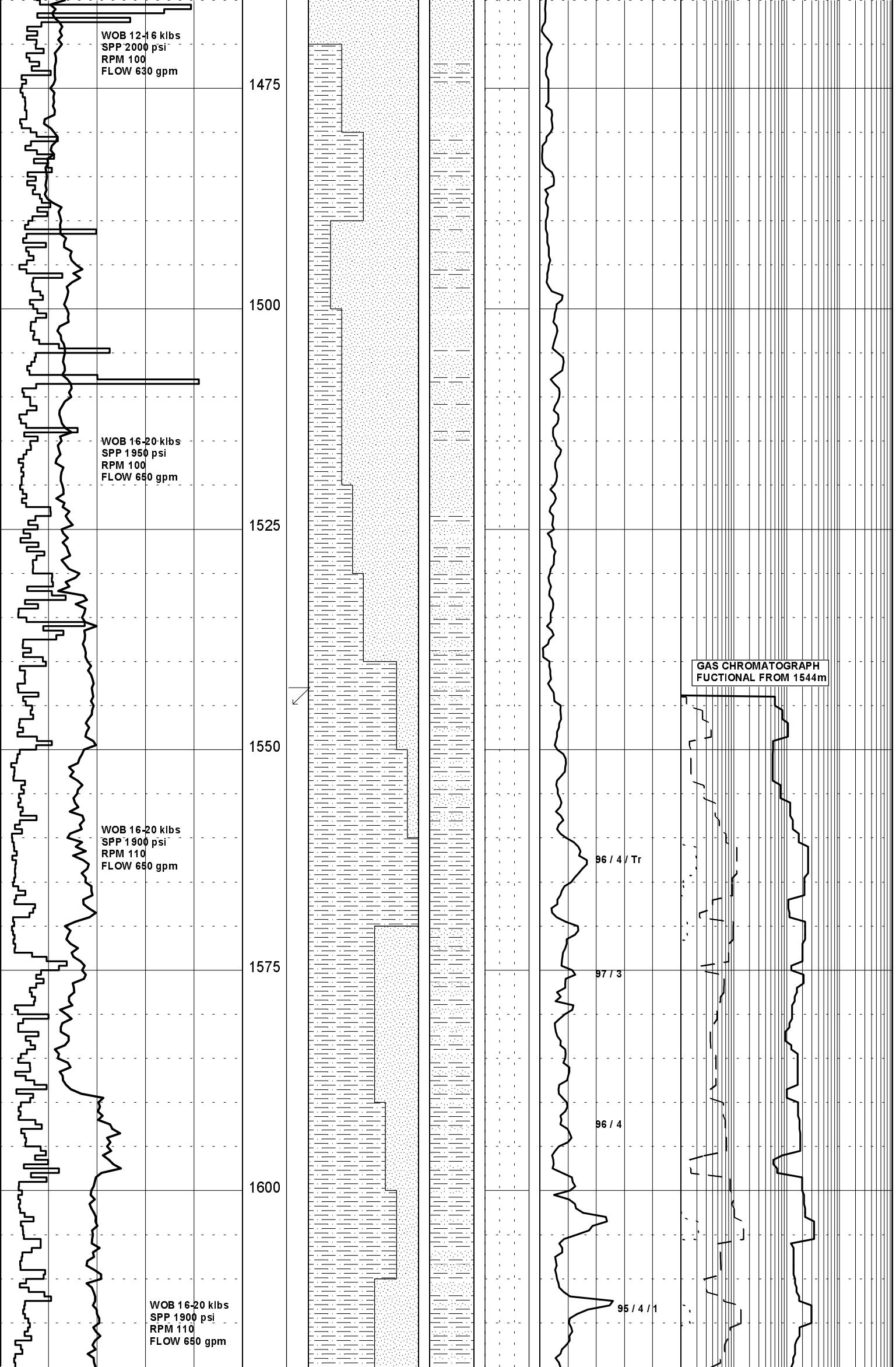
SILTSTONE:med gy/bn,arg,aren g/t vf SST i/p,com carb microlams, com lith incl,tr micmic,hd, sbfiss-pred sbblky.

SANDSTONE:clr-trnsl,frstd,wh-v pl gy,vf-crs,pred f,mod-pr srt, sa-sr,tr wh arg mtx,lse,gd inf por,no fluor.

SILTSTONE:lt-occ med gy,tr pl gy/bn,pred arg,micmic,occ carb striat,brit-mod hd,sbfiss-occ sbblky.

SANDSTONE:clr-trnsl,frstd,lt gy, vf-crs,pred f,mod srt,sa-sr,tr wk calc cmt,disp wh cly mtx,fri aggs,pred lse,pr-occ fr vis & inf por,no fluor.

SANDSTONE:clr-trnsl,wh-pl gy,f-crs,pred f-med,mod-pr srt,sa-sr wk calc cmt & tr kaol mtx,com lse,pr vis & pr-fr inf por,no fluor.



SILTSTONE:med-dk gy,gy/bn i/p, com vf aren,com carb spks,micmic mod hd-hd,sbblky-blky.

SANDSTONE:clr-trnsl,wh-pl gy,f-med,rr crs frags,mod srt,sa-sr, wk calc cmt,com kaol mtx,fri,com lse,pr vis & pr-fr inf por,no fluor.

SANDSTONE:clr-trnsl,lt gy,f-crs pred f,mod srt,sa-sr,wk calc cmt loc abdt kaol mtx,fri aggs,com lse,pr vis por,pr-occ fr inf por no fluor.

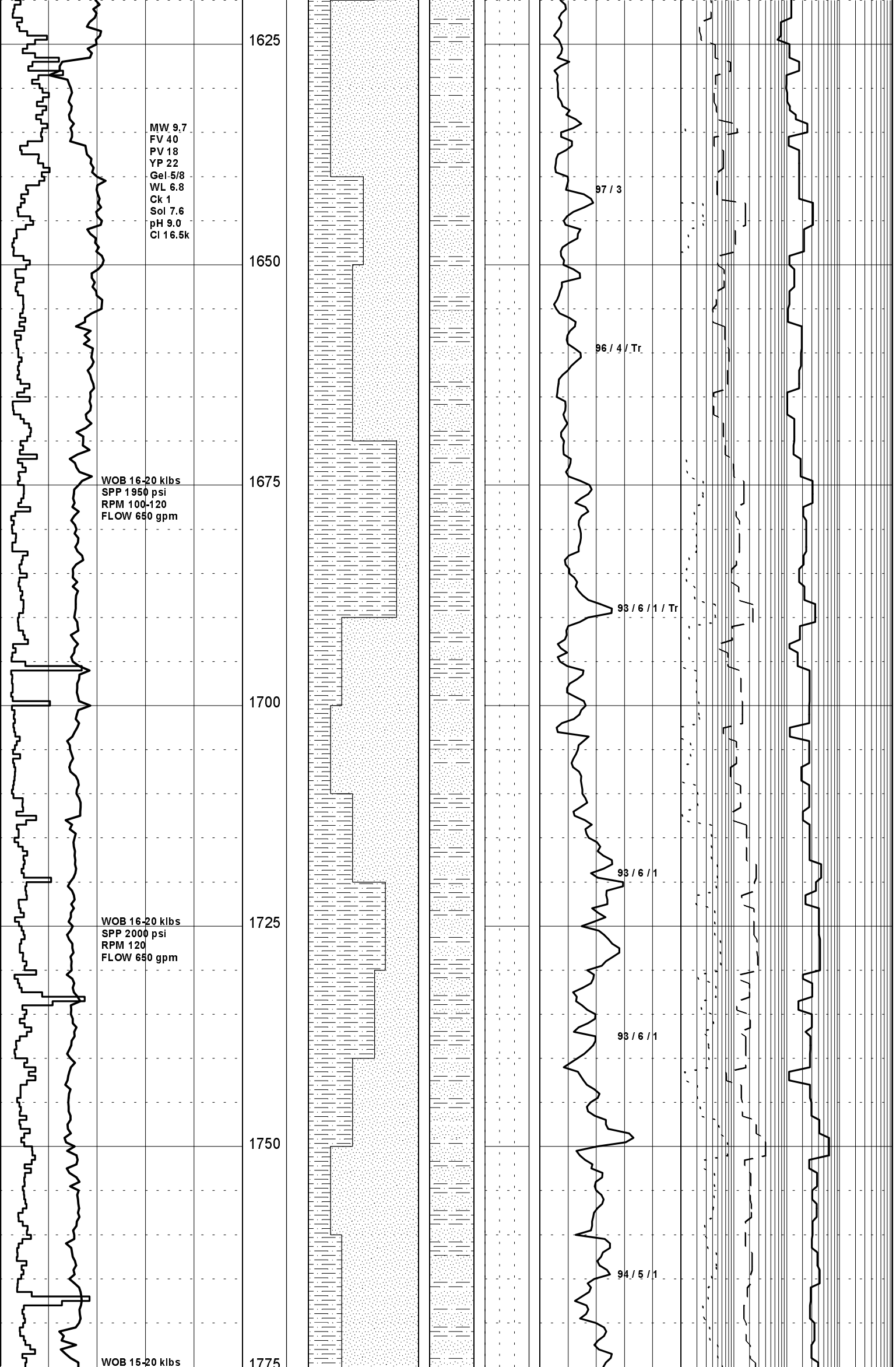
Survey @ 1545m: 0.75°

SILTSTONE:med-dk gy,gy/bl,occ aren,micmic,carb spks,brit-hd, pred mod hd,sbbkly-sbfiss.

SILTSTONE:med-dk gy,arg-vf aren, micmic,com carb spks,mod hd-hd, sbblky-sbfiss.

SILTSTONE:clr-trnsl,pl gy,vf-f, wl srt,sa-sr,wk-mod strg calc/ sil cmt,abdt kaol mtx,com lith incl & carb spks,fri-mod hd aggs lse i/p,pr-v pr vis & inf por, no fluor.

SILTSTONE:med-dk gy,dk gy/bn i/p arg,vf aren i/p,tr micmic,carb spks,hd,sbblky-sbfiss.



SANDSTONE:pl gn-gn wh,vf,sr,mod srt,mod-abdnt cly mtx,sil cmt, liths,felds,fri-mod hd,pr vis por,no fluor.

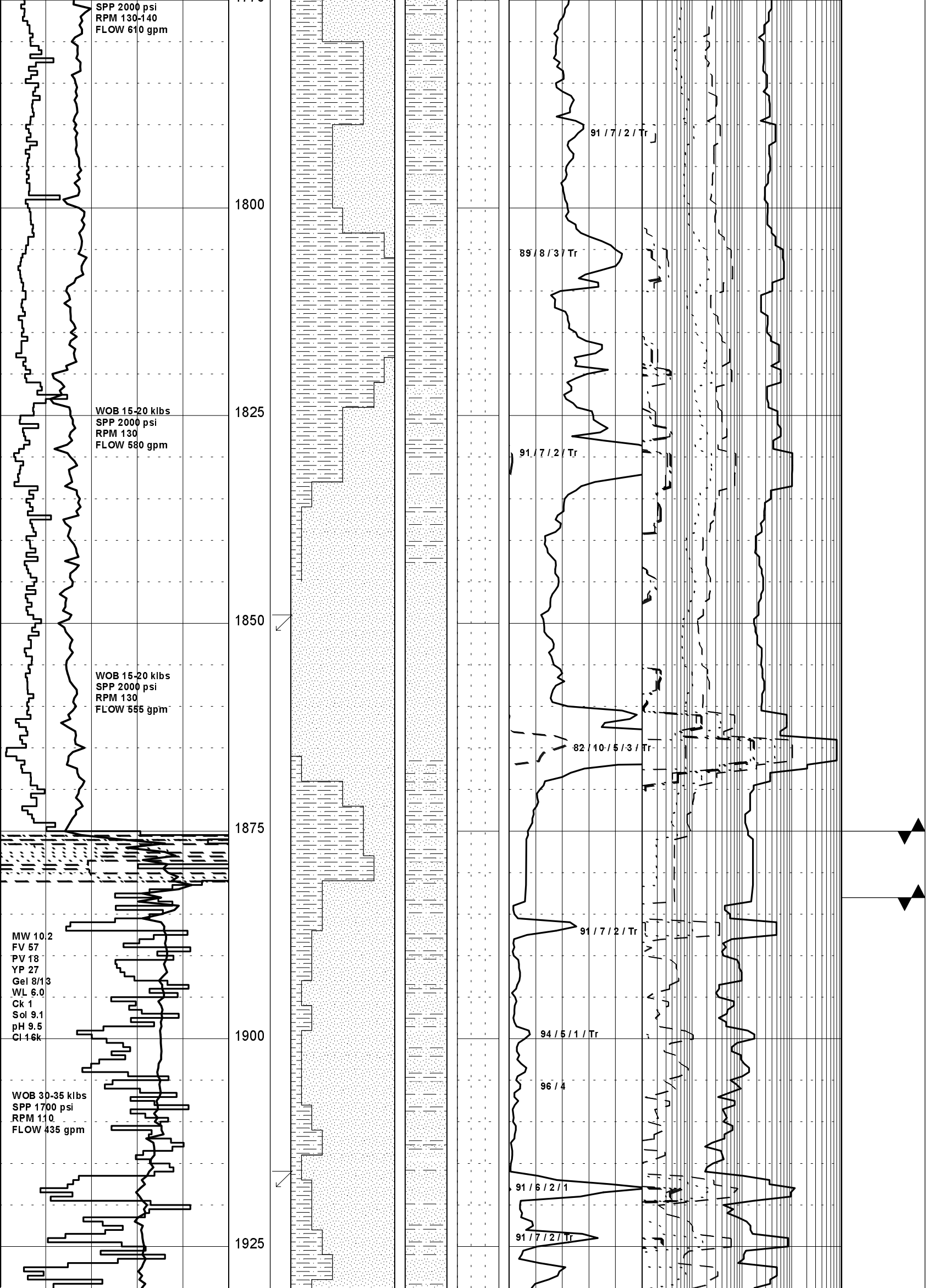
SILTSTONE:lt-med gy-gy bn,gy bn, pred aren,liths,felds,carb,arg g/t CLYST i/p,frm,sbfiss-blky.

SANDSTONE:lt bl gy,vf,sa-sr,mod wl srt,pred cly mtx,com bl blk & gn gy liths,mnr felds,occ carb lams,calc i/p,fri,pr-fr vis por, no fluor.

SILTSTONE:lt-dk bn-gy bn,frm, aren-arg,vf carb spks,micmic,frm sbfiss-sbblky.

SANDSTONE:wh-trnsl bl gy,f-med, mod wl srt,mod cly mtx,com liths mnr felds,occ carb lams,carb i/p fir,pr-fr vis por,no fluor.

SILTSTONE:med-dk gy-gy bn,abdnt vf carb spks & mica flks,com vf



sandy lenses,frm,sbfiss.

SILTSTONE:dk gy-gy bn,arg,frm, sbfiss.

SANDSTONE:trnsl,frstd,pl gy,occ clr,mnr pl gn,vf-f,occ med grns, sa-sr,wk sil cmt,pl gy arg mtx, mnr carb spks,brit-mod hd,pr vis por,no fluor.

SILTSTONE:dk gy-gy bn,med bn,arg micmic,fri,sbfiss.
SANDSTONE:clr-trnsl,pl gn-pl gy, vf-med,mod wl srt,sa-sr,wk sil cmt,wh arg mtx,tr glauc,rr sid, carb spks,frm-hd,pred mod hd,pr vis & fr-mod inf por,min fluor.

Survey @ 1851m: 0.75°

SANDSTONE:pl gy,pl gy/gn/pl bn, pl gn-gn,clr-trnsl,frstd,vf-med mod pr srt,sr-sa,mod sil cmt,wh-pl gn arg mtx,glauc,sid,carb spk mod hd-hd aggs,lse,pr vis & fr inf por,no fluor.

WIPER TRIP @ 1875m

SILTSTONE:tn-bn,bn/gy,pl gy,pl gn,arg,occ aren,micmic,carb spks fri-mod hd,sbfiss-sbblky.

BIT #4: JUNK MILL
SIZE: 216mm(8.5") JETS: 5x20
IN: 1875m OUT: 1883m
RUN: 8m HRS: 5.8
COND: 10 % WORN

BIT #5: SCH EPH43
SIZE: 216mm(8.5") JETS: 3x14
IN: 1883m OUT: 2027m
RUN: 144m HRS: 24.0
COND: 1-2-WT-A-E-1-NO-TD

Carbide Lag Check @ 1892m
Theor. Open Hole Strokes: 4235
Actual Open Hole Strokes: 4352
Open Hole O.G.: 2.6 %

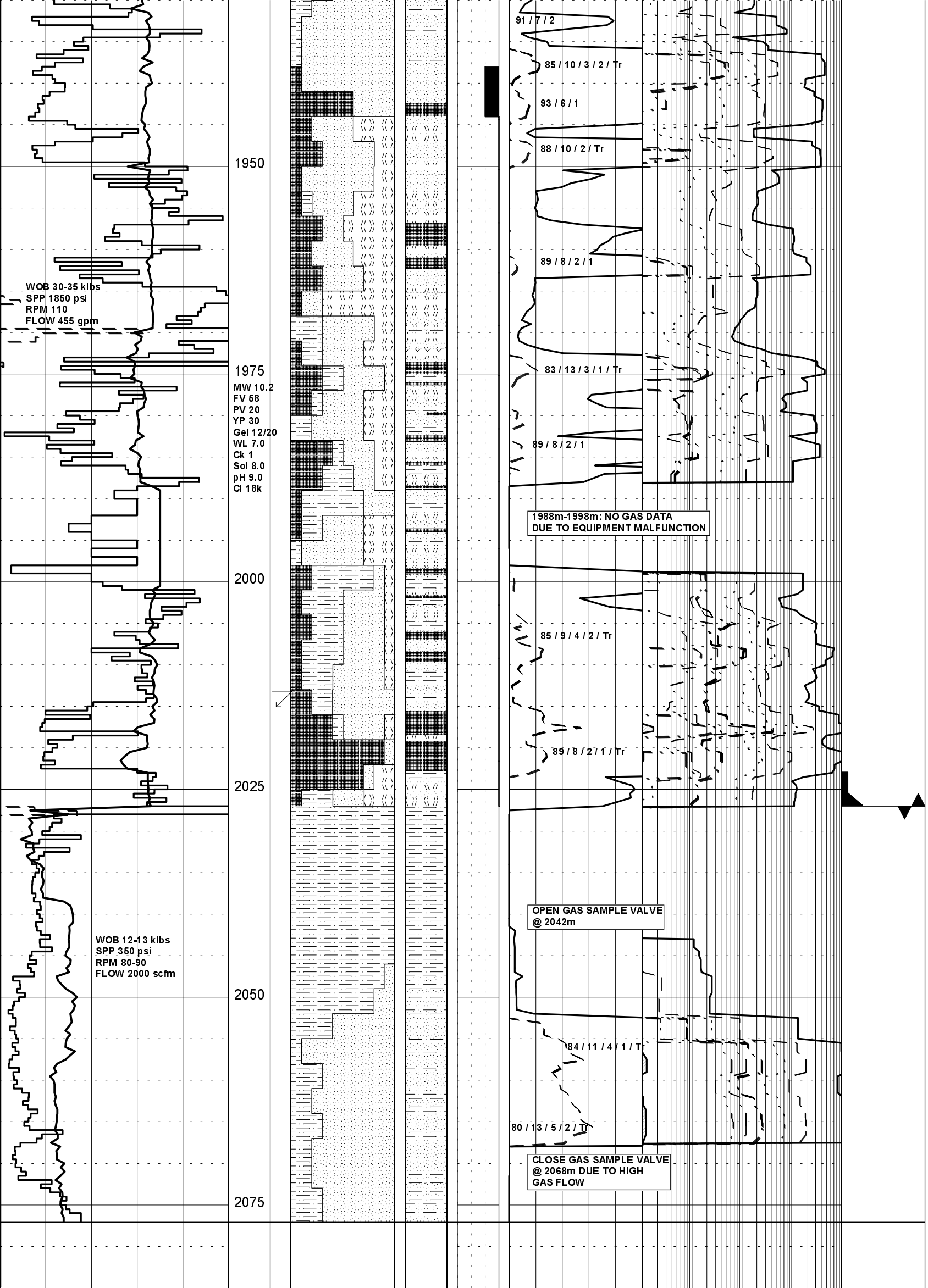
SANDSTONE:trnsl,mlky wh,pl gn,pl gy,clr,f-med,mod wl srt,sr-sa,wk calc cmt,wh-pl gy arg mtx,lse,fr inf por,no fluor.

SILSTONE:pl med gy,pl gn,arg, brit-mod hd,sbblky.

SANDSTONE:clr-trnsl,frstd,pl gn, pl gy,f-med,mod wl srt,sr-sa,wk calc cmt,wh-pl gy arg mtx,lse,fr inf por,no fluor.

Survey @ 1918m: 0.25°

SANDSTONE:trnsl,mlky wh,pl gn, pl gy,clr,med-crs,occ f,mod srt, sa-sr,mod calc cmt,wh-pl gy arg mtx,lse,fr inf por,no fluor.



SILTSTONE:pl-med gy,bn-pl bn,arg mod hd,sbblky.

FLUOR:1937m-1944m;10-20%,mod bri pl blu to blu wh,blmnng to fst cut & thk flm res.

COAL:blk,dk bn,ea-sbvit,fri-brit pred sbfiss,occ blky,hckly-unevn

SANDSTONE:clr-trnsl,mlky-pl gy, pred f-med,occ crs,mod pr srt,sa -ang,wk calc cmt,tr pl gy arg mtx,mnr lith incl,pred lse,occ fri aggs,pr vis & pr-occ fr inf por,no fluor.

TUFF:crm-vlt gy,pl gn i/p,wxy, sil,mod hd-hd,sbblky.

COAL:blk,ea-occ sbvit,brit-mod hd,unevn,striat i/p.

SILTSTONE:dk gy,gy bn,aren i/p, mnr micmic,frm-hd,sbfiss-sbblky

SANDSTONE:clr-trnsl,off wh-pl gy frstd i/p,f-med,pred med,occ crs mod pr srt,sa-ang,mnr wk calc cmt,tr pl gy arg mtx,tr liths, lse,occ fri aggs,pr-fr inf por, pr vis por,no fluor.

TUFF:off wh-crm,v lt gy i/p,wxy, sil,hd,sbblky.

SANDSTONE:clr-trnsl,off wh-pl gy mnr frstd,f-med,occ crs,mod pr srt,sa-ang,tr sr,mnr wk calc cmt tr pl gy arg mtx,mnr liths,lse, occ fri,pr vis & pr-fr inf por, no fluor.

COAL:blk,ea,occ sbvit,brit-mod hd,blky,unevn,tr slty,striat i/p

SANDSTONE:pl gy bn,trnsl-clr,f-med,occ crs,mod pr srt,sa-sr,wk calc cmt,wh arg mtx,lse,pr inf por,no fluor.

SILTSTONE:pl-dk gy,gy blk,bn,arg carb,micmic,mod hd,sbfiss-sbblky

Survey @ 2015m: 0.25°

COAL:blk,bn blk,ea-sbvit,brit-mod hd,hckly-unevn,sbfiss-sbblky

TUFF:tn,pl bn,pl gy,wxy txt,sft-frm,brit i/p.

178mm (7.0") CASING SHOE SET @ 2026.9m

BIT #6: VAREL ETD 14
SIZE: 156mm(6.125") JETS: NONE
IN: 2027m OUT: 2077m
RUN: 50m HRS: 2.9
COND: 1-1-WT-A-E-I-NO-TD

SILTSTONE:dk gy-gy/bn,blk,arg, aren i/p,carb,micmic,hd,sbblky-sbfiss,occ blky.

FLOW TEST #1:
2027m-2057m (D)
FLOW GAS @ 2.65 mmcfd
THRU 3/4" CHOKE;174 psi.

SANDSTONE:trnsl/bn,pl bn,clr/bn yel/bn,clr,vf-pred med,mod wl-wl srt,sa-sr,lse,fr-gd inf por,

SILTSTONE:med-dk gy/bn,arg,carb hd,sbblky.

FLOW TEST #2:
2027m-2077m (D)
FLOW GAS @ 4.13 mmcfd
THRU 3/4" CHOKE;279 psi.

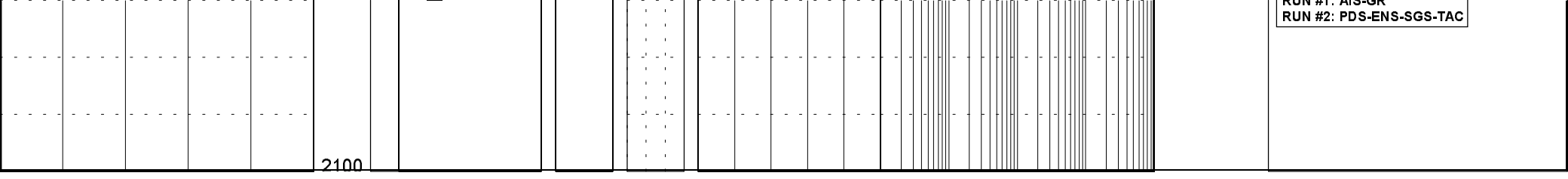
SANDSTONE:trnsl,yel/bn,pl gy,clr f-v crs,pred med-crs,sa-occ sr, lse,gd inf por,no fluor.

SILTSTONE:dk gy,blk,arg,carb, micmic,mod hd-hd,blky-sbblky.

SANDSTONE:trnsl,yel/bn,pl gy,clr vf-f,occ med/crs grns,mod-pr srt sa-sr,lse,gd inf por,no fluor.

MYALL CREEK-8 REACHED TD @ 2077.0mMDRT @ 18:30 HRS ON 05-04-2003

ELECTRIC LOGS RUN:
RUN #1: AIS,GR


2100
RUN #1: AIS-GR
RUN #2: PDS-ENS-SGS-TAC