3D OIL LIMITED

WARDIE 1

VIC/P57

WELL COMPLETION REPORT

BASIC DATA

1 December 20

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1. WELL SUMMARY AND OVERVIEW

Well summary

Wardie 1 was a deviated wildcat well located in the Gippsland Basin permit VIC/P57, approximately 1.2 km (surface location) southwest of the West Seahorse 1 (oil discovery well) and about 570m south of the West Seahorse 2 well. The Wardie Prospect was mapped as a four-way dip closure at the level of the upper Latrobe Group. The main objectives were Eocene sandstones (N2.3, N2.6 and P1), which were intersected in the nearby West Seahorse oil field. 3D Oil Ltd is the operator and 100% equity holder of offshore Victorian permit VIC/P57.

Wardie 1 was drilled from 10 May to 25 May 2008 using the Seadrill Jack-Up rig, *West Triton*. The well intersected all the target horizons approximately 15m deep to prognosis, indicating an unexpected variation in the velocity field used for depth conversion. Oil was encountered in sediments above the N1 reservoir target at 1591-1595mRT (1407.5-1411.5mss) within an interval of generally poor reservoir quality. Oil was also encountered in a shallower glauconitic sand at 1581-1584m MDRT (1397.5-1400.5mss) also within low reservoir quality sediments. The main N1 reservoir sands were water bearing as were all the deeper targets.

The well results indicate that the Wardie structure, although valid and oil-bearing, is smaller than mapped pre-drill. The potential recoverable oil volume in the Wardie structure was not considered to be sufficient to justify suspending the well and it was plugged and abandoned.

Australian Drilling Associates (ADA) managed the drilling operation and Baker Hughes INTEQ SLS provided formation evaluation and drill monitoring services. Schlumberger provided the LWD and Wireline services. Expro Group Australia Pty Ltd provided validation checks and analyses of MDT samples.

Notes: All depths are measured depth below Rotary Table (mMDRT) referenced to Australian Height Datum (AHD) unless otherwise stated.

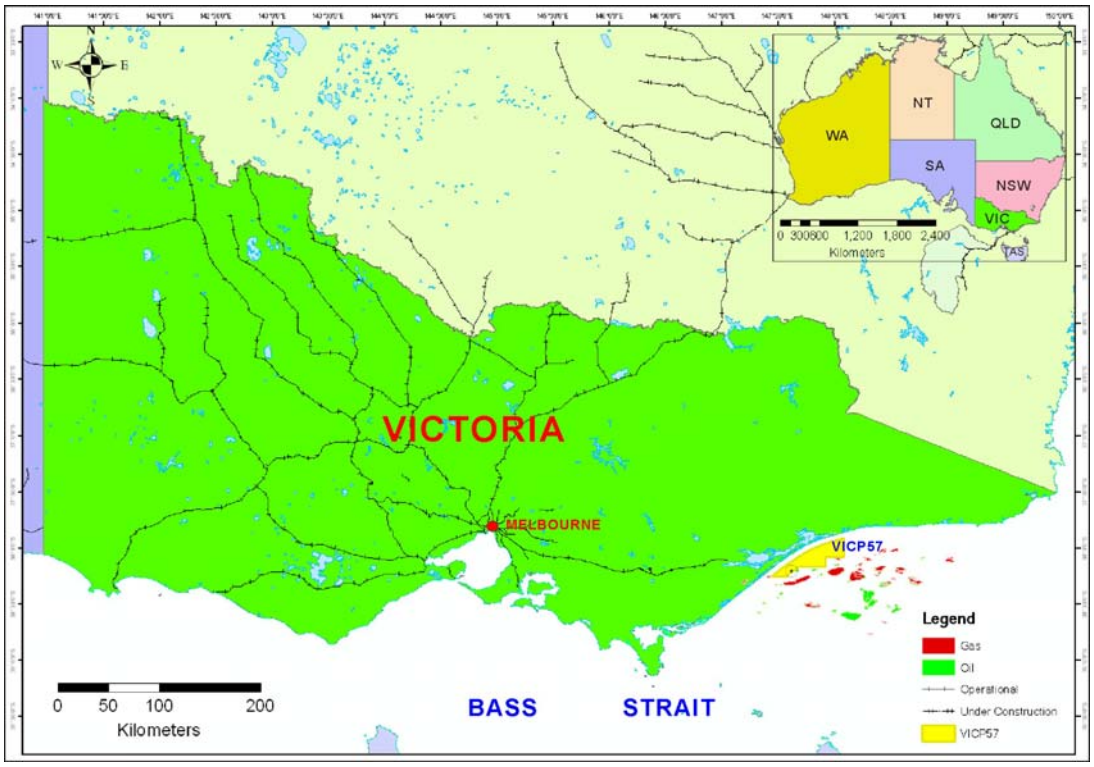


Figure 1. Location of VIC/P57.

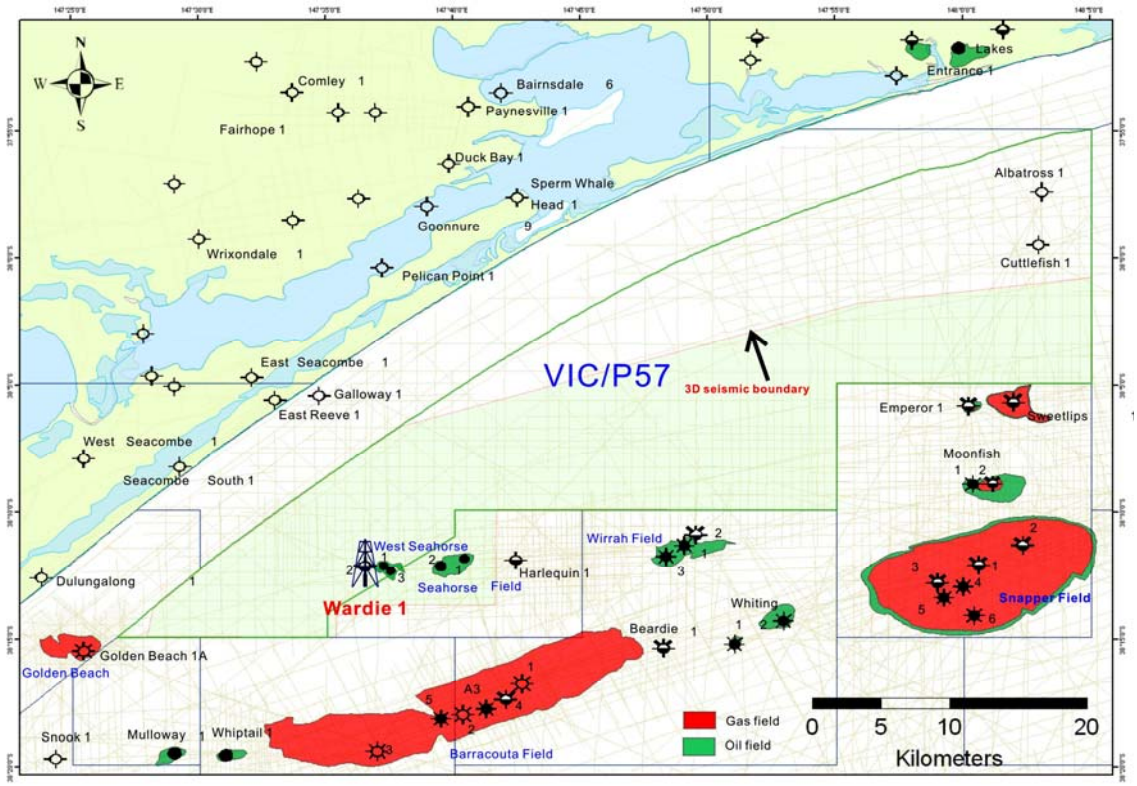


Figure 2. Location of the Wardie 1 well.

Well data summary

Well Name	Wardie-1
Country	Australia
Designation	Exploration
Field Name	Wardie Prospect
License/Permit	VIC / P57
Rig Name/Type	West Triton / Jack Up MODU
Field Operator	3D Oil Ltd
Participants	3D Oil Ltd: 100%
Rig on Location	9th May, 2008 - 16:30 hrs
Spud Date	10th May, 2008 - 19:30hrs
Reached TD	18th May, 2008 - 15:30 hrs
Rig Off Contract	25th May, 2008 - 22:30 hrs
Total Days on Operations	16.25 days
Total Days AFE (excluding Completions and Testing Phase)	14.67 days
Total Depth	1580.2m TVDSS / 1618.2m TVDRT / 1766.0mMDRT
Well Type	Directional 'S' profile
Maximum Deviation Angle	34.9˚
Water Depth	39.5m MSL
RT above MSL	38m
Well Slot	2
Zone	55 GDA94
Surface Latitude	38˚ 12' 24.881'' S
Surface Longitude	147˚ 37' 09.793'' E
Surface Easting	554 227.625m E
Surface Northing	5 771 046.028m N
Bottom Hole Location: Latitude	38˚ 12' 34.440" S
Bottom Hole Location: Longitude	147˚ 36' 48.166" E
Bottom Hole Location: Easting	553 699.70m E
Bottom Hole Location: Northing	5 770 754.92m N
36in Hole / 30in x 20in Conductor	136mMDRT / 133mMDRT
17.5in Hole / 13.375in Surface Casing	751.0mMDRT / 747.2mMDRT
12.25in Hole	1766.0mMDRT / 1618.2mTVDRT

Casing and cementing data

Casing Data

Type	Size (inches)	Weight (ppf)	Grade	Thread	Depth (mMDRT)
Conductor (30in x 20in tapered shoe joint)	30	309.7 (1" wall)	X-52	D60/MT	121.3
	20	169 (0.625" wall)	X-56	E.R.W	132.9
Surface Casing	13.375	68	N-80	BTC	747.2

Cementing Data

String Cemented	Cement Type	Dry Cmt Vol (sks)	Cement Additives	Mix Water (gal/sk)	Slurry Vol (bbls)	Slurry Density (ppg)	Cement to / from (mMDRT)	Csg Test Pressure (psi)
30in X 20in	Class G	1454	CaCl 1% BWOC NF-6: 0.25gal/10bbl	5.16	265	15.9	seafloor (77.5m) - 133.0m	NA
13.375in	Class G	726	CFR-3L: 3gal/10bbl HR-6L: 2gal/10bbl NF-6: 0.25gal/10bbl	5.10	150	15.9	432m-747m	2,000
Plug #1A	Class G	411	CFR-3L: 3gal/10bbl SCR-100L: 2gal/10bbl NF-6: 0.25gal/10bbl	4.70	85	15.8	1616m-1766m	NA
Plug #1B	Class G	320	CFR-3L: 3gal/10bbl SCR-100L: 2gal/10bbl NF-6: 0.25gal/10bbl	4.70	64	15.8	1513m-1616m (tagged at 1407m)	NA
Plug #2	Class G	290	CFR-3L: 3gal/10bbl SCR-100L: 2gal/10bbl NF-6: 0.25gal/10bbl	4.70	58	15.9	700m-805m	
Plug #3	Class G	19MT	CaCl 0.5% BWOC	5.16	93	15.9	95m-157m	

2 WELL OPERATIONS

Operations summary

Wardie-1 was drilled as an exploration well intended to target sandstones of the upper Latrobe Group in the Wardie structure using the Jack Up rig, *West Triton* (Figure 3).

Figure 3. Aerial photo-view of the West Triton.

Rig Mobilisation

The rig was already on location having previously drilled the West Seahorse-3 well from slot #1. Wardie-1 well (slot #2) commenced on 9 May 2008 at 16:30hrs with the installation of the CTU deck extension. Service lines were connected and the cement hose on the rig floor was changed out. A fault was traced in the ROV umbilical line and rectified costing 0.4 days (ROV fault affected temporary P&A operations being completed on West Seahorse-3). During this time 12 joints of heavy weight drill pipe (HWDP) were laid out for inspection and 12 new joints were picked up. Two stands of 5.5in drill pipe were also laid out while waiting on the ROV. The rig was then skidded over to slot #2, the CTU was installed onto the CTU deck extension and the CTU work platform and mouse hole placed in position.

ROV problems occurred just after abandoning West Seahorse-3 and it was thought repairs could be made offline during skidding operations to Wardie-1. However fault tracing on the ROV umbilical and repairs took more time than expected and caused 10 hours down time into Wardie-1 operations.

Drilling 36in x 26in conductor hole/setting 30in x 20in casing

The BHA, consisting of a 26in bit, 36in hole opener, Anderdrift tool, float sub and 36in stabilizer was RIH and bottom tagged at 76.8m due to a mound of cement being present. The bit position was checked relative to the West Seahorse-3 well and found to be approximately 3m from the West Seahorse-3 conductor casing. The ROV was stood back and a deviation survey was taken at the seabed (<0.5 deg) using the Anderdrift tool.

Wardie-1 was spudded on 10 May 2008 at 19:30hrs.The 36in x 26in conductor hole was drilled riser-less using seawater and hi-vis sweeps, pumping 75bbl of flocculated gel sweeps every single while drilling from 76.8m to a section TD of 136m. Anderdrift surveys were taken while drilling at 87m (2˚) and 134m (1˚). The hole was swept with 200bbl of flocculated gel mud and displaced with 350bbl pre-hydrated gel. The 36in BHA was POOH and laid down.

The 30in conductor was run with a 30” x 20” shoe joint to 74m (~ 1.5m above the Quik-Jay connector at seabed on West Seahorse-3).

The ROV was unable to sight the West Seahorse 3 conductor or the seabed due to turbulent currents and gel clouds in the proximity. Seawater was pumped at 400gpm in an attempt to clear the area around the seabed but there was no improvement. After waiting for visibility to improve at slack tide, the conductor was observed to be approximately 3m offset from West Seahorse-3 in the correct position. The conductor was lowered to the seabed and worked past the cuttings mound after several attempts. The conductor hung up on a connector at a depth of 85m on the aft side of the CTU. Attempts were made to pull the conductor forward using the air winch on the rig floor without success. The cantilever was then skidded 6in forward allowing the connecter to pass the hang up point and was RIH from 85m to 130m. The conductor was washed down from 130m to 133m to the programmed setting depth for the MLS joint to be 3m above the seabed. At this point landing ring inserts were installed at the CTU. Approximately two hours were taken to grind down weld protrusion on the 30in conductor for the Icon clamp. After the CTU was stroked to 100mm and the Icon clamp installed, the bolt-tensioning unit for the Icon clamp was found to be leaking hydraulic fluid and was repaired. The rig was then skidded 6in aft to centralise back over the Wardie-1 slot.

The 30in conductor was successfully cemented with 265bbls of 15.9ppg cement slurry with TOC at the mud line. The butt-weld landing collar was tagged at 85.40m. Once the space out of the low pressure riser and the diverter system was confirmed, the 30in conductor was cut at 0.3m above the Icon clamp on the CTU deck.

Drilling 17.5in surface hole/setting 13.375in casing

The 17.5in mud motor assembly was made up with a Baker Hughes MXL-T1V roller cone rock bit and MWD directional tools. The top of the shoe was tagged at 132.8m. The shoe was drilled out and drilling continued to 170m using seawater and pumping 2 sweeps of 30bbl flocculated gel mud per stand and spotting 30bbl of pre-hydrated gel on bottom at each connection. A gyro survey was taken at this depth and confirmed that there was no risk of colliding with West Seahorse-3. Continued to drill to the kick off depth at 250m. The 17.5in surface hole was directionally drilled in one

run without problems to a section TD of 751m. At section TD, 950bbl of 1.15SG inhibited mud was spotted on bottom. An over pull of 20klbs was observed at the 30in shoe when POOH. This was cleared by circulation and rotation before POOH to surface.

The 13.375in casing was RIH to 113m but it hung up on the MLS at the mud line. The rig was then skidded 6 inches forward to allow the casing to pass the MLS. A hydraulic hose burst on the skidding system and the hose was replaced costing 2 hours NPT. The 13.375in casing was then RIH hanging up at several places from 124m to 166m. The casing string was POOH and the centralisers and stop rings removed (costing 9 hours NPT). The casing was then re-run slick to 722m without problems, and the mud line hanger landed. The casing shoe was set at 747.2m.

Cement lines were pressure tested to 4000psi and a 90bbls seawater spacer pumped followed by 30bbls of tuned spacer. The 13.375in casing was cemented with 150bbls of 15.9ppg Class G slurry. Cement was displaced with 337bbls of seawater and the plug bumped. The casing could not be pressure tested on bump due to a leak in the wellhead running tool.

A failed attempt to release the running tool from wellhead was made. The top drive was then made up and 4klbs set down to fully collapse the running tool allowing the running tool to be backed out. The BOP and diverter system were then nippled up. The BOP was tested to 250/5000psi. The 13.375in casing was also pressure tested to 250/2000psi. The total NPT for this phase was 0.73 days.

Drilling 12.25in hole/logging while drilling

A 12.25in Power Drive rotary steerable BHA was made up with a Reed Hycalog RSX616M-A16 PDC bit. The assembly was RIH to 703m and after making up the TDS was washed down, reaming through a thin cement stringer at 719m and cement tagged at 732.5m (approx 2m above float collar). The plugs, float collar and shoe track were drilled out to 747m.The rat hole was cleaned out to 751m and hole displaced to 8.8ppg KCl polymer mud while drilling out float shoe.

After drilling 3m of new formation to 754m, a FIT was performed at 520psi surface pressure with 8.8ppg mud to 13.1ppg EMW without leak off. The 12.25in hole was then directionally drilled from 754m to 1397m when the driller's cyber chair system shut down due to software problems. The problem was rectified and drilling continued to 1520m. Control drilling commenced from 1520m to the well TD of 1766m at 30m/hr for recording LWD logs. At TD the hole was circulated clean and the shaker screens were initially blinded by fine sticky cuttings, so the pump rate was reduced to 815gpm for first bottoms up then gradually increased to 1080gpm for the remainder of the circulation period.

The drill string was then POOH from 1766m to 1178m working tight spots at 1540m to 1530m, 1283 to 1273m and 1253m to 1178m. The string was then pumped out of hole from 1178m to 919m. The hole packed off at 919m with 30klb over pull. The string was worked until circulation was regained and pumped out to 747m. The hole was circulated clean inside the casing shoe. The string was RIH and 8m fill tagged on bottom. A large quantity of fines and small cuttings/cavings were circulated out. The cavings were identified as originating from lower Lakes Entrance Formation. The hole was circulated clean and the drill string POOH.

Logging 12.25in Hole

Schlumberger wire line tools were then rigged up for the following logs:

Log #1 PEX-HRLA-BHC

Log #2 MDT (pressures and sampling)

The tools for Log #1 were picked up, radioactive sources loaded and RIH. The 12.25in open hole was logged down from 747m to 1700m. The logging tools were then pulled back and a repeat section acquired for the interval from 1675m - 1565m. The wire line was then RIH back down to 1760m (max depth achieved by wire line). It was then attempted unsuccessfully to work past 1760m. Logging of the main pass continued back up the interval from 1760m - 1300m with a caliper log taken up to the casing shoe. Log #1 tools were then POOH and rigged down.

The tools for Log #2: MDT - GR were then picked up and RIH. A total of 17 pre-tests were attempted between 1574m and 1681.5m resulting in 9 valid pressures, 4 super charged points, 3 tight tests and 1 seal failure. Samples were taken at 1582.4m (x2) and 1593.7 (x1). Log #2 tools were then POOH to surface where the samples were recovered and the MDT tools were then rigged down.

Well abandonment

This phase of the programme commenced with RIH of the mule shoe on 5.5in drill pipe to 1765m where the well was circulated bottoms up. Cement head and lines were rigged up, 10 bbls of drill water was pumped and the lines were pressure tested to 1000psi. Abandonment plug #1A was then set from 1776m to 1616m with 85bbls of 15.80ppg Class G cement slurry (caliper volume plus 10% excess). The cement was displaced with 2 bbls drill water followed by 98 bbls of mud. The string was POOH to 1613m.

The well was then circulated 1.5 times bottoms up and 170 bbls of contaminated mud was dumped prior to rigging up cement head and lines again. 10 bbls of drill water was pumped and the lines were pressure tested to 1000psi. Abandonment plug #1B was then set from 1616m to 1513m with 64bbls of 15.80ppg Class G cement slurry (caliper volume plus 20% excess). The cement was displaced with 2 bbls drill water followed by 90 bbls of mud. The string was POOH to 1406m.

The well was then circulated 1.5 times bottoms up and 170 bbls of contaminated mud was dumped. The link tilt clamps on the bails were adjusted to allow the elevators to reach the mouse hole and then excess pipe was laid down while waiting on cement. The string was then RIH, washing down from 1398m to 1407m. The top of plug #1B was tagged at 1407m with 5klb set down weight.

The string was then POOH to 903m and a 50 bbls high vis pill spotted before the string was pulled out to 805m. After rigging up the cement head and lines, 10 bbls of drill water was pumped and the lines were pressure tested to 1000psi. Abandonment plug #2 was then set from 805m to 700m with 58bbls of 15.80ppg Class G cement slurry. The cement was displaced with 2 bbls drill water followed by 37 bbls of mud. The string was POOH to 599m. The well was then circulated 1.5 times bottoms up

with no cement returns observed. The string was POOH laying out 45 singles of 5.5in drill pipe.

Cement plug #2 was tested to 1000 psi for 10 minutes. The diverter system and BOPs were nippled down. The flow line was removed in preparation to skid the rig and the wear bushing was retrieved. The 13.375in casing cutter was picked up and casing cut at 126m and the cutting tool laid down. The wellhead running tool was made up to the wellhead and the 13.375in landing string including the wellhead was POOH to surface and laid down. A cement stinger was RIH to 207m and 25bbls of hi vis was spotted before POOH to 157m. The cement head and lines were rigged up, 5 bbls of sea water was pumped and the lines were pressure tested to 500psi. Abandonment plug #3 was then set from 157m to 95m with 93bbls of 15.80ppg Class G cement slurry. The cement was displaced with 6 bbls of sea water before rigging down the cement lines and POOH to 95m and circulating the hole clean. The cement string was then POOH to surface and rigged down.

Three attempts were made to cut the 30" conductor at 78m MDRT. Although there were positive indications of the conductor being cut on the second and third attempts, the conductor could not be pulled free. Failure to cut the 30in conductor resulted in 0.35 days lost time. The 30" landing string was backed out at the Quik-Jay connector at 74.5m (3m above seabed). The released casing was then pulled to surface and laid out. The 30in handling equipment was rigged down and the CTU unit was moved from CTU deck to storage area.

Rig demobilisation

The CTU deck extension was removed and lowered onto the work boat. All tubulars were laid down from the derrick. The cantilever was skidded in and secured in stowed position. The main towing bridle was attached to the Pacific Battler. The rig was jacked down to 2m draft. Water tight integrity checks were carried out while attaching secondary tow lines to the Pacific Valkyrie and the Sirius Cove vessels. The rig then continued to be jacked down into the water, lifting the legs clear from the seabed and the tow commenced to Garfish location.

****** 22:30hrs, 17 May 2008: END OF WELL: WARDIE-1******

The total time spent on the well was 16.25 days, including mob/demobilisation.

Health, safety & environmental summary

Wardie-1 was drilled with a satisfactory HSE performance having incurred no lost-time, with only one incidence of a medical treatment case and one minor first aid incident recorded. Two near-miss incidents took place, the risks of which were minimised with the use of good planning and foresight, covering the hazards with the crew during Pre Tour meetings prior to commencing the jobs and heightening awareness of the correct procedures to follow. One property damage incident occurred when skidding in the rig due to the locking pins not being retracted, resulting in damage to supporting steelwork.

The following is an overview of incidents, tests, and drills etc, which were evaluated and conducted during the time on Waride-1:

Parameter	Units		Comment(s)
Man-hours	number	16908	
STOP Cards Generated	number	362	
Total MODU Proactive Safety Efforts	number	831	Including Issued / Active Work Permits, JSA, Work Instructions, Pre Job safety Mtgs, TOFS, Area Authority Audits & STOP
Audit			
Internal EP Compliance Audit	number	0	
MODU Mini HSE Audits	number	2	TBT / TOFS & Lifting Equipment Management By the Drilling HSE Advisors
Training			
ADA ERG Exercise	number	0	Emergency Response table top exercise Southern Stars for 3D Oil held earlier on 2nd May 08. (Conducted on West Seahorse-3)
Environmental Plan Training	number	0	
MODU Emergency Drill	number	4	1) 3 Fire / Abandon / Muster (Weekly) Drills held on 12th, 18th and 25th May 08 2) 1 Medical Drill held on 12th May 08
Reportable Incident (NOPSA)			
Lost Time Injury (LTI)	number	0	
Alternate Duties Injury (ADI)	number	0	
Medical Treatment Injury (MTI)	number	1	12th May 08 - Swollen knee due to contact with casing joint
Non Reportable Incident (NOPSA)			
First Aid Case	number	1	2/5/08 - IP had laceration and bruise on rt wrist when removing a lifting nubbin.
Near Miss	number	2	1) 14/5/08 - Hydraulic fluid leak into bunded area 2) 20/5/08 - Fuel sprayed back into crew face when refuelling generator for wire line unit (full PPE in place).
Property Damage	number	1	Locking pins not retracted resulting in damage to supporting steelwork.
Recordable incidents (DPI)			
Spills – occurrence	number	0	

Parameter	Units		Comment(s)
Spills – quantity	litre	0	
Wastes			
Hazardous wastes	m^3	1	All wastes are properly packed, stored and sent onshore to GML and disposed accordingly through Corio Waste Management, an EPA - approved permit holder to transport various wastes including waste from offshore
Non-hazardous wastes	m^3	57	
Marine User Interaction			
Cetacean sightings	number	2	Sighting reports on 24th & 25th May '08, sent to Dept of Environment & Heritage
Errant vessel interaction	number	0	
Impacts from Fishing Operations (interaction)	number	0	
Water Based Muds (WBM)			
Volume water based drilling fluid disposed into the ocean (m^3)	m^3	790	Reference made to the Well Environment report
Volume of drill cuttings using WBM disposed to the seabed (m^3)	m^3	251.9	Reference made to the Well Environment report
Oil / Chemical Spills discharged to the marine environment	bbl	0	Reference made to the Well Environment report
Problems with sewage plant resulted in discharge of untreated sewage to the marine environment	number	0	Reference made to the Well Environment report

Highlights

- No major HSE incident
- No spill or damage to environment
- Well completed within planned budget
- All geological drilling targets achieved
- Acquired all programmed LWD and wire line log data
- Successfully modified and installed the Conductor Tensioner Unit extension platform allowing West Seahorse-3 and Wardie-1 wells to be drilled from a common surface location, saving significant time and cost by eliminating a rig move
- Based on the trouble free logging on West Seahorse-3 it was envisaged that the 12.25in open hole interval could be increased on Wardie-1. The 13.375in casing was therefore set at a shallow depth compared to West Seahorse-3 (785m v/s 1117m MDRT), resulting in 0.25 days rig time savings as well as reduced material costs.
- Deployed high spec rotary steerable system successfully, saving about half a day of rig time and improving wellbore quality
- Timely hiring of a third workboat (Pacific Protector) allowed rig down and demobilisation operations to be accelerated by 1.5 days

Lowlights

- 13.375inch casing had to be pulled and re-run without centralisers due to the centralizers hanging up in the MLS whilst running the casing.
- The 30inch conductor could not be cut during abandonment (this was subsequently backed off above seabed at the Quik-Jay connector).
- Continuing problems with Drilquip running tool
- There were numerous issues with drilling equipment (notably the TDS and cyber chair) towards the end of well.
- After landing out the 13 3/8inch casing and wellhead, 3.5 hours NPT was recorded due to problems releasing the running tool from the wellhead.

3. TIME ANALYSIS

Summary

The total time on Wardie-1 well was 16.25 days, compared to the programmed time (normalised for the actual scope of work) of 14.67 days. The planned time did not include any contingency for down times or waiting on weather.

The original well AFE time was 24.20 days. The original time was normalised to reflect the actual work scope, as below:

- Cancellation of the 9.625in casing operations (reduction of 1.92 days)
- Cancellation of well testing (reduction of 7.60 days)

Therefore the actual time on location was 1.58 days over the AFE planned time (i.e. ignoring the casing and testing phases).

Total Non-Productive Time (NPT) amounted to 2.61 days for Wardie-1.

- 24.14% of all NPT occurred during the plug and abandonment phase (costing 0.63 days)
- 22.99% of all NPT occurred during the setting of the 13 3/8” casing (costing 0.60 days).
- 22.22% of all NPT occurred during the setting of the 30” conductor casing (costing 0.58 days).
- 16.09% of all NPT occurred during the mobilisation (costing 0.42days).
- 9.58% of all NPT was incurred during the drilling of the 12.25in hole (costing 0.25days)
- 4.98% of all NPT was incurred while rigging down and moving out (costing 0.13days)

In total 16.06% of the time on well was incurred as non-productive time.

Time reconciliation by well phase

OPERATION PHASE	Planned Time (days)	Actual Time (days)	Total NPT			Rig Repair			WOW			Delta
			Days	% of Total Actual Time	% of Total NPT Time	days	% of Total Actual Time	% of Total Rig Repair Time	days	% of Total Actual Time	% of Total WOW Time	
Mob & rig up	0.33	0.96	0.42	2.58%	16.09%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	+0.63
Drill 36" conductor hole	0.46	0.50	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	+0.04
Set 30" conductor	1.06	1.81	0.58	3.57%	22.22%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	+0.75
Drill 17.5" hole	1.64	0.98	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	-0.66
Set 13.375" casing	2.11	3.23	0.60	3.69%	22.99%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	+1.12
Drill 12.25" hole	2.69	2.85	0.25	1.54%	9.58%	0.08	0.49%	17.39%	0.00	0.00%	0.00%	+0.16
Log 12.25" hole	1.75	0.83	0.00	0.00%	0.00%	0.00	0.00%	0.00%	0.00	0.00%	0.00%	-0.92
P&A	2.13	3.44	0.63	3.88%	24.14%	0.25	1.54%	54.35%	0.00	0.00%	0.00%	+1.31
Rig down & move out	2.50	1.65	0.13	0.80%	4.98%	0.13	0.80%	28.26%	0.00	0.00%	0.00%	-0.85
TOTALS	**14.67**	**16.25**	**2.61**	**16.06%**	**100.00%**	**0.46**	**2.83%**	**100.00%**	**0.00**	**0.00%**	**0.00%**	**+1.58**

Time breakdown

Operation Phase	Time (days)					
	Planned	Actual	Programmed	Unprogrammed	NPT Programmed	NPT Unprogrammed
Mob & rig up	0.33	0.96	0.96	0.00	0.42	0.00
Drill 36" conductor hole	0.46	0.50	0.50	0.00	0.00	0.00
Set 30" conductor	1.06	1.81	1.81	0.00	0.58	0.00
Drill 17.5" hole	1.64	0.98	0.98	0.00	0.00	0.00
Set 13.375" casing	2.11	3.23	3.23	0.00	0.60	0.00
Drill 12.25" hole	2.69	2.85	2.85	0.00	0.25	0.00
Log 12.25" hole	1.75	0.83	0.83	0.00	0.00	0.00
P&A	2.13	3.44	3.44	0.00	0.63	0.00
Rig down & move out	2.50	1.65	1.65	0.00	0.13	0.00
TOTALS	**14.67**	**16.25**	**16.25**	**0**	**2.61**	**0**

Time Depth Curve

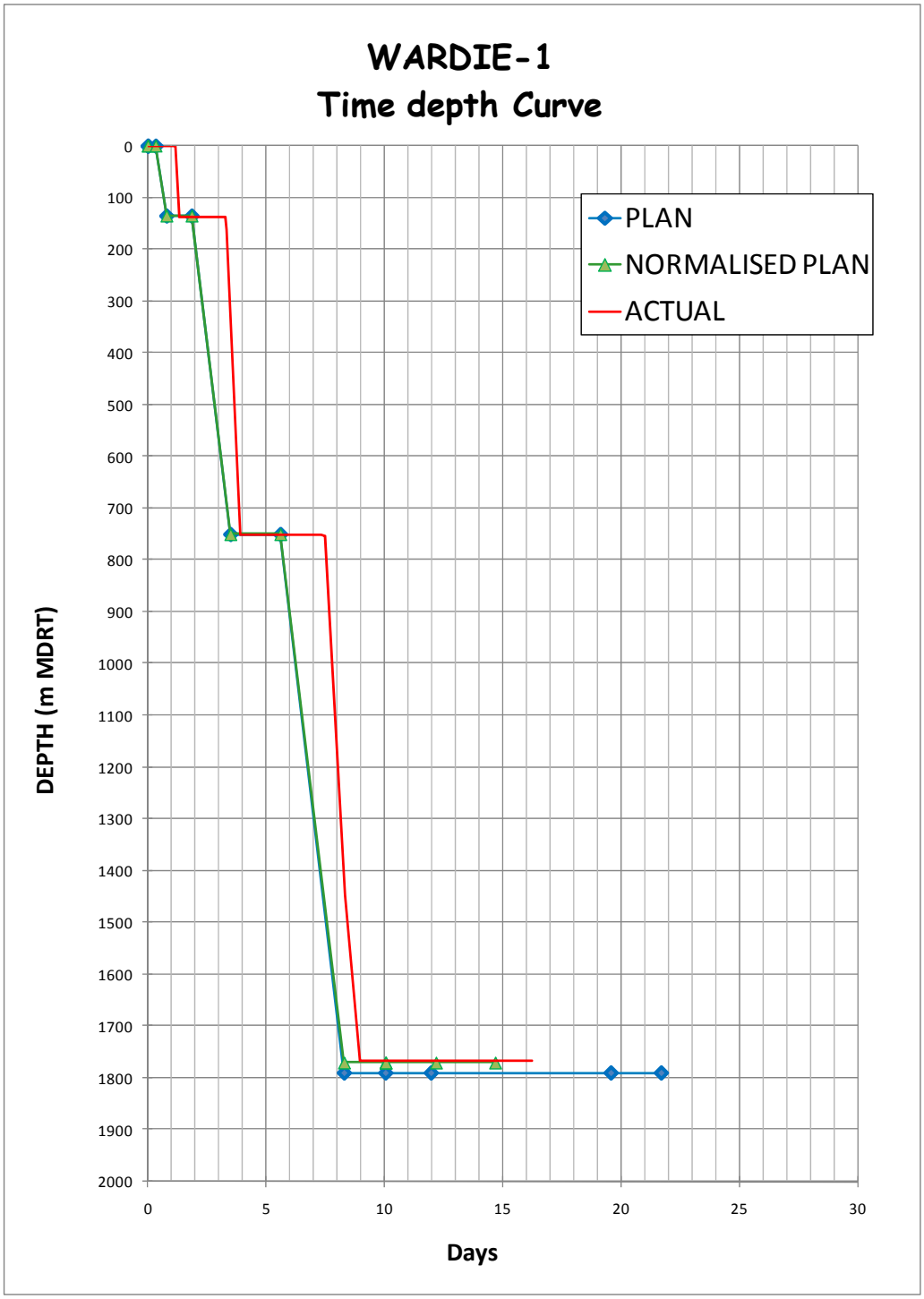
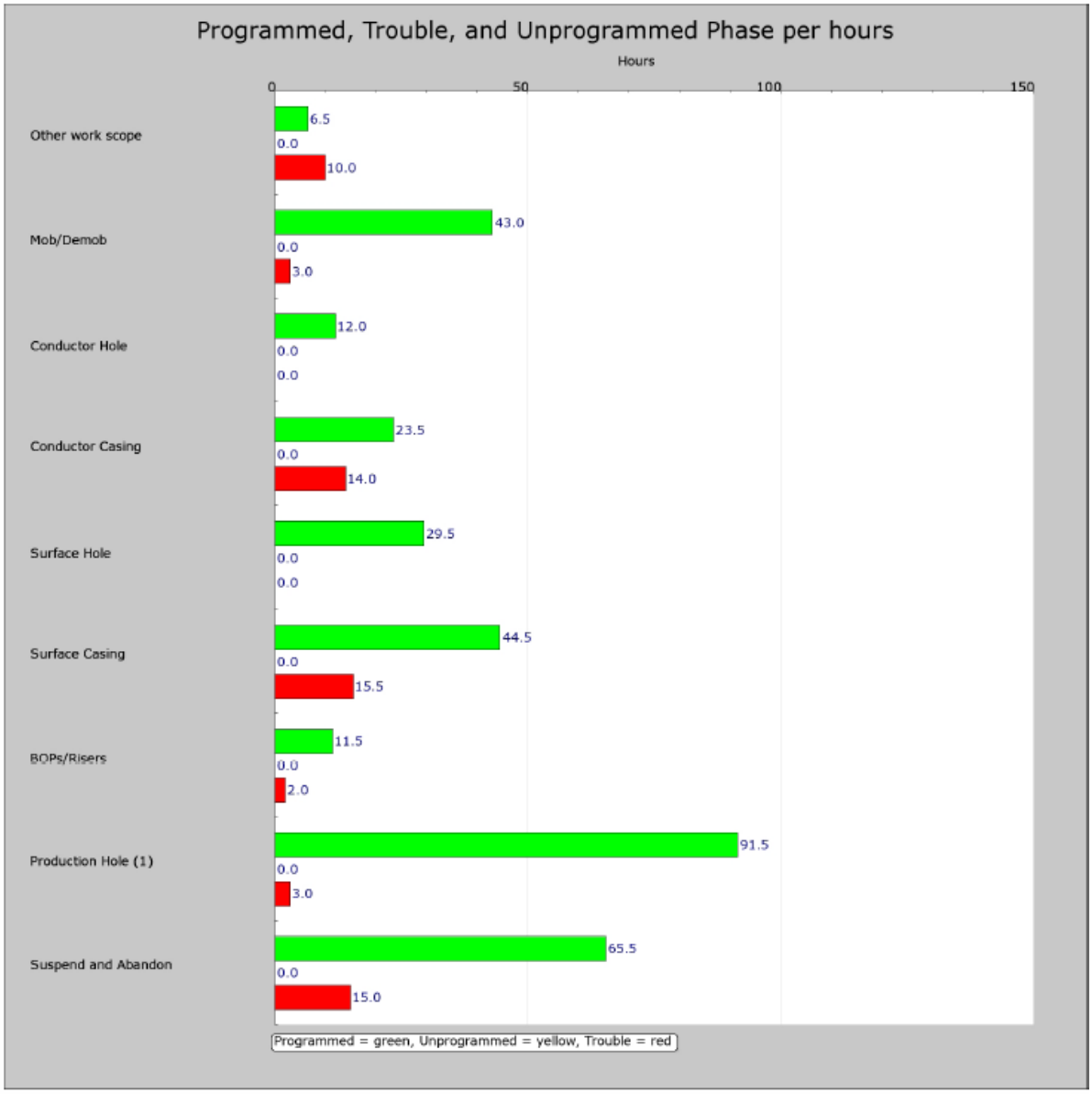


Figure 4. Time depth curve.

Programme, Trouble and Un-programmed by Phase

Time Breakdown by Phase



Total Time on Operations : 390 hrs

Total Productive Time : 327.5 hrs

Total Lost Time : 62.5 hrs

Total Unprogrammed Time : 0 hrs

Figure 5. Programme, Trouble and Un-programmed by Phase.

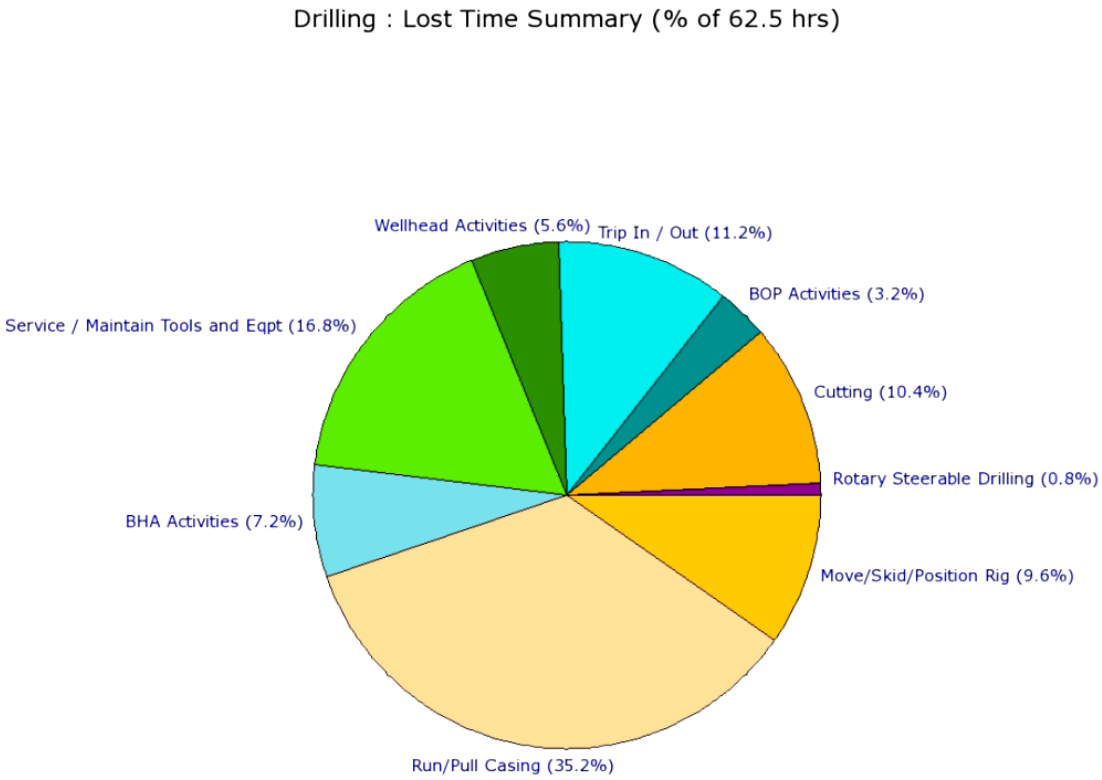
Non-productive time analysis

Phase (in sequence)	NPT (days)	NPT by Cause								
		WOW	Hole Condition		Rig Equipment		Third Party		Other	
Mob & rig up	0.42						0.42	Fault in ROV umbilical. Fault repaired.		
Drill 36" conductor hole	0.00									
Set 30" conductor	0.58		0.06	Conductor casing hung up on side aft side of CTU.			0.10	Troubleshoot bolt tensioning unit for Icon clamp.	0.04	No visibility with ROV due to current and gel clouds.
			0.04	Skidded cantilever 6in forward.			0.08	Re-install Icon clamp and tension up same.	0.04	Waited on improved visibility.
			0.04	Once casing run - skidded cantilever back to re-centralise over Wardie 1 slot.				Grinding weld to fit iron clamp.	0.04	Attempted to work conductor casing into hole. Conductor appeared to be slightly port of centre.
							0.08	The weld on the 30" conductor required grinding to allow installation of the Icon clamp.		
									0.04	Circulated and worked casing past hang-up point and into hole.
Drill 17.5" hole										
Set 13.375" casing	0.60		0.08	Seal on skidding system hydraulic hose burst. Hose replaced.			0.06	Failed attempt to release running tool from wellhead.		

Phase (in sequence)	NPT (days)	NPT by Cause							
		WOW	Hole Condition		Rig Equipment		Third Party		Other	
			0.31	Unable to work 13.375in casing past 166m. POOH to shoe track laying out 13.375in casing.			0.08	Made up top drive and applied 4klbs on running tool - tool fully collapsed. Backed out running tool with rig tongs.		
			0.04	Cut centralisers and stop collars from the shoe track						
			0.02	Cut joint # 75 above collar joint and laid out same. Backed out and loaded out float collar joint. Casing re-RIH without centralisers.						
Drill 12.25" hole	0.25				0.08	Leaks of 60psi/min occurred during IBOP test. Function and greased manifold valves to rectify problem.				
					0.04	Investigate problem with TDS. Rest PLC and reboot system.				

Phase (in sequence)	NPT (days)	NPT by Cause								
		WOW	Hole Condition		Rig Equipment		Third Party		Other	
					0.02	Driller's cyber chair system shut down, was able to able to circulate but not rotate or reciprocate. Investigated and rectified - software related problem.				
					0.11	Failed attempt to open trip tank line for flow check - valve on trip tank return line seized.				
Log 12.25" hole	0.00									
P&A	0.63				0.04	Top drive hydraulic inoperable - lost time racking back first stand of drill pipe.				
					0.08	Drillers display locked up - trouble shot and rebooted system.	0.38	First attempt to cut 30in conductor failed. Two more unsuccessful attempts were made after replacing cutting knives		
					0.13	Drillers display locked up - trouble shot and rebooted system.				

Phase (in sequence)	NPT (days)	NPT by Cause									
		WOW	Hole Condition		Rig Equipment		Third Party		Other		
Rig down & move out	0.13				0.13	Attempted to skid out rig package - lock pin left in extended position. Cut off lock pin assembly on port and starboard sides of the cantilever. Major damage to locking pins and associated steel work.					
TOTALS	2.61	0.00	0.37		0.49		0.46		0.16		
Percentage of NPT	100.0%	0.0%	14.18%		18.77%		17.62%		6.13%		
Percentage of Total Well Time	16.06%	0.0%	2.27%		3.02%		2.83%		0.98%		



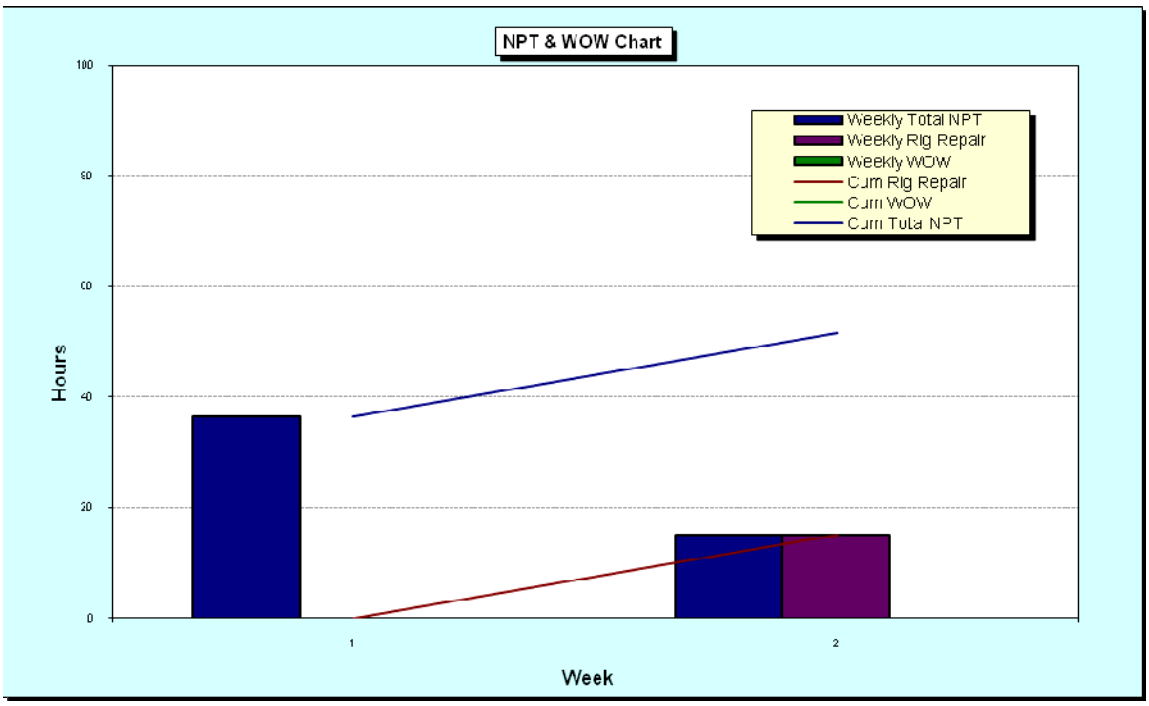


Figure 6. Lost time summary during drilling period.

Mobilisation and drilling phases

Observations by Phase		Comments / Corrective Action Taken or Proposed
Mob & rig up		
Drill 36" conductor hole		
Set 30" conductor	• Grinding the weld seam took 2 hours of rig time so that the Icon clamp could fit onto the 30" conductor.	• Grinding the weld on the conductor should have been done prior to sending to the rig saving rig time.
Drill 17.5" hole	Good bit performance	Hughes MXL-1V bit suitable for Gippsland Limestone formation.
Set 13.375" casing	• Casing held up on centralisers • No centralisers damaged or lost when pulling casing	• Avoid sharp change in inclination when spudding; Use minimum possible centralisation; Install stop collars at recommended distance from centralisers • Halliburton supplied Centek centralisers were used and are recommended in future
Drill 12.25" hole	Good bit performance	Reed PDC RSX-616 performed well and is recommended for use through Latrobe sands.
Log 12.25" hole		
Abandon & demob		

4. DRILLING & ENGINEERING SUMMARY

Drilling summary report

The primary objectives of the Wardie-1 exploration well were Eocene sandstones of the upper Latrobe Group, in particular the N2.3, N2.6 and P1 sandstone reservoirs. These intervals were intersected in West Seahorse-1 (drilled by Hudbay in 1981), where they consisted of a sequence of interbedded sandstones, siltstones and coals.

An extension was installed on the CTU deck of the West Triton rig and the cantilever was then skidded approximately 2.5m from the West Seahorse-3 slot. The Wardie-1 well was spudded at 19:30 hrs on 10 May 2008, using a 660 mm (20") Reed Rock Y1 1C bit with a 914 mm (36") Hole Opener. The seabed was tagged shallower than on the adjacent West Seahorse-3 well (39.5m water depth) due to a mound of cement being present around that well. The hole was drilled from the seabed at 76.8 m to 136.0 mMDRT. The hole section was drilled using seawater and hi-vis gel sweeps, with cuttings returned to the seabed. The 762 mm x 508 mm (30" x 20") casing was run and cemented with the 508 mm conductor shoe set at 133.0 mMDRT. After setting the conductor a 445 mm (171/2") Hughes MXLT1V tricone rock bit was made up on a directional BHA with MWD and the 445 mm section directionally drilled from 136.0 to 751.0 mMDRT. The 445 mm hole was also drilled using seawater and hi-vis gel sweeps, with cuttings dumped overboard to the sea from the CTU deck level as the riser and BOP were not yet installed. The well was kicked off at a depth of 250m and angle built to approximately 32.5 by 644 mMDRT and angle maintained for the remainder of the tangent section. The 340 mm (13.375") casing was run and cemented with the shoe set at 747.2 mMDRT.

After cementing the 340 mm surface casing string, the BOP stack and marine riser were installed. The BOPs were then pressure-tested and the diverter rigged up. The 311 mm hole section was drilled with a Reed RSX 61 6M-A1 6 PDC bit made up to a directional drilling BHA with Powerdrive and LWD tools. A thin cement stringer was tagged at 719.0 mMDRT which was reamed out and the string washed down to TOC at 732.5 mMDRT. The cement plugs, float collar, shoe track and 340 mm casing shoe at 747.2 mMDRT were drilled out using seawater and three meters of new formation cut to 754.0 mMDRT. The hole was then displaced to a KCl-Polymer water-based mud system initially weighted to 1.06 sg (8.8 ppg). The mud system was conditioned before pulling back into the shoe where a Formation Integrity Test (FIT) was performed with 1.06 sg mud yielding an Equivalent Mud Weight (EMW) of 1.57 sg/13.1 ppg (no leak-off). This bit drilled the entire section to well TD at 1766.0 mMDRT which was reached at 15:30 hrs on 18 May 2008. Hole angle and azimuth was maintained until the second kick-off point at ~1 208m where the well was steered down to the second tangent angle of under 9 through the Latrobe target interval. The bit was pulled out for wireline logging at TD, however a wiper trip was required as several intervals of tight hole with significant overpull were seen on the first trip out and it was necessary to pump and back-ream out all the way to the 340 mm casing shoe. There was also a tendency for the hole to pack-off in some places. After running the bit back to bottom (8m of fill encountered) and circulating the hole clean the drill string was pulled to surface without further incident.

After the wireline logging was successfully completed, the well was plugged and abandoned by setting four cement plugs. Cement plug #1A was set from 1766m to 1616 mMDRT and was followed by cement plug #1B from 1616m to 1513.0 mMDRT. The top of plug 1B was tagged with the cementing string at 1407 mMDRT after cement had hardened and was weight tested to 5 klbs. Cement plug #2 was then set across the 340 mm casing shoe from 805m to 700 mMDRT. This plug was allowed to harden before being pressure tested to 1000 psi. The final abandonment cement plug was set from 157m to 95 mMDRT after cutting the 340mm (13.375") casing at 126 mMDRT. Three attempts were then made to cut the 762 mm (30") conductor below the mudline at a depth of 78m, but these were all unsuccessful, despite some surface indications that the casing was at least partially cut. The 762mm (30") casing landing string was disconnected at the Quick-Jay connector 2m above the seabed and laid out. The CTU deck extension was then removed, the cantilever skid in and the rig jacked down.

The MODU West Triton was released from the Wardie-1 well location at 22:30 hrs on 25 May 2008

Final drilling well schematic

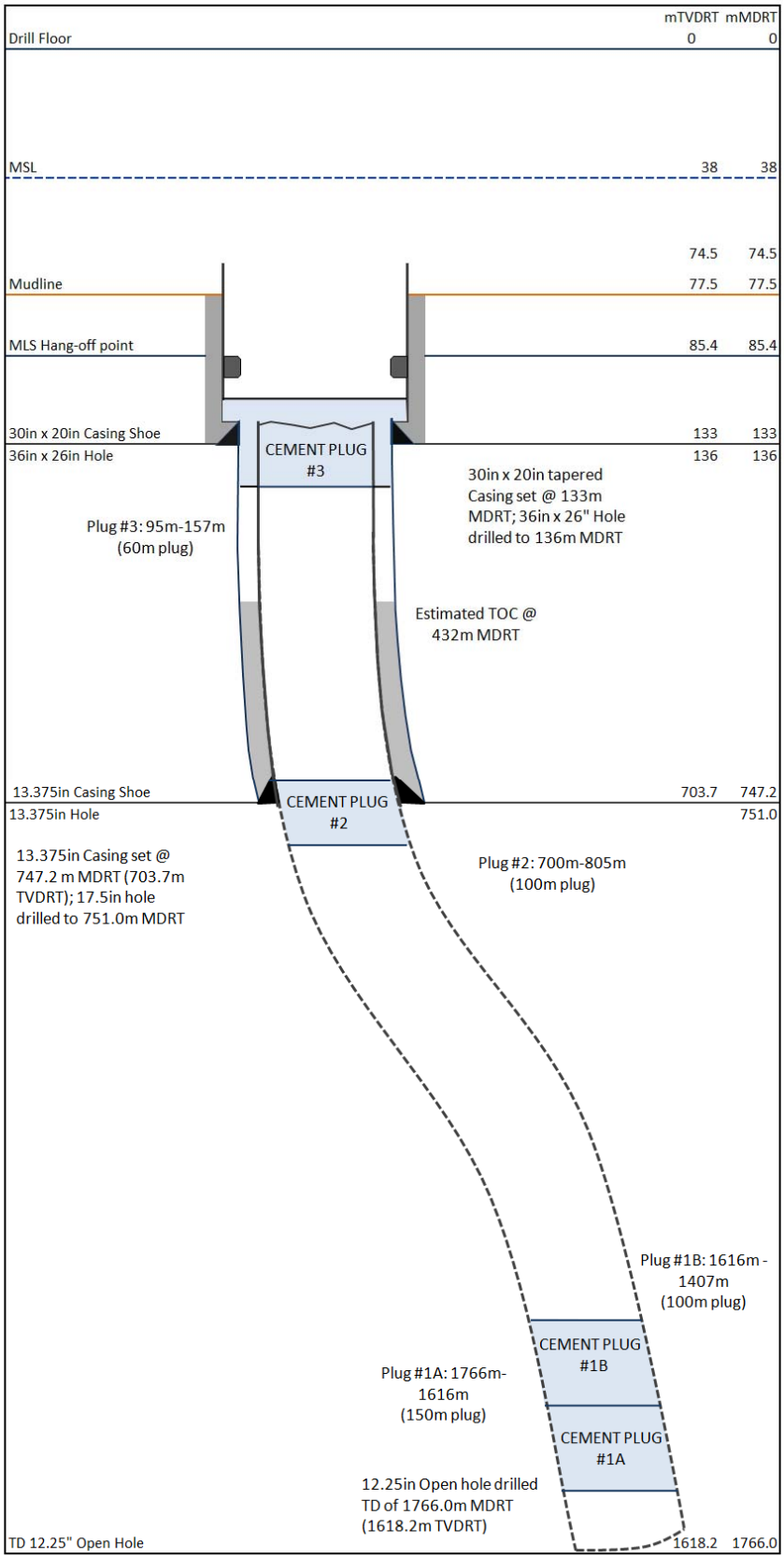


Figure 7. Summary of drilling schmatics and engineering.

Drilling & engineering

914 mm (36") Hole
Section 10 - 11 May 2008

Bit Run No. 1 Summary

Bit No.	RB1
Bit Size, mm	660 mm with 914 mm Hole Opener
Bit Type	Rock / Reed Y1 1 C
Serial Number	34406
Jets	3x22, 1x16
Depth In, mMDRT	76.8
Depth Out, mMDRT	136.0
Bit Grading	1-1-WT-A-NB-I-RR-TD

Drilling Parameters

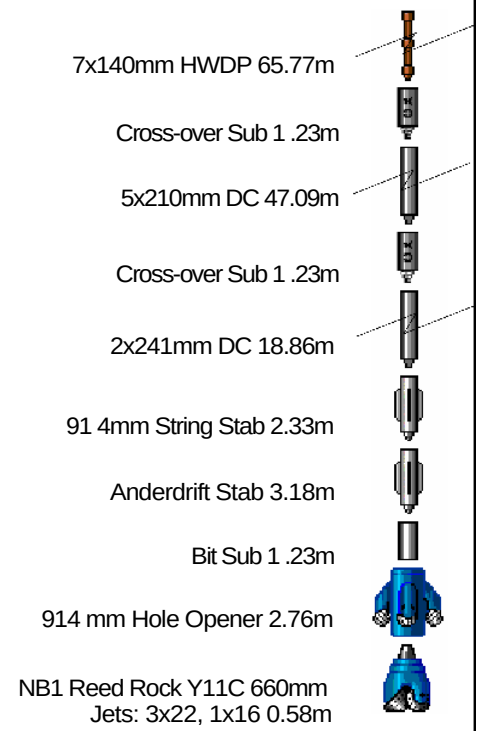
WOB, mt	0.3 – 5.7
RPM Surf	39 – 120
Pump Pressure, kPa	1055 – 9963
Flow In, lpm	1518 – 3789
Torque, kNm	0.04 – 5.87

Mud
Seawater 1.06 sg
High viscosity gel sweeps

Lithology
Returns to seabed.

Drilling Summary
This spud assembly was made up and run in, tagging the seabed at 76.8 mMDRT. Wardie-1 was spud at 1930hrs on 10 May 2008, drilling 914 mm hole from the mudline to 136.0 mMDRT. At TD, 200 bbl of flocculated gel was pumped to clean the hole which was then displaced with PHG mud prior to running the conductor.

BHA No. 1 144.26m



445 mm (17.5”) Hole Section
12 - 13 May 2008

Bit Run No. 2 Summary

Bit No.	NB2
Bit Size	445 mm
Bit Type	Hughes MXL-T1V
Serial Number	606589
Jets	3x20
Depth In.	136.0
Depth Out.	751.0
Bit Grading	1-1 -NO-A-0-I-NO-TD

Drilling

WOB, mt	0.4 – 22.4
RPM Surf	0 – 91
Pump Pressure,	4737 – 18650
Flow In, lpm	2063 – 4353
Torque, kNm	0 – 5.48

Mud

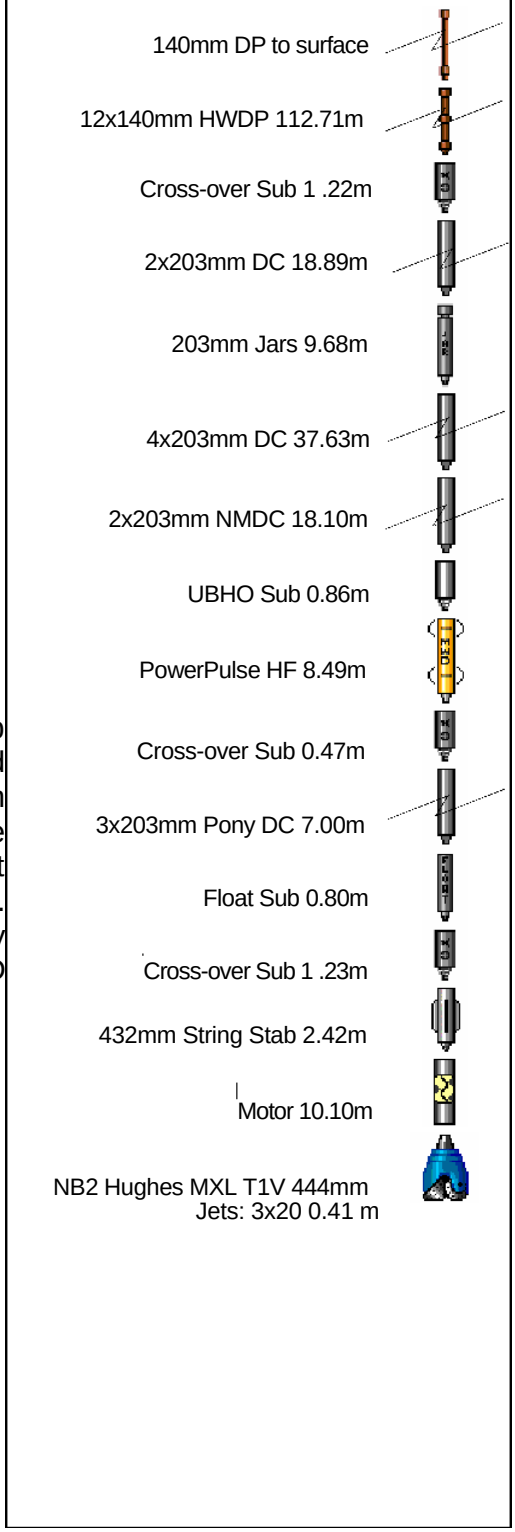
Seawater	1.06 sg

High viscosity gel sweeps

Lithology
Returns overboard from CTU deck.

Drilling Summary
A Hughes MXL-T1V tricone bit was made up to a directional drilling BHA with mud motor and MWD tools. The bit was washed down from 131 .0 mMDRT to the top of the 508 mm shoe at 132.8 mMDRT. The shoe was drilled out and rat hole cleaned out to 136.0 mMDRT. The 445 mm hole section was directionally drilled with seawater and hi-vis sweeps to the TD of the section at 751.0 mMDRT.

BHA No. 2 230.01 m



311 mm (12.25") Hole
Section 16 - 19 May 2008

Bit Run No. 3 Summary

Bit No.	NB3
Bit Size	311 mm
Bit Type	Reed RSX 61 6M-A1 6
Serial Number	218629
Jets	3x15, 3x16
Depth In, MDRT	751.0
Depth Out, mMDRT	1766.0
Bit Grading	1-1 -NO-A-E-I-NO-TD

Drilling

WOB mt	0.3 – 17.4
RPM Surf	79 – 241
Pump Pressure	8405– 15072
Flow In lpm	3634 – 4262
Torque kNm	2.05 – 21.83

Mud

KCl-Polymer	1.07 – 1.13 sg

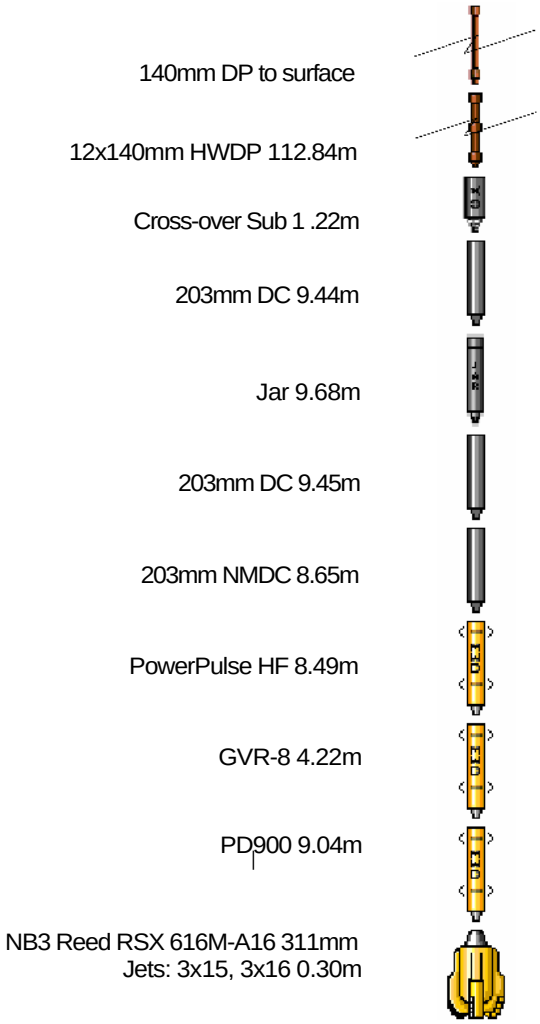
Lithology

Calcilutite, Calcisiltite, Calcarenite, Loose Sand, Calcareous Claystone, Carbonaceous Claystone, Siltstone, Sandstone, Coal

Drilling Summary

A PDC bit was made up to a directional drilling BHA with Powerdrive and LWD tools. After reaming through a thin cement stringer at 719 mMDRT, the bit was washed down to the top of the float collar at 732.5 mMDRT. The plugs, float collar and shoe track were drilled out using seawater. The hole was displaced to a KCl-Polymer water-based mud system initially weighted to 1 .06 sg (8.8 ppg) when drilling out the float shoe and then three metres of new formation was drilled to 754.0 mMDRT. After conditioning the new mud system, the bit was pulled back into the shoe and a Formation Integrity Test (FIT) was performed with 1 .06 sg mud yielding an Equivalent Mud Weight (EMW) of 1.57 sg. This PDC bit was directionally drilled to well TD at 1766.0 mMDRT.

BHA No.3 173.33m



Casing and Cementing

762 x 508 mm (30” x 20”) Casing
11 - 12 May 2008

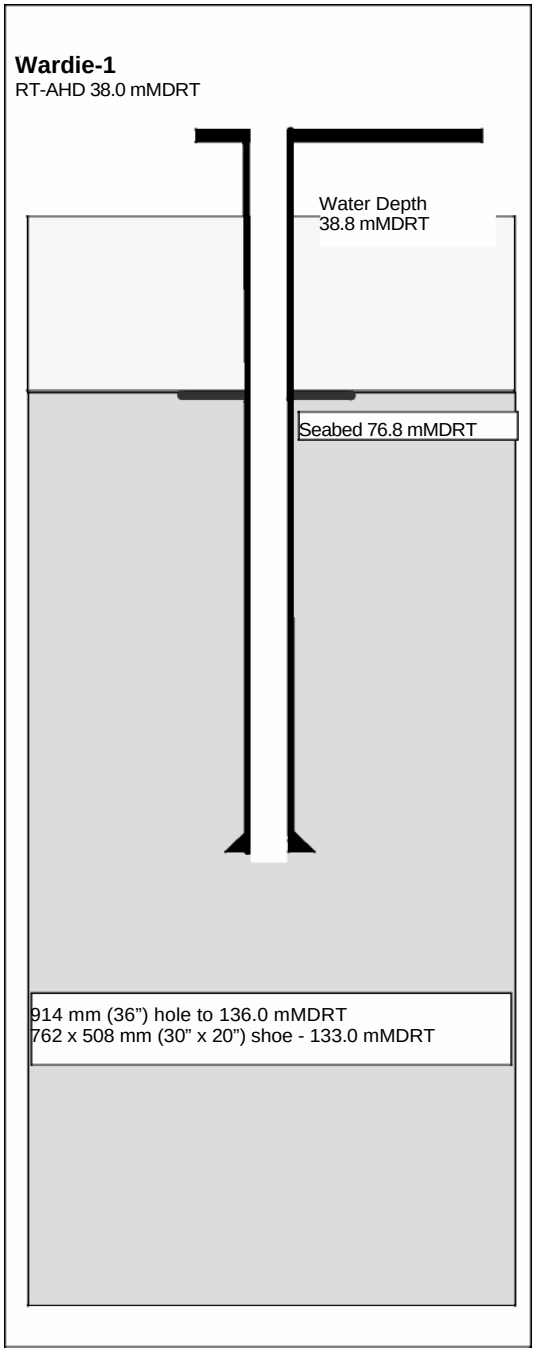
Hole Size: 914 mm (36”)
Depth: 136.0 mMDRT

Casing Details
OD 762 mm (30”)
Grade/Wt: X 52 461 kg/m
Joints: 10 x 762 mm joint
1 x 508 mm shoe
Shoe: 133.0 mMDRT

Cement Details
SLURRY:
Type: Class G
Weight: 1.9 sg (15.9 ppg)
Slurry Volume: 42.1 m^3 (265 bbls)

Summary

The 762 x 508 mm conductor string was run on 11 May 2008. The conductor had to be suspended 3.5m above the mudline for two hours due to poor visibility and once visibility improved the string had to be circulated and worked into the surface hole as it was hanging up at the mudline due to a slight misalignment. Each joint of casing was filled with sea water wile being run in. The string took weight at 130 mMDRT and had to be washed down from 130m to 133 mMDRT. The 508 mm shoe was set and cemented at 133.0 mMDRT as per the casing tally and then cemented in place. Prior to the cement job, the surface line was tested to 1000 psi. Then a preflush consisting of 14.3 m^3 (90 bbls) of seawater was pumped followed by 3.2 m^3 (20 bbls) of seawater with fluoroscein dye. The cement job comprised pumping of 42.1 m^3 (265 bbls) of 1 .9 sg (15.9 ppg) class “G” slurry. This was 20% over the theoretical annular volume and there were returns observed at the mudline by the ROV. The cement was displaced with 1 .6 m^3 (10 bbls) of seawater. After the cement had been pumped and the floats checked, the cement stinger and the 140 mm drill pipe were pulled to surface.



340 mm (1 3.375") Casing
14 - 15 May 2008

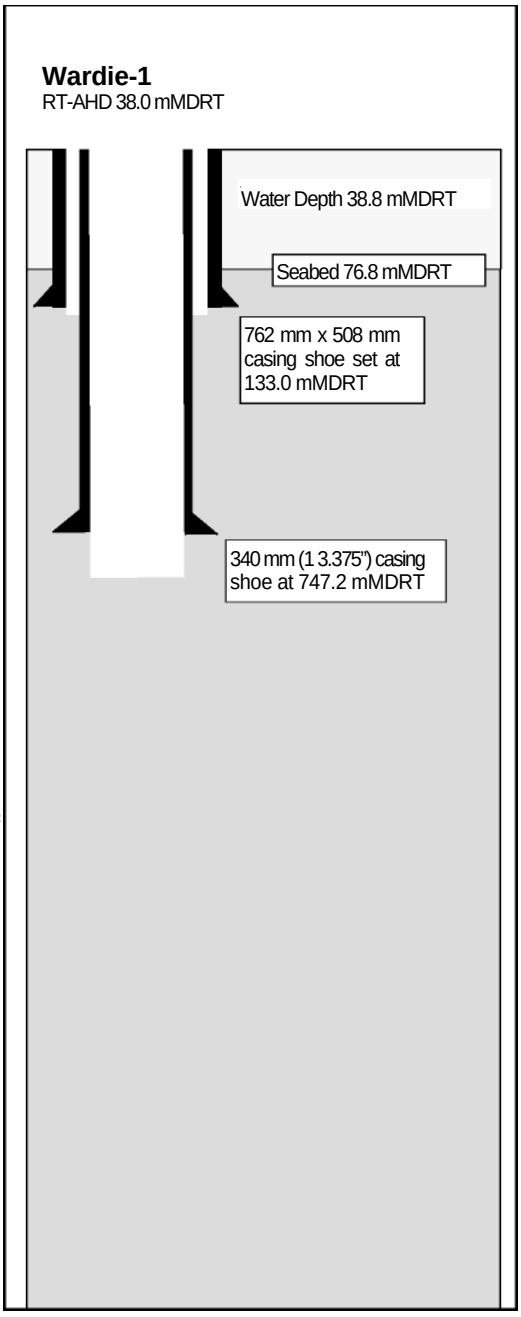
Hole Size: 444 mm (17.5")
Depth: 751.0 mMDRT

Casing Details

OD	340mm (1 3.375")
Grade / Wt:	N80: 101 kg/m (68 ppf)
Joints:	1 Shoe joint
	1 Float Collar joint
	56 x Casing joints +
	5 Landing Joints (CTU to MLS)
Shoe:	747.2 m

Cement Details

SLURRY:
Type: Class G
Weight: 1.90 sg (15.8 ppg)
Slurry Volume: 23.8 m^3 (150 bbls)



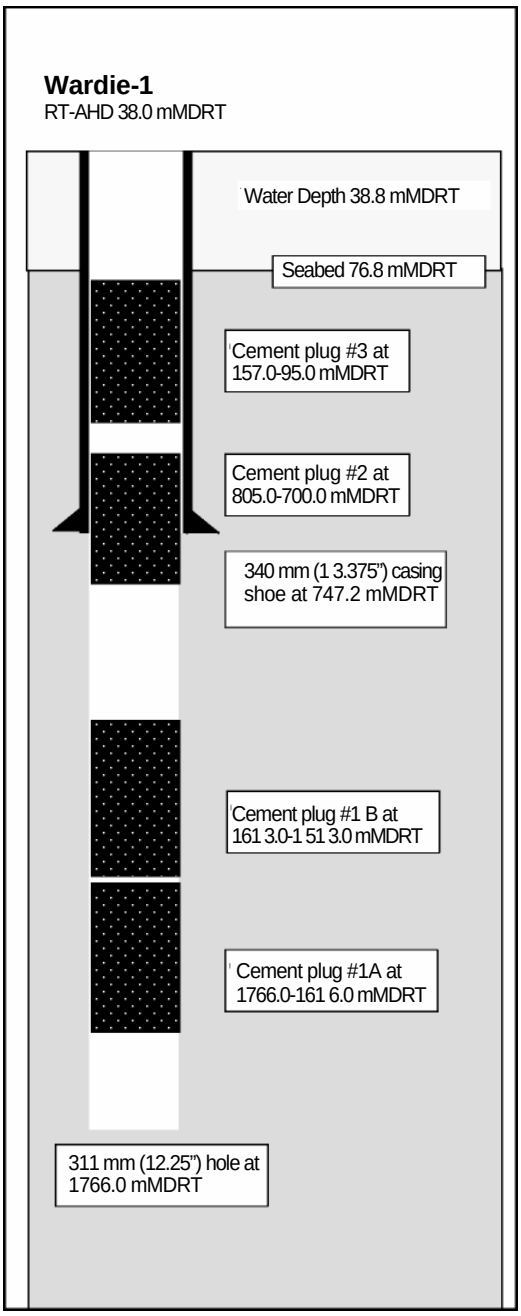
Summary

The 340 mm casing was run in hole as per 3D Oil's casing program. There was a great deal of difficulty running the casing in hole initially as the centralisers continually hung up on the mudline suspension. An attempt was made to improve the casing alignment with the wellbore by skidding the cantilever slightly but it was still not possible to work the casing down past 166 mMDRT. The casing was pulled back to surface and all centralisation removed. A new float collar joint was made up and the casing re-run to landing depth without further problems. Once the casing was landed, the casing volume was circulated and then the cement lines pressure tested to 4000 psi. A preflush of 14.3 m^3 (90 bbls) of seawater and 4.7 m^3 (30 bbls) of tuned spacer E+ was pumped ahead. The cement job consisted of 23.8 m^3 (150 bbls) of 1.9 sg (15.8 ppg) class "G" slurry. The cement was displaced with 53.6 m^3 (337 bbls) of sea water. The plug was bumped to 2000 psi. The casing shoe was set at 747.2 mMDRT.

Cement Plugs

21 - 22 May 2008

Hole Size: 311 mm (12.25")
Depth: 1766.0 mMDRT



Cement Plug Details

CEMENT PLUG #1A:
- Type: Class G
- Weight: 1.89 sg (1 5.8 ppg)
- Slurry Vol:13.51 m ^{3} (85 bbls)

CEMENT PLUG #1 B:
- Type: Class G
- Weight: 1.89 sg (1 5.8 ppg)
- Slurry Vol:10.17 m ^{3} (64 bbls)

CEMENT PLUG #2:
- Type: Class G
- Weight: 1.90 sg (15.9 ppg)
- Slurry Vol:9.22 m ^{3} (58 bbls)

CEMENT PLUG #3:
- Type: Class G
- Weight: 1.89 sg (15.8 ppg)
- Slurry Vol:14.7 m ^{3} (93 bbls)

Summary

Four cement plugs were pumped to P&A the Wardie-1 well. The cement stinger consisted of a mule shoe made up on 140 mm drill pipe. The cementing string was run in hole to 1765 mMDRT, bottoms up was circulated and then the cement lines were rigged up and tested to 1000 psi. All slurry volumes in the open hole were calculated using a 10% excess to the caliper volume. Cement plug #1A was set from 1766m to 1616 mMDRT and was followed by cement plug #1B from 1616m to 1513 mMDRT. After waiting on cement to harden, the string was washed down from 1398m and tagged top of cement plug #1B at 1407 mMDRT. The plug was weight tested with 5 klbs. Cement plug #2 was set across the 340 mm casing shoe from 805m to 700 mMDRT. The BOPs, riser, choke lines, and surface lines were flushed and then Plug #2 was successfully pressure tested to 1000 psi for 10min. The 340 mm (13.375") casing was then cut at 126 mMDRT and the cut joints pulled to surface. The final cement plug #3 was set from 157m to 95 mMDRT. Three attempts were made to cut the 762 mm (30") conductor at 78 mMDRT without success, so the 762mm landing joints were disconnected at the Quick-Jay connector 2m above the mudline and pulled to surface.

Bit Run summary

OPERATOR	WELL NAME	LOCATION	CONTRACTOR	RIG
3D Oil Ltd	Wardie-1	VIC/P-57	Seadrill	(MODU) West Triton

Mud Pump Data
Pumps 1, 2, and 3
165 mm 6.5" Liners
355 mm 14" Stroke
97% Efficiency, 16.03 litre/stk
(0.1394 bbl/stk)

BIT DULL CHARACTERISTICS

REASONS PULLED

BHA #	BIT No.	MAKE	TYPE	TFA sq.in.	JETS	SERIAL No.	DEPTH IN m	METRES ON BIT	HRS ON BOTTOM	AV ROP m/hr	CIRC HRS	WOB tonne	RPM Surf/Motor	TBR krev	SPP kPa	FLOW lpm	TQ kNm	GRADE I	O	D	L	B	G	O	R	MW SG	REMARKS
Wardie-1																											
914 mm (36") Hole Section 76.8 - 136.0 mMDRT																											
1	RB1	Reed	Y11C	1.3100	3x22, 1x16	34406	76.8	59.2	2.3	25.7	4.3	2.5	39-120/39-120	13.9	1055-9963	1518-3789	0.04-5.87	1	1	WT	A	NB	I	RR	TD	SW (1.06)	Spud
444 mm (17.5") Hole Section 136.0 - 751.0 mMDRT																											
2	NB2	Hughes	MXL-T1V	0.9204	3x20	606589	136	615	6.7	91.8	11.9	9.9	0-91/58-217	60.7	4737-18650	2063-4353	0-5.48	1	1	NO	A	0	I	NO	TD	SW (1.06)	13.375" Casing point
311 mm (12.25") Hole Section 751.0 - 1766.0 mMDRT TD																											
3	NB3	Reed	RSX 616M-A16	1.1068	3x15, 3x16	218629	751	1015	19.4	52.3	44.9	8.5	79-241/79-241	172.8	8405-15072	3634-4262	2.05-21.83	1	1	NO	A	E	I	NO	TD	1.07 - 1.13	TD

RT-AHD (m)	38.0 m
RT - Seabed	76.8 mMDRT
Total Depth (m)	1766.0 mMDRT

Bits run: time : depth chart

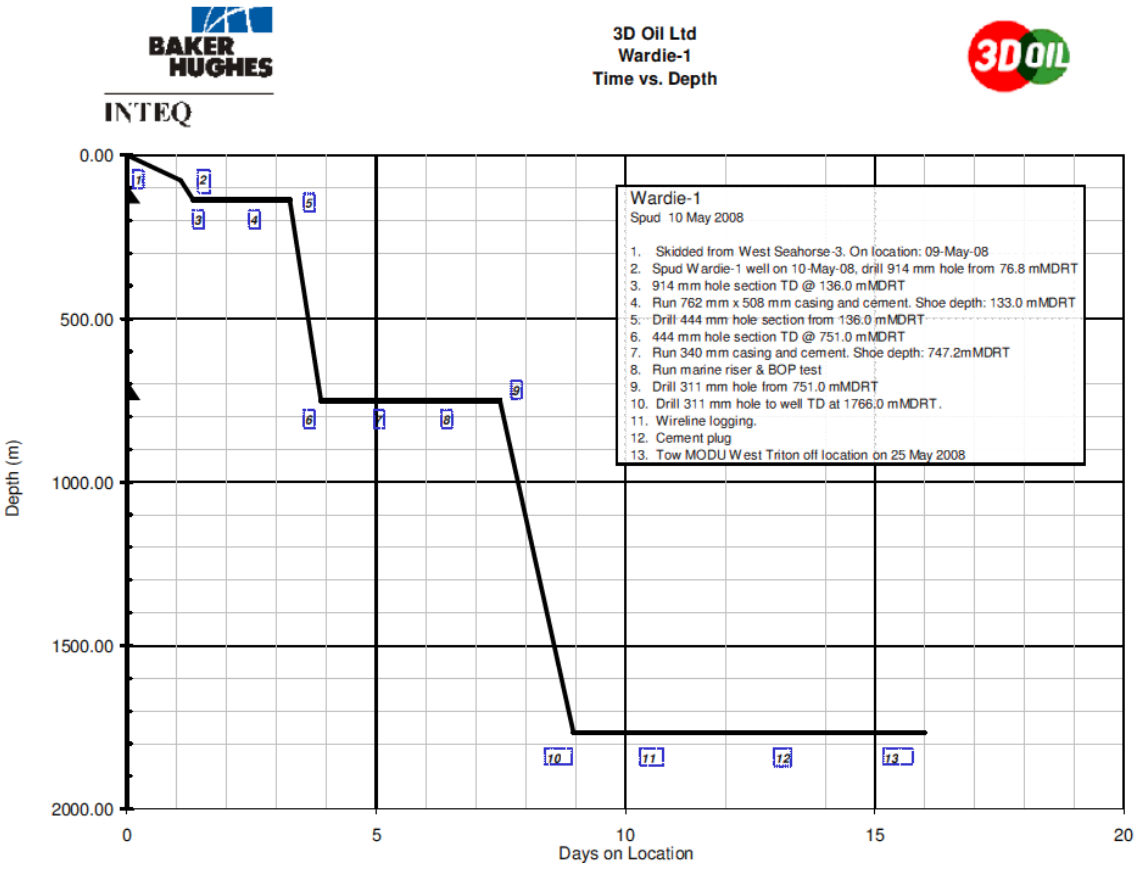


Figure 8. Summary of casing and cementing schematics by time vs. depth scale.

Bit Hydraulics summary

BAKER HUGHES INTEQ

Bit Hydraulics Summary

Operator	Well Name	Location	Drilling Contractor	Rig
3D Oil Ltd	Wardie-1	VIC/P-57	Seadrill	MODU West Triton

Drillstring Abbreviations
N Normal **P** Positive Displacement Motor **S** Powerdrive
M MWD **A** Adjustable Gauge Stabilizer **T** TRACS Tool **C** Core

Hydraulics Models
Power Law Model used for drilling with Mud
Bingham Model used for coring and drilling with seawater

Bit No.	Depth AHD (m)	Hole Size in	Jets x 1/32"	Drill String Type	Mud Type	Mud Density sg	PV mPas	YP Pa	Flow Rate lpm	Jet Vel m/sec	Impact Force lbf / in²	Hydraulic Power hhp	Power/ Area hp/sq in	Bit Loss KPa	Bit Loss %	Pipe* Loss Kpa	ECD sg	Annular Velocities DP OH m/sec	Annular Velocities DC OH m/sec	Annular Velocities DP Max Dia m/sec
Wardie-1																				
914 mm (36") Hole Section 76.8 - 136.0 mMDRT																				
RB1	136	36"	3x22, 1x16	N	SW / PHG sweep	1.06	-	-	3789	42.4	0.7	622	0.08	917	12.4	6439	1.060	-	0.10	-
444 mm (17.5") Hole Section 136.0 - 751.0 mMDRT																				
NB2	751	17.5"	3x20	N, M, P	SW / PHG sweep	1.06	-	-	4353	122.1	8.8	1716	3.11	7605	43.1	10045	1.062	0.52	0.60	0.19
311 mm (12.25") Hole Section 751.0 - 1766.0 mMDRT																				
NB3	1766	12.25"	3x15, 3x16	N, M, A	KCl-Polymer	1.13	13	13.9	4088	95.4	14.0	1395	3.89	4943	32.4	10328	1.162	1.12	1.12	0.27

* Note: Pipe Loss includes DP,HWDP, DC, MWD, Motor,Additional tools, surf equipment

Directional drilling summary

Performance drilling report

BHA 38 / Bit 2

17 1/2" (445 mm) Steerable Motor Assembly
136m – 751m MD

BHA

17 1/2" Hughes MXL-T1V Tooth Bit (3 x 20 jets)
9 5/8 PowerPak Motor (5:6 lobe, 4.0 stage, 17 1/4 sleeve and 1.5º bend) 17" String Stab
Crossover Sub Float Sub
3 x 8" Pony NMDC
Crossover Sub
PowerPulse MWD (800-1200 gpm)
UBHO
2 x 8" NMDC
8 1/4" Spiral Drill Collars (4 joints)
Hydraulic Jar
8 1/4" Spiral Drill Collar (2 joints)
Crossover Sub
5 1/2" HW Drill Pipe (12 joints)
5 1/2" Drill Pipe to Surface

Drilling Summary

Drilled cement and float equipment, cleaned out rat hole. This well was approximately 2.5 m from West Seahorse-3 so magnetic interference was encountered in the MWD surveys once drilling commenced. At 172m with inclination only surveys there was a high risk of collision with West Seahorse-3 so Gyro surveys were taken to confirm the actual azimuth. The Gyro surveys indicated that the well was diverging from West Seahorse-3 so the drilling commenced. At 200m no magnetic interference was encountered from the MWD surveys so these were used from this point onwards.

Rotary drilling continued to kick off point at 250m. Kick off building at 3º/30m to 32.48ºm along the azimuth of 241.15º azimuth. Continue drilling tangent section to casing point at 751m MDRT. This assembly is capable of building up to 4.8º/30m. Reactive torque was about 45º with 25 klbs WOB

No hole problems were encountered and all directional requirements were met. While tripping out of the hole the BHA got stuck at the shoe. The most likely cause was the 17" stabilizer getting stuck at the shoe. The BHA was rotated out with no resistance encountered.

Drilling Performance

Interval	Distance (m)	Time (hrs)	ROP (m/hr)
Total Drilled	615	6.7	91.79
Total Drilled in rotary	353	3.76	93.88
Total Drilled in slide mode	262	2.94	89.12
Bit Graded	1-1-NO-A-E-I-NO-TD (61 krevs)		

Section Breakdown

Section	Rotary m (%)	Slide m (%)
Start of run to KOP (136-250m)	125 (100%)	-
KOP to EOC (250-574m)	105 (32%)	219 (68%)
EOC to section TD (574-751m)	134 (76%)	43 (24%)

BHA 4 / Bit 3
12 1/4" (311 mm) Rotary Steerable Assembly 751m –
1766 m MD (1015m)

BHA
12 1/4" Reed Hycalog RSX616 MA 16 PDC Bit (3 x 15 & 3 x 16 jets) PowerDrive 900 X5 (without flow restrictor)
PowerDrive 900 Receiver (with ported float) and Flex Collar
8 1/4" GVR
PowerPulse MWD (600-1200 gpm)
1 x 8" NMDC
8 1/4" Spiral Drill Collars
Hydraulic Jar
8 1/4" Spiral Drill Collar
Crossover Sub
5 1/2" HW Drill Pipe (12 joints)
5 1/2" Drill Pipe to Surface

Drilling Summary
After drilling out cement and float equipment, three meters of new formation was drilled and a formation integrity test was performed.

Once out of the shoe the PowerDrive assembly had a dropping tendency in neutral steering mode of around 0.8º/30m. The tangent section of the well profile was drilled in inclination hold mode and increasing the right azimuth steering percentage accordingly to follow the planned well trajectory. The drilling parameters were adjusted to maintain a rate of penetration of around 115 m/hr.

In the previous well (West Seahorse-3) it was initially difficult to achieve the required drop rate so the drop section in this well was started deliberately at 1208m, 90m ahead of plan to allow for a lower drop rate than the plan. Drop rates of 1 .16º/30m to 1 .45º/30 m for the first 243m were achieved when the tool was set at 25% steering ratio and 180º tool face. It was later altered accordingly to increase the drop and turn rates. The rate of penetration was held back to 30 m/hr from 1522m onwards for logging purposes.

Once the drop was achieved the PowerDrive was placed in Inclination Hold mode for the remainder of the tangent section to TD at 1 766m MDRT. Both geological targets were successfully penetrated within the allowable tollerances.

Moderate stick-slip was observed for most of the run but it did not affect the steering ability. A few hard drilling intervals were encountered and higher stick slip and torque variance was experienced. While tripping out sticky hole sections were encountered all the way up to the 13 3/8" shoe. The BHA was washed and back reamed through these sections and a subsequent wiper trip to TD point was performed.

The bit was graded as 3-3-WT-A-X-I-CT-TD.

Drilling Performance;

Interval	Distance (m)	Time (hrs)	ROP (m/hr)
Rotary mode	1015	19.40	52.32

Deviated well, 'S'-type profile.
Details see attachment 7

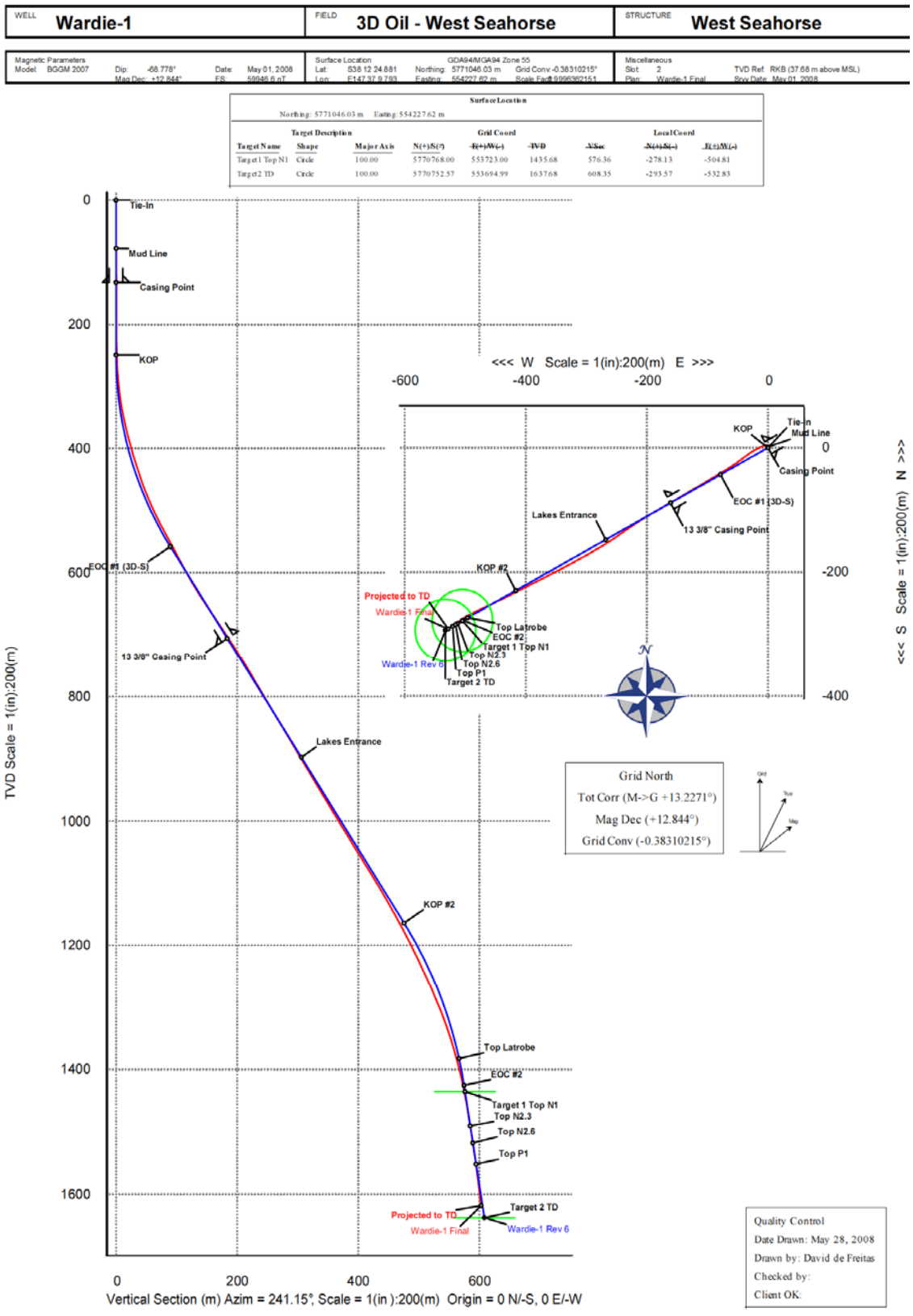


Figure 9. Sketch showing 'S'-type directional drilling profile.

Directional Dmag Geodetic Survey

Wardie-1 Final EOU Report

Comments	Measured Depth (m)	Inclination (deg)	Azimuth Grid (deg)	TVD (m)	Vertical Section (m)	NS Grid North (m)	EW Grid North (m)	DLS (deg/30m)	Semi-Axis Major NEV (m)	Semi-Axis Minor NEV (m)	EOU Unc Vertical (m)	Major Axis Azimuth NEV (deg)	Survey Tool Model
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	90.00	SLB_CNSG+DPIPE-Depth Only
Mud Line	77.50	1.96	317.71	77.48	0.31	0.98	-0.89	0.76	0.17	0.16	0.61	137.65	SLB_CNSG+DPIPE
	82.50	1.90	317.51	82.48	0.35	1.10	-1.01	0.36	0.17	0.17	0.61	137.42	SLB_CNSG+DPIPE
	87.50	1.85	317.30	87.48	0.39	1.23	-1.12	0.30	0.19	0.19	0.62	137.21	SLB_CNSG+DPIPE
	92.50	1.80	317.07	92.48	0.42	1.34	-1.22	0.30	0.21	0.21	0.63	137.03	SLB_CNSG+DPIPE
	97.50	1.74	316.83	97.47	0.46	1.45	-1.33	0.36	0.23	0.23	0.63	136.87	SLB_CNSG+DPIPE
	102.50	1.69	316.58	102.47	0.50	1.56	-1.43	0.30	0.25	0.25	0.64	136.72	SLB_CNSG+DPIPE
	107.50	1.63	316.30	107.47	0.54	1.67	-1.53	0.36	0.27	0.27	0.65	136.57	SLB_CNSG+DPIPE
	112.50	1.65	315.91	112.47	0.57	1.77	-1.63	0.14	0.28	0.28	0.66	136.37	SLB_CNSG+DPIPE
	117.50	1.78	316.62	117.47	0.61	1.88	-1.73	0.79	0.29	0.28	0.67	136.54	SLB_CNSG+DPIPE
	122.50	1.86	319.95	122.46	0.65	2.00	-1.84	0.80	0.29	0.29	0.67	137.94	SLB_CNSG+DPIPE
	127.50	1.88	323.69	127.46	0.67	2.13	-1.94	0.74	0.30	0.30	0.68	140.03	SLB_CNSG+DPIPE
	132.50	1.94	328.33	132.46	0.69	2.26	-2.03	0.99	0.32	0.32	0.69	142.37	SLB_CNSG+DPIPE
	134.60	2.03	330.59	134.56	0.69	2.33	-2.07	1.70	0.32	0.32	0.70	144.37	SLB_CNSG+DPIPE
	174.15	0.97	331.19	174.09	0.70	3.23	-2.58	0.80	0.39	0.39	0.99	146.82	SLB_MWD-STD
	202.30	1.06	330.50	202.24	0.70	3.67	-2.82	0.10	0.39	0.39	0.99	98.40	SLB_MWD-STD
	260.44	2.12	269.17	260.36	1.66	4.12	-4.16	0.96	0.41	0.41	0.99	35.23	SLB_MWD-STD
	290.09	5.23	252.00	289.94	3.47	3.69	-5.99	3.30	0.47	0.47	1.00	31.23	SLB_MWD-STD
	319.76	8.62	244.27	319.39	7.02	2.31	-9.28	3.55	0.57	0.55	1.00	7.35	SLB_MWD-STD
	349.23	11.69	243.65	348.40	12.21	0.03	-13.95	3.13	0.70	0.64	1.00	170.06	SLB_MWD-STD
	378.56	14.54	243.39	376.96	18.86	-2.94	-19.91	2.92	0.86	0.74	0.99	163.04	SLB_MWD-STD
	408.20	16.62	238.69	405.51	26.81	-6.81	-26.85	2.46	1.06	0.85	1.00	158.62	SLB_MWD-STD
	437.65	18.41	234.18	433.60	35.63	-11.72	-34.22	2.29	1.28	0.95	1.00	155.19	SLB_MWD-STD
	466.98	21.11	233.22	461.20	45.46	-17.60	-42.21	2.78	1.54	1.06	1.01	152.65	SLB_MWD-STD
	496.44	24.52	235.86	488.35	56.81	-24.21	-51.52	3.62	1.84	1.18	1.02	151.24	SLB_MWD-STD
	525.34	27.44	238.00	514.33	69.43	-31.10	-62.14	3.18	2.18	1.31	1.03	150.55	SLB_MWD-STD
	555.68	29.78	239.10	540.96	83.94	-38.68	-74.53	2.37	2.57	1.45	1.06	150.22	SLB_MWD-STD
	585.40	28.02	239.82	566.98	98.30	-45.98	-86.90	1.81	2.91	1.53	1.08	150.05	SLB_MWD-STD
	614.89	29.13	240.00	592.88	112.40	-53.05	-99.11	1.13	3.24	1.61	1.12	149.98	SLB_MWD-STD
	644.23	31.31	240.28	618.23	127.17	-60.40	-111.91	2.23	3.66	1.75	1.17	150.03	SLB_MWD-STD
	674.32	33.98	240.54	643.56	143.40	-68.41	-126.03	2.67	4.12	1.90	1.23	150.10	SLB_MWD-STD
	703.79	34.90	240.07	667.87	160.06	-76.67	-140.50	0.97	4.59	2.05	1.29	150.10	SLB_MWD-STD
	722.54	34.35	239.86	683.29	170.71	-82.00	-149.73	0.90	4.86	2.12	1.33	150.07	SLB_MWD-STD
	802.80	32.02	241.09	750.46	214.63	-103.66	-187.94	0.91	5.88	2.32	1.47	150.06	SLB_MWD-STD
	831.50	30.76	239.33	774.96	229.58	-111.08	-200.91	1.63	6.24	2.40	1.53	149.98	SLB_MWD-STD
	861.51	31.64	238.19	800.63	245.11	-119.15	-214.20	1.06	6.65	2.52	1.60	149.86	SLB_MWD-STD
	891.22	31.39	236.51	825.96	260.60	-127.53	-227.28	0.92	7.06	2.65	1.67	149.65	SLB_MWD-STD
	920.19	31.58	236.01	850.66	275.68	-135.93	-239.86	0.33	7.47	2.77	1.74	149.44	SLB_MWD-STD
	949.76	31.70	236.73	875.84	291.14	-144.52	-252.78	0.40	7.88	2.90	1.81	149.29	SLB_MWD-STD
	979.78	31.37	237.60	901.42	306.80	-153.03	-265.97	0.56	8.28	3.02	1.88	149.19	SLB_MWD-STD
	1009.21	31.56	240.47	926.53	322.15	-160.93	-279.14	1.54	8.68	3.13	1.95	149.25	SLB_MWD-STD
	1039.05	31.64	239.79	951.94	337.78	-168.72	-292.70	0.37	9.10	3.26	2.02	149.26	SLB_MWD-STD
	1066.59	31.64	241.83	975.39	352.22	-175.77	-305.31	1.17	9.48	3.38	2.09	149.37	SLB_MWD-STD
	1096.55	32.01	242.11	1000.85	368.02	-183.19	-319.25	0.40	9.91	3.51	2.17	149.48	SLB_MWD-STD
	1125.94	32.34	242.75	1025.72	383.67	-190.43	-333.13	0.48	10.34	3.65	2.25	149.62	SLB_MWD-STD
	1155.71	32.17	242.53	1050.90	399.55	-197.74	-347.24	0.21	10.77	3.78	2.33	149.72	SLB_MWD-STD
	1184.60	32.35	243.98	1075.33	414.96	-204.67	-361.01	0.83	11.17	3.90	2.40	149.88	SLB_MWD-STD
	1214.81	32.18	244.06	1100.88	431.07	-211.74	-375.50	0.17	11.60	4.02	2.48	150.03	SLB_MWD-STD
	1244.86	30.73	243.07	1126.51	446.73	-218.72	-389.55	1.54	12.01	4.13	2.55	150.12	SLB_MWD-STD
	1274.25	29.50	243.74	1151.93	461.47	-225.32	-402.73	1.30	12.39	4.24	2.61	150.23	SLB_MWD-STD
	1303.82	28.32	243.43	1177.82	475.75	-231.68	-415.53	1.21	12.75	4.34	2.67	150.32	SLB_MWD-STD
	1333.24	26.97	243.84	1203.88	489.39	-237.74	-427.76	1.39	13.10	4.45	2.73	150.41	SLB_MWD-STD
	1363.33	25.76	244.51	1230.84	502.73	-243.56	-439.79	1.24	13.45	4.56	2.79	150.52	SLB_MWD-STD
	1392.32	24.64	245.10	1257.07	515.05	-248.82	-450.96	1.19	13.77	4.66	2.84	150.62	SLB_MWD-STD
	1421.66	23.41	245.94	1283.87	526.96	-253.77	-461.83	1.31	14.07	4.76	2.89	150.74	SLB_MWD-STD
	1451.54	21.93	245.34	1311.44	538.44	-258.52	-472.32	1.50	14.37	4.86	2.93	150.83	SLB_MWD-STD
	1481.24	19.28	245.06	1339.23	548.86	-262.90	-481.81	2.68	14.63	4.95	2.96	150.91	SLB_MWD-STD
	1511.19	16.74	243.33	1367.71	558.11	-266.92	-490.15	2.60	14.86	5.03	2.99	150.93	SLB_MWD-STD
	1540.85	14.49	240.57	1396.28	566.09	-270.66	-497.20	2.40	15.06	5.10	3.02	150.91	SLB_MWD-STD
	1570.22	12.40	236.98	1424.84	572.91	-274.19	-503.04	2.30	15.22	5.17	3.03	150.83	SLB_MWD-STD
	1599.76	10.35	236.26	1453.80	578.72	-277.39	-507.91	2.09	15.36	5.23	3.05	150.79	SLB_MWD-STD
	1630.16	9.46	236.73	1483.75	583.93	-280.28	-512.27	0.88	15.49	5.28	3.07	150.76	SLB_MWD-STD
	1659.89	8.81	235.87	1513.10	588.63	-282.90	-516.20	0.67	15.60	5.33	3.08	150.72	SLB_MWD-STD
	1689.37	8.19	235.45	1542.26	592.97	-285.35	-519.79	0.63	15.71	5.38	3.09	150.68	SLB_MWD-STD
	1718.81	7.67	235.27	1571.41	597.01	-287.66	-523.14	0.53	15.80	5.43	3.10	150.65	SLB_MWD-STD
	1745.67	7.36	234.18	1598.04	600.50	-289.69	-526.00	0.38	15.89	5.47	3.11	150.61	SLB_MWD-STD
Projected to TD	1766.00	7.36	234.18	1618.21	603.08	-291.21	-528.12	0.00	16.25	5.70	3.16	150.35	SLB_BLIND+TREND

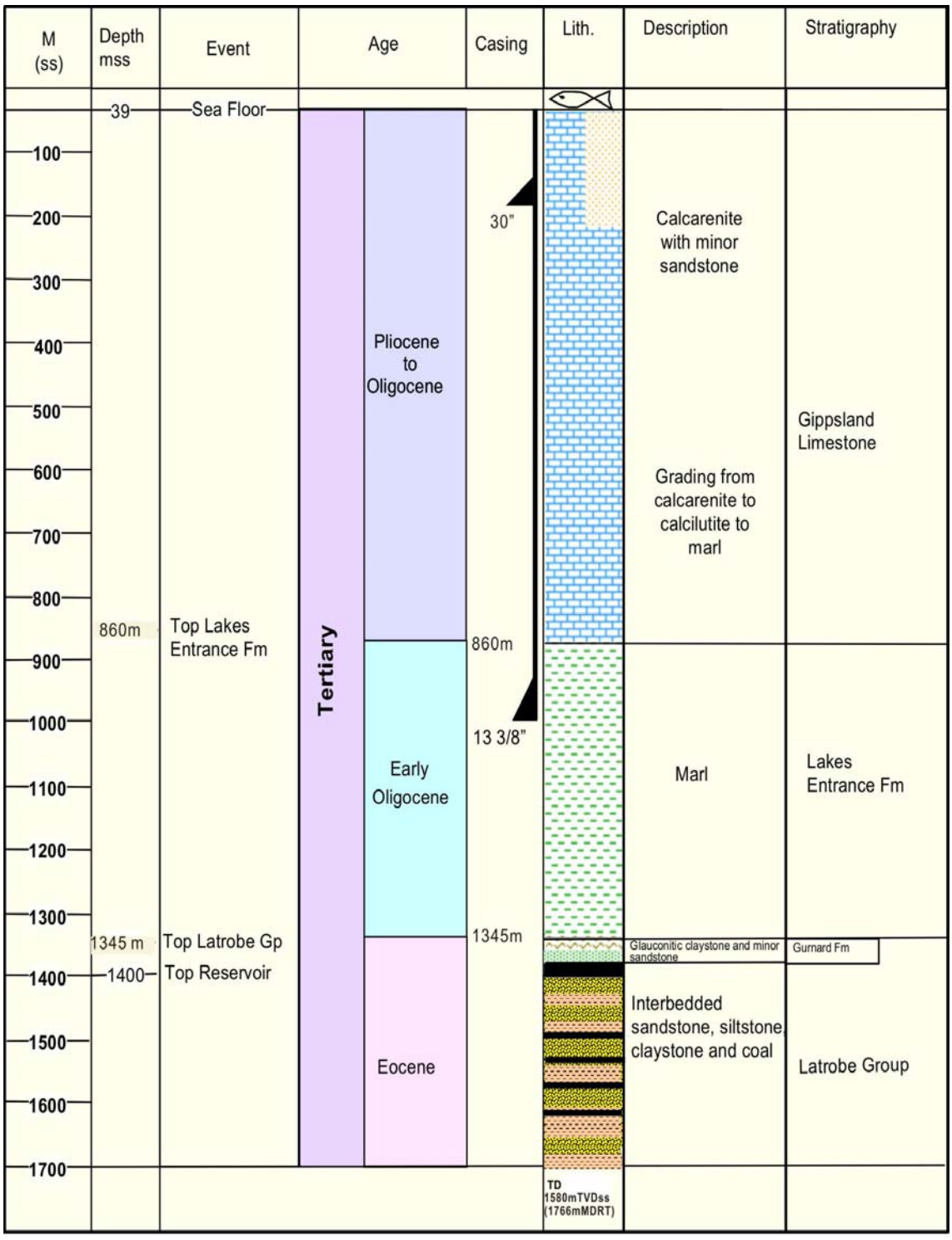


Figure 10. Lithological column and casing of the Wardie 1 well.

5. GEOLOGICAL SAMPLING & EVALUATION

Formation sampling & drill monitoring

Baker Hughes INTEQ SLS provided formation evaluation and drill monitoring services for Wardie-1 between 09 May and 25 May 2008 from the spud depth at 76.8 mMDRT to the well's total depth of 1766.0 mMDRT. Data was processed and stored using **Advantage version 2.10U2** software. All depths in this report are measured depth below Rotary Table (mMDRT) referenced to Australian Height Datum (AHD) unless otherwise stated.

All gas monitoring equipment was calibrated before drilling and checked regularly. Ditch cuttings were continuously collected through the drilling and Calcimetry analysis on cuttings samples was performed at the request of the Wellsite Geologists. Formation pressures and samples were taken with the Schlumberger MDT tool. Two oil samples were collected from a depth of 1582.4mMDRT.

Sampling summary

Cuttings samples were collected at the intervals tabulated below as advised by the Well site Geologists.

751 – 770 m	19 m interval
770 – 1320 m	20 m interval
1320 – 1520 m	10 m interval
1520 – 1760 m	5 m interval
1760 – 1766 m	6 m interval

The following washed samples were combined with the respective next available due to high ROP: 1350m, 1370m, 1440m, 1510m, 1565m, 1745m, 1750m, 1755m

The following unwashed samples were combined with the respective next available due to insufficient cuttings at the shakers:1490, 1520, 1525, 1540, 1545, 1645, 1650, 1665, 1670, 1710, 1725, 1740, 1760 & 1766m.

The following unwashed samples were combined with the respective next available due to insufficient cuttings at the shakers: 1440, 1505, 1510, 1515, 1565, 1745, 1750 & 1755m.

Sample Distribution

Set A (250g Unwashed Cuttings in Hubco bags) to be forwarded to:
3D Oil Limited Kensington Road Self Storage
180 Kensington Road
West Melbourne, Vic, 3003

Set B (250g Washed & Dried Drill Cuttings in polythene bags) to be forwarded to: *3D Oil Limited*
Kensington Road Self Storage
180 Kensington Road
West Melbourne, Vic, 3003

Set C (Samplex Tray) to be forwarded to:

3D Oil Limited
Kensington Road Self Storage
180 Kensington Road
West Melbourne, Vic, 3003

Set D (250g Washed & Dried Drill Cuttings in polythene bags) to be forwarded to:

Victorian Dept of Primary Industries
DPI Core Sample Library
18 South Road
(250 m south of Sneydes Road)
WERRIBEE 3030 (Melway Reference: 206 E8)

Set E (250g Washed & Dried Drill Cuttings in polythene bags) to be forwarded to:

Geoscience Australia
Manager,
Geoscience Australia Data Repositories
Geoscience Australia
Cnr Jerrabomberra Avenue and Hindmarsh Drive,
Symonstonymonston, ACT, 2609

Set F (Mud Sample & Mud Filtrate) to be forwarded to:

3D Oil Limited
Kensington Road Self Storage
180 Kensington Road
WEST MELBOURNE, ViC, 3003

SAMPLE TYPE	No. of Sets	INTERVAL			PACKING DETAILS
		Large Box No.	Small Box No.	Interval (m)	
UNWASHED SAMPLES: Set **A**	**1**	**1**	1	751 – 850	Packed in 3 boxes marked as Set A
			2	850 – 950	
			3	950 – 1050	
			4	1050 – 1150	
			5	1150 – 1250	
			6	1250 – 1360	
			7	1360 – 1430	
			8	1430 – 1490	
		2	9	1490 – 1540	
			10	1540 - 1575	
			11	1575 – 1600	
			12	1600 - 1625	
			13	1625 - 1650	
			14	1650 - 1675	
		3	15	1675 - 1700	
			16	1700 – 1725	
			17	1725 - 1766	
DRILL CUTTINGS 250g: Washed & Air Dried (polythene bags) Sets **B, D** & **E** from 751 – 1766 m	**3**	**1**	1	751 – 990	3 Large boxes marked as Set B, D & E
			2	990 – 1250	
			3	1250 – 1430	
			4	1430 – 1550	
			5	1550 – 1600	
			6	1600 – 1655	
			7	1655 – 1715	
			8	1715 – 1766	
SAMPLEX TRAYS: Set **C**	**1**			751 - 1766	Packed in 1 wooden box marked as Set C
MUD SAMPLES & MUD FILTRATE: Set **F**	**1**			751 - 1766	Packed in one box marked as Set F

Geological formation evaluation

Geological formation evaluation for Wardie-1 commenced from the start of the 311 mm hole section at 751.0 mMDRT to the well's Total Depth at 1766.0 mMDRT. All depths given are measured depths from the Rotary Table (mMDRT).

All gas monitoring equipment was calibrated before drilling each hole section and checked regularly. Calcimetry analysis on cuttings samples was performed at the request of the Wellsite Geologists.

The lithologies encountered at Wardie-1 are described below. For a graphical display of the lithology, see Appendix 1 & 10. The lithological descriptions on the Formation Evaluation Log were provided by the wellsite geologists, with input from the BHI mudloggers.

Sampling Intervals:

751 – 770 m	19 m interval
770 – 1320 m	20 m interval
1320 – 1520 m	10 m interval
1520 – 1760 m	5 m interval
1760 – 1766 m	6 m interval

Description of Samples:

914 mm Section (76.8 – 136.0 mMDRT)
Returns to seabed. No samples.

444 mm Section (136.0 – 751.0 mMDRT)
Returns overboard from CTU deck. No samples.

311 mm Section (751.0 – 970.0 mMDRT)
751.0 to 982.0 mMDRT.

Interbedded CALCISI LTITE, CALCILUTITE, CALCARENITE and LOOSE SAND/SANDSTONE

CALCILUTITE (Trace to 10%): White to pale grey, hard, amorphous, slightly silty.
CALCISILTITE (5 to 65%): Medium grey to olive grey, occasionally black. Soft to hard, firm in places. Moderately to highly calcareous. Minor to common clastic Silt fraction. Grading to fine sand in places.

CALCARENITE (5 to 65%): Light olive grey to olive grey, white to pale yellow. Moderately hard to hard, crushed in places. Very fine to coarse. Angular to sub-angular. Translucent opaque sparry calcite. Minor Silt, minor rounded fine sand in places. Minor black lithics and glauconite. Trace shell fragments. Highly calcareous, well cemented, poor visible porosity. Common calstic Silt fraction.

LOOSE SAND/SANDSTONE (Trace to 5%): Fine to medium, trace coarse to very coarse. Moderately sorted, sub- rounded to rounded. Translucent to transparent quartz, minor orange and yellow quartz. Trace cryptocrystalline pyrite. Minor coarse to very coarse rounded clear to frosted quartz.

982.0 to 1560.0 mMDRT.

Interbedded CALCI LUTITE, CALCARENITE, CALCISILTITE, CALCAREOUS CLAYSTONE.

CALCILUTITE (5 to 100%): Light greenish grey, very light olive to medium olive grey. White to pale grey. Hard, soft to firm in part. Amorphous, sub-blocky, rare sub-fissile. Argillaceous, slightly silty, common unidentified white silty specks. Trace pyrite, glauconite. Loose foraminifera and echinoid spines. Bryozoan fragments. Grading to calcareous Claystone in places.

CALCARENITE (Trace to 10%): Light olive grey to olive grey. Minor white to pale yellow. Dark grey. Moderately hard to hard. Very fine to fine. Angular to sub-angular. Translucent to opaque sparry calcite. Minor silt, minor black lithics, grading to Calcisiltite, trace shell fragments, trace bryozoan and echinoid spines. Highly calcareous, well cemented.

CALCISILTITE (Trace to 95%): Pale to medium grey to olive grey. Dominantly firm to hard. Blocky and sub-fissile. Moderately to highly calcareous. Minor to common clastic Silt fraction. Grading in places to fine sand. Abundant microcrystalline pyrite micro laminae. Possible dolomite cement, indicated by a slower HCl reaction. Trace to very fine dark mafic grains. Rare pyrite, disseminated in places. Common dark specks of carbonaceous material. Rare blocky calcite sparry crystals.

CALCAREOUS CLAYSTONE (50 to 95%): (from 1525m) Light greenish grey to olive grey, brownish grey in places. Firm to hard. Sub-blocky and sub-fissile. Argillaceous. Moderately to highly calcareous. Fine to coarse glauconite pellets and nodules. Trace broken crystalline calcite vein material. Trace foraminifera, echinoid spines, shell fragments and pyrite. Slightly silty in places.

1560.0 to 1596.0 mMDRT

Interbedded SILTSTONE, COAL, SANDSTONE, CALCILUTITE.

CALCILUTITE (5 to 15%): Light grey and light greenish grey to grey, soft to firm, predominantly firm to hard, amorphous to blocky, argillaceous, highly calcareous, common to abundant disseminated fine glauconite pellets in part, grading to calcareous Claystone, silty.

SILTSTONE (20 to 50%): Medium brownish grey to olive grey to brown. Firm to hard. Blocky. Slightly carbonaceous. Slightly calcareous.

COAL (Trace to 70%): Dark brown to black, glossy in part along fractures. Hard. Brittle. Silty in part.

SANDSTONE (Trace to 5%): Fine to very coarse. Poorly sorted. Sub-rounded to rounded. Clear to translucent quartz. Minor glauconite. Traces pyrite aggregates. Fair inferred porosity.

1596.0 to 1714.0 mMDRT

Interbedded SANDSTONE, COAL, SILTSTONE and CLAYSTONE.

SILTSTONE (5 to 80%): Medium brownish grey to olive grey, olive black, brown, pale yellowish brown. Firm to hard, blocky and sub-fissile. Slightly carbonaceous, non to slightly calcareous, Speckled dark brown to black with carbonaceous material and laminations. Grading to very fine Sand in places. Muscovite and fine to medium sand sized glauconite.

SANDSTONE (Trace to 100%): Pale grey to brownish grey, very light grey. Clear to translucent grains. Very fine to granule (grains). Moderately to very poorly sorted. Angular to sub-rounded, rarely sub-rounded, sub-spherical in part. Trace light yellow clay, trace to minor glauconite, trace muscovite, trace pyrite, minor lithics. Inferred silica cemented, but overgrowths not confirmed. Friable to hard, common loose grains. Poor visible porosity.

COAL (Trace to 80%): Dark brown to black. Glossy in places along fractures. Hard, brittle and Silty in places.

1714.0 to 1766.0 mMDRT

SANDSTONE with minor CLAYSTONE and SILTSTONE beds
SANDSTONE (80-100%): Very light grey, white. Translucent to transparent. Fine to coarse grains. Poorly to moderately sorted. Sub-angular to sub-spherical. Trace hard aggregates with siliceous cement. Poor to good inferred porosity.

SILTSTONE (0-20%): Pale yellowish brown, speckled dark brown to black. Firm to hard. Blocky to sub-fissile. Non to slightly calcareous. Rare glauconite. Grading to very find Sand in part.

CLAYSTONE (0-5%): Dark yellowish brown, brownish grey. Firm and sub-fissile.

ROP and gas readings:

311 mm Section (751.0 –1766.0 mMDRT)

Interval (m)	ROP range (m/hr)	ROP average (m/hr)	Total Gas range (%)	Total Gas average (%)
76.8 – 136	8.7 – 74.6	40		
136 – 751	16.9 – 250.2	115.9		
751 – 970	13.8 – 167.0	54.7	0.0019 – 0.0027	0.0023
970 - 1560	15.8 – 380.0	79.7	0.0022 – 0.0813	0.0254
1560 - 1766	1.5 – 66.7	25.7	0.0038 – 1.0564	0.1358

Minimum – maximum chromatograph readings:

311 mm Section (751.0 – 1766.0 mMDRT)

Interval (m)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	iC5 (ppm)	nC5 (ppm)
751 – 970	2 – 7	0 – 3	0	0	0	0	0
970 – 1560	4 – 718	0 – 9	0 – 7	0 – 1	0 – 1	0	0
1560 – 1766	8 – 8576	0 – 147	0 – 66	0 – 50	0 – 39	0 – 39	0 - 21

Oil Shows

The following shows were noted in cuttings from the Latrobe Formation:

(1570-1585m) Trace to 1% pale greenish yellow pin-point fluorescence. Moderately fast to fast blooming, blue- white cut. Thin moderately bright blue green fluorescing residual ring cut fluorescence. Very faint pale tea to pale yellow brown visible residue colour.

(1585-1605m) Trace to 1 % dull pinkish orange flourescence. Slow blooming dull to moderately bright blue white cut. Very thin to thin pale blue green fluorescing residual ring cut fluorescence. No to pale yellow brown visible residue colour.

(1605-1650m) Trace to 2% dull orange yellow fluorescence. No to slow diffuse bluish white cut. No to very thin pale blue fluorescing residual ring cut fluorescence.

(1650-1660m & 1665-1670m) Trace dull yellowish orange fluorescence

Gas Peaks

Depth (mMDRT)	TG (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	iC5 (ppm)	nC5 (ppm)
1579.0	1	4000	60	70	40	30	20	10
1585.0	1	4000	40	20	10	0	0	0
1597.5	.7	4000	60	8	10	0	0	0
1615.0	.6	2500	80	10	0	0	0	0
1619.0	.4	3000	90	0	0	0	0	0
1630.0	.2	1500	50	10	0	0	0	0
1637.0	.15	600	30	0	0	0	0	0
1644.0	.15	1200	110	17	0	0	0	0
1650.0	.18	900	80	15	0	0	0	0

Normalised Gas

A “normalised” total gas curve has been plotted on the Gas Ratio Log (see Appendix 1) for comparison with the regular total gas measurement. The normalised total gas is corrected for flow rate, drilling speed and hole size in an attempt to provide a consistent measure of “actual” mud gas per unit volume that can be compared across the various drilling intervals. The equation for normalised total gas is given below:

Normalised Gas = Total gas x (Total Flow / (ROP x Bit Size^2))

Calcimetry

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
770	64.2	12.2	76.4	1250	54.6	7.9	62.5
790	66.2	12.8	79.0	1270	59.4	5.8	64.9
810	67.4	12.8	80.3	1290	57.8	7.7	65.5
830	61.0	10.3	71.3	1310	41.7	727	49.5
850	70.6	9.6	80.3	1390	41.1	6.4	47.5
870	57.8	8.3	66.2	1410	25.7	5.1	30.8
890	57.8	7.7	65.5	1430	50.7	6.4	57.2
910	38.5	6.4	45.0	1450	48.8	5.8	54.6
930	59.7	12.8	72.6	1470	41.7	3.2	44.9
950	70.6	10.9	81.6	1490	35.3	2.6	37.9
970	73.9	14.8	88.6	1550	31.8	1.9	33.7
990	65.5	12.8	78.4	1570	14.8	0.6	15.4
1010	61.0	13.5	74.5	1590	19.3	0.8	20.1
1030	62.9	11.6	74.5	1610	9.3	0.6	9.9
1050	57.8	10.3	68.1	1630	9.6	0.4	10.1
1070	59.7	11.6	71.3	1650	8.3	0.5	8.9
1090	73.9	11.6	85.4	1670	6.4	0.9	7.3
1110	74.5	10.3	84.8	1690	2.4	0.3	2.7
1130	68.1	12.2	80.3	1710	3.9	0.5	4.4
1150	61.7	9.0	70.6	1730	15.6	0.2	15.8
1170	57.8	6.4	64.2	1740	18.0	1.4	19.4
1190	61.7	9.6	71.3	1760	8.5	0.1	8.6
1210	64.2	12.8	77.1	1766	7.4	0.1	7.5
1230	57.8	6.4	64.2				

MDT sampling (Pressure Sampling)

Two segregated samples were successfully recovered from a depth of 1582.4mMDRT and one sample from 1593.7mMDRT using the Schlumberger MDT tool. Single-phase transfers were performed on the three samples.

A report on the Validity Checks and Analyses of the MDT Samples is included as Attachment 12 and the fluid analyses performed by Petrotech PVT laboratory will be attached to the Wardie-1 WCR Interpretive Data.

MDT sample data

MDT FLUID SAMPLE DATA					
A. Sample Identification					
Run/seat number	Run 2 / Seat 1	Run 2 / Seat 1	Run 2 / Seat 16		
Sample depth	1582.4 mMDRT (1398.8m TVDSS)		1593.7mMDRT (1409.9m TVDSS)		
Pretest volume	20 cc	-	20.4 cc		
Chamber size	450 cc	450 cc	450 cc		
Chamber serial number	#3349	#3300	#3454		
Probe type	Large	Large	Large		
Choke size	N/A				
B. Sampling History					
Date	20-May-08	20-May-08	20-May-08		
Initial hydrostatic	2373.26 psia	-	2389.02 psia		
Tool Set	10:46 hrs	-	17:43		
Pretest start	10:46 hrs	-	17:46		
Initial formation pressure (pre	1983.33 psia	-	1981.9		
Pretest end	11:02	-	17:52		
Pretest duration	*6'00"*	-	*6'4"*		
Pumpout start	11:13	11:54	17:42		
Pumpout end	11:49	12:06	18:07		
Pumpout duration	*33'44"*	*12'07"*	*15'40"*		
Pumpout volume	9.70 litres	5.335 litres	4.365 litres		
OFA indication	Green	Green	Green/Blue		
Interpreted fluid at OFA	Oil	Oil	Oil/Filtrate		
Maximum resisitivity at probe	ohm-m				
Chamber open	11:49	12:06	18:07		
Minimum sampling pressure	920.15psia	899.08psia	239.8 psia		
Final formation pressure	N/A	1982.0 psia	N/A		
Chamber sealing pressure	1929.7 psia				
Seal chamber	11:54	12:09	18:15		
Chamber fill time	*4'57"*	*3'06"*	*8'04"*		
Tool retract	N/A	12:31	18:24		
Final hydrostatic	-	2371.56 psia	2371.5 psia		
Total time	-	*1hr55'*	*41'*		
C. Sample Downhole Temperature And Resistivity					
At sample depth (AMS)	52.2 degC	53.4 degC	56.2 degC		
Rm@sample depth (AMS)	0.063ohm-m	0.062ohm-m	0.060ohm-m		
D. Sample Recovery At Surface					
Surface opening pressure	3850 psig	1100 psig	0? psig		
Volume gas	cuft				
Volume oil/condensate	0.300 litres	0.380 litres		(Total volume of all Fluids combined)	
Volume water/filtrate	litres		0.380 litres		
E. Mud Filtrate Properties					
Rmud @ degC	0.112ohm-m@20.2degC				
K+ ion calculated from KCl%	- mg/l				
Chlorides titrated	38,000 mg/l				
pH	9				
Tritium	N/A DPM				
F. General Calibration					
Reported mud weight	9.33 ppg				
Calculated hydrostatic	*2287 psia*		*2304.6 psia*		

MDT Pressure point data

Wardie-1 - MDT PRESSURE POINT & SAMPLING PROGRAMME

sampling points
LFA FLUID CONFIRMATION
pressure test point

Pressure Point #	Actual Depth mMDRT	Actual Depth mTVDRT	Actual Depth mTVDSS	Depth ftTVDSS	Time Pad Set	CQG Initial Hydrostatic Pressure psia	CQG Final Hydrostatic Pressure psia	Drawdown Volume cc	CQG Flowing Pressure psia	CQG Final Buildup Pressure psia	strain Final Buildup Pressure psig	PTA standard cylindrical mtd Mobility md/cp	Temp. deg C	Remarks
1	1582.4	1437.1	1399.1	4590.45	10:46				900.00	1981.61	1970.88		55.0	went straight to pump-out; attempted pressure determination after, but not fully stabilised
1	1582.4	1437.1	1399.1	4590.45	12:15		2371.56	10.0		1982.00	1971.39	6.6	53.5	
2	1584.0	1438.3	1400.6	4595.37	12:46	2378.99	2371.63	10.0	1700.00	1984.20	1973.37	233.9	52.8	
3	1581.0	1435.4	1397.7	4585.85	13:19	2369.25	2369.30	10.1		2024.33	2013.30	1.3	53.1	supercharged - stable buildup pressure not obtainable
4	1574.5	1429.0	1391.3	4564.86	13:29	2358.75		3.6		1994.11	1982.99		53.1	supercharged
5	1574.0	1428.5	1390.8	4563.21	13:37	2358.20		10.1		1991.49	1980.54		53.0	supercharged; after pumpout, aborted buildup at 1986.6 not stabilised.
6	1573.8	1428.3	1390.6	4562.56	14:43	2357.82	2357.81	6.8		1989.97	1978.49		54.7	supercharged
7	1578.4	1432.8	1395.1	4577.32	14:59	2365.17		10.1					54.5	supercharged
8	1591.4	1445.6	1407.9	4619.32	15:26	2385.58		10.1					55.0	
9	1593.5	1447.6	1409.9	4625.88	15:34	2388.70		3.5					54.7	
10	1602.0	1456.0	1418.3	4653.44	15:50	2402.82	2402.95	10.0		1986.86	1975.90	12.3	54.8	valid test
11	1609.0	1462.9	1425.2	4676.08	16:04	2414.32	2414.40	10.0		1991.06	1980.21	34.7	55.2	valid test
12	1613.5	1467.3	1429.6	4690.52	16:20	2421.55	2421.64	10.1		1996.45	1985.47	17.1	55.2	valid test
13	1624.0	1477.7	1440.0	4724.64	16:41	2438.68	2438.78	10.1		2012.74	2001.74	3155.9	56.5	valid test
14	1656.5	1509.8	1472.1	4829.80	16:57	2491.75	2491.82	10.1		2064.45	2053.57	92.8	55.7	valid test
15	1681.5	1534.5	1496.8	4910.90	17:12	2533.00	2533.02	10.2		2101.91	2091.13	246.1	56.1	valid test
16	1593.7	1447.8	1410.1	4626.54	17:41	2389.02	2371.53	10.0		1981.85	1970.60	574.0	56.2	valid test
17	1580.9	1435.3	1397.6	4585.53	18:49	2366.70		10.0					56.4	tight, or probe blocked?
18	1580.7	1435.1	1397.4	4584.87	19:06	2367.76	2367.84	6.3					55.3	tight, or probe blocked?

Conventional Cores

No conventional cores were cut in Wardie 1.

Percussion Sidewall Cores

No percussion sidewall cores were acquired in Wardie 1.

Logging While Drilling (LWD)

MWD/LWD services were provided by Schlumberger and full details of their operation are recorded in their End of Well Report included herein as Enclosure 4. LWD operations are briefly summarised below.

LWD Run Summary 1

To be filled in at the end of each run by the LWD Engineer and verified by the Well Site Geologist

General Data							
Well Name	Wardie-1	**MWD Run#**	1	**Date**	12-May-2008	to	13-May-2008
Service Company	Schlumberger D&M	**BHA#**	2	**Drilled Interval**	136m MDRT	to	751m MDRT
UWI				**Wiped Interval**	N/A	to	
Engineers	**Anagh Kohli, S Aung**						

Hole Data									
Hole Size	17.5 in	**Inc Start**	0.97°	**Inc End**	34.35°	**Azi Start**	331.19°	**Azi End**	239.86°

Mud Data							
Mud type	Seawater with PHG sweeps	**Mud Weight sg**	1.06	**PV / YP**	24 / 103	**Cl mg/l**	-
% HG Solids	1.2	**K+ mg/l**	-	**Rmf**	-	**Rm**	-

Drilling Data							
Metres Drilled	615	**Avg ROP m/hr**	91.79	**Avg WOB klb**	19	**Avg Torque kftlb**	1-5
RPM	45-100	**Flow Rate GPM**	600-1150	**SPP psi**	650-2575	**BHCT**	21-23°C

Bit Data							
Make	Hughes Christensen	**Type**	Milled Tooth	**Depth In**	136m	**Depth Out**	751m
Number Jets	3	**Sizes**	20/32”	**Condition Out**		1-1-NO-A-E-I-NO-TD	

BHA Data														
BHA Item	Bit	Mud Motor	String Stab	Cross Over	Float Sub	NM Pony Collars	Cross Over	MWD	NM Drill Collars	Drill Collars	Jar	Drill Collars	Cross Over	HWDP
OD (in)	8.75	9.63	9.50	9.50	8.00	7.94	8.50	8.25	8.00	8.00	8.00	8.00	8.25	5.50
ID (in)	3.75	7.88	3.00	3.00	2.88	2.88	2.88	5.90	2.81	2.81	3.00	2.81	2.81	3.25
Length (m)	0.41	10.10	2.42	1.23	0.80	7.00	0.47	8.49	18.96	37.63	9.68	18.89	1.22	112.71
Total (m)	0.41	10.51	12.93	14.16	14.96	21.96	22.43	30.92	49.88	87.51	97.19	116.08	117.30	230.01

MWD / LWD Tool Data				
Tool Type	**TeleSCOPE**			
Sub Type	**MWD**			
Tool OD / ID (in)	OD=8.25 ID=N/A			
Mem Sample Rate (sec)	N/A			
Bit to Sensor Offset (m)	26.56			
First Reading (m)	N/A			
Flow Rate Range for Pulser Configuration			600-1200 GPM	

Data Acquisition				
	Pressure	**Gamma**	**Resistivity**	
Interval Logged (m)	N/A	N/A	N/A	
Meters Logged, %				
Meters Bad Data / Interval, %				
Meters No Data / % Interval (m)				

Density Calibration (Calibration filename format = ADN, Size, S/N, Date mmddyy, Time hhmm)	
Pre Run Calibration file	N/A
Post Run Calibration file	N/A
Comments	LWD tools not run

MWD/LWD Time Analysis					
Date & Time In	12/05/08 19:30 hrs	**Drilling time**	13 (6.7 on bottom)	**% Total**	44.0 (23.9)
Date & Time Out	13/05/08 23:30 hrs	**Wiping Time**	0	**% Total**	0
Time In Hole (hrs)	28.0	**Tripping Time**	13 (16.1)	**% Total**	44.0 (57.5)
Pumping time (hrs)	11.9	**Down Time / Other**	2 (0)	**% Total**	6.9 (0)
		Circ Time	1.5 (5.2)	**% Total**	5.1 (18.6)

Remarks: D&I run only. Objective was to kick the well off and stop in the tangent section. No MWD GR or LWD tools were run in the string. The run was successful. At the end of the run the actual well path was 1.5m to the right and 2.5m above the proposed line. Centre to centre was 2.21m at 751 mMDRT (706.8 mTVDRT). Note – IADC times given in centre time analysis column. Times in parentheses are from DD breakdown. “Other” time is for Gyro survey.

LWD Run Summary 2

To be filled in at the end of each run by the LWD Engineer and verified by the Well Site Geologist

General Data

Well Name	Wardie-1	**MWD Run#**	2	**Date**	16-May-2008	to	20-May-2008
Service Company	Schlumberger D&M	**BHA#**	3	**Drilled Interval**	751m MDRT	to	1766m MDRT
UWI				**Wiped Interval**	N/A	to	
Engineers	**Anagh Kohli, S Aung**						

Hole Data

Hole Size	311mm / 12¼"	**Inc Start**	32.02°	**Inc End**	7.36°	**Azi Start**	241.09°	**Azi End**	234.18°

Mud Data

Mud type	KCl Polymer WBM	**Mud Weight sg**	1.07 – 1.13	**PV / YP**	13 / 30	**Cl mg/l**	33,000 – 38,000
% HG Solids	0.1-0.5 %	**K+ mg/l**	43, 000	**Rmf**	0.1168 ohm-m - 15.9°C	**Rm**	0.1222 ohm-m - 16.0°C

Drilling Data

Metres Drilled	1015	**Avg ROP m/hr**	52.3	**Avg WOB klb**	20	**Avg Torque kftlb**	8.84
RPM	79-241 (156)	**Flow Rate GPM**	960-1125 (1105)	**SPP psi**	1219-2186 (1811)	**BHCT**	50.2°C

Bit Data

Make	Hycalog	**Type**	PDC	**Depth In**	751m	**Depth Out**	1766 m
Number Jets	6	**Sizes**	15,15,15,16,16,16	**Condition Out**		3-3-WT-A-X-I-CT-TD	

BHA Data

BHA Item	Bit	RSS BU	RSS	LWM	MWD	Drill Collars	Drill Collar	JAR	Drill Collars	XO	HWDP
OD (in)	12.25	9.25	9.25	8.25	8.25	8	8	8	8	8	5.5
ID (in)	3.25	3	6	3.9	5.9	2.8	2.8	3	2.8	2.81	3.25
Length (m)	0.3	4.22	4.82	4.22	8.49	8.65	9.45	9.68	9.44	1.22	112.71
Total (m)	0.3	4.52	9.34	13.56	22.05	30.7	40.15	49.83	59.27	60.49	173.2

MWD / LWD Tool Data

Tool Type	**RAB 8**	**RAB 8**	**RAB 8**	**RAB 8**	**RAB 8**	**TeleSCOPE**
Sub Type	**Gamma**	**Resistivity**	**Resistivity**	**Resistivity**	**Resistivity**	**MWD**
Tool OD / ID (in)	8.25 / 3.90					8.25 / 5.9
Mem Sample Rate (sec)	5 sec	5 sec	5 sec	5 sec	5 sec	N/A
Bit to Sensor Offset (m)	10.51	Shallow=11.28	Medium=11.15	Deep=10.98	Ring=10.77	Survey=17.68
First Reading (m)	747	747	747	747	747	802.8
Flow Rate Range for Pulser Configuration				600-1200 GPM		

Data Acquisition				
	Pressure	**Gamma**	**Resistivity**	
Interval Logged (m)	N/A	747.0 - 1756.2	747.0 - 1756.0 (Ring)	
Meters Logged, %	N/A	1009.2 / 99.9	1009 / 99.9	
Meters Bad Data / Interval, %	N/A	0	0	
Meters No Data / % Interval (m)	N/A	10.5 / 0.1	10.7 / 0.1	

Density Calibration	(Calibration filename format = ADN, Size, S/N, Date mmddyy, Time hhmm)
Pre Run Calibration file	N/A
Post Run Calibration file	N/A
Comments	ADN tool not run.

MWD/LWD Time Analysis					
Date & Time In	16/05/08 14:00 hrs	**Drilling time**[1]	35.5 (19.4)	**% Total**	41.3 (23.5)
Date & Time Out	20/05/08 00:30 hrs	**Wiping Time**	0 (7.25)	**% Total**	0 (8.8)
Time In Hole (hrs)	82.5	**Tripping Time**	30.0 (30.35)	**% Total**	34.9 (36.8)
Pumping time (hrs)	44.9	**Down Time / Other**	5.0 / 7.5	**% Total**	5.8 / 8.7
		Circ Time	8.0 (25.5)	**% Total**	9.3 (30.9)

Remarks: The objective of this run was to continue the tangent section and drop angle through the target horizons to TD. At TD the centre-to-centre distance from the actual well path to the plan was 2.19m. The quality of both real time and memory logs was good (ROP was controlled at 30m/hr maximum through the target to ensure good RT data was available). RT log quality was sufficient for well correlation and first indications of possible pay zones. No intervals of bad or missing data were present.

Times in parentheses in the LWD Time Analysis are from the DD, including actual on bottom drilling hours. The remaining times are taken from the DDR breakdown. All "Down Time" is rig related repairs, not LWD related. "Other" time includes the FIT and washing/drilling on cement

[1].

Wireline logging

Wireline services were provided by Schlumberger and full details of their operation are recorded in their End of Well Report included herein as Enclosure 5.

A single open hole logging suite (Suite 1) was recorded in Wardie 1. Suite- 1 was recorded across the 311mm (12 1/4") open hole section and consisted of two attempted logging runs.

Schlumberger wireline logging operations and summary of parameters:

Date	20/May/08									
Log Run Number (Suite / Run):	1	/	1							
Surface Temperature	10°C									
Depth Driller:	1766	metres								
Depth Logger:	1760	metres								
Bottom Log Interval:	1760	metres								
Top Log Interval:	1300	metres								
Casing Driller:	747	metres			Size:	13⅜"	Weight:	68 lbs/ft	ID:	12.415
Casing Logger:	746.5	metres								
Bit Size	12.25	"								
Type of Fluid in Hole	KCl/PHPA									
Density	9.5	ppg			x	Barite		Hematite	x	Other (Salt)
Viscosity	56				Titrated Chlorides	38,000	Nitrates			
pH	9				Titrated Calcium	400	Potassium			
Fluid Loss	11.6	HPHT			Barite	0.1	%	Oil / Water Rati		
Source of Sample	Flowline				Use a circulated mud sample for each analysis.					
Rm	0.112	@	20.2	°C						
Rmf	0.099	@	19.8	°C	0.0901	@ 23.9°C (75°F)				
Rmc	0.13	@	20.7	°C						

Log	Track	Scale Range		Comments (units, line codes, etc.)
GR	1	0	150	
SP				n/a
Caliper	1	10	20	Appropriate 10" range
Bit Size	1	6	16	Appropriate 10" range
Resistivity	2	0.2	200	
Density	3	1.65	2.65	
Correction	3	-0.9	0.1	
Pe	3	0	20	
Neutron	3	60	0	
Sonic	3	240	40	
Tension	Depth	10,000	0	

Drill stem testing

No DST was run in Wardie 1.

Biostratigraphy

No palynology samples collected.

ATTACHMENTS

Attachment 1: Well Montage

Attachment 2: Bit and BHA Record

Attachment 3: Mud Report

Attachment 4: Casing Report

Attachment 5: Cementing Report

Attachment 6: LOT/FIT Report

Attachment 7: Directional Drilling Report

Attachment 8: Activity Summary Reports

Attachment 9: Well Cost Summary

Attachment 10: Description of Cuttings

Attachment 11: Daily geological Reports

Attachment 12: Validity checks and analyses of MDT Samples

Attachment 13: PVT Report

LIST OF ENCLOSURES

Enclosure 1: Gas Log Plot

Enclosure 2: Drilling Data Plot

Enclosure 3: Mud Log Plot

Enclosure 4: LWD Log Plot

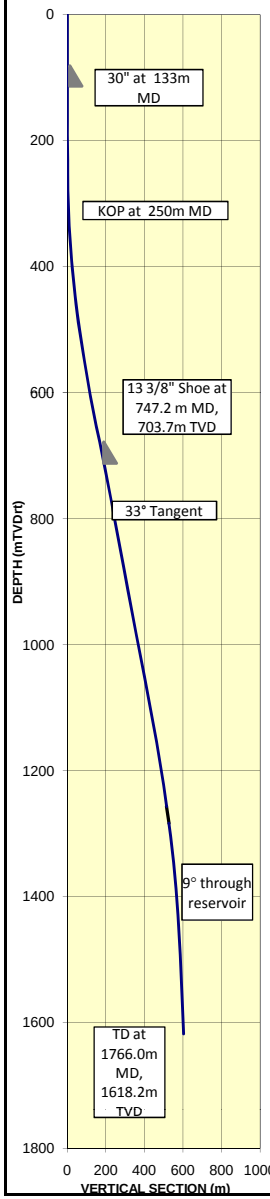
Enclosure 5: Wireline Log Plot

Attachment 1

Well Montage

Wardie-1 Post Well Summary

PROJECT:	Bass Strait Consortium	SURFACE LOCATION:	Latitude 38° 12' 24.881"S	DATUM:	Rotary Table	LICENSE:	VIC P57	PREPARED BY:	Manelle Moussa
WELL:	Wardie-1		Longitude 147° 37' 09.793" E	ELEVATION ABOVE MSL (m):	37.7	BASIN:	Gippsland	APPROVED BY:	Rajiv Tikkoo
CLASSIFICATION:	Exploration Well	UTM:	GDA94 Zone 55	WATER DEPTH (m):	39.5	STATE:	Victoria	LAST UPDATED:	26/06/2008
RIG:	West Triton		5 771 046.028m N; 554 227.625m E	WELL SLOT:	2	OPERATOR:	3D Oil Ltd.		



PROGNOSED FORMATION DEPTH	mTVDss	mTVDrt	mMDrt	CASING SHOES	Hole Size / Casing Depth (mMDrt)	CASING SIZE	CASING WEIGHT (ppf)	CASING GRADE	CASING CONNECT-ION	PORE PRESSURE GRADIENT (ppg)	FRACTURE GRADIENT (ppg)	BHST 0.04°C/m, 10°C at mudline (74m TVDrt)	MUD PROGRAM
Seabed	39.5	77.2	77.2		36"					Normal 8.4ppg			Seawater & High Viscosity Bentonite Sweeps MW = 8.70ppg Funnel Viscosity >100 sec 6rpm >40 pH = 9-10 Gel 10sec >15lb/100sqft Gel 10min >40lb/100sqft
Gippsland Limestone						30"	1" wall	X52	D60/MT		12ppg @ 200m	20°C	
					17.5"					Normal 8.4ppg			Seawater - Bentonite MW =9ppg Funnel Viscosity 50-80 sec pH = 8.0-9.5
	860	898	978			13.375"	68	N80	BTC		15ppg at 1000mTVDrt	48°C	
Lakes Entrance					12.25"					Normal 8.4ppg			KCl / PHPA / CLAYSEAL MW = 8.8-9.4ppg 6rpm = 13-16 API Flitrate <6 HTHP Filtrate <12 KCl = 6-8% by weight Excess PHPA >1ppb LGS <10% by vol ClaySeal = 2% by vol pH = 8.8-9.5 Residual Sulphite > 100mg/L Ca<400mg/l
Latrobe Group	1345	1383	1532										
TD	1580	1618	1766			Open Hole					17ppg at 1700mTVDrt	76° at TD	

CEMENTING PROGRAM	Additives	Density	TOC	Excess
Single Slurry	Class G + 1% Calcium Chloride + NF-6 Seawater	15.9ppg	mudline 77.5m MDrt	200%
Cement PLUG #3	Class G,+ CFR-3L + NF-6, + HR-6L Drill water	15.8ppg	95-157m	
Single Slurry	Class G + CFR-3L + NF-6 + HR-6L Seawater	15.9ppg	mudline 432m MDrt	10%
Cement PLUG #2	Class G + CFR-3L + NF-6 + HR-6L Drill water	15.9ppg	805-700m	
Cement PLUG #1B	Class G + CFR-3L + NF-6 + HR-6L Drill water	15.8ppg	1616-1407m	
Cement PLUG #1A	Class G + CFR-3L + NF-6 + HR-6L Drill water	15.8ppg	1776-1616m	

SURVEY PLAN	BITS AND BOTTOM HOLE ASSEMBLIES	FORMATION EVALUATION
Anderdrift	Bit & Hole Opener 26" Reed Y11C Bit + 36" HO Float Sub Anderdrfit Pulser Stabilizer 2 x 9.5" Collar 9.5" Crossover 5x 8 1/4" Collar 8 1/4" Crossover 12 x 5.5" HWDP	NA
MWD-DIR every 30m Gyro kick-off	17.5" Motor BHA 17.5" Hughes MXL-T1V Bit Motor Schlumberger A962M7848GT Stabilizer Crossover Float Sub 8" Pony NMDC (2 joints) PowerPulse HF MWD UBHO 8" NMDC (2 joints) 3 x 8 1/4" Collar (3 joints) Drilling Jar 8" 2 x 8" Collar (2 joints) Crossover 5 1/2" HWDP (18 joints)	Cuttings Sampling: Every 20m
MWD DIR-GR-RES	12 1/4" RSS/LWD BHA 12 .25" Reed RSX 616 PDC Bit PD 900 AA 12 1/4" Power Drive Unit PD 900 Receiver w/float PD 900 Flex Collar GVR-8 (Model RAB-8) PowerPulse HF 8" NMDC 8 1/4" Collar (1 joint) Hydraulic Jar HDL-100 8" Collar (1 joint) Crossover 7 1/4" HWDP (12 joints)	Wireline Logging 1. PEX-HRLA-BHC 2. MDT (Pressure & Sampling) Cuttings Sampling: Every 10m above Latrobe Every 5m thereafter

PRIMARY TARGET: 5770783 N, 553751 E
TARGET TOP: 1400m TVDss
SECONDARY TARGET: 5770768 N, 553723 E
TD: 1600m TVD SS

WELL PATH: Deviated
MAX ANGLE: 34.9°

OIL GRAVITY: 48 API
H_2S: 200ppm (separated reservoir gas)
CO_2: Trace amounts

SEISMIC LINE: INLINE 1500

KICK TOLERANCE
12.25": 72bbl*
*Based on MW of 9.5ppg, and pore pressure of 8.4ppg

OFFSET WELLS: West Seahorse-1, West Seahorse-2, Seahorse-1, 2, Harlequin-1

Attachment 2

Bit and BHA Record

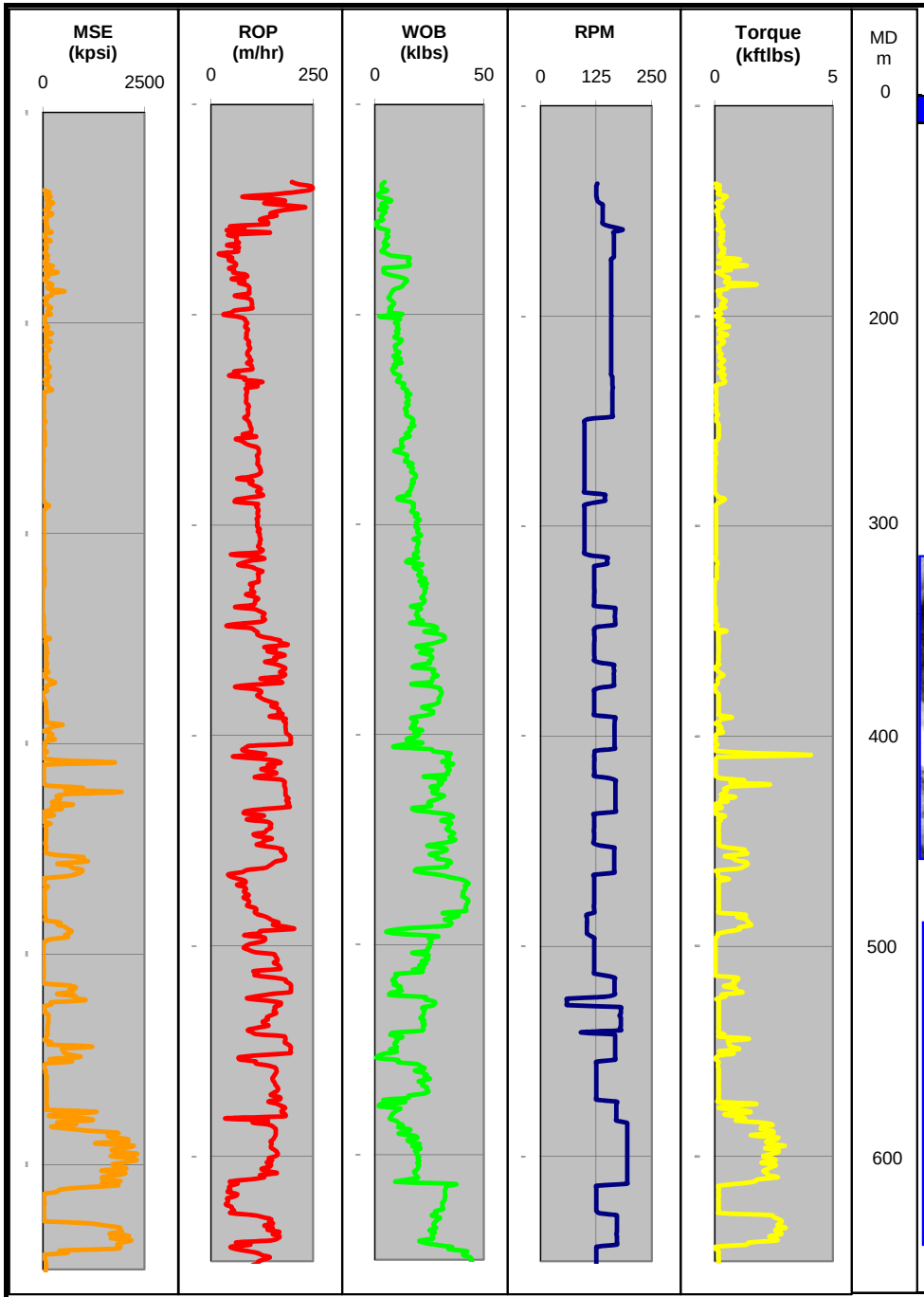
DFE above MSL : 38.0m | Lat : 38 Deg 12 Min 25.077 Sec | Spud Date : 10 May 2008 | Release Date : 25 May 2008

Water Depth : 39.5m | Long : 147 Deg 37 Min 9.810 Sec | Spud Time: 19.30 | Release Time: 22.30

Bit Record

Well: Wardie-1

Date In	Date Out	IADC	Bit#	Size (in)	Ser #	Mfr	Type	Jets	TFA	D.In (m)	D.Out (m)	Prog (m)	Hrs IADC	ROP (ft/hr)	SPP (psi)	Flow (gpm)	WOB (klb)	RPM	MW (sg)	I	O1	D	L	B	G	O2	R
10 May 2008	11 May 2008	1-1-1	1RR	26.00	34406	REED	Y11C	1 x 16 3 x 22	1.31	76.8	136.0	59.2	5	11.84	950	800	4.00	120	1.06	1	1	WT	A	NB	I	RR	TD
12 May 2008	13 May 2008	115	2	17.50	6065891	HUGHES	MXL-T1V	3 x 20	0.92	136.0	751.0	615	13	47.31	2575	1150	5000.00	60	1.06	1	1	NO	A	0	I	NO	TD
16 May 2008	19 May 2008	M422	3	12.25	218629	Reed Hycalog	RSX616MA16	3 x 15 3 x 16	1.107	751.0	1766.0	1015	35.5	28.59	2250	1100	20.00	160	1.08	3	3	WT	A	X	I	CT	TD



Bit Run Report

BAKER HUGHES Hughes Christensen

Photos

17 1/2" MXL-T1V

New Bit

Top View

Side View

Well Data

Well Name	WARDIE 1
Field	Gippsland Basin
Operator	3D OIL
Contractor	SeaDrill
Rig Name	WEST TRITON
DD Co.	Schlumberger
Date In	11-May-08
Date Out	17-May-08

Bit Data

Size / Run #	17.5"	Nozzles	3x20
Type	MXL-T1V	TFA (in^2)	0.921
Serial No.	6065891	Cutter size	-

Mud

Type	PHB	
M.W.	1.13	Sg
P.V.	5	cp
Y.P.	15	lb/100ft²

Hydraulics

SPP (psi)	3100
Flow (gpm)	1150
Bit Pressure	-
H.S.I	3.77

Bit Performance

In	Out	Mtr	Hours	ROP	WOB	RPM	V/D
136	751	615	13.9	44.2	25	148	D
IADC Hours			15	41.0	M/Hr IADC ROP		
TVD (In/Out)		136	707	Inc (In/Out)		0°	34.3
Vert. Sec				Azm (In/Out)			

Rig Dull Grading

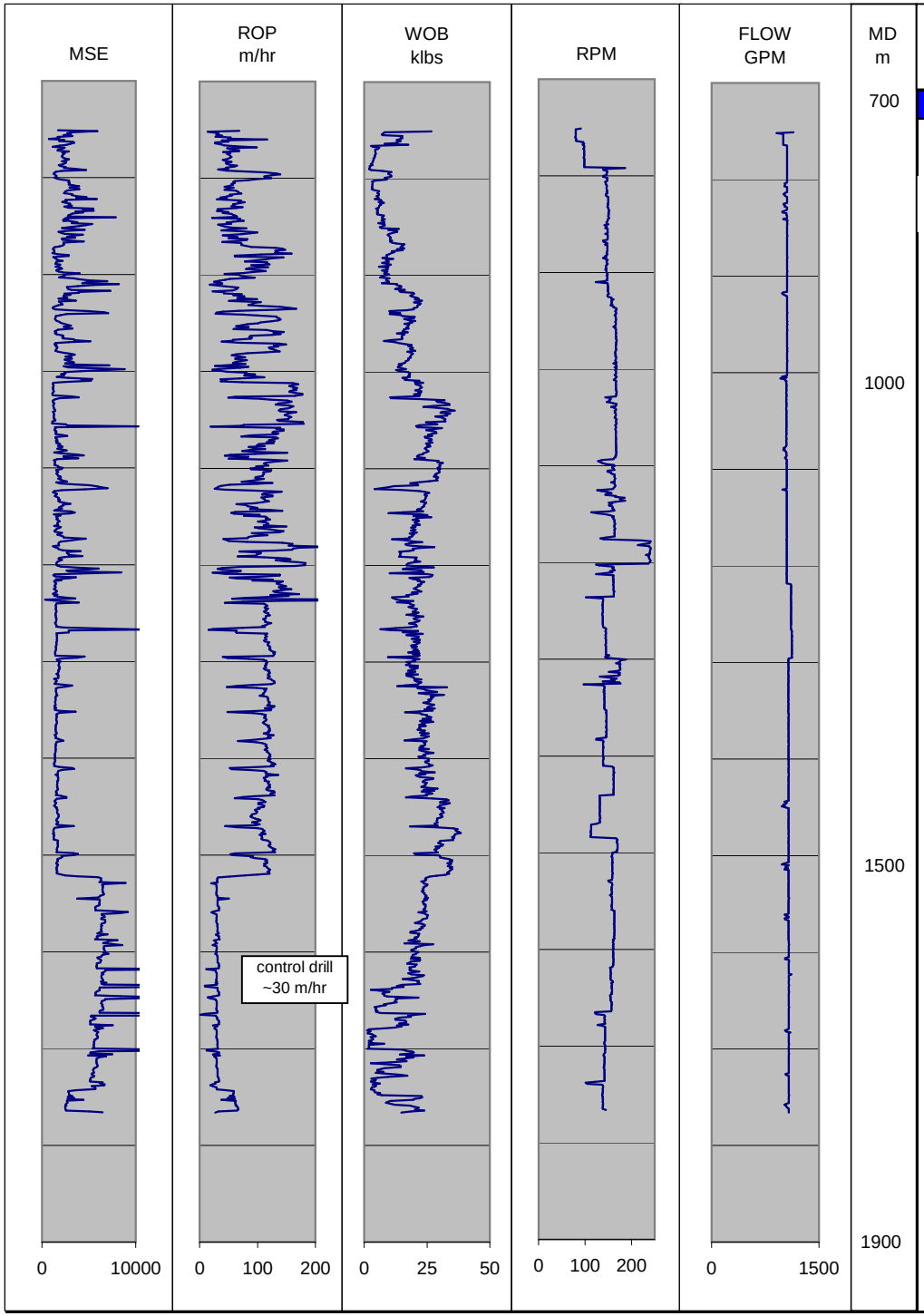
1	1	NO	A	E	I	NO	TD

Hughes Christensen Dull Grading

NOT GRADED

Comments

The 17.5" MXL-T1V is the new FASTMAX Rollercone product line, and was run on Mud Motor to drill the upper section through the Gippsland Limestone and kick off for directional into the Lakes Entrance Formation.Inclination build and hold to +/- 27º. The bit drilled this section in 1 run. MSE shows very efficient drilling to about 600mMD through the Gippsland Limestone. MSE increases in the transition into the Lakes Entrance formation with Torque increasing. The dull grading indicates that higher WOB may have improved performance through Lakes Entrance Formation.



Bit Run Report

REEDHycalog™
A Grant Prideco Company

Photos

12.25" RSX616M-A16

New Bit

Top View

Side View

Well Data

Well Name	Wardie 1
Field	West Sea Horse
Operator	ADA
Contractor	Seadrill
Rig Name	West Triton
DD Co.	Schlumberger
Date In	16-May-08
Date Out	18-May-08

Bit Data

Size / Run #	12.25"	Nozzles	3x15, 3x16
Type	RSX616M-A16	TFA (in^2)	1.107
Serial No.	218629	Cutter size	16mm

Mud		Hydraulics	
Type	WBM (KCL/Polymer)	SPP (psi)	2000
M.W.	9.6	Flow (gpm)	1100
P.V.	UNK	Bit Pressure	890
Y.P.	UNK	H.S.I	4.8

Bit Performance

In	Out	Mtr	Hours	ROP	WOB	RPM	V/D
751	1766	1015	19.3	52.59	20	150	D

IADC Hours		-	-	M/Hr IADC ROP	
TVD (In/Out)	-	-	Inc (In/Out)	34.4	7.4
Vert. Sec	-		Azm (In/Out)	240	234

Rig Dull Grading

3	3	WT	A	X	I	CT	TD

REEDHycalog Dull Grading

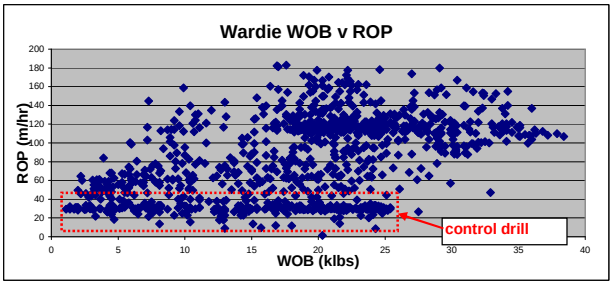
NOT GRADED

Comments

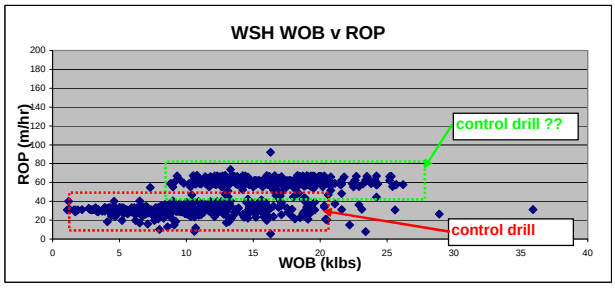
The RSX616M-A16 is a high Open Faced Volume bit designed for efficient cleaning and cuttings removal. Bit run on SLB's Power Drive tool with good directional control.

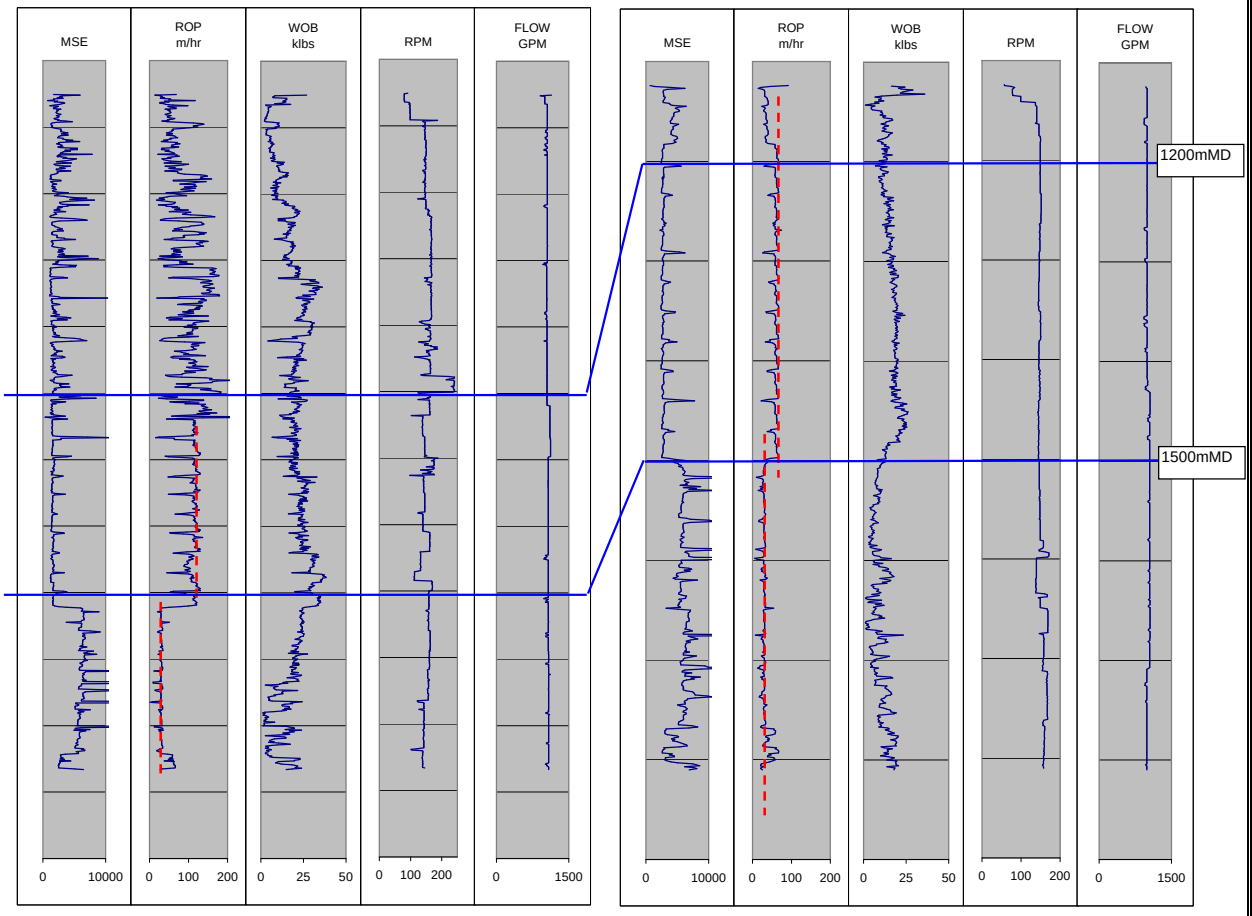
Excellent performance achieved by this bit. ROP >100 m/hr consistently throughout the run. Control drilling from ~1535m @ 30 m/hr for LWD logging was undertaken. Generally, WOB averaged around 20 klbs, and RPM ~150. Minor hard quartzitic sandstone stringers slowed ROP down to 2 m/hr in some parts. Good dull condition - even amounts of wear on inner and outer cutters, showing only minimal signs of mechanical damage. Bit built angle to ~35º and then dropped to almost vertical successfully. Consistent DLS of > 2.0º achieved in build and drop.

Wardie 1



WSH 3





Comments:

Both RSX616M-A16 bits used on West Seahorse 3, and Wardie 1 showed good performance throughout the completed interval. However the average performance on the Wardie 1 well was much better than the West Seahorse well.

Plotting the data for both wells shows some interesting commonalities. Both wells control drilled the Latrobe formation at 30 m/hr, from about 1500m on each well.

In the period between 1200m - 1500m, both wells exhibit very consistent ROP's. Wardie 1 drilled @ ~ 120m/hr for this interval, whilst West Seahorse only drilled at 60 m/hr for this interval. The consistency of the achieved ROP on each respective well seems to suggest that the section was control drilled. The information received from location, does not report that any special operations were undertaken through this interval.

As can be seen from the charts (top), the WOB on Wardie 1 was generally higher than the WOB run on West Seahorse 3, which can account for the increase in ROP achieved. It is suggested that a WOB of ~25+ klbs be run for best ROP performance.

High HSI 's on each run may have contributed to better performance, as the softer lithology of the Lakes Entrance formation responds well to hydraulic energy.

REED Hycalog
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PERFORMANCE DRIVEN TECHNOLOGY™

Attachment 3

Mud Report

HALLIBURTON

Fluid Systems

BAROID FLUID SERVICES RECAP

3D OIL AUSTRALIA PTY LTD
WEST TRITON
BASS STRAIT, VICTORIA

Wardie 1

Prepared by: B Auckram
G Lange
J Munford

Date: May, 2008

Table of Contents

1. WELL SUMMARY

1.1 Well Data

Well Name	:	Wardie 1
Operator	:	3D Oil Australia Pty Ltd
Well Type	:	Vertical/Exploration
Bottom Hole Temperature	:	58º C
Maximum Inclination	:	28.5º
Location	:	VIC P57, Gippsland Basin, Victoria
Contractor/Rig	:	West Triton
Start Date (Rig)	:	09/05/2008
Baroid On Location	:	09/05/2008
Drill Out Date	:	11/05/2008
RT to Mudline	:	77.5 m
Total Depth	:	1766m
Date TD Reached	:	18/05/2008
Total Days Actual Drilling	:	6
Date Released	:	25/04/2008
Total Days on Well	:	17
Drilling Cuttings Volume	:	290m^3

Formation Tops

Formation	MDRT (m)	TVDRT (m)	Length (m MD)
Gippsland	77.5	77.5	
Lakes Entrance	982	903.3	904.5
Gurnard Formation	1523	1379.4	541
Top N1			
Top N2.3	1653	1506.6	130
Top N2.6	1677.5	1530.8	24.5
Top P1			
Total Depth	1766	1618.2	88.5

1.3 Casing Program

30	Conductor	@	132 m MDRT
13 $^{3}/_{8}$	Intermediate Casing	@	747 m MDRT

1.4 Personnel

Drilling Supervisors	:	Shaughan Corless	Rocco Moussow
	:		Stefan Schmidt
Baroid Field Service Reps.	:	Brian Auckram	Gerald Lange
		James Munford	

2. COST SUMMARY

2.1 Drilling Fluid Costs

	Drilling Fluid	Hole Size	MD From	MD To	Cost USD $
1.	Seawater and Viscous Sweeps Pad Mud / Displacement Mud	36” x 17.5”	77.5m (36”) 136m (17.5”)	136m (36”) 751 m (17.5”)	13,197.52
3.	KCL/POLYMER	12 $^{1}/_{4}$”	751 m	1766 m	98,004.31

Mud Materials Used For Drilling	**USD $**	**111,201.83**
Mud Materials Used For Cementing	**USD $**	**414.60**
Mud Materials Used For Completion	**USD $**	**0**
Other Materials Used (Cleaning Pits & Rig Cleaning)	**USD $**	**0**
Products Lost / Damaged	**USD $**	**0**
Solids Control / Waste Management Cost	**USD $**	**0**
Total Materials	**Total USD $**	**111,616.43**

2.2 Engineering Costs

Service Representatives	From (date)	To (date)	Days
Brian Auckram	09/05/08	15/05/08	7
Gerald Lange	09/05/08	21/05/08	13
James Munford	15/05/08	25/05/08	10
Edwards Eugene	22/05/08	25/05/08	4
Total Days:			34
Service Cost	**@ USD $ 1250**	**USD $**	**42,500**
Total Cost of Materials & Engineering:		**USD $**	**154,116.43**

3. PERFORMANCE SUMMARY

3.1 Comments

The Jack-up West Triton was moved from the West Seahorse -3 location to Wardie - 1 location on the 9th May 2008.

3.2 Performance Indicators

Interval 1. (77.5m–751 m) – 36"x 17.5" Interval	**Program**	**Actual**	**Achieved (+/- 10 %)**
• Drilled, m	676	673	Yes
• Volume Built, bbl	3967	3891	Yes
• Dilution Rate, bbl/m	NA	NA	NA
• Consumption Rate, bbl/m	5.87	5.78	Yes
• Mud Cost / bbl, US$	7.14	3.39	No
• Mud Cost / m, US$	41.89	19.61	No
• Interval Mud Cost, US$	28,314.15	13,197.52	No

Interval 2. (751m – 1,766m) – 12.25 " Interval	**Program**	**Actual**	**Achieved (+/- 10 %)**
• Drilled, m	743	1015	No
• Volume Built, bbl	2704	2864	Yes
• Dilution Rate, bbl/m	1.75	1.95	No
• Consumption Rate, bbl/m	3.64	2.86	No
• Mud Cost / bbl, US$	46.31	34.22	No
• Mud Cost / m, US$	168.54	96.56	No
• Interval Mud Cost, US$	125,222.76	98,004.31	No

3.3 Explanation of Non-Conformance

Interval 1: 36" and 17.5"

The volume of Pre-Hydrated Bentonite (PHB) mud built for sweeps and the cost was lower then programmed. This was due to amount of PHB built during the P & A of West Seahorse-3.

Drilling the 17.5" section, seawater was used with 30 bbls of flocculated PHB high viscosity sweeps pumped on every 15m drilled and 30 bbls of PHB spotted on bottom on connections. At TD 751m, two 100 bbls PHB sweep was pumped in an interval of 20 minutes and circulated out with two bottoms up. The hole was then displaced with KCL / Polymer mud from the previous well. All mud returns to sea floor.

Interval 2: 12.25"

Drilling in the 12.25" section of the hole was drilled at high ROPs. The time it took to drill 1015m was less than two days. This contributed to less dilution required for the mud and the smaller consumption rates. The overall cost per barrel and meter for this interval was well short of programmed specifications. This could also be attributed to the higher ROP and lessened contamination of the mud. Less than programmed amount of chemicals was used in this well.

4. INTERVAL - 1

4.1 SUMMARY

36" Hole From 77m To 136 m In 1 Day

Drilling Fluid Seawater and Viscous Sweeps, Spud Mud
Formations Gippsland.

Wardie 1 was spudded at 18:30 on 10/5/2008.

The 36" interval was drilled riser-less, using seawater and unweighted hi-vis flocculated spud mud sweeps from 76.8 m to 136 m. The spud mud used for sweeps was built from pre-hydrated bentonite at 40 ppb, cut back with seawater once hydrated and flocculated by the addition of lime prior to pumping. 75 bbl sweeps were pumped at each joint to clean the hole.

The Pre-hydrated gel used was from a previous well and had ample time to hydrate.

After drilling to 136m, a 200bbl flocculated PHB sweep was pumped to clean the hole and the open hole was displaced with 350 bbls, of unflocculated PHB.

The 30" conductor was run to bottom after a delay due to poor visibility on the sea floor making it difficult to locate the hole. It was then cemented as per program.

Properties	**Programmed**		**Actual (Typical Drilling)**		
	Min	**Max**	**Min**	**Max**	**Conformance**
Mud Weight, sg	ALAP	ALAP	1.04	1.06	Yes
6 rpm, lb/100 ft²	>40		42	70	Yes
YP, lbs/100ft^2	>50		56	123	Yes
Viscosity, sec/qt	>100		100+	100+	Yes
pH	9	10	9	9.5	Yes
Plastic Viscosity, cp	ALAP		13	26	Yes

Maintenance

- The bentonite used was first prehydrated in drill water at a concentration of 35-40 ppb. This was then cut back to 20-30 ppb using seawater. Lime was added prior to use to enhance viscosity. Caustic soda was used to obtain required alkalinity.

- Pit # 6 was used for seawater for drilling. The hi-vis sweeps were contained in pits 4, 5, 6 and 8. All 1.1 sg weighted displacement mud, kept from the previous well was kept in pits 3 and 7.

INTERVAL – 2

4.2 SUMMARY

17.5" Hole From 136 m To 751 m In 2 Days

Drilling Fluid Flocculated Seawater/Bentonite
Formations Gippsland Limestone/Lakes Entrance

The 17.5" section was drilled using flocculated seawater / pre-hydrated bentonite fluid. Pre-hydrated Bentonite at 30-40ppb was prepared and pre-hydrated. The PHB was then cut back with seawater to approximately 15-20ppb, depending on viscosity requirements.

The sweep regime used was 2 x 30bbl sweeps while drilling each stand and a 30bbl unflocculated PHG pill spotted on bottom at connections.

Approximately 950bbl of 1.15sg inhibited mud mixed with some PHG for viscosity, retained from the previous well was spotted on bottom prior to pulling out of the hole to run casing.

The 13 3/8" casing was run and cemented with no problems.

Properties	**Programmed**		**Actual**		
	Min	**Max**	**Min**	**Max**	**Conformance**
Mud Weight, sg		<1.06	1.06	1.06	Yes
Viscosity, sec/qt	50	80	94	100+	No
pH	8	9.5	9.5	9.5	Yes

Explanation of Non-Conformance

- The Funnel Viscosity quoted is for the unflocculated PHG.

Maintenance

- The fluid for this interval consisted of prehydrated gel built at 35 ppb and blended with seawater once hydrated at approximately 2:1, depending on the funnel viscosity at the time of mixing dilution volume.
- The KCl / polymer mud used was from West Seahorse-3 well.

INTERVAL - 3

4.3 SUMMARY

12.25 ” Hole From 751m To 1766m In 2 Days

Drilling Fluid KCL/Polymer/Clayseal
Formations Lakes Entrance/Latrobe Formations

Properties	**Programmed**		**Actual (Typical Drilling)**		
	Min	**Max**	**Min**	**Max**	**Conformance**
Mud Weight, sg	1	1.2	1.06	1.13	Yes
PV, cp	ALAP		10	15	Yes
YP, lbs/100 ft^2	20	30	18	33	Yes
6 rpm, lbs/100 ft^2	12	16	9	15	Partial
pH	8.8	9.5	8.5	9.5	Partial
KCL, wt%	6	8	7.5	8	Yes
API WL, mL/30 min		6	5.1	7.2	Yes
LGS, % vol		10	1.27	4.42	Yes

Explanation of Non-Conformance

- The initial 6 rpm was less than programmed. Due to the low concentration of polymers added, to the initial mud built to ensure a smooth displacement. Additional PHPA and **BARAZAN D+**, was added to bring the mud into specification, once it was sheared.

Maintenance

- The initial 6rpm readings were below the programmed 10 -15. The new mud was built between 0.8 and 1ppb, to enable circulation over the shakers while un-sheared. The 6rpm was raised by gradual additions to 13-14 lbs/100 ft² with 0.5ppb **BARAZAN D+** and 0.75 ppb EZ-Mud. The shaker screens size at displacement were 89 mesh screens. After mud sheared the screens were replaced with used 255 mesh screens. A total of 5 x 255 mesh, new screens were used on this well.
- The potassium concentration depletion was only 0.5% from the initial 8% mixed and the new premixes were built with higher concentration of KCl to maintain 8%.
- The initial mud made, did not include the 10ppb calcium carbonate, which was required to be added prior to drilling the Latrobe. At 100m above the Latrobe formation the 10 ppb of calcium carbonate was added. There was an increase in mud weight of 0.1 ppg after the calcium carbonate was added.
- No large cuttings, coal or shale were observed at the shakers/ gumbo box while drilling. The **BARABLOK** at 4 ppb added prior to entering the Latrobe formation, was successful in controlling the coal stringers encountered while drilling. At total depth, after logging and prior to spotting the first cement plug, the hole was circulated and large pieces 4” x 2” x 1” of coal was observed over the shakers.

- The inhibition provided by 8% KCL and 2% **CLAY SEAL+** was sufficient to prevent any obvious signs of bit balling and the cuttings over the shakers were soft but not sticky and able to be removed by the shakers. The last few meters of formation drilled to total depth at 1766m, and circulated out, the clay over the shakers were very sticky blinding the top 20 mesh screen causing mud losses over the shaker. The pumps strokes were reduced to 100 stks per minute from 200 strks, eliminating the mud loses. The pump strokes were increased to 200 strokes after the clay was removed from the system.
- Circulated the hole clean and a wiper trip was made to the casing shoe, having to circulate and back ream due to tight hole. Ran back to bottom slick. Circulate bottoms up, a considerable amount of small cavings were observed over the shakers. Circulated until the hole was clean and mud weight consistent at 1.13 SG (9.4 ppg). Pulled out of the hole with no problems.
- Ran wire line logs with no hole difficulties.
- P & A well.

Solids Control Equipment

- The 4 VSM 300 shakers were dressed with 89 mesh screens, for the initial displacement of un-sheared KCL /Polymer mud. Circulating rates were +/- 1000 gpm and the screens were replaced with 255 mesh as soon as possible.
- The scalper screens initially installed on the shakers were 20 mesh. During the drilling of the interval, with the addition of premix for volume and PHPA / **BARAZAN D+** additions to the active, the mud was covering 60% of the four shakers scalper screens.
- One centrifuge was run continuously to total depth to help maintain the mud weight below 1.13 sg (9.4 ppg). Mud returns from the centrifuge to the active system were below 8.9 ppg,
- consistently.

4.4 Plug and Abandon

The well was plugged back with 3 cement plugs, no testing was done. No 9 5/8” casing was set.

5.0 EVALUATION

Comments

The practice of spotting KCl polymer fluid salvaged from previous wells should be continued.

Problems, Causes, Remedial Action Taken or Recommended

5.1 RECOMMENDATIONS FOR IMPROVEMENT

Mud system

- Consideration should be given to running an **ACCOLADE** mud system on future drills in the area. It may be possible to eliminate the wiper trip prior to logging by using the invert mud.

Drilling Fluid

- The initial concentration of 1-1.5 ppb PHPA should be maintained at 1.5 ppb. At the top of the Latrobe formation the 8% Potassium, 1.5 ppb PHPA and 2% CLAYSEAL PLUS should be maintained and in particular the clay drilled below the last production sand. The clay was very water absorbent dissolving, breaking the clay up, very sticky blinding the top 20 mesh screens on the shakers and increasing the MBT of the mud.

Solids Control and Mud Mixing Equipment

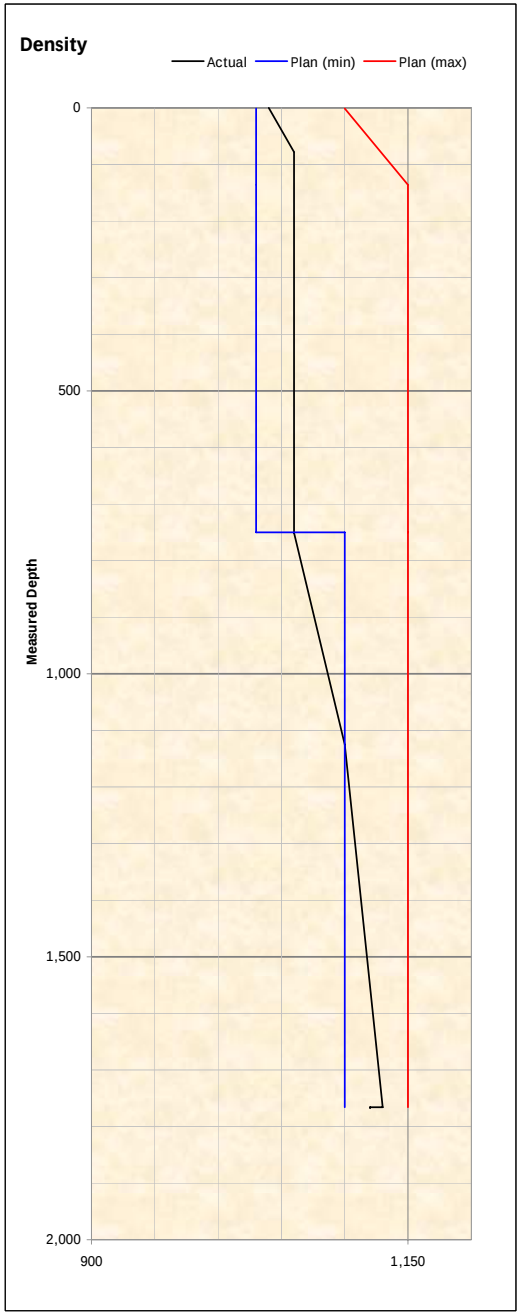
GRAPHS

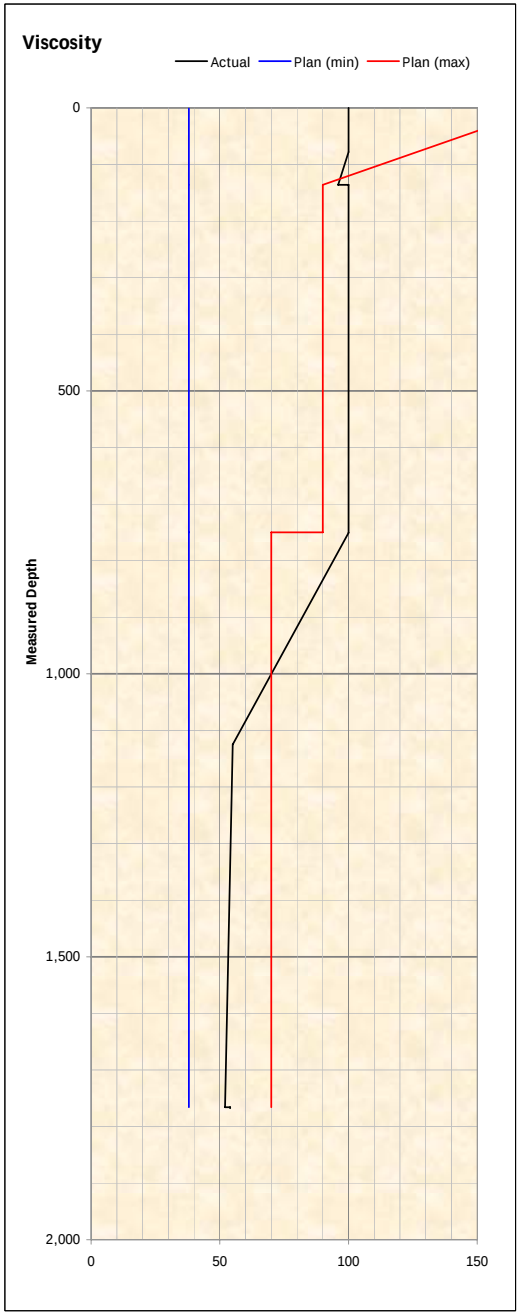

Cost vs Depth
Planned Cost
Actual Cost
Measured Depth, m
0
500
1,000
1,500
2,000
0
50,000
100,000
150,000
200,000
Cost, $

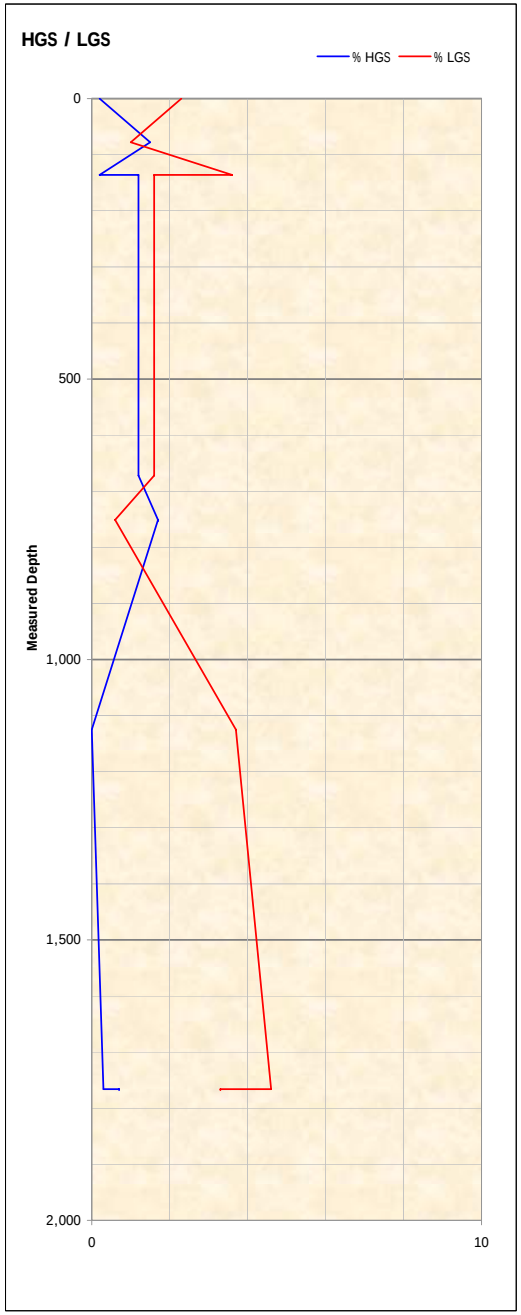
3D Oil

Wardie - 1

38o 12’ 25.08”S Lat X 147o 37’ 09.18”E Long







HALLIBURTON
Fluid Systems

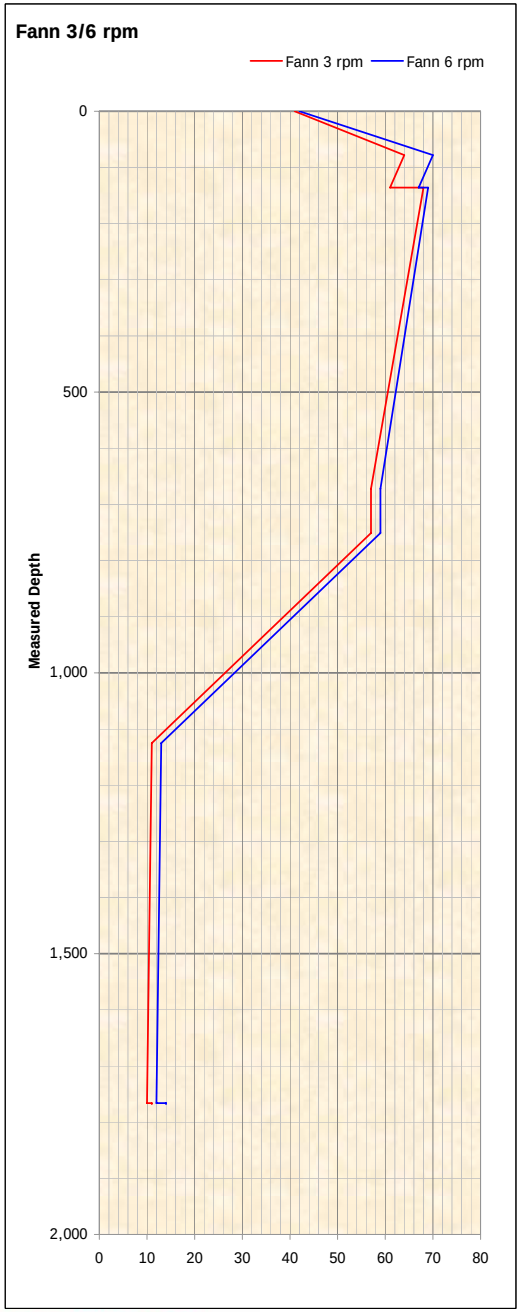
Physical Properties

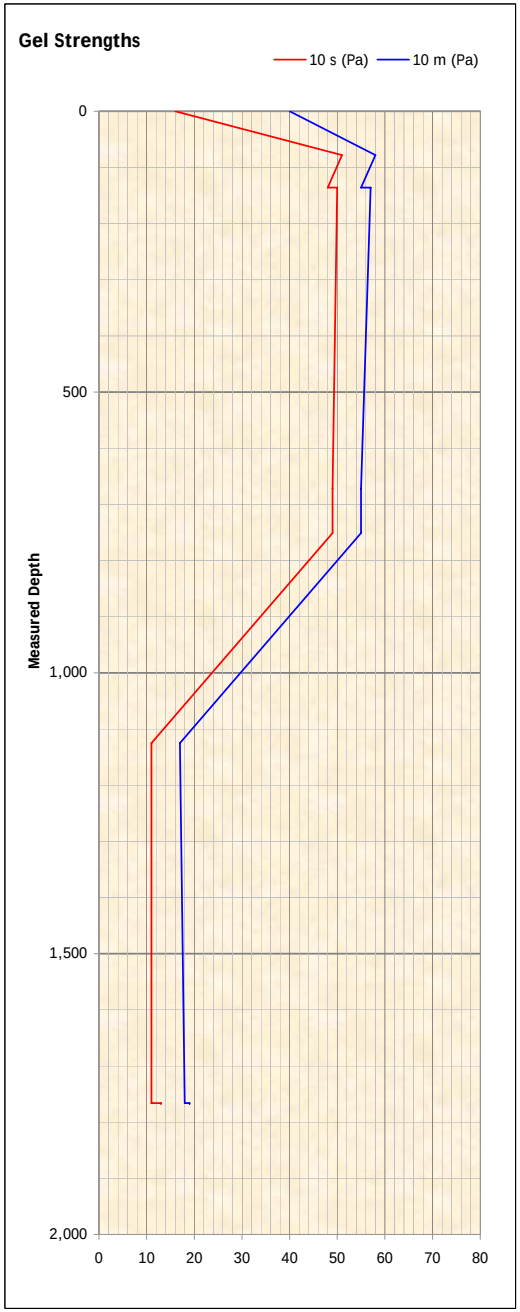
Baroid Fluid Services

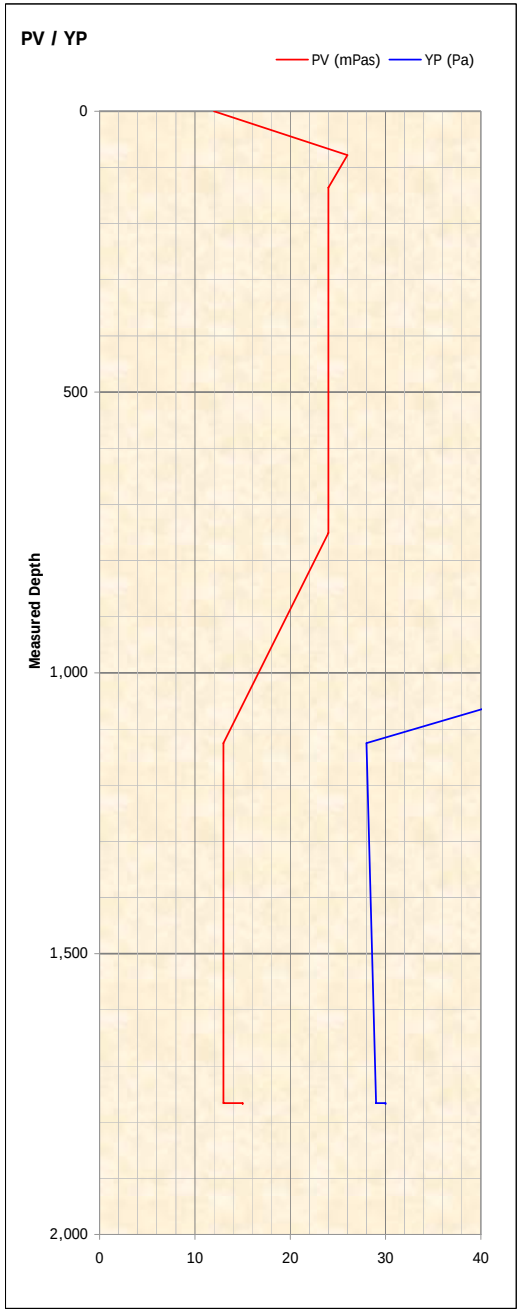
3D Oil

Wardie - 1

38o 12’ 25.08”S Lat X 147o 37’ 09.18”E Long







HALLIBURTON
Fluid Systems

Physical Properties

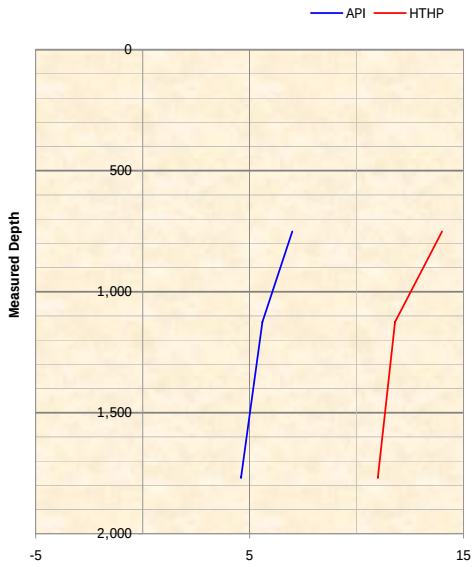
Baroid Fluid Services

3D Oil

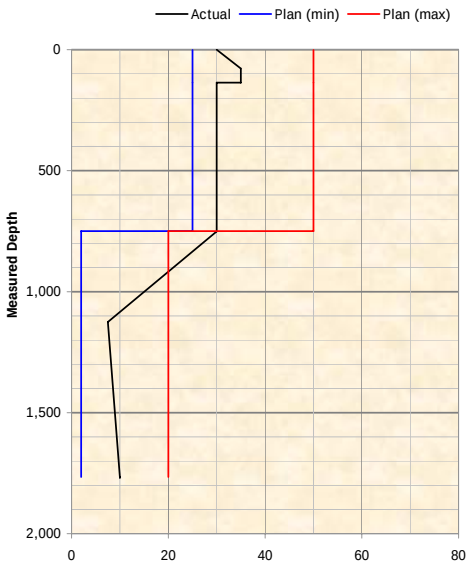
Wardie - 1

38o 12’ 25.08”S Lat X 147o 37’ 09.18”E Long

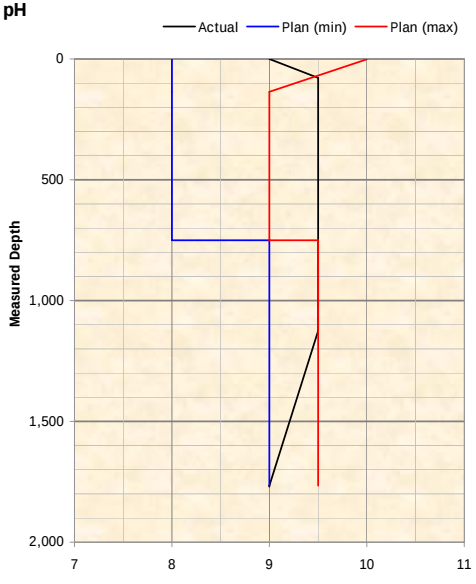
Filtrate Loss



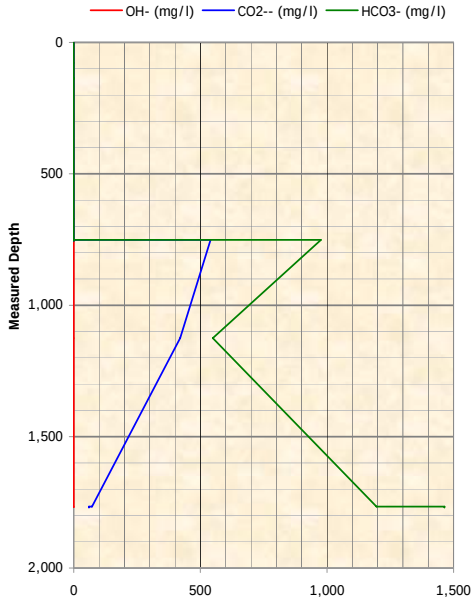
MBT



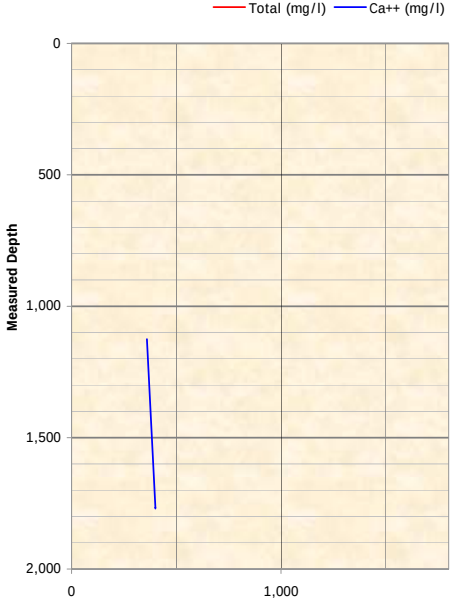
pH



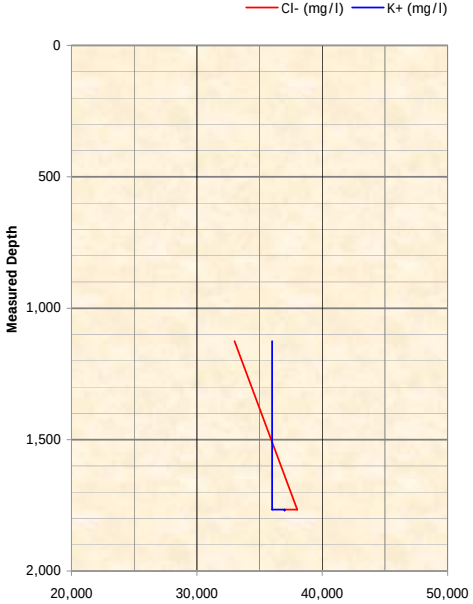
Alkalinity



Hardness



Chlorides/Potassium



HALLIBURTON
Fluid Systems

WBM Properties

Baroid Fluid Services

POSTWELL AUDIT

Baroid Fluid Services

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Well Summary Report

Well Data

Spud Date		05/10/2008	Fluids/Products: Drilling Cost	$	111,201.83
TD Date		05/18/2008	Fluids/Products: Completion Cost	$	0.00
Project			Solids Control/Waste Management Cost	$	0.00
Days on Well		17	Fluids/Products: Cementing Cost	$	414.60
From Date		05/09/2008	Prod Lost/Damaged Cost	$	0.00
To Date		05/25/2008	Engineer Services Cost	$	42,500.00
Drilling Days		8	Equipment Cost	$	0.00
Rotating / Drilling Hours		62.5/61.5	Transport/Packaging	$	0.00
Average ROP	m/hr	27.5	Other Cost	$	0.00
Maximum Density	SG	1.13	Total Well Cost	$	154,116.43
Total Measured Depth	m	1,766	Planned Cost	$	0.00
True Vertical Depth	m	1,618	Fluid Cost Per Fluid Volume	$/bbl	12.79
Distance Drilled	m	1,689	Fluid Cost Per Length Drilled	$/m	65.84
Maximum Deviation	deg	34.90	Fluid Cost/Vol of Hole Drilled	$/bbl	83.77
Max. Horz. Displacement	m	0	Total Additions/Hole Drilled	bbl/bbl	6.548
Bottom Hole Temp			Total Additions/Length Drilled	bbl/m	5.147

Casing Design

Description	Set Date & Time	Top MD m	Top TVD m	End MD m	End TVD m	CSG OD in	CSG ID in	Max. Hole Size in	Hole MD m	Hole TVD m
30 X52 457.0	05/11/2008 11:00	77	77	133	133	30.000	27.000	36.000	133	133
13.375 N-80 68.0	05/15/2008 11:00	0	0	747	704	13.375	12.415	17.500	747	704

Fluid Program

Int #	Fluid Type	Interval Days	BHT Deg C	Max. Dens SG	Whole fluid + Mix products	Other material charges	Other charges	Total Interval Cost $		
								Plan	Actual	Variance
1	Spud Mud	3		1.06		386.96	7,500.00		7,886.96	
2	Spud Mud KCl/Polymer Seawater	4		1.06	13,197.52	0.00	10,000.00		23,197.52	
3	KCl/Polymer Potassium Chloride brine Seawater	10		1.13	98,004.31	27.64	25,000.00		123,031.95	

Well Name	Wardie-1
Operator	3D Oil ltd
Contractor	Seadrill
Rig No	West Triton
Unit System	Apache

Well Summary Report

Total Well Cost $				111,201.83	414.60	42,500.00		154,116.43	154,116.43

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	Apache

Total Cost Breakdown

	Unit Size	Quantity	Total Cost
Engineering/Services			
Drilling Fluids Engineer	day(s)	17.00	21,250.00
Drilling Fluids Engineer 2	day(s)	17.00	21,250.00
		SubTotal	**$ 42,500.00**
Fluids/Products: Cementing Cost			
calcium chloride flake 77%	25 kg bag	30.00	414.60
		SubTotal	**$ 414.60**
Fluids/Products: Drilling Cost			
ALDACIDE G	5 gal can	7.00	489.30
BARABLOK	50 lb bag	60.00	1,823.40
Baracide	25 kg can	2.00	174.74
BARA-DEFOAM W300	5 gal can	1.00	55.92
BARAZAN D PLUS	25 kg bag	85.00	12,940.40
barite	1000 kg bulk	8.700	4,131.46
bentonite	1000 kg bulk	26.000	12,866.88
caustic soda	25 kg pail	14.00	618.66
Circal 60/16	25 kg sack	60.00	607.80
Circal Y	25 kg sack	89.00	1,139.20
citric acid	25 kg bag	3.00	138.72
CLAYSEAL PLUS	216 kg drum	35.00	33,482.40
DEXTRID LTE	25 kg sack	118.00	4,786.08
EZ-MUD	25 kg pail	14.00	1,201.62
EZ-MUD DP	25 kg bag	26.00	2,231.58
KCL Tech Grade (bulk)	1000 kg bulk	16.000	12,016.00
lime	25 kg bag	10.00	65.50
Omyacarb 5	25 kg bulk	57.000	535.23
PAC-L	25 kg bag	71.00	5,812.77
potassium chloride	1000 kg bag	26.00	15,626.00
potassium hydroxide	25 kg bag	4.00	179.92
soda ash	25 kg bag	21.00	278.25
		SubTotal	**$ 111,201.83**
		Total Well Cost:	**$ 154,116.43**

Well	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Net Well Cost Breakdown

Cost Breakdown I $	Interval 01	Interval 02	Interval 03	Total
Fluid/Product: Drilling		13,197.52	98,004.31	111,201.83
Fluid/Product: Comp/Filtration				
Solids Control/Waste Management Cost				
Fluids/Products: Cementing Cost	386.96		27.64	414.60
Engineering Services	7,500.00	10,000.00	25,000.00	42,500.00
Fluid/Product: Lost Damage				
Other Cost				
Equipment Cost				
Transport/Packaging Cost				
Total Cost	7,886.96	23,197.52	123,031.95	154,116.43

Cost Breakdown II $	Interval 01	Interval 02	Interval 03	Total
Total Products Cost	386.96	13,197.52	98,031.95	111,616.43
Total Fluids Cost				
Total Charges Cost	7,500.00	10,000.00	25,000.00	42,500.00
Allocated To / From Other Interval				
Total Cost	7,886.96	23,197.52	123,031.95	154,116.43
Planned Cost				
Variance				

Volume Breakdown bbl	Interval 01	Interval 02	Interval 03	Total
Total Base Fluids Addition				
Total Chemical Addition		66.6	253.1	319.7
Total Barite Addition			13.0	13.0
Total Water Addition	1,735.5	1,219.8	3,108.6	6,063.9
Total Fluid Built	1,735.5	1,286.3	3,374.8	6,396.6
Total Fluid Received	2,040.0			2,040.0
Total Influx Addition				
Not Used In Interval	-1,016.0			
Total Fluid Volume	2,759.5	4,275.8	4,195.6	8,436.6

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval Summary

Interval # 1	**Max Bit Size: 26.000 in**	**Hole Size Avg/Max**	**36.000 / 36.000 in**

Interval Start Date		05/09/2008	Planned Cost	$	0.00
Interval End Date		05/11/2008	Total Interval Cost	$	7,886.96
Interval TD Date		05/11/2008	Program Variance	$	7,886.96
Drilling Days		2.00	Other material charges	$	386.96
Rotating/Hours		5.00 / 5.00	Total Fluids Cost		
Interval Top MD/TVD	m	77.0 / 77.0	Total Charges Cost	$	7,500.00
Interval End MD/TVD	m	136.0 / 136.0	Total Cementing Cost	$	386.96
Footage	m	59.0	Fluid Cost Per Vol Unit	$/bbl	0.00
Average ROP	m/hr	11.8	Fluid Cost/Hole Drilled	$/m	0.00
Max Hole Angle	degrees	0.00	Fluid Cost/Vol Drilled	$/bbl	0.00
Casing Size	in	30.000	Fluid Built	bbl	1,735.5
Casing Shoe MD	m	133.0	Total Additions/Vol Drilled	bbl/bbl	11.32
Casing Length	m	56.0	Total Additions/Hole Drilled	bbl/m	46.77
Bottom Hole Temp			Fluid Loss/Vol Drilled	bbl/bbl	2.68
Max Fluid Density	SG	1.060	Fluid Loss/Hole Drilled	bbl/m	11.05

Interval Product and Base Fluids Usage and Cost

Product Function / Name	Drilling Fluid	Packaging	Quantity Used	Product Cost
Weighting Material				
calcium chloride flake 77%	No Fluid	25 kg bag	28.000	386.96
			Total	**$ 386.96**

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval Summary

Interval # 2	**Max Bit Size: 17.500 in**	**Hole Size Avg/Max**	**17.472 / 17.500 in**

Interval Start Date		05/12/2008	Planned Cost	$	0.00
Interval End Date		05/15/2008	Total Interval Cost	$	23,197.52
Interval TD Date		05/13/2008	Program Variance	$	23,197.52
Drilling Days		2.00	Other material charges	$	0.00
Rotating/Hours		15.50 / 15.00	Total Fluids Cost	$	13,197.52
Interval Top MD/TVD	m	136.0 / 136.0	Total Charges Cost	$	10,000.00
Interval End MD/TVD	m	751.0 / 706.8	Total Cementing Cost	$	0.00
Footage	m	615.0	Fluid Cost Per Vol Unit	$/bbl	3.09
Average ROP	m/hr	41.0	Fluid Cost/Hole Drilled	$/m	21.46
Max Hole Angle	degrees	34.90	Fluid Cost/Vol Drilled	$/bbl	22.06
Casing Size	in	0.000	Fluid Built	bbl	1,542.3
Casing Shoe MD	m	136.0	Total Additions/Vol Drilled	bbl/bbl	7.15
Casing Length	m	136.0	Total Additions/Hole Drilled	bbl/m	6.95
Bottom Hole Temp			Fluid Loss/Vol Drilled	bbl/bbl	5.65
Max Fluid Density	SG	1.060	Fluid Loss/Hole Drilled	bbl/m	5.50

Interval Product and Base Fluids Usage and Cost

Product Function / Name	Drilling Fluid	Packaging	Quantity Used	Product Cost
Viscosifier/Suspension Agent				
bentonite	Spud Mud	1000 kg bulk	26.000	12,866.88
			Total	**$ 12,866.88**
Alkalinity Control				
caustic soda	Spud Mud	25 kg pail	6.000	265.14
lime	Spud Mud	25 kg bag	10.000	65.50
			Total	**$ 330.64**

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval Summary

Interval # 3	**Max Bit Size: 12.250 in**	**Hole Size Avg/Max**	**12.250 / 12.250 in**

Interval Start Date		05/16/2008	Planned Cost	$	0.00
Interval End Date		05/25/2008	Total Interval Cost	$	123,031.95
Interval TD Date		05/19/2008	Program Variance	$	123,031.95
Drilling Days		4.00	Other material charges	$	27.64
Rotating/Hours		42.00 / 41.50	Total Fluids Cost	$	98,004.31
Interval Top MD/TVD	m	751.0 / 706.8	Total Charges Cost	$	25,000.00
Interval End MD/TVD	m	1,766.0 / 1,618.2	Total Cementing Cost	$	27.64
Footage	m	1,015.0	Fluid Cost Per Vol Unit	$/bbl	23.36
Average ROP	m/hr	24.5	Fluid Cost/Hole Drilled	$/m	96.56
Max Hole Angle	degrees	32.34	Fluid Cost/Vol Drilled	$/bbl	201.89
Casing Size	in	0.000	Fluid Built	bbl	3,374.8
Casing Shoe MD	m	136.0	Total Additions/Vol Drilled	bbl/bbl	8.64
Casing Length	m	136.0	Total Additions/Hole Drilled	bbl/m	4.13
Bottom Hole Temp			Fluid Loss/Vol Drilled	bbl/bbl	3.56
Max Fluid Density	SG	1.130	Fluid Loss/Hole Drilled	bbl/m	1.70

Interval Product and Base Fluids Usage and Cost

Product Function / Name	Drilling Fluid	Packaging	Quantity Used	Product Cost
Bactericides				
ALDACIDE G	KCl/Polymer	5 gal can	7.000	489.30
Baracide	KCl/Polymer	25 kg can	2.000	174.74
			Total	**$ 664.04**
Defoamer				
BARA-DEFOAM W300	KCl/Polymer	5 gal can	1.000	55.92
			Total	**$ 55.92**
Filtration Control				
BARABLOK	KCl/Polymer	50 lb bag	60.000	1,823.40
DEXTRID LTE	KCl/Polymer	25 kg sack	118.000	4,786.08
PAC-L	KCl/Polymer	25 kg bag	71.000	5,812.77
			Total	**$ 12,422.25**
Weighting Material				
barite	KCl/Polymer	1000 kg bulk	8.700	4,131.46
calcium chloride flake 77%	No Fluid	25 kg bag	2.000	27.64
			Total	**$ 4,159.10**
Viscosifier/Suspension Agent				
BARAZAN D PLUS	KCl/Polymer	25 kg bag	85.000	12,940.40
			Total	**$ 12,940.40**
Alkalinity Control				
caustic soda	KCl/Polymer	25 kg pail	8.000	353.52
citric acid	KCl/Polymer	25 kg bag	3.000	138.72
potassium hydroxide	KCl/Polymer	25 kg bag	4.000	179.92
soda ash	KCl/Polymer	25 kg bag	21.000	278.25
			Total	**$ 950.41**
Shale Control				
EZ-MUD	KCl/Polymer	25 kg pail	14.000	1,201.62
EZ-MUD DP	KCl/Polymer	25 kg bag	26.000	2,231.58

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval Summary

potassium chloride	KCl/Polymer	1000 kg bag	20.000		12,020.00
potassium chloride	Potassium Chloride brine	1000 kg bag	6.000		3,606.00
KCL Tech Grade (bulk)	KCl/Polymer	1000 kg bulk	11.000		8,261.00
KCL Tech Grade (bulk)	Potassium Chloride brine	1000 kg bulk	5.000		3,755.00
CLAYSEAL PLUS	KCl/Polymer	216 kg drum	35.000		33,482.40
			Total	**$**	**64,557.60**
Lost Circulation/Bridging Agent					
Circal Y	KCl/Polymer	25 kg sack	89.000		1,139.20
Circal 60/16	KCl/Polymer	25 kg sack	60.000		607.80
Omyacarb 5	KCl/Polymer	25 kg bulk	57.000		535.23
			Total	**$**	**2,282.23**

Well Name	Wardie-1
Operator	3D Oil ltd
Contractor	Seadrill
Rig No	West Triton
Unit System	Apache

Interval Cost Breakdown

Interval # 01		From Date	05/09/2008	Top of Interval	77.0 m
Max. Hole Size / Bit Size	36.000 / 26.000 in	To Date	05/11/2008	Bottom of Interval	136.0 m

Material	Unit Size	Quantity		Total Cost
Engineering/Services				
Drilling Fluids Engineer	day(s)	3.00		3750.00
Drilling Fluids Engineer 2	day(s)	3.00		3750.00
		SubTotal	**$**	**7,500.00**
Fluids/Products: Cementing Cost				
calcium chloride flake 77%	25 kg bag	28.00		386.96
		SubTotal	**$**	**386.96**
		Interval Total Cost	**$**	**7,886.96**
	Charged To/From Other Interval		**$**	
	Net Description Total Cost		**$**	**7,886.96**
	Programmed Cost		**$**	**0.00**
	Program Variance		**$**	**7,886.96**

Well Name	Wardie-1
Operator	3D Oil ltd
Contractor	Seadrill
Rig No	West Triton
Unit System	Apache

Interval Cost Breakdown

Interval # 02		From Date	05/12/2008	Top of Interval	136.0 m
Max. Hole Size / Bit Size	17.500 / 17.500 in	To Date	05/15/2008	Bottom of Interval	751.0 m

Material	Unit Size	Quantity		Total Cost
Engineering/Services				
Drilling Fluids Engineer	day(s)	4.00		5000.00
Drilling Fluids Engineer 2	day(s)	4.00		5000.00
		SubTotal	**$**	**10,000.00**
Fluids/Products: Drilling Cost				
bentonite	1000 kg bulk	26.000		12866.88
caustic soda	25 kg pail	6.00		265.14
lime	25 kg bag	10.00		65.50
		SubTotal	**$**	**13,197.52**
		Interval Total Cost	**$**	**23,197.52**
	Charged To/From Other Interval		**$**	
	Net Description Total Cost		**$**	**23,197.52**
	Programmed Cost		**$**	**0.00**
	Program Variance		**$**	**23,197.52**

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval Cost Breakdown

Interval # 03		**From Date**	**05/16/2008**	**Top of Interval**	**751.0 m**
Max. Hole Size / Bit Size	**12.250 / 12.250 in**	**To Date**	**05/25/2008**	**Bottom of Interval**	**1,766.0 m**

Material	Unit Size	Quantity		Total Cost
Engineering/Services				
Drilling Fluids Engineer	day(s)	10.00		12500.00
Drilling Fluids Engineer 2	day(s)	10.00		12500.00
		SubTotal	**$**	**25,000.00**
Fluids/Products: Cementing Cost				
calcium chloride flake 77%	25 kg bag	2.00		27.64
		SubTotal	**$**	**27.64**
Fluids/Products: Drilling Cost				
ALDACIDE G	5 gal can	7.00		489.30
BARABLOK	50 lb bag	60.00		1823.40
Baracide	25 kg can	2.00		174.74
BARA-DEFOAM W300	5 gal can	1.00		55.92
BARAZAN D PLUS	25 kg bag	85.00		12940.40
barite	1000 kg bulk	8.700		4131.46
caustic soda	25 kg pail	8.00		353.52
Circal 60/16	25 kg sack	60.00		607.80
Circal Y	25 kg sack	89.00		1139.20
citric acid	25 kg bag	3.00		138.72
CLAYSEAL PLUS	216 kg drum	35.00		33482.40
DEXTRID LTE	25 kg sack	118.00		4786.08
EZ-MUD	25 kg pail	14.00		1201.62
EZ-MUD DP	25 kg bag	26.00		2231.58
KCL Tech Grade (bulk)	1000 kg bulk	16.000		12016.00
Omyacarb 5	25 kg bulk	57.000		535.23
PAC-L	25 kg bag	71.00		5812.77
potassium chloride	1000 kg bag	26.00		15626.00
potassium hydroxide	25 kg bag	4.00		179.92
soda ash	25 kg bag	21.00		278.25
		SubTotal	**$**	**98,004.31**
		Interval Total Cost	**$**	**123,031.95**
		Charged To/From Other Interval	**$**	
		Net Description Total Cost	**$**	**123,031.95**
		Programmed Cost	**$**	**0.00**
		Program Variance	**$**	**123,031.95**

Baroid Fluid Services

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval Chemical Concentration

Interval # 01		**From Report Date**	**05/09/2008**	**Top of Interval**	**77.0 m**
Max. Hole Size / Bit Size	**36.000 / 26.000 in**	**To Report Date**	**05/11/2008**	**Bottom of Interval**	**136.0 m**

Well Name	Wardie-1
Operator	3D Oil ltd
Contractor	Seadrill
Rig No	West Triton
Unit System	Apache

Interval Chemical Concentration

Interval # 02		From Report Date	05/12/2008	Top of Interval	136.0 m
Max. Hole Size / Bit Size	17.500 / 17.500 in	To Report Date	05/15/2008	Bottom of Interval	751.0 m

Fluid Name: Spud Mud

Material	Average ppb	Minimum ppb	Maximum ppb
bentonite	17.16	12.62	18.75
caustic soda	0.11	0.11	0.11
lime	0.18	0.18	0.18

Fluid Name: Seawater

Material	Average ppb	Minimum ppb	Maximum ppb
bentonite	11.36	2.84	14.46
caustic soda	0.08	0.08	0.08
lime	0.14	0.13	0.14

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval Chemical Concentration

Interval # 03		**From Report Date**	**05/16/2008**	**Top of Interval**	**751.0 m**
Max. Hole Size / Bit Size	**12.250 / 12.250 in**	**To Report Date**	**05/25/2008**	**Bottom of Interval**	**1,766.0 m**

Fluid Name: Spud Mud

Material	Average ppb	Minimum ppb	Maximum ppb
bentonite	18.51	18.51	18.51
caustic soda	0.11	0.11	0.11
lime	0.18	0.18	0.18

Fluid Name: KCl/Polymer

Material	Average ppb	Minimum ppb	Maximum ppb
ALDACIDE G	0.12	0.03	0.17
BARABLOK	1.29	1.22	1.32
Baracide	0.04	0.04	0.07
BARA-DEFOAM W300	0.02	0.02	0.02
BARAZAN D PLUS	1.67	1.50	1.78
barite	8.22	7.82	8.41
caustic soda	0.17	0.15	0.26
Circal 60/16	1.42	1.35	1.45
Circal Y	2.10	2.00	2.15
citric acid	0.06	0.06	0.06
CLAYSEAL PLUS	6.17	5.32	6.76
DEXTRID LTE	2.34	1.96	2.55
EZ-MUD	0.28	0.16	0.31
EZ-MUD DP	0.49	0.26	0.53
KCL Tech Grade (bulk)	8.84	8.38	9.03
Omyacarb 5	1.35	1.26	1.39
PAC-L	1.43	1.35	1.47
potassium chloride	20.02	17.95	26.07
potassium hydroxide	0.08	0.08	0.08
soda ash	0.41	0.12	0.55

Fluid Name: Potassium Chloride brine

Material	Average ppb	Minimum ppb	Maximum ppb
KCL Tech Grade (bulk)	21.61	21.61	21.61
potassium chloride	15.96	9.47	32.18

Fluid Name: Seawater

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval Chemical Concentration

Material	Average ppb	Minimum ppb	Maximum ppb
bentonite	19.37	19.37	19.37
caustic soda	0.11	0.11	0.11
lime	0.19	0.19	0.19

Company	**3D Oil ltd**
Well Name	**Wardie-1**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Fluid Volume Record Report

			Additions								Losses						Volumes			
Report No	Date	Initial Volume	Received	Mixed	Base	Water	Barite	Chemicals	Other	Daily Total	SCE	Downhole	Misc	Mixed	Returned	Daily Total	Hole Volume	Active Pit Volume	Reserve Volume	Final Volume
		bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl
Interval # 01																				
Fluid Name: Spud Mud																				
001	05/09/08		1,248.0							1,248.0									1,248.0	1,248.0
002	05/10/08	1,248.0				650.3				650.3				250.0		250.0	217.3		1,431.0	1,648.3
003	05/11/08	1,648.3				721.2				721.2			652.0			652.0	244.5		1,575.0	1,819.5
Cumulative Volume			1,248.0			1,371.5				2,619.5			652.0	250.0		902.0				
Fluid Name: KCl/Polymer																				
001	05/09/08		792.0							792.0									792.0	792.0
003	05/11/08	792.0											123.0			123.0			669.0	669.0
Cumulative Volume			792.0							792.0			123.0			123.0				
Fluid Name: Seawater																				
002	05/10/08			250.0		364.0				614.0			250.0			250.0		364.0		364.0
003	05/11/08	364.0											17.0			17.0		347.0		347.0
Cumulative Volume				250.0		364.0				614.0			267.0			267.0				

Company	**3D Oil ltd**
Well Name	**Wardie-1**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Fluid Volume Record Report

			Additions								Losses						Volumes			
Report No	Date	Initial Volume	Received	Mixed	Base	Water	Barite	Chemicals	Other	Daily Total	SCE	Downhole	Misc	Mixed	Returned	Daily Total	Hole Volume	Active Pit Volume	Reserve Volume	Final Volume
		bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl
Interval # 02																				
Fluid Name: Spud Mud																				
004	05/12/08	1,819.5				419.0		32.7		451.7				101.0		101.0	143.1		2,027.1	2,170.2
005	05/13/08	2,170.2				786.0		33.8		819.8				2,760.1		2,760.1			229.9	229.9
007	05/15/08	229.9											74.0			74.0			155.9	155.9
Cumulative Volume						1,205.0		66.5		1,271.5			74.0	2,861.1		2,935.1				
Fluid Name: KCl/Polymer																				
005	05/13/08	669.0												539.0		539.0			130.0	130.0
007	05/15/08	130.0									130.0					130.0				
Cumulative Volume											130.0			539.0		669.0				
Fluid Name: Seawater																				
004	05/12/08	347.0		101.0						101.0			101.0			101.0		347.0		347.0
005	05/13/08	347.0		3,299.1						3,299.1			2,483.1			2,483.1	718.5	444.6		1,163.1
006	05/14/08	1,163.1				14.8				14.8							733.3	444.5		1,177.8
007	05/15/08	1,177.8									104.7		306.2			410.9	360.9	406.0		766.9
Cumulative Volume				3,400.1		14.8				3,414.9	104.7		2,890.3			2,995.0				
Fluid Name: Water																				
005	05/13/08					256.0				256.0									256.0	256.0
007	05/15/08	256.0									256.0					256.0				
Cumulative Volume						256.0				256.0	256.0					256.0				

Company	**3D Oil ltd**
Well Name	**Wardie-1**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Fluid Volume Record Report

			Additions								Losses						Volumes			
Report No	Date	Initial Volume	Received	Mixed	Base	Water	Barite	Chemicals	Other	Daily Total	SCE	Downhole	Misc	Mixed	Returned	Daily Total	Hole Volume	Active Pit Volume	Reserve Volume	Final Volume
		bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl	bbl
Interval # 03																				
Fluid Name: Spud Mud																				
008	05/16/08	155.9									155.9					155.9				
Cumulative Volume											155.9					155.9				
Fluid Name: KCl/Polymer																				
008	05/16/08					1,577.6		113.4		1,691.0									1,691.0	1,691.0
009	05/17/08	1,691.0		127.0		800.0		66.6		993.6	386.0		22.9			408.9	628.7	522.0	1,125.0	2,275.7
010	05/18/08	2,275.7		134.0			13.0	31.0		178.0	604.4					604.4	846.4	479.0	524.0	1,849.4
011	05/19/08	1,849.4						1.7		1.7	112.0		40.0			152.0	839.4	594.0	265.7	1,699.1
012	05/20/08	1,699.1									55.5		18.0			73.5	831.5	510.0	284.0	1,625.5
013	05/21/08	1,625.5						0.4		0.4	352.8					352.8	841.1	400.0	32.0	1,273.1
016	05/24/08	1,273.1													426.7	426.7	846.4			846.4
Cumulative Volume				261.0		2,377.6	13.0	213.1		2,864.7	1,510.7		80.9		426.7	2,018.3				
Fluid Name: Potassium Chloride brine																				
009	05/17/08					392.0		19.0		411.0				127.0		127.0			284.0	284.0
010	05/18/08	284.0												134.0		134.0			150.0	150.0
011	05/19/08	150.0				339.0		21.0		360.0									510.0	510.0
016	05/24/08	510.0													510.0	510.0				
Cumulative Volume						731.0		40.0		771.0				261.0	510.0	771.0				
Fluid Name: Seawater																				
008	05/16/08	766.9									136.3					136.3	321.7	309.0		630.7
009	05/17/08	630.7											630.7			630.7				
Cumulative Volume											136.3		630.7			767.0				

Operator	**3D Oil ltd**
Well Name	**Wardie-1**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Fluid Property Recap : Water-Based Fluid

Date	Depth	FL Temp	Density	Funn Visc	Rheology 49 Deg C					Filtration					Filtrate Analysis						MBT	Sand	Retort Analysis				Rheometer Dial Readings					
					PV	lbs/100 ft2				API	HTHP	Cake API	Cake HTHP	Temp	pH	Pm	Pf	Mf	Cl	Total Hardness	ppb Eq.	% by vol	% by vol				600	300	200	100	6	3
	m	Deg C	SG	sec/qt	cP	YP	10S	10M	30M	ml/30 min	ml/30 min	32nd in		Deg C		ml	ml	ml	mg/l	mg/l			Corr Solid	LGS	NAP Base	Water						
Interval # 01										**From Date**				**05/09/2008**						**Top of Interval**			**77.0**		**m**						
Max. Hole Size / Bit Size	**36.000 / 26.000 in**									**To Date**				**05/11/2008**						**Bottom of Interval**			**136.0**		**m**						
05/10/2008	78		1.060	100	26	123	51	58	65						9.50						35.0		2.46	0.983		97.3	175.0	149.0	141.0	120.0	70.0	64.0
05/11/2008	136		1.060	98	25	123	50	56	65						9.50						35.0		3.76	3.591		96	173.0	148.0	139.0	118.0	68.0	63.0
05/11/2008	136		1.060	96	24	121	48	55	63						9.50						35.0		3.76	3.591		96	169.0	145.0	137.0	116.0	67.0	61.0
Interval # 02										**From Date**				**05/12/2008**						**Top of Interval**			**136.0**		**m**						
Max. Hole Size / Bit Size	**17.500 / 17.500 in**									**To Date**				**05/15/2008**						**Bottom of Interval**			**751.0**		**m**						
05/12/2008	136		1.060	100	24	123	50	57	67						9.50						30.0		2.76	1.585		97	171.0	147.0	138.0	118.0	69.0	68.0
05/13/2008	250		1.060	100	23	122	51	56	68						9.50						30.0		2.76	1.585		97	168.0	145.0	136.0	117.0	70.0	69.0
05/13/2008	672		1.060	100	24	103	49	55	64						9.50						30.0		2.76	1.585		97	151.0	127.0	118.0	98.0	59.0	57.0
05/14/2008	0		1.060	100	24	103	49	55	64						9.50						30.0		2.26	0.581		97.5	151.0	127.0	118.0	98.0	59.0	57.0
Interval # 03										**From Date**				**05/16/2008**						**Top of Interval**			**751.0**		**m**						
Max. Hole Size / Bit Size	**12.250 / 12.250 in**									**To Date**				**05/25/2008**						**Bottom of Interval**			**1,766.0**		**m**						
05/16/2008	751		1.060	52	12	22	8	11	12	7.2	14.6	1	2		9.50	0.80	0.45	1.70	31,000	320	5.0		1.3	1.271		96.1	46.0	34.0	29.0	22.0	10.0	8.0
05/16/2008	751		1.060	55	10	25	8	11	12	7.0	14.0	1	2		9.50	0.80	0.45	1.70	31,000	320	5.0		1.3	1.271		96.1	45.0	35.0	28.0	22.0	10.0	8.0
05/17/2008	770		1.070	57	11	18	7	8	10	7.0	14.0	1	2		9.50	0.90	0.30	1.80	33,000	200	5.0		1.75	1.688		95.5	40.0	29.0	24.0	18.0	8.0	6.0
05/17/2008	968	31	1.090	58	11	27	10	15	18	5.8	12.2	1	2	121	10.00	1.60	0.50	1.40	34,000	320	7.5	0.50	3.01	2.99		94.2	49.0	38.0	33.0	26.0	12.0	10.0
05/17/2008	1,156	35	1.100	55	13	28	11	17	21	5.6	11.8	1	2	121	9.50	1.20	0.35	1.15	33,000	360	7.5	0.50	3.71	3.671		93.6	54.0	41.0	31.0	29.0	13.0	11.0
05/17/2008	1,381	35	1.120	58	13	30	13	18	22	5.0	12.0	1	2	121	9.50	1.30	0.30	1.00	33,000	560	6.3	0.50	4.63	4.249		92.7	56.0	43.0	38.0	29.0	13.0	10.0
05/18/2008	1,555	44	1.120	54	15	30	13	18	22	5.0	11.8	1	2	121	9.50	0.50	0.06	1.00	38,000	400	6.3	0.50	4.53	4.423		92.4	60.0	45.0	39.0	30.0	13.0	10.0
05/18/2008	1,664	44	1.130	58	14	28	10	18	24	4.8	11.2	1	2	121	8.50	1.30	0.08	0.90	36,000	480	10.0	0.25	5.11	4.787		92	56.0	42.0	36.0	27.0	12.0	10.0
05/18/2008	1,766	43	1.130	52	13	29	11	18	22	4.6	11.0	1	2	121	9.00	1.30	0.06	1.10	38,000	400	10.0	0.50	4.94	4.613		92	55.0	42.0	35.0	28.0	12.0	10.0
05/18/2008	1,766		1.120	54	15	30	13	19	23	4.9	11.5	1	2	121	9.00	1.30	0.04	1.00	38,000	400	8.8	0.50	4.12	3.609		92.8	60.0	45.0	39.0	31.0	14.0	11.0
05/19/2008	1,766		1.120	54	15	30	13	19	23	5.0	11.5	1	2	121	9.00	0.70	0.03	0.90	37,000	400	10.0	0.50	3.99	3.291		93	60.0	45.0	39.0	31.0	14.0	11.0
05/19/2008	1,766		1.120	56	13	33	14	19	23	5.0	11.4	1	2	121	9.00	1.00	0.06	1.00	38,000	440	10.0	0.25	4.53	4.423		92.4	59.0	46.0	40.0	31.0	15.0	13.0
05/19/2008	1,766	38	1.120	56	13	27	13	20	24	5.2	11.6	1	2	121	9.00	1.20	0.05	1.30	38,000	480	10.0	0.50	4.53	4.423		92.4	53.0	40.0	35.0	28.0	14.0	12.0
05/19/2008	1,766		1.120	55	14	27	14	20	23	5.2	11.6	1	2	121	9.00	1.00	0.04	0.80	38,000	480	10.0	0.50	4.53	4.423		92.4	55.0	41.0	37.0	30.0	14.0	12.0

Operator	**3D Oil ltd**
Well Name	**Wardie-1**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Fluid Property Recap : Water-Based Fluid

Date	Depth	FL Temp	Density	Funn Visc	Rheology 49 Deg C					Filtration					Filtrate Analysis						MBT	Sand	Retort Analysis				Rheometer Dial Readings					
					PV	lbs/100 ft2				API	HTHP	Cake API	Cake HTHP	Temp	pH	Pm	Pf	Mf	Cl	Total Hardness	ppb Eq.	% by vol	% by vol				600	300	200	100	6	3
	m	Deg C	SG	sec/qt	cP	YP	10S	10M	30M	ml/30 min	ml/30 min	32nd in		Deg C		ml	ml	ml	mg/l	mg/l			Corr Solid	LGS	NAP Base	Water						
05/20/2008	1,766		1.120	57	13	27	13	20	23	5.2	11.6	1	2	121	9.00	1.20	0.04	1.10	38,000	480	10.0	0.50	4.53	4.423		92.4	53.0	40.0	35.0	28.0	14.0	12.0
05/20/2008	1,766		1.120	58	13	27	14	19	22	5.1	11.7	1	2	121	9.00	1.00	0.07	1.30	39,000	480	10.0	0.50	4.45	4.335		92.4	53.0	40.0	34.0	26.0	14.0	12.0
05/21/2008	1,766		1.120	55	12	28	13	20	23	5.3	11.6	1	2	121	9.20	1.00	0.04	1.50	38,000	480	10.0	0.50	4.53	4.423		92.4	52.0	40.0	35.0	28.0	14.0	12.0
05/21/2008	1,766		1.120	55	13	27	13	20	22	5.3	11.8	1	2	121	9.50	1.20	0.08	1.70	38,000	480	10.0	0.50	4.53	4.423		92.4	53.0	40.0	35.0	28.0	14.0	12.0
05/22/2008	1,766		1.120	55	13	27	13	20	22	5.3	11.8	1	2	121	9.00	1.00	0.03	1.70	38,000	480	10.0	0.50	4.53	4.423		92.4	53.0	40.0	35.0	28.0	14.0	12.0
05/23/2008	1,766		1.120	55	14	26	13	20	22	5.3	11.8	1	2	121	9.00	1.00	0.03	1.70	38,000	480	10.0	0.50	4.53	4.423		92.4	54.0	40.0	35.0	28.0	14.0	12.0

Company	**3D Oil ltd**
Well Name	**Wardie-1**
Contractor	**Seadrill**
Rig Name	**West Triton**
Unit System	**Apache**

Fluid Program Exception Report

Report No	Date	Time	Depth m	Property Name	Unit System	Actual Value	Exception	Program Min	Program Max
008	05/16/2008	22:00	751	API Filtrate	ml/30 min	7.0	High	1.0	6.0
008	05/16/2008	16:00	751	API Filtrate	ml/30 min	7.2	High	1.0	6.0
008	05/16/2008	22:00	751	HTHP Filtrate	ml/30 min	14.0	High	1.0	12.0
008	05/16/2008	16:00	751	HTHP Filtrate	ml/30 min	14.6	High	1.0	12.0
009	05/17/2008	4:30	770	API Filtrate	ml/30 min	7.0	High	1.0	6.0
009	05/17/2008	4:30	770	HTHP Filtrate	ml/30 min	14.0	High	1.0	12.0
009	05/17/2008	9:52	968	HTHP Filtrate	ml/30 min	12.2	High	1.0	12.0
009	05/17/2008	9:52	968	pH	-	10.00	High	8.80	9.50
010	05/18/2008	9:50	1,664	pH	-	8.50	Low	8.80	9.50
013	05/21/2008	12:00	1,766	KCL %	% by vol	9.0	High	6.0	8.0

Operations Log Recap

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval	**01**		**From Date**	**001**	**Top of Interval**	**77.0**	**m**
Max. Hole Size / Bit Size	**36.000 / 26.000**	**in**	**To Date**	**003**	**Bottom of Interval**	**136.0**	**m**

For Report # 001 On 05/09/2008	**Operation at Depth .0 m**
Rig Activity	Skidded rig from West Seahorse-3 well at 16:30 hours. Rigging up to spud.
Activity	Rig up and rig down
Fluid Treatment	Received 792 bbls of KCl/Polymer/Clayseal plus mud from West Seahorse 3 well. Received 1248 bbls of PHB (spud mud) from West Seahorse 3 well.
For Report # 002 On 05/10/2008	**Operation at Depth 132.0 m**
Rig Activity	Continue to rig up and place Abandonment Cap on West Seahorse 3. Make up BHA and drill string and RIH. Tag seabed at 76.8m and spud Wardie 1 well at 18:30 hours drilling to 78m. ROV check string clearance and drill ahead to 132m at midnight with 75bbls floculated PHG sweeps every single and backream each stand.
Activity	Drilling
Fluid Treatment	Returned to Geelong marine terminal and deducted from inventory, 8 drums of XLR-RATE mud chemical.
For Report # 003 On 05/11/2008	**Operation at Depth 136.0 m**
Rig Activity	Continue to drill 36" hole from 132 to 136m. Pump 200bbl of Flocculated PHB and then displace hole with 350bbls of PHB and POOH. Lay out 2 x 8 1/4 DCs and 26" bit then run conductor. Attemps to stab into hole frustrated by poor visibility on the sea floor. Stab in and run to 132m, install anti-rotation wire and landing ring. Install ICON 30" gripper conductor clamp and attempt to torque up. Trouble shooting at midnight.
Activity	Run casing and cement
Fluid Treatment	Mixed pit of spud mud.

Operations Log Recap

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval	**02**		**From Date**	**004**	**Top of Interval**	**136.0**	**m**
Max. Hole Size / Bit Size	**17.500 / 17.500**	**in**	**To Date**	**007**	**Bottom of Interval**	**751.0**	**m**

For Report # 004 On 05/12/2008	**Operation at Depth 161.0 m**
Rig Activity	Level CTU and install ICON clamp. Cut 30" above icon clamp and lay out 30" above cut. Rig down 30" handling equipment, make up cement stinger and RIH. Cement as per programme with ROV observing returns to sea floor. Rig down cement lines and pick up and make up well head. Make up 17 1/2" BHA and RIH. Tag TOC at 131m and drill out to 132.8m then drill new formation to 161m at midnight with seawater and sweeps.
Activity	Drilling
Fluid Treatment	Received Mud Chemicals. Current sweep regime 2 x 30 bbls floculated PHG while drilling and 30 bbls unfloculated PHG on connections.
For Report # 005 On 05/13/2008	**Operation at Depth 751.0 m**
Rig Activity	Continue to drill 17 1/2" hole from 161m to 751m with Seawater and Sweeps. Sweep regime 2 x 30bbls flocculated PHG while drilling and 30bbl PHG spotted at the BHA on connections. At TD sweep the hole with 2 x 100bbl Hi Visc pills and circulate 2 x bottoms up. Then displace hole with 950bbls of Viscosified KCl/polymer mud and POOH. Working BHA and breaking out bit at midnight.
Activity	Run casing and cement
Fluid Treatment	Returned to Geelong marine terminal and deducted from inventory, 8 drums of XLR-RATE mud chemical.
For Report # 006 On 05/14/2008	**Operation at Depth 751.0 m**
Rig Activity	Make up landing ring and RIH with Jet Sub. POOH with Jet Sub and run 13 3/8 casing. RIH to 113m and hang up. Skid rig to clear obstruction and RIH to 166m. Hang up and unable to clear obstruction. POOH and remove centralizers. RIH. Running Casing at midnight.
Activity	Run casing and cement
Fluid Treatment	Mixing mud for next section (12 1/4" hole). Chemicals to be charged off on frist report of the new section.
For Report # 007 On 05/15/2008	**Operation at Depth 751.0 m**
Rig Activity	Rig down elevators, pick up wellhead. Install cement plug, pressure test surface lines to 4000psi. Pumped 90 bbl seawater, 30 bbl, Tuned Spacer, and mix & pump cement as per programme. Set 13 3/8" casing at MD 747.2m TVD 703.8m. Release running tool and install choke line. Rig up handling equipment and nipple up BOPs.
Activity	Nipple up B.O.P.
Fluid Treatment	KCl / Polymer mud mixed: 1683 bbls Total KCl / Polymer mud mixed: 1683 bbls. Continue mixing KCl polymer mud for displacement.

Operations Log Recap

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval	**03**		**From Date**	**008**	**Top of Interval**	**751.0**	**m**
Max. Hole Size / Bit Size	**12.250 / 12.250**	**in**	**To Date**	**017**	**Bottom of Interval**	**1,766.0**	**m**

For Report	**# 008**	**On**	**05/16/2008**	**Operation at Depth**	**751.0 m**
Rig Activity				Pressure test BOP's, Make up bit and BHA, RIH and test MWD. Continue to RIH and tag float collar 732.5m. Fault with TDS, service same. Drill top of cement at from 732.5m to 736m with seawater.	
Activity				Drilling out cement	
Fluid Treatment				KCl / Polymer mud mixed: 8 bbls Total KCl / Polymer mud mixed: 1691 bbls. Mixed 50 bbls of Hi-Vis KCl/Polymer/ Clayseal plus mud with Barazan D+. Continue mixing KCl polymer mud for dilution and volume.	
For Report	**# 009**	**On**	**05/17/2008**	**Operation at Depth**	**1,446.0 m**
Rig Activity				Cont. drill out shoe track and rat hole @ 747m, wash rat hole to 751m. Displaced seawater with 8.9 ppg with 8.9 ppg KCl/Polymer/Clayseal mud. Circ. & cond. mud to 8.9 in/out. Conducted FIT as per programme to EMW of 13.13 ppg. Continued drilling 12 1/4" hole fro 751 m to 1397m. Driller chair system crashed, troubleshoot. Cont. drilling from 1397m to 1446m as per Directional drillers instructions.	
Activity				Drilling	
Fluid Treatment				KCl / Polymer mud mixed: 993.6 bbls Total KCl / Polymer mud mixed: 2684.6 bbls. Continue mixing KCl polymer mud for dilution and volume. Mixed BARAZAN D+ to the active to increase and maintain the 6 RPM at 13. Cont. to bring up EZ MUD concentration via premix. Began running centrifuge at 950m to maintain MW. Begin adding 5ppb Circal Y & 5 ppb Circal 60/16 into active at 1425m, 100m above top of LaTrobe formation as per programme.	
For Report	**# 010**	**On**	**05/18/2008**	**Operation at Depth**	**1,766.0 m**
Rig Activity				Cont. drilling from 1446 m to 1520m as per Directional drillers instructions. Control ROP drilling from 1520m to 1766m. Survey every connection. Circulate hole clean @ 1075gpm. Trip tank remote valve not functioned, change out valve. Flow check, static. POOH wet from 1766m to 1530m, working tight spot at 1540m to 1530m.	
Activity				Tripping	
Fluid Treatment				KCl / Polymer mud mixed: 178 bbls Total KCl / Polymer mud mixed: 2862.6 bbls. Cont. adding 5ppb Circal Y & 5 ppb Circal 60/16 into active at 1425m, 100m above top of LaTrobe formation as per programme. Added 4 ppb BARABLOK into active @ 1515m. Continue to add EZ Mud to the active to increase and maintain concentration above 1 ppb.	
For Report	**# 011**	**On**	**05/19/2008**	**Operation at Depth**	**1,766.0 m**
Rig Activity				Cont. POOH wet from 1530m, ream tight spot at 1178m to 919m. Hole not taking proper displacement. Pump out of hole from 919m to casing shoe at 744m. Circ. bottoms up. RIH from 744m to 1737m pumping last single. Wash down last stand to 1766m. Circ. hole clean and condition mud. Flow check static. POOH wet from 1766m to 1412m. Pump slug and POOH from 1412m to shoe @ 747m. Flow check static. Cont. POOH and lay out BHA.	
Activity				Tripping	
Fluid Treatment				KCl / Polymer mud mixed: 1.7 bbls Total KCl / Polymer mud mixed: 2864.3 bbls.	

Operations Log Recap

Well Name	Wardie-1
Operator	3D Oil ltd
Contractor	Seadrill
Rig No	West Triton
Unit System	Apache

Interval	**03**		**From Date**	**008**	**Top of Interval**	**751.0**	**m**
Max. Hole Size / Bit Size	**12.250 / 12.250**	**in**	**To Date**	**017**	**Bottom of Interval**	**1,766.0**	**m**

	Made KCL brine for contingency purposes. Note: Some chemicals charged off today was due to an inventory reconciliation
For Report # 012 On 05/20/2008	**Operation at Depth 1,766.0 m**
Rig Activity	Cont. Lay down BHA. Rig up Schlumberger, Sonic pex tool string and install radio active sources. RIH with tools to commence logging as per logging programme. POOH recover RA sources and lay down tools. RIH MDT tools string to 1680m, checking pressure points as per programme, monitoring well via trip tanks. POH wireline MDT tools and make up 5 1/2" mule shoe on DP. RIH to 416m.
Activity	Tripping
Fluid Treatment	KCl / Polymer mud mixed: 0 bbls Total KCl / Polymer mud mixed: 2864.3 bbls.
For Report # 013 On 05/21/2008	**Operation at Depth 1,766.0 m**
Rig Activity	RIH with mule show on 5 1/2" DP from 414m to 1761m. Circ. bottoms up. Test surface lines to 1000psi. Cement plug with Halliburton as per cementing programme. Set Plug #1A from 1761m - 1616m. Pull out to 1613m. Circ. 1.5X bottoms up. Pump cement plug #1B as per cement programme from 1613m - 1406m. Circ. 1.5X bottoms up. POOH & lay down DP from 1406m to 842m. Tag cement plug #1B @ 1407m. POH from 903m to 805m. Mix & pump plug #2 as per programme. POH from 805m to 599m. Circ. 1.5X bottoms up @ 180spm, 300psi. POOH from 599m to 148m.
Activity	P&A
Fluid Treatment	Dump 170 bbls of cement contaminated mud on first plug Dump 170 bbls of cement contaminated mud on second plug
For Report # 014 On 05/22/2008	**Operation at Depth 1,766.0 m**
Rig Activity	Cont. lay down DP. Flush BOP diverter line. Line up Halliburton unit to test cement plug #2 to 1000psi. Remove choke line, flow line, prepare for skid. Pick up 13 3/8" casing cutter. Make up casing cutter as per Weatherford. RIH to 126m cut casing as per programme. Retrieve wellhead, 20X13 3/8" wedge, 8 joints of 13 3/8" casing. Pick up well head b/out running tool. Lay down same. Prepare to RIH with mule shoe.
Activity	Cut casing
Fluid Treatment	.
For Report # 015 On 05/23/2008	**Operation at Depth 1,766.0 m**
Rig Activity	Make up mule show and RIH with 5 1/2" DP to 207m. Spot 25 bbl Hi-Vis pill. Pull back to 157m. R/up cement line and test to 500psi. Mix and pump cement plug #3. POOH to 95m to circulate hole clean. POOH and lay down mule shoe. RIH with 30" casing cutter to 78m. Attempt cut. POH to change knifes. RIH to 78m, attempt again, no return torque. Break out TDS without hydraulic power. POH to surface. Change knifes and attempt again as per weatherford. POH lay down cutter assembly. Pickup casing spear. Prepare & moved work platform.
Activity	Rig up and rig down
Fluid Treatment	.
For Report # 016 On 05/24/2008	**Operation at Depth 1,766.0 m**
Rig Activity	RIH with 30" CSG spear latch onto conductor, attempt to free csg, no success. Remove icon clamp from conductor, pull CTU inserts. Pull 30" csg to rig floor and lay down same. Prepare for rig move. Skid rig in 15ft. R/up BOP sling, pick up work platform from t/deck place on main deck. Prepare to skid out to lower deck to boat. Lock in pin not released, pin damaged, cut off lock pin assembly. Skid out rig. P/up & L/dn DC from derrick. P/up HWDP, RIH to open slots to lay down.

Operations Log Recap

Well Name	**Wardie-1**
Operator	**3D Oil ltd**
Contractor	**Seadrill**
Rig No	**West Triton**
Unit System	**Apache**

Interval	**03**		**From Date**	**008**	**Top of Interval**	**751.0**	**m**
Max. Hole Size / Bit Size	**12.250 / 12.250**	**in**	**To Date**	**017**	**Bottom of Interval**	**1,766.0**	**m**

Activity	Rig up and rig down
Fluid Treatment	Backloaded 400 bbl KCL/Polymer mud and 500 bbl KCL brine for the next hole onto boat.

For Report	**# 017**	**On**	**05/25/2008**	**Operation at Depth**	**1,766.0 m**

Rig Activity	Cont. to lay down 5" DP. Rig up BOP slings and ext sling for lift up texas deck. Move DP and DC from cantilever to main before skid. Skid rig, secure BOP. Seafastened TDS & other loose items. Jack down rig to 2m draft. Conducted water integrity test. Cont. jacking down to complete draft, moved the rig 1km away from Wardie-1 drilling location.
Activity	Move to location
Fluid Treatment	.

Well Name	Wardie-1
Operator	3D Oil ltd
Contractor	Seadrill
Rig No	West Triton
Unit System	Apache

Deviation Actual

Survey Date	MD m	TVD m	Angle	Direction	Horiz Displ. m
05/13/2008	92	92	1.80	317.0	
05/13/2008	349	244	11.70	243.6	
05/14/2008	674	643	33.96	240.5	
05/14/2008	704	668	34.90	240.0	
05/14/2008	722	683	34.35	239.8	
05/14/2008	751	707	34.35	239.5	
05/18/2008	862	801	31.64	238.2	
05/18/2008	1,009	927	31.56	240.5	
05/18/2008	1,126	1,026	32.34	241.7	
05/21/2008	1,274	1,152	29.50	243.7	
05/21/2008	1,421	1,284	23.40	245.9	
05/21/2008	1,719	1,571	7.67	235.2	
05/21/2008	1,766	1,618	7.36	234.2	

Company	3D Oil ltd
Well Name	Wardie-1
Contractor	Seadrill
Rig No	West Triton
Unit System	Apache

Bit Record Report

Run No	Bit No	Bit Size in	Bit Manufacturer	Bit Type	Bit Style	IADC Code	Serial Number	Jet or TFA sq-in	Depth Out m	Run Length m	ROP m/hr	WOB lb	Bit RPM	Pump Press psi	Pump OutPut gpm	Fluid Type	Fluid Weight SG	Hole Angle	Bit Grading	Reason Pulled
1	1RR	26.000	RTC	Y11C	MT	111	34406	3x22|1x16	136.0	59.0	25.7	5,500.0	120	950.0	1,000	Spud Mud	1.030	2.03	1-1-WT-A-NB-I-RR-TD	TD - Total/Casing Depth
2	2	17.500	HUGHES	MXL-T1V	IN		606589	3x20	751.0	615.0	91.8	22,000.0	217	1,635.0	960	Seawater	1.060	34.9	1-1-NO-A-O-I-NO-TD	TD - Total/Casing Depth
3	3	12.250	REEDHYC	RSX616MA16	FC		218629	3x15|3x16	1,766.0	1,015.0	52.3	19,000.0	241	2,100.0	1,077	KCl/Polymer	1.120	7.36	1-1-NO-A-E-I-NO-TD	TD - Total/Casing Depth

DAILY MUD REPORTS

Baroid Fluid Services

Report No 001

Daily Drilling Fluid Report

Date 05/09/2008		**Depth** 0.0 m	
Spud Date 05/10/2008		**Rig Activity** Rig up and rig down	
Operator 3D Oil ltd	**Report For** Shaughan Corless	**Well Name** Wardie-1	
Contractor Seadrill	**Report For** Micheal Barry	**Rig Name** West Triton	**Unit System** Apache
Country Australia	**State/Province/Region** Victoria	**Geographic Area/County** Bass Strait	**Field or Block** VIC P57

Bit Information		Drill String (in) / (m) OD ID Length	in Casing m OD Set MD	Circulation/Hydraulics Data		
Bit Size	in			Model		
Make/Type				Bore in		
Jets				Strokes in		
TFA	sq-in			Eff(%)		
Jets Velocity	m/sec			bbl/strk		
Jet Impact Force	lbf			SPM		
Bit HHSI	hhp/in2			gpm|bbl/min		
Press Drop @ Bit	psi			Total GPM	AV, Riser	Circ Press psi
Bit Depth	m			Total Circ Time	AV min DP	Tot Pres Loss
ECD @ Csg Shoe	SG			BU Time , min	AV max DC	Press Drop DP
ECD @ Bit	SG			Total Strokes	BU Strokes	Press Drop An

Properties		1	2	3	4	Targets	Program
Source		Flow Line					
Time		23:59					
Depth	m	0					
FL Temp	Deg C						
Density @ Deg C	SG	1.040 @ 23					
FV @ Deg C	sec/qt	100 @ 23					
PV @ Deg C	cP	12 @ 23					
YP	lbs/100 ft2	56					
GELS	lbs/100 ft2	16/40/51					
600/300		80.0/68.0					
200/100		59.0/55.0					
6/3		42.0/41.0					
API Filt	ml/30 min						
HTHP @ Deg C	ml/30 min						
Cake API/HTHP	32nd in						
Corr Solid	% by Vol	2.5					
NAP/Water	% by Vol	-/97.3					
Sand	% by vol						
MBT	ppb Eq.	30.0					
pH @ Deg C		9.00					
ALK Mud	Pm						
ALK Filt	Pf/Mf						
Chlorides	mg/l						
Tot. Hardness	mg/l						
LGS/HGS	% by Vol	2.2/0.2					
LGS/HGS	ppb	20.35/3.33					
ASG	SG	2.747					
Additional Properties							

Fluid Treatments

Fluid Type

None.

Rig Activity

Skidded rig from West Seahorse-3 well at 16:30 hours.

Rigging up to spud.

Product Name	Units	Start	Rec	Used	End	Cost

Solids Control Equipment

Shaker	Screens	Hrs

Hydrocyclone	Cones	Screens	Hrs

Centrifuge	Speed	Feed Rate	Hrs

Time

Drilling	
Circulating	
Trips	
Rig	
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	7.5
Total	7.5
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown

Active	bbl	Additions	bbl	Losses	bbl
Annulus		Base		Fluid Dumped	
Pipe Cap		Drill Water		Transferred	
Active Pits		Dewatering		SCE	
Total Hole		Sea Water		Evaporation	
Total Circ		Whole Mud		Trips	
Reserve		Barite		Other	
Prev Vol		Chemicals		Total Surface	
Net Change		Other		Downhole	
Total Vol		Total		Total Losses	

Fluid Types	Vol bbl

Deviation Information

Survey MD	m
Survey TVD	m
Angle	Deg
Direction	
Horiz Displ.	m

Daily Products Cost	$0.00	Total Daily Cost	$0.00
Cumulative Products Cost	$0.00	Total Cumulative Cost	$0.00

Baroid Representatives	Brian Auckram	Gerald Lange	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 002

Daily Drilling Fluid Report

Date 05/10/2008		Depth 132.0 m	
Spud Date 05/10/2008		Rig Activity Drilling	
Operator 3D Oil ltd	Report For Shaughan Corless	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	26.000 in
Make/Type	SMITH/Y11C
Jets	3x22|1x16
TFA	1.310 sq-in
Jets Velocity	74.5 m/sec
Jet Impact Force	lbf
Bit HHSI	hhp/in2
Press Drop @ Bit	psi
Bit Depth	132.0 m
ECD @ Csg Shoe	SG
ECD @ Bit	SG

Drill String (in) / (m)

	OD	ID	Length
Drill Pipe	5.500	3.250	54.0
Drill Collar	8.250	3.000	48.0
Drill Collar	9.500	3.125	30.0
Open Hole	36.000		55.2

in Casing m

OD	Set	MD

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	86	85	0
gpm|bbl/min	503 | 11.98	497 | 11.84	

Total GPM	1,001	AV, Riser		Circ Press psi	
Total Circ Time	24	AV min DP	5.9	Tot Pres Loss	
BU Time , min	9	AV max DC	6.2	Press Drop DP	
Total Strokes	4,158	BU Strokes	1,516	Press Drop An	

Properties		1	2	3	4	Targets	Program
Source		Pit #1					
Time		20:00					
Depth	m	78					
FL Temp	Deg C						
Density @ Deg C	SG	1.060 @ 23					
FV @ Deg C	sec/qt	100 @ 23					
PV @ Deg C	cP	26 @ 23					
YP	lbs/100 ft2	123					
GELS	lbs/100 ft2	51/58/65					
600/300		175.0/149.0					
200/100		141.0/120.0					
6/3		70.0/64.0					
API Filt	ml/30 min						
HTHP @ Deg C	ml/30 min						
Cake API/HTHP	32nd in						
Corr Solid	% by Vol	2.5					
NAP/Water	% by Vol	-/97.3					
Sand	% by vol						
MBT	ppb Eq.	35.0					
pH @ Deg C		9.50 @ 23					
ALK Mud	Pm						
ALK Filt	Pf/Mf						
Chlorides	mg/l						
Tot. Hardness	mg/l						
LGS/HGS	% by Vol	1.0/1.5					
LGS/HGS	ppb	8.95/21.73					
ASG	SG	3.561					

Additional Properties

Fluid Treatments

Fluid Type Spud Mud

Received 792 bbls of KCl/Polymer/Clayseal plus mud from West Seahorse 3 well (at $34.48 per barrel)
Received 1248 bbls of PHB (spud mud) from West Seahorse 3 well (at $3.87 per barrel)
Charged 250 bbls of PHB on today's report used to spud well.

Returned to Geelong marine terminal and deducted from inventory, 8 drums of XLR-RATE mud chemical.

Rig Activity

Continue to rig up and place Abandonment Cap on West Seahorse 3.
Make up BHA and drill string and RIH.
Tag seabed at 76.8m and spud Wardie 1 well at 18:30 hours drilling to 78m.
ROV check string clearance and drill ahead to 132m at midnight with 75bbls floculated PHG sweeps every single and backream each stand.

Product Name	Units	Start	Rec	Used	End	Cost
Spud Mud	bbl		250.0	250.0		$967.50
Amodrill 1235	1500 l drum	2			2	
BARABLOK	50 lb bag	60			60	
Baracide	25 kg can	2			2	
BARACOR 100	55 gal drum	4			4	
BARAZAN D PLUS	25 kg bag	37			37	
barite	1000 kg bulk	134.000			134.000	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	42.000			42.000	
calcium chloride flake 77%	25 kg bag	49			49	
caustic soda	25 kg pail	63			63	
Circal 60/16	25 kg sack	60			60	
Circal Y	25 kg sack	42			42	
citric acid	25 kg bag	40			40	
CLAYSEAL PLUS	216 kg drum	19			19	
CON DET	55 gal drum	8			8	
DEXTRID LTE	25 kg sack	68			68	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	110			110	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	84			84	
N-DRIL HT PLUS	50 lb bag	55			55	
Omyacarb 5	25 kg bulk	90.000			90.000	
PAC-L	25 kg bag	55			55	
potassium chloride	1000 kg bag	9			9	
sapp	25 kg bag	40			40	
soda ash	25 kg bag	23			23	
sodium bicarbonate	25 kg bag	36			36	
sodium sulfite	25 kg bag	24			24	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	4.5
Circulating	
Trips	3.0
Rig	
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	16.5
Total	24.0
Rotating	4.5
ROP	29.3
Dil Rate	0.00

Fluid Volume Breakdown — Spud Mud

Active	bbl	Additions	bbl	Losses	bbl
Annulus	211.3	Base		Fluid Dumped	
Pipe Cap	4.2	Drill Water	650.3	Transferred	
Active Pits	364.0	Dewatering		SCE	
Total Hole	215.4	Sea Water		Evaporation	
Total Circ	579.4	Whole Mud		Trips	
Reserve	1431.0	Barite		Other	-250.0
Prev Vol	2040.0	Chemicals		Total Surface	
Net Change	400.3	Other		Downhole	
Total Vol	2010.4	Total	650.3	Total Losses	-250.0

Fluid Types	Vol bbl
Seawater	364.0
KCl/Polymer	792.0

Deviation Information

Survey MD	m
Survey TVD	m
Angle	Deg
Direction	
Horiz Displ.	m

Daily Products Cost	$967.50	Total Daily Cost	$967.50
Cumulative Products Cost	$967.50	Total Cumulative Cost	$967.50

Baroid Representatives	Brian Auckram	Gerald Lange	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 003

Daily Drilling Fluid Report

Date 05/11/2008		Depth 136.0 m	
Spud Date 05/10/2008		Rig Activity Wait on cement	
Operator 3D Oil ltd	Report For Shaughan Corless	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	in
Make/Type	
Jets	
TFA	sq-in
Jets Velocity	m/sec
Jet Impact Force	lbf
Bit HHSI	hhp/in2
Press Drop @ Bit	psi
Bit Depth	m
ECD @ Csg Shoe	SG
ECD @ Bit	SG

Drill String (in) / (m)

OD	ID	Length
Open Hole 36.000		59.2

in Casing m

OD	Set	MD

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	0	0	0
gpm|bbl/min			

Total GPM	AV, Riser	Circ Press psi
Total Circ Time	AV min DP	Tot Pres Loss
BU Time , min	AV max DC	Press Drop DP
Total Strokes	BU Strokes	Press Drop An

Properties		1	2	3	4
Source		Pit #1	Pit #1		
Time		4:35	13:45		
Depth	m	136	136		
FL Temp	Deg C				
Density @ Deg C	SG	1.060 @ 22	1.060 @ 22		
FV @ Deg C	sec/qt	98 @ 22	96 @ 22		
PV @ Deg C	cP	25 @ 22	24 @ 22		
YP	lbs/100 ft2	123	121		
GELS	lbs/100 ft2	50/56/65	48/55/63		
600/300		173.0/148.0	169.0/145.0		
200/100		139.0/118.0	137.0/116.0		
6/3		68.0/63.0	67.0/61.0		
API Filt	ml/30 min				
HTHP @ Deg C	ml/30 min				
Cake API/HTHP	32nd in				
Corr Solid	% by Vol	3.8	3.8		
NAP/Water	% by Vol	-/96.0	-/96.0		
Sand	% by vol				
MBT	ppb Eq.	35.0	35.0		
pH @ Deg C		9.50 @ 23	9.50 @ 23		
ALK Mud	Pm				
ALK Filt	Pf/Mf				
Chlorides	mg/l				
Tot. Hardness	mg/l				
LGS/HGS	% by Vol	3.6/0.2	3.6/0.2		
LGS/HGS	ppb	32.73/2.51	32.73/2.51		
ASG	SG	2.673	2.673		
Additional Properties					

Targets

Program

Fluid Treatments

Fluid Type Spud Mud

Mixed pit of spud mud.

Rig Activity

Continue to drill 36" hole from 132 to 136m.
Pump 200bbl of Flocculated PHB and then displace hole with 350bbls of PHB and POOH.
Lay out 2 x 8 1/4 DCs and 26" bit then run conductor.
Attemps to stab into hole frustrated by poor visibility on the sea floor.
Stab in and run to 132m, install anti-rotation wire and landing ring. Install ICON 30" gripper conductor clamp and attempt to torque up.
Trouble shooting at midnight.

Product Name	Units	Start	Rec	Used	End	Cost
Spud Mud	bbl		630.0	630.0		$2,438.10
calcium chloride flake 77%	25 kg bag	49		28	21	$386.96
Amodrill 1235	1500 l drum	2			2	
BARABLOK	50 lb bag	60			60	
Baracide	25 kg can	2			2	
BARACOR 100	55 gal drum	4			4	
BARAZAN D PLUS	25 kg bag	37			37	
barite	1000 kg bulk	134.000			134.000	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	42.000			42.000	
caustic soda	25 kg pail	63			63	
Circal 60/16	25 kg sack	60			60	
Circal Y	25 kg sack	42			42	
citric acid	25 kg bag	40			40	
CLAYSEAL PLUS	216 kg drum	19			19	
CON DET	55 gal drum	8			8	
DEXTRID LTE	25 kg sack	68			68	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	110			110	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	84			84	
N-DRIL HT PLUS	50 lb bag	55			55	
Omyacarb 5	25 kg bulk	90.000			90.000	
PAC-L	25 kg bag	55			55	
potassium chloride	1000 kg bag	9			9	
sapp	25 kg bag	40			40	
soda ash	25 kg bag	23			23	
sodium bicarbonate	25 kg bag	36			36	
sodium sulfite	25 kg bag	24			24	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	0.5
Circulating	0.5
Trips	2.5
Rig	
Surveys	
Fishing	
Run Casing	19.5
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	1.0
Total	24.0
Rotating	0.5
ROP	8.0
Dil Rate	0.00

Fluid Volume Breakdown — Spud Mud

Active	bbl	Additions	bbl	Losses	bbl
Annulus		Base		Fluid Dumped	
Pipe Cap		Drill Water	721.2	Transferred	
Active Pits	347.0	Dewatering		SCE	
Total Hole	244.5	Sea Water		Evaporation	
Total Circ	347.0	Whole Mud		Trips	
Reserve	1575.0	Barite		Other	-550.0
Prev Vol	1646.4	Chemicals		Total Surface	
Net Change	171.2	Other		Downhole	
Total Vol	2166.5	Total	721.2	Total Losses	-550.0

Fluid Types

	Vol bbl
KCl/Polymer	669.0
Seawater	347.0

Deviation Information

Survey MD	m
Survey TVD	m
Angle	Deg
Direction	
Horiz Displ.	m

Daily Products Cost	$2,825.06	Total Daily Cost	$2,825.06
Cumulative Products Cost	$3,792.56	Total Cumulative Cost	$3,792.56

Baroid Representatives Brian Auckram Gerald Lange
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Baroid Fluid Services

Report No 004

Daily Drilling Fluid Report

Date 05/12/2008		Depth 161.0 m	
Spud Date 05/10/2008		Rig Activity Drilling	
Operator 3D Oil ltd	Report For Shaughan Corless	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	17.500 in
Make/Type	HUGHES/MXL-T1V
Jets	3x20
TFA	0.920 sq-in
Jets Velocity	101.8 m/sec
Jet Impact Force	lbf
Bit HHSI	hhp/in2
Press Drop @ Bit	psi
Bit Depth	158.0 m
ECD @ Csg Shoe	SG
ECD @ Bit	SG

Drill String (in) / (m)

	OD	ID	Length
Drill Pipe	5.500	4.000	40.7
Drill Collar	8.250	2.875	67.4
Other	8.125	0.000	19.0
Other	8.250	0.000	8.5
Other	8.125	0.000	11.9
Motor	9.625	0.000	10.5
Open Hole	36.000		59.2
Open Hole	17.500		

in Casing m

OD	Set	MD
30.000	@	121.2
20.000	@	132.8

Circulation/Hydraulics Data

Model	Nat-14-P-220		Nat-14-P-220		Nat-14-P-220	
Bore in	6.500		6.500		6.500	
Strokes in	14.000		14.000		14.000	
Eff(%)	97		97		97	
bbl/strk	0.139		0.139		0.139	
SPM	82		82		0	
gpm|bbl/min	480	11.43	480	11.43		
Total GPM	960	AV, Riser		Circ Press psi		
Total Circ Time	21	AV min DP	5.7	Tot Pres Loss		
BU Time , min	5	AV max DC	10.0	Press Drop DP		
Total Strokes	3,380	BU Strokes	862	Press Drop An		

Properties		1	2	3	4	Targets	Program
Source		Pit #4					
Time		22:00					
Depth	m	136					
FL Temp	Deg C						
Density @ Deg C	SG	1.060 @ 22					
FV @ Deg C	sec/qt	100 @ 22					
PV @ Deg C	cP	24 @ 22					
YP	lbs/100 ft2	123					
GELS	lbs/100 ft2	50/57/67					
600/300		171.0/147.0					
200/100		138.0/118.0					
6/3		69.0/68.0					
API Filt	ml/30 min						
HTHP @ Deg C	ml/30 min						
Cake API/HTHP	32nd in						
Corr Solid	% by Vol	2.8					
NAP/Water	% by Vol	-/97.0					
Sand	% by vol						
MBT	ppb Eq.	30.0					
pH @ Deg C		9.50 @ 23					
ALK Mud	Pm						
ALK Filt	Pf/Mf						
Chlorides	mg/l						
Tot. Hardness	mg/l						
LGS/HGS	% by Vol	1.6/1.2					
LGS/HGS	ppb	14.44/17.30					
ASG	SG	3.281					
Additional Properties							

Fluid Treatments

Fluid Type Spud Mud

Received Mud Chemicals.
Charged off Bulk Bentonite used and remainder of PHG transferred over from West Seahorse 3.
Current sweep regime 2 x 30 bbls floculated PHG while drilling and 30 bbls unfloculated PHG on connections.

Rig Activity

Level CTU and install ICON clamp. Cut 30" above icon clamp and lay out 30" above cut. Rig down 30" handling equipment, make up cement stinger and RIH. Cement as per programme with ROV observing returns to sea floor. Rig down cement lines and pick up and make up well head.
Make up 17 1/2" BHA and RIH.
Tag TOC at 131m and drill out to 132.8m then drill new formation to 161m at midnight with seawater and sweeps.

Product Name	Units	Start	Rec	Used	End	Cost
Spud Mud	bbl		368.0	368.0		$1,424.16
bentonite	1000 kg bulk	42.000	25.000	13.000	54.000	$6,433.44
Amodrill 1235	1500 l drum	2			2	
BARABLOK	50 lb bag	60			60	
Baracide	25 kg can	2			2	
BARACOR 100	55 gal drum	4			4	
BARAZAN D PLUS	25 kg bag	37	60		97	
barite	1000 kg bulk	134.000			134.000	
BAROFIBRE FINE	25 lb bag	50			50	
calcium chloride flake 77%	25 kg bag	21			21	
caustic soda	25 kg pail	63			63	
Circal 60/16	25 kg sack	60	48		108	
Circal Y	25 kg sack	42	96		138	
citric acid	25 kg bag	40			40	
CLAYSEAL PLUS	216 kg drum	19	16		35	
CON DET	55 gal drum	8			8	
DEXTRID LTE	25 kg sack	68			68	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	110			110	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	84			84	
N-DRIL HT PLUS	50 lb bag	55			55	
Omyacarb 5	25 kg bulk	90.000			90.000	
PAC-L	25 kg bag	55			55	
potassium chloride	1000 kg bag	9			9	
sapp	25 kg bag	40			40	
soda ash	25 kg bag	23			23	
sodium bicarbonate	25 kg bag	36			36	
sodium sulfite	25 kg bag	24			24	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	1.0
Circulating	
Trips	7.0
Rig	0.5
Surveys	
Fishing	
Run Casing	15.0
Coring	
Reaming	0.5
Testing	
Logging	
Dir Work	
Repair	
Other	
Total	24.0
Rotating	1.5
ROP	25.0
Dil Rate	0.00

Fluid Volume Breakdown — Spud Mud

Active	bbl	Additions	bbl	Losses	bbl
Annulus	120.1	Base		Fluid Dumped	
Pipe Cap	3.8	Drill Water	419.0	Transferred	-101.0
Active Pits	347.0	Dewatering		SCE	
Total Hole	123.9	Sea Water		Evaporation	
Total Circ	470.9	Whole Mud		Trips	
Reserve	2024.0	Barite		Other	
Prev Vol	1819.5	Chemicals	32.7	Total Surface	
Net Change	350.7	Other		Downhole	
Total Vol	2494.9	Total	451.7	Total Losses	-101.0

Fluid Types

	Vol bbl
KCl/Polymer	669.0
Seawater	347.0

Deviation Information

Survey MD	m
Survey TVD	m
Angle	Deg
Direction	
Horiz Displ.	m

Daily Products Cost	$7,857.60	Total Daily Cost	$7,857.60
Cumulative Products Cost	$11,650.16	Total Cumulative Cost	$11,650.16

Baroid Representatives	Brian Auckram	Gerald Lange	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 005

Daily Drilling Fluid Report

Date 05/13/2008		Depth 751.0 m	
Spud Date 05/10/2008		Rig Activity Run casing and cement	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	17.500 in
Make/Type	HUGHES/MXL-T1V
Jets	3x20
TFA	0.920 sq-in
Jets Velocity	120.4 m/sec
Jet Impact Force	lbf
Bit HHSI	hhp/in2
Press Drop @ Bit	psi
Bit Depth	161.0 m
ECD @ Csg Shoe	SG
ECD @ Bit	SG

Drill String (in) / (m)

	OD	ID	Length
Drill Pipe	5.500	4.000	43.7
Drill Collar	8.250	2.875	67.4
Other	8.125	0.000	19.0
Other	8.250	0.000	8.5
Other	8.125	0.000	11.9
Motor	9.625	0.000	10.5
Open Hole	36.000		59.2
Open Hole	17.500		

in Casing m

OD	Set	MD
30.000	@	121.2
20.000	@	132.8

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	98	96	0
gpm|bbl/min	574	13.66	562 13.38
Total GPM	1,135	AV, Riser	Circ Press psi
Total Circ Time	20	AV min DP 6.7	Tot Pres Loss
BU Time , min	4	AV max DC 11.8	Press Drop DP
Total Strokes	3,807	BU Strokes 864	Press Drop An

Properties		1	2	3	4	Targets	Program
Source		Pit #4	Pit #1				
Time		4:00	12:00				
Depth	m	250	672				
FL Temp	Deg C						
Density @ Deg C	SG	1.060	1.060 @ 22				
FV @ Deg C	sec/qt	100 @ 22	100 @ 22				
PV @ Deg C	cP	23 @ 22	24 @ 22				
YP	lbs/100 ft2	122	103				
GELS	lbs/100 ft2	51/56/68	49/55/64				
600/300		168.0/145.0	151.0/127.0				
200/100		136.0/117.0	118.0/98.0				
6/3		70.0/69.0	59.0/57.0				
API Filt	ml/30 min						
HTHP @ Deg C	ml/30 min						
Cake API/HTHP	32nd in						
Corr Solid	% by Vol	2.8	2.8				
NAP/Water	% by Vol	-/97.0	-/97.0				
Sand	% by vol						
MBT	ppb Eq.	30.0	30.0				
pH @ Deg C		9.50 @ 23	9.50 @ 23				
ALK Mud	Pm						
ALK Filt	Pf/Mf						
Chlorides	mg/l						
Tot. Hardness	mg/l						
LGS/HGS	% by Vol	1.6/1.2	1.6/1.2				
LGS/HGS	ppb	14.44/17.30	14.44/17.30				
ASG	SG	3.281	3.281				
Additional Properties							

Fluid Treatments

Fluid Type Seawater

Returned to Geelong marine terminal and deducted from inventory, 8 drums of XLR-RATE mud chemical.

Rig Activity

Continue to drill 17 1/2" hole from 161m to 751m with Seawater and Sweeps. Sweep regime 2 x 30bbls flocculated PHG while drilling and 30bbl PHG spotted at the BHA on connections.
At TD sweep the hole with 2 x 100bbl Hi Visc pills and circulate 2 x bottoms up.
Then displace hole with 950bbls of Viscosified KCl/polymer mud and POOH.
Working BHA and breaking out bit at midnight.

Product Name	Units	Start	Rec	Used	End	Cost
bentonite	1000 kg bulk	54.000		13.000	41.000	$6,433.44
caustic soda	25 kg pail	63		6	57	$265.14
lime	25 kg bag	84		10	74	$65.50
Amodrill 1235	1500 l drum	2			2	
BARABLOK	50 lb bag	60			60	
Baracide	25 kg can	2			2	
BARACOR 100	55 gal drum	4			4	
BARAZAN D PLUS	25 kg bag	97			97	
barite	1000 kg bulk	134.000			134.000	
BAROFIBRE FINE	25 lb bag	50			50	
calcium chloride flake 77%	25 kg bag	21			21	
Circal 60/16	25 kg sack	60			60	
Circal Y	25 kg sack	90			90	
citric acid	25 kg bag	40			40	
CLAYSEAL PLUS	216 kg drum	35			35	
CON DET	55 gal drum	8			8	
CON DET	5 gal can		32		32	
DEXTRID LTE	25 kg sack	68	72		140	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	110			110	
EZ-MUD DP	25 kg bag		40		40	
Kwikseal Fine	40 lb bag	38			38	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail		48		48	
Omyacarb 5	25 kg bulk	90.000			90.000	
PAC-L	25 kg bag	55	71		126	
potassium chloride	1000 kg bag	9			9	
sapp	25 kg bag	40			40	
soda ash	25 kg bag	23			23	
Daily Products Cost	$6,764.08	Total Daily Cost			$6,764.08	
Cumulative Products Cost	$18,414.24	Total Cumulative Cost			$18,414.24	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	14.0
Circulating	1.5
Trips	8.5
Rig	
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	
Total	24.0
Rotating	14.0
ROP	42.1
Dil Rate	0.00

Fluid Volume Breakdown — Seawater

Active	bbl	Additions	bbl	Losses	bbl
Annulus	120.4	Base		Fluid Dumped	
Pipe Cap	4.0	Drill Water		Transferred	
Active Pits	406.0	Dewatering		SCE	
Total Hole	124.4	Sea Water		Evaporation	
Total Circ	530.4	Whole Mud	3299.1	Trips	
Reserve		Barite		Other	-2518.5
Prev Vol	347.0	Chemicals		Total Surface	
Net Change	780.6	Other		Downhole	
Total Vol	530.4	Total	3299.1	Total Losses	-2518.5

Fluid Types	Vol bbl
Spud Mud	227.0
KCl/Polymer	130.0
Water	256.0

Deviation Information

Survey MD	751.0 m
Survey TVD	706.8 m
Angle	34.35 Deg
Direction	240
Horiz Displ.	m

Baroid Representatives	Brian Auckram	Gerald Lange	
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Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 006

Daily Drilling Fluid Report

Date 05/14/2008		Depth 751.0 m	
Spud Date 05/10/2008		Rig Activity Run casing and cement	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	in
Make/Type	
Jets	
TFA	sq-in
Jets Velocity	m/sec
Jet Impact Force	lbf
Bit HHSI	hhp/in2
Press Drop @ Bit	psi
Bit Depth	m
ECD @ Csg Shoe	SG
ECD @ Bit	SG

Drill String (in) / (m)

	OD	ID	Length
Open Hole	36.000		59.2
Open Hole	17.500		

in Casing m

OD	Set	MD
30.000	@	121.2
20.000	@	132.8

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	0	0	0
gpm|bbl/min			

Total GPM	AV, Riser	Circ Press psi
Total Circ Time	AV min DP	Tot Pres Loss
BU Time , min	AV max DC	Press Drop DP
Total Strokes	BU Strokes	Press Drop An

Properties		1	2	3	4	Targets	Program
Source		Pit #1					
Time		12:00					
Depth	m	0					
FL Temp	Deg C						
Density @ Deg C	SG	1.060					
FV @ Deg C	sec/qt	100 @ 22					
PV @ Deg C	cP	24 @ 22					
YP	lbs/100 ft2	103					
GELS	lbs/100 ft2	49/55/64					
600/300		151.0/127.0					
200/100		118.0/98.0					
6/3		59.0/57.0					
API Filt	ml/30 min						
HTHP @ Deg C	ml/30 min						
Cake API/HTHP	32nd in						
Corr Solid	% by Vol	2.3					
NAP/Water	% by Vol	-/97.5					
Sand	% by vol						
MBT	ppb Eq.	30.0					
pH @ Deg C		9.50 @ 23					
ALK Mud	Pm						
ALK Filt	Pf/Mf						
Chlorides	mg/l						
Tot. Hardness	mg/l						
LGS/HGS	% by Vol	0.6/1.7					
LGS/HGS	ppb	5.30/24.69					
ASG	SG	3.788					
Additional Properties							

Fluid Treatments

Fluid Type Seawater

Mixing mud for next section (12 1/4" hole). Chemicals to be charged off on frist report of the new section.

Rig Activity

Make up landing ring and RIH with Jet Sub. POOH with Jet Sub and run 13 3/8 casing. RIH to 113m and hang up. Skid rig to clear obstruction and RIH to 166m. Hang up and unable to clear obstruction. POOH and remove centralizers. RIH. Running Casing at midnight.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
Amodrill 1235	1500 l drum	2			2	
BARABLOK	50 lb bag	60			60	
Baracide	25 kg can	2			2	
BARACOR 100	55 gal drum	4			4	
BARAZAN D PLUS	25 kg bag	97			97	
barite	1000 kg bulk	134.000			134.000	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	21			21	
caustic soda	25 kg pail	57			57	
Circal 60/16	25 kg sack	60			60	
Circal Y	25 kg sack	90			90	
citric acid	25 kg bag	40			40	
CLAYSEAL PLUS	216 kg drum	35			35	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
DEXTRID LTE	25 kg sack	140			140	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	110			110	
EZ-MUD DP	25 kg bag	40			40	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
Omyacarb 5	25 kg bulk	90.000			90.000	
PAC-L	25 kg bag	126			126	
potassium chloride	1000 kg bag	9			9	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	
Trips	0.5
Rig	
Surveys	
Fishing	
Run Casing	23.5
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	
Total	24.0
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown — Seawater

Active	bbl	Additions	bbl	Losses	bbl
Annulus		Base		Fluid Dumped	
Pipe Cap		Drill Water		Transferred	
Active Pits	406.0	Dewatering		SCE	
Total Hole	137.0	Sea Water	14.8	Evaporation	
Total Circ	406.0	Whole Mud		Trips	
Reserve		Barite		Other	
Prev Vol	530.4	Chemicals		Total Surface	
Net Change	14.8	Other		Downhole	
Total Vol	543.0	Total	14.8	Total Losses	

Fluid Types	Vol bbl
Spud Mud	227.0
KCl/Polymer	130.0
Water	256.0

Deviation Information

Survey MD	751.0 m
Survey TVD	706.8 m
Angle	34.35 Deg
Direction	240
Horiz Displ.	m

Daily Products Cost	$0.00	Total Daily Cost	$2,500.00
Cumulative Products Cost	$13,584.48	Total Cumulative Cost	$28,584.48

Baroid Representatives	Brian Auckram	Gerald Lange	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

Baroid Fluid Services

Report No 007

Daily Drilling Fluid Report

Date 05/15/2008	**Depth** 751.0 m		
Spud Date 05/10/2008	**Rig Activity** Nipple up B.O.P.		
Operator 3D Oil ltd	**Report For** Shaughan Corless /Stefan Schmidt	**Well Name** Wardie-1	
Contractor Seadrill	**Report For** Micheal Barry	**Rig Name** West Triton	**Unit System** Apache
Country Australia	**State/Province/Region** Victoria	**Geographic Area/County** Bass Strait	**Field or Block** VIC P57

Bit Information		Drill String (in) / (m) OD	ID	Length	in Casing m OD	Set	MD
Bit Size	in				30.000 @		121.2
Make/Type					20.000 @		132.8
Jets					13.375 @		136.0
TFA	sq-in						
Jets Velocity	m/sec						
Jet Impact Force	lbf						
Bit HHSI	hhp/in2						
Press Drop @ Bit	psi						
Bit Depth	m	Riser	12.415	77.0			
ECD @ Csg Shoe	SG						
ECD @ Bit	SG						

Circulation/Hydraulics Data			
Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	0	0	0
gpm|bbl/min			
Total GPM	AV, Riser	Circ Press psi	
Total Circ Time	AV min DP	Tot Pres Loss	
BU Time , min	AV max DC	Press Drop DP	
Total Strokes	BU Strokes	Press Drop An	

Properties		1	2	3	4	Targets	Program
Source							
Time							
Depth	m						
FL Temp	Deg C						
Density @ Deg C	SG						
FV @ Deg C	sec/qt						
PV @ Deg C	cP						
YP	lbs/100 ft2						
GELS	lbs/100 ft2						
600/300							
200/100							
6/3							
API Filt	ml/30 min						
HTHP @ Deg C	ml/30 min						
Cake API/HTHP	32nd in						
Corr Solid	% by Vol						
NAP/Water	% by Vol						
Sand	% by vol						
MBT	ppb Eq.						
pH @ Deg C							
ALK Mud	Pm						
ALK Filt	Pf/Mf						
Chlorides	mg/l						
Tot. Hardness	mg/l						
LGS/HGS	% by Vol						
LGS/HGS	ppb						
ASG	SG						
Additional Properties							

Fluid Treatments

Fluid Type Seawater

KCl / Polymer mud mixed: 1683 bbls
Total KCl / Polymer mud mixed: 1683 bbls.

Continue mixing KCl polymer mud for displacement.

Rig Activity

Set 13 3/8" casing at MD 747.2m TVD 703.8m. Rig down elevators, pick up wellhead. Install cement plug, pressure test surface lines to 4000psi. Pumped 90 bbl seawater, 30 bbl, Tuned Spacer, and mix & pump cement as per programme. Release running tool and install choke line. Rig up handling equipment and nipple up BOPs.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
Amodrill 1235	1500 l drum	2			2	
BARABLOK	50 lb bag	60			60	
Baracide	25 kg can	2			2	
BARACOR 100	55 gal drum	4			4	
BARAZAN D PLUS	25 kg bag	97			97	
barite	1000 kg bulk	134.000			134.000	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	21			21	
caustic soda	25 kg pail	57			57	
Circal 60/16	25 kg sack	60			60	
Circal Y	25 kg sack	90			90	
citric acid	25 kg bag	40			40	
CLAYSEAL PLUS	216 kg drum	35			35	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
DEXTRID LTE	25 kg sack	140			140	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	110			110	
EZ-MUD DP	25 kg bag	40			40	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
Omyacarb 5	25 kg bulk	90.000			90.000	
PAC-L	25 kg bag	126			126	
potassium chloride	1000 kg bag	9			9	

Daily Products Cost	$0.00	Total Daily Cost	$2,500.00
Cumulative Products Cost	$13,584.48	Total Cumulative Cost	$31,084.48

Baroid Representatives	Gerald Lange	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	1.5
Trips	
Rig	
Surveys	
Fishing	
Run Casing	18.5
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	4.0
Total	24.0
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown Seawater

Active	bbl	Additions	bbl	Losses	bbl
Annulus		Base		Fluid Dumped	
Pipe Cap		Drill Water		Transferred	
Active Pits	406.0	Dewatering		SCE	-69.3
Total Hole	66.8	Sea Water		Evaporation	
Total Circ	406.0	Whole Mud		Trips	
Reserve		Barite		Other	
Prev Vol	543.0	Chemicals		Total Surface	
Net Change	-69.3	Other		Downhole	
Total Vol	472.8	Total		Total Losses	-69.3

Fluid Types	Vol bbl
Spud Mud	153.0
KCl/Polymer	130.0

Deviation Information

Survey MD	751.0 m
Survey TVD	706.8 m
Angle	34.35 Deg
Direction	240
Horiz Displ.	m

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 008

Daily Drilling Fluid Report

Date 05/16/2008		Depth 751.0 m	
Spud Date 05/10/2008		Rig Activity Drilling out cement	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	12.250	in
Make/Type	REEDHYC/RSX616MA16	
Jets	3x15|3x16	
TFA	1.107	sq-in
Jets Velocity	92.8	m/sec
Jet Impact Force		lbf
Bit HHSI		hhp/in2
Press Drop @ Bit		psi
Bit Depth	736.0	m
ECD @ Csg Shoe		SG
ECD @ Bit		SG

Drill String (in) / (m)

	OD	ID	Length
Drill Pipe	5.500	4.670	570.8
Drill Pipe	5.500	3.250	112.7
Drill Collar	8.250	2.875	21.8
Other	8.250	0.000	21.3
Other	9.250	0.000	9.4

in Casing m

OD	Set	MD
13.375	@	136.0

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220	
Bore in	6.500	6.500	6.500	
Strokes in	14.000	14.000	14.000	
Eff(%)	97	97	97	
bbl/strk	0.139	0.139	0.139	
SPM	90	90	0	
gpm|bbl/min	527	12.54	527	12.54
Total GPM	1,053	AV, Riser		Circ Press psi
Total Circ Time	16	AV min DP	63.5	Tot Pres Loss
BU Time , min	2	AV max DC		Press Drop DP
Total Strokes	2,909	BU Strokes	377	Press Drop An

Properties		1	2	3	4	Targets	Program	
Source		Pit #8	Pit #1					
Time		16:00	22:00					
Depth	m	751	751					
FL Temp	Deg C							
Density @ Deg C	SG	1.060 @ 24	1.060 @ 25				1.000	1.150
FV @ Deg C	sec/qt	52 @ 24	55 @ 25					
PV @ Deg C	cP	12 @ 49	10 @ 49					
YP	lbs/100 ft2	22	25				1	45
GELS	lbs/100 ft2	8/11/12	8/11/12					
600/300		46.0/34.0	45.0/35.0					
200/100		29.0/22.0	28.0/22.0					
6/3		10.0/8.0	10.0/8.0					
API Filt	ml/30 min	7.2	7.0			X X	1.0	6.0
HTHP @ Deg C	ml/30 min	14.6	14.0			X X	1.0	12.0
Cake API/HTHP	32nd in	1/2	1/2					
Corr Solid	% by Vol	1.3	1.3					
NAP/Water	% by Vol	-/96.1	-/96.1					
Sand	% by vol							
MBT	ppb Eq.	5.0	5.0					
pH @ Deg C		9.50	9.50 @ 25				8.80	9.50
ALK Mud	Pm	0.80	0.80					
ALK Filt	Pf/Mf	0.45/1.70	0.45/1.70					
Chlorides	mg/l	31,000	31,000					
Tot. Hardness	mg/l	320	320					
LGS/HGS	% by Vol	1.3/0.0	1.3/0.0					
LGS/HGS	ppb	11.58/0.46	11.58/0.46					
ASG	SG	2.639	2.639					
Additional Properties								
KCL %	% by vol	7.5	7.5				6.0	8.0
PHPA Concentratio	ppb	0.30	0.30					

Fluid Treatments

Fluid Type Seawater

KCl / Polymer mud mixed: 8 bbls
Total KCl / Polymer mud mixed: 1691 bbls.

Mixed 50 bbls of Hi-Vis KCl/Polymer/ Clayseal plus mud with Barazan D+.
Continue mixing KCl polymer mud for dilution and volume.

Rig Activity

Pressure test BOP's, Make up bit and BHA, RIH and test MWD. Continue to RIH and tag float collar 732.5m. Fault with TDS, service same. Drill top of cement at from 732.5m to 736m with seawater.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
CLAYSEAL PLUS	216 kg drum	35		24	11	$22,959.36
potassium chloride	1000 kg bag	9	18	20	7	$12,020.00
BARAZAN D PLUS	25 kg bag	97		46	51	$7,003.04
PAC-L	25 kg bag	126		44	82	$3,602.28
DEXTRID LTE	25 kg sack	140		60	80	$2,433.60
EZ-MUD	25 kg pail	110		8	102	$686.64
EZ-MUD DP	25 kg bag	40		8	32	$686.64
caustic soda	25 kg pail	57		8	49	$353.52
Baracide	25 kg can	2		2		$174.74
soda ash	25 kg bag	23		4	19	$53.00
Amodrill 1235	1500 l drum	2			2	
BARABLOK	50 lb bag	60			60	
BARACOR 100	55 gal drum	4			4	
barite	1000 kg bulk	134.000			134.000	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	21			21	
Circal 60/16	25 kg sack	60			60	
Circal Y	25 kg sack	90			90	
citric acid	25 kg bag	40			40	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
EZ SPOT	55 gal drum	8			8	
KCL Tech Grade (bulk)	1000 kg bulk		9.000		9.000	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300	20 20 20 89 89 89 89	
VSM-300	20 20 20 89 89 89 89	
VSM-300	20 20 20 89 89 89 89	
VSM-300	20 20 20 89 89 89 89	
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	2.5
Circulating	
Trips	8.0
Rig	1.0
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	2.5
Testing	
Logging	
Dir Work	1.0
Repair	1.0
Other	8.0
Total	24.0
Rotating	5.0
ROP	
Dil Rate	0.00

Fluid Volume Breakdown — Seawater

Active	bbl	Additions	bbl	Losses	bbl
Annulus	52.5	Base		Fluid Dumped	
Pipe Cap	43.9	Drill Water		Transferred	
Active Pits	309.0	Dewatering		SCE	-136.3
Total Hole	96.4	Sea Water		Evaporation	
Total Circ	405.4	Whole Mud		Trips	
Reserve		Barite		Other	
Prev Vol	472.8	Chemicals		Total Surface	
Net Change	-136.3	Other		Downhole	
Total Vol	405.4	Total		Total Losses	-136.3

Fluid Types	Vol bbl
KCl/Polymer	1691.0

Deviation Information

Survey MD	751.0 m
Survey TVD	706.8 m
Angle	34.35 Deg
Direction	240
Horiz Displ.	m

Daily Products Cost	$49,972.82	Total Daily Cost	$52,472.82
Cumulative Products Cost	$63,557.30	Total Cumulative Cost	$83,557.30

Baroid Representatives	Gerald Lange	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 007

Daily Drilling Fluid Report

Date 05/15/2008	**Depth** 751.0 m		
Spud Date 05/10/2008	**Rig Activity** Nipple up B.O.P.		
Operator 3D Oil ltd	**Report For** Shaughan Corless /Stefan Schmidt	**Well Name** Wardie-1	
Contractor Seadrill	**Report For** Micheal Barry	**Rig Name** West Triton	**Unit System** Apache
Country Australia	**State/Province/Region** Victoria	**Geographic Area/County** Bass Strait	**Field or Block** VIC P57

Bit Information		Drill String (in) / (m) OD	ID	Length	in Casing m OD	Set	MD
Bit Size	in				30.000 @		121.2
Make/Type					20.000 @		132.8
Jets					13.375 @		136.0
TFA	sq-in						
Jets Velocity	m/sec						
Jet Impact Force	lbf						
Bit HHSI	hhp/in2						
Press Drop @ Bit	psi						
Bit Depth	m	Riser	12.415	77.0			
ECD @ Csg Shoe	SG						
ECD @ Bit	SG						

Circulation/Hydraulics Data			
Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	0	0	0
gpm|bbl/min			
Total GPM	AV, Riser	Circ Press psi	
Total Circ Time	AV min DP	Tot Pres Loss	
BU Time , min	AV max DC	Press Drop DP	
Total Strokes	BU Strokes	Press Drop An	

Properties		1	2	3	4	Targets	Program
Source							
Time							
Depth	m						
FL Temp	Deg C						
Density @ Deg C	SG						
FV @ Deg C	sec/qt						
PV @ Deg C	cP						
YP	lbs/100 ft2						
GELS	lbs/100 ft2						
600/300							
200/100							
6/3							
API Filt	ml/30 min						
HTHP @ Deg C	ml/30 min						
Cake API/HTHP	32nd in						
Corr Solid	% by Vol						
NAP/Water	% by Vol						
Sand	% by vol						
MBT	ppb Eq.						
pH @ Deg C							
ALK Mud	Pm						
ALK Filt	Pf/Mf						
Chlorides	mg/l						
Tot. Hardness	mg/l						
LGS/HGS	% by Vol						
LGS/HGS	ppb						
ASG	SG						
Additional Properties							

Fluid Treatments

Fluid Type Seawater

KCl / Polymer mud mixed: 1683 bbls
Total KCl / Polymer mud mixed: 1683 bbls.

Continue mixing KCl polymer mud for displacement.

Rig Activity

Set 13 3/8" casing at MD 747.2m TVD 703.8m. Rig down elevators, pick up wellhead. Install cement plug, pressure test surface lines to 4000psi. Pumped 90 bbl seawater, 30 bbl, Tuned Spacer, and mix & pump cement as per programme. Release running tool and install choke line. Rig up handling equipment and nipple up BOPs.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
Amodrill 1235	1500 l drum	2			2	
BARABLOK	50 lb bag	60			60	
Baracide	25 kg can	2			2	
BARACOR 100	55 gal drum	4			4	
BARAZAN D PLUS	25 kg bag	97			97	
barite	1000 kg bulk	134.000			134.000	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	21			21	
caustic soda	25 kg pail	57			57	
Circal 60/16	25 kg sack	60			60	
Circal Y	25 kg sack	90			90	
citric acid	25 kg bag	40			40	
CLAYSEAL PLUS	216 kg drum	35			35	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
DEXTRID LTE	25 kg sack	140			140	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	110			110	
EZ-MUD DP	25 kg bag	40			40	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
Omyacarb 5	25 kg bulk	90.000			90.000	
PAC-L	25 kg bag	126			126	
potassium chloride	1000 kg bag	9			9	

Daily Products Cost	$0.00	Total Daily Cost	$2,500.00
Cumulative Products Cost	$13,584.48	Total Cumulative Cost	$31,084.48

Baroid Representatives	Gerald Lange	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	1.5
Trips	
Rig	
Surveys	
Fishing	
Run Casing	18.5
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	4.0
Total	24.0
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown Seawater

Active	bbl	Additions	bbl	Losses	bbl
Annulus		Base		Fluid Dumped	
Pipe Cap		Drill Water		Transferred	
Active Pits	406.0	Dewatering		SCE	-69.3
Total Hole	66.8	Sea Water		Evaporation	
Total Circ	406.0	Whole Mud		Trips	
Reserve		Barite		Other	
Prev Vol	543.0	Chemicals		Total Surface	
Net Change	-69.3	Other		Downhole	
Total Vol	472.8	Total		Total Losses	-69.3

Fluid Types	Vol bbl
Spud Mud	153.0
KCl/Polymer	130.0

Deviation Information

Survey MD	751.0 m
Survey TVD	706.8 m
Angle	34.35 Deg
Direction	240
Horiz Displ.	m

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 009

Daily Drilling Fluid Report

Date 05/17/2008		Depth 1,446.0 m	
Spud Date 05/10/2008		Rig Activity Drilling	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	12.250	in
Make/Type	REEDHYC/RSX616MA16	
Jets	3x15|3x16	
TFA	1.107	sq-in
Jets Velocity	94.9	m/sec
Jet Impact Force	1621.7	lbf
Bit HHSI	4.31	hhp/in2
Press Drop @ Bit	809	psi
Bit Depth	1,446.0	m
ECD @ Csg Shoe	1.126	SG
ECD @ Bit	1.123	SG

Drill String (in) / (m)

	OD	ID	Length
Drill Pipe	5.500	4.670	1,280.8
Drill Pipe	5.500	3.250	112.7
Drill Collar	8.250	2.875	21.8
Other	8.250	0.000	21.3
Other	9.250	0.000	9.4

in Casing m

OD	Set	MD
13.375	@	136.0

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	92	92	0
gpm|bbl/min	538 12.82	538 12.82	

Total GPM	1,077	AV, Riser		Circ Press psi	2000
Total Circ Time	26	AV min DP	64.9	Tot Pres Loss	1616
BU Time , min	2	AV max DC		Press Drop DP	738
Total Strokes	4,790	BU Strokes	377	Press Drop An	6

Properties		1	2	3	Hyd 4	Targets				Program	
Source		Flow Line	Pit #6	Pit #6	Pit #6						
Time		4:30	9:52	14:53	21:00						
Depth	m	770	968	1,156	1,381						
FL Temp	Deg C		31	35	35						
Density @ Deg C	SG	1.070 @ 25	1.090 @ 27	1.100 @ 33	1.120 @ 30					1.000	1.150
FV @ Deg C	sec/qt	57 @ 25	58 @ 27	55 @ 33	58 @ 30						
PV @ Deg C	cP	11 @ 49	11 @ 49	13 @ 49	13 @ 49						
YP	lbs/100 ft2	18	27	28	30					1	45
GELS	lbs/100 ft2	7/8/10	10/15/18	11/17/21	13/18/22						
600/300		40.0/29.0	49.0/38.0	54.0/41.0	56.0/43.0						
200/100		24.0/18.0	33.0/26.0	31.0/29.0	38.0/29.0						
6/3		8.0/6.0	12.0/10.0	13.0/11.0	13.0/10.0						
API Filt	ml/30 min	7.0	5.8	5.6	5.0	X				1.0	6.0
HTHP @ Deg C	ml/30 min	14.0	12.2 @ 121	11.8 @ 121	12.0 @ 121	X	X			1.0	12.0
Cake API/HTHP	32nd in	1/2	1/2	1/2	1/2						
Corr Solid	% by Vol	1.8	3.0	3.7	4.6						
NAP/Water	% by Vol	-/95.5	-/94.2	-/93.6	-/92.7						
Sand	% by vol		0.50	0.50	0.50						
MBT	ppb Eq.	5.0	7.5	7.5	6.3						
pH @ Deg C		9.50 @ 25	10.00 @ 25	9.50 @ 25	9.50 @ 25		X			8.80	9.50
ALK Mud	Pm	0.90	1.60	1.20	1.30						
ALK Filt	Pf/Mf	0.30/1.80	0.50/1.40	0.35/1.15	0.30/1.00						
Chlorides	mg/l	33,000	34,000	33,000	33,000						
Tot. Hardness	mg/l	200	320	360	560						
LGS/HGS	% by Vol	1.7/0.1	3.0/0.0	3.7/0.0	4.2/0.4						
LGS/HGS	ppb	15.38/0.93	27.25/0.22	33.45/0.51	38.72/5.64						
ASG	SG	2.658	2.608	2.615	2.732						
Additional Properties											
KCL %	% by vol	7.5	7.5	7.5	7.5					6.0	8.0
PHPA Concentratio	ppb	0.30	0.30	0.80	0.80						

Fluid Treatments

Fluid Type KCl/Polymer

KCl / Polymer mud mixed: 993.6 bbls
Total KCl / Polymer mud mixed: 2684.6 bbls.

Continue mixing KCl polymer mud for dilution and volume.
Mixed BARAZAN D+ to the active to increase and maintain the 6 RPM at 13. Cont. to bring up EZ MUD concentration via premix. Began running centrifuge at 950m to maintain MW. Begin adding 5ppb Circal Y & 5 ppb Circal 60/16 into active at 1425m, 100m above top of LaTrobe formation as per programme.

Rig Activity

Cont. drill out shoe track and rat hole @ 747m, wash rat hole to 751m. Displaced seawater with 8.9 ppg with 8.9 ppg KCl/Polymer/Clayseal mud. Circ. & cond. mud to 8.9 in/out. Conducted FIT as per programme to EMW of 13.13 ppg. Continued drilling 12 1/4" hole fro 751 m to 1397m. Driller chair system crashed, troubleshoot. Cont. drilling from 1397m to 1446m as per Directional drillers instructions.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
KCL Tech Grade (bulk)	1000 kg bulk	9.000	18.000	11.000	16.000	$8,261.00
CLAYSEAL PLUS	216 kg drum	11		6	5	$5,739.84
BARAZAN D PLUS	25 kg bag	51		28	23	$4,262.72
potassium chloride	1000 kg bag	7		6	1	$3,606.00
PAC-L	25 kg bag	82		22	60	$1,801.14
EZ-MUD DP	25 kg bag	32		18	14	$1,544.94
DEXTRID LTE	25 kg sack	80		37	43	$1,500.72
potassium hydroxide	25 kg bag	77		4	73	$179.92
ALDACIDE G	5 gal can		32	2	30	$139.80
citric acid	25 kg bag	40		3	37	$138.72
soda ash	25 kg bag	19		2	17	$26.50
Amodrill 1235	1500 l drum	2			2	
BARABLOK	50 lb bag	60			60	
BARACOR 100	55 gal drum	4			4	
BARA-DEFOAM W300	5 gal can		18		18	
barite	1000 kg bulk	134.000			134.000	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	21			21	
caustic soda	25 kg pail	49			49	
Circal 60/16	25 kg sack	60			60	
Circal Y	25 kg sack	90			90	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	102			102	
Kwikseal Fine	40 lb bag	38			38	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	16.0
Centrifuge	3,000	40.00	

Time

Drilling	20.0
Circulating	1.0
Trips	
Rig	
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	1.5
Testing	
Logging	
Dir Work	
Repair	0.5
Other	1.0
Total	24.0
Rotating	21.5
ROP	34.8
Dil Rate	0.00

Fluid Volume Breakdown — KCl/Polymer

Active	bbl	Additions	bbl	Losses	bbl
Annulus	52.5	Base		Fluid Dumped	
Pipe Cap	93.0	Drill Water	800.0	Transferred	
Active Pits	522.0	Dewatering		SCE	-386.0
Total Hole	145.5	Sea Water		Evaporation	
Total Circ	667.5	Whole Mud	127.0	Trips	
Reserve	1125.0	Barite		Other	
Prev Vol	1691.0	Chemicals	66.6	Total Surface	-22.9
Net Change	584.7	Other		Downhole	
Total Vol	1792.5	Total	993.6	Total Losses	-408.9

Fluid Types

	Vol bbl
Potassium Chloride brine	284.0

Deviation Information

Survey MD	751.0	m
Survey TVD	706.8	m
Angle	34.35	Deg
Direction	240	
Horiz Displ.		m

Daily Products Cost	$27,201.30	Total Daily Cost	$29,701.30
Cumulative Products Cost	$90,758.60	Total Cumulative Cost	$113,258.60

Baroid Representatives	Gerald Lange	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 010

Daily Drilling Fluid Report

Date 05/18/2008		Depth 1,766.0 m	
Spud Date 05/10/2008		Rig Activity Tripping	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	12.250	in
Make/Type	REEDHYC/RSX616MA16	
Jets	3x15|3x16	
TFA	1.107	sq-in
Jets Velocity	94.9	m/sec
Jet Impact Force	1621.7	lbf
Bit HHSI	4.31	hhp/in2
Press Drop @ Bit	809	psi
Bit Depth	1,530.0	m
ECD @ Csg Shoe	1.127	SG
ECD @ Bit		SG

Drill String (in) / (m)

	OD	ID	Length
Drill Pipe	5.500	4.670	1,364.8
Drill Pipe	5.500	3.250	112.7
Drill Collar	8.250	2.875	21.8
Other	8.250	0.000	21.3
Other	9.250	0.000	9.4

in Casing m

OD	Set	MD
13.375	@	136.0

Leak Off SG 1.576

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	92	92	0
gpm|bbl/min	538 12.82	538 12.82	

Total GPM	1,077	AV, Riser		Circ Press psi	2100
Total Circ Time	25	AV min DP	64.9	Tot Pres Loss	1719
BU Time , min	2	AV max DC		Press Drop DP	834
Total Strokes	4,524	BU Strokes	377	Press Drop An	7

Properties		1	2	3	Hyd 4	Targets	Program	
Source		Flow Line	Pit #6	Flow Line	Pit #6			
Time		3:00	9:50	16:50	20:00			
Depth	m	1,555	1,664	1,766	1,766			
FL Temp	Deg C	44	44	43				
Density @ Deg C	SG	1.120 @ 30	1.130 @ 41	1.130 @ 39	1.120		1.000	1.150
FV @ Deg C	sec/qt	54 @ 30	58 @ 41	52 @ 39	54			
PV @ Deg C	cP	15 @ 49	14 @ 49	13 @ 49	15 @ 49			
YP	lbs/100 ft2	30	28	29	30		1	45
GELS	lbs/100 ft2	13/18/22	10/18/24	11/18/22	13/19/23			
600/300		60.0/45.0	56.0/42.0	55.0/42.0	60.0/45.0			
200/100		39.0/30.0	36.0/27.0	35.0/28.0	39.0/31.0			
6/3		13.0/10.0	12.0/10.0	12.0/10.0	14.0/11.0			
API Filt	ml/30 min	5.0	4.8	4.6	4.9		1.0	6.0
HTHP @ Deg C	ml/30 min	11.8 @ 121	11.2 @ 121	11.0 @ 121	11.5 @ 121		1.0	12.0
Cake API/HTHP	32nd in	1/2	1/2	1/2	1/2			
Corr Solid	% by Vol	4.5	5.1	4.9	4.1			
NAP/Water	% by Vol	-/92.4	-/92.0	-/92.0	-/92.8			
Sand	% by vol	0.50	0.25	0.50	0.50			
MBT	ppb Eq.	6.3	10.0	10.0	8.8			
pH @ Deg C		9.50 @ 25	8.50 @ 25	9.00 @ 25	9.00 @ 25	X	8.80	9.50
ALK Mud	Pm	0.50	1.30	1.30	1.30			
ALK Filt	Pf/Mf	0.06/1.00	0.08/0.90	0.06/1.10	0.04/1.00			
Chlorides	mg/l	38,000	36,000	38,000	38,000			
Tot. Hardness	mg/l	400	480	400	400			
LGS/HGS	% by Vol	4.4/0.1	4.8/0.3	4.6/0.3	3.6/0.5			
LGS/HGS	ppb	40.31/1.56	43.63/4.71	42.03/4.86	32.89/7.46			
ASG	SG	2.637	2.700	2.707	2.797			
Additional Properties								
KCL %	% by vol	7.5	7.5	7.5	7.5		6.0	8.0
PHPA Concentratio	ppb	0.80	1.00	1.00	1.00			

Fluid Treatments

Fluid Type KCl/Polymer

KCl / Polymer mud mixed: 178 bbls
Total KCl / Polymer mud mixed: 2862.6 bbls.

Cont. adding 5ppb Circal Y & 5 ppb Circal 60/16 into active at 1425m, 100m above top of LaTrobe formation as per programme.
Added 4 ppb BARABLOK into active @ 1515m.
Continue to add EZ Mud to the active to increase and maintain concentration above 1 ppb.

Rig Activity

Cont. drilling from 1446 m to 1520m as per Directional drillers instructions. Control ROP drilling from 1520m to 1766m. Survey every connection. Circulate hole clean @ 1075gpm. Trip tank remote valve not functioned, change out valve. Flow check, static. POOH wet from 1766m to 1530m, working tight spot at 1540m to 1530m.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
CLAYSEAL PLUS	216 kg drum	5		5		$4,783.20
barite	1000 kg bulk	134.000		8.700	125.300	$4,131.46
BARABLOK	50 lb bag	60		60		$1,823.40
BARAZAN D PLUS	25 kg bag	23		8	15	$1,217.92
Circal Y	25 kg sack	90	48	89	49	$1,139.20
DEXTRID LTE	25 kg sack	43		15	28	$608.40
Circal 60/16	25 kg sack	60	48	60	48	$607.80
Omyacarb 5	25 kg bulk	90.000		56.000	34.000	$525.84
EZ-MUD	25 kg pail	102		6	96	$514.98
PAC-L	25 kg bag	60		5	55	$409.35
soda ash	25 kg bag	17		8	9	$106.00
ALDACIDE G	5 gal can	30			30	
Amodrill 1235	1500 l drum	2			2	
BARACOR 100	55 gal drum	4			4	
BARA-DEFOAM W300	5 gal can	18			18	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	21			21	
caustic soda	25 kg pail	49			49	
citric acid	25 kg bag	37			37	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
EZ SPOT	55 gal drum	8			8	
EZ-MUD DP	25 kg bag	14			14	
KCL Tech Grade (bulk)	1000 kg bulk	16.000			16.000	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	18.0
Centrifuge	3,000	40.00	

Time

Drilling	15.5
Circulating	3.5
Trips	2.5
Rig	
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	2.5
Other	
Total	24.0
Rotating	15.5
ROP	20.6
Dil Rate	0.00

Fluid Volume Breakdown — KCl/Polymer

Active	bbl	Additions	bbl	Losses	bbl
Annulus	52.5	Base		Fluid Dumped	
Pipe Cap	98.8	Drill Water		Transferred	
Active Pits	479.0	Dewatering		SCE	-672.0
Total Hole	151.3	Sea Water		Evaporation	
Total Circ	630.3	Whole Mud	134.0	Trips	
Reserve	524.0	Barite	13.0	Other	
Prev Vol	1792.5	Chemicals	30.9	Total Surface	
Net Change	-494.1	Other		Downhole	
Total Vol	1154.3	Total	177.9	Total Losses	-672.0

Fluid Types

	Vol bbl
Potassium Chloride brine	150.0

Deviation Information

Survey MD	1,125.9	m
Survey TVD	1,025.7	m
Angle	32.34	Deg
Direction	242	
Horiz Displ.		m

Daily Products Cost	$15,867.55	Total Daily Cost	$18,367.55
Cumulative Products Cost	$106,626.15	Total Cumulative Cost	$131,626.15

Baroid Representatives	Gerald Lange	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 011

Daily Drilling Fluid Report

Date 05/19/2008		Depth 1,766.0 m	
Spud Date 05/10/2008		Rig Activity Tripping	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	12.250	in
Make/Type	REEDHYC/RSX616MA16	
Jets	3x15|3x16	
TFA	1.107	sq-in
Jets Velocity	82.5	m/sec
Jet Impact Force	1226.2	lbf
Bit HHSI	2.83	hhp/in2
Press Drop @ Bit	611	psi
Bit Depth	30.0	m
ECD @ Csg Shoe	1.123	SG
ECD @ Bit		SG

Drill String (in) / (m)

	OD	ID	Length
Other	8.250	0.000	20.6
Other	9.250	0.000	9.4

in Casing m

OD	Set	MD
30.000	@	133.0
13.375	@	136.0

Leak Off SG 1.576

Circulation/Hydraulics Data

Model	Nat-14-P-220		Nat-14-P-220		Nat-14-P-220	
Bore in	6.500		6.500		6.500	
Strokes in	14.000		14.000		14.000	
Eff(%)	97		97		97	
bbl/strk	0.139		0.139		0.139	
SPM	80		80		0	
gpm|bbl/min	468	11.15	468	11.15		
Total GPM	936	AV, Riser		Circ Press psi	1625	
Total Circ Time	26	AV min DP		Tot Pres Loss	668	
BU Time , min	0	AV max DC		Press Drop DP		
Total Strokes	4,203	BU Strokes	55	Press Drop An	3	

Properties		1	2	3	Hyd 4	Targets	Program		Fluid Treatments
Source		Flow Line	Pit #6	Pit #6	Pit #6				Fluid Type KCl/Polymer
Time		3:00	10:30	14:45	20:00				Made KCL brine for contingency purposes. Note: Some chemicals charged off today was due to an inventory reconciliation
Depth	m	1,766	1,766	1,766	1,766				
FL Temp	Deg C			38					
Density @ Deg C	SG	1.120	1.120 @ 30	1.120 @ 35	1.120		1.000	1.150	
FV @ Deg C	sec/qt	54	56 @ 30	56 @ 35	55				
PV @ Deg C	cP	15 @ 49	13 @ 49	13 @ 49	14 @ 49				
YP	lbs/100 ft2	30	33	27	27		1	45	
GELS	lbs/100 ft2	13/19/23	14/19/23	13/20/24	14/20/23				
600/300		60.0/45.0	59.0/46.0	53.0/40.0	55.0/41.0				
200/100		39.0/31.0	40.0/31.0	35.0/28.0	37.0/30.0				
6/3		14.0/11.0	15.0/13.0	14.0/12.0	14.0/12.0				
API Filt	ml/30 min	5.0	5.0	5.2	5.2		1.0	6.0	
HTHP @ Deg C	ml/30 min	11.5 @ 121	11.4 @ 121	11.6 @ 121	11.6 @ 121		1.0	12.0	
Cake API/HTHP	32nd in	1/2	1/2	1/2	1/2				
Corr Solid	% by Vol	4.0	4.5	4.5	4.5				
NAP/Water	% by Vol	-/93.0	-/92.4	-/92.4	-/92.4				
Sand	% by vol	0.50	0.25	0.50	0.50				
MBT	ppb Eq.	10.0	10.0	10.0	10.0				
pH @ Deg C		9.00 @ 25	9.00 @ 25	9.00 @ 25	9.00 @ 25		8.80	9.50	
ALK Mud	Pm	0.70	1.00	1.20	1.00				
ALK Filt	Pf/Mf	0.03/0.90	0.06/1.00	0.05/1.30	0.04/0.80				
Chlorides	mg/l	37,000	38,000	38,000	38,000				
Tot. Hardness	mg/l	400	440	480	480				
LGS/HGS	% by Vol	3.3/0.7	4.4/0.1	4.4/0.1	4.4/0.1				
LGS/HGS	ppb	29.99/10.34	40.31/1.56	40.31/1.56	40.31/1.56				
ASG	SG	2.881	2.637	2.637	2.637				
Additional Properties									
KCL %	% by vol	7.5	8.0	8.0	8.0		6.0	8.0	
PHPA Concentratio	ppb	1.00	1.00	1.00	1.00				

Rig Activity

Cont. POOH wet from 1530m, ream tight spot at 1178m to 919m. Hole not taking proper displacement. Pump out of hole from 919m to casing shoe at 744m. Circ. bottoms up. RIH from 744m to 1737m pumping last single. Wash down last stand to 1766m. Circ. hole clean and condition mud. Flow check static. POOH wet from 1766m to 1412m. Pump slug and POOH from 1412m to shoe @ 747m. Flow check static. Cont. POOH and lay out BHA.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
KCL Tech Grade (bulk)	1000 kg bulk	16.000		5.000	11.000	$3,755.00
ALDACIDE G	5 gal can	30		4	26	$279.60
DEXTRID LTE	25 kg sack	28		6	22	$243.36
soda ash	25 kg bag	9		7	2	$92.75
BARA-DEFOAM W300	5 gal can	18		1	17	$55.92
Omyacarb 5	25 kg bulk	34.000		1.000	33.000	$9.39
Amodrill 1235	1500 l drum	2			2	
BARACOR 100	55 gal drum	4			4	
BARAZAN D PLUS	25 kg bag	15	30		45	
barite	1000 kg bulk	125.300			125.300	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	21			21	
caustic soda	25 kg pail	49			49	
Circal 60/16	25 kg sack	48			48	
Circal Y	25 kg sack	49			49	
citric acid	25 kg bag	37			37	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	96			96	
EZ-MUD DP	25 kg bag	14			14	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
PAC-L	25 kg bag	55			55	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300	20 20 20 255 255 255 255	16.0
VSM-300	20 20 20 255 255 255 255	16.0
VSM-300	20 20 20 255 255 255 255	16.0
VSM-300	20 20 20 255 255 255 255	16.0
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	4.0
Trips	17.5
Rig	
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	
Testing	
Logging	
Dir Work	2.5
Repair	
Other	
Total	24.0
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown — KCl/Polymer

Active	bbl	Additions	bbl	Losses	bbl
Annulus	7.7	Base		Fluid Dumped	
Pipe Cap		Drill Water		Transferred	
Active Pits	578.0	Dewatering		SCE	-72.1
Total Hole	59.8	Sea Water		Evaporation	
Total Circ	585.7	Whole Mud		Trips	
Reserve	254.0	Barite		Other	-40.0
Prev Vol	1154.3	Chemicals	1.7	Total Surface	
Net Change	-110.4	Other		Downhole	
Total Vol	891.8	Total	1.7	Total Losses	-112.1

Fluid Types	Vol bbl
Potassium Chloride brine	510.0

Deviation Information

Survey MD	1,125.9	m
Survey TVD	1,025.7	m
Angle	32.34	Deg
Direction	242	
Horiz Displ.		m

Daily Products Cost	$4,436.02	Total Daily Cost	$6,936.02
Cumulative Products Cost	$111,062.17	Total Cumulative Cost	$138,562.17

Baroid Representatives	Gerald Lange	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 012

Daily Drilling Fluid Report

Date 05/20/2008		Depth 1,766.0 m	
Spud Date 05/10/2008		Rig Activity Tripping	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	5.500 in
Make/Type	REEVES/Mule Shoe
Jets	1x32
TFA	0.785 sq-in
Jets Velocity	m/sec
Jet Impact Force	lbf
Bit HHSI	hhp/in2
Press Drop @ Bit	psi
Bit Depth	416.0 m
ECD @ Csg Shoe	SG
ECD @ Bit	SG

Drill String (in) / (m)

	OD	ID	Length
Drill Pipe	5.500	4.670	416.0

in Casing m

OD	Set	MD
30.000	@	133.0
13.375	@	136.0

Leak Off SG 1.576

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	0	0	0
gpm|bbl/min			

Total GPM | AV, Riser | Circ Press psi
Total Circ Time | AV min DP | Tot Pres Loss
BU Time , min | AV max DC | Press Drop DP
Total Strokes | BU Strokes | Press Drop An

Properties		1	2	3	4	Targets	Program	
Source		Pit #6	Pit #6					
Time		10:05	20:00					
Depth	m	1,766	1,766					
FL Temp	Deg C							
Density @ Deg C	SG	1.120 @ 28	1.120 @ 28				1.000	1.150
FV @ Deg C	sec/qt	57 @ 28	58 @ 28					
PV @ Deg C	cP	13 @ 49	13 @ 49					
YP	lbs/100 ft2	27	27				1	45
GELS	lbs/100 ft2	13/20/23	14/19/22					
600/300		53.0/40.0	53.0/40.0					
200/100		35.0/28.0	34.0/26.0					
6/3		14.0/12.0	14.0/12.0					
API Filt	ml/30 min	5.2	5.1				1.0	6.0
HTHP @ Deg C	ml/30 min	11.6 @ 121	11.7 @ 121				1.0	12.0
Cake API/HTHP	32nd in	1/2	1/2					
Corr Solid	% by Vol	4.5	4.4					
NAP/Water	% by Vol	-/92.4	-/92.4					
Sand	% by vol	0.50	0.50					
MBT	ppb Eq.	10.0	10.0					
pH @ Deg C		9.00 @ 25	9.00 @ 25				8.80	9.50
ALK Mud	Pm	1.20	1.00					
ALK Filt	Pf/Mf	0.04/1.10	0.07/1.30					
Chlorides	mg/l	38,000	39,000					
Tot. Hardness	mg/l	480	480					
LGS/HGS	% by Vol	4.4/0.1	4.3/0.1					
LGS/HGS	ppb	40.31/1.56	39.50/1.64					
ASG	SG	2.637	2.640					
Additional Properties								
KCL %	% by vol	8.0	8.0				6.0	8.0
PHPA Concentratio	ppb	1.00	1.00					

Fluid Treatments

Fluid Type KCl/Polymer

KCl / Polymer mud mixed: 0 bbls
Total KCl / Polymer mud mixed: 2864.3 bbls.

Rig Activity

Cont. Lay down BHA. Rig up Schlumberger, Sonic pex tool string and install radio active sources. RIH with tools to commence logging as per logging programme. POOH recover RA sources and lay down tools. RIH MDT tools string to 1680m, checking pressure points as per programme, monitoring well via trip tanks. POH wireline MDT tools and make up 5 1/2" mule shoe on DP. RIH to 416m.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
ALDACIDE G	5 gal can	26			26	
Amodrill 1235	1500 l drum	2			2	
BARACOR 100	55 gal drum	4			4	
BARA-DEFOAM W300	5 gal can	17			17	
BARAZAN D PLUS	25 kg bag	45			45	
barite	1000 kg bulk	125.300			125.300	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	21			21	
caustic soda	25 kg pail	49			49	
Circal 60/16	25 kg sack	48			48	
Circal Y	25 kg sack	49			49	
citric acid	25 kg bag	37			37	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
DEXTRID LTE	25 kg sack	22			22	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	96			96	
EZ-MUD DP	25 kg bag	14			14	
KCL Tech Grade (bulk)	1000 kg bulk	11.000			11.000	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
Omyacarb 5	25 kg bulk	33.000			33.000	
PAC-L	25 kg bag	55			55	
potassium chloride	1000 kg bag	10			10	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	
Trips	2.0
Rig	
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	
Testing	
Logging	22.0
Dir Work	
Repair	
Other	
Total	24.0
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown — KCl/Polymer

Active	bbl	Additions	bbl	Losses	bbl
Annulus	52.5	Base		Fluid Dumped	
Pipe Cap	28.8	Drill Water		Transferred	
Active Pits	510.0	Dewatering		SCE	-55.5
Total Hole	81.3	Sea Water		Evaporation	
Total Circ	591.3	Whole Mud		Trips	-10.0
Reserve	284.0	Barite		Other	-8.0
Prev Vol	919.5	Chemicals		Total Surface	
Net Change	-73.5	Other		Downhole	
Total Vol	875.3	Total		Total Losses	-73.5

Fluid Types	Vol bbl
Potassium Chloride brine	510.0

Deviation Information

Survey MD	1,125.9 m
Survey TVD	1,025.7 m
Angle	32.34 Deg
Direction	242
Horiz Displ.	m

Daily Products Cost	$0.00	Total Daily Cost	$2,500.00
Cumulative Products Cost	$111,062.17	Total Cumulative Cost	$141,062.17

Baroid Representatives	Gerald Lange	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 013

Daily Drilling Fluid Report

Date 05/21/2008		Depth 1,766.0 m	
Spud Date 05/10/2008		Rig Activity P&A	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	5.500	in
Make/Type	REEVES/Mule Shoe	
Jets	1x32	
TFA	0.785	sq-in
Jets Velocity	130.9	m/sec
Jet Impact Force		lbf
Bit HHSI		hhp/in2
Press Drop @ Bit		psi
Bit Depth	148.0	m
ECD @ Csg Shoe		SG
ECD @ Bit		SG

Drill String (in) / (m)

	OD	ID	Length
Drill Pipe	5.500	4.670	148.0

in Casing m

OD	Set	MD
30.000	@	133.0
13.375	@	136.0

Leak Off SG 1.576

Circulation/Hydraulics Data

Model	Nat-14-P-220		Nat-14-P-220		Nat-14-P-220	
Bore in	6.500		6.500		6.500	
Strokes in	14.000		14.000		14.000	
Eff(%)	97		97		97	
bbl/strk	0.139		0.139		0.139	
SPM	90		90		0	
gpm|bbl/min	527	12.54	527	12.54		
Total GPM	1,053	AV, Riser			Circ Press psi	
Total Circ Time	18	AV min DP	63.5		Tot Pres Loss	
BU Time , min	2	AV max DC			Press Drop DP	
Total Strokes	3,321	BU Strokes	377		Press Drop An	

Properties		1	2	3	4	Targets	Program	
Source		Pit #6	Pit #6					
Time		12:00	18:00					
Depth	m	1,766	1,766					
FL Temp	Deg C							
Density @ Deg C	SG	1.120	1.120				1.000	1.150
FV @ Deg C	sec/qt	55 @ 28	55					
PV @ Deg C	cP	12 @ 49	13 @ 49					
YP	lbs/100 ft2	28	27				1	45
GELS	lbs/100 ft2	13/20/23	13/20/22					
600/300		52.0/40.0	53.0/40.0					
200/100		35.0/28.0	35.0/28.0					
6/3		14.0/12.0	14.0/12.0					
API Filt	ml/30 min	5.3	5.3				1.0	6.0
HTHP @ Deg C	ml/30 min	11.6 @ 121	11.8 @ 121				1.0	12.0
Cake API/HTHP	32nd in	1/2	1/2					
Corr Solid	% by Vol	4.5	4.5					
NAP/Water	% by Vol	-/92.4	-/92.4					
Sand	% by vol	0.50	0.50					
MBT	ppb Eq.	10.0	10.0					
pH @ Deg C		9.20 @ 25	9.50 @ 25				8.80	9.50
ALK Mud	Pm	1.00	1.20					
ALK Filt	Pf/Mf	0.04/1.50	0.08/1.70					
Chlorides	mg/l	38,000	38,000					
Tot. Hardness	mg/l	480	480					
LGS/HGS	% by Vol	4.4/0.1	4.4/0.1					
LGS/HGS	ppb	40.31/1.56	40.31/1.56					
ASG	SG	2.637	2.637					
Additional Properties								
KCL %	% by vol	9.0	8.0			X	6.0	8.0
PHPA Concentratio	ppb	1.00	1.00					

Fluid Treatments

Fluid Type KCl/Polymer

Dump 170 bbls of cement contaminated mud on first plug

Dump 170 bbls of cement contaminated mud on second plug

Rig Activity

RIH with mule show on 5 1/2" DP from 414m to 1761m. Circ. bottoms up. Test surface lines to 1000psi. Cement plug with Halliburton as per cementing programme. Set Plug #1A from 1761m - 1616m. Pull out to 1613m. Circ. 1.5X bottoms up. Pump cement plug #1B as per cement programme from 1613m - 1406m. Circ. 1.5X bottoms up. POOH & lay down DP from 1406m to 842m. Tag cement plug #1B @ 1407m. POH from 903m to 805m. Mix & pump plug #2 as per programme. POH from 805m to 599m. Circ. 1.5X bottoms up @ 180spm, 300psi. POOH from 599m to 148m.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
BARAZAN D PLUS	25 kg bag	45		3	42	$456.72
ALDACIDE G	5 gal can	26		1	25	$69.90
Amodrill 1235	1500 l drum	2			2	
BARACOR 100	55 gal drum	4			4	
BARA-DEFOAM W300	5 gal can	17			17	
barite	1000 kg bulk	125.300			125.300	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	21			21	
caustic soda	25 kg pail	49			49	
Circal 60/16	25 kg sack	48			48	
Circal Y	25 kg sack	49			49	
citric acid	25 kg bag	37			37	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
DEXTRID LTE	25 kg sack	22			22	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	96			96	
EZ-MUD DP	25 kg bag	14			14	
KCL Tech Grade (bulk)	1000 kg bulk	11.000			11.000	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
Omyacarb 5	25 kg bulk	33.000			33.000	
PAC-L	25 kg bag	55			55	
potassium chloride	1000 kg bag	10			10	

Daily Products Cost	$526.62	Total Daily Cost	$3,026.62
Cumulative Products Cost	$111,588.79	Total Cumulative Cost	$144,088.79

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300	20 20 20 255 255 255 255	24.0
VSM-300	20 20 20 255 255 255 255	
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	3.0
Trips	7.5
Rig	
Surveys	
Fishing	
Run Casing	2.5
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	9.5
Other	1.5
Total	24.0
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown — KCl/Polymer

Active	bbl	Additions	bbl	Losses	bbl
Annulus	52.5	Base		Fluid Dumped	
Pipe Cap	10.2	Drill Water		Transferred	
Active Pits	400.0	Dewatering		SCE	-352.8
Total Hole	62.8	Sea Water		Evaporation	
Total Circ	462.8	Whole Mud		Trips	
Reserve	32.0	Barite		Other	
Prev Vol	875.3	Chemicals	0.4	Total Surface	
Net Change	-352.4	Other		Downhole	
Total Vol	494.8	Total	0.4	Total Losses	-352.8

Fluid Types	Vol bbl
Potassium Chloride brine	510.0

Deviation Information

Survey MD	1,766.0	m
Survey TVD	1,618.2	m
Angle	7.36	Deg
Direction	234	
Horiz Displ.		m

Baroid Representatives	Gerald Lange	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 014

Daily Drilling Fluid Report

Date 05/22/2008		Depth 1,766.0 m	
Spud Date 05/10/2008		Rig Activity Cut casing	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size	in
Make/Type	
Jets	
TFA	sq-in
Jets Velocity	m/sec
Jet Impact Force	lbf
Bit HHSI	hhp/in2
Press Drop @ Bit	psi
Bit Depth	m
ECD @ Csg Shoe	SG
ECD @ Bit	SG

Drill String (in) / (m)

OD	ID	Length

in Casing m

OD	Set	MD
30.000	@	133.0
13.375	@	136.0

Leak Off SG 1.576

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	0	0	0
gpm|bbl/min			

Total GPM	AV, Riser	Circ Press psi
Total Circ Time	AV min DP	Tot Pres Loss
BU Time , min	AV max DC	Press Drop DP
Total Strokes	BU Strokes	Press Drop An

Properties		1	2	3	4	Targets	Program		Fluid Treatments
Source		Pit #6							Fluid Type KCl/Polymer
Time		18:00							.
Depth	m	1,766							
FL Temp	Deg C								
Density @ Deg C	SG	1.120					1.000	1.150	
FV @ Deg C	sec/qt	55							
PV @ Deg C	cP	13 @ 49							
YP	lbs/100 ft2	27					1	45	
GELS	lbs/100 ft2	13/20/22							
600/300		53.0/40.0							
200/100		35.0/28.0							
6/3		14.0/12.0							
API Filt	ml/30 min	5.3					1.0	6.0	
HTHP @ Deg C	ml/30 min	11.8 @ 121					1.0	12.0	
Cake API/HTHP	32nd in	1/2							
Corr Solid	% by Vol	4.5							
NAP/Water	% by Vol	-/92.4							
Sand	% by vol	0.50							
MBT	ppb Eq.	10.0							
pH @ Deg C		9.00 @ 25					8.80	9.50	
ALK Mud	Pm	1.00							
ALK Filt	Pf/Mf	0.03/1.70							
Chlorides	mg/l	38,000							
Tot. Hardness	mg/l	480							
LGS/HGS	% by Vol	4.4/0.1							
LGS/HGS	ppb	40.31/1.56							
ASG	SG	2.637							
Additional Properties									
KCL %	% by vol	8.0					6.0	8.0	
PHPA Concentratio	ppb	1.00							

Rig Activity

Cont. lay down DP. Flush BOP diverter line. Line up Halliburton unit to test cement plug #2 to 1000psi. Remove choke line, flow line, prepare for skid. Pick up 13 3/8" casing cutter. Make up casing cutter as per Weatherford. RIH to 126m cut casing as per programme. Retrieve wellhead, 20X13 3/8" wedge, 8 joints of 13 3/8" casing. Pick up well head b/out running tool. Lay down same. Prepare to RIH with mule shoe.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
calcium chloride flake 77%	25 kg bag	21		2	19	$27.64
ALDACIDE G	5 gal can	25			25	
Amodrill 1235	1500 l drum	2			2	
BARACOR 100	55 gal drum	4			4	
BARA-DEFOAM W300	5 gal can	17			17	
BARAZAN D PLUS	25 kg bag	42			42	
barite	1000 kg bulk	125.300			125.300	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
caustic soda	25 kg pail	49			49	
Circal 60/16	25 kg sack	48			48	
Circal Y	25 kg sack	49			49	
citric acid	25 kg bag	37			37	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
DEXTRID LTE	25 kg sack	22			22	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	96			96	
EZ-MUD DP	25 kg bag	14			14	
KCL Tech Grade (bulk)	1000 kg bulk	11.000			11.000	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
Omyacarb 5	25 kg bulk	33.000			33.000	
PAC-L	25 kg bag	55			55	
potassium chloride	1000 kg bag	10			10	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	1.5
Trips	5.0
Rig	
Surveys	
Fishing	
Run Casing	0.5
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	17.0
Total	24.0
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown — KCl/Polymer

Active	bbl	Additions	bbl	Losses	bbl
Annulus		Base		Fluid Dumped	
Pipe Cap		Drill Water		Transferred	
Active Pits		Dewatering		SCE	
Total Hole	66.8	Sea Water		Evaporation	
Total Circ		Whole Mud		Trips	
Reserve	426.7	Barite		Other	
Prev Vol	494.8	Chemicals		Total Surface	
Net Change		Other		Downhole	
Total Vol	493.5	Total		Total Losses	

Fluid Types	Vol bbl
Potassium Chloride brine	510.0

Deviation Information

Survey MD	1,766.0	m
Survey TVD	1,618.2	m
Angle	7.36	Deg
Direction	234	
Horiz Displ.		m

Daily Products Cost	$27.64	Total Daily Cost	$2,527.64
Cumulative Products Cost	$111,616.43	Total Cumulative Cost	$146,616.43

Baroid Representatives	Eugene Edwards	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 015

Daily Drilling Fluid Report

Date 05/23/2008	**Depth** 1,766.0 m		
Spud Date 05/10/2008	**Rig Activity** Rig up and rig down		
Operator 3D Oil ltd	**Report For** Shaughan Corless /Stefan Schmidt	**Well Name** Wardie-1	
Contractor Seadrill	**Report For** Micheal Barry	**Rig Name** West Triton	**Unit System** Apache
Country Australia	**State/Province/Region** Victoria	**Geographic Area/County** Bass Strait	**Field or Block** VIC P57

Bit Information		Drill String (in) / (m) OD ID Length	in Casing m OD Set MD	Circulation/Hydraulics Data			
Bit Size	in		30.000 @ 133.0	Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Make/Type			13.375 @ 136.0	Bore in	6.500	6.500	6.500
Jets				Strokes in	14.000	14.000	14.000
TFA	sq-in			Eff(%)	97	97	97
Jets Velocity	m/sec			bbl/strk	0.139	0.139	0.139
Jet Impact Force	lbf			SPM	0	0	0
Bit HHSI	hhp/in2			gpm|bbl/min			
Press Drop @ Bit	psi			Total GPM	AV, Riser	Circ Press psi	
Bit Depth	1,766.0 m			Total Circ Time	AV min DP	Tot Pres Loss	
ECD @ Csg Shoe	SG			BU Time , min	AV max DC	Press Drop DP	
ECD @ Bit	SG		Leak Off SG 1.576	Total Strokes	BU Strokes	Press Drop An	

Properties		1	2	3	4	Targets	Program		Fluid Treatments
Source		Pit #6							Fluid Type KCl/Polymer
Time		23:59							.
Depth	m	1,766							
FL Temp	Deg C								
Density @ Deg C	SG	1.120					1.000	1.150	
FV @ Deg C	sec/qt	55							
PV @ Deg C	cP	14 @ 49							
YP	lbs/100 ft2	26					1	45	
GELS	lbs/100 ft2	13/20/22							
600/300		54.0/40.0							
200/100		35.0/28.0							
6/3		14.0/12.0							
API Filt	ml/30 min	5.3					1.0	6.0	
HTHP @ Deg C	ml/30 min	11.8 @ 121					1.0	12.0	
Cake API/HTHP	32nd in	1/2							
Corr Solid	% by Vol	4.5							
NAP/Water	% by Vol	-/92.4							
Sand	% by vol	0.50							
MBT	ppb Eq.	10.0							
pH @ Deg C		9.00 @ 25					8.80	9.50	
ALK Mud	Pm	1.00							
ALK Filt	Pf/Mf	0.03/1.70							
Chlorides	mg/l	38,000							
Tot. Hardness	mg/l	480							
LGS/HGS	% by Vol	4.4/0.1							
LGS/HGS	ppb	40.31/1.56							
ASG	SG	2.637							
Additional Properties									
KCL %	% by vol	8.0					6.0	8.0	
PHPA Concentratio	ppb	1.00							

Rig Activity

Make up mule show and RIH with 5 1/2" DP to 207m. Spot 25 bbl Hi-Vis pill. Pull back to 157m. R/up cement line and test to 500psi. Mix and pump cement plug #3. POOH to 95m to circulate hole clean. POOH and lay down mule shoe. RIH with 30" casing cutter to 78m. Attempt cut. POH to change knifes. RIH to 78m, attempt again, no return torque. Break out TDS without hydraulic power. POH to surface. Change knifes and attempt again as per weatherford. POH lay down cutter assembly. Pickup casing spear. Prepare & moved work platform.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
ALDACIDE G	5 gal can	25			25	
Amodrill 1235	1500 l drum	2			2	
BARACOR 100	55 gal drum	4			4	
BARA-DEFOAM W300	5 gal can	17			17	
BARAZAN D PLUS	25 kg bag	42			42	
barite	1000 kg bulk	125.300			125.300	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	19			19	
caustic soda	25 kg pail	49			49	
Circal 60/16	25 kg sack	48			48	
Circal Y	25 kg sack	49			49	
citric acid	25 kg bag	37			37	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
DEXTRID LTE	25 kg sack	22			22	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	96			96	
EZ-MUD DP	25 kg bag	14			14	
KCL Tech Grade (bulk)	1000 kg bulk	11.000			11.000	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
Omyacarb 5	25 kg bulk	33.000			33.000	
PAC-L	25 kg bag	55			55	
potassium chloride	1000 kg bag	10			10	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	2.0
Trips	7.5
Rig	
Surveys	
Fishing	
Run Casing	6.0
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	5.0
Other	3.5
Total	24.0
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown KCl/Polymer

Active	bbl	Additions	bbl	Losses	bbl
Annulus		Base		Fluid Dumped	
Pipe Cap		Drill Water		Transferred	
Active Pits		Dewatering		SCE	
Total Hole	66.8	Sea Water		Evaporation	
Total Circ		Whole Mud		Trips	
Reserve	426.7	Barite		Other	
Prev Vol	493.5	Chemicals		Total Surface	
Net Change		Other		Downhole	
Total Vol	493.5	Total		Total Losses	

Fluid Types	Vol bbl
Potassium Chloride brine	510.0

Deviation Information

Survey MD	1,766.0 m
Survey TVD	1,618.2 m
Angle	7.36 Deg
Direction	234
Horiz Displ.	m

Daily Products Cost	$0.00	Total Daily Cost	$2,500.00
Cumulative Products Cost	$111,616.43	Total Cumulative Cost	$149,116.43

Baroid Representatives	Eugene Edwards	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 016

Daily Drilling Fluid Report

Date 05/24/2008		Depth 1,766.0 m	
Spud Date 05/10/2008		Rig Activity Rig up and rig down	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information

Bit Size		in
Make/Type		
Jets		
TFA		sq-in
Jets Velocity		m/sec
Jet Impact Force		lbf
Bit HHSI		hhp/in2
Press Drop @ Bit		psi
Bit Depth	1,766.0	m
ECD @ Csg Shoe		SG
ECD @ Bit		SG

Drill String (in) / (m)

OD	ID	Length

in Casing m

OD	Set	MD
30.000	@	133.0
13.375	@	136.0

Leak Off SG 1.576

Circulation/Hydraulics Data

Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Bore in	6.500	6.500	6.500
Strokes in	14.000	14.000	14.000
Eff(%)	97	97	97
bbl/strk	0.139	0.139	0.139
SPM	0	0	0
gpm|bbl/min			

Total GPM		AV, Riser	Circ Press psi
Total Circ Time		AV min DP	Tot Pres Loss
BU Time , min		AV max DC	Press Drop DP
Total Strokes		BU Strokes	Press Drop An

Properties		1	2	3	4	Targets	Program
Source							
Time							
Depth	m						
FL Temp	Deg C						
Density @ Deg C	SG						
FV @ Deg C	sec/qt						
PV @ Deg C	cP						
YP	lbs/100 ft2						
GELS	lbs/100 ft2						
600/300							
200/100							
6/3							
API Filt	ml/30 min						
HTHP @ Deg C	ml/30 min						
Cake API/HTHP	32nd in						
Corr Solid	% by Vol						
NAP/Water	% by Vol						
Sand	% by vol						
MBT	ppb Eq.						
pH @ Deg C							
ALK Mud	Pm						
ALK Filt	Pf/Mf						
Chlorides	mg/l						
Tot. Hardness	mg/l						
LGS/HGS	% by Vol						
LGS/HGS	ppb						
ASG	SG						

Additional Properties

Fluid Treatments

Fluid Type KCl/Polymer

Backloaded 400 bbl KCL/Polymer mud and 500 bbl KCL brine for the next hole onto boat.

Rig Activity

RIH with 30" CSG spear latch onto conductor, attempt to free csg, no success. Remove icon clamp from conductor, pull CTU inserts. Pull 30" csg to rig floor and lay down same. Prepare for rig move. Skid rig in 15ft. R/up BOP sling, pick up work platform from t/deck place on main deck. Prepare to skid out to lower deck to boat. Lock in pin not released, pin damaged, cut off lock pin assembly. Skid out rig. P/up & L/dn DC from derrick. P/up HWDP, RIH to open slots to lay down.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
ALDACIDE G	5 gal can	25			25	
Amodrill 1235	1500 l drum	2			2	
BARACOR 100	55 gal drum	4			4	
BARA-DEFOAM W300	5 gal can	17			17	
BARAZAN D PLUS	25 kg bag	42			42	
barite	1000 kg bulk	125.300			125.300	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	19			19	
caustic soda	25 kg pail	49			49	
Circal 60/16	25 kg sack	48			48	
Circal Y	25 kg sack	49			49	
citric acid	25 kg bag	37			37	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
DEXTRID LTE	25 kg sack	22			22	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	96			96	
EZ-MUD DP	25 kg bag	14			14	
KCL Tech Grade (bulk)	1000 kg bulk	11.000			11.000	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
Omyacarb 5	25 kg bulk	33.000			33.000	
PAC-L	25 kg bag	55			55	
potassium chloride	1000 kg bag	10			10	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	
Trips	5.0
Rig	
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	19.0
Total	24.0
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown — KCl/Polymer

Active	bbl	Additions	bbl	Losses	bbl
Annulus		Base		Fluid Dumped	
Pipe Cap		Drill Water		Transferred	-426.7
Active Pits		Dewatering		SCE	
Total Hole	66.8	Sea Water		Evaporation	
Total Circ		Whole Mud		Trips	
Reserve		Barite		Other	
Prev Vol	493.5	Chemicals		Total Surface	
Net Change	-426.7	Other		Downhole	
Total Vol	66.8	Total		Total Losses	-426.7

Fluid Types Vol bbl

Deviation Information

Survey MD	1,766.0	m
Survey TVD	1,618.2	m
Angle	7.36	Deg
Direction	234	
Horiz Displ.		m

Daily Products Cost	$0.00	Total Daily Cost	$2,500.00
Cumulative Products Cost	$111,616.43	Total Cumulative Cost	$151,616.43

Baroid Representatives	Eugene Edwards	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Baroid Fluid Services

Report No 017

Daily Drilling Fluid Report

Date 05/25/2008		Depth 1,766.0 m	
Spud Date 05/10/2008		Rig Activity Move to location	
Operator 3D Oil ltd	Report For Shaughan Corless /Stefan Schmidt	Well Name Wardie-1	
Contractor Seadrill	Report For Micheal Barry	Rig Name West Triton	Unit System Apache
Country Australia	State/Province/Region Victoria	Geographic Area/County Bass Strait	Field or Block VIC P57

Bit Information		Drill String (in) / (m) OD ID Length	in Casing m OD Set MD	Circulation/Hydraulics Data			
Bit Size	in		30.000 @ 133.0	Model	Nat-14-P-220	Nat-14-P-220	Nat-14-P-220
Make/Type			13.375 @ 136.0	Bore in	6.500	6.500	6.500
Jets				Strokes in	14.000	14.000	14.000
TFA	sq-in			Eff(%)	97	97	97
Jets Velocity	m/sec			bbl/strk	0.139	0.139	0.139
Jet Impact Force	lbf			SPM	0	0	0
Bit HHSI	hhp/in2			gpm|bbl/min			
Press Drop @ Bit	psi			Total GPM	AV, Riser	Circ Press psi	
Bit Depth	1,766.0 m			Total Circ Time	AV min DP	Tot Pres Loss	
ECD @ Csg Shoe	SG			BU Time , min	AV max DC	Press Drop DP	
ECD @ Bit	SG		Leak Off SG 1.576	Total Strokes	BU Strokes	Press Drop An	

Properties		1	2	3	4	Targets	Program
Source							
Time							
Depth	m						
FL Temp	Deg C						
Density @ Deg C	SG						
FV @ Deg C	sec/qt						
PV @ Deg C	cP						
YP	lbs/100 ft2						
GELS	lbs/100 ft2						
600/300							
200/100							
6/3							
API Filt	ml/30 min						
HTHP @ Deg C	ml/30 min						
Cake API/HTHP	32nd in						
Corr Solid	% by Vol						
NAP/Water	% by Vol						
Sand	% by vol						
MBT	ppb Eq.						
pH @ Deg C							
ALK Mud	Pm						
ALK Filt	Pf/Mf						
Chlorides	mg/l						
Tot. Hardness	mg/l						
LGS/HGS	% by Vol						
LGS/HGS	ppb						
ASG	SG						
Additional Properties							

Fluid Treatments

Fluid Type KCl/Polymer

.

Rig Activity

Cont. to lay down 5" DP. Rig up BOP slings and ext sling for lift up texas deck. Move DP and DC from cantilever to main before skid. Skid rig, secure BOP. Seafastened TDS & other loose items. Jack down rig to 2m draft. Conducted water integrity test. Cont. jacking down to complete draft, moved the rig 1km away from Wardie -1 drilling location.

Product Name	Units	Start	Rec	Used	End	Cost
Drilling Fluids Engineer 2	day(s)			1		$1,250.00
Drilling Fluids Engineer	day(s)			1		$1,250.00
ALDACIDE G	5 gal can	25			25	
Amodrill 1235	1500 l drum	2			2	
BARACOR 100	55 gal drum	4			4	
BARA-DEFOAM W300	5 gal can	17			17	
BARAZAN D PLUS	25 kg bag	42			42	
barite	1000 kg bulk	125.300			125.300	
BAROFIBRE FINE	25 lb bag	50			50	
bentonite	1000 kg bulk	41.000			41.000	
calcium chloride flake 77%	25 kg bag	19			19	
caustic soda	25 kg pail	49			49	
Circal 60/16	25 kg sack	48			48	
Circal Y	25 kg sack	49			49	
citric acid	25 kg bag	37			37	
CON DET	55 gal drum	8			8	
CON DET	5 gal can	32			32	
DEXTRID LTE	25 kg sack	22			22	
EZ SPOT	55 gal drum	8			8	
EZ-MUD	25 kg pail	96			96	
EZ-MUD DP	25 kg bag	14			14	
KCL Tech Grade (bulk)	1000 kg bulk	11.000			11.000	
Kwikseal Fine	40 lb bag	38			38	
lime	25 kg bag	74			74	
N-DRIL HT PLUS	50 lb bag	55			55	
NO-SULF	17 kg pail	48			48	
Omyacarb 5	25 kg bulk	33.000			33.000	
PAC-L	25 kg bag	55			55	
potassium chloride	1000 kg bag	10			10	

Solids Control Equipment

Shaker	Screens	Hrs
VSM-300		
VSM-300		
VSM-300		
VSM-300		
VSM-300		

Hydrocyclone	Cones	Screens	Hrs
D 16	16 4		

Centrifuge	Speed	Feed Rate	Hrs
Centrifuge	3,000	40.00	
Centrifuge	3,000	40.00	

Time

Drilling	
Circulating	
Trips	
Rig	
Surveys	
Fishing	
Run Casing	
Coring	
Reaming	
Testing	
Logging	
Dir Work	
Repair	
Other	22.5
Total	22.5
Rotating	
ROP	
Dil Rate	0.00

Fluid Volume Breakdown KCl/Polymer

Active	bbl	Additions	bbl	Losses	bbl
Annulus		Base		Fluid Dumped	
Pipe Cap		Drill Water		Transferred	
Active Pits		Dewatering		SCE	
Total Hole	66.8	Sea Water		Evaporation	
Total Circ		Whole Mud		Trips	
Reserve		Barite		Other	
Prev Vol	66.8	Chemicals		Total Surface	
Net Change		Other		Downhole	
Total Vol	66.8	Total		Total Losses	

Fluid Types Vol bbl

Deviation Information

Survey MD	1,766.0 m
Survey TVD	1,618.2 m
Angle	7.36 Deg
Direction	234
Horiz Displ.	m

Daily Products Cost	$0.00	Total Daily Cost	$2,500.00
Cumulative Products Cost	$111,616.43	Total Cumulative Cost	$154,116.43

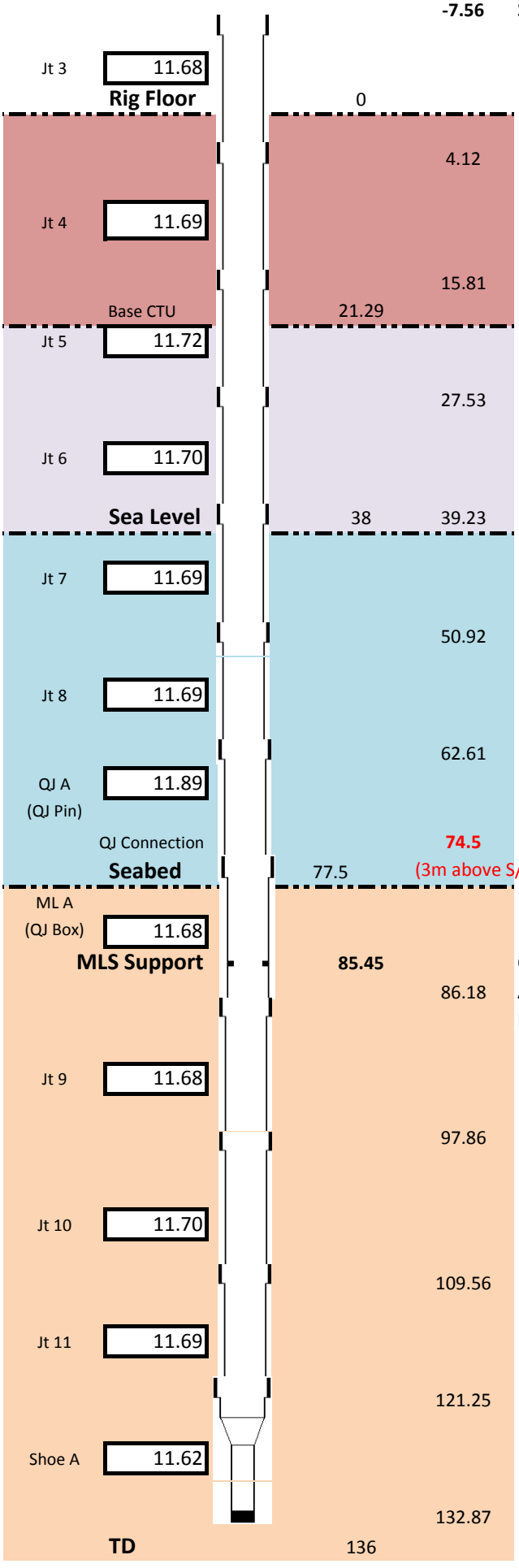
Baroid Representatives	Eugene Edwards	James Munford	
Office	90 Talinga Rd Melbourne	Telephone	61-03-9581-7555
Warehouse	c/o of Esso Australia Ltd	Telephone	61-3-56-881-445

HALLIBURTON | Fluid Systems

Attachment 4

Casing Report

Wardie-1 30" Conductor



R/T Elevation	38
Water Depth	39.5
RT - Seabed	**77.5**
R/T to base CTU	21.29

Conductor Running Order

Joint No	Length	Run Length
Shoe A	11.62	11.62
11	11.69	23.31
10	11.70	35.01
9	11.68	46.69
ML A	11.68	58.37
QJ A	11.89	70.26
8	11.69	81.95
7	11.69	93.64
6	11.70	105.34
5	11.72	117.06
4	11.69	128.75
3	11.68	140.43

RT - Seabed	77.50
Length of Jnts below seabed	58.37
Less stick up of QJ conn. Jnt	-3.00
Plus rathole	3.00
Final TD for 36" hole	135.87

Centre of MLS ring = 0.27m above box below
Actual landing point tagged with 26" bit at 85.4m
Landing point of 13-3/8" MLS hanger approx 85.45m

Wardie - 1
13 3/8" CASING TALLY

Australian Drilling Associates Pty Ltd

Casing Data					Well Data		
Size	13.375	in			Base CTU	21.3	m
Grade	N80				Mudline	77.5	m
Weight	101	kg/m	Burst	5020 psi	17.5" TD	**751.0**	m
Calipered ID	12.402	in	Nominal ID	12.415 in			m
M/U Loss	0.12	m	Drift ID	12.259 in	Rathole	**3.78**	m
Thread	BTC						
Internal Capacity	0.4902	bbl/m					

Joint Number	Meas. Length (ft)	Effective Length (ft)	Depth - Top of Joint (ft)	Depth - Bottom of Joint (ft)	Running Depth	Capacity bbls	Comments
Wellhead (above hang off point)	1.48	1.48	17.40	18.88	729.77		
Wellhead (below hang off point)	1.26	1.26	**18.88**	20.14	728.29		**Land off point on 30"at 18.88mRT**
X/O	4.46	4.46	20.14	24.60	727.03		
			24.60	24.60	722.57	354.21	
11	11.21	11.210	24.60	35.81	722.57	354.21	
3	11.42	11.420	35.81	47.23	711.36	348.71	
6	11.66	11.660	47.23	58.89	699.94	343.12	
7	11.46	11.460	58.89	70.35	688.28	337.40	
10	11.41	11.410	70.35	81.76	676.82	331.78	
Running Tool	3.64	3.64	81.76	85.40	665.41	326.19	
Upper MLS	0.05	0.05	85.40	85.45			
Lower MLS	3.18	3.18	**85.45**	88.63	661.77	324.40	**MLS hang-off at 85.45m**
16	11.52	11.52	88.63	100.15	658.59	322.85	
17	11.30	11.30	100.15	111.45	647.07	317.20	
18	11.15	11.15	111.45	122.60	635.77	311.66	
19	11.51	11.51	122.60	134.11	624.62	306.19	
20	11.44	11.44	134.11	145.55	613.11	300.55	
21	11.16	11.16	145.55	156.71	601.67	294.94	Centraliser
23	11.29	11.29	156.71	168.00	590.51	289.47	Centraliser
24	11.65	11.65	168.00	179.65	579.22	283.94	
25	11.69	11.69	179.65	191.34	567.57	278.23	
26	11.37	11.37	191.34	202.71	555.88	272.50	
27	11.65	11.65	202.71	214.36	544.51	266.92	
29	11.50	11.50	214.36	225.86	532.86	261.21	
30	11.25	11.25	225.86	237.11	521.36	255.57	
31	11.20	11.20	237.11	248.31	510.11	250.06	
32	11.10	11.10	248.31	259.41	498.91	244.57	
33	11.44	11.44	259.41	270.85	487.81	239.13	
34	11.51	11.51	270.85	282.36	476.37	233.52	
35	11.48	11.48	282.36	293.84	464.86	227.88	
36	11.13	11.13	293.84	304.97	453.38	222.25	
37	11.79	11.79	304.97	316.76	442.25	216.79	
38	11.32	11.32	316.76	328.08	430.46	211.01	
39	11.10	11.10	328.08	339.18	419.14	205.47	
40	11.24	11.24	339.18	350.42	408.04	200.02	
41	11.16	11.16	350.42	361.58	396.80	194.51	
42	11.56	11.56	361.58	373.14	385.64	189.04	
43	11.28	11.28	373.14	384.42	374.08	183.38	
44	11.55	11.55	384.42	395.97	362.80	177.85	
45	11.70	11.70	395.97	407.67	351.25	172.19	
46	11.59	11.59	407.67	419.26	339.55	166.45	
47	11.62	11.62	419.26	430.88	327.96	160.77	
48	11.28	11.28	430.88	442.16	316.34	155.07	
49	11.55	11.55	442.16	453.71	305.06	149.54	
50	11.59	11.59	453.71	465.30	293.51	143.88	
51	11.33	11.33	465.30	476.63	281.92	138.20	
52	11.15	11.15	476.63	487.78	270.59	132.64	
53	10.51	10.51	487.78	498.29	259.44	127.18	
54	11.08	11.08	498.29	509.37	248.93	122.03	
55	11.44	11.44	509.37	520.81	237.85	116.60	
56	11.64	11.64	520.81	532.45	226.41	110.99	

Joint Number	Meas. Length (ft)	Effective Length (ft)	Depth - Top of Joint (ft)	Depth - Bottom of Joint (ft)	Running Depth	Capacity bbls	Comments
57	11.56	11.56	532.45	544.01	214.77	105.28	
58	11.54	11.54	544.01	555.55	203.21	99.61	
59	11.55	11.55	555.55	567.10	191.67	93.96	
60	11.23	11.23	567.10	578.33	180.12	88.30	
61	11.28	11.28	578.33	589.61	168.89	82.79	
62	10.79	10.79	589.61	600.40	157.61	77.26	
63	10.72	10.72	600.40	611.12	146.82	71.97	
64	11.09	11.09	611.12	622.21	136.10	66.72	
65	11.08	11.08	622.21	633.29	125.01	61.28	
66	11.25	11.25	633.29	644.54	113.93	55.85	
67	11.67	11.67	644.54	656.21	102.68	50.33	
68	11.22	11.22	656.21	667.43	91.01	44.61	
69	11.25	11.25	667.43	678.68	79.79	39.11	
70	11.79	11.79	678.68	690.47	68.54	33.60	
71	10.98	10.98	690.47	701.45	56.75	27.82	
72	11.17	11.17	701.45	712.62	45.77	22.44	
73	11.26	11.26	712.62	723.88	34.60	16.96	
74	11.26	11.26	723.88	735.14	23.34	11.44	
Float Collar	0.37	0.37	735.14	735.51	12.08	5.92	
Shoe Jt 'A'	11.71	11.71	735.51	**747.22**	11.71	5.74	No centralisers run

Attachment 5

Cementing Report

Australian Drilling Associates
Level 5, Rialto North Tower
525 Collins St
Melbourne, Victoria, 3000

Wardie 1
Cementing
Post Job Report

Prepared for Rajiv Tikkoo
Friday, 16 April 2010

Submitted by Prem kumar
Halliburton Australia Pty Ltd
90 Talinga Rd, Cheltenham, VIC, 3192
Ph: 03 9581 7536 Fax: 03 9581 7599

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Friday, 16 April 2010

Rajiv Tikkoo
Australian Drilling Associates
Level 5, Rialto North Tower
525 Collins St
Melbourne, Victoria, 3000

Rajiv,

Re: Wardie#1

Included for your review is a copy of the Post Job Report of the Wardie#1 cementing operations. The PJR includes the programs, job logs, and lab reports.

I trust this PJR meets the requirements of ADA and with insight and reflection provides sufficient detail for future reference.

Yours sincerely,

Prem kumar Salibendla
Technical Professional

Table of Contents

1.0 Summary of operations

Cementation on Wardie#1 well was completed as follows

- 30" Conductor casing was cemented on the 12th of May 2008
- 13 3/8" Surface Casing was cemented on the 15th of May 2008
- Plug and abandonment of the well was completed on the 21st of May 2008.

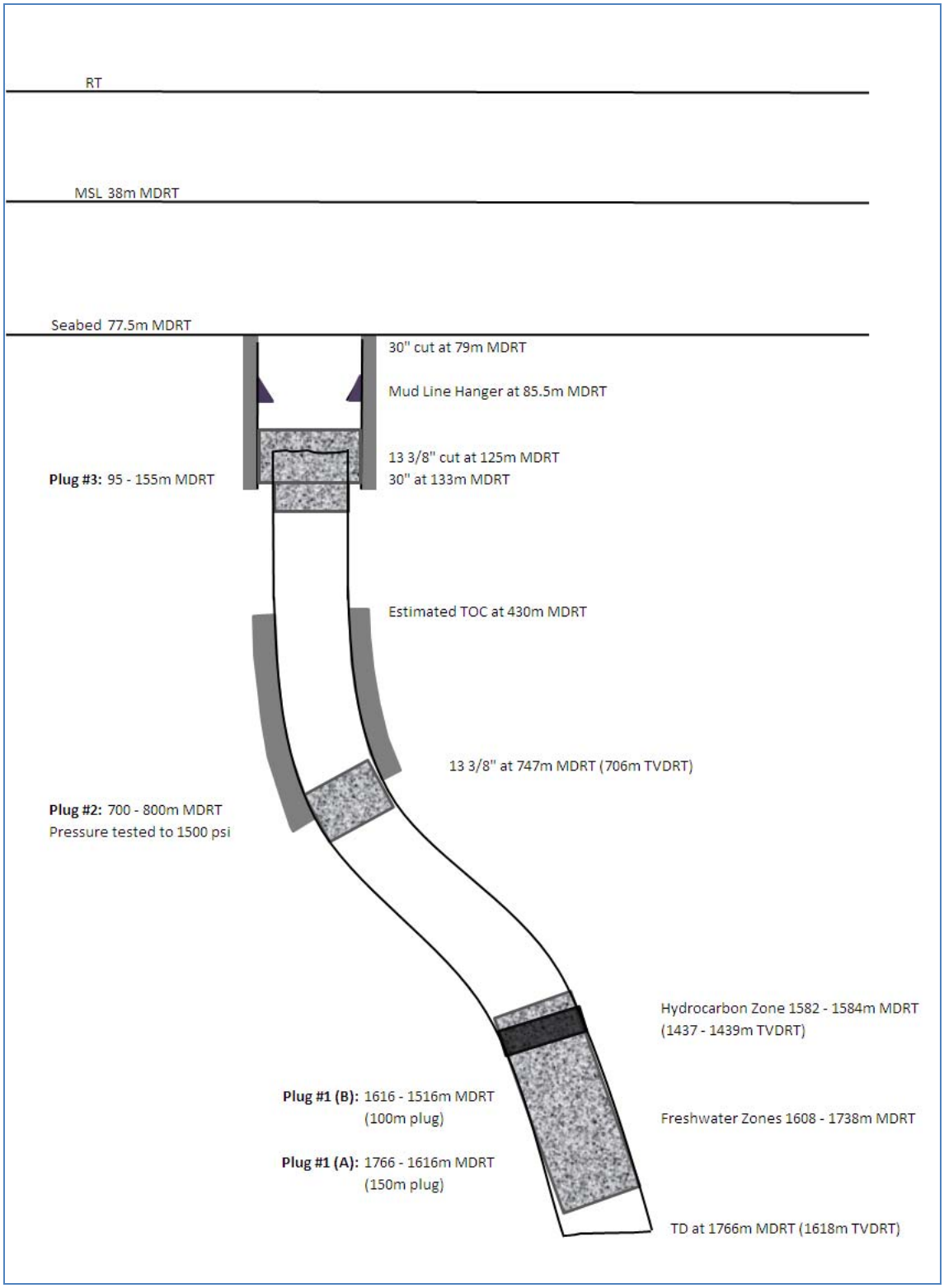
1.1 Lessons Learnt

The cementing operations on Wardie#1 were executed as planned in a safe and careful manner.

The centralisers on the 13 3/8" casing held up as they were run in hole. The hang up point occurred at a restriction in the conductor casing where the ID went from ~20inch to 17.5inch and then back out to 20inch. Under normal circumstances this restriction would be fine however there was an alignment issue with the rig which contributed to the magnitude of the drag encountered. As a result the casing was POOH and the centralisers removed. On the second run the casing went to bottom. As of the 29th of May discussions with Centek (Manufacturer of the centralisers) is still ongoing.

2.0 Cement Programs

2.1 Schematic



2.2 30in x 20in Casing Details

JOB PARAMETERS

Casing measured depth:	133m	BHST temperature:	20°C
True vertical depth:	133m	BHCT temperature:	17°C
Depth to top cement:	78m	Drilling mud type:	SW&HVBS
		Drilling mud density:	8.60ppg

WELLBORE

Casing/Tubing (Inner string job)

0-133m	5 1/2in 24.7ppf Tubing
0-120m	30in 309.7ppf Casing (X-52 D60/MT)
120-133m	20in 169ppf Casing

Annulus

0-78m	RKB-ML
78-133m	36in open hole (200% excess)

SPACERS

Spacer #1 - 100.0bbl Seawater at 8.55ppg

Seawater	42.00 gal/bbl	(12m OH annular fill / 13min contact time)

Spacer #2 - 20.0bbl Seawater + Dye at 8.57ppg

Seawater	41.98 gal/bbl	(2m OH annular fill / 3min contact time)
Fluorescein Dye	0.20 lb/bbl	

Contact times are based on the displacement rate.

CEMENT

Composition		**Properties**	
Adelaide Brighton Class G		Surface density:	15.90 ppg
Calcium Chloride 1%	1.00 %BWOC	Surface yield:	1.17 ft³/sk
Seawater	5.16 gal/sk	Total mixing fluid:	5.20 gal/sk

NF-6	0.25 gal/10bblMF	Thickening time (70 Bc):	3:30
		Free water vert at 17°C:	<1 %
		Comp strength at 19°C	50 psi in 4 hrs
		Comp strength at 19°C	500 psi in 6 hrs
		Comp strength at 19°C	2,000 psi in 24 hrs

Note that %BWOC are based on a 94 lb sack

VOLUME CALCULATIONS

Cement

30in Casing / 36in hole volume	43 m x 1.2620 bbl/m	53.6 bbl
30in Casing / 36in hole excess	2.00 x 53.6 bbl	107.3 bbl
20in Casing / 36in hole volume	13 m x 2.8555 bbl/m	37.1 bbl
20in Casing / 36in hole excess	2.00 x 37.1 bbl	74.2 bbl
	Total slurry volume =272.3 bbl	
Quantity of cement	272.3 bbl x 5.6146 / 1.17 ft^3/sk	1307 sks
Quantity of mix fluid	1307 sks x 5.20 gal/sk	161.8 bbl

Displacement

5 1/2in Tubing volume	133 m x 0.0695 bbl/m	9.2 bbl
	Total displacement volume =9.2 bbl	

PUMPING SCHEDULE & TIMES

	Volume (bbl)	**Rate (bbl/min)**	**Time (min)**
Make up lines & pressure test:	N/A	N/A	30
Circulate 1.5 x Casing volume:	13.8	10.0	1
Pump spacers:	120.0	10.0	12
Mix & pump cement:	272.3	6.0	45
Release dart/top plug:	N/A	N/A	5
Pump displacement:	9.2	8.0	1

Total job time (including circulation):	***94 min***	***1hr 34min***
Minimum cement thickening time (with 2hr safety factor):	***171 min***	***2hr 51min***

MINIMUM MATERIAL REQUIREMENTS (Double for loadout)

Spacer #1 - Seawater

Seawater	100 bbl

Spacer #2 - Seawater + Dye

Seawater	20 bbl
Fluorescein Dye	4 lb

Cement

Adelaide Brighton Class G	56 MT(1,313 ft³)
Calcium Chloride 1%	1,229 lbs
Seawater	160.6 bbl
NF-6	5 gals

These are estimates calculated on the information given. Calculations should be confirmed on the job site well in advance.

2.2.1 30Inch Casing Job Procedure

1) Run 30” casing to TD with innerstring pipe.
2) Rig up surface equipment including a releasing tool for the latch in dart if one is required
3) Establish circulation
4) Test lines to 3000psi
5) Pump 100bbls Seawater
6) Pump 20bbls Seawater with Fluorescein Dye
7) Mix and pump 265bbls of 15.9ppg cement or until returns are evident on the seafloor
8) Drop top plug/latch in plug if one is being used
9) Displace with 10bbls of WBM
10) Slow pump rate down for final 10bbls. Bump plug 500psi over and hold for 10mins. Bleed back and check floats

2.3 13 3/8 inch Casing Details

JOB PARAMETERS

Casing measured depth:	747m	BHST temperature:	48°C
True vertical depth:	704m	BHCT temperature:	34°C
Depth to top cement:	432m	Drilling mud type:	SW +Sweeps
		Drilling mud density:	9.50ppg

WELLBORE

Casing/Tubing

0-747m	13 3/8in 68ppf Casing (N-80 BTC)

Annulus

0-78m	RKB-ML
78-120m	30in 309.7ppf casing (28in ID)
120-133m	20in 169ppf casing (18.376in ID)
133-747m	17.5in open hole (10% excess)

SPACERS

Spacer #1 - 70.0bbl Seawater at 8.55ppg

Seawater	42.00 gal/bbl	(157m OH annular fill / 9min contact time)

Spacer #2 - 30.0bbl Tuned Spacer E+ at 11.00ppg

Freshwater	37.31 gal/bbl	(67m OH annular fill / 4min contact time)
Tuned Spacer	16.80 lb/bbl	
Barite	133.78 lb/bbl	

Contact times are based on the displacement rate.

CEMENT

Composition		**Properties**	
Adelaide Brighton Class G		Surface density:	15.90 ppg
CFR-3L	3.00 gal/10bblMF	Surface yield:	1.16 ft³/sk

HR-6L	2.00 gal/10bblMF	Total mixing fluid:	5.13 gal/sk
Seawater	5.07 gal/sk	Thickening time (70 Bc):	4:00
NF-6	0.25 gal/10bblMF	Free water vert at 34°C:	Trace %
		Fluid loss at 34°C:	<100 cc/30min
		Comp strength at 43°C	50 psi in 4.5 hrs
		Comp strength at 43°C	500 psi in 7 hrs
		Comp strength at 43°C	2,000 psi in 24 hrs

VOLUME CALCULATIONS

Cement

13 3/8in Casing / 17.5in hole volume	315 m x 0.4059 bbl/m	127.9 bbl
13 3/8in Casing / 17.5in hole excess	0.10 x 127.9 bbl	12.8 bbl
Shoe track volume	12 m x 0.4912 bbl/m	5.9 bbl
	Total slurry volume =146.6 bbl	
Quantity of cement	146.6 bbl x 5.6146 / 1.16 ft³/sk	710 sks
Quantity of mix fluid	710 sks x 5.13 gal/sk	86.7 bbl

Displacement

13 3/8in Casing volume	735 m x 0.4912 bbl/m	361.1 bbl
	Total displacement volume =361.1 bbl	

PUMPING SCHEDULE & TIMES

	Volume (bbl)	Rate (bbl/min)	Time (min)
Make up lines & pressure test:	N/A	N/A	30
Circulate 1.5 x Casing volume:	550.5	10.0	55
Pump spacers:	100.0	10.0	10
Mix & pump cement:	146.6	5.0	29
Release dart/top plug:	N/A	N/A	5
Pump displacement:	361.1	8.0	45

Total job time (including circulation):	***174 min***	***2hr 54min***
Minimum cement thickening time (with 2hr safety factor):	***199 min***	***3hr 19min***

MINIMUM MATERIAL REQUIREMENTS (Double for loadout)

Spacer #1 - Seawater

Seawater	70 bbl

Spacer #2 - Tuned Spacer E+

Freshwater	26.6 bbl
Tuned Spacer	504 lb
Barite	4,013 lb

Cement

Adelaide Brighton Class G	30 MT(704 ft³)
CFR-3L	26 gals
HR-6L	17 gals
Seawater	85.7 bbl
NF-6	3 gals

These are estimates calculated on the information given. Calculations should be confirmed on the job site well in advance.

2.3.1 13 3/8in Casing Job Procedure

1) Run 13 3/8" casing to TD
2) Establish circulation by pumping 10bbl sea water
3) Test lines to 3000psi
4) Pump 60bbls Seawater
5) Pump 30bbls Tuned spacer
6) Mix and pump 150bbls of single 15.9ppg slurry
7) Drop releasing dart on the releasing sleeve and pumped 1.57bbls FW and apply about 2500 ± 500psi to release the top plug.
8) Displace with 350bbls of mud. Use calliper volumes if possible
9) **Slow pump rate down to 1bbl/min** for final 10bbls. Bump plug 500psi over and hold for 10mins. Bleed back and check floats
10) End job

2.4 Plug#1a Details - 12.25in hole

JOB PARAMETERS

Plug bottom MD:	1,766m	BHST temperature:	76°C
Plug bottom TVD:	1,616m	BHCT temperature:	62°C
Plug top MD:	1,616m	Drilling mud type:	6-8% KCl/PHKA
Plug length:	150m	Drilling mud density:	9.50ppg
Plug length with DP in:	157m		

WELLBORE

Workstring

0-1,766m	5 1/2in 21.9ppf tubing (XT 57)

Annulus

0-1,766m	12.25in open hole (10% excess)

SPACERS

Spacer - Freshwater at 8.33ppg

Freshwater	42.00 gal/bbl	20.0bbl ahead and 3.4bbl behind to balance (42m annular fill / 3min contact time)

Contact times are based on the displacement rate.

CEMENT SLURRY

Composition		**Properties**	
Adelaide Brighton Class G		Surface density:	15.80 ppg
SCR-100L	2.00 gal/10bblMF	Surface yield:	1.16 ft³/sk
CFR-3L	3.00 gal/10bblMF	Total mixing fluid:	5.12 gal/sk
Freshwater	5.06 gal/sk	Thickening time (70 Bc):	3:30
NF-6	0.25 gal/10bblMF	Comp strength at 72°C	50 psi in 4 hrs
		Comp strength at 72°C	500 psi in 6 hrs
		Comp strength at 72°C	2,500 psi in 24 hrs

VOLUME CALCULATIONS

Cement

12.25in hole volume	150 m x 0.4782 bbl/m	71.7 bbl
12.25in hole excess	0.10 x 71.7 bbl	7.2 bbl
	Slurry volume =78.9 bbl	
Quantity of cement	78.9 bbl x 5.6146 / 1.16 ft³/sk	382 sacks
Quantity of mix fluid	382 sacks x 5.12 gal/sk	46.6 bbl

Displacement

5 1/2in tubing volume	1,562 m x 0.0728 bbl/m	113.7 bbl
	Total displacement volume =113.7 bbl	

PUMPING SCHEDULE & TIMES

	Volume (bbl)	Rate (bbl/min)	Time (min)
Make up lines & pressure test:	N/A	N/A	30
Circulate 1 x bottoms up:	758.8	6.0	126
Pump spacers ahead:	20.0	6.0	3
Mix & pump cement:	78.9	5.0	16
Drop wiper ball:	N/A	N/A	5
Pump spacers behind:	3.4	6.0	1
Pump displacement:	113.7	6.0	19
Pull workstring 27 m above TOC:	177m	9.0m/min	20
Circulate workstring clean:	116.0	6.0	19

Total job time (including circulation):	***239 min***	***3hr 59min***
Minimum cement thickening time (with 2hr safety factor):	***200 min***	***3hr 20min***

MINIMUM MATERIAL REQUIREMENTS (Double for loadout)

Spacer - Freshwater

Freshwater	23.4 bbl

Cement

Adelaide Brighton Class G	16 MT(375 ft³)
SCR-100L	10 gals
CFR-3L	14 gals
Freshwater	46 bbl
NF-6	2 gals

These are estimates calculated on the information given. Calculations should be confirmed on the job site well in advance.

2.4.1 Plug #1a`Job Procedure – Plug 1

1) RIH to 1766m with work string
2) Rig up surface lines.
3) Establish circulation, Pump 10bbls Fresh water.
4) Test lines 2000psi.
5) Pump 10bbls Fresh water.
6) Mix and pump 85bbls of 15.8ppg cement slurry.
7) Displace with 3.5bbls of fresh water to balance
8) Continue to displace with 113bbls of well fluid to create a balanced plug
9) Note 1bbl under displace to aid in dryPOOH
10) Pick up worksting to top of cement
11) Reverse circulate 1 1/2 times tubing volumes clean before POOH
12) Pick up and prepare for 1b plug

2.5 Plug#1b Details - 12.25in hole

JOB PARAMETERS

Plug bottom MD:	1,616m	BHST temperature:	72°C
Plug bottom TVD:	1,467m	BHCT temperature:	58°C
Plug top MD:	1,516m	Drilling mud type:	6-8% KCl/PHKA
Plug length:	100m	Drilling mud density:	9.50ppg
Plug length with DP in:	103m		

WELLBORE

Workstring

0-1,616m	4in 14ppf tubing

Annulus

0-747m	13 3/8in 68ppf casing (12.415in ID)
747-1,616m	12.25in open hole (10% excess)

SPACERS

Spacer - Freshwater at 8.33ppg

Freshwater	42.00 gal/bbl	20.0bbl ahead and 1.5bbl behind to balance
		(38m annular fill / 3min contact time)

Contact times are based on the displacement rate.

CEMENT SLURRY

Composition		**Properties**	
Adelaide Brighton Class G		Surface density:	15.80 ppg
SCR-100L	2.00 gal/10bblMF	Surface yield:	1.16 ft³/sk
CFR-3L	3.00 gal/10bblMF	Total mixing fluid:	5.12 gal/sk
Freshwater	5.05 gal/sk	Thickening time (70 Bc):	3:30
NF-6	0.25 gal/10bblMF	Comp strength at 67°C	50 psi in 4 hrs
		Comp strength at 67°C	500 psi in 6 hrs
		Comp strength at 67°C	2,500 psi in 24 hrs

VOLUME CALCULATIONS

Cement

12.25in hole volume	100 m x 0.4782 bbl/m	47.8 bbl
12.25in hole excess	0.10 x 47.8 bbl	4.8 bbl
	Slurry volume =52.6 bbl	
Quantity of cement	52.6 bbl x 5.6146 / 1.16 ft³/sk	255 sacks
Quantity of mix fluid	255 sacks x 5.12 gal/sk	31.1 bbl

Displacement

4in tubing volume	1,471 m x 0.0356 bbl/m	52.3 bbl
	Total displacement volume =52.3 bbl	

PUMPING SCHEDULE & TIMES

	Volume (bbl)	Rate (bbl/min)	Time (min)
Make up lines & pressure test:	N/A	N/A	30
Circulate 1 x bottoms up:	741.7	6.0	124
Pump spacers ahead:	20.0	6.0	3
Mix & pump cement:	52.6	5.0	11
Drop wiper ball:	N/A	N/A	5
Pump spacers behind:	1.5	6.0	0
Pump displacement:	52.3	6.0	9
Pull workstring 27 m above TOC:	127m	9.0m/min	14
Circulate workstring clean:	53.0	6.0	9

Total job time (including circulation):	***205 min***	***3hr 25min***
Minimum cement thickening time (with 2hr safety factor):	***168 min***	***2hr 48min***

MINIMUM MATERIAL REQUIREMENTS (Double for loadout)	
Spacer - Freshwater	
Freshwater	21.5 bbl
Cement	
Adelaide Brighton Class G	11 MT(258 ft³)
SCR-100L	6 gals
CFR-3L	9 gals
Freshwater	30.7 bbl
NF-6	1 gals

These are estimates calculated on the information given. Calculations should be confirmed on the job site well in advance.

2.5.1 Plug #1b`Job Procedure – Plug 1

1) RIH to 1616m with work string
2) Rig up surface lines.
3) Establish circulation, Pump 10bbls Fresh water.
4) Test lines 2000psi.
5) Pump 10bbls Fresh water.
6) Mix and pump 66bbls of 15.8ppg cement slurry.
7) Displace with 3.5bbls of fresh water to balance
8) Continue to displace with 103bbls of well fluid to create a balanced plug
9) Note 1bbl under displace to aid in dry POOH
10) Pick up worksting to top of cement
11) Reverse circulate 1 1/2 times tubing volumes clean before POOH
12) Pick up and prepare for second plug

2.6 Plug#2 Details - 13 3/8in casing x 12.25in hole

JOB PARAMETERS

Plug bottom MD:	800m	BHST temperature:	49°C
Plug bottom TVD:	752m	BHCT temperature:	39°C
Plug top MD:	700m	Drilling mud type:	6-8% KCL/PHKA
Plug length:	100m	Drilling mud density:	9.50ppg
Plug length with DP in:	105m		

WELLBORE

Workstring

0-800m	5 1/2in 21.9ppf tubing (XT-57)

Annulus

0-750m	13 3/8in 68ppf casing (12.415in ID)
750-800m	12.25in open hole (20% excess)

SPACERS

Spacer - Freshwater at 8.33ppg

Freshwater	42.00 gal/bbl	20.0bbl ahead and 3.7bbl behind to balance (35m annular fill / 3min contact time)

Contact times are based on the displacement rate.

CEMENT SLURRY

Composition		**Properties**	
Adelaide Brighton Class G		Surface density:	15.90 ppg
CFR-3L	3.00 gal/10bblMF	Surface yield:	1.16 ft³/sk
HR-6L	2.00 gal/10bblMF	Total mixing fluid:	5.13 gal/sk
Seawater	5.07 gal/sk	Thickening time (70 Bc):	3:00
NF-6	0.25 gal/10bblMF	Comp strength at 46°C	50 psi in 4 hrs
		Comp strength at 46°C	500 psi in 6 hrs
		Comp strength at 46°C	2,500 psi in 24 hrs

VOLUME CALCULATIONS

Cement

13 3/8in casing volume	50 m x 0.4912 bbl/m	24.6 bbl
12.25in hole volume	50 m x 0.4782 bbl/m	23.9 bbl
12.25in hole excess	0.20 x 23.9 bbl	4.8 bbl
		Slurry volume =53.3 bbl
Quantity of cement	53.3 bbl x 5.6146 / 1.16 ft³/sk	258 sacks
Quantity of mix fluid	258 sacks x 5.13 gal/sk	31.5 bbl

Displacement

5 1/2in tubing volume	644 m x 0.0728 bbl/m	46.9 bbl
		Total displacement volume =46.9 bbl

PUMPING SCHEDULE & TIMES

	Volume (bbl)	Rate (bbl/min)	Time (min)
Make up lines & pressure test:	N/A	N/A	30
Circulate 1 x bottoms up:	320.0	6.0	53
Pump spacers ahead:	20.0	6.0	3
Mix & pump cement:	53.3	5.0	11
Drop wiper ball:	N/A	N/A	5
Pump spacers behind:	3.7	6.0	1
Pump displacement:	46.9	6.0	8
Pull workstring 27 m above TOC:	127m	9.0m/min	14
Circulate workstring clean:	49.0	6.0	8

Total job time (including circulation):	***133 min***	***2hr 13min***
Minimum cement thickening time (with 2hr safety factor):	***167 min***	***2hr 47min***

MINIMUM MATERIAL REQUIREMENTS (Double for loadout)

Spacer - Freshwater

Freshwater	23.7 bbl

Cement

Adelaide Brighton Class G	11 MT(258 ft³)
CFR-3L	9 gals
HR-6L	6 gals
Seawater	31.1 bbl
NF-6	1 gals

These are estimates calculated on the information given. Calculations should be confirmed on the job site well in advance.

2.6.1 Plug 2 Job Procedure

1) RIH with workstring to 800m MD
2) Rig up surface lines, prime and test to 200/2000psi
3) Pump 10bbls Fresh water
4) Mix and pump 58bbls of 15.8ppg cement slurry.
5) Displace with 1.5bbls of fresh water to balance
6) Continue to displace with 46bbls of well fluid to create a balanced plug
7) Note 1bbl under displace to aid in dry POOH
8) Pick up work string at least one stand above top of cement
9) Reverse circulate 1 1/2 times tubing volumes clean before POOH
10) End Job

2.7 Plug#3 Details - 13 3/8in casing

JOB PARAMETERS

Plug bottom MD:	155m	BHST temperature:	28°C
Plug bottom TVD:	155m	BHCT temperature:	23°C
Plug top MD:	95m	Drilling mud type:	seawater
Plug length:	60m	Drilling mud density:	8.55ppg
Plug length with DP in:	61m		

WELLBORE

Workstring

0-155m	5 1/2in 21.9ppf tubing (XT-57)

Annulus

0-125m	30in 309.7ppf casing (28in ID)
125-155m	13 3/8in 68ppf casing (12.415in ID)

SPACERS

Spacer - Seawater at 8.33ppg

Seawater	42.00 gal/bbl	20.0bbl ahead and 0.6bbl behind to balance (8m annular fill / 3min contact time)

Contact times are based on the displacement rate.

CEMENT SLURRY

Composition		**Properties**	
Adelaide Brighton Class G		Surface density:	15.90 ppg
Calcium Chloride 1%	1.00 %BWOC	Surface yield:	1.17 ft³/sk
Seawater	5.16 gal/sk	Total mixing fluid:	5.20 gal/sk
NF-6	0.125 gal/10bblMF	Thickening time (70 Bc):	3:00
		Comp strength at 26°C	50 psi in 4 hrs
		Comp strength at 26°C	500 psi in 6 hrs
		Comp strength at 26°C	2,400 psi in 24 hrs

Note that %BWOC are based on a 94 lb sack

VOLUME CALCULATIONS

Cement

30in casing volume	30 m x 2.4986 bbl/m	75.0 bbl
13 3/8in casing volume	30 m x 0.4912 bbl/m	14.7 bbl
	Slurry volume =89.7 bbl	
Quantity of cement	89.7 bbl x 5.6146 / 1.17 ft³/sk	430 sacks
Quantity of mix fluid	430 sacks x 5.20 gal/sk	53.2 bbl

Displacement

5 1/2in tubing volume	86 m x 0.0728 bbl/m	6.3 bbl
	Total displacement volume =6.3 bbl	

PUMPING SCHEDULE & TIMES

	Volume (bbl)	Rate (bbl/min)	Time (min)
Make up lines & pressure test:	N/A	N/A	30
Circulate 1 x bottoms up:	312.1	6.0	52
Pump spacers ahead:	20.0	6.0	3
Mix & pump cement:	89.7	5.0	18
Drop wiper ball:	N/A	N/A	5
Pump spacers behind:	0.6	6.0	0
Pump displacement:	6.3	6.0	1
Pull workstring 27 m above TOC:	87m	9.0m/min	10
Circulate workstring clean:	5.0	6.0	1

Total job time (including circulation):	***120 min***	***2hr 00min***
Minimum cement thickening time (with 2hr safety factor):	***155 min***	***2hr 35min***

MINIMUM MATERIAL REQUIREMENTS (Double for loadout)

Spacer - Seawater

Seawater	20.6 bbl

Cement

Adelaide Brighton Class G	18 MT(422 ft³)
Calcium Chloride 1%	404 lbs
Seawater	52.8 bbl
NF-6	1 gals

These are estimates calculated on the information given. Calculations should be confirmed on the job site well in advance.

2.7.1 Plug # 3 Job Procedure

11) RIH to 155m with workstring
12) Rig up surface lines.
13) Establish circulation, Pump 10bbls Fresh water.
14) Test lines 2000psi.
15) Pump 10bbls Fresh water.
16) Mix and pumped 93bbls of 15.9ppg cement slurry.
17) Displace with 0.5bbls of fresh water to balance
18) Continue to displace with5bbls of well fluid to create a balanced plug
19) Note 1bbl under displace to aid in dry POOH
20) Pick up work string at least one stand above top of cement
21) Reverse circulate 1 1/2 times tubing volumes clean before POOH
22) End Job
23)

2.8 Guidelines for Preparation of Cement Mixwater

From time to time it is necessary to pre-mix the additives and mixwater for a cement job instead of adding them "on the fly" via the cement unit LAP system.

NOTE: If mixing in displacement tanks, Econolite and HR-6L are not compatible in their neat form. Ensure there is a sufficient level of water for dilution before mixing chemical additives or add them separately to the mixwater

Lab testing has indicated that there is a maximum age, or retention time, **for batch mixed mixwaters,** after which they should not be used. This is because slurry properties such as thickening time may be affected, and it applies particularly to the "high fineness" additives: Silicalite Liquid, Micromax, Gascon 469 and Microbond in conjunction with cement retarders. Therefore when pre-mixing additives the following guidelines need to be followed:
Prepare drillwater/seawater in a **clean pit/blender** and check fluid has the appropriate chloride content.

Freshwater	<1000	Ppm
Seawater	<20000	Ppm

Add 2 gal of defoamer (NF-6) per 10 bbl of water.
During the casing/liner run add the additives below in the following order.

a) Extenders – **Silicalite Liquid / Gascon 469 / Econolite Liquid**, **WG-17LXP**
b) Friction Reducers – **CFR-3L**.
c) Fluid Loss/Gas Migration Additives – **Halad additives / GasStop-L**.

Once the casing is on bottom or the liner hanger has been set and just prior to/during mud conditioning add the additives below in the following order.

a) Viscosifying Additives – **SA-533**. This must be added very slowly to prevent lumps forming and should be added directly to a tub and not though a mixing hopper, since a build up of partially hydrated polymer can form inside the gooseneck. Note that SA-533 requires at least 30 mins to yield.
b) Weighting Materials – **Micromax**.

Immediately prior to the jobs commencement add the retarder and then any expansive additives. Circulate the pit with maximum agitation.

a) Retarders – **HR-6L / HR-25L / SCR-100L**.
b) Expansive Additives - **MicroBond**.

If any foaming is observed add additional anti-foaming agents as required.

NOTE: Once the retarder has been added Halliburton recommends that the maximum surface time of the mixwater should be no more than **8** hours. This is due to the retarder being attracted to the high surface area of the siliceous material in the extender. This has the effect of reducing the retardation effect of the retarder on the cement.It is recommended that if the mixwater with retarder is left for more than 8 hours on surface that it be dumped and a new batch mixed. Mixwater that has been prepared without the addition of an extender or retarder can be kept for 24 hours. After 24 hours the mixwater should not be used for cementing operations unless authorised by a Halliburton engineer.

24)

2.9 Plug Setting Recommendations

1. **Cement Volume: Pumping sufficient volume is one of the biggest causes of plug failures.**
   - *Open hole*: HOC + 50% excess over gauge to account for washouts, (if not calipered).
   - *Cased Hole*: 10 bbls to compensate for mud contamination.

2. **If plug is not being set on a firm base, set a CST or spot a Viscous Reactive Pill (VRP),** the same length as the proposed plug, to act as a base.

3. **Drill pipe and stinger should be drifted for accurate displacement.** Include using a latch-down indicator sub (ball catcher) to achieve accurate displacement.

4. **Wash over the plug interval.** Rotate and reciprocate down over the entire interval at maximum rate, dependent on well conditions.

5. **Minimise any shutdowns to keep the mud in a fluidised condition.** This will help to maximise mud removal efficiency when placing cement.

6. **Use a side-port diverter tool** to direct the flow outwards, minimising intermixing and providing jetting action. DO NOT USE A MULE SHOE WITH NARROW SLOTS.

7. **Plug height should be limited to 500 ft.** The extra time taken to pull slowly out of the plug increases the risk of cementing-in the cementing assembly.

8. **Use 2-7/8" or 3 ½" stinger** on the end of the drill pipe to minimise stripping the plug when POOH. The recommended length is 1.5 x plug length. When in highly deviated or horizontal holes, centralising the stinger will prevent dead areas of mud on the low side of the hole.

9. **Pump minimum of 40 bbls of spacer ahead of the plug** and required volume behind to balance & separate the mud from the cement. It is best to keep the spacer weight almost equal to the cement weight in horizontal holes.

10. **Pump spacer, cement and displacement at maximum possible rates** with the cement unit, however **do not over displace** - slow rate down prior to end of calculated displacement.

11. **Use side entry sub/swivel** or top-drive cement head to enable rotation of the drill pipe whilst pumping cement and displacement - **DO NOT reciprocate.**

12. **POOH slowly (30 - 60 ft/min)** and break connections carefully to avoid stripping plug until 500ft above the cement plug. Avoid any delay's

13. **Do not circulate on top of plug.** Break circulation slowly so as to minimise disturbance of plug. Never reverse circulate when setting an open-hole plug.

14. **Waiting on cement** should be at least the time for the plug to reach 500 psi. or 3000 psi. for a Kick-off plug. Best results have been obtained by a mandatory 24 hr WOC before disturbing the plug.

3.0 LAB REPORTS

HALLIBURTON

CEMENT SLURRY REPORT

JOB INFORMATION

Customer	: 3D Oil		**Date**	:	9/05/2008
Well Name	: Wardie-1		**Reference**	:	WAR-08-01A
Casing Size	: 30inch				
Job Type	: Casing				
Slurry Type	: Single				
Time to Temp	: 13min				

WELL PROPERTIES

Depth(MD from RKB)	: 132	Meters	**Depth(TVD from RKB)**	:	132	Meters
Surface Temperature	: 25.00	Deg.C.	**Temperature Gradient**	:	-3.79	Deg.C./100M
BHST	: 20.00	Deg.C.	**BHCT (per API Spec 10)**	:	17.00	Deg.C.
Mud Weight	: 8.60	PPG	**Water Source**	:	Seawater	

SLURRY PROPERTIES

ABC Class G	: 94.00	Lbs/sk	From Yard		
NF-6	: 0.25	gal/10bbl of Mix Fluid	0.003	gal/sk	
Calcium Chloride 1%	: 1.00	%BWOC	0.012	gal/sk	

Slurry Weight	: 15.90	PPG	**Slurry Yield**	:	1.17	CuFt/Sack
Mixing Water	: 5.23	Gals/Sack	**Total Mixing Fluid**	:	5.24	Gals/Sack

THICKENING TIME

Reading (BC)	: **Initial BC**	**30 BC**	**50 BC**	**70 BC**		443	psi
Time(hrs:mins)	: 33	2:07	2:30	2:41		25	Deg.C.

COMPRESSIVE STRENGTH

UCA Summary	: **50psi**	**2:57**	**UCA Max Temp**	:	25	Deg C
	: **500psi**	**6:43**	**UCA Pressure**	:	3000	psi
	: **3930psi**	**65:36**				

Notes : The test was conducted to the specifications provided.

Lab Test Conducted By : Daniel Gibbons

Approved By : Prem kumar Salibendla/Andrew Stobie

HALLIBURTON

CEMENT SLURRY REPORT

JOB INFORMATION

Customer	:	3D Oil	**Date**	:	13/05/2008
Well Name	:	Wardie-1	**Reference**	:	WAR-08-02A
Casing Size	:	13 3/8inch			
Job Type	:	Casing			
Slurry Type	:	Single			
Time to Temp	:	19min			

WELL PROPERTIES

Depth(MD from RKB)	:	750	Meters	**Depth(TVD from RKB)**	:	706	Meters
Surface Temperature	:	25.00	Deg.C.	**Temperature Gradient**	:	3.26	Deg.C./100M
BHST	:	48.00	Deg.C.	**BHCT (per API Spec 10)**	:	34.00	Deg.C.
Mud Weight	:	9.50	PPG	**Water Source**	:	Seawater	

SLURRY PROPERTIES

ABC Class G	:	94.00	Lbs/sk	From Yard		
NF-6	:	0.25	gal/10bbl of Mix Fluid	0.003	gal/sk	
CFR-3L	:	3.00	gal/10bbl of Mix Fluid	0.037	gal/sk	
HR-6L	:	2.00	gal/10bbl of Mix Fluid	0.025	gal/sk	

Slurry Weight	:	15.90	PPG	**Slurry Yield**	:	1.16	CuFt/Sack
Mixing Water	:	5.10	Gals/Sack	**Total Mixing Fluid**	:	5.16	Gals/Sack

THICKENING TIME

Reading (BC)	:	**Initial BC**	**30 BC**	**50 BC**	**70 BC**	1,455	psi
Time(hrs:mins)	:	30	2:28	2:51	2:57	34	Deg.C.

Notes : The test was conducted to the specifications provided.

Lab Test Conducted By : Daniel Gibbons

Approved By : Prem kumar Salibendla/Andrew Stobie

HALLIBURTON

CEMENT SLURRY REPORT

JOB INFORMATION

Customer	:	3D Oil	**Date**	:	19/05/2008
Well Name	:	Wardie-1	**Reference**	:	WAR-08-03A
Casing Size	:	9 5/8inch			
Job Type	:	Casing and Plug 1a&1b			
Slurry Type	:	Single			
Time to Temp	:	19min			

WELL PROPERTIES

Depth(MD from RKB)	:	1790	Meters	**Depth(TVD from RKB)**	:	1638	Meters
Surface Temperature	:	25.00	Deg.C.	**Temperature Gradient**	:	3.17	Deg.C./100M
BHST	:	77.00	Deg.C.	**BHCT (per API Spec 10)**	:	48.00	Deg.C.
Mud Weight	:	9.50	PPG	**Water Source**	:	West Triton Drill Water	

SLURRY PROPERTIES

ABC Class G	:	94.00	Lbs/sk	From Yard			
NF-6	:	0.25	gal/10bbl of Mix Fluid		0.003	gal/sk	
CFR-3L	:	3.00	gal/10bbl of Mix Fluid		0.037	gal/sk	
SCR-100L	:	2.00	gal/10bbl of Mix Fluid		0.025	gal/sk	
Slurry Weight	:	15.80	PPG	**Slurry Yield**	:	1.16	CuFt/Sack
Mixing Water	:	4.75	Gals/Sack	**Total Mixing Fluid**	:	5.17	Gals/Sack

THICKENING TIME

Reading (BC)	:	**Initial BC**	**30 BC**	**50 BC**	**70 BC**	1,455	psi
Time(hrs:mins)	:	0	3:19	3:23	3:26	34	Deg.C.

Notes : The test was conducted to the specifications provided.

Lab Test Conducted By : Prem Kumar Salibendla

Approved By : Prem kumar Salibendla/Andrew Stobie

4.0 Job Summary, EJCS, Job Logs

4.1 30 inch Conductor Casing

4.1.1 Job Summary

HALLIBURTON

CUSTOMER	SALES ORDER No.	DATE
3D Oil	0	12 May 2008

CEMENT/PUMPING JOB SUMMARY

WELL	LOCATION/FIELD NAME	COUNTRY	HES REP	CUSTOMER REP	WELL TYPE
Wardie # 1	Bass Strait	Australia	R.Bridgman	Rocco Rossouw	Exploration

JOB TYPE	JOB PURPOSE CODE	BDA	RIG
Zonal Isolation	CEMENT CONDUCTOR CASING 14161	Perth	West Triton

PERSONNEL / EXPOSURE		HRS	PERSONNEL / EXPOSURE		HRS	PERSONNEL / EXPOSURE		HRS	PERSONNEL / EXPOSURE		HRS
386793	Robert Bridgman	12									
127046	Rod Stares	12									

EQUIPMENT

SAP#	PUMPING / MIXING	HOURS	SAP#	VEHICLES / TRAILERS	HOURS
0	SKID PUMP CMT TWIN HT400 ADVANTAGE 10851913	24			
0	Electric Hydraulic Package 10851913	24			
0	4 Tank Electric CMS 109658	24			

SAP#	BULK SUPPLY / TANKS	HOURS	SAP#	OTHER EQUIPMENT	HOURS
#N/A	Rig supplied Bulk system				

FLOAT EQUIPMENT AND CASING EQUIPMENT

SAP#	FLOAT EQUIPMENT	QTY	SAP#	PLUGS	QTY

SAP#	CASING ATTACHMENTS	QTY	SAP#	OTHER	QTY

WELL PROFILE

NEW CASING	OPEN HOLE + EXCESS OR CALIPER DATA	PREVIOUS CASING ONE	PREVIOUS CASING TWO
30x20in 309.7ppf	36in + 200% excess 77.5m to 136m		
0m to 132.87m MD, m TVD			

FOR PLUG AND LINER JOBS PLEASE INDICATE WORKSTRING 5.5in 24.7ppf S135 XT 57

CEMENT DESIGN

SLURRY 1 - Single							
DENSITY	15.9ppg	WATER REQ	5.16gal/sk	DENSITY	WATER REQ	DENSITY	WATER REQ
YIELD	1.17cuft/sk	MIX FLUID REQ	5.2gal/sk	YIELD	MIX FLUID REQ	YIELD	MIX FLUID REQ
WATER SOURCE :		Sea,		WATER SOURCE :		WATER SOURCE :	
CEMENT TYPE:		ABC Class 'G' @ 94 lb/sk		CEMENT TYPE:	ABC Class 'G' @ 94 lb/sk	CEMENT TYPE:	
Total Cement Used		1454 sks		Total Cement Used		Total Cement Used	
Estimated TOC		77.5 m		Estimated TOC		Estimated TOC	

Additive	Concentration	Total Used	Additive	Concentration	Total Used	Additive	Concentration	Total Used
Calcium Chloride	1 %BWOC	28 sx lbs						
NF-6		2 gals						

PUMPING SCHEDULE

FLUID DESCRIPTION	VOLUME bbls	DENSITY ppg	RATE bpm	FLUID DESCRIPTION	VOLUME bbls	DENSITY ppg	RATE bpm	FLUID DESCRIPTION	VOLUME bbls	DENSITY ppg	RATE bpm
1) sea water	10	8.54	8	5) seawater	10	8.54	5				
2) Sea water	90	8.54	8								
3) sea water + Dye	20	8.54	6								

4.1.2 Job Logs

HALLIBURTON	CUSTOMER	SALES ORDER No.	DATE
	3D Oil	0	12-May-2008

CEMENT/PUMPING JOB LOGS & DETAILS

WELL	LOCATION/FIELD NAME	COUNTRY	HES REP	CUSTOMER REP	WELL TYPE
Wardie # 1	Bass Strait	Australia	R.Bridgman	Rocco Rossouw	Exploration

JOB TYPE	JOB PURPOSE CODE	BDA	RIG
Zonal Isolation	CEMENT CONDUCTOR CASING 14161	Perth	West Triton

JOB LOG

DATE DAY-MTH-YR	TIME HRS:MIN	VOLUME BBLS	PRESSURE (psi) HIGH	 LOW	RATE BPM	JOB DESCRIPTION REMARKS/DETAILS
12/05/2008	7:45					Hold JSA
	7:54	10		206	8	Pump 10 BBL seawater
	7:58		1000			Pressure test lines to 1000psi
	8:03	90		200	8	Pump 90 BBL seawater
		20		200		Pump 20 BBL seawater with Dye
	8:28	265		215	5	Mix & Pump 265 BBL cmt @ 15.9 ppg
	9:22	10		180		Pump 10 BBL seawater
	9:24					Bleed off check Float
						Chemicals used
						1454sk= 62MT of Class G cement
						Cacl2=28sks=1540lbs
						NF-6=2gals

HALLIBURTON

4.1.3 KPI & EJCS

HALLIBURTON

CUSTOMER	SALES ORDER No.	DATE
3D Oil	0	12-May-2008

CEMENT/PUMPING KPI & EJCS

WELL	LOCATION/FIELD NAME	COUNTRY	HES REP	CUSTOMER REP	WELL TYPE
Wardie # 1	Bass Strait	Australia	R.Bridgman	Rocco Rossouw	Exploration

JOB TYPE	JOB PURPOSE CODE	BDA	RIG
Zonal Isolation	CEMENT CONDUCTOR CASING 14161	Perth	West Triton

KEY PERFORMANCE INDICATORS

TYPE OF JOB (Cementing or Non-Cementing): *Select the job type (Cementing or Non-Cementing)*	Cementing	**WAS THIS A PRIMARY CEMENT JOB (YES / NO)** *Primary cement job = Casing job, Liner Job, tie back*	YES
TOTAL OPERATING TIME (hrs) *Rig up/ Pumping/ Rig Down*	4 Hrs	**DID WE RUN WIPER PLUGS?**	None
HSE INCIDENT, ACCIDENT, INJURY: *This should be recordable incidents only*	NO	**WAS THIS A PLUG OR SQUEEZE JOB?**	Neither
WAS THE JOB DELIVERED CORRECTLY AS PERJOB DESIGN?: *This will be dictated by the customer*	YES	**WAS THIS A PRIMARY OR REMEDIAL JOB?** Remedial = Repeated attempts or corrections of initial cement job	Primary
TOTAL TIME PUMPING (hrs) *Total number of hours pumping fluid on this job*	2 Hrs	**MIXING DENSITY OF JOB STAYED IN DESIGNED RANGE** *Density defined as +/- 0.2ppg. Calculation: Total bbls cement mixed at designed density divided by total bbls of cement multiplied by 100*	100%
NON -PRODUCTIVE RIG TIME: *As a result of Halliburton cementing PSL*	nil	**WAS AUTOMATED DENSITY CONTROL USED**	YES
NUMBER OF JSA'S PERFORMED:	1	**JOB WAS PUMPED AT DESIGNED PUMP RATE** *Pump rate ranged defined as +/- bpm. Calculation : total bbls of fluid pumped at the designed rate divided by total bbls of fluid pumped multiplied by 100*	100%
NUMBER OF UNPLANNED SHUTDOWNS (After starting to pump)		**NUMBER OF REMEDIAL SQUEEZE JOBS REQUIRED - HES** *Number of remedial squeeze jobs required after primary job performed by HES*	nil
TYPE OF RIG(CLASSIFICATION) JOB WAS PERFORMED ON:	JACKUP	**NUMBER OF REMEDIAL AQUEEZE JOBS REQUIRED - COMPETITION** *Number of remedial squeeze jobs required after primary job performed by competition*	nil
REASON FOR UNPLANNED SHUTDOWNS (After starting to pump) *Add details in job logs*		**NUMBER OF REMEDIAL PLUG JOBS REQUIRED - HES** *Number of remedial plug jobs required after primary plug pumped by HES*	nil
REASON FOR NON-PRODUCTIVE RIG TIME (Cementing PSL responsibility): *Add details in job logs*			

EJCS / CUSTOMER COMMENTS

Dear Customer,

We hope you were happy with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and services of a standard unmatched in the service sector of the energy industry

Please take the time to let us know if our performance met your expectations. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

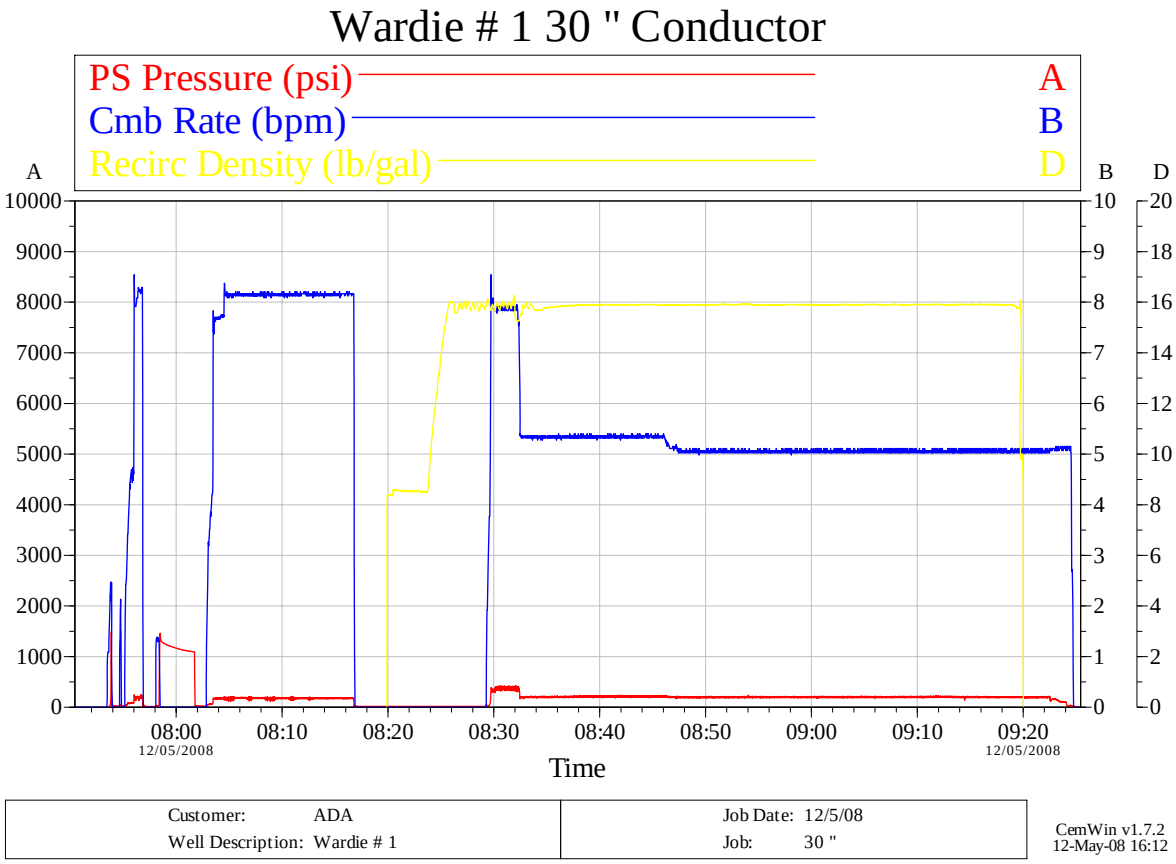
Please indicate your response by placing a tick in the box underneath the rating that best matches your opinion.

	Superior Performance (Establish new quality performance standards)	**Exceeded Expectations** (Provided more than what was expected)	**Met expectations** (Did what was expected)	**Below expectations** (Did not do what was expected, recovery made) **Create CPI**	**Poor** (Job problems / failures occured) **Create CPI**
	5	**4**	**3**	**2**	**1**
Did our personnel perform the job to your satisfaction?					
Did our equipment perform the job to your satisfaction?					
Did we perform the job to the agreed upon design?					
Did our products and materials perform as you expected?					
Did we perform in a safe & careful manner? PPE, Pre/Post mtgs, JSA					
Did we perform in an environmentally sound manner? Spills, disharges, clean up					
Was the job performed as scheduled? On time, as designed/discussed					
Did the equipment condition & appearance meet you expectations?					
How well did our personnel communicate during mobilisation, rig-up and job execution?					

	YES	**NO**
Overall, I was satisfied with Halliburton's job performance		

Customer Comments? *(What can we do to improve/maintain our services?)*

4.1.4 Technical Graph



4.2 13 3/8" SSR CASING

4.2.1 Job Summary

HALLIBURTON			CUSTOMER	SALES ORDER No.	DATE
			3D Oil		15 May 2008

CEMENT/PUMPING JOB SUMMARY

WELL	LOCATION/FIELD NAME	COUNTRY	HES REP	CUSTOMER REP	WELL TYPE
Wardie -1	Bass Strait	Australia	Robert Bridgman	Shaughan Corless	Exploration
JOB TYPE		**JOB PURPOSE CODE**		**BDA**	**RIG**
Zonal Isolation		SURFACE CASING 7521			West Triton

KEY PERFORMANCE INDICATORS

TYPE OF JOB (Cementing or Non-Cementing):	Cementing	**WAS THIS A PRIMARY CEMENT JOB (YES / NO)**	YES
Select the job type (Cementing or Non-Cementing)		*Primary cement job = Casing job, Liner Job, tie back*	
TOTAL OPERATING TIME (hrs)	12.0 hrs	**DID WE RUN WIPER PLUGS?**	None
Rig up/ Pumping/ Rig Down			
HSE INCIDENT, ACCIDENT, INJURY:	NO	**WAS THIS A PLUG OR SQUEEZE JOB?**	Neither
This should be recordable incidents only			
WAS THE JOB DELIVERED CORRECTLY AS PERJOB DESIGN'	YES	**WAS THIS A PRIMARY OR REMEDIAL JOB?**	Primary
This will be dictated by the customer		Remedial = Repeated attempts or corrections of initial cement job	
TOTAL TIME PUMPING (hrs)	3.0 hrs	**MIXING DENSITY OF JOB STAYED IN DESIGNED RANGE**	95%
Total number of hours pumping fluid on this job		*Density defined as +/- 0.2ppg. Calculation: Total bbls cement mixed at designed*	
NON -PRODUCTIVE RIG TIME:		*density divided by total bbls of cement multiplied by 100*	
As a result of Halliburton cementing PSL		**WAS AUTOMATED DENSITY CONTROL USED**	YES
NUMBER OF JSA'S PERFORMED:	1		
		JOB WAS PUMPED AT DESIGNED PUMP RATE	100%
NUMBER OF UNPLANNED SHUTDOWNS (After starting to pump)		*Pump rate ranged defined as +/- bpm. Calculation : total bbls of fluid pumped at*	
		the designed rate divided by total bbls of fluid pumped multiplied by 100	
TYPE OF RIG(CLASSIFICATION) JOB WAS PERFORMED ON:	JACKUP	**NUMBER OF REMEDIAL SQUEEZE JOBS REQUIRED - HES**	
		Number of remedial squeeze jobs required after primary job performed by HES	
REASON FOR UNPLANNED SHUTDOWNS (After starting to pump)		**NUMBER OF REMEDIAL AQUEEZE JOBS REQUIRED - COMPETITION**	
Add details in job logs		*Number of remedial squeeze jobs required after primary job performed by competition*	
REASON FOR NON-PRODUCTIVE RIG TIME (Cementing PSL responsibility):		**NUMBER OF REMEDIAL PLUG JOBS REQUIRED - HES**	
Add details in job logs		*Number of remedial plug jobs required after primary plug pumped by HES*	

EJCS / CUSTOMER COMMENTS

Dear Customer,

We hope you were happy with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and services of a standard unmatched in the service sector of the energy industry

Please take the time to let us know if our performance met your expectations. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of

Please indicate your response by placing a tick in the box underneath the rating that best matches your opinion.

	Superior Performance (Establish new quality performance standards) 5	**Exceeded Expectations** (Provided more than what was expected) 4	**Met expectations** (Did what was expected) 3	**Below expectations** (Did not do what was expected, recovery made) **Create CPI** 2	**Poor** (Job problems / failures occured) **Create CPI** 1
Did our personnel perform the job to your satisfaction?					
Did our equipment perform the job to your satisfaction?					
Did we perform the job to the agreed upon design?					
Did our products and materials perform as you expected?					
Did we perform in a safe & careful manner? PPE, Pre/Post mtgs, JSA					
Did we perform in an environmentally sound manner? Spills, disharges, clean up					
Was the job performed as scheduled? On time, as designed/discussed					
Did the equipment condition & appearance meet you expectations?					
How well did our personnel communicate during mobilisation, rig up and job execution					

	YES	NO
Overall, I was satisfied with Halliburton's job performance		

Customer Comments? *(What can we do to improve/maintain our services?)*

Customer Signature: ..... **Date:** .....

HALLIBURTON

HALLIBURTON	CUSTOMER	SALES ORDER No.	DATE
	3D Oil		15 May 2008

CEMENT/PUMPING JOB SUMMARY

WELL	LOCATION/FIELD NAME	COUNTRY	HES REP	CUSTOMER REP	WELL TYPE
Wardie -1	Bass Strait	Australia	Robert Bridgman	Shaughan Corless	Exploration
JOB TYPE		JOB PURPOSE CODE		BDA	RIG
Zonal Isolation		SURFACE CASING 7521			West Triton

PERSONELL

PERSONNEL / EXPOSURE		hrs	PERSONNEL / EXPOSURE		hrs	PERSONNEL / EXPOSURE	hrs	PERSONNEL / EXPOSURE	hrs
386793	Robert Bridgman	12	126997	Nigel Lucas	12				

EQUIPMENT

SAP#	PUMPING / MIXING	HOURS	SAP#	BULK SUPPLY / TANKS	HOURS
10951913	SKD ADVANTAGE 25DZ2 - WEST TRITON	12			

FLOAT EQUIPMENT AND CASING EQUIPMENT

SAP#	FLOAT EQUIPMENT	QTY	SAP#	PLUGS	QTY
	13 3/8 NR Buttress Float Collar	1			
	13 3/8 Butress Float shoe	1			

WELL PROFILE

NEW CASING	OPEN HOLE + EXCESS OR CALIPER DATA	PREVIOUS CASINGS
Tapered Casing , SSR, m shoe track		
13.375in 68ppf N80 Butt : 23m to 747.06m MD, m TVD		30"x20"in, 309.7ppf, 18.88m to 132.87m

CEMENT DESIGN

Tuned Spacer E+				Single				0			
DENSITY	11.0ppg	WATER	0.00gal/sk	DENSITY	15.9ppg	WATER	5.10gal/sk	DENSITY	0.0ppg	WATER	0.00gal/sk
YIELD	0.00cuft/ft	MIX FLUID	0.00gal/sk	YIELD	1.16cuft/ft	MIX FLUID	5.16gal/sk	YIELD	0.00cuft/ft	MIX FLUID	0.00gal/sk
WATER SOURCE				WATER SOURCE	Seawater			WATER SOURCE			
CEMENT TYPE	at lb/sk			CEMENT TYPE	ABC Class 'G' at 94lb/sk			CEMENT TYPE	at lb/sk		
Total Cement Used	sks			Total Cement Used	726sks			Total Cement Used	MT		
Estimated TOC	m			Estimated TOC	432m			Estimated TOC	m		
Additive	Concentration	Total Used		Additive	Concentration	Total Used		Additive	Concentration	Total Used	

END OF JOB DETAILS

4.2.2 JOB LOGS

HALLIBURTON

CUSTOMER	SALES ORDER No.	DATE
3D Oil		15 May 2008

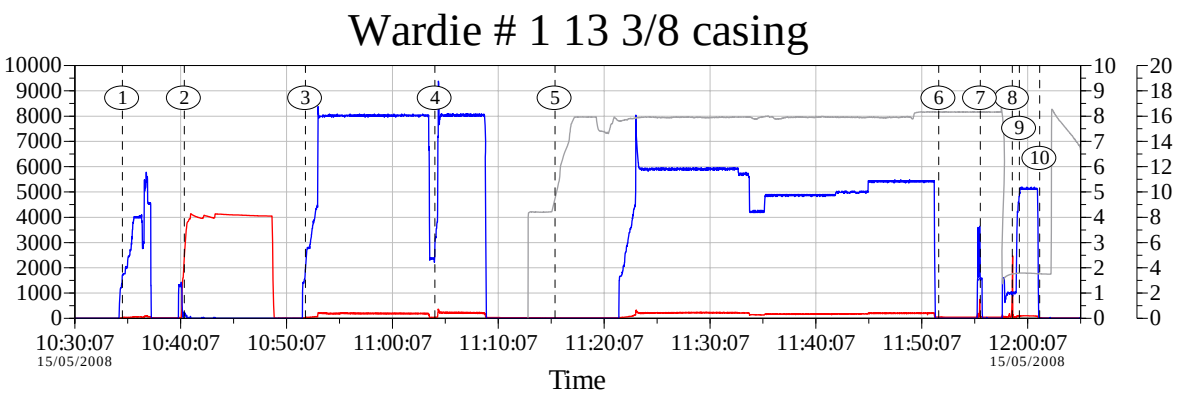
CEMENT/PUMPING JOB SUMMARY

WELL	LOCATION/FIELD NAME	COUNTRY	HES REP	CUSTOMER REP	WELL TYPE
Exploration	Bass Strait	Australia	Robert Bridgman	Shaughan Corless	Exploration
JOB TYPE		**JOB PURPOSE CODE**		**BDA**	**RIG**
Zonal Isolation		SURFACE CASING 7521		Perth	West Triton

JOB LOGS

DATE DAY-MTH-YR	TIME HRS:MIN	VOLUME BBLS	PRESSURE (psi) HIGH	PRESSURE (psi) LOW	RATE BPM	JOB DESCRIPTION REMARKS/DETAILS
15/05/2008						
	10:04					JSA with drill crew
	10:34	10		76	4	Pump 10 BBL Seawater Spacer
	10:40		4000		5	Pressure Test Lines
	10:51	90		214	8	Pump 90 BBL Seawater
	11:04	30		220	8	Pump 30 BBL Tuned Spacer E+ @ 11 ppg
	11:15	150		221	5	Mix & Pump 150 BBL Slurry @ 15.9 ppg
	11:51					Release Dart
	11:55	1.57				Pump 1.57 BBL To Land Dart
	11:58		2500			Land Dart and Shear Top Plug
	11:59	10		220	5	Pump 10 BBL Seawater
	12:01	340				Switch To Rig Pumps & Displace With 340 BBL of Seawater
	13:15					Bleed off Pressure & Check Floats , 3 BBL Returns
						Chemicals Used
						Tuned Spacer E + 840 LBS (17 Sks)
						CFR - 3 L = 30 Gals (Retarder)
						HR6L = 20 Gals (Retarder)
						NF-6 = 5 Gals (Defoamer)
						Cement " G " Class = 32 ton
						Tag Plug @ 732.5 Mtr
						1.5 Hrs to drill out
						25k on Bit to drill out

4.2.3 Pumping Chart



1	Pump 10 BBL sea water	10:34:37
2	Pressure test Line 4000 PSI	10:40:27
3	Pump 90 BBL sea water	10:51:54
4	Pump 30 BBl tune spacer	11:04:08
5	Mix and pump Cement 150 BBL @ 15.9ppg	11:15:28
6	Release Top dart	11:51:43
7	Pump Dart away with 1.5 BBL sea water	11:55:38
8	Plug Land and shear top plug	11:58:40
9	Displace with 10 BBL sea water	11:59:20
10	switch to rig Pumps and displace with 340 BBL of sea water	12:01:15

Customer: 3 D Oil	Job Date: 15/5/08
Well Description: Wardie # 1	Job: 13 3/8 Casing

TG Version G3.4.1
15-May-08 15:53

4.3 P&A Plugs

4.3.1 Summary

HALLIBURTON			CUSTOMER	SALES ORDER No.	DATE
			3D Oil		21 May 2008

CEMENT/PUMPING JOB SUMMARY

WELL	LOCATION/FIELD NAME	COUNTRY	HES REP	CUSTOMER REP	WELL TYPE
Wardie # 1	Bass Strait	Australia	Anthony Kelly	S. Schmidt	Exploration
JOB TYPE		**JOB PURPOSE CODE**		**BDA**	**RIG**
P&A Plugs		PLUG TO ABANDON 7528		Perth	West Triton

KEY PERFORMANCE INDICATORS

TYPE OF JOB (Cementing or Non-Cementing): *Select the job type (Cementing or Non-Cementing)*	Cementing	WAS THIS A PRIMARY CEMENT JOB (YES / NO) *Primary cement job = Casing job, Liner Job, tie back*	YES
TOTAL OPERATING TIME (hrs) *Rig up/ Pumping/ Rig Down*	48.0 hrs	DID WE RUN WIPER PLUGS?	None
HSE INCIDENT, ACCIDENT, INJURY: *This should be recordable incidents only*	NO	WAS THIS A PLUG OR SQUEEZE JOB?	Plug Job
WAS THE JOB DELIVERED CORRECTLY AS PERJOB DESIGN' *This will be dictated by the customer*	YES	WAS THIS A PRIMARY OR REMEDIAL JOB? *Remedial = Repeated attempts or corrections of initial cement job*	Primary
TOTAL TIME PUMPING (hrs) *Total number of hours pumping fluid on this job*	12.0 hrs	MIXING DENSITY OF JOB STAYED IN DESIGNED RANGE *Density defined as +/- 0.2ppg. Calculation: Total bbls cement mixed at designed density divided by total bbls of cement multiplied by 100*	99%
NON -PRODUCTIVE RIG TIME: *As a result of Halliburton cementing PSL*	nil	WAS AUTOMATED DENSITY CONTROL USED	YES
NUMBER OF JSA'S PERFORMED:	5	JOB WAS PUMPED AT DESIGNED PUMP RATE *Pump rate ranged defined as +/- bpm. Calculation : total bbls of fluid pumped at the designed rate divided by total bbls of fluid pumped multiplied by 100*	yes
NUMBER OF UNPLANNED SHUTDOWNS (After starting to pump)	nil	NUMBER OF REMEDIAL SQUEEZE JOBS REQUIRED - HES *Number of remedial squeeze jobs required after primary job performed by HES*	nil
TYPE OF RIG(CLASSIFICATION) JOB WAS PERFORMED ON:	JACKUP	NUMBER OF REMEDIAL AQUEEZE JOBS REQUIRED - COMPETITION *Number of remedial squeeze jobs required after primary job performed by competition*	nil
REASON FOR UNPLANNED SHUTDOWNS (After starting to pump) *Add details in job logs*		NUMBER OF REMEDIAL PLUG JOBS REQUIRED - HES *Number of remedial plug jobs required after primary plug pumped by HES*	nil
REASON FOR NON-PRODUCTIVE RIG TIME (Cementing PSL responsibility): *Add details in job logs*			

EJCS / CUSTOMER COMMENTS

Dear Customer,

We hope you were happy with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and services of a standard unmatched in the service sector of the energy industry

Please take the time to let us know if our performance met your expectations. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of

Please indicate your response by placing a tick in the box underneath the rating that best matches your opinion.

	Superior Performance (Establish new quality performance standards) 5	Exceeded Expectations (Provided more than what was expected) 4	Met expectations (Did what was expected) 3	Below expectations (Did not do what was expected, recovery made) Create CPI 2	Poor (Job problems / failures occured) Create CPI 1
Did our personnel perform the job to your satisfaction?		✓			
Did our equipment perform the job to your satisfaction?		✓			
Did we perform the job to the agreed upon design?		✓			
Did our products and materials perform as you expected?		✓			
Did we perform in a safe & careful manner? PPE, Pre/Post mtgs, JSA		✓			
Did we perform in an environmentally sound manner? Spills, disharges, clean up		✓			
Was the job performed as scheduled? On time, as designed/discussed		✓			
Did the equipment condition & appearance meet you expectations?		✓			
How well did our personnel communicate during mobilisation, rig up and job execution		✓			

	YES	NO
Overall, I was satisfied with Halliburton's job performance	✓	

Customer Comments? *(What can we do to improve/maintain our services?)*

HAL CEMENT PLUGS JOBS WHERE CARRIED OUT SAFELY AND WITHOUT EQUIPMENT FAILURES. GOOD WORK BY CREW. GOOD INPUT / INFO SAFETY !!

Customer Signature: SGH Leitmott Date: 23/5/08

HALLIBURTON

HALLIBURTON	CUSTOMER	SALES ORDER No.	DATE
	3D Oil		21 May 2008

CEMENT/PUMPING JOB SUMMARY

WELL	LOCATION/FIELD NAME	COUNTRY	HES REP	CUSTOMER REP	WELL TYPE
Wardie # 1	Bass Strait	Australia	Anthony Kelly	S. Schmidt	Exploration
JOB TYPE		**JOB PURPOSE CODE**		**BDA**	**RIG**
P&A Plugs		PLUG TO ABANDON 7528		Perth	West Triton

PERSONELL

PERSONNEL / EXPOSURE		hrs	PERSONNEL / EXPOSURE		hrs	PERSONNEL / EXPOSURE	hrs	PERSONNEL / EXPOSURE	hrs
331198	Anthony Kelly	48	126997	Nigel Lucas	48				

EQUIPMENT

SAP#	PUMPING / MIXING	HOURS	SAP#	BULK SUPPLY / TANKS	HOURS
10951913	SKD ADVANTAGE 25DZ2 - WEST TRITAN				

WELL PROFILE

NEW CASING	OPEN HOLE + EXCESS OR CALIPER DATA	PREVIOUS CASINGS
		13.375in, 68ppf, 0m to 749m

CEMENT DESIGN

Single				Single				Single			
DENSITY	15.8ppg	WATER	4.70gal/sk	DENSITY	15.8ppg	WATER	4.70gal/sk	DENSITY	15.9ppg	WATER	4.70gal/sk
YIELD	1.16cuft/ft	MIX FLUID	5.16gal/sk	YIELD	1.16cuft/ft	MIX FLUID	5.12gal/sk	YIELD	1.16cuft/ft	MIX FLUID	5.12gal/sk
WATER SOURCE	Drillwater			WATER SOURCE	Drillwater			WATER SOURCE	Drillwater		
CEMENT TYPE	ABC Class 'G' at 94lb/sk			CEMENT TYPE	ABC Class 'G' at 94lb/sk			CEMENT TYPE	ABC Class 'G' at 94lb/sk		
Total Cement Used	411sks			Total Cement Used	320sks			Total Cement Used	290sks		
Estimated TOC	1616m			Estimated TOC	1516m			Estimated TOC	700m		

Additive	Concentration	Total Used	Additive	Concentration	Total Used	Additive	Concentration	Total Used
CFR-3L	3gal gal/10bbl	15	CFR-3L	3 gal/10bbl	12gals	CFR-3L	3 gal/10bbl	12gals
SCR-100L	2 gal/10bbl	10	SCR-100L	2 gal/10bbl	8gals	HR-6L	2 gal/10bbl	8gals
NF-6L	0.02 gal/10bbl	1	NF-6L	0.02 gal/10bbl	1gals	NF-6l	0.02 gal/10bbl	1gals

Single				0				0			
DENSITY	15.9ppg	WATER	5.16gal/sk	DENSITY	0.0ppg	WATER	0.00gal/sk	DENSITY	0.0ppg	WATER	0.00gal/sk
YIELD	1.16cuft/ft	MIX FLUID	5.16gal/sk	YIELD	0.00cuft/ft	MIX FLUID	0.00gal/sk	YIELD	0.00cuft/ft	MIX FLUID	0.00gal/sk
WATER SOURCE	Seawater			WATER SOURCE				WATER SOURCE			
CEMENT TYPE	ABC Class 'G' at 94lb/sk			CEMENT TYPE	at lb/sk			CEMENT TYPE	at lb/sk		
Total Cement Used	19MT			Total Cement Used	MT			Total Cement Used	MT		
Estimated TOC	95m			Estimated TOC	m			Estimated TOC	m		

Additive	Concentration	Total Used	Additive	Concentration	Total Used	Additive	Concentration	Total Used
Calcium Chloride	0.5 %BWOC	150lbs						

END OF JOB DETAILS

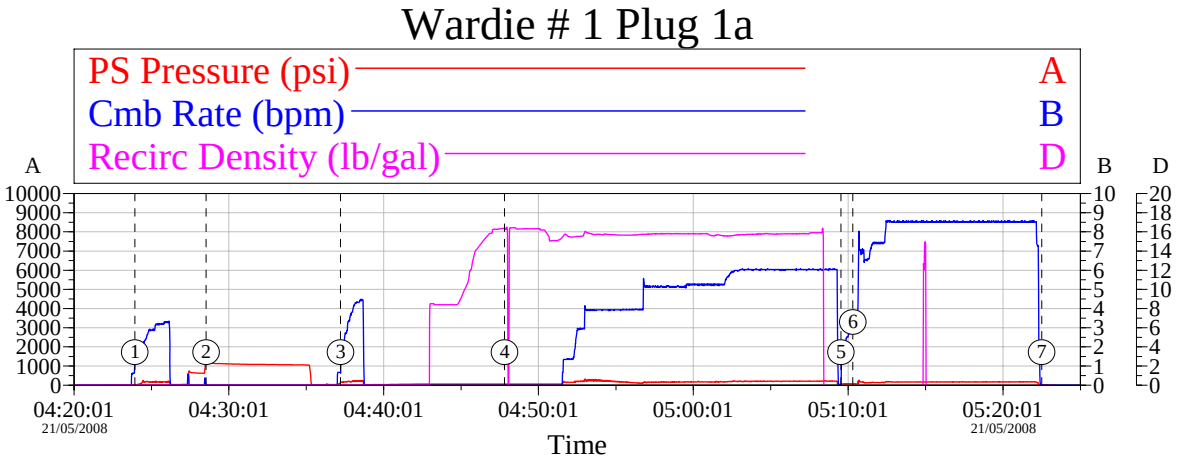
4.3.2 JOB LOGS

HALLIBURTON				CUSTOMER	SALES ORDER No.	DATE
				3D Oil		21 May 2008
CEMENT/PUMPING JOB SUMMARY						
WELL	**LOCATION/FIELD NAME**	**COUNTRY**		**HES REP**	**CUSTOMER REP**	**WELL TYPE**
Exploration	Bass Strait	Australia		Anthony Kelly	S. Schmidt	Exploration
JOB TYPE		**JOB PURPOSE CODE**			**BDA**	**RIG**
P&A Plugs		PLUG TO ABANDON 7528			Perth	West Triton

JOB LOGS

DATE	TIME	VOLUME	PRESSURE (psi)		RATE	JOB DESCRIPTION
DAY-MTH-YR	HRS:MIN	BBLS	HIGH	LOW	BPM	REMARKS/DETAILS
21/05/2008	4:00					JSA Safety Meeting
Plug 1a	4:23	6		27	4	Pump 6 BBl Drill Water
	4:28	0.02	1232		0.25	Pressure Test Lines
	4:37	5		143	4	Pump 5 BBls Drill Water
	4:47	85		60	6	Mix and pump 85 bbls 15.8 ppg slurry
	5:09	2		53	4	Pump 2 BBls Drill Water
	5:10	98		67	8.5	Displace with 98 BBls Mud
	5:22					End Job
Plug 1b	7:00					JSA Safety Meeting
	7:13	6		31	4	Pump 6 BBls Drill Water
	7:16		849		0.25	Pressure Test Lines
	7:21	5		123	4	Pump 5 BBls Drill Water
	7:28	66		46	6	Mix and pump 66 bbls 15.8 ppg slurry
	7:43	2		82		Pump 2 BBls Drill Water
	7:44	90		180	10	Displace with 90 BBls Mud
	7:53					End Job
						Tag Top of plug 1b, 1407mts , (high) 5k tag
Plug # 2	19:03	6		40	4	Pump 6 bbls Sea Water
	19:07		1045			Pressure Test Lines
	19:12	6		159	4	Pump 6 bbls Sea Water
	19:20	58		53	5	Pump 58 bbls 15.9 ppg slurry
	19:38	2		51		Pump 2 bbls Sea Water
	19:39	37		66	9.5	Displace 37 bbls Mud
	19:43					End Displace and check flow back
22-May-08	2:15		1000			Pressure test Plug 2 1000 psi,
23-May-08	2:25	5		55	4	Pump 5 bbls Sea Water
	2:28	0.02	500			Pressure Test Lines
	2:33	10		78	7	Pump 10 bbls Sea Water
	2:40	93		120	7	Mix and Pump 93 bbls 15.9 ppg Slurry
	2:57	6		150	6	Displace with 6 bbls Sea Water
						Materials used for P & A of Wardie #1
						Cement Class "G" 63 MT
						CFR -3L 40 Gallons, (Friction reducer)
						SCR-100L, 20 Gallons, (Retarder)
						HR -6L- 10 Gallons, (Retarder)
						NF-6L- 5 Gallons, (DE foamer)

4.3.3 PUMPING CHARTS



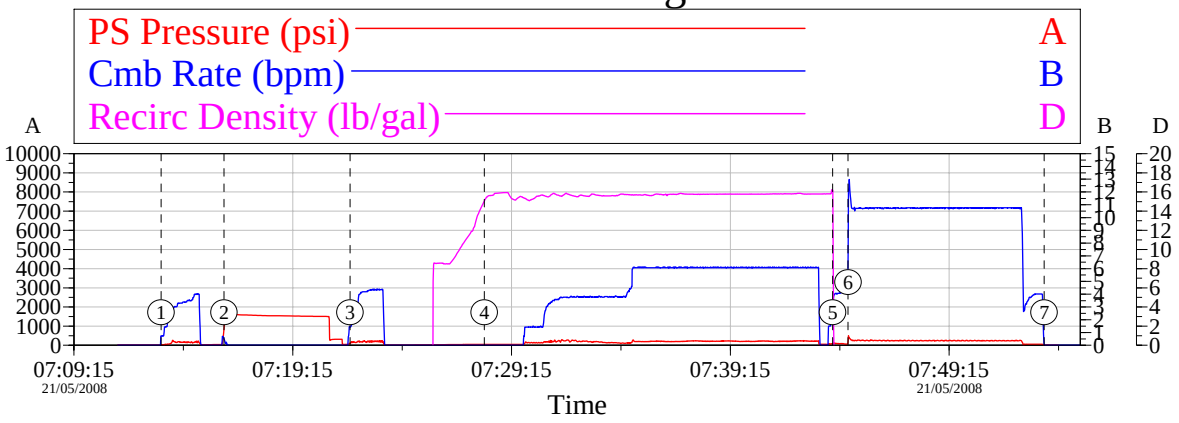
Event Log

	Intersection		PP	RD
1	Pump 6 BBL drill water	04:23:57	27.51	0.021
2	Pressure Test lines 1200	04:28:33	1232	0.019
3	Pump 5 BBL Drill water	04:37:14	143.6	0.020
4	Mix and pump 85 BBL cement @ 15.8 ppg	04:47:49	60.08	16.38
5	Pump 2 BBL drill water	05:09:33	53.39	-0.223
6	Displace with 98 BBl drill mud	05:10:19	67.92	-0.224
7	End displacing and check flow back	05:22:31	17.54	-0.224

Customer: ADA	Job Date: 21/5/08
Well Description: Wardie # 1	Job: Plug 1a

TG Version G3.4.1
21-May-08 10:11

Wardie # 1 Plug 1 b



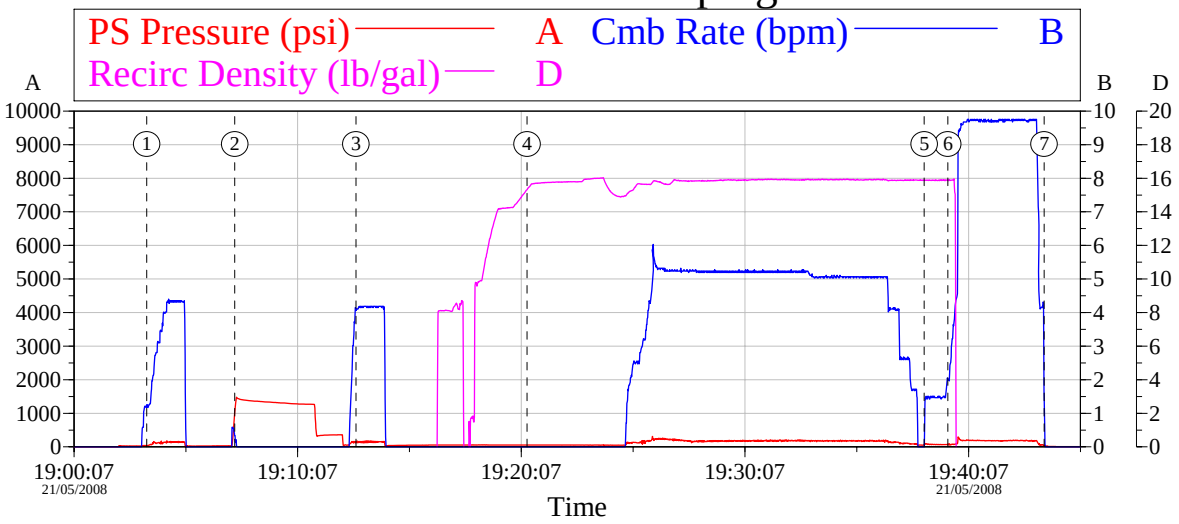
Event Log

Intersection		PP	C	RD
1	Pump 6 BBls Drill water	07:13:14	31.52	0.016	-0.223
2	Pressure Test Lines	07:16:06	849.1	5.271	-0.223
3	Pump 5 BBls Drill Water	07:21:52	123.2	5.409	-0.226
4	Mix and Pump 66 BBls at 15.8ppg	07:28:00	46.63	0.000	15.05
5	Pump 2 BBls Drill water	07:43:55	82.37	0.382	16.18
6	Displace with 90 BBls Drilling Mud	07:44:38	180.9	0.933	-0.298
7	Open 1" Lo-torq and Check for flow back	07:53:36	18.44	90.27	-0.300

Customer: ADA	Job Date: 21/5/08
Well Description: Wardie # 1	Job: PLug 1b

TG Version G3.4.1
23-May-08 05:15

Wardie # 1 P & A plug2



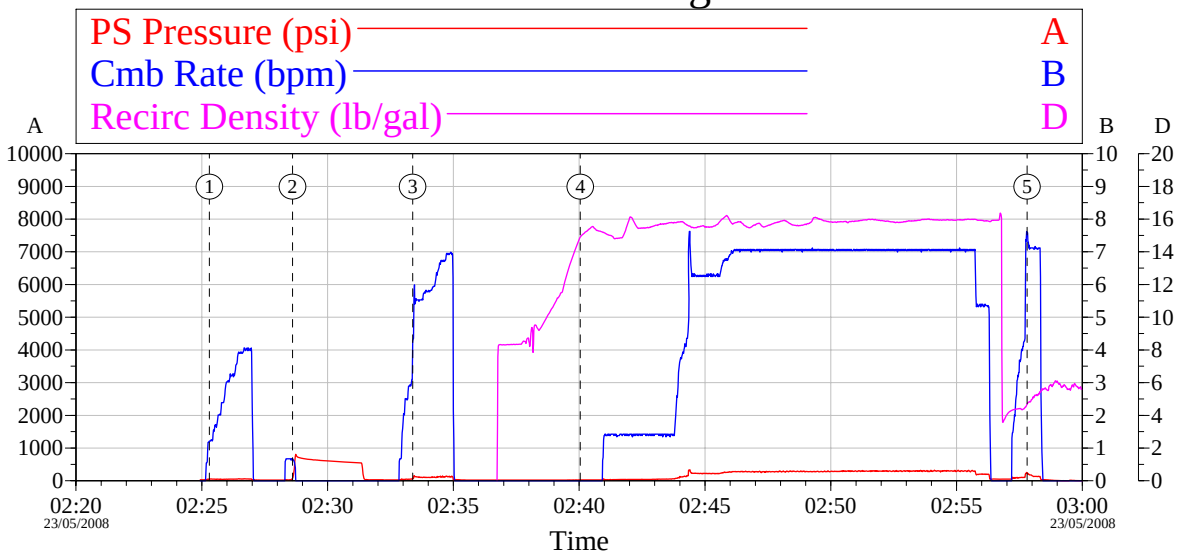
Event Log

	Intersection		PP	RD		Intersection		PP	RD
1	Pump 6 bbls of Sea Water	19:03:22	40.18	-0.300	2	Pressure Test Lines	19:07:18	1045	-0.299
3	Pump 6 bbls of Sea Water	19:12:44	159.4	-0.298	4	Mix and Pupm 58 bbls 15.9 ppg Slurry	19:20:23	53.67	15.32
5	Pump 2 bbls Sea Water	19:38:08	51.97	15.87	6	Displace 37 bbls Mud	19:39:11	66.55	15.89
7	End Displace and Check floats	19:43:30	23.20	-0.298					

Customer: ADA	Job Date: 21/5/08
Well Description: Wardie # 1	Job: Plug 2

TG Version G3.4.1
23-May-08 05:18

Wardie # 1 Plug 3



Event Log

	Intersection		PP		Intersection		PP
1	Pump 5 bbls Sea Water	02:25:18	55.58	2	Pressure Test	02:28:36	71.37
3	Pump 10 bbls	02:33:23	78.21	4	Mix and Pump 93 bbls 15.9ppg Slurry	02:40:02	25.94
5	Displace with 6 bbls Sea Water	02:57:48	242.3				

Customer: ADA	Job Date: 23/5/08
Well Description: Wardie # 1	Job: plug #3

TG Version G3.4.1
23-May-08 05:13

Attachment 6

LOT/FIT Report

FIT / LOT TEST RESULTS.

Australian Drilling Associates Pty Ltd ADA

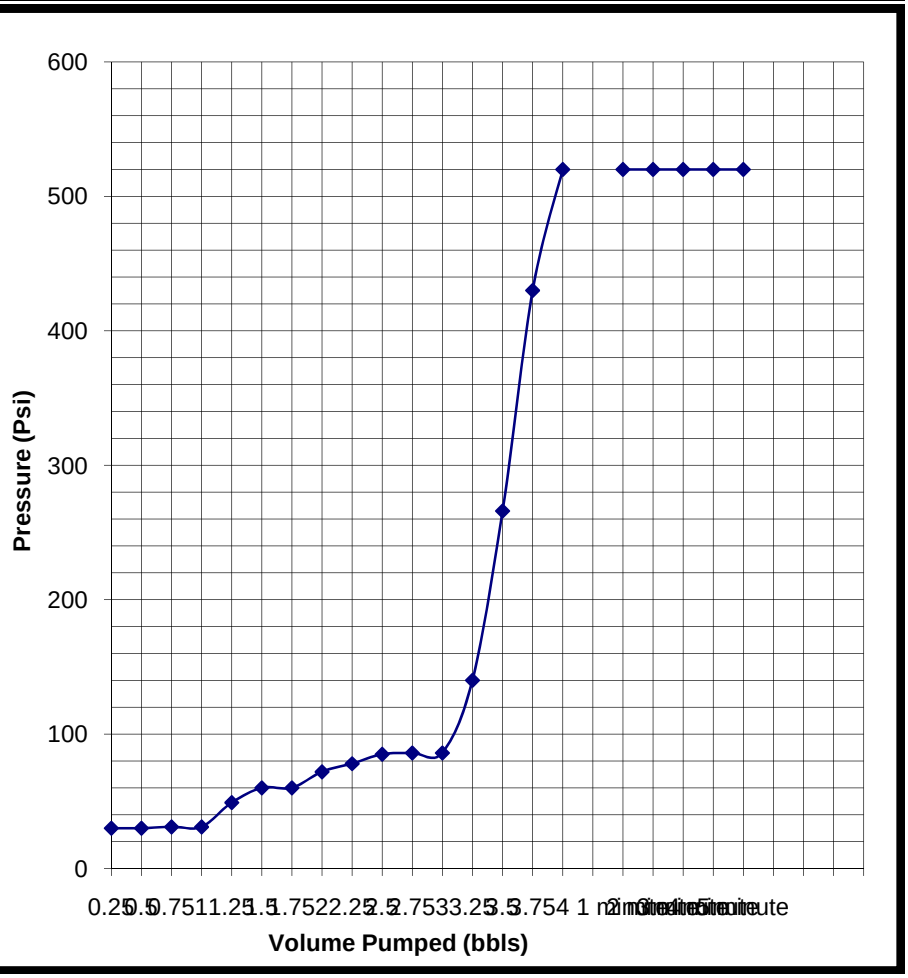
FIT / LOT DATA					
TEST DATE:	15/05/2008	WELL #:	Wardie-1	CLIENT:	3D Oil

CASING DATA				TEST MUD DATA	
CASING SIZE	CASING GRADE	SHOE TVD (M)	SHOE MD (M)	WEIGHT (PPG)	VISCOSITY (SEC)
13 3/8	L80	704	747.3	8.8	57

INDICATE TYPE OF TEST:	FIT:	☑	LOT:	☐

LEAK OFF OR FIT TEST PRESSURE (PSI):	EQUIVALENT MUD WEIGHT (PPG):	MAX. MUD WEIGHT (PPG):	VOLUME PUMPED (BBLS):	VOLUME RETURNED (BBLS):
520	4.33	13.13	4	4

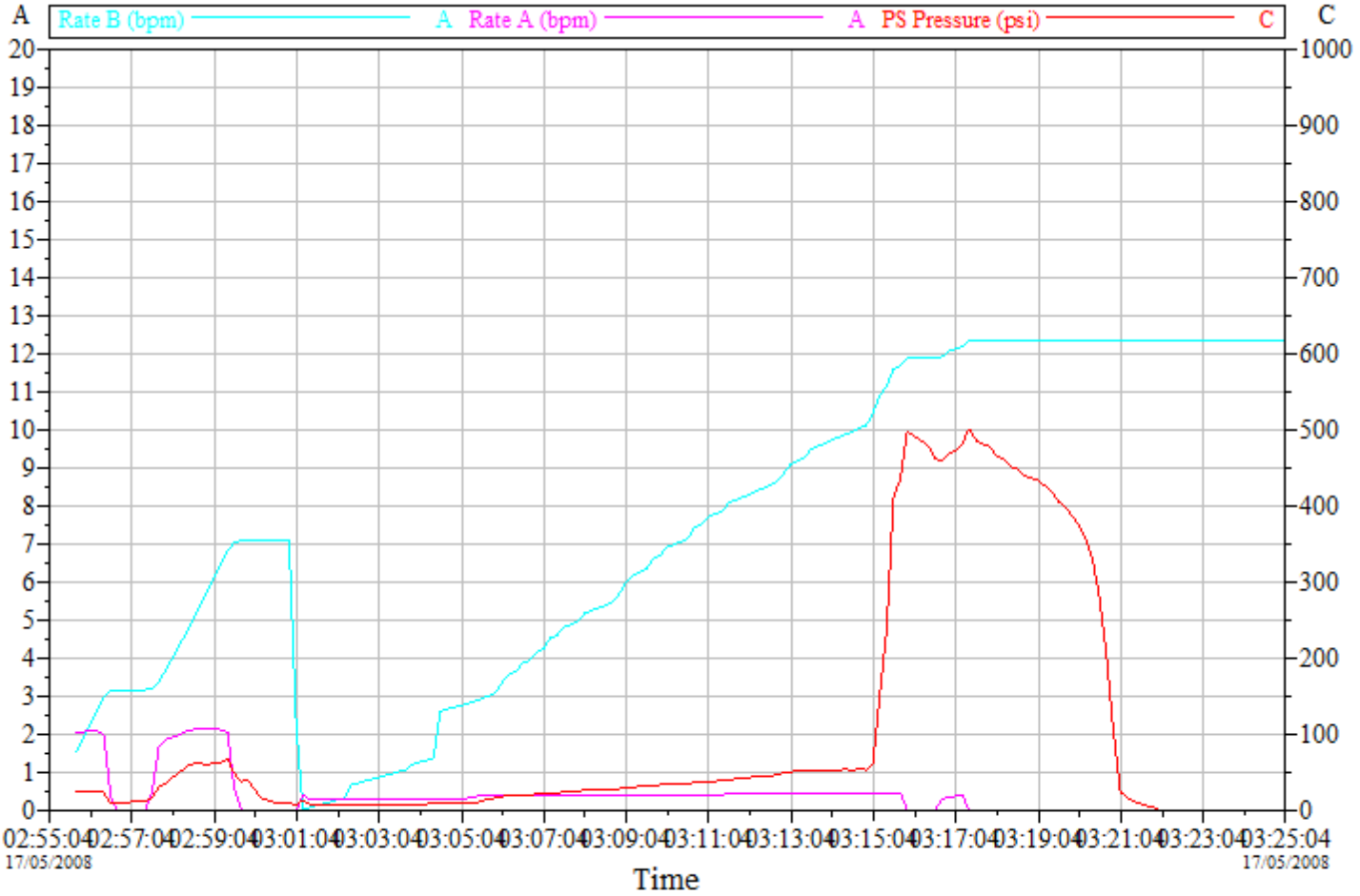
SURFACE PRESSURE (PSI):	VOLUME PUMPED (BBLS):
30	0.25
30	0.5
31	0.75
31	1
49	1.25
60	1.5
60	1.75
72	2
78	2.25
85	2.5
86	2.75
86	3
140	3.25
266	3.5
430	3.75
520	4
520	1 minute
520	2 minute
520	3 minute
520	4 minute
520	5 minute



PRESENT DAY INFO.				
DATE:	DEPTH (M):		MUD:	
	MD:	TVD:	WEIGHT (PPG):	VISCOSITY (SEC):
16/05/2008	747.3	704	8.8	56

MAASP = 520

COMMENTS:	



Customer: Well Desc:	Job Date: UWI:	Ticket #:

TG Version G3.4.1
17-May-08 12:46

Attachment 7

Directional Drilling Report

Schlumberger

3D Oil

Wardie-1

End of Well Report

	Name	Signature	Date
Schlumberger QC	David de Freitas		
Client approval			

Schlumberger

Contents

Schlumberger

General Information

Client:	3D Oil
Well Name:	Wardie-1
Rig:	West Triton
Field:	Exploration
Location:	Bass Strait
Country:	Australia
Cell Members:	**Patrick Dassens (DD)** **Punniamoorthy Sellathurai (DD)** **Anagh Kohli (MWD)** **San Thida Aung (MWD)**

Town Contacts:	**David de Freitas**	Directional Drilling Coordinator
	Mee Yean Tan	Field Services Manager

Company Representatives:	**S. Corless**	Company Representative
	R. Rossouw	Company Representative
	S. Ward	Geologist
	B. Leask	Geologist

Schlumberger

Geomagnetic and Survey Reference Criteria

Geomagnetic Data

Magnetic Model:	**BGGM version 2007**
Magnetic Date:	**May 1st 2008**
Magnetic Field Strength:	**59946.609nT**
Magnetic Declination:	**12.844°**
Magnetic Dip:	**-68.778°**

Survey Reference Criteria

Reference G:	**100.02 mG**
Reference H:	**1198.93 HCNT**
Reference Dip:	**-68.778°**
G value Tolerance:	**2.50 mG**
H value Tolerance:	**6.00 HCNT**
Dip Tolerance:	**0.45°**

Survey Corrections Applied

Reference North:	**Grid North**
Magnetic Declination:	**12.844°**
Grid Convergence:	**-0.38310215°**
Total Azimuth Correction:	**+13.227°**
Vertical Section Azimuth:	**241.15°**

Survey Reference Location

Location Coordinates

Latitude:	**38° 12' 24.881" South**
Longitude:	**147° 37' 9.793" East**
Easting:	**554227.625 m**
Northing:	**5771046.028 m**
Reference System:	

Schlumberger

3D Oil Ltd

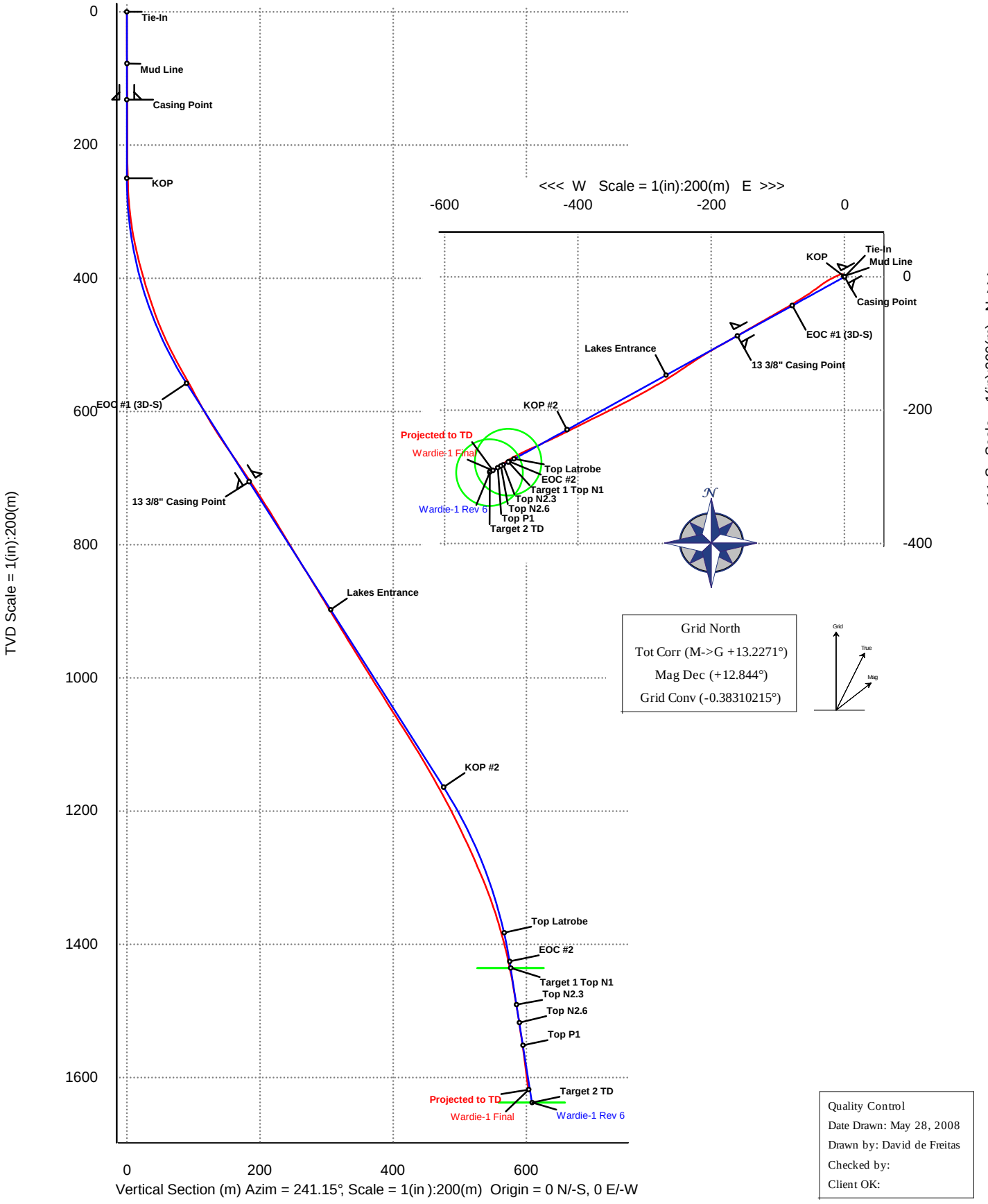
WELL	FIELD	STRUCTURE
Wardie-1	3D Oil - West Seahorse	West Seahorse

Magnetic Parameters				Surface Location				Miscellaneous			
Model:	BGGM 2007	Dip:	-68.778°	Lat:	S38 12 24.881	Northing:	5771046.03 m	Slot:	2	TVD Ref:	RKB (37.68 m above MSL)
		Mag Dec:	+12.844°	Lon:	E147 37 9.793	Easting:	554227.62 m	Plan:	Wardie-1 Final	Srvy Date:	May 01, 2008
		Date:	May 01, 2008			Grid Conv:	-0.38310215°				
		FS:	59946.6 nT		GDA94/MGA94 Zone 55	Scale Fact:	0.9996362151				

Surface Location

Northing: 5771046.03 m Easting: 554227.62 m

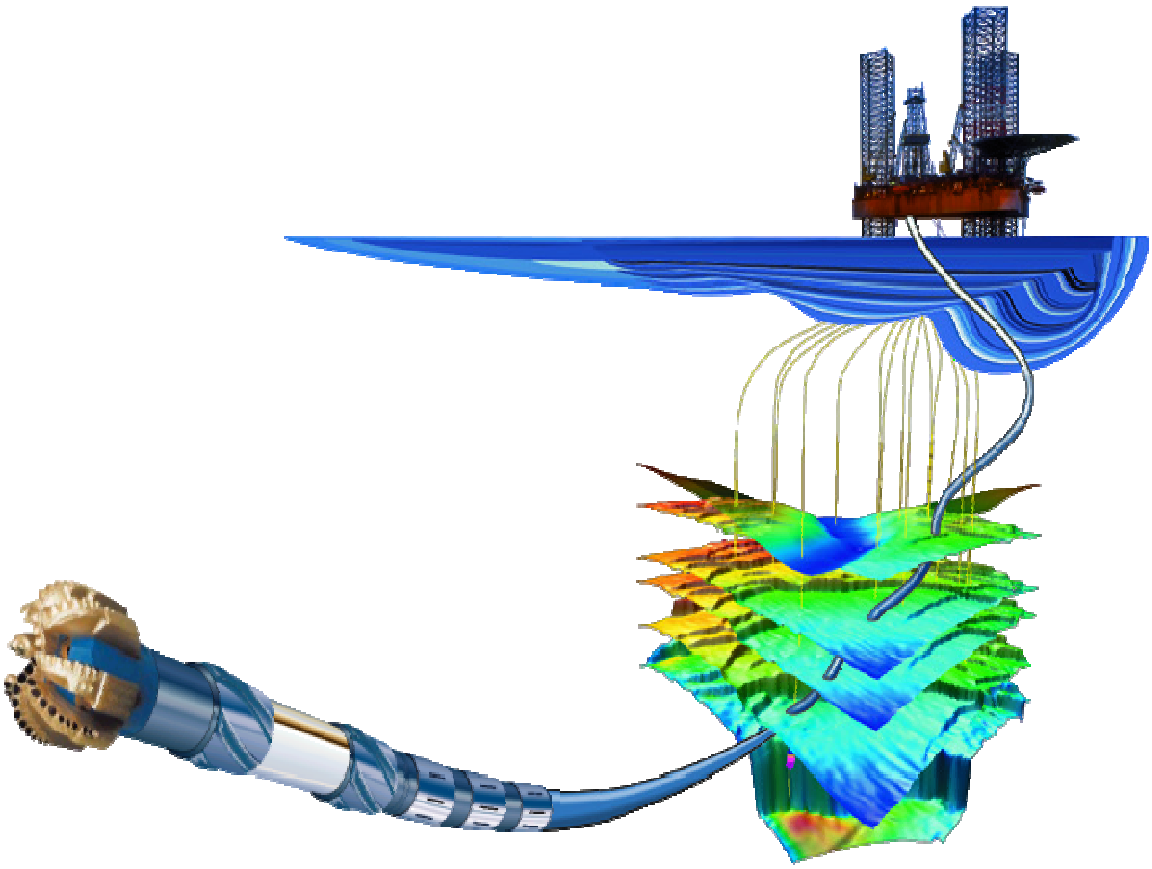
Target Description			Grid Coord				Local Coord	
Target Name	Shape	Major Axis	N(+)/S(-)	E(+)/W(-)	TVD	VSec	N(+)/S(-)	E(+)/W(-)
Target 1 Top N1	Circle	100.00	5770768.00	553723.00	1435.68	576.36	-278.13	-504.81
Target 2 TD	Circle	100.00	5770752.57	553694.99	1637.68	608.35	-293.57	-532.83



Quality Control
Date Drawn: May 28, 2008
Drawn by: David de Freitas
Checked by:
Client OK:

Schlumberger

Definitive Survey



Schlumberger

Wardie-1 Final Survey Report

Report Date:	19-May-08	**Survey / DLS Computation Method:**	Minimum Curvature / Lubinski
Client:	3D Oil Ltd	**Vertical Section Azimuth:**	241.150°
Field:	Exploration	**Vertical Section Origin:**	N 0.000 m, E 0.000 m
Structure / Slot:	West Seahorse / 2	**TVD Reference Datum:**	RKB
Well:	Wardie-1	**TVD Reference Elevation:**	37.7 m relative to MSL
Borehole:	Wardie-1	**Sea Bed / Ground Level Elevation:**	-39.500 m relative to MSL
UWI/API#:		**Magnetic Declination:**	12.844°
Survey Name / Date:	Wardie-1 Final / May 1, 2008	**Total Field Strength:**	59946.609 nT
Tort / AHD / DDI / ERD ratio:	82.133° / 608.54 m / 5.253 / 0.376	**Magnetic Dip:**	-68.778°
Grid Coordinate System:	GDA94/MGA94 Zone 55	**Declination Date:**	May 01, 2008
Location Lat/Long:	S 38 12 24.881, E 147 37 9.793	**Magnetic Declination Model:**	BGGM 2007
Location Grid N/E Y/X:	N 5771046.028 m, E 554227.625 m	**North Reference:**	Grid North
Grid Convergence Angle:	-0.38310215°	**Total Corr Mag North -> Grid North:**	+13.227°
Grid Scale Factor:	0.99963622	**Local Coordinates Referenced To:**	Well Head

Comments	Measured Depth (m)	Inclination (deg)	Azimuth Grid (deg)	Course Length (m)	TVD (m)	Vertical Section (m)	NS Grid North (m)	EW Grid North (m)	Closure (m)	Closure Azimuth (deg)	DLS (deg/30 m)	Mag / Grav Tool Face (deg)
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	317.71M
Mud Line	77.50	1.96	317.71	77.50	77.48	0.31	0.98	-0.89	1.33	317.71	0.76	317.51M
	82.50	1.90	317.51	5.00	82.48	0.35	1.10	-1.01	1.49	317.70	0.36	317.30M
	87.50	1.85	317.30	5.00	87.48	0.39	1.23	-1.12	1.66	317.67	0.30	317.07M
	92.50	1.80	317.07	5.00	92.48	0.42	1.34	-1.22	1.82	317.63	0.30	316.83M
	97.50	1.74	316.83	5.00	97.47	0.46	1.45	-1.33	1.97	317.57	0.36	316.58M
	102.50	1.69	316.58	5.00	102.47	0.50	1.56	-1.43	2.12	317.51	0.30	316.30M
	107.50	1.63	316.30	5.00	107.47	0.54	1.67	-1.53	2.27	317.45	0.36	315.91M
	112.50	1.65	315.91	5.00	112.47	0.57	1.77	-1.63	2.41	317.37	0.14	316.62M
	117.50	1.78	316.62	5.00	117.47	0.61	1.88	-1.73	2.56	317.30	0.79	319.95M
	122.50	1.86	319.95	5.00	122.46	0.65	2.00	-1.84	2.72	317.36	0.80	323.69M
	127.50	1.88	323.69	5.00	127.46	0.67	2.13	-1.94	2.88	317.61	0.74	328.33M
	132.50	1.94	328.33	5.00	132.46	0.69	2.26	-2.03	3.04	318.07	0.99	330.59M
	134.60	2.03	330.59	2.10	134.56	0.69	2.33	-2.07	3.12	318.34	1.70	331.19M
	174.15	0.97	331.19	39.55	174.09	0.70	3.23	-2.58	4.13	321.43	0.80	330.50M
	202.30	1.06	330.50	28.15	202.24	0.70	3.67	-2.82	4.63	322.44	0.10	269.17M
	260.44	2.12	269.17	58.14	260.36	1.66	4.12	-4.16	5.85	314.72	0.96	252.00M
	290.09	5.23	252.00	29.65	289.94	3.47	3.69	-5.99	7.04	301.64	3.30	19.24L
	319.76	8.62	244.27	29.67	319.39	7.02	2.31	-9.28	9.57	283.97	3.55	2.34L
	349.23	11.69	243.65	29.47	348.40	12.21	0.03	-13.95	13.95	270.10	3.13	1.31L
	378.56	14.54	243.39	29.33	376.96	18.85	-2.94	-19.91	20.12	261.59	2.92	33.53L
	408.20	16.62	238.69	29.64	405.51	26.81	-6.81	-26.85	27.71	255.76	2.46	39.34L
	437.65	18.41	234.18	29.45	433.60	35.63	-11.72	-34.22	36.18	251.09	2.29	7.31L
	466.98	21.11	233.22	29.33	461.20	45.46	-17.60	-42.21	45.73	247.37	2.78	17.93R
	496.44	24.52	235.86	29.46	488.35	56.81	-24.21	-51.52	56.93	244.83	3.62	18.76R
	525.34	27.44	238.00	28.90	514.33	69.43	-31.10	-62.14	69.49	243.41	3.18	13.17R
	555.68	29.78	239.10	30.34	540.96	83.94	-38.68	-74.53	83.97	242.57	2.37	169.13R
	585.40	28.02	239.82	29.72	566.98	98.30	-45.98	-86.90	98.31	242.12	1.81	4.51R
	614.89	29.13	240.00	29.49	592.88	112.40	-53.05	-99.11	112.41	241.84	1.13	3.82R
	644.23	31.31	240.28	29.34	618.23	127.17	-60.40	-111.91	127.17	241.64	2.23	3.12R
	674.32	33.98	240.54	30.09	643.56	143.40	-68.41	-126.03	143.40	241.50	2.67	16.31L
	703.79	34.90	240.07	29.47	667.87	160.06	-76.67	-140.50	160.06	241.38	0.97	167.85L
	722.54	34.35	239.86	18.75	683.29	170.71	-82.00	-149.73	170.71	241.29	0.90	164.40R
	802.80	32.02	241.09	80.26	750.46	214.63	-103.66	-187.94	214.63	241.12	0.91	144.71L
	831.50	30.76	239.33	28.70	774.96	229.58	-111.08	-200.91	229.58	241.06	1.63	34.35L
	861.51	31.64	238.19	30.01	800.63	245.11	-119.15	-214.20	245.11	240.92	1.06	106.61L

	891.22	31.39	236.51	29.71	825.96	260.60	-127.53	-227.28	260.61	240.70	0.92	54.17L
	920.19	31.58	236.01	28.97	850.66	275.68	-135.93	-239.86	275.70	240.46	0.33	72.68R
	949.76	31.70	236.73	29.57	875.84	291.14	-144.52	-252.78	291.17	240.24	0.40	126.32R
	979.78	31.37	237.60	30.02	901.42	306.80	-153.03	-265.97	306.85	240.08	0.56	84.00R
	1009.21	31.56	240.47	29.43	926.53	322.15	-160.93	-279.14	322.21	240.03	1.54	77.64L
	1039.05	31.64	239.79	29.84	951.94	337.78	-168.72	-292.70	337.84	240.04	0.37	90.00R
	1066.59	31.64	241.83	27.54	975.39	352.22	-175.77	-305.31	352.29	240.07	1.17	21.87R
	1096.55	32.01	242.11	29.96	1000.85	368.02	-183.19	-319.25	368.08	240.15	0.40	46.19R
	1125.94	32.34	242.75	29.39	1025.72	383.67	-190.43	-333.13	383.72	240.25	0.48	145.46L
	1155.71	32.17	242.53	29.77	1050.90	399.55	-197.74	-347.24	399.59	240.34	0.21	77.52R
	1184.60	32.35	243.98	28.89	1075.33	414.96	-204.67	-361.01	414.99	240.45	0.83	165.93R
	1214.81	32.18	244.06	30.21	1100.88	431.07	-211.74	-375.50	431.09	240.58	0.17	160.81L
	1244.86	30.73	243.07	30.05	1126.51	446.73	-218.72	-389.55	446.75	240.69	1.54	165.00R
	1274.25	29.50	243.74	29.39	1151.93	461.47	-225.32	-402.73	461.48	240.77	1.30	172.90L
	1303.82	28.32	243.43	29.57	1177.82	475.75	-231.68	-415.53	475.75	240.86	1.21	172.16R
	1333.24	26.97	243.84	29.42	1203.88	489.39	-237.74	-427.76	489.39	240.94	1.39	166.48R
	1363.33	25.76	244.51	30.09	1230.84	502.73	-243.56	-439.79	502.73	241.02	1.24	167.62R
	1392.32	24.64	245.10	28.99	1257.07	515.05	-248.82	-450.96	515.05	241.11	1.19	164.84R
	1421.66	23.41	245.94	29.34	1283.87	526.96	-253.77	-461.83	526.96	241.21	1.31	171.40L
	1451.54	21.93	245.34	29.88	1311.44	538.44	-258.52	-472.32	538.44	241.31	1.50	178.00L
	1481.24	19.28	245.06	29.70	1339.23	548.86	-262.90	-481.81	548.87	241.38	2.68	168.93L
	1511.19	16.74	243.33	29.95	1367.71	558.11	-266.92	-490.15	558.11	241.43	2.60	163.05L
	1540.85	14.49	240.57	29.66	1396.28	566.09	-270.66	-497.20	566.09	241.44	2.40	159.97L
	1570.22	12.40	236.98	29.37	1424.84	572.91	-274.19	-503.04	572.91	241.41	2.30	176.39L
	1599.76	10.35	236.26	29.54	1453.80	578.72	-277.39	-507.91	578.72	241.36	2.09	175.04R
	1630.16	9.46	236.73	30.40	1483.75	583.93	-280.28	-512.27	583.93	241.32	0.88	168.56L
	1659.89	8.81	235.87	29.73	1513.10	588.63	-282.90	-516.20	588.63	241.28	0.67	174.49L
	1689.37	8.19	235.45	29.48	1542.26	592.97	-285.35	-519.79	592.97	241.23	0.63	177.36L
	1718.81	7.67	235.27	29.44	1571.41	597.01	-287.66	-523.14	597.01	241.19	0.53	155.84L
	1745.67	7.36	234.18	26.86	1598.04	600.50	-289.69	-526.00	600.50	241.16	0.38	---
Projected to TD	1766.00	7.36	234.18	20.33	1618.21	603.08	-291.21	-528.12	603.08	241.13	0.00	---

Survey Type: Definitive Survey

Survey Error Model: **SLB ISCWSA version 24 *** 3-D 95.00% Confidence 2.7955 sigma**

Surveying Prog:

MD From (m)	MD To (m)	EOU Freq	Survey Tool Type	Borehole -> Survey
0.00	77.18	Act-Stns	SLB_CNSG+DPIPE-Depth Only	Wardie-1 -> Wardie-1 Final
77.18	134.60	Act-Stns	SLB_CNSG+DPIPE	Wardie-1 -> Wardie-1 Final
134.60	1745.67	Act-Stns	SLB_MWD-STD	Wardie-1 -> Wardie-1 Final
1745.67	1766.00	Act-Stns	SLB_BLIND+TREND	Wardie-1 -> Wardie-1 Final

Schlumberger

Wardie-1 Final Geodetic Survey

Report Date:	May 19, 2008	**Survey / DLS Computation Method:**	Minimum Curvature / Lubinski
Client:	3D Oil Ltd	**Vertical Section Azimuth:**	241.150°
Field:	Exploration	**Vertical Section Origin:**	N 0.000 m, E 0.000 m
Structure / Slot:	West Seahorse / 2	**TVD Reference Datum:**	RKB
Well:	Wardie-1	**TVD Reference Elevation:**	37.7 m relative to MSL
Borehole:	Wardie-1	**Sea Bed / Ground Level Elevation:**	-39.500 m relative to MSL
UWI/API#:		**Magnetic Declination:**	12.844°
Survey Name / Date:	Wardie-1 Final / May 1, 2008	**Total Field Strength:**	59946.609 nT
Tort / AHD / DDI / ERD ratio:	82.133° / 608.54 m / 5.253 / 0.376	**Magnetic Dip:**	-68.778°
Grid Coordinate System:	GDA94/MGA94 Zone 55	**Declination Date:**	May 01, 2008
Location Lat/Long:	S 38 12 24.881, E 147 37 9.793	**Magnetic Declination Model:**	BGGM 2007
Location Grid N/E Y/X:	N 5771046.028 m, E 554227.625 m	**North Reference:**	Grid North
Grid Convergence Angle:	-0.38310215°	**Total Corr Mag North -> Grid North:**	+13.227°
Grid Scale Factor:	0.99963622	**Local Coordinates Referenced To:**	Well Head

Comments	Measured Depth (m)	Inclination (deg)	Azimuth Grid (deg)	TVD (m)	Vertical Section (m)	NS Grid North (m)	EW Grid North (m)	DLS (deg/30 m)	Northing (m)	Easting (m)	Latitude	Longitude
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5771046.03	554227.62	S 38 12 24.881	E 147 37 9.793
Mud Line	77.50	1.96	317.71	77.48	0.31	0.98	-0.89	0.76	5771047.01	554226.73	S 38 12 24.850	E 147 37 9.756
	82.50	1.90	317.51	82.48	0.35	1.10	-1.01	0.36	5771047.13	554226.62	S 38 12 24.846	E 147 37 9.751
	87.50	1.85	317.30	87.48	0.39	1.23	-1.12	0.30	5771047.25	554226.51	S 38 12 24.842	E 147 37 9.747
	92.50	1.80	317.07	92.48	0.42	1.34	-1.22	0.30	5771047.37	554226.40	S 38 12 24.838	E 147 37 9.742
	97.50	1.74	316.83	97.47	0.46	1.45	-1.33	0.36	5771047.48	554226.30	S 38 12 24.834	E 147 37 9.738
	102.50	1.69	316.58	102.47	0.50	1.56	-1.43	0.30	5771047.59	554226.19	S 38 12 24.831	E 147 37 9.734
	107.50	1.63	316.30	107.47	0.54	1.67	-1.53	0.36	5771047.70	554226.09	S 38 12 24.827	E 147 37 9.730
	112.50	1.65	315.91	112.47	0.57	1.77	-1.63	0.14	5771047.80	554225.99	S 38 12 24.824	E 147 37 9.726
	117.50	1.78	316.62	117.47	0.61	1.88	-1.73	0.79	5771047.91	554225.89	S 38 12 24.821	E 147 37 9.721
	122.50	1.86	319.95	122.46	0.65	2.00	-1.84	0.80	5771048.03	554225.78	S 38 12 24.817	E 147 37 9.717
	127.50	1.88	323.69	127.46	0.67	2.13	-1.94	0.74	5771048.15	554225.68	S 38 12 24.813	E 147 37 9.713
	132.50	1.94	328.33	132.46	0.69	2.26	-2.03	0.99	5771048.29	554225.59	S 38 12 24.808	E 147 37 9.709
	134.60	2.03	330.59	134.56	0.69	2.33	-2.07	1.70	5771048.36	554225.55	S 38 12 24.806	E 147 37 9.707
	174.15	0.97	331.19	174.09	0.70	3.23	-2.58	0.80	5771049.26	554225.05	S 38 12 24.777	E 147 37 9.686
	202.30	1.06	330.50	202.24	0.70	3.67	-2.82	0.10	5771049.69	554224.81	S 38 12 24.763	E 147 37 9.676
	260.44	2.12	269.17	260.36	1.66	4.12	-4.16	0.96	5771050.15	554223.47	S 38 12 24.748	E 147 37 9.621
	290.09	5.23	252.00	289.94	3.47	3.69	-5.99	3.30	5771049.72	554221.63	S 38 12 24.763	E 147 37 9.546
	319.76	8.62	244.27	319.39	7.02	2.31	-9.28	3.55	5771048.34	554218.34	S 38 12 24.808	E 147 37 9.411
	349.23	11.69	243.65	348.40	12.21	0.03	-13.95	3.13	5771046.05	554213.68	S 38 12 24.883	E 147 37 9.220
	378.56	14.54	243.39	376.96	18.86	-2.94	-19.91	2.92	5771043.09	554207.73	S 38 12 24.981	E 147 37 8.976
	408.20	16.62	238.69	405.51	26.81	-6.81	-26.85	2.46	5771039.22	554200.78	S 38 12 25.108	E 147 37 8.691
	437.65	18.41	234.18	433.60	35.63	-11.72	-34.22	2.29	5771034.31	554193.41	S 38 12 25.269	E 147 37 8.390
	466.98	21.11	233.22	461.20	45.46	-17.60	-42.21	2.78	5771028.44	554185.43	S 38 12 25.461	E 147 37 8.063
	496.44	24.52	235.86	488.35	56.81	-24.21	-51.52	3.62	5771021.83	554176.12	S 38 12 25.677	E 147 37 7.682
	525.34	27.44	238.00	514.33	69.43	-31.10	-62.14	3.18	5771014.94	554165.51	S 38 12 25.903	E 147 37 7.248
	555.68	29.78	239.10	540.96	83.94	-38.68	-74.53	2.37	5771007.36	554153.12	S 38 12 26.152	E 147 37 6.740
	585.40	28.02	239.82	566.98	98.30	-45.98	-86.90	1.81	5771000.07	554140.76	S 38 12 26.391	E 147 37 6.234
	614.89	29.13	240.00	592.88	112.40	-53.05	-99.11	1.13	5770993.00	554128.56	S 38 12 26.623	E 147 37 5.734
	644.23	31.31	240.28	618.23	127.17	-60.40	-111.91	2.23	5770985.65	554115.75	S 38 12 26.864	E 147 37 5.210
	674.32	33.98	240.54	643.56	143.40	-68.41	-126.03	2.67	5770977.64	554101.64	S 38 12 27.127	E 147 37 4.632
	703.79	34.90	240.07	667.87	160.06	-76.67	-140.50	0.97	5770969.39	554087.17	S 38 12 27.398	E 147 37 4.039
	722.54	34.35	239.86	683.29	170.71	-82.00	-149.73	0.90	5770964.06	554077.95	S 38 12 27.573	E 147 37 3.662
	802.80	32.02	241.09	750.46	214.63	-103.66	-187.94	0.91	5770942.40	554039.75	S 38 12 28.284	E 147 37 2.097
	831.50	30.76	239.33	774.96	229.58	-111.08	-200.91	1.63	5770934.98	554026.78	S 38 12 28.527	E 147 37 1.566
	861.51	31.64	238.19	800.63	245.11	-119.15	-214.20	1.06	5770926.92	554013.50	S 38 12 28.792	E 147 37 1.022
	891.22	31.39	236.51	825.96	260.60	-127.53	-227.28	0.92	5770918.55	554000.43	S 38 12 29.066	E 147 37 0.486
	920.19	31.58	236.01	850.66	275.68	-135.93	-239.86	0.33	5770910.15	553987.85	S 38 12 29.341	E 147 36 59.972
	949.76	31.70	236.73	875.84	291.14	-144.52	-252.78	0.40	5770901.56	553974.94	S 38 12 29.623	E 147 36 59.443
	979.78	31.37	237.60	901.42	306.80	-153.03	-265.97	0.56	5770893.05	553961.75	S 38 12 29.902	E 147 36 58.903
	1009.21	31.56	240.47	926.53	322.15	-160.93	-279.14	1.54	5770885.15	553948.59	S 38 12 30.161	E 147 36 58.364

	1039.05	31.64	239.79	951.94	337.78	-168.72	-292.70	0.37	5770877.37	553935.03	S 38 12 30.416	E 147 36 57.809
	1066.59	31.64	241.83	975.39	352.22	-175.77	-305.31	1.17	5770870.33	553922.43	S 38 12 30.648	E 147 36 57.292
	1096.55	32.01	242.11	1000.85	368.02	-183.19	-319.25	0.40	5770862.90	553908.49	S 38 12 30.891	E 147 36 56.721
	1125.94	32.34	242.75	1025.72	383.67	-190.43	-333.13	0.48	5770855.66	553894.62	S 38 12 31.129	E 147 36 56.153
	1155.71	32.17	242.53	1050.90	399.55	-197.74	-347.24	0.21	5770848.36	553880.51	S 38 12 31.369	E 147 36 55.575
	1184.60	32.35	243.98	1075.33	414.96	-204.67	-361.01	0.83	5770841.43	553866.75	S 38 12 31.597	E 147 36 55.011
	1214.81	32.18	244.06	1100.88	431.07	-211.74	-375.50	0.17	5770834.37	553852.26	S 38 12 31.829	E 147 36 54.417
	1244.86	30.73	243.07	1126.51	446.73	-218.72	-389.55	1.54	5770827.39	553838.22	S 38 12 32.059	E 147 36 53.842
	1274.25	29.50	243.74	1151.93	461.47	-225.32	-402.73	1.30	5770820.79	553825.04	S 38 12 32.276	E 147 36 53.302
	1303.82	28.32	243.43	1177.82	475.75	-231.68	-415.53	1.21	5770814.43	553812.24	S 38 12 32.485	E 147 36 52.777
	1333.24	26.97	243.84	1203.88	489.39	-237.74	-427.76	1.39	5770808.37	553800.02	S 38 12 32.684	E 147 36 52.276
	1363.33	25.76	244.51	1230.84	502.73	-243.56	-439.79	1.24	5770802.55	553787.99	S 38 12 32.875	E 147 36 51.783
	1392.32	24.64	245.10	1257.07	515.05	-248.82	-450.96	1.19	5770797.30	553776.83	S 38 12 33.048	E 147 36 51.326
	1421.66	23.41	245.94	1283.87	526.96	-253.77	-461.83	1.31	5770792.35	553765.96	S 38 12 33.211	E 147 36 50.880
	1451.54	21.93	245.34	1311.44	538.44	-258.52	-472.32	1.50	5770787.60	553755.48	S 38 12 33.367	E 147 36 50.450
	1481.24	19.28	245.06	1339.23	548.86	-262.90	-481.81	2.68	5770783.22	553745.99	S 38 12 33.511	E 147 36 50.061
	1511.19	16.74	243.33	1367.71	558.11	-266.92	-490.15	2.60	5770779.20	553737.66	S 38 12 33.644	E 147 36 49.720
	1540.85	14.49	240.57	1396.28	566.09	-270.66	-497.20	2.40	5770775.46	553730.61	S 38 12 33.767	E 147 36 49.431
	1570.22	12.40	236.98	1424.84	572.91	-274.19	-503.04	2.30	5770771.94	553724.77	S 38 12 33.882	E 147 36 49.192
	1599.76	10.35	236.26	1453.80	578.72	-277.39	-507.91	2.09	5770768.74	553719.90	S 38 12 33.987	E 147 36 48.993
	1630.16	9.46	236.73	1483.75	583.93	-280.28	-512.27	0.88	5770765.85	553715.54	S 38 12 34.082	E 147 36 48.814
	1659.89	8.81	235.87	1513.10	588.63	-282.90	-516.20	0.67	5770763.24	553711.62	S 38 12 34.167	E 147 36 48.653
	1689.37	8.19	235.45	1542.26	592.97	-285.35	-519.79	0.63	5770760.78	553708.02	S 38 12 34.248	E 147 36 48.506
	1718.81	7.67	235.27	1571.41	597.01	-287.66	-523.14	0.53	5770758.47	553704.68	S 38 12 34.323	E 147 36 48.370
	1745.67	7.36	234.18	1598.04	600.50	-289.69	-526.00	0.38	5770756.44	553701.81	S 38 12 34.390	E 147 36 48.252
Projected to TD	1766.00	7.36	234.18	1618.21	603.08	-291.21	-528.12	0.00	5770754.92	553699.70	S 38 12 34.440	E 147 36 48.166

Survey Type: Definitive Survey

Survey Error Model: **SLB ISCWSA version 24 *** 3-D 95.00% Confidence 2.7955 sigma**

Surveying Prog:

MD From (m)	MD To (m)	EOU Freq	Survey Tool Type	Borehole -> Survey
0.00	77.18	Act-Stns	SLB_CNSG+DPIPE-Depth Only	Wardie-1 -> Wardie-1 Final
77.18	134.60	Act-Stns	SLB_CNSG+DPIPE	Wardie-1 -> Wardie-1 Final
134.60	1745.67	Act-Stns	SLB_MWD-STD	Wardie-1 -> Wardie-1 Final
1745.67	1766.00	Act-Stns	SLB_BLIND+TREND	Wardie-1 -> Wardie-1 Final

Schlumberger

Wardie-1 Final EOU Report

Report Date:	May 19, 2008	**Survey / DLS Computation Method:**	Minimum Curvature / Lubinski
Client:	3D Oil Ltd	**Vertical Section Azimuth:**	241.150°
Field:	Exploration	**Vertical Section Origin:**	N 0.000 m, E 0.000 m
Structure / Slot:	West Seahorse / 2	**TVD Reference Datum:**	RKB
Well:	Wardie-1	**TVD Reference Elevation:**	37.7 m relative to MSL
Borehole:	Wardie-1	**Sea Bed / Ground Level Elevation:**	-39.500 m relative to MSL
UWI/API#:		**Magnetic Declination:**	12.844°
Survey Name / Date:	Wardie-1 Final / May 1, 2008	**Total Field Strength:**	59946.609 nT
Tort / AHD / DDI / ERD ratio:	82.133° / 608.54 m / 5.253 / 0.376	**Magnetic Dip:**	-68.778°
Grid Coordinate System:	GDA94/MGA94 Zone 55	**Declination Date:**	May 01, 2008
Location Lat/Long:	S 38 12 24.881, E 147 37 9.793	**Magnetic Declination Model:**	BGGM 2007
Location Grid N/E Y/X:	N 5771046.028 m, E 554227.625 m	**North Reference:**	Grid North
Grid Convergence Angle:	-0.38310215°	**Total Corr Mag North -> Grid North:**	+13.227°
Grid Scale Factor:	0.99963622	**Local Coordinates Referenced To:**	Well Head

Comments	Measured Depth (m)	Inclination (deg)	Azimuth Grid (deg)	TVD (m)	Vertical Section (m)	NS Grid North (m)	EW Grid North (m)	DLS (deg/30 m)	Semi-Axis Major NEV (m)	Semi-Axis Minor NEV (m)	EOU Unc Vertical (m)	Major Axis Azimuth NEV (deg)	Survey Tool Model
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	90.00	SLB_CNSG+DPIPE-Depth Only
Mud Line	77.50	1.96	317.71	77.48	0.31	0.98	-0.89	0.76	0.17	0.16	0.61	137.65	SLB_CNSG+DPIPE
	82.50	1.90	317.51	82.48	0.35	1.10	-1.01	0.36	0.17	0.17	0.61	137.42	SLB_CNSG+DPIPE
	87.50	1.85	317.30	87.48	0.39	1.23	-1.12	0.30	0.19	0.19	0.62	137.21	SLB_CNSG+DPIPE
	92.50	1.80	317.07	92.48	0.42	1.34	-1.22	0.30	0.21	0.21	0.63	137.03	SLB_CNSG+DPIPE
	97.50	1.74	316.83	97.47	0.46	1.45	-1.33	0.36	0.23	0.23	0.63	136.87	SLB_CNSG+DPIPE
	102.50	1.69	316.58	102.47	0.50	1.56	-1.43	0.30	0.25	0.25	0.64	136.72	SLB_CNSG+DPIPE
	107.50	1.63	316.30	107.47	0.54	1.67	-1.53	0.36	0.27	0.27	0.65	136.57	SLB_CNSG+DPIPE
	112.50	1.65	315.91	112.47	0.57	1.77	-1.63	0.14	0.28	0.28	0.66	136.37	SLB_CNSG+DPIPE
	117.50	1.78	316.62	117.47	0.61	1.88	-1.73	0.79	0.29	0.28	0.67	136.54	SLB_CNSG+DPIPE
	122.50	1.86	319.95	122.46	0.65	2.00	-1.84	0.80	0.29	0.29	0.67	137.94	SLB_CNSG+DPIPE
	127.50	1.88	323.69	127.46	0.67	2.13	-1.94	0.74	0.30	0.30	0.68	140.03	SLB_CNSG+DPIPE
	132.50	1.94	328.33	132.46	0.69	2.26	-2.03	0.99	0.32	0.32	0.69	142.37	SLB_CNSG+DPIPE
	134.60	2.03	330.59	134.56	0.69	2.33	-2.07	1.70	0.32	0.32	0.70	144.37	SLB_CNSG+DPIPE
	174.15	0.97	331.19	174.09	0.70	3.23	-2.58	0.80	0.39	0.39	0.99	146.82	SLB_MWD-STD
	202.30	1.06	330.50	202.24	0.70	3.67	-2.82	0.10	0.39	0.39	0.99	98.40	SLB_MWD-STD
	260.44	2.12	269.17	260.36	1.66	4.12	-4.16	0.96	0.41	0.41	0.99	35.23	SLB_MWD-STD
	290.09	5.23	252.00	289.94	3.47	3.69	-5.99	3.30	0.47	0.47	1.00	31.23	SLB_MWD-STD
	319.76	8.62	244.27	319.39	7.02	2.31	-9.28	3.55	0.57	0.55	1.00	7.35	SLB_MWD-STD
	349.23	11.69	243.65	348.40	12.21	0.03	-13.95	3.13	0.70	0.64	1.00	170.06	SLB_MWD-STD
	378.56	14.54	243.39	376.96	18.86	-2.94	-19.91	2.92	0.86	0.74	0.99	163.04	SLB_MWD-STD
	408.20	16.62	238.69	405.51	26.81	-6.81	-26.85	2.46	1.06	0.85	1.00	158.62	SLB_MWD-STD
	437.65	18.41	234.18	433.60	35.63	-11.72	-34.22	2.29	1.28	0.95	1.00	155.19	SLB_MWD-STD
	466.98	21.11	233.22	461.20	45.46	-17.60	-42.21	2.78	1.54	1.06	1.01	152.65	SLB_MWD-STD
	496.44	24.52	235.86	488.35	56.81	-24.21	-51.52	3.62	1.84	1.18	1.02	151.24	SLB_MWD-STD
	525.34	27.44	238.00	514.33	69.43	-31.10	-62.14	3.18	2.18	1.31	1.03	150.55	SLB_MWD-STD
	555.68	29.78	239.10	540.96	83.94	-38.68	-74.53	2.37	2.57	1.45	1.06	150.22	SLB_MWD-STD
	585.40	28.02	239.82	566.98	98.30	-45.98	-86.90	1.81	2.91	1.53	1.08	150.05	SLB_MWD-STD
	614.89	29.13	240.00	592.88	112.40	-53.05	-99.11	1.13	3.24	1.61	1.12	149.98	SLB_MWD-STD
	644.23	31.31	240.28	618.23	127.17	-60.40	-111.91	2.23	3.66	1.75	1.17	150.03	SLB_MWD-STD
	674.32	33.98	240.54	643.56	143.40	-68.41	-126.03	2.67	4.12	1.90	1.23	150.10	SLB_MWD-STD
	703.79	34.90	240.07	667.87	160.06	-76.67	-140.50	0.97	4.59	2.05	1.29	150.10	SLB_MWD-STD
	722.54	34.35	239.86	683.29	170.71	-82.00	-149.73	0.90	4.86	2.12	1.33	150.07	SLB_MWD-STD
	802.80	32.02	241.09	750.46	214.63	-103.66	-187.94	0.91	5.88	2.32	1.47	150.06	SLB_MWD-STD
	831.50	30.76	239.33	774.96	229.58	-111.08	-200.91	1.63	6.24	2.40	1.53	149.98	SLB_MWD-STD
	861.51	31.64	238.19	800.63	245.11	-119.15	-214.20	1.06	6.65	2.52	1.60	149.86	SLB_MWD-STD
	891.22	31.39	236.51	825.96	260.60	-127.53	-227.28	0.92	7.06	2.65	1.67	149.65	SLB_MWD-STD
	920.19	31.58	236.01	850.66	275.68	-135.93	-239.86	0.33	7.47	2.77	1.74	149.44	SLB_MWD-STD
	949.76	31.70	236.73	875.84	291.14	-144.52	-252.78	0.40	7.88	2.90	1.81	149.29	SLB_MWD-STD
	979.78	31.37	237.60	901.42	306.80	-153.03	-265.97	0.56	8.28	3.02	1.88	149.19	SLB_MWD-STD
	1009.21	31.56	240.47	926.53	322.15	-160.93	-279.14	1.54	8.68	3.13	1.95	149.25	SLB_MWD-STD
	1039.05	31.64	239.79	951.94	337.78	-168.72	-292.70	0.37	9.10	3.26	2.02	149.26	SLB_MWD-STD
	1066.59	31.64	241.83	975.39	352.22	-175.77	-305.31	1.17	9.48	3.38	2.09	149.37	SLB_MWD-STD
	1096.55	32.01	242.11	1000.85	368.02	-183.19	-319.25	0.40	9.91	3.51	2.17	149.48	SLB_MWD-STD
	1125.94	32.34	242.75	1025.72	383.67	-190.43	-333.13	0.48	10.34	3.65	2.25	149.62	SLB_MWD-STD
	1155.71	32.17	242.53	1050.90	399.55	-197.74	-347.24	0.21	10.77	3.78	2.33	149.72	SLB_MWD-STD
	1184.60	32.35	243.98	1075.33	414.96	-204.67	-361.01	0.83	11.17	3.90	2.40	149.88	SLB_MWD-STD

	1214.81	32.18	244.06	1100.88	431.07	-211.74	-375.50	0.17	11.60	4.02	2.48	150.03	SLB_MWD-STD
	1244.86	30.73	243.07	1126.51	446.73	-218.72	-389.55	1.54	12.01	4.13	2.55	150.12	SLB_MWD-STD
	1274.25	29.50	243.74	1151.93	461.47	-225.32	-402.73	1.30	12.39	4.24	2.61	150.23	SLB_MWD-STD
	1303.82	28.32	243.43	1177.82	475.75	-231.68	-415.53	1.21	12.75	4.34	2.67	150.32	SLB_MWD-STD
	1333.24	26.97	243.84	1203.88	489.39	-237.74	-427.76	1.39	13.10	4.45	2.73	150.41	SLB_MWD-STD
	1363.33	25.76	244.51	1230.84	502.73	-243.56	-439.79	1.24	13.45	4.56	2.79	150.52	SLB_MWD-STD
	1392.32	24.64	245.10	1257.07	515.05	-248.82	-450.96	1.19	13.77	4.66	2.84	150.62	SLB_MWD-STD
	1421.66	23.41	245.94	1283.87	526.96	-253.77	-461.83	1.31	14.07	4.76	2.89	150.74	SLB_MWD-STD
	1451.54	21.93	245.34	1311.44	538.44	-258.52	-472.32	1.50	14.37	4.86	2.93	150.83	SLB_MWD-STD
	1481.24	19.28	245.06	1339.23	548.86	-262.90	-481.81	2.68	14.63	4.95	2.96	150.91	SLB_MWD-STD
	1511.19	16.74	243.33	1367.71	558.11	-266.92	-490.15	2.60	14.86	5.03	2.99	150.93	SLB_MWD-STD
	1540.85	14.49	240.57	1396.28	566.09	-270.66	-497.20	2.40	15.06	5.10	3.02	150.91	SLB_MWD-STD
	1570.22	12.40	236.98	1424.84	572.91	-274.19	-503.04	2.30	15.22	5.17	3.03	150.83	SLB_MWD-STD
	1599.76	10.35	236.26	1453.80	578.72	-277.39	-507.91	2.09	15.36	5.23	3.05	150.79	SLB_MWD-STD
	1630.16	9.46	236.73	1483.75	583.93	-280.28	-512.27	0.88	15.49	5.28	3.07	150.76	SLB_MWD-STD
	1659.89	8.81	235.87	1513.10	588.63	-282.90	-516.20	0.67	15.60	5.33	3.08	150.72	SLB_MWD-STD
	1689.37	8.19	235.45	1542.26	592.97	-285.35	-519.79	0.63	15.71	5.38	3.09	150.68	SLB_MWD-STD
	1718.81	7.67	235.27	1571.41	597.01	-287.66	-523.14	0.53	15.80	5.43	3.10	150.65	SLB_MWD-STD
	1745.67	7.36	234.18	1598.04	600.50	-289.69	-526.00	0.38	15.89	5.47	3.11	150.61	SLB_MWD-STD
Projected to TD	1766.00	7.36	234.18	1618.21	603.08	-291.21	-528.12	0.00	16.25	5.70	3.16	150.35	SLB_BLIND+TREND

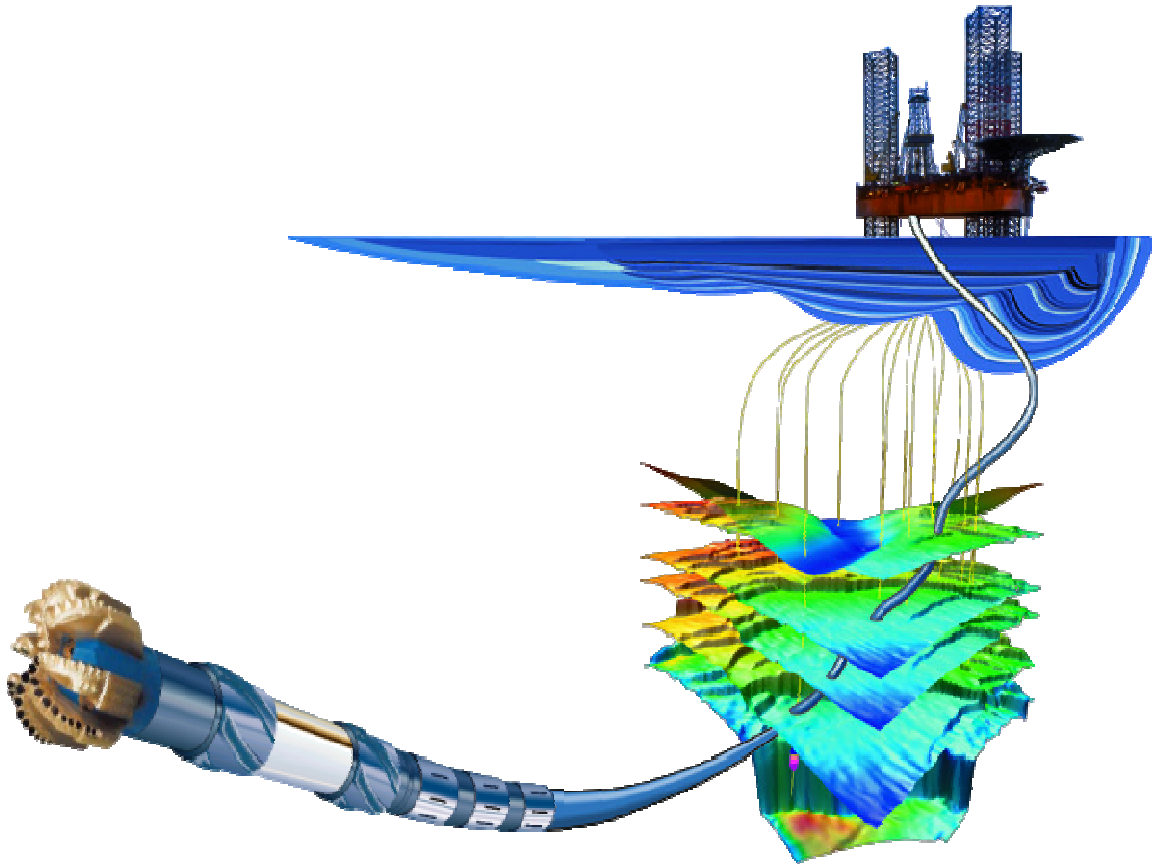
Survey Type: Definitive Survey
NOTES: Only depth error sources are used from surface to mud-line.
Structure Uncertainty: 0.00 m Included
Slot Uncertainty: 0.00 m Included
Hole Diameter: 12.25 in Included
Global Error Sources Used: YES
Along-Hole Depth Uncertainty: At survey stations

Survey Error Model: **SLB ISCWSA version 24 *** 3-D 95.00% Confidence 2.7955 sigma**
Surveying Prog:

MD From (m)	MD To (m)	EOU Freq	Survey Tool Type	Borehole -> Survey
0.00	77.18	Act-Stns	SLB_CNSG+DPIPE-Depth Only	Wardie-1 -> Wardie-1 Final
77.18	134.60	Act-Stns	SLB_CNSG+DPIPE	Wardie-1 -> Wardie-1 Final
134.60	1745.67	Act-Stns	SLB_MWD-STD	Wardie-1 -> Wardie-1 Final
1745.67	1766.00	Act-Stns	SLB_BLIND+TREND	Wardie-1 -> Wardie-1 Final

Schlumberger

Performance Drilling Report



Schlumberger

BHA 3 / Bit 2
17 ½" (445 mm) Steerable Motor Assembly
136m – 751m MD

BHA
17 ½" Hughes MXL-T1V Tooth Bit (3 x 20 jets)
9 5/8 PowerPak Motor (5:6 lobe, 4.0 stage, 17 ¼ sleeve and 1.5º bend)
17" String Stab
Crossover Sub
Float Sub
3 x 8" Pony NMDC
Crossover Sub
PowerPulse MWD (800-1200 gpm)
UBHO
2 x 8" NMDC
8 ¼" Spiral Drill Collars (4 joints)
Hydraulic Jar
8 ¼" Spiral Drill Collar (2 joints)
Crossover Sub
5 ½" HW Drill Pipe (12 joints)
5 ½" Drill Pipe to Surface

Drilling Summary

Drilled cement and float equipment, cleaned out rat hole. This well was approximately 2.5 m from West Seahorse-3 so magnetic interference was encountered in the MWD surveys once drilling commenced. At 172m with inclination only surveys there was a high risk of collision with West Seahorse-3 so Gyro surveys were taken to confirm the actual azimuth. The Gyro surveys indicated that the well was diverging from West Seahorse-3 so the drilling commenced. At 200m no magnetic interference was encountered from the MWD surveys so these were used from this point onwards.

Rotary drilling continued to kick off point at 250m. Kick off building at 3º/30m to 32.48ºm along the azimuth of 241.15º azimuth. Continue drilling tangent section to casing point @ 751m MDRT. This assembly is capable of building up to 4.8º/30m. Reactive torque was about 45º with 25 klbs WOB

No hole problems were encountered and all directional requirements were met. While tripping out of the hole the BHA got stuck at the shoe. The most likely cause was the 17" stabilizer getting stuck at the shoe. The BHA was rotated out with no resistance encountered.

Schlumberger

BHA 3 / Bit 2
17 ½" (445 mm) Steerable Motor Assembly
136m – 751m MD

BHA
17 ½" Hughes MXL-T1V Tooth Bit (3 x 20 jets)
9 5/8 PowerPak Motor (5:6 lobe, 4.0 stage, 17 ¼ sleeve and 1.5º bend)
17" String Stab
Crossover Sub
Float Sub
3 x 8" Pony NMDC
Crossover Sub
PowerPulse MWD (800-1200 gpm)
UBHO
2 x 8" NMDC
8 ¼" Spiral Drill Collars (4 joints)
Hydraulic Jar
8 ¼" Spiral Drill Collar (2 joints)
Crossover Sub
5 ½" HW Drill Pipe (12 joints)
5 ½" Drill Pipe to Surface

Drilling Summary

Drilled cement and float equipment, cleaned out rat hole. This well was approximately 2.5 m from West Seahorse-3 so magnetic interference was encountered in the MWD surveys once drilling commenced. At 172m with inclination only surveys there was a high risk of collision with West Seahorse-3 so Gyro surveys were taken to confirm the actual well azimuth. The Gyro surveys indicated that the well was diverging from West Seahorse-3 so drilling resumed. At 200m no further magnetic interference was encountered in the MWD surveys so these were used from this point onwards.

Rotary drilling continued to kick off point at 250m. Kicked off building at 3º/30m to 32.48ºm along an azimuth of 241.15º. Continue drilling tangent section to casing point at 751m MDRT. This assembly is capable of building inclination up to 4.8º/30m. Reactive torque was about 45º with 25 klbs WOB

No hole problems were encountered and all directional requirements were met. While tripping out of the hole the BHA got stuck at the shoe. The most likely cause was the 17" stabilizer getting hung up at the shoe. The BHA was pumped and rotated past the shoe with no further resistance encountered once inside the casing and the BHA was pulled to surface.

Schlumberger

Drilling Performance

Interval	Distance (m)	Time (hrs)	ROP (m/hr)
Total Drilled	615	6.7	91.79
Total Drilled in rotary	353	3.76	93.88
Total Drilled in slide mode	262	2.94	89.12
Bit Graded	1-1-NO-A-E-I-NO-TD (61 krevs)		

Section Breakdown

Section	Rotary m (%)	Slide m (%)
Start of run to KOP (136-250m)	125 (100%)	-
KOP to EOC (250-574m)	105 (32%)	219 (68%)
EOC to section TD (574-751m)	134 (76%)	43 (24%)

Schlumberger

BHA 4 / Bit 3
12 ¼" (311 mm) Rotary Steerable Assembly
751m – 1766 m MD (1015m)

BHA
12 ¼" Reed Hycalog RSX616 MA 16 PDC Bit (3 x 15 & 3 x 16 jets)
PowerDrive 900 X5 (without flow restrictor)
PowerDrive 900 Receiver (with ported float) and Flex Collar
8 ¼" GVR
PowerPulse MWD (600-1200 gpm)
1 x 8" NMDC
8 ¼" Spiral Drill Collars
Hydraulic Jar
8 ¼" Spiral Drill Collar
Crossover Sub
5 ½" HW Drill Pipe (12 joints)
5 ½" Drill Pipe to Surface

Drilling Summary

After drilling out cement and float equipment, three meters of new formation was drilled and a formation integrity test was performed.

Once out of the shoe the PowerDrive assembly had a dropping tendency in neutral steering mode of around 0.8º/30m. The tangent section of the well profile was drilled in inclination hold mode and increasing the right azimuth steering percentage accordingly to follow the planned well trajectory. The drilling parameters were adjusted to maintain a rate of penetration of around 115 m/hr.

In the previous well (West Seahorse-3) it was initially difficult to achieve the required drop rate so the drop section in this well was started deliberately at 1208m, 90m ahead of plan to allow for a lower drop rate than the plan. Drop rates of 1.16º/30m to 1.45º/30 m for the first 243m were achieved when the tool was set at 25% steering ratio and 180º tool face. It was later altered accordingly to increase the drop and turn rates. The rate of penetration was held back to 30 m/hr from 1522m onwards for logging purposes.

Once the drop was achieved the PowerDrive was placed in Inclination Hold mode for the remainder of the tangent section to TD at 1766m MDRT. Both geological targets were successfully penetrated within the allowable tollerances.

Moderate stick-slip was observed for most of the run but it did not affect the steering ability. A few hard drilling intervals were encountered and higher stick slip and torque variance was experienced. While tripping out sticky hole sections were encountered all the way up to the 13 3/8" shoe. The BHA was washed and back reamed through these sections and a subsequent wiper trip to TD point was performed.

The bit was graded as 3-3-WT-A-X-I-CT-TD.

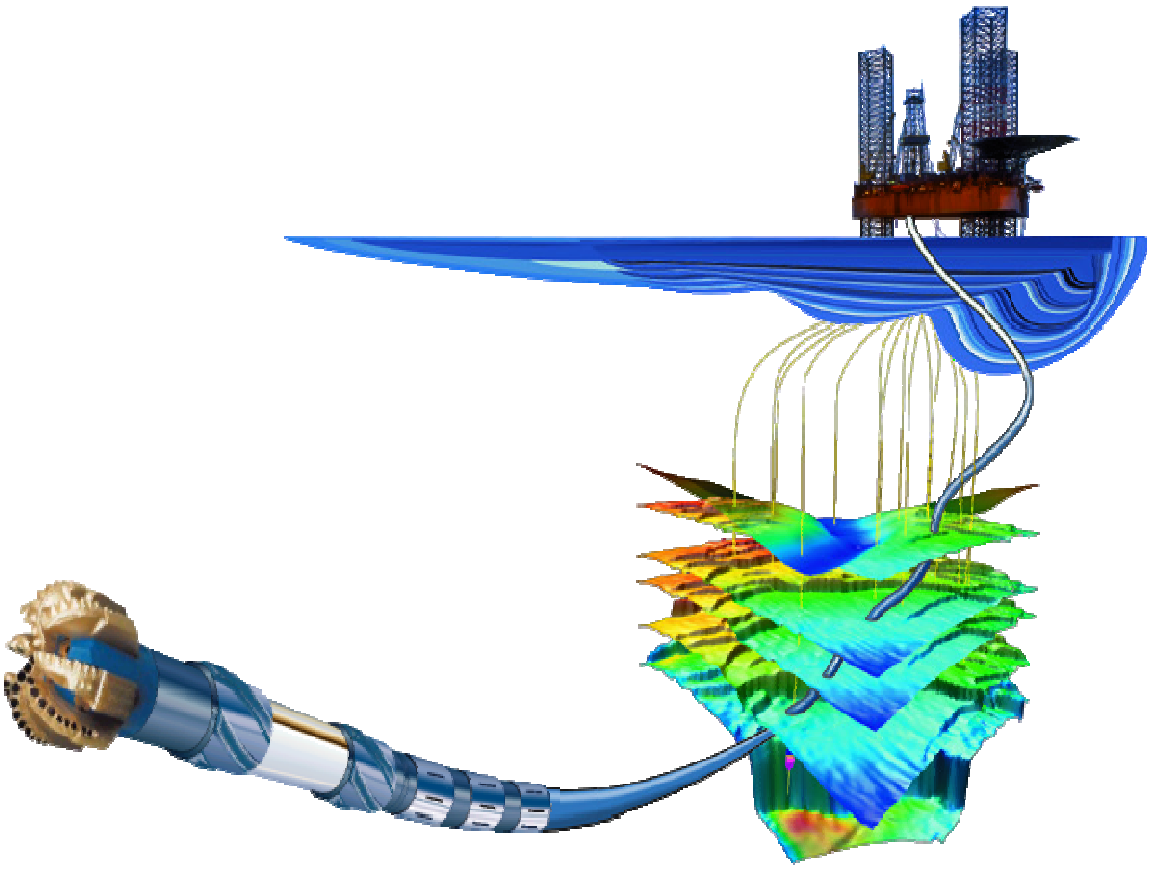
Schlumberger

Drilling Performance;

Interval	Distance (m)	Time (hrs)	ROP (m/hr)
Rotary mode	1015	19.40	52.32

Schlumberger

BHA Reports



BHA Data Sheet

3D Oil Ltd - Wardie-1

BHA #	17 1/2" Motor BHA	**Date**	May 13, 2008
Field	3D Oil - West Seahorse	**Well**	Wardie-1
Structure	West Seahorse	**Borehole**	Wardie-1

Item	Name	Vendor/ Model	Serial #	Fish. Neck OD (in)/ Length (m)	OD (in)/ ID (in)	Max OD (in)	Bottom/ Top Connection	Length (m)	Cum. Length (m)
1	17 1/2 " Bit	Hughes Christenser	6065891		8.75	17.50		0.41	0.41
		MXL T1V			3.75		7.63 Reg Pin		
2	PowerPak Motor (1.5 deg)	Schlumberger	5659		9.63	17.25	7.63 Reg Box	10.10	10.51
		A962M5640XP			7.88		7.63 Reg Box		
3	17" String Stab	Schlumberger	OSS061172A		9.50	17.00	7.63 Reg Pin	2.42	12.93
					3.00		7.63 Reg Box		
4	Crossover	Seadrill	SSD7124	8.00	9.50	9.50	7.63 Reg Pin	1.23	14.16
				0.62	3.00		6.63 Reg Box		
5	Float Sub	Schlumberger	ASQ 8037		8.00	8.00	6.63 Reg Pin	0.80	14.96
					2.88		6.63 Reg Box		
6	8" Pony NMDC	Schlumberger	7505		7.94	7.94	6.63 Reg Pin	2.45	17.41
					2.88		6.63 Reg Box		
7	8" Pony NMDC	Schlumberger	ASQ 8020		8.00	8.00	6.63 Reg Pin	3.00	20.41
					2.88		6.63 Reg Box		
8	8" Pony NMDC	Schlumberger	9504216		7.88	7.88	6.63 Reg Pin	1.55	21.96
					2.81		6.63 Reg Box		
9	Cross over sub	Schlumberger	42755		8.50	8.50	6.63 Reg Pin	0.47	22.43
					2.88		6.63 FH Box		
10	PowerPulse HF MWD	Schlumberger	VA77		8.25	8.25	6.63 FH Pin	8.49	30.92
		PowerPulse HF			5.90		6.63 Reg Box		
11	UBHO Sub	Schlumberger	S50991-3		8.00	8.00	6.63 Reg Pin	0.86	31.78
					2.25		6.63 Reg Box		
12	8" NMDC	Schlumberger	N688		8.00	8.00	6.63 Reg Pin	8.65	40.43
					2.81		6.63 Reg Box		
13	8" NMDC	Schlumberger	SBD 5555		8.25	8.25	6.63 Reg Pin	9.45	49.88
					3.25		6.63 Reg Box		
14	8" Collar (4 joints)	Seadrill			8.00	8.00	6.63 Reg Pin	37.63	87.51
					2.81		6.63 Reg Box		
15	Hydraulic Jar	Dailey Petroleum S	1762-1339		8.00	8.00	6.63 Reg Pin	9.68	97.19
		HDL-100			3.00		6.63 Reg Box		
16	8" Collar (2 joints)	Seadrill			8.00	8.00	6.63 Reg Pin	18.89	116.08
					2.81		6.63 Reg Box		
17	Crossover	Seadrill	SSD 7131		8.25	8.25	6.63 Reg Pin	1.22	117.30
					2.81		5.50 XT57 Box		
18	5 1/2" HWDP (12 joints)	Seadrill			5.50	7.00	5.50 XT57 Pin	112.71	230.01
					3.25		5.50 XT57 Box		
19	5-1/2 " 24.70 DPS, 10% Wear				5.42	7.00	5.50 XT57 Pin	to surface	
					4.67		5.50 XT57 Box		
					Total Weight (lbf)		79895	**Total Len.**	230.01
					Below Jar (lbf)		44528.9		

BHA Comments:	

Stabilizer	
Blade Length (m)	**Mid-Pt. To Bit (m)**
0.46	1.13
0.60	11.54
	Bend To Bottom
Bent Housing Angle (deg)	**Connection (m)**
1.50	2.78

Sensor	
Type	**Distance To Bit (m)**
D&I	26.56

Bit Nozzles	
Count	**Size(1/32 in)**
3	20.00
TFA (in2)	0.92

Quality Control	
Created By:	PSellathurai
Checked By:	

3D Oil Ltd
Wardie-1
West Seahorse
3D Oil - West Seahorse
Wardie-1
17 1/2" Motor BHA

	Cum. Len. (m)
5-1/2 " 24.70 DPS, 10% Wear	to surface
5 1/2" HWDP (12 joints)	230.01
Crossover	117.30
8" Collar (2 joints)	116.08
Hydraulic Jar	97.19
8" Collar (4 joints)	87.51
8" NMDC	49.88
8" NMDC	40.43
UBHO Sub	31.78
PowerPulse HF MWD	30.92
Cross over sub	22.43
8" Pony NMDC	21.96
8" Pony NMDC	20.41
8" Pony NMDC	17.41
Float Sub	14.96
Crossover	14.16
17" String Stab	12.93
PowerPak Motor (1.5 deg)	10.51
17 1/2 " Bit	0.41

BHA DESCRIPTION

ELEMENT	LENGTH (m)	OD (in)	ID (in)	MAX OD (in)
17 1/2 " Bit	0.41	17.50	3.75	17.50
PowerPak Motor (1.5 deg)	10.10	9.63	7.88	17.25
17" String Stab	2.42	9.50	3.00	17.00
Crossover	1.23	9.50	3.00	9.50
Float Sub	0.80	8.00	2.88	8.00
8" Pony NMDC	2.45	7.94	2.88	7.94
8" Pony NMDC	3.00	8.00	2.88	8.00
8" Pony NMDC	1.55	7.88	2.81	7.88
Cross over sub	0.47	8.50	2.88	8.50
PowerPulse HF MWD	8.49	8.25	5.90	8.25
UBHO Sub	0.86	8.00	2.25	8.00
8" NMDC	8.65	8.00	2.81	8.00
8" NMDC	9.45	8.25	3.25	8.25
8" Collar (4 joints)	37.63	8.00	2.81	8.00
Hydraulic Jar	9.68	8.00	3.00	8.00
8" Collar (2 joints)	18.89	8.00	2.81	8.00
Crossover	1.22	8.25	2.81	8.25
5 1/2" HWDP (12 joints)	112.71	5.50	3.25	7.00
5-1/2 " 24.70 DPS, 10% We	to surface	5.42	4.67	7.00

DRILLING OVERVIEW

Drilled cement and float equipment, cleaned out rat hole. Rotary drilled to kick off point at 250m. Kick off building at 3º/30m to 32.48ºm along the azimuth of 241.15º azimuth. Continue drilling tangent section to casing point @ 751m MDDF. This assembly is capable of building up to 4.8º/30m.

Depth in:	136.00 m	Depth out:	751.00 m
Inclination in:	0.97°	To:	34.35°
Direction in:	331.19°	To:	239.86°
Total Drilled	615.00 m	Dogleg:	3.0

Schlumberger

Quality Control

Created by: PSellathurai Date: 14/05/2008

Checked by: Date:

BHA Data Sheet

3D Oil Ltd - Wardie-1

BHA #	12 1/4" RSS/LWD BHA	**Date**	May 16, 2008
Field	3D Oil - West Seahorse	**Well**	Wardie-1
Structure	West Seahorse	**Borehole**	Wardie-1

Item	Name	Vendor/ Model	Serial #	Fish. Neck OD (in)/ Length (m)	OD (in)/ ID (in)	Max OD (in)	Bottom/ Top Connection	Length (m)	Cum. Length (m)
1	12 1/4 " PDC Bit	Reed Hycalog	218629		8.00	12.25		0.30	0.30
		RSX616 MA 16			3.25		6.63 Reg Pin		
2	PD 900 AA 12 1/4"	Schlumberger	51550		9.25	11.80	6.63 Reg Box	4.22	4.52
		PD 900 AA 12 1/4"			3.00		6.63 Reg Box		
3	PD900 Receiver w/float	Schlumberger	49245	8.38	9.50	9.50	6.63 Reg Pin	1.87	6.39
				0.48	6.00		6.63 FH Box		
4	PD900 Flex Collar	Schlumberger	51767		8.25	8.25	6.63 FH Pin	2.95	9.34
					5.00		6.63 FH Box		
5	GVR-8	Schlumberger	034		8.25	12.13	6.63 FH Pin	4.22	13.56
		RAB-8			3.90		6.63 FH Box		
6	PowerPulse HF	Schlumberger	VA77		8.25	8.49	6.63 FH Pin	8.49	22.05
		PowerPulse HF			5.90		6.63 Reg Box		
7	8" NMDC	Schlumberger	N688		8.00	8.00	6.63 Reg Pin	8.65	30.70
					2.81		6.63 Reg Box		
8	1 x 8" Collar				8.00	8.00	6.63 Reg Pin	9.45	40.15
					2.81		6.63 Reg Box		
9	Hydraulic Jar	Dailey Petroleum S	1762-1339		8.00	8.00	6.63 Reg Pin	9.68	49.83
		HDL-100			3.00		6.63 Reg Box		
10	1x 8" Collar				8.00	8.00	6.63 Reg Pin	9.44	59.27
					2.81		6.63 Reg Box		
11	Crossover		SSD7131		8.00	8.00	6.63 Reg Pin	1.22	60.49
					2.81		5.50 XT57 Box		
12	5 1/2" HWDP (12 joints)				5.50	7.00	5.50 XT57 Pin	112.84	173.33
					3.25		5.50 XT57 Box		
13	5-1/2 " 24.70 DPS, 10% Wear				5.42	7.00	5.50 XT57 Pin	to surface	
					4.67		5.50 XT57 Box		
					Total Weight (lbf)		54719	**Total Len.**	173.33
					Below Jar (lbf)		19203.7		

BHA Comments:	

Stabilizer	
Blade Length (m)	**Mid-Pt. To Bit (m)**
0.20	5.27
	Bend To Bottom
Bent Housing Angle (deg)	**Connection (m)**

Sensor	
Type	**Distance To Bit (m)**
PD Inc	2.67
Gamma Ra	10.51
Resistivity	11.15
D&I	17.68

Bit Nozzles	
Count	**Size(1/32 in)**
3	15.00
3	16.00
TFA (in2)	1.11

Quality Control	
Created By:	PSellathurai
Checked By:	

3D Oil Ltd
Wardie-1
West Seahorse
3D Oil - West Seahorse
Wardie-1
12 1/4" RSS/LWD BHA

	Cum. Len. (m)
5-1/2 " 24.70 DPS, 10% Wear	173.33
5 1/2" HWDP (12 joints)	173.33
Crossover	60.49
1x 8" Collar	59.27
Hydraulic Jar	49.83
1 x 8" Collar	40.15
8" NMDC	30.70
PowerPulse HF	22.05
GVR-8	13.56
PD900 Flex Collar	9.34
PD900 Receiver w/float	6.39
PD 900 AA 12 1/4"	4.52
12 1/4 " PDC Bit	0.30

BHA DESCRIPTION

ELEMENT	LENGTH (m)	OD (in)	ID (in)	MAX OD (in)
12 1/4 " PDC Bit	0.30	12.25	3.25	12.25
PD 900 AA 12 1/4"	4.22	9.25	3.00	11.80
PD900 Receiver w/float	1.87	9.50	6.00	9.50
PD900 Flex Collar	2.95	8.25	5.00	8.25
GVR-8	4.22	8.25	3.90	12.13
PowerPulse HF	8.49	8.25	5.90	8.49
8" NMDC	8.65	8.00	2.81	8.00
1 x 8" Collar	9.45	8.00	2.81	8.00
Hydraulic Jar	9.68	8.00	3.00	8.00
1x 8" Collar	9.44	8.00	2.81	8.00
Crossover	1.22	8.00	2.81	8.00
5 1/2" HWDP (12 joints)	112.84	5.50	3.25	7.00
5-1/2 " 24.70 DPS, 10% We	to surface	5.42	4.67	7.00

Bit to RAB Gamma Ray Sensor = 10.51 m
Bit to RAB Resistivity Sensor = 11.15 m
Bit to Direction & Inclination Sensor = 2.67 m

DRILLING OVERVIEW

This assembly had a dropping tendency in neutral steering mode of around 0.8º/30m. Drop rates of 1.16º/30m to 1.45º/30 m for the first 243m were achieved when the tool was set at 180º/25% setting, and around 2.7º/30m with 162ºL/75% setting.

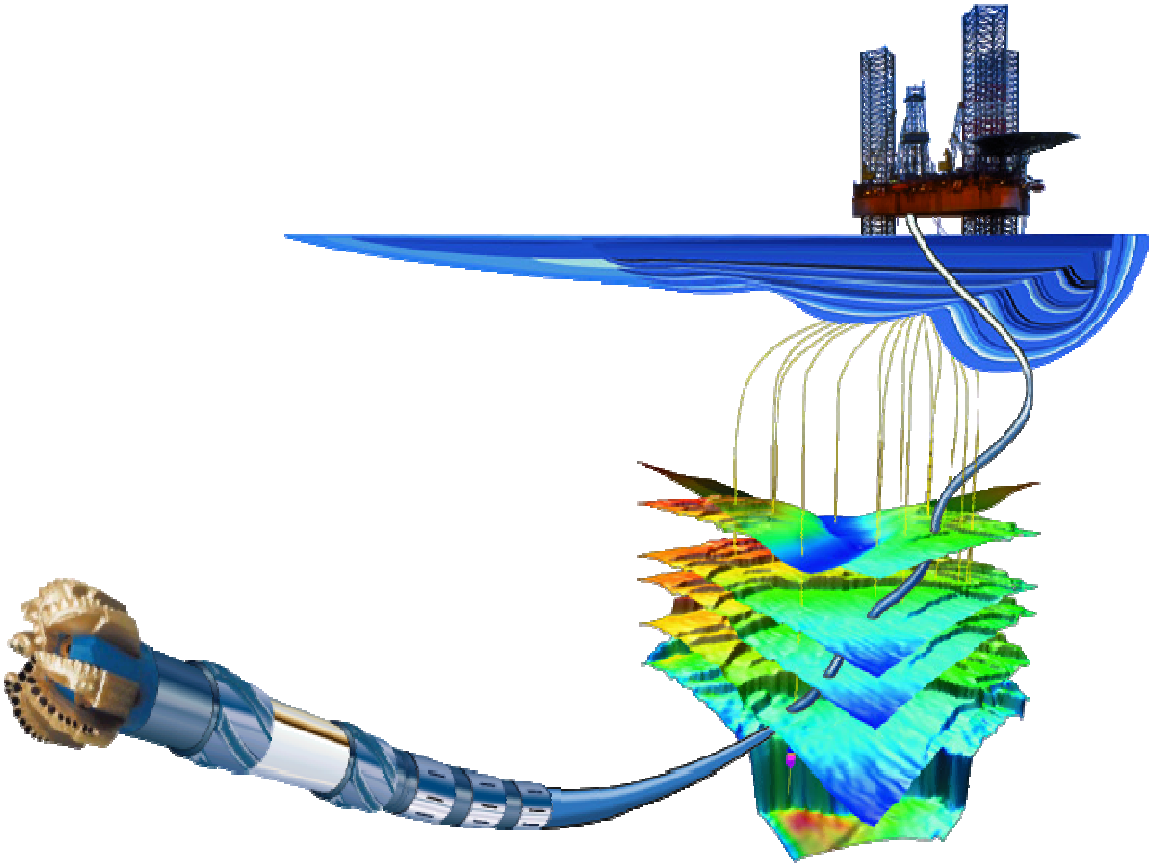
Depth in:	751.00 m	Depth out:	1766.00 m
Inclination in:	32.02°	To:	7.36°
Direction in:	241.09°	To:	234.18°
Total Drilled	1015.00 m	Dogleg:	0.2 to 2.7

Schlumberger

Quality Control
Created by: PSellathurai Date: 17/05/2008
Checked by: Date:

Schlumberger

Drilling Parameter Sheets



WELL# Wardie-1 **DATE:** 12-May-08 **Depth In :** 136.0 m MD **Pump Output:** 5.850 Gal / stk **Planned Angle :** 32.5°

Motor Speed: 0.11 Rev / Gal **Planned Direction :** 241.2°

BHA # 2 **BIT#** 2 **BHA :** 17 1/2" Bit, PowerPak Motor (1.5 deg), 17" String Stab, XO, Float Sub, 3x8" Pony NMDC, XO, PowerPulse, UBHO, 2x8" NMDC, 4x8" DC's, Hydraulic Jar, 2x8" DC, XO, 12x5 1/2" HWDP, DP to surface

SURVEY SPACING = 25.56 m MD **Last Casing :** 20" @132.8mRT **DLS 1=°/100Ft, 2=°/30Mts, 3=°/10Mts:** 2

	DRILLING TIME			Motor Work Sheet				Tool	SURVEY			TENDENCY °/30mts			STK /	FLOW	Surf	Motor			ROP	PRESSURE		REMARKS
R / S	START	STOP	SUM	FROM	TO	Meters Rotated	Meters Slide	Face	DEPTH	INCL	AZM	B / D	TR	Dogleg	MIN	RATE	RPM	RPM	WOB	TORQ	(m/hr)	Off Bottom	On Bottom	
R	22:40	23:00	0:20	132	133	1			115.00	1.69	-				103	603	30	66	2-6	2-3	3	625	650	Tag cement at 131.8m
R	23:00	23:04	0:04	133	144	11			142.70	1.03	-				103	603	60	66	0-2	2-3	165	625	650	
R	23:33	23:38	0:05	144	155	11									103	603	60	66	1-3	1-3	132	625	650	
R	23:38	0:02	0:24	155	172	17									160	936	63	103	0-2	2-3	43	1,475	1,500	Mid night depth
R	2:24	2:54	0:30	172	201	29			174.15	0.97	331.19	-0.80	0.46	0.80	154	901	60	99	1-3	2-3	58	1,400	1,525	Took Gyro survey to confirm azimuth
R	3:04	3:26	0:22	201	230	29			202.30	1.06	330.50	0.10	-0.74	0.10	154	901	60	99	1-10	1-3	79	1,425	1,450	125 klbs rot. Wt.
R	3:38	3:53	0:15	230	250	20									154	901	60	99	6-7	1-3	80	1,450	1,475	
S	3:56	4:04	0:08	250	259		9	220M							154	901	-	99	3-4	-	68	1,450	1,500	PUwt 123, SOwt 122
S	4:15	4:30	0:15	259	284		25	240M	260.44	2.12	269.17	0.55	-31.65	0.96	154	901	-	99	3-6	-	100	1,425	1,500	
R	4:30	4:34	0:04	284	288	4									154	901	45	99	9	1-3	60	1,425	1,475	PUwt 126, SOwt 125
S	4:54	5:08	0:14	288	313		25	230M	290.09	5.23	252.00	3.15	-17.37	3.30	154	901	-	99	6-8	-	107	1,450	1,500	PUwt 131, SOwt 126
R	5:08	5:11	0:03	313	318	5									154	901	45	99	6-8	1-3	100	1,450	1,500	
S	5:23	5:34	0:11	318	338		20	10L	319.76	8.62	244.27	3.43	-7.82	3.55	188	1100	-	121	6-11	-	109	2,125	2,200	
R	5:34	5:42	0:08	338	347	9									188	1100	45	121	8-11	1-2	68	2,150	2,250	PUwt 134, SOwt 127, Rot wt 130
S	5:55	6:00	0:05	347	365		18	10R	349.23	11.69	243.65	3.13	-0.63	3.13	188	1100		121	12-15		216	2,150	2,300	
R	6:00	6:07	0:07	365	377	12									188	1100	45	121	20	1-3	103	2,150	2,300	PUwt 138, SOwt 132, Rot wt 131
S	6:20	6:25	0:05	377	391		14	30L	378.56	14.54	243.39	2.92	-0.27	2.92	188	1100		121	18-20		168	2,150	2,350	
R	6:25	6:35	0:10	391	406	15									188	1100	45	121	18-20	1-3	90	2,150	2,350	PUwt 137, SOwt 128, Rot wt 131
S	6:50	6:55	0:05	406	420		14	55L	408.20	16.62	238.69	2.11	-4.76	2.46	188	1100		121	18-20		168	2,150	2,350	
R	6:55	7:05	0:10	420	436	16									188	1100	45	121	20	1-3	96	2,150	2,350	
S	7:15	7:25	0:10	436	452		16	30L	437.65	18.41	234.18	1.82	-4.59	2.29	188	1100		121	18		96	2,150	2,350	
R	7:25	7:35	0:10	452	465	13									188	1100	45	121	20	1-3	78	2,200	2,350	PUwt 142, SOwt 130, Rot wt 135
S	7:45	8:00	0:15	465	485		20	HS	466.98	21.11	233.22	2.76	-0.98	2.78	188	1100		121	23		80	2,200	2,375	
R	8:00	8:10	0:10	485	494	9									188	1100	45	121	23	1-5	54	2,200	2,375	PUwt 145, SOwt 131, Rot wt 137
S	8:20	8:32	0:12	494	514		20	10R	496.44	24.52	235.86	3.47	2.69	3.62	188	1100		121	20		100	2,200	2,375	
R	8:32	8:37	0:05	514	524	10									188	1100	45	121	20	1-5	120	2,200	2,375	PUwt 146, SOwt 130, Rot wt 137
S	8:45	9:00	0:15	524	542		18	10R	525.34	27.44	238.00	3.03	2.22	3.18	188	1100		121	18		72	2,200	2,375	
R	9:00	9:05	0:05	542	554	12									188	1100	45	121	20	1-5	144	2,275	2,375	PUwt 148, SOwt 130, Rot wt 138

TIME BREAKDOWN: (for new formation only)

Rotated Time : 2.87 **Meters Rotated :** 223 **Rotating ROP:** 77.8 m/hr

Slide Time : 1.92 **Meters Slide :** 199 **Sliding ROP:** 103.8 m/hr

Total Time : 4.78 **Meters Drilled :** 422 **Average ROP:** 88.2 m/hr

WELL# Wardie-1 DATE: 13-May-08 Depth In : 136.0 m MD Pump Output: 5.850 Gal / stk Planned Angle : 32.5°

Motor Speed: 0.11 Rev / Gal Planned Direction : 241.2°

BHA # 2 BIT# 2 BHA : 17 1/2" Bit, PowerPak Motor (1.5 deg), 17" String Stab, XO, Float Sub, 3x8" Pony NMDC, XO, PowerPulse, UBHO, 2x8" NMDC, 4x8" DC's, Hydraulic Jar, 2x8" DC, XO, 12x5 1/2" HWDP, DP to surface

SURVEY SPACING = 25.56 m MD Last Casing : 20" @132.8mRT DLS 1=°/100Ft, 2=°/30Mts, 3=°/10Mts: 2

	DRILLING TIME			Motor Work Sheet				Tool	SURVEY			TENDENCY °/30mts			STK /	FLOW	Surf	Motor			ROP	PRESSURE		REMARKS
R / S	START	STOP	SUM	FROM	TO	Meters Rotated	Meters Slide	Face	DEPTH	INCL	AZM	B / D	TR	Dogleg	MIN	RATE	RPM	RPM	WOB	TORQ	(m/hr)	Off Bottom	On Bottom	
S	9:18	9:26	0:08	554	574		20	HS	555.68	29.78	239.10	2.31	1.09	2.37	196	1147		126	18		150	2,400	2,500	Increase flow to 1150 gpm
R	9:26	9:40	0:14	574	584	10									196	1147	45	126	18	1-5	43	2,400	2,500	
R	10:05	10:25	0:20	584	613	29			585.40	28.02	239.82	-1.78	0.73	1.81	196	1147	70	126	20	1-5	87	2,400	2,500	Inc dropping in rotary. PUwt 154, SOwt 131, Rot wt 144
S	10:35	10:55	0:20	613	628		15	HS	614.89	29.13	240.00	1.13	0.18	1.13	196	1147		126	16		45	2,400	2,500	
R	10:55	11:02	0:07	628	643	15									196	1147	45	126	25	1-3	1-4	2,400	2,500	PUwt 156, SOwt 133, Rot wt 144
S	11:20	11:35	0:15	643	658		15	HS	644.23	31.31	240.28	2.23	0.29	2.23	196	1147		126	25		60	2,400	2,575	
R	11:35	11:45	0:10	658	672	14									196	1147	45	126	25	1-3	84	2,400	2,575	PUwt 158, SOwt 133, Rot wt 144
S	12:00	12:18	0:18	672	685		13	10L							196	1147		126	12-15		43	2,400	2,500	
R	12:18	12:35	0:17	685	702	17									196	1147	45	126	20	1-4	60	2,400	2,575	
R	12:45	13:15	0:30	702	731	29			703.79	34.90	240.07	0.94	-0.48	0.97	196	1147	70	126	15-25	1-4	58	2,400	2,575	Back ream 1 full stand; PUwt 158, SOwt 133, Rot wt 144
R	13:40	13:50	0:10	731	751	20									196	1147	90	126	15-25	1-4	120	2,400	2,575	Section TD.

TIME BREAKDOWN: (for new formation only)

Rotated Time : 1.80 Meters Rotated : 134 Rotating ROP: 74.4 m/hr

Slide Time : 1.02 Meters Slide : 63 Sliding ROP: 62.0 m/hr

Total Time : 2.82 Meters Drilled : 197 Average ROP: 69.9 m/hr

WELL# Wardie-1 **DATE:** 16-May-08 **Depth In :** 751.0 m MD **Pump Output:** 5.850 Gal / stk **Planned Angle :** 32.5°

Planned Direction : 241.2°

BHA # 4 **BIT#** 3 12.25 **BHA :** 12 1/4" PDC Bit, PD 900, Receiver, 6 5/8" In Line Flex, XO, GVR8, PowerPulse MWD, 8 1/4" NMDC, 8" Collar, Hydraulic Jar, 8" collar, 12 x 5 1/2" HWDP, DP to surface

WD SURVEY SPACING = 17.68 m **Last Casing :** 13 3/8" @ 747 m **DLS 1=°/100Ft, 2=°/30Mts, 3=°/10Mts:** 2

PD SURVEY SPACING = 2.67 m

	DRILLING TIME			RSS Work Sheet			Des	Steer	SURVEY			TENDENCY °/30mts			STK /	FLOW	Surf				ROP	PRESSURE		REMARKS
R / S	START	STOP	SUM	FROM	TO	Dist	T/F	%	DEPTH	INCL	AZM	B / D	TR	Dogleg	MIN	RATE	RPM		WOB	TORQ	(m/hr)	Off Bottom	On Bottom	
R	18:45				719		0	0							174	1018	0		0			1,450		SOwt 119, PUwt 148, wash down and tag cement at 719m
R	19:13	19:18	0:05	719	733	14									174	1018	80		3		168	1,450	1,450	Float at 732.5m
R	21:30	22:30	1:00	733	734	1									173	1012	90		5-10	1-3	1	1,425	1,425	Spinning on plug, start to vary drilling parameters
R	22:30	1:22	2:52	734	747	13									156	913	60-80		15-25	1-6	5	1,325	1,325	Shoe at 747m, start displace mud at 744m
R	1:22	1:25	0:03	747	751	4									156	913	80		0	1-6	80	1,100	1,100	Clean out rat hole (17th May)
R	1:40	1:48	0:08	751	754	3									172	1006	80		5	1-6	23	1,225	1,225	Drill out 3m new formation for FIT
R	4:03	4:19	0:16	754	762	8									172	1006	80		10	1-9	30	1,300	1,300	P/U 143; S/O 116; ROT 133
R	4:36	5:12	0:36	762	792	30									180	1053	100		10	1-9	50	1,425	1,425	P/U 150; S/O 118; ROT 131
R	5:28	5:57	0:29	792	821	29			802.80	32.02	241.09	-0.87	0.46	0.91	180	1053	150		10	6-11	60	1,450	1,450	D/L to GTF mode. P/U 154; S/O 120; ROT 131
R	6:15	6:31	0:16	821	836	15			831.50	30.76	239.33	-1.32	-1.84	1.63	180	1053	150		7-10	6-11	56	1,475	1,475	D/L to Inc. Hold
R	6:31	6:40	0:09	836	841	5	0	IH							180	1053	150		7-10	6-11	33	1,475	1,475	Inc. Hold
R	6:40	6:50	0:10	841	849	8									180	1053	150		7-10	6-11	48	1,475	1,475	D/L to Nudge 0.5 deg in inc
R	7:10	7:25	0:15	849	867	18			861.51	31.64	238.19	0.88	-1.14	1.06	180	1053	150		7-10	6-11	72	1,500	1,500	
R	7:25	7:35	0:10	867	879	12									180	1053	150		18	6-11	72	1,500	1,500	
R	7:47	8:13	0:26	879	909	30			891.22	31.39	236.51	-0.25	-1.70	0.92	180	1053	150		20	10-16	69	1,500	1,500	P/U 161; S/O 122; ROT 136
R	8:29	8:49	0:20	909	920	11	50R	IH							180	1053	150		20	10-16	33	1,500	1,500	Stick slip with 25k . Reduce Wt to 20
R	8:49	9:09	0:20	920	937	17			920.19	31.58	236.01	0.20	-0.52	0.33	180	1053	160		20-25	10-16	51	1,500	1,500	P/U 164; S/O 124; ROT 140
R	9:24	9:41	0:17	937	967	30			949.76	31.70	236.73	0.12	0.73	0.40	180	1053	160		20-25	10-16	106	1,500	1,500	P/U 170; S/O 124; ROT 140
R	9:59	10:22	0:23	967	997	30			979.78	31.37	237.60	-0.33	0.87	0.56	180	1053	160		20-25	10-16	78	1,500	1,500	P/U 170; S/O 124; ROT 140
R	10:45	10:57	0:12	997	1009	12									180	1053	170		20-25	10-16	60	1,500	1,500	D/L to Nudge 0.5 deg in inc
R	10:57	11:09	0:12	1009	1027	18			1009.21	31.56	240.47	0.19	2.93	1.54	180	1053	170		20-25	10-16	90	1,600	1,600	Nudge 0.5 deg in Inc
R	11:23	11:36	0:13	1027	1057	30			1039.05	31.64	239.79	0.08	-0.68	0.37	180	1053	170		20-25	10-16	138	1,600	1,600	B/R 6 m b'4 CONN.. Check P/U. P/U 181, S/O 127;ROT 143
R	11:57	12:18	0:21	1057	1086	29			1066.59	31.64	241.83		2.22	1.17	180	1053	170		20-25	10-16	83	1,600	1,600	SCR P/U 181, S/O 128;ROT 148
R	13:07	13:25	0:18	1086	1115	29			1096.55	32.01	242.11	0.37	0.28	0.40	180	1053	170		20-25	10-16	97	1,600	1,600	P/U 184, S/O 128;ROT 152
R	13:52	14:05	0:13	1115	1125	10									180	1053	170		20-25	10-16	46	1,650	1,650	
R	14:05	14:22	0:17	1125	1144	19	25R	IH	1125.94	32.34	242.75	0.34	0.65	0.48	180	1053	170		20-25	10-16	67	1,650	1,650	
R	14:40	15:03	0:23	1144	1173	29			1155.71	32.17	242.53	-0.17	-0.22	0.21	180	1053	170		20-25	10-16	76	1,650	1,650	P/U 187, S/O 127;ROT 152
R	15:20	15:35	0:15	1173	1203	30			1184.60	32.35	243.98	0.19	1.51	0.83	180	1053	170		20-25	10-16	120	1,650	1,650	

TIME BREAKDOWN: (for new formation only)

Rotated Time : 6.65 **Meters Rotated :** 452 **Rotating ROP:** 68.0 m/hr

Total Time : 6.65 **Meters Drilled :** 452 **Average ROP:** 68.0 m/hr

WELL# Wardie-1 **DATE:** 17-May-08 **Depth In :** 751.0 m MD **Pump Output:** 5.850 Gal / stk **Planned Angle :** 32.5°

Planned Direction : 241.2°

BHA # 4 **BIT# 3** 12.25 **BHA :** 12 1/4" PDC Bit, PD 900, Receiver, 6 5/8" In Line Flex, XO, GVR8, PowerPulse MWD, 8 1/4" NMDC, 8" Collar, Hydraulic Jar, 8" collar, 12 x 5 1/2" HWDP, DP to surface

WD SURVEY SPACING = 17.68 m **Last Casing :** 13 3/8" @ 747m **DLS 1=°/100Ft, 2=°/30Mts, 3=°/10Mts:** 2

PD SURVEY SPACING = 2.67 m

	DRILLING TIME			RSS Work Sheet			Des	Steer	SURVEY			TENDENCY °/30mts			STK /	FLOW	Surf				ROP	PRESSURE		REMARKS
R / S	START	STOP	SUM	FROM	TO	Dist	T/F	%	DEPTH	INCL	AZM	B / D	TR	Dogleg	MIN	RATE	RPM		WOB	TORQ	(m/hr)	Off Bottom	On Bottom	
R	16:13	16:23	0:10	1204	1208	4	25R	IH							180	1053	170		20-25	10-16	24	1,650	1,650	
R	16:23	16:36	0:13	1208	1234	26	180	25	1214.81	32.18	244.06	-0.17	0.08	0.17	190	1112	170		20-25	10-16	120	1,800	1,800	Start drop section
R	17:25	17:47	0:22	1234	1263	29			1244.86	30.73	243.07	-1.45	-0.99	1.54	190	1112	170		20-25	10-16	79	1,800	1,800	
R	18:23	18:44	0:21	1263	1293	30			1274.25	29.50	243.74	-1.26	0.68	1.30	192	1123	150		15	6-15	86	1,875	1,875	P/U 200; S/O 133
R	19:08	19:25	0:17	1293	1322	29			1303.82	28.32	243.43	-1.20	-0.31	1.21	184	1076	150		12-15	8-11	102	1,825	1,825	Reduced flow to limit PD bias unit pad pressure
R	19:58	20:14	0:16	1322	1352	30			1333.24	26.97	243.84	-1.38	0.42	1.39	184	1076	150		12-18	6-12	113	1,875	1,875	P/U 208; S/O 132: ROTwt 163, SCR's at end of stand
R	20:59	21:19	0:20	1352	1381	29			1363.33	25.76	244.51	-1.27	0.30	1.27	184	1076	150		16-18	5-13	87	1,950	1,950	P/U 220; S/O 135: ROTwt 164
R	21:47	22:03	0:16	1381	1411	30			1392.32	24.64	245.10	-1.16	0.61	1.19	184	1076	140		15-16	7-12	113	1,925	1,925	Ream full stand, SO, PU weights & SPP increasing
R	23:01	23:17	0:16	1411	1440	29			1421.66	23.41	245.94	-1.26	0.86	1.31	184	1076	165		12-16	4-12	109	1,950	1,950	
R	23:43	23:49	0:06	1440	1451	11									184	1076	130		20	8-15	110	2,025	2,025	P/U 224; S/O 145: ROTwt 175
R	23:49	0:01	0:12	1451	1470	19	162L	75	1451.54	21.93	245.34	-1.49	-0.60	1.50	184	1076	130		20	8-15	95	2,025	2,025	(18th May)
R	0:34	0:52	0:18	1470	1499	29			1481.24	19.28	245.06	-2.68	-0.28	2.68	184	1076	115-170		20	9-18	97	1,875	1,875	New mud in active, P/U 222; S/O 144: ROTwt 172
R	1:22	1:31	0:09	1499	1516	17			1511.19	16.74	243.33	-2.54	-1.73	2.60	184	1076	160		20	8-16	113	1,925	1,925	
R	1:31	1:35	0:04	1516	1522	6	144L	50							184	1076	160		20	9-17	90	2,000	2,000	
R	1:35	1:50	0:15	1522	1529	7									184	1076	160		12-13	7-13	28	2,000	2,000	Control drill at 30 m/hr, P/U 235; S/O 140: ROTwt 174
R	2:15	3:14	0:59	1529	1559	30			1540.85	14.49	240.57	-2.28	-2.79	2.40	184	1076	160		9-10	5-14	31	2,050	2,050	P/U 228; S/O 146: ROTwt 176
R	3:38	3:48	0:10	1559	1564	5									184	1076	165		8-9	6-17	30	2,050	2,050	
R	3:48	3:56	0:08	1564	1568	4	180	25							184	1076	165		10-11	6-16	30	2,075	2,075	
R	3:56	4:37	0:41	1568	1588	20	180	35	1570.22	12.40	236.98	-2.13	-3.67	2.30	184	1076	165		9-10	7-15	29	2,100	2,100	SCR's at end of stand
R	5:08	5:48	0:40	1588	1608	20			1599.76	10.35	236.26	-2.08	-0.73	2.09	184	1076	165		6-20	7-15	30	2,025	2,025	Hard formation at 1592m MD
R	5:48	6:10	0:22	1608	1618	10	0	0							184	1076	165		9-10	7-15	27	2,025	2,025	P/U 228; S/O 154: ROTwt 180
R	6:25	7:02	0:37	1618	1632	14			1630.16	9.46	236.73	-0.88	0.46	0.88	184	1076	165		9-10	7-15	23	2,100	2,100	Take check survey for inclination
R	7:02	7:55	0:53	1632	1645	13	0	IH							184	1076	165		9-10	7-15	15	2,100	2,100	
R	8:15	9:05	0:50	1645	1665	20			1659.89	8.81	235.87	-0.66	-0.87	0.67	184	1076	165		9-10	7-15	24	2,050	2,050	Hard formation at 1665m -1667m MD
R	9:05	10:25	1:20	1665	1667	2									184	1076	120		17	2-22	2	2,050	2,050	High stick slip
R	10:25	10:45	0:20	1667	1677	10									184	1076	165		9-10	7-15	30	2,050	2,050	Smooth Drilling P/U 231; S/O 158: ROTwt 185
R	11:00	11:15	0:15	1677	1683	6									184	1076	150		9-10	7-15	24	2,050	2,050	
R	11:15	12:10	0:55	1683	1707	24			1689.37	8.19	235.45	-0.63	-0.43	0.63	184	1076	150		9-10	7-15	26	2,050	2,050	D/L to Nudge 0.5 deg in incP/U 232; S/O 156: ROTwt 186

TIME BREAKDOWN: (for new formation only)

Rotated Time : 11.75 **Meters Rotated :** 503 **Rotating ROP:** 42.8 m/hr

Total Time : 11.75 **Meters Drilled :** 503 **Average ROP:** 42.8 m/hr

WELL# Wardie-1 **DATE:** 18-May-08 **Depth In :** 751.0 m MD **Pump Output:** 5.850 Gal / stk **Planned Angle :** 32.5°

Planned Direction : 241.2°

BHA # 4 **BIT#** 3 12.25 **BHA :** 12 1/4" PDC Bit, PD 900, Receiver, 6 5/8" In Line Flex, XO, GVR8, PowerPulse MWD, 8 1/4" NMDC, 8" Collar, Hydraulic Jar, 8" collar, 12 x 5 1/2" HWDP, DP to surface

WD SURVEY SPACING = 17.68 m **Last Casing :** 13 3/8" @ 747m **DLS 1=°/100Ft, 2=°/30Mts, 3=°/10Mts:** 2

PD SURVEY SPACING = 2.67 m

	DRILLING TIME			RSS Work Sheet			Des	Steer	SURVEY			TENDENCY °/30mts			STK /	FLOW	Surf				ROP	PRESSURE		REMARKS
R / S	START	STOP	SUM	FROM	TO	Dist	T/F	%	DEPTH	INCL	AZM	B / D	TR	Dogleg	MIN	RATE	RPM		WOB	TORQ	(m/hr)	Off Bottom	On Bottom	
R	13:04	13:55	0:51	1707	1734	27			1718.81	7.67	235.27	-0.53	-0.18	0.53	184	1076	150		7-10	7-15	32	2,100	2,100	
R	13:55	14:05	0:10	1734	1737	3									184	1076	150		7-10	7-15	18	2,100	2,100	P/U 234; S/O 156: ROTwt 188
R	14:28	15:05	0:37	1737	1766	29			1745.67	7.36	234.18	-0.35	-1.22	0.38	184	1076	150		7-10	7-15	47	2,100	2,100	Section TD. D/L Neutral Mode
							0	0																Bit grade 3-3-WT-A-X-I-CT-TD

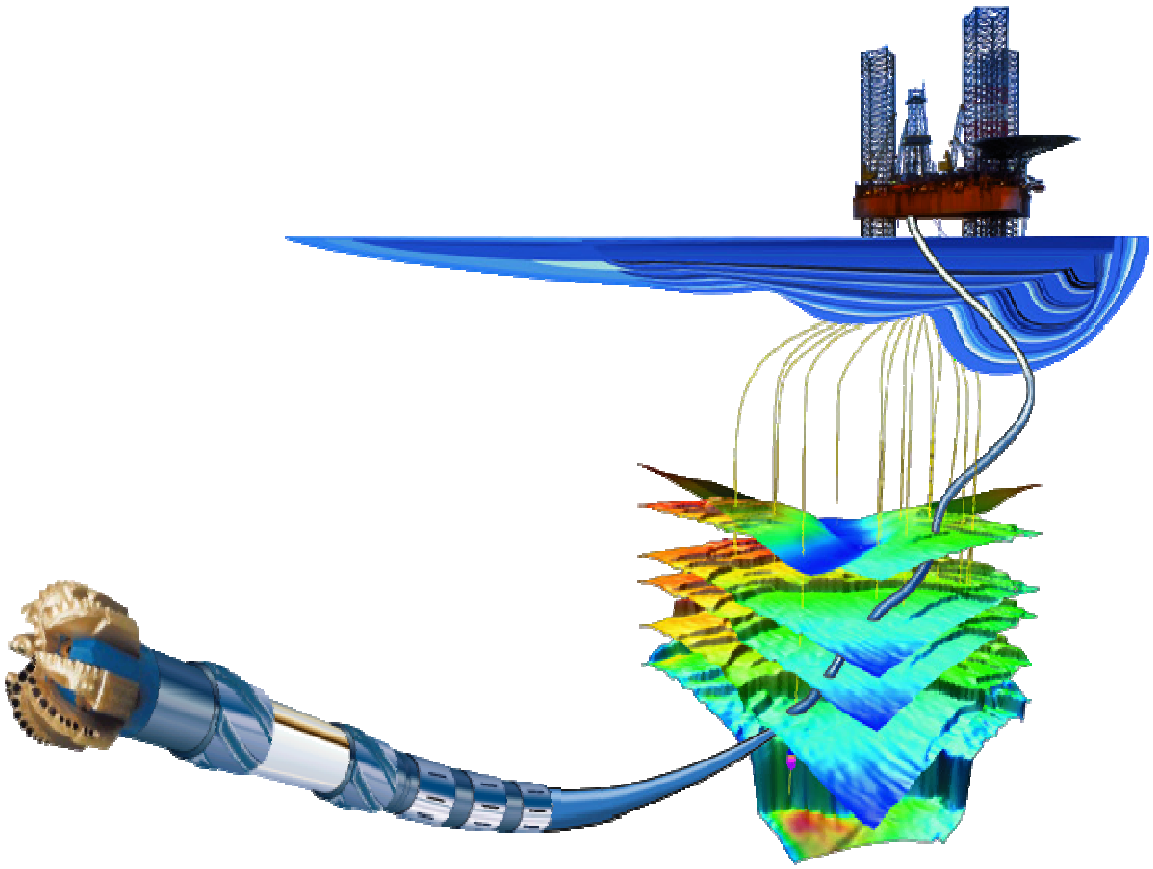
TIME BREAKDOWN: (for new formation only)

Rotated Time : 1.63 **Meters Rotated :** 59 **Rotating ROP:** 36.1 m/hr

Total Time : 1.63 **Meters Drilled :** 59 **Average ROP:** 36.1 m/hr

Schlumberger

Drilling Tool Run Reports



Schlumberger

Equipment Run Summary Report

14-May-2008
10:03AM

Job Number: 08ASQ0006 **Company:** 3D OIL **Rig Name:** West Triton
Company Rep: Shaughan Corless **Location:** MEA-APG-ASQ **Well Name:** Wardie-1
Run Number: 1

Run Information

	Date In		Date Out
	12-May-2008 7:30PM		13-May-2008 10:30PM
Depth (MD):	133.0 m	to	751.0 m
Depth (TVD):	133.0 m	to	706.8 m
Inclination:	0.00 deg	to	34.35 deg
Azimuth:	0.00 deg	to	239.86 deg

Drilling Distance:	615.00 m	Drilling Hours:	7.60 hrs
Rotary Drilling Distance:	353.00 m	Rotary Drilling Hrs:	3.76 hrs
Sliding Distance:	262.00 m	Sliding Hours:	2.94 hrs
Reaming Distance:	0.00 m	Reaming Hours:	0.00 hrs
		Hrs Below Rotary:	27.00 hrs
		Total Pumping Hrs:	11.90 hrs

Hole Size:	17.50 in	Min DLS:	0.10 deg/30 m
Last Casing Size:	20.000 in	Max DLS:	3.68 deg/30 m
Last Casing Depth:	132.8 m (MD)	Max DLS Depth:	496.4 m
Tool Face Arc:	40.0 cm	Surface Screen:	No
Total Face Angle:	213.33 deg	DFS Used:	No

North Ref Used:	Grid North	Inline Filter:	No
Magnetic Dec:	12.844 deg		
Grid Correction:	-0.383 deg		
Total Correction:	13.227 deg		
Est. Mag. Int:	0.63 deg		

Rig Information

Rig Type:	Jack Up	Pump Type:	Triplex
Water Depth:	39.50 m	Pulse Damp Press:	800 psi
Air Gap:	15.10 m	Number of Pumps:	3
RKB Height:	38.00 m	Pump Line ID:	6.50 in
Ground Elevation:	-39.50 m	Pump Output:	5.85 galUS/stroke
		Pump Stroke Len:	14.00 in

Run Objective

Drill the well directionally and get the right build rate.

D&M Crew List:

Cell Manager: Anagh Kohli

Crew: San thida Aung, MWD
Patrick Dassens, DD
Anagh Kohli, Cell Manager
Punniamoorthy Sellathurai, DD

DH Motor Information

Manufacturer:	D&M	Bit to Bend Dist:	m
Motor Type:	PowerPak	Bearing Play In:	0.11 in
Motor Size:		Bearing Play Out:	in
Serial No.:	5659	Bent Sub Angle:	deg
Lobe Config:	5:6	Bent HSG Angle:	1.5003 deg
Stage Length:	m		
Rubber:			
Sleeve Position:			
Sleeve Size:	17.25 in		
Bearing Type:	Mud Lubricated		

RSS Information

RSS Manufacturer:	
RSS Type:	
RSS SN:	
RSS Size:	
Pulse Ht Threshold:	
Min Pulse Width:	
Max Pulse Width:	
Conn Phase Angle:	deg
Rise Time Const:	
Fall Time Const:	
Digit Time:	

MWD Configuration

Mod Type:	QPSK	Int Tool Face Offset:	deg	Bit Rate:	6 bps	Slimpulse Pulser Config:	
Mod Gap:	0.12500 in	Turbine Config:	600-1200 galUS/min	Frequency:	12 Hz	Pred Sig Strength @ TD:	psi
SPT Type:	HA						

Drilling Parameters

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Equipment Run Summary Report

14-May-2008
10:03AM

Job Number: 08ASQ0006 **Company:** 3D OIL **Rig Name:** West Triton
Company Rep: Shaughan Corless **Location:** MEA-APG-ASQ **Well Name:** Wardie-1
Run Number: 1

	Min	Max	Avg
BH Temperature:	19.60 degC	23.00 degC	21.20 degC
Surface RPM:	0.00 rpm	59.00 rpm	34.67 rpm
ROP:	18.88 m/hr	104.00 m/hr	80.92 m/hr
Surface Torque:	1.00 kft.lbf	1.00 kft.lbf	1.00 kft.lbf
Flow Rate:	894.00 galUS/min	1,128.00 galUS/min	1,040.67 galUS/min
WOB Sliding:	25.00 klbm	25.00 klbm	25.00 klbm

Total DH Shocks (k): 0 k
Max Shock Level: 0
Max Shock Duration: 0 sec
Checkshot Type:
Checkshot Depth: m
Checkshot Incl: deg
Checkshot Azim: deg

Average Pump Pressure: 1506 psi

H2S In Well: No

Turbine RPM @ Min Flow Rate: 3,085 rpm
Turbine RPM @ Max Flow Rate: 3,984 rpm
Min Flow Rate: 894.00 galUS/min
Max Flow Rate: 1,128.00 galUS/min
SPP Off Bottom: 1,573.00 psi
SPP On Bottom: 1,592.00 psi

Mud Information

Mud Type: Water Base
Mud Company: Baroid Fluid Services
Mud Brand: Sea water with PHG sweeps
Funnel Viscosity: 100.00 s/qt
Plastic Viscosity: 24.00 cp
Yield Point: 103.00 lbm/100ft2
Mud Resistivity: ohm-m

Mud Clean: Yes
LCM Type:
LCM Size:
LCM Concentration: lbs/bbl
Weighting Material: Bentonite
Mud Weight: 8.84 lbm/galUS

pH: 9.50
Chlorides: ppm
Sand Content: %
Solids: 2.80 %
Percent Oil: %

IADC Bit Grading

Manufacturer: Hughes Christensen
Model: MXL T1V
Type: Milltooth

Total Revs: 61,000.00
Stick/Slip: 0
Reason Pulled: Total Depth/Casing Depth

IADC Code: 115
Jets (/ 32 in): 3X20
Bit TFA: 0.92 in2

Inner Row	Outer Row	Dull Char	Location	Bearings/Seals	Gauge	Other Chars
1.00	1.00	NO	A	E	I	NO

End of Run - Summary

Sync Hours: 8.26 hrs
Jamming: No 0.00 hrs
Surface Vibration: No
Trans Fail: No

Downhole Noise: No
Surface System Failure: No
Surface Noise: No
H2S in Well: No

Run Failed: No
D&M Trip: No
Low Oil Flag: No 0.00 hrs
Filter Screen/Plug Shear: No

Client Inconvenience: **No** Lost Time: hrs

Reason for POOH: Total Depth/Casing Depth

D&M Run Obj Met? [DD and MWD/LWD]: **No**

Brief Run Summary:

Run started with hookload problems. After adjusting the slips threshold and recalibrating the hookload things worked fine. Surveys were taken every stand. Just after coming out from casing we encountered magnetic interference and gyro surveys were run. Signal was good throughout the run and well was satisfactorily drilled to sectional TD. Minimal stick and slip was encountered with no major shocks.

If not, why?:

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Equipment Run Summary Report

14-May-2008
10:03AM

Job Number: 08ASQ0006 **Company:** 3D OIL **Rig Name:** West Triton
Company Rep: Shaughan Corless **Location:** MEA-APG-ASQ **Well Name:** Wardie-1
Run Number: 1

Equipment on the Run

Equipment	Pump Hours Start	Pump Hours Cumulative	Software Version	Tool Size
A962M-5659	36.90 hrs	48.80 hrs		9.63 in
FS800-ASQ8037	36.90 hrs	48.80 hrs		8.00 in
MDC-DE-VA77	78.38 hrs	90.28 hrs		8.25 in
MSSB-JB-42755	36.90 hrs	48.80 hrs		8.50 in
NMDC800L-N688	36.90 hrs	48.80 hrs		8.00 in
NMDC800S-7505	36.90 hrs	48.80 hrs		8.00 in
NMDC800S-9504216	36.90 hrs	48.80 hrs		8.00 in
NMDC800S-ASQ8020	36.90 hrs	48.80 hrs		8.00 in
NMDC825L-SBD5555	36.90 hrs	48.80 hrs		8.00 in
SZSS-IBSP-17A-OSS 061172A	36.90 hrs	48.80 hrs		9.50 in

Services on the Run

Equipment	Service	Tool Name	Real Time Hours	Real Time Failed	Real Time Depth	Recorded Mode Hours	Recorded Mode Failed	Recorded Mode Depth	CAF
MWD	Shock and Vibration	TeleScope	11.90 hrs		615.0 m	27.00 hrs		615.0 m	
MWD	Cont D&I	TeleScope	11.90 hrs		615.0 m	hrs			
MWD	D&I	TeleScope	11.90 hrs		615.0 m	27.00 hrs		615.0 m	
MOTORS	PowerPak	PowerPak	11.90 hrs		615.0 m	hrs			

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BHA Report

14-May-2008
10:03AM

Job Number: 08ASQ0006 **Company:** 3D OIL **Rig Name:** West Triton
Company Rep: Shaughan Corless **Location:** MEA-APG-ASQ **Well Name:** Wardie-1
Run Number: 1 **BHA Type:** Steerable Motor

								Fishing Neck		Stab	Bottom Connection		Top Connection		
Item	Description	Vendor	Tool Name	Serial Number	Length	OD	ID	OD	Len, m	OD	Size	Type	Size	Type	Cumul Len
1	BIT	Hughes Christensen	Milltooth	606589	0.41 m	17.50	3.75						7 5/8"	REG PIN	0.41 m
2	MOTORS	D&M	PowerPak	5659	10.10 m	9.63	7.88				7 5/8"	REG BOX	7 5/8"	REG BOX	10.51 m
3	STABILIZER	D&M		OSS 061172A	2.42 m	9.50	3.00				6 5/8"	REG PIN	6 5/8"	REG BOX	12.93 m
4	MONEL	D&M		7505	7.94 m	8.00					6 5/8"	REG PIN	6 5/8"	REG BOX	20.87 m
5	MONEL	D&M		ASQ8020	3.00 m	8.00	2.88				6 5/8"	REG PIN	6 5/8"	REG BOX	23.87 m
6	MONEL	D&M		9504216	1.55 m	8.00	2.81				6 5/8"	REG PIN	6 5/8"	FH BOX	25.42 m
7	CROSSOVER	D&M		42755	0.47 m	8.50	2.88				6 5/8"	FH PIN	6 5/8"	REG BOX	25.89 m
8	MWD	D&M	TeleScope	VA77	8.49 m	8.25	5.90				6 5/8"	FH PIN	6 5/8"	REG BOX	34.38 m
9	SUB	D&M		S50991-3	0.86 m	8.00	2.25				6 5/8"	REG PIN	6 5/8"	REG BOX	35.24 m
10	MONEL	D&M		N688	8.65 m	8.00	2.81				6 5/8"	REG PIN	6 5/8"	REG BOX	43.89 m
11	MONEL	D&M		SBD5555	9.45 m	8.00	3.25				6 5/8"	REG PIN	6 5/8"	REG BOX	53.34 m

Predicted BHA Tendency:

Hookload Out: 65,000
Pickup Out:
Slack Weight:

Wt Below Jars: 49,110
Wt Above Jars:
Total Air Wt:

Stab Description	Mid Pt to Bit	Blade Type	Blade Len	Blade Width	Gauge Len	Gauge In	Gauge Out

Bit to Read Out Port			Bit to Measurement Port		
MWD-TeleScope	24.20	m	TeleScope-D&I	26.56	m
MOTORS-PowerPak					

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Time Description Report

14-May-2008
10:03AM

Job Number:	08ASQ0006	**Company:**	3D OIL	**Rig Name:**	West Triton
Company Rep:	Shaughan Corless	**Location:**	MEA-APG-ASQ	**Well Name:**	Wardie-1
Run Number:	1				

Date/Time	Depth		Description
12-May-2008 12:13AM	170.0	m	prepare to run Gyro because the new well is very close to with the previous one
12-May-2008 10:01PM	0.0	m	Picking up BHA @ 5pm
12-May-2008 11:00PM	133.0	m	Start drilling with bad signal , low flow rate
12-May-2008 11:59PM	145.7	m	Drilling with pump 1 -57 spm and pump2 -46 spm with good signal, manual input @76 mMD (mud line)
13-May-2008 2:39AM	179.0	m	Drilling ahead, after running the Gyro, the difference between the azimuth of Gyro and D&I is 6 Deg
13-May-2008 3:14AM	213.0	m	Drilling ahead with good signal
13-May-2008 4:03AM	258.0	m	Sliding @ 3:53am, total flow rate 894,
13-May-2008 4:28AM			
13-May-2008 7:38AM	465.0	m	Sliding first 10-15m of each stand.
13-May-2008 9:28AM	573.0	m	Drill Ahead with corrective slides
13-May-2008 9:49AM	583.0	m	Circualting for hole cleaning
13-May-2008 10:18AM	605.0	m	End of corrective slides, rotating full stands now, BHA has a dropping tendency, will slide on the next stand.
13-May-2008 11:43AM	671.0	m	Drilling ahead with corrective slides. ROp ~ 100m/hr, WOB 15-25, 1100 gpm
13-May-2008 2:12PM	751.0	m	TD called
13-May-2008 3:12PM	749.0	m	Circulating at the bottom

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Drilling Parameters Report

14-May-2008
10:03:43AM

Job Number: 08ASQ0006
Company: 3D OIL
Rig Name: West Triton
Company Rep: Shaughan Corless
Location: MEA-APG-ASQ
Well Name: Wardie-1
Run Number: 1

	13-May-2008 12:03 PM	13-May-2008 7:27 AM	13-May-2008 2:55 AM
Field Engineer	Anagh Kohli	Anagh Kohli	San thida Aung
Depth	676.00 m	452.00 m	214.00 m
Avg ROP	26.22 m/hr	26.22 m/hr	26.22 m/hr
On Bottom ROP	83.69 m/hr	83.69 m/hr	83.69 m/hr
Flow Rate	1,128.00 galUS/min	1,100.00 galUS/min	894.00 galUS/min
Turbine RPM	3,984 rpm	3,828 rpm	3,085 rpm
Surface RPM		45 rpm	59 rpm
WOB Rotating		15.00 klbm	
WOB Sliding	25.00 klbm		
DH WOB			
Surface Torque		1.00 kft.lbf	
DH Torque			
Hookload	142 klbm	131 klbm	
PickUp Weight		139.00 klbm	
Slack Weight		135.00 klbm	
Friction			
SPP On Bottom	2,550.00 psi	2,350.00 psi	1,592.00 psi
SPP Off Bottom	2,400.00 psi	2,200.00 psi	1,573.00 psi
Diff Pressure	150 psi	150 psi	19 psi
BH Temperature	23.00 degC	21.00 degC	19.60 degC
Total Shocks (k)			
Max Shock Level			
Max Shock Duration			
Torsional Vib			
Lateral Vib	1	1	
Axial Vib			
CRPM		45 rpm	45 rpm
Stick/Slip		23	
Formation	Limestone	Limestone	Limestone
Signal Strength	12.30 psi	11.00 psi	29.00 psi
Percent Signal Conf	79 %	84 %	84 %

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Daily Drilling Activity Report

14-May-2008
10:03AM

Job Number:	08ASQ0006	**Company:**	3D OIL	**Rig Name:**	West Triton
Company Rep:	Shaughan Corless	**Location:**	MEA-APG-ASQ	**Well Name:**	Wardie-1
Run No:	1				

From	To	Elapsed	Depth in m From	Depth in m To	IADC Activity	Description
12-May-2008						
00:00	02:00	2.00	0.0	0.0	Run casing / cement	Level up CTU and install ico conductor Clamp
02:00	05:00	3.00	0.0	0.0	Run casing / cement	rig down 30" handline equipment, dress 30"conductor
05:00	12:30	7.50	0.0	0.0	PU / LD BHA / Tripping	RIH on cementing stiner, washdown last 10m
12:30	16:30	4.00	0.0	0.0	Run casing / cement	Level up ctu and install icon conductor clamp
16:30	22:30	6.00	0.0	0.0	PU / LD BHA / Tripping	service top drive and clear rig floor, pick up 17.5" BHA. Bit below the rotary table @ 19:30
22:30	23:59	1.48	133.0	161.0	Drilling	Drill 17.5" hole from 132.87m to 161 m,
13-May-2008						
00:00	02:30	2.50	161.0	161.0	Survey	Running Gyro surveys
02:30	03:00	0.50	161.0	213.0	Drilling	Drill Ahead
03:00	07:00	4.00	213.0	450.0	Drilling	Drilling Ahead with corrective slides
07:00	08:30	1.50	450.0	500.0	Drilling	Drill Ahead with corrective slides
08:30	09:40	1.17	500.0	584.0	Drilling	Drilling Ahead with corrective slides
09:40	10:00	0.33	584.0	584.0	Circulate / Condition mud	Circulate hole clean
10:00	10:30	0.50	584.0	613.0	Drilling	End of corrective slides
10:30	12:00	1.50	613.0	678.0	Drilling	Drill Ahead with corrective slides
12:00	14:00	2.00	678.0	751.0	Drilling	Drill to TD
14:00	15:30	1.50	751.0	751.0	Circulate / Condition mud	Circulate at bottom
15:30	23:30	8.00	751.0	751.0	Reaming / Hole opener / Unc	Pooh from 751m to 117m , and @ 18:30 Rack back drill pipe and break BHA

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DOWN-HOLE MOTOR RUN REPORT

RUN Nº 1 **Motor Size** 9 5/8" **Serial No** 5659 **Measurements are in** M

Company	3D Oil Ltd.	**Well**	Wardie-1	**Slot**	n/a	**Field**	Wildcat / exploration
Location	Bass Strait, Gippsland Basin			**Country**	Australia		
Operator	Australian Drilling Associates	**Rig**	Seadrill - West Triton	**Engineer**	Moorthy/Patrick	**Date**	13-May-08

Bit Size	Make	Type	IADC	Jets	Jets	Jets	TFA
17 1/2	Hughes Christensen	MXL-T1V	1-1-5	3 x 20			0.910

IADC CUTTING STRUCTURE

Inner Row	Outer Row	Dull Char'	Location	Drg/Seals	Gauge	Others	Reason for Trip
1	1	NO	A	E	I	NO	TD

Motor Made By	Size	Model / Type	Rot'/Stat', Stages		Serial No	Hsg Stab OD	°Bent Hsg	°Bent Sub
Schlumberger	9 5/8"	A962M5640XP	5/6	4.0	5659	17 1/4"	1.5	nil

Type **1** = Straight; **2** = Steerable; **3** = Double Bend: 2 **Rotor S/Nº** 5224 **Stator S/Nº** 6230

Drlg Cmt, W/Ream 0.50 **Drlg Hrs** 6.70 **Circ Hrs** 4.70 **Total Motor Circ Hrs** 11.90

Purpose of Run Drilled cement and float equipment, cleaned out rat hole. Rotary drilled to kick off point at 250m. Kick off building at 3º/30m to 32.48ºm along the azimuth of 241.15º azimuth. Continue drilling tangent section to casing point @ 750m MDDF.

BHA#

17 1/2" Bit
PowerPak Motor (1.5 deg)
17" String Stab
Crossover
Float Sub
3x8" Pony NMDC
Cross over sub
PowerPulse HF MWD
UBHO
2x8" NMDC
8" Collar (4 joints)
Hydraulic Jar
8" Collar (2 joints)
Crossover
5 1/2" HWDP (12 joints)
5-1/2" DP

Depth In	136.00	**Depth Out**	751.00	**Inter'l Drld**	615.00
Date In	12-May-08	**Date Out**	13-May-08	**Inter'l ROP**	91.79
Time In	19:30	**Time Out**	23:30	**Time BRT**	28.00 Hrs

Surveys	**MD IN**	174.15	**Inclin**	0.97	**Azim**	331.19
	MD OUT	722.54	**Inclin**	34.35	**Azim**	239.86

Flow Rate	Off Bttm Press	On Bttm Press	RPM	WOB
GPM	PSI	PSI	Surface	KLbs
1150	2400	2575	45-100	1-25

Mud Type	Seawater - Bentonite	**Mud Wt**		**Mud Grad'**	n/a	**Vis**	
PV		**Filtrate**	n/a	**% Solids**		**pH**	
YP		**% Oil/Water**	n/a	**% Sand**		**Circ Temp**	23 deg C

FAILURE? No **Slide (m)** 262 **Previous Hrs** 36.9 **Cumulative Hrs** 48.80

Remarks / Failure Report.

Reason for POOH : TD hole section **Failure :** Category = -

Did Motor Stall?	
No	No
Slide	Rty
0	0

Bearing Play	
In	3.0 mm
Out	5.0 mm
Condition	

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PowerDrive X5 Summary

PowerDrive — The new direction in rotary drilling

Rev 3: Please do not make any changes to this form !!!

JOB NUMBER	COMPANY REP.	DATE IN	DATE OUT	PowerDrive Run #	MWD Run #	Rig Bit Run #	PD Engineer
08ASQ00x	Shaughan Corless	16-May-08	19-May-08	1	2	4	Moorthy / Pat

CLIENT	Hole Depth - FROM	TO	Flex/ILF SN (ft/m)	Xtra Receiver #	Control Unit #
3D Oil Ltd	751.0 m MD	1766.0 m MD	51767	49245	303

RIG NAME	Inclination - FROM	TO	Control Collar #	Ext Sub #	Bias Unit #
Seadrill - West Triton	32.02 deg	7.36 deg	50245	51368	51550

WELL NAME	Azimuth - FROM	TO	Bit Mfg	Bit Type	Bit SN
Wardie-1	241.09 deg	234.18 deg	Reed	RSX616-A16	218629

LOCATION	Hole Size	Bit to D&I	Bit to PD D&I	Dull Grade - IADC Cutting Structure
Bass Strait	12 1/4"	17.68 m	2.67 m	3-3-WT-A-X-I-CT-TD

Map file name	Mag Dec / Grid Cor / Total Corr.			Connector Phase Angle	Downlink response ?	On Bottom Hours	Last Casing size/wt / depth
n/a (fast downlink)	+ 12.844	- 0.383	13.227	120	Good	19.40	13 3/8' 747 m

Bit to Bottom of BU Pad	Bit to Midpoint of Stab	Flex Lgth	WOB MIN / MAX		Ave. RPM	Ave. WOB	Off Bottom Circulating Hours	ft / M Drilled this run
0.60 m	3.67 m	2.95 m	3	25	150	12	25.50	1015.0

PD MIN/MAX		Initial / Final Battery Voltage		RPM MIN / MAX		MWD Min/Max Flow Rating		Below Rotary Table Hours	PD ft/M Drilled (Operating)
		3.8		100	170	600	1200	82.50	1015.0

Pulse Width MIN/MAX		Pulse height thre	Digit Time	Actual Flow MIN / MAX		Pump Output / Type		PowerDrive Operating Hours	On Btm ROP	Ave ROP
n/a	n/a	n/a	18 sec	900	1075	5.85	Triplex	44.90	52.3	52.3

Tool Response

Max DLS	Max BUR	Max Turn Rt
		n/a

Stab gauge before/after run: 12 1/8" / 12 1/8"

Run Objective

Maintain tangent of 32.5 degrees then drop to 9 degrees

SOFTWARE VERSION

TSIM	Comms mod	Sensor mod	MWD	IDEAL
AC	CMF523H15	SMV507RN	9.2C02	13_0c_08

Reason for POOH

TD well

Bit Hydraulics Calculations

Enter data in blue areas	
Pump Flow	1075
Mud Weight	9.3
Bit Diameter	12.25
Bit Flow	1058
Bit Pressure Drop	782
Hydraulic HP	483
HSI	4.1
Impact Press.	1414

Note: Rock compressive strength should be greater than the Impact Pressure.

Bit Nozzle Size and TFA

Nozzle	/ 32	TFA
1	15	0.173
2	15	0.173
3	15	0.173
4	16	0.196
5	16	0.196
6	16	0.196
7		
8		
9		
10		
Bit TFA =		1.107

Flow Restrictor Pressure Drop

Nozzle size (32nd)	TFA	Press. Drop

Total Pressure Drop Below PowerDrive

782 psi

Note: If the box above is red, the total pressure drop below the PowerDrive is not in the optimal range for pad operation. Confirm restrictor and bit nozzle selection is correct such that the total pressure drop below the PowerDrive is between 500 psi an

PowerDrive Serial No. / PUMP HOURS

PART	PFIX	SN	START	CUM
Control Unit	CU	303	0.00	44.90
Control Collar	CC	50245	0.00	44.90
Ext Sub	ES	51368	0.00	44.90
Bias Unit	BU	51550	0.00	44.90
Flex/ILF	PD9RX-AA	51767	39.20	84.10
Xtra Receiver		49245	39.20	84.10
Upper Torquer		49846	39.20	84.10
Lower Torquer		34624	39.20	84.10
Comms Module		730	39.20	84.10
Motor				

Downward Telemetry Calculations

Enter data in the blue areas

Digit Time	18	secs
Falling Time Constant (FTC)	n/a	secs
Rising Time Constant (RTC)	n/a	secs
Driller's Pulse - High / Low	1075 / 983	
Driller's Pulse Height	n/a	%
Pulse Amplitude	n/a	%
Minimum Recoverable Pulse	n/a	%
Minimum Threshold	n/a	%

Motor Run Information

Motor type	Seiral number
N/A	N/A

Bend type	Bend Angle
N/A	N/A

Stab type	Stab Gauge
N/A	N/A

Off Bottom pressure	On Bottom pressure
N/A	N/A

Backreaming Hours	Total Reaming Hours
N/A	N/A

Bearing Play after run (mm): N/A

Mud properties

Mud Company	Baroid
Mud Type	KCL Polymer
MW at **start** of run	8.9 ppg
MW at **end** of run	9.3 ppg
Funnel Viscosity	58 sec
Plastic Viscosity	13
Yeild Point	30
Maximum DH Temp. deg C	50ºC
Sand %	0.50 %
Soild %	4.60 %

Run Summary

This assembly had a dropping tendency in neutral steering mode of around 0.8º/30m. Drop rates of 1.16º/30m to 1.45º/30 m for the first 243m were achieved when the tool was set at 180º/25% setting, and around 2.7º/30m with 162ºL/75% setting. Downlinks with a 9% flow reduction were readily accepted. Found fragment (5cm long)of a plastic container cap trapped in the float when tools were above rotary table.

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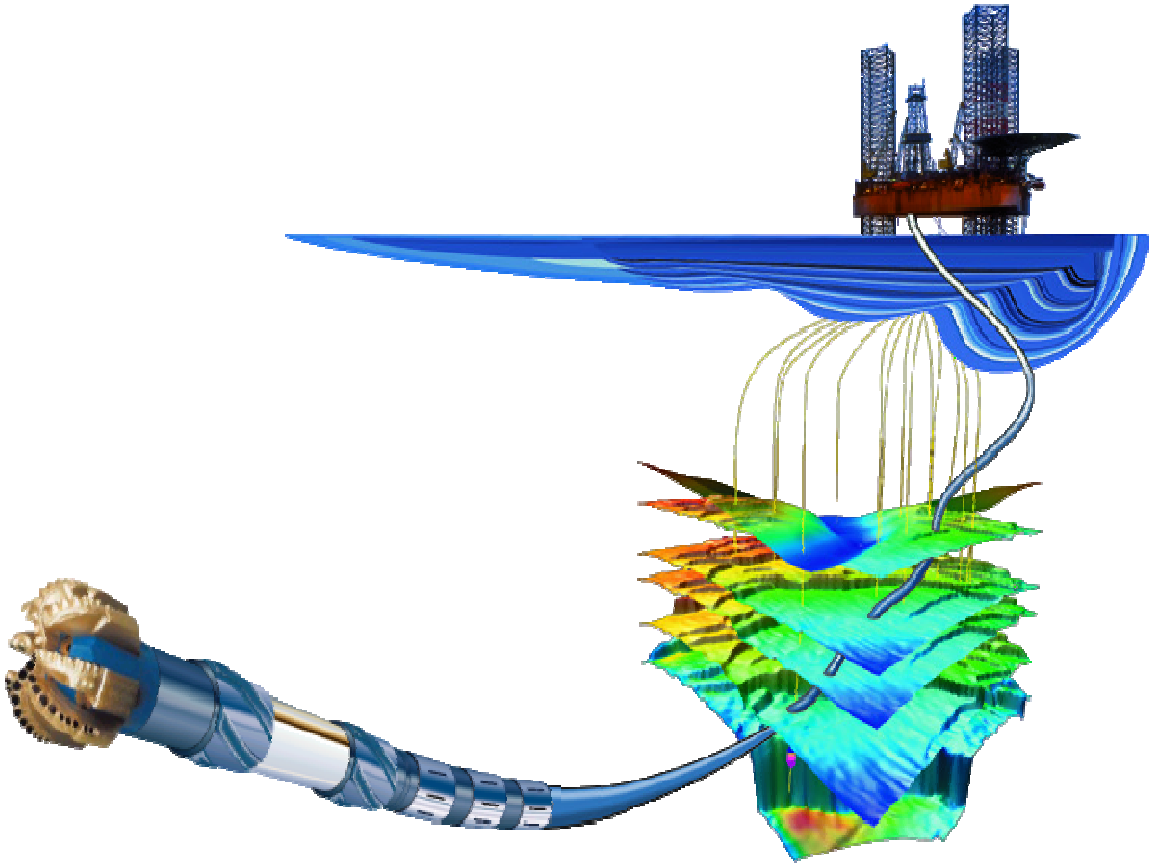
Drill Bit Gradings



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ROCK BIT GRADING CHART

BIT RUN DATA # 2

Bit Size:	17 1/2"
Manufacturer:	Hughes Christensen
Bit Type:	MXL-T1V
Serial Number:	6065891
New Bit:	Yes
IADC Code:	1-1-5
Number of Nozzles:	3
Size of Nozzles:	3 x 20
T.F.A. (sq. in):	0.91
W.O.B. :	1-25
Depth Out:	751m
Depth In:	136m
Meters Drilled:	615m
Drilling Hours:	6.70

WELL DATA

Date:	13-May-08
Drilling Supervisor:	Shaughan Corless
Platform:	West Triton
Well Number:	Wardie-1
Rig Contractor:	Seadrill
Final Hole Angle:	34.35º
Date in:	12-May-08
Date Out:	13/5/2008
BHA #	2

MUD AND LITHOLOGY DATA

Majority Formation:	Limestone
Other Formation:	
% Formation:	
Mud Type:	Seawater - Bentonite
Mud Weight:	
PV:	
YP:	
% Solids:	
% Oil / Water:	
Circulating Temperature (deg c):	

COMMENTS:

IADC ROCK BIT GRADING

(A)	(A)	(B)	(C)	(D)	(E)	(B)	(F)
1	1	NO	A	E	I	NO	TD

GRADING CHART AS PER IADC NOMENCLATURE

CUTTING STRUCTURE				Cone		REMARKS	
INNER ROWS	OUTER ROWS	DULL CHAR.	LOCATION	BEARING / SEALS	GAUGE	OTHER CHAR.	REASON PULLED
(A)	(A)	(B)	(C)	(D)	(E)	(B)	(F)

(A) Inner cutting structure = all inner rows. **(A)** Outer cutting structure = gauge row only.
In columns 1 and 2 **(A)** , a linear scale from 0 to 8 is used to describe the condition of the cutting structure according to the following -

Steel Tooth Bits - A measure of lost tooth height due to abrasion and or damage. 0 = No loss of tooth height, 8 = total loss of tooth height.
Insert Bits - A measure of total cutting structure reduction due to lost, worn and broken inserts. 0 = As new, 8 = all inserts lost, worn and / or broken.

(A)

0	No Wear
8	No Cutting structure

(B)

BC *	Broken Cone
BF	Bond Failure
BT	Broken Teeth/Cutters
BU	Balled Up
CC *	Cracked Cone
CD *	Cone Dragged
CI	Cone Interference
CR	Cored
CT	Chipped Cutters
ER	Erosion
FC	Flat Crested Wear
HC	Heat Checking
JD	Junk Damage
LC *	Lost Cone
LN	Lost Nozzle
LT	Lost Teeth / Cutters
OC	Off-Center Wear
PB	Pinched Bit
PN	Plugged Nozzle / Flow Passage
RG	Rounded Gauge
RO	Ring Out
SD	Shirttail Damage
SS	Self-Sharpening Wear
TR	Tracking
WO	Washed Out Bit
WT	Worn Teeth / Cutters
NO	No Dull Characteristics

* Show cone number or numbers under location **(C)** .

(C)
N - Nose Row
M - Middle Row
G - Gauge Row
A - All Rows

CONE #
1
2
3

(D)

NON - SEALED BEARINGS
A linear scale estimating bearing life.
0 - No life used,
8 - No bearing life remaining.

SEALED BEARINGS
E - Effective bearings
F - Failed Bearings

(E) In - In gauge, 1 - 1/16", 2 - 2/16", 3 - 3/16" UG etc

(F)

BHA	Change BHA
CM	Condition mud
CP	Core Point
DMF	Downhole Motor Fail
DP	Drill Plug
DSF	Drill String Failure
DST	Drill Stem Test
DTF	Downhole Tool Fail
FM	Formation Change
HP	Hole Problems/ LIH
HR	Hours on Bit
LIH	Lost in Hole
LOG	Run Logs
PP	Pump Pressure
PR	Penetration Rate
PR	Penetration Rate
RIG	Rig Repair
TD	Total Depth
TQ	Torque
TW	Twist-Off
WC	Weather Conditions
WO	Washout/Drill String

Schlumberger

PDC GRADING CHART

BIT RUN DATA # 4

Bit Size:	311mm (12 1/4")	
Manufacturer:	Reed	
Bit Model:	RSX616-A16	
Serial Number:	218629	
New Bit:	Yes	
IADC Code:	M422	
Number of Nozzles:	6	
Size of Nozzles:	3 x 15 3 x 16	
Number of Blades:	6	
Number of Cutters:	59	
Size of Cutters:	16,13	
T.F.A. (sq ins):	1.110	
W.O.B. :	3-25	Klfbs
Depth In:	751.0	m
Depth Out:	1766.0	m
Meters Drilled:	1015.0	m
Rotating Hours:		hrs
Metres Rotary:	1015.00	m
On bottom hours	19.40	hrs
Average R.O.P:	52.32	m/hr
Circulation Rate:		GPM
R.P.M. at Bit:	120-170	rpm
Motor Used:	No	
Motor Size:	N/a	
Bit Good for Rerun:	NO	

WELL DATA

Date:	19-May-08
Drilling Supervisor:	Shaughan Corless
Rig:	West Triton
Well Number:	Wardie-1
Rig Contractor:	Seadrill
Hole Angle:	33.00°
Date in:	16-May-08
Date Out:	19-May-08
SLB BHA #	2

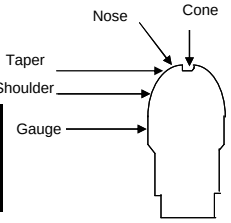
MUD AND LITHOLOGY DATA

Majority Formation:	Sand stone
Other Formation:	Silt stone
% Formation:	N/A
Mud Type:	KCL Polymer
Mud Weight:	9.32 ppg
PV:	13
YP:	30
Corrected solid:	4.60
% Oil / Water:	N/A
Circulating Temperature:	50ºC

COMMENTS:

PDC GRADING

(A)	(A)	(B)	(C)	(D)	(E)	(B)	(F)
3	3	WT	A	X	I	CT	TD



PDC GRADING CHART AS PER IADC NOMENCLATURE

CUTTING STRUCTURE				B	G	REMARKS	
INNER ROWS	OUTER ROWS	DULL CHAR.	LOC ATION.	BRING SEALS	GAUGE 1/16"	OTHER CHAR.	REASON PULLED
(A)	(A)	(B)	(C)	(D)	(E)	(B)	(F)

(A)	0	No Wear
	8	No Cutting structure

(B)	BT	Broken Cutters
	BU	Balled Up
	CR	Cored
	CT	Chipped Cutters
	ER	Erosion
	HC	Heat Checking
	JD	Junk Damage
	LN	Lost Nozzle
	LT	Lost Cutters
	OC	Off-Center Wear
	PN	Plugged Nozzle/ Waterway Passage
	RG	Rounded Gauge
	RO	Ring Out
	WO	Washed Out - Bit
	WT	Worn Cutters
	NO	Bit is Green
	IM	Impact
	DEL	Delamination
	SPL	Spalling
	BF	Bond Failure

(C)	C	Cone
	N	Nose
	T	Taper
	S	Shoulder
	G	Gauge
	A	All Angles

(D)	X	Fixed Cutter Bits

(E)	1	In Gauge
	1/16	1/16" Undergauge
	2/16	1/8" Undergauge etc.

(F)	BHA	Change BHA
	DMF	Downhole Motor Fail
	DSF	Drill String Fail
	DST	Drill Stem Test
	DTF	Downhole Tool Fail
	LOG	Run Logs
	RIG	Rig Repair
	CM	Condition mud
	CP	Core Point
	DP	Drill Plug
	FM	Formation Change
	HP	Hole Problems
	HR	Hours
	PP	Pump Pressure
	PR	Penetration Rate
	TD	Total Depth
	TQ	Torque
	TW	Twist-Off
	WC	Weather Conditions
	WO	Washout/Drill String

Attachment 8

Activity Summary Reports

DFE above MSL : 38.0m | Lat : 38 Deg 12 Min 25.077 Sec | Spud Date : 10 May 2008 | Release Date : 25 May 2008

Water Depth : 39.5m | Long : 147 Deg 37 Min 9.810 Sec | Spud Time : 19.30 | Release Time : 22.30

Well History

Well: Wardie-1

#	Date	Depth	24 Hour Summary
1	09 May 2008		Offload CTU deck extension and secure same on CTU deck whilst working on failed ROV. Connect service lines and change out cement hose on rig floor.
2	10 May 2008	132.0m	While waiting on ROV repair : install new cement hose on rig floor, lay out 12 jnts HWDP (for inspection) and pick up 12 newly inspected HWDP. Install 30" TA cap on West Seahorse-3. Skid rig back to Wardie-1 and rig up CTU, work platform and service lines. RIH 36" BHA. Check position with ROV and drill from 76.8m to 132m.
3	11 May 2008	132.0m	Complete drilling 36" hole from 132m to 136m. Circulate and displace hole to prehydrated gel mud. Run 30" conductor to 74m and wait on improved visibilty to stab shoe into well. Stab into well and run casing. Land out 30" casing and rig up Icon clamp at CTU. Troubleshoot Icon bolt tensioner, repair same and tension up clamp.
4	12 May 2008	161.0m	Level up CTU and tighten Icon clamp. Take load of casing on CTU and cut conductor 0.3m above Icon clamp. Lay out jnts of conductor. RIH with cement stinger, sting in and cement 30" conductor with 265bbl 15.9 ppg cement. RIH with 26" bit and take measurement to MLS landing ring. Pick up 18 3/4" w/head, make up SS plug equalising sub on r/tool and 20" x 13 3/8" CSG x/o onto w/head. Lay out same. Pick up 17 1/2" BHA, RIH and drill shoe at 133m and new hole to 161m
5	13 May 2008	751.0m	Drill 17 1/2" hole to section TD at 751mMD. POOH. Laid out 17 1/2" BHA.
6	14 May 2008	751.0m	Rigged up and ran casing to 113m. Skidded rig to align casing in well bore. Continued to run casing to 166m. Unable to pass 166m. POOH with casing. Removed centrilisers and stop collars from casing. Make up joint # 74 to float collar, checked float equipment and RIH with casing.
7	15 May 2008	751.0m	Ran and cemented 13 3/8" casing with shoe at 747m. Released running tool and laid out same. Laid out cement stand. Nippled up Bop's.
8	16 May 2008	751.0m	Nippled up Bop's and diveter system. Pressure tested IBOP'S and stabing valve. Made up 12 1/4" rotary steerable assembly. RIH, tagged TOC at 732.5m. Drilled out float collar and shoe track.
9	17 May 2008	1446.0m	Drilled out shoe track and cleaned out rathole to 751m. Displaced to new mud. Drilled 12 1/4" hole to 754m. Performed FIT to 13.1ppg EMW. Drilled 12 1/4" hole from 754m - 1446m.
10	18 May 2008	1766.0m	Driiled 12 1/4" hole to TD at 1766m MD. Circulated hole clean. Repaired trip tank return line valve. Flow checked and POOH for logging.
11	19 May 2008	1766.0m	Pumped and backreamed to shoe. Circulated hole clean at shoe. Ran back to bottom. Circulated hole clean. Flow checked. POOH. Laid out 12 1/4" BHA.
12	20 May 2008	1766.0m	Laid out 12 1/4" BHA. Rigged up for wireline logs. Ran logs #1 (PEX) & #2 (MDT). Rigged down wire line. RIH for abandonment plugs.
13	21 May 2008	1766.0m	RIH with 5 1/2" drill pipe and set P&A cement plugs at 1766m - 1513m. POOH to1406m. Circulated clean. POOH laying out drill pipe. RIH and tag top of plug 1B at 1407m with 5k down. POOH. Set cement plug #2 from 805m - 700m. POOH too 599m. Circulate clean.POOH laying out drill pipe.
14	22 May 2008	1766.0m	POOH laying out 5 1/2" drill pipe. Flushed BOPs, rise rand surface equipment. Tested cement plug #2 to 1000 psi. Nippled down BOPs and diverter system. Cut 13 3/8" casing at 126m and recovered same. Laid out well head and casing.
15	23 May 2008	1766.0m	Spot cement plug # 3 at 157 - 95m. Make up casing cutter and cut 30" casing at 78m. POOH, changed knifes. RIH and cut 30" casing at 78m. POOH changed knifes. RIH and cut 30" casing at 78m. POOH and laid out casing cutter. Made up 30" casing spear. Moved CTU work platform from CTU on Texas deck. Lost total 5 hours for drillers panel locking up. Lost 2 hours for pipe handling due to burst hyraulic return hose on Top Drive.
16	24 May 2008	1766.0m	Pull, recover and laid out 30" casing. Prepare rig package for rig move. Skid rig out and lower Texas deck extension onto work boat. Laid out tubulars from derrick.
17	25 May 2008	1766.0m	Laid out tubulars from derrick. Prepare rig for rig move. Jacked rig down, performed water integrity checks and commenced move to Nexus Location.

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Activity Report For Wardie-1

Date : 09 May 2008 **Daily Cost : US$ 203000** **Report Number : 1**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
0.0	P28	P	G10		0.5	Pick up CTU deck extension from boat. Offline: Fault traced in ROV umbilical. Commence re-terminating same.
0.0	P28	P	G10		1	Skid rig to West Seahorse -3 well centre position and install CTU deck extension on top of CTU deck. Pin and secure same. Offline: Continue work on ROV
0.0	P28	P	G1		2.5	Rig down slings. Install CTU deck. Offline: Continue work on ROV
0.0	P28	TP	G11	TP	3.5	Connect service lines. Change out cement hose on rig floor. Continue work on ROV.

Date : 10 May 2008 **Daily Cost : US$ 650000** **Report Number : 2**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
0.0	P28	TP	G11	TP	2	Continue installing new cement line on rig floor. Continue work on ROV. Complete repair at 01.30 hrs. Personnel due for rest/sleep after working for 18hrs. Will commence work again at 06.30.
0.0	P28	TP	G6	TP	4	Lay out 12 jnts HWDP due for inspection and pick up 12 jnts newly inspected HWDP.
0.0	P28	TP	G6	TP	0.5	Lay out two stands 5 1/2" DP from derrick while continuing to wait on ROV.
0.0	P28	P	G10		2.5	Make up and RIH 30" TA cap. Jump ROV and install TA on West Seahorse-3 Quick-Jay box connector 2m above seabed.
0.0	P1	P	M2		1.5	Prepare to skid rig. Hold PJSM and skid rig over Wardie-1 slot.
0.0	P1	P	G1		5	Install CTU on CTU deck extension.Tighten service lines and install wedges. Make up stand with side entry sub and TIW and rack back in derrick. Remove CTU 30" insert adapter. Install CTU work platform and mousehole.
0.0	P2	P	G6		3.5	Make up 26" bit and 36" hole opener. RIH BHA and tag seabed at 76.8m.
0.0	P2	P	G8		0.5	Check drillstring position relative to West Seahorse-3 - OK, approx 3m from WS-3 conductor. Stood ROV back and took Anderdrift survey at seabed (< 0.5°).
78.0	P2	P	D2		1	Spud well. Jet / drill with negligable weight from 76.8m to 78.5m. Stop drilling and recheck drillstring position with ROV. Position OK. Observe that bit has passed through layer of cement above seabed. Retrieve ROV.
132.0	P2	P	D2		3.5	Drill 36" hole from 78.5m to 132m. Take Anderdrift surveys at 87m - 2°, at 92m - 2° and at 134m - 1°. Pump 75bbl floc gel sweeps every single and backream both stands during drilling.

Date : 11 May 2008 **Daily Cost : US$ 650000** **Report Number : 3**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
136.0	P2	P	D2		0.5	Continue drilling 36" hole from 132m to 136m.
136.0	P2	P	F3		0.5	Pump and sweep hole with 200bbl flocculated gel mud and then pump 350bbl to displace hole to prehydrated gel.
136.0	P2	P	G8		2.5	POOH 36" BHA and lay down 2 x 8 1/4" DC's.
136.0	P3	P	G1		1	Rig up to run 30" conductor. Change out bails.
136.0	P3	P	G9		4	Hold PJSM. Pick up 30"x 20" shoe joint and check floats - ok. Continue RIH with 30", 310ppf, R3 casing to 74mRT : 3 x intermediate D60/MT joints, MLS joint with Quik-Jay box up and mudline release joint with 13-3/8" landing ring and Quik-Jay pin down. Conductor shoe positioned approx 1.5m above West Seahorse-3 conductor and 3.5m above seabed.
136.0	P3	TP	G9	WO	1	No visibility with ROV due to current and gel clouds - unable to see West Seahorse-3 conductor or seabed. Pump seawater down conductor at 400gpm to attempt to clear area around seabed - still no visibility.
136.0	P3	TP	G9	WO	1	Waiting on improved visibility (slack tide predicted at 11:14hrs).
136.0	P3	TP	G9	WO	1	Regain intermittent visibility. Conductor observed to be approx 3m offset from WS-3 conductor. Lower shoe to seabed level. Conductor observed to run inside cuttings mound at seabed. Attempt to continue RIH - conductor taking 20klb weight at seabed depth. Attempt to work conductor into hole

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Date : 11 May 2008 **Daily Cost : US$ 650000** **Report Number : 3**

						without success. Operation complicated by Quik-jay connector being at CTU level at the same time as shoe at seabed.
136.0	P3	TP	G9	WO	1	Move to 90° offset angle with ROV. Conductor appears to be slightly to port of hole centre. Pick up 1m. Commence pumping down with 400gpm. Circulate and work casing past hangup point and into hole
136.0	P3	P	G9		0.5	Continue RIH conductor to 85mRT.
136.0	P3	TP	G9	WB	1.5	Conductor connector hanging up on aft side of CTU. Attempt to pull conductor forward using tugger at rig floor and main deck. Unable to run past CTU.
136.0	P3	TP	G9	WB	1	Prepare and skid cantilever 6" forward.
136.0	P3	P	G9		2.5	Continue RIH with conductor from 85m to 130m. Took 40klb weight at 130m. Washed down from 130m - 133m (programmed setting depth - MLS joint 3m above seabed). Jump ROV to check height of MLS joint above seabed - poor visibility but joint appears to be in correct position.
136.0	P3	P	G9		1.5	Install landing ring inserts at CTU.
136.0	P3	P	G9		2	Grind down weld protrusion on 30" for Icon clamp. Stroke CTU to 100mm and install Icon clamp. Bolt tensioning unit for Icon clamp leaking hydraulic fluid - unable to tension clamp to specification.
136.0	P3	TP	G9	TP	2.5	Troubleshoot bolt tensioning unit for Icon clamp. Adapt leaking over-stroke pressure relief valve and tension up Icon clamp to target tension of 21,000psi.

Date : 12 May 2008 **Daily Cost : US$ 650000** **Report Number : 4**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
136.0	P3	TP	G9	TP	2	Level up CTU, re-install Icon clamp and tension up same.
136.0	P3	P	G9		1	Take load of 30" conductor casing on CTU and cut conductor 0.3m above Icon clamp.
136.0	P3	P	G9		1	Lay out 2 jnts 30" conductor casing including cut section.
136.0	P3	P	G1		1	Rig down 30" handling equipment and change out bails.
136.0	P3	P	F3		0.5	Make up Dril-Quip stab-in sub & 5m DP pup. Place 20" centraliser over top tooljoint of 5m DP pup jnt and make up first stand DP.
136.0	P3	TP	M2	WB	1	Skid rig 6" aft to centralise back over Wardie-1 slot.
136.0	P3	P	G8		1	RIH with stab-in sub. Wash down last 10m and stab into 20" shoe. Fill casing. Break circulation and confirm stab-in seals not leaking.
136.0	P3	P	F3		2	Rig up cement line and test to 1000psi. Pump 100bbls seawater spacer followed by 20bbls seawater with flouroscine dye. Cement conductor with 265bbls of 15.9ppg slurry (200% excess over open hole). Displace slurry with 10bbls seawater. Observed traces of dye in returns above the seabed with the ROV. Visibility too poor to determine whether there were cement returns at the seabed. ROV later observed hard cement around the conductor inside the base of the cuttings crater.
136.0	P3	P	G8		1	POOH. Lay out stab-in sub, DP pup, side entry sub and TIW valve.
136.0	P3	P	G8		1.5	Make up 26" bit. RIH on HWDP and tag MLS landing ring at 85.40mRT. POOH. Lay out 26" bit.
136.0	P3	P	G12		4.5	Pick up 18-3/4" wellhead. Break out running tool. Make up x/o, 1.5m DP pup, x/o and plug equalising sub below running tool and make up back into wellhead. Pick up and make up 20"x 13-3/8" crossover joint below wellhead and lay out assembly on main deck.
136.0	P3	P	G11		0.5	Service TDS.
136.0	P4	P	G8		5.5	Make up 17 1/2" DD BHA including mud motor and MWD tools and RIH to 131m. Wash down and tag shoe at 132.8m
136.0	P4	P	D1		0.5	Drill out to botom of shoe at 133m and clean out rathole to 136m. Take inclination at shoe - tool at 115m: 1.69°.
161.0	P4	P	D8		1	Drill 17 1/2" hole from 136m to 161m. Pump 2 x 30bbl flocculated gel sweeps per stand and spot 30bbl pre-hydrated gel on bottom at each connection.

Date : 13 May 2008 **Daily Cost : US$ 1347000** **Report Number : 5**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
170.0	P4	P	D8		0.5	Drilled ahead 17 1/2" hole from 161m to 170m. Relatively high MWD checkshot inclination of >1° at 143m (unclear reading). Decided to run gyro survey to confirm azimuth.

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Date : 13 May 2008 **Daily Cost : US$ 1347000** **Report Number : 5**

170.0	P4	P	E6		2	Rigged up Schlumberger and ran gyro survey on wireline. Survey at 135m is 2.33° inc, 331° azi (away from WS-3) and 7.6m offset from West Seahorse-3. Rigged down Schlumberger.
170.0	P4	P	D8		1.5	Continued drilling 17 1/2" hole from 170m to to KOP at 250m.
751.0	P4	P	D8		10	Directionally drilled 17-1/2" hole from 250m - 751m (section TD). Pumped 2 x 30bbl flocculated gel sweeps per stand and spotted 30bbl pre-hydrated gel on bottom at each connection.
751.0	P4	P	F4		1.5	Pumped 2 x 100 bbls h/vis and circulated hole clean. Displaced hole to 950bbls viscosified mud saved from West Seahorse-3.
751.0	P4	P	G8		3	POOH to 20" shoe. Hole good. 20k overpull top 17 1/2" stab at shoe. Install TDS, pump and rotate through shoe. No resistance. Continue to POOH to BHA at 117m.
751.0	P4	P	G6		4	Laid out 17 1/2" BHA.
751.0	P5	P	G15		1.5	Picked up and made up cementing head and racked back in derrick.

Date : 14 May 2008 **Daily Cost : US$ 650000** **Report Number : 6**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
751.0	P5	P	F3		0.5	RIH with jetting tool, jet MLS, POOH.
751.0	P5	P	G1		1.5	Rigged up to run 13 3/8" casing.
751.0	P5	P	G9		3.5	Held JSA and ran 13.3/8" casing as per program to 113m. Casing hanging up at MLS.
751.0	P5	TP	M2	WB	2	Attempted to skid rig to align casing with hole centre. Seal on skidding system hydraulic hose burst. Replaced same. Skidded rig. Ran one joint casing to 124m without hanging up.
751.0	P5	P	G9		2.5	Run 13 3/8" casing to 166m. Casing hanging up at several points each joint. Unable to work past 166m.
751.0	P5	TP	G9	WB	7.5	Held JSA. POOH to shoe track, laying out13 3/8" casing.
751.0	P5	TP	G9	WB	1	Cut centralisers and stop collars from shoe track.
751.0	P5	TP	G9	WB	0.5	Cut joint # 75 above float collar joint and laid out same. Backed out and laid out float collar joint.
751.0	P5	P	G9		5	Made up joint #74 to float collar. Checked floats - ok. Continued to RIH with 13 3/8" casing (without centralisers) to 500m. No hang-ups observed.

Date : 15 May 2008 **Daily Cost : US$ 650000** **Report Number : 7**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
751.0	P5	P	G9		4.5	Continued running 13 3/8" casing to 657m. Made up MLS hanger/running tool assembly. Continued RIH casing with MLS landing string to 722m - strap welded each casing connection above the MLS running tool.
751.0	P5	P	G1		1	Laid out casing fill up tool. Changed to DP elevators and bails.
751.0	P5	P	G12		3	Picked up and made up well head assembly. Broke out running tool. Drifted pup joints and crossovers to 2.5". Installed top cement plug onto plug launcher and made up running tool to wellhead. RIH and landed out casing on MLS hanger at 85.45m. Confirmed landout on MLS with gap of 40mm between 30" conductor and wellhead landing ring. Installed 2 1/16" wing valve on wellhead and rigged up cement lines.
751.0	P5	P	F4		1.5	Circulated casing prior to cement job. Held PJSM.
751.0	P5	P	G9		3	Pumped 10 bbls seawater. Tested lines 4000 psi. Pumped 90 bbls seawater followed by 30 bbls tuned spacer. Mixed and pumped 150 bbls class G slurry at 15.9ppg. Released dart and observed shear out of plug with 2500 psi after 2bbls. Pumped further 10 bbls seawater with cement unit. Switched to rig pumps and displaced cement wirth 337 bbls seawater. Bumped plug with 2000 psi. Casing pressure test not achieved due to leaking wellhead running tool. Bled of pressure. 3bbls bled back. Floats held.
751.0	P5	P	G9		1	Rigged down cement hose. Bleed off pressure from wellhead valve. Picked up 18klb on string, set load ring on top of 30" conductor, slacked of string.
751.0	P5	TP	G12	TP	1.5	Attempted to release running tool from well head. Running tool clutch not collapsing. Rotated running tool 1/4 turn to left and then back agian, running tool collapsed 1/2 way. Rotated running tool 1/4 turn to left again. Unable to collapse running tool fully.
751.0	P5	TP	G12	TP	2	Made up top drive to string, set down 4k on running tool and observed running tool fully collapsed. Backed out running tool with rig tongs.

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Date : 15 May 2008 **Daily Cost : US$ 650000** **Report Number : 7**

751.0	P5	P	G12		2.5	POOH. Laid out running tool, cross over subs, plug launcher and cement head.
751.0	P6	P	G13		4	Prepare to and nipple up Bop's.

Date : 16 May 2008 **Daily Cost : US$ 650000** **Report Number : 8**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
751.0	P6	P	G13		3.5	Continued to nipple up Bop's and diverter.
751.0	P6	P	G13		1	Made up test assembly for testing upper and lower IBOP'S and TDS hose.
751.0	P6	TP	G13	RE	2	Leaks of approx 60psi/min occuring on IBOP tests. Traced leaks. Functioned and greased manifold valves to rectify leaks.
751.0	P6	P	G13		2	Pressure tested IBOP's, stabbing valve and TDS hose to 250 / 5000psi for 5 / 10 minutes.
751.0	P6	P	G13		1	Lined up down choke line. Flushed lines. Pressure tested 13-3/8" casing and wellhead connection against shear rams to 250 / 2000psi for 5 / 10 minutes.
751.0	P5	P	G12		1	Made up and RIH with nominal bore protector. POOH and laid out running tool.
751.0	P5	P	G6		6.5	Made up and RIH bit and rotary steerable BHA to top of LWD tools. Made up crossover and surface tested tools ok. Continued RIH with BHA to 173m.
751.0	P5	P	G8		2.5	Continued RIH to 703m. Made up TDS and washed down from 703m. Reamed cement stringer at 719m. Washed down to 732m. Unable to rotate TDS after making connection at 732m.
751.0	P5	TP	G8	RE	1	Investigate problem with top drive. Reset PLC and reboot system.
751.0	P5	P	G11		1	Service Top Drive system.
751.0	P5	P	D1		2.5	Wash down from 732m. Tagged TOC at 732.5m (approx 2m above float collar). Drilled out float collar and shoe track to 737m.

Date : 17 May 2008 **Daily Cost : US$ 1140250** **Report Number : 9**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
751.0	P11	P	D1		1.5	Drilled out shoe track to 747m. Cleaned out rathole from 747m - 751m. Displaced hole to 8.8 ppg mud while drilling out float shoe.
754.0	P11	P	D2		0.5	Drilled new 12 1/4" hole from 751m - 754m.
754.0	P11	P	F4		1	Circulated mud weight even in and out. Pulled back inside shoe.
754.0	P11	P	E1		1	Preformed FIT : 520psi surface pressure with 8.8ppg mud and casing shoe at 704mTVD => 13.1ppg EMW without leak-off.
1397.0	P11	P	D4		18	Directionally drilled 12 1/4" hole from 754m - 1397mMD.
1397.0	P11	TP	D4	RE	0.5	Drillers cyber chair system shut down. Able to circulate but not rotate or reciprocate. Investigated and rectified problem (software related).
1446.0	P11	P	D4		1.5	Drilled 12 1/4" hole from 1397m - 1446mMD.

Date : 18 May 2008 **Daily Cost : US$ 1140250** **Report Number : 10**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1520.0	P11	P	D4		1.5	Directionally drilled 12 1/4" hole from 1446m - 1520mMD. Instantaneous ROP > 100m/hr.
1664.0	P11	P	D4		7.5	Control drilled 12 1/4" hole from 1520m - 1664mMD at 30m/hr instantaneous ROP for LWD logs.
1666.0	P11	P	D4		1.5	Drilled hard quartz stringer from 1664m - 1666mMD (<2m/hr).
1766.0	P11	P	D4		5	Directionally drilled 12 1/4" hole from 1666m - 1766mMD (TD). Control drilled at 30m/hr instantaneous ROP for LWD logs.
1766.0	P11	P	F4		3.5	Ciculated hole clean. Shaker screens initially blinded by fine, sticky cuttings. Reduced pump rate to 815gpm for first bottoms up then gradually increased pump rate to 1080gpm for remainder of circulation. Rotated string at 165rpm and reciprocated stand.
1766.0	P11	TP	G8	RE	2.5	Attempted to open trip tank line for flow check. Valve on trip tank return line seized. Changed out valve on return line whilst circulating and working string.

DFE above MSL : 38.0m | Lat : 38 Deg 12 Min 25.077 Sec | Spud Date : 10 May 2008 | Release Date : 25 May 2008

Water Depth : 39.5m | Long : 147 Deg 37 Min 9.810 Sec | Spud Time : 19.30 | Release Time : 22.30

Date : 18 May 2008 **Daily Cost : US$ 1140250** **Report Number : 10**

1766.0	P11	P	G8		2.5	Flow checked, POOH from 1766m - 1540m, 30k o/pull at 1540m, wash and reamed throught tight spot at 1540 - 1530m, continued POOH.

Date : 19 May 2008 **Daily Cost : US$ 650000** **Report Number : 11**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1766.0	P11	P	G8		2.5	Continued POOH working tight spots with 30k o/pull at 1283 - 1273m and 1253 - 1178m. 40k o/pull at 1178m and hole swabbing approx 2bbls.
1766.0	P11	P	D7		5	Pumped out from 1178m - 919m with 550 gpm / 1000 psi. Hole packed off at 919m with 30klb overpull. Worked string and regained circulation. Continued to pump and back ream from 919m - 747m with 1050 gpm / 2200 psi / 120 rpm. Hole swabbing when attempting to POOH without pumps.
1766.0	P11	P	F4		1	Circulated hole clean inside casing shoe.
1766.0	P11	P	G8		3.5	RIH to 1737m. No obstructions observed. Made up TDS at 1737m and washed down. Tagged 8m fill at 1758m.
1766.0	P11	P	F4		2.5	Washed to bottom at 1766m. Circulated hole clean at 1080gpm / 160rpm whilst reciprocating stand. Observed large quantities of fines over lower shaker screens and small cuttings/cavings over upper shaker screens after 1.5 x bottoms up. Cavings indentified as originating from lower Lakes Entrance. Circulated until clean over shakers.
1766.0	P11	P	G8		6	Flow checked. POOH wet to 1410m. Pumped slug. Continued POOH to BHA. Hole in good condition - maximum of 10-15klb overpull with no backreaming required.
1766.0	P11	P	G6		3.5	POOH with BHA. Laid out LWD tools and BHA.

Date : 20 May 2008 **Daily Cost : US$ 650000** **Report Number : 12**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1766.0	P11	P	G6		0.5	Completed laying out 12 1/4" DD / LWD tools.
1766.0	P11	P	G1		1	Held JSA and rigged up Schlumberger wireline.
1766.0	P11	P	G1		1	Picked up and made up PEX tool string.
1766.0	P11	P	E3		5	RIH with log #1 PEX-HRLA-BHC at 02.30 hours. Logged down from 747m to 1700m. Pulled back and logged repeat section from 1675m - 1565m. Ran back down to 1760m max wireline depth. Unable to work past 1760m. Logged up with main pass from 1760m - 1300m with caliper to casing shoe. POOH. Laid out tool string.
1766.0	P11	P	G1		2	Picked up and made up MDT tools. Changed out MDT probe. Performed tool checks.
1766.0	P11	P	E3		10	RIH with log #2 : MDT - GR : Took pretest pressures at the following depths - 1582.4m,1584.0m, 1581.0m, 1575.50m, 1574.0m,1573.8m, 1578.40m, 1591.4m, 1593.5m, 1602.0m, 1609.0m, 1613.5m, 1624.0m, 1656.5m, 1681.5m, 1650.0m, 1593.7m, 1580.7m. Took samples at 1582.4m (x2) and 1593.7 (x1).
1766.0	P11	P	E3		3	POOH with MDT. Recovered samples. Laid out MDT tools. Rigged down Schlumberger.
1766.0	P21	P	G8		1.5	Made up 5 1/2" mule shoe and RIH on 5 1/2" drillpipe.

Date : 21 May 2008 **Daily Cost : US$ 1039500** **Report Number : 13**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1766.0	P21	P	G8		3.5	RIH with mule shoe on 5 1/2" drillpipe to 1765m.
1766.0	P21	P	F4		0.5	Circulated bottoms up.
1766.0	P21	P	F3		1.5	Rigged up cement head and lines, pumped 10 bbls drill water. Test lines to 1000psi. Set abandonment plug #1A from 1776m-1616m : 85 bbls off 15.80 ppg Class G slurry (Caliper volume plus 10% excess). Displaced with 2 bbls drill water followed by 98 bbls mud.
1766.0	P21	P	G8		0.5	Rigged down cement line and cement head. POOH to 1613m.
1766.0	P21	P	F4		1	Circulated 1.5 times bottoms up. Dumped 170 bbls contaminated mud.
1766.0	P21	P	F3		1	Rigged up cement head and lines, pumped 10 bbls drill water. Test lines to 1000 psi. Set abandonment plug #1B from 1616m - 1513m : 64 bbls of 15.80 ppg Class G slurry (Caliper volume plus 20% excess). Displaced with 2 bbls drill water followed by 90 bbls mud.

DFE above MSL : 38.0m | Lat : 38 Deg 12 Min 25.077 Sec | Spud Date : 10 May 2008 | Release Date : 25 May 2008

Water Depth : 39.5m | Long : 147 Deg 37 Min 9.810 Sec | Spud Time : 19.30 | Release Time : 22.30

Date : 21 May 2008 **Daily Cost : US$ 1039500** **Report Number : 13**

1766.0	P21	P	G8		0.5	Rigged down cement line and cement head. POOH to 1406m.
1766.0	P21	P	F4		1	Circulated 1.5 times bottoms up. Dumped 170 bbls contaminated mud.
1766.0	P21	P	G1		0.5	Adjusted link tilt clamps on bails to allow elevators to reach mousehole.
1766.0	P21	P	G2		4.5	POOH laying out 5 1/2" drill pipe: laid out 60 singles.
1766.0	P21	P	G8		1.5	RIH. Washed down from 1398m to 1407m and tagged top of plug #1B at 1407m with 5k down.
1766.0	P21	P	F3		2	POOH to 903m. Spotted 50 bbls high vis.
1766.0	P21	P	G8		0.5	POOH to 805m.
1766.0	P21	P	F3		1.5	Rigged up cement head and lines. Pumped 10 bbls drill water. Tested lines to 1000 psi. Set abandonment plug #2 from 805m - 700m : 58 bbls of 15.80 ppg Class G slurry. Displaced with 2 bbls drill water followed by 37 bbls mud.
1766.0	P21	P	G8		0.5	Rigged down cement line and cement head. POOH to 599m.
1766.0	P21	P	F4		0.5	Circulated 1.5 times bottoms up. No cement returns observed.
1766.0	P21	P	G2		3	POOH laying out 5 1/2" drill pipe: laid out 45 singles

Date : 22 May 2008 **Daily Cost : US$ 730000** **Report Number : 14**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1766.0	P21	P	G2		1	POOH laying out 5 1/2" drill pipe.
1766.0	P21	P	G24		1.5	Flushed Bops, riser, kill and choke lines and surface lines with sea water.
1766.0	P21	P	P1		0.5	Tested cement plug #2 to 1000 psi for10 minutes: positive test.
1766.0	P21	P	G13		7	Nipple down diverter system and Bop's.
1766.0	P21	P	G12		0.5	Removed 2 1/16" wing valve from well head.
1766.0	P21	P	G24		0.5	Removed flow line for preparing to skid rig.
1766.0	P21	P	G12		0.5	Retrieved wear bushing.
1766.0	P21	P	G6		4	Picked up and made up 13 3/8" casing cutter. RIH to 126m.
1766.0	P21	P	G17		0.5	Cut 13 3/8" casing at 126m.
1766.0	P21	P	G8		0.5	POOH with casing cutter and laid out same.
1766.0	P21	P	G9		6	Made up well head running tool to well head. POOH with 13 3/8" casing and well head. Laid out well head and x/o. Laid out 8 jnts 13 3/8" casing and MLS hanger.
1766.0	P21	P	G12		1.5	Picked up well head. Break out and laid out running tool from well head and laid out same.

Date : 23 May 2008 **Daily Cost : US$ 650000** **Report Number : 15**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1766.0	P21	P	G8		1.5	RIH with mule shoe on 5 1/2" drill pipe to 207m.
1766.0	P21	P	F3		0.5	Spotted 25 bbls h/vis at 207m. POOH to 157m.
1766.0	P21	P	F3		1	Rigged up cement head and lines, pumped 5 bbls sea water. Tested lines to 500 psi, and pumped 5 bbls sea water. Mixed and pumped cement plug #3 with 93 bbls "G" class at 15.80 ppg slurry. Displaced with 6 bbls sea water: plug #3 from 157m - 95m.
1766.0	P21	P	G8		1	Rigged down cement line and head. POOH to 95m. Circulated hole clean. POOH.
1766.0	P21	P	G7		1.5	Made up 30" casing cutting assembly. RIH to 78m.
1766.0	P21	P	G17		3	Cut 30" casing at 78m. No indication of casing being cut.
1766.0	P21	TP	G8	RE	1	One hour lost for racking back first stand of drill pipe as top Drive hydrualics inoperable.
1766.0	P21	P	G8		0.5	POOH with casing cutter. Change out knifes on casing cutter.
1766.0	P21	P	G17		3.5	RIH with casing cutter to 78m. Cut casing at 78 m. Indication of casing being cut, lost returns, torque increased and pump pressure decreased.
1766.0	P21	TP	G11	RE	2	Drillers display locked up. Trouble shoot and reboot system. Attempted to log onto Hawk system in Norway, no success.
1766.0	P21	P	G8		1	POOH with casing cutter.

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Date : 23 May 2008 **Daily Cost : US$ 650000** **Report Number : 15**

1766.0	P21	P	G8		1	Changed out knifes on casing cutter. RIH to 78m.
1766.0	P21	P	G17		1.5	Cut casing at 78m. Indication of casing being cut, no returns.
1766.0	P21	TP	G11	RE	3	Drillers display locked up. Trouble shoot and reboot system. Log onto HAWK system in Norway, retified problem. Reboot system.
1766.0	P21	P	G8		1	POOH with casing cutter and laid out same.
1766.0	P21	P	G6		0.5	Make up casing spear.
1766.0	P21	P	G24		0.5	Move CTU work platform away from CTU.

Date : 24 May 2008 **Daily Cost : US$ 600000** **Report Number : 16**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1766.0	P21	P	G18		1	RIH with 30" casing spear, engaged spear. Attempted to pull 30" casing with 100k, 120k, 140k, 160k overpull. No success. Activated J lock release on 30" conductor at 77.5m and pulled casing. Picked up casing 0.30m.
1766.0	P21	P	G12		1	Removed ICON clamp from 30" conductor. Recoved J lock cable to surface.
1766.0	P21	P	G2		2	POOH with casing. Casing spear jammed in casing. Lay out 30" casing with casing spear engaged into casing.
1766.0	P21	P	G2		3	Changed out bails, elevators and POOH laying out 30" conductor. Rigged down casing handling equipment.
1766.0	P1	P	M2		6	Moved CTU unit from Texas deck to storage area. Removed all service hose from cantilever. Held PJSM for removing Texas deck extension and rigged up slings to remove CTU work platform from Texas deck. Moved work platform to main deck These operations where carried out in conjunction with repairing burst hydraulic hose on Top Drive System time taken was 2 hours to repair hose.
1766.0	P1	P	M2		1	Rigged up handling equipment, picked up Texas deck extension from Texas deck.
1766.0	P1	TP	M2	RE	3	Attempted to skid out rig package, lock pin left in extended postion. Cut of lock pin assembly on both Port and Starboard sides of cantilever. Major damage to locking pins and associated steel work.
1766.0	P1	P	M2		1.5	Held JSA, skidded rig aft 4m, lower Texas deck extension onto work boat. Rigged down handling equipment.
1766.0	P1	P	G2		5.5	Laid out tubulars from derrick.

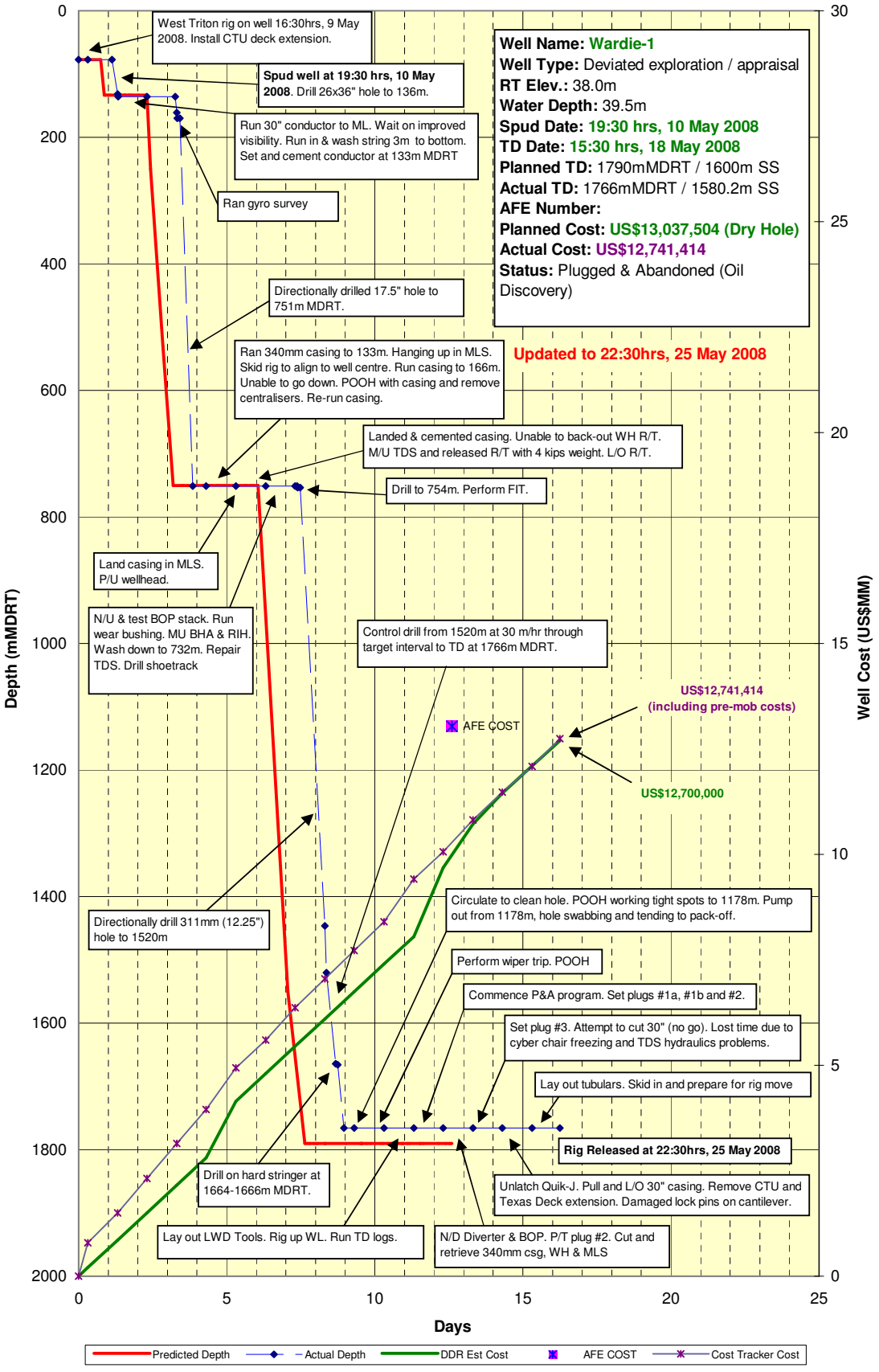
Date : 25 May 2008 **Daily Cost : US$ 750000** **Report Number : 17**

Depth (m)	Phase	Cls	Op	R.C.	Hrs	Activity
1766.0	P1	P	G2		10.5	Laid out tubulars from derrick.
1766.0	P1	P	M2		0.5	Rigged up handling slings for raising Texas deck.
1766.0	P1	P	M2		0.5	Held JSA and reveiwed JSA for skidding rig package.
1766.0	P1	P	M2		0.5	Move drill collars and drill pipe from cantilever deck to main deck for rig move.
1766.0	P1	P	M2		1	Hold JSA & skid the cantilever in to 15ft extension.
1766.0	P1	P	M2		2.5	Connect rig up slings from drawworks onto Texas deck and prepare for lifting. Remove stairway and pick up Kill & Choke hoses. Disconnect gumbo hose.
1766.0	P1	P	M2		2.5	Continue skid the cantilever inboard. Lift & secure the texas deck. Secure the cantliver in stowed position. Meanwhile attach main towing bridle to the Pacific Battler.
1766.0	P1	P	M2		1.5	Sea-fasten the BOP & TDS.
1766.0	P1	P	M2		1.5	Hold JSA. Jack rig down to 2m draft.
1766.0	P1	P	M2		1.5	Carry out water tight integrity checks while attaching secondary tow lines to the Pacific Valkyrie & the Sirus Cove. Continue jack down into the water, lift the legs clear from the seabed and commence the tow to Garfish location. Rig off contract to 3D Oil at 22:30 with rig 1km from Wardie location.

Attachment 9

Well Cost Summary

Time vs Depth Curve



WARDIE-1

DRILLING COSTS		Plan (US$)		Actual (US$)	
RIG OPERATIONS					
131111	Rig rate	$4,125,000		$4,468,750	
131113	Consumables	$31,500		$8,125	
131114	Rig catering	$9,000		$9,750	
131117	Additional crew at 50%	$29,552		$32,014	
	Sub Total		$4,195,052		$4,518,639
DRILLING & COMPLETION MATERIALS & SUPPLIES					
131121	Rig fuel lubes & water	$265,200		$287,300	
131122	Supply boat fuel, lubes & water	$644,640		$645,838	
131123	Consumables & software	$3,000		$3,250	
131124	Drilling fluids	$181,800		$116,447	
131125	Wellheads & MLS	$346,220		$328,970	
131126	Bits/hole openers	$116,978		$120,900	
131127	Casing and liner	$177,119		$113,498	
131128	Casing accessories	$53,858		$11,289	
131132	Conductor & surface casing	$249,387		$233,523	
131133	Brines and completion/testing fluids	$60,000		$0	
131137	Cement, additives, spacers & ads	$87,940		$57,096	
	Sub Total		$2,186,143		$1,918,110
DRILLING & COMPLETION SERVICES					
131144	Downhole Drilling Tools	$60,158		$54,493	
131146	Wellhead Services - Rentals & Engineers	$48,900		$37,156	
131147	Drilling /Completion Supervision	$421,000		$438,750	
131148	Shallow Gas Survey	$0		$0	
131149	Abandonment Equipment and Services	$7,000		$48,854	
131150	Real Time Data Transfer	$9,900		$4,950	
131151	Rig inspection, SMS audits etc	$2,722		$2,722	
131153	Rig positioning	$47,900		$21,931	
131154	Solid control, filtration equipment	$15,000		$0	
131155	Solids control/filtration/environmental engineers	$0		$0	
131156	Weather forecasting, medical support	$3,240		$3,623	
131157	Communications	$15,302		$16,221	
131158	ROV/diving	$76,610		$55,941	
131160	Mud engineering & Centrifuge services	$63,749		$68,731	
131161	Cement services, rental tools & equipment	$58,241		$53,740	
131162	Casing/tubing running - crew and equipment	$123,636		$91,967	
131163	Cement engineer	$36,322		$26,000	
131164	Well Surveying - crew, equipment and support	$84,480		$60,422	
131165	H2S services	$20,000		$0	
131166	Fishing services	$42,000		$65,259	
131167	Directional services - d.driller & support	$74,900		$45,630	
131169	Directional drilling equipment - excl MWD/LWD - eval	$411,176		$313,605	
	Sub Total		$1,622,235		$1,409,995
EVALUATION & TESTING					
131170	MWD/LWD personnel	$63,080		$46,120	
131171	Mud logging services (contract in A$)	$62,487		$49,706	
131172	MWD/LWD logging	$48,423		$59,360	
131173	Electric logging, equipment and services	$1,103,278		$724,530	
131178	Performance management	$16,200		$0	
131180	Daily reporting system	$3,900		$7,296	
131183	Wellsite geology	$44,000		$9,500	
131194	Operator sundries	$8,000		$0	
	Sub Total		$1,349,367		$896,513
LOGISTICS					
131201	Marine Transport	$1,350,158		$1,651,933	
131204	Helicopters	$410,373		$444,571	
131212	Shore Base Services	$249,072		$260,000	
131213	Mob/demob	$12,960		$0	
	Sub Total		$2,022,563		$2,356,504
OTHER					
131220	Miscellaneous	$0		$0	
	Sub Total		$0		$0
WELL DESIGN & MANAGEMENT					
131253	Engineering planning & operations support	$297,000		$297,000	
	Sub Total		$297,000		$297,000
OPERATOR					
131261	Operator own costs (Insurance)	$126,000		$126,000	
	Sub Total		$126,000		$126,000
	TOTAL DRILLING		$11,798,360		$11,522,761

TESTING COSTS		Plan (US$)	Actual (US$)
131174	E-log processing	$244,030	$19,990
131175	Downhole testing tools	$233,765	$66,083
131176	Perforating	$82,954	$27,100
131177	Nitrogen services	$0	$0
131179	Acidising equipment,consumables & services	$0	$0
131181	Downhole monitoring - Gauges & PVT	$96,788	$57,000
131182	Drillstem Testing	$203,226	$33,337
131184	Fluid analysis	$0	$0
131185	Slickline services, plugs, tools & personnel	$115,965	$24,000
131187	Completion Assembly make up	$0	$0
131188	Rig Modifications (Testing)	$30,000	$30,000
131189	Completion/Testing Supervision	$372,000	$192,000
131190	Sedimentology	$0	$0
131191	Surface testing equipment	$1,148,772	$615,105
131192	Surface Sampling & Bottles	$208,116	$52,747
131193	Deluge System	$90,960	$38,505
	TOTAL TESTING	$2,826,576	$1,155,868

	Plan (US$)	Actual (US$)
TOTAL WELL COST	$14,624,936	$12,678,629

Attachment 10

Description of Cuttings

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
		311mm / 12.25" hole section drilled from 751m MDRT commencing 04:00 hrs, 17 May 2008.							
		All sample returns to seabed above 751m.							
		20m sample interval							
751-770	80	**CALCARENITE:** Light olive grey to olive grey in part, minor white to pale yellow, moderately hard to hard, very fine to coarse, angular to sub-angular, translucent to opaque sparry calcite, minor silt, minor rounded fine sand in part, minor black lithics, minor glauconite, highly calcareous, well cemented, poor visible porosity.	PVP	-	-	-	-	-	-
	10	**LOOSE SAND:** Fine to medium, moderately sorted, sub-rounded to rounded, translucent to transparent quartz, minor orange to yellow quartz, trace cryptocrystalline pyrite. Minor coarse to very coarse rounded clear to frosted quartz.	PIP	-	-	-	-	-	-
	5	**SKELETAL FRAGMENTS:** Pale yellow to orange to grey, dominantly bivalve fragments, minor bryozoans.		-	-	-	-	-	-
	5	**CALCISILTITE:** Medium grey to olive grey to occasionally black, soft to hard, highly calcareous, minor to common clastic silt fraction grading in part to fine sand.	PVP	-	-	-	-	-	-
	Tr	**SANDSTONE:** Moderate olive brown, hard, very fine, welll sorted sub-rounded quartz and minor lithics, calcite cemented, silty matrix.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 64.2%; Dolomite: 12.2%							
790	70	**CALCARENITE:** as above, increase in clastic silt fraction.	PVP	-	-	-	-	-	-
	25	**CALCISILTITE:** Medium grey to olive grey to occasionaly black, dominantly soft, minor hard, highly calcareous, minor to common clastic silt fraction grading in part to fine sand.	PVP	-	-	-	-	-	-
	5	**LOOSE SAND:** as above.	PIP	-	-	-	-	-	-
	Tr	**SKELETAL FRAGMENTS:** dominantly bivalve fragments, minor bryozoans, trace echinoid spines.		-	-	-	-	-	-
	Tr	**SANDSTONE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 66.2%; Dolomite: 12.8%							
810	75	**CALCARENITE:** as above, common clastic silt fraction.	PVP	-	-	-	-	-	-
	20	**CALCISILTITE:** Medium grey to olive grey to occ black, dominantly soft to minor hard, highly calcareous, minor to common clastic silt fraction grading in parts to fine sand.	PVP	-	-	-	-	-	-
	5	**LOOSE SAND:** as above, dominantly fine to medium grained, trace coarse grains.		-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
	Tr	**SKELETAL FRAGMENTS:** Pale yellow to orange to grey, dominantly bivalve fragments, minor bryozoans, trace echinoid spines.		-	-	-	-	-	-
	Tr	**SANDSTONE:** Moderate olive brown, hard, very fine grained, welll sorted, sub-rounded quartz and minor lithics, calcite cemented, silty matrix.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 67.4%; Dolomite: 12.8%							
830	60	**CALCARENITE:** as above, common clastic silt fraction.	PVP	-	-	-	-	-	-
	40	**CALCISILTITE:** Medium grey to olive grey to occasionally black, dominantly soft, minor hard, highly calcareous, minor to common clastic silt fraction, grading in part to fine sand.	PVP	-	-	-	-	-	-
	Tr	**LOOSE SAND:** as above, dominantly fine to medium grained, trace coarse grains.		-	-	-	-	-	-
	Tr	**SKELETAL FRAGMENTS:** Pale yellow to orange to grey, dominantly bivalve fragments, minor bryozoans, trace echinoid spines.		-	-	-	-	-	-
		Calcimetry: Calcite: 61.0%; Dolomite: 10.3%							
850	50	**CALCARENITE:** as above, common clastic silt fraction.	PVP	-	-	-	-	-	-
	50	**CALCISILTITE:** Medium grey to olive grey to occasionally black, dominantly soft to firm, minor hard, highly calcareous, minor to common clastic silt fraction, grading in part to fine sand.	PVP	-	-	-	-	-	-
	Tr	**LOOSE SAND:** as above.		-	-	-	-	-	-
	Tr	**SKELETAL FRAGMENTS:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite: 70.6%; Dolomite: 9.6%							
870	60	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
	40	**CALCARENITE:** as above, dominantly hard but crushed in parts.	PVP	-	-	-	-	-	-
	Tr	**LOOSE SAND:** as above, dominantly fine grains.		-	-	-	-	-	-
	Tr	**SKELETAL FRAGMENTS:** as above, bivalve fragments, bryozoans, trace echinoid spines.		-	-	-	-	-	-
		Calcimetry: Calcite: 57.8%; Dolomite: 8.3%							
890	50	**CALCARENITE:** as above, increase in clastic silt fraction.	PVP	-	-	-	-	-	-
	50	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
	Tr	**LOOSE SAND:** as above, dominantly fine to medium grained, trace coarse to very coarse frosted & rounded quartz grains.		-	-	-	-	-	-
	Tr	**SKELETAL FRAGMENTS:** Pale yellow to orange to grey, dominantly bivalve fragments, minor bryozoans, trace echinoid spines.		-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
	Tr	**CALCILUTITE:** White, hard, amorphous.		-	-	-	-	-	-
		Calcimetry: Calcite: 57.8%; Dolomite: 7.7%							
910	50	**CALCARENITE:** as above, common clastic silt fraction.	PVP	-	-	-	-	-	-
	45	**CALCISILTITE:** Medium grey to olive grey to occassionally black, dominantly soft to firm, minor hard, highly calcareous, minor to common clastic silt fraction, grading in part to fine sand.	PVP	-	-	-	-	-	-
	5	**CALCILUTITE:** as above.		-	-	-	-	-	-
	Tr	**LOOSE SAND:** as above, dominantly fine to medium grained, trace coarse to very coarse, frosted & rounded quartz grains.		-	-	-	-	-	-
	Tr	**SKELETAL FRAGMENTS:** Dominantly bivalve fragments, minor bryozoans, trace echinoid spines.		-	-	-	-	-	-
		Calcimetry: Calcite: 38.5%; Dolomite: 6.4%							
930	45	**CALCARENITE:** as above, common clastic silt fraction.	PVP	-	-	-	-	-	-
	45	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
	10	**CALCILUTITE:** White to pale grey, hard, amorphous, slightly silty.		-	-	-	-	-	-
	Tr	**LOOSE SAND:** as above.		-	-	-	-	-	-
	Tr	**SKELETAL FRAGMENTS:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite 59.7%; Dolomite: 12.8%							
950	60	**CALCISILTITE:** Predominantly olive grey, medium grey, dominantly soft to firm, minor hard, highly calcareous, minor to common clastic silt fraction, grading in part to fine sand.	PVP	-	-	-	-	-	-
	35	**CALCARENITE:** as above, common clastic silt fraction.	PVP	-	-	-	-	-	-
	5	**CALCILUTITE:** as above.		-	-	-	-	-	-
	Tr	**LOOSE SAND:** as above.		-	-	-	-	-	-
	Tr	**SKELETAL FRAGMENTS:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite: 70.6%; Dolomite: 10.9%							
970	65	**CALCISILTITE:** Dominantly olive grey, medium grey, soft to firm, minor hard, moderately to highly calcareous, minor to common clastic silt fraction, grading in part to fine sand.	PVP	-	-	-	-	-	-
	30	**CALCARENITE:** as above, common clastic silt fraction.	PVP	-	-	-	-	-	-
	5	**CALCILUTITE:** as above.		-	-	-	-	-	-
	Tr	**LOOSE SAND:** as above.		-	-	-	-	-	-
	Tr	**SKELETAL FRAGMENTS:** Pale yellow to orange to grey, dominantly bivalve fragments, minor bryozoans, trace echinoid spines.		-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
		Calcimetry: Calcite: 73.9%; Dolomite: 14.8%							
990	80	**CALCISILTITE:** Pale grey to medium grey, olive grey, dominantly firm to hard, blocky, moderately to highly calcareous, minor to common clastic silt fraction, grading in part to fine sand. Possible dolomitic cement indicated by slower HCl reaction. Trace very fine dark mafic grains. Rare pyrite.	PVP	-	-	-	-	-	-
	10	**CALCILUTITE:** as above.		-	-	-	-	-	-
	10	**CALCARENITE:** Light olive grey to olive grey in part, minor white to pale yellow, moderately hard to hard, very fine to fine grained, angular to sub-angular, translucent to opaque sparry calcite, minor silt, minor black lithics, highly calcareous, well cemented, poor visible porosity.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 65.5%; Dolomite: 12.8%							
1010	80	**CALCISILTITE:** Pale to medium grey to olive grey, as above.	PVP	-	-	-	-	-	-
	10	**CALCILUTITE:** White to pale grey, hard, amorphous, slightly silty.		-	-	-	-	-	-
	10	**CALCARENITE:** as above. Trace shell fragments.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 61.0%; Dolomite: 13.5%							
1030	85	**CALCISILTITE:** Pale to medium grey to olive grey, as above.	PVP	-	-	-	-	-	-
	10	**CALCILUTITE:** as above.		-	-	-	-	-	-
	5	**CALCARENITE:** as above. Trace shell fragments.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 62.9%; Dolomite: 11.6%							
1050	85	**CALCISILTITE:** Pale to medium grey to olive grey, as above.	PVP	-	-	-	-	-	-
	10	**CALCILUTITE:** as above.		-	-	-	-	-	-
	5	**CALCARENITE:** as above. Trace bryozoan fragments.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 57.8%; Dolomite: 10.3%							
1070	95	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
	5	**CALCILUTITE:** as above.		-	-	-	-	-	-
	Tr	**CALCARENITE:** as above. Trace shell fragments.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 59.7%; Dolomite: 11.6%							
1090	95	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
	5	**CALCILUTITE:** as above.		-	-	-	-	-	-
	Tr	**CALCARENITE:** as above. Trace foraminifera, trace bryozoan.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 73.9%; Dolomite: 11.6%							
1110	90	**CALCISILTITE:** Pale grey to medium grey, olive grey, as above.	PVP	-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
	10	**CALCILUTITE:** White to pale grey, hard, amorphous, slightly silty.		-	-	-	-	-	-
	Tr	**CALCARENITE:** as above. Trace foraminifera, trace bryozoans, trace echinoid fragments.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 74.5%; Dolomite: 10.3%							
1130	90	**CALCISILTITE:** Pale grey to medium grey, olive grey, as above.	PVP	-	-	-	-	-	-
	5	**CALCILUTITE:** as above.		-	-	-	-	-	-
	5	**CALCARENITE:** as above. Trace foraminifera, trace bryozoans, trace echinoid fragments.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 68.1%; Dolomite: 12.2%							
1150	85	**CALCISILTITE:** as above. Rare disseminated pyrite.	PVP	-	-	-	-	-	-
	10	**CALCILUTITE:** White to predominantly light to medium olive grey, soft to firm, occasionally hard, amorphous, slightly silty.		-	-	-	-	-	-
	5	**CALCARENITE:** as above, trace bryozoans, trace echinoid fragments.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 61.7%; Dolomite: 9.0%							
1170	85	**CALCISILTITE:** Pale to medium grey, olive grey, as above. Rare disseminated pyrite.	PVP	-	-	-	-	-	-
	10	**CALCILUTITE:** as above.		-	-	-	-	-	-
	5	**CALCARENITE:** as above, trace bryozoans, trace bryozoan fragments, trace foraminifera, trace microcrystalline pyrite clusters.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 57.8%; Dolomite: 6.4%							
1190	75	**CALCISILTITE:** Olive grey, minor greyish olive, firm to moderately hard, blocky, with common dark specks of ?carbonaceous material, rare disseminated pyrite, rare blocky calcite sparry crystals; Trace medium grey, hard, sub-fissile, with abundant microcrystalline pyrite microlaminae; also trace pyrite masses with pyrite in acicular form replacing probable echinoid spines.	PVP	-	-	-	-	-	-
	20	**CALCILUTITE:** Off-white to light olive grey, firm to moderately hard, sub-blocky, rarely sub-fissile, slightly silty, with common unidentified white silt specks.		-	-	-	-	-	-
	5	**CALCARENITE:** Grading to Calcisiltite, with trace blocky sparry calcite aggregates up to very coarse sand-size.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 61.7%; Dolomite: 9.6%							

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
1210	60	**CALCILUTITE:** Very light to medium olive grey, firm, softening in water (slightly dispersive), sub-blocky to sub-fissile, with rare darker streaks, trace pyrite and glauconite, trace loose forams (common ovoid type) and echinoid spines.		-	-	-	-	-	-
	40	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
	Tr	**CALCARENITE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 64.2%; Dolomite: 12.8%							
1230	60	**CALCILUTITE:** as above.		-	-	-	-	-	-
	40	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 57.8%; Dolomite: 6.4%							
1250	50	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
	50	**CALCILUTITE:** as above; with rare very fine glauconite; also trace loose glauconite nodules, rarely mammillated, medium lower to very coarse lower sand sized; trace loose bryozoa & benthic forams.		-	-	-	-	-	-
	Tr	**CALCARENITE:** Dark grey, slightly translucent, speckled with ?pyrite aggregates.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 54.6%; Dolomite: 7.9%							
1270	70	**CALCILUTITE:** as above.		-	-	-	-	-	-
	30	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 59.1%; Dolomite: 5.8%							
1290	70	**CALCILUTITE:** as above.		-	-	-	-	-	-
	30	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 57.8%; Dolomite: 7.7%							
1310	75	**CALCILUTITE:** as above, more greenish grey than olive grey, firm to moderately hard, blocky, slightly more argillaceous (less calcareous); rare loose foraminifera (both benthic and planktic), trace loose bryozoan fragments.	PVP	-	-	-	-	-	-
	25	**CALCISILTITE:** Olive grey, firm to moderately hard, blocky, argillaceous, with common sand-sized recrystallised shell material, rare pyrite, grading to Calcilutite.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 41.7%; Dolomite: 7.7%							
		Start 10m sample interval from 1310m onwards							
1320	80	**CALCILUTITE:** as above.		-	-	-	-	-	-
	20	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
1330	80	**CALCILUTITE:** as above; trace loose glauconite nodules as above. Finer cuttings are rich in loose forams (mainly benthic forms, diverse range of taxa; rare planktics).		-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
	20	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Not performed							
1340	90	**CALCILUTITE:** as above.		-	-	-	-	-	-
	10	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
1350	90	**CALCILUTITE:** as above.		-	-	-	-	-	-
	10	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		Note: 1350m sample was taken while pumps were off – only very fine cuttings in tray.		-	-	-	-	-	-
		Calcimetry: Not performed							
1360	90	**CALCILUTITE:** as above.		-	-	-	-	-	-
	10	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
1370	90	**CALCILUTITE:** Greenish grey, firm to moderately hard, sub-blocky to sub-fissile, argillaceous, rarely grading to calcareous Claystone, with common loose forams as above.		-	-	-	-	-	-
	10	**CALCISILTITE:** Olive grey, firm to hard, blocky, with abundant microcrystalline calcite (best seen in dry samples).	PVP	-	-	-	-	-	-
		Calcimetry: Not performed							
1380	95	**CALCILUTITE:** as above.		-	-	-	-	-	-
	5	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
1390	95	**CALCILUTITE:** as above.		-	-	-	-	-	-
	5	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 41.1%; Dolomite: 6.4%							
1400	95	**CALCILUTITE:** as above, with trace pyritic streaks; rare medium dark grey, more fissile, hard Calcilutite.		-	-	-	-	-	-
	5	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
1410	100	**CALCILUTITE:** as above, grading to calcareous Claystone.		-	-	-	-	-	-
	Tr	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 25.7%; Dolomite: 5.1%							
1420	100	**CALCILUTITE:** as above, grading to calcareous Claystone.		-	-	-	-	-	-
	Tr	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
1430	100	**CALCILUTITE:** as above, grading to calcareous Claystone.		-	-	-	-	-	-
	Tr	**CALCISILTITE:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite: 50.7%; Dolomite: 6.4%							
1440		***No sample collected***.							
1450	100	**CALCILUTITE:** as above, grading to calcareous Claystone, trace very fine glauconite, trace foraminifera.		-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
	Tr	**CALCISILTITE:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite: 48.8%; Dolomite: 5.8%							
1460	100	**CALCILUTITE:** as above.		-	-	-	-	-	-
	Tr	**CALCISILTITE:** as above.		-	-	-	-	-	-
1470	100	**CALCILUTITE:** as above, grading to calcareous Claystone, trace very fine glauconite (slight increase over previous samples), trace foraminifera.		-	-	-	-	-	-
	Tr	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 41.7%; Dolomite: 3.2%							
1480	100	**CALCILUTITE:** as above, grading to calcareous Claystone, minor very fine to fine glauconite (slight increase over previous samples), trace foraminifera.		-	-	-	-	-	-
	Tr	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
1490	100	**CALCILUTITE:** as above, grading to calcareous Claystone, minor very fine to medium glauconite pellets and nodules, trace foraminifera, slightly silty in parts.		-	-	-	-	-	-
	Tr	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		Calcimetry: Calcite: 35.3%; Dolomite: 2.6%							
1500	100	**CALCILUTITE:** as above, grading to calcareous Claystone, trace very fine to medium glauconite pellets and nodules, trace foraminifera, slightly silty in part.		-	-	-	-	-	-
	Tr	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
1510		***No sample collected***.							
		Calcimetry: No sample							
1520	100	**CALCILUTITE:** Greenish grey to olive grey, firm to moderately hard, sub-blocky to sub-fissile, argillaceous, grading to moderately calcareous Claystone, rare (1%) very fine to medium glauconite pellets and nodules, trace foraminifera, slightly silty in part.		-	-	-	-	-	-
	Tr	**CALCISILTITE:** as above.	PVP	-	-	-	-	-	-
		5m sample interval commenced at 1520m MDRT.							
1525	95	**CALCAREOUS CLAYSTONE:** Light greenish grey to olive grey, firm to moderately hard, sub-blocky to sub-fissile, argillaceous, moderately to highly calcareous, minor very fine to medium glauconite pellets and nodules, trace foraminifera, slightly silty in part.		-	-	-	-	-	-
	5	**CALCILUTITE:** Light greenish grey to grey, soft to firm, amorphous to blocky, argillaceous, highly calcareous, common to abundant disseminated fine glauconite pellets.		-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
1530	90	**CALCAREOUS CLAYSTONE:** Light greenish grey to olive grey, firm to moderately hard, sub-blocky to sub-fissile, argillaceous, moderately to highly calcareous, rare (1%) very fine to medium glauconite pellets and nodules, trace foraminifera, slightly silty.		-	-	-	-	-	-
	10	**CALCILUTITE:** as above.		-	-	-	-	-	-
		Calcimetry: Not performed							
1535	85	**CALCAREOUS CLAYSTONE:** as above, with 5% loose and disseminated fine to coarse glauconite pellets and clusters.		-	-	-	-	-	-
	15	**CALCILUTITE:** as above.		-	-	-	-	-	-
1540	85	**CALCAREOUS CLAYSTONE:** as above, with common to abundant (20%) loose and disseminated fine to coarse glauconite pellets and clusters. Trace echinoid spines.		-	-	-	-	-	-
	15	**CALCILUTITE:** as above.		-	-	-	-	-	-
1545	85	**CALCAREOUS CLAYSTONE:** as above, with abundant (25%) loose and disseminated fine to coarse sand-sized glauconite pellets and clusters. Trace shell fragments, trace pyrite clusters.		-	-	-	-	-	-
	15	**CALCILUTITE:** as above, hard in part.		-	-	-	-	-	-
1550	80	**CALCAREOUS CLAYSTONE:** as above, with abundant (30%) loose and disseminated fine to coarse glauconite pellets and clusters. Trace shell fragments, trace pyrite clusters.		-	-	-	-	-	-
	20	**CALCILUTITE:** as above, hard in part.		-	-	-	-	-	-
		Calcimetry: Calcite: 31.8%; Dolomite: 1.9%							
1555	80	**CALCAREOUS CLAYSTONE:** as above, becoming brownish grey in part, grading to Siltstone. With abundant (30%) loose and disseminated fine to coarse glauconite pellets and clusters. Trace shell fragments, trace pyrite clusters. Trace broken crystalline calcite vein material.		-	-	-	-	-	-
	20	**CALCILUTITE:** as above, hard in part.		-	-	-	-	-	-
1560	50	**CALCAREOUS CLAYSTONE:** as above, grading to Siltstone. Common to abundant (20%) glauconite pellets and clusters (as above). Trace shell fragments, foraminifera and bryozoan fragments, trace pyrite clusters. Trace broken crystalline calcite vein material.		-	-	-	-	-	-
	50	**CALCILUTITE:** as above, hard in part, grading to calcareous Claystone		-	-	-	-	-	-
1565		***Sample not collected***.							
1570	75	**SILTSTONE:** Medium brown grey to olive grey to brown, firm to hard, blocky, slightly carbonaceous, non to slightly calcareous.	PVP	-	-	-	-	-	-
	20	**CALCILUTITE:** lLght grey to greenish grey, firm to hard, grading to calcareous Claystone, silty.		-	-	-	-	-	-
	5	**LOOSE SAND:** Very fine to coarse, poorly sorted, sub-rounded to rounded, clear translucent quartz grains.	FIP	-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
		Calcimetry: Calcite: 14.8%; Dolomite: 0.6%							
1575	55	**SILTSTONE:** Medium brown grey to olive grey to brown, firm to hard, blocky, slightly carbonaceous, non to slightly calcareous.	PVP	Nil	Trace pinpoint pale greenish yellow	Moderately fast blooming mod bri blue-white	Thin moderately bright blue green fluorescing residual ring	Nil	Poor
	20	**CALCILUTITE:** Light grey to greenish grey, firm to hard, grading to calcareous Claystone, silty.		-	-	-	-	-	-
	20	**COAL:** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in part.		-	-	-	-	-	-
	5	**LOOSE SAND:** as above. Minor glauconite.	FIP	-	-	-	-	-	-
1580	60	**COAL:** as above.		-	-	-	-	-	-
	30	**SILTSTONE:** Medium brown grey to olive grey to brown, firm to hard, blocky, slightly carbonaceous, non to slightly calcareous.	PVP	Nil	Trace pinpoint pale greenish yellow	Moderately fast blooming mod bri blue-white	Thin moderately bright blue green fluorescing residual ring	Very faint pale tea	Poor
	10	**CALCILUTITE:** Light grey to greenish grey, firm to hard, grading to calcareous Claystone, silty.		-	-	-	-	-	-
	Tr	**LOOSE SAND:** Very fine to coarse grained, poorly sorted, sub-rounded to rounded, clear translucent quartz grains. Minor glauconite.		-	-	-	-	-	-
1585	60	**COAL:** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in part.		-	-	-	-	-	-
	25	**SILTSTONE:** as above.	PVP	Nil	1% pinpoint pale greenish yellow	Fast streaming to blooming, bright green blue	Mod wide bright green blue fluorescing residual ring	Pale yellow brown	Fair
	10	**CALCILUTITE:** as above.		-	-	-	-	-	-
	5	**LOOSE SAND:** Fine to very coarse grained, poorly sorted, sub-rounded to rounded, clear translucent quartz grains. Minor glauconite, minor lithic fragments, trace pyrite clusters, trace pyritised quartz.	FIP	-	-	-	-	-	-
1590	60	**COAL:** as above.		-	-	-	-	-	-
	25	**SILTSTONE:** as above, slightly carbonaceous to coaly in part, non to slightly calcareous.	PVP	Nil	1% dull pinkish orange	Slow blooming dull blue white	Very thin very pale green blue fluorescing residual ring	C'less	Poor
	10	**CALCILUTITE:** as above, grading to calcareous Claystone.		-	-	-	-	-	-
	5	**LOOSE SAND:** Fine to very coarse grained, poorly sorted, sub-rounded to rounded clear translucent quartz. Minor glauconite, trace pyrite clusters. Trace pyritised quartz. Minor lithic fragments.	FIP	-	-	-	-	-	-
		Calcimetry: Calcite: 19.3%; Dolomite: 0.8%							
1595	50	**COAL:** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in parts.		-	-	-	-	-	-
	35	**SILTSTONE:** Medium brown grey to olive grey to dark brown, firm to hard, blocky, slightly carbonaceous to coaly in parts, non to slightly calcareous.	PVP	Nil	Trace dull pinkish orange	Slow blooming dull blue white	Thin very pale green blue fluorescing residual ring	C'less	Poor

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
	10	**CALCILUTITE:** Light grey to greenish grey, firm to hard, grading to calcareous Claystone, silty.		-	-	-	-	-	-
	5	**LOOSE SAND:** as above.	FIP	-	-	-	-	-	-
1600	60	**COAL:** as above.		-	-	-	-	-	-
	25	**SILTSTONE:** as above.	PVP	Nil	1% dull pinkish orange	Slow blooming moderately bright blue white	Thin very pale green blue fluorescing residual ring	C'less	Poor
	10	**CALCILUTITE:** as above.		-	-	-	-	-	-
	5	**LOOSE SAND:** as above.	FIP	-	-	-	-	-	-
1605	40	**SILTSTONE:** Medium brown grey to olive grey to dark brown, firm to hard, blocky, slightly carbonaceous to coaly in part, non to slightly calcareous.	PVP	Nil	1% dull pinkish orange	Slow blooming moderately bright blue white	Thin very pale green blue fluorescing residual ring	C'less	Poor
	30	**LOOSE SAND:** Pale grey to brownish grey, very fine upper to coarse upper, dominantly fine grained, poorly sorted, sub-rounded to rounded, clear quartz, minor lithics, minor glauconite.	FIP	-	-	-	-	-	-
	20	**CALCAREOUS CLAYSTONE:** Light grey to greenish grey, firm to hard, moderately to highly calcareous, silty.		-	-	-	-	-	-
	10	**COAL:** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in part.		-	-	-	-	-	-
1610	50	**SILTSTONE:** Medium brown grey to olive grey to dark brown, firm to hard, blocky, slightly carbonaceous to coaly in parts, non to slightly calcareous.	PVP	Nil	10% moderately bright to dull, yellow to orange	Very slow blooming bluish white (also from SLTST with no direct fluor).	Thin pale blue fluorescing residual ring	C'less	Poor
	30	**LOOSE SAND:** Pale grey to brownish grey, very fine upper to very coarse upper, minor clear quartz granules, dominantly medium grained, poorly sorted, sub-rounded to rounded, clear quartz, minor lithics, minor glauconite.	FIP	-	-	-	-	-	-
	15	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
	5	**COAL:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite: 9.3%; Dolomite: 0.6%							
1615	70	**SILTSTONE:** Medium brown grey, olive grey to olive black, firm to hard, blocky, slightly carbonaceous to coaly in parts, non to slightly calcareous.	PVP	Nil	2% dull orange-yellow	Slow, diffuse bluish white	nil	nil	Poor
	20	**LOOSE SAND:** Pale grey to brownish grey, very fine upper to very coarse upper, dominantly medium grained, poorly sorted, sub-rounded to rounded, clear quartz, minor lithics, minor calcite grains, minor glauconite, common sub-angular clear quartz granules, fair inferred porosity.	FIP	Nil	Trace bright light greenish yellow from sand grain fragment with siltstone cemented to it	nil	nil	nil	Poor
	10	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1620	70	**SILTSTONE:** as above.	PVP	Nil	Trace dull orange-yellow	nil	nil	nil	Poor
	15	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
	10	**LOOSE SAND:** as above.	FIP	-	-	-	-	-	-
	5	**COAL:** as above		-	-	-	-	-	-
1625	80	**SILTSTONE:** as above.	PVP		1% very dull yellow	Slow diffuse bluish white	Very thin pale blue fluorescing residual ring	C'less	Poor
	15	**LOOSE SAND:** as above, trace muscovite flakes, trace pyrite, common subangular clear quartz granules.	FIP	Nil	Trace pinpoint bri pale yellow (from sand grain)	nil	nil	nil	Poor
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1630	70	**SILTSTONE:** as above.	PVP	Nil	Trace dull yellow	nil	nil	nil	Poor
	25	**LOOSE SAND:** as above, dominantly medium grained, common sub-angular clear quartz granules, trace muscovite flakes, trace pyrite.	FIP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** Light grey to greenish grey, firm to hard, moderately to highly calcareous, silty.		-	-	-	-	-	-
		Calcimetry: Calcite: 9.6%; Dolomite: 0.4%							
1635	50	**SILTSTONE:** as above.	PVP	Nil	5% pinpoint moderately bright, pinkish orange (from vein calcite rockflour)	Slow, weak diffuse bluish white	Very thin pale blue fluorescing residual ring	C'less	Poor
	30	**COAL:** as above.		-	-	-	-	-	-
	15	**LOOSE SAND:** as above, dominantly medium grained, common sub-angular clear quartz granules, trace muscovite flakes, trace pyrite.	FIP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1640	75	**COAL:** as above.		-	-	-	-	-	-
	15	**SILTSTONE:** as above, commonly coaly, in part grading to carbonaceous very fine grained Sandstone.	PVP	Nil	Trace bright greenish yellow from calcite veinlets in dark brown Siltstone	nil	Very thin pale blue fluorescing residual ring	C'less	Poor
	5	**LOOSE SAND:** as above.	FIP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1645	40	**SILTSTONE:** Medium brown grey, olive grey to dark brown, firm to hard, blocky, slightly carbonaceous to coaly in part, non to slightly calcareous.	PVP	Nil	1% dull pinkish orange mineral fluorescence	Slow, diffuse blu wh cut from SLTST with no direct fluor.	nil	nil	Poor
	30	**LOOSE SAND:** Pale grey to brownish grey, very fine upper to coarse upper, dominantly medium grained, poorly sorted, sub-rounded to rounded clear quartz, common sub-angular to sub-rounded clear quartz granules, minor lithics, minor glauconite.	FIP	-	-	-	-	-	-
	20	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
	10	**COAL:** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in parts.		-	-	-	-	-	-
1650	65	**COAL:** as above.		-	-	-	-	-	-
	25	**SILTSTONE:** as above, commonly coaly, in part, grading to carbonaceous very fine grained Sandstone, poor visible porosity.	PVP	Nil	Trace pinpoint pinkish orange and light yellow	nil	nil	nil	Nil

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
	5	**LOOSE SAND:** as above, dominantly medium grained, trace muscovite flakes, trace pyrite, common sub-angular clear quartz granules.	FIP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** Light grey to greenish grey, firm to hard, moderately to highly calcareous, silty.		-	-	-	-	-	-
		Calcimetry: Calcite: 8.3%; Dolomite: 0.5%							
1655	50	**LOOSE SAND:** White to pale grey, fine lower to very coarse upper, minor granules, bimodal, dominantly fine to medium and very coarse grained, very poorly sorted, sub-rounded to sub-angular, clear to frosted quartz, trace muscovite, trace lithics, trace glauconite, good inferred porosity.	GIP	-	-	-	-	-	-
	30	**SILTSTONE:** Medium brown grey, olive grey to dark brown, firm to hard, blocky, slightly carbonaceous to coaly in part, non to slightly calcareous, in part grading to carbonaceous very fine grained Sandstone.	PVP	Nil	Trace dull yellowish orange	nil	nil	nil	Nil
	10	**COAL:** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in parts.		-	-	-	-	-	-
	10	**CALCAREOUS CLAYSTONE:** Light grey to greenish grey, firm to hard, moderately to highly calcareous, silty.		-	-	-	-	-	-
1660	85	**LOOSE SAND:** White to pale grey, fine lower to granular, bimodal, dominantly fine to medium and very coarse grained, very poorly sorted, sub-rounded to sub-angular, clear to frosted quartz, trace muscovite, trace lithics, trace glauconite.	GIP	-	-	-	-	-	-
	5	**SILTSTONE:** as above.	PVP	Nil	Trace dull yellowish orange	nil	nil	nil	Nil
	5	**COAL:** as above.		-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1665	45	**SILTSTONE:** as above.	PVP	-	-	-	-	-	-
	30	**COAL:** as above.		-	-	-	-	-	-
	10	**CARBONACEOUS CLAYSTONE:** Dark yellowish brown to brownish grey, firm, elongate, sub-fissile, commonly with dark polished faces (previously as traces, not differentiated from coal).		-	-	-	-	-	-
	10	**LOOSE SAND:** as above.	GIP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1670	80	**COAL:** as above.		-	-	-	-	-	-
	5	**CARBONACEOUS CLAYSTONE:** as above.		-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
	5	**LOOSE SAND:** as above.	FIP	-	-	-	-	-	-
	5	**SILTSTONE:** as above.	PVP	Nil	Trace dull yellowish orange	nil	nil	nil	Nil
		Calcimetry: Calcite: 6.4%; Dolomite: 0.9%							
1675	50	**COAL:** as above.		-	-	-	-	-	-
	20	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
	10	**CARBONACEOUS CLAYSTONE:** as above.		-	-	-	-	-	-
	15	**SILTSTONE:** as above.	PVP	-	-	-	-	-	-
	5	**LOOSE SAND:** as above.	FIP	-	-	-	-	-	-
1680	50	**LOOSE SAND:** Pale grey, very fine upper to granule, dominantly medium lower to medium upper grained, very poorly sorted, sub-angular, sub-spherical, transparent to translucent quartz; trace aggregates, hard, tightly silica cemented with apparent dark brown oil stain (but not confirmed by fluorescence).	GIP	Dark brown patchy oil? stain	Trace dull yellowish orange	No cut	nil	nil	Nil
	40	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
	5	**SILTSTONE:** Pale yellowish brown, speckled dark brown to black with carbonaceous material; also dusky yellowish brown with abundant carbonaceous material and laminae, blocky to sub-fissile, non calcareous, locally with common muscovite.	PVP	-	-	-	-	-	-
	5	**CLAYSTONE:** Pale yellowish brown, firm, sub-blocky, non calcareous; trace of dark brown Claystone.		-	-	-	-	-	-
1685	95	**LOOSE SAND:** Very light grey, as above.	GIP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above; trace pale yellowish brown Claystone.		-	-	-	-	-	-
1690	80	**LOOSE SAND:** White to very pale yellow, very fine to granule, dominantly very coarse upper to coarse upper grained, poorly sorted, angular fragments to sub-rounded, sub-spherical, transparent to translucent quartz.	GIP	-	-	-	-	-	-
	20	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite:2.4%; Dolomite: 0.3%							
1695	90	**LOOSE SAND:** Very pale yellow, coarse upper to granule, dominantly very coarse lower to upper grained, moderately sorted, angular fragments to sub-rounded, sub-spherical, transparent to translucent quartz.	GIP	-	-	-	-	-	-
	10	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1700	95	**LOOSE SAND:** as above.	GIP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1705	60	**LOOSE SAND:** as above.	GIP	-	-	-	-	-	-
	30	**SILTSTONE:** Pale yellowish brown, speckled with black coal and carbonaceous material, firm to moderately hard, sub-blocky to fissile, commonly microlaminated, with irregular coal fragments, rarely very fine sandy; rarely with scattered fine glauconite nodules; also loose mammilated grayish green glauconite (ovoid nodules, medium to coarse sand-sized).	PVP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
	5	**COAL:** as above.		-	-	-	-	-	-

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
1710	35	**LOOSE SAND:** as above, fine upper to granule, dominantly very coarse to granule grained, very poorly sorted, angular fragments to sub-angular grains, rarely rounded, subs-pherical, transparent to translucent quartz, good inferred porosity.	GIP	-	-	-	-	-	-
	60	**SILTSTONE:** as above.	PVP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite: 3.9%; Dolomite: 0.5%							
1715	50	**LOOSE SAND:** as above.	GIP	-	-	-	-	-	-
	45	**SILTSTONE:** as above.	PVP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1720	75	**LOOSE SAND:** as above.	GIP	-	-	-	-	-	-
	15	**SILTSTONE:** as above.	PVP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
	5	**COAL:** as above.		-	-	-	-	-	-
1725	75	**LOOSE SAND:** Light yellowish grey, bimodal, very fine upper to medium upper, and very coarse to granule grained, angular fragments to sub-rounded, transparent to translucent quartz.	GIP	-	-	-	-	-	-
	20	**SILTSTONE:** as above; rarely with abundant very dark green, fine to medium sand-sized glauconite; trace coal and carbonaceous Claystone.	PVP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1730	75	**LOOSE SAND:** as above.	GIP	-	-	-	-	-	-
	20	**SILTSTONE:** as above.	PVP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite: 15.6%; Dolomite: 0.2%							
1735	85	**LOOSE SAND:** as above, coarse upper to granule grained, moderately to poorly sorted, common angular fragments, dominantly sub-rounded, rarely well rounded, sub-spherical, transparent to translucent quartz, trace pinkish quartz. Trace coarse Sandstone aggregate, hard, poor visible porosity, trace light yellow clay, inferred silica cemented, but overgrowths not confirmed, non calcareous.	GIP - PVP	-	-	-	-	-	-
	10	**SILTSTONE:** as above.	PVP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
1740	95	**LOOSE SAND:** as above, dominantly very coarse upper to granule, moderately well sorted.	GIP	-	-	-	-	-	-
	Tr	**SILTSTONE:** as above.	PVP	-	-	-	-	-	-
	5	**CALCAREOUS CLAYSTONE:** as above.		-	-	-	-	-	-
		Calcimetry: Calcite: 18.0%; Dolomite: 1.4%							

WELLSITE CUTTINGS SAMPLES DESCRIPTIONS

DEPTH m	%	LITHOLOGY DESCRIPTION and COMMENTS (classification, colour, hardness, texture, mineralogy, modifiers, cement)	POR	STAIN DIST COLOUR	FLUOR DIST INTEN COLOUR	CUT INTEN COLOUR	CUT FLUOR INTEN COLOUR	RES COLOUR	SHOW QUAL
1745	100	**LOOSE SAND:** Very light grey, fine lower to granule grained, dominantly medium to coarse, very poorly sorted, angular to sub-rounded, transparent to translucent quartz. Markedly finer grained than above.	GIP	-	-	-	-	-	-
1750	100	**LOOSE SAND:** Very light grey, very fine to very coarse, dominantly medium to coarse grained, very poorly sorted, angular to sub-rounded, transparent to translucent quartz.	GIP	-	-	-	-	-	-
1755	100	**LOOSE SAND:** as above. ***Traces of Barablok mud additive appears as very fine black angular coal-like flakes***.	GIP	-	-	-	-	-	-
1760	100	**LOOSE SAND:** White to very light yellowish grey, fine upper to coarse upper, dominantly coarse grained, poorly sorted, angular to sub-angular, rarely sub-rounded, transparent to translucent, sub-spherical quartz.	GIP	-	-	-	-	-	-
		Calcimetry: Calcite: 8.5%; Dolomite: 0.1%							
1765	100	**LOOSE SAND:** as above.	GIP	-	-	-	-	-	-
1766	100	**LOOSE SAND:** as above, trace aggregates of pyrite crystals.	GIP	-	-	-	-	-	-
		Calcimetry: Calcite: 7.4%; Dolomite: 0.1%							
		311 mm (12.25") hole section reached TD of 1766 mMDRT at 15:30 hrs on 18 May 2008.							

Attachment 11

Daily Geological Reports

3D Oil Limited

Wardie-1

DAILY GEOLOGICAL REPORT

Report No. 01

REPORT PERIOD: 00:00 – 24:00 hrs, 13/05/2008

WELLSITE GEOLOGISTS: Simon Ward

RIG:	West Triton	**RT-ML (m):**	77.5	**DEPTH @ 24:00 HRS:**	751 mMDRT 706.8 mTVDRT
RIG TYPE:	Jack-up	**RT ELEV. (m, AMSL):**	38.0	**DEPTH LAST REPORT :** (@ 24:00 HRS)	161 mMDRT 161 mTVDRT
SPUD DATE:	10 May 2008 @ 19:30hrs	**LAST CSG/LINER: (mMDRT)**	762 mm (30") @ 133	**24HR. PROGRESS:**	590 m
DAYS FROM SPUD:	3.19	**MW (SG):**	1.06	**LAST SURVEY:**	34.4° @ 722.5 m MDRT, 239.9° Azi 683.3 mTVDRT
BIT SIZE:	444mm / 17.5"	**LAST LOT/FIT (SG):**	N/A	**EST. PORE PRESSURE:**	

Operations Summary

24HRS. DRILLING SUMMARY: Drilled 444mm (17.5") hole to 170m. Ran gyro survey on wireline to check hole orientation (survey confirmed well is oriented away from WSH-3 wellbore). Continued to drill to KOP at 250m and then directionally drilled the tangent hole section to TD at 751m using seawater and gel sweeps (all returns overboard as riser not installed). Circulated hole clean with two high-vis sweeps and then displaced the well with viscosified KCl/polymer mud. POOH – hole good. Encountered 20 kips overpull with the stabiliser at the conductor shoe. Made up the TDS and pumped and rotated through the shoe. Continued to POOH to surface and laid out 444mm (17.5") BHA. Commenced preparations for casing run.

CURRENT STATUS @ 06:00HRS: (14-05-2008) Skidding rig to align casing with well centre.

EXPECTED NEXT ACTIVITY: Run 340mm (13-3/8") casing and cement it in place.

Cuttings Descriptions

DEPTH (MMDRT) Top	DEPTH (MMDRT) Btm	ROP (M/HR.) Min.-Max. (Ave.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%) Ave.	BG GAS (%) Max.
161	751		No cuttings collected during this 24 hour period – all returns overboard from CTU deck.		

Gas Data

DEPTH (MMDRT)	TYPE	% Total Gas Min – Max (Avg)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	iC5 ppm	nC5 ppm
N/A									

Type: P-Peak, C–Connection T–Trip, W-Wiper Trip, BG-Background Gas, FC-Flow Check, *P-Pumps off, SWG-Swab Gas

Oil Show

Depth (mMDRT)	Oil stain	Fluor% / Colour	Fluor Type	Cut Fluor	Cut Type	Res Ring	Gas Peak	BG
N/A								

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
N/A							

Mud Data @ 672 mMDRT

Mud Type	MW (SG)	Viscosity (sec/qt)	PV / YP	Cl^- (mg/l)
Seawater/gel sweeps	1.06	100	24/103	-

Tracer Data

Depth	Type	Concentration	Additions Started (Depth / Date)
N/A			No tracer in use

MWD / LWD Tool Data

Tool Type	Telescope (D&I only)
Sub Type	MWD
RT Memory Sample Rate (sec)	N/A
Bit to Sensor Offset (m)	26.56
Flow Rate Range for Pulser Configuration	600 – 1200 GPM

Provisional Formation Tops

Formation (Seismic Horizon)	Prognosed* (mMDRT)	Prognosed (mSS)	Actual (mMDRT)	Actual (mSS)	Difference (High/Low) (m)	Based on
Mudline	77.0	39.0	77.5	39.5	0.5 L	Tagged with drill string**
Gippsland Limestone	80.0	45.0				
Lakes Entrance Formation	977.85	860.0				
Top Latrobe Group						
- Gurnard Formation	1531.6	1345.0				
- Top N1	1585.5	1398.0				
- Top N2.3	1641.2	1453.0				
- Top N2.6	1668.5	1480.0				
- Top P1	1702.9	1514.0				
Total Depth	1790.0	1600.0				

*Prognosed depth (MDRT) assumes a RT elevation of 38m above MSL and is based on **Directional Plan Wardie-1 Rev 06**.

**Seabed actually tagged at 76.8m with drill string due to a mound of cement being present from the adjacent WSH-3 well (Mudline encountered at 77.5mMDRT).

***Surveyed final RT elevation is actually 37.68m (38m is carried in Report headers).

Comments

Simon Ward on rig 13/5/08.

Schlumberger D&M crew already on board rig prior to WSG arrival.

All returns from the well during the 444mm (17.5”) section were diverted overboard to the sea from the CTU deck and did not pass over the shale shakers. Consequently no cuttings samples were collected and there was no monitoring of mud gas.

----------END OF REPORT----------

Report No. 02

REPORT PERIOD: 00:00 – 24:00 hrs, 14/05/2008

WELLSITE GEOLOGISTS: Simon Ward

RIG:	West Triton	**RT-ML (m):**	77.5	**DEPTH @ 24:00 HRS:**	751 mMDRT 706.8 mTVDRT
RIG TYPE:	Jack-up	**RT ELEV. (m, AMSL):**	38.0	**DEPTH LAST REPORT :** (@ 24:00 HRS)	751 mMDRT 706.8 mTVDRT
SPUD DATE:	10 May 2008 @ 19:30hrs	**LAST CSG/LINER: (mMDRT)**	762 mm (30") @ 133	**24HR. PROGRESS:**	0 m
DAYS FROM SPUD:	4.19	**MW (SG):**	1.06	**LAST SURVEY:**	34.4° @ 722.5m MDRT, 239.9° Azi 683.3 mTVDRT
BIT SIZE:	N/A	**LAST LOT/FIT (SG):**	N/A	**EST. PORE PRESSURE:**	

Operations Summary

24HRS. DRILLING SUMMARY:	Rigged up and ran 340mm (13 3/8") casing to 113m MDRT – casing hanging up inside MLS. Skidded rig forward to improve casing alignment with wellbore. Ran in with casing to 166m, still hanging up and unable to progress deeper. POOH with casing, removed all centralisers and stop collars and made up new joint of casing to float joint. Checked floats – OK. Re-ran 340mm (13 3/8") casing without centralisation to 500m.
CURRENT STATUS @ 06:00HRS: (15-05-2008)	Making up 476mm (18¾") wellhead assembly to casing.
EXPECTED NEXT ACTIVITY:	Land out casing. Cement casing. Nipple up BOP stack.

Cuttings Descriptions

DEPTH (MMDRT)		ROP (M/HR.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%)	
Top	Btm	Min.-Max. (Ave.)		Ave.	Max.

No cuttings collected during this 24 hour period.

Gas Data

DEPTH (MMDRT)	TYPE	% Total Gas Min – Max (Avg)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	iC5 ppm	nC5 ppm
N/A									

Type: P-Peak, C–Connection T–Trip, W-Wiper Trip, BG-Background Gas, FC-Flow Check, *P-Pumps off, SWG-Swab Gas

Oil Show

Depth (mMDRT)	Oil stain	Fluor% / Colour	Fluor Type	Cut Fluor	Cut Type	Res Ring	Gas Peak	BG
N/A								

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
N/A							

Mud Data @ 751 mMDRT

Mud Type	MW (SG)	Viscosity (sec/qt)	PV / YP	Cl^- (mg/l)
Seawater PHG	1.06	100	24 / 103	-

Tracer Data

Depth	Type	Concentration	Additions Started (Depth / Date)
N/A			No tracer in use

MWD / LWD Tool Data

Tool Type	N/A – tools out of hole.
Sub Type	
RT Memory Sample Rate (sec)	
Bit to Sensor Offset (m)	

Flow Rate Range for Pulser Configuration

Provisional Formation Tops

Formation (Seismic Horizon)	Prognosed* (mMDRT)	Prognosed (mSS)	Actual (mMDRT)	Actual (mSS)	Difference (High/Low) (m)	Based on
Mudline	77.0	39.0	77.5	39.5	0.5 L	Tagged with drill string**
Gippsland Limestone	80.0	45.0				
Lakes Entrance Formation	977.85	860.0				
Top Latrobe Group						
- Gurnard Formation	1531.6	1345.0				
- Top N1	1585.5	1398.0				
- Top N2.3	1641.2	1453.0				
- Top N2.6	1668.5	1480.0				
- Top P1	1702.9	1514.0				
Total Depth	1790.0	1600.0				

*Prognosed depth (MDRT) assumes a RT elevation of 38m above MSL and is based on **Directional Plan Wardie-1 Rev 06**.

**Seabed actually tagged at 76.8m with drill string due to a mound of cement being present from the adjacent WSH-3 well (Mudline encountered at 77.5mMDRT).

***Surveyed final RT elevation is actually 37.68m (38m is carried in Report headers).

Comments

BHI computer system rebooted at 18:38 hrs until 18:46 hrs, no time or depth data collected during this period.

BHI gas chromatograph was calibrated at 19:15 hrs with C1-C5 cocktail gas.

Schlumberger wireline tools for logging at TD are on board the *Pacific Valkyrie* which is now on location. The tools will be loaded onto the rig on 15 May.

----------END OF REPORT----------

Report No. 03

REPORT PERIOD: 00:00 – 24:00 hrs, 15/05/2008

WELLSITE GEOLOGISTS: Simon Ward

RIG:	West Triton	**RT-ML (m):**	77.5	**DEPTH @ 24:00 HRS:**	751 mMDRT 706.8 mTVDRT
RIG TYPE:	Jack-up	**RT ELEV. (m, AMSL):**	38.0	**DEPTH LAST REPORT :** (@ 24:00 HRS)	751 mMDRT 706.8 mTVDRT
SPUD DATE:	10 May 2008 @ 19:30hrs	**LAST CSG/LINER: (mMDRT)**	340mm (13.375") @ 747.2	**24HR. PROGRESS:**	0 m
DAYS FROM SPUD:	5.19	**MW (SG):**	1.06	**LAST SURVEY:**	34.4° @ 722.5 m MDRT, 239.9° Azi 683.3 mTVDRT
BIT SIZE:	N/A	**LAST LOT/FIT (SG):**	N/A	**EST. PORE PRESSURE:**	

Operations Summary

24HRS. DRILLING SUMMARY: Ran 340mm (13 3/8") casing to 657mMDRT. Made up MLS hanger assembly. Continued to run casing to 722m. Picked up 476mm (18¾") wellhead assembly and attached to casing. Landed out casing in MLS hanger at 85.45m MDRT. Cemented casing in place. Bumped plug to 2000 psi – floats held. Attempted to release wellhead running tool - no go. Made up TDS and applied 4 kips weight to fully collapse running tool clutch. Backed out running tool using rig tongs. Laid out wellhead running tool and cementing equipment. Nippled up BOP stack.

CURRENT STATUS @ 06:00HRS: (16-05-2008) Pressure testing BOP.

EXPECTED NEXT ACTIVITY: Pick up 311mm (12¼") directional BHA. RIH. Drill out cement. Conduct FIT.

Cuttings Descriptions

DEPTH (MMDRT) Top	DEPTH (MMDRT) Btm	ROP (M/HR.) Min.-Max. (Ave.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%) Ave.	BG GAS (%) Max.

No cuttings collected during this 24 hour period.

Gas Data

DEPTH (MMDRT)	TYPE	% Total Gas Min – Max (Avg)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	iC5 ppm	nC5 ppm
N/A									

Type: P-Peak, C–Connection T–Trip, W-Wiper Trip, BG-Background Gas, FC-Flow Check, *P-Pumps off, SWG-Swab Gas

Oil Show

Depth (mMDRT)	Oil stain	Fluor% / Colour	Fluor Type	Cut Fluor	Cut Type	Res Ring	Gas Peak	BG
N/A								

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
N/A							

Mud Data @ 751 mMDRT

Mud Type	MW (SG)	Viscosity (sec/qt)	PV / YP	Cl^- (mg/l)
Seawater PHG	1.06	100	24 / 103	-

Tracer Data

Depth	Type	Concentration	Additions Started (Depth / Date)
N/A			No tracer in use

MWD / LWD Tool Data

Tool Type	N/A – no tools in hole
Sub Type	
RT Memory Sample Rate (sec)	
Bit to Sensor Offset (m)	

Flow Rate Range for Pulser Configuration

Provisional Formation Tops

Formation (Seismic Horizon)	Prognosed* (mMDRT)	Prognosed (mSS)	Actual (mMDRT)	Actual (mSS)	Difference (High/Low) (m)	Based on
Mudline	77.0	39.0	77.5	39.5	0.5 L	Tagged with drill string**
Gippsland Limestone	80.0	45.0				
Lakes Entrance Formation	977.85	860.0				
Top Latrobe Group						
- Gurnard Formation	1531.6	1345.0				
- Top N1	1585.5	1398.0				
- Top N2.3	1641.2	1453.0				
- Top N2.6	1668.5	1480.0				
- Top P1	1702.9	1514.0				
Total Depth	1790.0	1600.0				

*Prognosed depth (MDRT) assumes a RT elevation of 38m above MSL and is based on **Directional Plan Wardie-1 Rev 06**.

**Seabed actually tagged at 76.8m with drill string due to a mound of cement being present from the adjacent WSH-3 well (Mudline encountered at 77.5mMDRT).

***Surveyed final RT elevation is actually 37.68m (38m is carried in Report headers).

Comments

Second WSG and Schlumberger WL crew due on board on 17 May 2008.

BHI Autocalcimeter has been calibrated.

----------END OF REPORT----------

Report No. 04

REPORT PERIOD: 00:00 – 24:00 hrs, 16/05/2008

WELLSITE GEOLOGISTS: Simon Ward

RIG:	West Triton	**RT-ML (m):**	77.5	**DEPTH @ 24:00 HRS:**	751 mMDRT 706.8 mTVDRT
RIG TYPE:	Jack-up	**RT ELEV. (m, AMSL):**	38.0	**DEPTH LAST REPORT :** (@ 24:00 HRS)	751 mMDRT 706.8 mTVDRT
SPUD DATE:	10 May 2008 @ 19:30hrs	**LAST CSG/LINER: (mMDRT)**	340mm (13.375") @ 747.2	**24HR. PROGRESS:**	0 m
DAYS FROM SPUD:	6.19	**MW (SG):**	1.06	**LAST SURVEY:**	34.4° @ 722.5 m MDRT, 239.9° Azi 683.3 mTVDRT
BIT SIZE:	311mm (12¼")	**LAST LOT/FIT (SG):**	N/A	**EST. PORE PRESSURE:**	

Operations Summary

24HRS. DRILLING SUMMARY:	Completed nipple up of Diverter and BOP stack. Pressure tested BOP's and associated valves and hoses. Pressure tested casing and wellhead connector to 2000 psi. Ran wear bushing. Made up 311mm (12¼") bit and directional BHA. Shallow tested LWD tools – OK. RIH to 703m MDRT. Made up TDS and washed down to 732m, reaming through cement stringer at 719m. Rectified problem with TDS. Tagged TOC at 732.5m. Drilled out cement, plugs, float collar and shoe track with seawater to 737m.
CURRENT STATUS @ 06:00HRS: (17-05-2008)	Drilling 311mm (12¼") directional hole with rotary steerable assembly since 04:00hrs. Currently at 820m MDRT.
EXPECTED NEXT ACTIVITY:	Drill 311mm (12¼") directional hole as per well plan.

Cuttings Descriptions

DEPTH (MMDRT)		ROP (M/HR.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%)	
Top	Btm	Min.-Max. (Ave.)		Ave.	Max.

No new formation drilled.

Gas Data

DEPTH (MMDRT)	TYPE	% Total Gas Min – Max (Avg)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	iC5 ppm	nC5 ppm
N/A									

Type: P-Peak, C–Connection T–Trip, W-Wiper Trip, BG-Background Gas, FC-Flow Check, *P-Pumps off, SWG-Swab Gas

Oil Show

Depth (mMDRT)	Oil stain	Fluor% / Colour	Fluor Type	Cut Fluor	Cut Type	Res Ring	Gas Peak	BG
N/A								

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
N/A							

Mud Data @ 751 mMDRT

Mud Type	MW (SG)	Viscosity (sec/qt)	PV / YP	Cl^- (mg/l)
Seawater PHG*	1.06	100	24 / 103	-

*Note: Hole will be displaced to a KCl-Polymer mud system while drilling the casing shoe.

Tracer Data

Depth	Type	Concentration	Additions Started (Depth / Date)
N/A			No tracer in use

MWD / LWD Tool Data

Tool Type	Powerdrive / GVR8		
Sub Type	Gamma	Resistivity	Survey
RT Memory Sample Rate (sec)	5	5	N/A
Bit to Sensor Offset (m)	10.51	10.77 Ring 10.98 Deep 11.15 Med 11.28 Shallow	17.68
Flow Rate Range for Pulser Configuration		600-1200 gpm	

Provisional Formation Tops

Formation (Seismic Horizon)	Prognosed* (mMDRT)	Prognosed (mSS)	Actual (mMDRT)	Actual (mSS)	Difference (High/Low) (m)	Based on
Mudline	77.0	39.0	77.5	39.5	0.5 L	Tagged with drill string**
Gippsland Limestone	80.0	45.0				
Lakes Entrance Formation	977.85	860.0				
Top Latrobe Group						
- Gurnard Formation	1531.6	1345.0				
- Top N1	1585.5	1398.0				
- Top N2.3	1641.2	1453.0				
- Top N2.6	1668.5	1480.0				
- Top P1	1702.9	1514.0				
Total Depth	1790.0	1600.0				

*Prognosed depth (MDRT) assumes a RT elevation of 38m above MSL and is based on **Directional Plan Wardie-1 Rev 06**.

**Seabed actually tagged at 76.8m with drill string due to a mound of cement being present from the adjacent WSH-3 well (Mudline encountered at 77.5mMDRT).

***Surveyed final RT elevation is actually 37.68m (38m is carried in Report headers).

Comments

Second WSG and Schlumberger WL crew due on board on 17 May 2008.

Schlumberger basket of wireline tools on rig 16 May 2008.

BHI Autocalcimeter recalibrated with 10% HCl as insufficient 20% HCl available on rig to complete well.
BHI CO_2 sensor calibrated with 10% cal gas.

BHI checked MTO with thermometer, MTI and MTO sensor recalibrated (upper temperature point on MTO sensor set 30% too high). MTI presently measured in Pit 6 whereas Pit 1 is now being used as the active pit.
All other BHI systems fully functional.

----------END OF REPORT----------

DAILY GEOLOGICAL REPORT

Report No. 05

REPORT PERIOD: 00:00 – 24:00 hrs, 17/05/2008

WELLSITE GEOLOGISTS: Simon Ward / Bill Leask

RIG:	West Triton	**RT-ML (m):**	77.5	**DEPTH @ 24:00 HRS:**	1446 mMDRT 1306.6 mTVDRT
RIG TYPE:	Jack-up	**RT ELEV. (m, AMSL):**	38.0	**DEPTH LAST REPORT:** (@ 24:00 HRS)	751 mMDRT 706.8 mTVDRT
SPUD DATE:	10 May 2008 @ 19:30hrs	**LAST CSG/LINER: (mMDRT)**	340mm (13.375") @ 747.2	**24HR. PROGRESS:**	695m
DAYS FROM SPUD:	7.19	**MW (SG):**	1.12	**LAST SURVEY:**	23.4° @ 1421.7m MDRT, 245.9° Azi 1283.9 mTVDRT
BIT SIZE:	311mm (12¼")	**LAST LOT/FIT (SG):**	1.57 @ 754m MD, 705mTVDRT (no leak-off)	**EST. PORE PRESSURE:**	

Operations Summary

24HRS. DRILLING SUMMARY:

Drilled out shoe track and casing shoe to 747.2m and cleaned out rathole to 751m MDRT. Displaced hole to 8.9 ppg KCl/Polymer/Clayseal mud while drilling out the shoe. Drilled 3m of new hole to 754m. Circulated and conditioned the mud system. Performed FIT to 1.57 SG (13.1 ppg) EMW (no leak-off). Drilled ahead 311mm (12¼") directional hole with rotary steerable assembly and LWD/MWD string to 1397m MDRT. Troubleshot and rectified problem with drilling control system. Continued drilling to 1446m MDRT.

CURRENT STATUS @ 06:00HRS: (18-05-2008)

Drilling 311mm (12¼") directional hole with rotary steerable assembly at 1610m MDRT.

EXPECTED NEXT ACTIVITY:

Drill 311mm (12¼") directional hole to TD.

Cuttings Descriptions

DEPTH (MMDRT) Top	Btm	ROP (M/HR.) Min.-Max. (Ave.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%) Ave.	Max.
751	830	3.7–140.2 (59.5)	**CALCARENITE (60–80%):** Light olive grey to olive grey in part, minor white to pale yellow, moderately hard to hard, very fine to coarse, angular to sub-angular, translucent to opaque sparry calcite, minor to common silt, minor rounded fine sand in parts, minor black lithics, trace glauconite in parts, highly calcareous, well cemented, poor visible porosity. **LOOSE SAND (Trace – 10%):** Fine to medium, moderately sorted, sub-rounded to rounded, translucent to transparent quartz, minor orange to yellow quartz, trace cryptocrystalline pyrite. Minor coarse to very coarse rounded clear to frosted quartz. **SKELETAL FRAGMENTS (Trace – 5%):** Pale yellow to orange to grey, dominantly bivalve fragments, minor bryozoans, echinoid. **CALCISILTITE (5–40%, increasing downhole):** Medium grey to olive grey to occasionally black, soft to hard, highly calcareous, minor to common clastic silt fraction grading in parts to fine sand. **SANDSTONE (Trace):** Moderate olive brown, hard, very fine, well sorted sub-rounded quartz and minor lithics, calcite cemented, silty matrix.	0.002	0.002
830	982	17.7–171.8 (83.6)	**CALCARENITE (30–50%):** as above, common clastic silt fraction, generally fine grained from 950m. **CALCISILTITE (45–65%):** Medium grey to olive grey to occasionally black (dominantly olive grey from 930m), dominantly soft to firm, minor hard, highly calcareous, minor to common clastic silt fraction grading in parts to fine sand. **CALCILUTITE (Trace to 10% from 870m):** White, hard, silty, amorphous. **LOOSE SAND (Trace):** Dominantly fine to medium grained, moderately sorted, rounded quartz, trace coarse to very coarse frosted rounded quartz. **SKELETAL FRAGMENTS (Trace):** Pale yellow to orange to grey, dominantly bivalve fragments, minor bryozoans, trace echinoid spine.	0.002	0.003
982	1235	13.7–222.2 (109.7)	**Preliminary pick top LAKES ENTRANCE FORMATION @ 982m MDRT.** **CALCISILTITE (80–90%):** Pale to medium grey to olive grey, dominantly firm to hard, blocky, moderately to highly calcareous, minor to common clastic silt fraction grading in parts to fine sand. Possible dolomitic cement indicated by slower HCl reaction. Trace very fine dark mafic grains. Rare pyrite. **CALCILUTITE (10%):** White to pale grey, hard, amorphous, slightly silty. **CALCARENITE (10%):** Light olive grey to olive grey in part, minor white to pale yellow, moderately hard to hard, very fine to fine, angular to sub-angular, translucent to opaque sparry calcite, minor silt, minor black lithics, highly calcareous, well cemented, poor visible porosity. Trace bryozoans, foraminifera, echinoid and shell fragments.	0.008	0.018

Cuttings Descriptions (Cont.)

Depth (mMDRT) Top	Depth (mMDRT) Btm	ROP (m/hr.) Min.-Max. (Ave.)	Descriptions (Lithology / Shows)	BG Gas (%) Ave.	BG Gas (%) Max.
1235	1440	15.8–380.0 (112.2)	**Calcilutite with minor Calcisiltite (Top corresponds to increased LWD gamma and lower, more consistent resistivity).** **CALCILUTITE (60–95%):** Very light to medium olive grey; by 1310m graded to greenish grey, firm to moderately hard, sub-blocky to sub-fissile, increasingly argillaceous, trace pyrite, rare loose forams in multiple taxa, both benthic and planktic, and echinoid spines; with rare very fine glauconite; at 1250–1330m trace loose glauconite nodules, rarely mammillated, medium lower to very coarse lower sized. Below 1420m, grading to calcareous Claystone. **CALCISILTITE (40% decreasing to 5%):** Olive grey, firm to moderately hard, blocky, argillaceous, with common sand-sized recrystallised shell material, rare pyrite, grading to Calcilutite.	0.033	0.081

Gas Data

Depth (mMDRT)	Type	% Total Gas Min – Max (Avg)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	iC5 ppm	nC5 ppm
751–982	BG	0.0019–0.0027 (0.0023)	2–7	0–3	0	0	0	0	0
982–1446	BG	0.0022–0.0813 (0.0198)	125	0–5	0–4	0–1	0–1	0	0

Type: P-Peak, C–Connection T–Trip, W-Wiper Trip, BG-Background Gas, FC-Flow Check, *P-Pumps off, SWG-Swab Gas

Oil Show

Depth (mMDRT)	Oil stain	Fluor% / Colour	Fluor Type	Cut Fluor	Cut Type	Res Ring	Gas Peak	BG
N/A								

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
N/A**							

**See note in “Comments” below.

Mud Data @ 1381 mMDRT

Mud Type	MW (SG)	Viscosity (sec/qt)	PV / YP	Cl⁻ (mg/l)
KCl / Polymer	1.12	58	13 / 30	33,000

Tracer Data

Depth	Type	Concentration	Additions Started (Depth / Date)
N/A			No tracer in use

MWD / LWD Tool Data

Tool Type	Powerdrive / GVR8		
Sub Type	Gamma	Resistivity	Survey
RT Memory Sample Rate (sec)	5	5	N/A
Bit to Sensor Offset (m)	10.51	10.98 D 11.15 M 11.28 S	17.68
Flow Rate Range for Pulser Configuration		600–1200 gpm	

Provisional Formation Tops

Formation (Seismic Horizon)	Prognosed* (mMDRT)	Prognosed (mSS)	Actual (mMDRT)	Actual (mSS)	Difference (High/Low) (m)	Based on
Mudline	77.0	39.0	77.5	39.5	0.5 L	Tagged with drill string**
Gippsland Limestone	80.0	45.0				
Lakes Entrance Formation	977.85	860.0	982	865.3	5.3 L	Change in resistivity character, slightly lower ROP, change to siltier cuttings
Top Latrobe Group						
- Gurnard Formation	1531.6	1345.0				
- Top N1	1585.5	1398.0				
- Top N2.3	1641.2	1453.0				
- Top N2.6	1668.5	1480.0				
- Top P1	1702.9	1514.0				
Total Depth	1790.0	1600.0				

*Prognosed depth (MDRT) assumes a RT elevation of 38m above MSL and is based on **Directional Plan Wardie-1 Rev 06**.

**Seabed actually tagged at 76.8m with drill string due to a mound of cement being present from the adjacent WSH-3 well (Mudline encountered at 77.5mMDRT).

***Surveyed final RT elevation is actually 37.68m (38m is carried in Report headers).

Comments

Bill Leask, second WSG, arrived on board 17 May 2008.

Schlumberger WL arrived on board on 17 May 2008, surface check of equipment underway.

MPSR sample from West Seahorse-3 arrived on board for processing.
Schlumberger thermometers arrived as DG on helicopter.

20m sample interval to 1320m, 10m sample interval 1320–1520m, 5m sample interval 1520m–TD.

BHI Autocalcimeter unserviceable at present, unit disassembled and solenoid valve for gas exit port cleaned however unit still not holding pressure.

$CaCO_3$ added to mud system from 1425m.

----------END OF REPORT----------

Report No. 06

REPORT PERIOD: 00:00 – 24:00 hrs, 18/05/2008

WELLSITE GEOLOGISTS: Simon Ward / Bill Leask

RIG:	West Triton	**RT-ML (m):**	77.5	**DEPTH @ 24:00 HRS:**	1766 mMDRT 1618.2 mTVDRT
RIG TYPE:	Jack-up	**RT ELEV. (m, AMSL):**	38.0	**DEPTH LAST REPORT :** (@ 24:00 HRS)	1446 mMDRT 1306.6 mTVDRT
SPUD DATE:	10 May 2008 @ 19:30hrs	**LAST CSG/LINER: (mMDRT)**	340mm (13.375") @ 747.2	**24HR. PROGRESS:**	320m
DAYS FROM SPUD:	8.19	**MW (SG):**	1.12	**LAST SURVEY:**	7.36° @ 1745.7m MDRT, 234.2° Azi 1598.0m TVDRT
BIT SIZE:	311mm (12¼")	**LAST LOT/FIT (SG):**	1.57 @ 754mMD, 705m TVDRT (no leak-off)	**EST. PORE PRESSURE:**	

Operations Summary

24HRS. DRILLING SUMMARY:	Directionally drilled 311mm (12¼") hole with rotary steerable assembly from 1466m to well TD at 1766m MDRT, control drilling at 30 m/hr for improved LWD acquisition from 1520m onwards. Circulated the hole clean for 3.5 hours, rotating and reciprocating the drill string (substantial amount of fine, sticky cuttings returned over the first two circulations). Commenced POOH but unable to open trip tank for flow check. Replaced faulty trip tank remote valve. POOH from 1766m to 1500m. Encountered 30 kips overpull at 1540m MDRT. Worked through tight spot from 1540m to 1530m MDRT before continuing to trip out.
CURRENT STATUS @ 06:00HRS: (19-05-2008)	Pumping and back-reaming out of the hole to the casing shoe. Bit currently at 850m MDRT.
EXPECTED NEXT ACTIVITY:	Run back in hole from the casing shoe for a wiper/conditioning trip. Circulate. POOH and rig up for wireline logging.

Cuttings Descriptions

DEPTH (MMDRT) Top	Btm	ROP (M/HR.) Min.-Max. (Ave.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%) Ave.	Max.
1440	1523	37.6–131.0 (103.7)	**Calcilutite (with minor accessory mineral glauconite appearing below 1450m).** **CALCILUTE (100%):** Greenish grey to olive grey, firm to moderately hard, sub-blocky to sub-fissile, variably argillaceous and grading to moderately calcareous Claystone, trace to rare (1%) very fine to medium glauconite pellets and nodules below 1450m, trace foraminifera, slightly silty in parts.	0.05	0.066

Cuttings Descriptions (Cont.)

DEPTH (MMDRT) Top	Btm	ROP (M/HR.) Min.-Max. (Ave.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%) Ave.	Max.
1523	1565	18.9–50.6 (29.9)	**Latrobe Group (Gurnard Formation):** **Glauconitic calcareous Claystone and Calcilutite.** **CALCAREOUS CLAYSTONE (50-95%):** Light greenish grey to olive grey, becoming brownish grey below 1550m, firm to moderately hard, sub-blocky to sub-fissile, moderately to highly calcareous, 1% very fine to medium glauconite pellets and nodules increasing to 30% fine to coarse nodules by 1550m, trace foraminifera, trace shell and bryozoan fragments. Slightly silty in parts. Trace broken crystalline calcite vein material in parts. **CALCILUTITE (5–50%):** Greenish grey to olive grey, firm to moderately hard, sub-blocky to sub-fissile, argillaceous, grading to Claystone, rare (1%) very fine to medium glauconite pellets and nodules, trace foraminifera, slightly silty in parts.	0.05	0.094
1565	1575	28.9–31.0 (29.9)	**Latrobe Group:** **Siltstone with minor Sand and Coal.** **SILTSTONE (55-75%):** Medium brown grey to olive grey to brown, firm to hard, blocky, slightly carbonaceous, non to slightly calcareous. **CALCILUTITE (20%):** Light grey to greenish grey, firm to hard, grading to calcareous Claystone, silty. **LOOSE SAND (5%):** Very fine to coarse grained, poorly sorted, sub-rounded to rounded, clear translucent quartz. **COAL (0–20%):** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in parts.	0.10	0.23
1575	1600	22.5–34.5 (29.8)	**Interbedded Coal, Siltstone and minor Sandstone (including inferred thick coal seam at 1582.5–1587.5mMDRT).** **COAL (60%):** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in parts. **SILTSTONE (25–35%):** Medium brown grey to olive grey to brown, firm to hard, blocky, slightly carbonaceous to coaly in parts, non to slightly calcareous. ***Moderate to poor oil show (see below).*** **CALCILUTITE (10%):** Light grey to greenish grey, firm to hard, grading to calcareous Claystone, silty; inferred uphole contamination. **LOOSE SAND (Trace – 5%):** Fine to very coarse grained, poorly sorted, sub-rounded to rounded, clear translucent quartz. Minor glauconite, trace pyrite clusters. Trace pyritised quartz. Minor lithic fragments. No shows.	0.50	0.69

Cuttings Descriptions (Cont.)

DEPTH (MMDRT) Top	Btm	ROP (M/HR.) Min.-Max. (Ave.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%) Ave.	Max.
1600	1634	11.7–34.7 (29.8)	**Interbedded Siltstone and Sandstone.** **(Thick low-gamma beds at 1600–1606m and 1614–1619m have same LWD character as coal seams above and below, but coal is only 5–10% of cuttings).** **SILTSTONE (40% increasing downhole to 80%):** Medium brown grey to olive grey to dark brown, firm to hard, blocky, slightly carbonaceous to coaly in parts, non to slightly calcareous. **LOOSE SAND (15–30%):** Pale grey to brownish grey, very fine upper to very coarse upper, dominantly medium grained, poorly sorted, sub-rounded to rounded, clear quartz, minor lithics, minor calcite grains, minor glauconite, common sub-angular clear quartz granules. **COAL (0–10%):** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in parts. **CALCAREOUS CLAYSTONE (5–20%):** Light grey to greenish grey, firm to hard, moderately to highly calcareous, silty. *(This lithology persists as 5–10% of samples to TD and probably represents uphole contamination.)*	0.20	0.40
1634	1657	6.5–33.6 (27.3)	**Interbedded Coal, Siltstone and Sandstone.** **COAL (10–75%):** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in parts. **SILTSTONE (15–40%):** Medium brown grey to olive grey to dark brown, firm to hard, blocky, slightly carbonaceous to coaly in parts, non to slightly calcareous; in parts grading to carbonaceous very fine Sandstone. **LOOSE SAND (5–30%):** Pale grey to brownish grey, very fine upper to coarse upper, dominantly medium grained, poorly sorted, sub-rounded to rounded clear quartz, minor lithics, minor glauconite, common sub-angular to sub-rounded clear quartz granules. **CALCAREOUS CLAYSTONE (5–20%):** as above.	0.10	0.25
1657	1664	26.7–31.0 (29.7)	**Sandstone.** **LOOSE SAND (85%):** White to pale grey, fine lower to granular, bimodal, dominantly fine to medium and very coarse grained, very poorly sorted, sub-rounded to sub-angular clear to frosted quartz, trace muscovite, trace lithics, trace glauconite. **SILTSTONE (5%):** as above. **COAL (5%):** as above. **CALCAREOUS CLAYSTONE (5%):** as above.	0.03	0.04

Cuttings Descriptions (Cont.)

DEPTH (MMDRT) Top	Btm	ROP (M/HR.) Min.-Max. (Ave.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%) Ave.	Max.
1664	1676	1.5–33.5 (27.8)	**Interbedded Siltstone, Coal and carbonaceous Claystone; thick coal seam inferred from LWD logs at 1670–1676.5m.** **SILTSTONE (5–45%):** Pale yellowish brown speckled dark brown to black with carbonaceous material; also dusky yellowish brown with abundant carbonaceous material and laminae, blocky to sub-fissile, non calcareous, locally with common muscovite. **COAL (30–80%):** Dark brown to black, glossy in parts along fractures, hard, brittle, silty in parts. **CARBONACEOUS CLAYSTONE (5–10%):** Dark yellowish brown to brownish grey, firm, elongate sub-fissile, commonly with dark polished faces. **LOOSE SAND (5-10%):** as above. **CALCAREOUS CLAYSTONE (5–20%):** as above.	0.05	0.14
1676	1702	4.2–32.8 (28.9)	**Sandstone.** **LOOSE SAND (50–95%):** White to very pale yellow, very fine to granule, dominantly very coarse upper to coarse upper grained, very poorly sorted, angular fragments to sub-rounded, sub-spherical, transparent to translucent quartz. **CALCAREOUS CLAYSTONE (5–40%):** as above. **COAL (0–5%):** as above. **SILTSTONE (0–5%):** as above.	0.01	0.02
1702	1729	20.5–35.1 (29.5)	**Interbedded Siltstone and Sandstone; Coal seams inferred from LWD logs, but only up to 5% of cuttings in some samples.** **LOOSE SAND (35–75%):** Light grey, fine upper to granule, dominantly very coarse to granule grained (clear bimodal sorting in some samples), very poorly sorted, angular fragments to sub-angular, rarely rounded grains, sub-spherical, transparent to translucent quartz. **SILTSTONE (15–60%):** Pale yellowish brown speckled with black coal and carbonaceous material, firm to moderately hard, sub-blocky to fissile, commonly microlaminated, with irregular coal fragments, rarely very fine sandy; rarely with scattered fine glauconite nodules; also loose mammilated grayish green glauconite ovoid nodules (medium to coarse sand-size). **CALCAREOUS CLAYSTONE (5%):** as above. **COAL (5%):** as above.	0.005	0.007

Cuttings Descriptions (Cont.)

DEPTH (MMDRT) Top	Btm	ROP (M/HR.) Min.-Max. (Ave.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%) Ave.	Max.
1729	1740	18.4–33.6 (28.9)	**Coarse – granular Sandstone, in upper part of a 20m thick bed.** **LOOSE SAND (85–95%):** Light yellowish grey, coarse upper to granule grained, moderately to poorly sorted, common angular fragments, dominantly sub-rounded, rarely well rounded, sub-spherical, transparent to translucent quartz, trace pinkish quartz. Trace coarse sandstone aggregate, hard, trace light yellow clay, inferred silica cemented, but overgrowths not confirmed, non calcareous, poor visible porosity. No shows. **SILTSTONE (Trace–5%):** as above. **CALCAREOUS CLAYSTONE (5%):** as above.	0.004	0.005
1740	1766	29.5–67.1 (55.3)	**Medium–coarse Sandstone, in beds up to 20m thick; Siltstone bed indicated on logs at 1749.5–1753m not confirmed by cuttings.** **LOOSE SAND (100%):** Very light grey, very fine to very coarse grained, dominantly medium to coarse, very poorly sorted, angular to sub-rounded, sub-spherical, transparent to translucent quartz. No shows.	0.004	0.004

Gas Data

DEPTH (MMDRT)	TYPE	% Total Gas Min – Max (Avg)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	iC5 ppm	nC5 ppm
1446–1523	BG	0.032–0.066 (0.05)	387	1–3	0–2	0	0	0	0
1523–1575	BG	0.03–0.23 (0.07)	541	1–18	1–21	0–7	0–6	0–2	0–1
1575–1621	BG**	0.2–0.65 (0.5)	3026	46	17	7	6	7	4
1585.5	P	1.20	8893	94	55	12	11	5	3
1590	P	0.693	5331	74	28	13	11	16	10
1598	P	0.685	5654	72	18	7	5	6	4
1604	P	0.614	4927	73	13	3	2	3	2
1615	P	0.579	4342	93	12	3	2	4	3
1621–1678	BG	0.01–0.25 (0.10)	668	49	9	1	1	1	0
1644	P	0.253	1779	147	24	2	2	1	1
1673	P	0.132	962	120	21	1	1	0	0
1678–1766	BG	0.004–0.02 (0.006)	19	2	1	0	0	0	0

Type: P-Peak, C–Connection T–Trip, W-Wiper Trip, BG-Background Gas, FC-Flow Check, *P-Pumps off, SWG-Swab Gas

**Note: Background gas through interval 1575–1621m estimated from trend through closely spaced peaks. Gas breakdown is average values for the interval, including peaks.

Oil Show

Depth (mMDRT)	Oil stain	Fluor% / Colour	Fluor Type	Cut Fluor	Cut Type	Res Ring	Gas Peak	BG
1570–1585	-	1% pale greenish yellow pinpoint	In Siltstone	Bright green blue	Fast streaming to blooming	Moderately wide bright green blue fluorescing residual ring	1.20%	0.5
1585–1605	-	1% dull pinkish orange		Moderately bright blue white	Slow blooming	Thin very pale green blue fluor residual ring	0.69	0.5
1605–1610	-	10% moderately bright to dull, yellow to orange		Bluish white (also from SLTST with no direct fluor)	Very slow blooming	Thin pale blue fluor residual ring	0.61	0.5
1610–1645	-	Trace–2% dull orange-yellow; also bright light greenish yellow, or dull pinkish orange	Most if not all mineral fluor.	bluish white, mainly from siltstone with no direct fluor	Slow diffuse	Very thin pale blue fluor residual ring	0.25	0.1
1645–1766	-	Very minor trace dull yellowish orange		nil	nil	nil		

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
N/A***							

***See note in “Comments” below.

Mud Data @ 1766 mMDRT

Mud Type	MW (SG)	Viscosity (sec/qt)	PV / YP	Cl^- (mg/l)
KCL / Polymer	1.12	54	15 / 30	38,000

Tracer Data

Depth	Type	Concentration	Additions Started (Depth / Date)
N/A			No tracer in use

MWD / LWD Tool Data

Tool Type	Powerdrive / GVR8		
Sub Type	Gamma	Resistivity	Survey
RT Memory Sample Rate (sec)	5	5	N/A
Bit to Sensor Offset (m)	10.51	10.98 D 11.15 M 11.28 S	17.68
Flow Rate Range for Pulser Configuration		600–1200 gpm	

Provisional Formation Tops

Formation (Seismic Horizon)	Prognosed* (mMDRT)	Prognosed (mSS)	Actual (mMDRT)	Actual (mSS)	Difference (High/Low) (m)	Based on
Mudline	77.0	39.0	77.5	39.5	0.5 L	Tagged with drill string**
Gippsland Limestone	80.0	45.0				
Lakes Entrance Formation	977.85	860.0	982	865.3	5.3 L	Change in resistivity character, slightly lower ROP, change to siltier cuttings
Top Latrobe Group						
- Gurnard Formation	1531.6	1345.0	1523	1341.4	3.6 H	Slight increase in gamma, change in cuttings
- Top N1	1585.5	1398.0				
- Top N2.3	1641.2	1453.0	1653	1468.6	15.6 L	Shale below coaly couplet indicated on gamma log
- Top N2.6	1668.5	1480.0	1677.5	1492.8	12.8 L	High gamma peak above thick sand bed
- Top P1	1702.9	1514.0				
Total Depth	1790.0	1600.0	1766	1580.2		

*Prognosed depth (MDRT) assumes a RT elevation of 38m above MSL and is based on **Directional Plan Wardie-1 Rev 06**.

**Seabed actually tagged at 76.8m with drill string due to a mound of cement being present from the adjacent WSH-3 well (Mudline encountered at 77.5mMDRT).

***Surveyed final RT elevation is actually 37.68m (38m is carried in Report headers).

Comments

Control drilled at 30m/hr from 1520–1743m.

BHI Autocalcimeter remained unserviceable, so no calcimetry analyses undertaken.
10m sample interval 1440–1520m, 5m sample interval 1520–1766m (TD).

Schlumberger wireline tools have all been surface tested and are on the catwalk ready for rigging up.

MPSR sample from West Seahorse-3 processed by Petrotech at 16:00 hrs.
Circulation stopped 20:34 hrs.

Mud samples 2x 1 litre collected at TD by BHI.
Packaging of all samples for shipment off rig is underway.
30ml filtrate sample from Latrobe interval collected by Mud Engineers.

----------END OF REPORT----------

Report No. 07

REPORT PERIOD: 00:00 – 24:00 hrs, 19/05/2008

WELLSITE GEOLOGISTS: Simon Ward / Bill Leask

RIG:	West Triton	**RT-ML (m):**	77.5	**DEPTH @ 24:00 HRS:**	1766 mMDRT 1618.2 mTVDRT
RIG TYPE:	Jack-up	**RT ELEV. (m, AMSL):**	38.0	**DEPTH LAST REPORT :** (@ 24:00 HRS)	1766 mMDRT 1618.2 mTVDRT
SPUD DATE:	10 May 2008 @ 19:30hrs	**LAST CSG/LINER: (mMDRT)**	340mm (13.375") @ 747.2	**24HR. PROGRESS:**	0m
DAYS FROM SPUD:	9.19	**MW (SG):**	1.12	**LAST SURVEY:**	7.36° @ 1745.7m MDRT, 234.2° Azi 1598.0m TVDRT
BIT SIZE:	311mm (12¼")	**LAST LOT/FIT (SG):**	1.57 @ 754mMD, 705m TVDRT (no leak-off)	**EST. PORE PRESSURE:**	

Operations Summary

24HRS. DRILLING SUMMARY: Continued to POOH working tight spots from 1283m to 1273m and 1253m to 1178m MDRT. Pumped out of hole from 1178m to 919m MDRT. Hole packed-off. Worked string and regained circulation. Continued to pump out of hole from 919m to the casing shoe. Circulated the hole clean at the shoe. RIH for a wiper trip. Made up the TDS at 1737m and washed to bottom, encountering 8m of fill from 1758m MDRT. Circulated the hole clean at TD. POOH to surface. Laid down the BHA.

CURRENT STATUS @ 06:00HRS: (20-05-2008) Wireline logging. Pulling out of hole with Suite #1, Run #1 (PEX-HRLA-BHC).

EXPECTED NEXT ACTIVITY: Continue wireline logging as per programme (next log MDT-GR).

Cuttings Descriptions

DEPTH (MMDRT)		ROP (M/HR.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%)	
Top	Btm	Min.-Max. (Ave.)		Ave.	Max.

No new lithology drilled.

Gas Data

DEPTH (MMDRT)	TYPE	% Total Gas Min – Max (Avg)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	iC5 ppm	nC5 ppm
1178 - 747	BG*	0.0020-0.0033 (0.0025)	-	-	-	-	-	-	-
1178	Max**	0.0046	46	-	-	-	-	-	-
1178	BG***	0.0028-0.0043 (0.0039)	-	-	-	-	-	-	-

Type: P-Peak, C–Connection T–Trip, W-Wiper Trip, BG-Background Gas, FC-Flow Check, *P-Pumps off, SWG-Swab Gas

*Circulating back-ground gas level while pumping out of the hole to the casing shoe.
***Circulating back-ground gas level at TD during wiper trip.

Oil Show

Depth (mMDRT)	Oil stain	Fluor% / Colour	Fluor Type	Cut Fluor	Cut Type	Res Ring	Gas Peak	BG
N/A								

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
N/A							

Mud Data @ 1766 mMDRT

Mud Type	MW (SG)	Viscosity (sec/qt)	PV / YP	Cl^- (mg/l)
KCl- Polymer	1.12	56	13 / 27	38,000

Tracer Data

Depth	Type	Concentration	Additions Started (Depth / Date)
N/A			No tracer in use

MWD / LWD Tool Data

Tool Type	Powerdrive / GVR8		
Sub Type	Gamma	Resistivity	Survey
RT Memory Sample Rate (sec)	5	5	N/A
Bit to Sensor Offset (m)	10.51	10.98 D 11.15 M 11.28 S	17.68
Flow Rate Range for Pulser Configuration		600–1200 gpm	

Provisional Formation Tops

Formation (Seismic Horizon)	Prognosed* (mMDRT)	Prognosed (mSS)	Actual (mMDRT)	Actual (mSS)	Difference (High/Low) (m)	Based on
Mudline	77.0	39.0	77.5	39.5	0.5 L	Tagged with drill string**
Gippsland Limestone	80.0	45.0				
Lakes Entrance Formation	977.85	860.0	982	865.3	5.3 L	Change in resistivity character, slightly lower ROP, change to siltier cuttings
Top Latrobe Group						
- Gurnard Formation	1531.6	1345.0	1523	1341.4	3.6 H	Slight increase in GR, change in cuttings
- Top N1	1585.5	1398.0				
- Top N2.3	1641.2	1453.0	1653	1468.6	15.6 L	Shale below coaly couplet indicated on GR log
- Top N2.6	1668.5	1480.0	1677.5	1492.8	12.8 L	High GR peak above thick sand bed
- Top P1	1702.9	1514.0				
Total Depth	1790.0	1600.0	1766	1580.2		

*Prognosed depth (MDRT) assumes a RT elevation of 38m above MSL and is based on **Directional Plan Wardie-1 Rev 06**.

**Seabed actually tagged at 76.8m with drill string due to a mound of cement being present from the adjacent WSH-3 well (Mudline encountered at 77.5mMDRT).

***Surveyed final RT elevation is actually 37.68m (38m is carried in Report headers).

Comments

All samples for both Wardie-1 and West Seahorse-3 have been packed for shipment off the West Triton rig and a manifest has been completed. Samples are to be dried and split at the BHI shore base in Perth.

2 x BHI Mudloggers departed rig on 19 May, 2 x Data Engineers remain on rig.

Fine cavings consisting of Lakes Entrance Formation lithologies were seen on the shale shakes when the well was circulated clean after the wiper trip. No sign of pressure cavings.

**Maximum gas recorded from the wiper trip was 0.005%.

----------END OF REPORT----------

Report No. 08

REPORT PERIOD: 00:00 – 24:00 hrs, 20/05/2008

WELLSITE GEOLOGISTS: Simon Ward / Bill Leask

RIG:	West Triton	**RT-ML (m):**	77.5	**DEPTH @ 24:00 HRS:**	1766 mMDRT 1618.2 mTVDRT
RIG TYPE:	Jack-up	**RT ELEV. (m, AMSL):**	38.0	**DEPTH LAST REPORT :** (@ 24:00 HRS)	1766 mMDRT 1618.2 mTVDRT
SPUD DATE:	10 May 2008 @ 19:30hrs	**LAST CSG/LINER: (mMDRT)**	340mm (13.375") @ 747.2	**24HR. PROGRESS:**	0m
DAYS FROM SPUD:	10.19	**MW (SG):**	1.12	**LAST SURVEY:**	7.36° @ 1745.7m MDRT, 234.2° Azi 1598.0m TVDRT
BIT SIZE:	311mm (12¼")	**LAST LOT/FIT (SG):**	1.57 @ 754mMD, 705m TVDRT (no leak-off)	**EST. PORE PRESSURE:**	

Operations Summary

24HRS. DRILLING SUMMARY:	Completed laying out BHA and directional and LWD tools (recovered LWD memory data offline). Rigged up Schlumberger. Ran Wireline logs as per program. Suite #1, Run #1: PEX-HRLA-BHC (logged from HUD at 1760m to 1300m); Run #2: MDT-GR (attempted 17 stations between 1574m and 1681.5m, obtained 9 valid pressures, 4 supercharged points, 3 tight, 1 seal failure and took 3 formation fluid samples). POOH and recovered MDT samples at surface. Rigged down Schlumberger Wireline. Made up and RIH with mule shoe on 5½" drill pipe.
CURRENT STATUS @ 06:00HRS: (21-05-2008)	Circulating above plug #1A at 1613m MDRT.
EXPECTED NEXT ACTIVITY:	Continue with P&A program

Cuttings Descriptions

DEPTH (MMDRT) Top	Btm	ROP (M/HR.) Min.-Max. (Ave.)	DESCRIPTIONS (LITHOLOGY / SHOWS)	BG GAS (%) Ave.	Max.

No drilling during the reporting period.

Gas Data

DEPTH (MMDRT)	TYPE	% Total Gas Min – Max (Avg)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	iC5 ppm	nC5 ppm
N/A**									

Type: P-Peak, C–Connection T–Trip, W-Wiper Trip, BG-Background Gas, FC-Flow Check, *P-Pumps off, SWG-Swab Gas

**Note: No circulation during reporting period.

Oil Show

Depth (mMDRT)	Oil stain	Fluor% / Colour	Fluor Type	Cut Fluor	Cut Type	Res Ring	Gas Peak	BG
N/A								

Calcimetry Data

Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)	Sample Depth (mMDRT)	Calcite (%)	Dolomite (%)	Total Carbonate (%)
N/A							

Mud Data @ 1766 mMDRT

Mud Type	MW (SG)	Viscosity (sec/qt)	PV / YP	Cl^- (mg/l)
KCl- Polymer	1.12	58	13 / 27	39,000

Tracer Data

Depth	Type	Concentration	Additions Started (Depth / Date)
N/A			No tracer in use

MWD / LWD Tool Data

Tool Type	N/A – No tools in hole
Sub Type	
RT Memory Sample Rate (sec)	
Bit to Sensor Offset (m)	

Flow Rate Range for Pulser Configuration

Provisional Final Formation Tops****

Formation (Seismic Horizon)	Prognosed* (mMDRT)	Prognosed (mSS)	Actual (mMDRT)	Actual (mSS)	Difference (High/Low) (m)	Based on
Mudline	77.0	39.0	77.5	39.5	0.5 L	Tagged with drill string**
Gippsland Limestone	80.0	45.0	-	-	-	
Lakes Entrance Formation	977.85	860.0	982.0	865.3	5.3 L	Change in character of LWD resistivity, lower ROP, siltier cuttings
Top Latrobe Group						
- Gurnard Formation	1531.6	1345.0	1568.5	1385.1	40.1 L	Wireline Logs
- Top N1	1585.5	1398.0	1598.5	1414.5	16.5 L	Wireline Logs
- Top N2.2	NP	-	1622.5	1438.2	-	Wireline Logs
- Top N2.3	1641.2	1453.0	1656.0	1471.3	18.3 L	Wireline Logs
- Top N2.6	1668.5	1480.0	1681.0	1496.0	16.0 L	Wireline Logs
- Top P1	1702.9	1514.0	1715.5	1530.1	16.1 L	Wireline Logs
Total Depth	1790.0	1600.0	1766.0	1580.2	-	Pipe tally

*Prognosed depth (MDRT) assumes a RT elevation of 38m above MSL and is based on **Directional Plan Wardie-1 Rev 06**.

**Seabed actually tagged at 76.8m with drill string due to a mound of cement being present from the adjacent WSH-3 well (Mudline encountered at 77.5mMDRT).

***Surveyed final RT elevation is actually 37.68m (38m is carried in Report headers).

****The “final” tops are based on Wireline Log depths and Final Demag MWD Survey results and may change.

Comments

All Wireline Logging activities and MDT results are recorded in separate reports.

LWD memory data was successfully retrieved, processed and e-mailed to 3D Oil office.

MPSR sample bottles from the MDT were recovered and processed as follows:

The first of the two chambers taken at 1582.4m was partially drained on-site by Petrotech to obtain preliminary oil properties. The remainder of this cylinder plus the second cylinder from this depth were then transferred to Petrotech bottles for sending in to a lab for further analytical work. The single sample from 1593.7mMDRT was transferred by Petrotech and no field analytical work undertaken.

Since midnight, Petrotech completed sample transfers and the requested analyses, though there was insufficient gas from the partially drained 1582.4m sample to allow $C0_2$ and H_2S readings to be taken.

During circulation of bottoms up from 1766m at about 0400hrs, the BHI gas trap had to be shut down due to the shaker header box overflowing. This situation arose because of a high pump rate with only 3 shakers available to process returns. Prior to the shut down of the gas trap the maximum gas while circulating was 0.27% and the circulating back-ground gas level was ca. 0.003%.

During this ciculation, large chunks of coal were present on the shakers, the largest being about 100x90x12 mm with many pieces in the 50x40x30 mm size range. Samples have been taken of the coal chunks.

Wellsite Geologists due to leave rig @ 1500 hrs 21 May 2008.

Wireline Logging crew due to leave the rig on 21 May 2008

Petrotech crew due to leave the rig on 21 May 2008.

This is the FINAL Daily Geological Report for Wardie-1.

----------END OF REPORT----------

Attachment 12

Validity Checks and Analyses of MDT Samples

Final Report Prepared For 3D Oil Limited

Well: Wardie-1

Validity Checks and Analyses Of MDT Samples

21st May 2008

Ref: 57025

WELL FLOW MANAGEMENT™

Expro Group Australia Pty Ltd

Petrotech

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Canning Vale

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SUMMARY

To validate the quality of samples taken by the Schlumberger MDT Wireline Formation Sampling tool, Petrotech performed a programme of validity checks and analysis on the retrieved samples.

The contents of the successfully retrieved chambers were transferred to Petrotech PVT sampling bottles and sent onshore to Core Laboratories for further analysis.

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Page

1. INTRODUCTION

In this report, Petrotech presents the validity checks and basic on-site analysis for samples retrieved from the MDT tool during logging for the Wardie-1 well. The analyses were carried out on the 21st May 2008.

In order to obtain the highest quality of well-site data from the MDT tool, Petrotech confirmed the quality of MDT samples retrieved by carrying out opening pressure measurements. Pressurised single-phase transfers of samples to Petrotech shipping bottles were performed to provide PVT samples for onshore analysis.

A total of three samples were collected using the Schlumberger MDT tool. Two samples were collected from 1582.4mMDRT (1398.8m TVDSS) and one from 1593.7mMDRT (1409.9m TVDSS). Single-phase transfers were performed on all three samples.

2. OFFSHORE ANALYSIS PROGRAMME

Wire line Fluid Sampling

Following collection of the Wireline Fluid Samples, the tools were brought back to the surface. The chambers were prepared for transfer by pressurising them to 1450psi above the reservoir pressure supplied from the Schlumberger logging data. The buffer fluid volume added to the chamber was recorded at all significant points with sample validity verified by non-invasive opening pressure measurement of the sample from the buffer side of the chamber (see Table 1).

Once the required pressure was reached, the sample was maintained in this condition for one hour with regular agitation to promote sample homogeneity, whilst constant pressure monitoring ensured sample stability and confirmed the absence of leaks. At the end of this period, sample transfer commenced at a minimum of 1450psi above reservoir pressure with the sample introduced into the Petrotech shipping bottle at a slow, constant rate (around 20cc per minute) so as to minimise disruption to the pressure equilibrium.

3. RESULTS

Table 1: WFS Sample Data

Client	3D Oil Limited
Well	Wardie-1
Project No.	57025

Sample Depth (mMDRT)	WFS Chamber No.	WFS Chamber Vol (cc)	Downhole Sampling Date	Downhole Sampling Time	Opening Pressure (psig)	Opening Temp (°C)
1582.4	3349	450	20/5/08	11:49 hrs	3850	14.0
1593.7	3454	450	20/5/08	18:07 hrs	Undetectable	13.0
1582.4	3300	450	20/5/08	12:06 hrs	1100	13.0

Table 2: PVT Transfer Data

Client	3D Oil Limited
Well	Wardie-1
Project No.	57025

Petrotech Sample No.	Sample Depth (mMDRT)	WFS Chamber No.	Transfer Date	Transfer Time	Petrotech Cylinder No.	Transfer Volume (mL)	Transfer Pressure (psig)	Transfer Temp. (°C)	Comments
T.01	1582	3349	21.05.08	2:00	PT-2162	300	5000	65.0	-
T.02	1594	3454	21.05.08	3:30	PT-1147	380	5000	65.0	-
T.03	1582	3300	21.05.08	5:10	PT-2173	380	5000	65.0	-

Table 3: Non-Pressurised Sample List

Client	3D Oil Limited
Well	Wardie-1
Project No.	57025

Petrotech Sample No.	Sample Depth (mMDRT)	WFS Chamber No.	Sample Nature	Sample Volume (mL)	Comments
A.01	1582	3349	Oil	90	Sent to Petrotech, Perth
A.02	1582	3349	Toluene	15	Sent to Petrotech, Perth
A.03	1582	3300	Toluene	30	Sent to Petrotech, Perth

Table 4: Pressurised Sample List

Client	3D Oil Limited
Well	Wardie-1
Project No.	57025

Transferred Samples

Petrotech Sample No.	Sample Depth (mMDRT)	WFS Chamber No	Sample Nature	Petrotech Cylinder No.	Shipping Volume (cc)	Shipping Pressure (psig)
T.01	1582	3349	Oil	PT-2162	300	800
T.02	1594	3454	Water	PT-1147	380	1100
T.03	1582	3300	Oil	PT-2173	380	800

Table 5: WFS Flash Data

Client	3D Oil Limited
Well	Wardie-1
Project No.	57025

Petrotech Sample No.	Sample Depth (mMDRT)	MDT Chamber No.	Stabilised Oil Volume (mL)	Measured Gas Volume	Measured Water Vol.	Barometric Pressure(mBar)	Ambient Temperature (^{0}C)	Gas-Oil Ratio (scf/bbl)
PT-2162	1582	3349	90	22.5L	-	1093	13.0	1437.71

4. DISCUSSION

The logging run was performed on the 20th May 2008. The Schlumberger MDT tool successfully recovered a total of three samples, two from a depth of 1582.4mMDRT and one from a depth of 1593.7mMDRT.

The opening pressure measurements suggested that all three samples were of acceptable quality. The opening pressures showed generally good consistency and the chambers remained intact until transfer.

During all transfers, the MPSR chambers were oriented such that sample was removed from the highest point. On completion of the transfers and analysis, the pressurised and dead samples were dispatched to Petrotech for onward shipment to Core Laboratories (Perth) as instructed by 3D Oil personnel.

5. APPENDICES: PVT SHEETS

WIRELINE FLUID SAMPLE TRANSFER SHEET

Client	3D Oil Limited
Well	Wardie-1
Rig	West Triton
Sampling Tool	MDT

SAMPLING DATA		
Sample number	T.01	
Chamber number	3349	
Sampled by	Schlumberger	
Sample depth	1582.4	mMDRT
Sample nature	Oil	
Date	20.05.08	
Transferred by	Andrew/Hadi	
Transfer commenced	2:00	
Transfer completed	02:35	
Cylinder number	PT-2162	
Cylinder coupled with	-	

TRANSFER CONDITIONS		
Transfer fluid	Glycol	
Cylinder volume	700	cc
Sample volume	300	cc
Transfer fluid remaining	0	cc
Transfer pressure	5000.0	psig
Shipping pressure	800.0	psig
Ambient temperature	14.0	°C

BOTTOM HOLE CONDITIONS		
Reservoir pressure	1983.3	psig
Reservoir temperature	54.7	°C

COMMENTS

WIRELINE FLUID SAMPLE TRANSFER SHEET

Client	3D Oil Limited
Well	Wardie-1
Rig	West Triton
Sampling Tool	MDT

SAMPLING DATA		
Sample number	T.02	
Chamber number	3454	
Sampled by	Schlumberger	
Sample depth	1593.7	mMDRT
Sample nature	Water	
Date	20.05.08	
Transferred by	Andrew/Hadi	
Transfer commenced	3:30	
Transfer completed	04:00	
Cylinder number	PT-1147	
Cylinder coupled with	-	

TRANSFER CONDITIONS		
Transfer fluid	Glycol	
Cylinder volume	700	cc
Sample volume	380	cc
Transfer fluid remaining	0	cc
Transfer pressure	5000.0	psig
Shipping pressure	1100.0	psig
Ambient temperature	13.0	°C

BOTTOM HOLE CONDITIONS		
Reservoir pressure	1981.9	psig
Reservoir temperature	56	°C

COMMENTS

WIRELINE FLUID SAMPLE TRANSFER SHEET

Client	3D Oil Limited
Well	Wardie-1
Rig	West Triton
Sampling Tool	MDT

SAMPLING DATA		
Sample number	T.03	
Chamber number	3300	
Sampled by	Schlumberger	
Sample depth	1582.4	mMDRT
Sample nature	Oil	
Date	20.05.08	
Transferred by	Andrew/Hadi	
Transfer commenced	5:10	
Transfer completed	05:35	
Cylinder number	PT-2173	
Cylinder coupled with	-	-

TRANSFER CONDITIONS		
Transfer fluid	Glycol	
Cylinder volume	700	cc
Sample volume	380	cc
Transfer fluid remaining	0	cc
Transfer pressure	5000.0	psig
Shipping pressure	800.0	psig
Ambient temperature	13.0	°C

BOTTOM HOLE CONDITIONS		
Reservoir pressure	1983.3	psig
Reservoir temperature	54.7	°C

COMMENTS

Attachment 13

Validity Checks and Analyses of MDT Samples

Core Lab™

RESERVOIR OPTIMIZATION

Reservoir Fluid Study

for

3D Oil

Wardie-1

AFL 20080029

CORE LABORATORIES AUSTRALIA PTY LTD

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30th September 2008

3D Oil Limited
Level 5,
164 Flinders Lane,
Melbourne
VIC 3000

Attention: Jon Keall

Dear Jon,

Subject: Reservoir Fluid Study: Well: Wardie-1; Our file: AFL 20080029

Two sub-surface oil and one sub-surface water sample were forwarded to our Perth laboratory on 19th June 2008 for initial validation and compositional analysis. Presented in the following report are the results of the requested analyses.

Core Laboratories Australia Pty Ltd are very pleased to have been of service to 3D Oil Limited in this work. Should any questions arise concerning the data presented in this report, or if we may be of assistance in any other matter, please do not hesitate to contact us.

Yours Faithfully,
For CORE LABORATORIES AUSTRALIA PTY LTD

Murray Macleod
Laboratory Supervisor

Table of Contents

Section A - Summary of Analysis Methods

Summary of Analysis Methods

Sample Validation

The opening pressures of the three sub-surface oil samples were recorded at ambient temperature. They were then stabilised at 5000 psig and heated to 100°C for 24 hours. The samples were agitated thoroughly to ensure they were completely single phase and homogenous. A check for free water was made and the sample volume determined.

Compositional Analysis (BHS Oil)

The fluid composition of each oil sample was determined using a combination of flash separation and gas chromatography techniques. Each fluid was flashed at a controlled temperature (50°C) and separated into oil and gas phases.

The gas was analysed using extended gas chromatography with compositions determined by a GPA 2286 method using a multi-column gas chromatograph system. A temperature programme was utilised to obtain optimum detection and separation of dodecanes plus components.

The flashed oil was analysed by temperature programmed high resolution capillary gas chromatography. The two analyses were then mathematically recombined to the flash gas-oil ratio.

Compositional Analysis (BHS water)

After separation of the emulsion which involved heat treatment to 94°C for 5 weeks, the pressurised water sample was subjected to an atmospheric (zero) flash analysis whereby the fluids were flashed from working pressure of 5000 psig and 94°C to atmospheric pressure and ambient temperature, and separated into gas and water phases. The gas-water ratio and the evolved gas composition are the data obtained from this test. A 12-ion analysis was not performed on the flashed water due to insufficient sample. The gas-water ratio was calculated from the volume of gas and weight of water obtained during the flash and density of flashed water.

Compositional Analysis Databases

For all compositions reported in this study, the properties used, eg Molecular Weight and Density of the individual components are tabulated in Section E of the Appendix.

Section B - Summary of Samples Received and Validation Data

Reported Well and Sampling Information - MDTs

Reservoir and Well Information

Field	
Well	Wardie-1
Reservoir Fluid	Oil
Formation	
Reservoir Pressure	1983.3 psig
Reservoir Temperature	54.7 °C
Installation	West Triton
Test	
Perforations	

Sampling Information

Date sampled	20-May-08
Time sampled	02:00-02:35, 05:10-05:35 hrs
Type of samples	MDT
Sampling company	Schlumberger
Sampling point	
Sampling Depth	1582.4 mMDRT
Choke	
Status of well	
Bottomhole pressure	1983.3 psig
Bottomhole temperature	54.7 °C
Wellhead flowing pressure	
Wellhead flowing temperature	
Separator pressure	
Separator temperature	
Pressure base	14.696 psia
Temperature base	15.6°C
Water flowrate	
Gas gravity (Air = 1)	
H2S	
CO2	
BS&W	
Oil gravity at 60°F	

Comments: Sampling information for samples T.01 and T.03

Summary of MDT Samples Received and Validation Data

MDT Samples

Sample Number	Cylinder Number	ex-Chamber Number	Sample Depth (m MDRT)	Sample Type	Sampling :- Pressure (psig)	Sampling :- Temp. (°C)	Laboratory opening :- Pressure (psig)	Laboratory opening :- Temp. (°C)	Water Volume (cm^3)	Sample Volume (cm^3)
T.01	PT-2162	3349	1582.4	Oil	1983	54.7	876	17.5	4*	300
T.02	PT-1147	3454	1593.7	Water	1983	54.7	439	15.2	**	325
T.03	PT-2173	3300	1582.4	Oil	1983	54.7	938	15.4	50*	325

Notes:

Sampling pressure and temperature information obtained from Expro sampling sheets.

* Samples appear to form emulsions readily. T.01 and T.03 were heat-treated until water-in oil fell below 0.1% for analysis.

** Water sample T.02 contained oil in emulsified form. After 1 week on heat, a small separated oil sample collected from the top of PT-1147 still contained >10% water (Karl Fischer titration timed out). This fluid does not pour at room temperature. After 5 weeks with periodic checks, 260cc of oil was collected leaving 60cc of water for flash analysis.

Sample Volumes at 5000 psig and 94°C

Section C - Compositional Analysis Data (Bottom Hole Oil Samples)

Compositional Analysis of Sample T.01, cylinder PT-2162 to C36 plus

	Component	Mole %	Weight %
H_2	Hydrogen	0.00	0.00
H_2S	Hydrogen Sulphide	0.00	0.00
CO_2	Carbon Dioxide	0.87	0.28
N_2	Nitrogen	0.23	0.05
C_1	Methane	26.23	3.12
C_2	Ethane	0.63	0.14
C_3	Propane	0.77	0.25
iC_4	i-Butane	0.85	0.36
nC_4	n-Butane	0.68	0.29
C_5	Neo-Pentane	0.04	0.02
iC_5	i-Pentane	1.26	0.67
nC_5	n-Pentane	0.71	0.38
C_6	Hexanes	3.18	2.03
	M-C-Pentane	0.70	0.44
	Benzene	0.01	0.00
	Cyclohexane	0.47	0.29
C_7	Heptanes	4.35	3.23
	M-C-Hexane	2.48	1.81
	Toluene	0.03	0.02
C_8	Octanes	6.41	5.43
	E-Benzene	0.15	0.12
	M/P-Xylene	0.37	0.29
	O-Xylene	0.07	0.06
C_9	Nonanes	5.39	5.13
	1,2,4-TMB	0.21	0.19
C_{10}	Decanes	5.83	6.15
C_{11}	Undecanes	4.65	5.07
C_{12}	Dodecanes	3.51	4.19
C_{13}	Tridecanes	3.57	4.63
C_{14}	Tetradecanes	3.13	4.41
C_{15}	Pentadecanes	3.33	5.08
C_{16}	Hexadecanes	2.64	4.34
C_{17}	Heptdecanes	2.38	4.18
C_{18}	Octadecanes	2.41	4.49
C_{19}	Nonadecanes	1.82	3.55
C_{20}	Eicosanes	1.56	3.18
C_{21}	Heneicosanes	1.28	2.77
C_{22}	Docosanes	1.09	2.48
C_{23}	Tricosanes	0.94	2.21
C_{24}	Tetracosanes	0.78	1.92
C_{25}	Pentacosanes	0.66	1.70
C_{26}	Hexacosanes	0.52	1.38
C_{27}	Heptacosanes	0.45	1.24
C_{28}	Octacosanes	0.35	1.01
C_{29}	Nonacosanes	0.32	0.96
C_{30}	Triacontanes	0.25	0.79
C_{31}	Hentriacontanes	0.23	0.75
C_{32}	Dotriacontanes	0.17	0.55
C_{33}	Tritriacontanes	0.14	0.48
C_{34}	Tetratriacontanes	0.11	0.40
C_{35}	Pentatriacontanes	0.09	0.31
$C_{36}+$	Hexatriacontanes Plus	1.70	7.18
	Totals :	100.00	100.00

Note: 0.00 means less than 0.005.

Compositional Analysis of Sample T.01, cylinder PT-2162 to C36 plus

Calculated Residue Properties		
C_7 plus	Mole%	64.55
	Molecular Weight (g mol-1)	193
	Density at 15.6°C (g cm-3)	0.8168
C_{11} plus	Mole%	38.08
	Molecular Weight (g mol-1)	245
	Density at 15.6°C (g cm-3)	0.8530
C_{20} plus	Mole%	10.64
	Molecular Weight (g mol-1)	371
	Density at 15.6°C (g cm-3)	0.8931
C_{36} plus	Mole %	1.70
	Molecular Weight (g mol-1)	568
	Density at 15.6°C (g cm-3)	0.9298

Calculated Whole Sample Properties		
	Average mole weight (g mol-1)	135
	GOR from Flash* (scf/bbl)	280

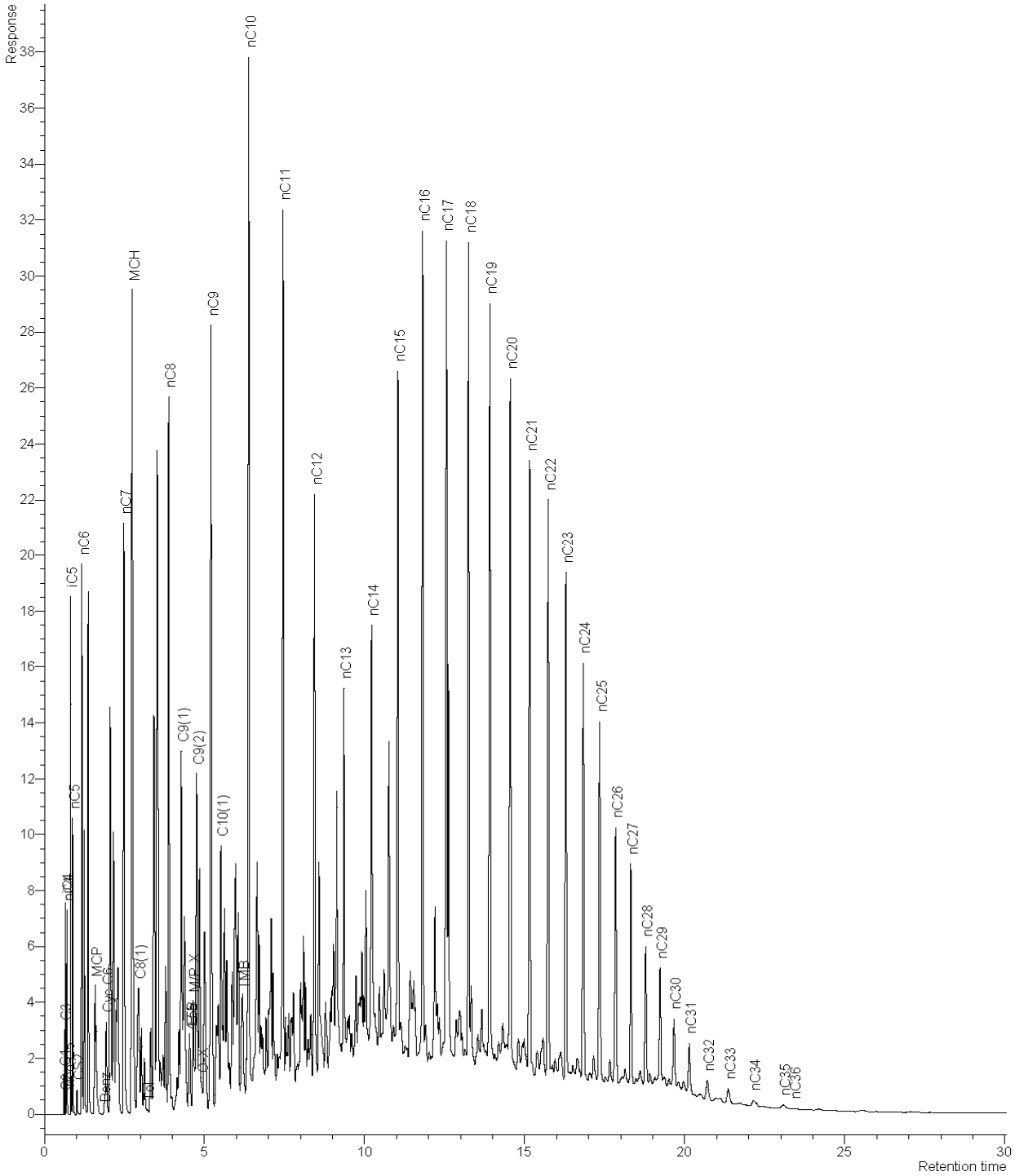
* Reservoir fluid flashed from 5000 psig at 94°C to atmospheric pressure at 50°C

Fingerprint Analysis of flashed oil, Sample T.01, cylinder PT-2162

Chromatogram

Wardie-1 S/F (1,1)
Acquired Monday, 14 July 2008 4:27:14 PM

wb13072008,as_1.2207,1,1,1



Compositional Analysis of Sample T.03, cylinder PT-2173 to C36 plus

	Component	Mole %	Weight %
H_2	Hydrogen	0.00	0.00
H_2S	Hydrogen Sulphide	0.00	0.00
CO_2	Carbon Dioxide	0.84	0.28
N_2	Nitrogen	0.26	0.05
C_1	Methane	26.83	3.20
C_2	Ethane	0.62	0.14
C_3	Propane	0.74	0.24
iC_4	i-Butane	0.85	0.37
nC_4	n-Butane	0.65	0.28
C_5	Neo-Pentane	0.04	0.02
iC_5	i-Pentane	1.20	0.64
nC_5	n-Pentane	0.67	0.36
C_6	Hexanes	3.05	1.95
	M-C-Pentane	0.68	0.42
	Benzene	0.00	0.00
	Cyclohexane	0.46	0.29
C_7	Heptanes	4.26	3.17
	M-C-Hexane	2.44	1.79
	Toluene	0.02	0.02
C_8	Octanes	6.33	5.38
	E-Benzene	0.16	0.12
	M/P-Xylene	0.36	0.28
	O-Xylene	0.08	0.06
C_9	Nonanes	5.32	5.08
	1,2,4-TMB	0.20	0.18
C_{10}	Decanes	5.83	6.17
C_{11}	Undecanes	4.64	5.08
C_{12}	Dodecanes	3.52	4.22
C_{13}	Tridecanes	3.55	4.62
C_{14}	Tetradecanes	3.13	4.42
C_{15}	Pentadecanes	3.32	5.09
C_{16}	Hexadecanes	2.62	4.33
C_{17}	Heptdecanes	2.38	4.20
C_{18}	Octadecanes	2.42	4.53
C_{19}	Nonadecanes	1.82	3.57
C_{20}	Eicosanes	1.57	3.22
C_{21}	Heneicosanes	1.29	2.80
C_{22}	Docosanes	1.10	2.51
C_{23}	Tricosanes	0.95	2.24
C_{24}	Tetracosanes	0.80	1.96
C_{25}	Pentacosanes	0.67	1.72
C_{26}	Hexacosanes	0.52	1.39
C_{27}	Heptacosanes	0.45	1.26
C_{28}	Octacosanes	0.36	1.04
C_{29}	Nonacosanes	0.33	0.97
C_{30}	Triacontanes	0.26	0.81
C_{31}	Hentriacontanes	0.24	0.77
C_{32}	Dotriacontanes	0.17	0.56
C_{33}	Tritriacontanes	0.14	0.49
C_{34}	Tetratriacontanes	0.12	0.41
C_{35}	Pentatriacontanes	0.10	0.35
$C_{36}+$	Hexatriacontanes Plus	1.64	6.95
	Totals :	100.00	100.00

Note: 0.00 means less than 0.005.

Compositional Analysis of Sample T.03, cylinder PT-2173 to C36 plus

Calculated Residue Properties		
C_7 plus	Mole%	64.25
	Molecular Weight (g mol-1)	193
	Density at 15.6°C (g cm-3)	0.8170
C_{11} plus	Mole%	38.11
	Molecular Weight (g mol-1)	245
	Density at 15.6°C (g cm-3)	0.8529
C_{20} plus	Mole%	10.71
	Molecular Weight (g mol-1)	369
	Density at 15.6°C (g cm-3)	0.8928
C_{36} plus	Mole %	1.64
	Molecular Weight (g mol-1)	568
	Density at 15.6°C (g cm-3)	0.9299

Calculated Whole Sample Properties		
	Average mole weight (g mol-1)	134
	GOR from Flash* (scf/bbl)	286

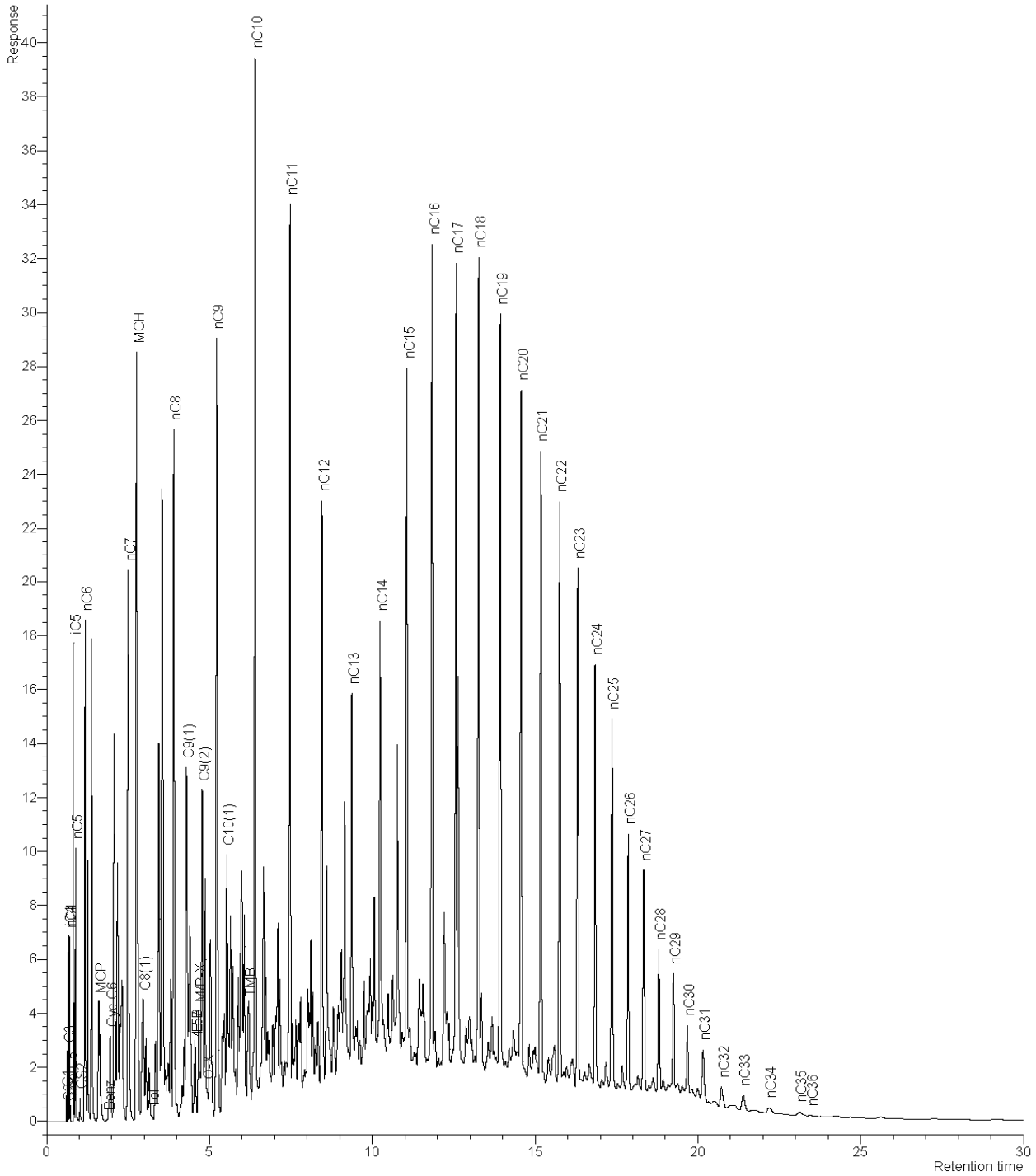
* Reservoir fluid flashed from 5000 psig at 94°C to atmospheric pressure at 50°C

Fingerprint Analysis of flashed oil sample T.03, cylinder PT-2173

Chromatogram

Wardie-1 S/F (1,1)
Acquired Friday, 11 July 2008 3:46:05 PM

wb06072008,as_1.2201,1,1,1



Section D - Compositional Analysis Data - Bottom Hole Water Sample

Compositional Analysis of Flashed Gas from Sample T.02, Cylinder PT-1147 to C12+

	Component	Mole %	Weight %
H_2	Hydrogen	0.00	0.00
H_2S	Hydrogen Sulphide	0.00	0.00
CO_2	Carbon Dioxide	6.13	10.32
N_2	Nitrogen	1.22	1.31
C_1	Methane	77.31	47.48
C_2	Ethane	3.33	3.83
C_3	Propane	1.15	1.94
iC_4	i-Butane	0.74	1.64
nC_4	n-Butane	0.56	1.23
C_5	Neo-Pentane	0.06	0.17
iC_5	i-Pentane	1.31	3.63
nC_5	n-Pentane	0.94	2.58
C_6	Hexanes	3.20	10.45
	M-C-Pentane	0.33	1.06
	Benzene	0.00	0.00
	Cyclohexane	0.59	1.89
C_7	Heptanes	1.59	6.06
	M-C-Hexane	0.61	2.29
	Toluene	0.03	0.09
C_8	Octanes	0.70	3.07
	E-Benzene	0.01	0.04
	M/P-Xylene	0.00	0.00
	O-Xylene	0.00	0.00
C_9	Nonanes	0.17	0.81
	1,2,4-TMB	0.02	0.11
C_{10}	Decanes	0.00	0.00
C_{11}	Undecanes	0.00	0.00
$C_{12}+$	Dodecanes Plus	0.00	0.00
	Totals :	100.00	100.00

Note: 0.00 means less than 0.005.

Calculated Properties	
C_7+	
Mole%	4.05
Molecular Weight (g mol-1)	99.6
Density at 15.6°C (g cm-3)	0.7317

Calculated Whole Gas Properties	
Molecular Weight (g mol-1)	26.14
Real Relative Density (Air=1 at 14.696 psia and 15.6°C)	0.9075

Gas-Water Ratio	
Gas Water Ratio (scf/bbl) from flash at 19.6°C	19.7

Note:
Reservoir fluid was flashed from 5000 psig and 94°C to atmospheric pressure and 19.6°C

Detailed Flashed Water Analysis from Sample T.02, Cylinder PT-1147

Dissolved Constituent	Units	Results
Ions		
Calcium, Ca	mg/L	
Magnesium, Mg	mg/L	
Iron, Fe (soluble)	mg/L	
Sodium, Na	mg/L	
Potassium, K	mg/L	
Strontium, Sr	mg/L	
Barium, Ba	mg/L	
Manganese, Mn	mg/L	
Chloride, Cl	mg/L	
Sulphate, SO4	mg/L	
Bicarbonate, HCO3	mg/L	
Carbonate, CO3	mg/L	
Hydroxide, OH	mg/L	
Basic Properties		
pH	pH units	7.7
Resistivity, @ 25°C	ohm-m	
Total Dissolved Solids (calculated)	mg/L	
Total Dissolved Solids (by evaporation at 110°C)	mg/L	
Total Dissolved Solids (by evaporation at 180°C)	mg/L	
Density, @ 20°C	gm/cc	1.0425

Notes:

1. During validation checks, sample T.02 (PT-1147) was found to be a tight margarine-like emulsion.
2. The sample was left upright and standing on heat at 5000 psig and 94°C.
3. Sample status was checked periodically over 5 weeks.
4. 260cc of free oil was removed (and stored) leaving 60cc of water available for flash analysis.
5. The volume of water collected was insufficient and quality inadequate for detailed water analysis and resistivity.

Section E - Appendix

Data Used in Gas Compositional Calculations

Component		Mole Weight (g mol-1)	Density (g cm-3 at 60°F)	Component		Mole Weight (g mol-1)	Density (g cm-3 at 60°F)
Hydrogen	*	2.016	N/A	33DMC5	*	100.20	0.6954
Oxygen/(Argon)	**	31.999	1.1410	Cyclohexane	*	84.16	0.7827
Nitrogen (Corrected)	**	28.013	0.8086	2MC6/23DMC5	*	100.20	0.6917
Methane	**	16.043	0.2997	11DMCYC5/3MC6	*	99.20	0.7253
Carbon Dioxide	**	44.010	0.8172	t13DMCYC5	*	98.19	0.7528
Ethane	**	30.070	0.3558	c13DMCYC5/3EC5	*	99.20	0.7262
Hydrogen Sulphide	**	34.080	0.8006	t12DMCYC5	*	98.19	0.7554
Propane	**	44.097	0.5065	Heptanes (nC7)	*	100.20	0.6875
i-Butane	**	58.123	0.5623	22DMC6	*	114.23	0.6994
n-Butane	**	58.123	0.5834	MCYC6	*	98.19	0.7740
Neo-Pentane	*	72.15	0.5968	ECYC5	*	98.19	0.7704
i-Pentane	**	72.150	0.6238	223TMC5/24&25DMC6	*	114.23	0.7060
n-Pentane	**	72.150	0.6305	ctc124TMCYC5	*	112.21	0.7511
22DMC4	*	86.18	0.6529	ctc123TMCYC5	*	112.21	0.7574
23DMC4/CYC5	*	78.16	0.7129	Toluene	*	92.14	0.8734
2MC5	*	86.18	0.6572	Octanes (nC8)	*	114.23	0.7063
3MC5	*	86.18	0.6682	E-Benzene	*	106.17	0.8735
Hexanes (nC6)	*	86.18	0.6631	M/P-Xylene	*	106.17	0.8671
22DMC5	*	100.20	0.6814	O-Xylene	*	106.17	0.8840
M-C-Pentane	*	84.16	0.7533	Nonanes (nC9)	*	128.26	0.7212
24DMC5	*	100.20	0.6757	Decanes	***	134	0.778
223TMC4	*	100.20	0.6947	Undecanes	***	147	0.789
Benzene	*	78.11	0.8820	Dodecanes	***	161	0.800

Data Source Refs :

* ASTM Data Series Publication DS 4B (1991) - Physical Constants of Hydrocarbon and Non-Hydrocarbon Compounds.

** GPA Table of Physical Constants of Paraffin Hydrocarbons and Other Components of Natural Gas, GPA 2145-96.

*** Journal of Petroleum Technology, Nov 1978, Pages 1649-1655.
Predicting Phase Behaviour of Condensate/Crude Oil Systems Using Methane Interaction Coefficients - D.L. Katz & A. Firoozabadi.

Note :
The gas mole % compositions were calculated from the measured weight % compositions using the most detailed analysis results, involving as many of the above components as were identified. The reported component mole % compositions were then sub-grouped into the generic carbon number components.

Data Used in Liquid Compositional Calculations

Component		Mole Weight (g mol-1)	Density (g cm-3 at 60°F)	Component		Mole Weight (g mol-1)	Density (g cm-3 at 60°F)
Hydrogen	*	2.016	N/A	Undecanes	***	147	0.789
Hyd. sulphide	**	34.080	0.8006	Dodecanes	***	161	0.800
Carbon Dioxide	**	44.010	0.8172	Tridecanes	***	175	0.811
Nitrogen	**	28.013	0.8086	Tetradecanes	***	190	0.822
Methane	**	16.043	0.2997	Pentadecanes	***	206	0.832
Ethane	**	30.070	0.3558	Hexadecanes	***	222	0.839
Propane	**	44.097	0.5065	Heptadecanes	***	237	0.847
i-Butane	**	58.123	0.5623	Octadecanes	***	251	0.852
n-Butane	**	58.123	0.5834	Nonadecanes	***	263	0.857
i-Pentane	**	72.150	0.6238	Eicosanes	***	275	0.862
n-Pentane	**	72.150	0.6305	Heneicosanes	***	291	0.867
Hexanes	**	86.177	0.6634	Docosanes	***	305	0.872
Me-cyclo-pentane	*	84.16	0.7533	Tricosanes	***	318	0.877
Benzene	*	78.11	0.8820	Tetracosanes	***	331	0.881
Cyclo-hexane	*	84.16	0.7827	Pentacosanes	***	345	0.885
Heptanes	**	100.204	0.6874	Hexacosanes	***	359	0.889
Me-cyclo-hexane	*	98.19	0.7740	Heptacosanes	***	374	0.893
Toluene	*	92.14	0.8734	Octacosanes	***	388	0.896
Octanes	**	114.231	0.7061	Nonacosanes	***	402	0.899
Ethyl-benzene	*	106.17	0.8735	Triacontanes	***	416	0.902
Meta/Para-xylene	*	106.17	0.8671	Hentriacontanes	***	430	0.906
Ortho-xylene	*	106.17	0.8840	Dotriacontanes	***	444	0.909
Nonanes	**	128.258	0.7212	Tritriacontanes	***	458	0.912
1-2-4-T-M-benzene	*	120.19	0.8797	Tetratriacontanes	***	472	0.914
Decanes	**	142.285	0.7334	Pentatriacontanes	***	486	0.917

Data Source Refs :

* ASTM Data Series Publication DS 4B (1991) - Physical Constants of Hydrocarbon and Non-Hydrocarbon Compounds.

** GPA Table of Physical Constants of Paraffin Hydrocarbons and Other Components of Natural Gas GPA 2145-96.

*** Journal of Petroleum Technology, Nov 1978, Pages 1649-1655.
Predicting Phase Behaviour of Condensate/Crude Oil Systems Using Methane Interaction Coefficients - D.L. Katz & A. Firoozabadi.

Note :
The residue mole weight and density values (eg heptanes plus, undecanes plus, eicosanes plus) are calculated so that the calculated average mole weights and densities correspond with the measured values. This can lead to anomalous residue mole weights and densities where the Katz and Firoozabadi values may not be suitable for the isomer groups detected.

Report prepared by	**Report approved by**
Damien Gerard **Senior Reservoir Fluids Analyst**	**Murray Macleod** **Laboratory Supervisor**

Enclosure 1

Gas Log Plot

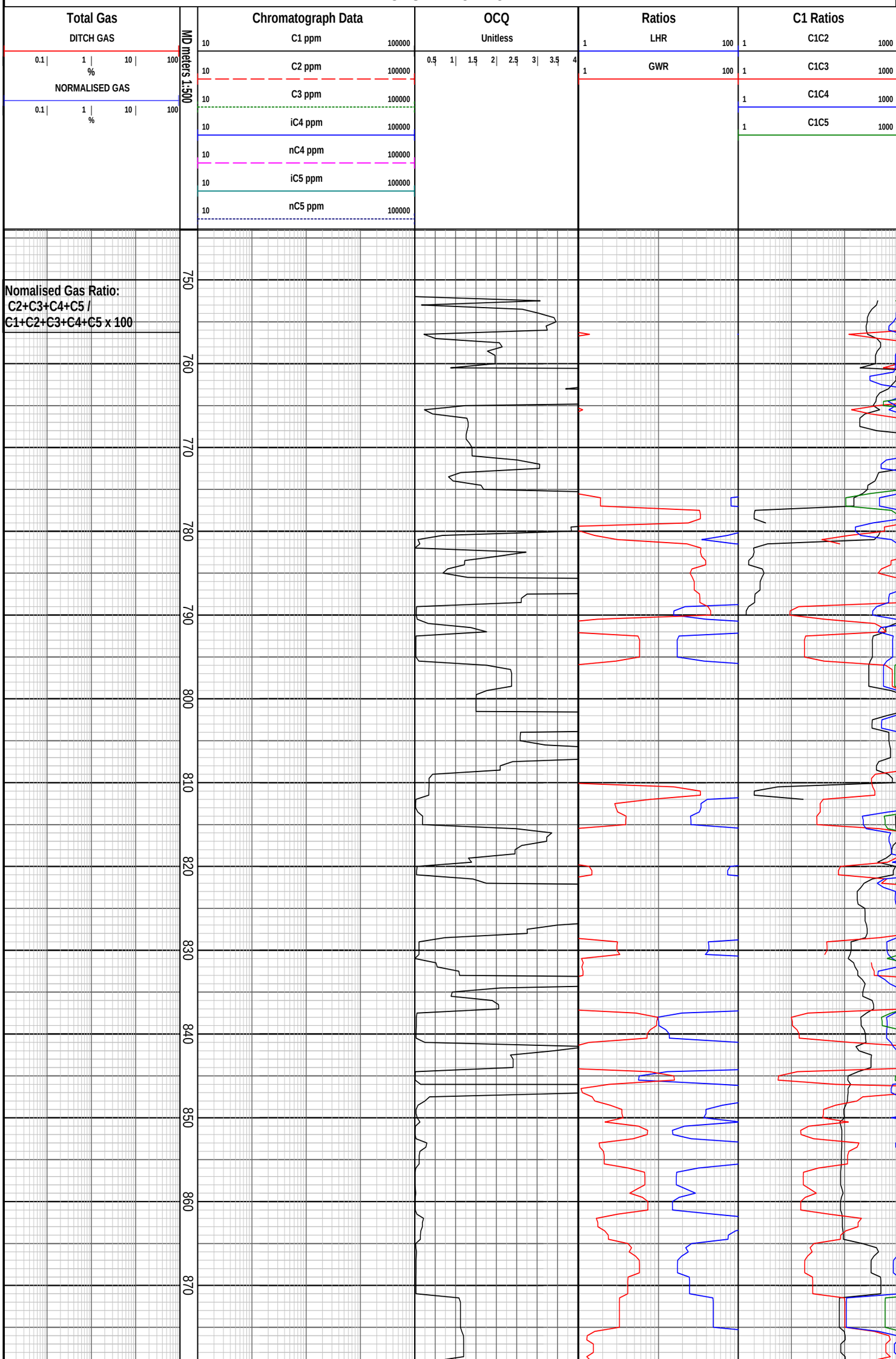
1:500

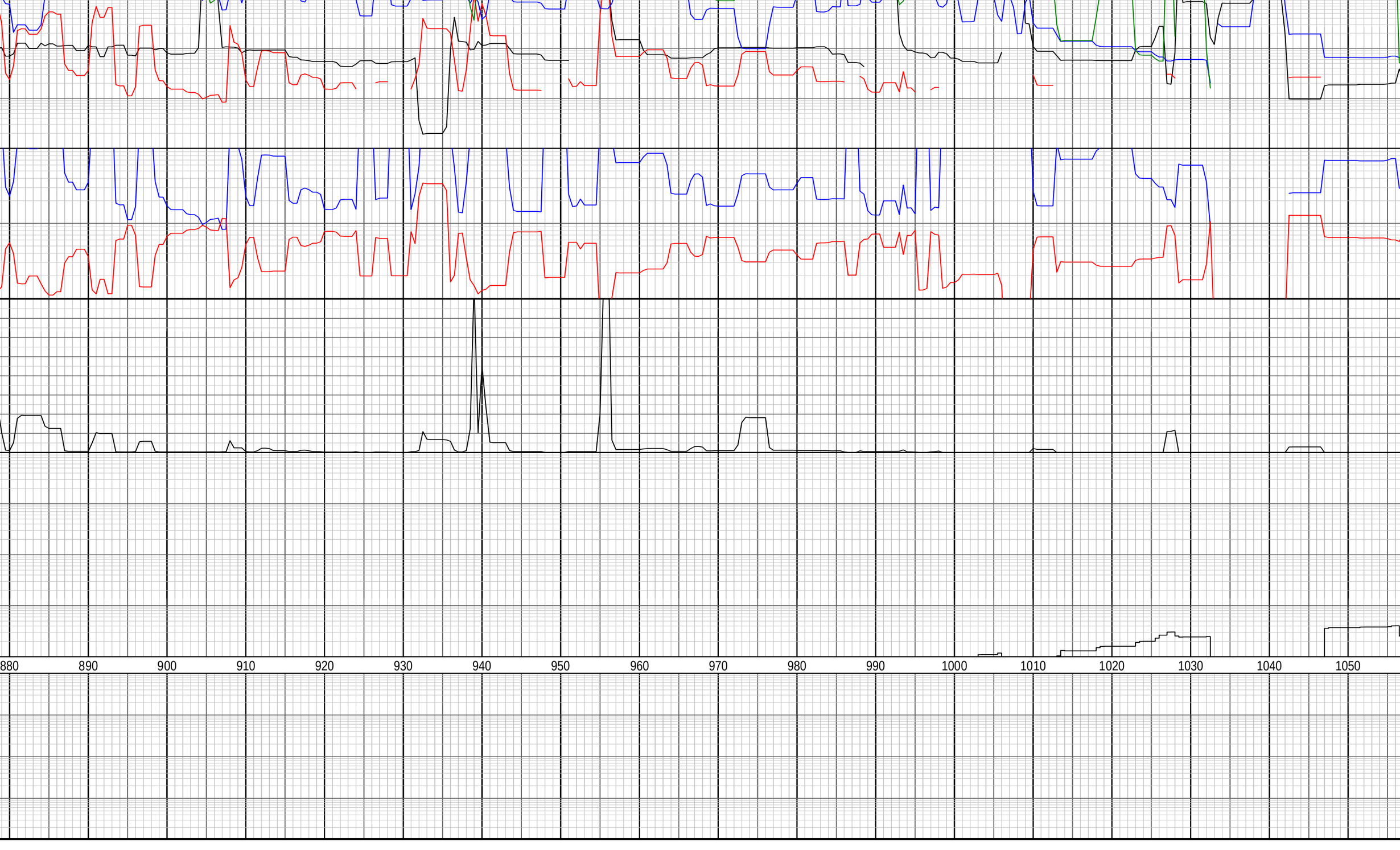
BAKER HUGHES INTEQ

Company : 3D Oil Ltd
Well : Wardie-1
Interval : 744.00 - 1776.67 meters
Created : 22/May/2008 11:17:12 PM

3D OIL

GAS RATIO PLOT

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890
900
910
920
930
940
950
960
970
980
990
1000
1010
1020
1030
1040
1050


1060
1070
1080
1090
1100
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1120
1130
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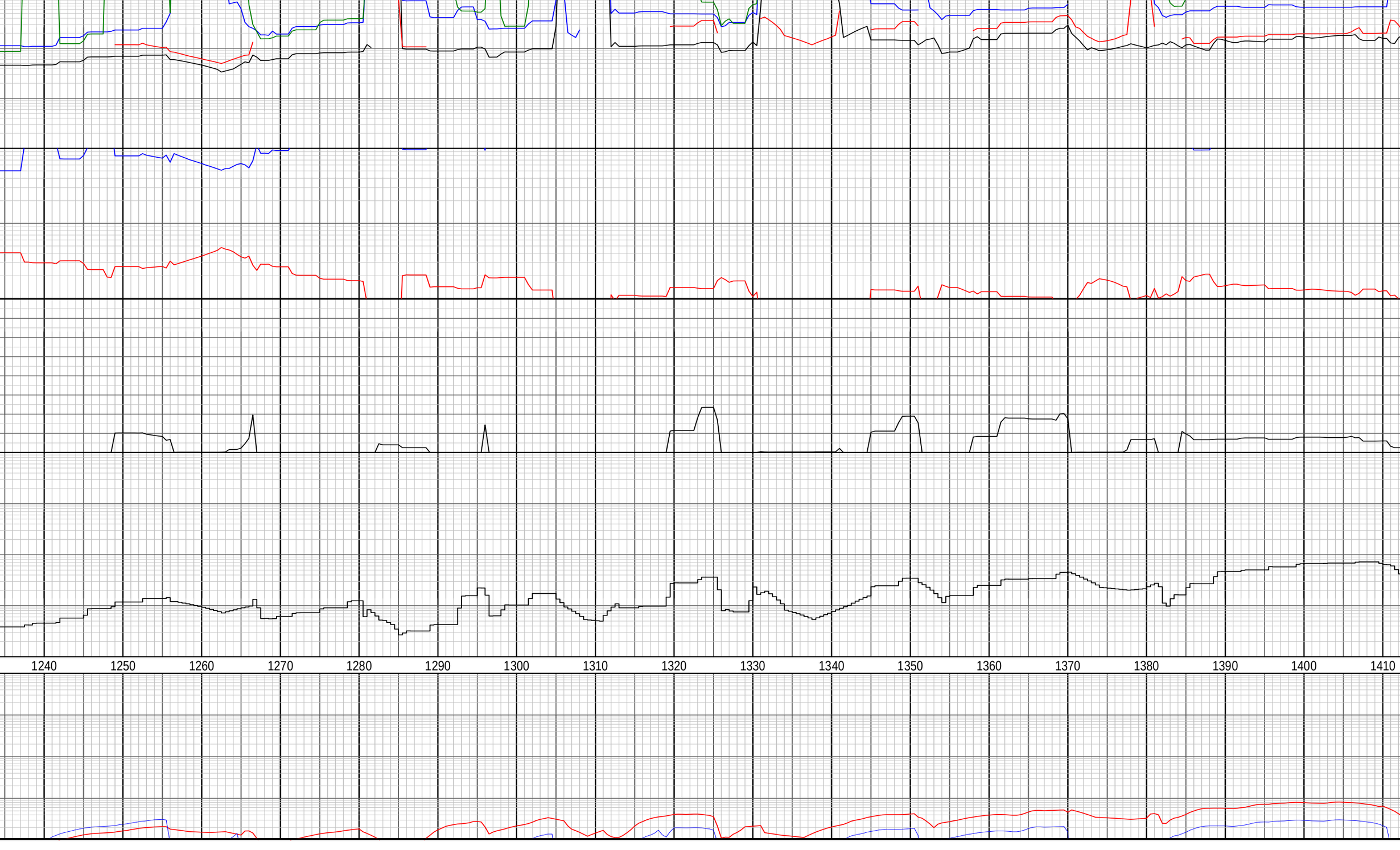
1150
1160
1170
1180
1190
1200
1210
1220
1230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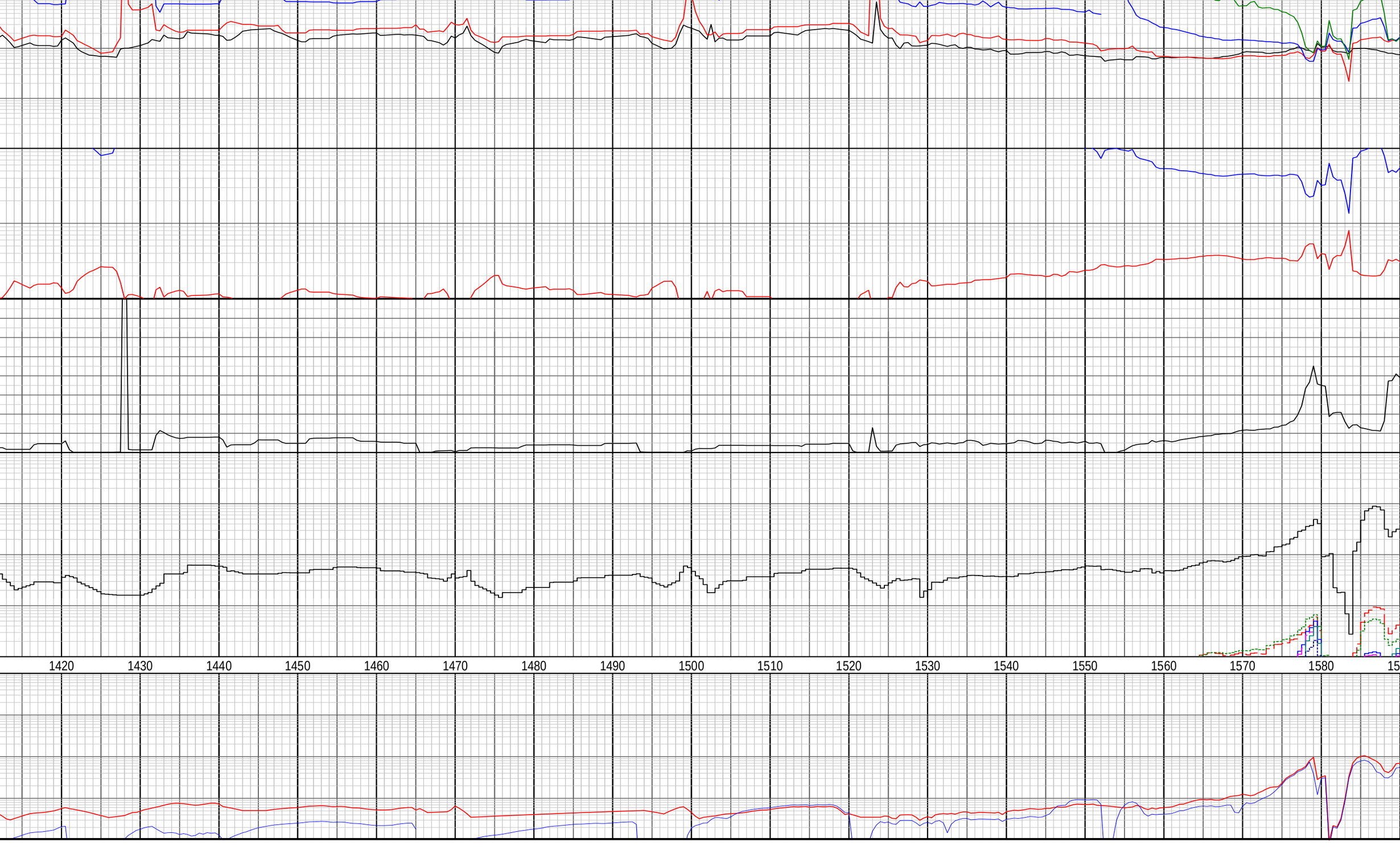
1390
1400
1410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1490
1500
1510
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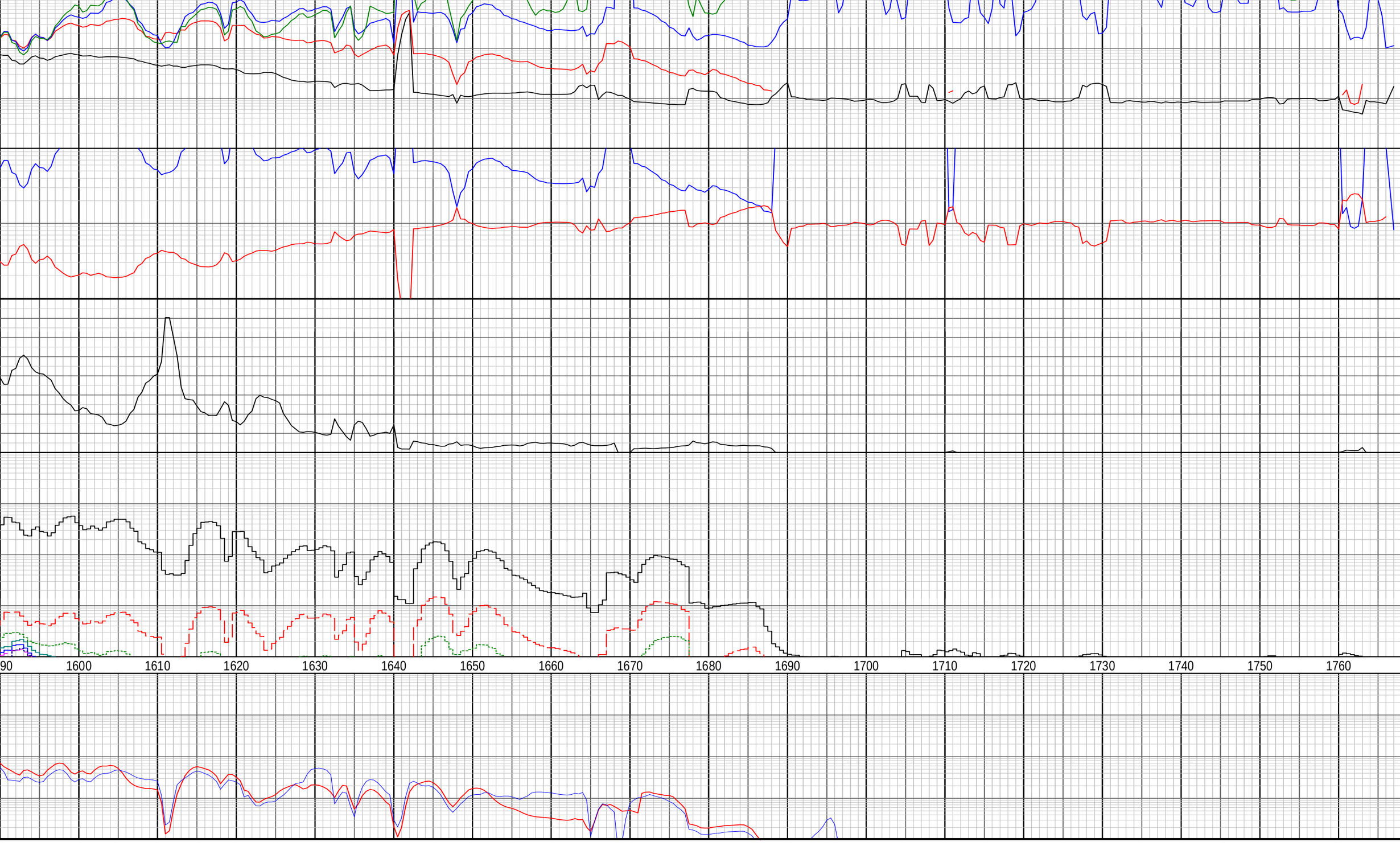
1530
1540
1550
1560
1570
1580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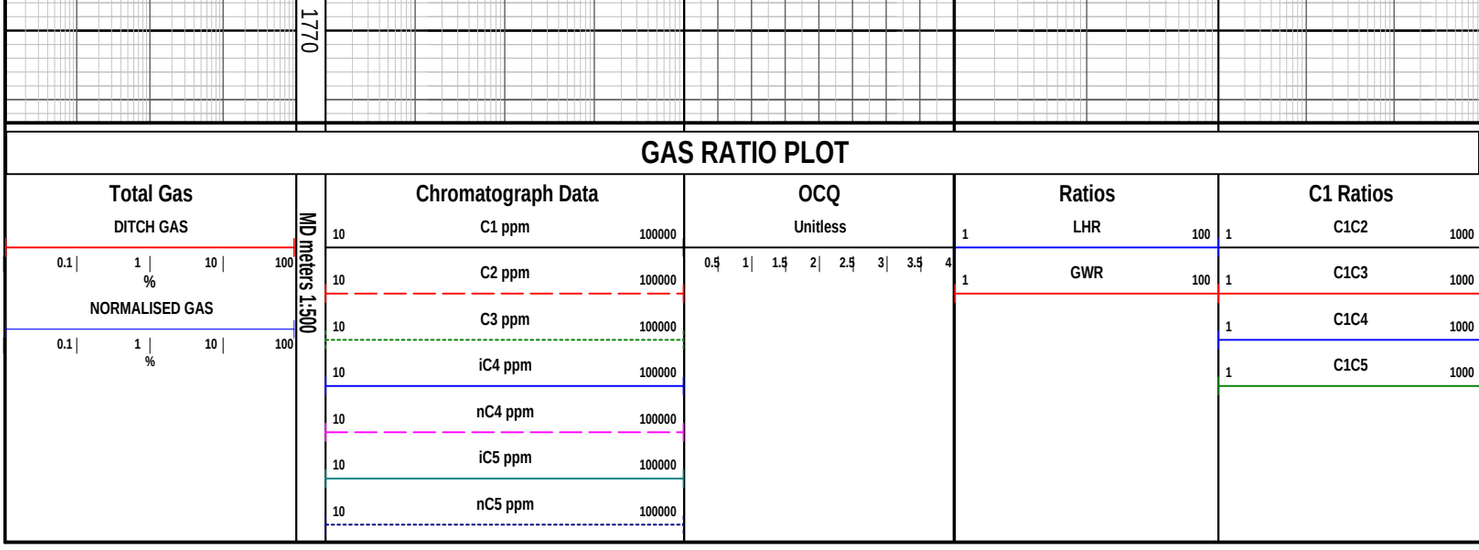
1600
1610
1620
1630
1640
1650
1660
1670
1680
1690
1700
1710
1720
1730
1740
1750
1760


1770
GAS RATIO PLOT
Total Gas
DITCH GAS
0.1
1
10
100
%
NORMALISED GAS
0.1
1
10
100
%
MD meters 1:500
Chromatograph Data
10
C1 ppm
100000
10
C2 ppm
100000
10
C3 ppm
100000
10
iC4 ppm
100000
10
nC4 ppm
100000
10
iC5 ppm
100000
10
nC5 ppm
100000
OCQ
Unitless
0.5
1
1.5
2
2.5
3
3.5
4
Ratios
1
LHR
100
1
GWR
100
C1 Ratios
1
C1C2
1000
1
C1C3
1000
1
C1C4
1000
1
C1C5
1000

Enclosure 2

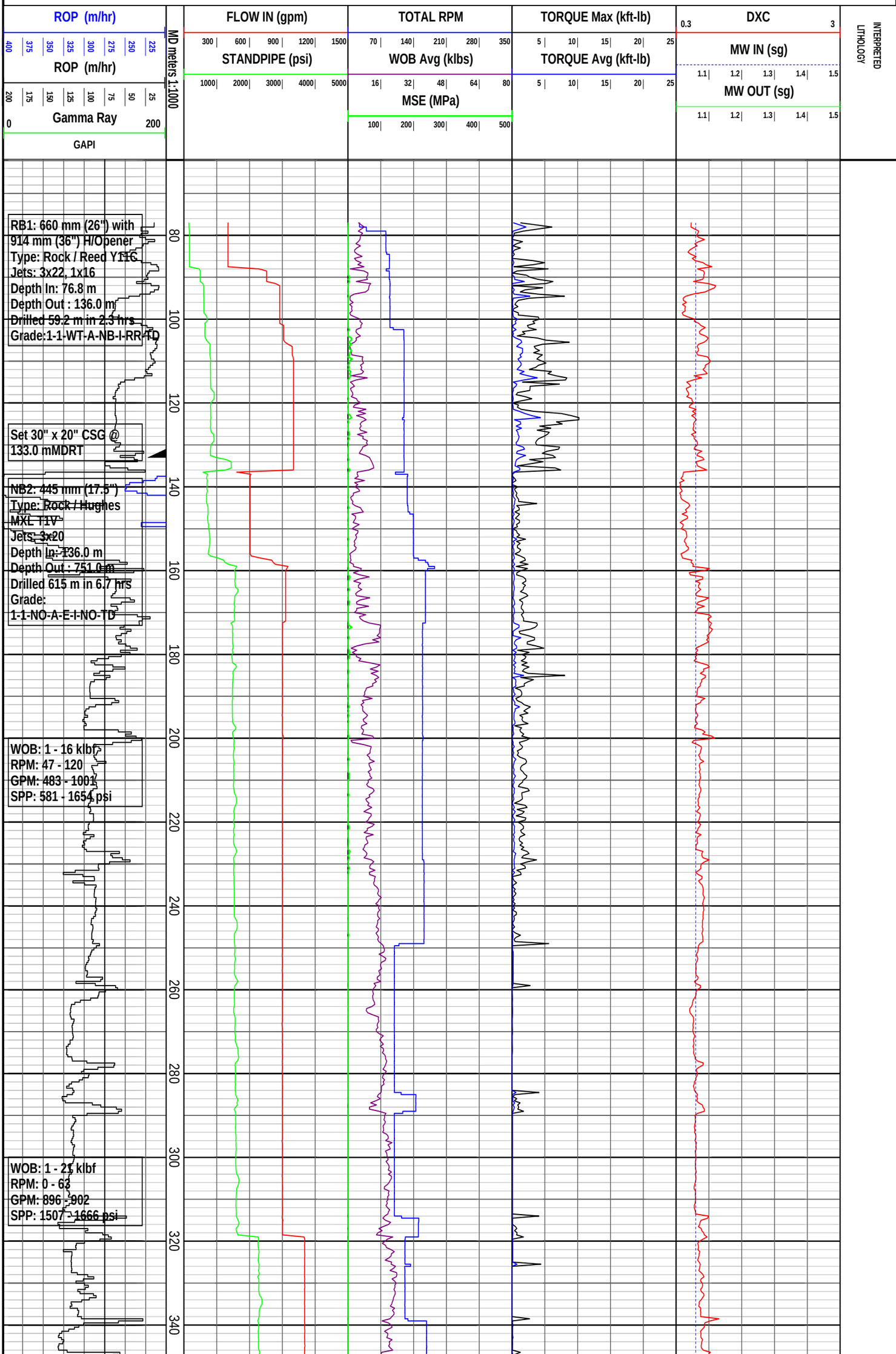
Drilling Data Plot
1:1000

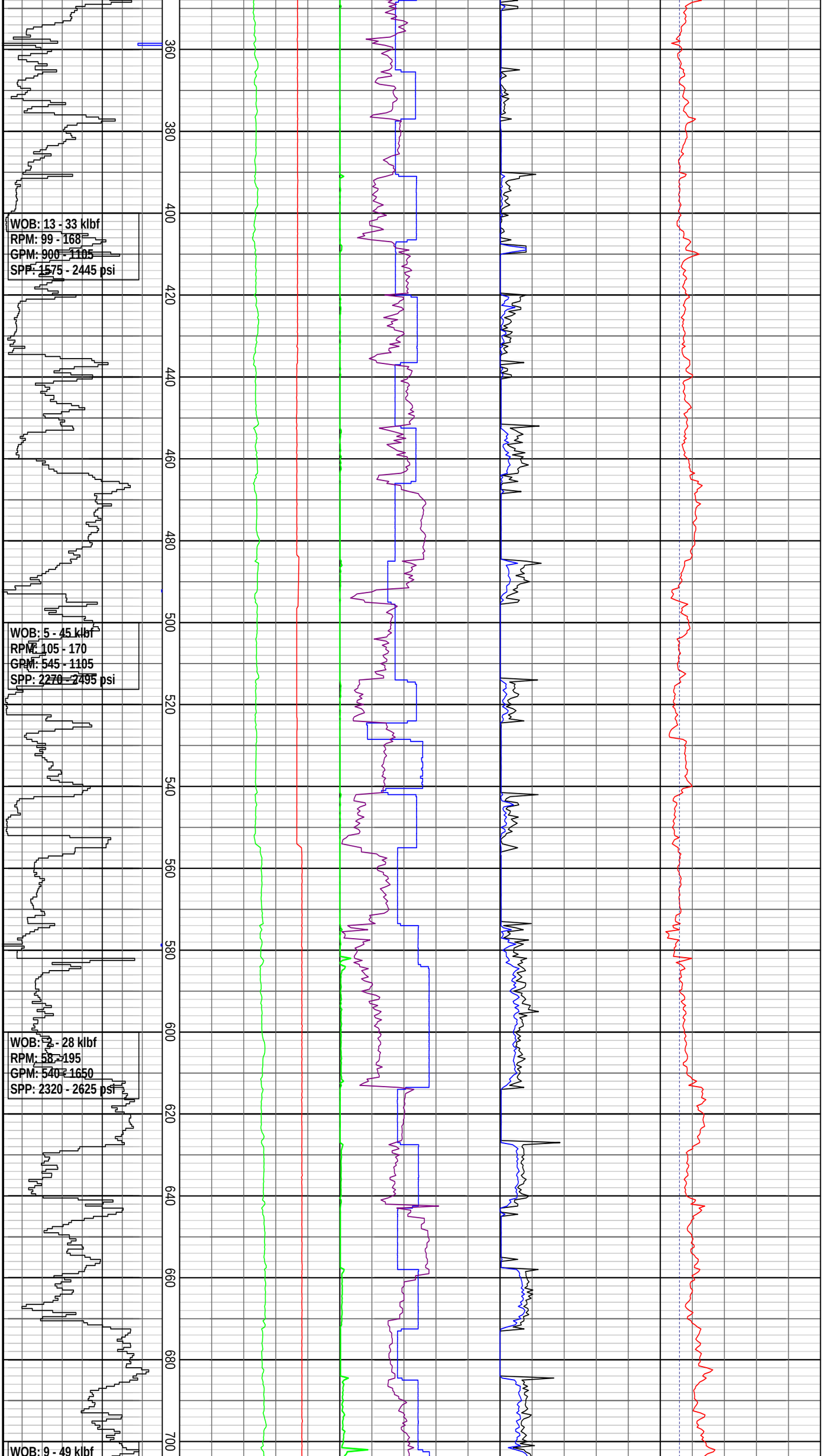
BAKER HUGHES INTEQ

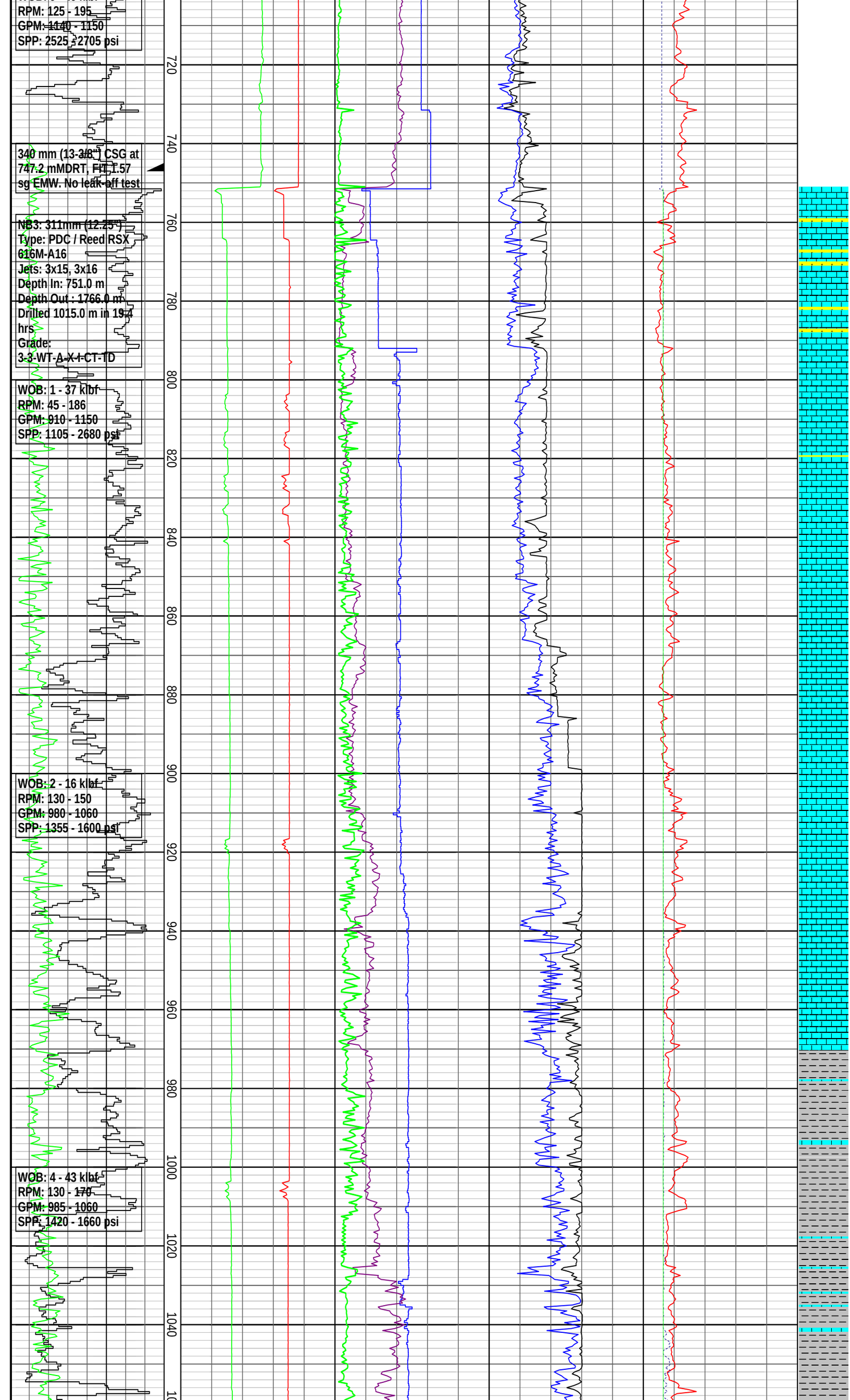
Company : 3D Oil Ltd
Well : Wardie-1
Interval : 62.00 - 1782.46 meters
Created : 22/May/2008 11:17:12 PM

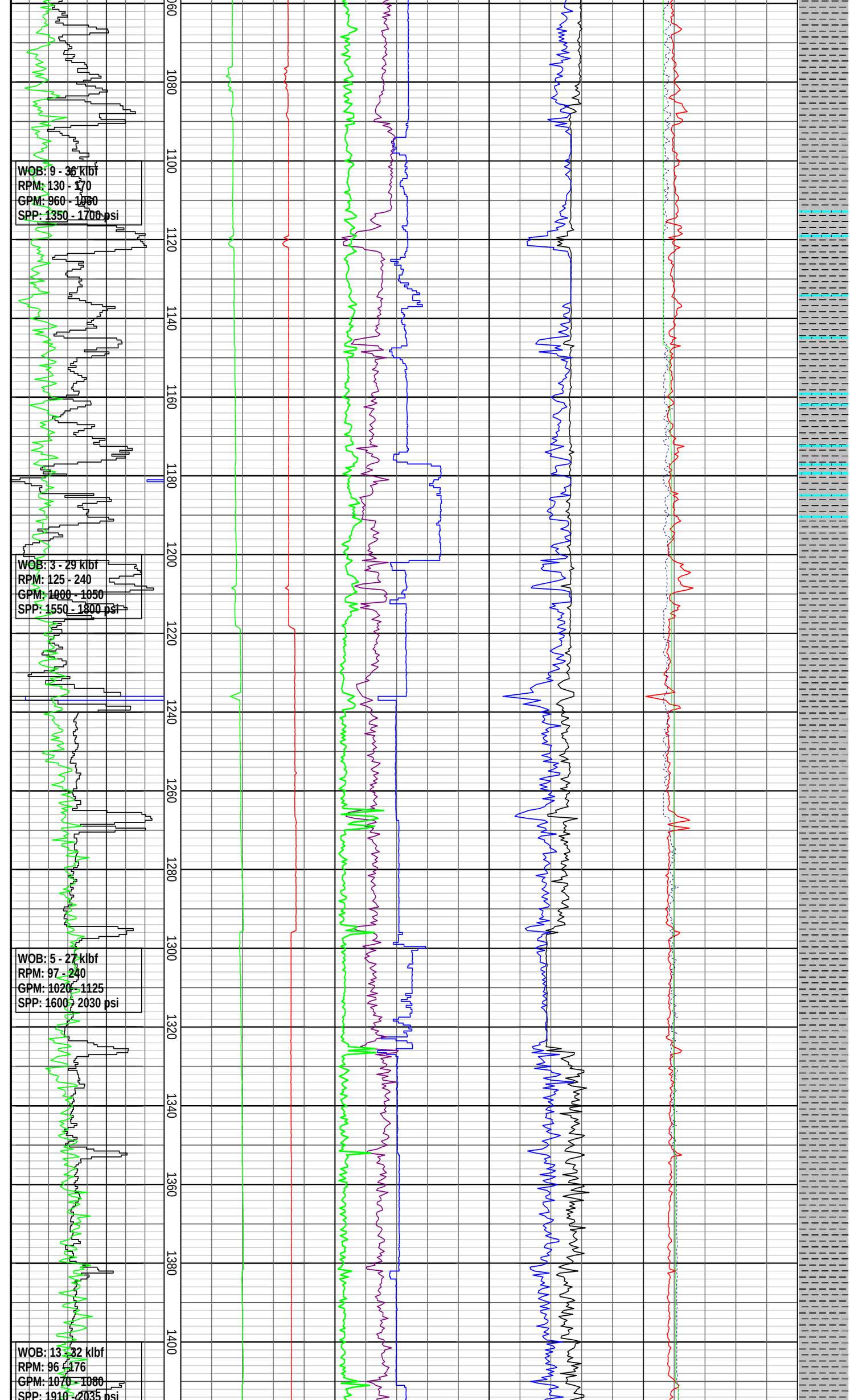
3D OIL

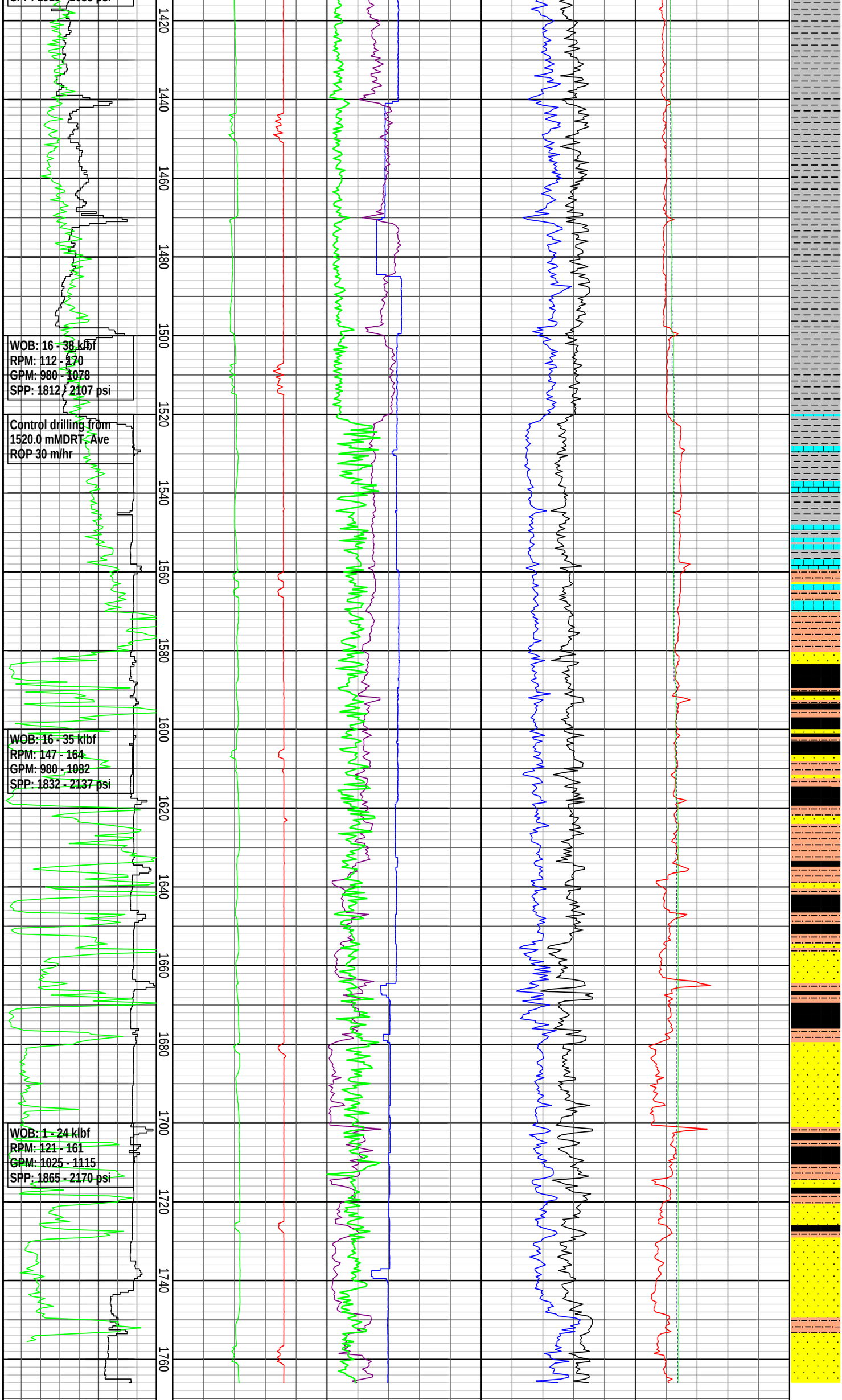
DRILLING DATA PLOT




WOB: 13 - 33 klbf
RPM: 99 - 168
GPM: 900 - 1105
SPP: 1575 - 2445 psi
WOB: 5 - 45 klbf
RPM: 105 - 170
GPM: 545 - 1105
SPP: 2270 - 2495 psi
WOB: 2 - 28 klbf
RPM: 58 - 195
GPM: 540 - 1650
SPP: 2320 - 2625 psi
WOB: 9 - 49 klbf
360
380
400
420
440
460
480
500
520
540
560
580
600
620
640
660
680
700


RPM: 125 - 195
GPM: 1140 - 1150
SPP: 2525 - 2705 psi
340 mm (13-3/8") CSG at 747.2 mMDRT, FIT 1.57 sg EMW. No leak-off test
NB3: 311mm (12.25")
Type: PDC / Reed RSX 616M-A16
Jets: 3x15, 3x16
Depth In: 751.0 m
Depth Out : 1766.0 m
Drilled 1015.0 m in 19.4 hrs
Grade:
3-3-WT-A-X-I-CT-TD
WOB: 1 - 37 klbf
RPM: 45 - 186
GPM: 910 - 1150
SPP: 1105 - 2680 psi
WOB: 2 - 16 klbf
RPM: 130 - 150
GPM: 980 - 1060
SPP: 1355 - 1600 psi
WOB: 4 - 43 klbf
RPM: 130 - 170
GPM: 985 - 1060
SPP: 1420 - 1660 psi
720
740
760
780
800
820
840
860
880
900
920
940
960
980
1000
1020
1040


WOB: 9 - 36 klbf
RPM: 130 - 170
GPM: 960 - 1080
SPP: 1350 - 1700 psi
WOB: 3 - 29 klbf
RPM: 125 - 240
GPM: 1000 - 1050
SPP: 1550 - 1800 psi
WOB: 5 - 27 klbf
RPM: 97 - 240
GPM: 1020 - 1125
SPP: 1600 - 2030 psi
WOB: 13 - 32 klbf
RPM: 96 - 176
GPM: 1070 - 1080
SPP: 1910 - 2035 psi
1060
1080
1100
1120
1140
1160
1180
1200
1220
1240
1260
1280
1300
1320
1340
1360
1380
1400


1420
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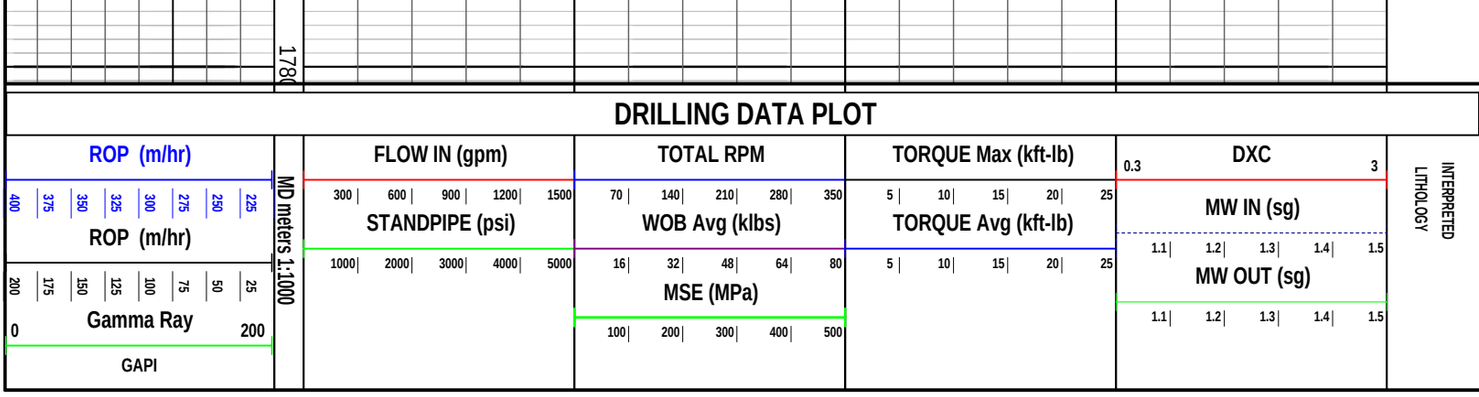
1480
1500
1520
1540
1560
1580
1600
1620
1640
1660
1680
1700
1720
1740
1760
WOB: 16 - 38 klbf
RPM: 112 - 170
GPM: 980 - 1078
SPP: 1812 - 2107 psi
Control drilling from
1520.0 mMDRT. Ave
ROP 30 m/hr
WOB: 16 - 35 klbf
RPM: 147 - 164
GPM: 980 - 1082
SPP: 1832 - 2137 psi
WOB: 1 - 24 klbf
RPM: 121 - 161
GPM: 1025 - 1115
SPP: 1865 - 2170 psi


1780
DRILLING DATA PLOT
ROP (m/hr)
400 375 350 325 300 275 250 225
ROP (m/hr)
200 175 150 125 100 75 50 25
Gamma Ray
0 200
GAPI
MD meters 1:1000
FLOW IN (gpm)
300 600 900 1200 1500
STANDPIPE (psi)
1000 2000 3000 4000 5000
TOTAL RPM
70 140 210 280 350
WOB Avg (klbs)
16 32 48 64 80
MSE (MPa)
100 200 300 400 500
TORQUE Max (kft-lb)
5 10 15 20 25
TORQUE Avg (kft-lb)
5 10 15 20 25
DXC
0.3 3
MW IN (sg)
1.1 1.2 1.3 1.4 1.5
MW OUT (sg)
1.1 1.2 1.3 1.4 1.5
INTERPRETED LITHOLOGY

Enclosure 3

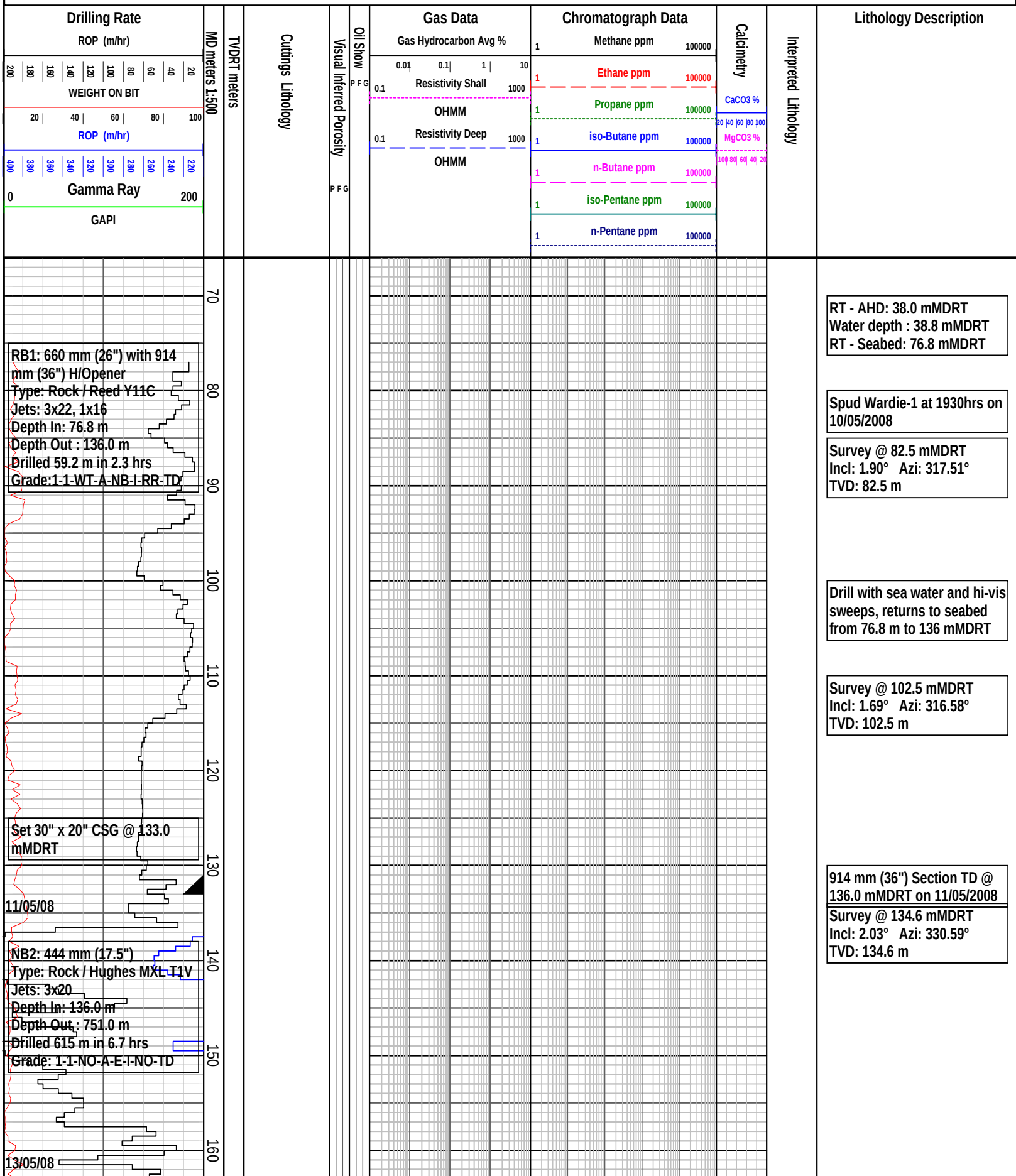
Mud Log Plot
1:500

BAKER HUGHES INTEQ

Company : 3D Oil Ltd
Well : Wardie-1
Interval : 66.00 - 1788.90 meters
Created : 22/May/2008 11:17:12 PM

3D OIL

FORMATION EVALUATION LOG



RT - AHD: 38.0 mMDRT
Water depth : 38.8 mMDRT
RT - Seabed: 76.8 mMDRT

Spud Wardie-1 at 1930hrs on 10/05/2008

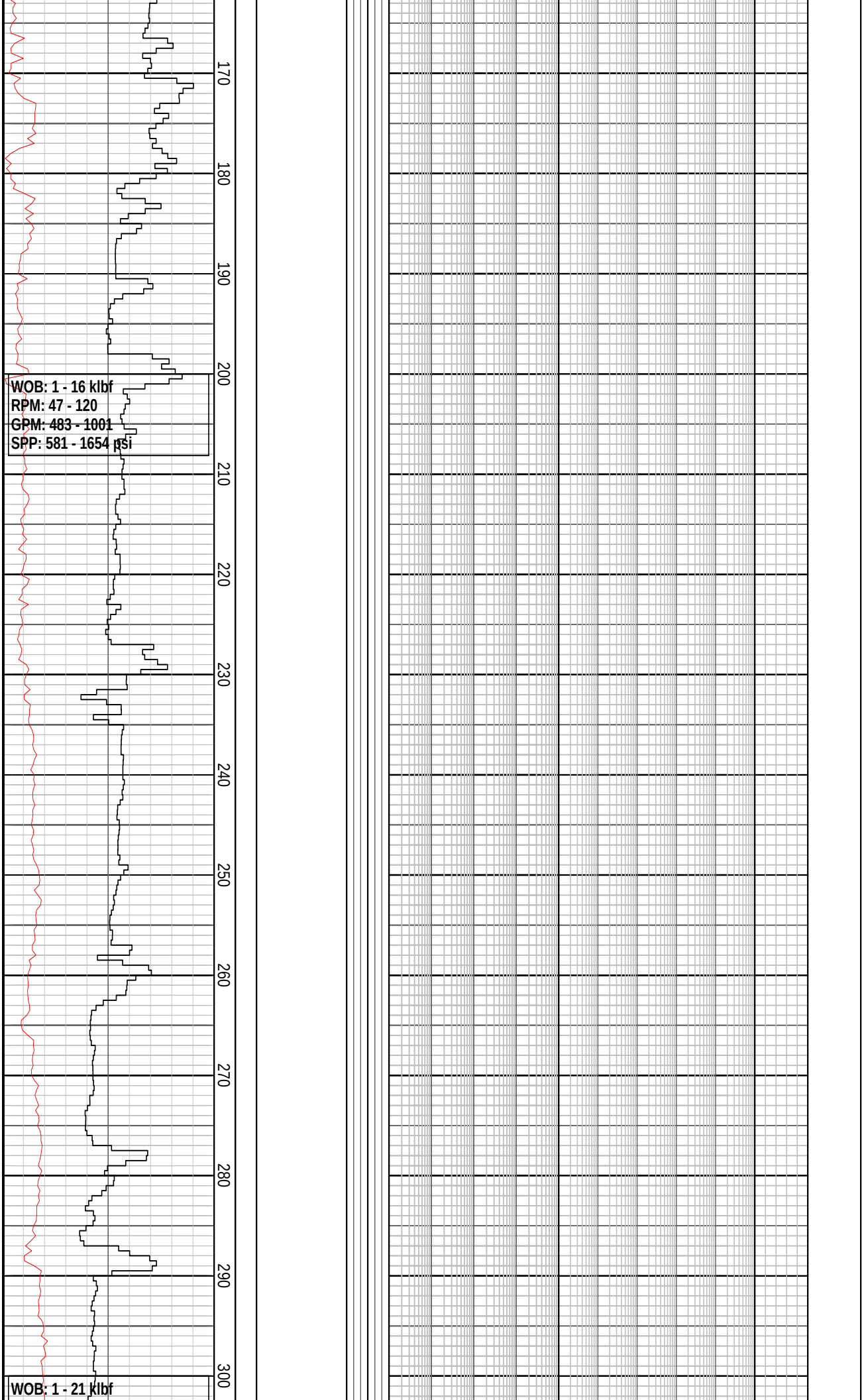
Survey @ 82.5 mMDRT
Incl: 1.90° Azi: 317.51°
TVD: 82.5 m

Drill with sea water and hi-vis sweeps, returns to seabed from 76.8 m to 136 mMDRT

Survey @ 102.5 mMDRT
Incl: 1.69° Azi: 316.58°
TVD: 102.5 m

914 mm (36") Section TD @ 136.0 mMDRT on 11/05/2008

Survey @ 134.6 mMDRT
Incl: 2.03° Azi: 330.59°
TVD: 134.6 m



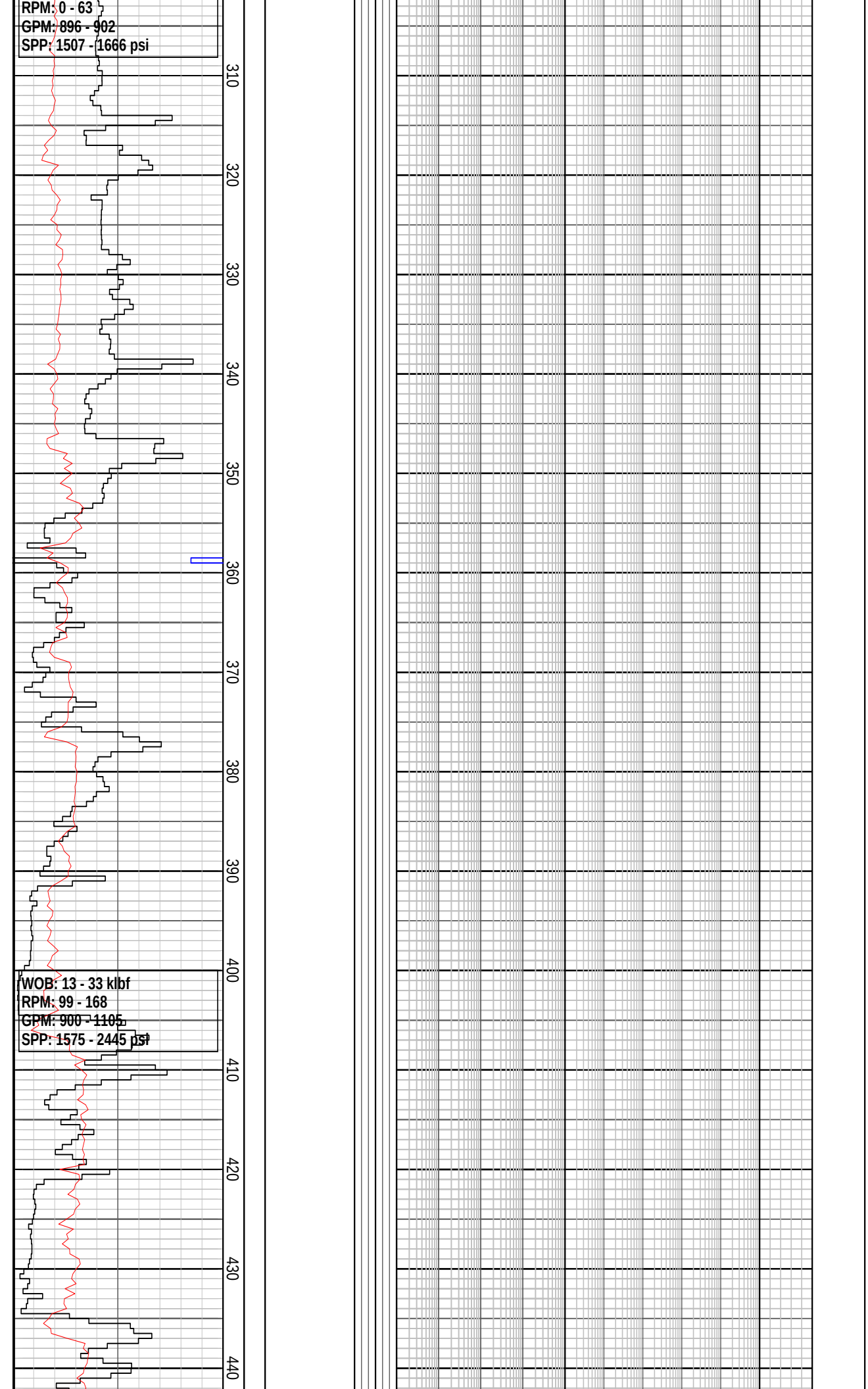
Survey @ 174.15 mMDRT
Incl: 0.97° Azi: 331.19°
TVD: 174.1 m

Survey @ 202.30 mMDRT
Incl: 1.06° Azi: 330.50°
TVD: 202.2 m

Drill with sea water and hi-vis sweeps, returns dumped overboard from CTU deck from 136 m to 751.0 mMDRT

Survey @ 260.44 mMDRT
Incl: 2.12° Azi: 269.17°
TVD: 260.4 m

Survey @ 290.09 mMDRT
Incl: 5.23° Azi: 252.00°
TVD: 289.9 m



Drill with sea water and hi-vis sweeps, returns dumped overboard from CTU deck from 136 m to 751.0 mMDRT

Survey @ 319.76 mMDRT
Incl: 8.62° Azi: 244.27°
TVD: 319.4 m

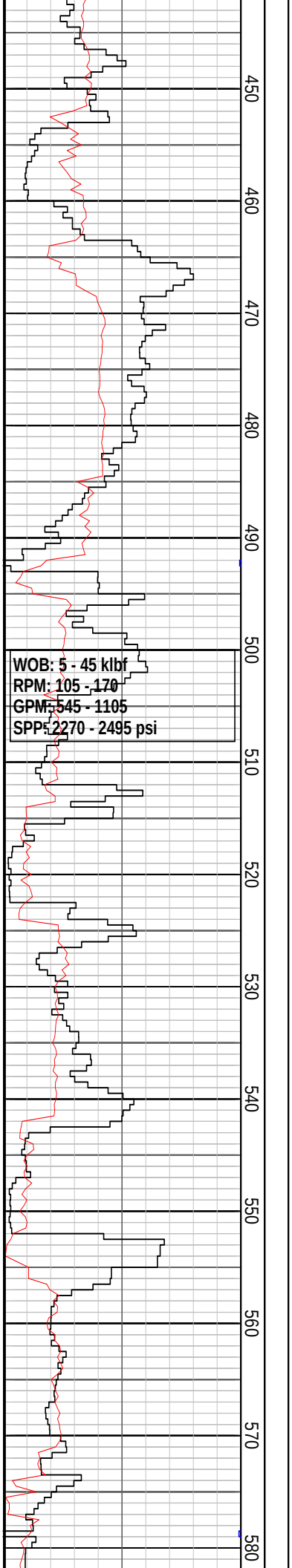
Survey @ 349.23 mMDRT
Incl: 11.69° Azi: 243.65°
TVD: 348.4 m

Survey @ 378.56 mMDRT
Inc: 14.54° Azi: 243.39°
TVD: 377.0 m

Drill with sea water and hi-vis sweeps, returns dumped overboard from CTU deck from 136 m to 751.0 mMDRT

Survey @ 408.2 mMDRT
Incl: 16.62° Azi: 238.69°
TVD: 405.5 m

Survey @ 437.65 mMDRT
Incl: 18.41° Azi: 234.18°
TVD: 433.6 m



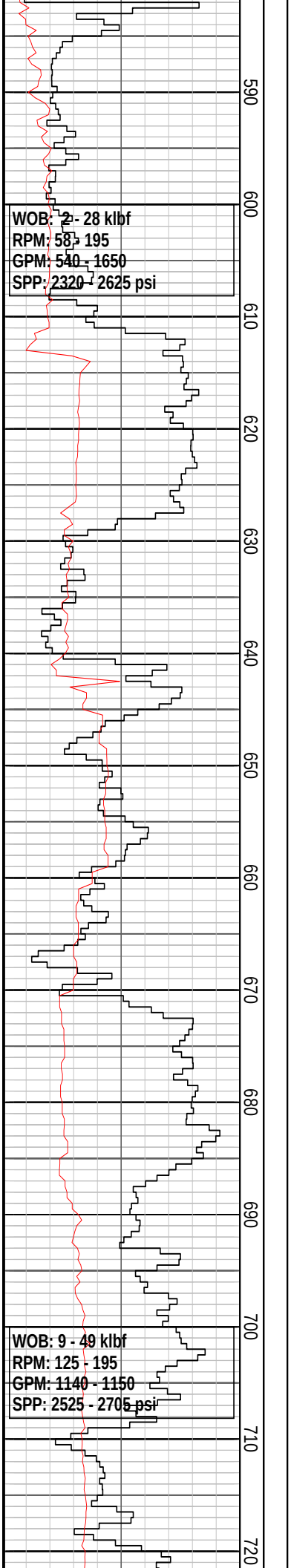
Survey @ 466.98 mMDRT
Incl: 21.11° Azi: 233.22°
TVD: 461.2 m

Survey @ 496.44 mMDRT
Incl: 24.52° Azi: 235.86°
TVD: 488.3 m

Drill with sea water and hi-vis sweeps, returns dumped overboard from CTU deck from 136 m to 751.0 mMDRT

Survey @ 525.34 mMDRT
Incl: 27.44° Azi: 238.00°
TVD: 514.3 m

Survey @ 555.68 mMDRT
Incl: 29.78° Azi: 239.10°
TVD: 541.0 m



Survey @ 585.40 mMDRT
Incl: 28.02° Azi: 239.82°
TVD: 567.0 m

Drill with sea water and hi-vis sweeps, returns dumped overboard from CTU deck from 136 m to 751.0 mMDRT

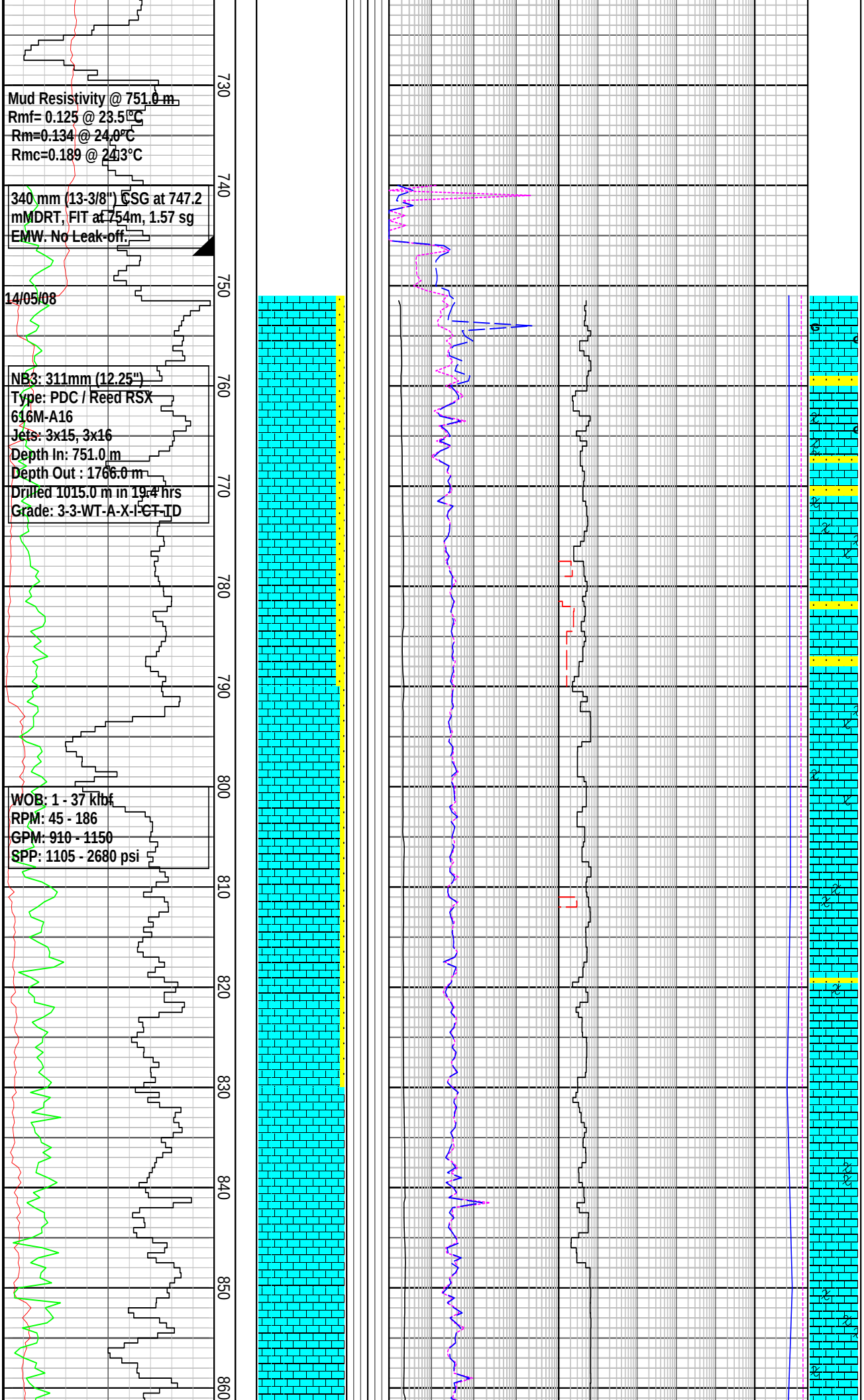
Survey @ 614.89 mMDRT
Incl: 29.13° Azi: 240.0°
TVD: 592.9 m

Survey @ 644.23 mMDRT
Incl: 31.31° Azi: 240.28°
TVD: 618.2 m

Survey @ 674.32 mMDRT
Incl: 33.98° Azi: 240.54°
TVD: 643.6 m

Drill with sea water and hi-vis sweeps, returns dumped to seabed from CTU deck from 136 m to 751.0 mMDRT

Survey @ 703.79 mMDRT
Incl: 34.90° Azi: 240.07°
TVD: 667.9 m



Survey @ 722.54 mMDRT
Incl: 34.35° Azi: 239.86°
TVD: 683.3 m

444 mm (17.5") Section TD @ 751.0 mMDRT on 13/05/2008

CALCARENITE: lt olv gy, olv gy i/p, mnr wh-pa yel, mod hd-hd, v f-crs, ang-sbang, trnsl-op sparry calc, mnr slt, mnr rndd f sd i/p, mnr blk lit, mnr glau, tr f shl frag, wl cmt, p vis por.

CALCISILTITE: m gy-olv gy-occ blk, sft-hd, v calc, mnr-com clas slt-f sd i/p, p inf por.

SAND: loose qtz, f-m gr, mod srt, sbrndd-rndd, trnsp-trnsl qtz, mnr crs-v crs rndd clr-frstd qtz, tr pyr, p inf por.

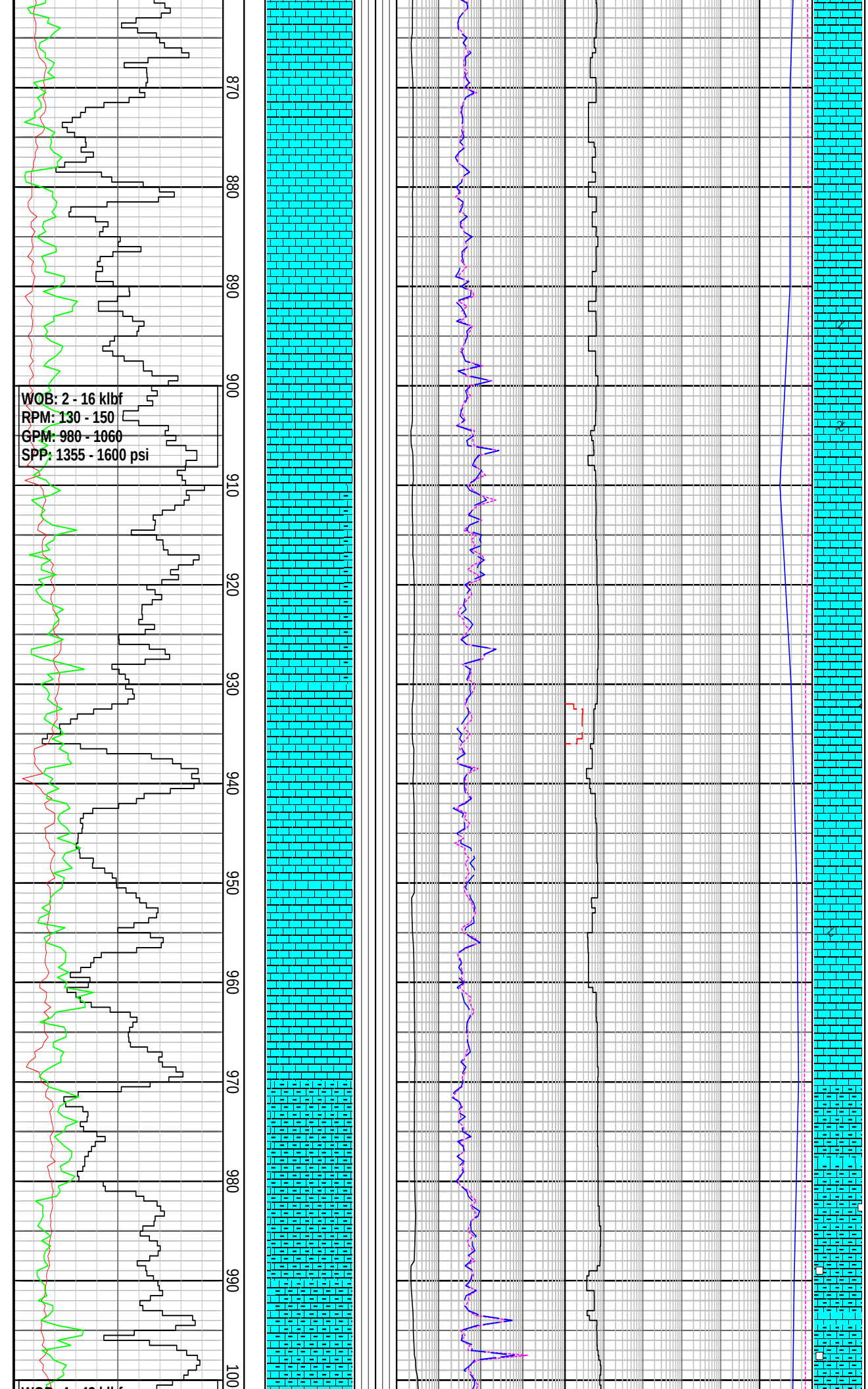
MW: 1.07 sg FV: 57
PV: 11 YP: 18
Gels: 7/8/10 PH: 9.5

Survey @ 802.80 mMDRT
Incl: 32.02° Azi: 241.09°
TVD: 750.5 m

CALCARENITE: lt olv gy-olv gy i/p, mnr wh-pa yel, mod hd-hd, v f-crs, ang-sbang, trnsl-op sparry calc, com clas slt, mnr rndd f sd i/p, mnr blk lit, mnr glau, tr f shl frag, wl cmt, p vis por.

Survey @ 831.50 mMDRT
Incl: 30.76° Azi: 239.33°
TVD: 775.0 m

CALCISILTITE: m gy, olv gy, occ blk, sft, mnr hd, v calc, mnr-com clas slt-f sd i/p, p vis por.



Survey @ 861.51 mMDRT
Incl: 31.64° Azi: 238.19°
TVD: 800.6 m

CALCARENITE: lt olv gy-olv gy, gen a/a, p vis por.

SKELETAL FRAGMENTS: mnr bryozoa, tr bivalves, tr echinoid spines.

Survey @ 891.22 mMDRT
Incl: 31.39° Azi: 236.51°
TVD: 826.0 m

CALCISILTITE: m gy-olv gy, occ blk, sft-frm, mnr hd, v calc, mnr-com clas slt-f sd, p vis por.

Survey @ 920.19 mMDRT
Incl: 31.58° Azi: 236°
TVD: 850.7 m

CALCILUTITE: wh-pa gy, hd, amor, sli slty.

CALCARENITE: lt olv gy-olv gy, mnr wh-pl yel, hd, vf-crs, ang-sbang, trnsl-opq sparry calct, com clas slt, mnr rndd f sd, mnr blk lit, mnr glau, tr f shl frag, wl cmt, p vis por.

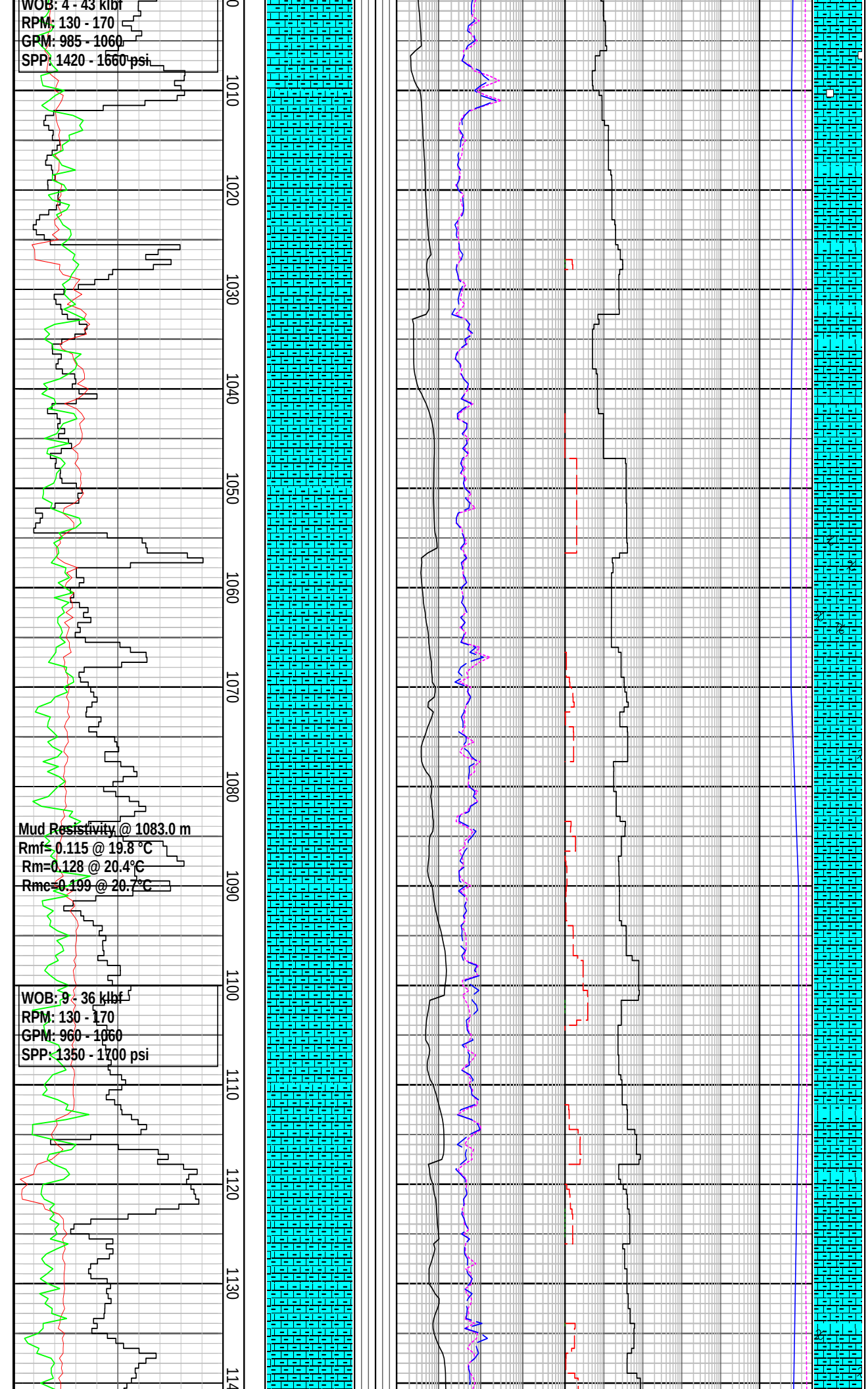
Survey @ 949.76 mMDRT
Incl: 31.70° Azi: 236.73°
TVD: 875.8 m

CALCISILTITE: m gy-olv gy-occ blk, sft-frm, mnr hd, hi calc, mnr-com clas fraction, grd i/p-f sd, p vis por.

MW: 1.09 sg FV: 58
PV: 11 YP: 27
Gels: 10/15/18 PH: 10.0

Survey @ 979.78 mMDRT
Incl: 31.37° Azi: 237.60°
TVD: 901.4 m

CALCISILTITE: lt-m gy, olv gy, frm-hd, blky, mod-v calc, mnr-com clas slt-f sd i/p, poss Dol cmt i/p, tr vf dk lit, r pyr, p vis por.



Survey @ 1009.21 mMDRT
Incl: 31.56° Azi:240.47°
TVD: 926.5 m

CALCARENITE: lt olv gy-olv gy i/p, mnr wh-pa yel, mod hd-hd, v f-f, ang-sbang, trnsl to op sparry calcite, mnr slt, mnr blk lit, v calc, wl cmt, pr vis por.

Survey @ 1039.05 mMDRT
Incl: 31.64° Azi: 239.79°
TVD: 951.9 m

CALCILUTITE: wh-pa gy, hd, amor, sli slty.

CALCISILTITE: lt-m gy, olv gy, gen a/a, p vis por.

Survey @ 1066.59 mMDRT
Incl: 31.64° Azi: 241.83°
TVD: 975.4 m

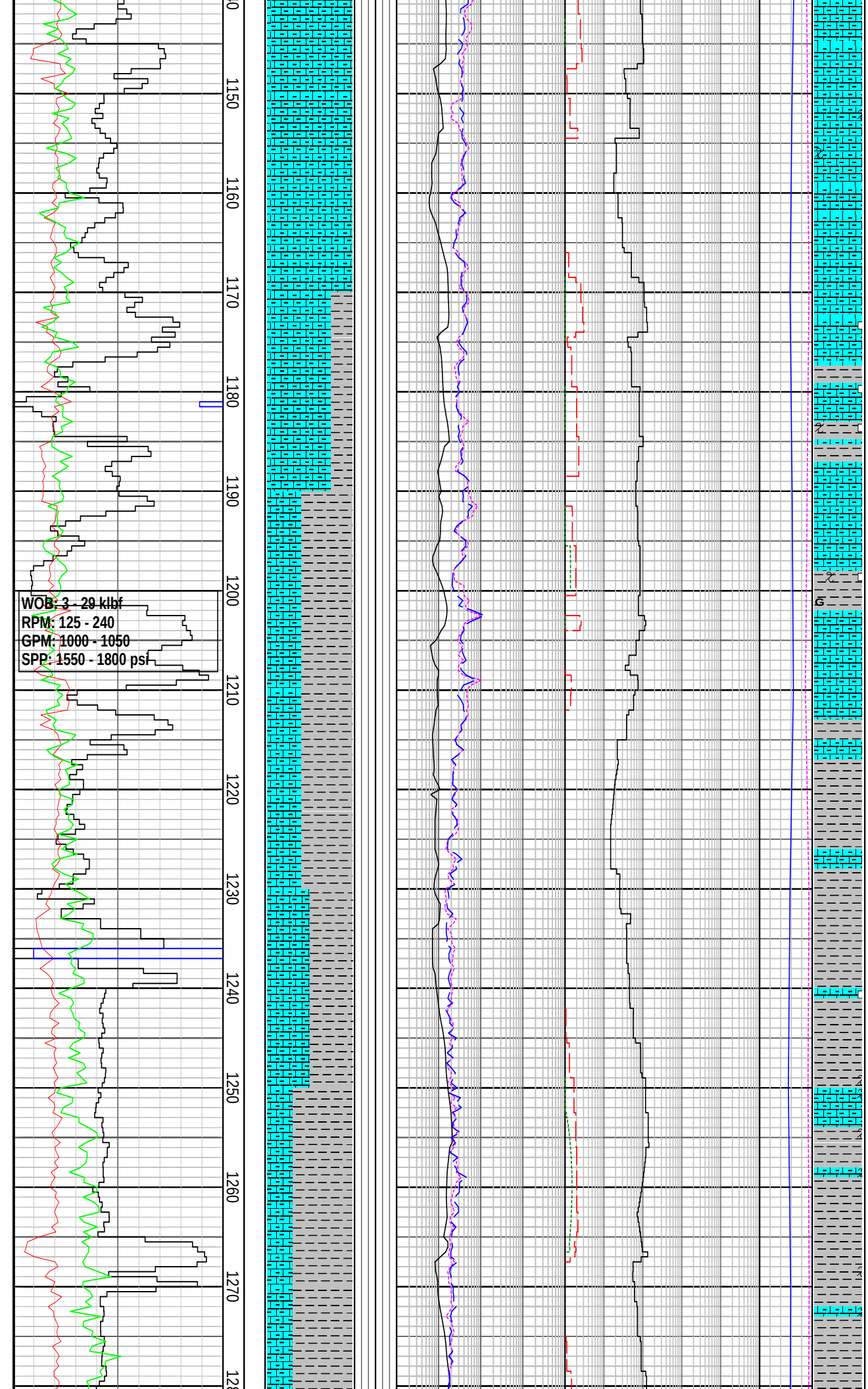
CALCARENITE: lt olv gy-olv gy i/p, gen a/a, tr bry frag, p vis por.

Survey @ 1096.55 mMDRT
Incl: 32.01° Azi: 242.11°
TVD: 1000.8 m

CALCISILTITE: lt-m gy, olv gy, frm-hd, blky, mod-v calc, mnr-com clas slt-f sd i/p, poss Dol cmt i/p, tr vf dk lit, r pyr, p vis por.

Survey @ 1125.94 mMDRT
Incl: 32.34° Azi: 242.75°
TVD: 1025.70 m

CALCARENITE: lt olv gy-olv gy i/p, mnr wh-pl yel, mod hd-hd, vf-f sparry calct, a/a,



mnr blk lit, tr bry frag, tr foram, wl cmt, p vis por.

Survey @ 1155.71 mMDRT
Incl: 32.17° Azi: 242.53°
TVD: 1050.9 m

CALCILUTITE: wh, lt olv gy-olv gy, sft-frm, occ hd, amor, sli slty.

MW: 1.10 sg FV: 55
PV: 13 YP: 28
Gels: 11/17/21 PH: 9.5

Survey @ 1184.60 mMDRT
Incl: 32.35° Azi: 243.98°
TVD: 1075.3 m

CALCISILTITE: olv gy, mnr gy olv, frm-mod hd, blky, com dk carb spks, r dissem pyr, r subhed sparry calct xtals, tr m gy, hd, sbfis, w/ abd micr xln pyr, p vis por.

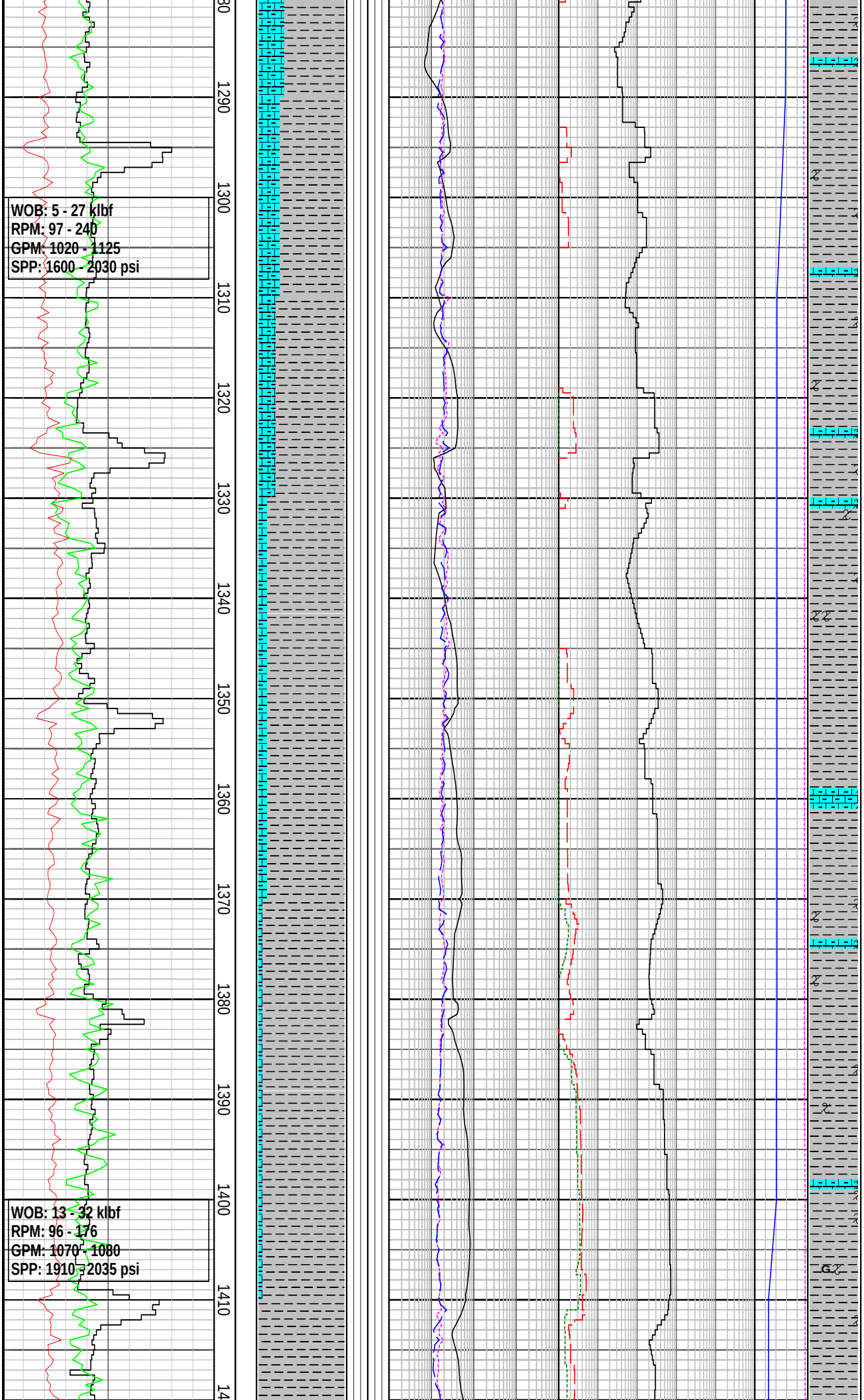
Survey @ 1214.81 mMDRT
Incl: 32.18° Azi: 244.06°
TVD: 1100.9 m

CALCILUTITE: yel gy-lt olv gy, frm, disp i/p, sbblky-sbfis, tr pyr, tr glau, tr foram.

Survey @ 1244.86 mMDRT
Incl: 30.73° Azi: 243.07°
TVD: 1126.5 m

CALCISILTITE: olv gy, mnr gy olv, frm-mod hd, blky, com dk carb spks, r dissem pyr, r subhed, sparry calct xtals, tr foss, p vis por.

Survey @ 1274.25 mMDRT
Incl: 29.50° Azi: 243.74°
TVD: 1151.9 m



CALCILUTITE: lt olv gy-olv gy, gn gy, frm-mod hd, disp, sbblky-sbfiss, tr pyr, tr f glau (pel & nod), tr bry, tr foram, less calc & grd to MARL.

Survey @ 1303.82 mMDRT
Incl: 28.32° Azi: 243.43°
TVD: 1177.8 m

CALCISILTITE: olv gy, gn gy, frm-mod hd, blky, arg, r foram, r pyr, tr bry, grd to CLCLUT i/p, p vis por.

Survey @ 1333.24 mMDRT
Incl: 26.97° Azi: 243.84°
TVD: 1203.9 m

CALCILUTITE: gn gy, olv gy i/p, frm, disp, blky, sli more arg, sbblky-sbfis, r-com foram, tr pyr, tr glau, grd to MARL.

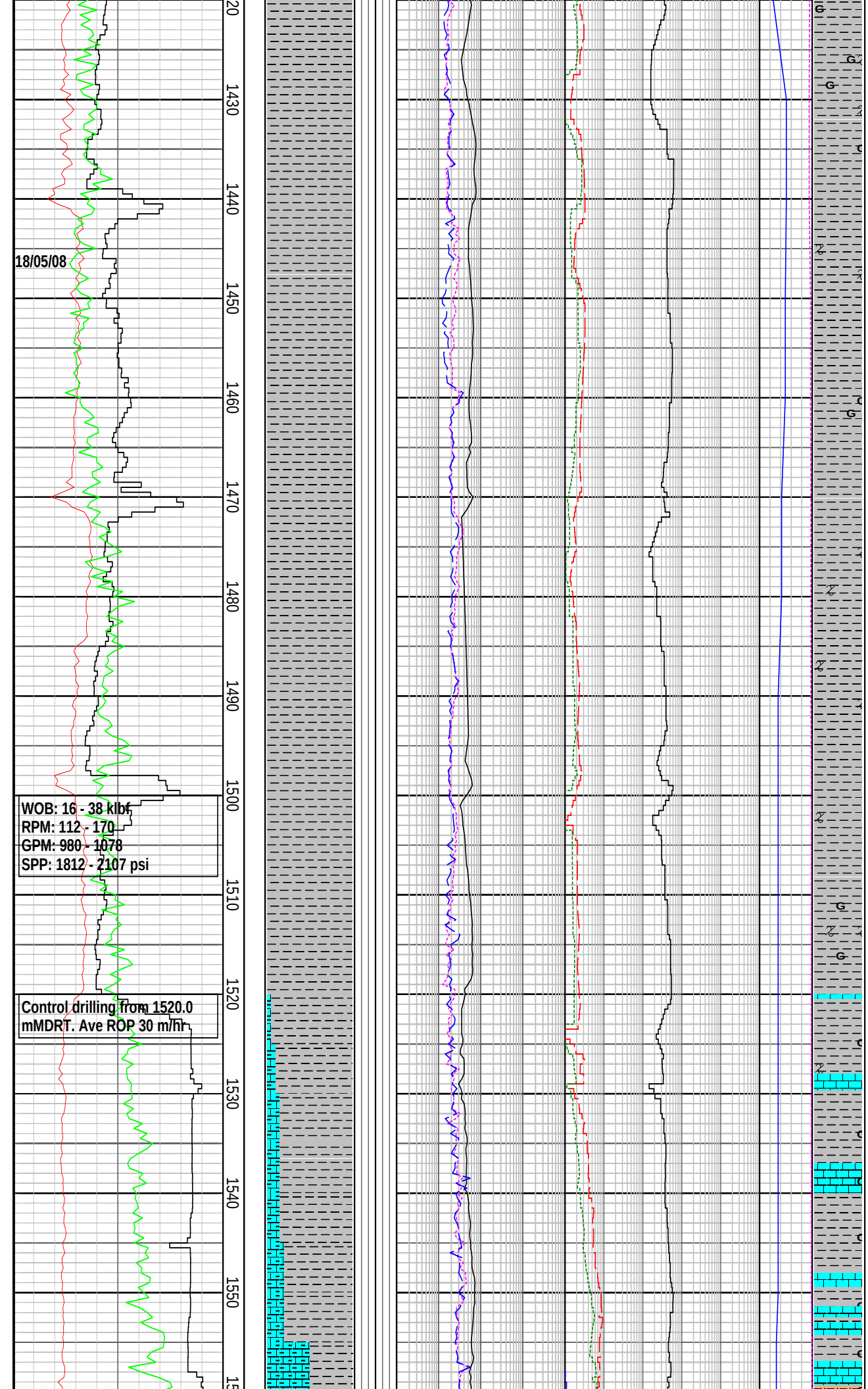
Survey @ 1363.33 mMDRT
Incl: 25.76° Azi: 244.51°
TVD: 1230.8 m

CALCISILTITE: olv gy, frm-hd, blky, micr xln calct, p vis por.

MW: 1.12 sg FV: 58
PV: 13 YP: 30
Gels: 13/18/22 PH: 9.5

Survey @ 1392.32 mMDRT
Incl: 24.64° Azi: 245.10°
TVD: 1257.1 m

CALCILUTITE: gn gy, r m gy, frm-mod hd, sbblky-sbfis, arg, disp i/p, com foram, tr pyr, grd to calc CLST.



Survey @ 1421.66 mMDRT
Incl: 23.41° Azi: 245.94°
TVD: 1283.9 m

Added sized CaCO3 to mud system from 1425.0 mMDRT on 17-May-08 until TD

CALCILUTITE: gen a/a, grd to calc CLST, tr vf glau, tr foram.

Survey @ 1451.54 mMDRT
Incl: 21.93° Azi: 245.34°
TVD: 1311.4 m

CALCILUTITE: gn gy, frm, disp, arg, sbblky-sbfis, tr-r vf glau, tr pyr strk, tr foram, grd to calc CLST.

Survey @ 1481.24 mMDRT
Incl: 19.28° Azi: 245.06°
TVD: 1339.2 m

CALCILUTITE: a/a, grd to calc CLST, mnr vf-m glau, tr foram, sli slty i/p.

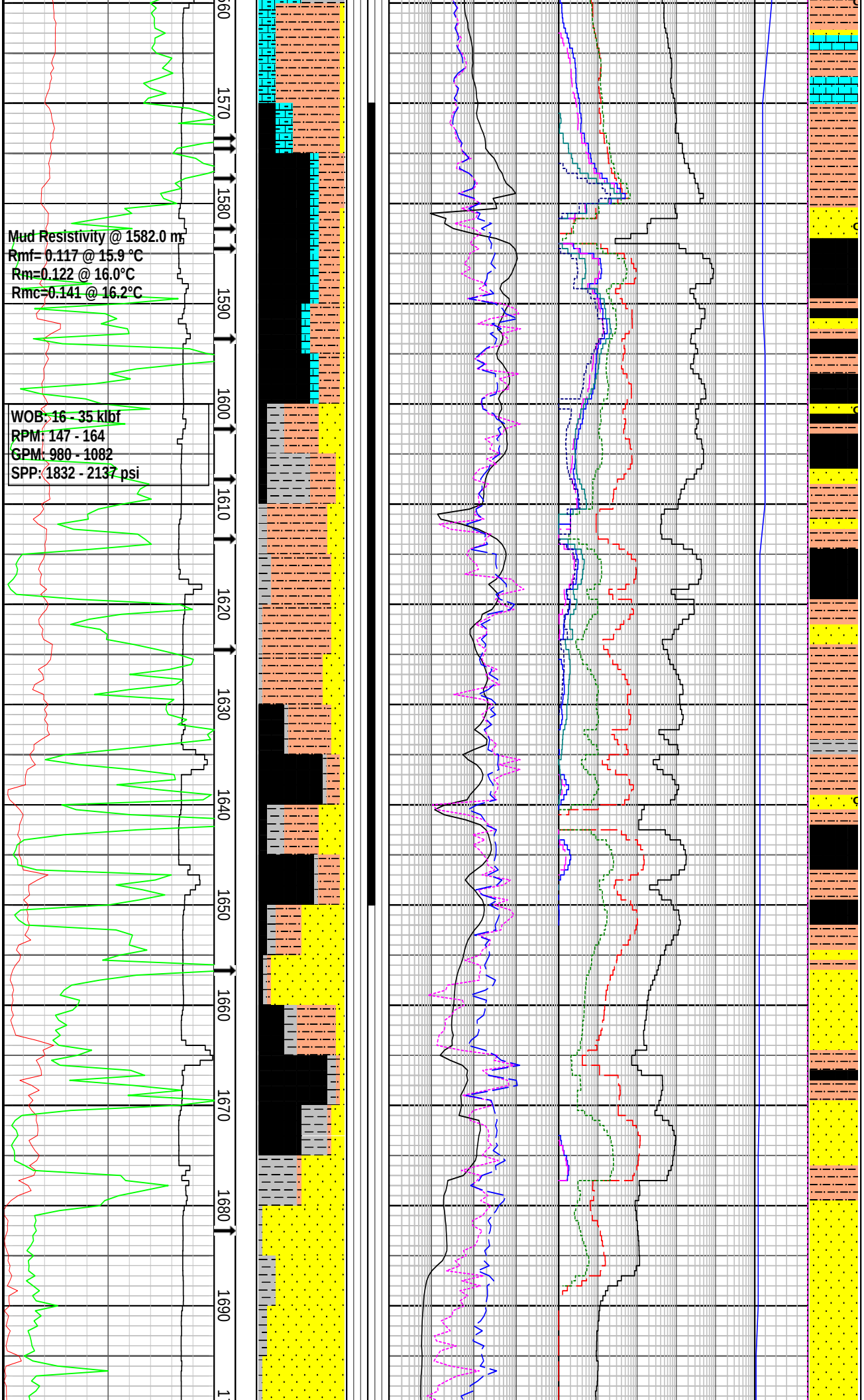
Survey @ 1511.19 mMDRT
Incl: 16.74° Azi: 243.33°
TVD: 1367.7 m

CALCAREOUS CLAYSTONE: lt gn gy, olv gy, frm-mod hd, sbblky-sbfis, mod-v calc, mnr glau (pel & nod), tr foram, sli slty

Survey @ 1540.85 mMDRT
Incl: 14.49° Azi: 240.57°
TVD: 1396.3 m

CALCAREOUS CLAYSTONE: a/a, w/com-abd glau, tr foss

MW: 1.12 sg FV: 54
PV: 15 YP: 30
Gels: 13/18/22 PH: 9.5



SILTSTONE: med brn gy- olv gy-brn, frm-hd, blky, sli carb, non-sli calc

Survey @ 1570.22 mMDRT
Incl: 12.40° Azi: 236.98°
TVD: 1424.8 m

COAL: dk brn-blk, glos i/p along frac, hd, brit, slty i/p

SAND: dissag, f-v crs, p srt, sbrndd-rndd, clr-trnsl qtz, mnr glau, tr pyr agg, f inf por.

FLUORESCENCE (1575-1585m): tr-1% pp pa gn yel, mod fst strmg-blmg, mod bri bl wh cut, thn, mod bri bl gn flu res rng, pa yel brn vis res rng.

Survey @ 1599.76 mMDRT
Incl: 10.35° Azi: 236.26°
TVD: 1453.8 m

SANDSTONE: lt gy, brn gy, vf -crs mnr gran, dom f, p srt, sbrdd-rndd clr qtz, mnr lit & glau, f inf por

FLUORESCENCE (1585-1615m): tr-1% dll pnk-or, slw blmg mod bri bl wh cut, v thn, v pl gn blu flu res rng, no vis res rng

Survey @ 1630.16 mMDRT
Incl: 9.46° Azi: 236.73°
TVD: 1483.7 m

FLUORESCENCE (1615-1630m): tr-2% dll or yel, nil-slw dif blu wh cut, nil-v thn pa blu wh flu res rng

COAL: dk brn-blk, glos i/p along frac, hd, brit, slty i/p

SANDSTONE: lse qtz, lt gy, vf gran, dom m, pr srt, sbrndd-rndd, trnsp qtz, mnr lit & glau, f inf por

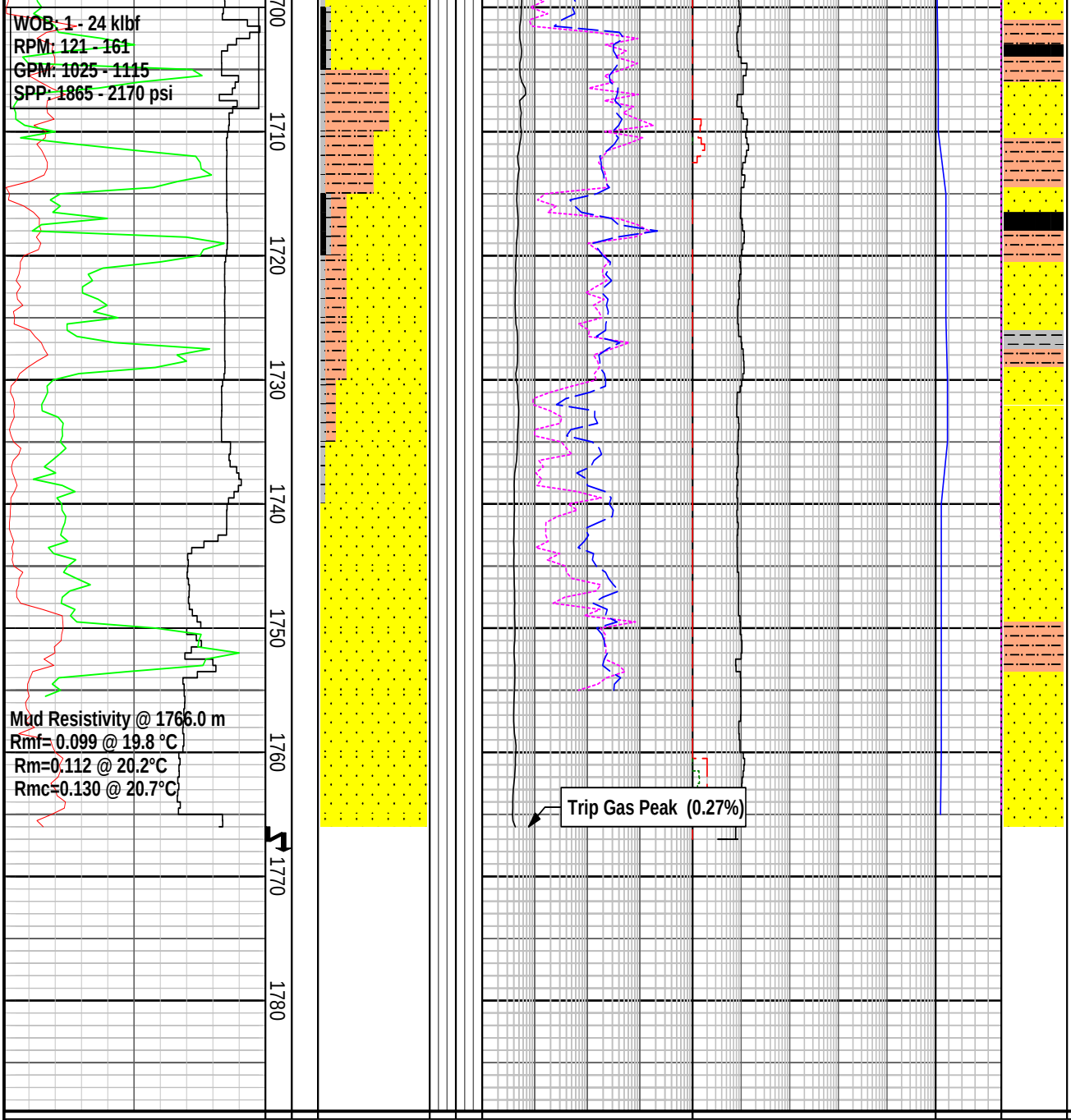
FLUORESCENCE (1630-1650m): 5% decr to tr, dll pnk-or, tr bri gn yel, nil-slw dif blu wh cut, nil-v thn pl bl flu res rng i/p

Survey @ 1659.89 mMDRT
Incl: 8.81° Azi: 235.87°
TVD: 1513.1 m

CARBONACEOUS CLAYSTONE: dk yel brn, brn gy, frm, splntry, sbfis

SANDSTONE: disagg, lt gy, vf gran, dom m, v p srt, sbang, sbsph, tranl-trnsp qtz, tr hd aggs w/sil cmt, g inf por, no shw

Survey @ 1689.37 mMDRT
Incl: 8.19° Azi: 235.45°
TVD: 1542.3 m



SILTSTONE: pa yelsh brn, spkld dk brn-blk w-/ carb mat & lam, blky-sbfis, non calc, loc w/ com mic, r glau

Survey @ 1718.81 mMDRT
Incl: 7.67° Azi: 235.27°
TVD: 1571.4 m

SANDSTONE: disagg qtz, a/a, crs gran, p-mod srt, p vis por, g inf por, no shw

MW: 1.13 sg FV: 52
PV: 13 YP: 29
Gels: 11/18/22 PH: 9.0

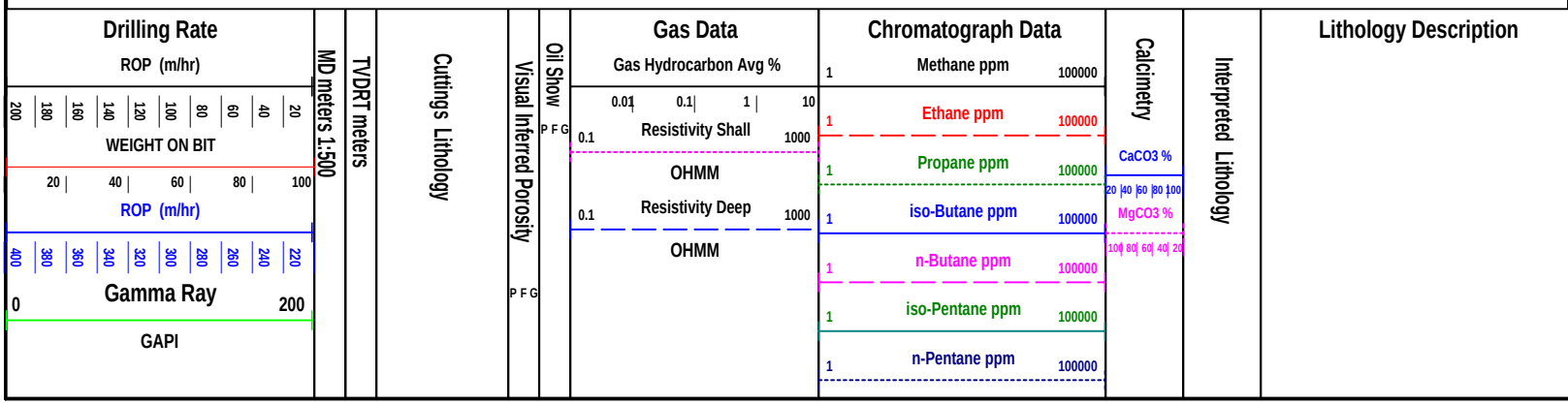
Survey @ 1745.67 mMDRT
Incl: 7.36° Azi: 234.18°
TVD: 1598.04 m

SANDSTONE: v lt gy, wh, f-crs gr, dom crs, p srt, ang-sbang, sbsph, trnsp-trnsl qtz, g inf por, no shw

Wardie-1 reached TD of 1766.0 mMDRT at 1530hrs on 18/05/2008

Wireline logging:
Run #1. PEX-HRLA-BHC (1295.0 - 1761.0 mMDRT)
Run #2. MDT-GR (1573.8 - 1681.5 mMDRT)

FORMATION EVALUATION LOG



Enclosure 4

LWD Log Plot
1:500

Schlumberger

Company: **3D Oil Ltd**

12.25 in. Section

Well: **Wardie-1**

Field: **Exploration**

Rig: **West Triton** State: **Victoria**

Rig: West Triton
Field: Exploration
Location: Vic P/57, Bass Strait
Well: Wardie-1
Company: 3D Oil Ltd

geoVISION*825 Resistivity
1:500 Measured Depth
Recorded Mode Log

Location

Total depth:	1766.0 m
Spud date:	09-May-08
Run:	2

Elevation

K.B.	Top Drive
G.L.	-39.5 m
D.F.	38.0 m

Permanent datum:	Mean Sea Level	Elev.:	0.0 m
Log measured from:	Rig Floor	38.0 m	above Perm. datum
Depth reference:	Driller's Depth		

Job no.	X= E 554227.6 m	Longitude	Latitude
08ASQ0006	Y= N 5771046.0 m	E 147°37' 09.793"	S 38°12' 24.881"

Depth logged:	747.0 m To 1754.7 m	Mag decl:	12.84 deg.	Other services:	
Date logged:	16-May-08 To 20-May-08	Mag dip:	-68.78 deg.	See Remarks	

Bore hole record

Hole size	from	to
17.5 in.	133.0 m	751.0 m
12.25 in.	751.0 m	1766.0 m

Casing record

Size	Density	from	to
30.0 in.	502.2 lbm/m	0.0 m	121.2 m
20.0 in.	334.8 lbm/m	121.2 m	132.8 m
13.375 in.	226.0 lbm/m	0.0 m	747.0 m

Mud record

Type	from	to
Sea Water	133.0 m	751.0 m
KCl Polymer	751.0 m	1766.0 m

Borehole deviation record

Min	Max	from	to
0.97 deg.	34.9 deg.	133.0 m	751.0 m
7.36 deg.	32.35 deg.	751.0 m	1766.0 m

Surface equipment

Unit	OLU-KC-0702
Depth system	DWE & CLT

Software record

IDEAL Wis	ID 13_0C_08		
SPM	hspm13_0C_03		
LWD	See Remarks		
MWD	See Remarks		

Bit Run Summary

Run number		2
Bit size	in	12.25
Bit start depth	m	751.0
Bit end depth	m	1766.0
Top interval logged	m	747.0
Bottom interval logged	m	1754.7
Begin log: time		14:00
Begin log: date		16-May-08
End log: time		00:30
End log: date		20-May-08
Mud data		
Depth	m	1766.0
Type		KCl Polymer
Mud weight	ppg	9.3
Solids	%	0.1
Chlorides	ppm	38000
Rm	ohm.m@°C	0.12@20.4
Rmf	ohm.m@°C	0.11@19.8
Rmc	ohm.m@°C	0.14@20.7

Potassium	%	3									
Environmental data											
GR											
Mud weight	ppg	9.3									
Bit size	in	12.25									
Resistivity											
Neutron porosity											
Hole Size	in	12.25									
Mud weight	ppg	9.3									
Temperature	℃	50.2									
Mud salinity	ppk	N/A									
Formation salinity		N/A									
Recording rate 1	SEC	5(GVR)									
Recording rate 2	SEC	N/A									
Filtering GR		3 pts									
Filtering density		3 pts									
Filtering Neutron		3 pts									
Company representative		S.Ward	B.Leask								
Anadrill personnel		A.Kohli	S.Aung	P.Dassens	P.Sellathurai						

OTHER SERVICES FOR RUN2	OTHER SERVICES FOR RUN	OTHER SERVICES FOR RUN
Directional Drilling Directional Surveys		

REMARKS: RUN NUMBER 2	REMARKS: RUN NUMBER	REMARKS: RUN NUMBER
Depth is referenced to Driller's Depth. Run 1 was MWD D&I run only. Gamma Ray is corrected for mud weight, tool size, bit size and potassium percentage in the mud. Resistivity is borehole compensated and enironmentally corrected. KCl content of the mud was 8% by weight. POOH due to TD of Wardie-1.		

EQUIPMENT DESCRIPTION

RUN2	RUN	RUN
DOWNHOLE EQUIPMENT		

DOWNHOLE EQUIPMENT

8 1/4" TeleScope* — 22.05

MDC: VA77

PMEA: 201

MDI: 1556

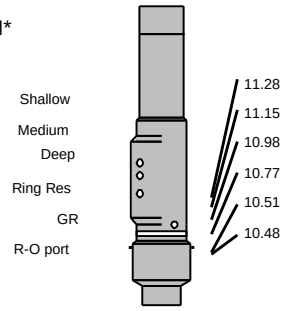
PMVC: 109

DHS: 9.2C02

8 1/4" geoVISION* — 13.56

S/N: 034

DHS: V9.1

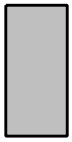


PowerDrive X5* 900 Flex Collar — 9.34

S/N: 51767

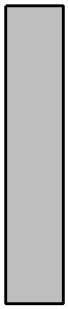
PowerDrive X5* 900 Receiver — 6.39

S/N: 49245



PowerDrive X5* 900 AA CU — 4.52

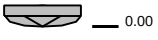
S/N: 51550



12 1/4" Reed Hycalog PDC Bit — 0.30

OD 12.25

S/N: 218629



Maximum string diameter 12.25 in.

All lengths in Meters

Variable Name	Variable Description	Run Name & Value		
	Run Number			2
	General Information			
BHT_RM	Bottom Hole Temperature (RM)		DEGC	50.200
BSAL_RM	Mud Salinity (RM)		PPK	0.000
BS_RM	Bit Size (RM)		IN	12.250
COEF_M	User Defined FEXP in Clean Sand		----	1.650
C_WS	Overpressure correction to Sw and M		----	1.000
FEXP	Formation Factor Exponent(RM)		----	2.000
FNUM	Formation Factor Enumerator(RM)		----	1.000
FPHI_RM	Formation Factor Porosity Source (RM)		----	XPLOT
MST_RM	Mud Sample temperature (RM)		DEGC	20.400
MW_RM	Mud Weight (RM)		LB/G	9.300
OBMF_RM	Oil Based Mud (RM)		----	NO
RHOF_RM	Mud Filtrate Density (RM)		G/C3	1.000
RHOM_RM	Matrix density (RM)		G/C3	2.710
RMS_RM	Resistivity of Mud Sample (RM)		OHMM	0.122
RWA_COMP_M	Rwa computation model			
RWA_DEN_AD	Rwa Density Input ADN			
RWA_DEN_CD	Rwa Density Input CDN			
RWA_DEN_IN	Rwa Density Input			
RWA_FORM_M	Rwa computation formation model			
RWA_RES_IN	Rwa computation resistivity input			
RWS_RM	Resistivity of Connate Water (RM)		OHMM	1.000
SHT_RM	Ground Level Temperature (Mud-Line When Offshore) (RM)		DEGC	10.000
TD_RM	Total Measured Depth (RM)		M	1766.000
TWS_RM	Temperature of Connate Water (RM)		DEGC	23.889
VF_ILLI	Fraction of illite in shales		----	0.500
VF_KAOL	Fraction of kaolinite in shales		----	0.500
VF_MONT	Fraction of montmorillonite in shales		----	0.000
XPDM_RM	Cross plot density porosity multiplier		----	0.675
XPNM_RM	Cross plot neutron porosity multiplier		----	0.325
	RAB			
RAB/BTN_SLV_SIZE/PARAMETE	IN -- RAB: Button Sleeve Diameter			11 7/8
RAB/STAB_SIZE/PARAMETER	RAB: Stabilizer Diameter		IN	12-12.25
BDBHCA	RAB: Button Deep Borehole A Factor		----	-0.035
BDBHCB	RAB: Button Deep Borehole B Factor		----	-0.019
BHA_COEF_VER	RAB: BHA Coef Generator Version		----	2.000
BITBHCA	RAB: Bit A Borehole Factor		----	0.101
BITBHCB	RAB: Bit B Borehole Factor		----	-0.074
BIT_K_FACTOR	RAB: Bit K Factor		----	14.045
BMBHCA	RAB: Button Medium Borehole A Factor		----	0.006
BMBHCB	RAB: Button Medium Borehole B Factor		----	-0.020
BSBHCA	RAB: Button Shallow Borehole A Factor		----	-0.009
BSBHCB	RAB: Button Shallow Borehole B Factor		----	-0.036
BUT_KIMP_A	RAB: Button Impedance Coeff A		----	0.002
BUT_KIMP_B	RAB: Button Impedance Coeff B		----	0.000
DBUTTON_K_FACTO	RAB: Button Deep K factor		----	0.003
DHS_VERSION	RAB: DownHole Software Version		----	-999.250
GR_BHC_TOOLSIZE	RAB: Gamma-Ray Borehole Coeff 1		----	8.250
HI_CSDEPTH_OUT	RAB: Allow Hi-Resolution CS_DEPTH Image Data Output		----	NO
HI_DLIS_OUT	RAB: Allow Hi-Resolution DLIS Image Data Output		----	NO
HI_RIVER_OUT	RAB: Allow Hi-Resolution River for Image Data Output		----	NO
IMAGE_MAX_GR	RAB: GR Image Maximum Scale Value		GAPI	120.000
IMAGE_MAX_RES	RAB: Image Maximum Resistivity Value		OHMM	100.000
IMAGE_MIN_GR	RAB: GR Image Minimum Scale Value		GAPI	20.000
IMAGE_MIN_RES	RAB: Image Minimum Resistivity Value		OHMM	1.000
JSD_RAB	RAB Acquisition start date		OHMM	1.000
KPER	Potassium Concentration (RM)		----	3.000
MAG_DECL_RAB	RAB: Magnetic Declination		DEG	12.840
MAG_INCL_RAB	RAB: Magnetic Dip		DEG	-68.780
MBUTTON_K_FACTO	RAB: Button Medium K Factor		----	0.004
OBM	RAB: Oil base Mud		----	NO
ORIENTATION_RM	Rab Image Orientation		----	MN
RABBDA0	RAB: Button Deep A0 Coeff		----	-0.122
RABBDA1	RAB: Button Deep A1 Coeff		----	0.116
RABBDA2	RAB: Button Deep A2 Coeff		----	-0.050
RABBDA3	RAB: Button Deep A3 Coeff		----	0.010
RABBDA4	RAB: Button Deep A4 Coeff		----	-0.001
RABBDA5	RAB: Button Deep A5 Coeff		----	0.000
RABBDMIN	RAB: Button Deep Minimum Value		----	0.038
RABBITA0	RAB: Bit A0 Coeff		----	3.861
RABBITA1	RAB: Bit A1 Coeff		----	-10.947
RABBITA2	RAB: Bit A2 Coeff		----	27.583
RABBITA3	RAB: Bit A3 Coeff		----	-30.508
RABBITA4	RAB: Bit A4 Coeff		----	16.261
RABBITA5	RAB: Bit A5 Coeff		----	-3.368
RABBITMIN	RAB: Bit Minimum Value		----	22.439
RABBMA0	RAB: Button Medium A0 Coeff		----	-0.121
RABBMA1	RAB: Button Medium A1 Coeff		----	0.107
RABBMA2	RAB: Button Medium A2 Coeff		----	-0.045
RABBMA3	RAB: Button Medium A3 Coeff		----	0.009
RABBMA4	RAB: Button Medium A4 Coeff		----	-0.001
RABBMA5	RAB: Button Medium A5 Coeff		----	0.000
RABBMMIN	RAB: Button Medium Minimum Value		----	0.041
RABBSA0	RAB: Button Shallow A0 Coeff		----	-0.127
RABBSA1	RAB: Button Shallow A1 Coeff		----	0.105
RABBSA2	RAB: Button Shallow A2 Coeff		----	-0.043

RABBSA3	RAB: Button Shallow A3 Coeff	----	0.008
RABBSA4	RAB: Button Shallow A4 Coeff	----	-0.001
RABBSA5	RAB: Button Shallow A5 Coeff	----	0.000
RABBSMIN	RAB: Button Shallow Minimum Value	----	0.055
RABDHS	RAB Down Hole Software	----	4.000
RABEC	RAB: Resistivity Env-Cor	----	YES
RABRNGA0	RAB: RING A0 Coeff	----	-0.119
RABRNGA1	RAB: RING A1 Coeff	----	0.116
RABRNGA2	RAB: RING A2 Coeff	----	-0.051
RABRNGA3	RAB: RING A3 Coeff	----	0.010
RABRNGA4	RAB: RING A4 Coeff	----	-0.001
RABRNGA5	RAB: RING A5 Coeff	----	0.000
RABRNGMIN	RAB: Ring Minimum Value	----	1.150
RAB_BIT_ECAL	Bit Resistivity for ECAL_RAB?	----	YES
RAB_BIT_INVERSI	Input Bit Resistivity for Inversion? (Recommended at the bit)	----	NO
RAB_CALIPER_CAL	Compute ECAL_RAB?	----	NO
RAB_DATA_FIX	RAB: Create A Corrected RAB Time Data File	----	NO
RAB_DATA_LTB	RAB: Create An RAB LTB Data File	----	NO
RAB_DEEPBTN_ECA	Deep Button Resistivity for ECAL_RAB?	----	YES
RAB_DEEPBTN_INV	Input Deep Button Resistivity for Inversion?	----	YES
RAB_INVERSION	Perform Rt Inversion?	----	NO
RAB_INVERSION_B	RAB Bit Sensor Weight for Inversion[0,1]	----	0.000
RAB_INVERSION_B	Ending Depth for GR Cutoff in Zone1 (default through the whole well)	M	30480.000
RAB_INVERSION_B	Ending Depth of Zone10	M	-304.571
RAB_INVERSION_B	Ending Depth of Zone2	M	-304.571
RAB_INVERSION_B	Ending Depth of Zone3	M	-304.571
RAB_INVERSION_B	Ending Depth of Zone4	M	-304.571
RAB_INVERSION_B	Ending Depth of Zone5	M	-304.571
RAB_INVERSION_B	Ending Depth of Zone6	M	-304.571
RAB_INVERSION_B	Ending Depth of Zone7	M	-304.571
RAB_INVERSION_B	Ending Depth of Zone8	M	-304.571
RAB_INVERSION_B	Ending Depth of Zone9	M	-304.571
RAB_INVERSION_C	Continuity Multiplier[0,1]	----	0.500
RAB_INVERSION_D	RAB Deep Button Sensor Weight for Inversion[0,1]	----	1.000
RAB_INVERSION_D	RAB inversion for Dh?	----	YES
RAB_INVERSION_D	RAB inversion for Di?	----	YES
RAB_INVERSION_G	GR Cutoff for Shale Formation	----	75.000
RAB_INVERSION_G	GR Cutoff for Shale Formation in Zone1(default through the whole well)	GAPI	75.000
RAB_INVERSION_G	GR Cutoff in Zone10	GAPI	75.000
RAB_INVERSION_G	GR Cutoff in Zone2	GAPI	75.000
RAB_INVERSION_G	GR Cutoff in Zone3	GAPI	75.000
RAB_INVERSION_G	GR Cutoff in Zone4	GAPI	75.000
RAB_INVERSION_G	GR Cutoff in Zone5	GAPI	75.000
RAB_INVERSION_G	GR Cutoff in Zone6	GAPI	75.000
RAB_INVERSION_G	GR Cutoff in Zone7	GAPI	75.000
RAB_INVERSION_G	GR Cutoff in Zone8	GAPI	75.000
RAB_INVERSION_G	GR Cutoff in Zone9	GAPI	75.000
RAB_INVERSION_M	RAB Medium Button Sensor Weight for Inversion[0,1]	----	1.000
RAB_INVERSION_R	Resistivity Cutoff for Shale Formation	OHMM	2.000
RAB_INVERSION_R	Resistive Invasion Allowed	----	NO
RAB_INVERSION_R	RAB Ring Sensor Weight for Inversion[0,1]	----	1.000
RAB_INVERSION_R	RAB inversion for Rmud?	----	NO
RAB_INVERSION_R	RAB inversion for Rt?	----	YES
RAB_INVERSION_R	Rt to R-deepest separation penalty multiplier[0,1]	----	0.500
RAB_INVERSION_R	RAB inversion for Rxo?	----	YES
RAB_INVERSION_S	GR of Clean Sand Formation	----	-999.250
RAB_INVERSION_S	GR of Shale Formation	----	-999.250
RAB_INVERSION_S	RAB Shallow Button Sensor Weight for Inversion[0,1]	----	1.000
RAB_INVERSION_T	Inversion Threshold[0, 0.3]	----	0.010
RAB_INVERSION_W	Formation Water Resistivity	OHMM	0.100
RAB_INVERSION_W	Formation Water Temperature	----	150.000
RAB_MEDIUMBTN_E	Medium Button Resistivity for ECAL_RAB?	----	YES
RAB_MEDIUMBTN_I	Input Medium Button Resistivity for Inversion?	----	YES
RAB_QUAD	RAB: Process Quadrant data ?	----	YES
RAB_RIGMODE_ECA	Bit on Bottom?	----	YES
RAB_RING_ECAL	Ring Resistivity for ECAL_RAB?	----	YES
RAB_RING_INVERS	Imput RING Resistivity for Inversion?	----	YES
RAB_SHALLOWBTN_	Shallow Button Resistivity for ECAL_RAB?	----	YES
RAB_SHALLOWBTN_	Input Shallow Button Resistivity for Inversion?	----	YES
RAB_TAB	RAB: Compute TAB ?	----	YES
RAB_TECHLOG	RAB: Generate Techlog ?	----	YES
RAB_TEMP_SELECT	RAB Temperature Selection	----	MEASURED
RAB_TICKS	RAB: Generate Ticks ?	----	YES
READOUT_PORT_MP	RAB: ROP to Bit Face Distance	M	10.480
RINGBHCA	RAB: Ring Borehole A Factor	----	0.298
RINGBHCB	RAB: Ring Borehole B Factor	----	-0.112
RING_KIMP_A	RAB: Ring Impedance Coeff A	----	0.000
RING_KIMP_B	RAB: Ring Impedance Coeff B	----	0.000
RING_K_FACTOR	RAB: Ring K Factor	----	0.102
RSD	LWD run start date dd-mmm-yy	OHMM	0.122
RWA_COMP_MOD	Rwa computation model	----	BASIC
RWA_DEN_ADN	Rwa Density Input	----	RHOB
RWA_DEN_CDN	Rwa Density Input	----	RHOB
RWA_DEN_INPUT	Rwa Density Input	----	RHOB
RWA_FORM_MOD	Rwa computation formation model	----	CLASTIC
RWA_RES_INPUT	Rwa computation resistivity input	----	RT
SBUTTON_K_FACTO	RAB: Button Shallow K Factor	----	0.005
SCALE_IMAGES	RAB: Process Image Data	----	YES
STAB	RAB: Run with Stabilizer	----	YES
TFF_OFFSET_RAB	RAB Time-Frame File Time Offset	S	0.000
TIMEFRAME_FILE_	RAB: Time Frame File Name	S	0.000
TOOLTYPE	RAB: Azimuthal Tool	----	YES
TS_VERSION	RAB: ToolScope Software Version	----	-999.250
VRAB6	Rab Tool type (ENP/PILOT)	----	RAB8_ENP
WIN_SIZE_DYN_IM	RAB: Window Size for Scaling Dynamic Image	M	0.914
WRK	to Report Potassium Concentration (RM)	----	K by Wgt %

Schlumberger Drilling & Measurements ID13 Parameter Insert Header Software version 3.0c

Wardie-1 geoVISION*825 Resistivity RM 500MD

Format: GeoVISION Resistivity Log **Vertical Scale: 1:500** **Graphics File Created: 23-May-2008 09:19**

PIP SUMMARY

Gamma Ray Samples

Ring Samples

Ring Resistivity (RES_RING)
0.2 (OHMM) 2000

Rate of Penetration, Averaged over Last 5ft (ROP5_RM)
200 (M/HR) 0

Shallow Button Resistivity (RES_BS)
0.2 (OHMM) 2000

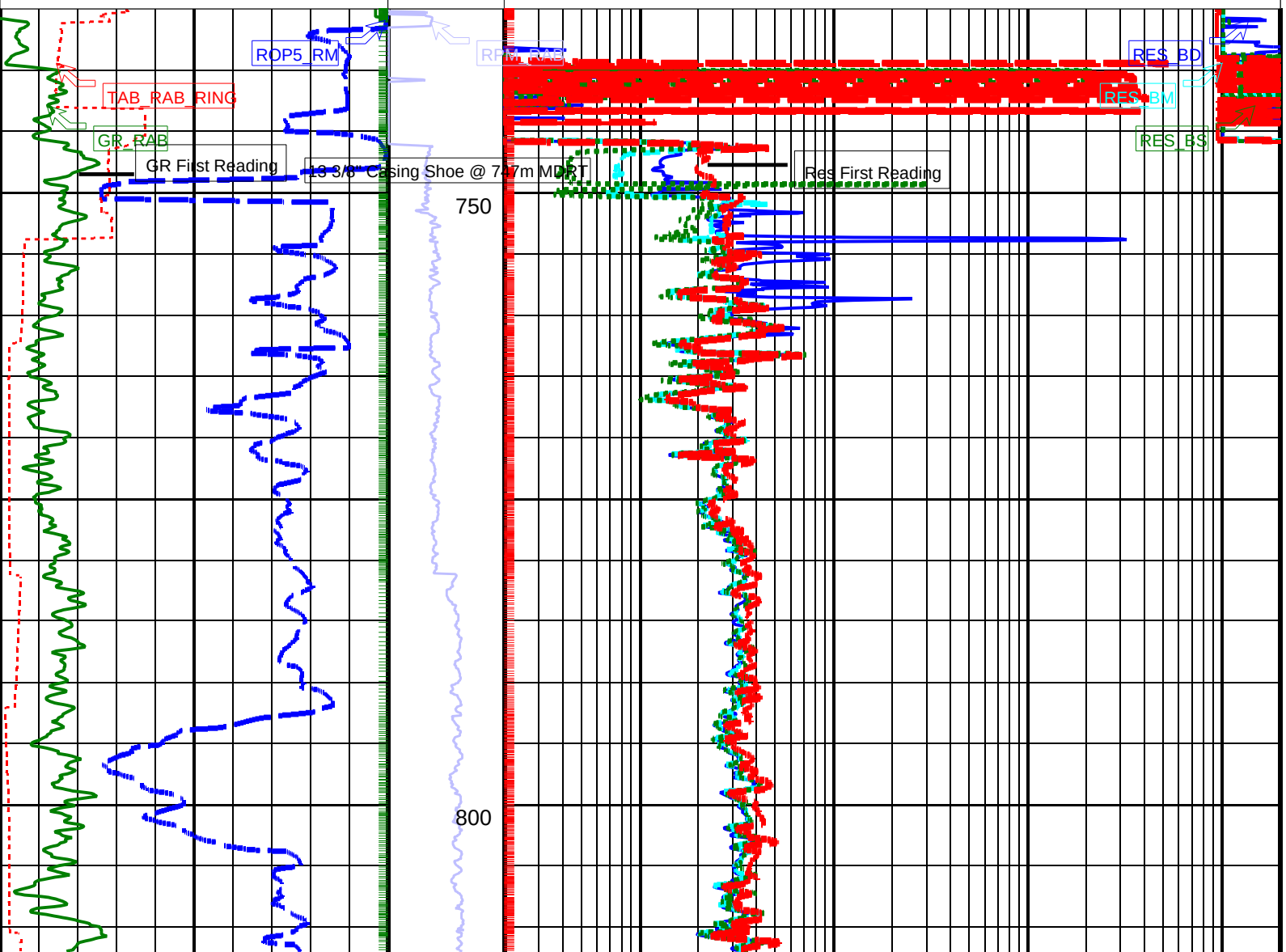
Ring Resistivity Time After Bit (TAB_RAB_RING)
0 (HR) 10

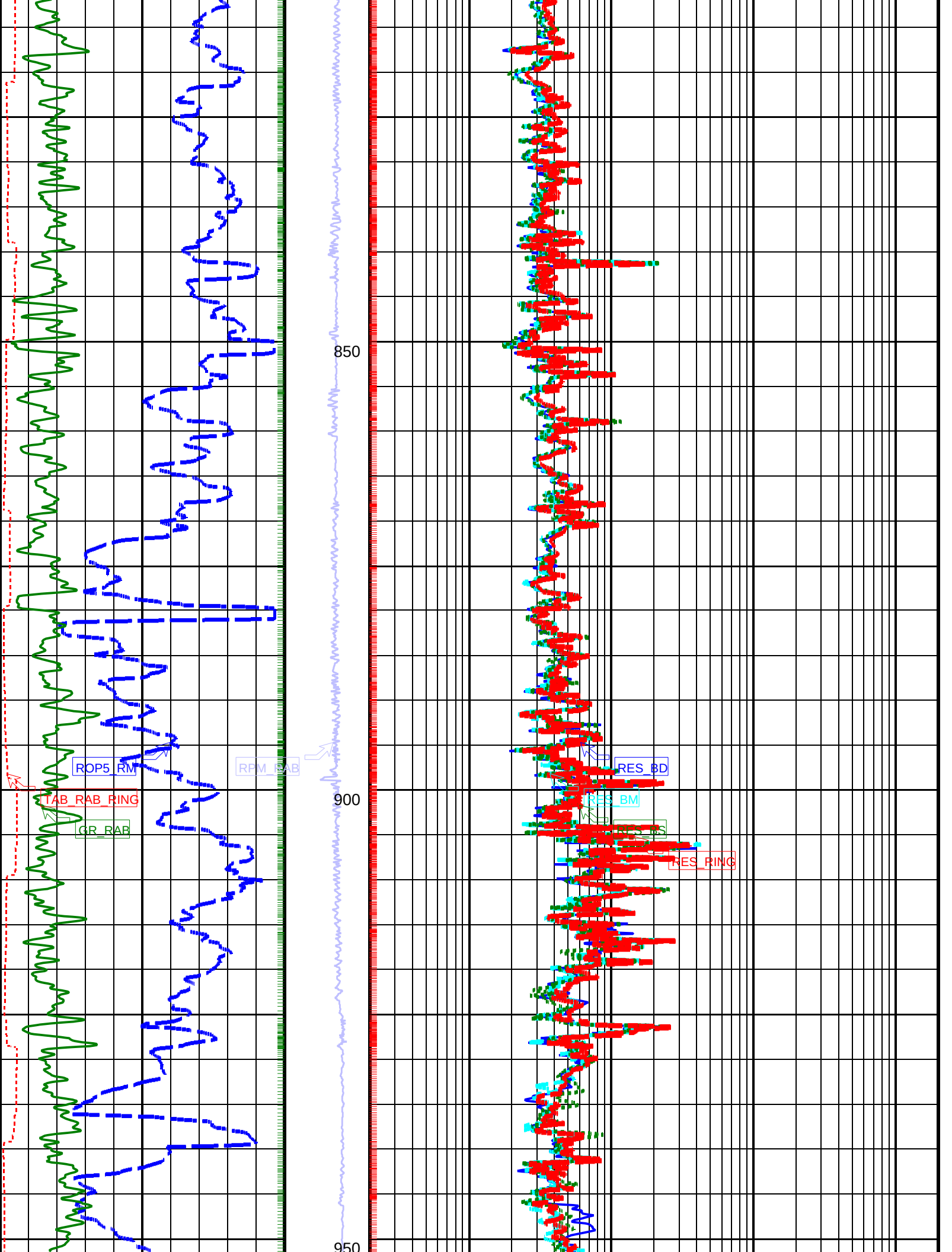
Medium Button Resistivity (RES_BM)
0.2 (OHMM) 2000

RAB Gamma Ray (GR_RAB)
0 (GAPI) 200

RAB Rotational Speed (RPM_RAB) (RPM)
0 250

Deep Button Resistivity (RES_BD)
0.2 (OHMM) 2000

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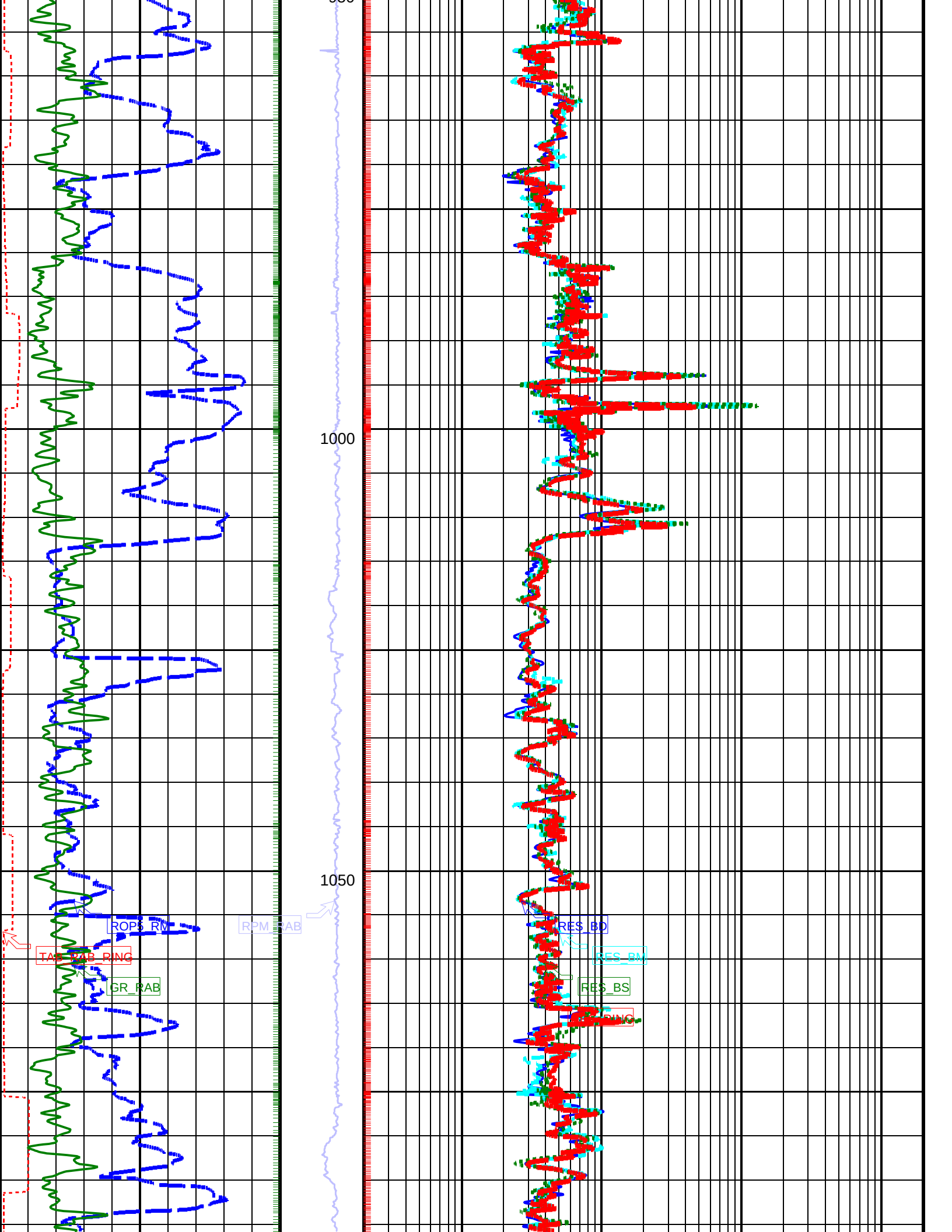
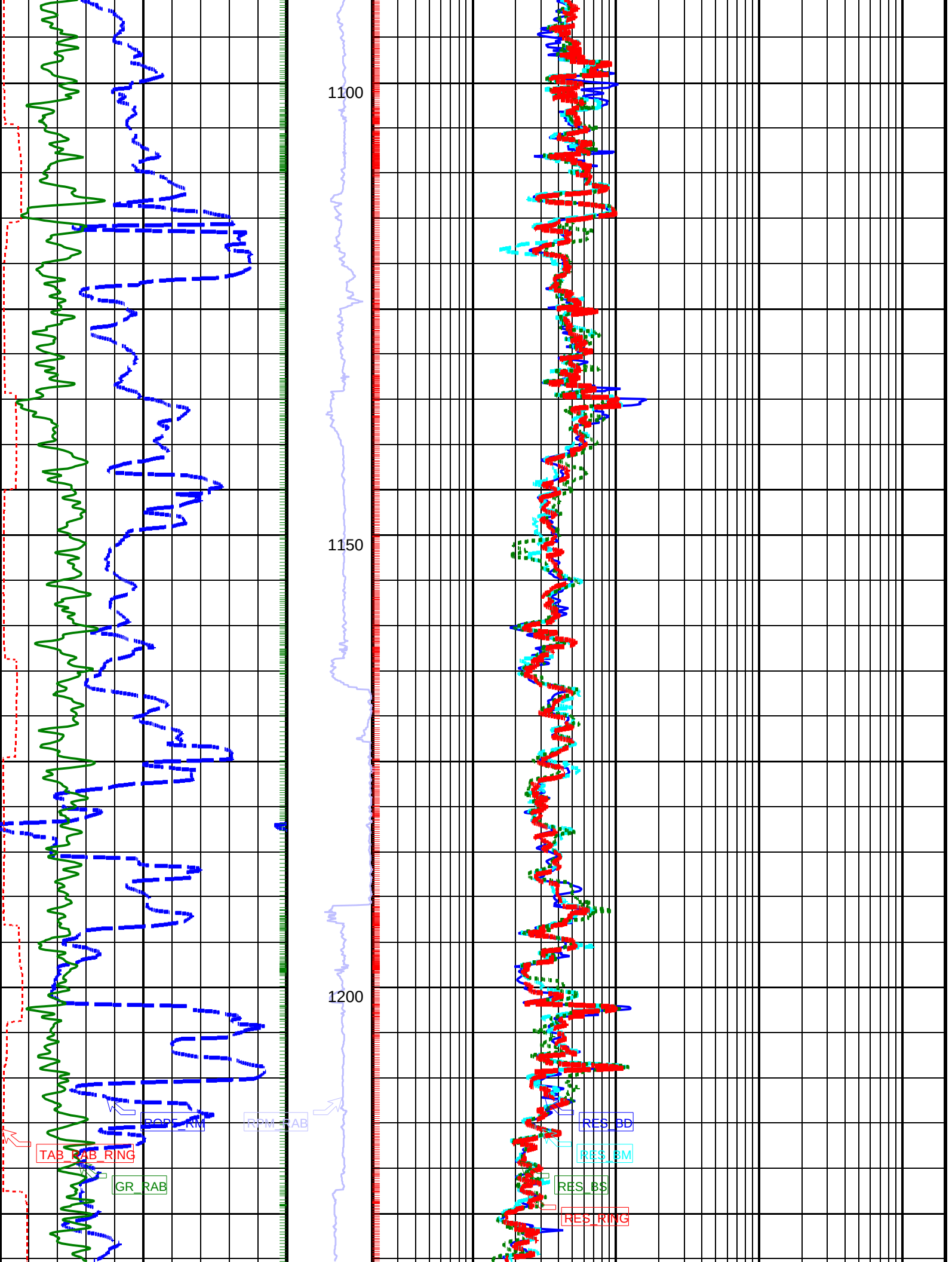
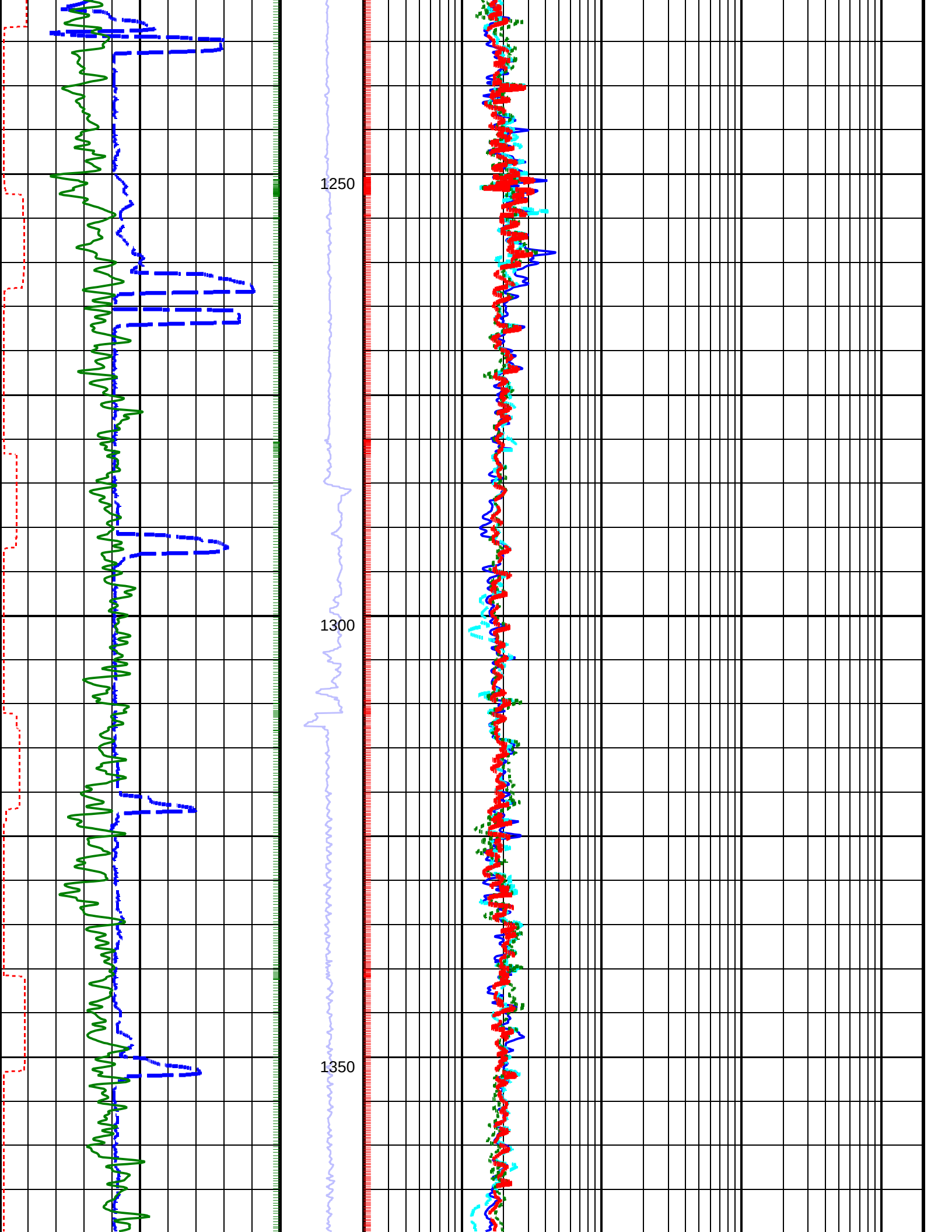
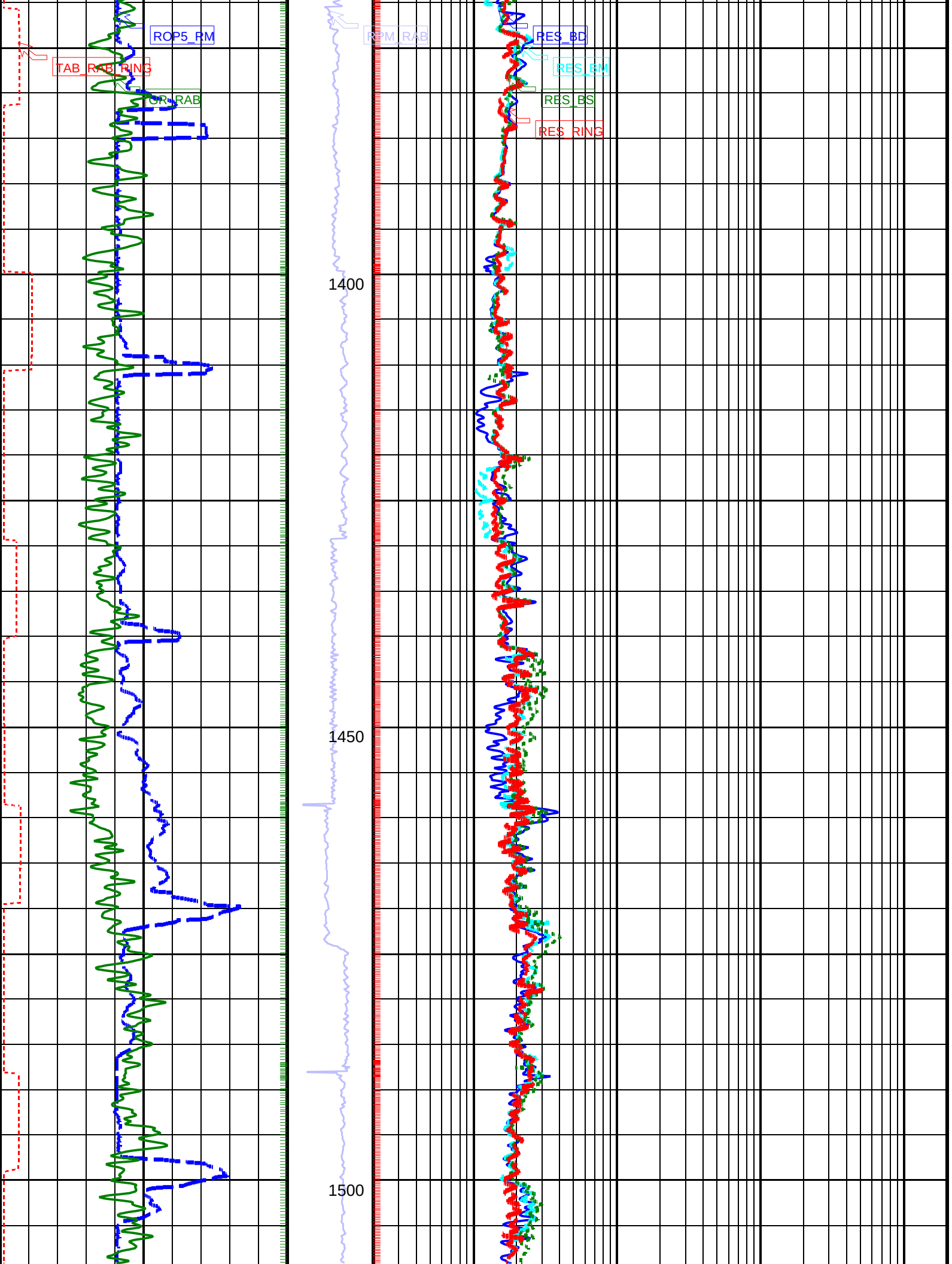
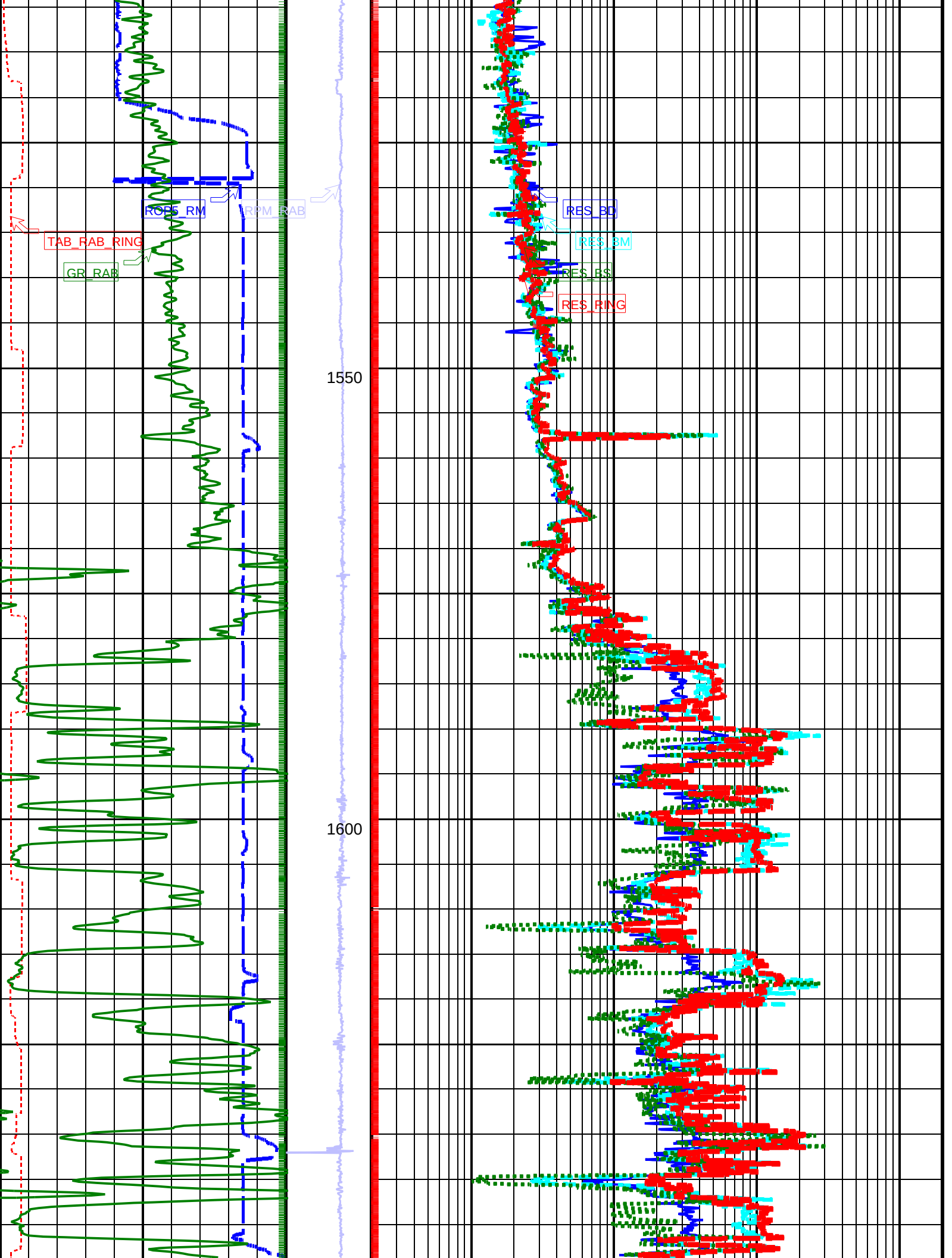
RPM_RAB
TAB_RAB_RING
GR_RAB
RES_BD
RES_BM
RES_BS
RES_RING
850
900
950


1000
1050
ROPS_RM
TAB_RAB_RING
GR_RAB
RPM_RAB
RES_BD
RES_RM
RES_BS


1100
1150
1200
TAB_RAB_RING
GR_RAB
RES_BS
RES_RING


1250
1300
1350


ROP5_RM
TAB_RAB_RING
GR_RAB
RPM_RAB
RES_BD
RES_BM
RES_BS
RES_RING
1400
1450
1500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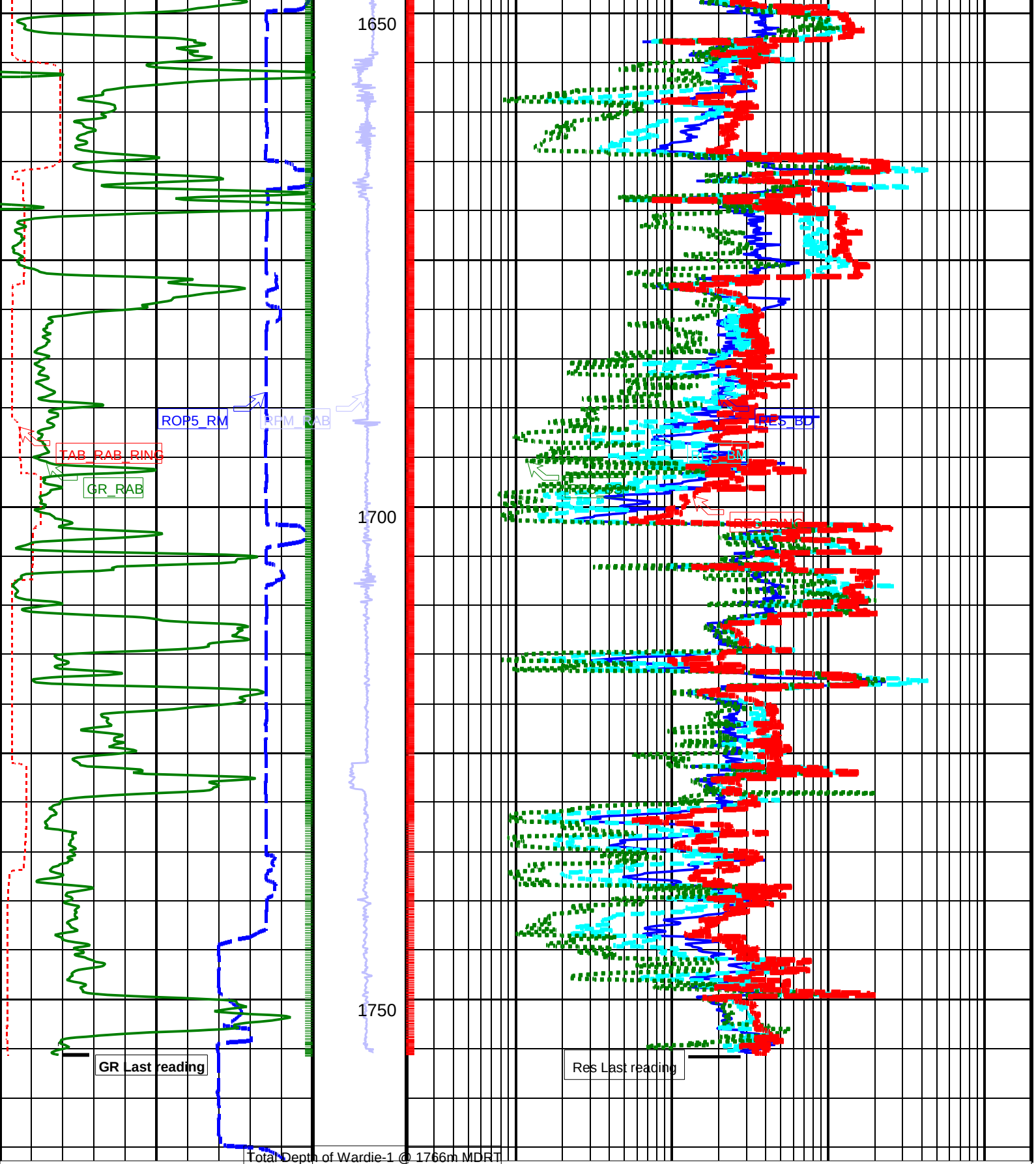
RPM_RAB
TAB_RAB_RING
GR_RAB
RES_BD
RES_BM
RES_RS
RES_RING
1550
1600



RAB Gamma Ray (GR_RAB)

0 (GAPI) 200

RAB Rotational Speed (RPM_RAB) (RPM)

0 250

Deep Button Resistivity (RES_BD)

0.2 (OHMM) 2000

Ring Resistivity Time After Bit (TAB_RAB_RING)

0 (HR) 10

Medium Button Resistivity (RES_BM)

0.2 (OHMM) 2000

Rate of Penetration, Averaged over Last

Rate of Penetration, Averaged over Last 5ft (ROP5_RM)

200 (M/HR) 0

Shallow Button Resistivity (RES_BS)

0.2 (OHMM) 2000

Ring Resistivity (RES_RING)

0.2 (OHMM) 2000

PIP SUMMARY

Gamma Ray Samples

Ring Samples

IDEAL Version: ID13_0C_08

IDF

8.25-in. Resistivity At-the-Bit / Equipment Identification

Primary Equipment:

Tool Name and Serial Number	RAB8 - AA	034
Calibration Status	Valid -	

Master: 2-Apr-2008 10:14

8.25-in. Resistivity At-the-Bit Calibration

Resistivity: Fixture

Phase	Ring/T1 factor ----	Value
Master		0.01090
	0.009500 (Minimum) 0.01100 (Nominal) 0.01250 (Maximum)	

Phase	Ring/T2 factor ----	Value
Master		0.01093
	0.009500 (Minimum) 0.01100 (Nominal) 0.01250 (Maximum)	

Phase	M0/T1 factor ----	Value
Master		1.055
	0.9000 (Minimum) 1.050 (Nominal) 1.200 (Maximum)	

Phase	M0/T2 factor ----	Value
Master		1.042
	0.9000 (Minimum) 1.050 (Nominal) 1.200 (Maximum)	

Phase	M2/T1 factor ----	Value
Master		0.9832
	0.8500 (Minimum) 1.000 (Nominal) 1.150 (Maximum)	

Phase	M2/T2 factor ----	Value
Master		0.9552
	0.8500 (Minimum) 1.000 (Nominal) 1.150 (Maximum)	

Phase	BTN shallow/T1 factor ----	Value
Master		0.0006639
	0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)	

Phase	BTN shallow/T2 factor ----	Value
Master		0.0006665
	0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)	

Phase	BTN medium/T1 factor ----	Value
Master		0.0006641
	0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)	

Phase	BTN medium/T2 factor ----	Value
Master		0.0006662
	0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)	

Phase	BTN deep/T1 factor ----	Value
Master		0.0006589
	0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)	

Phase	BTN deep/T2 factor ----	Value
Master		0.0006598
	0.0005700 (Minimum) 0.0006700 (Nominal) 0.0007700 (Maximum)	

Master: 2-Apr-2008 11:06

8.25-in. Resistivity At-the-Bit Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor ----	Value
Master		9.065
	6.500 (Minimum) 8.000 (Nominal) 9.500 (Maximum)	

SCHLUMBERGER

Survey report 23-May-2008 09:58:23

```
Client...................: 3D Oil Ltd
Field....................: Exploration

Well.....................: Wardie-1
API number...............: 08ASQ0006
Engineer.................: AK/STDA

COUNTY:..................: N/A
STATE:...................: Victoria

Spud date................: 09-May-08
Last survey date.........: 18-May-08
Total accepted surveys...: 67
MD of first survey.......: 0.00 m
MD of last survey........: 1745.67 m

----- Survey calculation methods------------
Method for positions....: Minimum curvature

----- Geomagnetic data ----------------------
Magnetic model..........: BGGM version 2007
```

Method for positions.....: Minimum curvature
Method for DLS.....: Mason & Taylor

----- Depth reference -----------------------
Permanent datum.....: Mean Sea Level
Depth reference.....: Driller's Depth
GL above permanent.....: -39.5 m
KB above permanent.....: Top Drive
DF above permanent.....: 38.0 m

----- Vertical section origin----------------
Latitude (+N/S-).....: 0.00 m
Departure (+E/W-).....: 0.00 m

----- Platform reference point---------------
Latitude (+N/S-).....:
Departure (+E/W-).....:

Azimuth from Vsect Origin to target: 241.15 degrees

Magnetic model.....: BGGM version 2007
Magnetic date.....: 10-May-2008
Magnetic field strength..: 1198.92 HCNT
Magnetic dec (+E/W-).....: 12.84 degrees
Magnetic dip.....: -68.78 degrees

----- MWD survey Reference Criteria ---------
Reference G.....: 1000.02 mGal
Reference H.....: 1198.92 HCNT
Reference Dip.....: -68.78 degrees
Tolerance of G.....: (+/-) 2.50 mGal
Tolerance of H.....: (+/-) 6.00 HCNT
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Corrections ---------------------------
Magnetic dec (+E/W-).....: 12.84 degrees
Grid convergence (+E/W-).: -0.38 degrees
Total az corr (+E/W-).....: 13.22 degrees
(Total az corr = magnetic dec - grid conv)
Survey Correction Type ...:
I=Sag Corrected Inclination
M=Schlumberger Magnetic Correction
S=Shell Magnetic Correction
F=Failed Axis Correction
R=Magnetic Resonance Tool Correction
D=Dmag Magnetic Correction

SCHLUMBERGER Survey Report

Seq # -	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/ 100f)	Srvy tool type	Tool Corr (deg)
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIP	None
2	77.50	1.96	317.71	77.50	77.48	0.31	0.98	-0.89	1.33	317.71	0.77	GYR	None
3	82.50	1.90	317.51	5.00	82.48	0.35	1.10	-1.01	1.49	317.70	0.37	GYR	None
4	87.50	1.85	317.30	5.00	87.48	0.39	1.23	-1.12	1.66	317.67	0.31	GYR	None
5	92.50	1.80	317.07	5.00	92.48	0.42	1.34	-1.22	1.82	317.63	0.31	GYR	None
6	97.50	1.74	316.83	5.00	97.47	0.46	1.45	-1.33	1.97	317.57	0.37	GYR	None
7	102.50	1.69	316.58	5.00	102.47	0.50	1.56	-1.43	2.12	317.51	0.31	GYR	None
8	107.50	1.63	316.30	5.00	107.47	0.54	1.67	-1.53	2.27	317.45	0.37	GYR	None
9	112.50	1.65	315.91	5.00	112.47	0.57	1.77	-1.63	2.41	317.37	0.14	GYR	None
10	117.50	1.78	316.62	5.00	117.47	0.61	1.88	-1.73	2.56	317.30	0.80	GYR	None
11	122.50	1.86	319.95	5.00	122.46	0.65	2.00	-1.84	2.72	317.36	0.81	GYR	None
12	127.50	1.88	323.69	5.00	127.46	0.67	2.13	-1.94	2.88	317.61	0.75	GYR	None
13	132.50	1.94	328.33	5.00	132.46	0.69	2.26	-2.03	3.04	318.07	1.01	GYR	None
14	134.60	2.03	330.59	2.10	134.56	0.69	2.33	-2.07	3.12	318.34	1.73	GYR	None
15	174.15	0.97	331.19	39.55	174.09	0.70	3.23	-2.58	4.13	321.43	0.82	PUP	None
16	202.30	1.06	330.50	28.15	202.24	0.70	3.67	-2.82	4.63	322.44	0.10	PUP	None
17	260.44	2.12	269.17	58.14	260.36	1.66	4.12	-4.16	5.85	314.72	0.98	PUP	None
18	290.09	5.23	252.00	29.65	289.94	3.47	3.69	-5.99	7.04	301.64	3.36	PUP	None
19	319.76	8.62	244.27	29.67	319.39	7.02	2.31	-9.28	9.57	283.97	3.60	PUP	None
20	349.23	11.69	243.65	29.47	348.40	12.21	0.03	-13.95	13.95	270.10	3.18	PUP	None
21	378.56	14.54	243.39	29.33	376.96	18.85	-2.94	-19.91	20.12	261.59	2.96	PUP	None
22	408.20	16.62	238.69	29.64	405.51	26.81	-6.81	-26.85	27.71	255.76	2.50	PUP	None
23	437.65	18.41	234.18	29.45	433.60	35.63	-11.72	-34.22	36.18	251.09	2.32	PUP	None
24	466.98	21.11	233.22	29.33	461.20	45.46	-17.60	-42.21	45.73	247.37	2.83	PUP	None
25	496.44	24.52	235.86	29.46	488.35	56.81	-24.21	-51.52	56.93	244.83	3.68	PUP	None
26	525.34	27.44	238.00	28.90	514.33	69.43	-31.10	-62.14	69.49	243.41	3.23	PUP	None
27	555.68	29.78	239.10	30.34	540.96	83.94	-38.68	-74.53	83.97	242.57	2.41	PUP	None
28	585.40	28.02	239.82	29.72	566.98	98.30	-45.98	-86.90	98.31	242.12	1.84	PUP	None
29	614.89	29.13	240.00	29.49	592.88	112.40	-53.05	-99.11	112.41	241.84	1.15	PUP	None
30	644.23	31.31	240.28	29.34	618.23	127.17	-60.40	-111.91	127.17	241.64	2.27	PUP	None
31	674.32	33.98	240.54	30.09	643.56	143.40	-68.41	-126.03	143.40	241.50	2.71	PUP	None
32	703.79	34.90	240.07	29.47	667.87	160.06	-76.67	-140.50	160.06	241.38	0.99	PUP	None
33	722.54	34.35	239.86	18.75	683.29	170.71	-82.00	-149.73	170.71	241.29	0.91	PUP	None
34	802.80	32.02	241.09	80.26	750.46	214.63	-103.66	-187.94	214.63	241.12	0.92	PUP	None
35	831.50	30.76	239.33	28.70	774.96	229.58	-111.08	-200.91	229.58	241.06	1.65	PUP	None
36	861.51	31.64	238.19	30.01	800.63	245.11	-119.15	-214.20	245.11	240.92	1.08	PUP	None
37	891.22	31.39	236.51	29.71	825.96	260.60	-127.53	-227.28	260.61	240.70	0.94	PUP	None
38	920.19	31.58	236.01	28.97	850.66	275.68	-135.93	-239.86	275.70	240.46	0.34	PUP	None
39	949.76	31.70	236.73	29.57	875.84	291.14	-144.52	-252.78	291.17	240.24	0.41	PUP	None
40	979.78	31.37	237.60	30.02	901.42	306.80	-153.03	-265.97	306.85	240.08	0.57	PUP	None
41	1009.21	31.56	240.47	29.43	926.53	322.15	-160.93	-279.14	322.21	240.03	1.56	PUP	None
42	1039.05	31.64	239.79	29.84	951.94	337.78	-168.72	-292.70	337.84	240.04	0.37	PUP	None
43	1066.59	31.64	241.83	27.54	975.39	352.22	-175.77	-305.31	352.29	240.07	1.18	PUP	None
44	1096.55	32.01	242.11	29.96	1000.85	368.02	-183.19	-319.25	368.08	240.15	0.41	PUP	None
45	1125.94	32.34	242.75	29.39	1025.72	383.67	-190.43	-333.13	383.72	240.25	0.49	PUP	None
46	1155.71	32.17	242.53	29.77	1050.90	399.55	-197.74	-347.24	399.59	240.34	0.21	PUP	None
47	1184.60	32.35	243.98	28.89	1075.33	414.96	-204.67	-361.01	414.99	240.45	0.84	PUP	None
48	1214.81	32.18	244.06	30.21	1100.88	431.07	-211.74	-375.50	431.09	240.58	0.18	PUP	None
49	1244.86	30.73	243.07	30.05	1126.51	446.73	-218.72	-389.55	446.75	240.69	1.56	PUP	None
50	1274.25	29.50	243.74	29.39	1151.93	461.47	-225.32	-402.73	461.48	240.77	1.32	PUP	None

51	1303.82	28.32	243.43	29.57	1177.82	475.75	-231.68	-415.53	475.75	240.86	1.23	PUP	None
52	1333.24	26.97	243.84	29.42	1203.88	489.39	-237.74	-427.76	489.39	240.94	1.41	PUP	None
53	1363.33	25.76	244.51	30.09	1230.84	502.73	-243.56	-439.79	502.73	241.02	1.26	PUP	None
54	1392.32	24.64	245.10	28.99	1257.07	515.05	-248.82	-450.96	515.05	241.11	1.21	PUP	None
55	1421.66	23.41	245.94	29.34	1283.86	526.96	-253.77	-461.83	526.96	241.21	1.33	PUP	None
56	1451.54	21.93	245.34	29.88	1311.44	538.44	-258.52	-472.32	538.44	241.31	1.53	PUP	None
57	1481.24	19.28	245.06	29.70	1339.23	548.86	-262.90	-481.81	548.87	241.38	2.72	PUP	None
58	1511.19	16.74	243.33	29.95	1367.71	558.11	-266.92	-490.15	558.11	241.43	2.64	PUP	None
59	1540.85	14.49	240.57	29.66	1396.28	566.09	-270.66	-497.20	566.09	241.44	2.43	PUP	None
60	1570.22	12.40	236.98	29.37	1424.84	572.91	-274.19	-503.04	572.91	241.41	2.33	PUP	None
61	1599.76	10.35	236.26	29.54	1453.80	578.72	-277.39	-507.91	578.72	241.36	2.12	PUP	None
62	1630.16	9.46	236.73	30.40	1483.75	583.93	-280.28	-512.27	583.93	241.32	0.90	PUP	None
63	1659.89	8.81	235.87	29.73	1513.10	588.63	-282.90	-516.20	588.63	241.28	0.68	PUP	None
64	1689.37	8.19	235.45	29.48	1542.25	592.97	-285.35	-519.79	592.97	241.23	0.64	PUP	None
65	1718.81	7.67	235.27	29.44	1571.41	597.01	-287.66	-523.14	597.01	241.19	0.54	PUP	None
66	1745.67	7.36	234.18	26.86	1598.04	600.50	-289.69	-526.00	600.50	241.16	0.39	PUP	None
67	1766.00	7.36	234.18	20.33	1618.21	603.08	-291.21	-528.12	603.08	241.13	0.00	Projected to TD	

Company: **3D Oil Ltd**

Schlumberger

Well: **Wardie-1**

Field: **Exploration**

Rig: **West Triton**

12.25 in. Section

State: **Victoria**

geoVISION*825 Resistivity
1:500 Measured Depth
Recorded Mode Log

Data Quality Report

Geomarket	APG	Location	Bass Strait
Job Date	09-May-08	Customer	3D Oil Ltd
Rig	West Triton	Field/Well	Vic-P57
Engineer	AK/STDA	Job Number	08ASQ0006

Type of Measurement

Res	GR			

When data does not meet standards, put a number in the colum corresponding to the measurement with a corresponding number and remark below. Use additional pages for remarks

Positive remarks are welcome; do not append them with a number.

Remarks

Presentation

Description of Well - Names, Geometry, Services, Location and References; General Content
Header, user of trademarks, directional data, well plot, order of components, spelling and style, units sensor to toolface angle recorded

Equiment and Software Description
Tool sketch, equipment numbers, software versions, data rates, filtering weights

Processing Traceability and Environment Description
Acquisition environment, parameters and key constants for each run or zone, complete and relavant remarks

Annotations, Presented Formats, QC Curves, Print Quality
Documented splice points; data gap explanations, mud changes, movement indicator, color selection

Calibration and Verifications

Calibration / Before survey verification / After survey verification
Validity, completeness (includes equipment number), timeliness, unedited, descrepency explained

Operating Procedures

Depth Control
Comparison with driller's depth, other logs, other bit runs, between RT and RM. Depth summary listing

Logging speed and sampling rates
As recommended in reference manual or job planner. No loss of data or spatial resolution

Data Comparison
Between runs and passes, with data from nearby wells, other conveyance, mud log and markers

Operating Anomalies/Failure/Missing Data/Sensor Orientation/Transmission Losses
Absence of noise and spurious variations, anomaly repeated, corrected, reported or explained.

Digital Delivery

Digital Products
Labeled, verification listing with complete digital record, backup for archival; record matches hard copy.

Job Quality Rating (JQR)
Number of boxes without number X 10

Irregular Operation
Excessive ROP or speed, high deviation, shocks, vibrations, sticking conditions

Borehole Geometry
Shape (caves, etc), rugosity, spiralled hole, mud induced fractures. Casing, tubing conditions

Borehole Fluid
Barite, KCl, salinity, additives, gas cut, unstable

Interferences
External noise, nearby casing or drillpipe, debris, unusual formation composition

Operation Outside Tool Specifications
GeomarketTemperature, pressure, hole size, hole deviation, dog-leg severity, flow rate, rpm, solids value of parameter

Environmental Quality Rating (EQR)
Number of boxes without number X 20

Cell Manager: Anagh Kohli FSM: M.McDermott

DQR Header Utility ver 1.1c

Schlumberger Drilling & Measurements

Revised January 2002

Enclosure 5

Wireline Log Plot
1:500

Schlumberger

Company: **3D Oil Limited**

Well: **Wardie−1**
Field: **Exploration**
Rig: **West Triton** Country: **Australia**

BHC−HRLA−PEX−G
Sonic−Resistivity−Density−Neutron−G
Suite 1 Run 1 − Scale 1:500 (MD)

Rig: West Triton
Field: Exploration
Location: Vic P/57, Bass Strait
Well: Wardie−1
Company: 3D Oil Limited

LOCATION

Vic P/57, Bass Strait
N 5771046.028 m, E 554227.625 m

Elev.: K.B. 38 m
G.L. −39.5 m
D.F. 38 m

Permanent Datum: MSL — Elev.: 0 m
Log Measured From: Drill Floor — 38.0 m above Perm. Datum
Drilling Measured From: Drill Floor

State:	Max. Well Deviation	Longitude	Latitude
Victoria	34.9 deg	E 147 37 9.793	S 38 12 24.881

	Run 1	Run 2	Run 3
Logging Date	20−May−2008		
Run Number	1		
Depth Driller	1766 m		
Schlumberger Depth	1760 m		
Bottom Log Interval	1757.2 m		
Top Log Interval	1300 m		
Casing Driller Size @ Depth	13.375 in @ 747.2 m	@	
Casing Schlumberger	746.5 m		
Bit Size	12.250 in		
Type Fluid In Hole	KCl Polymer		
MUD Density / Viscosity	1.12 g/cm3 / 56 s		
MUD Fluid Loss / PH	5.2 cm3 / 9		
MUD Source Of Sample	Flow Line		
RM @ Measured Temperature	0.112 ohm.m @ 20.2 degC	@	
RMF @ Measured Temperature	0.099 ohm.m @ 19.8 degC	@	
RMC @ Measured Temperature	0.130 ohm.m @ 20.7 degC	@	
Source RMF / RMC	Press / Press		
RM @ MRT / RMF @ MRT	0.060 @ 56 / 0.053 @ 56	@ / @	
Maximum Recorded Temperatures	56 degC / 56 / 56		
Circulation Stopped / Time	19−May−2008 / 14:45		
Logger On Bottom / Time	20−May−2008 / 04:40		
Unit Number / Location	41 / AUSL		
Recorded By	A. Dandi , Malik Jahangir		
Witnessed By	Simon Ward, Bill Leask		

	Run 1	Run 2	Run 3
Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth	@		
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
MUD Density / Viscosity	/		
MUD Fluid Loss / PH	/		
MUD Source Of Sample			
RM @ Measured Temperature	@		
RMF @ Measured Temperature	@		
RMC @ Measured Temperature	@		
Source RMF / RMC	/		
RM @ MRT / RMF @ MRT	@ / @		
Maximum Recorded Temperatures			
Circulation Stopped / Time			
Logger On Bottom / Time			
Unit Number / Location	/		
Recorded By			
Witnessed By			

DEPTH SUMMARY LISTING

Date Created: 21−JUL−2008 21:05:52

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW−H	Type:	CMTD−B/A	Type:	7−46ZV−XS
Serial Number:	796	Serial Number:	1721	Serial Number:	77178
Calibration Date:	29−Jan−2008	Calibration Date:	27−Feb−2008	Length:	7315.20 M
Calibrator Serial Number:	1009	Calibrator Serial Number:	1051		
Calibration Cable Type:	7−46ZV−XS	Calibration Gain:	0.81	Conveyance Method:	Wireline
Wheel Correction 1:	−5	Calibration Offset:	−610.00	Rig Type:	Offshore_Fixed
Wheel Correction 2:	−5				

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	78.22 M
Rig Up Length At Bottom:	78.12 M
Rig Up Length Correction:	0.10 M
Stretch Correction:	1.90 M
Tool Zero Check At Surface:	0.90 M

Depth Control Remarks

1. First Run in hole , all schlumberger depth control procedures followed
2. IDW used as a primary depth reference , Z Chart as a secondary
3.
4.
5.
6.

OTHER SERVICES1
OS1: MDT−GR
OS2:
OS3:
OS4:
OS5:

REMARKS: RUN NUMBER 1

Tool String run as per tool sketch with 7 x 2.5" standoffs and a bowspring.

Maximum recorded temperature was 56 degC obtained from LEH−QT thermometers (3 max. reading thermometers run at client request).

Neutron porosity corrected for hole size and mud weight.

Density corrected for bit size.

Repeat pass carried in High resolution mode from 1570 m to 1670 m as per client request.

Did not reach TD due to fill on bottom. Tagged up at 1760 m. Main pass logged out from HUD to 1300m in standard resolution mode

as per client request.

Caliper logged up to casing shoe.

Mud properties taken from Daily Mud Report #11 for 19−May−2008:

Chlorides = 38,000 mg/l.

KCl = 8.0 (% by weight).

Barite = 0.1(% by vol).

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:		15C0−309	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

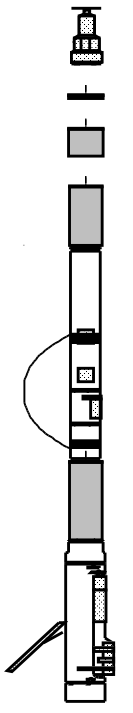
EQUIPMENT DESCRIPTION

RUN 1

SURFACE EQUIPMENT

GSR−U/Y
NCT−B
CNB−AB
NCS−VB
WITM (DTS)−A

DOWNHOLE EQUIPMENT

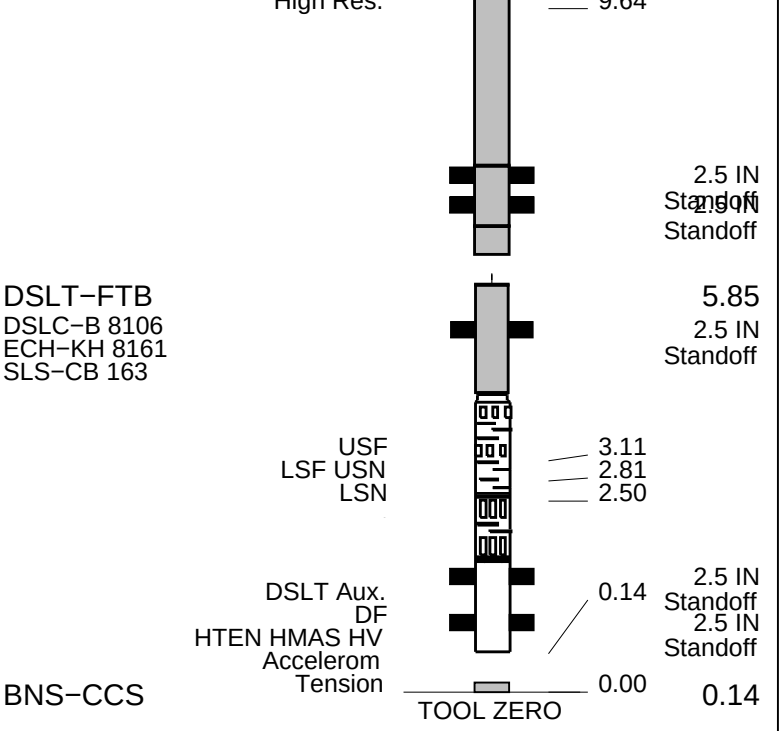


LEH−QT 23.69
LEH−QT 1181

SP SPARC 22.39
BSP 22.80
AH−369 CTEM 21.68 22.39
HGNS HTEM
HMCA 21.04
DTC−H TelStatus 21.96
ECH−KC 10020 ToolStatu 21.04
DTCH0−A 8944
HILTB−FTB HGNS Gamm 20.82 21.04
HGNSD−B 856
HMCA
HGNH 3915
NLS−KL HGNS Neut 19.04
NSR−F 5224 HGNS Neut 18.88
HACCZ 379
HCNT HGNS sens 18.17
HGR
HRCC−B 868
HRMS−B 788 HRCC cart 16.95
HRGD−BC 1806 MCFL 15.30
GLS−J 5334 HILT cali 15.15
MCFL Device 1 HRDD−LS
HILT Nucl. LS 28356 HRDD−SS
HILT Nucl. SS 14120 HRDD−BS 15.03
HILT Nucl. BS 26468
BOW−SPR
NPV−N 5224
AH−107 2840 14.44
AH−107 2840
AH−107 2910 13.83
AH−107 2910
HRLT−B 13.22
HRUH−B 847 2.5 IN Standoff
HRUC−B 848 2.5 IN Standoff
HRLS−B 848
HRLH−B 851
HRLC−B 845
AH−270 851

High Res 9.64

RUN 2

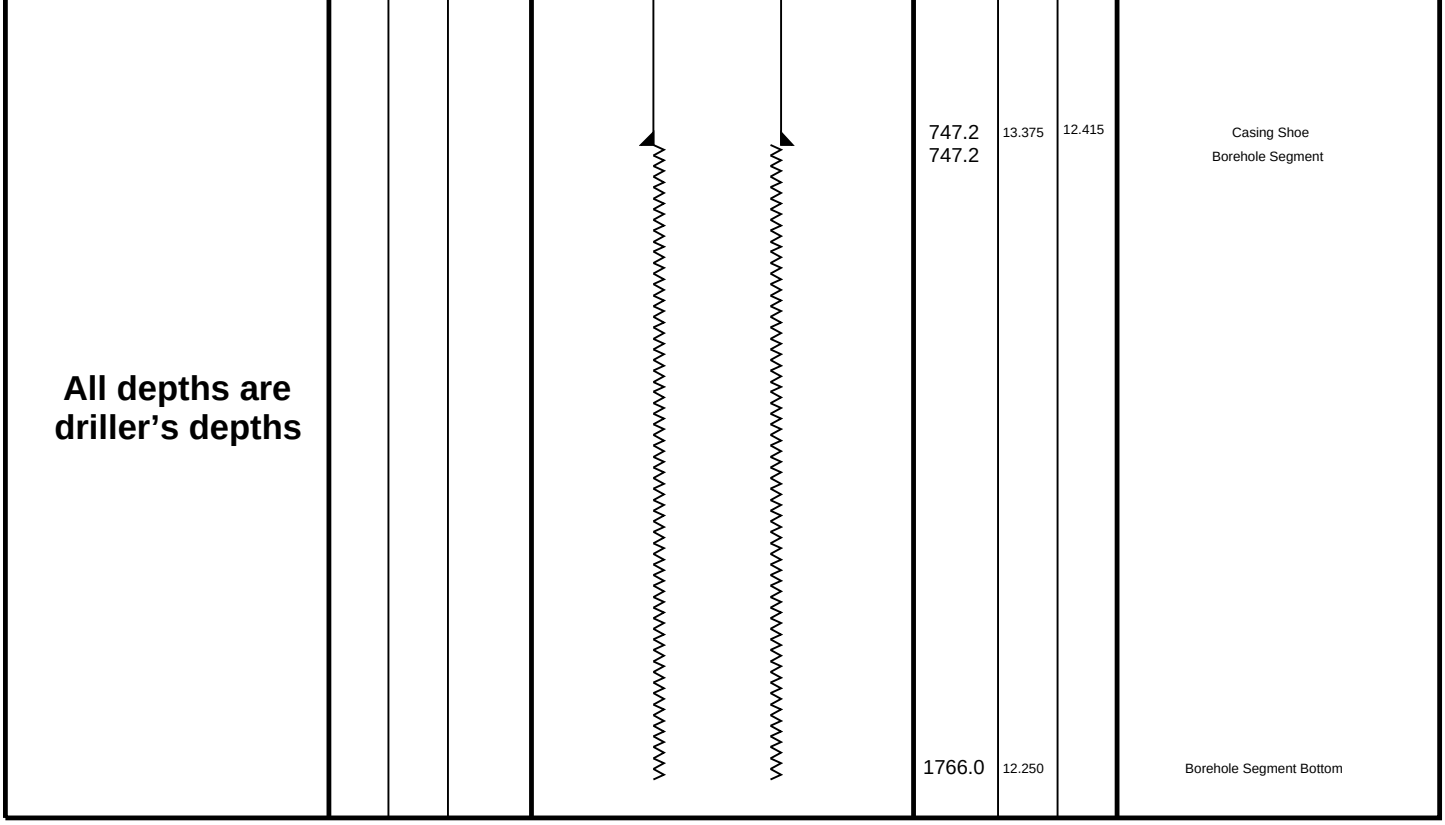


MAXIMUM STRING DIAMETER 8.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Client: 3D Oil
Well: Wardie−1
Field: Exploration
State: Victoria
Country: Australia

Rig Name: West Triton
Reference Datum: Mean Sea Level
Elevation: 38.0 m

Production String	(in) OD	(in) ID	(m) MD	Well Schematic	(m) MD	(in) OD	(in) ID	Casing String
Kelly Bushing Elevation			38.0					
Derrick Floor Elevation			38.0					
Mean Sea Level			0.0					
					39.5			
					133.0	30.000	28.00	Casing Shoe



Schlumberger

High Resolution Pass
1:500

MAXIS Field Log

Company: 3D Oil Limited **Well: Wardie−1**

Input DLIS Files

DEFAULT	**SONIC_HRLA_TLD_MCFL_014PUP FN:14**	**PRODUCER**	**08−Jun−2008 15:50**	**1675.0 M**	**1565.3 M**

Output DLIS Files

DEFAULT	**SONIC_HRLA_TLD_MCFL_026PUP FN:31**	**PRODUCER**	**19−Jun−2008 23:01**	**1675.0 M**	**1565.8 M**

Integrated Hole/Cement Volume Summary

Hole Volume = 8.98 M3

Cement Volume = 3.85 M3 (assuming 9.63 IN casing O.D.)

Computed from 1675.0 M to 1565.9 M using data channel(s) HCAL

OP System Version: 15C0−309

MCM

DSLT−FTB	SRPC−3546−Q1_2008_OP15	HRLT−B	SRPC−3546−Q1_2008_OP15
HILTB−FTB	SRPC−3546−Q1_2008_OP15	DTC−H	SRPC−3546−Q1_2008_OP15
BSP	SRPC−3546−Q1_2008_OP15		

PIP SUMMARY

- Integrated Hole Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

HRLT True Resistivity (RT_HRLT)
0.2 (OHMM) 2000

H. Res. Invaded Zone Resistivity (RXO8)
0.2 (OHMM) 2000

Area From HCAL to BS

HRLT Resistivity 5 (RLA5)
0.2 (OHMM) 2000

Sand From RHO8 to HTNP

Tool/Tot. Drag From D4T to STIA

SP (SP)
−80 (MV) 20

HRLT Resistivity 4 (RLA4)
0.2 (OHMM) 2000

H. Res. Formation Density (RHO8)
1.95 (G/C3) 2.95

Cable Drag From D4T to STIT

Gamma Ray (EHGR)
0 (GAPI) 200

HRLT Resistivity 3 (RLA3)
0.2 (OHMM) 2000

H. Res. Formation Pe (PEF8)
0 (---- 10

Density Correction (HDRA)
−0.25 (G/C3) 0.25

Stuck Stretch (STIT)
0 (M) 20

HILT Caliper (HCAL)
6 (IN) 16

HRLT Resistivity 2 (RLA2)
0.2 (OHMM) 2000

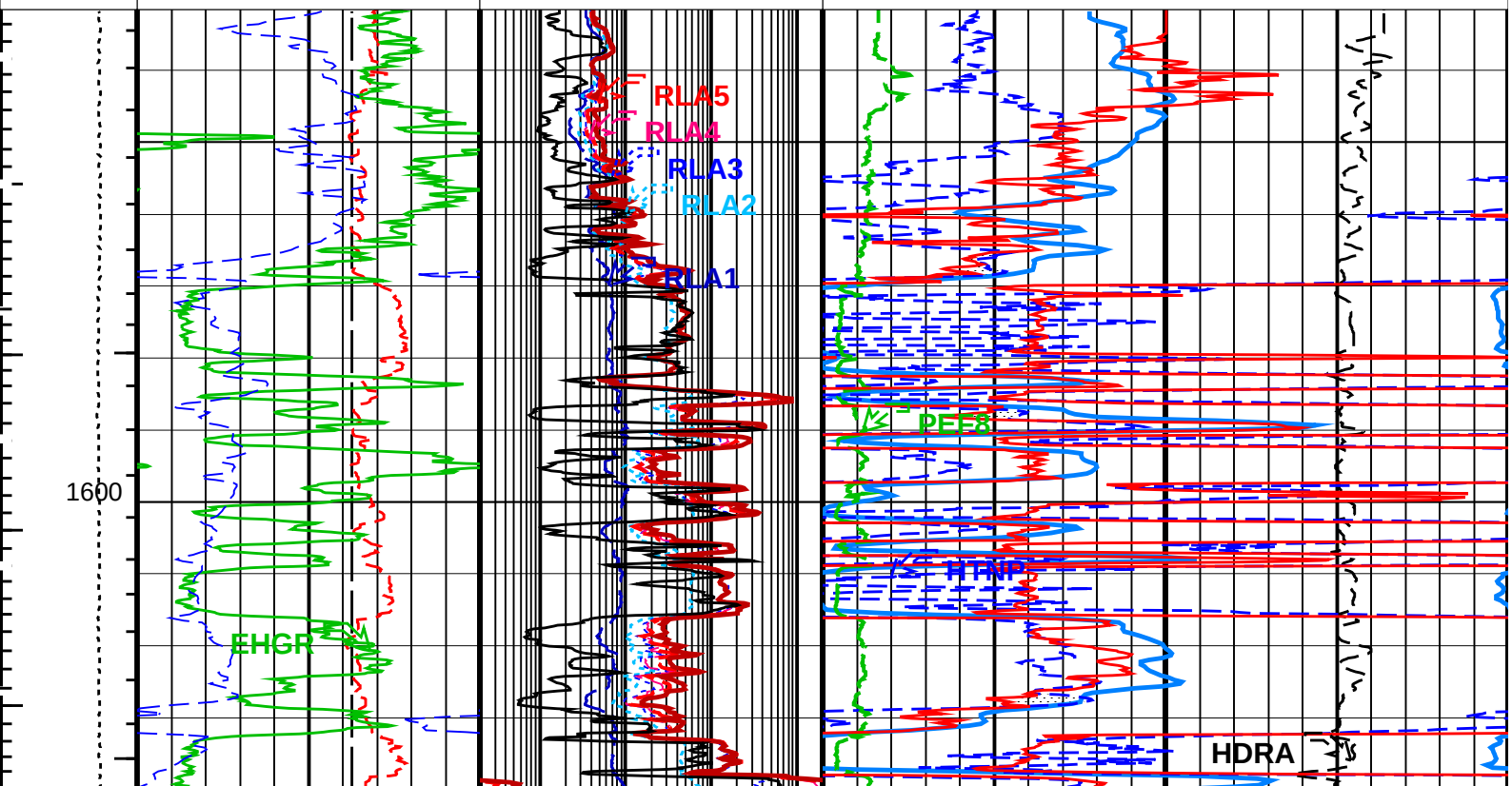
HiRes TNPH (HTNP)
0.45 (V/V) −0.15

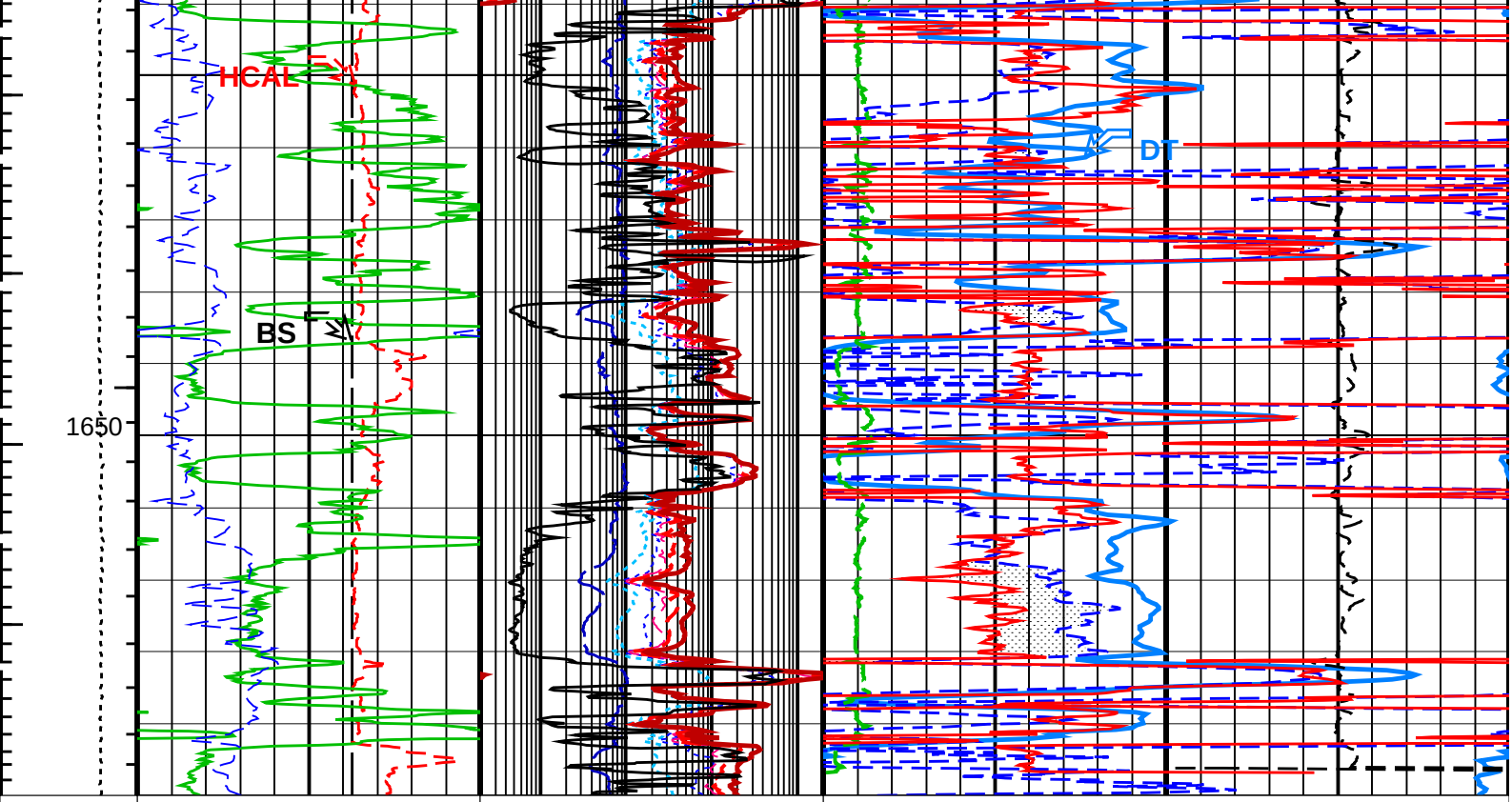
Tension (TENS) (LBF)
0 5000

Bit Size (BS)
6 (IN) 16

HRLT Resistivity 1 (RLA1)
0.2 (OHMM) 2000

Delta−T (DT)
140 (US/F) 40





Tension (TENS) (LBF) 0 5000	Bit Size (BS) 6 (IN) 16	HRLT Resistivity 1 (RLA1) 0.2 (OHMM) 2000	Delta−T (DT) 140 (US/F) 40
Stuck Stretch (STIT) 0 (M) 20	HILT Caliper (HCAL) 6 (IN) 16	HRLT Resistivity 2 (RLA2) 0.2 (OHMM) 2000	HiRes TNPH (HTNP) 0.45 (V/V) −0.15
Cable Drag From D4T to STIT	Gamma Ray (EHGR) 0 (GAPI) 200	HRLT Resistivity 3 (RLA3) 0.2 (OHMM) 2000	H. Res. Formation Pe (PEF8) 0 (---- 10 / Density Correction (HDRA) −0.25 (G/C3) 0.25
Tool/Tot. Drag From D4T to STIA	SP (SP) −80 (MV) 20	HRLT Resistivity 4 (RLA4) 0.2 (OHMM) 2000	H. Res. Formation Density (RHO8) 1.95 (G/C3) 2.95
	Area From HCAL to BS	HRLT Resistivity 5 (RLA5) 0.2 (OHMM) 2000	Sand From RHO8 to HTNP
		H. Res. Invaded Zone Resistivity (RXO8) 0.2 (OHMM) 2000	
		HRLT True Resistivity (RT_HRLT) 0.2 (OHMM) 2000	

PIP SUMMARY

- Integrated Hole Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
	DSLT−ETB: Digitizing Sonic Logging Tool	

	DSLT−FTB: Digitizing Sonic Logging Tool		
	Telemetry Mode	DSLC_FTB	
	DSLT Firing Mode	SDDB	
AGC	Automatic Gain Control Status	ON	
AMSG	Auxiliary Minimum Sliding Gate	140	US
CBAF	CBL Adjustment Factor	1	
CBLG	CBL Gate Width	45	US
CDTS	C−Delta−T Shale	100	US/F
DDEL	Digitizing Delay	0	US
DETE	Delta−T Detection	E2	
DFAD	Digital First Arrival Detection Switch	HOST	
DIVL	DSLT Depth Sampling Interval	20	
DRCS	DSLT DLIS Recording Size	180	
DSIN	Digitizing Sample Interval	10	
DTCM	Delta−T Computation Mode	FULL	
DTF	Delta−T Fluid	189	US/F
DTFS	DSLC Telemetry Frame Size	396	
DTM	Delta−T Matrix	56	US/F
DWCO	Digitizing Word Count	180	
GAI	Manual Gain	40	
ITTS	Integrated Transit Time Source	DT	
MAHTR	Manual High Threshold Reference	120	
MGAI	Maximum Gain	60	
MIGA	Minimum Gain	1	
MNHTR	Minimum High Threshold Reference	100	
MODE	Sonic Firing Mode	SDDB	
NMSG	Near Minimum Sliding Gate	140	US
NMXG	Near Maximum Sliding Gate	970	US
NUMP	Number of Detection Passes	2	
RATE	Firing Rate	R15	
RDFA	Reset DFAD	OFF	
SDTH	Switch Down Threshold	20000	
SFAF	Sonic Formation Attenuation Factor	10	DB/M
SGAD	Sliding Gate Status	ON	
SGAI	Selectable Acquisition Gain	AUTO	
SGCL	Sliding Gate Closing Delta−T	140	US/F
SGCW	Sliding Gate Closing Width	25	US
SGDT	Sliding Gate Delta−T	40	US/F
SGW	Sliding Gate Width	110	US
SLEV	Signal Level for AGC	5000	
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DT	
SUTH	Switch Up Threshold	1000	
VDLG	VDL Manual Gain	40	
WAGC	Waveform AGC Allow/Disallow	OFF	
WGAI	Waveform Manual Gain	20	
WGDT	Waveform Gain Delta−T	240	US/F
WGIN	Waveform Gain Interval	2540	US
WMOD	Waveform Firing Mode	FULL	
	HRLT−B: High Resolution Laterolog Array − E		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	56	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	47.801	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	NOBARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO	
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO	
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO	
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO	
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO	
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO	
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
PROCINV	Inversion Selection	ON	
PROCMFL	Inversion Micro−Resistivity Selection	NO_EXTERNAL_RXO	
PROCMSO	Mechanical Standoff Fin Size	2.5	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSPO	Sonde Position	Eccentered	
SHT	Surface Hole Temperature	20	DEGC
	HILTB−FTB: High resolution Integrated Logging Tool−DTS		
BHFL	Borehole Fluid Type	WATER	

BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	56	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
EXSICL	External Shale Indicator Clean Value	20	
EXSISH	External Shale Indicator Shale Value	150	
FD	Fluid Density	1	G/C3
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
FSAL	Formation Salinity	−50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCLF	Germany Coal−like Formation Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HACPP	Accelerometer PROM Presence	PRESENT_FILE	
HART	Accelerometer Reference Temperature	20	DEGC
HDCOD	HILT Density Coal detection	2	G/C3
HDSAD	HILT Density Salt detection	2.1	G/C3
HILT_GAS_DENSITY	HILT Gas Downhole Density	0	G/C3
HILT_GAS_OPTION	HILT Gas Computation Option	OFF	
HNCOD	HILT Neutron Coal detection	45	PU
HNSAD	HILT Neutron Salt detection	5	PU
HPHIECUT	HILT effective Porosity Cutoff	5	PU
HSCO	Hole Size Correction Option	YES	
HSIS	HILT Shale Indicator Selection	GR	
HSSO	HRDD Nuclear Source Strength Option	NORMAL	
HSWCUT	HILT Water Saturation from AITH cutoff	50	%
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	BARI	
MDEN	Matrix Density	2.71	G/C3
MHC0	MCFL B0 Contrast Correction Coefficient	2.2e−005	OHMS
MHC1	MCFL B1 Contrast Correction Coefficient	3.2e−005	OHMS
MHCC	MCFL High Contrast Correction Switch	NO	
MPOF	MCFL Processing Operation Mode	ON	
MWCO	Mud Weight Correction Option	YES	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	BARITE	
NPRM	HRDD Processing Mode	HiRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PEA_FILTER	PEA Filter	NO_FILTER	
PEFC_FILTER	PEFC Filter	NO_FILTER	
PHIMAX	HILT max porosity	35	PU
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SEXP_HILT	HILT Saturation Exponent	2	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
BSP: Bridle SP			
SPNV	SP Next Value	0	MV
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	56	DEGC
FCD	Future Casing (Outer) Diameter	9.625	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth − Driller	1766.00	M
TDL	Total Depth − Logger	1760.00	M
DIR: Directional Survey Computation			
SPED	East Departure of Starting Point	0	M
SPND	North Departure of Starting Point	0	M
SPVD	TVD of Starting Point	0	M
TAZI	Vertical Section Azimuth	0	DEG
TIED	East Departure of Tie−in Point	0	M
TIMD	Along−hole depth of Tie−in Point	0	M
TIND	North Departure of Tie−in Point	0	M

TIVD	TVD of Tie−in Point	0	M
System and Miscellaneous			
ALTDPCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	12.250	IN
BSAL	Borehole Salinity	63000.00	PPM
CSIZ	Current Casing Size	13.375	IN
CWEI	Casing Weight	68.00	LB/F
DFD	Drilling Fluid Density	1.12	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	−50000.00	M
MST	Mud Sample Temperature	20.20	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.0994	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1760	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: HIRES_SON_RES_DENS_NEU_GR_SP_D500 Vertical Scale: 1:500 Graphics File Created: 19−Jun−2008 23:01

OP System Version: 15C0−309

MCM

DSLT−FTB	SRPC−3546−Q1_2008_OP15	HRLT−B	SRPC−3546−Q1_2008_OP15
HILTB−FTB	SRPC−3546−Q1_2008_OP15	DTC−H	SRPC−3546−Q1_2008_OP15
BSP	SRPC−3546−Q1_2008_OP15		

Input DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_014PUP	FN:14	PRODUCER	08−Jun−2008 15:50	1675.0 M	1565.3 M

Output DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_026PUP	FN:31	PRODUCER	19−Jun−2008 23:01		

Schlumberger

Standard Resolution Pass
1:500

MAXIS Field Log

Company: 3D Oil Limited Well: Wardie−1

Input DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_014LUP	FN:31	PRODUCER	06−Jun−2008 11:07	1761.0 M	689.2 M

Output DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_017PUP	FN:20	PRODUCER	08−Jun−2008 10:13	1761.0 M	1298.3 M
CUSTOMER	SONIC_HRLA_TLD_MCFL_017PUC	FN:21	CUSTOMER	08−Jun−2008 10:13	1761.0 M	1298.3 M

Integrated Hole/Cement Volume Summary

Hole Volume = 39.85 M3

Cement Volume = 18.18 M3 (assuming 9.63 IN casing O.D.)

Computed from 1759.9 M to 1298.4 M using data channel(s) HCAL

OP System Version: 15C0−309

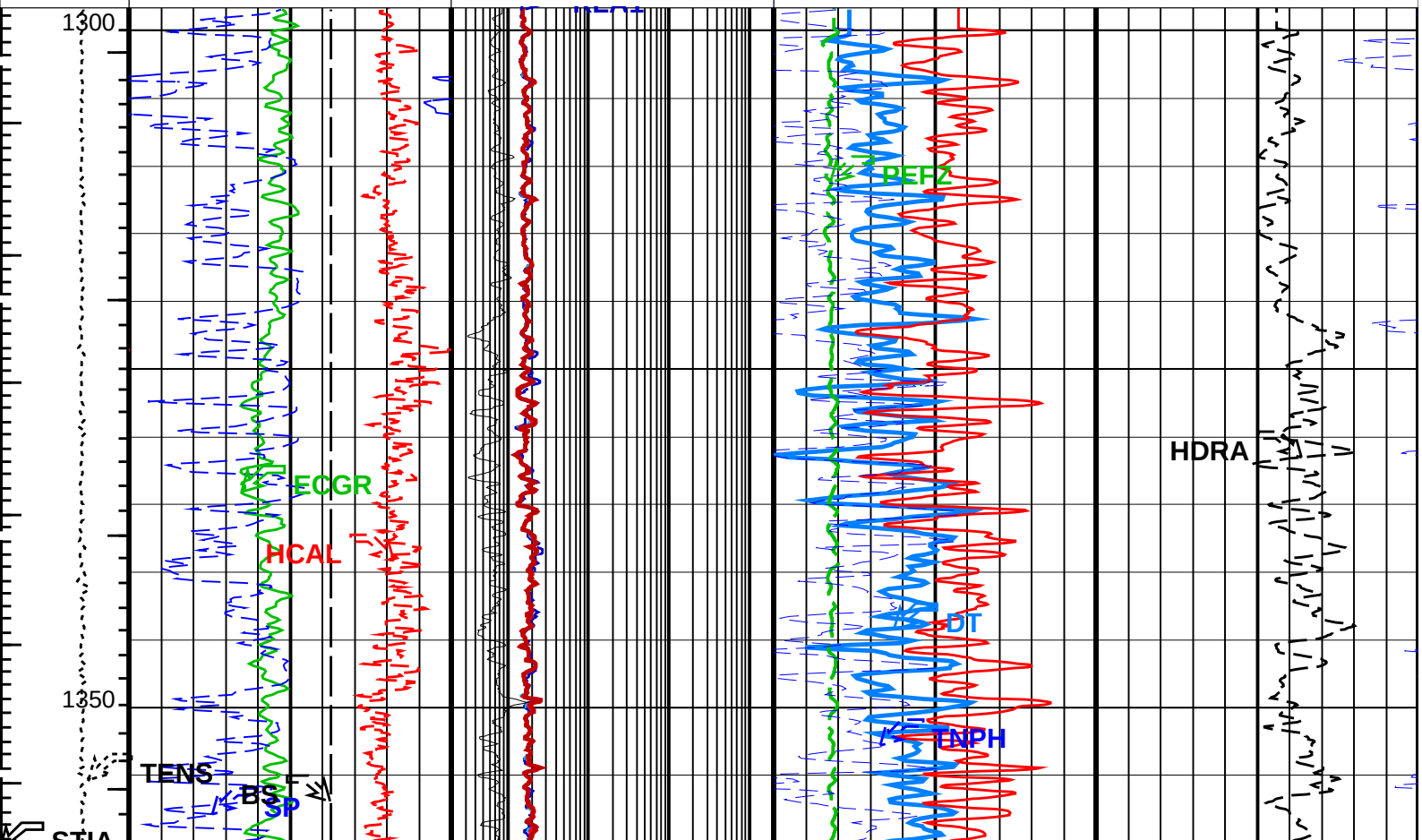
MCM

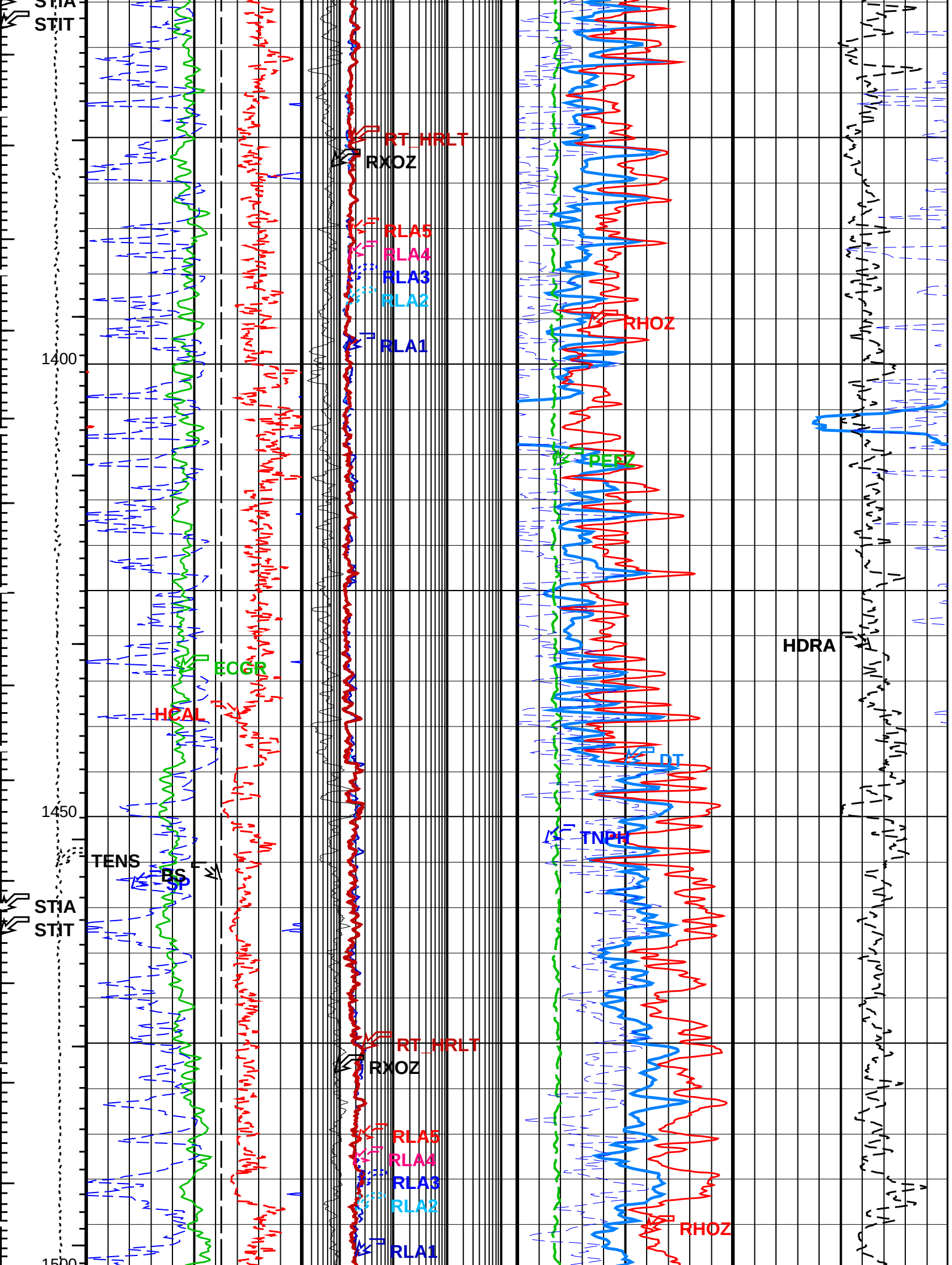
DSLT−FTB	SRPC−3546−Q1_2008_OP15	HRLT−B	SRPC−3546−Q1_2008_OP15
HILTB−FTB	SRPC−3546−Q1_2008_OP15	DTC−H	SRPC−3546−Q1_2008_OP15
BSP	SRPC−3546−Q1_2008_OP15		

PIP SUMMARY

- Integrated Hole Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

		HRLT True Resistivity (RT_HRLT) 0.2 (OHMM) 2000 Std. Res. Invaded Zone Resistivity (RXOZ) 0.2 (OHMM) 2000	
Stuck Tool Indicator, Adjusted (STIA) 0 (M) 20	Area From HCAL to BS	HRLT Resistivity 5 (RLA5) 0.2 (OHMM) 2000	Sand From RHOZ to TNPH
Tool/Tot. Drag From D4T to STIA	SP (SP) −80 (MV) 20	HRLT Resistivity 4 (RLA4) 0.2 (OHMM) 2000	Env.Corr.Thermal Neutron Porosity (TNPH) 0.45 (V/V) −0.15
Cable Drag From D4T to STIT	Gamma Ray (ECGR) 0 (GAPI) 200	HRLT Resistivity 3 (RLA3) 0.2 (OHMM) 2000	Std. Res. Formation Density (RHOZ) 1.95 (G/C3) 2.95
Stuck Stretch (STIT) 0 (M) 20	HILT Caliper (HCAL) 6 (IN) 16	HRLT Resistivity 2 (RLA2) 0.2 (OHMM) 2000	Std. Res. Formation Pe (PEFZ) 0 (---- 10 Density Correction (HDRA) −0.25 (G/C3) 0.25
Tension (TENS) (LBF) 0 5000	Bit Size (BS) 6 (IN) 16	HRLT Resistivity 1 (RLA1) 0.2 (OHMM) 2000	Delta−T (DT) 140 (US/F) 40

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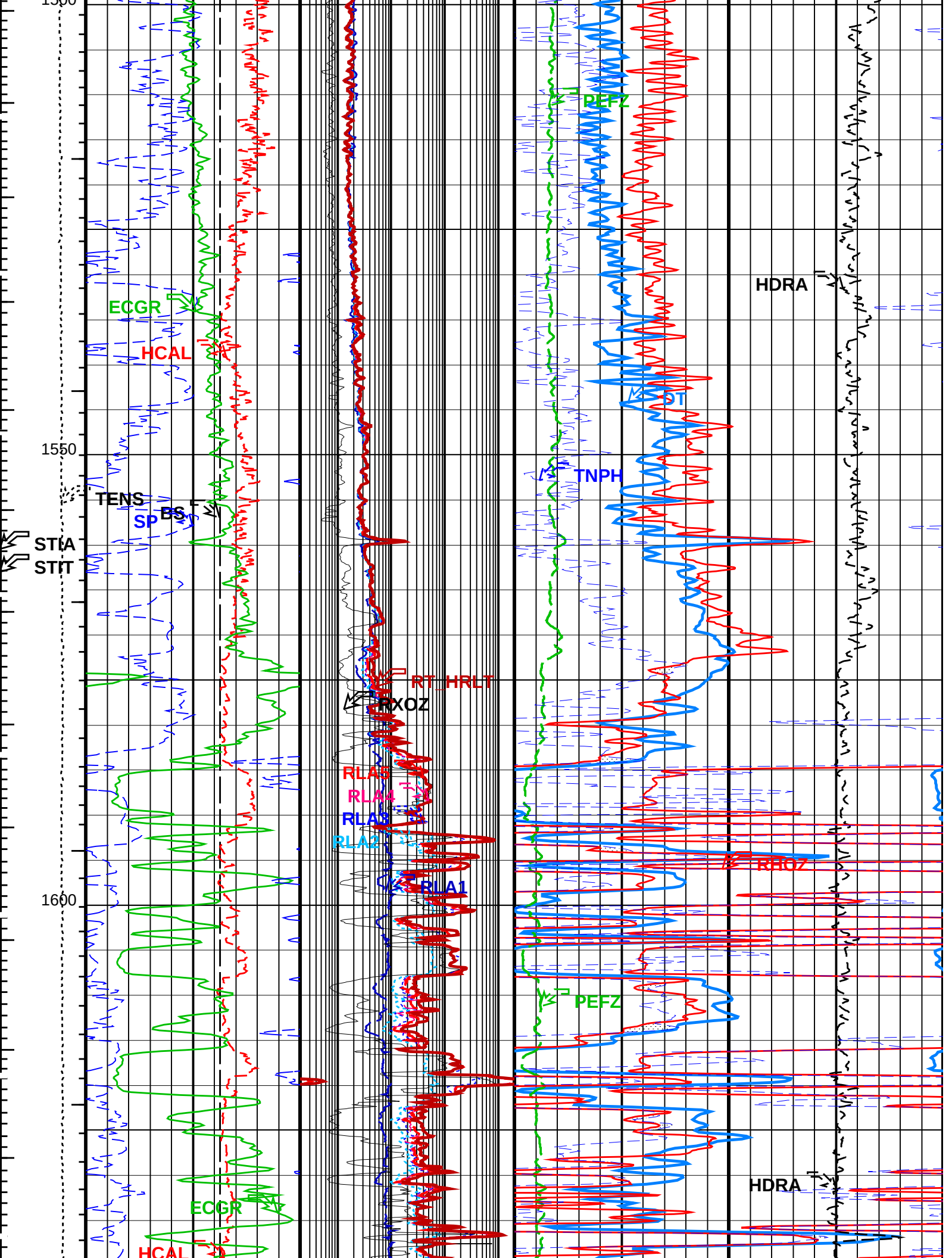
ST1T
RT_HRLT
RXOZ
RLA5
RLA4
RLA3
RLA2
RLA1
RHOZ
1400
PEFZ
HDRA
ECGR
HCAL
DT
1450
TNPH
TENS
BS
SP
ST1A
ST1T
RT_HRLT
RXOZ
RLA5
RLA4
RLA3
RLA2
RHOZ
RLA1
1500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HCAL
TENS
SP
BS
STIA
STIT
PEFZ
HDRA
DT
TNPH
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RXOZ
RLA5
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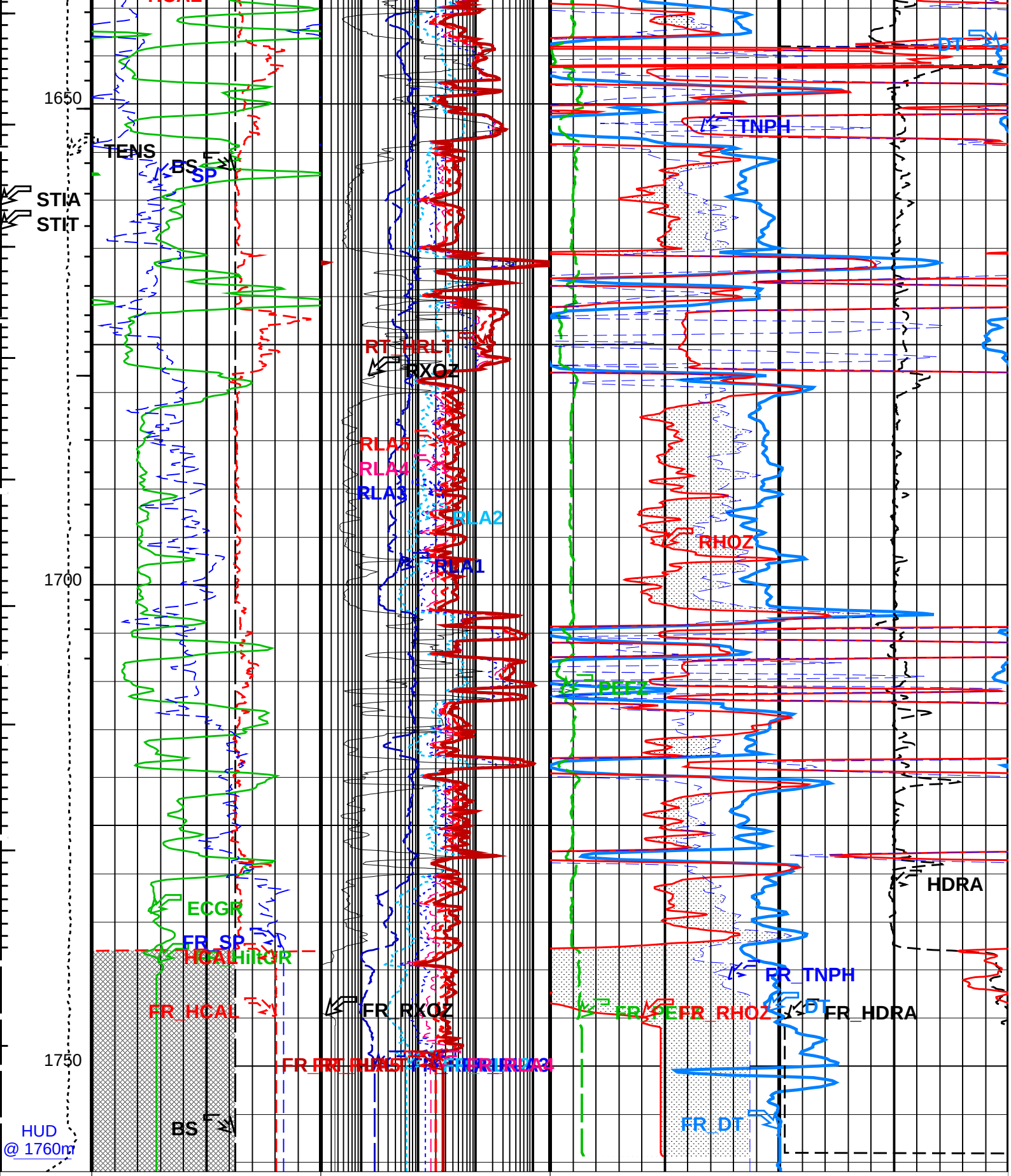
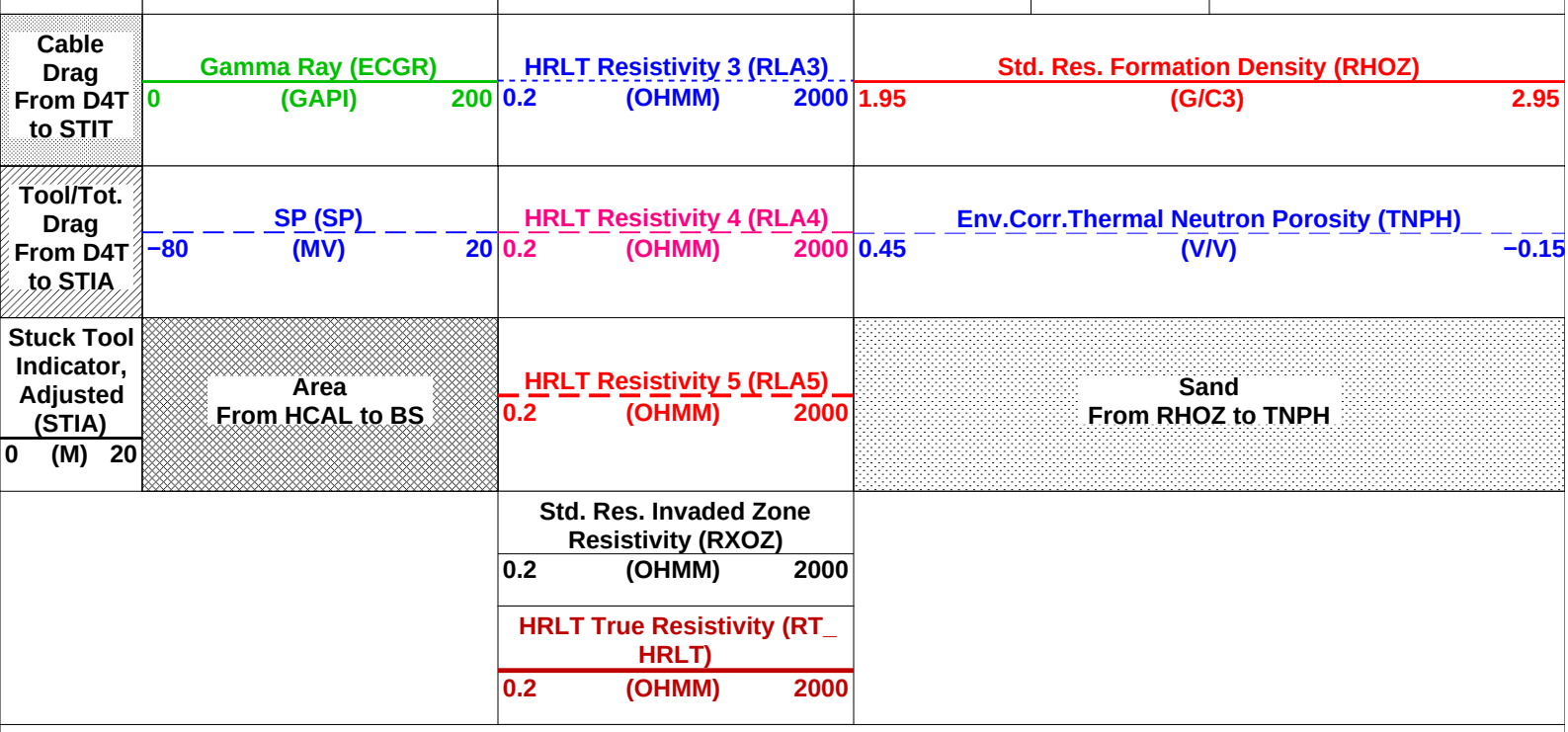
RLA2
RLA1
RHOZ
PEFZ
HDRA
ECGR
HCAL



Tension (TENS) (LBF)	Bit Size (BS) (IN)	HRLT Resistivity 1 (RLA1) (OHMM)	Delta−T (DT) (US/F)
0 5000	6 16	0.2 2000	140 40

Stuck Stretch (STIT)	HILT Caliper (HCAL)	HRLT Resistivity 2 (RLA2)	Std. Res. Formation Pe (PEFZ)	Density Correction (HDRA)
0 (M) 20	6 (IN) 16	0.2 (OHMM) 2000	0 (---- 10	−0.25 (G/C3) 0.25



PIP SUMMARY

- Integrated Hole Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Cement Volume Major Pip Every 1 M3
- Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	DSLT−FTB: Digitizing Sonic Logging Tool		
	Telemetry Mode	DSLC_FTB	
	DSLT Firing Mode	SDDB	
DDEL	Digitizing Delay	0	US
DIVL	DSLT Depth Sampling Interval	20	
DRCS	DSLT DLIS Recording Size	180	
DSIN	Digitizing Sample Interval	10	
DTFS	DSLC Telemetry Frame Size	396	
DWCO	Digitizing Word Count	180	
GAI	Manual Gain	40	
MAHTR	Manual High Threshold Reference	120	
MGAI	Maximum Gain	60	
MNHTR	Minimum High Threshold Reference	100	
NMSG	Near Minimum Sliding Gate	140	US
NMXG	Near Maximum Sliding Gate	970	US
RATE	Firing Rate	R15	
SFAF	Sonic Formation Attenuation Factor	10	DB/M
SGCL	Sliding Gate Closing Delta−T	140	US/F
SGDT	Sliding Gate Delta−T	40	US/F
SGW	Sliding Gate Width	110	US
SLEV	Signal Level for AGC	5000	
WMOD	Waveform Firing Mode	FULL	
	HRLT−B: High Resolution Laterolog Array − E		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	56	DEGC
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
PROCINV	Inversion Selection	ON	
PROCMFL	Inversion Micro−Resistivity Selection	NO_EXTERNAL_RXO	
PROCMSO	Mechanical Standoff Fin Size	2.5	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSPO	Sonde Position	Eccentered	
SHT	Surface Hole Temperature	20	DEGC
	HILTB−FTB: High resolution Integrated Logging Tool−DTS		
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	

BHT	Bottom Hole Temperature (used in calculations)	56	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
FSAL	Formation Salinity	−50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCLF	Germany Coal−like Formation Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	BARI	
MPOF	MCFL Processing Operation Mode	ON	
MWCO	Mud Weight Correction Option	YES	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	BARITE	
NPRM	HRDD Processing Mode	HiRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
BSP: Bridle SP			
SPNV	SP Next Value	0	MV
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	56	DEGC
FCD	Future Casing (Outer) Diameter	9.625	IN
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth − Driller	1766.00	M
TDL	Total Depth − Logger	1760.00	M
System and Miscellaneous			
BS	Bit Size	12.250	IN
BSAL	Borehole Salinity	63000.00	PPM
CSIZ	Current Casing Size	13.375	IN
CWEI	Casing Weight	68.00	LB/F
DFD	Drilling Fluid Density	1.12	G/C3
DO	Depth Offset for Playback	0.0	M
DORL	Depth Offset for Repeat Analysis	0.0	M
MST	Mud Sample Temperature	20.20	DEGC
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.0994	OHMM
TD	Total Depth	1760	M

Format: SON_RES_DENS_NEU_GR_SP_D500 Vertical Scale: 1:500 Graphics File Created: 08−Jun−2008 10:13

OP System Version: 15C0−309

MCM

DSLT−FTB	SRPC−3546−Q1_2008_OP15	HRLT−B	SRPC−3546−Q1_2008_OP15
HILTB−FTB	SRPC−3546−Q1_2008_OP15	DTC−H	SRPC−3546−Q1_2008_OP15
BSP	SRPC−3546−Q1_2008_OP15		

Input DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_014LUP	FN:31	PRODUCER	06−Jun−2008 11:07	1761.0 M	689.2 M

Output DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_017PUP	FN:20	PRODUCER	08−Jun−2008 10:13
CUSTOMER	SONIC_HRLA_TLD_MCFL_017PUC	FN:21	CUSTOMER	08−Jun−2008 10:13

Schlumberger

Caliper
1:500

MAXIS Field Log

Company: 3D Oil Limited **Well: Wardie−1**

Input DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_014LUP FN:31	PRODUCER	21−May−2008 13:14	1761.0 M	689.2 M

Output DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_034PUP FN:39	PRODUCER	21−Jun−2008 21:32	1761.0 M	742.3 M

Integrated Hole/Cement Volume Summary

Hole Volume = 85.86 M3

Cement Volume = 38.29 M3 (assuming 9.63 IN casing O.D.)

Computed from 1759.9 M to 746.6 M using data channel(s) HCAL

OP System Version: 15C0−309

MCM

DSLT−FTB	SRPC−3546−Q1_2008_OP15	HRLT−B	SRPC−3546−Q1_2008_OP15
HILTB−FTB	SRPC−3546−Q1_2008_OP15	DTC−H	SRPC−3546−Q1_2008_OP15
BSP	SRPC−3546−Q1_2008_OP15		

PIP SUMMARY

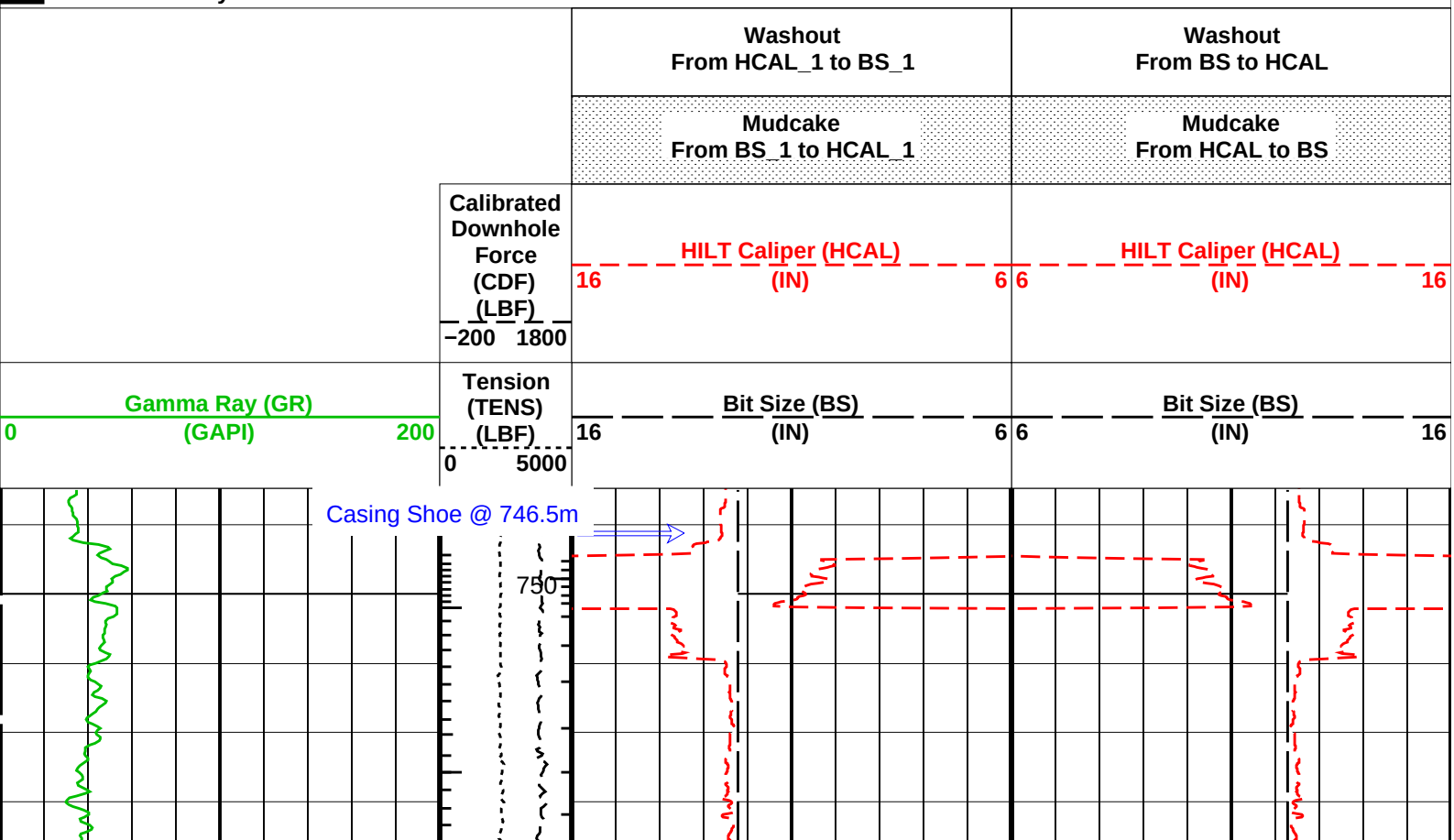
Integrated Hole Volume Minor Pip Every 0.1 M3

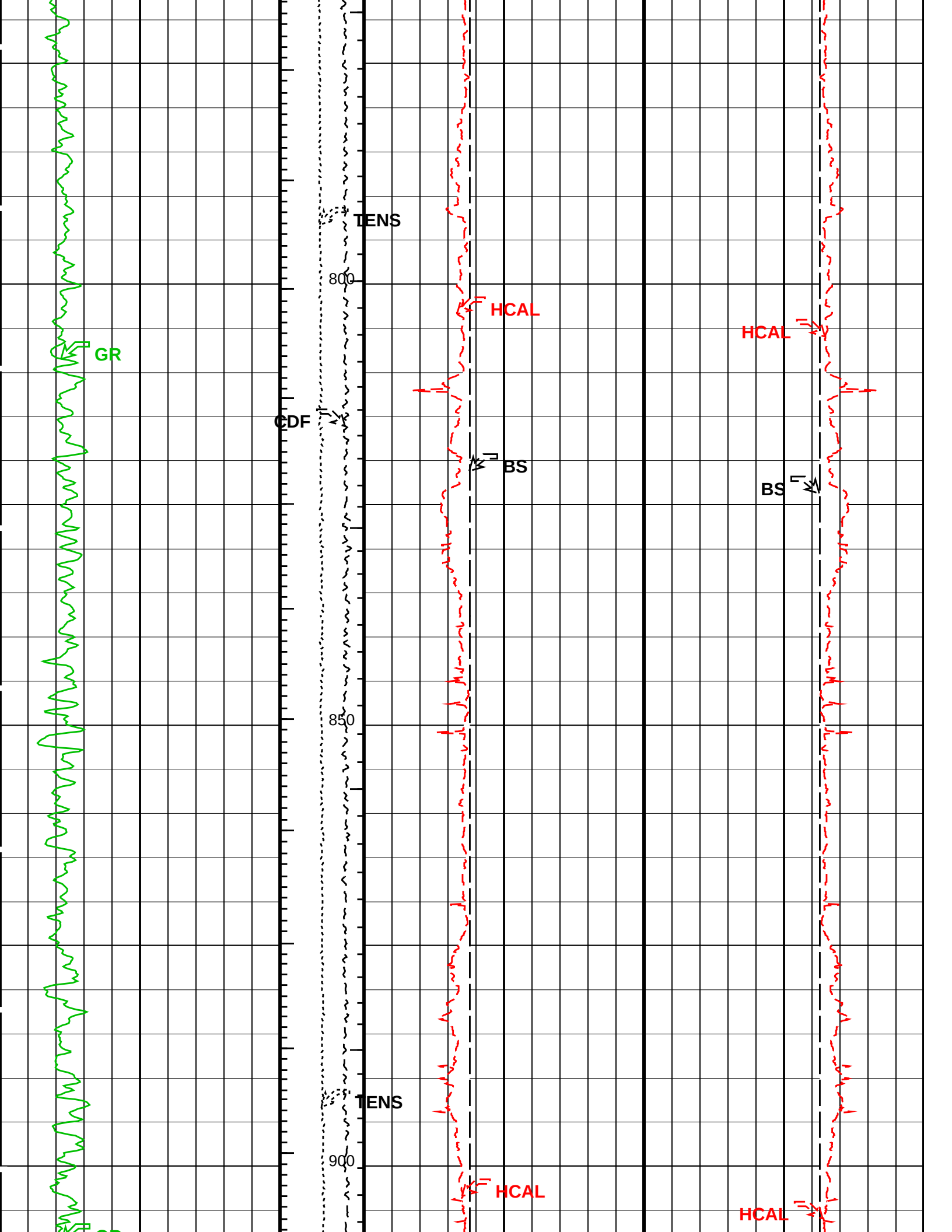
Integrated Hole Volume Major Pip Every 1 M3

Integrated Cement Volume Minor Pip Every 0.1 M3

Integrated Cement Volume Major Pip Every 1 M3

Time Mark Every 60 S

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CDF
BS
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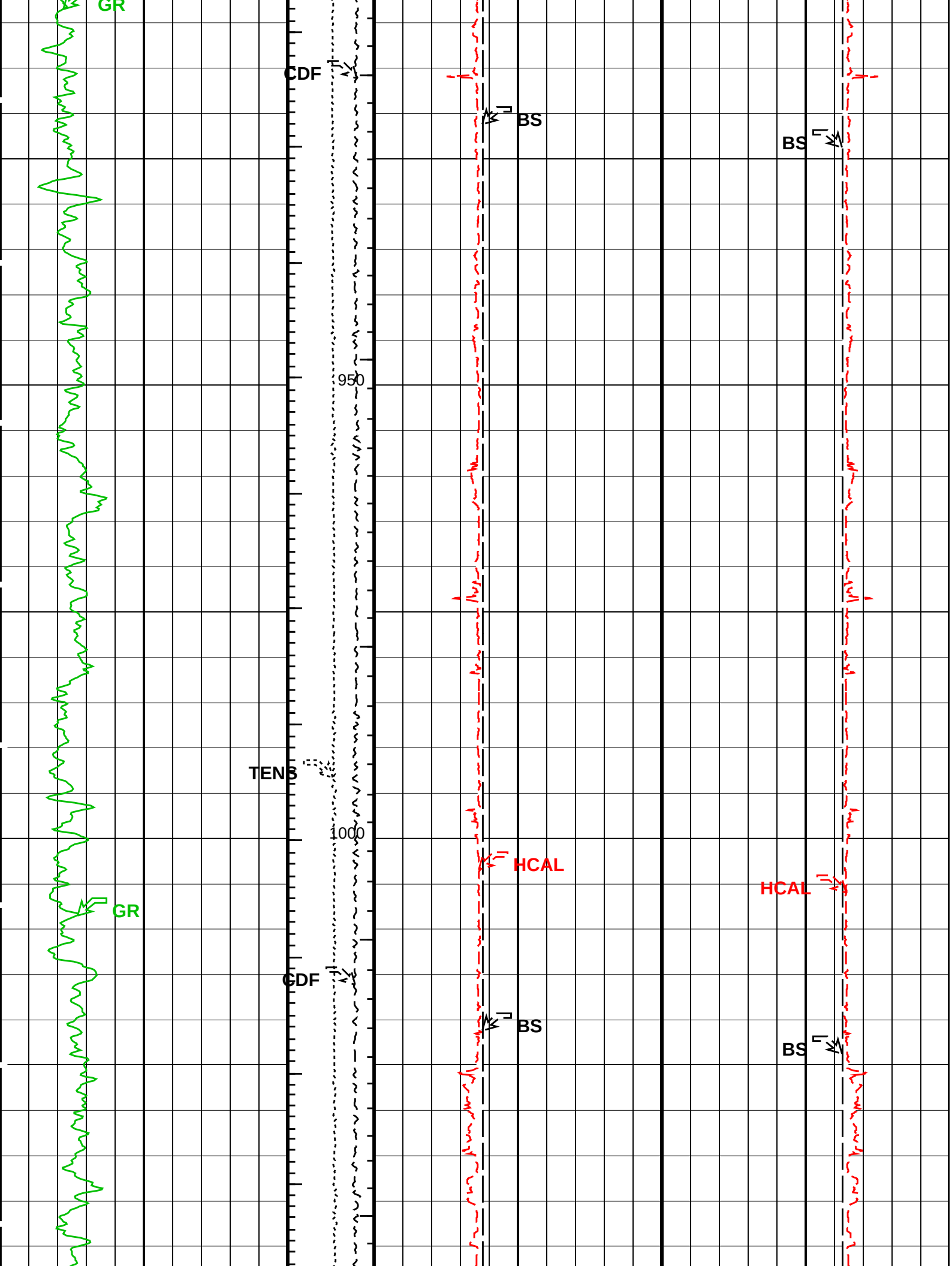
HCAL
HCAL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BS
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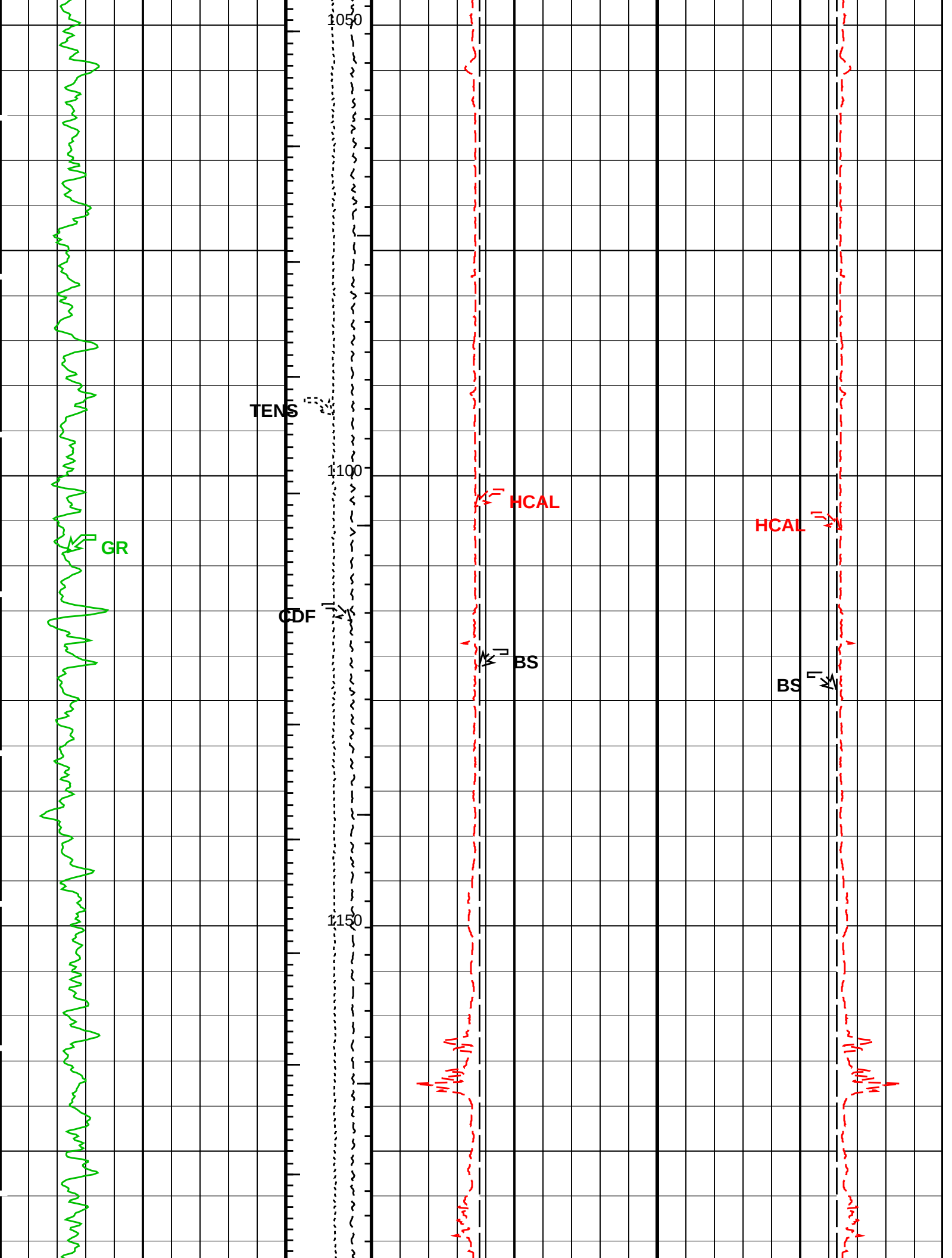
BS
BS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BS
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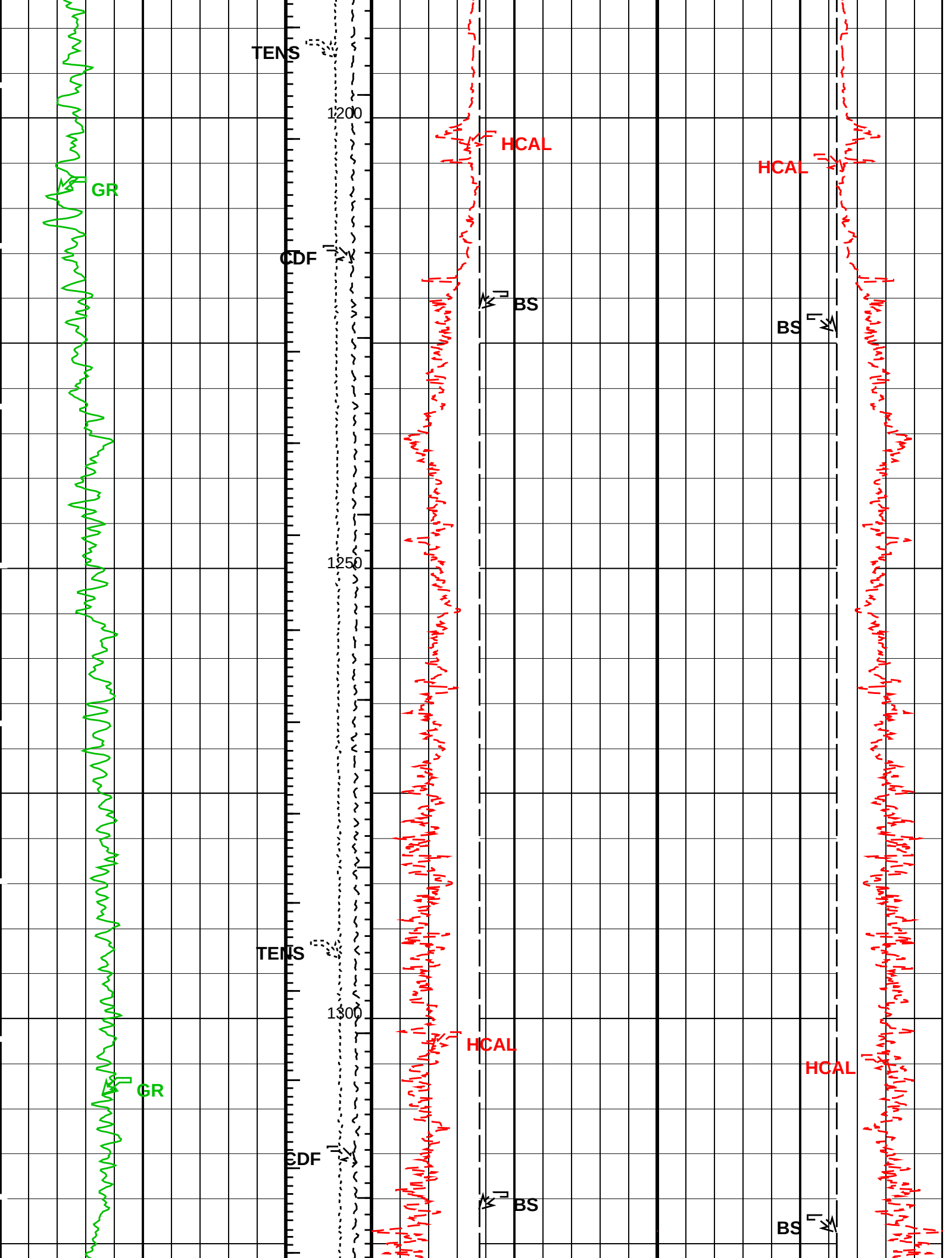
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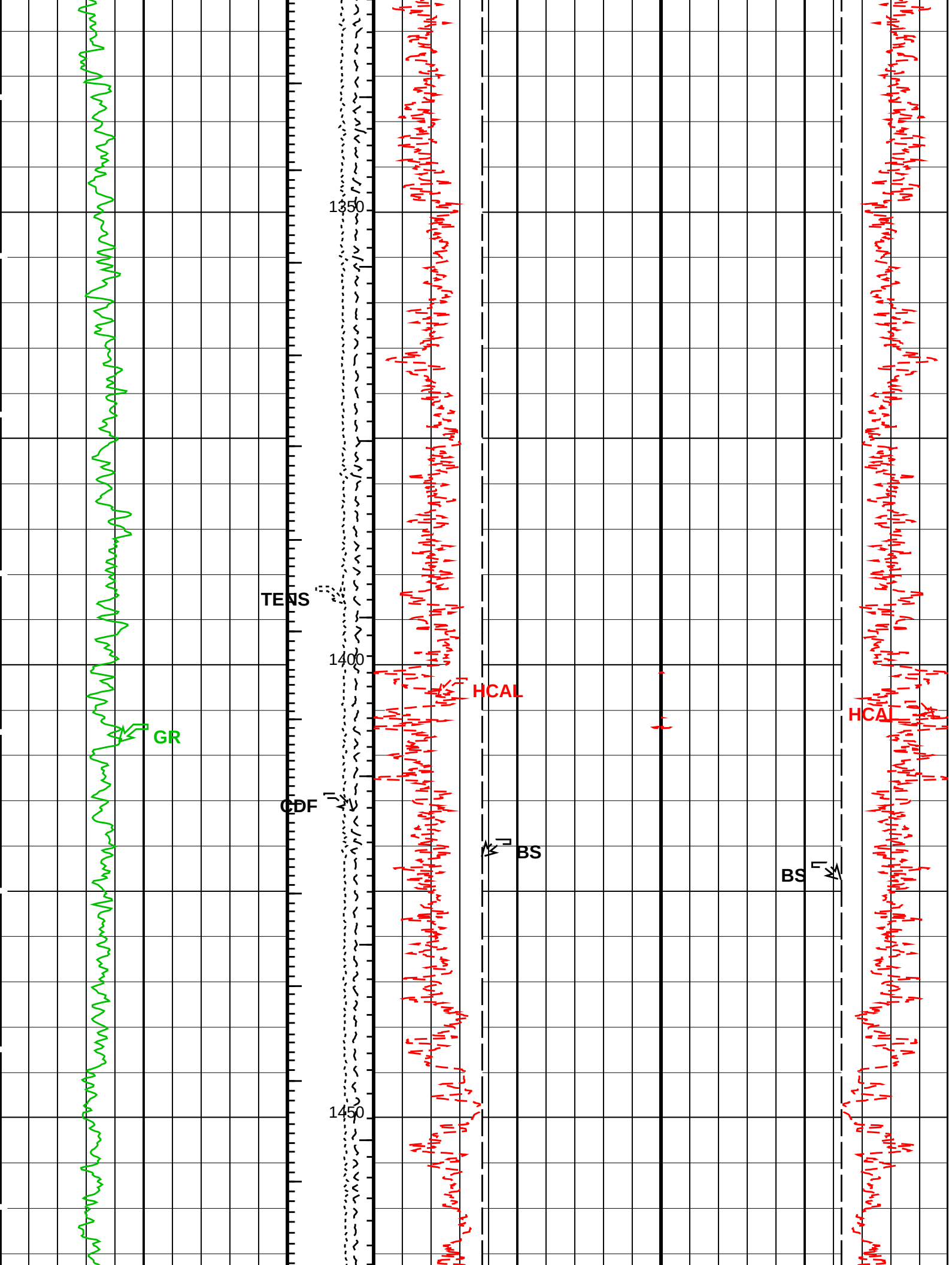
GR
HCAL
CDF
BS
HCAL
BS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CDF
BS
BS
HCAL
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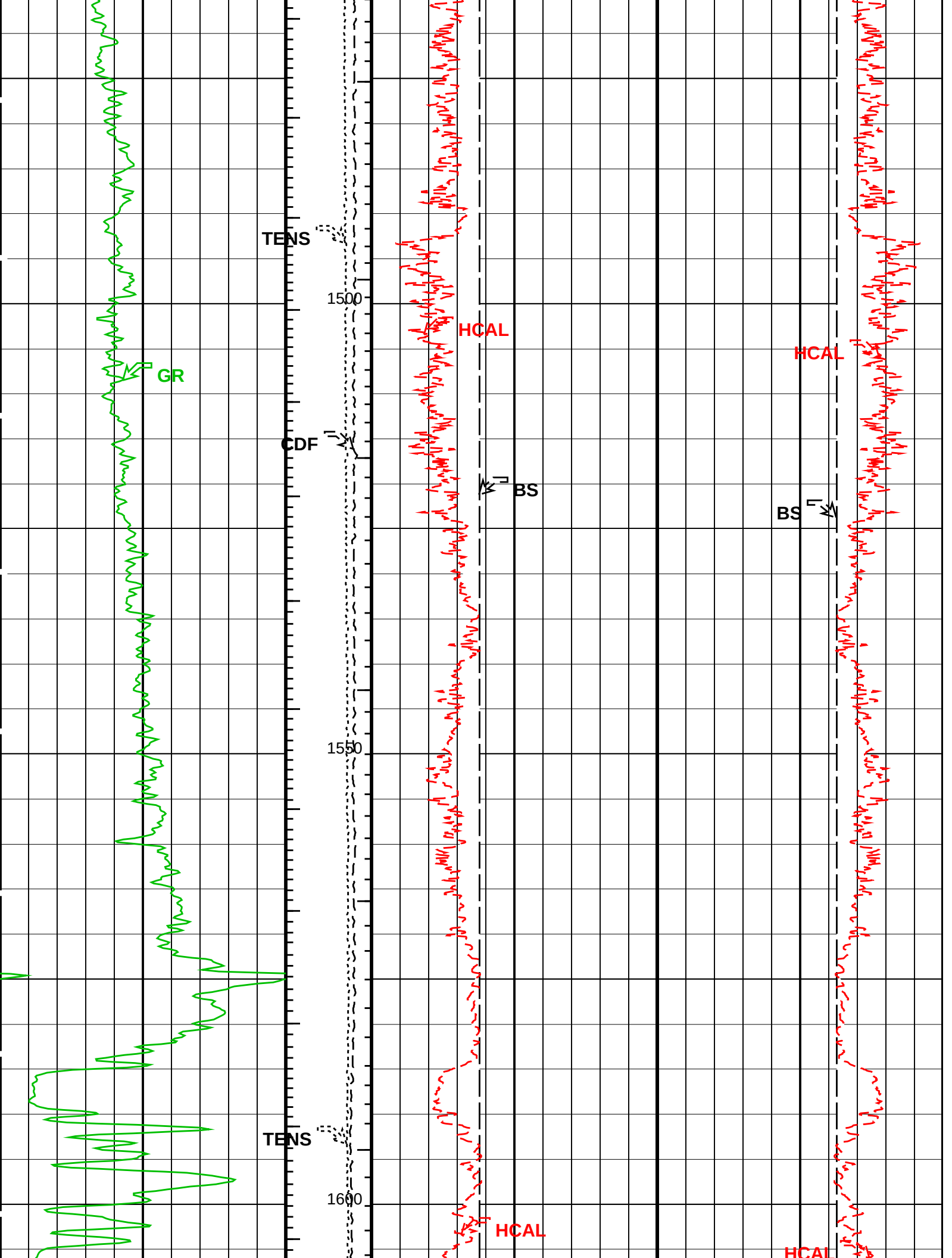
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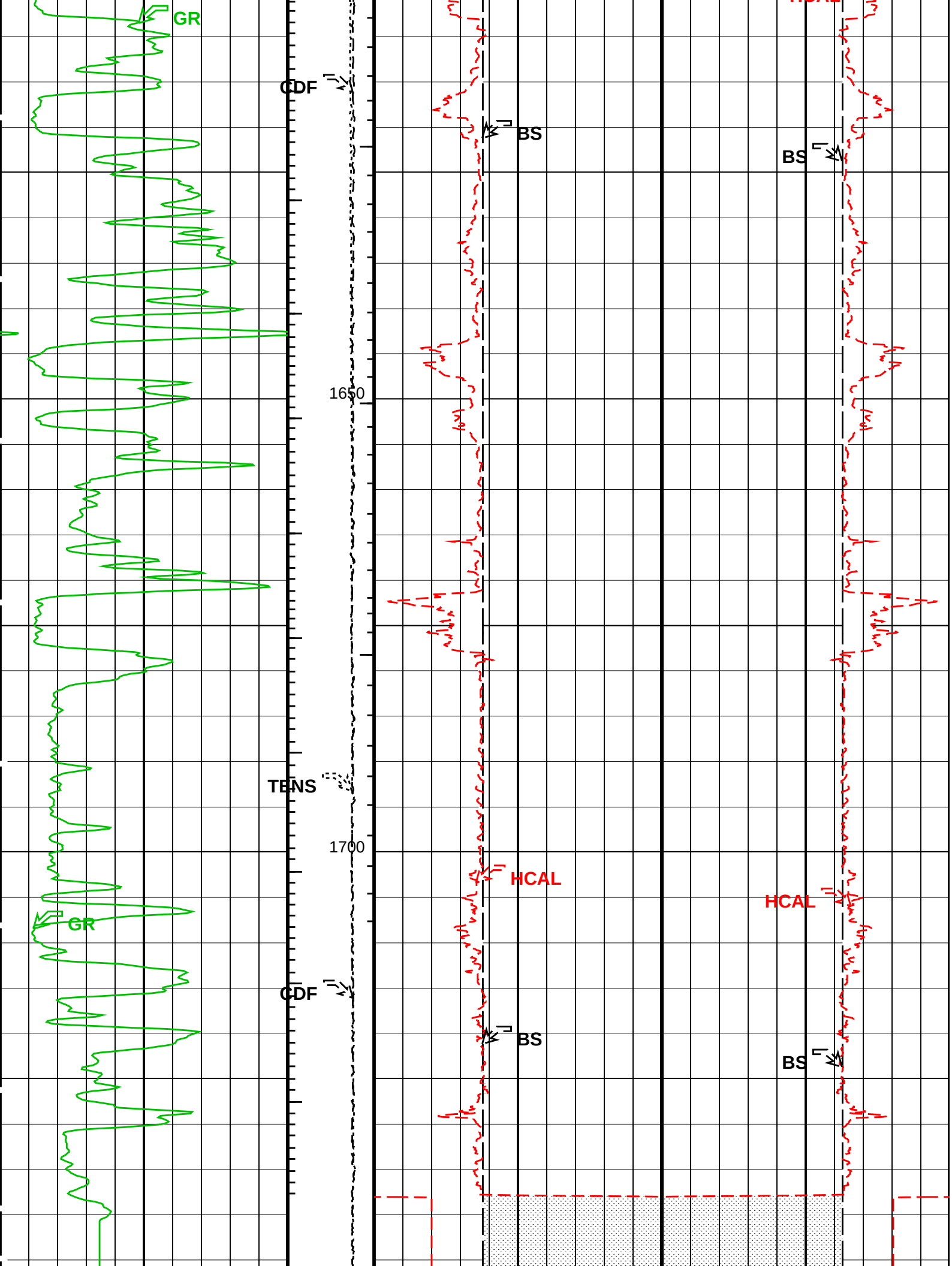
HCAL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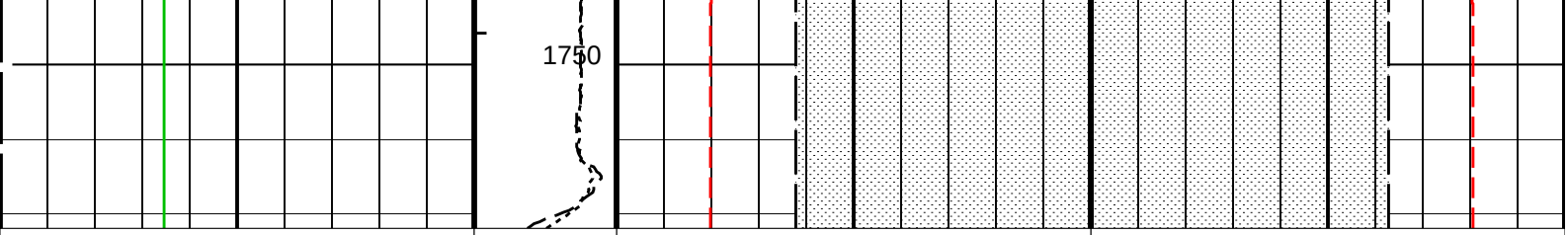
BS



Gamma Ray (GR)	Tension (TENS)	Bit Size (BS)	Bit Size (BS)
0 (GAPI) 200	0 5000	16 (IN) 6	6 (IN) 16
	Calibrated Downhole Force (CDF) (LBF) −200 1800	HILT Caliper (HCAL) 16 (IN) 6	HILT Caliper (HCAL) 6 (IN) 16
		Mudcake From BS_1 to HCAL_1	Mudcake From HCAL to BS
		Washout From HCAL_1 to BS_1	Washout From BS to HCAL

PIP SUMMARY

- Integrated Hole Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Cement Volume Major Pip Every 1 M3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HOLEV: Integrated Hole/Cement Volume		
FCD	Future Casing (Outer) Diameter	9.625	IN
HVCS	Integrated Hole Volume Caliper Selection	HCAL	
	System and Miscellaneous		
BS	Bit Size	12.250	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	1760	M

Format: CALIPER LOG 500 Vertical Scale: 1:500 Graphics File Created: 21−Jun−2008 21:32

OP System Version: 15C0−309

MCM

DSLT−FTB	SRPC−3546−Q1_2008_OP15	HRLT−B	SRPC−3546−Q1_2008_OP15
HILTB−FTB	SRPC−3546−Q1_2008_OP15	DTC−H	SRPC−3546−Q1_2008_OP15
BSP	SRPC−3546−Q1_2008_OP15		

Input DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_014LUP FN:31	PRODUCER	21−May−2008 13:14	1761.0 M	689.2 M

Output DLIS Files

DEFAULT	SONIC_HRLA_TLD_MCFL_034PUP FN:39	PRODUCER	21−Jun−2008 21:32

Company: **3D Oil Limited**

Schlumberger

Well: **Wardie−1**
Field: **Exploration**
Rig: **West Triton**
Country: **Australia**

BHC−HRLA−PEX−G
Sonic−Resistivity−Density−Neutron−G
Suite 1 Run 1 − Scale 1:500 (MD)