WOODSIDE

THA02, Well Completion Report, Basic Data

T/L2, Otway Basin, September 2007

WELL COMPLETION REPORT

THA02
Basic Data

(T/L2, Otway Basin)

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1 INTRODUCTION

The Thylacine field is located in Production Licence T/L2 in the offshore Otway Basin, some 70 km south of Port Campbell, Victoria (Figure 1). One deviated and three horizontal gas production wells, THA01, THA02, THA03 and THA04, respectively, were drilled and completed from the Thylacine platform from the 17 March 2006 to the 24 September 2006.

The slot used from the Thylacine platform for each well is given below:

Well Name	Internal Well Name	Slot #
THA01	TA1	1
THA02	TA3	5
THA03	TA4	3
THA04	TA2	2

Operations were carried out by the jackup drilling rig "Maersk Guardian"; water depth at the well location was 99.3 metres at Lowest Astronomical Tide (LAT), and the rig's rotary table elevation was 50.5 metres (LAT). Depth measurements in this report are with reference to the rotary table elevation and are indicated by mRT.

The Maersk Guardian came on contract on 17 March 2006 and spudded an exploration well Thylacine South-1 from the platform on the same day. The top hole section of this well (to the 473mm (18.625") casing shoe) was subsequently used for the THA04 production well, and the 17 March 2006 is considered the spud date for the THA04 well.

Once operations on the exploration well were complete, the rig was skidded to the THA01 development well slot on 12 April 2006, which was spudded on the following day. A total depth (TD) of 2634mRT was reached on 13 May 2006. The THA01 well was suspended and the rig was skidded to the THA02 well on 20 May 2006; this well was spudded and the 660mm (26") conductor was run on the same day. The rig was then skidded to the THA03 well, which was spudded on 22 May 2006 and drilled to the 473mm (18.625") casing shoe. The rig was then skidded back to the THA02 slot on 26 May 2006. The THA02 well was drilled to a TD of 4101mRT, which it reached on 15 June 2006. The THA02 well was perforated on 27 June 2006 and, following a clean up flow, drilling and completion operations were finished on this well on 07 July 2006.

The rig was then skidded to the THA01 well on 7 July 2006. The well was perforated on 11 July 2006 and, following a clean up flow, drilling and completion operations were finished for THA01 on 19 July 2006. The rig was then skidded back to the THA03 well location, where the well had been suspended at the 473mm (18.625") casing shoe. The THA03 well reached a TD of 3780mRT on 2 August 2006. THA03 was displaced to brine and suspended while the rig was skidded to the THA04 location on 10 August 2006.

The cement plug from the Thylacine South exploration well at the 473mm (18.625") casing shoe was drilled and the THA04 well was drilled to a TD of 3987mRT which it reached on 26 August 2006. The THA04 well was perforated on 2 September 2006 and the completion was run; operations were suspended on the well on 10 September 2006 when the rig was skidded back to THA03. THA03 was perforated on 13 September 2006, completion was run, and following a clean up flow, the well was handed over to production on 22 September 2006. The rig then returned to finish operations on the THA04 well, which was handed over to production on 24 September 2006. From 24 September to 31 October 2006, the rig was used for production operations prior to leaving the platform.

The total time on the THA02 well was 43 days, and the estimated final cost is A$32.2MM.

Table 1: Well Data Sheet, THA02

Well:	THA02 (NB: the internal designation for this well is TA3.)
Permit:	T/L 2, Otway Basin, Western Australia
Name and Address of Operator:	Woodside Energy Ltd. 240 St Georges Terrace Perth WA 6000 Australia
Name and Address of Joint Venturers:	Woodside Energy Ltd. 240 St Georges Terrace Perth WA 6000 Australia Origin Energy Ltd. 339 Coronation Drive Milton QLD 4064 CalEnergy Gas (Australia) Limited 185 Great Eastern Highway Belmont, WA 6104 Benaris Exploration (Otway) Pty Ltd Unit 23, 25 Claremont Street South Yarra VIC 3141
Final Well Co-ordinates:	Latitude: 39° 14' 14.47" S Longitude: 142° 54' 7.58" E Datum: GDA 94 Easting: 664161 m Northing: 5 655 159.6 m Zone 54 South
Seismic Reference:	Investigator 3D PreSDM
Water Depth:	99.3 metres (LAT)
Drilling Rig:	Maersk Guardian (Jackup)
Rotary Table:	50.5 metres (LAT)
Date Rig Contract Commenced:	1200hrs, 17 March 2006
Rig on Location:	0700 hrs, 20 May 2006
Spud Date:	1400 hrs, 20 May 2006
Total Depth:	4101 mMDRT / 2347.5 mTVDRT
Date Total Depth Reached:	0130 hrs, 15 June 2006
Rig Released:	0300 hrs, 7 July 2006
Well Status:	Completed Gas Producer
Total Time on Well:	43.06 days (including completion)
Estimated Final Cost:	A$32.2 MM

2 OPERATIONS SUMMARY

THA02 commenced at 0700hrs on 20th May 2006 with the rig skidding over slot #5. No problems were experienced skidding the rig or making up the 762mm (30") BHA. The drill line was slipped and cut and the blow out preventer (BOP) was secured on the port test stump concurrently with the skidding operations.

The well was spudded and drilled to 219m with a 445mm (17.5") bit and 762mm (30") hole opener assembly. Bit walk was monitored with the remote operated vehicle's (ROV's) sonar system due to lack of visibility. The hole was displaced to pre-hydrated hi-vis gel mud prior to pulling out, running and cementing the 660mm (26") conductor in place at 219m MDRT. The rig was then skidded over to slot #3, THA03 to drill and case off the 762mm (30") and 584 mm (23") hole sections.

The rig was then skidded back to slot #5, THA02 from THA03 and the 584mm (23") hole section drilled riserless to 638m with a Varel ETRIG bit using a mid stand Guar and connection Gel mud sweep regime. The hole was displaced with unweighted Pre-Hydrated Bentonite/ Drispac SL/R and a 1.15sg Kcl/ Drispac SL/R inhibitive pill prior to pulling out of the hole and retrieving the starter head wearbushing. 473mm (18.625") casing was then run and landed off in the starter head, with the shoe at 633mMDRT.

A cement stinger (20 stands 140mm (5.5") drillpipe and the casing hanger running tool) was run and locked into the hanger prior to for cementing the casing in place. Lead cement returns were confirmed at surface via the wellhead outlets.

A compact wellhead housing incorporating landing shoulders for 340mm(13.375"), 273mm (10.75") and 178mm (7") casing and tubing hangers was then installed and tested prior to nippling up a high pressure (HP) riser system, the BOP and low pressure (LP) riser system c/w a Ball Joint Overshot (BJOS). The BJOS was incorporated in the system to mitigate the requirement to unlatch the BOP due to excessive movement in adverse weather conditions.

A "dummy" 340mm (13.375") casing hanger was installed prior to installing a "middle" stage wearbushing, making up and running the 311mm (12.25") BHA which included a 308mm (12.125") GeoPilot and Security/DBS FMF3563Z PDC bit. The well was displaced to synthetic based mud (SBM) prior to drilling out the shoe and confirming the formation strength with a formation integrity test (FIT) to 2.0SG EMW without leak off.

The 311mm (12.25") section was drilled to 2299m with one bit run (two were originally planned). Pyritic sandstone stringers, which were encountered throughout this interval, were drilled with varying weight on bit (WOB) and revolutions per minute (RPM) parameters. The majority of the section was drilled with two mud pumps due to the ongoing problem of the power requirements for three pumps tripping one of the generators. The well was circulated clean prior to pulling out of the hole in preparation for running 244mm (9.625") casing. A number of tight spots with up to 50klbs overpulls were encountered and wiped through on the trip out of the hole; back reaming was not required.

The hole section was cased off with 244mm (9.625") casing without any hole related problems. However, the shoe track and 113m of casing then had to be pulled back to surface and replaced due to the check valve in the TAM packer being found washed out with a stainless steel ball and three pieces of steel missing from the check valve body, assumed to be lost downhole.

The wellhead was jetted with SBM prior to installing the casing hanger pack off, without draining the stack. A pressure test on the pack off seals was unsuccessful due to the seals being damaged during installation. After a number of unsuccessful attempts to clear the debris in the wellhead through the stack the seals were removed from the wellhead by nippling down the BOP and lifting the HP riser. The wellhead was inspected prior to

installing and testing a replacement pack off and found to be in good condition.

The BOP was nippled back up and the connector tested prior to picking up additional 140mm (5 ½”) drill pipe in preparation for drilling the 216mm (8.5”) hole section.

After drilling out the shoe track (shoe at 2293mMDRT) and conducting a successful FIT to 2.0SG EMW the 216mm (8.5”) section was drilled horizontally to a total depth (TD) of 4026m on 15 June 2006. Two Security/DBS FMF3653Z bits and an 216mm (8.5”) 7600 series GeoPilot were used. The trip out of the hole was due to the premature failure of the clutch in the GeoPilot tool. At TD the hole was circulated clean with three bottoms up prior to pulling back to the casing shoe. A total of 25 formation pressure tests were obtained with the GeoTap tool. A wiper trip back to TD was then carried out and the open hole back reamed to the shoe in preparation for installing a 178mm (7)” liner.

The 178mm (7”) liner was run and cemented in place with the shoe at 4023mMDRT, with no hole related problems. The liner top packer was set prior to releasing the liner running tools and reverse circulating the excess cement from above the liner top out of the hole. The liner lap and casing were successfully pressure tested to 3000psi prior to pulling out of the hole and laying down the cement head and liner hanger running tools.

The BOP was pressure tested prior running in with a BOP jetting tool with a Nylon head which jammed, leaving the nylon shroud in the wellhead. The BOP was nippled and the majority of nylon jetting tool shroud milled with a 216mm (8.5”) PDC bit.

The BOP was nippled back up prior to a 152mm (6”) bit, 178mm (7”) scraper, 102mm (4”) drill pipe, MFCT and 244mm (9.625”) casing scraper clean up assembly being run in the hole, pushing the remainder of the nylon shroud past the 178mm (7”) liner top where after a short while milling it was pushed to the end of the well. The SBM was displaced from the hole with seawater in preparation for completing the well.

The well was then completed and cleaned up. The estimated final well cost was A$32.2MM with a total of 43.06 days, including the completion, being spent on the well.

The Daily Drilling Reports, which also contain the casing and cementing details, are contained in Appendix 1. The FIT data is contained in Appendix 2, and the Mud Properties Report can be found in Appendix 3. The Bit Record is contained in Appendix 6 in the Mudlogging End of Well Report.

3 FORMATION SAMPLING

3.1 Ditch Cuttings

Approximately 830g samples of ditch cuttings were collected at five to ten metre intervals from THA02 as detailed in Table 2 below. The washed and dried samples were split into four sets of 200 grams and placed in bags. There was also one set of 30 gram FIS samples. One set of cuttings were collected in "samplex" trays.

Table 2: Sampling Intervals

Sample Rate (m)	Depth from (mMDRT)	Depth to (mMDRT)
5	645	650
10	650	1210
5	1210	1260
10	1260	1710
5	1710	1890
10	1890	2000
5	2000	2270
10	2270	2280
5	2280	2545
10	2545	2555
5	2555	2620
10	2620	2630
5	2630	2720
10	2720	2730
5	2730	3515
10	3515	3525
5	3525	3570
10	3570	3580
5	3580	3940
10	3940	3950
5	3950	4026 TD

All samples were despatched to Core Laboratories Australia Pty. Ltd., 44 Belmont Avenue, Kewdale, WA for distribution (Appendix 6, Mudlogging FWR). Set 1 was despatched to Geoscience Australia, c/o Australian Geological Survey Organisation (AGSO), Symonston, ACT, and Set 2 to WA DoIR, Geological Survey Stores and Transport Depot, Carlisle WA. The remaining sets were retained by Woodside and are located at Core Laboratories Australia Pty. Ltd., 44 Belmont Avenue, Kewdale, WA.

3.2 Sidewall Cores

No sidewall samples were taken in THA02.

3.3 Conventional Cores

No cores were cut in THA02.

3.4 Mud Gas Samples

Twenty Mud Gas Isotope Logging (MGIL) samples were collected from 2290 to 4000 mMDRT in THA02. The samples were sent to Isotech Laboratories, Champaign, Illinois and results of the analyses are given in Appendix 9.

4 FORMATION EVALUATION

4.1 Mudlogging

Geoservices provided mudlogging services for the drilling of THA02. This included conventional mudlogging, formation evaluation, drill monitoring, drill gas summaries and pressure evaluation services. Geoservices' End of Well Report and Formation Evaluation Log, Drilling Data Plot and Pressure Evaluation Log are contained in Appendix 6. The digital mudlogging data are also attached.

4.2 Lithological Logging

Lithology and hydrocarbon shows are described in the Daily Geological Reports (Appendix 4). THA02 cuttings were described by the Wellsite Geologists from 638 to 4026 mMDRT, and are recorded on the Wellsite Lithology Log (Appendix 5).

4.3 Hydrocarbon Indications

Chromatographic breakdown of the ditch gas, total gas and trip gas was recorded over the sampled intervals as shown in Table 4 and Appendix 6.

Table 3: Gas Summary

Gas	Depth Interval (mMDRT)	Range (%)	Depth Max Gas (mMDRT)
CI	638 – 4026	Tr – 7.873	3568
C2	638 – 4026	0.000 – 0.342	3625
C3	638 – 4026	0.000 – 0.072	3625
iC4	638 – 4026	0.000 – 0.009	3625
nC4	638 – 4026	0.000 – 0.008	3625
iC4	638 – 4026	0.000 – 0.002	3625
nC5	638 – 4026	0.000 – 0.001	3625
TG	638 – 4026	0.000 – 13.81	3625

A maximum peak gas reading of 13.81%, C1 to C5, was recorded at a depth of 3597 mMDRT in THA02. No hydrocarbon fluorescence was observed during the drilling of THA02.

4.4 Logging While Drilling (MWD)

Logging While Drilling was performed by Sperry Drilling Services as summarised in table 5.

Table 4: LWD Data Acquired

Hole Size	Tools	Depth Interval (mMDRT)	Notes
762 mm	ESS surveys	150.0 – 219.9	
584 mm	Direction surveys	219.9 – 638.0	
311 mm	ABG-DDS-PWD-EWR-P4-DGR-DM	638.0 – 2299.0	
216 mm	ABG-DM-EWR-P4-ALD-ACAL-CTN-GeoTap-PWD	2299.0 – 3510.0	POOH due to GeoPilot malfunction.
216 mm	ABG-DM-DGR-EWR-PR-ALD-ACAL-CTN-GeoTap-PWD	3510.0 – 4026.0	

Full details of the LWD operations are contained in Sperry's End of Well Report (Appendix 7).

4.5 Wireline Logging

No wireline logs were acquired in THA02.

4.6 Vertical Seismic Profiling (VSP)

No VSP data was acquired in THA02.

4.7 Biostratigraphy

No palynological analysis was performed on the THA02 cuttings.

4.8 Geochemistry

No geochemical analyses were performed on the THA02 samples.

4.9 Petrology

No petrological analyses were performed on the THA02 samples.

5 TESTING

5.1 Pressure Testing and Fluid Sampling

Sperry Drilling Services carried out a single run with the GeoTap LWD formation pressure sampler in THA02. Twenty five pressure readings were made with a total of 7 valid pressures being obtained. This data can be seen in Appendix 8. No Fluid samples were obtained.

5.2 Production Testing

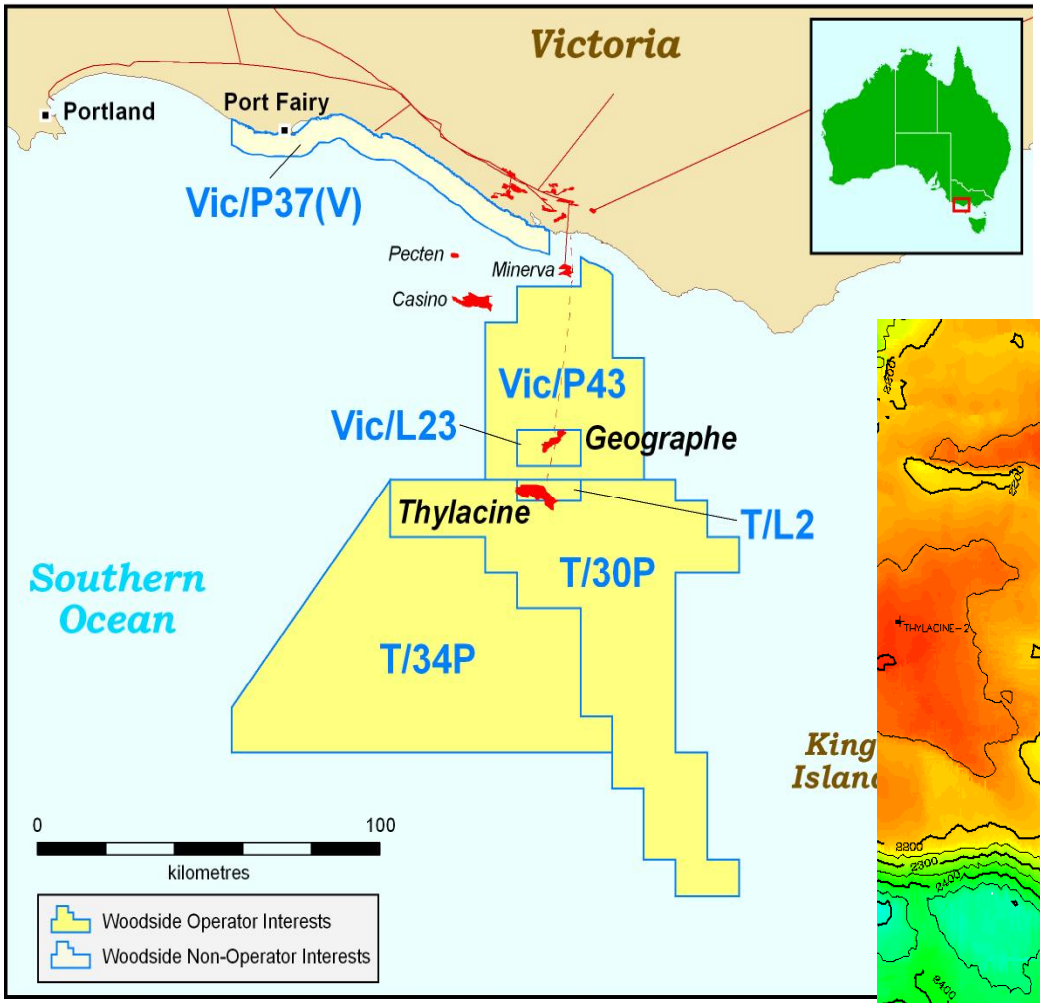
Production testing was carried out on THA02 during completion. The well was perforated at 2609.5 - 2747.3 mMDRT, 2990.1 - 3155.6 mMDRT, 3495.2 - 3653.7 mMDRT and 3744.2 - 3972.0 mMDRT. The test results are summarised in Table 5 below.

Table 5: Production Test Summary

Test No	Perforated Interval (mMDRT)	Choke Size	Gas (MMscf/d)	Condensate (bpd)	Water (bpd)
1*	See above	72/64”	62*	n.a.*	n.a.*
2	See above	68/64”	52.5	116	74
3*	See above	76/64”	65*	n.a.*	n.a.*

*Not flowed through the test separator as the main objective is to unload and cleanup the well. Gas rates are estimated. Condensate & water rates are not available.

Thylacine Development Location Map



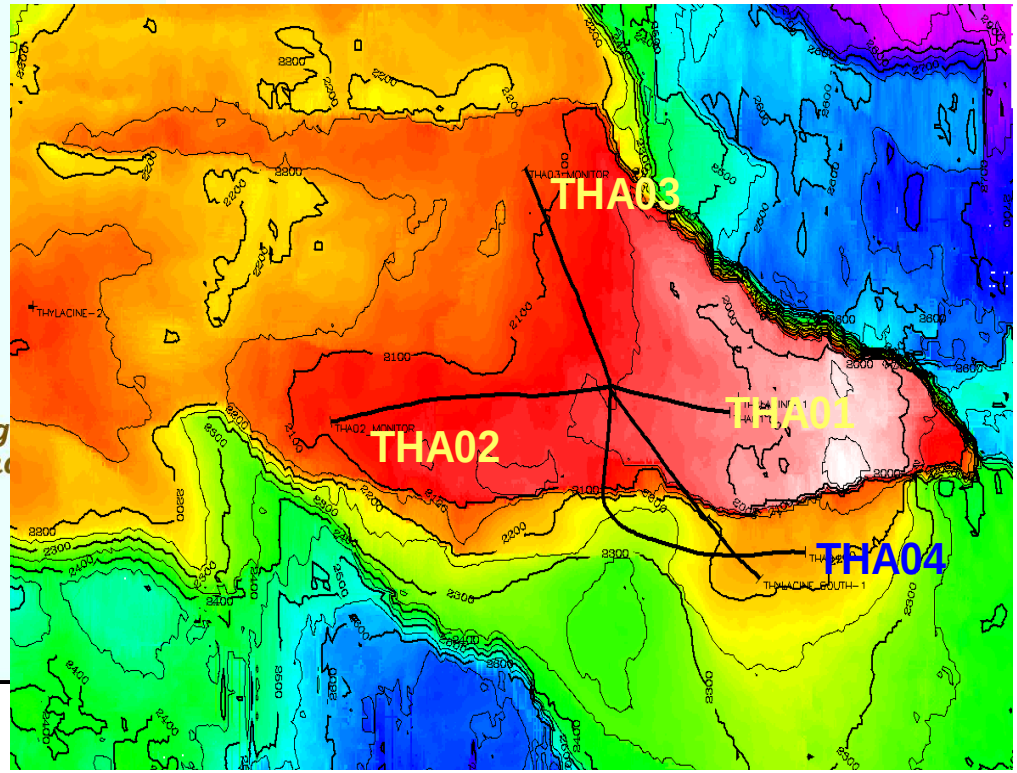


Figure 1

Figure 2: THA02 Days vs Depth Chart

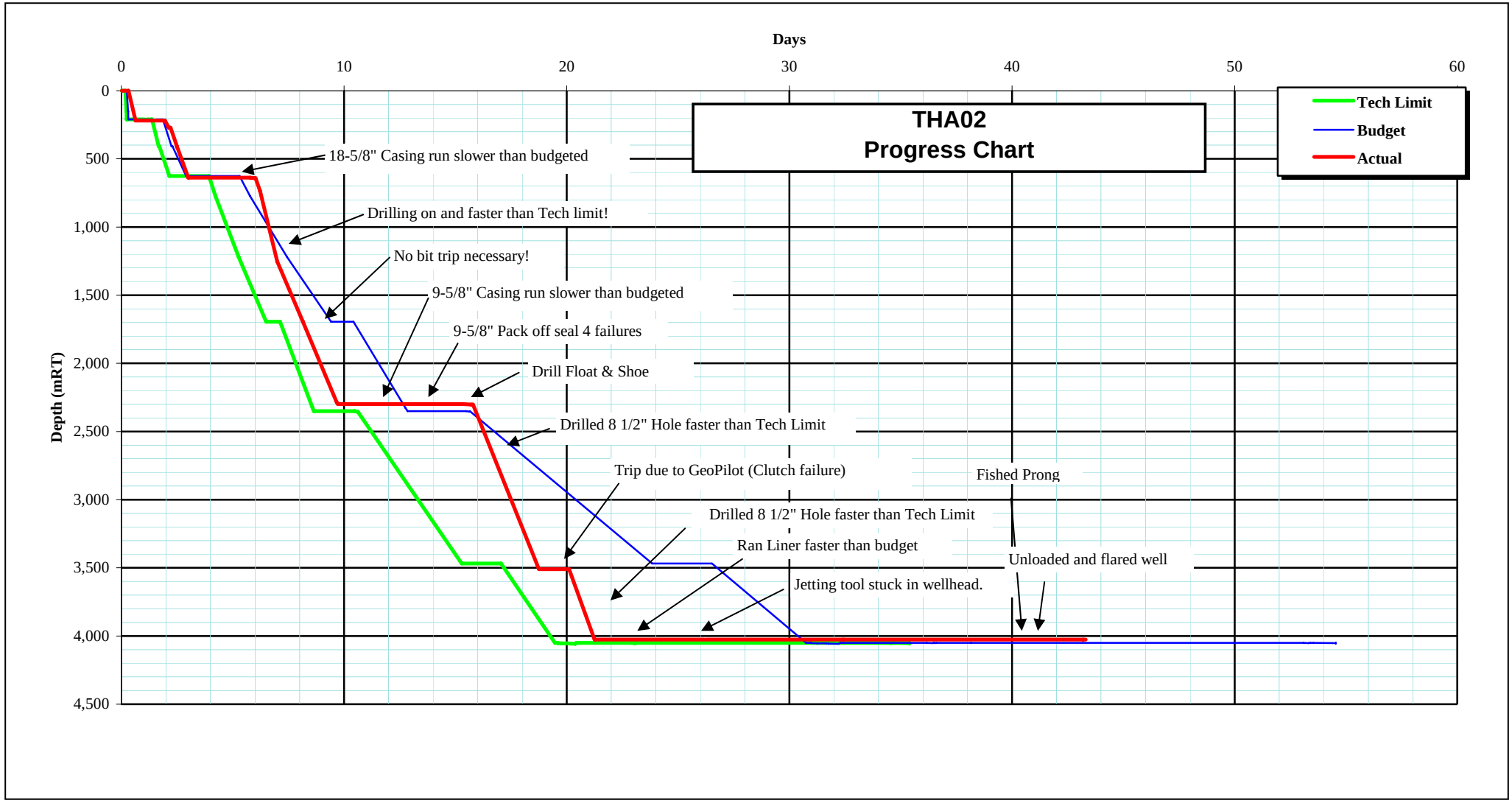
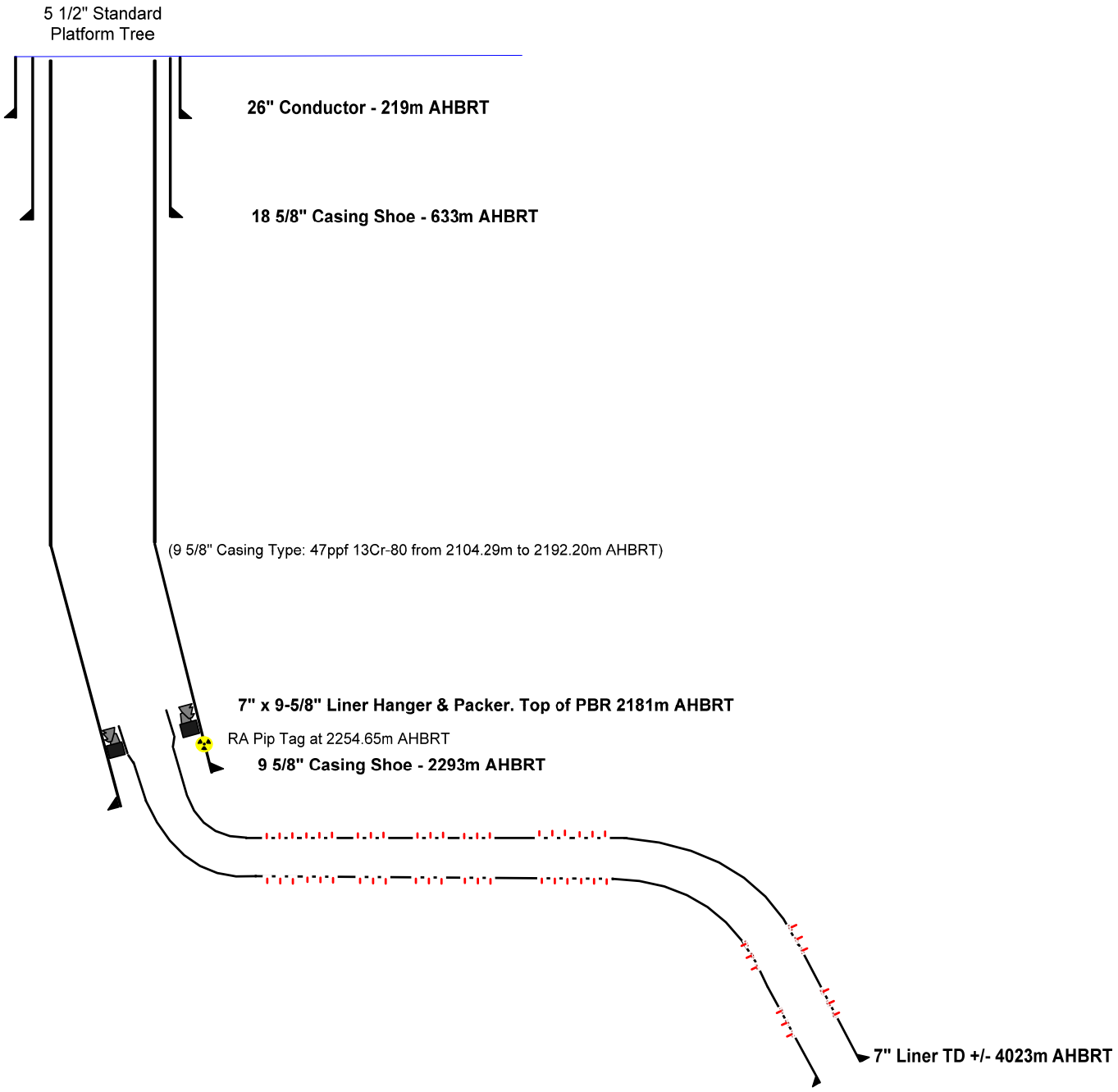


Figure 3: THA02 Well Schematic



Daily Drilling Reports

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 1 **Report Date: 20/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	0.75	MD (m):	219.90	Day WSM:	S. Job, P. Hodson
DFS:	0.75	Planned Depth (m):	4,101.19	Night WSM:	
Budget Days:	54.60	TVD (m):	219.90	Rig OIM:	Lars Lovenholdt
Progress Days:	0.59	Progress (m):	219.90	RT-SL (m):	50.50
AFE Cost:	36,351,054.00 ($)				
Cumulative Total:	5,957,423.00 ($)				

Ops 00:00 to 06:00 : POOH racked back BHA. Rigged up to run conductor. Commenced running 660mm (26") conductor.

Ops Summary : Skidded rig on location. Made up BHA#1. RIH tagged sea bed. Drilled 444.5mm (17 1/2") x 762mm (30") hole to TD - 219.9m. Carried out wiper trip. POOH.

Ops Look Ahead : Land Conductor. Release running tool. RIH cement stinger. Land out Tag-In-Adapter. Break circulation. Cement conductor in place.

From	Dur. (hr)	Phase	Code	Class	Operation
6:30	0.50	RM	SAF	P	Held toolbox talk for rig skidding with deck and mechanical departments and with rig crew for slip and cut operations.
7:00	1.00	RM	PSI	P	Skidded rig sub structure starboard. Secured BOPs on port test stump. Concurrently slipped and cut drill line.
8:00	0.50	RM	PSI	P	Skidded cantilever aft over Slot 5 (THA02)
8:30	0.50	RM	PSI	P	Cleared drill floor. Installed stairway access. Secured sub structure post skidding op's.
9:00	0.50	D36	PSI	D	Removed hatch cover. Concurrently trouble shot electrical fault with PRS.
9:30	4.50	D36	TRP	P	Made up and ran in hole BHA #1 444.5mm (17 1/2") bit x 762mm (30") hole opener. Skidded rig to fine tune alignment with slot. ROV monitored bit and BHA through platform jacket guides at 102m and 125m.
14:00	2.50	D36	DRR	P	Spudded well. Drilled cap rock from 149.5m to 151m (1.5hrs) RPM 20max, WOB <2kdaN (5klbs), 1.8m3/min (480gpm), 1.1MPa (160psi), 0.1356 - 0.2712 daN.m (1 -2klb.ft) ROP <1m/hr. 151m - 163m RPM 15 - 30, WOB 2kdaN (5klbs) - 4kdaN (10klbs), 1.8m3/min (480gpm), 1.1MPa (160psi), 0.1356 - 0.2712 daN.m (1 -2klb.ft) ROP 20m/hr. Poor - no visiblity at seabed with ROV, monitored for bit walk with sonar and visually from above.
16:30	1.00	D36	DRR	D	Pulled back to seabed to repair mud pump #3 suction system. Note: Only pump #1 or #2 avaliable in conjunction with rotary and draworks with SCR#1 down.
17:30	4.25	D36	DRR	P	Drilled 444.5 / 762mm (17 1/2" / 30") hole to section TD 219.9m / 219m. RPM 80, WOB 0kdaN - 4kdaN (9klbs), 3.6m3/min (950gpm), 6MPa (900psi), 0 - 0.2712 daN.m (0 -2 klbs.ft) ROP 35m/hr. No visibility at seabed with ROV, monitored wellbore with sonar. ROP slowed to 10-15m/hr for last 10m of hole drilled increased weight on bit to maintain.
21:45	0.25	D36	PCD	P	Displaced hole to gel. Pulled back 10m off bottom after initial 8m3 (50bbl) pumped. Maintained reciprocation and 80RPM during remainder of the hole displacement.
22:00	1.00	D36	TRP	P	Wiped hole without pumps from 210m to 149.5m. No drag / overpulls seen on way out or in. Tagged TD at 219m with 444.5m (17 1/2") bit. Worked in hole with 30RPM no pumps to 219.4m. Started pumps on seawater. Drilled off the last 1/2m with minimal WOB.
23:00	0.50	D36	TRP	P	Displaced hole to gel. Pulled back 10m after first 8m3 (50bbl) pumped.
23:30	0.50	D36	TRP	P	Broke connection. Dropped EMS. Ran back down to TD. Pulled out of the hole to 123m.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.90				Open Hole	30.000

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SPUD MUD	1030	12.00	66.000	49.00	

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 1 **Report Date: 20/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

CASING

Last Casing:	Next Casing:	Last BOP:

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	0.00
DSLTI		Stop/Start Cards	4.00	4.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	5
SCHLUMBERGER	3	SPERRY SUN	4
TECHNIP	2	MAERSK	16
OMS	38	TMT	6
HALCO	2	Oil States	2
_Others	6	WEATHERFORD	2
BHDF	4	GEOSERVICES	2
		Total POB :	94

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BRINE	bbls	19.00	-19.00	WATER, POTABLE	MT	28.00	-28.00
BARITE BULK	MT	4.00	-4.00	DIESEL	MT	14.00	-14.00
GEL, FRESH	MT	7.00	-7.00	CEMENT	MT	0.00	0.00
WATER, DRILLING	MT	210.00	170.00	HELI FUEL	Ltrs	0.00	0.00
CEMENT HTB	MT	0.00	0.00	BASE OIL	m3	0.00	0.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Portland		
Invincible Tide	Standby at rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	11.00	2.700	2.700				11.00

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 1			Report Date: 20/05/2006
Block: T/L2	Rig: Maersk Guardian	Water Depth(m): 99.30	Start Date: 20/05/2006

- No accidents or incidents over past 24hrs.
- Max relative motion recorded 200mm at 0620hrs corresponding to 4.86m Hs.
- Forecast for significant wave height to peak at 3.9m on Sunday 14th and dropping off to +/-2.5m from Tuesday 16th for the remainder of the week.
- Fluid ends on pump #2 will be serviced while running conductor.
- SCR#1 back on line.

Crossover: welotwy-61 (7 5/8" pin x 6 5/8" box) - rotating 5.58hrs, welotwy-5 (5 1/2" x 6 5/8") - 219.5 rotating hrs.

Bit#1 data: 17 1/2" Hughes MX-1 3 x 12 (TFA = 0.332) c/w 30" Transco Hole Opener 4 x 16 (TFA = 0.785)
Daily Bit Data : 70m, On Bottom 5.6hrs, Circulating 7.2hrs, 17krevs, 23m/hr average on bottom ROP, 12.5 m/hr IADC ROP.

BHA #1 (Bit #1): 17 1/2" MX-1 roller cone, 30" hole opener, 9 1/2" float sub, 9 7/16" float sub, 9 9/16" NMDC, 9 9/16" NMDC, 9 3/4" DC, Stab (29 3/4"), 9 3/4" DC, X-O 7 5/8" pin x 6 5/8" box (otway 61) , 8 1/4" DC x 3, X-O 6 5/8" pin x 5 1/2" DSTJ (otway 5), 5 1/2" HWDP.

Bit grading: 1-1-WT-A-E-I-NO-TD

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 2 **Report Date: 21/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	1.58	MD (m):	219.90	Day WSM:	S. Job, P. Hodson
DFS:	1.58	Planned Depth (m):	4,101.19	Night WSM:	
Budget Days:	54.60	TVD (m):	219.90	Rig OIM:	Lars Lovenholdt
Progress Days:	1.25	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 6,866,842.00 ($)

Ops 00:00 to 06:00 : Refer to THA03 DDR.

Ops Summary : Ran conductor. Checked floats - failed. Pulled back, made up replacement float. Ran and landed conductor. Cemented conductor in place. Suspended operations on THA02. Skidded rig to THA03 location.

Ops Look Ahead : Refer to THA03 DDR.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	2.50	D36	TRP	P	Pulled out of hole from 123m to surface. Laid out stabiliser, recovered EMS, racked BHA and bit. Bit grading: 1-1-WT-A-E-I-NO-TD
2:30	0.50	C36	PSI	P	Made up cement stand and racked back in derrick.
3:00	1.00	C36	RUD	P	Rigged up Oilstates Merlin Clamp and Weatherford handiling equipment for running 660mm (26") conductor.
4:00	0.25	C36	SAF	P	Held toolbox talk in preparation for running conductor.
4:15	1.25	C36	COI	D	Picked up and ran in hole with float shoe and two joints of conductor without coating.
5:30	1.00	C36	COI	D	With shoe below sub cellar deck filled conductor with sea water to confirm floats clear and operational. Float failed to open. Trouble shot options and attempt to free floats.
6:30	1.50	C36	COI	D	Held toolbox talk. Pulled conductor shoe back to surface laying out each joint. Inspected shoe joint, no visible obstruction.
8:00	0.50	C36	COI	P	Picked up back up shoe joint. Filled conductor and tested floats clear with sea water - OK.
8:30	5.50	C36	COI	P	Ran 660mm (26") conductor to 219m filling each joint with 3.5m3 (22bbl) seawater. Average run rate 3 jnts per hour.
14:00	1.00	C36	COI	P	Changed out elevators to 138mm (5 1/2") drillpipe elevators. Made up conductor landing joint. Ran in hole. Worked past ledge at 210m with 26.6kdaN (60klbs). Landed conductor on bottom 219m. 102.3kdaN (230klbs) up 100 kdaN (225klbs) down.
15:00	1.00	C36	COI	P	Released conductor running tool and laid it out. Top of conductor 0.9m above cellar deck TOS. Cleared drillfloor of conductor running equipment.
16:00	1.00	C36	COI	P	Made up cement stinger assembly complete with B122C Tag-In-Adaptor. Ran in hole to 210m, established circulation. Ran in hole and landed in the shoe 218m with 4.4 - 6.6kdaN (10 - 15klbs) down. Confirmed returns to seabed with ROV.
17:00	1.00	C36	PCD	P	Maintained circulation at cement rate 0.95m3/min (6bbl/min) 0 MPa while rigging up cement lines and filling drillpipe and conductor annulus with seawater. Pressure tested cement line 20.7MPa (3000psi) - OK. Filled conductor with sea water and monitored levels - stable. Held toolbox talk for cement operation.
18:00	1.00	C36	COI	P	Cemented 660mm (26") conductor in place. Pumped 1.6m3 (10bbls) of seawater with fluorescence dye. 24.6m3 (158bbls) 1.9sg neat G cement at 0.95m3/min (6bbl/min) 2m3 (13bbls) seawater. ROV confirmed dyed seawater returns, indication of heavier / darker returns noted after 20.7m3 (130bbls) pumped. Accpetance criteria #2 met - cement returns to surface.
19:00	0.50	C36	COI	P	Vented pressure back to cement unit, confirmed float holding. Rigged down cement line. Un-stabbed from Tag-In-Adapter. Circulated 12m3 (75bbl) sea water to clear cement stinger, monitored returns at surface.
19:30	0.50	C36	TRP	P	Pulled out hole to surface. laid out Tag - In - Adapter. Suspended operations on THA02 commence skidding rig to THA03

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 2 **Report Date: 21/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.90				Open Hole	30.000
26" Conductor	0.00	219.90				Casing	30.000

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SPUD MUD	1060	12.00	48.000	39.00	

CASING

Last Casing:	Next Casing:	Last BOP:

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	0.00
DSLTI		Stop/Start Cards		4.00
TRCs:		Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	5
SCHLUMBERGER	3	SPERRY SUN	4
Keppel Prince	1	TECHNIP	2
MAERSK	15	OMS	38
TMT	6	HALCO	2
Oil States	2	_Others	6
WEATHERFORD	2	BHDF	4
		Total POB :	94

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
HELI FUEL	Ltrs	0.00	2,707.00	CEMENT HTB	MT	0.00	0.00
BASE OIL	m3	0.00	138.00	BARITE BULK	MT	2.00	74.00
BRINE	bbls	0.00	49.00	GEL, FRESH	MT	25.00	65.00
WATER, POTABLE	MT	29.00	352.00	WATER, DRILLING	MT	267.00	213.00
DIESEL	MT	7.00	242.00	CEMENT	MT	30.00	188.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Portland		
Invincible Tide	Standby at rig		

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 2 **Report Date: 21/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	5.66	0.823	4.000				10.00

REMARKS

Ref THA03 DDR #1 for remarks covering this 24hr period.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 3 **Report Date: 26/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	2.58	MD (m):	272.00	Day WSM:	Dwayne Rota
DFS:	2.58	Planned Depth (m):	4,101.19	Night WSM:	Shaughan Corless
Budget Days:	54.60	TVD (m):	272.00	Rig OIM:	Lars Lovenholdt
Progress Days:	1.90	Progress (m):	52.10	RT-SL (m):	50.50
AFE Cost:	36,351,054.00 ($)				
Cumulative Total:	7,058,549.00 ($)				

Ops 00:00 to 06:00 : Re-terminated gyro wireline head (wiring found parted inside head). Drilled ahead from 272m - 374m.

Ops Summary : Skidded rig from THA03 back to THA02. RIH with BHA. Drilled out cement and 660mm (26") shoe. Drilled 584mm (23") hole from 219m - 272m using gyro surveys to orient motor and nudge away from existing wells. Worked on failed gyro tool.

Ops Look Ahead : Drill ahead to 584mm (23") section TD at approx 638m. POOH to run 473mm (18-5/8") casing.

From	Dur. (hr)	Phase	Code	Class	Operation
9:00	0.50	D23	RUD	P	Prepared to skid derrick from THA03 back to THA02 (previously left with 26" conductor cemented on 21/5/2006).
9:30	2.00	D23	RUD	P	Skidded derrick and cantilever from THA03 to THA02.
11:30	2.00	D23	WHM	P	Removed THA02 platform hatch. Made up wear bushing running tool. RIH with wear bushing, aligned rig over wellhead and installed wear bushing. POOH running tool.
13:30	3.50	D23	DRT	P	Held TBT. RIH with 584mm (23") BHA to 157m (scribed in to maintain toolface orientation).
17:00	0.50	D23	TRP	P	Made up TDS. Shallow tested MWD tools. Washed down and tagged top of cement at 217.5m.
17:30	1.00	D23	DCP	P	Drilled out cement and floats from 217.5m - 219m.
18:30	1.50	D23	DRM	P	Drilled 584mm (23") hole from 219m - 243m in rotary mode.
20:00	1.50	D23	DVM	P	Held SJA. Rigged up and RIH with gyro survey tool on wireline. Landed gyro, took single shot survey (inc 0.3°, Azi 185°, toolface 60°). POOH gyro.
21:30	1.00	D23	DRM	P	Oriented motor to 270°. Drilled in slide mode from 243m - 272m. Took MWD survey - azimuth readings still affected by magnetic interference.
22:30	0.50	D23	REP	D	RIH with gyro on wireline. Attempted to take survey. No communications with gyro tool.
23:00	1.00	D23	REP	D	POOH with gyro tool. Pulled drillstring back inside shoe.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	272.00	30.000	219.00		Open Hole	23.000

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SPUD MUD	1060	10.00	52.000	41.00	

CASING

Last Casing:	Next Casing:	Last BOP:

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 3 **Report Date: 26/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports		0.00
DSLTI		Stop/Start Cards	1.00	5.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	5
SPERRY SUN	4	Keppel Prince	10
TECHNIP	2	MAERSK	16
OMS	37	GYRO	2
HALCO	2	_Others	6
WEATHERFORD	2	BHDF	4
		Total POB :	94

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BASE OIL	m3		138.00	WATER, POTABLE	MT		365.00
CEMENT HTB	MT		0.00	GEL, FRESH	MT		64.00
DIESEL	MT	8.00	205.00	WATER, DRILLING	MT	234.00	262.00
BRINE	bbls		300.00	HELI FUEL	Ltrs		4,160.00
CEMENT	MT	103.00	115.00	BARITE BULK	MT	7.00	153.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Portland		
Invincible Tide	Standby at rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							

REMARKS

- No accidents or incidents over past 24hrs.

- Backdated incident from 15 May 06 (not previously reported) : An oxygen bottle delivered to the rig on 15 May from the company Air Liquide in Melbourne was found to be carrying labels for both oxygen and nitrogen.

- Concurrently with THA02 operations, the THA03 compact housing was nippled up. Trash seals were tested to 3.5 / 13.8MPa (500 / 2000psi) for 5 / 15 minutes. Main seals were tested to 3.5 / 20.7MPa (500 / 3000psi) for 5 / 15 minutes.

Bit #2RR data: 23" Varel ETR1G (1.1.5). S/N 218183. Nozzles : 2 x 22/32, 1 x 20/32, 1 x 16/32. Bit was previously run on THA03.
Daily bit data : 53m, 2.5 IADC hrs, 1.84hrs on bottom, 3.75hrs circulating, 10krevs. 28.8m/hr avg on bottom ROP. 21.2m/hr IADC ROP.
Total bit run data : 53m, 2.5 IADC hrs, 1.84hrs on bottom, 3.75hrs circulating, 10krevs. 28.8m/hr avg on bottom ROP. 21.2m/hr IADC ROP.

BHA #2 : 23" Bit #2RR, 9-5/8" PDM, Float sub, 9-1/2" HOC, 9-1/2" UBHO, 9-1/2" NMDC, 23" string stab, 9-3/4"DC, X/O (Wel otwy-61), 3 x 8-1/4"DC's, 8-1/4" jars, 2 x 8-1/4"DC's, X/O (Wel otwy 62, 6 x 5 1/2" HWDP.
BHA length : 157.8m. Weight below jars : 45klb.

Crossover rotating hours : Wel otwy-61 - 30.4 hrs, Wel otwy-62 - 20.4 hrs.
Jars rotating hrs (s/n DACCH 03788) : 20.4hrs.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 4 **Report Date: 27/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	3.58	MD (m):	638.00	Day WSM:	Dwayne Rota
DFS:	3.58	Planned Depth (m):	4,101.19	Night WSM:	Shaughan Corless
Budget Days:	54.60	TVD (m):	637.00	Rig OIM:	Lars Lovenholdt
Progress Days:	3.07	Progress (m):	366.00	RT-SL (m):	50.50
AFE Cost:	36,351,054.00 ($)				
Cumulative Total:	7,403,369.00 ($)				

Ops 00:00 to 06:00 : Racked back BHA. Retrieved wear bushing. Rigged up and commenced running 473mm (18-5/8") casing. Shoe at 311m at 06:00hrs (27 joints run, 25 remaining).

Ops Summary : Repaired gyro. Drilled 584mm (23") hole from 272m - 638m (section TD). Circulated sweep. Spotted high vis mud on bottom.

Ops Look Ahead : Land 473mm (18-5/8") casing. Run cmt stinger and cement casing. POOH with stinger. Lay out BHA from derrick. Nipple up compact housing, BOP's, riser and diverter. Pressure test surface equipment. Pick up DP. Prepare to pick up 311mm (12-1/4") BHA.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.50	D23	REP	D	Wiring found parted inside gyro wireline termination head. Cut and commenced rewiring.
0:30	1.00	D23	DRM	P	Drilled ahead in slide mode from 272m - 282m. Surveyed with MWD - magnetic interference still present.
1:30	1.00	D23	DVM	P	RIH with gyro tool on wireline and surveyed (Inc 0.9°, Azi 270.7°, toolface 275.2°). POOH with gyro.
2:30	17.00	D23	DRM	P	Drilled 584mm (23") hole from 282m - 638mMD (section TD). Nudged wellpath to 6.7° inclination, 280° azimuth at section TD. Drilled with seawater, pumping 12m3 (75bbl) guar gum sweeps each single and spotting 16m3 (100bbl) gel around BHA prior to connections. Drilling parameters : 4.2m3/min (1100gpm), 12.4MPa (1800psi) off bottom pressure, 13.2MPa (1920psi) on bottom pressure, 90RPM surface rotary, 140RPM downhole rotary, 9 - 14T (20 - 30 klb) WOB, 407 daN.m (3kft-lb) off bottom torque, 815daN.m (6kft-lb) on bottom torque. Rotating weight 80T (175klb), pickup 82T (180klb), slackoff 77T (170klb).
19:30	2.00	D23	PCD	P	Swept hole with 32m3 (200bbls) gel. Pumped 80m3 (500bbls) Type 1 unweighted gel / polymer followed by 80m3 (500bbls) 1.15SG Type 2 KCl / polymer spotted on bottom.
21:30	2.50	D23	TRP	P	POOH. Hole in good condition with negligable overpull. Racked back BHA. Stump tested BOP's concurrently with drilling, circulating and tripping : Annular to 1.7 / 24.2 MPa (250 / 3500psi) for 5 / 10 minutes. Pipe rams, shear rams, C&K valves and manifold valves to 1.7 / 34.5 MPa (250 / 5000psi) for 5 / 10 minutes.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	30.000	219.00		Open Hole	23.000

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SPUD MUD	1060	11.00	48.000	40.00	

CASING

Last Casing: 30.000 in @ 219.00 m	Next Casing: 9.625 in @ 2,278.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 4 **Report Date: 27/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	1.00	1.00
DSLTI		Stop/Start Cards	18.00	23.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

Approximately 100 litres of Diesel Fuel Spill on deck only, while re-fueling Crane#2.

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	5
SPERRY SUN	4	Keppel Prince	10
TECHNIP	2	MAERSK	16
OMS	37	GYRO	2
HALCO	2	_Others	6
WEATHERFORD	2	BHDF	4
		Total POB :	94

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
WATER, POTABLE	MT	27.00	382.00	CEMENT HTB	MT		0.00
BARITE BULK	MT	6.00	147.00	GEL, FRESH	MT	28.00	36.00
BASE OIL	m3		138.00	WATER, DRILLING	MT		380.00
DIESEL	MT	7.00	198.00	HELI FUEL	Ltrs	20.00	8,140.00
CEMENT	MT		200.00	BRINE	bbls		300.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Portland		
Invincible Tide	Standby at rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							

REMARKS

- No accidents over past 24hrs.

Bit #2RR data: 23" Varel ETR1G (1.1.5). S/N 218183. Nozzles : 2 x 22/32, 1 x 20/32, 1 x 16/32. Bit was previously run on THA03.
Daily bit data : 366m, 18.0 IADC hrs, 12.34hrs on bottom, 18.45hrs circulating, 152krevs. 29.7m/hr avg on bottom ROP. 20.3m/hr IADC ROP.
Total bit run data : 419m, 20.5 IADC hrs, 14.18hrs on bottom, 22.20hrs circulating, 162krevs. 29.5m/hr avg on bottom ROP. 20.4m/hr IADC ROP.

BHA #2 : 23" Bit #2RR, 9-5/8" PDM, Float sub, 9-1/2" HOC, 9-1/2" UBHO, 9-1/2" NMDC, 23" string stab, 9-3/4"DC, X/O (Wel otwy-61), 3 x 8-1/4"DC's, 8-1/4" jars, 2 x 8-1/4"DC's, X/O (Wel otwy 62, 6 x 5 1/2" HWDP.
BHA length : 157.8m. Weight below jars : 45klb.

Crossover rotating hours : Wel otwy-61 - 42.8 hrs, Wel otwy-62 - 32.8 hrs.
Jars rotating hrs (s/n DACCH 03788) : 32.8hrs.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 5 **Report Date: 28/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	4.58	MD (m):	638.00	Day WSM:	Dwayne Rota
DFS:	4.58	Planned Depth (m):	4,101.19	Night WSM:	Shaughan Corless
Budget Days:	54.60	TVD (m):	637.00	Rig OIM:	Lars Lovenholdt
Progress Days:	4.44	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 8,353,391.00 ($)

Ops 00:00 to 06:00 : Landed and made up compact housing. Pressure tested seals. Nippled up HP riser, BOP's and LP riser.

Ops Summary : POOH 584mm (23") BHA. Retrieved wear bushing. Ran and cemented 473mm (18-5/8") casing. Commenced compact wellhead installation.

Ops Look Ahead : Continue N/U BOP's, riser, BJO and diverter. Pressure test casing / wellhead / shear rams. Lay out BHA from derrick. M/U and RIH 311mm (12-1/4") BHA.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.00	D23	DRT	P	Continued POOH racking back BHA (retrieved MWD probe).
1:00	0.50	D23	WHM	P	Retrieved wear bushing.
1:30	0.50	C23	CLR	P	Rigged up to run casing.
2:00	6.50	C23	CLR	P	Held TBT. Picked up shoe joint and tested floats ok. Continued RIH with 473mm (18-5/8"), 141kg/m (94.5ppf), X56, R3, DW2 casing to 600m. Total of 52 joints run including shoe joint.
8:30	1.00	C23	CLR	P	Picked up and made up casing hanger / hanger running tool. Made up DW2 casing running tool into top of casing hanger running tool. RIH on drillpipe and landed 473mm (18-5/8") casing hanger in 762mm (30") sliplock housing with 473mm casing shoe set at 633m.
9:30	1.00	C23	CLR	P	Backed out casing hanger running tool. Retrieved running tools to rig floor and racked back DW2 casing running tool. Laid out casing hanger running tool. Laid out casing handling equipment. Pressure tested hanger body seals to 3.5 / 13.8MPa (500 / 2000psi) for 5 / 15 minutes.
10:30	3.50	C23	CSR	P	RIH with 20 stands 140mm drillpipe as cementing stinger. Made up hanger running tool / casing running tool on top of DP stinger and RIH. Picked up pups/side entry sub and made up above casing running tool. Landed hanger running tool onto wellhead and made up to previously landed casing hanger (bottom of cementing stinger at 610m).
14:00	1.00	C23	CLC	P	Made up cement lines to side entry sub at rig floor. Held TBT. Pumped 9.6m3 (60bbls) seawater ahead with cement unit. Tested lines to 20.7MPa (3000psi).
15:00	3.00	C23	CLC	P	Cemented 473mm (18-5/8") casing as follows : Lead : 56T (1310sx) class G with 65.6m3 (410bbls) econolite mix fluid to give 83m3 (520bbls) of 1.50SG slurry. Tail : 47T (1095sx) class G with 22m3 (138bbls) mix fluid to give 37m3 (230bbls) of 1.90SG slurry. Displaced cement with 9.6m3 (60bbls) seawater. Bled off. Floats held. Note : Cement returns observed at wellhead after pumping 4.5m3 (28bbls) of tail slurry => total of approx 42m3 (260bbls) cement returns at surface by the end of displacement (Acceptance Criteria #4 satisfied). Top of 473mm (18-5/8") casing hanger measured at 59mm above top of sliplock housing - Acceptance Criteria #3 satisfied.
18:00	0.50	C23	CSR	P	Backed casing hanger running tool out at wellhead. Picked up cementing string 10m. Circulated string clean with 32m3 (200bbls) seawater.
18:30	2.00	C23	CSR	P	Laid out side entry sub and pups. Pulled hanger running tool / casing running tool to RT and laid out.
20:30	2.00	C23	CSR	P	POOH with cementing stinger. Cleared floor.
22:30	1.50	C36	BPR	P	Installed platform main deck hatch cover and lowered compact housing onto deck. RIH compact housing running tool on DP stand, made up into compact housing and picked up housing.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	30.000	219.00		Casing	17.690

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 5 **Report Date: 28/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SPUD MUD	1060	11.00	48.000	40.00	

CASING

Last Casing: 30.000 in @ 219.00 m	Next Casing: 9.625 in @ 2,278.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	1.00	2.00
DSLTI		Stop/Start Cards	7.00	30.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

Oxygen and Accetyene Bottles were transported incorrectly in open tops.

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	5
SPERRY SUN	4	Keppel Prince	10
TECHNIP	2	MAERSK	16
OMS	37	GYRO	2
HALCO	2	_Others	6
WEATHERFORD	2	BHDF	4
		Total POB :	94

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
GEL, FRESH	MT	6.00	30.00	BARITE BULK	MT		147.00
BRINE	bbls	232.00	1,025.00	CEMENT	MT	104.00	96.00
BASE OIL	m3		138.00	HELI FUEL	Ltrs		8,120.00
CEMENT HTB	MT		0.00	WATER, DRILLING	MT		340.00
DIESEL	MT	4.00	194.00	WATER, POTABLE	MT	27.00	378.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Portland		
Invincible Tide	Standby at rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							

REMARKS

- No accidents over past 24hrs.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 6 **Report Date: 29/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	5.58	MD (m):	638.00	Day WSM:	Dwayne Rota
DFS:	5.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	637.00	Rig OIM:	Lars Lovenholdt
Progress Days:	5.08	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 9,320,805.00 ($)

Ops 00:00 to 06:00 : Make up and RIH with 311mm (12-1/4") Rotary Steerable drilling assembly. Tested MWD tools - OK.

Ops Summary : Landed wellhead. Ran HP riser, BOP, LP riser and diverter system. Tested 473mm (18-5/8") casing. Ran 340mm (13-3/8") dummy hanger. Ran wear bushing. Laid down 583mm (23") BHA. Picked up 9600 series Geolpilot tool and made up 311mm (12-1/4") PDC bit.

Ops Look Ahead : Continue RIH. Tag cement. Displace well to SBM. Drill cement and 473mm (18-5/8") casing shoe. Drill new formation to 641m. Perform FIT to 2.0 SG. Drill 311mm (12-1/4") hole section.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.00	C23	BPR	P	Land wellhead, release running tool, pull to surface and L/O running tool
1:00	1.50	C23	BPR	P	P/U HP riser, lower to top deck of platform. Cameron test 'P' seals to 20.7MPa (3000psi). Acceptance criteria #8 met - "Compact spool pressure integrity".
2:30	1.00	C23	BPR	P	Land and secure HP riser, install platform gratings
3:30	2.00	C23	BPR	P	Lift, transport and land BOP's on HP riser and secure same.
5:30	1.50	C23	BPR	P	P/U, run and land low pressure riser to BOP.
7:00	2.00	C23	BPR	P	P/U and land diverter, pressure Koomey and diverter system
9:00	0.50	C23	BPR	P	Fill riser and BOP with seawater. Check for leaks.
9:30	0.50	C23	PSI	P	Clear drillfloor of BOP and diverter handling equipment.
10:00	2.00	C23	BPR	P	M/U 340mm (13-3/8") dummy hanger. Run and land. M/U wear bushing and land same.
12:00	10.50	D12	DRT	P	L/O 584mm (23") BHA and excess drill collars and HWDP from derrick. Offline pressure tested 473mm (18-5/8") casing and connector to 14.5 MPa (2100psi) against BOP shear rams 1hr - OK. Acceptance criteria #9 met - "18-5/8" Casing Integrity"
22:30	0.25	D12	SAF	P	Held JSA for picking up rotary steerable assy.
22:45	1.25	D12	DRT	P	Commenced picking up 311mm (12.25") Geopilot BHA as per Sperry instructions.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SPUD MUD	1250	49.00	22.000	14.00	

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 6 **Report Date: 29/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports		2.00
DSLTI		Stop/Start Cards	18.00	48.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	0	SPERRY SUN	5
Keppel Prince	10	TECHNIP	2
MAERSK	16	OMS	38
HALCO	2	_Others	1
BHDF	7	GEOSERVICES	6
		Total POB :	95

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
HELI FUEL	Ltrs	728.00	7,392.00	BARITE BULK	MT	0.00	147.00
CEMENT HTB	MT	0.00	0.00	DIESEL	MT	4.00	190.00
CEMENT	MT	0.00	96.00	GEL, FRESH	MT	0.00	30.00
BRINE	bbls	957.00	68.00	WATER, DRILLING	MT	11.00	329.00
BASE OIL	m3	10.00	128.00	WATER, POTABLE	MT	27.00	391.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Portland		
Invincible Tide	Standby at rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							

REMARKS

- No accidents or incidents over past 24hrs.

- SCR system fully operational for 12-1/4" section plus spare unit is in country.

BHA : 12-1/4" bit, 12-1/8" Geopilot, 12-1/8" NM stab, 8" NM flex Collar, 8" RLL/DGR/EWR/PWD/HCIM, 8" Feed through Stabiliser, 8" hangoff collar w/P4M pulser, 8" Non-Mag drill collar, 8" float sub w/ ported float, 4 x 8-1/4" spiral DC's, 8" jars, 2 x 8-1/4" DC's, WEL X/O (otway 62), 6 x 5-1/2" HWDP.

Bit : 12-1/4" Security/DBS FMF3563Z, S/N 10795301.

Crossover rotating hours : Wel otwy-62 - 32.8 hrs.
Jars rotating hrs (s/n DACCH 03788) : 32.8 hrs.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 7 **Report Date: 30/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	6.58	MD (m):	734.00	Day WSM:	Dwayne Rota
DFS:	6.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	732.23	Rig OIM:	Lars Lovenholdt
Progress Days:	5.77	Progress (m):	96.00	RT-SL (m):	50.50
AFE Cost:	36,351,054.00 ($)				
Cumulative Total:	9,567,573.00 ($)				

Ops 00:00 to 06:00 : Drilled 311mm (12-1/4") hole from 734m to 941m. Drilling parameters: WOB 5-7T (10-15 klbs), RPM 175, Flow 4.54 m3/min (1200 GPM). Took directional surveys at each connection.

Ops Summary : Continued P/U and RIH with 311mm (12-1/4") BHA to 618m. Pressure tested surface well control equipment. Drilled cement, casing shoe, rathole and 3m new formation to 641m. Performed FIT to 2.0SG EMW. Drilled 311mm (12-1/4") hole from 641m to 734m.

Ops Look Ahead : Continue to drill 311mm (12-1/4") hole to section TD as per directional plan.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.50	D12	DRT	P	Continued P/U 311mm (12-1/4") BHA and RIH as per Sperry Instructions.
1:30	0.50	D12	DRT	P	Uploaded and tested MWD tools - OK.
2:00	3.00	D12	DRT	P	Continued P/U BHA and RIH to 128m. Tested MWD with 3 m3/min (800 GPM) 6 MPa (870psi). Continued RIH BHA to 155m.
5:00	0.25	D12	SAF	P	Held Tool Box Talk re-installing PS21 slips.
5:15	4.25	D12	DRT	P	Picked up 39 joints 140mm (5-1/2") drillpipe from deck, and RIH to 531m.
9:30	0.50	D12	DRT	P	Continued RIH to 618m.
10:00	4.50	D12	PRE	P	Rigged up testing assembly. Pressure tested surface equipment (2x stab-in FOSV). Tested IBOP's, Kelly Hose and Geopilot return lines, low press 3.45 MPa (500psi) / 5 mins; high press 34.5 MPa (5000psi) / 10 mins. Perform draw-down test on BOP. Rigged down surface lines and valves.
14:30	0.50	D12	SAF	P	Held Tool box talk re- displacing well to SBM.
15:00	1.00	D12	PCD	P	Displaced well to SBM at 4.54 m3/min (1200 gpm) and 40 rpm using 7.95 m3 (50bbl) high viscosity SBM spacer pill.
16:00	2.00	D12	DCP	P	Drilled out cement from 628m, and drilled 473mm (18-5/8") shoe at 634m. Drilled rat hole cement to 638m.
18:00	0.50	D12	DRS	P	Drilled 311mm (12-1/4") hole from 638m to 641m.
18:30	1.50	D12	FST	P	Spaced out and lined-up to perform FIT. Shut-in well on upper pipe rams, opened kill line, and pumped in through kill line and standpipe simultaneously. Performed FIT to 2.0 SG EMW using 1.25 SG mud and 4.65 MPa (675psi), in 0.04 m3 (0.25 bbl) stages. Allowed final pressure to stabilise for 11 mins. Bled off back to cement unit. Acceptance criteria #10 met - "18-5/8" Shoe Integrity".
20:00	4.00	D12	DRS	P	Drilled 311mm (12-1/4") hole from 641m to 734m. Maintained 80 RPM until Geopilot tool and stabiliser were in open hole. Staged up RPM to 175. Maintained flowrate at 4.54m3/min (1200 GPM). Drilling parameters : 4.54m3/min (1200gpm), 19.7MPa (2860psi) 175 RPM, 5 - 7T (10 - 15 klb) WOB, 570 daN.m (4.2kft-lb) torque. Rotating weight 77T (170klb), pickup 77T (170klb), slackoff 77T (170klb).

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	734.00	18.625	638.00		Open Hole	

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	38.00	19.000	8.00	

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 7 **Report Date: 30/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports		2.00
DSLTI		Stop/Start Cards	3.00	51.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	7	SPERRY SUN	5
Keppel Prince	10	TECHNIP	2
MAERSK	16	OMS	38
HALCO	2	BHDF	7
		Total POB :	93

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
HELI FUEL	Ltrs	237.00	7,155.00	WATER, DRILLING	MT	17.00	312.00
BRINE	bbls		1,025.00	DIESEL	MT		183.00
WATER, POTABLE	MT	30.00	405.00	GEL, FRESH	MT		30.00
BARITE BULK	MT		147.00	CEMENT HTB	MT		0.00
CEMENT	MT		96.00	BASE OIL	m3		128.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	At rig	30/05/2006	
Invincible Tide	En Route to Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							13.00

REMARKS

No accidents or incidents over past 24hrs.

BHA : 12-1/4" bit, 12-1/8" Geopilot, 12-1/8" NM stab, 8" NM flex Collar, 8" RLL/DGR/EWR/PWD/HCIM, 8" Feed through Stabiliser, 8" hangoff collar w/P4M pulser, 8" Non-Mag drill collar, 8" float sub w/ ported float, 4 x 8-1/4" spiral DC's, 8" jars, 2 x 8-1/4" DC's, WEL X/O (otway 62), 6 x 5-1/2" HWDP.

Bit : 12-1/4" Security/DBS FMF3563Z, S/N 10795301.

Daily bit data : 96m, 4.5 IADC hrs, 4.46hrs on bottom, 6.14hrs circulating, 21.5m/hr avg on bottom ROP. 21.3m/hr IADC ROP.

Crossover rotating hours : Wel otwy-62 - 37.3 hrs.
Jars rotating hrs (s/n DACCH 03788) : 37.3 hrs.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 8 **Report Date: 31/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	7.58	MD (m):	1,382.00	Day WSM:	Dwayne Rota
DFS:	7.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	1,377.20	Rig OIM:	George Clark
Progress Days:	7.62	Progress (m):	648.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 9,843,423.00 ($)

Ops 00:00 to 06:00 : Drilled 311mm (12-1/4") hole from 1382m to 1544m.

Ops Summary : Drilled 311mm (12-1/4") hole from 734m to 1168m. Pump #2 down. Raised permit and replaced liner on pump #2. Continued drilling 311mm (12-1/4") hole from 1168m to 1382m.

Ops Look Ahead : Continue to drill 311mm (12-1/4") hole to section TD as per directional plan.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	12.00	D12	DRS	P	Drilled 311mm (12-1/4") hole from 734m to 1168m. Drilling parameters : 4.0 - 4.54m3/min (1055 - 1200gpm), 17.4 - 21.67MPa (2530 - 3140psi) 175 RPM, 5 - 12T (10 - 25 klb) WOB, 574 daN.m (4.23kft-lb) torque. Rotating weight 95T (210klb), pickup 97T (213klb), slackoff 93T (206klb).
12:00	3.00	D12	REP	D	Pump #2 down. Insufficient flow rate available from only 1 pump to continue drilling. Changed out liner and swab. Pump #3 still out of service with washed out pressure relief line.
15:00	9.00	D12	DRS	P	Drilled 311mm (12-1/4") hole from 1168m to 1382m. Encountered a number of thin hard stringers. Reduced RPM and increased WOB accordingly. Drilling parameters : 4.0 - 4.54m3/min (1055 - 1200gpm), 17.4 - 21.67MPa (2530 - 3140psi) 80 - 175 RPM, 5 - 12T (10 - 25 klb) WOB, 574 daN.m (4.23kft-lb) ave torque. Rotating weight 101T (222klb), pickup 102T (225klb), slackoff 100T (220klb).

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	1,382.00	18.625	638.00		Open Hole	

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	46.00	27.000	15.00	

CASING

Last Casing: 18.625 in @ 638.00 m	Next Casing: 9.625 in @ 2,278.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 8 **Report Date: 31/05/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	0.00	51.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	7	SPERRY SUN	5
Keppel Prince	9	TECHNIP	2
MAERSK	15	OMS	39
HALCO	2	BHDF	7
		Total POB :	92

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
CEMENT HTB	MT		0.00	DIESEL	MT		173.00
WATER, DRILLING	MT	28.00	284.00	GEL, FRESH	MT		30.00
BRINE	bbls		1,025.00	HELI FUEL	Ltrs		6,609.00
BARITE BULK	MT	14.00	133.00	BASE OIL	m3	29.00	99.00
WATER, POTABLE	MT	17.00	388.00	CEMENT	MT		96.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	At rig	30/05/2006	
Invincible Tide	En Route to Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							13.00

REMARKS

No accidents or incidents over past 24hrs.

BHA : 12-1/4" bit, 12-1/8" Geopilot, 12-1/8" NM stab, 8" NM flex Collar, 8" RLL/DGR/EWR/PWD/HCIM, 8" Feed through Stabiliser, 8" hangoff collar w/P4M pulser, 8" Non-Mag drill collar, 8" float sub w/ ported float, 4 x 8-1/4" spiral DC's, 8" jars, 2 x 8-1/4" DC's, WEL X/O (otway 62), 6 x 5-1/2" HWDP.

Bit : 12-1/4" Security/DBS FMF3563Z, S/N 10795301.

Daily bit data : 648m, 21 IADC hrs, 15.98 hrs on bottom, 19.99 hrs circulating, 40.55 m/hr avg on bottom ROP. 30.85 m/hr IADC ROP.
Total Bit data : 744m, 25.5 IACD hrs, 20.44 hrs on bottom, 26.13 hrs circulating, 36.4 m/hr ave on bottom ROP, 29.2 m/hr IADC ROP.

Crossover rotating hours : Wel otwy-62 - 53.3 hrs.
Jars rotating hrs (s/n DACCH 03788) : 53.3 hrs.

Metal Recovery from Ditch Magnet:

00:00 - 12:00 hrs	666 gms	113 krevs
12:00 - 24:00 hrs	1505 gms	62 krevs

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 9 **Report Date: 1/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	8.58	MD (m):	1,832.00	Day WSM:	Dwayne Rota
DFS:	8.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	1,818.11	Rig OIM:	George Clark
Progress Days:	12.75	Progress (m):	450.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 10,284,845.00 ($)

Ops 00:00 to 06:00 : Drilled 311mm (12-1/4") hole from 1832m to 1918m.

Ops Summary : Drilled 311mm (12-1/4") hole from 1382m to 1570m. Pump #2 down - washed wear plate. Raised permit and worked on pump #2. Changed pressure relief system from pump #2 to #1. Continued drilling 311mm (12-1/4") hole from 1570m to 1832m.

Ops Look Ahead : Continue to drill 311mm (12-1/4") hole to section TD as per directional plan.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	7.00	D12	DRS	P	Drilled 311mm (12-1/4") hole from 1382m to 1570m. Drilling parameters : 3.85m3/min (1015gpm), 18.4MPa (2670psi) 150 - 185 RPM, 6.8 - 12T (15 - 25 klb) WOB, 858 daN.m (6.36kft-lb) torque. Rotating weight 102T (224klb), pickup 107T (235klb), slackoff 103T (226klb).
7:00	5.50	D12	REP	D	Pump #2 down with washed-out wear plate. Insufficient flow rate available from only 1 pump to continue drilling. Attempted to change out wear plate and swab, without success. Removed pressure relief line from pump #2, and installed same on pump #1. Pump #1 now back in service.
12:30	11.50	D12	DRS	P	Drilled 311mm (12-1/4") hole from 1570m to 1832m. Continued to remove wear plate and swab from pump #2 offline. Drilling parameters : 3.85m3/min (1015gpm), 18.4MPa (2670psi) 150 RPM, 6.8 - 12T (15 - 25 klb) WOB, 858 daN.m (6.36kft-lb) torque. Rotating weight 116T (255klb), pickup 118T (260klb), slackoff 114T (250klb).

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	1,832.00	18.625	638.00		Open Hole	12.250

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1260	43.00	29.000	16.00	

CASING

Last Casing: 18.625 in @ 638.00 m | Next Casing: 9.625 in @ 2,278.00 m | Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 9 **Report Date: 1/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	4.00	63.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	7	SPERRY SUN	5
Keppel Prince	9	TECHNIP	2
MAERSK	15	OMS	39
HALCO	2	BHDF	7
		Total POB :	92

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
CEMENT HTB	MT		0.00	HELI FUEL	Ltrs		5,800.00
GEL, FRESH	MT		30.00	WATER, POTABLE	MT		401.00
WATER, DRILLING	MT	16.00	268.00	BARITE BULK	MT		133.00
BASE OIL	m3	19.00	80.00	BRINE	bbls		1,335.00
CEMENT	MT		167.00	DIESEL	MT		280.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	At rig	30/05/2006	
Invincible Tide	En Route to Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							13.00

REMARKS

No accidents or incidents over past 24hrs.

BHA : 12-1/4" bit, 12-1/8" Geopilot, 12-1/8" NM stab, 8" NM flex Collar, 8" RLL/DGR/EWR/PWD/HCIM, 8" Feed through Stabiliser, 8" hangoff collar w/P4M pulser, 8" Non-Mag drill collar, 8" float sub w/ ported float, 4 x 8-1/4" spiral DC's, 8" jars, 2 x 8-1/4" DC's, WEL X/O (otway 62), 6 x 5-1/2" HWDP.

Bit : 12-1/4" Security/DBS FMF3563Z, S/N 10795301.

Daily bit data : 450m, 18.5 IADC hrs, 14.76 hrs on bottom, 21.5 hrs circulating, 30.48 m/hr avg on bottom ROP. 24.3 m/hr IADC ROP.
Total Bit data : 1194m, 44 IACD hrs, 34.76 hrs on bottom, 47.63 hrs circulating, 34.34 m/hr ave on bottom ROP, 27.1 m/hr IADC ROP.

Crossover rotating hours : Wel otwy-62 - 70.8 hrs.
Jars rotating hrs (s/n DACCH 03788) : 70.8 hrs.

Metal Recovery from Ditch Magnet:

00:00 - 12:00 hrs	280 gms	53 krevs
12:00 - 24:00 hrs	152 gms	72 krevs

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 10 **Report Date: 2/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	9.58	MD (m):	2,203.00	Day WSM:	Dwayne Rota
DFS:	9.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,075.70	Rig OIM:	George Clark
Progress Days:	12.75	Progress (m):	371.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 10,640,441.00 ($)

Ops 00:00 to 06:00 : Continued drilling 311mm (12-1/4") hole from 2203m to 2296m by 06:00.
Drilled a further 3m to TD at 2299m.

Ops Summary : Drilled 311mm (12-1/4") hole from 1832m to 1862m. Changed orifice size on Geospan tool. Circulated with 3 pumps, generator #1 tripped out 3 times during this operation. Continued drilling 311mm (12-1/4") hole from 1862m to 2203m.

Ops Look Ahead : Continue to drill 311mm (12-1/4") hole to section TD as per directional plan. Circulate hole clean. POOH. Rig up and run 244mm (9-5/8") casing.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	2.50	D12	DRS	P	Drilled 311mm (12-1/4") hole from 1832m to 1862m. Drilling parameters : 3.85m3/min (1015gpm), 18.4MPa (2670psi) 150 RPM, 6.8 - 12T (15 - 25 klb) WOB, 540 - 1080daN.m (4 - 8kft-lb) torque. Rotating weight 111T (245klb), pickup 119T (263klb), slackoff 114T (251klb).
2:30	2.00	D12	REP	D	Changed out orifice on Geospan Tool, as signal had become weak with increasing depth. Attempted to circulate with 3 pumps, but generator #1 tripped out 3 times while attempting to establish new MWD parameters. Breaker would then no longer re-set.
4:30	19.50	D12	DRS	P	Drilled 311mm (12-1/4") hole from 1862m to 2203m. Drilling parameters : 4.37m3/min (1150gpm), 24.8MPa (3600psi) 150 RPM, 7.3 - 12T (16 - 25 klb) WOB, 533 - 1871 daN.m (3.95 - 13.86kft-lb) torque. Rotating weight 110T (243klb), pickup 123T (270klb), slackoff 111T (245klb).

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,203.00	18.625	638.00		Open Hole	12.250

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	38.00	29.000	14.00	

CASING

Last Casing: 18.625 in @ 638.00 m	Next Casing: 9.625 in @ 2,294.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 10 **Report Date: 2/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	5.00	68.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	6	SPERRY SUN	5
Keppel Prince	8	TECHNIP	1
MAERSK	15	OMS	40
HALCO	2	_Others	1
WEATHERFORD	5	BHDF	7
		Total POB :	96

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BASE OIL	m3	8.00	72.00	WATER, DRILLING	MT	34.00	276.00
GEL, FRESH	MT		30.00	CEMENT	MT		167.00
BRINE	bbls		1,335.00	DIESEL	MT		265.00
BARITE BULK	MT	13.00	120.00	CEMENT HTB	MT		0.00
HELI FUEL	Ltrs	206.00	5,594.00	WATER, POTABLE	MT	70.00	373.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							12.30

REMARKS

No accidents or incidents over past 24hrs.

BHA : 12-1/4" bit, 12-1/8" Geopilot, 12-1/8" NM stab, 8" NM flex Collar, 8" RLL/DGR/EWR/PWD/HCIM, 8" Feed through Stabiliser, 8" hangoff collar w/P4M pulser, 8" Non-Mag drill collar, 8" float sub w/ ported float, 4 x 8-1/4" spiral DC's, 8" jars, 2 x 8-1/4" DC's, WEL X/O (otway 62), 6 x 5-1/2" HWDP.

Bit : 12-1/4" Security/DBS FMF3563Z, S/N 10795301.

Daily bit data : 371m, 22 IADC hrs, 16.48 hrs on bottom, 20.91 hrs circulating, 20.69 m/hr avg on bottom ROP. 15.5 m/hr IADC ROP.
Total Bit data : 1565m, 68 IACD hrs, 50.95 hrs on bottom, 68.54 hrs circulating, 30.71 m/hr ave on bottom ROP, 23.0 m/hr IADC ROP.

Crossover rotating hours : Wel otwy-62: 89.5 hrs.
Jars rotating hrs (s/n DACCH 03788) : 89.5 hrs.

Metal Recovery from Ditch Magnet:
00:00 - 12:00 hrs 112 gms 56 krevs
12:00 - 24:00 hrs 324 gms 80 krevs

Maximum Total Gas: 0.43%
Average Total Gas: 0.23%

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 11 **Report Date: 3/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	10.58	MD (m):	2,299.00	Day WSM:	Dwayne Rota
DFS:	10.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,106.00	Rig OIM:	George Clark
Progress Days:	13.45	Progress (m):	96.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 10,975,342.00 ($)

Ops 00:00 to 06:00 : Continued laying down BHA. Rigged up Weatherford tong and FMS. Torqued pup joints to casing hanger assy. Made up 244mm (9-5/8") shoetrack and tested floats. Rigged up Weatherford 500T air operated elevators. Made up TAM packer.

Ops Summary : Drilled 311mm (12-1/4") hole to section TD at 2299m. Circulated and cleaned hole. POH and laid down directional BHA.

Ops Look Ahead : Run and cement 244mm (9-5/8") casing. Run seal assembly.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	7.00	D12	DRS	P	Drilled 311mm (12-1/4") hole from 2203m to 2299m. Gas reading increased to 4.79%. Picked up to circulate for samples. Drilling parameters : 4.37m3/min (1150gpm), 25MPa (3625psi) 139 RPM, 9 - 13.6T (20 - 30 klb) WOB, 1282 - 1795 daN.m (9.8 - 13.3kft-lb) torque. Rotating weight 109T (240klb), pickup 123T (270klb), slackoff 107T (235klb).
7:00	1.50	D12	PCD	P	Circulated bottoms up for samples at 4.37 m3/min (1150 GPM) with 150 RPM.
8:30	2.00	D12	PCD	P	Circulated 3x bottoms up at 4.37 m3/min (1150 GPM), while rotating at 150 rpm. Pulled out slowly from 2296m to 2210m.
10:30	1.00	D12	DRT	P	Flow checked well - static. POH 6 stands wet, from 2210m - 2025m. Hole taking correct fluid. Minimal drag, 1-2T (2 - 4.5 klbs) overpull.
11:30	0.50	D12	PCD	P	Flow checked - static. Pumped slug.
12:00	6.50	D12	DRT	P	POH from 2025m to 473mm (18-5/8") shoe at 633m. Worked through tight spots, 1726m, 1721m, 1713m, 1405m, 1395m, 1390m, 1364m, 1360m, 1325m, 1320m, & 1278m. Staged up to maximum overpull of 23T (50 klbs). Held trip drill at casing shoe - 30 seconds.
18:30	4.50	D12	DRT	P	Flow checked at 473mm (18-5/8") casing shoe - static. Continued POH to 184m. Flow checked prior to pulling BHA through the BOP. Continued POH. Broke off bit and laid out same. (1-1-WT-G-X-0-ER-TD).
23:00	1.00	D12	DRT	P	Broke down and laid out directional BHA.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Open Hole	12.250

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	41.00	26.000	14.00	

CASING

Last Casing: 18.625 in @ 638.00 m	Next Casing: 9.625 in @ 2,294.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 11 **Report Date: 3/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	12.00	80.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SPERRY SUN	5	Keppel Prince	8
TECHNIP	1	MAERSK	16
OMS	39	HALCO	2
_Others	1	WEATHERFORD	5
BHDF	7	GEOSERVICES	4
		Total POB :	96

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
CEMENT HTB	MT		0.00	WATER, POTABLE	MT		346.00
GEL, FRESH	MT		30.00	BASE OIL	m3		72.00
DIESEL	MT	15.00	250.00	BRINE	bbls		1,335.00
WATER, DRILLING	MT	36.00	282.00	CEMENT	MT		167.00
BARITE BULK	MT	12.00	108.00	HELI FUEL	Ltrs	236.00	5,358.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							11.80

REMARKS

No accidents or incidents over past 24hrs.

Bit : 12-1/4" Security/DBS FMF3563Z, S/N 10795301. Graded 1-1-WT-G-X-0-ER-TD.

Daily bit data : 95m, 7 IADC hrs, 4.28 hrs on bottom, 9.42 hrs circulating, 22.19 m/hr avg on bottom ROP. 13.57 m/hr IADC ROP.
Total Bit data : 1660m, 75 IACD hrs, 55.23 hrs on bottom, 77.96 hrs circulating, 30.06 m/hr ave on bottom ROP, 22.13 m/hr IADC ROP.

Crossover rotating hours : Wel otwy-62: 97.9 hrs.
Jars rotating hrs (s/n DACCH 03788) : 97.9 hrs.

Maximum Total Gas: 4.79%
Average Total Gas: 0.60%

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 12 **Report Date: 4/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	11.58	MD (m):	2,299.00	Day WSM:	Dwayne Rota
DFS:	11.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,106.00	Rig OIM:	George Clark
Progress Days:	13.90	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 11,524,784.00 ($)

Ops 00:00 to 06:00 : Run 244mm (9-5/8") casing from 320m to 860m.

Ops Summary : L/D BHA. Pulled wear bushing. R/U to run casing. Ran 244mm (9-5/8") shoetrack. Picked up air-op elevators. Ran casing to 151m. TAM packer problem. POH casing to check for junk inside. Re-ran 244mm (9-5/8") casing.

Ops Look Ahead : Run and land 244mm (9-5/8") casing. Circulate and cement. Run seal assembly.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.50	D12	DRT	P	Continued to lay down rotary steerable BHA.
0:30	1.00	C12	WHM	P	RIH wear bushing running tool. Pulled wear bushing.
1:30	0.50	C12	RUD	P	Installed Weatherford FMS slips and 16k casing power tong and JAM unit.
2:00	0.50	C12	WHM	P	Picked up casing hanger assembly and torqued up 2ea 244mm (9-5/8") pup joints below.
2:30	0.25	C12	SAF	P	Held toolbox talk relating to running 244mm (9-5/8") shoetrack.
2:45	1.25	C12	CLR	P	Picked up and threadlocked 244mm (9-5/8") casing shoe joint, intermediate joint and float collar joint, using 150T side door elevators and dog collar. Filled shoetrack with mud, picked up and checked floats for correct operation.
4:00	1.50	C12	RUD	P	Changed out damaged Weatherford Isis hose in derrick. Permit raised for man riding operation.
5:30	1.50	C12	RUD	P	Continued to rig up drillfloor for running casing. Changed out bails, picked up Weatherford 500T elevators and made up TAM packer to topdrive.
7:00	0.25	C12	SAF	P	Held toolbox talk with drillfloor, deck and casing crew for running casing.
7:15	2.25	C12	CLR	P	RIH with 244mm (9-5/8") casing, filing each joint with the TAM packer. Installed RA pip tag on pin end of first joint above float collar joint. (Planned depth 2254.64m).
9:30	1.50	C12	NGI	D	Investigated leak on TAM packer. Discovered check valve washed out, and stainless steel ball and 3ea pieces of steel missing from check valve body.
11:00	0.25	C12	SAF	D	Held toolbox talk regarding retrieving junk from casing.
11:15	0.75	C12	RUD	D	Re-installed TAM packer without the check valve.
12:00	0.25	C12	SAF	D	Held toolbox talk with new crew for POH with casing.
12:15	3.25	C12	CLR	D	POH 244mm (9-5/8") casing from 151m to 38m. Laid out on main deck.
15:30	1.50	C12	CLR	D	Cut casing with oxy acetelene and laid out shoetrack to deck.
17:00	0.50	C12	PSI	D	Cleared excess equipment and cleaned drillfloor.
17:30	0.25	C12	SAF	D	Held toolbox talk for running casing.
17:45	1.75	C12	CLR	D	Picked up and threadlocked 244mm (9-5/8") shoe joint, intermediate joint and float collar joint. Filled with mud, picked up and checked for correct float operation.
19:30	0.50	C12	NGI	D	PDM malfunctioned - unable to pick-up casing joints from deck. Reset operational sequence.
20:00	1.25	C12	CLR	D	Ran 244mm (9-5/8") casing to 151m. Installed RA pip tag on pin end of first joint above float collar joint. (Planned depth 2254.60m).
21:15	2.75	C12	CLR	P	Ran 244mm (9-5/8") casing from 151m to 320m. Fill casing every 5 joints using fill-up hose.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Open Hole	12.250

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 12 **Report Date: 4/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1260	41.00	26.000	14.00	

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	12.00	92.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	7
SPERRY SUN	6	Keppel Prince	8
TECHNIP	1	MAERSK	16
OMS	39	HALCO	2
_Others	1	WEATHERFORD	5
BHDF	5	GEOSERVICES	4
		Total POB :	96

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
GEL, FRESH	MT		44.00	CEMENT HTB	MT		0.00
BASE OIL	m3		72.00	DIESEL	MT		242.00
WATER, POTABLE	MT	27.00	319.00	BARITE BULK	MT		108.00
WATER, DRILLING	MT	40.00	283.00	HELI FUEL	Ltrs	20.00	5,338.00
CEMENT	MT		167.00	BRINE	bbls		1,335.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.13							11.80

REMARKS

No accidents or incidents for this 24 hour period.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 13 **Report Date: 5/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	12.58	MD (m):	2,299.00	Day WSM:	Dwayne Rota
DFS:	12.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,106.00	Rig OIM:	George Clark
Progress Days:	14.50	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 11,858,001.00 ($)

Ops 00:00 to 06:00 : Pumped and displaced cement. Bumped plug. Inflow tested floats.

Ops Summary : Ran and landed 244mm (9-5/8") casing. Circulated bottoms up. Pumped tuned spacer.

Ops Look Ahead : WOC. Inflow test floats. Run seal assembly. Install wearbushing. Pick up and rack back drillpipe. Make up 216mm (8 1/2")BHA. RIH.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	20.50	C12	CLR	P	Ran 244mm (9 5/8") casing from 320m to 2259m. (Maximum run rate 11jnts/hr overall average 7.5jnts/hr) Filled casing with SBM every 5 jnts. Broke circulation at 632m 473mm (18 5/8") casing shoe and 1250m - 1.3m3/min (8bbls/min) 0.93MPa (135psi) Centralised conductor due to casing couplings hanging up on dummy 340mm (13 3/8") casing hanger. Total 2.5m3 (16bbls) losses recorded during casing installation.
20:30	1.25	C12	CLR	P	Made up 273mm (10 3/4") casing hanger assembly, 2 x landing joints. Recorded pick up and slack off weights: Up 172kkg (380klbs), Down 145kkg (320klbs)
21:45	0.25	C12	CLR	P	Inflated TAM packer prior to running in with 2nd landing joint. Broke circulation 0.64m3/min (4 bbls/min). RIH and landed casing hanger. (Casing shoe at 2293.4m) Recorded 18mm subsidence at wellhead with casing landed.
22:00	1.50	C12	PCD	P	Circulated 1 x bottoms up at cementing rate, 1.3m3/min (8bbls/min) 2.01MPa (300psi) No losses recorded during circulation.
23:30	0.50	C12	PCD	P	Pumped 9.5m3 (60bbls) tuned spacer. Displaced surface lines with SBM. Released TAM packer.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1260	41.00	26.000	14.00	

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 13 **Report Date: 5/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports		2.00
DSLTI		Stop/Start Cards	3.00	95.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	7
SPERRY SUN	6	Keppel Prince	8
TECHNIP	1	MAERSK	16
OMS	39	HALCO	2
_Others	1	WEATHERFORD	5
BHDF	5	GEOSERVICES	4
		Total POB :	96

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BARITE BULK	MT	6.00	102.00	BASE OIL	m3	0.00	72.00
WATER, DRILLING	MT	36.00	279.00	CEMENT	MT	0.00	167.00
CEMENT HTB	MT	0.00	0.00	HELI FUEL	Ltrs	20.00	5,318.00
WATER, POTABLE	MT	27.00	292.00	BRINE	bbls	0.00	1,335.00
DIESEL	MT	8.00	234.00	GEL, FRESH	MT	0.00	44.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30							

REMARKS

- No accidents or incidents over past 24hr period

- Serviced drawworks off critical path.
- Plug bumped after 3.25bbls over theoretical volume pumped.

- Long term weather forecast: Significant wave height increasing to 3m late Thursday.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 14 **Report Date: 6/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	13.58	MD (m):	2,299.00	Day WSM:	Dwayne Rota
DFS:	13.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,106.00	Rig OIM:	George Clark
Progress Days:	14.88	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 12,241,573.00 ($)

Ops 00:00 to 06:00 : Ran and attempted to test pack off seal assembly (#4) - test failed. Pulled pack off seal assembly.

Ops Summary : Inflow tested floats. Rigged down cement head. Jetted wellhead and riser. Ran and attempted to test pack off seal assembly (#1) - test failed. Pulled and attempted to set and test pack off seal assembly (#2 & #3) - test failed.

Ops Look Ahead : Pull BOP's. Install and test pack off seal assembly. Install BOP's. Install wearbushing. Pick up and rack back drillpipe. Make up 216mm (8 1/2")BHA. RIH.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.75	C12	CLC	P	Installed bottom wiper plug in top landing joint. Rigged up cement head, chicksans and flexible lines from cement line manifold.
0:45	0.25	C12	SAF	P	Held Toolbox Talk in preparation for pumping cement.
1:00	0.25	C12	PRE	P	Pumped 0.8m3 (5bbls) drillwater spacer. Pressure tested cement lines 20.7MPa (3000psi) 5mins OK.
1:15	1.00	C12	CLC	P	Pumped 2.4m3 (15bbl) drillwater spacer. Mixed and pumped 10.5m3 (66bbls) 1.5sg (12.5ppg) lead cement slurry at 0.8m3/min (5bpm). Mixed and pumped 11.8m3 (74bbls) 1.9sg (15.8ppg) tail cement slurry at 0.8m3/min (5bpm).
2:15	1.50	C12	CLC	P	Released top dart from cement head. Pumped 0.8m3 (5bbl) cement. Displaced cement with 88m3 (554bbl) SBM at 1.2m3/min (7.5bbl/min) Plug failed to bump after 0.48m3 (3bbl) over theoretical displacement volume pumped.
3:45	1.75	C12	CLC	D	Bled back 0.24m3 (1.5bbl) to inflow test floats - test failed Pumped 0.24m3 (1.5bbl) back into the casing and bled back fast to inflow test floats, monitored at rig floor - test failed. Pumped 0.28m3 (1.75bbl) 0.2MPa (30psi) pressure increase indicated plug bump. Pressured up to 6.2MPa (900psi) with 0.5m3 (2.9bbl) pumped - good test. Bled back to inflow test floats, monitored at rig floor - test failed 0.04m3/hr (0.25bbl/hr) flow back.
5:30	4.00	C12	CLC	D	Pressured back up to 3.1MPa (450psi) (0.45MPa (65psi) over hydrostatic). WOC. Note: Pressure built up to 6.9MPa (1000psi)
9:30	0.50	C12	CLC	P	Bled back to inflow test floats - test passed.
10:00	0.50	C12	CLR	P	Rigged down cement head and lines.
10:30	1.00	C12	TRP	P	Backed out casing hanger running tool, laid out landing string and running tool.
11:30	0.50	C12	PSI	P	Rigged down casing running and TAM packer equipment. Cleared rig floor.
12:00	0.50	C12	PCD	P	Rigged up 140mm (5 1/2") drillpipe handling equipment. Made up BOP jetting tool.
12:30	1.00	C12	PCD	P	Ran in hole and jetted the wellhead and riser at 1.3m3/min (8bbl/min). Pulled back and laid out the jetting tool.
13:30	1.00	C12	CLR	P	Made up pack off seal assembly. Lined up compact housing side outlet to holding tank to release hydraulic pressure. Ran in hole c/w pack off seal assembly. Tool took weight over last 2m due to hydraulic effect, slowed run in hole rate to release pressure diffrential. Landed pack off seal assembly with 4.5kdaN (10klbs) Located anti-rotational pins, left hand rotation. Energised hold down ring with 4 turns to the right. Pulled 4.5kdaN (10klbs) overpull, confirmed seal assembly latched in position.
14:30	1.00	C12	CLR	D	Lined up to pressure test between pack off seals. Unable to rig up test manifold due to mud flowing out of test port. Made up seal assembly running tool and retrieved the pack off seal assembly.
15:30	0.50	C12	CLR	D	Inspected pack off seal assembly. 1 1/2 OD seals missing, ID seals in good condition.
16:00	2.00	C12	CLR	D	Redressed pack off seal assembly. Discussed options with onshore support team.
18:00	0.75	C12	CLR	D	Hooked up wilden pump to lower compact housing outlet. Drained BOPs and riser.
18:45	1.00	C12	CLR	D	Made up BOP jetting tool. Ran in hole and jetted wellhead. Worked jetting tool over hanger neck to break up / clear debris.. Pulled out and laid out the jetting tool.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 14 **Report Date: 6/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

19:45	0.25	C12	CLR	D	Made up replacement pack off seal assembly to running tool (c/w bypass ports).
20:00	1.00	C12	CLR	D	Ran in hole, landed pack off seal assembly with 4.5kdaN (10klbs) Located anti-rotational pins, left hand rotation. Energised hold down ring with 4 turns to the right. Pulled 4.5kdaN (10klbs) overpull, confirmed seal assembly latched in position. Pressure tested between pack seals - Test failed unable to pressure up past 10MPa (1450psi). Pressure bled back to zero immediately. Released and pulled pack off seal assembly to surafce.
21:00	0.50	C12	CLR	D	Inspected seals and running tool. Scouring recorded to both OD and ID seals and outer body of the running tool due to suspected seals (junk) remaining on top of hanger neck.
21:30	1.00	C12	CLR	D	Discussed options with onshore support team (Woodside and Cameron).
22:30	1.50	C12	CLR	D	Ran in hole, landed pack off seal assembly with 4.5kdaN (10klbs) Located anti-rotational pins, left hand rotation. Energised hold down ring with 4 turns to the right. Pulled 4.5kdaN (10klbs) overpull, confirmed seal assembly latched in position. Pressure tested between pack seals - Test failed unable to pressure up past 2MPa (290psi). Pressure bled back to zero immediately. Released and pulled pack off seal assembly to surface and inspected seals. No damage to OD seals, minor damage to internal seals.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1260	40.00	30.000	14.00	

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	5.00	100.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	7
SCHLUMBERGER	3	SPERRY SUN	6
Keppel Prince	8	TECHNIP	2
MAERSK	19	OMS	39
HALCO	2	BHDF	5
		Total POB :	97

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 14 **Report Date: 6/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
GEL, FRESH	MT		44.00	BARITE BULK	MT		102.00
BRINE	bbls	0.00	1,335.00	DIESEL	MT	8.00	226.00
CEMENT HTB	MT		0.00	CEMENT	MT		143.00
WATER, POTABLE	MT	27.00	297.00	BASE OIL	m3	0.00	72.00
WATER, DRILLING	MT	6.00	273.00	HELI FUEL	Ltrs	1,538.00	3,780.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	4.00						11.40

REMARKS

- No accidents or incidents over past 24hrs.

- OMS employees held 2hr union meeting.
- Completed risk assessment and compiled a detailed SJA in preparation for lifting the BOP's.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 15 **Report Date: 7/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	14.58	MD (m):	2,299.00	Day WSM:	Dwayne Rota
DFS:	14.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,106.00	Rig OIM:	George Clark
Progress Days:	14.98	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 11,971,054.00 ($)

Ops 00:00 to 06:00 : Picked up 58 joints drillpipe and ran in hole.

Ops Summary : Ran and tested pack off seal assembly (#4) - test failed. Pulled pack off seal assembly. Nippled down BOP and HP riser. Cleaned wellhead and hanger area. Installed and tested pack off seal assembly-OK. Nippled up BOP's. Pressure tested casing.

Ops Look Ahead : Pick up remaining joints drillpipe and rack back. Make up 216mm (8 1/2")BHA. RIH. Drill out shoe. Perform FIT. Drill 216mm (8 1/2") hole.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.50	C12	CLR	D	Discussed options with Woodside and Cameron onshore support.
1:30	2.00	C12	CLR	D	Made up BOP jetting tool. Ran in hole and jetted top of casing hanger and wellhead area with SBM mud 0.8m3/min (5bbl/min). Pulled out of hole and laid out jetting tool.
3:30	1.00	C12	CLR	D	Replaced internal and external seals on pack off seal assembly. Ran in hole and landed pack off with 8 kdaN (18klbs) down. Located anti-rotational pins. Engaged hanger lock down ring with 6 turns to the right.
4:30	1.00	C12	CLR	D	Pressure tested pack off seals 3.45MPa (500psi) 5mins OK, took 3 attempts to gain pressure. Pressure tested pack off seals 34.5MPa (5000psi) 15mins OK, bled off 6.9MPa (1000psi) during initial stages of pressure test.
5:30	0.50	C12	CLR	D	Made running tool back up two turns. Pulled 8.9KdaN (20klbs) overpull, confirmed pack seal assembly locked in place. Disengaged running tool with 4 turns to the right. Pressure tested pack off seals - Test failed, unable to increase pressure past 2MPa (290psi)
6:00	1.00	C12	CLR	D	Made running tool back up and disengaged hanger lock down ring. Pulled pack off seal assembly to surface. No damage to OD seals minor damage to internal seals.
7:00	1.00	C12	BPR	D	Nippled down diverter system.
8:00	2.00	C12	BPR	D	Nippled down BOP and high pressure riser.
10:00	4.00	C12	CLR	D	Pumped out excess mud trapped in wellhead area. Cleaned debris / lost seals from hanger neck area. Inspected Wellhead seal areas and hanger neck - both scored from contact with pack off seal assembly seal retaining springs and debris. Removed score marks with emery paper and buffing tool.
14:00	1.00	C12	CLR	D	Made up redressed pack off seal assembly. Ran in hole and attempted to set. Unable to set due to excessive torque. Pulled seal assembly back to the rig floor.
15:00	1.00	C12	CLR	D	Changed out running tool and seal assembly. Ran in hole landed pack off seal assembly with 4.5kdaN (10klbs). Located anti-rotational pins with left hand rotation. Rotated 4 turns to right to engage lock down ring. Pulled 4.5kdaN (10klbs) overpull - confirmed seal assembly locked in place.
16:00	1.00	C12	CLR	P	Pressure tested between pack off seal assembly seals. 3.45MPa (500psi) - 5mins OK and 34.5MPa (5000psi) - 15mins OK. Acceptance Criteria #12 met - 9.5/8" hanger seal integrity. Released pack off seal assembly running tool. Pulled back to the rig floor and laid out running tool.
17:00	0.50	C12	TRP	P	Made up wearbushing. Ran in hole and installed wear bushing. Pulled back and racked back running tool.
17:30	1.50	C12	BPR	D	Picked up and landed the High Pressure riser. Made up fast lock connection.
19:00	2.00	C12	BPR	D	Landed BOP and made up connector. Installed diverter. Function tested BOP rams. Filled riser and BOP with SBM.
21:00	2.50	C12	PRE	P	Pressure tested BOP connector and 244mm (9 5/8") casing 24.1MPa (3500psi) 1hour - OK
23:30	0.50	C12	NGI	U	Shut down operations for union meeting.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 15 **Report Date: 7/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1260	40.00	30.000	14.00	

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	5.00	105.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	9
SCHLUMBERGER	3	SPERRY SUN	6
Keppel Prince	6	TECHNIP	2
MAERSK	19	OMS	39
HALCO	2	BHDF	5
		Total POB :	97

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
CEMENT HTB	MT	0.00	0.00	BRINE	bbls	0.00	1,335.00
WATER, DRILLING	MT	8.00	265.00	HELI FUEL	Ltrs	398.00	3,382.00
CEMENT	MT	0.00	143.00	BASE OIL	m3	0.00	72.00
WATER, POTABLE	MT	28.00	313.00	GEL, FRESH	MT	0.00	44.00
DIESEL	MT	8.00	218.00	BARITE BULK	MT	0.00	102.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	3.00	0.800	2.100				12.00

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 15			**Report Date: 7/06/2006**
Block: T/L2	**Rig: Maersk Guardian**	**Water Depth(m): 99.30**	**Start Date: 20/05/2006**

REMARKS

- No accidents or incidents over past 24hrs.

- OMS employees held union meeting.
- Dispensation for lifting the BOP's received from Maersk management.
- Reviewed Geo Tap logging requirements.
- Preparations for well test operations ongoing.

- Daily costs come to -$270,518 due to a credit of $597,000 for mud materials for the 12 1/4" section. Hence, cumulative total has decreased today.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 16 **Report Date: 8/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	15.58	MD (m):	2,299.00	Day WSM:	Shaughan Coreless
DFS:	15.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,106.00	Rig OIM:	George Clark
Progress Days:	15.49	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 12,385,059.00 ($)

Ops 00:00 to 06:00 : Drilled through cement plugs and float. Drilled shoe track, shoe and rat hole to 2299m.

Ops Summary : Picked up remaining joints of drillpipe and racked back. Make up 216mm (8 1/2") BHA. RIH. Tagged top of cement. Commenced drilling Top cement plug.

Ops Look Ahead : Drill 3m new formation to 2302m . Conduct FIT. Drill 216mm (8 1/2") hole.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.50	C12	NGI	U	Shut down operations for union meeting.
0:30	0.50	D09	TRP	D	Attempted to comence picking up 140mm (5 1/2") drillpipe. PLS failed to operate.
1:00	8.00	D09	TRP	P	Picked up and ran in hole with 102 jnts 140mm (5 1/2") drillpipe.
9:00	2.00	D09	TRP	P	Pulled out of hole and racked back 34 stands 140mm (5 1/2") drillpipe.
11:00	0.25	D09	PSI	P	Changed out BX elevators, pulled PS21 slips and installed master bushings.
11:15	0.25	D09	SAF	P	Held toolbox talk in preparation for making up 216mm (8 1/2") BHA.
11:30	5.00	D09	TRP	P	Made up and ran in hole with 216mm (8 1/2") BHA#4 to 137m.
16:30	0.50	D09	PCD	P	Broke in geopilot seals and shallow tested MWD. Calibrated drawworks.
17:00	4.50	D09	TRP	P	Ran in hole with BHA#4 from 137m to 2218m.
21:30	0.75	D09	DCP	P	Made up TDS. Washed down to 2260m 30RPM, 2.6m3/min (700GPM). Tagged top of cement at 2260m with 2.2kdaN (5klbs).
22:15	0.50	D09	DCP	P	Drilled cement from 2260m to 2266m. Tagged top cement wiper plug with 2.2 kdaN (5klbs).
22:45	1.25	D09	DCP	P	Drilled on cement plugs / float collar at 2266m varying parameters from 2.2 kdaN (5klbs) to 4.4kdaN (10klbs) 50RPM to 80RPM.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1260	40.00	30.000	14.00	

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 16 **Report Date: 8/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	6.00	111.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	7
SCHLUMBERGER	3	SPERRY SUN	6
Keppel Prince	4	TECHNIP	4
MAERSK	19	OMS	38
HALCO	2	BHDF	6
		Total POB :	96

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
WATER, POTABLE	MT	6.00	351.00	BARITE BULK	MT	0.00	102.00
DIESEL	MT	8.00	210.00	CEMENT HTB	MT	0.00	0.00
CEMENT	MT	0.00	143.00	BASE OIL	m3	0.00	75.00
BRINE	bbls	0.00	1,373.00	HELI FUEL	Ltrs	382.00	3,000.00
GEL, FRESH	MT	0.00	44.00	WATER, DRILLING	MT	56.00	209.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	1.54	0.244	0.640				

REMARKS

- No accidents or incidents over past 24hrs.

- Serviced Mud Pumps #1 & #3 Fluid ends
- Installed Burner Heads on Flare Booms
- Incorrect size crankshaft delivered for engine #5, replacement being sourced.

Bit #4: Security DBS FMF3653Z. S/N 10765114. Nozzles : 3 x 16/32", 3 x 15/32". TFA : 1.107"
Daily bit data : 0m, 0IADC hrs, 0hrs on bottom, 1.9hrs circulating, 0 on bottom krevs. 0m/hr avg on bottom ROP. 0m/hr IADC ROP.
Total bit run data : 0m, 0IADC hrs, 0hrs on bottom, 1.9hrs circulating, 0 on bottom krevs. 0m/hr avg on bottom ROP. 0m/hr IADC ROP.

BHA #4 : 8 1/2" Bit #4, 8 1/2" 7600 Series Geopilot (GP850TL121), 6 3/4" NM Flex Collar w/DM, 6 3/4" RLL w/DGR +EWR, 6 3/4" ALD +CTN, 6 3/4" GeoTap w/PWD, 6 3/4" HOC w/P4M Pulser, 1 x 6 3/4" Non-Mag Drill Collar, 6 3/4" Float Sub w/ ported float, 4 1/2" IF Pin x 5 1/2" FH Box X-over (OTWY-42), 2 x 5 1/2" HWDP, 7" Jar (21445E), 6 x 5 1/2" HWDP. = 137.02m

Crossover rotating hours : WEL OTWY-42 - 0 hrs.
Jars rotating hrs (s/n 21445E) : 0hrs.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 17 **Report Date: 9/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	16.58	MD (m):	2,530.00	Day WSM:	Shaughan Coreless
DFS:	16.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,133.00	Rig OIM:	George Clark
Progress Days:	17.91	Progress (m):	231.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 12,770,762.00 ($)

Ops 00:00 to 06:00 : Drilled 216mm (8 1/2") Hole from 2530m to 2642m (2643m, 92deg Inc, 271Az)

Ops Summary : Drilled 3m new formation to 2302m. Circulated even mud weights in and out. Conducted FIT to 2sg EMW. Drilled 216mm (8 1/2") Hole to 2530m

Ops Look Ahead : Drill 216mm (8 1/2") hole.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.75	D09	DCP	P	Drilled out cement plugs / float collar at 2266m varying parameters from 2.3T (5klbs) to 4.6T (10klbs) 50RPM to 80RPM.
0:45	1.00	D09	DCP	P	Recorded SCR's. Drilled shoe track from 2267m to 2293m.
1:45	2.75	D09	DCP	P	Drilled out shoe at 2293m. Varied parameters from 2.3T (5klbs) to 8.2T (18klbs) 50RPM to 80RPM, 2.8m3/min (750gpm).
4:30	2.00	D09	DRS	P	Drilled out rat hole to 2299m and 3m new formation from 2299m to 2302m. Worked bit through shoe until cleared of obstructions. Up weight 103T (227klbs) down weight 96T (211klbs), Torque <1.1kdaNm (8kft.lbf), 2.8m3/min (750gpm). Maximum 9T (20klbs) overpull seen at shoe.
6:30	1.00	D09	PCD	P	Pulled back inside shoe. Circulated until even mud weight in and out in preparation for FIT test - 1.25sg
7:30	1.00	D09	FST	P	Lined up cement unit to pump down both drillstring and annulus. Pressure tested lines 20.7MPa (3000psi). Conducted FIT with cement unit: 15.51MPa (2250psi) at surface with shoe at 2106mTVD and 1.25sg mud => 2.0sg EMW. Acceptance Criteria #13 met (244mm (9-5/8") shoe integrity with 2.0sg FIT)
8:30	12.50	D09	DRS	P	Drilled 216mm (8 1/2") hole from 2302m to 2518m. Drilling Prameters: 2.8m3/min (730gpm), 20.7MPa (3000psi), 170RPM, 7.5 - 9.8T (17 - 22klbs) WOB, 1.4 - 1.5kdaNm (10-11kftlbf) torque. Rotating weight 95.4T (210klbs), Pick up 116T (255klbs), Slack off 100T (220klbs)
21:00	1.50	D09	DRS	D	Inconsistent survey data recorded at 2518m (azimuth shift by 20deg over 30m). Circulated Bottoms up. Recorded additional surveys at 2497m, 2488m and 2479m. Circulated and reciprocated the drillstring. Investigated survey inconsistency with assistance from Sperry Sun worldwide support teams.
22:30	1.50	D09	DRS	P	Drilled 216mm (8 1/2") hole from 2518m to 2530m. Determined that azimuth inconsistencies due to drilling >90deg in a well that crosses magnetic west. Established links with worldwide support team in Alaska to process survey data and correct azimuth readings as required. Drilling Parameters: 2.8m3/min (730gpm), 20.7MPa (3000psi), 170RPM, 9.8T (22klbs) WOB, 1.5kdaNm (11kftlbf) on bottom torque, 0.8kdaNm (6kftlbf) off bottom torque. Rotating weight 95.4T (210klbs), Pick up 116T (255klbs), Slack off 100T (220klbs)

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	2,956.00	9.625	2,299.00		Open Hole	8.500

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	30.00	20.000	11.00	

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 17 **Report Date: 9/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

CASING

Last Casing: 9.625 in @ 2,299.00 m	Next Casing: 7.000 in @ 4,102.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	5.00	116.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	7	SCHLUMBERGER	3
SPERRY SUN	7	TECHNIP	5
MAERSK	19	OMS	38
HALCO	2	BHDF	6
		Total POB :	93

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
CEMENT HTB	MT	0.00	0.00	WATER, POTABLE	MT	17.00	375.00
BARITE BULK	MT	9.00	93.00	GEL, FRESH	MT	0.00	44.00
BRINE	bbls	1,373.00	0.00	WATER, DRILLING	MT	0.00	284.00
BASE OIL	m3	29.00	46.00	DIESEL	MT	12.00	198.00
HELI FUEL	Ltrs	442.00	2,558.00	CEMENT	MT	0.00	143.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	2.00	2.000	2.000				11.80

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 17			Report Date: 9/06/2006
Block: T/L2	**Rig: Maersk Guardian**	**Water Depth(m): 99.30**	**Start Date: 20/05/2006**

- No accidents or incidents over past 24hrs.

- #2 pump POP off valve washed out - waiting on replacement / spare POP off valve.
- MWD real time caliper readings failed at start of run.
- Geopilot signaling no oil - low oil and clutch warning light active from 0615hrs.
- Well test crews completed overside welding op's.

Bit #4: Security DBS FMF3653Z. S/N 10765114. Nozzles : 3 x 16/32", 3 x 15/32". TFA : 1.107"
Daily bit data : 231m, IADC 14.25hrs, 10hrs on bottom, 20hrs circulating, 122 on bottom krevs. 30m/hr avg on bottom ROP. 10.5m/hr IADC ROP.
Total bit run data : 231m, IADC 14.25hrs, 10hrs on bottom, 22hrs circulating, 122 on bottom krevs. 30m/hr avg on bottom ROP. 10.5m/hr IADC ROP.

BHA #4 : 8 1/2" Bit #4, 8 1/2" 7600 Series Geopilot (GP850TL121), 6 3/4" NM Flex Collar w/DM, 6 3/4" RLL w/DGR +EWR, 6 3/4" ALD +CTN, 6 3/4" GeoTap w/PWD, 6 3/4" HOC w/P4M Pulser, 1 x 6 3/4" Non-Mag Drill Collar, 6 3/4" Float Sub w/ ported float, 4 1/2" IF Pin x 5 1/2" FH Box X-over (OTWY-42), 2 x 5 1/2" HWDP, 7" Jar (21445E), 6 x 5 1/2" HWDP. = 137.02m

Crossover rotating hours : WEL OTWY-42 - 22.17 hrs.
Jars rotating hrs (s/n 21445E) : 22.17hrs.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 18 **Report Date: 10/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	17.58	MD (m):	2,956.00	Day WSM:	Shaughan Coreless
DFS:	17.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,130.00	Rig OIM:	George Clark
Progress Days:	20.50	Progress (m):	426.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 13,112,335.00 ($)

Ops 00:00 to 06:00 : Drilled 216mm (8 1/2") hole from 2956m to 3041m. Took GeoTap pressure test. Drilled to 3047m. Took GeoTap pressure test.

Ops Summary : Drilled 216mm (8 1/2") hole from 2530m to 2956m.

Ops Look Ahead : Drill 216mm (8 1/2") hole.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	17.50	D09	DRS	P	Drilled 216mm (8 1/2") hole from 2530m to 2867m (337m). Revised directional path as stipulated by onshore sub surface support team. Drilling Parameters: 2.7m3/min (730gpm), 22.6MPa (3300psi), 170RPM, 5.5 - 9T (12-20klbs) WOB, 1.4-1.6kdaNm (10-12kftlbf) on bottom torque, 0.9kdaNm (7kftlbf) off bottom torque. Rotating weight 93T (205klbs), Pick up 114T (250klbs), Slack off 99T (218klbs) Instantaneous ROP 30m/hr, average ROP 19m/hr.
17:30	1.50	D09	DRS	D	MWD detection corrupted (using mud pumps #1 and #3). Confirmed clear signal with pump #1. Shutdown Pump #3, moved POP off valve from Pump #3 to Pump #2. Took survey confirmed clear signal with mud pumps #1 and #2.
19:00	5.00	D09	DRS	P	Drilled 216mm (8 1/2") hole from 2867m to 2956m (89m). Revised directional path as stipulated by onshore sub surface support team. Drilling Parameters: 2.7m3/min (730gpm), 24.1MPa (3500psi), 170RPM, 5.5 - 9T (12-20klbs) WOB, 1.6 - 2kdaNm (12-15kftlbf) on bottom torque, 0.9kdaNm (7kftlbf) off bottom torque. Rotating weight 93T (205klbs), Pick up 114T (250klbs), Slack off 99T (218klbs) Instantaneous ROP 30m/hr, average ROP 18m/hr.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	2,956.00	9.625	2,299.00		Open Hole	8.500

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	39.00	27.000	13.00	

CASING

Last Casing: 9.625 in @ 2,299.00 m	Next Casing: 7.000 in @ 4,102.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 18 **Report Date: 10/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	3.00	119.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	7	SCHLUMBERGER	3
SPERRY SUN	7	TECHNIP	5
MAERSK	19	OMS	38
HALCO	2	BHDF	6
		Total POB :	93

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
CEMENT HTB	MT	0.00	0.00	WATER, DRILLING	MT	29.00	255.00
BASE OIL	m3	0.00	55.00	BARITE BULK	MT	8.00	85.00
BRINE	bbls	0.00	0.00	HELI FUEL	Ltrs	0.00	2,578.00
WATER, POTABLE	MT	36.00	380.00	GEL, FRESH	MT	0.00	44.00
CEMENT	MT	0.00	143.00	DIESEL	MT	18.00	180.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	16.00	3.600	3.600				9.00

REMARKS

- No accidents or incidents over past 24hrs.

- Held platform muster drill (Helicopter crash on Helideck). Fire suppressant system and foam uptake failed to work automatically during drill.
Maintenance plan put in place.

Bit #4: Security DBS FMF3653Z. S/N 10765114. Nozzles : 3 x 16/32", 3 x 15/32". TFA : 1.107"
Daily bit data : 426m, IADC 22.5hrs, 15.4hrs on bottom, 21.29hrs circulating, 165 on bottom krevs. 30m/hr avg on bottom ROP. 19m/hr IADC ROP.
Total bit run data : 657m, IADC 36.75hrs, 25.4hrs on bottom, 43.5hrs circulating, 287 on bottom krevs. 30m/hr avg on bottom ROP. 18m/hr IADC ROP.

BHA #4 : 8 1/2" Bit #4, 8 1/2" 7600 Series Geopilot (GP850TL121), 6 3/4" NM Flex Collar w/DM, 6 3/4" RLL w/DGR +EWR, 6 3/4" ALD +CTN, 6 3/4" GeoTap w/PWD, 6 3/4" HOC w/P4M Pulser, 1 x 6 3/4" Non-Mag Drill Collar, 6 3/4" Float Sub w/ ported float, 4 1/2" IF Pin x 5 1/2" FH Box X-over (OTWY-42), 2 x 5 1/2" HWDP, 7" Jar (21445E), 6 x 5 1/2" HWDP. = 137.02m

Crossover rotating hours : WEL OTWY-42 - 43.5 hrs.
Jars rotating hrs (s/n 21445E) : 43.5hrs.
Ditch Magnet sample weights - Daily 504g; Cumulative 3900g

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 19 **Report Date: 11/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	18.58	MD (m):	3,375.00	Day WSM:	Shaughan Coreless
DFS:	18.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,128.00	Rig OIM:	George Clark
Progress Days:	23.30	Progress (m):	419.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 13,457,162.00 ($)

Ops 00:00 to 06:00 : Drilled 216mm (8 1/2") hole from 3375m to 3485m

Ops Summary : Continued Drilling 216mm (8 1/2") hole. Recorded 2 x reservoir pressures with GeoTap tool. Drilled 216mm (8 1/2") hole from 2956 to 3375m - 419m

Ops Look Ahead : Drill 216mm (8 1/2") hole.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	4.50	D09	DRS	P	Drilled 216mm (8 1/2") hole from 2956m to 3042m (86m) Maintained directional path as advised by onshore support team. Drilling Parameters: 2.7m3/min (730gpm), 24.1MPa (3500psi), 170RPM, 5.5 - 11.4T (12-25klbs) WOB, 1.6 - 2kdaNm (12-15kftlbf) on bottom torque, 0.9-1.1kdaNm (7-8kftlbf) off bottom torque. Rotating weight 92T (202klbs), Pick up 118T (260klbs), Slack off 95.5T (210klbs) Instantaneous ROP 30m/hr, average ROP 19m/hr.
4:30	1.00	D09	PRE	P	Recorded formation pressure test with GeoTap tool. Back reamed from 3042m to 3032m. Worked torque out of string, orientated GeoTap tool highside. Activated GeoTap tool at 3008.5mBRT, 2131mTVD - 22.39MPa a (3247psia)
5:30	0.25	D09	DRS	P	Drilled 216mm (8 1/2") hole from 3042m to 3047m (5m)
5:45	0.50	D09	PRE	P	Recorded formation pressure test with GeoTap tool. Back reamed from 3047m to 3037m. Worked torque out of string, orientated GeoTap tool highside. Activated GeoTap tool at 3015mBRT, 2132.8mTVD - 22.36MPa a (3243psia)
6:15	16.25	D09	DRS	P	Drilled 216mm (8 1/2") hole from 3047m to 3350m (303m) Maintained directional path as advised by onshore support team. Drilling Parameters: 2.7m3/min (730gpm), 25.8MPa (3750psi), 170RPM, 5.5 - 11.4T (12-25klbs) WOB, 1.6 - 2kdaNm (12-15kftlbf) on bottom torque, 0.9kdaNm (7-8kftlbf) off bottom torque. Rotating weight 90T (198klbs), Pick up 120.5T (265klbs), Slack off 93T (205klbs) Instantaneous ROP 30m/hr, average ROP 18.6m/hr.
22:30	0.50	D09	DRS	D	Changed from pump #2 to pump #3 due to 4MPa (600psi) pressure loss. (required change over of POP off's due to no spares onboard)
23:00	1.00	D09	DRS	P	Drilled 216mm (8 1/2") hole from 3350m to 3375 (25m) Maintained directional path as advised by onshore support team. Drilling Parameters: 2.7m3/min (730gpm), 25.8MPa (3750psi), 170RPM, 5.5 - 11.4T (12-25klbs) WOB, 1.6 - 2kdaNm (12-15kftlbf) on bottom torque, 0.9kdaNm (7-8kftlbf) off bottom torque. Rotating weight 90T (198klbs), Pick up 120.5T (265klbs), Slack off 93T (205klbs) Instantaneous ROP 30m/hr, average ROP 25m/hr.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	2,956.00	9.625	2,299.00		Open Hole	8.500

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1260	42.00	36.000	15.00	

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 19 **Report Date: 11/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	7.00	126.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	7	SCHLUMBERGER	3
SPERRY SUN	7	TECHNIP	5
MAERSK	18	OMS	37
HALCO	2	BHDF	6
		Total POB :	91

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
GEL, FRESH	MT	0.00	44.00	WATER, DRILLING	MT	36.00	219.00
BASE OIL	m3	0.00	55.00	BARITE BULK	MT	7.00	78.00
BRINE	bbls	0.00	1,373.00	WATER, POTABLE	MT	23.00	398.00
HELI FUEL	Ltrs	0.00	2,368.00	CEMENT	MT	0.00	97.00
CEMENT HTB	MT	0.00	46.00	DIESEL	MT	15.00	165.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	10.00	3.100	3.100				9.80

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 19			Report Date: 11/06/2006
Block: T/L2	Rig: Maersk Guardian	Water Depth(m): 99.30	Start Date: 20/05/2006

- No accidents or incidents over past 24hrs.

- Held Safety time out and training with all groups of personnel handling SBM due to 5 x recordings of SBM rash on arms / hands.
- Corrected azimuth data recorded based on data received back from Sperry Sun worldwide support in Alaska.
- Changed out 3 x valves and 2 x seats in pump #2 fluid end after pressure loss.
- MWD signal eratic with pump #3 back on line.
- Mud rheology increasing due to increase in LGS. Ran centrifuges for 24hrs, unable to maintain control. Plan to add base oil to reduce high rheology.
- Commenced laying out 7" liner.

Bit #4: Security DBS FMF3653Z. S/N 10765114. Nozzles : 3 x 16/32", 3 x 15/32". TFA : 1.107"
Daily bit data : 419m, IADC 22hrs, 15.6hrs on bottom, 21.9hrs circulating, 163 on bottom krevs. 30m/hr avg on bottom ROP. 19m/hr IADC ROP.
Total bit run data : 1076m, IADC 58.75hrs, 41.3hrs on bottom, 65.3hrs circulating, 450 on bottom krevs. 30m/hr avg on bottom ROP. 18m/hr IADC ROP.

BHA #4 : 8 1/2" Bit #4, 8 1/2" 7600 Series Geopilot (GP850TL121), 6 3/4" NM Flex Collar w/DM, 6 3/4" RLL w/DGR +EWR, 6 3/4" ALD +CTN, 6 3/4" GeoTap w/PWD, 6 3/4" HOC w/P4M Pulser, 1 x 6 3/4" Non-Mag Drill Collar, 6 3/4" Float Sub w/ ported float, 4 1/2" IF Pin x 5 1/2" FH Box X-over (OTWY-42), 2 x 5 1/2" HWDP, 7" Jar (21445E), 6 x 5 1/2" HWDP. = 137.02m

Crossover rotating hours : WEL OTWY-42 - 65 hrs.
Jars rotating hrs (s/n 21445E) : 65hrs.
Ditch Magnet sample weights - Daily 855g; Cumulative 4756g.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 20 **Report Date: 12/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	19.58	MD (m):	3,510.00	Day WSM:	Shaughan Corless
DFS:	19.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,126.00	Rig OIM:	George Clark
Progress Days:	24.50	Progress (m):	135.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 13,829,369.00 ($)

Ops 00:00 to 06:00 : Completed MWD download. Made up replacement Geopilot, Flex Joint and Bit. RIH with BHA. RIH 140mm (5 1/2") drillpipe to 350m.

Ops Summary : Drill 216mm (8 1/2") hole to 3510m. Geopilot clutch failed. Circulated clean. POOH. Laid out Geopilot, Flex Joint and Bit. Downloaded MWD.

Ops Look Ahead : RIH. Drill 216mm (8 1/2") hole.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	7.50	D09	DRS	P	Drilled 216mm (8 1/2") hole from 3375m to 3510m (135m). Maintained directional path as advised by onshore support team. Drilling Parameters: 2.7m3/min (730gpm), 25.8MPa (3750psi), 170RPM, 9 - 11.4T (20-25klbs) WOB, 1.6 - 2kdaNm (12-15kftlbf) on bottom torque, 0.9kdaNm (7-8kftlbf) off bottom torque. Rotating weight 87T (195klbs), Pick up 120.5T (265klbs), Slack off 93T (205klbs) Instantaneous ROP 30m/hr, average ROP 18m/hr.
7:30	2.50	D09	TRP	P	Geopilot clutch failed, unable to maintain directional control. Circulated 4 x Bottoms up, maintaining rotation 180RPM, 28m3/min (740gpm) and reciprocating the pipe. Monitored returns at shakers.
10:00	0.50	D09	SAF	P	Flow checked well - Static. Concurrently investigated TDS rotation head failure.
10:30	1.50	D09	TRP	P	Pumped slug. Pulled out of hole on elevators to 3125m, took 13.6T (30klbs) overpull. Ran back in hole and wiped past OK. Pulled out of hole to 3118m, took 13.6T (30klbs) overpull. Ran back in hole and attempt to wipe hole, unable to pass 3120m.
12:00	0.50	D09	TRP	U	Made up TDS. Reamed down to 3144m, backreamed to 3115m, reamed down to 3144m. Shutdown pumps and rotation. Pulled out of hole to 3115m - No overpull.
12:30	2.50	D09	TRP	P	Pumped slug. Pulled out of hole on elevators back into the casing shoe @2293m. Hole in good conditions with no overpulls recorded.
15:00	0.50	D09	SAF	P	Flow checked well - Static. Concurrently investigated TDS rotation head failure.
15:30	1.00	D09	REP	D	Continued TDS rotation head failure investigation. Traced problem to failed potentiometer. Removed rotation head drive for repairs.
16:30	5.00	D09	TRP	P	Pulled out of the hole to 165m. Flow checked well in preparation for breaking down the BHA.
21:30	1.25	D09	TRP	P	Pulled out and racked back BHA. Inspected Geo tap probe - Good condition Removed debris (metal ring) from baffle plate above above HOC Pulser. Removed radioactive source.
22:45	0.25	D09	TRP	P	Hooked up and powered down MWD tools.
23:00	1.00	D09	TRP	P	Racked back MWD tool stand and commenced MWD data download. Concurrently laid out Flex collar, Geopilot and Bit. Bit grading: 1-1-WT-A-X-I-ER-DTF

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	3,510.00	9.625	2,299.00		Open Hole	8.500

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 20 **Report Date: 12/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	38.00	29.000	14.00	

CASING

Last Casing: 9.625 in @ 2,299.00 m	Next Casing: 7.000 in @ 4,102.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	8.00	134.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	7	SCHLUMBERGER	5
SPERRY SUN	7	TECHNIP	6
MAERSK	18	OMS	37
HALCO	2	BHDF	6
		Total POB :	94

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BASE OIL	m3	14.00	41.00	HELI FUEL	Ltrs	390.00	1,978.00
CEMENT HTB	MT	0.00	46.00	CEMENT	MT	0.00	97.00
WATER, DRILLING	MT	25.00	194.00	GEL, FRESH	MT	0.00	44.00
WATER, POTABLE	MT	53.00	392.00	BRINE	bbls	0.00	1,373.00
DIESEL	MT	0.00	165.00	BARITE BULK	MT	0.00	78.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	8.00	3.200	3.200				10.40

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 20			Report Date: 12/06/2006
Block: T/L2	Rig: Maersk Guardian	Water Depth(m): 99.30	Start Date: 20/05/2006

- No accidents or incidents over past 24hrs.

- Replaced pulsation dampener bladder on Pump #1, Bladder torn.
- No spares onboard for rotating head motor.
- Completed laying out 7" liner.

Bit #4: Security DBS FMF3653Z. S/N 10765114. Nozzles : 3 x 16/32", 3 x 15/32". TFA : 1.107"
Daily bit data : 135m, IADC 7.5hrs, 5.5hrs on bottom, 9.7hrs circulating, 57 on bottom krevs. 30m/hr avg on bottom ROP. 18m/hr IADC ROP.
Total bit run data : 1211m, IADC 66.25hrs, 46.8hrs on bottom, 75hrs circulating, 507 on bottom krevs. 30m/hr avg on bottom ROP. 18m/hr IADC ROP.

BHA #4 : 8 1/2" Bit #4, 8 1/2" 7600 Series Geopilot (GP850TL121), 6 3/4" NM Flex Collar w/DM, 6 3/4" RLL w/DGR +EWR, 6 3/4" ALD +CTN, 6 3/4" GeoTap w/PWD, 6 3/4" HOC w/P4M Pulser, 1 x 6 3/4" Non-Mag Drill Collar, 6 3/4" Float Sub w/ ported float, 4 1/2" IF Pin x 5 1/2" FH Box X-over (OTWY-42), 2 x 5 1/2" HWDP, 7" Jar (21445E), 6 x 5 1/2" HWDP. = 137.02m

Bit Grading: 1-1-WT-A-X-I-ER-DTF

Crossover rotating hours : WEL OTWY-42 - 75 hrs.
Jars rotating hrs (s/n 21445E) : 75hrs.
Ditch Magnet sample weights - Daily 380g; Cumulative 5136g.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 21 **Report Date: 13/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	20.58	MD (m):	3,572.00	Day WSM:	Shaughan Corless
DFS:	20.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,129.00	Rig OIM:	George Clark
Progress Days:	26.78	Progress (m):	62.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 14,223,812.00 ($)

Ops 00:00 to 06:00 : Drilled 216mm (8 1/2") hole from 3572m to 3682m.

Ops Summary : Made up BHA. RIH. Drilled from 216mm (8.5") hole from 3510m to 3548m. Recorded GeoPilot reservoir tests x 2. Drilled 216mm
(8 1/2") hole from 3548m to 3572m.

Ops Look Ahead : Drill 216mm (8 1/2") hole.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.50	D09	TRP	P	Downloaded MWD data. Concurrently made up Bit#5, GeoPilot and Flex collar.
1:30	4.00	D09	TRP	P	Made up BHA#5, changing out survey tool. Installed radioactive source, pulled and checked float. Shallow pulse tested MWD and worked in GeoPilot seals. 2.3m3/min (600gpm) 10.5MPa (1530psi)
5:30	6.00	D09	TRP	P	Ran in hole on 140mm (5 1/2") drillpipe from 136m to 2303m
11:30	0.50	D09	PCD	P	Made up TDS. Established circulation. Recorded 4 quadrant check shot. Confirmed tools reading within survey tolerances. (ie. surveys consistent with previous tool)
12:00	3.50	D09	TRP	P	Ran in hole on 140mm (5 1/2") drillpipe from 2303m to 3491m. Hole in good condition.
15:30	0.50	D09	REM	P	Made up TDS. Established circulation, washed to bottom 3510m. Maximum trip gas 15%.
16:00	2.00	D09	DRS	P	Drilled 216mm (8 1/2") hole from 3510m to 3548m (38m). Maintained directional path as advised by onshore support team. Drilling Parameters: 2.7m3/min (730gpm), 25.8MPa (3750psi), 170RPM, 4.5-6.4T (10-14klbs) WOB, 1.6 - 2kdaNm (12-15kftlbf) on bottom torque, 0.9kdaNm (8kftlbf) off bottom torque. Rotating weight 86T (190klbs), Pick up 118T (260klbs), Slack off 88.5T (195klbs) Instantaneous ROP 27m/hr, average ROP 19m/hr.
18:00	4.50	D09	PCD	U	Reviewed and clarified directional path required to reach hole TD with onshore subsurface team. Pulled back one single, established circulation 2.6m3/min (700gpm) 80RPM. Reciprocated pipe on the upper double. Concurrently recorded 2 x reservoir pressure tests with GeoTap. 1# - 3517.67mBRT, 2124.99mTVD, 91.18deg. 2# - 3518.83mBRT, 2124.96mTVD, 91.18deg. Total tests performed 5. 3 tests aborted due to tight / poor reservoir response.
22:30	1.50	D09	DRS	P	Drilled 216mm (8 1/2") hole from 3548m to 3572m (24m). Maintained directional path as advised by onshore support team. Drilling Parameters: 2.7m3/min (730gpm), 25.4MPa (3850psi), 170RPM, 4.5-6.4T (10-14klbs) WOB, 1.6 - 2kdaNm (12-15kftlbf) on bottom torque, 0.9kdaNm (8kftlbf) off bottom torque. Rotating weight 87T (195klbs), Pick up 123T (270klbs), Slack off 91T (200klbs) Instantaneous ROP 25m/hr, average ROP 16m/hr.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	3,572.00	9.625	2,299.00		Open Hole	8.500

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 21 **Report Date: 13/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	44.00	32.000	14.00	

CASING

Last Casing: 9.625 in @ 2,299.00 m	Next Casing: 7.000 in @ 4,102.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	8.00	142.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	8	SPERRY SUN	7
TECHNIP	5	MAERSK	20
OMS	36	HALCO	2
BHDF	6	GEOSERVICES	6
		Total POB :	90

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
HELI FUEL	Ltrs	467.00	1,511.00	BASE OIL	m3	0.00	41.00
BRINE	bbls	0.00	1,373.00	BARITE BULK	MT	0.00	78.00
WATER, DRILLING	MT	30.00	204.00	GEL, FRESH	MT	0.00	44.00
WATER, POTABLE	MT	69.00	357.00	DIESEL	MT	19.00	256.00
CEMENT	MT	0.00	97.00	CEMENT HTB	MT	0.00	46.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	7.00	2.150	2.100				13.00

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 21			Report Date: 13/06/2006
Block: T/L2	Rig: Maersk Guardian	Water Depth(m): 99.30	Start Date: 20/05/2006

- No accidents or incidents over past 24hrs.

- HS forecast to increase to 5m on Friday and then coming back down on Saturday.
- Pressure tested Oil and Gas well test lines and replacement connections.

Bit #5: Security DBS FMFX 653. S/N 10695263. Nozzles : 3 x 16/32", 3 x 15/32". TFA : 1.107"
Daily bit data : 62 m, IADC 3.5hrs, 2.6hrs on bottom, 9.2hrs circulating, 28 on bottom krevs. 25m/hr avg on bottom ROP. 18m/hr IADC ROP.
Total bit run data : 62 m, IADC 3.5hrs, 2.6hrs on bottom, 9.2hrs circulating, 28 on bottom krevs. 25m/hr avg on bottom ROP. 18m/hr IADC ROP.

BHA #5 : 8 1/2" Bit #5, 8 1/2" 7600 Series Geopilot (GP850TL119), 6 3/4" NM Flex Collar w/DM, 6 3/4" RLL w/DGR +EWR, 6 3/4" ALD +CTN, 6 3/4" GeoTap w/PWD, 6 3/4" HOC w/P4M Pulser, 1 x 6 3/4" Non-Mag Drill Collar, 6 3/4" Float Sub w/ ported float, 4 1/2" IF Pin x 5 1/2" FH Box X-over (OTWY-42), 2 x 5 1/2" HWDP, 7" Jar (21445E), 6 x 5 1/2" HWDP. = 136.14m

Crossover rotating hours : WEL OTWY-42 - 84hrs.
Jars rotating hrs (s/n 21445E) : 84hrs.
Ditch Magnet sample weights - Daily 0g; Cumulative 5136g.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 22 **Report Date: 14/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	21.58	MD (m):	4,011.00	Day WSM:	Shaughan Corless
DFS:	21.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,329.03	Rig OIM:	George Clark
Progress Days:	30.75	Progress (m):	439.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 14,647,526.00 ($)

Ops 00:00 to 06:00 : Drilled 216mm (8 1/2") hole from 4011m to 4026m (2340mTVD). Circulated hole clean. Commenced pulling out of hole taking GeoTap pressure tests.

Ops Summary : Drilled 216mm (8 1/2") hole from 3572m to 4011m.

Ops Look Ahead : Drill 216mm (8 1/2") hole.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	24.00	D09	DRS	P	Drilled 216mm (8 1/2") hole from 3572m to 4011m (439m). Maintained directional path as advised by onshore support team. Drilling Parameters: 2.7m3/min (730gpm), 25.4MPa (3850psi), 170RPM, 4.5-10T (13-22klbs) WOB, 1.76 - 2.1kdaNm (12-15kftlbf) on bottom torque, 1.4kdaNm (10kftlbf) off bottom torque. Rotating weight 97T (213klbs), Pick up 136T (300klbs), Slack off 102T (225klbs) - 3925mRT Instantaneous ROP 25m/hr, average ROP 18m/hr.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,011.00	9.625	2,299.00		Open Hole	8.500

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	35.00	24.000	10.00	

CASING

Last Casing: 9.625 in @ 2,299.00 m	Next Casing: 7.000 in @ 4,102.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	2.00
DSLTI		Stop/Start Cards	6.00	148.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 22 **Report Date: 14/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	9	SPERRY SUN	7
TECHNIP	4	MAERSK	19
OMS	37	HALCO	2
WEATHERFORD	6	BHDF	6
		Total POB :	96

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
GEL, FRESH	MT	0.00	44.00	BASE OIL	m3	6.00	35.00
DIESEL	MT	26.00	230.00	WATER, DRILLING	MT	2.00	232.00
BRINE	bbls	0.00	1,373.00	HELI FUEL	Ltrs	0.00	1,511.00
CEMENT	MT	0.00	97.00	BARITE BULK	MT	5.00	73.00
CEMENT HTB	MT	0.00	46.00	WATER, POTABLE	MT	15.00	342.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig	30/05/2006	
Invincible Tide	Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	11.50	2.400	2.400				13.00

REMARKS

- One FAI reported over past 24hrs (delayed reporting from 2 days ago) - Bruised ribs, person slipped while washing down inside of cuttings dryer.

- HS forecast to increase to 5m on Friday and then reducing to below 4m on Saturday.

Bit #5: Security DBS FMFX 653. S/N 10695263. Nozzles : 3 x 16/32", 3 x 15/32". TFA : 1.107"
Daily bit data : 439m, IADC 24hrs, 17.4hrs on bottom, 22hrs circulating, 155 on bottom krevs. 25m/hr avg on bottom ROP. 18m/hr IADC ROP.
Total bit run data : 501m, IADC 27.5hrs, 20hrs on bottom, 31.3hrs circulating, 183 on bottom krevs. 25m/hr avg on bottom ROP. 18m/hr IADC ROP.

BHA #5 : 8 1/2" Bit #5, 8 1/2" 7600 Series Geopilot (GP850TL119), 6 3/4" NM Flex Collar w/DM, 6 3/4" RLL w/DGR +EWR, 6 3/4" ALD +CTN, 6 3/4" GeoTap w/PWD, 6 3/4" HOC w/P4M Pulser, 1 x 6 3/4" Non-Mag Drill Collar, 6 3/4" Float Sub w/ ported float, 4 1/2" IF Pin x 5 1/2" FH Box X-over (OTWY-42), 2 x 5 1/2" HWDP, 7" Jar (21445E), 6 x 5 1/2" HWDP. = 136.14m

Crossover rotating hours : WEL OTWY-42 - 106.29hrs.
Jars rotating hrs (s/n 21445E) : 106.29hrs.
Ditch Magnet sample weights - Daily 150g; Cumulative 5886g.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 23 **Report Date: 15/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	22.58	MD (m):	4,026.00	Day WSM:	Shaughan Corless
DFS:	22.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	30.97	Progress (m):	15.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 14,999,621.00 ($)

Ops 00:00 to 06:00 : Recorded final formation pressure test. Pulled back to 244mm (9 5/8") shoe 2293m. RIH to 3800m.

Ops Summary : Drilled 216mm (8 1/2") hole from 4011m to 4026m (2340mTVD) Hole TD. Circulated hole clean. Pulled out of hole taking formation pressure tests.

Ops Look Ahead : RIH to 4026m. Back ream out of the hole to the 244mm (9 5/8") shoe 2293m. Circulate hole clean. POOH.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.50	D09	DRS	P	Drilled 216mm (8 1/2") hole from 4011m to 4026m Hole TD. Maintained directional path as advised by onshore support team. Drilling Parameters: 2.7m3/min (730gpm), 25.4MPa (3850psi), 170RPM, 4.5-10T (13-22klbs) WOB, 1.76 - 2.1kdaNm (12-15kftlbf) on bottom torque, 1.4kdaNm (10kftlbf) off bottom torque. Rotating weight 97T (213klbs), Pick up 136T (300klbs), Slack off 102T (225klbs)
1:30	2.50	D09	PCD	P	Circulated hole clean, 3 x bottoms up. Maintained reciprocation over last stand, 170RPM, 2.7m3/min (730gpm).
4:00	4.00	D09	TRP	P	Pulled out of the hole conducting 7 x formation pressure tests with GeoTap at: 3517.79m, 3517.67m, 3517.62m, 3518.40m, 3518.83m, 3992.01m, 3961.25m. Tests at 3517.67m, 3517.62m, 3518.40m did not reach stabilisation, remainder good tests.
8:00	0.50	D09	TRP	D	Repaired suction screen on Mud Pump #1.
8:30	15.50	D09	TRP	P	Pulled out of the hole conducting 17x formation pressure tests with GeoTap at: 3929.92m, 3876.2m, 3885.75m, 3815.9m, 3832.22m, 3832.43m, 3832.32m, 3842.62m, 3756.76m, 3527.86m, 3527.86m, 3009.93m, 3014.93m, 2701.92m, 2630m, 2627.98m, 2628.11m. Tests at 3832.22m did not reach stabilisation and did not seal at 3832.43m, 3832.32m, 3009.93m, 2630m, 2627.98m, 2628.11m, remaining 10 recorded good tests.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,299.00		Open Hole	8.500

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	36.00	23.000	10.00	

CASING

Last Casing: 9.625 in @ 2,299.00 m	Next Casing: 7.000 in @ 4,026.00 m	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 23 **Report Date: 15/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	1.00	3.00
DSLTI		Stop/Start Cards	5.00	153.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	8	SPERRY SUN	6
TECHNIP	4	MAERSK	19
OMS	38	HALCO	2
HALLIBURTON SERVICES	3	WEATHERFORD	6
BHDF	6	GEOSERVICES	4
		Total POB :	96

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
WATER, DRILLING	MT	30.00	243.00	HELI FUEL	Ltrs	131.00	4,727.00
GEL, FRESH	MT	0.00	44.00	BRINE	bbls	0.00	1,373.00
WATER, POTABLE	MT	30.00	312.00	BASE OIL	m3	0.00	179.00
CEMENT	MT	0.00	97.00	BARITE BULK	MT	6.00	67.00
CEMENT HTB	MT	0.00	46.00	DIESEL	MT	14.00	216.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	8.50		4.000				11.00

REMARKS

- One Incident (Medical Treatment Case) reported over past 24hrs - Lacerated top lip and damaged teeth while playing badminton.

- HS forecast to reduce to below 4m on Saturday, increasing again on Tuesday.

Bit #5: Security DBS FMFX 653. S/N 10695263. Nozzles : 3 x 16/32", 3 x 15/32". TFA : 1.107"
Daily bit data : 15m, IADC 1.5hrs, 0.8hrs on bottom, 17hrs circulating, 8 on bottom krevs. 25m/hr avg on bottom ROP. 10m/hr IADC ROP.
Total bit run data : 516m, IADC 29hrs, 21hrs on bottom, 48.5hrs circulating, 191on bottom krevs. 25m/hr avg on bottom ROP. 18m/hr IADC ROP.

BHA #5 : 8 1/2" Bit #5, 8 1/2" 7600 Series Geopilot (GP850TL119), 6 3/4" NM Flex Collar w/DM, 6 3/4" RLL w/DGR +EWR, 6 3/4" ALD +CTN, 6 3/4" GeoTap w/PWD, 6 3/4" HOC w/P4M Pulser, 1 x 6 3/4" Non-Mag Drill Collar, 6 3/4" Float Sub w/ ported float, 4 1/2" IF Pin x 5 1/2" FH Box X-over (OTWY-42), 2 x 5 1/2" HWDP, 7" Jar (21445E), 6 x 5 1/2" HWDP. = 136.14m

Crossover rotating hours : WEL OTWY-42 - 123.45hrs.
Jars rotating hrs (s/n 21445E) : 123.45hrs.
Ditch Magnet sample weights - Daily 220g; Cumulative 6106g.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 24 **Report Date: 16/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	23.58	MD (m):	4,026.00	Day WSM:	Shaughan Corless
DFS:	23.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	31.26	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 16,586,214.00 ($)

Ops 00:00 to 06:00 : POOH. Racked BHA.

Ops Summary : RIH to 4026m (TD). Back reamed out of the hole to the 244mm (9 5/8") shoe 2293m. Circulated 2 x bottoms up. POOH.

Ops Look Ahead : Make up cement head stand and rack back. Run 178mm (7") liner. Make up liner hanger. RIH set liner hanger. Cement liner in place.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.50	D09	TRP	P	Recorded final formation pressure test at 2628.11m (2657m bit depth). Test failed due to no seal.
0:30	1.00	D09	TRP	P	Pulled out of hole from 2657m to 2293m, 244mm (9 5/8") casing shoe. No overpulls seen.
1:30	5.00	D09	TRP	P	Ran in hole from 2293m to 4012m. Hole in good condition, no hang up points.
6:30	1.00	D09	PCD	P	Made up TDS. Washed down from 4012m to 4026m. No fill recorded.
7:30	12.50	D09	REM	P	Back reamed out of open hole from 4026m to 2293m, 244mm (9 5/8") casing shoe. 120RPM, 2.7m3/min (730gpm) Hole in good condition, no overpulls recorded.
20:00	0.50	D09	PCD	P	Recorded torque and drag parameters at casing shoe (2293m) in preparation for 178mm (7") liner installation. Pumps on: 1.3m3/min (340gpm) 108T (238klbs) up, 102T (225klbs) down. 20RPM 0.4 kdaNm (3kftlbs), 40RPM 0.4 kdaNm (3kftlbs) Pumps off: 112T (247klbs) up, 105T (232klbs) down. 20RPM 0.4 - 0.5 kdaNm (3-4kftlbs), 40RPM 0.4 kdaNm (3kftlbs)
20:30	0.50	D09	PCD	P	Flushed choke and kill lines. Functioned BOP rams.
21:00	1.00	D09	PCD	P	Circulated 2 x Bottoms up, shakers clean. Concurrently installed repaired TDS rotating head motor.
22:00	0.50	D09	SAF	P	Flow checked well - static. Concurrently installed repaired TDS rotating head motor.
22:30	0.50	D09	REP	D	Continued TDS rotating head motor installation. Unable to reconnect electrical connections, suspended installation.
23:00	0.50	D09	PCD	P	Reset GeoPiolt to zero deflection (moved to 100% deflection while recording parameters at casing shoe). Pumped slug.
23:30	0.50	D09	TRP	P	Dropped 76mm (3") hollow drift with wire tail. Pulled out of the hole from 2293m to 2083m

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Open Hole	8.500

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	36.00	21.000	10.00	

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 24 **Report Date: 16/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	3.00
DSLTI		Stop/Start Cards	15.00	168.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	5	SPERRY SUN	6
TECHNIP	3	MAERSK	18
OMS	38	HALCO	2
HALLIBURTON SERVICES	1	WEATHERFORD	6
BHDF	6	GEOSERVICES	4
		Total POB :	89

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
DIESEL	MT	10.00	206.00	BRINE	bbls	0.00	1,373.00
CEMENT HTB	MT	0.00	46.00	GEL, FRESH	MT	0.00	44.00
CEMENT	MT	0.00	97.00	BASE OIL	m3	8.00	171.00
WATER, POTABLE	MT	37.00	311.00	HELI FUEL	Ltrs	23.00	4,704.00
WATER, DRILLING	MT	20.00	223.00	BARITE BULK	MT	0.00	67.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	4.37		3.000				15.00

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 24			Report Date: 16/06/2006
Block: T/L2	**Rig: Maersk Guardian**	**Water Depth(m): 99.30**	**Start Date: 20/05/2006**

- No accidents or incidents over past 24hrs.

- HS forecast to rise to 4m by late Monday early Tuesday dropping to near 3m for remainder of the week.

Bit #5: Security DBS FMFX 653. S/N 10695263. Nozzles : 3 x 16/32", 3 x 15/32". TFA : 1.107"
Daily bit data : 0m, IADC 0hrs, 0hrs on bottom, 8.5hrs circulating, 0 on bottom krevs. 0m/hr avg on bottom ROP. 0m/hr IADC ROP.
Total bit run data : 516m, IADC 29hrs, 21hrs on bottom, 57hrs circulating, 191on bottom krevs. 25m/hr avg on bottom ROP. 18m/hr IADC ROP.

BHA #5 : 8 1/2" Bit #5, 8 1/2" 7600 Series Geopilot (GP850TL119), 6 3/4" NM Flex Collar w/DM, 6 3/4" RLL w/DGR +EWR, 6 3/4" ALD +CTN, 6 3/4" GeoTap w/PWD, 6 3/4" HOC w/P4M Pulser, 1 x 6 3/4" Non-Mag Drill Collar, 6 3/4" Float Sub w/ ported float, 4 1/2" IF Pin x 5 1/2" FH Box X-over (OTWY-42), 2 x 5 1/2" HWDP, 7" Jar (21445E), 6 x 5 1/2" HWDP. = 136.14m

Crossover rotating hours : WEL OTWY-42 - 123.45hrs.
Jars rotating hrs (s/n 21445E) : 123.45hrs.

Ditch Magnet sample weights - Daily 150g; Cumulative 6256g.

Daily costs include $1.2 mil Gravel Pack down-rig cost.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 25 **Report Date: 17/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	24.58	MD (m):	4,026.00	Day WSM:	Shaughan Corless
DFS:	24.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	34.21	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 17,582,660.00 ($)

Ops 00:00 to 06:00 : RIH 178mm (7") liner. Made up Liner hanger. Circulate liner volume.

Ops Summary : POOH and racked back BHA #5. Laid out Bit and GeoPilot. Made up cement stand. RIH Shoe track. RIH 178mm (7") liner.

Ops Look Ahead : RIH 178mm (7") liner to TD. Set liner hanger. Cement liner in place. Set and test liner top packer. Reverse circulate excess cement out of hole.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	4.00	D09	TRP	P	Pulled out of the hole from 2093m to 134m (BHA). Flow checked well - static.
4:00	2.00	D09	TRP	P	Pulled out of hole and racked back BHA #5. Recovered radioactive sources. Inspected and removed GeoTap Probe. OD section of seal torn, ID section of seal in good condition, overall condition fair, could have effected a seal in good quality formation. Hooked up and attempted to download MWD tools - No communication. Racked back tools, to download post 7" liner installation, on deck.
6:00	1.00	D09	TRP	P	Laid out bit #5, GeoPilot and Flex joint. Functioned BOP shear rams. Bit grading 1 - 1 - WT - A - X - I - NO - TD
7:00	0.50	D09	PSI	P	Made up and racked back cement stand.
7:30	0.25	C09	SAF	P	Held toolbox talk in preparation for liner installation operations.
7:45	1.75	C09	RUD	P	Cleared drillfloor of excess equipment. Rigged up 178mm (7") liner running equipment.
9:30	1.00	C09	CLR	P	Made up and thread locked shoe track and landing collar, checked floats OK.
10:30	13.50	C09	CLR	P	Ran in hole with 178mm (7") liner to 1476m. Overall average run rate 8.4jnts/hr. Instantaneous run rate up to 12 jnts/hr. Used PDM and PLS system for handling tubulars - minimal damage to OD of 13Cr pipe from pipe handling equipment dies. Monitored hole for losses - Lost 3.5m3 (22bbls) over 1st 60 jnts Lost 1.4m3 (9bbls) over next 70jnts

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Open Hole	8.500

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	36.00	21.000	10.00	

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 25 **Report Date: 17/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	3.00
DSLTI		Stop/Start Cards	14.00	182.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	3	SCHLUMBERGER	2
SPERRY SUN	1	TECHNIP	3
MAERSK	16	OMS	38
HALCO	2	_Others	6
HALLIBURTON SERVICES	1	WEATHERFORD	6
BHDF	6	GEOSERVICES	4
		Total POB :	88

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BASE OIL	m3	12.00	159.00	BRINE	bbls	0.00	1,373.00
WATER, POTABLE	MT	30.00	329.00	GEL, FRESH	MT	0.00	44.00
CEMENT HTB	MT	0.00	46.00	WATER, DRILLING	MT	86.00	367.00
DIESEL	MT	9.00	197.00	BARITE BULK	MT	11.00	141.00
CEMENT	MT	0.00	143.00	HELI FUEL	Ltrs	820.00	3,884.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	2.00		2.000				12.70

REMARKS

- No accidents or incidents over past 24hrs.

- HS forecast to rise to 4m by late Monday early Tuesday dropping to 2.5 - 3m for remainder of the week.
- Held muster and abandon rig drill.
- Offloaded completion tubulars.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 26 **Report Date: 18/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	25.58	MD (m):	4,026.00	Day WSM:	Shaughan Corless
DFS:	25.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	36.05	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 18,274,158.00 ($)

Ops 00:00 to 06:00 : Reverse circulated excess cement out of hole. Pressure tested liner. Slip and cut drill line. Commenced POOH.

Ops Summary : RIH 178mm (7") liner to TD. Set liner hanger. Cemented liner in place. Set and tested liner top packer. Reverse circulated excess cement out of hole.

Ops Look Ahead : POOH. Lay out liner running tools. Lay out 216mm (8 1/2") BHA. Jet and pressure test BOPs.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	3.75	C09	CLR	P	Ran in hole with 178mm (7"), 43.2kg/m (29ppf), Vam Top HT, 13Cr, R3 liner from 1476m to 1832m. Total of 169 joints run including shoe track and three pups. Installed centralisers on each full joint. Total losses during liner make up - 4.4m3 (28bbl). No rejected joints.
3:45	0.75	C09	CLR	P	Changed out FMS slips for hand slips and elevators for 127mm (5") drill pipe elevators. Filled liner.
4:30	0.50	C09	CLR	P	Made up single wiper plug to liner hanger. Stabbed and made up liner hanger. Picked up to confirm hanger connections. Confirmed shear pin configuration. Pick Up Weight - 103T (228klbs) Down - 92T (220klbs)
5:00	2.00	C09	PCD	P	Changed out handling equipment for 140mm (5 1/2") drillpipe. Made up X-over and 1 x stand drill pipe. Recorded SCRs. Circulated 1.2 x liner volume 1.3m3/min (340bpm), 5.2MPa (750psi). Pick Up Weight - 95T (210klbs) Down - 89T (196klbs) Rotating - 92T (202klbs) 20 RPM 0.3 - 0.4 kdaNm (3 - 4 kft-lb). No pumps - 104T (228klbs) Up, 100T (220llbs) down.
7:00	1.50	C09	CLR	P	Ran in hole with 178mm (7") liner on 140mm (5 1/2") drillpipe to 2293m, 244mm (9 5/8") casing shoe.
8:30	0.50	C09	CLR	P	Recorded parameters prior to going into open hole: No Pumps: 115T (253klbs) Up, 109T (220klbs) down, 105T (232klbs) Rotating. 20 RPM 0.4 - 0.7kdaNm (3 - 5 kft-lb) 0.6m3/min (170gpm). 3.4MPa (480psi). 109T (240klbs) Up, 100T (220klbs) Down, 105t (232klbs) 20RPM 0.27 - 0.8 kdaNm (2 - 6 kft-lb)
9:00	6.00	C09	CLR	P	Ran in hole with 178mm (7") liner on 140mm (5 1/2") drillpipe to 4005m. Broke circulation at 2750m. Total losses during liner installation through open hole - 3.1 m3 (20bbl)
15:00	0.50	C09	CLR	P	Made up TDS. Washed down at 20rpm, 20spm, 1.5kdaNm (11kft-lbf). Tagged bottom at 4027.5m. Picked back up to 4005m. Racked back stand.
15:30	2.50	C09	CLR	P	Made up cement head stand and TDS. Washed down to 4025m. Circulated liner until gas readings were trending downwards (max gas 17%). Concurrently made up cement line. Recorded pick up and slack off weights after circulating 130T (285klbs) Up, 86T (190klbs) Down.
18:00	0.50	C09	CLR	P	Released liner setting ball and pumped down. Observed ball seat and pressured up to 14.6MPa (2100psi) to set liner. Top of PBR at 2181m with shoe set at 4023m. Tested liner set with 11T (25klbs) overpull and set down 13.6T (30klbs) string weight on liner. Bled off setting pressure.
18:30	0.25	C09	CLR	P	Released running tool with 11 RH turns. Observed torque increase from 0.4 to 1.5 kdaNm (3 to 11kft-lb). Picked up 1m to confirm running tool free. Set down 13.6T (30klbs) string weight on liner.
18:45	1.25	C09	PCD	P	Pressured up and sheared out ball seat with 18MPa (2600psi). Circulated liner whilst rotating at 20rpm. Staged circulation rate up to 1.59m3/min (10bpm) (no losses). Held TBT for cementing during circulation. Pumped 9.5m3 (60bbls) tuned spacer with rig pumps.
20:00	0.50	C09	PRE	P	Pumped 1.6m3 (10bbl) drill water with cement unit. Pressure tested cement lines to 34.5MPa (5000psi).
20:30	0.50	C09	PCD	P	Cemented liner: 33.3T (782sx) HTB cement mixed with 14.9m3 (94bbl) mix fluid to give 26m3 (163bbl) of 1.87sg (15.6ppg) slurry.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 26 **Report Date: 18/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

21:00	1.50	C09	PCD	P	Released drillpipe dart and displaced dart with 0.5m3 (3bbls) drillwater followed by SBM from cement unit. Observed wiper plug shear out after 23.4m3 (147.5bbl) mud displacement. Bumped plug after a further 35.8m3 (225bbl) mud displacement after plug shear. Circulating pressure prior to bump was 12.4Mpa (1800psi) 0.8m3/min (5BPM). Bumped plug to 16.5MPa (2400psi) / 10 minutes. Bled off 0.7m3 (4.5 bbl). Floats held. Maintained rotation 20RPM throughout displacement: 10m3 (64bbl) - 1.6 kdaNm (12kft-lb) 17 MPa (2500psi) 1.3m3/min (8BPM) 24m3 (150bbl) - 2 kdaNm (15kft-lb) 17 MPa (2500psi) 1.3m3/min (8BPM) 32m3 (200bbl) - 2.2kdaNm (16kft-lb) 18 MPa (2600psi) 1.3m3/min (8BPM) Shut down rotation prior to plug bump. No losses during cementing and displacement.
22:30	0.50	C09	PCD	P	Picked up 4m, released actuator dogs. Set liner top packer with 36T (80klb) weight down. Clear indication of shear screws sheared at 13.6T (30klb) and 22.7T (50klb) down.
23:00	1.00	C09	PCD	P	Applied 3.4MPa (500psi) to drill pipe, stung out of liner with running tool. Observed pressure drop. Forward circulated to clear cement from liner top. Closed annular and commenced reverse circulating excess cement from above liner top.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	36.00	24.000	11.00	

CASING

Last Casing:	Next Casing:	Last BOP: 27/05/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	3.00
DSLTI		Stop/Start Cards	7.00	189.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 26 **Report Date: 18/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	3	SCHLUMBERGER	2
SPERRY SUN	1	TECHNIP	3
MAERSK	16	OMS	38
HALCO	2	_Others	6
HALLIBURTON SERVICES	1	WEATHERFORD	6
BHDF	6	GEOSERVICES	4
		Total POB :	88

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
WATER, DRILLING	MT	249.00	373.00	CEMENT	MT	0.00	143.00
BASE OIL	m3	0.00	159.00	BARITE BULK	MT	3.00	138.00
HELI FUEL	Ltrs	0.00	3,864.00	CEMENT HTB	MT	0.00	46.00
GEL, FRESH	MT	0.00	44.00	WATER, POTABLE	MT	35.00	321.00
DIESEL	MT	7.00	190.00	BRINE	bbls	0.00	1,373.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	4.00		2.400				12.00

REMARKS

- No accidents or incidents over past 24hrs.

- Held man overboard drill.
- Held fortnightly safety meetings with all personnel.

- 10 - 20bbls contaminated cement returns seen at surface during reverse circulation.
- HS forecast to rise to 4m early Tuesday dropping to 2m - 2.5m for remainder of the week.
- Installed 3m pup jnts at 3880m, 3877m (above Unit 5) and 2266m (above Unit 1).
- Laid out 5 1/2" completion tubing on deck in preparation for running.
- Cleared decks in preparation for taking onboard completion and well test equipment.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 27 **Report Date: 19/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	26.58	MD (m):	4,026.00	Day WSM:	Shaughan Corless
DFS:	26.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	36.50	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 18,598,835.00 ($)

Ops 00:00 to 06:00 : Concluded BOP pressure test. Made up nylon jetting tool and RIH. Tool became stuck in wellhead. Pulled 40 klbs overpull and tool came free. Pulled to surface and found nylon shroud missing. Drained riser and prepared to lift BOP to retrieve nylon shroud.

Ops Summary : Reversed out excess cement. Tested liner top packer. POOH and laid down running tool. Laid down MWD and LWD tools. Retrieved wear bushing. Pressure tested BOP's.

Ops Look Ahead : Lift BOP. Retrieve nylon jetting tool. Re-connect BOP and test connector. Jet wellhead and BOP. Clean diverter. Make up casing cleanout assemblies. Pick up and RIH 3-1/2" and 4" drillpipe.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.50	C09	PCD	P	Continued to reverse circulate at 70 spm 7.6 MPa (1100psi). 1.6 - 3.2 m3 (10-20bbls) contaminated cement returns seen at surface during reverse circulation.
0:30	0.50	C09	PCD	P	Opened Annular preventer and flow checked wel l- well static. Lined up to test liner top packer.
1:00	1.00	C09	PRE	P	Tested liner top packer with cement unit to 20.7 MPa (3000psi) for 10 mins - OK. Note: Acceptance criteria #14 met - 7" liner top packer and 9-5/8" production casing integrity.
2:00	1.00	C09	DRT	P	Racked back cement head stand in derrick. POOH from 2151m to 2014m.
3:00	0.50	C09	PSI	P	Cleaned and cleared rig floor of excess equipment.
3:30	1.50	C09	MNR	P	Slipped 38m (125ft) and cut 33m (108ft) drilling line.
5:00	1.50	C09	DRT	P	Broke out and laid down cement head. Picked up drillpipe single. Pumped slug.
6:30	5.00	C09	DRT	P	POOH drillpipe from 2014m to surface.
11:30	0.50	C09	CLC	P	Laid down 7" liner running tools.
12:00	0.25	C09	SAF	P	Held toolbox talk for laying down BHA.
12:15	1.25	C09	DRT	P	Laid down MWD and LWD tools.
13:30	1.50	C09	DRT	P	Picked up cement head. Broke out upper handling pup and TIW valve.
15:00	1.00	C09	WHM	P	Picked up and RIH wear bushing running tool. Latched wear bushing and retrieved same.
16:00	2.00	C09	BPT	P	Picked up BOP test tool and RIH. Rigged up test hose and lines.
18:00	5.00	C09	BPT	P	Pressure tested BOP's and TDS. Annular to 2.01 / 24.1 MPA (300 / 3500psi). All other tests to 2.01 / 27.6 MPa (300 / 4000psi).
23:00	1.00	C09	BPT	P	Broke out and laid out BOP test tool assembly.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	36.00	24.000	11.00	

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 27 **Report Date: 19/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	3.00
DSLTI		Stop/Start Cards	13.00	202.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	3	SCHLUMBERGER	2
SPERRY SUN	1	TECHNIP	3
MAERSK	19	OMS	37
HALCO	2	_Others	6
HALLIBURTON SERVICES	1	WEATHERFORD	1
BHDF	2	GEOSERVICES	3
		Total POB :	80

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
WATER, POTABLE	MT	32.00	321.00	GEL, FRESH	MT		44.00
HELI FUEL	Ltrs	84.00	3,780.00	DIESEL	MT	7.00	183.00
WATER, DRILLING	MT	118.00	455.00	BARITE BULK	MT	8.00	130.00
CEMENT	MT		143.00	CEMENT HTB	MT		14.00
BRINE	bbls		1,373.00	BASE OIL	m3		159.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	2.06	0.800	2.800				12.60

REMARKS

No accidents or incidents during last 24 hours.

PCS crews continued with pit cleaning operation.
Mermaid Raider arrived location at 22:20hrs 19/06/06.
Invincible Tide departed Maersk Guardian at 21:10hrs. Off hire at 21:10hrs 19/06/06.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 28 **Report Date: 20/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	27.58	MD (m):	4,026.00	Day WSM:	Shaughan Corless
DFS:	27.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	36.50	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 18,948,478.00 ($)

Ops 00:00 to 06:00 : RIH to wellhead with 216mm (8-1/2") PDC bit. Tagged nylon sleeve. Rotated and broke off several pieces of sleeve. Continued until bit buried. Drilled nylon sleeve in wellhead.

Ops Summary : Made up nylon jetting tool. Tool became stuck in wellhead. Drained riser and BOP. Lifted BOP and laid down HP riser. Attempted to recover nylon sleeve without success. Installed wear bushing. RIH with used 216mm (8-1/2") PDC bit.

Ops Look Ahead : Drill out nylon jetting tool. Re-connect HP riser, BOP and diverter. Test wellhead connector. Jet wellhead and BOP. Install wear bushing. Make up casing cleanout assemblies. Pick up and RIH 3-1/2" and 4" drillpipe.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.50	C09	BPT	P	Continued to break out and lay down test assembly.
0:30	0.50	CU	WHM	D	Made up nylon jetting tool. RIH to wellhead. Landed out in 244mm (9-5/8") wellhead. Jetting tool jammed. Pulled free with 18T (40 klbs) overpull. Pulled tool to surface and noted that nylon shroud had parted from inner mandrel.
1:00	5.00	CU	WHM	D	Pumped out riser and BOP into holding tank.
6:00	4.00	CU	WHM	P	Cleaned out drip pan.
10:00	2.00	CU	BPR	D	Pulled and laid out diverter. Disconnected BOP, lifted and moved away from well centre.
12:00	0.50	CU	RUD	D	Rigged up to pull high pressure riser.
12:30	1.00	CU	BPR	D	Lifted high pressure riser and laid out.
13:30	1.50	CU	WHM	D	Emptied and cleaned out excess mud from inside wellhead. Found nylon sleeve in 244mm (9-5/8") seal assembly / casing swedge.
15:00	1.00	CU	RUD	D	Rigged up and connected wire and chain hoists through jet holes in the nylon sleeve. Attempted to pull nylon sleeve without success.
16:00	2.00	CU	RUD	D	Rigged up and fabricated various tools for drilling and cutting out nylon sleeve.
18:00	4.50	CU	MCP	D	Drilled holes in solid bottom of nylon sleeve. Attempted to pull nylon sleeve free with chain blocks - no success.
22:30	1.50	CU	WHM	D	Ran 311mm (12-1/4") wear bushing to protect compact wellhead. Made up used 216mm (8-1/2") PDC bit, bit sub, crossover and 1 stand 140mm (5-1/2") drillpipe.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	36.00	24.000	11.00	

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 6:00:00PM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 28 **Report Date: 20/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	3.00
DSLTI		Stop/Start Cards	7.00	209.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	5	SCHLUMBERGER	2
TECHNIP	3	MAERSK	23
OMS	38	HALCO	2
_Others	5	HALLIBURTON SERVICES	4
BHDF	2	GEOSERVICES	3
		Total POB :	87

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
WATER, POTABLE	MT	6.00	354.00	BARITE BULK	MT		130.00
HELI FUEL	Ltrs	530.00	3,250.00	BRINE	bbls		1,373.00
CEMENT	MT		143.00	DIESEL	MT		175.00
BASE OIL	m3		159.00	WATER, DRILLING	MT		445.00
GEL, FRESH	MT		44.00	CEMENT HTB	MT		14.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	1.06	1.400	2.200				13.00

REMARKS

No accidents or incidents during last 24 hours.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 29 **Report Date: 21/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	28.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	28.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	36.62	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 19,098,528.00 ($)

Ops 00:00 to 06:00 : Continued picking up 89mm (3-1/2") drillpipe singles from cantilever and RIH to 147m. Change to 102mm (4") handling tools. Fault on PDM. Power blackout at 03:30hrs. Trouble shot faults on PDM and PLS. Continue picking up 102mm (4") drillpipe singles.

Ops Summary : Milled nylon sleeve from wellhead. Installed HP riser, BOP and diverter and tested connectors. Installed wear bushing. Jetted wellhead and BOP. Picked up and RIH with cleanout assembly.

Ops Look Ahead : Pick up and RIH 89mm (3-1/2") and 102mm (4") drillpipe. Pick up 244mm (9-5/8") casing scraper and MFCT. RIH. Scrape and work obstruction through 178mm (7") liner top. RIH and tag 178mm (7") liner top with bearing sub.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.50	CU	DRT	D	RIH with 216mm (8-1/2") PDC bit to 27m.
0:30	7.00	CU	MCP	D	Milled obstruction at 27m with 15 RPM. Recovered nylon fragments and cuttings periodically. After milling, obstruction moved freely downhole to 41m with 1.5-2T (3-4 klbs) weight.
7:30	0.50	CU	DRT	D	POOH and broke off bit and crossovers.
8:00	1.00	CU	BPR	D	Retrieved wear bushing. Held toolbox talk for picking up and handling HP riser. Rigged up lifting equipment.
9:00	1.50	CU	BPR	D	Picked up and landed HP riser.
10:30	1.50	CU	BPR	D	Laid down lifting equipment.Torqued up connection between wellhead and HP riser to 108 daN.m (800 ft/lbs). Held toolbox talk. Landed BOP. Rigged up to handle diverter. Inspected Eaton brake offline.
12:00	0.50	CU	BPR	D	Held toolbox talk. Picked up diverter.
12:30	2.00	CU	BPR	D	Nippled up BOP and diverter.
14:30	1.00	CU	BPR	D	Filled up riser and BOP with mud. Picked up and RIH BOP test plug. Note: Power blackout from 15:00 to 15:15 hours due to gas ESD.
15:30	1.00	CU	BPT	D	Pressure tested between BOP, HP riser and wellhead to 2.01 / 27.6 MPa (300 / 4000psi) for 5 / 10 minutes.
16:30	0.50	CU	BPT	D	POOH with test plug, broke out and racked drillpipe stand.
17:00	0.50	CU	NGI	D	Re-started PRS, PLS and AR4000 after power blackout.
17:30	0.50	CU	WHM	D	Installed wear bushing.
18:00	3.00	CU	WHM	P	Made up jetting assembly and TIW valve. RIH to 29m. Broke cirulation and staged pumps up to 200spm 8.3 MPa (1200psi). Shakers unable to contain mud volume due to low mud temperature. Reduced flow rate to 143 spm 3.86 MPa (560psi). Rotated at 15 RPM and slowly jetted from 29m to 41m. Tagged obstruction and stopped RPM. Obstruction moved downhole freely with 1-1.5T (2-3 klbs). Stopped pumping and obstruction continued to move downhole freely with same weight. Increased running speed and weight increased to 1.5-2T (3-4 klbs). Pushed obstruction freely downhole to 58m. Brought pumps up to 143 spm 3.86MPa (560psi) and RPM to 15. Jetted wellhead and BOP. Functioned annular and pipe rams twice and made 3 passes accross BOP.
21:00	1.00	CU	PSI	P	POOH and broke out jetting tool and TIW valve. Cleared rig floor and changed handling gear.
22:00	1.00	CU	DRT	P	Picked up 244mm (9-5/8") casing scraper and MFCT assembly and made up crossover and handling pup joint. Laid out assembly on cantilever.
23:00	0.50	CU	DRT	P	Made up 152mm (6") milled tooth bit, bit sub and 178mm (7") Razorback casing scraper.
23:30	0.50	CU	DRT	P	Picked up 89mm (3-1/2") drillpipe singles from cantilever and RIH to 18m.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 29 **Report Date: 21/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	36.00	24.000	11.00	

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	1.00	4.00
DSLTI		Stop/Start Cards	6.00	215.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
WOODSIDE	6	SCHLUMBERGER	2
TECHNIP	2	MAERSK	24
OMS	37	HALCO	2
_Others	6	HALLIBURTON SERVICES	7
BHDF	4	GEOSERVICES	2
		Total POB :	92

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
GEL, FRESH	MT		44.00	BASE OIL	m3		159.00
WATER, POTABLE	MT	38.00	358.00	BRINE	bbls		1,373.00
CEMENT	MT		143.00	BARITE BULK	MT		130.00
DIESEL	MT	6.00	289.00	WATER, DRILLING	MT	30.00	415.00
CEMENT HTB	MT		14.00	HELI FUEL	Ltrs		5,134.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 29 **Report Date: 21/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	22.00	1.400	1.000				13.40

REMARKS

1 first aid treatment case. Person reported to medic with rash to feet and hands caused by exposure to SBM. Preliminary classification E-4.

Note: 30ea 3-3/8" TCP gun spacer sections loaded.
Continued checking and laying out completion and well testing equipment.
PCS continued pit cleaning.
Weather forecast indicates max Hs near 5m by Wednesday 28th June.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 30 **Report Date: 22/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	29.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	29.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	36.87	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 19,762,814.00 ($)

Ops 00:00 to 06:00 : Operation shutdown, waiting for new Zone Management CPU from town. Continued SBM cleaning operation.

Ops Summary : Picked up and RIH 89mm (3-1/2") drillpipe. Changed to 102mm (4") handling gear. Fault on PLS/PDM. Unplanned ESD. Restore power. Continued picking up and RIH 102mm (4") singles. Held planned ESD. Restored power. Unable to restore Zone Management System.

Ops Look Ahead : Continue RIH 102mm (4") drillpipe. Pick up 244mm (9-5/8") casing scraper and MFCT. RIH. Scrape and work obstruction through 178mm (7") liner top. RIH and tag 178mm (7") liner top with bearing sub.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.50	CU	DRT	P	Continued picking up 89mm (3-1/2") drillpipe singles. RIH to from 18m to 146m.
1:30	0.50	CU	RUD	P	Changed elevators and slips to handle 102mm (4") drillpipe.
2:00	1.00	CU	NGI	D	Investigated malfunction on PLS / PDM system.
3:00	0.50	CU	RUD	D	Changed handling equipment at 157m.
3:30	1.50	CU	REP	D	Power blacked out. Suspect gas ESD due to malfunctioning lights on gas panel. Restored all systems.
5:00	15.00	CU	DRT	P	Continued picking up 102mm (4") drillpipe singles and RIH from 157m to 1331m.
20:00	1.00	CU	REP	D	Stopped operation and performed planned ESD to determine cause of previous unplanned ESD's. Restored power and reset pipe handling equipment. Unable to restore Zone management system.
21:00	3.00	CU	NOA	D	Trouble shoot Zone Management system. Unable to move blocks, pipe handler, PLS, PDM or conveyor. CPU not operational. New CPU required from town. Continued with SBM cleaning operation.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	36.00	22.000	11.00	

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 30 **Report Date: 22/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	4.00
DSLTI		Stop/Start Cards	10.00	225.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	6
SCHLUMBERGER	3	TECHNIP	1
MAERSK	19	OMS	38
HALCO	2	_Others	6
HALLIBURTON SERVICES	7	WEATHERFORD	4
BHDF	4	GEOSERVICES	2
		Total POB :	93

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BASE OIL	m3	26.00	133.00	CEMENT	MT		143.00
BARITE BULK	MT		130.00	WATER, DRILLING	MT		386.00
DIESEL	MT	10.00	279.00	CEMENT HTB	MT		14.00
HELI FUEL	Ltrs	420.00	4,714.00	BRINE	bbls	717.00	656.00
WATER, POTABLE	MT	35.00	351.00	GEL, FRESH	MT		44.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	22.00	1.800	1.800				13.30

REMARKS

No accidents or incidents over last 24 hours.

SBM cleaning operation: Trip tank cleaned, and flowline and shaker header box cleaned of cuttings.
Pit management plan prepared.
Prepared 90 m3 (564 bbls) 1.15SG brine; 84 m3 (527 bbls) Seawater with detergent; 26.5 m3 (166 bbls) Hi-Vis Bypolymer.

Halliburton completion sub assemblies laid out and strapped.
Additional 30x 86mm (3-3/8") spacer gun sections prepared. Spacer guns stabbed into doubles and laid out on cantilever deck ready to run.
Co-Flexip well testing flowline secured off port aft of rig and run to platform mezzanine deck.

Weather forecast indicates max Hs of 5m by Tuesday pm, easing to 3m by Thursday.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 31 **Report Date: 23/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	30.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	30.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	36.87	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 20,089,120.00 ($)

Ops 00:00 to 06:00 : Completed sensor calibrations. Continued RIH with 102mm (4") drillpipe. Picked up and made up 244mm (9-5/8") casing scraper and MFCT assy. Broke circulation and checked MFCT for leaks. Continued circulating due to mud U-tubing.

Ops Summary : Waited for CPU module to arrive from town. Installed new CPU. Trouble shoot hardware and software and re-configured systems. Re-estalished software communication and re-calibrated sensors.

Ops Look Ahead : Continue RIH with cleanout assembly. Scrape and work obstruction through 178mm (7") liner top. RIH and tag 178mm (7") liner top with bearing sub. Displace SBM from well, and displace well to filtered brine.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	14.50	CU	NOA	D	Waiting for replacement CPU module to arrive from town.
14:30	9.50	CU	MNR	D	Recieved new CPU module and installed same. Trouble shoot hardware and software for Zone Management System. Reconfigured hardware and software with support from Copenhagen. Re-established software communication. Calibrated sensors and re-set setpoints.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	1250	36.00	22.000	11.00	

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	4.00
DSLTI		Stop/Start Cards	10.00	235.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 31 **Report Date: 23/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	6
SCHLUMBERGER	3	TECHNIP	2
MAERSK	18	OMS	38
HALCO	2	_Others	10
HALLIBURTON SERVICES	7	WEATHERFORD	1
BHDF	2	GEOSERVICES	2
		Total POB :	92

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
WATER, POTABLE	MT	20.00	366.00	DIESEL	MT	8.00	271.00
WATER, DRILLING	MT	31.00	355.00	GEL, FRESH	MT		44.00
BARITE BULK	MT		130.00	CEMENT	MT		143.00
BRINE	bbls		1,354.00	BASE OIL	m3		131.00
HELI FUEL	Ltrs	378.00	8,336.00	CEMENT HTB	MT		14.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	20.00	1.700	2.000				11.40

REMARKS

No accidents or incidents over last 24 hours.

Continued SBM cleaning. Cleaned flowlines, shakers, header box and drillfloor drains. Cleared excess equipment from drillfloor.
Changed out cementing hose and pressure tested same. Flushed choke & kill manifold with base oil.
Continued making up TCP guns into doubles on cantilever deck.
Installed PSV and stood up Schlumberger gauge tank in test area. Changed oil line bypass valve.

Weather forecast indicates max Hs of 5.6m by Wednesday 28/06/06. Wind speed of 25kn, gusting to 37 kn on Tuesday 27/06/06.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 32 **Report Date: 24/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	31.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	31.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	37.45	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 20,405,038.00 ($)

Ops 00:00 to 06:00 : Continued displacing detergent pills, and chased with seawater. Flushed choke and kill manifold. Flushed trip tank and surface lines with detergent. Flushed cement line and test line. Cleaned flowline and shaker header box.

Ops Summary : RIH with 102mm (4") drillpipe. Picked up 244mm (9-5/8") casing scraper & MFCT assy. RIH to TOL. Worked casing scraper over packer setting interval. Sheared open MFCT. Displaced base oil and seawater / detergent pills.

Ops Look Ahead : Displace well to filtered brine. Spot Perflow pill across perforation interval. POOH with clean-out assembly. RIH with jetting tool and jet wellhead, BOP and riser. Rig up and RIH TCP guns.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.50	CU	MNR	D	Continued to calibrate Zone Management sensors.
0:30	3.50	CU	DRT	P	Continued to pick up and RIH 102mm (4") drillpipe singles from 1331m to 1793m.
4:00	0.50	CU	RUD	P	Changed elevators for 139mm (5-1/2") drillpipe. Picked up 244mm (9-5/8") casing scraper and MFCT assembly. String weight below bearing sub 26T (57 klbs).
4:30	0.50	CU	PCD	P	Broke circulation with 1.34 m3/min (350 gpm) and checked tools for leaks. Changed inserts on PS21 slips.
5:00	1.00	CU	PCD	U	Broke off TDS. Well U-tubing. Made up TDS and circulated well at 1805m.
6:00	1.50	CU	DRT	P	Installed PS21 slips. Continued to RIH 139mm (5-1/2") drillpipe stands from 1805m to 2153m.
7:30	0.50	CU	PCD	P	Reciprocated string from 5m to 20m above 178mm (7") liner top at 2181m to establish parameters. Circulated at 1.96 m3/min (510 gpm), 22.1 MPa (3200psi); 2.31 m3/min (600 gpm), 29 MPa (4200 psi); 20 rpm with 1.3 kft/lbs. Rotating weight 81.8T (180 klbs).
8:00	0.50	CU	MNR	D	Unable to pump and rotate due to generator problems.
8:30	1.00	CU	PCD	P	Continued to reciprocate string with reduced pump rate, 1.7 m3/min (440 gpm), 15.86 MPa (2300psi) to clean out top of PBR. No indication of debris.
9:30	0.50	CU	PCD	U	Reamed down and tagged debris at 2165m. Milled out debris at 2165m with 0.26 kdaNm (2.0 kft/lbs) at 30 rpm. 1.73 m3/min (450 gpm) 16.5 MPa (2390psi). Picked up to pull 178mm (7") casing scraper above top of PBR to allow debris to clear.
10:00	0.50	CU	MNR	U	Draw works overspeed alarm. Trouble shot same.
10:30	0.50	CU	DRT	P	Picked up above 178mm (7") liner top and RIH past 2185m without problems. Held up at 2189m. Worked through 3 times, held up 2.3T (5 klbs)in both directions with and without pumps.
11:00	5.50	CU	DRT	P	Continued RIH on 139mm (5-1/2") drillpipe from 2192m to 3917m.
16:30	1.00	CU	CLM	P	Worked 244mm (9-5/8") casing scraper from 2117m to 2175m. Made 5 passes. P/U weight 125T (275 klbs), S/O weight 98T (215 klbs).
17:30	0.50	CU	CLM	P	Made up TDS. Slacked off string and tagged top of 178mm (7") liner at 2180.7m with bearing sub. Set down 4.5T (10 klbs) to confirm tag, and shear ring sheared early, opening MFCT circulating ports. Note P/U weight 127T (280 klbs), S/O weight 100T (220 klbs), therefore shear ring rating of 18T (40 klbs) exceeded with just 4.5T (10 klbs) set down on top of PBR.
18:00	0.50	CU	PCD	P	Picked up and closed MFCT. Established circulation at 1.32 m3/min (342 gpm), 15 MPa (2170 psi). Staged pumps up to 1.63 m3/min (425 gpm), 22 MPa (3200psi). Pulled back and racked 2 stands 139mm (5-1/2") drillpipe.
18:30	2.50	CU	CLM	P	Worked 244mm (9-5/8") casing scraper from 2121m to 2150m. Made 8 passes. Circulated at 1.63 m3/min (425 gpm) 21.2 MPa (3070psi), and rotated at 40 rpm on the upstroke. No circulation or rotation on the downstroke.
21:00	2.00	CU	PCD	P	RIH 2 stands drillpipe. Tagged top of 178mm (7") liner with bearing sub. Set down 6.8T (15 klbs) to open MFCT circulating ports. Circulated bottoms up. Pumped at previous rate of 1.63 m3/min (425 gpm) with 5.17 MPa (750psi). Staged pumps up to 3.11 m3/min (810 gpm) at 13.5 MPa (1950psi). Functioned both rams and annular preventer.
23:00	1.00	CU	PCD	P	Started planned displacement of SBM. Pumped 20 m3 (125 bbls) base oil. Displaced choke and kill manifold and choke and kill lines with base oil. Pumped 48 m3 (300bbls) unweighted 7% detergent / seawater at 1.63 m3/min (425 gpm), 21.4 MPa (3100psi).

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 32 **Report Date: 24/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SBM (AusCF2004)	149,783	36.00	22.000	11.00	

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	4.00
DSLTI		Stop/Start Cards	8.00	243.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	6
SCHLUMBERGER	8	TECHNIP	2
MAERSK	18	OMS	38
HALCO	2	_Others	10
HALLIBURTON SERVICES	7	WEATHERFORD	1
BHDF	2	GEOSERVICES	2
		Total POB :	97

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
GEL, FRESH	MT		44.00	HELI FUEL	Ltrs		8,316.00
WATER, DRILLING	MT	35.00	320.00	BARITE BULK	MT		130.00
BRINE	bbls		1,354.00	BASE OIL	m3		131.00
CEMENT HTB	MT		14.00	DIESEL	MT		258.00
CEMENT	MT		143.00	WATER, POTABLE	MT		354.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 32 **Report Date: 24/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	11.00	1.600	1.800				11.30

REMARKS

No accidents or incidents during last 24 hours.

Halliburton continued making up 3-3/8" TCP guns into doubles on cantilever deck.
PCS continued SBM cleaning in preparation for brine displacement.
Schlumberger continued rigging up testing spread.

Held H2S muster with all crews.
Weather forecast indicates max Hs as 5.7 during Wednesday 28/06/06.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 33 **Report Date: 25/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	32.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	32.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	38.30	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 20,885,407.00 ($)

Ops 00:00 to 06:00 : Changed to 89mm (3-1/2") handling gear. POOH to surface. Closed shear rams and pressure tested casing through kill line to 27.6 MPa (4000psi) for 1 hour. Broke down 244mm (9-5/8") casing scraper and MFCT. M/U jetting tool and jetted w/head, BOP and riser.

Ops Summary : Continued displacing SBM from hole with detergent train and seawater. Displaced well to 1.15 SG brine. Spotted Perflow pill. POOH.

Ops Look Ahead : Rig up and RIH TCP guns. Shoot perforations as per program. POOH, lay down guns. RIH with clean-up assembly and circulate out Perflow pill. POOH. Rig up and run 139mm (5-1/2") completion.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.50	CU	PCD	P	Continued planned displacement of SBM. Pumped 20 m3 (125 bbls) Hi-Vis Bio-Polymer push pill at 1.63 m3/min (425 gpm) 20.6 MPa (3000psi). Pumped 15 m3 (95 bbls) unweighted 7% detergent / seawater at 1.63 m3/min (425 gpm) 20.6 MPa (3000 psi). Flushed cement & test lines; and choke and kill lines with detergent.
1:30	2.00	CU	PCD	P	Pumped seawater at 3.08 m3/min (800 gpm) 20 MPa (2900psi). Monitored shakers and took SBM and baseoil returns back to pits. Captured interface of base oil and detergent pill. Began dumping pills when no further oil contamination was detected. Flushed trip tank and return lines with detergent. After seawater returns were seen at shakers, pumped a further 47.5 m3 (300 bbls) seawater.
3:30	2.00	CU	PSI	P	Filled trip tank with seawater. Circulated across the hole with the trip tank pump and flow checked the well. Flushed and cleaned flowlines & header box. Functioned both pipe rams and annular preventer. Slacked off and tagged liner top with bearing sub. Slacked off 6.8 T (15 klbs) to open circulation ports on MFCT.
5:30	0.50	CU	PCD	P	Flushed choke and kill manifolds and lines with 7% detergent / seawater, and displaced to seawater.
6:00	4.00	CU	PCD	P	Circulated well with seawater at 3.26 m3/min (850 gpm) 5.1 MPa (1250psi). Checked NTU values every 5 minutes. Continued circulating until NTU values were consistently below 70. Picked up string 4m and confirmed MFCT tool was closed.
10:00	1.00	CU	PCD	P	Displaced well to 1.15 SG brine.
11:00	0.50	CU	PCD	P	Spotted 19 m3 (120 bbls) Perflow in 178mm (7") liner across the perforation interval.
11:30	0.50	CU	TRP	P	Flowchecked well - OK. Recorded parameters. P/U weight 127T (280 klbs), S/O weight 99T (218 klbs), rotating weight 113T (250 klbs), free rotating torque at 20 RPM 1.04 kdaNm (8000 ft/lbs).
12:00	4.00	CU	TRP	P	POOH from 3975m to 2179m.
16:00	0.50	CU	TRP	P	Made up TDS and recorded parameters. P/U weight 86.3T (190 klbs), S/O weight 85T (187 klbs), rotating weight 85T (187 klbs), free rotating torque at 20 rpm 0.13 kdaNm (1000 ft/lbs). Continued POOH from 2179m to 2071m.
16:30	1.00	CU	PCD	U	Drillstring U-tubing. Made up TDS. Pumped 7m3 (45 bbls) brine slug at 1.18 SG.
17:30	1.00	CU	TRP	P	Continued POOH from 2071m to 1806m.
18:30	1.50	CU	RUD	P	Changed out handling gear from 139mm (5-1/2") to 101mm (4"). Changed inserts in PS-21 slips, and dies in PRS. Laid down 244mm (9-5/8") casing scraper and MFCT assembly.
20:00	4.00	CU	TRP	P	Laid out 101mm (4") drillpipe pup joint, and continued POOH from 1806m to 147m.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 33 **Report Date: 25/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	1.00	5.00
DSLTI		Stop/Start Cards	10.00	253.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	6
SCHLUMBERGER	8	TECHNIP	2
MAERSK	18	OMS	38
HALCO	2	_Others	10
HALLIBURTON SERVICES	7	WEATHERFORD	1
BHDF	2	GEOSERVICES	2
		Total POB :	97

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
DIESEL	MT	10.00	248.00	CEMENT HTB	MT		14.00
WATER, POTABLE	MT	36.00	348.00	GEL, FRESH	MT		44.00
BASE OIL	m3	9.00	122.00	BARITE BULK	MT		130.00
WATER, DRILLING	MT	45.00	275.00	BRINE	bbls	1,159.00	195.00
CEMENT	MT		143.00	HELI FUEL	Ltrs		8,295.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	10.00	1.400	2.000				12.10

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 33			Report Date: 25/06/2006
Block: T/L2	Rig: Maersk Guardian	Water Depth(m): 99.30	Start Date: 20/05/2006

Incident report. IR on the Maersk Supporter slipped on deck while working cargo with the rig on 23/06/06. IR returned to normal duties at the time. When the M. Supporter arrived in Portland on 25/06/06, the IR was checked by a doctor who cleared him as unfit for work for 1 week due to strained left knee. Preliminary classification C2.

Weather forecast indicates max Hs of 6.5 by Saturday 01/07/06. Windspeed of 28 kn, gusting to 42 kn on Tuesday 27/06/06.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 34 **Report Date: 26/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	33.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	33.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	47.88	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 21,113,632.00 ($)

Ops 00:00 to 06:00 : Continued RIH with 85mm (3-3/8") TCP guns on 139mm (5-1/2") drillpipe.

Ops Summary : Continued POOH 89mm (3-1/2") drillpipe. Spotted high vis pill at 46m. Laid down BHA. Pressure tested casing and liner to 27.6 MPa (4000 psi). Jetted wellhead and BOP. Displaced high vis pill. Rigged up and RIH TCP guns.

Ops Look Ahead : Continue RIH TCP guns. Shoot perforations as per program. Flow check. POOH, lay down guns. RIH with clean-up assembly and circulate out Perflow pill. POOH. Rig up and run 139mm (5-1/2") completion.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.00	CU	TRP	P	Changed handling equipment for 89mm (3-1/2") drillpipe. Continued POOH from 147.8m to 49m.
1:00	1.00	CU	PCD	P	Made up TDS. Spotted 2 m3 (12.5 bbl) high vis pill at 46m.
2:00	0.50	CU	TRP	P	POOH to surface. Broke out bit, bit sub, crossover and 178mm (7") casing scraper. Closed shear rams.
2:30	1.50	CU	PRE	P	Pressure tested 244mm (9-5/8") casing and 178mm (7") liner against shear rams to 27.6 MPa (4000psi) for 1 hour. Pumped up in 0.04 m3 (1/4 bbl) stages. Pumped total of 1.27 m3 (8 bbl). Lost 0.076 MPa (11 psi) over first 20 minutes, pressure then stabilised with no further loss. Note: Acceptance criteria #14 met: 178mm (7") liner, liner top and 244mm (9-5/8") production casing integrity with 1.15 SG brine. During pressure test, cleared rig floor of excess equipment. Picked up and broke down 244mm (9-5/8") casing scraper and MFCT. Made up nylon jetting tool, made up TDS and tested with 0.23 m3/min (60 gpm). Bled off pressure back to cement unit. Recovered 1.27 m3 (8 bbl). Opened shear rams.
4:00	1.00	CU	MNR	D	Unable to break out TDS. Problem with TDS torque wrench. Adjusted same.
5:00	0.50	CU	PCD	P	RIH to wellhead. Jetted wellhead, BOP and riser.
5:30	1.00	CU	PCD	P	RIH to 50m. Displaced high vis pill from well, dumping returns. POOH and laid out jetting assembly.
6:30	2.00	CS	RUD	P	Made up crossovers and perforated pup joint to single of 102mm (4") drillpipe and laid out on cantilever. Cleared rig floor. Held toolbox talk for picking up TCP guns. Rigged up to run 85mm (3-3/8") TCP guns.
8:30	11.50	CS	TRP	P	Picked up and RIH 85mm (3-3/8") TCP guns in doubles, as per tally to 1377m. Picked up and made up TDF firing head. Operation stopped twice for helicopter landings.
20:00	1.00	CS	TRP	P	Changed handling assembly for 102mm (4") drillpipe. Picked up single of 102mm (4") drillpipe with crossover and perforated pup joint. P/U weight 57.2T (126 klbs), S/O weight 59T (130 klbs).
21:00	1.50	CS	TRP	P	Continued RIH with TCP guns on 102mm (4") drillpipe stands from 1377m to 1831m.
22:30	1.50	CS	TRP	P	Changed out handling gear from 102mm (4") to 139mm (5-1/2"). Changed elevators, dressed PS21 slips, and changed dies in PRS. Picked up single of 139mm (5-1/2") drillpipe and made up crossovers back to 102mm (4") WT38.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 34 **Report Date: 26/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	1.00	6.00
DSLTI		Stop/Start Cards	13.00	266.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	6
SCHLUMBERGER	8	TECHNIP	2
MAERSK	19	OMS	38
HALCO	2	_Others	7
HALLIBURTON SERVICES	7	WEATHERFORD	5
BHDF	3	GEOSERVICES	2
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BARITE BULK	MT		130.00	HELI FUEL	Ltrs		8,074.00
CEMENT HTB	MT		14.00	WATER, POTABLE	MT		379.00
CEMENT	MT		143.00	BASE OIL	m3		122.00
BRINE	bbls	208.00	1,112.00	GEL, FRESH	MT		44.00
DIESEL	MT	7.00	270.00	WATER, DRILLING	MT	130.00	300.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	30.00	2.100	3.200				12.40

REMARKS

1 incident report for last 24 hours. PCS pit cleaning crew taken to medic with bruised inner left thigh. Discharge hose on suction cleaning system became blocked, and built up pressure. As hose was disconnected, it flew off under pressure, hitting the person's thigh. Preliminary classification D2 - FAC.

Weather forecast indicates max Hs of 5.4m during Tuesday 27/06/06. Winds gusting to 42 kn. Sea state will then reduce to 3.0m by Friday 30/06/06, with wind gusts of between 20 and 38 kn. Max Hs will then increase to 6m by Sunday 2nd July.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 35 **Report Date: 27/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	34.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	34.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	48.60	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 21,452,847.00 ($)

Ops 00:00 to 06:00 : Continued POOH and laying down 85.7mm (3-3/8") TCP guns in singles.

Ops Summary : RIH with TCP guns. Positioned on depth. Pressured up and fired guns. Flowchecked well. POOH, monitoring losses. POOH and laid down TCP guns in singles.

Ops Look Ahead : RIH with clean-up assembly and circulate out Perflow pill. Circulate in light brine & packer fluid. POOH. Pull wear bushing. RIH and jet tubing hanger seal area. Rig up and run 139mm (5-1/2") completion.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	6.00	CS	TRP	P	Continued RIH with TCP guns on 139mm (5-1/2") drillpipe from 1841m to 3775m at 90 sec/stand.
6:00	0.50	CS	NGI	U	Investigated incorrect fluid displacement of 139mm (5-1/2") drillpipe during tripping. Flowchecked with no pipe movement, noted fluid losses. Stopped trip tank pump - level static. Visually checked wellbore - fluid level dropping. Lo-torq valve on bottom of high pressure riser had worked loose due to conductor / platform movement during swell. Made up and secured same.
6:30	0.50	CS	TRP	P	Continued RIH with TCP guns on 139mm (5-1/2") drillpipe from 3775m to 3951m.
7:00	1.00	CS	TRP	P	Held toolbox talk for firing TCP guns. RIH to 3978m. Pulled back and positioned string at firing depth at 3973m.
8:00	0.50	CS	TRP	P	Made up TDS. Lined up to cement unit. Confirmed line up. Closed annular preventer.
8:30	1.00	CS	INT	P	Applied 13.8 MPa (2000 psi) to well with cement unit. Bled off to cement unit. Waited 5 minutes and confirmed guns had fired. Opened annular preventer and pulled back to 3950m. Initial loss 4.1 m3 (26 bbls).Flowchecked well for 50 minutes. Lost a further 3.66 m3 (23 bbls) during the flowcheck - rate of loss decreasing to approx 0.63 m3/hr (4 bbl/hr). Perforation intervals: 2609.52 - 2747.34m MDRT 2990.07 - 3155.56m MDRT 3495.15 - 3653.73m MDRT 3744.24 - 3972.00m MDRT Gun type: Halliburton 86mm (3-3/8") HMX 6spf Dominator charges.
9:30	1.00	CS	TRP	P	POOH from 3950m to 3924m. Flowchecked for 50 minutes. Loss rate 0.48 m3/hr (3 bbl/hr).
10:30	2.50	CS	TRP	P	POOH from 3924m to 3257m. Flowchecked for 5 minutes every 5 stands pulled. Losses steady at 0.16 m3/hr (1 bbl/hr).
13:00	3.50	CS	TRP	P	Fluid U-tubed up drillpipe. Broke circulation to cure u-tubing. Continued POOH from 3257m to 1843m.
16:30	1.50	CS	TRP	P	Flow checked. Losses recorded as 0.16 m3/hr (1 bbl/hr). Changed out handling gear from 139mm (5-1/2") to 102mm (4"). Redressed PS21, PRS and changed elevators. Laid out 102mm (4") drillpipe single with crossovers, perforated pup joint and firing head.
18:00	1.00	CS	TRP	P	Continued POOH from 1843m to 1360m. Changed out elevators and redressed PS21 slips for 3-1/2" to handle TCP guns.
19:00	5.00	CS	TRP	P	Held toolbox talk for laying down spent TCP guns. Continued POOH and laying down TCP guns in singles from 1360m to 1039m.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 35 **Report Date: 27/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	6.00
DSLTI		Stop/Start Cards	9.00	275.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	8	TECHNIP	2
MAERSK	15	OMS	38
HALCO	2	_Others	4
HALLIBURTON SERVICES	7	WEATHERFORD	5
BHDF	2	GEOSERVICES	2
		Total POB :	93

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
DIESEL	MT	10.00	260.00	GEL, FRESH	MT		44.00
BRINE	bbls	357.00	755.00	CEMENT HTB	MT		14.00
HELI FUEL	Ltrs	304.00	7,770.00	BASE OIL	m3		122.00
WATER, DRILLING	MT	90.00	210.00	CEMENT	MT		143.00
WATER, POTABLE	MT	34.00	431.00	BARITE BULK	MT		130.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	5.00	1.600	3.700				11.60

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 35			Report Date: 27/06/2006
Block: T/L2	**Rig: Maersk Guardian**	**Water Depth(m): 99.30**	**Start Date: 20/05/2006**

No accidents or incidents over last 24 hours.

Thylacine Platform access prevented while TCP were being laid down.

Weather forecast indicates max Hs easing from 5.2m to <3m by Friday 30/06/06. Winds speeds of between 20 to 27 kn, gusting to 35 to 40 kn from pm Wednesday 28/06/06 to Sunday 02/07/06.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 36 **Report Date: 28/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	35.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	35.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	48.92	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 21,817,449.00 ($)

Ops 00:00 to 06:00 : Continued to RIH with 139mm (5-1/2") drill pipe from 2248m to 3604m, filling string every 10 stands.

Ops Summary : POOH and laid down TCP guns. Made up clean up assembly and RIH. Worked junk through top of 178mm (7") liner.

Ops Look Ahead : Circulate out Perflow pill. Circulate in light brine & packer fluid. POOH. Pull wear bushing. RIH and jet tubing hanger seal area. Rig up and run 139mm (5-1/2") completion tubing.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	11.00	CS	TRP	P	Continued POOH and laying down TCP guns in singles from 1039m to surface. Dog collar spanner dropped in hole.
11:00	1.00	CU	PSI	P	Cleared rig floor and prepared to pick up clean out BHA.
12:00	6.00	CU	TRP	P	RIH with clean out assembly to 1809m. BHA: 152mm (6") milled tooth bit with open jets, bit sub.
18:00	1.50	CU	RUD	P	Changed to 139mm handling gear. Dressed PS21 slips & dies in PRS. Made up crossovers and float sub.
19:30	1.00	CU	TRP	P	Continued RIH from 1809m to 2132m. Filled string every 10 stands.
20:30	1.50	CU	TRP	D	Rotated string in hole at 15 RPM. Free rotating torque 0.13 kdaNm (1000 ft/lbs). Tagged junk at 2182.8m with 2.3T (5 klbs), torque increased to 0.18 kdaNm (1400 ft/lbs). Junk passed inside liner PBR. Continued to rotate down to 2187.7m. Held up with 2.3T (5 klbs).
22:00	1.00	CU	TRP	D	Worked junk several times using varying parameters at 2187.7m. Worked down intially with rotary on and no pumps. Worked down with no rotary. Worked down with combination of rotary, pumps and weight. Slacked off a max of 5.5T (12 klbs). Rotated at 30 rpm, torque increased from 0.13 kdaNm (1000 ft/lbs) to 0.39 kdaNm (3000 ft/lbs). Circulating rate 1.08 m3/min (282 gpm) 3.58 MPa (520 psi). Junk passed through setting sleeve into 178mm (7" liner). Worked string up and down with no hold up.
23:00	1.00	CU	TRP	P	Continued RIH from 2187.7m to 2248m. Filled drillpipe every 10 stands and recorded pick up and slack off weights.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 36 **Report Date: 28/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	6.00
DSLTI		Stop/Start Cards	7.00	282.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	7
SCHLUMBERGER	13	Keppel Prince	1
TECHNIP	2	MAERSK	13
OMS	39	HALCO	2
_Others	4	HALLIBURTON SERVICES	3
WEATHERFORD	5	BHDF	2
		Total POB :	95

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BRINE	bbls	60.00	695.00	GEL, FRESH	MT		44.00
CEMENT HTB	MT		14.00	WATER, POTABLE	MT		437.00
CEMENT	MT		143.00	WATER, DRILLING	MT		444.00
DIESEL	MT	7.00	253.00	HELI FUEL	Ltrs	161.00	7,609.00
BARITE BULK	MT		130.00	BASE OIL	m3		122.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	30.00	1.700	3.000				11.80

REMARKS

No accidents or incidents over last 24 hours.

Held conference call with Woodside onshore team re: unloading well strategy.

Weather forecast indiactes max Hs of 5.5m by Sunday 02/07/06. Average wind speed forecast to be between 16 and 28 kn, gusting to a max of 42kn on Saturday 01/07/06.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 37 **Report Date: 29/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	36.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	36.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	48.92	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 22,138,526.00 ($)

Ops 00:00 to 06:00 : POOH to surface. Laid down 2 joints 102mm (4") and 15 joints 89mm (3-1/2") drillpipe. Broke off bit and bit sub. Retrieved wear bushing. Drained riser and BOP. RIH with Cameron wellhead jetting tool. Jetted wellhead and BOP.

Ops Summary : RIH to 3976m. Displace out Perflow. Displaced 178mm (7") liner to 1.05 SG brine. POOH to top of liner. Displaced hole above 2141m with packer fluid at 1.15 SG. POOH.

Ops Look Ahead : Rig up and run 139mm (5-1/2") completion tubing.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	7.50	CU	TRP	P	Continued RIH with 139mm (5-1/2") drillpipe from 2248m to 3974m. Filled string every 10 stands.
7:30	2.50	CU	PCD	P	Held toolbox talk for clean up procedure. Pumped 3.2 m3 (20 bbl) high-vis brine and displaced with 75.7 m3 (475 bbls) 1.15 SG brine. Displaced Perflow and high vis pill from well.
10:00	1.50	CU	PCD	P	Pumped 1.6 m3 (10 bbls) high vis brine and displaced 178mm (7") liner with 31 m3 (195 bbls) brine at 1.05 SG. Chased with 26 m3 (163 bbls) brine at 1.15 SG to balance.
11:30	0.25	CU	CWF	P	Flowchecked well on trip tank - well losing at 0.16 m3/hr (1 bbl/hr).
11:45	6.25	CU	TRP	P	POOH from 3666m to 2141m. Well losing 0.16 m/hr (1 bbl/hr).
18:00	1.50	CU	PCD	P	Displaced well to packer fluid from 2141m to surface. Pumped 84.5 m3 (530 bbl) 1.15 SG brine at 2.58 m3/min, 18.6 MPa. Flowchecked well on trip tank for 15 minutes. Loss rate 0.16 m3/hr (1 bbl/hr).
19:30	1.00	CU	TRP	P	Continued POOH from 2141m to 1814m.
20:30	1.00	CU	RUD	P	Broke out and laid down crossovers and float sub. Changed to 102mm (4") drillpipe handling equipment.
21:30	2.50	CU	TRP	P	Continued POOH from 1814m to 789m.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 37 **Report Date: 29/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	6.00
DSLTI		Stop/Start Cards	12.00	294.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	7
SCHLUMBERGER	13	TECHNIP	2
MAERSK	13	OMS	38
HALCO	2	_Others	4
HALLIBURTON SERVICES	3	WEATHERFORD	5
BHDF	3	GEOSERVICES	2
		Total POB :	94

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
DIESEL	MT	3.00	250.00	GEL, FRESH	MT		44.00
CEMENT HTB	MT		14.00	BARITE BULK	MT		130.00
BASE OIL	m3		122.00	WATER, DRILLING	MT		440.00
HELI FUEL	Ltrs	226.00	7,383.00	CEMENT	MT		143.00
WATER, POTABLE	MT	30.00	407.00	BRINE	bbls	635.00	60.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland	30/05/2006	
Mermaid Raider	Stand by at rig	19/06/2006	
Invincible Tide	Standby at Rig		
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	32.00	1.900	2.200				13.30

REMARKS

No accidents or incidents during last 24 hours.

Weather forecast indicates max Hs of 5.2 by Sunday 02/07/06. Wind gusting to 42 kn during Saturday 01/07/06

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 38 **Report Date: 30/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	37.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	37.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	49.61	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 22,660,482.00 ($)

Ops 00:00 to 06:00 : Ran 139mm (5-1/2") 13Cr completion tubing from 1184m to 1800m.

Ops Summary : POOH and laid down 89mm (3-1/2") drillpipe. Retrieved wear bushing. Jetted wellhead and confirmed landing point. Rigged up and ran 139mm (5-1/2") 13Cr completion tubing and accessories to 1184m.

Ops Look Ahead : Continue RIH with 139mm (5-1/2") completion tubing. Pick up and make up TRSV. Continue RIH. Make up tubing hanger. RIH and land tubing hanger on 194mm (7-5/8") landing string.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.00	CU	TRP	P	Continued to POOH with 102mm (4") drillpipe from 789m to 164m.
1:00	2.50	CU	TRP	P	Changed handling equipment for 89mm (3-1/2"). Held toolbox talk for laying down drillpipe. Laid out 15 joints 89mm (3-1/2") drillpipe. Broke out bit and bit sub. Bit had several gauge marks on the shirttail area, indicative of working junk. No damage to teeth, cones or bearings.
3:30	1.00	CU	WHM	P	Changed handling equipment. RIH and retrieved wear bushing. Took 0.45T (1 klb) overpull to free wear bushing. POOH. No appreciable wear pattern visible in wear bushing.
4:30	2.50	CU	WHM	P	Made up Cameron wellhead jetting tool. RIH and tagged top of 273mm (10-3/4") seal assembly. Opened side outlet valves on compact wellhead and drained riser and BOP. Jetted wellhead with 0.97 - 1.3 m3/min (256 - 342 gpm) with no pressure. Continued jetting until clean seawater seen at wellhead. Stopped pumping and closed side outlet valves. Filled riser and BOP. POOH and strapped landing string. Landing point confirmed as 27.88m. Laid out jetting sub.
7:00	0.75	IC	RUD	P	Cleared rig floor and rigged up to run completion. Held toolbox talk for running completion.
7:45	2.25	IC	CLR	P	Tailed-in sub assemblies to rig floor. Picked up mule shoe and shearable centraliser sub-assembly, confirmed 3 pins installed. Unable to latch 139mm (5-1/2") 150T side door elevators. Changed elevators for 100T side doors. RIH with landing nipple/perforated pup sub-assembly; 244mm (9-5/8") AHC packer sub-assembly; and PDHG carrier sub assembly.
10:00	2.00	IC	CLR	P	Terminated DHPG cable, and pressure tested cable entry to 55 MPa (8000psi) for 15 minutes.
12:00	12.00	IC	CLR	P	Continued to pick up and RIH with 139mm (5-1/2") 13 Cr completion tubing joints from 101m to 1184m using split bushings and hand slips. Installed cross coupling cable clamps at each connection. Loss rate to hole while RIH tubing, 0.16 m3/hr (1 bbl/hr).

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 38 **Report Date: 30/06/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	1.00	7.00
DSLTI		Stop/Start Cards	13.00	307.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	7
SCHLUMBERGER	15	Keppel Prince	1
TECHNIP	2	MAERSK	15
OMS	38	HALCO	2
_Others	4	HALLIBURTON SERVICES	3
WEATHERFORD	5	BHDF	3
		Total POB :	99

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
DIESEL	MT	7.00	243.00	BASE OIL	m3		122.00
WATER, DRILLING	MT	9.00	431.00	CEMENT	MT		143.00
CEMENT HTB	MT		14.00	GEL, FRESH	MT		44.00
BARITE BULK	MT		130.00	WATER, POTABLE	MT		352.00
HELI FUEL	Ltrs	275.00	7,108.00	BRINE	bbls		169.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland		
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	30.00	2.400	2.400				13.50

REMARKS

1 HSE06 Incident report. While beginning the transfer of diesel from the Maersk Supporter to the Maersk Guardian, the fuel line started to leak and then ruptured. Personnel managed to stop the operation immediately, with only an estimated 2 - 5 litres fuel spilled into the ocean. Preliminary classification E2 environment.

Conducted comms exercise for environmental notification with Woodside marine duty manager.

Commenced inspecting well test equipment as per the pre-flow checklist. Well test rig up approx 85% complete. Pressure testing ongoing.

THA02 Xmas tree and tubing hanger ready for running.
986 barrels brine @ 1.15 SG ready in pits at <25 NTU.

Weather forecast indicates max Hs of 5.1m on Sunday, easing slightly to an average of 4m through to Wednesday 05/07/06. Max Hs then forecast to increase to 6m during Thursday 06/07/06. Wind gusting to 53 kn during Saturday 1/07/06, easing to <25 kn during Monday and Tuesday, increasing again to 42 kn by Wednesday 05/07/06.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 39 **Report Date: 1/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	38.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	38.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	50.67	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 22,972,001.00 ($)

Ops 00:00 to 06:00 : Waited on weather. Picked up and made up swab valve assembly to landing string. Rigged up scaffolding. Made up wireline BOP and side entry sub. Filled BOP and landing string.

Ops Summary : Continued RIH with 139mm (5-1/2") completion tubing. Made up TRSV, connected control line and pressure tested. Continued RIH. M/U tubing hanger and terminated control line and cable. Drained riser. Landed TH and engaged snap ring. Tested TH seals-OK .

Ops Look Ahead : Make up slickline lubricator and pressure test. Displace well with packer fluid and diesel. Install slickline plug. Set the production packer and test the annulus. Install tubing hanger plug.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	6.50	IC	TUR	P	Continued to pick up and RIH with 139mm (5-1/2") 13 Cr completion tubing joints from 1184m to 1827m using split bushings and hand slips. Installed cross coupling cable clamps at each connection. Loss rate to hole while RIH tubing, 0.16 m3/hr (1 bbl/hr).
6:30	2.00	IC	TUR	P	Picked up TRSV and made up to string. Terminated 6.35mm (1/4") Incoloy control line and pressure tested to 57.1 MPa (7500 psi) for 15 minutes. Bled off pressure and recorded volume of fluid returned. Pressured up control line to 34.5 MPa (5000 psi). Bled to zero and recorded fluid volume returned. Pressured up control line to 20.7 MPa (3000 psi) to maintain TRSV open while RIH.
8:30	3.50	IC	TUR	P	Continued to RIH with 139mm (5-1/2") completion tubing from 1827m to 2150m.
12:00	0.50	IC	HAI	P	Changed elevators for 193mm (7-5/8") landing string. Picked up and made up 473mm x 139mm (18-5/8" x 5-1/2") tubing hanger and running tool assembly. Backed out the tubing hanger running tool and picked up clear of the tubing hanger.
12:30	4.50	IC	PRE	P	Cut the PDHG cable and passed through port in the tubing hanger. Made up the Incoloy gyrolock fittings. Bled off the TRSV control line, cut and passed through the tubing hanger port. Made up the Incoloy gyrolock fittings. Pressure tested the gallery around the gauge line to 34.5 MPa (5000psi) for 15 mins. Pressure tested the gallery around the TRSV control line to 34.5 MPa (5000 psi) for 15 minutes. Reconnected the PDHG cable using a field splice. Pressured up to 20.7 MPa (3000 psi) on the TRSV control line. Made up the tubing hanger running tool and adjusted the snap ring.
17:00	4.50	IC	TUR	P	Picked up and RIH with 193mm (7-5/8") landing string. Drained riser and BOP from 'A' annulus side outlet. Landed tubing hanger and rotated running tool 4 turns to the right to engage snap ring. Picked up string weight plus 9T (20 klbs) overpull to confirm snap ring engaged. Slacked off weight. Note: 193mm (7-5/8") handling pup joint on tubing hanger running tool was too short, causing difficulty setting bushings and slips.
21:30	2.50	IC	WOW	U	Waited on weather. Wind gusting up to 50kn, unable to use cranes. Pressure tested tubing hanger seals via compact housing test ports to 24.5 MPa (5000psi) for 15 minutes. Filled landing string with brine via fill-up hose and flowchecked for 15 minutes. Fluid losses 0.13 m3/hr (0.8 bbl/hr). Pressure tested flexible hose from wellhead to rig floor against lo-torq valve to 31 MPa (4500psi) for 15 minutes. Monitored pressure on PDHG.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	137,800				

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 39 **Report Date: 1/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	7.00
DSLTI		Stop/Start Cards	12.00	319.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	7
SCHLUMBERGER	15	Keppel Prince	1
TECHNIP	2	MAERSK	15
OMS	38	HALCO	2
_Others	4	HALLIBURTON SERVICES	3
WEATHERFORD	5	BHDF	3
		Total POB :	99

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
CEMENT	MT		143.00	CEMENT HTB	MT		14.00
WATER, POTABLE	MT	30.00	363.00	HELI FUEL	Ltrs	20.00	7,088.00
BASE OIL	m3		122.00	DIESEL	MT		237.00
WATER, DRILLING	MT	64.00	367.00	BRINE	bbls	126.00	43.00
BARITE BULK	MT		130.00	GEL, FRESH	MT		44.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland		
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	36.00	3.000	4.300				10.60

REMARKS

No accidents or incidents during last 24 hours.

Held fire and evacuation muster drills with all crews.

Weather forecast indicates max Hs near 6.5m on Thursday 06/07/06. Wind speed easing throughout Monday and Tuesday 04/07/06, increasing to max gust speed of 42kn by Thursday 06/07/06.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 40 **Report Date: 2/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	39.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	39.58	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	51.73	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 23,292,376.00 ($)

Ops 00:00 to 06:00 : Continued attempting to test 139mm tubing to 27.6 MPa (4000psi) - failed test. Tested annulus to 27.6 MPa (4000psi) - good test. Pressured up on tubing to 27.6 MPa (4000psi). Pressure leaking off at 0.21 MPa/min (20 psi/min). Perform in-flow test.

Ops Summary : Made up slickline lubricator and pressure tested suface equipment. Displaced well with packer fluid and diesel. Installed slickline plug and prong. Lost slickline toolstring. Set the production packer and attempted to test the tubing.

Ops Look Ahead : Conduct TRSV in-flow test. Install tubing hanger plug. Nipple down slickline equipment. Nipple down BOP and HP riser. Nipple up Xmas tree.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.00	IC	WOW	U	Continued to wait on weather to operate cranes.
1:00	4.00	IC	SLO	P	Held toolbox talk for rigging up slickline pressure control equipment. Picked up and made up swab valve assembly to 194mm (7-5/8") landing string. Installed scaffold work platform for slickline BOP and swab valve manipulation. (Note, no man-riding operation required.)Picked up and made up slickline BOP assembly and pump-in tee. Connected pump-in hose.
5:00	2.00	IC	SLO	P	Picked up slickline lubricator. Made up RNT plug toolstring. Made up lubricator to slickline BOP.
7:00	1.00	IC	PRE	P	Pressure tested swab valve and slickline lubricator to 31 MPa (4500 psi) for 15 minutes. Opened swab valve. RIH with slickline plug and and set plug in tubing hanger. Sheared off running tool and POOH toolstring. Backed off lubricator and changed to plug retrieval tool. Made up lubricator to BOP.
8:00	0.50	IC	PRE	P	Pressure tested 194mm (7-5/8") landing string and slickline lubricator to 31 MPa (4500 psi).
8:30	0.50	IC	SLO	P	Bled off pressure. RIH and retrieved plug from tubing hanger. POOH, broke off lubricator and changed toolstring to 4.437" RPT plug. Made up lubricator.
9:00	4.00	IC	PCD	P	Held toolbox talk for displacing well. Pumped 15.95 m3 (100 bbls) clean packer fluid at 1.15 SG. Changed over lines and pumped 24.56 m3 (154 bbls) diesel at 0.26 m3/min (1.6 bbl/min). Pumped a further 1.12 m3 (7 bbl) packer fluid at 1.15 SG. Returned 41.5 m3 (260 bbls) during displacement. Lost 0.16m3 (1 bbl).
13:00	2.00	IC	SLO	P	Closed annulus valve. Opened swab valve fully. RIH with RPT plug on slickline. Set plug in RPT nipple at 2153m. Jarred down to release running tool. POOH.
15:00	3.00	IC	SLO	P	Tools to surface. Broke off lubricator and made up equalising prong to SB running tool. Made up lubricator. RIH with equalising prong to 1890m. Lost 0.13T (300 lbs) weight on slickline weight indicator. Continued RIH to 2153m. Pressure tested against prong to 3.45 MPa (500 psi). Good test.
18:00	1.00	IC	SLO	P	POOH with slickline running tools. Wireline tools backed off at swivel. Left in hole 102mm (4") SB running tool; HIT tool; 2 x 102mm (4") roller stems. Approx 6.4m (21ft) length. Fish neck 82.6mm (3.25") OD with 34.8mm (1.37") box. Completion tubing minimum drift 116mm (4.562").
19:00	3.50	IC	SLO	D	Examined slickline running tools and consulted onshore team.
22:30	0.50	IC	SLO	P	Broke off lubricator. Slipped and cut 10m wire and tied new rope socket. Made up RXN running tool with 122mm (4.813") RNT hanger plug. Made up lubricator and pressure tested in-situ test sub to 27.6 MPa (4000 psi).
23:00	0.50	IC	PRE	P	Pressure tested 113mm (4.437") RPT plug to 9 MPa (1300psi).
23:30	0.50	IC	SLO	P	Pressure up tubing above RPT plug to 27.6 MPA (4000 psi) and set the AHC packer.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,299.00	18.625	638.00		Casing	8.681
8.5" Hole	2,299.00	4,026.00	9.625	2,293.00		Casing	6.184

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 40 **Report Date: 2/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing:	Next Casing:	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	7.00
DSLTI		Stop/Start Cards	13.00	332.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	15	Keppel Prince	1
TECHNIP	2	MAERSK	15
OMS	38	HALCO	2
_Others	4	HALLIBURTON SERVICES	6
WEATHERFORD	5	BHDF	2
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BRINE	bbls		43.00	WATER, POTABLE	MT		371.00
BASE OIL	m3		122.00	CEMENT HTB	MT		14.00
DIESEL	MT	6.00	231.00	HELI FUEL	Ltrs	20.00	7,068.00
BARITE BULK	MT		130.00	GEL, FRESH	MT		44.00
CEMENT	MT		143.00	WATER, DRILLING	MT		333.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland		
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	7.00	1.600	3.700				10.70

REMARKS

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 40			**Report Date: 2/07/2006**
Block: T/L2	**Rig: Maersk Guardian**	**Water Depth(m): 99.30**	**Start Date: 20/05/2006**

No accidents or incidents over last 24 hours.

Held pre-flow briefings for all personnel during the weekly safety meetings at 13:00hrs and 01:00 hrs.

Gas line diverter valve not holding pressure. Replacement to be mobilised asap.

Weather forecast indicates max Hs of 6m by Thursday 06/07/06. Wind gusting to 35kn by Thursday 06/07/06.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 41 **Report Date: 3/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	40.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	40.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	52.40	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 25,578,502.00 ($)

Ops 00:00 to 06:00 : Completed nippling down BOP's. Pulled high pressure riser. Terminated PDHG and TRSV lines.

Ops Summary : Pressure tested deepset plug - failed test. Pressure tested annulus. Inflow tested deepset plug. Inflow tested TRSV. Installed and tested tubing hanger plug. Rigged down slickline. Nippled down BOP's.

Ops Look Ahead : Nipple up and test Xmas tree. Pull Tubing hanger plug. Fish toolstring. Pull deepset prong and plug.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.75	IC	PRE	D	Pressure tested 113mm (4.437") RPT plug and tubing 27.6MPa (4000psi). Pressure constantly bled off 0.07 - 0.08MPa/min (10-12 psi/min) - test failed. Closed surface valves, monitored pressure at cement unit, annulus and tubing (via PDHG). Confirmed surface lines and annulus holding OK. Pressure continued bleeding off downhole. Vented pressure on tubing to 3.4MPa (500psi).
1:45	1.00	IC	PRE	P	Lined up and pressure tested the annulus 27.6MPa (4000psi) 15min - Good test.
2:45	1.25	IC	PRE	D	Pressure tested 113mm (4.437") RPT plug and tubing 27.6MPa (4000psi). Pressure constantly bled off 0.14MPa/min (20 psi/min) - test failed.
4:00	2.00	IC	PRE	P	Vented pressure on tubing to 0.8MPa (120psi). Inflow tested 113mm (4.437") RPT plug 5.2MPa (760psi) 30mins - Good test.
6:00	1.50	IC	PRE	P	Pressured tubing up to 4.8MPa (700psi). Closed TRSV. Vented pressure off above TRSV off to 0.69MPa (100psi). Inflow tested TRSV 4.1Mpa (600psi) - Good test.
7:30	1.00	IC	SLO	U	Discussed options with onshore support.
8:30	0.50	IC	SLO	P	Vented pressure above TRSV to 0MPa. Made up 122mm (4.813") RNT tubing hanger plug. Ran in hole and set 122mm (4.813") RNT tubing hanger plug at 28m. Pulled out of hole, broke lubricator, confirmed plug set correctly.
9:00	2.00	IC	PRE	P	Pressure tested 122mm (4.813") RNT tubing hanger plug 3.4MPa (500psi) 5mins and 27.6MPa (4000psi) 15min - Good test.
11:00	0.25	IC	SAF	P	Held tool box talk in preparation for rigging down slickline equipment.
11:15	1.25	IC	RUD	P	Laid out slickline tools and rigged down pressure control equipment and scaffolding platform.
12:30	2.25	IC	RUD	P	Filled drilling riser with brine. Drilling riser leaking at EC6 991mm (39") connection (between Ball Joint Overshot and diverter). Syphoned diesel out of slickline BOP's down to first 7 5/8" landing string connection. Broke out swab valve at 7-5/8" connection. Installed water hose in completion riser and displaced diesel from completion riser with water.
14:45	1.25	IC	RUD	P	Backed out THRT and laid out landing string and tubing hanger running tool. Final DHPG readings 003 - 21.5MPa (3119psi), 96.33 degC and 004 - 21.5MPa (3119psi), 97.31 degC. 31.8mA @ 37.7 volts DC.
16:00	0.50	IC	PSI	P	Cleared drill floor of excess equipment. Concurrently drained riser.
16:30	0.25	IC	SAF	P	Held tool box talk in preparation for nippling down BOPs.
16:45	2.75	IC	BPR	P	Pulled diverter and Ball Joint Overshot. Broke out EC6 991mm (39") connection. Inspected seal condition - OK. Made up EC6 connection and laid out and inspected Ball Joint Overshot and diverter. (Minor damage to one point on top seal in Ball Joint Overshot)
19:30	4.50	IC	BPR	P	Laid out slick joint. Nippled down BOP's.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 41 **Report Date: 3/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 19/06/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	7.00
DSLTI		Stop/Start Cards	8.00	340.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	15	Keppel Prince	1
TECHNIP	2	MAERSK	15
OMS	38	HALCO	2
_Others	4	HALLIBURTON SERVICES	6
WEATHERFORD	5	BHDF	2
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
CEMENT	MT	0.00	143.00	CEMENT HTB	MT	0.00	14.00
HELI FUEL	Ltrs	142.00	6,926.00	WATER, DRILLING	MT	13.00	320.00
GEL, FRESH	MT	0.00	44.00	BASE OIL	m3	0.00	122.00
BRINE	bbls	0.00	1,410.00	DIESEL	MT	35.00	196.00
BARITE BULK	MT	0.00	130.00	WATER, POTABLE	MT	31.00	383.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland		
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	5.00		3.400				12.00

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 41			Report Date: 3/07/2006
Block: T/L2	Rig: Maersk Guardian	Water Depth(m): 99.30	Start Date: 20/05/2006

No accidents or incidents over past 24hrs
- Conducted 2 x Permit to Work audits.
- Prepared SBM training documentation for all drillcrew members.

- Serviced fluid end on pump #1.
- Mobilised slickline fishing tools for AM flights 04/07/06.
- Pressure tested gas diverter manifold and well test surface lines and equipment. Callibrated meter factors. Checked times on ESD on stations.
- Continued loading 7" TCP guns.

-Weather Forecast: Hs increasing to 6m during Thursday, dropping off to 5m on Saturday. Winds Gusting to 35kn Wednesday AM and remaining 30 - 35kn for remainder of the week.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 42 **Report Date: 4/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	41.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	41.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	George Clark
Progress Days:	53.07	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 25,948,443.00 ($)

Ops 00:00 to 06:00 : Completed pressure testing well test lines. Pulled tubing hanger plug. Retrieved lost tool string and deep set prong.

Ops Summary : Completed nippling down BOPs and HP riser. Terminated lines. Installed and pressure tested Xmas tree. Rigged up Slickline equipment and well test lines. Pressure tested Slickline rig up and well test lines.

Ops Look Ahead : Pull deep set plug. Clean up well.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.00	IC	BPR	P	Nippled down and transferred BOPs to set back area.
1:00	0.50	IC	BPR	P	Pulled and laid out HP riser. Installed main deck hatch covers.
1:30	2.50	IC	XTI	P	Cleaned wellhead, top of hanger and ID of tubing hanger plug. Wrapped TRSV control line and gauge cable round hanger neck. Terminated TRSV control line and PDHG cable. Made up TRSV and gauge exit flanges to compact housing. (TRSV outlet 30deg clockwise from alignment fixture mounting preparation) Concurrently transferred Xmas tree over well.
4:00	2.00	IC	XTI	P	Installed SRL seal over hanger neck with hydraulic installation tool. Made up tree alignment arm jig to compact housing. Installed a new CF-18 gasket and filled hanger neck void with hydraulic oil.
6:00	2.00	IC	XTI	P	Picked up Xmas tree. Adjusted rigging to ensure Xmas tree vertical. Made up upper section of tree alignment fixture. Inspected seals and cleaned seal areas. Removed Autoclave fittings from test ports and vent port. Lowered Xmas tree over compact housing hub. Orientated Xmas tree as per Technip supplied drawing "Package 4a: Offshore facilities piping plan cellar deck". Landed Xmas tree and made up fastlock connection.
8:00	0.75	IC	XTI	P	Installed and made up actuated HFWV.
8:45	1.75	IC	PRE	P	Pressure tested void between CF gasket, LS hanger neck seals, hanger body seals, TRSV control line and Gauge cable exit flanges with vent port below SRL seal open 3.4MPa (500psi) 5min and 34.5MPa (5000psi) 15min - good test. Acceptance criteria #20 met - Xmas Tree CF18 gasket.
10:30	4.00	IC	PRE	P	Filled tree body with water. Pressure tested tree cavity against 122mm (4.813") RNT plug, blind flange on KWV, tree cap, closed HFWV and SR seal with vent port below SRL seal open. 3.4MPa (500psi) 5min and 34.5MPa (5000psi) 15min - good test. (had to cycle tree valves to disperse air trapped in tree grease) Acceptance Criteria #21 met - Xmas Tree SRL seals.
14:30	2.25	IC	RUD	P	Rigged up wireline riser, BOP and lubricator. Made up GR pulling tool & equalising probe toolstring. Concurrently pressure tested compact housing / gauge outlet termination 34.5MPa (5000psi) 15mins.
16:45	0.25	IC	RUD	P	Hooked up intervention well control panel lines to the UMGV and TRSV. Pressure tested UMGV line 20.7MPa (3000psi) and TRSV line 34.5MPa (5000psi) against closed TRSV isolation valve.
17:00	3.00	IC	RUD	P	Completed rigging up well test surface lines to the HFWV. Hooked up and tested line from the SSV shutdown panel to the HFWV.
20:00	0.50	IC	PCD	P	Flushed lines and filled wireline lubricator and riser with 60/40 Seawater/Glycol mix.
20:30	3.50	IC	PRE	P	Pressure tested lines and wireline rig up against Well Test SSV 27.6MPa (4000psi) - test failed. Trouble shot leak. Concurrently: Received Petroline Releasable Overshot onboard. Stripped down and function tested Petroline Releasable Overshot prior to commencing machining OD down from 117.5mm (4.625") to 114.3mm (4.5").

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 42 **Report Date: 4/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 4/07/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	7.00
DSLTI		Stop/Start Cards	6.00	346.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	18	TECHNIP	2
MAERSK	15	OMS	37
HALCO	2	_Others	4
HALLIBURTON SERVICES	6	BHDF	2
		Total POB :	96

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BRINE	bbls	0.00	1,410.00	DIESEL	MT	8.00	188.00
HELI FUEL	Ltrs	1,596.00	5,330.00	BASE OIL	m3	0.00	122.00
BARITE BULK	MT	0.00	130.00	CEMENT	MT	0.00	143.00
WATER, DRILLING	MT	25.00	295.00	WATER, POTABLE	MT	14.00	410.00
CEMENT HTB	MT	0.00	14.00	GEL, FRESH	MT	0.00	44.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland		
Invincible Tide	Standby at Rig		

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 42 **Report Date: 4/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	13.00	1.900	1.900				11.00

REMARKS

No accidents or incidents over past 24hrs.

- Pressure tested BOPs on test stump.
- Helicopter night flight landed with Petroline Releasable Overshot.
- Completed loading 7" TCP guns, stored in bunkers and explosive magazine.
- Conducted preliminary preparation for well test checks.

- Weather Forecast: Hs increasing to 6m by Thursday PM, dropping off to below 5m Saturday PM. Winds Gusting to 35-40kn Wednesday, dropping off to 30kn on Thursday PM for remainder of the week prior to picking back up to 40kn on Sunday AM.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 43 **Report Date: 5/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	42.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	42.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	53.87	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 26,880,022.00 ($)

Ops 00:00 to 06:00 : Continued well clean up at +/-60mmscf/d with test separator bypassed due to perforation debris.

Ops Summary : Pulled lost toolstring and deep set prong. Pulled deep set plug body. Finalised pre-flow checks. Commenced well clean up.

Ops Look Ahead : Complete well clean up. Rig down riser and well test lines. Skid rig to THA01.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.25	IC	PRE	P	Pressured up well test lines and wireline rig to 3.45MPa (500psi) against choke manifold. Closed well test SSV. Pressure tested against well test SSV 27.6MPa (4000psi) 10mins - good test. Concurrently: Continued machining OD of Petroline Releasable Overshot down to 114.3mm (4.5")
1:15	0.75	IC	SLO	P	Opened UMGV. RIH with GR pulling tool and equalising probe toolstring to 28m. Latched and pulled 122mm (4.813") RNT tubing hanger plug. Closed UMGV, vented lubricator to well test package, closed swab valve. Broke out lubricator and laid out the plug, seals in good condition. Concurrently: Completed machining OD of Petroline Releasable Overshot down to 114.3mm (4.5")
2:00	1.00	IC	SLO	D	Rebuilt Petroline Releasable Overshot. Made up Petroline Releasable Overshot complete with RB pulling tool (Jar Up to shear) to toolstring. Made up lubricator and pressure tested insitu test sub to 27.6MPa (4000psi). Opened UMGV and swab valve. Pressured up on well to 5.2MPa (750psi), equalised across TRSV. Opened TRSV.
3:00	2.50	IC	SLO	D	RIH with Petroline Releasable Overshot. Tagged and latched fish at 2145m. Picked up 91kg (200lbs) over pull to confirm latch. Jarred down 5 times to confirm good latch on fish. Pulled to 545kg (1200lbs) overpull, jarred up lightly with spang jars 10 mins. Pulled and held 545kg (1200lbs) overpull, fish came free after 5mins. THP pressure dropped from 5.2MPa (750psi) to 4.7MPa (680psi). Pulled out the hole, closed UMGV, vented lubricator to well test package, closed swab valve. Broke out lubricator and laid out fished toolstring and deep set prong. Bottom stack of prong seals slightly worn, SB running tool pin 1/2 sheared. No indication of roll pin lower section of swivel joint in retrieved toolstring.
5:30	2.00	IC	SLO	P	Made up 102mm (4"GR) to tool string. Opened UMGV and swab valves. Ran in hole, latched and pulled 113mm (4.437") RPT plug body at 2152m. Pulled out the hole, closed UMGV, vented lubricator to well test package, closed swab valve. Concurrently completed Pre-Flow checklist.
7:30	1.50	IC	RUD	P	Broke off the lubricator and laid out the 113mm (4.437") RPT plug body and toolstring. Rigged down the lubricator and wireline BOPs.
9:00	1.00	IC	PRE	P	Topped up the riser with 40/60 glycol seawater mix, made up the test cap to the riser. Opened the swab valve and HFWV. Pressure tested the surface lines to the choke manifold to 27.6MPa (4000psi) 10min - good test.
10:00	1.00	PT	PRE	P	Bled off the pressure at the well test choke to 2500psi. Function tested the well test ESD system from all stations. ESD at panel functioned HFWV & SSV closed on 2 seconds. Attempted to function pnumatic buttons but ESD failed. Troubleshoot - ESD air hose trapped. Functioned ESD, all stations functioned within 10 seconds.
11:00	3.50	PT	WOW	D	Closed in the swab valve & stood by due to wind coming directly from rig aft (35 - 40kn and 300deg), wrong direction for igniting flare. (PDHG 3098psi, 98.86 deg c)
14:30	1.50	PT	SAF	P	Carried out pre-flow SJA & final pre-flow checks. Wind speed 25-30kn and 290deg.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 43 **Report Date: 5/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

16:00	1.50	PT	WFL	P	Commenced well clean up. Opened UMGV, HFWV and choke (40/64"). Flowed diesel cushion to surface. BS&W 100% Diesel - A annulus at 5.5MPa (800psi) - bled off 160ltrs - PDHG 3023psi, 102.9deg C. FTHP 0.3 - 1.7MPa (43-252psi)
17:30	0.50	PT	WFL	P	BS&W 100% Brine at surface - reduce choke setting (32/64"), FTHP increased to 2.4MPa (348psi) - PDHG 20.9MPa (3035psi), 102.8deg C.
18:00	5.00	PT	WFL	P	Gas at surface, FTHP 1250psi - A annulus at 6.9MPa (1000psi) - bled down annulus 160 ltrs - PDHG 20.9MPa (3044psi), 103.4deg C. Increased choke opening in stages. Choke (64/64"), WHP - 2440psi, WHT - 74.5 C, Rate - 45 MMscf/d, PDHG - 21.3MPa (3091 psi), 106 C.
23:00	1.00	PT	WFL	P	Continued flowing well. Perforation debris to surface. Choke 72/64" Fixed, WHP - 19MPA (2335 psi), WHT - 75.1 C, Rate - 54 MMscf, PDHG - 21.3MPa (3091 psi), 106 C.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 4/07/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	7.00
DSLTI		Stop/Start Cards	7.00	353.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	17	TECHNIP	3
MAERSK	16	OMS	37
HALCO	2	_Others	3
HALLIBURTON SERVICES	5	BHDF	2
		Total POB :	95

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 43 **Report Date: 5/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BARITE BULK	MT	0.00	130.00	HELI FUEL	Ltrs	220.00	5,110.00
WATER, POTABLE	MT	45.00	408.00	BASE OIL	m3	0.00	122.00
GEL, FRESH	MT	0.00	44.00	WATER, DRILLING	MT	50.00	245.00
BRINE	bbls	115.00	1,295.00	CEMENT HTB	MT	0.00	14.00
DIESEL	MT	6.00	182.00	CEMENT	MT	0.00	143.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland		
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	12.00	2.100	2.400				12.20

REMARKS

No accidents or incidents over past 24hrs.

- Slipped and cut drill line.
- Inspected mud pump dampeners.
- Thermal wellhead growth 10mm.

- Weather Forecast: Hs increasing to 5m Thursday PM, dropping to 4m Sunday PM. Winds gusting to 30kn for remainder of week, picking back up to 40kn on Monday AM.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 44 **Report Date: 6/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	43.58	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	43.58	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 27,364,987.00 ($)

Ops 00:00 to 06:00 : Completed Well Clean up. Flushed lines. Rigged down riser. Installed tree cap. Commenced skidding rig to THA01.

Ops Summary : Continue well clean up.

Ops Look Ahead : Commence THA01 completion op's.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	14.00	PT	WFL	P	Bypassed well test seperator due to large amounts of perforation debris. Choke (72/64") WHP - 16MPa (2334.9psi), WHT - 75.1 C, Gas Rate +/-55 MMscf/day. Flow rate stabled out at approx. 60 MMscf. Choke (72/64"), WHP - 15.5MPa (2243.4psi), WHT - 77.9 C, PDHG - 21.2MPa (3080psi), 107 C. BS&W - 33% brine, 67% condensate.
14:00	3.00	PT	WFL	P	Diverted flow to the well test separator. Flowed well until stable. Choke (68/64"). FTHP 16.4MPa (2373psi), DSCP 6.8MPa (990psi), FTHT 78.4C. BS&W - 40% brine. Gas rate 53.9 MMscf/day, PDHG 21.5MPa (3114psi), 23.8m3/day (150bbls/day) Total liquids. Collected 2 x PVT samples.
17:00	7.00	PT	WFL	P	Bypassed well test separator and increased flow rate to maximum flow rate, >60MMscf/day, Choke (76/64"). Continued to flow the well to clean up debris. FTHP 14.9MPa (2172psi), DSCP 7.8MPa (1135psi). PDHG 21MPa (3073psi), 107.49C. Stable flow with no choke movements required due to debris achieved for final 2hrs 45mins. Sand detection stablilised at an average of 1grm/sec (1.1lb/1MMscf) for final 1.5hrs - within acceptance criteria for sand/debris production, infrequent spikes up to 2 grm/sec were recorded. Shut choke - well clean up complete. Total fluid bled off 'A' annulus during well clean up 0.95m3 (6bbls). Wellhead and tree thermal expansion 13mm.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 4/07/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 44 **Report Date: 6/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	7.00
DSLTI		Stop/Start Cards	3.00	356.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	16	TECHNIP	2
MAERSK	16	OMS	37
HALCO	2	_Others	3
HALLIBURTON SERVICES	5	BHDF	2
		Total POB :	93

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
WATER, POTABLE	MT	24.00	427.00	HELI FUEL	Ltrs	285.00	4,825.00
GEL, FRESH	MT	0.00	44.00	BARITE BULK	MT	0.00	130.00
BRINE	bbls	517.00	778.00	DIESEL	MT	7.00	175.00
CEMENT HTB	MT	0.00	14.00	CEMENT	MT	0.00	143.00
WATER, DRILLING	MT	30.00	215.00	BASE OIL	m3	0.00	122.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland		
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	15.00	2.400	4.300				

REMARKS

No accidents or incidents over past 24hrs.

- Continued monitoring and recording PDHG data in order to capture PBU information.
- Carried out pre-skid preparations.

- Weather Forecast: HS at 6m decreasing to 4m Sunday PM prior to increasing to >6m Tuesday AM. Winds gusting to 30kn increasing 50kn gusts Monday AM.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 45 **Report Date: 7/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	44.70	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	44.70	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 31,804,125.00 ($)

Ops 00:00 to 06:00 :

Ops Summary : Closed in at tree. Flushed surface lines and riser. Rigged down riser. Installed tree cap.

Ops Look Ahead :

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.25	PT	WFL	P	Closed in well at choke, low pressure pilot tripped when choke was shut. Reset pilot. Monitored WHP. Pressure increased from 15MPa (2187psi) to 19MPa (2769psI).
0:15	0.50	PT	RUD	P	Closed UMGV, bled off pressure above to 0.69MPa (100psi), inflow tested UMGV 15mins, 0 MPa build up - good test. Bled off pressure to and closed TRSV.
0:45	1.25	PT	RUD	P	Disconnected TRSV and UGMV control lines from tree. Flushed riser and well test package through oil and gas lines to burners with sea water. Spotted 50/50 sea water glycol mix across tree. PDHG reading 22.4MPa (3246.8psi). 105.8 C.
2:00	1.00	PT	RUD	P	Drained riser, broke out lo-torques and pump in T, pulled and laid out riser. Installed tree cap. End of THA02 D&C operations 0300hrs 07/07/2006

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1150				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 4/07/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 45 **Report Date: 7/07/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	1.00	8.00
DSLTI		Stop/Start Cards	0.00	356.00
TRCs:	0	Stop/Start Tours	0.00	0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	13	TECHNIP	2
MAERSK	16	OMS	38
HALCO	2	_Others	1
HALLIBURTON SERVICES	5	BHDF	2
		Total POB :	89

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
CEMENT	MT	0.00	143.00	HELI FUEL	Ltrs	0.00	4,825.00
WATER, POTABLE	MT	0.00	427.00	BRINE	bbls	0.00	778.00
BASE OIL	m3	0.00	122.00	CEMENT HTB	MT	0.00	14.00
WATER, DRILLING	MT	0.00	215.00	DIESEL	MT	0.00	175.00
BARITE BULK	MT	0.00	130.00	GEL, FRESH	MT	0.00	44.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Transit to Portland		
Invincible Tide	Standby at Rig		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	13.00	2.300	4.800				

REMARKS

1 incident recorded over past 24hrs - Crane hook snagged workshop container door. (Preliminary classification C2 people)

Offline op's:
- Rigged down well test lines and installed blind flange on HFWV.
- Pressure tested tree cap, UMGV, HFWV and MKWV to 32.4MPa (4700psi) 15mins - Good test.
- Prepared tree and annulus valves for well handover.

Today's Cumulative Total cost includes the Campaign Demob Allocation of $4,081,570.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 46 **Report Date: 24/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	45.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	45.54	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 31,875,928.00 ($)

Ops 00:00 to 06:00 : Laid down prong and M/U blind box. Put 60 litres methanol into slickline riser. M/U lubricator and filled with 80/20 glycol mix. Pressured to 18.6 MPa (2700psi). Opened swab and UMGV. RIH tools - restriction at UMGV. Worked valve, cleared hydrate plug.

Ops Summary : R/U slickline and well test lines to THA02 xmas tree. Pressure tested well test lines. Tested ESD's. RIH slickline and set RPT plug. POOH. M/U prong. RIH - hydrate blockage. POOH - tools stuck in lubricator. Bled off and freed tools. Flushed w/ glycol.

Ops Look Ahead : L/D blind box and M/U prong. RIH and set prong. Bleed-off tubing pressure to burners. Inflow test on plug. Lubricate 1.19 SG brine into tubing. Run tubing punch. Circulate well to 1.19 SG brine. Run chemical cutter and cut tubing above packer.

From	Dur. (hr)	Phase	Code	Class	Operation
6:00	2.00	WM	RUD	P	Removed tree cap and rigged up slickline riser and BOP on THA02 xmas tree. Made up RPT plug and running tool. Made up lubricator.
8:00	3.50	WM	RUD	P	Rigged up well test lines. Pressure tested THA04 xmas tree offline. THA04 ready for handover to production.
11:30	2.00	WM	PRE	P	Flushed surface lines from cement unit to WTCM. Function tested SSV and WTCM. Pressure tested well test surface lines against SSV and UMGV to 27.6 MPa (4000psi).
13:30	1.00	WM	PRE	P	Opened SSV, and pressure tested WTCM to 27.6 MPa (4000psi).
14:30	0.50	WM	SAF	P	Bled down pressure on lines to 17.2 MPa (2500psi) and tested ESD's. Bled down to zero.
15:00	0.25	WM	SAF	P	Held toolbox talk and completed pre-flow checklist. Opened UMGV and noted THP 18.6 MPa (2700psi).
15:15	3.25	WM	SLO	P	RIH with RPT plug on slickline. Set plug in RNT nipple in tubing tailpipe. POOH with running tool.
18:30	0.50	WM	SLO	P	Bled down and broke off lubricator. Made up prong and junk catcher assy. RIH. Tools stuck in lubricator, inable to slack-off toolstring.
19:00	1.00	WM	SLO	D	Closed UMGV and swab valve. Held toolbox talk on rig floor for clearing hydrate blockage.
20:00	2.00	WM	SLO	D	Mixed 2.9 m3 (10bbls) 80/20 glycol in cement displacement tank. Opened swab valve and equalised pressure to WTCM. Bled off pressure and at 4.14 MPa (600psi), slickline tools became free. Opened UMGV, closed WTCM and slowly opened swab valve to equalise pressure.
22:00	1.00	WM	SLO	D	RIH with slickline. Tools hung up at xmas tree. Bled down pressure, broke off lubricator and checked slickline toolstring. Evidence of hydrate around chevron packings on prong. Checked shear pin on running tool.
23:00	1.00	WM	SLO	D	Made up lubricator. Attempted to RIH with toolstring. Tools hung up at xmas tree. Pulled back tools into lubricator, closed swab valve and UMGV and bled off pressure.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1190				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 23/09/2006 12:00:00AM

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 46 **Report Date: 24/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	13.00	369.00
TRCs:	0	Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	8
SCHLUMBERGER	21	TECHNIP	8
MAERSK	15	OMS	37
HALCO	2	_Others	2
BHDF	1	GEOSERVICES	2
		Total POB :	97

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BARITE BULK	MT		5.00	CEMENT HTB	MT		1.00
BASE OIL	m3		3.00	CEMENT	MT		5.00
DIESEL	MT		102.00	WATER, POTABLE	MT		391.00
WATER, DRILLING	MT		145.00	BRINE	bbls		96.00
GEL, FRESH	MT		3.00	HELI FUEL	Ltrs		2,889.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	17.49	2.900	4.500				9.40

REMARKS

No accidents or incidents over past 24hrs.
Held emergency fire and abandon rig drills with all personnel.
Held bi-weekly safety meetings with all crews. Schlumberger made presentation on chemical cutter operations.

Weather Forecast: Max HS decreasing to <3m by Tuesday 26/09/06 PM, then b/n 3 and 4m through to Friday 29/09/06. Winds forecast to decrease to <20kn by PM Monday 25/09/06 through to Tuesday 26/09/06, then increase to 25kn on Wednesday.

Completed bleeding down 20" pipeline on Thylacine platform.
Completed pressure testing THA04 xmas tree in preparation to hand over well to production.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 47 **Report Date: 25/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	46.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	46.54	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 32,207,057.00 ($)

Ops 00:00 to 06:00 : Trouble shot problem with CCL toolstring. Armed tubing punch. RIH to 250m. No response from CCL. POOH and disarmed tubing punch. Broke out toolstring.

Ops Summary : Trouble shot hydrate problem. RIH and set prong. Bled off THP. Inflow test on RPT plug. Filled tubing w/1.19 SG brine. Topped up annulus. R/D slickline. R/U wireline. Bled off and topped up tubing. Flushed lines to test spread. M/U tubing punch. RIH.

Ops Look Ahead : Run tubing punch. Circulate well to 1.19SG brine. Pressure test RPT plug, AHC packer, 244mm (9-5/8") casing, and tubing hanger seals. Run chemical cutter and cut tubing above packer. R/D wireline. R/U slickline set tubing hanger plug.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.50	WM	SLO	U	Pumped 0.48 m3 (3bbl) 80/20 glycol into the lubricator from the cement unit. Closed the needle valves and pressured up system to 18.6 MPa (2700psi). Opened UMGV and swab valve. RIH with prong. Tools hung up at xmas tree due to hydrate. POOH. Closed swab valve and UMGV. Opened WTCM and bled off pressure to port burner.
1:30	1.50	WM	SLO	U	Broke off lubricator and changed tools. No damage to tools was evident, but prong had hydrate on chevron seals. M/U 117mm (4.6") OD blind box. Put 60 litres methanol into top of lubricator. Made up lubricator.
3:00	2.00	WM	SLO	U	Opened swab valve to allow methanol to enter xmas tree cavity. Closed swab valve. Opened needle valves on lubricator. Pumped 0.48 m3 (3bbl) 80/20 glycol into lubricator. Closed needle valves. Pressured up system to 18.6 MPa (2700psi) with cement unit. Opened UMGV and swab valve. RIH, tools hung up at xmas tree. Gently hand-jarred and discovered tool was tagging UMGV. Checked UMGV actuator sight glass and found UMGV was not fully stroking open. Picked up tool and functioned UMGV to clear hydrate. Checked sight glass and found UMGV had opened approx 25mm (1") further. RIH with toolstring, and tools passed through xmas tree and tubing hanger. Ran tools through xmas tree again to confirm. POOH. Closed swab valve. Functioned UMGV, then closed.
5:00	2.50	WM	SLO	P	Opened WTCM and bled off pressure to port burner. Broke off lubricator and made up prong and running tool. Made up lubricator and opened needle valves. Pumped 0.48 m3 (3bbl) 80-20 glycol into lubricator. Pressured up to 18.6 MPa (2700psi) from cement unit. Opened UMGV and swab valve. RIH with prong. Set prong in RPT plug. Jarred-off running tool. POOH.
7:30	0.50	WM	SLO	P	Closed swab valve and UMGV. Opened WTCM and bled off pressure to port burner. Broke off lubricator and laid down running tool.
8:00	1.50	WM	SLO	P	Made up lubricator and tested 'insitu' sub to 27.6 MPa (4000psi) for 5 minutes. Opened UMGV and swab valve. Opened choke at WTCM and bled off tubing pressure above RPT plug to port burner. Bled pressure off to 0.69 MPa (100psi) and shut-in well. Bled off 'A' annulus to 0.69 MPa (100psi).
9:30	1.00	WM	INT	P	Conducted inflow test for RPT plug for 1 hour. Good test.
10:30	3.00	WM	PCD	P	Bled off tubing pressure to zero. Held toolbox talk for lubricating brine into tubing. Pumped 26.7 m3 (168 bbl) 1.19SG brine into tubing at 0.48 m3/min (3 bbl/min), 0.69 MPa (100psi). Bled off annulus to zero and topped up with 1.3 m3 (8 bbls) 1.19SG brine.
13:30	0.50	WM	RUD	P	Rigged down slickline lubricator.
14:00	3.50	WM	RUD	P	Rigged up electric line pressure control equipment, lubricator and BOP's. Rigged up wireline sheave and tools.
17:30	1.00	WM	PRE	P	Pressure tested wireline pressure control equipment to 27.6 MPa (4000psi) for 15 minutes.
18:30	1.50	WM	SPP	P	Opened UMGV and swab valve. Opened WTCM and bled off tubing pressure to port burner. Bled off from 3.26 MPa (473psi) to zero. Topped up tubing with 5.9 m3 (37bbls) brine. Opened annulus and topped up with .039 m3 (0.25) bbl brine. Closed UMGV.
20:00	0.50	WM	PCD	P	Opened MFWV and HFWV. Flushed through from cement unit via WTCM to gas line and oil line burners with seawater until all hydrocarbons were removed. Flushed through system with drillwater. Started rigging down Schlumberger well test equipment offline.
20:30	2.00	WM	ELO	P	Held toolbox for making up and running tubing punch. Restricted access to rig floor and Thylacine platform. Made up and armed tubing punch. Noted power to logging unit was off and switch was present on rig floor. Made up lubricator and tested connection.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 47 **Report Date: 25/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

22:30	1.50	WM	ELO	D	Opened UMGV and swab valve. RIH with tools to 250m. (100m below seabed). Power back on in logging unit. Continued RIH. No signal from CCL. Stopped RIH and checked for electrical open circuit. Checked continuity at collector of wireline drum - OK. POOH with tubing punch. Broke off lubricator and dis-armed tubing punch. Trouble shot fault on CCL and toolstring. Checked each component of the toolstring for continuity and insulation. Broke down rope socket and checked for continuity and insulation. No faults found. Broke out CCL and made up back-up tool. Checked CCL response - poor signal from CCL tool with background noise. Made original tool up and re-checked CCL response - good.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1190				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 23/09/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	10.00	379.00
TRCs:	0	Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	8
SCHLUMBERGER	17	TECHNIP	8
MAERSK	15	OMS	37
HALCO	2	_Others	4
WEATHERFORD	4	BHDF	1
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
HELI FUEL	Ltrs	422.00	2,467.00	CEMENT HTB	MT		1.00
WATER, DRILLING	MT		145.00	CEMENT	MT		5.00
BASE OIL	m3		3.00	BRINE	bbls		1,054.00
WATER, POTABLE	MT	29.00	362.00	BARITE BULK	MT		5.00
DIESEL	MT	9.00	93.00	GEL, FRESH	MT		3.00

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 47 **Report Date: 25/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	14.40	2.200	3.300				12.10

REMARKS

No accidents or incidents over past 24hrs.

Weather Forecast: Max HS remaining below 3m on Tuesday and Wednesday 26 and 27/09/06, then b/n 3 and 4m through to Saturday 30/09/06.
Winds forecast to remain at between 20 to 24kn through to Saturday 30/09/06.

Began rigging down Schlumberger well testing package.

Handed over THA04 well to production.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 48 **Report Date: 26/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	47.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	47.54	Planned Depth (m):	4,101.19	Night WSM:	Andy Banks
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 32,491,159.00 ($)

Ops 00:00 to 06:00 : L/D tubing punch. Made up lubricator. Circ 2x tubing and annular volumes of 1.19SG brine at 0.95 m3/min (6 bpm). Flowchecked. Pressure tested RPT plug, packer, 244mm casing and TH seals to 27.6 MPa (4000psi) for 15 mins-OK. Held TBT for chemical cutter.

Ops Summary : CCL not working. Trouble shot wireline equipment and tools. Cut off 350m wire and re-terminated. Made up CCL w/out tubing punch and RIH. Tools functioned. M/U tubing punch & RIH. Correlated on depth. Fired tubing punch. POOH - all charges fired.

Ops Look Ahead : Run chemical cutter and cut tubing above packer. R/D wireline. R/U slickline set tubing hanger plug. Nipple down xmas tree. Nipple up BOP. M/U tubing hanger running tool.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	0.50	WM	ELO	D	POOH with wireline toolstring. CCL not working.
0:30	3.50	WM	ELO	D	Tools at surface. Closed UMGV and swab valve. Broke off lubricator. Dis-armed tubing punch. Checked MPD tool and hot checked tools - all OK. Broke out CCL and checked - OK. Broke out cable head (MH-22) and checked head. Gas boots-OK. Continuity and insulation checks OK. Reconnected cable head. Made up back-up CCL - not working. Changed back to original CCL and checked continuity. Powered down wireline unit. Made up tubing punch.
4:00	1.50	WM	ELO	D	Opened UMGV and swab valve. RIH with tubing punch toolstring. Powered-up wireline unit with tools below seabed. Power on at 300m - CCL not working. Called SLB in town to assist trouble shooting. POOH with toolstring. Powered down wireline unit at 241m.
5:30	9.00	WM	ELO	D	Tools at surface. Closed UMGV and swab valve. Dis-armed tubing punch. Checked CCL again at surface - working OK. SLB engineer out of hours. Called for additional engineer from town. Cut off 350m cable. Built new rope socket and tested for insulation and continuity - OK. Waited 1 hour for engineer to arrive and complete rig safety induction. Made up back-up CCL tool with 2 weight bars, no flex sub, and without the tubing punch.
14:30	1.00	WM	ELO	D	Made up lubricator and tested connection. Opened UMGV and swab valve. RIH with toolstring to 250m. Tool functioning with excessive background noise. POOH with back-up CCL.
15:30	0.50	WM	ELO	D	Tools at surface. Closed swab valve and UMGV. Changed out CCL for original tool.
16:00	1.00	WM	ELO	D	Tool not functioning, trouble shot and fixed fault. Opened UMGV and swab valve. RIH toolstring to 350m. Tools functioning but still noisy. Powered down unit and powered up to simulate previous problem. Tools working. POOH.
17:00	2.00	WM	ELO	D	Tools at surface. Closed swab valve and UMGV. Broke off lubricator. Powered down wireline unit. Revoked all hot work permits. Made up and armed tubing punch.
19:00	1.50	WM	ELO	P	Made up lubricator. Opened UMGV and swab valve. RIH to 340m. Powered up wireline unit. Signal from CCL. RIH at 2133 m/hr (7000 ft/hr). With tools below 1100m, signal improved.
20:30	2.00	WM	ELO	P	Slowed down at 2050m to 609 m/hr (2000 ft/hr). Signal deteriorated with lesser RIH speed. RIH to 2143m. Made numerous repeat passes and adjusted gain and frequency to improve signal quality. Logged up at 1371 m/hr (4500 ft/hr). Signal quality poor. Made 2 more logging passes at 1371 m/hr (4500 ft/hr) and 2133 m/hr (7000 ft/hr). Ran back down to CCL depth of 2135m. Top shot depth 2139.6m. Fired tubing punch. Annulus pressure increased from 0.52 MPa (75psi) to 0.62 MPa (90psi).
22:30	1.50	WM	ELO	P	POOH with tubing punch/CCL assembly. Tools at surface. Closed swab valve and UMGV. Powered down wireline unit and cleared rig floor of excess personnel. Broke off lubricator and confirmed all tubing punch charges had fired. Broke off tubing punch.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 48 **Report Date: 26/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
SALT MUD	1190				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 23/09/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	10.00	389.00
TRCs:	0	Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	9
SCHLUMBERGER	17	TECHNIP	11
MAERSK	15	OMS	35
HALCO	2	_Others	4
HALLIBURTON SERVICES	2	WEATHERFORD	1
BHDF	1	GEOSERVICES	2
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
HELI FUEL	Ltrs	422.00	2,045.00	GEL, FRESH	MT		3.00
CEMENT HTB	MT		1.00	CEMENT	MT		5.00
BRINE	bbls	222.00	832.00	BARITE BULK	MT		5.00
WATER, DRILLING	MT	18.00	498.00	WATER, POTABLE	MT	29.00	333.00
DIESEL	MT	6.00	180.00	BASE OIL	m3		3.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	18.52	1.500	2.100				14.30

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 48			**Report Date: 26/09/2006**
Block: T/L2	**Rig: Maersk Guardian**	**Water Depth(m): 99.30**	**Start Date: 20/05/2006**

No accidents or incidents over past 24hrs.

Weather Forecast: Max HS increasing to b/n 3.5 and 4m from Thursday 28/09/06 through to Sunday 01/10/06. Winds forecast to decrease to <20kn on Thursday 28/09/06 through to Sunday 01/10/06.

Continued rigging down and backloading Schlumberger well testing package.
Began clearing Thylacine Platform helideck for cleaning and painting.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 49 **Report Date: 27/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	48.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	48.54	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 32,926,046.00 ($)

Ops 00:00 to 06:00 : Pulled Xmas tree. Prepared wellhead. Ran HP riser. Nippled up BOPs.

Ops Summary : Ran chemical cutter and cut tubing above packer. Rigged down wireline. Rigged up slickline. Set and pressure tested tubing hanger plug. Nippled down Xmas tree.

Ops Look Ahead : Nipple up BOPs. Pressure test wellhead connection. Make up tubing hanger running / pulling tool. Pull tubing hanger plug. Pull tubing.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	3.00	WM	PCD	P	Circulated well to 1.19sg brine at 0.95m3/min (6bbl/min). Pumped a total of 152m3 (957bbls) - 2 x bottoms up. Final gas reading at surface 0%. Max. gas 9%.
3:00	0.50	WM	PCD	P	Shut and monitored for pressure build up 15mins - static.
3:30	0.50	WM	PRE	P	Pressure tested tubing and annulus against deep set plug and production packer 27.6MPa (4000psi) 15min - good test. Acceptance criteria #1 met.
4:00	0.25	WM	SAF	P	Held tool box talk in preparation for making up chemical cutter toolstring.
4:15	2.75	WM	ELO	P	Made up and installed chemical cutter toolstring.
7:00	0.50	WM	ELO	P	Made up lubricator and pressure tested connection via insitu sub 27.6MPa (4000psi) - good test.
7:30	2.25	WM	ELO	P	Opened UMGV and swab valve. Ran in hole with chemical cutter toolstring, correlated on depth from 2135m to 2000m. Ran in hole to 2139m, tool hung up with 90.7kg (200lbs) down.
9:45	4.75	WM	ELO	D	Attempted to pull free with 181.4kg (400lbs) overpull - tool stuck. Increased overpulls in 90.7kg (200lbs) increments. Tools came free with 861.84kg (1900lbs) overpull, 1950.5kg (4300lbs) at surface. Pick up weight 1088.6kg (2400lbs)
14:30	0.25	WM	ELO	P	Correlated wireline depth over the PDHG sub assembly. Ran in hole and positioned chemical cutter at 2137.7m, CCL at 2132.1m.
14:45	0.25	WM	SAF	P	Held toolbox talk in preparation for chemical cut.
15:00	1.50	WM	ELO	P	Activated chemical cutter - good indication tool activated. Pulled out of hole to 220m after waiting 5mins.
16:30	0.25	WM	SAF	P	Held toolbox talk in preparation for pulling chemical cutter to surface. Cleared platform of all personnel.
16:45	0.25	WM	ELO	P	Pulled tools to surface. Closed swab valve and UMGV.
17:00	2.00	WM	ELO	P	Laid out spent chemical cutter toolstring - good indication tools functioned correctly. Rigged down electric line lubricator and BOPs.
19:00	0.50	WM	SLO	P	Installed slickline BOPs. Rigged up slickline equipment and 122.25mm (4.813") RNT tubing hanger plug toolstring.
19:30	0.50	WM	SLO	P	Ran in hole and set 122.25mm (4.813") RNT tubing hanger plug at 27.9m.
20:00	1.00	WM	PRE	P	Installed pressure cap. Pressure tested 122.25mm (4.813") RNT tubing hanger plug 34.5MPa (5000psi) 15min - Good test.
21:00	1.00	WM	RUD	P	Rigged down slickline equipment and BOPs. Pulled and racked back riser.
22:00	2.00	WM	XTR	P	Prepared to pull Xmas tree. Removed blind flange and well test crossover. Loosened fastlock connection.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 49 **Report Date: 27/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
NACL Brine	1190				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 28/09/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	8.00	397.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	9
SCHLUMBERGER	13	TECHNIP	11
MAERSK	15	OMS	35
HALCO	2	_Others	4
HALLIBURTON SERVICES	2	WEATHERFORD	4
BHDF	1	GEOSERVICES	2
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
GEL, FRESH	MT	0.00	3.00	CEMENT	MT	0.00	5.00
BASE OIL	m3	0.00	3.00	BARITE BULK	MT	0.00	5.00
HELI FUEL	Ltrs	42.00	4,003.00	BRINE	bbls	20.00	812.00
WATER, POTABLE	MT	30.00	303.00	CEMENT HTB	MT	0.00	1.00
DIESEL	MT	8.00	172.00	WATER, DRILLING	MT	0.00	515.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 49 **Report Date: 27/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	6.00	2.200	4.300				11.20

REMARKS

No accidents or incidents over past 24hrs.

Weather Forecast: Max HS decreasing from 5m to 3m by Friday AM prior to increasing 4.5m by Saturday PM. Winds forecast to remain at 15kn gusts through Thursday prior to increasing to 35kn gusts by Friday PM then dropping off 15kn by Saturday.

Continued rigging down Schlumberger well testing package.
Rigged down Fugro equipment.
Cleared Thylacine Platform helideck for cleaning and painting.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 50 **Report Date: 28/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	49.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	49.54	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 33,192,319.00 ($)

Ops 00:00 to 06:00 : Pulled, inspected and laid out 140mm (5 1/2") tubing from 1399m to 630m.

Ops Summary : Nippled up BOPs. Pressure tested wellhead connection. Made up tubing hanger running / pulling tool. Pulled tubing hanger plug. Pulled, inspected and laid out 140mm (5 1/2") tubing from 2137m to 1399m.

Ops Look Ahead : Pull, inspect and lay out 140mm (5 1/2") tubing. Lay out PDHG and cut joint tubing. Pick up 194mm (7 5/8") overshot. RIH replacement completion string.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	2.50	WM	XTI	P	Pulled Xmas tree back to main deck. Cleaned and inspected top of tubing hanger lock down ring. No significant debris, removed 4 x small metal shavings which would not have prevented snap ring collapsing.
2:30	0.25	WM	SAF	P	Held toolbox talk in preparation for nippling up BOPs.
2:45	1.25	WM	BPR	P	Landed and nippled up High Pressure riser.
4:00	2.00	WM	BPR	P	Landed and nippled up BOPs.
6:00	1.00	WM	BPR	P	Nippled up Low Pressure riser, Choke and Kill hoses.
7:00	1.00	WM	BPR	P	Installed Ball Joint Overshot and Diverter.
8:00	2.75	WM	PRE	P	Pressure tested Wellhead, High Pressure riser and BOP connections against tubing hanger plug and closed shear rams 27.6MPa (4000psi) 10mins. Re-tightened High Pressure riser x BOP connection and changed swivel on HP riser outlet out prior achieving a good test.
10:45	1.25	WM	TRP	P	Picked up the tubing hanger running tool and ran in on 194mm (7 5/8") landing string. Made up the tubing hanger running tool to the tubing hanger with 8 turns to left.
12:00	0.50	WM	SLO	P	Rigged up slickline equipment and 102mm (4") GR pulling tool. Ran in hole 27.9m, latched and pulled 122.25mm (4.813") RNT tubing hanger plug. Rigged down slickline equipment.
12:30	0.75	WM	TRP	P	Made up the tubing hanger running tool a further 2 1/2 turns to collapse the tubing hanger lockdown ring, total 10 1/2 turns to left. Picked up 89T (196klbs), confirmed tubing hanger and tubing free.
13:15	0.75	WM	TRP	P	Laid out 194mm (7 5/8") landing string.
14:00	0.50	WM	TRP	P	Cut control and gauge lines. Laid out the tubing hanger - seals in good condition, no damage to thread seal face.
14:30	1.00	WM	TRP	P	Threaded control line and PDHG cable over sheaves in derrick. Changed over to 140mm (5 1/2") side door elevators.
15:30	8.50	WM	TRP	P	Pulled out of hole with 140mm (5 1/2") tubing from 2137m to 1399m. Cleaned and inspected each pin and box connection for damage - no damage to Pin or Box seal faces / indication of potential leak paths observed. Inspected and laid out the TRSV sub assembly - no damage or indication of potential leak paths observed. No tubing joints rejected due to damaged seal faces / potential leak paths. Rejected 3 joints, 2 x due to external damage to couplings and 1 x due to external damage to pin end from tong break out jaw slipping.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 50 **Report Date: 28/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
NACL Brine	1190				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 28/09/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	9.00	406.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	1	WOODSIDE	7
SCHLUMBERGER	4	TECHNIP	14
MAERSK	15	OMS	36
HALCO	2	_Others	11
HALLIBURTON SERVICES	2	WEATHERFORD	5
		Total POB :	99

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BASE OIL	m3	0.00	3.00	BRINE	bbls	0.00	812.00
CEMENT HTB	MT	0.00	1.00	BARITE BULK	MT	0.00	5.00
DIESEL	MT	9.00	290.00	CEMENT	MT	0.00	5.00
WATER, DRILLING	MT	0.00	615.00	WATER, POTABLE	MT	32.00	271.00
GEL, FRESH	MT	0.00	3.00	HELI FUEL	Ltrs	313.00	3,690.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	13.00	2.000	3.000				12.80

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 50			Report Date: 28/09/2006
Block: T/L2	Rig: Maersk Guardian	Water Depth(m): 99.30	Start Date: 20/05/2006

No accidents or incidents over past 24hrs.

Weather Forecast: Max HS increasing from 3m to 4.5m by Saturday PM prior to dropping back down to 3m by Sunday PM. Winds forecast to drop from 35kn gusts to 15kn gusts by Saturday AM prior to picking back up to 35kn gusts on Sunday PM.

Completed rigging down Schlumberger well testing package.
Rigged down and backloaded Geoservice mud logging unit and Technip outside office.
Cleared and cleaned Thylacine Platform helideck in preparation for painting.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 51 **Report Date: 29/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	50.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	50.54	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 33,868,078.00 ($)

Ops 00:00 to 06:00 : RIH replacement completion string from 996m to 1738m.

Ops Summary : Pulled, inspected and laid out 140mm (5 1/2") tubing. Laid out PDHG and chemically cut joint tubing. Picked up 194mm (7 5/8") overshot. RIH replacement completion string to 996m.

Ops Look Ahead : RIH replacement completion string.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	11.00	WM	TRP	P	Pulled out of hole with 140mm (5 1/2") tubing from 1399m to surface. Cleaned and inspected each pin and box connection for damage - no damage to Pin or Box seal faces / indication of potential leak paths observed. Inspected and laid out the PDHG sub assembly - no damage or indication of potential leak paths observed. Inspected and laid out final chemically cut joint - clean cut 1.039m from pin end = 3.97m stub above bottom AHC packer. No tubing joints rejected due to damaged seal faces / potential leak paths. Rejected 4 joints, 3 x due to external damage to pin end from tong break out jaw slipping and 1x due to pin end threads galling during back out.
11:00	0.75	WM	PSI	P	Cleared rig floor. Installed new gauge cable and TRSV control line through sheaves in derrick. Serviced Weatherford tong.
11:45	0.25	WM	TRP	P	Picked up assembly #1, 194mm (7 5/8") overshot x 140mm (5 1/2") Vam Top crossover.
12:00	0.25	WM	SAF	P	Held Tool Box Talk with oncoming crew in preparation for running replacement completion string.
12:15	0.25	WM	TRP	P	Made up 1 x joint 140mm (5 1/2") tubing.
12:30	0.50	WM	TRP	P	Made up assembly #EN15-UC07, 244mm (9 5/8") x 140mm (5 1/2") HHC production packer.
13:00	0.50	WM	TRP	P	Made up 2 x joints 140mm (5 1/2") tubing.
13:30	2.00	WM	TRP	P	Made up sub assembly TH15-04, Permanent Down Hole Gauge (PDHG) assembly. Made up 1 x joint 140mm (5 1/2") 13Cr tubing. Pulled back to the gauge mandrel. Made up gauge cable termination to the gauge assembly. Pressure tested connection 55.1 MPa (8000psi) 15mins - good test. Confirmed gauges reading pressure and temperature.
15:30	8.50	WM	TRP	P	Ran in hole with 140mm (5 1/2") 13Cr tubing making up cross coupling gauge cable clamps to each connection from 76m to 996m. Inspected threads prior to each connection - OK. Monitored make up graphs on each connections - connections shouldering correctly well within tolerance. Average run rate 8.5jnts per hour.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
NACL Brine	1190				

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 51 **Report Date: 29/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 28/09/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	6.00	412.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	4	TECHNIP	14
MAERSK	15	OMS	36
HALCO	2	_Others	14
HALLIBURTON SERVICES	2	WEATHERFORD	5
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BRINE	bbls	797.00	15.00	WATER, DRILLING	MT	160.00	455.00
BASE OIL	m3	0.00	3.00	GEL, FRESH	MT	0.00	3.00
CEMENT HTB	MT	0.00	1.00	WATER, POTABLE	MT	42.00	324.00
CEMENT	MT	0.00	5.00	BARITE BULK	MT	0.00	5.00
HELI FUEL	Ltrs	0.00	3,690.00	DIESEL	MT	4.00	286.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	7.50	2.100	3.200				11.10

REMARKS

No accidents or incidents over past 24hrs.

Weather Forecast: Max HS 4.5m dropping back down to 3m by Sunday PM, picking back up to 4m on Tuesday. Winds forecast to pick up from 15kn gusts to 30kn gusts on Sunday PM prior to dropping down to 7kn gusts on Tuesday AM for a short period.

Prepared equipment for cleaning SBM holding tank.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 52 **Report Date: 30/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	51.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	51.54	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 34,645,832.00 ($)

Ops 00:00 to 06:00 : Continued pressure testing tubing to 27.6MPa (4000psi) - test failed. Pulled HE3 Bridge Plug. Ran and set HE3 Bridge Plug at 1036m.

Ops Summary : RIH replacement completion string. Tagged lower production packer. Drifted down to debris catcher sub. Spaced out. Made up Tubing Hanger. RIH and set 140mm (5 1/2") HE3 Bridge Plug above replacement production packer. Commenced pressure test.

Ops Look Ahead : Complete tubing pressure testing. Terminate gauge and control lines. Land tubing hanger. Set and test Tubing Hanger plug. Nipple down BOPs.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	6.50	WM	TRP	P	Ran in hole with 140mm (5 1/2") 13Cr tubing making up cross coupling gauge cable clamps to each connection from 996m to 1788m Inspected threads prior to each connection - OK. Monitored make up graphs on each connections - connections shouldering correctly well within tolerance. Replaced 1 x coupling due to tong damage during make up. Average run rate 9.8 jnts per hour.
6:30	0.50	WM	TRP	D	Picked up sub assembly #TH16-04, SP2 TRSV. Unable to achieve acceptable make up after 3 attempts - high shoulder. Laid out sub assembly.
7:00	1.75	WM	TRP	P	Made up sub assembly TH16-05. SP2 TRSV, serial # 1367341-1. Made up lower special TRSV cross coupling gauge cable protector. Made up 1 x joint 140mm (5-1/2") tubing. Pulled back to the TRSV assembly and made up control line fitting. Pressure tested TRSV control line connection to 71.7MPa (7500 psi) 15 minutes - good test. Measured fluid returns from 34.5MPa (5000psi) to 0MPa - 140ml returns. Increased control line pressure to 20.7MPa (3000 psi). Made up upper special TRSV cross coupling gauge cable protector.
8:45	3.75	WM	TRP	P	Ran in hole with 140mm (5 1/2") 13Cr tubing making up cross coupling gauge cable clamps to each connection from 1788m to 2141.3m. Laid 1 x joint tubing (#39) due to galled pin end thread on make up also changed out coupling on Joint #40 due to damage. Tagged lower production packer with 4.5T (10klbs) down.
12:30	0.25	WM	SLO	P	Rigged up slickline equipment openhole.
12:45	2.50	WM	SLO	P	Ran in hole with 114mm (4.49") OD HE3 bridge plug drift. Tagged chemical cut at 2138.4m. Hung up in S3 profile below lower production packer at 2144.8m. Pulled out of hole.
15:15	2.25	WM	SLO	U	Ran in hole with 108mm (4.25") drift. Tagged top of debris catcher at 2151.2m. Pulled out of hole. Rigged down slickline equipment.
17:30	0.50	WM	TRP	P	Pulled back and laid out 4 joints of tubing.
18:00	1.00	WM	TRP	P	Made up 1 x 7.5m space out pup joint and sub assembly #TH17-01, Tubing hanger and running tool. Ran in hole to place tubing hanger 5.25m below the rotary table, set slips.
19:00	0.25	WM	SLO	P	Rigged up slickline open hole.
19:15	3.75	WM	SLO	P	Made up 140mm (5 1/2") HE3 Bridge Plug c/w DPU setting tool. Initiated DPU timer, set for 160min - Time required to RIH to depth, POOH plus 30min safety margin. Ran in hole to 2074.7m element depth. Clear indications DPU activated after set time delay - 68kg (150lbs) weight loss. Pulled out of hole with DPU setting tool.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 52 **Report Date: 30/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

23:00	1.00	WM	PRE	P	Made up 194mm (7 5/8") x 140mm (5 1/2") circulating swage. Topped up tubing string. Made up cement test line. Pressure tested the tubing against the HE3 plug 3.45MPa (500psi) 5mins - Good test, concurrently drained the riser via the 'A' annulus outlet.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
NACL Brine	1190				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 28/09/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	4.00	416.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	6
SCHLUMBERGER	4	TECHNIP	14
MAERSK	15	OMS	36
HALCO	2	_Others	14
HALLIBURTON SERVICES	2	WEATHERFORD	5
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
HELI FUEL	Ltrs	0.00	3,690.00	BRINE	bbls	0.00	15.00
WATER, POTABLE	MT	26.00	336.00	DIESEL	MT	5.00	281.00
CEMENT HTB	MT	0.00	1.00	CEMENT	MT	0.00	5.00
GEL, FRESH	MT	0.00	3.00	BARITE BULK	MT	0.00	5.00
WATER, DRILLING	MT	34.00	421.00	BASE OIL	m3	0.00	3.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 52 **Report Date: 30/09/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	9.50	1.300	3.400				11.90

REMARKS

No accidents or incidents over past 24hrs.

Held weekly Fire and Abandon rig drill - Fire in lower shaker house.

Weather Forecast: Max HS 3.5m picking up to 4.5m on Tuesday prior to dropping back down to 2.75m on Wednesday PM through to Thursday. Winds forecast to pick up to 30kn gusts on Sunday PM prior to dropping down to 7kn gusts on Tuesday AM for a short period then picking back up to 35kn gusts on Wednesday PM.

Commenced cleaning SBM holding tank.
Retrieved well test overboard vent lines.
Connected last two anchors back on rig, from Invincible Tide.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 53 **Report Date: 1/10/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	52.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	52.54	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 34,957,582.00 ($)

Ops 00:00 to 06:00 : Pulled HE3 bridge plug. Terminated and tested gauge and control lines.

Ops Summary : Set and tested HE3 bridge plug at 1036m. Pulled and redressed HE3 bridge plug. Set and tested HE3 bridge plug at 2074m.

Ops Look Ahead : Land and lock in Tubing Hanger. Pressure test Tubing Hanger neck seals. Set and test Tubing Hanger plug. Pull landing string. Nipple down BOPs. Install Xmas tree.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.00	WM	PRE	U	Pressure tested the tubing string against the HE3 bridge plug 27.6MPa (4000psi) monitoring 'A' annulus for returns. Failed pressure test due to continual flow of fluid from 'A' annulus outlet at 130ml/min and pressure dropping off at 21kPa (3psi) / 10min
1:00	1.00	WM	PRE	U	Monitored 'A' annulus with no pressure on tubing - fluid continued to flow from the 'A' annulus outlet at same rate. Concurrently: Changed out circulating swage assembly for a Pump in Tee assembly to enable picking up the tubing hanger above the rig floor with pressure applied against the HE3 plug.
2:00	1.00	WM	SLO	U	Rigged up slickline. Ran in hole, equalised and pulled the HE3 bridge plug from 2074.7m. Concurrently: Re-tested surface lines 27.6MPa (4000psi) 15min - pressure dropped at 34kPa (5psi) /10min, final 5mins static pressure - good test.
3:00	0.50	WM	SLO	U	Made up replacement HE3 bridge plug c/w DPU setting tool set for 40min delay.
3:30	2.50	WM	SLO	U	Ran in hole and set HE3 bridge plug at 1036m. Pulled out of hole and rigged down slickline equipment.
6:00	0.75	WM	PRE	U	Rigged up Pump In Tee assembly and made up the cement line.
6:45	0.50	WM	PRE	U	Pressure tested against the HE3 bridge plug 3.45MPa (500psi). Failed pressure test due to pressure bleeding off at 6.8kPa/min (1psi/min) and fluid draining from 'A' annulus outlet at 50ml/min.
7:15	0.75	WM	TRP	U	Pulled back to place hanger assembly above the rig floor.
8:00	5.00	WM	PRE	U	Pressure tested tubing string against the HE3 bridge plug 3.45MPa (500psi) 5mins and 27.6MPa (4000psi) monitoring tubing hanger for leaks. - Good tests, final 30min static pressure.
13:00	0.50	WM	RUD	U	Ran tubing hanger back below rig floor. Rigged down Pump In Tee test assembly.
13:30	1.50	WM	SLO	U	Rigged up slickline equipment. Ran in hole latched and retieved the HE3 bridge plug.
15:00	4.50	WM	SLO	U	Redressed the HE3 bridge plug.
19:30	2.50	WM	SLO	U	Made up redressed HE3 bridge plug c/w DPU set for 120min delay. Ran in hole and set HE3 bridge plug at 2074m. Pulled out of hole and rigged down slickline equipment.
22:00	1.75	WM	PRE	P	Pressure tested tubing string against the HE3 bridge plug 3.45MPa (500psi) 5mins and 27.6MPa (4000psi) 1hr monitoring 'A' annulus for returns. - Good tests, minimal returns recorded at 'A' annulus at end of pressure test period.
23:45	0.25	WM	RUD	P	Rigged down Pump In Tee test assembly.

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 53 **Report Date: 1/10/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
NACL Brine	1190				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 28/09/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	7.00	423.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	7
SCHLUMBERGER	4	TECHNIP	12
MAERSK	15	OMS	37
HALCO	2	_Others	14
HALLIBURTON SERVICES	2	WEATHERFORD	5
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
BARITE BULK	MT	0.00	5.00	WATER, DRILLING	MT	82.00	339.00
DIESEL	MT	9.00	272.00	WATER, POTABLE	MT	34.00	332.00
GEL, FRESH	MT	0.00	3.00	CEMENT	MT	0.00	5.00
HELI FUEL	Ltrs	0.00	3,690.00	BRINE	bbls	0.00	15.00
BASE OIL	m3	0.00	3.00	CEMENT HTB	MT	0.00	1.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	13.00	1.300	2.000				12.40

REMARKS

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 53			**Report Date: 1/10/2006**
Block: T/L2	**Rig: Maersk Guardian**	**Water Depth(m): 99.30**	**Start Date: 20/05/2006**

No accidents or incidents over past 24hrs.

Held bi-weekly departmental safety meetings.

Weather Forecast: Max HS 3m picking up to 4m on Tuesday AM prior to dropping back down to 3.25m on Wednesday AM through to Thursday PM. Winds forecast to drop off to 10kn gusts on Tuesday AM for a short period then picking back up to 35kn gusts on Wednesday PM and 45kn gusts on Thursday AM.

Continued cleaning SBM holding tank, mid section cleaned.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 54 **Report Date: 2/10/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	53.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	53.54	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 35,234,437.00 ($)

Ops 00:00 to 06:00 : Pressure tested CF 18 void and SRL seal. Rigged up slickline.

Ops Summary : Pulled HE3 bridge plug. Terminated and tested PDHG and control lines. Landed and locked in Tubing Hanger. Pressure tested Tubing Hanger neck seals. Set and tested Tubing Hanger plug. Pulled landing string. Nippled down BOPs. Installed Xmas tree.

Ops Look Ahead : Pull tubing hanger plug. Displace to diesel. Set and test packer. Test annulus. Inflow test TRSV. Pull deep set plug. Rig down and hand well to operations. WOW to jack down and tow to Western Port.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	2.00	WM	SLO	P	Rigged up slickline. Ran in hole, equalised and pulled the HE3 bridge plug from 2074m. Rigged down slickline and laid out Pump In Tee assembly.
2:00	4.00	WM	XTI	P	Pulled the tubing hanger back to surface. Removed running tools and fed TRSV control line and PDHG cable through the hanger. Pressure tested the galleries around the TRSV control line and PDHG cable hanger feed throughs 34.5MPa (5000psi) 15mins - good tests. Pressure tested TRSV control 51.7MPa (7500psi) 15mins - Good test. Measured control line returns from 34.5MPa (5000psi) to zero - 150ml Opened TRSV and locked in 20.7MPa (3000psi).
6:00	0.50	WM	TRP	P	Ran in hole to 27.9m, landed the tubing hanger. Tubing string weights prior to land out 84t (185klbs) down, 86.4T (190klbs) up.
6:30	0.50	WM	XTI	P	Engaged tubing hanger lock down ring with 4 turns to right. Pulled 9T (20klbs) overpull - confirmed hanger locked in place.
7:00	1.25	WM	PRE	P	Pressure tested the tubing hanger neck seals 3.45MPa (500psi) 5mins and 34.5MPa (5000psi) 15mins - good tests. Met Acceptance Criteria #5.
8:15	0.50	WM	SLO	P	Rigged up slickline. Ran in hole and set the 122.2mm (4.813") RNT tubing hanger plug at 27.9m.
8:45	1.75	WM	PRE	P	Pressure tested the 122.2mm (4.813") RNT tubing hanger plug 34.5MPa (5000psi) 15min - good test.
10:30	0.50	WM	TRP	P	Terminated control line and PDHG cable. Concurrently: Filled the riser.
11:00	1.00	WM	TRP	P	Released the tubing hanger running tool with an additional 7 turns to the right. Laid out landing string and tubing hanger running tool.
12:00	1.00	WM	RUD	P	Rigged down tubing handling equipment and cleared drillfloor.
13:00	0.25	WM	SAF	P	Held Tool Box Talk in preparation for nippling down the BOPs.
13:15	4.75	WM	BPR	P	Pulled diverter, broke off Ball Joint Overshot. Nippled down the BOPs, removed and laid out the HP riser.
18:00	0.75	WM	XTI	P	Cleaned and inspected tubing hanger neck and top of compact housing, minimal debris seen on lockdown ring.
18:45	1.50	WM	XTI	P	Terminated the TRSV control line and PDHG cable at the compact housing wellhead exit points.
20:15	0.50	WM	XTI	P	Installed tubing hanger neck SRL seal.
20:45	0.75	WM	XTI	P	Transfered the Xmas tree to the blocks. Orientated and landed the Xmas tree.
21:30	1.50	WM	XTI	P	Made up Xmas tree Fast Lock connection.
23:00	0.75	WM	XTI	P	Installed the HFWV and the blind flange to KWV. Replaced main deck hatch cover.
23:45	0.25	WM	XTI	P	Filled CF18 gasket void with oil in preparation for pressure testing.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 54 **Report Date: 2/10/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
NACL Brine	1190				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 28/09/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	1.00	424.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	8
SCHLUMBERGER	4	TECHNIP	14
MAERSK	15	OMS	36
HALCO	2	_Others	13
HALLIBURTON SERVICES	2	WEATHERFORD	4
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
GEL, FRESH	MT	0.00	3.00	CEMENT HTB	MT	0.00	1.00
BARITE BULK	MT	0.00	5.00	HELI FUEL	Ltrs	233.00	3,457.00
CEMENT	MT	0.00	5.00	WATER, POTABLE	MT	30.00	319.00
BASE OIL	m3	0.00	3.00	BRINE	bbls	0.00	15.00
WATER, DRILLING	MT	0.00	396.00	DIESEL	MT	5.00	267.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 54 **Report Date: 2/10/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	4.50	1.300	3.600				11.90

REMARKS

No accidents or incidents over past 24hrs.

Weather Forecast: Initial Max HS 4m dropping down to 2.75m on Wednesday prior to picking up to 3.5m by Thursday PM and increasing to 5m by Saturday AM. Winds forecast to increase from 10kn gusts to 35kn gusts on Wednesday PM then decrease to 20kn by Friday AM.

Continued cleaning SBM holding tank.
Supporter on location 2130hrs, unloaded cargo overnight, currently finalising backload in preparation for sailing to Portland at 1800hrs.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 55 **Report Date: 3/10/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

DOL:	54.45	MD (m):	4,026.00	Day WSM:	Stuart Job
DFS:	54.54	Planned Depth (m):	4,101.19	Night WSM:	Phil Hodson
Budget Days:	54.60	TVD (m):	2,340.00	Rig OIM:	Lars Lovenholdt
Progress Days:	54.54	Progress (m):	0.00	RT-SL (m):	50.50

AFE Cost: 36,351,054.00 ($)

Cumulative Total: 35,794,519.00 ($)

Ops 00:00 to 06:00 : Pressure tested lines - good test. Pressure tested 'A' annulus - Good test.

Ops Summary : Pressure tested tree connection and hanger neck seals. Pulled tubing hanger plug. Displaced to diesel. Set and pressure tested tubing and packer.

Ops Look Ahead : Inflow test TRSV. Pull deep set plug. Rig down and hand well to operations. WOW to jack down and tow to Western Port.

From	Dur. (hr)	Phase	Code	Class	Operation
0:00	1.00	WM	XTI	P	Filled CF18 void with oil in preparation for pressure test.
1:00	1.00	WM	PRE	P	Pressure tested CF18 gasket, TRSV and PDHG outlets 3.45MPa (500psi) 5mins and 34.5MPa (5000psi) 15mins - good tests Acceptance criteria #6 met.
2:00	2.00	WM	PRE	P	Filled Xmas tree body. Pressure tested SRL hanger neck seal against closed manual Kill and Flow Wing valves 3.45MPa (500psi) 5mins and 34.5MPa (5000psi) 15mins - good tests. Acceptance criteria #7 met.
4:00	1.75	WM	RUD	P	Lifted main deck hatch cover. Rigged up slickline riser and lubricator.
5:45	2.75	WM	PRE	P	Pressure tested lines and slickline pressure control equipment 27.6MPa (4000psi) 15mins - good tests. 20.7kPa (3psi) per 5mins. Tested against tubing hanger plug due to not achieving a good test against the swab valve.
8:30	0.50	WM	SLO	P	Latched and pulled the 122.2mm (4.813") RNT tubing hanger plug from 27.9m. Made up 102mm (4") GR pulling tool.
9:00	2.25	WM	PRE	P	Pressure tested line made up to the 'A' annulus outlet 27.6 MPa (4000psi) 15 mins - good test. 20.7kPa (3psi) per 5mins. Concurrently terminated PDHG outlet.
11:15	0.25	WM	SAF	P	Held Tool Box talk in preparation for pumping diesel.
11:30	2.75	WM	PCD	P	Pumped down the tubing taking returns via the 'A' annulus outlet to the pits. 2.4m3 (15bbls) 1.19sg packer fluid at 0.3m3/min (2bbl/min). 24.3m3 (153bbls) diesel at 0.24m3/min (1.5bbl/min). 0.95m3 (6bbls) 1.19sg packer fluid. Final THP 6.7MPa (965psi).
14:15	0.25	WM	PRE	P	Closed 'A' annulus valves. Pressured up on the tubing to set the hydrostatic set production packer. Clear indication of the packer setting at 10.5MPa (1523psi) on the 'A' annulus.
14:30	2.00	WM	PRE	D	Vented 'A' annulus pressure and increased tubing pressure to 27.6MPa (4000psi). Pressure tested tubing 27.6MPa (4000psi). Unable to achieve an acceptable pressure test 13.7kPa/min (2psi/min) leak off rate, 'A' annuls on vacuum.
16:30	2.50	WM	PRE	D	Lined up to the 'A' annulus via the test line. Pressure tested the 'A' annulus 27.6MPa (4000psi). Unable to achieve an acceptable pressure test 6.8kPa/min (1psi/min) leak off rate.
19:00	1.00	WM	PRE	D	Broke line at 'A' annulus and installed elbow + Lo-Torque valve. Removed lubricator and installed pressure cap.
20:00	2.00	WM	PRE	D	Pressure tested line to 'A' annuls against the Lo-Torque valve via the Test line 27.6MPa (4000psi) - test failed. 124kPa (18psi) pressure loss over last 10mins.
22:00	2.00	WM	PRE	D	Made up replacement flexible line. Pressure tested line via the Test line 27.6MPa (4000psi) - test failed.

Woodside Energy
Daily Operations Report
Well: THA02

Report No.#: 55 **Report Date: 3/10/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

HOLE SECTIONS

Section	MD Top (m)	MD Base (m)	OD of prev. Csg (in)	MD of prev Csg.shoe (m)	Pilot Hole	Section Type	Effective Hole Diameter (in)
30" Hole	0.00	219.00				Casing	24.000
23" Hole	219.00	638.00	26.000	219.00		Casing	17.690
12.25" Hole	638.00	2,293.00	18.625	633.00		Casing	8.681
8.5" Hole	2,293.00	4,026.00	9.625	2,293.00		Casing	6.184

DRILLING FLUIDS

Mud Type	Density (kg/m³)	PV (cp)	YP (lbf/100ft²)	6RPM (°)	Pump Liners (in)
NACL Brine	1190				

CASING

Last Casing: 9.625 in @ 2,293.00 m	Next Casing: 7.000 in @ 4,021.00 m	Last BOP: 28/09/2006 12:00:00AM

BITS TODAY

Bit No.	Size (mm)	Manufacturer	Model No.	Class	IADC Code	Serial No.	Jets (32nd")	MD In (m)	MD Out (m)	I-O-D-L-B-G-O-R

BIT OPERATIONS

TODAY											CUMULATIVE		
MD (m)	WOB Min/Max (kip)	Current RPM (rpm)	Flow Rate (gpm)	SPP (psi)	P Bit (psi)	% @ Bit	HHP (hhp)	Hours (hr)	Footage (m)	ROP (m/hr)	Hours Cum (hr)	Footage Cum (m)	ROP Cum (m/hr)

OHSE Report

			Daily	Cumulative
LTI's:	0	Incident Reports	0.00	8.00
DSLTI		Stop/Start Cards	0.00	424.00
TRCs:		Stop/Start Tours		0.00

Safety Comments

PERSONNEL DATA

Company	No. People	Company	No. People
CAMERON	2	WOODSIDE	9
SCHLUMBERGER	6	TECHNIP	18
MAERSK	15	OMS	37
HALCO	2	_Others	9
		Total POB :	100

MATERIALS

Product Name	Unit Size	Usage	Quantity End	Product Name	Unit Size	Usage	Quantity End
WATER, DRILLING	MT	0.00	496.00	BARITE BULK	MT	0.00	5.00
CEMENT HTB	MT	0.00	1.00	GEL, FRESH	MT	0.00	3.00
BRINE	bbls	0.00	15.00	DIESEL	MT	6.00	261.00
WATER, POTABLE	MT	32.00	308.00	CEMENT	MT	0.00	5.00
BASE OIL	m3	0.00	3.00	HELI FUEL	Ltrs	0.00	3,457.00

SUPPORT CRAFT

Name	Comments	Arrival Date	Departure Date
Maersk Supporter	Standby at Rig		
Invincible Tide	En route to Portland		

Woodside Energy

Daily Operations Report

Well: THA02

Report No.#: 55 **Report Date: 3/10/2006**

Block: T/L2 **Rig: Maersk Guardian** **Water Depth(m): 99.30** **Start Date: 20/05/2006**

WEATHER

Rig Heading (°)	10m Wind Spd (m/s)	Wave (m)	Swell (m)	Heave (m)	Pitch (°)	Roll (°)	Temperature (°C)
129.30	12.00	1.600	2.400				12.60

REMARKS

No accidents or incidents over past 24hrs.

Weather Forecast: Initial Max HS 2.75m picking up to 5m by Saturday PM then coming down to 2.5m on Tuesday. Winds forecast to remain at 30kn gusts through to Thursday PM then drop off 15kn gusts by Friday AM prior to picking back up to 35kn on Saturday PM..

Continued cleaning SBM holding tank.
Offloaded Maersk equipment from Portland and backloaded excess equipment from rig in preparation for jacking down.
Prepared for load testing platform crane on completion of THA02 workover.

LOT / FIT Data

THA02

Formation Integrity Test Data

Casing Data		Formation Integrity Test		
Shoe Depth	Size	Depth	FIT	Mudweight in hole
mMDRT	mm (")	mMDRT	EMW (SG)	SG
632.9	473mm (18.625")	641	2.02	1.25
2293.4	244mm (9.625")	2302	2.00	1.26

Mud Properties Table

Drilling Fluids

WOODSIDE

MUD PROPERTIES

30” and 23” INTERVALS

Date 2006	Section inch	Depth (m)	Mud Weight (sg)	Funnel Viscosity (sec/qt)	F.L. Temp °C	Plastic Viscosity cP	Yield Point lb/100ft²	Gels lb/ 100ft²	A.P.I. Fluid Loss	A.P.I Filter Cake	Corrected Solids (% by vol)	Water (% by vol)	pH	Chlorides g/l	Sand %	LGS %	MBT %			
20/05/06	30	69	1.06	140		12	66		14.0	2	5	95	9	200		3.77	34			
26/05/06	23	271	1.06	147		10	52	28/41	14.4	3	4	96	9.5	520		3.77	34			
27/05/06	23	475	1.06	141		11	48	27/39	13.5	3	4	96	8.5	320		3.78	34			

12.25 ’’ Interval

Date 2005	Section inch	Depth (m)	Mud Weight (sg)	Funnel Viscosity (sec/qt)	F.L. Temp °C	Plastic Viscosity cP	Yield Point lb/100ft²	Gels lb/ 100ft²	HTHP Fluid Loss	HTHP Filter Cake	Corrected Solids (% by vol)	Oil (% by vol)	Water (% by vol)	ES	Chlorides g/l	Sand %	LGS %	HGS %	6 RPM	O/W ratio
29/05/06	12.25	638	1.20	210		32	13	7/12	3.8	3	11.1	57.5	30	500	118	0.25	6.0	5.0	6	66/34
30/05/06	12.25	734	1.25	110	52	38	19	8/14	6.0	3	12.5	54	32	340	116	0.25	6.3	6.2	8	63/37
31/05/06	12.25	1382	1.25	97	55	46	27	14/21	3.6	2	13.3	55	30	651	139	0.3	8.0	5.7	15	65/35
01/06/06	12.25	1832	1.26	112	54	43	29	15/21	2.6	2	13.8	58	26.5	621	152	0.5	8.1	5.7	16	69/31
02/06/06	12.25	2203	1.26	80	56	38	29	14/21	3.0	2	13.7	60.5	24	680	174	0.5	8.35	5.33	14	72/28
03/06/06	12.25	2298	1.26	90	56	41	26	14/22	3	2	13.8	60.5	24	690	167	0.5	7.46	6.31	14	72/28
04/06/06	12.25	2298	1.26	82		41	26	14/21	3	2	13.8	60.5	24	700	167	0.5	7.46	6.31	14	72/28
05/06/06	12.25	2298	1.26	80	54	41	26	14/21	3	2	13.8	60.5	24	700	167	0.5	7.46	6.31	14	72/28
06/06/06	12.25	2298	1.26	90		40	30	15/22	3	2	13.7	59	25.5	710	161	0.5	7.64	6.1	14	70/30

Drilling Fluids

WOODSIDE

8.5 ’’ Interval

Date	DMR No.	Depth (m)	Mud Weight (sg)	Funnel Viscosity (sec/qt)	F.L./ Test Temp °C	6 / 3 RPM	PV / YP cP / lb/100ft²	10 sec lb/ 100ft²	10 min Gel 100ft²	HTHP Fluid Loss	HTHP Filter Cake	Water (% by vol)	Base Oil (% by Vol)	Corrected Solids (% by vol)	ES	Chlorides mg/l	Sand %	LGS / HGS %	O/W Ratio
07-Jun-06	15	2298/2108	1.26	90	/30.0	14/12	40/30	15	22	/3.0	/2	25.0	59.0	16.0/14.3	704.0	160937	0.50	8.65/5.63	70:30
08-Jun-06	16	2298/2108	1.26	86	48.0/30.0	14/12	40/30	14	21	/3.0	/2	25.0	59.0	16.0/14.3	700.0	160937	0.50	8.65/5.63	70:30
09-Jun-06	17	2530/2132	1.25	70	56.0/32.0	11/8	30/20	12	16	/3.0	/2	22.5	62.0	15.5/13.7	760.0	184960	0.25	8.15/5.52	73:27
10-Jun-06	18	2956/2130	1.25	85	56.0/32.0	13/11	39/27	13	20	/3.0	/2	22.5	62.0	15.5/13.8	780.0	173600	0.25	8.21/5.59	73:27
11-Jun-06	19	3375/2128	1.26	88	70.0/32.0	15/13	42/36	16	23	/3.0	/2	21.0	62.5	16.5/14.8	780.0	184960	0.25	9.50/5.29	75:25
12-Jun-06	20	3510/2126	1.25	90	/30.0	14/12	38/29	14	21	/3.0	/2	20.0	64.0	16.0/14.3	764.0	189184	0.25	8.95/5.38	76:24
13-Jun-06	21	3573/2124	1.25	76	70.0/32.0	14/12	44/32	15	23	/3.0	/2	22.0	62.5	15.5/13.8	780.0	173340	0.25	8.17/5.68	74:26
14-Jun-06	22	4008/2327	1.25	70	71.0/32.0	10/8	35/24	12	20	/3.0	/2	19.5	65.0	15.5/13.9	800.0	189292	0.25	7.84/6.02	77:23
15-Jun-06	23	4026/2340	1.25	68	72.0/32.0	10/8	36/23	11	20	/3.0	/2	19.5	65.0	15.5/13.9	770.0	189292	0.25	7.84/6.02	77:23
16-Jun-06	24	4026/2340	1.25	69	70.0/32.0	10/8	36/21	11	20	/3.0	/3	19.0	65.5	15.5/13.9	800.0	193828	0.25	7.77/6.09	78:22
17-Jun-06	25	4026/2340	1.25	78	/30.0	10/8	36/21	11	20	/3.0	/2	19.0	65.5	15.5/13.9	800.0	193828	0.25	7.77/6.09	78:22
18-Jun-06	26	4026/2340	1.25	70	68.0/32.0	11/9	36/24	12	20	/3.0	/2	19.0	65.5	15.5/13.9	780.0	193828	0.25	7.77/6.09	78:22
19-Jun-06	27	4026/2340	1.25	80	/30.0	11/9	36/24	12	20	/3.0	/2	19.0	65.5	15.5/13.9	760.0	193828	0.25	7.77/6.09	78:22
20-Jun-06	28	4026/2340	1.25	76	/29.0	11/9	36/22	12	20	/3.0	/2	19.0	65.5	15.5/13.9	775.0	193828	0.25	7.77/6.09	78:22
21-Jun-06	29	4026/2340	1.25	77	/29.0	11/9	36/22	12	20	/3.0	/2	19.0	65.5	15.5/13.9	780.0	193828	0.25	7.77/6.09	78:22
22-Jun-06	30	4026/2340	1.25	77	/30.0	11/9	36/22	11	20	/3.0	/2	19.0	65.5	15.5/13.9	780.0	193828	0.25	7.77/6.09	78:22
23-Jun-06	31	4026/2340	1.25	77	/30.0	11/9	36/22	11	20	/3.0	/2	19.0	65.5	15.5/13.9	775.0	193828	0.25	7.77/6.09	78:22
24-Jun-06	32	4026/2340	1.25	75	/29.0	11/9	36/22	11	20	/3.0	/2	19.0	65.5	15.5/13.9	775.0	193828	0.25	7.77/6.09	78:22

Daily Geological Reports

CONFIDENTIAL

Date:	29th May 2006	**Last Casing:**	473 mm (18⅝") @ 632.9 mMDRT
Report Number:	01	**FIT:**	-
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	638.0 mMDRT (637 mTVDRT)	**ECD:**	-
Lag Depth:	638 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	638.0 mMDRT (637 mTVDRT)	**Mud Chlorides:**	143.4 (water phase)
Progress:	0m	**Est. Pore Press:**	-
Water Depth:	99.3 mLAT	**Last Survey Depth:**	620.25 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 6.72°
Bit Diameter:	311 mm (12¼")		Azi: 280.11°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Landed wellhead. Picked up high pressure riser, landed and secured. Landed BOP on riser. Ran and landed low pressure riser. Nippled up diverter. Filled riser with water to check for leaks. Pressure tested BOPs. Made up 311 mm (12¼") bottom hole assembly.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Continued to make up 311 mm (12¼") bottom hole assembly.*
NEXT 24h Hrs:	*Continue to run in hole with 311 mm (12 ¼") bottom hole assembly, tag cement. Drill out cement and shoe plus 3 metres of new hole. Run formation integrity test. Drill 311 mm (12 ¼") hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 06/05/06:	*Running in hole with 12 ¼" bottom hole assembly at 210 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

- No new formation drilled.

HYDROCARBON FLUORESCENCE

- No new formation drilled.

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**

SAMPLE QUALITY

- No samples recovered.

MUDLOGGING EQUIPMENT/PERSONNEL

- Full crew onboard.
- Systems running properly.

LWD

- No MWD/LWD tools in the hole.

REMARKS

- None

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	30th May 2006	**Last Casing:**	473 mm (18⅝") @ 632.9 mMDRT
Report Number:	02	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	734.0 mMDRT (732.23 mTVDRT)	**ECD:**	1.27
Lag Depth:	883 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	638.0 mMDRT (637 mTVDRT)	**Mud Chlorides:**	116.4 (water phase)
Progress:	96m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	927.23 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 4.40°
Bit Diameter:	311 mm (12¼")		Azi: 268.45°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Continued to pick up and run in hole with 311mm (12 1/4") bottom hole assembly to 618 mMDRT. Pressure tested surface well control equipment. Displaced well to SBM. Drilled cement, casing shoe, rat hole and 3 metres new formation to 641 mMDRT. Performed FIT to 2.0 sg EMW. Drilled 311mm (12 1/4") hole from 641 to 734 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled 311 mm (12 ¼") hole from 734 to 941 mMDRT.*
NEXT 24h Hrs:	*Drill ahead in 311 mm (12 ¼") hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 31/05/06:	*Drilling 311 mm (12 ¼") hole at 941 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 638 to 765 mMDRT
ROP (range): 6.0 to 79 m/hr
Av ROP: 47 m/hr
CALCAREOUS CLAYSTONE interbedded with ARGILLACEOUS CALCILUTITE.
CALCAREOUS CLAYSTONE (60 to 100%): olive grey to minor light olive grey, medium dark grey, trace off white, firm to soft, blocky, 20% calcareous clay, 10% quartz silt, trace carbonaceous material and laminations.
ARGILLACEOUS CALCILUTITE (0 to 40%): light olive grey, off white, soft to very soft in parts, blocky, 10% quartz clay, trace carbonaceous specks, trace glauconite specks.

INTERVAL: 765 to 883 mMDRT
ROP (range): 13 to 83 m/hr
Av ROP: 67 m/hr
CALCAREOUS CLAYSTONE interbedded with minor ARGILLACEOUS CALCILUTITE
CALCAREOUS CLAYSTONE (60 to 100%): olive grey to minor light olive grey, medium dark grey, trace off white, firm to soft, blocky, 20% calcareous clay, 10% quartz silt, trace carbonaceous material and laminations.
ARGILLACEOUS CALCILUTITE (0 to 40%): light olive grey, off white, soft to very soft in parts, blocky, 10% quartz clay, trace carbonaceous specks, trace glauconite specks.

HYDROCARBON FLUORESCENCE

No hydrocarbon fluorescence detected.

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
638 - 765	0.0 – 0.0 (0.0)	Tr	-	-	-	-	-	-	0.0
765 - 883	0.0 – 0.03 (0.02)	0.02	Tr	-	-	-	-	-	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None	-	-	-	-	-	-	-	-	-
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None	-	-	-	-	-	-	-	-	-
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None	-	-	-	-	-	-	-	-	-

SAMPLE QUALITY

- Good.

MUDLOGGING EQUIPMENT/PERSONNEL

- Full crew onboard.
- Systems running properly.

LWD

- Sensor to bit distances – Preliminary.

Vibration (DDS)	20.11
Pressure While Drilling (PWD)	15.90
Resistivity (EWR-P4)	13.40
Gamma (DGR)	11.04
Directional (DM)	8.61
Gamma at Bit (ABG)	0.95

REMARKS

- None

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	31st May 2006	**Last Casing:**	473 mm (18⅝") @ 632.9 mMDRT
Report Number:	03	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	1382.0 mMDRT (1377.20 mTVDRT)	**ECD:**	1.27
Lag Depth:	1511 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	734.0 mMDRT (732.23 mTVDRT)	**Mud Chlorides:**	139.2 (water phase)
Progress:	648m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	1476.99 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 9.05°
Bit Diameter:	311 mm (12¼")		Azi: 273.21°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled 311mm (12 1/4") hole from 734 to 1166 mMDRT. Repaired mud pump. Drilled 311mm (12 1/4") hole from 1166 to 1382 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled 311 mm (12 ¼") hole from 1382 to 1544 mMDRT.*
NEXT 24h Hrs:	*Drill 311 mm (12 ¼") hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 01/06/06:	*Drilling 311 mm (12 ¼") hole at 1544 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 883 to 1190 mMDRT
ROP (range): 1.8 to 80 m/hr
Av ROP: 62 m/hr
CALCAREOUS CLAYSTONE interbedded with minor CALCILUTITE
CALCAREOUS CLAYSTONE (80 to 100%): olive grey to minor light olive grey, medium dark to dark grey, trace off white, soft to moderately hard, amorphous to blocky, 20% calcareous clay, 5% quartz silt, trace carbonaceous material and laminations.
CALCILUTITE (0 to 20%): light olive grey, off white, soft to very soft in parts, blocky, 10% quartz clay, trace carbonaceous specks.

INTERVAL: 1190 to 1253 mMDRT
ROP (range): 5.7 to 64 m/hr
Av ROP: 28 m/hr
CALCILUTITE interbedded with CALCAREOUS CLAYSTONE
CALCILUTITE (40 to 70%): light olive grey, medium light grey, off white, soft to moderately hard, blocky to amorphous, 10% quartz clay, 5% quartz silt, increasing glauconite specks, minor carbonaceous material and specks.
CALCAREOUS CLAYSTONE (30 to 60%): medium grey, light olive grey to olive grey, minor off white, soft to moderately hard, blocky to occasionally sub-fissile, 20% calcareous clay, 15% quartz silt, trace carbonaceous specks.

INTERVAL: 1253 to 1395 mMDRT
ROP (range): 3.0 to 67 m/hr
Av ROP: 55 m/hr
SANDSTONE interbedded with SILTY CLAYSTONE.
SANDSTONE (70 to 95%): clear to translucent, dusky yellow, loose, very fine to granular grains, minor very fine, predominantly fine to medium, minor coarse to very coarse, trace granular, moderately well to well sorted, sub-rounded to sub-angular, sub-spherical to spherical, 10 to 15% quartz silt, trace siliceous cement, rare coloured lithics, trace carbonaceous specks, trace disseminated pyrite, fair to good inferred porosity.
SILTY CLAYSTONE (5 to 30%): medium dark to dark grey, medium to light brown, trace olive green, soft to moderately hard, blocky, rare calcareous clay, 20% quartz silt, rare very fine quartz sand, trace carbonaceous specks, trace disseminated pyrite.

INTERVAL: 1395 to 1438 mMDRT
ROP (range): 26 to 71 m/hr
Av ROP: 65 m/hr
SANDSTONE interbedded with SILTY CLAYSTONE.
SANDSTONE (60 to 90%): clear to translucent, dusky yellow, pale brown, loose, very fine to trace granular grains, predominantly medium to coarse, moderately well sorted, rounded to sub-angular, sub-spherical to spherical, trace lithics, trace carbonaceous specks and material, trace glauconite, trace disseminated pyrite, fair to good inferred porosity.
SILTY CLAYSTONE (10 to 40%): medium dark to dark grey, medium to light brown, trace olive green, soft to moderately hard, blocky, rare calcareous clay, 20% quartz silt, rare very fine quartz sands, trace carbonaceous specks.

INTERVAL: 1438 to 1514 mMDRT
ROP (range): 1.7 to 71 m/hr
Av ROP: 50 m/hr
SILTY CLAYSTONE interbedded with SANDSTONE.
SILTY CLAYSTONE (20 to 80%): dark grey to greyish black, dark brown to brownish black, olive black, soft, blocky, amorphous, trace calcareous clay, 35% quartz silt, trace carbonaceous specks, trace glauconite, trace disseminated pyrite.
SANDSTONE (20 to 80%): clear to translucent, dusky yellow, pale brown, loose, very fine to very coarse grains, predominantly fine to coarse grains, minor very fine and very coarse, trace granular, moderately well sorted, rounded to sub-angular, sub-spherical to spherical, trace lithics, trace disseminated pyrite, fair to good inferred porosity.

HYDROCARBON FLUORESCENCE

- No hydrocarbon fluorescence detected.

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
883 – 1190	0.0 – 0.05 (0.02)	0.04	-	-	-	-	-	-	0.0
1190 – 1253	0.01 – 0.03 (0.02)	0.02	-	-	-	-	-	-	0.0
1253 - 1395	0.02 – 0.06 (0.04)	0.04	-	-	-	-	-	-	0.0
1395 – 1438	0.02 – 0.06 (0.03)	0.03	-	-	-	-	-	-	0.0
1438 - 1514	0.01 – 0.03 (0.02)	Tr	-	-	-	-	-	-	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									

SAMPLE QUALITY

- Good

MUDLOGGING EQUIPMENT/PERSONNEL

- Full crew onboard.
- Systems running properly.

LWD

- Sensor to bit distances.

Vibration (DDS)	20.11
Pressure While Drilling (PWD)	15.90
Resistivity (EWR-P4)	13.40
Gamma (DGR)	11.04
Directional (DM)	8.61
Gamma at Bit (ABG)	0.95

REMARKS

- None

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	1st June 2006	**Last Casing:**	473 mm (18⅝") @ 632.9 mMDRT
Report Number:	04	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.26 sg
Depth @ 24:00 Hrs:	1832.0 mMDRT (1818.11 mTVDRT)	**ECD:**	1.29 sg
Lag Depth:	1881 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	1382.0 mMDRT (1377.20 mTVDRT)	**Mud Chlorides:**	152.4 (water phase)
Progress:	430 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	1853.06 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 24.85°
Bit Diameter:	311 mm (12¼")		Azi: 276.6°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled 311mm (12 1/4") hole from 1382 to 1570 mMDRT. Repaired mud pump. Drilled 311mm (12 1/4") hole from 1570 to 1832 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled 311 mm (12 ¼") hole from 1832 to 1918 mMDRT.*
NEXT 24h Hrs:	*Drill 311 mm (12 ¼") hole to section TD.*
CURRENT OPERATION @ 06:00 Hrs AEST 02/06/06:	*Drilling 311 mm (12 ¼") hole at 1918 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 1514 to 1695 mMDRT
ROP (range): 1.6 to 69 m/hr
Av ROP: 45 m/hr
SILTY CLAYSTONE interbedded with SANDSTONE
SANDSTONE (0 to 80%): clear to translucent, dusky yellow, pale brown, loose, very fine to granular grains, dominantly very fine to fine grained, moderately sorted, rounded to sub-angular, sub-spherical to spherical, trace lithics, trace disseminated pyrite, fair inferred porosity.
SILTY CLAYSTONE (20 to 100%): dark grey to dark brown, light olive to dark olive grey, dominantly dark brown to dark olive grey, soft to firm, blocky to sub-fissile, amorphous, 25% quartz silt, trace to minor carbonaceous specks and laminae, trace glauconite, trace disseminated pyrite.

INTERVAL: 1695 to 1732 mMDRT
ROP (range): 14 to 63 m/hr
Av ROP: 44 m/hr
SILTY CLAYSTONE interbedded with SANDSTONE
SILTY CLAYSTONE (50 to 90%): dark grey to dark brown, light olive to dark olive grey, dominantly dark brown to dark olive grey, soft to firm, blocky to sub-fissile, amorphous, 25% quartz silt, trace to minor carbonaceous specks, trace disseminated pyrite.
SANDSTONE (10 to 50%): clear to translucent, frosted, dusky yellow, pale brown, loose, very fine to medium, predominantly very fine to fine, minor medium grains, moderately to well sorted, sub-rounded to sub-angular, sub-spherical to spherical, trace lithics, trace disseminated pyrite, fair inferred porosity.

INTERVAL: 1732 to 1881mMDRT
ROP (range): 2.9 to 66 m/hr
Av ROP: 42 m/hr
Massive SILTY CLAYSTONE
SILTY CLAYSTONE (100%): medium to dark grey, dark brown, light olive to dark olive grey, soft to firm, blocky to minor sub-fissile, trace carbonaceous specks and micro-laminations.

HYDROCARBON FLUORESCENCE

- No hydrocarbon fluorescence detected.

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
1514 – 1695	0.01 – 0.10 (0.06)	0.06	0.001	Tr	-	-	-	-	0.0
1695 – 1732	0.04 – 0.10 (0.07)	0.08	0.002	Tr	-	-	-	-	0.0
1732 - 1881	0.05 – 0.26 (0.15)	0.15	0.002	Tr	-	-	-	-	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									

SAMPLE QUALITY

- Good

MUDLOGGING EQUIPMENT/PERSONNEL

- Full crew onboard.
- Systems running properly.

LWD

- Sensor to bit distances.

Vibration (DDS)	20.11
Pressure While Drilling (PWD)	15.90
Resistivity (EWR-P4)	13.40
Gamma (DGR)	11.04
Directional (DM)	8.61
Gamma at Bit (ABG)	0.95

REMARKS

None

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	2nd June 2006	**Last Casing:**	473 mm (18⅝") @ 632.9 mMDRT
Report Number:	05	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	2203.0 mMDRT (2075.70 mTVDRT)	**ECD:**	1.27 sg
Lag Depth:	2260 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	1832.0 mMDRT (1818.11 mTVDRT)	**Mud Chlorides:**	174.3 (water phase)
Progress:	371 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	2259.31 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 73.39°
Bit Diameter:	311 mm (12¼")		Azi: 274.89°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled 311mm (12 1/4") hole from 1832 to 2203 mMDRT*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled 311 mm (12 ¼") hole from 2203 to 2263 mMDRT.*
NEXT 24h Hrs:	*Drill 311 mm (12 ¼") hole to section TD.*
CURRENT OPERATION @ 06:00 Hrs AEST 03/06/06:	*Drilling 311 mm (12 ¼") hole at 2296 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 1832 to 2268mMDRT
ROP (range): 2.0 to 65 m/hr
Av ROP: 23 m/hr
Massive SILTY CLAYSTONE
SILTY CLAYSTONE (100%): medium to dark grey, grading to predominantly dark grey to greyish black at depth, dark brown, light olive to dark olive grey, soft to firm, moderately hard in parts, blocky to minor sub-fissile, 25% quartz silt, trace very fine quartz grains, trace carbonaceous specks and micro-laminations, trace glauconite, trace disseminated pyrite, micromicaceous in part.

HYDROCARBON FLUORESCENCE

- No hydrocarbon fluorescence detected.

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
1832 – 2268	0.03 – 0.53 (0.23)	0.22	0.007	Tr	-	-	-	-	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									

SAMPLE QUALITY

- Good

MUDLOGGING EQUIPMENT/PERSONNEL

- Full crew onboard.
- Systems running properly.

LWD

- Sensor to bit distances.

Vibration (DDS)	20.11
Pressure While Drilling (PWD)	15.90
Resistivity (EWR-P4)	13.40
Gamma (DGR)	11.04
Directional (DM)	8.61
Gamma at Bit (ABG)	0.95

REMARKS

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	3rd June 2006	**Last Casing:**	473 mm (18⅝") @ 632.9 mMDRT
Report Number:	06	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	2299 mMDRT (2107.7 mTVDRT)	**ECD:**	1.27 sg
Lag Depth:	2299 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	2203.0 mMDRT		
		Mud Chlorides:	167.1 (water phase)
Progress:	95.8 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	2287.29 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 73.01°
Bit Diameter:	311 mm (12¼")		Azi: 274.85°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled 311mm (12 1/4") hole from 2203.0 to 2299 mMDRT. Circulated bottoms up, conditioned hole and pulled out of hole.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Finished pulling out of hole. Rigged up to run 244 mm (9 5/8") casing. Began running in with 244 mm (9 ⅝") casing.*
NEXT 24h Hrs:	*Run and cement 244 mm (9 ⅝") casing.*
CURRENT OPERATION @ 06:00 Hrs AEST 04/06/06:	*Running 244 mm (9 ⅝") casing.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 2268 to 2286.5 mMDRT
ROP (range): 7.6 to 39.9 m/hr
Av ROP: 27.0 m/hr
Massive SILTY CLAYSTONE
SILTY CLAYSTONE (100%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, trace very fine quartz sand, trace carbonaceous specks, occasional trace glauconite and disseminated pyrite.

INTERVAL: 2286.5 to 2299 mMDRT
ROP (range): 7.4 to 48.7 m/hr
Av ROP: 38.7 m/hr
SILTY CLAYSTONE interbedded with ARGILLACEOUS SANDSTONE
SILTY CLAYSTONE (80 to 90%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, trace very fine quartz sand, trace carbonaceous specks, occasional trace glauconite and disseminated pyrite.
ARGILLACEOUS SANDSTONE (10 to 20%): clear to translucent, medium light to dark grey, loose to firm, very fine to fine, moderately to well sorted, subangular to subrounded, sub spherical to spherical, 20% quartz clay, 15% quartz silt, trace carbonaceous specks and material, trace lithic fragments, very poor visual to poor inferred porosity.

HYDROCARBON FLUORESCENCE

- No hydrocarbon fluorescence detected.

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
2268 – 2286.5	0.15 – 1.42 (0.42)	0.494	0.029	0.007	Tr	Tr	Tr	Tr	0.0
2286.5 – 2298.8	0.43 – 4.79 (3.60)	3.214	0.144	0.029	0.002	0.002	Tr	Tr	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
2294.0	4.79	3.957	0.179	0.036	0.005	0.004	0.001	0.001	0.00
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									

SAMPLE QUALITY

- Good

MUDLOGGING EQUIPMENT/PERSONNEL

- Full crew onboard.
- Systems running properly.

LWD

- Sensor to bit distances.

Vibration (DDS)	20.11
Pressure While Drilling (PWD)	15.90
Resistivity (EWR-P4)	13.40
Gamma (DGR)	11.04
Directional (DM)	8.61
Gamma at Bit (ABG)	0.95

REMARKS

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	4th June 2006	**Last Casing:**	473 mm (18⅝") @ 632.9 mMDRT
Report Number:	07	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.26 sg
Depth @ 24:00 Hrs:	2299.0 mMDRT (2107.74 mTVDRT)	**ECD:**	No drilling incurred.
Lag Depth:	2299.0 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	2299.0 mMDRT (2107.74 mTVDRT)	**Mud Chlorides:**	167.1 (water phase)
Progress:	0 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	2287.29 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 73.01°
Bit Diameter:	311 mm (12¼")		Azi: 274.85°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Finished laying out rotary steerable bottom hole assembly. Changed damaged hoses. Ran 244 mm (9 ⅝") casing, investigated leak on TAM packer. Pulled out of hole with 244 mm (9 ⅝") casing, Cut casing with oxy acetylene and laid out shoe track on deck. Ran 244 mm (9 ⅝") casing.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Ran 244 mm (9 ⅝") casing.*
NEXT 24h Hrs:	*Run and cement 244 mm (9 ⅝") casing.*
CURRENT OPERATION @ 06:00 Hrs AEST 05/06/06:	*Running 244 mm (9 ⅝") casing at 754 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

- No new hole drilled.

HYDROCARBON FLUORESCENCE

- No hydrocarbon fluorescence detected.

GAS SUMMARY

- No new hole drilled.

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers onboard.
- Systems running properly.

LWD

- Nothing to report.

REMARKS

- None

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	5th June 2006	**Last Casing:**	473 mm (18⅝") @ 632.9 mMDRT
Report Number:	08	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.26 sg
Depth @ 24:00 Hrs:	2299.0 mMDRT (2107.74 mTVDRT)	**ECD:**	No drilling.
Lag Depth:	2299.0 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	2299.0 mMDRT (2107.74 mTVDRT)	**Mud Chlorides:**	167.1 (water phase)
Progress:	0 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	2287.29 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 73.01°
Bit Diameter:	311 mm (12¼")		Azi: 274.85°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Ran and landed 244 mm (9 ⅝") casing. Circulated bottoms up. Pumped spacer.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Pumped and displaced cement (plug bumped).*
NEXT 24h Hrs:	*Wait on cement. Run seal assembly. Install wear bushing. Pick up drill pipe. Make up 216 mm (8 ½") bottom hole assembly and run in hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 06/06/06:	*Waiting on cement.*

GEOLOGICAL SUMMARY

LITHOLOGY

- No new formation drilled.

HYDROCARBON FLUORESCENCE

- No new formation drilled.

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
None	-	-	-	-	-	-	-	-	-
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None	-	-	-	-	-	-	-	-	-
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None	-	-	-	-	-	-	-	-	-
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
2295	0.85	0.83	0.02	0.003	0.001	-	-	-	0.0

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers onboard.
- Systems running properly.

LWD

- No new data received.

REMARKS

- None.

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	6th June 2006	**Last Casing:**	473 mm (18⅝") @ 632.9 mMDRT
Report Number:	09	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.26 sg
Depth @ 24:00 Hrs:	2299.0 mMDRT (2107.74 mTVDRT)	**ECD:**	No drilling incurred.
Lag Depth:	2299.0 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	2299.0 mMDRT (2107.74 mTVDRT)	**Mud Chlorides:**	161.4 (water phase)
Progress:	0 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	2287.29 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 73.01°
Bit Diameter:	311 mm (12¼")		Azi: 274.85°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Waited on cement. Laid out cementing equipment. Jetted wellhead. Ran pack off seal assembly #1 and pressure tested - failed. Retrieved pack off seal assembly. Re-jetted wellhead, ran pack off seal assembly #2 and pressure tested - failed. Retrieved seal assembly. Ran in hole with pack off seal assembly #3 and pressure tested - failed. Retrieved seal assembly.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Ran in hole with pack off seal assembly #4 and pressure tested - failed. Retrieved pack off seal assembly.*
NEXT 24h Hrs:	*Pull BOP's. Install and test pack off seal assembly. Install BOP's. Install wear bushing. Pick up and rack back drill pipe. Make up 8 ½" bottom hole assembly and run in hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 07/06/06:	*Nippling down BOP's.*

GEOLOGICAL SUMMARY

LITHOLOGY

- No new formation drilled.

HYDROCARBON FLUORESCENCE

- No new formation drilled.

GAS SUMMARY

- No new hole drilled.

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers onboard.
- Systems running properly.

LWD

- No new hole drilled.

REMARKS

- None.

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	7th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	10	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.26 sg
Depth @ 24:00 Hrs:	2299.0 mMDRT (2107.74 mTVDRT)	**ECD:**	No drilling incurred.
Lag Depth:	2299.0 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	2299.0 mMDRT (2107.74 mTVDRT)	**Mud Chlorides:**	161.4 (water phase)
Progress:	0 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	2287.29 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 73.01°
Bit Diameter:	311 mm (12¼")		Azi: 274.85°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Nippled down BOPs and high pressure riser. Cleaned wellhead and hanger area. Ran and pressure tested seal assembly. Installed wear bushing. Nippled up BOPs and high pressure riser.* Pressure tested casing.
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Picked up 58 joints of drill pipe and ran in hole.*
NEXT 24h Hrs:	*Pick up drill pipe and rack back same. Make up 216 mm (8 ½") bottom hole assembly and run in hole. Drill out cement, shoe and 3 metres of new formation. Run FIT to 2.0 sg EMW. Drill 216 mm (8 ½") hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 08/06/06:	*Picking up drill pipe.*

GEOLOGICAL SUMMARY

LITHOLOGY

- No new formation drilled.

HYDROCARBON FLUORESCENCE

- No new formation drilled.

GAS SUMMARY

- No new Formation drilled.

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers onboard.
- 2 x Sample Catchers back on board Thursday.

LWD

- No new hole drilled.

REMARKS

- None

WELLSITE GEOLOGISTS

Shane Robbie / John Hobday

CONFIDENTIAL

Date:	8th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	11	**FIT:**	2.01 EMW @ 641m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.26 sg
Depth @ 24:00 Hrs:	2299.0 mMDRT (2107.74 mTVDRT)	**ECD:**	No drilling occurred.
Lag Depth:	2299.0 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	2299.0 mMDRT (2107.74 mTVDRT)	**Temperature**	48°C
		Mud Chlorides:	160,937 ppm (water phase)
Progress:	0 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	2287.29 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 73.01°
Bit Diameter:	216 mm (8½")		Azi: 274.85°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Picked up drill pipe. Made up bottom hole assembly and ran in hole with 216 mm (8 ½") drilling assembly and Geopilot. Tagged top of cement at 2260 mMDRT. Drilled cement to 2267 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled out cement and shoe from 2267 to 2298.5 mMDRT.*
NEXT 24h Hrs:	*Drill to 2302mMDRT. Perform formation integrity test to 2.0 sg EMW. Drill 216 mm (8 ½") hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 09/06/06:	*Circulating at 2299 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

- No new formation drilled.

HYDROCARBON FLUORESCENCE

- No new formation drilled.

GAS SUMMARY

- No new formation drilled.

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers and 2 x Sample Catchers onboard.

LWD

- Sensor to bit distances.

Pressure While Drilling (PWD)	28.66
Formation Tester (Geotap)	28.52
Porosity (CTN)	25.13
Caliper (ACAL)	24.28
Density (ALD)	21.04
Resistivity (EWR-P4)	13.68
Gamma (DGR)	11.37
Directional (DM)	8.92
Gamma at Bit (ABG)	1.41
Vibration (DDS)	0.00

REMARKS

Top of cement tagged at 2260 mMDRT.

WELLSITE GEOLOGISTS

Shane Robbie / Bill Fawcett

CONFIDENTIAL

Date:	9th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	12	**FIT:**	2.01 EMW @ 2302m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	2530.0 mMDRT (2131.6 mTVDRT)	**ECD:**	1.35 sg
Lag Depth:	2299.0 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	2299.0 mMDRT (2107.74 mTVDRT)	**Temperature**	56°C
		Mud Chlorides:	184,960 ppm
Progress:	231 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	2527.13 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 93.22°
Bit Diameter:	216 mm (8½")		Azi: 279.94°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled from 2299 to 2302 mMDRT. Ran FIT to 2.0 sg EMW. Drilled 216 mm (8½") hole to 2530 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled 8½" hole from 2530 to 2653 mMDRT.*
NEXT 24h Hrs:	*Drill 216 mm (8 ½") hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 10/06/06:	*Drilling 216 mm (8 ½") hole at 2653 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 2299 to 2455 mMDRT
ROP (range): 2.1 to 33.6 m/hr
Av ROP: 25.7 m/hr

SILTY CLAYSTONE interbedded with ARGILLACEOUS SANDSTONE
SILTY CLAYSTONE (80%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, trace to rare very fine quartz sand, rare to moderately common carbonaceous specks and laminae, trace disseminated pyrite.
ARGILLACEOUS SANDSTONE (20%): clear to translucent, medium light to dark grey, brown grey in part, loose to firm, very fine to medium, dominantly very fine to fine grained, moderately well sorted, subangular to subrounded, sub-spherical to spherical, 30% light grey to light brown grey clay, 10% quartz silt, trace to rare carbonaceous specks and material, trace to rare lithic fragments, very poor visual to poor inferred porosity.

INTERVAL: 2455 to 2562 mMDRT
ROP (range): 9.1 to 31.1 m/hr
Av ROP: 29.1 m/hr

SILTY CLAYSTONE
SILTY CLAYSTONE (100%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, trace to rare very fine quartz sand, rare to moderately common carbonaceous specks and laminae, trace disseminated pyrite.

INTERVAL: 2562 to 2572.5 mMDRT
ROP (range): 9.1 to 31.1 m/hr
Av ROP: 28.1 m/hr

SILTY CLAYSTONE and ARGILLACEOUS SANDSTONE
SILTY CLAYSTONE (70%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, trace to rare very fine quartz sand, rare to moderately common carbonaceous specks and laminae, trace disseminated pyrite.
ARGILLACEOUS SANDSTONE (30%): clear to translucent, loose, very fine to rarely medium, dominantly very fine grained, well sorted, subrounded, sub-spherical to spherical, 20% light grey to light brown grey clay, 20% quartz silt, poor visual to moderate inferred porosity.

INTERVAL: 2572.5 to 2625 mMDRT
ROP (range): 10.7 to 30.7 m/hr
Av ROP: 29.6 m/hr

SILTY CLAYSTONE
SILTY CLAYSTONE (100%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, trace to minor very fine quartz sand, rare to moderately common carbonaceous specks and laminae, trace disseminated pyrite.

HYDROCARBON FLUORESCENCE

- Nil hydrocarbon fluorescence

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
2299 - 2455	0.33 - 6.52 (1.58)	1.42	0.065	0.014	0.002	0.002	0.001	0.002	0.0
2455 - 2562.0	0.19 - 4.18 (0.94)	0.8445	0.041	0.009	0.008	0.001	0.001	tr	0.0
2562 - 2572.5	0.72 - 4.18 (1.74)	2.017	0.096	0.02	0.014	0.002	0.001	tr	0.0
2572.5 - 2625	1.31 - 4.43 (2.32)	2.645	0.151	0.026	0.016	0.003	0.001	tr	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
2313	6.52	3.335	0.137	0.025	0.003	0.002	0.001	0.001	0.0
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers and 2 x Sample Catchers onboard.

LWD

- Sensor to bit distances.

Pressure While Drilling (PWD)	28.66
Formation Tester (Geotap)	28.52
Porosity (CTN)	25.13
Caliper (ACAL)	24.28
Density (ALD)	21.04
Resistivity (EWR-P4)	13.68
Gamma (DGR)	11.37
Directional (DM)	8.92
Gamma at Bit (ABG)	1.41
Vibration (DDS)	0.00

REMARKS

The well path was programmed to evaluate the Thylacine Member Unit 1 with a gently inclined (93°) horizontal section to a minimum depth of 2125.5 mTVDRT.

WELLSITE GEOLOGISTS

Shane Robbie / Bill Fawcett

CONFIDENTIAL

Date:	10th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	13	**FIT:**	2.01 EMW @ 2302m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	2956 mMDRT (2130.4 mTVDRT)	**ECD:**	1.36 sg
Lag Depth:	2945 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	2530.0 mMDRT (2131.6 mTVDRT)	**Temperature**	56°C
		Mud Chlorides:	173,600 ppm
Progress:	426 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	2932.3 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 87.66°
Bit Diameter:	216 mm (8½")		Azi: 271.56°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled 216 mm (8½") hole from 2530 to 2956 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled 8½" hole from 2956 to 3047 mMDRT. Ran two GeoTap tests at 3008.8 and 3015 mMDRT.*
NEXT 24h Hrs:	*Drill 216 mm (8 ½") hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 11/06/06:	*Running GeoTap Test No. 2 at 3015 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 2625 to 2700 mMDRT
ROP (range): 5.0 to 30.9 m/hr
Av ROP: 27.7 m/hr

SILTY CLAYSTONE interbedded with ARGILLACEOUS SANDSTONE
SILTY CLAYSTONE (70 to 90%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, rare very fine quartz sand ranging up to 5%, rare to 5% carbonaceous specks and laminae, trace disseminated pyrite.
ARGILLACEOUS SANDSTONE (10 to 30%): clear to translucent, loose, very fine to rarely medium, dominantly very fine grained, well sorted, subangular to subrounded, subspherical to spherical, 20% light grey to light brown grey clay, dispersive in part, 20% quartz silt, trace carbonaceous fragments, trace lithic fragments, poor visual to poor inferred porosity.

INTERVAL: 2700 to 2740 mMDRT
ROP (range): 12.8 to 30.8 m/hr
Av ROP: 29.0 m/hr

ARGILLACEOUS SANDSTONE interbedded with SILTY CLAYSTONE
ARGILLACEOUS SANDSTONE (20 to 60%): clear to translucent, medium dark grey, olive grey, loose to friable, dominantly loose, very fine to rarely medium, dominantly fine grained, well sorted, subangular to subrounded, subspherical to spherical, 20% light grey to light brown grey clay, dispersive in part, 20% quartz silt, trace carbonaceous fragments, trace lithic fragments, poor visual to fair inferred porosity.
SILTY CLAYSTONE (40 to 80%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, rare very fine quartz sand ranging up to 5%, rare to 5% carbonaceous specks and laminae, trace disseminated pyrite.

INTERVAL: 2740 to 2956 mMDRT
ROP (range): 11.1 to 31.2 m/hr
Av ROP: 28.3 m/hr

SILTY CLAYSTONE with occasional thin ARGILLACEOUS SANDSTONE interbeds
SILTY CLAYSTONE (95 to 100%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, rare very fine quartz sand ranging up to 5%, rare to 5% carbonaceous specks and laminae, trace disseminated pyrite.
ARGILLACEOUS SANDSTONE (0 to 5%): clear to translucent, medium dark grey, olive grey, loose to friable, dominantly loose, very fine to rarely medium, dominantly fine grained, well sorted, subangular to subrounded, subspherical to spherical, 20% light grey to light brown grey clay, dispersive in part, 20% quartz silt, trace carbonaceous fragments, trace lithic fragments, poor visual to fair inferred porosity.

INTERVAL: 2956 to 3000 mMDRT
ROP (range): 14.1 to 30.7 m/hr
Av ROP: 27.4 m/hr

SILTY CLAYSTONE
SILTY CLAYSTONE (100%): predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, trace to rare very fine quartz sand, rare to moderately common carbonaceous specks and laminae, trace disseminated pyrite.

INTERVAL: 3000 to 3005 mMDRT
ROP (range): 28.0 to 31.0 m/hr
Av ROP: 29.9 m/hr

SANDSTONE and SILTY CLAYSTONE
SANDSTONE (80%): clear to translucent, frosted in part, loose, very fine to coarse, dominantly fine to medium grained, poorly sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, occasional green lithics, fair to good visual and inferred porosity.
SILTY CLAYSTONE (20%): predominantly dark grey to greyish black, light to occasionally dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, occasional loose medium to coarse quartz sand, rare to moderately common carbonaceous specks, trace pyrite.

INTERVAL: 3005 to 3025 mMDRT
ROP (range): 28.0 to 31.0 m/hr
Av ROP: 29.9 m/hr

SANDSTONE
SANDSTONE (100%): clear to translucent, frosted in part, loose, very fine to coarse, dominantly fine to medium grained, poorly sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, trace green lithics, fair to good visual and inferred porosity.

HYDROCARBON FLUORESCENCE

Nil hydrocarbon fluorescence

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
2625 to 2700	1.24-6.05 (3.92)	3.50	0.166	0.035	0.016	0.004	0.001	0.001	0.0
2700 to 2740	3.04 – 8.72 (6.53)	5.682	0.275	0.059	0.016	0.007	0.002	0.001	0.0
2740 to 2956	0.20 – 3.04 (0.75)	0.664	0.035	0.009	0.004	0.001	0.001	tr	0.0
2956 - 3000	0.28 – 4.77 (1.13)	1.034	0.059	0.013	0.002	0.002	0.001	tr	0.0
3000 - 3025	2.25-9.48 (4.77)	4.193	0.257	0.058	0.008	0.007	0.002	tr	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
3020	9.36	8.282	0.516	0.096	0.019	0.017	0.009	0.001	0.0
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers and 2 x Sample Catchers onboard.
- All equipment working.

LWD

- Sperry Sun have advised that there is some additional uncertainty in their surveys with respect to azimuth. High uncertainties in the azimuthal readings are known to exist when drilling horizontally in due east and west directions. These uncertainties have been compounded by an as yet unknown cause (possibilities include local magnetic anomalies in the basement, a magnetic effect of the drilling fluid and tool malfunction/calibration. Sperry Sun have advised that we are likely further north than previously indicated (by up to 57 m north of the intended location at the 06:00 hr depth). The well will be steered further south to accommodate the new survey interpretation. There are no issues surrounding the inclination data.

- Sensor to bit distances.

Pressure While Drilling (PWD)	28.66
Formation Tester (Geotap)	28.52
Porosity (CTN)	25.13
Caliper (ACAL)	24.28
Density (ALD)	21.04
Resistivity (EWR-P4)	13.68
Gamma (DGR)	11.37
Directional (DM)	8.92
Gamma at Bit (ABG)	1.41
Vibration (DDS)	0.00

REMARKS

- Limited sample coming back over the shakers.
- Geotap tests were run at 3008.5 mMDRT and 3015 mMDRT.

WELLSITE GEOLOGISTS

Shane Robbie / Bill Fawcett

CONFIDENTIAL

Date:	11th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	14	**FIT:**	2.01 EMW @ 2302m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.26 sg
Depth @ 24:00 Hrs:	3375 mMDRT (2128.15mTVDRT)	**ECD:**	1.43 sg
Lag Depth:	3370 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	2956.0 mMDRT (2130.4 mTVDRT)	**Temperature**	70°C
		Mud Chlorides:	184,960 ppm
Progress:	419 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	3335.97 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 91.86°
Bit Diameter:	216 mm (8½")		Azi: 267.23°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled 216 mm (8½") hole from 2956 to 3047 mMDRT. Ran two GeoTap tests at 3008.8 and 3015 mMDRT. Drilled 216 mm (8½") hole from 3047 to 3375 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled 8½" hole from 3375 to 3485 mMDRT.*
NEXT 24h Hrs:	*Drill 216 mm (8 ½") hole as per program.*
CURRENT OPERATION @ 06:00 Hrs AEST 12/06/06:	*Drilling 8½" hole at 3485 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 3025 to 3040 mMDRT
ROP (range): 10.9 to 30.9 m/hr
Av ROP: 28.9 m/hr

SANDSTONE
SANDSTONE (100%): clear to translucent, white to frosted, light olive grey to olive grey, brown grey, loose to friable, very fine to very coarse, dominantly very fine to fine grained, poorly sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, 10% very light grey clay, 10% quartz silt, trace dark and green lithics, trace carbonaceous material, fair visual and inferred porosity.

INTERVAL: 3040 to 3100 mMDRT
ROP (range): 10.4 to 30.9 m/hr
Av ROP: 29.2 m/hr

SANDSTONE interbedded with SILTY CLAYSTONE
SANDSTONE (40 to 70%): clear to translucent, white to frosted, light olive grey to olive grey, brown grey, loose to friable, very fine to very coarse, dominantly very fine to fine grained, poorly sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, 10% very light grey clay, 10% quartz silt, trace dark and green lithics, trace carbonaceous material, fair visual and inferred porosity.
SILTY CLAYSTONE (30 to 60%): dark grey to greyish black, light to dark brown, olive grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% very fine to fine quartz sand, trace to rare carbonaceous specks, trace pyrite.

INTERVAL: 3100 to 3148 mMDRT
ROP (range): 8.5 to 31.2 m/hr
Av ROP: 29.6 m/hr

ARGILLACEOUS SANDSTONE interbedded with SILTY CLAYSTONE
ARGILLACEOUS SANDSTONE (20 to 70%): clear to translucent, white to frosted, light olive grey to olive grey, brown grey, loose to friable, very fine to very coarse, dominantly very fine to fine grained, poorly sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, 20% very light grey clay, 10% quartz silt, trace dark and green lithics, trace carbonaceous material, poor visual to poor to fair inferred porosity.
SILTY CLAYSTONE (30 to 80%): dark grey to greyish black, light to dark brown, olive grey, dominantly dark brown to olive grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% very fine to fine grained quartz sand, trace to rare carbonaceous specks, trace pyrite.

INTERVAL: 3148 to 3250 mMDRT
ROP (range): 12.9 to 31.1 m/hr
Av ROP: 29.1 m/hr

SILTY CLAYSTONE
SILTY CLAYSTONE (100%): dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% loose very fine to fine quartz sand and as micro-laminae, trace to rare carbonaceous specks and micro-laminae, trace pyrite.

INTERVAL: 3250 to 3375 mMDRT
ROP (range): 14.7 to 36.7 m/hr
Av ROP: 28.75 m/hr

SILTY CLAYSTONE with minor interbedded ARGILLACEOUS SANDSTONE
SILTY CLAYSTONE (90-100%): predominantly dark grey to greyish black, light to occasionally dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, occasional loose medium to coarse quartz sand, minor carbonaceous specks, trace pyrite.
ARGILLACEOUS SANDSTONE (0-10%): clear to translucent, white to frosted, loose, very fine grading to silt, well sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, inferred minor clay and silt in undisturbed sample, fair visual to poor to fair inferred porosity.

INTERVAL: 3375 to 3455 mMDRT
ROP (range): 16.9 to 34.2 m/hr
Av ROP: 28.4 m/hr

SILTY CLAYSTONE with minor interbedded ARGILLACEOUS SANDSTONE
SILTY CLAYSTONE (95-100%): predominantly dark grey to greyish black, light to occasionally dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, rare loose medium to coarse quartz sand, minor carbonaceous specks, trace pyrite.
ARGILLACEOUS SANDSTONE (0-5%): clear to translucent, white to frosted, loose, very fine grained grading to silt, well sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, inferred clay and silt, poor to fair inferred porosity.

HYDROCARBON FLUORESCENCE

Nil hydrocarbon fluorescence

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
3025 to 3040	4.04 to 5.01 (4.64)	3.980	0.260	0.063	0.009	0.008	0.002	0.001	0.0
3040 to 3100	3.07 to 5.69 (4.64)	3.755	0.236	0.056	0.008	0.007	0.002	0.001	0.0
3100 to 3148	1.25 to 4.80 (3.65)	2.916	0.198	0.051	0.007	0.007	0.002	0.001	0.0
3148 to 3250	0.14 to 4.07 (0.92)	0.720	0.044	0.013	0.002	0.002	0.001	0.001	0.0
3250 to 3375	0.41 to 6.12 (1.96)	1.566	0.076	0.015	0.003	0.002	0.001	0.001	0.0
3375 to 3455	0.76 to 2.96 (1.68)	1.32	0.057	0.012	0.002	0.002	0.001	0.001	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers and 2 x Sample Catchers onboard.
- All equipment working.

LWD

- Sensor to bit distances.

Pressure While Drilling (PWD)	28.66
Formation Tester (Geotap)	28.52
Porosity (CTN)	25.13
Caliper (ACAL)	24.28
Density (ALD)	21.04
Resistivity (EWR-P4)	13.68
Gamma (DGR)	11.37
Directional (DM)	8.92
Gamma at Bit (ABG)	1.41
Vibration (DDS)	0.00

REMARKS

- Calcimetries being performed at 20 metre intervals.
- Calcium carbonate being added to mud system to act as a bridging agent within the reservoir section.
- GeoTap formation pressure data recorded at 3008.8 and 3015 mMDRT.
- Test #1: 3008.8 mMDRT Unit 1 reservoir pressure 3247 psia.
- Test #2: 3015.0 mMDRT Unit 1 reservoir pressure 3243 psia.

WELLSITE GEOLOGISTS

Shane Robbie / Bill Fawcett

CONFIDENTIAL

Date:	12th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	15	**FIT:**	2.01 EMW @ 2302m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	3510 mMDRT (2128.15mTVDRT)	**ECD:**	n/a
Lag Depth:	3510 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	3375.0 mMDRT (2128.15 mTVDRT)	**Temperature**	70°C
		Mud Chlorides:	184,184 ppm
Progress:	135 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	3481.19 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 90.62°
Bit Diameter:	216 mm (8½")		Azi: 271.42°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled 216 mm (8½") hole from 3375 to 3510 mMDRT. Geopilot malfunctioned. Began to pull out of hole to change out GeoPilot.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Pulled out of hole and racked back stands. Removed radioactive sources and changed out GeoPilot. Loaded radioactive sources and commenced to run in hole with the 216 mm (8 ½") bottom hole assembly. Conducted shallow pulse test on the LWD prior to running in hole.*
NEXT 24h Hrs:	*Drill 216 mm (8 ½") hole at ~90° until turn down point.*
CURRENT OPERATION @ 06:00 Hrs AEST 13/06/06:	*Running in hole with 216 mm (8 ½") drilling assembly at 350 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 3455 to 3510 mMDRT
ROP (range): 19 to 35 m/hr
Av ROP: 30 m/hr

SILTY CLAYSTONE
SILTY CLAYSTONE (90 to 100%): dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% loose very fine to fine quartz sand and as micro-laminae, trace to rare carbonaceous specks and micro-laminae, trace pyrite.
ARGILLACEOUS SANDSTONE (0 to 10%): light to medium grey, white to translucent, clear, loose to firm, very fine to fine, dominantly very fine grained, well sorted, 30% disseminated clay and claystone lithic fragments, grades to litharenite in part, 20% silt, poor to fair porosity.

HYDROCARBON FLUORESCENCE

Nil hydrocarbon fluorescence

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
3455 to 3510	1.67 to 8.00 (3.98)	3.508	0.152	0.032	0.004	0.003	0.001	0.001	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
3507	8.00	6.814	0.299	0.069	0.009	0.006	0.001	0.001	0.0
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers and 2 x Sample Catchers onboard.
- All equipment working.

LWD

- Sensor to bit distances.

Pressure While Drilling (PWD)	27.78
Formation Tester (Geotap)	27.64
Porosity (CTN)	24.25
Caliper (ACAL)	23.4
Density (ALD)	20.16
Resistivity (EWR-P4)	12.8
Gamma (DGR)	10.49
Directional (DM)	8.02
Gamma at Bit (ABG)	1.43
Vibration (DDS)	0.00

REMARKS

- Shallow pulse testing on the LWD while running in hole was successful.
- The configuration of the bottom hole assembly was changed slightly due to the new GeoPilot tool and the sensor to bit distances in the table above have been altered accordingly.

WELLSITE GEOLOGISTS

Jon Hobday / Bill Fawcett

CONFIDENTIAL

Date:	13th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	16	**FIT:**	2.01 EMW @ 2302m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	3572 mMDRT (2124.0mTVDRT)	**ECD:**	1.36 sg
Lag Depth:	3562 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	3375.0 mMDRT (2128.15 mTVDRT)	**Temperature**	70°C
		Mud Chlorides:	173,340 ppm
Progress:	197 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	3568.54 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 90.62°
Bit Diameter:	216 mm (8½")		Azi: 269.75°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Pulled out of hole and racked back stands, changed out the GeoPilot. Run in hole, conducted shallow pulse test. Run in hole to 3510mMDRT and drilled ahead to 3548 mMDRT. Conducted GeoTap tests at 3517.79 mMDRT (good test), 3517.67mMDRT (tight), 3517.62 mMDRT (tight), 3518.40 mMDRT (good test) and 3518.83 mMDRT (good test). Drilled ahead to 3572 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled 216 mm (8 ½") hole to the 06:00 hr depth of 3682 mMDRT, dropping angle as per program.*
NEXT 24h Hrs:	*Drill 216 mm (8 ½") hole dropping angle as per program.*
CURRENT OPERATION @ 06:00 Hrs AEST 14/06/06:	*Drilling 216 mm (8 ½") hole at 3682 mMDRT.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 3455 to 3515 mMDRT
ROP (range): 19 to 35 m/hr
Av ROP: 30 m/hr

SILTY CLAYSTONE with interbedded ARGILLACEOUS CLAYSTONE
SILTY CLAYSTONE (90 to 100%): dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% very fine to fine loose and micro-laminated quartz sand, trace to rare carbonaceous specks and micro-laminae, trace pyrite.
ARGILLACEOUS SANDSTONE (0 to 10%): light to medium grey, white to translucent, clear, loose to firm, very fine to fine, dominantly very fine grained, well sorted, 30% disseminated clay and claystone lithic fragments, grades to litharenite in part, 20% silt, poor to fair porosity.

INTERVAL: 3515 to 3525 mMDRT
ROP (range): 13.8 to 28.9 m/hr
Av ROP: 20.1 m/hr

ARGILLACEOUS SANDSTONE and SILTY CLAYSTONE
ARGILLACEOUS SANDSTONE (70%): light to medium grey, light brown, white to translucent, clear, very fine to fine, trace medium, dominantly very fine grained, loose to firm, sub-blocky, well sorted, 40% disseminated clay and claystone lithic fragments, grades to litharenite, 20% silt, poor to fair visual and inferred porosity**.**
SILTY CLAYSTONE (30%): dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% very fine to fine loose and micro-laminated quartz sand, trace to rare carbonaceous specks and micro-laminae, trace pyrite.

INTERVAL: 3525 to 3580 mMDRT
ROP (range): 112.1 to 29.7 m/hr
Av ROP: 26.96 m/hr

ARGILLACEOUS SANDSTONE (70 to 80%): light to medium grey, light brown, white to translucent, clear, loose to firm, very fine to coarse, dominantly fine to very fine grained, poorly sorted, 30% disseminated clay and claystone lithic fragments, grades to litharenite in part, 20% silt, poor to fair porosity. Coarser fraction may be understated based on poor returns to surface from the horizontal section.
SILTY CLAYSTONE (20 to 30%): dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt trace to 5% very fine to fine loose and micro-laminated quartz sand, trace to rare carbonaceous specks and micro-laminae, trace pyrite.

HYDROCARBON FLUORESCENCE

Nil hydrocarbon fluorescence

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
3510 - 3525	3.13 to 15.70 (6.71)	5.34	0.17	0.028	0.003	0.003	0.001	0.001	0.0
3525 - 3580	2.97-13.39 (10.02)	7.395	0.290	0.054	0.007	0.006	0.002	0.001	0.0
3580 - 3640	4.56-13.81 (11.06)	7.873	0.342	0.072	0.009	0.008	0.002	.001	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
3510	15.66	13.917	0.162	0.001	0.001	0.001	tr	tr	0.0

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers and 2 x Sample Catchers onboard.
- All equipment working.

LWD

- Sensor to bit distances.

Pressure While Drilling (PWD)	27.78
Formation Tester (Geotap)	27.64
Porosity (CTN)	24.25
Caliper (ACAL)	23.4
Density (ALD)	20.16
Resistivity (EWR-P4)	12.8
Gamma (DGR)	10.49
Directional (DM)	8.02
Gamma at Bit (ABG)	1.43
Vibration (DDS)	0.00

REMARKS

- Cuttings volume across the shakers is significantly lower than in the preceding horizontal and vertical section. Poor returns to surface suggest that cuttings may be accumulating in the lower quadrants of the horizontal borehole section. Lithology deduced from these cuttings, especially with respect to the coarser quartzose sand fraction, may not be fully representative when correlated with the LWD logs.

WELLSITE GEOLOGISTS

Jon Hobday / Bill Fawcett

CONFIDENTIAL

Date:	14th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	17	**FIT:**	2.01 EMW @ 2302m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	4011 mMDRT (2340.18mTVDRT)	**ECD:**	1.37 sg
Lag Depth:	4026 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	3572 mMDRT (2124.0mTVDRT)	**Temperature**	70°C
		Mud Chlorides:	173,340 ppm
Progress:	439 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	4026.0 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 41.94°
Bit Diameter:	216 mm (8½")		Azi: 269.81°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled 216 mm (8 ½") hole with decreasing inclination from 3572 mMDRT to 4011 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Drilled 216 mm (8 ½") hole from 4011 mMDRT to total depth at 4026 mMDRT/ (2340.18 mTVDRT).*
NEXT 24h Hrs:	*Complete Geotap testing program and pull out of hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 15/06/06:	*Acquiring formation pressure data at 3992 mMDRT with the Geotap tool.*

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 3580 to 3640 mMDRT
ROP (range): 8.15 to 30.33 m/hr
Av ROP: 28.10 m/hr
ARGILLACEOUS SANDSTONE with minor SILTY CALYSTONE
ARGILLACEOUS SANDSTONE (95 to 100%): light to medium grey, light brown, white to translucent, clear, loose to firm, very fine to fine, rarely medium to coarse grained, moderately well to well sorted, 30% to 50% disseminated clay and claystone lithic fragments, grades to litharenite in part, 20% silt, poor to fair porosity. Coarser fraction may be understated based on poor returns to surface from the horizontal section.
SILTY CLAYSTONE (0 to 5%): dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% loose and micro-laminated very fine to fine quartz sand, trace to rare carbonaceous specks and micro-laminae, trace pyrite.

INTERVAL: 3640 to 3655 mMDRT
ROP (range): 23.7 to 29.4 m/hr
Av ROP: 26.7 m/hr
ARGILLACEOUS SANDSTONE interbedded with minor SILTY CLAYSTONE
ARGILLACEOUS SANDSTONE (70 to 80%): light to medium grey, light brown, white to translucent, clear, loose to firm, very fine to fine, rarely medium to coarse grained, moderately well sorted, 50% disseminated clay and claystone lithic fragments, grades to litharenite in part, 20% silt, poor visual porosity to poor to fair inferred porosity. Coarser fraction may be understated based on poor returns to surface from the horizontal section.
SILTY CLAYSTONE (20 to 30%): dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% loose and micro-laminated very fine to fine quartz sand, trace to rare carbonaceous specks and micro-laminae, trace pyrite.

INTERVAL: 3655 to 3752 mMDRT
ROP (range): 8.66 to 30.31 m/hr
Av ROP: 24.80 m/hr
SILTY CLAYSTONE with trace ARGILLACEOUS SANDSTONE stringers
SILTY CLAYSTONE (90 to 100%): dark grey to greyish black, dark brownish grey, soft to moderately hard, blocky to sub-fissile in parts, 25% quartz silt, trace sand, trace carbonaceous specks.
ARGILLACEOUS SANDSTONE (0 to 10%): clear to translucent, white to off white, yellowish grey, loose, firm to occasionally moderately hard aggregates, predominantly blocky to sub-blocky, very fine to coarse, moderately well sorted, sub-angular to occasionally rounded, sub-spherical to spherical, 30% white to yellowish grey clay, 20% quartz silt, trace siliceous cement, trace carbonaceous specks, trace lithic fragments, poor to fair inferred porosity.

INTERVAL: 3752 to 3910 mMDRT
ROP (range): 10.25 to 31.85 m/hr
Av ROP: 27.04 m/hr
ARGILLACEOUS SANDSTONE with interbedded SILTY CLAYSTONE
ARGILLACEOUS SANDSTONE (10 to 70%): clear to translucent, white to off white, yellowish grey, firm to occasionally hard aggregates, loose in parts, blocky to sub-blocky, very fine to coarse grained, trace very coarse and granular grains, moderately sorted, sub-angular to sub-rounded, occasionally rounded, sub-spherical to spherical, 25% yellowish grey quartz clay, 20% quartz silt, rare siliceous cement, trace carbonaceous specks and micro-laminations, trace glauconite grains, trace lithic fragments, poor to fair inferred porosity.
SILTY CLAYSTONE (30 to 90%): dark grey to greyish black, dark brownish grey, minor medium grey, yellowish grey, soft to moderately hard, blocky to sub-fissile, 35% quartz silt, trace quartz sand, trace carbonaceous specks and micro-laminations.

INTERVAL: 3910 to 3990 mMDRT
ROP (range): 10.85 to 32.25 m/hr
Av ROP: 28.67 m/hr
Interbedded SILTY SANDSTONE and SILTY CLAYSTONE
SILTY SANDSTONE (20 to 80%): clear to translucent, white to off white, yellowish grey, loose, friable to moderately hard, rare hard aggregates, blocky to sub-blocky, very fine to granule grains, poorly to locally moderately well sorted, angular to sub-rounded, sub-elongate to spherical, angular fractures associated with coarse to granule grains, 5% yellowish grey quartz clay, 20% quartz silt, trace siliceous cement, trace carbonaceous specks, trace glauconite grains, trace lithics, trace pyrite frosting on quartz aggregates, fair to good inferred porosity.
SILTY CLAYSTONE (20 to 80%): dark grey to greyish black, dark brownish grey, minor medium grey, yellowish grey, soft to moderately hard, blocky to sub-fissile, 35% quartz silt, trace quartz sand, trace carbonaceous specks and micro-laminations.

INTERVAL: 3990 to 4026 mMDRT
ROP (range): 11.29 to 30.85 m/hr
Av ROP: 26.35 m/hr
SILTY SANDSTONE with interbedded SILTY CLAYSTONE
SILTY SANDSTONE (40 to 80%): clear to translucent, white to off white, yellowish grey, loose, friable to moderately hard, rare hard aggregates, blocky to sub-blocky, predominantly very fine to fine, minor medium and trace coarse to very coarse grained, moderately well sorted to well sorted, angular to sub-rounded, sub-elongate to spherical, angular fracture in part, 5% yellowish grey quartz clay, 20% quartz silt, trace to minor siliceous cement, trace carbonaceous specks, trace lithics, nil to fair visual and inferred porosity.
SILTY CLAYSTONE (20 to 60%): dark grey to greyish black, dark brownish grey, minor medium grey, yellowish grey, soft to moderately hard, blocky to sub-fissile, 35% quartz silt, trace quartz sand, trace carbonaceous specks and micro-laminations.

HYDROCARBON FLUORESCENCE

Nil hydrocarbon fluorescence

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
3580 - 3650	4.56 to 13.81 (11.06)	7.873	0.342	0.072	0.009	0.008	0.002	0.001	0.0
3650 - 3760	0.30 -10.82 (2.87)	1.057	0.049	0.012	0.002	0.002	0.001	0.001	0.0
3760 - 3910	0.45-12.27 (4.70)	3.422	0.126	0.024	0.004	0.003	0.001	.001	0.0
3910 - 3990	1.22 – 12.67 (7.37)	5.384	0.192	0.037	0.005	0.005	0.002	0.001	0.0
3990 - 4026	2.98 – 10.85 (7.39)	5.578	0.200	0.041	0.005	0.005	0.002	0.001	0.0
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
None									
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
3510	15.66	13.917	0.162	0.001	0.001	0.001	tr	tr	0.0

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers and 2 x Sample Catchers onboard.
- All equipment working.

LWD

- Sensor to bit distances.

Pressure While Drilling (PWD)	27.78
Formation Tester (Geotap)	27.64
Porosity (CTN)	24.25
Caliper (ACAL)	23.4
Density (ALD)	20.16
Resistivity (EWR-P4)	12.8
Gamma (DGR)	10.49
Directional (DM)	8.02
Gamma at Bit (ABG)	1.43
Vibration (DDS)	0.00

REMARKS

- Cuttings volume across the shakers is lower than in the preceding horizontal and vertical section. Poor returns to surface suggest that some possibly coarser cuttings are accumulating in the lower quadrants of the horizontal borehole section and very fine sands are being lost through the shaker screens. Lithology deduced from these cuttings, especially with respect to the quartzose sand fraction, may not be fully representative when correlated with the LWD DGR, ALD and CTN.

WELLSITE GEOLOGISTS

Jon Hobday / Bill Fawcett

CONFIDENTIAL

Date:	15th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	18	**FIT:**	2.01 EMW @ 2302m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	4026 mMDRT (2340.18 mTVDRT)	**ECD:**	1.36 sg
Lag Depth:	4026 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	4026 mMDRT (2340.18 mTVDRT)	**Temperature**	72°C
		Mud Chlorides:	189,292 ppm
Progress:	0 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	4026.0 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 41.94°
Bit Diameter:	216 mm (8½")		Azi: 269.81°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	*Drilled ahead from 4011 mMDRT to 4026 mMDRT (TD). Circulated hole clean. Commenced GeoTap testing program. Performed 17 GeoTap pressure points and commenced pressure point #18 at 2628 mMDRT.*
MIDNIGHT TO 06:00 Hrs SUMMARY:	*Completed GeoTap sample points 18 and 19. Pulled out of hole to casing shoe at 2293 MMDRT and commenced running in hole to TD.*
NEXT 24h Hrs:	*Run in hole from casing shoe at 2293 mMDRT to TD. Back ream out of hole.*
CURRENT OPERATION @ 06:00 Hrs AEST 16/06/06:	*Running in hole at 3800 mMDRT..*

GEOLOGICAL SUMMARY

LITHOLOGY

No new section drilled

HYDROCARBON FLUORESCENCE

No new section drilled

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	IC4 (%)	NC4 (%)	IC5 (%)	NC5 (%)	CO2 (%)
-	-	-	-	-	-	-	-	-	-
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
-	-	-	-	-	-	-	-	-	-
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
-	-	-	-	-	-	-	-	-	-
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**IC4 (%)**	**NC4 (%)**	**IC5 (%)**	**NC5 (%)**	**CO2 (%)**
-	-	-	-	-	-	-	-	-	-

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers onboard. 1 x Data Engineer crew change.
- All equipment working.

LWD

- Sensor to bit distances.

Pressure While Drilling (PWD)	27.78
Formation Tester (Geotap)	27.64
Porosity (CTN)	24.25
Caliper (ACAL)	23.4
Density (ALD)	20.16
Resistivity (EWR-P4)	12.8
Gamma (DGR)	10.49
Directional (DM)	8.02
Gamma at Bit (ABG)	1.43
Vibration (DDS)	0.00

REMARKS

- 1 x WSG to leave well site this morning.

WELLSITE GEOLOGISTS

Jon Hobday / Bill Fawcett

CONFIDENTIAL

Date:	16th June 2006	**Last Casing:**	244 mm (9⅝") @ 2293.4 mMDRT
Report Number:	19	**FIT:**	2.01 EMW @ 2302m
Report Period:	0000-2400 Hours AEST	**Mud Weight:**	1.25 sg
Depth @ 24:00 Hrs:	4026 mMDRT (2340.18 mTVDRT)	**ECD:**	Not pumping
Lag Depth:	4026 mMDRT	**Mud Type:**	SBM (SYN-TEQ)
Last Depth:	4026 mMDRT (2340.18 mTVDRT)	**Temperature**	72°C
		Mud Chlorides:	193.8ppm
Progress:	0 m	**Est. Pore Press:**	1.05 sg (normal at TD)
Water Depth:	99.3 mLAT	**Last Survey Depth:**	4026.0 mMDRT
RT:	50.5 mLAT	**Deviation:**	Incl: 41.94°
Bit Diameter:	216 mm (8½")		Azi: 269.81°

OPERATIONS SUMMARY

24 HOUR SUMMARY: *This is the final Daily Geological Report for THA02*
Completed running in hole to total depth 4024 mMDRT, back reamed out of hole to 244 mm (9⅝") shoe at 2293 mMDRT. Circulated 2x bottoms up, pulled out of hole.

MIDNIGHT TO 06:00 Hrs SUMMARY: *Continued to pull out of hole, racked back the bottom hole assembly.*

NEXT 24h Hrs: *Run and cement 7" liner.*

CURRENT OPERATION @ 06:00 Hrs AEST 17/06/06: *Removing LWD sources.*

GEOLOGICAL SUMMARY

LITHOLOGY

No new section drilled.

HYDROCARBON FLUORESCENCE

No new section drilled.

GAS SUMMARY

Depth Interval	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	iC5 (%)	nC5 (%)	CO2 (%)
None	-	-	-	-	-	-	-	-	-
Gas Peaks	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**iC4 (%)**	**nC4 (%)**	**iC5 (%)**	**nC5 (%)**	**CO2 (%)**
None	-	-	-	-	-	-	-	-	-
Connection Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**iC4 (%)**	**nC4 (%)**	**iC5 (%)**	**nC5 (%)**	**CO2 (%)**
None	-	-	-	-	-	-	-	-	-
Trip Gas	**Total GAS (%)**	**C1 (%)**	**C2 (%)**	**C3 (%)**	**iC4 (%)**	**nC4 (%)**	**iC5 (%)**	**nC5 (%)**	**CO2 (%)**
3940 aprox.	17.33	17.02	0.531	0.063	0.005	0.005	0.001	0.000	0.0

MUDLOGGING EQUIPMENT/PERSONNEL

- 2 x Data Engineers, 2 x Mudloggers onboard. 1 x Data Engineer crew change.
- All equipment working.

LWD

- Sensor to bit distances.

Pressure While Drilling (PWD)	27.78
Formation Tester (Geotap)	27.64
Porosity (CTN)	24.25
Caliper (ACAL)	23.4
Density (ALD)	20.16
Resistivity (EWR-P4)	12.8
Gamma (DGR)	10.49
Directional (DM)	8.02
Gamma at Bit (ABG)	1.43
Vibration (DDS)	0.00

REMARKS

- This is the final Daily Geological Report for THA02.

WELLSITE GEOLOGISTS

John Hobday

Wellsite Lithology Log

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Version: 3.0.2

Woodside Energy Ltd.

Well Name :

Wellsite Lithology Log

Rig:	**Rig Type:**	**Latitude:**	**Wellsite Geologists:**
Basin:	**Rotary Table:**	**Longitude:**	
Date Spudded:	**Water Depth:**	**Eastings:**	
Date TD:	**Total Depth:**	**Northings:**	
	Well Status:	**Seismic line:**	

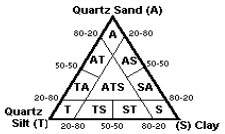
Rock Types

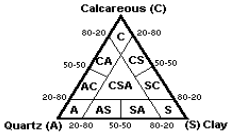
	Sample Contaminated or Missed		
(Clyst)	Claystone		
(Clyst, calc)	Claystone, calcareous		
(Sltst)	Siltstone		
(Sst)	Sandstone		
(Cgl)	Conglomerate		
(Lst)	Limestone (recrystallised)		
(Cl)	Calcilutite		
(Ct)	Calcisiltite		
(Ca)	Calcarenite		
(Cr)	Calcirudite		
(Dol)	Dolomite		

Accessories

(An)	Anhydrite	Py:	Pyrite	Al:	Algae
(Gyp)	Gypsum	Mc:	Mica	O:	Ooliths
(Ha)	Halite/Salt	Ch:	Chert	Co:	Corals
(C)	Coal	C:	Lignite / Coal	Cr:	Crinoids
(Cht)	Chert	G:	Glauconite	Fo:	Foraminifera
		F:	Feldspar	Br:	Bryozoa
		Ce:	Chlorite	Os:	Ostracoda
(MM)	Metamorphic	Qx:	Quartz Crystals	Rd:	Radiolaria
(Plut)	Plutonic	Cx:	Calcite Crystals	I:	Inoceramus
(Vol)	Volcanic	Sc:	Siderite Concretions	Sk:	Skeletal Fragments
"	silty	Gp:	Gypsum	Lf:	Lithic Fragments
....	sandy				
___	argillaceous	He:	Hematite		

Rock Classification





Sample Reliability
Q: Questionable
U: Unreliable
No entry indicates that sample is considered reliable.

Hardness
L: Loose
VS : Very Soft
S : Soft
Fr : Friable
F : Firm
MH : Moderately Hard
H: Hard

Fracture
A: Amorphous
Ang: Angular
B: Blocky
SB: Sub Blocky
Conc: Conchoidal
Disp: Dispersive
F: Fissile
SF: Sub Fissile
M: Massive
Sp: Splintery
St: Sticky

Rounding
A: Angular
SA: Subangular
SR: Subrounded
R: Rounded
WR: Well Rounded

Sorting
VP: Very Poor
P: Poor
M: Moderate
W: Well
VW: Very Well

Sphericity
VE: Very Elongated
E: Elongated
SE: Slightly Elongated
SS: Slightly Spherical
S: Spherical
VS: Very Spherical

Cement
Q: Silica
C: Calcite
D: Dolomite
P: Pyrite
Sd: Siderite

Porosity
g: intergranular
v: vugular
i: intraskeletal
f: fracture

Colour
wh = white
gy = grey
blk = black
red = red
pk = pink
pu = purple
brn = brown
yel = yellow
gn = green
olv = olive
blu = blue
orng = orange
cl = colourless
mult = multicolour
trans = translucent
lt = light
dk = dark
med = medium
vgt = variegated

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture		Grains: Calcareous Clay (%)	Calcareous Silt (%)	Calcareous Sand (%)	Siliciclastic Clay (%)	Siliciclastic Silt (%)	Siliciclastic Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Cements 1 Type	Cements 1 %	Cements 2 Type	Cements 2 %	Cements 3 Type	Cements 3 %	Accessories 1 Type	Accessories 1 %	Accessories 2 Type	Accessories 2 %	Accessories 3 Type	Accessories 3 %	Accessories 4 Type	Accessories 4 %	Accessories 5 Type	Accessories 5 %	Porosity Type	Porosity %	HC Shows (y/n)	Longhand Description
645		Cl	arg	40	lt olv gy to med gy,off wh	S	VS	B	A	80.0			20.0			100.0							0.0									Co	0.1												J. Hobday on tour. ARGILLACEOUS CALCILUTITE: light olive grey to medium grey, off white, very soft to soft, blocky, amorphous trace broken coral fragments. Trace cement contamination.
		Clyst	calc	60	lt olv gy to olv gy,med dk gy	S	F	B		30.0			68.0	2.0		100.0							0.0									C	0.1	Co	0.1										CALCAREOUS CLAYSTONE: light olive grey to medium olive grey, soft to occasionally firm, blocky, 30% calcareous clay, trace calcareous silt, 2% quartz silt, trace carbonaceous debris.
650		Cl	arg	30	lt olv gy to med gy,off wh	S	VS	B	A	80.0			20.0			100.0							0.0									Co	0.1												ARGILLACEOUS CALCILUTITE: as above.
		Clyst	calc	70	lt olv gy to olv gy,med dk gy	S	F	B		30.0			68.0	2.0		100.0							0.0									C	0.1	Co	0.1										CALCAREOUS CLAYSTONE: as above.

Lithology Colours

Wellsite Lithology Log

Well Name :

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Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture		Grains: Calcareous Clay (%)	Calcareous Silt (%)	Calcareous Sand (%)	Siliciclastic Clay (%)	Siliciclastic Silt (%)	Siliciclastic Sand (%)	Total (100%)	Grain Size & Characteristics: Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Cements 1 Type	Cements 1 %	Cements 2 Type	Cements 2 %	Cements 3 Type	Cements 3 %	Accessories 1 Type	Accessories 1 %	Accessories 2 Type	Accessories 2 %	Accessories 3 Type	Accessories 3 %	Accessories 4 Type	Accessories 4 %	Accessories 5 Type	Accessories 5 %	Porosity Type	Porosity %	HC Shows (y/n)	Lithology Colours	Longhand Description
660		Cl	arg	30	lt olv gy to med gy,off wh	S	VS	B	A	80.0			20.0			100.0							0.0									Co	0.1													ARGILLACEOUS CALCILUTITE: as above.
		Clyst	calc	70	lt olv gy to olv gy,med dk gy	S	F	B		30.0			68.0	2.0		100.0							0.0									C	0.1	Co	0.1											CALCAREOUS CLAYSTONE: as above.
670		Cl	arg	30	lt olv gy to med gy,off wh	S	VS	B	A	80.0			20.0			100.0							0.0									Co	0.1													ARGILLACEOUS CALCILUTITE: as above.
		Clyst	calc	70	lt olv gy to olv gy,med dk gy	S	F	B		30.0			68.0	2.0		100.0							0.0									C	0.1	Co	0.1											CALCAREOUS CLAYSTONE: as above.
680		Clyst	calc	100	lt olv gy to mnr olv gy,tr med dk gy	S	F	B	A	40.0			60.0	0.1		100.1							0.0									C	0.1	Co	0.1											CALCAREOUS CLAYSTONE: light olive grey to minor medium olive grey, soft to occasionally firm, blocky, amorphous, 40% calcareous clay, trace calcareous silt, trace quartz silt, trace carbonaceous debris.
690		Clyst	calc	100	lt olv gy to mnr olv gy,tr med dk gy	S	F	B	A	40.0			60.0	0.1		100.1							0.0									C	0.1	Co	0.1											CALCAREOUS CLAYSTONE: as above.
700		Clyst	calc	100	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B		20.0			70.0	10.0		100.0							0.0									C	0.2													CALCAREOUS CLAYSTONE: olive grey to minor light olive grey, medium dark grey, trace off white, firm to soft blocky, 20% calcareous clay, 10% quartz silt, trace carbonaceous material and laminations.
710		Clyst	calc	100	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B		20.0			70.0	10.0		100.0							0.0									C	0.2													CALCAREOUS CLAYSTONE: as above.
720		Clyst	calc	90	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B		20.0			70.0	10.0		100.0							0.0									C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl	arg	10	lt olv gy to med gy,off wh	S	VS	B	A	80.0			20.0			100.0							0.0									C	0.1													ARGILLACEOUS CALCILUTITE: light olive grey to med grey, off white, soft to very soft, blocky to amorphous, 20% quartz clay.
730		Clyst	calc	90	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B		20.0			70.0	10.0		100.0							0.0									C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl	arg	10	lt olv gy to med gy,off wh	S	VS	B		80.0			20.0			100.0							0.0									C	0.1	G	0.1											ARGILLACEOUS CALCILUTITE: as above, including trace glauconite specks.
740		Clyst	calc	70	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B		20.0			75.0	5.0		100.0							0.0									C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl	arg	30	lt olv gy to med gy,off wh	S	VS	B		80.0			20.0			100.0							0.0									C	0.1													ARGILLACEOUS CALCILUTITE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
750		Clyst	calc	60	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B	20.0			75.0	5.0		100.0							0.0											C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl	arg	40	lt olv gy to med gy,off wh	S	VS	B	80.0			20.0			100.0							0.0											C	0.1	G	0.1										ARGILLACEOUS CALCILUTITE: as above.
760		Clyst	calc	90	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B	20.0			75.0	5.0		100.0							0.0											C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl	arg	10	lt olv gy to med gy,off wh	S	VS	B	80.0			20.0			100.0							0.0											C	0.1	G	0.1										ARGILLACEOUS CALCILUTITE: as above.
770		Clyst	calc	90	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B	20.0			70.0	10.0		100.0							0.0											C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl	arg	10	lt olv gy to med gy,off wh	S	VS	B	80.0			20.0			100.0							0.0											C	0.1	G	0.1										ARGILLACEOUS CALCILUTITE: as above.
780		Clyst	calc	70	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B	20.0			70.0	10.0		100.0							0.0											C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl	arg	30	lt olv gy,off wh	S	VS	B	90.0			10.0			100.0							0.0											C	0.1												ARGILLACEOUS CALCILUTITE: light olive grey, off white, soft to very soft in parts, blocky, 10% quartz clay, trace carbonaceous specks, trace glauconite specks.
790		Clyst	calc	80	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B	20.0			70.0	10.0		100.0							0.0											C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl	arg	20	lt olv gy,off wh	S	VS	B	90.0			10.0			100.0							0.0											C	0.1												ARGILLACEOUS CALCILUTITE: as above.
800		Clyst	calc	90	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B	20.0			70.0	10.0		100.0							0.0											C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl	arg	10	lt olv gy,off wh	S	VS	B	90.0			10.0			100.0							0.0											C	0.1												ARGILLACEOUS CALCILUTITE: as above.
810		Clyst	calc	80	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B	20.0			70.0	10.0		100.0							0.0											C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl	arg	20	lt olv gy,off wh	S	VS	B	90.0			10.0			100.0							0.0											C	0.1	G	0.1										ARGILLACEOUS CALCILUTITE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
820		Clyst	calc	60	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B		20.0			70.0	10.0		100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl	arg	40	lt olv gy,off wh	S	VS	B		90.0			10.0			100.0							0.0										C	0.1	G	0.1											ARGILLACEOUS CALCILUTITE: as above.
830		Clyst	calc	90	olv gy to lt olv gy,med dk gy,tr off wh	F	S	B		20.0			75.0	5.0		100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl	arg	10	lt olv gy,off wh	S	VS	B		90.0			10.0			100.0							0.0										C	0.1													ARGILLACEOUS CALCILUTITE: as above.
840		Clyst	calc	70	lt olv gy to olv gy,med dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl	arg	30	lt olv gy,off wh	S	VS	B		90.0			10.0			100.0							0.0										C	0.1	G	0.1											ARGILLACEOUS CALCILUTITE: as above.
850		Clyst	calc	90	lt olv gy to olv gy,med dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl	arg	10	lt olv gy,off wh	S	VS	B		90.0			10.0			100.0							0.0										C	0.1	G	0.1											ARGILLACEOUS CALCILUTITE: as above.
860		Clyst	calc	90	lt olv gy to olv gy,med dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl	arg	10	lt olv gy,off wh	S	VS	B		90.0			10.0			100.0							0.0										C	0.1													ARGILLACEOUS CALCILUTITE: as above.
870		Clyst	calc	90	lt olv gy to olv gy,med dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl	arg	10	lt olv gy,off wh	S	VS	B		90.0			10.0			100.0							0.0										C	0.1													ARGILLACEOUS CALCILUTITE: as above.
880		Clyst	calc	100	lt olv gy to olv gy,med dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
890		Clyst	calc	100	lt olv gy to olv gy,med dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity				
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						Lithology Colours
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		Longhand Description
900		Clyst	calc	100	lt olv gy to olv gy,med dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
910		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
920		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													S. Robbie on tour. CALCAREOUS CLAYSTONE: olive grey to minor light olive grey, medium dark to dark grey, trace off white, firm to soft, amorphous to blocky, 20% calcareous clay, 10% quartz silt, trace carbonaceous material and laminations.
930		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
940		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
950		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
960		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
970		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above, dominantly light olive grey.
980		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
990		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
1000		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
1010		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
1020		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
1030		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
1040		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
1050		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
1060		Clyst	calc	100	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
1070		Clyst	calc	95	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: olive grey to minor light olive grey, medium dark to dark grey, trace off white, firm to soft, amorphous to blocky, 20% calcareous clay, 5% quartz silt, trace carbonaceous material and laminations.
		Cl		5	lt olv gy,off wh	VS	S	B	A	95.0			5.0			100.0							0.0																								CALCILUTITE: light olive grey, off white, soft to very soft in parts, blocky, 10% quartz clay, trace carbonaceous specks.
1080		Clyst	calc	95	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl		5	lt olv gy,off wh	VS	S	B	A	95.0			5.0			100.0							0.0																								CALCILUTITE: as above.
1090		Clyst	calc	95	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			80.0			100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl		5	lt olv gy,off wh	VS	S	B	A	95.0			5.0			100.0							0.0																								CALCILUTITE: as above.
1100		Clyst	calc	90	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl		10	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																								CALCILUTITE: as above.
1110		Clyst	calc	90	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.
		Cl		10	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																								CALCILUTITE: as above.
1120		Clyst	calc	90	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1													CALCAREOUS CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Cl		10	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																								CALCILUTITE: as above.
1130		Clyst	calc	90	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		10	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																								CALCILUTITE: as above.
1140		Clyst	calc	90	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		10	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																								CALCILUTITE: as above.
1150		Clyst	calc	90	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		10	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																								CALCILUTITE: as above.
1160		Clyst	calc	90	lt olv gy to olv gy,med dk to dk gy,off wh	F	S	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		10	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																								CALCILUTITE: as above.
1170		Clyst	calc	90	lt olv gy to olv gy,med dk to dk gy,off wh	S	MH	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: olive grey to minor light olive grey, medium dark to dark grey, trace off white, soft to moderately hard, amorphous to blocky, 20% calcareous clay, 5% quartz silt, trace carbonaceous material and laminations.
		Cl		10	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																								CALCILUTITE: light olive grey, off white, soft to very soft in parts, blocky, 10% quartz clay, trace carbonaceous specks.
1180		Clyst	calc	90	lt olv gy to olv gy,med dk to dk gy,off wh	S	MH	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		10	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																								CALCILUTITE: as above.
1190		Clyst	calc	80	lt olv gy to olv gy,med dk to dk gy,off wh	S	MH	B	A	20.0			75.0	5.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Cl		20	lt olv gy,off wh	VS	S	B	A	90.0			5.0	5.0		100.0							0.0																							CALCILUTITE: as above.
1200		Clyst	calc	40	lt olv gy to olv gy,med dk,off wh	S	MH	B	A	20.0			70.0	10.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: olive grey to minor light olive grey, medium dark, trace off white, soft to moderately hard, amorphous to blocky, 20% calcareous clay, 10% quartz silt, trace carbonaceous material and laminations.
		Cl		60	lt olv gy,med lt gy	S	MH	B	A	85.0			5.0	10.0		100.0							0.0										C	0.1	G	0.1										CALCILUTITE: light olive grey, light medium grey, soft to moderately hard, blocky, 5% quartz clay, 10% quartz silt, trace carbonaceous specks and glauconite.
1210		Clyst	calc	40	lt olv gy to olv gy,med dk,off wh	S	MH	B	A	20.0			70.0	10.0		100.0							0.0										C	0.1												J. Hobday on tour. CALCAREOUS CLAYSTONE: olive grey to minor light olive grey, medium dark, trace off white, soft to moderately hard, amorphous to blocky, 20% calcareous clay, 10% quartz silt, trace carbonaceous material.
		Cl		60	lt olv gy,med lt gy	S	MH	B	A	85.0			5.0	10.0		100.0							0.0										C	0.1	G	0.1										CALCILUTITE: light olive grey, light medium grey, soft to moderately hard, blocky, 5% quartz clay, 10% quartz silt, trace carbonaceous specks and glauconite specks.
1215		Clyst	calc	30	lt olv gy to olv gy,med dk,off wh	S	MH	B	A	20.0			70.0	10.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		70	lt olv gy,med lt gy	S	MH	B	A	85.0			5.0	10.0		100.0							0.0										C	0.1	G	0.1										CALCILUTITE: as above.
1220		Clyst	calc	30	lt olv gy to olv gy,med dk,off wh	S	MH	B	A	20.0			70.0	10.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		70	lt olv gy,med lt gy	S	MH	B	A	85.0			5.0	10.0		100.0							0.0										C	0.1	G	0.1										CALCILUTITE: as above.
1230		Clyst	calc	60	lt olv gy to olv gy,med dk,off wh	S	MH	B	A	20.0			65.0	15.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: light olive grey, medium light grey, off white, soft to moderately hard in parts, blocky, amorphous in parts, 10% quartz clay, 5% quartz silt, carbonaceous specks.
		Cl		40	lt olv gy,med lt gy,off wh	S	MH	B	A	85.0			10.0	5.0		100.0							0.0										G	0.2	C	0.1										CALCILUTITE: light olive grey, medium light grey, off white, soft to moderately hard, blocky to amorphous, 10% quartz clay, 5% quartz silt, increasing glauconite specks, minor carbonaceous material and specks.
1235		Clyst	calc	30	lt olv gy to olv gy,med dk,off wh	S	MH	B	A	20.0			65.0	15.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		70	lt olv gy,med lt gy,off wh	S	MH	B	A	85.0			10.0	5.0		100.0							0.0										G	0.2	C	0.1										CALCILUTITE: as above.
1240		Clyst	calc	40	med dk gy,lt olv gy to olv gy,off wh	S	MH	B	SF	20.0			65.0	15.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: medium grey, light olive grey to olive grey, minor off white, soft to moderately hard, blocky to occasionally sub-fissile, 20% calcareous clay, 15% quartz silt, trace carbonaceous specks.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5					
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)	Longhand Description
		Cl		60	lt olv gy,med lt gy,off wh	S	MH	B	A	85.0			10.0	5.0		100.0							0.0										G	0.1	C	0.1										CALCILUTITE: as above.
1245		Clyst	calc	30	med dk gy,lt olv gy to olv gy,off wh	S	MH	B	SF	20.0			65.0	15.0		100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		70	lt olv gy,med lt gy,off wh	S	MH	B	A	85.0			10.0	5.0		100.0							0.0										G	0.1	C	0.1										CALCILUTITE: as above.
1250		Clyst	calc	30	med dk gy,lt olv gy to olv gy,off wh	S	MH	B	SF	20.0			60.0	15.0	5.0	100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above, slight increase in sand sized quartz grains.
		Cl		70	lt olv gy,med lt gy,off wh	S	MH	B	A	85.0			10.0	5.0		100.0							0.0										G	0.1	C	0.1										CALCILUTITE: as above.
1255		Sst		30	clr to trans,dsky yel,lt olv gy to lt gn gy	L	MH			5.0			5.0	15.0	75.0	100.0	20.0	30.0	30.0	15.0	5.0		100.0	M	P	SR	A	SS	S	C	0.1	Q	0.1			C	0.1	G	0.1					g	15	N	SANDSTONE: clear to translucent, dusky yellow, light olive grey to light greyish green, loose, minor moderately hard aggregates, 15% quartz silt, very fine to very coarse grains, predominantly fine to medium, common very fine, common coarse, minor very coarse grains, moderately to locally poor sorting, sub-rounded to sub-angular, angular in parts, sub-spherical to spherical, rare calcareous and siliceous matrix, trace calcareous and siliceous cement, fair inferred porosity.
		Clyst	calc	30	med dk gy,lt olv gy to olv gy,off wh	S	MH	B	SF	20.0			60.0	15.0	5.0	100.0							0.0										C	0.1												CALCAREOUS CLAYSTONE: as above.
		Cl		40	lt olv gy,med lt gy,off wh	S	MH	B	A	85.0			10.0	5.0		100.0							0.0										G	0.1	C	0.1										CALCILUTITE: as above.
1260		Sst		80	clr to trans,dsky yel	L	MH						0.1	10.0	90.0	100.1	10.0	10.0	20.0	30.0	25.0	5.0	100.0	M		SR	R	SS	S					G	0.1	Lf	0.1	Py	0.1					g	20	N	SANDSTONE: clear to translucent, dusky yellow, loose, trace moderately hard aggregates, 15% quartz silt, very fine to granular grains, predominantly coarse to very coarse, minor very fine to fine, commonly medium, predominately coarse to very coarse, minor granules, moderately to locally poor sorting, sub-rounded to rounded, trace angular in parts, sub-spherical to spherical, rare glauconite grains, trace siliceous matrix, no visible cement, trace lithic grains and material, trace pyrite nodules, fair to good inferred porosity.
		Clyst	silty	15	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B		15.0			60.0	20.0	5.0	100.0							0.0										C	0.1	G	0.1	Py	0.1								SILTY CLAYSTONE: medium dark to dark grey, medium to light brown, trace olive green, soft to moderately hard, blocky, 15% calcareous clay, 20% quartz silt, 5% very fine quartz sands, trace carbonaceous specks, trac glauconite, trace nodular pyrite.
		Cl		5	lt olv gy,med lt gy,off wh	S	MH	B	A	85.0			10.0	5.0		100.0							0.0																							CALCILUTITE: as above.
1270		Sst		80	clr to trans,dsky yel	L	MH						0.1	10.0	90.0	100.1	10.0	10.0	20.0	30.0	25.0	5.0	100.0	M		SR	R	SS	S					G	0.1	Lf	0.1	Py	0.1					g	20	N	SANDSTONE: as above.
		Clyst	silty	20	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B		5.0			70.0	20.0	5.0	100.0							0.0										C	0.1	G	0.1	Py	0.1								SILTY CLAYSTONE: as above.
1280		Sst		70	clr to trans,dsky yel	L							0.1	10.0	90.0	100.1	10.0	20.0	20.0	25.0	20.0	5.0	100.0	M		SR	R	SS	S					G	0.1	Lf	0.1							g	20	N	SANDSTONE: as above.

Lithology Colours

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	30	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1290		Sst		70	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	10.0	30.0	35.0	20.0	5.0	0.1	100.1	M	P	A	SR	SE	SE	Q	0.1			Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above, grain sizes decreasing.
		Clyst	slty	30	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1300		Sst		80	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	15.0	35.0	40.0	5.0	5.0	0.1	100.1	M	W	SA	SR	SE					Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above, grain sizes decreasing.
		Clyst	slty	20	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1310		Sst		80	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	15.0	35.0	40.0	5.0	5.0	0.1	100.1	M	W	SA	SR	SE					Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above.
		Clyst	slty	20	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1320		Sst		90	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	15.0	35.0	40.0	5.0	5.0	0.1	100.1	M	W	SA	SR	SE					Lf	0.1	C	0.1							g	15	N		SANDSTONE: clear to translucent, dusky yellow, loose, 15% quartz silt, very fine to trace granular grains, minor very fine, predominantly fine to medium, minor coarse to very coarse, trace granules, moderately well to well sorting, sub-rounded to sub-angular in parts, sub-spherical to spherical, rare coloured lithics, trace siliceous matrix, no visible cement, trace carbonaceous specks, fair to good inferred porosity.
		Clyst	slty	10	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1330		Sst		90	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	15.0	35.0	40.0	5.0	5.0	0.1	100.1	M	W	SA	SR	SE					Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above.
		Clyst	slty	10	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1340		Sst		90	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	15.0	35.0	45.0	5.0	0.1	0.1	100.2	M	W	SA	SR	SE					Lf	0.1	C	0.1	Py	0.1					g	15	N		SANDSTONE: as above trace disseminated pyrite.
		Clyst	slty	10	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1350		Sst		70	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	15.0	35.0	45.0	5.0	0.1	0.1	100.2	M	W	SA	SR	SE					Lf	0.1	C	0.1	Py	0.1					g	15	N		SANDSTONE: as above trace disseminated pyrite.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories												Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5								
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING		ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	30	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0											C	0.1															SILTY CLAYSTONE: as above.
1360		Sst		95	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	10.0	40.0	45.0	5.0	0.1	0.1	100.2	M	W	SA	SR	SE							Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above.
		Clyst	slty	5	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0											C	0.1															SILTY CLAYSTONE: as above.
1370		Sst		90	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	10.0	40.0	45.0	5.0	0.1	0.1	100.2	M	W	SA	SR	SE							Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above.
		Clyst	slty	10	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0											C	0.1															SILTY CLAYSTONE: as above.
1380		Sst		90	clr to trans,dsky yel	L						0.1	15.0	85.0	100.1	10.0	40.0	45.0	5.0	0.1	0.1	100.2	M	W	SA	SR	SE							Lf	0.1	C	0.1	G	0.1					g	15	N		SANDSTONE: as above.
		Clyst	slty	10	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0											C	0.1															SILTY CLAYSTONE: as above.
1390		Sst		80	clr to trans,dsky yel,tr orng	L						0.1	15.0	85.0	100.1	10.0	40.0	45.0	5.0	0.1	0.1	100.2	M	W	SA	SR	SE							Lf	0.1	C	0.1	G	0.1					g	15	N		SANDSTONE: as above.
		Clyst	slty	20	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0											C	0.1															SILTY CLAYSTONE: as above.
1400		Sst		90	clr to trans,dsky yel,pl brn	L								100.0	100.0	5.0	15.0	40.0	30.0	10.0	0.1	100.1	M		R	SA	SS	S						Lf	0.1	C	0.1	G	0.1	Py	0.1			g	15	N		SANDSTONE: clear to translucent, dusky yellow, pale brown, loose, very fine to trace granules grains, predominantly medium to coarse, moderately well sorted, rounded to sub-angular, sub-spherical to spherical, trace lithics, trace carbonaceous specks and material, trace glauconite, trace disseminated pyrite, fair to good inferred porosity.
		Clyst	slty	10	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0											C	0.1															SILTY CLAYSTONE: medium dark to dark grey, medium to light brown, trace olive green, soft to moderately hard, blocky, rare calcareous clay, 20% quartz silt, rare very fine quartz sands, trace carbonaceous specks.
1410		Sst		70	clr to trans,dsky yel,pl brn	L								100.0	100.0	5.0	15.0	40.0	30.0	10.0	0.1	100.1	M		R	SA	SS	S						Lf	0.1	C	0.1	G	0.1	Py	0.1			g	15	N		SANDSTONE: as above.
		Clyst	slty	30	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B	5.0			70.0	20.0	5.0	100.0							0.0											C	0.1															SILTY CLAYSTONE: as above.
1420		Sst		60	clr to trans,dsky yel,pl brn	L								100.0	100.0	5.0	15.0	40.0	30.0	10.0	0.1	100.1	M		R	SA	SS	S						Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above, decreasing glauconite and disseminated pyrite.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture		Grains: Calcareous: Clay (%)	Calcareous: Silt (%)	Calcareous: Sand (%)	Siliciclastic: Clay (%)	Siliciclastic: Silt (%)	Siliciclastic: Sand (%)	% Total (100%)	Grain Size & Characteristics: Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING		ROUNDING		SPHERICITY	Cements 1: Type	%	Cements 2: Type	%	Cements 3: Type	%	Accessories 1: Type	%	Accessories 2: Type	%	Accessories 3: Type	%	Accessories 4: Type	%	Accessories 5: Type	%	Porosity: Type	%	HC Shows (y/n)	Lithology Colours	Longhand Description
		Clyst	slty	40	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B		5.0			70.0	20.0	5.0	100.0							0.0											C	0.1														SILTY CLAYSTONE: as above.
1430		Sst		80	clr to trans,dsky yel,pl brn	L									100.0	100.0	5.0	15.0	40.0	30.0	10.0	0.1	100.1	M		R	SA	SS	S					Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above.
		Clyst	slty	20	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B		5.0			70.0	20.0	5.0	100.0							0.0											C	0.1														SILTY CLAYSTONE: as above.
1440		Sst		80	clr to trans,dsky yel,pl brn	L									100.0	100.0	5.0	15.0	40.0	30.0	10.0	0.1	100.1	M		R	SA	SS	S					Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above.
		Clyst	slty	20	med dk to dk gy,lt to med brn,tr olv gn	S	MH	B		5.0			70.0	20.0	5.0	100.0							0.0											C	0.1														SILTY CLAYSTONE: as above.
1450		Sst		50	clr to trans,dsky yel,pl brn	L									100.0	100.0	5.0	15.0	40.0	30.0	10.0	0.1	100.1	M		R	SA	SS	S					Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above.
		Clyst	slty	50	dk gy to gy blk,dk brn to brn blk,olv blk	S		B	A	0.1			65.0	35.0		100.1							0.0											C	0.1	G	0.1	Py	0.1										SILTY CLAYSTONE: dark grey to greyish black, dark brown to brownish black, olive black, soft, blocky, amorphous, trace calcareous clay, 35% quartz silt, trace carbonaceous specks, trace glauconite, trace disseminated pyrite.
1460		Sst		30	clr to trans,dsky yel,pl brn	L									100.0	100.0	5.0	15.0	40.0	30.0	10.0	0.1	100.1	M		R	SA	SS	S					Lf	0.1	C	0.1							g	15	N		SANDSTONE: as above.
		Clyst	slty	70	dk gy to gy blk,dk brn to brn blk,olv blk	S		B	A	0.1			65.0	35.0		100.1							0.0											C	0.1	G	0.1	Py	0.1										SILTY CLAYSTONE: as above.
1470		Sst		40	clr to trans,dsky yel,pl brn	L									100.0	100.0	5.0	30.0	30.0	30.0	5.0	0.1	100.1	M		R	SA	SS	S	P	3.0			Py	5.0	C	0.1	Lf	0.1							g	15	N		SANDSTONE: as above, rare pyrite cement, 5% disseminated pyrite..
		Clyst	slty	60	dk gy to gy blk,dk brn to brn blk,olv blk	S		B	A	0.1			65.0	35.0		100.1							0.0											C	0.1	G	0.1	Py	0.1										SILTY CLAYSTONE: as above.
1480		Sst		20	clr to trans,dsky yel,pl brn	L									100.0	100.0	5.0	30.0	30.0	30.0	5.0	0.1	100.1	M		R	SA	SS	S					Lf	0.1	Py	0.1							g	15	N		SANDSTONE: as above.
		Clyst	slty	80	dk gy to gy blk,dk brn to brn blk,olv blk	S		B	A	0.1			65.0	35.0		100.1							0.0											C	0.1	G	0.1										SILTY CLAYSTONE: as above.
1490		Sst		20	clr to trans,dsky yel,pl brn	L									100.0	100.0	5.0	30.0	30.0	30.0	5.0	0.1	100.1	M		R	SA	SS	S					Lf	0.1	Py	0.1							g	15	N		SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	80	dk gy to gy blk,dk brn to brn blk,olv blk	S		B	A	0.1			65.0	35.0		100.1							0.0										C	0.1	G	0.1										SILTY CLAYSTONE: as above.
1500		Sst		60	clr to trans,dsky yel,pl brn	L									100.0	100.0	5.0	30.0	30.0	30.0	5.0	0.1	100.1	P	M	R	SA	SS	S					Lf	0.1	Py	0.1						g	15	N		SANDSTONE: clear to translucent, dusky yellow, pale brown, loose, very fine to very coarse grains, minor very fine, predominantly fine to coarse grains, minor very coarse, trace granules, poor to moderately sorted, rounded to sub-angular, sub-spherical to spherical, trace lithics, trace disseminated pyrite, good inferred porosity.
		Clyst	slty	40	dk gy to gy blk,dk brn to brn blk,olv blk	S		B	A	0.1			65.0	35.0		100.1							0.0										G	0.3	Py	0.1										SILTY CLAYSTONE: as above.
1510		Sst		80	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	0.1	10.0	35.0	40.0	10.0	5.0	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2						g	15	N		SANDSTONE: as above, increasing disseminated pyrite.
		Clyst	slty	20	dk gy to gy blk,dk brn to brn blk,olv blk	S		B	A	0.1			65.0	35.0		100.1							0.0										C	0.1	G	0.1										SILTY CLAYSTONE: as above.
1515		Sst		60	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	0.1	10.0	35.0	40.0	10.0	5.0	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2						g	15	N		S. Robbie on tour. SANDSTONE: as above.
		Clyst	slty	40	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A	0.1			65.0	35.0		100.1							0.0										C	0.1	G	0.1										SILTY CLAYSTONE: as above.
1520		Sst		80	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	0.1	10.0	35.0	40.0	10.0	5.0	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2						g	15	N		SANDSTONE: as above.
		Clyst	slty	20	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A	0.1			65.0	35.0		100.1							0.0										C	0.1	G	0.1										SILTY CLAYSTONE: as above.
1530		Sst		60	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	0.1	10.0	35.0	40.0	10.0	5.0	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2						g	15	N		SANDSTONE: as above.
		Clyst	slty	40	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A	0.1			65.0	35.0		100.1							0.0										C	0.1	G	0.1										SILTY CLAYSTONE: as above.
1540		Sst		60	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	0.1	10.0	35.0	40.0	10.0	5.0	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2						g	15	N		SANDSTONE: as above.
		Clyst	slty	40	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A	0.1			65.0	35.0		100.1							0.0										C	0.1	G	0.1										SILTY CLAYSTONE: as above.
1550		Sst		40	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	0.1	10.0	35.0	40.0	10.0	5.0	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2						g	15	N		SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	60	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A				75.0	25.0		100.0							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1560		Sst		40	clr to trans,frstd,d sky yel,pl brn	L									100.0	100.0	0.1	10.0	35.0	40.0	10.0	5.0	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	15	N		SANDSTONE: as above.
		Clyst	slty	60	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A				75.0	25.0		100.0							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1570		Sst		30	clr to trans,frstd,d sky yel,pl brn	L									100.0	100.0	0.1	10.0	35.0	40.0	10.0	5.0	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	15	N		SANDSTONE: clear to translucent, dusky yellow, pale brown, loose, very fine to granular grains, becoming predominantly very fine to fine grained with depth, poor to moderately sorted, rounded to sub-angular, sub-spherical to spherical, trace lithics, trace disseminated pyrite, fair to good inferred porosity.
		Clyst	slty	70	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A				75.0	25.0		100.0							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: dark grey to greyish black, dark brown to brownish black, olive black, soft to firm, blocky, amorphous, 25% quartz silt, trace carbonaceous specks, trace glauconite, trace disseminated pyrite.
1575		Sst		20	clr to trans,frstd,d sky yel,pl brn	L									100.0	100.0	10.0	25.0	40.0	20.0	5.0	0.1	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	12	N		SANDSTONE: as above.
		Clyst	slty	80	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A				75.0	25.0		100.0							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1580		Sst		10	clr to trans,frstd,d sky yel,pl brn	L									100.0	100.0	10.0	25.0	40.0	20.0	5.0	0.1	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	12	N		SANDSTONE: as above, becoming dominantly very fine to fine grained.
		Clyst	slty	90	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A				75.0	25.0		100.0							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1585		Sst		10	clr to trans,frstd,d sky yel,pl brn	L									100.0	100.0	10.0	25.0	40.0	20.0	5.0	0.1	100.1	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	12	N		SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A				75.0	25.0		100.0							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1590		Sst		10	clr to trans,frstd,d sky yel,pl brn	L									100.0	100.0	20.0	45.0	30.0	5.0	0.1	0.1	100.2	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N		SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A				75.0	25.0		100.0							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1600		Sst		10	clr to trans,frstd,d sky yel,pl brn	L									100.0	100.0	40.0	45.0	10.0	5.0	0.1	0.1	100.2	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N		SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity				
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)
		Clyst	slty	90	dk gy to gy blk,dk brn to brn blk,olv blk	S	F	B	A				75.0	25.0		100.0							0.0										C	0.1	G	0.1										
1610		Sst		10	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	50.0	45.0	5.0	0.1	0.1	0.1	100.3	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N
		Clyst	slty	90	dk gy to dk brn,lt olv to olv grey	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	G	0.1										
1620		Sst		10	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	50.0	45.0	5.0	0.1	0.1	0.1	100.3	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N
		Clyst	slty	90	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	G	0.1										
1630		Sst		10	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	50.0	45.0	5.0	0.1	0.1	0.1	100.3	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N
		Clyst	slty	90	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	G	0.1										
1640		Sst		10	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	50.0	45.0	5.0	0.1	0.1	0.1	100.3	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N
		Clyst	slty	90	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	G	0.1										
1650		Sst		10	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	50.0	45.0	5.0	0.1	0.1	0.1	100.3	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N
		Clyst	slty	90	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.2	G	0.1										
1660		Sst		10	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	50.0	45.0	5.0	0.1	0.1	0.1	100.3	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N
		Clyst	slty	90	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.2	G	0.1										
1670		Sst		10	clr to trans,frstd,dsky yel,pl brn	L									100.0	100.0	50.0	45.0	5.0	0.1	0.1	0.1	100.3	P	M	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N

Lithology Colours

Longhand Description

SILTY CLAYSTONE: as above.

SANDSTONE: as above.

SILTY CLAYSTONE: as above.

SANDSTONE: clear to translucent, dusky yellow, pale brown, loose, very fine to granular grains, dominantly very fine to fine grained, moderately sorted, rounded to sub-angular, sub-spherical to spherical, trace lithics, trace disseminated pyrite, fair inferred porosity.

SILTY CLAYSTONE: dark grey to dark brown, light olive to dark olive grey, dominantly dark brown to dark olive grey, soft to firm, blocky to sub-fissile, amorphous, 25% quartz silt, trace to minor carbonaceous specks and laminae, trace glauconite, trace disseminated pyrite.

SANDSTONE: as above.

SILTY CLAYSTONE: as above.

SANDSTONE: as above.

SILTY CLAYSTONE: as above.

SANDSTONE: as above.

SILTY CLAYSTONE: as above.

SANDSTONE: as above.

SILTY CLAYSTONE: as above.

SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5					
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)	Lithology Colours	Longhand Description
		Clyst	slty	90	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.2	G	0.1										SILTY CLAYSTONE: as above.
1680		Clyst	slty	100	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1												J. Hobday on tour. SILTY CLAYSTONE: dark grey to dark brown, light olive to dark olive grey, dominantly dark brown to dark olive grey, soft to firm, blocky to sub-fissile, amorphous, 25% quartz silt, trace to minor carbonaceous specks.
1690		Clyst	slty	100	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	Py	0.1										SILTY CLAYSTONE: as above, including trace disseminated pyrite.
1700		Sst		10	clr to trans,frstd,d sky yel,pl brn	L									100.0	100.0	40.0	50.0	10.0				100.0	M	W	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N	SANDSTONE: clear to translucent, frosted, dusky yellow, pale brown, loose, very fine to medium, predominantly very fine to fine, minor medium grains, moderately to well sorted, sub-rounded to sub-angular, sub-spherical to spherical, trace lithics, trace disseminated pyrite, fair inferred porosity.
		Clyst	slty	90	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	Py	0.1										SILTY CLAYSTONE: as above.
1710		Sst		30	clr to trans,frstd,d sky yel,pl brn	L									100.0	100.0	40.0	50.0	10.0				100.0	M	W	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N	SANDSTONE: as above.
		Clyst	slty	70	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	Py	0.1										SILTY CLAYSTONE: as above.
1715		Sst		40	clr to trans,frstd,d sky yel,pl brn,wh to off wh	L	F								100.0	100.0	40.0	50.0	10.0				100.0	M	W	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N	SANDSTONE: as above.
		Clyst	slty	60	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	Py	0.1										SILTY CLAYSTONE: as above.
1720		Sst		50	clr to trans,frstd,d sky yel,pl brn,wh to off wh	L	MH								100.0	100.0	30.0	50.0	20.0	0.1			100.1	M	W	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N	SANDSTONE: as above.
		Clyst	slty	50	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	Py	0.1										SILTY CLAYSTONE: as above.
1725		Sst		20	clr to trans,frstd,d sky yel,pl brn,wh to off wh	L	MH								100.0	100.0	30.0	50.0	20.0	0.1			100.1	M	W	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N	SANDSTONE: as above.
		Clyst	slty	80	dk gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	Py	0.1										SILTY CLAYSTONE: as above.
1730		Sst		10	clr to trans,frstd,d sky yel,pl brn,wh to off wh	L	MH								100.0	100.0	30.0	50.0	20.0	0.1			100.1	M	W	SR	SA	SS	S					Lf	0.1	Py	0.2							g	10	N	SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	90	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0		100.0							0.0										C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
1735		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: medium to dark grey, dark brown, light olive to dark olive grey, soft to firm, blocky to minor sub-fissile, trace carbonaceous specks and micro-laminations.
1740		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
1745		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
1750		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	Lf	0.1											SILTY CLAYSTONE: as above.
1755		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1	Lf	0.1											SILTY CLAYSTONE: as above.
1760		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1	Lf	0.1											SILTY CLAYSTONE: as above.
1765		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1	Lf	0.1											SILTY CLAYSTONE: as above.
1770		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1	Lf	0.1											SILTY CLAYSTONE: as above.
1775		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1780		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1785		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1													SILTY CLAYSTONE: as above.
1790		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
1800		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
1805		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1												SILTY CLAYSTONE: as above.
1810		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1												SILTY CLAYSTONE: as above.
1815		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
1820		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
1830		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1												SILTY CLAYSTONE: as above.
1835		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1												SILTY CLAYSTONE: as above.
1840		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
1845		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1												SILTY CLAYSTONE: as above.
1850		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1												SILTY CLAYSTONE: as above.
1855		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				70.0	25.0	5.0	100.0							0.0										C	0.1												SILTY CLAYSTONE: as above.
1860		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
1865		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
1870		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
1875		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
1880		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
1885		Clyst	slty	100	dk to med gy,dk brn,lt olv to dk olv gy	S	F	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											S. Robbie on tour. SILTY CLAYSTONE: as above.
1890		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: medium to dark grey, dark brown, light olive grey to olive black, soft to moderately hard, blocky to minor sub-fissile, trace very fine quartz grains, trace carbonaceous specks and micro-laminations, trace glauconite, micromicaceous in part.
1900		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1910		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1920		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1930		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1940		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1950		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1960		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1970		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1980		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
1990		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2000		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: medium to dark grey, dark brown, light olive grey to olive black, soft to moderately hard, blocky to minor sub-fissile, trace very fine quartz grains, trace carbonaceous specks and micro-laminations, trace glauconite, micromicaceous in part.

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2005		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2010		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2020		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2025		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2030		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2035		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2040		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2045		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2050		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2055		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2060		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2065		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2070		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1	Py	0.1									SILTY CLAYSTONE: medium to dark grey, dark brown, light olive grey to olive black, soft to moderately hard, blocky to minor sub-fissile, trace very fine quartz grains, trace carbonaceous specks and micro-laminations, trace glauconite, occasional trace pyrite, micromicaceous in part.
2075		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1	Py	0.1									SILTY CLAYSTONE: as above.

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2080		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2085		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1	Py	0.1									SILTY CLAYSTONE: as above.
2090		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2100		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2110		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1	Py	0.1									J. Hobday on tour. SILTY CLAYSTONE: medium to dark grey, dark brown, light olive grey to olive black, soft to moderately hard, blocky to minor sub-fissile, trace very fine quartz grains, trace carbonaceous specks and micro-laminations, trace glauconite, occasional trace pyrite, micromicaceous in part.
2115		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2120		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2125		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2130		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2135		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2140		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2145		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2150		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2155		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2160		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2165		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2170		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2175		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2180		Clyst	slty	100	med to dk gy,dk brn,lt olv to olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
2185		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, trace quartz sand, trace carbonaceous specks.
2190		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
2195		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
2200		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
2205		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
2210		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
2215		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
2220		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
2225		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1	G	0.1											SILTY CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics											Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%												1		2		3		1		2		3		4		5							
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2230		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1													SILTY CLAYSTONE: as above.
2235		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1													SILTY CLAYSTONE: as above.
2240		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1													SILTY CLAYSTONE: as above.
2245		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1													SILTY CLAYSTONE: as above.
2250		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1													SILTY CLAYSTONE: as above.
2255		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1													SILTY CLAYSTONE: as above.
2260		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1													SILTY CLAYSTONE: as above.
2265		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1	Py	0.1											S. Robbie on tour. SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, trace very fine quartz sand, trace carbonaceous specks, occasional trace glauconite and disseminated pyrite.
2270		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1													SILTY CLAYSTONE: as above.
2280		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1	G	0.1											SILTY CLAYSTONE: as above.
2285		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1	G	0.1	Py	0.1									SILTY CLAYSTONE: as above.
2290		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1	G	0.1	Py	0.1									SILTY CLAYSTONE: as above.
		Sst	arg	10	med dk gy to dk gy,brn gy	L	F					20.0	15.0	65.0	100.0	90.0	10.0					100.0	M	W	SA	SR	SS	S						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: clear to translucent, medium light to dark grey, loose to firm, very fine to fine, moderately to well sorted, sub-angular to sub-rounded, sub-spherical to spherical, 20% quartz clay, 15% quartz silt, trace carbonaceous specks and material, trace lithic fragments, very poor visual to poor inferred porosity.
2295		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1	G	0.1	Py	0.1									SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture		Grains: Calcareous Clay (%)	Calcareous Silt (%)	Calcareous Sand (%)	Siliciclastic Clay (%)	Siliciclastic Silt (%)	Siliciclastic Sand (%)	Total (100%)	Grain Size & Characteristics: Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Cements 1 Type	Cements 1 %	Cements 2 Type	Cements 2 %	Cements 3 Type	Cements 3 %	Accessories 1 Type	Accessories 1 %	Accessories 2 Type	Accessories 2 %	Accessories 3 Type	Accessories 3 %	Accessories 4 Type	Accessories 4 %	Accessories 5 Type	Accessories 5 %	Porosity Type	Porosity %	HC Shows (y/n)	Lithology Colours	Longhand Description
		Sst	arg	20	med dk gy to dk gy,brn gy	L	F						20.0	15.0	65.0	100.0	90.0	10.0					100.0	M	W	SA	SR	SS	S					C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2299		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1	G	0.1	Py	0.1									SILTY CLAYSTONE: as above.
		Sst	arg	20	med dk gy to dk gy,brn gy	L	F						20.0	15.0	65.0	100.0	90.0	10.0					100.0	M	W	SA	SR	SS	S					C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2305		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1												S. Robbie on tour. SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, trace very fine quartz sand, trace to rare carbonaceous specks and laminae.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F						20.0	15.0	65.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S					C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: clear to translucent, medium light to dark grey, brown grey in part, loose to firm, very fine to coarse, dominantly very fine to fine, trace medium and coarse grains, moderately to well sorted sub-angular to sub-rounded, sub-spherical to spherical, 20% light grey to light brown grey quartz clay, 15% quartz silt, trace to rare carbonaceous specks and material, trace to rare lithic fragments, very poor visual to poor inferred porosity.
2310		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1												SILTY CLAYSTONE: as above.
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F						20.0	15.0	65.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S					C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2315		Clyst	slty	60	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1												SILTY CLAYSTONE: as above.
		Sst	arg	40	clr to trans,med dk gy to dk gy,brn gy	L	F						20.0	15.0	65.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S					C	0.1	Lf	0.1							g	9	N		ARGILLACEOUS SANDSTONE: as above, dominantly loose.
2320		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1												SILTY CLAYSTONE: as above.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F						20.0	15.0	65.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S					C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above, dominantly loose.
2325		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1												SILTY CLAYSTONE: as above.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F						20.0	15.0	65.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S					C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above, dominantly loose.
2330		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	0.1												SILTY CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%												1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F					20.0	15.0	65.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above, dominantly loose.
2335		Clyst	silty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0												C	0.1													SILTY CLAYSTONE: as above.
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above, 30% quartz clay, dispersive in part, 10% quartz silt.
2340		Clyst	silty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0												C	0.1													SILTY CLAYSTONE: as above.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2345		Clyst	silty	60	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0												C	0.1													SILTY CLAYSTONE: as above.
		Sst	arg	40	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2350		Clyst	silty	40	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0												C	0.1													SILTY CLAYSTONE: as above.
		Sst	arg	60	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	40.0	60.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above, dominantly loose and fine grained.
2355		Clyst	silty	50	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0												C	0.1													SILTY CLAYSTONE: as above.
		Sst	arg	50	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	40.0	60.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2360		Clyst	silty	40	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0												C	0.1													SILTY CLAYSTONE: as above.
		Sst	arg	60	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	40.0	60.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2365		Clyst	silty	50	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0												C	0.1													SILTY CLAYSTONE: as above.

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%																															
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING		ROUNDING		SPHERICITY		1		2		3		1		2		3		4		5		Porosity		HC Shows (y/n)		
																													Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%					
		Sst	arg	50	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2370		Clyst	slty	60	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0													C	0.1	Py	0.1											SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, trace very fine quartz sand, trace to rare carbonaceous specks and laminae, trace disseminated pyrite.
		Sst	arg	40	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: clear to translucent, medium light to dark grey, brown grey in part, loose to firm, very fine to medium, dominantly very fine to fine, moderately to well sorted, sub-angular to sub-rounded, sub-spherical to spherical, 30% light grey to light brown grey quartz clay, 10% quartz silt, trace to rare carbonaceous specks and material, trace to rare lithic fragments, very poor visual to poor inferred porosity.
2375		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0													C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2380		Clyst	slty	60	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0													C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	40	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2385		Clyst	slty	60	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0													C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	40	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2385		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0													C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2390		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0													C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2395		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0													C	0.1	Py	0.1											SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%												1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2400		Clyst	silty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2405		Clyst	silty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	60.0	40.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2410		Clyst	silty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2415		Clyst	silty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1	Py	0.1											SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, trace to rare very fine quartz sand, trace to rare carbonaceous specks and laminae, trace disseminated pyrite.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: clear to translucent, medium light to dark grey, brown grey in part, loose to firm, very fine to medium, dominantly very fine to fine, moderately to well sorted, sub-angular to sub-rounded, sub-spherical to spherical, 30% light grey to light brown grey quartz clay, 10% quartz silt, trace to rare carbonaceous specks and material, trace to rare lithic fragments, very poor visual to poor inferred porosity.
2420		Clyst	silty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2425		Clyst	silty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S							C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2430		Clyst	silty	70	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1	Py	0.1											SILTY CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%												1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Sst	arg	30	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2435		Clyst	silty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0											C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2440		Clyst	silty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0											C	0.1	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M	W	SA	SR	SS	S						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2445		Clyst	silty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0											C	2.0													B. Fawcett on tour. SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, trace to rare very fine quartz sand, rare to moderately common carbonaceous specks and laminae, trace disseminated pyrite.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M		SA	SR	SS	S						C	0.1									g	8			ARGILLACEOUS SANDSTONE: clear to translucent, medium light to dark grey, brown grey in part, loose to firm, very fine to medium, dominantly very fine to fine, moderately well sorted, sub-angular to sub-rounded, sub-spherical to spherical, 30% light grey to light brown grey quartz clay, 10% quartz silt, trace to rare carbonaceous specks and material, trace to rare lithic fragments, very poor visual to poor inferred porosity.
2450		Clyst	silty	80	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				75.0	25.0	0.1	100.1						0.0											C	2.0													SILTY CLAYSTONE: as above.
		Sst	arg	20	clr to trans,med dk gy to dk gy,brn gy	L	F					30.0	10.0	60.0	100.0	70.0	30.0	0.1	0.1			100.2	M		SA	SR	SS	S						C	0.1									g	6	N		ARGILLACEOUS SANDSTONE: as above.
2455		Clyst	silty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				65.0	30.0	5.0	100.0	100.0					100.0	W		SA	SR	SE	SS						C	3.0													SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, minor very fine quartz sand ranging up to 5%, rare to moderately common carbonaceous specks and laminae, trace disseminated pyrite.
2460		Clyst	silty	100	dk gy to gy blk,dk brn,olv blk	S	MH	B	SF				65.0	30.0	5.0	100.0	100.0					100.0	W		SA	SR	SE	SS						C	3.0													SILTY CLAYSTONE: as above.
2465		Clyst	silty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				65.0	30.0	5.0	100.0	100.0					100.0	W		SA	SR	SE	SS						C	3.0													SILTY CLAYSTONE: as above.
2470		Clyst	silty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				65.0	30.0	5.0	100.0	100.0					100.0	W		SA	SR	SE	SS						C	3.0													SILTY CLAYSTONE: as above.
2475		Clyst	silty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				65.0	30.0	5.0	100.0	100.0					100.0	W		SA	SR	SE	SS						C	3.0													SILTY CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2480		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				65.0	30.0	5.0	100.0	95.0			5.0			100.0	W	SA	SR	SE	SS							C	3.0											SILTY CLAYSTONE: as above, very fine sand with occasional clear, unconsolidated coarse grains, rounded to sub-spherical.
2485		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				65.0	30.0	5.0	100.0	100.0						100.0	W	SA	SR	SE	SS							C	3.0											SILTY CLAYSTONE: as above.
2490		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				70.0	30.0	0.1	100.1	100.0						100.0	W	SA	SR	SE	SS							C	3.0											SILTY CLAYSTONE: as above.
2495		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1	100.0						100.0	W	SA	SR	SE	SS							C	3.0											SILTY CLAYSTONE: as above.
2500		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1	100.0						100.0	W	SA	SR	SE	SS							C	3.0											SILTY CLAYSTONE: as above.
2505		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1	100.0						100.0	W	SA	SR	SE	SS							C	3.0											SILTY CLAYSTONE: as above.
2510		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1	100.0						100.0	W	SA	SR	SE	SS							C	3.0	Lf	0.1									SILTY CLAYSTONE: as above.
2515		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	3.0	Lf	0.1									SILTY CLAYSTONE: as above.
2520		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	3.0	Lf	0.1									SILTY CLAYSTONE: as above.
2525		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	3.0	Lf	0.1									SILTY CLAYSTONE: as above.
2530		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	3.0	Lf	0.1									SILTY CLAYSTONE: as above.
2535		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	3.0	Lf	0.1									SILTY CLAYSTONE: as above.
2540		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	3.0	Lf	0.1									SILTY CLAYSTONE: as above.
2545		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	3.0	Lf	0.1									SILTY CLAYSTONE: as above.

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2550		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2555		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2560		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2565		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2565		Sst	arg	30	clr to trans	L	F					20.0	20.0	60.0	100.0	85.0	10.0	5.0				100.0	M	SA	SR	SE	SS							C	0.1											ARGILLACEOUS SANDSTONE: clear to translucent, loose, very fine to rarely medium, dominantly very fine, well sorted, sub-angular to sub-rounded, sub-spherical to spherical, 20% clay, 20% quartz silt, trace to rare lithic fragments, poor visual to poor inferred porosity.
2570		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, minor very fine quartz sand ranging up to 5%, moderately common to common carbonaceous specks and laminae, trace disseminated pyrite.
2575		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				70.0	25.0	5.0	100.0							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2580		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				70.0	25.0	5.0	100.0							0.0										C	3.0													SILTY CLAYSTONE: as above.
2585		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2590		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
2595		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2600		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				70.0	25.0	5.0	100.0							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2605		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2610		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics											Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%																																	
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2615		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Lf	0.1											SILTY CLAYSTONE: as above.
2620		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2625		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0												SILTY CLAYSTONE: as above.
2635		Sst	arg	30	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	85.0	10.0	5.0				100.0	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		S. Robbie on tour. ARGILLACEOUS SANDSTONE: clear to translucent, loose, very fine to rarely medium, dominantly very fine, well sorted, sub-angular to sub-rounded, sub-spherical to spherical, 20% light grey to light brown grey clay, dispersive in part, 20% quartz silt, trace carbonaceous fragments, trace lithic fragments, poor visual to poor inferred porosity.
		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, rare very fine quartz sand ranging up to 5%, rare to 5% carbonaceous specks and laminae, trace disseminated pyrite.
2640		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	85.0	10.0	5.0				100.0	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2645		Sst	arg	20	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	85.0	10.0	5.0				100.0	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2650		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2655		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2660		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2665		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2670		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2675		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2680		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2685		Sst	arg	20	clr to trans,med dk gy,olv gy	L	F					30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: clear to translucent, medium dark grey, olive grey, loose to friable, very fine to rarely medium, dominantly very fine, moderately to well sorted, sub-angular to sub-rounded, sub-spherical to spherical, 30% light grey to light brown grey clay, dispersive in part, 10% quartz silt, trace carbonaceous fragments, trace lithic fragments, poor visual to poor inferred porosity.
		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, rare very fine quartz sand ranging up to 5%, rare to 5% carbonaceous specks and laminae, trace disseminated pyrite.
2690		Sst	arg	20	clr to trans,med dk gy,olv gy	L	F					30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2695		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture		Grains: Calcareous: Clay (%)	Calcareous: Silt (%)	Calcareous: Sand (%)	Siliciclastic: Clay (%)	Siliciclastic: Silt (%)	Siliciclastic: Sand (%)	% Total (100%)	Grain Size & Characteristics: Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING			SPHERICITY	Cements 1 Type	Cements 1 %	Cements 2 Type	Cements 2 %	Cements 3 Type	Cements 3 %	Accessories 1 Type	Accessories 1 %	Accessories 2 Type	Accessories 2 %	Accessories 3 Type	Accessories 3 %	Accessories 4 Type	Accessories 4 %	Accessories 5 Type	Accessories 5 %	Porosity Type	Porosity %	HC Shows (y/n)	Lithology Colours	Longhand Description
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2700		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F						30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2705		Sst	arg	20	clr to trans,med dk gy,olv gy	L	F						30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	80	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2710		Sst	arg	30	clr to trans,med dk gy,olv gy	L	F						30.0	10.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2715		Sst	arg	60	clr to trans,med dk gy,olv gy	L	F						20.0	20.0	60.0	100.0	40.0	60.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	10	N		ARGILLACEOUS SANDSTONE: clear to translucent, medium dark grey, olive grey, loose to friable, dominantly loose, very fine to rarely medium, dominantly fine, well sorted, sub-angular to sub-rounded, sub-spherical to spherical, 20% light grey to light brown grey clay, dispersive in part, 20% quartz silt, trace carbonaceous fragments, trace lithic fragments, poor visual to fair inferred porosity.
		Clyst	slty	40	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2720		Sst	arg	30	clr to trans,med dk gy,olv gy	L	F						20.0	20.0	60.0	100.0	40.0	60.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2725		Sst	arg	30	clr to trans,med dk gy,olv gy	L	F						20.0	20.0	60.0	100.0	40.0	60.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	70	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0											C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2730		Sst	arg	40	clr to trans,med dk gy,olv gy	L	F						20.0	20.0	60.0	100.0	40.0	60.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	10	N		ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	60	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2735		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N	ARGILLACEOUS SANDSTONE: as above, dominantly very fine grained.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2740		Sst	arg	10	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	85.0	15.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2745		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, rare very fine quartz sand ranging up to 5%, rare to 5% carbonaceous specks and laminae, trace disseminated pyrite.
2750		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2755		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2760		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2765		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2770		Clyst	slty	95	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
		Sst	arg	5	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	90.0	10.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N	ARGILLACEOUS SANDSTONE: clear to translucent, medium dark grey, olive grey, loose to friable, dominantly loose, very fine to rarely medium, dominantly very fine, well sorted, sub-angular to sub-rounded, sub-spherical t spherical, 20% light grey to light brown grey clay, dispersive in part, 20% quartz silt, trace carbonaceous fragments, trace lithic fragments, poor visual to fair inferred porosity.
2775		Clyst	slty	95	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
		Sst	arg	5	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	90.0	10.0	0.1				100.1	M	W	SA	SR	SS	SS						C	0.1	Lf	0.1							g	8	N	ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%												1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2780		Clyst	slty	95	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	5	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	90.0	10.0	0.1				100.1	M	W	SA	SR	SS	SS					C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2785		Clyst	slty	95	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	5	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	90.0	10.0	0.1				100.1	M	W	SA	SR	SS	SS					C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2790		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2795		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2800		Clyst	slty	95	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	5	clr to trans,med dk gy,olv gy	L	F					20.0	20.0	60.0	100.0	90.0	10.0	0.1				100.1	M	W	SA	SR	SS	SS					C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
2805		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: predominantly dark grey to greyish black, dark brown, olive black, soft to moderately hard blocky to sub-fissile, 25% quartz silt, rare very fine quartz sand ranging up to 5%, rare to 5% carbonaceous specks and laminae, trace disseminated pyrite.
2810		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2815		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2820		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2825		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2830		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2835		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2840		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2845		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2850		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2855		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2865		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2870		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											B. Fawcett on tour. SILTY CLAYSTONE: predominantly dark grey to greyish black, light to occasionally dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, trace to rare very fine quartz sand, rare to moderately common carbonaceous specks, trace pyrite.
2875		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2880		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2885		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2890		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2895		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2900		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2905		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2910		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2915		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2920		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2925		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2930		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2935		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2940		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2945		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	23.0	2.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2950		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	24.0	1.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2955		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	24.0	1.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2960		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	24.0	1.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2965		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	24.0	1.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2970		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	24.0	1.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
2975		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	24.0	1.0	100.0							0.0										C	3.0	Py	0.1										SILTY CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
2980		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	24.0	1.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2985		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	24.0	1.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2990		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	24.0	1.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
2995		Clyst	slty	100	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	20.0	5.0	100.0			40.0	60.0			100.0										C	3.0	Py	0.1											SILTY CLAYSTONE: predominantly dark grey to greyish black, light to occasionally dark brown, olive black, soft to moderately hard, blocky to sub-fissile, 25% quartz silt, occasional loose medium to coarse quartz sand, rare to moderately common carbonaceous specks, trace pyrite.
3000		Clyst	slty	20	dk gy to gy blk,dk brn,olv blk,lt brn	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3000		Sst		80	clr to trans,frstd	L	Fr						10.0	90.0	100.0	15.0	45.0	30.0	10.0			100.0	P	M	SA	SR	SE	S													g	15	N		SANDSTONE: clear to translucent, frosted in part, loose and unconsolidated, very fine to coarse, dominantly fine to medium, poorly sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, occasional green lithics, fair to good visual and inferred porosity.
3005		Sst		100	clr to trans,frstd	L	Fr						10.0	90.0	100.0	15.0	45.0	30.0	10.0			100.0	P	M	SA	SR	SE	S					Lf	0.1									g	15	N		SANDSTONE: clear to translucent, frosted in part, loose and unconsolidated, very fine to coarse, dominantly fine to medium, poorly sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, trace green lithics, fair to good visual and inferred porosity.
3010		Sst		100	clr to trans,frstd	L	Fr						10.0	90.0	100.0	15.0	45.0	30.0	10.0			100.0	P	M	SA	SR	SE	S					Lf	0.1									g	15	N		SANDSTONE: as above
3015		Sst		100	clr to trans,frstd to wh	L								100.0	100.0	35.0	50.0	15.0				100.0	W		SA	SR	SE	S					Lf	0.1									g	18	N		SANDSTONE: as above, very fine to medium, dominantly fine grain, good inferred and visual porosity.
3020		Sst		100	clr to trans,frstd to wh	L	Fr						10.0	90.0	100.0	35.0	50.0	10.0	5.0			100.0	P	M	SA	SR	SE	S	Q	20.0			Lf	0.1									g	15	N		SANDSTONE: as above, very fine to medium, occasionally coarse grain, loose to firm, poorly to moderately sorted, 10% silt, fair to moderate inferred and visual porosity.
3025		Sst		100	clr to trans,frstd to wh	L	Fr						10.0	90.0	100.0	40.0	45.0	10.0	5.0			100.0	P	M	SA	SR	SE	S	Q	20.0			Lf	0.1									g	15	N		SANDSTONE: as above
3030		Sst		100	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					10.0	10.0	80.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1			Lf	0.1	C	0.1							g	12	N		S. Robbie on tour. SANDSTONE: clear to translucent, white to frosted, light olive grey to olive grey, brown grey, loose to friable, very fine to very coarse, dominantly very fine to fine, poorly sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, 10% very light grey clay, 10% quartz silt, trace dark and green lithics, trace carbonaceous material, fair visual and inferred porosity.
3035		Sst		100	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					10.0	10.0	80.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1			Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above
3040		Sst		100	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					10.0	10.0	80.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1			Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above

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Lithology									Grains							Grain Size & Characteristics										Cements					Accessories									Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%												1		2		3		1		2		3		4		5					
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3045	U	Sst		40	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					10.0	10.0	80.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above
	U	Clyst	slty	60	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0													C	3.0	Py	0.1										SILTY CLAYSTONE: dark grey to greyish black, light to dark brown, olive grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% very fine to fine quartz sand, trace to rare carbonaceous specks, trace pyrite.
3050	Q	Sst		40	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					10.0	10.0	80.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above
	Q	Clyst	slty	60	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0													C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
3055	Q	Sst		60	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					10.0	10.0	80.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above
	Q	Clyst	slty	40	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0													C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
3060		Sst		60	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					15.0	10.0	75.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above grading to an ARGILLACEOUS SANDSTONE in part.
		Clyst	slty	40	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0													C	3.0	Py	0.1										SILTY CLAYSTONE: as above becoming dominantly dark brown to olive grey.
3065		Sst		60	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					15.0	10.0	75.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above
		Clyst	slty	40	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0													C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
3075		Sst		70	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					15.0	10.0	75.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above
		Clyst	slty	30	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0													C	3.0	Py	0.1										SILTY CLAYSTONE: as above.
3080		Sst		70	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					15.0	10.0	75.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above
		Clyst	slty	30	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0													C	3.0	Py	0.1										SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology								Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
								Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING		ROUNDING		SPHERICITY		Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		Longhand Description
3085		Sst		60	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					15.0	10.0	75.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		SANDSTONE: as above
		Clyst	silty	40	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0												C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3090		Sst		40	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					15.0	10.0	75.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	10	N		SANDSTONE: as above
		Clyst	silty	60	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0												C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3095		Sst		40	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					15.0	10.0	75.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	10	N		SANDSTONE: as above
		Clyst	silty	60	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0												C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3100		Sst	arg	40	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	9	N		ARGILLACEOUS SANDSTONE: clear to translucent, white to frosted, light olive grey to olive grey, brown grey, loose to friable, very fine to very coarse, dominantly very fine to fine, poorly sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, 20% very light grey clay, 10% quartz silt, trace dark and green lithics, trace carbonaceous material, poor visual to poor to fair inferred porosity.
		Clyst	silty	60	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0												C	3.0	Py	0.1											SILTY CLAYSTONE: dark grey to greyish black, light to dark brown, olive grey, dominantly dark brown to olive grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% very fine to fine quartz sand, trace to rare carbonaceous specks, trace pyrite.
3105		Sst	arg	50	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	9	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	50	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0												C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3110		Sst	arg	60	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	9	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	40	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0												C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3115		Sst	arg	70	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA	SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	9	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	30	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0												C	3.0	Py	0.1											SILTY CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3120		Sst	arg	60	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	9	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	40	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3125		Sst	arg	40	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	9	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	60	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3130		Sst	arg	70	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	35.0	45.0	15.0	5.0	0.1		100.1	P	M	SA SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	30	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3135		Sst	arg	70	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	35.0	45.0	15.0	5.0	0.1		100.1	P	M	SA SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	12	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	30	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3140		Sst	arg	60	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	9	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	40	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3145		Sst	arg	40	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	9	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	60	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3150		Sst	arg	20	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	40.0	45.0	10.0	5.0	0.1		100.1	P	M	SA SR	SE	S	Q	0.1					Lf	0.1	C	0.1							g	9	N		ARGILLACEOUS SANDSTONE: as above
		Clyst	silty	80	dk gy to gy blk,olv gy to olv blk,lt brn to dk brn	S	MH	B	SF			75.0	20.0	5.0	100.0							0.0											C	3.0	Py	0.1											SILTY CLAYSTONE: as above.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3155		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% loose very fine to fine quartz sand and as micro-laminae, trace to rare carbonaceou specks and micro-laminae, trace pyrite.
3160		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3165		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3170		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3175		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3180		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3185		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3190		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3195		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3200		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3205		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3210		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3215		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3220		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% loose very fine to fine quartz sand and as micro-laminae, trace to rare carbonaceou specks and micro-laminae, trace pyrite.

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3225		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3230		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3235		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3240		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3245		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3250		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
3255		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	10	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr						20.0	10.0	70.0	100.0	80.0	20.0	0.1				100.1	P	M	SA	SR	SE	S					Lf	0.1	C	0.1							g	8	N		ARGILLACEOUS SANDSTONE: clear to translucent, white to frosted, light olive grey to olive grey, brown grey, loose to friable, very fine to medium, dominantly very fine, poor to moderately sorted, sub-angular to sub-rounded, sub-elongate to occasionally spherical, 20% very light grey clay, 10% quartz silt, trace dark and green lithics, trace carbonaceous material, poor visual porosity.
3260		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	10	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr						20.0	10.0	70.0	100.0	80.0	20.0	0.1				100.1	P	M	SA	SR	SE	S					Lf	0.1	C	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
3265		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0												B. Fawcett on tour. SILTY CLAYSTONE: as above.
		Sst	arg	10	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr						20.0	10.0	70.0	100.0	80.0	20.0	0.1				100.1	P	M	SA	SR	SE	S					Lf	0.1	C	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above.
3270		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0												SILTY CLAYSTONE: as above.
		Sst	arg	10	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr						20.0	10.0	70.0	100.0	80.0	20.0	0.1				100.1	P	M	SA	SR	SE	S					Lf	0.1	C	0.1							g	8			ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3275		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0													SILTY CLAYSTONE: as above.
		Sst	arg	10	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	80.0	20.0	0.1				100.1	P	M	SA	SR	SE	S					Lf	0.1	C	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
3280		Clyst	slty	85	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0													SILTY CLAYSTONE: as above.
		Sst	arg	15	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	80.0	20.0	0.1				100.1	P	M	SA	SR	SE	S					Lf	0.1	C	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
3285		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: as above.
		Sst	arg	10	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	80.0	20.0	0.1				100.1	P	M	SA	SR	SE	S					Lf	0.1	C	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
3290		Clyst	slty	95	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0													SILTY CLAYSTONE: as above.
		Sst	arg	5	clr to trans,frstd to wh,lt olv gy to olv gy,brn gy	L	Fr					20.0	10.0	70.0	100.0	80.0	20.0	0.1				100.1	P	M	SA	SR	SE	S					Lf	0.1	C	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
3295		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0	Py	0.1											SILTY CLAYSTONE: dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% loose very fine to fine quartz sand and as micro-laminae, trace to rare carbonaceou specks and micro-laminae, trace pyrite.
3300		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0													SILTY CLAYSTONE: as above.
3305		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0													SILTY CLAYSTONE: as above.
3310		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0													SILTY CLAYSTONE: as above.
3315		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	20.0	5.0	100.0							0.0										C	3.0													SILTY CLAYSTONE: as above.
3320		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3325		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3330		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3335		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3340		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3345		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3350		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3355		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3360		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3365		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3370		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3375		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3380		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3385		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3390		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3395		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3400		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3405		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3410		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3415		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3420		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3425		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3430		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3435		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3440		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3445		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3450		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3455		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3460		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3465		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													S. Robbie on tour. SILTY CLAYSTONE: dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% loose very fine to fine quartz sand and as micro-laminae, trace to rare carbonaceou specks and micro-laminae, trace pyrite.
3470		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3475		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3480		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3485		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3490		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3495		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3500		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
3505		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0												N	SILTY CLAYSTONE: as above.
		Sst	arg	10	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	20.0	50.0	100.0	60.0	40.0					100.0	M		SA	SR	SE	SS				Lf	0.1									g	6			ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear, very fine to fine, dominantly very fine, loose to firm, sub-blocky, well sorted, 30% clay disseminated or as grains grading in part to litharenite 20% silt, poor to fair porosity.
3510		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
		Sst	arg	10	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	20.0	50.0	100.0	60.0	40.0					100.0	M		SA	SR	SE	S	Q	100.0		Lf	0.1									g	6	N		ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear, very fine to fine, dominantly very fine, loose to firm, sub-blocky, well sorted, 30% clay disseminated and as claystone lithic fragments, grade to litharenite, 20% silt, poor to fair porosity.
3515		Clyst	slty	50	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
		Sst	arg	50	clr to trans,wh,lt gy	L	Fr	B	SB				40.0	20.0	40.0	100.0	55.0	35.0	10.0				100.0	M	W	SA	R	SE	S	Q	100.0		C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear, very fine to fine, rarely medium, dominantly very fine, loose to firm, sub-blocky, well sorted, 40% clay disseminated and as claystone lithic fragments, grades to litharenite, 20% silt, poor to fair porosity.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING		ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)	
3520		Clyst	slty	50	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
		Sst	arg	50	clr to trans,wh,lt gy	L	Fr	B	SB				40.0	20.0	40.0	100.0	55.0	35.0	10.0				100.0	M	W	SA	R	SE	S	Q	100.0						C	0.1	Lf	0.1						g	8		ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear, very fine to fine, trace medium, dominantly very fine, loose to firm, sub-blocky, well sorted, 40% clay disseminated and as claystone lithic fragments, grades to litharenite, 20% silt, poor to fair porosity.
3525		Clyst	slty	30	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
		Sst	arg	70	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	55.0	35.0	10.0				100.0	M	W	SA	R	SE	S	Q	100.0						C	0.1	Lf	0.1						g	8	N	ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear, very fine to fine, trace medium, dominantly very fine, loose to firm, sub-blocky, well sorted, 50% clay disseminated and as claystone lithic fragments, grades to litharenite, 20% silt, poor to fair porosity.
3530		Clyst	slty	30	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
		Sst	arg	70	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	55.0	35.0	10.0				100.0	M	W	SA	R	SE	S	Q	100.0						C	0.1	Lf	0.1						g	8	N	ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear, very fine to coarse, dominantly fine to very fine, loose to firm, sub-blocky, well sorted, 50% clay dominantly present as 40% claystone lithic fragments, grades to litharenite and 10% disseminated, 20% silt, poor to fair porosity. Poor cuttings returns suggest very fine and coarser fraction may not be accurately represented by passing through screens and along horizontal section. Bill Fawcett on tour.
3535		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
		Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				20.0	10.0	70.0	100.0	30.0	35.0	20.0	15.0			100.0	M	W	SA	R	SE	S	Q	100.0						C	0.1	Lf	0.1						g	8	N	ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, very fine to fine, trace medium, dominantly very fine, loose to firm, sub-blocky, well sorted, 20% clay disseminated and as claystone lithic fragments, grades to litharenite, 20% silt, poor to fair porosity.
3540		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
	Q	Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	10.0	60.0	100.0	30.0	35.0	20.0	15.0			100.0	M	W	SA	R	SE	S	Q	100.0						C	0.1	Lf	0.1						g	8	N	ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear to yellow brown, very fine to coarse, loose to firm in fine aggregates, sub-blocky, poorly sorted, 30% clay as 25% claystone lithic fragments and 5% disseminated, 20% silt, good visual porosity and fair to good inferred porosity.
3545		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
	Q	Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	10.0	60.0	100.0	30.0	35.0	20.0	15.0			100.0	M	W	SA	R	SE	S	Q	100.0						C	0.1	Lf	0.1						g	8	N	ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear to light yellow brown, very fine to coarse, loose to firm in fine aggregates, sub-blocky, poorly sorted, 30% clay disseminated and as claystone lithic fragments, 20% silt, good visual porosity and fair to good inferred porosity.
3550		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
	Q	Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	10.0	60.0	100.0	30.0	35.0	20.0	15.0			100.0	M	W	SA	R	SE	S	Q	100.0						C	0.1	Lf	0.1						g	8	N	ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3555		Clyst	slty	40	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
	Q	Sst	arg	60	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	10.0	60.0	100.0	40.0	40.0	10.0	10.0			100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	8	N		ARGILLACEOUS SANDSTONE: as above, dominantly fine to very fine.
3560		Clyst	slty	40	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
	Q	Sst	arg	60	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	10.0	60.0	100.0	50.0	40.0	10.0				100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, fine to very fine. Correlation with LWD logs and small cuttings volume recovered at surface suggests substantial fraction of cuttings passing through shaker screens or being cleaned from the borehole horizontal section.
3565		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
	Q	Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	10.0	60.0	100.0	40.0	40.0	10.0	10.0			100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, dominantly fine to very fine.
3570		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
	Q	Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	10.0	60.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, dominantly fine to very fine.
3575		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
	Q	Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	10.0	60.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, dominantly fine to very fine.
3580		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: as above.
	Q	Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, dominantly fine to very fine.
3585		Clyst	slty	10	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0													SILTY CLAYSTONE: dark grey to greyish black, dark brown grey, soft to moderately hard, blocky to sub-fissile, 20% quartz silt, trace to 5% loose very fine to fine quartz sand and as micro-laminae, trace to rare carbonaceou specks and micro-laminae, trace pyrite.
	Q	Sst	arg	90	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	65.0	35.0					100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, fine to very fine. Correlation with LWD logs and small cuttings volume recovered at surface suggests substantial fraction of cuttings passing through shaker screens or being cleaned from the borehole horizontal section.

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories												Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5								
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3590		Clyst	slty	10	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0														SILTY CLAYSTONE: as above.
	Q	Sst	arg	90	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	65.0	35.0					100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, dominantly fine to very fine.
3595		Clyst	slty	10	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0														SILTY CLAYSTONE: as above.
	Q	Sst	arg	90	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	65.0	35.0					100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, fine to very fine.
3600		Clyst	slty	10	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0														SILTY CLAYSTONE: as above.
	Q	Sst	arg	90	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	10.0	60.0	100.0	65.0	35.0					100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear to light yellow brown, very fine to coarse, dominantly very fine to fine, loose to firm in fine aggregates, sub-blocky, poorly sorted, 30% clay dominantly as claystone lithic fragments grading to litharenite and disseminated, 20% silt, poor visual porosity and poor to fair inferred porosity.
3605		Clyst	slty	10	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	3.0														SILTY CLAYSTONE: as above.
	Q	Sst	arg	90	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	65.0	35.0					100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, up to 50% clay.
3610		Sst	arg	100	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	65.0	35.0					100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
3615		Sst	arg	100	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	65.0	35.0					100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
3620		Sst	arg	100	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	65.0	35.0					100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
3625		Sst	arg	100	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	65.0	35.0					100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
3630		Sst	arg	100	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	20.0	50.0	100.0	50.0	35.0	10.0	5.0			100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: light to medium grey, white to translucent, clear to light yellow brown, very fine to coarse, dominantly very fine to fine, loose to firm in fine aggregates, sub-blocky, poorly sorted, 30% clay dominantly as claystone lithic fragments grading to litharenite and disseminated, 20% silt, poor visual porosity and poor to fair inferred porosity.
3635		Sst	arg	100	clr to trans,wh,lt gy	L	Fr	B	SB				30.0	20.0	50.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SE	S	Q	100.0			C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

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Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture		Grains: Calcareous: Clay (%)	Calcareous: Silt (%)	Calcareous: Sand (%)	Siliciclastic: Clay (%)	Siliciclastic: Silt (%)	Siliciclastic: Sand (%)	% Total (100%)	Grain Size & Characteristics: Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Cements 1: Type	Cements 1: %	Cements 2: Type	Cements 2: %	Cements 3: Type	Cements 3: %	Accessories 1: Type	Accessories 1: %	Accessories 2: Type	Accessories 2: %	Accessories 3: Type	Accessories 3: %	Accessories 4: Type	Accessories 4: %	Accessories 5: Type	Accessories 5: %	Porosity: Type	Porosity: %	HC Shows (y/n)	Longhand Description
3640		Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SE	S	Q	100.0					C	0.1	Lf	0.1							g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1												SILTY CLAYSTONE: as above.
3645		Sst	arg	80	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SE	S	Q	100.0					C	0.1	Lf	0.1							g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	20	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1												SILTY CLAYSTONE: as above.
3650		Sst	arg	70	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SE	S	Q	100.0					C	0.1	Lf	0.1							g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	30	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1												SILTY CLAYSTONE: as above.
3655		Sst	arg	50	clr to trans,wh,lt gy	L	Fr	B	SB				50.0	20.0	30.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SE	S	Q	100.0					C	0.1	Lf	0.1							g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	50	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1												SILTY CLAYSTONE: as above.
3660		Sst	arg	40	clr to trans,wh to off wh,yel gy	L	MH	B	SB				30.0	20.0	50.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SS	S	Q	5.0					C	0.1	Lf	0.1							g	6	N	J. Hobday on tour. ARGILLACEOUS SANDSTONE: clear to translucent, white to off white, yellowish grey, loose, firm to occasionally moderately hard aggregates, predominantly blocky to sub-blocky, 30% quartz clay, 20% quartz silt very fine to coarse, 30% fine, 5% medium and coarse grains, moderately to well sorted, sub-angular to occasionally rounded, sub-spherical to spherical, trace siliceous cement, abundant off white to yellowish grey matrix, trace carbonaceous specks, trace lithic fragments, poor to fair inferred porosity.
		Clyst	slty	60	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1												SILTY CLAYSTONE: dark grey to greyish black, dark brownish grey, soft to moderately hard, blocky to sub-fissile in parts, 25% quartz silt, trace sand, trace carbonaceous specks.
3665		Sst	arg	10	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	60.0	30.0	5.0	5.0			100.0	M	W	SA	R	SS	S	Q	5.0					C	0.1	Lf	0.1							g	6	N	ARGILLACEOUS SANDSTONE: as above, minor hard off white to yellowish grey clay lithic aggregates.
		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1												SILTY CLAYSTONE: as above.
3670		Sst	arg	10	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	70.0	25.0	5.0	0.1			100.1	M	W	SA	R	SS	S	Q	5.0					C	0.1	Lf	0.1							g	6	N	ARGILLACEOUS SANDSTONE: as above, decreasing to trace hard off white to yellowish grey clay lithic aggregates.
		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0												C	0.1												SILTY CLAYSTONE: as above.

Lithology Colours

Wellsite Lithology Log

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3675		Sst	arg	10	clr to trans,wh to off wh,yel gy	L	H	B	SB				30.0	20.0	50.0	100.0	55.0	30.0	10.0	5.0			100.0	M W	SA R	SS S	Q	5.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, 55% very fine, 30% fine, 10% medium, 5% coarse grains.
		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3680		Sst	arg	10	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	70.0	25.0	5.0	0.1			100.1	M W	SA R	SS S	Q	5.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above, 70% very fine, 25% fine, 5% medium, trace coarse grains.
		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3685		Sst	arg	10	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	70.0	25.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3690		Sst	arg	5	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	70.0	25.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	95	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3695		Sst	arg	10	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3700		Sst	arg	10	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3705		Sst	arg	10	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
3710		Sst	arg	5	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	95	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3715		Sst	arg	5	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	95	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3720		Sst	arg	5	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	95	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3725		Sst	arg	5	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	95	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3730		Sst	arg	5	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	95	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3735		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3740		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3745		Clyst	slty	100	dk gy to gy blk,dk brn gy	S	MH	B	SF				75.0	25.0	0.1	100.1							0.0										C	0.1													SILTY CLAYSTONE: as above.
3750		Sst	arg	5	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M W	SA R	SS S	Q	3.0					C	0.1	Lf	0.1							g	6	N		ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	95	dk gy to gy blk,dk brn gy	S	MH	B	SF				70.0	30.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3755		Sst	arg	5	clr to trans,wh to off wh,yel gy	L	H	B	SB				35.0	15.0	50.0	100.0	75.0	20.0	5.0	0.1			100.1	M	W	SA	R	SS	S	Q	3.0										g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	95	dk gy to gy blk,dk brn gy	S	MH	B	SF				70.0	30.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3760		Sst	arg	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	20.0	30.0	30.0	20.0	0.1	0.1	100.2	M	W	SA	R	SS	S	Q	3.0										g	6	N		ARGILLACEOUS SANDSTONE: clear to translucent, white to off white, yellowish grey, firm to occasionally hard aggregates, loose in parts, blocky to sub-blocky, very fine to trace very coarse and granules, moderately to well sorted, sub-angular to sub-rounded, occasionally rounded, sub-spherical to spherical, 25% quartz clay, 20% quartz silt, rare siliceous cement, common yellowish grey matrix, trace carbonaceous specks and micro-laminations, trace glauconite grains, trace lithic fragments, poor to fair inferred porosity.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: dark grey to greyish black, dark brownish grey, minor medium grey, yellowish grey, soft to moderately hard, blocky to sub-fissile, trace carbonaceous specks and micro-laminations.
3765		Sst	arg	70	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	20.0	30.0	30.0	20.0	0.1	0.1	100.2	M	W	SA	R	SS	S	Q	1.0										g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	30	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3770		Sst	arg	70	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	10.0	20.0	30.0	20.0	10.0	10.0	100.0	P	M	A	SR	SE	S	Q	1.0										g	6	N		ARGILLACEOUS SANDSTONE: clear to translucent, white to off white, yellowish grey, loose, friable to moderately hard, rare hard aggregates, blocky to sub-blocky, angular fracture associated with coarse to granule grains, 20% quartz clay, 15% quartz silt, very fine to granule grains, 10% very fine, 20% fine, 30% medium, 20% coarse, 10% very coarse and granule grains, poor to locally moderately sorting, angular to sub-rounded, sub-elongate to spherical, trace siliceous cement, abundant yellowish grey matrix, trace carbonaceous specks, trace glauconite grains, trace lithics, fair to poor inferred porosity.
		Clyst	slty	30	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3775		Sst	arg	30	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	20.0	30.0	30.0	20.0	0.1	0.1	100.2	M	W	SA	R	SS	S	Q	1.0										g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	70	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3780		Sst	arg	70	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	20.0	30.0	30.0	20.0	0.1	0.1	100.2	M	W	SA	R	SS	S	Q	1.0										g	6	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	30	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3785		Sst	arg	60	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	20.0	30.0	30.0	20.0	0.1	0.1	100.2	M	W	SA	R	SS	S	Q	1.0										g	6	N		ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories												Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5								
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING		ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	40	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1															SILTY CLAYSTONE: as above.
3790		Sst	arg	20	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	25.0	40.0	25.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0							C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	80	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1															SILTY CLAYSTONE: as above.
3795		Sst	arg	10	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	25.0	40.0	25.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0							C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	90	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1															SILTY CLAYSTONE: as above.
3800		Sst	arg	70	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	25.0	40.0	25.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0							C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	30	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1															SILTY CLAYSTONE: as above.
3805		Sst	arg	90	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	25.0	40.0	25.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0							C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	10	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1															SILTY CLAYSTONE: as above.
3810		Sst	arg	95	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	25.0	40.0	25.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0							C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	5	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1															SILTY CLAYSTONE: as above.
3815		Sst	arg	95	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	25.0	40.0	25.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0							C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	5	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1															SILTY CLAYSTONE: as above.
3820		Sst	arg	20	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	20.0	60.0	100.0	25.0	40.0	25.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0							C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5					
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)	Longhand Description
		Clyst	slty	80	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3825		Sst	arg	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	25.0	40.0	25.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0						C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3830		Sst	arg	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	20.0	40.0	30.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0						C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3835		Sst	arg	50	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	20.0	40.0	30.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0						C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	50	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3840		Sst	arg	60	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	15.0	35.0	25.0	15.0	10.0	0.1	100.1	P	M	SA	R	SS	S	Q	1.0						C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above, 15% very fine, 35% fine, 25% medium, 15% coarse, 10% very coarse, trace granules, poor to moderately sorted.
		Clyst	slty	40	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3845		Sst	arg	30	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	20.0	40.0	30.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0						C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	70	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3850		Sst	arg	30	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	20.0	40.0	30.0	10.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0						C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	70	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1												SILTY CLAYSTONE: as above.
3855		Sst	arg	30	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	25.0	40.0	30.0	5.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0						C	0.1	Lf	0.1	G	0.1					g	6	N	ARGILLACEOUS SANDSTONE: as above.

Lithology Colours

Wellsite Lithology Log

Well Name :

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Lithology									Grains							Grain Size & Characteristics										Cements					Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3	1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)	
		Clyst	slty	70	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0									C	0.1												SILTY CLAYSTONE: as above.
3860		Sst	arg	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	15.0	65.0	100.0	20.0	40.0	30.0	5.0	0.1	5.0	100.1	M	W	SA	R	SS	S	Q	1.0					C	0.1	Lf	0.1	G	0.1				g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0									C	0.1												SILTY CLAYSTONE: as above.
3865		Sst	arg	50	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	20.0	60.0	100.0	25.0	40.0	30.0	5.0	0.1		100.1	M	W	SA	R	SS	S	Q	1.0					C	0.1	Lf	0.1						g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	50	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0									C	0.1												SILTY CLAYSTONE: as above.
3870		Sst	arg	30	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	20.0	60.0	100.0	30.0	45.0	25.0	0.1	0.1		100.2	M	W	SA	R	SS	S	Q	1.0					C	0.1	Lf	0.1						g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	70	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0									C	0.1												SILTY CLAYSTONE: as above.
3875		Sst	arg	20	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	40.0	40.0	20.0	0.1	0.1		100.2	M	W	SA	R	SS	S	Q	1.0					C	0.1	Lf	0.1						g	6	N	Bill Fawcett on tour. ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	80	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0									C	0.1												SILTY CLAYSTONE: as above.
3880		Sst	arg	20	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	50.0	45.0	5.0	0.1	0.1		100.2	M	W	SA	R	SS	S	Q	1.0					C	0.1	Lf	0.1						g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	80	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0									C	0.1												SILTY CLAYSTONE: as above.
3885		Sst	arg	20	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	55.0	45.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	1.0					C	0.1	Lf	0.1						g	6	N	ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	80	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0									C	0.1												SILTY CLAYSTONE: as above.
3890		Sst	arg	20	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	55.0	45.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	1.0					C	0.1	Lf	0.1						g	6	N	ARGILLACEOUS SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5					
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING		ROUNDING		SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)
		Clyst	slty	80	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1											
3895		Sst	arg	20	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	50.0	45.0	0.1	5.0	0.1		100.2	M	W	SA	R	SS	S	Q	1.0			C	0.1	Lf	0.1							g	6	N
		Clyst	slty	80	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1											
3900		Sst	arg	20	clr to trans,wh to off wh,yel gy	L	H	B	SB				25.0	20.0	55.0	100.0	50.0	45.0	0.1	5.0	0.1		100.2	M	W	SA	R	SS	S	Q	3.0			C	0.1	Lf	0.1							g	6	N
		Clyst	slty	80	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1											
3905		Sst	arg	50	clr to trans,wh to off wh,yel gy	L	H	B	SB				20.0	20.0	60.0	100.0	50.0	45.0	0.1	5.0	0.1		100.2	M	W	SA	R	SS	S	Q	3.0			C	0.1	Lf	0.1							g	6	N
		Clyst	slty	50	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1											
3910		Sst	slty	30	clr to trans,wh to off wh,yel gy	L	H	B	SB				15.0	20.0	65.0	100.0	50.0	45.0	0.1	5.0	0.1		100.2	M	W	SA	R	SS	S	Q	3.0			C	0.1	Lf	0.1							g	6	N
		Clyst	slty	70	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1											
3915		Sst	slty	50	clr to trans,wh to off wh,yel gy	L	H	B	SB				10.0	20.0	70.0	100.0	50.0	45.0	0.1	5.0	0.1		100.2	M	W	SA	R	SS	S	Q	3.0			C	0.1	Lf	0.1							g	8	N
		Clyst	slty	50	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1											
3920		Sst	slty	60	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	45.0	0.1	5.0	0.1		100.2	M	W	SA	R	SS	S	Q	3.0			C	0.1	Lf	0.1							g	8	N
		Clyst	slty	40	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1											
3925		Sst	slty	80	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	30.0	30.0	10.0	20.0	10.0		100.0	M	W	SA	R	SS	S	Q	3.0			C	0.1	Lf	0.1	Py	0.1					g	18	N

Lithology Colours

Longhand Description

SILTY CLAYSTONE: as above.

ARGILLACEOUS SANDSTONE: as above.

SILTY CLAYSTONE: as above.

ARGILLACEOUS SANDSTONE: as above, siliceous cemented aggregates more common.

SILTY CLAYSTONE: as above.

ARGILLACEOUS SANDSTONE: as above.

SILTY CLAYSTONE: as above.

SILTY SANDSTONE: clear to translucent, white to off white, yellowish grey, predominantly loose, friable to moderately hard, rare hard aggregates, blocky to sub-blocky, predominantly very fine to fine with minor to rare very coarse grains, moderately to locally well sorted, sub-angular to rounded in parts, sub-spherical to spherical 15% yellowish quartz clay, 20% quartz silt, rare siliceous cement, trace carbonaceous specks and lithics, poor t fair inferred porosity.

SILTY CLAYSTONE: as above.

SILTY SANDSTONE: as above, decreasing in quartz clay content.

SILTY CLAYSTONE: as above.

SILTY SANDSTONE: as above.

SILTY CLAYSTONE: as above.

SILTY SANDSTONE: clear to translucent, white to off white, yellowish grey, loose, friable to moderately hard, rare hard aggregates, blocky to sub-blocky, angular fracture associated with coarse to granule grains, 5% quart clay, 20% quartz silt, very fine to granule grains, 30% very fine, 30% fine, 10% medium, 20% coarse, 10% very coarse and granule grains, poor to locally moderately well sorted, angular to sub-rounded, sub-elongate to spherical, minor to increasingly common siliceous cement, minor yellowish grey matrix, trace carbonaceous specks, trace glauconite grains, trace lithics, fair to good inferred porosity.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			Lithology Colours	Longhand Description
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5						
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)		
		Clyst	slty	20	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0									SILTY CLAYSTONE: as above, nodular and disseminated pyrite associated with silty claystone.
3930		Sst	slty	90	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	30.0	30.0	10.0	20.0	10.0		100.0	M	W	SA	R	SS	S	Q	3.0			C	0.1	Lf	0.1	Py	0.1					g	18	N		ARGILLACEOUS SANDSTONE: as above.
		Clyst	slty	10	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0									SILTY CLAYSTONE: as above.
3935		Sst	slty	90	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	30.0	30.0	10.0	20.0	10.0		100.0	M	W	SA	R	SS	S	Q	4.0			C	0.1	Lf	0.1	Py	0.1					g	18	N		SILTY SANDSTONE: clear to translucent, white to off white, yellowish grey, loose, friable to moderately hard, rare hard aggregates, blocky to sub-blocky, angular fracture associated with coarse to granule grains, 5% quartz clay, 20% quartz silt, very fine to granule grains, 30% very fine, 30% fine, 10% medium, 20% coarse, 10% very coarse and granule grains, poor to locally moderately well sorted, angular to sub-rounded, sub-elongate to spherical, moderately common siliceous cement, minor yellowish grey matrix, trace carbonaceous specks, trace glauconite grains, trace lithics, pyrite frosting on quartz aggregates, fair to good inferred porosity.
		Clyst	slty	10	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0									SILTY CLAYSTONE: as above.
3940		Sst	slty	70	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	30.0	30.0	10.0	20.0	10.0		100.0	M	W	SA	R	SS	S	Q	4.0			C	0.1	Lf	0.1	Py	0.1					g	18	N		SILTY SANDSTONE: as above.
		Clyst	slty	30	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0									SILTY CLAYSTONE: as above.
3945		Sst	slty	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	30.0	30.0	10.0	20.0	10.0		100.0	M	W	SA	R	SS	S	Q	4.0			C	0.1	Lf	0.1	Py	0.1					g	18	N		SILTY SANDSTONE: as above.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0									SILTY CLAYSTONE: as above.
3950		Sst	slty	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	40.0	40.0	10.0	5.0	5.0		100.0	M	W	SA	R	SS	S	Q	4.0			C	0.1	Lf	0.1	Py	0.1					g	18	N		SILTY SANDSTONE: as above.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0									SILTY CLAYSTONE: as above.
3955		Sst	slty	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	60.0	40.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	4.0			C	0.1	Lf	0.1	Py	0.1					g	18	N		SILTY SANDSTONE: as above, medium, coarse and very coarse sand rare to absent
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0									SILTY CLAYSTONE: as above.
3960		Sst	slty	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	40.0	40.0	10.0	5.0	5.0		100.0	M	W	SA	R	SS	S	Q	5.0			C	0.1	Lf	0.1	Py	0.1					g	18	N		SILTY SANDSTONE: as above, 10% medium, 5% coarse and 5% very coarse grain quartz proximal facies present.

Wellsite Lithology Log

Well Name :

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Please Note: **TRACE =0.1** due to database requirements

Lithology									Grains							Grain Size & Characteristics										Cements						Accessories										Porosity			
									Calcareous			Siliciclastic			%											1		2		3		1		2		3		4		5					
Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture	Clay (%)	Silt (%)	Sand (%)	Clay (%)	Silt (%)	Sand (%)	Total (100%)	Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	Type	%	HC Shows (y/n)	Longhand Description
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0								SILTY CLAYSTONE: as above.
3965		Sst	slty	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	40.0	40.0	10.0	5.0	5.0		100.0	M	W	SA	R	SS	S	Q	5.0					C	0.1	Lf	0.1	Py	0.1					g	18	N	SILTY SANDSTONE: as above.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0								SILTY CLAYSTONE: as above.
3970		Sst	slty	50	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	45.0	40.0	5.0	5.0	5.0		100.0	M	W	SA	R	SS	S	Q	5.0					C	0.1	Lf	0.1	Py	0.1					g	18	N	SILTY SANDSTONE: as above.
		Clyst	slty	50	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0								SILTY CLAYSTONE: as above.
3975		Sst	slty	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	50.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	5.0					C	0.1	Lf	0.1	Py	0.1					g	18	N	SILTY SANDSTONE: as above, sand fine to very fine, well sorted, medium, coarse and very coarse sand rare to absent.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0								SILTY CLAYSTONE: as above.
3980		Sst	slty	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	50.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	5.0					C	0.1	Lf	0.1	Py	0.1					g	18	N	SILTY SANDSTONE: as above.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	2.0								SILTY CLAYSTONE: as above.
3985		Sst	slty	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	50.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	5.0					C	0.1	Lf	0.1	Py	0.1					g	18	N	SILTY SANDSTONE: as above.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	0.1								SILTY CLAYSTONE: as above.
3990		Sst	slty	40	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	50.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	5.0					C	0.1	Lf	0.1	Py	0.1					g	18	N	SILTY SANDSTONE: clear to translucent, white to off white, yellowish grey, loose, friable to moderately hard, rare hard aggregates, blocky to sub-blocky, angular fracture in part, 5% quartz clay, 20% quartz silt, very fine to trace very coarse grains, 50% very fine, 40% fine, 10% medium, trace medium to very coarse grains, moderately well sorted to well sorted in silicified aggregates, angular to sub-rounded, sub-elongate to spherical, trace to minor siliceous cement, minor yellowish grey matrix, trace carbonaceous specks, trace lithics, nil to poor porosity in aggregates, fair visual and inferred porosity in loose grains.
		Clyst	slty	60	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	0.1								SILTY CLAYSTONE: as above.
3995		Sst	slty	60	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	50.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	8.0					C	0.1	Lf	0.1	Py	0.1					g	18	N	SILTY SANDSTONE: as above.

Wellsite Lithology Log

Well Name :

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Depth (mRT)	Sample Reliability	Main Lithology	Modifier (>20%)	% of rock	Colour	Hardness		Fracture		Grains: Calcareous Clay (%)	Calcareous Silt (%)	Calcareous Sand (%)	Siliciclastic Clay (%)	Siliciclastic Silt (%)	Siliciclastic Sand (%)	Total (100%)	Grain Size & Characteristics: Very Fine (%)	Fine (%)	Medium (%)	Coarse (%)	Very Coarse (%)	Granular (%)	Total (100%)	SORTING	ROUNDING	SPHERICITY	Cements 1 Type	Cements 1 %	Cements 2 Type	Cements 2 %	Cements 3 Type	Cements 3 %	Accessories 1 Type	Accessories 1 %	Accessories 2 Type	Accessories 2 %	Accessories 3 Type	Accessories 3 %	Accessories 4 Type	Accessories 4 %	Accessories 5 Type	Accessories 5 %	Porosity Type	Porosity %	HC Shows (y/n)	Longhand Description
		Clyst	slty	40	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	0.1								SILTY CLAYSTONE: as above.
4000		Sst	slty	60	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	50.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	8.0										g	18	N	SILTY SANDSTONE: as above.
		Clyst	slty	40	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	0.1								SILTY CLAYSTONE: as above.
4005		Sst	slty	60	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	50.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	8.0										g	18	N	SILTY SANDSTONE: as above.
		Clyst	slty	40	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	0.1								SILTY CLAYSTONE: as above.
4010		Sst	slty	70	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	50.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	8.0										g	18	N	SILTY SANDSTONE: clear to translucent, white to off white, yellowish grey, loose, friable to moderately hard, rare hard aggregates, blocky to sub-blocky, angular fracture in part, 5% quartz clay, 20% quartz silt, very fine to trace very coarse grains, 50% very fine, 40% fine, 10% medium, trace medium to very coarse grains, moderatel well sorted to well sorted in silicified aggregates, angular to sub-rounded, sub-elongate to spherical, trace to minor siliceous cement, minor yellowish grey matrix, trace carbonaceous specks, trace lithics, nil to poor porosity in aggregates, fair visual and inferred porosity in loose grains.
		Clyst	slty	30	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	0.1								SILTY CLAYSTONE: as above.
4015		Sst	slty	80	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	50.0	50.0	0.1	0.1	0.1		100.3	M	W	SA	R	SS	S	Q	10.0										g	18	N	SILTY SANDSTONE: as above.
		Clyst	slty	20	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	0.1								SILTY CLAYSTONE: as above.
4020		Sst	slty	80	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	45.0	35.0	5.0	10.0	5.0		100.0	M	W	SA	R	SS	S	Q	10.0										g	18	N	SILTY SANDSTONE: clear to translucent, white to off white, yellowish grey, loose, friable to moderately hard, rare hard aggregates, blocky to sub-blocky, angular fracture in part, 5% quartz clay, 20% quartz silt, very fine to very coarse grains, 45% very fine, 35% fine, 5% medium, 10% coarse, 10% very coarse, trace medium to very coarse grains, moderately well sorted to well sorted in silicified aggregates, angular to sub-rounded, sub-elongate to spherical, trace to minor siliceous cement, minor yellowish grey matrix, trace carbonaceous specks, trace lithics, nil to poor porosity in aggregates, fair visual and inferred porosity in loose grains.
		Clyst	slty	20	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	0.1								SILTY CLAYSTONE: as above.
4025		Sst	slty	90	clr to trans,wh to off wh,yel gy	L	H	B	SB				5.0	20.0	75.0	100.0	45.0	35.0	5.0	10.0	5.0		100.0	M	W	SA	R	SS	S	Q	10.0										g	18	N	SILTY SANDSTONE: as above.
		Clyst	slty	10	dk gy to gy blk,dk brn gy,mnr med gy,yel gy	S	MH	B	SF				65.0	35.0	0.1	100.1							0.0										C	0.1			Py	0.1								SILTY CLAYSTONE: as above.
																0.0							0.0																					

Lithology Colours

Litholog Description Codes

Lithology	
Anh	Anhydrite
C	Coal
Cgl	Conglomerate
Ca	Calcarenite
Cht	Chert
Cl	Calcilutite
Clyst	Claystone
Cr	Calcirudite
Ct	Calcisiltite
Dol	Dolomite
Gyp	Gypsum
Lst	Limestone
MM	Metamorphic
Non	None
Plut	Plutonic
Salt/Ev	Salt-Evaporite
Sst	Sandstone
Sltst	Siltstone
Tuf	Tuff
Vol	Volcanic
Unsp	Unspecified

Modifier	
arg	ARGILLACEOUS
calc	CALCAREOUS
carb	CARBONACEOUS
dol	DOLOMITIC
glc	GLAUCONITIC
kaol	KAOLINITIC
mic	MICACEOUS
ool	OOLITIC
py	PYRITIC
sdy	SANDY
sid	SIDERITIC
sil	SILICEOUS

Colour	
wh	white
gy	grey
blk	black
rd	red
pk	pink
pu	purple
orng	orange
brn	brown
yel	yellow
grn	green
ol	olive
bl	blue
cl	colourless
multi	multicoloured
trans	translucent
lt	light
dk	dark
mod	moderate
vgt	variegated

Hardness	
L	Loose
VS	Very soft
S	Soft
Fr	Friable
F	Firm
MH	Moderately hard
H	Hard
Fracture	
A	amorphous,
Ang	angular,
B	blocky,
SB	sub-blocky,
Conc	conchoidal,
Disp	dispersive,
F	fissile,
SF	sub-fissile,
M	massive,
Sp	splintery,
St	sticky,
Porosity	
g	granular
v	vugular
I	intra-skeletal
f	fracture

Rounding	
WR	Well Rounded
R	Rounded
SR	Sub-rounded
SA	Sub-angular
A	Angular
Sorting	
VP	Very Poor
P	Poor
M	Moderately
W	Well
VW	Very Well
Sphericity	
VE	Very Elongated
E	Elongated
SE	Slightly Elongated
SS	Slightly Spherical
S	Spherical
VS	Very Spherical
Cements	
Q	Silica
P	Pyrite
C	Calcite
D	Dolomite
Sd	Siderite

Accessories	
Cx	Calcite crystals
Ch	Chert
Ce	Chlorite
Cc	Coal/Lignite
C	Coal
F	Feldspar
G	Glauconite
Gp	Gypsum
He	Hematite
Lf	Lithic Fragments
Mc	Mica
Py	Pyrite
Qx	Quartz crystals
Sc	Siderite Concretions
Al	Algae
Br	Bryozoa
Co	Corals
Cr	Crinoid
Fo	Foram
I	Inoceramus
O	Ooliths
Os	Ostracod
Rd	Radiolaria
Sk	Skel Frag

Hydrocarbon Show Codes

Stain	
bl	blue
brn	brown
gn	gold
or	orange
vi	violet
yl	yellow
wh	white
col	colourless
stra	straw
am	amber
pl	pale
lt	light
dk	dark

Odour	
No	None
Sli	Slight
Mod	Moderate
Stg	Strong

Intensity	
VD	Very Dull
D	Dull
MB	Mod. Bright
B	Bright
VDD	Very Dull - Dull
VDMB	Very Dull - Mod. Bright
VDB	Very Dull - Bright
DMB	Dull - Mod. Bright
DB	Dull to Bright
MBB	Mod Bright - Bright

Distribution	
PP	Pinpoint
S	Spotty
P	Patchy
E	Even
PPS	Pinpoint - Spotted
PPP	Pinpoint - Patchy
PPE	Pinpoint - Even
PE	Patchy - Even

Cut Rate	
N	Nil
VS	Very Slow
S	Slow
MF	Mod. Fast
F	Fast
VF	Very Fast
I	Instant

Colour	
wh	white
gy	grey
blk	black
rd	red
pk	pink
pu	purple
orng	orange
brn	brown
yel	yellow
grn	green
ol	olive
bl	blue
cl	colourless
multi	multicoloured
trans	translucent
lt	light
dk	dark
mod	moderate
vgt	variegated

Cut Type	
D	Diffuse
Bld	Bleeding
S	Streaming
Blm	Blooming

Show Rating	
P	Poor
F	Fair
G	Good
VG	Very Good
E	Excellent

Thickness	
Tk	Thick
mTk	mod Thick
mTn	mod Thin
Tn	Thin
P	Patchy

C

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Rock Types--colours

Sample Contaminated or Missed

	(S)	**Claystone**		**(An)**	**Anhydrite**
	(SC)	**Claystone, Calc**		**(Gp)**	**Gypsum**
"	**(T)**	**Siltstone**		**(Ha)**	**Halite**
	(A)	**Sandstone**			
	(R)	**Conglomerate**		**(C)**	**Coal**
	(X)	**Limestone (recrystallised)**			
	(Cl)	**Calcilutite**		**(Cht)**	**Chert**
	(Ct)	**Calcisiltite**			
	(Ca)	**Calcarenite**		**(MM)**	**Metamorphic**
	(Cr)	**Calcirudite**		**(Plut)**	**Plutonic**
	(D)	**Dolomite**		**(Vol)**	**Volcanic**

" " silty

.... sandy

—— argillaceous

Mudlogging
End of Well Report

THA02

FINAL WELL REPORT

Prepared by

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B.	Formation Evaluation Log	Scale 1:500
C.	Drilling Data Log	Scale 1:1000
D.	Pressure Evaluation Log	Scale 1:1000
E.	Gas Evaluation Log	Scale 1:500

1.0 WELL DATA SUMMARY

All depths are measured depths from rotary table (MDRT) unless otherwise specified.

Well Name	: THA02
Field	: Thylacine
Permit	: T/L2
Operator	: Woodside Energy Ltd
Drilling Rig	: Maersk Guardian
Well Classification	: Horizontal Development
Surface Location	
Latitude	: 39° 14' 14.47" S
Longitude	: 142° 54' 07.58" E
Easting	: 664161.0 m E
Northing	: 5655159.6 m N
Depth Reference	: L.A.T.
Water Depth	: 99.3 m
Rotary Table to L.A.T	: 50.50 m
Rotary Table to Seabed	: 149.8 m
Casing Data	: (1) 660mm (26") casing shoe at 219 mMDRT
	: (2) 473mm ($18^5/_8$") casing shoe at 632.9 mMDRT
	: (3) 245mm ($9^5/_8$") casing shoe at 2293.4 mMDRT
	: (3) 178mm (7") liner shoe at 4022.5 mMDRT
Hole Size	: (1) 762mm (30") hole from 149.5 m to 220 m
	: (2) 584mm (23") hole from 220 m to 638 m
	: (3) 311mm (12¼") hole from 638 m to 2299m
	: (4) 216mm (8½") hole from 2299m to 4026m
Mud Type	: (1) Seawater with Gel Sweeps
	: (2) Synthetic Oil base Mud
Offset Wells	:Thylacine-1, Thylacine-2, Geographe-1
Proposed Total Depth	: 4083 m MDRT (2297 mTVDSSLAT)
Actual Total Depth :	: 4026 m MDRT (2289.69 mTVDSSLAT)
Spud Date	: 14:00 hrs, 20th May 2006
Date TD Reached	: 01:30 hrs, 15th June 2006
Well Status	: Cased and Completed

2.0 GENERAL INFORMATION

2.1 Executive Summary

THA02 is the western development well for the Thylacine field. The objective of THA02 is to recover gas optimally from the various reservoir intervals with in the Thylacine gas field. The entire reservoir section was drilled in a single hole size.

Geoservices provided a full mudlogging service from the 30" section to TD during this well.

762 mm (30") Section

The rig Maersk Guardian was skidded from THA01 to THA02 on the 20th of May 2006, and the THA02 was spudded at 14:00 hours on the 20th of May 2006. The sea floor was tagged at 149.5m and drilling proceeded with Bit#1, a Hughes MX-1 445mm (17.5") bit with 762mm (30") hole opener from this point to 220.0m.

The 660mm (26") conductor was then run and cemented with the shoe set at 219.0m.

The well was then suspended and the rig skidded to well THA03.

584 mm (23") Section

The rig was skidded from THA03 to THA02 on the 26th of May 2006.

After installing and testing the diverter system, Bit#2, a 584 mm (23") Varel ETRIG bit, with 2 x 22, 1 x 16 and centre jet 1 x 20 was made up with BHA and run in the hole. The cement was tagged at 217 m, and the 584 mm (23") hole was drilled down to a TD of 638mMDRT (638 mTVD). This bit drilled 419m in 14.18 on bottom drilling hours and was graded as 2-2-WT-A-E-IN-NO-TD.

The 473mm (18 $^{5}/_{8}$") casing was then run and cemented with the shoe set at 632.9m.

311 mm (12¼") Section

The 311 mm (12¼") section was directionally drilled from 638mMDRT to 2299mMDRT, building to 73.01 degrees inclination and turning to 274.85 degrees azimuth. One bit was used to drill this section.

Bit #3, a Security DBS FMF3653Z with 6 x 18, 1 x 21 2 jets, was directionally drilled from 638mMDRT to 2299mMDRT. This bit drilled 1661m in 55.23 on bottom drilling hours and was graded 1-1-WT-G-X-O-ER-TD.

The 245mm (9 $^{5}/_{8}$") casing was then run and cemented with the shoe set at 2293.0m.

216 mm (8½") Section

The 216 mm (8½") section was directionally drilled from 2299mMDRT to 4026mMDRT. The inclination of the well was built continuously and reached an angle of 89.47 degrees inclination and turning to 273.81 degrees azimuth at 2469.29mMDRT. The horizontal section was drilled from 2469mMDRT to 3568mMDRT. From 3568mMDRT the angle was dropped with the final inclination at the toe of the well being 41.94 degrees with the azimuth of 269.81 degrees.

The GeoPilot failure at 3510m necessitated the BHA to be pulled to surface for replacement of the tool. Two bits were used to drill this section.

Following TD, the 7" liner string was made up and run in the hole on drill pipe. The 7" liner was cemented in place and hung off in the 9 $^{5}/_{8}$" casing. The 7" liner was set with a shoe depth of 4022.5mMDRT (2337.6mTVD).

The 9-5/8" casing and 7" liner was successfully pressure tested and a clean out assembly was run to the float collar of the 7" liner. The well was displaced to unfiltered brine.

The well was then completed as per the completion program.

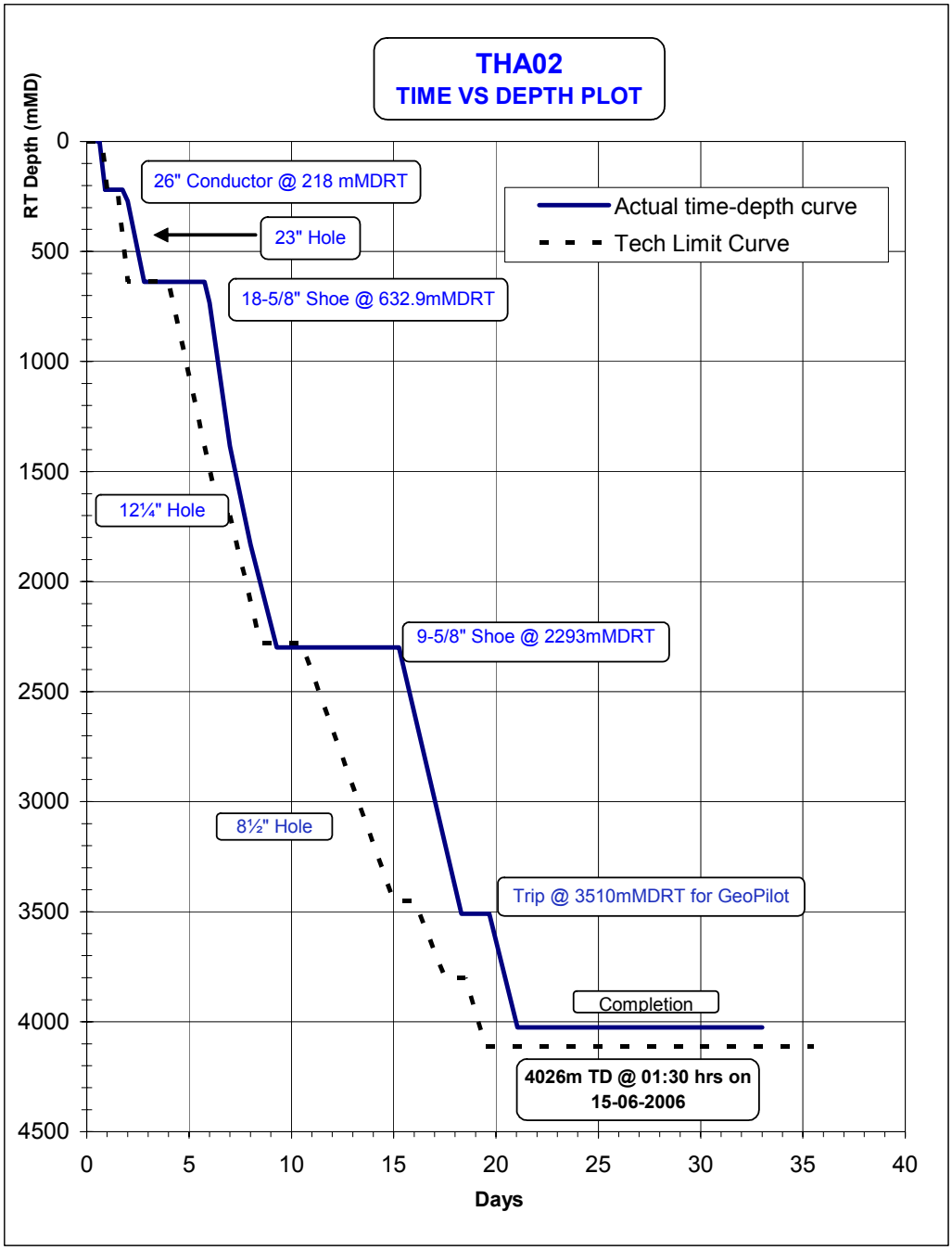
2.2 Geoservices Personnel

ALS Engineers	: Tom Platt
	: Daniel van der Aa
	: Sridhar Vignaraja
	: Dmitriy Ilyin
Mudloggers	: Josh Heffernan
	: Andrew Lowndes
	: Alex Djukanovic
	: Bradley Weir
Sample Catchers	: Ben Cross
	: Jonathon Cook
	: Elizabeth Reducto

2.3 Contractor Information

Drilling	: Maersk
Rig name	: Maersk Guardian
Rig type	: Jack-Up
Mud logging	: Geoservices Overseas Oilfield Services S.A.
Mud engineering	: Baker Hughes Drilling Fluids
MWD	: Halliburton
Wireline logging	: Schlumberger
Cementing	: Halliburton
Well head completion	: Cameron
ROV	: Total Marine Technology
Casing	: Weatherford
Work boats	: Invincible Tide, Maersk Supporter
Helicopters	: Bristows

2.4 Days versus Depth Progress Chart



2.5 Sample Collection Summary

5 sets of washed and dried, (4 sets of 200 gram and 1 set of 30 gram FIS samples) and one set of samplex trays were collected during this well from 645 m to TD at 4026 mMDRT.

The sampling interval for the well was required at 5m sampling from 645m to 4026m. However, due to high ROP rates, the following sampling intervals were caught:

Sample Rate (m)	Depth from (mMDRT)	Depth to (mMDRT)
5	645	650
10	650	1210
5	1210	1260
10	1260	1710
5	1710	1890
10	1890	2000
5	2000	2270
10	2270	2280
5	2280	2545
10	2545	2555
5	2555	2620
10	2620	2630
5	2630	2720
10	2720	2730
5	2730	3515
10	3515	3525
5	3525	3570
10	3570	3580
5	3580	3940
10	3940	3950
5	3950	4026 TD

All samples were forwarded to Core laboratories, WA 6105

Further cuttings sample distribution was as follows:

Recipient	Washed and Dried 200 g	Washed and Dried 30g	Samplex Trays
WEL	2	1	1
Geoscience Australia	1		
Mineral Resources Tasmania	1		

Mud samples were also taken from the following depths:

Sample Number	Depth (m)	Filtrate taken	Notes
1	645	No	
2	2298	No	
3	4026 TD	Yes	

Isotube gas samples were collected at the following depths from THA02:
All depths are in mMDRT:

700	800	900	1000	1100	1200	1300	1400	1500	1600
1700	1800	1900	2000	2100	2210	2293	2300	2320	2346
2400	2500	2565.5	2600	2629	2700	2800	2900	2999.3	3000
3020	3100	3200	3300	3400	3500	3529	3600	3700	3730
3760	3790	3820	3850	3880	3910	3940	3970	4000	4026

NB: A detailed sample manifest is enclosed with the Final Well Report (Enclosure F).

3.0 GEOLOGICAL INFORMATION

3.1 Gas Ratio Interpretation - Introduction

Gas composition and total gas in mud were measured using the Geoservices Reserval (A combined total gas detector and chromatograph coupled with a GZG degasser). As a backup gas detection system a Geoservices FID Chromatograph Panel (FCP) and FID Gas Panel (FGP) were in place. Both use the FID technique of measuring ions released when hydrocarbons are burnt in a pure hydrogen flame.

Gas is extracted from the mud at the shale shakers by a degasser that is essentially an agitator inside a chamber through which the mud continually passes. The GZG degasser is specially designed to degas a constant volume of mud regardless of pump rates and conditions in the possum belly. The gas is then drawn back to the unit through tubing to the gas analysis equipment. Independent sensors in the unit also measure H_2S and CO_2.

The composition of the gas in mud from the formation is significant in determining the geochemical origin and value of a show. There are several methods that can be used to determine whether the hydrocarbon gas in mud comes from a potential gas or oil zone. Amongst these methods are the Triangle Diagram (also known as the gas composition diagram), Pixler Diagram (also known as the gas ratios method), and the gas Wetness/Balance/Character plots.

3.2 Explanation of Gas Composition Diagrams

The Triangle or Gas Composition Diagram is used to graphically represent the hydrocarbon distribution in the gas and to determine whether it corresponds to a gas or oil reservoir. The triangular diagram is obtained by tracing lines on three scales at 120° to each other, corresponding respectively to the ratios of ethane, propane and normal butane to the total gas. The scales are arranged in such a way that if the apex of the triangle is upward, the diagram represents the analysis of gas from a gas zone, while if the apex points downwards, the diagram represents the analysis of gas from an oil zone. A large triangle diagram represents dry gas or low GOR oil, while small triangles represent wet gases or high GOR oils. The centre of the triangle should fall inside the area delineated by the dotted line, which encircles compositions that are regarded as 'normal'. If the triangle area is outside this area the gas indicates that the reservoir is not exploitable and that the heavier hydrocarbon composition is 'abnormal' i.e. hydrocarbons that are chemically altered or gases with special compositions which are not associated with oil.

The Gas Ratio Analysis Diagram is a plot of the ratio of C1 to the other gas elements. The magnitude of the methane to ethane ratio determines if the reservoir contains gas or oil or if it is non-productive. The following conclusions are possible:

Ratio C1/C2:	< 2	non-productive zone
	2 - 15	oil present
	15 - 65	gas present
	> 65	non-productive zone

The slope of the line of the ratio plot of C1/C2, C1/C3, C1/C4 and C1/C5 indicates whether the reservoir will produce hydrocarbons or hydrocarbons and water. Positive line slopes indicate production; negative line slopes indicate water-bearing formations. When using the Gas Ratio Diagram, the following points should be borne in mind:

1. Productive dry gas zones may show only C1, but abnormally high shows of C1 are usually indicative of saltwater zones.
2. If the ratio C1/C2 is low in the oil section and the ratio C1/C4 is high in the gas section, the zone is probably non-productive.
3. If any ratio (C1/C5 excepted in an oil based mud) is lower than the preceding ratio then the zone is probably non-productive.
4. The ratios may not be definitive for zones of low permeability.
5. Steep gas ratio plots may be indicative of tight zones.

3.3 Explanation of Wetness/Balance/Character Curves

Another method for evaluating gas zones plots against depth three ratios: hydrocarbon Wetness (W_h), hydrocarbon Balance (B_h) and hydrocarbon Character (C_h), where:

$$W_h = \frac{(C2 + C3 + C4 + C5)}{(C1+C2+C3+C4+C5)} \times 100\ (\%)$$

$$B_h = \frac{(C1 + C2)}{(C3 + C4 + C5)}$$

$$C_h = \frac{(C4 + C5)}{C3}$$

Wetness (W_h) is the primary zone indicator and provides a measure of the relative proportion of heavier gases in the overall gas show as follows:

$W_h < 0.5$	Light non-associated gas with low productivity potential or only geo-pressured methane.
$0.5 < W_h < 17.5$	Potentially productive gas with gas density increasing with W_h.
$17.5 < W_h < 40.0$	Potentially productive oil with gravity decreasing as W_h increases.
$W_h > 40.0$	Heavy or residual oil with low productivity potential.

As reservoir hydrocarbons become denser in the transition from gas to oil, Balance (B_h) and Wetness (W_h) values move closer together and eventually intersect. The zone guidelines for B_h combine with those for W_h to improve reliability of show evaluation as follows:

$W_h < 0.5$ and $B_h > 100$	Very light, dry gas that is almost certainly non-productive.
$0.5 < W_h < 17.5$ and $W_h < B_h < 100$	Productive gas with gas increasing in wetness and density as the two curves converge.
$0.5 < W_h < 17.5$ and $B_h < W_h$	Productive gas condensate or a high gravity gas/oil ratio.
$17.5 < W_h < 40$ and $B_h < W_h$	Productive oil with oil gravity decreasing - density increasing as the curves diverge.
$17.5 < W_h < 40$ and $B_h > W_h$	Non-productive residual oil.

Character (C_h) values serve to resolve ambiguities between oil or gas indications by defining the following:

$0.5 < W_h < 17.5$ and $B_h < W_h$ and $C_h < 0.5$	Productive wet gas or condensate.
$0.5 < W_h < 17.5$ and $B_h < W_h$ and $C_h > 0.5$	Productive high gravity and/or high GOR oil.

It is important to note that in the conclusion to each of the interpretive tools, the terms ‘productive’ and ‘non-productive’ are used in a geochemical sense. Ultimate production of a zone is dependent upon reservoir thickness and extent as well as other physical and economic factors that are not taken into account when analysing gas compositions. The methods discussed here are intended to assist the interpretive skills of the geologist or log analyst.

3.4 Gas Composition Discussion

Gas monitoring commenced using the Geoservices Reserval gas system from the beginning of the 12¼" phase at 638 m through to the THA02 total depth of 4026mMDRT.

No significant gas was encountered while drilling the THA02 12 $^{1}/_{4}$" hole prior to the depth of 2286mMDRT. Drilling of this section occurred with a mud weight from 1.25sg to 1.26sg, with consistent background gas levels between 0.1-0.4% and a maximum peak of 4.79% at 2294mDRT. This gas was dry, predominantly consisting of C1 (methane) levels above 96-100%, C2 (ethane) levels of trace - 4%, with traces of C3 (propane), C4 (butane), and C5 (pentane) gas.

The 8 $^{1}/_{2}$" section was drilled with the same SBM system at the previous 12$^{1}/_{4}$" section, with mud weights being in the range of 1.25-1.26sg. No connection gas was encountered in either phases.

- The interval between 2286mMDRT and 3815mMDRT had a maximum total gas peak of 13.81% at the depth of 3597mMDRT, with an associated C1 to C5 ratio breakdown of: 95 / 4 / 1 / Tr / Tr.

- The interval between 3815mMDRT and 3865mMDRT had a maximum total gas peak of 10.82% at the depth of 3829mMDRT. The associated C1 to C5 ratio breakdown for this peak was: 96 / 3 / 1 / Tr / Tr.

- The interval between 3865mMDRT and 3909mMDRT had a maximum total gas peak of 12.27% at the depth of 3889.5mMDRT. The associated C1 to C5 ratio breakdown for this peak was: 96 / 3 / 1 / Tr / Tr.

- The interval between 3909mMDRT and 4026mMDRT TD had a maximum total gas peak of 11.33% at the depth of 3923mMDRT, with an associated C1 to C5 ratio breakdown of 96 / 3 / 1 / Tr / Tr.

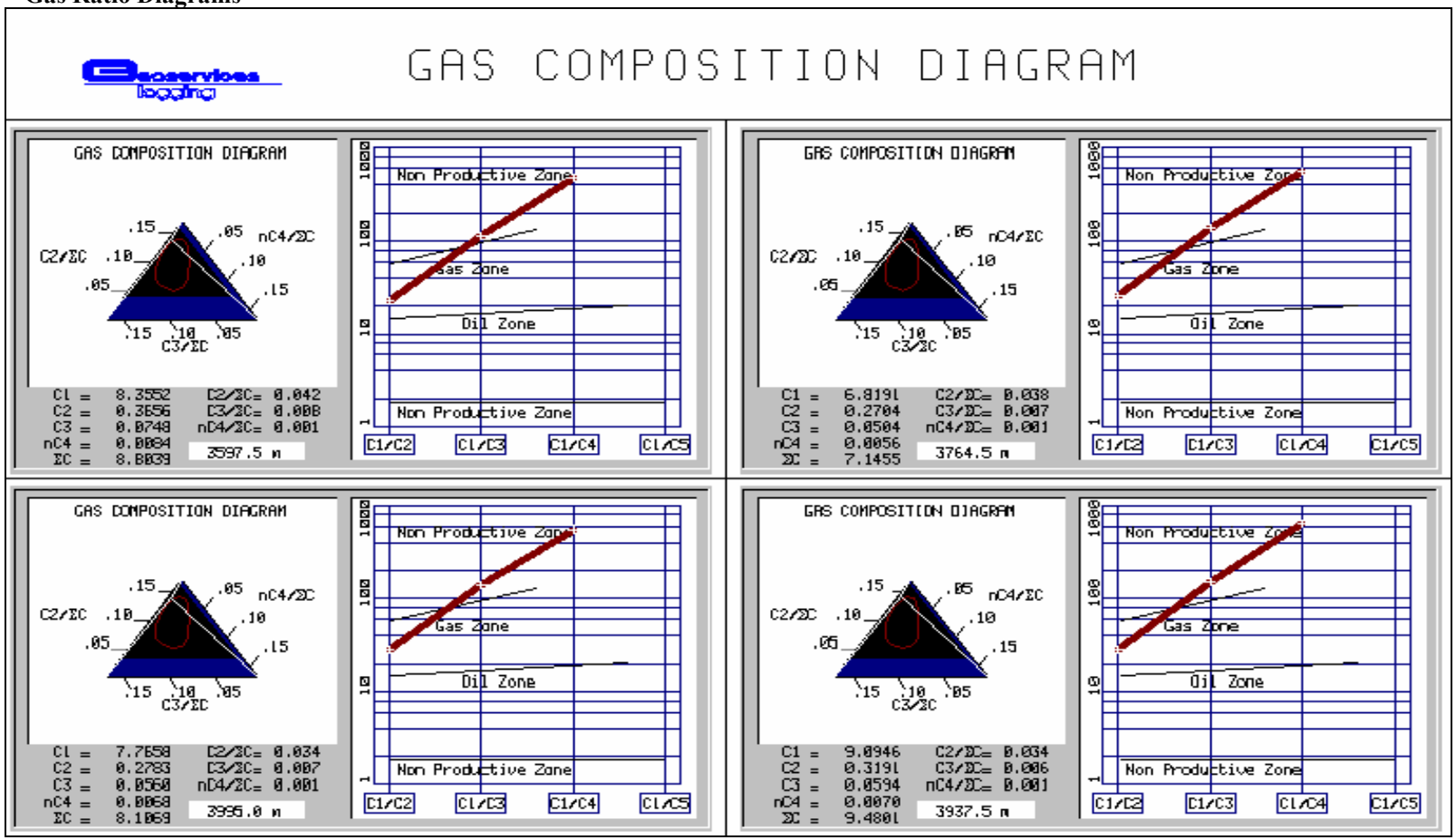
Background gas readings throughout these reservoir zones varied between 5.0% and 11.0% with similar C1 to C5 ratios, denoting a relatively dry gas with negligible heavy gas components.

No CO_2 or H_2S gas was encountered in THA02.

3.5 Gas Peaks
(From Reserval Gas Detection System)

Depth (m)	Total Gas Peak (%)	C_1 (%)	C_2 (%)	C_3 (%)	iC_4 (%)	nC_4 (%)	iC_5 (%)	nC_5 (%)
2291	4.48	3.9568	0.1777	0.0357	0.0051	0.0039	0.0012	0.0005
2313	6.52	5.2568	0.2356	0.0447	0.0053	0.0043	0.0017	0.0003
2344	4.63	2.8898	0.1218	0.0229	0.0029	0.0024	0.0012	0.0004
2565.5	4.18	2.3921	0.1034	0.0201	0.0141	0.0022	0.0009	0.0004
2611	4.65	3.4046	0.1623	0.0338	0.0165	0.0038	0.0011	0.0005
2646.5	4.26	3.8756	0.1622	0.0198	0.0154	0.003	0.0011	0.0005
2692.5	5.32	3.6873	0.1751	0.037	0.0157	0.0048	0.0016	0.0008
2732	8.72	7.2077	0.2834	0.059	0.015	0.0071	0.0021	0.001
2819.5	1.05	0.8914	0.0409	0.0095	0.0038	0.0013	0.001	0.0003
2999.5	4.77	3.6538	0.2154	0.0465	0.0062	0.0052	0.0017	0.0007
3020	9.36	8.2818	0.5157	0.0964	0.0187	0.0174	0.009	0.0009
3039	5.01	3.9985	0.2608	0.0639	0.0089	0.008	0.0024	0.001
3076.5	5.63	4.2232	0.2556	0.0594	0.0079	0.0073	0.002	0.001
3125	4.39	3.2335	0.2213	0.0568	0.008	0.0074	0.0021	0.0011
3258	6.12	4.175	0.1773	0.034	0.0048	0.0039	0.0015	0.0009
3300	4	2.1328	0.0918	0.0205	0.0035	0.0027	0.0014	0.0005
3411	2.91	1.8166	0.0756	0.0153	0.0026	0.0018	0.001	0.0003
3499.5	6.21	4.9164	0.2698	0.0652	0.006	0.0051	0.0013	0.0005
3517.5	8.45	5.2155	0.1725	0.0283	0.0034	0.0026	0.001	0.0004
3544.5	11.54	8.2225	0.3094	0.0578	0.0068	0.0059	0.0017	0.0007
3568	13.07	8.4025	0.3416	0.0657	0.0079	0.007	0.0021	0.0009
3597	13.81	8.0989	0.358	0.0737	0.0092	0.0082	0.0023	0.0011
3625	11.95	8.3908	0.3699	0.0786	0.0102	0.0094	0.0027	0.0014
3671	2.51	1.4056	0.0664	0.0177	0.0034	0.0029	0.0014	0.0007
3759	10.05	7.248	0.295	0.0566	0.0071	0.0061	0.0019	0.0009
3765	10.15	6.6321	0.2628	0.05	0.0064	0.0054	0.0017	0.0008
3779.5	8.64	5.8591	0.227	0.0411	0.0053	0.0044	0.0015	0.0007
3788	7.84	4.689	0.1841	0.0369	0.0052	0.0044	0.0015	0.0006
3819	8.55	5.1633	0.172	0.0296	0.0041	0.0035	0.0013	0.0006
3829.5	10.82	8.7284	0.2689	0.0406	0.0054	0.0046	0.0013	0.0006
3843.5	10.04	8.2796	0.2904	0.0502	0.0064	0.0059	0.0018	0.0008
3866	3.09	2.5743	0.0902	0.0179	0.0028	0.0022	0.0011	0.0004
3878.5	10.43	7.8168	0.2897	0.0542	0.0068	0.0063	0.002	0.0009
3889.5	12.27	9.2172	0.3331	0.0607	0.0073	0.0069	0.002	0.0009
3923	11.33	8.5586	0.2971	0.0533	0.0065	0.0062	0.0019	0.0009
3962.5	10.52	6.0588	0.2095	0.0396	0.0055	0.0051	0.0019	0.0008
3996	10.85	6.8908	0.2404	0.0478	0.0063	0.006	0.002	0.001
4011	7.62	5.3708	0.1875	0.037	0.0048	0.0044	0.0015	0.0007

3.6 Gas Ratio Diagrams



Revision	Date	Issued by	Approved by	Remarks
1	June 2006	Geoservices Unit 171	Operations Manager	

4.0 PRESSURE ANALYSIS

4.1 Pressure Summary

Formation pressures were monitored throughout this well by recording a range of indicators. These indicators vary from direct observations of background gas and cuttings to drilling characteristics such as torque and tight hole, as well as quantitative methods like the D'exponent.

D'Exponent: This is a normalized rate of penetration that takes into account mud weight, bit wear and hydraulics. It can be reliably used in shales and clean claystones, and as an indicator in siltstones, silty shales and calcareous claystones. A normal trend line is established through normally pressured shale points, representing a normal compaction trend, and any leftward deviation of subsequent shale points from this trend, representing relative undercompaction can indicate overpressure (plotted relative to depth) or increased porosity due to changes in the lithology.

The D'exponent could not be effectively used for the detection of overpressure due to the use of PDC bits with a mud motor, the directional nature of the hole and the presence of sandstone and calcareous claystones through large sections of the well. However, it is still a useful tool in helping to establish any possible areas of abnormal pressure.

The 30" and 26" sections were drilled with sea water and returns were to the seabed, however a normal trend was established in the 12¼" section starting at 640mMDRT, this yielded a normally pressured gradient for this well, following a reasonably linear trend.

The D'exponent trend tracks in a generally linear trend down to approximately 1100mMDRT, through which a reasonable gradient was established.

Below 1180mMDRT the trend takes a general shift to the left, which could indicate an area of possible under-compaction. This shift in the trend occurred through a zone of Calcareous Claystone and Calcilutite. The shift in D'exponent plot continues to about 1250mMDRT and below this depth the trend again becomes more linear tracking the trend line.

The next major shift in the D'exponent is below 1500mMDRT and there are many zones that contain sandstone from 2300m down to TD at 4026m. Although there was predicted to be a zone of undercompaction around 1735mMDRT, due to the presence of Sandstone throughout this section the D'exponent plot was unable to differentiate between that predicted area and the presence of Sandstone.

Overall the D'exponent plot does not indicate any abnormal pressure zones, due in part to the presence of Sandstones masking the predicted under-compacted zone around 1735mMDRT.

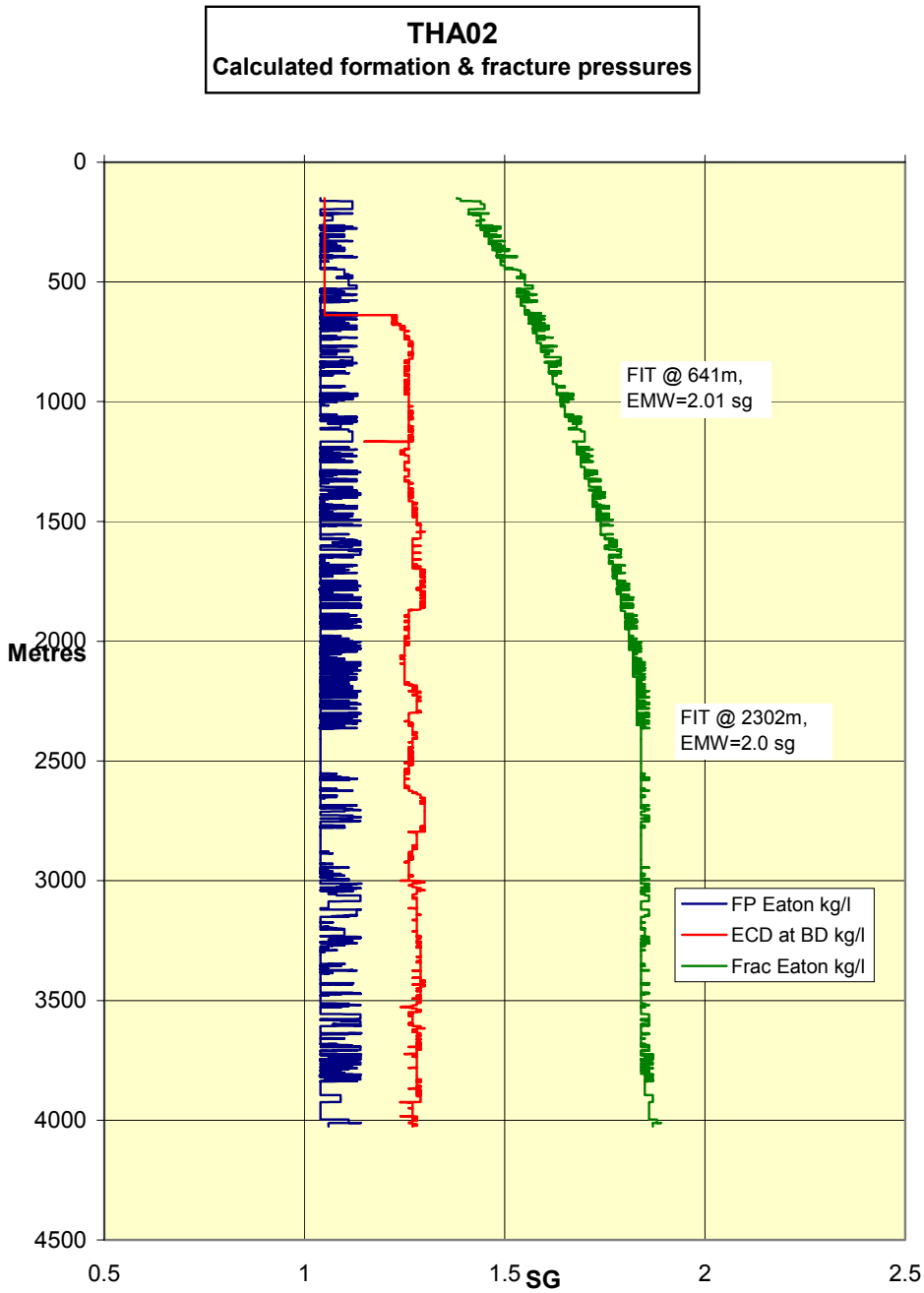
Gas: THA-02 was drilled with an overbalanced mud system, required to maintain borehole stability. Due to this overbalance, background gas remained very low with no noted increases to indicate increasing formation pressure. There were no connection gases recorded. The minimum trip gas recorded in the 8½" section was 15.7% at 3572m and the maximum trip gas overall was 19.7% at 4026m.

Flow-line Temperature: Flow-line temperature increased in a smooth linear fashion (allowing for mud additions and the cooling effect of the riser) throughout the well from 40°C to 72°C. There were no indications from mud temperature of abnormal pressures.

Cuttings: There were no large sized cuttings observed at the shakers that may have indicated an abnormally pressured zone in this well.

The indicators generally pointed to a normally pressured environment from surface to TD while drilling THA-02.

4.2 D-Exponent Plot



5.0 DRILLING SUMMARY

5.1 Mud Record

The 660mm (30") and the 584mm (23") sections of THA02 were drilled with Seawater and Gel sweeps, with weight of 1.06 sg. Properties of this mud are listed below:

Depth m	MW sg	FV sec/qt	PV cps	YP lb/100'	Gels lb/100'	Oil/H_2O Ratio	Filtrate cc	Sand %	Corr Solids %	Cake /32"
150	1.06	140	10	52	-	-	-	-	4.0	-
270	1.06	147	10	52	-	-	-	-	4.0	-
638	1.06	140	10	53	-	-	-	-	4.0	-

The 311mm (12¼") and 216mm (8½") sections of THA02 were drilled with Synthetic Base Mud, with weight range of 1.25 sg to 1.26 sg. Properties of this mud are listed below:

Depth m	MW sg	FV sec/qt	PV cps	YP lb/100'	Gels lb/100'	Oil/H_2O Ratio	Filtrate cc	Sand %	Corr Solids %	Cake /32"
638	1.25	345	49	22	10/18	63:37	4.4	0.25	12.6	3
680	1.25	110	38	19	8/15	65:35	4.0	0.25	12.0	2
1019	1.24	115	48	31	14/26	65:35	3.0	0.30	13.3	2
1252	1.25	97	46	14	14/21	65:35	3.6	0.30	13.3	1
1570	1.25	132	44	28	13/26	67:33	2.8	0.50	13.2	2
1745	1.26	112	43	29	15/21	69:31	2.6	0.30	13.8	2
1915	1.26	112	42	24	12/22	69:31	2.5	0.50	13.6	2
2203	1.25	80	38	29	14/21	72:28	3.0	0.50	13.7	2
2299	1.26	90	41	26	14/21	72:28	3.0	0.50	13.8	2
2530	1.25	72	32	24	13/20	60:24	3.0	0.25	13.7	2
2956	1.26	75	40	28	13/20	62:22	3.0	0.25	13.8	2
3375	1.26	90	43	31	16/22	62:22	3.0	0.25	14.3	2
3510	1.25	75	38	29	14/21	64:20	3.0	0.25	14.3	2
3573	1.25	86	38	29	14/21	64:20	3.0	0.25	14.3	2
3751	1.25	74	41	33	22/24	75:25	3.0	0.25	13.8	2
4008	1.25	70	35	24	12/20	77:23	3.0	0.25	13.9	2
4026	1.25	68	36	24	12/20	77:23	3.0	0.25	13/9	2

5.2 Bit Record

Bit	Size (mm)	Make	Type	Jets	TFA in^2	In (m)	Out (m)	Run (m)	Hrs	WOB klbs	RPM	TRQ kftlbs	SPP psi	Flow gpm	Grading
1	445	Hughes	MX-1	3x 12	0.33	149.5	220	70	5.50	0.6 – 8.4	14 – 81	0.2 – 1.94	136 – 999	378 – 946	1-1-WT-A-E-IN-NO-TD
2RR	584	Varel	ETRIG	2 x 22, 1 x 16, cj 20	1.25	219.5	638	419	14.18	1.1 – 30.2	59 – 238	0.0 – 4.91	623 – 1946	579 - 1138	2-2-WT-A-E-IN-NO-TD
3	311	Security DBS	FMF3653Z	6x18, 1x 21	1.83	638	2298	1660	55.23	0.5 – 30.1	60 – 180	1.66 – 1386	1265 – 3828	980 – 1215	1-1-WT-G-X-0-ER-TD
4	216	Security DBS	FMFX653Z	3x16, 3x15	1.11	2299	3510	1211	46.81	5 - 27	70 - 183	4.8 – 11.5	2589 - 3776	705 - 754	1-1-WT-A-X-I-ER-BHA
5	216	Security DBS	FMFX653Z	3x16, 3x15	1.11	3510	4026	516	20.79	8 - 27	116 - 170	7.79 – 11.42	3326 - 3938	716 - 750	1-1-WT-A-X-I-NO-TD

5.3 Hydraulic Listing

Depth (m)	Mud Weight sg	ECD sg	Flow Rate (gpm)	Total Pressure Loss (psi)	Pressure Loss Across Bit (psi)	Mud Velocity Through bit (m/sec)	Bit Hydraulic Power (hp)	Mud Impact at Bit (kgf)	Total Hydraulic Power (hp)	Ratio (Bit Pwr/Total Pwr) (%)
849	1.26	1.27	1197	3945	905	94	640	916	2788	23
1252	1.25	1.27	1017	3310	654	80	393	662	1988	20
1570	1.26	1.29	1018	3551	654	80	393	662	2133	18
1745	126	1.30	1017	3683	654	80	393	662	2212	18
1915	1.26	1.28	988	3166	603	78	352	617	1847	19
2203	1.26	1.28	1147	4223	814	90	551	832	2860	19
2298	1.26	1.41	748	3345	439	66	194	339	1479	13
2530	1.25	1.39	748	3266	435	66	192	396	1444	13
2956	1.26	1.46	748	3345	439	66	194	399	1631	12
3375	1.26	1.51	748	4015	439	66	194	399	1774	11
3510	1.25	1.48	748	3913	435	66	192	396	1730	11
3573	1.25	1.49	748	3930	435	66	192	396	1737	11
4008	1.25	1.46	727	3847	411	64	176.5	373.6	1652	11
4026	1.25	1.47	748	4040	435	66	192	399	1479	13

5.4 Drilling Phase Summary

5.4.1 762mm (30”) Hole Section

Date	: 20th May 2006
Measured depth	: 149.5 m – 220 m
TVDSS LAT	: 99.0 m – 169.5 m
Number of bits used	: 1
Mud type	: Seawater, with gel sweeps

THA02 was spudded at 14:00 hours, on the 20th May 2006. A 762mm (30”) BHA was made up, consisting of a 445mm (17½”) Hughes MX-1 bit run in conjunction with a 762mm (30”) hole opener. Sea floor sediments were tagged at 149.5 m and the 762mm hole was drilled without incident to a depth of 220 m. Gel sweeps were then pumped around the well prior to displacing to a gel mud before pulling out of hole and rigging up to run the 762mm (30”) conductor.

This bit drilled 70.0 m of new formation in 5.50 hours, at an average ROP of 12.7 m/hr. This bit was graded 1-1-WT-A-E-IN-NO-TD.

The 660mm (26”) conductor was then run and cemented with the shoe at a depth of 219 m.

The well was then suspended and the rig skidded to well THA03.

5.4.2 584 mm (23") Hole Section

Dates	: 26th to 27th May 2006
Measured depth	: 220 m - 638 m
TVDSSLAT	: 169.5 m – 586.1 m
Number of bits used	: 1
Mud type	: Seawater with Gel Sweeps

After installing and testing the diverter system, a 584 mm (23") Varel ETRIG 16 bit with 2 x 22, 1 x 16 and 1 x 20 jets was made up with BHA and run in the hole. The cement was tagged at 217 m, and the 584 mm (23") hole was drilled ahead from 217m to section TD of 638mMDRT (636.6mTVD). The hole was circulated clean and a DRISPAC pill was spotted on bottom. The well was flow checked and the bit pulled out of hole.

This bit drilled 419m in 14.18 on bottom drilling hours, at an average ROP of 29.5 m/hr and was graded as 2-2-WT-A-E-IN-NO-TD.

A string of 473mm (18 5/8”) casing was then run and cemented with the shoe at a depth of 632.9m.

5.4.3 311 mm (12¼") Hole Section

Dates	: 30th May - 04th June 2006
Measured depth	: 638 m - 2298 m
TVDSSLAT	: 586.1 m – 2106.0 m
Number of bits used	: 1
Mud type	: SBM

The 311 mm (12¼") section was directionally drilled from 638mMDRT to 2298mMDRT, building to 73.01 degrees inclination and turning to 274 degrees azimuth.

After installing and testing the BOP stack, a 311 mm (12¼") Security DBS FMF3653Z (Bit#3), with 6 x 18 and 1 x 21 jets was made up with BHA incorporating a GeoPilot rotary-steerable tool and a Geospan tool, along with a LWD suite. The string was run in hole and cement was tagged at 628mMDRT. The well was displaced to SBM, which was circulated and conditioned. The cement and shoe track was drilled out from 628 to 633mMDRT, and the rat-hole was cleaned out to 638mMDRT. New hole was drilled from 638 to 641mMDRT and a formation integrity test was performed. The FIT returned the required result of 2.01sg EMW.

The 311 mm (12¼") section was directionally drilled from 641mMDRT to 1168mMDRT, holding angle at approximately 5° inclination and an azimuth of approximately 272°. At 1168mMDRT pump problems occurred and mud pump #2 required a liner and swab to be changed out. The hole was circulated until repairs were completed.

The 311 mm (12¼") section was directionally drilled from 1168mMDRT to 2299mMDRT, building to a bit angle of 73°, and holding an azimuth of 274° between 1700mMDRT and 2259mMDRT. At 2299mMDRT gas readings increased to 4.79% and the drill-string was picked up off bottom and the sample circulated out of hole. TD for the section was confirmed and the well was circulated for 3 x bottom's up whilst slowly pulling out of hole from 2296mMDRT to 2210mMDRT. A flow check was performed and then the drill-string was pulled out of hole.

The drill-string was worked through several tight spots between 1726mMDRT and 1278mMDRT. A flow check was performed at the casing shoe, and the drill-string then pulled to surface. The bit was broken off and the BHA was laid down.

This bit drilled 1661m in 55.23 on bottom drilling hours and was graded 1-1-WT-G-X-O-ER-TD.

180 joints of 245mm (9 $^{5}/_{8}$") casing was then run and cemented with the shoe at a depth of 2293m.

5.4.4 216 mm (8½") Hole Section

Dates	: 09th June to 15th June 2006
Measured depth	: 2299 m - 4026 m
TVDSSLAT	: 2106.1 m – 2289.69 m
Number of bits used	: 2
Mud type	: SBM

The 216 mm (8½") section was directionally drilled from 2299mMDRT to 4026mMDRT. The inclination of the well was built continuously and reached an angle of 89.5 degrees inclination and turning to 273.8 degrees azimuth at 2469mMDRT. The horizontal section was drilled from 2469mMDRT to 3568mMDRT and from 3568mMDRT the angle was dropped with the final inclination at the toe of the well being 41.9 degrees with the azimuth of 269.8 degrees.

Bit #4, a 216 mm (8½") Security DBS FMFX 653Z PDC bit with 3 x 16, 3 x 15 jets was made up with BHA incorporating a GeoPilot rotary–steerable tool and a Geospan tool, along with a PWD and a LWD suite. The string was run in hole and cement was tagged at 2260mMDRT. The cement and shoe track was drilled out from 2260mMDRT to 2293mMDRT, and the rat-hole was cleaned out to 2299mMDRT. 3m of new hole was drilled from 2299mMDRT to 2302mMDRT and a formation integrity test was performed. The FIT achieved the required EMW of 2.00 sg.

The 216 mm (8½") section was then drilled from 2302mMDRT, maintaining the previous directional path. The hole was drilled to 3042mMDRT, where the GeoTap tool was activated to sample the formation pressure at the tool depth of 3008.5mMDRT (TVD 2131m).

The hole was drilled ahead to 3047mMDRT where the GeoTap tool was activated to sample the formation pressure at the tool depth of 3015mMDRT (TVD 2132.8m).

The hole was drilled ahead to 3510mMDRT where the GeoPilot clutch failed while drilling which resulted in the loss of directional control of the well. The hole was then circulated clean and the drill string and bit #4 pulled out of hole to replace the GeoPilot. This bit drilled 1211m in 46.8 on bottom drilling hours and was graded as 1-1-WT-A-X-I-ER-BHA.

The Geopilot rotary-steerable assembly and the PDC bit was changed out, maintaining the same BHA configuration as the previous bit run.

Bit#5, a Security DBS FMFX 653Z PDC bit was run in the hole and commenced drilling from 3510mMDRT and achieved the required TD at 4026mMDRT at 01:30 on the 15th June 2006. Bit #5 drilled 516m in 21.8 on bottom hours and was graded 1-1-WT-A-X-I-NO-TD. At TD, 3x bottoms up circulations were made while reciprocating the pipe, at which point the shaker cutting returns were minimal and the hole was deemed clean. The drilling assembly was pumped out of hole to the 9 $^{5}/_{8}$" casing shoe with no unexpected incidents. The drilling assembly was then pulled to surface.

Following TD, the 7" liner string was made up and run in the hole on drill pipe. The 7" liner was cemented in place and hung off inside the 9 $^{5}/_{8}$" casing. The 7" liner was set with a shoe depth of 4022.5mMDRT (2337.6mTVD).

The 9-5/8" casing and 7" liner was successfully pressure tested and a clean out assembly was run to the float collar of the 7" liner. The well was displaced to unfiltered brine.

The well was then completed as per the completions program.

6.0 ENCLOSURES

Enclosure B

FORMATION EVALUATION LOG

1 : 500

FORMATION EVALUATION LOG

WELL : THA02

WOODSIDE

Geoservices

FROM (m): 140 TO (m): 4040 SCALE: 1/ 500

Country :	: AUSTRALIA	**POSITION**		**CASING**	
Region	: Otway Basin	Latitude	: 39°14'14.47" S	660mm Shoe at (mMDRT)	: 217.0
Field	: Thylacine	Longitude	: 142°54'07.58" E	473mm Shoe at (mMDRT)	: 632.9
Permit	: T/L2 & T/30P	X (m)	: 5655159.6 N	244mm Shoe at (mMDRT)	: 2293.4
Well Type	: Exp/Appraisal	Y (m)	: 664161.0 E	178mm Shoe at (mMDRT)	: 4022.5
Rig Name	: Maersk Guardian	DATUM:	: GDA94		

Spud Date	: 20-05-2006
Total Depth Date	: 15-06-2006
Total Depth (mRT)	4026m
T.V.D. (mSSLAT)	: 2340.18m
Status	: Completed
RT-LAT (m)	: 50.5
RT-Seabed (m)	: 149.8

ABBREVIATIONS

MW MUD WEIGHT
FV FUNNEL VISCOSITY
PV PLASTIC VISCOSITY
YP YIELD POINT
FC FILTER CAKE
SOL SOLIDS
WL FILTRATE
SD SAND - %
S SALINITY - PPM
RM MUD RESISTIVITY
RMF MUD FILTRATE
C CARBIDE TEST
LAT LOGGED AFTER TRIP
DS DEVIATION SURVEY

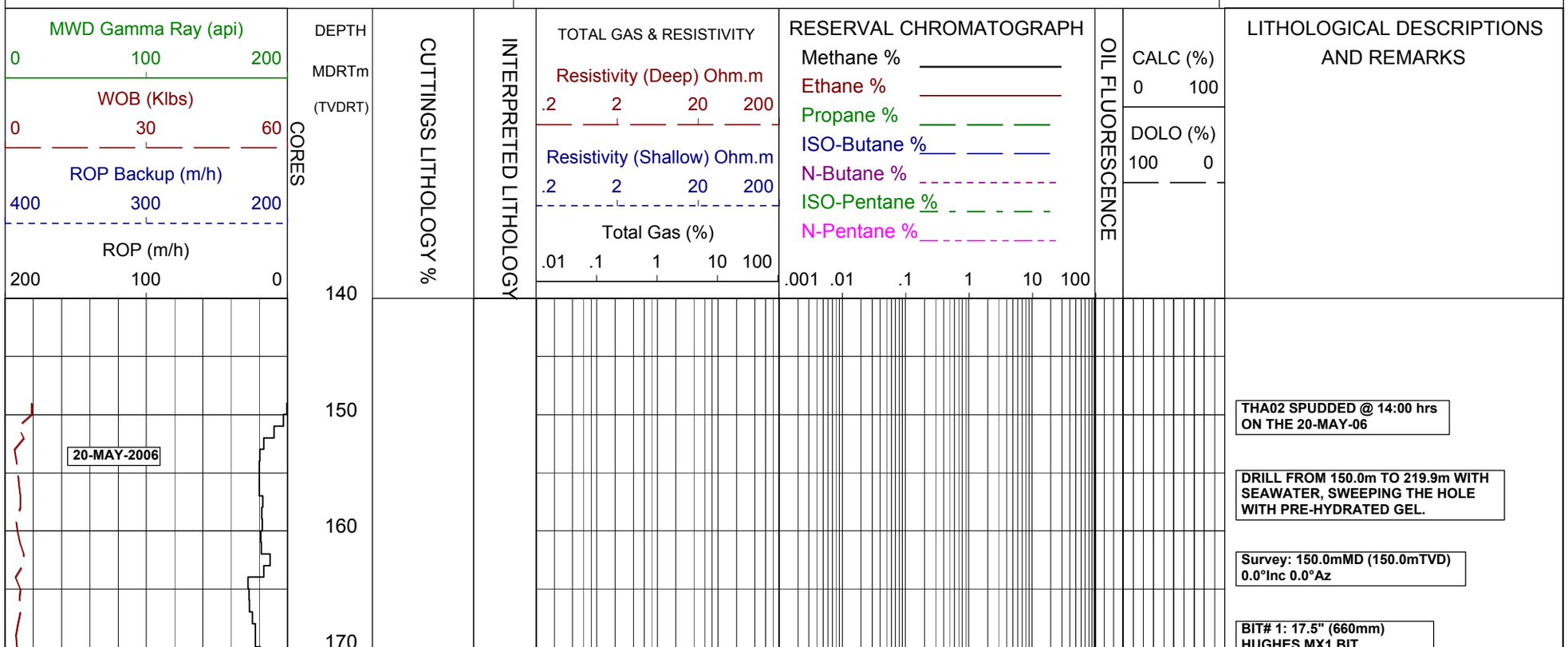
NB NEW BIT
RR RERUN BIT
CB CORE BIT
WOB WEIGHT ON BIT
RPM REVS PER MINUTE
FLC FLOW CHECK
CR CIRCULATE RETURNS
PR POOR RETURNS
NR NO RETURNS
BG BACKGROUND GAS
TG TRIP GAS
STG SHORT TRIP GAS
CG CONNECTION GAS
SG SWAB GAS
SVG SURVEY GAS

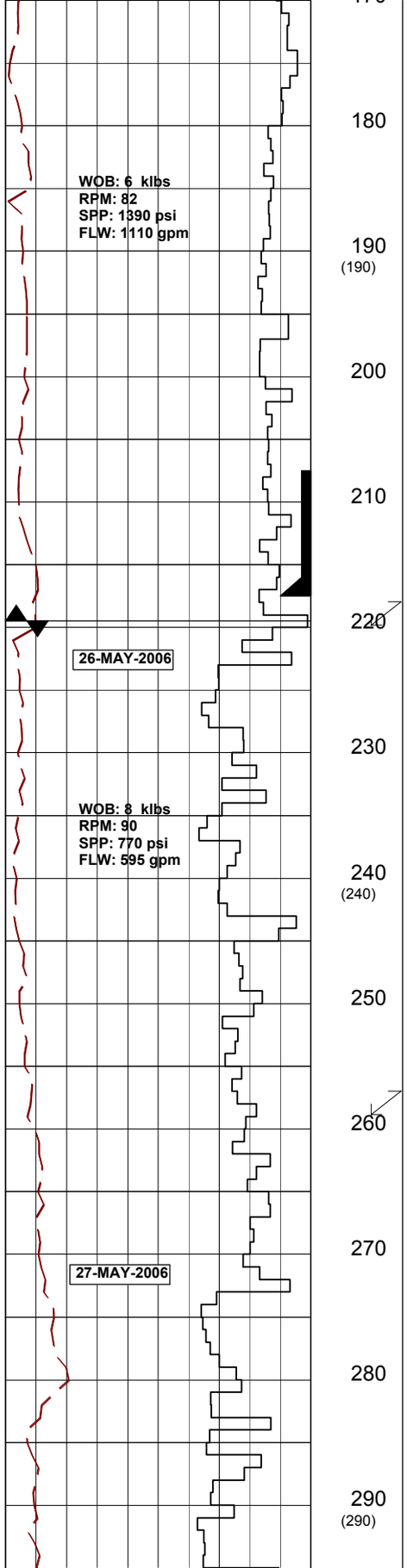
LITHOLOGY LEGEND

Limestone
Coal
Fine Sandstone
Siltstone
Carb. Siltstone
Calc. Siltstone
Calcisiltite
Calcilutite
Calcarenite
Gypsum
Marl
Dolomite
Claystone
Calc Claystone
Lithic frag
Foraminifera
Pyrite
Glauconite
Mica
Ferrous
Fossils
Calcareous
Dolomitic
Chert

ENGINEERING LEGEND

Deviation Survey
Casing Shoe
Wiper Trip
SWC (rec)
SWC (unrec)
Core
Bit Trip





HUGHES MXT BIT
W/ 30" (762mm) H.O
JETS: 3 X 12
IN: 149.5m OUT: 219.5m
RUN: 70.0m HRS: 5.50
COND: 1-1-WT-A-E-I-NO-TD

RETURNS TO SEA BED.

Survey: 208.00mMD (207.10mTVD)
0.52°Inc 196.77°Az

660mm (26") CONDUCTOR
SET @ 219m

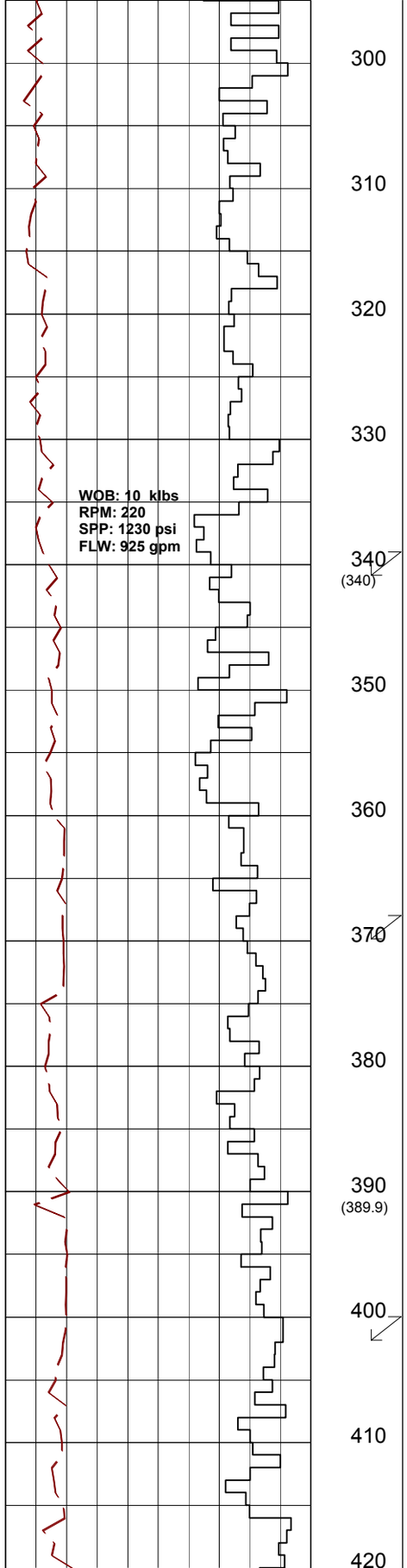
Survey: 220.40mMD (220.40mTVD)
0.29°Inc 185.42°Az.

BIT# 2RR: 23" (584mm)
VAREL ETRIG BIT
JETS: 16,20,2x22
IN: 219m OUT: 638m
RUN: 219m HRS: 14.18
COND:2-2-WT-A-E-I-NO-TD

RETURNS TO SEA.

DRILL FROM 219.5m TO 638m WITH
SEAWATER, SWEEPING THE HOLE
WITH PRE-HYDRATED GEL.

Survey: 259.70mMD (259.70mTVD)
0.89°Inc 270.66°Az.



300

310

320

330

340
(340)

350

360

370

380

390
(389.9)

400

410

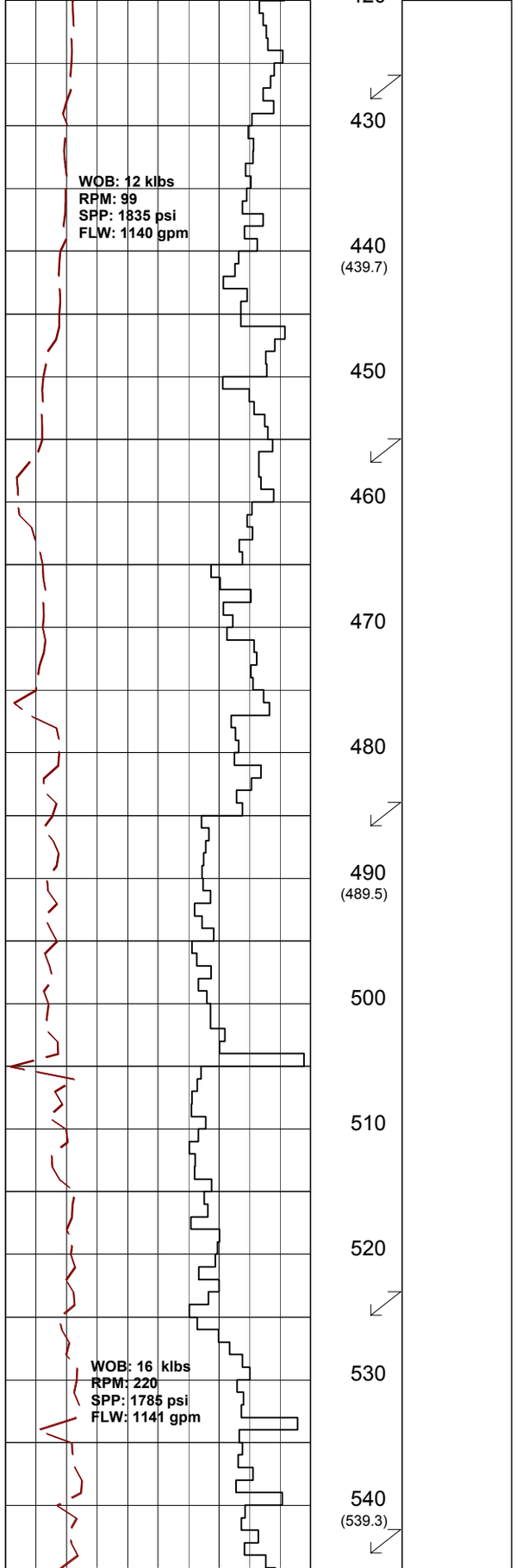
420

RETURNS TO SEA.

Survey: 341.49mMD (341.44mTVD)
2.59°Inc 273.52°Az.

Survey: 370.42mMD (370.34mTVD)
3.21°Inc 272.48Az.

Survey: 399.40mMD (399.26mTVD)
3.84°Inc 274.34Az.



Survey: 428.36mMD (428.14mTVD)
4.65°Inc 272.33Az.

RETURNS TO SEA.

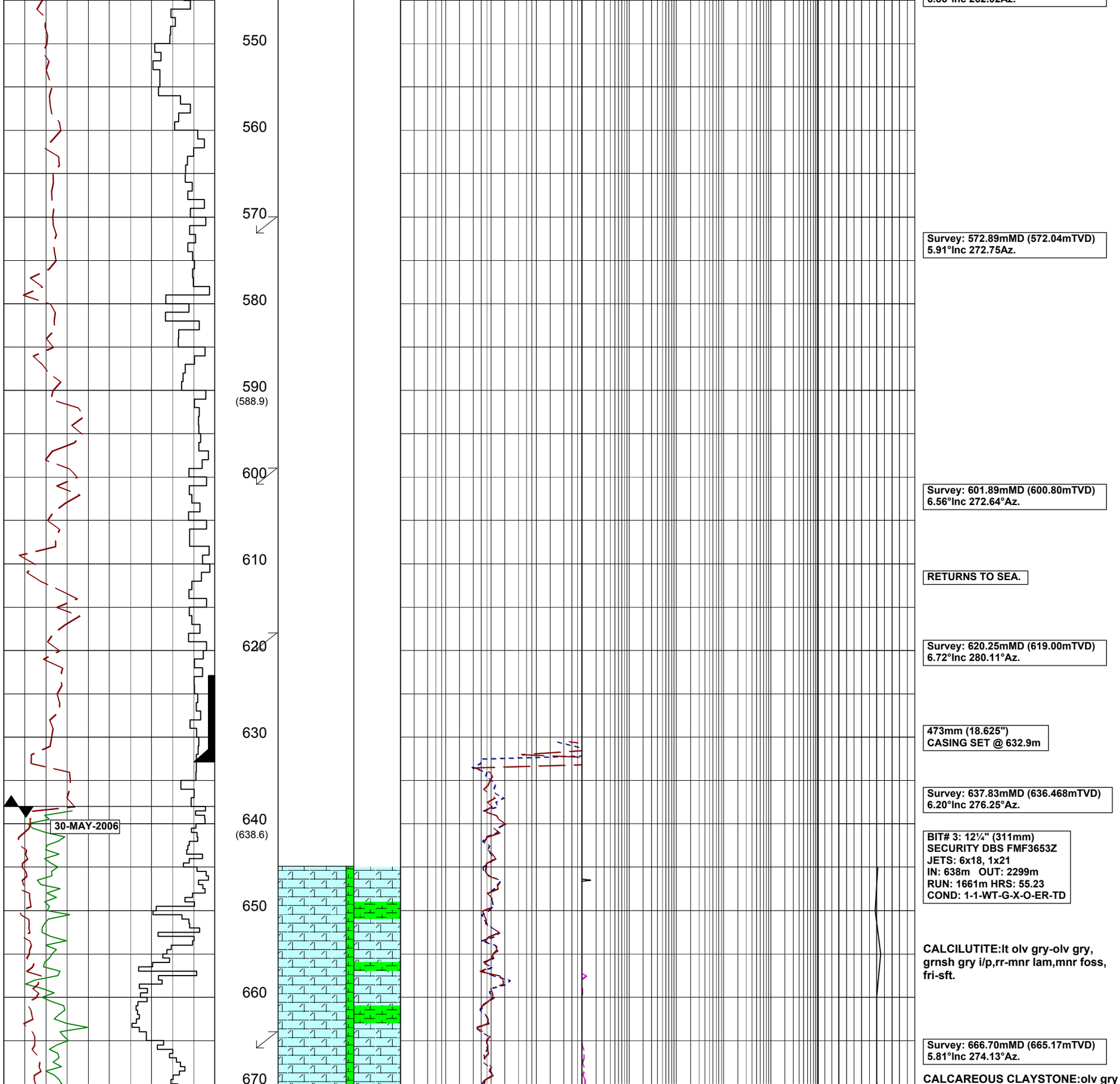
Survey: 457.28mMD (456.95mTVD)
5.51°Inc 259.78Az.

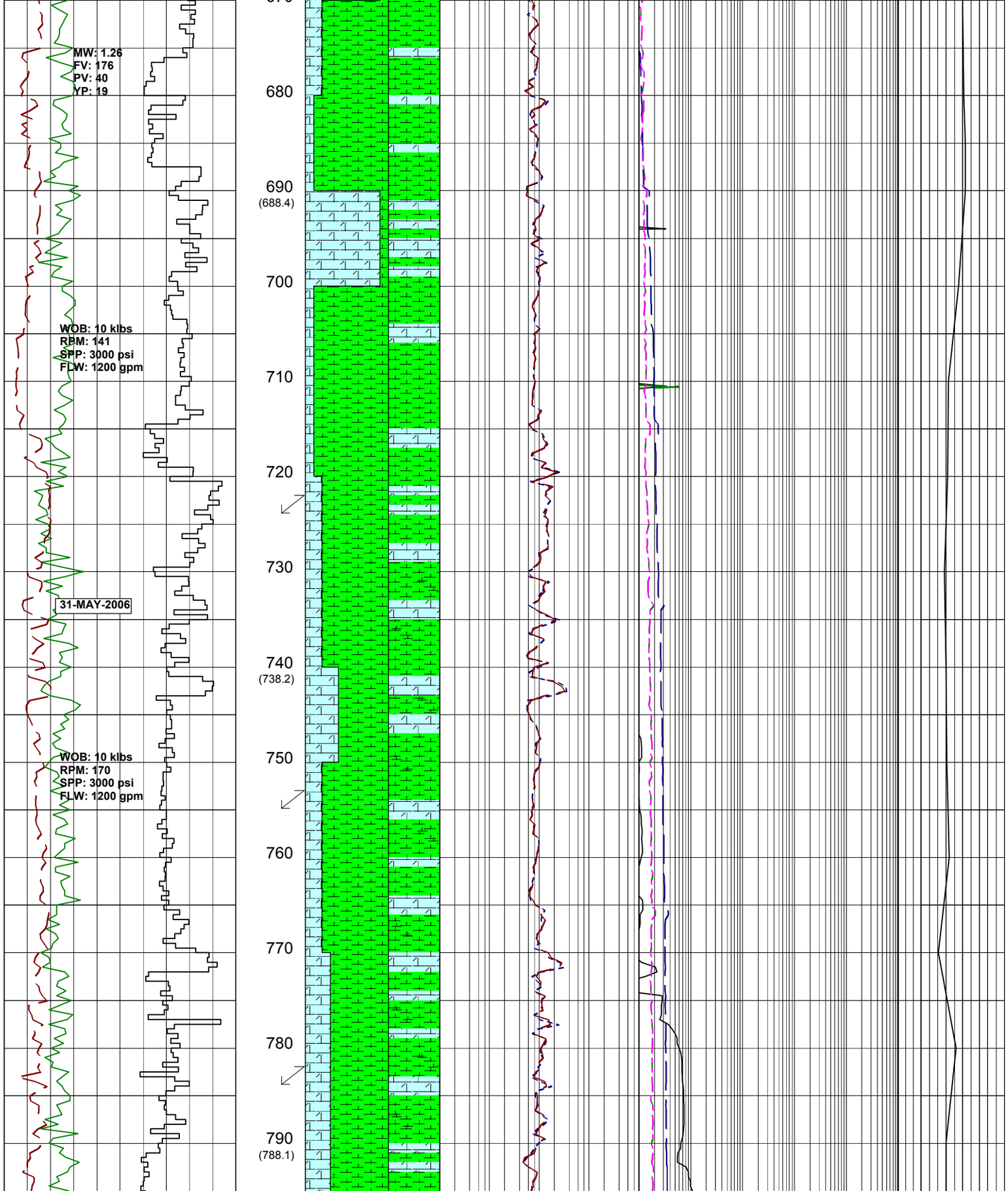
Survey: 486.27mMD (485.80mTVD)
5.77°Inc 264.15Az.

Survey: 525.14mMD (524.48mTVD)
5.58°Inc 268.32Az.

RETURNS TO SEA.

Survey: 544.15mMD (543.38mTVD)
6.86°Inc 262.02Az.


550
560
570
580
590
(588.9)
600
610
620
630
640
(638.6)
650
660
670
30-MAY-2006
Survey: 572.89mMD (572.04mTVD)
5.91°Inc 272.75Az.
Survey: 601.89mMD (600.80mTVD)
6.56°Inc 272.64°Az.
RETURNS TO SEA.
Survey: 620.25mMD (619.00mTVD)
6.72°Inc 280.11°Az.
473mm (18.625")
CASING SET @ 632.9m
Survey: 637.83mMD (636.468mTVD)
6.20°Inc 276.25°Az.
BIT# 3: 12¼" (311mm)
SECURITY DBS FMF3653Z
JETS: 6x18, 1x21
IN: 638m OUT: 2299m
RUN: 1661m HRS: 55.23
COND: 1-1-WT-G-X-O-ER-TD
CALCILUTITE:lt olv gry-olv gry,
grnsh gry i/p,rr-mnr lam,mnr foss,
fri-sft.
Survey: 666.70mMD (665.17mTVD)
5.81°Inc 274.13°Az.
CALCAREOUS CLAYSTONE:olv gry



grnsh gry,lt olv gry,abdt calc,mnr arg,mnr foss,tr forams,sft-v sft, sbblky-amorph.

CALCILUTITE:lt gry,lt olv gry, mnr arg,rr mnr foss,sft,amor.

CALCAREOUS CLAYSTONE:olv blk, dk grnsh gry,lt olv gry i/p,abdt calc, tr carb spks,sft-pred frm,blky-sbblky.

Survey: 724.56mMD (722.81mTVD) 4.14°Inc 270.99°Az.

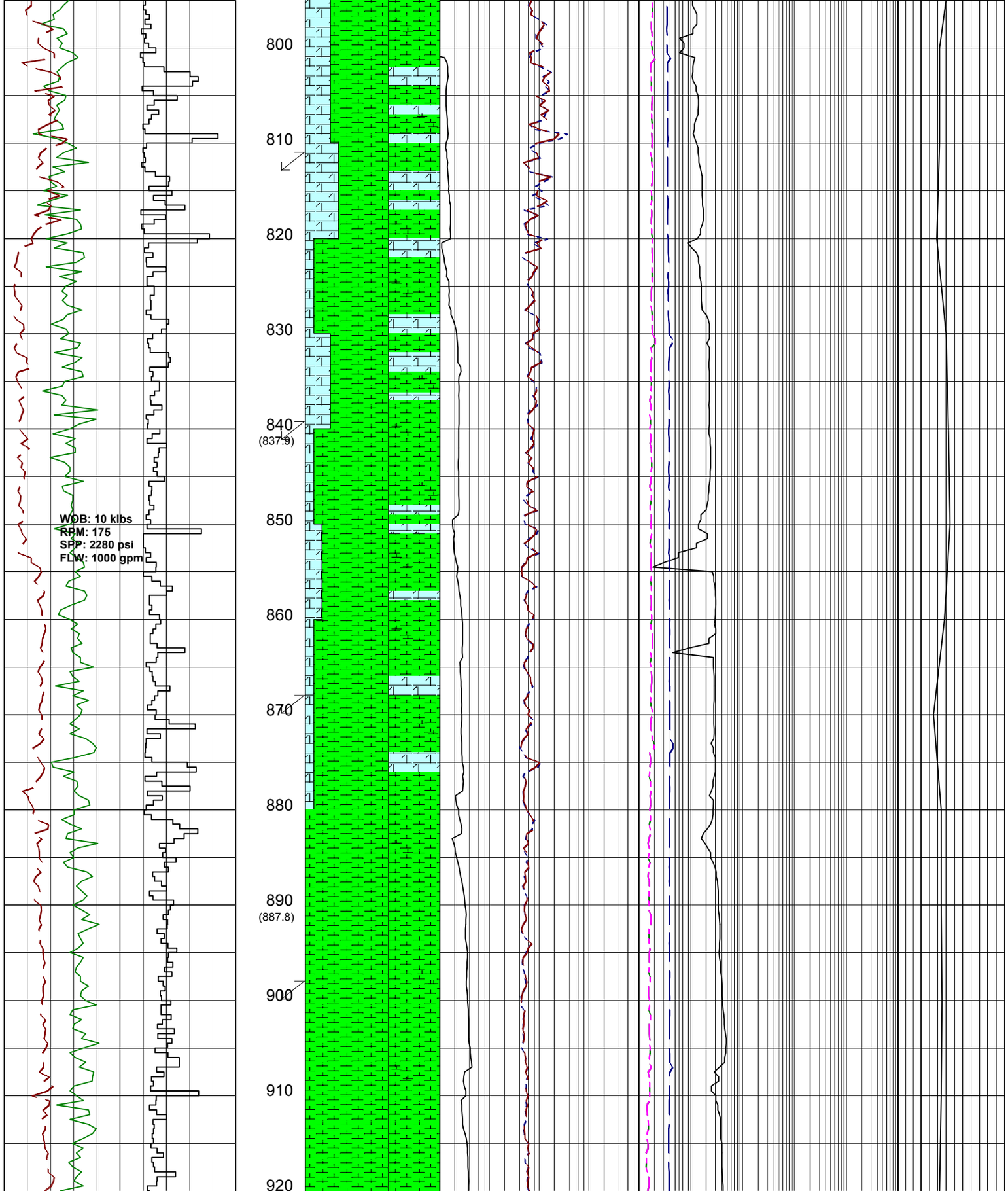
CALCAREOUS CLAYSTONE:olv blk, dk grnsh gry,lt olv gry,abdt calc, tr carb spks,sft-pred frm,blky-sbblky.

Survey: 753.49mMD (751.66mTVD) 4.50°Inc 273.29°Az.

ARGILLACEOUS CALCILUTITE:lt olv gry,lt grnsh gry i/p,abdt cly,xln i/p, off wh,tr carb spks,sft-frm,blky-sbblky.

Survey: 782.47mMD (780.55mTVD) 4.29°Inc 270.74°Az.

CALCAREOUS CLAYSTONE:lt olv gry, dk grnsh gry i/p,abdt calc,tr carb spks,frm-mod hd,tr hd,blky-sbblky.



Survey: 811.43mMD (809.44mTVD)
4.34°Inc 267.95°Az.

ARGILLACEOUS CALCILUTITE:lt olv gry,lt grnsh gry i/p,abdt cly,xln i/p, off wh,tr carb spks,rr-mnr glauc,sft-frm,blky-sbblky.

CALCAREOUS CLAYSTONE:lt olv gry,olv gry i/p,abdt calc,tr carb spks,sft-frm,sbblky-blky.

Survey: 840.35mMD (838.27mTVD)
4.62°Inc 270.66°Az.

CALCAREOUS CLAYSTONE:lt olv gry,olv gry i/p,abdt calc,tr carb spks,sft-frm,sbblky-blky.

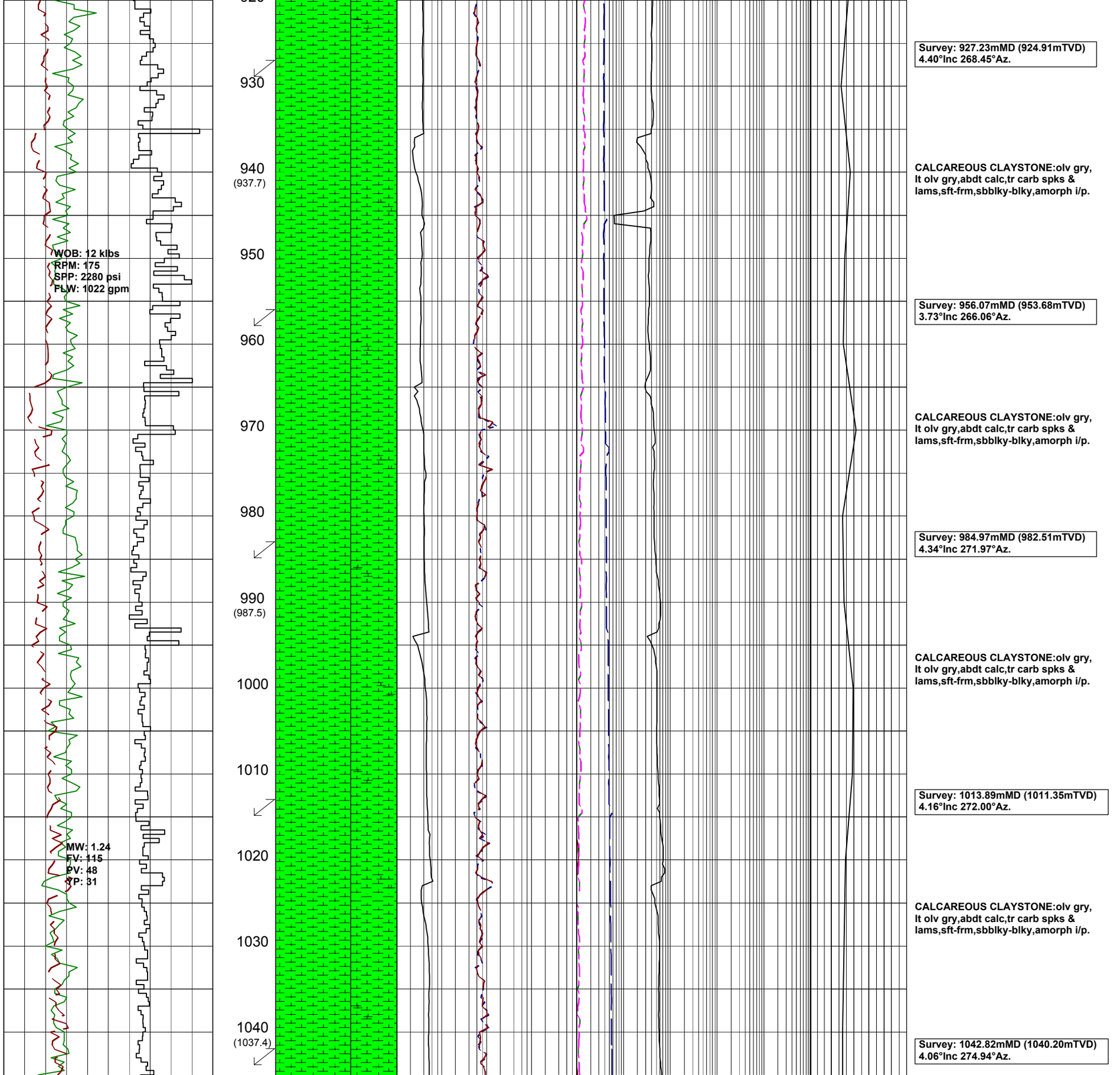
Survey: 869.34mMD (867.17mTVD)
4.34°Inc 269.72°Az.

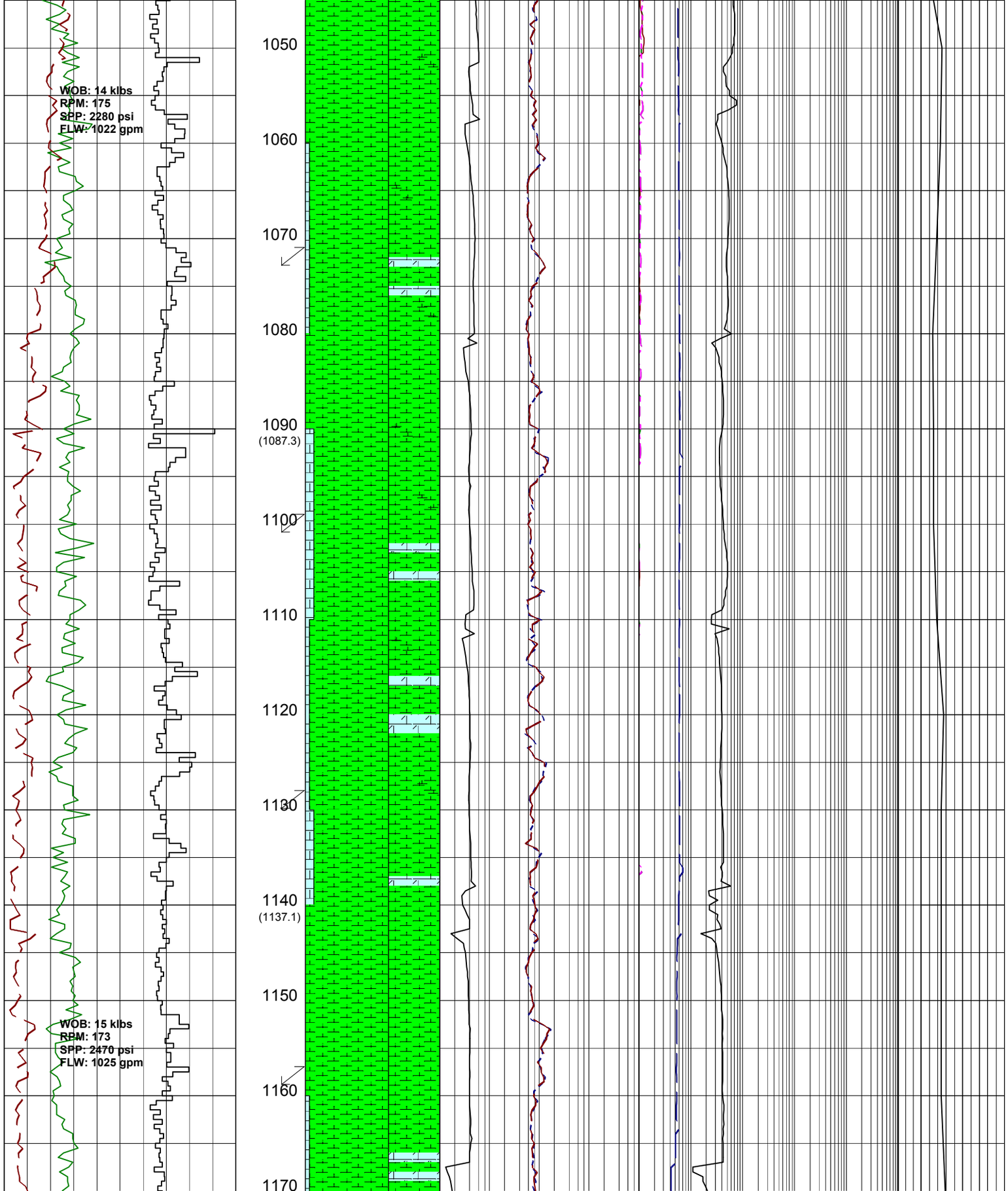
CALCAREOUS CLAYSTONE:lt olv gry,olv gry i/p,lt brn i/p,abdt calc, tr carb spks,sft-frm,sbblky-blky.

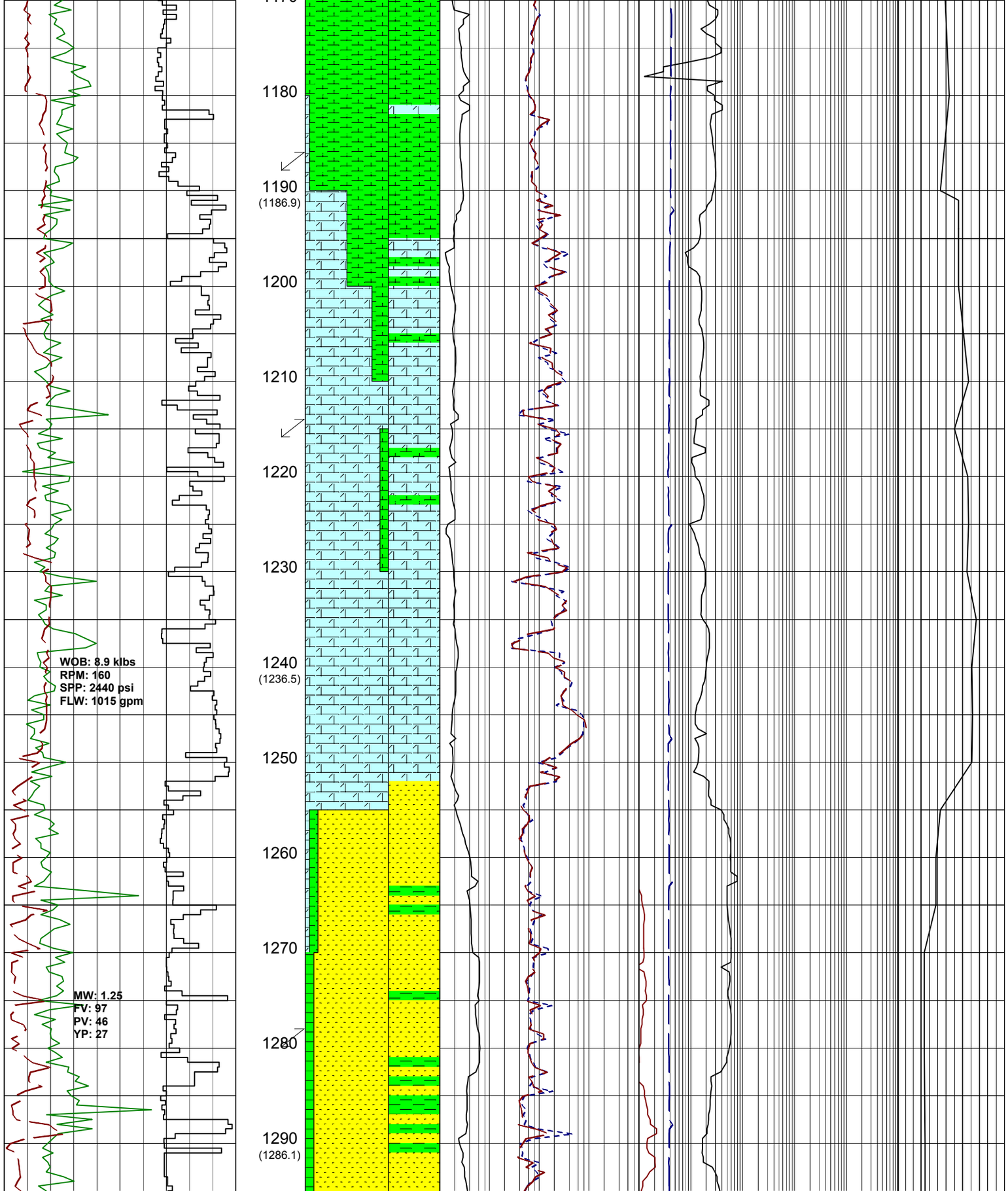
Survey: 898.28mMD (896.04mTVD)
3.92°Inc 268.79°Az.

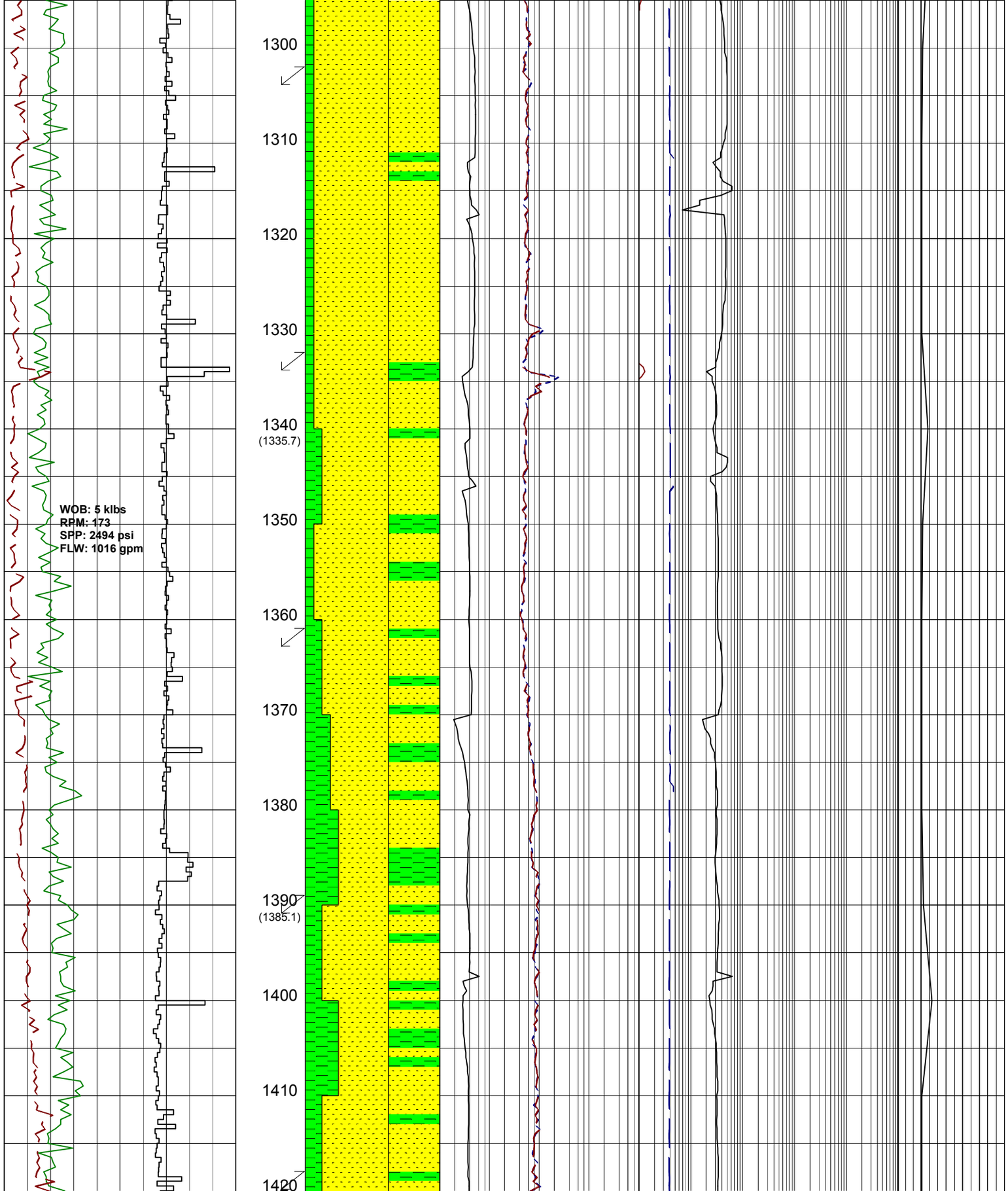
CALCAREOUS CLAYSTONE:lt olv gry,olv gry i/p,lt gry,lt brn i/p,abdt calc,tr carb spks,sft-frm,sbblky-blky, amorph i/p.

CALCAREOUS CLAYSTONE:olv gry, lt olv gry,abdt calc,tr carb spks & lams,sft-frm,sbblky-blky,amorph i/p.


930
940
(937.7)
950
960
970
980
990
(987.5)
1000
1010
1020
1030
1040
(1037.4)
WOB: 12 klbs
RPM: 175
SPP: 2280 psi
FLW: 1022 gpm
MW: 1.24
FV: 115
PV: 48
YP: 31
Survey: 927.23mMD (924.91mTVD)
4.40°Inc 268.45°Az.
CALCAREOUS CLAYSTONE:olv gry,
lt olv gry,abdt calc,tr carb spks &
lams,sft-frm,sbblky-blky,amorph i/p.
Survey: 956.07mMD (953.68mTVD)
3.73°Inc 266.06°Az.
CALCAREOUS CLAYSTONE:olv gry,
lt olv gry,abdt calc,tr carb spks &
lams,sft-frm,sbblky-blky,amorph i/p.
Survey: 984.97mMD (982.51mTVD)
4.34°Inc 271.97°Az.
CALCAREOUS CLAYSTONE:olv gry,
lt olv gry,abdt calc,tr carb spks &
lams,sft-frm,sbblky-blky,amorph i/p.
Survey: 1013.89mMD (1011.35mTVD)
4.16°Inc 272.00°Az.
CALCAREOUS CLAYSTONE:olv gry,
lt olv gry,abdt calc,tr carb spks &
lams,sft-frm,sbblky-blky,amorph i/p.
Survey: 1042.82mMD (1040.20mTVD)
4.06°Inc 274.94°Az.


WOB: 14 klbs
RPM: 175
SPP: 2280 psi
FLW: 1022 gpm
1050
1060
1070
1080
1090
(1087.3)
1100
1110
1120
1130
1140
(1137.1)
1150
WOB: 15 klbs
RPM: 173
SPP: 2470 psi
FLW: 1025 gpm
1160
1170
CALCAREOUS CLAYSTONE:olv gry, lt olv gry,abdt calc,tr carb spks & lams,sft-frm,sbblky-blky,amorph i/p.
Survey: 1071.77mMD (1069.08mTVD) 3.93°Inc 261.43°Az.
CALCAREOUS CLAYSTONE:olv gry, lt olv gry,abdt calc,tr carb spks & lams,sft-frm,sbblky-blky,amorph i/p.
Survey: 1100.72mMD (1097.96mTVD) 4.17°Inc 266.35°Az.
CALCAREOUS CLAYSTONE:olv gry lt olv gry,yel gry,abdt calc,rr carb spks & lams,sft-frm,sbblky-blky,amor.
CALCILUTITE:lt olv gry,lt gry, lt yelsh gry,abdt carb,mnr arg,rr foss,sft-v sft,sbblky-amor.
Survey: 1129.60mMD (1126.76mTVD) 4.49°Inc 268.53°Az.
CALCAREOUS CLAYSTONE:lt olv gry,olv blk,brnsh gry,olv gry,rr foss,abdt calc spks & lams,v sft-frm,sbblky-blky.
Survey: 1158.57mMD (1155.63mTVD) 5.03°Inc 274.87°Az.
CALCAREOUS CLAYSTONE:olv blk,


1180
1190
(1186.9)
1200
1210
1220
1230
1240
(1236.5)
1250
1260
1270
1280
1290
(1286.1)
WOB: 8.9 klbs
RPM: 160
SPP: 2440 psi
FLW: 1015 gpm
MW: 1.25
FV: 97
PV: 46
YP: 27
lt olv gry,brnsh gry,abdt calc,rr foss,
com carb,mnr glauc,v sft-frm,sbblky-
blky.
Survey: 1187.50mMD (1184.41mTVD)
6.72°Inc 277.51°Az.
CALCILUTITE:lt grnsh gry,lt olv
gry-dk olv gry,yelsh gry,mnr arg,
com aren,rr foss,v sft-frm,sbblky.
Survey: 1216.40mMD (1213.09mTVD)
7.21°Inc 278.85°Az.
CALCILUTITE:lt gry,lt olv gry,
yelsh gry,com arg,mnr aren,rr
foss,sft-mod hd,sbfiss-blky.
SANDSTONE:clr-trnsl,yelsh gry,
pnksh gry,med-gran,pr srt,sbang-
sbrnd,tr calc & sil cmt,tr arg mtx,
mnr glauc,rr chlor,lse,com sft-mod
hd,gd vis por,gd inf por,no fluor.
Survey: 1274.31mMD (1270.53mTVD)
7.49°Inc 272.32°Az.
SANDSTONE:trnsl-clr,pnksh gry,
yelsh gry,f-gran,pr srt,sbrnd,tr sil
& calc cmt,tr arg mtx,rr glauc,rr chlor,
sft-mod hd,com lse,gd vis & inf por,
no fluor.



Survey: 1303.24mMD (1299.21mTVD)
7.51°Inc 269.23°Az.

SANDSTONE:trnsl yelsh gry,pnksh gry,v f-gran,pr srt,sbang-sbrnd,tr calc & sil cmt,tr arg mtx,mnr glauc,rr chlor, sft-hd,com lse,pr vis por,pr inf por, no fluor.

Survey: 1332.21mMD (1327.21mTVD)
7.47°Inc 270.49°Az.

SILTY CLAYSTONE:olv gry,dk grnsh gry i/p,abdt slt,rr calc,tr carb spks, frm,sbblky-blky.

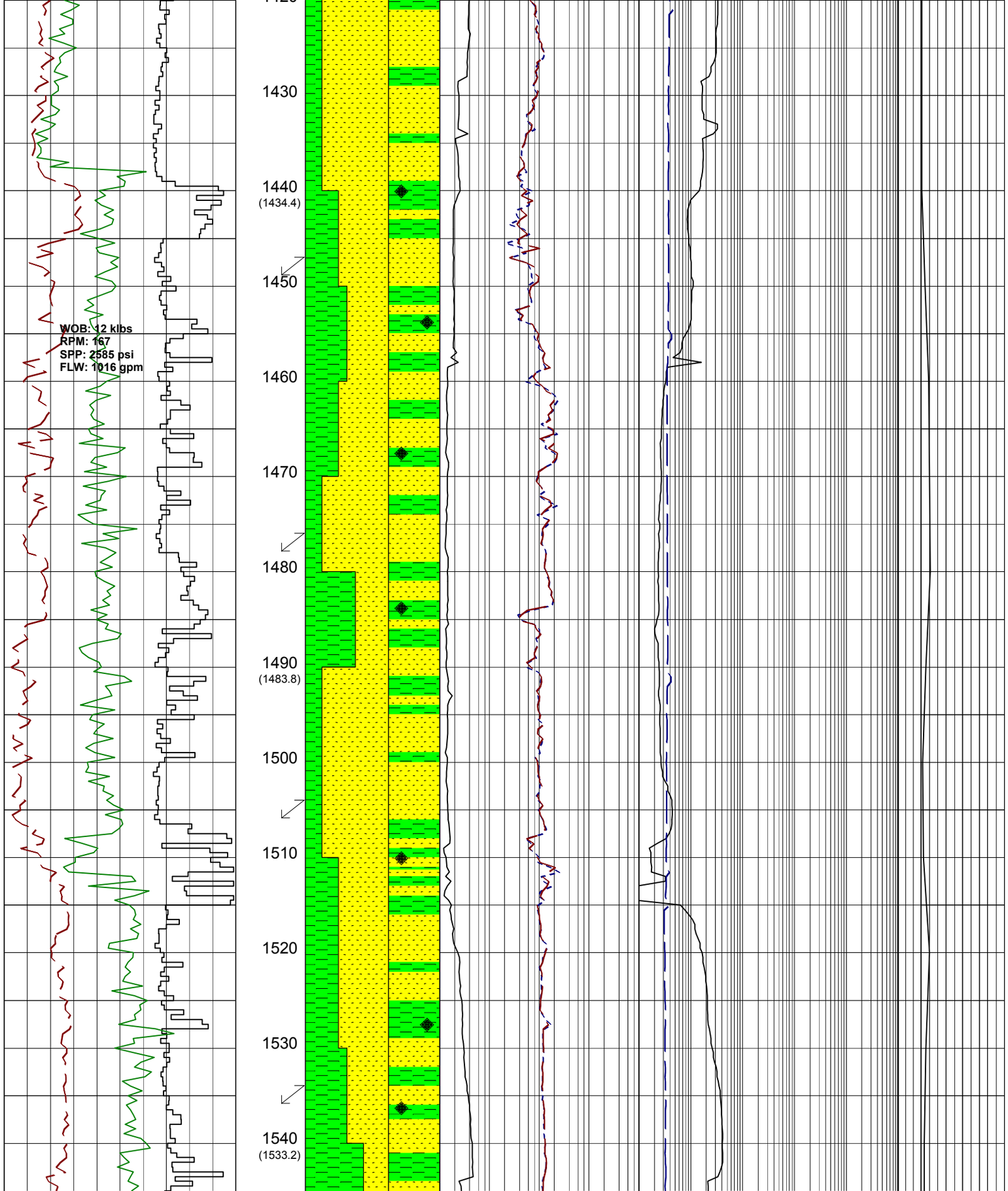
Survey: 1361.32mMD (1356.76mTVD)
8.41°Inc 273.97°Az.

SANDSTONE:clr-trnsl,frstd,tr dsky yel,wh-opq,pred f-med,com vf-crs,tr gran,pr srt,sbrnd-sbang,rr rnd, tr arg cmt,tr off wh-lt olv gry arg mtx,tr dissem pyr,rr glauc,lse,mnr fri-frm aggs,pr vis por,fr inf por, no fluor..

Survey: 1390.21mMD (1385.30mTVD)
9.62°Inc 275.12°Az.

SANDSTONE:clr-trnsl,frstd,tr dsky yel,wh-opq,pred f-med,com vf-crs,tr gran,pr srt,sbrnd-sbang,rr rnd, tr arg cmt,tr dissem pyr,rr glauc,lse, mnr fri-frm aggs,pr vis por,fr inf por, no fluor..

Survey: 1419.15mMD (1413.83mTVD)
9.54°Inc 275.91°Az.



SILTY CLAYSTONE:olv blk,grnsh blk i/p,dk gry i/p,abdt slt,com carb spks,rr glauc,rr liths,sft,sbblky-blky.

SANDSTONE:clr-trnsl,dsky yel, wh-opq,f-med grs,com crs,rr vf,pr srt,sbrnd,com rnd,mnr sbang,rr glauc, rr qtz ovgths,tr nod pyr,lse,fr inf por,no fluor.

Survey: 1448.06mMD (1442.35mTVD) 9.40°Inc 274.75°Az.

SILTY CLAYSTONE:olv gry,olv blk,grnsh blk i/p,abdt slt,mnr glauc, rr calc,tr carb,mnr nod pyr,rr carb spks & mat,frm,tr mod hd,blky-sbblky.

SANDSTONE:clr-trnsl,wh-opq,dsky yel,pl brn i/p,pred f-med,rr-mnr crs, mod srt,sbrnd,mnr rnd,rr sbang,com glauc,com nod & dissem pyr,tr qtz ovgths,lse,fr inf por,no fluor.

Survey: 1476.99mMD (1470.90mTVD) 9.05°Inc 273.21°Az.

SILTY CLAYSTONE:olv gry,olv blk,grnsh blk i/p,abdt slt,mnr glauc, rr nod pyr,rr carb spks & mat,frm,tr mod hd,blky-sbblky.

SANDSTONE:clr-trnsl,wh-opq,dsky yel,pl brn i/p,f-pred med,rr-mnr crs, mod srt,sbrnd,mnr rnd,rr sbang, com glauc,com nod & dissem pyr,tr qtz ovgths,lse,fr inf por,no fluor.

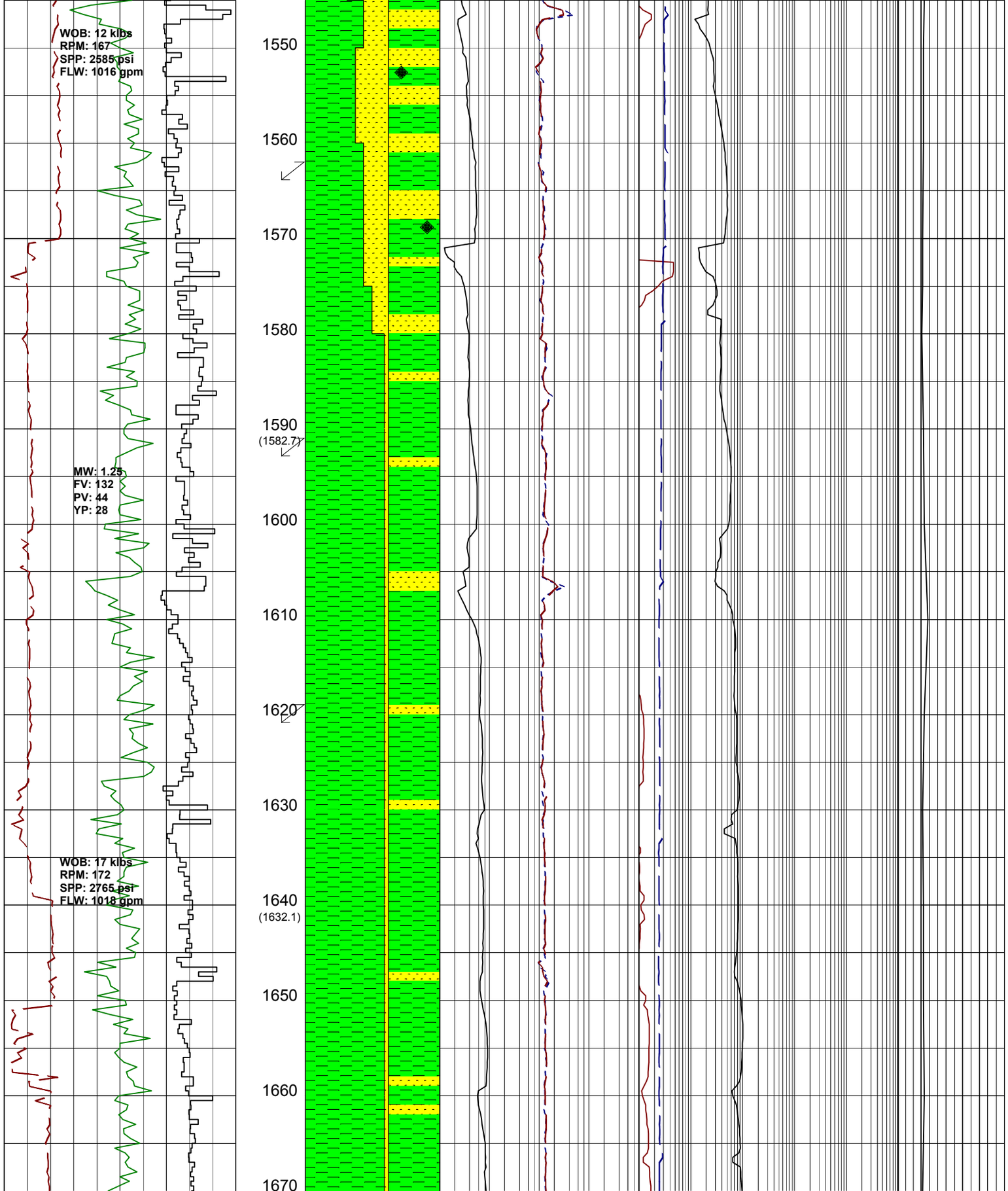
Survey: 1505.90mMD (1499.48mTVD) 8.41°Inc 272.71°Az.

SANDSTONE:clr-trnsl,wh-opq,f-pred med,mnr-com crs,rr-mnr gran,pr srt,sbang i/p,rr pyr cmt,tr arg mtx, abdt dissem & nod pyr,rr glauc,rr qtz ovgths,lse,fr inf por,no fluor.

SILTY CLAYSTONE:olv gry,dk grnsh gry,abdt slt,tr carb,tr glauc,tr carb spks & lams,tr-rr liths,sft-frm,sbblky-blky.

Survey: 1534.85mMD (1528.12mTVD) 8.28°Inc 270.88°Az.

SILTY CLAYSTONE:olv gry,dk grnsh gry,abdt slt,tr carb,tr glauc,tr carb spks & lams,tr-rr liths,sft-frm,sbblky-



blky.

SANDSTONE:clr-trnsl,wh-opq, dsky yel i/p,f-pred med,mnr-com crs, mod srt,sbrnd,rnd i/p,mnr-com sbang, tr glauc,rr-mnr dissem & nod pyr,lse, fr inf por,no fluor.

Survey: 1563.74mMD (1556.74mTVD) 8.34°Inc 273.85°Az.

SILTY CLAYSTONE:dk olv gry,olv gry,brnsh blk,rr aren,abdt slt,rr carb spks & lams,mnr liths,sft-frm,sbblky-blky.

SANDSTONE:clr-mlky wh,opq,dsky yel i/p,f-med,com crs-gran,pr-mod srt, sbrnd,tr glauc,rr dissem & nod pyr,lse, fr inf por,no fluor.

Survey: 1592.67mMD (1585.32mTVD) 8.85°Inc 273.85°Az.

SILTY CLAYSTONE:olv gry,dk olv gry,brnsh gry,tr aren,abdt slt,rr carb spks & lams,rr liths,sft-frm, sbblky-blky.

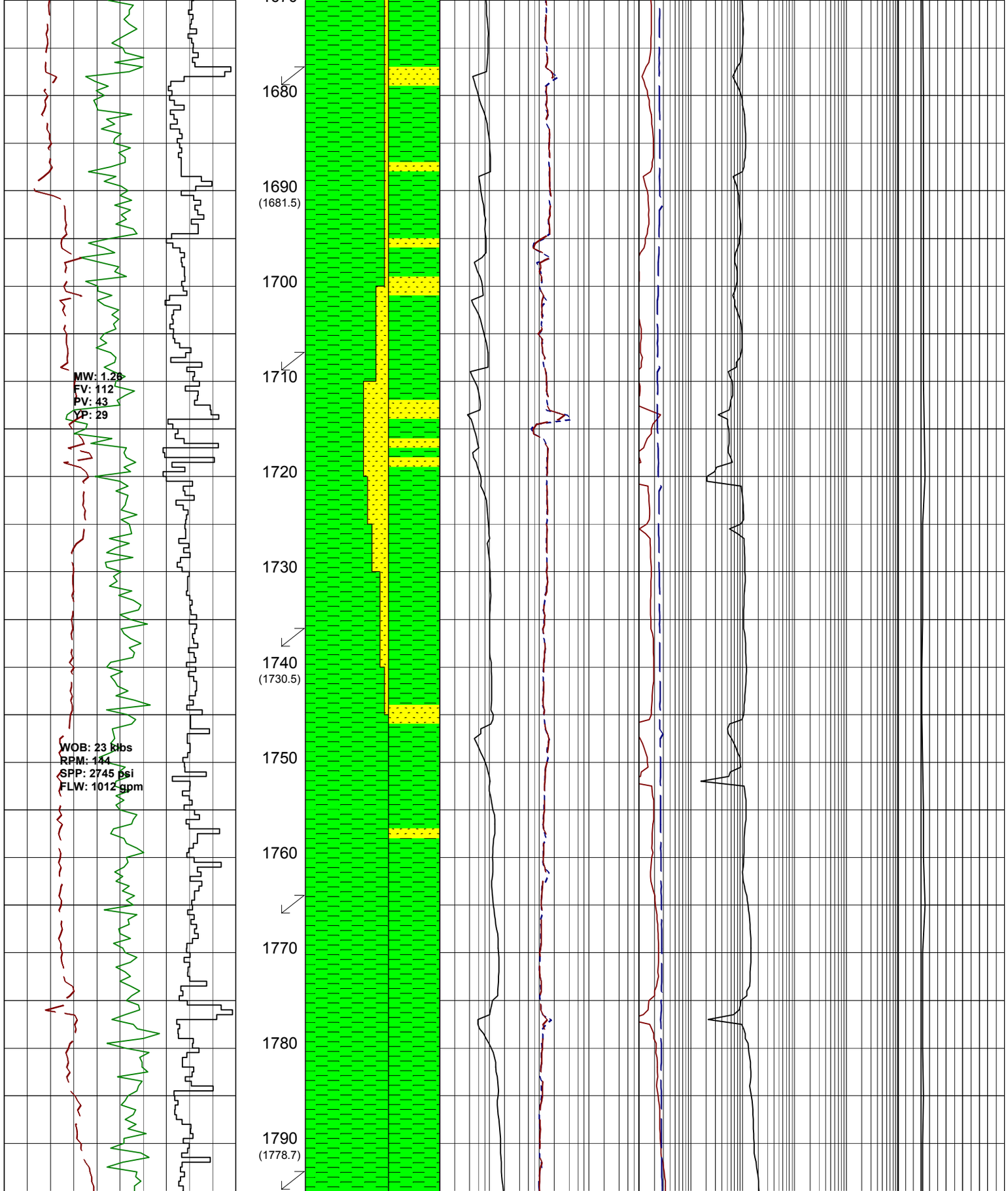
Survey: 1621.60mMD (1613.92mTVD) 8.77°Inc 273.02°Az.

SILTY CLAYSTONE:dk olv gry,brn gry,olv gry,abdt slt,com aren,tr liths, rr carb spks & lams,v sft-frm,sbblky-blky.

Survey: 1650.50mMD (1642.48mTVD) 8.90°Inc 271.30°Az.

SILTY CLAYSTONE:olv gry,dk grnsh gry,brnsh gry,com aren,rr carb spks, tr carb lams,abdt slt,v sft-mod hd, pred sft,sbblky-blky.

SANDSTONE:clr-trnsl,occ dsky yel vf-gran pred vf mod pr srt sbang-



yel,vf-gran,pred vf,mod pr srt,sbang sbrnd,lse,mod hd,fr inf por,no fluor.

Survey: 1679.43mMD (1671.04mTVD) 9.29°Inc 270.16°Az.

SILTY CLAYSTONE:dk grnsh gry, olv gry,brnsh gry,mnr aren,mnr carb spks & lams,rr glauc,abdt slt,v sft-hd,sbblky-blky.

Survey: 1708.39mMD (1699.59mTVD) 9.95°Inc 271.28°Az.

SILTY CLAYSTONE:brnsh gry,olv gry,dk grnsh gry,abdt slt,mnr aren, rr carb spks & lams,rr glauc,sft-mod hd,sbblky-blky.

SANDSTONE:clr-mlky,occ trnsl dsky yel,vf-gran,pr srt,ang-sbrnd, lse grs,mod hd,fr-pr inf por,no fluor.

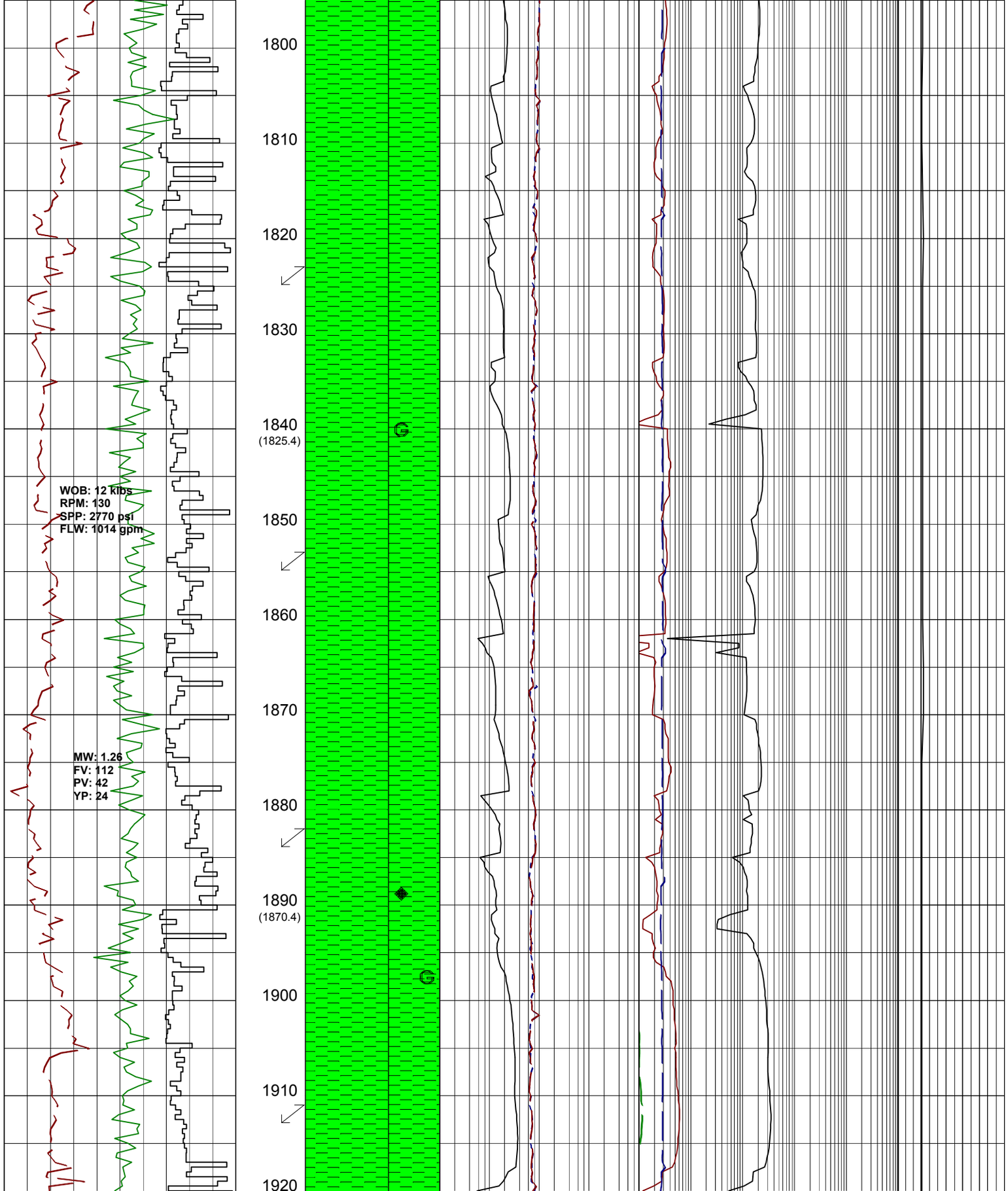
Survey: 1737.35mMD (1727.94mTVD) 13.61°Inc 273.91°Az.

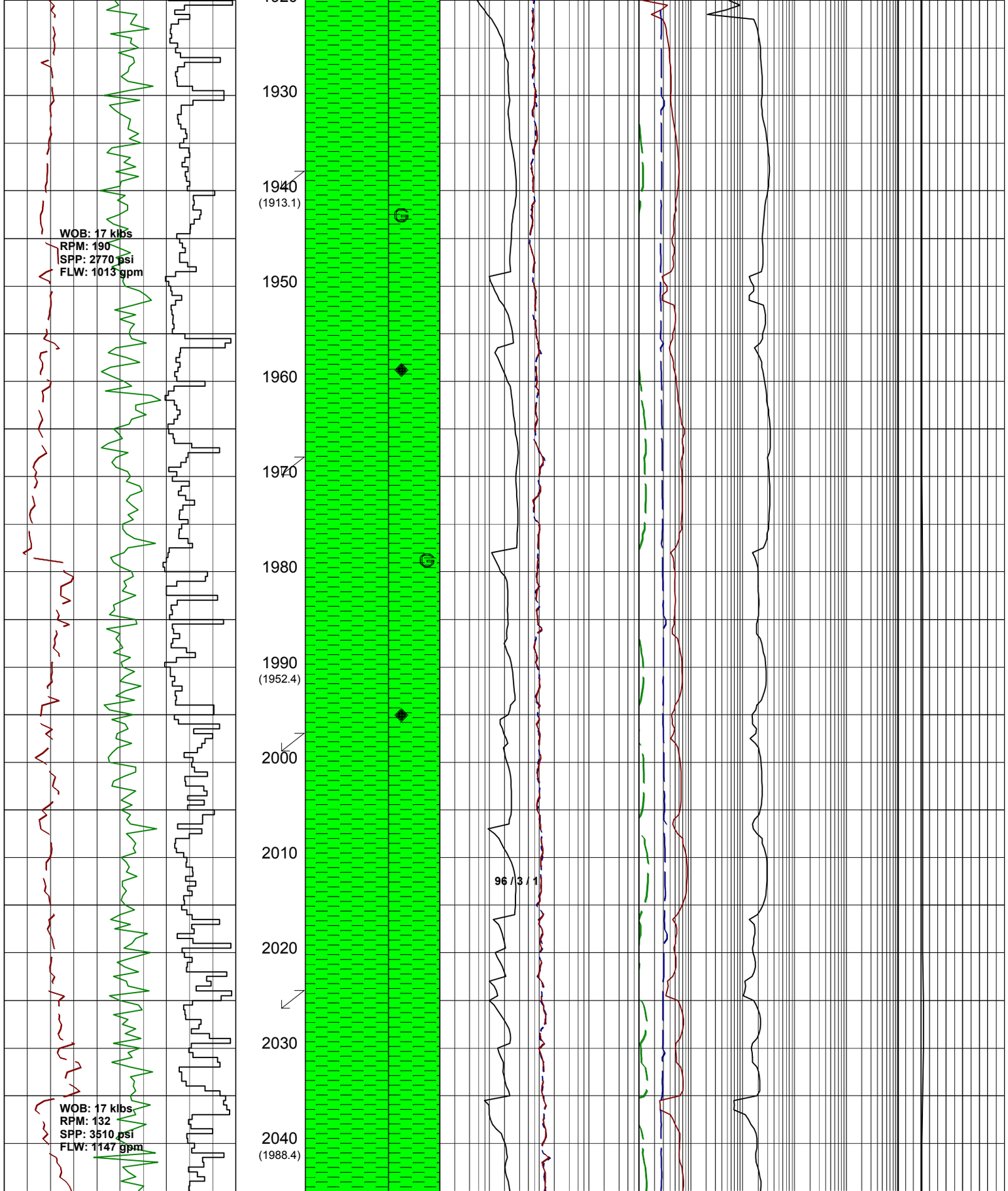
SITLY CLAYSTONE:dk olv gry,olv blk,lt olv gry,grnsh gry,mnr aren,rr carb,abdt slt,v sft-mod hd,pred sft, sbfiss-blky.

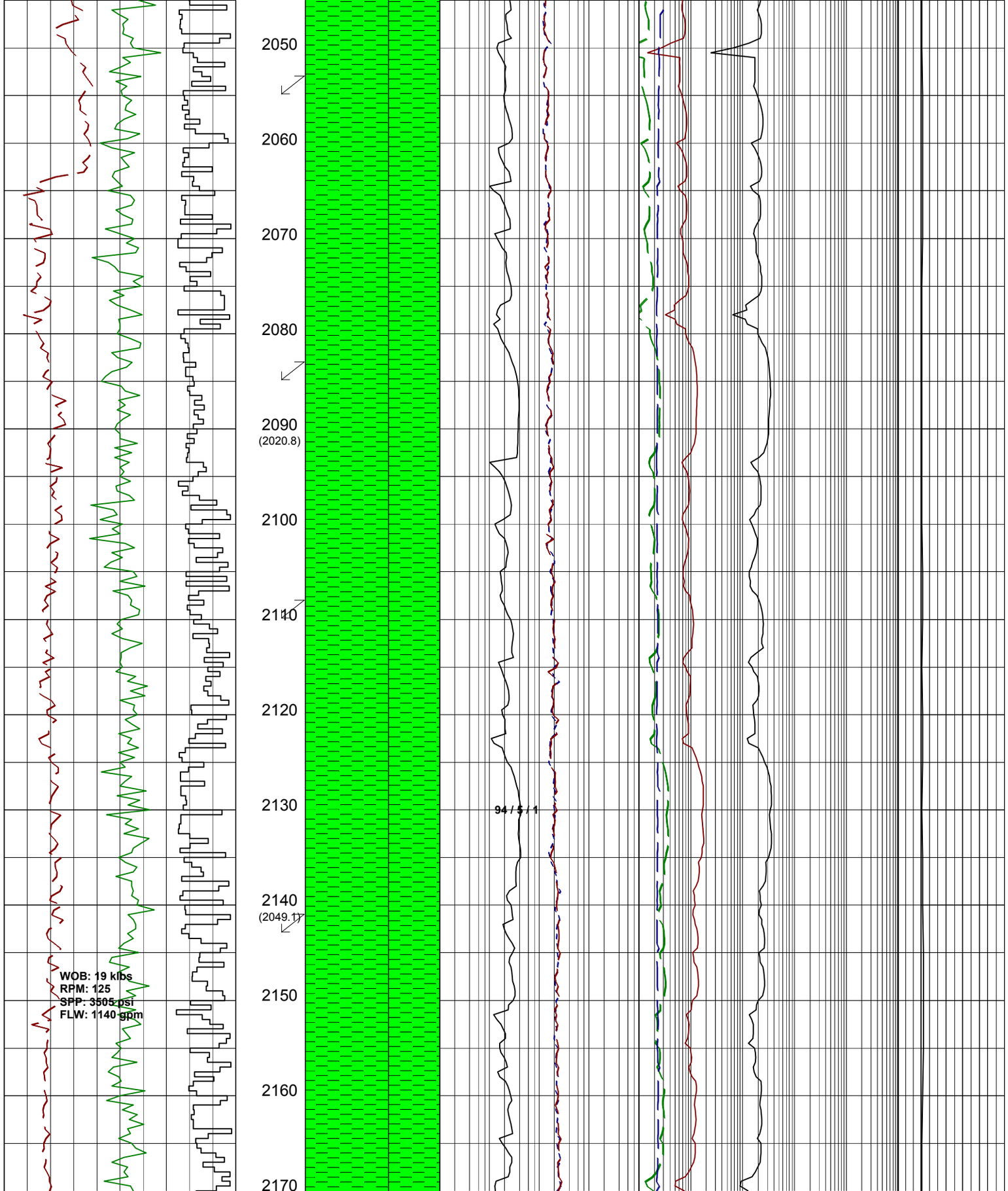
Survey: 1766.32mMD (1756.04mTVD) 14.48°Inc 273.78°Az.

SILTY CLAYSTONE:olv blk,olv gry, brnsh gry,grnsh blk,abdt slt,com aren, rr carb spks & lams,mnr glauc,sft-mod hd,sbfiss-blky.

Survey: 1795.25mMD (1783.76mTVD)


18.77°Inc 275.16°Az.
1800
SILTY CLAYSTONE:lt olv gry,
olv gry-olv blk,abdt slt,tr-rr carb
spks & lams,frm,sbblky-blky.
1810
1820
Survey: 1824.14mMD (1810.84mTVD)
21.92°Inc 277.04°Az.
1830
1840
(1825.4)
SILTY CLAYSTONE:lt olv gry,
olv gry-olv blk,rr calc,abdt slt,
tr glauc,tr-rr carb spks & lams,frm,
sbblky-blky.
WOB: 12 klbs
RPM: 130
SPP: 2770 psi
FLW: 1014 gpm
1850
Survey: 1853.06mMD (1810.84mTVD)
24.90°Inc 276.60°Az.
1860
SILTY CLAYSTONE:lt olv gry,
olv gry-olv blk,rr calc,abdt slt,
tr glauc,tr-rr carb spks & lams,frm,
sbblky-blky,sbfiss i/p.
1870
MW: 1.26
FV: 112
PV: 42
YP: 24
1880
Survey: 1882.07mMD (1863.48mTVD)
26.96°Inc 269.43°Az.
1890
(1870.4)
SILTY CLAYSTONE:lt olv gry,
olv gry-olv blk,abdt slt,rr glauc,
tr-rr carb spks & lams,tr pyr nod,
sft-frm,sbblky-blky,sbfiss i/p.
1900
1910
Survey: 1911.03mMD (1888.82mTVD)
30.94°Inc 270.57°Az.
1920


1930
1940
(1913.1)
1950
1960
1970
1980
1990
(1952.4)
2000
2010
2020
2030
2040
(1988.4)
WOB: 17 klbs
RPM: 190
SPP: 2770 psi
FLW: 1013 gpm
WOB: 17 klbs
RPM: 132
SPP: 3510 psi
FLW: 1147 gpm
96 / 3 / 1
SILTY CLAYSTONE:lt olv gry, olv gry-olv blk,abdt slt,tr glauc, tr-rr carb spks & lams,tr pyr nod, sft-frm,sbblky-blky,sbfiss i/p.
Survey: 1939.98mMD (1913.09mTVD) 35.09°Inc 272.02°Az.
SILTY CLAYSTONE:lt olv gry, olv gry-olv blk,abdt slt,tr glauc, tr-rr carb spks & lams,tr pyr nod, sft-frm,sbblky-blky,sbfiss i/p.
Survey: 1968.91mMD (1936.30mTVD) 38.21°Inc 272.59°Az.
SILTY CLAYSTONE:lt olv gry, olv gry-olv blk,abdt slt,tr glauc, tr-rr carb spks & lams,tr pyr nod, sft-frm,sbblky-blky,sbfiss i/p.
Survey: 1997.86mMD (1958.45mTVD) 41.94°Inc 273.44°Az.
SILTY CLAYSTONE:olv gry-olv blk,lt olv gry,abdt slt,rr carb spks & lams,tr glauc,rr pyr nod,v sft-frm, pred sft,sbblky-blky,i/p sbfiss.
Survey: 2026.79mMD (1979.36mTVD) 45.44°Inc 272.99°Az.
SILTY CLAYSTONE:olv blk-olv gry, lt olv gry,dk grnsh gry,abdt slt,mnr glauc,rr carb spks & lams,tr pyr nod, sft-frm,sbblky-blky.



Survey: 2055.71mMD (1999.01mTVD)
48.46°Inc 272.75°Az.

SILTY CLAYSTONE:lt olv gry,olv blk-olv gry,dk grnsh gry,abdt slt,rr glauc,rr pyr nod,sft-frm,sbblky-blky, sbfiss i/p.

Survey: 2084.64mMD (2017.83mTVD)
51.86°Inc 272.71°Az.

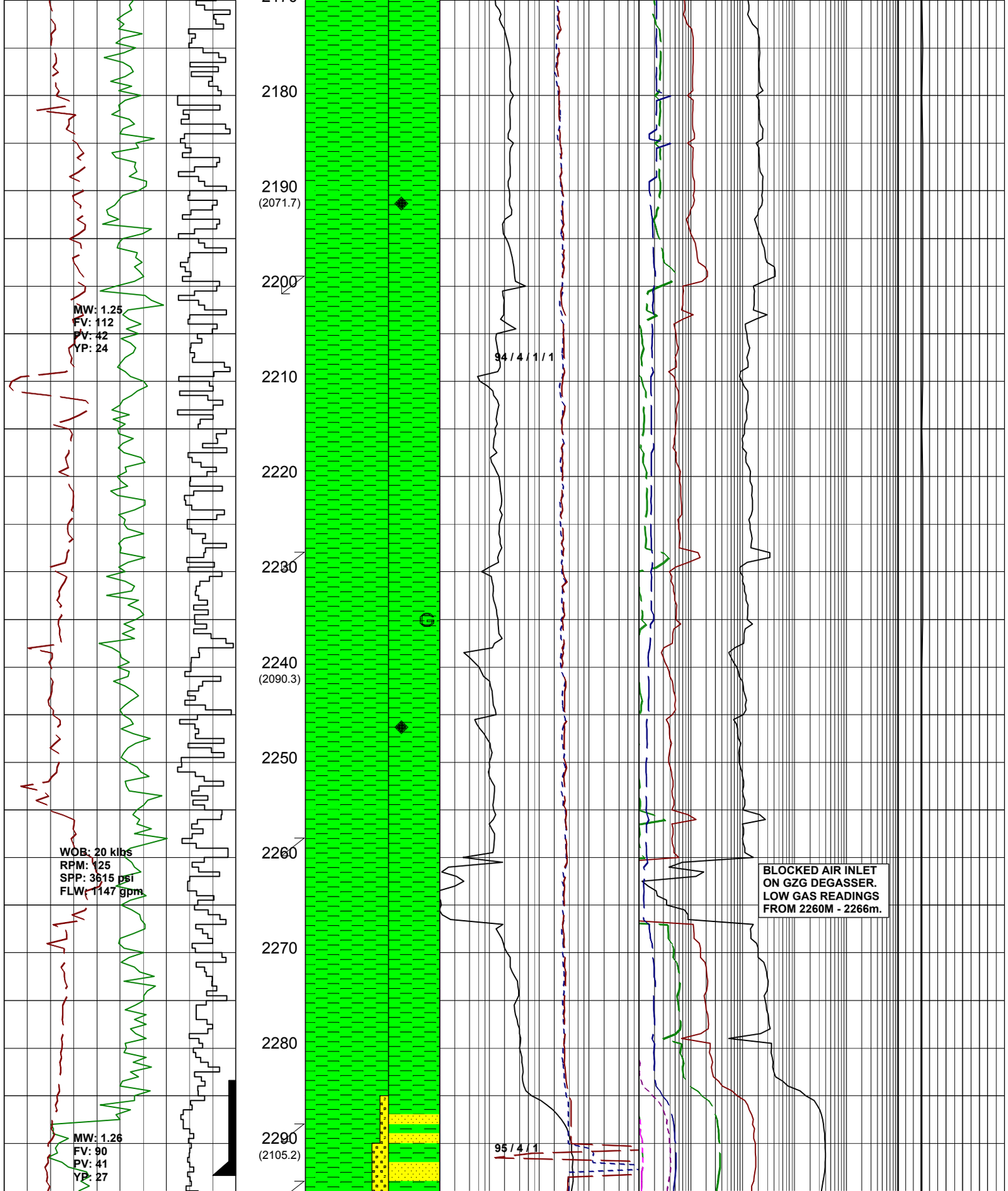
SILTY CLAYSTONE:olv gry,olv blk, lt olv gry,lt brnsh orng i/p,abdt slt, rr pyr nod,tr glauc,sft-frm,v sft i/p, sbllky-blky.

Survey: 2110.88mMD (2033.28mTVD)
54.91°Inc 272.40°Az.

SILTY CLAYSTONE:lt olv gry,dk olv gry,olv blk,lt brnsh orng i/p,abdt slt,mnr glauc,rr nod pyr,sft-frm,v sft i/p,sbblky-blky.

Survey: 2142.55mMD (2050.46mTVD)
59.40°Inc 274.22°Az.

SILTY CLAYSTONE:lt olv gry,dk olv gry,olv blk,lt brnsh orng i/p,abdt slt,mnr glauc,rr nod pyr,sft-frm,v sft i/p,sbblky-blky.



Survey: 2171.49mMD (2063.96mTVD)
64.94°Inc 274.96°Az.

SILTY CLAYSTONE:olv gry-dk olv gry,grysh blk-brnsh blk,lt olv gry i/p,abdt slt,tr nod pyr,sft-frm,sbblky-blky.

Survey: 2200.39mMD (2076.01mTVD)
65.78°Inc 275.15°Az.

SILTY CLAYSTONE:olv gry-dk olv gry,grysh blk-brnsh blk,lt olv gry i/p,abdt slt,tr nod pyr,rr glauc, sft-frm,sbblky-blky.

Survey: 2229.34mMD (2086.92mTVD)
69.94°Inc 274.26°Az.

SILTY CLAYSTONE:olv gry-dk olv gry,grysh blk-brnsh blk,lt olv gry i/p,abdt slt,rr glauc,rr dissem & nod pyr,sft-frm,mnr mod hd,sbblky-blky.

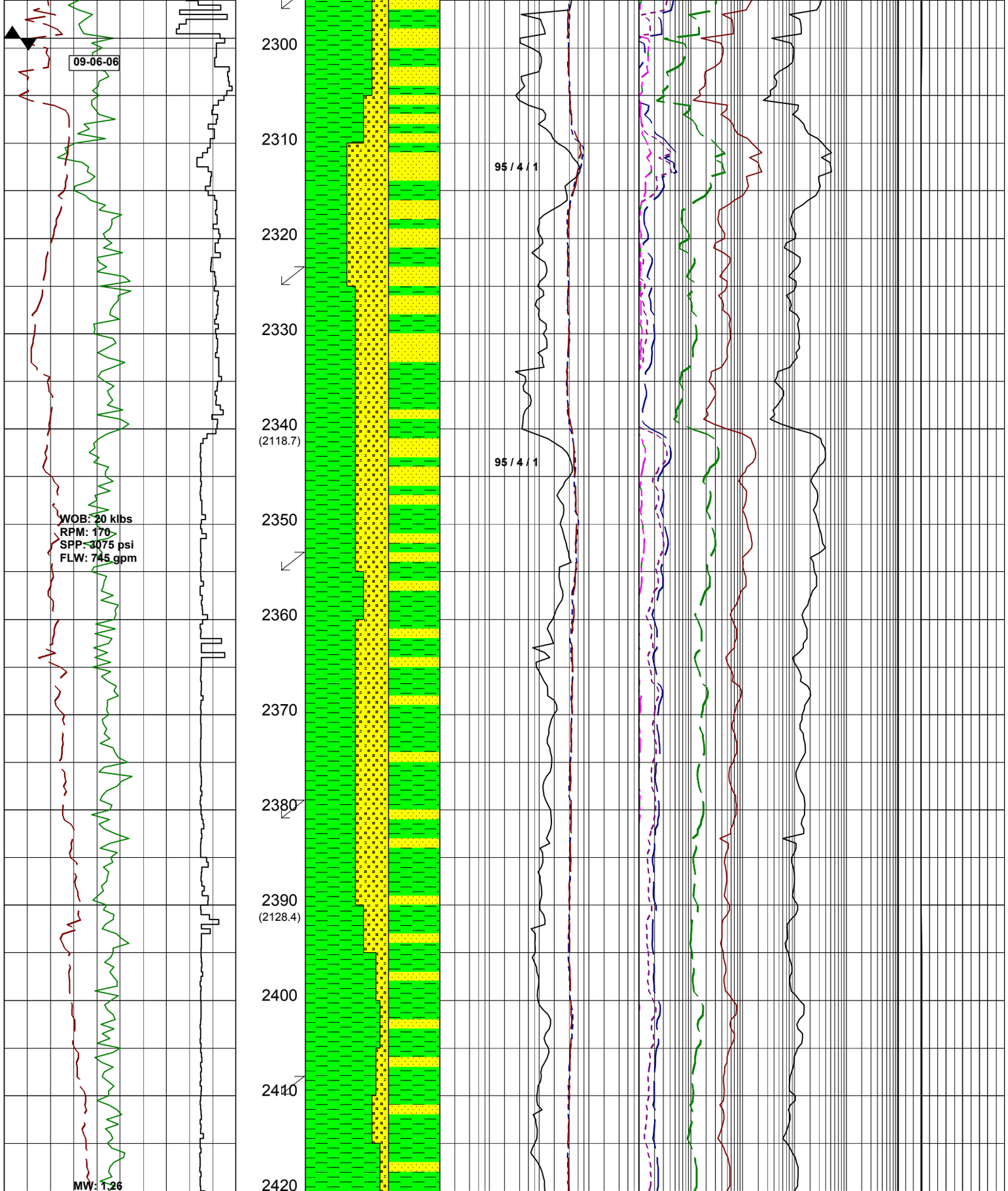
Survey: 2259.31mMD (2296.34mTVD)
73.39°Inc 274.99°Az.

SILTY CLAYSTONE:olv gry-dk olv gry,grysh blk-brnsh blk,lt olv gry i/p,abdt slt,rr glauc,rr dissem & nod pyr,sft-frm,mnr mod hd,sbblky-blky.

245mm (9-5/8")
CASING SET @ 2293.4m

Survey: 2287.29mMD (2104.43mTVD)
73.01°Inc 274.85°Az.

ARGILLACEOUS SANDSTONE: clr-trnsl,wh-opq,brnsh gry,lt olv gry,pred vf-f,tr-med,mod wl-wl srt, sbrnd-rnd,sbang i/p,tr sil cmt,com-abdt off wh-pl brn arg mtx,tr glauc, tr nod pyr,lse,mnr-com fri aggs,pr vis por,fr inf por,no fluor.



Survey: 2295.69mMD (2106.87mTVD)
72.83°Inc 273.90°Az.

BIT# 4: 8½" (216mm)
SECURITY DBS FMF3653Z
JETS: 3x16, 3x15
IN: 2299m OUT:3510m
RUN:1211m HRS:46.81
COND:1-1-WT-A-X-I-ER-BHA

ARGILLACEOUS SANDSTONE:
olv gry,brnsh gry,clr-trnsl,wh-opq,pred vf-f,wl srt,sbrnd-sbang, tr pyr cmt,com-abdt grysh yell-lt gry brn arg-slty mtx,tr dissem pyr,tr qtz ovgths,tr carb spks,pred fir-frm, rr mod hd,com lse,pr vis por,fr inf por,no fluor.

Survey: 2324.71mMD (2115.00mTVD)
74.76°Inc 273.81°Az.

SILTY CLAYSTONE:olv gry,brnsh gry, mnr med dk gry,abdt slt,mnr aren,com carb spks & frags,pred frm,mnr mod hd,blky-sbblky.

Survey: 2353.60mMD (2122.02mTVD)
77.11°Inc 274.62°Az.

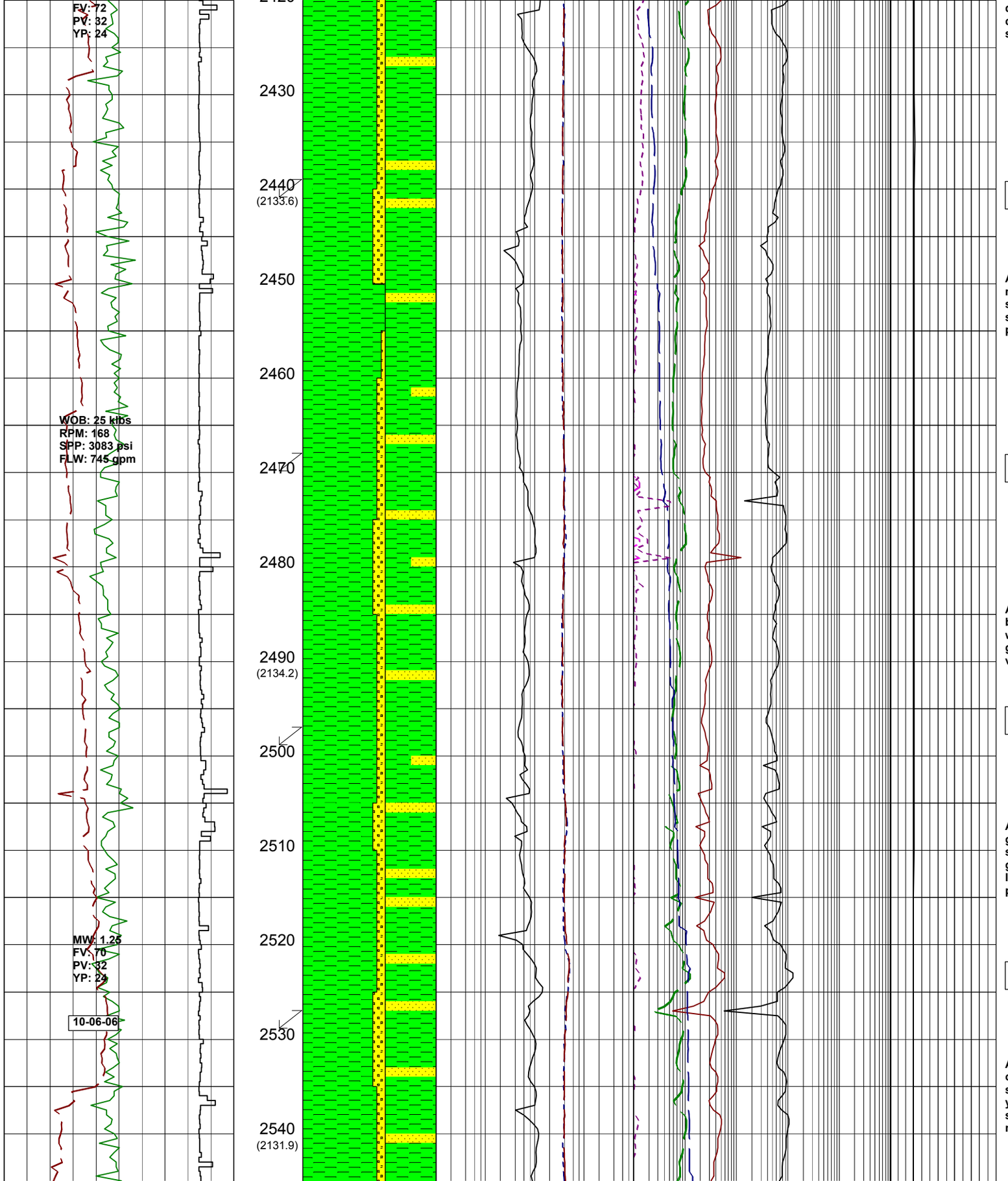
ARGILLACEOUS SANDSTONE:
olv gry,clr-trnsl,vf-f,wl srt,sbrnd, wk sil cmt,abdt yelsh gry cly mtx,tr carb spks,lse,sft-frm,v pr vis por,pr-fr inf por,no fluor.

Survey: 2380.35mMD (2127.14mTVD)
80.82°Inc 270.53°Az.

ARGILLACEOUS SANDSTONE:
olv gry,dk gry,clr-trnsl,vf-f,wl srt, sbrnd-rnd,wk sil cmt,abdt yelsh gry cly mtx,tr carb spks,lse,sft-frm,v pr vis por,pr-fr inf por,no fluor.

Survey: 2409.42mMD (2131.04mTVD)
83.75°Inc 271.69°Az.

SILTY CLAYSTONE:olv blk,brnsh blk,



dk gry i/p,abdt slt,mnr aren,rr-mnr carb spks,pred frm-mod hd,mnr sft, sbblky-blky.

Survey: 2440.38mMD (2133.66mTVD) 86.54°Inc 272.76°Az.

ARGILLACEOUS SANDSTONE:dk gry, med dk gry,olv gry,clr trnsl,vf-f,wl srt, sb rnd-rnd,abdt cly mtx,tr carb spks,lse,sft-frm,v pr vis por,pr-fr inf por,no flour.

Survey: 2469.29mMD (2134.64mTVD) 89.57°Inc 273.99°Az.

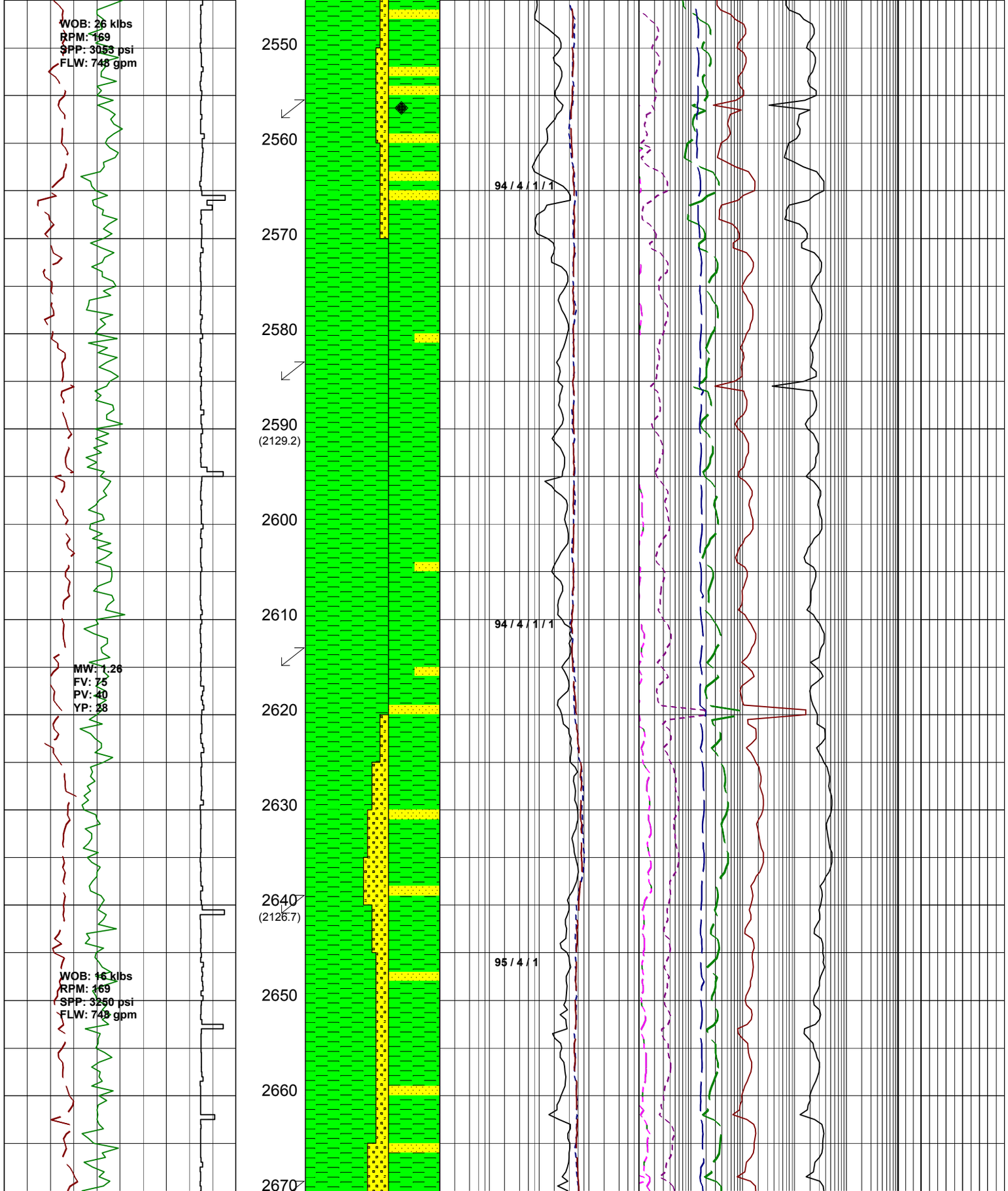
ARGILLACEOUS SANDSTONE:gry blk,dk grey,olv gry,clr trnsl,vf-rr f, wl-v wl srt,sbrnd,wk sil cmt,abdt yelsh gry cly mtx,tr carb spks,lse,sft-frm, v pr vis por, por-fr inf por,no fluor.

Survey: 2497.93mMD (2134.08mTVD) 92.66°Inc 285.85°Az.

ARGILLACEOUS SANDSTONE:olv gry,med gry,clr-trnsl,vf-f,wl-mod wl srt,rnd-sbrnd,mnr sil cmt,abdt lt gry-yelsh gry cly mtx,rr carb spks, lse,sft-frm aggs,pr vis por,pr-fr inf por,no fluor.

Survey: 2527.13mMD (2132.58mTVD) 93.22°Inc 285.11°Az.

ARGILLACEOUS SANDSTONE: olv gry,dk gry,clr-trnsl,vf-f,wl srt, sbrnd-rnd,mnr sil cmt,abdt lt gry-yelsh gry cly mtx,tr carb spks,lse, sft-frm,v pr vis por,pr-fr inf por, no fluor.



SILTY CLAYSTONE:olv gry,dk grnsh gry,dk gry,abdt slt,rr-mnr aren, com carb spks & frags,tr nod pyr,pred frm,mod hd,sbblky-blky.

Survey: 2556.06mMD (2130.99mTVD) 93.09°Inc 282.07°Az.

SILTY CLAYSTONE:olv gry,dk grnsh gry,dk gry,abdt slt,rr-mnr aren, com carb spks & frags,rr nod pyr,pred frm,mod hd,sbblky-blky.

ARGILLACEOUS SANDSTONE:lt olv gry,olv gry-med dk gry,off wh i/p, clr-trnsl,vf-f,wl srt,rnd-sbrnd,sbang i/p,mnr sil cmt,abdt lt gry-yelsh gry cly mtx,rr-mnr carb spks,tr dissem pyr, rr glauc,sft-frm aggs,com lse,pr vis por,fr inf por,no fluor.

Survey: 2584.99mMD (2129.41mTVD) 93.16°Inc 278.76°Az.

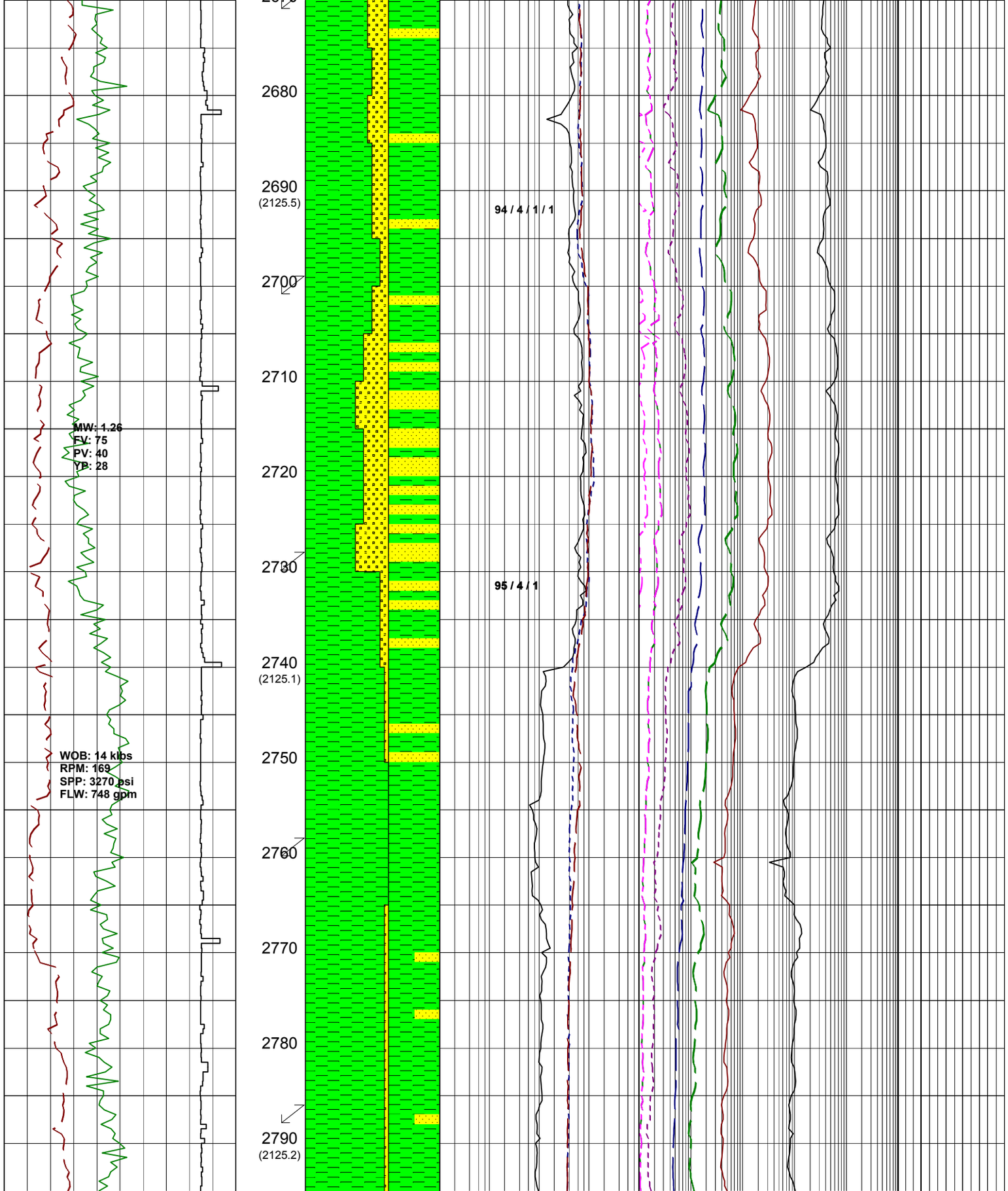
SILTY CLAYSTONE:olv gry,dk grnsh gry,dk gry,abdt slt,rr-mnr aren, com carb spks & frags,pred frm,mod hd,sbblky-blky.

Survey: 2613.89mMD (2127.90mTVD) 92.85°Inc 276.08°Az.

ARGILLACEOUS SANDSTONE:lt olv gry,olv gry-med dk gry,wh-off wh,clr-trnsl,vf-f,wl srt,rnd-sbrnd,sbang i/p, mnr sil cmt,abdt grysh yell cly mtx,rr-mnr carb spks,rr glauc,sft-frm aggs, abdt lse,pr vis por,fr inf por,no fluor.

Survey: 2642.82mMD (2126.52mTVD) 92.60°Inc 275.29°Az.

ARGILLACEOUS SANDSTONE:olv blk,dk gry,wh-off wh clr-trnsl,vf-f, wel srt,rnd-sbrnd,sbang,mnr sil cmt, abdt yelsh gry cly mtx,tr-rr carb spks, tr glauc,sft-frm aggs,abdt lse,pr vis por,fr inf por.



Survey: 2671.78mMD (2125.74mTVD)
90.50°Inc 275.95°Az.

SILTY CLAYSTONE:olv gry,dk grnsh gry,abdt slt,mnr carb spks, pred frm,mnr mod hd,sbblky-blky.

Survey: 2700.74mMD (2125.42mTVD)
90.75°Inc 275.69°Az.

ARGILLACEOUS SANDSTONE: olv gry,dk gry,clr-trnsl,vf-f,wl srt, sbrnd-rnd,abdt cly mtx,tr carb spks, lse,sft-frm,v pr vis por,pr-fr inf por.

Survey: 2729.71mMD (2125.11mTVD)
90.50°Inc 276.17°Az.

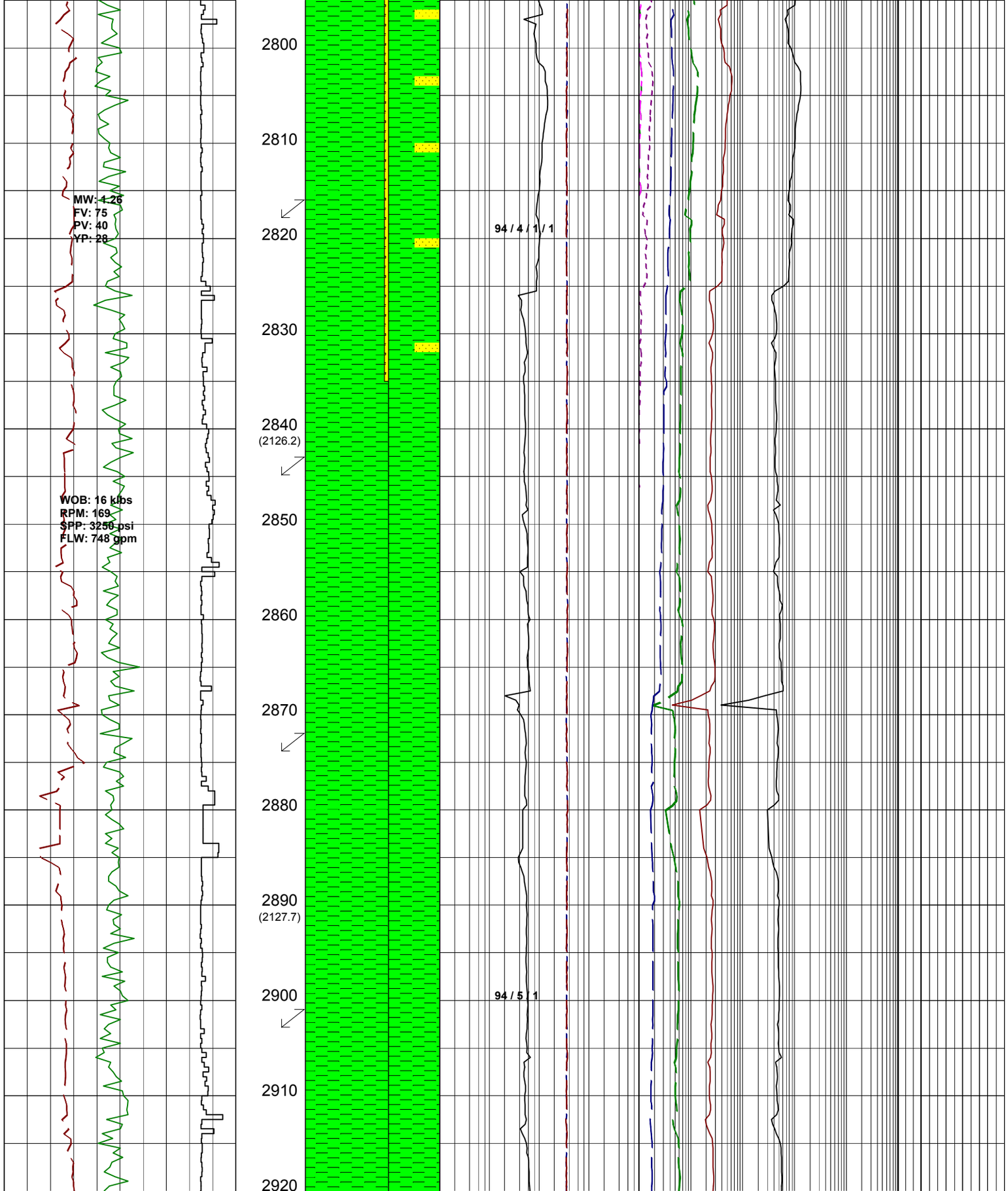
SILTY CLAYSTONE:olv gry,dk grnsh gry,dk gry,abdt slt,rr-mnr aren, com carb spks & frags,rr nod pyr,pred frm,mod hd,sbblky-blky.

SILTY CLAYSTONE:grsh blk,dk gry abdt slt,mnr aren,mnr-com carb spks & mat,pred frm-mod hd,sbblky-blky.

Survey: 2758.64mMD (2124.96mTVD)
90.07°Inc 275.82°Az.

SILTY CLAYSTONE:grysh blk, dk gry olv gry,abdt slt,mnr aren,mnr-com carb spks & mat,pred frm-mod hd, sbblky-blky.

Survey: 2786.01mMD (2125.14mTVD)
89.20°Inc 277.60°Az.



ARGILLACEOUS SANDSTONE:olv gry,med gry,lt olv gry-off wh i/p,clr-trnsl i/p,pred vf,f i/p,wl srt,sbrnd, mnr sbang,tr-rr sil cmt,abdt yelsh gry cly mtx,com carb spks & mat,lse,com frm-fri,pr vis por,fr inf por,no fluor.

Survey: 2816.45mMD (2125.74mTVD) 88.53°Inc 274.82°Az.

SILTY CLAYSTONE:grysh blk,dk gry olv gry,abdt slt,mnr aren,mnr-com carb spks & mat,pred frm-mod hd, sbblky-blky.

Survey: 2843.56mMD (2126.31mTVD) 89.08°Inc 272.77°Az.

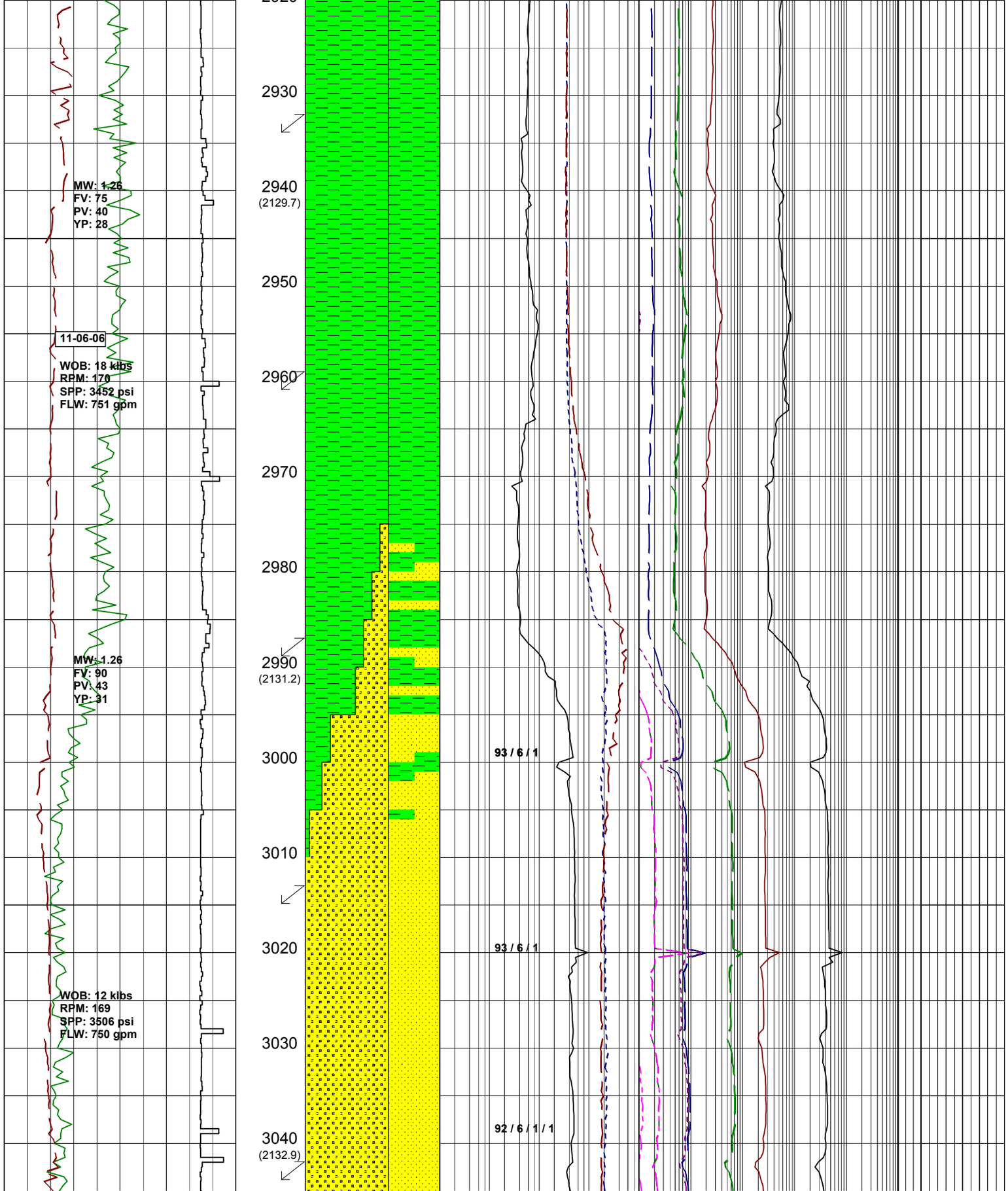
SILTY CLAYSTONE:grysh blk,dk gry olv gry,abdt slt,mnr aren,mnr-com carb spks & mat,pred frm-mod hd, sbblky-blky.

Survey: 2872.88mMD (2127.02mTVD) 88.15°Inc 274.77°Az.

SILTY CLAYSTONE:grysh blk,dk gry olv gry,abdt slt,rr wk calc,mnr aren, mnr-com carb spks & mat,pred frm-mod hd,hd i/p,sbblky-blky.

Survey: 2901.72mMD (2128.13mTVD) 87.41°Inc 276.08°Az.

SILTY CLAYSTONE:grysh blk,dk gry olv gry,abdt slt,rr wk calc,mnr aren, mnr-com carb spks & mat,pred frm-mod hd,hd i/p,sbblky-blky.



Survey: 2932.30mMD (2129.45mTVD)
87.66°Inc 276.72°Az.

SILTY CLAYSTONE:grysh blk,dk gry olv gry,abdt slt,mnr aren,mnr-com carb spks & mat,pred frm-mod hd, sbblky-blky.

Survey: 2961.25mMD (2130.41mTVD)
88.53°Inc 273.72°Az.

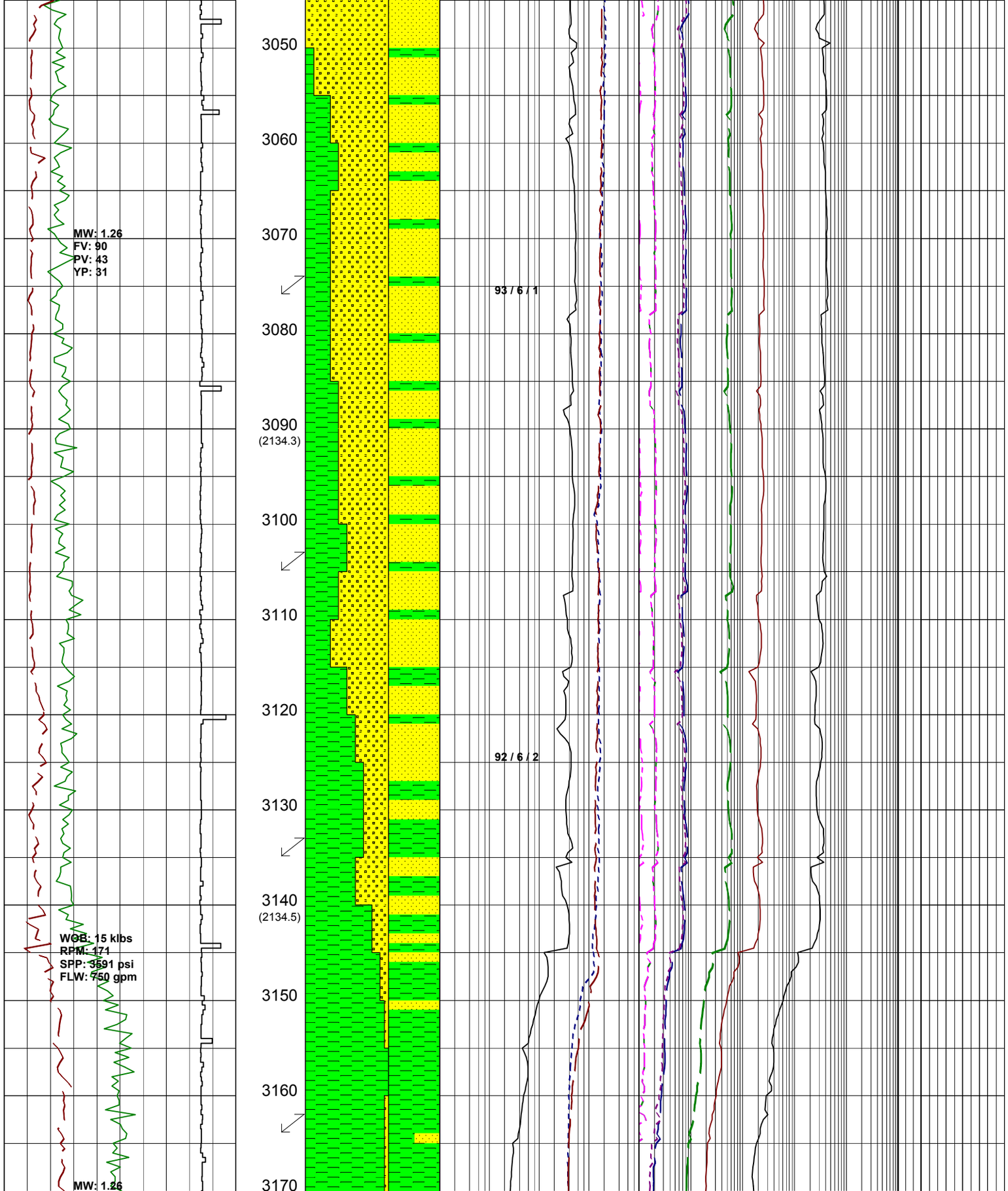
SILTY CLAYSTONE:grysh blk,dk gry olv gry,abdt slt,rr wk calc,mnr aren, mnr-com carb spks & mat,pred frm-mod hd,hd i/p,sbblky-blky.

Survey: 2990.18mMD (2131.23mTVD)
88.22°Inc 277.49°Az.

SANDSTONE:olv gry,med dk gry,clr-trnsl,vf-crs,pr srt,sbrnd-rnd,mnr sil cmt,mnr cly mtx,tr-rr carb spks, pred lse,com fri aggs,fr vis por,fr inf por,no fluor.

Survey: 3019.10mMD (2132.19mTVD)
87.97°Inc 275.06°Az.

SANDSTONE:olv gry,med gry, mlky,clr-trnsl,pred vf-f,mnr med-crs,pr-mod srt,sbrnd,wk sil cmt,mnr yelsh gry-ltbrn cly-slty mtx,tr carb spks,tr glauc,pred lse,fri aggs,fr vis por,fr infpor,no fluor.



Survey: 3048.03mMD (2133.23mTVD)
87.91°Inc 276.21°Az.

SILTY CLAYSTONE:olv gry,olv blk, mod yel brn,dk yel brn,f-vf qtz grs, sft,sbblky.

Survey: 3076.97mMD (2134.07mTVD)
88.77°Inc 276.21°Az.

ARGILLACEOUS SANDSTONE: lt olv gry-olv gry,med lt gry,clr-trnsl,mlky i/p,vf-f,mod wl srt,sbrnd-sbang i/p,mod sil cmt,com yelsh gry-lt gey brn cly mtx,tr carb spks, rr glauc,lse,fri aggs,pr vis por, fr inf por,no fluor.

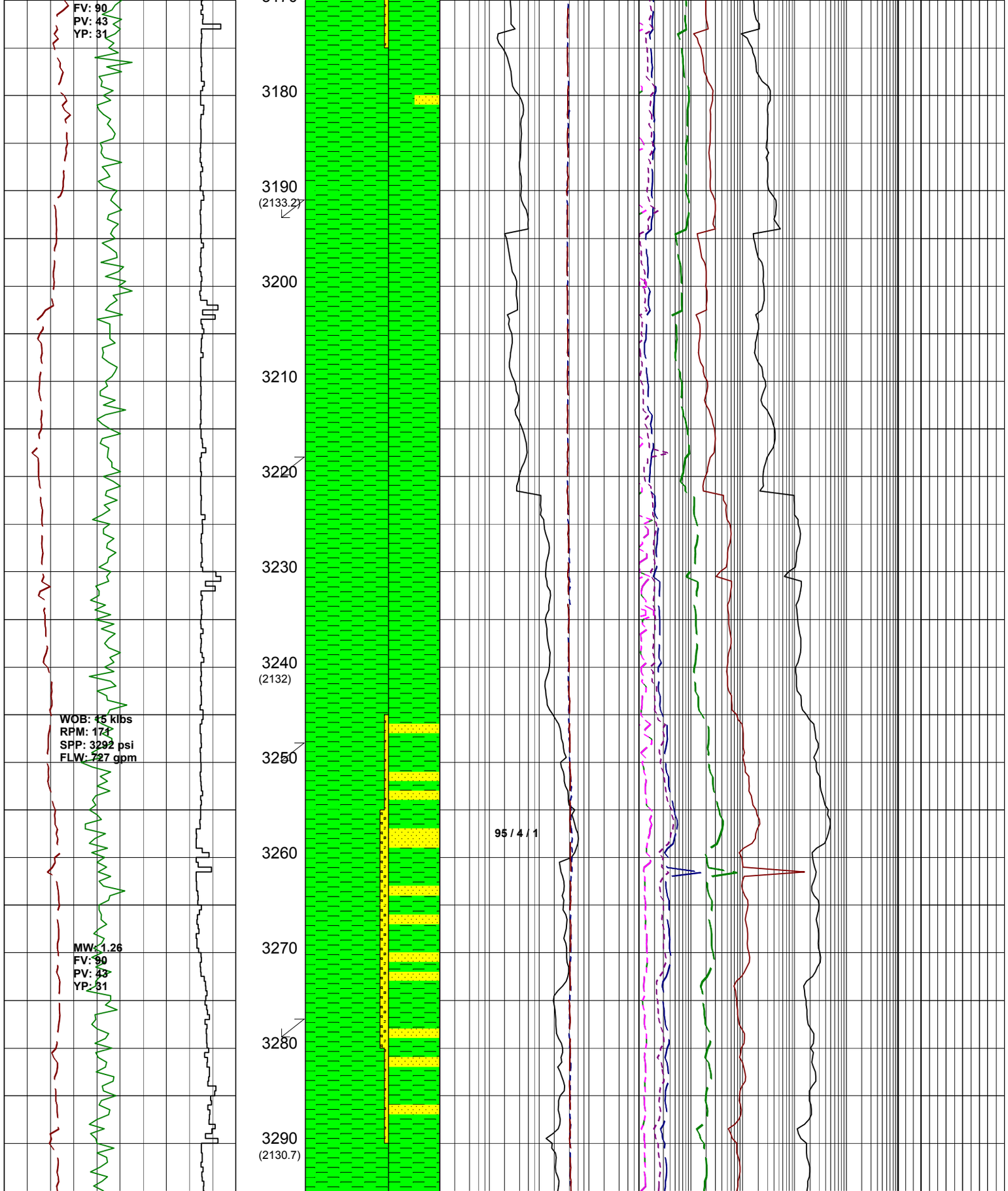
Survey: 3105.94mMD (2134.59mTVD)
89.21Inc 275.52°Az.

ARGILLACEOUS SANDSTONE:lt olv gry-olv gry,med gry,clr-trnsl,mlky i/p,vf-f,mod wl srt,sbrnd-sbang i/p, wk sil cmt,com yelsh gry arg mtx,tr carb spks,rr glauc,lse,sft-fri aggs, pr vis por,fr inf por,no fluor.

Survey: 3134.88mMD (2134.58mTVD)
90.81°Inc 275.69°Az.

SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,abdt slt,mnr aren, rr carb spks,sft-pred frm,mnr mod hd, blky-sbblky.

Survey: 3162.22mMD (2133.97mTVD)
91.73°Inc 274.81°Az.



SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,mnr lt olv gry,lt brn, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.

Survey: 3191.15mMD (2133.18mTVD) 91.43°Inc 273.46°Az.

SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,com lt olv gry,lt brn, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.

Survey: 3220.27mMD (2132.50mTVD) 91.24°Inc 272.90°Az.

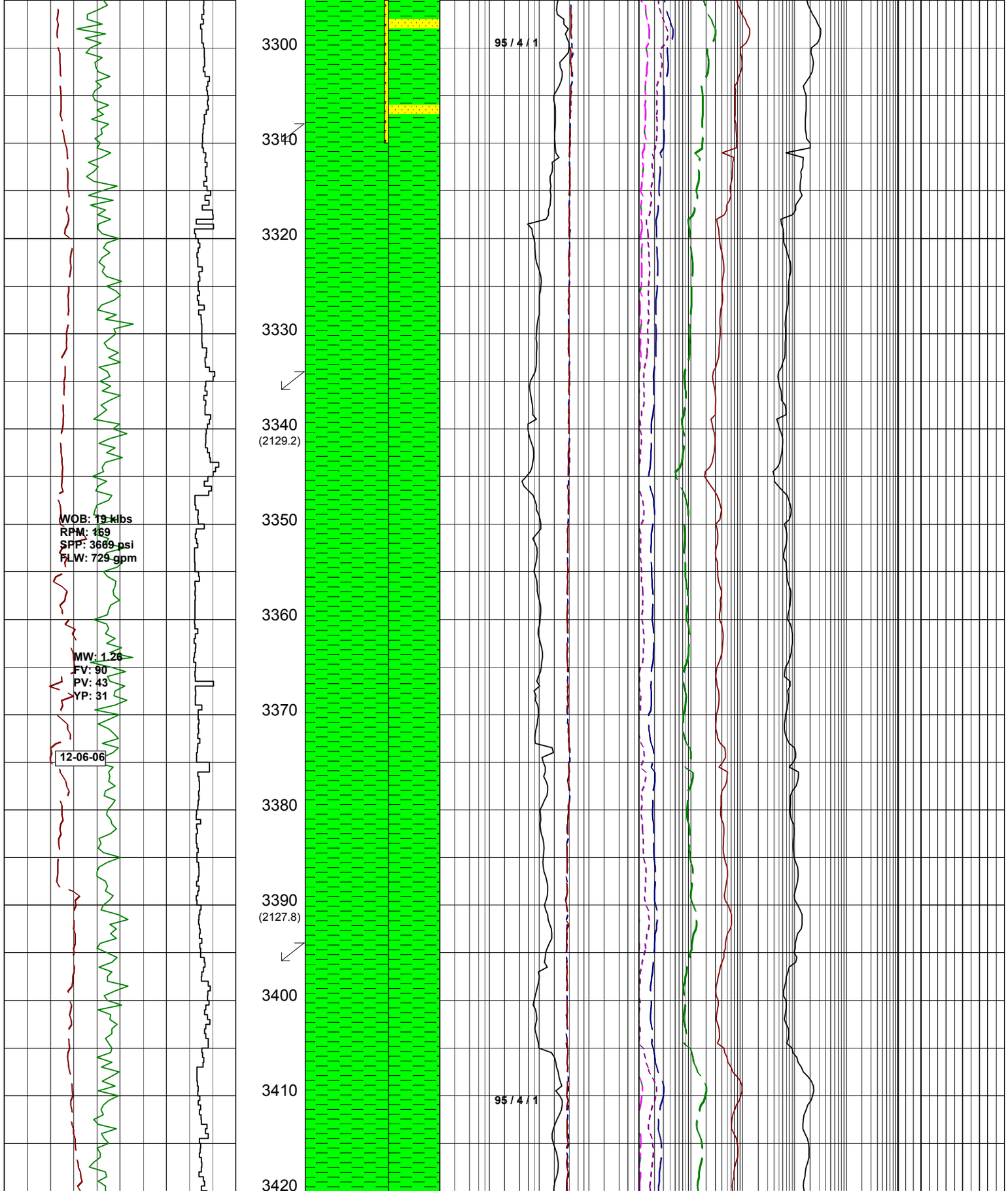
SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,com lt olv gry,lt brn, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.

Survey: 3248.91mMD (2131.83mTVD) 91.43°Inc 272.30°Az.

ARGILLACEOUS SANDSTONE:lt olv gry,off wh,med gry i/p,clr-trnsl,vf-f,wl srt,sbrnd-rnd,com sbang,wk sil cmt,abdt cly-slty mtx,tr-mnr carb spks & lams,rr glauc,lse,mnr fri aggs,pr vis por,fr inf por,no fluor.

Survey: 3277.48mMD (2131.04mTVD) 91.74°Inc 270.72°Az.

SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,com lt olv gry,lt brn, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.



Survey: 3308.52mMD (2130.15mTVD)
91.55°Inc 267.86°Az.

SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,com lt olv gry,lt brn, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.

Survey: 3335.97mMD (2129.33mTVD)
91.86°Inc 267.23°Az.

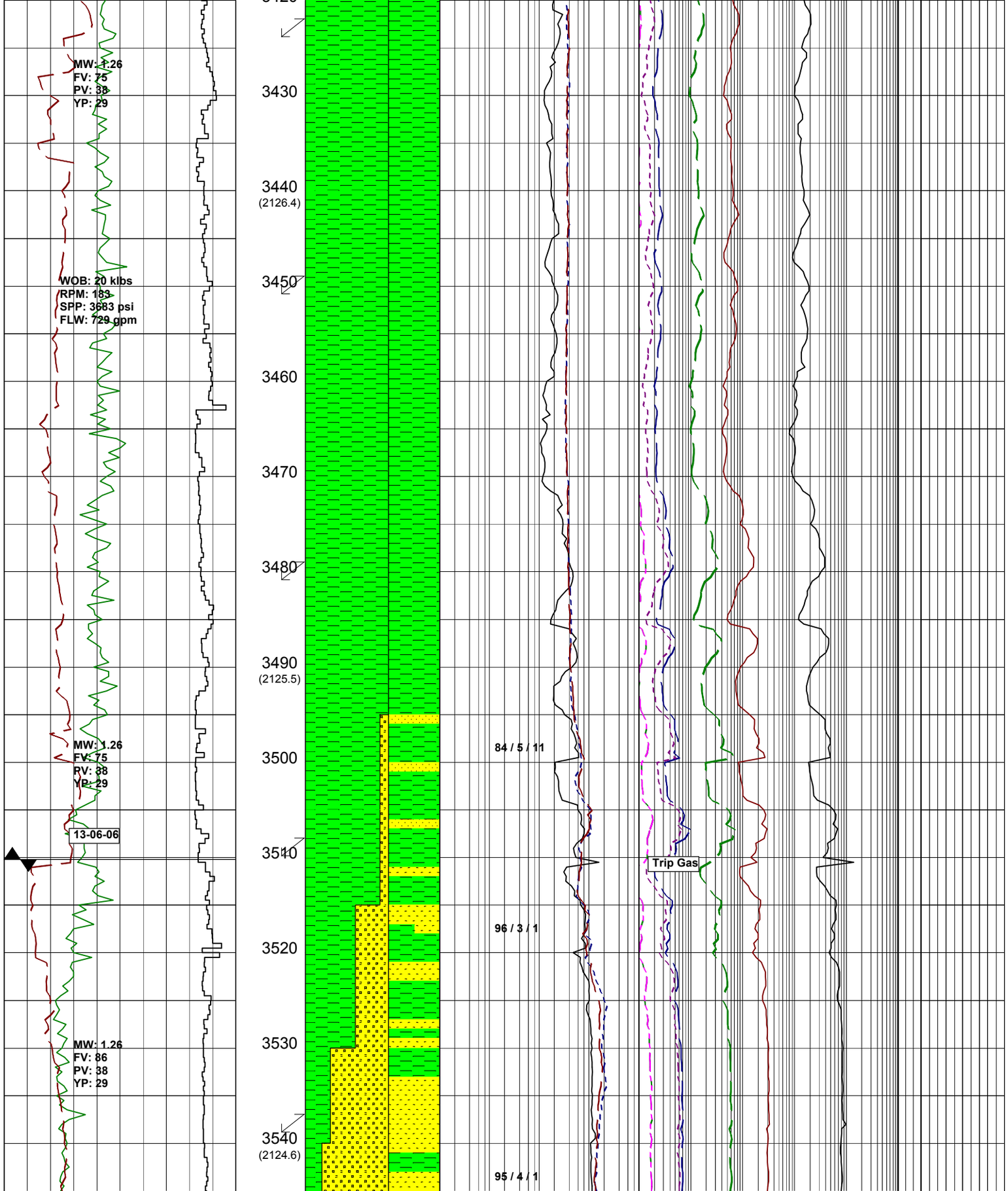
SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,com lt olv gry,lt brn, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.

Survey: 3366.39mMD (2128.40mTVD)
91.67°Inc 267.91°Az.

SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,com lt olv gry, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.

Survey: 3395.36mMD (2127.61mTVD)
91.42°Inc 268.54°Az.

SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,rr lt olv gry,lt brn, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.



Survey: 3424.31mMD (2126.82mTVD)
91.73°Inc 269.11°Az.

SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,rr lt olv gry,lt brn, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.

Survey: 3452.27mMD (2126.11mTVD)
91.18°Inc 270.09°Az.

SILTY CLAYSTONE:dk gry-grysh blk,dk brnsh gry,rr lt olv gry,lt brn, abdt slt,mnr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.

Survey: 3481.19mMD (2125.65mTVD)
90.62°Inc 271.42°Az.

ARGILLACEOUS SANDSTONE:lt olv gry,off wh,med gry i/p,clr-trnsl, vf-f,wl srt,sbrnd,com sbang,com sil cmt,abdt yelsh gry arg mtx,tr-rr carb spks,lse-fri mnr aggs,pr vis por, fr inf por,no fluor.

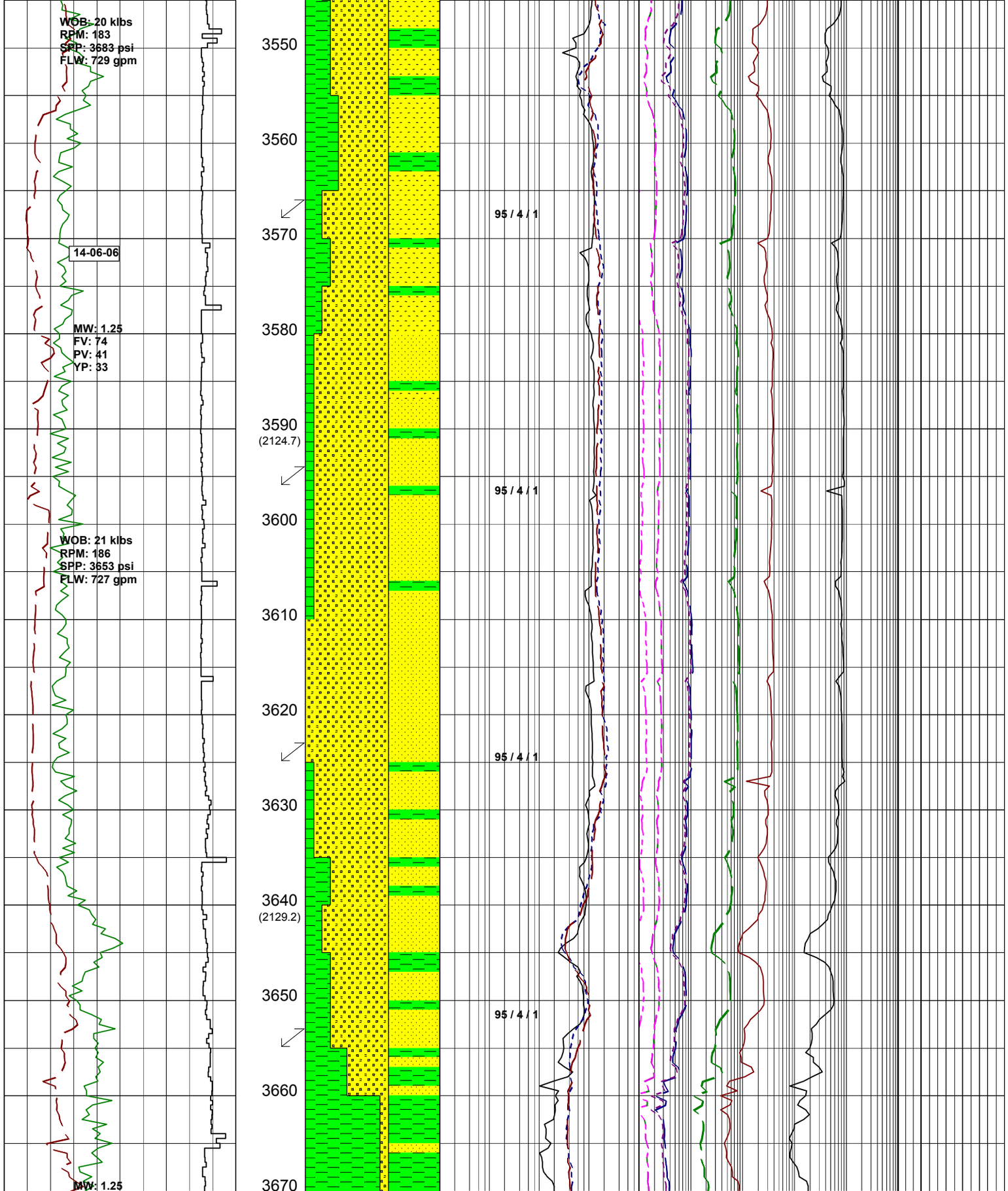
Survey: 3510.20mMD (2125.15mTVD)
91.36°Inc 270.88°Az.

BIT# 5: 8½" (216mm)
SECURITY DBS FMF3653Z
JETS: 3x16, 3x15
IN: 3510m OUT: 4026m
RUN: 516m HRS: 20.79
COND:

SILTY CLAYSTONE:dk gry-blk dk brnsh gry,lt brn i/p,abdt slt, rr aren,rr carb spks,sft-pred frm,mnr mod hd,blky-sbblky.

Survey: 3539.05mMD (2124.64mTVD)
90.68°Inc 268.43°Az.

ARGILACEOUS SANDSTONE:lt gry,



med gry,off wh,med brn gry,vf-f,occ crs-med,mod wl srt,sbang-sbrnd,wk sil cmt,abdt yelsh gry cly mtx,tr carb spks,fri,lse i/p,pr vis por,no fluor.

Survey: 3568.54mMD (2124.30mTVD)
90.62°Inc 269.75°Az.

ARGILLACEOUS SANDSTONE:
lt gry,med gry,off wh,lt olv gry i/p, clr trnsl,vf-f,mod wl srt,sbang-sbrnd,tr sil cmt,com ylsh gry arg mtx,tr carb spks,lse-fri,pr vis por, pr-fr inf por,no fluor.

Survey: 3596.90mMD (2124.78mTVD)
87.47°Inc 267.06°Az.

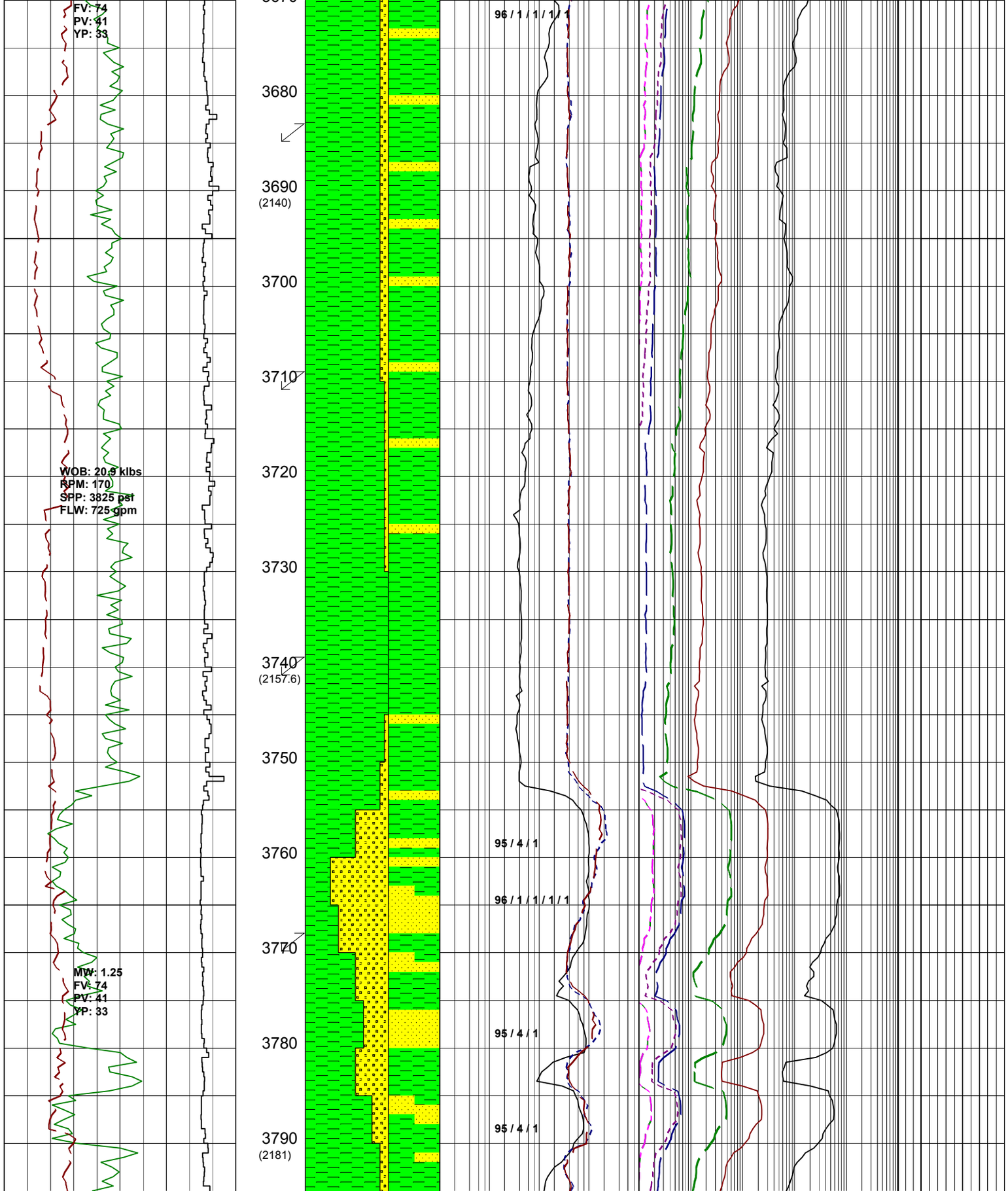
ARGILLACEOUS SANDSTONE:
lt gry,med gry,off wh,lt olv gry i/p,clr trnsl,vf-f,mod wl srt,sbang-sbrnd,tr sil cmt,com yelsh gry arg mtx,tr carb spks,lse-fri,pr vis por,pr-fr inf por,no fluor.

Survey: 3625.86mMD (2127.09mTVD)
83.38°Inc 266.72°Az.

SILTY CLAYSTONE:dk gry-blk dk brnsh gry,lt brn i/p,abdt slt rr aren,rr carb spks,sft-pred frm,mod hd-hd,blky-sbblky.

Survey: 3654.78mMD (2131.46mTVD)
79.21°Inc 266.22°Az.

ARGILLACEOUS SANDSTONE:
lt gry,med gry,off wh,lt olv gry i/p, clr trnsl,vf-f,mod wl srt,rnd-sbrnd, tr sil cmt,com ylsh gry arg mtx,tr carb spks,lse-fri,pr vis por,pr-fr inf por,no fluor.



Survey: 3683.72mMD (2138.07mTVD)
74.37°Inc 265.83°Az.

SILTY CLAYSTONE:gry blk,olv blk,
dk gry,com slt,frm-mod hd,mnr sft,
blky-sbblky.

ARGILLACEOUS SANDSTONE:
lt gry,med gry,off wh,vf-f,mod wl
srt,rnd-sbrnd,com sil cmt,com yelsh
gry arg mtx,tr carb spks,lse-fri,pr
vis por,pr-fr inf por,no fluor.

Survey: 3712.66mMD (2147.14mTVD)
69.09°Inc 265.58°Az.

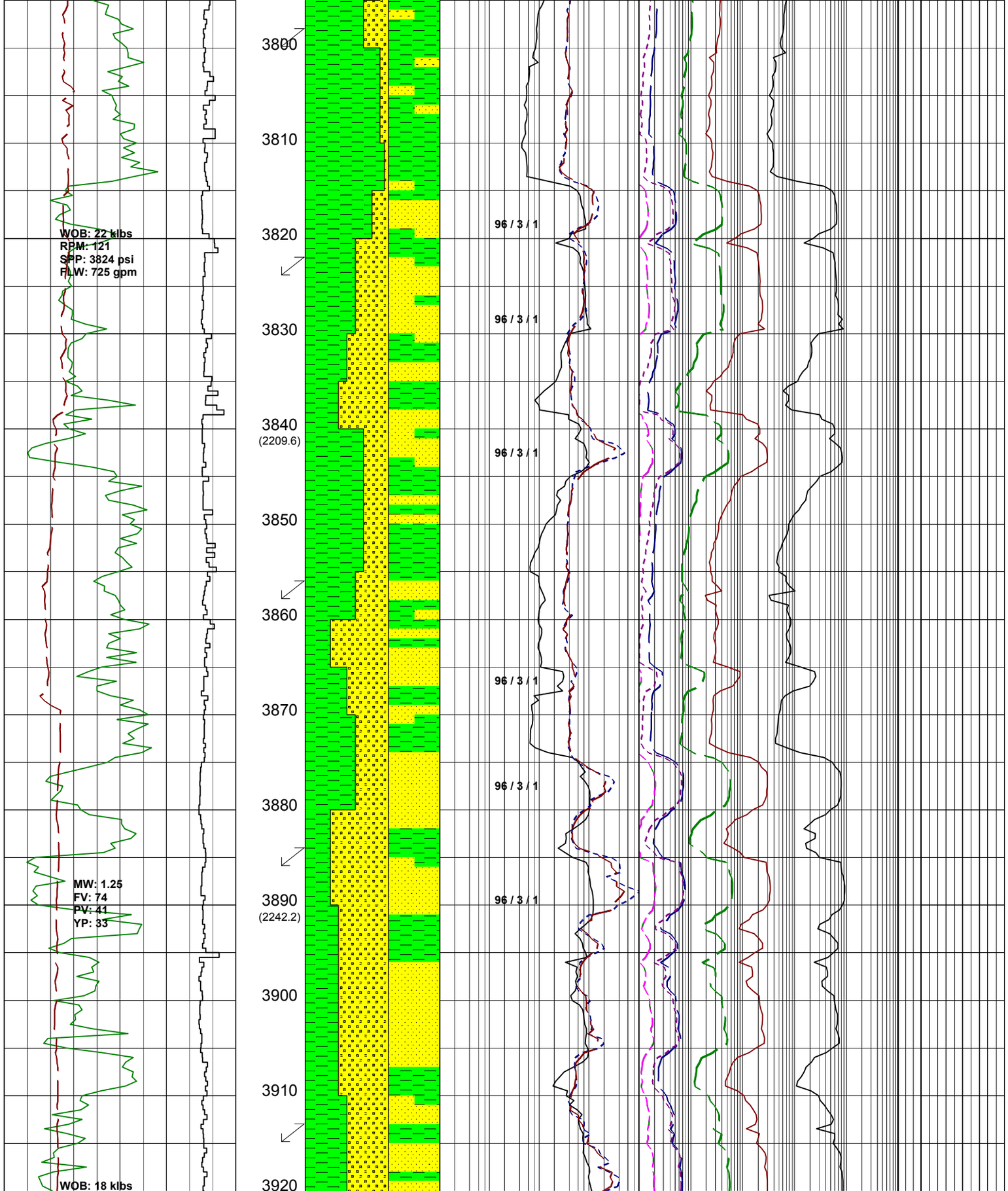
SILTY CLAYSTONE:gry blk,olv blk,
dk gry,com slt,frm-mod hd,
mnr sft,blky-sbblky.

Survey: 3741.63mMD (2158.20mTVD)
66.06°Inc 268.24°Az.

ARGILLACEOUS SANDSTONE:
lt gry,med gry,yelsh gry,vf-f,mod
wl srt,rnd-sbrnd,tr-mnr sil cmt,com
yelsh gry agr mtx,tr carb spks,tr
glauc spks,lse-fri,pr vispor,pr-fr
inf por,no fluor.

Survey: 3770.60mMD (2171.05mTVD)
61.26°Inc 267.44°Az.

SILTY CLAYSTONE:gry blk,olv blk,
dk gry,com slt,frm-mod hd,
mnr sft,blky-sbblky.



Survey: 3799.55mMD (2185.86mTVD)
57.17°Inc 268.95°Az.

ARGILLACEOUS SANDSTONE:
lt gry,ly gry brn,off wh,med gry brn i/p,sbang-sbrnd,wl srt,rr sil cmt,tr wk calc cmt i/p,abdt yelsh gry arg mtx,tr carb spks,tr glauc spks, lse-fri,pr vis por,pr-fr inf por,no fluor.

Survey: 3824.40mMD (2199.90mTVD)
54.02°Inc 268.15°Az.

SILTY CLAYSTONE:dk olv brn,dk brn,olv blk,dk gry,com slt,frm-mod hd,mnr sft,sbblky-blky.

ARGILLACEOUS SANDSTONE:
off wh,lt gry brn,med gry brn,vf-f, occ crs qtz frags,mod wl srt,sbrnd, tr sil cmt,abdt yelsh gry arg mtx, tr carb spks,tr glauc spks,lse-fri, pr vis por,pr-fr inf por,no fluor.

Survey: 3857.31mMD (2220.31mTVD)
49.28°Inc 270.04°Az.

SILTY CLAYSTONE:dk brn,olv blk, dk gry brn,com slt,tr carb spks,sft-frm,sbblky-blky.

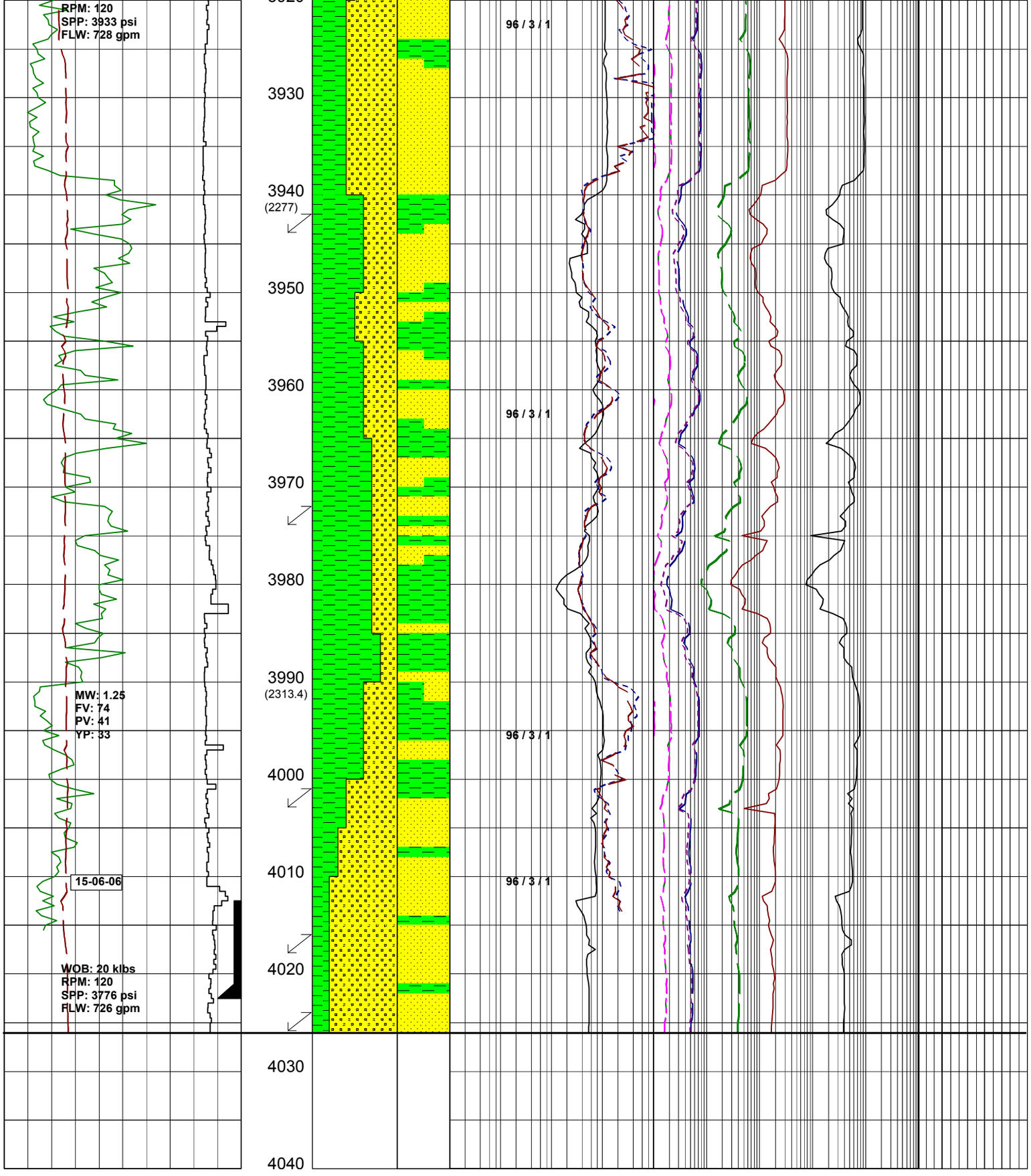
ARGILLACEOUS SANDSTONE:
off wh,lt gry,lt gry brn,vf-f,occ crs,wl srt,sbrnd,tr off wh-lt gry brn sil cmt,abdt yelsh gry cly mtx, tr carb spks,tr glauc,lse-fri,pr vis por,pr-fr inf por,no fluor.

Survey: 3886.19mMD (2239.57mTVD)
47.08°Inc 270.46°Az.

SILTY CLAYSTONE:dk brn,olv blk, dk gry brn,com slt,tr carb spks, sft-frm,sbblky-blky.

ARGILLACEOUS SANDSTONE:
off wh,lt gry,lt gry brn,vf-f,occ crs qrtz frags,wl srt,sbrnd,com off wh-lt gry brnsil cmt,tr carb spks,tr glauc,lse-fri,pr vis por, pr-fr inf por,no fluor.

Survey: 3915.14mMD (2259.53mTVD)
45.75°Inc 270.18°Az.



SILTY CLAYSTONE:dk brn,olv blk, dk gry brn,com slt,rr nod pyr, tr carb spks,frm-mod hd,sft i/p, sbblky-blky.

SILTY SANDSTONE:off wh,lt gry, lt gry brn,vf-f,occ crs qrtz frags, mod wl srt,sbrnd,com off wh-lt gry brn sil cmt,com dissem & nod pyr, tr carb spks,tr glauc,lse-fri,pr vis por,pr-fr inf por,no fluor.

Survey: 3944.07mMD (2279.92mTVD) 44.63°Inc 271.10°Az.

SILTY CLAYSTONE:dk brn,olv blk, dk gry brn,com slt,com nod pry,tr carb spks,frm-mod hd,sft i/p, sbblky-blky.

SILTY SANDSTONE:off wh,lt gry, lt gry brn,vf-f,occ crs qrtz frags, mod wl srt,sbrnd,com off wh-lt gry brn sil cmt,occ lse aggs,com dissem & nod pyr,tr carb spks,tr glauc,lse-fri,pr vis por,pr-fr inf por,no fluor.

Survey: 3973.05mMD (2300.90mTVD) 42.59°Inc 270.42°Az.

SILTY CLAYSTONE:dk brn,olv blk, dk gry brn,com slt,com nod pyr, tr carb spks,frm-mod hd,sft i/p, sbblky-blky.

Survey: 4001.93mMD (2322.28mTVD) 41.91°Inc 270.87°Az.

SILTY SANDSTONE:off wh,lt gry, lt olv gry i/p,clr trnsl grs, vf-f,wl-mod wl srt,rnd-wl rnd, mod sil cmt,tr carb spks, fri-lse,mod hd i/p,fr-gd vis por, fr inf por,no fluor.

Survey: 4017.67mMD (2333.99mTVD) 41.94°Inc 269.81°Az.

Survey: 4026.00mMD (2340.18mTVD) 41.94°Inc 269.81°Az.

178mm (7") CASING SET @ 4022.5m

THA02 REACHED TD @ 4026m ON 15/06/06 - 01:30 HRS

Enclosure C

DRILLING DATA PLOT

1 : 1000

DRILLING DATA PLOT

WELL : THA02

WOODSIDE

Geoservices

FROM (m): 140 TO (m): 4060 SCALE: 1/ 1000

Country : AUSTRALIA	**POSITION**		**CASING**		
Region : Otway Basin	Latitude	: 39°14'14.47" S	660mm Shoe at (mMDRT) : 217.0	Spud Date	: 20-05-2006
Field : Thylacine	Longitude	: 142°54'07.58" E	473mm Shoe at (mMDRT) : 632.9	Total Depth Date	: 15-06-2006
Permit : Maersk Guardian	X (m)	: 5655159.6 N	244mm Shoe at (mMDRT) : 2293.4	Total Depth (mRT)	4026m
Well Type : Exp/Appraisal	Y (m)	: 664161.0 E	178mm Shoe at (mMDRT) : 4022.5	T.V.D. (mSSLAT)	: 2340.18m
Rig Name : Maersk Guardian	RT-LAT (m)	: 50.5		Status	: Completed
	RT-Seabed (m)	: 149.8			

ABBREVIATIONS

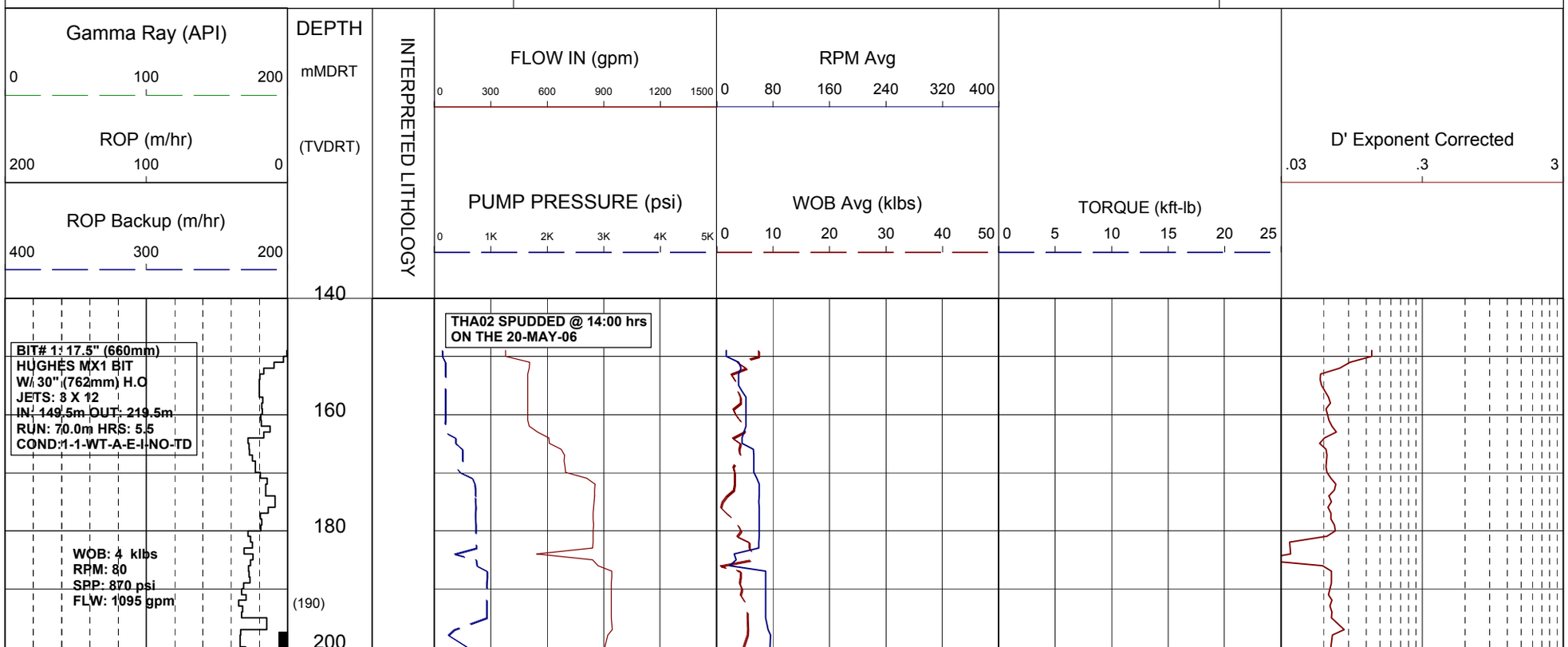
MW MUD WEIGHT	NB NEW BIT
FV FUNNEL VISCOSITY	RR RERUN BIT
PV PLASTIC VISCOSITY	CB CORE BIT
YP YIELD POINT	WOB WEIGHT ON BIT
FC FILTER CAKE	RPM REVS PER MINUTE
SOL SOLIDS	FLC FLOW CHECK
WL FILTRATE	CR CIRCULATE RETURNS
SD SAND - %	PR POOR RETURNS
S SALINITY - PPM	NR NO RETURNS
RM MUD RESISTIVITY	BG BACKGROUND GAS
RMF MUD FILTRATE	TG TRIP GAS
C CARBIDE TEST	STG SHORT TRIP GAS
LAT LOGGED AFTER TRIP	CG CONNECTION GAS
DS DEVIATION SURVEY	SG SWAB GAS
	SVG SURVEY GAS

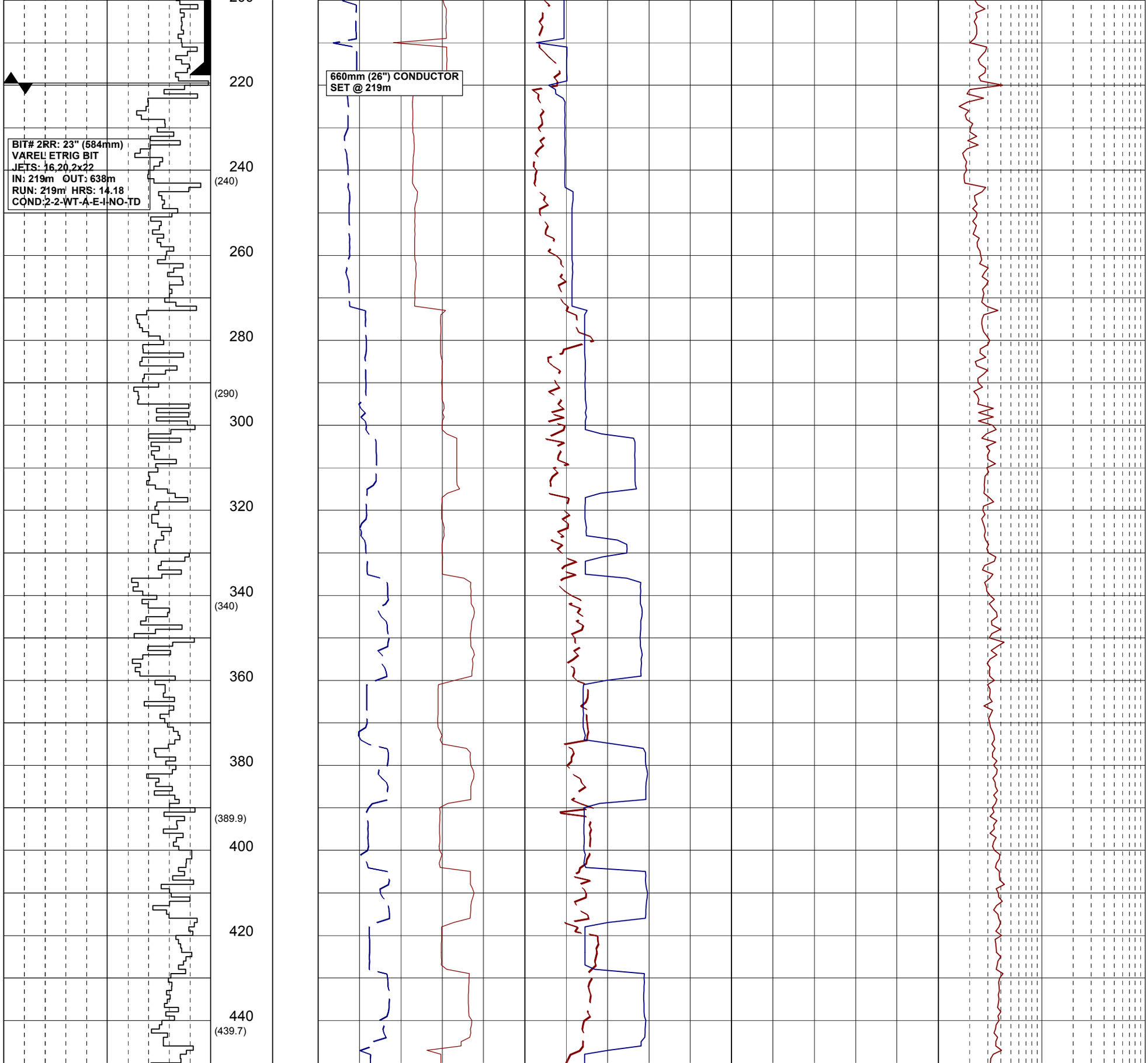
LITHOLOGY LEGEND

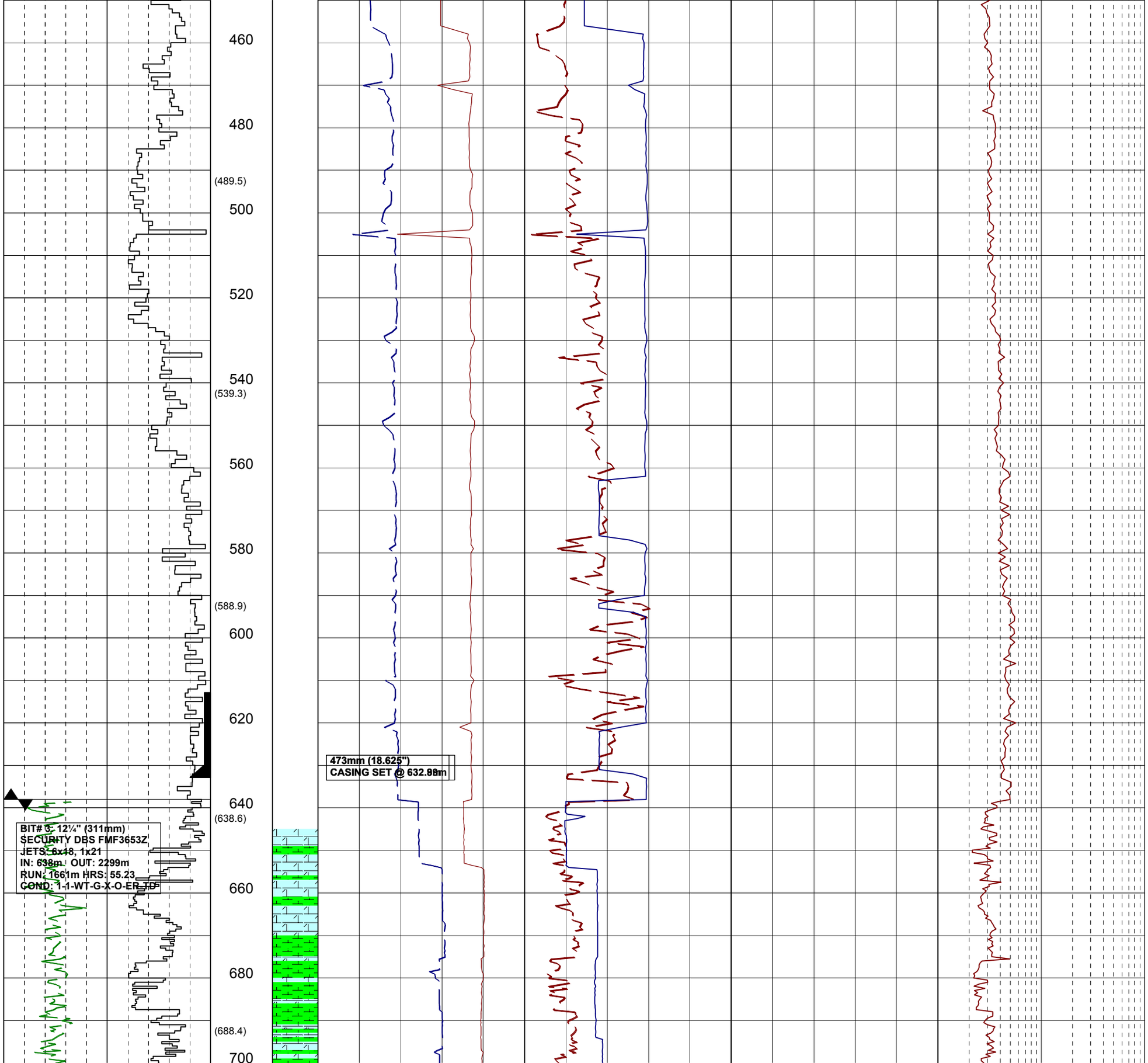
Limestone	Calcarenite	Pyrite
Coal	Gypsum	Glauconite
Fine Sandstone	Marl	Mica
Siltstone	Dolomite	Ferrous
Carb. Siltstone	Claystone	Fossils
Calc. Siltstone	Calc Claystone	Calcareous
Calcisiltite	Lithic frag	Dolomitic
Calcilutite	Foraminifera	Chert

ENGINEERING LEGEND

- Deviation Survey
- Casing Shoe
- Wiper Trip
- SWC (rec)
- SWC (unrec)
- Core
- Bit Trip




660mm (26") CONDUCTOR
SET @ 219m
BIT# 2RR: 23" (584mm)
VAREL ETRIG BIT
JETS: 16,20,2x22
IN: 219m OUT: 638m
RUN: 219m HRS: 14.18
COND:2-2-WT-A-E-I-NO-TD
220
240
(240)
260
280
(290)
300
320
340
(340)
360
380
(389.9)
400
420
440
(439.7)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480
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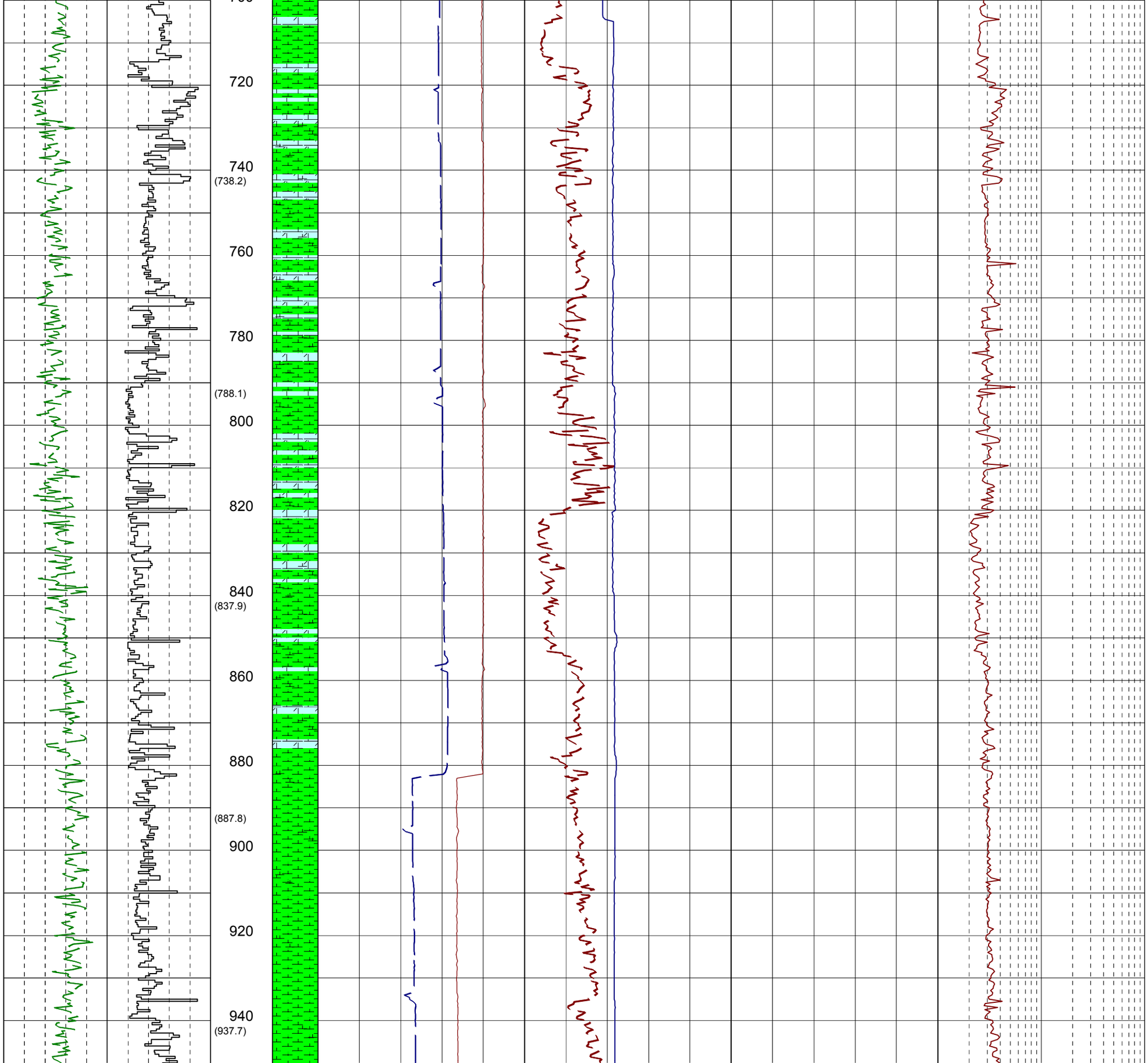
500
520
540
(539.3)
560
580
(588.9)
600
620
640
(638.6)
660
680
(688.4)
700
473mm (18.625")
CASING SET @ 632.80m
BIT# 3: 12¼" (311mm)
SECURITY DBS FMF3653Z
JETS: 6x18, 1x21
IN: 638m OUT: 2299m
RUN: 1661m HRS: 55.23
COND: 1-1-WT-G-X-O-ER-TD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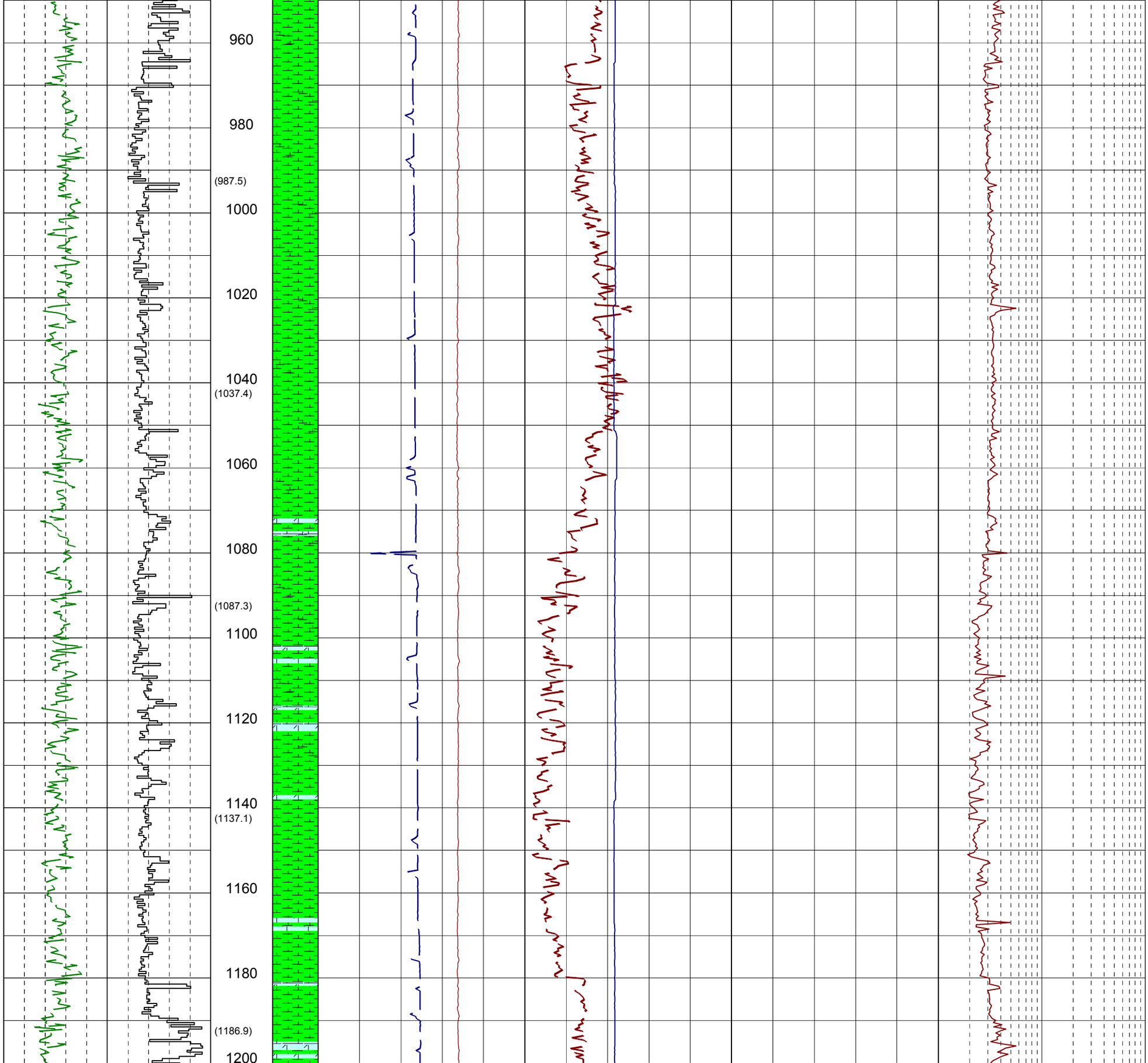
900
920
940
(937.7)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1160
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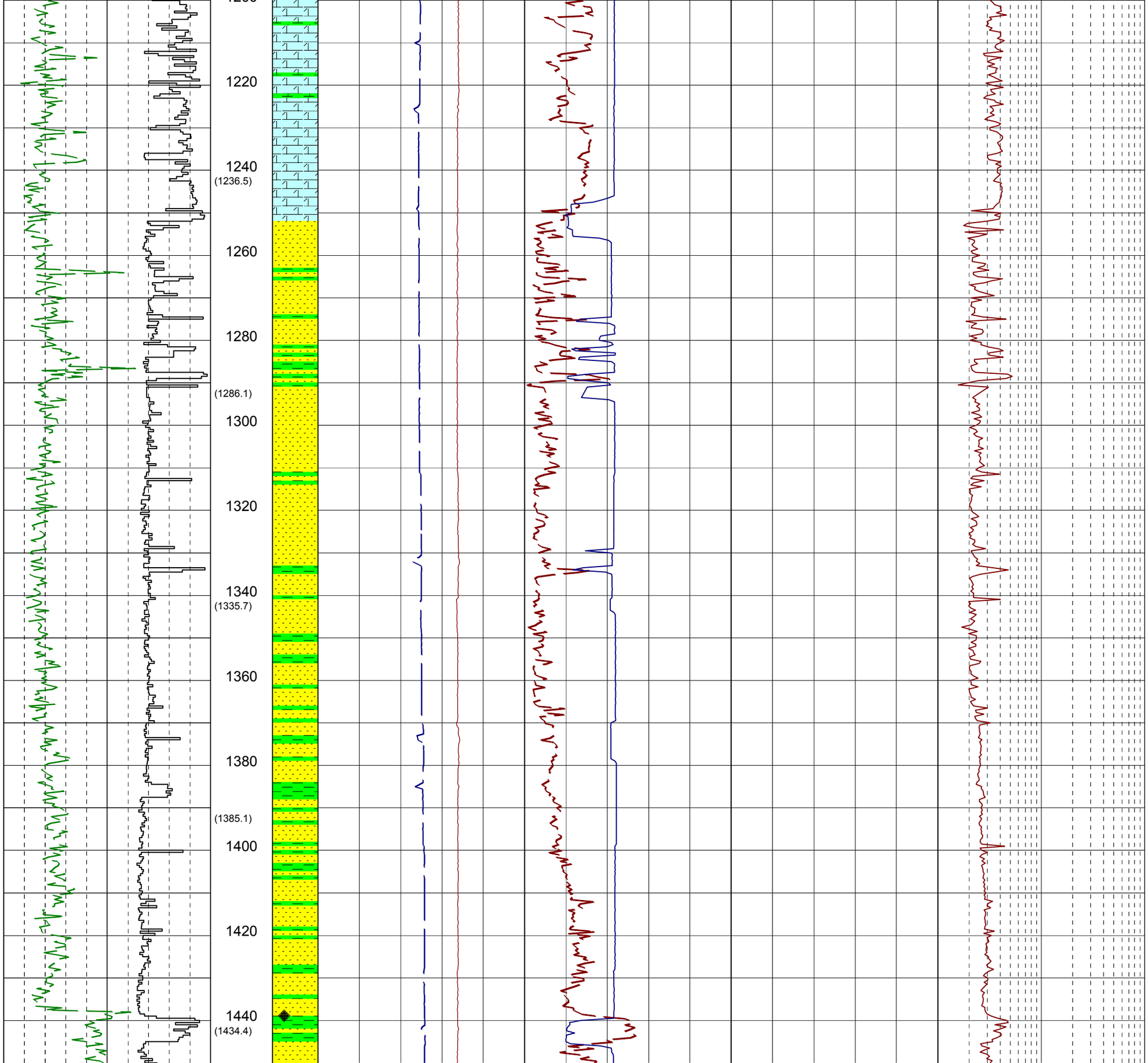
(1186.9)
1200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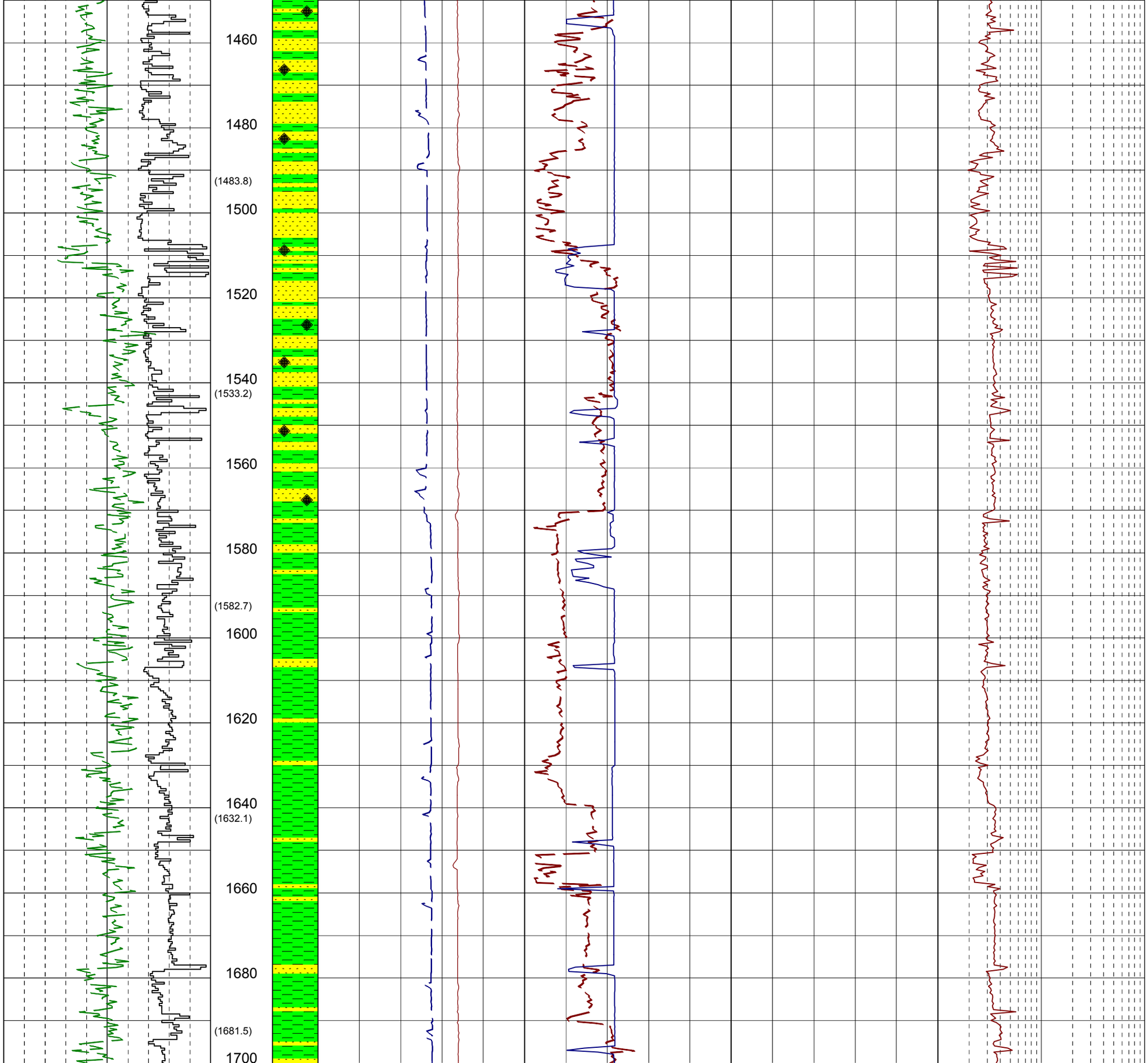
1440
(1434.4)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1480
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1500
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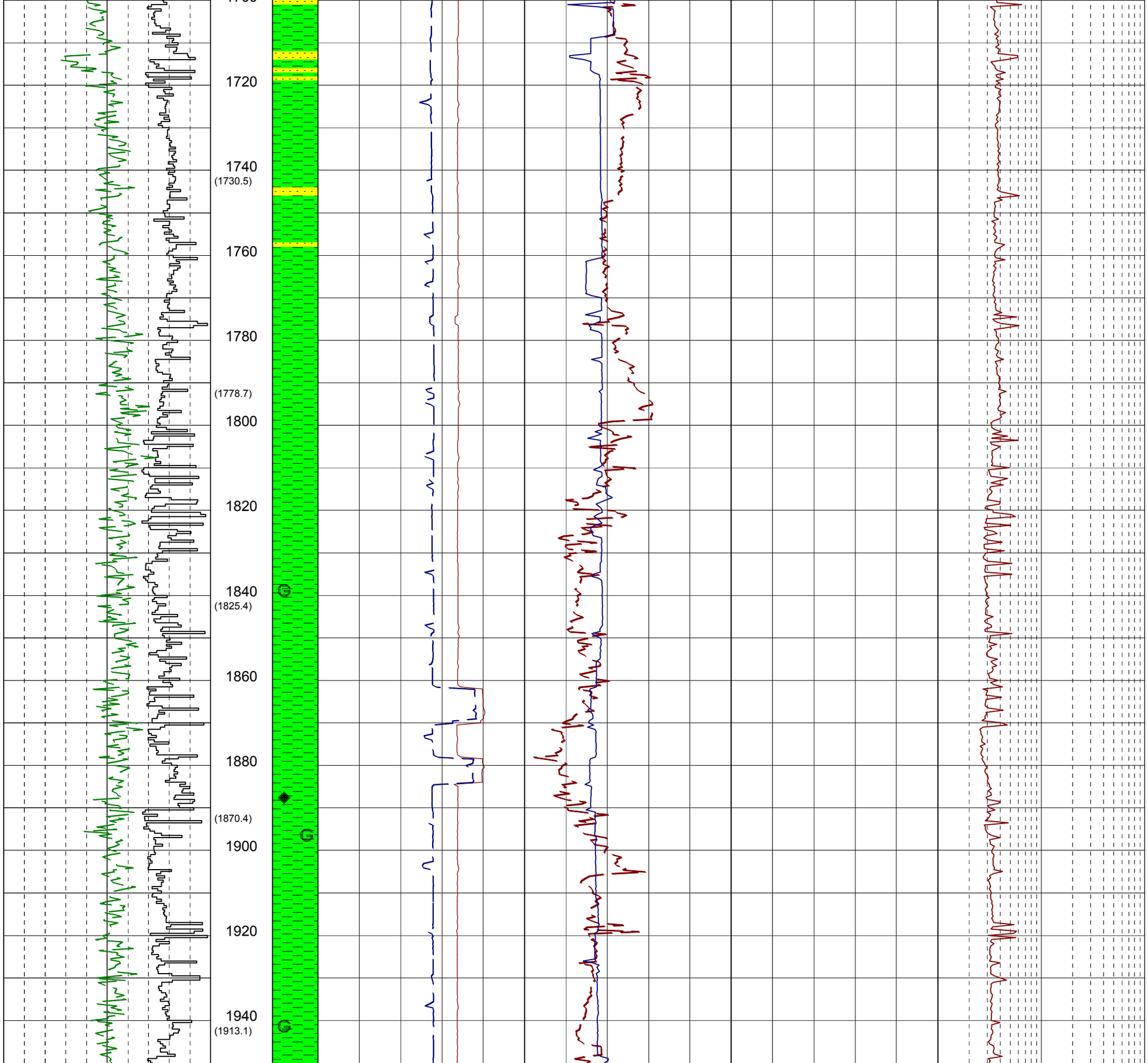
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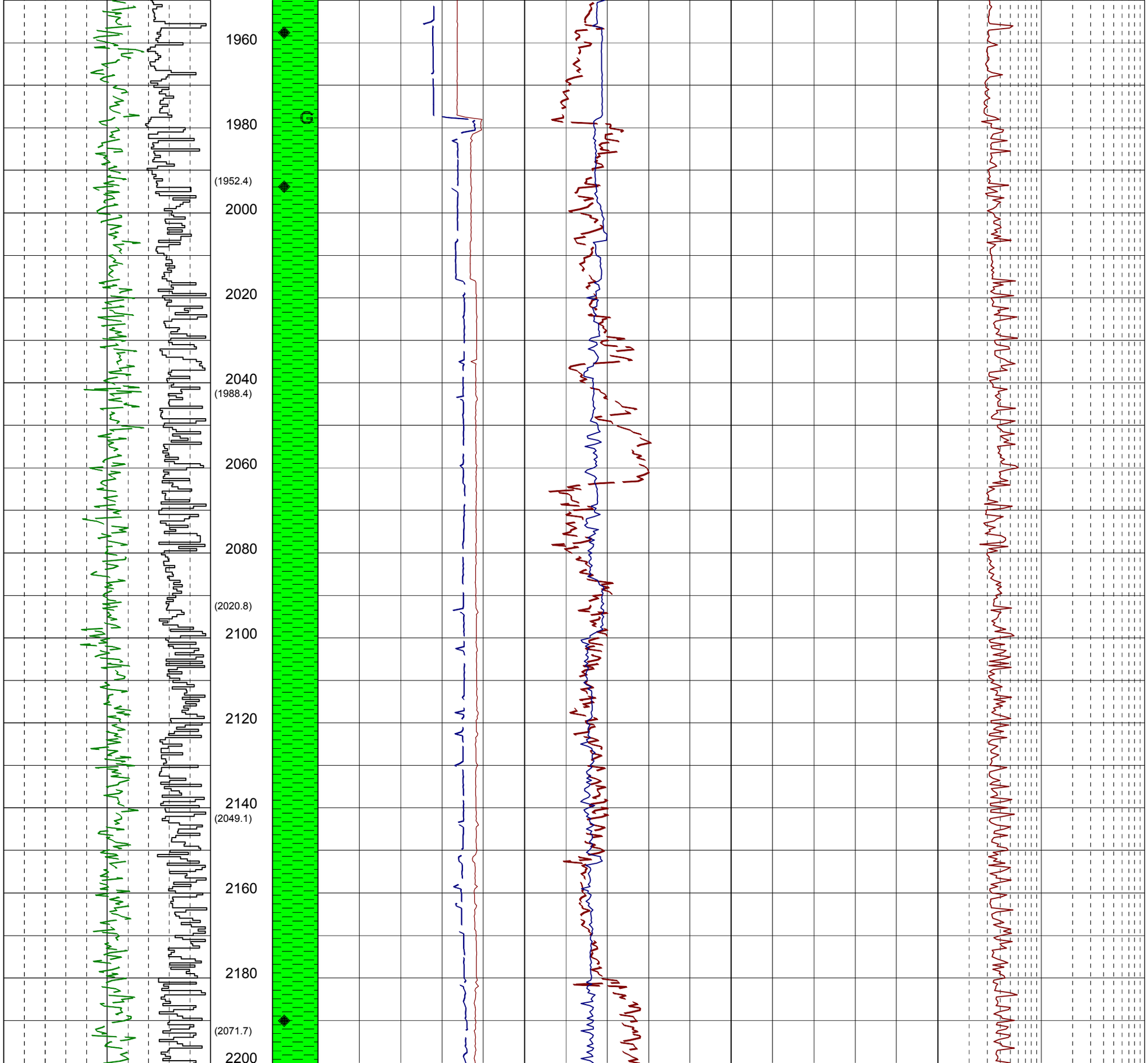
1900
1920
1940
(1913.1)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2000
2020
2040
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2080
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2140
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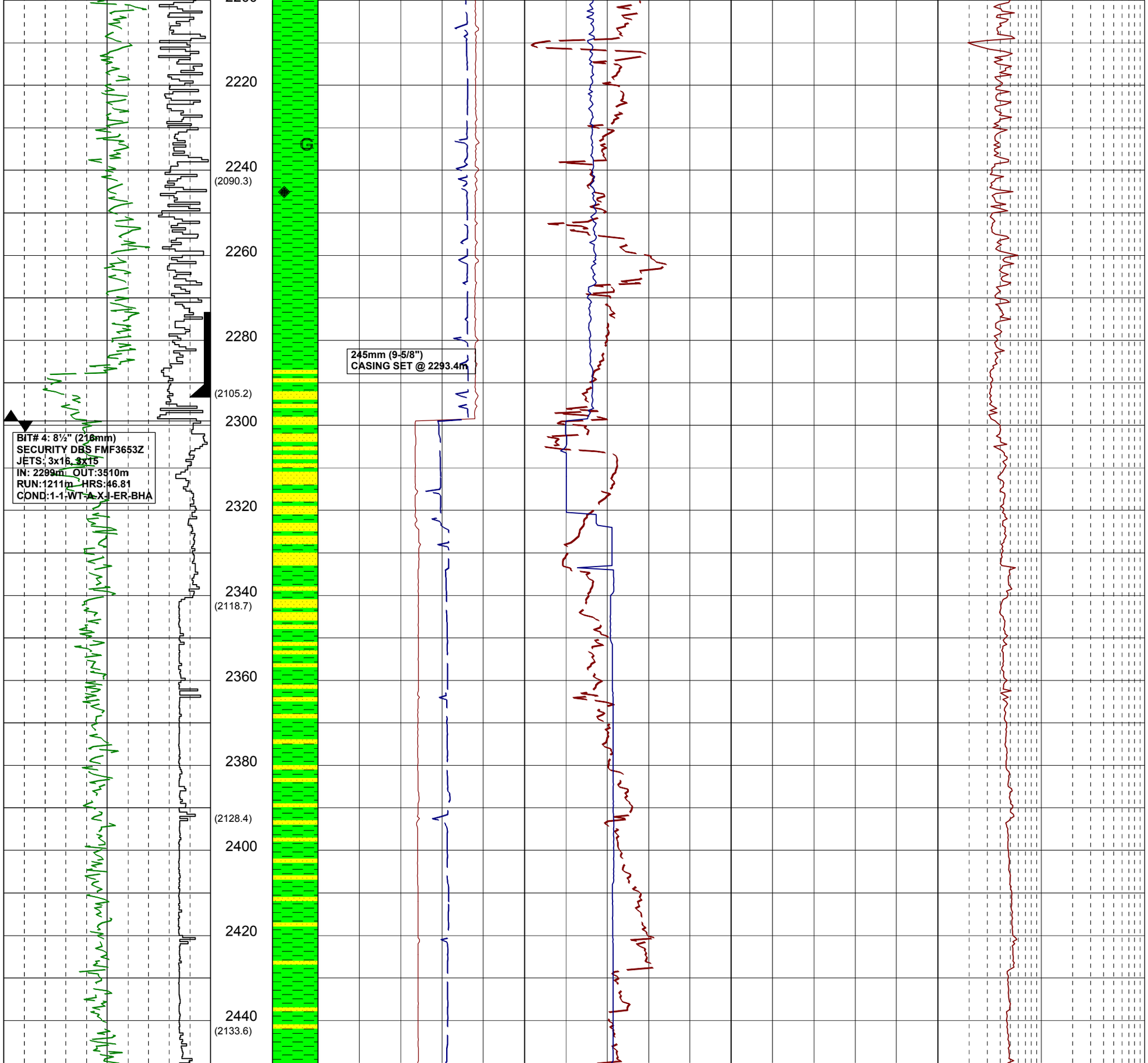
2160
2180
(2071.7)
2200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2240
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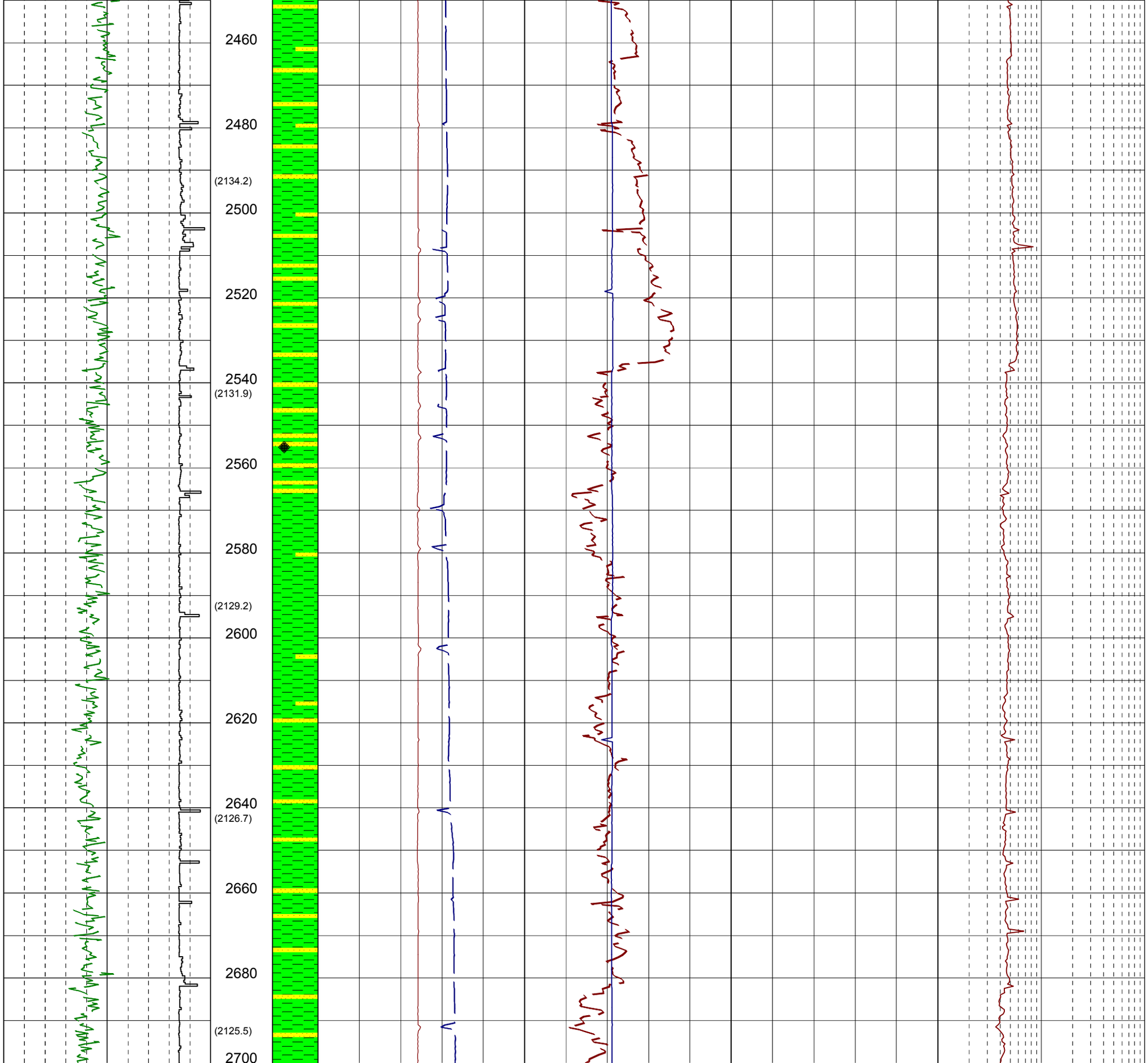
2260
2280
(2105.2)
2300
2320
2340
(2118.7)
2360
2380
(2128.4)
2400
2420
2440
(2133.6)
245mm (9-5/8")
CASING SET @ 2293.4m
BIT# 4: 8½" (216mm)
SECURITY DBS FMF3653Z
JETS: 3x16, 3x15
IN: 2299m OUT:3510m
RUN:1211m HRS:46.81
COND:1-1-WT-A-X-I-ER-BHA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(2125.5)
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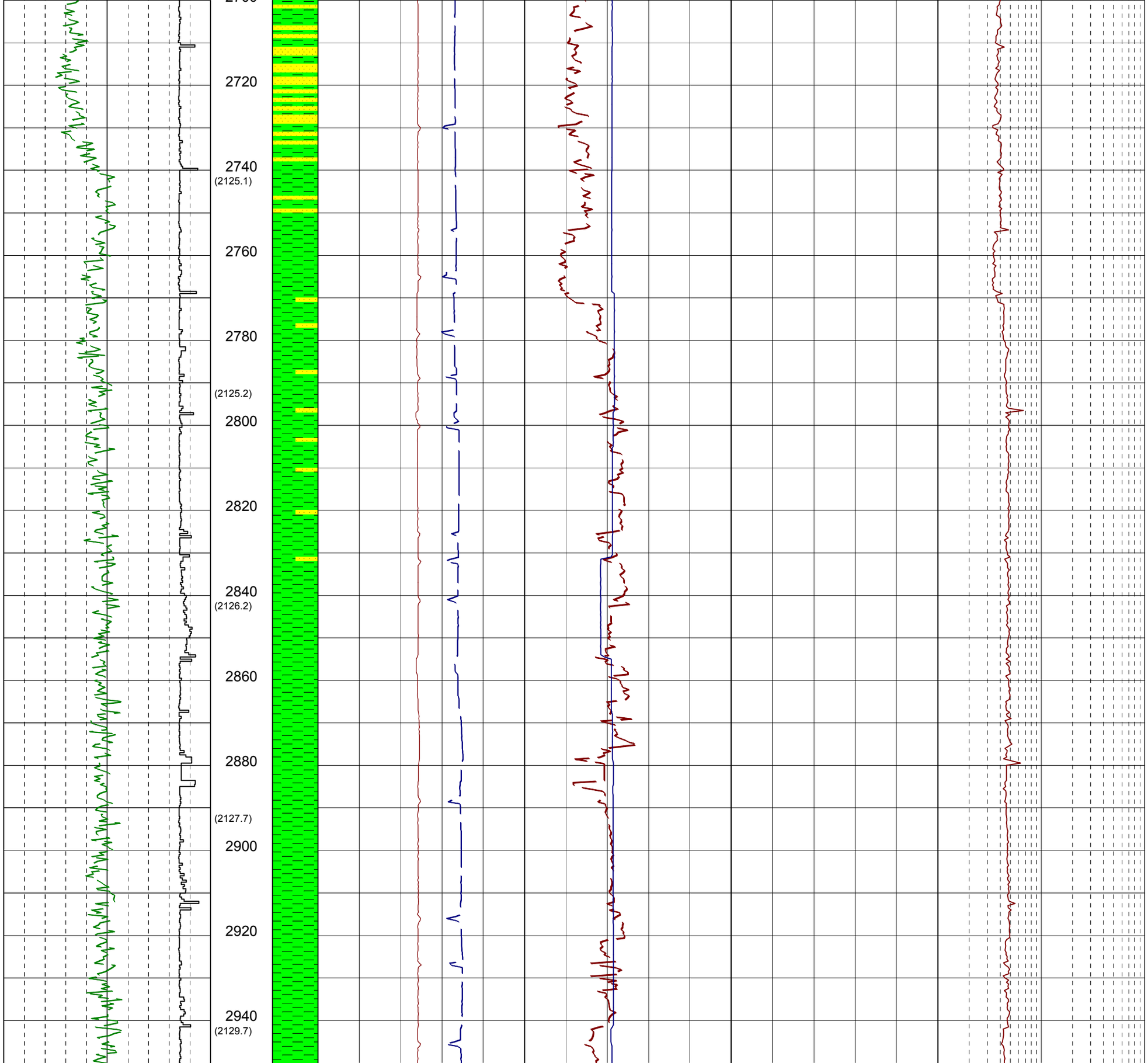
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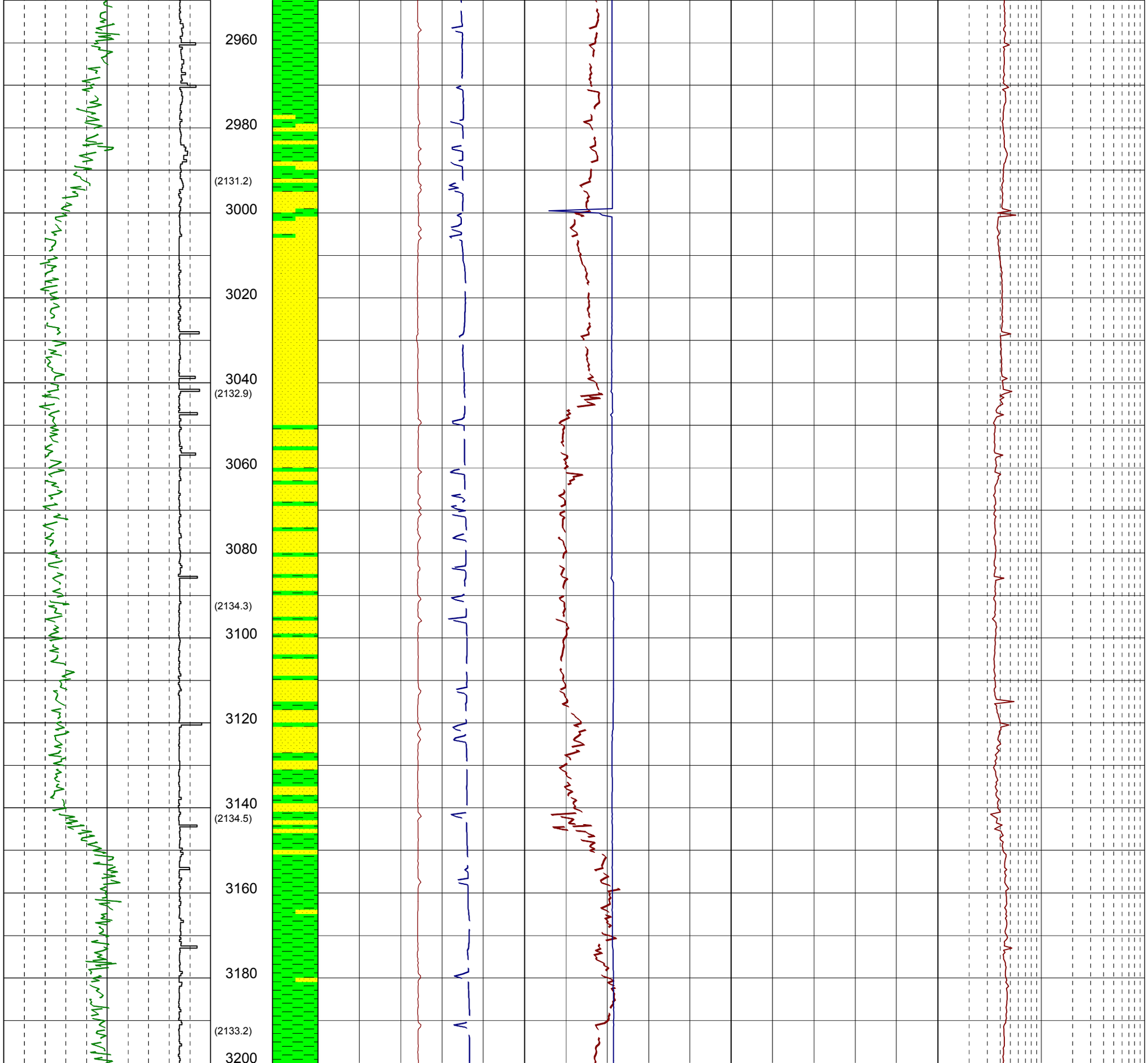
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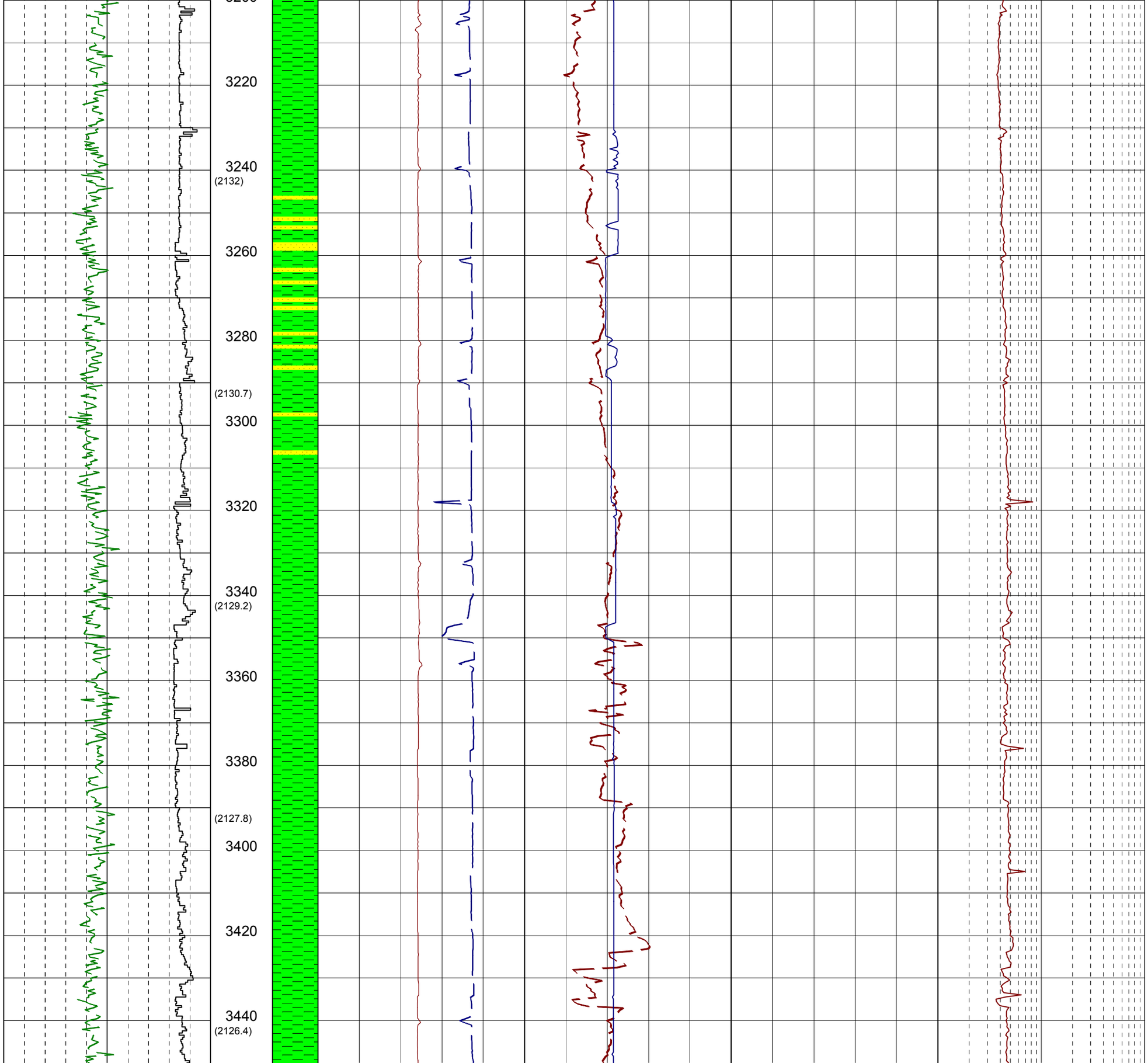
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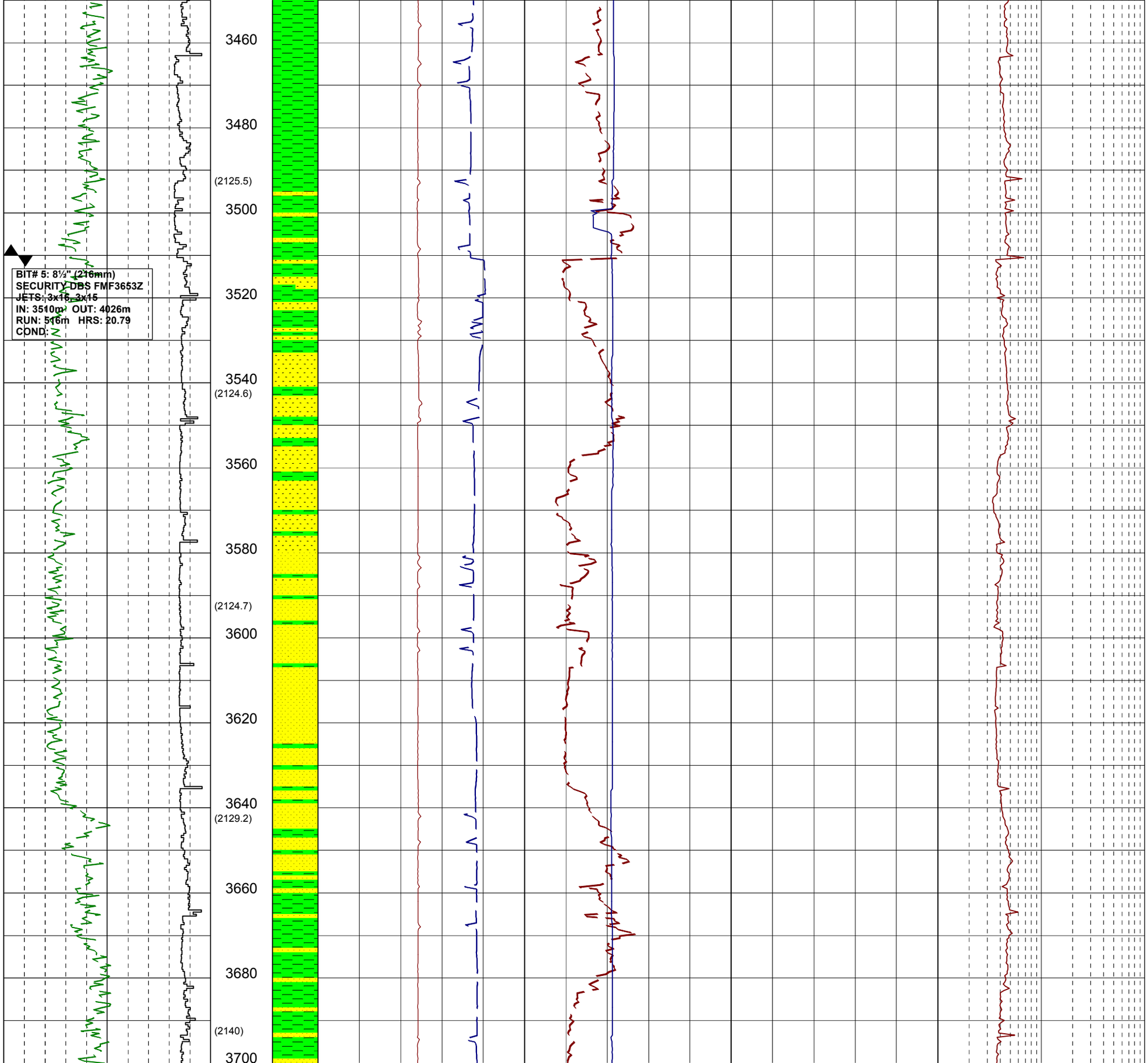
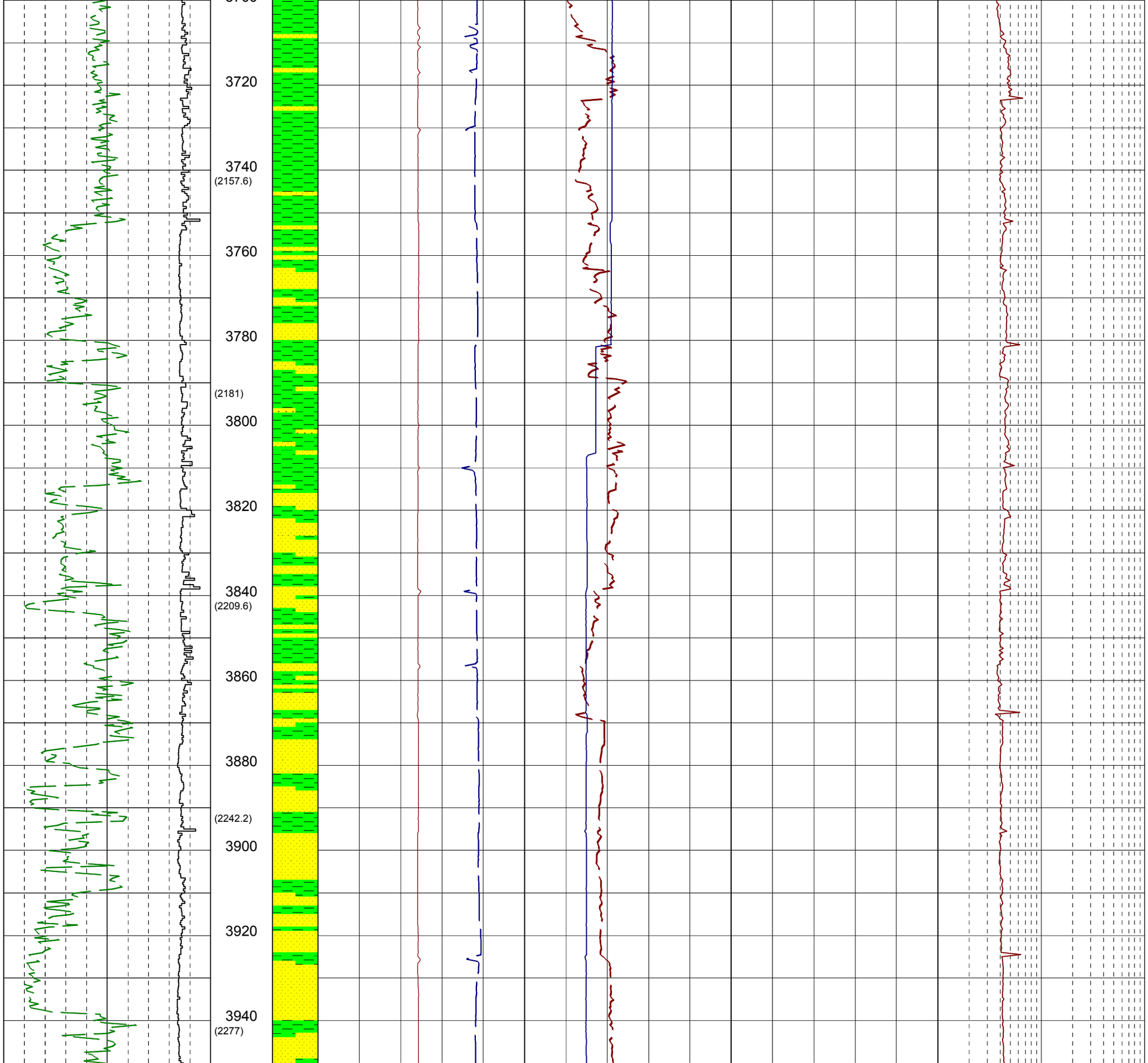

BIT# 5: 8½" (216mm)
SECURITY DBS FMF3653Z
JETS: 3x16, 3x15
IN: 3510m OUT: 4026m
RUN: 516m HRS: 20.79
COND:
3460
3480
(2125.5)
3500
3520
3540
(2124.6)
3560
3580
(2124.7)
3600
3620
3640
(2129.2)
3660
3680
(2140)
3700


3720
3740
(2157.6)
3760
3780
(2181)
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3820
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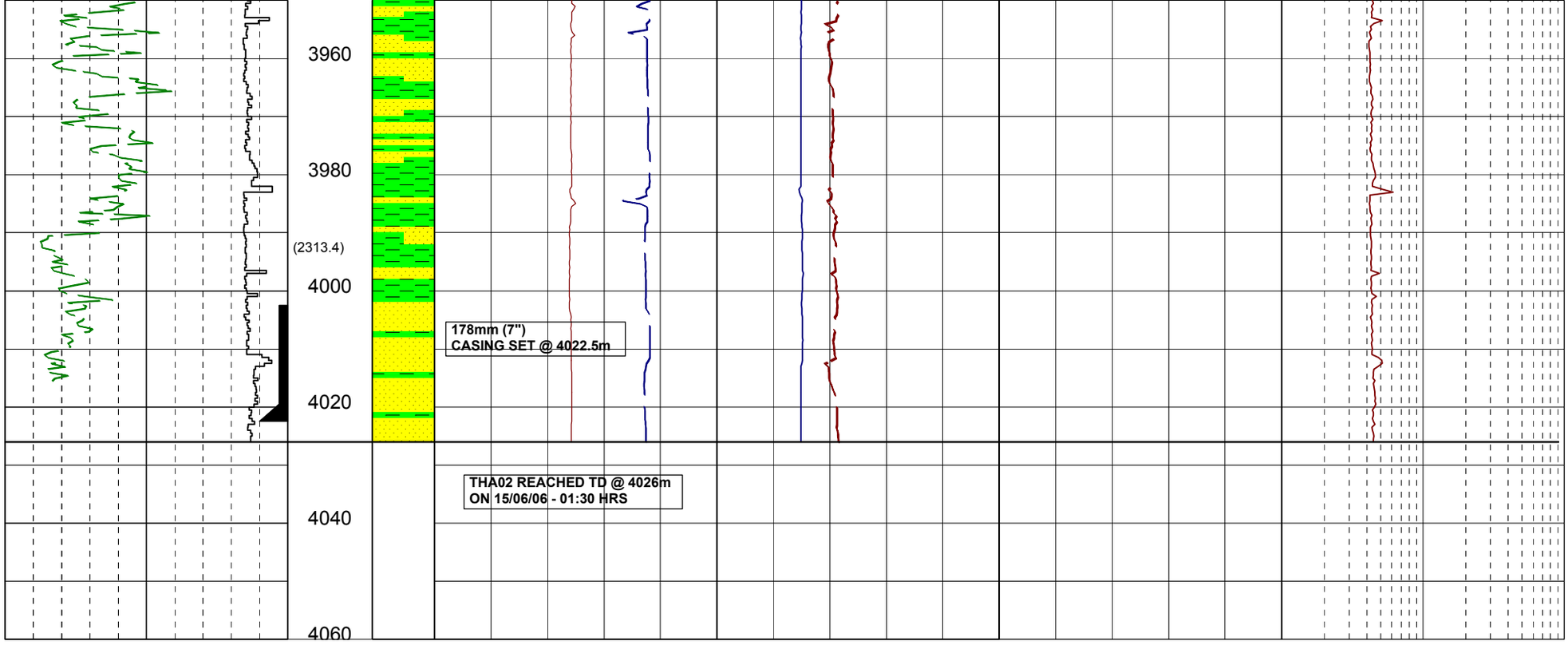
(2209.6)
3860
3880
(2242.2)
3900
3920
3940
(2277)


3960
3980
(2313.4)
4000
4020
4040
4060
178mm (7")
CASING SET @ 4022.5m
THA02 REACHED TD @ 4026m
ON 15/06/06 - 01:30 HRS

Enclosure D

PRESSURE EVALUATION PLOT

1 : 1000

PRESSURE EVALUATION LOG

WELL : THA02

WOODSIDE

Geoservices

FROM (m): 140 TO (m): 4060 SCALE: 1/ 1000

Country	: AUSTRALIA	**POSITION**		**CASING**	
Region	: Otway Basin	Latitude	: 39°14'14.47" S	660mm Shoe at (mMDRT)	: 217.0
Field	: Thylacine	Longitude	: 142°54'07.58" E	473mm Shoe at (mMDRT)	: 632.9
Permit	: T/L2 & T/30P	X (m)	: 5655159.6 N	244mm Shoe at (mMDRT)	: 2293.4
Well Type	: Exp/Appraisal	Y (m)	: 664161.0 E	178mm Shoe at (mMDRT)	: 4022.5
Rig Name	: Maersk Guardian	RT-LAT (m)	: 50.5		
		RT-Seabed (m)	: 149.8		

Spud Date	: 20-05-2006
Total Depth Date	: 15-06-2006
Total Depth (mRT)	4026m
T.V.D. (mSSLAT)	: 2340.18m
Status	: Completed

ABBREVIATIONS

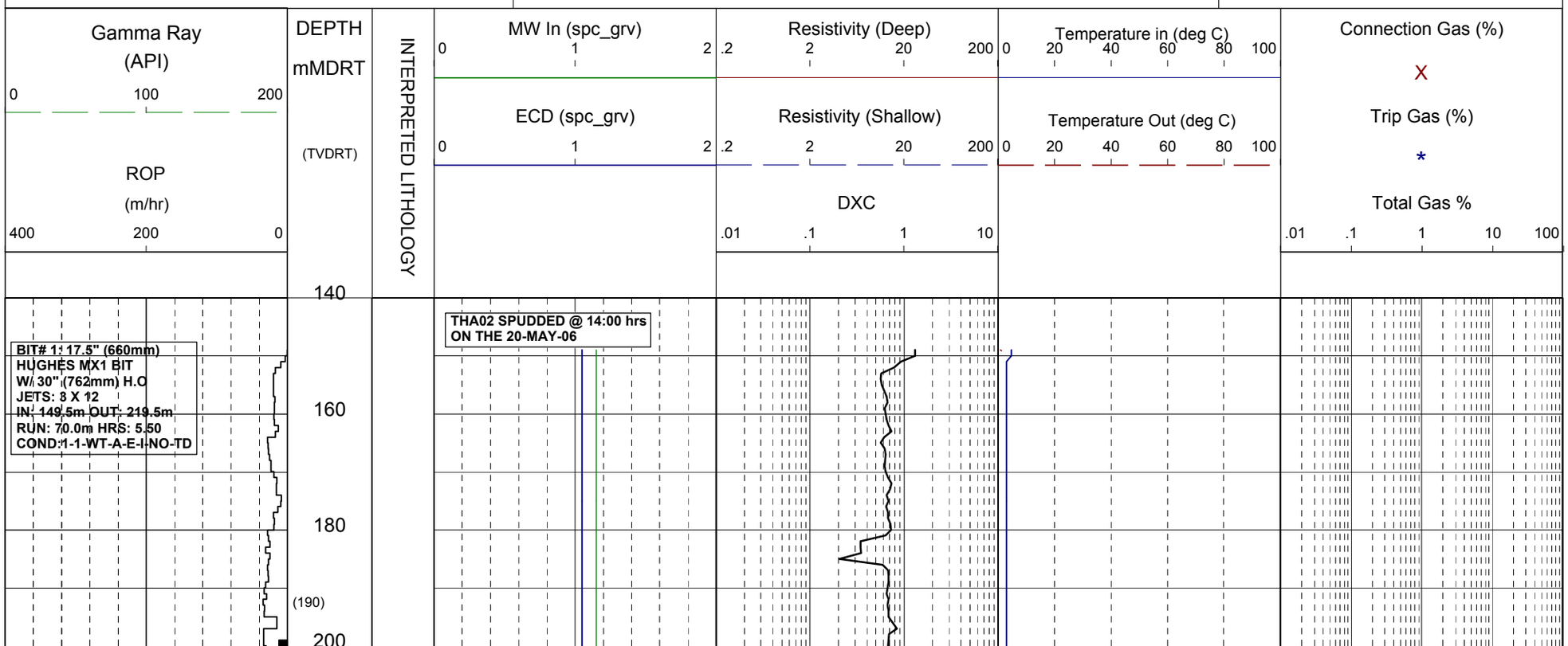
MW MUD WEIGHT	NB NEW BIT
FV FUNNEL VISCOSITY	RR RERUN BIT
PV PLASTIC VISCOSITY	CB CORE BIT
YP YIELD POINT	WOB WEIGHT ON BIT
FC FILTER CAKE	RPM REVS PER MINUTE
SOL SOLIDS	FLC FLOW CHECK
WL FILTRATE	CR CIRCULATE RETURNS
SD SAND - %	PR POOR RETURNS
S SALINITY - PPM	NR NO RETURNS
RM MUD RESISTIVITY	BG BACKGROUND GAS
RMF MUD FILTRATE	TG TRIP GAS
C CARBIDE TEST	STG SHORT TRIP GAS
LAT LOGGED AFTER TRIP	CG CONNECTION GAS
DS DEVIATION SURVEY	SG SWAB GAS
	SVG SURVEY GAS

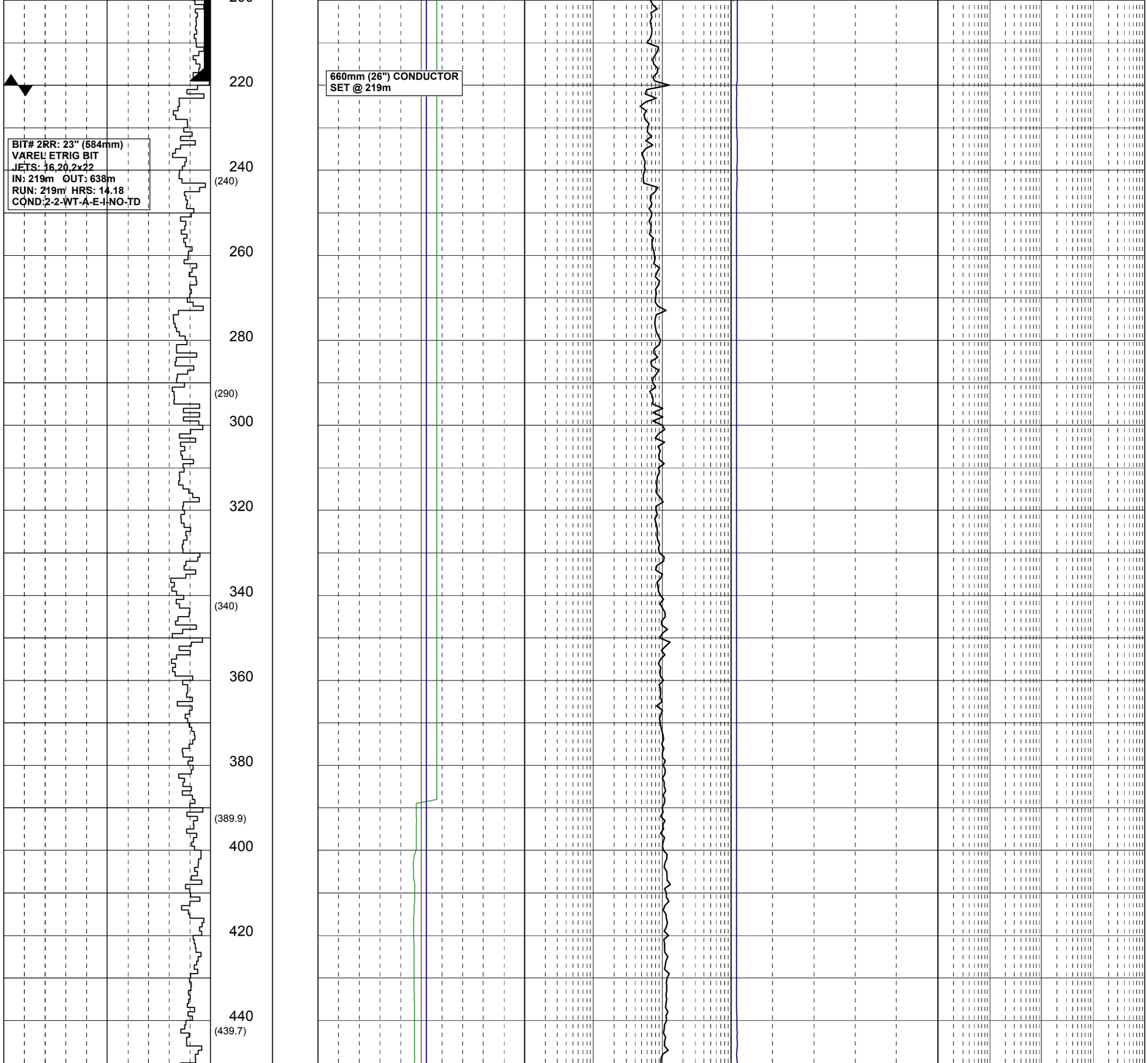
LITHOLOGY LEGEND

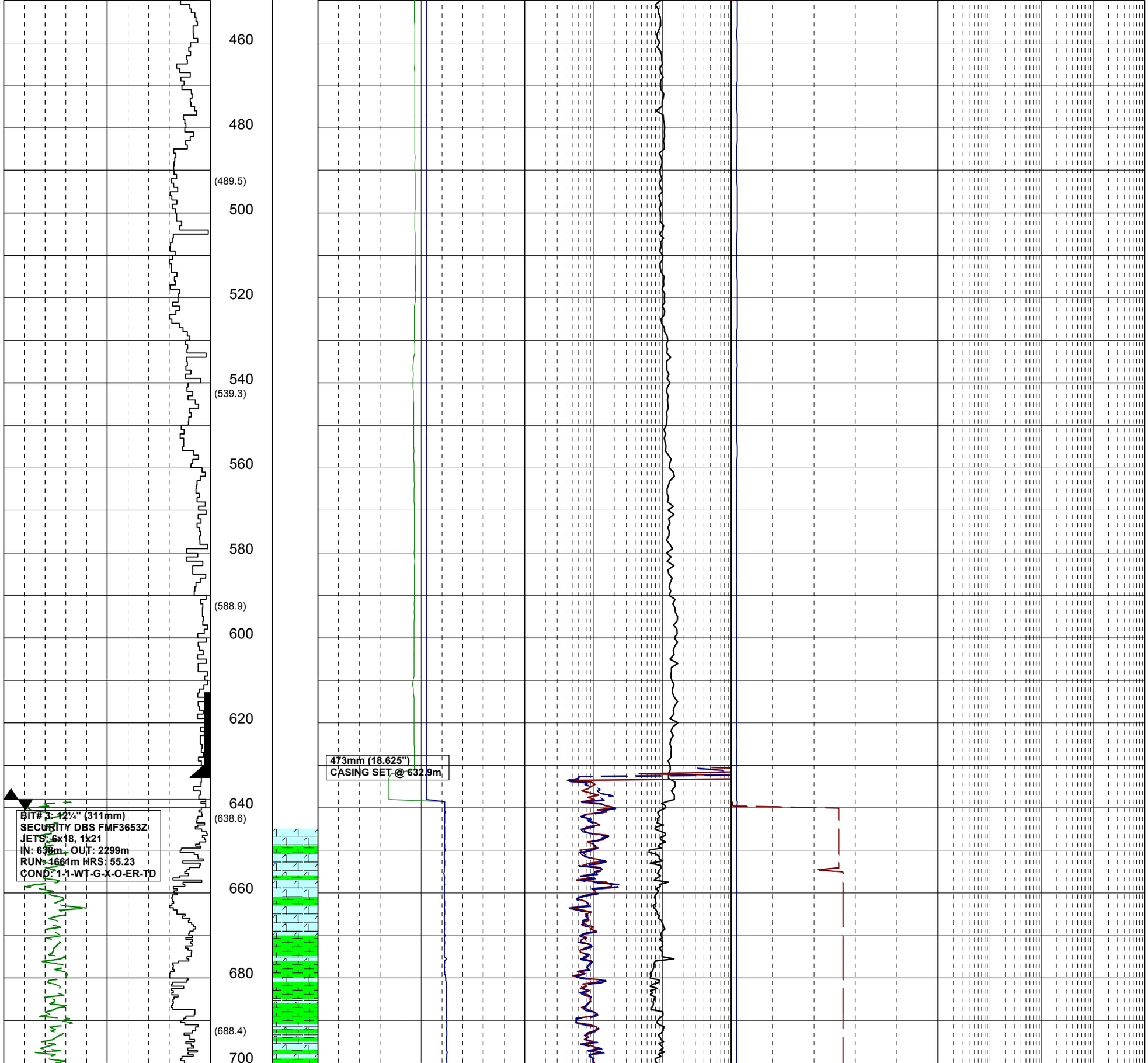
Limestone	Calcarenite	Pyrite
Coal	Gypsum	Glauconite
Fine Sandstone	Marl	Mica
Siltstone	Dolomite	Ferrous
Carb. Siltstone	Claystone	Fossils
Calc. Siltstone	Calc Claystone	Calcareous
Calcisiltite	Lithic frag	Dolomitic
Calcilutite	Foraminifera	

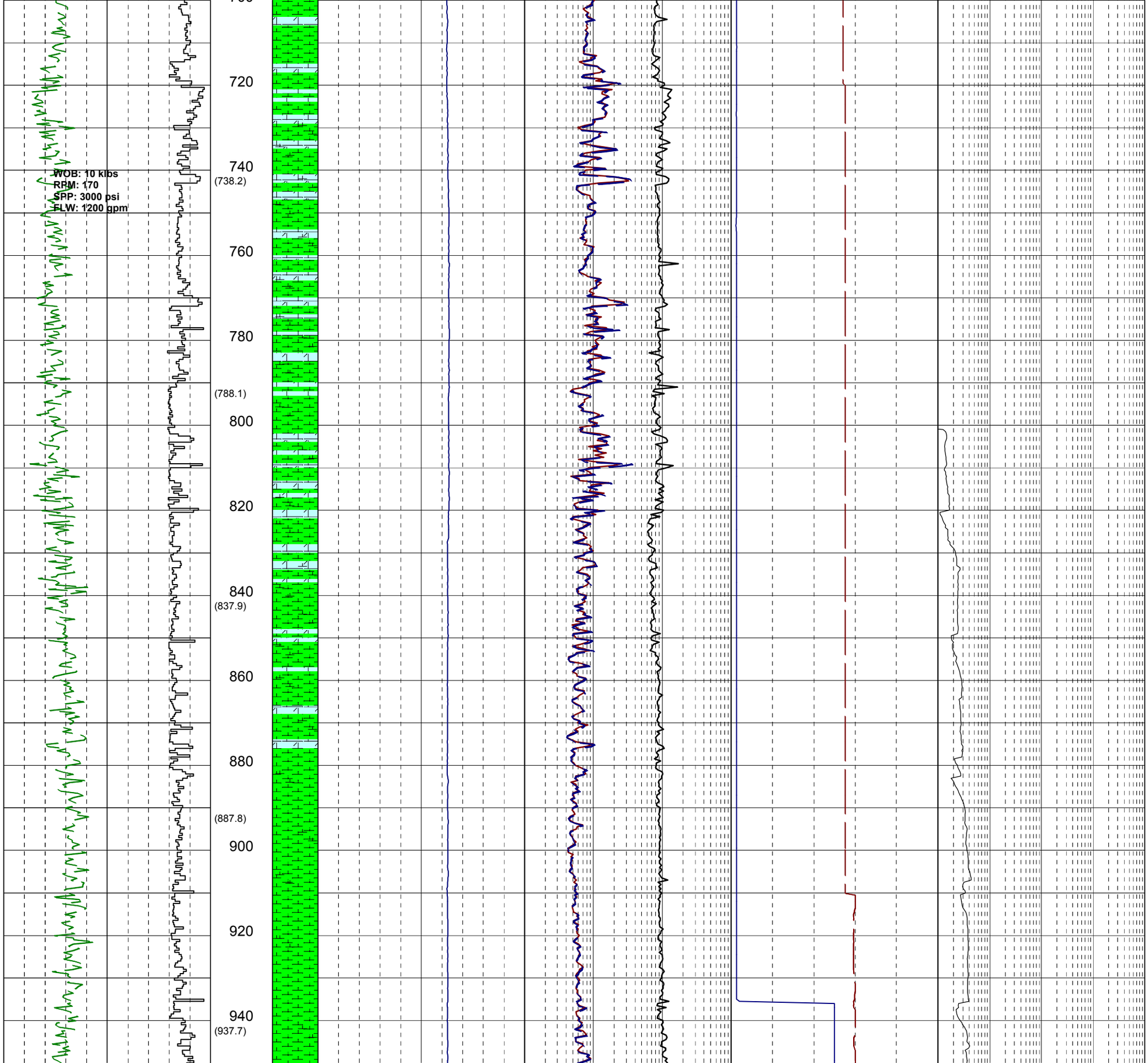
ENGINEERING LEGEND

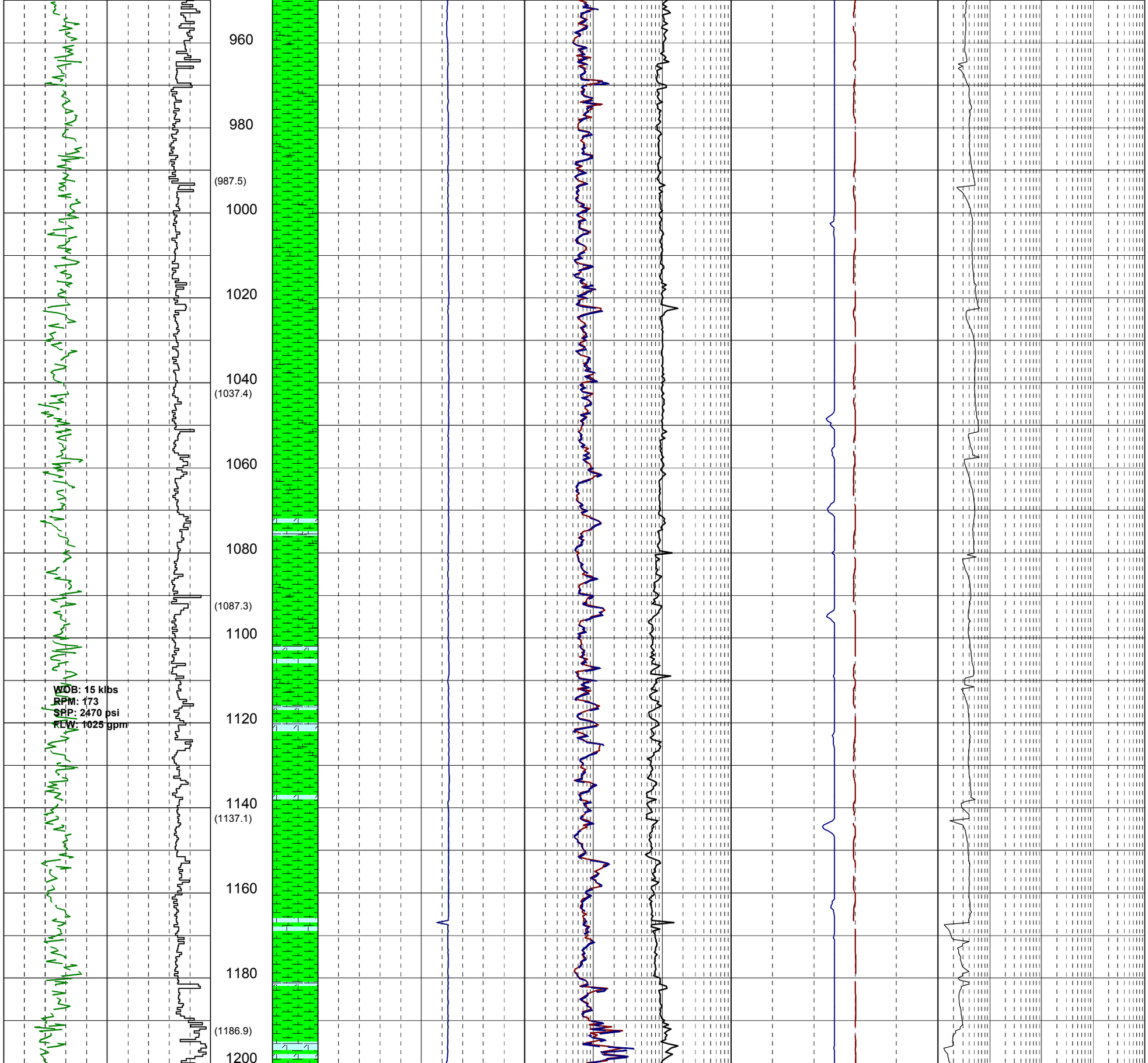
- Deviation Survey
- Casing Shoe
- Wiper Trip
- SWC (rec)
- SWC (unrec)
- Core
- Bit Trip

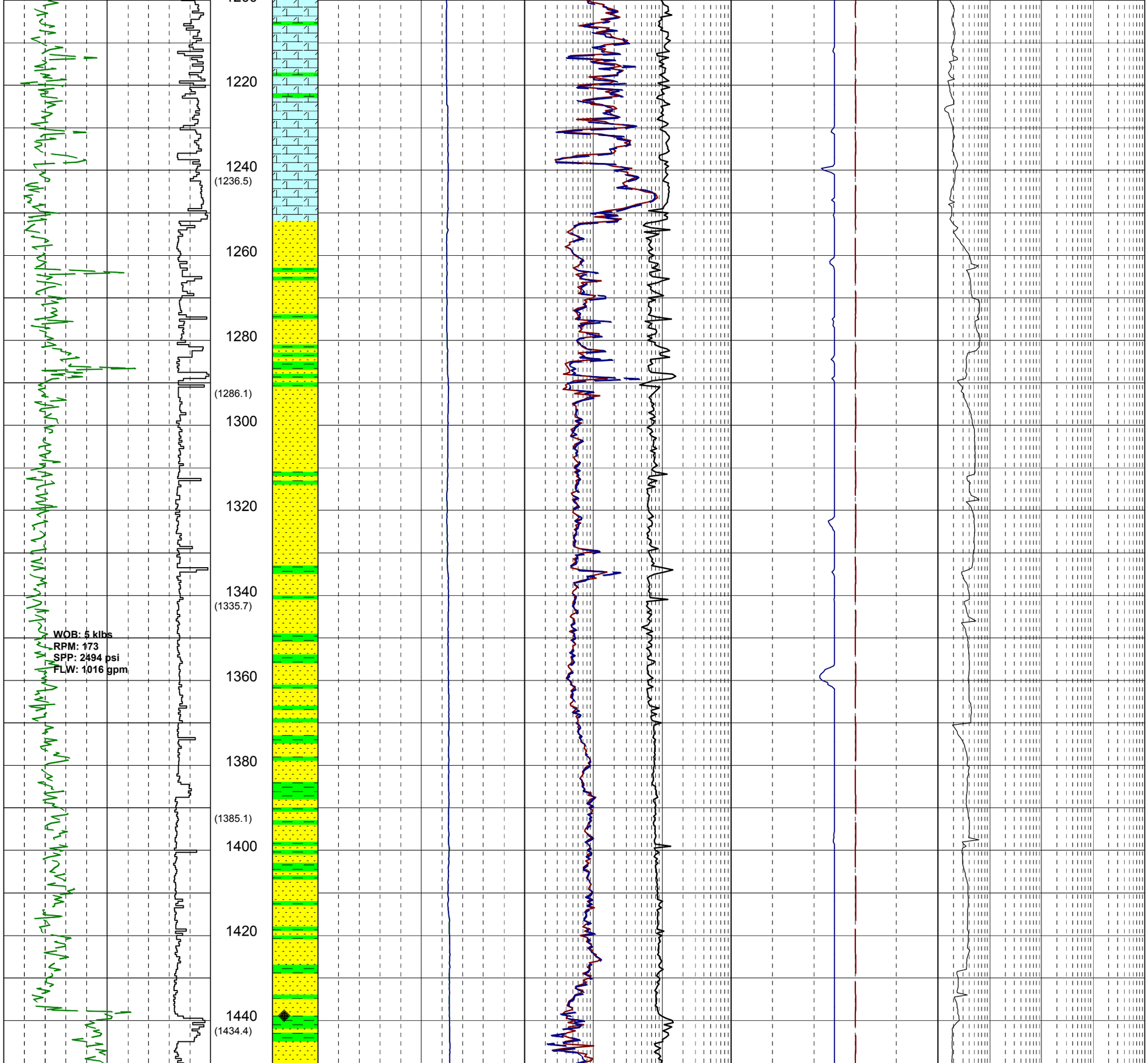


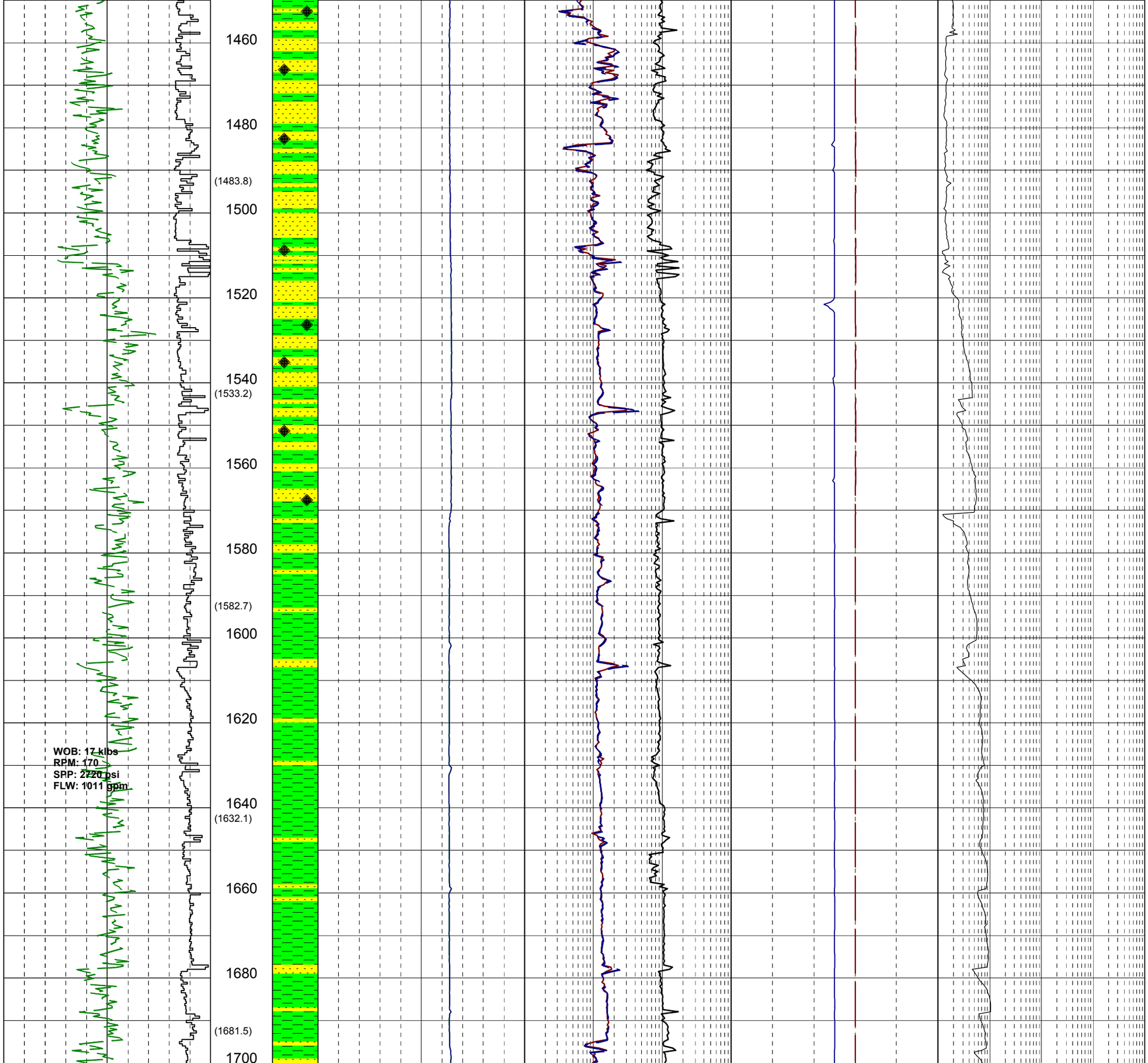

220
240
(240)
260
280
(290)
300
320
340
(340)
360
380
(389.9)
400
420
440
(439.7)
BIT# 2RR: 23" (584mm)
VAREL ETRIG BIT
JETS: 16,20,2x22
IN: 219m OUT: 638m
RUN: 219m HRS: 14.18
COND:2-2-WT-A-E-I-NO-TD
660mm (26") CONDUCTOR
SET @ 219m

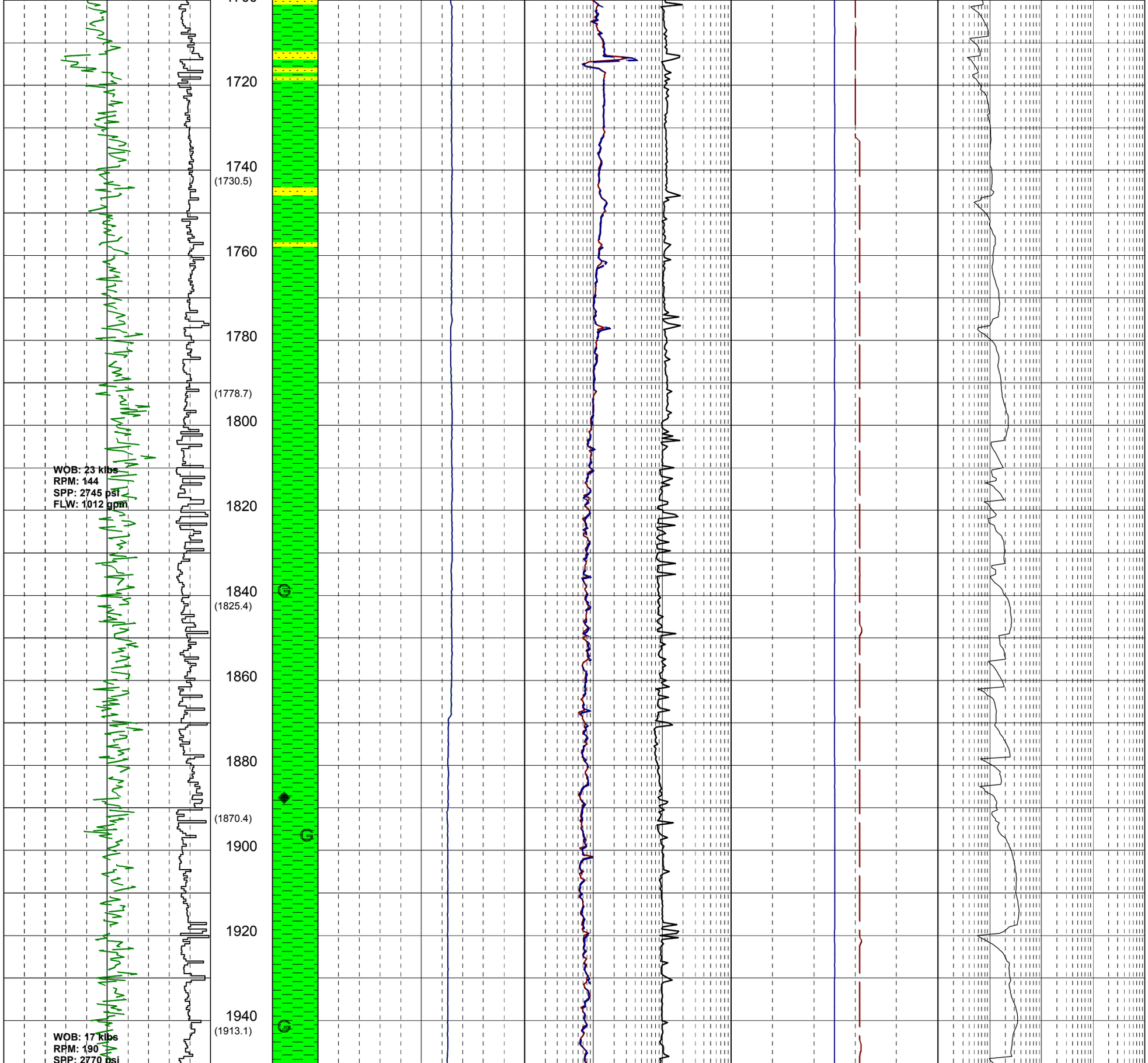

460
480
(489.5)
500
520
540
(539.3)
560
580
(588.9)
600
620
640
(638.6)
660
680
(688.4)
700
473mm (18.625")
CASING SET @ 632.9m
BIT# 3: 12¼" (311mm)
SECURITY DBS FMF3653Z
JETS: 6x18, 1x21
IN: 638m, OUT: 2299m
RUN: 1661m HRS: 55.23
COND: 1-1-WT-G-X-O-ER-TD

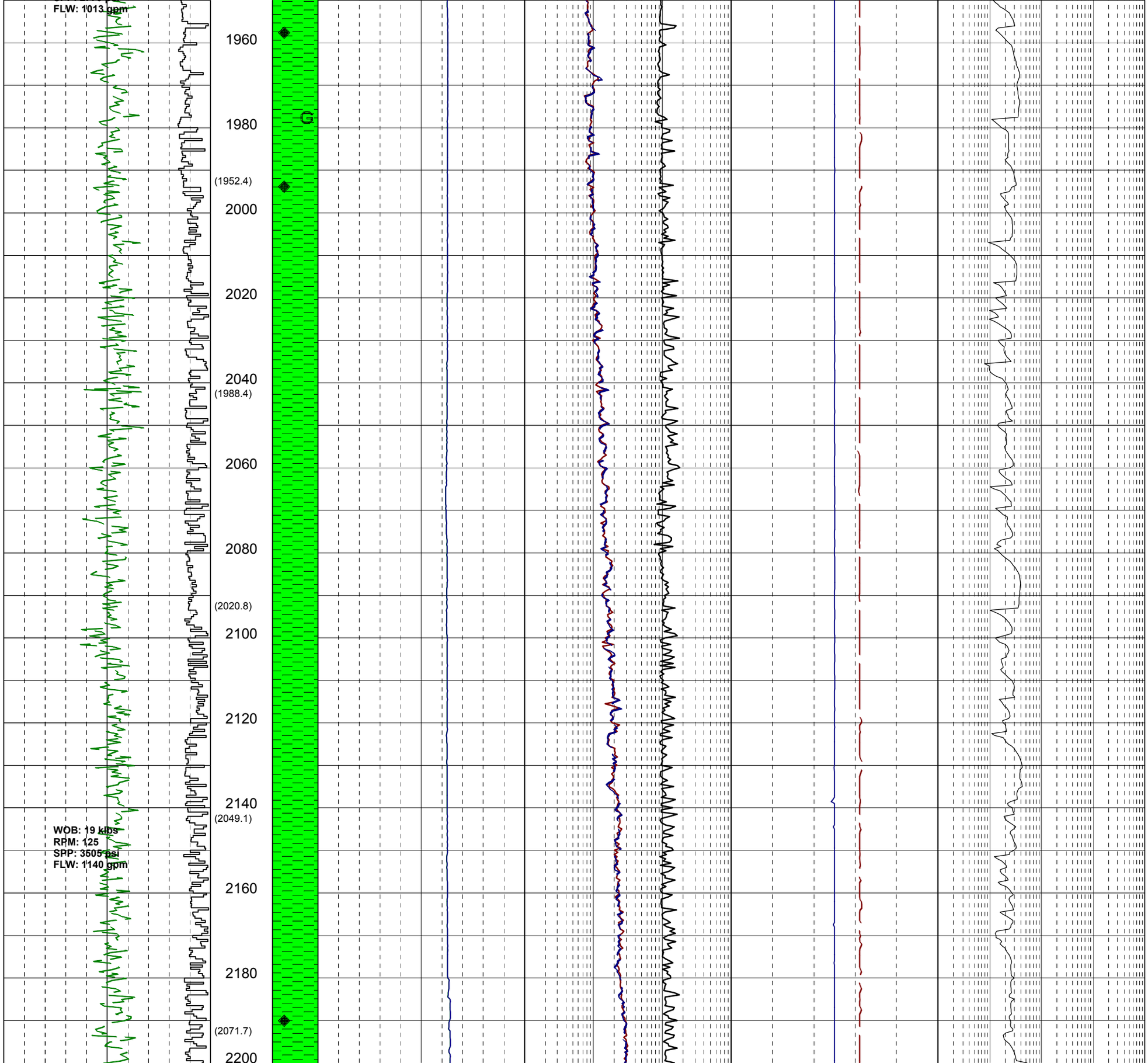

WOB: 10 klbs
RPM: 170
SPP: 3000 psi
FLW: 1200 gpm
720
740
(738.2)
760
780
(788.1)
800
820
840
(837.9)
860
880
(887.8)
900
920
940
(937.7)

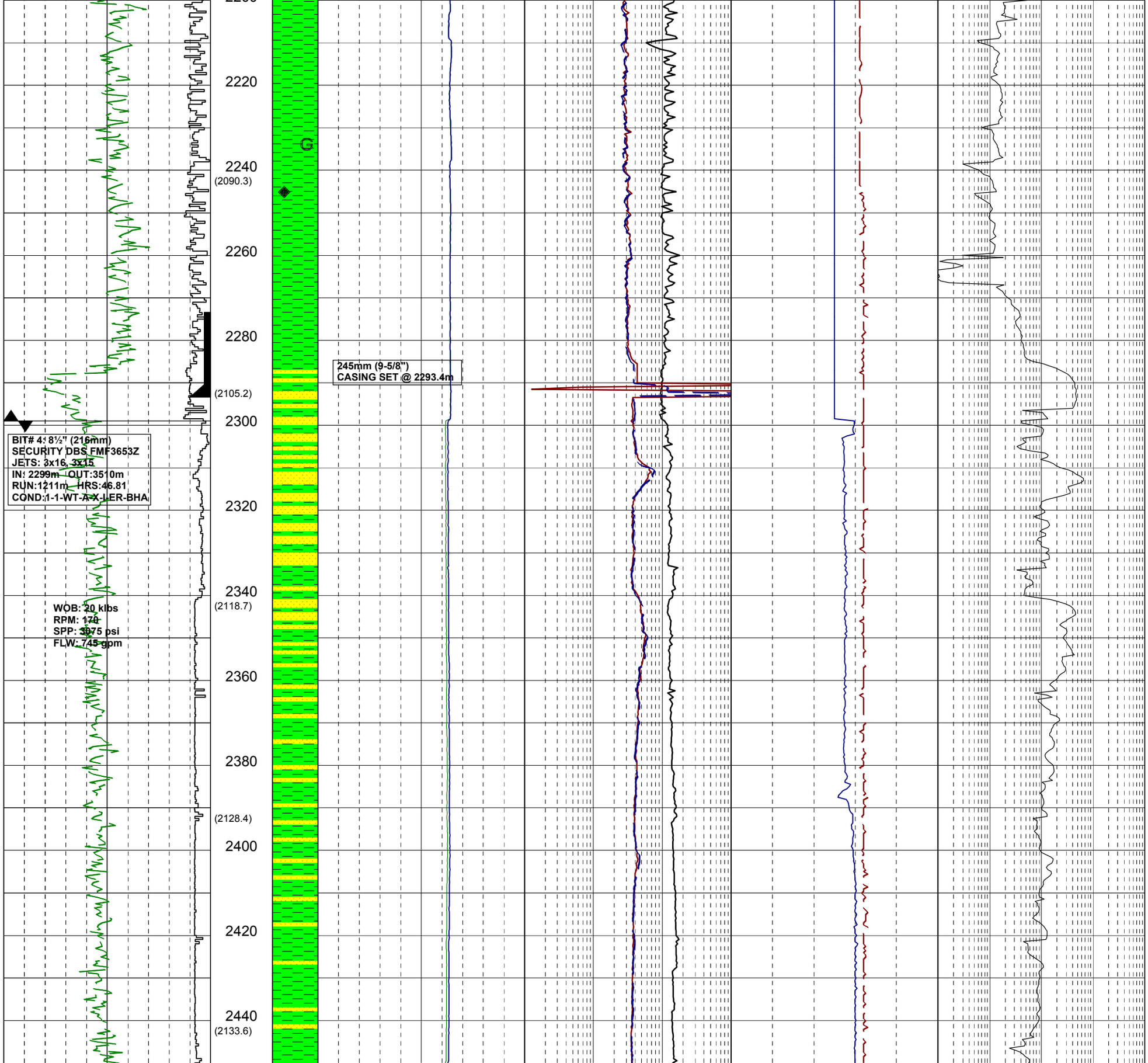

960
980
(987.5)
1000
1020
1040
(1037.4)
1060
1080
(1087.3)
1100
WOB: 15 klbs
RPM: 173
SPP: 2470 psi
FLW: 1025 gpm
1120
1140
(1137.1)
1160
1180
(1186.9)
1200

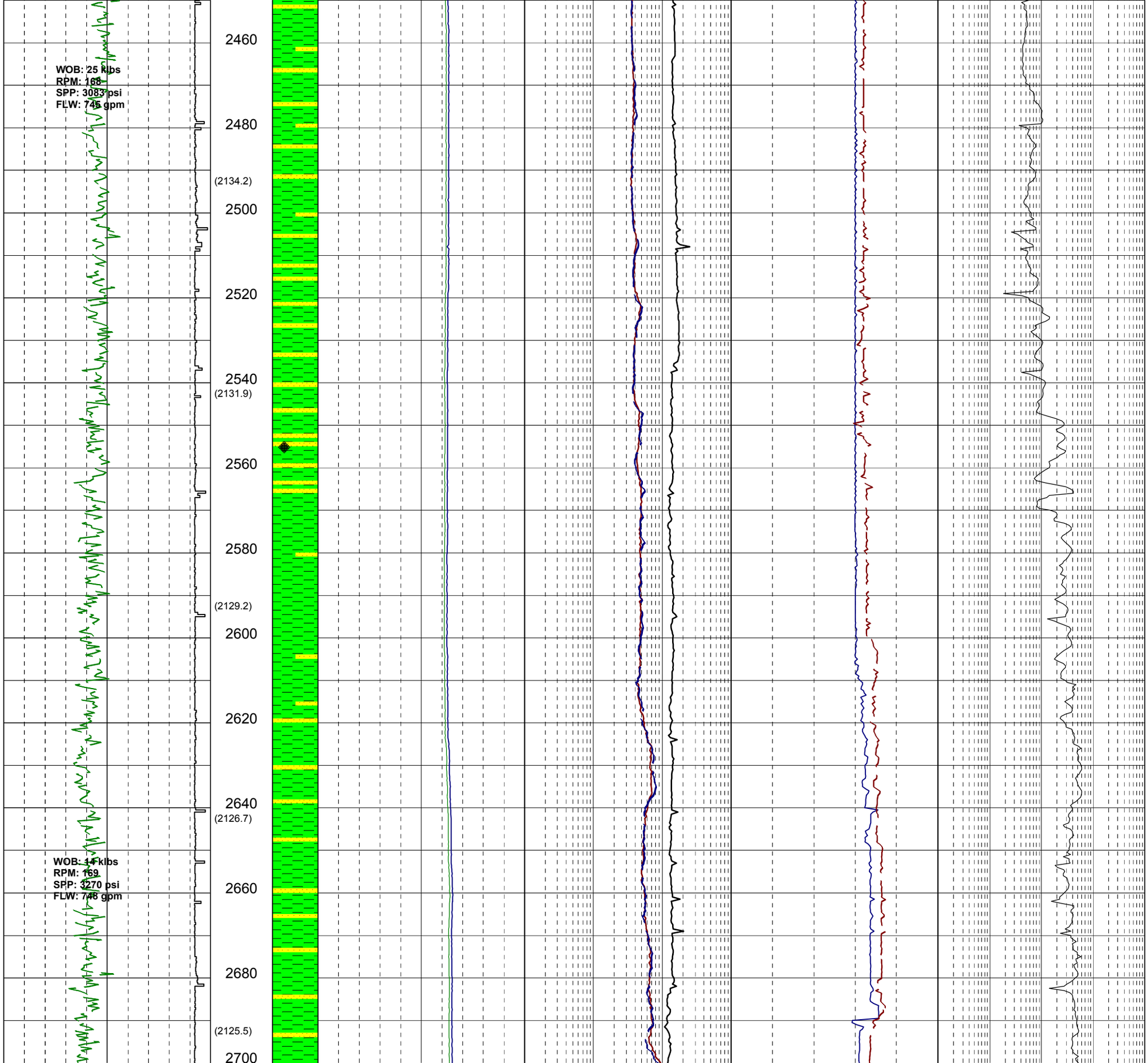

1220
1240
(1236.5)
1260
1280
(1286.1)
1300
1320
1340
(1335.7)
WOB: 5 klbs
RPM: 173
SPP: 2494 psi
FLW: 1016 gpm
1360
1380
(1385.1)
1400
1420
1440
(1434.4)

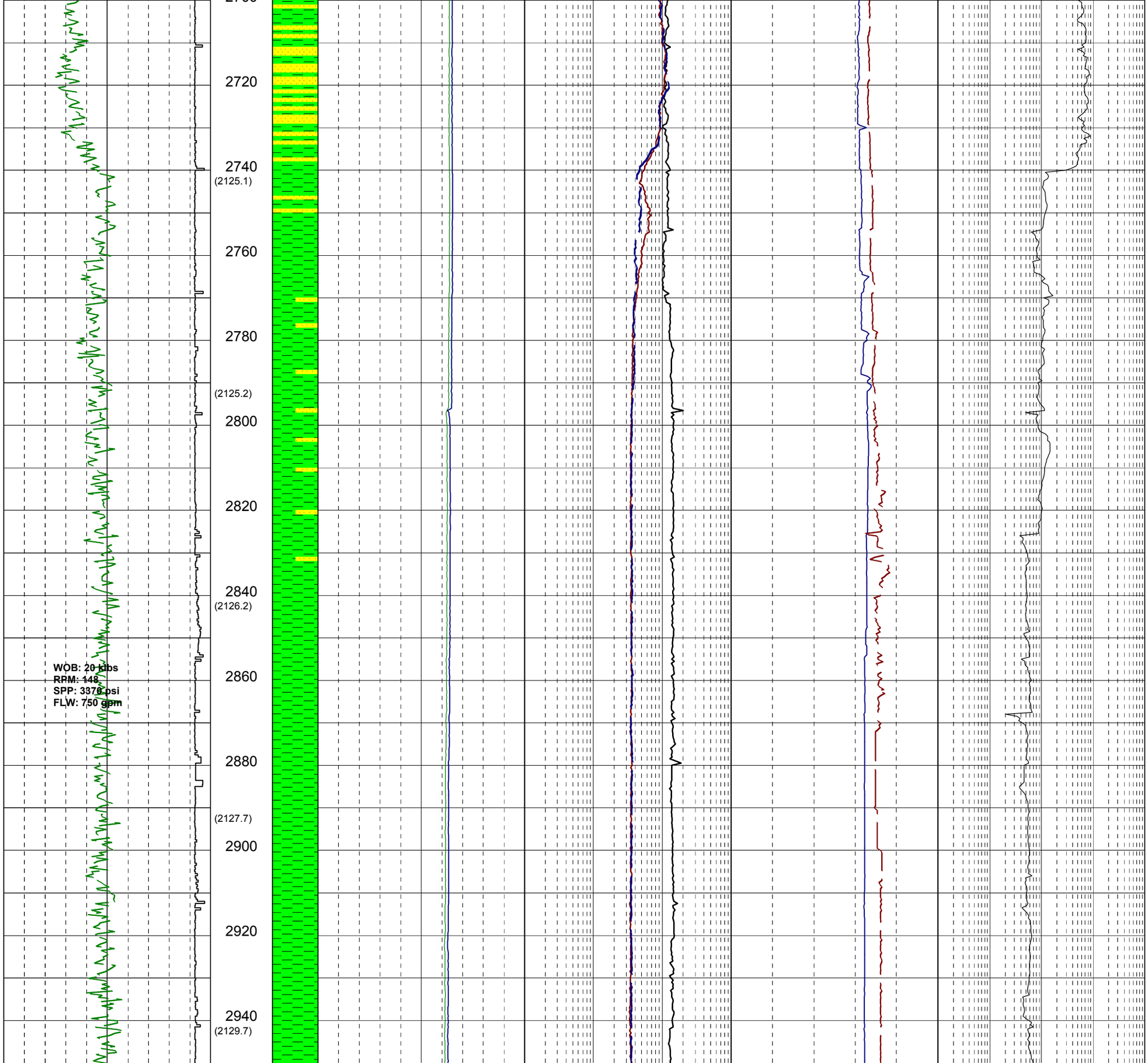

1460
1480
(1483.8)
1500
1520
1540
(1533.2)
1560
1580
(1582.7)
1600
1620
WOB: 17 klbs
RPM: 170
SPP: 2720 psi
FLW: 1011 gpm
1640
(1632.1)
1660
1680
(1681.5)
1700

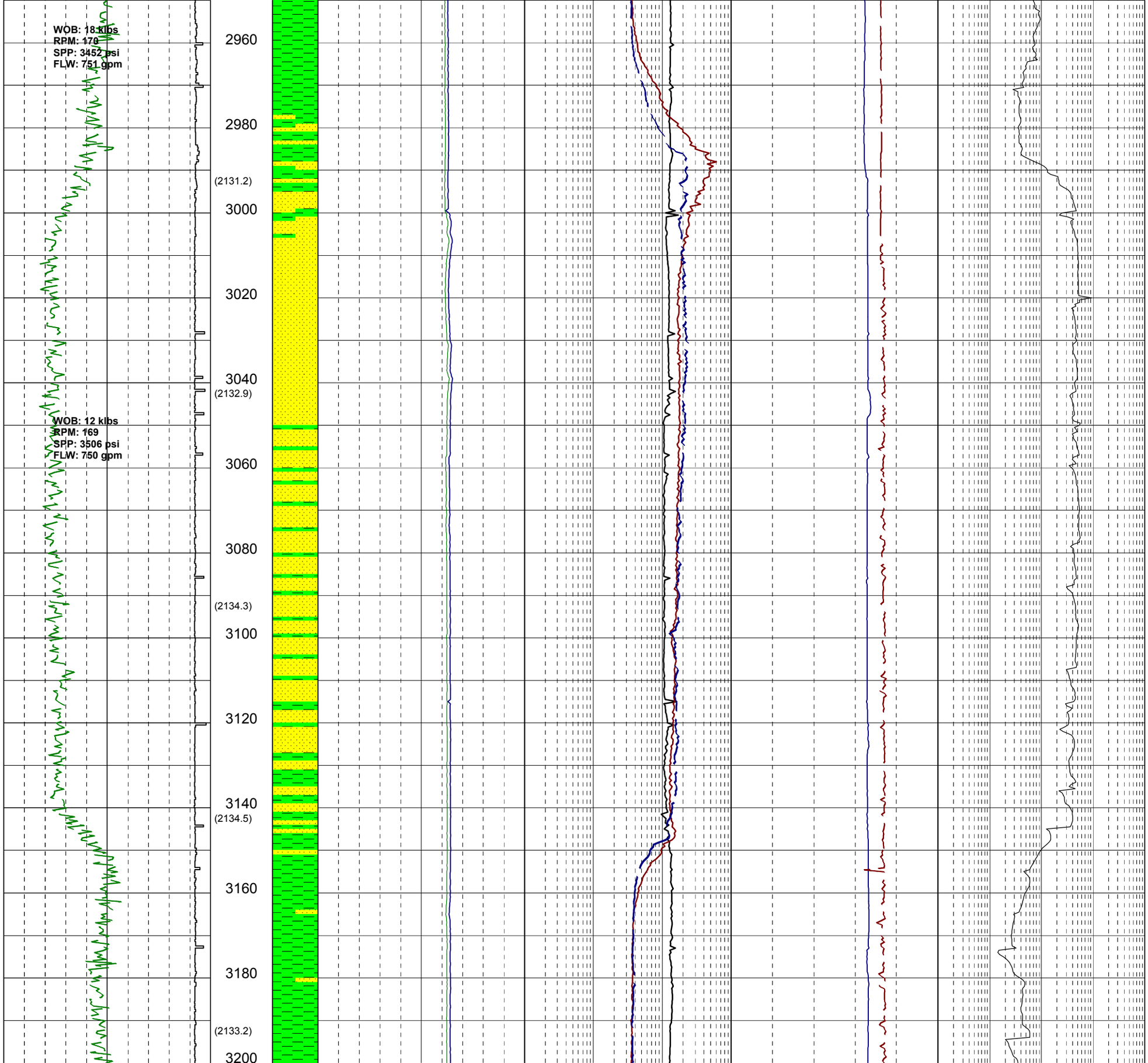

1720
1740
(1730.5)
1760
1780
(1778.7)
1800
WOB: 23 klbs
RPM: 144
SPP: 2745 psi
FLW: 1012 gpm
1820
1840
(1825.4)
1860
1880
(1870.4)
1900
1920
1940
(1913.1)
WOB: 17 klbs
RPM: 190
SPP: 2770 psi

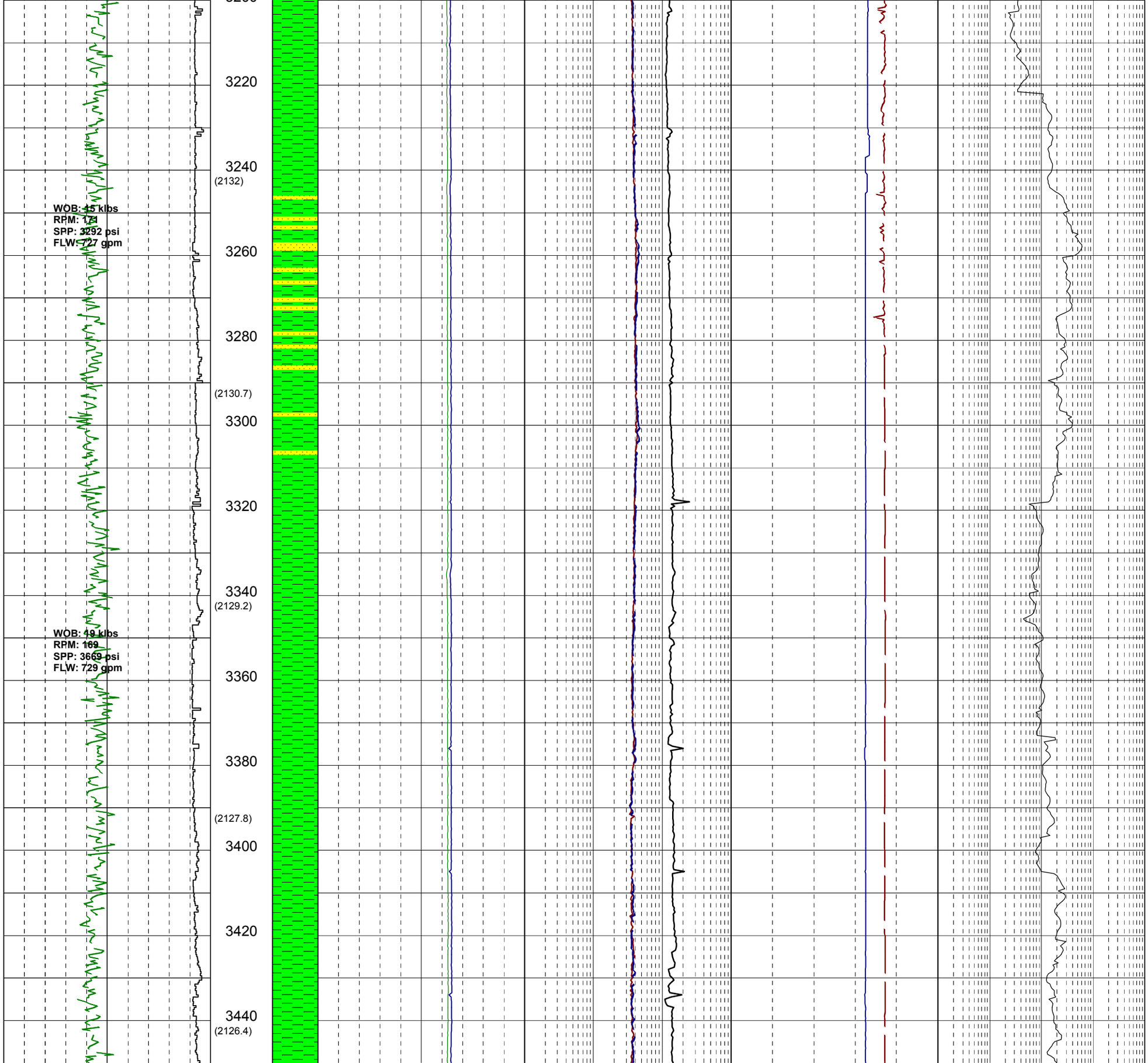

FLW: 1013 gpm
1960
1980
(1952.4)
2000
2020
2040
(1988.4)
2060
2080
(2020.8)
2100
2120
2140
(2049.1)
WOB: 19 klbs
RPM: 125
SPP: 3505 psi
FLW: 1140 gpm
2160
2180
(2071.7)
2200

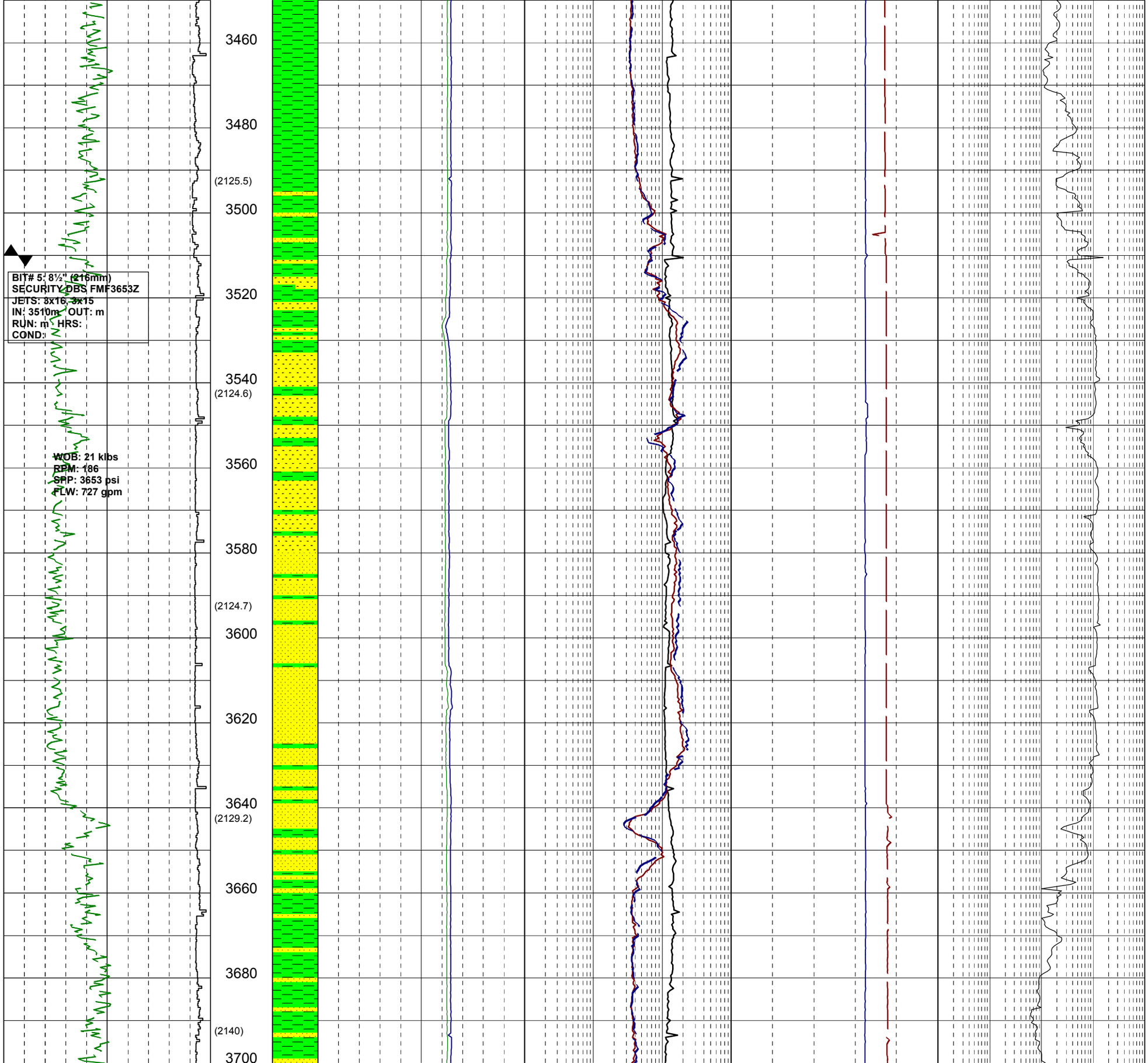

2220
2240
(2090.3)
2260
2280
(2105.2)
2300
2320
2340
(2118.7)
2360
2380
(2128.4)
2400
2420
2440
(2133.6)
G
245mm (9-5/8")
CASING SET @ 2293.4m
BIT# 4: 8½" (216mm)
SECURITY DBS FMF3653Z
JETS: 3x16, 3x15
IN: 2299m OUT:3510m
RUN:1211m HRS:46.81
COND:1-1-WT-A-X-I-ER-BHA
WOB: 20 klbs
RPM: 170
SPP: 3975 psi
FLW: 745 gpm

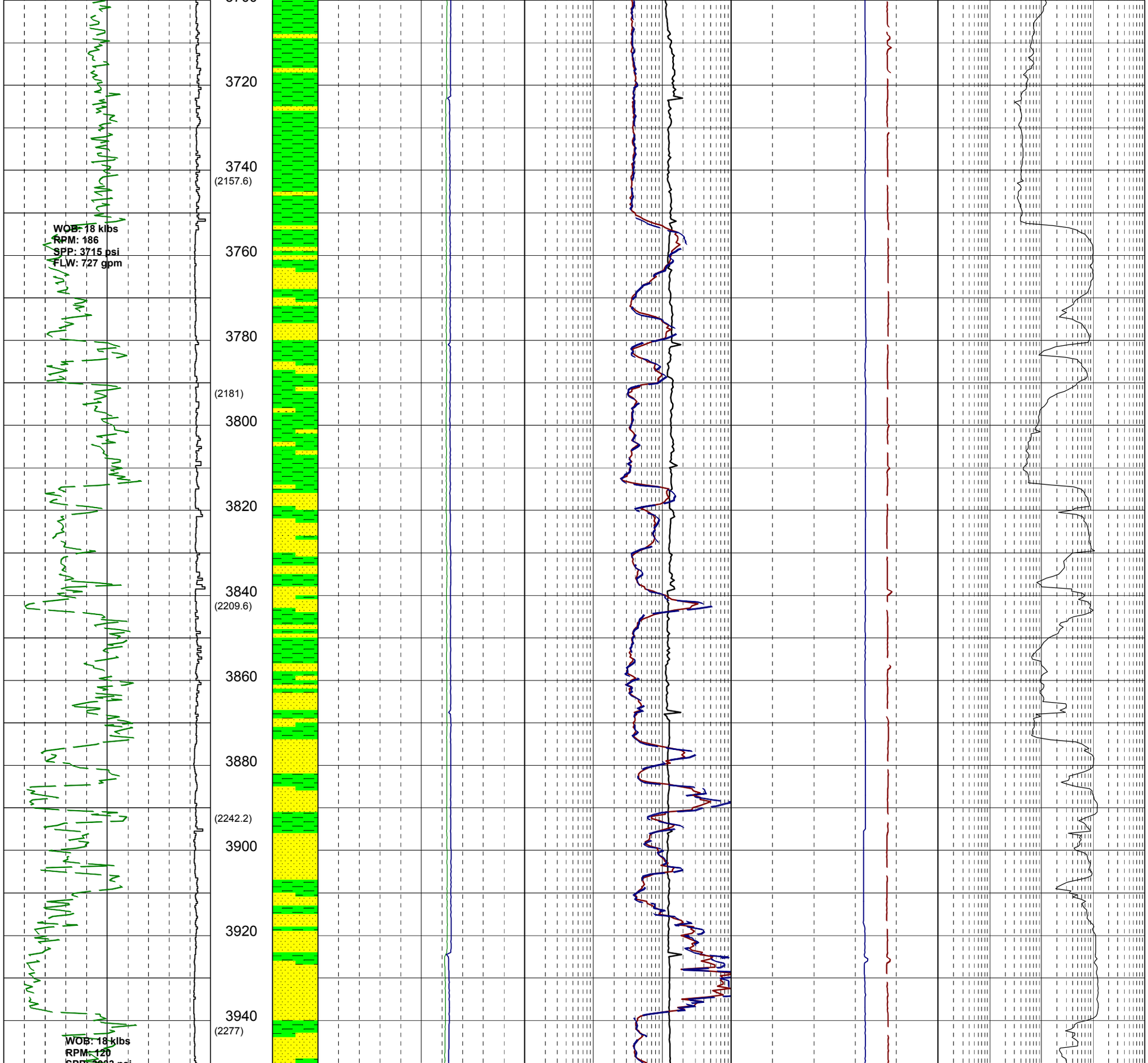

WOB: 25 klbs
RPM: 168
SPP: 3083 psi
FLW: 745 gpm
2460
2480
(2134.2)
2500
2520
2540
(2131.9)
2560
2580
(2129.2)
2600
2620
2640
(2126.7)
WOB: 14 klbs
RPM: 169
SPP: 3270 psi
FLW: 748 gpm
2660
2680
(2125.5)
2700

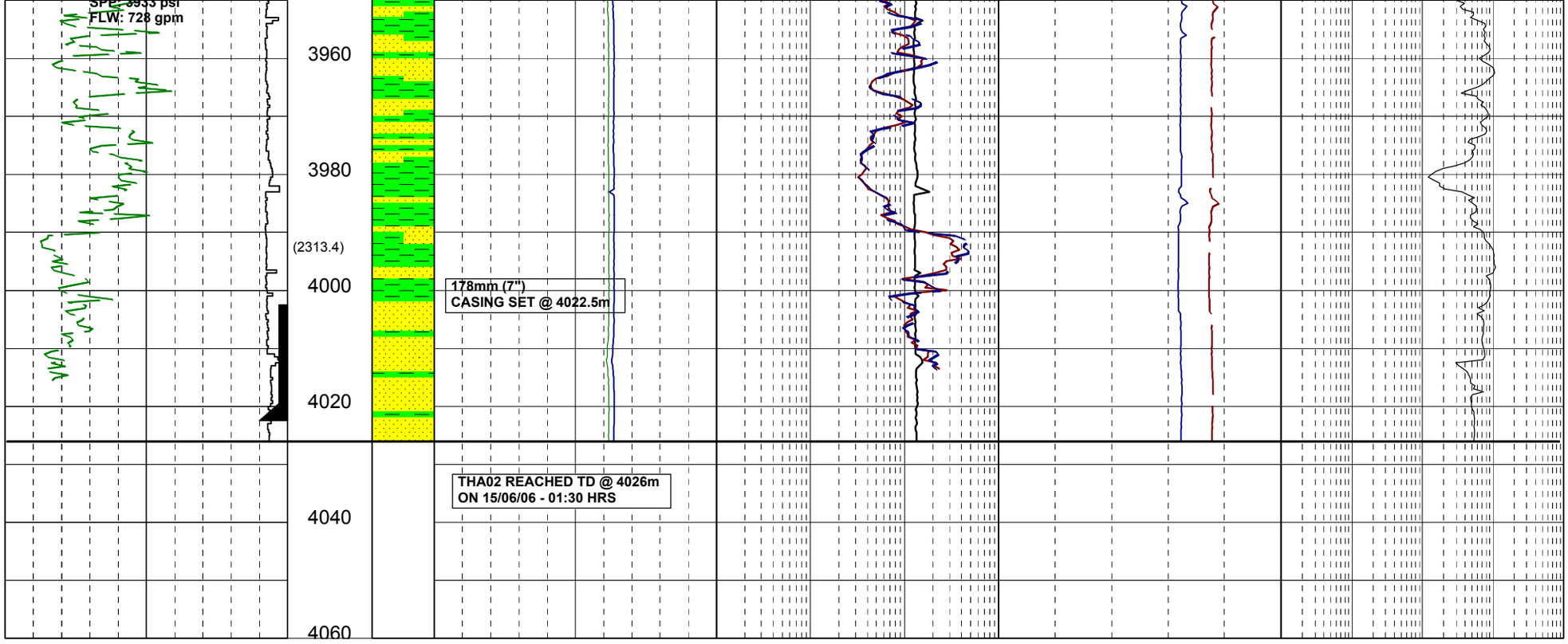

2720
2740
(2125.1)
2760
2780
(2125.2)
2800
2820
2840
(2126.2)
WOB: 20 klbs
RPM: 148
SPP: 3370 psi
FLW: 750 gpm
2860
2880
(2127.7)
2900
2920
2940
(2129.7)


WOB: 18 klbs
RPM: 170
SPP: 3452 psi
FLW: 751 gpm
2960
2980
(2131.2)
3000
3020
3040
(2132.9)
WOB: 12 klbs
RPM: 169
SPP: 3506 psi
FLW: 750 gpm
3060
3080
(2134.3)
3100
3120
3140
(2134.5)
3160
3180
(2133.2)
3200


3220
3240
(2132)
WOB: 45 klbs
RPM: 171
SPP: 3292 psi
FLW: 727 gpm
3260
3280
(2130.7)
3300
3320
3340
(2129.2)
WOB: 49 klbs
RPM: 169
SPP: 3669 psi
FLW: 729 gpm
3360
3380
(2127.8)
3400
3420
3440
(2126.4)


3460
3480
(2125.5)
3500
BIT# 5: 8½" (216mm)
SECURITY DBS FMF3653Z
JETS: 8x16, 3x15
IN: 3510m OUT: m
RUN: m HRS:
COND:
3520
3540
(2124.6)
WOB: 21 klbs
RPM: 186
SPP: 3653 psi
FLW: 727 gpm
3560
3580
(2124.7)
3600
3620
3640
(2129.2)
3660
3680
(2140)
3700


3720
3740
(2157.6)
WOB: 18 klbs
RPM: 186
SPP: 3715 psi
FLW: 727 gpm
3760
3780
(2181)
3800
3820
3840
(2209.6)
3860
3880
(2242.2)
3900
3920
3940
(2277)
WOB: 18 klbs
RPM: 120


SPP: 3933 psi
FLW: 728 gpm
3960
3980
(2313.4)
4000
4020
178mm (7")
CASING SET @ 4022.5m
THA02 REACHED TD @ 4026m
ON 15/06/06 - 01:30 HRS
4040
4060

Enclosure E

GAS EVALUATION LOG

1 : 500

GAS LOG

WOODSIDE

Geoservices

FROM :(m) 620 TO :(m) 4040 SCALE : 1/ 500

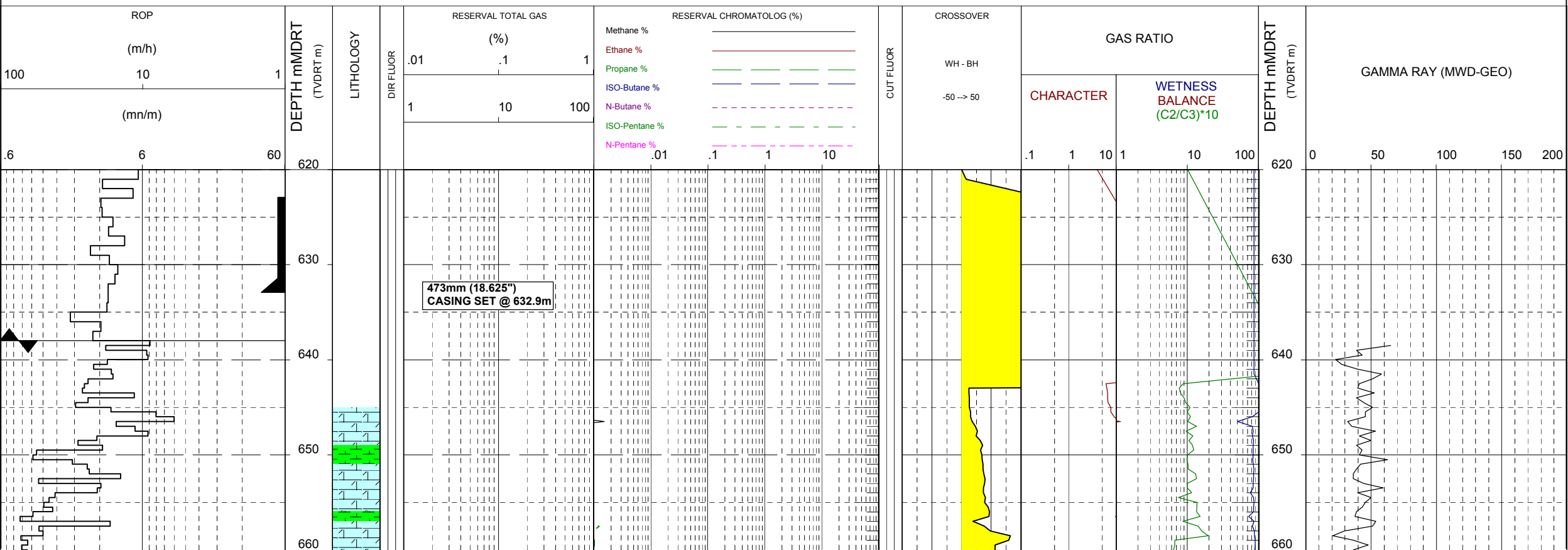
Well name	: THA02	Location	: 39°14'14.47" S 142°54'07.58" E	Rig Name	: Maersk Guardian
Client name	: WOODSIDE ENERGY LTD	Country	: AUSTRALIA	Rig Type	: Jack-up
RT-LAT (m)	: 50.5	Final TD (m)	: 4026m	X coordinate (m)	: 5655159.6 N
RT-Seabed (m)	: 149.8	TVD (mSSLAT)	: 2340.18m	Y Coordinate (m)	: 664161.0 E

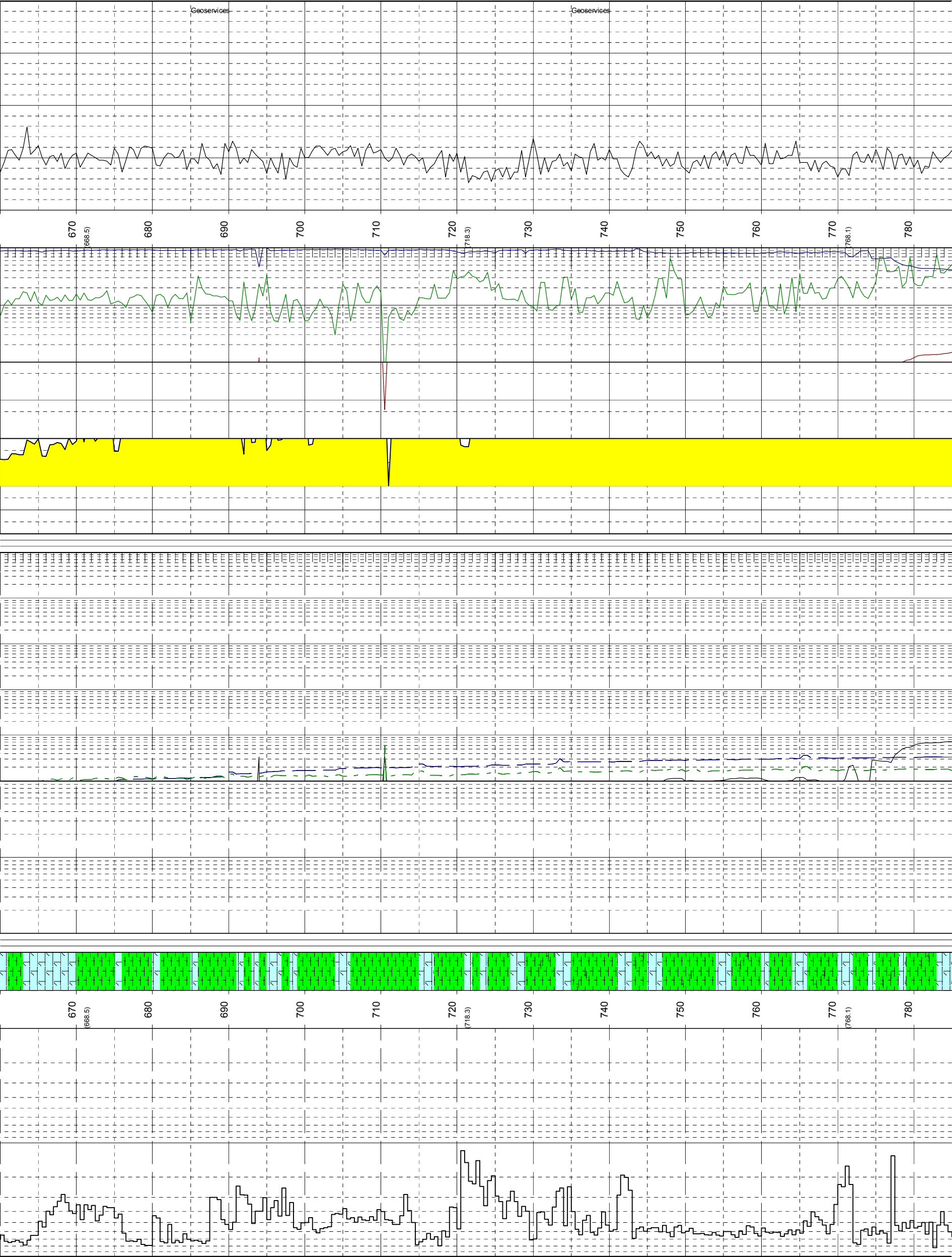
Limestone, Coal, Fine Sandstone, Siltstone, Carb. Siltstone, Calc. Siltstone, Calcisiltite, Calcilutite, Calcarenite

Gypsum, Marl, Dolomite, Claystone, Calc Claystone

Lithic frag, Foraminifera, Pyrite, Glauconite, Mica, Ferrous, Fossils, Calcareous, Chert

Deviation Survey, Casing Shoe, Wiper Trip, SWC (rec), SWC (unrec), Core, Bit Trip




Geoservices
Geoservices
670
(668.5)
680
690
700
710
720
(718.3)
730
740
750
760
770
(768.1)
780
670
(668.5)
680
690
700
710
720
(718.3)
730
740
750
760
770
(768.1)
780

Geoservices
Geoservices
Geoservices
790
800
810
820
(818)
830
840
850
860
870
(867.8)
880
890
900
910
790
800
810
820
(818)
830
840
850
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870
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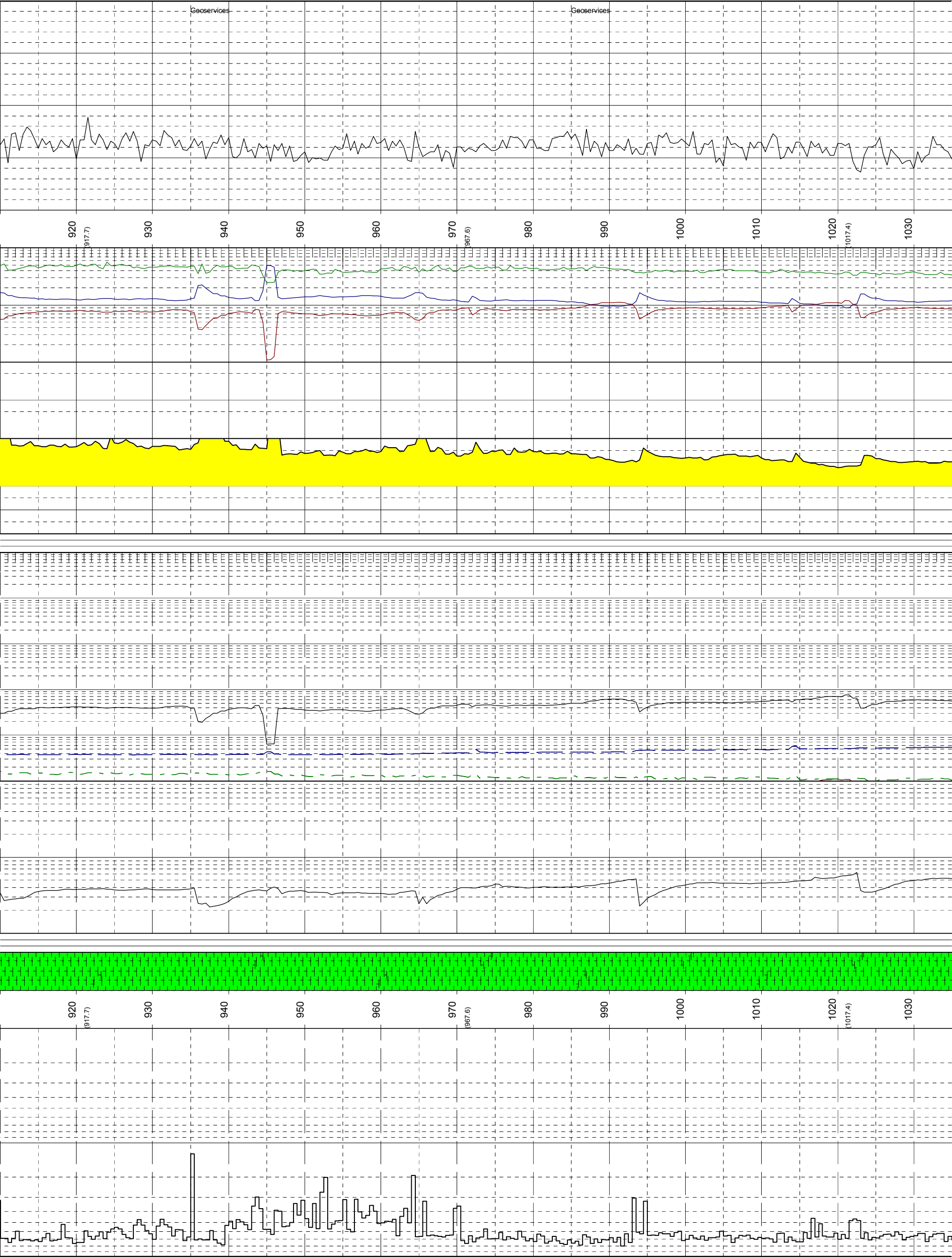
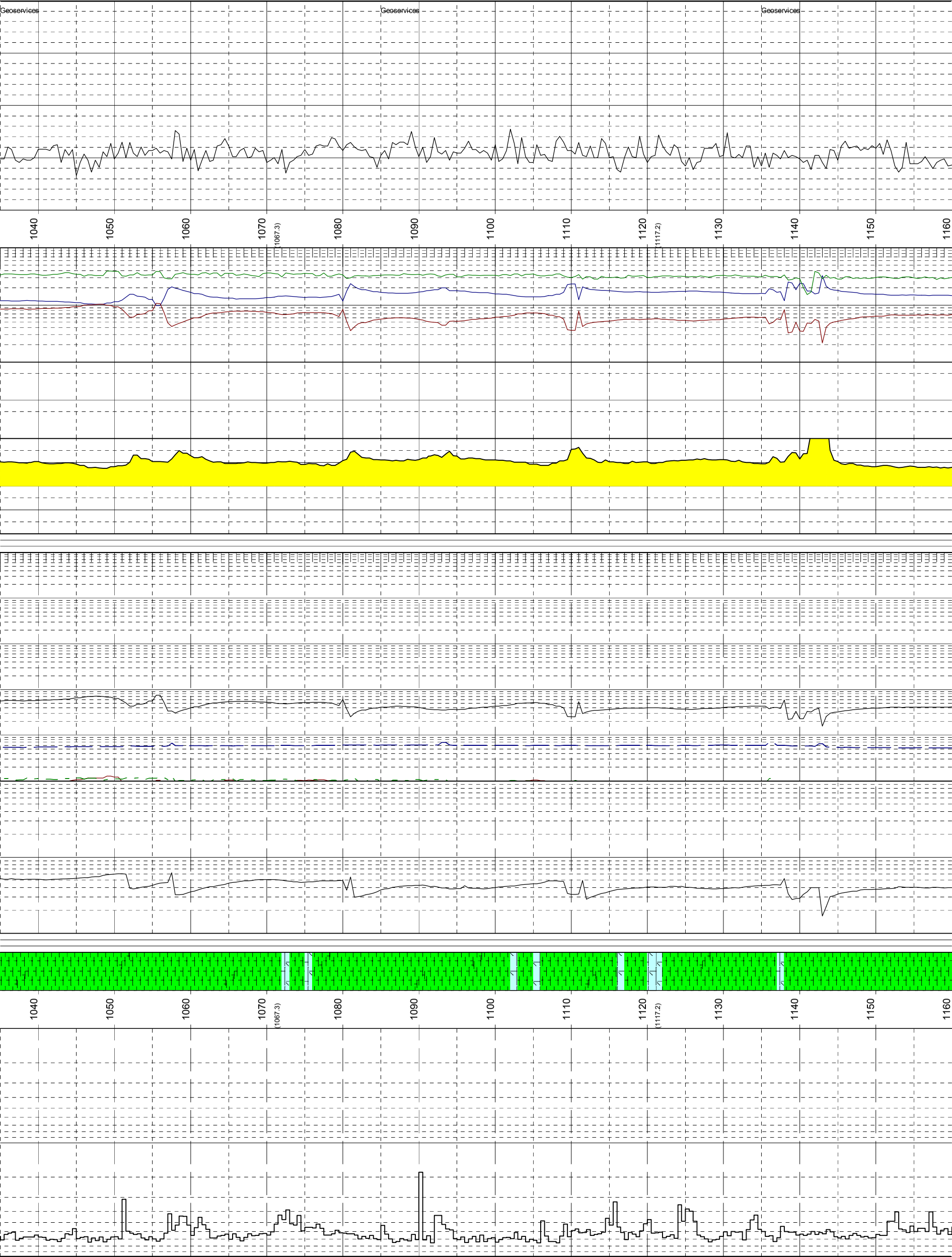
880
890
900
910


Geoservices
Geoservices
920
(917.7)
930
940
950
960
970
(967.6)
980
990
1000
1010
1020
(1017.4)
1030
920
(917.7)
930
940
950
960
970
(967.6)
980
990
1000
1010
1020
(1017.4)
1030


Geoservices
Geoservices
Geoservices
1040
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1060
1070
(1067.3)
1080
1090
1100
1110
1120
(1117.2)
1130
1140
1150
1160
1040
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(1117.2)
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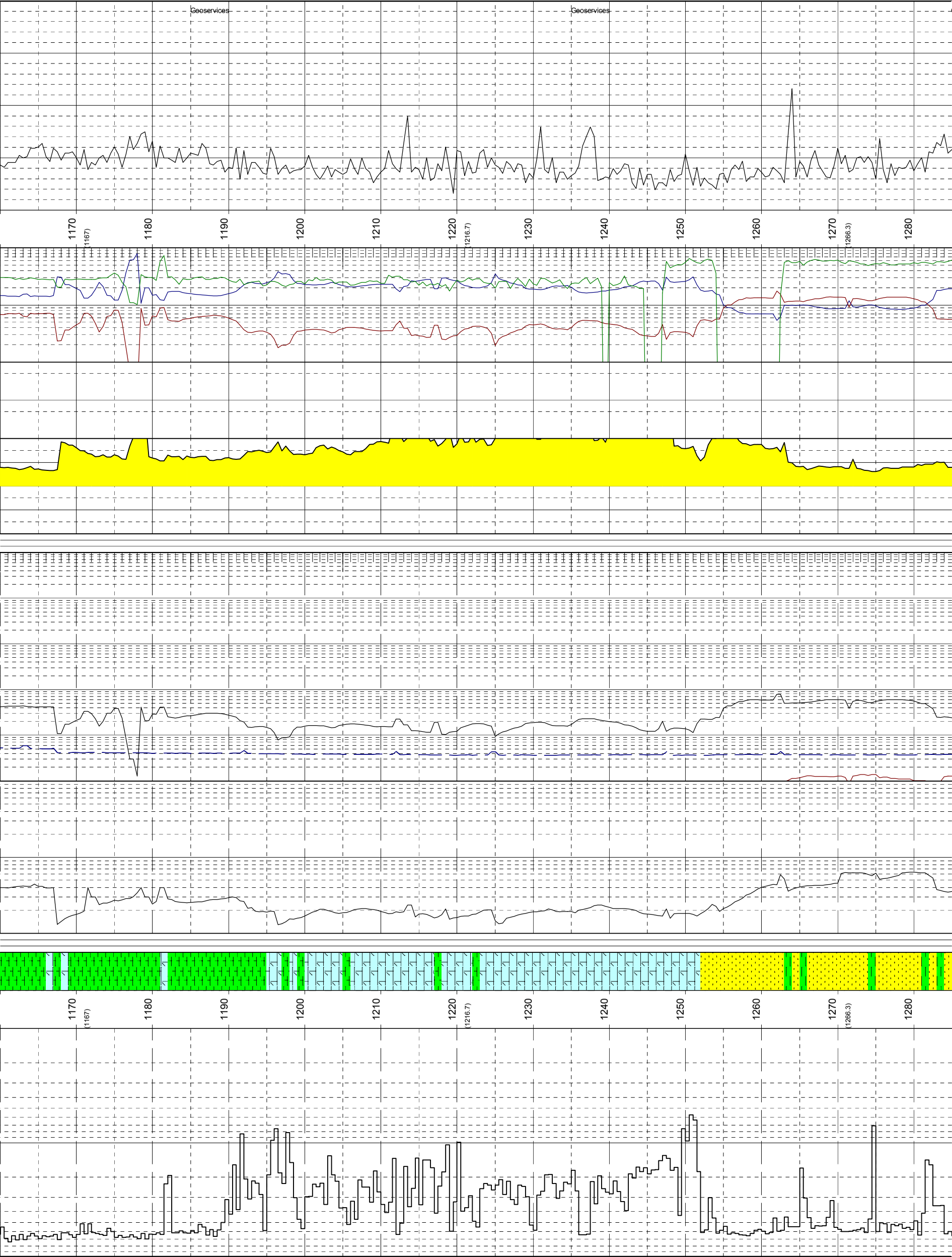
1150
1160


Geoservices
Geoservices
1170
(1167)
1180
1190
1200
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1220
(1216.7)
1230
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1250
1260
1270
(1266.3)
1280
1170
(1167)
1180
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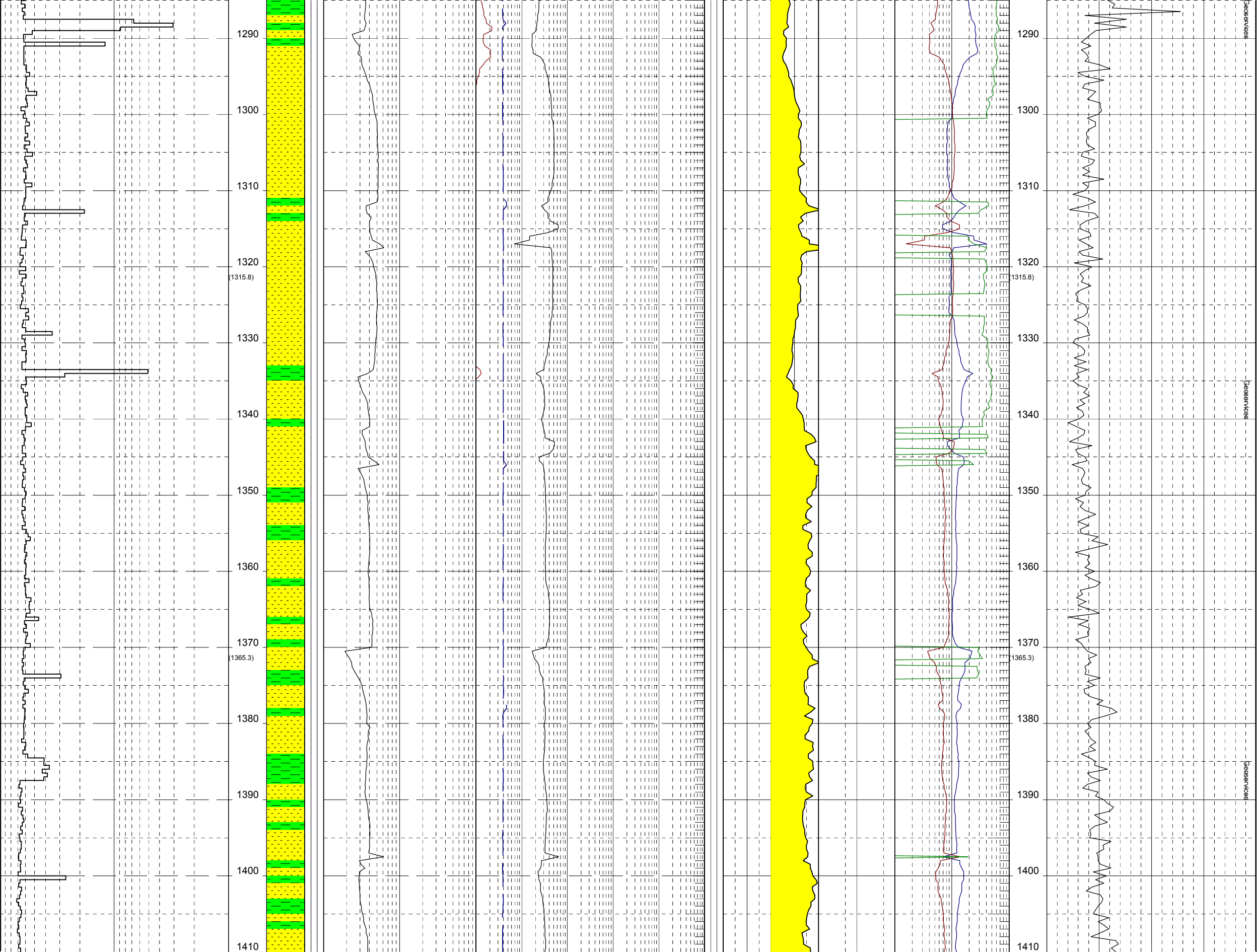
1250
1260
1270
(1266.3)
1280


1290
1300
1310
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(1315.8)
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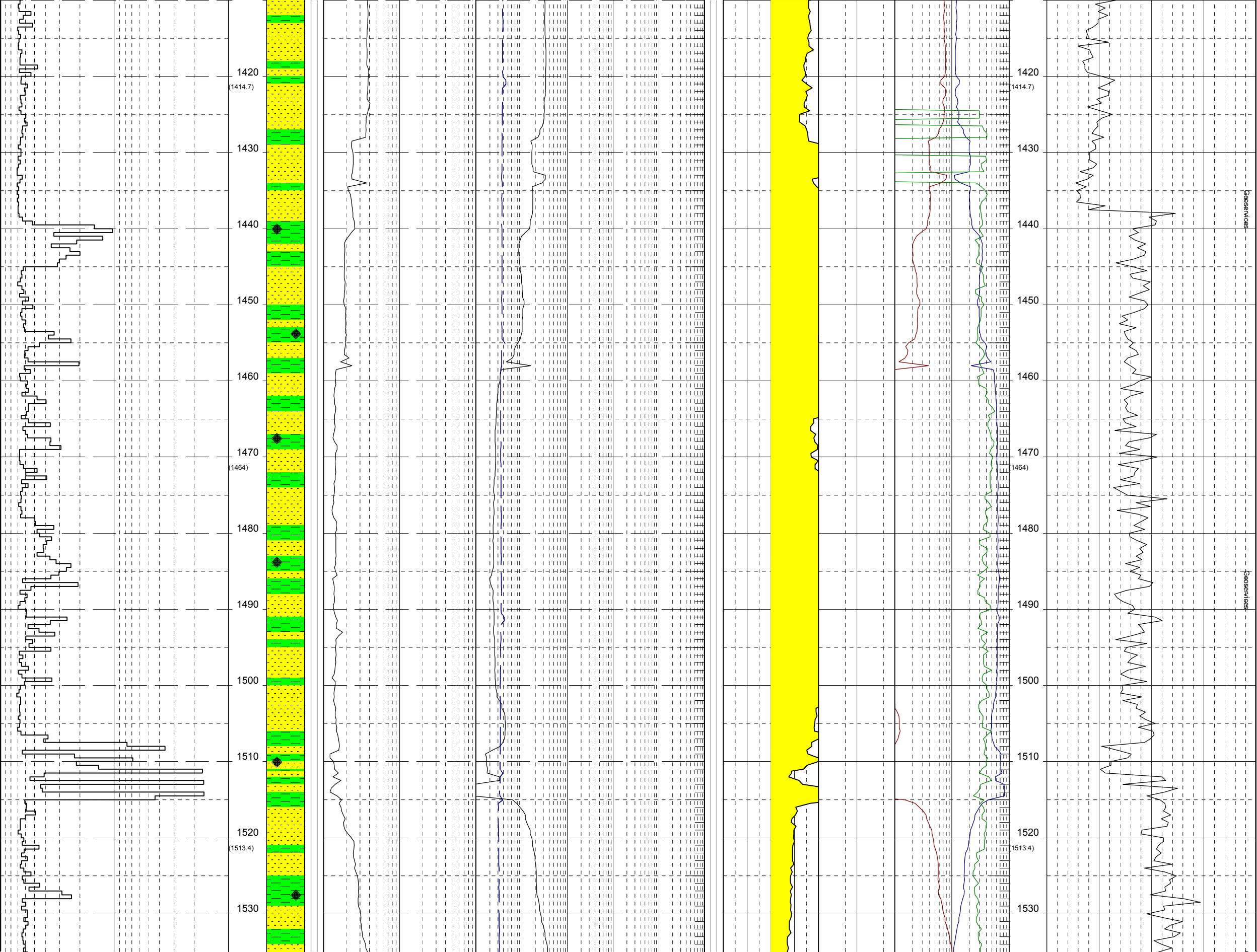
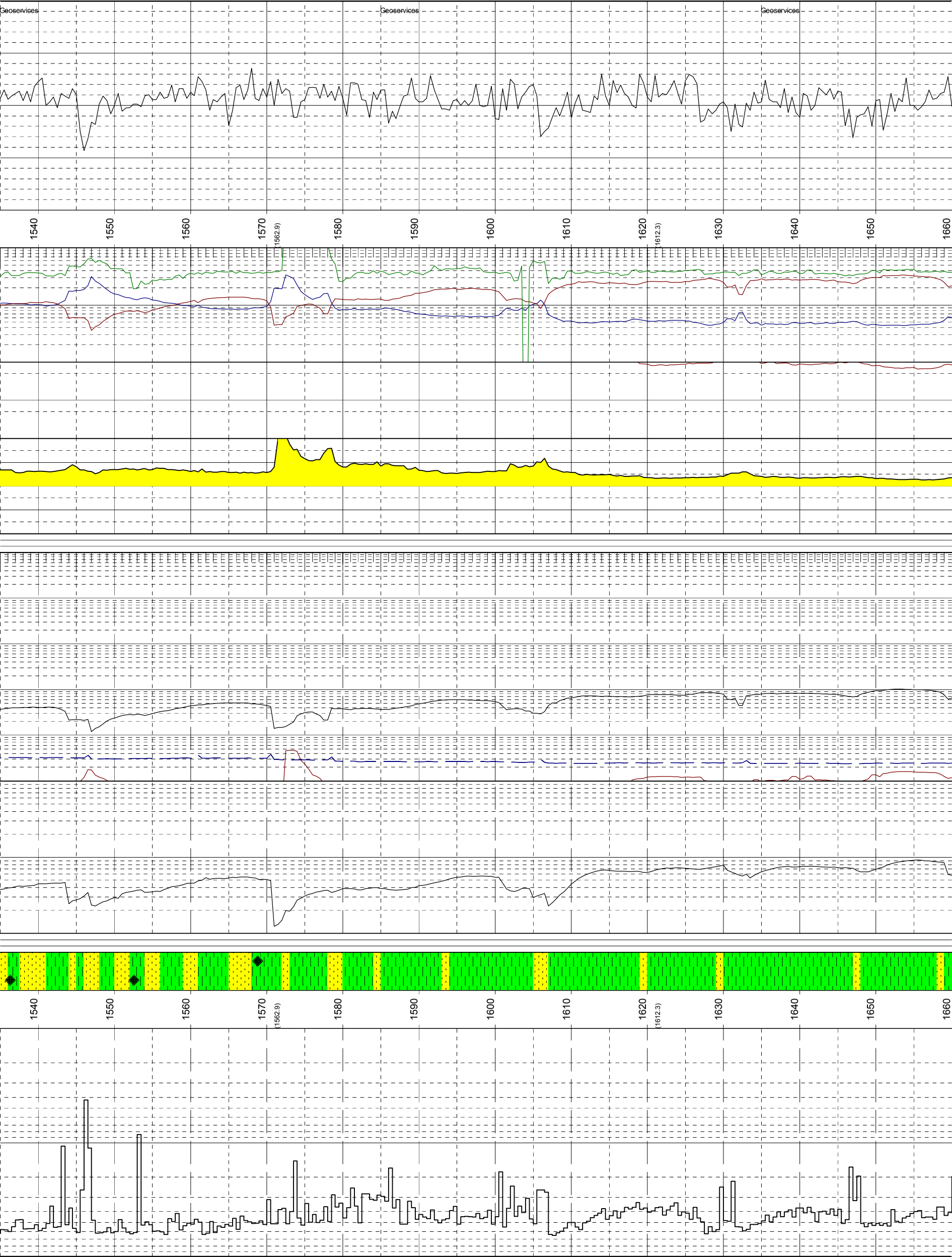
1360
1370
(1365.3)
1380
1390
1400
1410
Geoservices


1420
(1414.7)
1430
1440
1450
1460
1470
(1464)
1480
1490
1500
1510
1520
(1513.4)
1530
geoservices
geoservices


Geoservices
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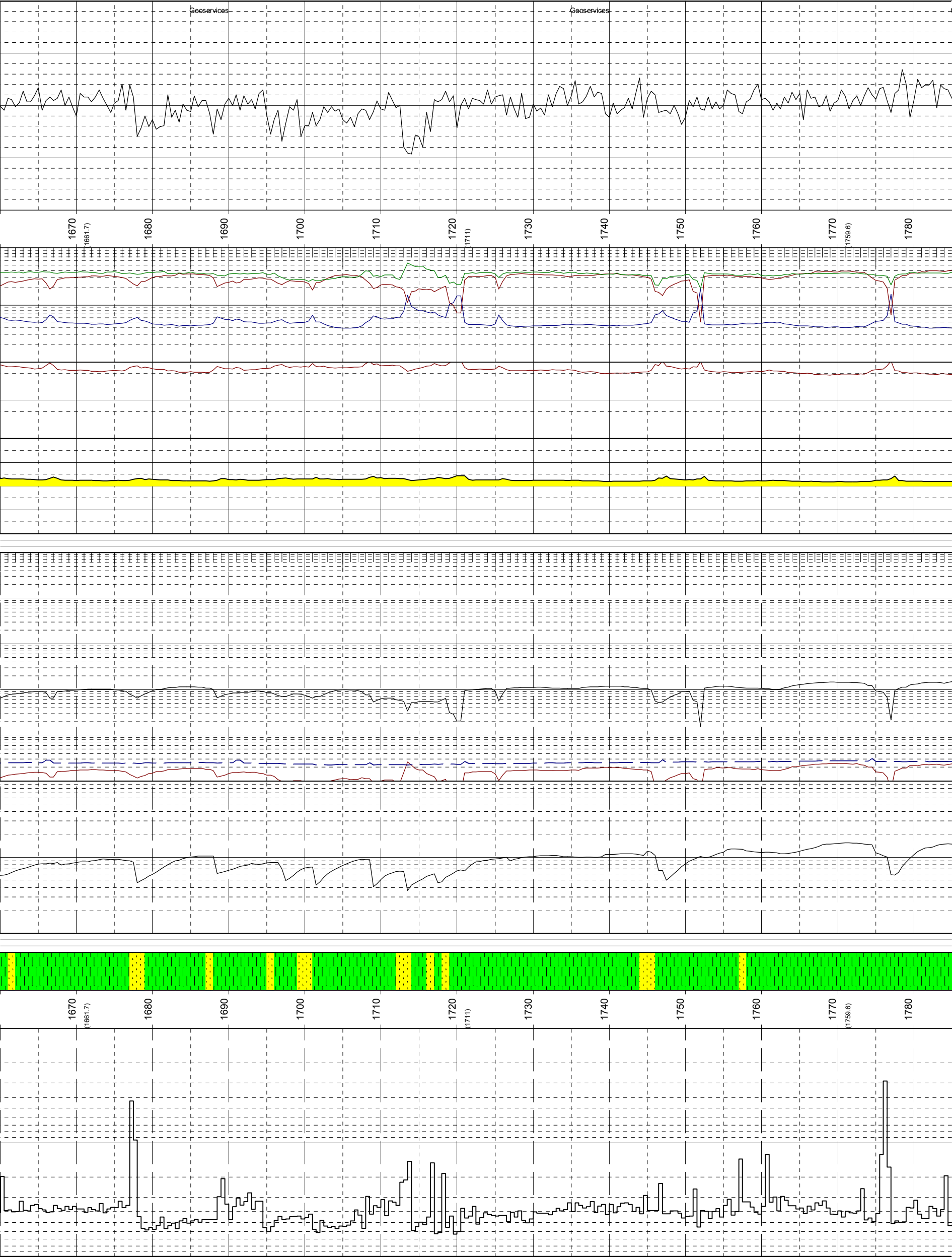
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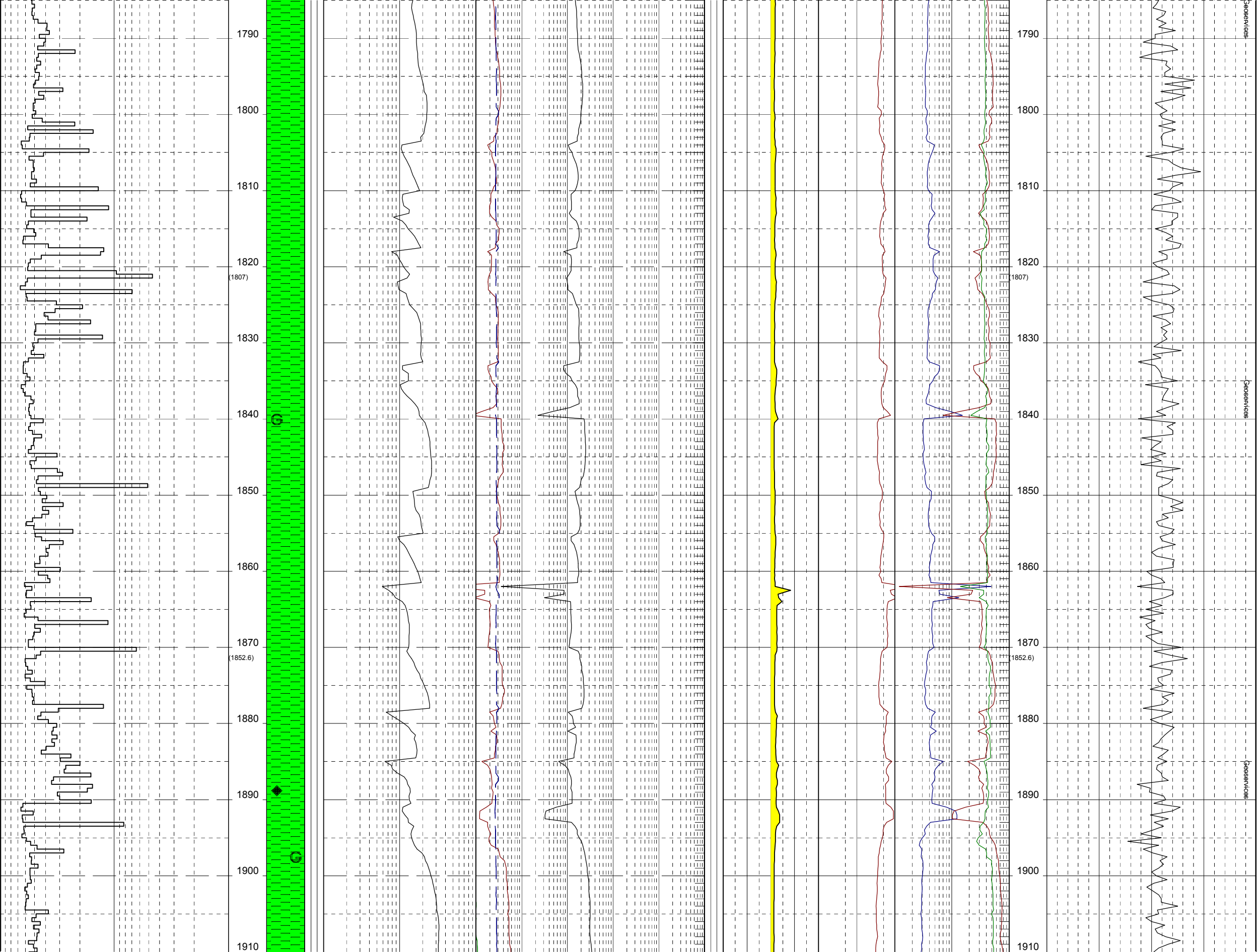
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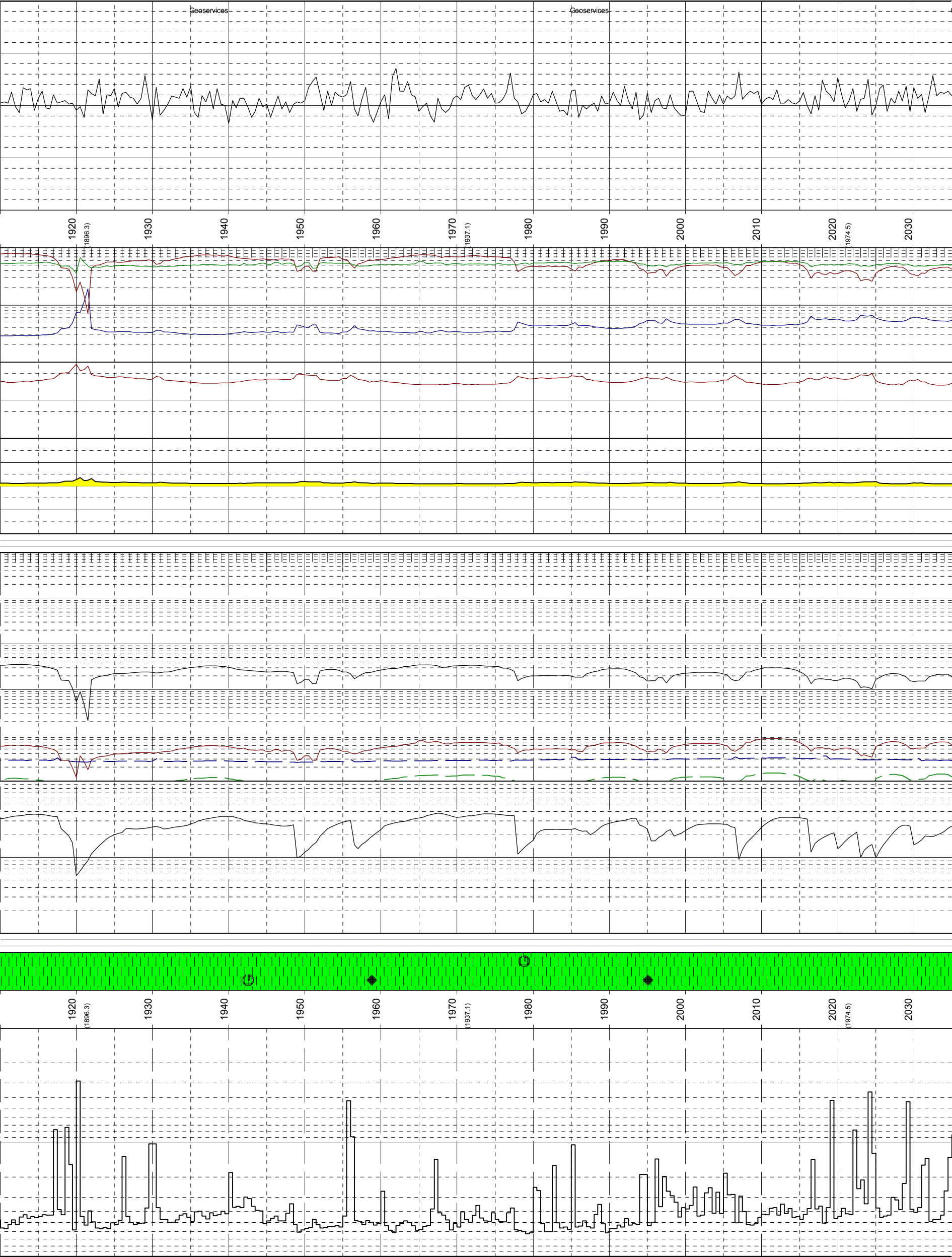
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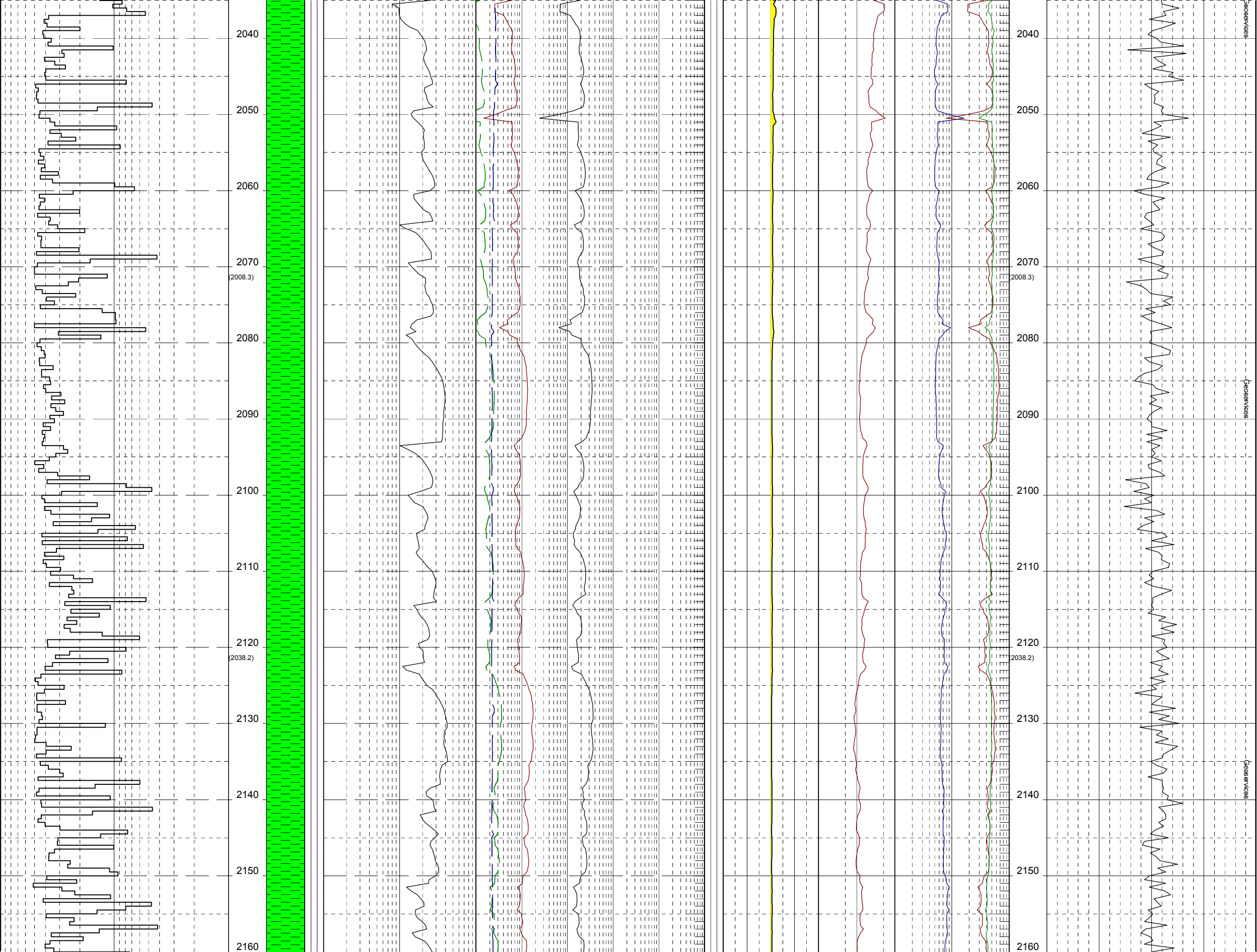
2020
(1974.5)
2030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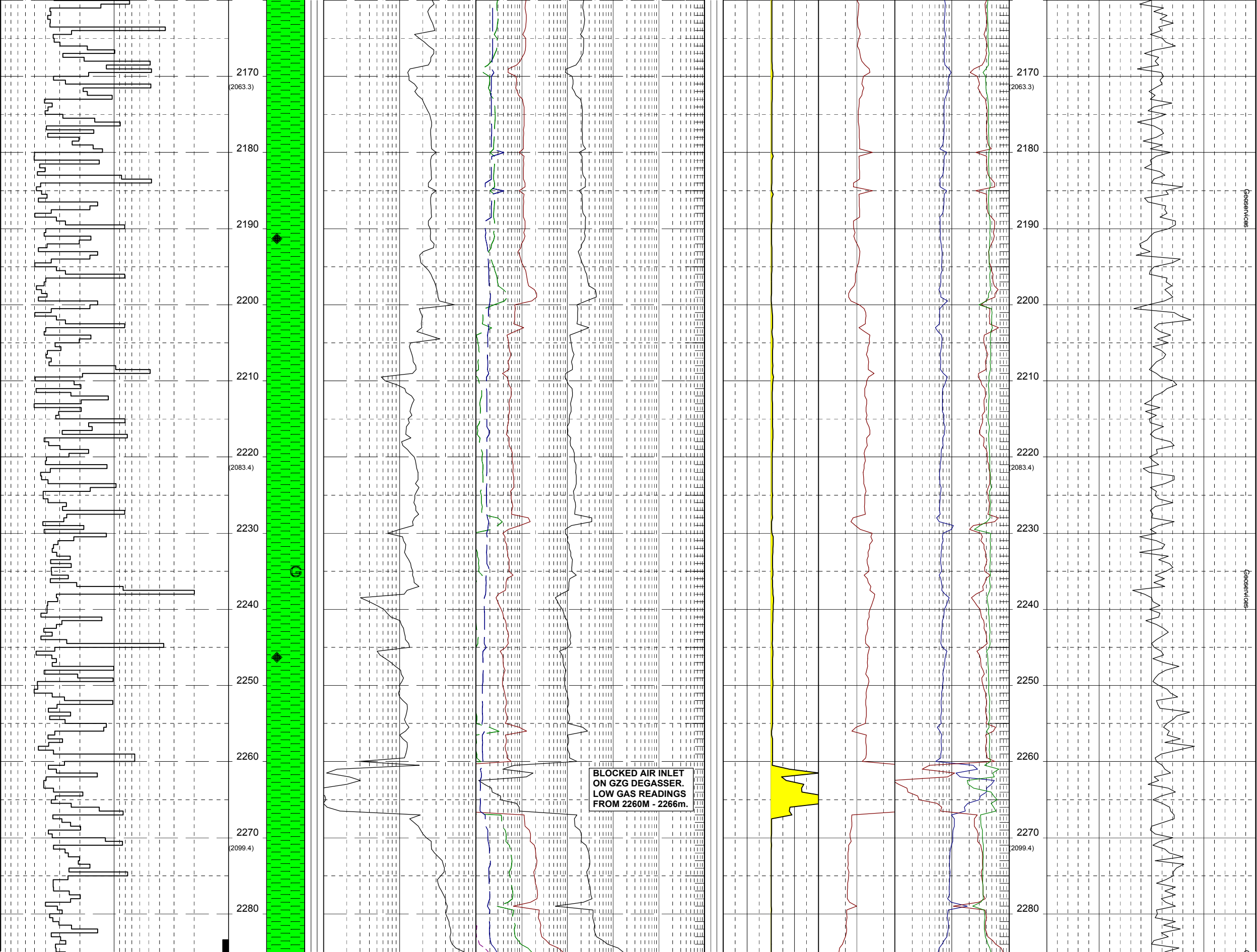
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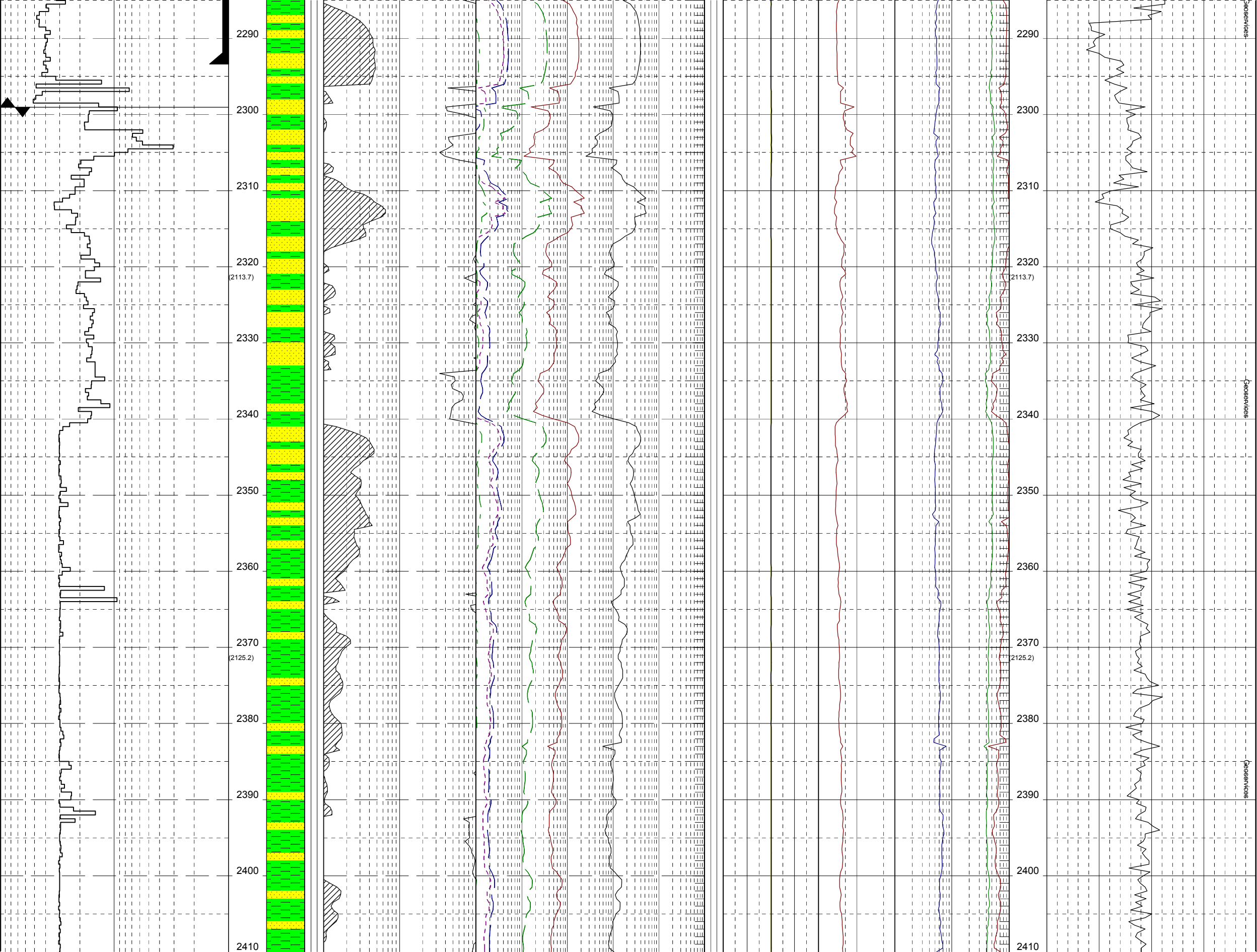
BLOCKED AIR INLET
ON GZG DEGASSER.
LOW GAS READINGS
FROM 2260M - 2266m.
Geoservices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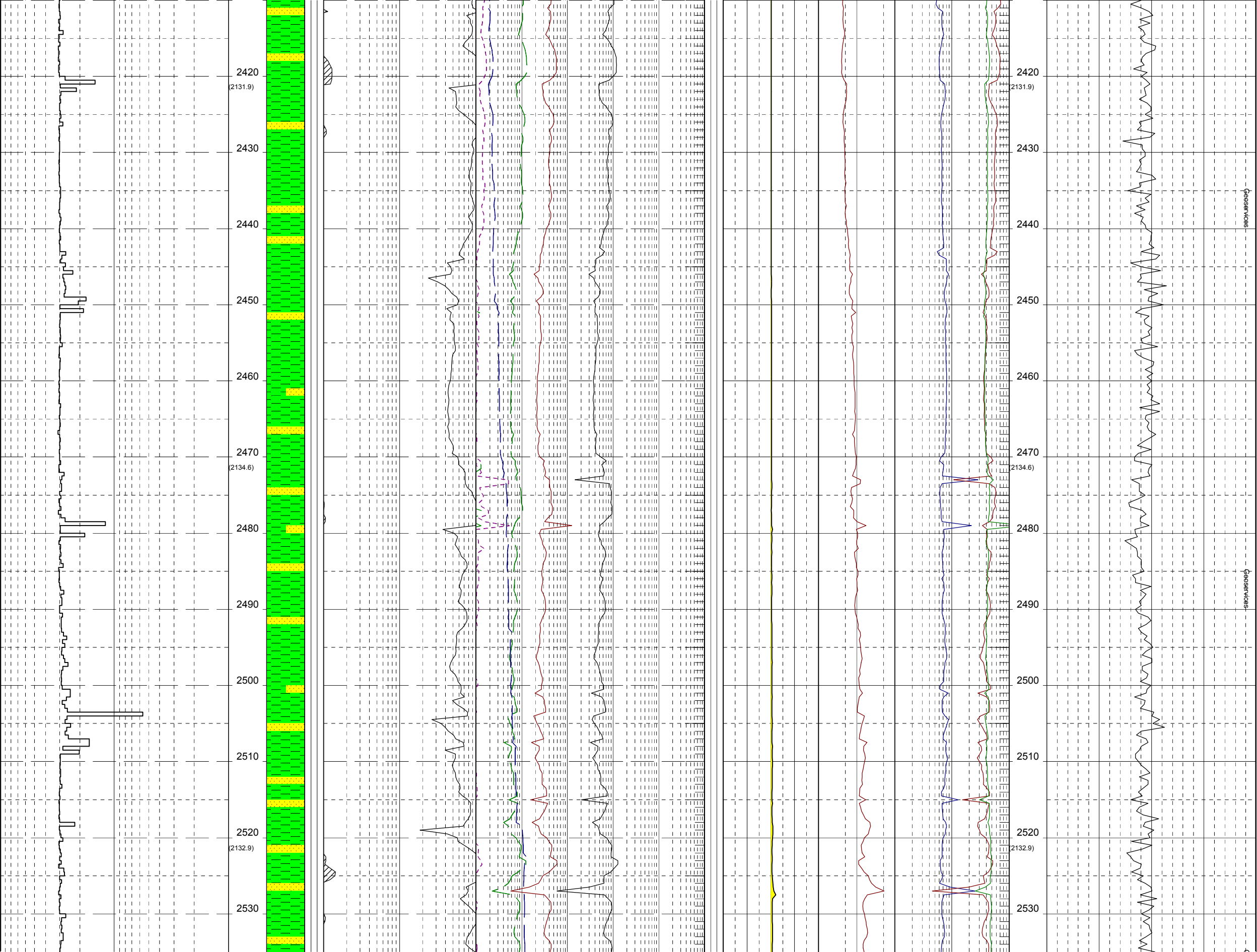
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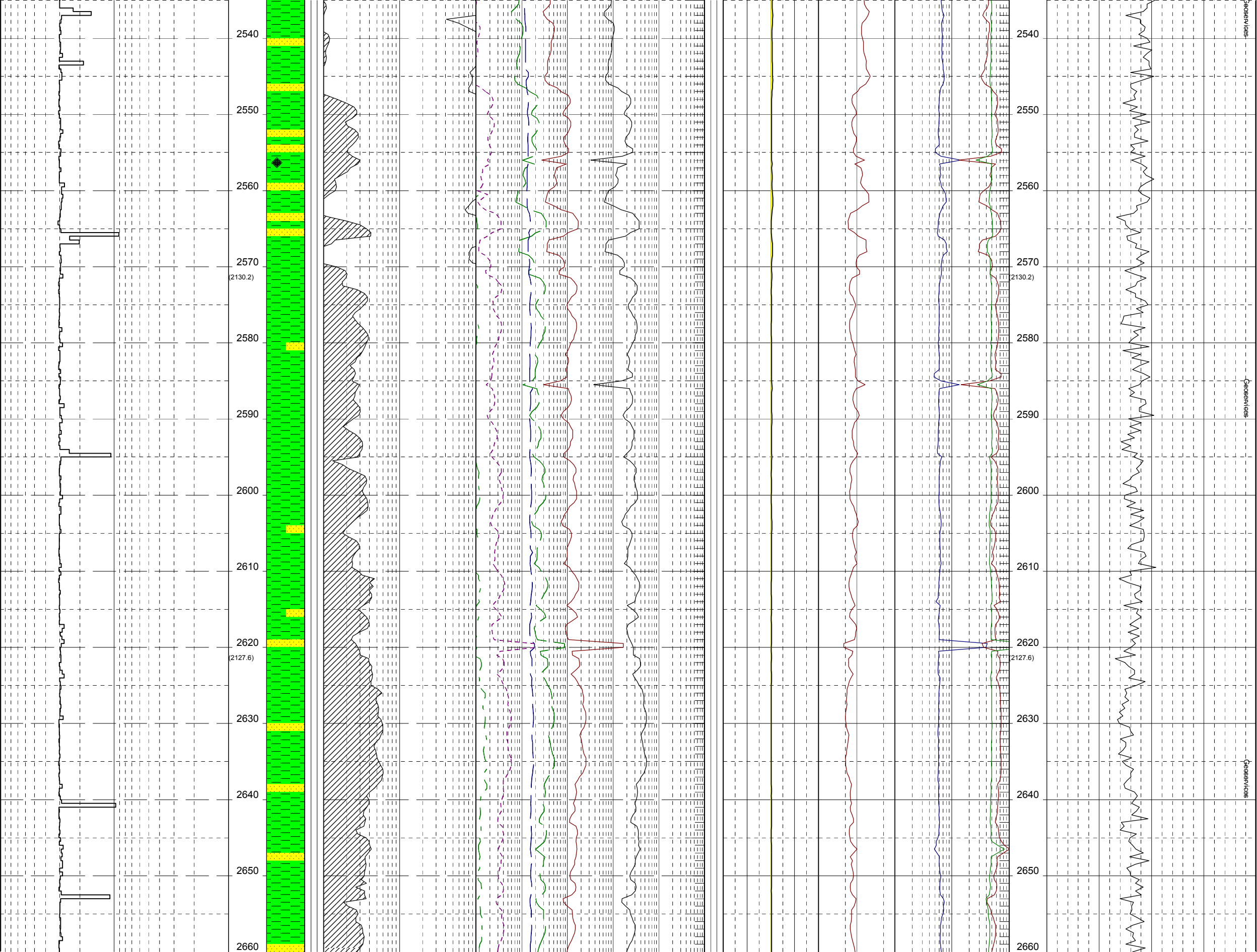
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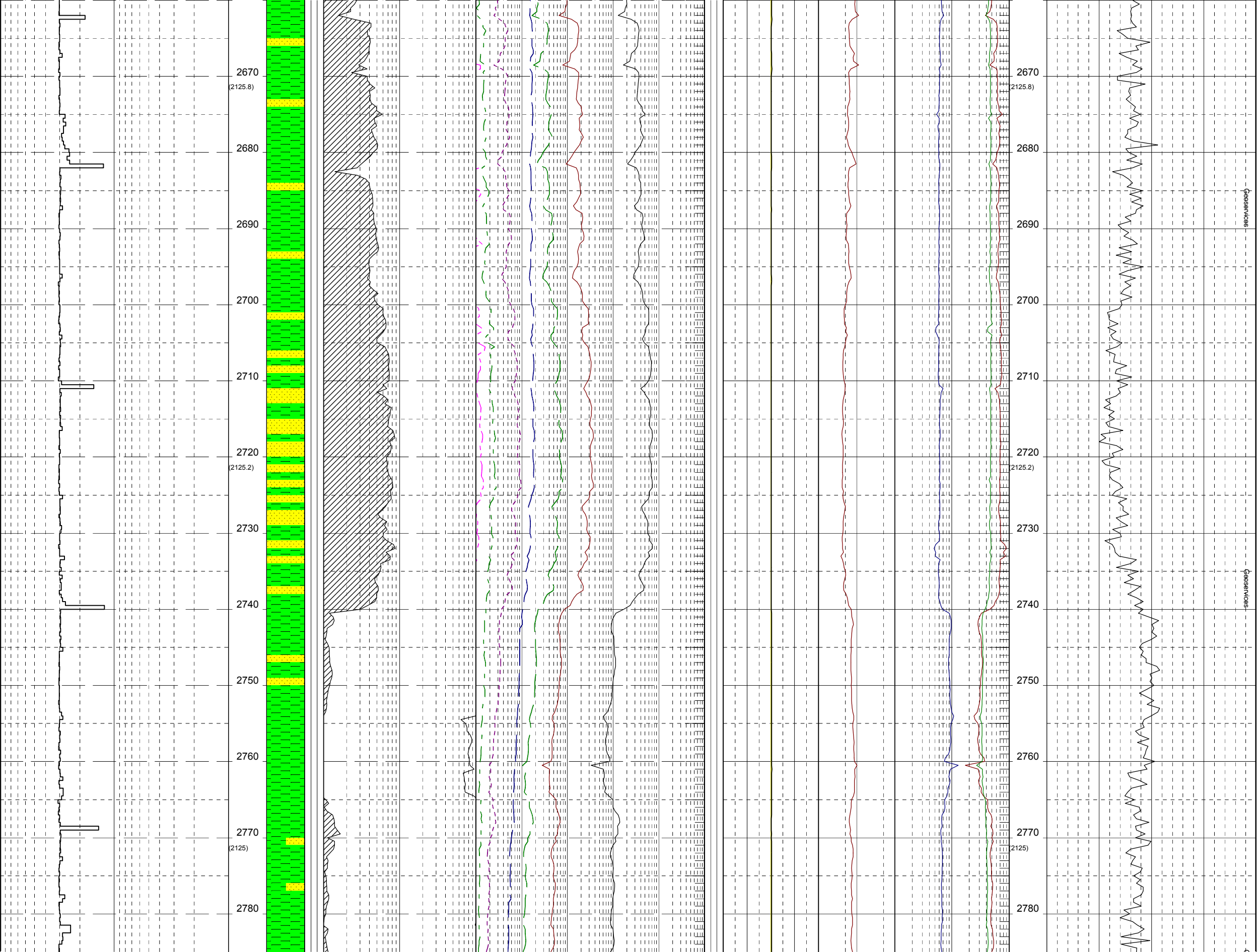
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2680
2690
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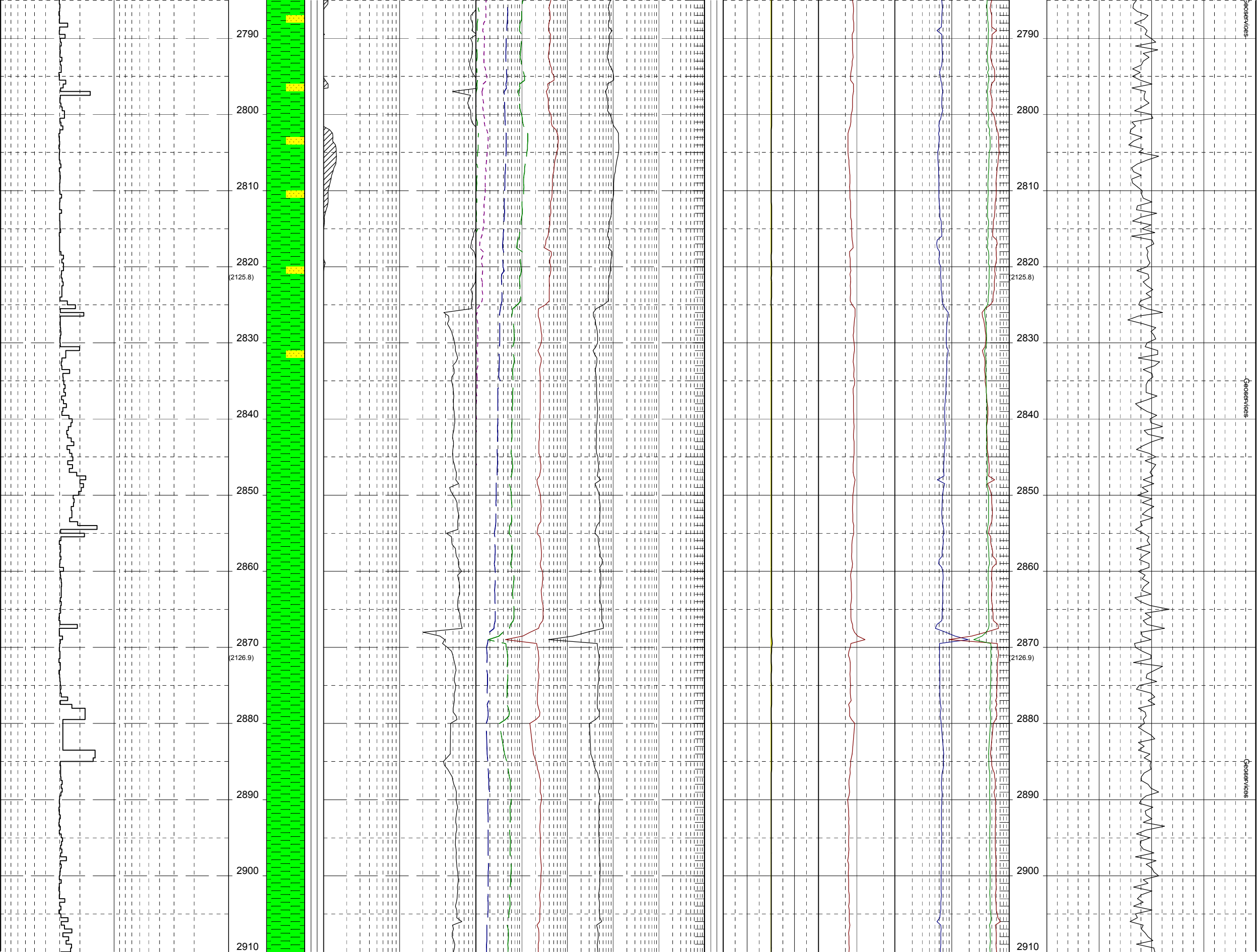
2780
Geoservices
Geoservices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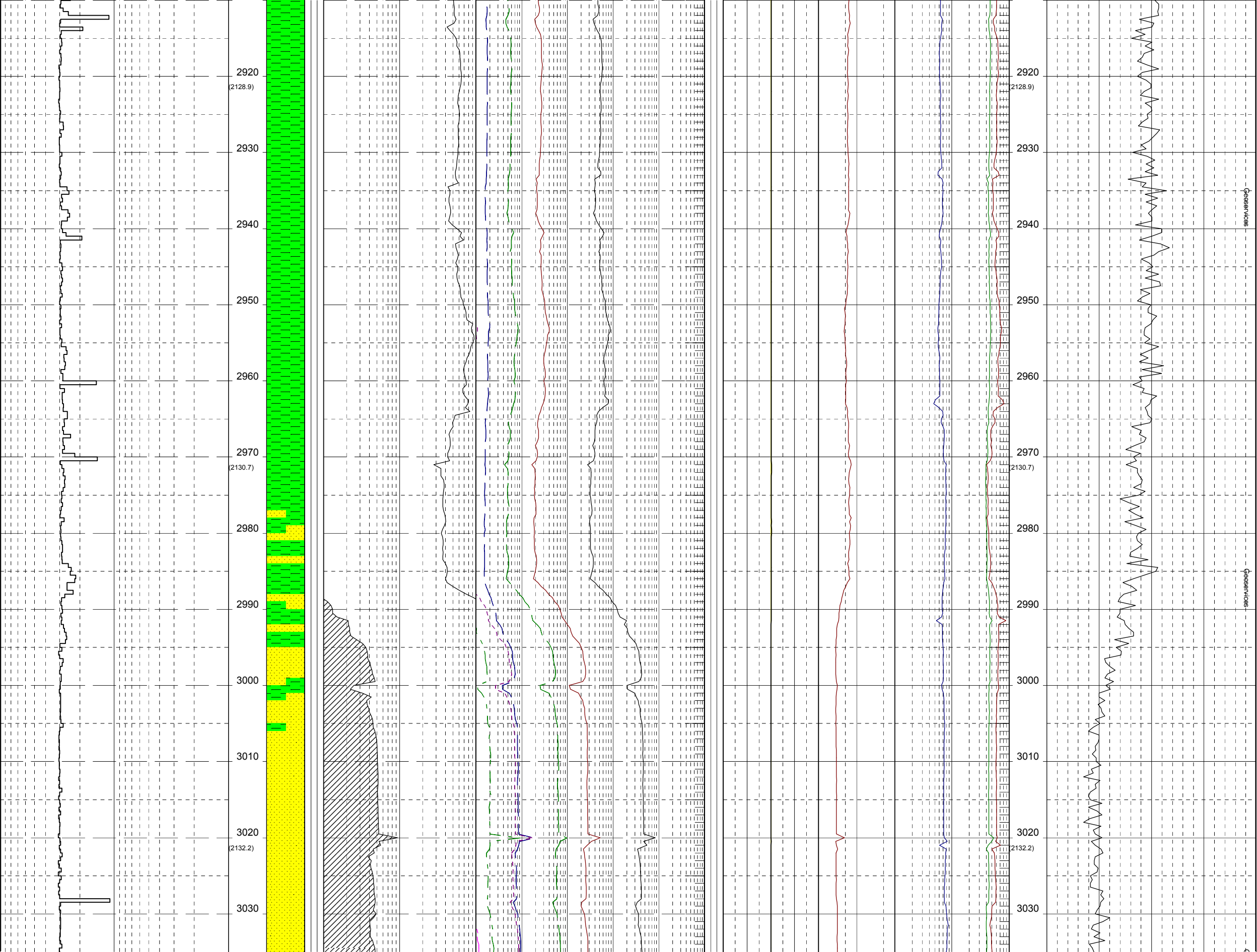
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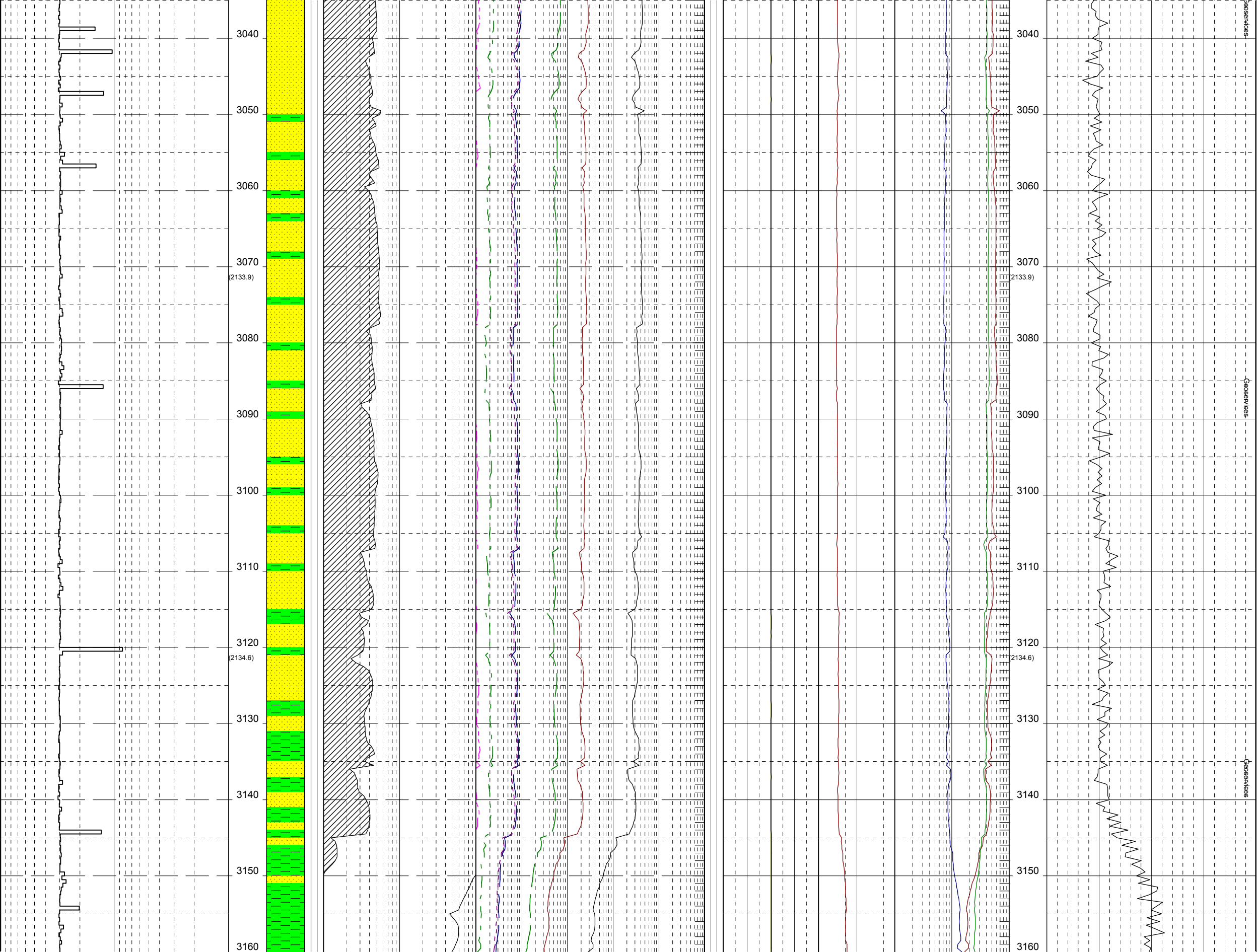
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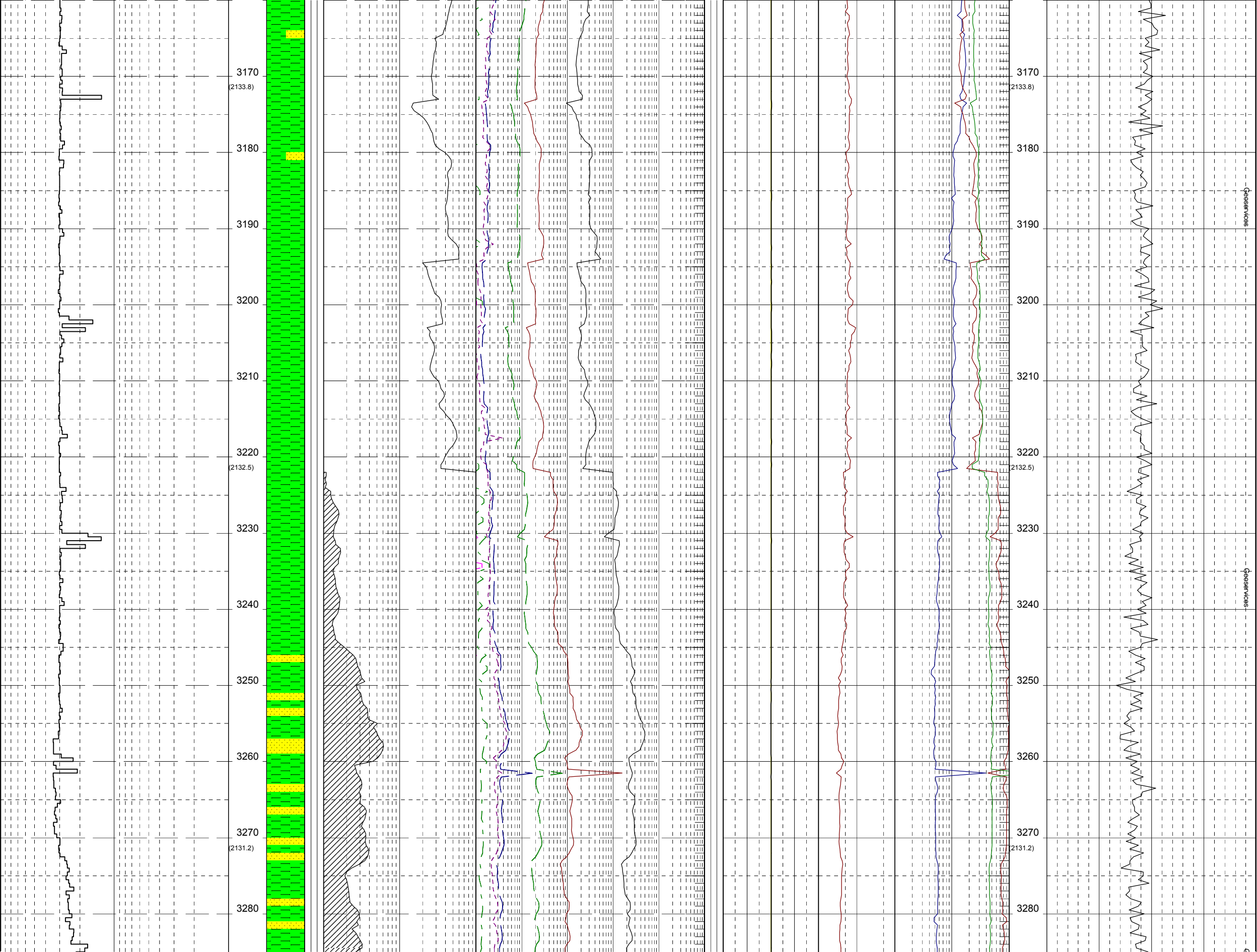
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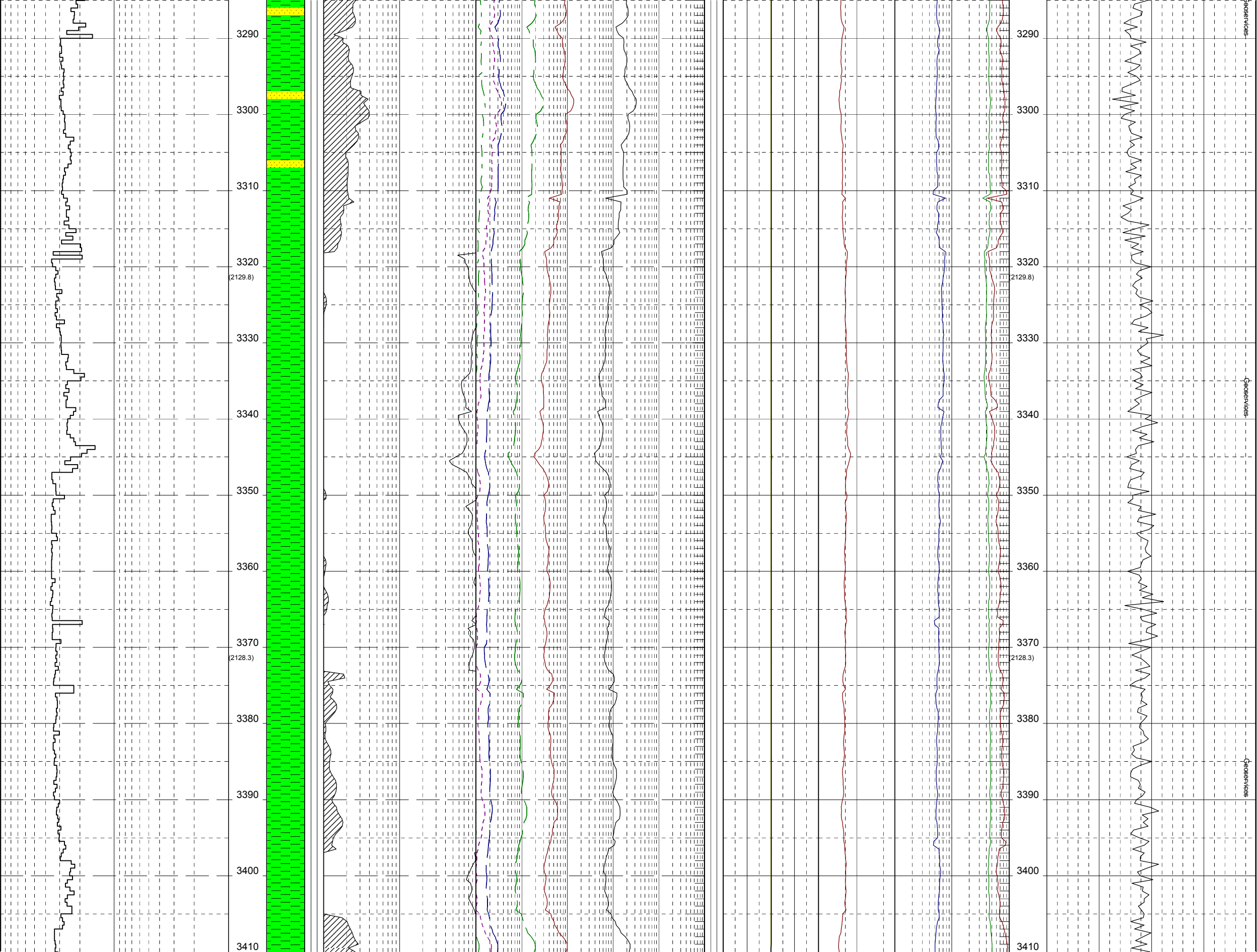
Geoservices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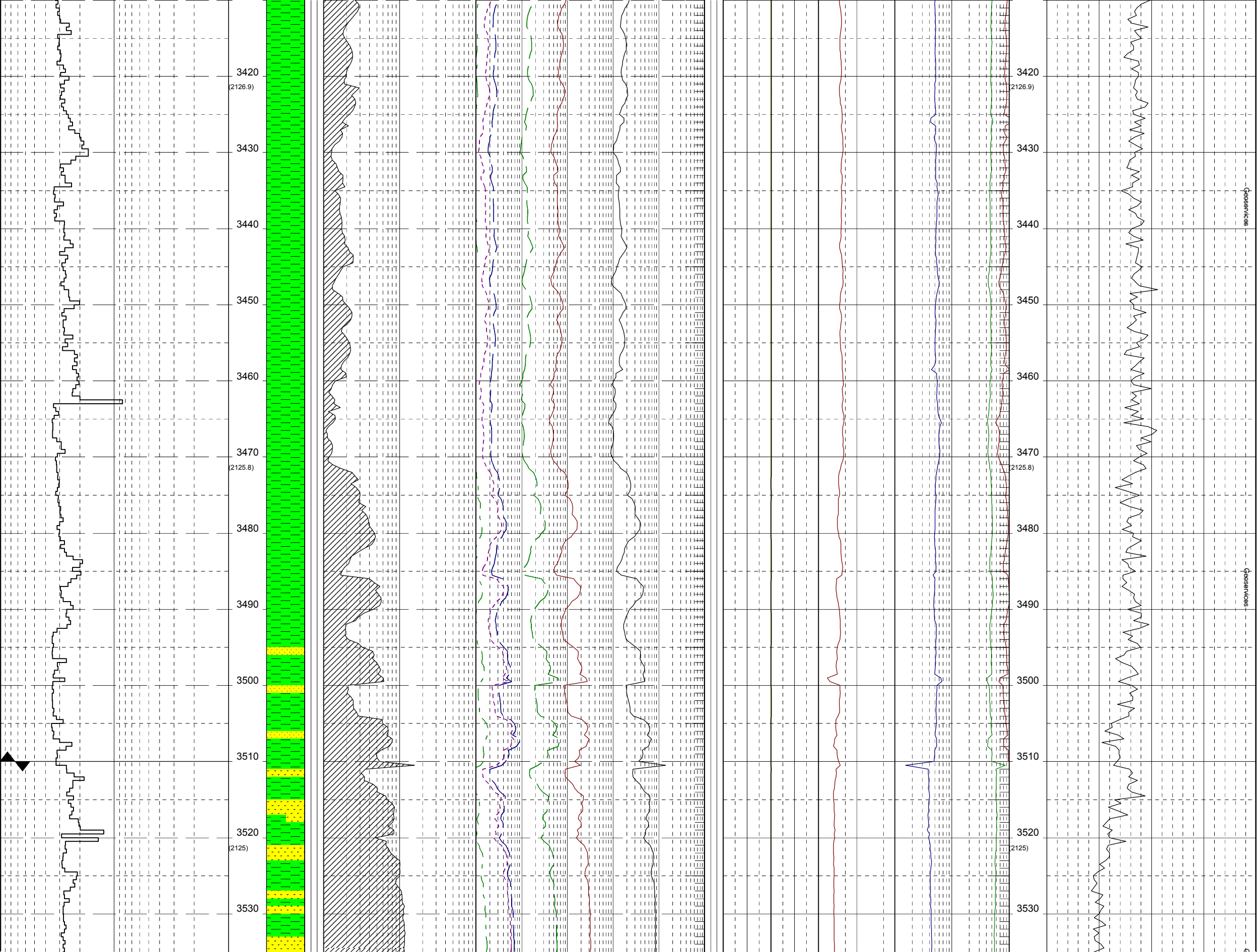
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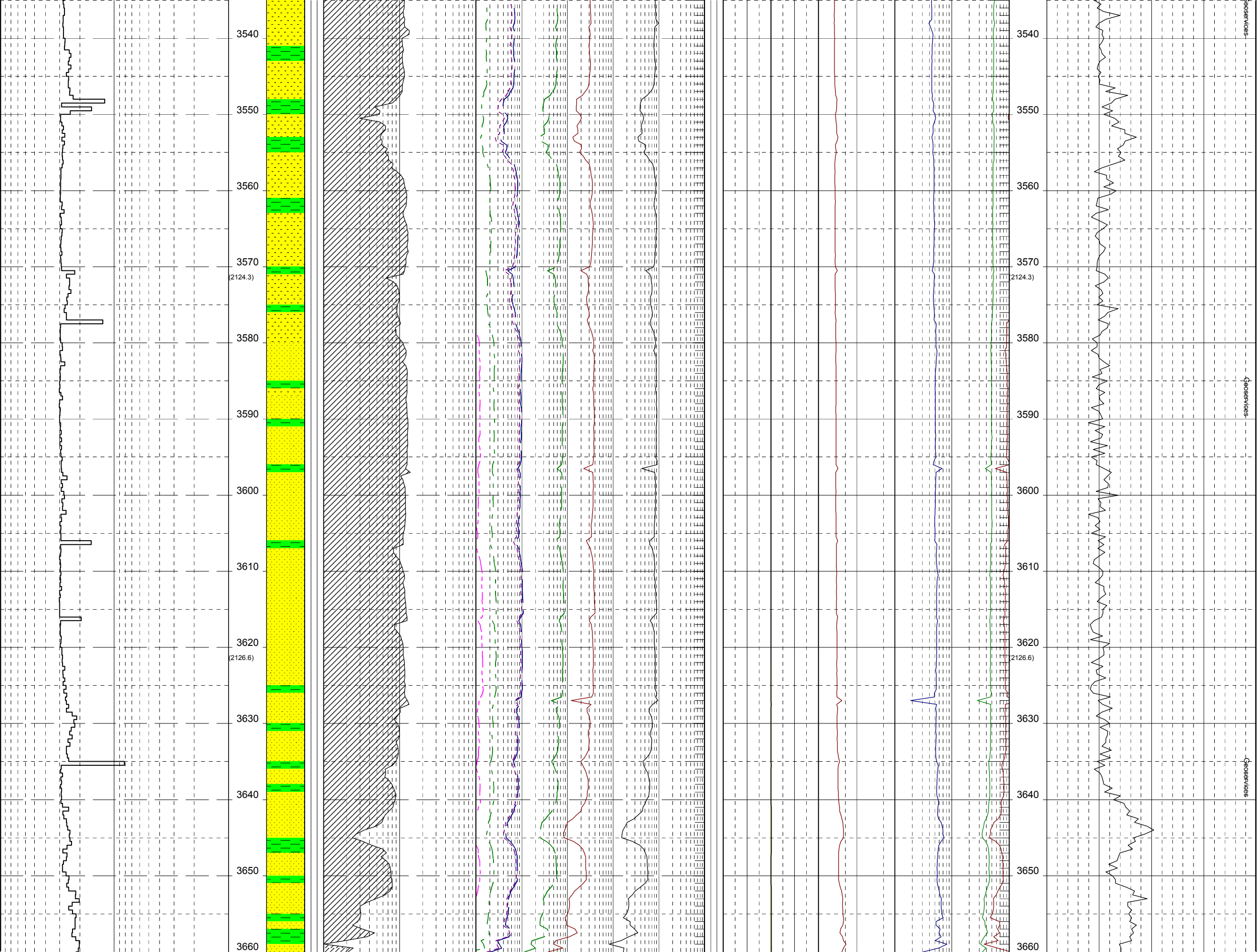
Geoservices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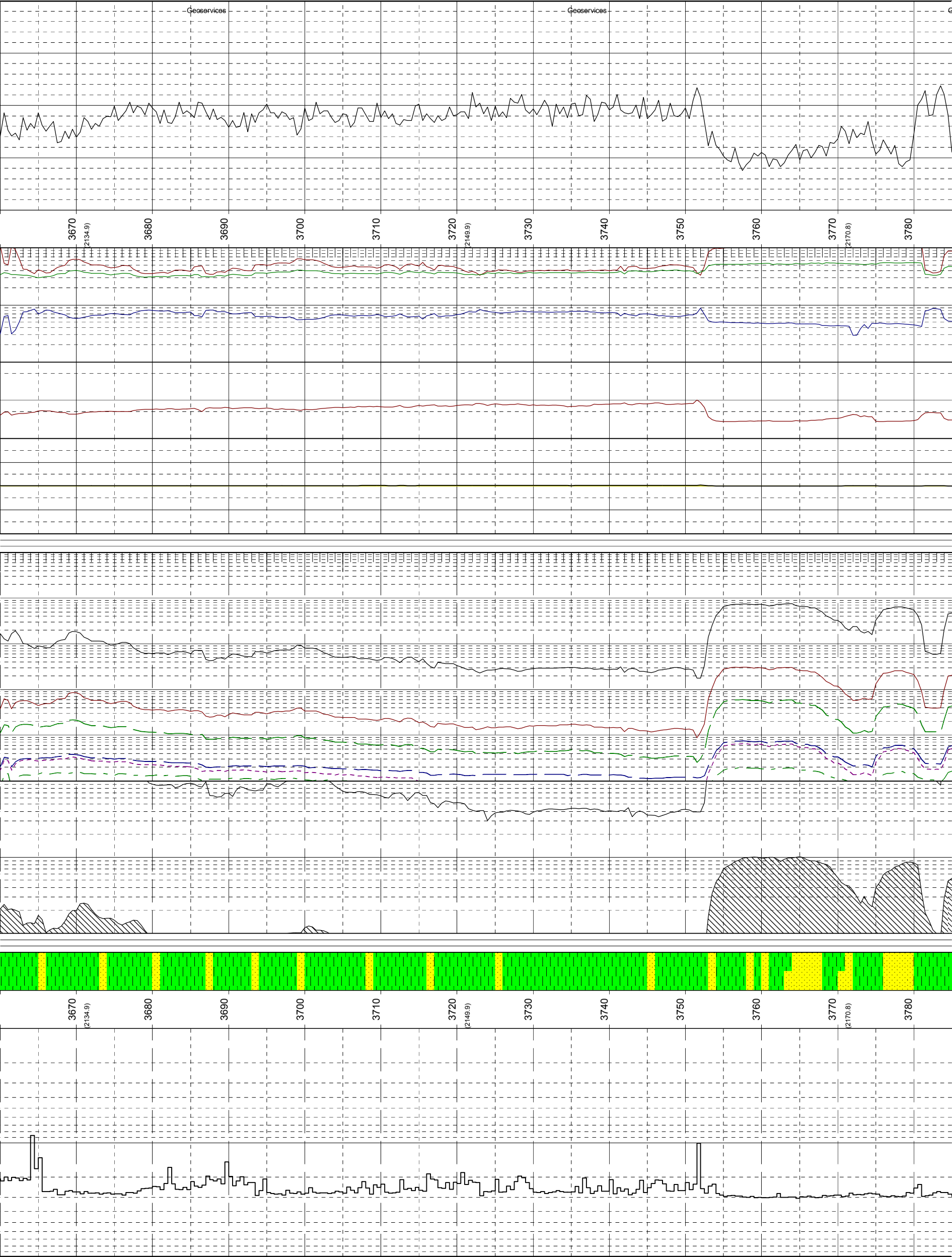
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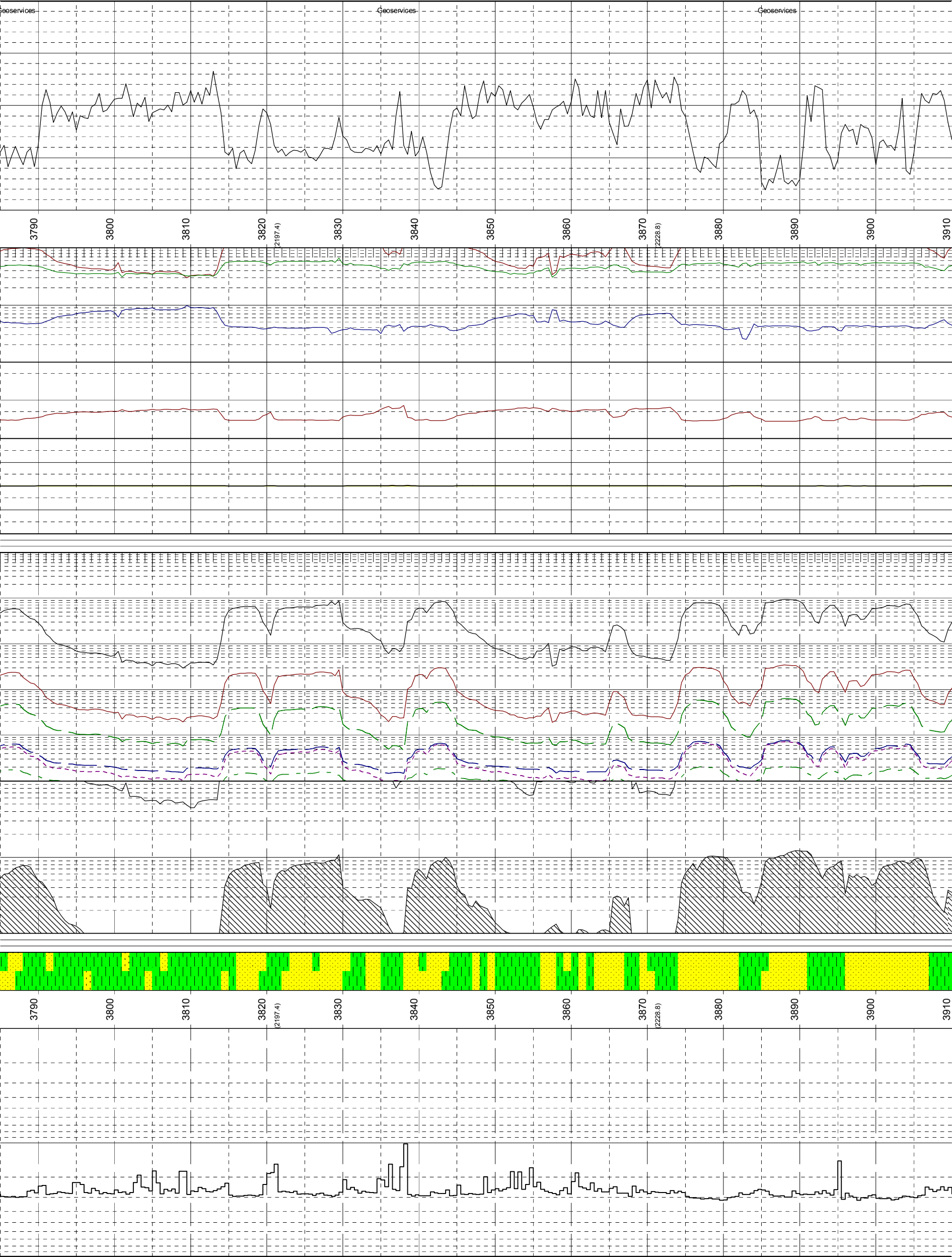
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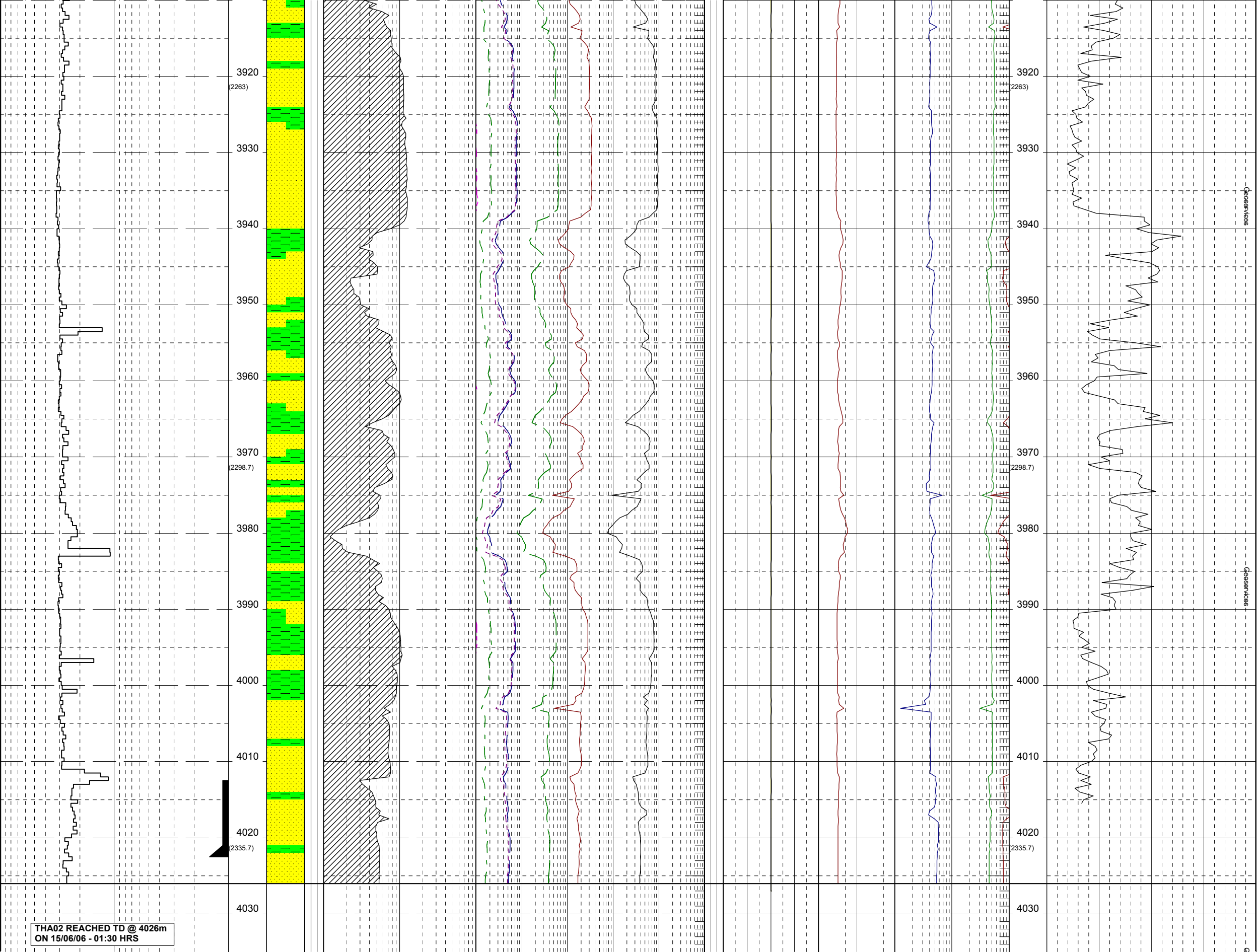
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3940
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3960
3970
(2298.7)
3980
3990
4000
4010
4020
(2335.7)
4030
THA02 REACHED TD @ 4026m
ON 15/06/06 - 01:30 HRS
Geoservices

4040

4040

eoservices

MWD End of Well Report

HALLIBURTON

Sperry Drilling Services

LWD End of Well Report

for

Woodside Energy Ltd

THA02

Rig:	Maersk Guardian
Field:	Thylacine
Country:	Australia
Job No:	AU-FE-0003930658

Date: 17th June 2006

HALLIBURTON

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2. Operational Overview
3. Summary of MWD Runs
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General Information

Company:	Woodside Energy Ltd
Rig:	Maersk Guardian
Well:	THA02
Field:	Thylacine
Lease Name:	T/L2
State:	Tasmania
County:	
Country:	Australia
API Number:	
Sperry-Sun Job Number:	AU-FE-0003930658
Job start date:	20-May-06
Job end date:	17-Jun-06
North reference:	Grid
Declination:	11.110 deg
Dip angle:	-70.335 deg
Total magnetic field:	61057 nT
Date of magnetic data:	20 May, 2006
Wellhead coordinates N:	39 deg. 14 min 14.47 sec South
Wellhead coordinates E:	142 deg. 54 min 7.58 sec East
Vertical section direction:	273.32 deg
Unit Number:	SSDS-40
MWD Engineers:	P. King, V. Roewer, B. Redmond, M. Tomlinson, M. Lee, W. Burch
Company Representatives:	S. Job, D. Rota, S. Corless
Company Geologist:	S. Robbie, J. Hobday

Operational Overview

Sperry Drilling Services was contracted by Woodside Energy Ltd to provide Logging While Drilling (LWD) services for the drilling of the development well, THA02.

762mm Hole Section

The 762mm hole section was drilled to a TD of 219.9 mMDRT in one bit run. At TD of the run an ESS Multi Shot survey tool was dropped to verify the inclination of the hole.

584mm Hole Section

The 584mm hole section was drilled to a TD of 638.0 mMDRT in one bit run. The run utilised a Directional While Drilling (DWD) tool along with a positive Displacement Motor (PDM).

311mm Hole Section

The 311mm hole section was drilled to a TD of 2299.0 mMDRT in one bit run. The run utilised a LWD tool suite comprised of Dual Gamma Ray (DGR) and Four Phase Electromagnetic Wave Resistivity (EWR-P4) for formation evaluation, Pressure While Drilling (PWD) and Drillstring Dynamics Sensor (DDS) for drilling efficiency and the rotary steerable 9600 GeoPilot.

216mm Hole Section

The 216mm hole section was drilled to a TD of 4026.0 mMDRT in two bit runs. The run utilised a LWD tool suite comprised of Dual Gamma Ray (DGR), Four Phase Electromagnetic Wave Resistivity (EWR-P4, Azimuthal Litho-Density (ALD), Compensated Thermal Neutron (CTN) for formation evaluation with Pressure While Drilling (PWD), Acoustic Caliper (ACAL) and Drillstring Dynamics Sensor (DDS) for drilling efficiency and the rotary steerable 7600 GeoPilot.
The first run drilled to 3510.0 mMDRT and POOH for a GeoPilot failure. The subsequent run drilled to well TD.
A GeoTap FPWD tool was run in the 216mm hole section and Formation Pressures were taken.

Summary of MWD runs

Run No.	Bit No.	Hole Size (mm)	MWD Service	Start Depth (m)	End Depth (m)	Drill/Wipe Distance (m)	Run Start Date Time	Run End Date Time	BRT Hrs.	Oper. Hrs.	Circ. Hrs.	Max Temp. (degC)	Serv. Int.	Trip for MWD	Failure Type
100	1	445.00	ESS	149.800	219.900	70.100	20-May-06 12:00	21-May-06 02:40	14.67	0.000	0.000	0.00	No	No	
200	2	584.00	D/GWD	219.900	638.000	418.100	26-May-06 21:33	28-May-06 01:00	27.45	27.45	22.200	14.90	No	No	
300	3	311.00	DIR-FE	638.000	2299.000	1661.000	30-May-06 01:49	04-Jun-06 04:50	123.03	123.03	78.580	96.00	No	No	
400	4	216.00	DIR-FE-NUKE-GT	2299.000	3510.000	1211.000	08-Jun-06 14:10	12-Jun-06 22:51	104.70	104.70	76.470	109.00	Yes	No	ACAL
500	5	216.00	DIR-FE-NUKE-GT	3510.000	4026.000	516.000	13-Jun-06 02:31	17-Jun-06 05:50	99.31	99.31	63.130	112.00	No	No	

Bitrun Summary

RUN TIME DATA

MWD Run	: 100	**Run Start**	: 20-May-06 12:00	**BRT Hrs**	: 14.67 hr	**Circ. Hrs**	: N/A
Rig Bit No	: 1	**Run End**	: 21-May-06 02:40	**Hole Size**	: 445.00 mm	**Oper. Hrs**	: N/A

DRILLING DATA

Start Depth	: 149.80 m	**Footage**	: 70.10 m	**Avg RPM**	: N/A	**Avg ROP**	: N/A
End Depth	: 219.90 m	**Avg Flow Rate**	: N/A	**Avg WOB**	: N/A	**Avg SPP**	: N/A

MUD DATA

Mud Type	: Sea Water						
Weight	: 1.040 sg	**Viscosity**	: N/A	**PV**	: N/A	**YP**	: N/A
Chlorides	: N/A	**Max Temp.**	: N/A	**% Solids**	: N/A	**% Sand**	: N/A
pH	: N/A	**Fluid Loss**	: N/A	**% Oil**	: N/A	**O:W**	:

MWD PERFORMANCE

Tool OD	: 203.20 mm	**Type**	: ESS	**Min. Inc.**	: 0.52 deg	**Min. Inc. Depth**	: 169.130 m
Final Az.	: 196.77 deg	**Max Op. Press.**	: N/A	**Max Inc.**	: 0.71 deg	**Max Inc. Depth**	: 208.000 m
		MWD Real-time %	: 100 %	**MWD Recorded %**	: N/A		

	Length (m)	Dist From Bit (m)
		310.17
5-1/2" X 3-3/8" HWDP #57 - FH 139.70 mm OD / 96.50 mm ID	29.19	
X-Over Sub 203.00 mm OD / 71.12 mm ID	1.38	214.40
		209.88
Spiral Drill Collar 209.00 mm OD / 76.20 mm ID	26.83	
X-Over Sub 241.00 mm OD / 76.20 mm ID	1.36	121.85
		117.39
Spiral Drill Collar 254.00 mm OD / 76.20 mm ID	9.53	
Stabilizer 241.00 mm OD / 71.12 mm ID	2.88	86.12
		76.67
Spiral Drill Collar 254.00 mm OD / 76.20 mm ID	9.52	
		45.44
NMDC 241.00 mm OD / 76.20 mm ID * DEP II Sonde * DEP II Sonde	7.46	
Float Sub 241.00 mm OD / 76.20 mm ID	1.78	20.96
Float Sub 241.00 mm OD / 76.20 mm ID	1.99	15.12
Hole Opener 762.00 mm OD / 76.20 mm ID	2.20	8.60
Mill 445 mm OD / 76.20 mm ID	0.42	1.38

COMMENTS

Spud THA02 from sea-bed at 149.8 mMDRT.
Drill to 219.9 mMDRT then ran Electonic Survey Sensor (ESS).

Bitrun Summary

RUN TIME DATA

MWD Run	: 200	**Run Start**	: 26-May-06 21:33	**BRT Hrs**	: 27.45 hr	**Circ. Hrs**	: 22.20 hr
Rig Bit No	: 2	**Run End**	: 28-May-06 01:00	**Hole Size**	: 584.00 mm	**Oper. Hrs**	: 27.20 hr

DRILLING DATA

Start Depth	: 219.90 m	**Footage**	: 418.10 m	**Avg RPM**	: 89 rpm	**Avg ROP**	: 87.00 m/hr
End Depth	: 638.00 m	**Avg Flow Rate**	: 933.00 gpm	**Avg WOB**	: 36.0 klb	**Avg SPP**	: 1367 psig

MUD DATA

Mud Type	: Sea Water						
Weight	: 1.060 sg	**Viscosity**	: 156.00 spl	**PV**	: 14 cP	**YP**	: 60 Pa
Chlorides	: 350.00 ppm	**Max Temp.**	: 14.90 degC	**% Solids**	: 4.00 %	**% Sand**	: N/A
pH	: 8.50 pH	**Fluid Loss**	: 14 mptm	**% Oil**	: N/A	**O:W**	: N/A

MWD PERFORMANCE

Tool OD	: 241.30 mm	**Type**	: D/GWD	**Min. Inc.**	: 0.29 deg	**Min. Inc. Depth**	: 220.400 m
Final Az.	: 280.11 deg	**Max Op. Press.**	: 4699 psig	**Max Inc.**	: 6.87 deg	**Max Inc. Depth**	: 544.150 m
	MWD Real-time %	: 100 %		**MWD Recorded %**	: N/A		

	Length (m)	Dist From Bit (m)
		517.68
Heavy Weight 178.00 mm OD / 71.00 mm ID	58.14	
		326.94
X-Over Sub 178.00 mm OD / 71.00 mm ID	1.38	
		322.41
2x 8 1/4" Drill Collar 209.55 mm OD / 71.44 mm ID	17.31	
		265.62
8" Drilling Jar 240.00 mm OD / 71.00 mm ID	9.63	
		234.02
3 x 8 1/4" Drill Collar 209.55 mm OD / 71.44 mm ID	27.21	
		144.75
X-Over Sub 237.50 mm OD / 75.00 mm ID	1.36	
		140.29
9.75" Spiral DC 209.55 mm OD / 71.44 mm ID	9.53	
		109.02
23" Stabilizer 241.30 mm OD / 75.00 mm ID	2.87	
		99.61
NMDC 237.50 mm OD / 75.00 mm ID	8.92	
		70.34
Orienting Sub UBHO 241.30 mm OD / 165.10 mm ID	0.92	
		67.32
MWD	9.54	
		36.02
Float Sub 240.60 mm OD / 75.00 mm ID	0.75	
		33.56
244mm SperryDrill 244 mm OD / 152 mm ID	9.69	
		1.77
Varel ETR1G 584.00 mm OD / 75.00 mm ID	0.54	

	Length (m)	Dist From Bit (m)
		0.00
HOC 241.00 mm OD / 48.00 mm ID SN : 0 * Positive Pulser - SN : 8270 * TM - SN : 116496 * DM Sonde - SN : 133447	9.54	
		17.25

COMMENTS

RIH with 584mm BHA. Drill to section TD of 638.0 mMDRT.

Bitrun Summary

RUN TIME DATA

MWD Run	: 300	**Run Start**	: 30-May-06 01:49	**BRT Hrs**	: 123.03 hr	**Circ. Hrs**	: 78.58 hr
Rig Bit No	: 3	**Run End**	: 04-Jun-06 04:50	**Hole Size**	: 311.00 mm	**Oper. Hrs**	: 123.03 hr

DRILLING DATA

Start Depth	: 638.00 m	**Footage**	: 1661.00 m	**Avg RPM**	: 156 rpm	**Avg ROP**	: 20.00 m/hr
End Depth	: 2299.00 m	**Avg Flow Rate**	: 1050.00 gpm	**Avg WOB**	: 15.0 klb	**Avg SPP**	: 2340 psig

MUD DATA

Mud Type	: IO/LAO/Ester Blend						
Weight	: 1.260 sg	**Viscosity**	: 84.50 spl	**PV**	: 38 cP	**YP**	: 13.89 Pa
Chlorides	: 25355.00 ppm	**Max Temp.**	: 96.00 degC	**% Solids**	: 13.70 %	**% Sand**	: 5.00 %
pH	: N/A	**Fluid Loss**	: 2 mptm	**% Oil**	: 60.50 %	**O:W**	: 72:28

MWD PERFORMANCE

Tool OD	: 203.20 mm	**Type**	: DIR-FE	**Min. Inc.**	: 3.73 deg	**Min. Inc. Depth**	: 956.070 m
Final Az.	: 274.85 deg	**Max Op. Press.**	: 4123 psig	**Max Inc.**	: 73.39 deg	**Max Inc. Depth**	: 2259.310 m
	MWD Real-time %	: 99 %		**MWD Recorded %**	: 100 %		

	Length (m)	Dist From Bit (m)
		511.65
Heavy Weight 140.00 mm OD / 86.00 mm ID	58.12	
X-Over Sub 203.00 mm OD / 71.00 mm ID	1.38	320.96
		316.44
Spiral Drill Collar 210.00 mm OD / 71.00 mm ID	17.31	
		259.65
Jar 203.00 mm OD / 70.00 mm ID	9.63	
		228.05
Spiral Drill Collar 210.00 mm OD / 71.00 mm ID	35.85	
Float Sub 203.00 mm OD / 71.00 mm ID	0.77	110.43
		107.91
NMDC 203.00 mm OD / 73.02 mm ID	8.58	
		79.76
MWD	14.36	
Flex Collar 203.00 mm OD / 89.00 mm ID * DM Sonde	2.81	8.61
Stabilizer 244.00 mm OD / 89.00 mm ID	0.78	23.43
		20.87
MWD	5.83	
Security FMF3653Z 311 mm OD / 71 mm ID	0.53	1.74

	Length (m)	Dist From Bit (m)
HOC 203.00 mm OD / 49.00 mm ID SN : 10718048 * Positive Pulser - SN : 8301 * TM - SN : 116496	3.11	0.00
		69.55
Sub 203.00 mm OD / 49.00 mm ID SN : 0	2.83	
		60.27
8" HCIM Collar 203.00 mm OD / 48.77 mm ID * HCIM Insert - SN : 152862	1.45	
PWD 203.00 mm OD / 49.00 mm ID * PWD Insert - SN : 0	1.32	15.90
EWR-P4 203.00 mm OD / 49.00 mm ID * EWR-P4 Insert - SN : 37661	3.72	13.40
DGR 203.00 mm OD / 49.00 mm ID * DGR Insert - SN : 10718409	1.93	11.04
		20.87
Geo-Pilot 244.00 mm OD / 89.00 mm ID	5.83	

COMMENTS

Drilled to section TD of 2299.0 mMDRT.
All recorded data recovered at surface.

Bitrun Summary

RUN TIME DATA

MWD Run	: 400	**Run Start**	: 08-Jun-06 14:10	**BRT Hrs**	: 104.68 hr	**Circ. Hrs**	: 76.47 hr
Rig Bit No	: 4	**Run End**	: 12-Jun-06 22:51	**Hole Size**	: 216.00 mm	**Oper. Hrs**	: 104.70 hr

DRILLING DATA

Start Depth	: 2299.00 m	**Footage**	: 1211.00 m	**Avg RPM**	: 170 rpm	**Avg ROP**	: 25.30 m/hr
End Depth	: 3510.00 m	**Avg Flow Rate**	: 730.00 gpm	**Avg WOB**	: 17.0 klb	**Avg SPP**	: 3750 psig

MUD DATA

Mud Type	: Ester Base						
Weight	: 1.260 sg	**Viscosity**	: 93.00 spl	**PV**	: 42 cP	**YP**	: 17.28 Pa
Chlorides	: 38842.00 ppm	**Max Temp.**	: 109.00 degC	**% Solids**	: 14.80 %	**% Sand**	: 0.30 %
pH	: N/A	**Fluid Loss**	: 3 mptm	**% Oil**	: 62.50 %	**O:W**	: 75:25

MWD PERFORMANCE

Tool OD	: 171.45 mm	**Type**	: DIR-FE-NUKE-GT	**Min. Inc.**	: 72.83 deg	**Min. Inc. Depth**	: 2295.600 m
Final Az.	: 271.42 deg	**Max Op. Press.**	: 3771 psig	**Max Inc.**	: 93.22 deg	**Max Inc. Depth**	: 2527.130 m
		MWD Real-time %	: 99 %	**MWD Recorded %**	: 100 %		

	Length (m)	Dist From Bit (m)
		449.57
5-1/2" 139.70 mm OD / 85.73 mm ID	58.12	
		258.89
6-3/4" Jar 174.50 mm OD / 69.85 mm ID	9.86	
		226.54
5-1/2" 139.70 mm OD / 85.73 mm ID	19.38	
		162.96
X-Over Sub 171.00 mm OD / 82.55 mm ID	1.38	
		158.43
Float Sub 171.00 mm OD / 82.55 mm ID	0.79	
		155.84
NMDC 171.00 mm OD / 73.15 mm ID	9.45	
		124.84
MWD	27.21	
		35.56
Stabilizer 171.00 mm OD / 48.77 mm ID	0.59	
		8.92
Flex Collar 171.00 mm OD / 48.77 mm ID * DM Sonde	2.77	
		24.54
Geo-Pilot 7600 193.80 mm OD / 41.40 mm ID	7.06	
		1.38
Security FMF3653Z 216 mm OD / 58 mm ID	0.42	

	Length (m)	Dist From Bit (m)
HOC 171.00 mm OD / 73.15 mm ID * Positive Pulser - SN : 8241 * TM - SN : 116496	3.06	0.00
FTWD Collar 171.00 mm OD / 48.77 mm ID * FTWD Insert * PWD-FTWD Insert - SN : 0	8.43	28.66
6-3/4" CTN Collar 171.00 mm OD / 48.77 mm ID * CTN Insert - SN : 10603697	4.73	25.34
6-3/4" ALD Collar 171.00 mm OD / 48.77 mm ID * ALD Insert - SN : 10718174	4.49	21.27
		56.89
6-3/4" HCIM Collar 171.00 mm OD / 48.77 mm ID * HCIM Insert - SN : 43987	1.47	
6-3/4" EWR-P4 Collar 171.00 mm OD / 48.77 mm ID * EWR-P4 Insert - SN : 136366	3.69	13.68
		11.47
6-3/4" DGR Collar 171.00 mm OD / 48.77 mm ID * DDS Insert - SN : 144358 * DGR Insert - SN : 144358	1.34	
		11.37

COMMENTS

Drilled 216mm hole to 3510.0 mMDRT and POOH for GeoPilot Failure. All recorded data recovered at surface.

Bitrun Summary

RUN TIME DATA

MWD Run	: 500	**Run Start**	: 13-Jun-06 02:31	**BRT Hrs**	: 99.31 hr	**Circ. Hrs**	: 63.13 hr
Rig Bit No	: 5	**Run End**	: 17-Jun-06 05:50	**Hole Size**	: 216.00 mm	**Oper. Hrs**	: 99.31 hr

DRILLING DATA

Start Depth	: 3510.00 m	**Footage**	: 516.00 m	**Avg RPM**	: 146 rpm	**Avg ROP**	: 26.00 m/hr
End Depth	: 4026.00 m	**Avg Flow Rate**	: 725.00 gpm	**Avg WOB**	: 18.0 klb	**Avg SPP**	: 3795 psig

MUD DATA

Mud Type	: Ester Base						
Weight	: 1.250 sg	**Viscosity**	: 74.00 spl	**PV**	: 35 cP	**YP**	: 26.000 m/hr
Chlorides	: 36912.00 ppm	**Max Temp.**	: 112.00 degC	**% Solids**	: 13.90 %	**% Sand**	: 0.30 %
pH	: N/A	**Fluid Loss**	: 2 mptm	**% Oil**	: 65.00 %	**O:W**	: 77:23

MWD PERFORMANCE

Tool OD	: 171.45 mm	**Type**	: DIR-FE-NUKE-GT	**Min. Inc.**	: 41.91 deg	**Min. Inc. Depth**	: 4001.930 m
Final Az.	: 269.81 deg	**Max Op. Press.**	: 4152 psig	**Max Inc.**	: 91.36 deg	**Max Inc. Depth**	: 3510.200 m
		MWD Real-time %	: 98 %	**MWD Recorded %**	: 100 %		

	Length (m)	Dist From Bit (m)
		446.65
5-1/2" 139.70 mm OD / 85.73 mm ID	58.12	
		255.97
6-3/4" Jar 174.50 mm OD / 69.85 mm ID	9.86	
		223.62
5-1/2" 139.70 mm OD / 85.73 mm ID	19.38	
		160.04
X-Over Sub 171.00 mm OD / 82.55 mm ID	1.38	
		155.51
Float Sub 171.00 mm OD / 82.55 mm ID	0.79	
		152.92
NMDC 165.10 mm OD / 73.15 mm ID	9.45	
		121.92
MWD	27.21	
		32.64
Stabilizer 171.00 mm OD / 48.77 mm ID	0.59	
		8.02
Flex Collar 171.00 mm OD / 48.77 mm ID * DM Sonde	2.80	
		21.52
Geo-Pilot 7600 193.80 mm OD / 41.40 mm ID	6.13	
		1.41
Security FMF3653Z 216 mm OD / 58 mm ID	0.43	

	Length (m)	Dist From Bit (m)
HOC 171.00 mm OD / 73.15 mm ID * Positive Pulser - SN : 8241 * TM - SN : 116496	3.06	0.00
FTWD Collar 171.00 mm OD / 48.77 mm ID * FTWD Insert * PWD-FTWD Insert - SN : 0	8.43	27.78
6-3/4" CTN Collar 171.00 mm OD / 48.77 mm ID * CTN Insert - SN : 10603697	4.73	24.46
6-3/4" ALD Collar 171.00 mm OD / 48.77 mm ID * ALD Insert - SN : 10718174	4.49	20.39
		53.97
6-3/4" HCIM Collar 171.00 mm OD / 48.77 mm ID * HCIM Insert - SN : 43987	1.47	
6-3/4" EWR-P4 Collar 171.00 mm OD / 48.77 mm ID * EWR-P4 Insert - SN : 136366	3.69	12.80
		10.59
6-3/4" DGR Collar 171.00 mm OD / 48.77 mm ID * DDS Insert - SN : 144358 * DGR Insert - SN : 144358	1.34	
		10.49

COMMENTS

Drilled to Section TD at 4026.0 mMDRT. GeoTap tests were performed after drilling to TD.
All recorded data recovered at surface.

Directional Survey Data

Tie-in

0.000	0.00	0.00	0.000	0.000 N	0.000 E		***

Measured Depth (m)	Inclination (deg)	Direction (deg)	Vertical Depth (m)	Latitude (m)	Departure (m)	Vertical Section (m)	Dogleg (°/30m)
150.000	0.00	0.00	150.000	0.000 N	0.000 E	0.000	0.00
169.130	0.71	221.05	169.130	0.089 S	0.078 W	0.073	1.11
208.000	0.52	196.77	207.997	0.440 S	0.287 W	0.261	0.25
220.400	0.29	185.42	220.397	0.525 S	0.306 W	0.275	0.59
259.700	0.89	270.66	259.695	0.621 S	0.621 W	0.584	0.70
341.490	2.59	273.52	341.444	0.500 S	3.101 W	3.066	0.62
370.420	3.21	272.48	370.337	0.425 S	4.562 W	4.530	0.65
399.400	3.84	274.34	399.262	0.316 S	6.340 W	6.312	0.66
428.360	4.65	272.33	428.143	0.195 S	8.480 W	8.455	0.85
457.280	5.51	259.78	456.950	0.394 S	11.018 W	10.977	1.45
486.270	5.77	264.15	485.799	0.789 S	13.838 W	13.769	0.52
525.140	5.59	268.32	524.479	1.044 S	17.674 W	17.584	0.35
544.150	6.87	262.02	543.376	1.229 S	19.725 W	19.621	2.29
572.990	5.92	272.75	572.038	1.397 S	22.919 W	22.800	1.58
601.890	6.64	272.65	600.764	1.248 S	26.077 W	25.961	0.75
620.250	6.72	280.11	619.000	1.010 S	28.195 W	28.089	1.42
637.830	6.20	276.25	636.468	0.726 S	30.151 W	30.058	1.16
666.700	5.81	274.13	665.180	0.451 S	33.158 W	33.077	0.47
724.560	4.14	270.99	722.820	0.204 S	38.168 W	38.092	0.88
753.490	4.52	273.28	751.667	0.121 S	40.350 W	40.275	0.43
782.470	4.29	270.74	780.562	0.042 S	42.574 W	42.500	0.31
811.430	4.34	267.95	809.439	0.067 S	44.752 W	44.673	0.22
840.350	4.62	270.66	838.271	0.093 S	47.010 W	46.926	0.36
869.340	4.34	269.72	867.173	0.085 S	49.275 W	49.187	0.30
898.280	3.92	268.79	896.037	0.111 S	51.359 W	51.266	0.44
927.230	4.40	268.45	924.911	0.162 S	53.458 W	53.359	0.50
956.070	3.73	266.06	953.678	0.256 S	55.500 W	55.392	0.72
984.970	4.34	268.49	982.507	0.350 S	57.531 W	57.414	0.66
1013.890	4.16	272.00	1011.347	0.342 S	59.673 W	59.553	0.33
1042.820	4.06	274.94	1040.203	0.217 S	61.742 W	61.626	0.24
1071.770	3.93	261.43	1069.083	0.277 S	63.744 W	63.621	0.98
1100.720	4.17	266.35	1097.961	0.491 S	65.776 W	65.637	0.44
1129.600	4.49	268.53	1126.758	0.587 S	67.954 W	67.806	0.37
1158.570	5.03	274.87	1155.628	0.509 S	70.353 W	70.205	0.78
1187.500	6.72	277.51	1184.405	0.180 S	73.295 W	73.161	1.77
1216.400	7.21	278.85	1213.092	0.320 N	76.763 W	76.653	0.54
1274.310	7.49	272.32	1270.527	1.032 N	84.125 W	84.044	0.46
1303.240	7.51	269.23	1299.210	1.083 N	87.900 W	87.815	0.42
1332.210	7.47	270.49	1327.933	1.074 N	91.676 W	91.584	0.18
1361.320	8.41	273.97	1356.763	1.237 N	95.692 W	95.603	1.09
1390.210	9.62	275.12	1385.296	1.599 N	100.204 W	100.128	1.27
1419.150	9.54	275.91	1413.833	2.062 N	104.998 W	104.941	0.16
1448.060	9.40	274.75	1442.349	2.504 N	109.734 W	109.694	0.25
1476.990	9.05	273.21	1470.904	2.827 N	114.360 W	114.331	0.44
1505.900	8.41	272.71	1499.479	3.054 N	118.742 W	118.719	0.67
1534.850	8.28	270.88	1528.123	3.187 N	122.941 W	122.919	0.31
1563.740	8.34	272.11	1556.710	3.296 N	127.114 W	127.092	0.19
1592.670	8.65	273.85	1585.322	3.519 N	131.382 W	131.365	0.42

Directional Survey Data

Measured Depth (m)	Inclination (deg)	Direction (deg)	Vertical Depth (m)	Latitude (m)	Departure (m)	Vertical Section (m)	Dogleg (°/30m)
1621.600	8.77	273.02	1613.919	3.781 N	135.755 W	135.746	0.18
1650.500	8.90	271.30	1642.476	3.948 N	140.190 W	140.183	0.31
1679.430	9.29	270.16	1671.042	4.005 N	144.762 W	144.751	0.45
1708.390	9.95	271.28	1699.595	4.068 N	149.601 W	149.586	0.71
1737.350	13.61	273.91	1727.940	4.356 N	155.504 W	155.495	3.83
1766.320	14.48	273.78	1756.044	4.827 N	162.519 W	162.525	0.90
1795.250	18.77	275.16	1783.758	5.485 N	170.767 W	170.798	4.47
1824.140	21.92	277.04	1810.843	6.564 N	180.751 W	180.827	3.34
1853.060	24.85	276.60	1837.384	7.924 N	192.147 W	192.283	3.04
1882.070	26.96	269.43	1863.484	8.560 N	204.783 W	204.935	3.90
1911.030	30.94	270.57	1888.821	8.569 N	218.797 W	218.926	4.16
1939.980	35.09	272.02	1913.091	8.936 N	234.562 W	234.686	4.38
1968.910	38.21	272.59	1936.299	9.634 N	251.815 W	251.950	3.25
1997.860	41.94	273.44	1958.448	10.619 N	270.423 W	270.584	3.91
2026.790	45.44	272.99	1979.363	11.737 N	290.372 W	290.564	3.64
2055.710	48.46	272.75	1999.103	12.794 N	311.476 W	311.695	3.14
2084.640	51.86	272.71	2017.634	13.852 N	333.661 W	333.904	3.53
2110.880	54.91	272.40	2033.283	14.790 N	354.700 W	354.961	3.50
2142.550	59.40	274.22	2050.456	16.336 N	381.254 W	381.560	4.49
2171.490	64.94	274.96	2063.962	18.388 N	406.754 W	407.136	5.78
2200.390	65.78	275.15	2076.010	20.702 N	432.920 W	433.392	0.89
2229.340	69.94	274.26	2086.918	22.899 N	459.639 W	460.194	4.39
2259.310	73.39	274.89	2096.345	25.169 N	487.992 W	488.631	3.50
2287.290	73.01	274.85	2104.432	27.443 N	514.681 W	515.407	0.41
2295.600	72.83	274.15	2106.873	28.066 N	522.600 W	523.348	2.50
2324.710	74.76	273.81	2114.996	30.006 N	550.485 W	551.299	2.02
2353.600	77.11	274.62	2122.017	32.067 N	578.431 W	579.317	2.57
2380.350	80.82	275.67	2127.136	34.422 N	604.575 W	605.554	4.32
2409.420	83.75	281.32	2131.041	38.680 N	633.050 W	634.228	6.52
2440.380	86.54	283.47	2133.662	45.302 N	663.175 W	664.686	3.41
2469.290	89.57	284.75	2134.643	52.345 N	691.193 W	693.064	3.41
2497.930	92.66	285.85	2134.085	59.900 N	718.809 W	721.071	3.44
2527.130	93.22	285.11	2132.588	67.684 N	746.912 W	749.578	0.95
2556.060	93.09	282.07	2130.995	74.470 N	774.986 W	777.998	3.15
2584.990	93.16	278.76	2129.417	79.692 N	803.393 W	806.660	3.43
2613.890	92.85	276.08	2127.902	83.418 N	832.009 W	835.444	2.80
2642.820	92.60	275.29	2126.527	86.281 N	860.764 W	864.316	0.86
2671.780	90.50	275.95	2125.743	89.116 N	889.572 W	893.240	2.28
2700.740	90.75	275.69	2125.428	92.052 N	918.381 W	922.171	0.37
2729.710	90.50	276.17	2125.111	95.045 N	947.195 W	951.109	0.56
2758.640	90.07	275.82	2124.968	98.067 N	975.966 W	980.007	0.57
2786.010	89.20	277.60	2125.142	101.265 N	1003.146 W	1007.327	2.17
2816.450	88.53	274.82	2125.745	104.557 N	1033.399 W	1037.720	2.82
2843.560	89.08	272.77	2126.310	106.350 N	1060.442 W	1064.821	2.35
2872.880	88.15	274.77	2127.019	108.277 N	1089.688 W	1094.130	2.26
2901.720	87.41	276.08	2128.136	111.002 N	1118.377 W	1122.928	1.56
2932.300	87.66	276.72	2129.452	114.408 N	1148.738 W	1153.435	0.67
2961.250	88.53	273.72	2130.414	117.040 N	1177.548 W	1182.350	3.24
2990.180	88.22	277.49	2131.235	119.863 N	1206.323 W	1211.240	3.92
3019.100	87.97	275.06	2132.196	123.023 N	1235.052 W	1240.103	2.53
3048.030	87.91	276.60	2133.236	125.959 N	1263.812 W	1268.986	1.60

Directional Survey Data

Measured Depth (m)	Inclination (deg)	Direction (deg)	Vertical Depth (m)	Latitude (m)	Departure (m)	Vertical Section (m)	Dogleg (°/30m)
3076.970	88.77	276.21	2134.074	129.186 N	1292.559 W	1297.872	0.98
3105.940	89.21	275.52	2134.585	132.146 N	1321.373 W	1326.808	0.85
3134.880	90.81	275.69	2134.580	134.973 N	1350.174 W	1355.724	1.67
3162.220	91.73	274.81	2133.974	137.474 N	1377.392 W	1383.042	1.40
3191.150	91.43	273.46	2133.176	139.559 N	1406.235 W	1411.957	1.43
3220.270	91.24	272.90	2132.498	141.174 N	1435.302 W	1441.069	0.61
3248.910	91.43	272.30	2131.831	142.473 N	1463.905 W	1469.699	0.66
3277.480	91.74	270.72	2131.040	143.225 N	1492.453 W	1498.243	1.69
3308.520	91.55	267.86	2130.149	142.841 N	1523.474 W	1529.190	2.77
3335.970	91.86	267.23	2129.332	141.666 N	1550.887 W	1556.488	0.77
3366.390	91.67	267.91	2128.395	140.377 N	1581.265 W	1586.741	0.70
3395.360	91.42	268.54	2127.614	139.480 N	1610.210 W	1615.586	0.70
3424.310	91.73	269.11	2126.818	138.886 N	1639.143 W	1644.435	0.67
3452.270	91.18	270.09	2126.108	138.691 N	1667.093 W	1672.327	1.21
3481.190	90.62	271.42	2125.654	139.073 N	1696.006 W	1701.214	1.50
3510.200	91.36	270.88	2125.153	139.655 N	1725.006 W	1730.198	0.95
3539.050	90.68	268.43	2124.639	139.481 N	1753.848 W	1758.982	2.64
3568.540	90.62	269.75	2124.305	139.013 N	1783.332 W	1788.390	1.34
3596.900	87.47	267.06	2124.777	138.224 N	1811.671 W	1816.635	4.38
3625.860	83.38	266.72	2127.087	136.659 N	1840.490 W	1845.315	4.25
3654.780	79.21	266.22	2131.463	134.900 N	1869.016 W	1873.692	4.36
3683.720	74.37	265.83	2138.074	132.948 N	1897.114 W	1901.630	5.03
3712.660	69.09	265.58	2147.144	130.892 N	1924.509 W	1928.859	5.48
3741.630	66.06	268.24	2158.195	129.442 N	1951.242 W	1955.464	4.04
3770.600	61.26	267.44	2171.046	128.467 N	1977.178 W	1981.300	5.03
3799.550	57.17	268.95	2185.860	127.677 N	2002.030 W	2006.064	4.45
3824.400	54.02	268.15	2199.900	127.161 N	2022.524 W	2026.493	3.89
3857.310	49.28	270.04	2220.315	126.740 N	2048.320 W	2052.222	4.53
3886.190	47.08	270.46	2239.570	126.832 N	2069.841 W	2073.712	2.31
3915.140	45.75	270.18	2259.529	126.950 N	2090.810 W	2094.653	1.39
3944.070	44.63	271.10	2279.918	127.178 N	2111.332 W	2115.154	1.34
3973.050	42.59	270.42	2300.899	127.445 N	2131.318 W	2135.122	2.17
4001.930	41.91	270.87	2322.277	127.663 N	2150.735 W	2154.519	0.77
4017.670	41.94	269.81	2333.988	127.726 N	2161.251 W	2165.021	1.35
4026.000	41.94	269.81	2340.184	127.707 N	2166.818 W	2170.578	0.00

CALCULATION BASED ON MINIMUM CURVATURE METHOD

SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT
TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT

VERTICAL SECTION RELATIVE TO WELL HEAD
VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 273.32 DEGREES(GRID)
A TOTAL CORRECTION OF 12.31 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD
HORIZONTAL DISPLACEMENT(CLOSURE) AT 4026.00 METRES
IS 2170.58 METRES ALONG 273.37 DEGREES (GRID)

Service Interrupt Report

MWD Run Number	: 400	**Time/Date fo Failure**	: 08-Jun-06 18:43
Rig Bit Number	: 4	**Depth at time fo Failure**	: 2285.000 m
MWD Run start time/date	: 08-Jun-06 14:10	**Lost Rig Hours**	: hr
MWD Run end time/date	: 12-Jun-06 22:51		

RIG ACTIVITY

Drilling out cement and shoe track.

DESCRIPTION OF FAILURE

ACAL was pulsing up NO RESPONSE errors. At 2494.2 mMDRT the tool came back on.

ACTION TAKEN

None, drilled ahead.

OPERATION IMPACT

Lost data from 2290.0 to 2494.2 mMDRT.

REASON FOR FAILURE

Battery found completely depleted.

HALLIBURTON

Drilling, Evaluation and Digital Solutions

Woodside Energy Ltd.

Directional Drilling End of Well Report

Well: THA02

Date: May – June 2006

HALLIBURTON

Sperry Drilling Services

Table of Contents

1. Well Summary
2. Definitive Survey Report and A4 Plot
3. Survey and Drilling Parameters
4. BHA Data
5. Motor Performance Reports
6. Daily Directional Drilling Reports

Customer : Woodside Energy Ltd.

Well : THA02

Job Objectives:

The objective of THA02 is to recover gas optimally from the various reservoir intervals within the Thylacine gas field, and ensure minimal intervention during the project life.

Summary of Results:

30" Hole Section

This short section was drilled from 150m to 219m at an average 10.6m/hr with no problems. Low WOB (around 5k) was used to maintain verticality, an EMS survey showing 0.52° inc. on bottom.

23" Hole Section

The section was drilled from 219m to 638m at an average ROP of 29.5m/hr. A gyro was used for initial orientation, and the well kicked off and built to 5° to establish separation from other slots.
Rotary trend was inconsistent throughout most of the run, with the assembly both building and dropping, and walking both left and right. Over the last two stands a strong build and right hand walk was seen. Effective doglegs in sliding mode were 1.7° - 4.2°.

12¼" Hole Section

The section was drilled in one run from 638m to 2298m at an average ROP of 30.0m/hr. Following a revision to the wellplan, the well was built to 73° at 3.5°/30m, with the assembly producing effective doglegs of 8 - 10° in the initial part of the build section, and upwards of 6° towards the end of the build.
Frequent hard stringers were encountered throughout the run, and high torque and stick/slip were a continual problem, requiring the drilling parameters to be changed accordingly.

For most of the section only two mud pumps were available, but this did not affect the performance of the downhole tools, and effective hole cleaning was maintained with 980 gpm.
At 2284m a level 1 oil light was seen from the GeoPilot, followed soon after by a level 2 indicator.
After informing town, drilling continued until the GABi indicated the top of the reservoir sand. At 2298m a sample was circulated up to confirm this, and the assembly tripped to run 9 5/8" casing.
This was a good performance from the assembly, and despite pump problems the section was drilled ahead of technical limit.

8½" Section

Run #1

The float collar, shoe track and shoe proved difficult to drill out, taking 7 hours in total and raising suspicion of debris on bottom.
Shortly after commencing drilling, a "Position 2" oil light was indicated from the GeoPilot, but drilling continued.

The well was landed horizontal at 2134m TVD and the build continued to 93° at 3.3°/30m, then held to 2671m MD. The assembly was then Geo-steered through multiple zones of interest successfully at 87.9°inc to 3134.88m MD (2134.58mTVD) then back to 91.5° inc at 2125mTVD. While attempting to level out at 90°, the GeoPilot clutch mechanism was observed to slip repeatedly and was unable to produce or hold a lowside toolface. As well as this, the tool was unable to respond to deflection commands or return to the "Home" position. The assembly was tripped to change GeoPilot.

Run #2

After drilling the remainder of the horizontal section, and having discussed a new wellplan with WEL in town, commenced the drop at 4.2°/30m. This initially required 100% deflection, which was gradually reduced to 80% as the drop rate increased with the decrease in hole angle, A left hand walk tendency was counteracted by a 150R toolface set, and ROP was controlled at 30m/hr to ensure good log quality from the LWD.

Having dropped angle to 50°, the deflection setting was reduced to 40% to achieve the required 1.4°/30m drop to the final inclination of 42°.
Drilling then continued with GeoPilot in cruise control over the last 1½ stands to well TD at 4026m MD (2340m TVD).
The hole was circulated clean and the assembly tripped to the shoe. On the trip out, GeoTap pressure samples were taken throughout the reservoir sands, 26 in all. The assembly was run back to bottom and the hole again circulated clean prior to backreaming out to the shoe and continuing to POOH surface.

Discussion:

BHA Summary:

BHA #1

The assembly completed this section to 219m with no problems

BHA #2

The assembly performed as expected, giving effective doglegs of 1.7°- 4.2°. Average ROP for the run was 29.5m/hr.

BHA #3

The assembly produced doglegs in excess of expectation and performed very well overall, drilling the section in one run and ahead of technical limit. A level 2 oil light late in the run was a cause for concern, but did not prevent the section from being completed.

BHA #4

The assembly completed the build up and land out at horizontal, but soon after drilling began, a "Level 2" oil light was indicated by the GeoPilot, although drilling continued. After geosteering through several zones of interest, the GeoPilot failed to respond to deflection commands, or return to the 'Home' position, so the assembly was tripped

BHA #5

The remainder of the horizontal section was drilled and the drop off to the final inclination of 42° completed as per the revised wellplan. Initially 100% deflection required to achieve 4° doglegs. Drilled to TD at 4026m and performed a wiper trip to the shoe, during which GeoTap samples were taken to establish pore pressure.

BHA #	Bit #	Motor Run #	Hole Size (in)	MD In (m)	MD Out (m)	TVD In (m)	TVD Out (m)	Inc In (deg)	Inc Out (deg)	Azi In (deg)	Azi Out (deg)	Drlg hrs	Circ hrs
1	1		17.500	149	220	149	220	0.0	0.3	0	186	7	1
2	2rr1	1	23.000	220	638	220	637	0.3	6.2	186	276	20	4
3	3		12.250	638	2298	637	2108	6.2	73.0	276	274	75	13
4	4		8.500	2298	3510	2108	2125	73.0	91.4	274	271	67	11
5	5		8.500	3510	4026	2125	2340	91.4	41.9	271	270	29	19

Table 1 - BHA Summary

Motor Run #	Manufacturer	Type	Lobe	OD (in)	Gauge (in)	Bend (deg)	Adj	DLS (Ori) (°/100')	ROP (Ori) (m/hr)	ROP (Rot) (m/hr)
1	SSDS	SperryDrill	6/7	9.625	22.750	1.15	Y		22	21

Table 2 - Motor Run Summary

Bit Run Summary:

Bit #1 150m - 219m

Make : Hughes
Size : 17½"
Type : MX-1 Milled Tooth
Serial No :
IADC : 1-1-5
Jets : 3 x 12
TFA : 0.331
Grading in: NEW
Grading out: 1-1-WT-A-E-I-NO-TD

The short section was drilled with no problems.

Bit #2 219m - 638m

Make : Varel
Size : 23"
Type : ETR1GJ Milled Tooth
Serial No : 218183

IADC : 1-1-5
Jets : 2x22, 1x20,1x16
TFA : 1.246
Grading in: 1-1-WT-A-E-I-NO-TD
Grading out: 2-2-WT-A-E-I-NO-TD

The bit drilled the section in one run at an average ROP of 29.5m/hr

Bit #3 638m - 2298m

Make : Security
Size : 12¼"
Type : FMF3563Z PDC
Serial No : 10795301
IADC : M223
Jets : 6 x 18, 1 x 21
TFA : 1.829
Grading in: NEW
Grading out: 1-1-WT-G-X-G-0-ER-TD

A good bit performance, drilling the section in one run at an average ROP of 30m/hr

Bit #4 2298m - 3510m

Make : Security
Size : 8½"
Type : FMF3563Z PDC
Serial No : 10765114
IADC : M223
Jets : 3 x 16, 3 x 15
TFA : 1.104
Grading in: NEW
Grading out: 1-1-WT-A-X-I-ER-DTF

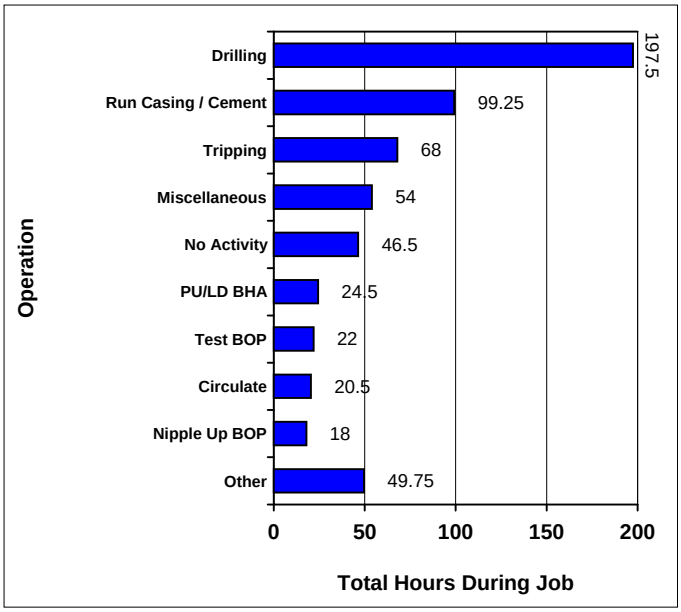
Bit #5 3510m - 4026m

Make : Security
Size : 8½"
Type : FMF3563Z PDC
Serial No : 10695263
IADC : M223
Jets : 3 x 16, 3 x 15
TFA : 1.104
Grading in: NEW
Grading out:

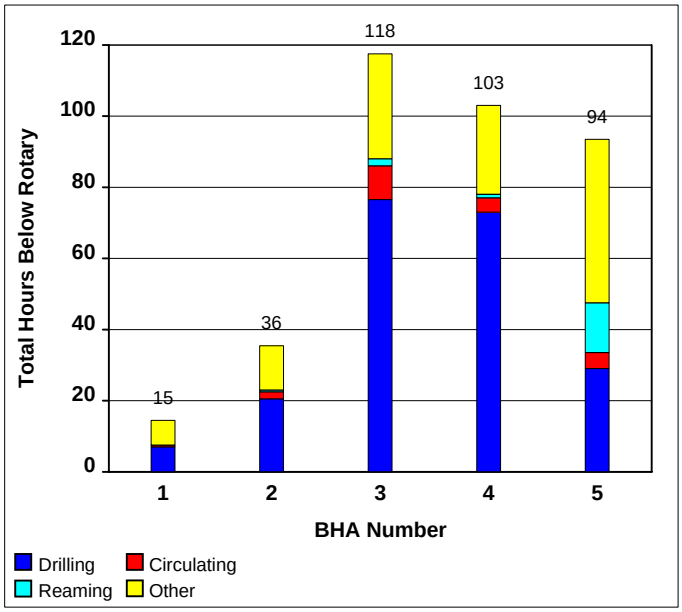
Bit #	Manufacturer	Style	OD (in)	Gge Len (in)	Nozzles (/32's)	TFA (in²)	Dull Grades I O D L B G O R	Ftge (m)	Drlg hrs	ROP (m/hr)
1	Hughes	MX-1	17.500		3x12	0.331	1-1-WT-A -E-I-NO-TD	71	7.00	10
2rr1	Varel	ETR1GJ	23.000		2x22, 1x20, 1x16	1.246	2-2-WT-A -E-I-NO-TD	418	19.50	21
3	Security DBS	FMF3653Z	12.250	4.000	6x18, 1x21	1.829	1-1-WT-G -X-0-ER-TD	1660	75.00	22
4	Security DBS	FMF3653Z	8.500	3.000	3x16, 3x15	1.107	1-1-WT- A-X-I-ER-DTF	1212	67.00	18
5	Security DBS	FMFX 653	8.500	3.000	3x16, 3x15	1.107		516	29.00	18

Table 3 - Bit Run Summary

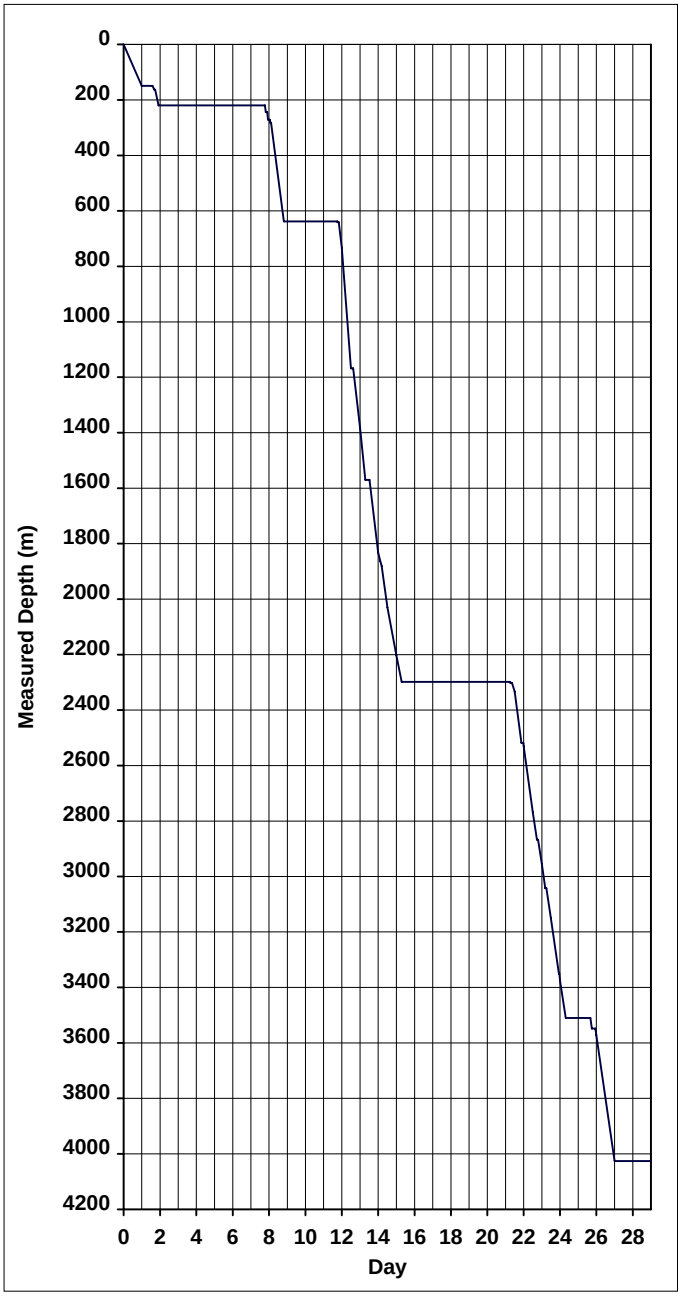
Hours by Operation Summary



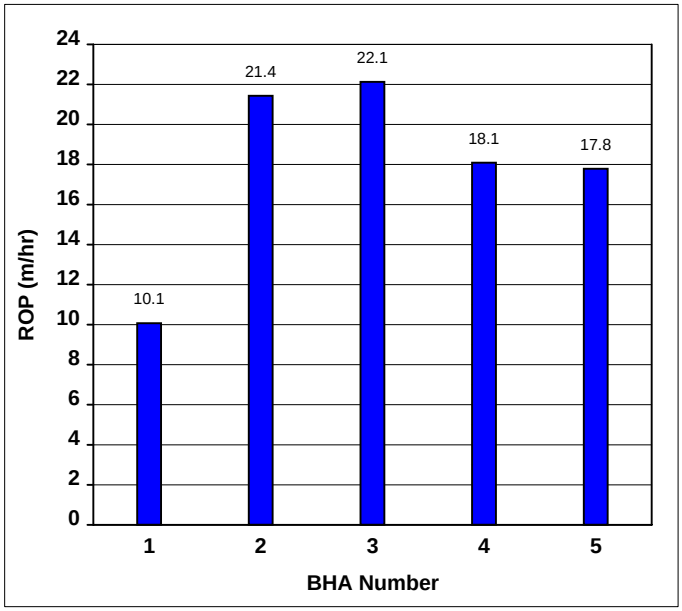
Hours per BHA Breakdown



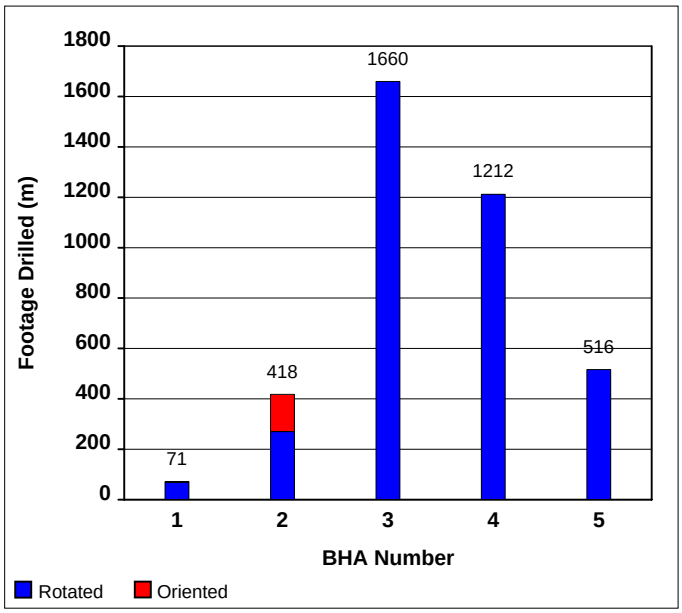
Days vs. Depth



Average Rate of Penetration per BHA



Footage per BHA

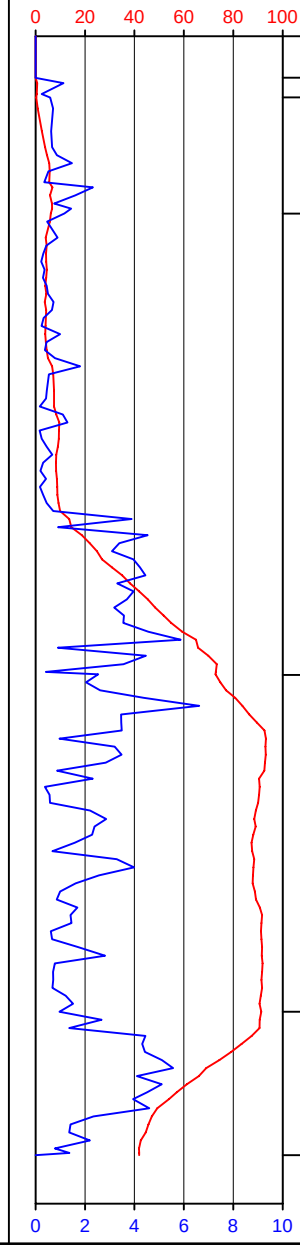


Sperry-Sun Drilling Services

Woodside Energy Ltd.
THA02
Maersk Guardian

T/L2
Thylacine
AU-DD-0003930658

MD (m)	Formation Name MD/TVD	Bit Data	Drilling Parameters	Motor	BHA Stabilizers	Comments	BHA ID
0	Seabed 150 / 150						@ 0
200		MX-1 3x12 /32's 0.55 ft/min 7.00 hrs	WOB 5000 lbs RPM 59 FLO 779 gpm SPP 594 psi		29.750 in @ 24.87 m	Well THA02 spudded 20/05/06	#1 @ 149
400		ETR1GJ 2x22,1x20,1x16 /32's 1.17 ft/min 19.50 hrs	WOB 18944 lbs RPM 87 FLO 1000 gpm SPP 1461 psi	9-5/8" SperryDrill 6/7 L 1.15° ABH	22.750 in @ 1.33 m 23.000 in @ 31.79 m		#2 @ 220
800		FMF3653Z 6x18, 1x21 /32's 1.21 ft/min 75.00 hrs	WOB 18806 lbs RPM 153 FLO 1038 gpm SPP 2856 psi		12.125 in @ 6.64 m 12.188 in @ 18.62 m	Shallow Pulse Test: 800gpm = 870 psi Total Circ Hours: 77.96 per Geoservices Mudlogging Total Drlg. Hours: 55.23 per Geoservices Mudlogging Total BRT Hours : 112.50	#3 @ 638
2400		FMF3653Z 3x16, 3x15 /32's 0.99 ft/min 67.00 hrs	WOB 18887 lbs RPM 168 FLO 733 gpm SPP 3421 psi		8.375 in @ 10.65 m 8.250 in @ 20.92 m	Bit Make-up Torque : 25000 ft/lbs	#4 @ 2298
3600		FMFX 653 3x16, 3x15 /32's 0.97 ft/min 29.00 hrs	WOB 17419 lbs RPM 147 FLO 726 gpm SPP 3816 psi		8.375 in @ 9.76 m 8.250 in @ 20.03 m	Bit Make-up Torque : 25000 ft/lbs	#5 @ 3510
4200							



Woodside Energy-Otway Gas Development

Otway Gas Development
Thylacine Platform
THA02 - Slot Slot 5
THA02S0

Design: THA02S0

Standard Survey Report

17 August, 2006

Halliburton Company

Survey Report

Company:	Woodside Energy-Otway Gas Develo	**Local Co-ordinate Reference:**	Site Thylacine Platform
Project:	Otway Gas Development	**TVD Reference:**	RT Revised @ 50.50m
Site:	Thylacine Platform	**MD Reference:**	RT Revised @ 50.50m
Well:	THA02	**North Reference:**	Grid
Wellbore:	THA02S0	**Survey Calculation Method:**	Minimum Curvature
Design:	THA02S0	**Database:**	EDM 2003.14 Single User Db

Project Otway Gas Development, Otway Basin, Australia

Map System:	Universal Transverse Mercator	**System Datum:**	Lowest Astronomical Tide
Geo Datum:	GDA94		
Map Zone:	Zone 54S (138 E to 144 E)		

Site Thylacine Platform, T/30P

Site Position:		**Northing:**	5,655,160.20 m	**Latitude:**	39° 14' 14.451 S
From:	Map	**Easting:**	664,161.60 m	**Longitude:**	142° 54' 7.603 E
Position Uncertainty:	0.00 m	**Slot Radius:**	0.00 mm	**Grid Convergence:**	-1.20 °

Well THA02 - Slot Slot 5, Deviated well - produce from units 4 & 5

Well Position	**+N/-S**	-0.60 m	**Northing:**	5,655,159.60 m	**Latitude:**	39° 14' 14.471 S
	+E/-W	-0.60 m	**Easting:**	664,161.00 m	**Longitude:**	142° 54' 7.578 E
Position Uncertainty		0.00 m	**Wellhead Elevation:**	m	**Water Depth:**	99.50 m

Wellbore THA02S0

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2006	1/06/2006	11.09	-70.34	61,042

Design THA02S0

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (m)	+N/-S (m)	+E/-W (m)	Direction (°)
	0.00	-0.60	-0.60	273.32

Survey Program **Date** 17/08/2006

From (m)	To (m)	Survey (Wellbore)	Tool Name	Description
150.00	637.83	THA02-MWD1 (THA02S0)	MWD+SAG	MWD + Sag correction
666.70	2,409.42	THA02-MWD2 (THA02S0)	MWD+SAG	MWD + Sag correction
2,440.38	4,026.00	THA02-MWD3 (THA02S0)	MWD+SAG	MWD + Sag correction

Survey

Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
0.00	0.00	0.00	0.00	-0.60	-0.60	0.00	0.000	0.00	0.00
150.00	0.00	360.00	150.00	-0.60	-0.60	0.00	0.000	0.00	0.00
169.13	0.71	221.05	169.13	-0.69	-0.68	0.07	1.113	1.11	0.00
208.00	0.52	196.77	208.00	-1.04	-0.89	0.26	0.246	-0.15	-18.74
220.40	0.29	185.42	220.40	-1.13	-0.91	0.28	0.587	-0.56	-27.46
259.70	0.89	270.66	259.70	-1.22	-1.22	0.58	0.697	0.46	65.07
341.49	2.59	273.52	341.44	-1.10	-3.70	3.07	0.624	0.62	1.05
370.42	3.21	272.48	370.34	-1.02	-5.16	4.53	0.645	0.64	-1.08
399.40	3.84	274.34	399.26	-0.92	-6.94	6.31	0.663	0.65	1.93
428.36	4.65	272.33	428.14	-0.79	-9.08	8.45	0.853	0.84	-2.08
457.28	5.51	259.78	456.95	-0.99	-11.62	10.98	1.453	0.89	-13.02
486.27	5.77	264.15	485.80	-1.39	-14.44	13.77	0.519	0.27	4.52
525.14	5.59	268.32	524.48	-1.64	-18.27	17.58	0.347	-0.14	3.22
544.15	6.87	262.02	543.38	-1.83	-20.33	19.62	2.287	2.02	-9.94
572.99	5.92	272.75	572.04	-2.00	-23.52	22.80	1.584	-0.99	11.16
601.89	6.64	272.65	600.76	-1.85	-26.68	25.96	0.747	0.75	-0.10

Halliburton Company

Survey Report

Company:	Woodside Energy-Otway Gas Develo	**Local Co-ordinate Reference:**	Site Thylacine Platform
Project:	Otway Gas Development	**TVD Reference:**	RT Revised @ 50.50m
Site:	Thylacine Platform	**MD Reference:**	RT Revised @ 50.50m
Well:	THA02	**North Reference:**	Grid
Wellbore:	THA02S0	**Survey Calculation Method:**	Minimum Curvature
Design:	THA02S0	**Database:**	EDM 2003.14 Single User Db

Survey

Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
620.25	6.72	280.11	619.00	-1.61	-28.79	28.09	1.423	0.13	12.19
637.83	6.20	276.25	636.47	-1.33	-30.75	30.06	1.156	-0.89	-6.59
666.70	5.81	274.13	665.18	-1.05	-33.76	33.08	0.466	-0.41	-2.20
724.56	4.14	270.99	722.82	-0.80	-38.77	38.09	0.877	-0.87	-1.63
753.49	4.52	273.28	751.67	-0.72	-40.95	40.28	0.433	0.39	2.37
782.47	4.29	270.74	780.56	-0.64	-43.17	42.50	0.312	-0.24	-2.63
811.43	4.34	267.95	809.44	-0.67	-45.35	44.67	0.224	0.05	-2.89
840.35	4.62	270.66	838.27	-0.69	-47.61	46.93	0.364	0.29	2.81
869.34	4.34	269.72	867.17	-0.68	-49.87	49.19	0.300	-0.29	-0.97
898.28	3.92	268.79	896.04	-0.71	-51.96	51.27	0.441	-0.44	-0.96
927.23	4.40	268.45	924.91	-0.76	-54.06	53.36	0.498	0.50	-0.35
956.07	3.73	266.06	953.68	-0.86	-56.10	55.39	0.719	-0.70	-2.49
984.97	4.34	268.49	982.51	-0.95	-58.13	57.41	0.657	0.63	2.52
1,013.89	4.16	272.00	1,011.35	-0.94	-60.27	59.55	0.328	-0.19	3.64
1,042.82	4.06	274.94	1,040.20	-0.82	-62.34	61.63	0.242	-0.10	3.05
1,071.77	3.93	261.43	1,069.08	-0.88	-64.34	63.62	0.982	-0.13	-14.00
1,100.72	4.17	266.35	1,097.96	-1.09	-66.38	65.64	0.437	0.25	5.10
1,129.60	4.49	268.53	1,126.76	-1.19	-68.55	67.81	0.374	0.33	2.26
1,158.57	5.03	274.87	1,155.63	-1.11	-70.95	70.21	0.780	0.56	6.57
1,187.50	6.72	277.51	1,184.41	-0.78	-73.89	73.16	1.774	1.75	2.74
1,216.40	7.21	278.85	1,213.09	-0.28	-77.36	76.65	0.536	0.51	1.39
1,274.31	7.49	272.32	1,270.53	0.43	-84.73	84.04	0.456	0.15	-3.38
1,303.24	7.51	269.23	1,299.21	0.48	-88.50	87.81	0.419	0.02	-3.20
1,332.21	7.47	270.49	1,327.93	0.47	-92.28	91.58	0.175	-0.04	1.30
1,361.32	8.41	273.97	1,356.76	0.64	-96.29	95.60	1.088	0.97	3.59
1,390.21	9.62	275.12	1,385.30	1.00	-100.80	100.13	1.270	1.26	1.19
1,419.15	9.54	275.91	1,413.83	1.46	-105.60	104.94	0.160	-0.08	0.82
1,448.06	9.40	274.75	1,442.35	1.90	-110.33	109.69	0.246	-0.15	-1.20
1,476.99	9.05	273.21	1,470.90	2.23	-114.96	114.33	0.444	-0.36	-1.60
1,505.90	8.41	272.71	1,499.48	2.45	-119.34	118.72	0.669	-0.66	-0.52
1,534.85	8.28	270.88	1,528.12	2.59	-123.54	122.92	0.306	-0.13	-1.90
1,563.74	8.34	272.11	1,556.71	2.70	-127.71	127.09	0.195	0.06	1.28
1,592.67	8.65	273.85	1,585.32	2.92	-131.98	131.36	0.418	0.32	1.80
1,621.60	8.77	273.02	1,613.92	3.18	-136.35	135.75	0.180	0.12	-0.86
1,650.50	8.90	271.30	1,642.48	3.35	-140.79	140.18	0.306	0.13	-1.79
1,679.43	9.29	270.16	1,671.04	3.41	-145.36	144.75	0.445	0.40	-1.18
1,708.39	9.95	271.28	1,699.59	3.47	-150.20	149.59	0.711	0.68	1.16
1,737.35	13.61	273.91	1,727.94	3.76	-156.10	155.50	3.831	3.79	2.72
1,766.32	14.48	273.78	1,756.04	4.23	-163.12	162.53	0.902	0.90	-0.13
1,795.25	18.77	275.16	1,783.76	4.88	-171.37	170.80	4.467	4.45	1.43
1,824.14	21.92	277.04	1,810.84	5.96	-181.35	180.83	3.340	3.27	1.95
1,853.06	24.85	276.60	1,837.38	7.32	-192.75	192.28	3.045	3.04	-0.46
1,882.07	26.96	269.43	1,863.48	7.96	-205.38	204.93	3.902	2.18	-7.41
1,911.03	30.94	270.57	1,888.82	7.97	-219.40	218.93	4.162	4.12	1.18
1,939.98	35.09	272.02	1,913.09	8.34	-235.16	234.69	4.377	4.30	1.50
1,968.91	38.21	272.59	1,936.30	9.03	-252.41	251.95	3.255	3.24	0.59
1,997.86	41.94	273.44	1,958.45	10.02	-271.02	270.58	3.907	3.87	0.88
2,026.79	45.44	272.99	1,979.36	11.14	-290.97	290.56	3.644	3.63	-0.47
2,055.71	48.46	272.75	1,999.10	12.19	-312.08	311.69	3.138	3.13	-0.25
2,084.64	51.86	272.71	2,017.63	13.25	-334.26	333.90	3.526	3.53	-0.04
2,110.88	54.91	272.40	2,033.28	14.19	-355.30	354.96	3.499	3.49	-0.35
2,142.55	59.40	274.22	2,050.46	15.74	-381.85	381.56	4.493	4.25	1.72
2,171.49	64.94	274.96	2,063.96	17.79	-407.35	407.14	5.783	5.74	0.77
2,200.39	65.78	275.15	2,076.01	20.10	-433.52	433.39	0.890	0.87	0.20
2,229.34	69.94	274.26	2,086.92	22.30	-460.24	460.19	4.395	4.31	-0.92
2,259.31	73.39	274.89	2,096.34	24.57	-488.59	488.63	3.505	3.45	0.63
2,287.29	73.01	274.85	2,104.43	26.84	-515.28	515.41	0.409	-0.41	-0.04
2,295.60	72.83	274.15	2,106.87	27.47	-523.20	523.35	2.501	-0.65	-2.53
2,324.71	74.76	273.81	2,115.00	29.40	-551.08	551.30	2.017	1.99	-0.35

Halliburton Company

Survey Report

Company:	Woodside Energy-Otway Gas Develo	**Local Co-ordinate Reference:**	Site Thylacine Platform
Project:	Otway Gas Development	**TVD Reference:**	RT Revised @ 50.50m
Site:	Thylacine Platform	**MD Reference:**	RT Revised @ 50.50m
Well:	THA02	**North Reference:**	Grid
Wellbore:	THA02S0	**Survey Calculation Method:**	Minimum Curvature
Design:	THA02S0	**Database:**	EDM 2003.14 Single User Db

Survey

Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
2,353.60	77.11	274.62	2,122.02	31.47	-579.03	579.32	2.573	2.44	0.84
2,380.35	80.82	275.67	2,127.14	33.82	-605.18	605.55	4.318	4.16	1.18
2,409.42	83.75	281.32	2,131.04	38.08	-633.65	634.23	6.521	3.02	5.83
2,440.38	86.54	283.47	2,133.66	44.70	-663.78	664.69	3.408	2.70	2.08
2,469.29	89.57	284.75	2,134.64	51.74	-691.79	693.07	3.413	3.14	1.33
2,497.93	92.66	285.85	2,134.09	59.30	-719.41	721.07	3.436	3.24	1.15
2,527.13	93.22	285.11	2,132.59	67.08	-747.51	749.58	0.953	0.58	-0.76
2,556.06	93.09	282.07	2,131.00	73.87	-775.58	778.00	3.151	-0.13	-3.15
2,584.99	93.16	278.76	2,129.42	79.09	-803.99	806.66	3.428	0.07	-3.43
2,613.89	92.85	276.08	2,127.90	82.82	-832.61	835.44	2.797	-0.32	-2.78
2,642.82	92.60	275.29	2,126.53	85.68	-861.36	864.32	0.858	-0.26	-0.82
2,671.78	90.50	275.95	2,125.74	88.51	-890.17	893.24	2.280	-2.18	0.68
2,700.74	90.75	275.69	2,125.43	91.45	-918.98	922.17	0.374	0.26	-0.27
2,729.71	90.50	276.17	2,125.11	94.44	-947.79	951.11	0.560	-0.26	0.50
2,758.64	90.07	275.82	2,124.97	97.46	-976.57	980.01	0.575	-0.45	-0.36
2,786.01	89.20	277.60	2,125.14	100.66	-1,003.75	1,007.33	2.172	-0.95	1.95
2,816.45	88.53	274.82	2,125.75	103.95	-1,034.00	1,037.72	2.818	-0.66	-2.74
2,843.56	89.08	272.77	2,126.31	105.75	-1,061.04	1,064.82	2.348	0.61	-2.27
2,872.88	88.15	274.77	2,127.02	107.68	-1,090.29	1,094.13	2.256	-0.95	2.05
2,901.72	87.41	276.08	2,128.14	110.40	-1,118.98	1,122.93	1.564	-0.77	1.36
2,932.30	87.66	276.72	2,129.45	113.81	-1,149.34	1,153.44	0.674	0.25	0.63
2,961.25	88.53	273.72	2,130.41	116.44	-1,178.15	1,182.35	3.235	0.90	-3.11
2,990.18	88.22	277.49	2,131.24	119.26	-1,206.92	1,211.24	3.921	-0.32	3.91
3,019.10	87.97	275.06	2,132.20	122.42	-1,235.65	1,240.10	2.533	-0.26	-2.52
3,048.03	87.91	276.60	2,133.24	125.36	-1,264.41	1,268.99	1.597	-0.06	1.60
3,076.97	88.77	276.21	2,134.08	128.58	-1,293.16	1,297.87	0.979	0.89	-0.40
3,105.94	89.21	275.52	2,134.59	131.54	-1,321.97	1,326.81	0.847	0.46	-0.71
3,134.88	90.81	275.69	2,134.58	134.37	-1,350.77	1,355.72	1.668	1.66	0.18
3,162.22	91.73	274.81	2,133.97	136.87	-1,377.99	1,383.04	1.397	1.01	-0.97
3,191.15	91.43	273.46	2,133.18	138.96	-1,406.83	1,411.96	1.434	-0.31	-1.40
3,220.27	91.24	272.90	2,132.50	140.57	-1,435.90	1,441.07	0.609	-0.20	-0.58
3,248.91	91.43	272.30	2,131.83	141.87	-1,464.50	1,469.70	0.659	0.20	-0.63
3,277.48	91.74	270.72	2,131.04	142.62	-1,493.05	1,498.24	1.690	0.33	-1.66
3,308.52	91.55	267.86	2,130.15	142.24	-1,524.07	1,529.19	2.769	-0.18	-2.76
3,335.97	91.86	267.23	2,129.33	141.06	-1,551.49	1,556.49	0.767	0.34	-0.69
3,366.39	91.67	267.91	2,128.40	139.77	-1,581.87	1,586.74	0.696	-0.19	0.67
3,395.36	91.42	268.54	2,127.62	138.88	-1,610.81	1,615.58	0.702	-0.26	0.65
3,424.31	91.73	269.11	2,126.82	138.28	-1,639.74	1,644.43	0.672	0.32	0.59
3,452.27	91.18	270.09	2,126.11	138.09	-1,667.69	1,672.33	1.205	-0.59	1.05
3,481.19	90.62	271.42	2,125.66	138.47	-1,696.61	1,701.21	1.497	-0.58	1.38
3,510.20	91.36	270.88	2,125.15	139.05	-1,725.61	1,730.20	0.947	0.77	-0.56
3,539.05	90.68	268.43	2,124.64	138.88	-1,754.45	1,758.98	2.644	-0.71	-2.55
3,568.54	90.62	269.75	2,124.31	138.41	-1,783.93	1,788.39	1.344	-0.06	1.34
3,596.90	87.47	267.06	2,124.78	137.62	-1,812.27	1,816.64	4.381	-3.33	-2.85
3,625.86	83.38	266.72	2,127.09	136.05	-1,841.09	1,845.32	4.251	-4.24	-0.35
3,654.78	79.21	266.22	2,131.46	134.30	-1,869.62	1,873.69	4.356	-4.33	-0.52
3,683.72	74.37	265.83	2,138.08	132.34	-1,897.71	1,901.63	5.033	-5.02	-0.40
3,712.66	69.09	265.58	2,147.14	130.29	-1,925.11	1,928.86	5.479	-5.47	-0.26
3,741.63	66.06	268.24	2,158.20	128.84	-1,951.84	1,955.46	4.041	-3.14	2.75
3,770.60	61.26	267.44	2,171.05	127.86	-1,977.78	1,981.30	5.026	-4.97	-0.83
3,799.55	57.17	268.95	2,185.86	127.07	-2,002.63	2,006.06	4.446	-4.24	1.56
3,824.40	54.02	268.15	2,199.90	126.56	-2,023.12	2,026.49	3.885	-3.80	-0.97
3,857.31	49.28	270.04	2,220.32	126.14	-2,048.92	2,052.22	4.527	-4.32	1.72
3,886.19	47.08	270.46	2,239.57	126.23	-2,070.44	2,073.71	2.308	-2.29	0.44
3,915.14	45.75	270.18	2,259.53	126.35	-2,091.41	2,094.65	1.394	-1.38	-0.29
3,944.07	44.63	271.10	2,279.92	126.57	-2,111.93	2,115.15	1.344	-1.16	0.95
3,973.05	42.59	270.42	2,300.90	126.84	-2,131.92	2,135.12	2.167	-2.11	-0.70
4,001.93	41.91	270.87	2,322.28	127.06	-2,151.33	2,154.52	0.773	-0.71	0.47
4,017.67	41.94	269.81	2,333.99	127.12	-2,161.85	2,165.02	1.351	0.06	-2.02
4,026.00	41.94	269.81	2,340.19	127.10	-2,167.42	2,170.58	0.000	0.00	0.00

Halliburton Company

Survey Report

Company:	Woodside Energy-Otway Gas Develo	**Local Co-ordinate Reference:**	Site Thylacine Platform
Project:	Otway Gas Development	**TVD Reference:**	RT Revised @ 50.50m
Site:	Thylacine Platform	**MD Reference:**	RT Revised @ 50.50m
Well:	THA02	**North Reference:**	Grid
Wellbore:	THA02S0	**Survey Calculation Method:**	Minimum Curvature
Design:	THA02S0	**Database:**	EDM 2003.14 Single User Db

Survey

Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (m)	+N/-S (m)	+E/-W (m)	Northing (m)	Easting (m)	Latitude	Longitude

Casing Points

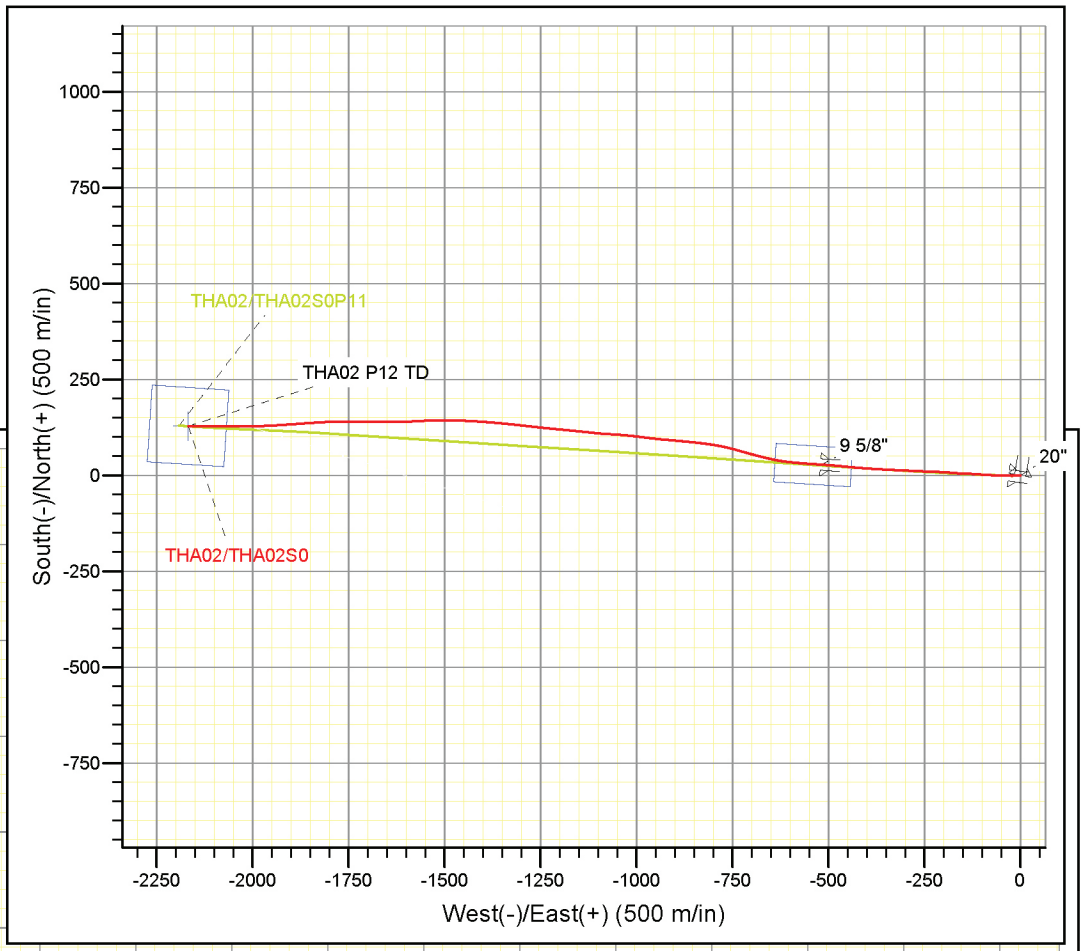
Measured Depth (m)	Vertical Depth (m)	Name	Casing Diameter (mm)	Hole Diameter (mm)
217.00	217.00	20"	508.00	660.40
633.00	631.67	18 5/8"	473.07	584.20
2,293.00	2,106.11	9 5/8"	244.47	374.65

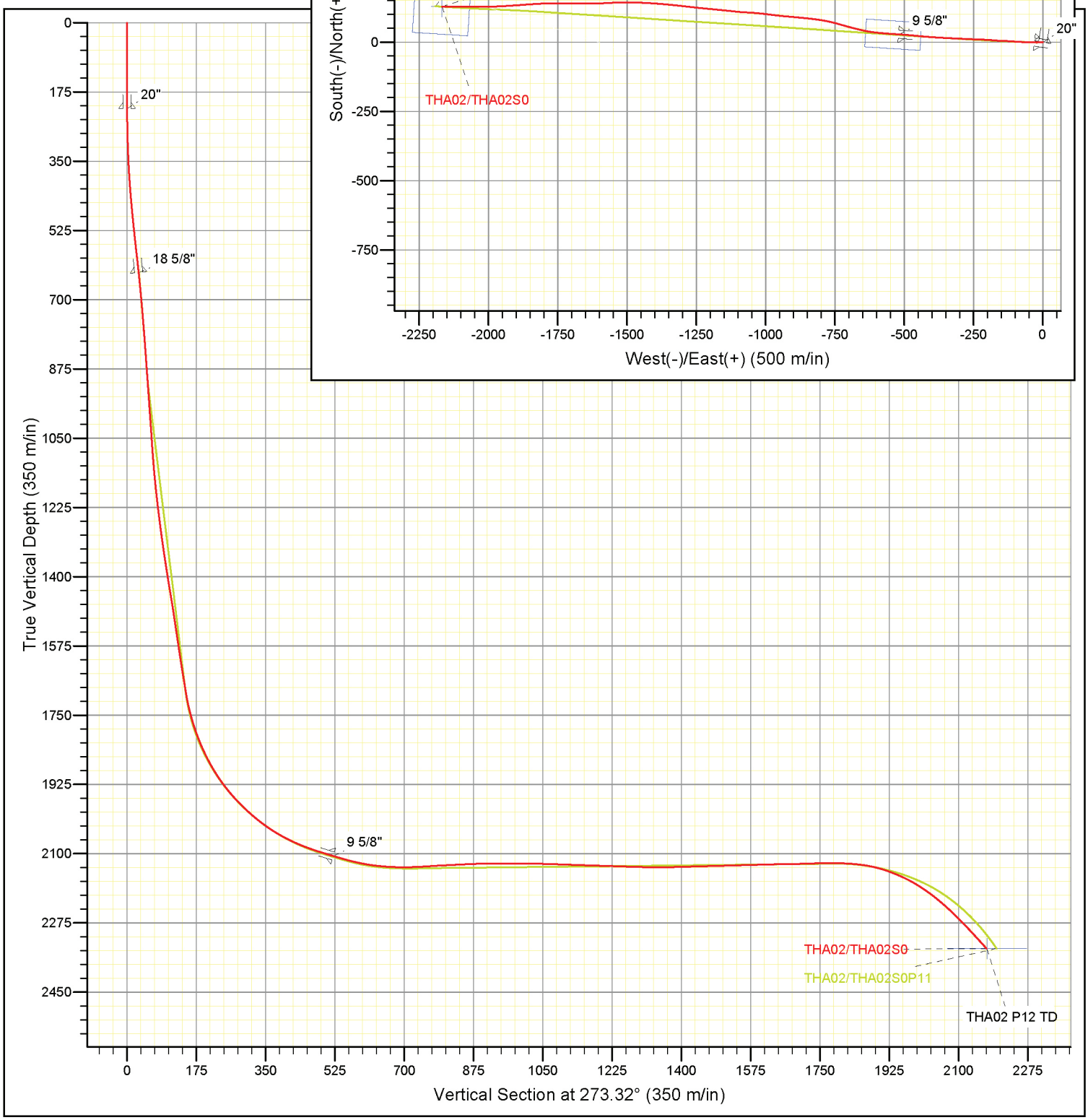
Checked By: _____ Approved By: _____ Date: _____

Sperry Drilling Services

Project: Otway Gas Development
Site: Thylacine Platform
Well: THA02
Wellbore: THA02S0
Design: THA02S0 (THA02/THA02S0)

WOODSIDE





sperry-sun DRILLING SERVICES

Survey and Drilling Parameters

Customer : Woodside Energy Ltd.
Well : THA02
Rig : Maersk Guardian

Field : T/L2
Slot : Thylacine
Job # : AU-DD-0003930658

North Ref : Mag **Declination :** ° **VS Dir :** 273.32° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates N/S (m)	Coordinates E/W (m)	DLS (°/100')	Build Rate (°/100')	Turn Rate (°/100')	WOB (lbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation From (m)	Orientation To (m)	Tool Face (deg)	ROP (m/hr)	BHA No. (#)	Comment
0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00									1	Tieon
150.00	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	0.00	5000	20	480	160				2	1	
169.13	0.71	221.05	169.1	0.1	-0.1	-0.1	1.13	1.13	0.00	5000	35	600	310				25	1	
208.00	0.52	196.77	208.0	0.3	-0.4	-0.3	0.25	-0.15	0.00	5000	80	950	850				35	1	
220.40	0.29	185.42	220.4	0.3	-0.5	-0.3	0.60	-0.57	0.00	5000	35	730	700				12	2	
259.70	0.89	270.66	259.7	0.6	-0.6	-0.6	0.71	0.47	0.00	10000		700	660	243	260	90L	55	2	
341.49	2.59	273.52	341.4	3.1	-0.5	-3.1	0.63	0.63	0.00	12000	80	1100	1650	260	271	90L	65	2	
														271	300	95L		2	
														315	321	90L		2	
														329	335	90L		2	
370.42	3.21	272.48	370.3	4.5	-0.4	-4.6	0.66	0.65	-1.10	12000		900	1120	358	370	100L	45	2	
399.40	3.84	274.34	399.3	6.3	-0.3	-6.3	0.67	0.66	1.96	20000		900	1140	370	374	100L	40	2	
														388	399	100L		2	
428.36	4.65	272.33	428.1	8.5	-0.2	-8.5	0.87	0.85	-2.12	20000	90	1100	1635	399	404	100L	30	2	
														418	428	35L		2	
457.28	5.51	259.78	456.9	11.0	-0.4	-11.0	1.48	0.91	-13.23	25000	90	1100	1680	446	457	120L	40	2	
486.27	5.77	264.15	485.8	13.8	-0.8	-13.8	0.53	0.27	4.59	25000	90	1100	1720				50	2	
525.14	5.59	268.32	524.5	17.6	-1.0	-17.7	0.35	-0.14	3.27	25000	90	1100	1820				60	2	
544.15	6.87	262.02	543.4	19.6	-1.2	-19.7	2.32	2.05	-10.10	25000	90	1100	1780				50	2	
572.99	5.92	272.75	572.0	22.8	-1.4	-22.9	1.61	-1.00	11.34	25000		1100	1900	562	573	150R	15	2	
601.89	6.64	272.65	600.8	26.0	-1.2	-26.1	0.76	0.76	-0.11	25000	90	1100	1850	573	576	150R	20	2	
														592	593	150L		2	
620.25	6.72	280.11	619.0	28.1	-1.0	-28.2	1.45	0.13	12.38	30000		1100	1900	620	620	LS	20	2	
637.83	6.20	276.25	636.5	30.1	-0.7	-30.2	1.17	-0.90	-6.69	30000	90	1100	1940	620	631	LS	20	2	
666.70	5.81	274.13	665.2	33.1	-0.5	-33.2	0.47	-0.41	-2.24	14000	140	1170	3052				25	3	
724.56	4.14	270.99	722.8	38.1	-0.2	-38.2	0.89	-0.88	-1.65	14000	175	1150	2910				30	3	
753.49	4.52	273.28	751.7	40.3	-0.1	-40.4	0.44	0.40	2.41	14000	172	1158	2965				45	3	
782.47	4.29	270.74	780.6	42.5	0.0	-42.6	0.32	-0.24	-2.67	14000	175	1158	2970				40	3	
811.43	4.34	267.95	809.4	44.7	-0.1	-44.8	0.23	0.05	-2.94	13000	175	1160	3150				40	3	
840.35	4.62	270.66	838.3	46.9	-0.1	-47.0	0.37	0.30	2.86	14000	175	1155	3130				42	3	

sperry-sun DRILLING SERVICES

Survey and Drilling Parameters

Customer : Woodside Energy Ltd.
Well : THA02
Rig : Maersk Guardian

Field : T/L2
Slot : Thylacine
Job # : AU-DD-0003930658

North Ref : Mag **Declination :** ° **VS Dir :** 273.32° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates N/S (m)	Coordinates E/W (m)	DLS (°/100')	Build Rate (°/100')	Turn Rate (°/100')	WOB (lbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation From (m)	Orientation To (m)	Tool Face (deg)	ROP (m/hr)	BHA No. (#)	Comment
869.34	4.34	269.72	867.2	49.2	-0.1	-49.3	0.30	-0.29	-0.99	14000	175	1155	3130				33	3	
898.28	3.92	268.79	896.0	51.3	-0.1	-51.4	0.45	-0.44	-0.98	14000	175	1155	3145				35	3	
927.23	4.40	268.45	924.9	53.4	-0.2	-53.5	0.51	0.51	-0.36	14000	175	983	2265				55	3	
956.07	3.73	266.06	953.7	55.4	-0.3	-55.5	0.73	-0.71	-2.53	20000	175	984	2350				50	3	
984.97	4.34	268.49	982.5	57.4	-0.3	-57.5	0.67	0.64	2.56	20000	170	983	2290				65	3	
1013.89	4.16	272.00	1011.3	59.6	-0.3	-59.7	0.33	-0.19	3.70	15000	175	980	2810				67	3	
1042.82	4.06	274.94	1040.2	61.6	-0.2	-61.7	0.25	-0.11	3.10	20000	175	980	2325				65	3	
1071.77	3.93	261.43	1069.1	63.6	-0.3	-63.7	1.00	-0.14	-14.22	15000	175	984	2350				55	3	
1100.72	4.17	266.35	1098.0	65.6	-0.5	-65.8	0.44	0.25	5.18	10000	175	982	2380				55	3	
1129.60	4.49	268.53	1126.8	67.8	-0.6	-68.0	0.38	0.34	2.30	10000	175	984	2400				55	3	
1158.57	5.03	274.87	1155.6	70.2	-0.5	-70.4	0.79	0.57	6.67	15000	175	982	2420				45	3	
1187.50	6.72	277.51	1184.4	73.2	-0.2	-73.3	1.80	1.78	2.78	15000	175	980	2450				45	3	
1216.40	7.21	278.85	1213.1	76.7	0.3	-76.8	0.54	0.52	1.41	18000	175	985	2425				35	3	
1274.31	7.49	272.32	1270.5	84.0	1.0	-84.1	0.46	0.15	-3.44	18000	100	985	2445				30	3	
1303.24	7.51	269.23	1299.2	87.8	1.1	-87.9	0.43	0.02	-3.26	18000	100	985	2500				35	3	
1332.21	7.47	270.49	1327.9	91.6	1.1	-91.7	0.18	-0.04	1.33	8000	175	985	2480				45	3	
1361.32	8.41	273.97	1356.8	95.6	1.2	-95.7	1.11	0.98	3.64	8000	175	985	2560				55	3	
1390.21	9.62	275.12	1385.3	100.1	1.6	-100.2	1.29	1.28	1.21	8000	175	985	2550				55	3	
1419.15	9.54	275.91	1413.8	104.9	2.1	-105.0	0.16	-0.08	0.83	12000	175	985	2550				50	3	
1448.06	9.40	274.75	1442.3	109.7	2.5	-109.7	0.25	-0.15	-1.22	25000	175	985	2550				45	3	
1476.99	9.05	273.21	1470.9	114.3	2.8	-114.4	0.45	-0.37	-1.62	18000	175	985	2680				40	3	
1505.90	8.41	272.71	1499.5	118.7	3.1	-118.7	0.68	-0.67	-0.53	23000	100	985	2630				35	3	
1534.85	8.28	270.88	1528.1	122.9	3.2	-122.9	0.31	-0.14	-1.93	25000	175	985	2650				30	3	
1563.74	8.34	272.11	1556.7	127.1	3.3	-127.1	0.20	0.06	1.30	25000	90	982	2630				40	3	
1592.67	8.65	273.85	1585.3	131.4	3.5	-131.4	0.42	0.33	1.83	15000	100	984	2740				40	3	
1621.60	8.77	273.02	1613.9	135.7	3.8	-135.8	0.18	0.13	-0.87	25000	175	982	2715				40	3	
1650.50	8.90	271.30	1642.5	140.2	3.9	-140.2	0.31	0.14	-1.81	20000	175	990	2730				40	3	
1679.43	9.29	270.16	1671.0	144.8	4.0	-144.8	0.45	0.41	-1.20	20000	150	983	2740				42	3	
1708.39	9.95	271.28	1699.6	149.6	4.1	-149.6	0.72	0.69	1.18	20000	150	983	2740				42	3	
1737.35	13.61	273.91	1727.9	155.5	4.4	-155.5	3.89	3.85	2.77	24000	145	983	2740				8	3	
1766.32	14.48	273.78	1756.0	162.5	4.8	-162.5	0.92	0.92	-0.14	25000	150	983	2750				45	3	

sperry-sun DRILLING SERVICES

Survey and Drilling Parameters

Customer : Woodside Energy Ltd.
Well : THA02
Rig : Maersk Guardian

Field : T/L2
Slot : Thylacine
Job # : AU-DD-0003930658

North Ref : Mag **Declination :** ° **VS Dir :** 273.32° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates N/S (m)	Coordinates E/W (m)	DLS (°/100')	Build Rate (°/100')	Turn Rate (°/100')	WOB (lbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation From (m)	Orientation To (m)	Tool Face (deg)	ROP (m/hr)	BHA No. (#)	Comment
1795.25	18.77	275.16	1783.8	170.8	5.5	-170.8	4.54	4.52	1.45	23000	150	983	2780				35	3	
1824.14	21.92	277.04	1810.8	180.8	6.6	-180.8	3.39	3.32	1.98	23000	150	983	2780				35	3	
1853.06	24.85	276.60	1837.4	192.3	7.9	-192.1	3.09	3.09	-0.46	27000	145	983	2790				52	3	
1882.07	26.96	269.43	1863.5	204.9	8.6	-204.8	3.96	2.22	-7.53	20000	130	1160	3772				55	3	
1911.03	30.94	270.57	1888.8	218.9	8.6	-218.8	4.23	4.19	1.20	25000	140	980	2773				55	3	
1939.98	35.09	272.02	1913.1	234.7	8.9	-234.6	4.45	4.37	1.53	20000	140	987	2820				55	3	
1968.91	38.21	272.59	1936.3	251.9	9.6	-251.8	3.31	3.29	0.60	20000	150	986	2790				50	3	
1997.86	41.94	273.44	1958.4	270.6	10.6	-270.4	3.97	3.93	0.89	15000	150	1080	3370				25	3	
2026.79	45.44	272.99	1979.4	290.6	11.7	-290.4	3.70	3.69	-0.47	20000	140	1150	3540				23	3	
2055.71	48.46	272.75	1999.1	311.7	12.8	-311.5	3.19	3.18	-0.25	30000	140	1110	3500				25	3	
2084.64	51.86	272.71	2017.6	333.9	13.9	-333.7	3.58	3.58	-0.04	20000	140	1110	3545				35	3	
2110.88	54.91	272.40	2033.3	355.0	14.8	-354.7	3.55	3.54	-0.36	30000	140	1110	3500				30	3	
2142.55	59.40	274.22	2050.5	381.6	16.3	-381.3	4.56	4.32	1.75	25000	140	1100	3500				30	3	
2171.50	64.94	274.96	2064.0	407.1	18.4	-406.8	5.87	5.83	0.78	25000	140	1100	3550				30	3	
2200.39	65.78	275.15	2076.0	433.4	20.7	-432.9	0.90	0.89	0.20	25000	135	1100	3550				25	3	
2229.34	69.94	274.26	2086.9	460.2	22.9	-459.6	4.46	4.38	-0.94	25000	135	1100	3550				25	3	
2259.31	73.39	274.89	2096.3	488.6	25.2	-488.0	3.56	3.51	0.64	25000	135	1100	3550				20	3	
2287.29	73.01	274.85	2104.4	515.4	27.4	-514.7	0.42	-0.41	-0.04	25000	135	1106	3545				20	3	
2295.60	72.83	274.15	2106.9	523.3	28.1	-522.6	2.54	-0.66	-2.57	25000	135	1106	3545				20	3	
2324.71	74.76	273.81	2115.0	551.3	30.0	-550.5	2.05	2.02	-0.36	18000	140	700	2965				15	4	
2353.60	77.11	274.62	2122.0	579.3	32.1	-578.4	2.61	2.48	0.85	18000	140	700	3095				16	4	
2380.35	80.82	275.67	2127.1	605.6	34.4	-604.6	4.39	4.23	1.20	20000	170	740	3185				27	4	
2409.42	83.75	281.32	2131.0	634.2	38.7	-633.0	6.63	3.07	5.92	20000	170	740	3200				28	4	
2440.38	86.54	283.47	2133.7	664.7	45.3	-663.2	3.46	2.75	2.12	20000	170	745	3210				28	4	
2469.29	89.57	284.75	2134.6	693.1	52.3	-691.2	3.47	3.19	1.35	20000	170	740	3150				28	4	
2497.93	92.66	285.85	2134.1	721.1	59.9	-718.8	3.49	3.29	1.17	22000	170	745	3210				28	4	
2527.13	93.22	285.11	2132.6	749.6	67.7	-746.9	0.97	0.58	-0.77	20000	170	750	3210				30	4	
2556.06	93.09	282.07	2131.0	778.0	74.5	-775.0	3.20	-0.14	-3.20	22000	170	745	3210				28	4	
2584.99	93.16	278.76	2129.4	806.7	79.7	-803.4	3.48	0.07	-3.49	18000	170	724	3050				30	4	
2613.89	92.85	276.08	2127.9	835.4	83.4	-832.0	2.84	-0.33	-2.83	18000	170	724	3050				30	4	
2642.82	92.60	275.29	2126.5	864.3	86.3	-860.8	0.87	-0.26	-0.83	18000	170	724	3050				30	4	

sperry-sun DRILLING SERVICES

Survey and Drilling Parameters

Customer : Woodside Energy Ltd.
Well : THA02
Rig : Maersk Guardian

Field : T/L2
Slot : Thylacine
Job # : AU-DD-0003930658

North Ref : Mag **Declination :** ° **VS Dir :** 273.32° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates N/S (m)	Coordinates E/W (m)	DLS (°/100')	Build Rate (°/100')	Turn Rate (°/100')	WOB (lbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation From (m)	Orientation To (m)	Tool Face (deg)	ROP (m/hr)	BHA No. (#)	Comment
2671.78	90.50	275.95	2125.7	893.2	89.1	-889.6	2.32	-2.21	0.69	18000	170	740	3310				30	4	
2700.74	90.75	275.69	2125.4	922.2	92.1	-918.4	0.38	0.26	-0.27	18000	170	740	3310				30	4	
2729.71	90.50	276.17	2125.1	951.1	95.0	-947.2	0.57	-0.26	0.51	18000	170	740	3310				30	4	
2758.64	90.07	275.82	2125.0	980.0	98.1	-976.0	0.58	-0.45	-0.37	20000	170	750	3340				30	4	
2786.01	89.20	277.60	2125.1	1007.3	101.3	-1003.1	2.21	-0.97	1.98	20000	170	750	3340				30	4	
2816.45	88.53	274.82	2125.7	1037.7	104.6	-1033.4	2.86	-0.67	-2.78	20000	170	750	3340				30	4	
2843.56	89.08	272.77	2126.3	1064.8	106.3	-1060.4	2.39	0.62	-2.30	22000	170	750	3380				27	4	
2872.88	88.15	274.77	2127.0	1094.1	108.3	-1089.7	2.29	-0.97	2.08	20000	170	750	3430				30	4	
2901.72	87.41	276.08	2128.1	1122.9	111.0	-1118.4	1.59	-0.78	1.38	25000	170	750	3460				30	4	
2932.30	87.66	276.72	2129.5	1153.4	114.4	-1148.7	0.68	0.25	0.64	25000	170	750	3430				30	4	
2961.25	88.53	273.72	2130.4	1182.3	117.0	-1177.5	3.29	0.92	-3.16	20000	170	750	3430				29	4	
2990.18	88.22	277.49	2131.2	1211.2	119.9	-1206.3	3.98	-0.33	3.97	18000	169	726	3510				30	4	
3019.10	87.97	275.06	2132.2	1240.1	123.0	-1235.1	2.57	-0.26	-2.56	10000	170	725	3436				30	4	
3048.03	87.91	276.60	2133.2	1269.0	126.0	-1263.8	1.62	-0.06	1.62	10500	169	725	3520				32	4	
3076.97	88.77	276.21	2134.1	1297.9	129.2	-1292.6	0.99	0.91	-0.41	9000	170	725	3565				28	4	
3105.94	89.21	275.52	2134.6	1326.8	132.1	-1321.4	0.86	0.46	-0.73	9000	170	725	3565				28	4	
3134.88	90.81	275.69	2134.6	1355.7	135.0	-1350.2	1.69	1.69	0.18	20000	170	724	3563				30	4	
3162.22	91.73	274.81	2134.0	1383.0	137.5	-1377.4	1.42	1.03	-0.98	20000	170	726	3600				30	4	
3191.15	91.43	273.46	2133.2	1412.0	139.6	-1406.2	1.46	-0.32	-1.42	24000	170	725	3630				30	4	
3220.27	91.24	272.90	2132.5	1441.1	141.2	-1435.3	0.62	-0.20	-0.59	23000	170	725	3670				30	4	
3248.91	91.43	272.30	2131.8	1469.7	142.5	-1463.9	0.67	0.20	-0.64	23000	170	725	3670				30	4	
3277.48	91.74	270.72	2131.0	1498.2	143.2	-1492.5	1.72	0.33	-1.69	25000	170	730	3710				35	4	
3308.52	91.55	267.86	2130.2	1529.2	142.8	-1523.5	2.81	-0.19	-2.81	23000	170	728	3719				30	4	
3335.97	91.86	267.23	2129.3	1556.5	141.7	-1550.9	0.78	0.34	-0.70	22000	176	727	3719				27	4	
3366.39	91.67	267.91	2128.4	1586.7	140.4	-1581.3	0.71	-0.19	0.68	20000	170	730	3740				30	4	
3395.36	91.42	268.54	2127.6	1615.6	139.5	-1610.2	0.71	-0.26	0.66	20000	170	730	3740				30	4	
3424.31	91.73	269.11	2126.8	1644.4	138.9	-1639.1	0.68	0.33	0.60	22000	170	725	3685				25	4	
3452.27	91.18	270.09	2126.1	1672.3	138.7	-1667.1	1.22	-0.60	1.07	11000	171	722	3706				32	4	
3481.19	90.62	271.42	2125.7	1701.2	139.1	-1696.0	1.52	-0.59	1.40	11000	170	722	3710				25	4	
3510.00	91.36	270.88	2125.2	1730.0	139.6	-1724.8	0.97	0.78	-0.57	11000	140	725	3865				10	5	

sperry-sun DRILLING SERVICES

Survey and Drilling Parameters

Customer : Woodside Energy Ltd.
Well : THA02
Rig : Maersk Guardian

Field : T/L2
Slot : Thylacine
Job # : AU-DD-0003930658

North Ref : Mag **Declination :** ° **VS Dir :** 273.32° (from Wellhead)

WELLBORE SURVEY										DRILLING PARAMETERS									
Measured Depth (m)	Incl Angle (deg)	Azi Dir (deg)	Vertical Depth (m)	Vertical Section (m)	Coordinates N/S (m)	Coordinates E/W (m)	DLS (°/100')	Build Rate (°/100')	Turn Rate (°/100')	WOB (lbs)	RPM	Flow Rate (gpm)	Stand Pipe (psi)	Orientation From (m)	Orientation To (m)	Tool Face (deg)	ROP (m/hr)	BHA No. (#)	Comment
3539.00	90.68	268.43	2124.6	1758.9	139.5	-1753.8	2.67	-0.71	-2.58	11000	140	725	3865				10	5	
3568.54	90.62	269.75	2124.3	1788.4	139.0	-1783.3	1.36	-0.06	1.36	15000	170	725	3770				28	5	
3596.90	87.47	267.06	2124.8	1816.6	138.2	-1811.7	4.45	-3.39	-2.89	20000	170	735	3730				30	5	
3625.86	83.38	266.72	2127.1	1845.3	136.6	-1840.5	4.32	-4.30	-0.36	15000	170	730	3770				30	5	
3654.78	79.21	266.22	2131.5	1873.7	134.9	-1869.0	4.43	-4.39	-0.53	20000	170	725	3830				25	5	
3683.72	74.37	265.83	2138.1	1901.6	132.9	-1897.1	5.11	-5.10	-0.41	25000	170	725	3830				27	5	
3712.66	69.09	265.58	2147.1	1928.9	130.9	-1924.5	5.57	-5.56	-0.26	15000	170	720	3825				30	5	
3741.63	66.06	268.24	2158.2	1955.5	129.4	-1951.2	4.11	-3.19	2.80	15000	170	725	3800				22	5	
3770.60	61.26	267.44	2171.0	1981.3	128.5	-1977.2	5.11	-5.05	-0.84	15000	170	725	3830				30	5	
3799.55	57.17	268.95	2185.9	2006.1	127.7	-2002.0	4.52	-4.31	1.59	15000	170	725	3830				30	5	
3824.40	54.02	268.15	2199.9	2026.5	127.2	-2022.5	3.95	-3.86	-0.98	20000	120	725	3835				25	5	
3857.31	49.28	270.04	2220.3	2052.2	126.7	-2048.3	4.60	-4.39	1.75	20000	120	725	3835				25	5	
3886.19	47.08	270.46	2239.6	2073.7	126.8	-2069.8	2.35	-2.32	0.44	20000	120	725	3835				25	5	
3915.14	45.75	270.18	2259.5	2094.7	126.9	-2090.8	1.42	-1.40	-0.29	20000	120	725	3885				30	5	
3944.07	44.63	271.10	2279.9	2115.2	127.2	-2111.3	1.37	-1.18	0.97	20000	120	728	3840				30	5	
3973.05	42.59	270.42	2300.9	2135.1	127.4	-2131.3	2.20	-2.15	-0.72	15000	120	725	3760				30	5	
4001.93	41.91	270.87	2322.3	2154.5	127.7	-2150.7	0.79	-0.72	0.47	15000	120	725	3760				30	5	
4017.67	41.94	269.81	2334.0	2165.0	127.7	-2161.3	1.37	0.06	-2.05	15000	120	725	3760				30	5	
4026.00	41.94	269.81	2340.2	2170.6	127.7	-2166.8	0.00	0.00	0.00									5	Projection to TD.

Sperry-Sun DRILLING SERVICES

BHA Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

BHA# 1

BHA# 1 : **Date In** :20/05/200 **MD In (m) :** 0 **TVD In (m) :** 0 **Date Out** 21/05/2006 **MD Out (m):** 220 **TVD Out (m):** 220

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
1	17.500	Hughes	MX-1	T1852-0	3x12	0.331	1-1-WT-A -E-I-NO-TD

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	17½" Milled Tooth Bit	T1852-0	17.500	3.000	17.500	795.63	P 7-5/8" Reg	0.42	
2	30" Transco Hole Opener	T1852-0	9.500	3.000	30.000	217.48	B 7-5/8" Reg	2.20	
3	9½" Float Sub	Otway-2	9.500	3.000		217.48	B 7-5/8" Reg	1.99	
4	9½" Float Sub	Otway-1	9.500	3.000		217.48	B 7-5/8" Reg	1.78	
5	9½" NM Pony Drill collar (5m)	S24935-3	9.500	3.000		217.00	B 7-5/8" Reg	4.59	
6	9½" NM Pony Drill collar (3m)	SBD2367	9.500	3.000		217.00	B 7-5/8" Reg	2.93	
7	1x 9¾" Spiral Drill collar	19910	9.500	3.000		217.00	B 7-5/8" Reg	9.52	
8	29¾" String Stabiliser	GU25663	9.500	2.880	29.750	219.37	B 7-5/8" Reg	2.87	24.87
9	1x 9¾" Spiral Drill collar	rig	9.500	3.000		217.00	B 7-5/8" Reg	9.53	
10	Cross Over Sub	Otway-3	9.500	3.000		217.48	B 6-5/8" Reg	1.36	
11	3x 8¼" Spiral Drill collars	Rig	8.000	3.000		147.00	B 6-5/8" Reg	26.83	
12	Cross Over Sub	Otway-6	7.500	2.810		129.43	B 5-1/2" DSFH	1.38	
13	15 x 5½" HWDP		5.500	3.375		57.00	B 5-1/2" DSTJ	145.50	
								210.90	

Parameter		Min	Max	Ave
WOB (lbs)	:	5000	5000	5000
RPM (rpm)	:	20	80	59
Flow (gpm)	:	480	950	779
SPP (psi)	:	160	850	594

Activity	Hrs
Drilling :	7.00
Reaming :	0.00
Circ-Other :	0.50
Total :	7.50

BHA Weight		(lb)
in Air (Total)	:	68043
in Mud (Total)	:	
in Air (Bel Jars)	:	0
in Mud (Bel Jars)	:	

Drill String	OD(in)	Len (m)

PERFORMANCE

	In	Out
Inclination (deg)	0.00	0.30
Azimuth (deg)	0.00	186.06

	Distance (m)	ROP (m/hr)	Build (°/100')	Turn (°/100')	DLS (°/100')
Oriented :	150.00	0			
Rotated :	70.00	31			
Total :	220.00	31	0.04	0.00	0.04

COMMENTS

Well THA02 spudded 20/05/06

OBJECTIVES:

Spud well and drill vertically to 219m MD.

RESULTS:

The 30" section was drilled vertically from 150m to 218m with no problems in 6.57 hrs on bottom at an average ROP of 10.6 m/hr. 100 bbl hi-vis sweeps were pumped every single. An EMS was run at TD and showed an on-bottom inclination of 0.52°

RECOMMENDATIONS:

No changes required

Sperry-Sun DRILLING SERVICES

BHA Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

BHA# 2

BHA# 2 : **Date In** :26/05/200 **MD In (m) :** 220 **TVD In (m) :** 220 **Date Out** 28/05/200 **MD Out (m):** 638 **TVD Out (m):** 637

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
2rr1	23.000	Varel	ETR1GJ	218183	2x22, 1x20, 1x16	1.246	2-2-WT-A -E-I-NO-TD

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs
1	9.625	SSDS	SperryDrill	963085	1.15°		94	111.00

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	23" Milled Tooth Bit	218183	23.000	3.000	23.000		P 7-5/8" Reg	0.54	
2	9-5/8" SperryDrill Lobe 6/7 - 6.0 stg	963085	9.625	6.135	22.750	147.21	B 7-5/8" Reg	9.69	1.33
3	9½" Float Sub w/non ported valve	DA9093	9.500	3.000		217.48	B 7-5/8" Reg	0.75	
4	1 x 9½" NM HOC w/ Dir + TM	10492794	9.500	2.000		230.00	B 7-5/8" Reg	9.54	
5	9½" NM UBHO Sub	2553	9.500	3.000		217.48	B 7-5/8" Reg	0.92	
6	1 x 9½" Non Mag Drill collar	6438	9.500	3.000		217.00	B 7-5/8" Reg	8.92	
7	23 " Welded Blade Stabilizer	GU 2566	9.500	2.750	23.000	221.32	B 7-5/8" Reg	2.87	31.79
8	1x 9¾" Spiral Drill collar	19910	9.500	3.000		217.00	B 7-5/8" Reg	9.53	
9	Cross Over Sub	Otway-3	9.500	3.000		217.48	B 6-5/8" Reg	1.36	
10	3x 8¼" Spiral Drill collars	rig	8.250	3.000		158.09	B 6-5/8" Reg	27.21	
11	8" Drilling Jar	DACCH03788	8.250	2.750		161.94	B 6-5/8" Reg	9.63	
12	2x 8¼" Spiral Drill collars	Rig	8.250	3.000		158.09	B 6-5/8" Reg	17.31	
13	Cross Over Sub	Otway-62	8.000	2.810		150.17	B 5-1/2" DSFH	1.38	
14	6 x 5½" HWDP		5.500	3.375		57.00	B 5-1/2" DSTJ	58.14	
								157.79	

Parameter	Min	Max	Ave
WOB (lbs) :	5000	30000	18944
RPM (rpm) :	35	170	87
Flow (gpm) :	700	1100	1000
SPP (psi) :	640	1940	1461

Activity	Hrs
Drilling :	19.50
Reaming :	0.50
Circ-Other :	3.00
Total :	23.00

BHA Weight	(lb)
in Air (Total) :	71486
in Mud (Total) :	60131
in Air (Bel Jars) :	45839
in Mud (Bel Jars) :	38558

Drill String	OD(in)	Len (m)
DP(S)-NC50(XH)-19.50#	5.000	480

PERFORMANCE

	In	Out
Inclination (deg)	0.30	6.20
Azimuth (deg)	186.06	276.24

	Distance (m)	ROP (m/hr)	Build (°/100')	Turn (°/100')	DLS (°/100')
Oriented :	148.00	22			
Rotated :	270.00	21			
Total :	418.00	21	0.43	0.00	0.45

COMMENTS

OBJECTIVES:

From the 26" conductor, nudge well to 3.5° inclination on 267° azimuth to establish top hole separation from neighbouring slots, then drop back to 1.8° and hold, before building again to 5° just prior to casing point, to provide a highside reference for GeoPilot in the 12¼" section.

RESULTS:

The 23" section was drilled in one run from 219m to 638m in 14.2 on-bottom hours, at an average ROP of 29.5m/hr. Of the total 419m, 153m (36.5%) was drilled in sliding mode, and 266m (63.5%) drilled in rotary mode.

The assembly was scribed in the hole to top of cement at 217.5m, and the float, shoe and rathole drilled out to 219m. After drilling the first stand in rotary, a gyro was run and the toolface orientated on 270°. A second gyro was run after one stand drilled, and the orientation checked. Having built to 4.6° the assembly was rotated ahead, but the trend was difficult to assess, as the surveys showed both build and drop, as well as both right and left hand walk. Several slides were made to maintain inclination and direction, with the assembly giving effective doglegs of 1.7° - 4.2°.

As with THA01 and THA03, stringers from around 570m slowed ROP to <10m/hr, and over the last two stands a strong build and right hand walk were seen. An 11m lowside slide just prior to TD puts the projected inclination at 6.2°.
At 638m the hole was circulated clean and the assembly tripped to run 18 5/8" casing.

RECOMMENDATIONS:

No changes required

Sperry-Sun DRILLING SERVICES

BHA Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

BHA# 3

BHA# 3 : **Date In** :29/05/200 **MD In (m) :** 638 **TVD In (m) :** 637 **Date Out** 3/06/2006 **MD Out (m):** 2298 **TVD Out (m):** 2108

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
3	12.250	Security DBS	FMF3653Z	10795301	6x18, 1x21	1.829	1-1-WT-G -X-0-ER-TD

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	12 1/4" Long Gauge PDC Bit	10795301	12.250	3.000	12.250	377.57	B 6-5/8" Reg	0.53	
2	9600 Series Geopilot	GP1225082	9.625	3.500		215.18	B 6-5/8" Reg	5.83	
3	12 1/8" NM Stabiliser	BHA 3	9.625	3.500	12.125	215.18	B 6-5/8" Reg	0.78	6.64
4	8" Non-Mag Flex Collar w/DM	CP1015763	8.000	3.500		138.52	B 6-5/8" Reg	2.81	
5	8" RLL w/DGR + EWR + PWD + HCIM	DM90103157	8.000	1.920		161.44	B 6-5/8" Reg	8.42	
6	12 3/16" Feed Thru Stabiliser	11363	8.000	3.500	12.188	138.52	B 6-5/8" Reg	2.83	18.62
7	8" Hangoff Collar	10718049	8.000	1.920		161.44	B 6-5/8" Reg	3.11	
8	1x 8" Non-Mag Drill collar	47627	8.000	2.810		150.00	B 6-5/8" Reg	8.58	
9	8" Float Sub w/ported float	A-609	8.000	2.810		150.17	B 6-5/8" Reg	0.77	
10	4 x 8 1/4" Spiral Drill collars	MSK	8.000	2.810		150.00	B 6-5/8" Reg	35.85	
11	8" Drilling Jar	DACCH03788	8.250	2.750		161.94	B 6-5/8" Reg	9.63	
12	2 x 8 1/4" Spiral Drill collars		8.000	2.810		150.00	B 6-5/8" Reg	17.31	
13	WEL Tapered Cross Over Sub	Otway-62	8.000	2.810		150.17	B 6-5/8" FH	1.38	
14	6 x 5½" HWDP		5.500	3.375		57.00	B 6-5/8" FH	58.12	
								155.95	

Parameter		Min	Max	Ave
WOB (lbs)	:	5000	30000	18806
RPM (rpm)	:	80	175	153
Flow (gpm)	:	980	1170	1038
SPP (psi)	:	2265	3820	2856

Activity	Hrs
Drilling :	75.00
Reaming :	2.00
Circ-Other :	11.00
Total :	88.00

BHA Weight		(lb)
in Air (Total)	:	61421
in Mud (Total)	:	51587
in Air (Bel Jars)	:	36237
in Mud (Bel Jars)	:	30435

Drill String	OD(in)	Len (m)
DP(S)-NC50(XH)-19.50#	5.000	2142

PERFORMANCE

	In	Out
Inclination (deg)	6.20	72.99
Azimuth (deg)	276.24	274.12

	Distance (m)	ROP (m/hr)	Build (°/100')	Turn (°/100')	DLS (°/100')
Oriented :	0.00	0			
Rotated :	1660.00	22			
Total :	1660.00	22	1.23	-0.04	1.23

COMMENTS

Shallow Pulse Test: 800gpm = 870 psi

Total Circ Hours: 77.96 per Geoservices Mudlogging
Total Drlg. Hours: 55.23 per Geoservices Mudlogging
Total BRT Hours : 112.50

OBJECTIVES:

Hold at 5° inclination and 271° azimuth to the kick-off point at 1674m, then build at 3.5°/30m to 68°.

RESULTS:

The 12¼" section was drilled in one run from 638m to 2298m (1660m) in 55.2 on bottom hours, at an average ROP of 30.0 m/hr.

The assembly was RIH and the string rotated to lubricate the GeoPilot seals prior to washing the last stand down, although it is unlikely that the anti-rotation housing was able to grip the 18 5/8" casing, especially at 5° inclination. After tagging top of cement at 628m the hole was displaced to SBM, and the float, shoe and rathole drilled out to 638m.

Following an FIT at 641m drilling commenced with the GeoPilot set at 16% deflection on lowside, to reduce hole angle to around 4°, as the well was high on section. Once back on proposal the inclination was held at 5°, until a change to the wellplan at 1170m put the well 12m low on vertical section, and required a build to 9° and then a hold to the start of the build section, to get back to the line.
Soon after drilling started, pump #1 went down and became unavailable due to lack of spares, so drilling continued with two pumps at 980 gpm. On two occasions later in the section drilling was stopped and the hole circulated when a second pump went down.
The build commenced at 1708m with 70% deflection on highside toolface, but this was reduced to 45-50%, as the assembly was proving capable of 8-10° doglegs in the medium soft sandstone/marl formation. A right hand walk tendency required a toolface of 20L to maintain 270° azimuth.

At around 1800m, problems down linking to GeoPilot were experienced, caused by pulse attenuation due to increasing depth, so the choke size on the GeoSpan unit was increased from 20 to 22. This combined with problems supplying sufficient rig power to run the third mud pump caused further delays in continuing drilling.
Frequent hard stringers, though not very thick, were encountered virtually from the start of the build section, and high torque and stick/slip were continuous problems, requiring the drilling parameters to be constantly adjusted in order to maximise ROP and prevent damage to the downhole tools. Each stand was backreamed/reamed at least once, with the GeoPilot put in the "home" position prior to doing so.

At 2284m however, a level 1 oil light was seen, followed shortly after by a level 2 indicator.
Drilling continued, and having built to 73° inclination as per proposal, drilled ahead holding angle. At 2298m the hole was circulated clean and the assembly tripped to run 9 5/8" casing.

RECOMMENDATIONS:

This was a good performance from the assembly, and despite pump problems the section was drilled ahead of technical limit, with all the directional objectives met.

Sperry-Sun DRILLING SERVICES

BHA Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

BHA# 4

BHA# 4 : **Date In** :8/06/2006 **MD In (m) :** 2298 **TVD In (m) :** 2108 **Date Out** 13/06/2006 **MD Out (m):** 3510 **TVD Out (m):** 2125

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
4	8.500	Security DBS	FMF3653Z	10765114	3x16, 3x15	1.107	1-1-WT- A-X-I-ER-DTF

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	8½" FMF3653Z PDC Bit	10765114	8.500	2.280	8.500	179.47	B 4-1/2" IF	0.42	
2	7600 Series Geopilot	GP850TL121	7.630	1.630		148.71	B 4-1/2" IF	7.06	
3	Non-Mag 6 3/4" NM Flex Collar w/DM	CP919968	6.750	1.920		112.09	B 4-1/2" IF	2.77	
4	6-3/4" RLL w/DGR + EWR	DA9010625	6.750	1.920	8.375	112.09	B 4-1/2" IF	7.09	
5	6-3/4" ALD + CTN	DM90106405	6.750	1.920	8.250	112.09	B 4-1/2" IF	9.22	
6	6-3/4" Geotap w/PWD	SP90101713	6.750	1.920		112.09	B 4-1/2" IF	8.43	
7	6-3/4" HOC w/P4M Pulser	222497	6.880	2.880		104.50	B 4-1/2" IF	3.06	
8	1x 6 3/4" Non-Mag Drill collar	10678816	6.500	3.250		85.00	B 4-1/2" IF	9.45	
9	6 3/4" Float Sub w/ported float	A263	6.750	2.810		100.82	B 4-1/2" IF	0.79	
10	Cross Over Sub	Rig	6.750	2.810		100.82	B 5-1/2" FH	1.38	
11	2 x 5½" HWDP		5.500	3.375		57.00	B 5-1/2" FH	19.38	
12	Drilling Jar	21445E	7.000	2.500		114.43	B 5-1/2" FH	9.86	
13	6 x 5½" HWDP		5.500	3.375		57.00	B 5-1/2" FH	58.12	
								137.03	

Parameter		Min	Max	Ave
WOB (lbs)	:	9000	25000	18887
RPM (rpm)	:	80	176	168
Flow (gpm)	:	700	750	733
SPP (psi)	:	2965	3825	3421

Activity	Hrs
Drilling :	67.00
Reaming :	1.00
Circ-Other :	10.00
Total :	78.00

BHA Weight		(lb)
in Air (Total)	:	36405
in Mud (Total)	:	30576
in Air (Bel Jars)	:	21835
in Mud (Bel Jars)	:	18339

Drill String	OD(in)	Len (m)
DP(S)-NC50(XH)-19.50#	5.000	3373

PERFORMANCE

	In	Out
Inclination (deg)	72.99	91.36
Azimuth (deg)	274.12	270.88

	Distance (m)	ROP (m/hr)	Build (°/100')	Turn (°/100')	DLS (°/100')
Oriented :	0.00	0			
Rotated :	1212.00	18			
Total :	1212.00	18	0.46	-0.08	0.47

COMMENTS

Bit Make-up Torque : 25000 ft/lbs

OBJECTIVES:

Complete building from 73° to 90°inc, to land well out at 2137.6m TVD

RESULTS:

BHA4 drilled out float & shoe track then majority of 8-1/2" section 2298 - 3510m in 46.8 on bottom hours, at an average ROP of 25 m/hr.

The assembly was RIH and the string rotated with incremental rpm stages to lubricate the GeoPilot seals prior to washing stand #73 down then tagged top of cement at 2260m. Speculation that potentially foreign debris may have interfered progress when drilling out float collar & shoe track. Approximately 7hrs were accumulated when attempting to drill cement & shoe. Following an FIT at 2302m and drilling ahead new 8-1/2" hole section GeoPilot delivered "Position 2" oil level indication. WEL elects to drill ahead and accepts applied conditions.

GeoPilot drilling resumed with an average deflection range 50- 70% deflection on highside to continue well path per proposed 3.5°/30m build rate to land horizontal at 2134mTVD. Build rates of 3.3°/ 30m were produced until a sail angle of 93° inc was established and held until assembly drilled to 2671mMD (2125.5mTVD)
The assembly progressed to be Geo-steered through multiple zones of interest successfully at 87.9° inc down to 3134.88mMD (2134.58mTVD) then up at 91.5° inc to a target of 2125mTVD.

When efforts to level-off well bore to 91° - 90.° inc the GeoPilot clutch mechanism was observed to slip repeatedly and unable to produce or hold 180 T/F. Compounding results, Tool deflection was unable to respond or return "Home".
Through duration of run WOB averaged 10-12,000lbs while ROP was limited to 30m/hr accommodate guidelines for logging set by WEL Geology. Backreaming was consistent on each stand and no hole drag concerns or conditions were apparent.
POOH to change out GeoPilot 7600 series.

Maintaining toolfaces & achieving sufficient buildup rates were observed from GP performance.

Sperry-Sun DRILLING SERVICES

BHA Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

BHA# 5

BHA# 5 : **Date In** :13/06/200 **MD In (m) :** 3510 **TVD In (m) :** 2125 **Date Cur**: 16/06/2006 **MD Cur (m):** 4026 **TVD Cur (m):** 2340

BIT DATA

Bit #	OD (in)	MFR	Style	Serial#	Nozzles (/32's)	TFA (in²)	Dull Condition
5	8.500	Security DBS	FMFX 653	10695263	3x16, 3x15	1.107	

MOTOR DATA

Run #	OD (in)	MFR	Model	Serial#	Bend	Nzl (/32's)	Avg Dif (psi)	Cum Circ Hrs

COMPONENT DATA

Item #	Description	Serial #	OD (in)	ID (in)	Gauge (in)	Weight (lbs/ft)	Top Con	Length (m)	Bit - Center Blade (m)
1	8½" FMFX 653PDC Bit	10695263	8.500	2.280	8.500	179.47	B 4-1/2" IF	0.43	
2	7600 Series Geopilot	GP850TL119	7.630	1.630		148.71	B 4-1/2" IF	6.13	
3	6 3/4" NM Flex Collar w/DM	CP772990	6.750	1.920		112.09	B 4-1/2" IF	2.80	
4	6-3/4" RLL w/DGR + EWR	DA9010625	6.750	1.920	8.375	112.09	B 4-1/2" IF	7.09	
5	6-3/4" ALD + CTN	DM90106405	6.750	1.920	8.250	112.09	B 4-1/2" IF	9.22	
6	6-3/4" Geotap w/PWD	SP90101713	6.750	1.920		112.09	B 4-1/2" IF	8.43	
7	6-3/4" HOC w/P4M Pulser	222497	6.880	2.880		104.50	B 4-1/2" IF	3.06	
8	1x 6 3/4" Non-Mag Drill collar	10678816	6.500	3.250		85.00	B 4-1/2" IF	9.45	
9	6 3/4" Float Sub w/ported float	A263	6.750	2.810		100.82	B 4-1/2" IF	0.79	
10	Cross Over Sub	Rig	6.750	2.810		100.82	B 5-1/2" FH	1.38	
11	2 x 5½" HWDP		5.500	3.375		57.00	B 5-1/2" FH	19.38	
12	Drilling Jar	21445E	7.000	2.500		114.43	B 5-1/2" FH	9.86	
13	6 x 5½" HWDP		5.500	3.375		57.00	B 5-1/2" FH	58.12	
								136.14	

Parameter	Min	Max	Ave
WOB (lbs) :	11000	25000	17419
RPM (rpm) :	120	170	147
Flow (gpm) :	720	735	726
SPP (psi) :	3730	3885	3816

Activity	Hrs
Drilling :	29.00
Reaming :	14.00
Circ-Other :	4.50
Total :	47.50

BHA Weight	(lb)
in Air (Total) :	35968
in Mud (Total) :	30255
in Air (Bel Jars) :	21398
in Mud (Bel Jars) :	17999

Drill String	OD(in)	Len (m)
DP(S)-FH-24.70#	5.500	3890

PERFORMANCE

	In	Out
Inclination (deg)	91.36	41.94
Azimuth (deg)	270.88	269.81

	Distance (m)	ROP (m/hr)	Build (°/100')	Turn (°/100')	DLS (°/100')
Oriented :	0.00	0			
Rotated :	516.00	18			
Total :	516.00	18	-2.92	-0.06	2.92

COMMENTS

Bit Make-up Torque : 25000 ft/lbs

OBJECTIVES:

Continue to drill horizontally to the start of the drop at 3566m. It is planned to drop at 3.3°/30m, to have 33° inclination by TD at 4060mMD.

RESULTS:

A total of 516m was drilled with this assembly in 20.0 drilling hours, at an average ROP of 25.8m/hr.

A new bit and GeoPilot were picked up and the assembly RIH, the GeoPilot seals lubricated and the last stand washed to bottom at 3510m. The GeoPilot was initially set on lowside to effect a slight drop back to 90.5°, then inclination cruise was activated to maintain this angle through the reservoir to the start of the drop.
Due to uncertainty about where to start the drop, and what the TD inclination should be, drilling was stopped at 3548m while new wellplan options were considered in town. The plan agreed on was to drop at 4.2°/30m to a final inclination of 42° on a 271° azimuth.

In all, 6 hours was spent discussing a new plan, during which some time was used to obtain GeoTap samples, a total of 5 samples successfully taken.

Drilling continued and the drop commenced at 3570m with GeoPilot set on lowside with 85% deflection. Initially, this produced doglegs of only 3° - 3.5°, so the deflection was increased to 100% and the required doglegs of up to 4.5° were achieved. A left hand walk tendency was counteracted by a 150R toolface setting.

As the inclination decreased, the rate of drop also increased, and by 3750m, at around 70° inclination, doglegs of up to 6° were possible with 80-90% deflection.
ROP was controlled at 30m/hr to comply with the LWD logging requirements and ensure good data density.

From 50° inclination, the plan was to reduce the drop rate to 1.4°/30m, so the deflection was reduced to around 40%. Once the drop was completed to 42°, drilling continued with GeoPilot in cruise control over the last 1½ stands to well TD at 4026mMD (2340m TVD).

The hole was circulated clean and the assembly tripped to the shoe. On the trip out, GeoTap pressure samples were taken throughout the reservoir sands. The assembly was run back to bottom and the hole again circulated clean prior to backreaming out to the shoe and continuing to POOH surface.

RECOMMENDATIONS:

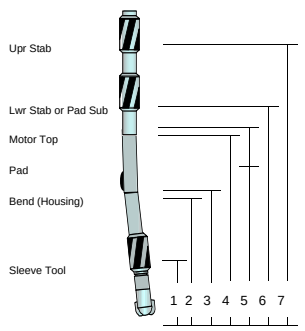
No changes required

MOTOR PERFORMANCE REPORT

M-AU-DD-0003930658-2

Motor Serial #	963085	**Job #**	AU-DD-0003930658
Directional Driller(s)	Tim Gallagher, Philippe Grandjean	**Customer**	Woodside Energy Ltd.
Location	Thylacine	**Rig**	Maersk Guardian
Well	THA02	**Bit Run #**	2rr1 **BHA #** 2 **Motor Run #** 1
Depth In/Out	220 / 638 *m*	**Date In/Out**	26/05/2006 / 28/05/2006 **Hole Size** 23.000 *in*
Application Details	Kickoff		

MOTOR CONFIGURATION



	From Bit *(m)*	Component		Type	Diam In/Out *(in)*
1	1.33	Sleeve Stab/Pad	Yes	Stab: 5 I 0°	22.750 22.750
2	2.79	Bent Housing	Yes	Adjustable: 1.15° bend	
3	2.95	Housing Tool Used	Yes	Pad 0.250 in Th	
4	10.23	Stator Elastomer	Nitrile	Stator: Standard	
5		Bent Sub / 2nd Bent Hsg	No		
6	31.79	Lower String Stab	Yes	Stab: 4 W 0°	23.000 23.000
7		Upper String Stab	No		

Additional Features :

Flex Collar : No **Short Brg Pack** : Yes **Rtr Noz / Size** : */32's*

Brg Cfg (Off/On) : **Lobe Cfg** : 6/7 **BHA OD/ID** : 9.500 / 3.000 *in*

	Arr	Ret
Pick Up Sub	No	No
Bit Box Protr	Yes	No

MOTOR RUN DATA

Max Dogleg While Rotating	2.33 *°/100'*	**RPM**	90	**Motor Stalled**	No
Max Dogleg Overpulled In	*°/100'*	**Force**	*lbf*	**Float Valve**	Yes
Max Dogleg Pushed Through	*°/100'*	**Force**	*lbf*	**DP Filter**	No
Hole Azimuth Start / End	186.06° / 276.24°	**Inc Start / End**	0.30° / 6.20°		
Interval Oriented / Rot.	148 / 270 *m*	**Directional Perf Ori / Rot**	/ *°/100'*		
Jarring Occured	No				

Prev Job/Well Hrs	88.00
Drilling Hrs	19.50
Circ Hrs	3.00
Reaming Hrs	0.50
Total Hrs This Run	23.00
New Cumulative Hrs	111.00

	Diff Press *(psi)*	Str RPM	Rotn Torque *(ft-lbs)*	Drag Up/Dn *(lbf)*	WOB *(lbs)*	ROP Oriented *(m/hr)*	ROP Rotated *(m/hr)*
Avg	94	87	6000	5000 / 5000	18944	22	21
Max	180	170	7000	5000 / 5000	30000	70	65

PRE-RUN TESTS

Motor Tested Pre-Run : No **with** :

Dump Sub Operating : N/A **Brg Play** : 5.0 *mm*

Flow 1 : *gpm* **Pressure 1** : *psi*

Flow 2 : *gpm* **Pressure 2** : *psi*

Driveshaft Rotation Observed : No

Bearing Leakage Observed : No

POST-RUN TESTS

Motor Tested Post-Run : No **with** :

Dump Sub Operating : N/A **Brg Play** : 6.0 *mm*

Flow 1 : *gpm* **Pressure 1** : *psi*

Flow 2 : *gpm* **Pressure 2** : *psi*

Driveshaft Rotation Observed : No

Bearing Leakage Observed : No

Driveshaft Rotated to Drain Mud : Yes

Fluid Flushed : No **Fluid Used** :

MUD DATA

Base : Oil **Additives** : **Mud Wt** : 10.5 *ppg* **SPP Start/End** : 700 / 1940 *psi*

% Oil/Water : 56.50 / 29.75 **% Solids** : 13.50 **% Sand** : 0.25 **PV** : 40 *cp* **YP** : 19.0 *lbf/100ft²* **pH** :

DH Temp Avg/Max : / **FlowRate Avg/Max** : 1000 / 1100 *gpm* **Chloride Content** : *ppm*

Principle Formation Name(s) : **Lithology** : Marl, Marl / Claystone

BIT DATA

Make : Varel **Type** : ETR1GJ **Serial #** : 218183

Pre Existing Hours From Other Wells: 27

Prev Drilling Hrs : 0.00 **Prev Reaming Hrs** : 0.00 **No of Runs This Bit** : 1

Jet Sizes *(/32's)* : 2x22, 1x20, 1x16 **TFA** : 1.246 *in²* **Gage Length** : *in*

Dull Grade	1	2	3	4	5	6	7	8
In	1	1	WT	A	E	I	NO	TD
Out	2	2	WT	A	E	I	NO	TD

PERFORMANCE COMMENTS

Problem Perceived : No **Problem Date** : **Service Interrupt** : No **Service Interrupt Hrs** :

Performance Motor : Yes **Tandem Motor** : No **LIH** : No **PPR Ref #** :

The motor performed to specification and no problems were encountered.

Customer Representative's Signature (optional) : ..... **Date:** .....

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DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 1 19/05/2006

Total Depth	**(m)**	**:**	149	**Casing Depth**	**(m)**	**:**	0.00	**Operator Reps** : Stuart Job, Phil Hodson
Drilled last 24 hrs	**(m)**	**:**	149	**Casing Diameter**	**(in)**	**:**	0.000	**SSDS Reps** : Tim Gallagher (1), Philippe Grandjean (1)
Hole Size	**(in)**	**:**		**Casing ID**	**(in)**	:		

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
0.00	0.00	0.00	0.00	0.00	N00.00E

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Gel/Seawater	8.8	147	10	52.0	28.0 / 41.0	14	9.5	4.00		

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:00	24.00	149.50		No Activity

COMMENTS

Performing suspension of THA01

2 x Directional Drillers on location

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DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 2 20/05/2006

Total Depth	**(m)**	: 220	**Casing Depth**	**(m)**	: 217.00	**Operator Reps**	:	Stuart Job, Phil Hodson
Drilled last 24 hrs	**(m)**	: 71	**Casing Diameter**	**(in)**	: 26.000	**SSDS Reps**	:	Tim Gallagher (2), Philippe Grandjean (2)
Hole Size	**(in)**	: 17.500	**Casing ID**	**(in)**	: 24.000			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
208.00	0.52	196.77	208.00	0.53	S33.11W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Seabed	149.80	149.80

BHA SUMMARY

BHA 1: 210.90 m; Bit #1 (7. hrs), Other, Sub, Sub, Pony, Pony, 1x DC, Stab, 1x DC, Sub, 3x DC, Sub, HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	345	49	22.0	10.0 / 18.0	4		14.00	0.25	54.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	08:00	8.00	149.50		Finish suspension of THA01
08:00	08:30	0.50	149.50		Skid cantiliver aft over slot # 5 .
08:30	09:00	0.50	149.50		Clear rig floor,install stair way & secure substructure after skid
09:00	09:30	0.50	149.50		Remove hatch cover over slot # 5
09:30	12:00	2.50	149.50		P/u & M/u BHA 1 .Fine tune alignement & RIH
12:00	14:00	2.00	149.50	1	Continue to RIH using ROV to pass thru plate forme guides.Tag sea bed @ 149.5 m
14:00	16:30	2.50	163.00	1	Start to drill from 149.5 to 163 m
16:30	17:30	1.00	163.00	1	Pull back to sea bed to repair mud pump # 3.
17:30	22:00	4.50	220.00	1	Drill staging pumps & parameters to 940 gal/min 80 rpm .Spot 250 bbls gels.
22:00	23:00	1.00	220.00	1	Wipe hole from 219.9 to 149.5 m .No tight spot.
23:00	23:30	0.50	220.00	1	Spot 250 bbls gel pill.
23:30	00:00	0.50	220.00	1	Drop EMS and POOH from 219.9 to 123m

COMMENTS

Drill 30" hole to TD @ 219.9 m

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DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 3 21/05/2006

Total Depth	**(m)**	:	220	**Casing Depth**	**(m)**	:	217.00	**Operator Reps**	:	Stuart Job, Phil Hodson
Drilled last 24 hrs	**(m)**	:	0	**Casing Diameter**	**(in)**	:	26.000	**SSDS Reps**	:	Tim Gallagher (3), Philippe Grandjean (3)
Hole Size	**(in)**	:	17.500	**Casing ID**	**(in)**	:	24.000			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
208.00	0.52	196.77	208.00	0.53	S33.11W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Seabed	149.80	149.80

BHA SUMMARY

BHA 1: 210.90 m; Bit #1 (7. hrs), Other, Sub, Sub, Pony, Pony, 1x DC, Stab, 1x DC, Sub, 3x DC, Sub, HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	345	49	22.0	10.0 / 18.0	4		14.00	0.25	54.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	220.00	1	Continue to POOH.L/out 29 3/4" Stab. Reteive EMS.
02:30	03:00	0.50	220.00		M/up Cement stand and rack in derrick.
03:00	04:00	1.00	220.00		P/up 26" Conductor handling equipment.
04:00	06:00	2.00	220.00		P/up & RIH 26" Conductor to 36m.
06:00	06:30	0.50	220.00		Attempt to test float : no success
06:30	08:00	1.50	220.00		Pull conductor & L/out same
08:00	12:00	4.00	220.00		P/up spare shoe joint & test float : OK
12:00	14:00	2.00	220.00		RIH 26" Conductor to 192m.
14:00	15:00	1.00	220.00		P/up and run landing joint.Land conductor at 219m
15:00	16:00	1.00	220.00		Release running tool.Pull back & L/out same.
16:00	19:30	3.50	220.00		Cement job
19:30	20:00	0.50	220.00		POOH cement stinger to surface
20:00	21:30	1.50	220.00		Skid from Slot # 5 to Slot # 3.
21:30	00:00	2.50	220.00		No Activity

COMMENTS

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DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 4 26/05/2006

Total Depth	**(m)**	:	271	**Casing Depth**	**(m)**	:	217.00	**Operator Reps**	:	Dwayne Rota, Shaughan Corless
Drilled last 24 hrs	**(m)**	:	51	**Casing Diameter**	**(in)**	:	26.000	**SSDS Reps**	:	Tim Gallagher (4), Philippe Grandjean (4)
Hole Size	**(in)**	:	23.000	**Casing ID**	**(in)**	:	24.000			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
259.70	0.89	270.66	259.70	0.88	S45.01W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)
Seabed	149.80	149.80

BHA SUMMARY

BHA 2: 157.79 m; Bit #2rr1 (0.5 hrs), PDM #2 (88.5 hrs), Sub, 1 x DC, Sub, 1 x DC, Stab, 1x DC, Sub, 3x DC, Jar, 2x DC, Sub, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Gel/Seawater	8.8	147	10	52.0	28.0 / 41.0	14	9.5	4.00		

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	11:00	11.00	220.00		No Activity
11:00	11:30	0.50	220.00		Secure rig area after skid from THA03 to THA02.
11:30	12:00	0.50	220.00		Install compact well head on THA03.Remove cover on THA02.
12:00	13:30	1.50	220.00		M/up 26 " wear bushing running tool.Land off wear busing.POOH & L/d R tool.
13:30	17:00	3.50	220.00	2	M/up & RIH 23 " BHA 2 .
17:00	17:30	0.50	220.00	2	Wash down from 200 to 217.5 m ,Tag cement.
17:30	18:30	1.00	220.00	2	Drill out cement , float & shoe to 219m.
18:30	19:30	1.00	244.00	2	Drill 23 " hole to 244m
19:30	21:30	2.00	244.00	2	Perform Gyro wireline run # 1
21:30	22:30	1.00	271.00	2	Drill 23 " section to 271m.
22:30	00:00	1.50	271.00	2	Perform Gyro wireline run # 2.Tool fail.POOH to shoe whilst repair Gyro tool .

COMMENTS

Drill 23" section from 220 to 271 m using Gyro .

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 5 27/05/2006

Total Depth	**(m)**	:	638	**Casing Depth**	**(m)**	:	633.00	**Operator Reps**	:	Dwayne Rota, Shaughan Corless
Drilled last 24 hrs	**(m)**	:	367	**Casing Diameter**	**(in)**	:	18.625	**SSDS Reps**	:	Tim Gallagher (5), Philippe Grandjean (5)
Hole Size	**(in)**	:	23.000	**Casing ID**	**(in)**	:	17.755			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
637.83	6.20	276.25	636.47	30.16	S88.62W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 2: 157.79 m; Bit #2rr1 (0.5 hrs), PDM #2 (88.5 hrs), Sub, 1 x DC, Sub, 1 x DC, Stab, 1x DC, Sub, 3x DC, Jar, 2x DC, Sub, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	176	40	19.0	8.0 / 8.0	4		13.50	0.25	56.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:30	0.50	271.00	2	Continue to fix Gyro problem.
00:30	01:00	0.50	271.00	2	While continue to fix gyro,RIH to 271m .
01:00	01:30	0.50	282.00	2	Drill 23" hole to 282m.
01:30	02:30	1.00	282.00	2	RIH Gyrodata survey tool
02:30	19:30	17.00	638.00	2	Drill 23" hole to casing point.
19:30	21:30	2.00	638.00	2	Circulate well clean.
21:30	00:00	2.50	638.00	2	POOH from 638 to 80m .

COMMENTS

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 6 28/05/2006

Total Depth	**(m)**	:	638	**Casing Depth**	**(m)**	:	633.00	**Operator Reps**	:	Dwayne Rota, Shaughan Corless
Drilled last 24 hrs	**(m)**	:	0	**Casing Diameter**	**(in)**	:	18.625	**SSDS Reps**	:	Tim Gallagher (6), Philippe Grandjean (6)
Hole Size	**(in)**	:	23.000	**Casing ID**	**(in)**	:	17.755			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
637.83	6.20	276.25	636.47	30.16	S88.62W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 2: 157.79 m; Bit #2rr1 (0.5 hrs), PDM #2 (88.5 hrs), Sub, 1 x DC, Sub, 1 x DC, Stab, 1x DC, Sub, 3x DC, Jar, 2x DC, Sub, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	176	40	19.0	8.0 / 8.0	4		13.50	0.25	56.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	01:00	1.00	638.00	2	POOH to surface & rack back BHA in derrick.
01:00	01:30	0.50	638.00	2	Pull Wear bushing & lay out.
01:30	02:00	0.50	638.00		Rig up 18 5/8" handling casing equipement.
02:00	02:30	0.50	638.00		TBT.P/up shoe joint & test float :ok.
02:30	08:30	6.00	638.00		Run Casing to 601m.
08:30	09:30	1.00	638.00		M/up hanger R/T + Begley R/T,RIH & land casing.
09:30	10:00	0.50	638.00		L/out hanger & Begley R/T.Cameron test:ok.
10:00	10:30	0.50	638.00		L/out casing handling gear.
10:30	12:00	1.50	638.00		RIH open end drill 5 1/2" drill pipe cement stinger.
12:00	14:00	2.00	638.00		Continue to RIH cement string.
14:00	18:00	4.00	638.00		Pressure test surface lines , cement job as per programme
18:00	22:30	4.50	638.00		POOH and rack back cement stand.
22:30	00:00	1.50	638.00		Start to install Compact housing on well head as per Cameron instruction.

COMMENTS

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 7 29/05/2006

Total Depth	**(m)**	:	638	**Casing Depth**	**(m)**	:	633.00	**Operator Reps**	:	Dwayne Rota, Andy Banks
Drilled last 24 hrs	**(m)**	:	0	**Casing Diameter**	**(in)**	:	18.625	**SSDS Reps**	:	Tim Gallagher (7), Trevor Ziegler (1)
Hole Size	**(in)**	:	12.250	**Casing ID**	**(in)**	:	17.755			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
637.83	6.20	276.25	636.47	30.16	S88.62W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 3: 155.95 m; Bit #3 (1.5 hrs), Other, Stab, Flex, MWD, Stab, MWD, 1x DC, Sub, 4 x DC, Jar, 2 x DC, Sub, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	176	40	19.0	8.0 / 8.0	4		13.50	0.25	56.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	01:00	1.00	638.00		Land wellhead/ release running tool/ POOH & LD RT.
01:00	02:30	1.50	638.00		PU High pressure riser/ Lower to top deck Platform/ PT seals.
02:30	05:30	3.00	638.00		Land secure HP riser/ Land BOPs/ MU riser & secure.
05:30	07:00	1.50	638.00		PU/ run/ land & secure LP riser to BOP.
07:00	09:00	2.00	638.00		PU & land diverter/ PT Koomey unit and diverter system.
09:00	10:00	1.00	638.00		Clear drill floor of BOP handling equipment.
10:00	12:00	2.00	638.00		MU 13-3/8" dummy hanger/ MU Wear bushing.
12:00	22:30	10.50	638.00		LD 23" BHA/ excess DC & HWDP from derick.
22:30	00:00	1.50	638.00	3	PU BHA 12-1/4" BHA/ MU GeoPilot tools/install bit.

COMMENTS

Trevor Ziegler DD relieves Philippe Grandjean DD

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DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 8 30/05/2006

Total Depth	**(m)**	:	734	**Casing Depth**	**(m)**	:	633.00	**Operator Reps** : Dwayne Rota, Andy Banks
Drilled last 24 hrs	**(m)**	:	96	**Casing Diameter**	**(in)**	:	18.625	**SSDS Reps** : Tim Gallagher (8), Trevor Ziegler (2)
Hole Size	**(in)**	:	12.250	**Casing ID**	**(in)**	:	17.755	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
724.56	4.14	270.99	722.82	38.17	S89.69W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 3: 155.95 m; Bit #3 (1.5 hrs), Other, Stab, Flex, MWD, Stab, MWD, 1x DC, Sub, 4 x DC, Jar, 2 x DC, Sub, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	110	38	19.0	15.0 / 14.0	6		14.00	0.25	54.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	01:30	1.50	638.00	3	Continue PU 12-1/4" BHA.
01:30	02:00	0.50	638.00	3	Download & Test MWD/ OK.
02:00	05:00	3.00	638.00	3	PU 4x 8" Spiral DC/ RIH to md 128/ Shallow Pulse Test/ OK.
05:00	09:30	4.50	638.00	3	Continue RIH to md 531m while PU 39x 5-1/2" DP from Deck.
09:30	10:00	0.50	638.00	3	RIH to md 618m.
10:00	14:30	4.50	638.00	3	PU Test assembly/ Pressure test surface eqipment.
14:30	16:30	2.00	638.00	3	Circulate/ Displace to SBM system.
16:30	18:00	1.50	638.00	3	Drill Cement from md 628 - 633m./ Drill shoe & rat-hole.
18:00	18:30	0.50	641.00	3	Drilling 12-1/4" GeoPilot section for FIT.
18:30	20:00	1.50	641.00	3	Space-out & perform FIT.
20:00	00:00	4.00	734.00	3	Drilling 12-1/4" GeoPilot section. 641 - 734m

COMMENTS

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 9 31/05/2006

Total Depth	**(m)**	:	1382	**Casing Depth**	**(m)**	:	633.00	**Operator Reps** : Dwayne Rota, Andy Banks
Drilled last 24 hrs	**(m)**	:	648	**Casing Diameter**	**(in)**	:	18.625	**SSDS Reps** : Tim Gallagher (9), Trevor Ziegler (3)
Hole Size	**(in)**	:	12.250	**Casing ID**	**(in)**	:	17.755	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1361.32	8.41	273.97	1356.76	95.70	N89.26W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 3: 155.95 m; Bit #3 (1.5 hrs), Other, Stab, Flex, MWD, Stab, MWD, 1x DC, Sub, 4 x DC, Jar, 2 x DC, Sub, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	97	46	27.0	14.0 / 21.0	4		15.00	0.30	55.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	12:00	12.00	1168.00	3	Drilling 12-1/4" GeoPilot section. 734 - 1168m
12:00	15:00	3.00	1168.00	3	Rig Repair/ Pump #2 change-out liner & swab.
15:00	00:00	9.00	1382.00	3	Drilling 12-1/4" GeoPilot section. 1168 - 1382m

COMMENTS

Intermitant stringers encountered requiring adjusted drilling parameters of WOB +25K while reducing RPM to 90 in order to effectively drill

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 10 1/06/2006

Total Depth	**(m)**	:	1832	**Casing Depth**	**(m)**	:	633.00	**Operator Reps** : Dwayne Rota, Andy Banks
Drilled last 24 hrs	**(m)**	:	450	**Casing Diameter**	**(in)**	:	18.625	**SSDS Reps** : Tim Gallagher (10), Trevor Ziegler (4)
Hole Size	**(in)**	:	12.250	**Casing ID**	**(in)**	:	17.755	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
1824.14	21.92	277.04	1810.84	180.87	N87.92W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 3: 155.95 m; Bit #3 (1.5 hrs), Other, Stab, Flex, MWD, Stab, MWD, 1x DC, Sub, 4 x DC, Jar, 2 x DC, Sub, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	112	43	29.0	15.0 / 21.0	3		15.50	0.30	58.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	07:00	7.00	1570.00	3	Drilling 12-1/4" GeoPilot section 1382 - 1570m.
07:00	12:00	5.00	1570.00	3	Circulate one pump/ Repair Pump #2 washed wear plate & liner.
12:00	12:30	0.50	1570.00	3	Circulate/ De-isolate Pump #1.
12:30	00:00	11.50	1832.00	3	Drilling 12-1/4" GeoPilot section 1570 - 1832m

COMMENTS

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 11 2/06/2006

Total Depth	**(m)**	:	2203	**Casing Depth**	**(m)**	:	633.00	**Operator Reps** : Dwayne Rota, Andy Banks
Drilled last 24 hrs	**(m)**	:	371	**Casing Diameter**	**(in)**	:	18.625	**SSDS Reps** : Tim Gallagher (11), Trevor Ziegler (5)
Hole Size	**(in)**	:	12.250	**Casing ID**	**(in)**	:	17.755	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2200.39	65.78	275.15	2076.01	433.41	N87.26W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 3: 155.95 m; Bit #3 (1.5 hrs), Other, Stab, Flex, MWD, Stab, MWD, 1x DC, Sub, 4 x DC, Jar, 2 x DC, Sub, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	112	42	24.0	12.0 / 22.0	3		15.50	0.50	58.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	1862.00	3	Drilling 12-1/4" GeoPilot section 1832 - 1862m.
02:30	04:30	2.00	1880.00	3	Drilling 1832 - 1880m. (Interupted intervals)
04:30	12:00	7.50	2030.00	3	Drilling 12-1/4" GeoPilot section 1880 - 2030m.
12:00	00:00	12.00	2203.00	3	Drilling 12-1/4" Geopilot section 2030 - 2203m.

COMMENTS

Geopilot Ops: md 1862 - 1880m. VPA Mean (261) approaches VPA SD 16. Repeated attempts to downlink timed out resulted in changing out to 20/ 32nd nozzle then to 22/ 32nd nozzle in Geospan unit.
Succesful downlinking then continued with 22/ 32nd. ROP was compromised by time spent trouble shooting downlink and the combination of MSK Guardian generator breaker tripping, supplying insufficient power to run 3x pumps.

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 12 3/06/2006

Total Depth	**(m)**	:	2298	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps** : Dwayne Rota, Andy Banks
Drilled last 24 hrs	**(m)**	:	95	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps** : Tim Gallagher (12), Trevor Ziegler (6)
Hole Size	**(in)**	:	12.250	**Casing ID**	**(in)**	:	8.740	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2295.60	72.83	274.15	2106.87	523.35	N86.93W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 3: 155.95 m; Bit #3 (6. hrs), Other, Stab, Flex, MWD, Stab, MWD, 1x DC, Sub, 4 x DC, Jar, 2 x DC, Sub, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	70	41	27.0	14.0 / 21.0	3		15.50	0.50	60.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	07:00	7.00	2298.00	3	Drilling 12-1/4" GeoPilot section. 2203 - 2298m
07:00	08:30	1.50	2298.00	3	Circulate up samples to confirm target entry (Thylacine Unit 1).
08:30	10:30	2.00	2298.00	3	Circulate Borttoms-up/ Backream to 2296 - 2210m
10:30	11:30	1.00	2298.00	3	Flow check OK/ POOH wet 6x stands 2210 - 2025m.
11:30	12:00	0.50	2298.00	3	Flow check OK/ Pump slug.
12:00	18:30	6.50	2298.00	3	Continue POOH/ Work thru tight spot(s) Max pull 30-50klbs.
18:30	23:30	5.00	2298.00	3	Trip Out (at Surface)/ Flow check OK/ Lay down jars & NMDC.
23:30	00:00	0.50	2298.00	3	Download RLWD/Break-off bit/ LD GeoPilot BHA.

COMMENTS

GeoPilot Ops: 9600 Series GeoPilot responded succeslsfully in one run encountering zero service interuption. An average Deflection of 65-75% with HS T/F generated aprox 6.90°/ 30m then when landing past 65°inc in hole the assembly was observed to produce 7°- 9.50°/ 30m DLS from aggressive 80-90% Deflection @ HS T/F.

Home position trend following a HS deflection, the assembly was capable of building 2.7° - 3.6°/ 30m.

Home position trend following a 180 deflection, the assembly was capable of dropping 2.°/ 30m.

Minimal correction for azimuth was required.

Thylacine Unit 1 target was intercepted with 55.23 total on bottom drilling hours.

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 13 4/06/2006

Total Depth	**(m)**	:	2298	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps** : Dwayne Rota, Andy Banks
Drilled last 24 hrs	**(m)**	:	0	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps** : Tim Gallagher (13), Trevor Ziegler (7)
Hole Size	**(in)**	:		**Casing ID**	**(in)**	:	8.740	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2295.60	72.83	274.15	2106.87	523.35	N86.93W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	70	41	27.0	14.0 / 21.0	3		15.50	0.50	60.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:15	0.25	2298.00		Service Rig
00:15	00:00	23.75	2298.00		Run Casing / Cement

COMMENTS

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 14 5/06/2006

Total Depth	**(m)**	:	2298	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps** : Dwayne Rota, Phil Hodson
Drilled last 24 hrs	**(m)**	:	0	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps** : Tim Gallagher (14), Trevor Ziegler (8)
Hole Size	**(in)**	:		**Casing ID**	**(in)**	:	8.740	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2295.60	72.83	274.15	2106.87	523.35	N86.93W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	70	41	27.0	14.0 / 21.0	3		15.50	0.50	60.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	04:30	4.50	2298.00		Run 9-5/8" Casing 320 - 632m.
04:30	20:30	16.00	2298.00		Run 9-5/8" Casing 632 - 2259m
20:30	22:00	1.50	2298.00		PU Hanger/ RIH with landing string
22:00	00:00	2.00	2298.00		Land casing/ Circulate bottoms up.

COMMENTS

Bill Burch: Geo-Tap Engineer arrives MSK_Guardian.

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 15 6/06/2006

Total Depth	**(m)**	:	2298	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps** : Dwayne Rota, Phil Hodson
Drilled last 24 hrs	**(m)**	:	0	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps** : Tim Gallagher (15), Trevor Ziegler (9)
Hole Size	**(in)**	:		**Casing ID**	**(in)**	:	8.740	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2295.60	72.83	274.15	2106.87	523.35	N86.93W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	70	41	27.0	14.0 / 21.0	3		15.50	0.50	60.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	02:30	2.50	2298.00		Cement casing as per program
02:30	04:00	1.50	2298.00		Displace hole with SBM from cement unit
04:00	10:00	6.00	2298.00		Test float - backflow on casing. Bleed off pressure
10:00	12:00	2.00	2298.00		Rig down casing/cementing equipment
12:00	13:30	1.50	2298.00		M/up jetting tool and jet wellhead
13:30	15:30	2.00	2298.00		M/up seal assy and pressure test - no success. Pull seal assembly
15:30	21:30	6.00	2298.00		Redress and inspect inner and outer seals
21:30	22:30	1.00	2298.00		Discuss options with onshore support
22:30	00:00	1.50	2298.00		RIH and set seal assy. Press. test - no sucess. Layout seal assembly

COMMENTS

Current Ops:

Removed BOP, found damaged rubber seal on seal assembly. Replace same and test assembly without BOP.

sperry-sun DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 16 7/06/2006

Total Depth	**(m)**	:	2298	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps** : Dwayne Rota, Phil Hodson
Drilled last 24 hrs	**(m)**	:	0	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps** : Tim Gallagher (16), Trevor Ziegler (10)
Hole Size	**(in)**	:		**Casing ID**	**(in)**	:	8.740	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2295.60	72.83	274.15	2106.87	523.35	N86.93W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	70	41	27.0	14.0 / 21.0	3		15.50	0.50	60.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	01:30	1.50	2298.00		WOO/ Discusions & reviews with onshore offices.
01:30	06:00	4.50	2298.00		PU RIH seal assembly/ test no-go. POOH.
06:00	07:00	1.00	2298.00		Retrieve seal assembly / LD same.
07:00	08:00	1.00	2298.00		Nipple down diverter.
08:00	10:00	2.00	2298.00		Nipple down BOP & High pressure riser.
10:00	14:00	4.00	2298.00		Pump out wellhead/ clear debris/ clean upset area.
14:00	15:00	1.00	2298.00		Make-up & run seal assembly/ No-set due to over torque.
15:00	17:00	2.00	2298.00		Change out RT/ rerun seal assembly/ set & test OK.
17:00	19:00	2.00	2298.00		PU, run, land, & secure HP riser.
19:00	21:00	2.00	2298.00		Transport, land & secure BOP/ Run & land diverter/ function test BOP/ fill riser
21:00	23:30	2.50	2298.00		Test BOP
23:30	00:00	0.50	2298.00		No Activity/ Shutdown due to union meeting.

COMMENTS

17:00hrs Seal assembly test OK: 500psi/ 5min 5000psi/ 15min

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 17 8/06/2006

Total Depth	**(m)**	:	2298	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps** : Shaughn Corless, Phil Hodson
Drilled last 24 hrs	**(m)**	:	0	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps** : Tim Gallagher (17), Trevor Ziegler (11)
Hole Size	**(in)**	:	8.500	**Casing ID**	**(in)**	:	8.740	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2295.60	72.83	274.15	2106.87	523.35	N86.93W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 4: 137.03 m; Bit #4 (1. hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	70	41	27.0	14.0 / 21.0	3		15.50	0.50	60.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:30	0.50	2298.00		No Activity
00:30	01:00	0.50	2298.00		Rig Repair/ PLS malfunction.
01:00	09:00	8.00	2298.00		PU & RIH from deck 102x 5-1/2" DP 21.9 #/ Ft.
09:00	11:00	2.00	2298.00		Rack-back 34 stands DP.
11:00	13:30	2.50	2298.00	4	Change handling gear/ PU 8-1/2" GeoPliot BHA.
13:30	14:00	0.50	2298.00	4	Download MWD Data.
14:00	14:30	0.50	2298.00	4	Load radio-active sources.
14:30	16:30	2.00	2298.00	4	Continue PU BHA while RIH to 137m.
16:30	17:00	0.50	2298.00	4	Circulate/ Shallow Pulse Test MWD OK/ Break-in GP seals.
17:00	21:30	4.50	2298.00	4	RIH to md 2218m.
21:30	22:30	1.00	2298.00	4	Break-circulation/ Wash down & tag top of cement md 2260.
22:30	00:00	1.50	2298.00	4	Drill Cement & shoe track to 2269m.

COMMENTS

Top of Float collar: md 2266 - 2267m.

Experienced substantial difficulty drilling out Float Colar & Shoe as foreign debris impeded progress.
Retrieved at surfaces potential remenants of seal assembly work & nippling down of BOP stack. Carries to 06:30hrs Frfiday 09-June-06.

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 18 9/06/2006

Total Depth	**(m)**	:	2530	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps**	:	Shaughn Corless, Phil Hodson
Drilled last 24 hrs	**(m)**	:	232	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps**	:	Trevor Ziegler (12), Phillpe Grandjean (1)
Hole Size	**(in)**	:	8.500	**Casing ID**	**(in)**	:	8.740			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2527.13	93.22	285.11	2132.59	749.97	N84.82W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 4: 137.03 m; Bit #4 (1. hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	70	30	20.0	12.0 / 16.0	3		15.50	0.25	62.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	04:30	4.50	2298.00	4	Drilling float collar & shoe track 2267 - 2293m.
04:30	06:00	1.50	2299.00	4	Drilling rathole to 2299m.
06:00	06:30	0.50	2302.00	4	Drilling 8-1/2" section (new hole).
06:30	07:30	1.00	2302.00	4	Circulate/ Work-thru shoe multi passes freely then pull back in csg for FIT.
07:30	08:30	1.00	2302.00	4	FIT/ Rig up test lines/ Test OK 2250 psi 2.0sg
08:30	12:00	3.50	2333.00	4	Drilling 8-1/2" section 2302 - 2333m.
12:00	21:00	9.00	2518.00	4	Drilling 8-1/2" section 2333 - 2518m.
21:00	22:30	1.50	2518.00	4	Pull back one stand/ Confirm error in azm swing.
22:30	23:30	1.00	2518.00	4	Circulate while decoding & processing MWD data.
23:30	00:00	0.50	2530.00	4	Drilling 8-1/2" section 2518 - 2530m.

COMMENTS

Mike Marshall DD (trainee) arrives.

Philippe Grandjean DD relieves Tim Gallagher DD

sperry-sun DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 19 10/06/2006

Total Depth	**(m)**	:	2956	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps**	:	Shaughn Corless, Phil Hodson
Drilled last 24 hrs	**(m)**	:	426	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps**	:	Trevor Ziegler (13), Phillpe Grandjean (2)
Hole Size	**(in)**	:	8.500	**Casing ID**	**(in)**	:	8.740			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
2932.30	87.66	276.72	2129.45	1154.42	N84.31W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 4: 137.03 m; Bit #4 (1. hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	85	39	27.0	13.0 / 20.0	3		15.50	0.25	62.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	12:00	12.00	2768.00	4	Drilling 8-1/2" section. 2530-2768m
12:00	17:30	5.50	2867.00	4	Drilling 8-1/2" section. 2768-2867m
17:30	19:00	1.50	2867.00	4	Alternate pumps/check strainers to regain MWD Detection.
19:00	00:00	5.00	2956.00	4	Drilling 8-1/2" section. 2867-2956m

COMMENTS

sperry-sun DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS Report # 20 11/06/2006

Total Depth	**(m)**	:	3375	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps**	:	Shaughn Corless, Phil Hodson
Drilled last 24 hrs	**(m)**	:	419	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps**	:	Trevor Ziegler (14), Phillpe Grandjean (3)
Hole Size	**(in)**	:	8.500	**Casing ID**	**(in)**	:	8.740			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3366.39	91.67	267.91	2128.40	1587.48	N84.93W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 4: 137.03 m; Bit #4 (1. hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.5	88	42	36.0	16.0 / 23.0	3		16.50	0.25	62.50

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	04:30	4.50	3042.00	4	Drilling 8-1/2" section. 2956-3042m
04:30	06:00	1.50	3042.00	4	Perform GEOTAP pressure test.
06:00	12:00	6.00	3150.00	4	Drilling 8-1/2" section. 3042-3150m
12:00	22:30	10.50	3350.00	4	Drilling 8-1/2" section. 3150-3350m
22:30	23:00	0.50	3350.00	4	Change to Mud Pump #3.
23:00	00:00	1.00	3375.00	4	Drilling 8-1/2" section. 3350-3375m

COMMENTS

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 21 12/06/2006

Total Depth	**(m)**	:	3510	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps**	:	Shaughn Corless, Phil Hodson
Drilled last 24 hrs	**(m)**	:	135	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps**	:	Trevor Ziegler (15), Phillpe Grandjean (4)
Hole Size	**(in)**	:	8.500	**Casing ID**	**(in)**	:	8.740			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3510.00	91.36	270.88	2125.16	1730.45	N85.37W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 4: 137.03 m; Bit #4 (2.5 hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	75	38	29.0	14.0 / 23.0	3		16.00	0.25	64.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	07:30	7.50	3510.00	4	Drilling 8-1/2" section 3375 - 3510m.
07:30	10:00	2.50	3510.00	4	Circulate bottoms up 4x.
10:00	10:30	0.50	3510.00	4	Flow Check OK/ Investigate problem with rotating head.
10:30	12:00	1.50	3510.00	4	POOH 3491 - 3120m. 40Klbs over pull.
12:00	15:00	3.00	3510.00	4	Continue work thru tight spot/ @ 3120m OK/ POOH.
15:00	15:30	0.50	3510.00	4	Flow Check OK.
15:30	16:30	1.00	3510.00	4	Rig Repair/ Change TDS Rheostat.
16:30	21:30	5.00	3510.00	4	Trip Out (at Surface)/ Flow Check OK/ Pull BHA thru BOP.
21:30	23:30	2.00	3510.00	4	Remove RA Source/ Break off bit/ Change out Geopilot Tool.
23:30	00:00	0.50	3510.00	4	Lay out GP & NM Flex DM/ Download MWD Data.

COMMENTS

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 22 13/06/2006

Total Depth	**(m)**	:	3572	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps** : Shaughan Corless, Phil Hodson
Drilled last 24 hrs	**(m)**	:	62	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps** : Tim Gallagher (18), Phillpe Grandjean (5)
Hole Size	**(in)**	:	8.500	**Casing ID**	**(in)**	:	8.740	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
3568.54	90.62	269.75	2124.31	1788.74	N85.54W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 4: 137.03 m; Bit #4 (22. hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP
BHA 5: 136.14 m; Bit #5 (0.5 hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	75	38	29.0	14.0 / 23.0	3		16.00	0.25	64.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:30	0.50	3510.00	4	P/up new GeoPilot and make up bit
00:30	01:30	1.00	3510.00	4	Initialise MWD
01:30	02:30	1.00	3510.00	4	Continue to m/up BHA.
02:30	04:30	2.00	3510.00	5	RIH with BHA. Load radioactive sources and check float
04:30	05:30	1.00	3510.00	5	Shallow hole test LWD
05:30	12:00	6.50	3510.00	5	Install PS21 slips and cont. RIH to 2303m
12:00	15:30	3.50	3510.00	5	Cont. RIH to 3491m
15:30	16:00	0.50	3510.00	5	Wash down last stand and tag bottom at 3510m
16:00	18:00	2.00	3548.00	5	Drill 8½" hole 3510-3548m
18:00	19:30	1.50	3548.00	5	Circulate while reviewing wellplan
19:30	20:00	0.50	3548.00	5	Perform Geotap pressure test
20:00	20:30	0.50	3548.00	5	Circulate while reviewing wellplan
20:30	22:30	2.00	3548.00	5	Perform Geotap pressure tests
22:30	00:00	1.50	3572.00	5	Drill 8½" hole 3548-3572m

COMMENTS

Drilling 8½" hole
06:00 Depth: 3683m

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DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 23 14/06/2006

Total Depth	**(m)**	:	4026	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps** : Shaughan Corless, Phil Hodson
Drilled last 24 hrs	**(m)**	:	454	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps** : Tim Gallagher (19), Phillpe Grandjean (6)
Hole Size	**(in)**	:	8.500	**Casing ID**	**(in)**	:	8.740	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
4026.00	41.94	269.81	2340.19	2170.58	N86.63W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 5: 136.14 m; Bit #5 (0.5 hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	68	36	24.0	12.0 / 20.0	3		13.90	0.25	65.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:00	24.00	4026.00	5	Drilling 8 1/2" section 3572 - 4026m

COMMENTS

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 24 15/06/2006

Total Depth	**(m)**	:	4026	**Casing Depth**	**(m)**	:	2293.00	**Operator Reps** : Shaughan Corless, Phil Hodson
Drilled last 24 hrs	**(m)**	:	0	**Casing Diameter**	**(in)**	:	9.625	**SSDS Reps** : Philippe Grandjean (7), Michael Marshall (1)
Hole Size	**(in)**	:	8.500	**Casing ID**	**(in)**	:	8.740	

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
4026.00	41.94	269.81	2340.19	2170.58	N86.63W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 5: 136.14 m; Bit #5 (0.5 hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	68	36	24.0	12.0 / 20.0	3		13.90	0.25	65.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	01:30	1.50	4026.00	5	Drilling 8 1/2' section to 4206m
01:30	04:00	2.50	4026.00	5	Circulate hole clean.
04:00	08:00	4.00	4026.00	5	Conduct Flow check and GeoTap pressure tests.
08:00	08:30	0.50	4026.00	5	Repair Suction Screen on MP #1.
08:30	00:00	15.50	4026.00	5	Continue with GeoTap test program.

COMMENTS

TD well at prescribed orientations.
Conducting GeoTap testing at requested depths.
-Backloaded 7600 GeoPliot (GP850TL121).

sperry-sun
DRILLING SERVICES

Daily Drilling Report

Customer : Woodside Energy Ltd.
Well : THA02
Field : T/L2
Slot : Thylacine
Rig : Maersk Guardian
Job # : AU-DD-0003930658

CURRENT STATUS **Report #** 25 16/06/2006

Total Depth	**(m)**	: 4026	**Casing Depth**	**(m)**	: 2293.00	**Operator Reps**	:	Shaughan Corless, Phil Hodson
Drilled last 24 hrs	**(m)**	: 0	**Casing Diameter**	**(in)**	: 9.625	**SSDS Reps**	:	Philippe Grandjean (8), Michael Marshall (2)
Hole Size	**(in)**	: 8.500	**Casing ID**	**(in)**	: 8.740			

LAST SURVEY

Depth (m)	Inclination	Azimuth	TVD (m)	Displ (m)	Direction
4026.00	41.94	269.81	2340.19	2170.58	N86.63W

LAST FORMATION TOP

Formation Name	MD Top (m)	TVD Top (m)

BHA SUMMARY

BHA 5: 136.14 m; Bit #5 (0.5 hrs), Other, Flex, MWD, MWD, MWD, MWD, 1x DC, Sub, Sub, 2 x HWDP, Jar, 6 x HWDP

MUD DATA

Type	Weight (ppg)	FV (sec)	PV (cp)	YP (lbf/100ft²)	Gels	Fluid Loss	pH	Solids (%)	Sand (%)	Oil (%)
Oil Base	10.4	68	36	24.0	12.0 / 20.0	3		13.90	0.25	65.00

TIME BREAKDOWN

From	To	Hours	TMD (m)	BHA #	Activity
00:00	00:30	0.50	4026.00	5	Complete GeoTap pressure surveys.
00:30	01:30	1.00	4026.00	5	Trip Out to Csg Shoe (2293 m).
01:30	06:30	5.00	4026.00	5	Trip In to 4012m.
06:30	07:30	1.00	4026.00	5	Reaming 4012 m to 4026 m (Tag Btm) and take weight indicator readings.
07:30	20:00	12.50	4026.00	5	Backream OOH to 2293 m (Csg shoe).
20:00	20:30	0.50	4026.00	5	Take weight indicator readings.
20:30	21:00	0.50	4026.00	5	Flush choke and kill lines and function surface BOP equipment.
21:00	22:00	1.00	4026.00	5	Circulate B/U and begin install Rotating Head assy.
22:00	22:30	0.50	4026.00	5	Flow check.
22:30	23:00	0.50	4026.00	5	Continue install Rotating Head gear.
23:00	23:30	0.50	4026.00	5	Slug pipe.
23:30	00:00	0.50	4026.00	5	Drop hollow rabbit and POH to 2083 m, cont.

COMMENTS

Backream to shoe with GeoPilot deflection at zero.

C:\Documents and Settings\hx13923\Desktop\Thylacine Surveys\THA02S0.csv

MD	INCL	AZIMUTH	TVD	N(+)	E(+)	VS	DL/30m	UTM X	UTM Y	TVDSS
0	0	0	0	0	0	0	0	664161	5655160	-50.5
150	0	360	150	0	0	0	0	664161	5655160	99.5
169.13	0.71	221.05	169.13	-0.09	-0.08	0.07	1.11	664160.9	5655160	118.63
208	0.52	196.77	208	-0.44	-0.29	0.26	0.25	664160.7	5655159	157.5
220.4	0.29	185.42	220.4	-0.53	-0.31	0.28	0.59	664160.7	5655159	169.9
259.7	0.89	270.66	259.7	-0.62	-0.62	0.58	0.7	664160.4	5655159	209.2
341.49	2.59	273.52	341.44	-0.5	-3.1	3.07	0.62	664157.9	5655159	290.94
370.42	3.21	272.48	370.34	-0.42	-4.56	4.53	0.65	664156.4	5655159	319.84
399.4	3.84	274.34	399.26	-0.32	-6.34	6.31	0.66	664154.7	5655159	348.76
428.36	4.65	272.33	428.14	-0.19	-8.48	8.45	0.85	664152.5	5655159	377.64
457.28	5.51	259.78	456.95	-0.39	-11.02	10.98	1.45	664150	5655159	406.45
486.27	5.77	264.15	485.8	-0.79	-13.84	13.77	0.52	664147.2	5655159	435.3
525.14	5.59	268.32	524.48	-1.04	-17.67	17.58	0.35	664143.3	5655159	473.98
544.15	6.87	262.02	543.38	-1.23	-19.73	19.62	2.29	664141.3	5655158	492.88
572.99	5.92	272.75	572.04	-1.4	-22.92	22.8	1.58	664138.1	5655158	521.54
601.89	6.64	272.65	600.76	-1.25	-26.08	25.96	0.75	664134.9	5655158	550.26
620.25	6.72	280.11	619	-1.01	-28.19	28.09	1.42	664132.8	5655159	568.5
637.83	6.2	276.25	636.47	-0.73	-30.15	30.06	1.16	664130.8	5655159	585.97
666.7	5.81	274.13	665.18	-0.45	-33.16	33.08	0.47	664127.8	5655159	614.68
724.56	4.14	270.99	722.82	-0.2	-38.17	38.09	0.88	664122.8	5655159	672.32
753.49	4.52	273.28	751.67	-0.12	-40.35	40.28	0.43	664120.7	5655159	701.17
782.47	4.29	270.74	780.56	-0.04	-42.57	42.5	0.31	664118.4	5655160	730.06
811.43	4.34	267.95	809.44	-0.07	-44.75	44.67	0.22	664116.2	5655160	758.94
840.35	4.62	270.66	838.27	-0.09	-47.01	46.93	0.36	664114	5655160	787.77
869.34	4.34	269.72	867.17	-0.08	-49.27	49.19	0.3	664111.7	5655160	816.67
898.28	3.92	268.79	896.04	-0.11	-51.36	51.27	0.44	664109.6	5655159	845.54
927.23	4.4	268.45	924.91	-0.16	-53.46	53.36	0.5	664107.5	5655159	874.41
956.07	3.73	266.06	953.68	-0.26	-55.5	55.39	0.72	664105.5	5655159	903.18
984.97	4.34	268.49	982.51	-0.35	-57.53	57.41	0.66	664103.5	5655159	932.01
1013.89	4.16	272	1011.35	-0.34	-59.67	59.55	0.33	664101.3	5655159	960.85
1042.82	4.06	274.94	1040.2	-0.22	-61.74	61.63	0.24	664099.3	5655159	989.7
1071.77	3.93	261.43	1069.08	-0.28	-63.74	63.62	0.98	664097.3	5655159	1018.58
1100.72	4.17	266.35	1097.96	-0.49	-65.78	65.64	0.44	664095.2	5655159	1047.46
1129.6	4.49	268.53	1126.76	-0.59	-67.95	67.81	0.37	664093	5655159	1076.26
1158.57	5.03	274.87	1155.63	-0.51	-70.35	70.21	0.78	664090.6	5655159	1105.13
1187.5	6.72	277.51	1184.41	-0.18	-73.29	73.16	1.77	664087.7	5655159	1133.91
1216.4	7.21	278.85	1213.09	0.32	-76.76	76.65	0.54	664084.2	5655160	1162.59
1274.31	7.49	272.32	1270.53	1.03	-84.13	84.04	0.46	664076.9	5655161	1220.03
1303.24	7.51	269.23	1299.21	1.08	-87.9	87.81	0.42	664073.1	5655161	1248.71
1332.21	7.47	270.49	1327.93	1.07	-91.68	91.58	0.18	664069.3	5655161	1277.43
1361.32	8.41	273.97	1356.76	1.24	-95.69	95.6	1.09	664065.3	5655161	1306.26
1390.21	9.62	275.12	1385.3	1.6	-100.2	100.13	1.27	664060.8	5655161	1334.8
1419.15	9.54	275.91	1413.83	2.06	-105	104.94	0.16	664056	5655162	1363.33
1448.06	9.4	274.75	1442.35	2.5	-109.73	109.69	0.25	664051.3	5655162	1391.85
1476.99	9.05	273.21	1470.9	2.83	-114.36	114.33	0.44	664046.6	5655162	1420.4
1505.9	8.41	272.71	1499.48	3.05	-118.74	118.72	0.67	664042.3	5655163	1448.98
1534.85	8.28	270.88	1528.12	3.19	-122.94	122.92	0.31	664038.1	5655163	1477.62
1563.74	8.34	272.11	1556.71	3.3	-127.11	127.09	0.19	664033.9	5655163	1506.21
1592.67	8.65	273.85	1585.32	3.52	-131.38	131.36	0.42	664029.6	5655163	1534.82
1621.6	8.77	273.02	1613.92	3.78	-135.75	135.75	0.18	664025.2	5655163	1563.42
1650.5	8.9	271.3	1642.48	3.95	-140.19	140.18	0.31	664020.8	5655164	1591.98
1679.43	9.29	270.16	1671.04	4.01	-144.76	144.75	0.45	664016.2	5655164	1620.54
1708.39	9.95	271.28	1699.59	4.07	-149.6	149.59	0.71	664011.4	5655164	1649.09
1737.35	13.61	273.91	1727.94	4.36	-155.5	155.5	3.83	664005.5	5655164	1677.44
1766.32	14.48	273.78	1756.04	4.83	-162.52	162.53	0.9	663998.5	5655164	1705.54
1795.25	18.77	275.16	1783.76	5.48	-170.77	170.8	4.47	663990.2	5655165	1733.26
1824.14	21.92	277.04	1810.84	6.56	-180.75	180.83	3.34	663980.2	5655166	1760.34
1853.06	24.85	276.6	1837.38	7.92	-192.15	192.28	3.04	663968.9	5655168	1786.88
1882.07	26.96	269.43	1863.48	8.56	-204.78	204.93	3.9	663956.2	5655168	1812.98
1911.03	30.94	270.57	1888.82	8.57	-218.8	218.93	4.16	663942.2	5655168	1838.32
1939.98	35.09	272.02	1913.09	8.94	-234.56	234.69	4.38	663926.4	5655169	1862.59
1968.91	38.21	272.59	1936.3	9.63	-251.81	251.95	3.25	663909.2	5655169	1885.8
1997.86	41.94	273.44	1958.45	10.62	-270.42	270.58	3.91	663890.6	5655170	1907.95
2026.79	45.44	272.99	1979.36	11.74	-290.37	290.56	3.64	663870.6	5655171	1928.86
2055.71	48.46	272.75	1999.1	12.79	-311.48	311.69	3.14	663849.5	5655172	1948.6
2084.64	51.86	272.71	2017.63	13.85	-333.66	333.9	3.53	663827.3	5655173	1967.13
2110.88	54.91	272.4	2033.28	14.79	-354.7	354.96	3.5	663806.3	5655174	1982.78

2142.55	59.4	274.22	2050.46	16.34	-381.25	381.56	4.49	663779.7	5655176	1999.96
2171.49	64.94	274.96	2063.96	18.39	-406.75	407.14	5.78	663754.2	5655178	2013.46
2200.39	65.78	275.15	2076.01	20.7	-432.92	433.39	0.89	663728.1	5655180	2025.51
2229.34	69.94	274.26	2086.92	22.9	-459.64	460.19	4.39	663701.4	5655182	2036.42
2259.31	73.39	274.89	2096.34	25.17	-487.99	488.63	3.5	663673	5655185	2045.84
2287.29	73.01	274.85	2104.43	27.44	-514.68	515.41	0.41	663646.3	5655187	2053.93
2295.6	72.83	274.15	2106.87	28.07	-522.6	523.35	2.5	663638.4	5655188	2056.37
2324.71	74.76	273.81	2115	30	-550.48	551.3	2.02	663610.5	5655190	2064.5
2353.6	77.11	274.62	2122.02	32.07	-578.43	579.32	2.57	663582.6	5655192	2071.52
2380.35	80.82	275.67	2127.14	34.42	-604.58	605.55	4.32	663556.4	5655194	2076.64
2409.42	83.75	281.32	2131.04	38.68	-633.05	634.23	6.52	663528	5655198	2080.54
2440.38	86.54	283.47	2133.66	45.3	-663.18	664.69	3.41	663497.8	5655205	2083.16
2469.29	89.57	284.75	2134.64	52.34	-691.19	693.07	3.41	663469.8	5655212	2084.14
2497.93	92.66	285.85	2134.09	59.9	-718.81	721.07	3.44	663442.2	5655219	2083.59
2527.13	93.22	285.11	2132.59	67.68	-746.91	749.58	0.95	663414.1	5655227	2082.09
2556.06	93.09	282.07	2131	74.47	-774.98	778	3.15	663386	5655234	2080.5
2584.99	93.16	278.76	2129.42	79.69	-803.39	806.66	3.43	663357.6	5655239	2078.92
2613.89	92.85	276.08	2127.9	83.42	-832.01	835.44	2.8	663329	5655243	2077.4
2642.82	92.6	275.29	2126.53	86.28	-860.76	864.32	0.86	663300.2	5655246	2076.03
2671.78	90.5	275.95	2125.74	89.11	-889.57	893.24	2.28	663271.4	5655249	2075.24
2700.74	90.75	275.69	2125.43	92.05	-918.38	922.17	0.37	663242.6	5655252	2074.93
2729.71	90.5	276.17	2125.11	95.04	-947.19	951.11	0.56	663213.8	5655255	2074.61
2758.64	90.07	275.82	2124.97	98.06	-975.97	980.01	0.57	663185	5655258	2074.47
2786.01	89.2	277.6	2125.14	101.26	-1003.15	1007.33	2.17	663157.9	5655261	2074.64
2816.45	88.53	274.82	2125.75	104.55	-1033.4	1037.72	2.82	663127.6	5655264	2075.25
2843.56	89.08	272.77	2126.31	106.35	-1060.44	1064.82	2.35	663100.6	5655266	2075.81
2872.88	88.15	274.77	2127.02	108.28	-1089.69	1094.13	2.26	663071.3	5655268	2076.52
2901.72	87.41	276.08	2128.14	111	-1118.38	1122.93	1.56	663042.6	5655271	2077.64
2932.3	87.66	276.72	2129.45	114.41	-1148.74	1153.44	0.67	663012.3	5655274	2078.95
2961.25	88.53	273.72	2130.41	117.04	-1177.55	1182.35	3.24	662983.5	5655277	2079.91
2990.18	88.22	277.49	2131.24	119.86	-1206.32	1211.24	3.92	662954.7	5655279	2080.74
3019.1	87.97	275.06	2132.2	123.02	-1235.05	1240.1	2.53	662925.9	5655283	2081.7
3048.03	87.91	276.6	2133.24	125.96	-1263.81	1268.99	1.6	662897.2	5655286	2082.74
3076.97	88.77	276.21	2134.08	129.18	-1292.56	1297.87	0.98	662868.4	5655289	2083.58
3105.94	89.21	275.52	2134.59	132.14	-1321.37	1326.81	0.85	662839.6	5655292	2084.09
3134.88	90.81	275.69	2134.58	134.97	-1350.17	1355.72	1.67	662810.8	5655295	2084.08
3162.22	91.73	274.81	2133.97	137.47	-1377.39	1383.04	1.4	662783.6	5655297	2083.47
3191.15	91.43	273.46	2133.18	139.56	-1406.23	1411.96	1.43	662754.8	5655299	2082.68
3220.27	91.24	272.9	2132.5	141.17	-1435.3	1441.07	0.61	662725.7	5655301	2082
3248.91	91.43	272.3	2131.83	142.47	-1463.9	1469.7	0.66	662697.1	5655302	2081.33
3277.48	91.74	270.72	2131.04	143.22	-1492.45	1498.24	1.69	662668.5	5655303	2080.54
3308.52	91.55	267.86	2130.15	142.84	-1523.47	1529.19	2.77	662637.5	5655302	2079.65
3335.97	91.86	267.23	2129.33	141.66	-1550.89	1556.49	0.77	662610.1	5655301	2078.83
3366.39	91.67	267.91	2128.4	140.37	-1581.27	1586.74	0.7	662579.7	5655300	2077.9
3395.36	91.42	268.54	2127.62	139.48	-1610.21	1615.58	0.7	662550.8	5655299	2077.12
3424.31	91.73	269.11	2126.82	138.88	-1639.14	1644.43	0.67	662521.9	5655298	2076.32
3452.27	91.18	270.09	2126.11	138.69	-1667.09	1672.33	1.21	662493.9	5655298	2075.61
3481.19	90.62	271.42	2125.66	139.07	-1696.01	1701.21	1.5	662465	5655299	2075.16
3510.2	91.36	270.88	2125.15	139.65	-1725.01	1730.2	0.95	662436	5655299	2074.65
3539.05	90.68	268.43	2124.64	139.48	-1753.85	1758.98	2.64	662407.2	5655299	2074.14
3568.54	90.62	269.75	2124.31	139.01	-1783.33	1788.39	1.34	662377.7	5655299	2073.81
3596.9	87.47	267.06	2124.78	138.22	-1811.67	1816.64	4.38	662349.3	5655298	2074.28
3625.86	83.38	266.72	2127.09	136.65	-1840.49	1845.32	4.25	662320.5	5655296	2076.59
3654.78	79.21	266.22	2131.46	134.9	-1869.02	1873.69	4.36	662292	5655294	2080.96
3683.72	74.37	265.83	2138.08	132.94	-1897.11	1901.63	5.03	662263.9	5655293	2087.58
3712.66	69.09	265.58	2147.14	130.89	-1924.51	1928.86	5.48	662236.5	5655290	2096.64
3741.63	66.06	268.24	2158.2	129.44	-1951.24	1955.46	4.04	662209.8	5655289	2107.7
3770.6	61.26	267.44	2171.05	128.46	-1977.18	1981.3	5.03	662183.8	5655288	2120.55
3799.55	57.17	268.95	2185.86	127.67	-2002.03	2006.06	4.45	662159	5655287	2135.36
3824.4	54.02	268.15	2199.9	127.16	-2022.52	2026.49	3.89	662138.5	5655287	2149.4
3857.31	49.28	270.04	2220.32	126.74	-2048.32	2052.22	4.53	662112.7	5655286	2169.82
3886.19	47.08	270.46	2239.57	126.83	-2069.84	2073.71	2.31	662091.2	5655286	2189.07
3915.14	45.75	270.18	2259.53	126.95	-2090.81	2094.65	1.39	662070.2	5655287	2209.03
3944.07	44.63	271.1	2279.92	127.17	-2111.33	2115.15	1.34	662049.7	5655287	2229.42
3973.05	42.59	270.42	2300.9	127.44	-2131.32	2135.12	2.17	662029.7	5655287	2250.4
4001.93	41.91	270.87	2322.28	127.66	-2150.73	2154.52	0.77	662010.3	5655287	2271.78
4017.67	41.94	269.81	2333.99	127.72	-2161.25	2165.02	1.35	661999.7	5655287	2283.49
4026	41.94	269.81	2340.19	127.7	-2166.82	2170.58	0	661994.2	5655287	2289.69

HALLIBURTON

ALD Azimuthal Lithodensity
CTN Compensated Thermal Neutron
DGR Dual Gamma Ray
EWR-Phase 4
ACAL Acoustic Caliper

Powered by INSITE™

1 : 1000

Sperry Drilling Services

Country	: **Australia**
Field	: **Thylacine**
Location	: **39° 14' 14.47" South GDA94** **142° 54' 7.58" East GDA94**
Well	: **THA02**
Company	: **Woodside Energy Ltd**
Rig	: **Maersk Guardian**

Company : **Woodside Energy Ltd**
Rig : **Maersk Guardian**
Well : **THA02**
Field : **Thylacine**
Country : **Australia**
DOE Number :

LOCATION
Latitude : **39° 14' 14.47" South GDA94**
Longitude : **142° 54' 7.58" East GDA94**
UTM Easting = 664,161.0 m
UTM Northing = 5,655,159.6 m

Other Services
Directional Drilling

Permanent Datum : **LAT** Elevation : **0.00 m**
Log Measured From : **Drill Floor** **50.50 m** Above Permanent Datum
Drilling Measured From : **Drill Floor**

MD LOG

Elev. KB
DF **50.50**
GL
WD **99.30 m**

Depth Logged : **638.00 m** To **4,026.00 m**
Date Logged : **20-May-06** To **17-Jun-06**
Total Depth MD : **4,026.00 m** TVD : **2,340.18 m**
Spud Date : **20-May-06**

Unit No. : **SSDS-40** Job No. : **AU-FE-0003930658**
Plot Type : **Final**
Plot Date : **03-Oct-06**

Run No.	Borehole Record (MD) Size	From	To
1	762.000 mm	149.80 m	219.90 m
2	584.000 mm	219.90 m	638.00 m
3	311.000 mm	638.00 m	2,299.00 m
4	216.000 mm	2,299.00 m	3,510.00 m
5	216.000 mm	3,510.00 m	4,026.00 m

Run No.	Borehole Record (MD) Size	From	To

Casing Record (MD) Size	Weight	From	To
660.000 mm	397.68 kgpm	149.80 m	219.90 m
473.000 mm	139.89 kgpm	149.80 m	633.00 m
244.000 mm	70.00 kgpm	149.80 m	2,293.40 m

WELL INFORMATION

MWD Run Number	300	400	500
Date run completed	04-Jun-06	12-Jun-06	17-Jun-06
Rig Bit Number	3	4	5
Bit Size (mm)	311	216	216
Tool Nominal OD (mm)	203	171	171
Log Start Depth (MD, m)	638.00	2,299.00	3,510.00
Log End Depth (MD, m)	2,299.00	3,510.00	4,026.00
Drill or Wipe	Drilling	Drilling	Drilling
Drill/Wipe Start Date and Time	30-May-06 20:00	08-Jun-06 00:05	13-Jun-06 16:15
Drill/Wipe End Date and Time	03-Jun-06 06:57	12-Jun-06 07:45	16-Jun-06 00:15
Min Inc (deg) @ Depth (MD, m)	3.73 @ 956.07	72.83 @ 2,295.60	41.91 @ 4,001.93
Max Inc (deg) @ Depth (MD, m)	73.39 @ 2,259.31	93.22 @ 2,527.13	91.36 @ 3,510
Bit TFA(in2) / Bit Type	1.83 / Sec FMF3653Z	1.10 / Sec FMF3653Z	1.10 / Sec FMF3653Z
Flow Rate (gpm)	1050	730	725
Max AV (mpm) / CV (mpm) @ MWD	117.5 / 131.0	207.0 / 181.8	201.6 / 155.4
Fluid Type	Ester Blend	Ester Base	Ester Base
Density (sg) / Viscosity (spl)	1.25 / 84.5	1.26 / 93.0	1.26 / 74.0
Filtrate CL (ppm)	25,355	38,842	36,912
pH / Fluid Loss (mptm)	N/A / 2.0	N/A / 3.0	N/A / 2
PV (cP) / YP (pa)	38 / 13.89	42 / 17.28	35 / 11.49
% Solids / % Sand	13.7 / 5.0	14.8 / 0.3	13.9 / 0.3
% Oil / Oil:Water Ratio	60.5 / 72:28	62.5 / 75:25	65.0 / 77:23
Rm @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A	N/A @ N/A
Rmf @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A	N/A @ N/A
Rmc @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A	N/A @ N/A
Max Tool Temp (degC) / Source	96 / EWR-P4	109 / EWR-P4	112 / EWR-P4
Rm @ Max Tool Temp (degC)	N/A @ 96	N/A @ 109	N/A @ 112
Lead MWD Engineer	P. King	M. Lee	M. Lee
Customer Representative	D. Rota	S. Corless	S. Corless

SENSOR INFORMATION

Downhole Processor Information

Tool Type	HCIM	HCIM	HCIM		
Software Version	68.18	72.13	72.13		
Sub Serial Number	152862	43987	43987		
Insert Serial Number	134502	161828	161828		
Date and Time Initialized	30-May-06 01:52	08-Jun-06 14:12	13-Jun-06 02:33		
Date and Time Read	04-Jun-06 04:50	12-Jun-06 23:24	19-Jun-06 14:10		

Directional Sensor Information

Tool Type	DM	DM	DM		
Distance From Bit (m)	8.61	8.92	8.02		
Software Version	3.15	3.15	3.15		
Sub Serial Number	CP1015763	CP919968	CP772990		
Sonde Serial Number	133447	133447	185534		
Sensor ID Number	N/A	N/A	N/A		
Toolface Offset (deg)	N/A	N/A	N/A		

Gamma Ray Sensor Information

Tool Type	DGR	DGR	DGR		
Distance From Bit (m)	11.04	11.37	10.49		
Recorded Sample Period (sec)	12	14	14		
Software Version	N/A	N/A	N/A		
Sub Serial Number	10718409	144358	144358		
Insert/Sonde Serial Number	172498	50437	50437		

Resistivity Sensor Information

Tool Type	EWR-P4	EWR-P4	EWR-P4		
Distance From Bit (m)	13.40	13.68	12.80		
Recorded Sample Period (sec)	14	14	14		
Software Version	1.38	1.38	1.38		
Sub Serial Number	37661	136366	136366		
Receiver Insert Serial Number	205859	61101	61101		
Transmitter Insert Serial Number	151389	77011	77011		
Receiver Orientation	Down	Down	Down		

Neutron Sensor Information

Tool Type		CTN	CTN		
Distance From Bit (m)		25.34	24.46		
Recorded Sample Period (sec)		20	20		
Sub Serial Number		10603697	10603697		
Insert Serial Number		192981	192981		
Source Serial Number		0102NN	0102NN		
Source Factor		N/A	N/A		
Pin Orientation		Up	Up		

Density Sensor Information

Tool Type		ALD	ALD		
Distance From Bit (m)		21.27	20.39		
Recorded Sample Period (sec)		20	20		
Software Version		2.13	2.13		
Sub Serial Number		10718174	10718174		
Insert Serial Number		215918	215918		
Sensor ID Number		32081	32081		
Source Serial Number		2434GW	2434GW		
Pin Orientation		Up	Up		

Stabilizer Blade O.D. (mm)		209.550	209.550		
DPA Offset		132.00	211.50		

Caliper Sensor Information

Tool Type		ACAL	ACAL		
Distance From Bit (m)		24.28	23.40		
Software Version		2.05	2.05		
Sub Serial Number		10603697	10603697		
Insert Serial Number		192981	192981		

REMARKS

1.) All depths are bit depths and are referenced to the driller's pipe tally unless otherwise noted.

2.) AV/CV values are calculated at the LWD collar using the Bingham Law for oil based mud, measured in m/min.

3.) Curve Mnemonics used are:

SGRC - Smoothed Combined Gamma Ray, api
SROP - Smoothed Rate of Penetration, m/hr
SEXP - Smoothed Extra-Shallow Phase Resistivity, ohm-metre
SESP - Smoothed Shallow Phase Resistivity, ohm-metre
SEMP - Smoothed Medium Phase Resistivity, ohm-metre
SEDP - Smoothed Deep Phase Resistivity, ohm-metre
ACAL - Smoothed Acoustic Caliper Hole Size, inches
SCO2 - Smoothed Best Bin Stand Off Correction, g/cc
SBD2 - Smoothed Best Bin Bulk Density, g/cc
SNP2 - Smoothed Near Detector Pe, b/e
TNPL - Smoothed Compensated Thermal Neutron Porosity (LS), v/v

4.) Resistivity data has been corrected for borehole effects.

5.) CTN data has been processed using the following parameters and is based on Limestone matrix:

MW = 1.25 - 1.26 sg
Formation Salinity = 15,000 ppm Cl
Mud Salinity = 38,842 - 41,902 ppm Cl
Matrix Density = 2.71 g/cc
Fluid Density = 1.00 g/cc

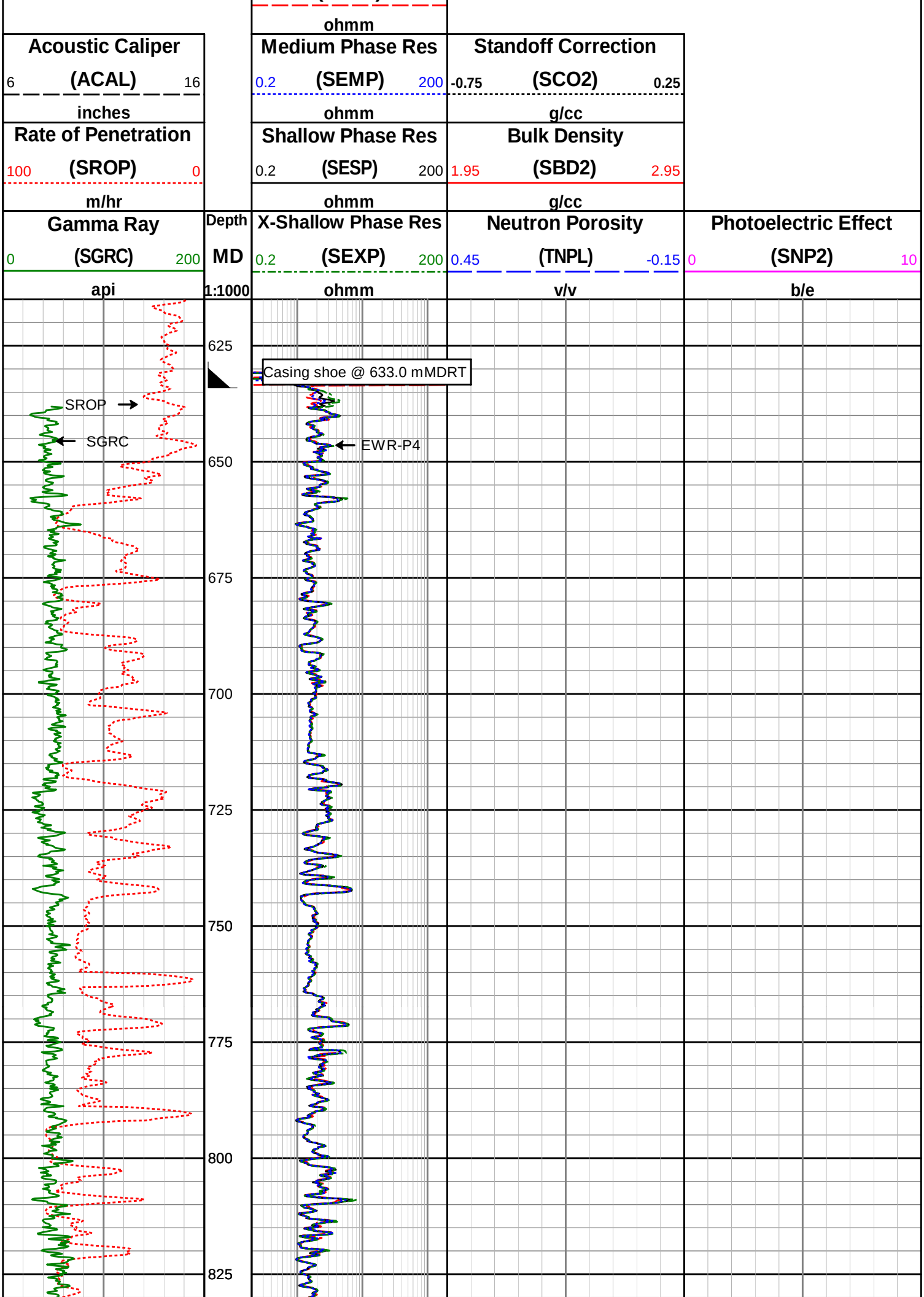
6.) CTN data has been reprocessed using hole size derived from the Acoustic Caliper tool.

7.) Caliper data presented from 2293.0 to 2494.2 mMDRT is Hole Size Indicator from the ALD tool.

WARRANTY

HALLIBURTON ENERGY SERVICES (HES) WILL USE ITS BEST EFFORTS TO FURNISH CUSTOMERS WITH ACCURATE INFORMATION AND INTERPRETATIONS THAT ARE PART OF, AND INCIDENT TO, THE SERVICES PROVIDED. HOWEVER, HES CANNOT AND DOES NOT WARRANT THE ACCURACY OR CORRECTNESS OF SUCH INFORMATION AND INTERPRETATIONS. UNDER NO CIRCUMSTANCES SHOULD ANY SUCH INFORMATION OR INTERPRETATION BE RELIED UPON AS THE SOLE BASIS FOR ANY DRILLING, COMPLETION, PRODUCTION, OR FINANCIAL DECISION OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING VENTURE, DRILLING RIG OR ITS CREW OR ANY OTHER THIRD PARTY. THE CUSTOMER HAS FULL RESPONSIBILITY FOR ALL DRILLING, COMPLETION AND PRODUCTION OPERATION. HES MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES RENDERED. IN NO EVENT WILL HES BE LIABLE FOR FAILURE TO OBTAIN ANY PARTICULAR RESULTS OR FOR ANY DAMAGES, INCLUDING, BUT NOT LIMITED TO, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OF ANY INFORMATION OR INTERPRETATION PROVIDED BY HES.

	Deep Phase Res 0.2 **(SEDP)** 200	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g/cc
Rate of Penetration
100 (SROP) 0
m/hr
Shallow Phase Res
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ohmm
Bulk Density
1.95 (SBD2) 2.95
g/cc
Gamma Ray
0 (SGRC) 200
api
Depth
MD
1:1000
X-Shallow Phase Res
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ohmm
Neutron Porosity
0.45 (TNPL) -0.15
v/v
Photoelectric Effect
0 (SNP2) 10
b/e
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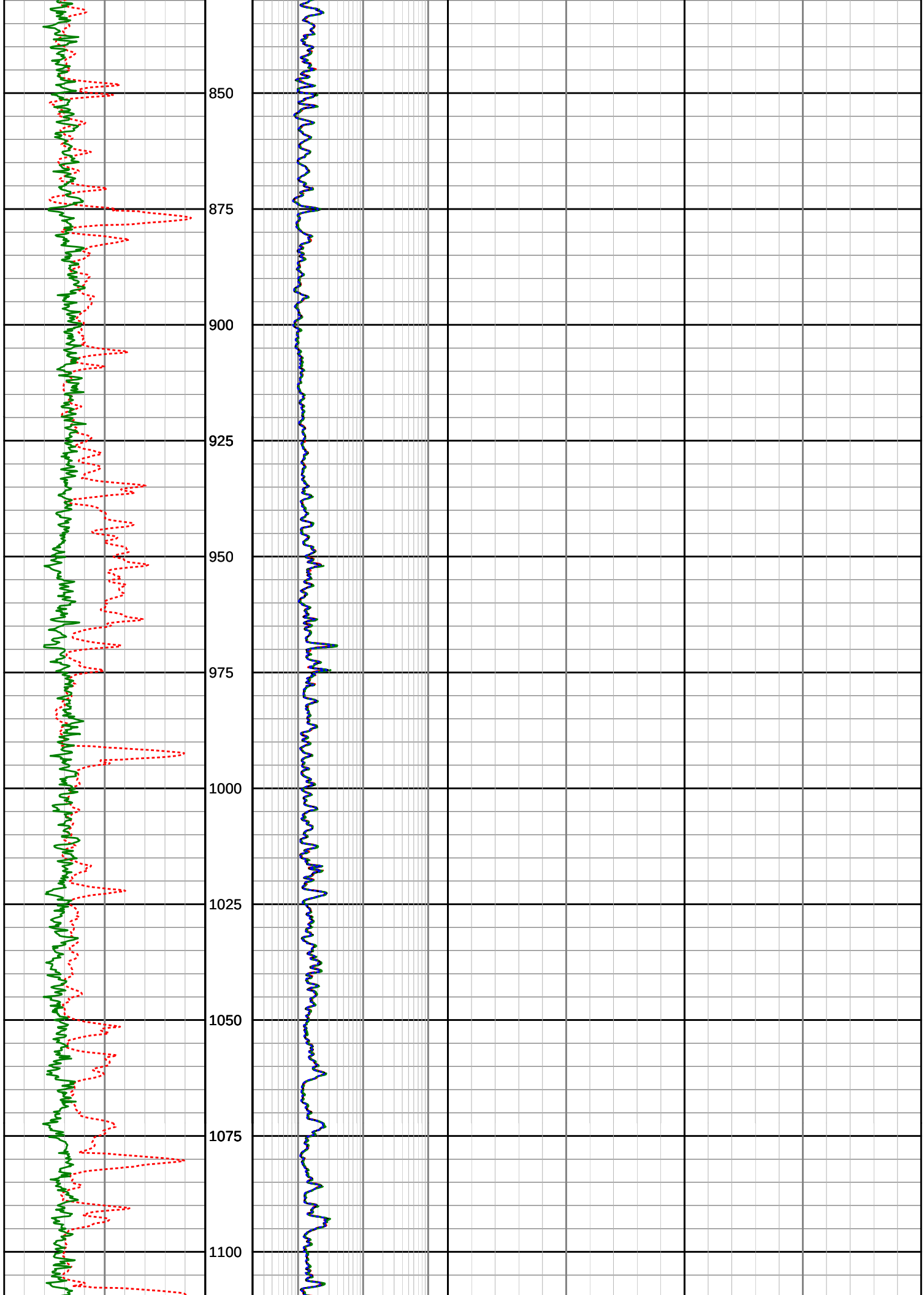
Casing shoe @ 633.0 mMDRT
SROP
SGRC
EWR-P4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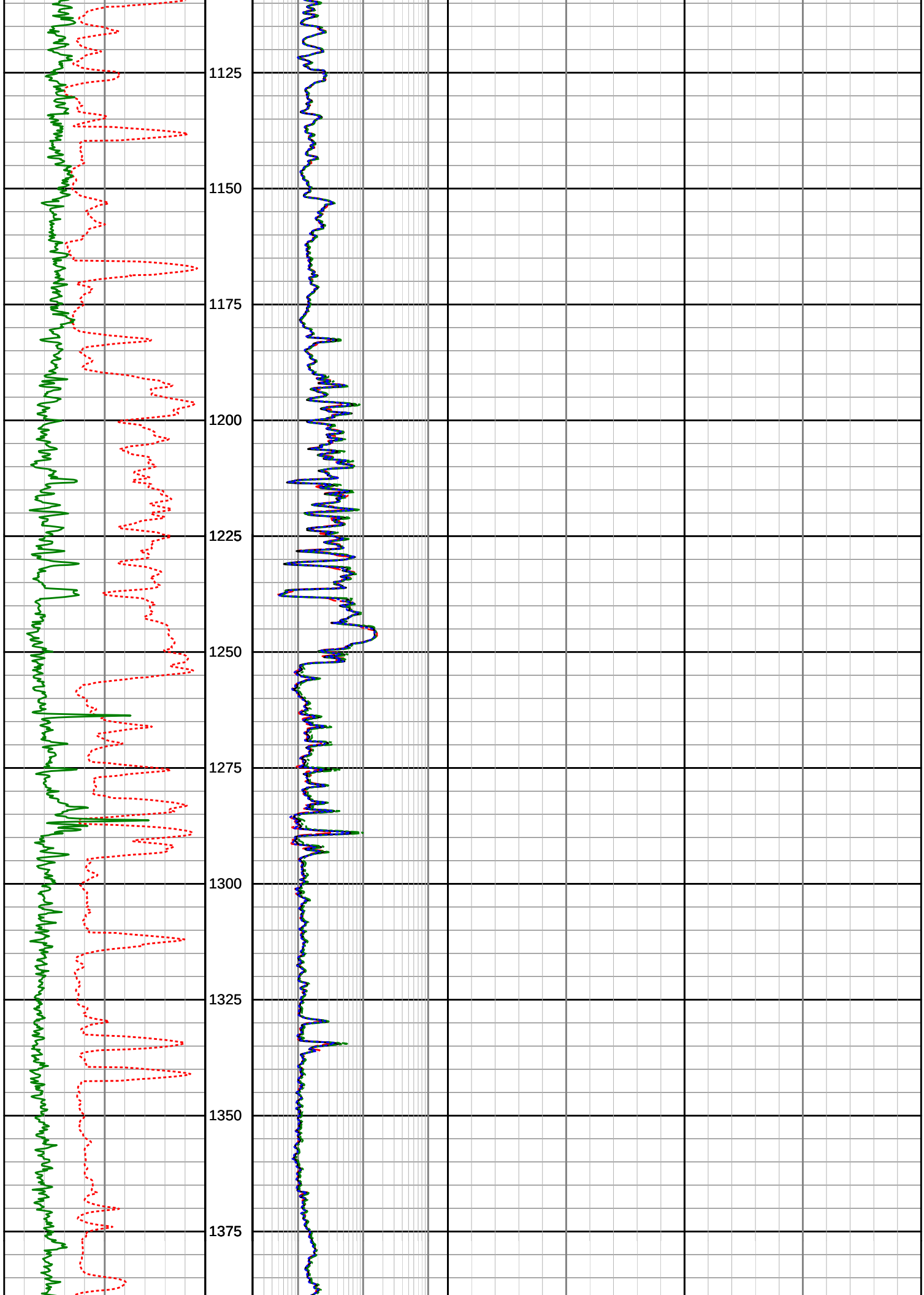
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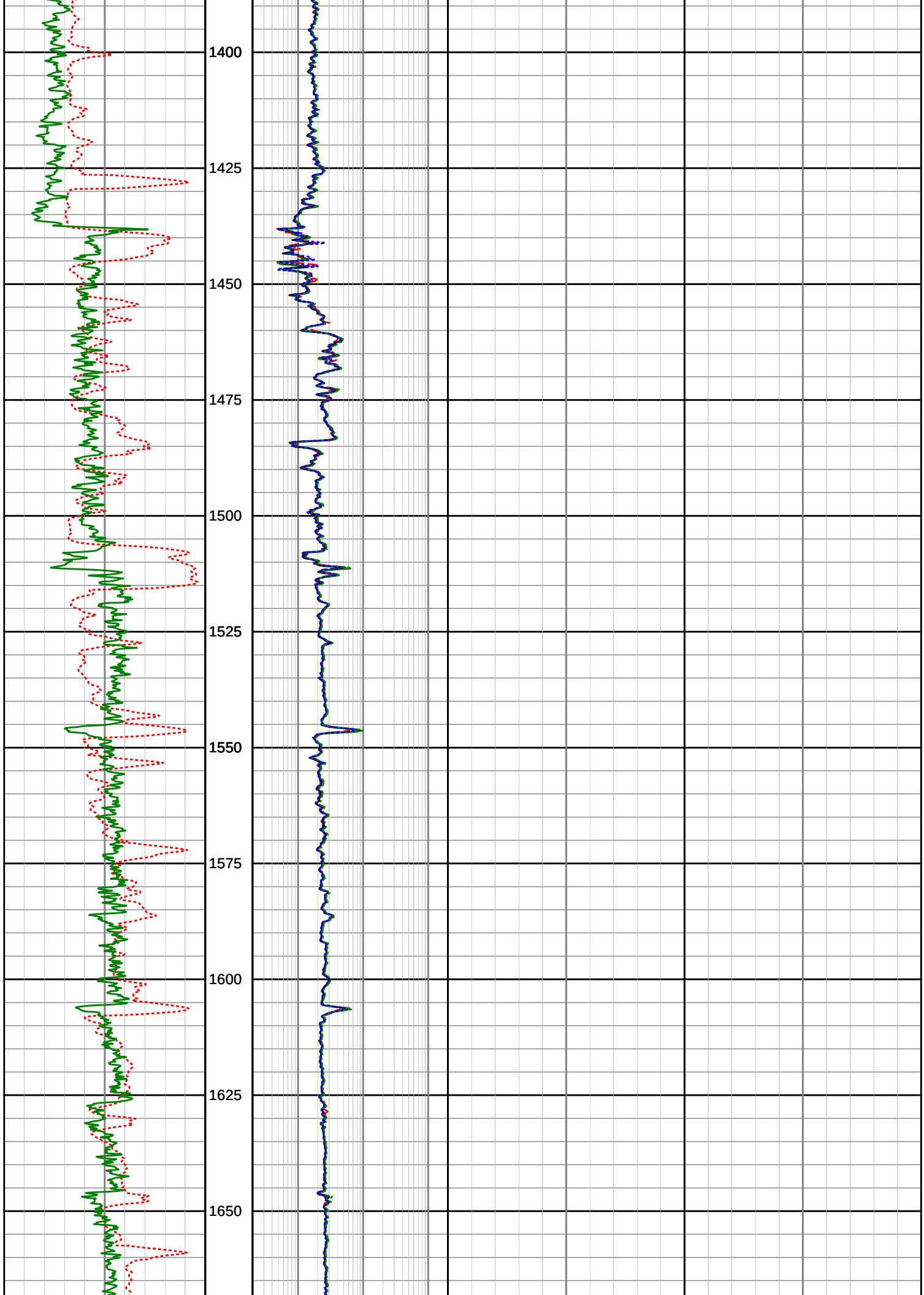
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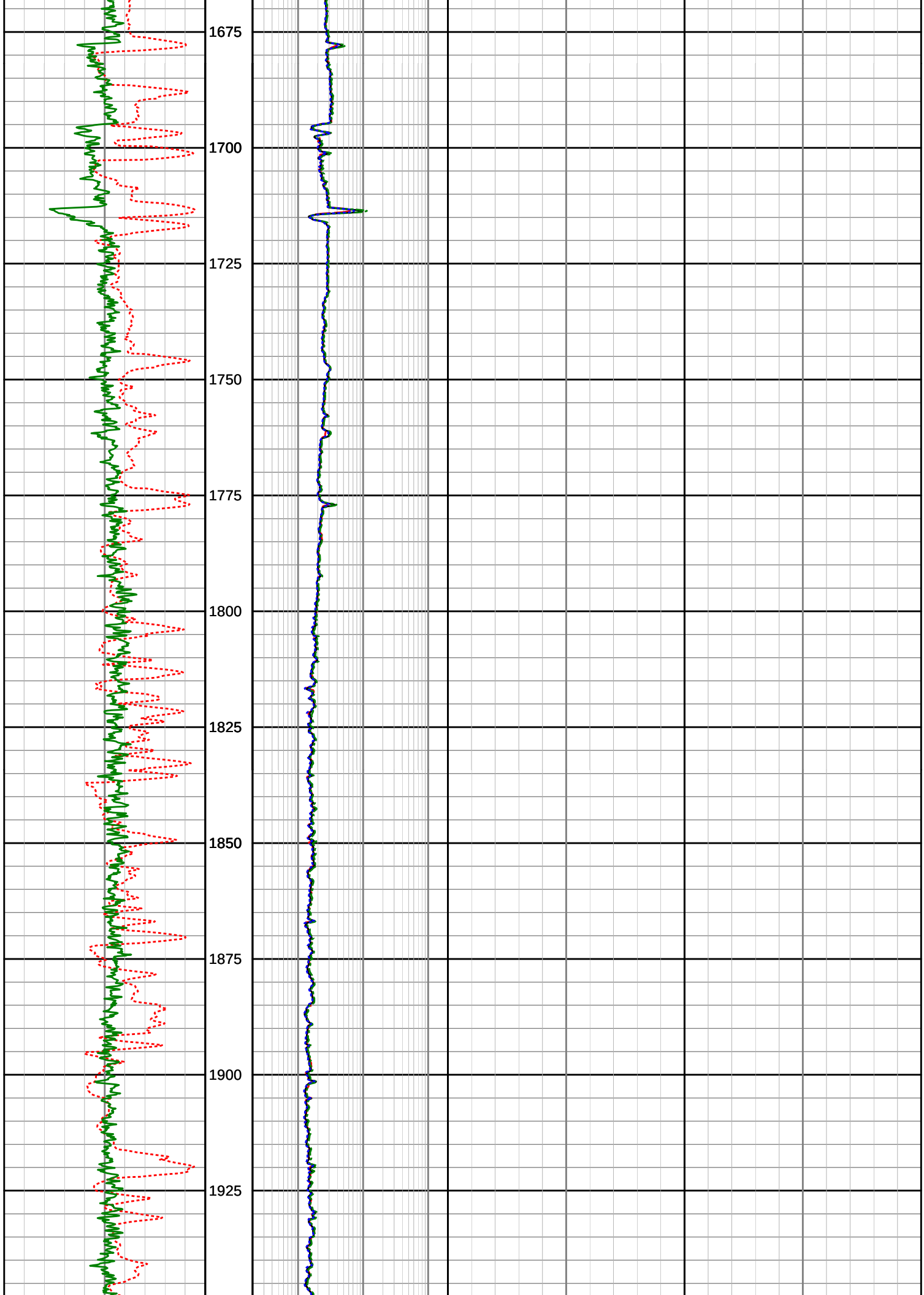
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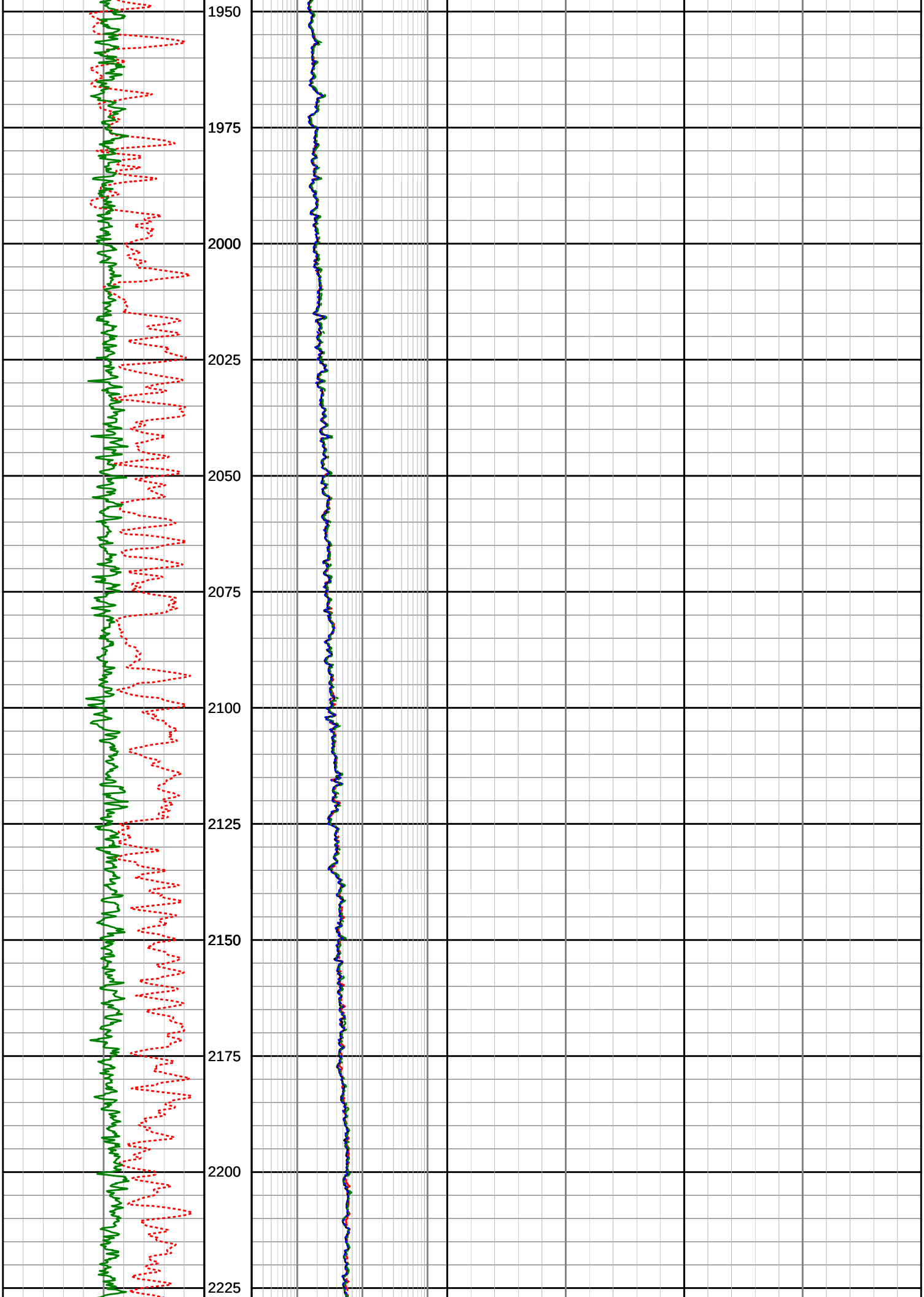
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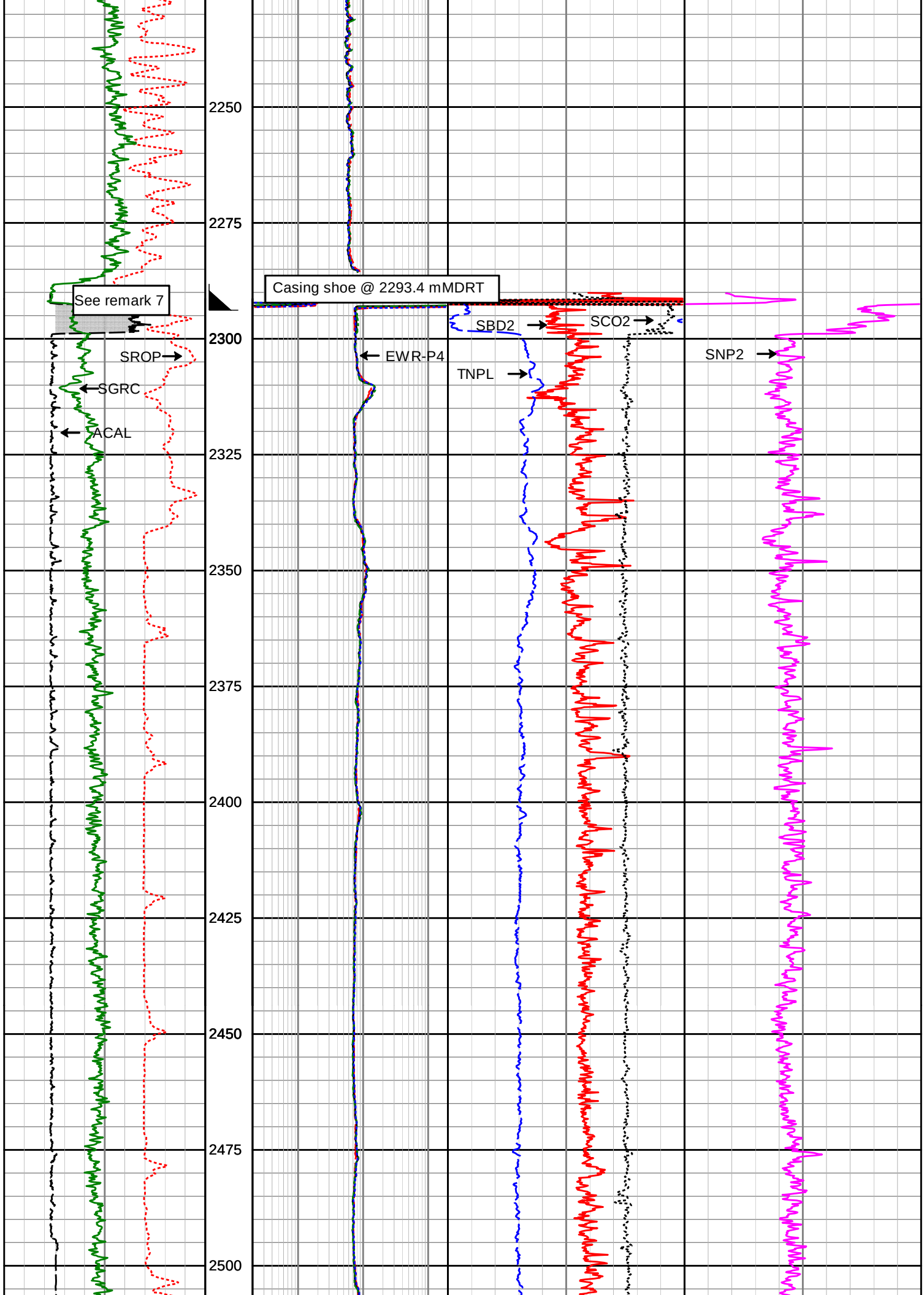
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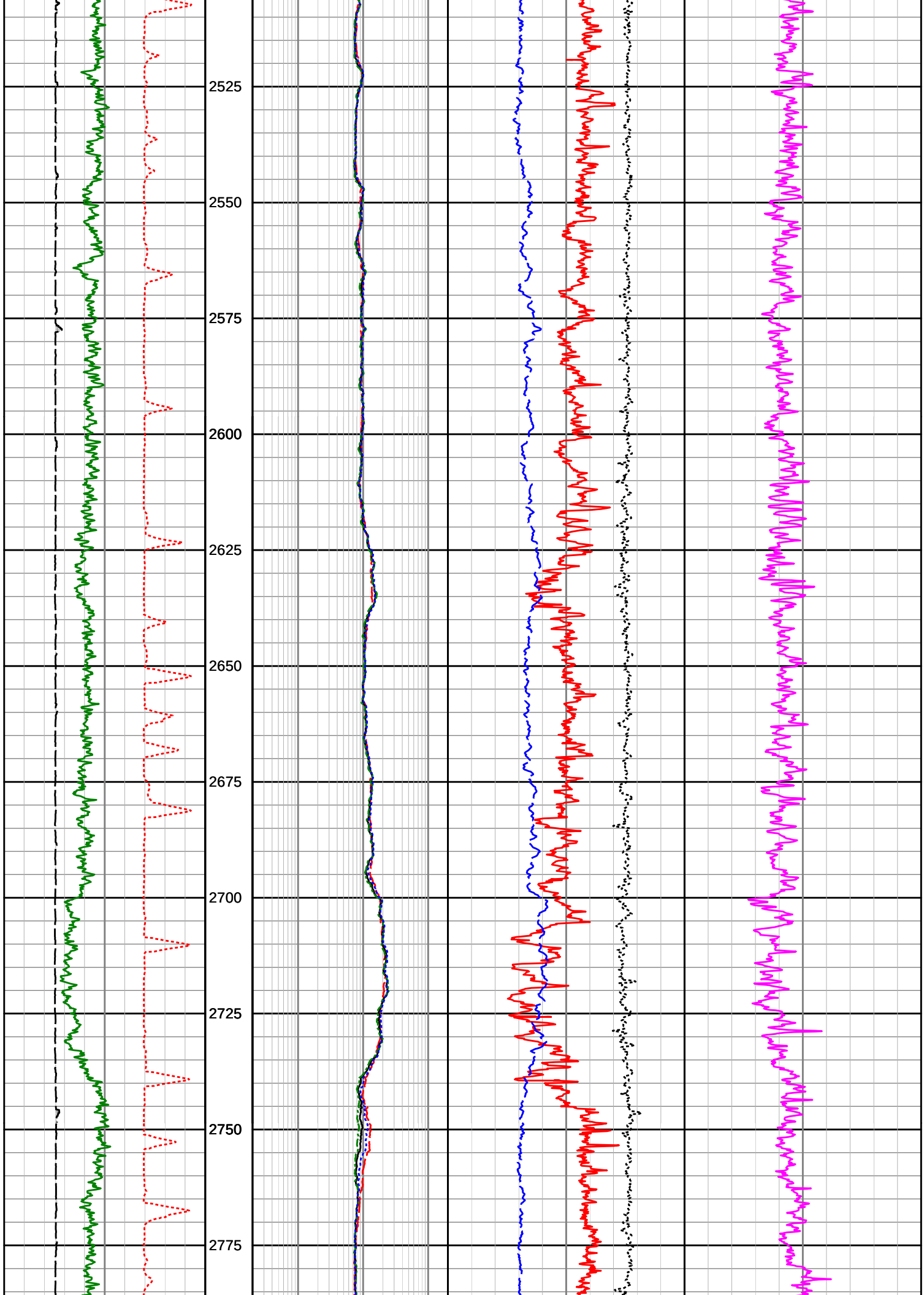
See remark 7
Casing shoe @ 2293.4 mMDRT
SROP
SGRC
ACAL
EWR-P4
SBD2
SCO2
TNPL
SNP2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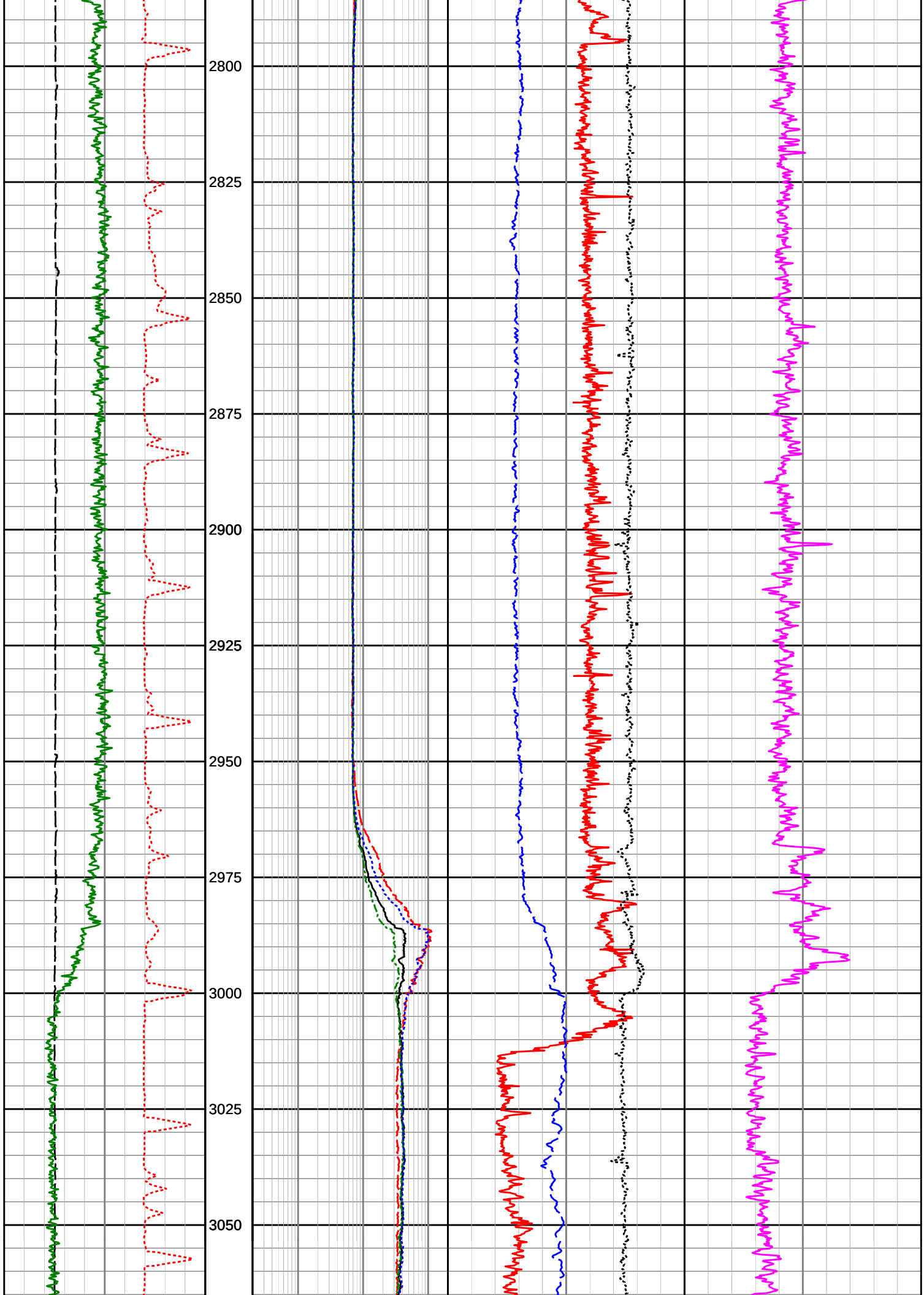
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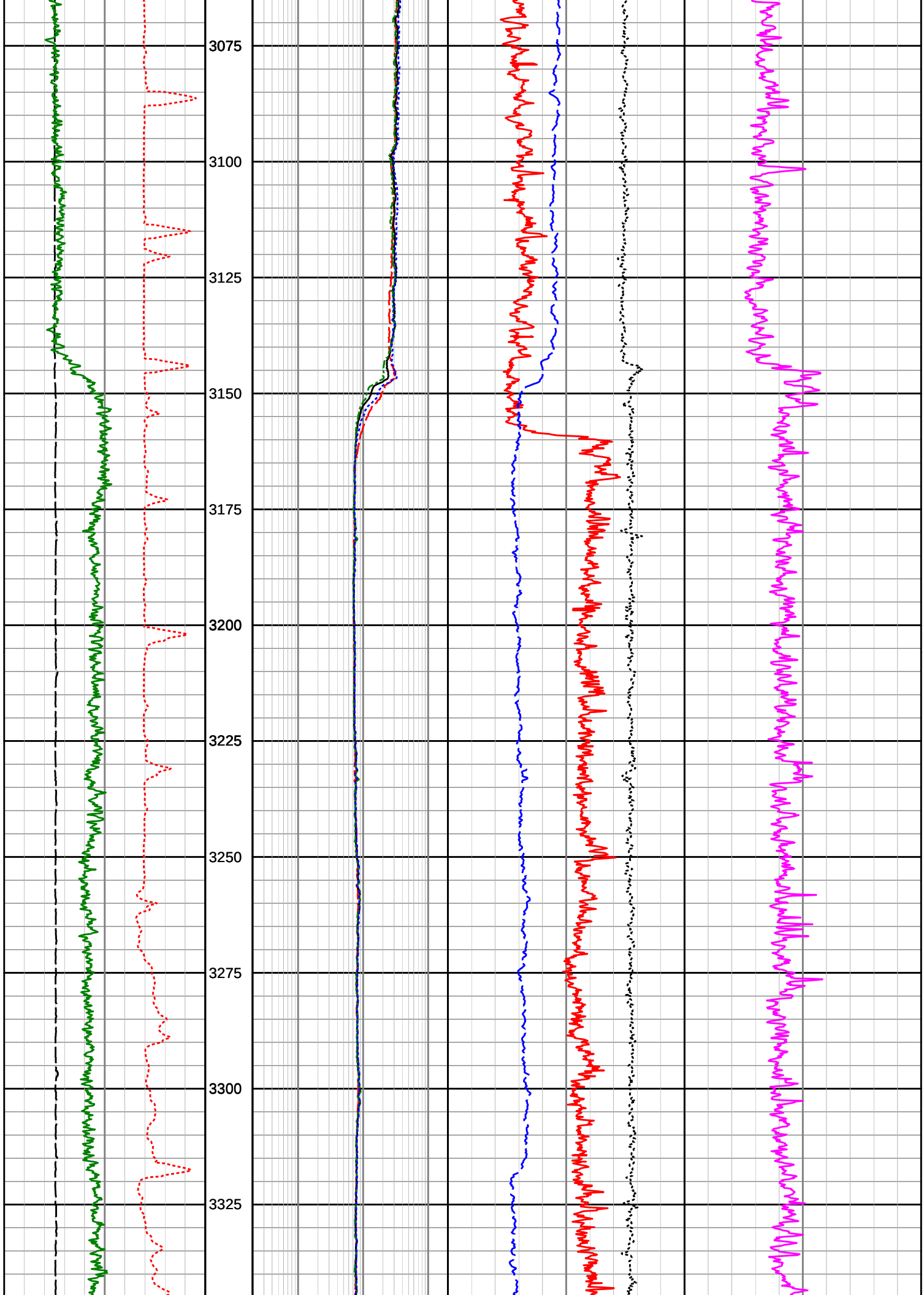
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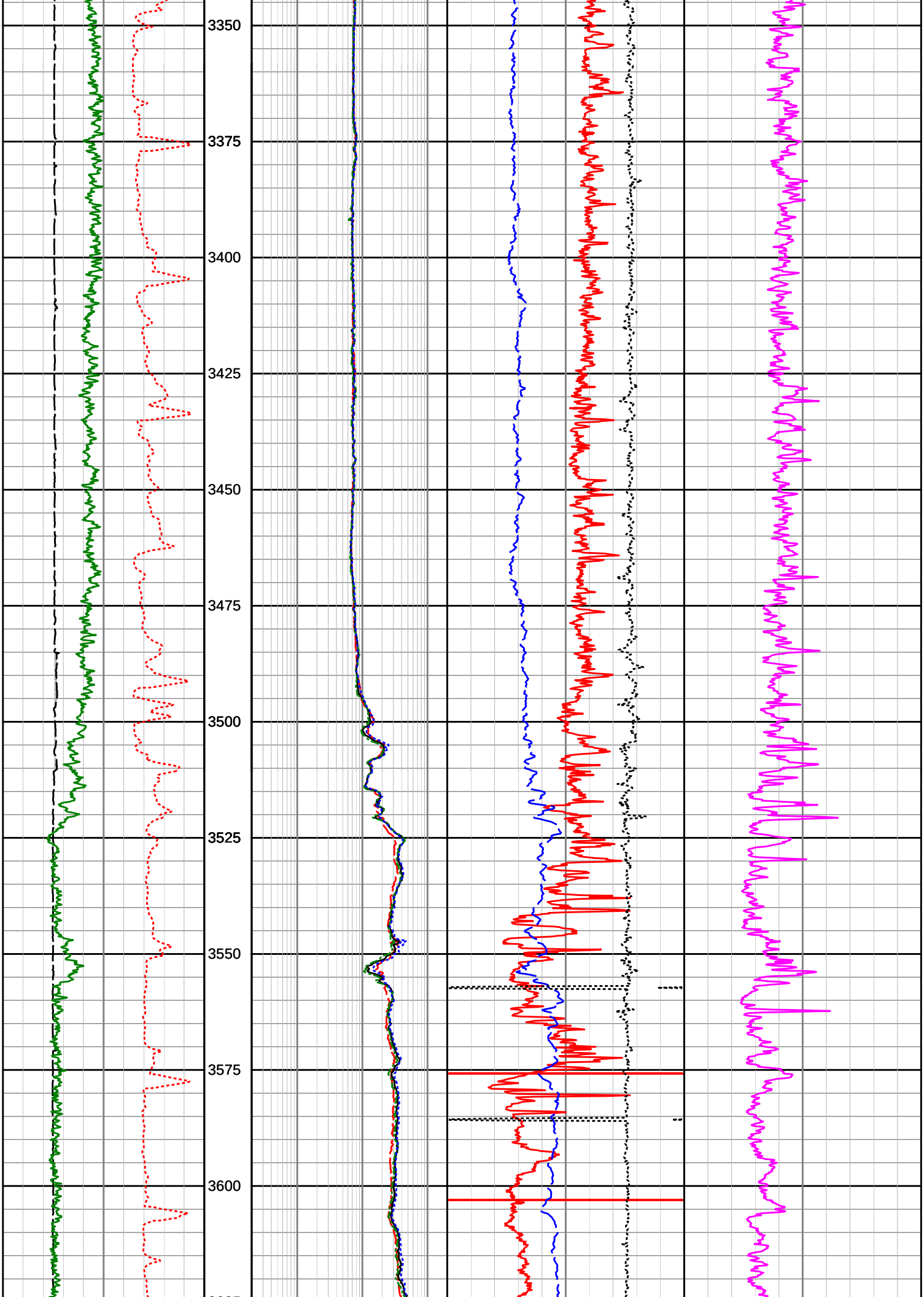
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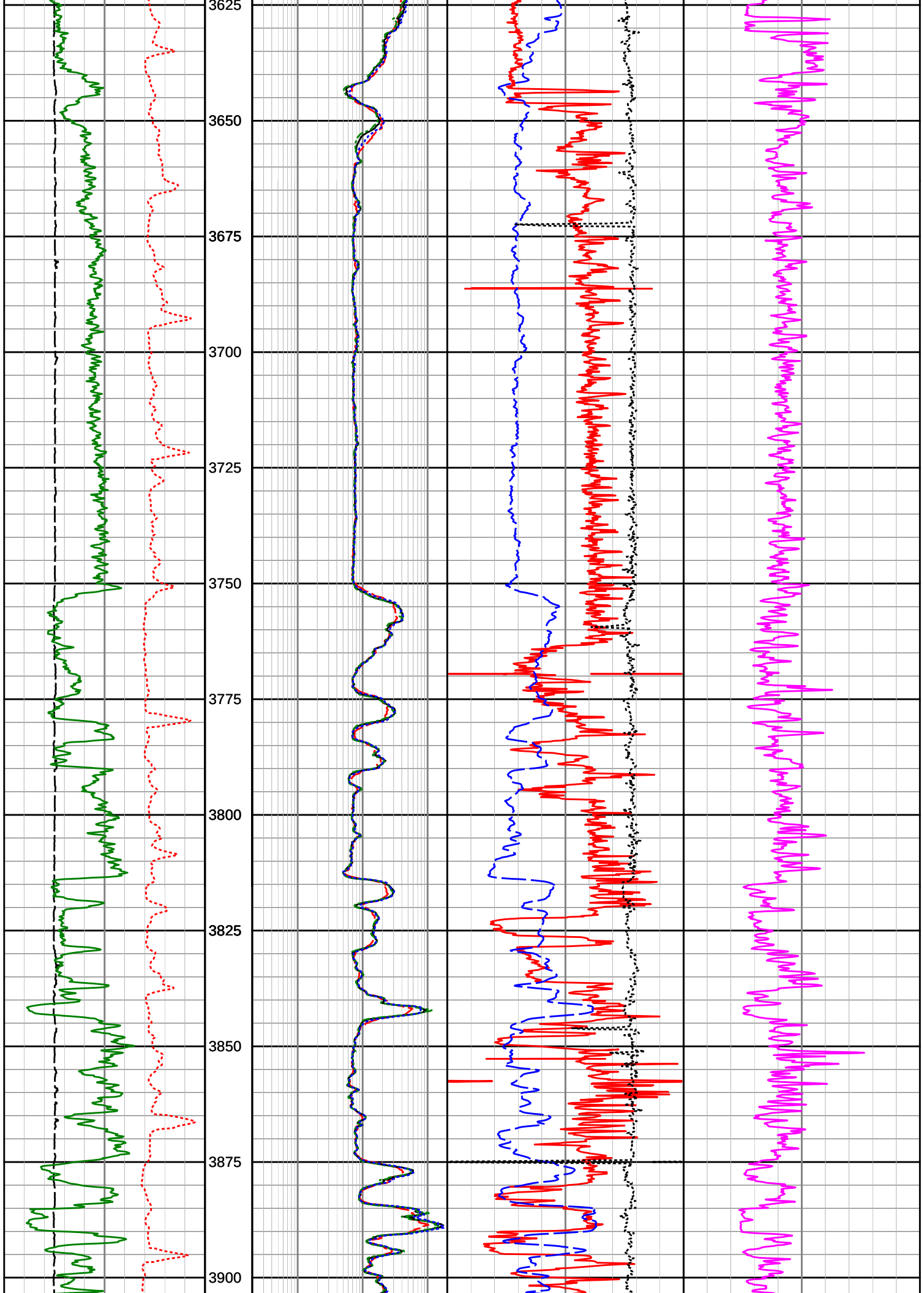
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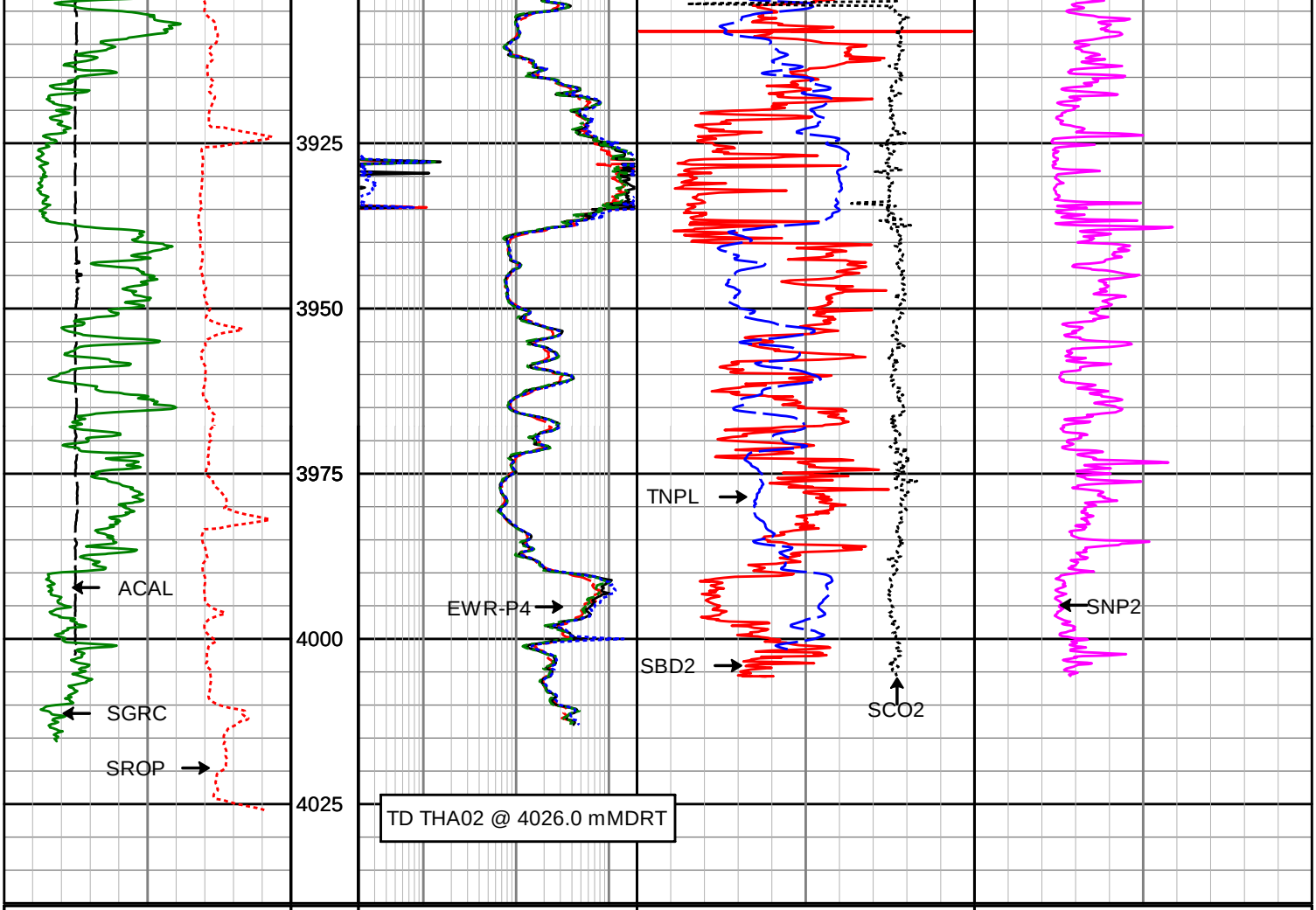


Gamma Ray (SGRC)	Depth	X-Shallow Phase Res (SEXP)	Neutron Porosity (TNPL)	Photoelectric Effect (SNP2)
0 — 200	MD	0.2 — 200	0.45 — -0.15	0 — 10
api	1:1000	ohmm	v/v	b/e

Rate of Penetration (SROP)	Shallow Phase Res (SESP)	Bulk Density (SBD2)
100 — 0	0.2 — 200	1.95 — 2.95
m/hr	ohmm	g/cc

Acoustic Caliper (ACAL)	Medium Phase Res (SEMP)	Standoff Correction (SCO2)
6 — 16	0.2 — 200	-0.75 — 0.25
inches	ohmm	g/cc

Deep Phase Res (SEDP)
0.2 — 200
ohmm

HALLIBURTON

DIRECTIONAL SURVEY REPORT

Woodside Energy Ltd
THA02
Thylacine
Tasmania
Australia
AU-FE-000393065
RT-LAT=50.5m
Surveys from 169.13m to 2229.34m are SUCOP and SAG Corrected
Surveys from 2259.31m to 2380.35m are SAG Corrected.
Surveys from 2409.42m to 3596.90m are Cazandra and SAG Corrected.
Surveys from 3625.86m to 3683.72m are SAG Corrected.

Surveys from 3712.66m to TD are SUCOP and SAG Corrected.

Measured Depth (metres)	Inclination (degrees)	Direction (degrees)	Vertical Depth (metres)	Latitude (metres)	Departure (metres)	Vertical Section (metres)	Dogleg (deg/30m)
0.000	0.00	0.00	0.000	0.000 N	0.000 E	0.000	TIE-IN
150.000	0.00	0.00	150.000	0.000 N	0.000 E	0.000	0.00
169.130	0.71	221.05	169.130	0.089 S	0.078 W	0.073	1.11
208.000	0.52	196.77	207.997	0.440 S	0.287 W	0.261	0.25
220.400	0.29	185.42	220.397	0.525 S	0.306 W	0.275	0.59
259.700	0.89	270.66	259.695	0.621 S	0.621 W	0.584	0.70
341.490	2.59	273.52	341.444	0.500 S	3.101 W	3.066	0.62
370.420	3.21	272.48	370.337	0.425 S	4.562 W	4.530	0.65
399.400	3.84	274.34	399.262	0.316 S	6.340 W	6.312	0.66
428.360	4.65	272.33	428.143	0.195 S	8.480 W	8.455	0.85
457.280	5.51	259.78	456.950	0.394 S	11.018 W	10.977	1.45
486.270	5.77	264.15	485.799	0.789 S	13.838 W	13.769	0.52
525.140	5.59	268.32	524.479	1.044 S	17.674 W	17.584	0.35
544.150	6.87	262.02	543.376	1.229 S	19.725 W	19.621	2.29
572.990	5.92	272.75	572.038	1.397 S	22.919 W	22.800	1.58
601.890	6.64	272.65	600.764	1.248 S	26.077 W	25.961	0.75
620.250	6.72	280.11	619.000	1.010 S	28.195 W	28.089	1.42
637.830	6.20	276.25	636.468	0.726 S	30.151 W	30.058	1.16
666.700	5.81	274.13	665.180	0.451 S	33.158 W	33.077	0.47
724.560	4.14	270.99	722.820	0.204 S	38.168 W	38.092	0.88
753.490	4.52	273.28	751.667	0.121 S	40.350 W	40.275	0.43
782.470	4.29	270.74	780.562	0.042 S	42.574 W	42.500	0.31
811.430	4.34	267.95	809.439	0.067 S	44.752 W	44.673	0.22
840.350	4.62	270.66	838.271	0.093 S	47.010 W	46.926	0.36
869.340	4.34	269.72	867.173	0.085 S	49.275 W	49.187	0.30
898.280	3.92	268.79	896.037	0.111 S	51.359 W	51.266	0.44
927.230	4.40	268.45	924.911	0.162 S	53.458 W	53.359	0.50
956.070	3.73	266.06	953.678	0.256 S	55.500 W	55.392	0.72
984.970	4.34	268.49	982.507	0.350 S	57.531 W	57.414	0.66
1013.890	4.16	272.00	1011.347	0.342 S	59.673 W	59.553	0.33
1042.820	4.06	274.94	1040.203	0.217 S	61.742 W	61.626	0.24
1071.770	3.93	261.43	1069.083	0.277 S	63.744 W	63.621	0.98
1100.720	4.17	266.35	1097.961	0.491 S	65.776 W	65.637	0.44
1129.600	4.49	268.53	1126.758	0.587 S	67.954 W	67.806	0.37
1158.570	5.03	274.87	1155.628	0.509 S	70.353 W	70.205	0.78
1187.500	6.72	277.51	1184.405	0.180 S	73.295 W	73.161	1.77
1216.400	7.21	278.85	1213.092	0.320 N	76.763 W	76.653	0.54
1274.310	7.49	272.32	1270.527	1.032 N	84.125 W	84.044	0.46
1303.240	7.51	269.23	1299.210	1.083 N	87.900 W	87.815	0.42
1332.210	7.47	270.49	1327.933	1.074 N	91.676 W	91.584	0.18
1361.320	8.41	273.97	1356.763	1.237 N	95.692 W	95.603	1.09
1390.210	9.62	275.12	1385.296	1.599 N	100.204 W	100.128	1.27
1419.150	9.54	275.91	1413.833	2.062 N	104.998 W	104.941	0.16
1448.060	9.40	274.75	1442.349	2.504 N	109.734 W	109.694	0.25
1476.990	9.05	273.21	1470.904	2.827 N	114.360 W	114.331	0.44
1505.900	8.41	272.71	1499.479	3.054 N	118.742 W	118.719	0.67
1534.850	8.28	270.88	1528.123	3.187 N	122.941 W	122.919	0.31
1563.740	8.34	272.11	1556.710	3.296 N	127.114 W	127.092	0.19
1592.670	8.65	273.85	1585.322	3.519 N	131.382 W	131.365	0.42
1621.600	8.77	273.02	1613.919	3.781 N	135.755 W	135.746	0.18
1650.500	8.90	271.30	1642.476	3.948 N	140.190 W	140.183	0.31
1679.430	9.29	270.16	1671.042	4.005 N	144.762 W	144.751	0.45
1708.390	9.95	271.28	1699.595	4.068 N	149.601 W	149.586	0.71
1737.350	13.61	273.91	1727.940	4.356 N	155.504 W	155.495	3.83
1766.320	14.48	273.78	1756.044	4.827 N	162.519 W	162.525	0.90
1795.250	18.77	275.16	1783.758	5.485 N	170.767 W	170.798	4.47
1824.140	21.92	277.04	1810.843	6.564 N	180.751 W	180.827	3.34
1853.060	24.85	276.60	1837.384	7.924 N	192.147 W	192.283	3.04
1882.070	26.96	269.43	1863.484	8.560 N	204.783 W	204.935	3.90
1911.030	30.94	270.57	1888.821	8.569 N	218.797 W	218.926	4.16
1939.980	35.09	272.02	1913.091	8.936 N	234.562 W	234.686	4.38
1968.910	38.21	272.59	1936.299	9.634 N	251.815 W	251.950	3.25
1997.860	41.94	273.44	1958.448	10.619 N	270.423 W	270.584	3.91
2026.790	45.44	272.99	1979.363	11.737 N	290.372 W	290.564	3.64
2055.710	48.46	272.75	1999.103	12.794 N	311.476 W	311.695	3.14
2084.640	51.86	272.71	2017.634	13.852 N	333.661 W	333.904	3.53

2110.880	54.91	272.40	2033.283	14.790 N	354.700 W	354.961	3.50
2142.550	59.40	274.22	2050.456	16.336 N	381.254 W	381.560	4.49
2171.490	64.94	274.96	2063.962	18.388 N	406.754 W	407.136	5.78
2200.390	65.78	275.15	2076.010	20.702 N	432.920 W	433.392	0.89
2229.340	69.94	274.26	2086.918	22.899 N	459.639 W	460.194	4.39
2259.310	73.39	274.89	2096.345	25.169 N	487.992 W	488.631	3.50
2287.290	73.01	274.85	2104.432	27.443 N	514.681 W	515.407	0.41
2295.600	72.83	274.15	2106.873	28.066 N	522.600 W	523.348	2.50
2324.710	74.76	273.81	2114.996	30.006 N	550.485 W	551.299	2.02
2353.600	77.11	274.62	2122.017	32.067 N	578.431 W	579.317	2.57
2380.350	80.82	275.67	2127.136	34.422 N	604.575 W	605.554	4.32
2409.420	83.75	281.32	2131.041	38.680 N	633.050 W	634.228	6.52
2440.380	86.54	283.47	2133.662	45.302 N	663.175 W	664.686	3.41
2469.290	89.57	284.75	2134.643	52.345 N	691.193 W	693.064	3.41
2497.930	92.66	285.85	2134.085	59.900 N	718.809 W	721.071	3.44
2527.130	93.22	285.11	2132.588	67.684 N	746.912 W	749.578	0.95
2556.060	93.09	282.07	2130.995	74.470 N	774.986 W	777.998	3.15
2584.990	93.16	278.76	2129.417	79.692 N	803.393 W	806.660	3.43
2613.890	92.85	276.08	2127.902	83.418 N	832.009 W	835.444	2.80
2642.820	92.60	275.29	2126.527	86.281 N	860.764 W	864.316	0.86
2671.780	90.50	275.95	2125.743	89.116 N	889.572 W	893.240	2.28
2700.740	90.75	275.69	2125.428	92.052 N	918.381 W	922.171	0.37
2729.710	90.50	276.17	2125.111	95.045 N	947.195 W	951.109	0.56
2758.640	90.07	275.82	2124.968	98.067 N	975.966 W	980.007	0.57
2786.010	89.20	277.60	2125.142	101.265 N	1003.146 W	1007.327	2.17
2816.450	88.53	274.82	2125.745	104.557 N	1033.399 W	1037.720	2.82
2843.560	89.08	272.77	2126.310	106.350 N	1060.442 W	1064.821	2.35
2872.880	88.15	274.77	2127.019	108.277 N	1089.688 W	1094.130	2.26
2901.720	87.41	276.08	2128.136	111.002 N	1118.377 W	1122.928	1.56
2932.300	87.66	276.72	2129.452	114.408 N	1148.738 W	1153.435	0.67
2961.250	88.53	273.72	2130.414	117.040 N	1177.548 W	1182.350	3.24
2990.180	88.22	277.49	2131.235	119.863 N	1206.323 W	1211.240	3.92
3019.100	87.97	275.06	2132.196	123.023 N	1235.052 W	1240.103	2.53
3048.030	87.91	276.60	2133.236	125.959 N	1263.812 W	1268.986	1.60
3076.970	88.77	276.21	2134.074	129.186 N	1292.559 W	1297.872	0.98
3105.940	89.21	275.52	2134.585	132.146 N	1321.373 W	1326.808	0.85
3134.880	90.81	275.69	2134.580	134.973 N	1350.174 W	1355.724	1.67
3162.220	91.73	274.81	2133.974	137.474 N	1377.392 W	1383.042	1.40
3191.150	91.43	273.46	2133.176	139.559 N	1406.235 W	1411.957	1.43
3220.270	91.24	272.90	2132.498	141.174 N	1435.302 W	1441.069	0.61
3248.910	91.43	272.30	2131.831	142.473 N	1463.905 W	1469.699	0.66
3277.480	91.74	270.72	2131.040	143.225 N	1492.453 W	1498.243	1.69
3308.520	91.55	267.86	2130.149	142.841 N	1523.474 W	1529.190	2.77
3335.970	91.86	267.23	2129.332	141.666 N	1550.887 W	1556.488	0.77
3366.390	91.67	267.91	2128.395	140.377 N	1581.265 W	1586.741	0.70
3395.360	91.42	268.54	2127.614	139.480 N	1610.210 W	1615.586	0.70
3424.310	91.73	269.11	2126.818	138.886 N	1639.143 W	1644.435	0.67
3452.270	91.18	270.09	2126.108	138.691 N	1667.093 W	1672.327	1.21
3481.190	90.62	271.42	2125.654	139.073 N	1696.006 W	1701.214	1.50
3510.200	91.36	270.88	2125.153	139.655 N	1725.006 W	1730.198	0.95
3539.050	90.68	268.43	2124.639	139.481 N	1753.848 W	1758.982	2.64
3568.540	90.62	269.75	2124.305	139.013 N	1783.332 W	1788.390	1.34
3596.900	87.47	267.06	2124.777	138.224 N	1811.671 W	1816.635	4.38
3625.860	83.38	266.72	2127.087	136.659 N	1840.490 W	1845.315	4.25
3654.780	79.21	266.22	2131.463	134.900 N	1869.016 W	1873.692	4.36
3683.720	74.37	265.83	2138.074	132.948 N	1897.114 W	1901.630	5.03
3712.660	69.09	265.58	2147.144	130.892 N	1924.509 W	1928.859	5.48
3741.630	66.06	268.24	2158.195	129.442 N	1951.242 W	1955.464	4.04
3770.600	61.26	267.44	2171.046	128.467 N	1977.178 W	1981.300	5.03
3799.550	57.17	268.95	2185.860	127.677 N	2002.030 W	2006.064	4.45
3824.400	54.02	268.15	2199.900	127.161 N	2022.524 W	2026.493	3.89
3857.310	49.28	270.04	2220.315	126.740 N	2048.320 W	2052.222	4.53
3886.190	47.08	270.46	2239.570	126.832 N	2069.841 W	2073.712	2.31
3915.140	45.75	270.18	2259.529	126.950 N	2090.810 W	2094.653	1.39
3944.070	44.63	271.10	2279.918	127.178 N	2111.332 W	2115.154	1.34
3973.050	42.59	270.42	2300.899	127.445 N	2131.318 W	2135.122	2.17
4001.930	41.91	270.87	2322.277	127.663 N	2150.735 W	2154.519	0.77
4017.670	41.94	269.81	2333.988	127.726 N	2161.251 W	2165.021	1.35
4026.000	41.94	269.81	2340.184	127.707 N	2166.818 W	2170.578	0.00

CALCULATION BASED ON MINIMUM CURVATURE METHOD

SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT
TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT

VERTICAL SECTION RELATIVE TO WELL HEAD
VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 273.32 DEGREES (GRID)
A TOTAL CORRECTION OF 12.31 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 4026.000 METRES
IS 2170.579 METRES ALONG 273.37 DEGREES (GRID)

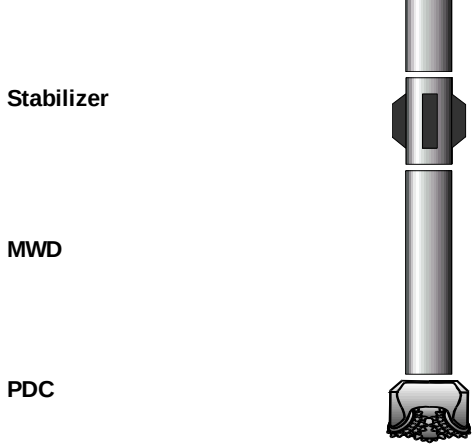
Date Printed:03 October 2006

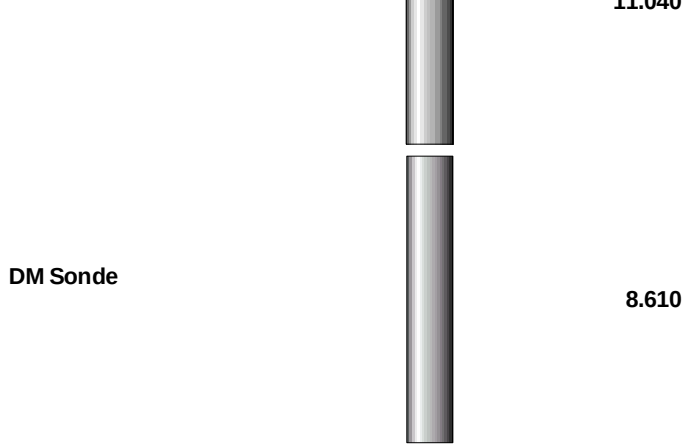
MWD RUN 300 - BHA

	Component Length (m)
Heavy Weight	58.120
X-Over Sub	1.380
Spiral Drill Collar	17.310
Jar	9.630
Spiral Drill Collar	35.850
Float Sub	.770
Non-Magnetic	8.580
MWD	14.36
Flex	2.810

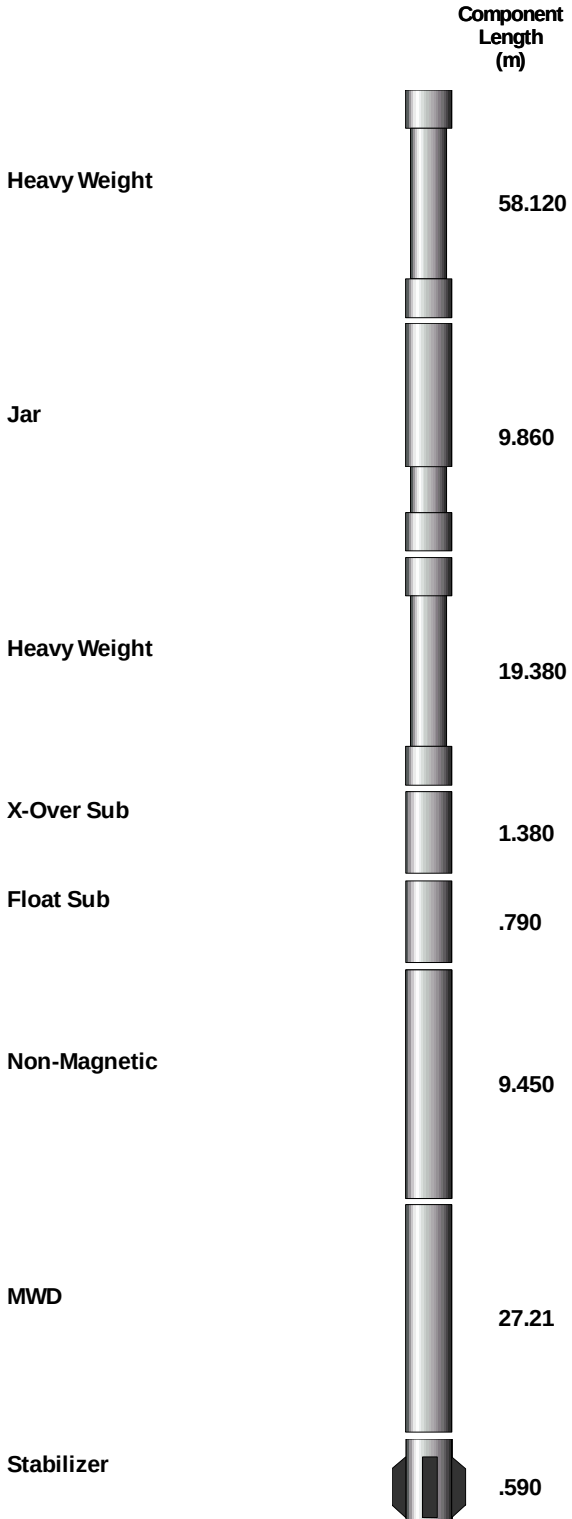
MWD RUN 300 - MWD

	Sensor Measure Point Distance To Bit (m)
Positive Pulser	
TM	
HCIM Insert	
PWD Insert	15.900
EWR-P4 Insert	13.400
DGR Insert	11.040

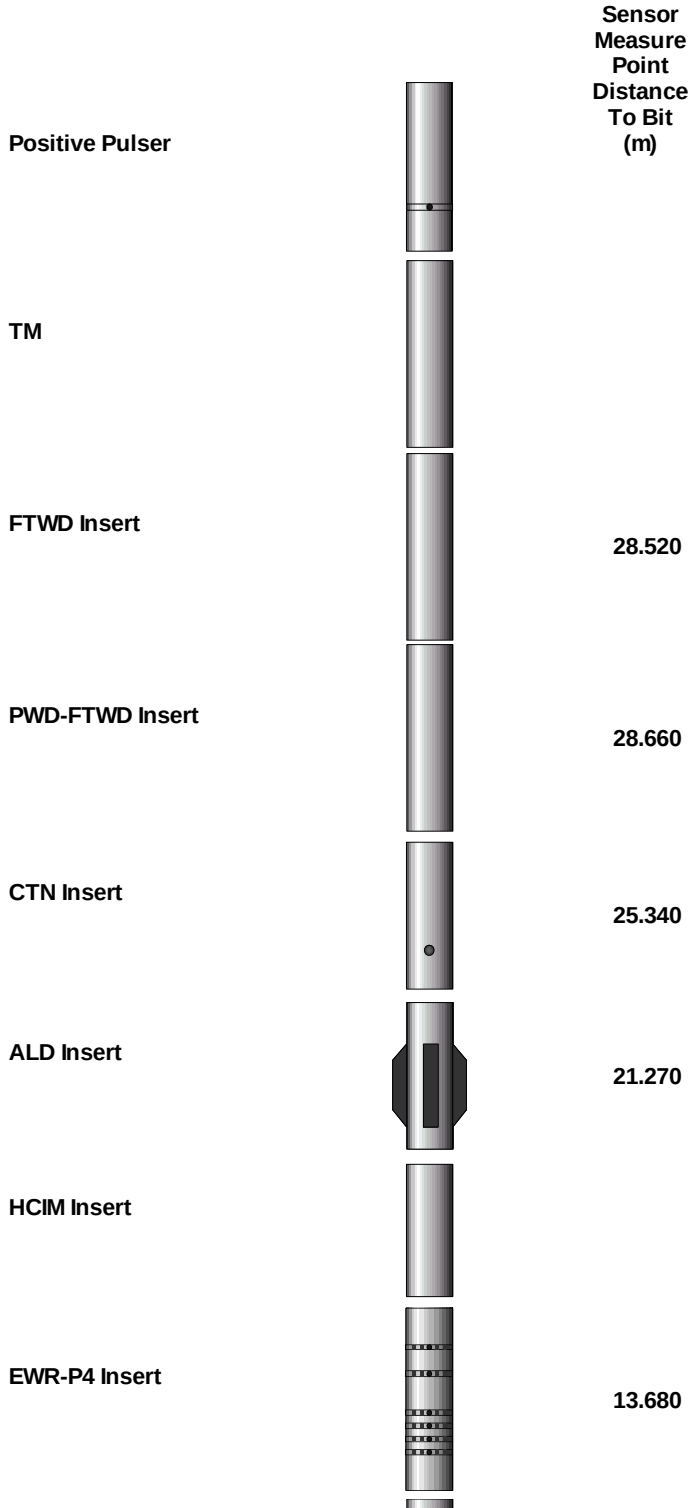


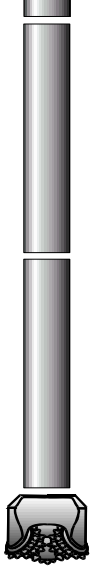


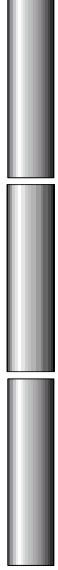
MWD RUN 400 - BHA



MWD RUN 400 - MWD

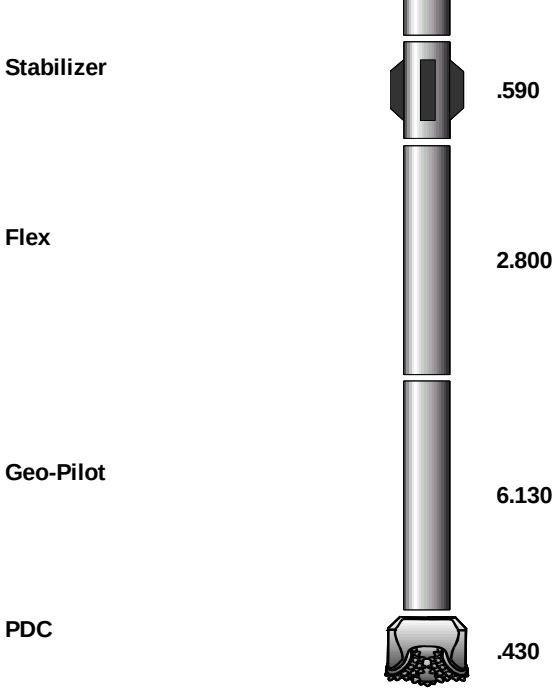






MWD RUN 500 - BHA

MWD RUN 500 - MWD


Stabilizer
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Flex
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Geo-Pilot
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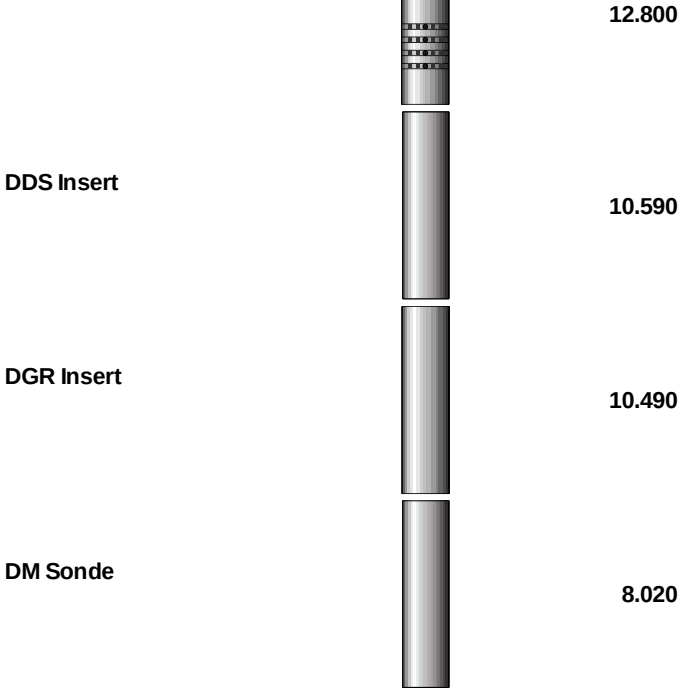
PDC
.430


12.800
DDS Insert
10.590
DGR Insert
10.490
DM Sonde
8.020

HALLIBURTON

ALD Azimuthal Lithodensity
CTN Compensated Thermal Neutron
DGR Dual Gamma Ray
EWR-Phase 4
ACAL Acoustic Caliper

Powered by INSITE™

1 : 1000

Sperry Drilling Services

Country	: **Australia**
Field	: **Thylacine**
Location	: **39° 14' 14.47" South GDA94** **142° 54' 7.58" East GDA94**
Well	: **THA02**
Company	: **Woodside Energy Ltd**
Rig	: **Maersk Guardian**

Company : **Woodside Energy Ltd**
Rig : **Maersk Guardian**
Well : **THA02**
Field : **Thylacine**
Country : **Australia**
DOE Number :

LOCATION
Latitude : **39° 14' 14.47" South GDA94**
Longitude : **142° 54' 7.58" East GDA94**
UTM Easting = 664,161.0 m
UTM Northing = 5,655,159.6 m

Other Services
Directional Drilling

Permanent Datum : **LAT** Elevation : **0.00 m**
Log Measured From : **Drill Floor** **50.50 m** Above Permanent Datum
Drilling Measured From : **Drill Floor**

TVD LOG

Elev. KB
DF **50.50**
GL
WD **99.30 m**

Depth Logged : **636.64 m** To **2,340.18 m**
Date Logged : **20-May-06** To **17-Jun-06**
Total Depth MD : **4,026.00 m** TVD : **2,340.18 m**
Spud Date : **20-May-06**

Unit No. : **SSDS-40** Job No. : **AU-FE-0003930658**
Plot Type : **Final**
Plot Date : **28-Sep-06**

Run No.	Borehole Record (TVD) Size	From	To
1	762.000 mm	149.80 m	219.89 m
2	584.000 mm	219.89 m	636.64 m
3	311.000 mm	636.64 m	2,107.87 m
4	216.000 mm	2,107.87 m	2,125.16 m
5	216.000 mm	2,125.16 m	2,340.18 m

Run No.	Borehole Record (TVD) Size	From	To

Casing Record (TVD) Size	Weight	From	To
660.000 mm	397.68 kgpm	149.80 m	219.90 m
473.000 mm	139.89 kgpm	149.80 m	631.67 m
244.000 mm	70.00 kgpm	149.80 m	2,106.22 m

WELL INFORMATION

MWD Run Number	300	400	500
Date run completed	04-Jun-06	12-Jun-06	17-Jun-06
Rig Bit Number	3	4	5
Bit Size (mm)	311	216	216
Tool Nominal OD (mm)	203	171	171
Log Start Depth (TVD, m)	636.64	2107.87	2125.16
Log End Depth (TVD, m)	2107.87	2125.16	2340.18
Drill or Wipe	Drilling	Drilling	Drilling
Drill/Wipe Start Date and Time	30-May-06 20:00	08-Jun-06 00:05	13-Jun-06 16:15
Drill/Wipe End Date and Time	03-Jun-06 06:57	12-Jun-06 07:45	16-Jun-06 00:15
Min Inc (deg) @ Depth (TVD, m)	3.73 @ 650.61	72.83 @ 1,508.07	41.91 @ 2,777.31
Max Inc (deg) @ Depth (TVD, m)	73.39 @ 1,481.07	93.22 @ 1,680.29	91.36 @ 2,411.54
Bit TFA(in2) / Bit Type	1.83 / SEC FMF3653Z	1.11 / SEC FMF3653Z	1.11 / SEC FMF3653Z
Flow Rate (gpm)	1050	730	725
Max AV (mpm) / CV (mpm) @ MWD	117.5 / 131.0	207.0 / 181.8	201.6 / 155.4
Fluid Type	Synteq	Synteq	Synteq
Density (sg) / Viscosity (spl)	1.25 / 84.5	1.26 / 93.0	1.26 / 74.0
Filtrate CL (ppm)	25,355	38,842	36,912
pH / Fluid Loss (mptm)	N/A / 2.0	N/A / 3.0	N/A / 2
PV (cP) / YP (pa)	38 / 13.89	42 / 17.28	35 / 11.49
% Solids / % Sand	13.7 / 5.0	14.8 / 0.3	13.9 / 0.3
% Oil / Oil:Water Ratio	60.5 / 72:28	62.5 / 75:25	65.0 / 77:23
Rm @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A	N/A @ N/A
Rmf @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A	N/A @ N/A
Rmc @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A	N/A @ N/A
Max Tool Temp (degC) / Source	96 / EWR-P4	109 / EWR-P4	112 / EWR-P4
Rm @ Max Tool Temp (degC)	N/A @ 96	N/A @ 109	N/A @ 112
Lead MWD Engineer	P. King	M. Lee	M. Lee
Customer Representative	D. Rota	S. Corless	S. Corless

SENSOR INFORMATION

Downhole Processor Information

Tool Type	HCIM	HCIM	HCIM		
Software Version	68.18	72.13	72.13		
Sub Serial Number	152862	43987	43987		
Insert Serial Number	134502	161828	161828		
Date and Time Initialized	30-May-06 01:52	08-Jun-06 14:12	13-Jun-06 02:33		
Date and Time Read	04-Jun-06 04:50	12-Jun-06 23:24	19-Jun-06 14:10		

Directional Sensor Information

Tool Type	DM	DM	DM		
Distance From Bit (m)	8.61	8.92	8.02		
Software Version	3.15	3.15	3.15		
Sub Serial Number	CP1015763	CP919968	CP772990		
Sonde Serial Number	133447	133447	185534		
Sensor ID Number	N/A	N/A	N/A		
Toolface Offset (deg)	N/A	N/A	N/A		

Gamma Ray Sensor Information

Tool Type	DGR	DGR	DGR		
Distance From Bit (m)	11.04	11.37	10.49		
Recorded Sample Period (sec)	12	14	14		
Software Version	N/A	N/A	N/A		
Sub Serial Number	10718409	144358	144358		
Insert/Sonde Serial Number	172498	50437	50437		

Resistivity Sensor Information

Tool Type	EWR-P4	EWR-P4	EWR-P4		
Distance From Bit (m)	13.40	13.68	12.80		
Recorded Sample Period (sec)	14	14	14		
Software Version	1.38	1.38	1.38		
Sub Serial Number	37661	136366	136366		
Receiver Insert Serial Number	205859	61101	61101		
Transmitter Insert Serial Number	151389	77011	77011		
Receiver Orientation	Down	Down	Down		

Neutron Sensor Information

Tool Type		CTN	CTN		
Distance From Bit (m)		25.34	24.46		
Recorded Sample Period (sec)		20	20		
Sub Serial Number		10603697	10603697		
Insert Serial Number		192981	192981		
Source Serial Number		0102NN	0102NN		
Source Factor		N/A	N/A		
Pin Orientation		Up	Up		

Density Sensor Information

Tool Type		ALD	ALD		
Distance From Bit (m)		21.27	20.39		
Recorded Sample Period (sec)		20	20		
Software Version		2.13	2.13		
Sub Serial Number		10718174	10718174		
Insert Serial Number		215918	215918		
Sensor ID Number		32081	32081		
Source Serial Number		2434GW	2434GW		
Pin Orientation		Up	Up		

Stabilizer Blade O.D. (mm)		209.550	209.550		
DPA Offset		132.00	211.50		

Caliper Sensor Information

Tool Type		ACAL	ACAL		
Distance From Bit (m)		24.28	23.40		
Software Version		2.05	2.05		
Sub Serial Number		10603697	10603697		
Insert Serial Number		192981	192981		

REMARKS

1.) All depths are bit depths and are referenced to the driller's pipe tally unless otherwise noted.

2.) AV/CV values are calculated at the LWD collar using the Bingham Plastic Model for oil based mud, measured in m/min.

3.) Curve Mnemonics used are:

SGRC - Smoothed Combined Gamma Ray, api
SROP - Smoothed Rate of Penetration, m/hr
SEXP - Smoothed Extra-Shallow Phase Resistivity, ohm-metre
SESP - Smoothed Shallow Phase Resistivity, ohm-metre
SEMP - Smoothed Medium Phase Resistivity, ohm-metre
SEDP - Smoothed Deep Phase Resistivity, ohm-metre
ACAL - Smoothed Acoustic Caliper Hole Size, inches
SCO2 - Smoothed Low Count Rate Stand Off Correction, g/cc
SBD2 - Smoothed Low Count Rate Bulk Density, g/cc
SNP2 - Smoothed Near Detector Pe, b/e
TNPL - Smoothed Compensated Thermal Neutron Porosity (LS), v/v

4.) CTN data has been processed using the following parameters and is based on Limestone matrix:

MW = 1.25 - 1.26 sg
Formation Salinity = 15,000 ppm Cl
Mud Salinity = 38,842 - 41,902 ppm Cl
Matrix Density = 2.71 g/cc
Fluid Density = 1.00 g/cc

5.) CTN data has been reprocessed using hole size derived from the Acoustic Caliper tool.

6.) Caliper data presented from 2106.11 to 2134.24 mTVDRT is Hole Size Indicator from the ALD tool.

WARRANTY

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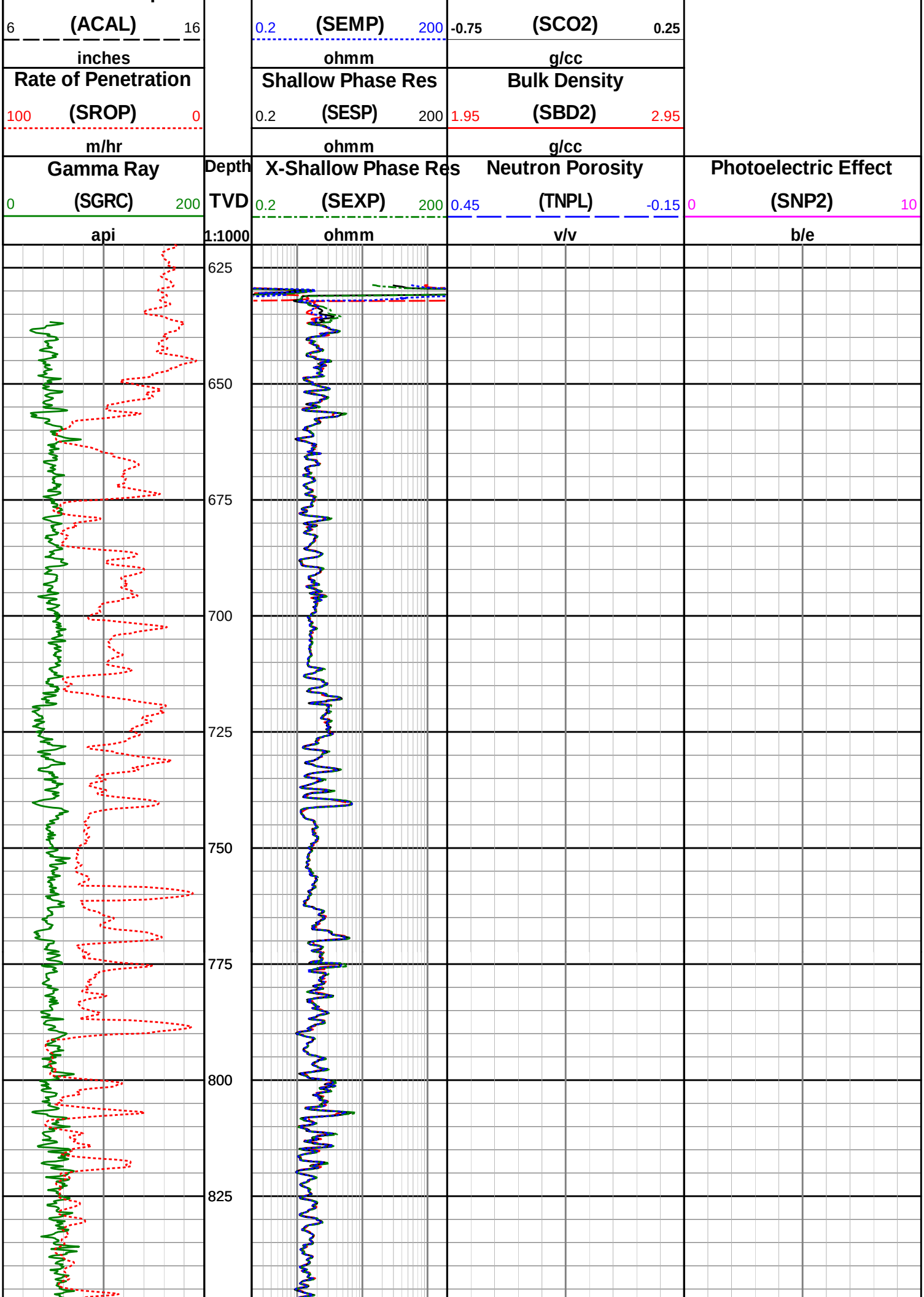
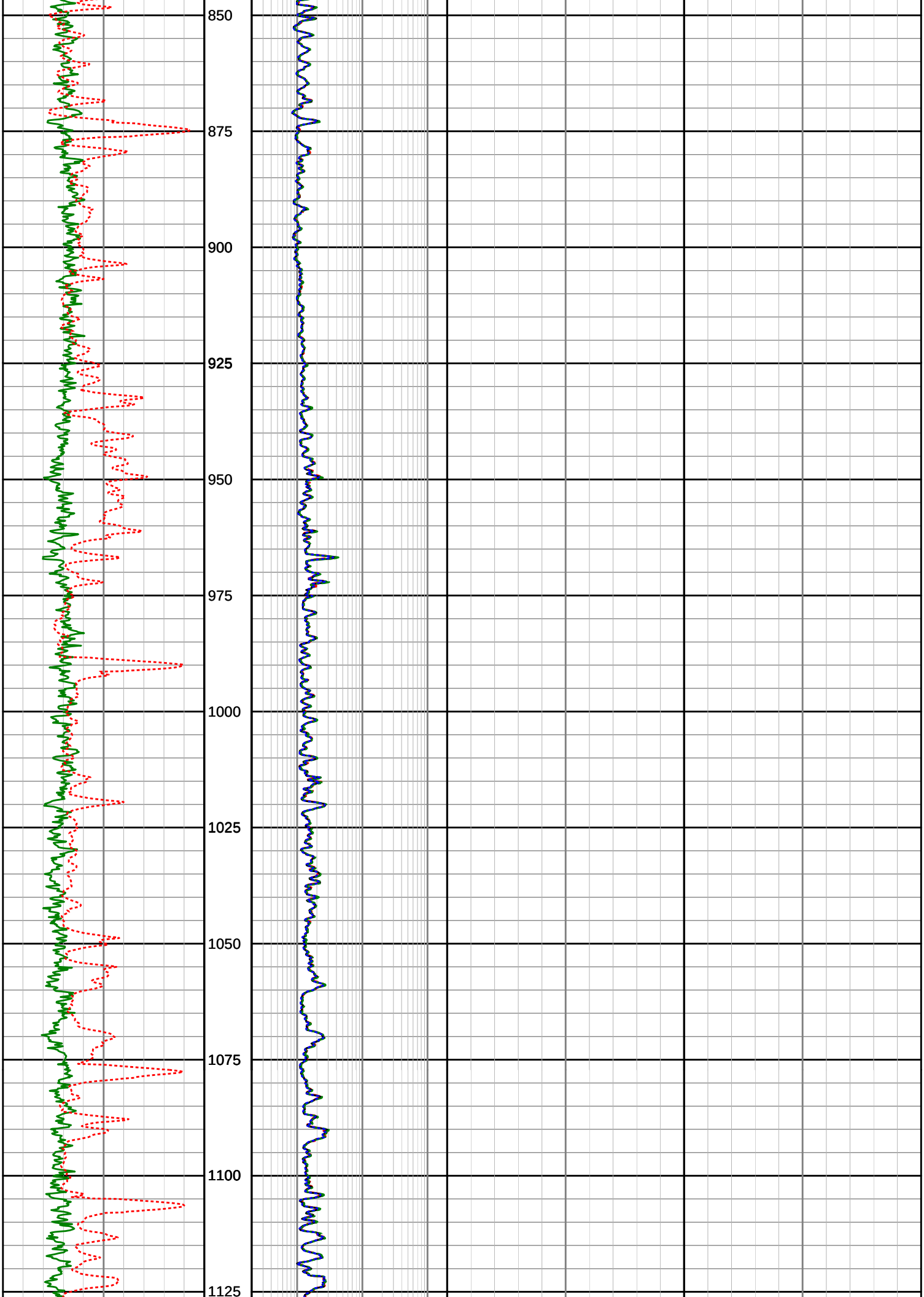
	Deep Phase Res (SEDP) 0.2 – 200 ohmm	
Acoustic Caliper	**Medium Phase Res**	**Standoff Correction**


6 (ACAL) 16
inches
Rate of Penetration
100 (SROP) 0
m/hr
Gamma Ray
0 (SGRC) 200
api
Depth
TVD
1:1000
0.2 (SEMP) 200
ohmm
Shallow Phase Res
0.2 (SESP) 200
ohmm
X-Shallow Phase Res
0.2 (SEXP) 200
ohmm
-0.75 (SCO2) 0.25
g/cc
Bulk Density
1.95 (SBD2) 2.95
g/cc
Neutron Porosity
0.45 (TNPL) -0.15
v/v
Photoelectric Effect
0 (SNP2) 10
b/e
625
650
675
700
725
750
775
800
825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925
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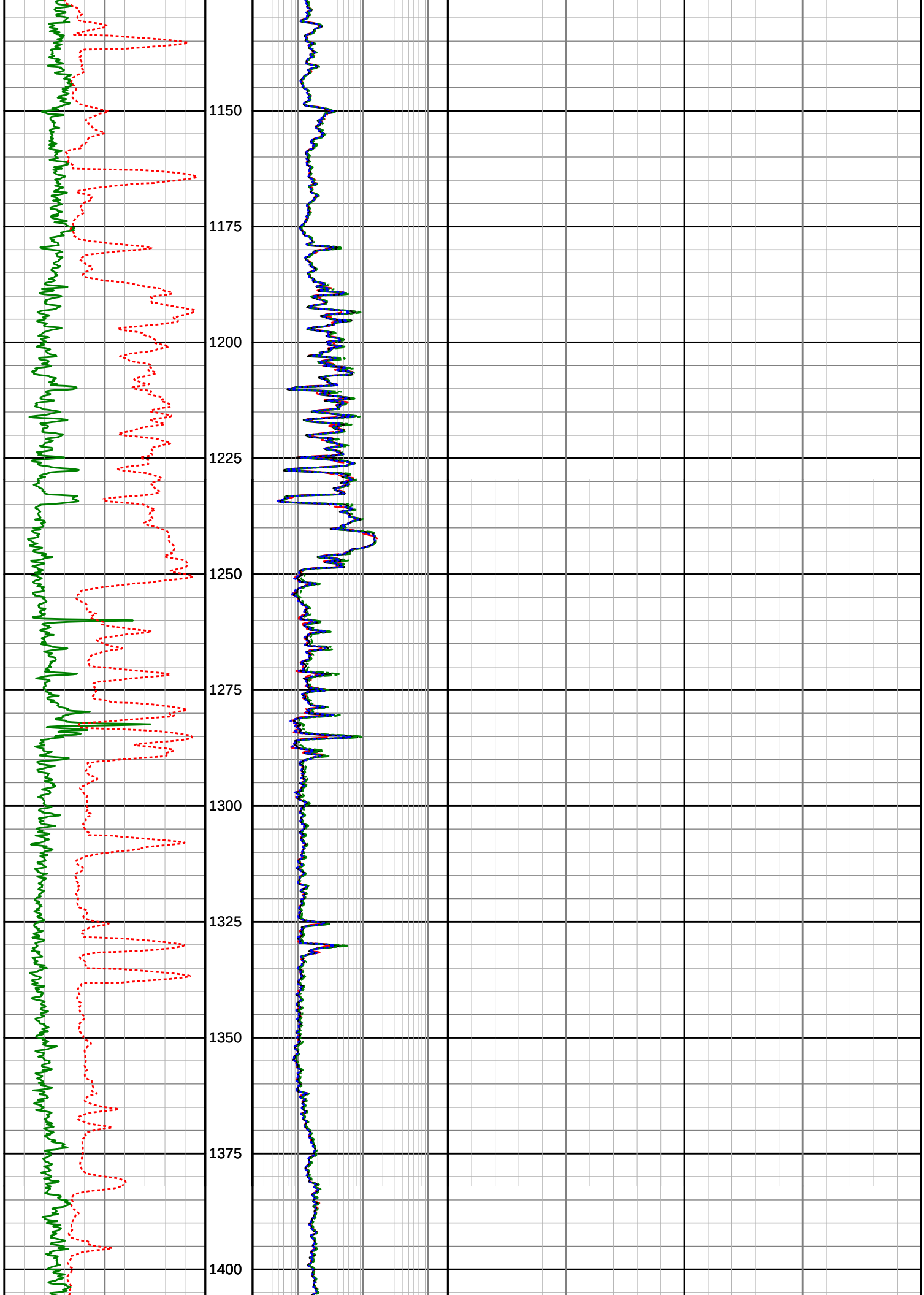
1075
1100
1125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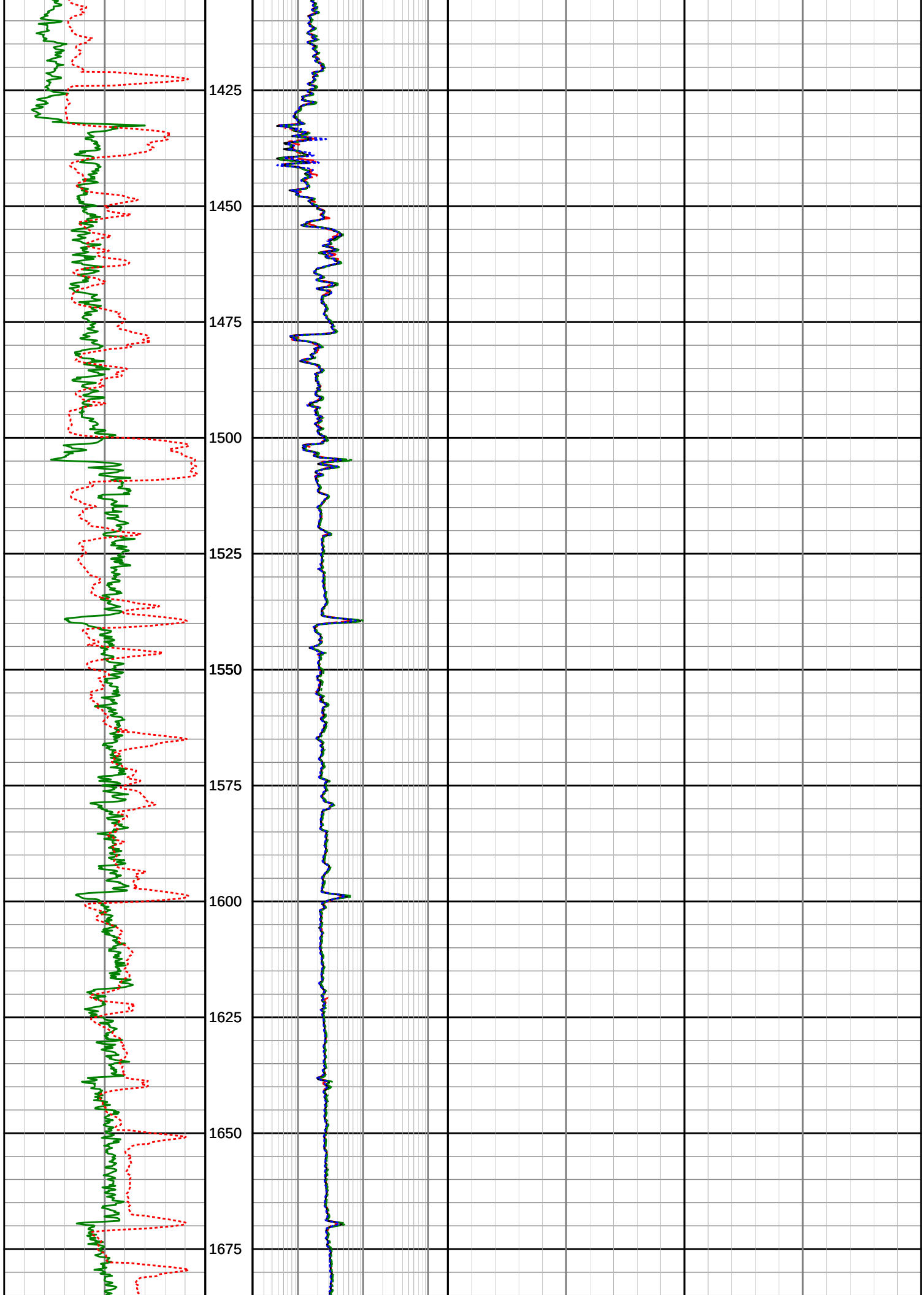
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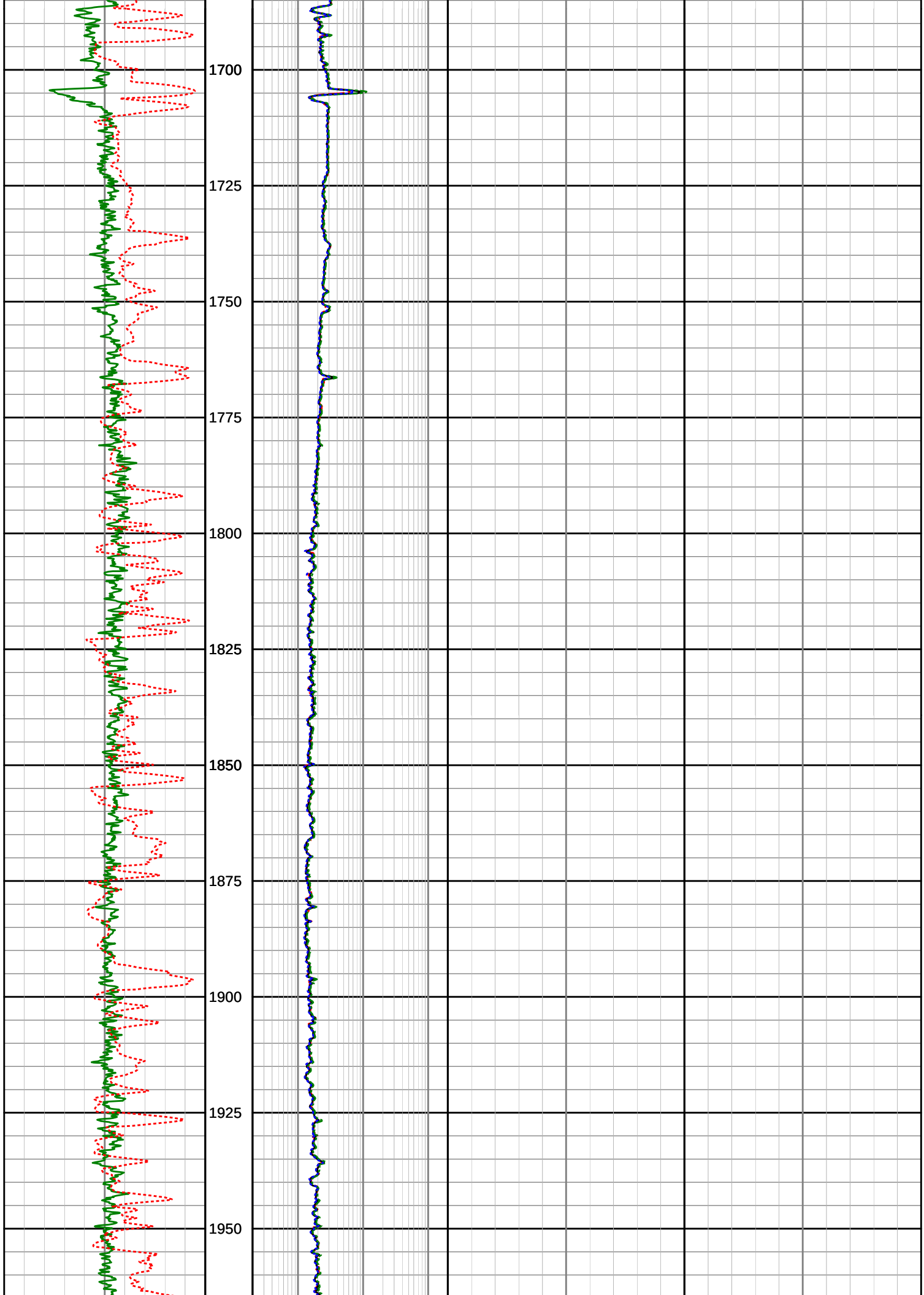
1675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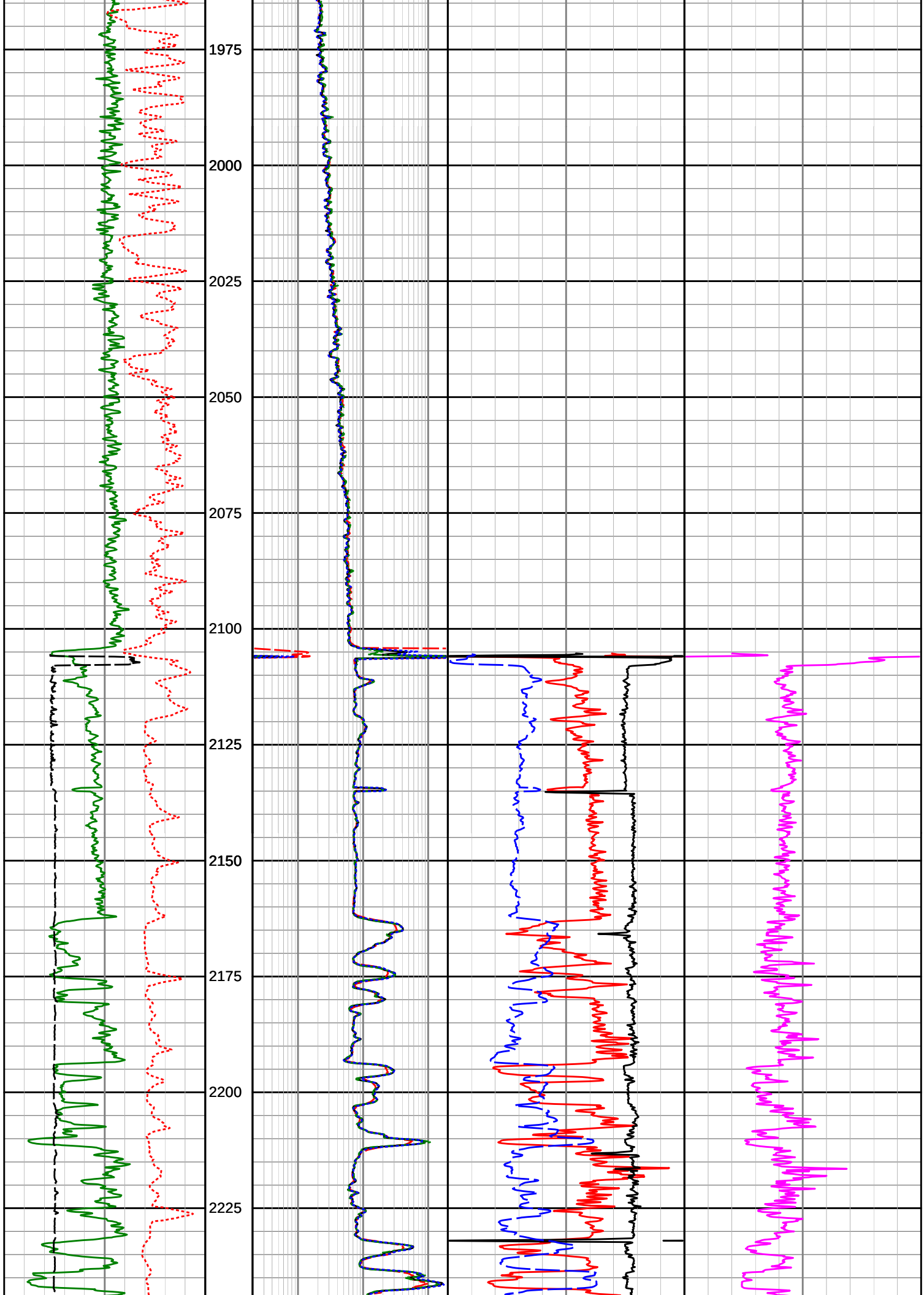
1775
1800
1825
1850
1875
1900
1925
1950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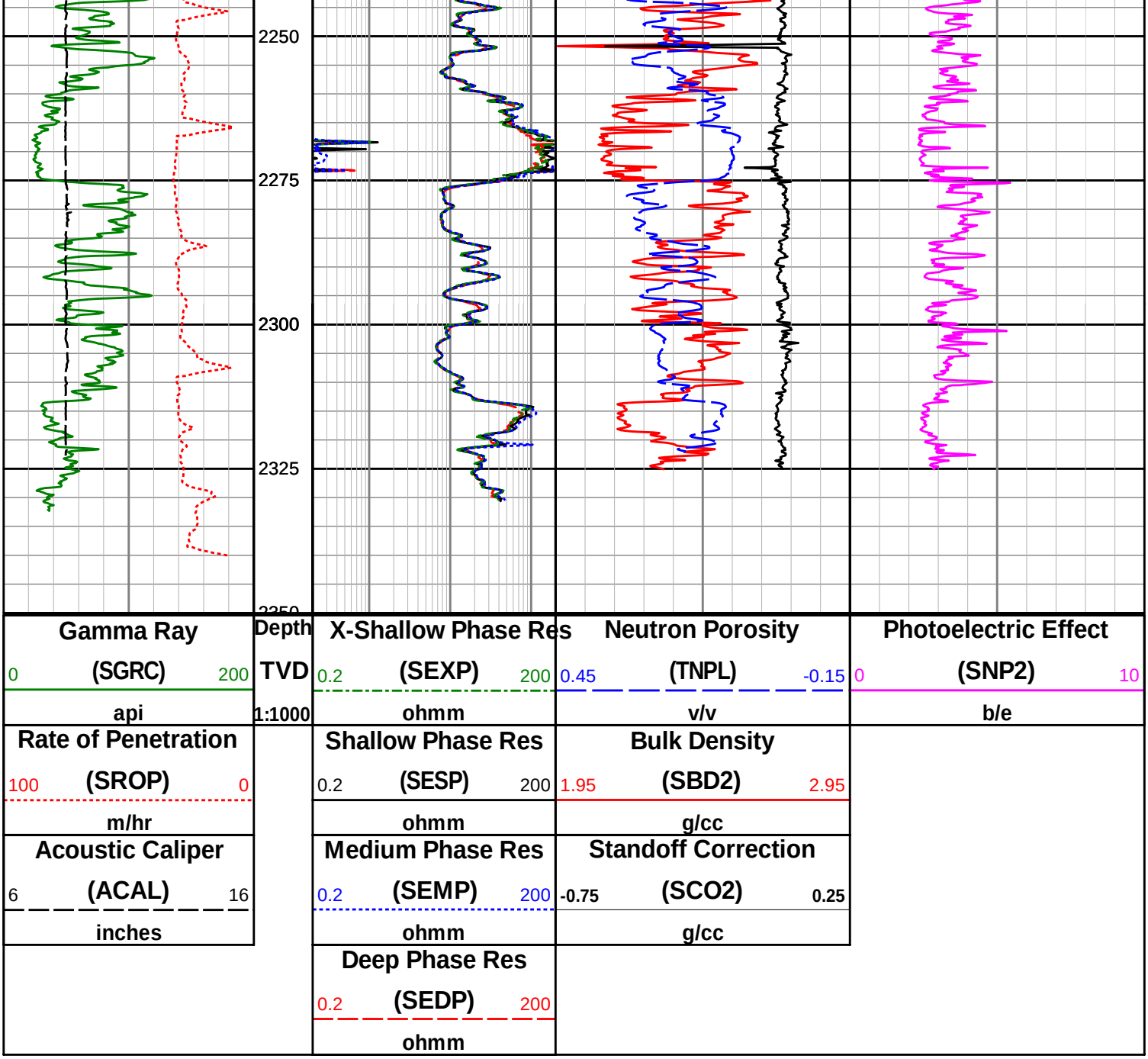
2225



HALLIBURTON

DIRECTIONAL SURVEY REPORT

Woodside Energy Ltd
THA02
Thylacine
Tasmania
Australia
AU-FE-000393065
RT-LAT=50.5m
Final survey projected to TD
Surveys from 169.13m to 2229.34m are SUCOP and SAG Corrected
Surveys from 2259.31m to 2380.35m are SAG Corrected.
Surveys from 2409.42m to 3596.90m are Cazandra and SAG Corrected.
Surveys from 3625.86m to 3683.72m are SAG Corrected.
Surveys from 3712.66m to TD are SUCOP and SAG Corrected.

Measured Depth (metres)	*Inclination (degrees)*	*Direction (degrees)*	*Vertical Depth (metres)*	*Latitude (metres)*	*Departure (metres)*	*Vertical Section (metres)*	*Dogleg (deg/30m)*
0.000	0.00	0.00	0.000	0.000 N	0.000 E	0.000	TIE-IN
150.000	0.00	0.00	150.000	0.000 N	0.000 E	0.000	0.00

169.130	0.71	221.05	169.130	0.089 S	0.078 W	0.073	1.11
208.000	0.52	196.77	207.997	0.440 S	0.287 W	0.261	0.25
220.400	0.29	185.42	220.397	0.525 S	0.306 W	0.275	0.59
259.700	0.89	270.66	259.695	0.621 S	0.621 W	0.584	0.70
341.490	2.59	273.52	341.444	0.500 S	3.101 W	3.066	0.62
370.420	3.21	272.48	370.337	0.425 S	4.562 W	4.530	0.65
399.400	3.84	274.34	399.262	0.316 S	6.340 W	6.312	0.66
428.360	4.65	272.33	428.143	0.195 S	8.480 W	8.455	0.85
457.280	5.51	259.78	456.950	0.394 S	11.018 W	10.977	1.45
486.270	5.77	264.15	485.799	0.789 S	13.838 W	13.769	0.52
525.140	5.59	268.32	524.479	1.044 S	17.674 W	17.584	0.35
544.150	6.87	262.02	543.376	1.229 S	19.725 W	19.621	2.29
572.990	5.92	272.75	572.038	1.397 S	22.919 W	22.800	1.58
601.890	6.64	272.65	600.764	1.248 S	26.077 W	25.961	0.75
620.250	6.72	280.11	619.000	1.010 S	28.195 W	28.089	1.42
637.830	6.20	276.25	636.468	0.726 S	30.151 W	30.058	1.16
666.700	5.81	274.13	665.180	0.451 S	33.158 W	33.077	0.47
724.560	4.14	270.99	722.820	0.204 S	38.168 W	38.092	0.88
753.490	4.52	273.28	751.667	0.121 S	40.350 W	40.275	0.43
782.470	4.29	270.74	780.562	0.042 S	42.574 W	42.500	0.31
811.430	4.34	267.95	809.439	0.067 S	44.752 W	44.673	0.22
840.350	4.62	270.66	838.271	0.093 S	47.010 W	46.926	0.36
869.340	4.34	269.72	867.173	0.085 S	49.275 W	49.187	0.30
898.280	3.92	268.79	896.037	0.111 S	51.359 W	51.266	0.44
927.230	4.40	268.45	924.911	0.162 S	53.458 W	53.359	0.50
956.070	3.73	266.06	953.678	0.256 S	55.500 W	55.392	0.72
984.970	4.34	268.49	982.507	0.350 S	57.531 W	57.414	0.66
1013.890	4.16	272.00	1011.347	0.342 S	59.673 W	59.553	0.33
1042.820	4.06	274.94	1040.203	0.217 S	61.742 W	61.626	0.24
1071.770	3.93	261.43	1069.083	0.277 S	63.744 W	63.621	0.98
1100.720	4.17	266.35	1097.961	0.491 S	65.776 W	65.637	0.44
1129.600	4.49	268.53	1126.758	0.587 S	67.954 W	67.806	0.37
1158.570	5.03	274.87	1155.628	0.509 S	70.353 W	70.205	0.78
1187.500	6.72	277.51	1184.405	0.180 S	73.295 W	73.161	1.77
1216.400	7.21	278.85	1213.092	0.320 N	76.763 W	76.653	0.54
1274.310	7.49	272.32	1270.527	1.032 N	84.125 W	84.044	0.46
1303.240	7.51	269.23	1299.210	1.083 N	87.900 W	87.815	0.42
1332.210	7.47	270.49	1327.933	1.074 N	91.676 W	91.584	0.18
1361.320	8.41	273.97	1356.763	1.237 N	95.692 W	95.603	1.09
1390.210	9.62	275.12	1385.296	1.599 N	100.204 W	100.128	1.27
1419.150	9.54	275.91	1413.833	2.062 N	104.998 W	104.941	0.16
1448.060	9.40	274.75	1442.349	2.504 N	109.734 W	109.694	0.25
1476.990	9.05	273.21	1470.904	2.827 N	114.360 W	114.331	0.44
1505.900	8.41	272.71	1499.479	3.054 N	118.742 W	118.719	0.67
1534.850	8.28	270.88	1528.123	3.187 N	122.941 W	122.919	0.31
1563.740	8.34	272.11	1556.710	3.296 N	127.114 W	127.092	0.19
1592.670	8.65	273.85	1585.322	3.519 N	131.382 W	131.365	0.42
1621.600	8.77	273.02	1613.919	3.781 N	135.755 W	135.746	0.18
1650.500	8.90	271.30	1642.476	3.948 N	140.190 W	140.183	0.31
1679.430	9.29	270.16	1671.042	4.005 N	144.762 W	144.751	0.45
1708.390	9.95	271.28	1699.595	4.068 N	149.601 W	149.586	0.71
1737.350	13.61	273.91	1727.940	4.356 N	155.504 W	155.495	3.83
1766.320	14.48	273.78	1756.044	4.827 N	162.519 W	162.525	0.90
1795.250	18.77	275.16	1783.758	5.485 N	170.767 W	170.798	4.47
1824.140	21.92	277.04	1810.843	6.564 N	180.751 W	180.827	3.34
1853.060	24.85	276.60	1837.384	7.924 N	192.147 W	192.283	3.04
1882.070	26.96	269.43	1863.484	8.560 N	204.783 W	204.935	3.90
1911.030	30.94	270.57	1888.821	8.569 N	218.797 W	218.926	4.16
1939.980	35.09	272.02	1913.091	8.936 N	234.562 W	234.686	4.38
1968.910	38.21	272.59	1936.299	9.634 N	251.815 W	251.950	3.25
1997.860	41.94	273.44	1958.448	10.619 N	270.423 W	270.584	3.91
2026.790	45.44	272.99	1979.363	11.737 N	290.372 W	290.564	3.64
2055.710	48.46	272.75	1999.103	12.794 N	311.476 W	311.695	3.14
2084.640	51.86	272.71	2017.634	13.852 N	333.661 W	333.904	3.53
2110.880	54.91	272.40	2033.283	14.790 N	354.700 W	354.961	3.50
2142.550	59.40	274.22	2050.456	16.336 N	381.254 W	381.560	4.49
2171.490	64.94	274.96	2063.962	18.388 N	406.754 W	407.136	5.78
2200.390	65.78	275.15	2076.010	20.702 N	432.920 W	433.392	0.89
2229.340	69.94	274.26	2086.918	22.899 N	459.639 W	460.194	4.39
2259.310	73.39	274.89	2096.345	25.169 N	487.992 W	488.631	3.50
2287.290	73.01	274.85	2104.432	27.443 N	514.681 W	515.407	0.41

2295.600	72.83	274.15	2106.873	28.066 N	522.600 W	523.348	2.50
2324.710	74.76	273.81	2114.996	30.006 N	550.485 W	551.299	2.02
2353.600	77.11	274.62	2122.017	32.067 N	578.431 W	579.317	2.57
2380.350	80.82	275.67	2127.136	34.422 N	604.575 W	605.554	4.32
2409.420	83.75	281.32	2131.041	38.680 N	633.050 W	634.228	6.52
2440.380	86.54	283.47	2133.662	45.302 N	663.175 W	664.686	3.41
2469.290	89.57	284.75	2134.643	52.345 N	691.193 W	693.064	3.41
2497.930	92.66	285.85	2134.085	59.900 N	718.809 W	721.071	3.44
2527.130	93.22	285.11	2132.588	67.684 N	746.912 W	749.578	0.95
2556.060	93.09	282.07	2130.995	74.470 N	774.986 W	777.998	3.15
2584.990	93.16	278.76	2129.417	79.692 N	803.393 W	806.660	3.43
2613.890	92.85	276.08	2127.902	83.418 N	832.009 W	835.444	2.80
2642.820	92.60	275.29	2126.527	86.281 N	860.764 W	864.316	0.86
2671.780	90.50	275.95	2125.743	89.116 N	889.572 W	893.240	2.28
2700.740	90.75	275.69	2125.428	92.052 N	918.381 W	922.171	0.37
2729.710	90.50	276.17	2125.111	95.045 N	947.195 W	951.109	0.56
2758.640	90.07	275.82	2124.968	98.067 N	975.966 W	980.007	0.57
2786.010	89.20	277.60	2125.142	101.265 N	1003.146 W	1007.327	2.17
2816.450	88.53	274.82	2125.745	104.557 N	1033.399 W	1037.720	2.82
2843.560	89.08	272.77	2126.310	106.350 N	1060.442 W	1064.821	2.35
2872.880	88.15	274.77	2127.019	108.277 N	1089.688 W	1094.130	2.26
2901.720	87.41	276.08	2128.136	111.002 N	1118.377 W	1122.928	1.56
2932.300	87.66	276.72	2129.452	114.408 N	1148.738 W	1153.435	0.67
2961.250	88.53	273.72	2130.414	117.040 N	1177.548 W	1182.350	3.24
2990.180	88.22	277.49	2131.235	119.863 N	1206.323 W	1211.240	3.92
3019.100	87.97	275.06	2132.196	123.023 N	1235.052 W	1240.103	2.53
3048.030	87.91	276.60	2133.236	125.959 N	1263.812 W	1268.986	1.60
3076.970	88.77	276.21	2134.074	129.186 N	1292.559 W	1297.872	0.98
3105.940	89.21	275.52	2134.585	132.146 N	1321.373 W	1326.808	0.85
3134.880	90.81	275.69	2134.580	134.973 N	1350.174 W	1355.724	1.67
3162.220	91.73	274.81	2133.974	137.474 N	1377.392 W	1383.042	1.40
3191.150	91.43	273.46	2133.176	139.559 N	1406.235 W	1411.957	1.43
3220.270	91.24	272.90	2132.498	141.174 N	1435.302 W	1441.069	0.61
3248.910	91.43	272.30	2131.831	142.473 N	1463.905 W	1469.699	0.66
3277.480	91.74	270.72	2131.040	143.225 N	1492.453 W	1498.243	1.69
3308.520	91.55	267.86	2130.149	142.841 N	1523.474 W	1529.190	2.77
3335.970	91.86	267.23	2129.332	141.666 N	1550.887 W	1556.488	0.77
3366.390	91.67	267.91	2128.395	140.377 N	1581.265 W	1586.741	0.70
3395.360	91.42	268.54	2127.614	139.480 N	1610.210 W	1615.586	0.70
3424.310	91.73	269.11	2126.818	138.886 N	1639.143 W	1644.435	0.67
3452.270	91.18	270.09	2126.108	138.691 N	1667.093 W	1672.327	1.21
3481.190	90.62	271.42	2125.654	139.073 N	1696.006 W	1701.214	1.50
3510.200	91.36	270.88	2125.153	139.655 N	1725.006 W	1730.198	0.95
3539.050	90.68	268.43	2124.639	139.481 N	1753.848 W	1758.982	2.64
3568.540	90.62	269.75	2124.305	139.013 N	1783.332 W	1788.390	1.34
3596.900	87.47	267.06	2124.777	138.224 N	1811.671 W	1816.635	4.38
3625.860	83.38	266.72	2127.087	136.659 N	1840.490 W	1845.315	4.25
3654.780	79.21	266.22	2131.463	134.900 N	1869.016 W	1873.692	4.36
3683.720	74.37	265.83	2138.074	132.948 N	1897.114 W	1901.630	5.03
3712.660	69.09	265.58	2147.144	130.892 N	1924.509 W	1928.859	5.48
3741.630	66.06	268.24	2158.195	129.442 N	1951.242 W	1955.464	4.04
3770.600	61.26	267.44	2171.046	128.467 N	1977.178 W	1981.300	5.03
3799.550	57.17	268.95	2185.860	127.677 N	2002.030 W	2006.064	4.45
3824.400	54.02	268.15	2199.900	127.161 N	2022.524 W	2026.493	3.89
3857.310	49.28	270.04	2220.315	126.740 N	2048.320 W	2052.222	4.53
3886.190	47.08	270.46	2239.570	126.832 N	2069.841 W	2073.712	2.31
3915.140	45.75	270.18	2259.529	126.950 N	2090.810 W	2094.653	1.39
3944.070	44.63	271.10	2279.918	127.178 N	2111.332 W	2115.154	1.34
3973.050	42.59	270.42	2300.899	127.445 N	2131.318 W	2135.122	2.17
4001.930	41.91	270.87	2322.277	127.663 N	2150.735 W	2154.519	0.77
4017.670	41.94	269.81	2333.988	127.726 N	2161.251 W	2165.021	1.35
4026.000	41.94	269.81	2340.184	127.707 N	2166.818 W	2170.578	0.00

CALCULATION BASED ON MINIMUM CURVATURE METHOD

SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT
TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT

VERTICAL SECTION RELATIVE TO WELL HEAD
VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 273.32 DEGREES (GRID)
A TOTAL CORRECTION OF 12.31 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED

HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 4026.000 METRES
IS 2170.579 METRES ALONG 273.37 DEGREES (GRID)

Date Printed:28 September 2006

MWD RUN 300 - BHA

	Component Length (m)
Heavy Weight	58.120
X-Over Sub	1.380
Spiral Drill Collar	17.310
Jar	9.630
Spiral Drill Collar	35.850
Float Sub	.770
Non-Magnetic	8.580
MWD	14.36
Flex	2.810
Stabilizer	.780

MWD RUN 300 - MWD

	Sensor Measure Point Distance To Bit (m)
Positive Pulser	
TM	
HCIM Insert	
PWD Insert	15.900
EWR-P4 Insert	13.400
DGR Insert	11.040

MWD 5.830

PDC .530

DM Sonde 8.610

MWD RUN 400 - BHA

	Component Length (m)
Heavy Weight	58.120
Jar	9.860
Heavy Weight	19.380
X-Over Sub	1.380
Float Sub	.790
Non-Magnetic	9.450
MWD	27.21
Stabilizer	.590
Flex	2.770

MWD RUN 400 - MWD

	Sensor Measure Point Distance To Bit (m)
Positive Pulser	
TM	
FTWD Insert	28.520
PWD-FTWD Insert	28.660
CTN Insert	25.340
ALD Insert	21.270
HCIM Insert	
EWR-P4 Insert	13.680
DDS Insert	11.470
DGR Insert	

Geo-Pilot	7.060
PDC	.420

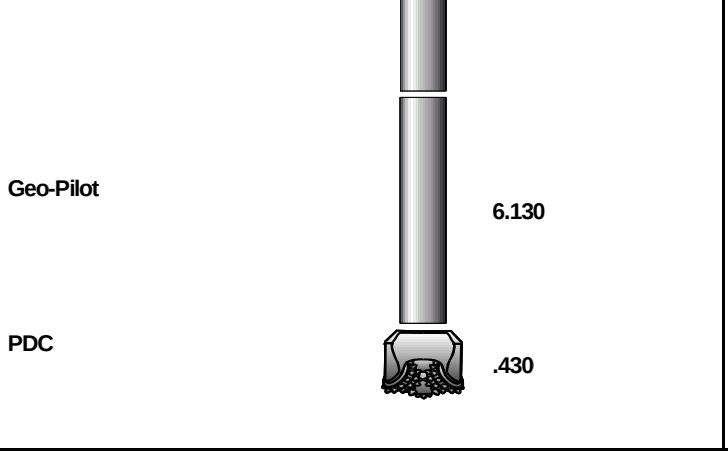
DGR Insert	11.370
DM Sonde	8.920

MWD RUN 500 - BHA

	Component Length (m)
Heavy Weight	58.120
Jar	9.860
Heavy Weight	19.380
X-Over Sub	1.380
Float Sub	.790
Non-Magnetic	9.450
MWD	27.21
Stabilizer	.590
Flex	2.800

MWD RUN 500 - MWD

	Sensor Measure Point Distance To Bit (m)
Positive Pulser	
TM	
FTWD Insert	27.640
PWD-FTWD Insert	27.780
CTN Insert	24.460
ALD Insert	20.390
HCIM Insert	
EWR-P4 Insert	12.800
DDS Insert	10.590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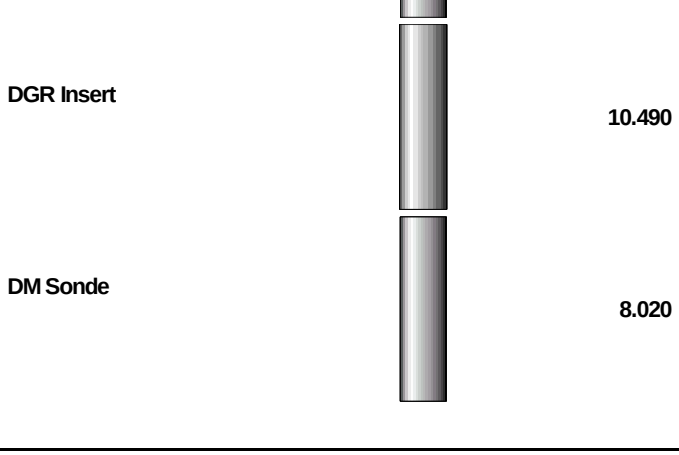

DGR Insert
10.490
DM Sonde
8.020

DDS Drillstring Dynamics

Powered by INSITE™

1 : 1000

Sperry Drilling Services

Company	: **Woodside Energy Ltd**
Rig	: **Maersk Guardian**
Well	: **THA02**
Field	: **Thylacine**
Country	: **Australia**
DOE Number	:

Country : Australia
Field : Thylacine
Location : Lat: 39° 14' 14.47" South GDA94 Long: 142° 54' 7.58" East GDA94
Well : THA02
Company : Woodside Energy Ltd
Rig : Maersk Guardian

LOCATION
Latitude : **39° 14' 14.47" South GDA94**
Longitude : **142° 54' 7.58" East GDA94**
UTM Easting = **664,161.0 m**
UTM Northing = **5,655,159.6 m**

Other Services

Permanent Datum : **LAT** Elevation : **0.00 m**
Log Measured From : **Drill Floor** **50.50 m** Above Permanent Datum
Drilling Measured From : **Drill Floor**

MD LOG

Elev. KB
DF **50.50 m**
GL
WD **99.30 m**

Depth Logged : **630.00 m** To **4,026.00 m**
Date Logged : **20-May-06** To **17-Jun-06**
Total Depth MD : **4,026.00 m** TVD : **2,340.18 m**
Spud Date : **20-May-06**

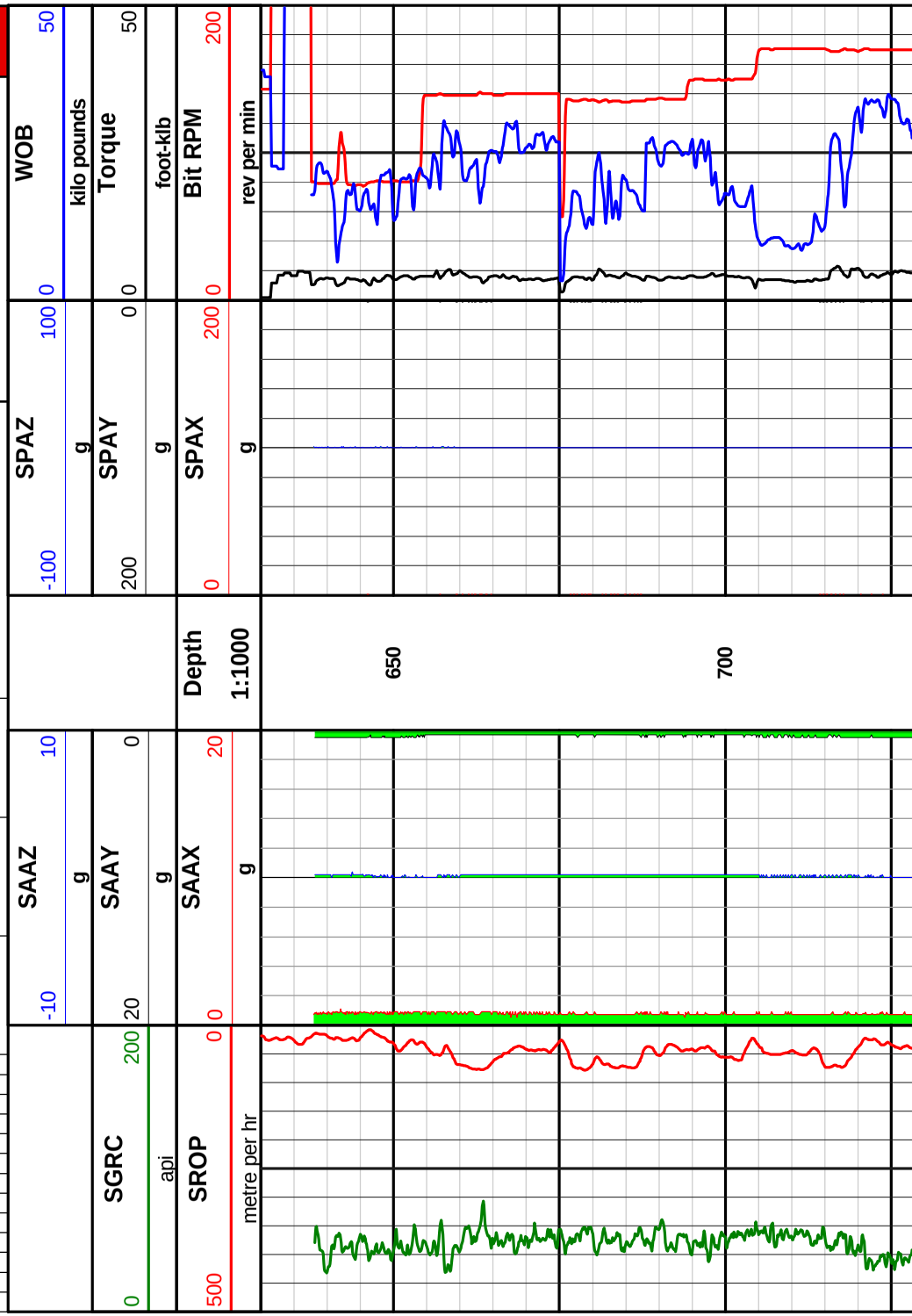
Unit No. : **SSDS-40** Job No. : **AU-FE-0003930658**
Plot Type : **Final**
Plot Date : **19-Jun-06**

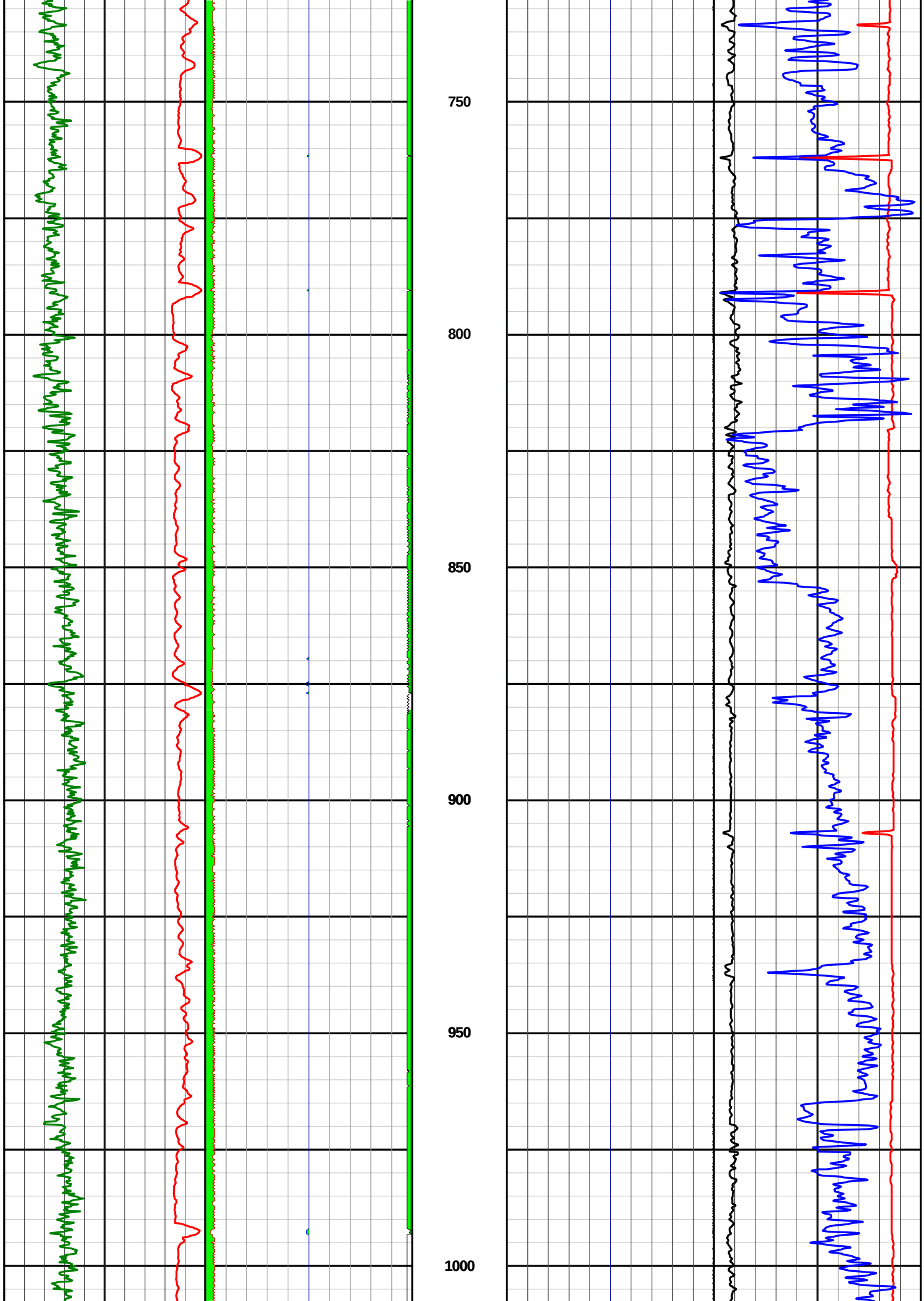
Run No.	Borehole Record (MD) Size	From	To
1	444.500 mm	149.80 m	219.00 m
2	584.000 mm	219.00 m	638.00 m
3	311.000 mm	638.00 m	2,299.00 m
4	216.000 mm	2,299.00 m	3,510.00 m
5	216.000 mm	3,510.00 m	4,026.00 m

Run No.	Borehole Record (MD) Size	From	To

Casing Record (MD)

Size	Weight	From	To
660.400 mm	397.68 kgpm	149.80 m	219.90 m
473.075 mm	139.89 kgpm	149.80 m	633.00 m
244.500 mm	70.00 kgpm	149.80 m	2,293.40 m

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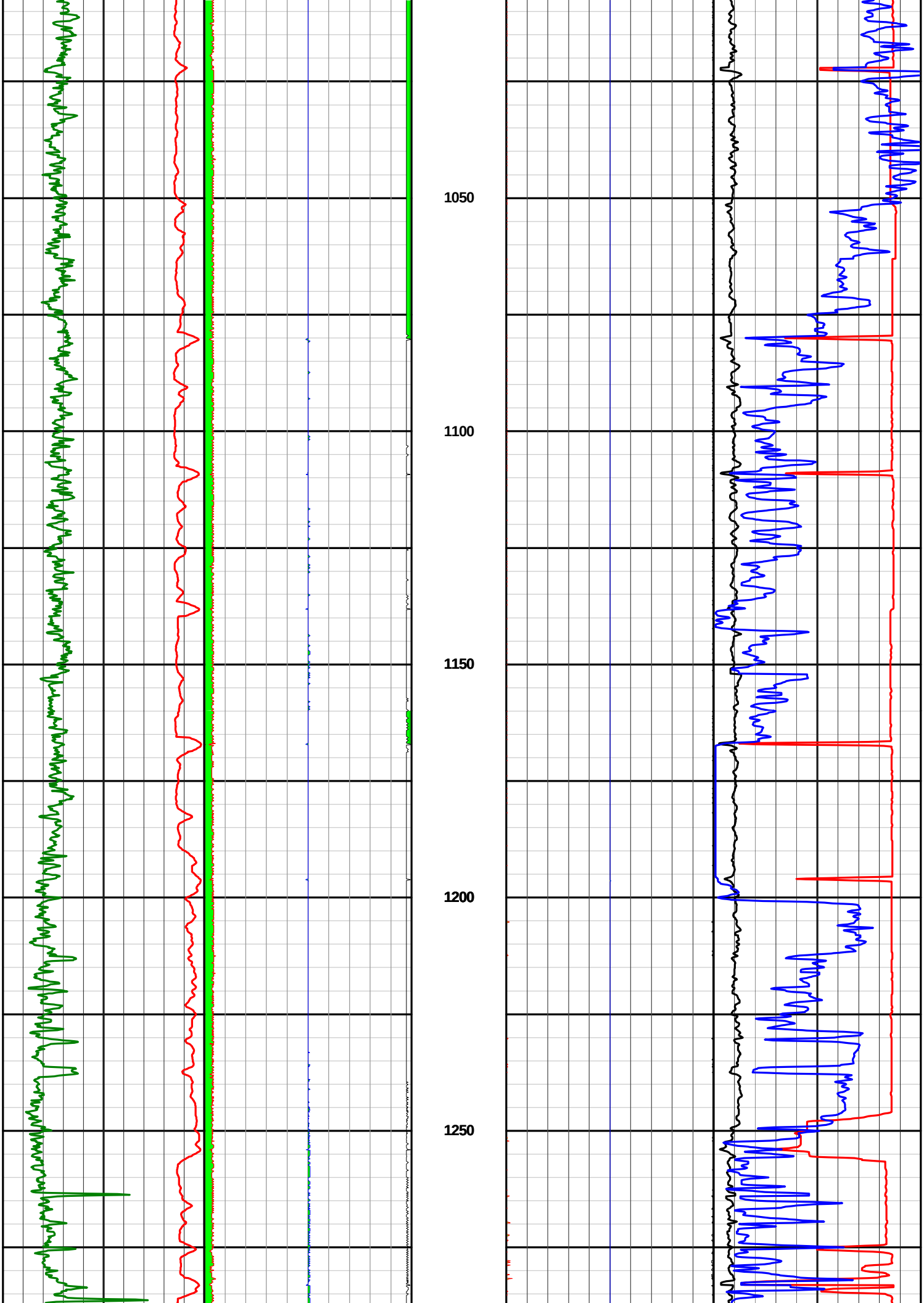
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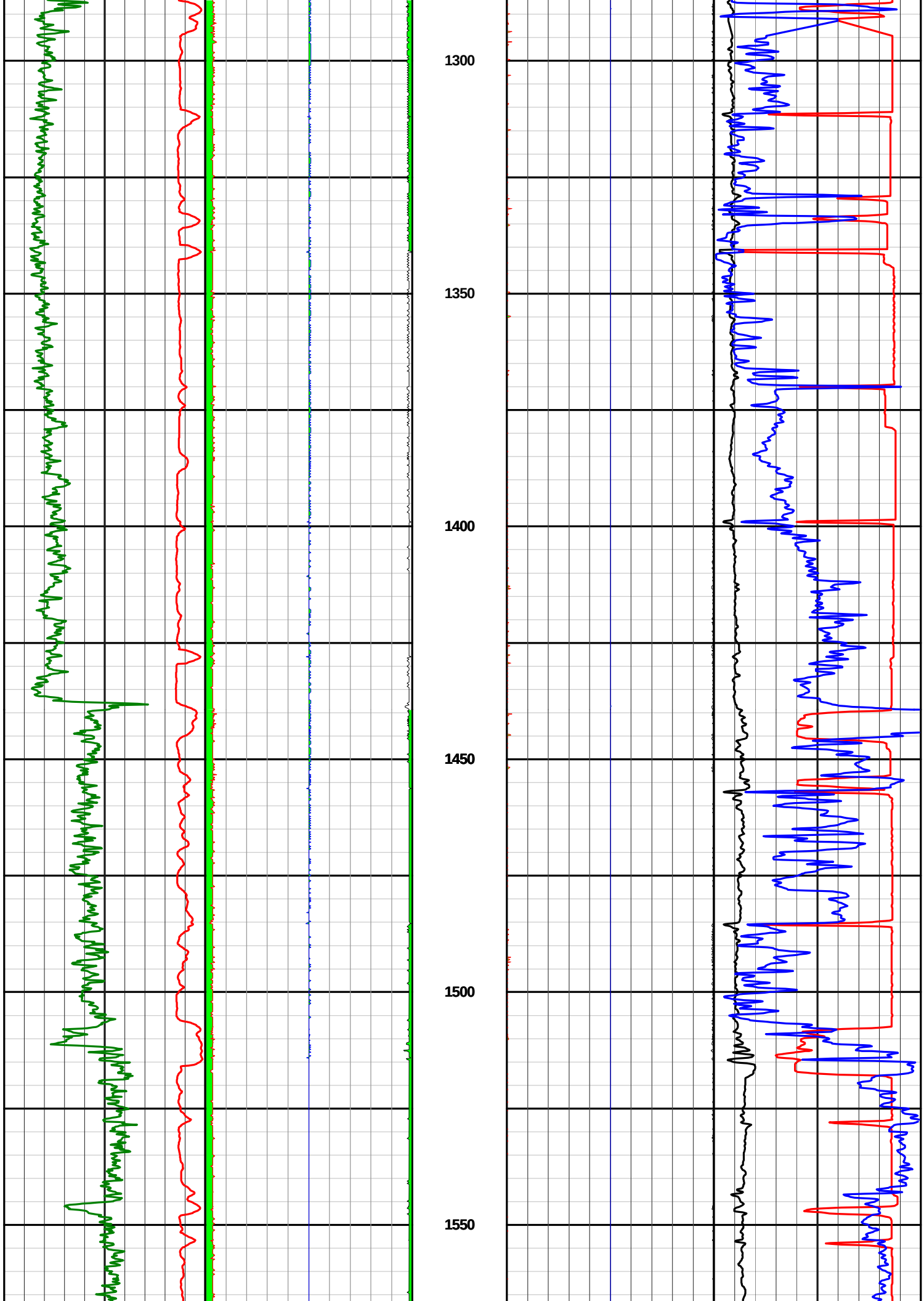
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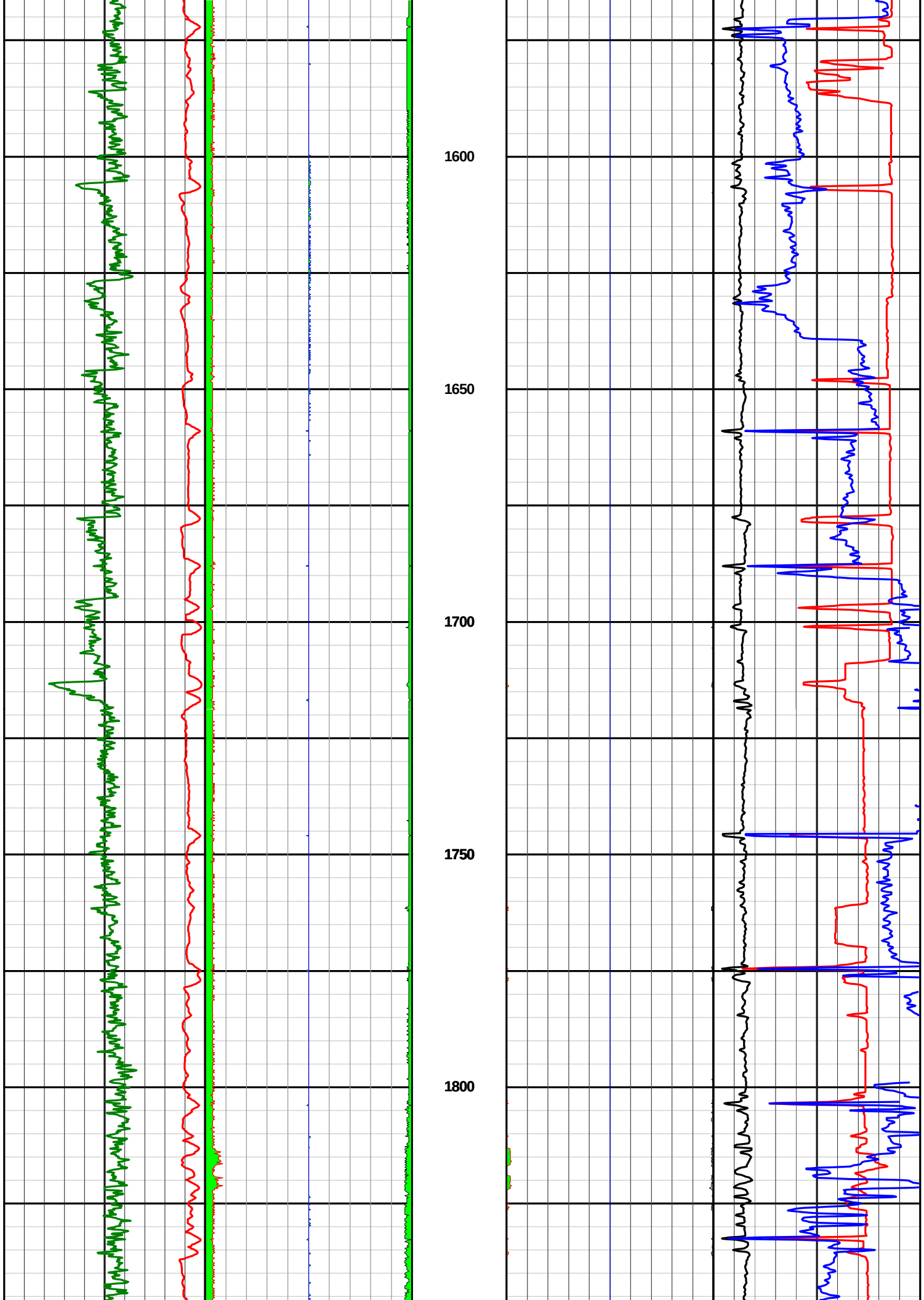
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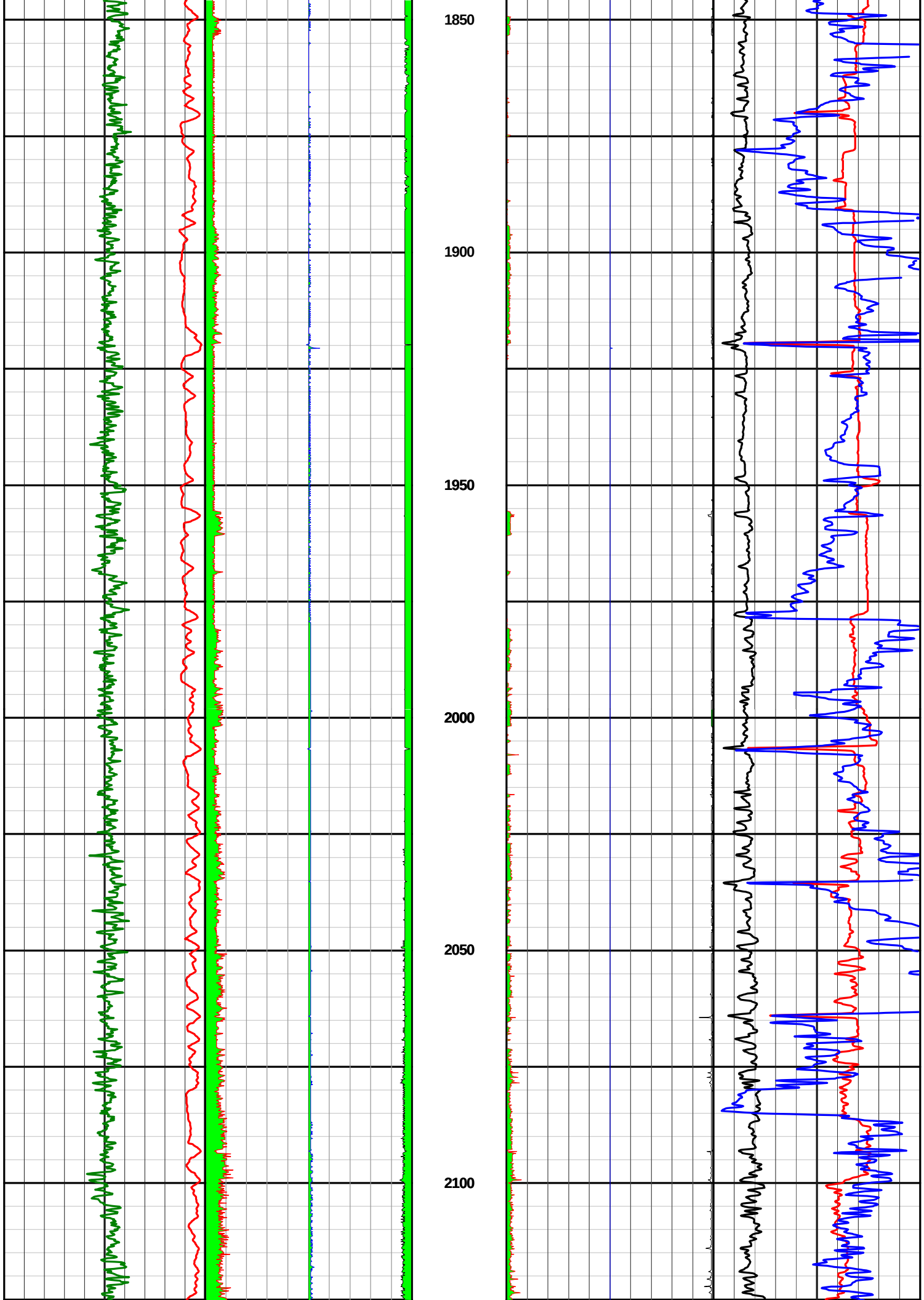
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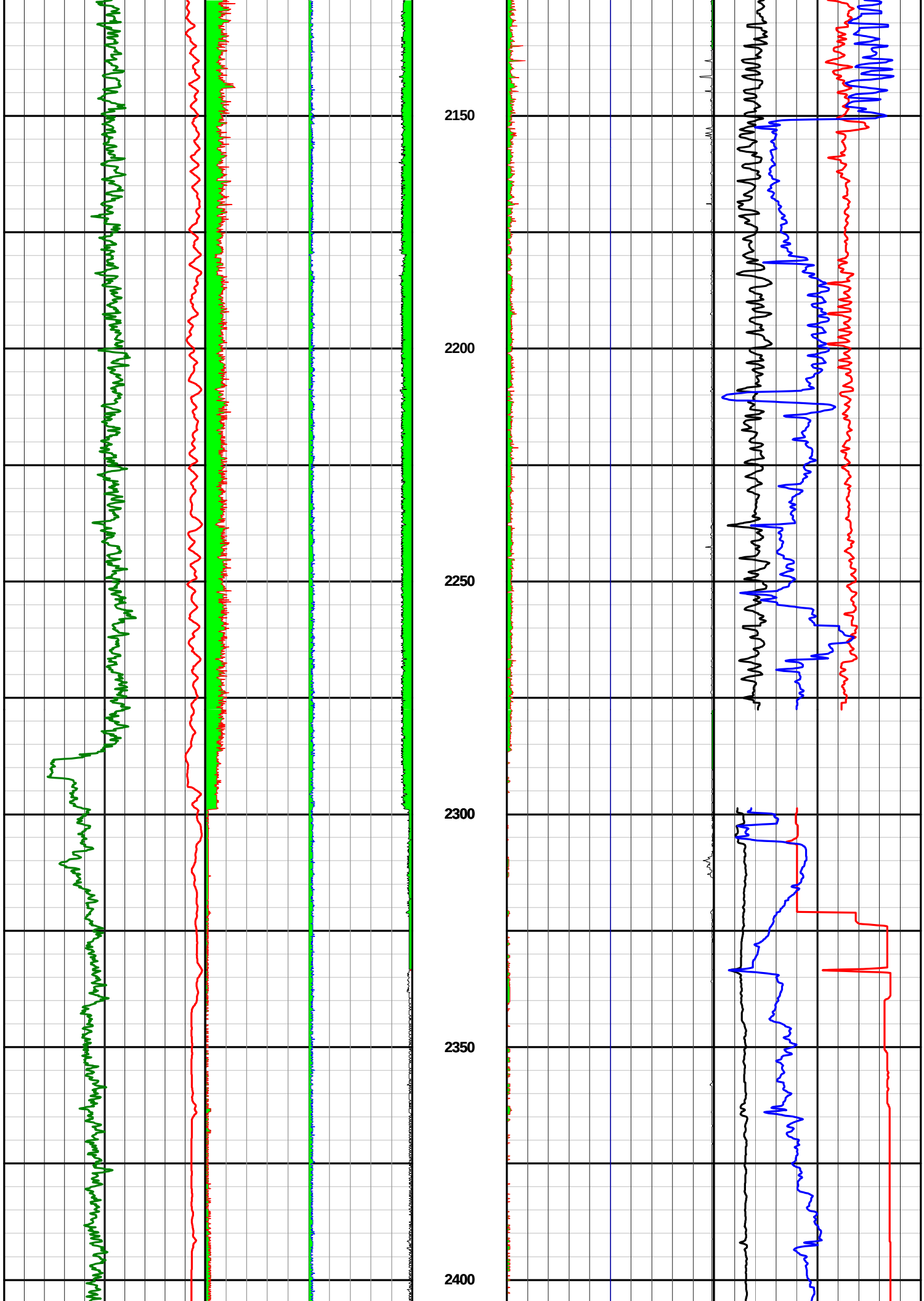
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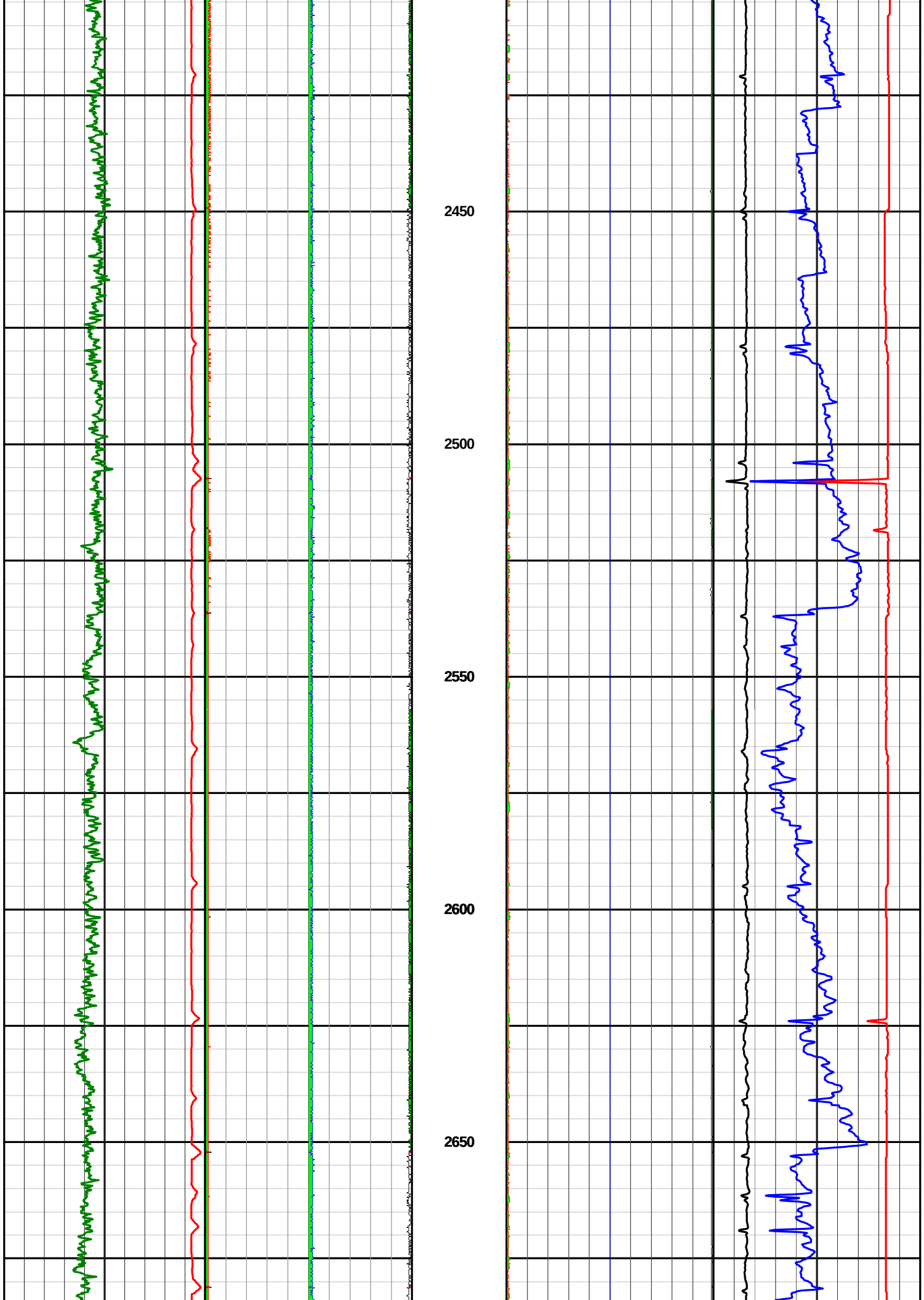
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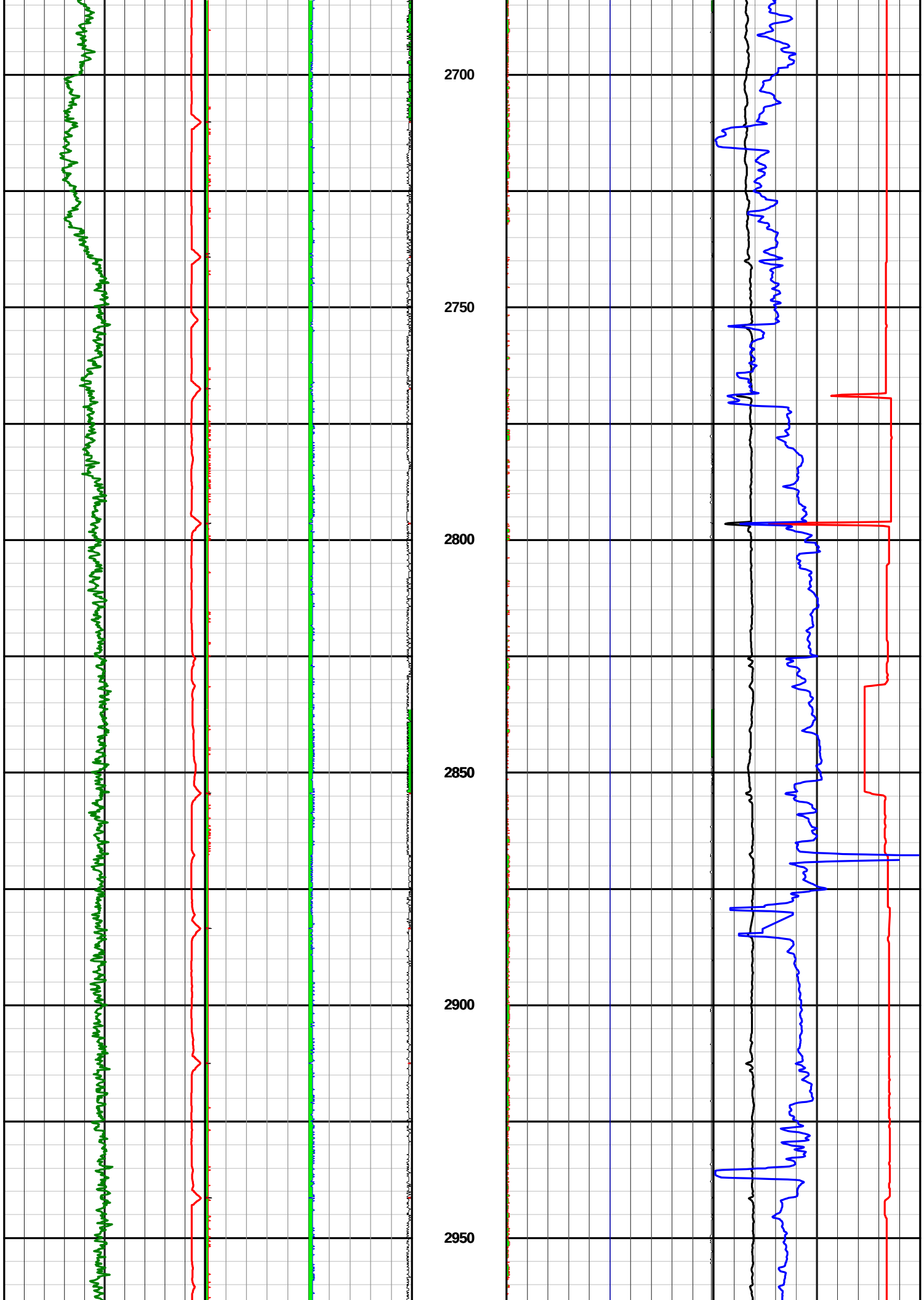
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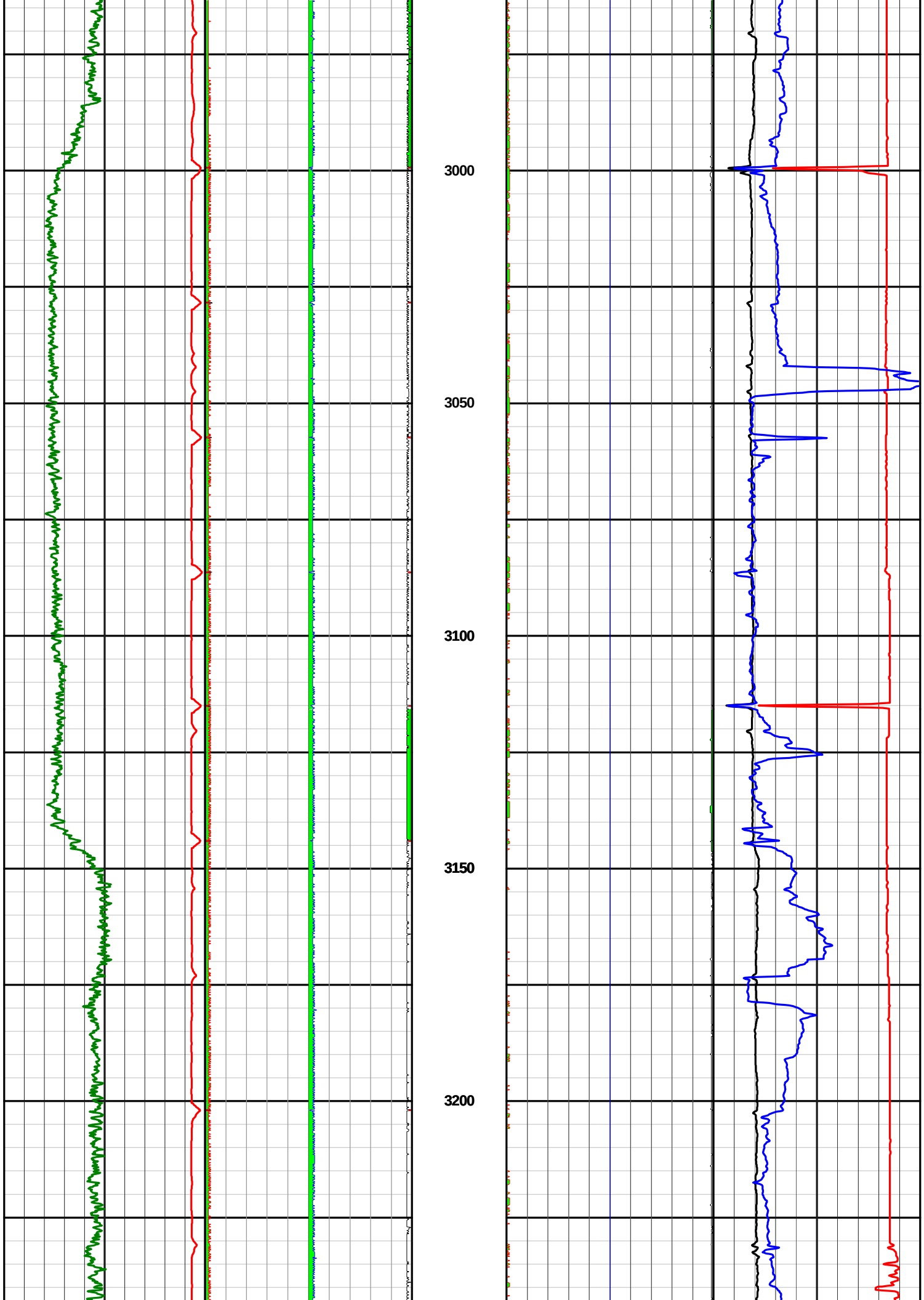
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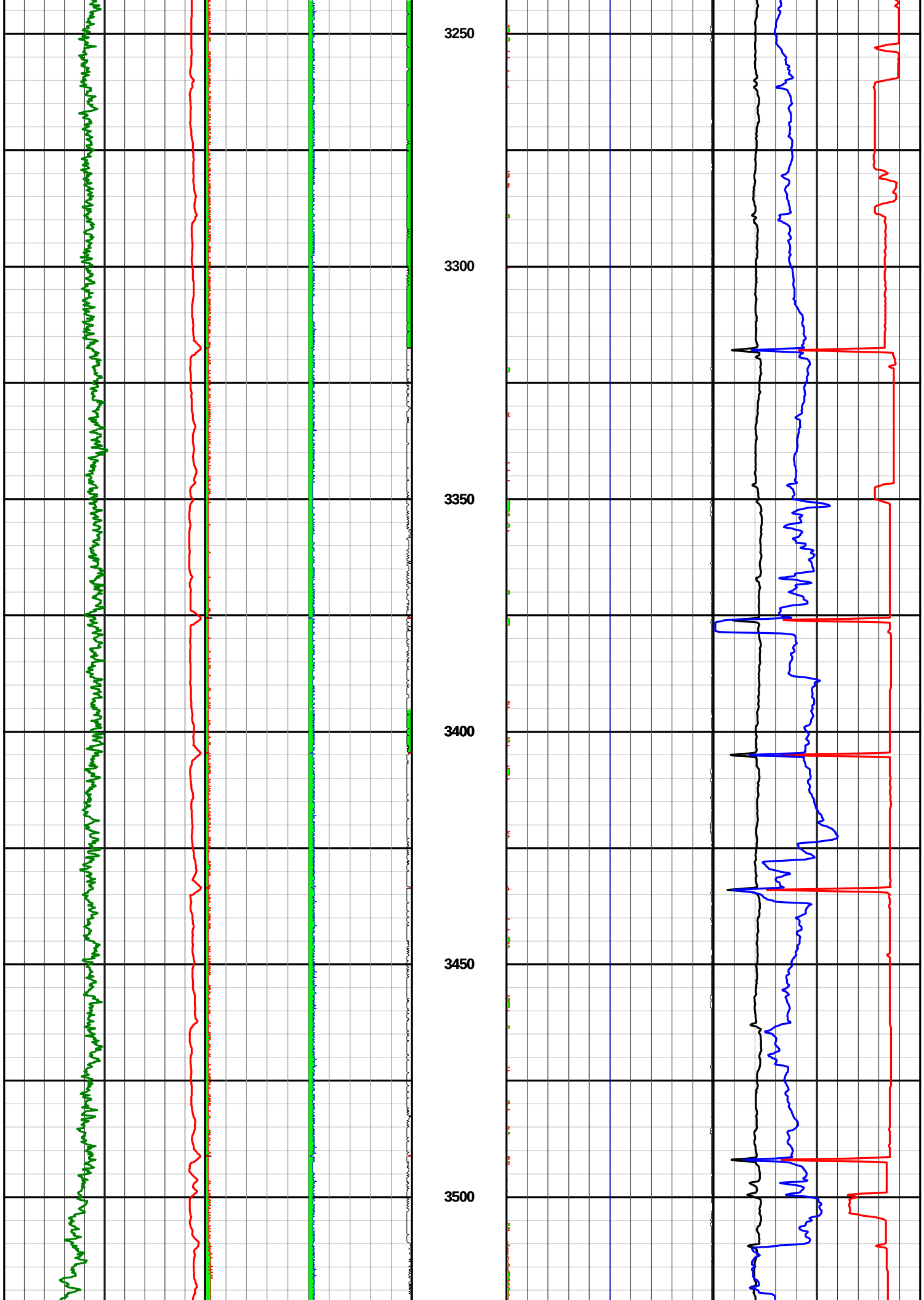
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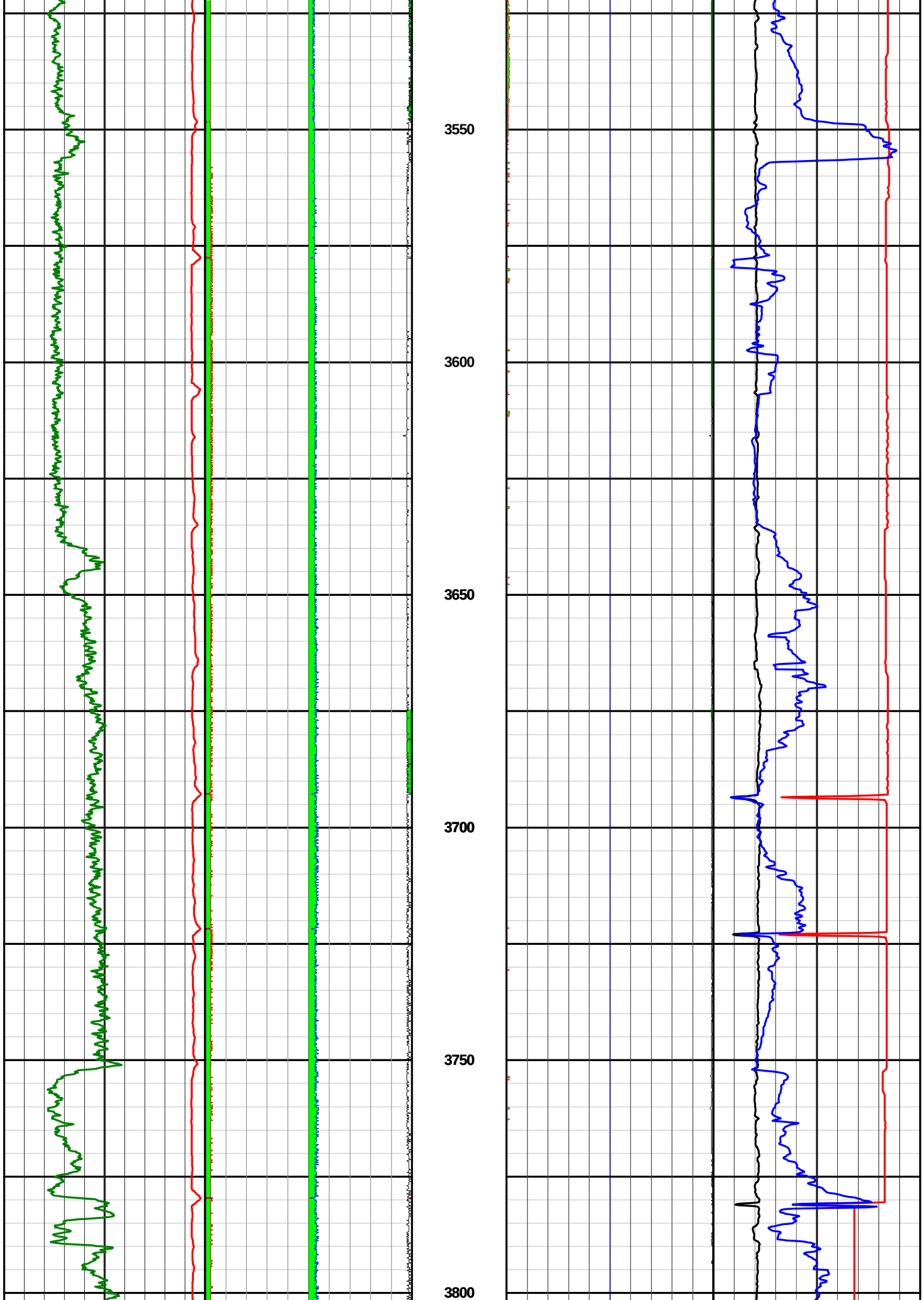
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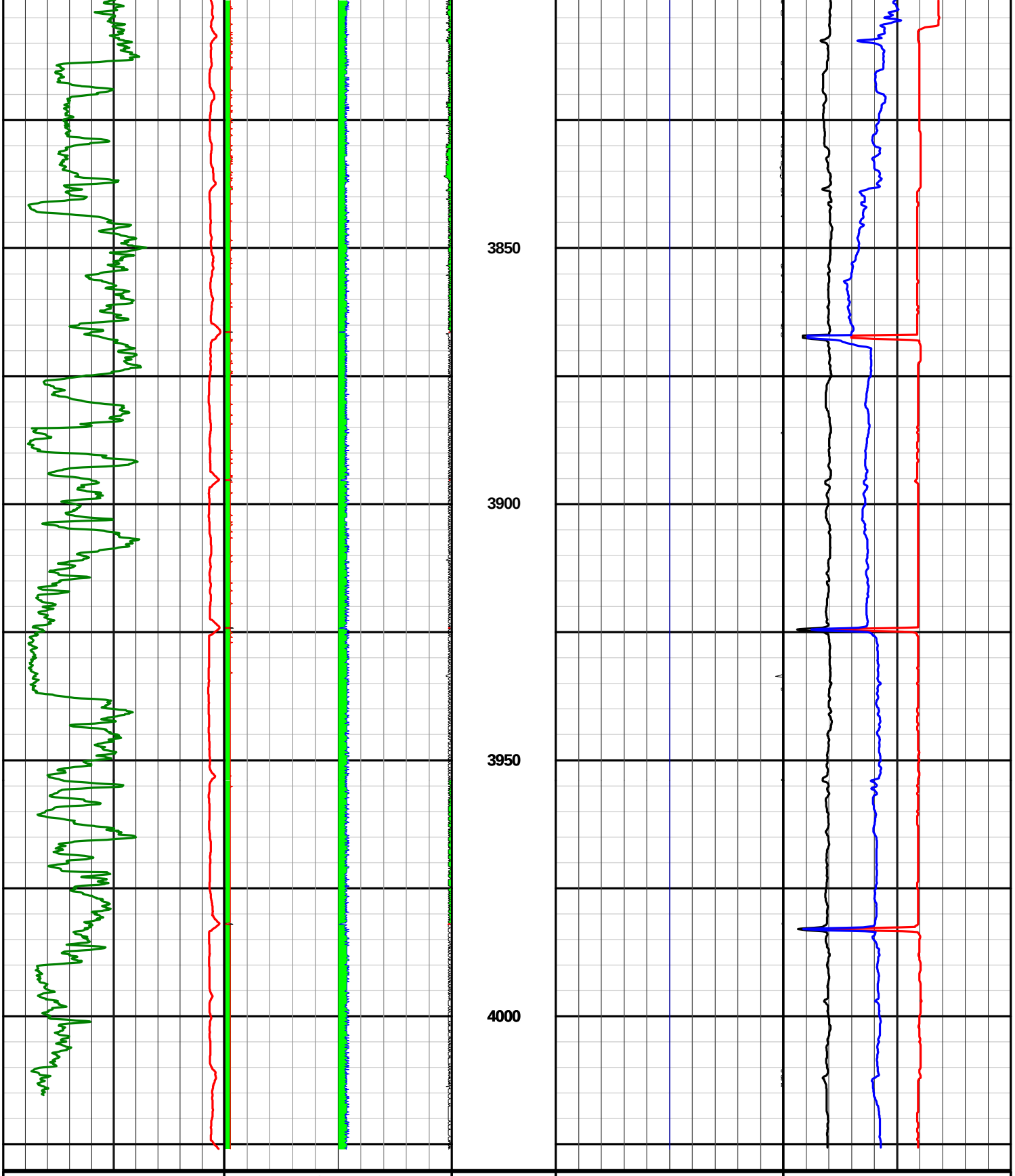


SROP 500 – 0 metre per hr	SAAX 0 – 20 g	Depth 1:1000	SPAX 0 – 200 g	Bit RPM 0 – 200 rev per min
SGRC 0 – 200 api	SAAY 20 – 0 g		SPAY 200 – 0 g	Torque 0 – 50 foot-klb
	SAAZ -10 – 10 g		SPAZ -100 – 100 g	WOB 0 – 50 kilo pounds

HALLIBURTON

DDS Drillstring Dynamics

Powered by INSITE™

Sperry Drilling Services

Country	: Australia
Field	: Thylacine
Location	: 39° 14' 14.47" South GDA94 142° 54' 7.58" East GDA94
Well	: THA02
Company	: Woodside Energy Ltd
Rig	: Maersk Guardian

Company	:	**Woodside Energy Ltd**
Rig	:	**Maersk Guardian**
Well	:	**THA02**
Field	:	**Thylacine**
Country	:	**Australia**
DOE Number	:	

LOCATION

Latitude : **39° 14' 14.47" South GDA94**
Longitude : **142° 54' 7.58" East GDA94**

UTM Easting = 664,161.0 m
UTM Northing = 5,655,159.6 m

Other Services

Permanent Datum	: **LAT**	Elevation :	**0.00 m**	Elev.	KB
Log Measured From	: **Drill Floor**	**50.50 m**	Above Permanent Datum		DF **50.50 m**
Drilling Measured From	: **Drill Floor**				GL
					WD **99.30 m**

TIME LOG

Depth Logged	: **638.00 m** To **4,026.00 m**	Unit No. : **SSDS-40**	Job No. : **AU-FE-0003930658**
Date Logged	: **20-May-06** To **17-Jun-06**		
Total Depth MD	: **4,026.00 m** TVD : **2,340.18 m**	Plot Type : **Final**	
Spud Date	: **20-May-06**	Plot Date : **04-Sep-06**	

Run No.	Borehole Record (MD) Size	From	To
3	311.000 mm	638.00 m	2,299.00 m
4	216.000 mm	2,299.00 m	3,510.00 m
5	216.000 mm	3,510.00 m	4,026.00 m

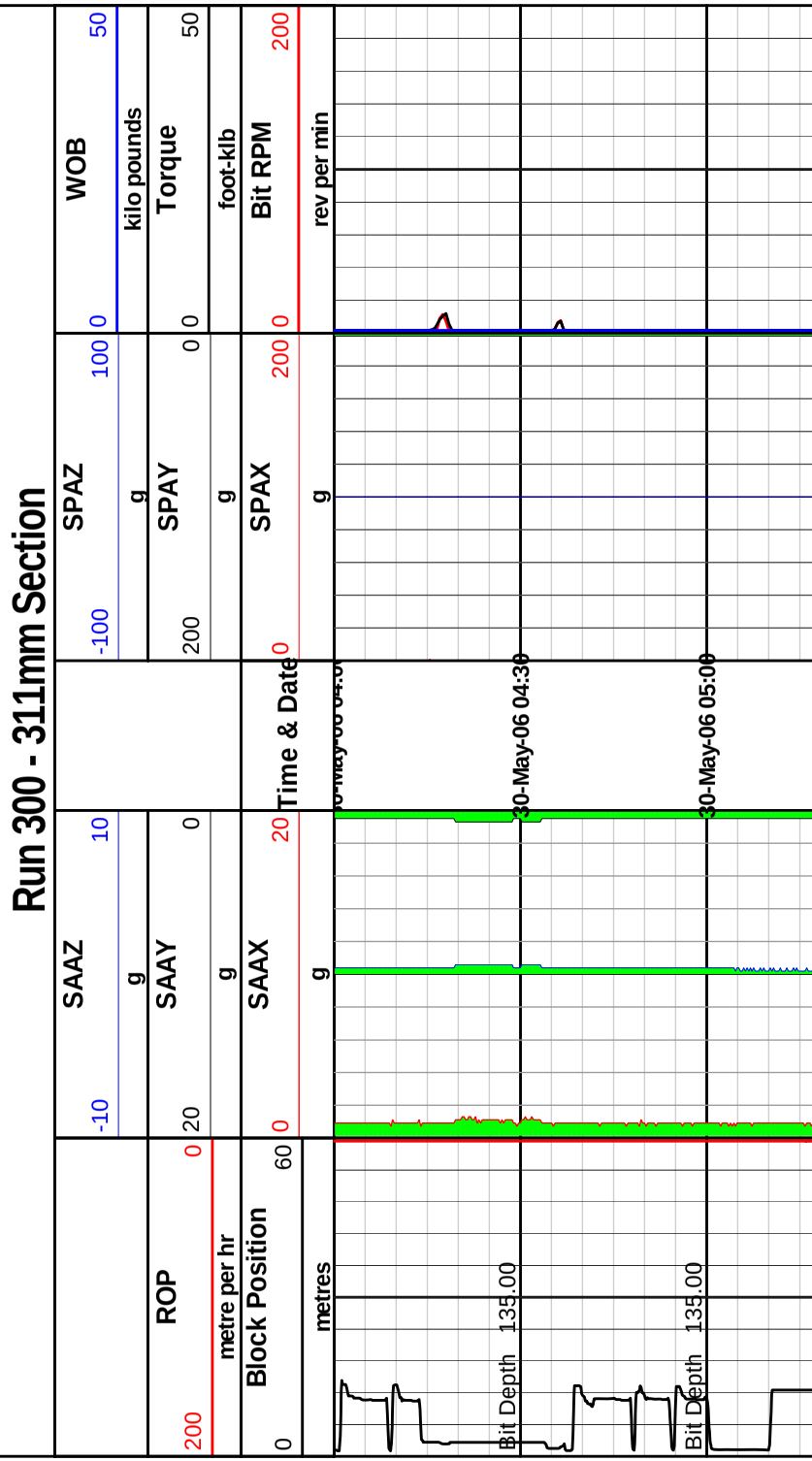
Run No.	Borehole Record (MD) Size	From	To

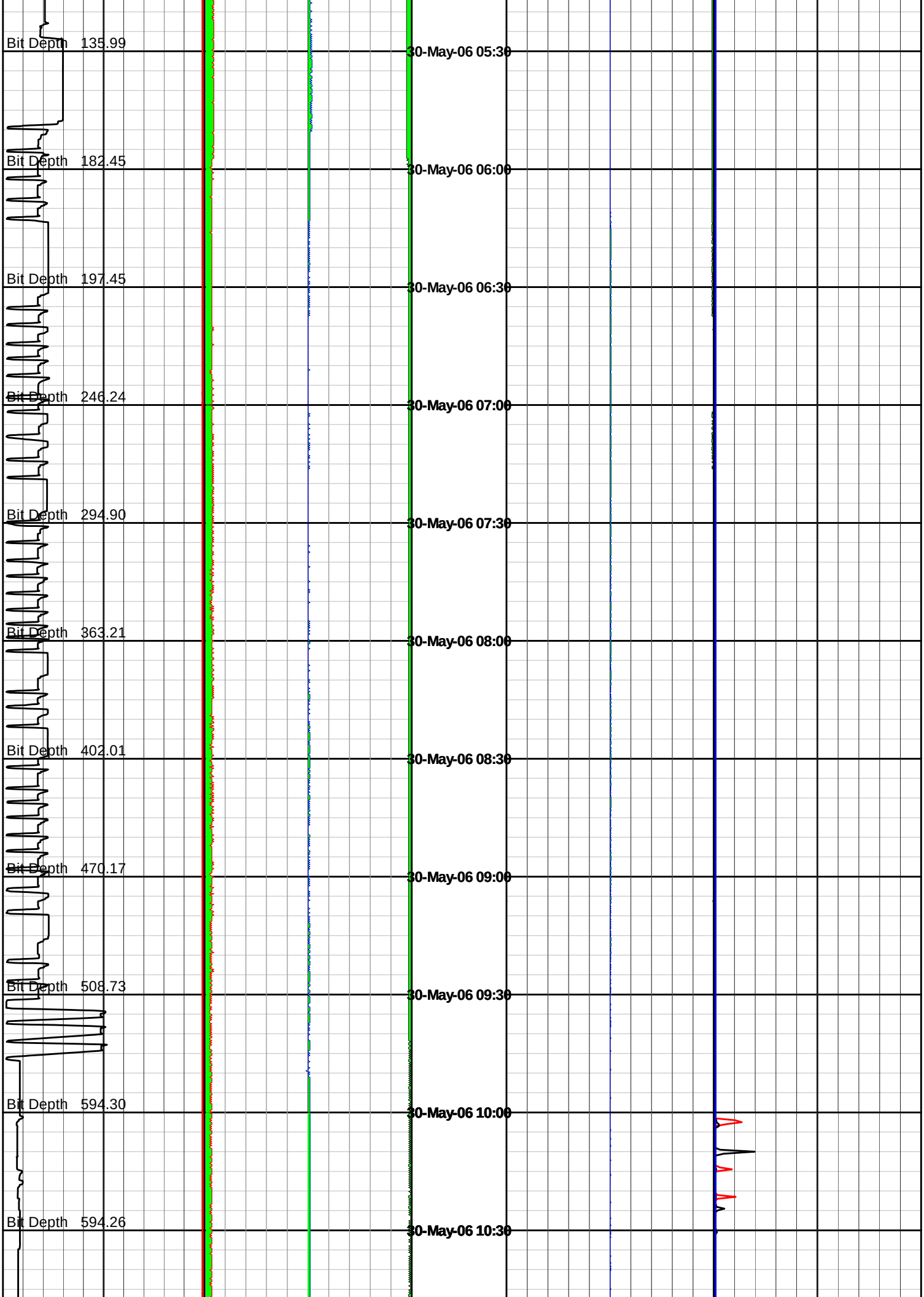
Casing Record (MD)

Size	Weight	From	To
660.000 mm	397.68 kgpm	149.80 m	219.90 m
473.000 mm	139.89 kgpm	149.80 m	633.00 m
244.000 mm	70.00 kgpm	149.80 m	2,293.40 m

Woodside Energy Ltd
THA02

Run 300 - 311mm Section

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Bit Depth 508.73
Bit Depth 594.30
Bit Depth 594.26
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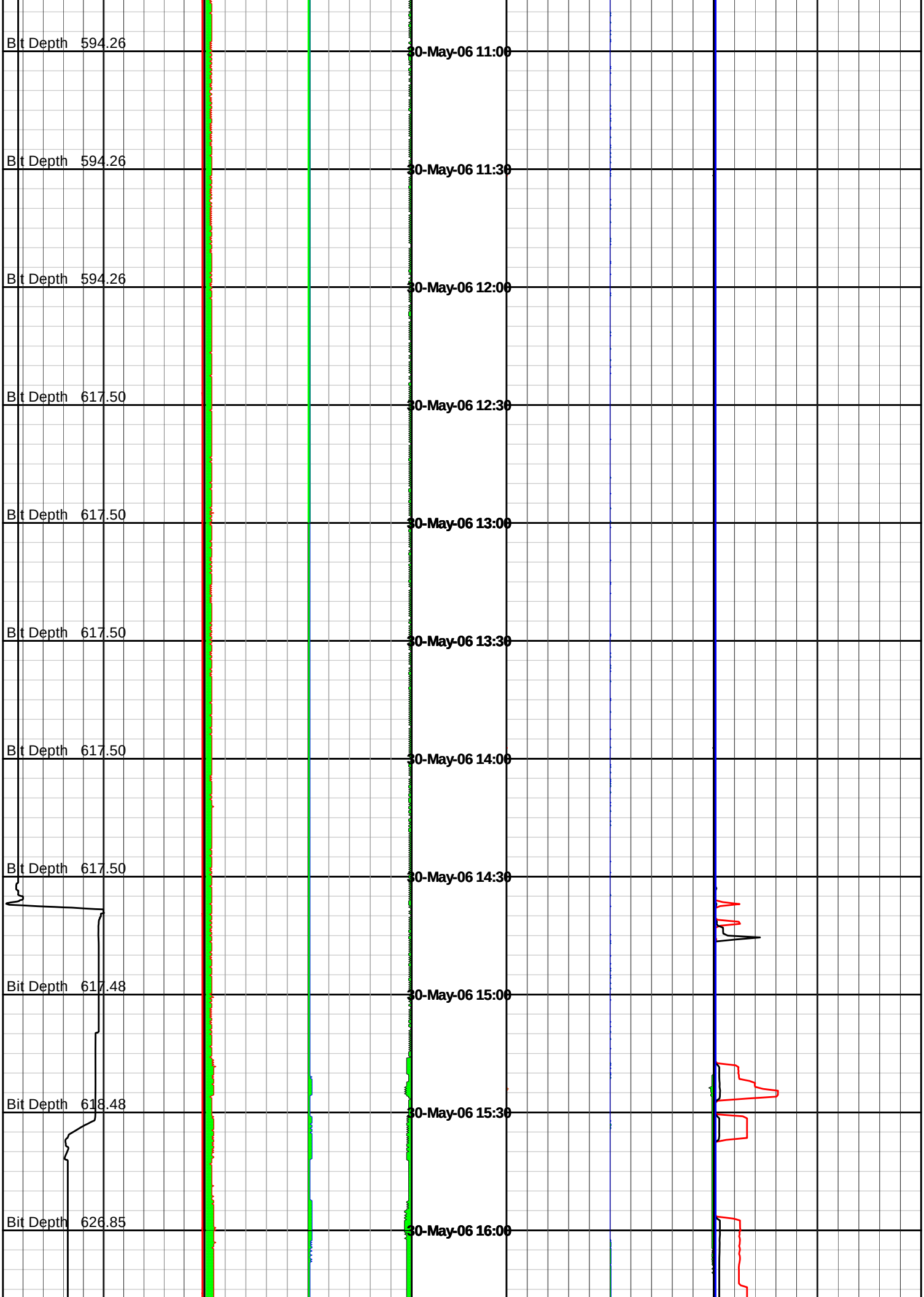
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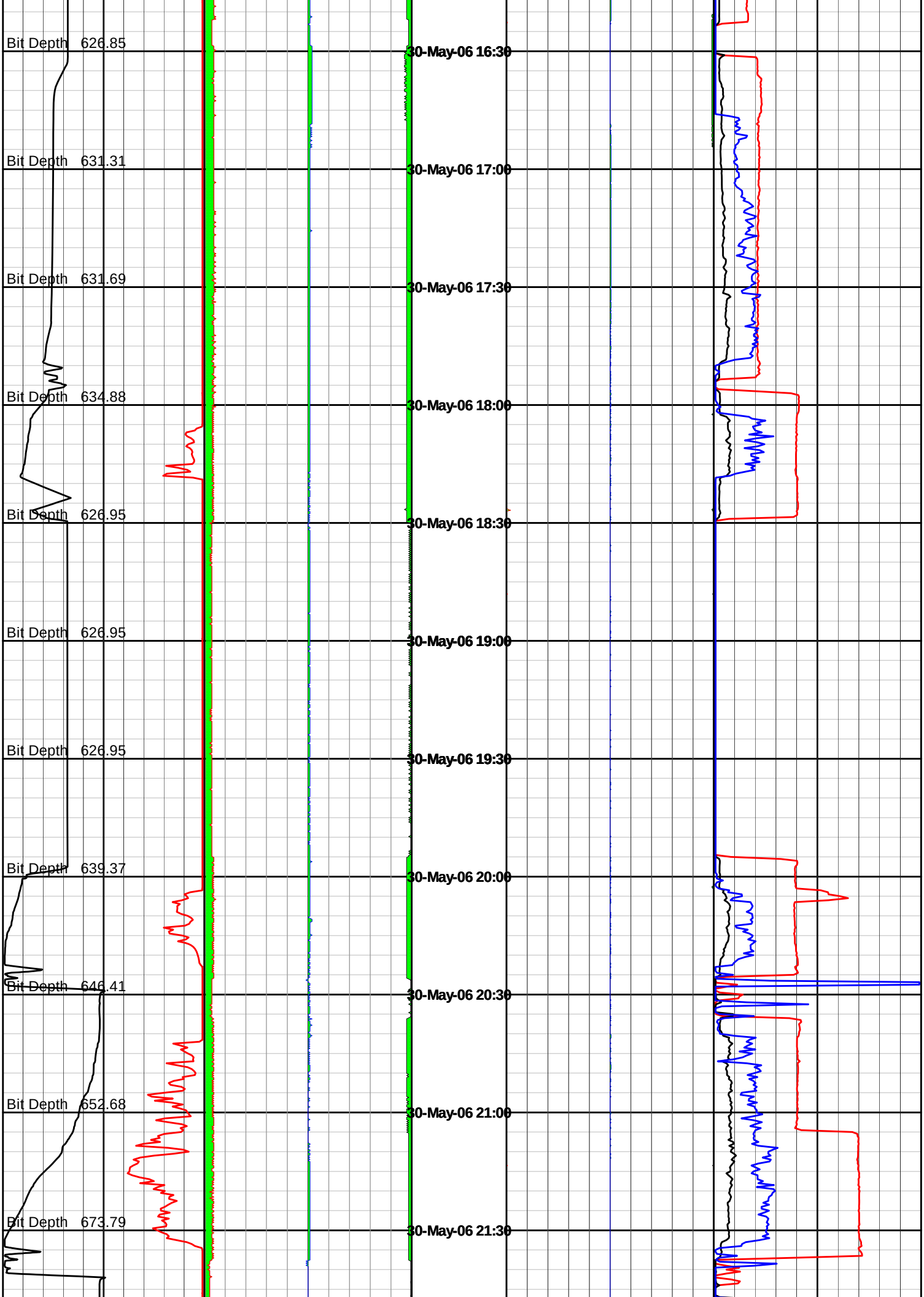
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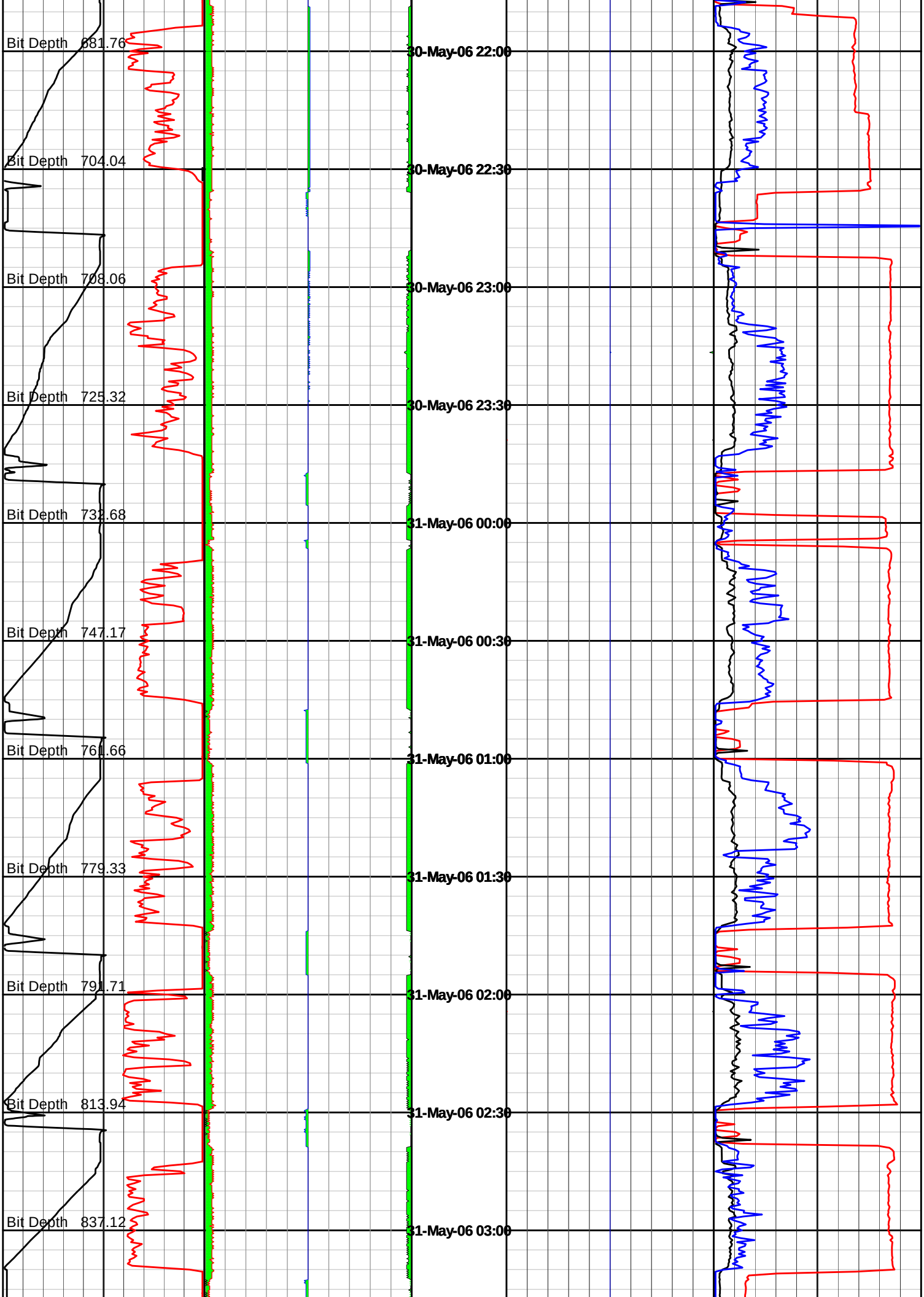
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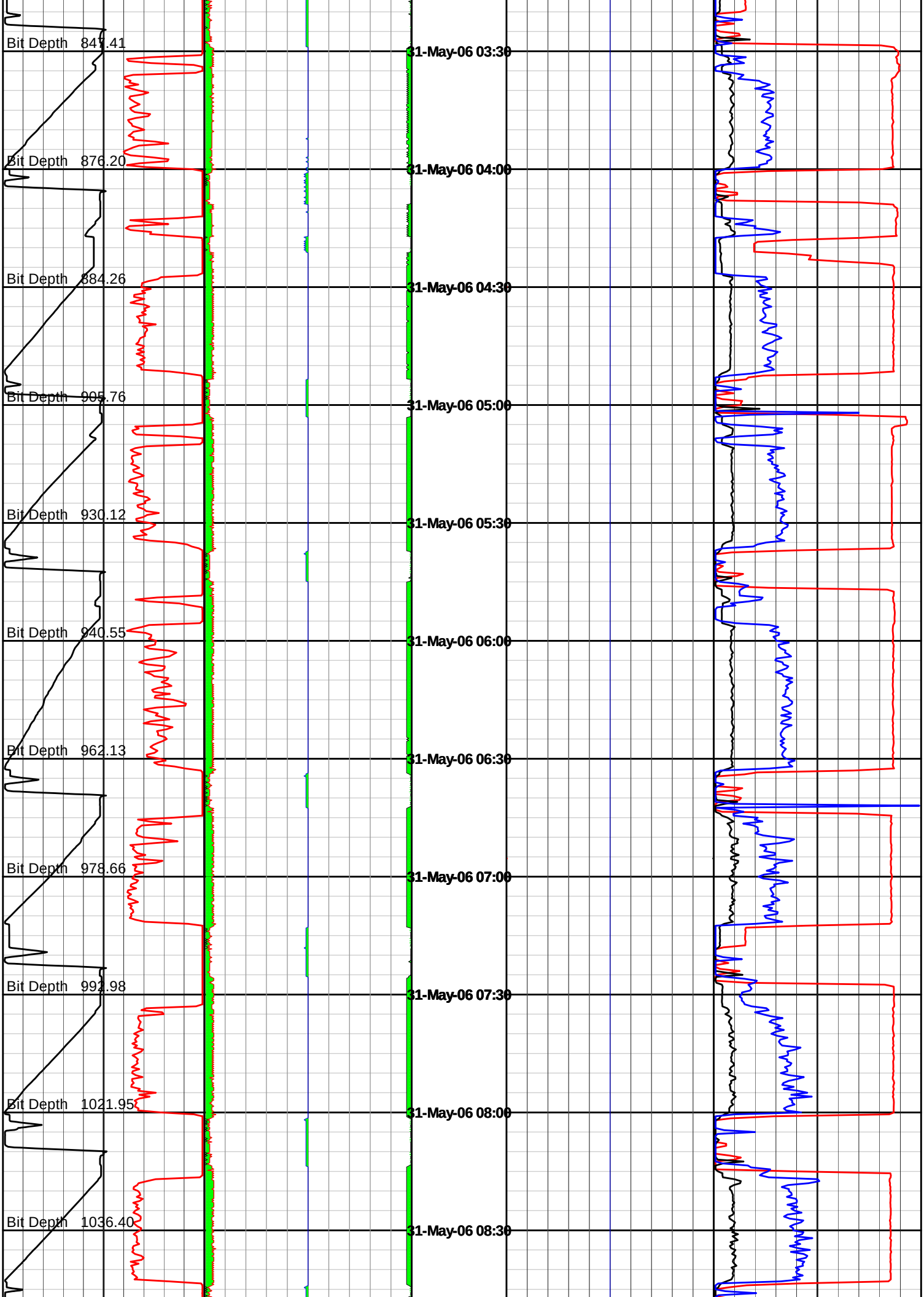
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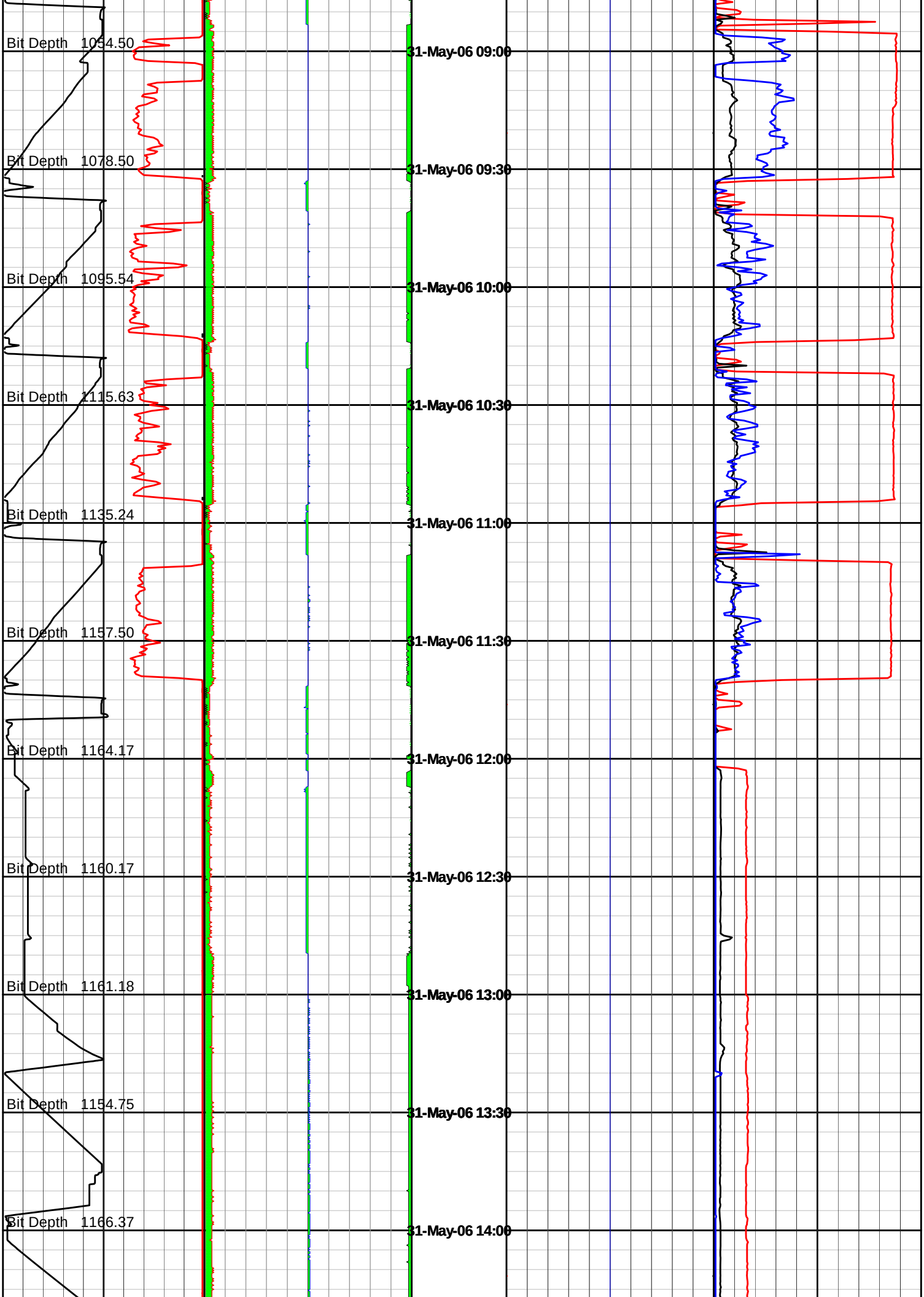
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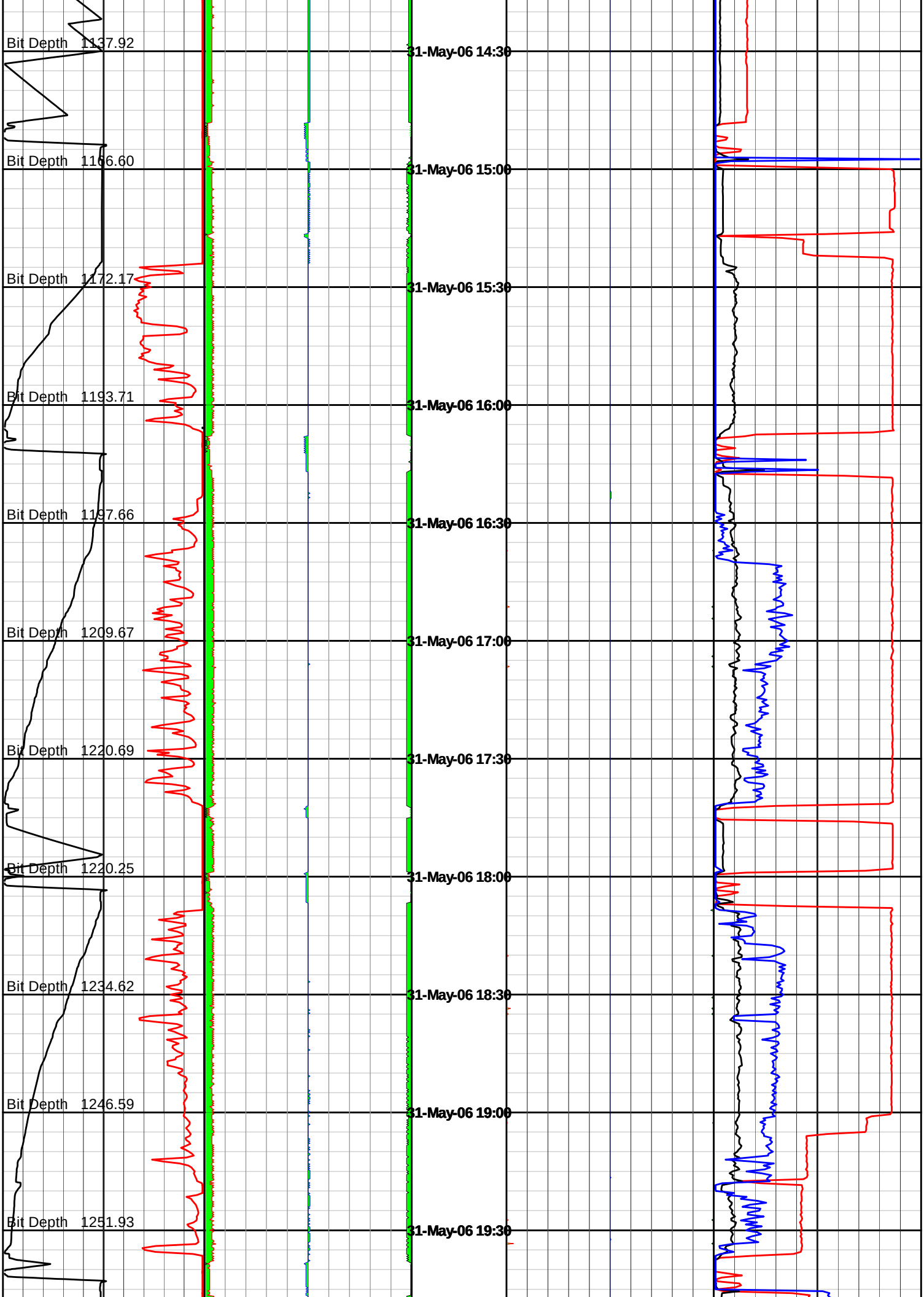
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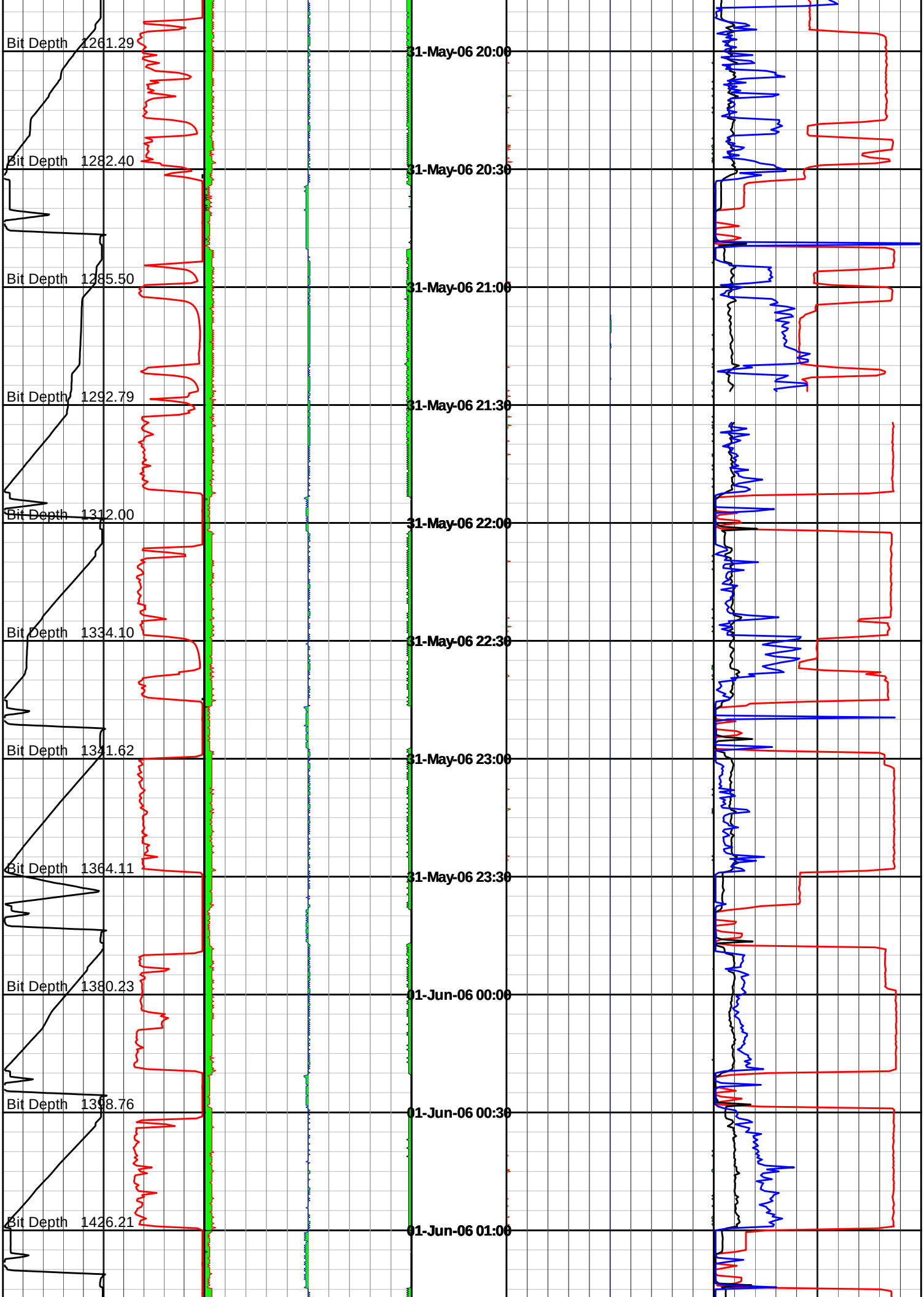
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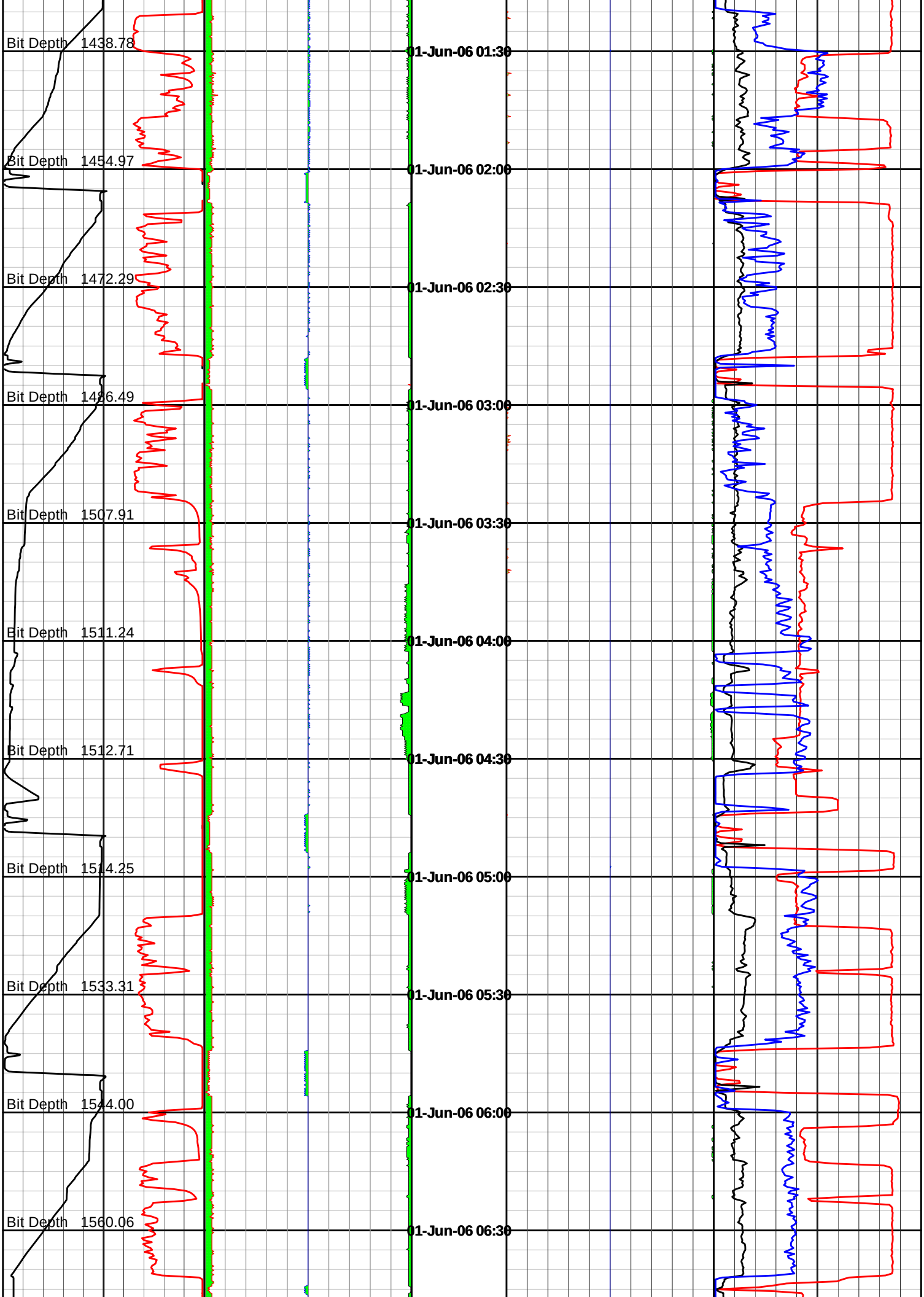
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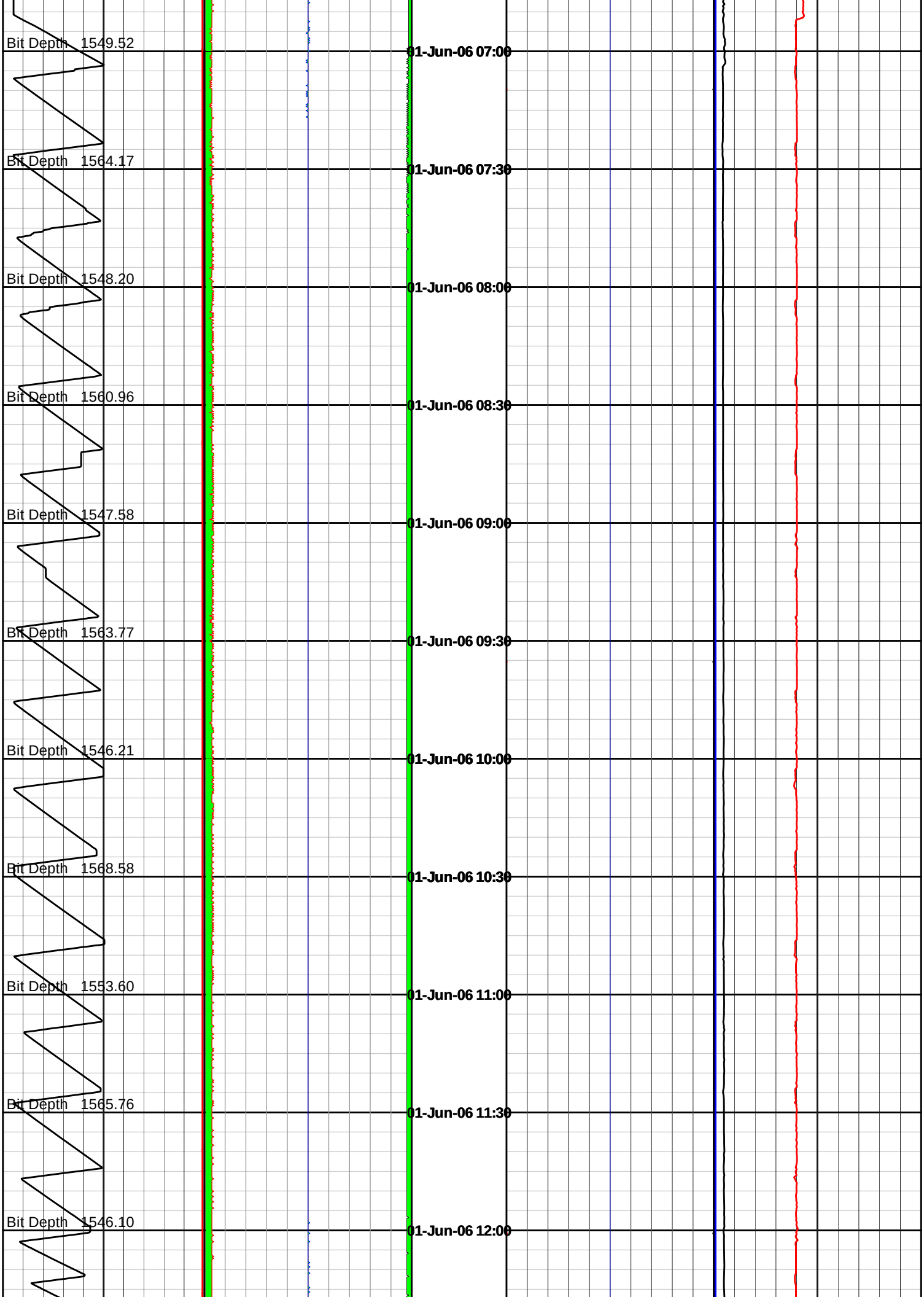
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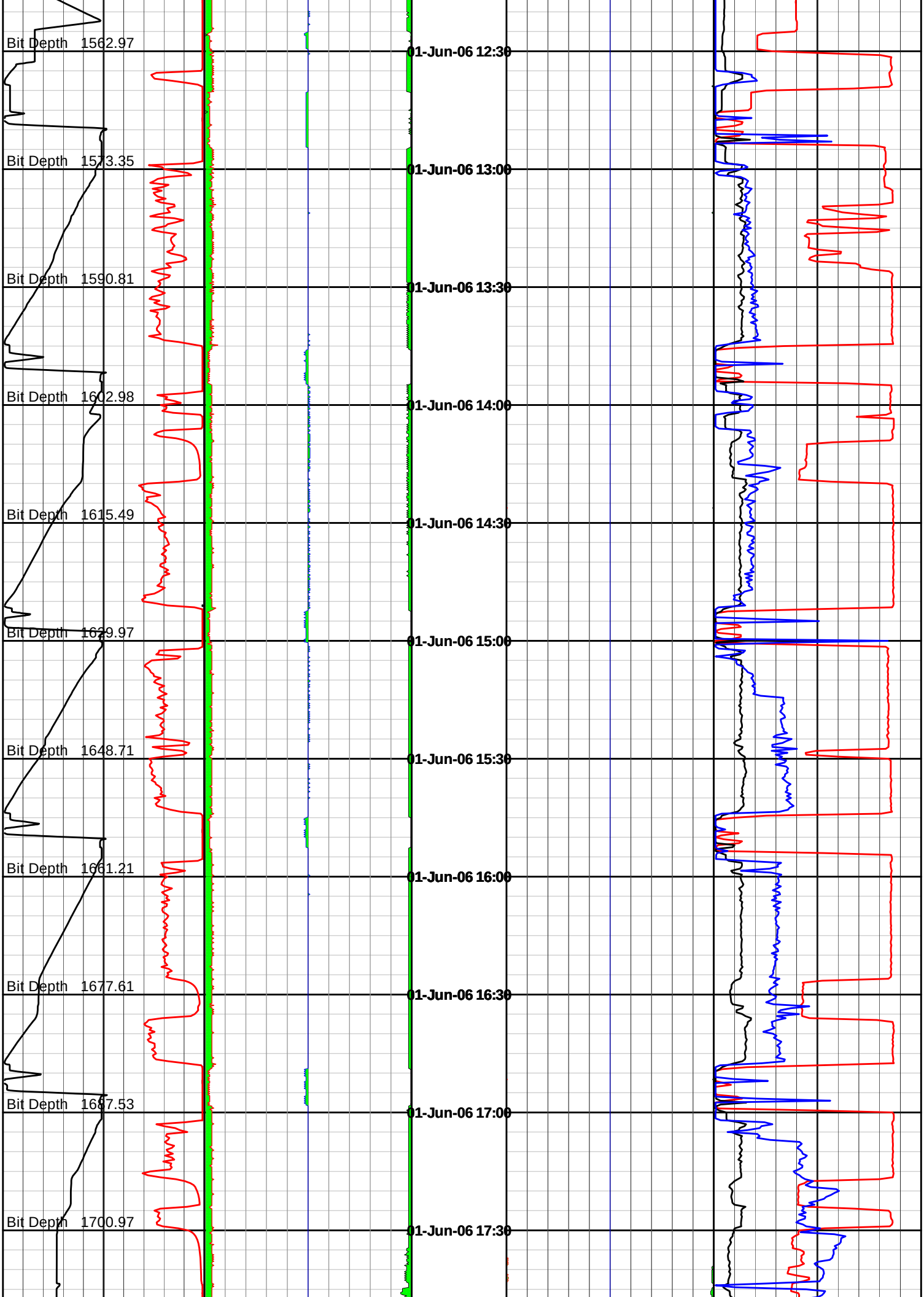
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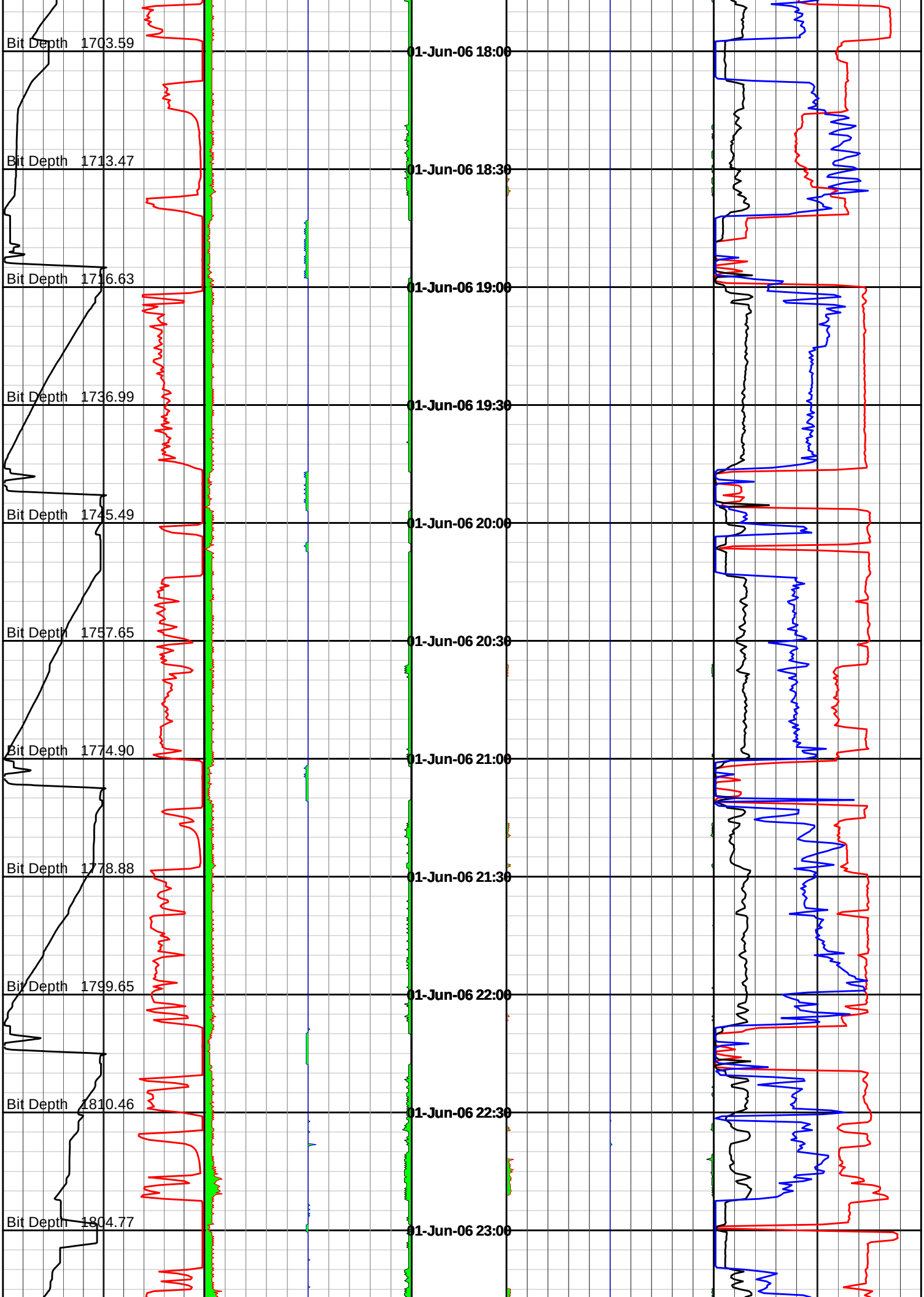
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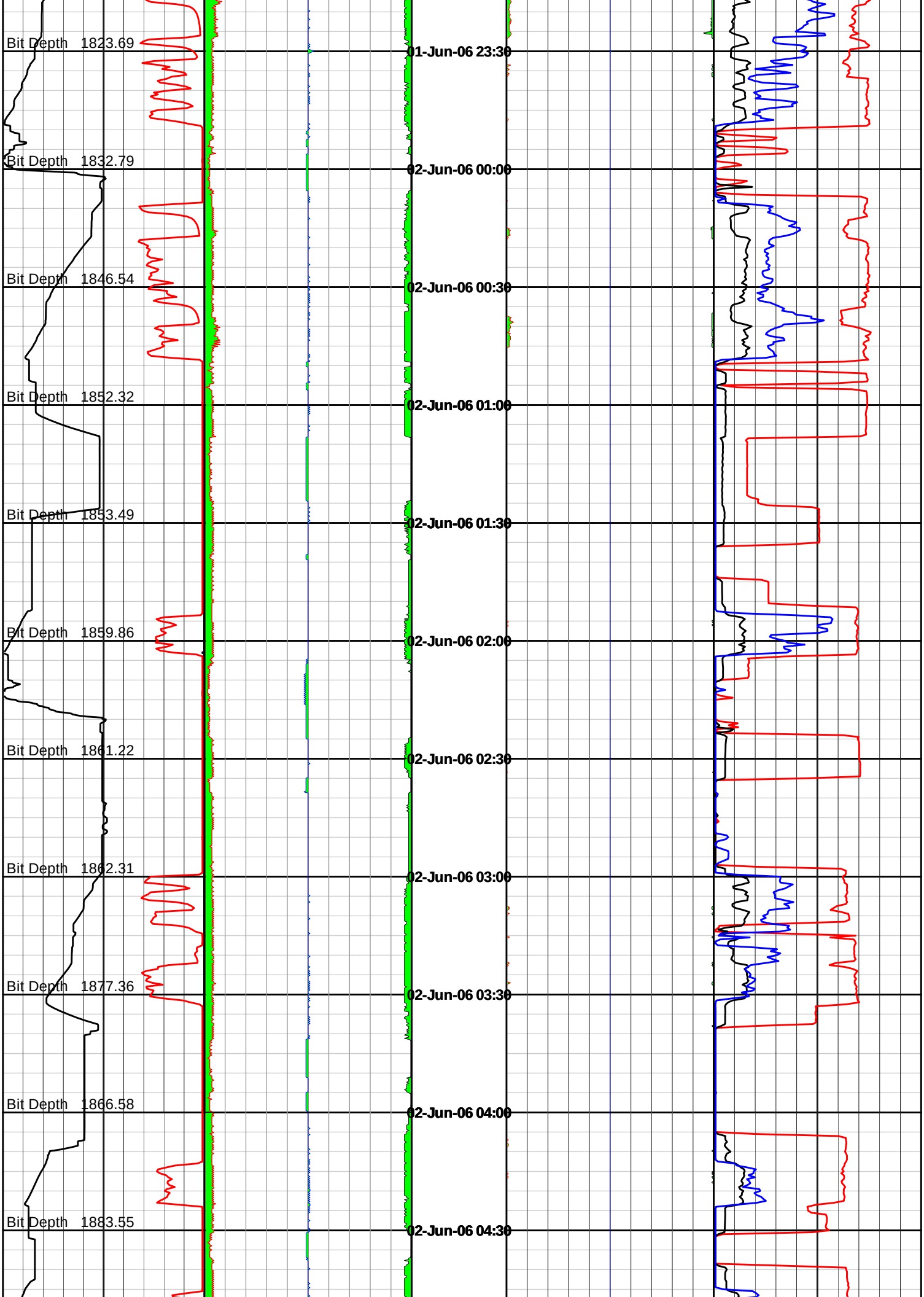
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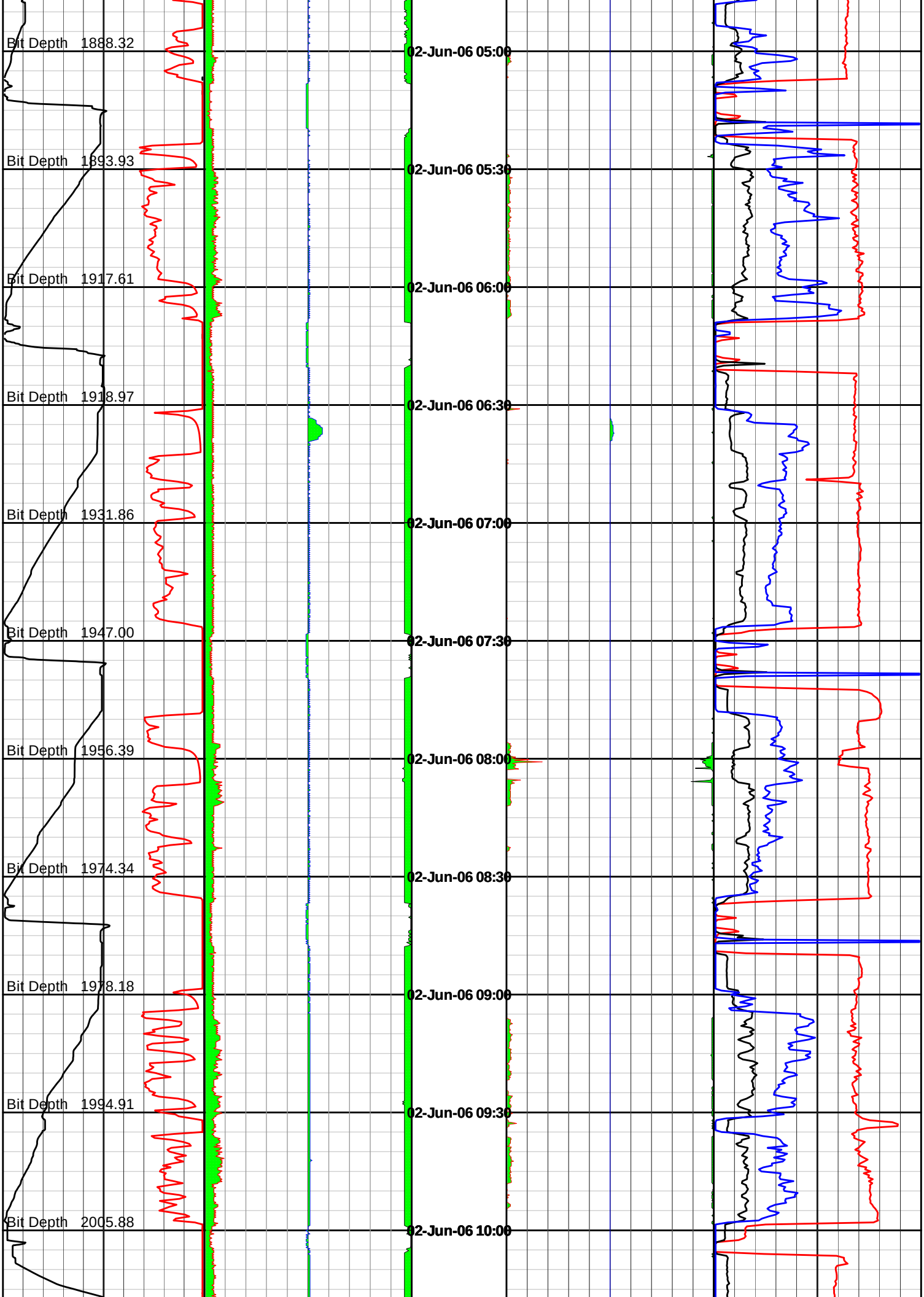
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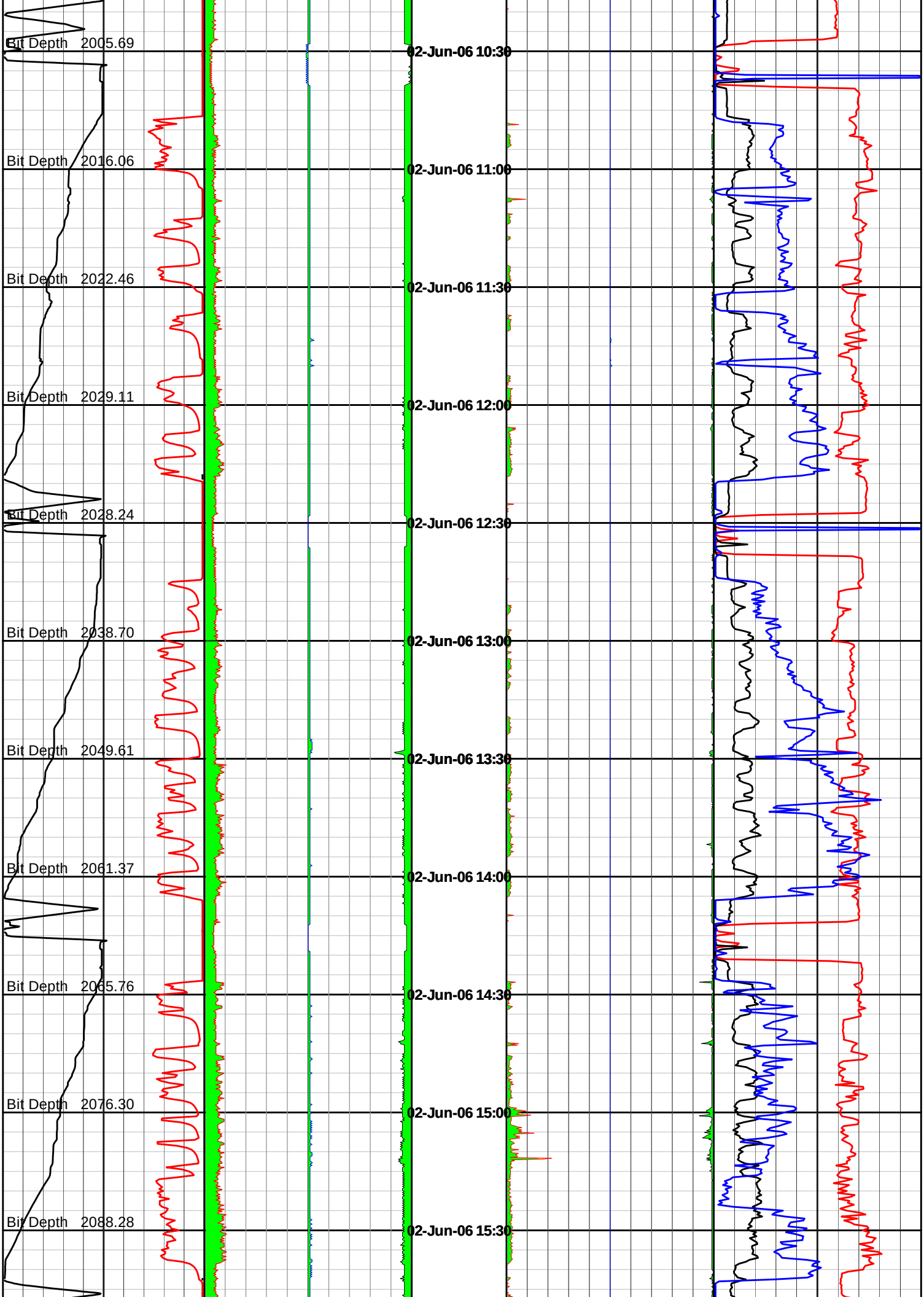
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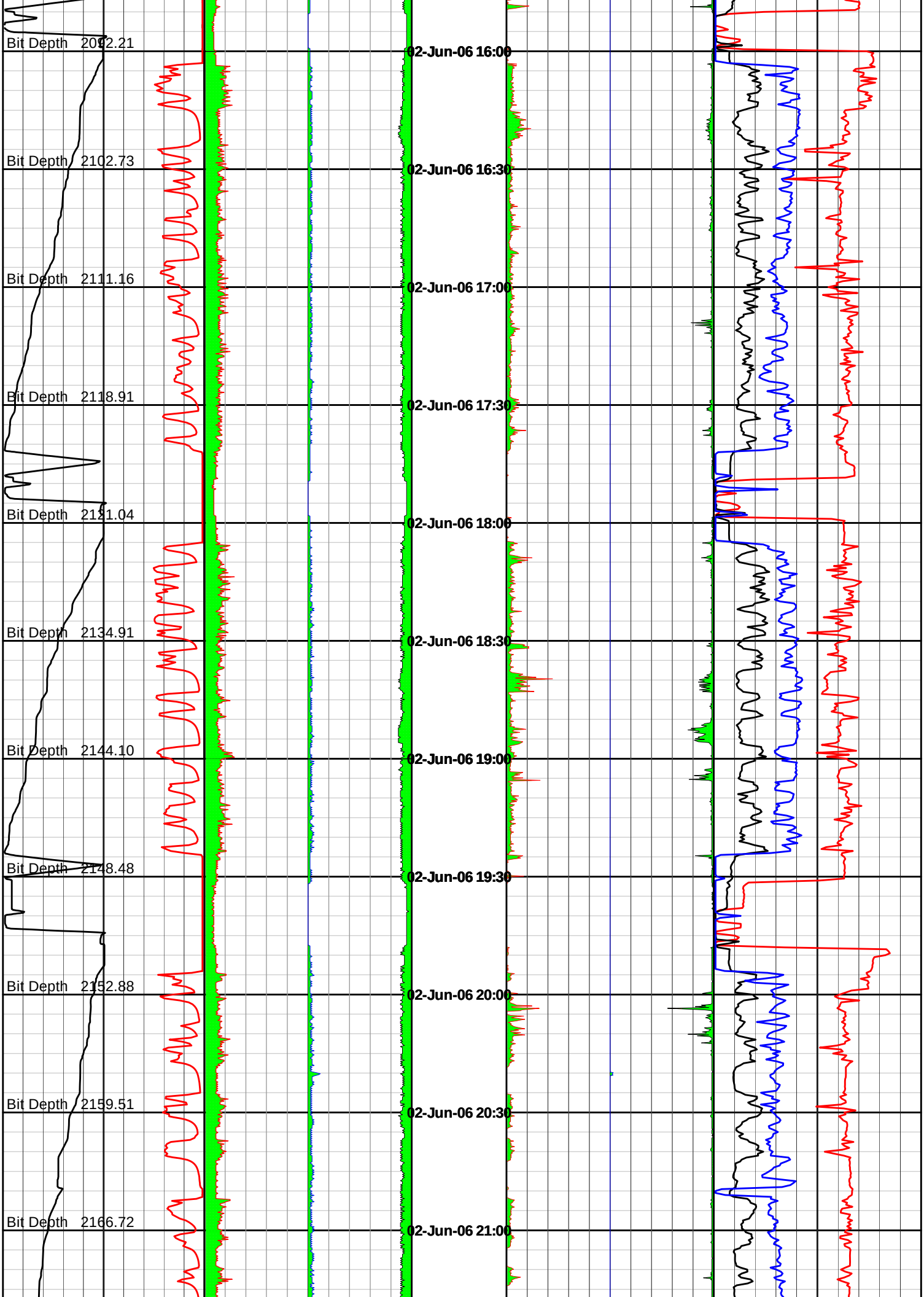
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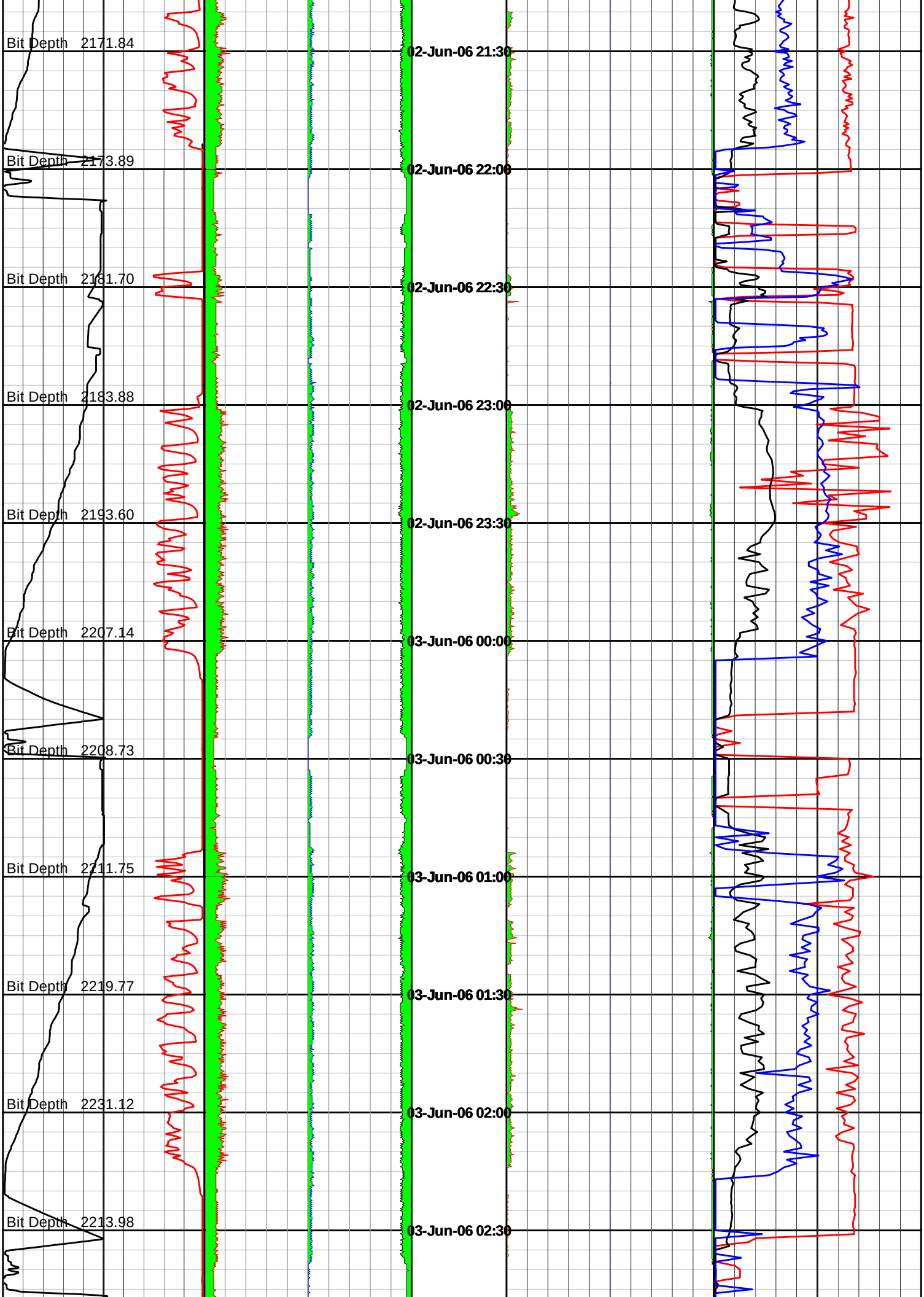
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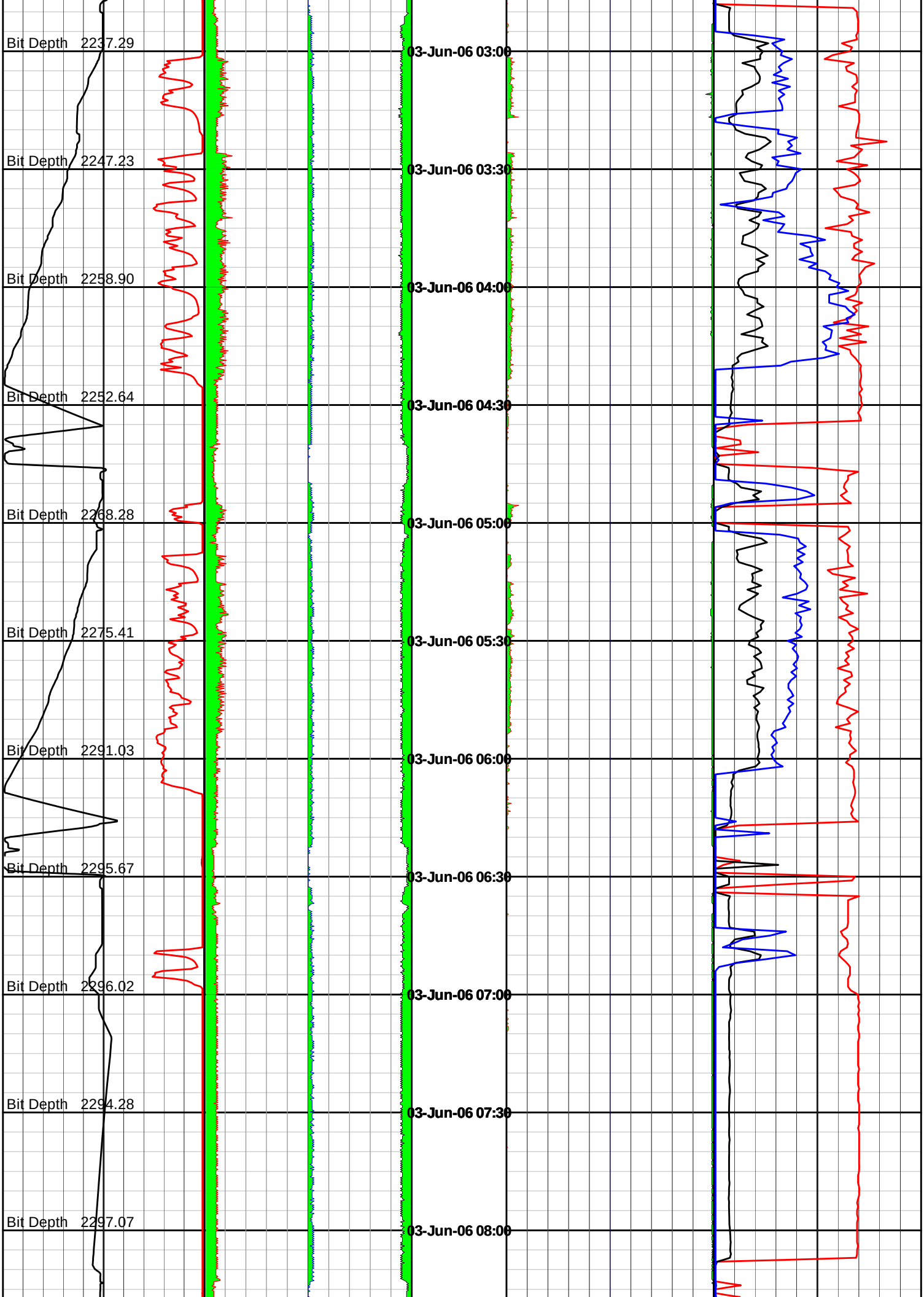
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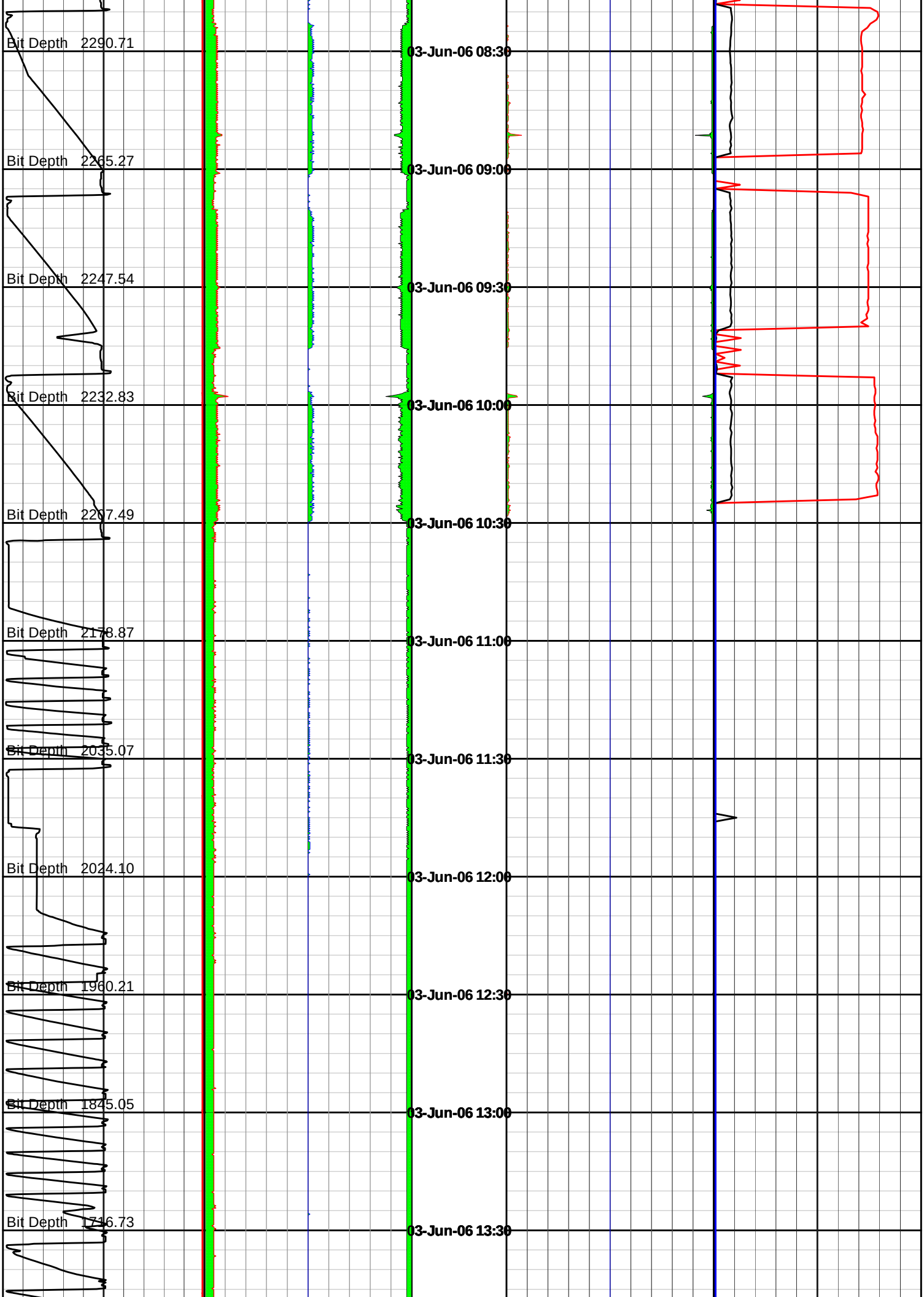
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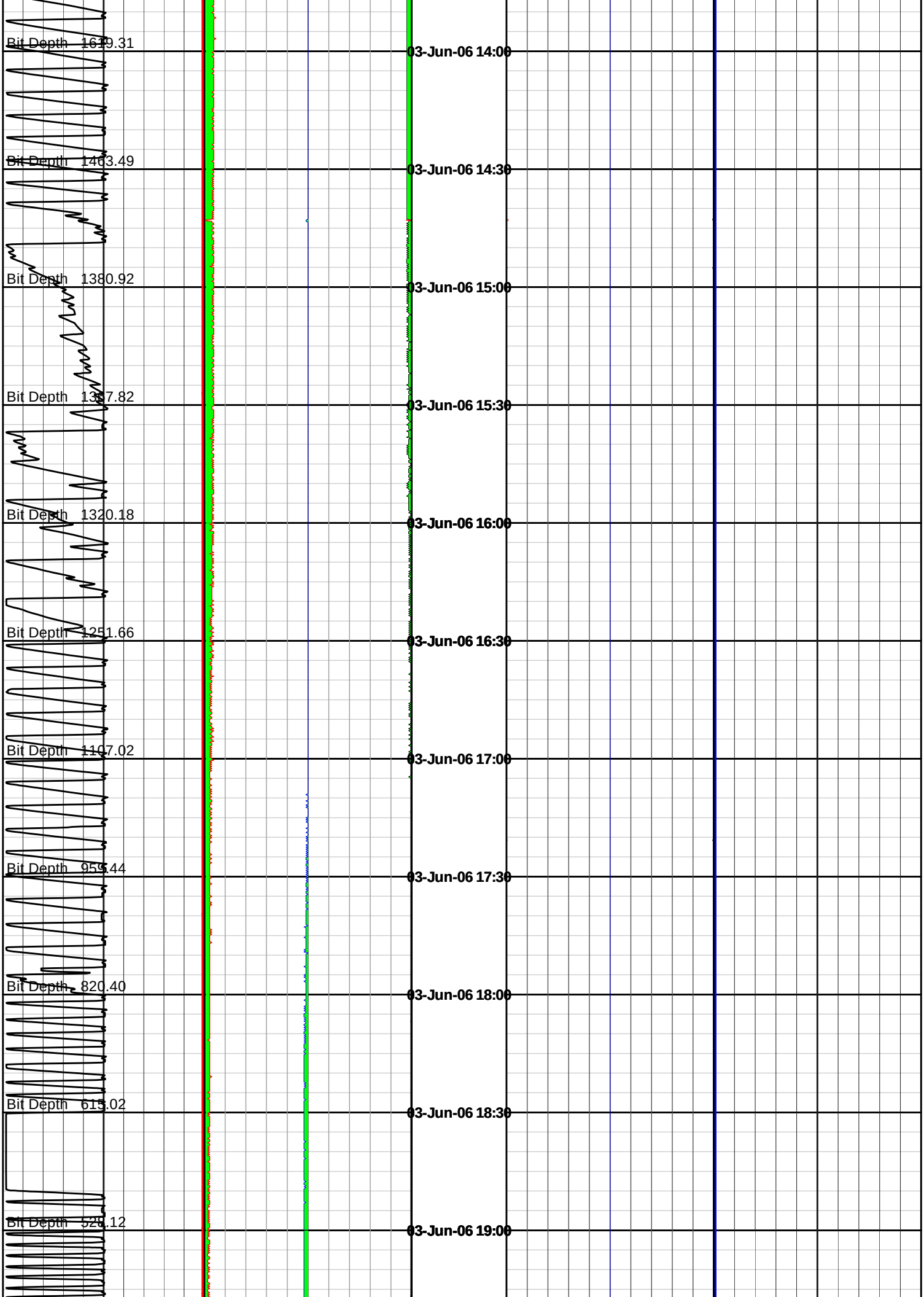
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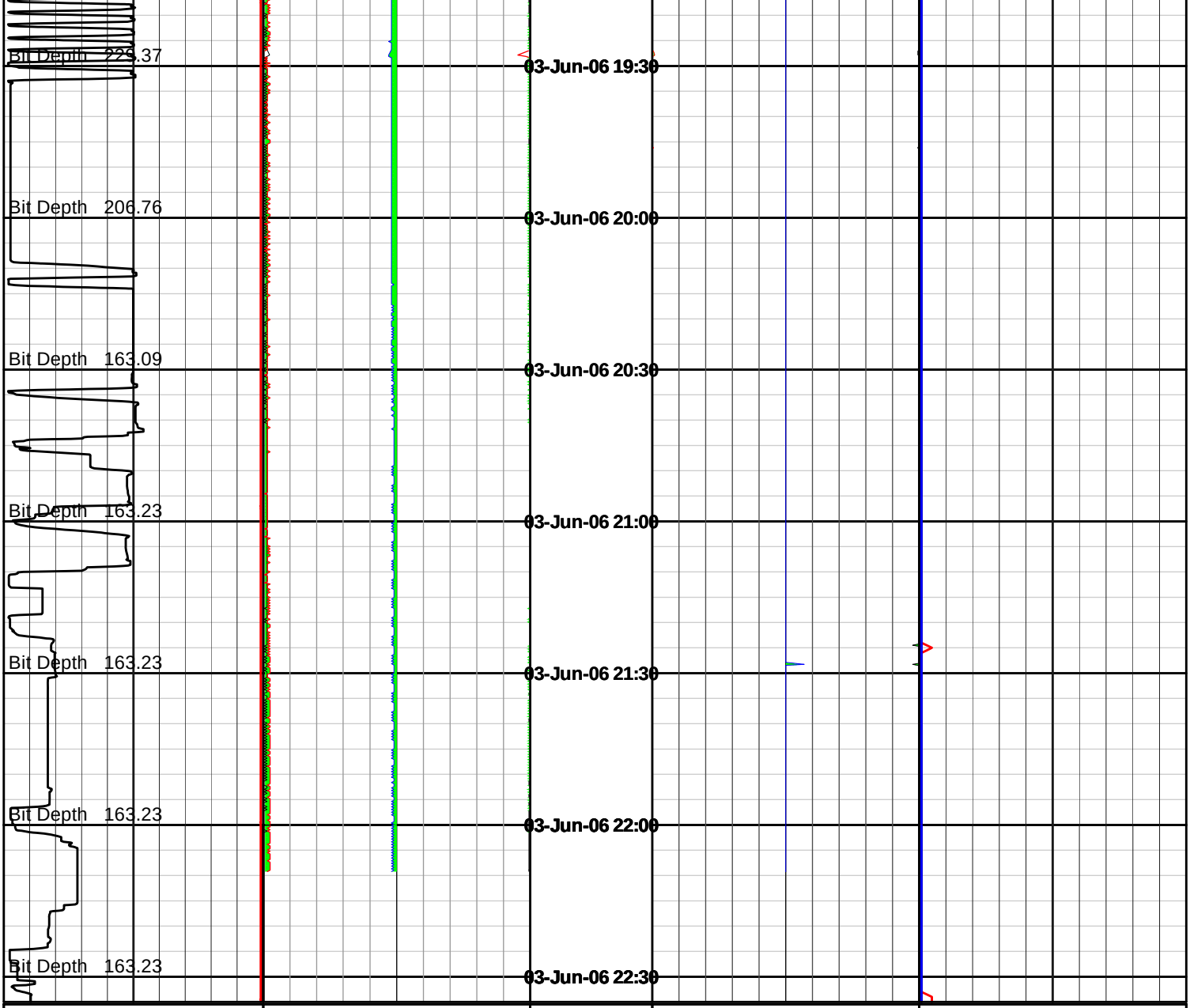


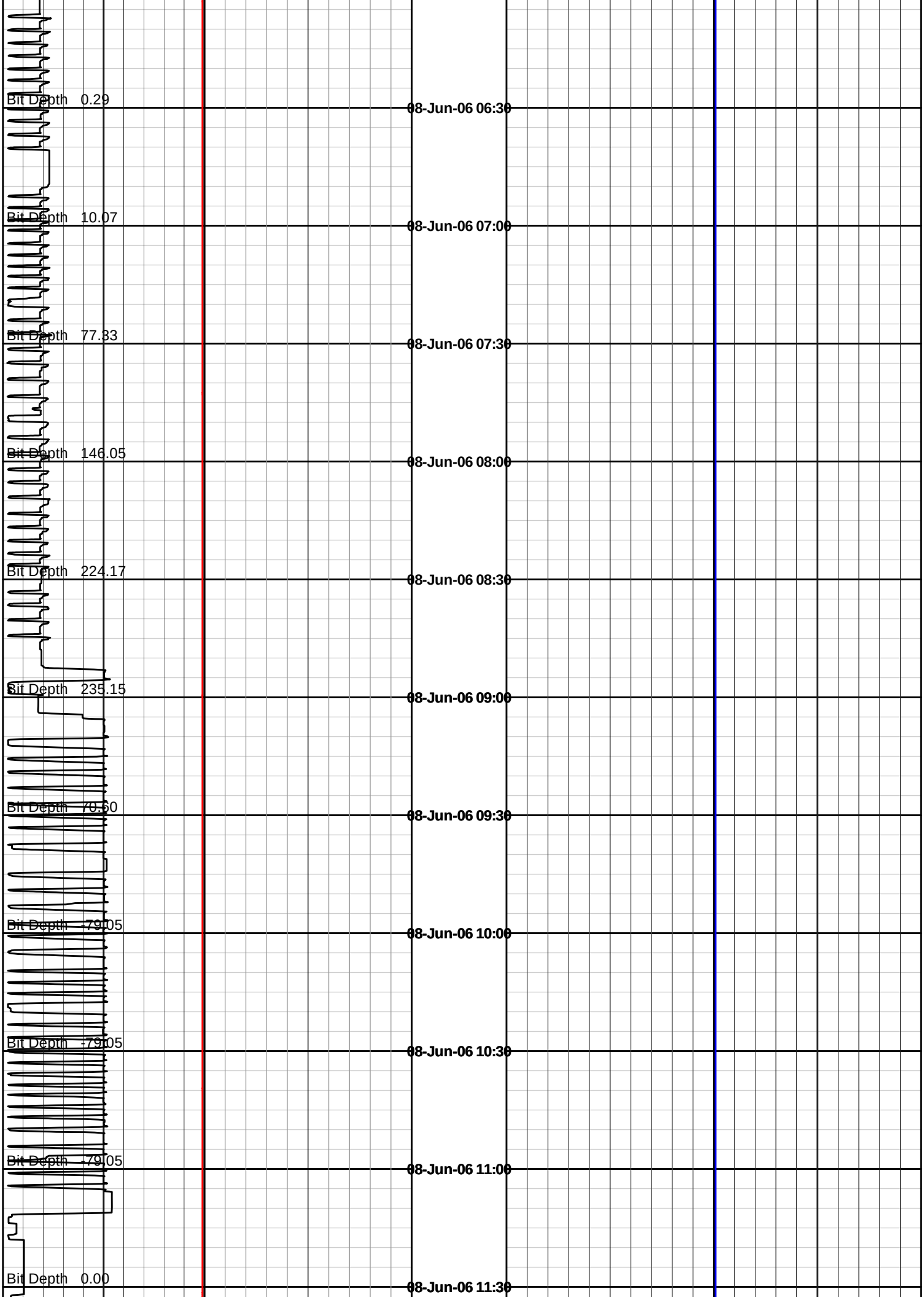
Block Position 0 – 60 metres	SAAX 0 – 20 g	Time & Date	SPAX 0 – 200 g	Bit RPM 0 – 200 rev per min
ROP 200 – 0 metre per hr	SAAY 20 – 0 g		SPAY 200 – 0 g	Torque 0 – 50 foot-klb
	SAAZ -10 – 10 g		SPAZ -100 – 100 g	WOB 0 – 50 kilo pounds

Woodside Energy Ltd

THA02

Run 400 - 216mm Section

	SAAZ -10 – 10 g		SPAZ -100 – 100 g	WOB 0 – 50 kilo pounds
ROP 200 – 0 metre per hr	SAAY 20 – 0 g		SPAY 200 – 0 g	Torque 0 – 50 foot-klb
Block Position 0 – 60 metres	SAAX 0 – 20 g	Time & Date	SPAX 0 – 200 g	Bit RPM 0 – 200 rev per min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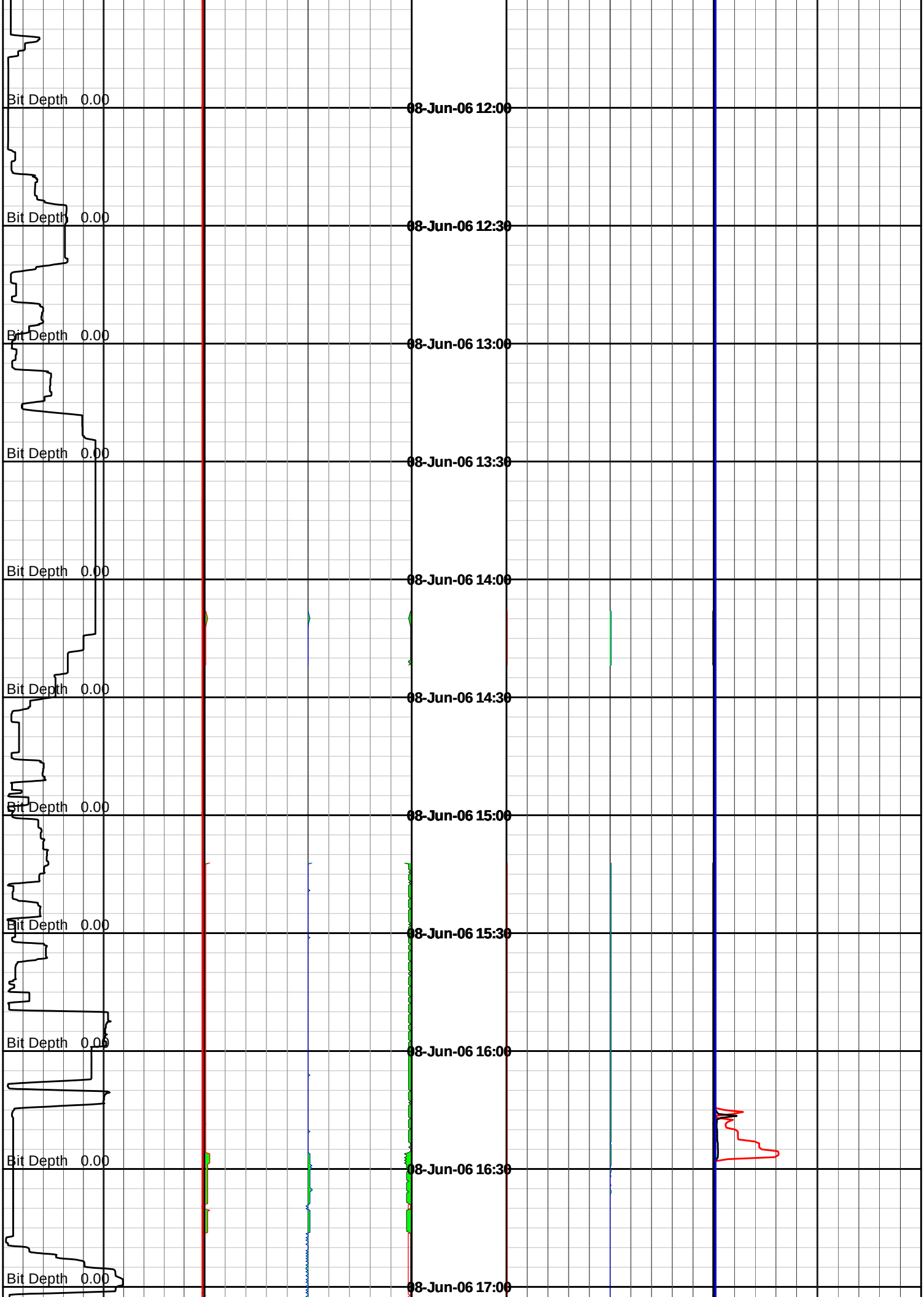
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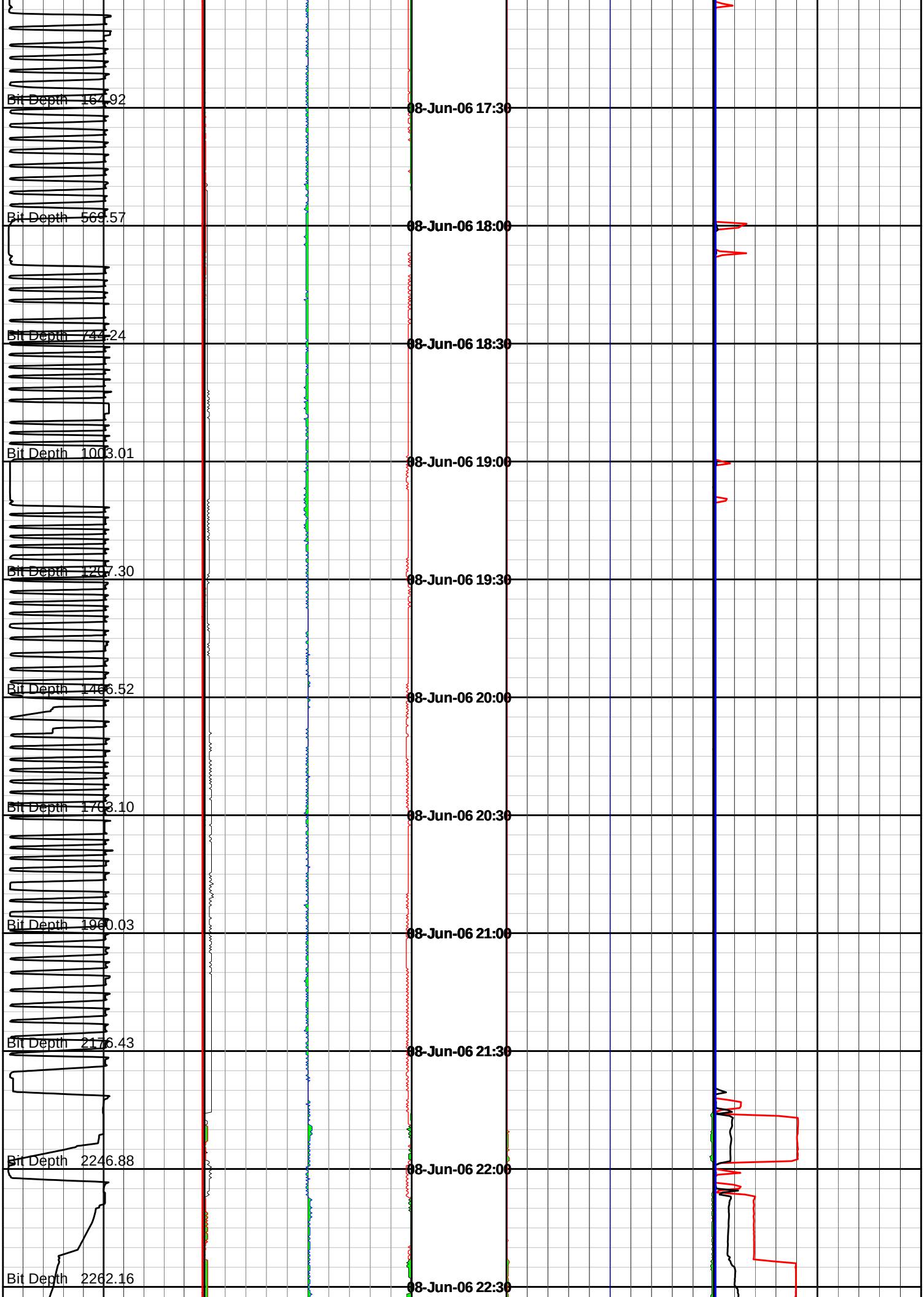
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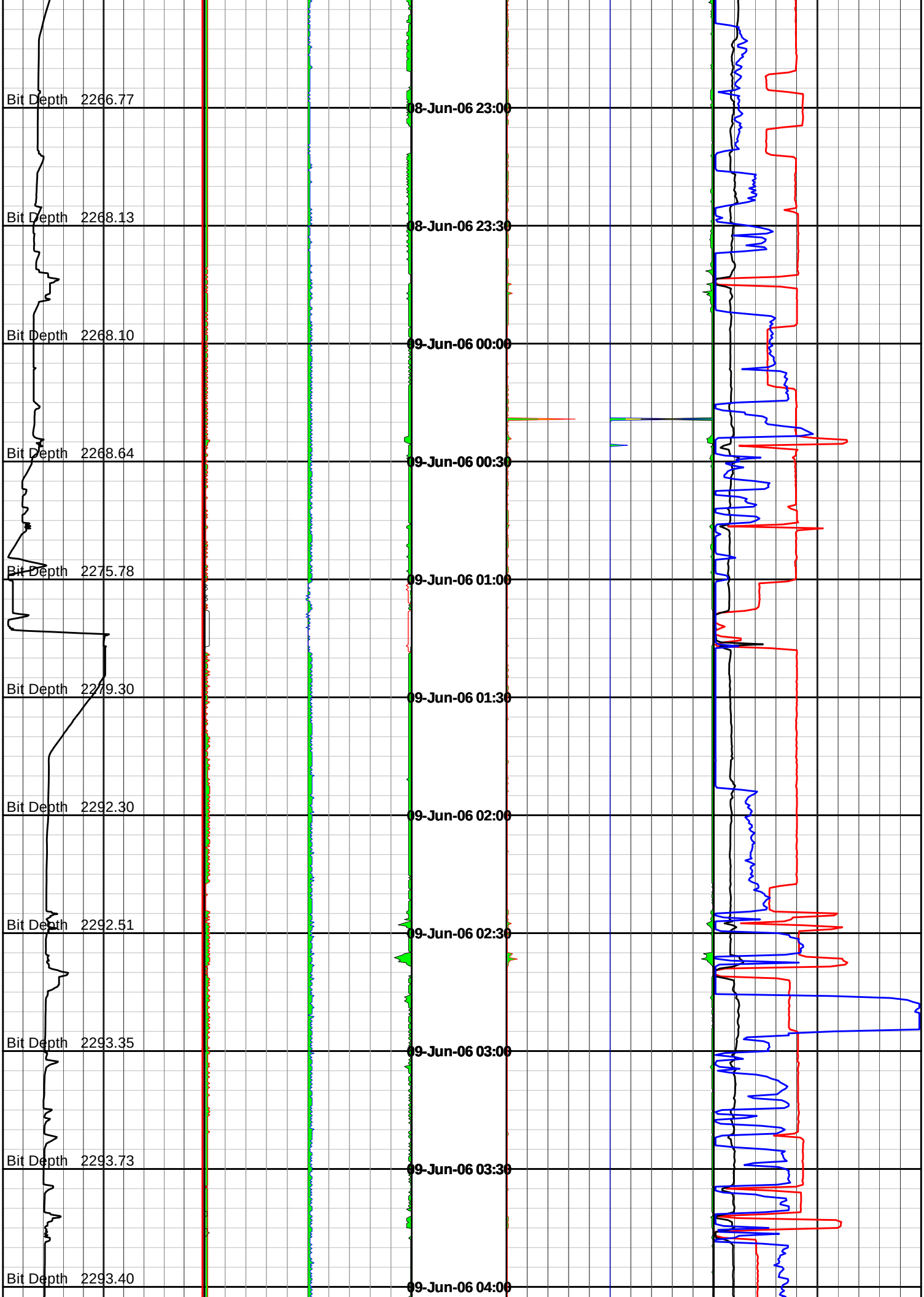
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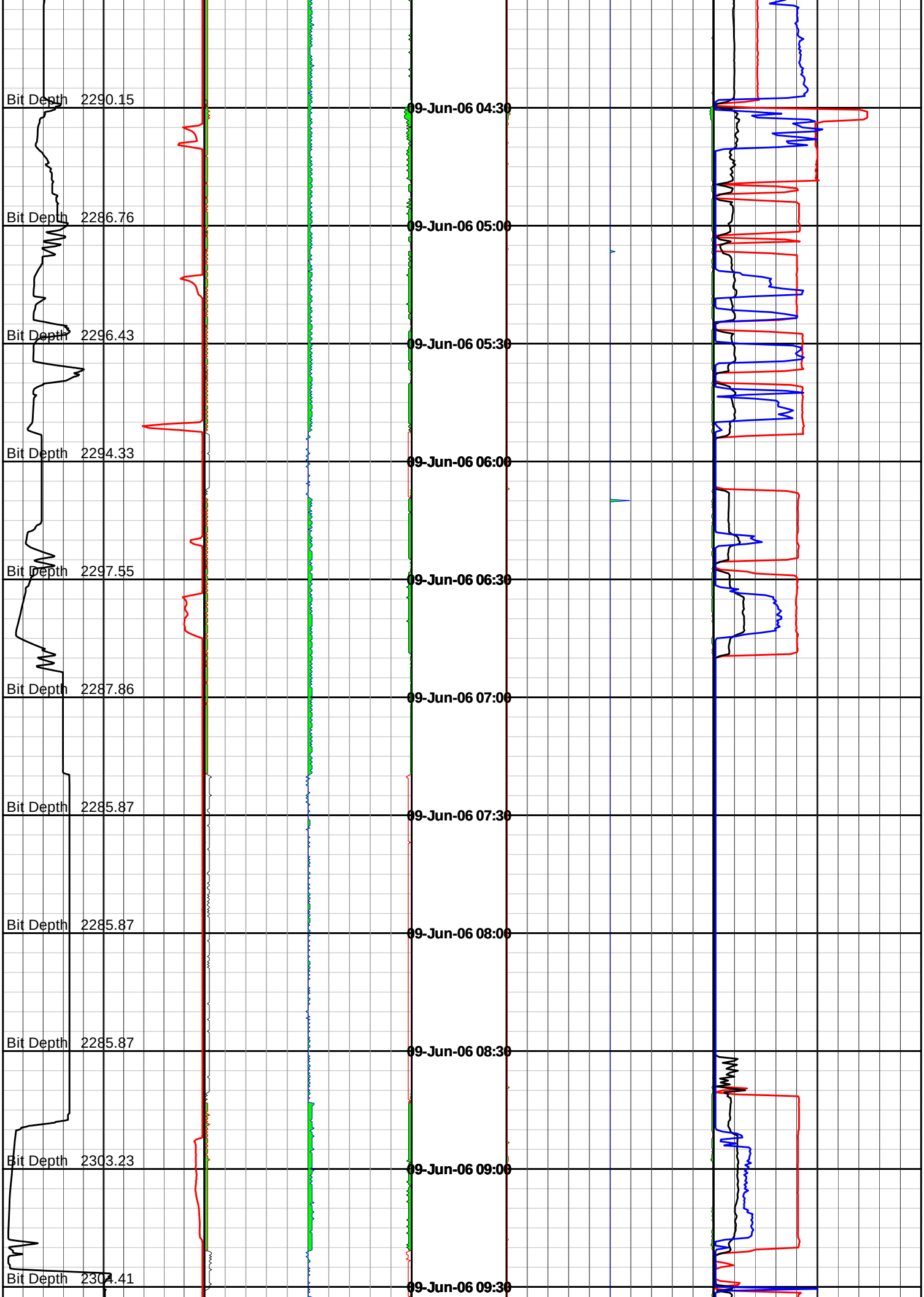
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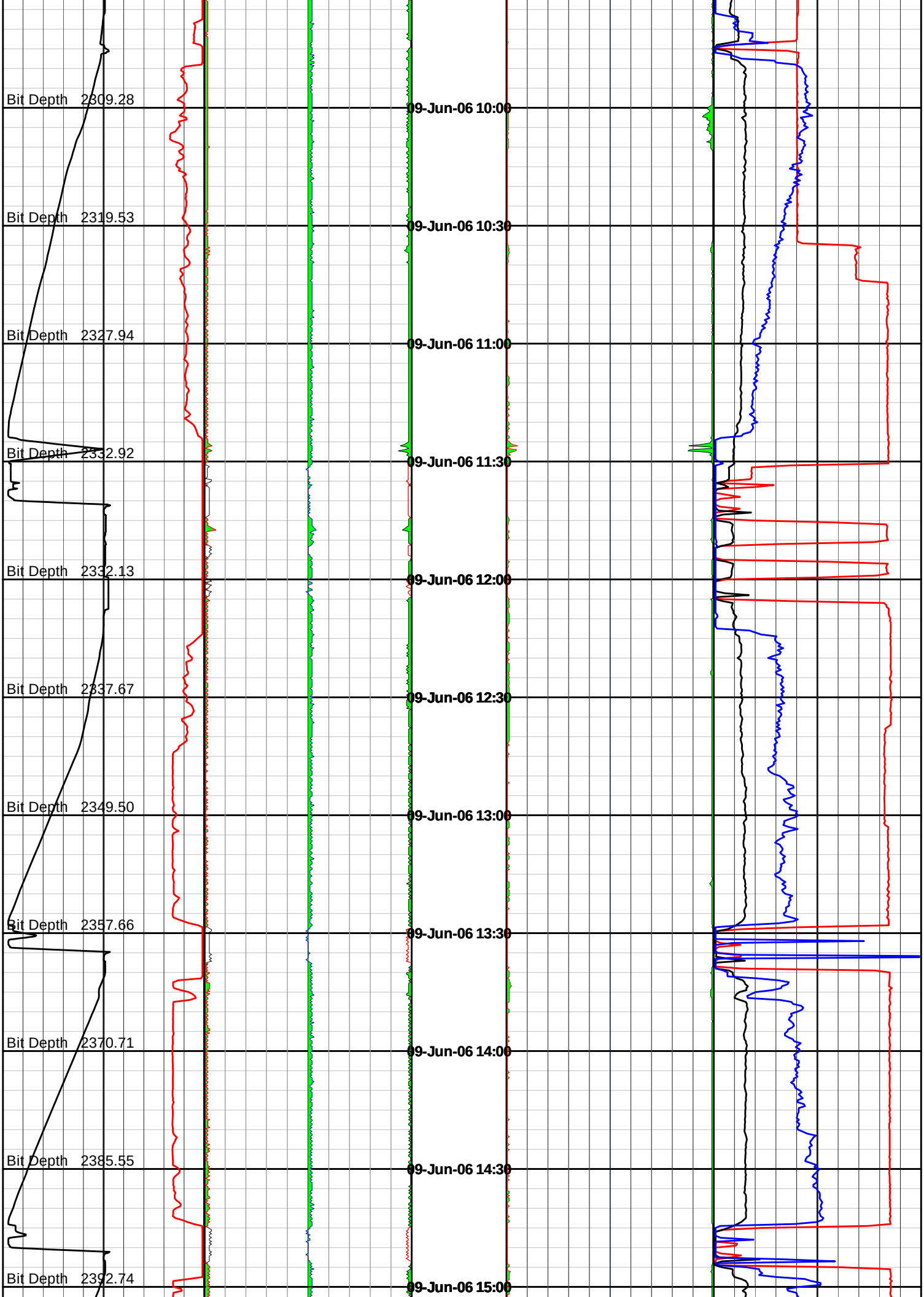
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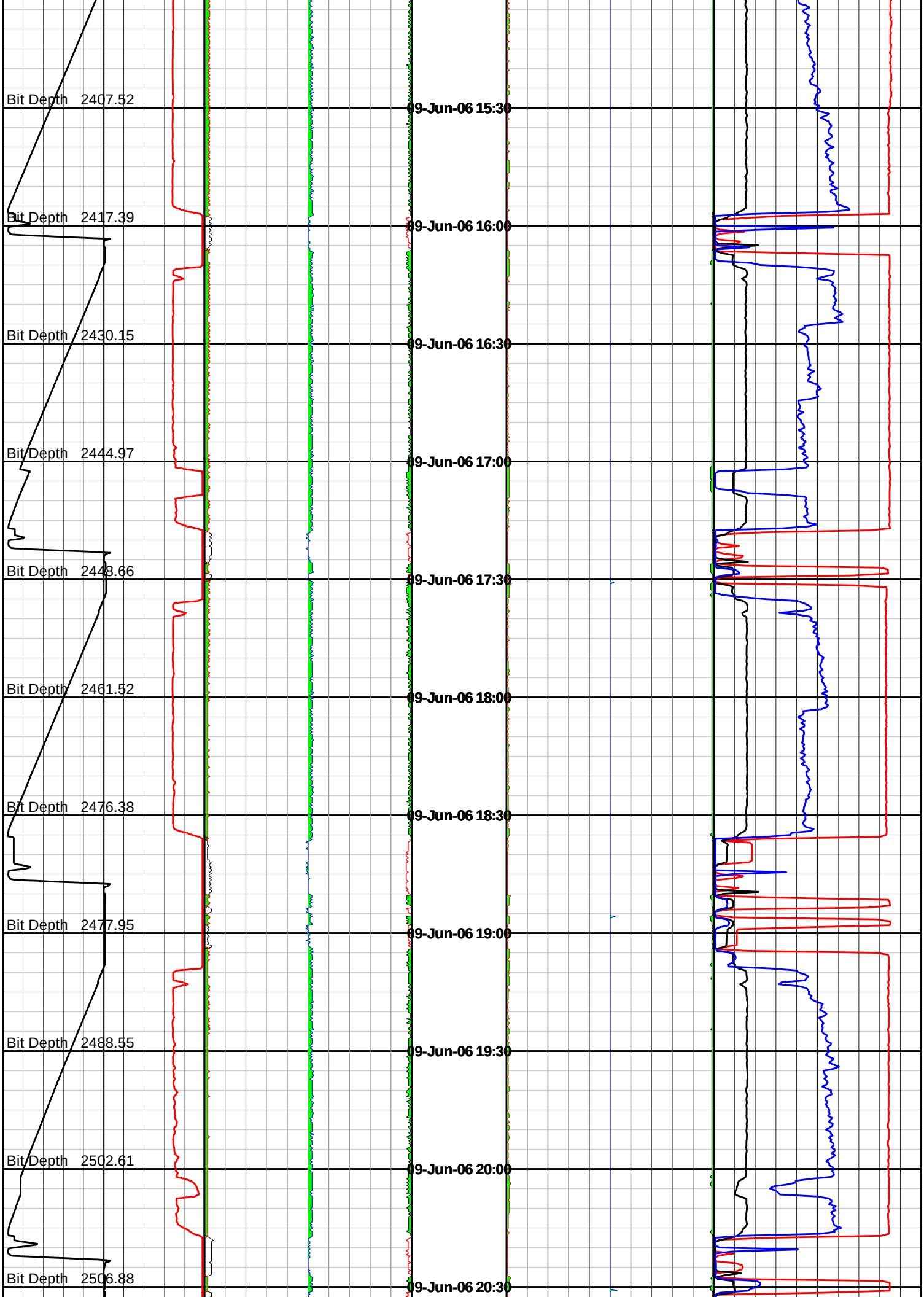
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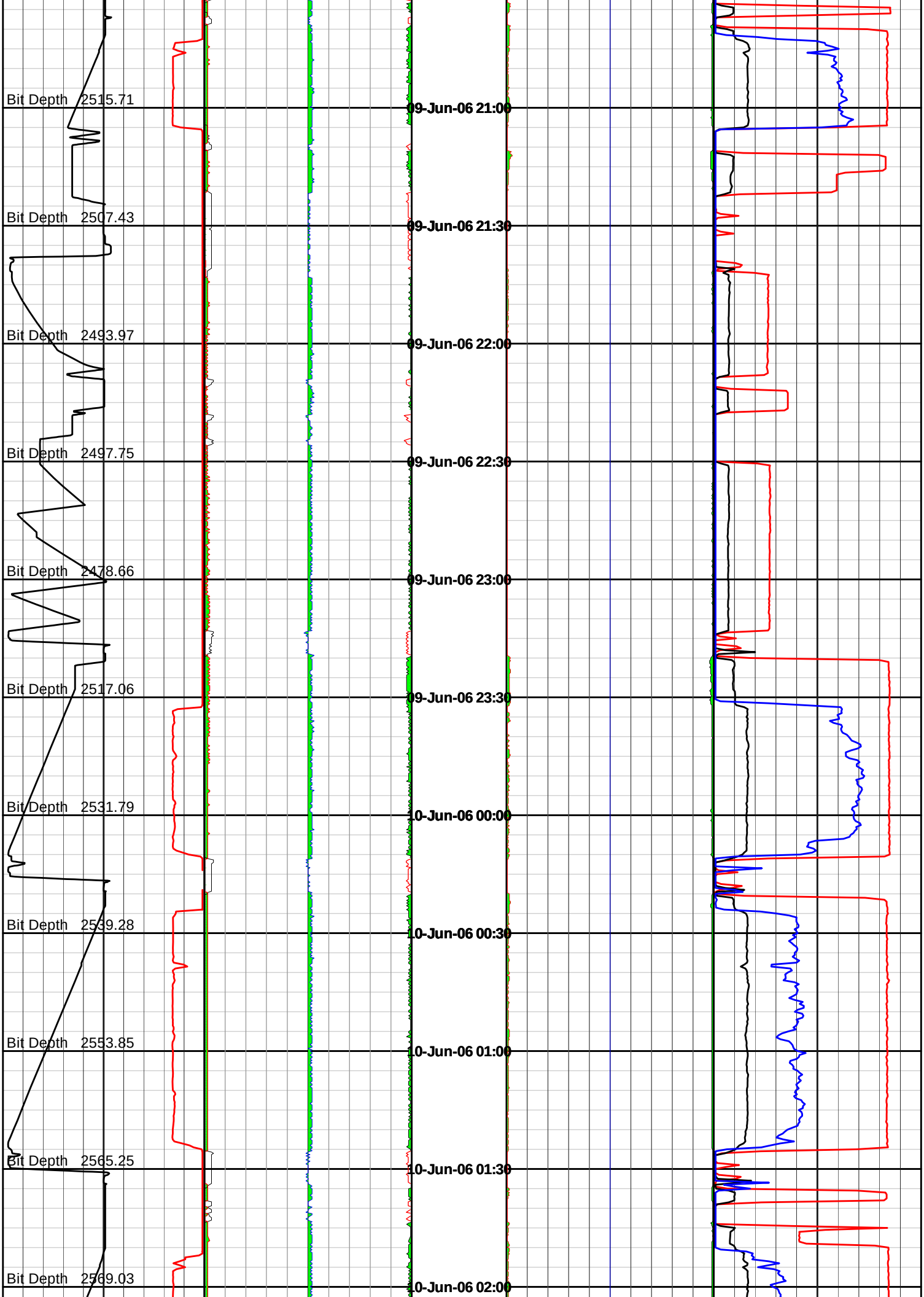
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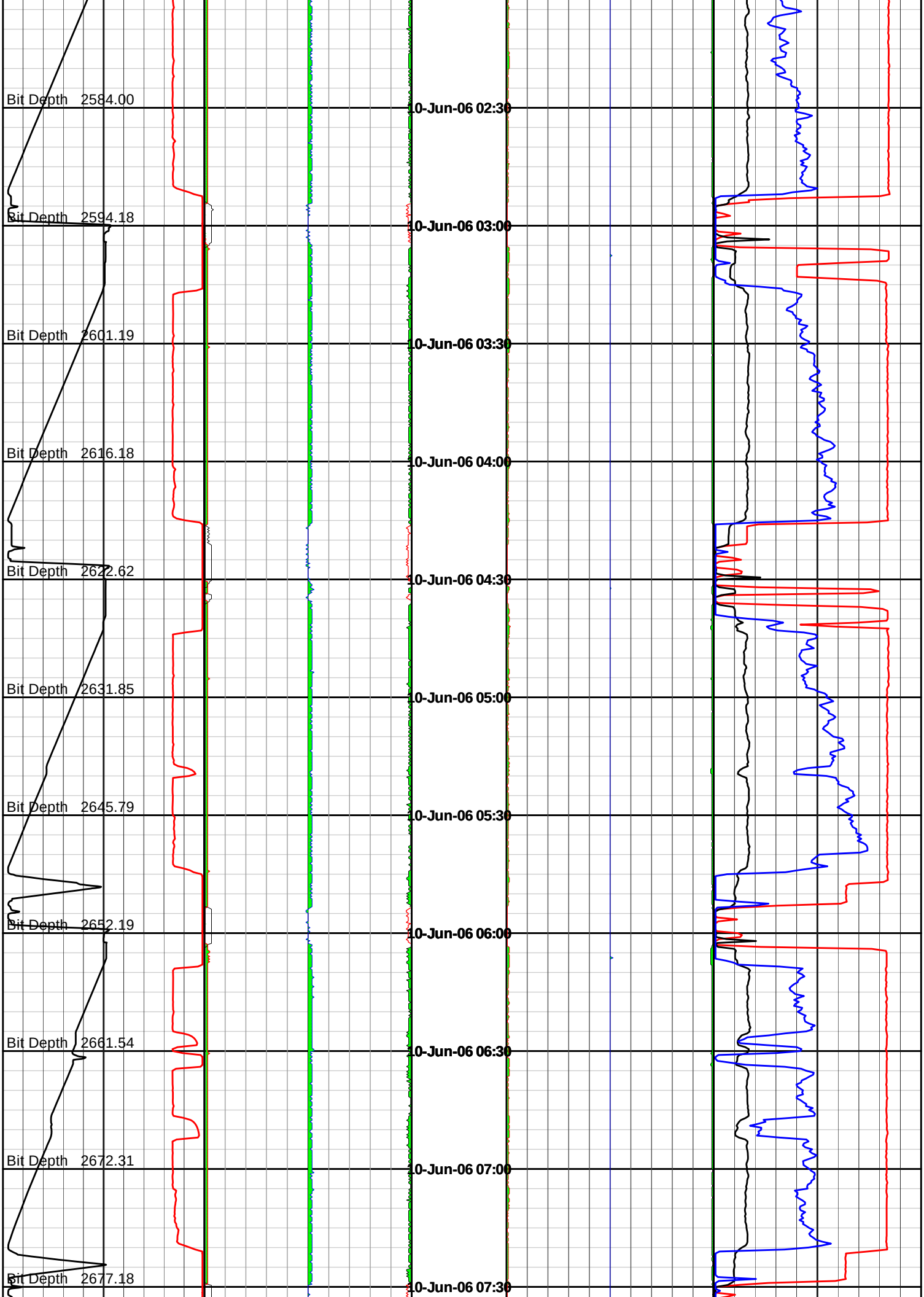
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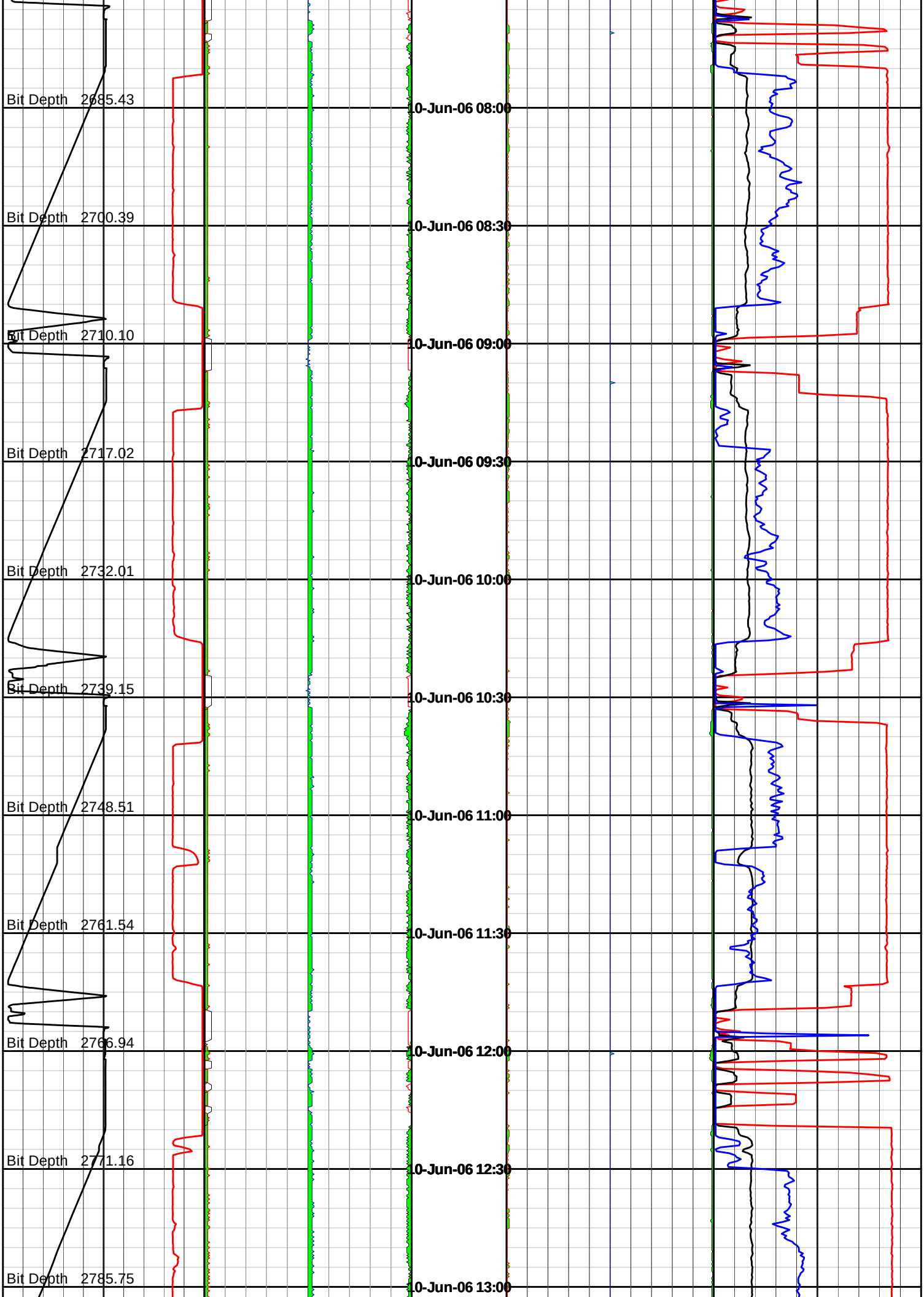
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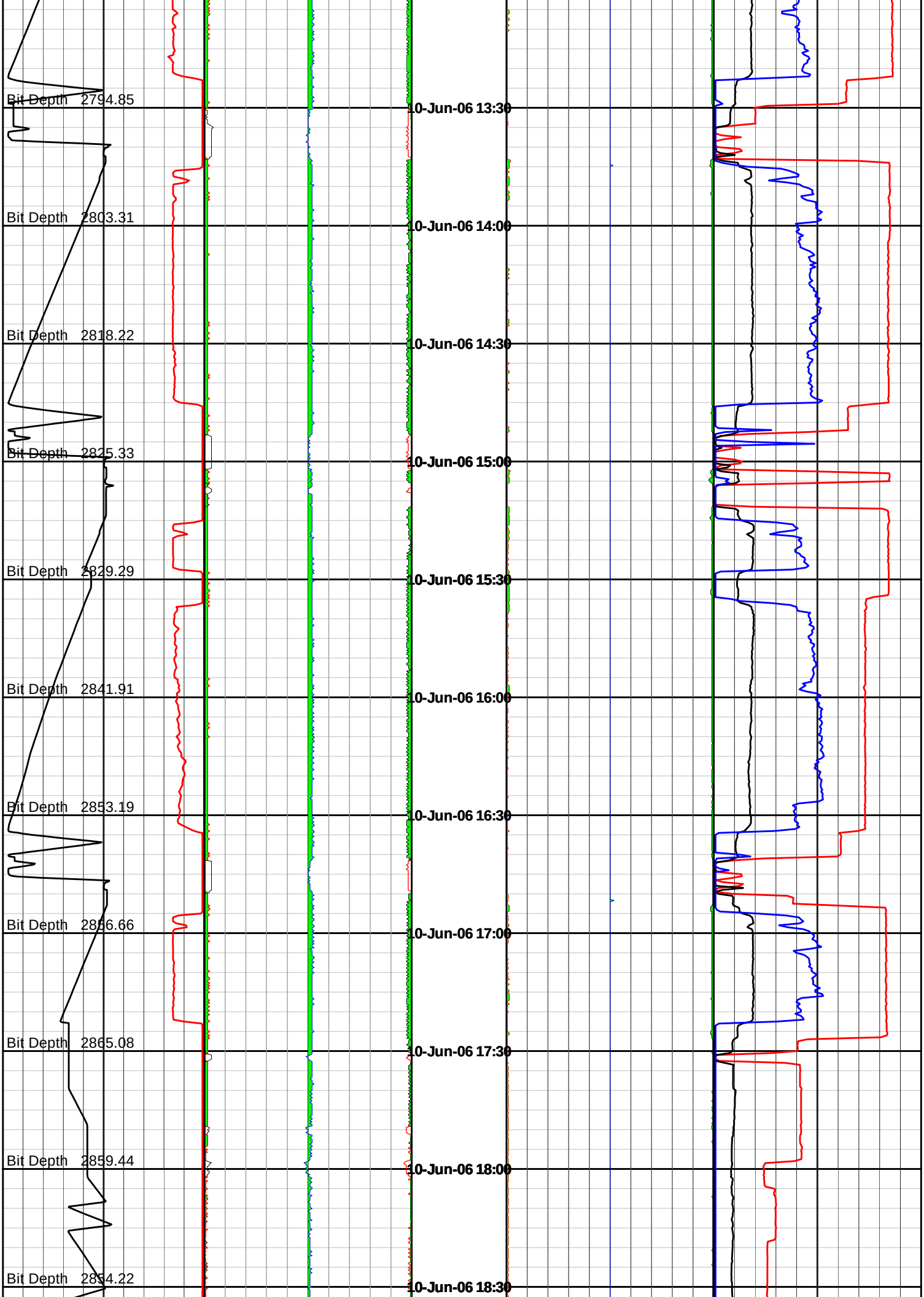
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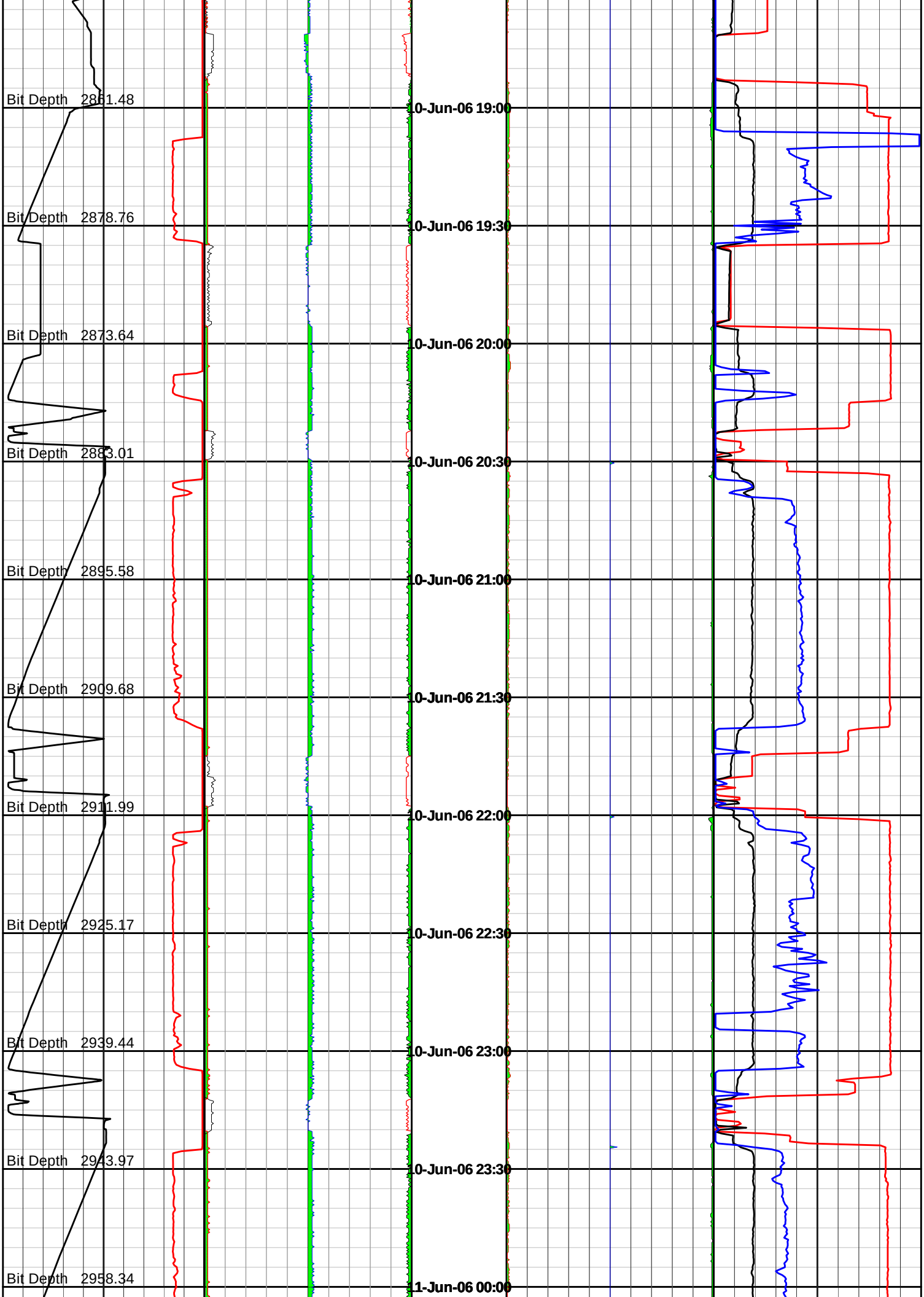
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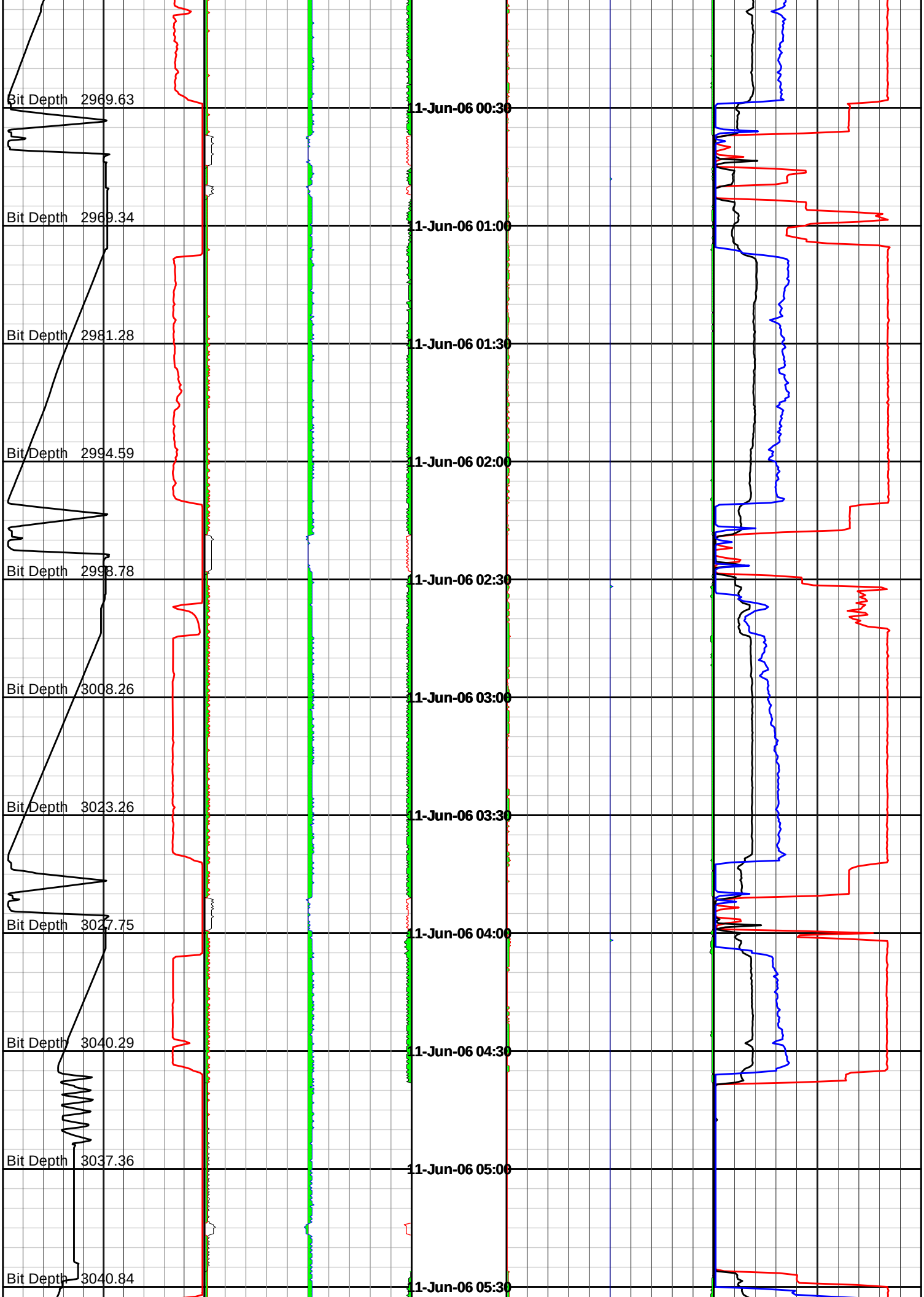
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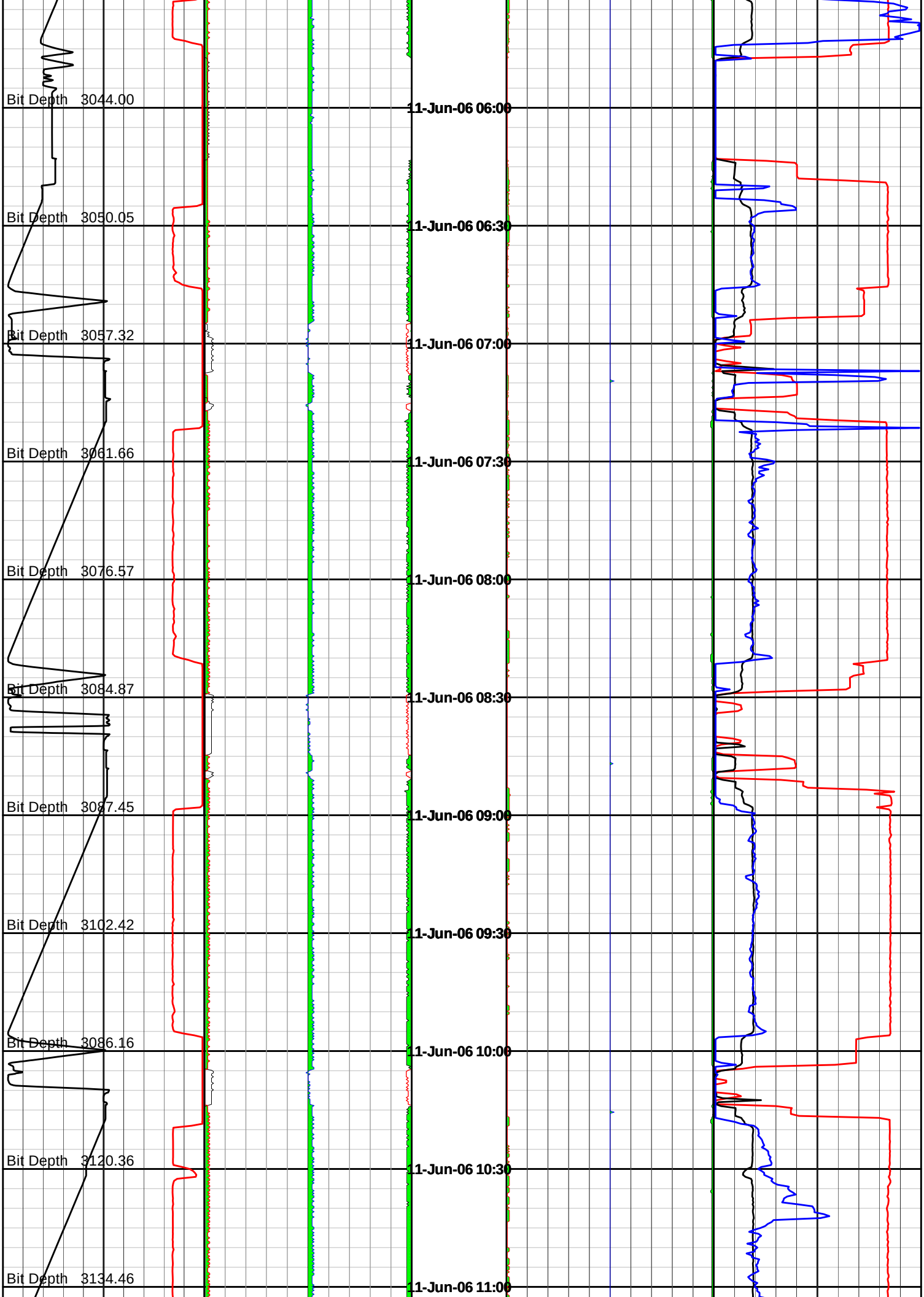
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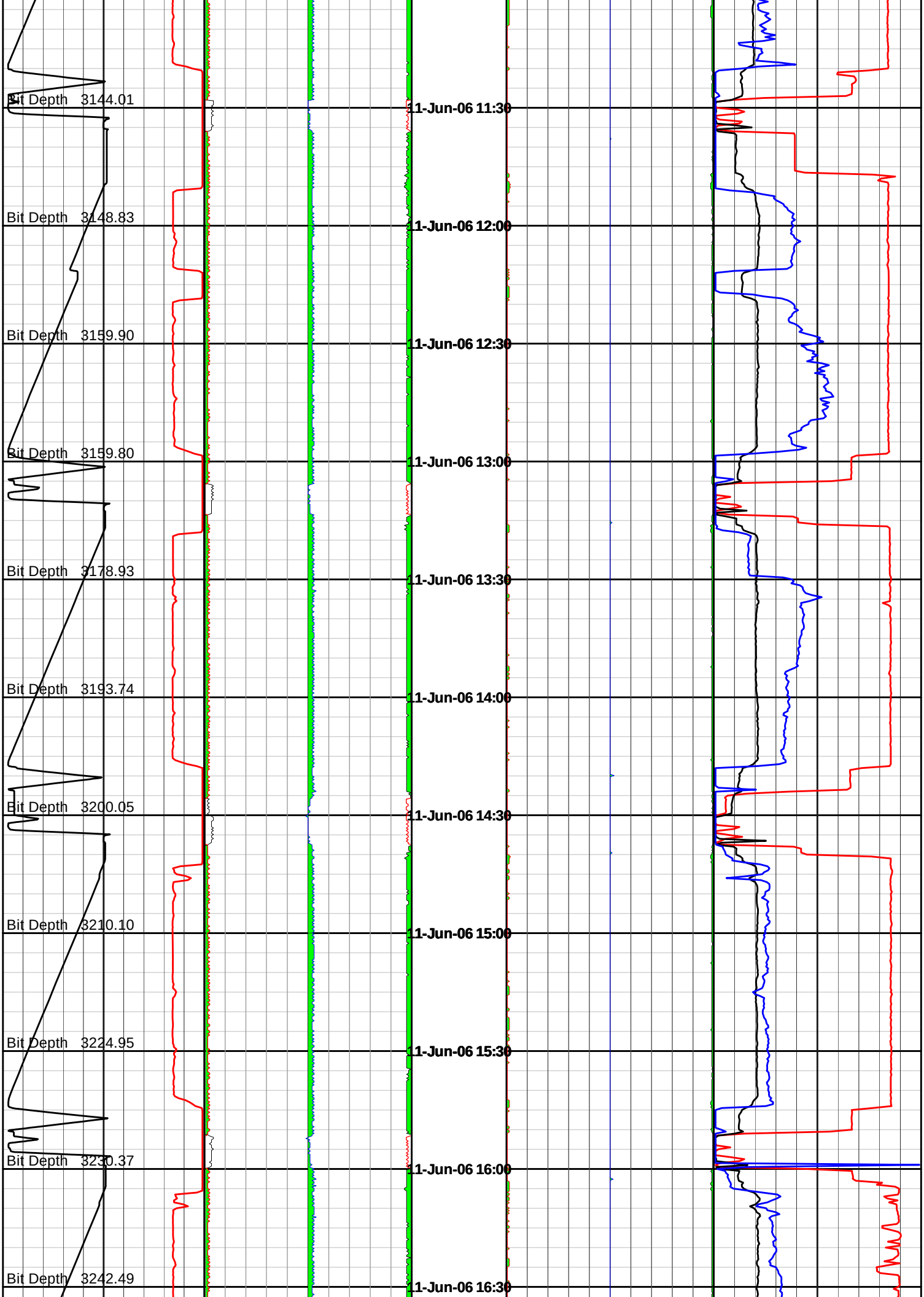
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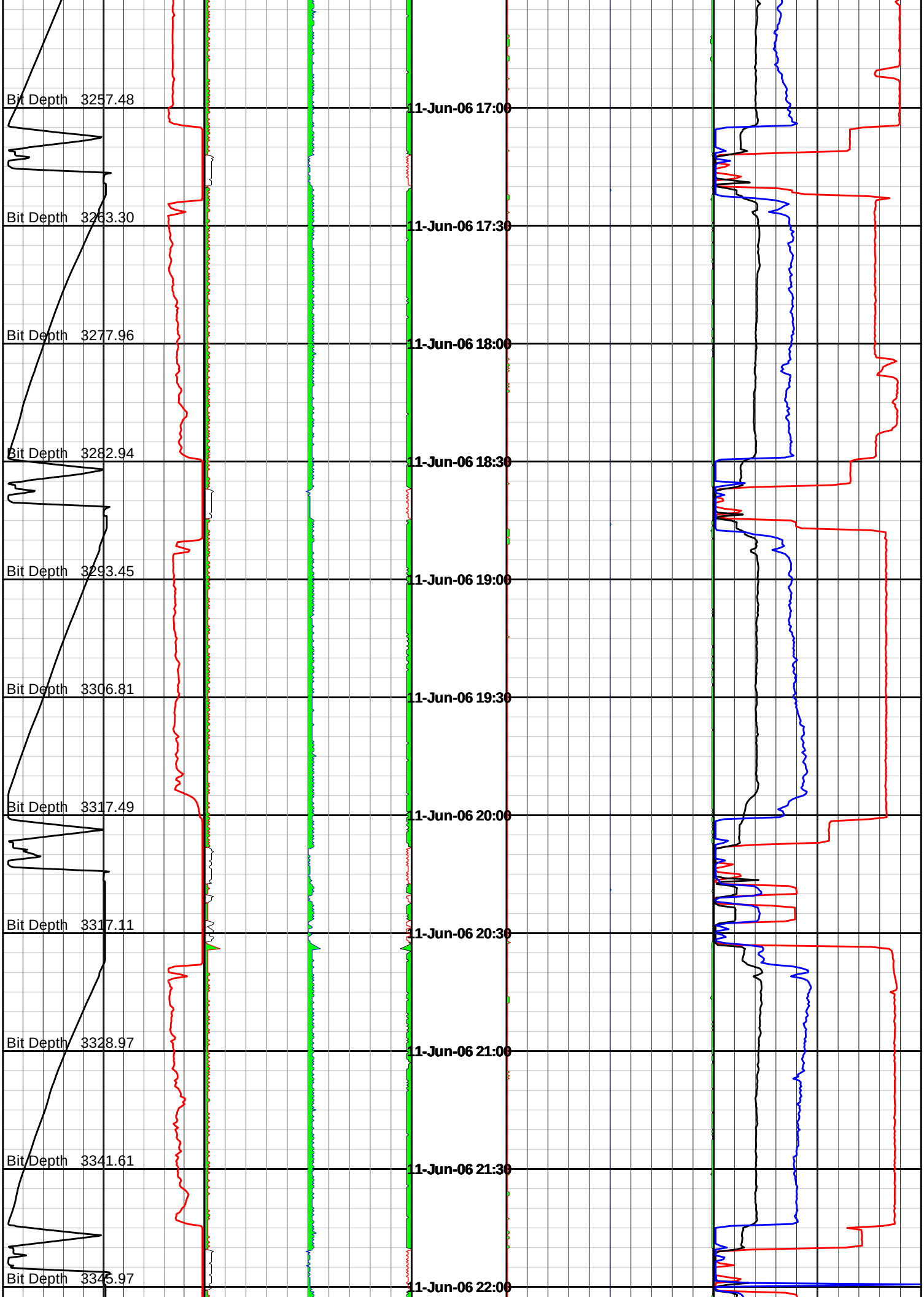
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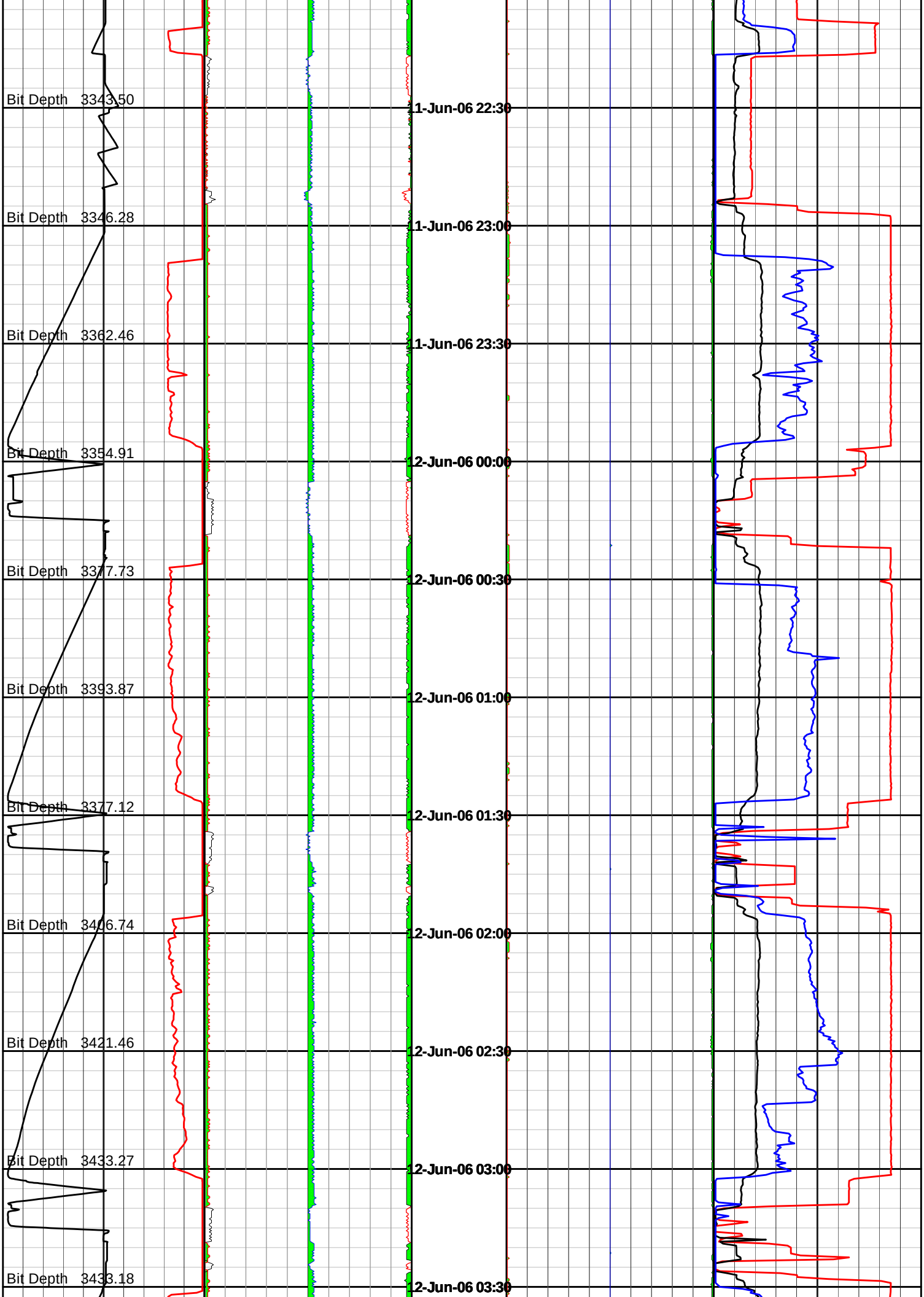
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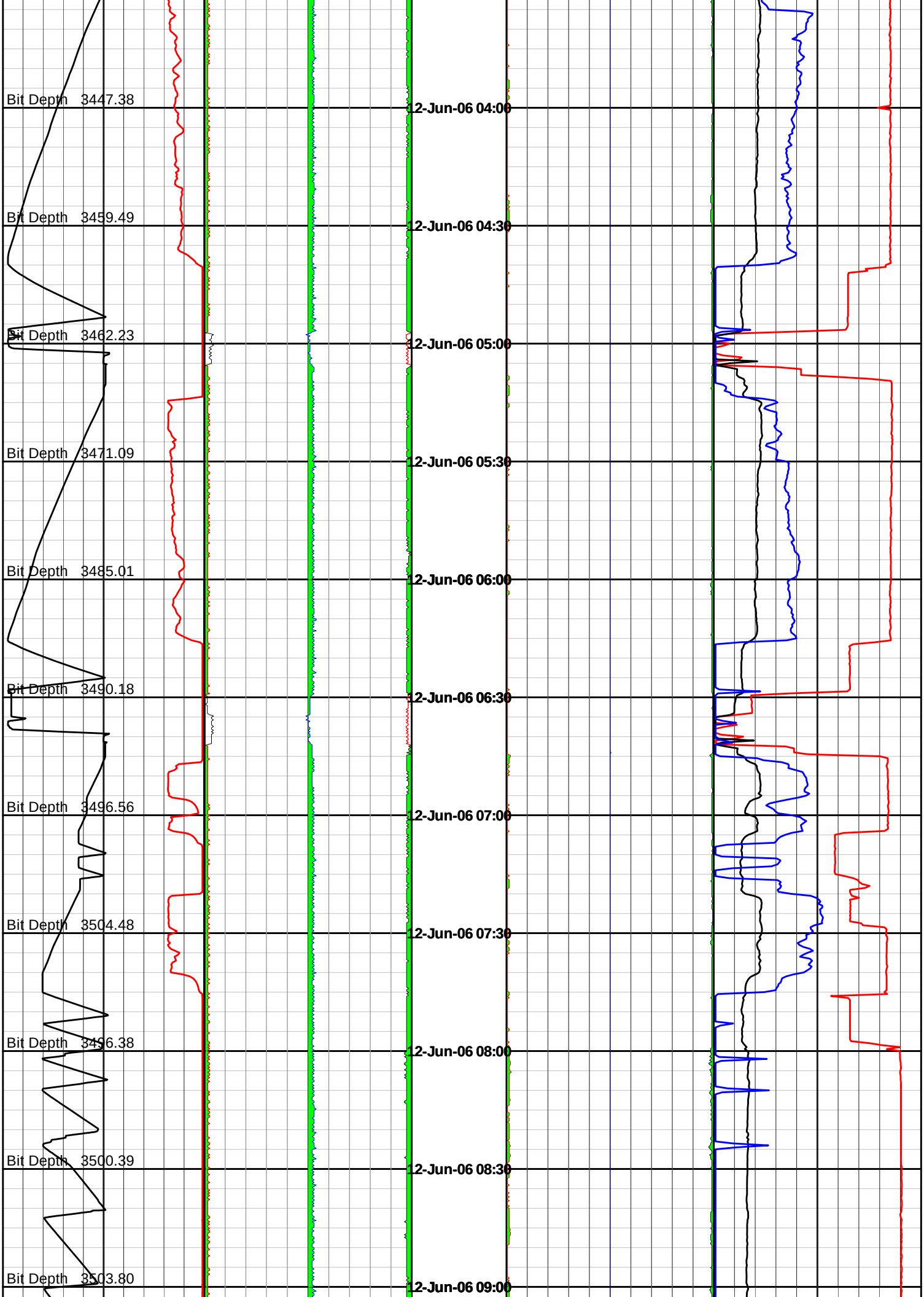
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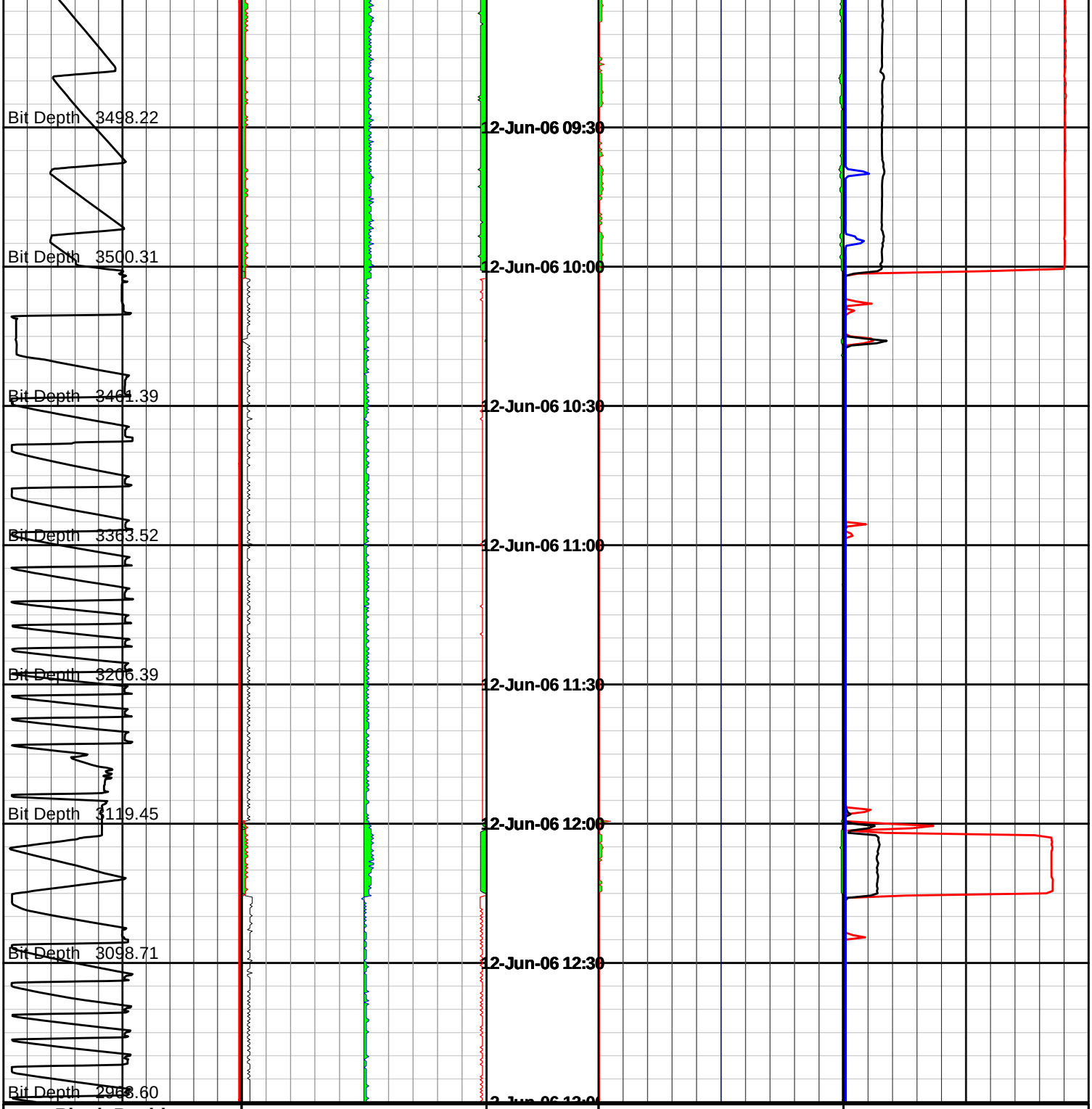

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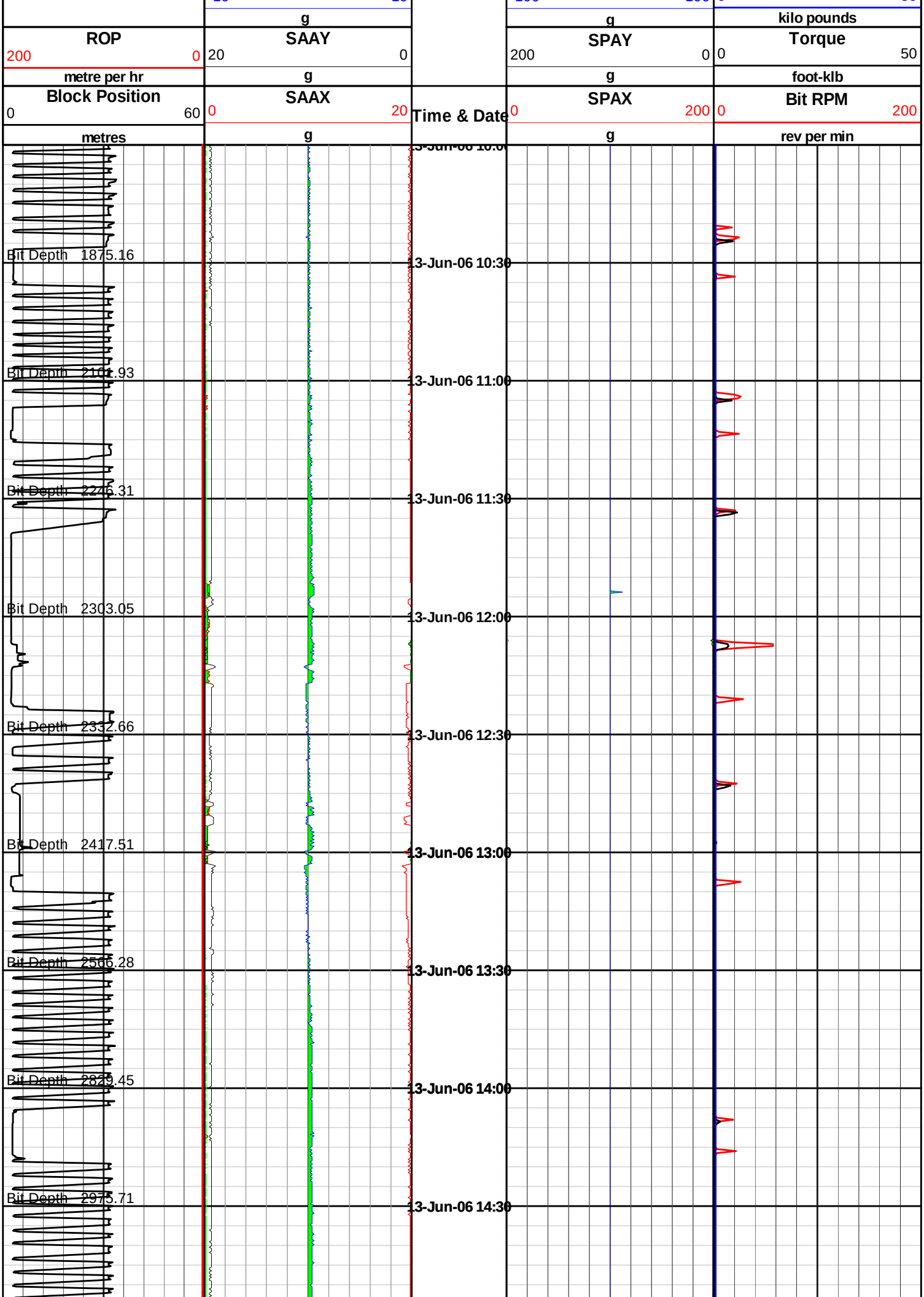
0 – 60	0 – 20		0 – 200	0 – 200
metres	g		g	rev per min
ROP	**SAAY**		**SPAY**	**Torque**
200 – 0	20 – 0		200 – 0	0 – 50
metre per hr	g		g	foot-klb
	SAAZ		**SPAZ**	**WOB**
	-10 – 10		-100 – 100	0 – 50
	g		g	kilo pounds

Woodside Energy Ltd

THA02

Run 500 - 216mm Section

	SAAZ		SPAZ	WOB
	-10 – 10		-100 – 100	0 – 50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metre per hr
Block Position
0
60
metres
SAAY
20
0
g
SAAX
0
20
g
Time & Date
SPAY
200
0
g
SPAX
0
200
g
Torque
0
50
kilo pounds
foot-klb
Bit RPM
0
200
rev per min
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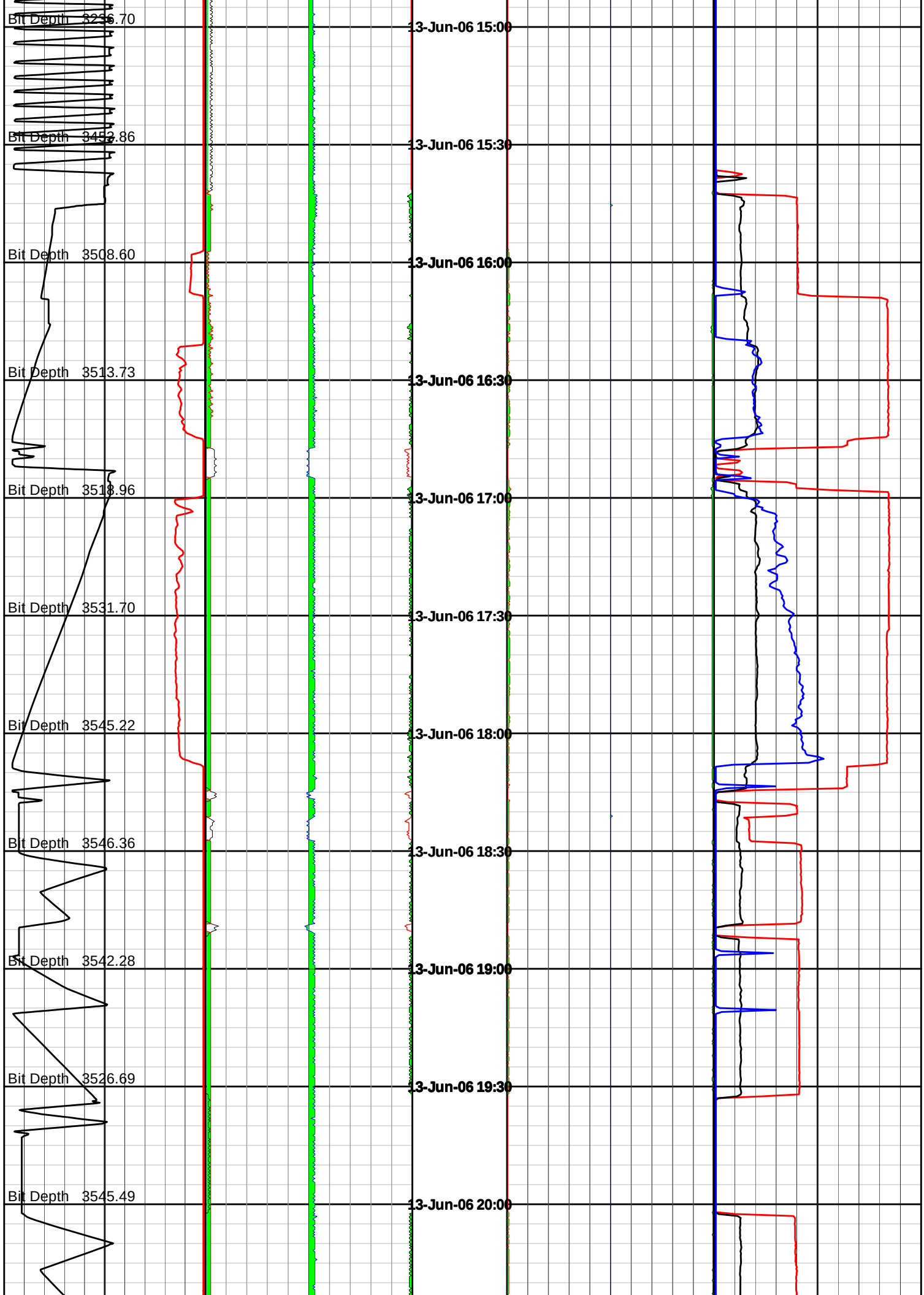
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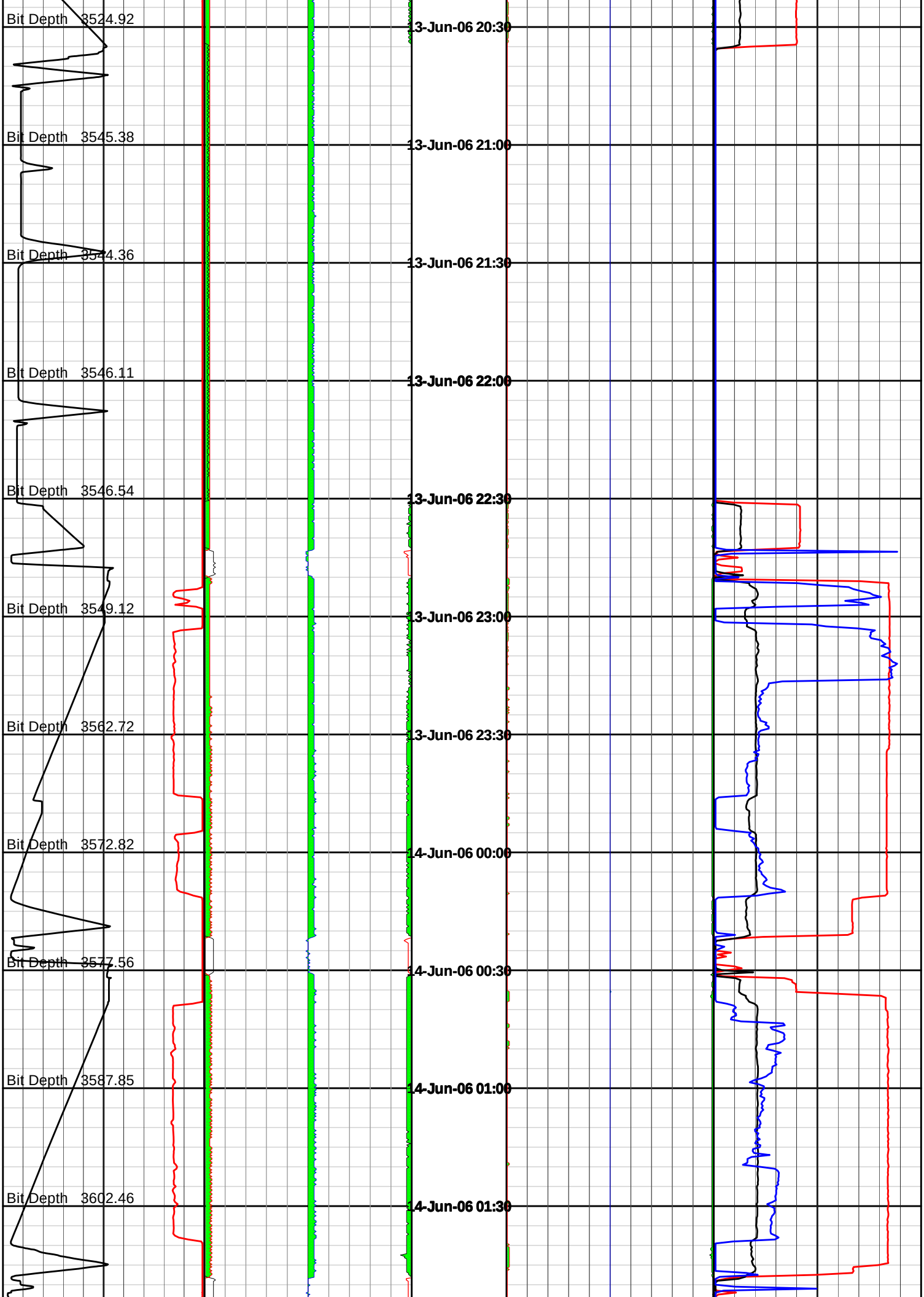
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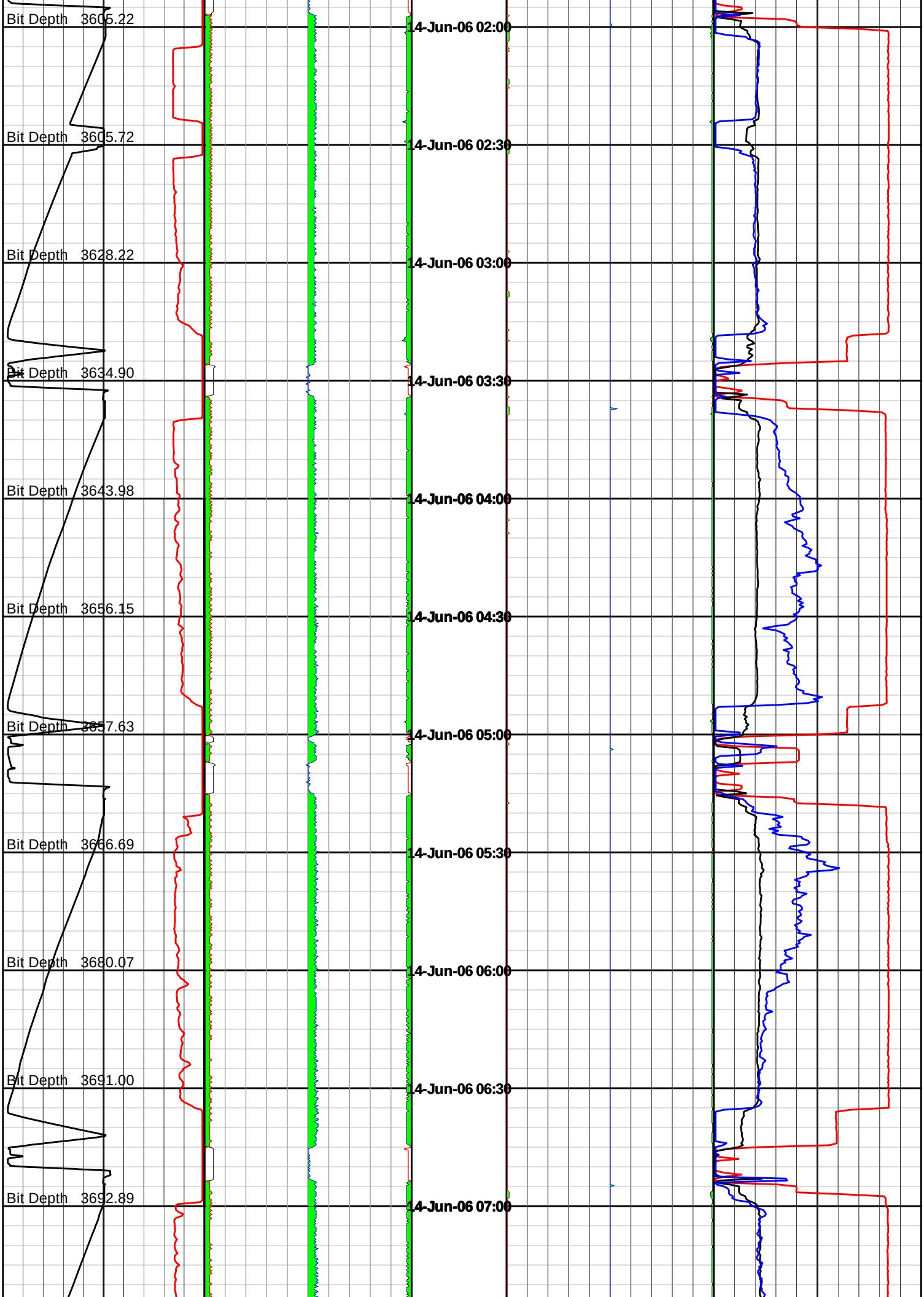
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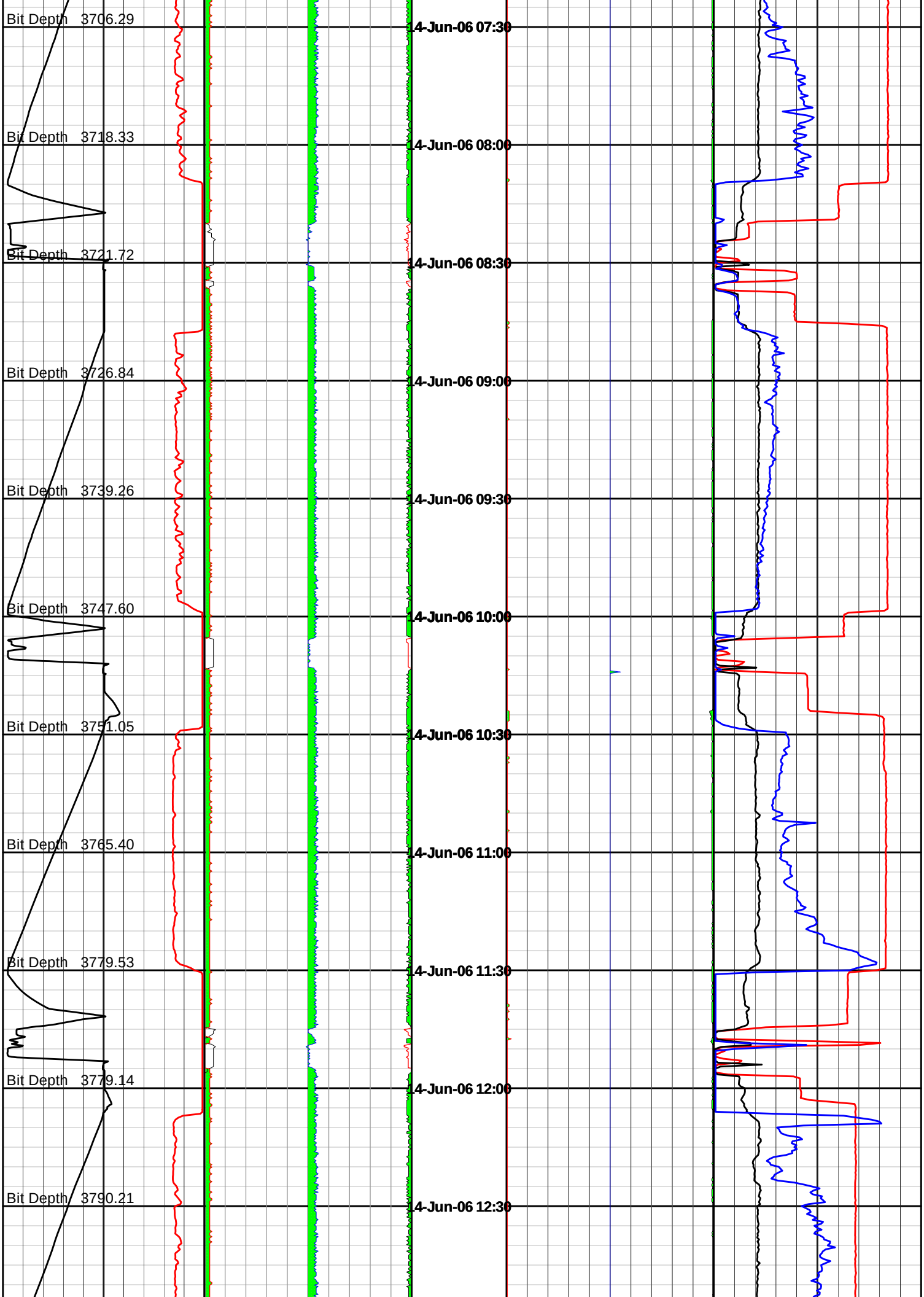
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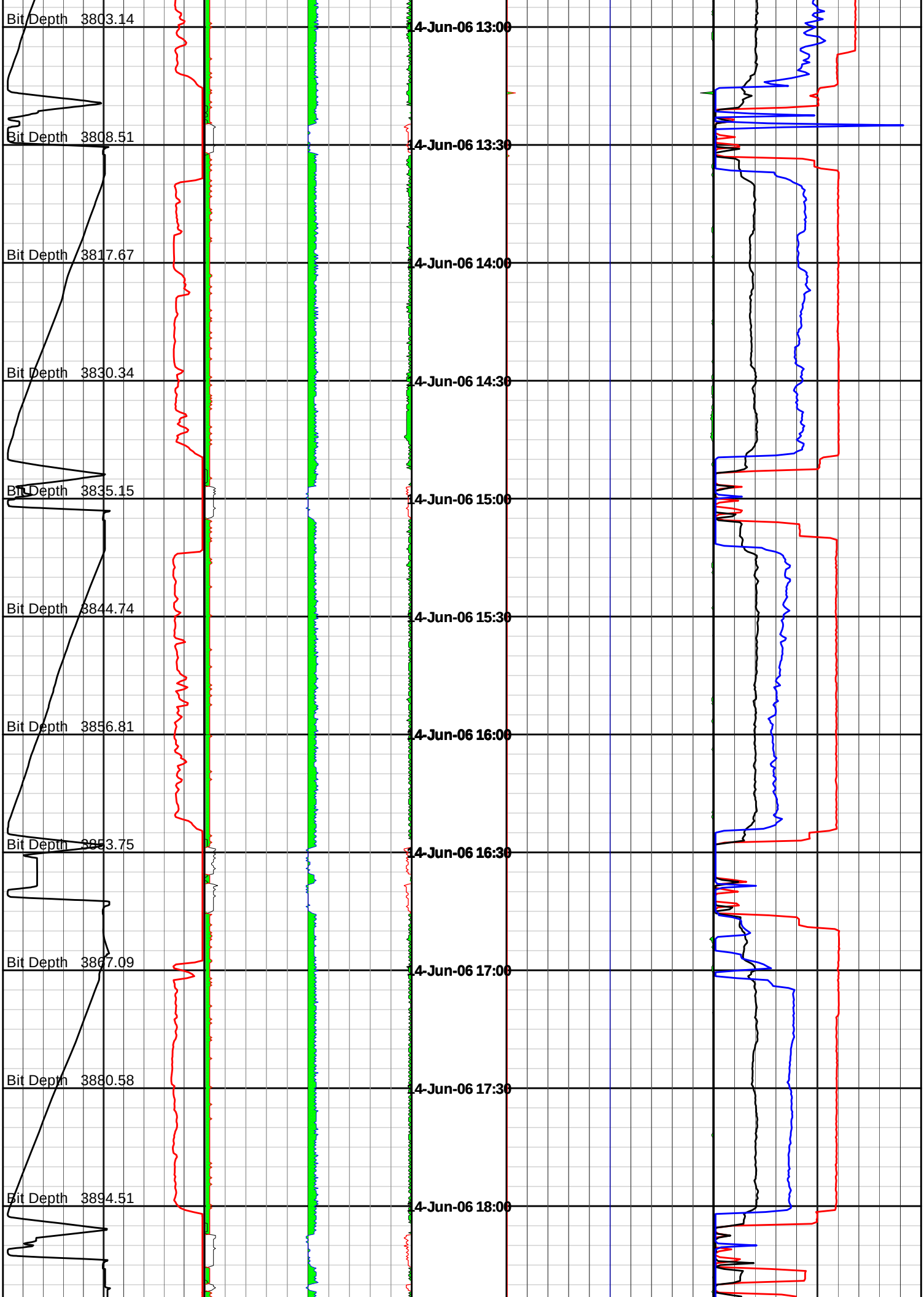
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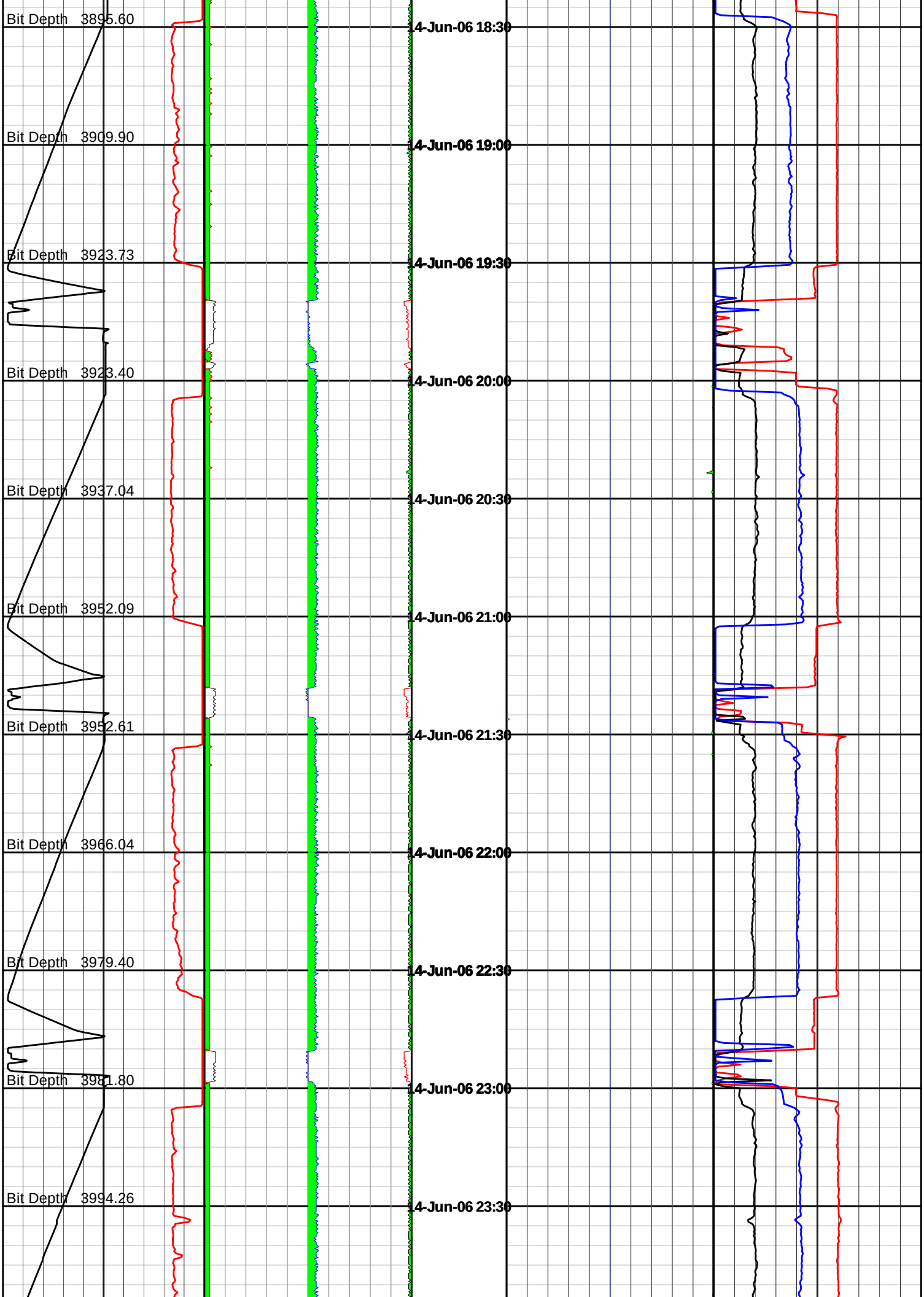
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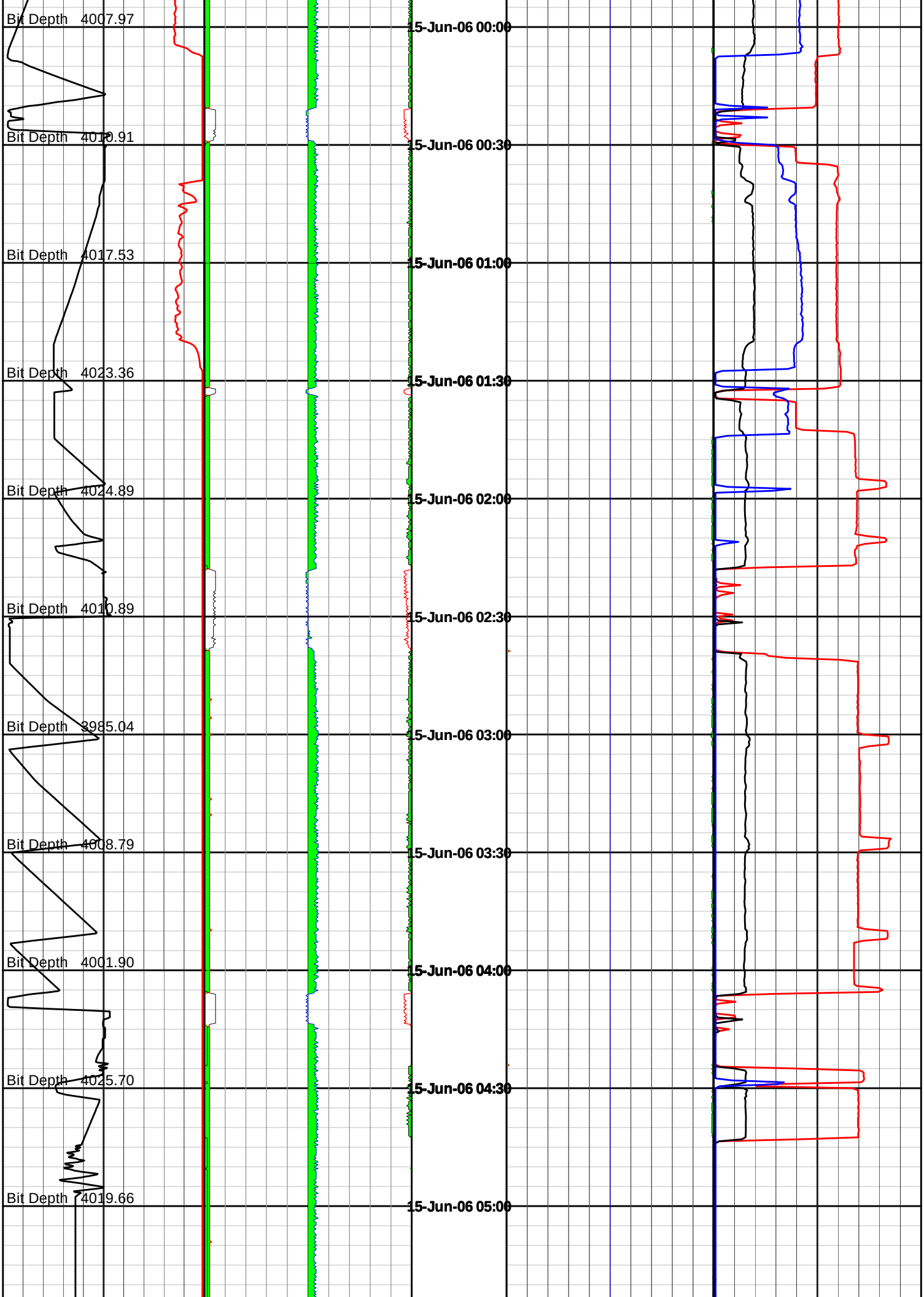
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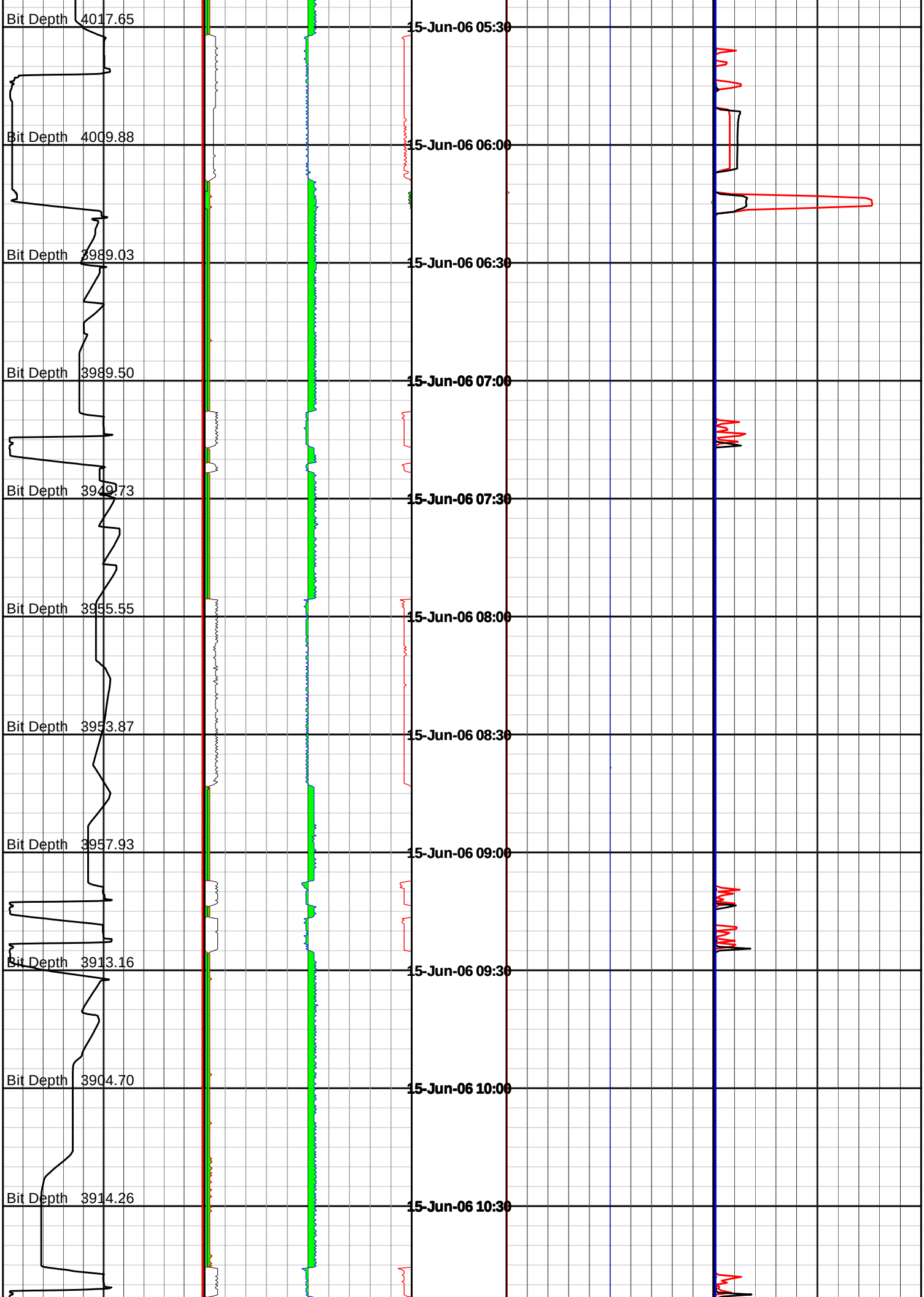
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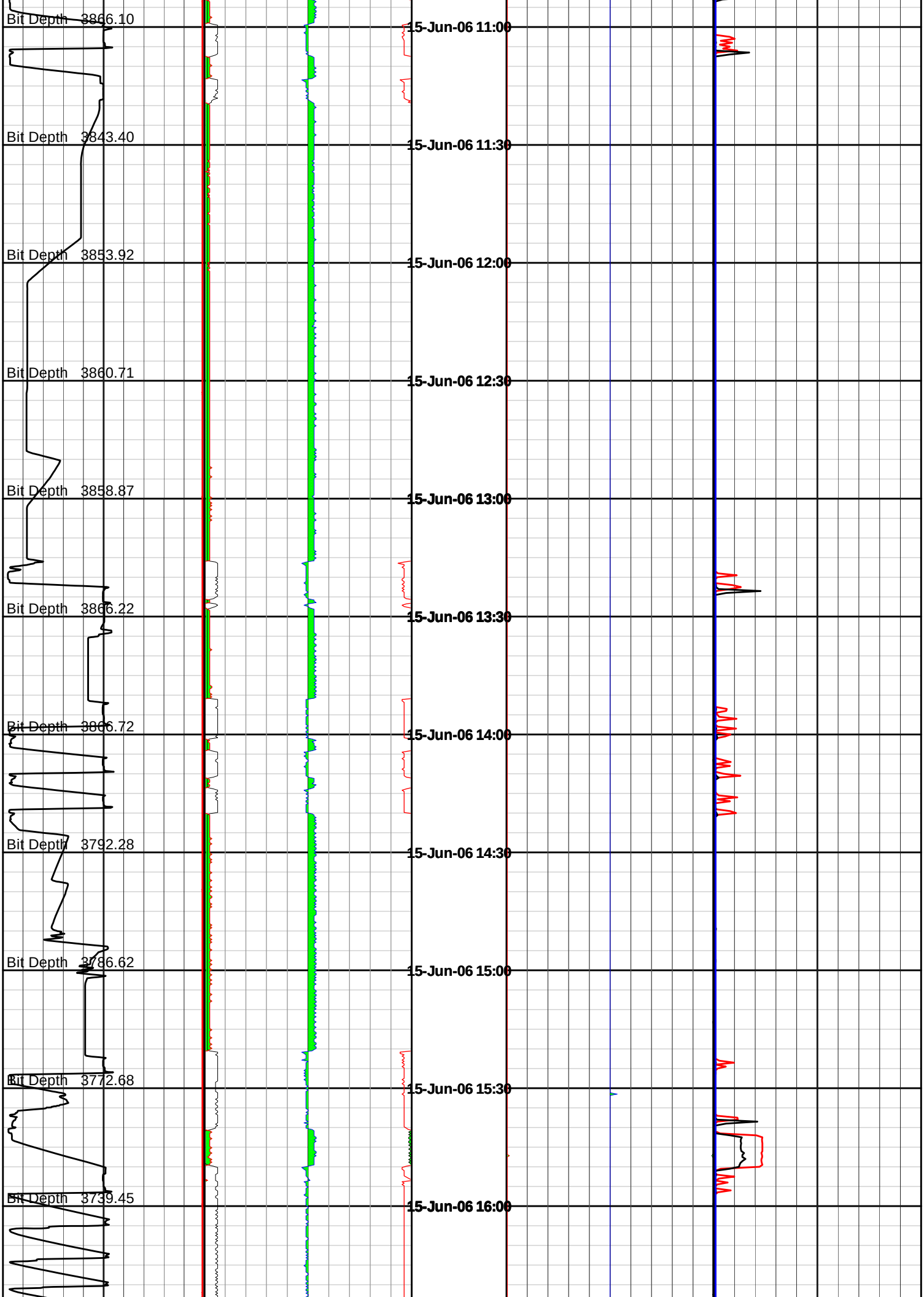
Bit Depth 3866.10
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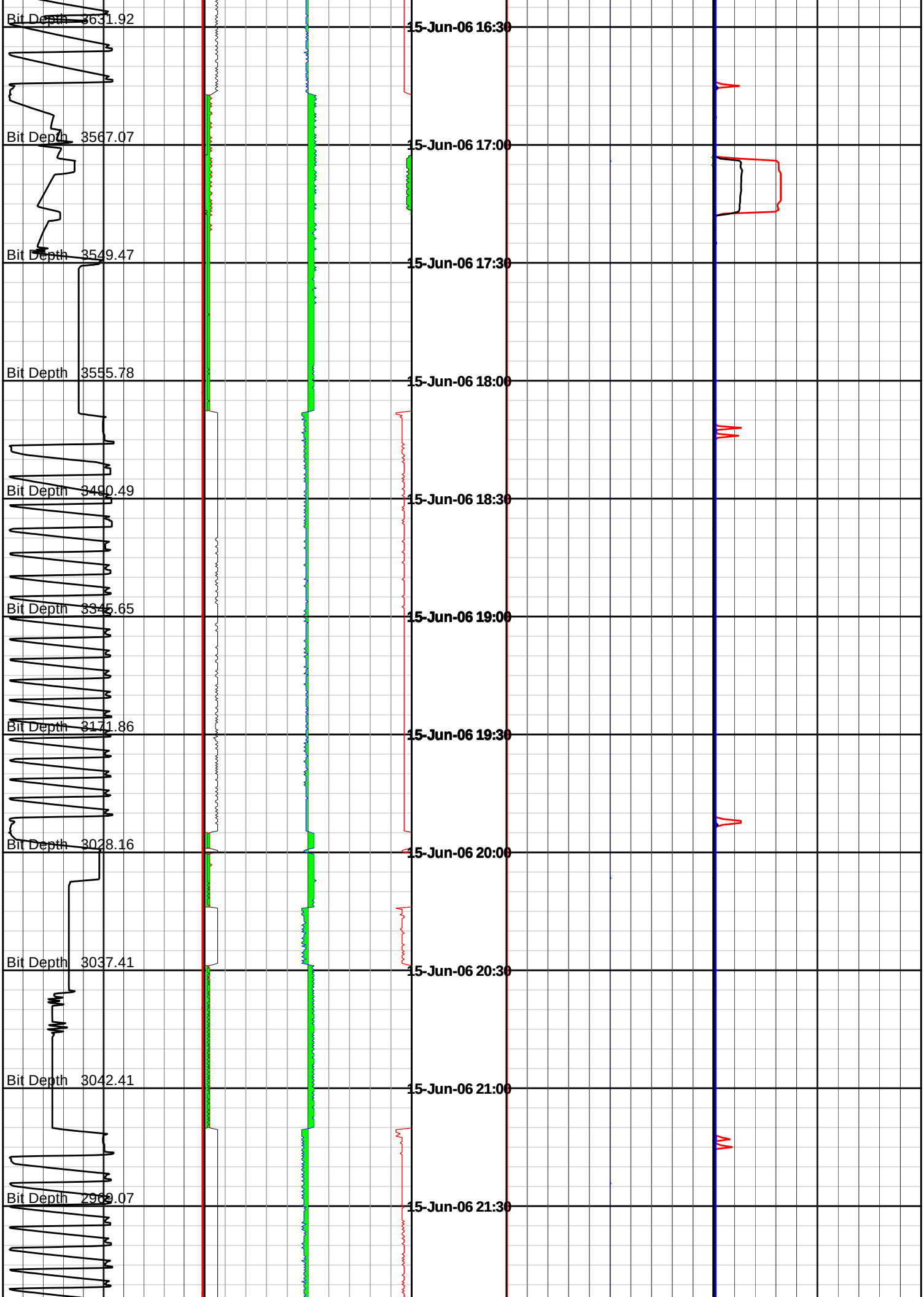
Bit Depth 3858.87
Bit Depth 3866.22
Bit Depth 3866.72
Bit Depth 3792.28
Bit Depth 3786.62
Bit Depth 3772.68
Bit Depth 3739.45
15-Jun-06 11:00
15-Jun-06 11:30
15-Jun-06 12:00
15-Jun-06 12:30
15-Jun-06 13:00
15-Jun-06 13:30
15-Jun-06 14:00
15-Jun-06 14:30
15-Jun-06 15:00
15-Jun-06 15:30
15-Jun-06 16:00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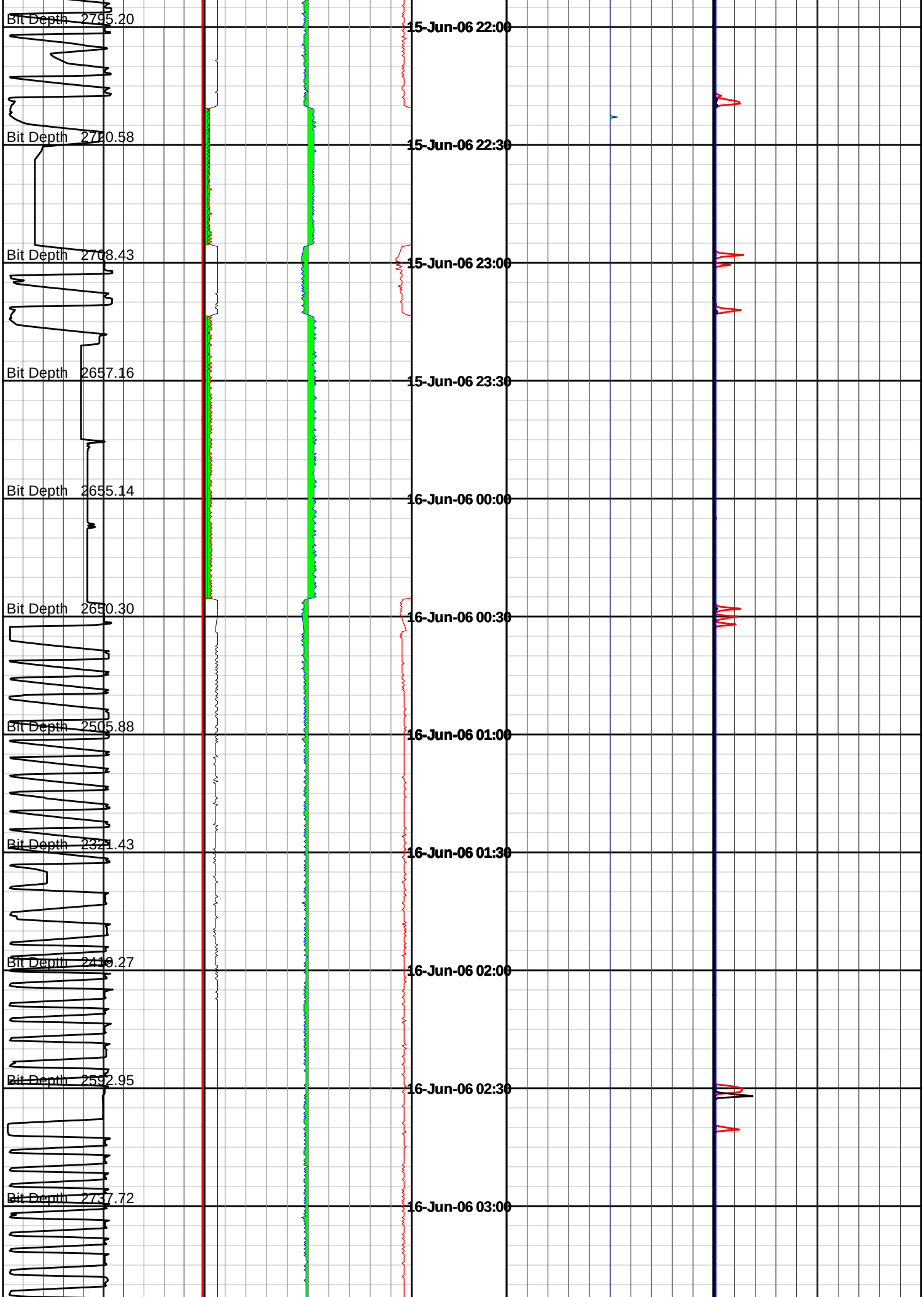
Bit Depth 3345.65
Bit Depth 3171.86
Bit Depth 3028.16
Bit Depth 3037.41
Bit Depth 3042.41
Bit Depth 2969.07
15-Jun-06 16:30
15-Jun-06 17:00
15-Jun-06 17:30
15-Jun-06 18:00
15-Jun-06 18:30
15-Jun-06 19:00
15-Jun-06 19:30
15-Jun-06 20:00
15-Jun-06 20:30
15-Jun-06 21:00
15-Jun-06 21:30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Bit Depth 2708.43
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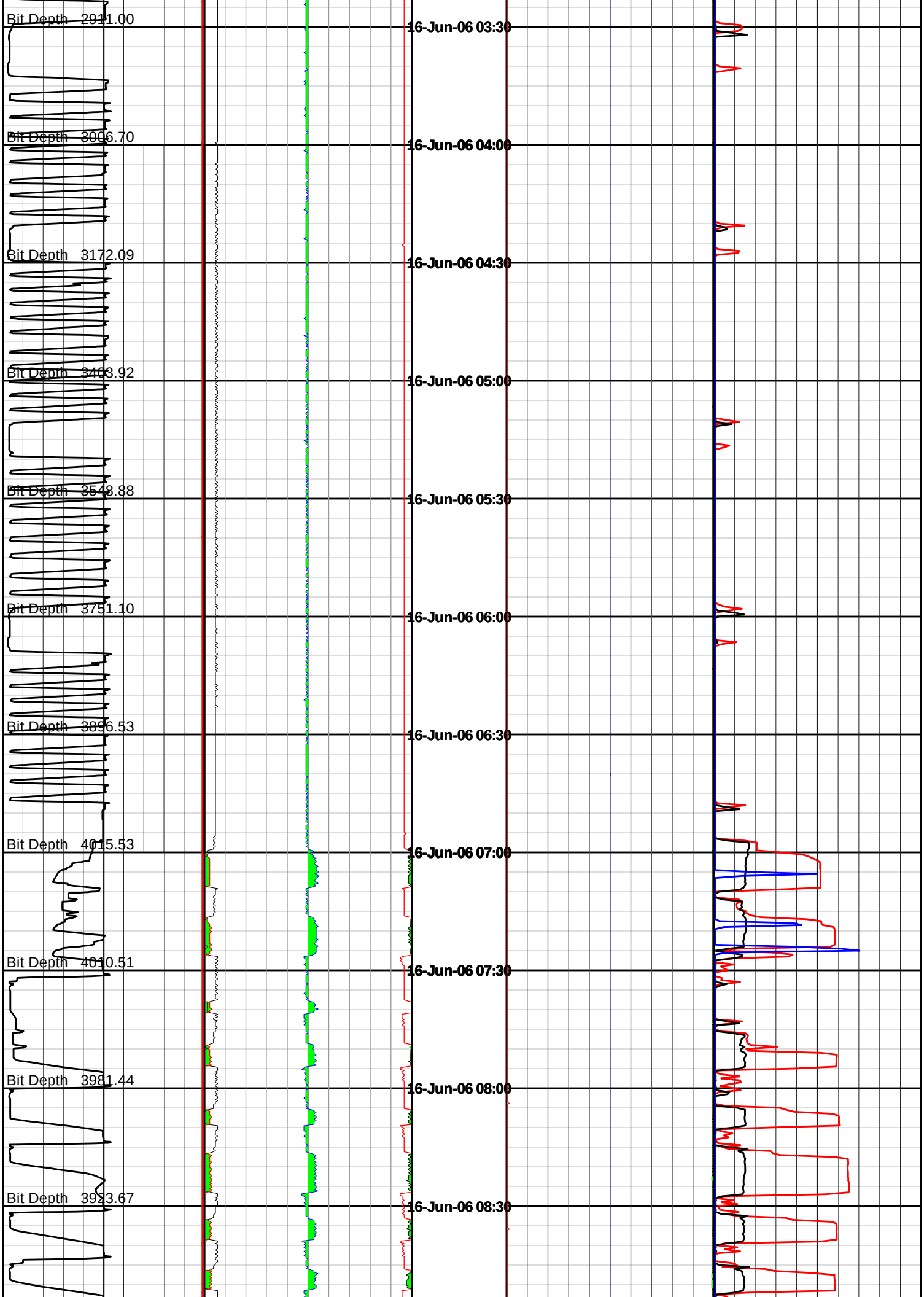
Bit Depth 2655.14
Bit Depth 2650.30
Bit Depth 2505.88
Bit Depth 2321.43
Bit Depth 2410.27
Bit Depth 2592.95
Bit Depth 2737.72
15-Jun-06 22:00
15-Jun-06 22:30
15-Jun-06 23:00
15-Jun-06 23:30
16-Jun-06 00:00
16-Jun-06 00:30
16-Jun-06 01:00
16-Jun-06 01:30
16-Jun-06 02:00
16-Jun-06 02:30
16-Jun-06 03:00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Bit Depth 3548.88
Bit Depth 3751.10
Bit Depth 3896.53
Bit Depth 4015.53
Bit Depth 4010.51
Bit Depth 3981.44
Bit Depth 3923.67
16-Jun-06 03:30
16-Jun-06 04:00
16-Jun-06 04:30
16-Jun-06 05:00
16-Jun-06 05:30
16-Jun-06 06:00
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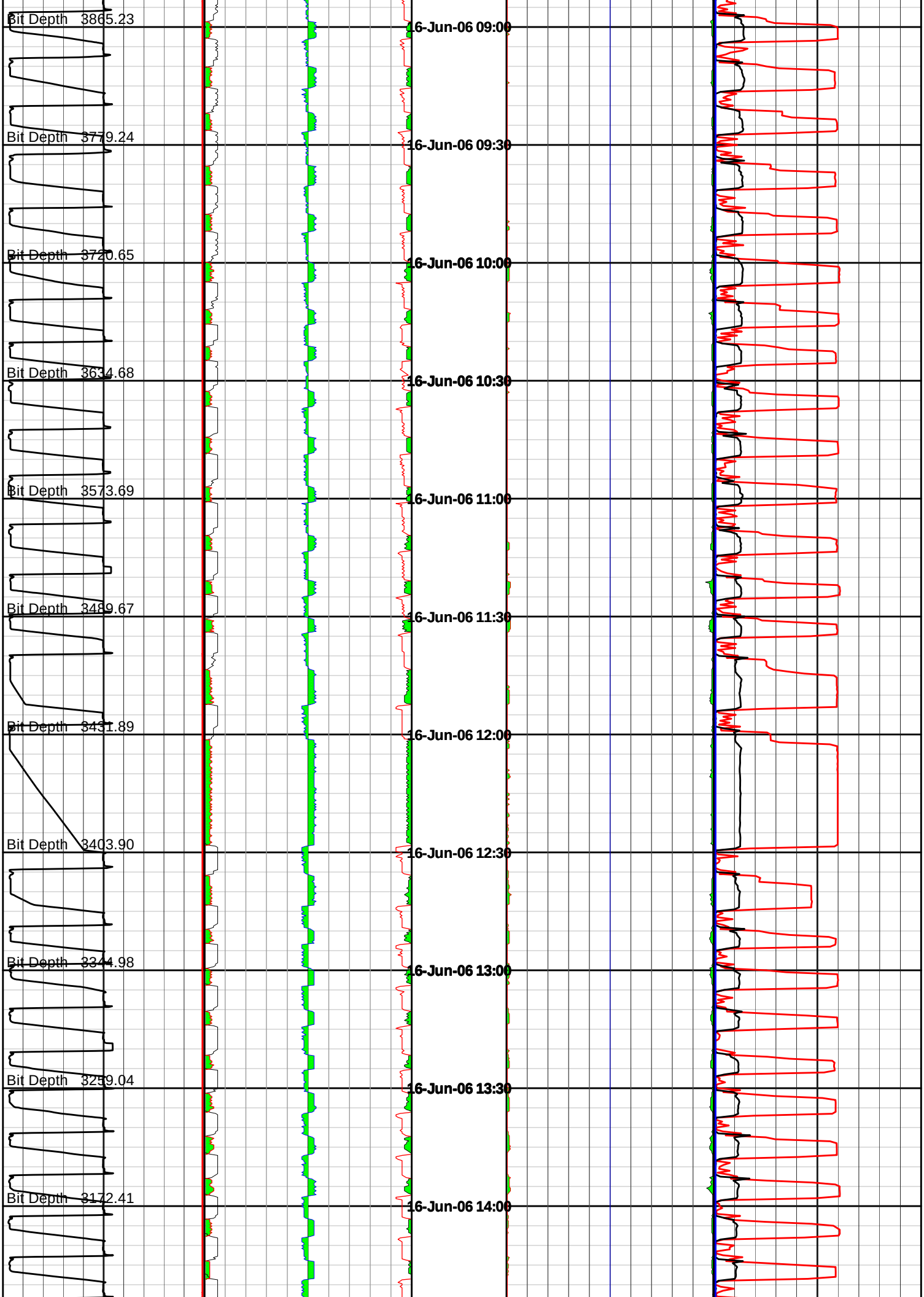
16-Jun-06 07:00
16-Jun-06 07:30
16-Jun-06 08:00
16-Jun-06 08:30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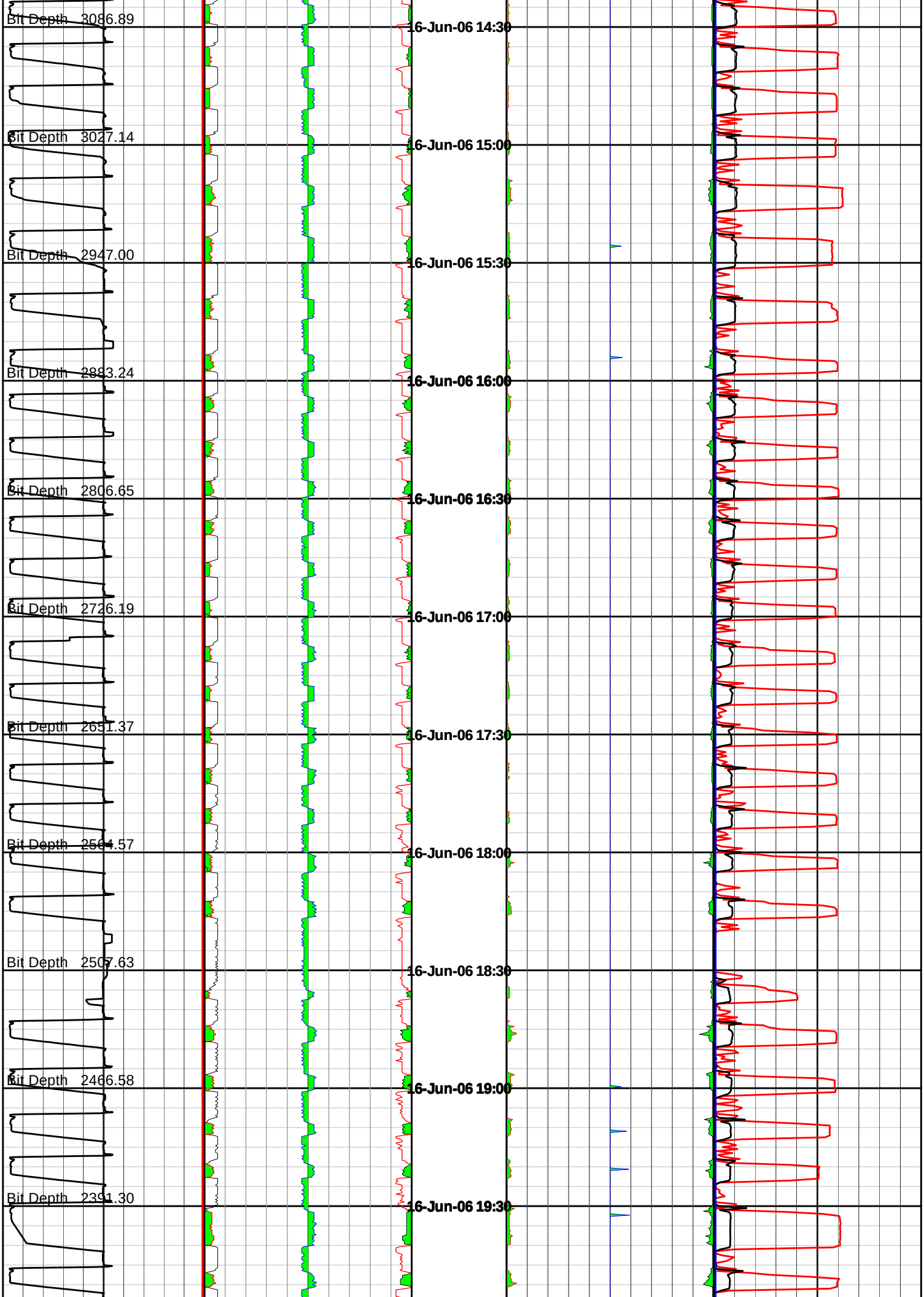
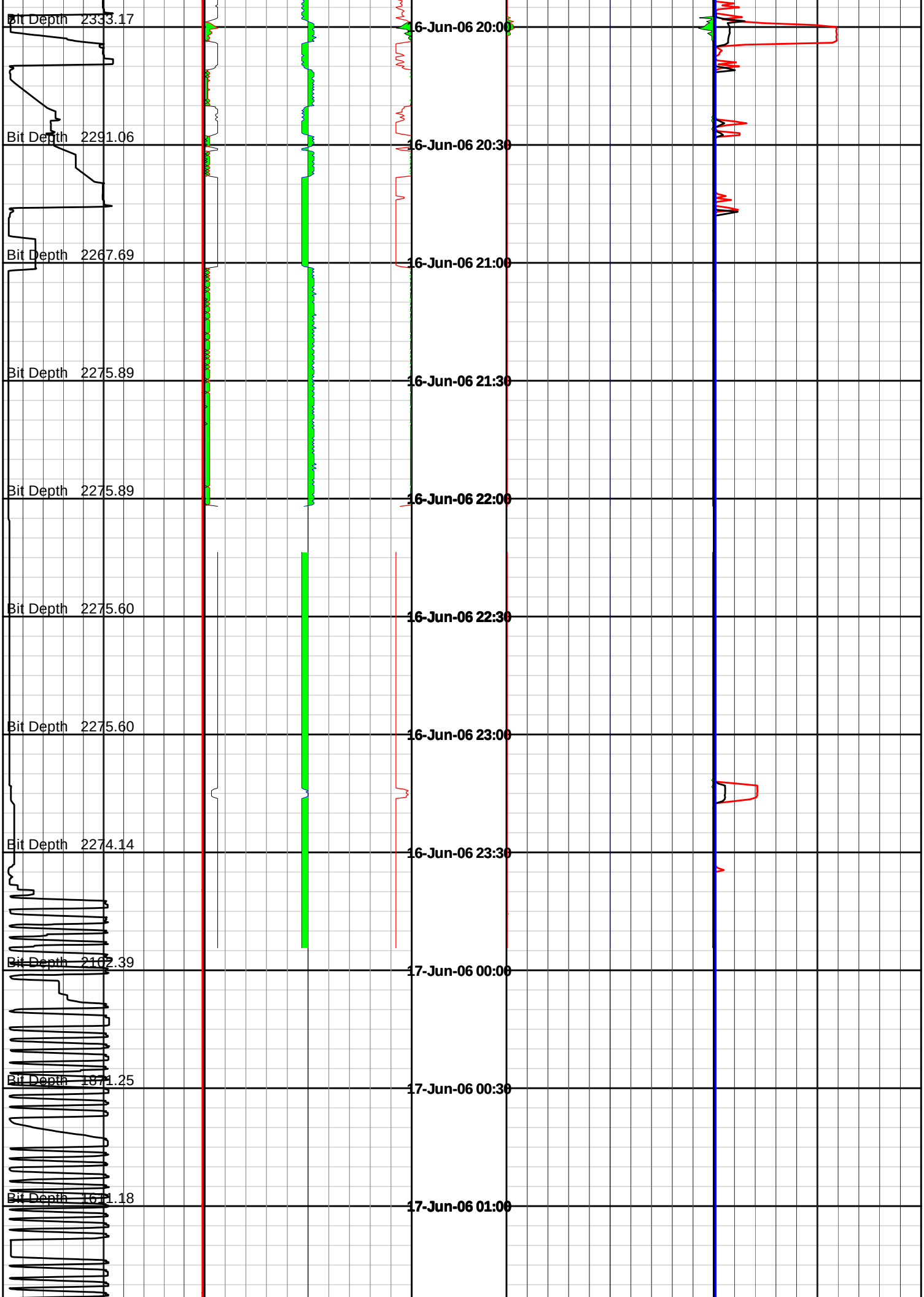
Bit Depth 3779.24
Bit Depth 3720.65
Bit Depth 3634.68
Bit Depth 3573.69
Bit Depth 3489.67
Bit Depth 3431.89
Bit Depth 3403.90
Bit Depth 3344.98
Bit Depth 3259.04
Bit Depth 3172.41
16-Jun-06 09:00
16-Jun-06 09:30
16-Jun-06 10:00
16-Jun-06 10:30
16-Jun-06 11:00
16-Jun-06 11:30
16-Jun-06 12:00
16-Jun-06 12:30
16-Jun-06 13:00
16-Jun-06 13:30
16-Jun-06 14:00


Bit Depth 3086.89
16-Jun-06 14:30
Bit Depth 3027.14
16-Jun-06 15:00
Bit Depth 2947.00
16-Jun-06 15:30
Bit Depth 2883.24
16-Jun-06 16:00
Bit Depth 2806.65
16-Jun-06 16:30
Bit Depth 2726.19
16-Jun-06 17:00
Bit Depth 2651.37
16-Jun-06 17:30
Bit Depth 2564.57
16-Jun-06 18:00
Bit Depth 2507.63
16-Jun-06 18:30
Bit Depth 2466.58
16-Jun-06 19:00
Bit Depth 2391.30
16-Jun-06 19:30


Bit Depth 2333.17
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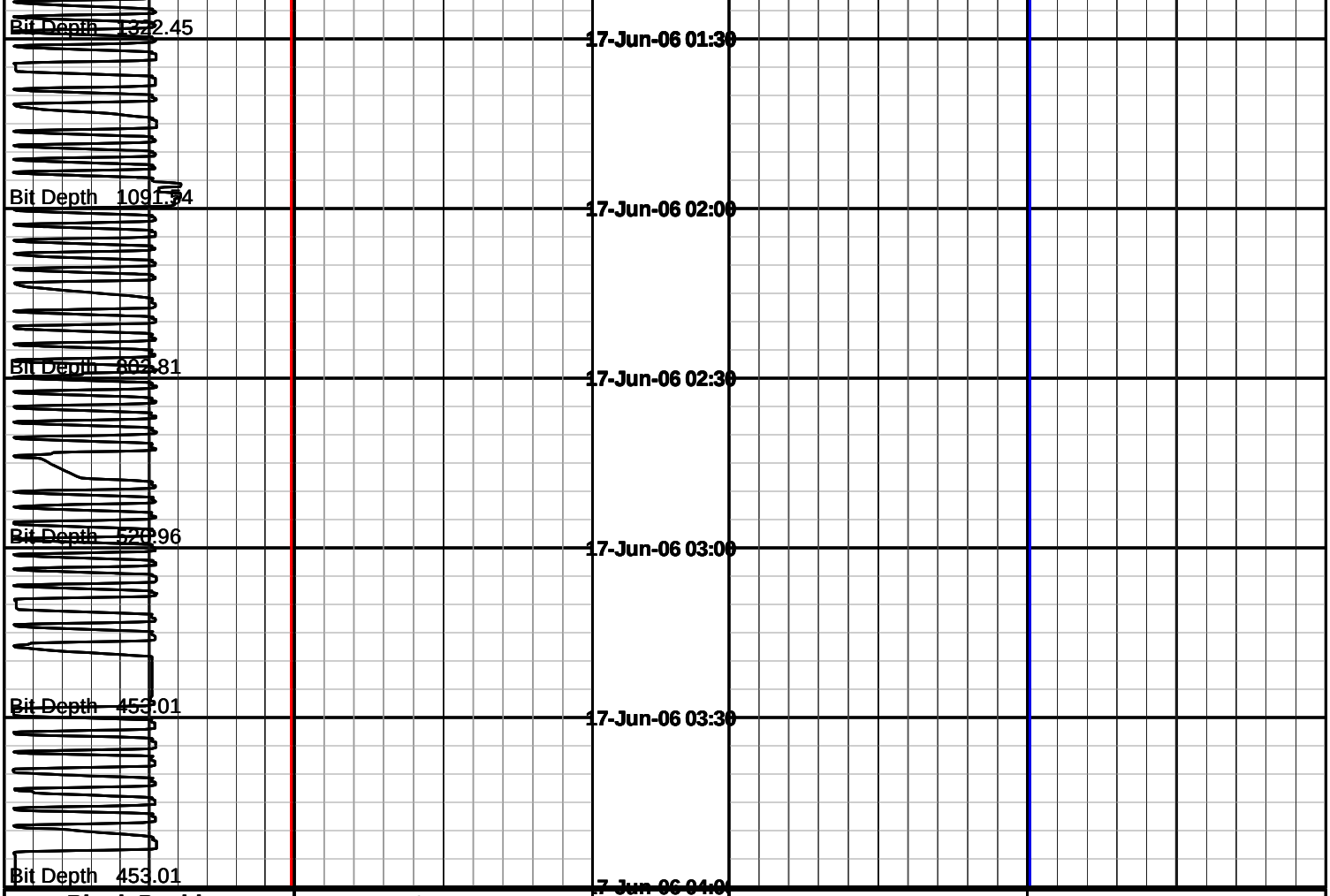
Bit Depth 2267.69
Bit Depth 2275.89
Bit Depth 2275.89
Bit Depth 2275.60
Bit Depth 2275.60
Bit Depth 2274.14
Bit Depth 2102.39
Bit Depth 1871.25
Bit Depth 1671.18
16-Jun-06 20:00
16-Jun-06 20:30
16-Jun-06 21:00
16-Jun-06 21:30
16-Jun-06 22:00
16-Jun-06 22:30
16-Jun-06 23:00
16-Jun-06 23:30
17-Jun-06 00:00
17-Jun-06 00:30
17-Jun-06 01:00



Block Position	SAAX	Time & Date	SPAX	Bit RPM
0 — 60	0 — 20		0 — 200	0 — 200
metres	g		g	rev per min
ROP	**SAAY**		**SPAY**	**Torque**
200 — 0	20 — 0		200 — 0	0 — 50
metre per hr	g		g	foot-klb
	SAAZ		**SPAZ**	**WOB**
	-10 — 10		-100 — 100	0 — 50
	g		g	kilo pounds

HALLIBURTON

PWD Pressure While Drilling

Powered by INSITE™

Sperry Drilling Services

Country	: Australia
Field	: Thylacine
Location	: 39° 14' 14.47" South GDA94 142° 54' 7.58" East GDA94
Well	: THA02
Company	: Woodside Energy Ltd
Rig	: Maersk Guardian

Company	:	**Woodside Energy Ltd**
Rig	:	**Maersk Guardian**
Well	:	**THA02**
Field	:	**Thylacine**
Country	:	**Australia**
DOE Number	:	

LOCATION

Latitude : **39° 14' 14.47" South GDA94**
Longitude : **142° 54' 7.58" East GDA94**

UTM Easting = 664,161.0 m
UTM Northing = 5,655,159.6 m

Other Services

Permanent Datum : **LAT** Elevation : **0.00 m**
Log Measured From : **Drill Floor** **50.50 m** Above Permanent Datum
Drilling Measured From : **Drill Floor**

TIME LOG

Elev. KB
DF **50.50 m**
GL
WD **99.30 m**

Depth Logged : **630.00 m** To **4,026.00 m**
Date Logged : **20-May-06** To **17-Jun-06**
Total Depth MD : **4,026.00 m** TVD : **2,340.18 m**
Spud Date : **20-May-06**

Unit No. : **SSDS-40** Job No. : **AU-FE-0003930658**
Plot Type : **Final**
Plot Date : **04-Sep-06**

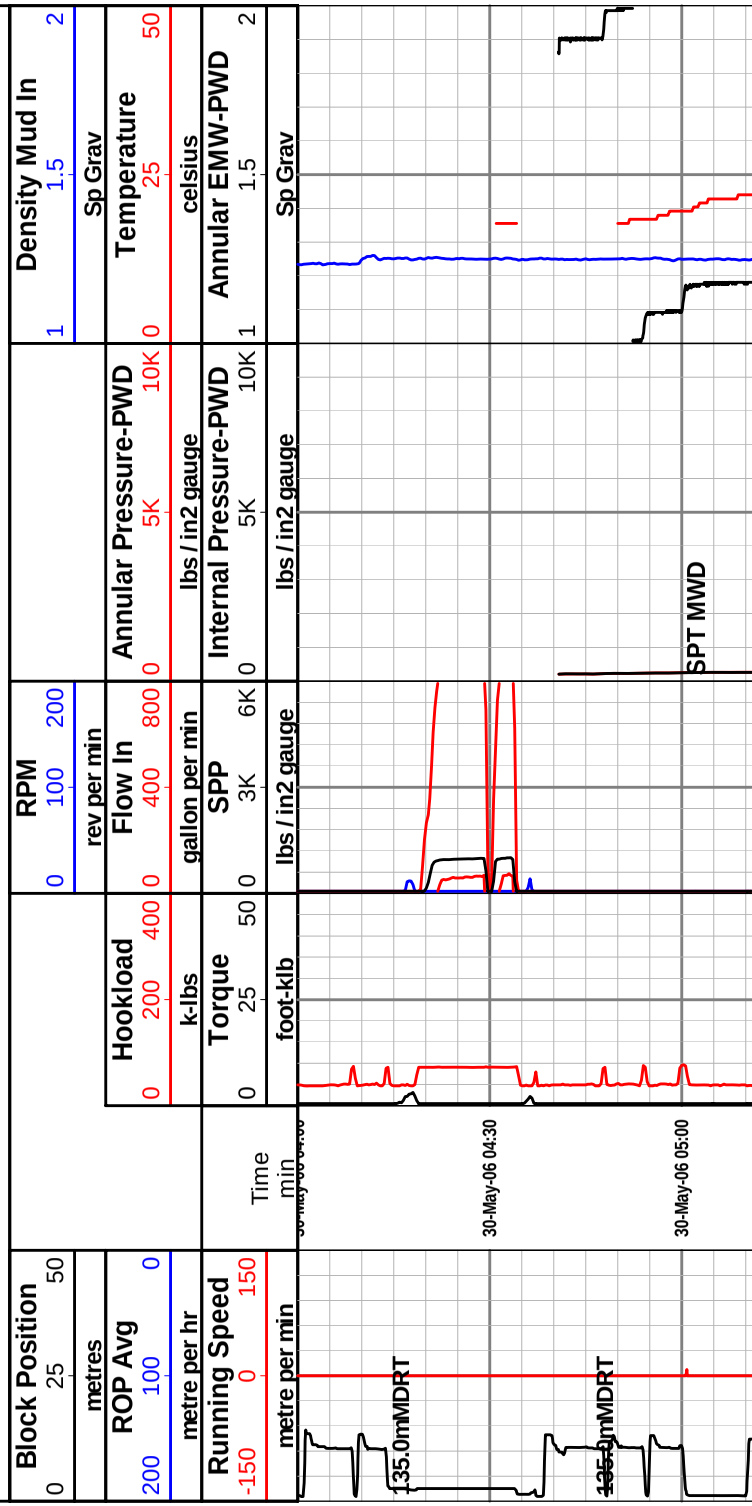
Run No.	Borehole Record (MD) Size	From	To
3	311.000 mm	638.00 m	2,299.00 m
4	216.000 mm	2,299.00 m	3,510.00 m
5	216.000 mm	3,510.00 m	4,026.00 m

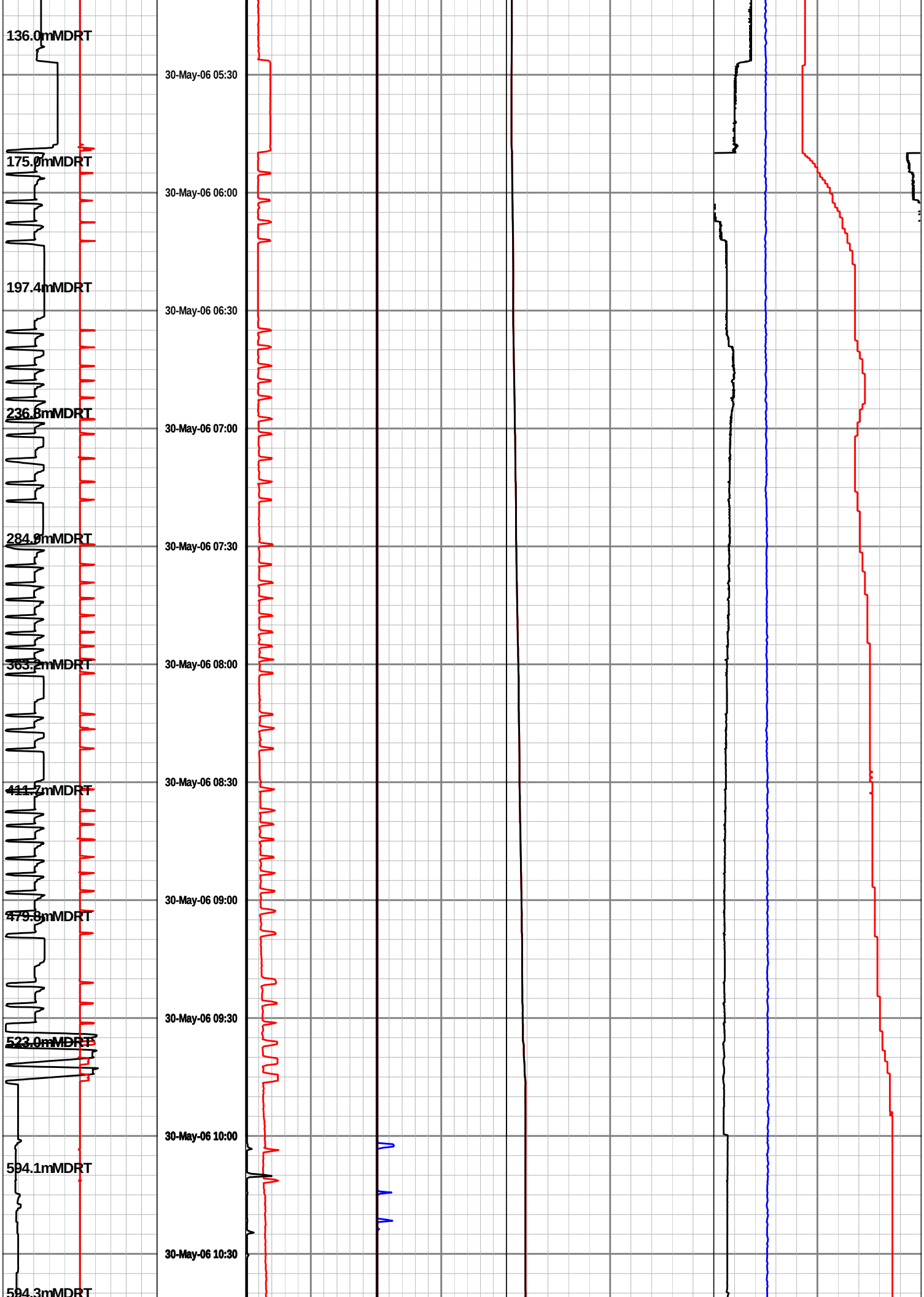
Run No.	Borehole Record (MD) Size	From	To

Casing Record (MD)

Size	Weight	From	To
660.000 mm	397.68 kgpm	149.80 m	219.90 m
473.000 mm	139.89 kgpm	149.80 m	633.00 m
244.000 mm	70.00 kgpm	149.80 m	2,293.40 m

Run 300 : 311 mm Hole Section
Drilled from 638.0 to 2299.0 mMDRT
04:00 hrs 30th May 2006 - 22:35 hrs 3rd Jun 2006
SDL Data presented as acquired from Geoservices




136.0mMDRT
175.0mMDRT
197.4mMDRT
236.8mMDRT
284.9mMDRT
363.2mMDRT
411.7mMDRT
479.8mMDRT
523.0mMDRT
594.1mMDRT
594.3mMDRT
30-May-06 05:30
30-May-06 06:00
30-May-06 06:30
30-May-06 07:00
30-May-06 07:30
30-May-06 08:00
30-May-06 08:30
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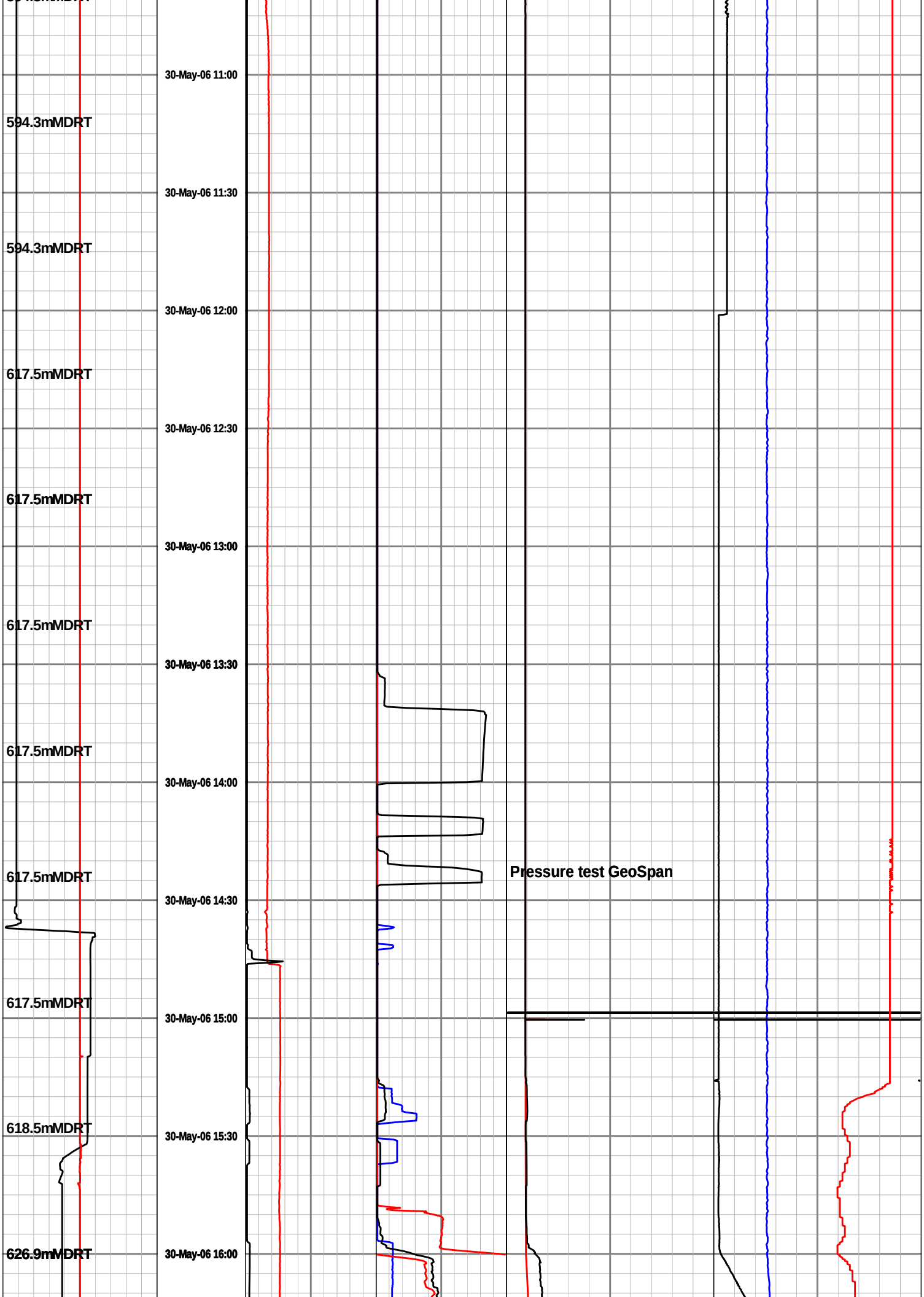
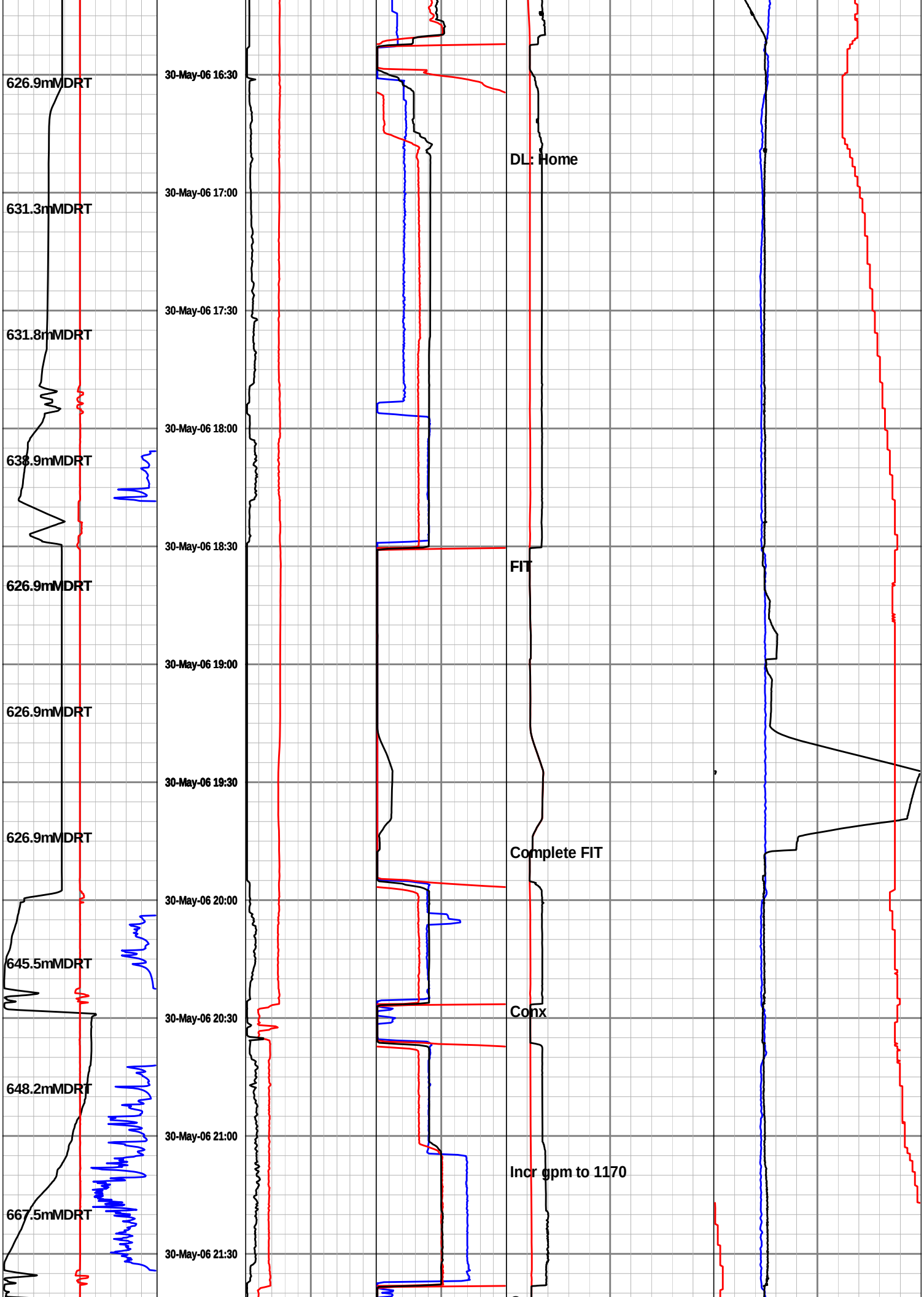
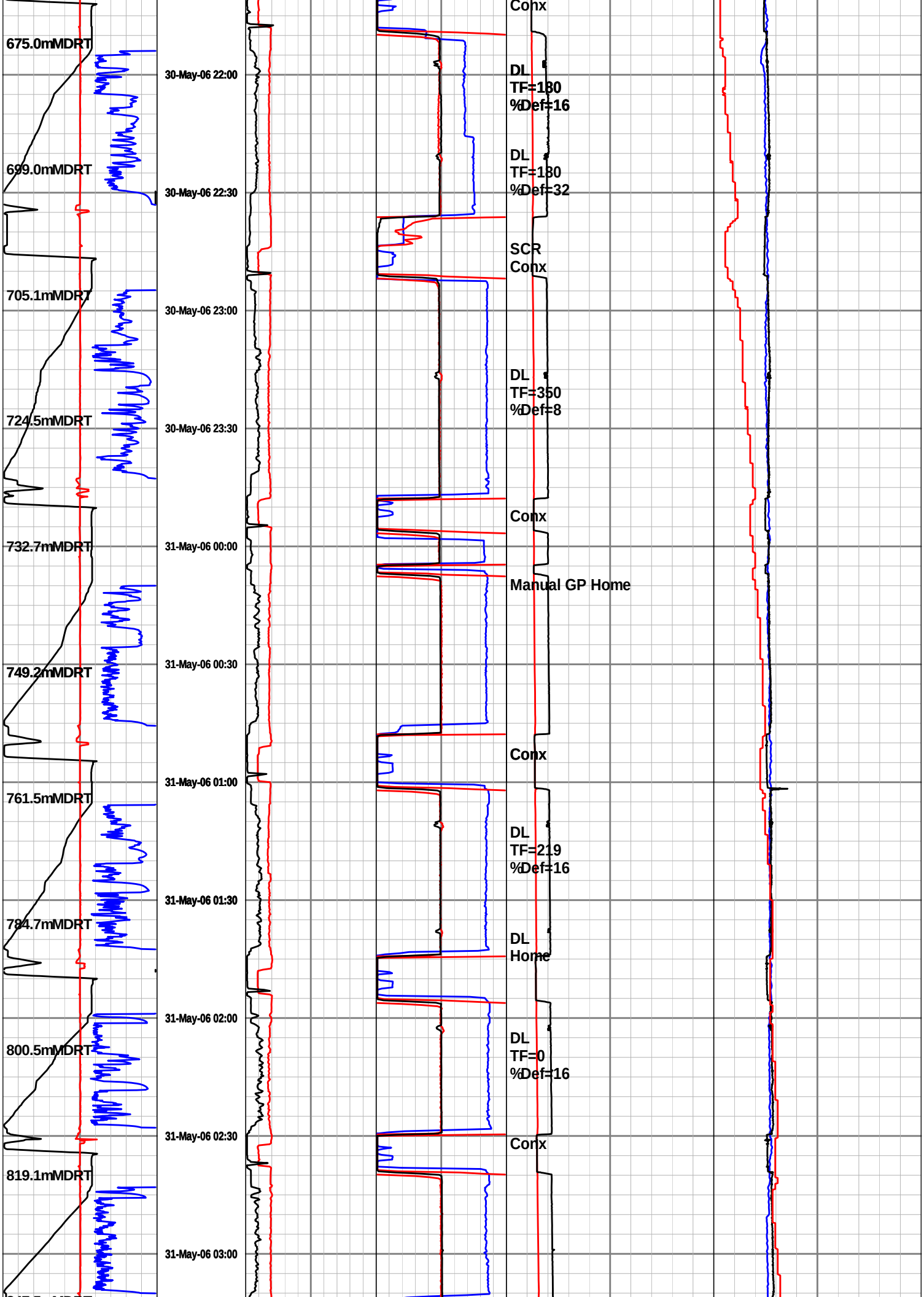
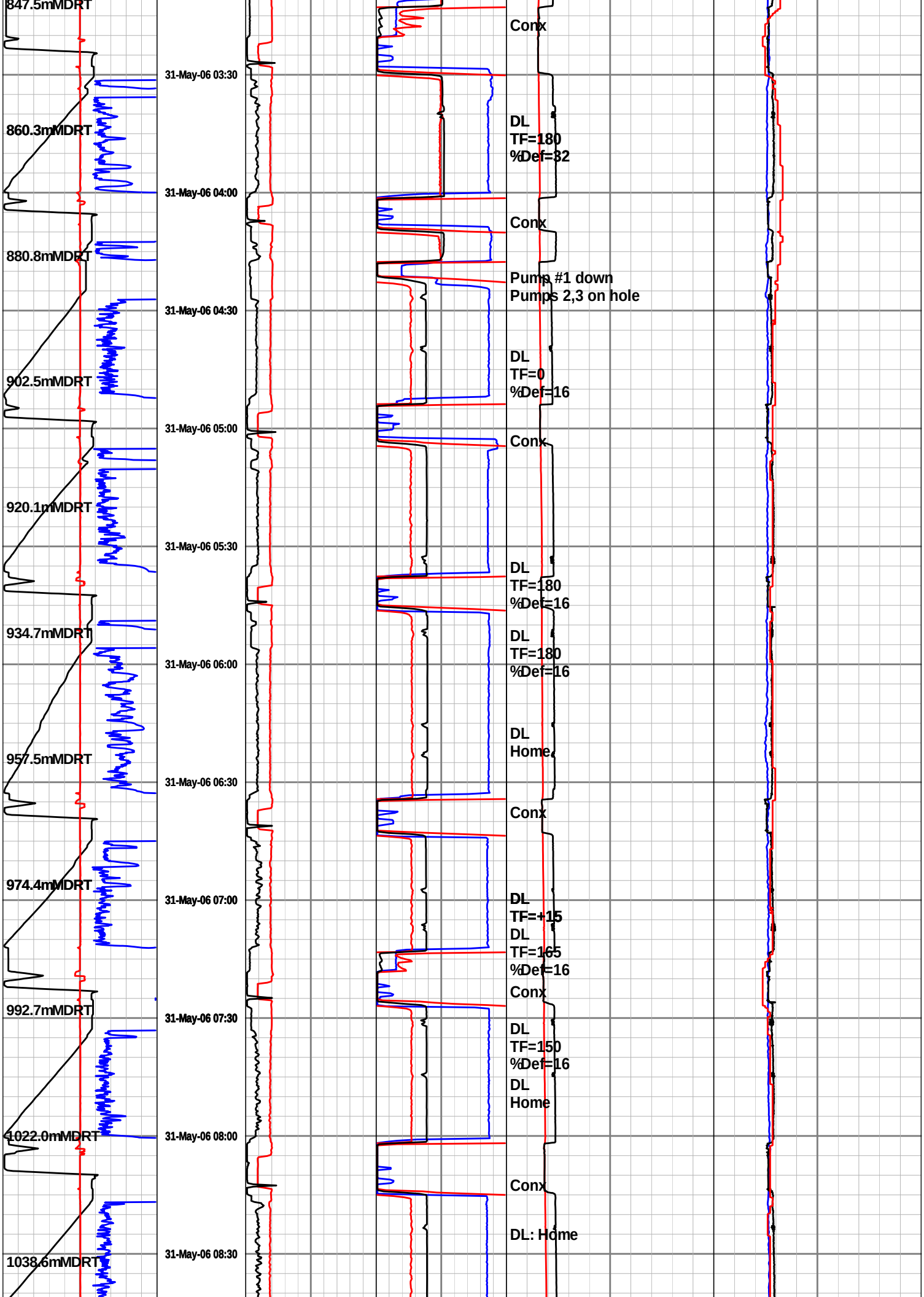
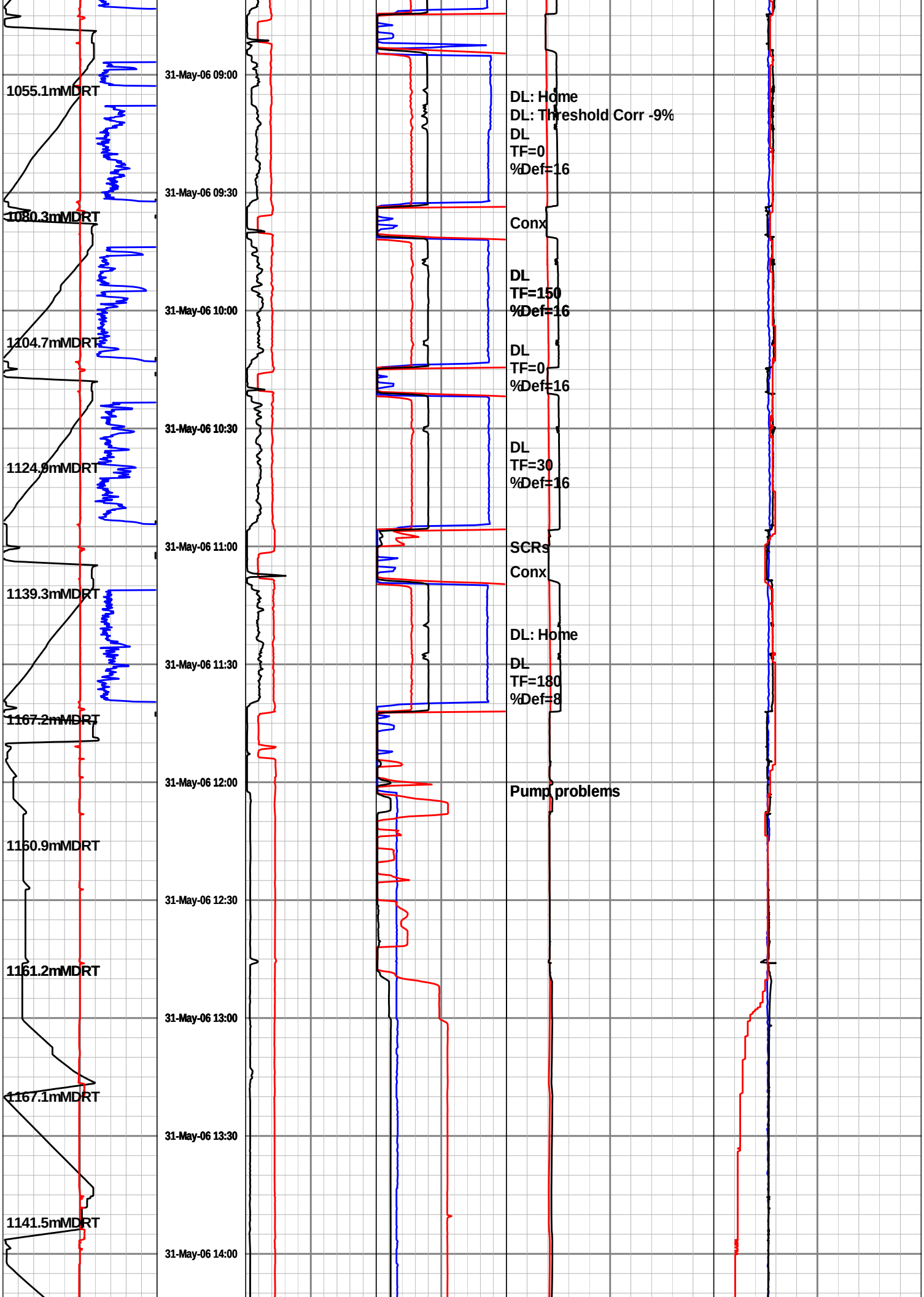
30-May-06 09:30
30-May-06 10:00
30-May-06 10:30

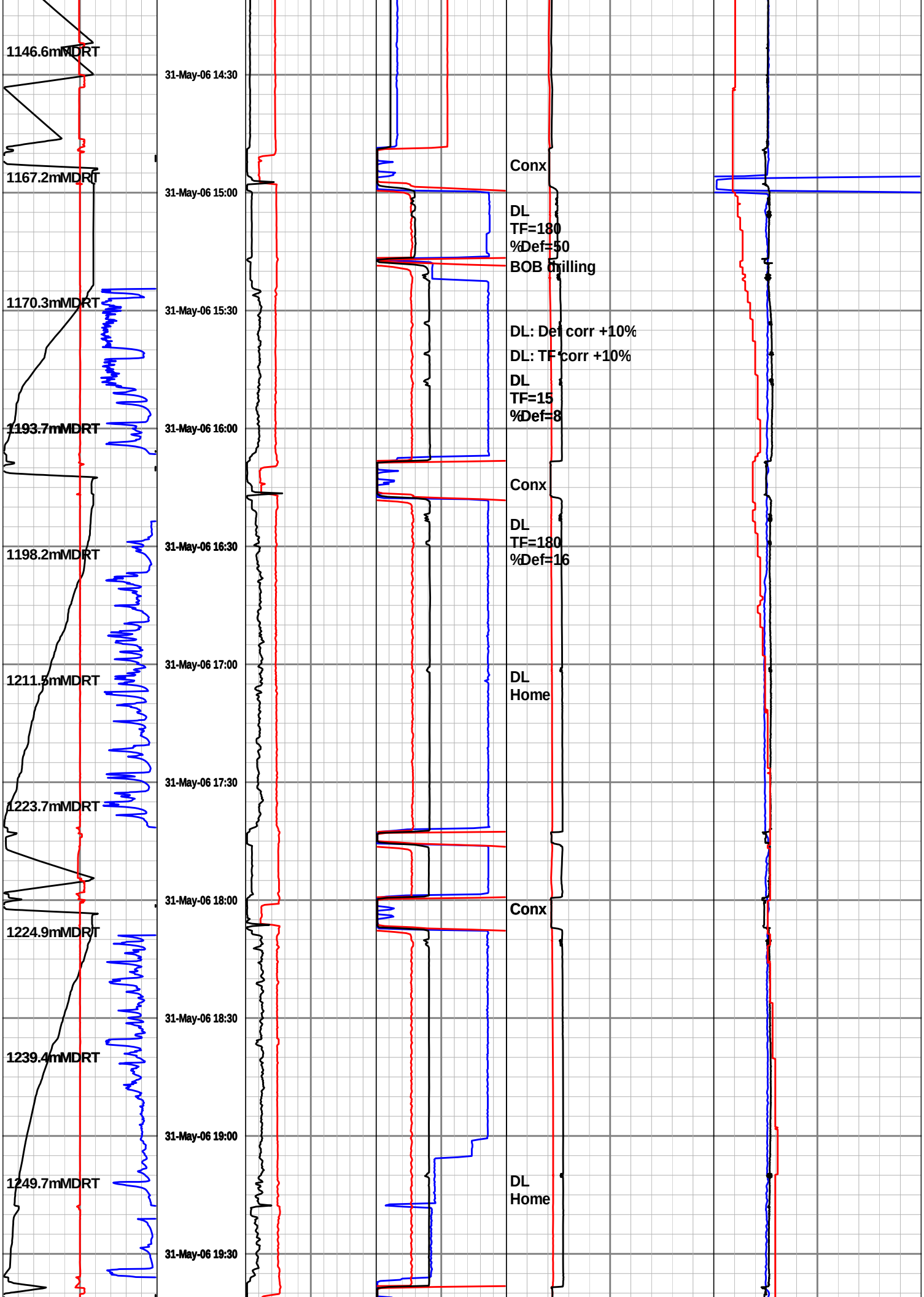

30-May-06 11:00
594.3mMDRT
30-May-06 11:30
594.3mMDRT
30-May-06 12:00
617.5mMDRT
30-May-06 12:30
617.5mMDRT
30-May-06 13:00
617.5mMDRT
30-May-06 13:30
617.5mMDRT
30-May-06 14:00
617.5mMDRT
Pressure test GeoSpan
30-May-06 14:30
617.5mMDRT
30-May-06 15:00
618.5mMDRT
30-May-06 15:30
626.9mMDRT
30-May-06 16:00

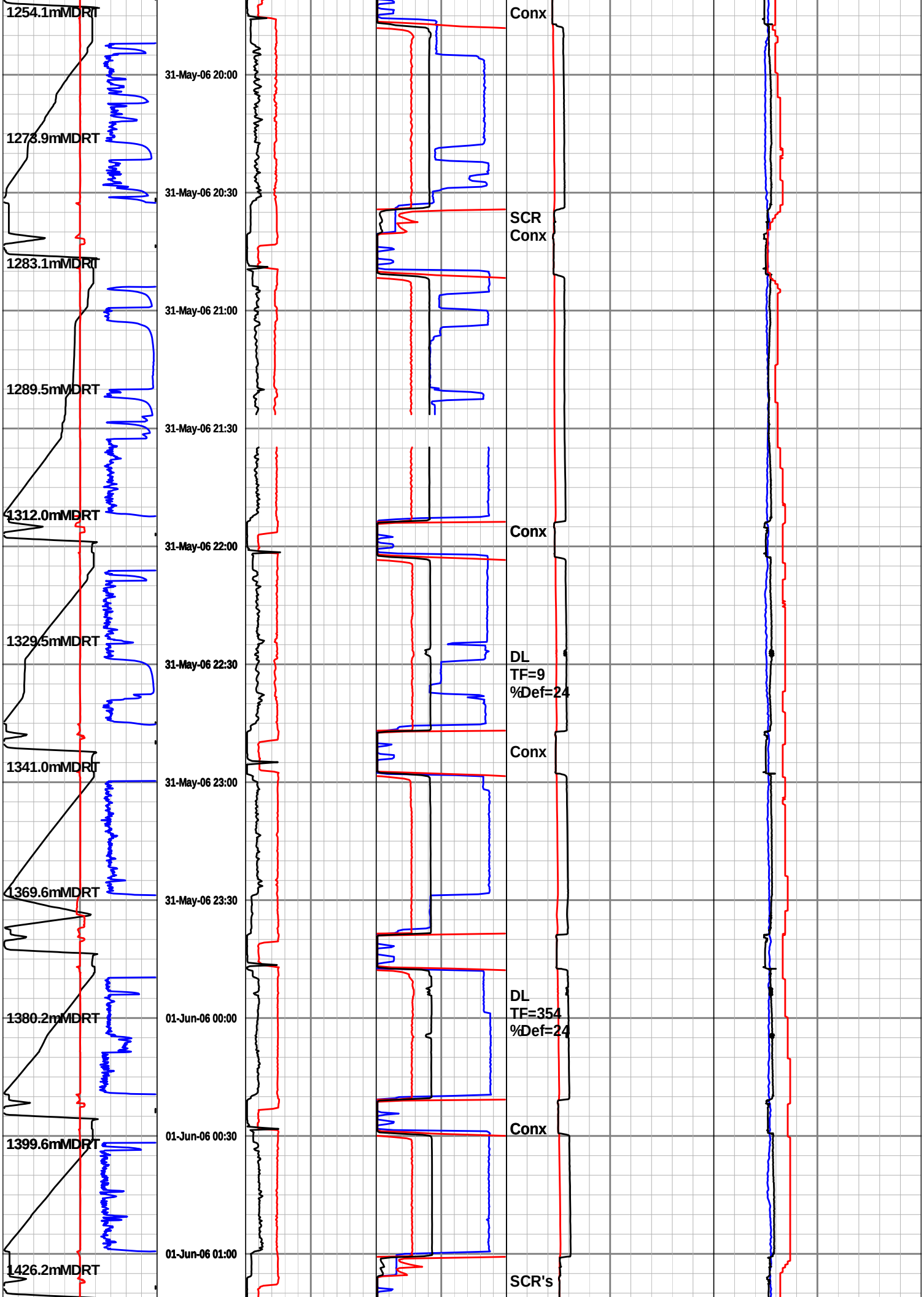

626.9mMDRT
631.3mMDRT
631.8mMDRT
638.9mMDRT
626.9mMDRT
626.9mMDRT
626.9mMDRT
645.5mMDRT
648.2mMDRT
667.5mMDRT
30-May-06 16:30
30-May-06 17:00
30-May-06 17:30
30-May-06 18:00
30-May-06 18:30
30-May-06 19:00
30-May-06 19:30
30-May-06 20:00
30-May-06 20:30
30-May-06 21:00
30-May-06 21:30
DL: Home
FIT
Complete FIT
Conx
Incr gpm to 1170

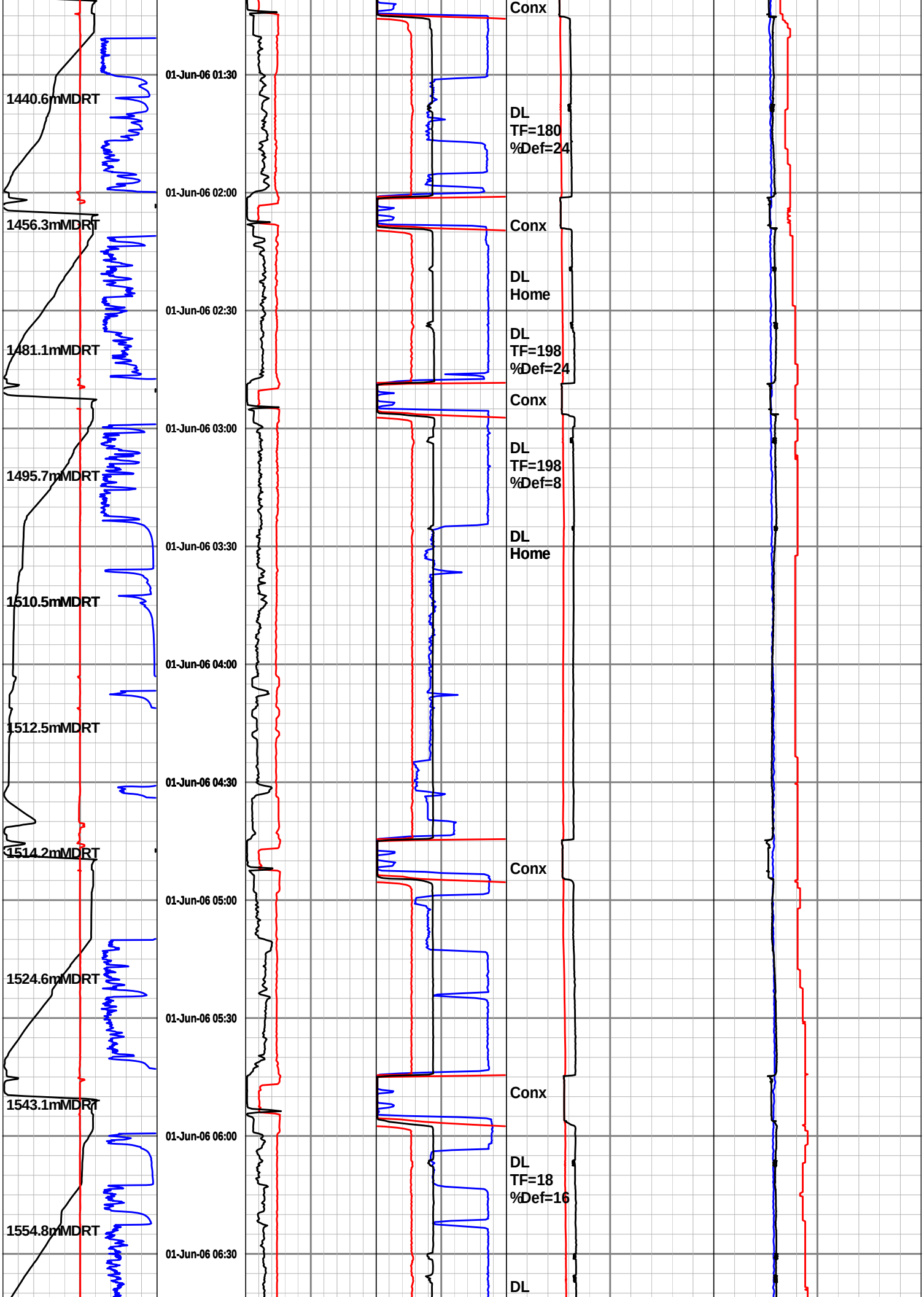

675.0mMDRT
699.0mMDRT
705.1mMDRT
724.5mMDRT
732.7mMDRT
749.2mMDRT
761.5mMDRT
784.7mMDRT
800.5mMDRT
819.1mMDRT
30-May-06 22:00
30-May-06 22:30
30-May-06 23:00
30-May-06 23:30
31-May-06 00:00
31-May-06 00:30
31-May-06 01:00
31-May-06 01:30
31-May-06 02:00
31-May-06 02:30
31-May-06 03:00
Conx
DL
TF=180
%Def=16
DL
TF=180
%Def=32
SCR
Conx
DL
TF=350
%Def=8
Conx
Manual GP Home
Conx
DL
TF=219
%Def=16
DL
Home
DL
TF=0
%Def=16
Conx

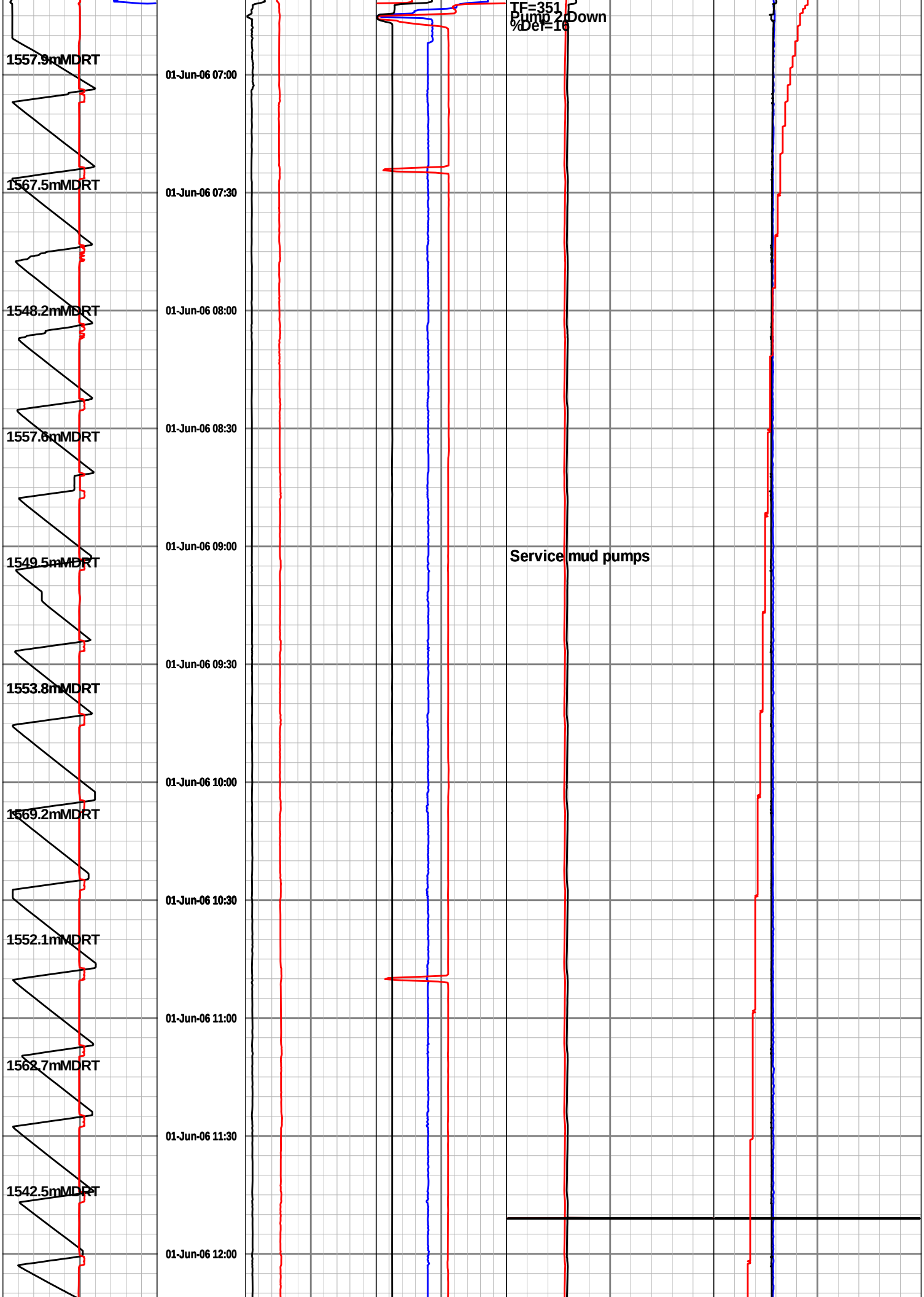

847.5mMDRT
860.3mMDRT
880.8mMDRT
902.5mMDRT
920.1mMDRT
934.7mMDRT
957.5mMDRT
974.4mMDRT
992.7mMDRT
1022.0mMDRT
1038.6mMDRT
31-May-06 03:30
31-May-06 04:00
31-May-06 04:30
31-May-06 05:00
31-May-06 05:30
31-May-06 06:00
31-May-06 06:30
31-May-06 07:00
31-May-06 07:30
31-May-06 08:00
31-May-06 08:30
Conx
DL
TF=180
%Def=32
Conx
Pump #1 down
Pumps 2,3 on hole
DL
TF=0
%Def=16
Conx
DL
TF=180
%Def=16
DL
TF=180
%Def=16
DL
Home
Conx
DL
TF=+15
DL
TF=165
%Def=16
Conx
DL
TF=150
%Def=16
DL
Home
Conx
DL: Home

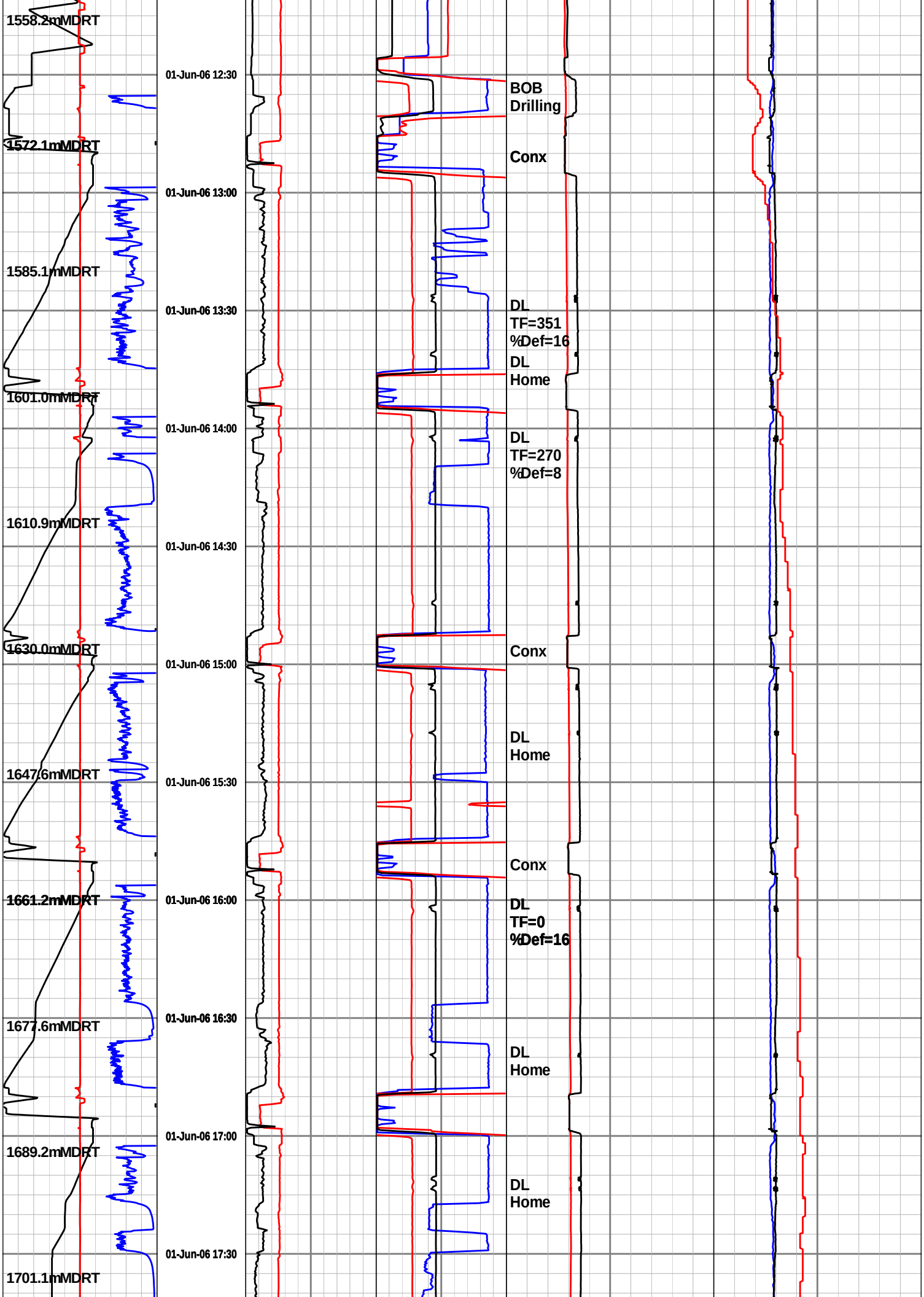

1055.1mMDRT
1080.3mMDRT
1104.7mMDRT
1124.9mMDRT
1139.3mMDRT
1167.2mMDRT
1160.9mMDRT
1161.2mMDRT
1167.1mMDRT
1141.5mMDRT
31-May-06 09:00
31-May-06 09:30
31-May-06 10:00
31-May-06 10:30
31-May-06 11:00
31-May-06 11:30
31-May-06 12:00
31-May-06 12:30
31-May-06 13:00
31-May-06 13:30
31-May-06 14:00
DL: Home
DL: Threshold Corr -9%
DL
TF=0
%Def=16
Conx
DL
TF=150
%Def=16
DL
TF=0
%Def=16
DL
TF=30
%Def=16
SCRs
Conx
DL: Home
DL
TF=180
%Def=8
Pump problems

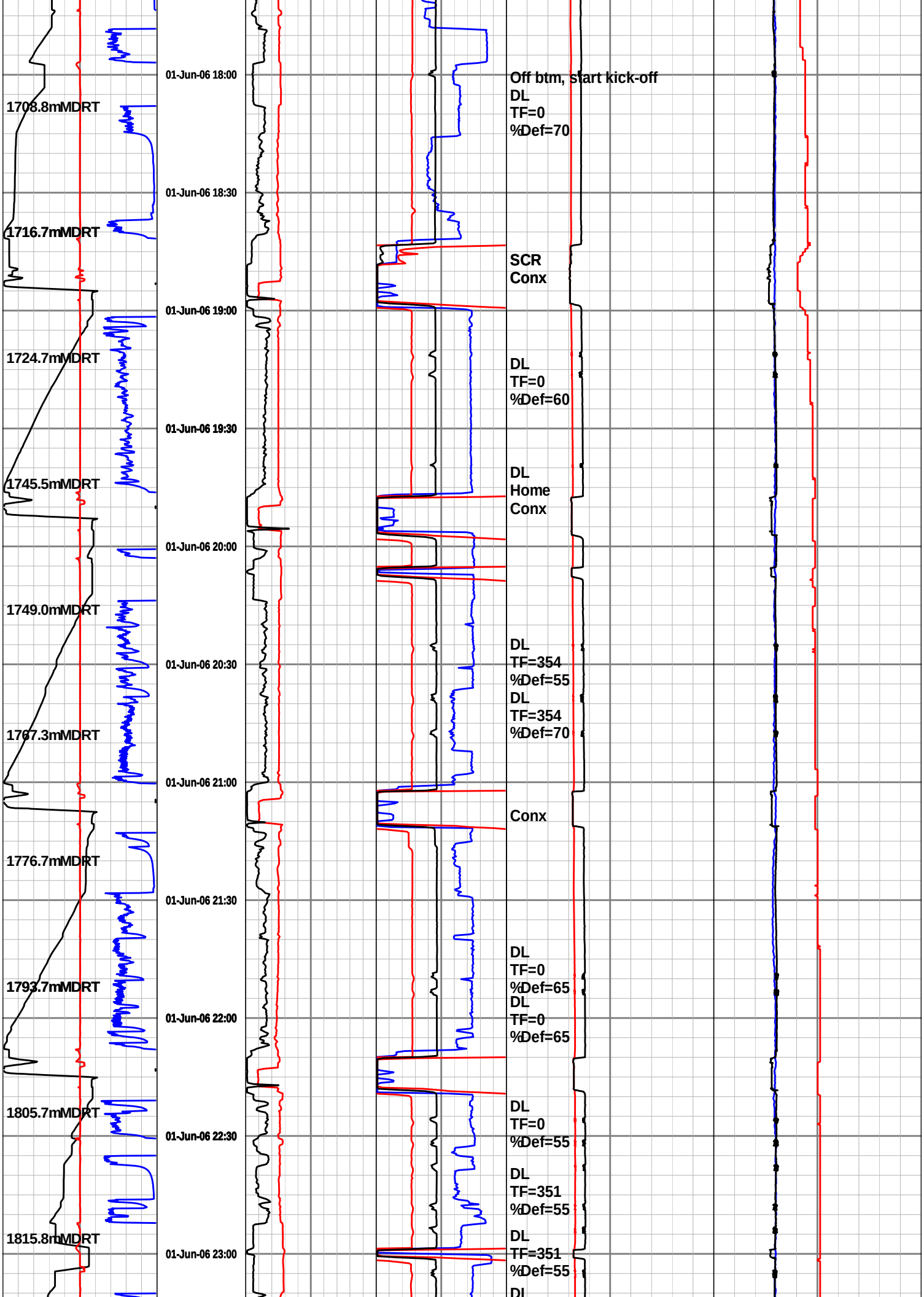

1146.6mMDRT
1167.2mMDRT
1170.3mMDRT
1193.7mMDRT
1198.2mMDRT
1211.5mMDRT
1223.7mMDRT
1224.9mMDRT
1239.4mMDRT
1249.7mMDRT
31-May-06 14:30
31-May-06 15:00
31-May-06 15:30
31-May-06 16:00
31-May-06 16:30
31-May-06 17:00
31-May-06 17:30
31-May-06 18:00
31-May-06 18:30
31-May-06 19:00
31-May-06 19:30
Conx
DL
TF=180
%Def=50
BOB drilling
DL: Def corr +10%
DL: TF corr +10%
DL
TF=15
%Def=8
Conx
DL
TF=180
%Def=16
DL
Home
Conx
DL
Home

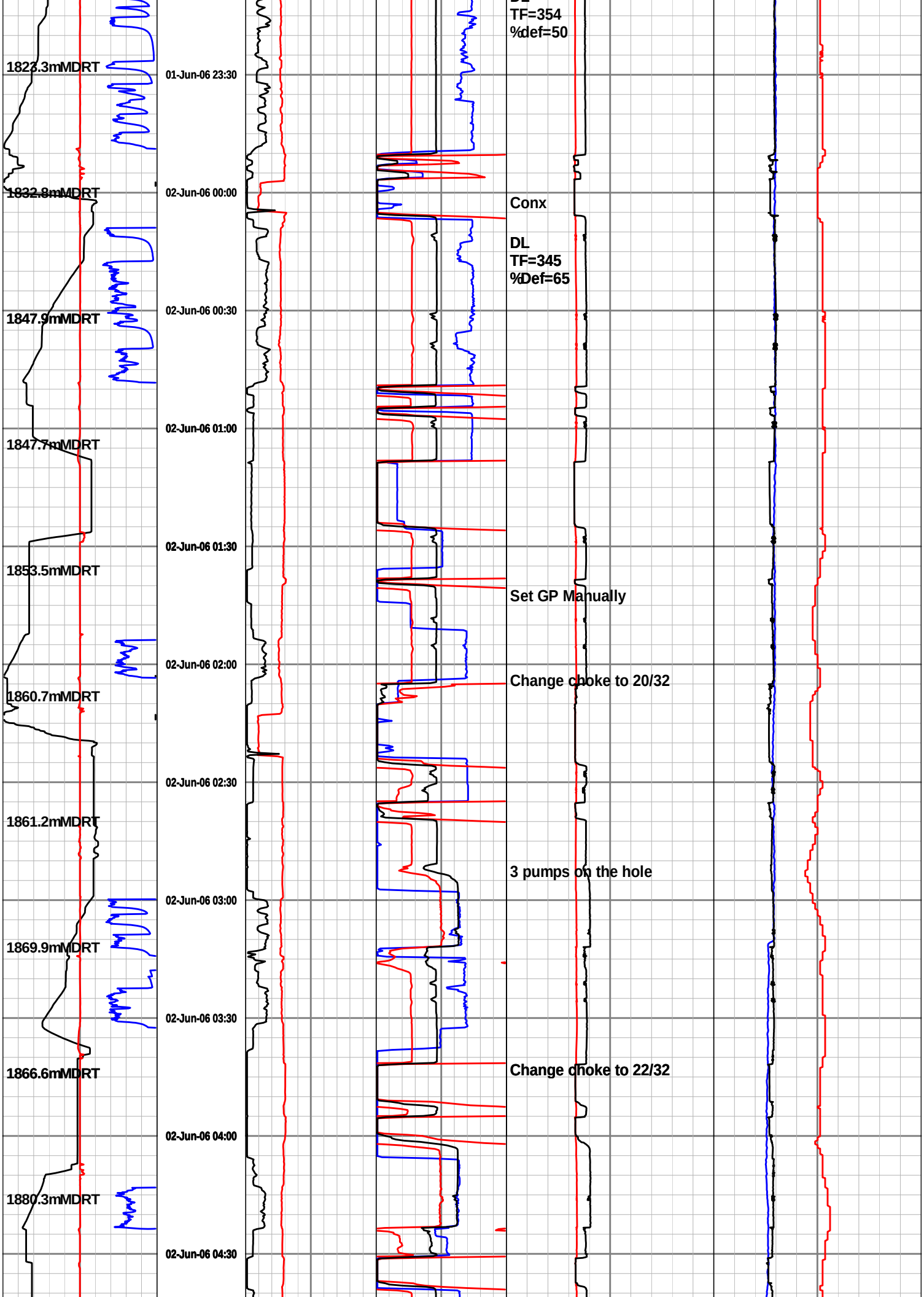

1254.1mMDRT
31-May-06 20:00
1273.9mMDRT
31-May-06 20:30
1283.1mMDRT
31-May-06 21:00
1289.5mMDRT
31-May-06 21:30
1312.0mMDRT
31-May-06 22:00
1329.5mMDRT
31-May-06 22:30
1341.0mMDRT
31-May-06 23:00
1369.6mMDRT
31-May-06 23:30
1380.2mMDRT
01-Jun-06 00:00
1399.6mMDRT
01-Jun-06 00:30
1426.2mMDRT
01-Jun-06 01:00
Conx
SCR
Conx
Conx
DL
TF=9
%Def=24
Conx
DL
TF=354
%Def=24
Conx
SCR's

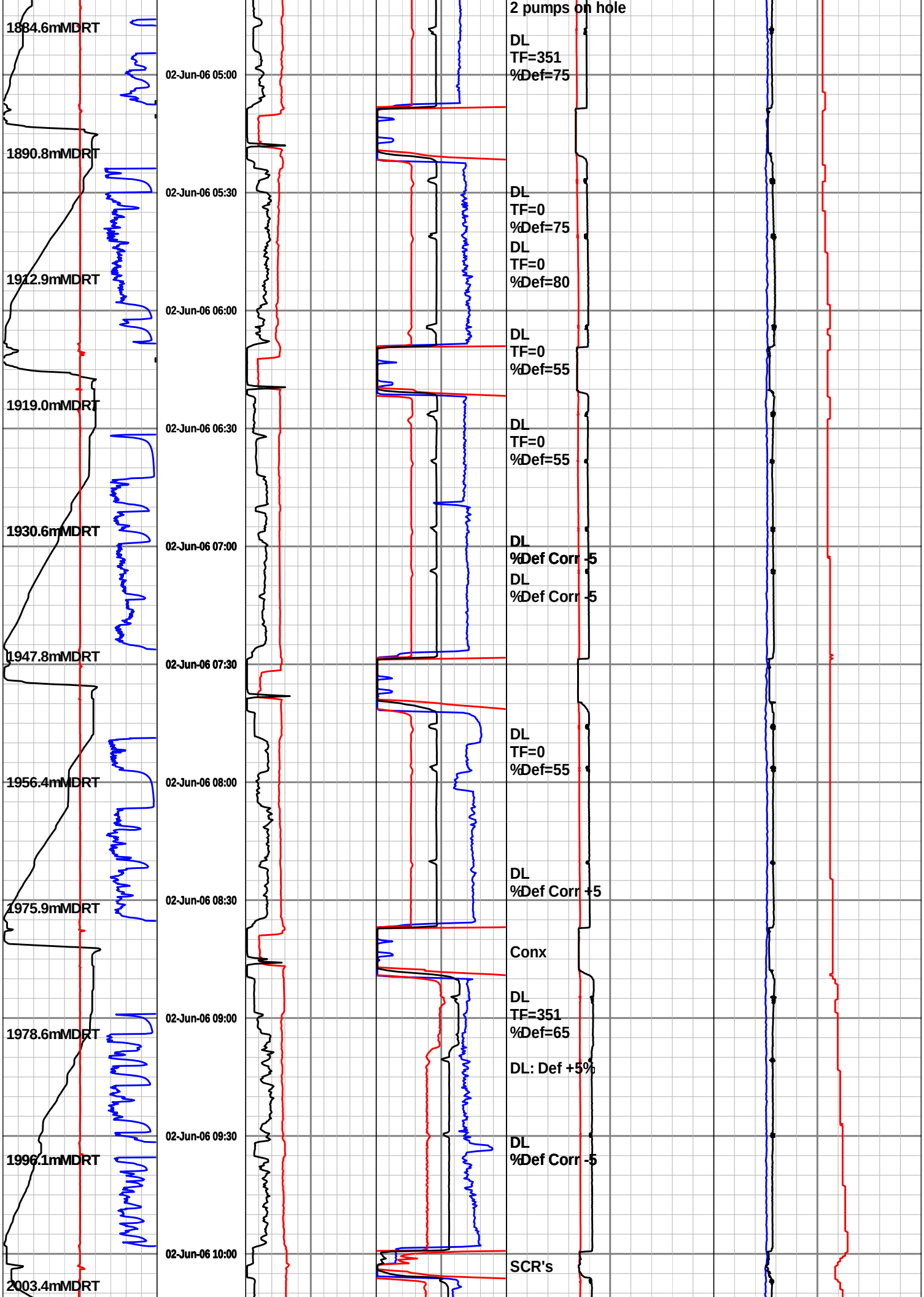

Conx
01-Jun-06 01:30
1440.6mMDRT
DL
TF=180
%Def=24
01-Jun-06 02:00
1456.3mMDRT
Conx
DL
Home
01-Jun-06 02:30
1481.1mMDRT
DL
TF=198
%Def=24
Conx
01-Jun-06 03:00
1495.7mMDRT
DL
TF=198
%Def=8
01-Jun-06 03:30
DL
Home
1510.5mMDRT
01-Jun-06 04:00
1512.5mMDRT
01-Jun-06 04:30
1514.2mMDRT
Conx
01-Jun-06 05:00
1524.6mMDRT
01-Jun-06 05:30
Conx
1543.1mMDRT
01-Jun-06 06:00
DL
TF=18
%Def=16
1554.8mMDRT
01-Jun-06 06:30
DL

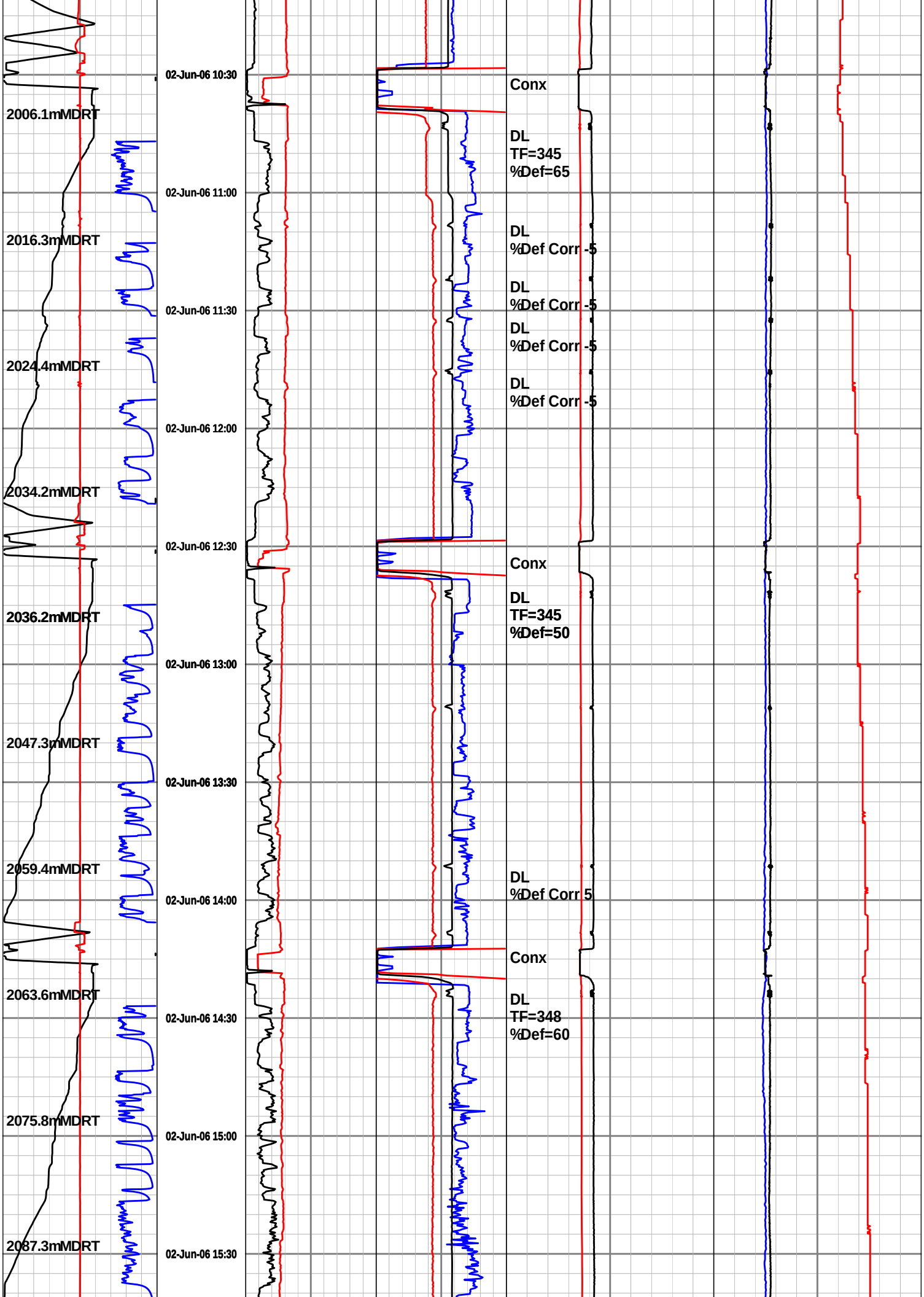

TF=351
Pump 2Down
%Def=16
1557.9mMDRT
01-Jun-06 07:00
1567.5mMDRT
01-Jun-06 07:30
1548.2mMDRT
01-Jun-06 08:00
1557.6mMDRT
01-Jun-06 08:30
1549.5mMDRT
01-Jun-06 09:00
Service mud pumps
1553.8mMDRT
01-Jun-06 09:30
1569.2mMDRT
01-Jun-06 10:00
1552.1mMDRT
01-Jun-06 10:30
1562.7mMDRT
01-Jun-06 11:00
1542.5mMDRT
01-Jun-06 11:30
01-Jun-06 12:00

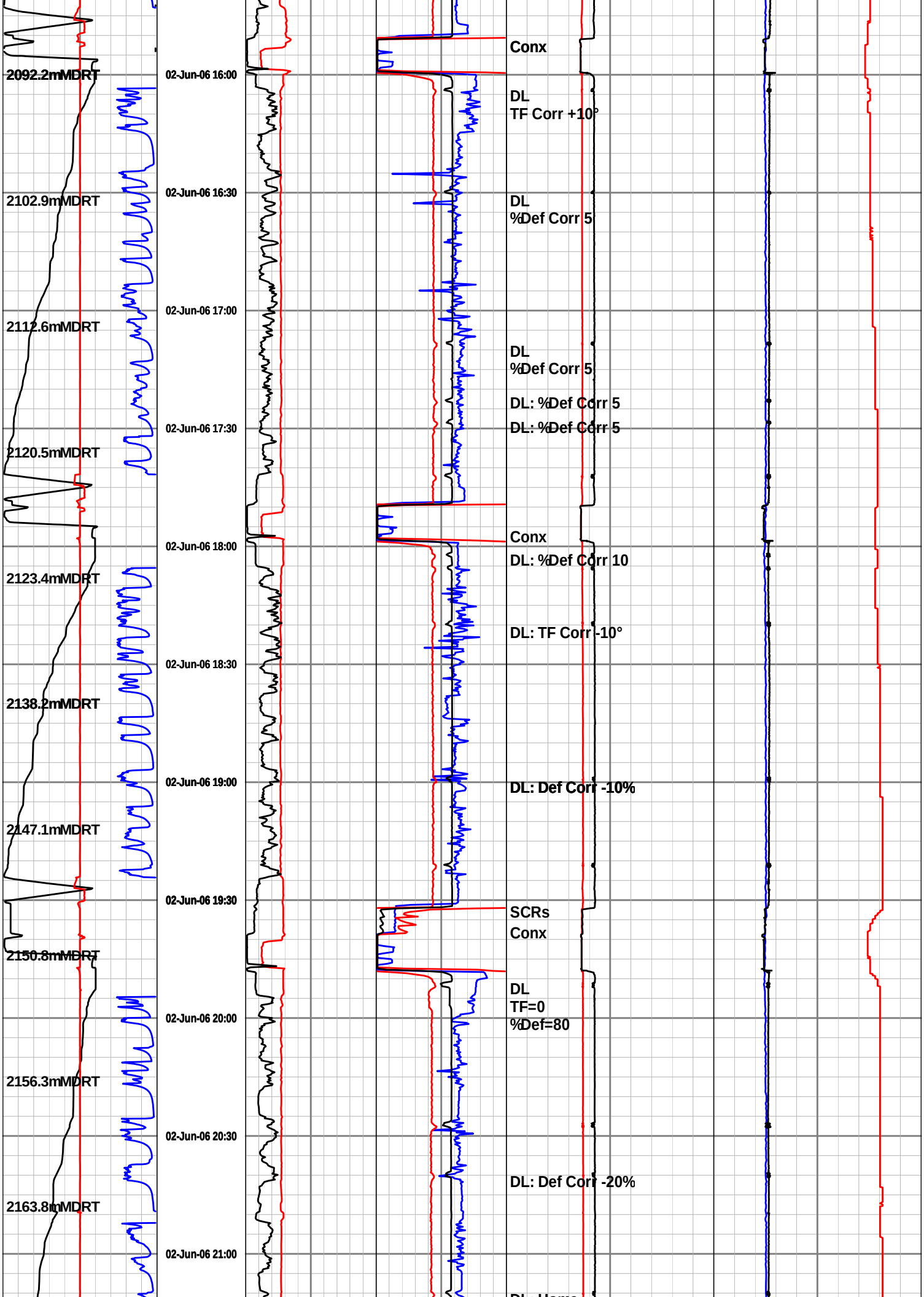

1558.2mMDRT
01-Jun-06 12:30
BOB
Drilling
1572.1mMDRT
Conx
01-Jun-06 13:00
1585.1mMDRT
01-Jun-06 13:30
DL
TF=351
%Def=16
DL
Home
1601.0mMDRT
01-Jun-06 14:00
DL
TF=270
%Def=8
1610.9mMDRT
01-Jun-06 14:30
1630.0mMDRT
Conx
01-Jun-06 15:00
DL
Home
1647.6mMDRT
01-Jun-06 15:30
Conx
1661.2mMDRT
01-Jun-06 16:00
DL
TF=0
%Def=16
1677.6mMDRT
01-Jun-06 16:30
DL
Home
01-Jun-06 17:00
1689.2mMDRT
DL
Home
01-Jun-06 17:30
1701.1mMDRT

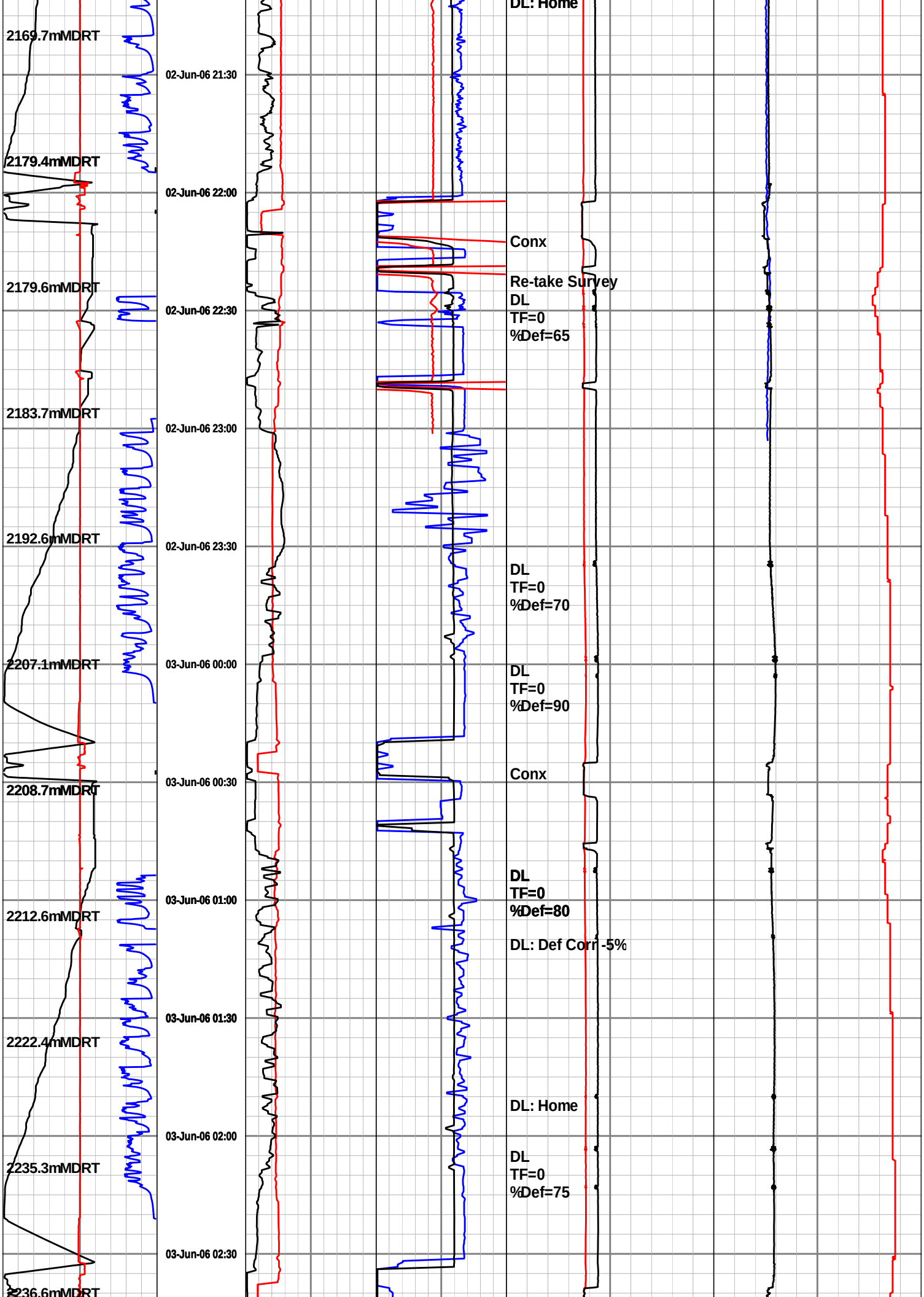

01-Jun-06 18:00
01-Jun-06 18:30
01-Jun-06 19:00
01-Jun-06 19:30
01-Jun-06 20:00
01-Jun-06 20:30
01-Jun-06 21:00
01-Jun-06 21:30
01-Jun-06 22:00
01-Jun-06 22:30
01-Jun-06 23:00
1708.8mMDRT
1716.7mMDRT
1724.7mMDRT
1745.5mMDRT
1749.0mMDRT
1767.3mMDRT
1776.7mMDRT
1793.7mMDRT
1805.7mMDRT
1815.8mMDRT
Off btm, start kick-off
DL
TF=0
%Def=70
SCR
Conx
DL
TF=0
%Def=60
DL
Home
Conx
DL
TF=354
%Def=55
DL
TF=354
%Def=70
Conx
DL
TF=0
%Def=65
DL
TF=0
%Def=65
DL
TF=0
%Def=55
DL
TF=351
%Def=55
DL
TF=351
%Def=55
DL

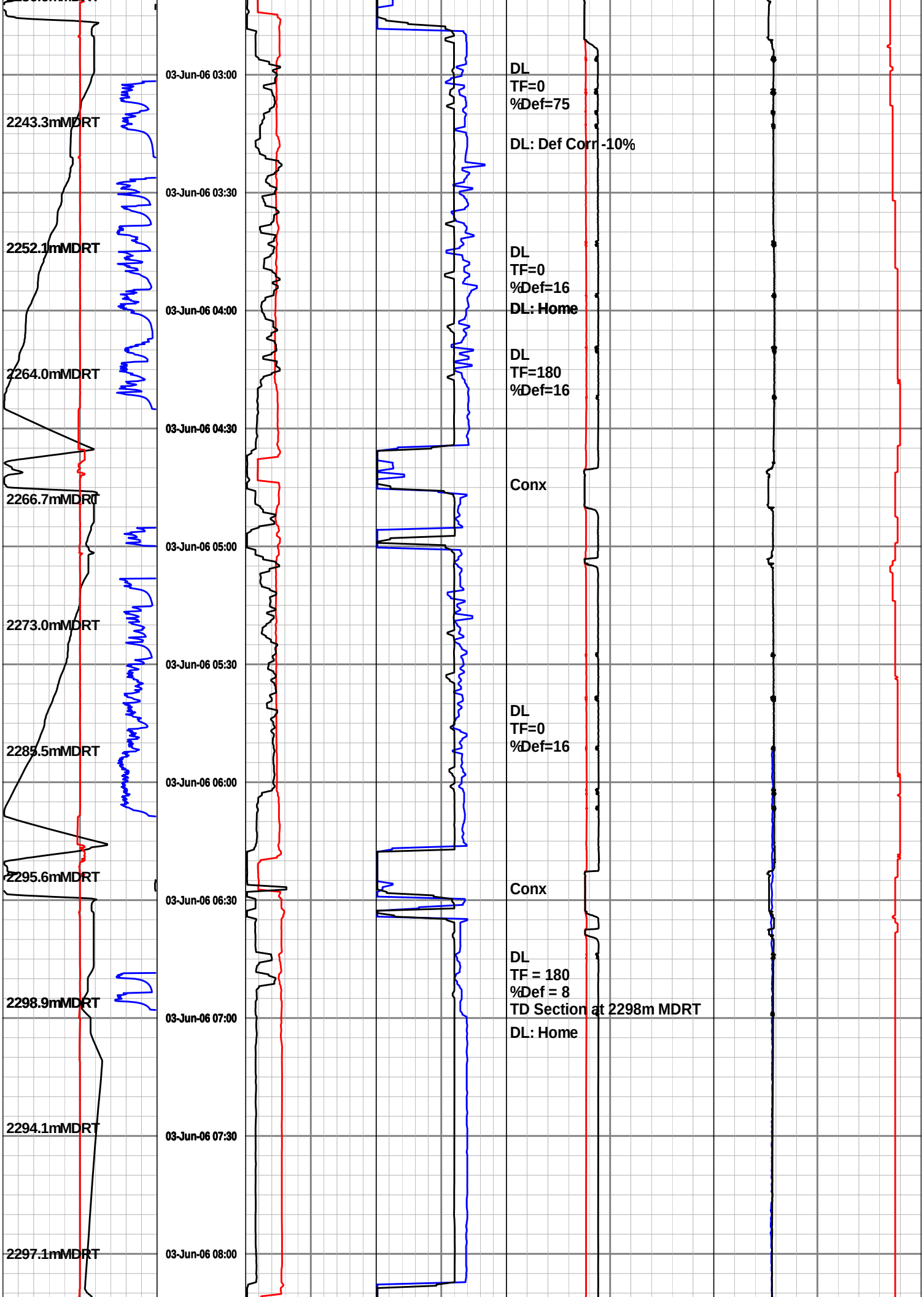

DL
TF=354
%def=50
1823.3mMDRT
01-Jun-06 23:30
1832.8mMDRT
02-Jun-06 00:00
Conx
DL
TF=345
%Def=65
1847.9mMDRT
02-Jun-06 00:30
02-Jun-06 01:00
1847.7mMDRT
02-Jun-06 01:30
1853.5mMDRT
Set GP Manually
02-Jun-06 02:00
Change choke to 20/32
1860.7mMDRT
02-Jun-06 02:30
1861.2mMDRT
3 pumps on the hole
02-Jun-06 03:00
1869.9mMDRT
02-Jun-06 03:30
1866.6mMDRT
Change choke to 22/32
02-Jun-06 04:00
1880.3mMDRT
02-Jun-06 04:30

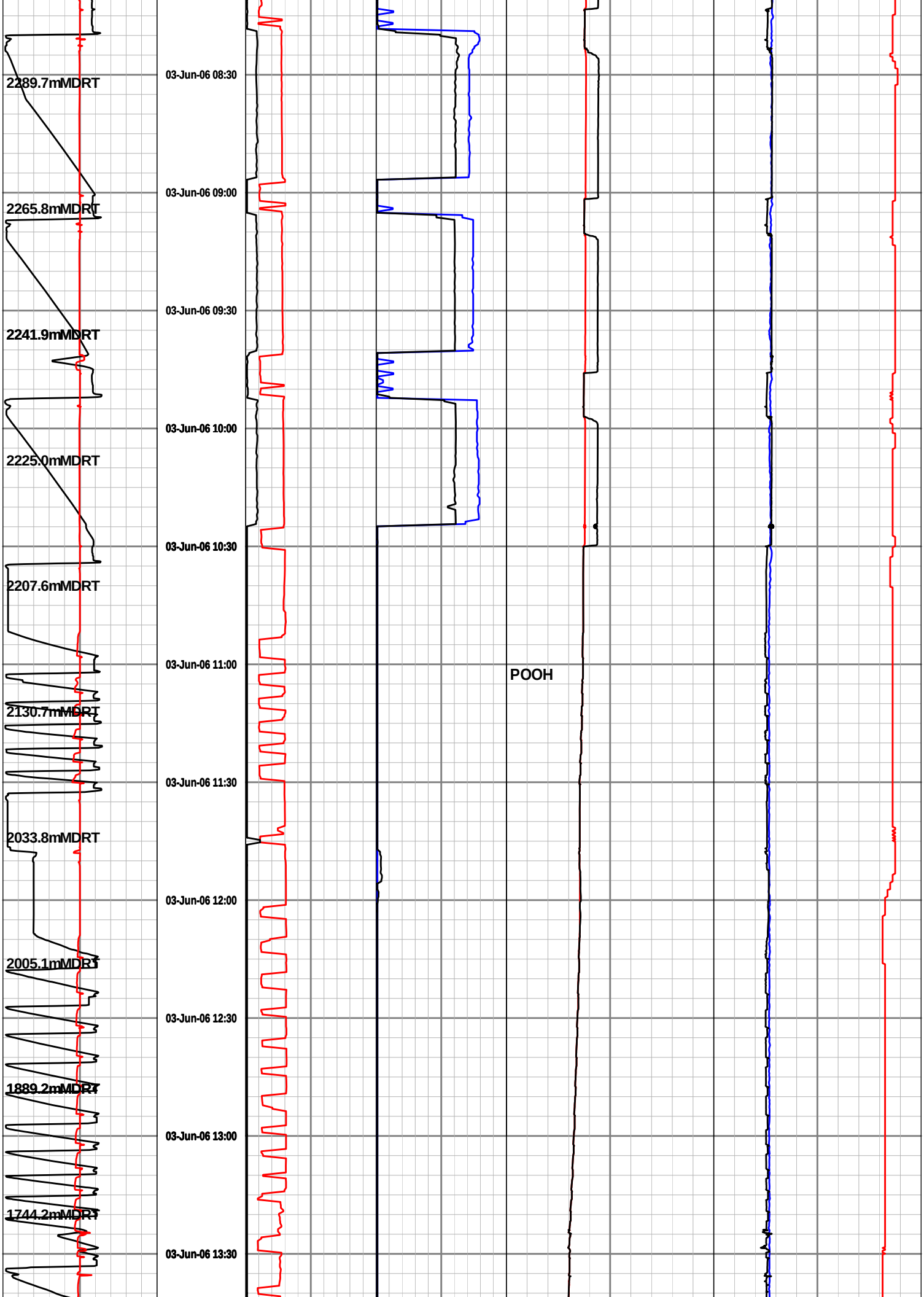

2 pumps on hole
1884.6mMDRT
DL
TF=351
%Def=75
02-Jun-06 05:00
1890.8mMDRT
02-Jun-06 05:30
DL
TF=0
%Def=75
DL
TF=0
%Def=80
1912.9mMDRT
02-Jun-06 06:00
DL
TF=0
%Def=55
1919.0mMDRT
02-Jun-06 06:30
DL
TF=0
%Def=55
1930.6mMDRT
02-Jun-06 07:00
DL
%Def Corr -5
DL
%Def Corr -5
1947.8mMDRT
02-Jun-06 07:30
DL
TF=0
%Def=55
1956.4mMDRT
02-Jun-06 08:00
DL
%Def Corr +5
1975.9mMDRT
02-Jun-06 08:30
Conx
DL
TF=351
%Def=65
1978.6mMDRT
02-Jun-06 09:00
DL: Def +5%
02-Jun-06 09:30
DL
%Def Corr -5
1996.1mMDRT
02-Jun-06 10:00
SCR's
2003.4mMDRT

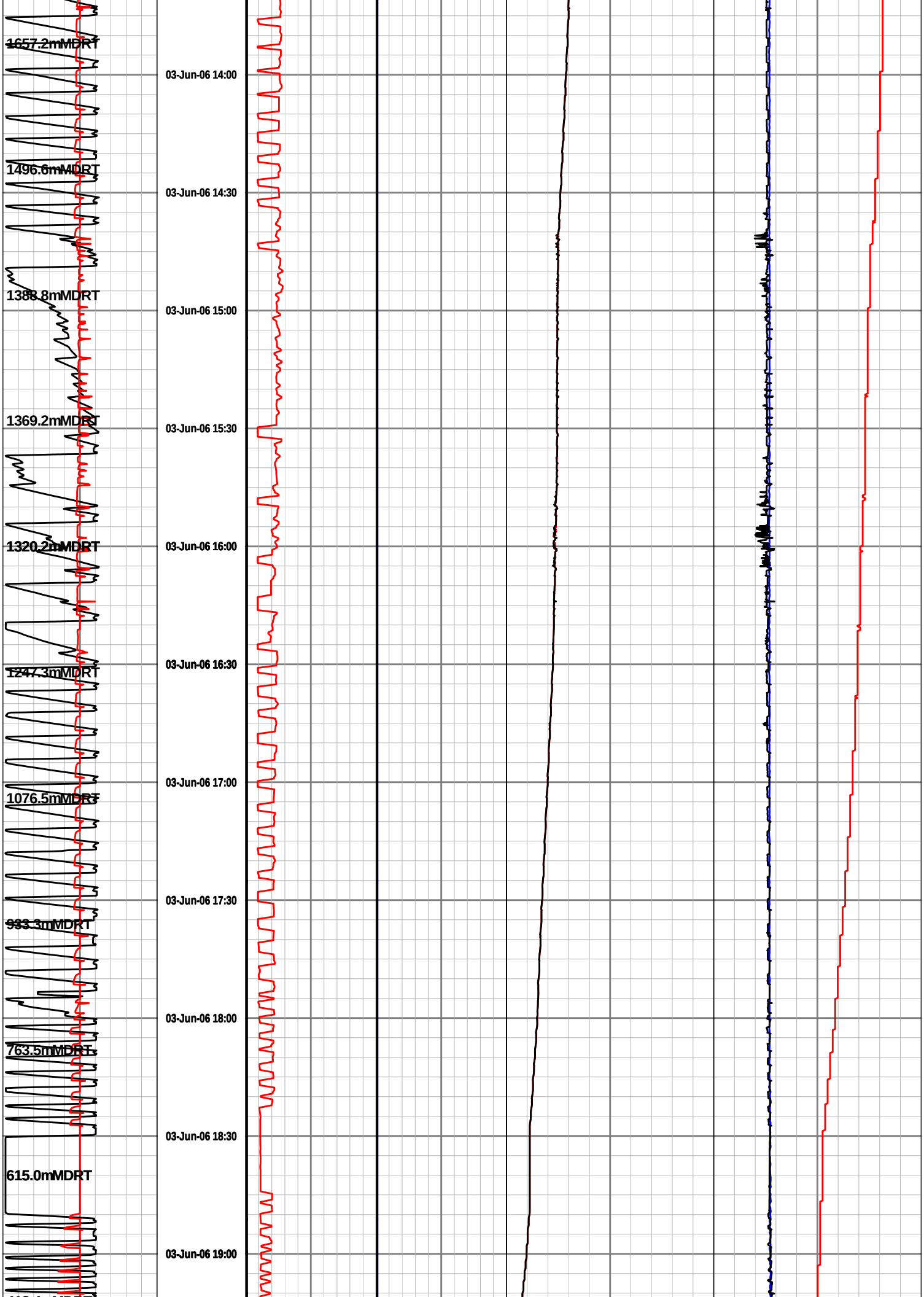

02-Jun-06 10:30
Conx
2006.1mMDRT
DL
TF=345
%Def=65
02-Jun-06 11:00
2016.3mMDRT
DL
%Def Corr -5
DL
%Def Corr -5
02-Jun-06 11:30
DL
%Def Corr -5
2024.4mMDRT
DL
%Def Corr -5
02-Jun-06 12:00
2034.2mMDRT
02-Jun-06 12:30
Conx
2036.2mMDRT
DL
TF=345
%Def=50
02-Jun-06 13:00
2047.3mMDRT
02-Jun-06 13:30
2059.4mMDRT
DL
%Def Corr 5
02-Jun-06 14:00
Conx
2063.6mMDRT
DL
TF=348
%Def=60
02-Jun-06 14:30
2075.8mMDRT
02-Jun-06 15:00
2087.3mMDRT
02-Jun-06 15:30

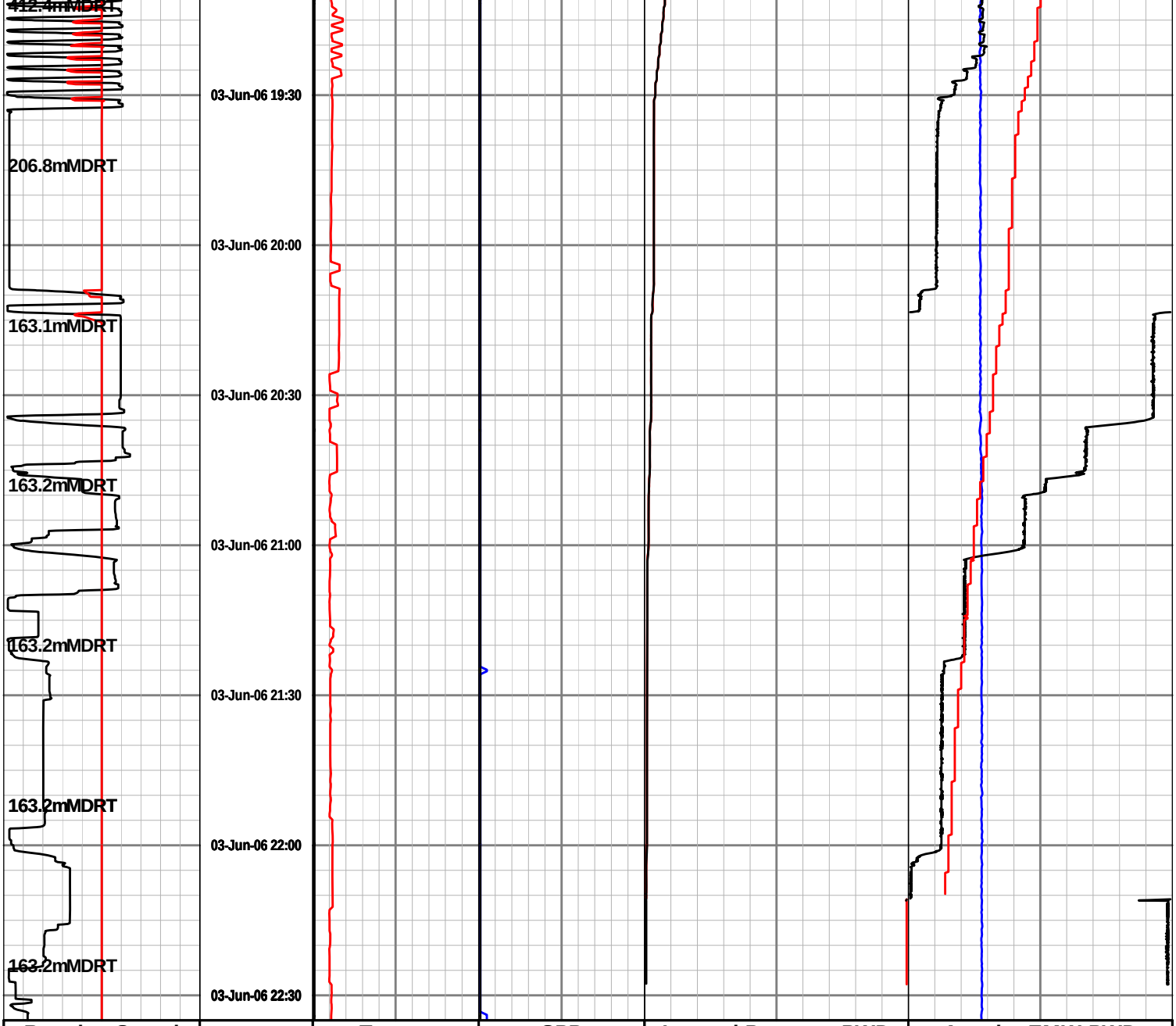

2092.2mMDRT
2102.9mMDRT
2112.6mMDRT
2120.5mMDRT
2123.4mMDRT
2138.2mMDRT
2147.1mMDRT
2150.8mMDRT
2156.3mMDRT
2163.8mMDRT
02-Jun-06 16:00
02-Jun-06 16:30
02-Jun-06 17:00
02-Jun-06 17:30
02-Jun-06 18:00
02-Jun-06 18:30
02-Jun-06 19:00
02-Jun-06 19:30
02-Jun-06 20:00
02-Jun-06 20:30
02-Jun-06 21:00
Conx
DL
TF Corr +10°
DL
%Def Corr 5
DL
%Def Corr 5
DL: %Def Corr 5
DL: %Def Corr 5
Conx
DL: %Def Corr 10
DL: TF Corr -10°
DL: Def Corr -10%
SCRs
Conx
DL
TF=0
%Def=80
DL: Def Corr -20%


2169.7mMDRT
2179.4mMDRT
2179.6mMDRT
2183.7mMDRT
2192.6mMDRT
2207.1mMDRT
2208.7mMDRT
2212.6mMDRT
2222.4mMDRT
2235.3mMDRT
2236.6mMDRT
02-Jun-06 21:30
02-Jun-06 22:00
02-Jun-06 22:30
02-Jun-06 23:00
02-Jun-06 23:30
03-Jun-06 00:00
03-Jun-06 00:30
03-Jun-06 01:00
03-Jun-06 01:30
03-Jun-06 02:00
03-Jun-06 02:30
DL: Home
Conx
Re-take Survey
DL
TF=0
%Def=65
DL
TF=0
%Def=70
DL
TF=0
%Def=90
Conx
DL
TF=0
%Def=80
DL: Def Corr -5%
DL: Home
DL
TF=0
%Def=75


03-Jun-06 03:00
2243.3mMDRT
03-Jun-06 03:30
2252.1mMDRT
03-Jun-06 04:00
2264.0mMDRT
03-Jun-06 04:30
2266.7mMDRT
03-Jun-06 05:00
2273.0mMDRT
03-Jun-06 05:30
2285.5mMDRT
03-Jun-06 06:00
2295.6mMDRT
03-Jun-06 06:30
2298.9mMDRT
03-Jun-06 07:00
2294.1mMDRT
03-Jun-06 07:30
2297.1mMDRT
03-Jun-06 08:00
DL
TF=0
%Def=75
DL: Def Corr -10%
DL
TF=0
%Def=16
DL: Home
DL
TF=180
%Def=16
Conx
DL
TF=0
%Def=16
Conx
DL
TF = 180
%Def = 8
TD Section at 2298m MDRT
DL: Home

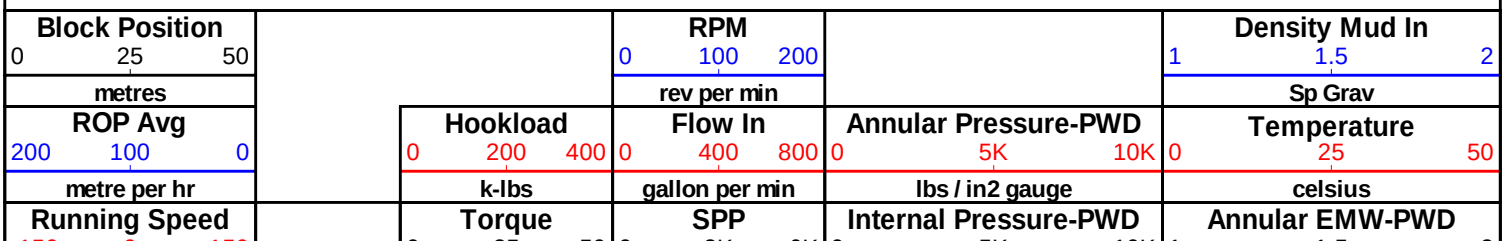

2289.7mMDRT
2265.8mMDRT
2241.9mMDRT
2225.0mMDRT
2207.6mMDRT
2130.7mMDRT
2033.8mMDRT
2005.1mMDRT
1889.2mMDRT
1744.2mMDRT
03-Jun-06 08:30
03-Jun-06 09:00
03-Jun-06 09:30
03-Jun-06 10:00
03-Jun-06 10:30
03-Jun-06 11:00
03-Jun-06 11:30
03-Jun-06 12:00
03-Jun-06 12:30
03-Jun-06 13:00
03-Jun-06 13:30
POOH

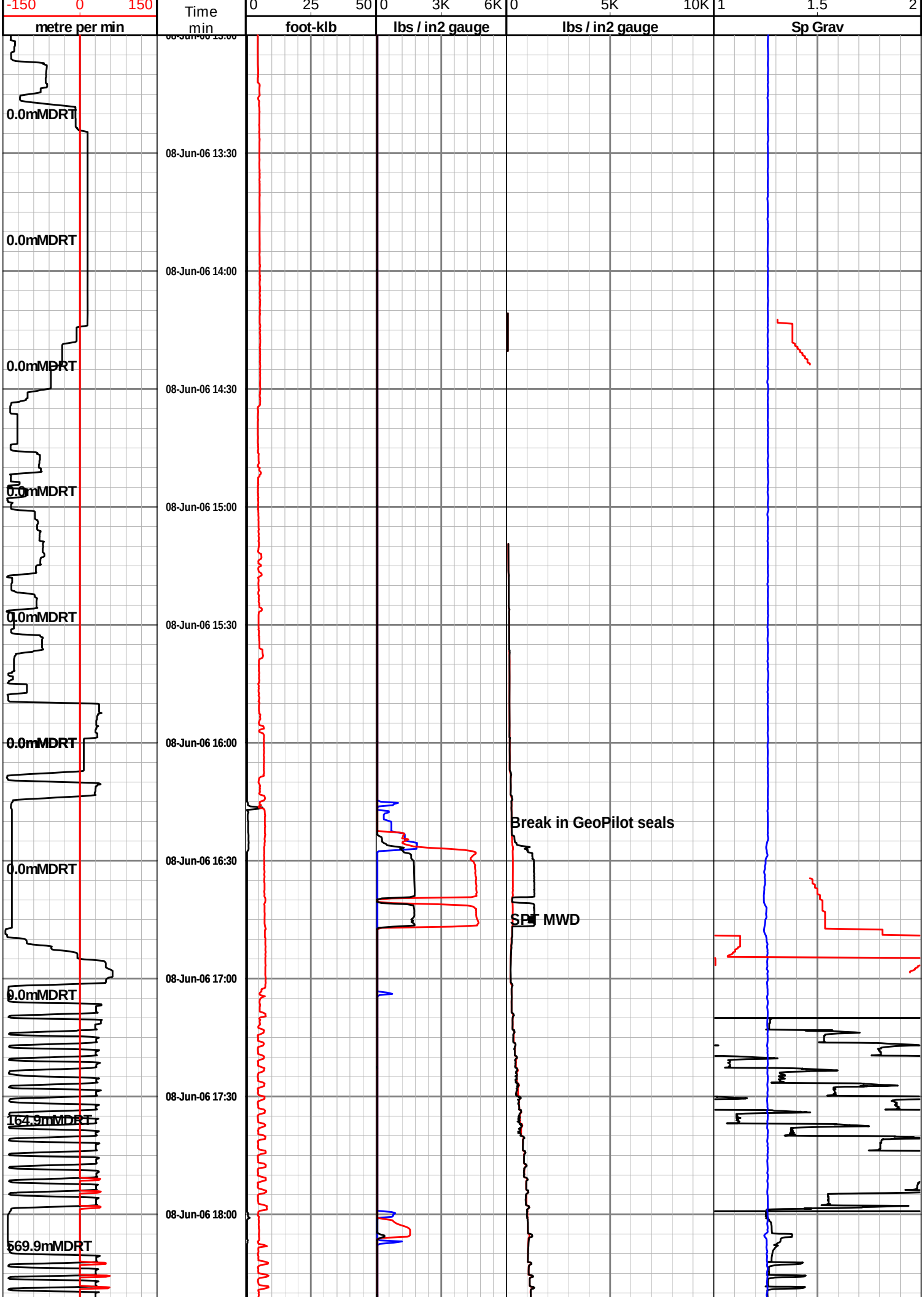

1657.2mMDRT
1496.6mMDRT
1388.8mMDRT
1369.2mMDRT
1320.2mMDRT
1247.3mMDRT
1076.5mMDRT
933.3mMDRT
763.5mMDRT
615.0mMDRT
03-Jun-06 14:00
03-Jun-06 14:30
03-Jun-06 15:00
03-Jun-06 15:30
03-Jun-06 16:00
03-Jun-06 16:30
03-Jun-06 17:00
03-Jun-06 17:30
03-Jun-06 18:00
03-Jun-06 18:30
03-Jun-06 19:00

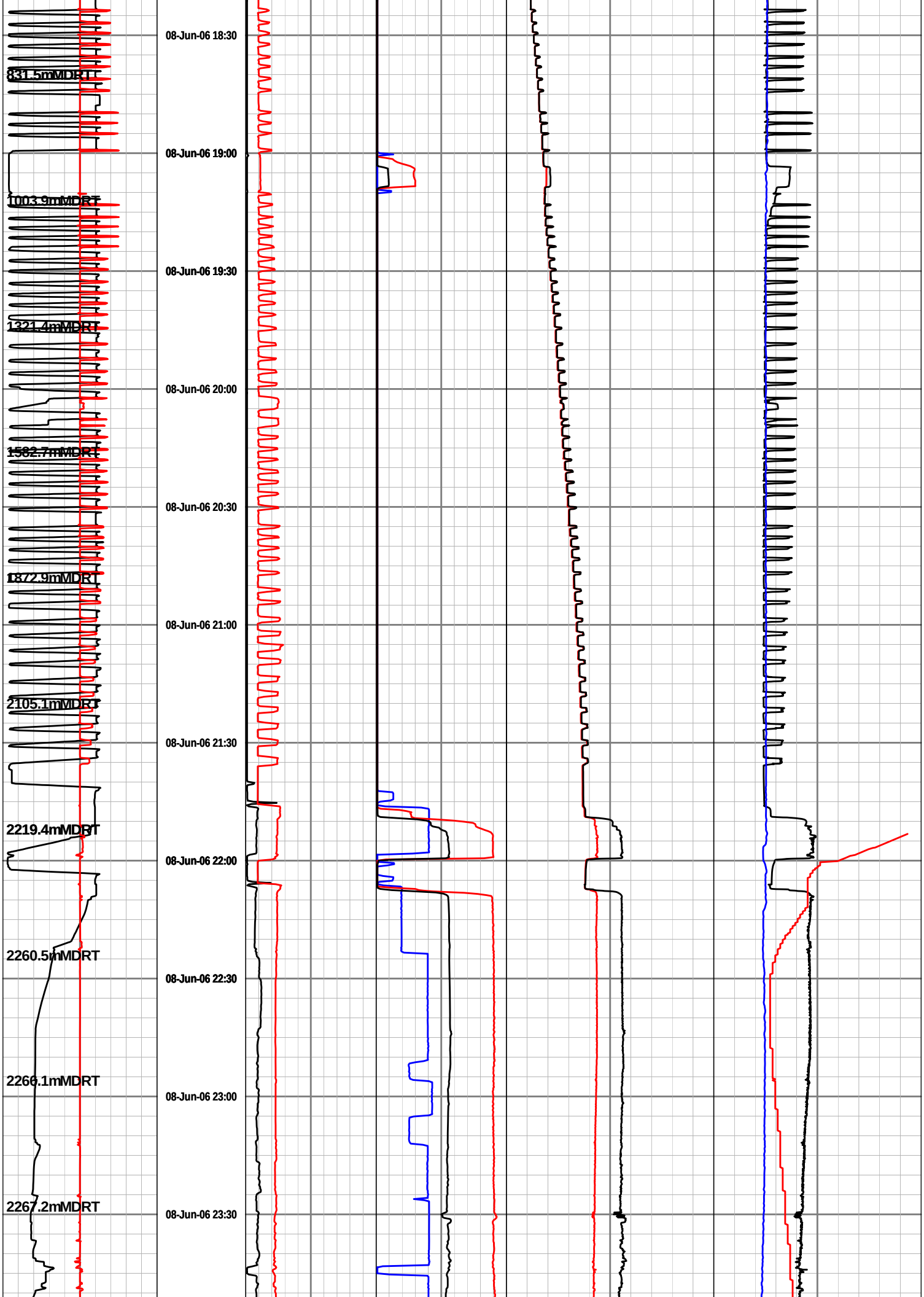


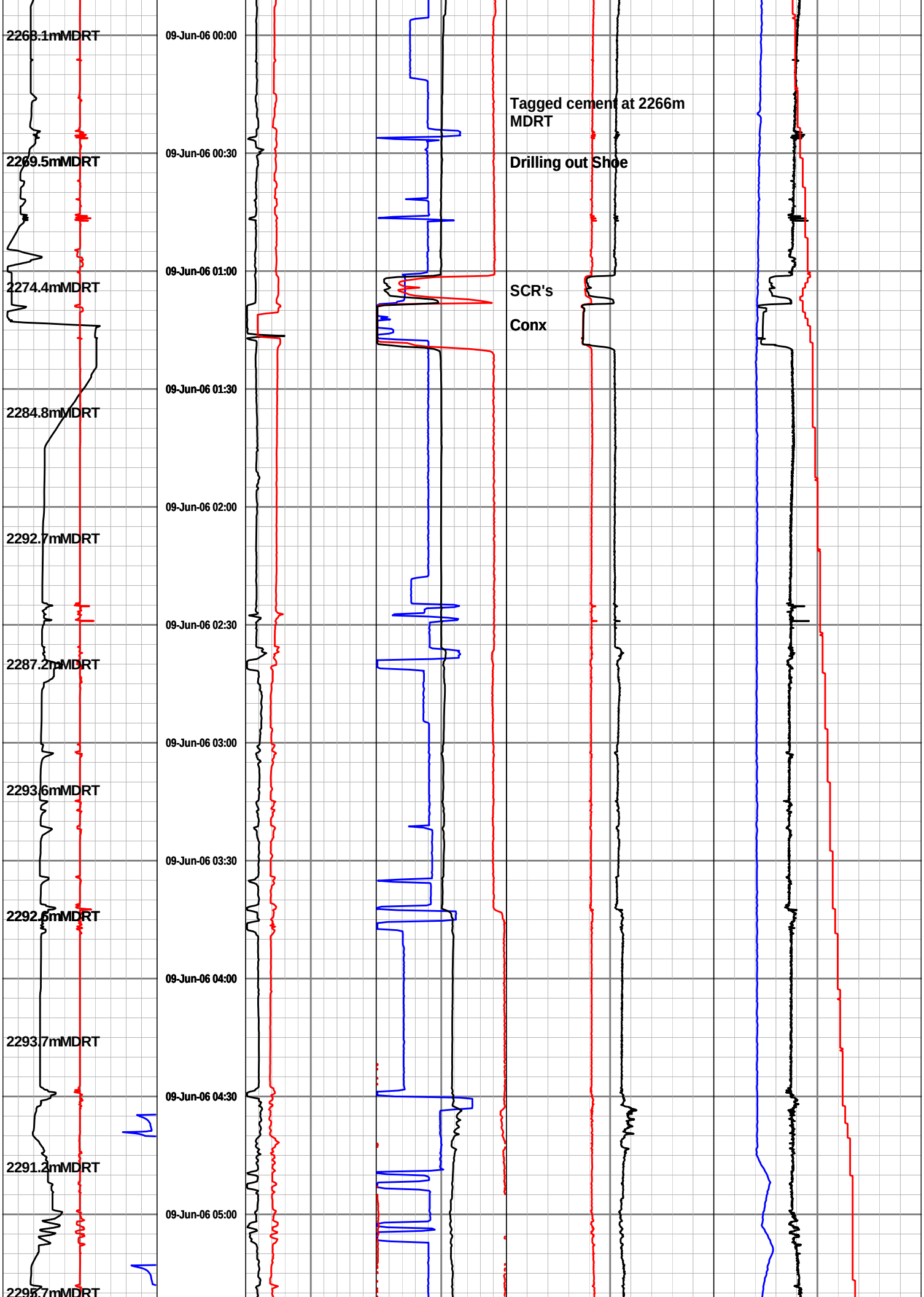
Run 400 : 216 mm Hole Section
Drilled from 2299.0 to 3510.0 mMDRT
06:00 hrs 8th Jun 2006 - 13:00 hrs 12th Jun 2006

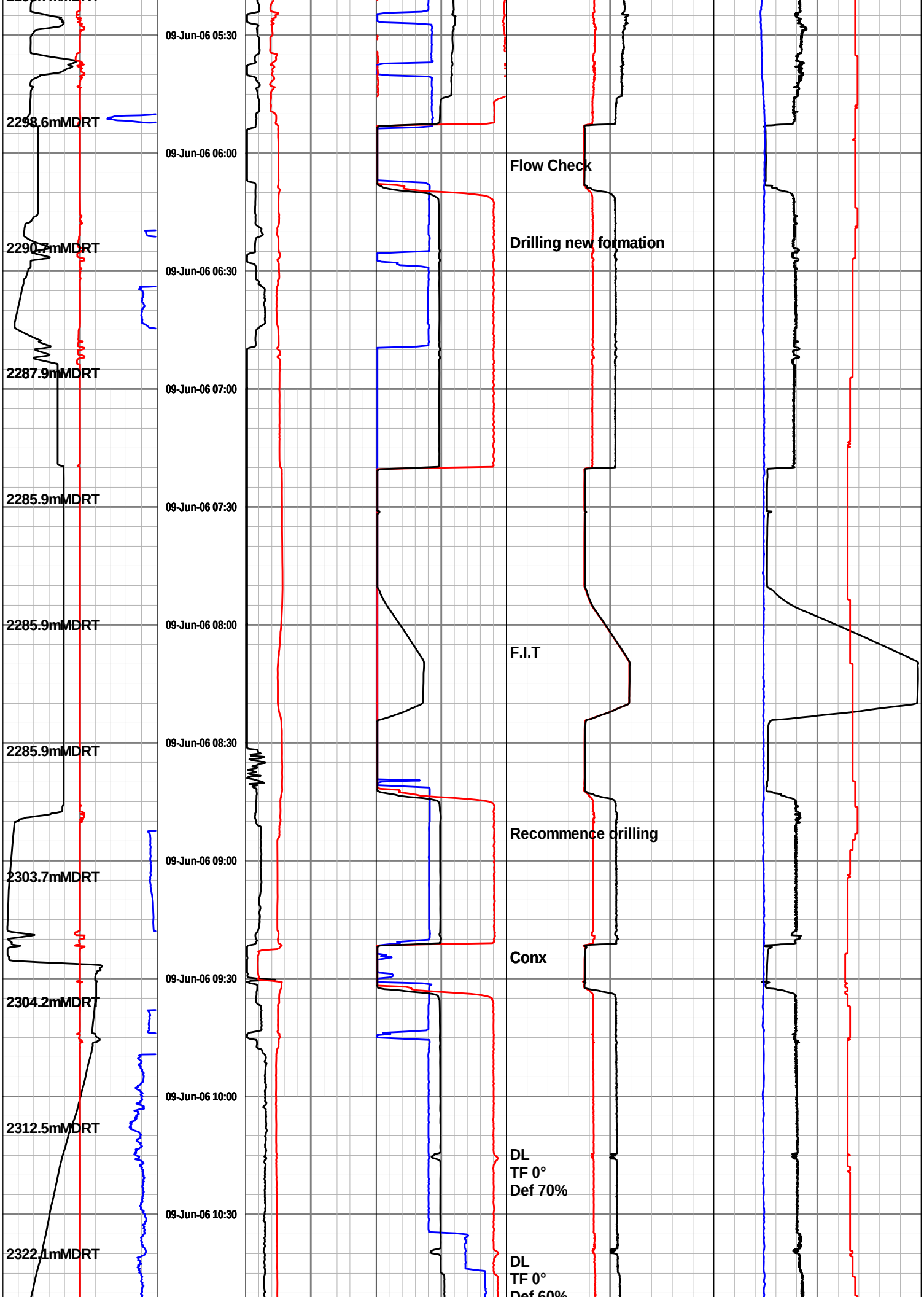
SDL Data presented as acquired from Geoservices

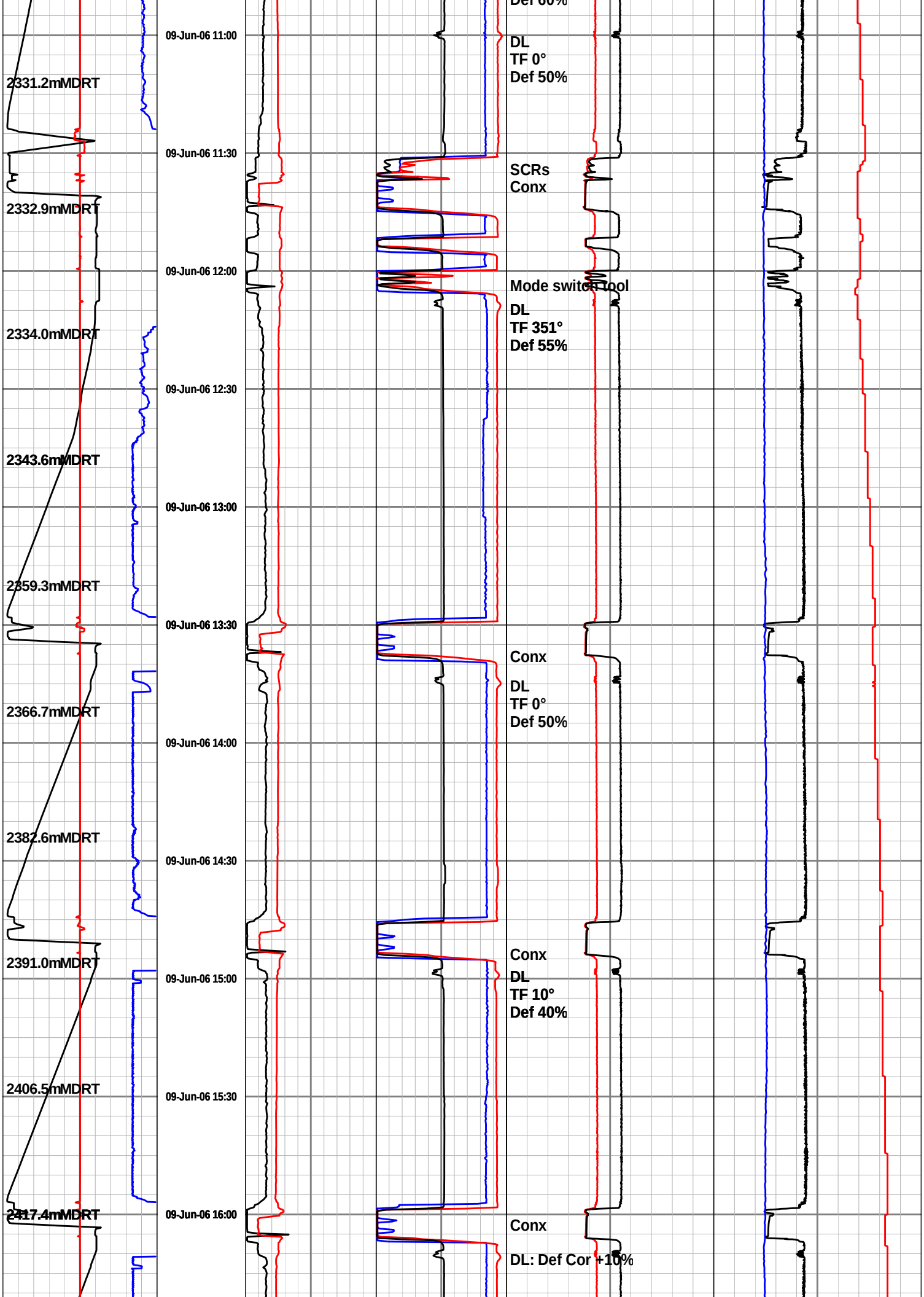


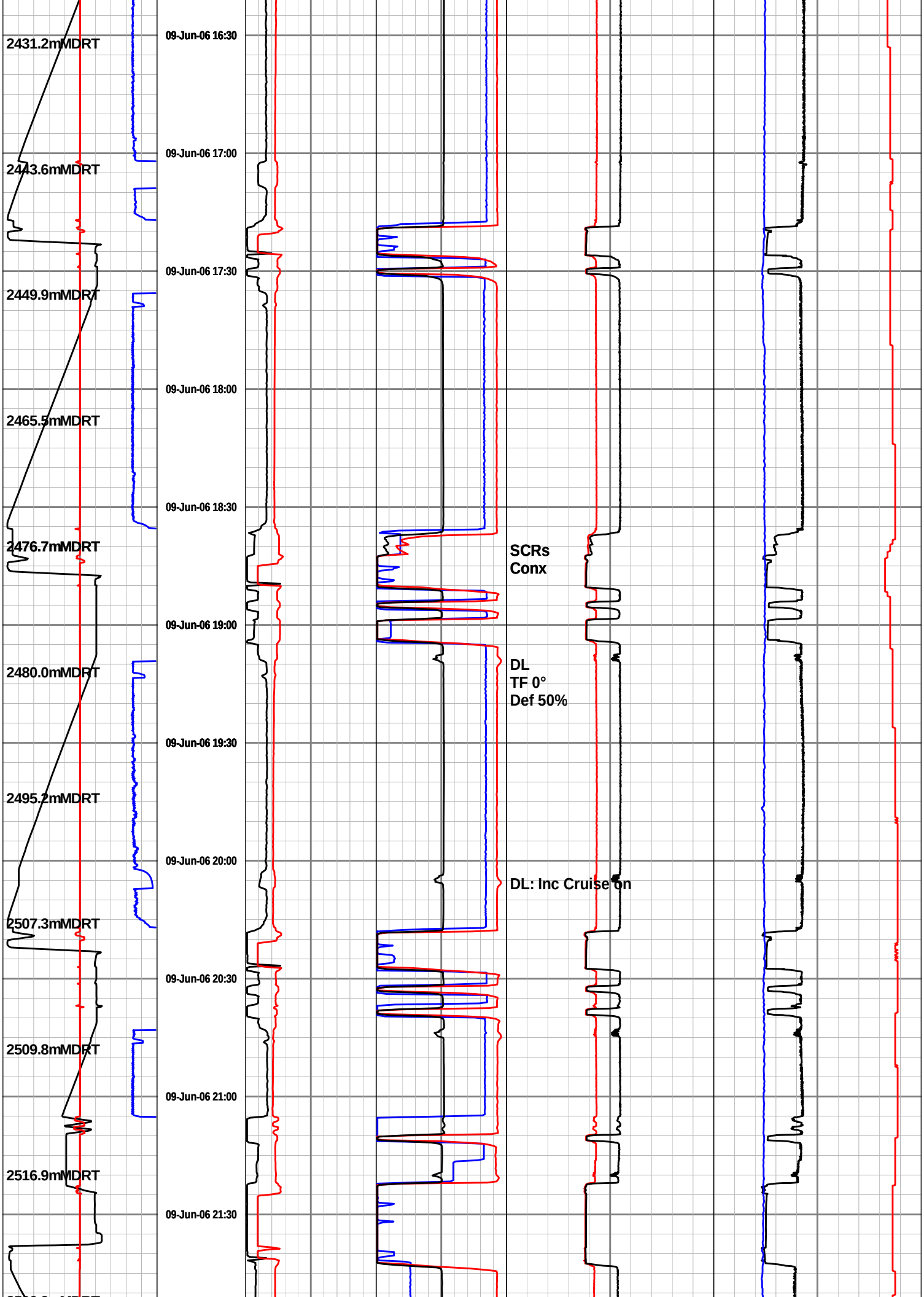

-150
0
150
metre per min
Time
min
0
25
50
foot-klb
0
3K
6K
lbs / in2 gauge
0
5K
10K
lbs / in2 gauge
1
1.5
2
Sp Grav
0.0mMDRT
08-Jun-06 13:30
0.0mMDRT
08-Jun-06 14:00
0.0mMDRT
08-Jun-06 14:30
0.0mMDRT
08-Jun-06 15:00
0.0mMDRT
08-Jun-06 15:30
0.0mMDRT
08-Jun-06 16:00
Break in GeoPilot seals
0.0mMDRT
08-Jun-06 16:30
SPT MWD
08-Jun-06 17:00
9.0mMDRT
08-Jun-06 17:30
164.9mMDRT
08-Jun-06 18:00
569.9mMDRT

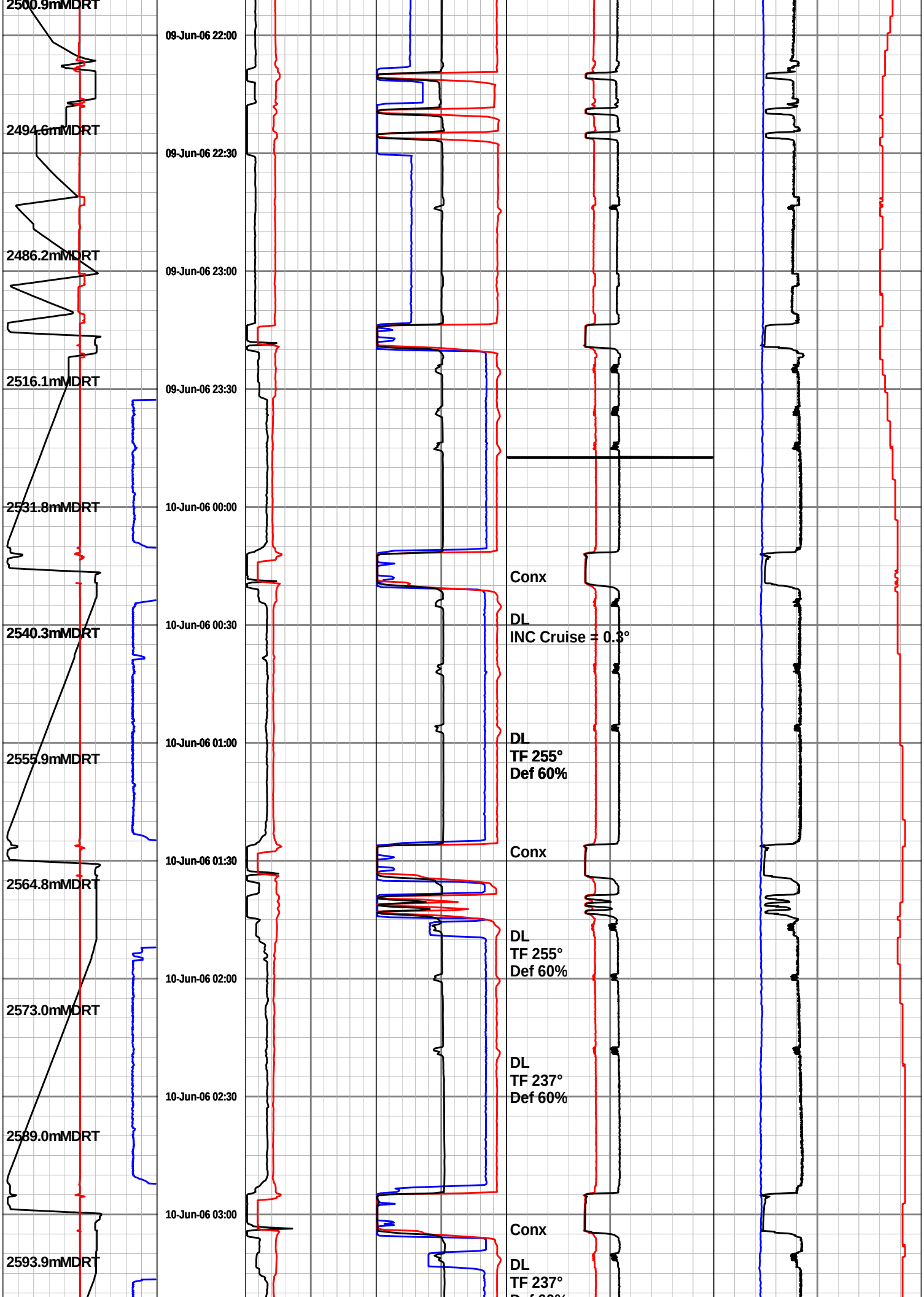

08-Jun-06 18:30
831.5mMDRT
08-Jun-06 19:00
1003.9mMDRT
08-Jun-06 19:30
1321.4mMDRT
08-Jun-06 20:00
1582.7mMDRT
08-Jun-06 20:30
1872.9mMDRT
08-Jun-06 21:00
2105.1mMDRT
08-Jun-06 21:30
2219.4mMDRT
08-Jun-06 22:00
2260.5mMDRT
08-Jun-06 22:30
2266.1mMDRT
08-Jun-06 23:00
2267.2mMDRT
08-Jun-06 23:30

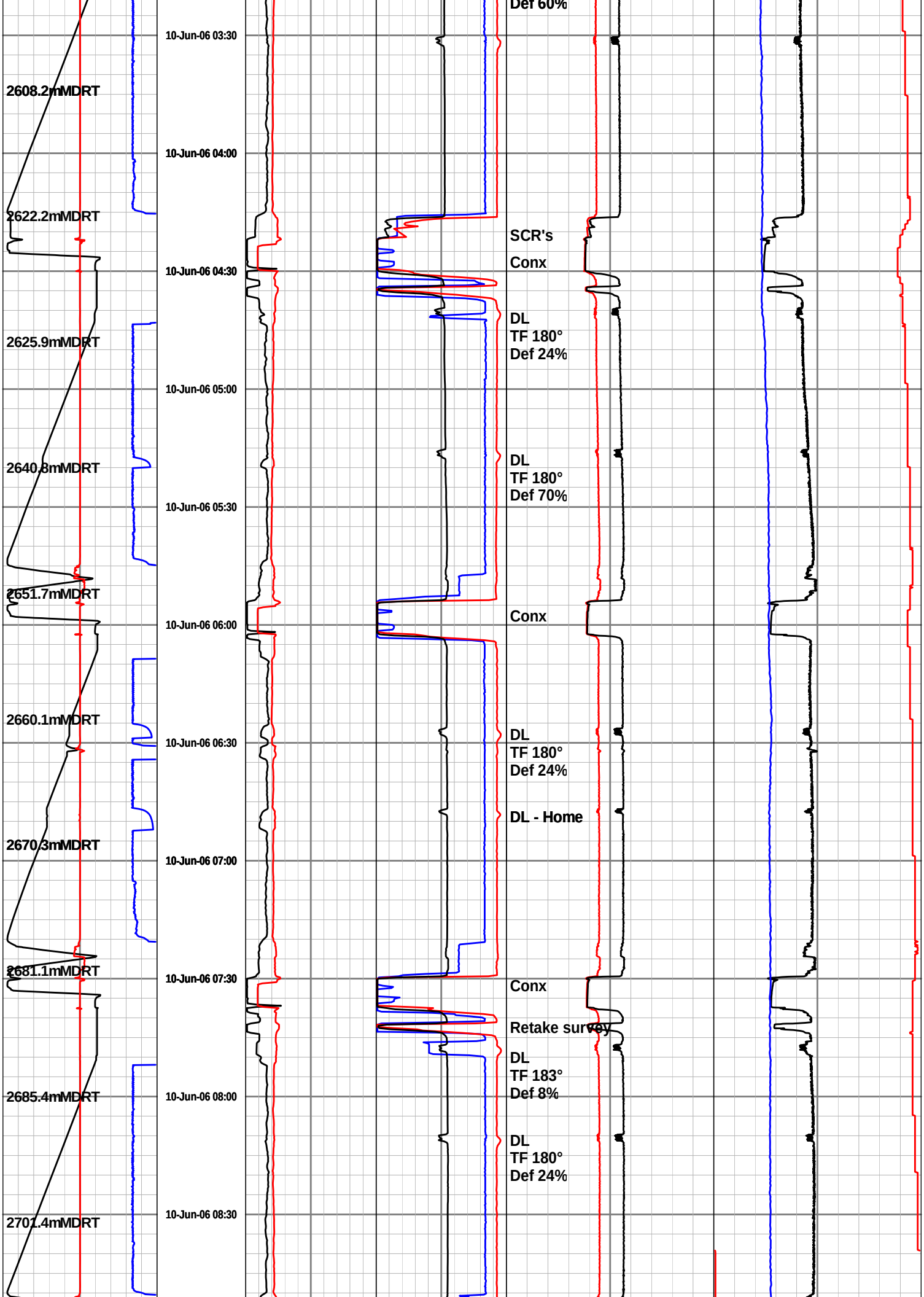

2268.1mMDRT
2269.5mMDRT
2274.4mMDRT
2284.8mMDRT
2292.7mMDRT
2287.2mMDRT
2293.6mMDRT
2292.6mMDRT
2293.7mMDRT
2291.2mMDRT
09-Jun-06 00:00
09-Jun-06 00:30
09-Jun-06 01:00
09-Jun-06 01:30
09-Jun-06 02:00
09-Jun-06 02:30
09-Jun-06 03:00
09-Jun-06 03:30
09-Jun-06 04:00
09-Jun-06 04:30
09-Jun-06 05:00
Tagged cement at 2266m MDRT
Drilling out Shoe
SCR's
Conx

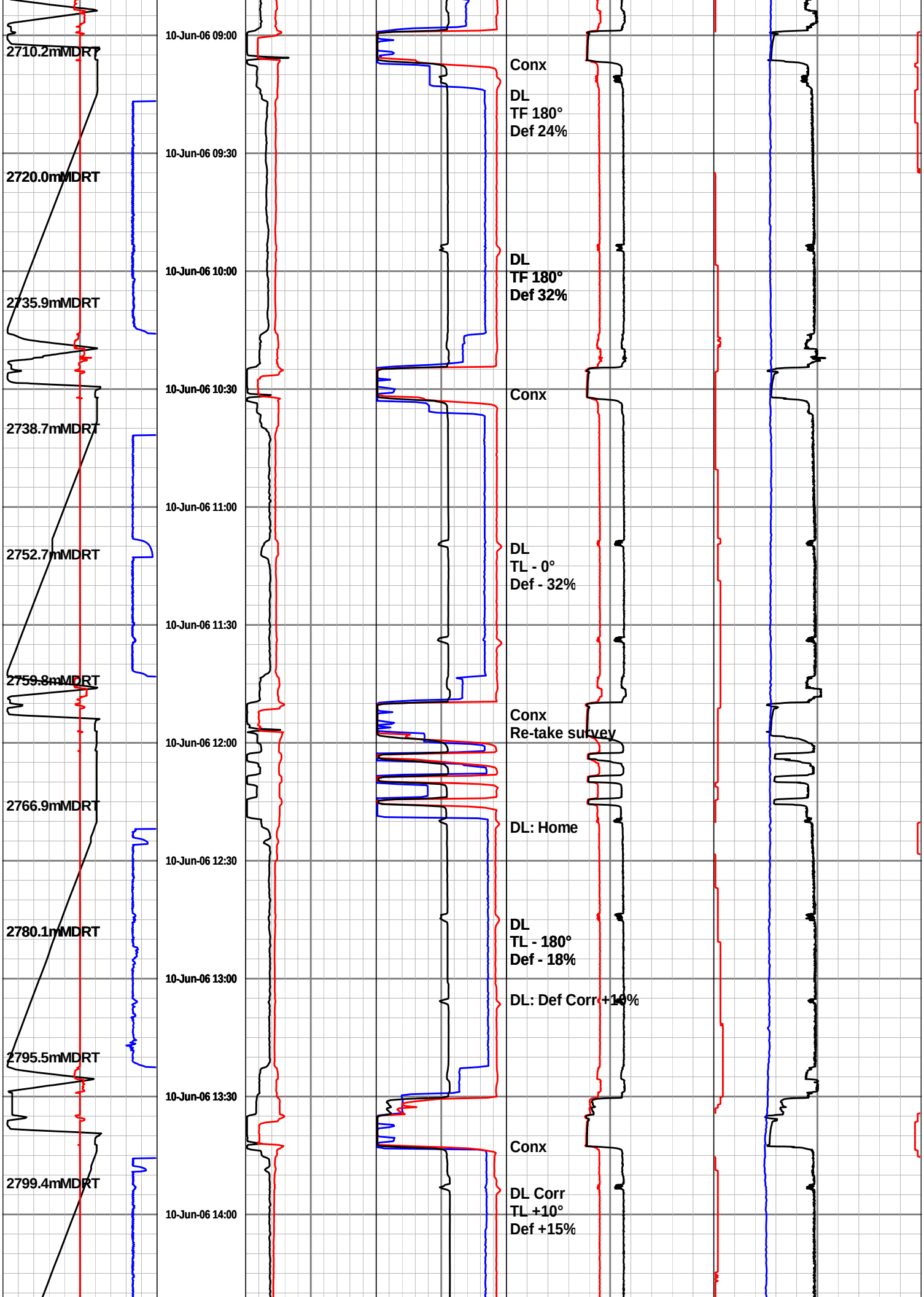

09-Jun-06 05:30
2298.6mMDRT
09-Jun-06 06:00
Flow Check
2290.7mMDRT
Drilling new formation
09-Jun-06 06:30
2287.9mMDRT
09-Jun-06 07:00
2285.9mMDRT
09-Jun-06 07:30
2285.9mMDRT
09-Jun-06 08:00
F.I.T
09-Jun-06 08:30
2285.9mMDRT
Recommence drilling
09-Jun-06 09:00
2303.7mMDRT
Conx
09-Jun-06 09:30
2304.2mMDRT
09-Jun-06 10:00
2312.5mMDRT
DL
TF 0°
Def 70%
09-Jun-06 10:30
2322.1mMDRT
DL
TF 0°
Def 60%

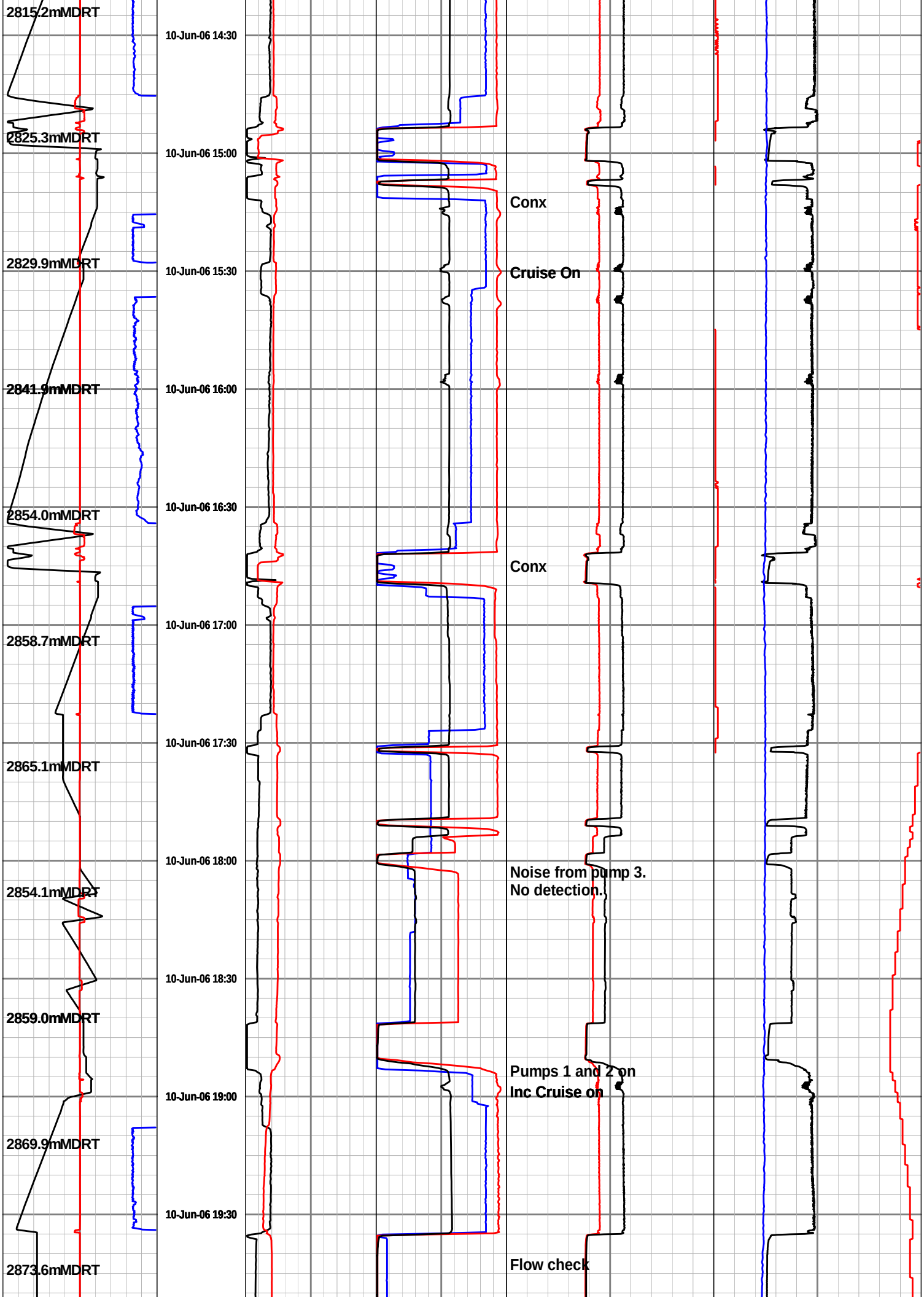

Def 60%
09-Jun-06 11:00
DL
TF 0°
Def 50%
2331.2mMDRT
09-Jun-06 11:30
SCRs
Conx
2332.9mMDRT
09-Jun-06 12:00
Mode switch tool
DL
TF 351°
Def 55%
2334.0mMDRT
09-Jun-06 12:30
2343.6mMDRT
09-Jun-06 13:00
2359.3mMDRT
09-Jun-06 13:30
Conx
DL
TF 0°
Def 50%
2366.7mMDRT
09-Jun-06 14:00
2382.6mMDRT
09-Jun-06 14:30
Conx
2391.0mMDRT
09-Jun-06 15:00
DL
TF 10°
Def 40%
2406.5mMDRT
09-Jun-06 15:30
2417.4mMDRT
09-Jun-06 16:00
Conx
DL: Def Cor +10%

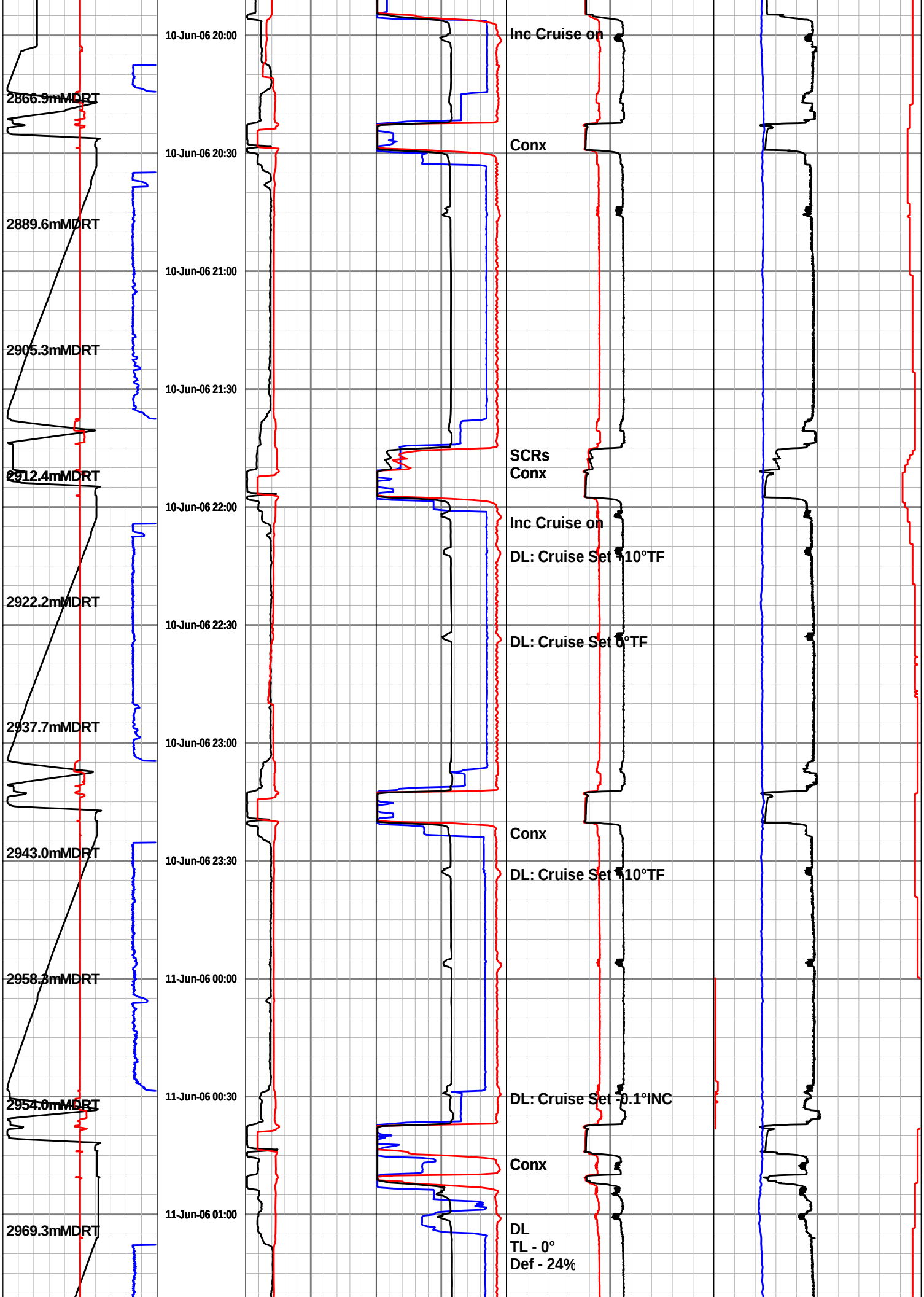

2431.2mMDRT
2443.6mMDRT
2449.9mMDRT
2465.5mMDRT
2476.7mMDRT
2480.0mMDRT
2495.2mMDRT
2507.3mMDRT
2509.8mMDRT
2516.9mMDRT
09-Jun-06 16:30
09-Jun-06 17:00
09-Jun-06 17:30
09-Jun-06 18:00
09-Jun-06 18:30
09-Jun-06 19:00
09-Jun-06 19:30
09-Jun-06 20:00
09-Jun-06 20:30
09-Jun-06 21:00
09-Jun-06 21:30
SCRs
Conx
DL
TF 0°
Def 50%
DL: Inc Cruise on

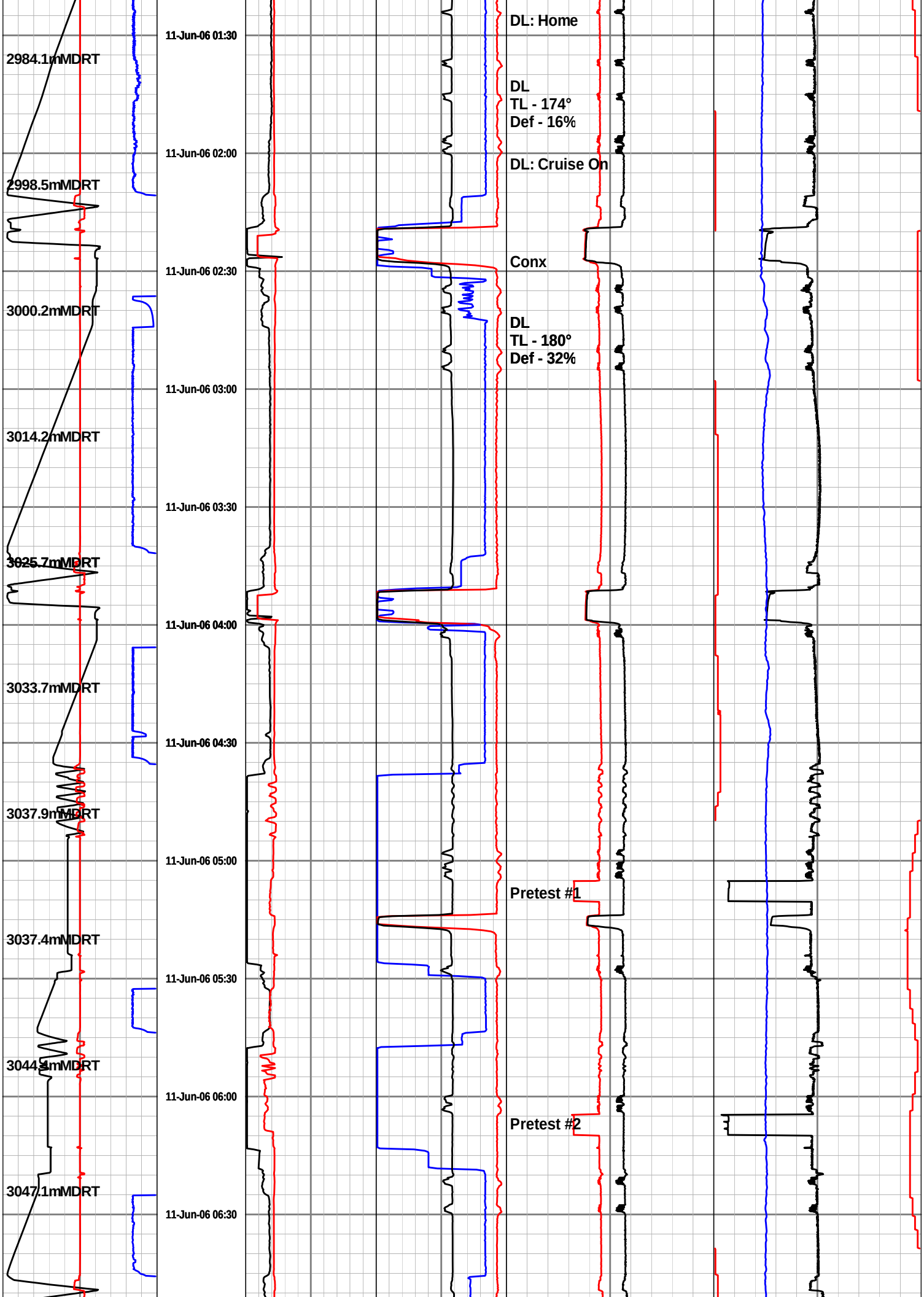

2500.9mMDRT
09-Jun-06 22:00
2494.6mMDRT
09-Jun-06 22:30
2486.2mMDRT
09-Jun-06 23:00
2516.1mMDRT
09-Jun-06 23:30
2531.8mMDRT
10-Jun-06 00:00
Conx
2540.3mMDRT
10-Jun-06 00:30
DL
INC Cruise = 0.3°
2555.9mMDRT
10-Jun-06 01:00
DL
TF 255°
Def 60%
10-Jun-06 01:30
Conx
2564.8mMDRT
DL
TF 255°
Def 60%
2573.0mMDRT
10-Jun-06 02:00
DL
TF 237°
Def 60%
2589.0mMDRT
10-Jun-06 02:30
10-Jun-06 03:00
Conx
2593.9mMDRT
DL
TF 237°

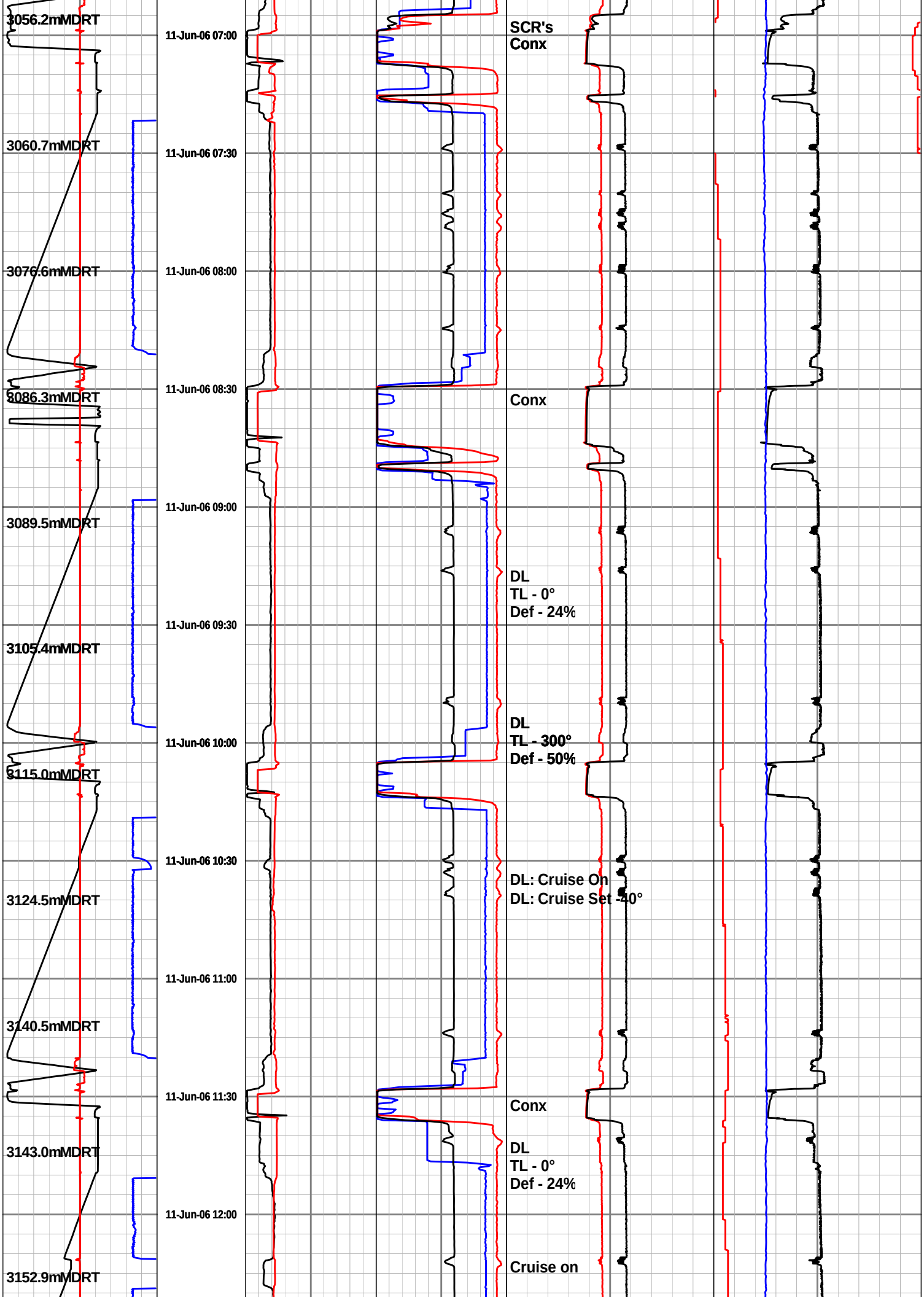

Def 60%
10-Jun-06 03:30
2608.2mMDRT
10-Jun-06 04:00
2622.2mMDRT
SCR's
Conx
10-Jun-06 04:30
DL
TF 180°
Def 24%
2625.9mMDRT
10-Jun-06 05:00
DL
TF 180°
Def 70%
2640.8mMDRT
10-Jun-06 05:30
2651.7mMDRT
Conx
10-Jun-06 06:00
2660.1mMDRT
DL
TF 180°
Def 24%
10-Jun-06 06:30
DL - Home
2670.3mMDRT
10-Jun-06 07:00
2681.1mMDRT
10-Jun-06 07:30
Conx
Retake survey
DL
TF 183°
Def 8%
2685.4mMDRT
10-Jun-06 08:00
DL
TF 180°
Def 24%
10-Jun-06 08:30
2701.4mMDRT

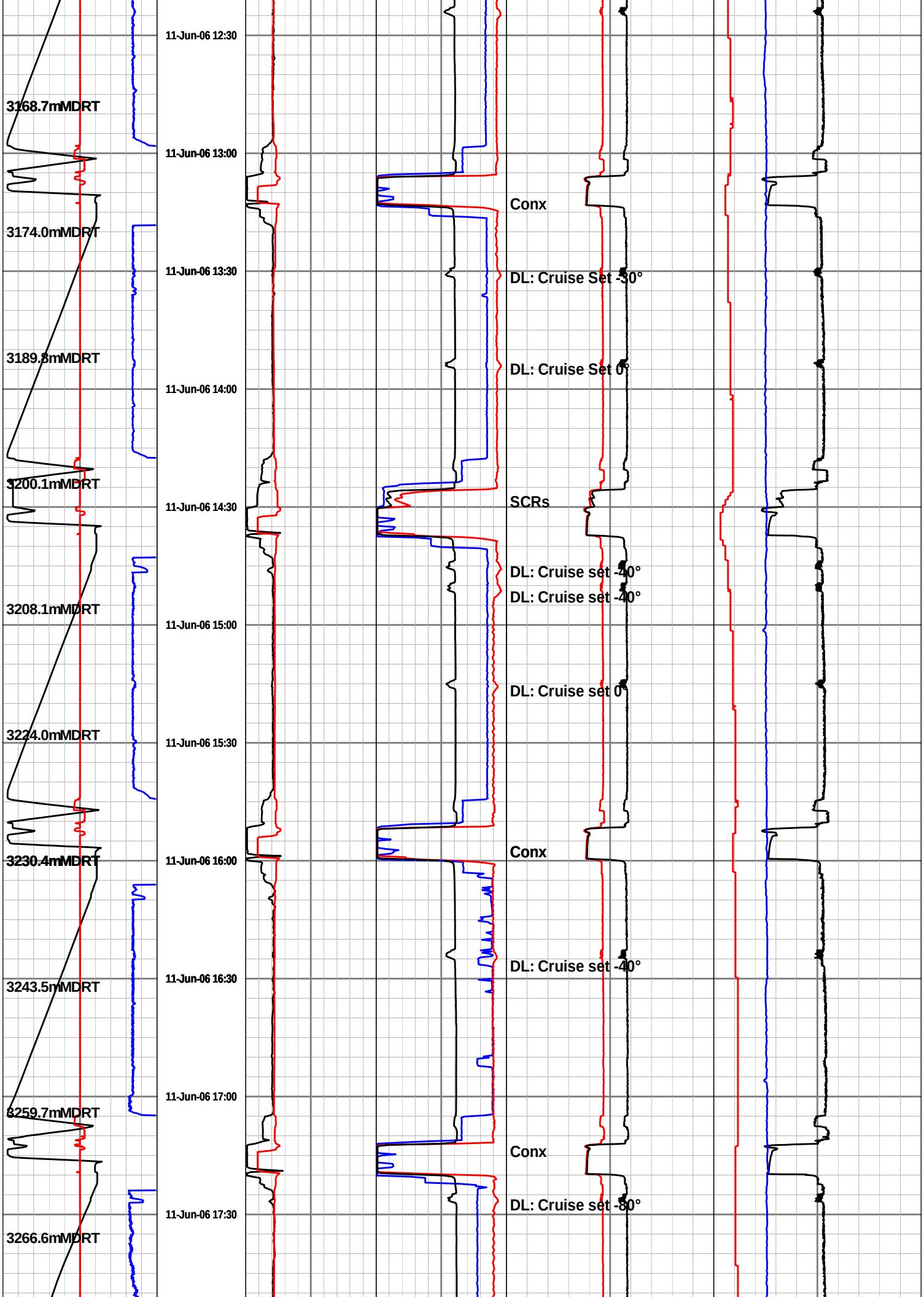

2710.2mMDRT
2720.0mMDRT
2735.9mMDRT
2738.7mMDRT
2752.7mMDRT
2759.8mMDRT
2766.9mMDRT
2780.1mMDRT
2795.5mMDRT
2799.4mMDRT
10-Jun-06 09:00
10-Jun-06 09:30
10-Jun-06 10:00
10-Jun-06 10:30
10-Jun-06 11:00
10-Jun-06 11:30
10-Jun-06 12:00
10-Jun-06 12:30
10-Jun-06 13:00
10-Jun-06 13:30
10-Jun-06 14:00
Conx
DL
TF 180°
Def 24%
DL
TF 180°
Def 32%
Conx
DL
TL - 0°
Def - 32%
Conx
Re-take survey
DL: Home
DL
TL - 180°
Def - 18%
DL: Def Corr +10%
Conx
DL Corr
TL +10°
Def +15%

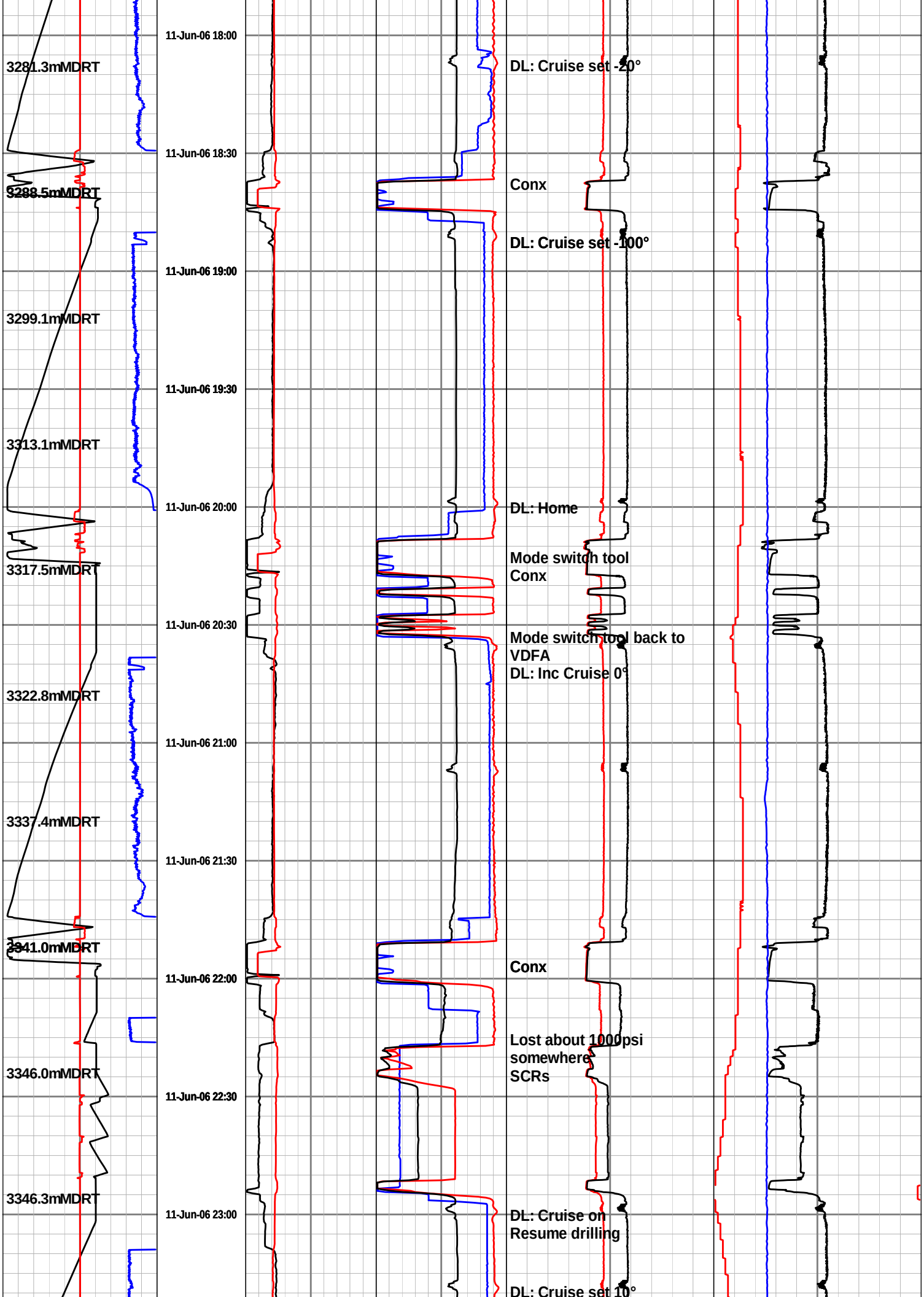

2815.2mMDRT
2825.3mMDRT
2829.9mMDRT
2841.9mMDRT
2854.0mMDRT
2858.7mMDRT
2865.1mMDRT
2854.1mMDRT
2859.0mMDRT
2869.9mMDRT
2873.6mMDRT
10-Jun-06 14:30
10-Jun-06 15:00
10-Jun-06 15:30
10-Jun-06 16:00
10-Jun-06 16:30
10-Jun-06 17:00
10-Jun-06 17:30
10-Jun-06 18:00
10-Jun-06 18:30
10-Jun-06 19:00
10-Jun-06 19:30
Conx
Cruise On
Conx
Noise from pump 3.
No detection.
Pumps 1 and 2 on
Inc Cruise on
Flow check

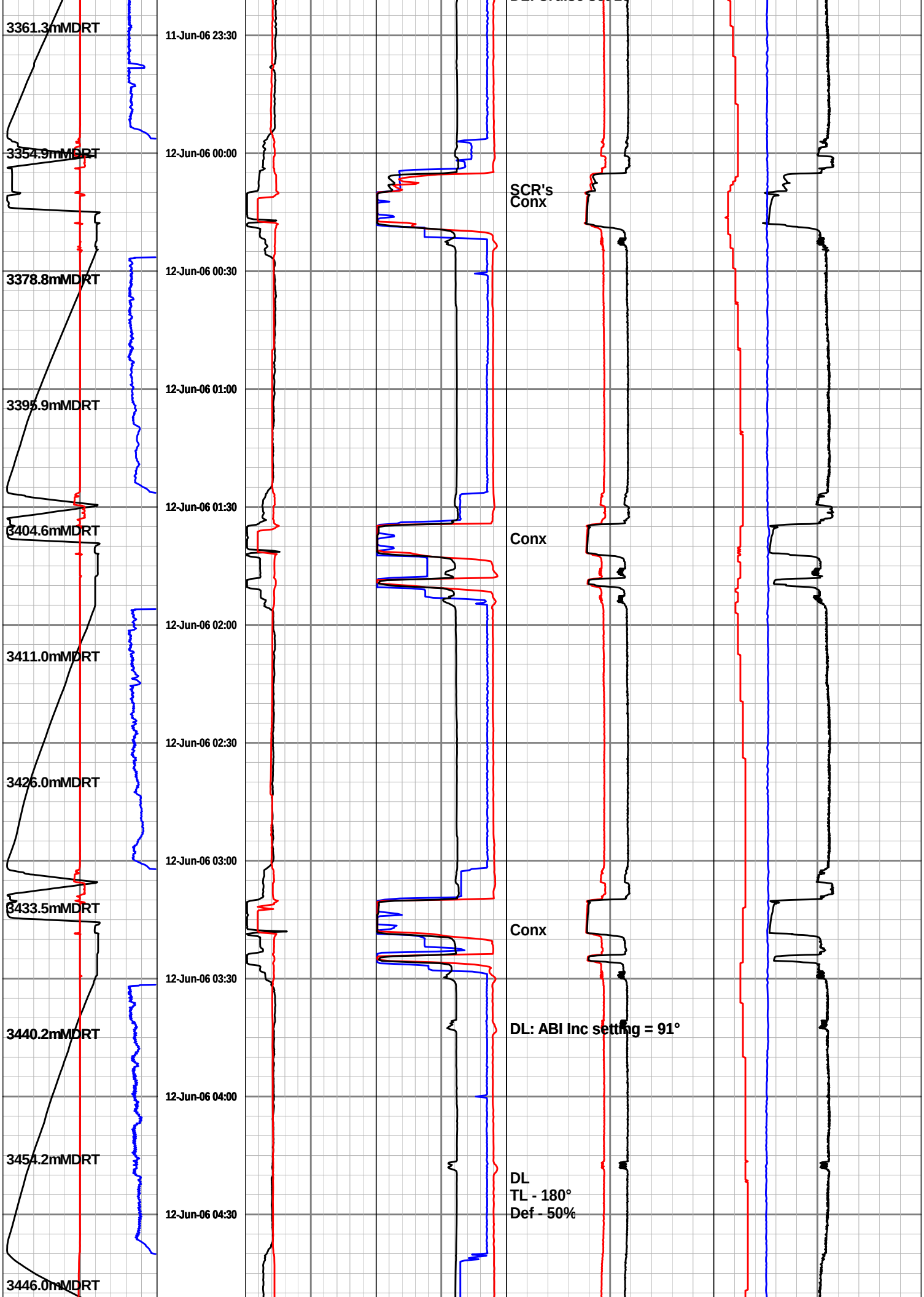

10-Jun-06 20:00
Inc Cruise on
2866.9mMDRT
10-Jun-06 20:30
Conx
2889.6mMDRT
10-Jun-06 21:00
2905.3mMDRT
10-Jun-06 21:30
SCRs
Conx
2912.4mMDRT
10-Jun-06 22:00
Inc Cruise on
DL: Cruise Set +10°TF
2922.2mMDRT
10-Jun-06 22:30
DL: Cruise Set 0°TF
2937.7mMDRT
10-Jun-06 23:00
Conx
2943.0mMDRT
10-Jun-06 23:30
DL: Cruise Set +10°TF
2958.3mMDRT
11-Jun-06 00:00
2954.0mMDRT
11-Jun-06 00:30
DL: Cruise Set -0.1°INC
Conx
2969.3mMDRT
11-Jun-06 01:00
DL
TL - 0°
Def - 24%

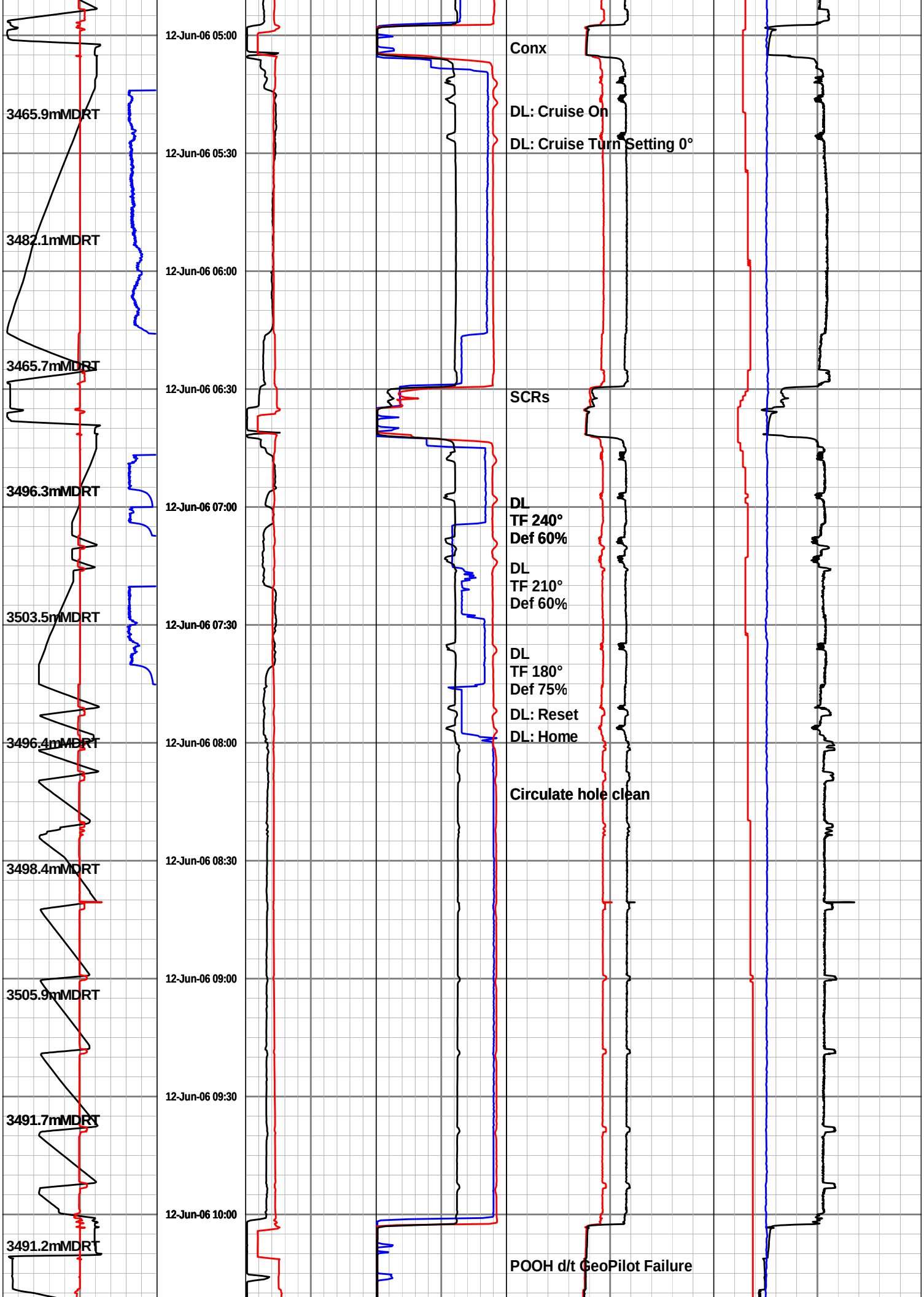

2984.1mMDRT
2998.5mMDRT
3000.2mMDRT
3014.2mMDRT
3025.7mMDRT
3033.7mMDRT
3037.9mMDRT
3037.4mMDRT
3044.3mMDRT
3047.1mMDRT
11-Jun-06 01:30
11-Jun-06 02:00
11-Jun-06 02:30
11-Jun-06 03:00
11-Jun-06 03:30
11-Jun-06 04:00
11-Jun-06 04:30
11-Jun-06 05:00
11-Jun-06 05:30
11-Jun-06 06:00
11-Jun-06 06:30
DL: Home
DL
TL - 174°
Def - 16%
DL: Cruise On
Conx
DL
TL - 180°
Def - 32%
Pretest #1
Pretest #2

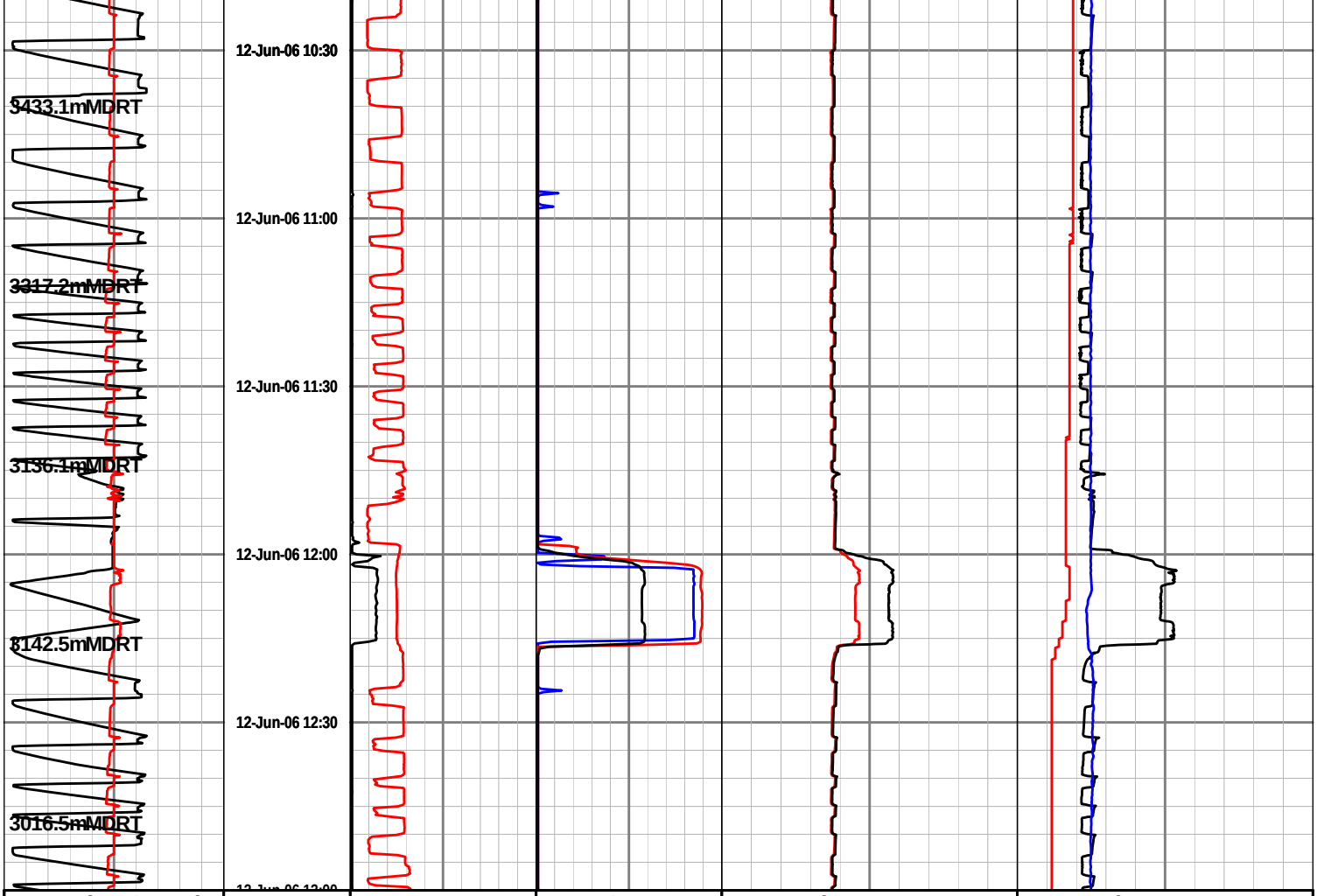

3056.2mMDRT
3060.7mMDRT
3076.6mMDRT
3086.3mMDRT
3089.5mMDRT
3105.4mMDRT
3115.0mMDRT
3124.5mMDRT
3140.5mMDRT
3143.0mMDRT
3152.9mMDRT
11-Jun-06 07:00
11-Jun-06 07:30
11-Jun-06 08:00
11-Jun-06 08:30
11-Jun-06 09:00
11-Jun-06 09:30
11-Jun-06 10:00
11-Jun-06 10:30
11-Jun-06 11:00
11-Jun-06 11:30
11-Jun-06 12:00
SCR's
Conx
Conx
DL
TL - 0°
Def - 24%
DL
TL - 300°
Def - 50%
DL: Cruise On
DL: Cruise Set -40°
Conx
DL
TL - 0°
Def - 24%
Cruise on


11-Jun-06 12:30
3168.7mMDRT
11-Jun-06 13:00
Conx
3174.0mMDRT
11-Jun-06 13:30
DL: Cruise Set -30°
3189.8mMDRT
DL: Cruise Set 0°
11-Jun-06 14:00
3200.1mMDRT
11-Jun-06 14:30
SCRs
DL: Cruise set -40°
DL: Cruise set -40°
3208.1mMDRT
11-Jun-06 15:00
DL: Cruise set 0°
3224.0mMDRT
11-Jun-06 15:30
Conx
3230.4mMDRT
11-Jun-06 16:00
DL: Cruise set -40°
11-Jun-06 16:30
3243.5mMDRT
11-Jun-06 17:00
3259.7mMDRT
Conx
DL: Cruise set -80°
11-Jun-06 17:30
3266.6mMDRT


3281.3mMDRT
3288.5mMDRT
3299.1mMDRT
3313.1mMDRT
3317.5mMDRT
3322.8mMDRT
3337.4mMDRT
3341.0mMDRT
3346.0mMDRT
3346.3mMDRT
11-Jun-06 18:00
11-Jun-06 18:30
11-Jun-06 19:00
11-Jun-06 19:30
11-Jun-06 20:00
11-Jun-06 20:30
11-Jun-06 21:00
11-Jun-06 21:30
11-Jun-06 22:00
11-Jun-06 22:30
11-Jun-06 23:00
DL: Cruise set -20°
Conx
DL: Cruise set -100°
DL: Home
Mode switch tool
Conx
Mode switch tool back to
VDFA
DL: Inc Cruise 0°
Conx
Lost about 1000psi
somewhere
SCRs
DL: Cruise on
Resume drilling
DL: Cruise set 10°


3361.3mMDRT
3354.9mMDRT
3378.8mMDRT
3395.9mMDRT
3404.6mMDRT
3411.0mMDRT
3426.0mMDRT
3433.5mMDRT
3440.2mMDRT
3454.2mMDRT
3446.0mMDRT
11-Jun-06 23:30
12-Jun-06 00:00
12-Jun-06 00:30
12-Jun-06 01:00
12-Jun-06 01:30
12-Jun-06 02:00
12-Jun-06 02:30
12-Jun-06 03:00
12-Jun-06 03:30
12-Jun-06 04:00
12-Jun-06 04:30
SCR's
Conx
Conx
Conx
DL: ABI Inc setting = 91°
DL
TL - 180°
Def - 50%

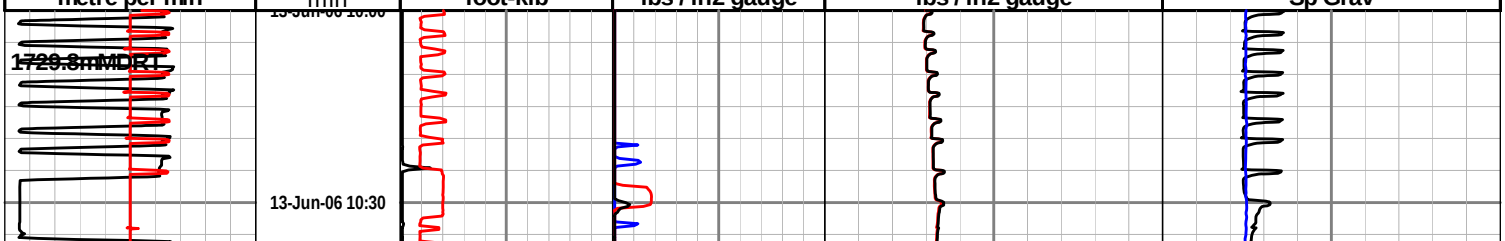

12-Jun-06 05:00
12-Jun-06 05:30
12-Jun-06 06:00
12-Jun-06 06:30
12-Jun-06 07:00
12-Jun-06 07:30
12-Jun-06 08:00
12-Jun-06 08:30
12-Jun-06 09:00
12-Jun-06 09:30
12-Jun-06 10:00
3465.9mMDRT
3482.1mMDRT
3465.7mMDRT
3496.3mMDRT
3503.5mMDRT
3496.4mMDRT
3498.4mMDRT
3505.9mMDRT
3491.7mMDRT
3491.2mMDRT
Conx
DL: Cruise On
DL: Cruise Turn Setting 0°
SCRs
DL
TF 240°
Def 60%
DL
TF 210°
Def 60%
DL
TF 180°
Def 75%
DL: Reset
DL: Home
Circulate hole clean
POOH d/t GeoPilot Failure

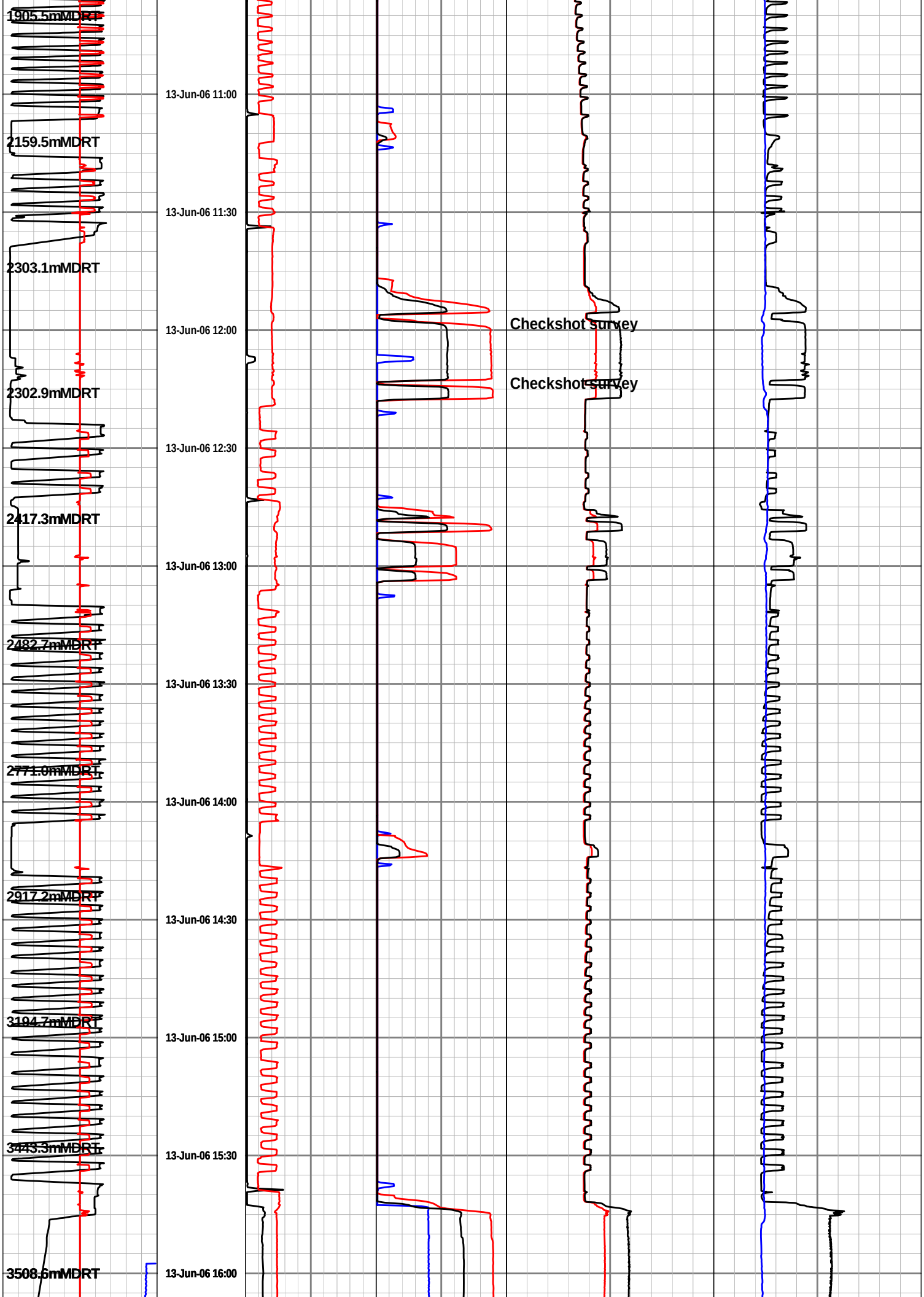


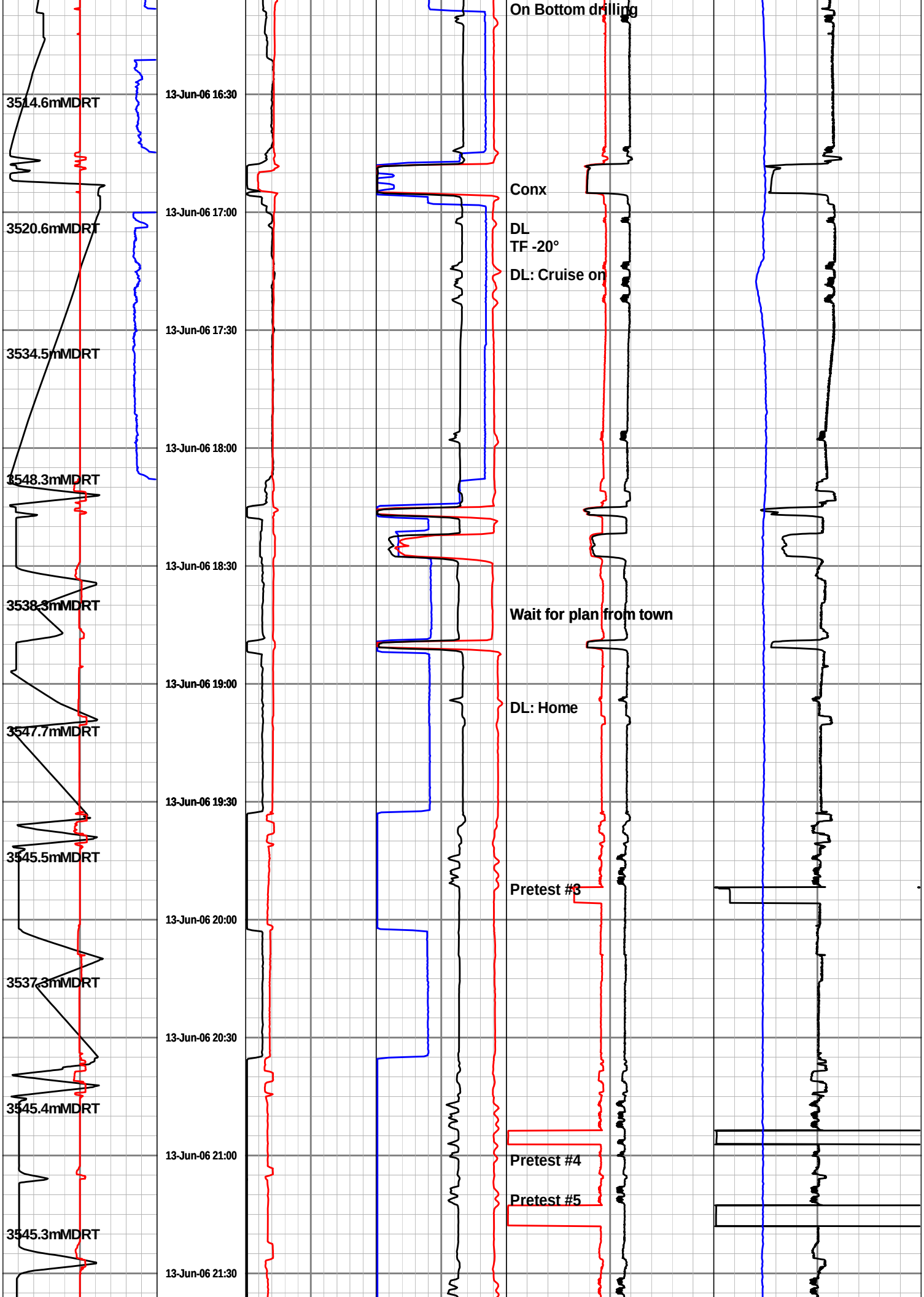
Running Speed	Time	Torque	SPP	Internal Pressure-PWD	Annular EMW-PWD
-150 0 150	min	0 25 50	0 3K 6K	0 5K 10K	1 1.5 2
metre per min		foot-klb	lbs / in2 gauge	lbs / in2 gauge	Sp Grav
ROP Avg		**Hookload**	**Flow In**	**Annular Pressure-PWD**	**Temperature**
200 100 0		0 200 400	0 400 800	0 5K 10K	0 25 50
metre per hr		k-lbs	gallon per min	lbs / in2 gauge	celsius
Block Position			**RPM**		**Density Mud In**
0 25 50			0 100 200		1 1.5 2
metres			rev per min		Sp Grav

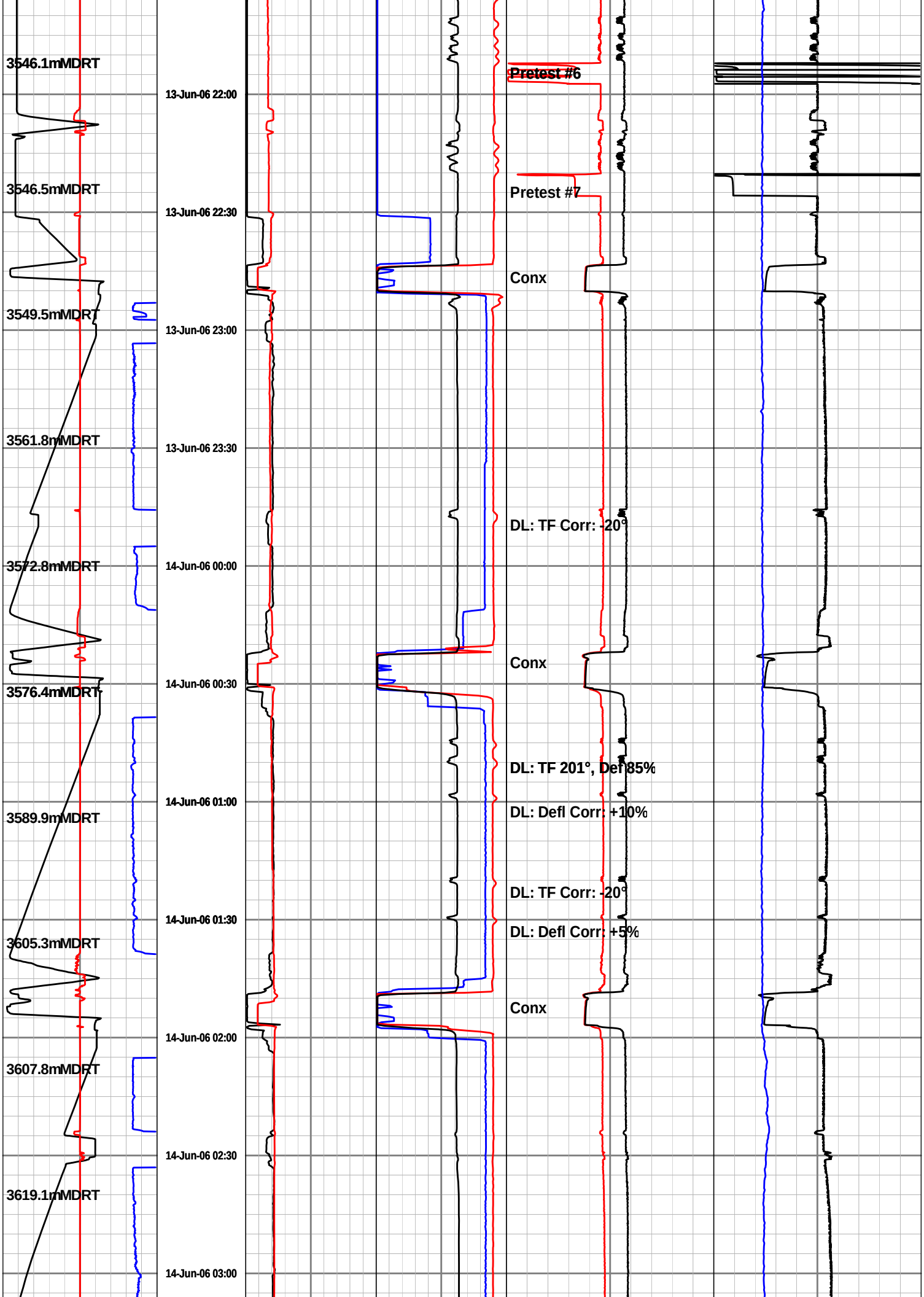
Run 500 : 216 mm Hole Section
Drilled from 3510.0 to 4026.0 mMDRT
10:00 hrs 13th Jun 2006 - 04:00 hrs 17th Jun 2006
SDL Data presented as acquired from Geoservices

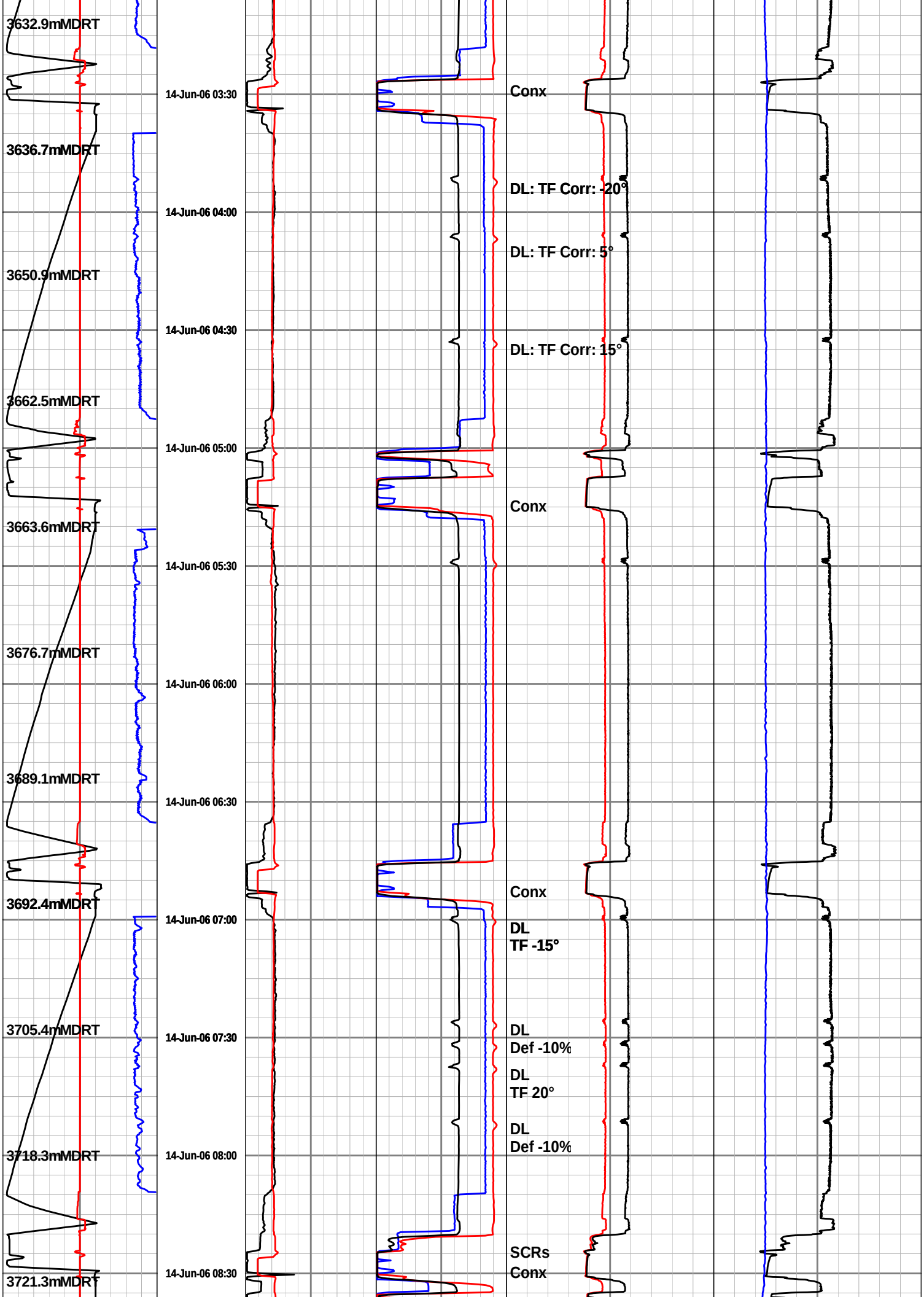
Block Position			RPM		Density Mud In
0 25 50			0 100 200		1 1.5 2
metres			rev per min		Sp Grav
ROP Avg		**Hookload**	**Flow In**	**Annular Pressure-PWD**	**Temperature**
200 100 0		0 200 400	0 400 800	0 5K 10K	0 25 50
metre per hr		k-lbs	gallon per min	lbs / in2 gauge	celsius
Running Speed	Time	**Torque**	**SPP**	**Internal Pressure-PWD**	**Annular EMW-PWD**
-150 0 150	min	0 25 50	0 3K 6K	0 5K 10K	1 1.5 2
metre per min		foot-klb	lbs / in2 gauge	lbs / in2 gauge	Sp Grav

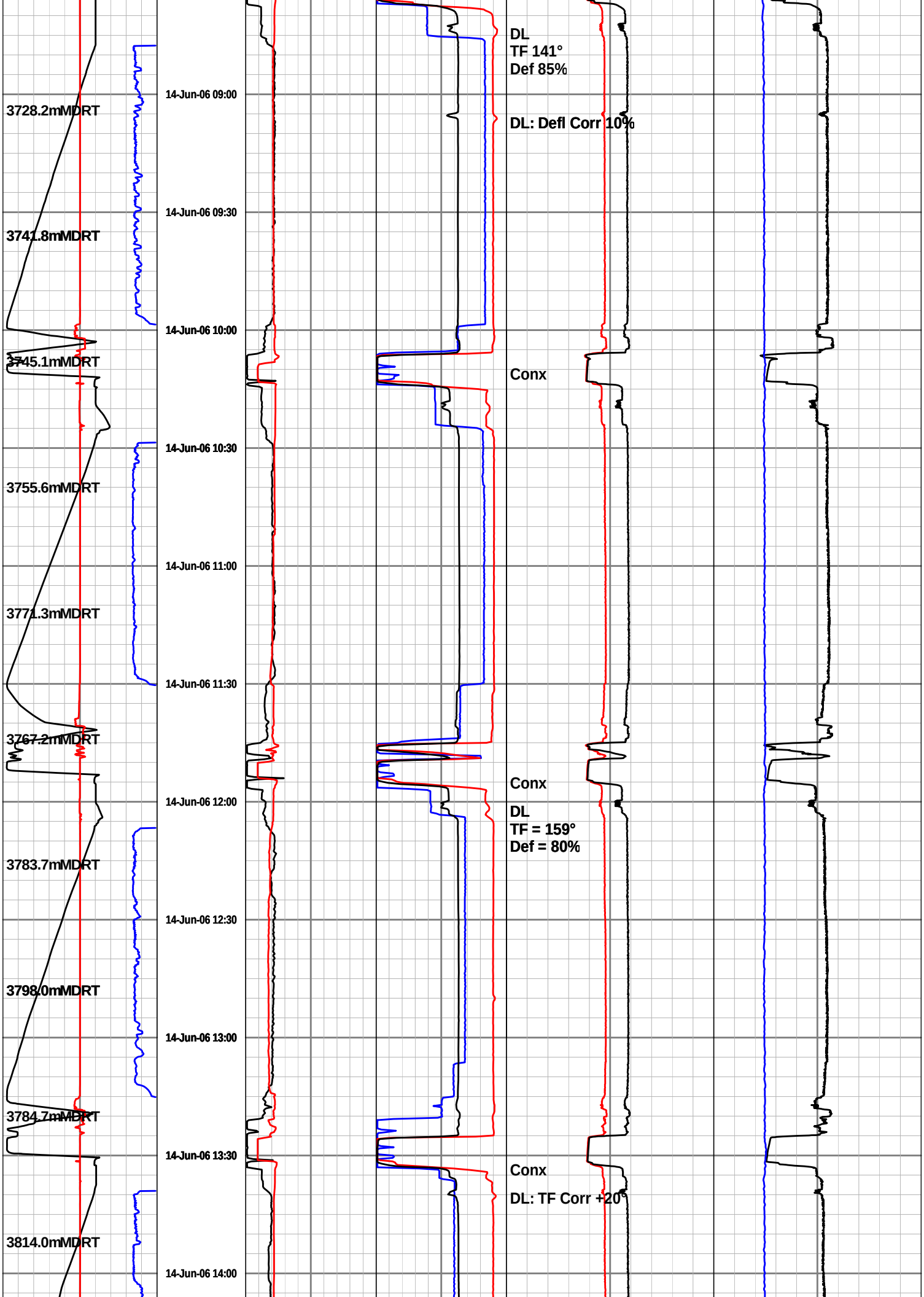


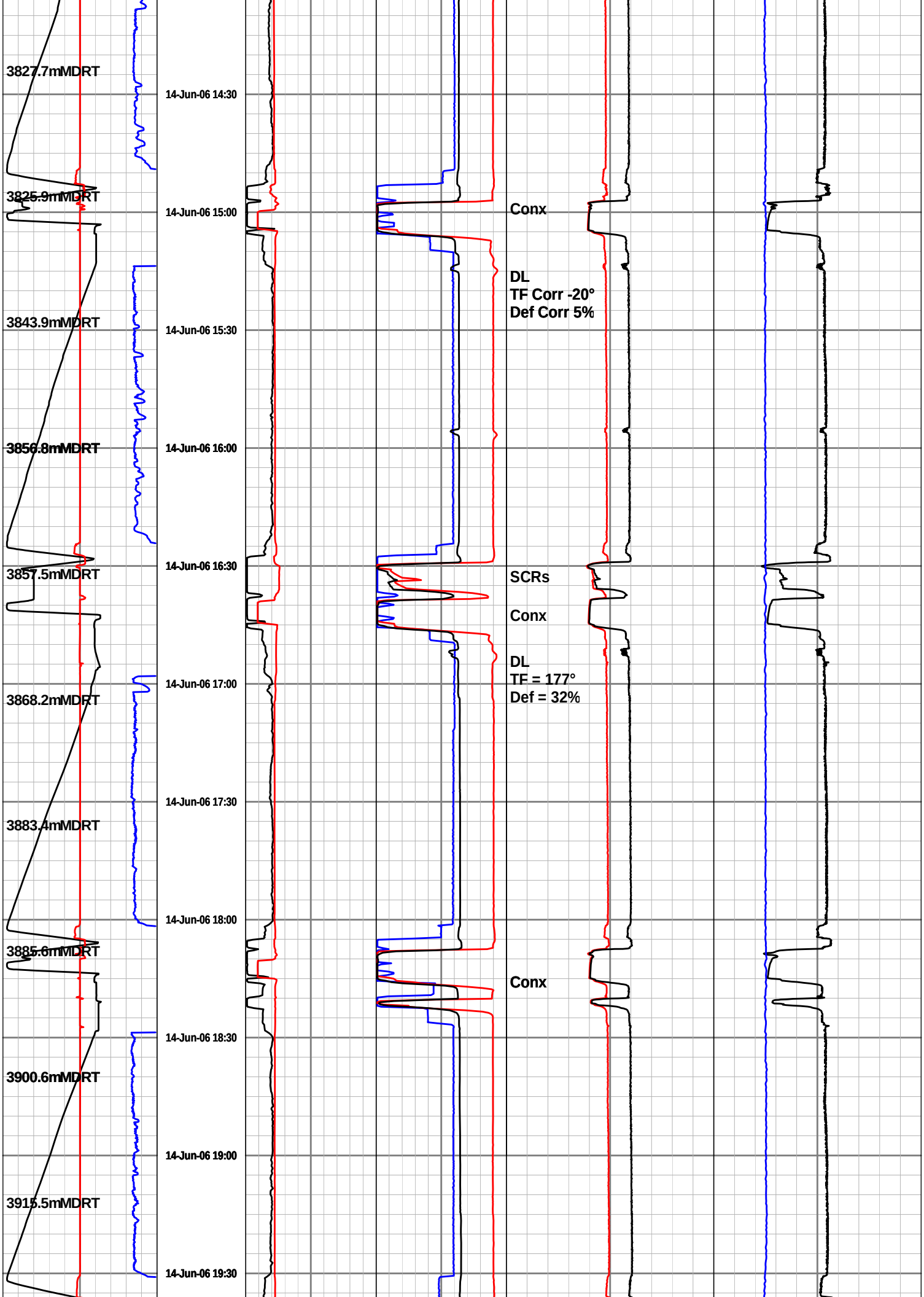

1905.5mMDRT
2159.5mMDRT
2303.1mMDRT
2302.9mMDRT
2417.3mMDRT
2482.7mMDRT
2771.0mMDRT
2917.2mMDRT
3194.7mMDRT
3443.3mMDRT
3508.6mMDRT
13-Jun-06 11:00
13-Jun-06 11:30
13-Jun-06 12:00
13-Jun-06 12:30
13-Jun-06 13:00
13-Jun-06 13:30
13-Jun-06 14:00
13-Jun-06 14:30
13-Jun-06 15:00
13-Jun-06 15:30
13-Jun-06 16:00
Checkshot survey
Checkshot survey

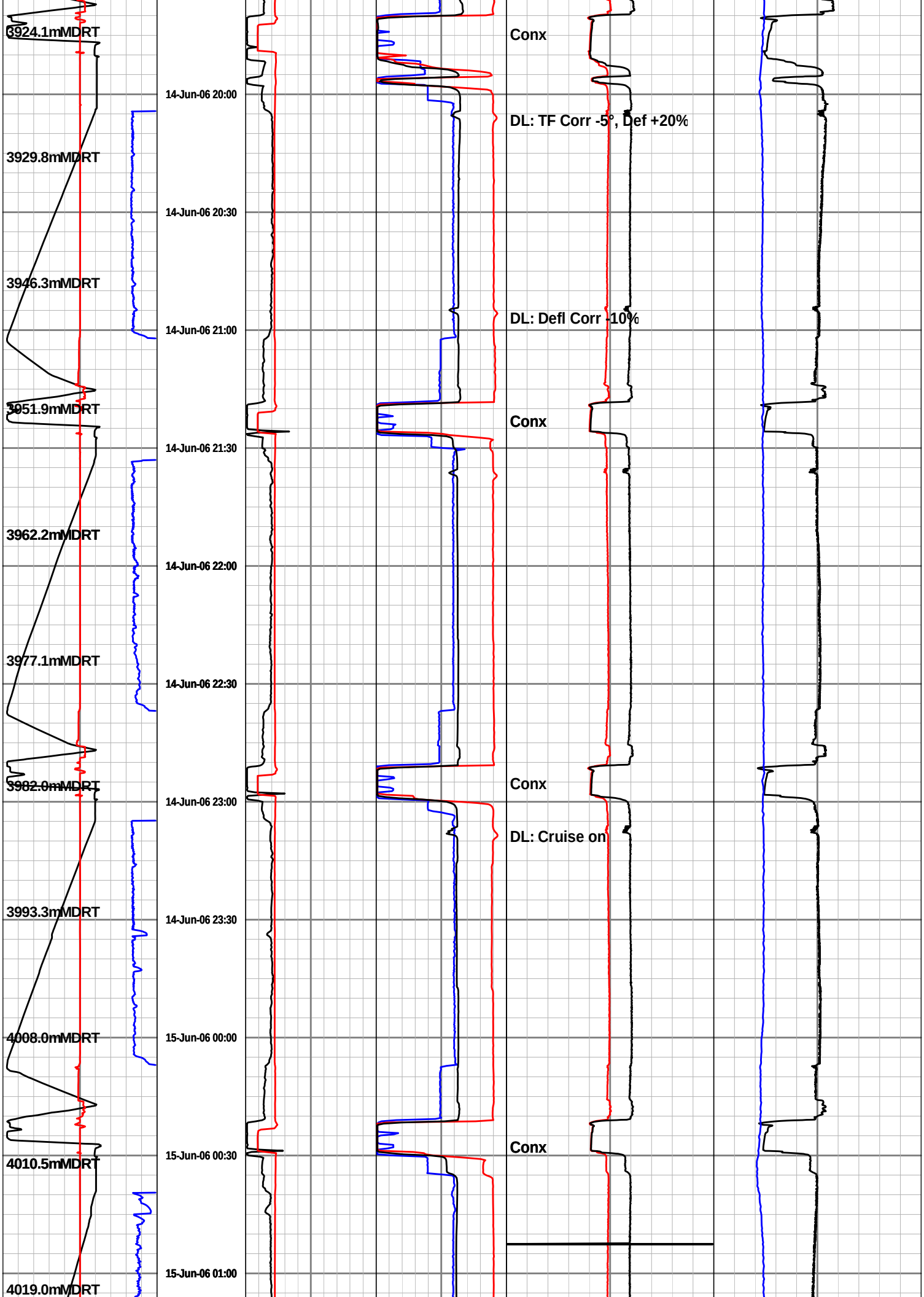

On Bottom drilling
3514.6mMDRT
13-Jun-06 16:30
Conx
13-Jun-06 17:00
3520.6mMDRT
DL
TF -20°
DL: Cruise on
13-Jun-06 17:30
3534.5mMDRT
13-Jun-06 18:00
3548.3mMDRT
13-Jun-06 18:30
3538.3mMDRT
Wait for plan from town
13-Jun-06 19:00
DL: Home
3547.7mMDRT
13-Jun-06 19:30
3545.5mMDRT
Pretest #3
13-Jun-06 20:00
3537.3mMDRT
13-Jun-06 20:30
3545.4mMDRT
13-Jun-06 21:00
Pretest #4
Pretest #5
3545.3mMDRT
13-Jun-06 21:30

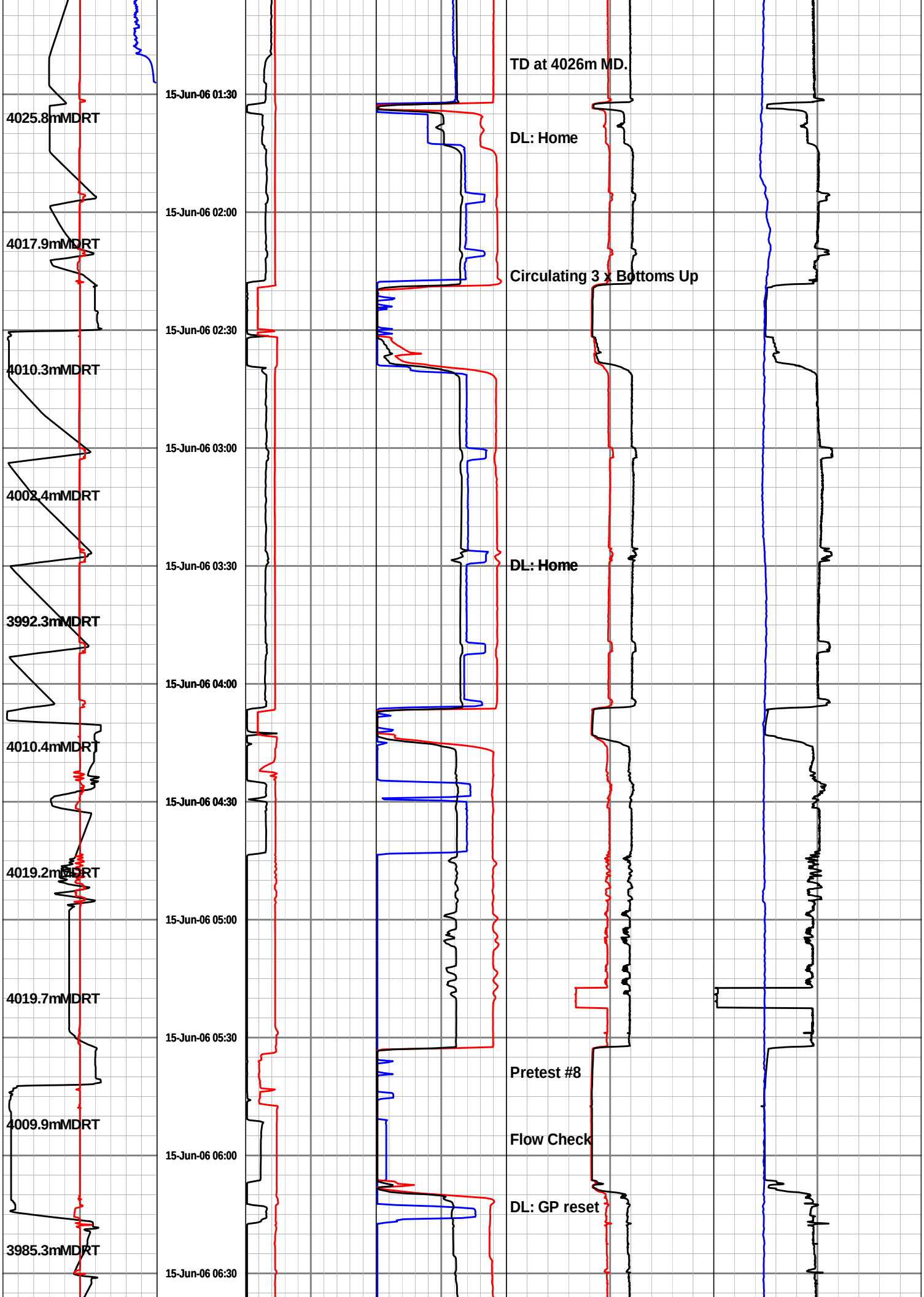

3546.1mMDRT
3546.5mMDRT
3549.5mMDRT
3561.8mMDRT
3572.8mMDRT
3576.4mMDRT
3589.9mMDRT
3605.3mMDRT
3607.8mMDRT
3619.1mMDRT
13-Jun-06 22:00
13-Jun-06 22:30
13-Jun-06 23:00
13-Jun-06 23:30
14-Jun-06 00:00
14-Jun-06 00:30
14-Jun-06 01:00
14-Jun-06 01:30
14-Jun-06 02:00
14-Jun-06 02:30
14-Jun-06 03:00
Pretest #6
Pretest #7
Conx
DL: TF Corr: -20°
Conx
DL: TF 201°, Defl 85%
DL: Defl Corr: +10%
DL: TF Corr: -20°
DL: Defl Corr: +5%
Conx

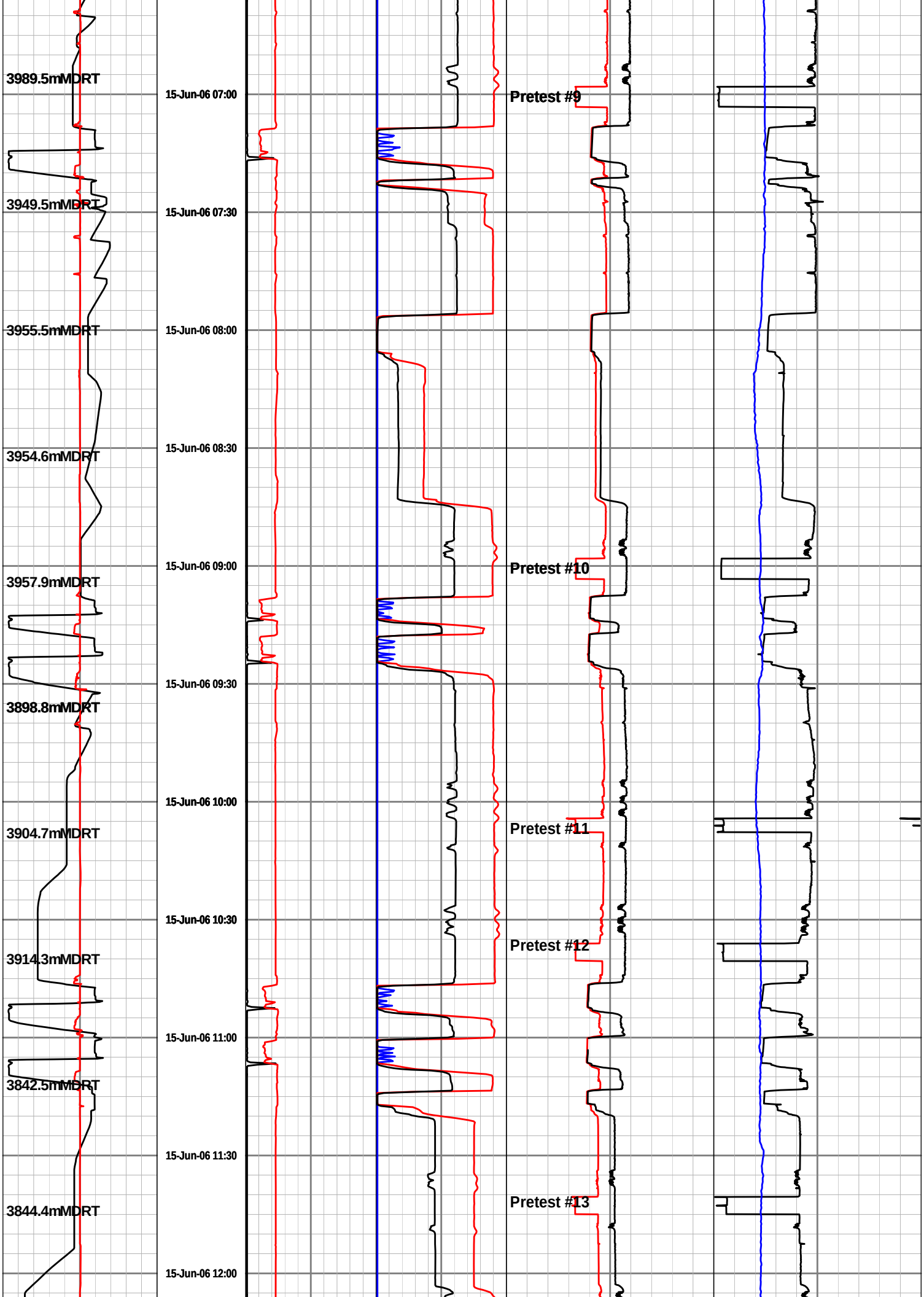

3632.9mMDRT
3636.7mMDRT
3650.9mMDRT
3662.5mMDRT
3663.6mMDRT
3676.7mMDRT
3689.1mMDRT
3692.4mMDRT
3705.4mMDRT
3718.3mMDRT
3721.3mMDRT
14-Jun-06 03:30
14-Jun-06 04:00
14-Jun-06 04:30
14-Jun-06 05:00
14-Jun-06 05:30
14-Jun-06 06:00
14-Jun-06 06:30
14-Jun-06 07:00
14-Jun-06 07:30
14-Jun-06 08:00
14-Jun-06 08:30
Conx
DL: TF Corr: -20°
DL: TF Corr: 5°
DL: TF Corr: 15°
Conx
Conx
DL
TF -15°
DL
Def -10%
DL
TF 20°
DL
Def -10%
SCRs
Conx

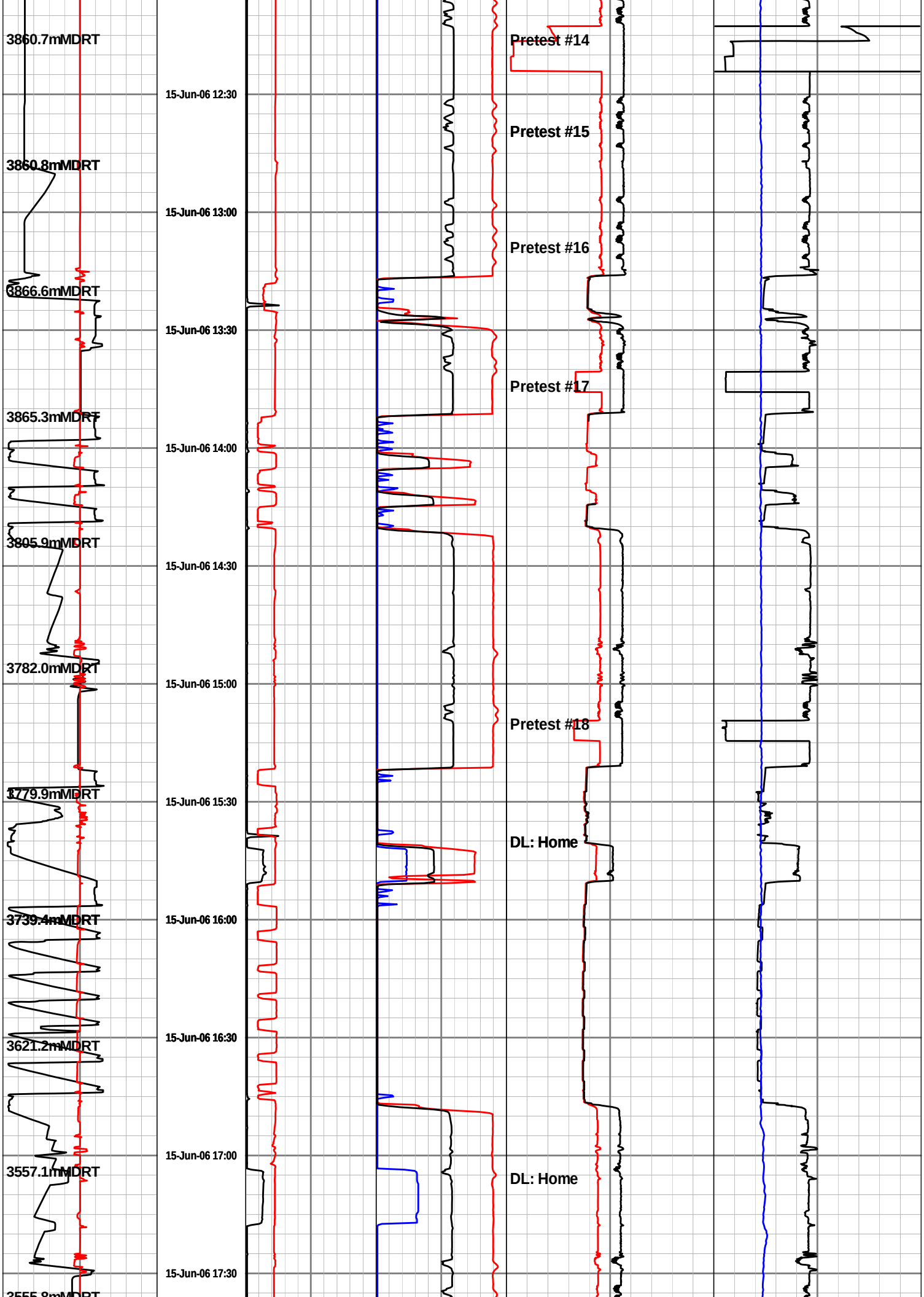

3728.2mMDRT
3741.8mMDRT
3745.1mMDRT
3755.6mMDRT
3771.3mMDRT
3767.2mMDRT
3783.7mMDRT
3798.0mMDRT
3784.7mMDRT
3814.0mMDRT
14-Jun-06 09:00
14-Jun-06 09:30
14-Jun-06 10:00
14-Jun-06 10:30
14-Jun-06 11:00
14-Jun-06 11:30
14-Jun-06 12:00
14-Jun-06 12:30
14-Jun-06 13:00
14-Jun-06 13:30
14-Jun-06 14:00
DL
TF 141°
Def 85%
DL: Defl Corr 10%
Conx
Conx
DL
TF = 159°
Def = 80%
Conx
DL: TF Corr +20°

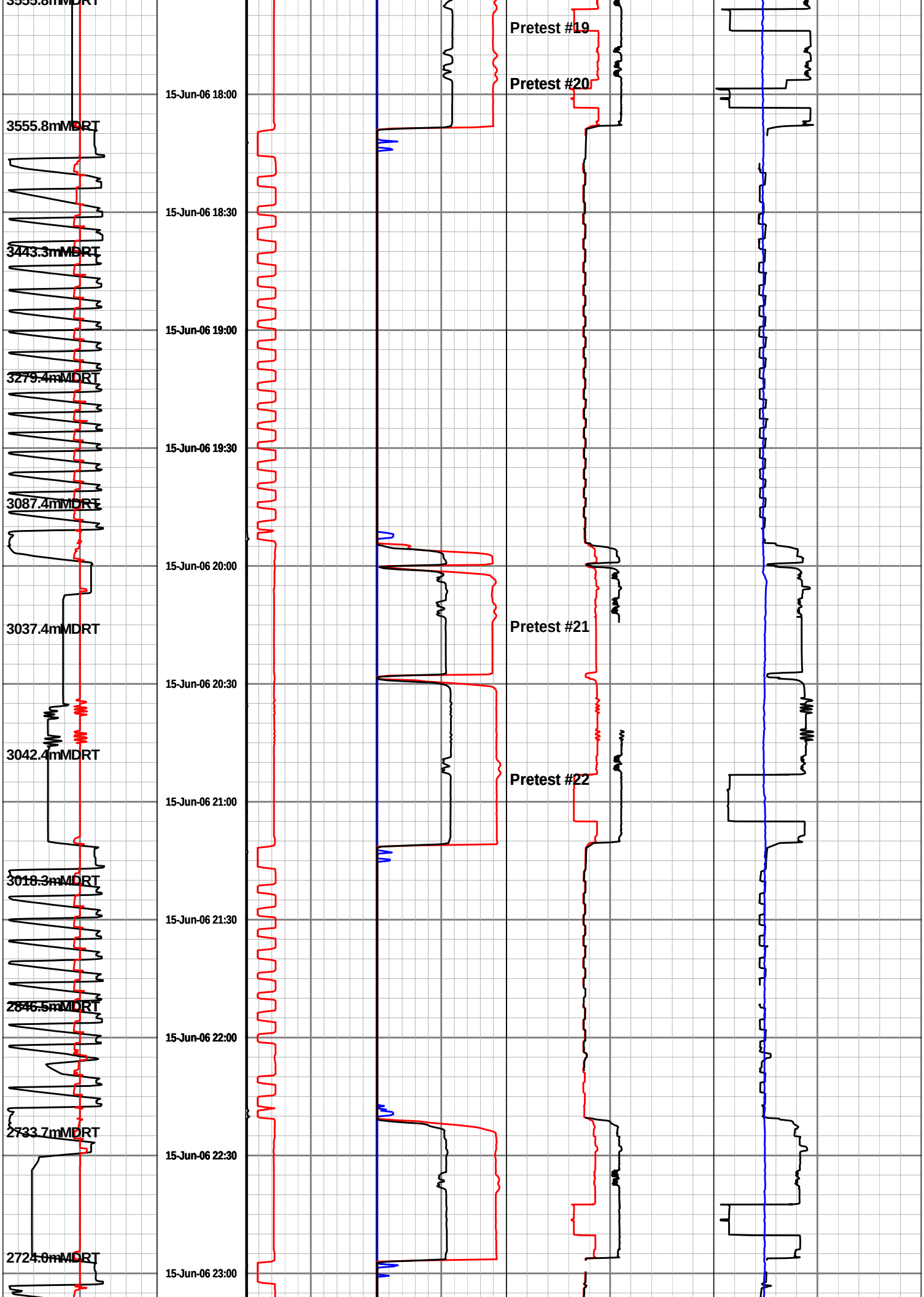

3827.7mMDRT
14-Jun-06 14:30
3825.9mMDRT
14-Jun-06 15:00
Conx
DL
TF Corr -20°
Def Corr 5%
3843.9mMDRT
14-Jun-06 15:30
3856.8mMDRT
14-Jun-06 16:00
14-Jun-06 16:30
3857.5mMDRT
SCRs
Conx
DL
TF = 177°
Def = 32%
14-Jun-06 17:00
3868.2mMDRT
14-Jun-06 17:30
3883.4mMDRT
14-Jun-06 18:00
3885.6mMDRT
Conx
14-Jun-06 18:30
3900.6mMDRT
14-Jun-06 19:00
3915.5mMDRT
14-Jun-06 19:30

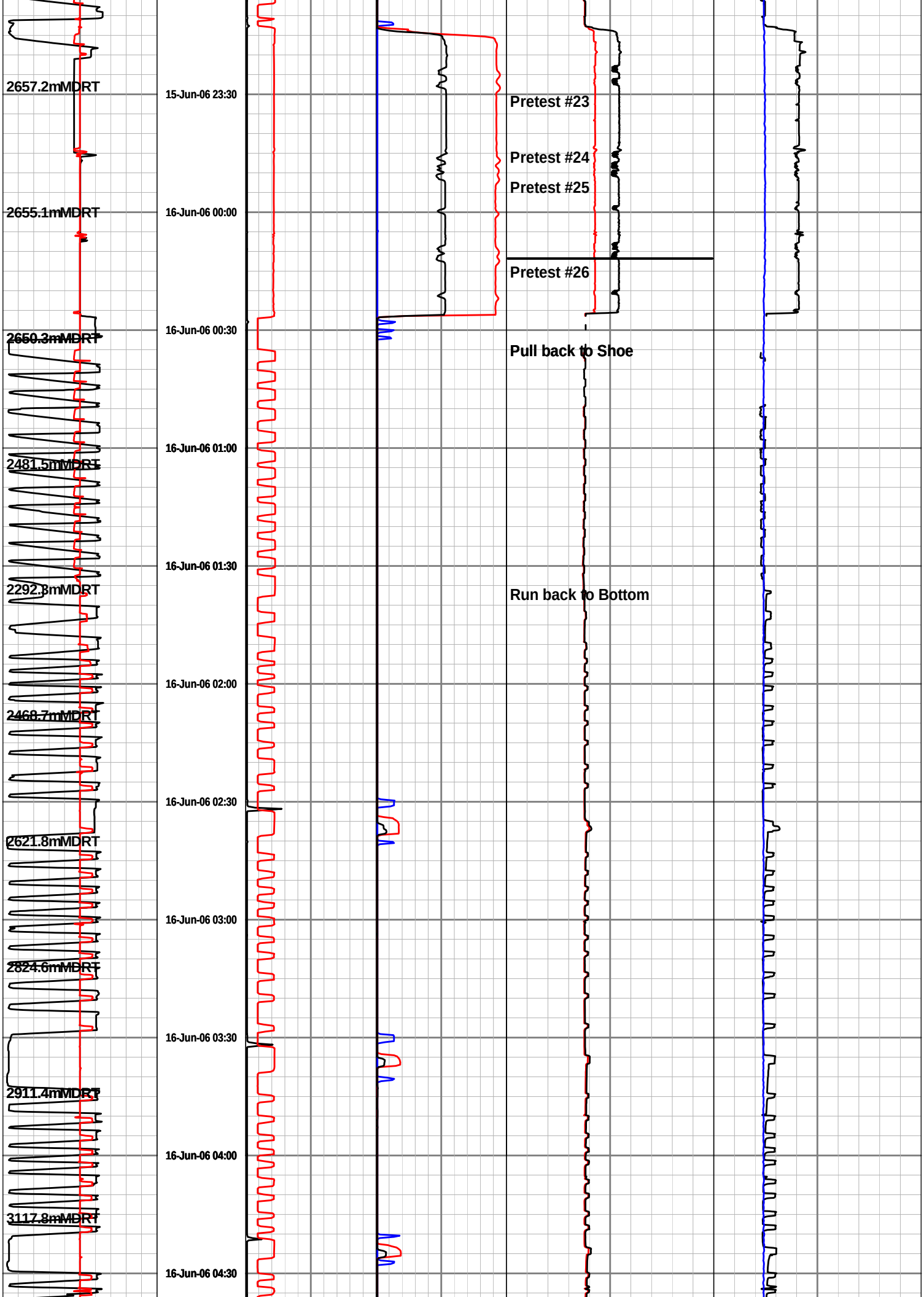

3924.1mMDRT
3929.8mMDRT
3946.3mMDRT
3951.9mMDRT
3962.2mMDRT
3977.1mMDRT
3982.0mMDRT
3993.3mMDRT
4008.0mMDRT
4010.5mMDRT
4019.0mMDRT
14-Jun-06 20:00
14-Jun-06 20:30
14-Jun-06 21:00
14-Jun-06 21:30
14-Jun-06 22:00
14-Jun-06 22:30
14-Jun-06 23:00
14-Jun-06 23:30
15-Jun-06 00:00
15-Jun-06 00:30
15-Jun-06 01:00
Conx
DL: TF Corr -5°, Def +20%
DL: Defl Corr -10%
Conx
Conx
DL: Cruise on
Conx


TD at 4026m MD.
15-Jun-06 01:30
4025.8mMDRT
DL: Home
15-Jun-06 02:00
4017.9mMDRT
Circulating 3 x Bottoms Up
15-Jun-06 02:30
4010.3mMDRT
15-Jun-06 03:00
4002.4mMDRT
15-Jun-06 03:30
DL: Home
3992.3mMDRT
15-Jun-06 04:00
4010.4mMDRT
15-Jun-06 04:30
4019.2mMDRT
15-Jun-06 05:00
4019.7mMDRT
15-Jun-06 05:30
Pretest #8
4009.9mMDRT
Flow Check
15-Jun-06 06:00
DL: GP reset
3985.3mMDRT
15-Jun-06 06:30


3989.5mMDRT
3949.5mMDRT
3955.5mMDRT
3954.6mMDRT
3957.9mMDRT
3898.8mMDRT
3904.7mMDRT
3914.3mMDRT
3842.5mMDRT
3844.4mMDRT
15-Jun-06 07:00
15-Jun-06 07:30
15-Jun-06 08:00
15-Jun-06 08:30
15-Jun-06 09:00
15-Jun-06 09:30
15-Jun-06 10:00
15-Jun-06 10:30
15-Jun-06 11:00
15-Jun-06 11:30
15-Jun-06 12:00
Pretest #9
Pretest #10
Pretest #11
Pretest #12
Pretest #13


3860.7mMDRT
3860.8mMDRT
3866.6mMDRT
3865.3mMDRT
3805.9mMDRT
3782.0mMDRT
3779.9mMDRT
3739.4mMDRT
3621.2mMDRT
3557.1mMDRT
3555.8mMDRT
15-Jun-06 12:30
15-Jun-06 13:00
15-Jun-06 13:30
15-Jun-06 14:00
15-Jun-06 14:30
15-Jun-06 15:00
15-Jun-06 15:30
15-Jun-06 16:00
15-Jun-06 16:30
15-Jun-06 17:00
15-Jun-06 17:30
Pretest #14
Pretest #15
Pretest #16
Pretest #17
Pretest #18
DL: Home
DL: Home


3555.8mMDRT
3443.3mMDRT
3279.4mMDRT
3087.4mMDRT
3037.4mMDRT
3042.4mMDRT
3018.3mMDRT
2846.5mMDRT
2733.7mMDRT
2724.0mMDRT
15-Jun-06 18:00
15-Jun-06 18:30
15-Jun-06 19:00
15-Jun-06 19:30
15-Jun-06 20:00
15-Jun-06 20:30
15-Jun-06 21:00
15-Jun-06 21:30
15-Jun-06 22:00
15-Jun-06 22:30
15-Jun-06 23:00
Pretest #19
Pretest #20
Pretest #21
Pretest #22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2468.7mMDRT
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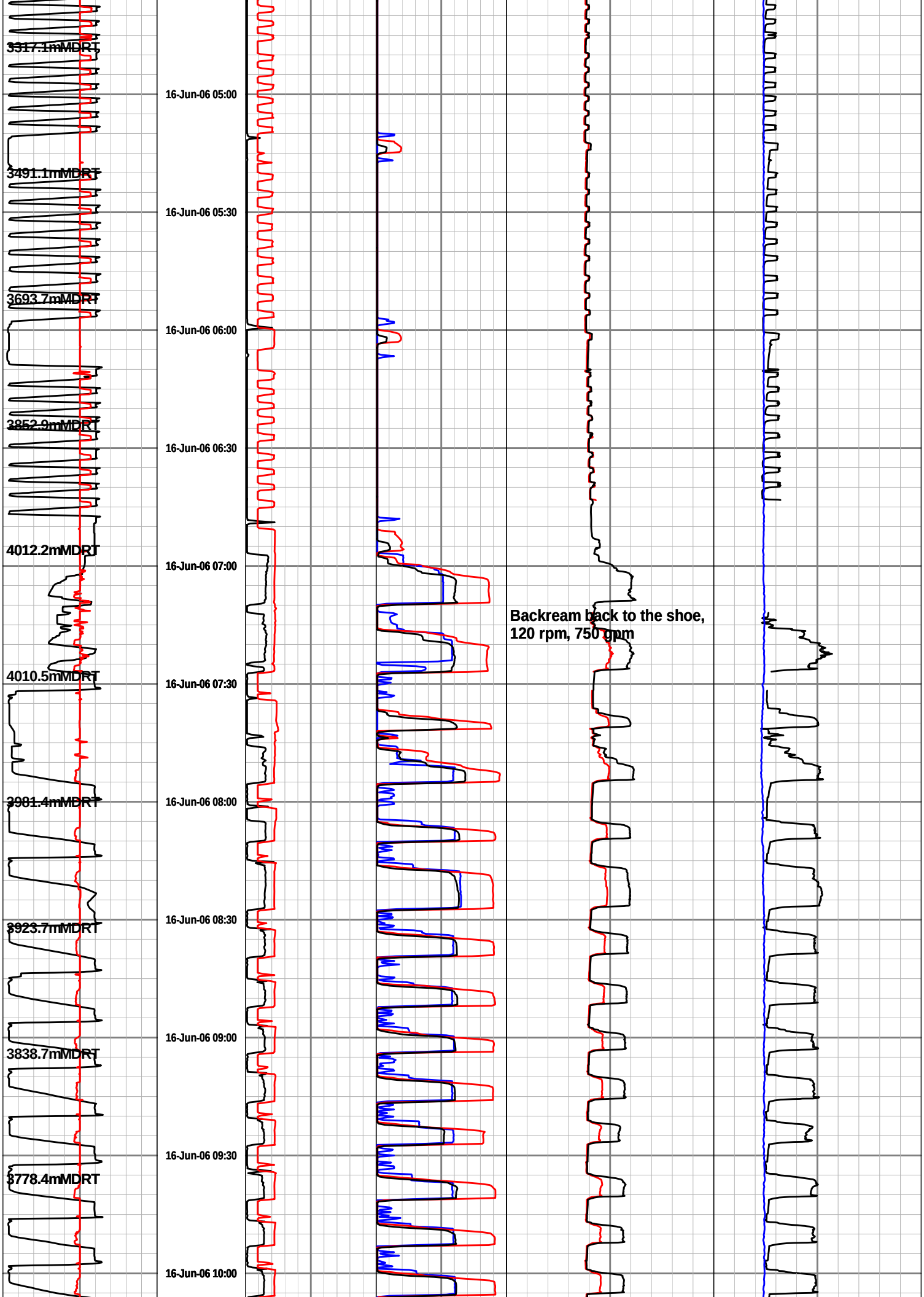
2824.6mMDRT
2911.4mMDRT
3117.8mMDRT
15-Jun-06 23:30
16-Jun-06 00:00
16-Jun-06 00:30
16-Jun-06 01:00
16-Jun-06 01:30
16-Jun-06 02:00
16-Jun-06 02:30
16-Jun-06 03:00
16-Jun-06 03:30
16-Jun-06 04:00
16-Jun-06 04:30
Pretest #23
Pretest #24
Pretest #25
Pretest #26
Pull back to Shoe
Run back to Bottom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4010.5mMDRT
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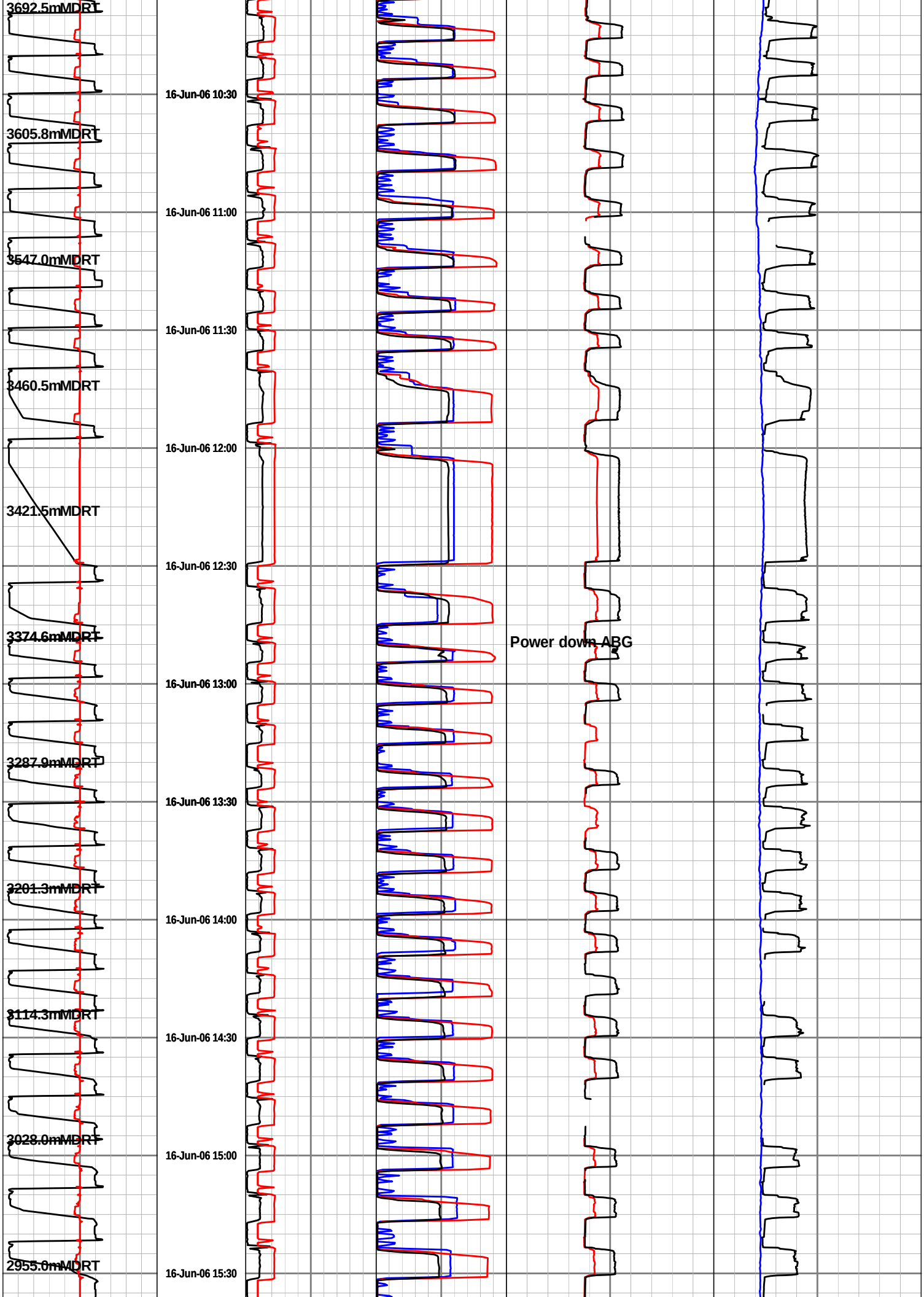
3923.7mMDRT
3838.7mMDRT
3778.4mMDRT
16-Jun-06 05:00
16-Jun-06 05:30
16-Jun-06 06:00
16-Jun-06 06:30
16-Jun-06 07:00
16-Jun-06 07:30
16-Jun-06 08:00
16-Jun-06 08:30
16-Jun-06 09:00
16-Jun-06 09:30
16-Jun-06 10:00
Backream back to the shoe,
120 rpm, 750 gpm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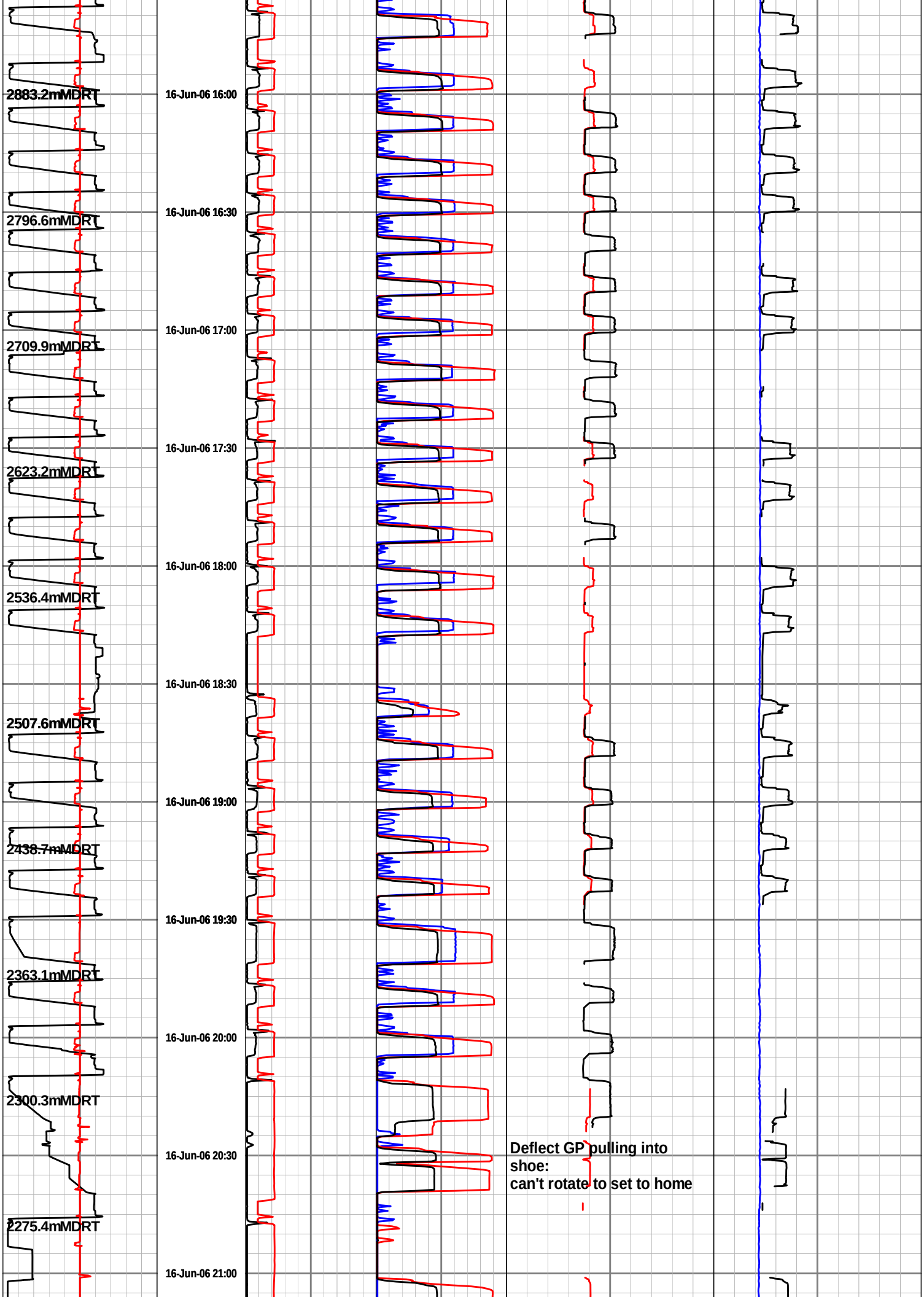
3201.3mMDRT
3114.3mMDRT
3028.0mMDRT
2955.0mMDRT
16-Jun-06 10:30
16-Jun-06 11:00
16-Jun-06 11:30
16-Jun-06 12:00
16-Jun-06 12:30
16-Jun-06 13:00
16-Jun-06 13:30
16-Jun-06 14:00
16-Jun-06 14:30
16-Jun-06 15:00
16-Jun-06 15:30
Power down ABG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2507.6mMDRT
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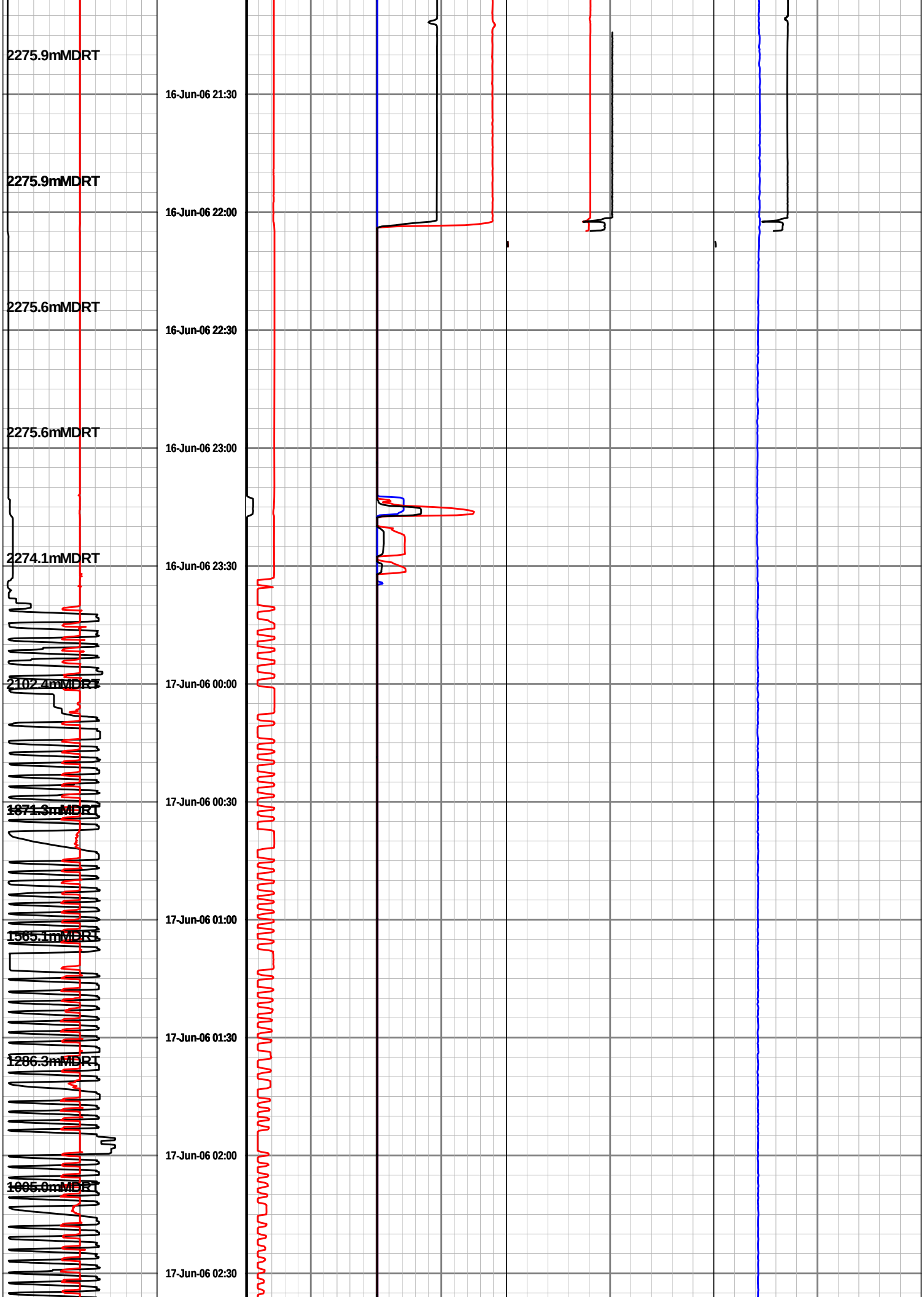
2363.1mMDRT
2300.3mMDRT
2275.4mMDRT
16-Jun-06 16:00
16-Jun-06 16:30
16-Jun-06 17:00
16-Jun-06 17:30
16-Jun-06 18:00
16-Jun-06 18:30
16-Jun-06 19:00
16-Jun-06 19:30
16-Jun-06 20:00
16-Jun-06 20:30
16-Jun-06 21:00
Deflect GP pulling into
shoe:
can't rotate to set to home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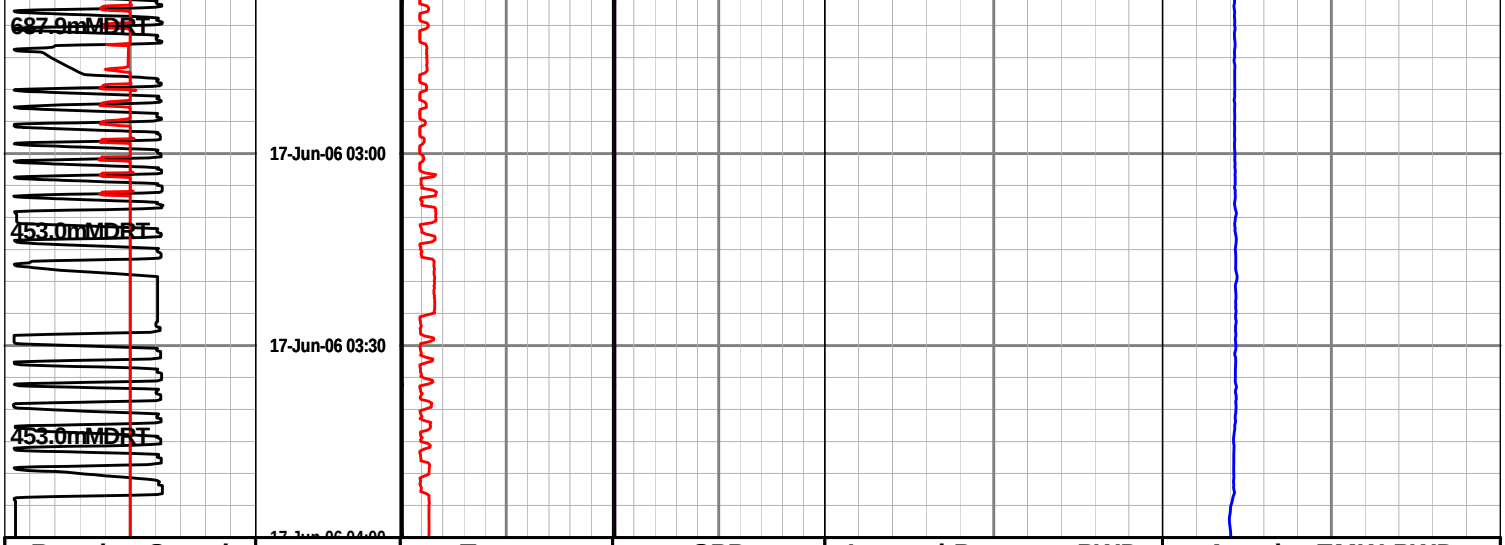
2274.1mMDRT
2102.4mMDRT
1871.3mMDRT
1565.1mMDRT
1286.3mMDRT
1005.0mMDRT
16-Jun-06 21:30
16-Jun-06 22:00
16-Jun-06 22:30
16-Jun-06 23:00
16-Jun-06 23:30
17-Jun-06 00:00
17-Jun-06 00:30
17-Jun-06 01:00
17-Jun-06 01:30
17-Jun-06 02:00
17-Jun-06 02:30



Running Speed	Time min	Torque	SPP	Internal Pressure-PWD	Annular EMW-PWD
-150 0 150		0 25 50	0 3K 6K	0 5K 10K	1 1.5 2
metre per min		foot-klb	lbs / in2 gauge	lbs / in2 gauge	Sp Grav
ROP Avg		**Hookload**	**Flow In**	**Annular Pressure-PWD**	**Temperature**
200 100 0		0 200 400	0 400 800	0 5K 10K	0 25 50
metre per hr		k-lbs	gallon per min	lbs / in2 gauge	celsius
Block Position			**RPM**		**Density Mud In**
0 25 50			0 100 200		1 1.5 2
metres			rev per min		Sp Grav

Formation Pressure Data

GeoTap®

Sperry
Drilling Services

GeoTap Pressure Transient Analysis

Client:	**Woodside Energy, Ltd.**
Well:	**THA02**
Field:	**Thylacine**
Rig:	**Maersk Guardian**
Country:	**Australia**
Logged:	**W. Burch**
Analyst:	**P. Kowalchuk**
Date:	**29 June 206**

HALLIBURTON

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Test No. 18 54
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Overview

Sperry Drilling Services was contracted to provide Directional Drilling, Measurements-While Drilling, and Logging-While Drilling services for Woodside Energy, Ltd. for a development well in the Thylacine field. THA02 was drilled to a Measured Depth of 4,026.00 m (True Vertical Depth of 2,340.18 m) in the following sections:

Run	Borehole Size (mm)	Measured Depth (m)
100	445	219.00
200	584	638.00
300	311	2,299.00
400	216	3,510.00
500	216	4,026.00

During the 311 mm borehole section, Dual Gamma Ray, Electromagnetic Wave Resistivity, Pressure While Drilling services were run both Real-Time and Recorded with the GeoPilot Rotary Steerable System. This borehole section also included At Bit Gamma service which was run concurrently with the GeoPilot to determine the casing point.

In the 216 mm borehole section, DGR, EWR, PWD, ABG, and GeoPilot services were continued with the addition of Azimuthal Litho-Density, Compensated Thermal Neutron, Acoustic Caliper both Real-Time and Recorded to determine the lithology and associated properties of the reservoir. The data was also used to help determine the horizontal well placement as the geology dictated.

At the request of Woodside Energy, Ltd., the GeoTap service was run during the 216 mm borehole section to determine formation pressure while drilling. This data was used to compare THA02 pressure results to offset Thylacine field pressures and to confirm the pressure gradients as previously established in the Thylacine formations.

Run 400 was unable to be drilled in a single run due to a GeoPilot failure. Prior to pulling out of hole to change out the GeoPilot, two GeoTap pressure test points were taken. The remaining pressure tests were taken during Run 500.

The majority of the pressure tests were taken after drilling the well to TD. Also, to reduce the length of time of testing most of the pressure test points were not orientated with respect to the probe. A couple of the no seal pressure tests were attempted with orientation to isolate possible pad damage.

The overall GeoTap program included a wide range of pressure testing parameters. This was a first for the Thylacine team and several learning lessons were captured. This will help for future planning of the GeoTap service as well as to assist in the analysis of the data. Drawdown rates, volumes, and build-up times were varied as the conditions and situations presented themselves.

A total of 26 pressure tests were attempted. There were several dry pressure tests and a few no seal pressure tests. Several tests showed possible supercharging. The Real-Time Pressure Test Summary and final analysis Test Summary are included in the following sections.

Log Header

WELL INFORMATION					
MWD Run Number	400	500			
Date run completed	12-Jun-06	17-Jun-06			
Rig Bit Number	4	5			
Bit Size (mm)	216	216			
Tool Nominal OD (mm)	171	171			
Log Start Depth (MD, m)	2,299.00	3,510.00			
Log End Depth (MD, m)	3,510.00	4,026.00			
Drill or Wipe	Drilling	Drilling			
Drill/Wipe Start Date and Time	08-Jun-06 00:05	13-Jun-06 16:15			
Drill/Wipe End Date and Time	12-Jun-06 07:45	16-Jun-06 00:15			
Min Inc (deg) @ Depth (MD, m)	72.83 @ 2,295.60	41.91 @ 4,001.93			
Max Inc (deg) @ Depth (MD, m)	93.22 @ 2,527.13	91.36 @ 3,510.20			
Bit TFA(in2) / Bit Type	10 / Security FMF3653	.10 / Security FMFX65			
Flow Rate (gpm)	730	725			
Max AV (mpm) / CV (mpm) @ MWD	207.0 / 181.8	201.6 / 155.4			
Fluid Type	Synteq	Synteq			
Density (sg) / Viscosity (spl)	1.26 / 93.0	1.26 / 74.0			
Filtrate CL (ppm)	38,842	36,912			
pH / Fluid Loss (mptm)	N/A / 3.0	N/A / 2.0			
PV (cP) / YP (pa)	42 / 17.28	35 / 11.49			
% Solids / % Sand	14.8 / 0.3	13.9 / 0.3			
% Oil / Oil:Water Ratio	62.5 / 75:25	65.0 / 77:23			
Rm @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A			
Rmf @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A			
Rmc @ Measured Temp (degC)	N/A @ N/A	N/A @ N/A			
Max Tool Temp (degC) / Source	109 / EWR-P4	112 / EWR-P4			
Rm @ Max Tool Temp (degC)	N/A @ 109	N/A @ 112			
Lead MWD Engineer	M. Lee	M. Lee			
Customer Representative	S. Corless	S. Corless			

SENSOR INFORMATION

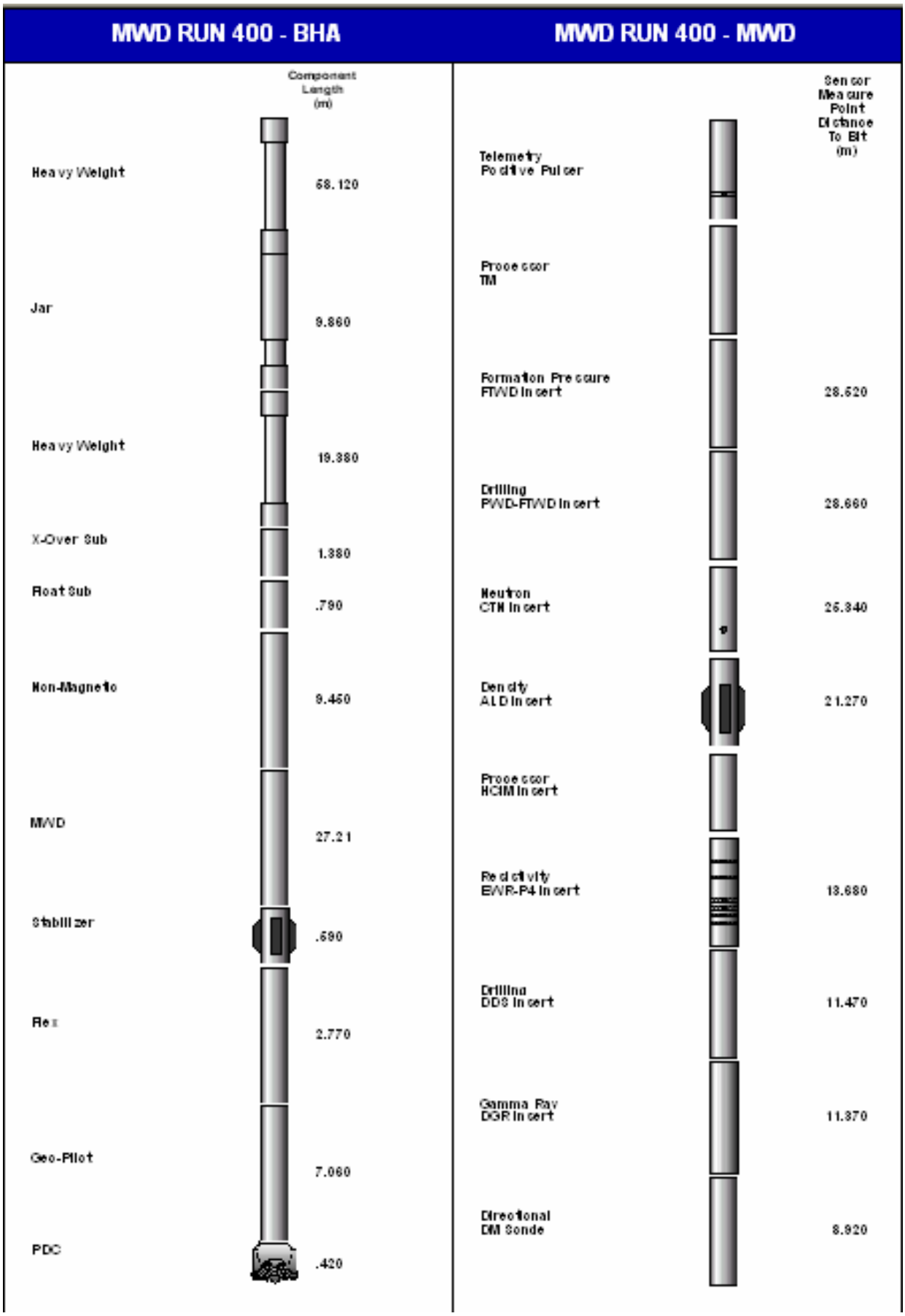
Downhole Processor Information					
Tool Type	HCIM	HCIM			
Software Version	72.13	72.13			
Sub Serial Number	43987	43987			
Insert Serial Number	161828	161828			
Date and Time Initialized	08-Jun-06 14:12	13-Jun-06 02:33			
Date and Time Read	12-Jun-06 23:24	19-Jun-06 14:10			

Directional Sensor Information					
Tool Type	DM	DM			
Distance From Bit (m)	8	8.02			
Software Version	3.15	3.15			
Sub Serial Number	CP919968	CP772990			
Sonde Serial Number	133447	185534			
Sensor ID Number	N/A	N/A			
Toolface Offset (deg)	N/A	N/A			

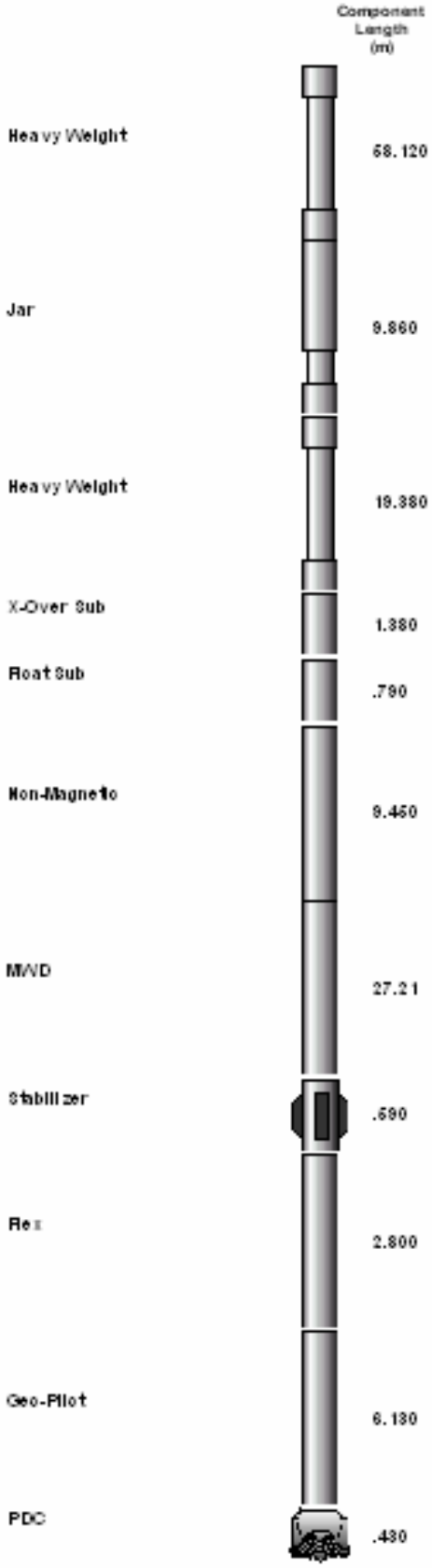
Gamma Ray Sensor Information					
Tool Type	DGR	DGR			
Distance From Bit (m)	11.37	10.49			
Recorded Sample Period (sec)	14	14			
Software Version	N/A	N/A			
Sub Serial Number	144358	144358			
Insert/Sonde Serial Number	50437	50437			

FTWD Sensor Information					
Tool Type	FTWD	FTWD			
Distance From Bit (m)	28.52	27.64			
FTWD Pad Offset	324.00	59.40			
PIC Software Version	2,595.00	2,595.00			
Software Version	2.58	2.58			

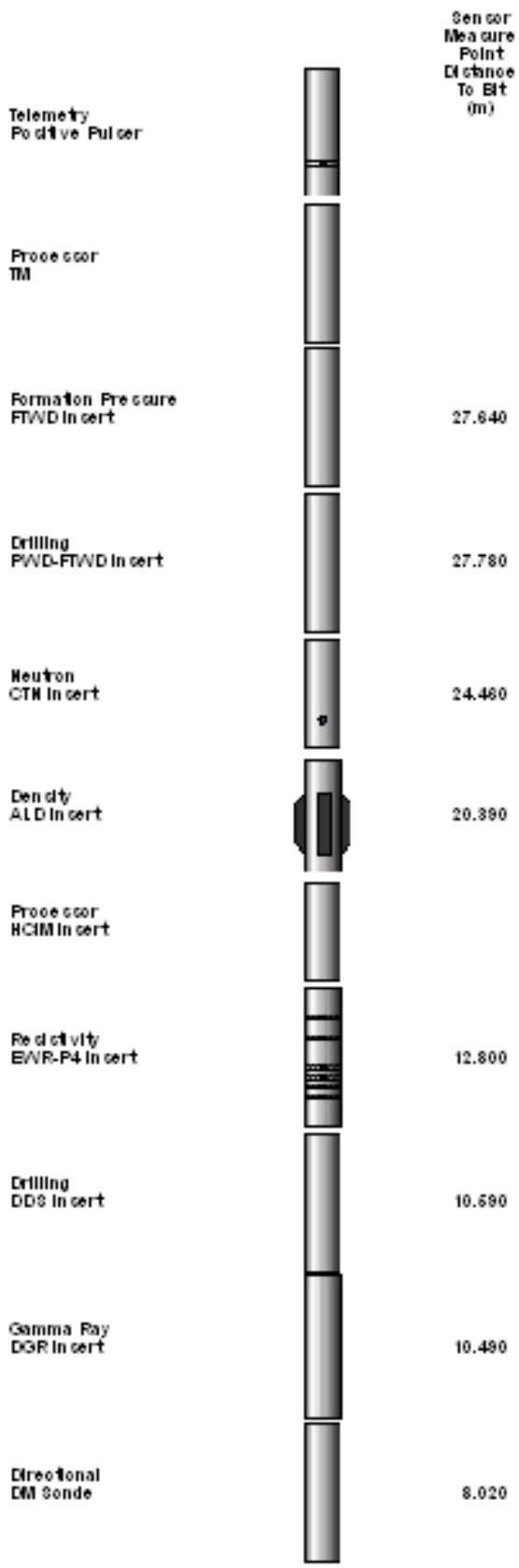
Tool String Diagram



MWD RUN 500 - BHA



MWD RUN 500 - MWD



Real-Time Pressure Test Summary

Customer	Woodside Energy Lt	Job #	AU-FE-0003930658	Run #	400	GeoSpan Choke #	22	MW (SG)	1.25	Customer Geologist:
Well	THA02	Rig	Maersk Guardian	FT SW Version	2.58	Pad Type	Standard	PV (Cp)	40	S. Robbie / B. Fawcett
Field	Thylacine	Unit	SSDS-40	INSITE SW Version	6.2.2 Build 8	Snorkel Diameter	0.22"	Pad Offset	324	Customer Representative:
FTWD Engineer	W. Burch	Date	11-Jun-06	HCIM SW Version	72.13	Flow Line Volume	42.5cc	FTWD Measure Po	28.50	S. Corless / P. Hodson

GeoTap - Formation Testing While Drilling

Sperry-Sun

Sample No #	Bit Depth m	FTWD MD m	FTWD TVD m	Inclination deg	Date	Time	Hyd 1 Pres psia	Hyd 2 Pres psia	D D Pres psia	Fill-Up Pres psia	Stop Pres psia	RT PWD Pres psia	FTWD TF deg	Comments
1	3037.07	3008.57	2131.83	88.06	11-Jun-06	05:05	4484	4480	4492	3244	3247.0	3246.7	54L	Good Test (10 cc @ 1 cc/sec; BU = 96 sec); Poor Detection
2	3042.98	3014.48	2132.03	88.01	"	06:04	4489	4480	4497	3169	3243.0	3243.7	36L	Good Test (10 cc @ 1 cc/sec; BU = 96 sec)

Customer	Woodside Energy Lt	Job #	AU-FE-0003930658	Run #	500	GeoSpan Choke #	22	MW (SG)	1.25	Customer Geologist:
Well	THA02	Rig	Maersk Guardian	FT SW Version	2.58	Pad Type	Standard	PV (Cp)	40	J. Hobday / B. Fawcett
Field	Thylacine	Unit	SSDS-40	INSITE SW Version	6.2.2 Build 8	Snorkel Diameter	0.22"	Pad Offset	59	Customer Representative:
FTWD Engineer	W. Burch	Date	13-Jun-06	HCIM SW Version	72.13	Flow Line Volume	42.5cc	FTWD Measure Po	27.64	S. Corless / P. Hodson

GeoTap - Formation Testing While Drilling

Sperry-Sun

Sample No #	Bit Depth m	FTWD MD m	FTWD TVD m	Inclination deg	Date	Time	Hyd 1 Pres psia	Hyd 2 Pres psia	D D Pres psia	Fill-Up Pres psia	Stop Pres psia	RT PWD Pres psia	FTWD TF deg	Comments
3	3545.43	3517.79	2124.99	91.18	13-Jun-06	19:51	4573	4598	4653	3101	3260.0	3261.7	71R	Good Test (10 cc @ 1 cc/sec; BU = 224 sec); Slow Drawdown
4	3545.31	3517.67	2124.99	91.18	"	20:58	4558	4598	4638	38	35.0	39.7	75L	Tight Test; Abort
5	3545.26	3517.62	2124.99	91.18	"	21:09	4548	4568	4620	28	29.0	31.7	72L	Tight Test; Abort
6	3546.04	3518.40	2124.97	91.18	"	21:58	4539	4548	4555	51	3040.0	3380.7	75L	***Did Not Reach Stabilization*** (10 cc @ 1 cc/sec; BU = 96 sec)
7	3546.47	3518.83	2124.96	91.18	"	22:27	4539	4558	4555	811	3309.0	3307.7	75L	Good Test (10 cc @ 1 cc/sec; BU = 320 sec); Slow Drawdown
8	4019.65	3992.01	2314.91	42.14	15-Jun-06	05:25	4856	4888	4872	3312	3343.0	3344.7	171L	Good Test (10 cc @ 1 cc/sec; BU = 96 sec)
9	3988.89	3961.25	2292.27	43.42	"	07:05	4835	4872	4867	3323	3339.0	3340.7	62R	Good Test (10 cc @ 1 cc/sec; BU = 96 sec)
10	3957.56	3929.92	2269.90	45.18	"	09:05	4725	4731	4749	3349	3344.0	3344.7	74R	Good Test (10 cc @ 1 cc/sec; BU = 96 sec)
11	3903.84	3876.20	2232.82	47.84	"	10:09	4664	4684	4688	3080	3321.0	3322.7	53R	Good Test (20 cc @ 1.5 cc/sec; BU = 96 sec)
12	3913.39	3885.75	2239.27	47.11	"	10:42	4608	4644	4640	4480	3330.0	3329.7	59R	Good Test (10 cc @ 1.5 cc/sec; BU = 128 sec)
13	3843.54	3815.90	2194.97	55.10	"	11:51	4402	4431	4426	4370	3311.0	3311.7	30R	Good Test (10 cc @ 1.5 cc/sec; BU = 128 sec)
14	3859.86	3832.22	2204.56	52.89	"	12:26	4568	4603	4592	2928	2362.0	2366.7	59R	***Did Not Reach Stabilization*** (10 cc @ 1.0 cc/sec; BU = 224 sec
15	3860.07	3832.43	2204.68	52.86	"	12:46	4558	4603	4590	4558	N/A	N/A	59R	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 320 sec); Slow Drawdown
16	3859.96	3832.32	2204.62	52.88	"	13:10	4579	4603	4585	4553	N/A	N/A	56R	***No Seal*** (5 cc @ 0.5 cc/sec; BU = 512 sec); Slow Drawdown
17	3870.26	3842.62	2210.94	51.39	"	13:48	4573	4613	4605	3325	3328.0	3329.7	45R	Good Test (10 cc @ 1.0 cc/sec; BU = 96 sec)
18	3784.40	3756.76	2164.64	63.55	"	15:17	4484	4519	4516	3212	3257.0	3257.7	139L	Good Test (15 cc @ 1.0 cc/sec; BU = 96 sec)
19	3555.50	3527.86	2124.80	90.94	"	17:46	4407	4446	4439	3151	3258.0	3257.7	64L	Good Test (10 cc @ 0.5 cc/sec; BU = 320 sec); Slow Drawdown
20	3555.50	3527.86	2124.80	90.94	"	18:05	4417	4450	4449	3985	3253.0	3254.7	64L	Good Test (10 cc @ 0.5 cc/sec; BU = 128 sec)
21	3037.57	3009.93	2131.88	88.05	"	20:24	4307	N/A	N/A	N/A	N/A	N/A	58L	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 224 sec); Poor Detection
22	3042.57	3014.93	2132.05	88.01	"	21:08	4359	4383	4383	3399	3248.0	3246.7	159R	Good Test (10 cc @ 0.5 cc/sec; BU = 224 sec)
23	2729.56	2701.92	2125.41	90.74	"	22:52	4260	4302	4284	4260	3248.0	3246.7	147R	Good Test (10 cc @ 0.5 cc/sec; BU = 224 sec)
24	2657.64	2630.00	2127.12	92.71	"	23:42	4265	4288	4289	4265	4284.0	4283.7	153R	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 224 sec)
25	2655.62	2627.98	2127.22	92.73	16-Jun-06	00:04	4255	4288	4279	4239	4242.0	4278.7	153R	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 320 sec)
26	2655.75	2628.11	2127.21	92.73	"	00:23	4260	4288	4276	4260	4240.0	4278.7	174L	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 320 sec)

Test Summary

Test No.	MD (m)	Phyds1 (psia)	Phyds2 (psia)	Psdd (psia)	Pedd (psia)	Pstop (psia)	dTdd (sec)	dTbu (sec)	*Remarks*
1.1	3008.84	4485.52	4484.85	4292.12	3247.87	3259.46	10.20	94.50	Possible Supercharging
1.2	3008.84	4485.52	4484.85	3259.40	3250.89	3248.54	10.20	94.50	Possible Supercharging
1.3	3008.84	4485.52	4484.85	3248.60	3245.61	3247.35	10.20	94.50	Possible Supercharging
2.1	3015.48	4486.41	4490.90	4493.00	3173.26	3251.51	10.20	92.00	Somewhat Stable Test
2.2	3015.48	4486.41	4490.90	3251.26	3186.14	3242.47	10.00	95.40	Good Stable Test
2.3	3015.48	4486.41	4490.90	3242.47	3293.00	3243.09	10.00	95.80	Good Stable Test
3.1	3517.85	4573.87	4594.61	4657.71	3103.16	3260.47	20.4	223	Good Stable Test
4.1	3517.74	4550.23	4561.50						Dry Test Aborted
5.1	3517.69	4545.46	4566.39						Dry Test Aborted
6.1	3518.47	4533.02	4554.20						Dry Test Phase Change Poor Stability
6.2	3518.47	4533.02	4554.20						Dry Test Phase Change Didn't Stabilize
6.3	3518.47	4533.02	4554.20						Dry Test Phase Change Didn't Stabilize
7.1	3518.90	4539.92	4559.87	4484.09	839.88	3309.07	18.60	318.00	Good Stable Test
8.1	3992.02	4858.03	4886.98	4814.47	3311.81	3356.61	2.00	95.00	Somewhat Stable Test Possible Supercharging
8.2	3992.02	4858.03	4886.98	3356.57	3312.85	3343.90	10.00	95.00	Stable Test
8.3	3992.02	4858.03	4886.98	3343.92	3310.81	3343.16	10.00	95.00	Good Stable Test
9.1	3961.86	4842.77	4873.23	4756.69	3324.30	3350.78	7.40	95.80	Some Supercharging Possible
9.2	3961.86	4842.77	4873.23	3350.78	3323.57	3340.31	10.20	95.40	Good Stable Test
9.3	3961.86	4842.77	4873.23	3340.31	3322.22	3339.44	10.60	96.20	Good Stable Test
10.1	3930.29	4734.57	4726.41	4317.24	3348.36	3346.22	5.60	94.00	Some Supercharging Possible Not enough DD

10.2	3930.29	4734.57	4726.41	3346.20	3344.04	3345.21	10.40	94.60	Some Supercharging Possible Not enough DD
10.3	3930.29	4734.57	4726.41	3345.19	3343.99	3344.52	10.40	94.60	Some Supercharging Possible Not enough DD
11.1	3877.06	4660.49	4687.11	4453.63	3081.01	3330.95	11.00	95.20	Stable Test
11.2	3877.06	4660.49	4687.11	3330.97	3093.46	3321.40	7.00	91.80	Good Stable Test
12.1	3886.62	4612.23	4638.79				3.40	126.00	Mud Cake not breached
12.2	3886.62	4612.23	4638.79	4502.69	3288.54	3333.71	4.00	125.00	Stable Test Not Enough DD for Good Mobility calculation
12.3	3886.62	4612.23	4638.79	3333.68	3313.77	3330.38	6.60	126.00	Test Still Building
13.1	3816.75	4403.17	4430.44				17.80	115.20	Mud Cake not breached
13.2	3816.75	4403.17	4430.44	4346.54	3140.21	3321.79	4.60	126.60	Somewhat Stable Test Possible Supercharging
13.3	3816.75	4403.17	4430.44	3321.75	3163.96	3311.83	6.80	127.20	Somewhat Stable Test
14.1	3833.07	4567.81	4608.55				10.00	223.00	Mud Cake not breached
14.2	3833.07	4567.81	4608.55	2347.39	251.93	299.41	9.00	222.00	Still building
14.3	3833.07	4567.81	4608.55	299.39	162.49	176.43	10.60	221.40	Still building
15.1	3832.43								No Seal
16.1	3832.32								No Seal
17.1	3843.47	4572.21	4613.17	4284.18	3333.43	3330.64	3.20	93.80	Stable Test Not Enough DD for Good Mobility calculation
17.2	3843.47	4572.21	4613.17	3330.64	3324.03	3328.73	10.00	95.00	Stable Test Not Enough DD for Good Mobility calculation

17.3	3843.47	4572.21	4613.17	3328.71	3326.72	3328.29	10.20	95.80	Stable Test Not Enough DD for Good Mobility calculation
18.1	3757.79	4482.89	4520.78	4129.11	3209.73	3268.45	4.80	96.00	Stable Test
18.2	3757.79	4482.89	4520.78	3268.45	3207.58	3258.00	15.20	94.80	Still building
18.3	3757.79	4482.89	4520.78	3258.01	3209.89	3257.53	1.40	95.60	Still building
19.1	3528.14	4407.27	4447.84	4369.58	3149.75	3258.18	12.60	318.00	Good Stable Test
20.1	3528.14	4419.84	4451.11	4416.70	4098.63	4084.96	1.80	126.00	Mud Cake not breached
20.2	3528.14	4419.84	4451.11	4084.92	3108.97	3258.82	19.60	127.40	Good Stable Test
20.3	3528.14	4419.84	4451.11	3258.84	3122.02	3253.23	20.20	127.00	Still building
22.1	3014.77	4359.22	4380.39	4057.84	3253.49	3264.36	4.40	222.00	Some Supercharging Possible
22.2	3014.77	4359.22	4380.39	3264.44	3234.63	3248.05	23.25	221.55	Still building
22.3	3014.77	4359.22	4380.39	3248.05	3238.11	3248.47	20.00	222.00	Still building
23.1	2701.48	4262.64	4299.84				19.00	221.00	Mud Cake not breached
23.2	2701.48	4262.64	4299.84	4189.38	3128.15	3247.99	4.80	222.00	Good Stable Test
23.2	2701.48	4262.64	4299.84	3247.95	3123.00	3248.08	20.84	221.96	Good Stable Test
24.1	2629.52								No Seal
25.1	2627.50								No Seal
26.1	2627.63								No Seal

Pressure Transient Summary						
Test Identification		**PTA Pressure**		**PTA Mobilities**		**Remarks**
Test No.	**MD (m)**	**Pexact (psia)**	**Pstdev (psia)**	**Mexact (md/cp)**	**Mexact stdev (%)**	
1.1	3008.84	3259.43	1.45	395	1.48	Possible Supercharging
1.2	3008.84	3248.59 (pstop)				Possible Supercharging
1.3	3008.84	3247.37	0.26	3180	1.00	Possible Supercharging
2.1	3015.48	3251.51	1.11	70.4	1.03	Somewhat Stable Test
2.2	3015.48	3242.39	0.17	101	0.99	Good Stable Test
2.3	3015.48	3243.09	0.15	114	0.98	Good Stable Test
3.1	3517.85	3260.47	1.24	17.9	0.98	Good Stable Test
4.1	3517.74					Dry Test Aborted
5.1	3517.69					Dry Test Aborted
6.1	3518.47	3383.95	7.17	0.943	0.88	Dry Test Phase Change Poor Stability
6.2	3518.47					Dry Test Phase Change Didn't Stabilize
6.3	3518.47					Dry Test Phase Change Didn't Stabilize
7.1	3518.90	3309.30	4.97	1.23	1.25	Good Stable Test
8.1	3992.02	3356.59	0.81	454	0.90	Somewhat Stable Test Possible Supercharging
8.2	3992.02	3343.84	0.15	185	0.9	Stable Test
8.3	3992.02	3343.27	0.11	176	1	Good Stable Test
9.1	3961.86	3350.80	0.72	214	0.7	Some Supercharging Possible
9.2	3961.86	3340.43	0.37	329	0.99	Good Stable Test
9.3	3961.86	3339.37	0.08	315	0.99	Good Stable Test
10.1	3930.29	3346.23	0.42	10200	1.02	Some Supercharging Possible Not enough DD
10.2	3930.29	3345.21	0.22	3730	8.4	Some Supercharging Possible Not enough DD
10.3	3930.29	3344.52	0.15	> 5500	0.79	Some Supercharging Possible Not enough DD
11.1	3877.06	3330.95	3.01	20.9	0.99	Stable Test
11.2	3877.06	3321.40	1.76	35.9	0.98	Good Stable Test
12.1	3886.62					Mud Cake not breached
12.2	3886.62	3333.71	0.12	199	0.66	Stable Test Not Enough DD for Good Mobility calculation
12.3	3886.62	3330.38	0.63	217	0.97	Test Still Building
13.1	3816.75					Mud Cake not breached
13.2	3816.75	3321.81	1.38	68.6	0.96	Somewhat Stable Test Possible Supercharging
13.3	3816.75	3311.85	0.37	57.0	1.09	Somewhat Stable Test

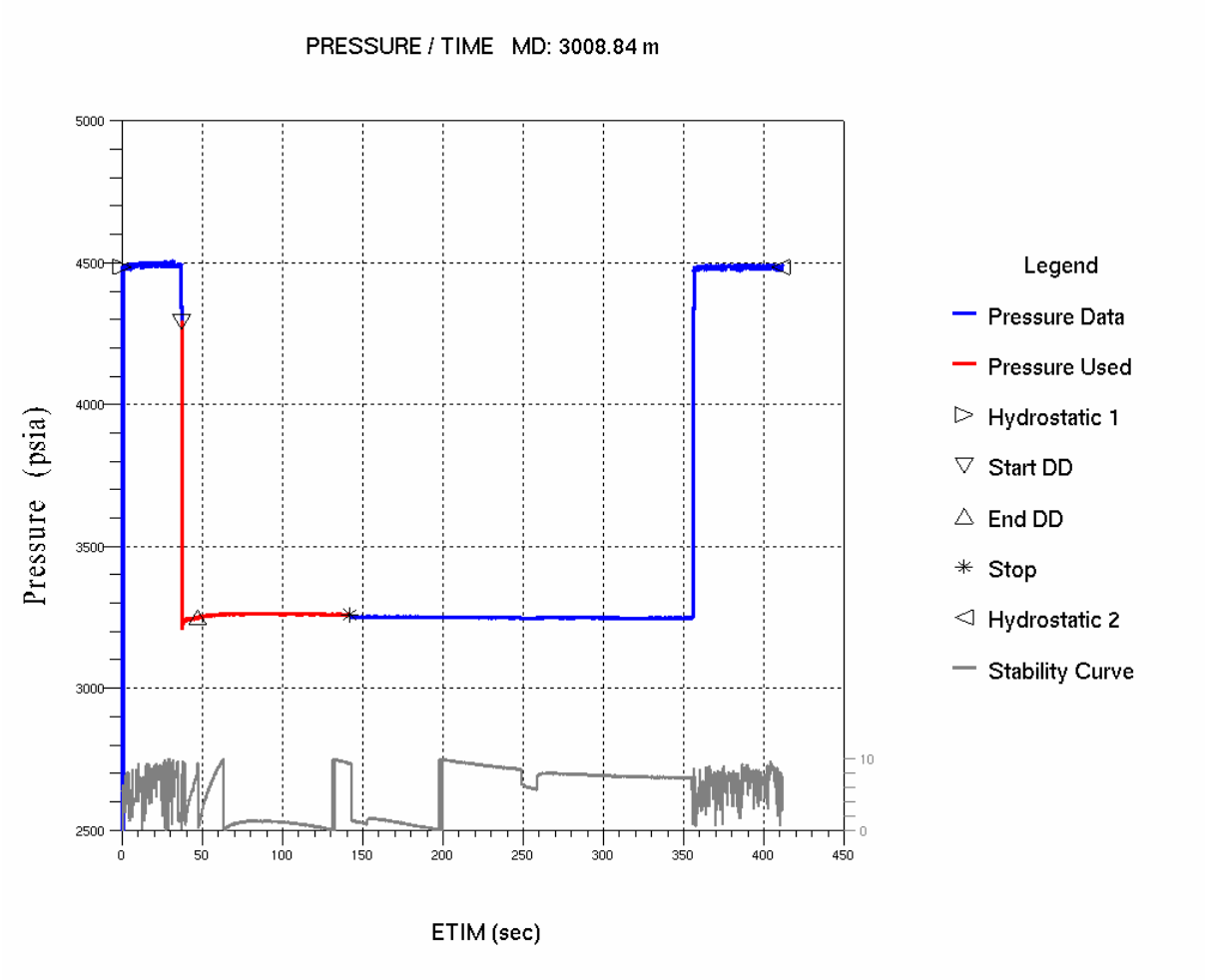
14.1	3833.07					Mud Cake not breached
14.2	3833.07	299.40	0.98	37.9	0.66	Still building
14.3	3833.07	176.43	0.38	48.1	4.58	Still building
15.1	3832.43					No Seal
16.1	3832.32					No Seal
17.1	3843.47	3330.63	1.12	17900		Stable Test Not Enough DD for Good Mobility calculation
17.2	3843.47	3328.73	0.15	326	7.18	Stable Test Not Enough DD for Good Mobility calculation
17.3	3843.47	3328.30	0.06	1080	8.35	Stable Test Not Enough DD for Good Mobility calculation
18.1	3757.79	3268.57	0.81	132	0.88	Stable Test
18.2	3757.79	3257.98	1.28	74.9	0.99	Still building
18.3	3757.79	3257.53	0.95	853	1	Still building
19.1	3528.14	3258.19	3.51	42.0	0.94	Good Stable Test
20.1	3528.14					Mud Cake not breached
20.2	3528.14	3258.83	2.54	19.5	0.99	Good Stable Test
20.3	3528.14	3253.08	1.34	21.7	0.99	Still building
22.1	3014.77	3264.36	2.80	994	6.16	Some Supercharging Possible
22.2	3014.77	3248.02	0.58	152	1.01	Still building
22.3	3014.77	3248.38	0.44	275	1.05	Still building
23.1	2701.48					Mud Cake not breached
23.2	2701.48	3248.00	3.14	99.7	0.98	Good Stable Test
23.3	2701.48	3248.25	0.20	31.5	1	Good Stable Test
24.1	2629.52					No Seal
25.1	2627.50					No Seal
26.1	2627.63					No Seal

Legend:
Pexact: Projected formation pressure based on exact model.
Pstdev: Standard deviation of actual pressures from exact model
Mexact: Spherical Mobility based on exact model
Msdd: Spherical Drawdown Mobility

Plots

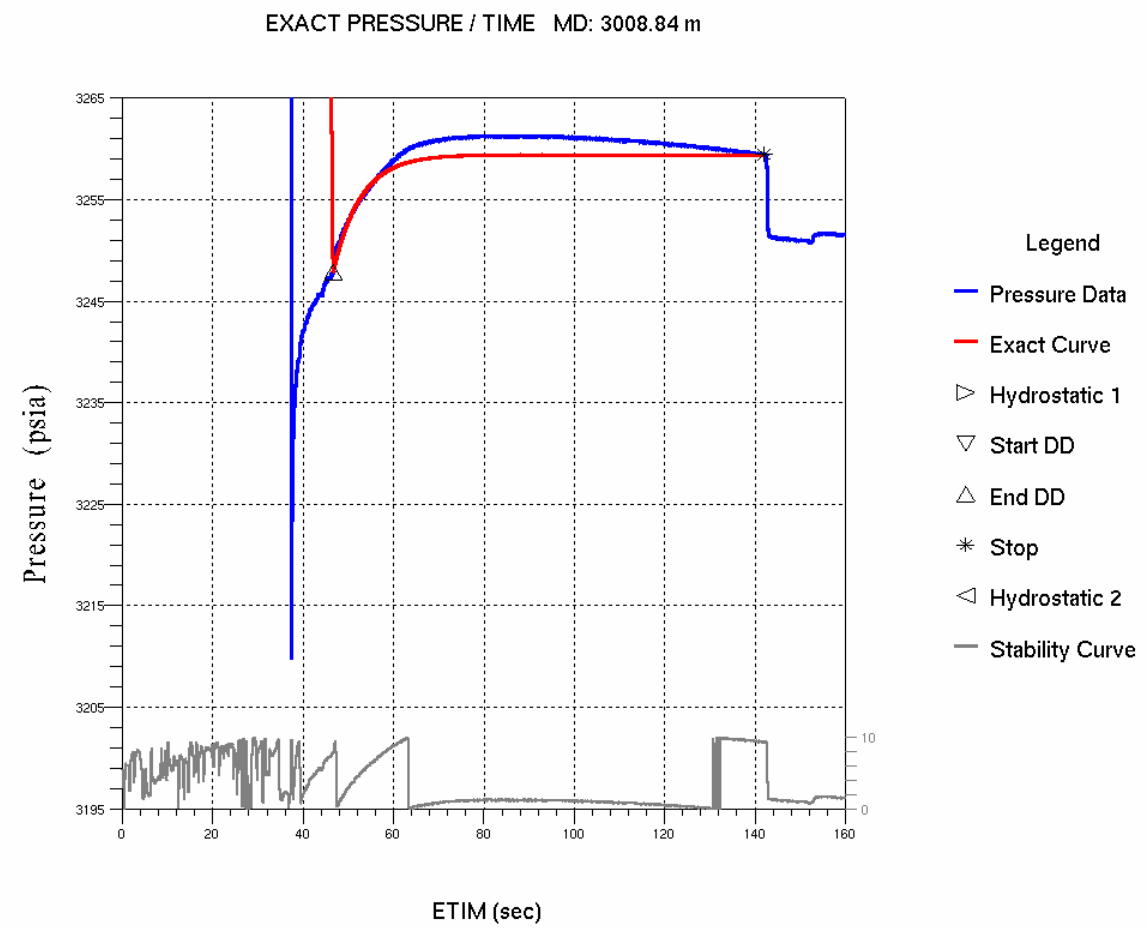
Test No. 1

GeoTap Pretest Test# 1
MD 3008.84 m TVD 0.00 m 06-11-2006 05:03



Test No. 1.1

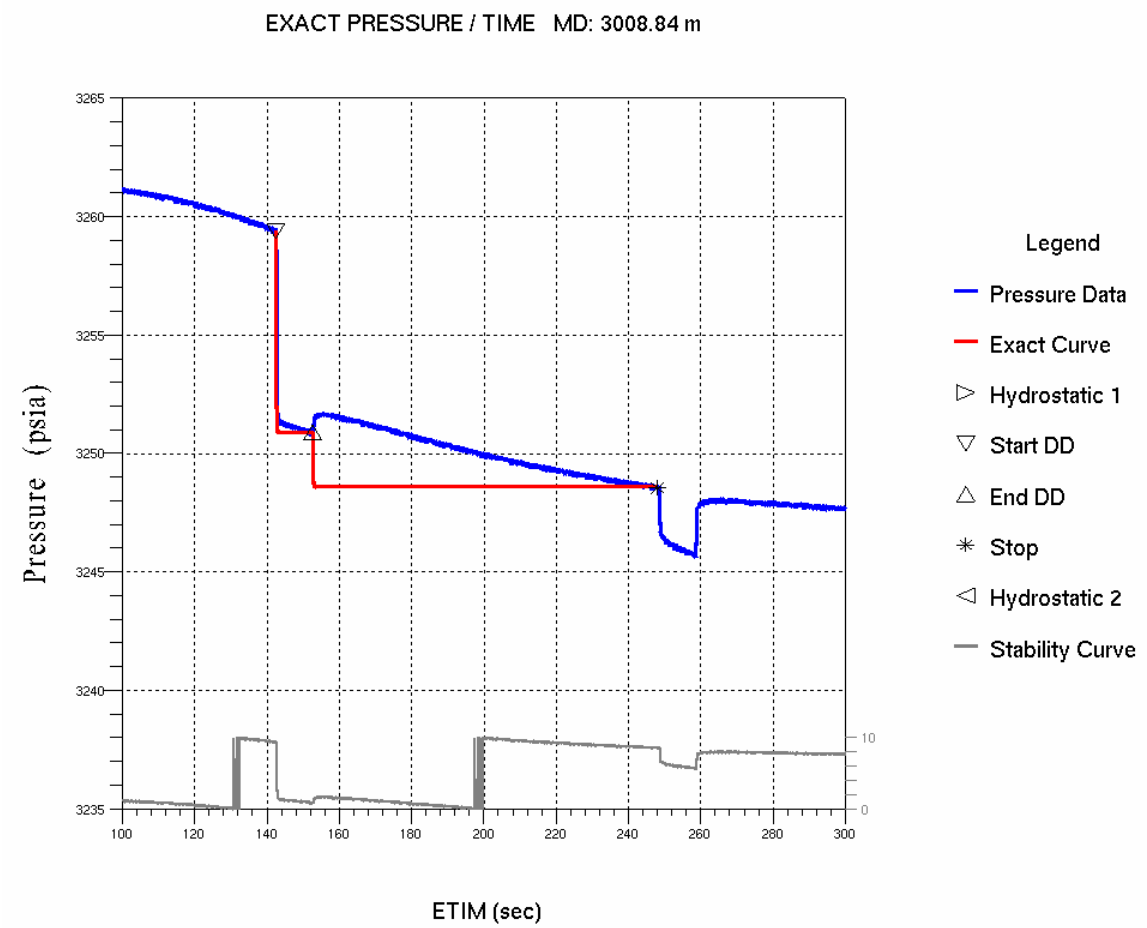
GeoTap Pretest Test# 1.1
MD 3008.84 m TVD 0.00 m 06-11-2006 05:03



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3008.84	3259.43	1.45	395	1.48	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.98	0.56	0.15	4.26e-006	42.50

Test No. 1.2

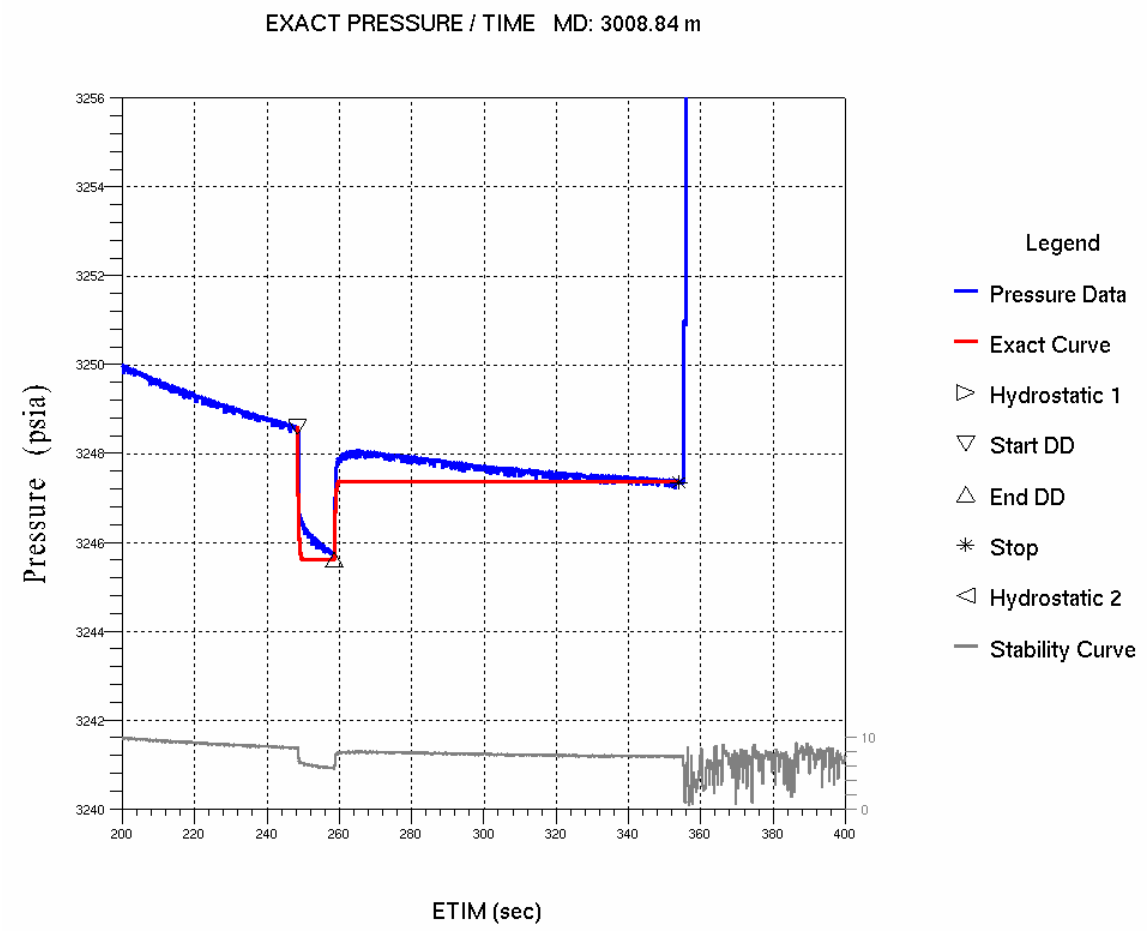
GeoTap Pretest Test# 1.2
MD 3008.84 m TVD 0.00 m 06-11-2006 05:03



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3008.84	3248.59	1.32	5620	1.15	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.98	0.56	0.15	6.93e-004	42.50

Test No. 1.3

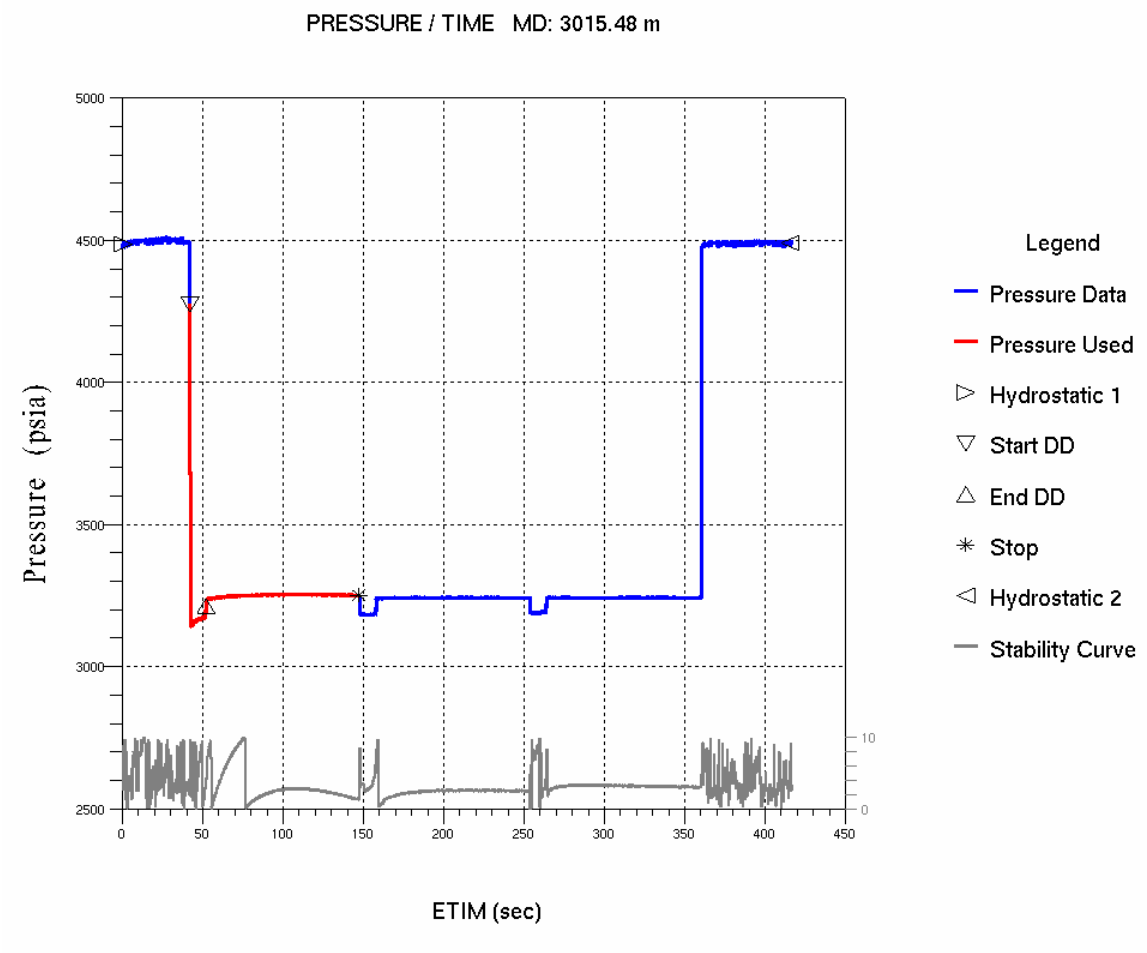
GeoTap Pretest Test# 1.3
MD 3008.84 m TVD 0.00 m 06-11-2006 05:03



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3008.84	3247.37	0.26	3180	1.00	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.98	0.56	0.15	2.57e-003	42.50

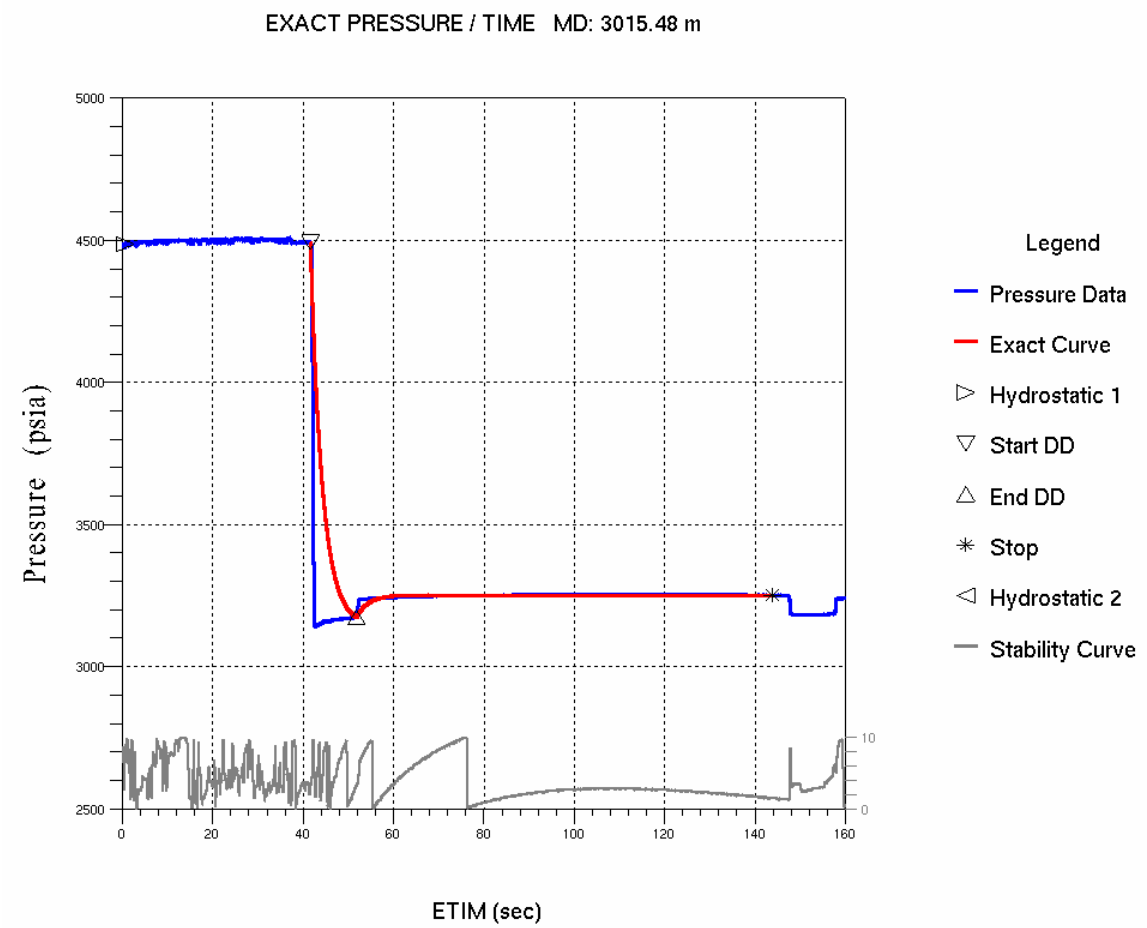
Test No. 2

GeoTap Pretest Test# 2
MD 3015.48 m TVD 0.00 m 06-11-2006 06:03



Test No. 2.1

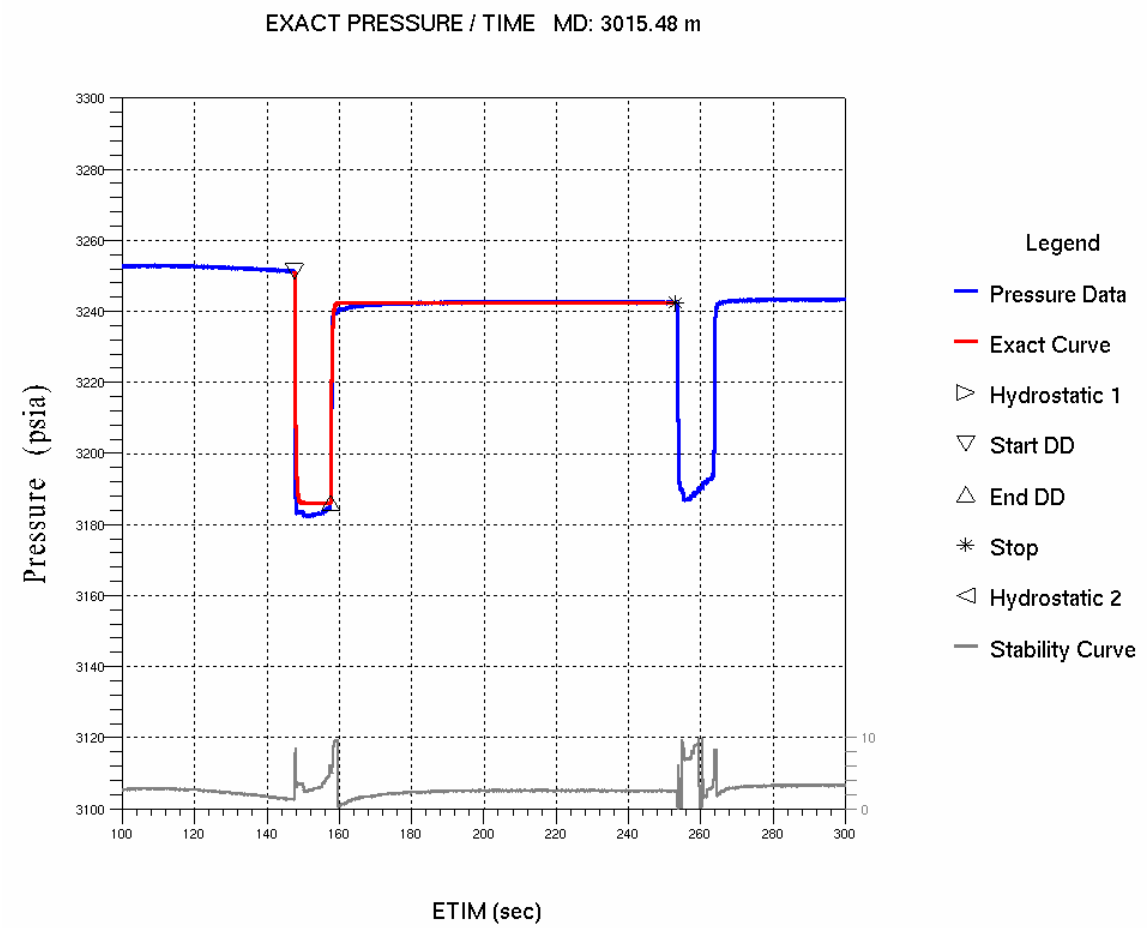
GeoTap Pretest Test# 2.1
MD 3015.48 m TVD 0.00 m 06-11-2006 06:03



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3015.48	3251.51	1.11	70.4	1.03	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.98	0.56	0.15	7.76e-006	42.50

Test No. 2.2

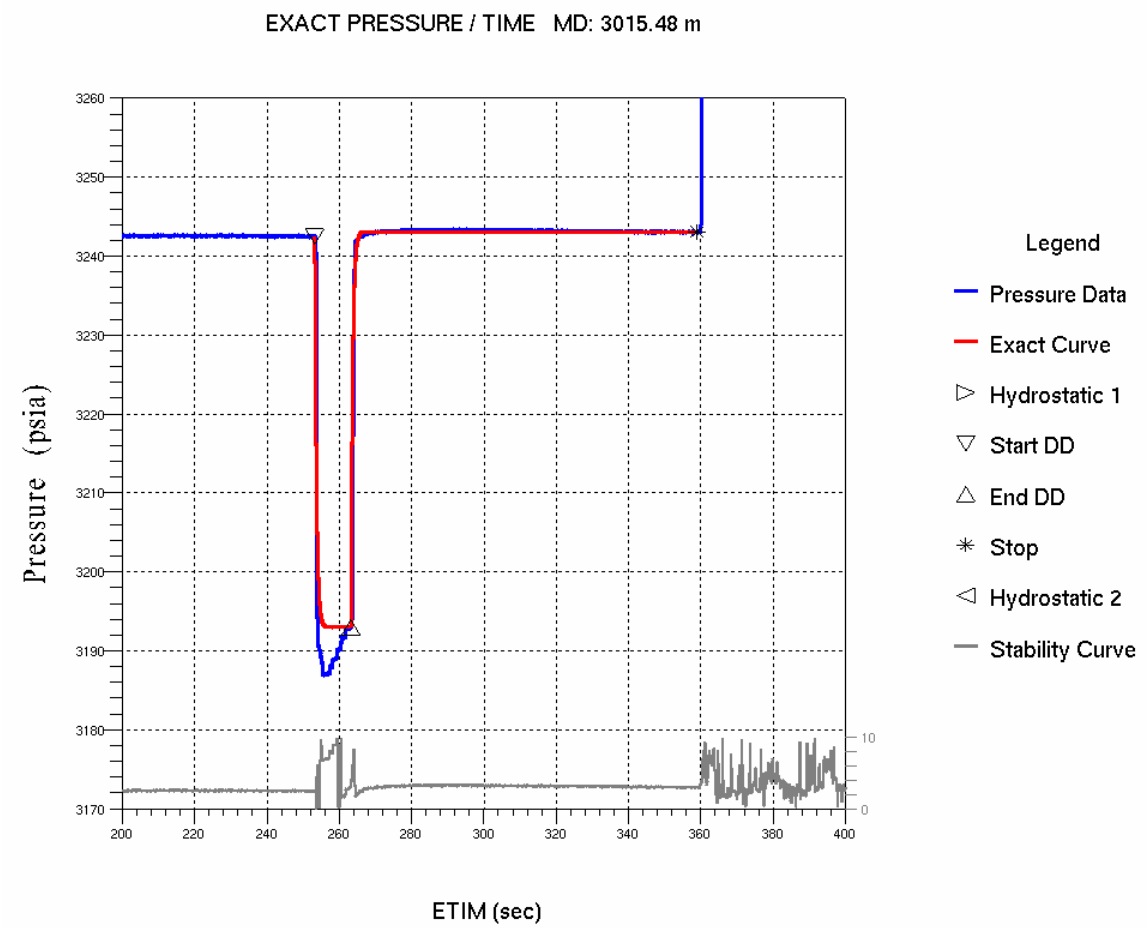
GeoTap Pretest Test# 2.3
MD 3015.48 m TVD 0.00 m 06-11-2006 06:03



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3015.48	3242.39	0.17	101	0.99	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.00	0.56	0.15	8.93e-005	42.50

Test No. 2.3

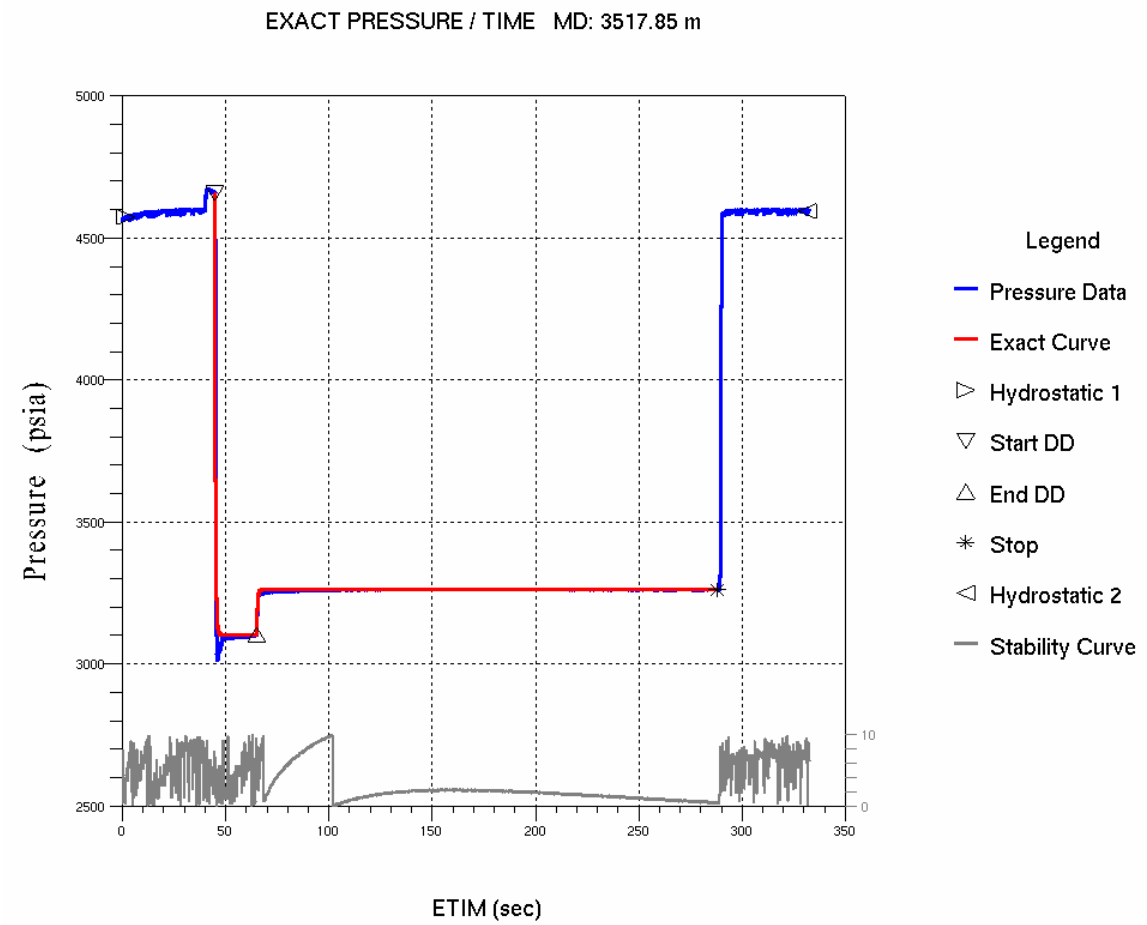
GeoTap Pretest Test# 2.4
MD 3015.48 m TVD 0.00 m 06-11-2006 06:03



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3015.48	3243.09	0.15	114	0.98	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.00	0.56	0.15	1.07e-004	42.50

Test No. 3

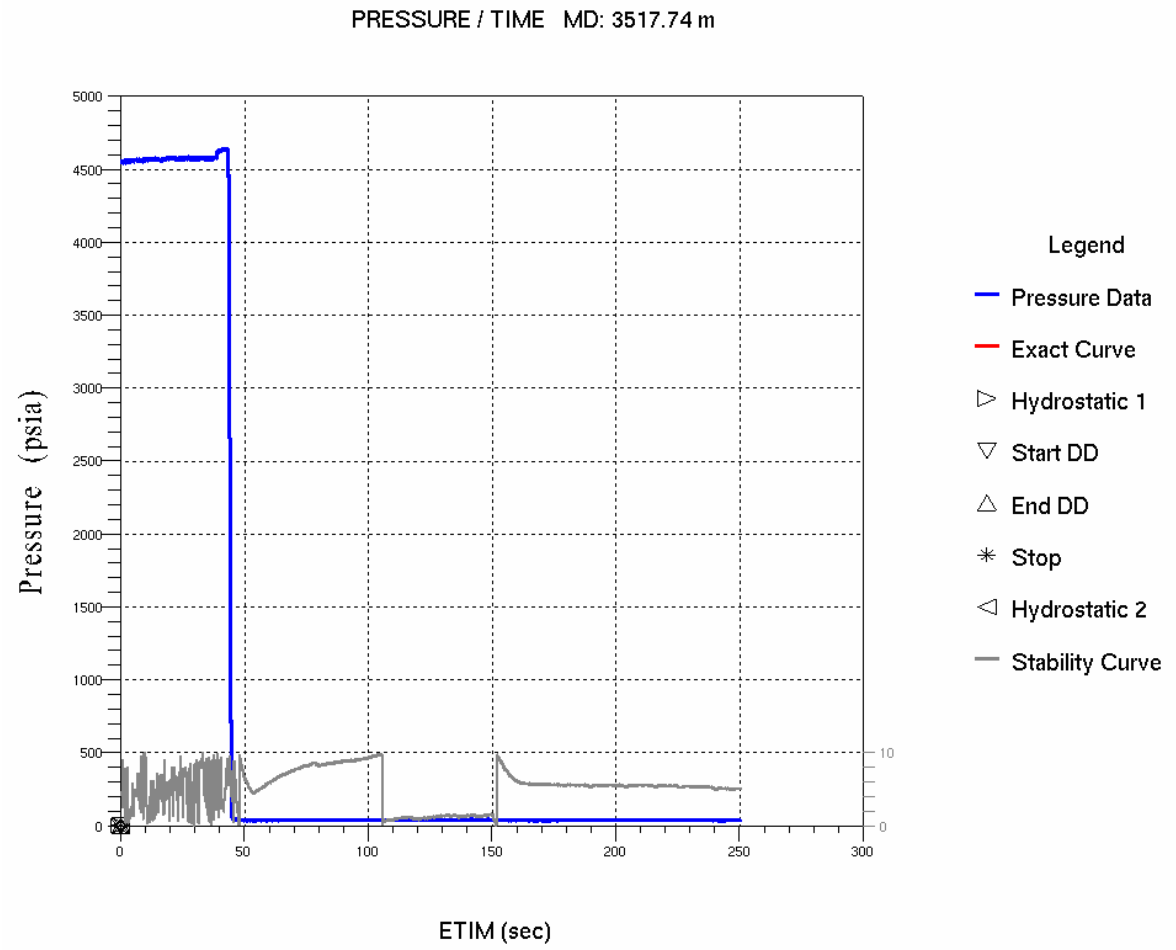
GeoTap Pretest Test# 3
MD 3517.85 m TVD 0.00 m 06-13-2006 19:51



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3517.85	3260.47	1.24	17.9	0.98	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.49	0.56	0.15	2.18e-006	42.50

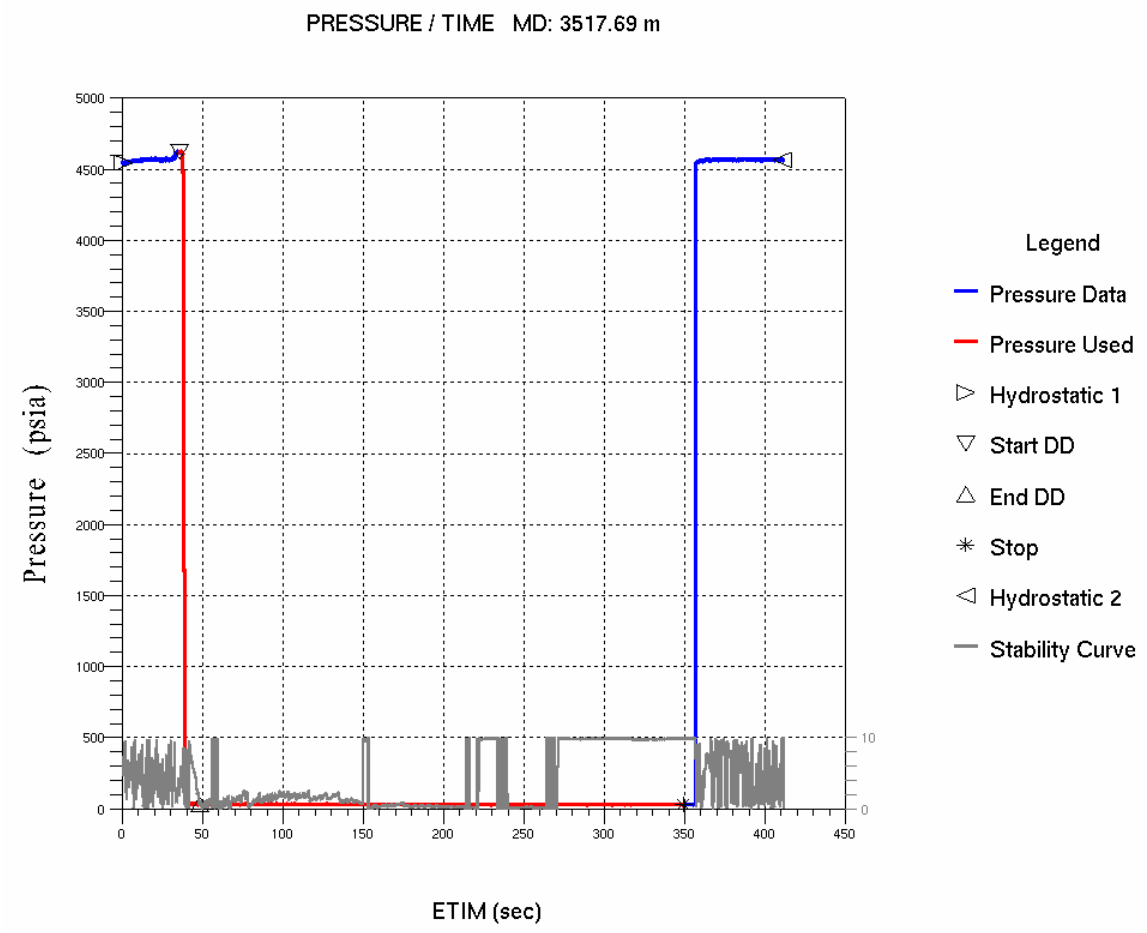
Test No. 4

GeoTap Pretest Test# 4
MD 3517.74 m TVD 0.00 m 06-13-2006 20:52



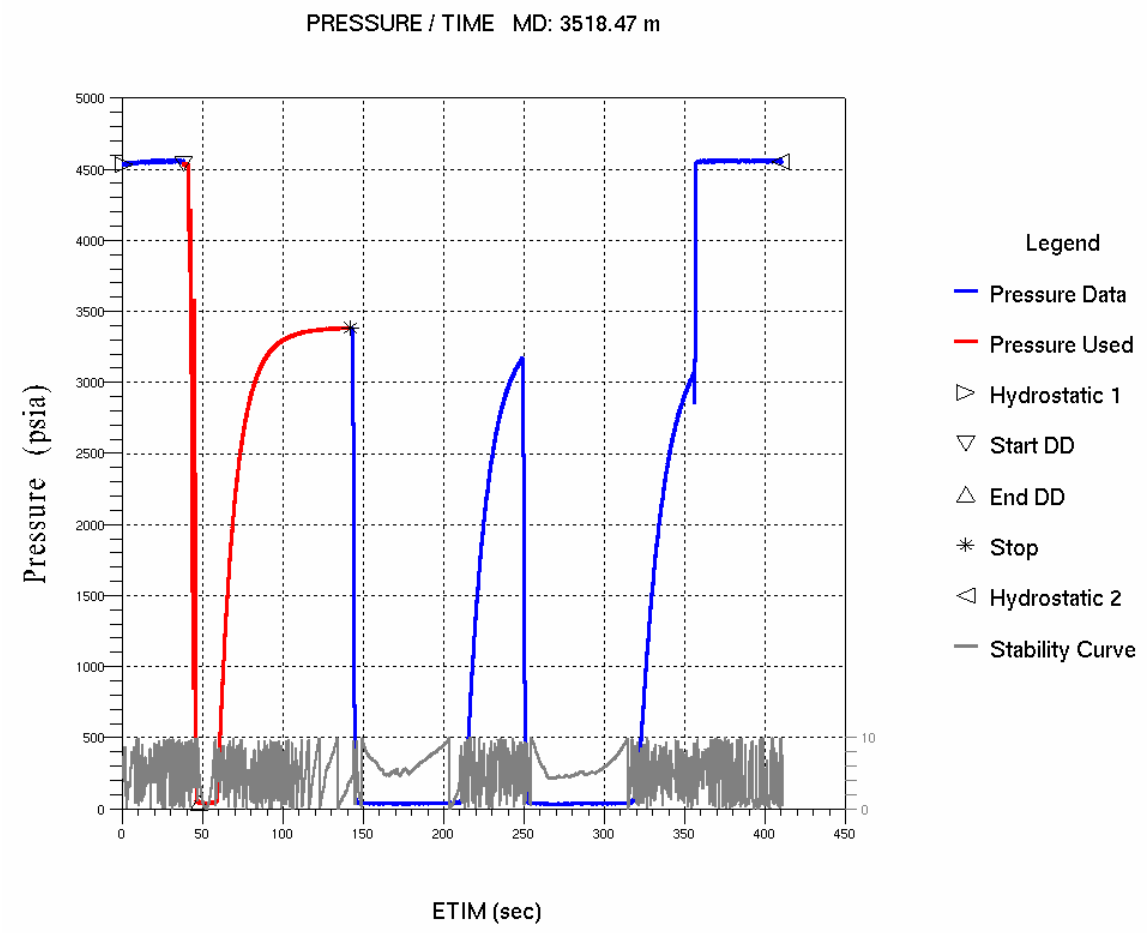
Test No. 5

GeoTap Pretest Test# 5
MD 3517.69 m TVD 0.00 m 06-13-2006 21:12



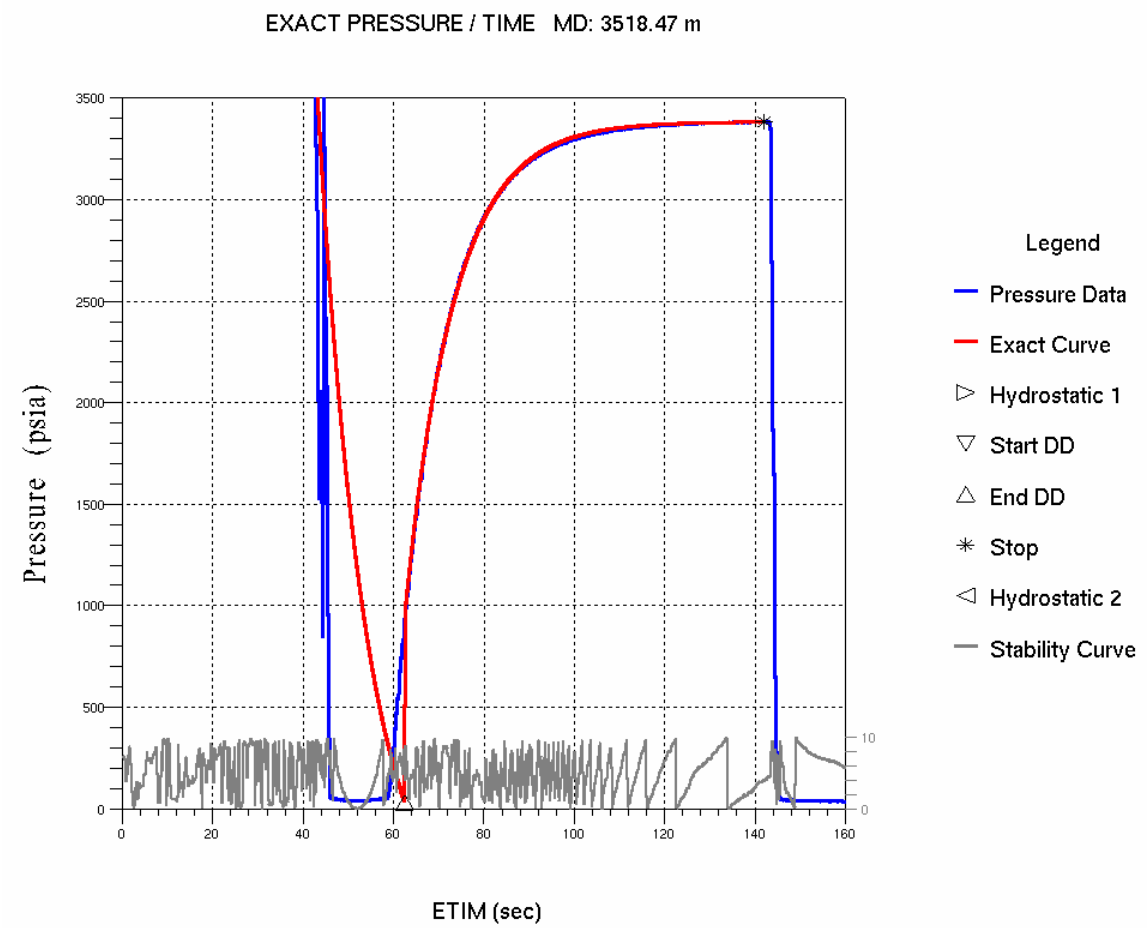
Test No. 6

GeoTap Pretest Test# 6
MD 3518.47 m TVD 0.00 m 06-13-2006 21:51



Test No. 6.1

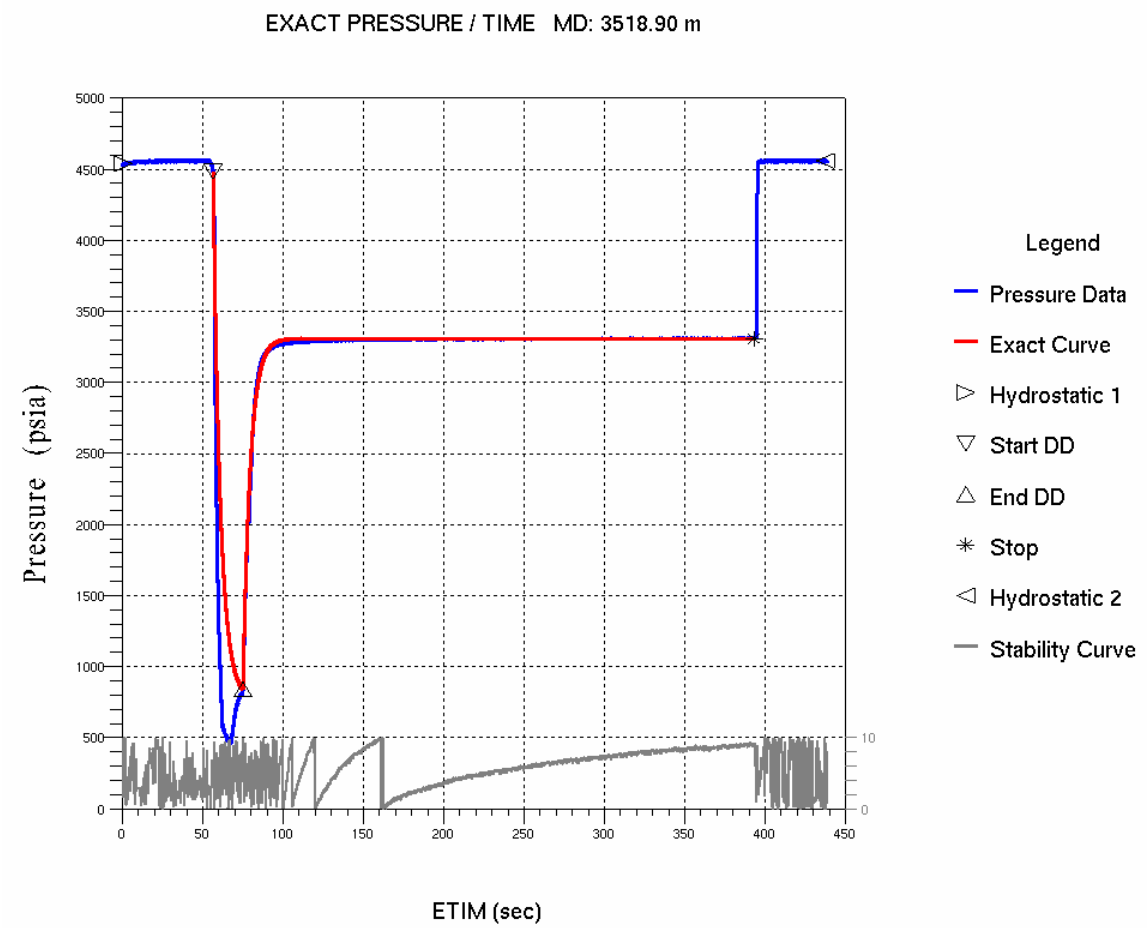
GeoTap Pretest Test# 6.1
MD 3518.47 m TVD 0.00 m 06-13-2006 21:51



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3518.47	3383.95	7.17	0.943	0.88	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.46	0.56	0.15	1.94e-006	42.50

Test No. 7

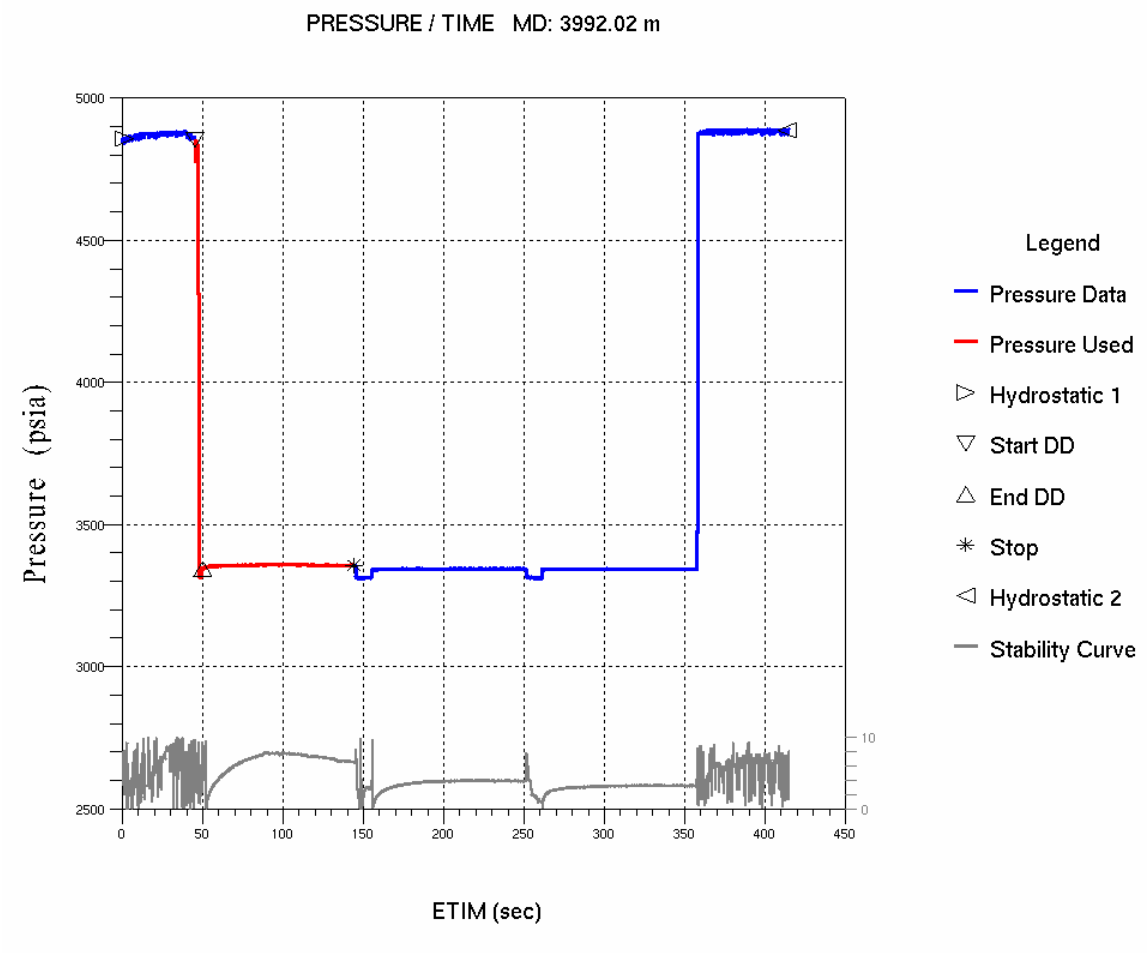
GeoTap Pretest Test# 7
MD 3518.90 m TVD 0.00 m 06-13-2006 22:19



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3518.90	3309.30	4.97	1.23	0.96	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.54	0.56	0.15	3.84e-006	42.50

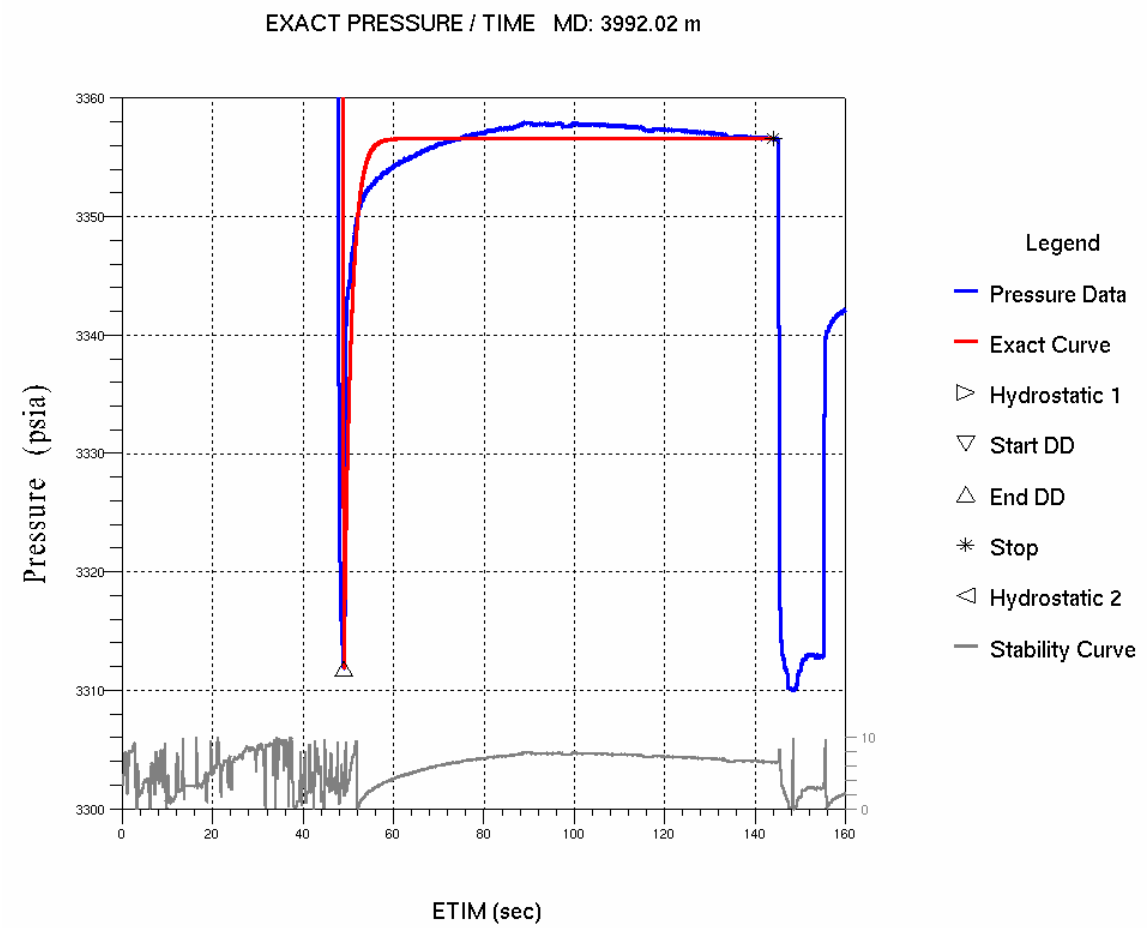
Test No. 8

GeoTap Pretest Test# 8
MD 3992.02 m TVD 0.00 m 06-15-2006 05:16



Test No. 8.1

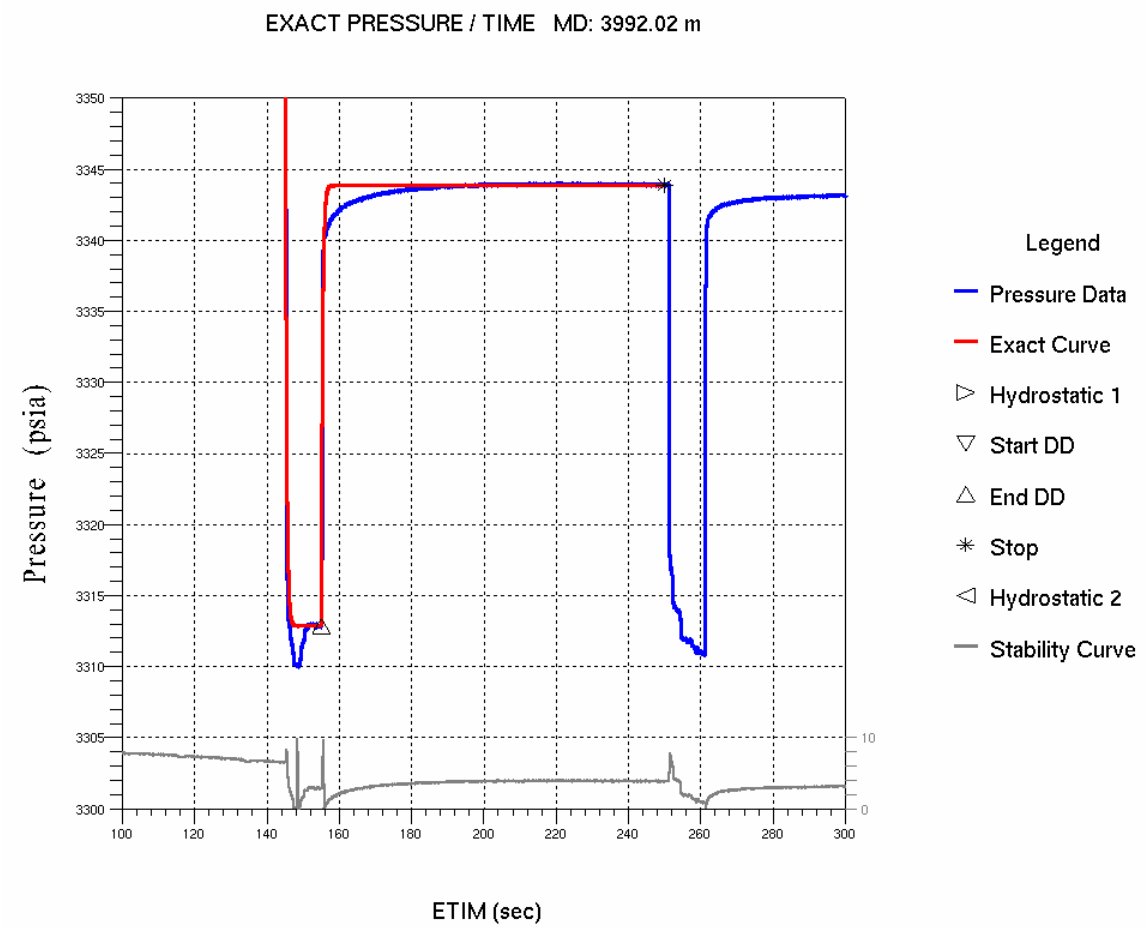
GeoTap Pretest Test# 8.1
MD 3992.02 m TVD 0.00 m 06-15-2006 05:16



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3992.02	3356.59	0.81	454	0.90	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	5.00	0.56	0.15	4.18e-005	42.50

Test No. 8.2

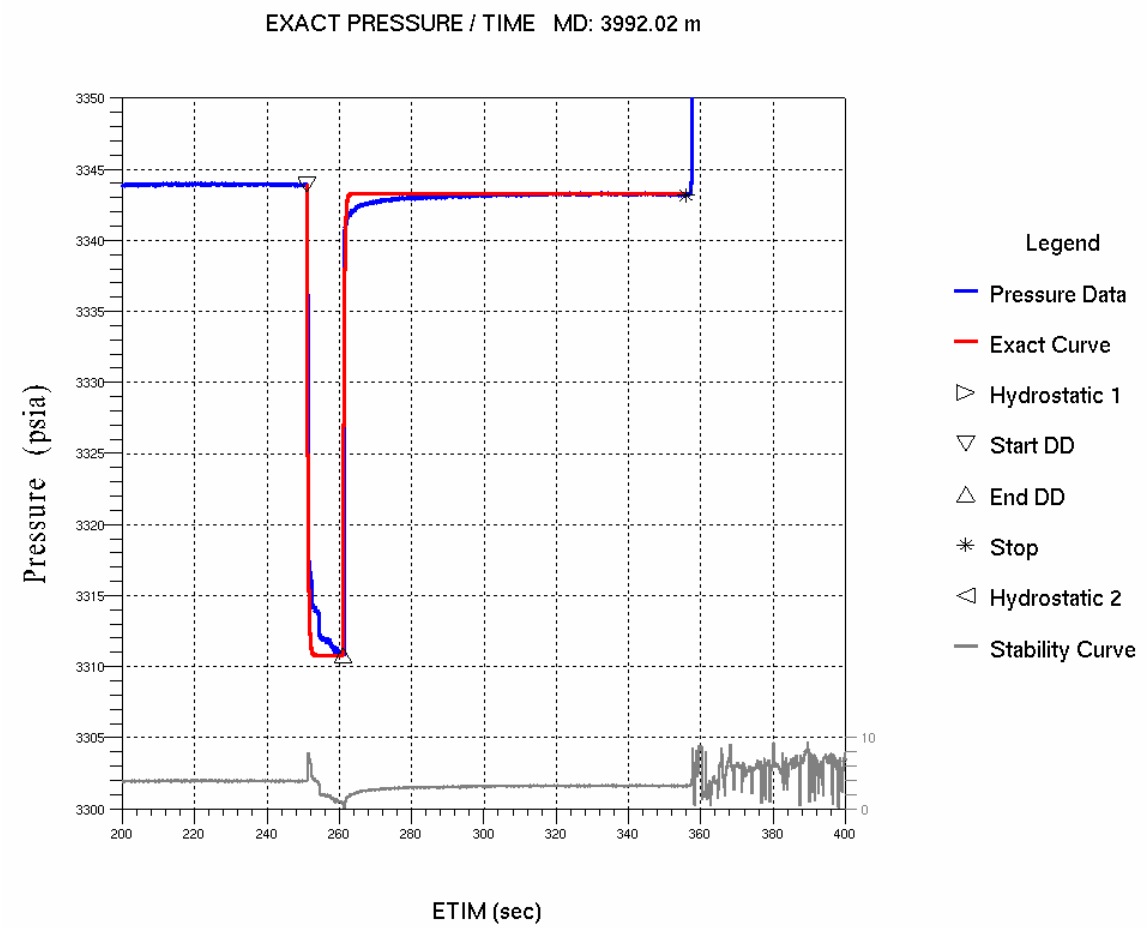
GeoTap Pretest Test# 8.2
MD 3992.02 m TVD 0.00 m 06-15-2006 05:16



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3992.02	3343.84	0.15	185	0.99	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.00	0.56	0.15	1.23e-004	42.50

Test No. 8.3

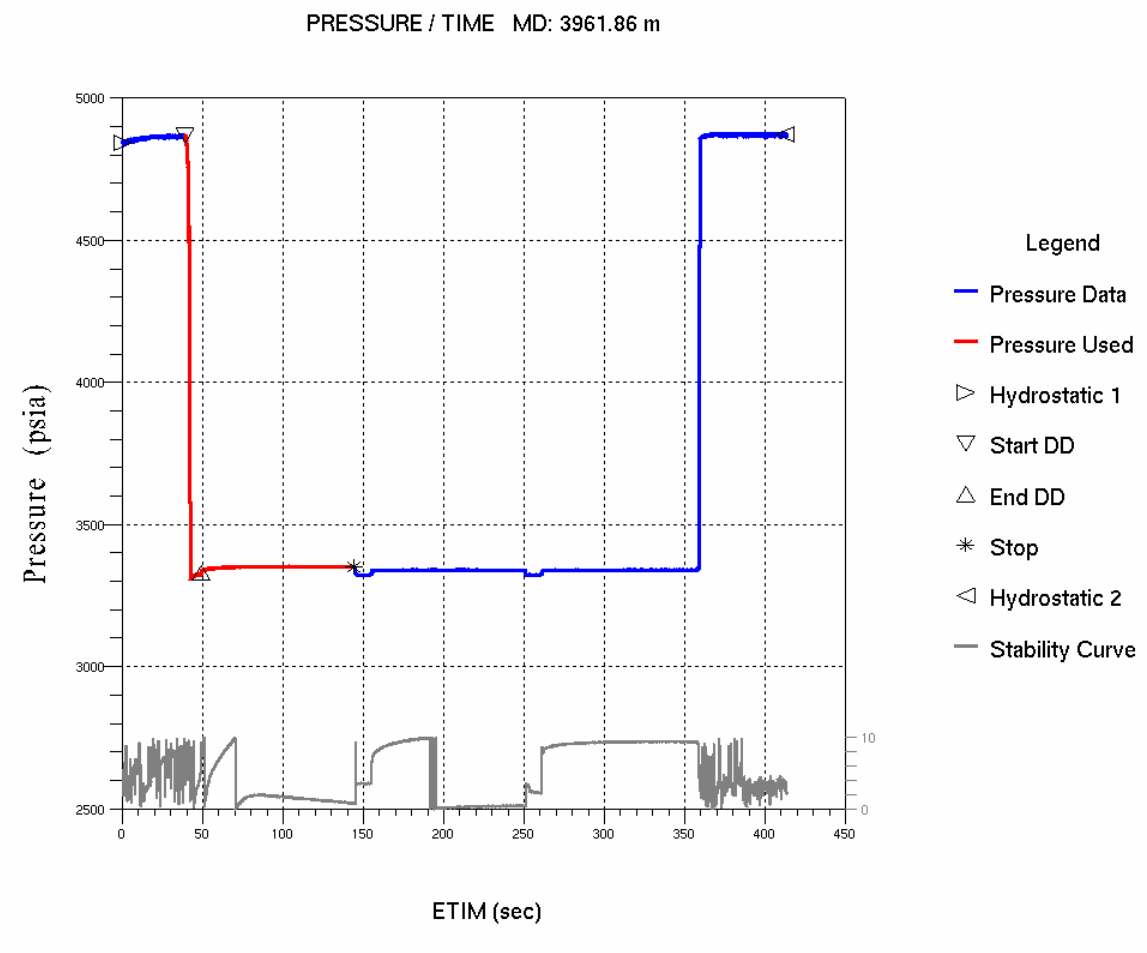
GeoTap Pretest Test# 8.3
MD 3992.02 m TVD 0.00 m 06-15-2006 05:16



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3992.02	3343.27	0.11	176	1.00	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.00	0.56	0.15	1.80e-004	42.50

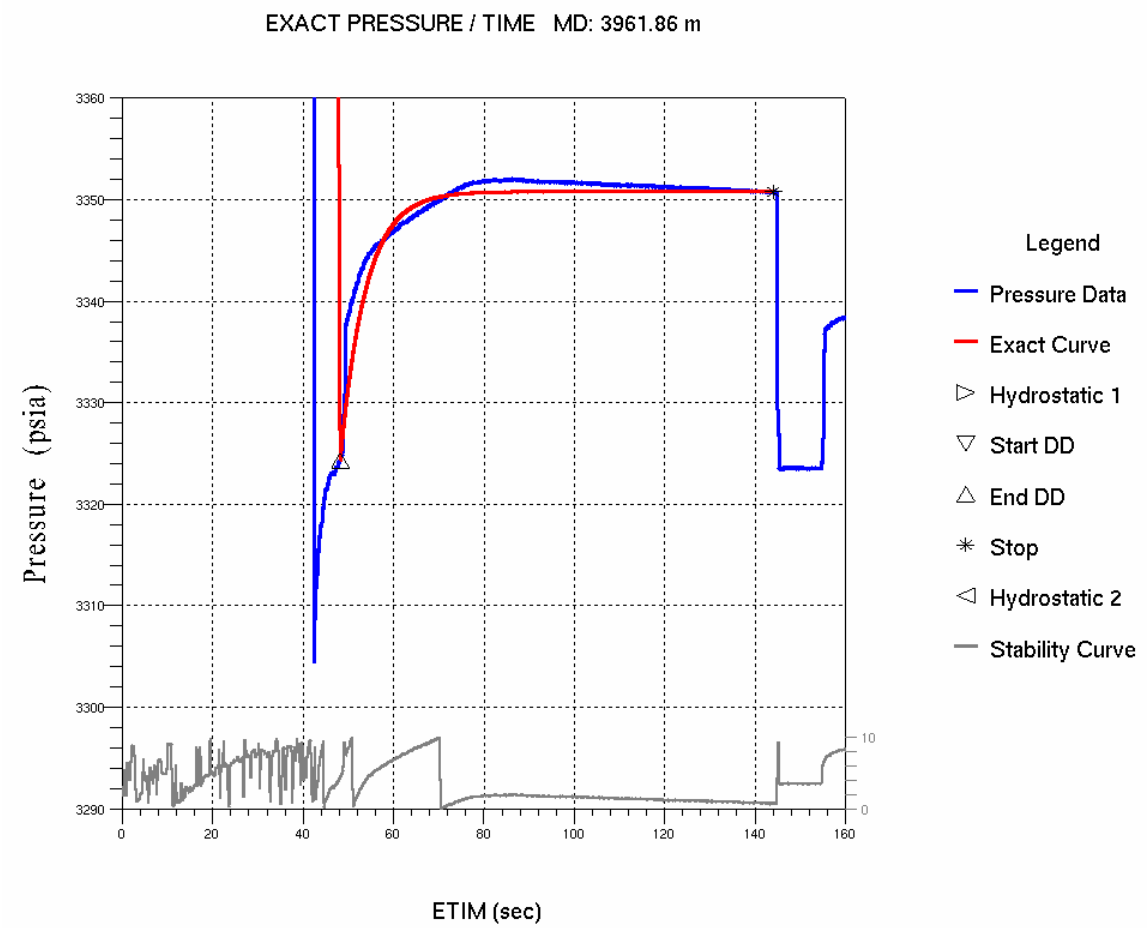
Test No. 9

GeoTap Pretest Test# 9
MD 3961.86 m TVD 0.00 m 06-15-2006 06:57



Test No. 9.1

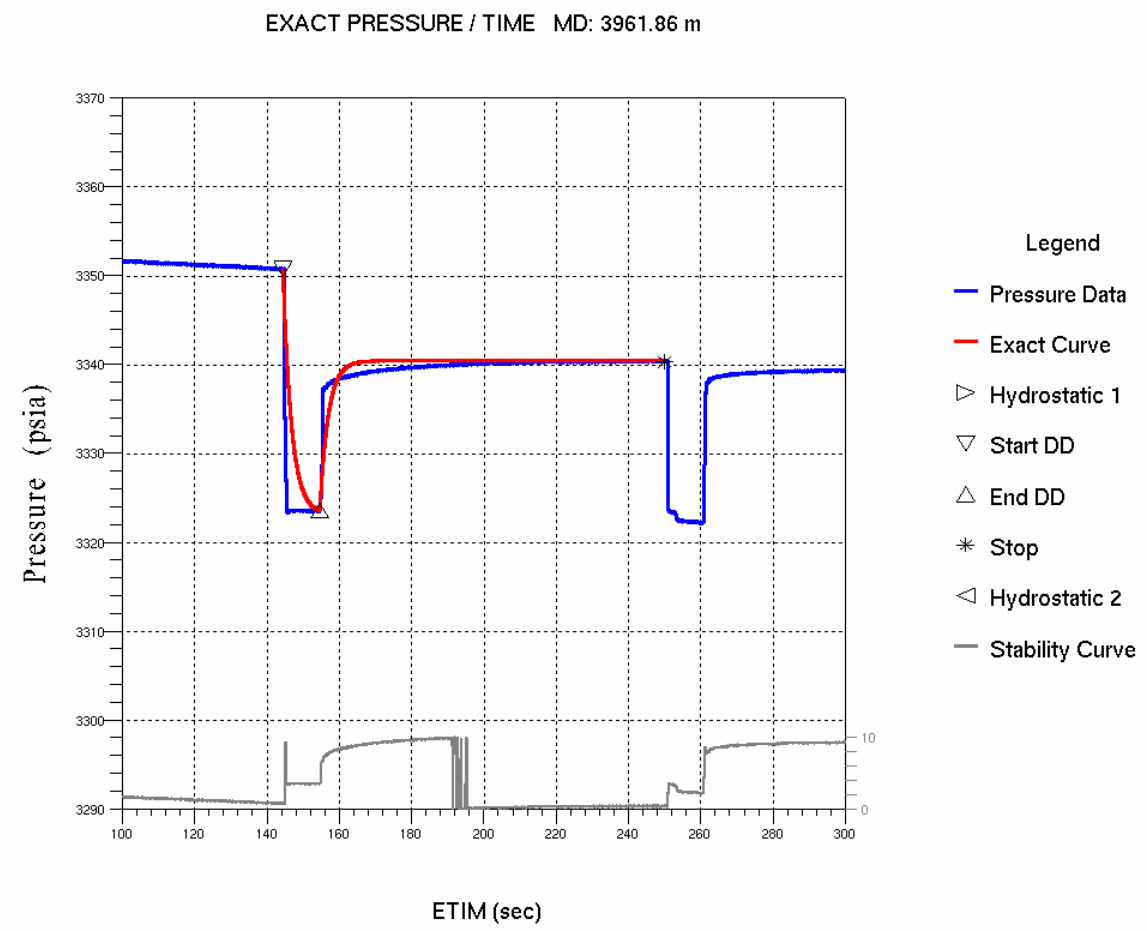
GeoTap Pretest Test# 9.1
MD 3961.86 m TVD 0.00 m 06-15-2006 06:57



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3961.86	3350.80	0.72	214	0.70	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.35	0.56	0.15	1.02e-005	42.50

Test No. 9.2

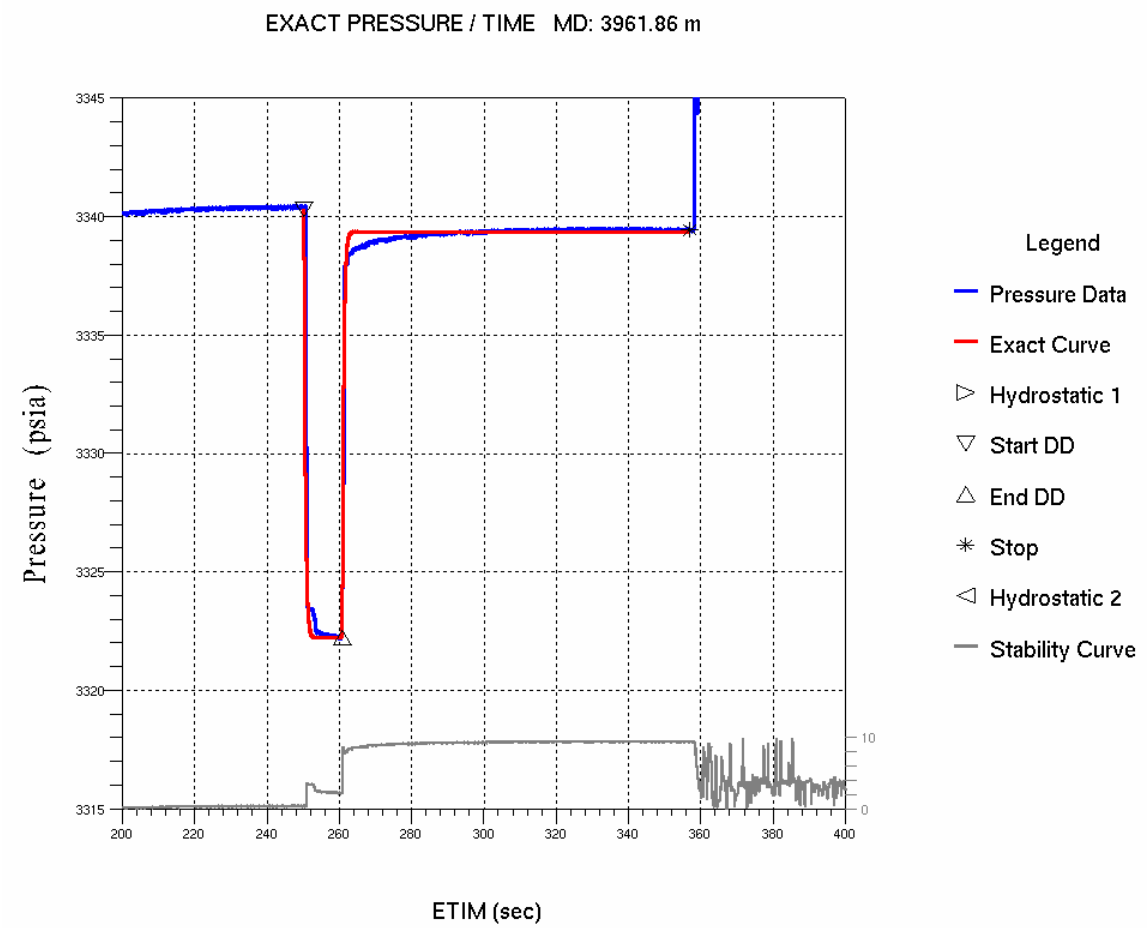
GeoTap Pretest Test# 9.2
MD 3961.86 m TVD 0.00 m 06-15-2006 06:57



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3961.86	3340.43	0.37	329	0.99	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.98	0.56	0.15	2.15e-004	42.50

Test No. 9.3

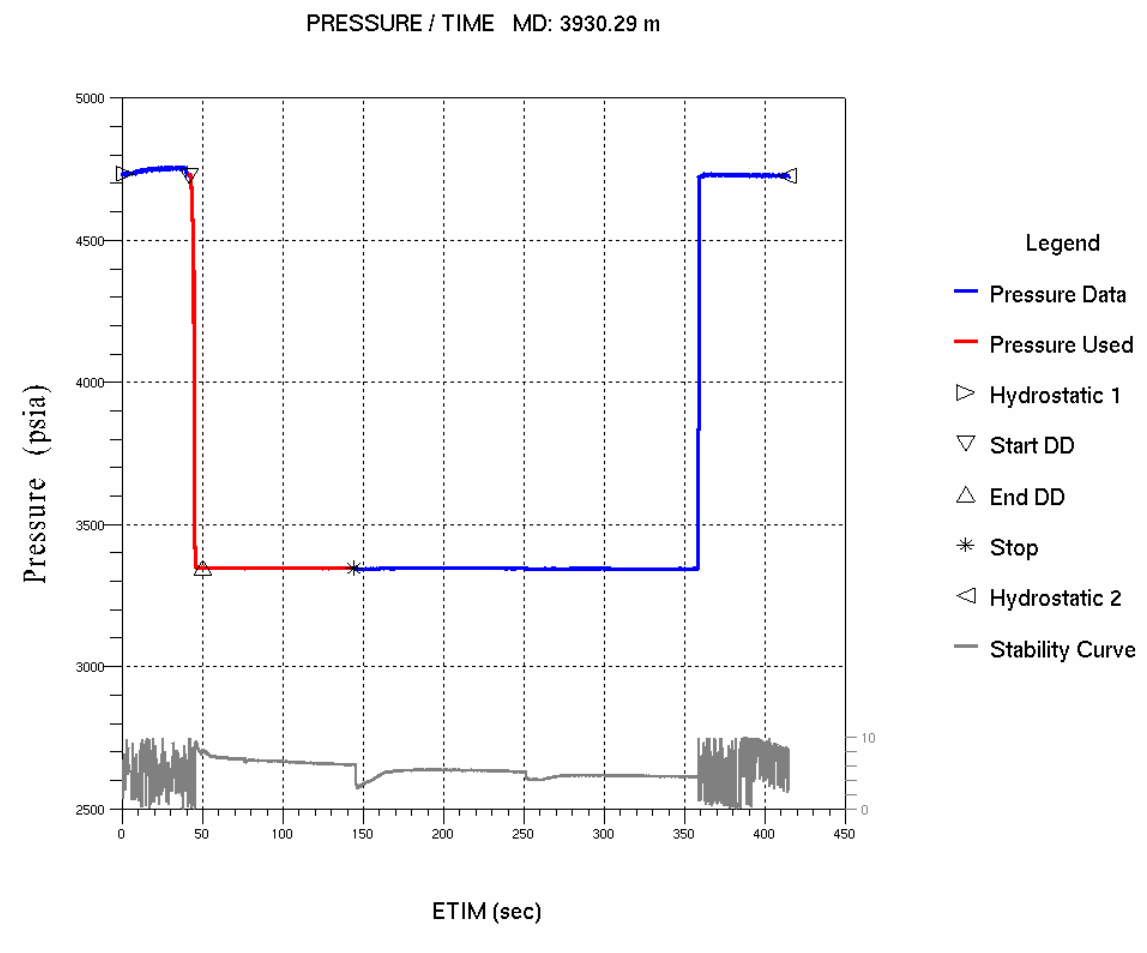
GeoTap Pretest Test# 9.3
MD 3961.86 m TVD 0.00 m 06-15-2006 06:57



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3961.86	3339.37	0.08	315	0.99	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.94	0.56	0.15	2.67e-004	42.50

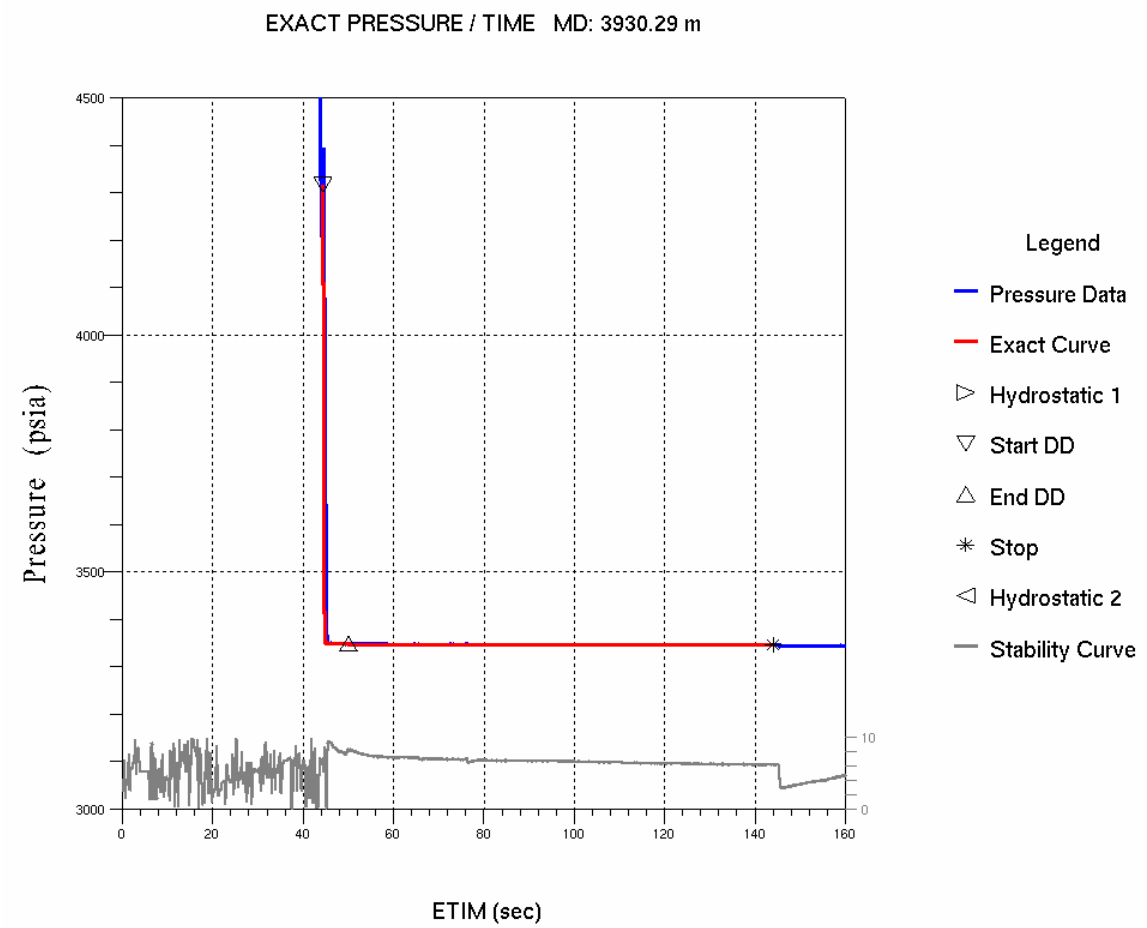
Test No. 10

GeoTap Pretest Test# 10
MD 3930.29 m TVD 0.00 m 06-15-2006 08:57



Test No. 10.1

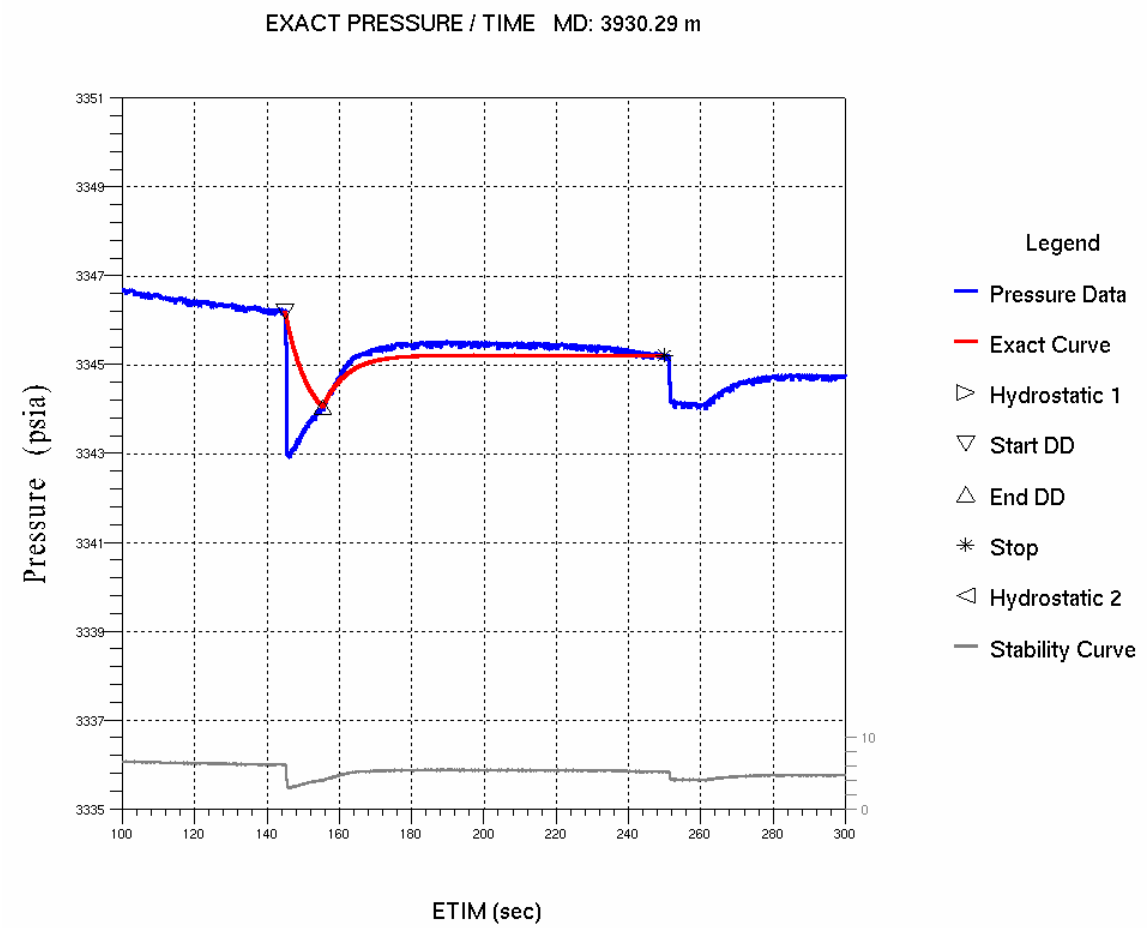
GeoTap Pretest Test# 10.1
MD 3930.29 m TVD 0.00 m 06-15-2006 08:57



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3930.29	3346.23	0.42	10200	1.02	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.79	0.56	0.15	1.54e-005	42.50

Test No. 10.2

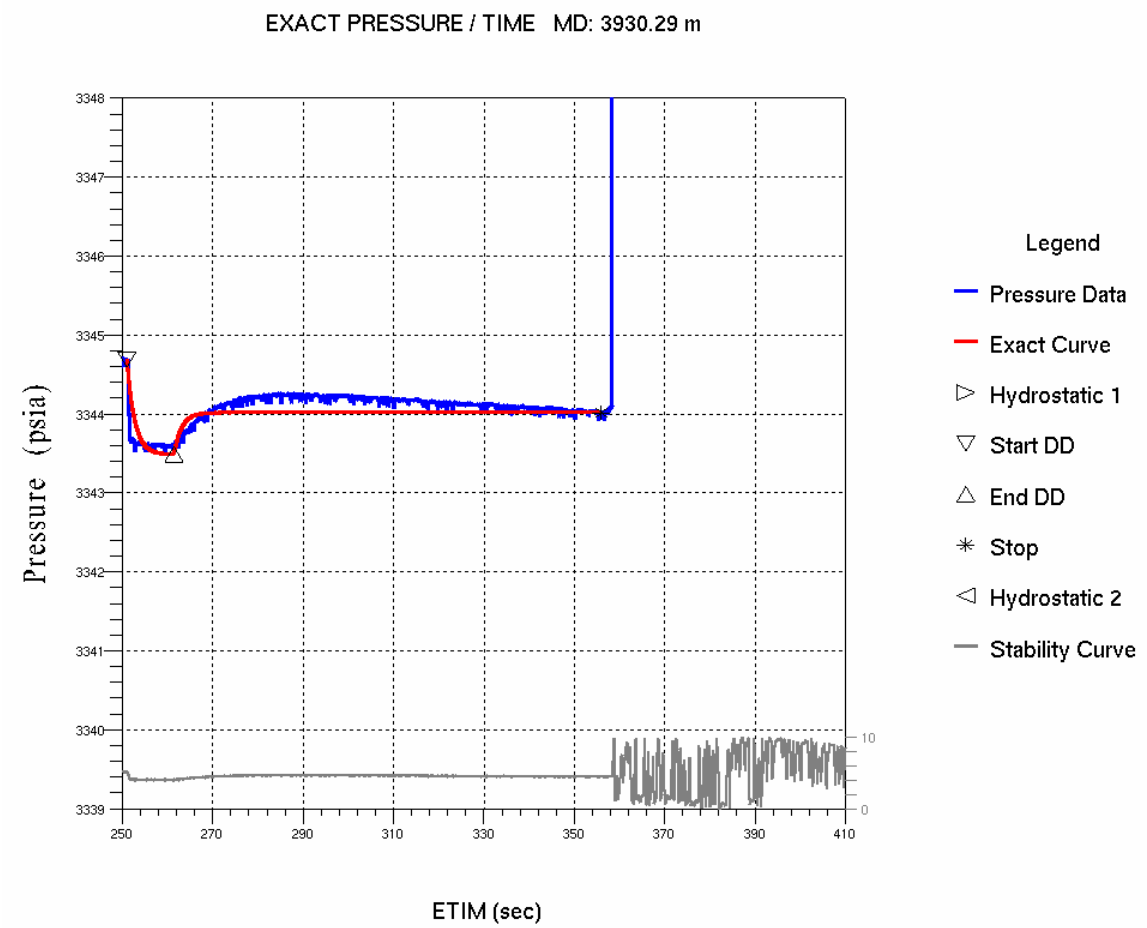
GeoTap Pretest Test# 11.3
MD 3930.29 m TVD 0.00 m 06-15-2006 08:57



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3930.29	3345.21	0.22	3730	8.40	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.96	0.56	0.15	2.57e-003	42.50

Test No. 10.3

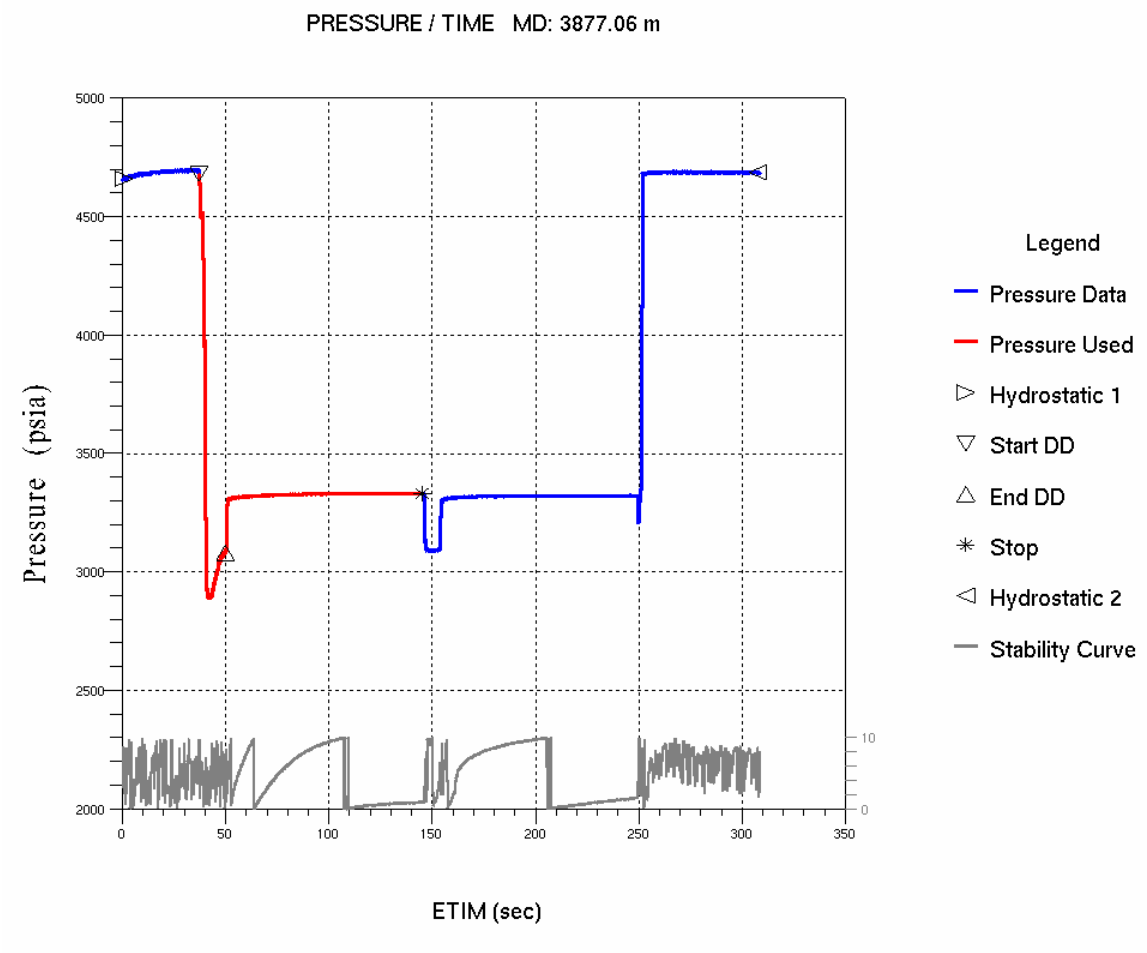
GeoTap Pretest Test# 11.4
MD 3930.29 m TVD 0.00 m 06-15-2006 08:57



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3930.29	3344.52	0.15	> 5500	0.79	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.96	0.56	0.15	7.97e-003	42.50

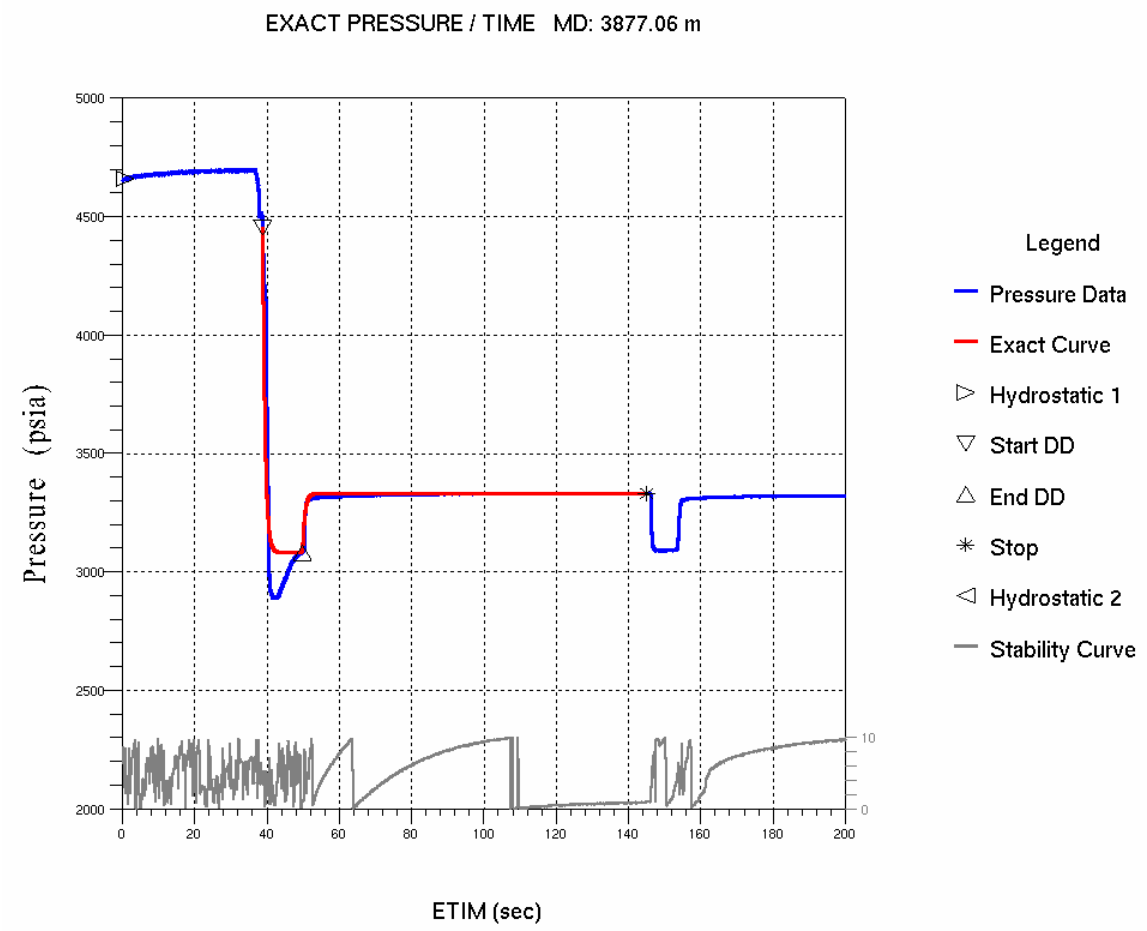
Test No. 11

GeoTap Pretest Test# 11
MD 3877.06 m TVD 0.00 m 06-15-2006 10:03



Test No. 11.1

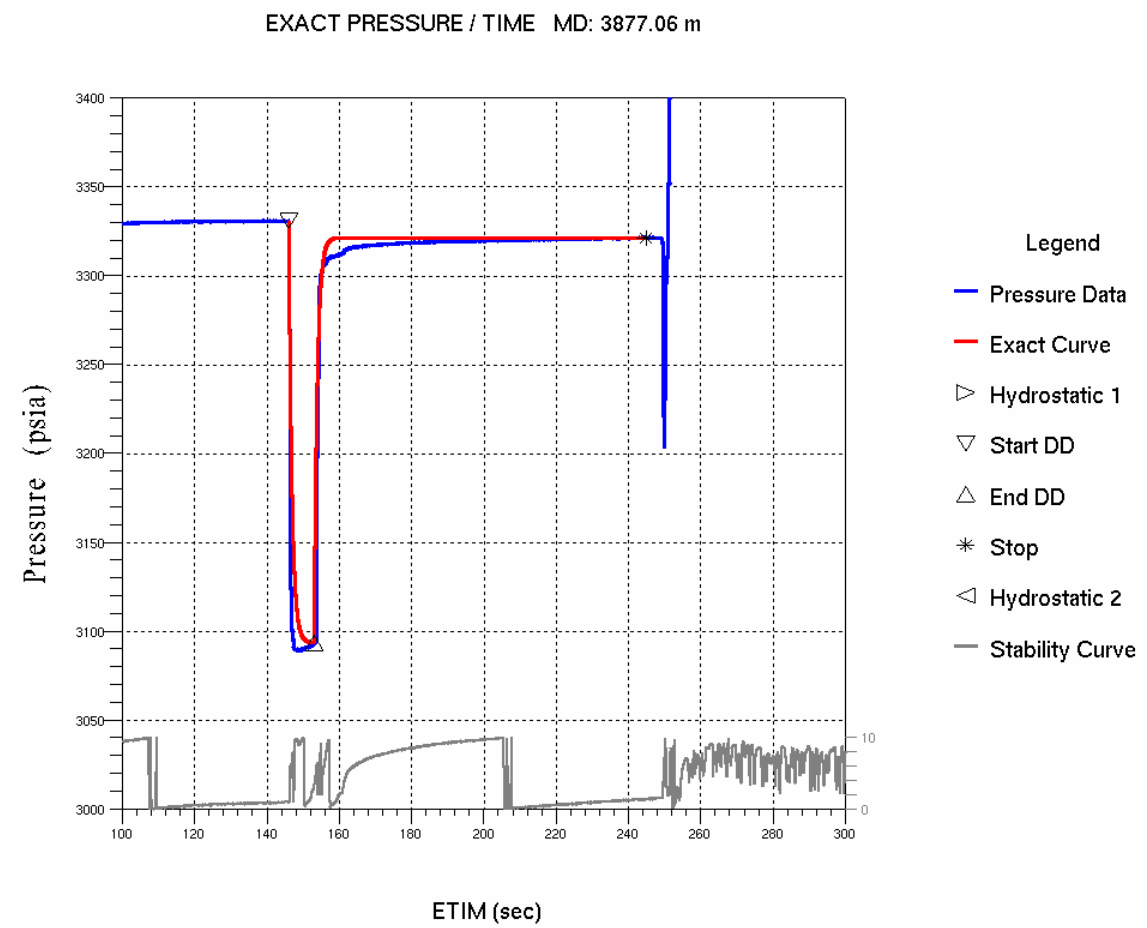
GeoTap Pretest Test# 11.1
MD 3877.06 m TVD 0.00 m 06-15-2006 10:03



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3877.06	3330.95	3.01	20.9	0.99	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.91	0.56	0.15	7.79e-006	42.50

Test No. 11.2

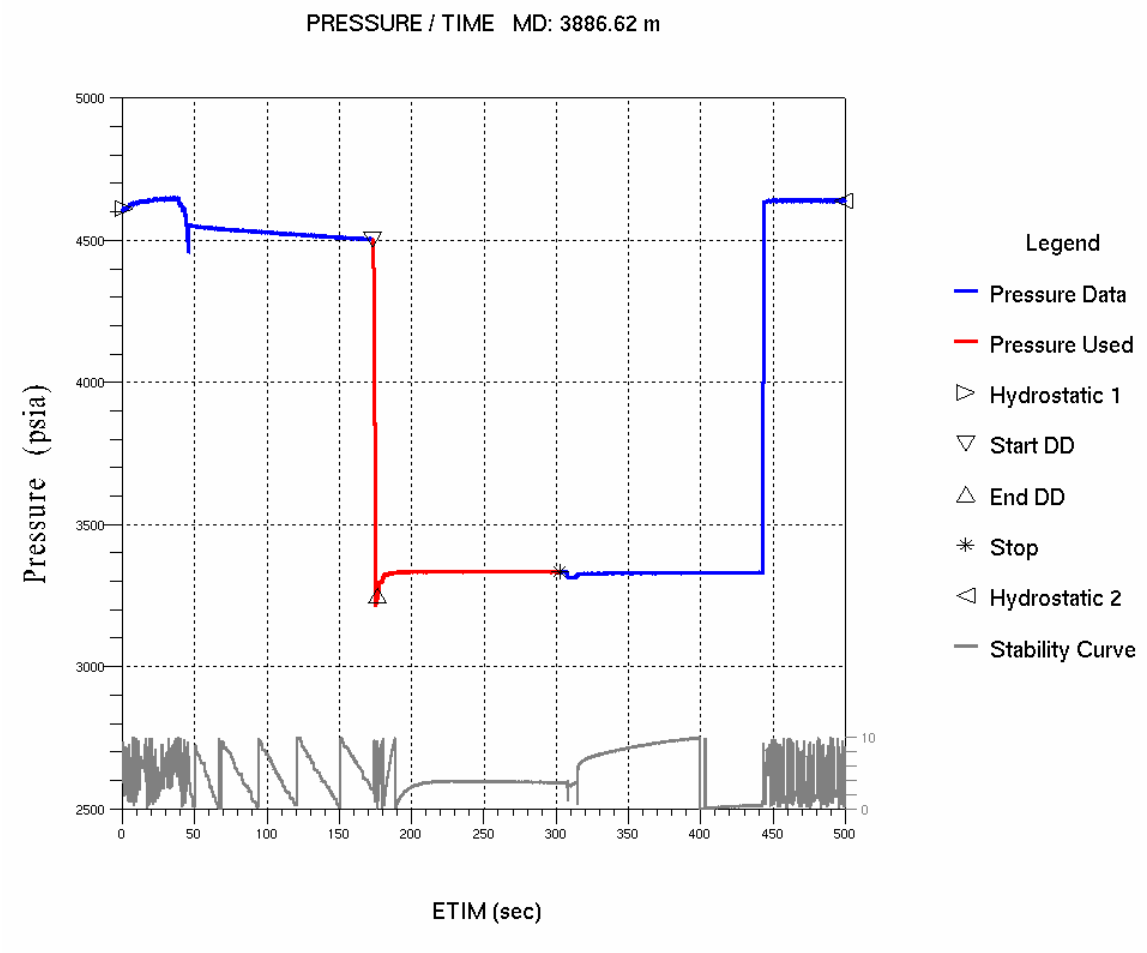
GeoTap Pretest Test# 12.3
MD 3877.06 m TVD 0.00 m 06-15-2006 10:03



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3877.06	3321.40	1.76	35.9	0.98	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.43	0.56	0.15	4.34e-005	42.50

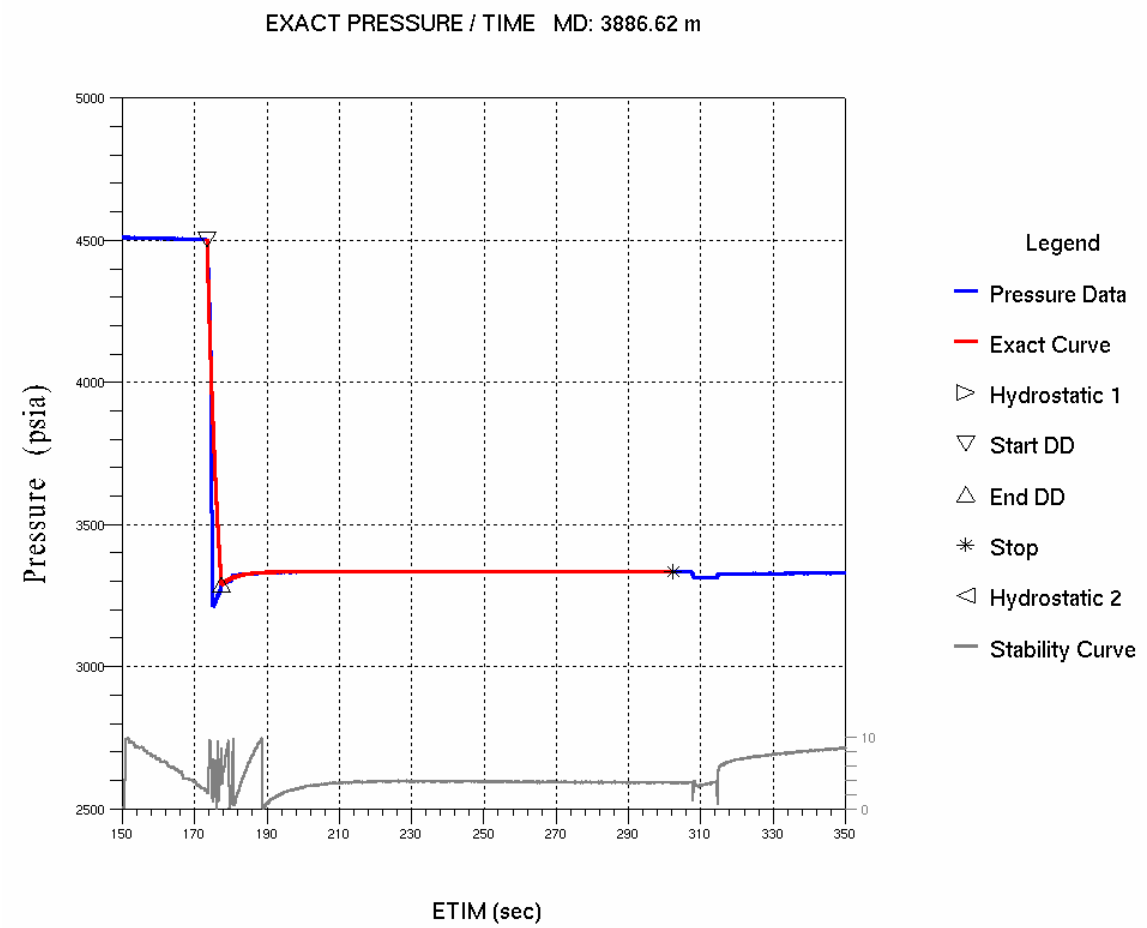
Test No. 12

GeoTap Pretest Test# 12
MD 3886.62 m TVD 0.00 m 06-15-2006 10:33



Test No. 12.2

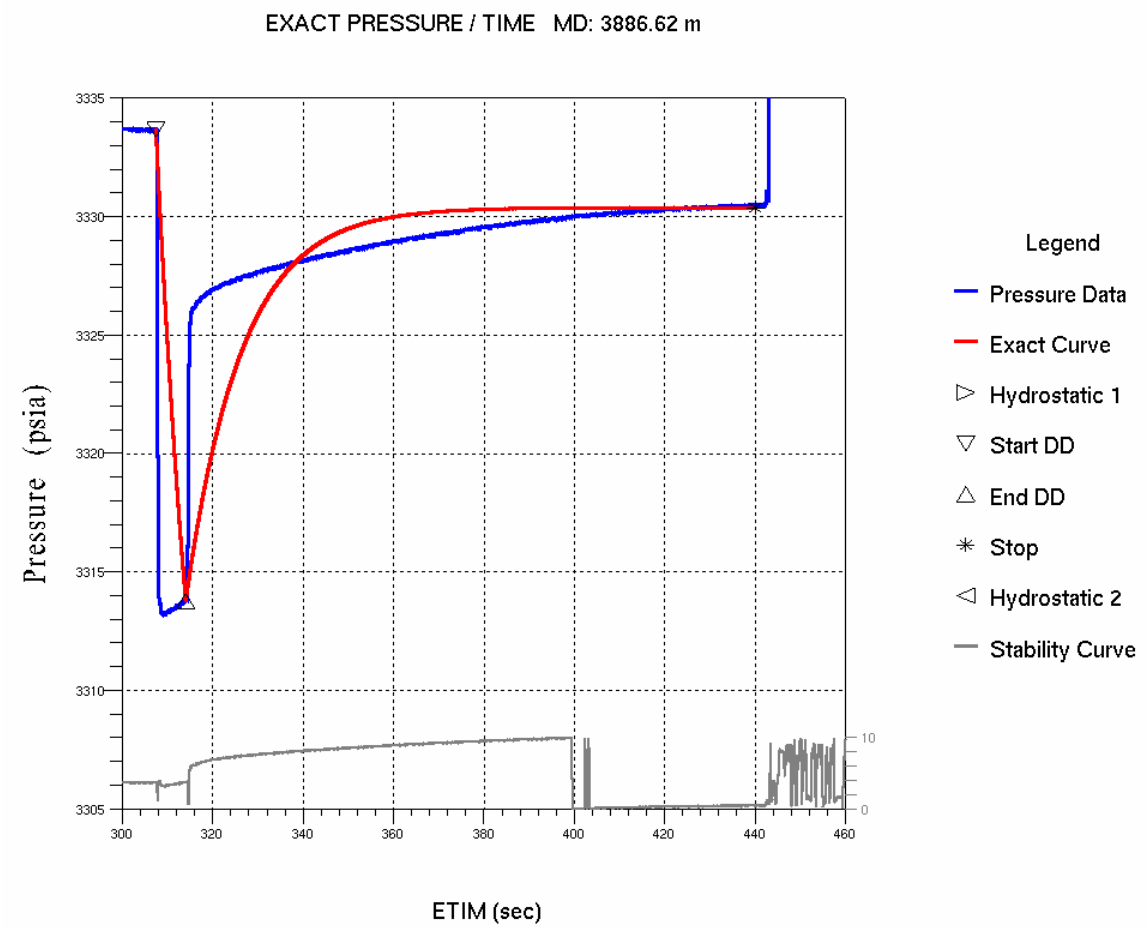
GeoTap Pretest Test# 12.2
MD 3886.62 m TVD 0.00 m 06-15-2006 10:33



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3886.62	3333.71	0.12	199	0.66	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	2.50	0.56	0.15	3.07e-005	42.50

Test No. 12.3

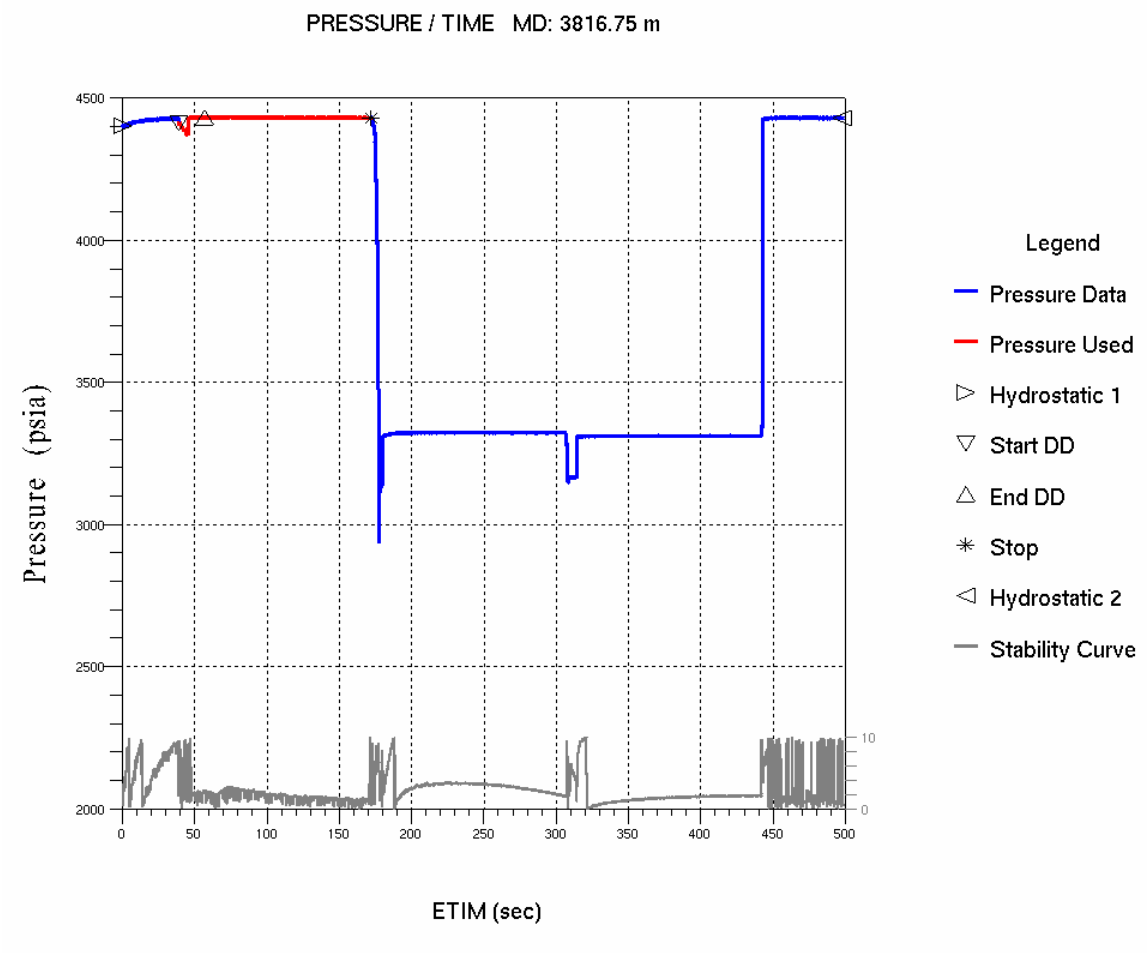
GeoTap Pretest Test# 12.3
MD 3886.62 m TVD 0.00 m 06-15-2006 10:33



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3886.62	3330.38	0.63	217	0.97	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.52	0.56	0.15	5.65e-004	42.50

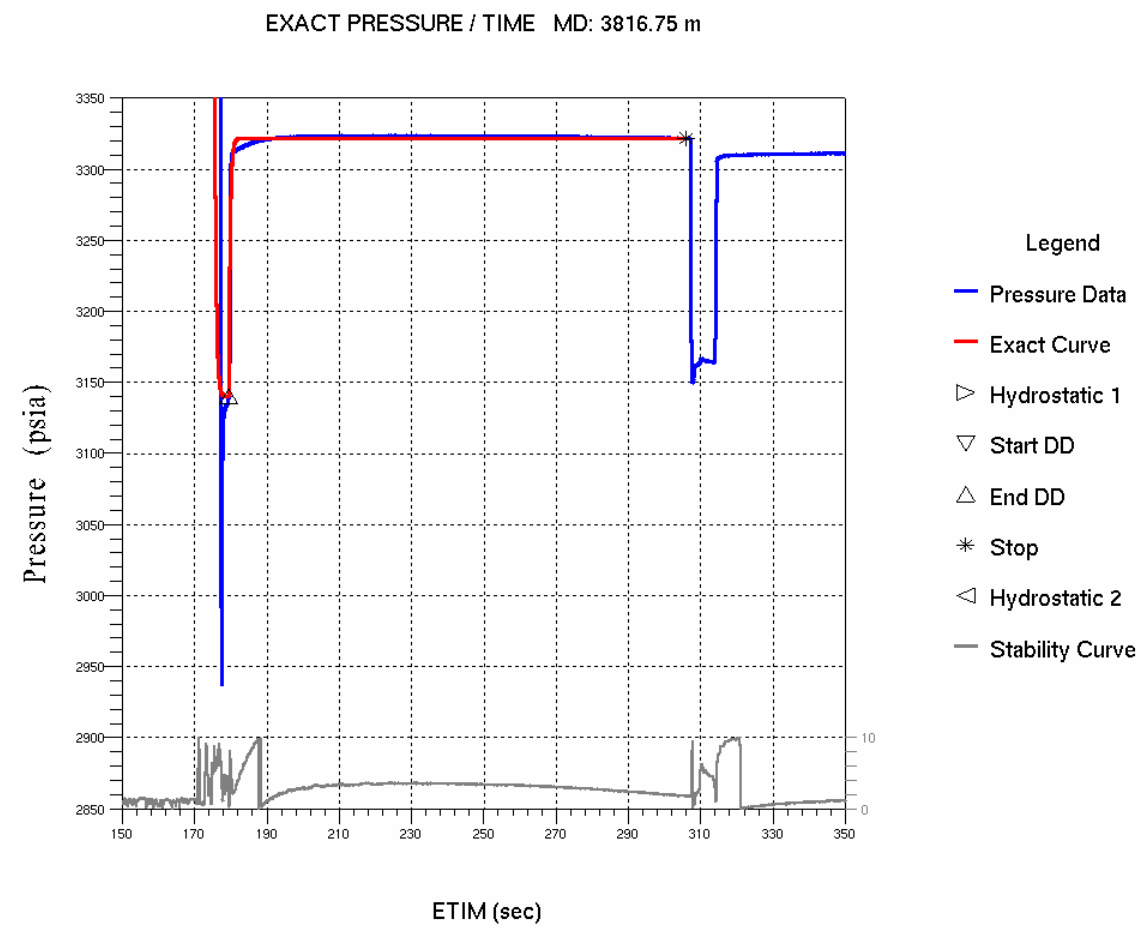
Test No. 13

GeoTap Pretest Test# 13
MD 3816.75 m TVD 0.00 m 06-15-2006 11:37



Test No. 13.2

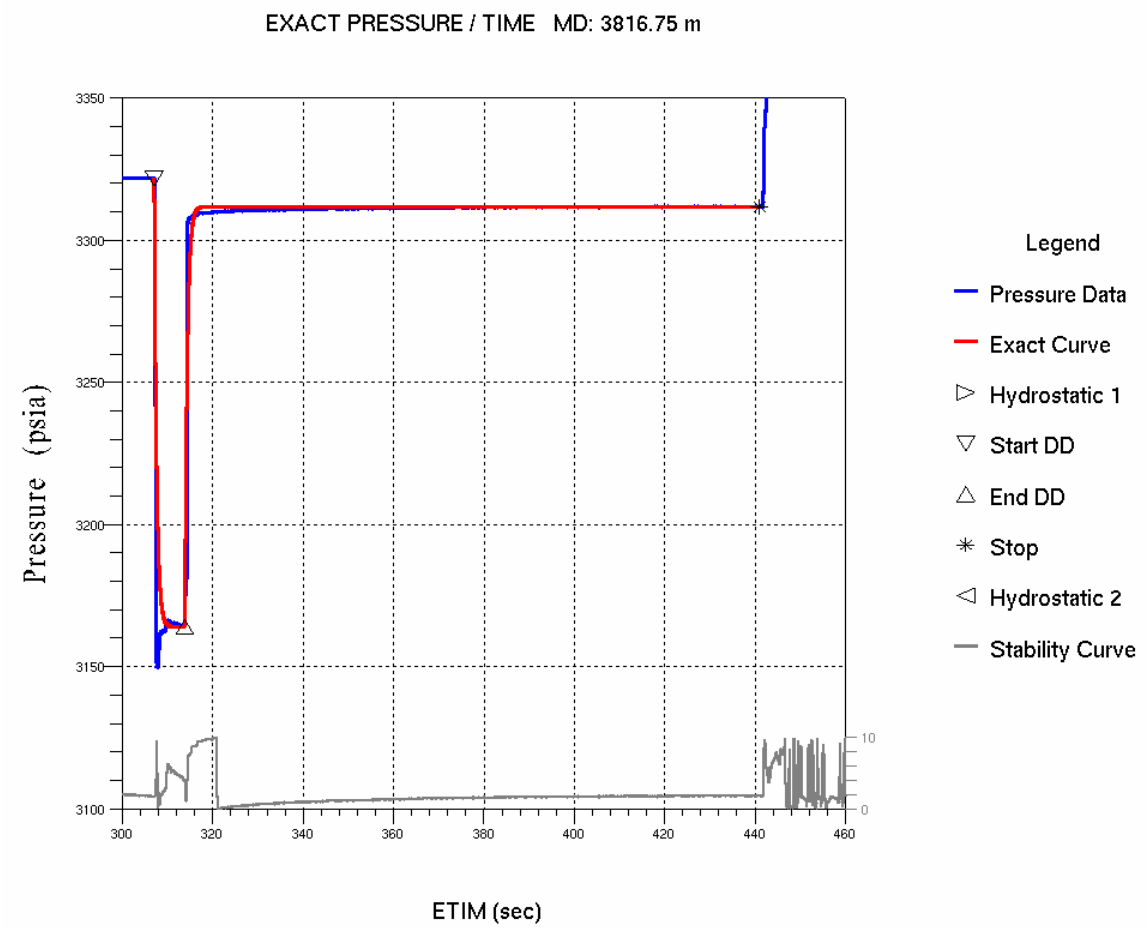
GeoTap Pretest Test# 13.2
MD 3816.75 m TVD 0.00 m 06-15-2006 11:37



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3816.75	3321.81	1.38	68.6	0.96	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	2.17	0.56	0.15	1.89e-005	42.50

Test No. 13.3

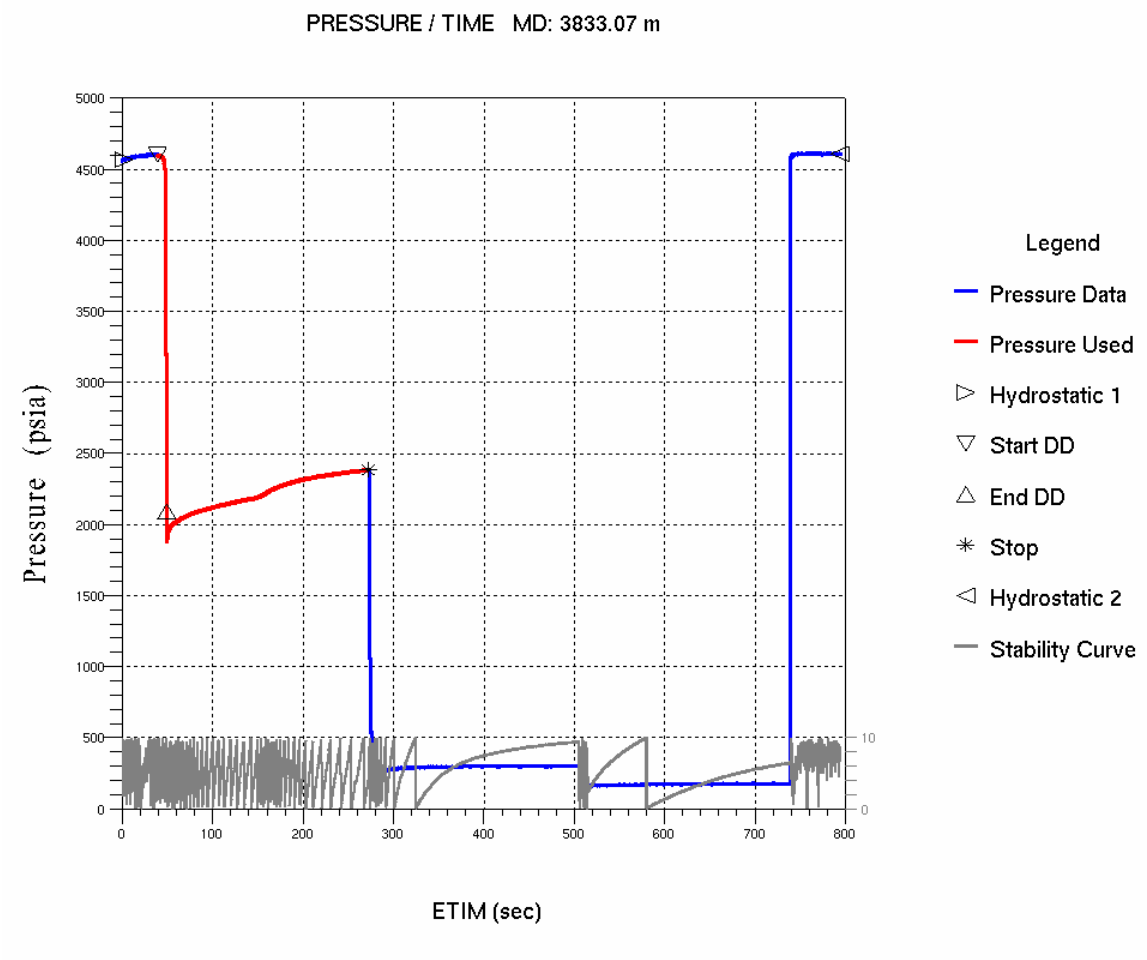
GeoTap Pretest Test# 13.3
MD 3816.75 m TVD 0.00 m 06-15-2006 11:37



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3816.75	3311.85	0.37	57.0	1.09	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.47	0.56	0.15	4.36e-005	42.50

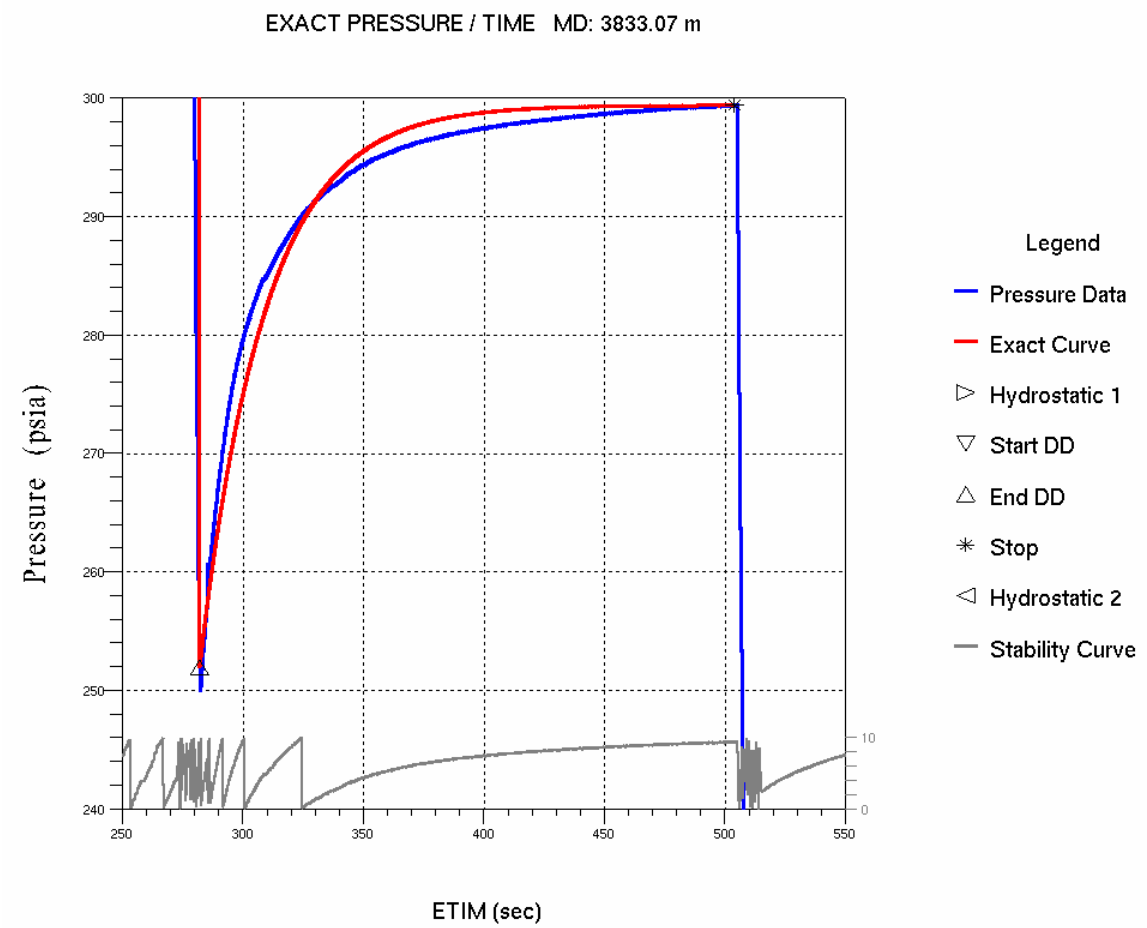
Test No. 14

GeoTap Pretest Test# 14
MD 3833.07 m TVD 0.00 m 06-15-2006 12:11



Test No. 14.2

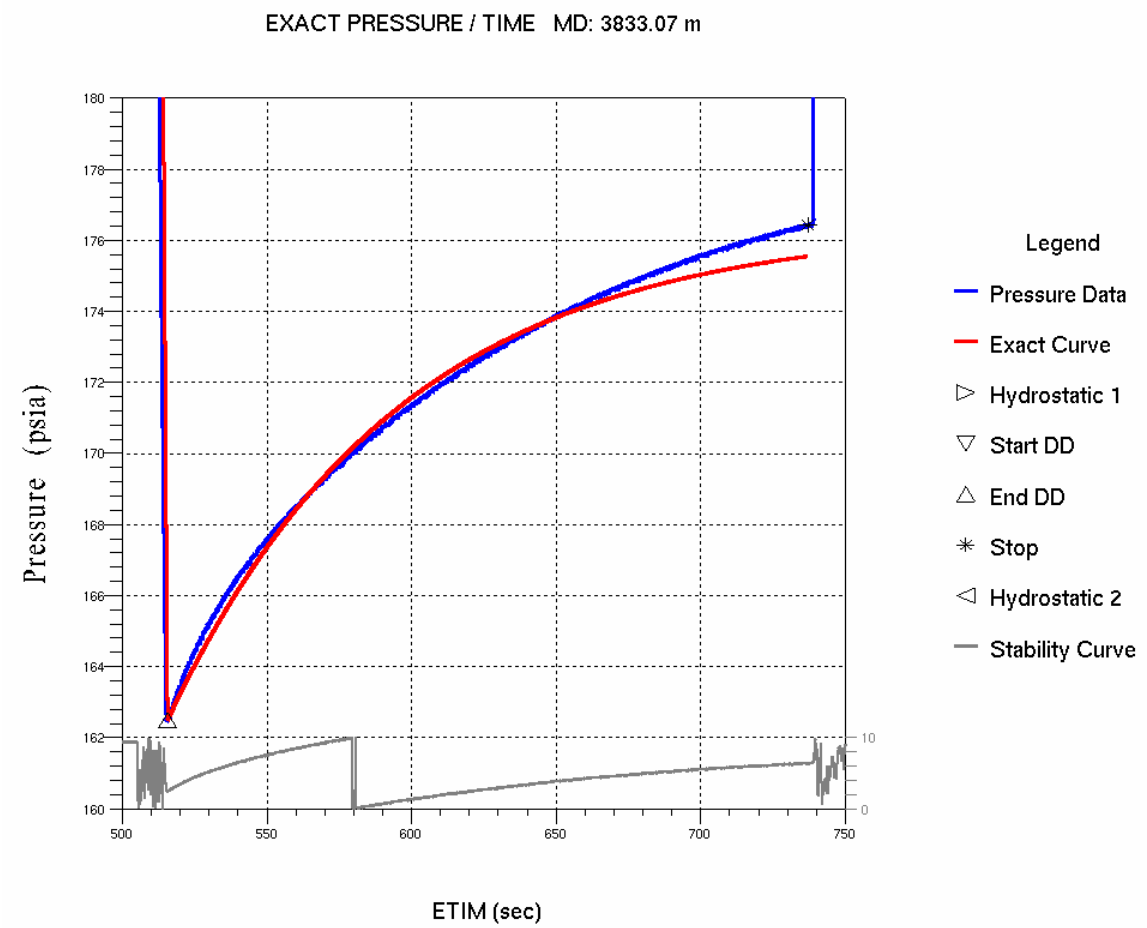
GeoTap Pretest Test# 14.2
MD 3833.07 m TVD 0.00 m 06-15-2006 12:11



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3833.07	299.40	0.98	37.9	0.66	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.11	0.56	0.15	7.60e-006	42.50

Test No. 14.3

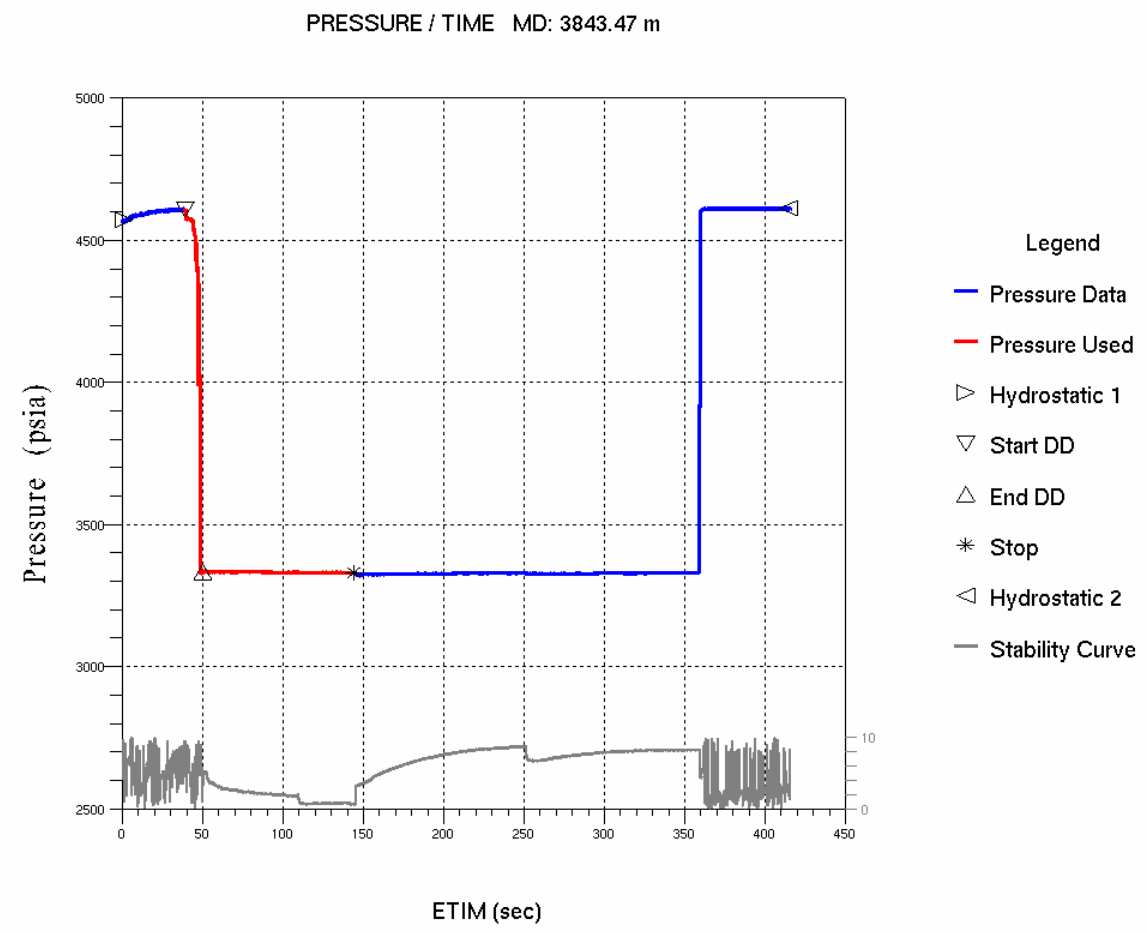
GeoTap Pretest Test# 14.3
MD 3833.07 m TVD 0.00 m 06-15-2006 12:11



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3833.07	176.43	0.38	48.1	4.58	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.94	0.56	0.15	4.68e-004	42.50

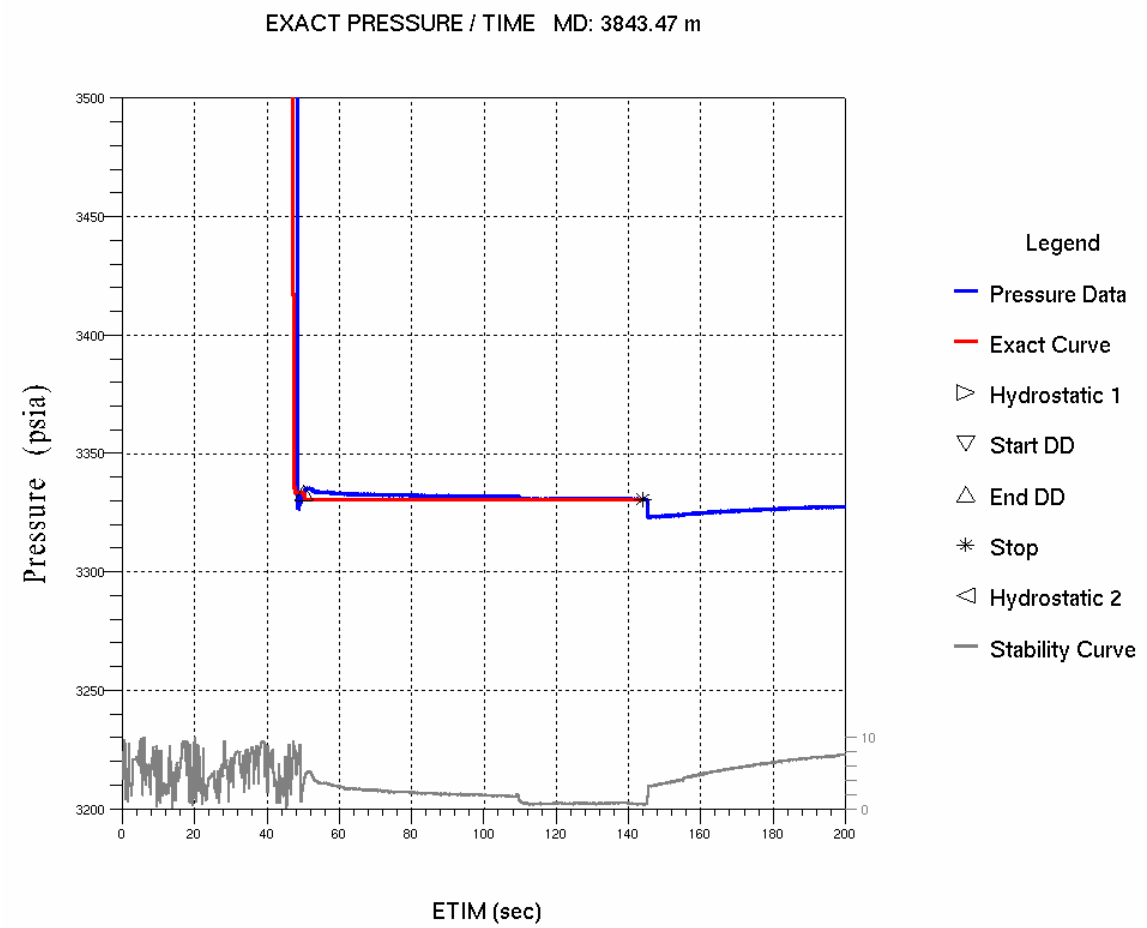
Test No. 17

GeoTap Pretest Test# 17
MD 3843.47 m TVD 0.00 m 06-15-2006 13:39



Test No. 17.1

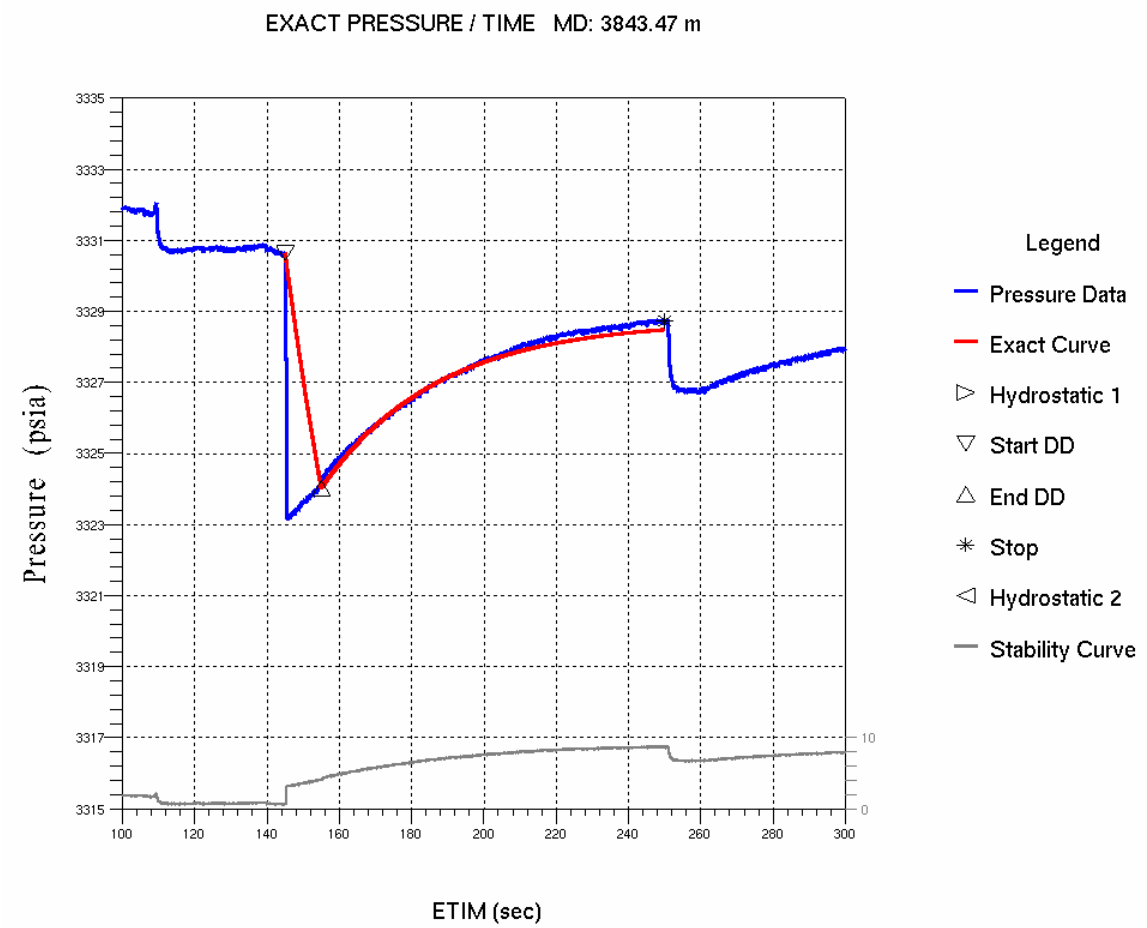
GeoTap Pretest Test# 17.1
MD 3843.47 m TVD 0.00 m 06-15-2006 13:39



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3843.47	3330.63	1.12	17900		
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	3.13	0.56	0.15	2.38e-005	42.50

Test No. 17.2

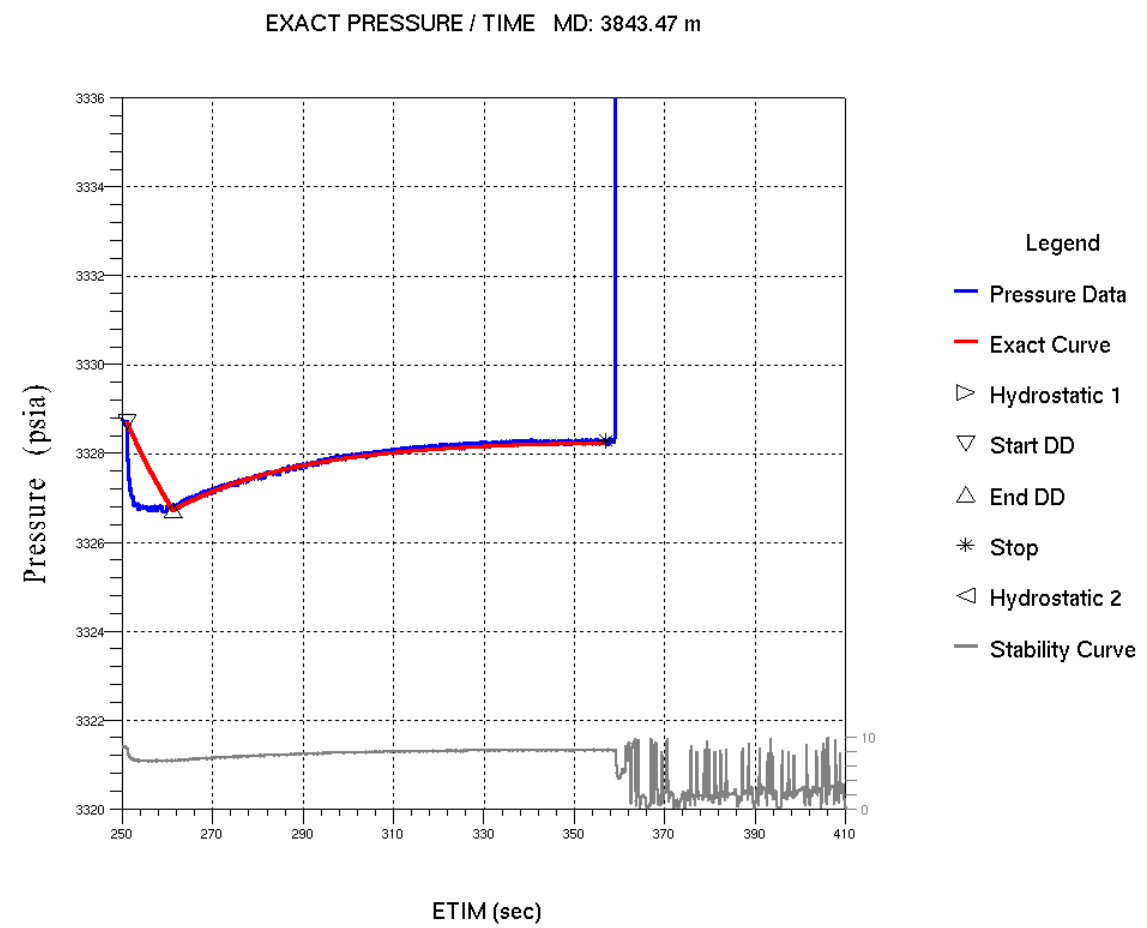
GeoTap Pretest Test# 17.2
MD 3843.47 m TVD 0.00 m 06-15-2006 13:39



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3843.47	3328.73	0.15	326	7.18	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	1.00	0.56	0.15	6.29e-004	42.50

Test No. 17.3

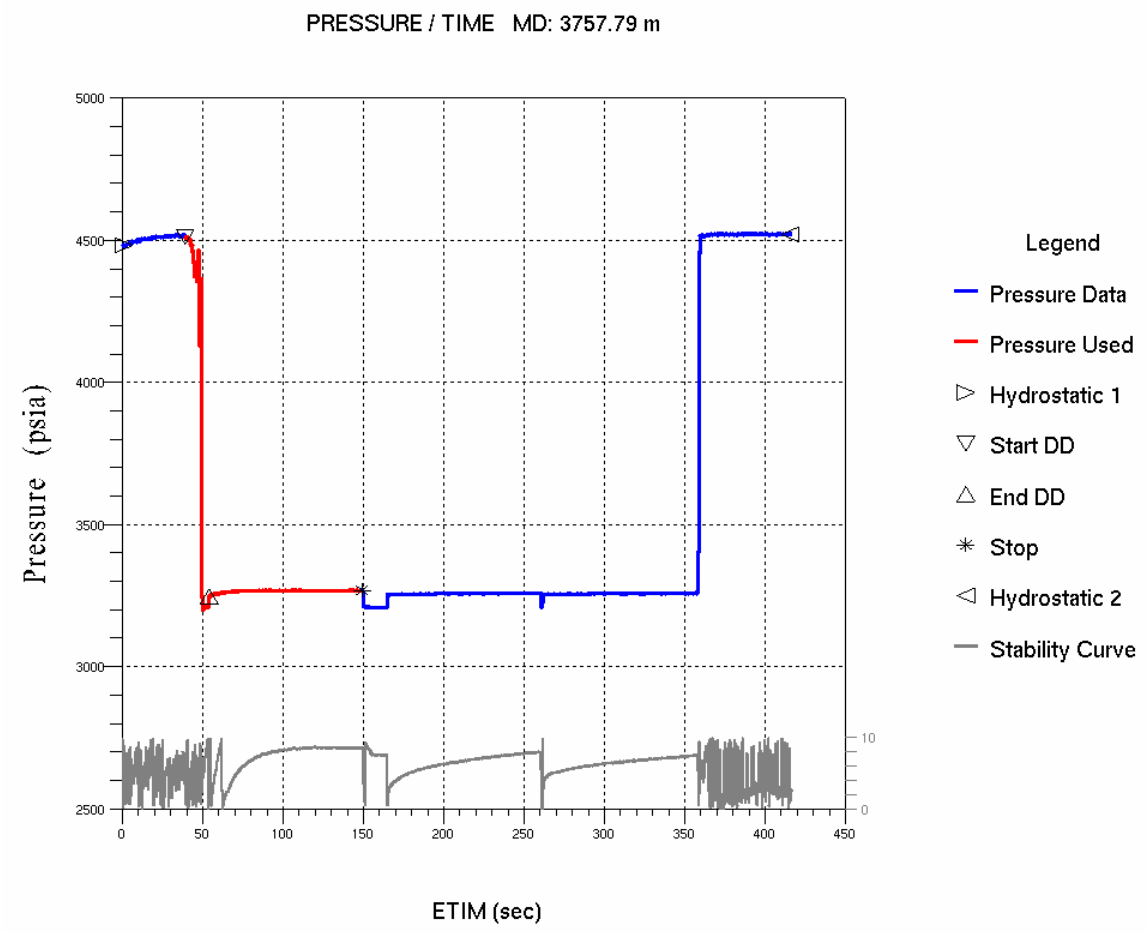
GeoTap Pretest Test# 17.3
MD 3843.47 m TVD 0.00 m 06-15-2006 13:39



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3843.47	3328.30	0.06	1080	8.35	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.98	0.56	0.15	5.46e-003	42.50

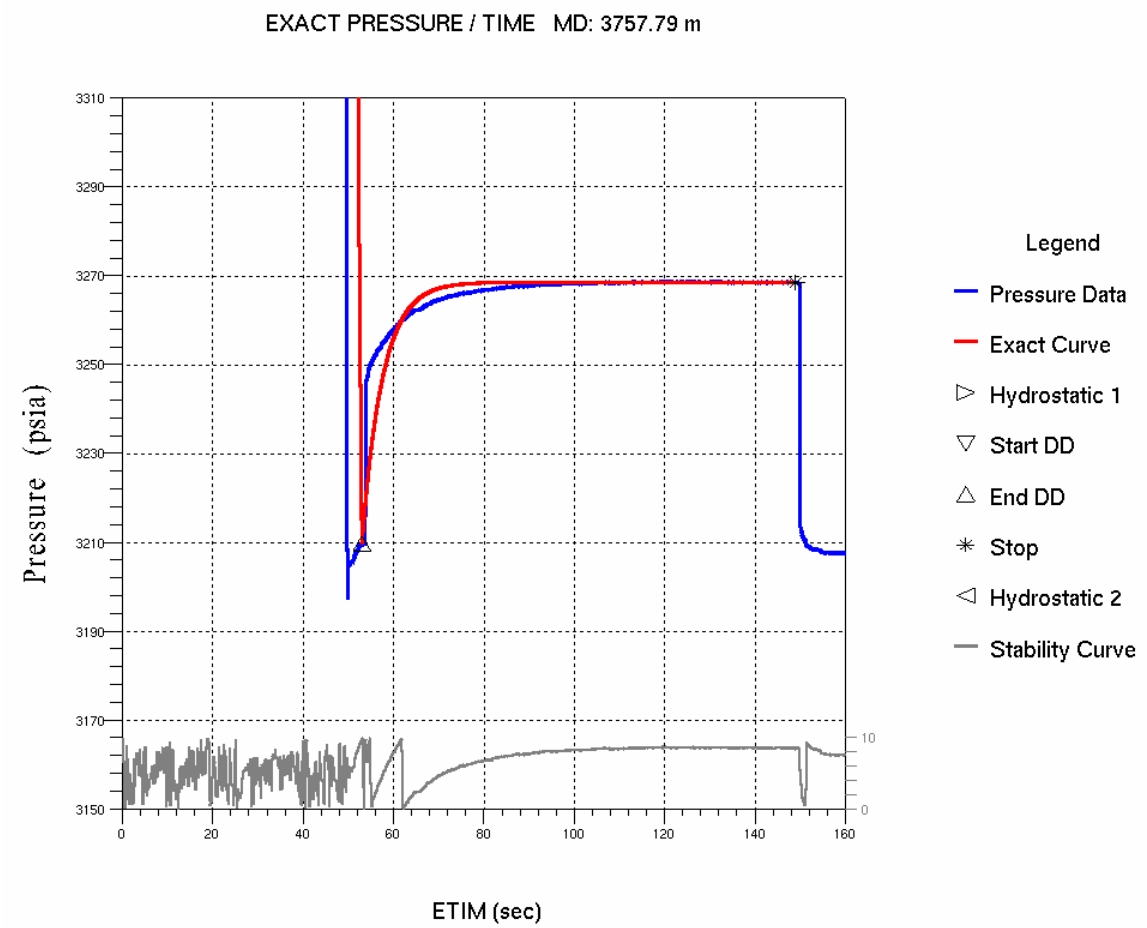
Test No. 18

GeoTap Pretest Test# 18
MD 3757.79 m TVD 0.00 m 06-15-2006 15:08



Test No. 18.1

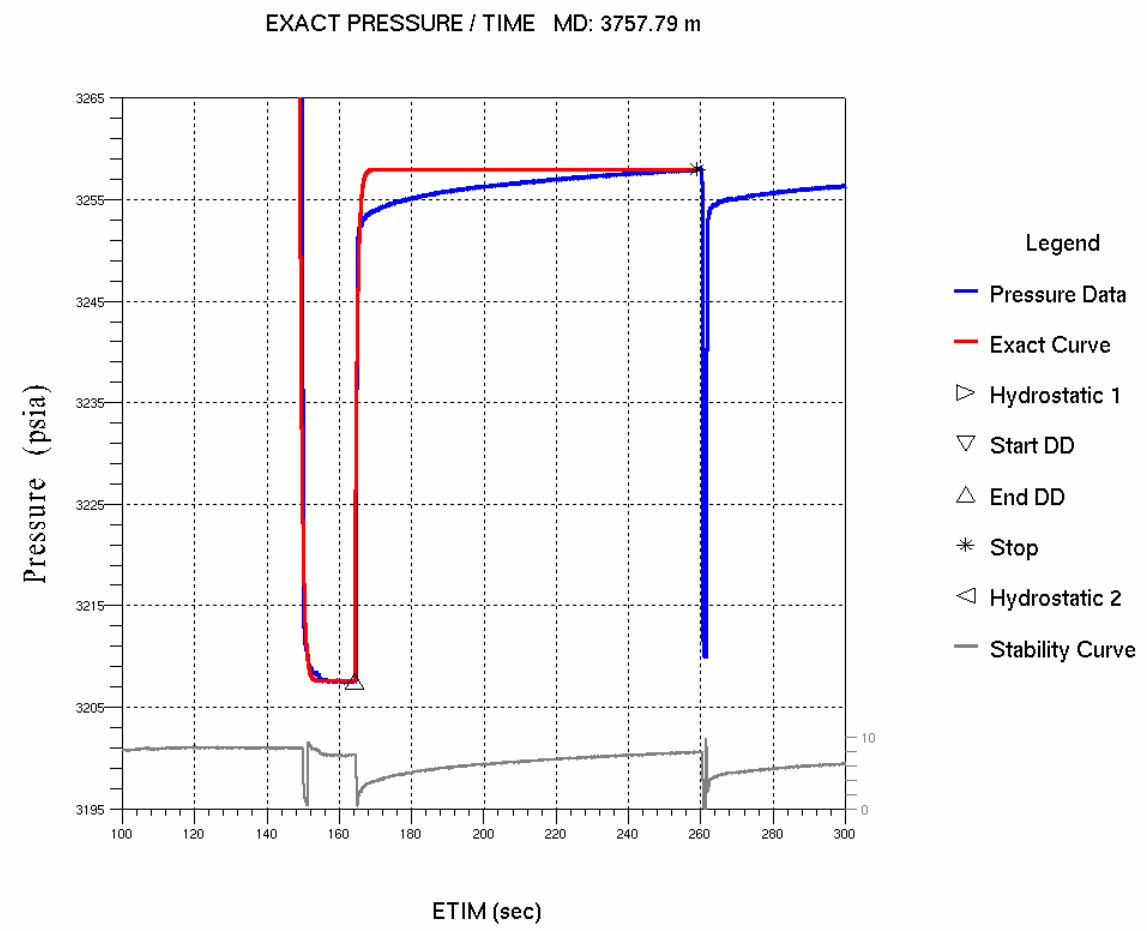
GeoTap Pretest Test# 18.1
MD 3757.79 m TVD 0.00 m 06-15-2006 15:08



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3757.79	3268.57	0.81	132	0.88	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	2.08	0.56	0.15	2.20e-005	42.50

Test No. 18.2

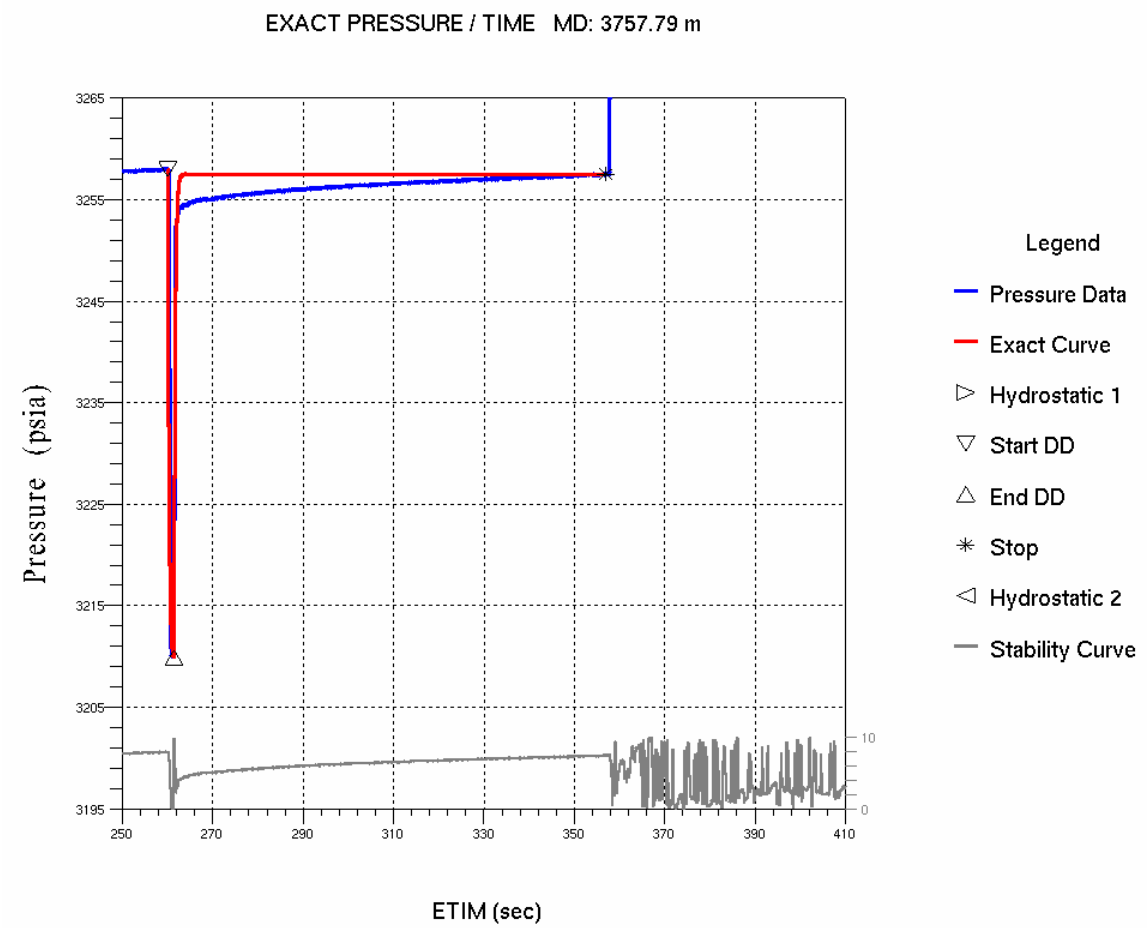
GeoTap Pretest Test# 18.2
MD 3757.79 m TVD 0.00 m 06-15-2006 15:08



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3757.79	3257.98	1.28	74.9	0.99	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.66	0.56	0.15	5.62e-005	42.50

Test No. 18.3

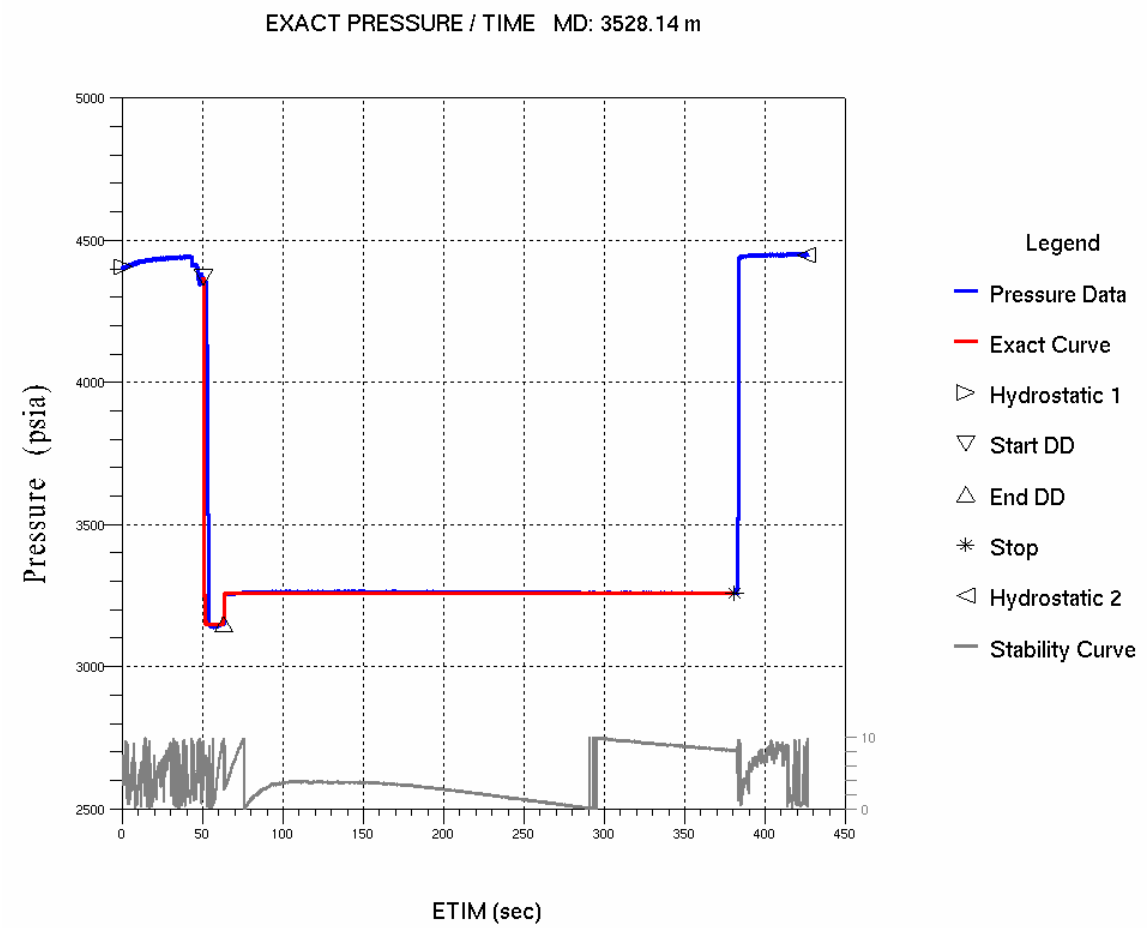
GeoTap Pretest Test# 18.3
MD 3757.79 m TVD 0.00 m 06-15-2006 15:08



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3757.79	3257.53	0.95	853	1.00	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	7.14	0.56	0.15	7.76e-004	42.50

Test No. 19

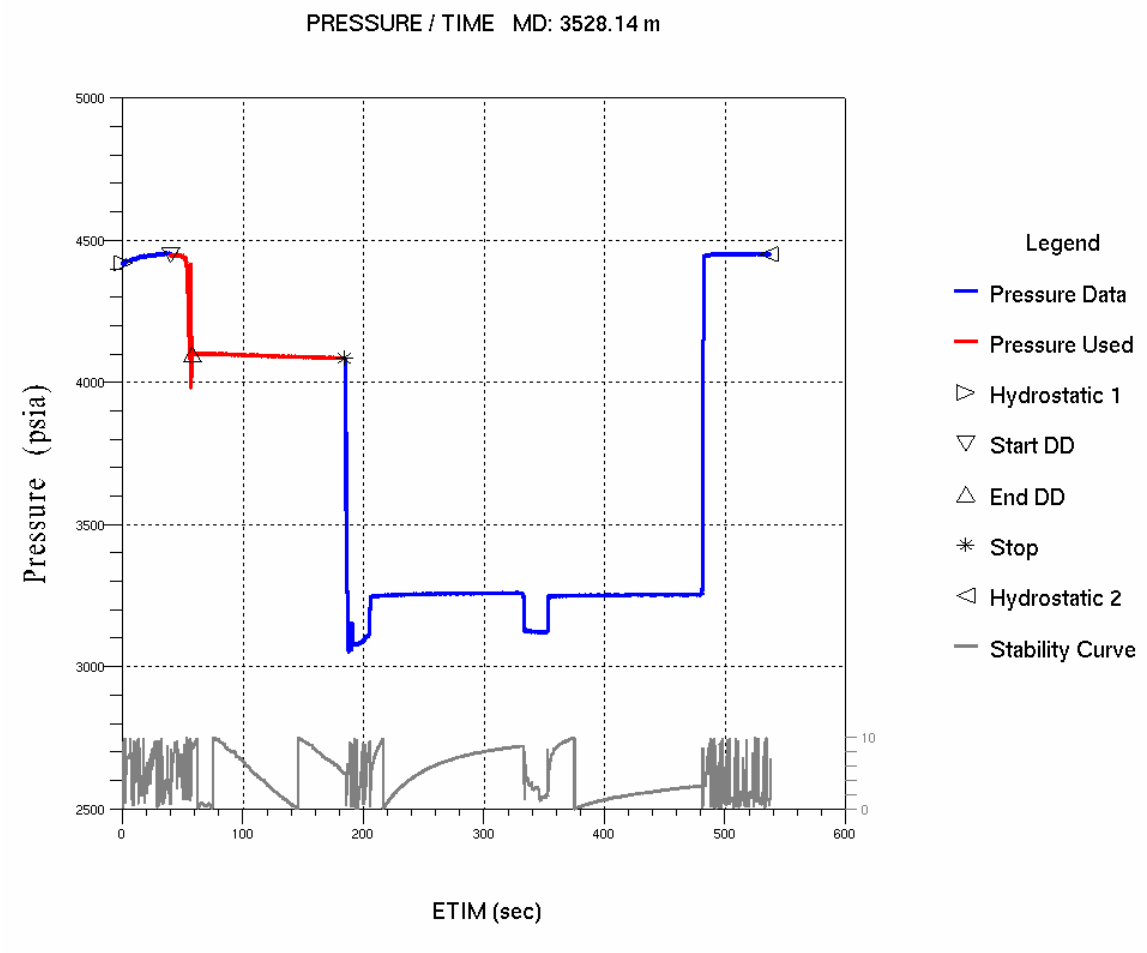
GeoTap Pretest Test# 19
MD 3528.14 m TVD 0.00 m 06-15-2006 17:37



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3528.14	3258.19	3.51	42.0	0.94	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.79	0.56	0.15	7.78e-006	42.50

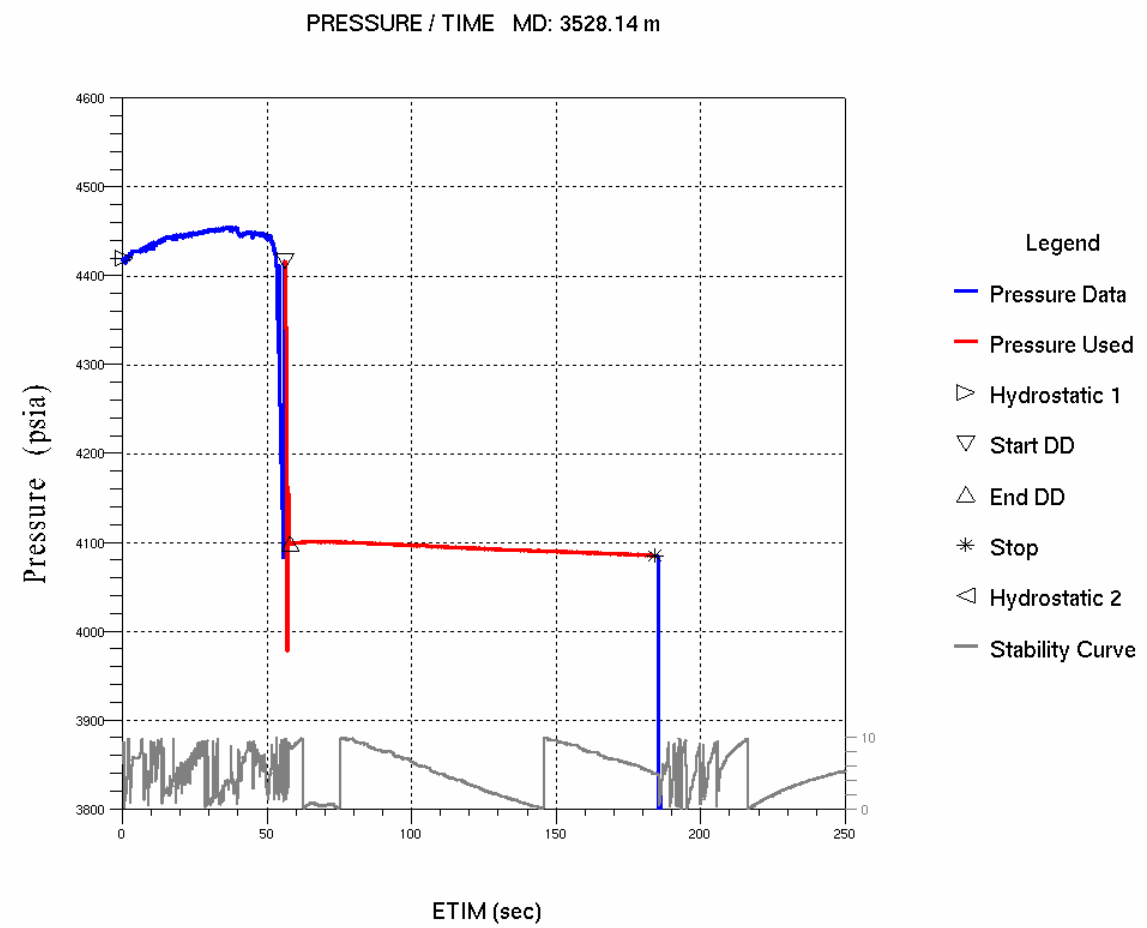
Test No. 20

GeoTap Pretest Test# 20
MD 3528.14 m TVD 0.00 m 06-15-2006 17:55



Test No. 20.1

GeoTap Pretest Test# 23.2
MD 3528.14 m TVD 0.00 m 06-15-2006 17:55

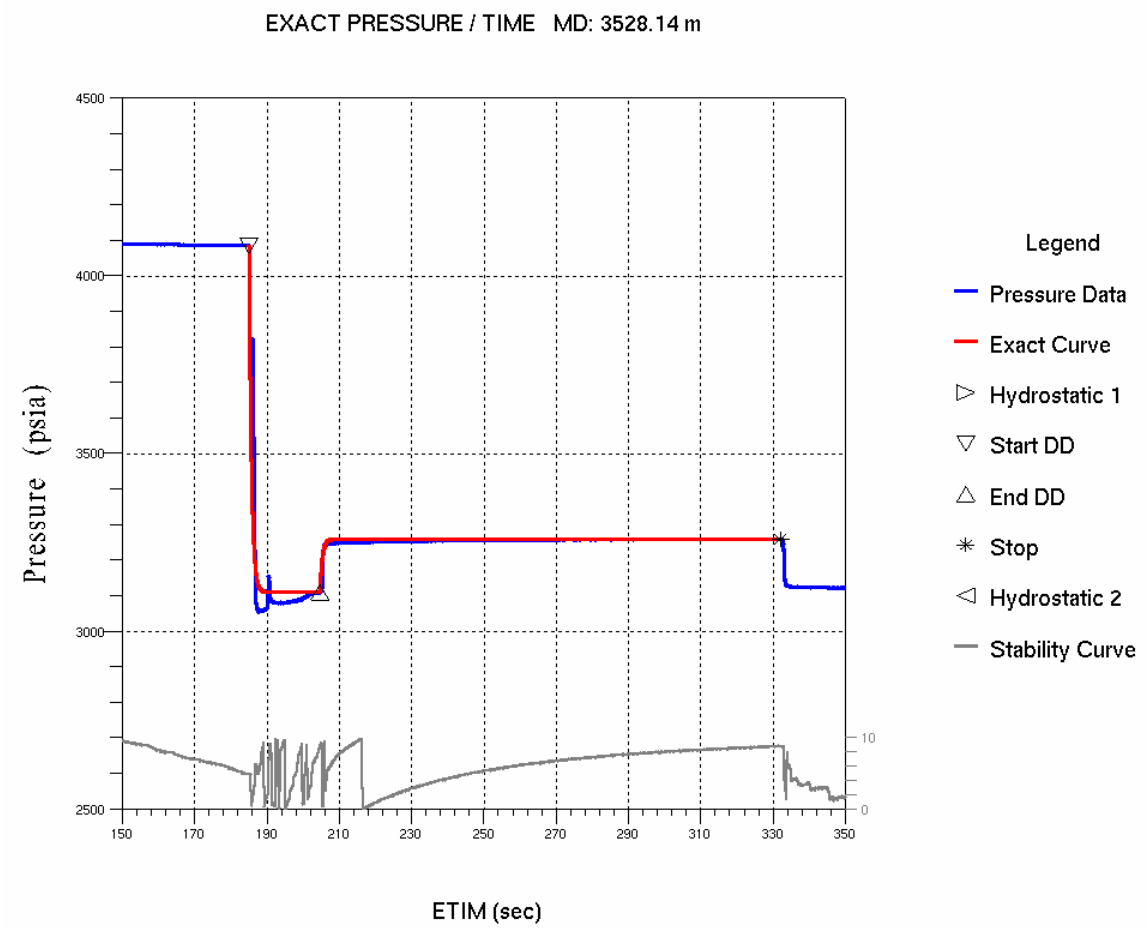


PRESSURE/TIME PLOT SUMMARY									
Depth	**Hydrostatic**		**Pretest Pressures**			**Pretest Times**			**Mobility**
MD (m)	**Phyds1 (psia)**	**Phyds2 (psia)**	**Psdd (psia)**	**Pedd (psia)**	**Pstop (psia)**	**Tsdd (sec)**	**Tedd (sec)**	**Tstop (sec)**	**Mdd (md/cp)**
3528.14	4419.84	4451.11	4416.70	4098.63	4084.96	56.20	58.00	184.00	

CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	5.56	0.56	0.15	9.54e-005	42.50

Test No. 20.2

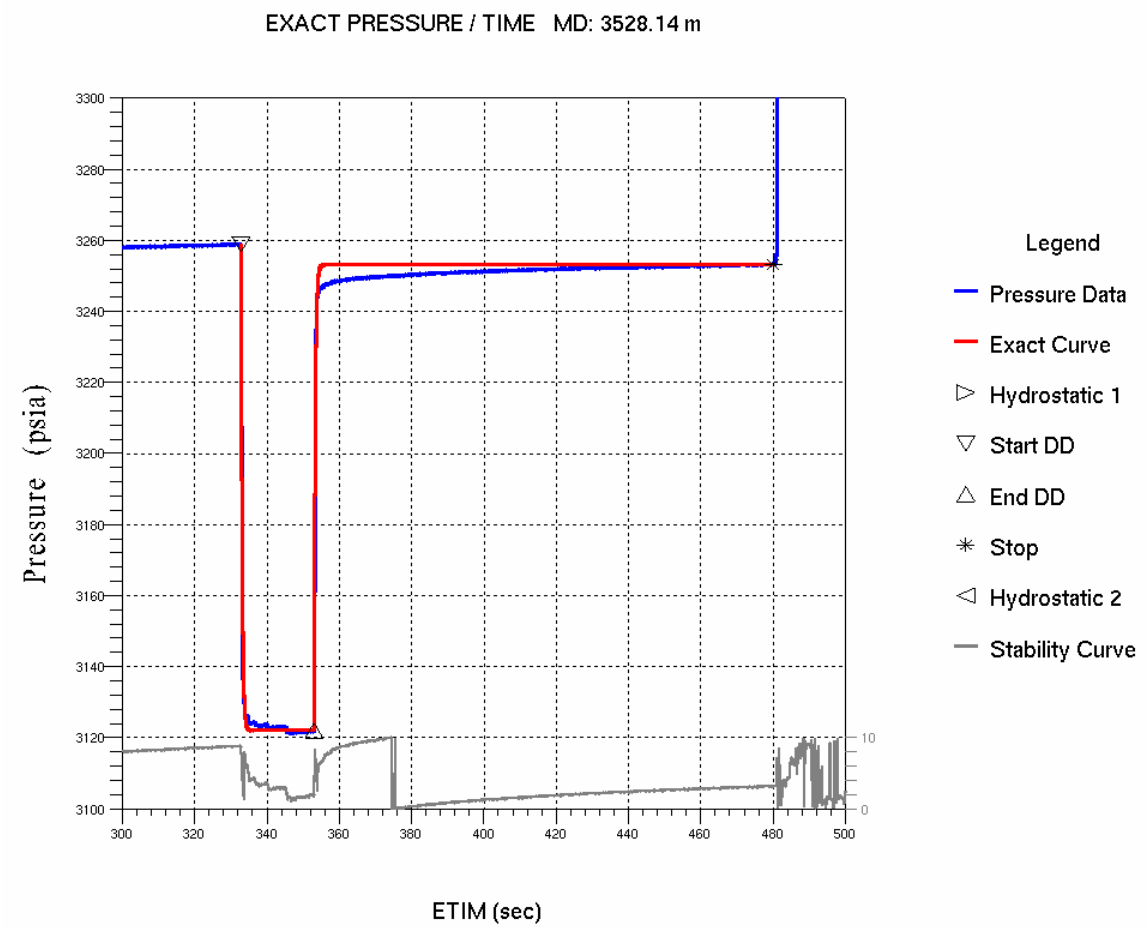
GeoTap Pretest Test# 23.3
MD 3528.14 m TVD 0.00 m 06-15-2006 17:55



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3528.14	3258.83	2.54	19.5	0.99	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.51	0.56	0.15	5.71e-006	42.50

Test No. 20.3

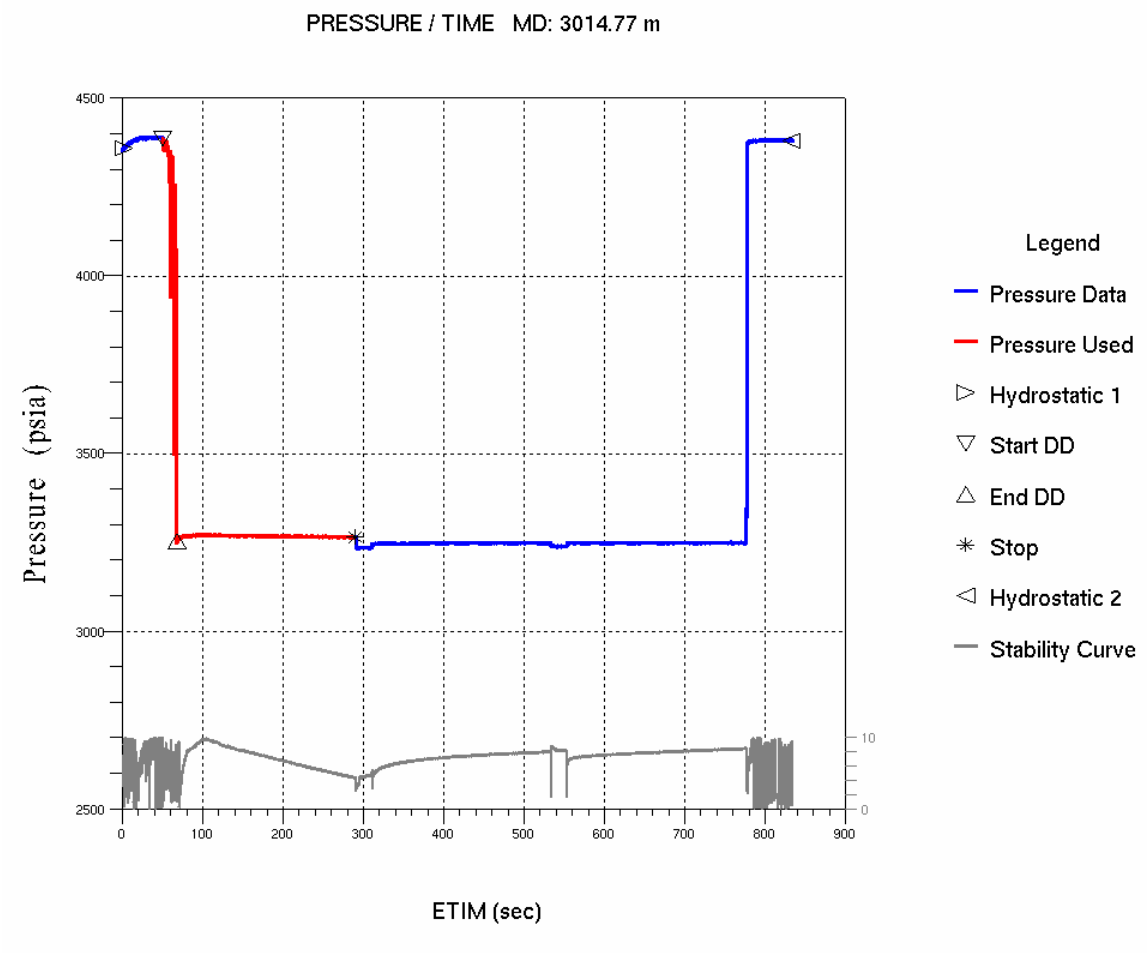
GeoTap Pretest Test# 23.4
MD 3528.14 m TVD 0.00 m 06-15-2006 17:55



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3528.14	3253.08	1.34	21.7	0.99	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.50	0.56	0.15	3.44e-005	42.50

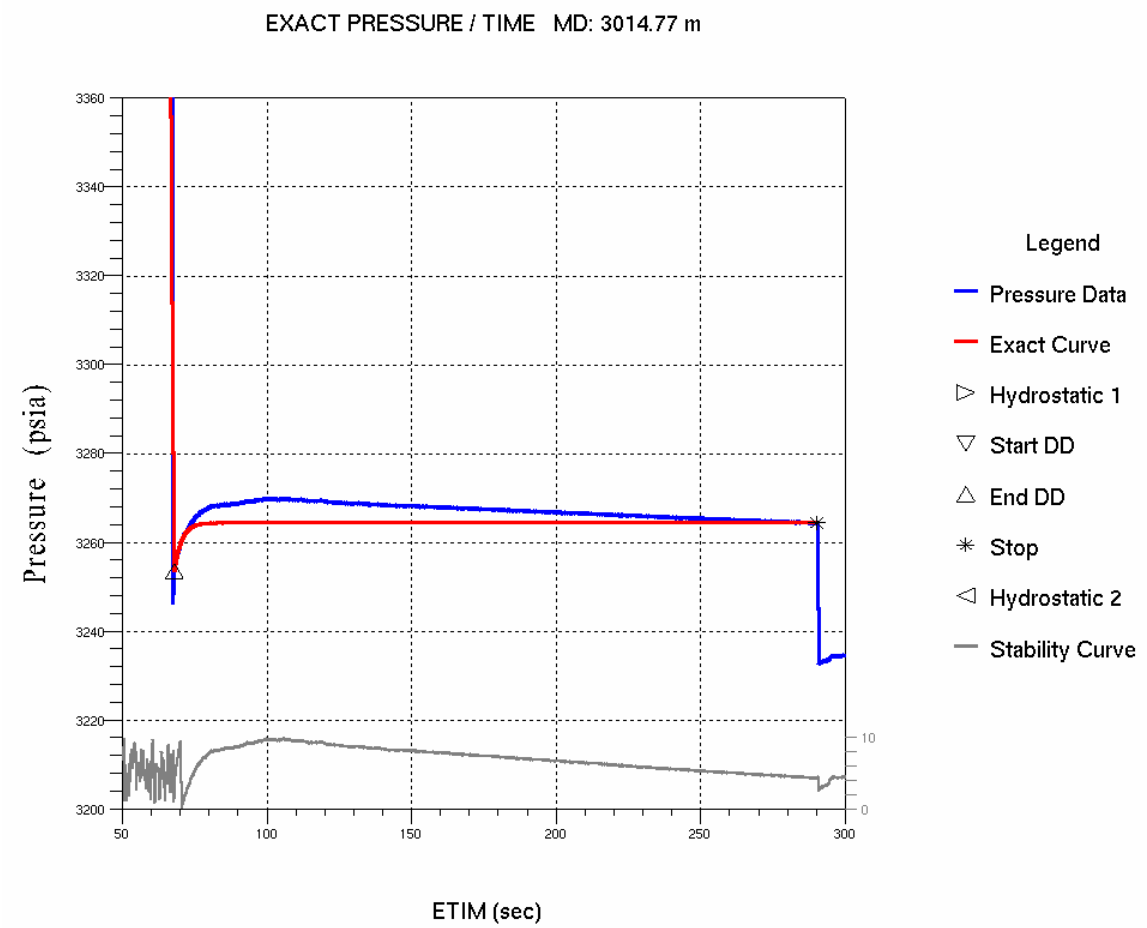
Test No. 22

GeoTap Pretest Test# 22
MD 3014.77 m TVD 0.00 m 06-15-2006 20:52



Test No. 22.1

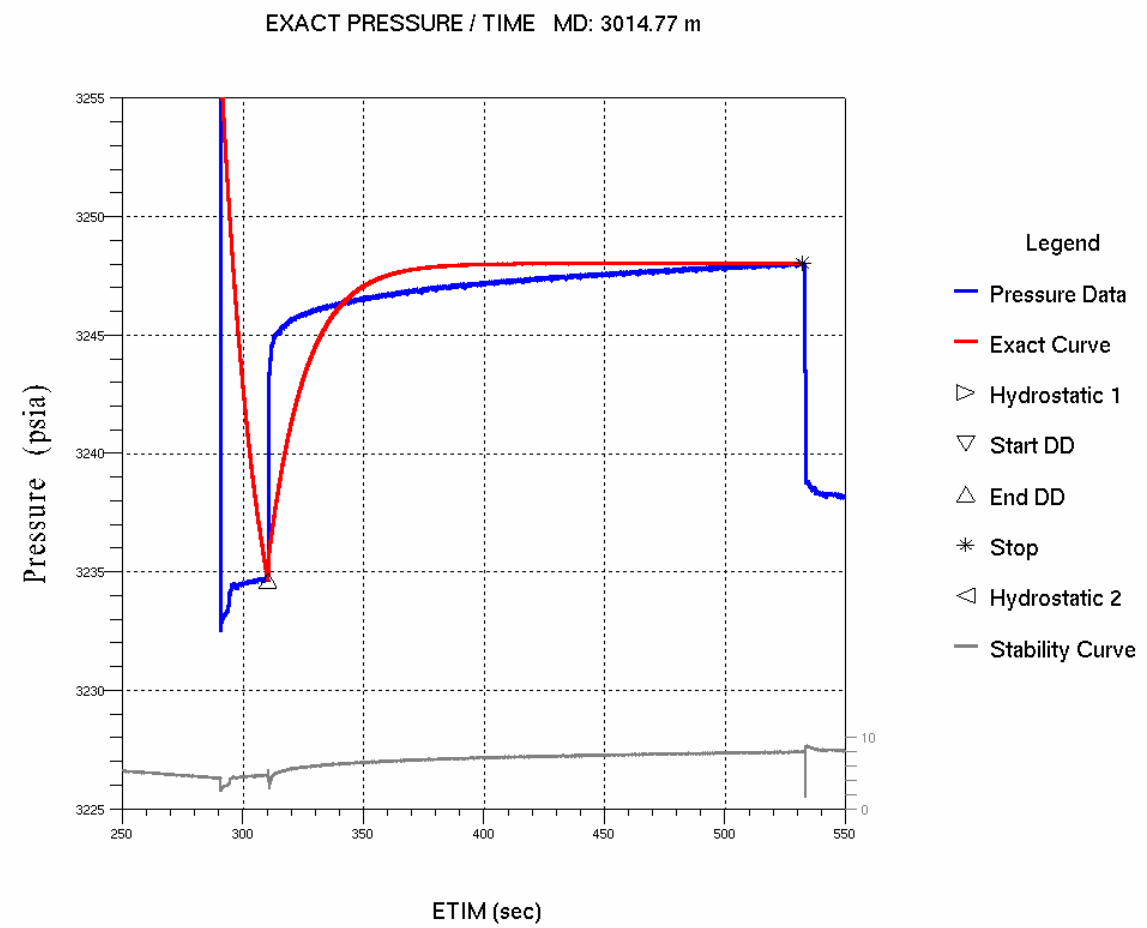
GeoTap Pretest Test# 22.1
MD 3014.77 m TVD 0.00 m 06-15-2006 20:52



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3014.77	3264.36	2.80	994	6.16	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	2.27	0.56	0.15	1.94e-005	42.50

Test No. 22.2

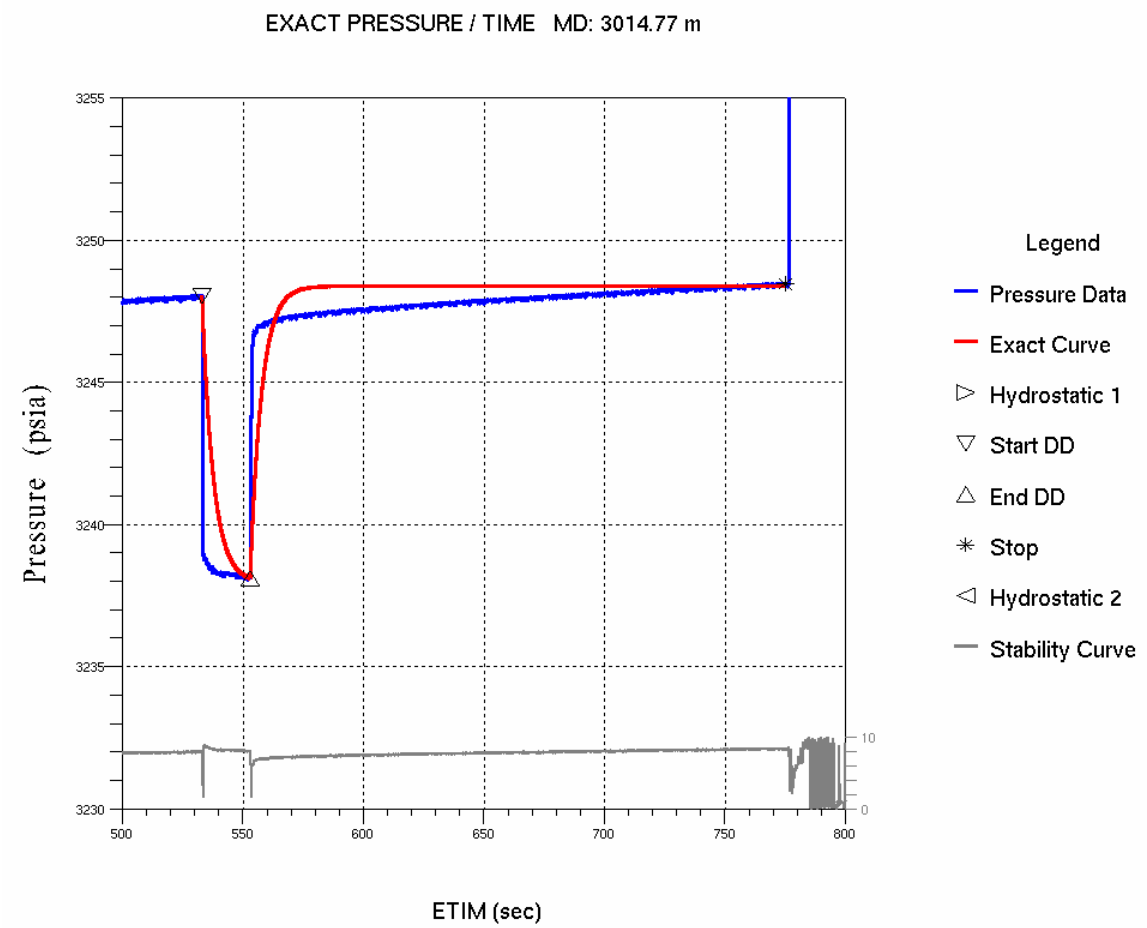
GeoTap Pretest Test# 22.2
MD 3014.77 m TVD 0.00 m 06-15-2006 20:52



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3014.77	3248.02	0.58	152	1.01	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.43	0.56	0.15	9.24e-005	42.50

Test No. 22.3

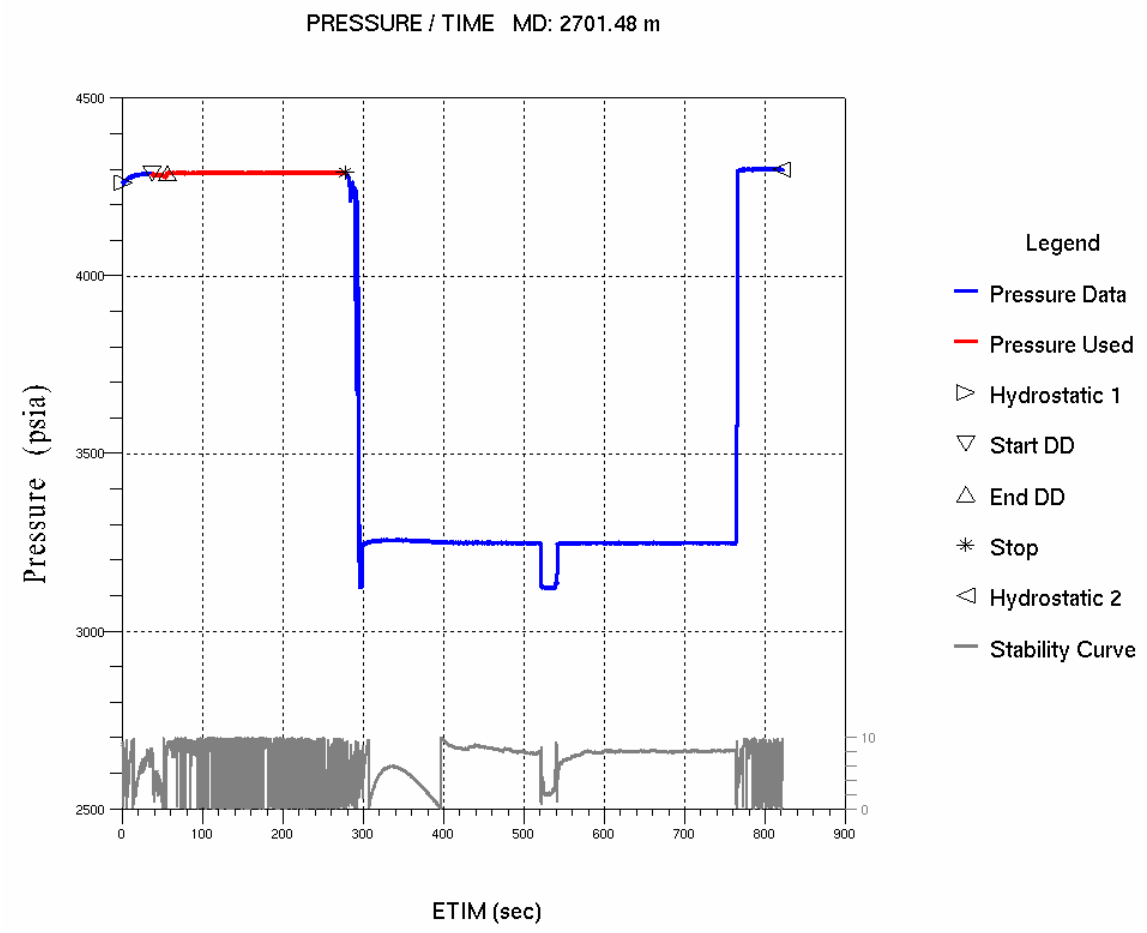
GeoTap Pretest Test# 22.3
MD 3014.77 m TVD 0.00 m 06-15-2006 20:52



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
3014.77	3248.38	0.44	275	1.05	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.50	0.56	0.15	3.68e-004	42.50

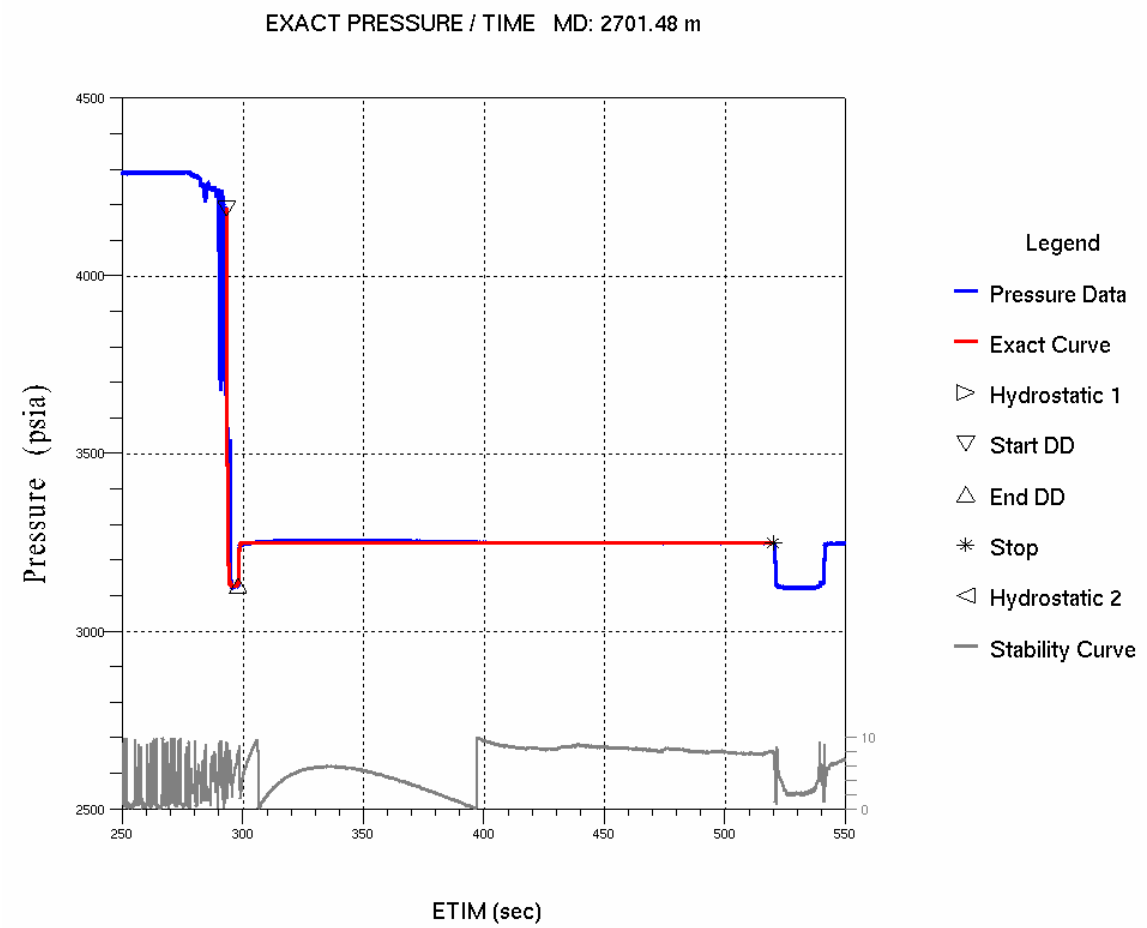
Test No. 23

GeoTap Pretest Test# 23
MD 2701.48 m TVD 0.00 m 06-15-2006 22:37



Test No. 23.2

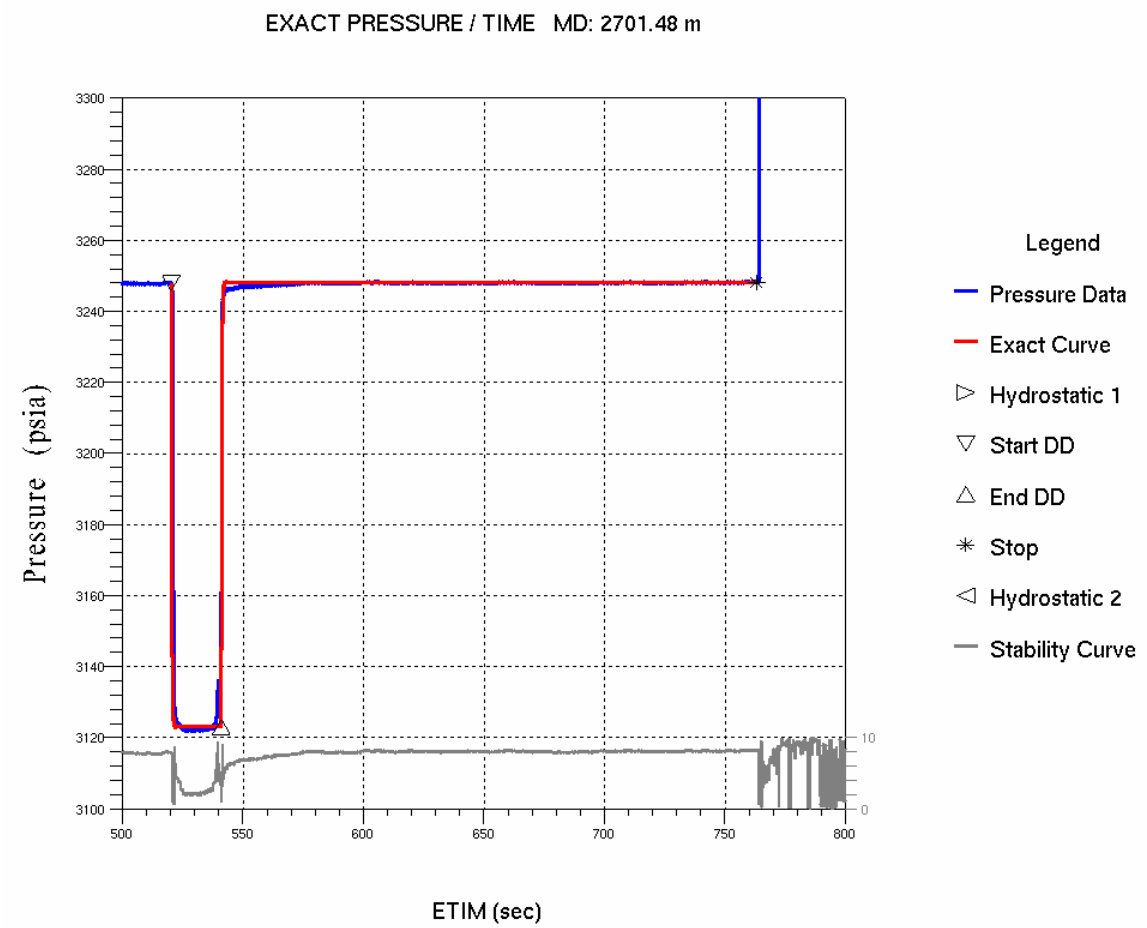
GeoTap Pretest Test# 23.2
MD 2701.48 m TVD 0.00 m 06-15-2006 22:37



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
2701.48	3248.00	3.14	99.7	0.98	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	2.08	0.56	0.15	2.18e-005	42.50

Test No. 23.3

GeoTap Pretest Test# 23.3
MD 2701.48 m TVD 0.00 m 06-15-2006 22:37



EXACT PRESSURE / TIME PLOT SUMMARY					
MD (m)	**Pexact (psia)**	**Pexact stdev(psia)**	**Mexact(md/cp)**	**Mexact stdev(%)**	
2701.48	3248.25	0.20	31.5	1.00	
CONSTANTS - SPHERICAL FLOW					
Volume (cc)	**Rate (cc/sec).**	**Rsnorkel (cm)**	**Porosity (fraction)**	**Ct (1/psia)**	**Flow-line Storage (cc)**
10.00	0.48	0.56	0.15	2.83e-005	42.50

Disclaimer

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Customer	Woodside Energy Ltd.	Job #	AU-FE-0003930658	Run #	500	GeoSpan Choke #	22	MW (SG)	1.25	Customer Geologist:
Well	THA02	Rig	Maersk Guardian	FT SW Version	2.58	Pad Type	Standard	PV (Cp)	40	J. Hobday / B. Fawcett
Field	Thylacine	Unit	SSDS-40	INSITE SW Version	6.2.2 Build 8	Snorkel Diameter	0.22"	Pad Offset	59	Customer Representative:
FTWD Engineer	W. Burch	Date	13-Jun-06	HCIM SW Version	72.13	Flow Line Volume	42.5cc	FTWD Measure Point	27.64	S. Corless / P. Hodson

GeoTap - Formation Testing While Drilling

Sperry-Sun

Sample No #	Bit Depth m	FTWD MD m	FTWD TVD m	Inclination deg	Date	Time	Hyd 1 Pres psia	Hyd 2 Pres psia	D D Pres psia	Fill-Up Pres psia	Stop Pres psia	RT PWD Pres psia	FTWD TF deg	Comments
1	3037.07	3009.43	2131.83	88.06	11-Jun-06	05:05	4484	4480	4492	3244	3247.0	3246.7	54L	Good Test (10 cc @ 1 cc/sec; BU = 96 sec); Poor Detection
2	3042.98	3015.34	2132.03	88.01	"	06:04	4489	4480	4497	3169	3243.0	3243.7	36L	Good Test (10 cc @ 1 cc/sec; BU = 96 sec)
3	3545.43	3517.79	2124.99	91.18	13-Jun-06	19:51	4573	4598	4653	3101	3260.0	3261.7	71R	Good Test (10 cc @ 1 cc/sec; BU = 224 sec); Slow Drawdown
4	3545.31	3517.67	2124.99	91.18	"	20:58	4558	4598	4638	38	35.0	39.7	75L	Tight Test; Abort
5	3545.26	3517.62	2124.99	91.18	"	21:09	4548	4568	4620	28	29.0	31.7	72L	Tight Test; Abort
6	3546.04	3518.40	2124.97	91.18	"	21:58	4539	4548	4555	51	3040.0	3380.7	75L	***Did Not Reach Stabilization*** (10 cc @ 1 cc/sec; BU = 96 sec)
7	3546.47	3518.83	2124.96	91.18	"	22:27	4539	4558	4555	811	3309.0	3307.7	75L	Good Test (10 cc @ 1 cc/sec; BU = 320 sec); Slow Drawdown
8	4019.65	3992.01	2314.91	42.14	15-Jun-06	05:25	4856	4888	4872	3312	3343.0	3344.7	171L	Good Test (10 cc @ 1 cc/sec; BU = 96 sec)
9	3988.89	3961.25	2292.27	43.42	"	07:05	4835	4872	4867	3323	3339.0	3340.7	62R	Good Test (10 cc @ 1 cc/sec; BU = 96 sec)
10	3957.56	3929.92	2269.90	45.18	"	09:05	4725	4731	4749	3349	3344.0	3344.7	74R	Good Test (10 cc @ 1 cc/sec; BU = 96 sec)
11	3903.84	3876.20	2232.82	47.84	"	10:09	4664	4684	4688	3080	3321.0	3322.7	53R	Good Test (20 cc @ 1.5 cc/sec; BU = 96 sec)
12	3913.39	3885.75	2239.27	47.11	"	10:42	4608	4644	4640	4480	3330.0	3329.7	59R	Good Test (10 cc @ 1.5 cc/sec; BU = 128 sec)
13	3843.54	3815.90	2194.97	55.10	"	11:51	4402	4431	4426	4370	3311.0	3311.7	30R	Good Test (10 cc @ 1.5 cc/sec; BU = 128 sec)
14	3859.86	3832.22	2204.56	52.89	"	12:26	4568	4603	4592	2928	2362.0	2366.7	59R	***Did Not Reach Stabilization*** (10 cc @ 1.0 cc/sec; BU = 224 sec)
15	3860.07	3832.43	2204.68	52.86	"	12:46	4558	4603	4590	4558	N/A	N/A	59R	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 320 sec); Slow Drawdown
16	3859.96	3832.32	2204.62	52.88	"	13:10	4579	4603	4585	4553	N/A	N/A	56R	***No Seal*** (5 cc @ 0.5 cc/sec; BU = 512 sec); Slow Drawdown
17	3870.26	3842.62	2210.94	51.39	"	13:48	4573	4613	4605	3325	3328.0	3329.7	45R	Good Test (10 cc @ 1.0 cc/sec; BU = 96 sec)
18	3784.40	3756.76	2164.64	63.55	"	15:17	4484	4519	4516	3212	3257.0	3257.7	139L	Good Test (15 cc @ 1.0 cc/sec; BU = 96 sec)
19	3555.50	3527.86	2124.80	90.94	"	17:46	4407	4446	4439	3151	3258.0	3257.7	64L	Good Test (10 cc @ 0.5 cc/sec; BU = 320 sec); Slow Drawdown
20	3555.50	3527.86	2124.80	90.94	"	18:05	4417	4450	4449	3985	3253.0	3254.7	64L	Good Test (10 cc @ 0.5 cc/sec; BU = 128 sec)
21	3037.57	3009.93	2131.88	88.05	"	20:24	4307	N/A	N/A	N/A	N/A	N/A	58L	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 224 sec); Poor Detection
22	3042.57	3014.93	2132.05	88.01	"	21:08	4359	4383	4383	3399	3248.0	3246.7	159R	Good Test (10 cc @ 0.5 cc/sec; BU = 224 sec)
23	2729.56	2701.92	2125.41	90.74	"	22:52	4260	4302	4284	4260	3248.0	3246.7	147R	Good Test (10 cc @ 0.5 cc/sec; BU = 224 sec)
24	2657.64	2630.00	2127.12	92.71	"	23:42	4265	4288	4289	4265	4284.0	4283.7	153R	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 224 sec)
25	2655.62	2627.98	2127.22	92.73	16-Jun-06	00:04	4255	4288	4279	4239	4242.0	4278.7	153R	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 320 sec)
26	2655.75	2628.11	2127.21	92.73	"	00:23	4260	4288	4276	4260	4240.0	4278.7	174L	***No Seal*** (10 cc @ 0.5 cc/sec; BU = 320 sec)

Mud Gas Isotopes Report

Appendix 9

Isotech Mudgas Data
Job 8222
Well: Thylacine #02
84 IsoTubes

Isotech Lab No.	Isotech Job No.	Sample Date	Sample Time	Depth 1 Meter	Well Name	Gas Units	GC Date	O_2 + Ar ppm	CO_2 ppm	N_2 ppm	CO ppm	C_1 ppm	C_2 ppm	C_2H_4 ppm	C_3 ppm	C_3H_6 ppm	iC_4 ppm	nC_4 ppm	iC_5 ppm	nC_5 ppm	C_6+ ppm	Mass Spec Date	$\delta^{13}C_1$ per mil	$\delta^{13}C_2$ per mil	$\delta^{13}C_3$ per mil
113749	8222	6/03/2006	7:00	2293	Thylacine THA #02	4.4	3/24/2007	194800	180	761200	130	41400	1770	6	395	3	45	45	10	6	7	4/18/2007	-40.2	-29.5	-27.7
113750	8222	6/09/2006	9:25	2300		0.44	3/24/2007	210000	200	785300	60	4150	186	1	42	0	5	5	1	1	1	4/28/2007	-38.9	-29.3	**-27.0**
113751	8222	6/09/2006	10:15	2320		0.94	3/24/2007	210400	210	780100	0	8880	336	1	76	0	9	9	2	1	2	4/28/2007	-38.7	-29.1	**-27.0**
113752	8222	6/10/2006	1:58	2565.5		4.18	3/24/2007	203700	200	772200	60	22500	994	4	247	2	32	31	8	5	9	4/18/2007	-39.1	-28.8	-27.5
113753	8222	6/10/2006	3:45	2600		3.2	3/24/2007	201700	190	764300	40	31900	1410	4	329	2	42	40	10	6	10	4/18/2007	-38.8	-28.8	-27.5
113754	8222	6/10/2006	5:20	2629		6.02	3/24/2007	198600	200	753400	40	45200	1980	3	447	1	56	52	13	8	12	4/18/2007	-38.9	-28.8	-27.4
113755	8222	6/10/2006	8:45	2700		3.1	3/24/2007	200500	200	768600	90	28900	1260	2	308	1	42	41	12	8	16	4/18/2007	-38.8	-28.6	-27.1
113756	8222	6/11/2006	3:00	3000		2	3/24/2007	206900	180	772300	40	19300	982	4	252	2	32	30	7	4	7	4/18/2007	-38.2	-28.6	-27.2
113757	8222	6/11/2006	3:51	3020		9.36	3/24/2007	210300	180	782600	60	6300	365	2	132	1	22	22	7	4	9	4/18/2007	-35.0	-26.2	-25.7
113758	8222	6/11/2006	9:45	3100		5.06	3/24/2007	203400	200	752600	0	40400	2490	2	645	1	87	81	22	12	17	4/18/2007	-39.0	-28.6	-27.4
113759	8222	6/12/2006	7:50	3500		2.42	3/24/2007	198200	210	780400	170	19900	818	3	204	2	27	27	7	5	10	4/18/2007	-38.9	-29.0	-27.6
113760	8222	6/13/2006	17:45	3529		10.65	3/24/2007	183900	180	731600	70	80800	2760	5	526	2	58	51	11	6	8	4/18/2007	-39.8	-29.1	-27.7
113761	8222	6/14/2006	1:58	3600		11.18	3/24/2007	187600	190	726900	70	80700	3500	2	772	1	94	87	21	12	16	4/18/2007	-39.0	-28.7	-27.4
113762	8222	6/14/2006	11:10	3760		9.9	3/24/2007	188000	220	733900	100	74000	2960	6	622	3	74	68	17	10	15	4/18/2007	-39.1	-29.0	-27.4
113763	8222	6/14/2006	13:00	3790		7.8	3/24/2007	190800	220	747700	120	58300	2240	2	495	1	63	58	15	9	14	4/18/2007	-39.3	-28.9	-27.5
113764	8222	6/14/2006	18:00	3880		10.3	3/24/2007	186200	210	729100	80	80700	2890	2	613	1	73	70	17	10	13	4/18/2007	-37.7	-28.4	-27.2
113765	8222	6/14/2006	19:27	3910		1.85	3/24/2007	198600	210	785800	190	14500	491	3	132	1	19	22	7	5	12	4/18/2007	-36.3	-27.3	-26.5
113766	8222	6/14/2006	21:00	3940		12.2	3/24/2007	185000	200	715200	50	95500	3170	2	655	1	78	77	20	12	18	4/18/2007	-37.6	-28.5	-27.2
113767	8222	6/14/2006	22:35	3970		7.29	3/24/2007	192200	210	751900	120	53300	1780	1	400	1	51	51	14	8	14	4/18/2007	-38.3	-28.8	-27.7
113768	8222	6/15/2006	0:20	4000		9.29	3/24/2007	192400	210	739600	80	64900	2190	2	471	1	58	57	15	9	14	4/18/2007	-37.2	-28.0	-26.8

Chemical analysis based on standards accurate to within 2%.
in blue = carbon isotope data obtained via cryogenic enrichment

Rig Positioning Report

Appendix 10

REPORT FOR THE OTWAY GAS PROJECT OFFSHORE FACILITIES INSTALLATION

SURVEY SERVICES

FUGRO SURVEY JOB NO. – P0339

TOPL JOB NO. – AP004057

Client	:	Technip Oceania Pty Ltd
		1100 Hay Street
		West Perth, 6005
	:	Western Australia
Date of Survey	:	12 November 2005 - 30 March 2006

0	Final			6 April 2006
Rev	Description	Checked	Approved	Date

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1.0 SURVEY RESULTS

1.1 The Project

Fugro Survey Pty Ltd (Fugro), Perth was contracted by Technip Oceania Pty Ltd (TOPL) to provide survey services for the Otway Gas Project - Offshore Facilities. The Otway Project is operated by Woodside Energy Ltd (WEL) and includes the Thylacine and Geographe Fields located in the Otway Basin in permits VIC P/43 and T/30P approximately 70kms offshore South West Victoria, Australia. Water depth at the fields is approximately 100m.

A general location diagram is shown as Figure 1-1.

The Otway Project consists of an unmanned platform gathering gas from four wells and piped ashore via a new 70km pipeline to a gas plant onshore. TOPL was contracted to install the jacket and topsides and used the jack up rig *Maersk Guardian* to carry out this work.

Fugro provided survey personnel and equipment on board the *Maersk Guardian* and equipment on the associated vessels. Fugro's Starfix.DGPS was used as the primary positioning system for all vessels on the project.

The offshore phase of the project was completed between 12 November 2005 and 23 March 2006. Appendix A contains the Fugro Daily Operations Reports for the work undertaken.

This report details the as-built details of the jacket and topside facilities. The geodetic parameters used and the operational survey procedures employed to complete the scope of work defined below are also described.

1.2 Scope of Work

The survey scope of work carried out included the following:

- Develop and have approved the project survey procedures.
- Prepare and test equipment in Perth ready for dispatch to the various vessels at the required ports of mobilisation.
- Install and function test a motion sensor and data logging system on the jacket tow barge at the MSE shipyard in Johor Baru, Malaysia.
- Mobilise personnel and equipment to Western Port, Portland and Geelong for installation of equipment on the JUR, support vessels and the jacket barge. This included a BMS system to remotely control the navigation and positioning systems on three AHTs.
- Re-install the motion sensor and telemetry equipment on the jacket barge to allow monitoring of barge motion during jacket launch.
- Function test, and calibrate all equipment on the JUR in Western Port prior to sail away for the field. Similarly, function test and calibrate where possible, navigation equipment installed on the various support vessels.
- Determine JUR offsets from the centre stern datum to navigation antennae by completing a closed survey traverse around the rig.

GENERAL LOCATION DIAGRAM

FIGURE 1-1

u:\p0339\dgn\figure\procedure\figure1-1.dgn

- Provide positioning assistance for the JUR and three AHT's to hook up the pre-laid temporary moorings and position the JUR on location and heading at the Thylacine location.

- Once the JUR was on location and jacked up to operating height, confirm position and determine MSL elevation by conducting carrier phase GPS observations as per the WEL specification. Process data using the Aus Pos service and provide confirmation of the results by processing at the Fugro offices in Perth.

- Provide positioning assistance for the AHT's during the launch, tow and upending of the jacket at the stern of the JUR.

- Once the jacket was on the seabed, provide checks on verticality using the installed pill bubble and the supplied digital level.

- Transfer LAT elevation from the JUR to the jacket and confirm position prior to commencement of piling operations.

- On completion of piling, re-observe GPS carrier phase observations on board the JUR and transfer height to the jacket to enable leg cut off levels to be marked relative to LAT.

- Prior to the load out of the top sides section on the tow barge, mobilise positioning equipment to the barge. The motion sensor remained configured to transmit barge motion data to the JUR for display and logging.

- Provide positioning assistance using the BMS on board the JUR to reposition the pre-laid temporary moorings and install additional moorings required for the top side's installation.

- Provide positioning assistance as required for the AHT's to bring the top sides barge into position at the stern of the JUR.

- Once the top sides have been installed, undertake survey measurements to confirm final deck elevation and level.

- Demobilise all equipment and personnel to Perth at completion of the project.

- Compile a daily report offshore listing equipment and personnel on board and detailing the events of the day.

- Compile field reports throughout the project on specific survey operations as required.

- On completion of the jacket and top sides installation phase of the Otway Gas Project and on return to Perth, complete a final as-built survey report.

1.3 Abbreviations

The following abbreviations are in use throughout this report.

AHD	-	Australian Height Datum
AHT	-	Anchor Handling Tug
APSat	-	Asia Pacific Satellite
BMS	-	Barge Management System
CM	-	Central Meridian
CRP	-	Common Reference Point
DGPS	-	Differential Global Positioning System
Fugro	-	Fugro Survey Pty Ltd.
GDA94	-	Geodetic Datum Australia 1994
GPS	-	Global Positioning System
HS & E	-	Health Safety and Environment
JHA	-	Job Hazard Analysis
JUR	-	Jack-Up Rig
LAT	-	Lowest Astronomical Tide
LSF	-	Lateral Support Frame
MGA	-	Map Grid Australia
MRDGPS	-	Multi Reference Differential Global Positioning System
MSL	-	Mean Sea Level
PDF	-	Portable Document Format
ROV	-	Remote Operated Vehicle
TOPL	-	Technip Oceania Pty Ltd
WEL		Woodside Energy Limited
WGS84	-	World Geodetic System 1984

1.4 Report Structure

This report presents the as-built results of the Otway Gas Project undertaken from the *Maersk Guardian* between November 2005 and March 2006. The report also includes details of the survey equipment used and calibrations undertaken. Descriptions of the survey operations, field procedures and a section on health, safety and environmental procedures are also included.

Information pertaining to equipment calibrations, as-laid results and other project documentation is provided in the attached appendices. This report and associated appendices are also supplied digitally in Adobe Acrobat (PDF) format.

2.0 SURVEY RESULTS

The following sections provide a summary of the survey results obtained during the project. All coordinates are in terms of the project geodesy detailed in Section 6.1 of this report.

2.1 Jack Up Rig Positioning Results

2.1.1 Final Rig Position

The *Maersk Guardian* was positioned at the Thylacine-A location at 20:44 on 18 November 2005. On completion of pre-load operations the rig was jacked-up to an air gap of 17.8m and a final position fix was taken. The final position of the *Maersk Guardian* centre stern was established by calculating the mean position from one hour of DGPS data logged between 06:02 and 07:02 on 21 November 2005. During this period, calculated centre stern coordinates from the primary and secondary positioning systems were logged at five second intervals using Starfix.Seis. Data from the primary positioning system was used for the final position calculation.

Table 2-1 summarises details of the final JUR position at the Thylacine location.

GDA94, MGA, CM 141° E		
Position	**Easting (m)**	**Northing (m)**
Design Location Thylacine A	664169.65	5655160.35
Final JUR Location	664165.59	5655155.38
Coordinate Difference	-4.06	-4.97
Radial Difference from Design	6.4m at 219.2° (Grid)	

TABLE 2-1 : FINAL JUR POSITION AT THYLACINE-A

A copy of the original rig position field report is contained in Appendix B.

2.1.2 GPS Carrier Phase Measurements

The GPS carrier phase measurements were completed between 04:45 and 10:45 on 21 November 2005. Table 2-2 summarises the results obtained which served to confirm the final position of the JUR.

GDA94, MGA, CM 141° E			
Position	**Easting (m)**	**Northing (m)**	**Height (m) (above MSL)**
Carrier Phase Position for GPS Antenna	664207.04	5655118.21	52.23
Carrier Phase Position for JUR	664165.92	5655155.35	
Final JUR Location	664165.59	5655155.38	
Difference	0.32	0.03	

TABLE 2-2 : GPS CARRIER PHASE RESULTS

2.1.3 *Final Rig Heading*

The heading of the *Maersk Guardian* at the Thylacine-A location was established by calculating the average heading during one hour of corrected gyro compass readings logged between 06:02 and 07:02 on 21 November 2005. During this period heading data were logged at five second intervals using Starfix.Seis.

Table 2-3 summarises the final heading of the *Maersk Guardian* at the Thylacine-A location.

Description	Grid	True
Design Rig Heading	135°	133.8°
Final Rig Heading	129.1°	127.9°
Difference from Design	-5.9°	

TABLE 2-3 : FINAL JUR HEADING AT THYLACINE-A

2.2 Jacket Installation Results

2.2.1 *Final Jacket Position*

The final position of the jacket was established from observations from each of the two stern survey control points to the centre of the jackets legs. From these measurements the jacket datum position could be established.

The results of final jacket position are shown in Table 2-4.

GDA94, MGA, CM 141° E		
Position	**Easting (m)**	**Northing (m)**
Design Jacket Datum	664165	5655165
Jacket Datum	664161.63	5655160.19
Difference from Design	-3.37	-4.81

TABLE 2-4 : FINAL THYLACINE JACKET POSITION

Full details of jacket position are provided in the Field Reports contained in Appendix B.

2.2.2 *Final Jacket Heading*

The final jacket heading was calculated from observations to each of the centre of legs C/3 and E/3 from the two stern survey control stations.

The results of final jacket heading are shown in Table 2-5.

Description	Grid	True
Jacket Heading	219.8°	218.6°

TABLE 2-5 : FINAL THYLACINE JACKET HEADING

Full details of final jacket heading are provided in the Field Reports contained in Appendix B.

2.2.3 *Final Jacket Elevation*

The jacket elevation was established from observations from the starboard stern survey control station. An LAT height for this control station was established from the second GPS carrier phase logging session which was undertaken on the 15 February 2006. Appendix C. contains details of the carrier phase results.

The results of the jacket and JUR elevation observations are shown in Table 2-6.

Description	Height Above LAT (m)
Jacket THY-A Top Deck (Average)	31.01
JUR Drill Floor	50.46
JUR Underside of Hull	29.51

TABLE 2-6 : FINAL THYLACINE JACKET ELEVATIONS

Full details of jacket elevations are provided in the Field Reports contained in Appendix B.

2.2.4 *Final Jacket Level*

The level survey showed that there is a maximum level difference from highest to lowest point on the top deck of 0.163m. This difference is along the X axis of the top deck which equates to +0.27° of roll over the length of top sides.

Full details of the level survey are in Appendix B.

3.0 HEALTH, SAFETY & ENVIRONMENT MANAGEMENT

3.1 Health, Safety & Environment Management

All work undertaken by Fugro personnel during the project was conducted within the guidelines of Fugro's Safety Policy as defined in Fugro's Safety Manual (FSSM01) and Offshore Survey Safety Practices (FSSM06).

The Fugro Party Chief was the designated on site Fugro Safety Representative and liaised with the TOPL HSE Coordinator on board the *Maersk Guardian* concerning all matters relating to safety.

All Fugro personnel were supplied with full personal protective equipment (PPE) and this was worn at all times when on deck.

3.2 Inductions

Fugro personnel received rig and project inductions on board the *Maersk Guardian.* Specific vessel emergency procedures and mustering details were explained to all personnel, together with the project scope of work and the identified hazards associated with the tasks to be carried out.

A summary of all inductions held during the project is contained in Table 3-1.

Date	Induction	Location
13 November 2005	Rig Safety Induction – 2 Fugro personnel	*Maersk Guardian*
15 November 2005	Rig Safety Induction – 1 Fugro personnel	*Maersk Guardian*
28 November 2005	TOPL Project Induction	*Maersk Guardian*
13 December 2005	Rig Safety Induction – 1 Fugro personnel	*Maersk Guardian*
15 February 2006	Rig Safety Induction – 1 Fugro personnel	*Maersk Guardian*
22 February 2006	Rig Safety Induction – 1 Fugro personnel	*Maersk Guardian*

TABLE 3-1 : SUMMARY OF INDUCTIONS

3.3 Safety Meetings & Drills

A summary of all safety meetings and drills held during the project is contained in Table 3-2.

Date	Meeting/Drill	Location
14 November 2005	Abandon Rig Drill and Emergency Muster	*Maersk Guardian*
15 November 2005	Fire Drill and Emergency Muster	*Maersk Guardian*
22 November 2005	Abandon Rig Drill and Emergency Muster	*Maersk Guardian*
26 November 2005	Fire Drill and Emergency Muster	*Maersk Guardian*
27 November 2005	Rig Safety Meeting	*Maersk Guardian*
30 November 2005	Fugro Safety Meeting	*Maersk Guardian*
3 December 2005	Abandon Rig Drill and Emergency Muster	*Maersk Guardian*
10 December 2005	Fire Drill and Emergency Muster	*Maersk Guardian*
15 December 2005	Fugro Safety Meeting	*Maersk Guardian*
17 December 2005	Abandon Rig Drill and Emergency Muster	*Maersk Guardian*
31 December 2005	Fire Drill and Emergency Muster	*Maersk Guardian*
7 January 2006	Fugro Toolbox Meeting	*Maersk Guardian*
18 February 2006	Fire Drill and Emergency Muster	*Maersk Guardian*
25 February 2006	Fire Drill and Emergency Muster	*Maersk Guardian*

TABLE 3-2 : SUMMARY OF PROJECT SAFETY MEETINGS/DRILLS

Copies of the minutes of the Fugro safety meetings are contained in Appendix D.

3.4 Job Hazard Analysis

Prior to the commencement of any key survey tasks, for example, equipment mobilisation, a Job Hazard Analysis (JHA) was undertaken. This is a method of evaluating step by step the risks involved with the process and then looking at ways in which that potential risk can be eliminated or, as a minimum, protected against. The JHA involves clear documentation of the task and any specific variations and actions required for the particular equipment or vessel set-up.

For survey tasks identified in the Hazard Register the JHA was reviewed whereas for other tasks a new JHA was carried out. Table 3-3 summarises the project specific JHAs undertaken.

Date	JHA Reference	JHA Description
25 November 2005	SMS-J24	Vessel Transfer at Sea (Review)
30 November 2005	SMS-J27	Mobilisation of Anchor Handling Vessels (Review)
1 December 2005	F001	Survey Observations at Rig Stern
15 February 2006	-	Technip JHA for Working on Jacket

TABLE 3-3 : JOB HAZARD ANALYSIS

3.5 Reported Hazards and Incidents

Fugro personnel utilised the hazard reporting systems on board the *Maersk Guardian*. No safety incidents involving Fugro personnel were encountered and no injuries were suffered during the project.

4.0 SURVEY OPERATIONS

4.1 Sequence of Events

The offshore phase of the project was carried out between 12 November 2005 and 23 March 2006. A brief summary of the installation program is presented in Table 4-1. For more detailed information refer to the Daily Operations Reports provided in Appendix A of this report.

Installation Dates		Description
From	To	
12 Nov 2005		Two Fugro personnel travel Perth to Melbourne.
13 Nov 2005	14 Nov 2005	Personnel and equipment transferred to *Maersk Guardian* at Western Port. Two additional Fugro personnel transfer to rig from *Maersk Supporter*. Complete mobilisation of JUR and check equipment on *Pacific Wrangler* and *Far Grip*.
15 Nov 2005		Two personnel mobilise survey equipment to *Lady Gerda* and jacket barge in Geelong. Undertake survey traverse on JUR.
16 Nov 2005		One personnel return to Perth. One personnel travel to Portland to check equipment on *Pacific Wrangler.* Complete calibrations on board JUR.
16 Nov 2005	18 Nov 2005	*Maersk Guardian* towed to site and positioned at Thylacine location.
17 Nov 2005		One personnel travel Portland to Perth.
19 Nov 2005	21 Nov 2005	Rig completing pre-load operations. Re-positioning of pre-laid moorings. Observation of GPS carrier phase data.
22 Nov 2005	10 Dec 2005	*Maersk Guardian* at Thylacine awaiting arrival of jacket barge.
30 Nov 2005		Survey equipment mobilised to the *Ray J Hope.*
30 Nov 2005	1 Dec 2005	Jacket barge on location at Thylacine, decision made not to proceed with launch and installation of jacket. Barge returns to Geelong.
10 Dec 2005	11 Dec 2005	Jacket barge on location at Thylacine, launch operations commenced. Launch abandoned and barge returned to Portland.
12 Dec 2005		*Maersk Guardian* at Thylacine awaiting arrival of jacket barge. One Fugro personnel depart JUR and travel to Perth.
13 Dec 2005		One Fugro personnel arrive on board JUR.
16 Dec 2005		One Fugro personnel depart JUR.
19 Dec 2005		One Fugro personnel arrive on board JUR.
20 Dec 2005	21 Dec 2005	Jacket barge on location at Thylacine, launch operations commenced. Launch abandoned and barge returned to Portland.
21 Dec 2005		Two Fugro personnel depart JUR.
31 Dec 2005		Two Fugro personnel arrive on board JUR.
5 Jan 2006	6 Jan 2006	Jacket barge on location at Thylacine, jacket launched, upended and landed on seabed.
7 Jan 2006	8 Jan 2006	Conduct verticality, orientation and offset checks on jacket.
10 Jan 2006	12 Jan 2006	Fugro personnel transfer to *Maersk Supporter* to carry out topside anchor deployment.
12 Jan 2006		Two Fugro personnel depart JUR.
2 Feb 2006		One Fugro personnel arrive on board JUR.

Installation Dates		Description
From	To	
4 Feb 2006	5 Feb 2006	Deploying S2 & S3 anchors from *Maersk Supporter.*
6 Feb 2006		Compiling report on anchor deployment locations and checking requirements for two phase based GPS positions for height.
7 Feb 2006		One Fugro personnel depart JUR.
14 Feb 2006		One Fugro personnel arrive on board JUR. Logging data for GPS carrier phase data to determine height.
15 Feb 2006		One Fugro personnel arrive on board JUR.
16 Feb 2006		Transferring level to jacket and marking cut off elevation at 9.4m LAT.
17 Feb 2006		Relocating positions of S3, S4 & P1 anchor buoys.
18 Feb 2006	22 Feb 2006	Standing by for top sides barge.
22 Feb 2006		One Fugro personnel depart and one arrived on JUR.
23 Feb 2006		Standing by for top sides barge.
24 Feb 2006	25 Feb 2006	Connecting top sides barge to anchors.
26 Feb 2006	27 Feb 2006	Top sides lifted off barge, disconnecting anchor wires from barge. Demobilised *Maersk Guardian*.
27 Feb 2006		Two Fugro personnel depart JUR.
28 Feb 2006	2 Mar 2006	Demobilising top sides barge and Lady Gerda AHT in Portland.
23 Mar 2006		One Fugro personnel arrived on JUR. Carrying out final as-built survey on THY-A Jacket.
24 Mar 2006		One Fugro personnel departed JUR.
29 Mar 2006		Travelling to Portland
30 Mar 2006		Demobilising *Maersk Supporter*

TABLE 4-1 : INSTALLATION SUMMARY

4.2 Project Preparations

Prior to mobilisation for the offshore phase of the work, there was a period of preparation in order to organise the equipment and personnel and to put together a plan for the conduct of the survey support services. A key component of the preparation was the compilation of project documentation. This process involved interaction between Fugro, TOPL and WEL to produce health, safety, environmental, quality management and operational procedures.

4.3 Mobilisation

Two Fugro personnel travelled from Perth to Melbourne on 12 November 2005, and transferred the following day to the JUR *Maersk Guardian*. The survey equipment was loaded in a container and arrived on board the rig later that day. Mobilisation took place with the JUR on the heavy lift vessel *Transshelf'* at anchor at Western Port. Two additional Fugro personnel transferred from the *Maersk Supporter* to the JUR on 14 November 2005. This vessel had been involved in the installation of temporary moorings offshore and was therefore left mobilised as an AHT.

All navigation and survey equipment were installed in the jacking control room of the *Maersk Guardian* and navigation and telemetry antennae mounted in clear locations on the control room roof and adjacent to the helideck. The installed navigation equipment and gyro compass were interfaced to the navigation computer and a helmsman display provided for the rig tow master.

Prior to the JUR departing Western Port on 16 November 2005, DGPS checks and gyro calibrations were completed to demonstrate correct operation of these systems. An offset traverse was undertaken using a Total Station instrument to accurately locate the GPS antenna relative to the centre stern of the JUR.

For the rig move operations the AHTs *Far Grip* and *Pacific Wrangler* were to be used and it was required to mobilise these vessels with positioning packages that would operate with the rig BMS. Both vessels were mobilised with DGPS and telemetry equipment from a previous contract and therefore it was required only to install modems operating at the correct BMS frequency. Personnel visited each vessel prior to the tow to site to install the modem and check that systems were operational.

For the jacket and top sides installation the *Lady Gerda* and *Ray J Hope* were mobilised with positioning and telemetry equipment. The *Lady Gerda* was mobilised in Geelong on 15 November 2005. The jacket barge was in Geelong at this time and the required motion sensor and telemetry equipment were installed in the winch room on the barge and connected to a battery supply. The *Ray J Hope* was mobilised offshore on 30 November 2006, with personnel transferring with the equipment from the JUR to complete this mobilisation.

The top sides barge was mobilised in Geelong on the 22 February 2006, with a motion sensor and telemetry equipment. In addition to this, DGPS was installed with telemetry so the movement of the top sides barge could be monitored from the JUR using the BMS system.

4.4 General Positioning

The *Maersk Guardian* and all support vessels used Fugro's Starfix positioning systems for surface positioning throughout the project. The Starfix reference stations used to provide accurate differential corrections during the project were Melbourne, Ceduna, Cobar and Bathurst.

A scaled outline of the *Maersk Guardian* was displayed at all times on the navigation screen on board the JUR. The BMS system permitted the location of all AHTs with survey equipment installed and within telemetry range of the JUR to also be displayed. An as-laid database was also displayed on the screen to indicate the location of the Thylacine-1 wellhead, the pre-installed anchors and surface pennant buoys.

Similar navigation displays were available on each AHT such that each vessel was able to see its location with respect to all other vessels, including the JUR. Any amendments to the as-laid database were transmitted by radio modem to ensure information on the AHT navigation screens remained current.

4.5 Jack Up Rig Positioning

The *Maersk Guardian* was towed out from Western Port by the AHTs *Maersk Supporter* and *Far Grip* on 16 November 2005. The position of the channel markers in the Western Channel were displayed on the navigation screen and a tow route as supplied by WEL was entered to the navigation computer.

The JUR arrived at the Thylacine-A location on 17 November 2005, and the legs were jacked down to approximately 50m above the seabed whilst an assessment was made of the prevailing weather conditions. The *Pacific Wrangler* arrived on location to assist with the rig positioning and the location of all vessels was monitored using the BMS on board the *Maersk Guardian.* The JUR remained under tow outside of the pre-installed mooring system until the following day when the decision was made to make use of the current weather window to pin the JUR on location.

Due to the time required to connect to the pre-installed moorings and the possibility of deteriorating weather conditions it was decided not to connect to the mooring system but to use the three AHTs to statically position the JUR. The design heading and location of the JUR were displayed as a template on the navigation screen and range and bearing information provided to assist in positioning the rig within the required tolerance.

The three AHTs were connected to the JUR and under the control of the tow master, each vessel was positioned on DP to bring the rig to the correct heading and position. Figure 4-1 shows an example of the navigation screen made available to the tow master to assist with this operation.

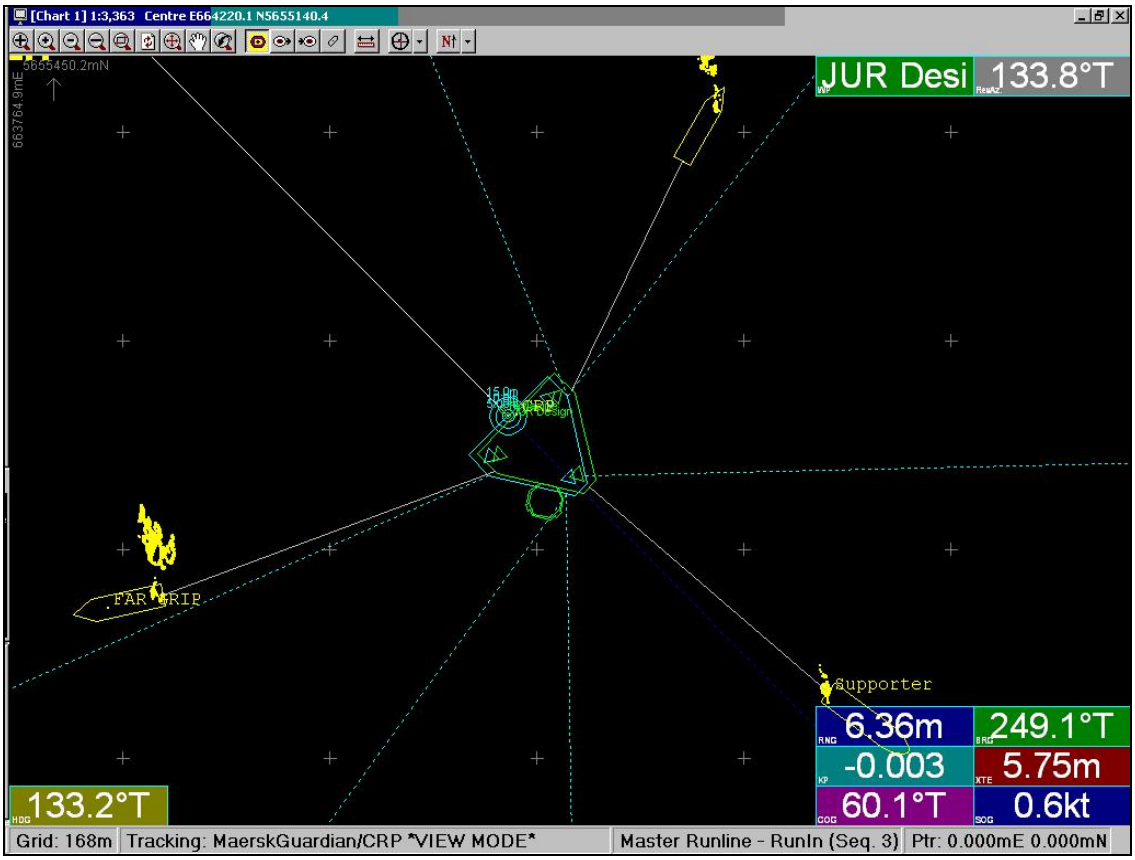


FIGURE 4-1 : EXAMPLE NAVIGATION DISPLAY DURING FINAL JUR POSITIONING

The legs were lowered and the JUR pinned on location at 20:44 on 18 November 2005. A preliminary position and heading were determined prior to preload operations. The preload was completed on 21 November 2005, and the rig jacked up to its working air gap of 17.8m.

Final position and heading for the *Maersk Guardian* was determined by logging one hour of data, at an interval of five seconds, from the primary DGPS and the gyro compass. Appendix B contains a copy of the issued field report detailing final mean position and heading relative to design.

To provide confirmation of position and determine an elevation datum, it was required to observe GPS carrier phase data on the JUR at completion of the preload operations. A Trimble SSE dual frequency GPS receiver with ground plane antenna was mobilised for this purpose and the antenna sited at an optimum location to minimise signal reflections. On 21 November 2005, data was logged at a 15 second interval for a period of six hours.

The data was sent ashore for processing and the results obtained were checked by on board processing with Trimble software, GPSurvey. The final solution used baseline data logged at Melbourne, Hobart and Tidbinbilla in New South Wales.

The processed results also yielded an ellipsoidal height for the phase centre of the GPS antenna. It was necessary to correct this height to AHD and the ellipsoid-geoid separation was obtained from Geoscience Australia. A further correction to LAT was then applied using the vertical datum information detailed in Section 6.3 of this report.

4.6 Jacket Installation

Preparations for the jacket installation included the transfer of elevation from the GPS antenna datum to two of the JUR legs. This ensured the elevation datum was not lost when the rig hull was jacked to a different position during the jacket installation operations. A combination of vertical tape measurements and tilting level observations were used to transfer the LAT elevation at the GPS antenna to fixed reference points on the bow and port legs of the JUR.

After a period of time waiting for a suitable weather window to commence jacket installation operations the jacket barge was towed to site from Portland on 29 November 2005. The launch of the jacket was aborted due to the JUR not being ready and the jacket barge was towed to Portland. The jacket barge was again towed out to site on the 10 December 2005, however the launch was aborted due to engineering problems and the jacket barge was returned to Portland. On 19 December 2005, the jacket barge was towed out to site but the jacket launch was again aborted and returned to Portland. After returning to Portland the barge was refitted to overcome the engineering problems and was towed out to site on 4 January 2006. The jacket was launched, upended and landed on the seabed between 5 and 7 January 2006. The position and heading of the jacket was controlled by the LSF and on the JUR consequently no positioning services were required.

Once the jacket had been landed and secured in the LSF a check was conducted for verticality using a digital builder's level. A copy of the field report detailing the results of the survey can be found in Appendix H.

On 8 January 2006, after the jacket had been ballasted down, an orientation and offset check was conducted. Observations were made to the centre of the tower legs using a total station from two survey stations situated on the port and starboard extremities of the JUR's stern. From these observations a coordinate was calculated for the datum point and also the orientation of the jacket. Elevations from the JUR leg bench marks were transferred down to the stern stations and then transferred to the +18.5m elevation horizontal frame on the jacket using a total station.

4.7 Topside Anchor Deployment

Prior to the arrival of the top sides barge an eight anchor mooring system was installed in accordance with Technip Drawing No. AP004057-190-DW-3842-002. Positioning was monitored from the *Maersk Supporter* and the final position of the anchors is an estimate based on pre-tension load of 80 Te and subsequent catenary calculations using client supplied software. Appendix H contains a field report that details the final positions of the topside anchors.

4.8 Top Sides Installation

The top side was transferred from a heavy lift vessel to the barge at Geelong. A radio modem was installed on the barge to transmit motion data to the JUR. A BMS system was also mobilised onto the barge. This allowed personnel on the JUR to track all tugs and the barge.

The BMS on the JUR was utilised to track the top sides barge and all AHT's during hook up of the top sides barge to the preinstalled mooring system. Motion data (heave, pitch, roll, and accelerations in heave, pitch, and roll) were displayed graphically on the JUR. Data for the past 30 minutes was displayed and all data was logged. The OCM used the information along with weather forecasts to decide on when to bring the barge into position under the JUR derrick.

The top sides barge was moved into final position on the 26 February 2006, using visual means as the DGPS system was receiving multipath errors from the JUR structure. Once in position and the weather conditions were right the top side was lifted from the barge and left suspended from the derrick until jacket readiness.

The BMS was used again to assist in removing the top sides barge from the eight anchors and out of the field on the 26 and 27 February 2006.

GPS carrier phase observations were completed on February 2006, prior to the top deck being installed, GPS data was logged over 24 hours at two locations one on each stern leg. This was used to determine an LAT height of the GPS antennas with post processing and thus transfer LAT heights to the jacket and control points around the JUR.

The LAT height of the top deck was transferred by total station on the 23 March 2006, from the starboard control point on the JUR. A number of observations were taken on both face left and face right of the instrument. The level survey was also carried out on the top deck on the 23 March 2006, a total of eight points were taken around the top sides to give a good spread around the deck level.

It should be noted that there was movement on both the JUR and the jacket due to the large swell at the time making levelling of the instruments challenging.

Appendix B contains a field report that details the LAT height and level survey.

4.9 Demobilisation

Due to the extended nature of the project a number of personnel and equipment demobilisations were undertaken prior to the completion of the scope of work on 30 March 2006. Full details are provided in the Daily Operations Reports contained in Appendix A.

The AHTs *Far Grip* and *Pacific Wrangler* were required for the rig move operations only and went off charter on 18 and 22 November 2005, respectively. Survey equipment remained on board apart from the telemetry modems which were demobilised to the *Maersk Guardian.*

The *Maersk Guardian* was demobilised on 27 February 2006, of all BMS equipment. A minimal amount of land survey equipment was left on board to carry out the remaining as-built survey work on the top sides.

The top sides barge and the *Lady Gerda* were demobilised in Portland on 1 March 2006. The *Maersk Supporter* was demobilised in Portland on 30 March 2006.

4.10 Processing and Reporting

After completion of the offshore phase of the project, all electronic survey data was backed up for return to Fugro's Perth office for processing and final reporting. The processing and charting procedures used are explained below.

The positioning data obtained were of good quality and the compilation and processing of the recorded data was completed offshore.

5.0 EQUIPMENT CALIBRATION, VERIFICATION AND OPERATION

5.1 Gyro Compass Calibration

To provide vessel heading information during the Otway Gas Project jacket and top sides installation the *Maersk Guardian* was mobilised with an SG Brown Meridian gyro compass. This was installed in the jacking control room and was interfaced to the navigation computer.

Calibration of the gyro compass was undertaken by two different methods prior to the rig being floated off the heavy lift vessel, *Transshelf,* in Western Port, Victoria. The initial method adopted was to observe an angle, relative to rig heading, from the helideck of the *Maersk Guardian* to the main mast on the *Maersk Supporter.* The position of the mast was known and was being transmitted to the rig using Starfix.Wombat. This enabled a true bearing to be computed between the observing position and the mast, to which the observed angle could be applied to determine a computed rig heading.

The second method of calibration was by sun azimuth observations using a Wild T1000 theodolite set up on the helideck and a reference bearing established parallel with the centreline of the rig. Observed angles from the reference to the sun were applied to the computed sun azimuth to determine a true heading for the rig. For both methods of calibration the observed gyrocompass values were logged with Starfix.Seis during the period of survey observations and a gyro correction value was determined by comparing computed rig heading with the observed values.

The mean correction determined from both calibration exercises is summarised in Table 5-1.

Gyro Compass	Calibration Method	Correction
SG Brown (S/N 137393)	Observation to *Maersk Supporter*	-1.02°
SG Brown (S/N 137393)	Sun Azimuth	-0.63°
	Mean Correction	**-0.82°**

TABLE 5-1 : GYRO CALIBRATION RESULTS

The mean correction value was entered to the navigation computer to correct all interfaced gyro values obtained during the project.

Full details of the gyro calibrations and the observations made are provided in Appendix E.

5.2 DGPS Operation and Verification

To provide surface positioning for the *Maersk Guardian* during the rig move, the vessel was mobilised with two Fugro Starfix Differential GPS systems. These systems were installed, interfaced to the navigation computer and configured to provide three navigation solutions using differential corrections from reference stations at Melbourne, Cobar, Ceduna and Bathurst. Corrections were delivered to the vessel from the Optus and APSat communications satellites. Table 5-2 summarises the three navigation solutions available.

System	Description	Corrections
Primary	Starfix HP	Melbourne, Cobar, Ceduna, Bathurst (OPTUS)
Secondary	Starfix GSS	Global corrections
Tertiary	Trimble/Starfix.MRDGPS	Melbourne, Cobar, Ceduna, Bathurst (APSAT)

TABLE 5-2 : JUR DGPS CONFIGURATION

Mobilisation of the *Maersk Guardian* was undertaken at Western Port whilst the rig was still on the heavy lift vessel and therefore the method of verifying correct operation of the DGPS was restricted to a range and bearing observation to the *Maersk Supporter.* The DGPS on this vessel had been checked previously whilst alongside at Portland, Victoria. Appendix F contains details of the DGPS verification undertaken on board the *Maersk Supporter.*

Prior to the position check, all rig offsets had been confirmed by traverse and the gyro compass had also been calibrated. A total station instrument was set up on the helideck and used to observe range and bearing measurements to a prism on the mast of the *Maersk Supporter.* Position data from the vessel was telemetred to the rig and logged to enable a comparison between computed and observed positions to be made.

A summary of the results of this verification check is shown in Table 5-3.

Position	Mean C-O East (SD)	Mean C-O North (SD)
Maersk Supporter Mast	-1.67 (0.44)	-0.78 (0.33)

TABLE 5-3 : DGPS VERIFICATION

A DGPS comparison was also undertaken between all navigation systems with data being logged simultaneously and reduced to vessel datum. Table 5-4 summarises the results of the comparison.

System	Diff East (m)	Diff North (m)	SD East	SD North
Primary	-	-	-	-
Secondary	-0.21	0.03	0.07	0.04
Tertiary	-0.04	0.17	-0.48	-0.48

TABLE 5-4 : DGPS COMPARISONS

The results obtained from the DGPS checks indicate that all positioning systems were installed and operating correctly. The comparison between the positioning systems was displayed and monitored throughout the project.

Full details of the DGPS verification checks are contained in Appendix F.

6.0 SURVEY PARAMETERS

6.1 Geodetic Parameters

All coordinates are referenced to the Geocentric Datum of Australia 1994 (GDA94) unless otherwise noted. The Global Positioning System (GPS) operates on the World Geodetic System 1984 (WGS84) datum. Fugro's Differential GPS Reference Stations are currently defined in the International Terrestrial Reference Frame 2000 (ITRF2000 Epoch 2005.75) datum. Due to the continual refinement of the WGS84 reference frame, for all cases, the transformation parameters indicate that the WGS84 and ITRF2000 reference frames are essentially identical.

Datum	**:**	**World Geodetic System 1984 (WGS84)**
Reference Spheroid	:	World Geodetic System 1984
Semi Major Axis	:	6378137.000m
Inverse flattening	:	298.257223563

Datum	**:**	**Geodetic Datum Australia 1994 (GDA94)**
Reference Spheroid	:	GRS 80
Semi Major Axis	:	6378137.000m
Inverse flattening	:	298.257222101

The following seven parameter datum transformation (Table 6-1) was used in Fugro's software, to transform WGS84 (ITRF2000 Epoch 2005.50) coordinates to GDA94 coordinates. These parameters are calculated from the 14 parameter transformation defined by Geoscience Australia. Fugro follows the Coordinate Frame Rotation convention (as defined by UKOOA) for datum transformations.

Transformation Parameters from WGS84 (ITRF2000 Epoch 2005.50) to GDA94			
dX	-0.0156m	rX	+0.014452"
dY	-0.0349m	rY	+0.013052"
dZ	-0.0513m	rZ	+0.015040"
		dS	+0.004976ppm

TABLE 6-1 : TRANSFORMATION PARAMETERS

All grid projection coordinates are referenced to the Map Grid of Australia.

Grid	**:**	**Map Grid of Australia 1994 (MGA94)**
Projection	:	Transverse Mercator
Latitude of Origin	:	0°
Central Meridian	:	141° E (UTM Zone 54)
Central Scale Factor	:	0.9996
False Easting	:	500000m
False Northing	:	10000000m
Units	:	Metres

A printout of the navigation software configuration showing the geodetic parameters in use during the project is included in Appendix G.

6.2 Differential GPS Reference Stations

Fugro's Differential GPS Reference Stations are currently defined in the ITRF2000 (Epoch 2005.75) datum and shown in Table 6-2.

ITRF 2000, EPOCH 2005.75					
Station	**Id**	**Latitude**	**Longitude**	**Height (m)**	**Uplink**
Bathurst	336	33° 25' 46.882" S	149° 34' 01.968" E	756.66	Optus/APSat
Ceduna	355	32° 07' 03.052" S	133° 41' 22.849" E	7.27	Optus/APSat
Cobar	316	31° 29' 57.434" S	145° 50' 20.344" E	270.17	Optus/APSat
Melbourne	385 / 938	37° 48' 29.008" S	144° 57' 48.029" E	82.06	Optus/APSat

TABLE 6-2 : STARFIX DGPS REFERENCE STATIONS

6.3 Vertical Datum

The vertical datum used for this project was Lowest Astronomical Tide (LAT). From information supplied by WEL, LAT at the Thylacine A location LAT is 0.63m below Mean Sea Level (MSL). For the determination of the elevation of the jacket, height was transferred from GPS observations on the JUR. These were obtained relative to AHD, which is assumed to equal MSL.

7.0 SURVEY EQUIPMENT, VESSEL & PERSONNEL

7.1 Equipment Listing

7.1.1 Maersk Guardian

The following equipment was used on the *Maersk Guardian* during the project.

Positioning Systems
2 x Starfix DGPS (one spare)

Navigation and Data Logging System
2 x Pentium computers c/w Fugro's Starfix Navigation software (one spare)
1 x Helmsman Monitor
2 x SG Brown Gyro Compass (one spare)
1 x Offline reporting computer
1 x Printer
2 x Radio Modems for BMS (one spare)

Additional Equipment
2 x Leica TCRP1203 Total Station and Tripod
1 x Survey Level and Saff
1 x Digital Spirit Level
2 x Trimble SSE Dual Frequency GPS Receivers (one spare)
1 x Radio Modem for reception of MRU data from top sides barge

Spare Remote Vessel Package
1 x DGPS Receiver
1 x Navigation computers
1 x Helmsman Monitor
1 x Fluxgate Compass
1 x Radio Modem

All systems were supplied with the necessary cabling, power supplies, antennae, accessories, manuals and consumables for the system to be operational.

Figure 7-1 shows the equipment flow diagram for the *Maersk Guardian.*

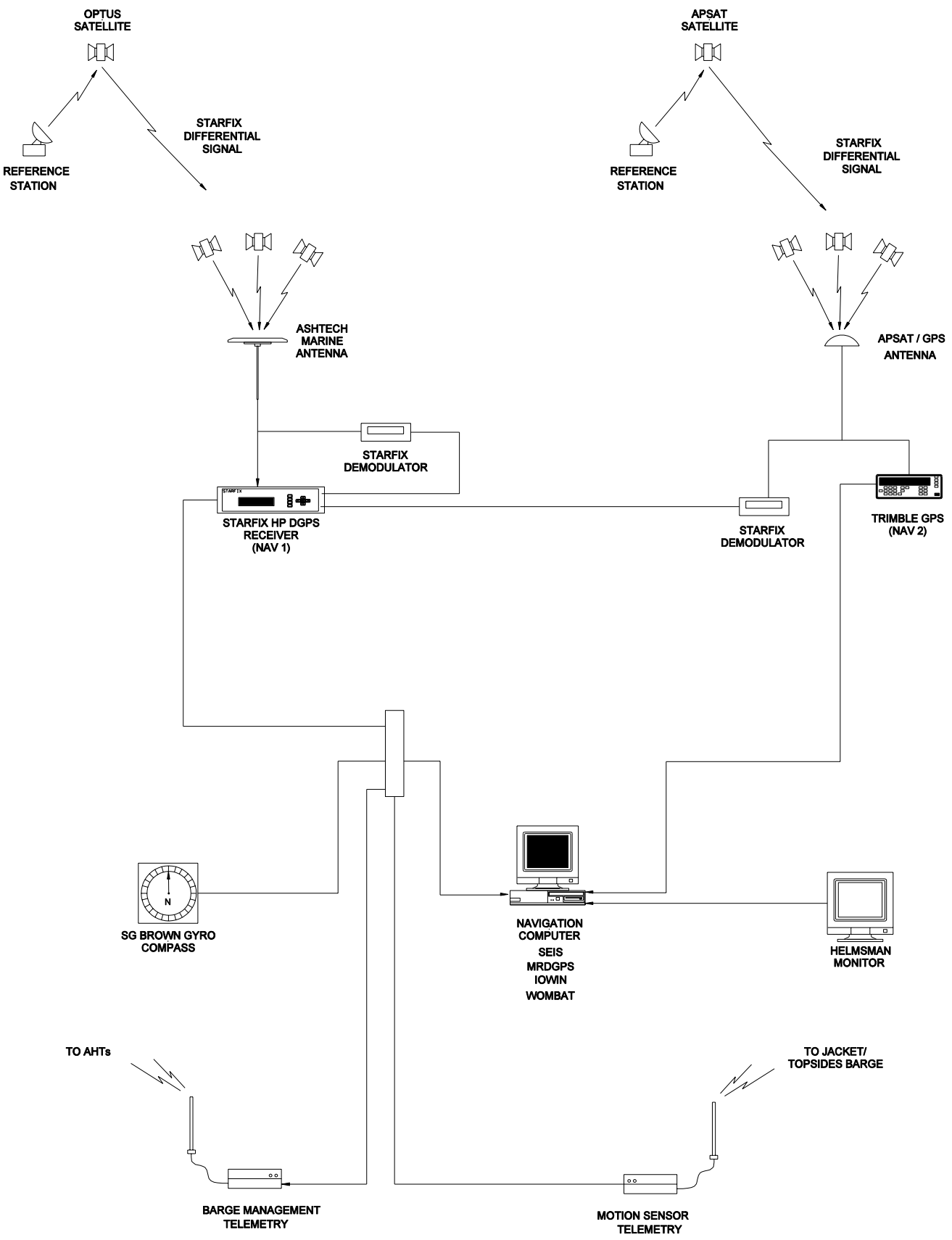
7.1.2 Substructure and Top Sides Barge

The following equipment was installed in the winch room of the barge.

1 x TSS DMS-05 Motion Sensor
1 x Portable PC
1 x Radio Modem to transmit motion data to the JUR

For the installation of the top sides a navigation package comprising the following equipment was added.

1 x DGPS Receiver
1 x Navigation Computers
1 x Helmsman Monitor
1 x Fluxgate Compass
1 x Radio Modem



EQUIPMENT FLOW DIAGRAM – MAERSK GUARDIAN

FIGURE 7–1

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7.1.3 *Support Vessels*

The following vessels were mobilised at various times during the project with navigation and telemetry equipment.

- *Maersk Supporter*
- *Far Grip*
- *Pacific Wrangler*
- *Lady Gerda*
- *Ray J Hope*

The equipment used comprised the following items and all systems were supplied with the necessary cabling, power supplies, antennae and consumables for the system to be operational.

1 x DGPS Receiver
1 x Navigation computers
1 x Helmsman Monitor
1 x Fluxgate Compass
1 x Radio Modem

Figure 7-2 shows an equipment flow diagram for the typical set up of navigation and telemetry on each of the support vessels.

7.2 Vessels

The *Maersk Guardian* is a jack-up rig approximately 84m in length and 90m in width. The survey equipment was installed in, and operated from, the jacking control room. GPS and telemetry antenna were mounted on the control room roof and adjacent to the helideck in positions selected to minimise the potential for signal obstruction and reflection.

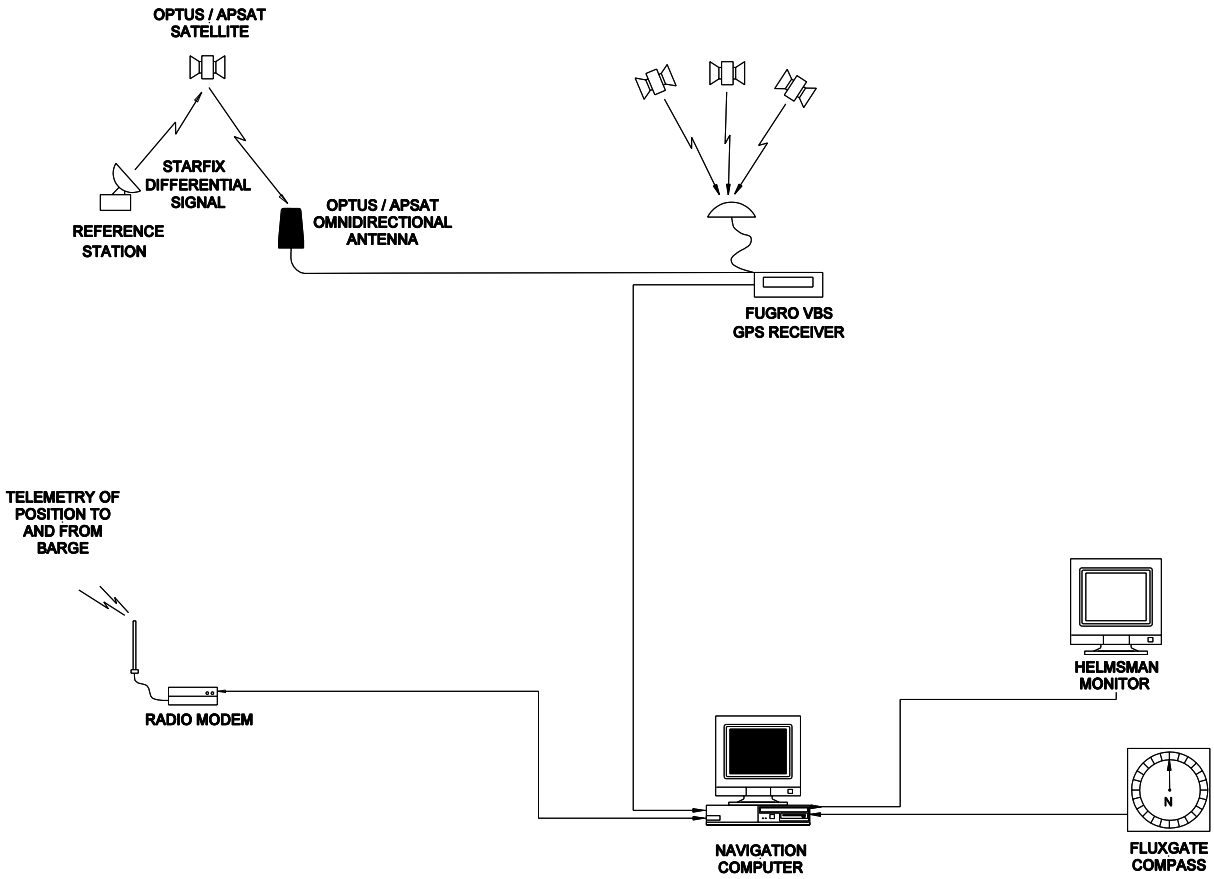
A vessel offset diagram for the *Maersk Guardian* is included as Figure 7-3. The centre stern of the rig was selected as the common reference point (CRP) and all navigation antenna and vessel offsets were related to this point. Offsets are also recorded in the Starfix.Seis configuration printout included in Appendix G.

The *Maersk Supporter* is an 80m long anchor handling vessel equipped with a dynamic positioning (Class 1) system. The survey equipment was installed and operated from the bridge. This vessel was used prior to the rig move to position and pre-tension a six anchor mooring system. For the jacket installation, the tow master was based on the *Maersk Supporter* and an additional navigation monitor was supplied to the vessel to assist the tow master with vessel positioning.

The anchor handling vessels *Pacific Wrangler* and *Far Grip* were mobilised with positioning and telemetry equipment for the duration of the JUR move to Thylacine-A. Survey equipment had been installed on the bridge of each vessel from previous positioning projects. For the duration of the rig move a modem was supplied to each vessel to enable the positioning equipment to operate with the BMS on board the *Maersk Guardian*.

The *Lady Gerda* and *Ray J Hope* are anchor handling vessels operated by Farstad and Tidewater respectively. These two vessels were mobilised with positioning and telemetry equipment to assist in the jacket and top sides installation works.

ANCHOR HANDLING TUG



EQUIPMENT FLOW DIAGRAM – AHT

FIGURE 7–2

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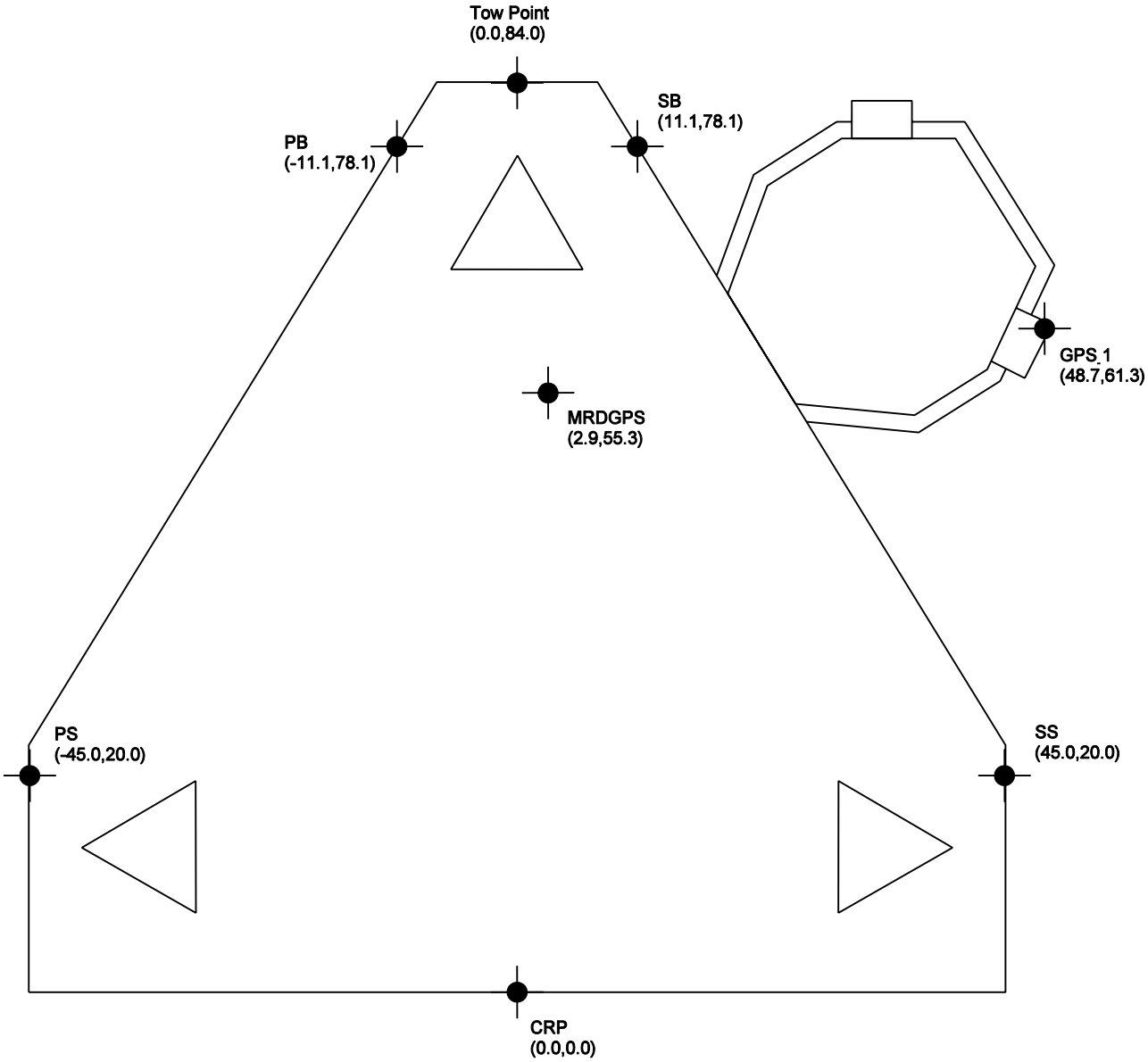

VESSEL OFFSET DIAGRAM – MAERSK GUARDIAN

FIGURE 7–3

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Vessel offset diagrams for the *Maersk Supporter, Far Grip, Pacific Wrangler, Lady Gerda* and *Ray J Hope* are included as Figure 7-4, Figure 7-5, Figure 7-6, Figure 7-7 and Figure 7-8 respectively. A common reference point (CRP) was selected and all navigation antenna and vessel offsets were related to this point. Offsets are also recorded in the Starfix.Seis configuration printout included in Appendix G.

7.3 Personnel

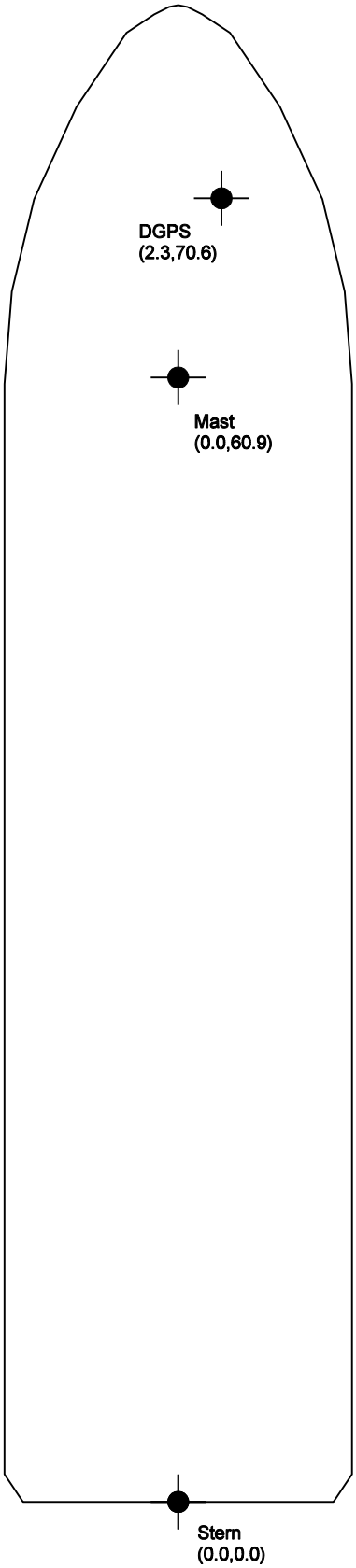
The following Fugro personnel were involved in the offshore phase of the project.

Mobilisation and Jacket Installation

Paul Caswell	Party Chief/Surveyor	14 November – 16 December 2005
Mick Elmslie	Surveyor	12 November – 12 December 2005
Chris Kennedy	Surveyor	12 November – 16 November 2005
Jonathon Richards	Technician	14 November – 17 November 2005
Stephen Lumb	Party Chief/Surveyor	12 December – 21 December 2005
Mick Elmslie	Party Chief/Surveyor	19 December – 21 December 2005
Stephen Lumb	Surveyor	31 December 2005 – 12 January 2006
Mick Elmslie	Party Chief/Surveyor	31 December 2005 – 12 January 2006
Stephen Lumb	Party Chief/Surveyor	2 February – 6 February 2006

Topsides Installation

Stephen Lumb	Party Chief/Surveyor	13 February – 22 February 2006
Simon Staples	Party Chief/Surveyor	13 February – 2 March 2006
Louise Arrowsmith	Surveyor	21 February – 2 March 2006
Jonathon Richards	Technician	21 February – 22 February 2006
Simon Staples	Surveyor	22 March – 24 March 2006
Simon Staples	Surveyor	29 March – 30 March 2006



VESSEL OFFSET DIAGRAM – MAERSK SUPPORTER

FIGURE 7–4

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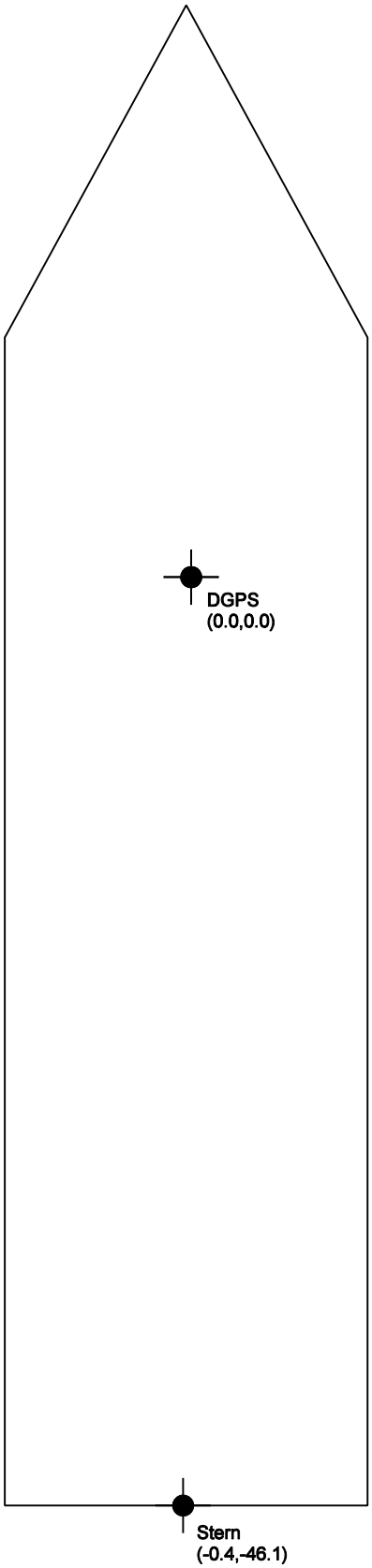

VESSEL OFFSET DIAGRAM – FAR GRIP

FIGURE 7–5

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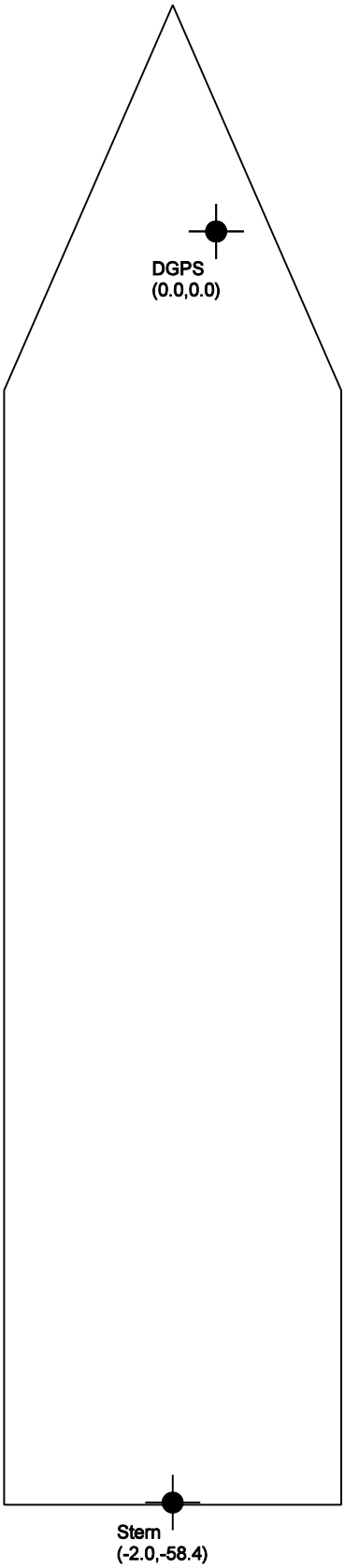

VESSEL OFFSET DIAGRAM – PACIFIC WRANGLER

FIGURE 7–6

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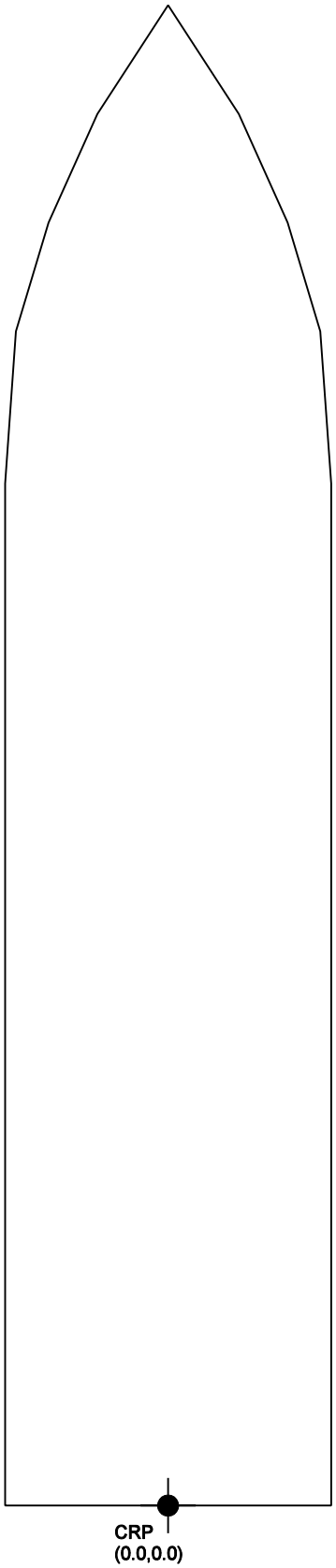

VESSEL OFFSET DIAGRAM – LADY GERDA

FIGURE 7–7

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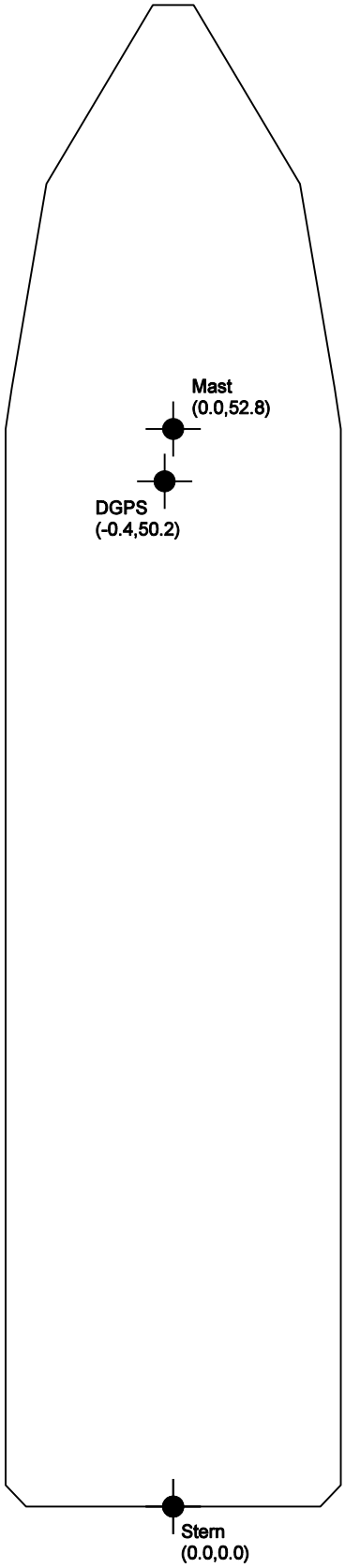

VESSEL OFFSET DIAGRAM – RAY J HOPE

FIGURE 7–8

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8.0 CONCLUSIONS AND RECOMMENDATIONS

Survey operations conducted during the project were completed in a timely and efficient manner. All survey systems on board the vessel operated within system limitations and expectations.

9.0 DISTRIBUTION

Copies of this report have been distributed as follows:

Technip Oceania Pty Ltd	: 2 hard copies
Attn: Mr Jonathan Wilson	: 2 electronic copies
Mr Scott Simpson	
and	
Perth Document Control	
Fugro Survey Pty Ltd	: 1 hard copy
	: 1 electronic copy

APPENDIX A
DAILY OPERATIONS REPORTS

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: WESTERNPORT	DATE: 12 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
1245	1920	M.Elmslie and C.Kennedy travel Perth to Melbourne.
1920	2400	Overnight in Holiday Inn, Melbourne Airport.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	TBA	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	TBA	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			C. Kennedy	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION: 2 X HOLIDAY INN

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Lawer	WILSON	P0339_01

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: WESTERNPORT	DATE: 13 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0800	0945	Collect hire car and travel from Melbourne to Stony Point.
0945	1030	Standby at Stony Point.
1030	1330	Travel to Geelong to check survey system on Far Grip.
1330	1500	On board Far Grip. Update navigation software.
1500	1730	Travel Geelong to Stony Point ready to join Maersk Guardian.
1800		M.Elmslie transfer to Maersk Guardian
1900		C.Kennedy transfer to Maersk Guardian
1900	2300	Standby on rig awaiting arrival of survey equipment.
2130		Fugro personnel receive rig inductions.
2300	2400	Survey equipment on board, personnel commence mobilisation.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Far Grip	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	TBA	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			C. Kennedy	Surveyor
VEHICLES: 1 X HIRE CAR					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Lawrence	WILSON	P0339_02

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: WESTERNPORT	DATE: 14 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0230	Personnel continue mobilisation of primary navigation equipment.
0230	0800	Suspend mobilisation – personnel resting.
0800		Mobilisation resumed – confirm Maersk Supporter operational as remote vessel.
0915		P.Caswell and J.Richards transfer from Maersk Supporter to Maersk Guardian.
1015	1115	J.Richards on board Far Grip to mobilise telemetry system, return to rig.
1145	1210	Emergency muster drill.
1500	1830	J.Richards and C.Kennedy depart rig and travel to Geelong.
1615		M.Elmslie on board Pacific Wrangler to upgrade software and mobilise telemetry
	1910	system. Return to rig on completion.
1830		Remote telemetry systems on all three AHTs now operational.
2100	2400	Personnel off shift. All navigation equipment installed and interfaced.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Far Grip	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Pacific Wrangler	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			C. Kennedy	Surveyor
VEHICLES: 1 X HIRE CAR				P. Caswell	Surveyor / PC
CONSUMABLES:				J. Richards	Technician
ACCOMMODATION: 2 X HOTEL, GEELONG.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Caswell	WILSON	P0339_03

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: WESTERNPORT	DATE: 15 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0745	1145	Undertaking survey observations for rig traverse to confirm system offsets.
0845	0915	Attend marine department meeting for latest update.
1145	1210	Fire drill and emergency muster.
1300	1615	Resume traverse observations.
1450		Crew vessel depart with GPS antenna for Lady Gurda on board.
1510	1620	Attend pre-rig move meeting.
1630	1800	Preliminary traverse calculations completed.
1650	1705	Attend project and safety briefing from OIM.
1705	1735	P.Caswell receive rig induction.
1945	2030	Theodolite observations taken to Maersk Supporter for initial gyro calibration.
2045	2200	Survey traverse plotted and rig offsets finalised.
0930	1400	J.Richards and C.Kennedy mobilise Lady Gurda alongside Geelong.
1500	1700	Complete mobilisation of motion sensor and display package on jacket barge.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Far Grip	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Pacific Wrangler	1	M. Elmslie	Surveyor
Dual Frequency GPS	2	Lady Gurda	1	C. Kennedy	Surveyor
VEHICLES: 1 X HIRE CAR				P. Caswell	Surveyor / PC
CONSUMABLES:				J. Richards	Technician
ACCOMMODATION: 2 X HOTEL, GEELONG.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Caswell	WILSON.	P0339_04

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: WESTERNPORT	DATE: 16 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0750	Preparations for floating rig off heavy lift vessel 'Transshelf'
0750		Maersk Guardian free from heavy lift vessel. Monitor vessel movements.
0800	1930	Preparations to commence tow on evening slack tide.
0900	1100	Secure all navigation equipment ready for tow to site.
1130	1150	Survey observations to Maersk Supporter to confirm DGPS integrity.
1320	1420	Test data collection with dual frequency GPS.
1710	1800	Sun azimuth observations undertaken for gyro calibration.
1930	2300	Rig under tow from Maersk Supporter and Far Grip through Western Port channel.
2106	2116	Log data for DGPS comparison
2313	2400	Pilot departs, Maersk Guardian continue transit to Thylacine location.
		.
0830	1230	All installation of survey equipment on Lady Gerda and jacket barge completed.
1630	2100	J.Richards travel Geelong to Portland.
2110	2400	C.Kennedy travel Melbourne to Perth.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Far Grip	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Pacific Wrangler	1	M. Elmslie	Surveyor
Dual Frequency GPS	2	Lady Gerda	1	C. Kennedy	Surveyor
VEHICLES: 1 X HIRE CAR				P. Caswell	Surveyor / PC
CONSUMABLES:				J. Richards	Technician
ACCOMMODATION: 1 X HOTEL, PORTLAND.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

1 X Battery and Battery Charger purchased to supply survey equipment installed on Jacket Barge.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_05

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 17 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2030	Maersk Guardian under tow to Thylacine location.
0800	1000	J.Richards checking survey equipment on Pacific Wrangler
2030	2217	Approximately 1 Nm from location, jacking legs down to 50m above seabed.
2055	2400	J.Richards travel Melbourne to Perth.
2220		Weather conditions unsuitable to jack down further, Pacific Wrangler and Maersk
	2400	Supporter maintain slow tow of rig to north of buoy pattern.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Far Grip	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Pacific Wrangler	1	M. Elmslie	Surveyor
Dual Frequency GPS	2	Lady Gerda	1	J. Richards	Technician
VEHICLES: 1 X HIRE CAR (RETURNED)				P. Caswell	Surveyor / PC
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Lunen		P0339_06

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 18 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0815	Maersk Guardian remains under tow, monitoring weather conditions.
0815		Tow vessels instructed to head directly for location.
0900	1000	Pacific Wrangler checking position of anchor buoys,
1045	1115	Pacific Wrangler connected to port stern of rig.
1140	1300	Far Grip released from tow rigging and re-connected at starboard stern of rig.
1310		Commence jacking legs down to approximately 25 m above seabed.
1438	1458	Undertake static positioning trial with three vessels holding rig position.
1500	1655	Move rig into design location.
1655	1955	Rig held on location whilst clearance obtained to proceed with pinning of legs.
2000	2044	Lower jacket legs until on seabed. Rig on final position.
2140		Pacific Wrangler disconnected from port stern.
2144		Pacific Wrangler released to transit to Portland.
2210	2220	Log position and heading data for preliminary final position report.
2230		Far Grip disconnected from starboard stern, preparing to run anchors.
2350		Commence pre-load operations.
2352		Far Grip released off hire, underway to Port of Melbourne.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Far Grip	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Pacific Wrangler	1	M. Elmslie	Surveyor
Dual Frequency GPS	2	Lady Gerda	1	P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PAlmwen		P0339_07

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 19 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Maersk Guardian undertaking pre-load operations.
1248	1400	Maersk Supporter disconnect from rig and prepare for anchor operations.
1412	1550	Recover Anchor No 1 buoy to Supporter deck and bring anchor to roller.
1550	1634	Reposition vessel to wet store location and deploy anchor to seabed.
1640	1747	Paying out chain/wire and pre-tension anchor leg to 50Te.
1750	1850	Connect 80m pennant and redeploy anchor buoy.
1924	2010	Supporter recover Anchor No 2 buoy to deck and pull up on pennant wire.
2010	2108	Reposition vessel and lay pennant buoy to south of anchor leg bearing.
2122	2255	Supporter recover Anchor No 1A buoy to deck and bring anchor to roller.
2255	2333	Reposition vessel to target location for topsides anchor P4.
2333	2400	P4 anchor on seabed, paying out chain along anchor leg bearing

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_08

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 20 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Maersk Guardian undertaking pre-load operations.
0000	0031	Supporter complete paying out of chain/wire on anchor leg P4.
0031	0155	Complete pre-tensioning of anchor to 100 Te.
0155	0238	Connect pennant wire rigging and deploy pennant buoy for anchor leg P4.
0240	0302	Supporter reposition vessel to anchor buoy 3A and secure on deck.
0302	0431	Recover anchor leg 3A to bring anchor to roller.
0431	0502	Supporter relocate to target position for topsides anchor P1.
0502	0511	Lower original anchor 3A to P1 position on seabed.
0514	0623	Paying out chain/wire along anchor leg P1.
0623	0818	Tension anchor leg P1 to 90 Te.
0818	0915	Connect pennant wire rigging and deploy pennant buoy for anchor leg P1.
0915	0939	Supporter reposition vessel to anchor buoy 3 and secure on deck.
0939	1124	Reposition anchor buoy 3 at new location.
1220	1303	Supporter pick up anchor buoy 3 and reposition at new location.
1318	1512	Supporter pick up anchor buoy 2 and recover anchor. Redeploy as P3 anchor.
1515	1626	Paying out chain/wire along anchor leg P3.
1626	1800	Tensioning anchor leg P3. Anchor not holding at 80 Te.
1800	1918	Lay anchor leg P3 to seabed and deploy pennant buoy.
1950	2145	Install dual frequency GPS antenna and test log one hour of data.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Final position for rig and dual frequency GPS data to be logged tomorrow a.m on completion of jacking up to final air gap.

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Curwen	Wilson	P0339_09

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 21 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0105	Maersk Guardian undertaking pre-load operations.
0105	0210	Maersk Guardian jack-up to final air gap of 17.8m.
0445	1045	Logging of GPS carrier phase data.
0602	0702	Log DGPS data for final position fix.
0945	0950	Toolbox meeting to discuss safe access to jacket legs.
0950		Undertake marking of height datums on jacket legs and preliminary height
	1200	observations.
1300	1500	Continue height and line of sight checks around the rig.
1930		Pacific Wrangler arrives in the field – survey system operational.
2000	2015	Check measurements made from rig deck to water surface.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Pacific Wrangler	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Final rig position submitted to client. GPS carrier phase data sent ashore for processing.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_10

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 22 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket installation works.
0400		Maersk Supporter departs field with cargo for Portland.
0735		Receive telemetry modem from Pacific Wrangler.
0750		Pacific Wrangler departs rig for Melbourne, now off hire.
0925		Meeting with Technip Tow Master, Mike Hancock to discuss survey requirements
	1005	for jacket installation works.
1145	1200	Emergency muster and abandon rig drill.
1345	1415	Survey observations to determine remaining jacking heights on each leg.
1800		Receive results of GPS carrier phase observations. Confirm results with check
	2000	processing on board.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Processing of GPS carrier phase observations completed.

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Unwin		P0339_11

Fugro Survey Pty Ltd
PM-F50

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 23 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket installation works.
0815	0930	Power down and disconnect gyro compass ready for demobilisation.
0950	1135	Undertaking survey observations on deck to confirm offsets for jacket installation.
1225	1630	Continue survey observations on deck.
1800	2200	Reduction and computation of traverse observations.
1845		Maersk Supporter returns to the field – survey system tested as operational.
1900	1915	Test video splitter equipment required for Maersk Supporter.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Gyro compass packed up in preparation for demobilisation from rig as instructed.

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Cruven		P0339_12

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 24 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket installation works.
		Complete traverse calculations and height reduction in preparation for jacket
		installation.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Linwell		P0339_13

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 25 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket installation works.
1630		P.Caswell transfer to Maersk Supporter to install additional navigation monitor
	1815	and return to rig.
1900		RJ Hope arrives at the Maersk Guardian.
2115		Maersk Supporter departs rig for Portland.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Cuwen	Brett Proudman	P0339_14

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 26 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket installation works.
1000		Arrange with Technip boilermaker for manufacture of bracket for theodolite at port
		stern of rig.
1035	1105	Fire drill and emergency muster

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Weather conditions remain unsuitable for mobilisation of survey package on RJ Hope.

Party Chief Signature:	Client Representative Signature:	D O R Number
PAlnwen		P0339_15

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 27 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket installation works.
0900	1130	Transfer MSL height from GPS antenna to bow leg using survey level and staff.
1300	1330	Rig safety meeting.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Weather conditions remain unsuitable for mobilisation of survey package on RJ Hope.

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Curwen	Brett Proud	P0339_16

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 28 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket installation works.
1430		Radio Modem demobilised from Far Grip arrives on board rig.
1545	1630	Technip project induction held.
2130		Lady Gerda arrives in field. Advise vessel master of anchor buoy locations and
		agree to wait until daylight to configure survey system on board.
2145		Ray J Hope departs for Geelong.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Weather conditions remain unsuitable for mobilisation of survey package on Ray J Hope.

Party Chief Signature:	Client Representative Signature:	D O R Number
PAlmwell		P0339_17

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 29 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket installation works.
0210		Commence anchor operations with Maersk Supporter to reset anchor P3.
0300	0405	P3 buoy on deck, recovering and disconnecting pennant wire.
0405	0450	Recover wire and chain to bring anchor to roller.
0450	0525	Vessel reposition and change heading for anchor deployment.
0531	0630	P3 anchor on seabed. Paying out chain/wire along anchor leg.
0630	0755	Tension anchor leg to 70 Te.
0755	0853	Connect pennant wire and let go P3 buoy.
1545	1630	Demobilise DGPS and install radio modem/antenna for jacket barge telemetry.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	2	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2			M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_18

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 30 NOV 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket arrival.
0900	0940	Test computer equipment for Ray J Hope is fully operational.
1010	1200	Levelling observations to transfer height datum across to port leg.
1130		Receiving motion data from jacket barge.
1300	2400	Logging barge motion data at 5 second interval.
1915	1930	Fugro safety meeting undertaken.
1940	1955	Fugro personnel view 'Frog' transfer training video.
2030		P.Caswell and M.Elmslie transfer to Ray J Hope
2050	2300	Mobilise positioning and telemetry equipment.
2300	2400	Standby for transfer back to Maersk Guardian.
		Advised by rig that crane operator will not do personnel transfer at night. Personnel
		remain on board Ray J Hope overnight.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Ray J Hope	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

With delay to jacket launch it is likely that motion monitoring equipment on barge will fail unless batteries that supply power to equipment are recharged.

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Caswell		P0339_19

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 1 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Technip preparations for jacket arrival.
0720		P.Caswell and M.Elmslie transfer from Ray J Hope back to Maersk Guardian.
1215		Lady Gerda take over tow of jacket barge and proceed to Geelong.
1305	1315	Instruction on permit to work system received from Technip HSE Representative.
1330		Review safety requirements for surveying operations at stern post jacket
	1400	installation with Technip HSE Representative.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Ray J Hope	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Caswell	[signature]	P0339_20

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 2 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather window suitable for jacket installation.
1000	1140	P. Caswell transfer to Ray J Hope for equipment checks and return to rig.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Ray J Hope	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Caswell	[signature]	P0339_21

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 3 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather window suitable for jacket installation.
2230	2245	Emergency muster and abandon rig drill.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Ray J Hope	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Lnwen		P0339_22

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 4 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather window suitable for jacket installation.
0945	1100	Inventory of survey equipment. Test spare fluxgate compass for Ray J Hope.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Ray J Hope	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Unwen	Brett Proud	P0339_23

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 5 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather window suitable for jacket installation.
1630	1700	Spare fluxgate compass transferred to Ray J Hope

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Ray J Hope	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PAlmwen		P0339_24

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 6 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather window suitable for jacket installation.
1000	1100	Attempting to resolve fluxgate gyro problems on Ray J Hope
1550		Replacement fluxgate transferred to Ray J Hope. Compass installed and calibrated
	1700	correctly.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix DGPS	2	Survey Level/Staff	1	Barge	
Starfix Navigation	2	MRU Radio Modem	1	Motion Sensor / PC	1
Gyrocompass	2	Spare AHT Package	1	Radio Modem	1
Offline Computer	1	AHT Packages		AHT package	1
Printer	2	Maersk Supporter	1		
BMS Radio Modem	2	Lady Gerda	1	**PERSONNEL**	**TITLE**
Total Stations/Tripod	2	Ray J Hope	1	M. Elmslie	Surveyor
Dual Frequency GPS	2			P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

DGPS and Gyro equipment demobilised ashore

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Linwell		P0339_25

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 7 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather window suitable for jacket installation.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			M. Elmslie	Surveyor
				P. Caswell	Surveyor / PC

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Luwen		P0339_26

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 8 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather window suitable for jacket installation.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			M. Elmslie	Surveyor
				P. Caswell	Surveyor / PC

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
P A Unwen		P0339_27

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 9 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather window suitable for jacket installation.
0910		Confirm survey system operational on Maersk Supporter
1050		Lady Gerda arrive in field – confirm survey system operational

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			M. Elmslie	Surveyor
				P. Caswell	Surveyor / PC

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Lenwen		P0339_28

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 10 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather window suitable for jacket installation.
1030	1100	Fire and emergency muster drill.
2010		Technip personnel transferred to Lady Gerda to assess conditions for transfer to
		jacket barge.
2048	2120	Technip personnel transfer to jacket barge.
2130		Ray J Hope attaching pick-up slings to buoys P4 and P1.
2210		Technip engineer reports MRU batteries on barge flat, commence charging.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			M. Elmslie	Surveyor
				P. Caswell	Surveyor / PC

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Lawen		P0339_29

Fugro Survey Pty Ltd
PM-F50

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 11 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0250	Monitoring weather conditions prior to committing to jacket launch.
0115	0150	Jacking operations to reduce air gap to approximately 12m.
0250	0646	Continue with preparations for jacket launch.
0600	0620	Connect Ray J Hope and Lady Gerda to soft lines on jacket.
0646	1400	Winch wire parted on jacket barge – launch operations on hold.
1400	2400	Jacket launch abandoned, barge underway to Portland.
1550	1620	Jacking operations to restore air gap to 17.8m.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			M. Elmslie	Surveyor
				P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

MRU on jacket barge failed to work – batteries flat and unable to be charged.

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Lunwen		P0339_30

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 12 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on next weather window to resume jacket installation operations.
0715	1315	M.Elmslie depart rig. Travel to Perth via Melbourne.
1415	1800	S. Lumb travel New Plymouth, New Zealand to Melbourne.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			M. Elmslie	Surveyor
				P. Caswell	Surveyor / PC
VEHICLES:				S. Lumb	Surveyor
CONSUMABLES:					
ACCOMMODATION:. 1 X HOLIDAY INN, MELBOURNE					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Batteries for MRU require attention prior to jacket barge transiting back to JUR. Also checks need to be made that telemetry antenna is correctly mounted on winch house roof.

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Caswell	Brett Powell	P0339_31

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 13 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on next weather window to resume jacket installation operations.
		S. Lumb remains in Melbourne after being bumped from helicopter.
2015		Maersk Supporter arrives back in the field – survey system operational.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				P. Caswell	Surveyor / PC

VEHICLES:

CONSUMABLES:

ACCOMMODATION:. 1 X HOLIDAY INN, MELBOURNE

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Lumwell		P0339_32

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 14 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on next weather window to resume jacket installation operations.
0950		Ray J Hope departs location for Portland.
1430	1600	S. Lumb by helicopter from Essendon to Maersk Guardian..
1615	1715	S. Lumb receives rig induction.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				P. Caswell	Surveyor / PC

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Caswell	[signature]	P0339_33

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 15 DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on next weather window to resume jacket installation operations.
1230		Undertake walk round on deck to explain location of survey stations and review
	1330	JHA for survey observations at jack-up stern.
1330	1800	Install and test spare tug package for subsequent mobilisation to top sides barge.
1830	1850	Undertake Fugro Safety Meeting.
2000		Maersk Supporter departs rig for Portland.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				P. Caswell	Surveyor / PC
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
PA Caswell	Brett Proud	P0339_34

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 16TH DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0730	Waiting on next weather window to resume jacket installation operations.
0715	0730	Paul Caswell departed rig for Perth
0730	2400	Waiting on next weather window to resume jacket installation operations.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen Lumb.		P0339_35

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 17TH DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on next weather window to resume jacket installation operations.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen Plumb.		P0339_36

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 18TH DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on next weather window to resume jacket installation operations.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen Lumb		P0339_36

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 19TH DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on next weather window to resume jacket installation operations.
1750		M.Elmslie arrives onboard.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_38

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 20TH DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2024	Waiting on next weather window to resume jacket installation operations.
1026	1050	Conduct jacking operations to 12m air gap.
1755	1830	Technip personnel transferred to jacket barge.
2024	2400	Conduct ballasting and removal of sea fastenings on jacket barge.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:.					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_39

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 21TH DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0249	Continue Barge ballasting and removal of sea fastenings.
0249		Go ahead for jacket launch announced. Removing final sea fastenings.
0302		Commencing jacket launch.
0330		Barge experiencing problems with launch jacks.
0815		Ray J Hope catches mooring line in prop.
1050		Launch abandoned.
1700		Fugro system powered down.
1715	1845	Fugro personnel depart rig and travel to Melbourne.
1930		Check into accomadation.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION: MELBOURNE AIRPORT HOLIDAY INN

AUTHORISED CONTRACT CHANGES / COMMENTS: FUGRO EQUIPMENT TO REMAIN ONBOARD RIG UNTIL RETURN OF FUGRO PERSONNEL.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_40

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 22TH DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0815	1215	M.Elmslie travels from Melbourne to Perth.
1030	1500	S.Lumb travels from Melbourne to New Plymouth.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	PERSONNEL	TITLE
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:.

AUTHORISED CONTRACT CHANGES / COMMENTS: FUGRO EQUIPMENT TO REMAIN ONBOARD RIG UNTIL RETURN OF FUGRO PERSONNEL.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_41

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 30TH DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
1655	2020	M.Elmslie travels from Perth to Melbourne.
1215	1800	S.Lumb travels from New Plymouth to Melbourne.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	PERSONNEL	TITLE
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION: MELBOURNE AIRPORT HOLIDAY INN

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_42

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 31TH DEC 2005
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0930	1100	Fugro personnel travel from Melbourne to Maersk Guardian.
1115		Fugro system powered up.
1100	2400	Waiting on weather.
1230		Fugro personnel attend fire/abandonment drill.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_43

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 01/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_44

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 02/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_45

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 03/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:		
CONSUMABLES:		
ACCOMMODATION:		

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_46

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 04/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Waiting on weather.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_47

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 05/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	1330	Waiting on weather.
0908	0928	Rig power failure, survey system running on UPS.
1330		Technip personnel transferred to Lady Gerda.
1400		Supporter experiencing heading problems.
1430		M.Elmslie transferred to Supporter.
1432	1503	Technip personnel transferred to jacket barge. Commence ballasting and cutting
		sea fastenings.
1539		Supporter at P4 Buoy 664760 E 5655437 N
1600		Problem with connection into gyro repeater on supporter, fluxgate installed.
1609		Supporter at P1 Buoy 663962 E 5654824 N
1630		M.Elmslie returns to rig.
1930		Technip crew change on jacket barge.
2100		R J Hope connected to jacket and in launch position.
2128		Lady Gerda connected to jacket and in launch postion.
2250		Permission given to launch.
2314		Jacket launched and clear of barge.
2314	2400	Tugs manoeuvring jacket into position.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_48

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 06/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	1203	Tugs manoeuvring jacket into position.
1015		Discussion with Tow Master concerning position of anchors.
1203		Jacket connected to main block of Maersk Guardian.
1210		Commence preparations for upending of jacket.
1522	1640	Jacking up to 28.4m airgap.
1640	2400	Continue preparations for upending of jacket.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_49

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 07/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0218	Continue upending operations.
0218		Jacket upended.
0510	0544	Jacking down .
1100	1330	Conduct station coordination on port stern.
1235		Jacket landed.
1350	1415	Conduct verticality check on jacket
1430	1545	Conduct station coordination on starboard stern.
1550	1830	Level traverse from port stern station to starboard stern station.
1850	1915	Height transfer from port leg benchmark to port stern station.
2000	2350	Calculations for verticality check and level traverse.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_50

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 08/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	1200	Fugro personnel on standby to conduct checks on jacket.
1000		Discussion with K.Mobs(Woodside Rep) regarding demobilisation of survey spread
		from the R J Hope.
1030		Phone conversation with R J Hope master regarding demob of equipment.
		Equipment to be transferred to Supporter and returned to the rig.
1200	1330	Level traverse conducted.
1340	1500	Calculations for level traverse.
1530		Discussion with N.Yann (Technip Engineer) regarding orientation and offset check.
1730		Instructed by Tehnip to conduct checks on jacket.
1800	1900	Waiting on access to jacket.
1900	2030	Conduct check observations to jacket.
2110	2355	Calculations for jacket checks.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2	Ray J Hope	1	**PERSONNEL**	**TITLE**
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_51

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 09/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Fugro Personnel on standby for anchor operations

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				M Elmslie	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen P Lumb		P0339_52

Fugro Survey Pty Ltd
PM-F50

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 10/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0915	Waiting to conduct anchor operations.
0915		M.Elmslie, S.Lumb and Technip engineer transferred to Supporter.
0920	0930	Vessel induction.
0930	1002	Recovering #3 buoy.
0940	1030	Issue arises with procedure for anchor deployment, Technip engineer calls beach
		for direction.
1002	1158	Recover #3 anchor
1158	1530	Deploy anchor P2. Final position 664566 E 5654188 N
1530	1621	Vessel recovering P1 buoy.
1621	1814	Recover P1 anchor.
1814	2156	Deploy anchor P1. Final position 663672 E 5654190 N
2156	2233	Vessel recovering #4 buoy.
2233	2400	Deploying anchor S1.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			PERSONNEL	TITLE
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_53

Fugro Survey Pty Ltd
PM-F50

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 11/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0258	Deploying Anchor S1, Final position 663153 E 5654708 N
0258	0423	Vessel moving to P4 buoy and recovering.
0507	0642	Recovering anchor P4
0642	1856	Deploying anchor P4, experiencing excessive dragging, having to redeploy several
		time in order to get anchor to hold. Final position 665184 E 5655665 N
1856	1945	Moving to wet store buoy and recovering.
2005	2103	Start Heaving In
2103	2133	Anchor @ Roller
2133	2137	S4 Anchor on bottom 664628 E 5656191 N MF #15
2137	2226	Start Paying Out
2226	2236	Stop Paying Out
2236	2248	Start Taking Up Tension(No Fix Taken)
2248	2318	Pretension Fix 664279E 5655404N @40Te
2318	2347	Start Load test @80Te
2347	2400	S4 anchor load test complete 664203E ,5655404N

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO.
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS Radio Modem	2	Maersk Supporter	1	AHT package	1
Total Stations/Tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			PERSONNEL	TITLE
Survey Level/Staff	1			S. Lumb	Surveyor
				M. Elmslie	Surveyor

VEHICLES:

CONSUMABLES:

ACCOMMODATION:

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_54

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 12/01/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0300	Recover buoy for Anchor P3 Secure and load test and recompute final position
0300	0600	Anchor handling operations complete at this point in time
0600	0730	Personnel transfer from the Supporter to the Guardian
0730	0845	Elmslie and Lumb Depart Guardian for Melbourne and onto Perth

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				M Elmslie	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen P Lumb	[signature]	P0339_55

Mat Linton 04/02/06

Approved by the Operations Manager – 12/05/04
Note – To ensure that this is the latest version check the Online BMS.
Page 1 of 1

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 2/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
1500	1915	S.Lumb Travel from New Plymouth to Melbourne
1915	2400	Overnight Holiday Inn

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen P Lumb		P0339_56

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 3/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0415	Overnight Holiday Inn
0415	0720	Travel to Heliport and fly out to the Guardian
0720	0800	Check equipment locate previous reports.
0800	0810	Note the rig has been jacked and will require a level run to the Port Survey Station.
0810	1000	Discussion with Matt Linton regarding work requirements. S Lumb advised that his instructions relate to a pre piling check as the jacket is not fully installed yet. Final position check to occur post piling operations this includes the phase GPS observations.
1000	1100	Phil the rigger assigned as survey hand. Boarded the jacket to explain survey requirements, and then we had to vacate as the derrick was about to skid out. Job on hold until further notice.
1100	1110	Skidding completed. Phil had to attend tool box regarding upcoming programme, and subsequently advised that installation of a pile was about to take place accordingly no access to the jacket available at this time.
1110	1430	Collate information for level transfer from Port Leg to rig deck. Undertake level run with a helping hand from Dom the supervising rigger. Complete height transfer compute new heights for Port and starboard survey stations.
1430	1630	Create ACAD drawing for reporting
1630	2000	Check progress with pile as Dom the supervising rigger had advised that an opportunity might exist at this point in time, opportunity not available. Currently on hold pending access to jacket.
2000	2400	Currently on hold pending access to jacket

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen Lumb	Matt Linton 04/02/06.	P0339_57

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 4/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0530	Currently on hold pending access to jacket
0830	1030	Gained Access to Jacket and completed field work.
1030	1115	Fire drill
1115	1130	Watch Frog video In preparation for vessel transfer
1130	1430	Start Computations complete preliminary report and diagram
1430	1700	Awaiting transfer to Supporter
1700	1730	S Lumb transferred to the Supporter
1730	1740	Check Nav Set Up. All Operational
1740	1810	Discuss Work scope with Simon (Technip Rep) regarding the remaining two anchors
1810	1840	In Position to drop S3 Awaiting Completion of Back deck tool box meeting
1840	1850	Preparing to deploy and lower anchor S3
1850	1902	S3 on Bottom 663723.326mE 5656191.116mN
1902	1903	Logging started
1903	1921	Chain out preparing to tension anchor
1921	1934	Failed to take start hauling back in
1934	2001	Rotated anchor moving back to drop point
2001	2010	Within 20m ready to deploy S3
2010	2017	Anchor on bottom 663721.74 mE 5656192.44mN
2017	2025	Logging started
2025	2035	Pretension test started
2035	2045	Aborting and starting to haul in S3
2045	2106	Anchor at stern
2106	2122	Anchor on bottom 663713.81mE 5656201.82mN
2122	2123	Logging Started
2123	2211	Wire pennant attached to chain
2211	2300	Stopped paying out wire currently 655m along track
2300	2328	Start pre tension test 80 Tn
2328	2350	Spoke to Simon (Technip) regarding catenary program, he was happy to accept the horizontal projection distances from the spread sheet provided by Technip
1150	2402	Completed load test Final Anchor position **S3(663722.32mE 5656184.89mN)**

DAILY OPERATIONS REPORT

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_58

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 5/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0010	Operations continue with respect to changing out pennants
0010	1030	Preparing to launch S2
1030	1108	S2 over the stern
1108	1150	Deploying Anchor S2
1150	1157	Anchor on Bottom 663142.26mE 5655607.578mN
1157	1244	Pre Tension Chain to 50 Te
1244	1250	Start 10min Pre Tension Test Stern Fix Start pre Tensioning 663469.7E 5655464.0N(Chain)
1250	1300	Pre Tension Completed
1300	1330	Started logging for final anchor laydown and pre tensioning to 99Te currently attaching the 300m pennant wire..
1330	1420	Paying Out Wire
1420	1456	Coming up on Tension
1456	1514	Load Test Started 99 Te
1514	1545	Load Test Complete Stern coordinates 663919.66E 5655359.66N Compute Final coordinates (**S2 663151.39E 5655604.70N)**
1545	1700	Logging stopped
1700	1707	S2 Buoy deployed 663830.89E 5655291.33N
1707	1718	S3 Buoy Bumped 664116.08 E 5655644.24N
1718	1722	Change Starfix back to wombat configuration
1722	2400	Transfer from Supporter to Guardian Complete Daily Reports and Field reports

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_59

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 6/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0800	2000	Collate information on as laid anchors provide in field report format, check equipment requirements for two phase based GPS positions for height transfer. Camera not onboard but visual check confirms this can be achieved. Will report the same to Perth for implementation as alternative procedure.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_60

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 7/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0730	S Lumb departs Guardian for New Plymouth

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

ALL equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen Lumb	Mat Linton	P0339_61

Approved by the Operations Manager – 12/05/04
Note – To ensure that this is the latest version check the Online BMS.

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 14/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0415	Overnight at the Hilton
0415	0445	S Lumb and S Staples await transport to helipad. No sign of transport so we caught a taxi.
0445	0505	Check in for flight, S Staples advised that he was being bumped and will fly out tomorrow.
0705	0810	Helicopter Essodon to Guardian
0900	1540	Start setting up GPS receivers, running cables ensuring lines of site between marks.
1540	1558	Started logging starboard antenna UTC 0440
1558	1900	Started logging port antenna UTC 0458 both antennas to be logged for 12hrs.
1900	1910	Check all systems are operational, note currently a 3.5m sea with less that 10knots of wind. 3hrs worth of logging on port receiver. 3.24hrs worth of logging Stbd receiver.
1900	2400	Continue logging

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen P Lumb		P0339_63

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 15/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0445	Continue logging
0445	0515	Collect receivers note antenna height measured from ground plane notch, not true vertical. The actual measurement was entered into receiver, notify office for processing purposes. #2485 STBD receiver #4341 PORT receiver
0515	0630	Download data from receivers in readiness for transmittal to Perth Office
0630	0715	Simon Staples arrives Guardian.
0715	0900	Simon Staples undergoes rig induction
0900	1000	Initial introduction to job, including work around survey stations and stern positions
1000	1700	Undertake terrestrial observations for transfer of position and level onto the jacket, limited access to jacket throughout the day.
1700	2400	Process data in preparation for mark up of the jacket cans to 19.40m LAT including transforming data after receipt of post processed GPS data.

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen P Lumb	Brett Rad	P0339_64

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 16/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0600	0700	Complete calculations with respect to antenna heights.
0700	0830	Access jacket and complete level transfer and mark up of the jacket can to 19.4m LAT
0830	1530	Prepare dwg files and field report for submission to Technip.
1530	1800	Set up theodolite and run through operation with Simon

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen P Lumb		P0339_65

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 17/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0600	0930	Awaiting advice on buoy movements.
0930	1000	Simon transferred to the supporter to carry out required buoy shifts
1000	1545	Simon Renwick supplied two dimensional control surveys for comparison. Comparison undertaken and reported back to Simon.
1545	1800	Simon returned from supporter Relocated Buoy positions S3 664025 mE 5655590 mN S4 664370 mE 5655540 mN P1 663856 mE 5654772 mN

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen Lumb.	Brett Pearce	P0339_66

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 18/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	On standby

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_67

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 19/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	On standby

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen Lumb		P0339_68

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 20/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	On standby

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen P Lumb		P0339_69

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 21/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Fugro Personnel on standby for topside operations

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
Stephen Lumb	[signature]	P0339_70

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 22/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	2400	Fugro Personnel on standby for topside operations
1400		Barge with topdeck commenced tow to site with Lady Gerda

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			S Lumb/L Arrowsmith	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_71

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 23/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	23:59	Fugro Personnel on standby for topside operations
11:30		Todeck barge with Lady Gerda arrived on site
13:00	14:00	Meeting to discuss attachment of anchors to topdeck barge and barge movements

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			L Arrowsmith	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_72

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 24/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	1100	Fugro Personnel on standby for topside operations
1100		Started topdeck barge movements to setup location
1345		S.Staples transferred to topdeck barge to fix BMS
1350		Topdeck barge connected to P4 anchor wire
1550		Topdeck barge connected to S4 anchor wire
1830		S.Staples transferred back to JUR
1910		Topdeck barge connected to S2 anchor wire
2130		Topdeck barge connected to P3 anchor wire
2355	2359	Topdeck barge connected to P1 anchor wire, start to tension up on anchors

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			L Arrowsmith	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_73

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 25/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0040	Continue tensioning up anchors S2, S4, S2, P3 and P1
0040		Disconnected bridle from Invincible Tide
0150		Topdeck barge connected to S1 anchor wire
0515		Topdeck barge connected to S3 anchor wire
0515	0630	Barge tensioning up on all anchors and moving to stand off location
0830		Supporter disconnected from S3, barge and survey personnel standing by for
		Topdeck installation
1030	1115	Carried out an Fire and Abandon Ship Drill
1230		Survey requested to install an additional monitor in barge control room
1430		S.Staples tranfered to barge via FRC
1520	1540	Monitor installed
1800		S.Staples returned to JUR Maersk Guardian
1800	2359	Personnel standing by for topdeck installation
		Note: no time for P2 anchor connection

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			L Arrowsmith	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_74

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 26/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0900	Personnel standing by for topdeck installation
0900		Barge having problems with BMS, no Mouse
1010		L.Arrowsmith tranfering to barge via Lady Gerda and FRC
1050		Problem on barge fixed
1100	1130	Barge moving to location for lift
1330		L. Arrowsmith back on board Maersk Guardian, survey personnel standing by
1710		Topdeck lifted off barge
1715	1830	Disconnecting P2 anchor wire from barge
1830	2359	Survey personnel standing by till morning for continual recovery of anchor wires

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			L Arrowsmith	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_75

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 27/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0600	Personnel standing by for disconnection of anchor wires from barge
0600	1310	Continuing disconnection of anchor wires from barge
1310	1325	Barge transit to 500m exclusion zone
1325	1830	Demobilising Maersk Guardian JUR
1830	2359	Survey personnel standing by for morning chopper

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			L Arrowsmith	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_76

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 28/02/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0399

FROM	TO	SUMMARY OF OPERATIONS
0000	0630	Survey personnel standing by for morning chopper
0630		Survey personnel depart Maersk Guardian

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
Starfix Navigation	2	MRU Radio Modem	1	Barge	
Offline Computer	1	Spare AHT Package	1	Motion Sensor / PC	1
Printer	2	AHT Packages		Radio Modem	1
BMS radio Modem	2	Maersk Supporter	1	AHT Package	1
Total Stations/ tripod	2	Lady Gerda	1		
Dual Frequency GPS	2			**Personnel**	**Title**
Survey Level/Staff	1			L Arrowsmith	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_77

Fugro Survey Pty Ltd
PM-F50

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 01/03/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0830	1030	Demobilising Lady Gerda AHT in Portland
1030	1130	Loading Fugro container with equipment from Lady Gerda and top deck barge
1130	1230	Waiting for container to be moved to transportation companies yard
1330	1430	Loading Fugro container with the remaining equipment from Woodside container

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
AHT Packages					
Maersk Supporter	1				
				Personnel	**Title**
				L Arrowsmith	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_78

Fugro Survey Pty Ltd
PM-F50

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: THYLACINE	DATE: 02/03/2006
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0500	1300	Transit from Portland to Melbourne airport

EQUIPMENT	NO.	EQUIPMENT	NO.	EQUIPMENT	NO
AHT Packages					
Maersk Supporter	1				
				Personnel	**Title**
				L Arrowsmith	Surveyor
VEHICLES:				S Staples	Surveyor
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

All equipment remains onboard until personnel return.

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_79

Fugro Survey Pty Ltd
PM-F50

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: BASE STRAIGHT	DATE: 22/03/06
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
2030	2359	Arrived in Melbourne, waiting for morning chopper to Maersk Guardian JUR

EQUIPMENT	NO.	EQUIPMENT	NO.	PERSONNEL	TITLE
Maersk Guardian		**Maersk Supporter**		Simon Staples	Surveyor
Leica Total Station	1	Starfix Suit	1		
Level	1	DGPS system	1		
Prisms / Tri-Bracs	-	Fluxgate Compass	1		

VEHICLES:

CONSUMABLES:

ACCOMMODATION:

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		P0339_80

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: BASE STRAIGHT	DATE: 23/03/06
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0830		Arrived on board Maersk Guardian
0915	1015	Carrying out level survey of THY-A topdeck
1015	1130	Carrying out LAT transfer to THY-A topdeck
1130	1330	Compiling report for Technip
1330	1500	Demobilising remaining land survey equipment from around JUR
1500	2359	Waiting for morning chopper

EQUIPMENT	NO.	EQUIPMENT	NO.	PERSONNEL	TITLE
Maersk Guardian		**Maersk Supporter**		Simon Staples	Surveyor
Leica Total Station	1	Starfix Suit	1		
Level	1	DGPS system	1		
Prisms / Tri-Bracs	-	Fluxgate Compass	1		
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
	ALLAN ROGERS	

Fugro Survey Pty Ltd
PM-F50
DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: BASE STRAIGHT	DATE: 24/03/06
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0000	0700	Waiting for chopper

EQUIPMENT	NO.	EQUIPMENT	NO.	PERSONNEL	TITLE
Maersk Guardian		**Maersk Supporter**		Simon Staples	Surveyor
Leica Total Station	1	Starfix Suit	1		
Level	1	DGPS system	1		
Prisms / Tri-Bracs	-	Fluxgate Compass	1		
VEHICLES:					
CONSUMABLES:					
ACCOMMODATION:					

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
	ALLAN ROGERS	

Fugro Survey Pty Ltd
PM-F50

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: BASE STRAIGHT	DATE: 29/03/06
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0610	1530	Travelling to Portland
1530	2359	Waiting for Maersk Supporter to arrive in port

EQUIPMENT	NO.	EQUIPMENT	NO.	PERSONNEL	TITLE
Maersk Guardian		**Maersk Supporter**		Simon Staples	Surveyor
		Starfix Suit	1		
Level	1	DGPS system	1		
Prisms / Tri-Bracs	-	Fluxgate Compass	1		

VEHICLES:

CONSUMABLES:

ACCOMMODATION:

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		DOR_83

Fugro Survey Pty Ltd
PM-F50

DAILY OPERATIONS REPORT

CLIENT: TECHNIP	LOCATION: BASE STRAIGHT	DATE: 30/03/06
PROJECT: OTWAY GAS PROJECT	VESSEL: MAERSK GUARDIAN	JOB NO: P0339

FROM	TO	SUMMARY OF OPERATIONS
0830	1115	Demobilising Maersk Supporter
1610	2330	Travelling to Perth

EQUIPMENT	NO.	EQUIPMENT	NO.	PERSONNEL	TITLE
Maersk Guardian		**Maersk Supporter**		Simon Staples	Surveyor
		Starfix Suit	1		
Level	1	DGPS system	1		
Prisms / Tri-Bracs	-	Fluxgate Compass	1		

VEHICLES:

CONSUMABLES:

ACCOMMODATION:

AUTHORISED CONTRACT CHANGES / COMMENTS:

Party Chief Signature:	Client Representative Signature:	D O R Number
		DOR_84

APPENDIX B
AS-BUILT FIELD REPORTS

APPENDIX B1

FINAL RIG POSITION & HEADING

RIG POSITION FIELD REPORT

Thylacine

Client :	**Technip Oceania Pty Ltd**	**Job Number :**	**P0339**
Rig :	**Maersk Guardian**	**Date:**	**21-Nov-05**
Project :	**Otway Gas Project - Thylacine Jacket**		
Attention :	**J.Wilson (Technip) / N. Harrison (Woodside Survey Representative)**		
Company Man :	**D.Rota**		

The final location of the centre stem on the Maersk Guardian was derived from 60 minutes of observations of the Primary Differential GPS Data, between 06:02 and 07:02 hrs on 21 November 2005 on completion of jacking to the final air gap

The results of the observations are as follows:

Geographical Coordinates			**Grid Coordinates**	
Latitude (ϕ)	**-039° 14' 14.60"**	**South**	**Easting**	**664165.6**
Longitude (λ)	**142° 54' 7.77"**	**East**	**Northing**	**5655155.4**

The centre stern position is **6.4 m** at a bearing of **219.2°** Grid from the design location.

The Client supplied design location for : Thylacine .

Geographical Coordinates			**Grid Coordinates**	
Latitude (ϕ)	**-039° 14' 14.44"**	**South**	**Easting**	**664169.7**
Longitude (λ)	**142° 54' 7.94"**	**East**	**Northing**	**5655160.4**
			Heading	**135° Grid**

The heading of the Maersk Guardian was derived from the mean of 10 minutes of the Gyro heading :

127.92° TRUE **129.13° Grid**

All coordinates in this field report are quoted in the following coordinate system:

Datum :	GDA94_Australia_ICSM-ITRF2005.50	Projection :	Transverse Mercator (UTM)	
Spheroid :	GRS80	Zone (Central Meridian) :	54	141° East

Party Chief/Surveyor: P.Caswell / M.Elmslie

Client Representative : J.Wilson

APPENDIX B2

FINAL JACKET POSITION & HEADING

Field Report 11 Dual Phase GPS Observations, Jacket Heighting Orientation and Offset from Stern of JUR Date 16th February 2006

Fugro Survey Pty Ltd where contracted by Technip Oceania Ltd to undertake dual phase GPS and survey observations for the purpose of jacket heighting and orientation to enable the four cans to be marked at 19.400m LAT cut off.
The jacket had been piled, however the structural grouting was not completed.
The jacket was found to be very stable throughout the observational period, with a moderate sea state of less than 3.5m and light winds less than 15knts.
The JUR was moving throughout the observational period primarily due to the fact that the JUR was jacked to an air gap of 29.5m.

Two dual phase GPS antennas where setup on the port and starboard legs. Observations where subsequently logged for a period of twelve hours. The data was then post processed by the Australian Governments AusPos Online GPS processing service.
Using the post processed baseline, positional information was then transferred to the jacket using conventional survey from both GPS points by using a total station.
Throughout the survey forced centering was employed to minimise observational errors arising from the inability to use the total stations compensator. This inability was due primarily to the amount of movement occurring on the JUR.
The total station was set up on each of the GPS survey stations and then moved to the starboard stern of the Maersk Guardian and a number of observations were taken to the centres of the tower legs. The total station was then moved to the port stern of the rig and the observations were repeated to the same points on the jacket. From these observations orientation and offsets of the jacket datum from rig centreline and the transom were calculated.
This method provided an independent check on our positional and level transfer to the jacket. The results confirmed that the positional and level transfer had been undertaken correctly by the survey team.

The results of the orientation and offset checks are summarised in the following tables:

Orientation (Grid Bearing)	
Jacket Heading	219.79°
JUR Stern Heading	219.0°
Difference	0.79°

Orientation was calculated from the bearing between the observed positions of tower legs E/3 and C/3.

From the observations to the three tower legs a coordinate for the datum of the jacket was able to be calculated.

Jacket Datum Coordinate (GDA94, MGA94, CM 141° E)	
Easting	664161.63
Northing	5655160.19

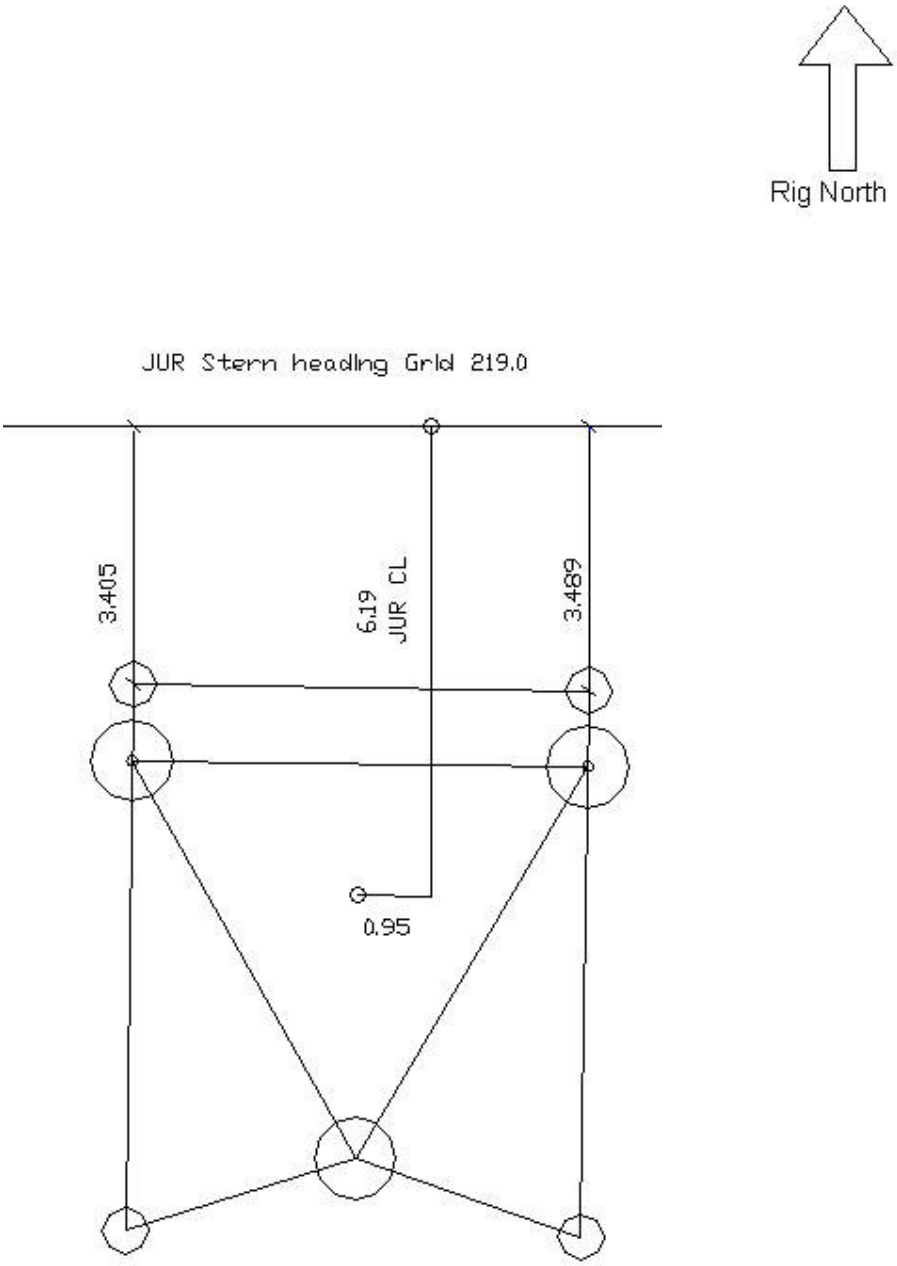
Using this coordinate offsets from the rigs transom and centreline were calculated.

Jacket Datum Offsets	
Offset from Transom	-6.19m
Offset from Rig Centreline	-0.95m

Using a split bubble level and steel rule, elevations relative to LAT were transferred to the four cans requiring trimming.
Also included for clarity is a table detailing the relationship of the drill floor to the jacket cut offs and the current air gap.

Observations were undertaken in the best conditions that we have seen thus far on this job.

……..
Stephen P Lumb
Registered Surveyor
Fugro BTW Ltd
Maersk Guardian



19.400 RL LAT Marked On Cans

Platform heading Grid 219.79

Note: All Dimensions in Metres

All heading information in terms of Grid Bearings

Location	Computed Heights Above LAT
Drill Floor	50.46m LAT
Air Gap	29.51m LAT
Marked Cut Offs	19.40m LAT

APPENDIX B3

FINAL JACKET LEVEL AND LAT HEIGHT

Field Report 13 THY-A Topdeck level and Height Above LAT Date 23th March 2006

Fugro Survey Pty Ltd where contracted by Technip Oceania Ltd to undertake a final survey of the topdeck module once in place. The final survey consisted of a level traverse over the topdeck and transferring the LAT height to the topdeck.

The level traverse covered 8 points around the topdeck. From the results it can be seen that the lowest point is on the northern most point of the helideck with a gradual slope towards the highest point at the flare boom +0.163m giving a gradient of 0.27°. See the drawing attached to this report.

The LAT height was transferred from the starboard stern control station that had been established previously from a traverse and a height from DGPS carrier phase observations. A number of observations were taken to level point 6 on the jacket topdeck and averaged out in order to minimise errors from the jacket and JUR movement.

The attached drawing shows the location of all level points and the differences between.

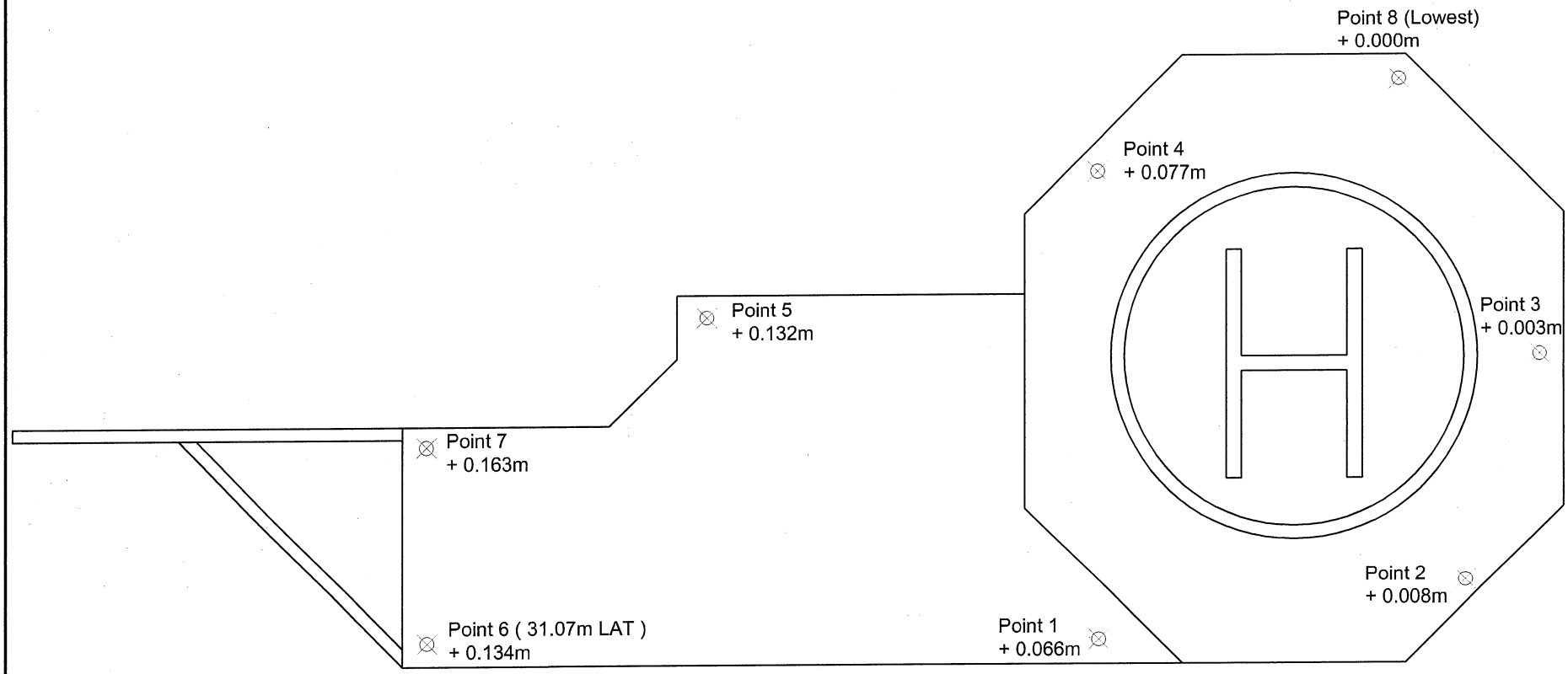
Table showing the LAT heights

Position	LAT Height (m)
JUR drill floor	50.46
Hull of JUR	29.51
Jacket Topdeck (**Avgerage**)	31.01

.....
Simon Staples

FUGRO SURVEY PTY LTD.

TOPDECK LEVELS OF THY-A



NOTE: conditions where not to good due to the large swell causing the movement on the jacket.
DRAWING NOT TO SCALE

APPENDIX C
FINAL CARRIER PHASE PROCESSING RESULTS

Australian Government

Geoscience Australia

AUSPOS Online GPS Processing Report

Space Geodesy Analysis Centre
Geohazards Division, Geoscience Australia

February 15, 2006

This document is a report of the GPS data processing undertaken by the AUSPOS Online GPS Processing Service. The AUSPOS Online GPS Processing Service uses International GPS Service (IGS) products (final, rapid, ultra-rapid depending on availability) including Precise Orbits, Earth Orientation, Coordinate Solutions (IGS-SSC) to compute precise coordinates in ITRF anywhere on Earth. The Service is designed to process only dual frequency GPS phase data.

The AUSPOS Online GPS Processing Service is a free service and you are encouraged to use it for your projects. However, you may not charge others for this service. Geoscience Australia does not warrant that this service a) is error free; b) meets the customer's requirements. Geoscience Australia shall not be liable to the customer in respect of any loss, damage or injury (including consequential loss, damage or injury) however caused, which may arise directly or indirectly in respect of this service.

An overview of the GPS processing strategy is attached to this report. Please direct email correspondence to geodesy@ga.gov.au

AUSPOS Project Manager

Geohazards Division
Geoscience Australia
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Tel: +61 2 6249 9111. Fax: +61 2 6249 9929
Geoscience Australia Home Page: www.ga.gov.au

Job number: #167383; User: `r.bright@fugro.com.au` AUSPOS version 1.01.24

1 User and IGS GPS Data

All antenna heights refer to the vertical distance from the Ground Mark to the Antennna Reference Point (ARP).

User File	Antenna Type	Antenna Height (m)	Start Time	End Time
`24850451.000`	`DEFAULT(NONE)`	0.0000	2006-02-14 04:40:00	2006-02-14 17:53:00
`43410450.000`	`DEFAULT(NONE)`	0.0000	2006-02-14 04:57:59	2006-02-14 17:59:00

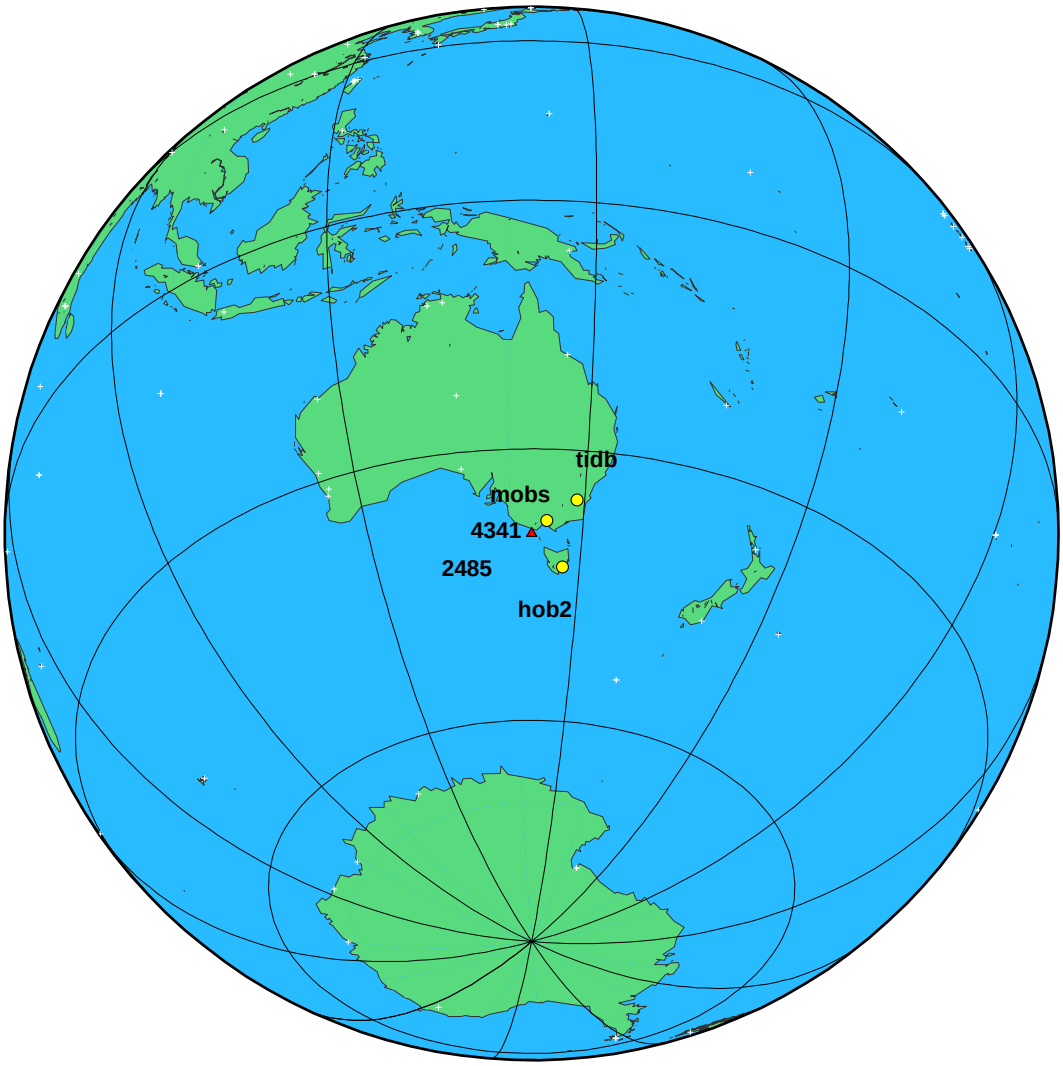


Figure 1: Global View – submitted GPS station(s) and nearby IGS GPS stations used in the processing; triangle(s) represent submitted user data; circle(s) represent the nearest available IGS stations.

2 Processing Summary

Date	IGS Data	User Data	Orbit Type
2006-02-14	mobs hob2 tidb	2485 4341	IGS Ultra-Rapid

Warning: An IGS Ultra-Rapid orbit product has been used in this computation. For improved results please resubmit approximately 2 days after the observation session end to ensure the use of the IGS Rapid orbit product. For the highest quality coordinates please resubmit approximately 2 weeks after the observation session end to ensure the use of the IGS Final orbit product.

3 Computed Coordinates, GDA94

For Australian users Geocentric Datum of Australia (GDA94, ITRF92@1994.0) coordinates are provided. GDA94 coordinates are determined from ITRF coordinates by an Geoscience Australia (GA) derived coordinate transformation process. GA transformation parameters between ITRF and GDA94 are re-computed weekly, incorporating the latest available tectonic motions (determined from the GA GPS network). GA recommends that users within Australia use GDA94 coordinates. All coordinates refer to the Ground Mark. For general/technical information on GDA94 see www.ga.gov.au/nmd/geodesy/datums/gda.jsp and www.icsm.gov.au/icsm/gda/gdatm/

3.1 Cartesian, GDA94

	X(m)	Y(m)	Z(m)	
tidb	-4460996.066	2682557.134	-3674443.860	GDA94
hob2	-3950071.285	2522415.221	-4311638.526	GDA94
mobs	-4130635.787	2894953.100	-3890531.465	GDA94
2485	-3945527.059	2983754.210	-4012824.890	GDA94
4341	-3945575.743	2983742.769	-4012785.801	GDA94

3.2 Geodetic, GRS80 Ellipsoid, GDA94

The height above the Geoid is computed using the GPS Ellipsoidal height and subtracting a Geoid-Ellipsoid separation. Geoid-Ellipsoidal separations are computed using a bilinear interpolation of the AUSGeoid98 grid. The height above the Geoid is only provided for sites within the AUSGeoid98 extents. For information on AUSGeoid98 see www.ga.gov.au/nmd/geodesy/ausgeoid/

	Latitude(DMS)	Longitude(DMS)	Ellipsoidal Height(m)	Above-Geoid Height(m)	
tidb	-35-23 -57.1561	148 58 47.9845	665.425	646.140	GDA94
hob2	-42-48 -16.9852	147 26 19.4356	41.144	44.450	GDA94
mobs	-37-49 -45.8990	144 58 31.2066	40.677	35.730	GDA94
2485	-39-14 -15.8523	142 54 7.4652	49.281	52.523	GDA94
4341	-39-14 -14.2157	142 54 9.0701	49.287	52.525	GDA94

3.3 MGA Grid, GRS80 Ellipsoid, GDA94

	East(M)	North(M)	Zone	Ellipsoidal Height(m)	Above-Geoid Height(m)	
tidb	679807.860	6080884.476	55	665.425	646.140	GDA94
hob2	535873.399	5260777.226	55	41.144	44.450	GDA94
mobs	321819.591	5811180.033	55	40.677	35.730	GDA94
2485	664157.398	5655117.077	54	49.281	52.523	GDA94
4341	664196.937	5655166.726	54	49.287	52.525	GDA94

4 Computed Coordinates, ITRF2000

All computed coordinates are based on the IGS realisation of the ITRF2000 reference frame, provided by the IGS cumulative solution. All the given ITRF2000 coordinates refer to a mean epoch of the site observation data. All coordinates refer to the Ground Mark.

4.1 Cartesian, ITRF2000

	X(m)	Y(m)	Z(m)	ITRF2000 @
tidb	-4460996.476	2682557.095	-3674443.302	2006/02/14
hob2	-3950071.735	2522415.277	-4311638.013	2006/02/14
mobs	-4130636.232	2894953.102	-3890530.911	2006/02/14
2485	-3945527.521	2983754.236	-4012824.341	2006/02/14
4341	-3945576.205	2983742.795	-4012785.252	2006/02/14

4.2 Geodetic, GRS80 Ellipsoid, ITRF2000

The height above the Geoid is computed using the GPS Ellipsoidal height and subtracting a Geoid-Ellipsoid separation. Geoid-Ellipsoidal separations, in this section, are computed using a spherical harmonic synthesis of the global EGM96 geoid. More information on the EGM96 geoid can be found at
earth-info.nga.mil/GandG/wgsegm/egm96.html

	Latitude(DMS)	Longitude(DMS)	Ellipsoidal Height(m)	Above-Geoid Height(m)
tidb	-35-23 -57.1351	148 58 47.9942	665.372	646.209
hob2	-42-48 -16.9640	147 26 19.4442	41.096	44.606
mobs	-37-49 -45.8775	144 58 31.2170	40.626	36.036
2485	-39-14 -15.8307	142 54 7.4759	49.231	53.240
4341	-39-14 -14.1940	142 54 9.0809	49.237	53.242

5 Solution Information

To validate your solution you should check the :-

i. Antenna Reference Point (ARP) to Ground Mark records;

ii. Apriori Coordinate Updates (valid range is 0.000 - 15.000 m);

iii. Coordinate Precision (valid range is 0.001 - 0.025 m);

iv. Root Mean Square (RMS) (valid range is 0.0005 - 0.0250 m); and

v. % Observations Deleted (valid range is 0 - 25) %;

5.1 ARP to Ground Mark, per day

All heights refer to the vertical distance from the Ground Mark to the Antenna Reference Point (ARP). The Antenna Offsets refer to the vertical distance from the ARP to the L1 phase centre.

	Height(m)	Antenna Offsets(m)			
Station	Up	East	North	Up	yyyy/mm/dd
2485	0.0000	0.0000	0.0000	0.0000	2006/02/14
4341	0.0000	0.0000	0.0000	0.0000	2006/02/14

5.2 Apriori Coordinate Updates - Cartesian, per day

	dX(m)	dY(m)	dZ(m)	yyyy/mm/dd
2485	0.040	0.031	-0.009	2006/02/14
4341	-0.077	-0.097	-0.046	2006/02/14

5.3 Coordinate Precision - Cartesian, per day

1 Sigma	sX(m)	sY(m)	sZ(m)	yyyy/mm/dd
2485	0.011	0.011	0.011	2006/02/14
4341	0.011	0.011	0.011	2006/02/14

5.4 RMS, Observations, Deletions per day

Data	RMS (m)	# Observations	% Obs. Deleted	Date
tidb	0.0087	26239	5 %	2006-02-14
hob2	0.0096	23674	7 %	2006-02-14
mobs	0.0079	36123	6 %	2006-02-14
2485	0.0153	13807	19 %	2006-02-14
4341	0.0155	16377	20 %	2006-02-14

A GPS Computation Standards

A.1 Measurement Modelling

Observable	Ionosphere corrected L1 double difference carrier phase, Psuedo-range only used for receiver clock estimation, Elevation cut-off 15°, Sampling rate 30 seconds, Weighting 1.0cm for double difference, elevation dependent 1/sin(E).
Troposphere	Hopfield, Niell mapping function
Preprocessing	Receiver clocks estimated using pseudo-range information
Satellite center of mass correction	Block II x,y,z: 0.2794, 0.0000, 1.0259 m Block IIA x,y,z: 0.2794, 0.0000, 1.2053 m
Satellite Antenna Phase centre calibration	Not applied
Ground Antenna phase centre calibrations	Elevation-dependent phase centre corrections are applied according to the model IGS01, the NGS antenna calibrations are used when the antenna used is not a recognised IGS type. The corrections are given relative to the Dorne Margolin T antenna.
Atmospheric Drag	Jachhia Model
Centre of Mass Correction / Attitude	Nil

A.2 Orbit Modelling

Earth's Gravitational (Static) Potential Model	EGM96 - degree and order 12
Solid Earth Tides (Dynamic) Potential	Love Model
Ocean Tide (Dynamic) Potential	Christodoulidis
Third Body Perturbations	Sun, Moon and Planets Values for physical constants - AU, Moon/Earth mass ratio, GM(moon, sun and planets) from JPL DE403 Planetary Ephemeris.
Direct Solar Radiation Pressure	Rock

A.3 Station Position Modelling and Reference Frame

Precession	IAU76/IERS96
Nutation	IAU80/IERS96 (including epsilon and psi corrections)
Sine terms added to accumulated precession and nutation in Right Ascension	As in IERS TN 21, p. 21
Geodesic Nutation	As in IERS TN 21, P. 37
Polar Motion	IGS Earth Orientation Parameters (Ultra-rapid, Rapid, Final) - apriori
Earth Rotation (UT1)	IGS Earth Orientation Parameters (Ultra-rapid, Rapid, Final) - apriori
Daily and Sub-daily tidal corrections to X, Y and UT1	Applied (IERS2000)
Plate Motion	IGS Cumulative SSC
Planetary and Lunar Ephemeris	JPL DE403
Station Displacement - Solid Earth Tide Loading	Williamson and Diamante (1972) + Wahr (1980) for the frequency dependent elastic response of the Earth's fluid interior.
Station Displacement - Ocean Tide Loading	not applied
Station Displacement - Pole Tide	applied
Station Displacement - Atmosphere Loading	not applied
Reference Frame	IGS Cumulative SSC

APPENDIX D
HS&E MANAGEMENT

HEALTH, SAFETY & ENVIRONMENT MEETING RECORD

Date: 30 November 2005	**Time: 1915-1930**
Location: Maersk Guardian	**Job Number: P0339**

Personnel Present:

P. Caswell

M. Elmslie

Items Discussed:

1. PPE - Boots, overalls, hard hats and glasses required on deck. Ensure clear glasses available for night time work.
2. Reminder on hazard identification. Use Maersk/Technip systems as appropriate to record any potential hazards observed.
3. Review of upcoming activities
   - Mobilisation of Ray J Hope. JHA on 'Mobilisation of Anchor Vessels' to be reviewed and amended if required.
   - Observation of final jacket position and transfer of level datum. Need to be aware of other activities happening simultaneously on the rig. Suggest wearing of fluoro vests so that personnel are more easily seen by others on deck. Theodolite set up at port and starboard stern requires close proximity to rig side – life vest / safety line if required.
   - Possible transfer to jacket once on seabed. Use ladders/stairway provided and life vest to be worn. Supervision by Technip personnel required.
4. Possible demobilisation of some equipment to Perth. Use correct manual handling techniques with lifting of heavy boxes.
5. Personnel transfer to AHTs will be with the 'Frog'. Ensure training is provided and personnel properly instructed on procedure prior to use each time.

Action Items:	Action by:	Target date
1. Request Fugro, Perth to provide fluro vests for use on deck.	PC	
2. Discuss with Technip HSE the safety requirements for use of theodolite at port and starboard stern.	PC	

Signature of Site HS&E Rep:	PAlnwen	**Date:**	30/11/2005

PLEASE FORWARD ORIGINAL TO FUGRO SURVEY HS&E MANAGER

HEALTH, SAFETY & ENVIRONMENT MEETING RECORD

Date: 15 December 2005	**Time: 1830-1850**
Location: Maersk Guardian	**Job Number: P0339**

Personnel Present:

P. Caswell

S. Lumb

Items Discussed:

1. PPE - Reminder on requirement for overalls, hard hats and glasses when on deck.
2. Completed familiarisation tour on deck to show location of survey stations and safe access to potential work areas.
3. Advise barge engineer when going onto deck for survey observations in case of conflict with other simultaneous operations.
4. Fluro vests arrived from Perth, should be worn when undertaking levelling and theodolite work on deck.
5. JHA for survey operations at the stern has been reviewed today. Prior to actually commencing the work an 'Over Side' work permit is to be raised, and the JHA again reviewed during a formalised toolbox meeting in accordance with Maersk safety systems.
6. Review of other upcoming activities
   - Vessel transfers are now unlikely to be required. However, if transfer is required personnel to watch 'Frog' video and ensure Frog operations are properly supervised by rig personnel.
   - Possible transfer to jacket once on seabed. Use ladders/stairway provided and life vest to be worn. Supervision by Technip personnel required.
7. Reminder that emergency muster drills normally held each Saturday. Rig safety meeting held every fortnight and Fugro personnel to attend if possible.

Action Items:	Action by:	Target date
1. Request hard hat chin strap from Technip.	SL	

Signature of Site HS&E Rep: PA Lumsden	**Date:** 15/12/05

PLEASE FORWARD ORIGINAL TO FUGRO SURVEY HS&E MANAGER

HEALTH, SAFETY & ENVIRONMENT MEETING RECORD

Date: 21/02/2006	**Time: 14:00**
Location: Maersk Guardian	**Job Number: P0339**

Personnel Present:

Steve Lumb

Simon Staples

Items Discussed:

1. PPE – Reminder on requirement for PPE on deck.
2. Review of other upcoming activities

- Transfers to jacket. Use ladder and full harness and life jacket as per Technip JSA.
- Transfers to vessel via 'Frog'. Watch safety video and make sure PPE worn during transfer including chin strap for hard hat.

3. Participated in abandon ship drill on the 18th February at 22:30.

Action Items:	Action by:	Target date

Signature of Site HS&E Rep: Stephen Lumb **Date:** 21st Feb 2006

PLEASE FORWARD ORIGINAL TO FUGRO SURVEY HS&E MANAGER

APPENDIX E
GYRO CALIBRATION

Field Report 1 **Gyro Calibration** **Date: 18 November 2005**

To provide heading information for the *Maersk Guardian* jack-up rig during the Otway Gas Project the rig was mobilised with an SG Brown gyro compass. This was installed in the control room and was interfaced to the navigation computer.

Calibration of the gyro compass was undertaken in two stages prior to the rig being floated off the heavy lift vessel in Western Port, Victoria. Between 19:45 and 20:30 on 15 November 2005 a series of theodolite observations were made from the helideck of the *Maersk Guardian* to the *Maersk Supporter* at anchor approximately 1km from the rig. A prism had been previously attached to the main mast of the *Maersk Supporter* for this purpose. The DGPS system on this vessel had been calibrated alongside in Portland and vessel position was being transmitted to the rig using Starfix.Wombat.

The positions for the observing station and the *Maersk Supporter* mast were recorded together with gyro compass readings at the time of the theodolite observation. This enabled a calculated rig heading to be compared against the observed value and a correction determined.

In addition to this calibration, a series of sun azimuth observations were made between 17:14 and 17:42 on 16 November. A Wild T1000 theodolite was set up on the helideck and a reference bearing established parallel with the centreline of the rig. . Observed gyrocompass values were logged with Starfix.Seis during the period of sun observations and a gyro correction value was determined by comparing computed rig heading with the observed values.

The mean correction determined from both calibration exercises is summarised in the following table.

Gyro Compass	Mean Correction
SG Brown (S/N 136002)	-0.82°

This value was entered to the navigation computer to correct all interfaced gyro values obtained during the subsequent rig move to the Thylacine location.

Attached are copies of the Fugro Survey gyro compass calibration forms completed for the calibration observations.

.....

Paul Caswell
Fugro Survey Pty Ltd
Maersk Guardian

GYRO COMPASS CALIBRATION BY SUN AZIMUTH - CALCULATION SUMMARY

Fugro Job Number:	P0339	**Vessel:**	Maersk Guardian
Job Description:	Otway Gas Project - Thylacine Jacket	**Instrument**	Wild T1000
Client:	Technip Oceania Pty Ltd	**Serial No.**	13040
Surveyor:	P.Caswell / M.Elmslie	**Date:**	November 16, 2005
		Time Zone :	11hrs

Vessel Details

	D	M	S
Enter correction from RO to vessel centreline	180°	00 '	00 "

Enter approximate WGS84 position of instrument :

	D	M	S
Latitude (ϕ)	-38 °	25 '	57 "
Longitude (λ)	145 °	15 '	13 "

Observations

Obs. No.	Date	UTC	Instrument Position		Calculated Sun Azimuth at UTC		Observed Direction to Sun				Calc'd Vessel Hdg	Obs'd Vessel Hdg	Sun Semi Diameter	(C-O) Degrees
			Latitude (ϕ) DMS	Longitude (λ) DMS	DMS	Dec. Deg	Deg	Min	Sec	Dec. Deg				
1	16-Nov-05	6:14:10	-038° 25' 57.00"	145° 15' 13.00"	271° 16' 36.33"	271.277 °	340°	34'	38	340.577	110.700 °	111.30 °	0.2700	-0.60 °
2	16-Nov-05	6:16:34	-038° 25' 57.00"	145° 15' 13.00"	270° 53' 51.91"	270.898 °	340°	35'	52	340.598	110.300 °	110.80 °	0.2700	-0.50 °
3	16-Nov-05	6:24:34	-038° 25' 57.00"	145° 15' 13.00"	269° 38' 55.41"	269.649 °	336°	17'	34	336.293	113.356 °	114.00 °	0.2700	-0.64 °
4	16-Nov-05	6:25:31	-038° 25' 57.00"	145° 15' 13.00"	269° 30' 6.38"	269.502 °	335°	37'	05	335.618	113.884 °	114.50 °	0.2700	-0.62 °
5	16-Nov-05	6:30:26	-038° 25' 57.00"	145° 15' 13.00"	268° 44' 43.89"	268.746 °	336°	26'	37	336.444	112.302 °	113.00 °	0.2700	-0.70 °
6	16-Nov-05	6:32:26	-038° 25' 57.00"	145° 15' 13.00"	268° 26' 23.48"	268.440 °	335°	42'	22	335.706	112.734 °	113.40 °	0.2700	-0.67 °
7	16-Nov-05	6:34:47	-038° 25' 57.00"	145° 15' 13.00"	268° 04' 55.42"	268.082 °	333°	30'	12	333.503	114.579 °	115.20 °	0.2700	-0.62 °
8	16-Nov-05	6:35:39	-038° 25' 57.00"	145° 15' 13.00"	267° 57' 1.69"	267.950 °	332°	37'	01	332.617	115.334 °	116.00 °	0.2700	-0.67 °
9	16-Nov-05	6:40:06	-038° 25' 57.00"	145° 15' 13.00"	267° 16' 39.70"	267.278 °	331°	10'	52	331.181	116.097 °	116.80 °	0.2700	-0.70 °
10	16-Nov-05	6:42:13	-038° 25' 57.00"	145° 15' 13.00"	266° 57' 33.52"	266.959 °	326°	41'	44	326.696	120.264 °	120.80 °	0.2700	-0.54 °

Mean	**-0.63 °**
Std. Deviation	**0.07**
Maximum	**-0.50 °**
Minimum	**-0.70 °**
Range	**0.20**

Signature

SURVEYOR / PARTY CHIEF
P.Caswell / M.Elmslie

Fugro Survey Pty Ltd
FSHY31-2

GYRO-COMPASS CALIBRATION - RESULTS SHEET

Fugro Job Number:	P0339	**Location**	Western Port
Job Description:	Otway Gas Project	**Vessel:**	Maersk Guardian
Client:	Technip	**Observation Date:**	15 November 2005
Surveyor:	P.Caswell/M.Elmslie	**Gyro :**	SG Brown
Time Zone	UTC+ 11	**Serial No.:**	136002

Geodesy

Spheroid	GRS80	**Projection**	Transverse Mercator (UTM)	**Zone**	54
Datum	GDA94_Australia_ICSM-ITRF2005.50	**Central Meridian**	141		

Results

Obs	Time (hh:mm:ss)	Calculated Bearing to Mast (Grid)				Observed Angle to RO				Calculated Heading (G)	Calc Heading (T)	Observed Heading (T)	C-O
1	19:56:38	276	011	036	276.1935	47	35	36	47.593	228.600	225.96	227.00	-1.04
2	19:57:25	276	010	018	276.1717	47	27	55	47.465	228.706	226.07	227.20	-1.13
3	19:59:30	276	015	003	276.2509	46	53	38	46.894	229.357	226.72	227.80	-1.08
4	20:07:02	275	055	027	275.9240	44	48	41	44.811	231.113	228.47	229.30	-0.83
5	20:10:45	276	003	006	276.0516	44	13	22	44.223	231.829	229.19	230.20	-1.01
												Mean	**-1.02**
												SD	**0.12**

Signature

SURVEYOR/PARTY CHIEF

Date :

Fugro Survey Pty Ltd
FSHY31-2

GYRO-COMPASS CALIBRATION - INPUT SHEET

Fugro Job Number:	P0339	**Location**	Western Port
Job Description:	Otway Gas Project	**Vessel:**	Maersk Guardian
Client:	Technip	**Observation Date:**	15 November 2005
Surveyor:	P.Caswell/M.Elmslie	**Gyro Type:**	SG Brown
Time Zone	UTC+ 11	**Serial No.:**	136002

Geodesy

Spheroid	GRS80	**Projection**	Transverse Mercator (UTM)
Semi Major Axis	6378137	Central Meridian	141
Inverse Flattening	298.2572	False Easting	500000
Datum	GDA94_Australia_ICSM-ITRF2005.50	False Northing	10000000
		Central Scale Factor	0.9996

Station Details

Instrument Station: Stn 2 (Maersk Guardian Traverse)
Instrument Type : Leica TCRP1203
Instrument Serial No. : -

Backsight Station (RO) : Stn 1 (Maersk Guardian Traverse)

Calculated Convergence : 002 38 06

Observations

Obs	Time	Observer's Position		Maersk Supporter Mast		Observed Angle to RO			Observed Heading
		Easting	Northing	Easting	Northing				
1	19:56:38	869678	5737586	870664	5737479	47	35	36	227.00
2	19:57:25	869675	5737585	870665	5737478	47	27	55	227.20
3	19:59:30	869682	5737583	870668	5737475	46	53	38	227.80
4	20:07:02	869686	5737578	870669	5737476	44	48	41	229.30
5	20:10:45	869690	5737577	870671	5737473	44	13	22	230.20

Signature PA Caswell
SURVEYOR/PARTY CHIEF

Date : 15/11/2005

APPENDIX F
DGPS VERIFICATION

Field Report 2 **DGPS Check** **Date: 16 November 2005**

To provide surface positioning for the *Maersk Guardian* during the rig move to Thylacine, the jack-up was mobilised with two Fugro Starfix Differential GPS systems. These systems were installed, interfaced to the navigation computer and configured to provide three navigation solutions as summarised in the following table.

System	Description	Reference Stations
Primary	Starfix HP	Melbourne, Ceduna, Cobar, Bathurst (OPTUS and APSAT)
Secondary	Starfix GSS	Global corrections
Tertiary	Starfix MRDGPS	Melbourne, Ceduna, Cobar, Bathurst (OPTUS and APSAT)

During the vessel mobilisation at Western Port, Victoria the rig remained on the heavy lift vessel and the only means to check the DGPS was against the positioning system on board the *Maersk Supporter*. A DGPS check had been undertaken on the *Maersk Supporter* during mobilisation in Portland and a prism was mounted on the vessel mast at this time to allow subsequent checks to be made from the rig to this vessel.

Prior to the position check, all rig offsets had been confirmed by traverse and the gyro compass had also been calibrated. A Wild T1000 Total Station was set up on one of the traverse stations and a reference bearing established relative to rig heading. Between 11:30 and 11:50 on 16 November 2005, horizontal angles and distances were measured from the rig to the *Maersk Supporter* mast. Position data for the rig and the *Maersk Supporter*, as provided by Starfix.Wombat, were logged during this time to permit a comparison to be made between observed and computed positions.

A summary of the results of the position check is shown in the table below.

Position	Mean C-O East (SD)	Mean C-O North (SD)
Maersk Supporter Mast	-1.67 (0.44)	-0.78 (0.33)

A DGPS system comparison was also undertaken prior to moving the rig onto the design location. Position data for all three systems was logged between 22:19 and 22:29 on 17 November and reduced to vessel datum to allow comparisons to be made. The table below summarises the results obtained.

System	Diff East (m)	Diff North (m)	SD East	SD North
Primary	-		-	
Secondary	-0.21	0.03	0.07	0.04
Tertiary	-0.04	0.17	-0.48	-0.48

The above results indicate that all positioning systems were installed and operating correctly. Attached are copies of the Fugro Survey DGPS verification forms compiled during the checks undertaken.

PA Caswell

.....

Paul Caswell
Fugro Survey Pty Ltd
Maersk Guardian

Fugro Survey Pty Ltd

DGPS CALIBRATION - CALCULATION SUMMARY

Fugro Job Number:		P0339		**Vessel:**	Maersk Guardian
Job Description:		Otway Gas Project		**Instrument**	Leica 1203 Total Station
Client:		Technip Oceania Pty Ltd		**Serial No.**	
Surveyor:		PC/ME		**Date:**	16th November 2005
				Time Zone :	UTC +11
Setup Stn:	Stn 11	**Backsight Stn:**	MRDGPS Antenna	**Target:**	Prism on Maersk Supporter Mast

Geodesy

Spheroid	GRS80	**Projection**	Transverse Mercator (UTM)
Datum	GDA94_Australia_ICSM-ITRF2005.50	**Central Meridian**	141
		Zone	54

Obs	Stn 11 Coordinates		Grid Bearing			Dist(m)	Calculated		Observed		C-O	
Number	Easting	Northing	Deg	Min	Sec		Easting	Northing	Easting	Northing	Diff E(m)	Diff N(m)
1	871514.80	5737350.84	111	51	13	166.968	871669.77	5737288.69	871671.50	5737289.95	-1.73	-1.26
2	871516.69	5737350.51	109	49	57	166.671	871673.47	5737293.97	871674.91	5737294.50	-1.43	-0.54
3	871517.38	5737350.21	108	58	53	166.346	871674.68	5737296.11	871676.13	5737297.22	-1.44	-1.11
4	871517.06	5737350.25	107	56	27	166.942	871675.89	5737298.82	871676.64	5737299.79	-0.75	-0.97
5	871516.67	5737349.64	106	52	50	165.019	871674.58	5737301.72	871676.24	5737301.99	-1.66	-0.27
6	871515.65	5737348.91	105	51	27	164.281	871673.68	5737304.02	871675.47	5737304.31	-1.79	-0.30
7	871514.37	5737348.15	105	27	52	163.682	871672.13	5737304.50	871673.92	5737305.32	-1.79	-0.82
8	871512.96	5737347.42	105	23	17	162.606	871669.74	5737304.27	871671.33	5737305.29	-1.59	-1.02
9	871511.36	5737346.66	105	4	9	160.839	871666.66	5737304.84	871669.02	5737305.50	-2.36	-0.66
10	871506.80	5737344.82	105	7	21	160.807	871662.04	5737302.86	871664.19	5737303.71	-2.16	-0.85
										Mean	**-1.67**	**-0.78**
										SD	**0.44**	**0.33**

Signature

SURVEYOR/PARTY CHIEF

Fugro Survey Pty Ltd
FSHY25-5
DGPS COMPARISON - THREE SYSTEMS

Client :	Technip Oceania Pty Ltd	**Job No.:**	P0339	**Datum :**	GDA94
Project :	Otway Gas Project	**Vessel :**	Maersk Guardian	**Spheroid :**	GRS80
Survey Station :	Offshore comparison	**Obs Date :**	17th November 2005	**Projection :**	UTM
Time Zone :	UTC + 11	**Surveyor :**	PC / ME	**CM :**	141
				Zone :	54

Obs	UTC Time	Fix	Starfix HP		StarfixGSS		Differences 1 - 2		Starfix MRDGPS		Differences 1 - 3	
			Easting	Northing	Easting	Northing	dE (m)	dN (m)	Easting	Northing	dE (m)	dN (m)
1	11:19:18	981	663452.89	5658957.76	663453.16	5658957.71	-0.28	0.05	663453.17	5658956.92	-0.28	0.84
2	11:19:48	982	663446.05	5658982.16	663446.26	5658982.15	-0.21	0.01	663446.44	5658981.79	-0.40	0.38
3	11:20:18	983	663438.12	5659005.54	663438.37	5659005.51	-0.26	0.03	663437.78	5659005.50	0.34	0.04
4	11:20:48	984	663428.16	5659028.41	663428.41	5659028.38	-0.25	0.03	663429.02	5659026.82	-0.86	1.59
5	11:21:18	985	663418.03	5659051.27	663418.14	5659051.22	-0.11	0.05	663416.70	5659052.73	1.33	-1.46
6	11:21:48	986	663409.79	5659074.04	663410.06	5659073.99	-0.27	0.05	663410.86	5659072.94	-1.06	1.10
7	11:22:18	987	663400.21	5659096.79	663400.39	5659096.69	-0.18	0.10	663399.50	5659095.67	0.71	1.12
8	11:22:48	988	663392.31	5659119.89	663392.56	5659119.85	-0.25	0.04	663393.69	5659119.66	-1.38	0.23
9	11:23:18	989	663383.32	5659142.67	663383.47	5659142.63	-0.15	0.04	663383.91	5659142.41	-0.59	0.27
10	11:23:48	990	663372.57	5659163.98	663372.78	5659163.91	-0.22	0.07	663372.92	5659163.93	-0.36	0.05
11	11:24:18	991	663359.81	5659184.91	663360.11	5659184.91	-0.30	0.00	663360.21	5659184.90	-0.41	0.01
12	11:24:48	992	663345.62	5659205.29	663345.80	5659205.31	-0.19	-0.02	663345.47	5659205.07	0.15	0.22
13	11:25:18	993	663329.38	5659222.78	663329.62	5659222.76	-0.24	0.03	663329.75	5659222.88	-0.37	-0.09
14	11:25:48	994	663315.38	5659241.52	663315.41	5659241.41	-0.03	0.11	663313.35	5659240.88	2.03	0.64
15	11:26:18	995	663306.70	5659262.89	663307.00	5659262.94	-0.30	-0.04	663306.20	5659265.26	0.50	-2.36
16	11:26:48	996	663291.43	5659279.69	663291.69	5659279.76	-0.26	-0.07	663298.22	5659288.62	~~-6.79~~	~~-8.93~~
17	11:27:18	997	663275.11	5659293.74	663275.27	5659293.70	-0.16	0.03	663290.23	5659311.99	~~-15.12~~	~~-18.25~~
18	11:27:48	998	663262.37	5659307.59	663262.59	5659307.61	-0.22	-0.02	663282.25	5659335.36	~~-19.88~~	~~-27.77~~
19	11:28:18	999	663248.86	5659322.77	663249.08	5659322.75	-0.22	0.02	663245.18	5659321.47	~~3.69~~	~~1.30~~
20	11:28:48	1000	663231.82	5659336.64	663232.02	5659336.63	-0.21	0.00	663233.22	5659331.37	~~-1.40~~	~~5.27~~
	Means						**-0.21**	**0.03**			**-0.04**	**0.17**
	Standard Deviations						**0.07**	**0.04**			**-0.48**	**-0.48**
					Mean Vector	**0.22 m at**		**276.74**	**Mean Vector**	**0.18 m at**		**346.00**

Signature

SURVEYOR/PARTY CHIEF

Approved by the Operations Manager, 29-3-2005.
Note: To ensure the latest version check the Online BMS.

APPENDIX G
JOB CONFIGURATION

MAERSK GUARDIAN - STARFIX.SEIS JOB CONFIGURATION

```
10/12/2005  00:00:01 UTC
*** FUGRO SURVEY STARFIX.SEIS ***

Header : Project Name                      :   Otway Gas Project
         Project Number                    :   P0339
         Project Description               :   Jacket and Topside Installation
         Project Location                  :   Otway Basin
         Client                            :   Technip Oceania Pty Ltd
         Client Representative             :   AP004057
         Client Reference Number           :   Jonathon Wilson
         Geophysical Contractor            :   Fugro
         Positioning Contractor            :   Fugro
         Positioning Processing Contractor:   Fugro
         Setup By                          :   PC,JR
         On                                :
         Time Source                       :   9 GPS Raw Data Trimble
         Time Offset                       :   11:00 (Using UTC)
         Vessel                            :   Guardian

Files Runline  :   C:\Fugro_Projects\P0339\Seis files\Runline\P0339_20051119.srn
      Centreline    :   (None)
      Database :   C:\Fugro_Projects\P0339\Seis files\Database\P0339_20051116.sdb
      CAD      :   C:\Fugro_Projects\P0339\Seis files\Dgn\cad_p0339_20051129.dgn
      Waypoint :   C:\Fugro_Projects\P0339\Seis files\Waypoint\P0339_20051209.swy

Logging: Directory     :   C:\Fugro_Projects\\P0339\NonSession\SEIS\

Fixing : Mode          :   Distance
         Start Mode    :   Manual
         Stop Mode     :   Auto Run-Out = 0.0m
         Fix Devices   :
           Auto-Fix    :   SEIS
           Manual      :   SEIS
           External    :   (None)
           Offset      :   (None)
           MOB         :   (None)
         Fix Interval  :    25.000m
         Reset at SOL  :   No
         Next Fix No.  :     8299
         Fix Increment :        1
         Start FFID    :     8299
         Start Man. Fix:       20
         Early Start   :       20s
         Logging Start :       10s

Datum 1: Datum         :  GDA94_Australia_ICSM-ITRF2005.50
         Spheroid      :  GRS80
         SemiMajor Axis:  6378137.000
         1/Flattening  :  298.2572221010
         Eccentricity^2:  0.006694380022901

         Projection    :  Transverse Mercator (UTM)
         Grid Name     :
         Lat. Origin   :    0d00'00.0000"N
         Lon. Origin   :  141d00'00.0000"E
         False East    :    500000.000m
         False North   :  10000000.000m
         Scale Factor  :  0.9996
         Convergence   :  Australia/New Zealand

Datum 2: Datum         :  WGS84
         Spheroid      :  WGS84
```

```
         SemiMajor Axis:  6378137.000
         1/Flattening  :  298.2572235630
         Eccentricity^2:  0.006694379990141

Datum2>1:Parameters    :  From WGS84 to GDA94_Australia_ICSM-ITRF2005.50
         DX            :    -0.0156m         RX            :     0.0145"
         DY            :    -0.0349m         RY            :     0.0131"
         DZ            :    -0.0513m         RZ            :     0.0150"
         D Scale       :     0.0050ppm       Rot Convention:  +RZ=-RLongitude

Sundry : Vertical Datum:
         Ell. Sep.     :     0.0000m
         Distances     :   Spheroidal
         Bearings      :   True
         Units         :  metres
         Conversion    :     1.0000000000

Main Vessel  :  Guardian
             :  C:\PROGRAM FILES\FUGRO\7.1\SHARED\DATA\VESSEL_SHAPES\GUARDIAN.SVS

Nav. 1 : System        :  MRDGPS    (In Use)
         Type          :  Lat - Long
         Priority      :     1
         Time-out      :     5.0s
         Offset Name   :  MRDGPS
         X Offset      :     2.86m
         Y Offset      :    55.34m
         Ant. Height   :     0.00m
Nav. 2 : System        :  Trimble
         Type          :  Lat - Long
         Priority      :     2
         Time-out      :     5.0s
         Offset Name   :  MRDGPS
         X Offset      :     2.86m
         Y Offset      :    55.34m
         Ant. Height   :     0.00m
Dead Reckoning: No   Timeout:  30.0s

Heading 1 : System        :  Manual    (In Use)
         Priority      :     1
         Time-out      :     3.0s
         Offset Name   :  CRP
         X Offset      :     0.00m
         Y Offset      :     0.00m
         Z Offset      :     0.00m
         Correction    :     0.00 Degrees

Pitch/Roll 1 : System      : TSS335    (In Use)
           Priority    :    1
           Time-out    :    3.0s
           Offset Name : CRP
           X Offset    :    0.00m
           Y Offset    :    0.00m
           Z Offset    :    0.00m
           Corr'n Pitch:    0.00 Degrees
           Corr'n Roll :    0.00 Degrees

Sounder 1: System      : EchoTrac.High    (In Use)
           Priority    :    1
           Time-out    :    5.0s
           Offset Name : CRP
           X Offset    :    0.00m
           Y Offset    :    0.00m
           Z Offset    :    0.00m
```

```
           Vel. Sound  : 1500.00m/s
Sounder 2: System      : EchoTrac.Low
           Priority    :    2
           Time-out    :    5.0s
           Offset Name : CRP
           X Offset    :    0.00m
           Y Offset    :    0.00m
           Z Offset    :    0.00m
           Vel. Sound  : 1500.00m/s

Fairlead:Name                       X         Y         Z
         SB                       11.10     78.10      0.00
         PB                      -11.10     78.10      0.00
         PS                      -45.00     20.00      0.00
         SS                       45.00     20.00      0.00


Secondary Vessel 1     :  Supporter
            :  C:\PROGRAM FILES\FUGRO\7.1\SHARED\DATA\VESSEL_SHAPES\SUPPORTER.SVS

Nav. 1 : System        :  SUPPORTER    (In Use)
         Type          :  Lat - Long
         Priority      :     1
         Time-out      :    15.0s
         Offset Name   :  CRP
         X Offset      :     0.00m
         Y Offset      :     0.00m
         Ant. Height   :     0.00m
Dead Reckoning: No   Timeout:  30.0s

Heading 1 : System        :  SUPPORTER    (In Use)
         Priority      :     1
         Time-out      :    15.0s
         Offset Name   :  CRP
         X Offset      :     0.00m
         Y Offset      :     0.00m
         Z Offset      :     0.00m
         Correction    :     0.00 Degrees

Offsets: Name                       X         Y         Z
         Stern                      0.00      0.00      0.00
         TrimbleDI                  0.00     71.05      0.00
         Mast                       0.00     60.85      0.00
         MRDGPS                     2.34     70.55      0.00

Secondary Vessel 2     :  LadyGerda
            :  C:\PROGRAM FILES\FUGRO\7.1\SHARED\DATA\VESSEL_SHAPES\LADYGERDA.SVS

Nav. 1 : System        :  LADYGERDA    (In Use)
         Type          :  Lat - Long
         Priority      :     1
         Time-out      :    15.0s
         Offset Name   :  CRP
         X Offset      :     0.00m
         Y Offset      :     0.00m
         Ant. Height   :     0.00m
Dead Reckoning: No   Timeout:  30.0s

Heading 1 : System        :  LADYGERDA    (In Use)
         Priority      :     1
         Time-out      :    15.0s
         Offset Name   :  CRP
         X Offset      :     0.00m
         Y Offset      :     0.00m
```

```
         Z Offset      :     0.00m
         Correction    :     0.00 Degrees

Secondary Vessel 3     :  RayJHope
             :  C:\PROGRAM FILES\FUGRO\7.1\SHARED\DATA\VESSEL_SHAPES\RAYJHOPE.SVS

Nav. 1 : System        :  RAYJHOPE    (In Use)
         Type          :  Lat - Long
         Priority      :     1
         Time-out      :     0.0s
         Offset Name   :  CRP
         X Offset      :     0.00m
         Y Offset      :     0.00m
         Ant. Height   :     0.00m
Dead Reckoning: No   Timeout:  30.0s

Heading 1 : System        :  RAYJHOPE    (In Use)
         Priority      :     1
         Time-out      :     0.0s
         Offset Name   :  CRP
         X Offset      :     0.00m
         Y Offset      :     0.00m
         Z Offset      :     0.00m
         Correction    :     0.00 Degrees

Offsets: Name                      X         Y         Z
         Stern                     0.00      0.00      0.00
         Mast                      0.00     52.75      0.00
         GPS                      -0.42     50.19      0.00

O/Ts   : Steered Point:  O/T 0
         Shot         :  O/T 8

O/T  0    PR CRP              Flt:    Pos Sys: Datum In-Use
O/T  1    PR HP_GGA.GGA Datum Flt:    Pos Sys: HP_GGA.GGA Datum
O/T  2    PR GSS_GGA.GGA Datu Flt:    Pos Sys: GSS_GGA.GGA Datum
O/T  3    PR PtS              Flt:    Frlead : PS
O/T  4    PR MRDGPS Datum     Flt:    Pos Sys: MRDGPS Datum
O/T  5    PR StS              Flt:    Frlead : SS
O/T  6    PR HP_GGA.GGA Anten Flt:    Pos Sys: HP_GGA.GGA Antenna
O/T  7    PR GSS_GGA.GGA Ante Flt:    Pos Sys: GSS_GGA.GGA Antenna
O/T  8    PR Supporter        Flt:    Pos Sys: Datum In-Use
O/T  9    PR MRDGPS           Flt:    Fxd Off: MRDGPS
O/T 10       LadyGerda        Flt:    Pos Sys: Datum In-Use
O/T 11       RayJHope         Flt:    Pos Sys: Datum In-Use

O/T Legend:   PR=Print LG=Log SN=Snap to line

Waypoint : JUR Design
Position :  39d14'14.4410"S 142d54'07.9381"E    0.0m
             664169.650mE  5655160.351mN        0.0m
Printing:
         Fix mark rate   :   1
         Weather Device  :   (None)
         Weather Interval:    60 minutes
         Weather Enabled :   No
         Config Changes  :   No
         System Timeouts :   No
         Concise Header  :   No

Software:Starfix Suite 7.1  (Service Pack 1)
         HF: Starfix Suite 7.1 400NMEAIn HF1
         HF: SuperIn HF2
         Seis       Ver 2.09.0006
```

```
SeisEngine Ver 2.09.0007
Display    Ver 2.15.0005
Anchors    Ver 3.03.0004
Print      Ver 2.04.0001
```

APPENDIX H
MISCELLANEOUS FIELD REPORTS

Field Report 3 **Revised Anchor and Pennant Buoy Positions** **Date: 20 Nov 2005**

During pre-load operations on board the jack-up rig *Maersk Guardian,* the *Maersk Supporter* was required to assist in the repositioning of some of the pre-laid anchor leg moorings. The anchor legs were to be reconfigured to ensure clear access for the jacket barge to the north west of the rig.

The following table summarises the revised deployment locations for the anchors, and for completeness includes anchor positions for those anchors whose position remained unchanged. Positioning was monitored remotely from the *Maersk Guardian* and the final position is an estimate based on pre-tension load and subsequent catenary calculations.

GDA94, CM 141° East			
Anchor (previous)	**Anchor (revised)**	**Easting**	**Northing**
1	1 (Wet Store)	666127	5655145
1A	P4	665291	5655722
2	P3	665136	5654784
3	3	664233	5654068
3A	P1	663611	5654041
4	4	663193	5654688

Updated buoy positions are summarised in the table below and include the anchor legs where the pennant buoy was moved, but not the anchor. Position fixes were taken at the stern of the *Maersk Supporter* as each buoy was released.

GDA94, CM 141° East		
Anchor Buoy	**Easting**	**Northing**
1 (Wet Store)	667043	5655204
P4	664749	5655329
P3	664640	5654625
3	664346	5654491
P1	663892	5654674
4	663721	5654784

The anchoring operations were completed between 14:00 on 19 November 2005 and 19:20 the following day. Anchor P3 remains in a temporary position and will be relocated to its correct position for the topside barge mooring at a later date.

.....

Paul Caswell
Fugro Survey Pty Ltd
Maersk Guardian

Field Report 4 Establishment of JUR Elevation Datum Date: 10 Dec 2005

Once the *Maersk Guardian* had completed pre-load operations and had established an air gap of 17.8m it was required to undertake GPS carrier phase measurements to determine an elevation relative to Lowest Astronomical Tide (LAT) that could subsequently be transferred to the installed jacket. The GPS carrier phase measurements were made on 21 November 2005 to a dual frequency ground plane antenna mounted on the navigation mast above the jacking control room.

The results of the carrier phase processing and the reduction from an ellipsoidal height to an elevation above LAT are summarised in the following table

GPS Antenna Elevation	
Datum	**Elevation (m)**
Ellipsoidal Height	48.99
Correction to Geoid	+3.24
Geoidal Height / MSL	52.23
Correction to LAT	+0.63
LAT	52.86

To maintain this height reference regardless of movements of the jack-up rig hull, it was necessary to transfer the established height datum from the hull to the jack-up legs. Tape measurements were made from the antenna to the deck and then a Wild NK2 Tilting Level was used to transfer the elevation to the top of a plate on a ladder on the bow leg. Measurements were also made to the main deck and a similar plate on the port leg. These measurements were completed on 30 November 2005. The elevations, relative to LAT, of the reference points on the two legs are summarised in the following table.

Reference Point	Elevation above LAT (m)
Bow Leg plate	37.987
Port Leg plate	33.305

As a gross check on the rig air gap a series of measurements were made from the main deck to the waterline. A correction for tide was applied using predicted values supplied by Woodside and this was compared against the value derived from the above elevation observations. The table below summarises the results of this check.

Air Gap From Tape Measurement		Air Gap from GPS Observations	
Main Deck to Water Line	27.56m	Main Deck above LAT (Mean)	27.77m
Depth of Hull	-9.5m	Depth of Hull	-9.5m
Tide Correction	0.2m		-
Computed Air Gap	18.26m	Computed Air Gap	18.27m

The computed air gap tabulated above is from LAT to the bottom of the rig hull. Predicted tides at Thylacine are generally in the range 0.2 to 1.1 m above LAT.

……

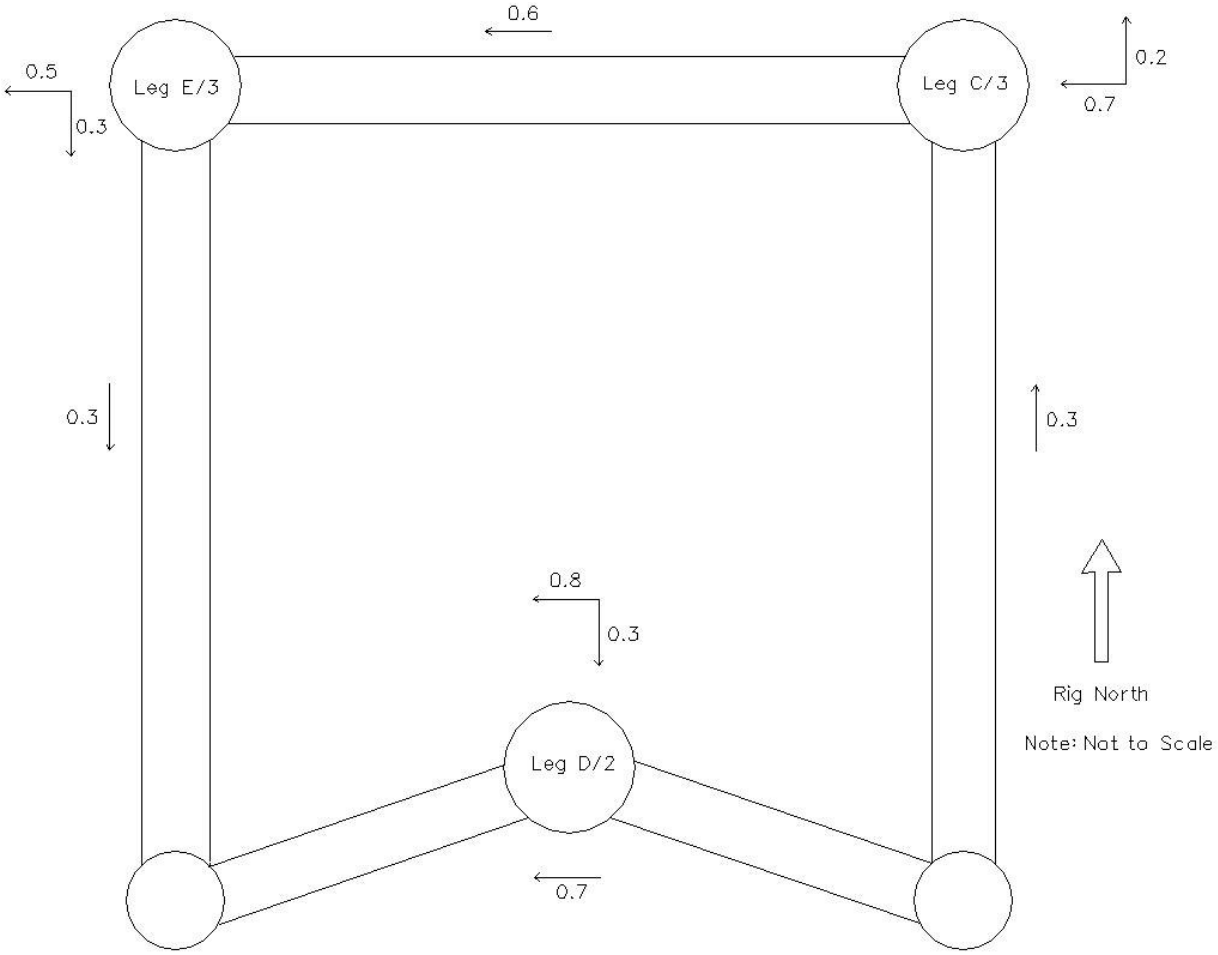
Paul Caswell
Fugro Survey Pty Ltd
Maersk Guardian

Field Report 5 Veritcal and Horizontal check of Jacket Date: 7 Jan 2006

Once the Jacket had been upended, manoeuvred into position and landed a verticality check was required before flooding of the legs and the start of piling could begin.

A digital builders level was used to check the verticality of the three tower legs. It was placed vertically against the legs in a bow-stern and port-starboard direction and a deviation from the vertical was recorded. The builders level was also placed horizontally on the elevation +17.0m bracing frame to determine how level the Jacket was sitting.

The results of the vertical and horizontal checks are summarised in the following figure



Note: Numbers are in decimals of degrees and arrows indicate direction of deviation from the vertical and horizontal.

Measurements were taken at 1415 on 7 January 2006 while the jacket was resting on the seabed before flooding of the legs and there was no weight on the lifting rigging, there was some movement of the jacket during the measurements.

……

Mick Elmslie
Fugro Survey Pty Ltd
Maersk Guardian

Field Report 6 Orientation and Offset check Date: 8 Jan 2006

Prior to the commencement of piling operations an orientation and offset check was conducted on the jacket.

A total station was set up on the starboard stern of the Maersk Guardian and a number of observations were taken to the centres of the tower legs and also to the top of the +18.5m elevation tower horizontal frame. The total station was then moved to the port stern of the rig and the observations were repeated to the same points on the jacket. From these observations orientation and offsets of the jacket datum from the rig centreline and from the transom were calculated.

The results of the orientation and offset checks are summarised in the following tables

Orientation (Grid Bearing)	
Jacket Heading	220.5°
JUR Stern Heading	219.1°
Difference	**1.4°**

Orientation was calculated from the bearing between the observed positions of tower legs E/3 and C/3.

From the observations to the three tower legs a coordinate for the datum of the jacket was able to be calculated.

Jacket Datum Coordinate (GDA94, MGA94, CM 141° E)	
Easting	664 160.56m
Northing	5 655 159.65m

Using this coordinate offsets from the rigs transom and centreline were calculated.

Jacket Datum Offsets	
Offset from Transom	-6.59m
Offset from rig centreline	-0.14m

Elevations relative to LAT were transferred to the stern stations from benchmarks established on the rigs legs via a Wild NK2 tilting level. These elevations were then transferred to the top of the +18.5m elevation tower horizontal frame using the total station. The observed elevations on the tower horizontal frame are summarised in the table below.

Elevations +18.5m elevation Tower Horizontal Frame (LAT)	
Starboard tubular	18.53m
Port tublular	18.57m

Observations were undertaken during a period of large swell and strong winds which may have effected the accuracy of the observations.

……

Mick Elmslie
Fugro Survey Pty Ltd
Maersk Guardian

Field Report 7 Topside Anchor and Pennant Buoy Positions Date: 12 Jan 2006

After the installation of the jacket, the *Maersk Supporter* was required to assist in the repositioning of the local pre-laid anchor leg moorings. The anchor legs were to be reconfigured for the positioning of the topside barge during the topside installation phase of the project.

The following table summarises the redeployment locations of the anchors. Positioning was monitored from the *Maersk Supporter* and the final position is an estimate based on pre-tension load of 80 Te and subsequent catenary calculations using client supplied software.

GDA94, CM 141° East			
Anchor(Previous)	**Anchor(Revised)**	**Easting**	**Northing**
3	P2	664566	5654188
P1	P1	663672	5654190
4	S1	663153	5654708
P4	P4	665184	5655665
1 (Wet Store)	S4	664618	5656172
P3	P3	665104	5654790

Updated buoy positions are summarised in the table below. Position fixes were taken at the stern of the *Maersk Supporter* on deployment of each buoy.

GDA94, CM 141° East		
Anchor Buoy	**Easting**	**Northing**
P2	664394	5654958
P1	663953	5654808
S1	663742	5654903
P4	664635	5655441
S4	664282	5655630
P3	664542	5655194

Anchoring operations were conducted between 09:30 on 10 January and 03:13 on 12 January 2006

……

Mick Elmslie
Fugro Survey Pty Ltd
Maersk Guardian

Field Report 8 Orientation and Offset Check Date 4rd February 2006

Part way through the piling operations a second orientation and offset check was conducted on the jacket.

A total station was set up on the starboard stern of the Maersk Guardian and a number of observations were taken to the centres of the tower legs and also to the top of the +18.5m elevation horizontal frame. The total station was then moved to the port stern of the rig and the observations were repeated to the same points on the jacket. From these observations orientation and offsets of the jacket datum from rig centreline and the transom were calculated.

The results of the orientation and offset checks are summarised in the following tables:

Orientation (Grid Bearing)	
Jacket Heading	219.71°
JUR Stern Heading	219.13°
Difference	0.58°

Orientation was calculated from the bearing between the observed positions of tower legs E/3 and C/3.

From the observations to the three tower legs a coordinate for the datum of the jacket was able to be calculated.

Jacket Datum Coordinate (GDA94, MGA94, CM 141° E)	
Easting	664161.39m
Northing	5655160.05m

Using this coordinate offsets from the rigs transom and centreline were calculated.

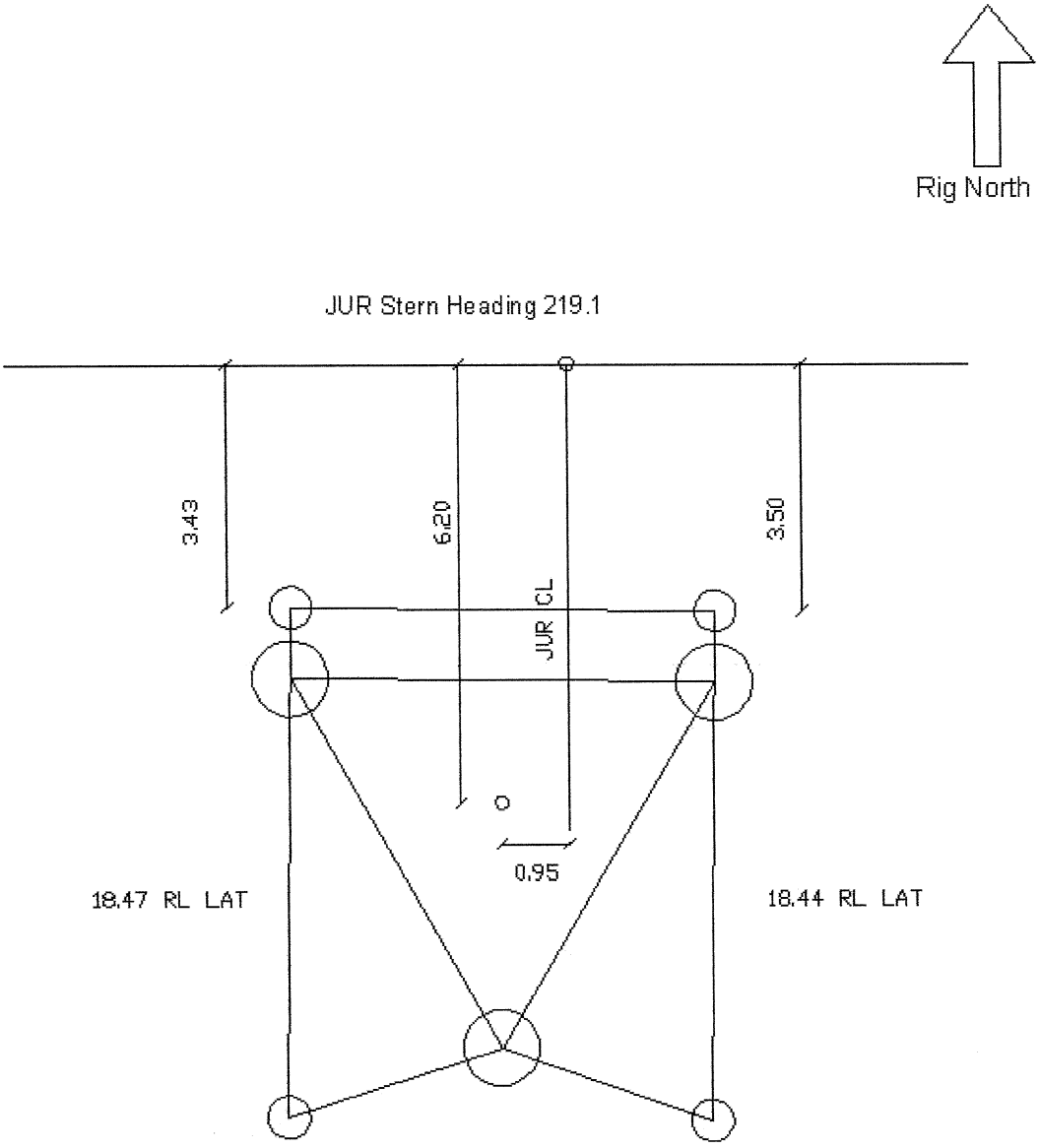
Jacket Datum Offsets	
Offset from Transom	-6.20m
Offset from Rig Centreline	-0.95m

Elevations relative to LAT were transferred to the stern survey stations from benchmarks established on the rigs legs via a Wild NK2 tilting level. These elevations were then transferred to the top of the +18.5m elevation tower horizontal frame using the total station. The observed elevations on the tower horizontal frame are summarised in the table below.

Elevations +18.5m elevation Tower Horizontal Frame (LAT)	
Starboard Tubular	18.44m
Port Tubular	18.47m

Observations were undertaken in reasonable conditions, although there was clearly visible movement of the jacket during the course of the observing period. The jacket was not secured in this instance by the lateral support frame and the JUR air gap had also been increased to 29.2m.

Stephen P Lumb
Registered Surveyor
Fugro BTW Ltd
Maersk Guardian



Platform Heading Grid 219.71

Note: All dimensions in metres
All heading information in terms of grid bearing.

Field Report 9 Mooring Installation S2 and S3 Date 4& 5th February 2006

Anchor handling operations were undertaken to install moorings S2 and S3 in accordance with client requirements. Both anchors were successfully set, although it took 3 attempts to install S3.
The following table details the computed as laid final positions for S2 and S3.
The final positions were calculated using the client supplied catenary calculation sheet and the computed bearing between the stern and the anchor drop position. This methodology was employed on the previous mooring installation in January.

Anchor	mE	mN
S2	663151.39	5655604.70
S3	663722.32	5656184.89

Stephen P Lumb
Registered Surveyor
Fugro BTW Ltd
Maersk Guardian

Field Report 10 As-Laid Anchor and Buoy Positions Date 6th February 2006

The following table identifies the Final as laid Anchor and Buoy positions along with the install period.

Install Period	Anchor	mE	mN	Buoy	mN	mN
4-5/02/06	S2	663151	5655605	S2	663831	5655291
4-5/02/06	S3	663722	5656185	S3	664116	5655644
10-12/01/06	P2	664566	5654188	P2	664394	5654958
10-12/01/06	P1	663672	5654190	P1	663953	5654808
10-12/01/06	S1	663153	5654708	S1	663742	5654903
10-12/01/06	P4	665184	5655665	P4	664635	5655441
10-12/01/06	S4	664618	5656172	S4	664282	5655630
10-12/01/06	P3	665104	5654790	P3	664542	5655194

Stephen P Lumb
Registered Surveyor
Fugro BTW Ltd
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Field Report 12 Relocated Buoy Positions S3, S4 and P1 Date 17th February 2006

The buoys were relocated to clear a 300m corridor through the anchor pattern for the Loralay pipelaying vessel. The following table details the relocated positions of the buoys.

Buoy	mE	mN
S3	664025	5655590
S4	664370	5655540
P1	663856	5654772

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