Schlumberger

Company: **OMV Australia Pty Ltd**

Well: **Baleen−4**
Field: **Baleen Field**
Rig: **Ocean Bounty** State: **Victoria**

Rig: Ocean Bounty
Field: Baleen Field
Location: VIC/L21
Well: Baleen−4
Company: OMV Australia Pty Ltd

PERFORM − APWD
Time based − 2" per 3600’
Real Time & Recorded Memory Data

Location

Total depth:	2290.0 m
Spud date:	29−Sep−2004
Runs:	4 To 4

Elevation

K.B.	Top Drive
G.L.	−78.1 m
D.F.	25.0 m

Permanent datum: MSL Elev.: 0.0 m
Log measured from: Rotary Table 25.0 m above Perm. datum
Depth reference: Driller’s Pipe Tally

X = 626 675.90mE
Y = 5 792 541.30mN

Longitude 148° 26’ 34.42’’E
Latitude 38° 00’ 20.99’’S

Depth logged: 1995.9 m To 2281.6 m
Date logged: 21−Oct−04 To 23−Oct−04

Mag decl: 13.16 deg.
Mag dip: −68.52 deg.

Other services:
Directional Drilling

Bore hole record

Hole size	from	to
12.25 in.	336.0 m	1890.0 m
8.5 in.	1890.0 m	2290.0 m

Casing record

Size	Density	from	to
30.0 in.	310.0 lb/ft	78.1 m	328.0 m
9.625 in.	47.0 lb/ft	78.1 m	1885.3 m

Mud record

Type	from	to
PETROFREE	336.0 m	1890.0 m
BARADRIL−N	1890.0 m	2290.0 m

Borehole deviation record

Min	Max	from	to
10.15 deg.	89.38 deg.	331.9 m	1873.21 m
88.28 deg.	90.14 deg.	1933.88 m	2272.56 m

Surface equipment

Unit	OLU−KC0101
Depth system	Geolograph+GTE

Software record

IDEAL Wis	ID9_1c_01r		
SPM	hspm9_2c_08		
LWD	V6.4B 01		
MWD	70C00		

Bit Run Summary

Run number	1	2	3	4
Bit size in.	12.25	12.25	8.5	8.5
Bit start depth m	336.0	733.0	1890.0	2010.5
Bit end depth m	733.0	1890.0	2010.5	2290.0
Top interval logged m	320.0	717.6	1881.5	1995.9
Bottom interval logged m	717.6	1881.5	1995.9	2281.6
Begin log: time	00:45	23:00	18:00	18:00
Begin log: date	10−Oct−04	11−Oct−04	19−Oct−04	21−Oct−04
End log: time	19:00	20:00	16:30	7:45
End log: date	11−Oct−04	14−Oct−04	21−Oct−04	23−Oct−04
Mud data				
Depth m	733.0	1890.0	1987.0	2290.0
Type	PETROFREE	PETROFREE	BARADRIL−N	BARADRIL−N
Mud weight lb/gal	9.3	9.5	9.1	9.3
Solids %by vol	6.7	6.9	3.1	4.4
Chlorides mg/L	73200	75000	29000	27500
Rm ohmm@degC	n/a	n/a	0.1518@25.2	0.1469@26.4
Rmf ohmm@degC	n/a	n/a	0.1387@24.8	0.1298@26.3
Rmc ohmm@degC	n/a	n/a	0.1568@25.4	0.1518@25.4

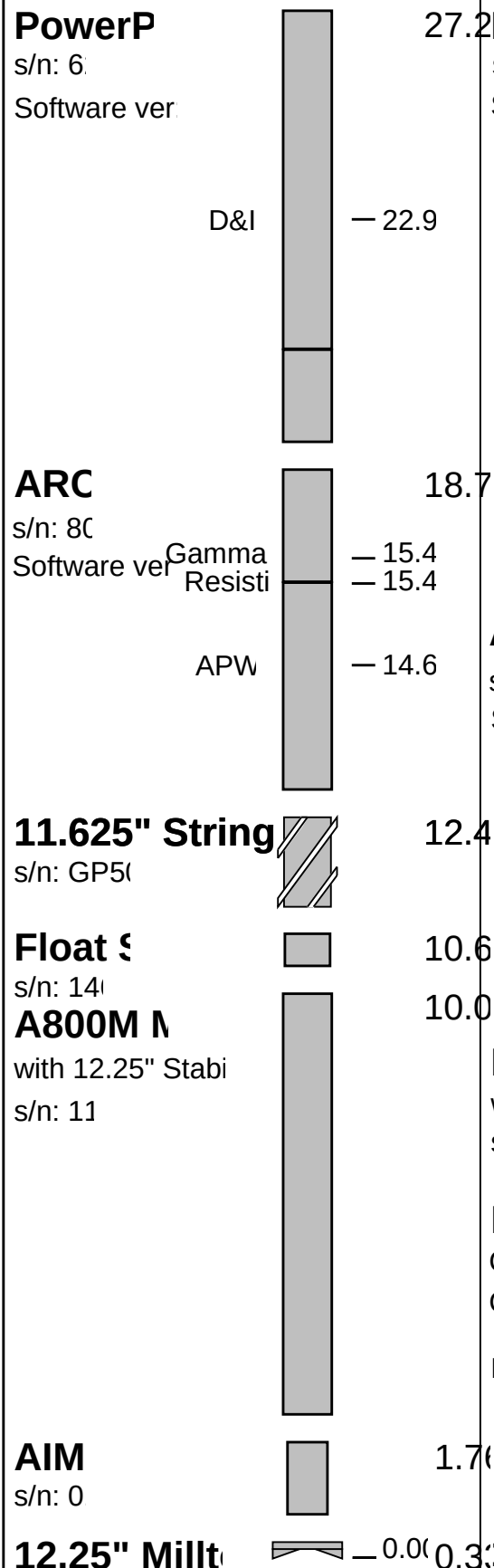
Potassium	%	n/a	n/a	2.86	2.7						
Environmental data											
GR											
Mud weight	lb/gal	9.3	9.5	9.1	9.3						
Bit size	in.	12.25	12.25	8.5	8.5						
Resistivity											
Neutron porosity											
Hole Size	in.	12.25	12.25	8.5	8.5						
Mud weight	lb/gal	9.3	9.5	9.1	9.3						
Downhole Temperature	degC	70.0	85.0	92.5	58.0						
Mud salinity	ppk	n/a	n/a	n/a	n/a						
Formation salinity	mg/L	n/a	n/a	n/a	n/a						
Recording rate 1	SEC	10sec	10sec	10sec	10sec	GR					
Recording rate 2	SEC	10sec	10sec	10sec	10sec	RES					
Filtering GR		3pt	3pt	3pt	3pt						
Filtering density		n/a	n/a	n/a	n/a						
Filtering Neutron		n/a	n/a	n/a	n/a						
Company representative		G.Howard	C.Roots	H.Heinzle	T. Tesdale	G. Wakelin−King					
Schlumberger D&M personnel		O.Radicevic	M.Saicic	C.Soper	D.Hay	K.Wilson					

OTHER SERVICES FOR RUN1	OTHER SERVICES FOR RUN2	OTHER SERVICES FOR RUN3
Directional Surveys APWD (Annular Pressure While Drilling) MVC (Multiple Vibration Chassis)	Directional Surveys APWD (Annular Pressure While Drilling) MVC (Multiple Vibration Chassis)	Directional Surveys APWD (Annular Pressure While Drilling) MVC (Multiple Vibration Chassis)
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2	REMARKS: RUN NUMBER 3
ARC Gamma Ray measurements are corrected for mud weight, tool size and bit size. ARC Resistivity measurements are borehole compensated. POOH: To run rotary steerable assembly.	ARC Gamma Ray measurements are corrected for mud weight, tool size and bit size. ARC Resistivity measurements are borehole compensated. POOH: TD of the section.	ARC Gamma Ray measurements are corrected for mud weight, tool size, bit size and for Potassium content in the mud. ARC Resistivity measurements are borehole compensated and environmentally corrected. POOH: To change BHA.

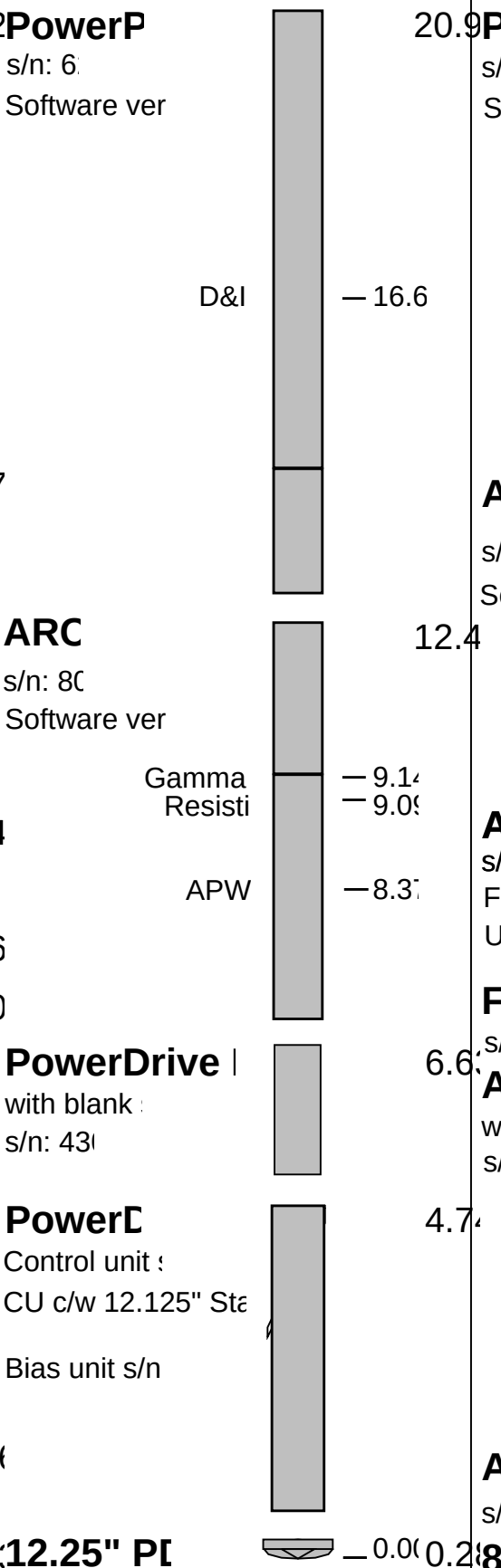
EQUIPMENT DESCRIPTION

RUN1	RUN2	RUN3
DOWNHOLE E	DOWNHOLE E	DOWNHOLE E

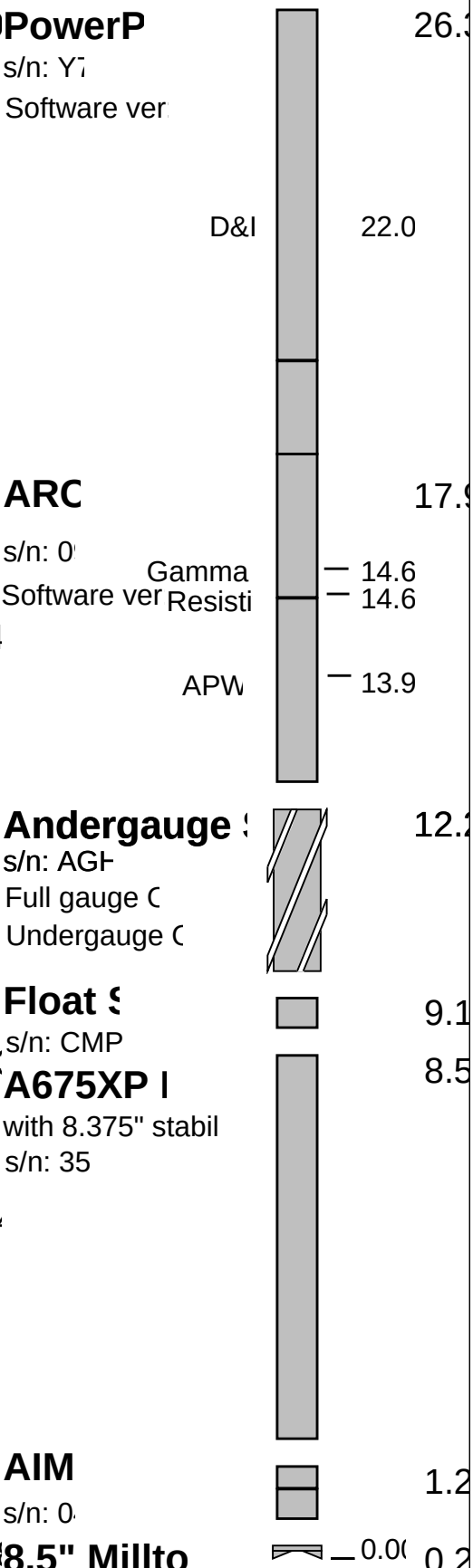
DOWNHOLE E



DOWNHOLE E



DOWNHOLE E



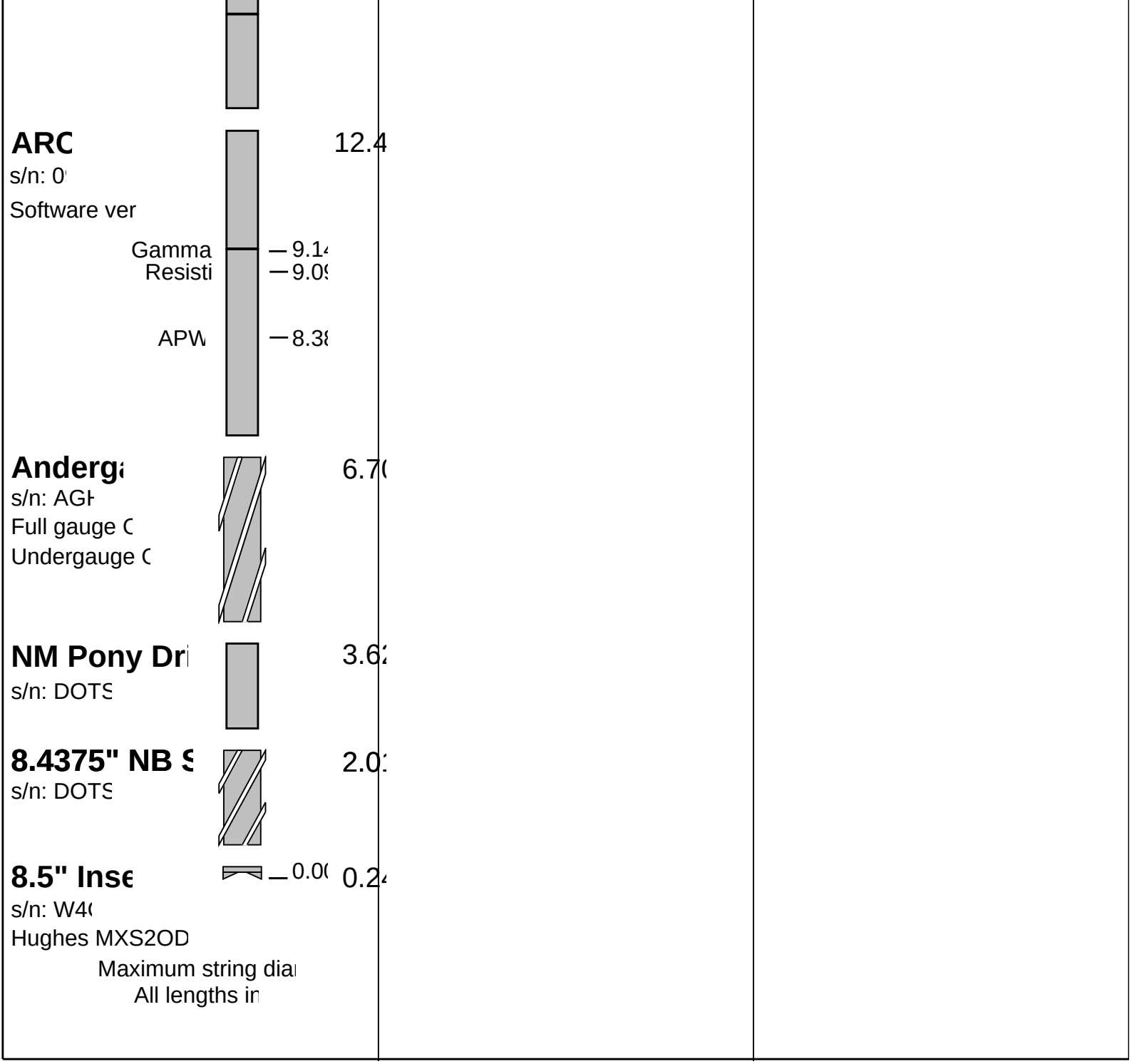
DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED−DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED−DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED−DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED−DATA.

OTHER SERVICES FOR RUN4	OTHER SERVICES FOR RUN	OTHER SERVICES FOR RUN
Directional Surveys APWD (Annular Pressure While Drilling) MVC (Multiple Vibration Chassis)		
REMARKS: RUN NUMBER 4	**REMARKS: RUN NUMBER**	**REMARKS: RUN NUMBER**
ARC Gamma Ray measurements are corrected for mud weight, tool size, bit size and for Potassium content in the mud. ARC Resistivity measurements are borehole compensated and environmentally corrected. POOH: Baleen−4 TD.		

EQUIPMENT DESCRIPTION

RUN4	RUN	RUN
DOWNHOLE E **PowerP** 20.8 s/n: Y7 Software ver D&I — 16.5		



	Run 1	Run 2	Run 3	Run 4
Bottom Hole Temperature (degC)	70.000000	85.000000	92.500000	58.000000
Bit Size (in)	12.250000	12.250000	8.500000	8.500000
Mud Weight (ppg)	9.300000	9.500000	9.100000	9.100000
Oil Based Mud (RM)	YES	YES	NO	NO
Resistivity of Mud Sample (RM)	1000.000000	1000.000000	0.152800	0.146900
Mud Sample Temperature (degC)	25.000000	25.000000	25.200000	26.400000
Total Measured Depth (m)	733.000000	1890.000000	2010.500000	2290.000000
ARC Tool Size (in)	8.250000	8.250000	6.750000	6.750000
ARC Down hole software version Number	6.400000	6.400000	6.400000	6.400000
Potassium Concentration (mg/L)	0.000000	0.000000	2.860000	2.700000
Way to Report Potassium Concentration (RM)	K_by_Wgt_%	K_by_Wgt_%	K_by_Wgt_%	K_by_Wgt_%
ARC Down Hole Software Version	8019.000000	8026.000000	99.000000	99.000000
ARC Tool Serial Number				

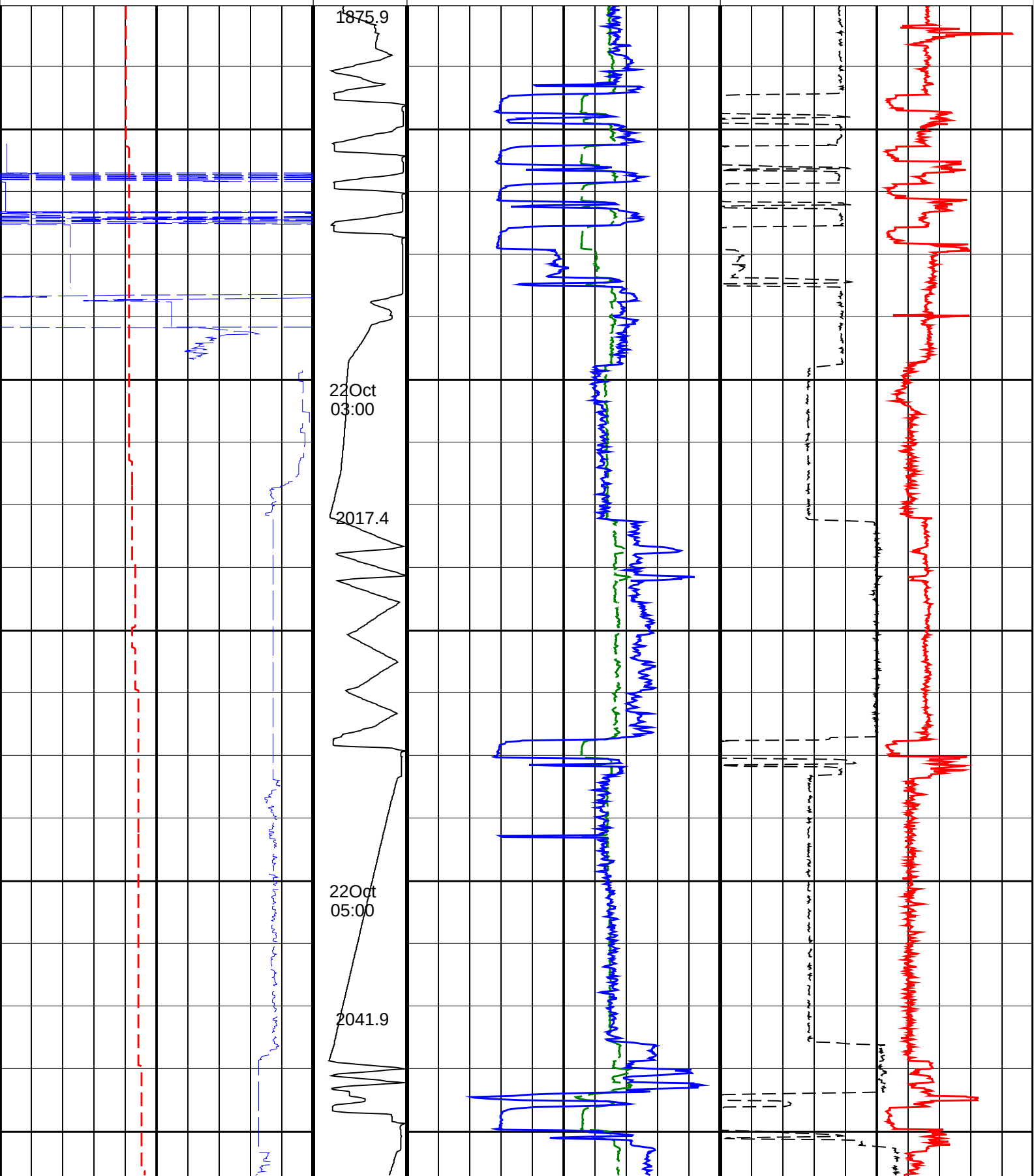
Parameter Insert Header Software version 2.0c"

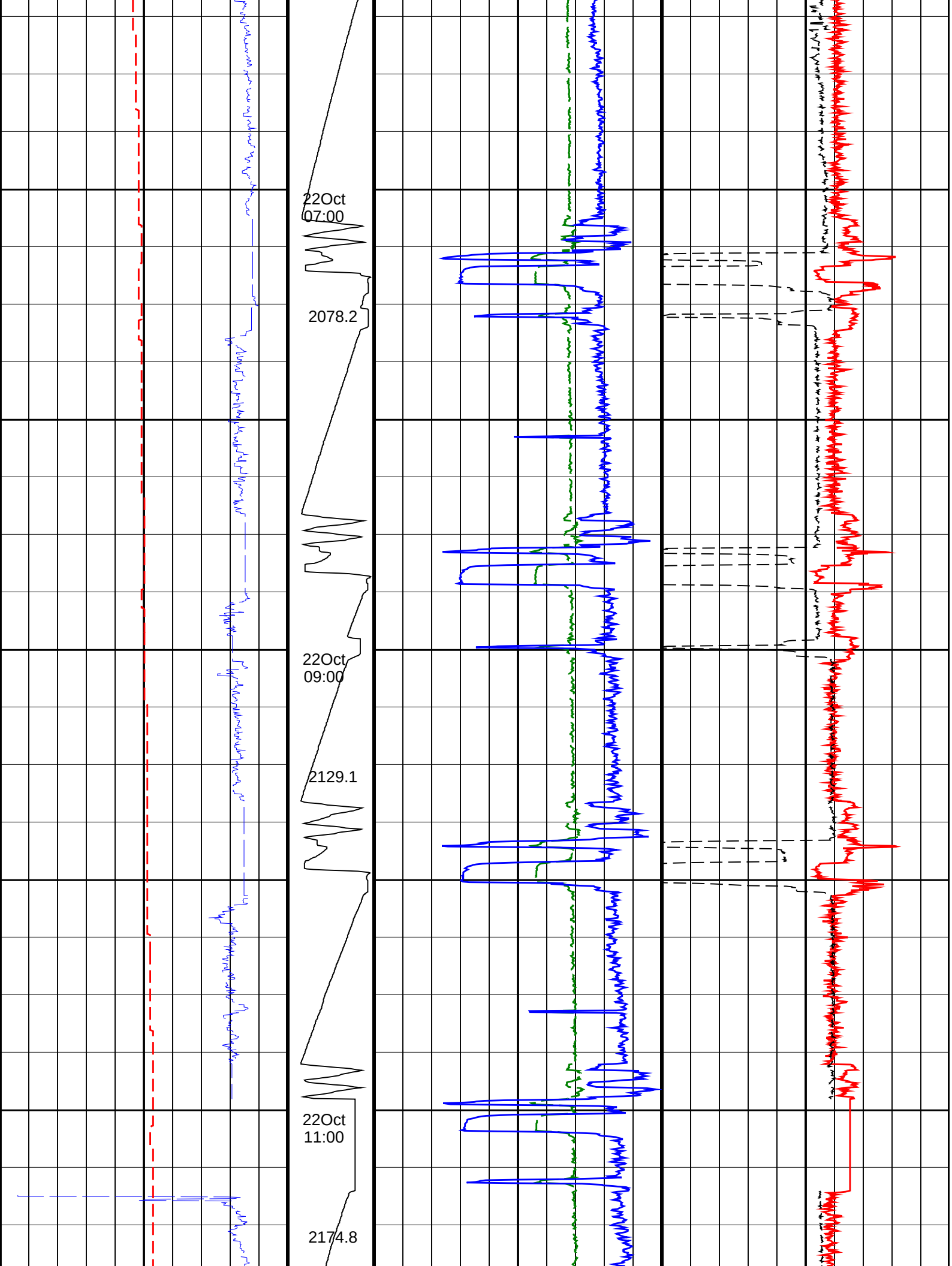
IDEAL Version: ID9_1C_01

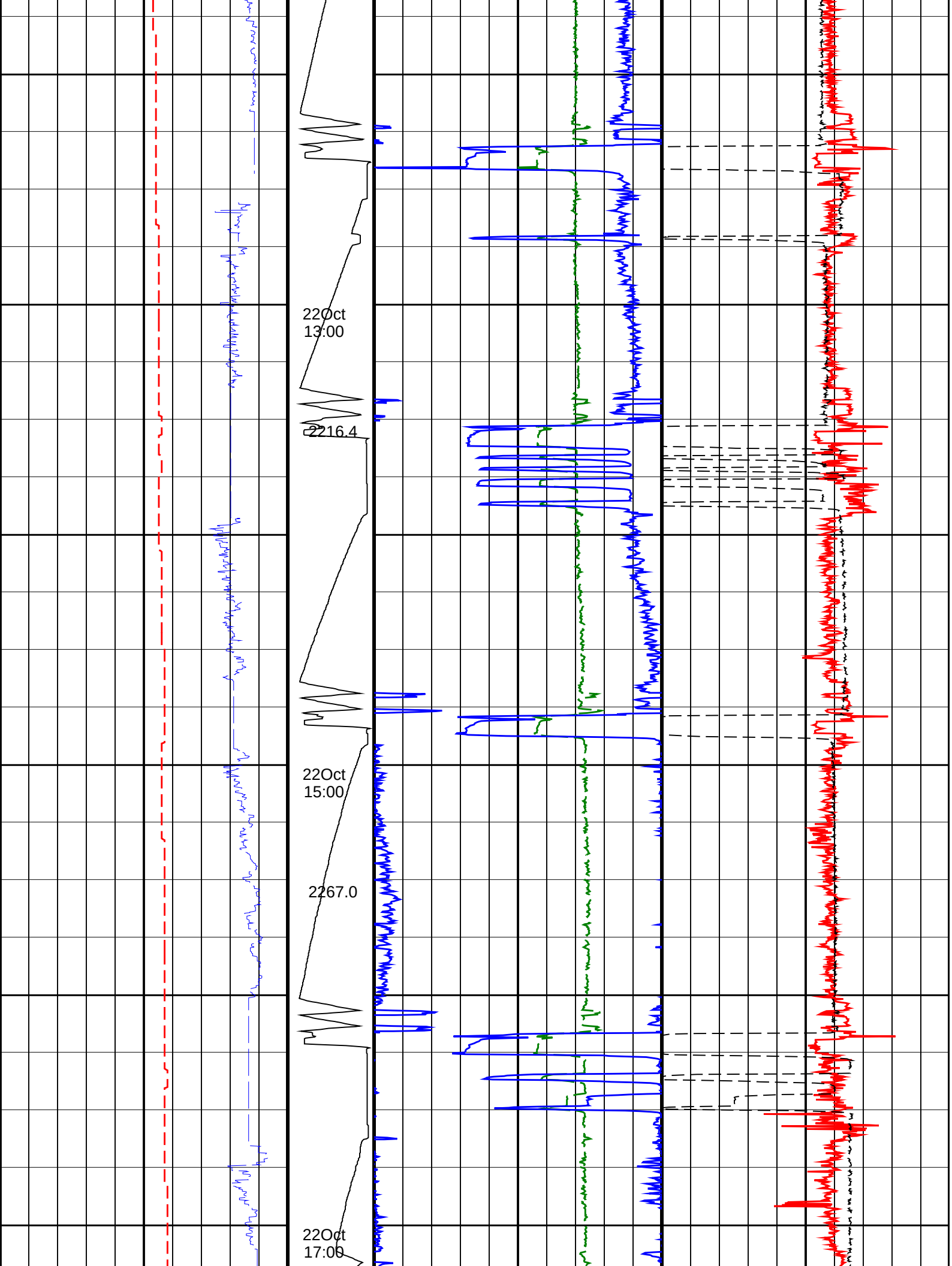
IDF

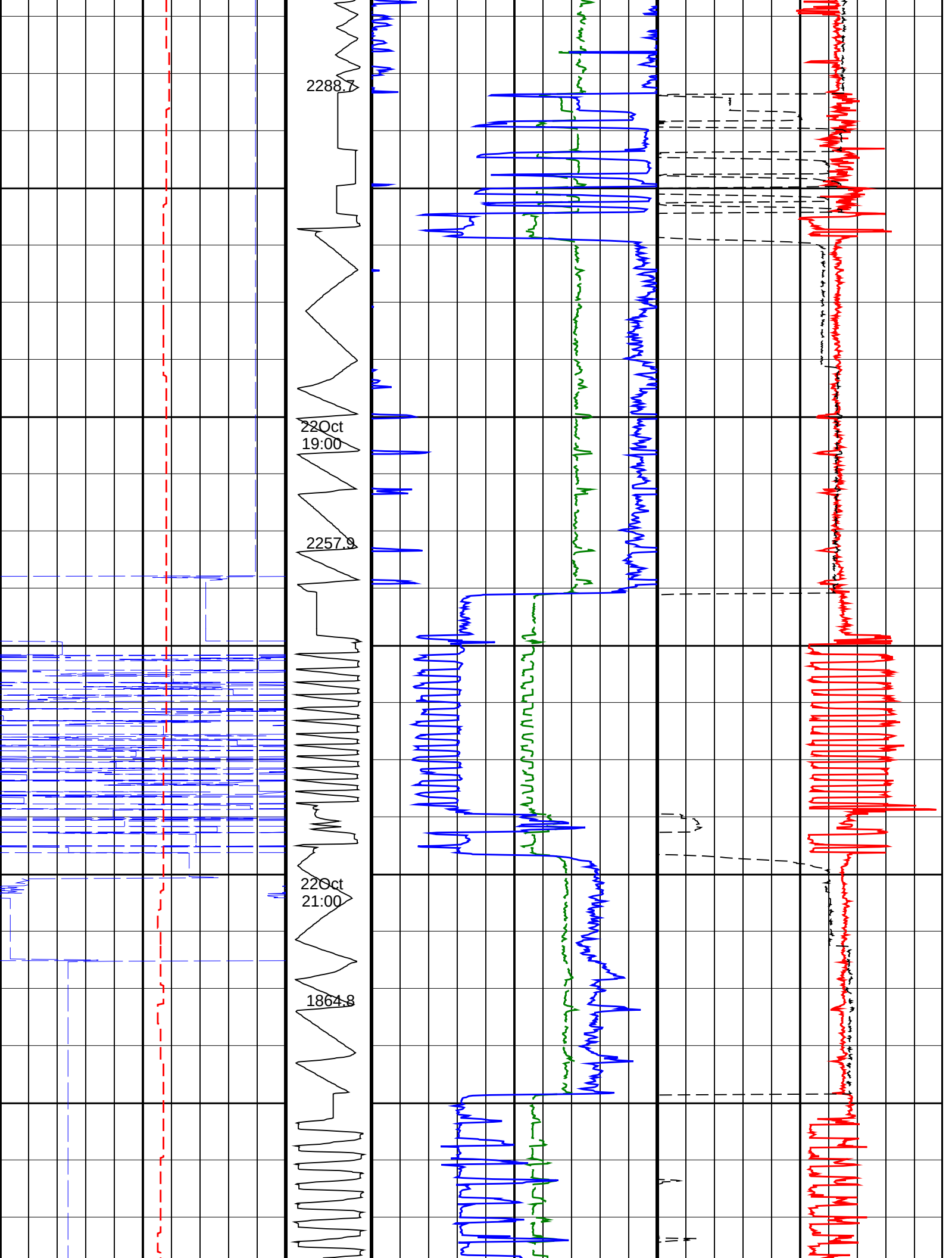
Format: APWD Time Based Vertical Scale: 2" per 3600S Graphics File Created: 23−Oct−2004 11:16

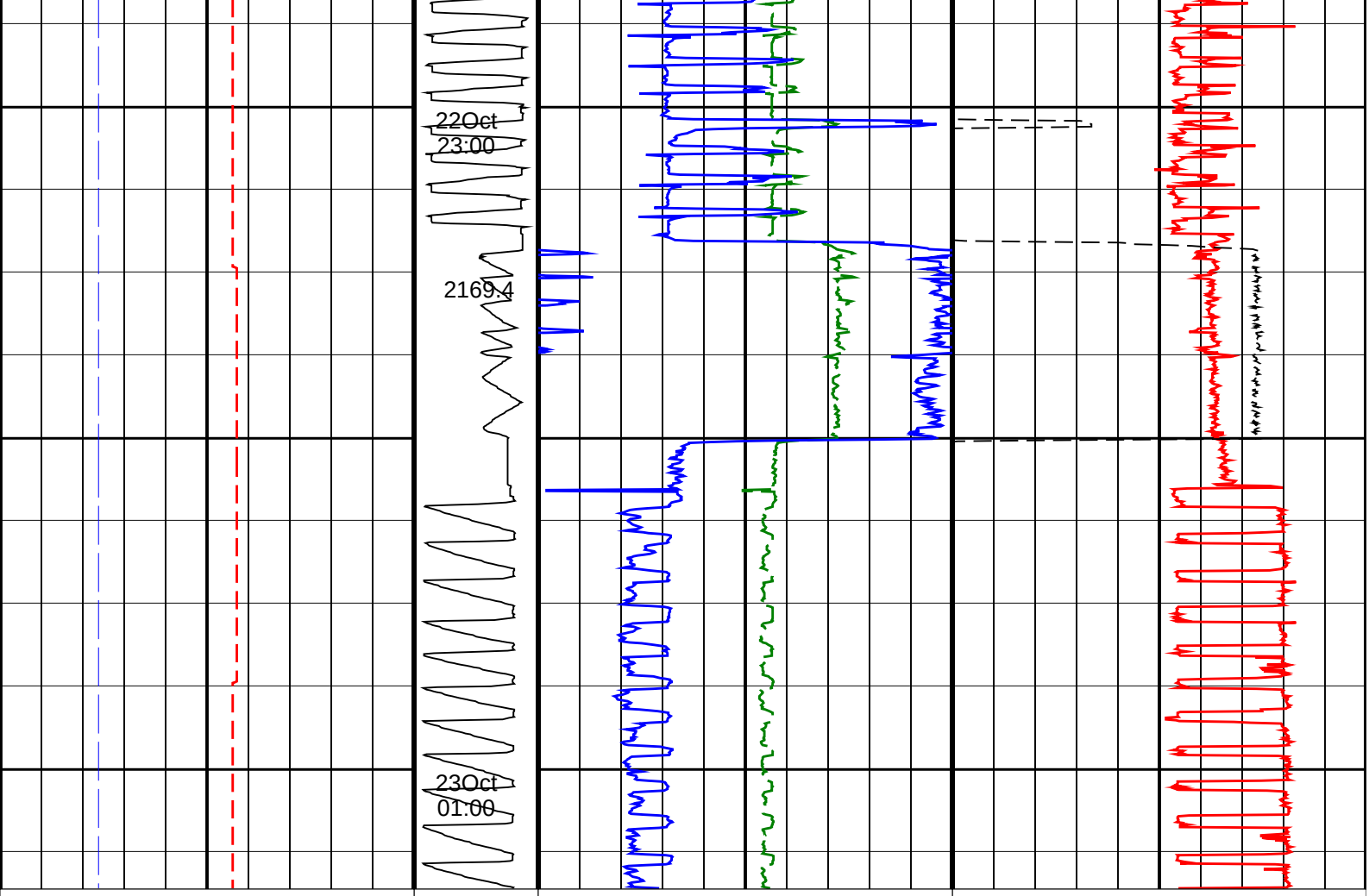
TEMP (MSP2)	Bit Depth (DEPT) (M)	ECD (MSP3)	Stand_pipe_pressure (SPPA)
0 (DEGC) 100		8 (PPG) 12	0 (PSI) 5000
Rop*5 (ROP5)	**Block_position (BPOS)**	**PRSA (MSP1)**	**Hookload (HKLD)**
200 (M/HR) 0	0 (M) 40	0 (PSI) 2000	0 (KLBF) 250




22Oct
07:00
2078.2
22Oct
09:00
2129.1
22Oct
11:00
2174.8


22Oct
13:00
2216.4
22Oct
15:00
2267.0
22Oct
17:00


2288.7
22Oct
19:00
2257.9
22Oct
21:00
1864.8



Rop*5 (ROP5)	Block_ position (BPOS)	PRSA (MSP1)	Hookload (HKLD)
200 (M/HR) 0	0 (M) 40	0 (PSI) 2000	0 (KLBF) 250
TEMP (MSP2)	**Bit Depth (DEPT) (M)**	**ECD (MSP3)**	**Stand_pipe_pressure (SPPA)**
0 (DEGC) 100		8 (PPG) 12	0 (PSI) 5000

IDEAL Version: ID9_1C_01

IDF

8.25−in. Array Resistivity Compensated / Equipment Identification

Primary Equipment:

Tool Name and Serial Number	ARC8 − AA	8019
ARC825 Calibration Status	−	

Master: 28−Aug−2004 3:28

8.25−in. Array Resistivity Compensated Calibration

Resistivity: Air

Phase	Phase−Shift T1	Value
Master		1.012
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T2	Value
Master		−0.5076
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T3	Value
Master		0.5194
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T4	Value
Master		−0.4304
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T5	Value
Master		−0.02064
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T1 at 400KHz	Value
Master		1.783
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T2 at 400KHz	Value
Master		−1.325

Phase	Phase−Shift T3 at 400KHz	Value
Master		1.616

Phase	Phase−Shift T4 at 400KHz	Value
Master		−1.325

Phase	Phase−Shift T5 at 400KHz	Value
Master		1.564
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Master: 28−Aug−2004 3:28

8.25−in. Array Resistivity Compensated Calibration

Resistivity: Air

Phase	Attenuation T1	Value
Master		8.369
	6.500 (Minimum) 8.500 (Nominal) 10.50 (Maximum)	

Phase	Attenuation T2	Value
Master		6.359
	4.500 (Minimum) 6.500 (Nominal) 8.500 (Maximum)	

Phase	Attenuation T3	Value
Master		5.053
	2.500 (Minimum) 4.500 (Nominal) 6.500 (Maximum)	

Phase	Attenuation T4	Value
Master		4.266
	2.600 (Minimum) 4.600 (Nominal) 6.600 (Maximum)	

Phase	Attenuation T5	Value
Master		3.602
	1.600 (Minimum) 3.600 (Nominal) 5.600 (Maximum)	

Phase	Attenuation T1 at 400KHz	Value
Master		8.300
	6.500 (Minimum) 8.500 (Nominal) 10.50 (Maximum)	

Phase	Attenuation T2 at 400KHz	Value
Master		6.340
	4.500 (Minimum) 6.500 (Nominal) 8.500 (Maximum)	

Phase	Attenuation T3 at 400KHz	Value
Master		5.058
	2.500 (Minimum) 4.500 (Nominal) 6.500 (Maximum)	

Phase	Attenuation T4 at 400KHz	Value
Master		4.313
	2.600 (Minimum) 4.600 (Nominal) 6.600 (Maximum)	

Phase	Attenuation T5 at 400KHz	Value
Master		3.640
	1.600 (Minimum) 3.600 (Nominal) 5.600 (Maximum)	

Master: 28−Aug−2004 1:45

8.25−in. Array Resistivity Compensated Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor (equals Calibration Gain multiplied by API Gain Factor) CPS	Value
Master		8.587
	4.960 (Minimum) 7.200 (Nominal) 9.650 (Maximum)	

8.25−in. Array Resistivity Compensated / Equipment Identification

Primary Equipment:

Tool Name and Serial Number	ARC8 − AA	8026
ARC825 Calibration Status	−	

Master: 24−Sep−2004 4:00

8.25−in. Array Resistivity Compensated Calibration

Resistivity: Air

Phase	Phase−Shift T1	Value
Master		0.02420
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Phase	Phase−Shift T2	Value
Master		0.4614
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Phase	Phase−Shift T3	Value
Master		−0.1478
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Phase	Phase−Shift T4	Value
Master		0.1925
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Phase	Phase−Shift T5	Value
Master		−0.3114
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Phase	Phase−Shift T1 at 400KHz	Value
Master		−0.3613
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Phase	Phase−Shift T2 at 400KHz	Value
Master		0.5359
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Phase	Phase−Shift T3 at 400KHz	Value
Master		−0.6794
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Phase	Phase−Shift T4 at 400KHz	Value
Master		0.3575
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Phase	Phase−Shift T5 at 400KHz	Value
Master		−0.4279
	−3.900 (Minimum) 0.1000 (Nominal) 4.100 (Maximum)	

Master: 24−Sep−2004 4:00

8.25−in. Array Resistivity Compensated Calibration

Resistivity: Air

Phase	Attenuation T1	Value	Phase	Attenuation T2	Value	Phase	Attenuation T3	Value
Master		7.421	Master		7.380	Master		4.073
6.500 (Minimum)	8.500 (Nominal)	10.50 (Maximum)	4.500 (Minimum)	6.500 (Nominal)	8.500 (Maximum)	2.500 (Minimum)	4.500 (Nominal)	6.500 (Maximum)

Phase	Attenuation T4	Value	Phase	Attenuation T5	Value	Phase	Attenuation T1 at 400KHz	Value
Master		5.267	Master		2.625	Master		7.436
2.600 (Minimum)	4.600 (Nominal)	6.600 (Maximum)	1.600 (Minimum)	3.600 (Nominal)	5.600 (Maximum)	6.500 (Minimum)	8.500 (Nominal)	10.50 (Maximum)

Phase	Attenuation T2 at 400KHz	Value	Phase	Attenuation T3 at 400KHz	Value	Phase	Attenuation T4 at 400KHz	Value
Master		7.260	Master		4.126	Master		5.256
4.500 (Minimum)	6.500 (Nominal)	8.500 (Maximum)	2.500 (Minimum)	4.500 (Nominal)	6.500 (Maximum)	2.600 (Minimum)	4.600 (Nominal)	6.600 (Maximum)

Phase	Attenuation T5 at 400KHz	Value
Master		2.744
1.600 (Minimum)	3.600 (Nominal)	5.600 (Maximum)

Master: 24−Sep−2004 5:15

8.25−in. Array Resistivity Compensated Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor (equals Calibration Gain multiplied by API Gain Factor) CPS	Value
Master		7.296
4.960 (Minimum)	7.200 (Nominal)	9.650 (Maximum)

6.75−in. Array Resistivity Compensated / Equipment Identification

Primary Equipment:

Tool Name and Serial Number	ARC6 − BA	99
ARC675 Calibration Status	−	

Master: 21−Sep−2004 3:35

6.75−in. Array Resistivity Compensated Calibration

Resistivity: Air

Phase	Phase−Shift T1	Value	Phase	Phase−Shift T2	Value	Phase	Phase−Shift T3	Value
Master		−1.300	Master		1.567	Master		−1.481
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)	−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)	−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T4	Value	Phase	Phase−Shift T5	Value	Phase	Phase−Shift T1 at 400KHz	Value
Master		1.451	Master		−1.402	Master		−1.723
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)	−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)	−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T2 at 400KHz	Value	Phase	Phase−Shift T3 at 400KHz	Value	Phase	Phase−Shift T4 at 400KHz	Value
Master		1.969	Master		−1.814	Master		1.966
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)	−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)	−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Phase	Phase−Shift T5 at 400KHz	Value
Master		−1.824
−3.900 (Minimum)	0.1000 (Nominal)	4.100 (Maximum)

Master: 21−Sep−2004 3:35

6.75−in. Array Resistivity Compensated Calibration

Resistivity: Air

Phase	Attenuation T1	Value	Phase	Attenuation T2	Value	Phase	Attenuation T3	Value
Master		8.281	Master		6.704	Master		4.911
6.500 (Minimum)	8.500 (Nominal)	10.50 (Maximum)	4.500 (Minimum)	6.500 (Nominal)	8.500 (Maximum)	2.500 (Minimum)	4.500 (Nominal)	6.500 (Maximum)

Phase	Attenuation T4	Value
Master		4.564
2.600 (Minimum)	4.600 (Nominal)	6.600 (Maximum)

Phase	Attenuation T5	Value
Master		3.414
1.600 (Minimum)	3.600 (Nominal)	5.600 (Maximum)

Phase	Attenuation T1 at 400KHz	Value
Master		8.234
6.500 (Minimum)	8.500 (Nominal)	10.50 (Maximum)

Phase	Attenuation T2 at 400KHz	Value
Master		6.698
4.500 (Minimum)	6.500 (Nominal)	8.500 (Maximum)

Phase	Attenuation T3 at 400KHz	Value
Master		4.859
2.500 (Minimum)	4.500 (Nominal)	6.500 (Maximum)

Phase	Attenuation T4 at 400KHz	Value
Master		4.599
2.600 (Minimum)	4.600 (Nominal)	6.600 (Maximum)

Phase	Attenuation T5 at 400KHz	Value
Master		3.418
1.600 (Minimum)	3.600 (Nominal)	5.600 (Maximum)

Master: 21−Sep−2004 5:21

6.75−in. Array Resistivity Compensated Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor (equals Calibration Gain multiplied by API Gain Factor) CPS	Value
Master		5.278
2.780 (Minimum)	4.800 (Nominal)	6.000 (Maximum)

SCHLUMBERGER D&M

Survey report

Client.....: OMV Australia Pty. Ltd.
Field.....: Baleen

Well.....: Baleen−4 Spud date.....: 27−Sep−04
Location.....: VIC/L21 Last survey date.....: 22−Oct−04
Engineer.....: O.Radicevic, M.Saicic Total accepted surveys...: 110
MD of first survey.....: 0.00 m
Rig:.....: Ocean Bounty MD of last survey.....: 2290.00 m
STATE:.....: Victoria

−−−−− Survey calculation methods−−−−−−−−−−−−− −−−−− Geomagnetic data −−−−−−−−−−−−−−−−−−−−−−
Method for positions.....: Minimum curvature Magnetic model.....: BGGM version 2004
Method for DLS.....: Mason & Taylor Magnetic date.....: 28−Sep−2004
Magnetic field strength..: 1196.76 HCNT
−−−−− Depth reference −−−−−−−−−−−−−−−−−−−−−−− Magnetic dec (+E/W−).....: 13.16 degrees
Permanent datum.....: MSL Magnetic dip.....: −68.51 degrees
Depth reference.....: Driller's Pipe Tally
GL above permanent.....: −53.10 m −−−−− MWD survey Reference Criteria −−−−−−−−−
KB above permanent.....: Top Drive Reference G.....: 1000.01 mGal
DF above permanent.....: 25.00 m Reference H.....: 1196.76 HCNT
Reference Dip.....: −68.51 degrees
−−−−− Vertical section origin−−−−−−−−−−−−−−−−− Tolerance of G.....: (+/−) 2.50 mGal
Latitude (+N/S−).....: 0.00 m Tolerance of H.....: (+/−) 6.00 HCNT
Departure (+E/W−).....: 0.00 m Tolerance of Dip.....: (+/−) 0.45 degrees

−−−−− Platform reference point−−−−−−−−−−−−−−−− −−−−− Corrections −−−−−−−−−−−−−−−−−−−−−−−−−−
Latitude (+N/S−).....: 0.00 m Magnetic dec (+E/W−).....: 13.16 degrees
Departure (+E/W−).....: 0.00 m Grid convergence (+E/W−).: −0.89 degrees
Total az corr (+E/W−)....: 14.05 degrees
Azimuth from Vsect Origin to target: 236.54 degrees (Total az corr = magnetic dec − grid conv)
Survey Correction Type ...:
I=Sag Corrected Inclination
M=Schlumberger Magnetic Correction
S=Shell Magnetic Correction
F=Failed Axis Correction
R=Magnetic Resonance Tool Correction
D=Dmag Magnetic Correction

[(c)2004 IDEAL ID9_1C_01]
SCHLUMBERGER Survey Report

Seq #	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S− (m)	Displ +E/W− (m)	Total displ (m)	At Azim (deg)	DLS (deg/ 10m)	Srvy tool type	Corr (deg)
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	TIP	None
2	85.50	0.72	148.00	85.50	85.50	0.01	−0.46	0.28	0.54	148.00	0.08	GYRO	None
3	114.41	0.83	148.79	28.91	114.41	0.03	−0.79	0.49	0.93	148.18	0.04	GYRO	None
4	143.28	1.06	157.74	28.87	143.27	0.09	−1.21	0.70	1.40	150.08	0.09	GYRO	None
5	172.21	1.69	173.27	28.93	172.19	0.33	−1.89	0.85	2.07	155.73	0.25	GYRO	None
6	201.10	3.17	186.11	28.89	201.06	1.03	−3.10	0.82	3.21	165.28	0.54	GYRO	None

7	23None	5.19	198.92	28.92	229.90	2.58	−5.14	0.31	5.15	176.59	0.77	GYRO	None
8	240.66	5.90	205.43	10.64	240.49	3.43	−6.09	−0.08	6.09	180.80	0.89	GYRO	None
9	250.30	6.08	217.27	9.64	250.08	4.33	−6.94	−0.61	6.97	185.00	1.29	GYRO	None
10	258.91	6.16	226.44	8.61	258.64	5.22	−7.62	−1.22	7.72	189.08	1.14	GYRO	None
11	269.55	6.32	227.70	10.64	269.21	6.36	−8.41	−2.06	8.66	193.80	0.20	GYRO	None
12	279.19	6.90	234.11	9.64	278.79	7.46	−9.10	−2.93	9.56	197.82	0.97	GYRO	None
13	287.80	7.85	242.47	8.61	287.33	8.56	−9.68	−3.87	10.42	201.78	1.66	GYRO	None
14	298.42	9.21	237.18	10.62	297.83	10.13	−10.48	−5.22	11.71	206.51	1.48	GYRO	None
15	308.05	10.10	238.53	9.63	307.33	11.75	−11.33	−6.59	13.11	210.18	0.95	GYRO	None
16	316.68	10.29	242.74	8.63	315.82	13.27	−12.08	−7.92	14.45	213.25	0.89	GYRO	None
17	327.20	10.18	241.47	10.52	326.17	15.13	−12.96	−9.57	16.11	216.46	0.24	GYRO	None
18	331.90	10.15	239.35	4.70	330.80	15.96	−13.37	−10.30	16.87	217.61	0.80	GYRO	None
19	338.44	11.15	241.24	6.54	337.23	17.16	−13.96	−11.35	17.99	219.09	1.62	GYRO	None
20	347.85	12.69	243.31	9.41	346.43	19.10	−14.87	−13.07	19.79	221.32	1.70	GYRO	None
21	356.99	14.80	245.14	9.14	355.31	21.25	−15.81	−15.02	21.81	223.54	2.36	GYRO	None
22	366.24	16.83	246.11	9.25	364.21	23.74	−16.85	−17.32	24.16	225.79	2.21	GYRO	None
23	375.50	18.93	247.36	9.26	373.02	26.54	−17.97	−19.93	26.84	227.97	2.31	GYRO	None
24	385.68	21.05	245.80	10.18	382.59	29.96	−19.35	−23.12	30.15	230.07	2.15	GYRO	None
25	393.95	23.12	244.79	8.27	390.25	33.04	−20.65	−25.95	33.16	231.48	2.54	GYRO	None
26	403.21	25.13	243.56	9.26	398.70	36.79	−22.30	−29.35	36.87	232.77	2.24	GYRO	None
27	412.35	27.12	242.95	9.14	406.91	40.78	−24.12	−32.95	40.83	233.80	2.20	GYRO	None
28	421.51	29.19	241.96	9.16	414.98	45.08	−26.12	−36.78	45.11	234.62	2.32	GYRO	None
29	430.70	31.35	242.55	9.19	422.92	49.69	−28.27	−40.88	49.70	235.33	2.37	GYRO	None
30	439.89	33.43	241.60	9.19	430.68	54.59	−30.58	−45.23	54.59	235.94	2.33	GYRO	None
31	449.94	35.39	241.28	10.05	438.97	60.25	−33.29	−50.22	60.25	236.46	1.96	GYRO	None
32	468.29	39.80	240.85	18.35	453.51	71.41	−38.71	−60.01	71.41	237.18	2.41	GYRO	None
33	477.94	41.95	240.56	9.65	460.80	77.70	−41.80	−65.52	77.71	237.46	2.24	GYRO	None
34	487.58	44.05	239.96	9.64	467.85	84.26	−45.06	−71.22	84.28	237.68	2.22	GYRO	None
35	497.20	46.23	239.87	9.62	474.64	91.07	−48.48	−77.12	91.10	237.85	2.27	GYRO	None
36	516.42	50.04	239.89	19.22	487.46	105.36	−55.66	−89.50	105.40	238.12	1.98	GYRO	None
37	535.75	54.20	239.30	19.33	499.33	120.59	−63.38	−102.66	120.65	238.31	2.17	GYRO	None
38	545.39	56.25	239.90	9.64	504.83	128.50	−67.39	−109.49	128.56	238.39	2.19	GYRO	None
39	555.03	58.27	239.89	9.64	510.04	136.59	−71.46	−116.50	136.67	238.48	2.10	GYRO	None
40	564.67	60.27	239.99	9.64	514.97	144.86	−75.61	−123.67	144.95	238.56	2.08	GYRO	None
41	574.28	62.30	240.43	9.61	519.58	153.27	−79.79	−130.99	153.38	238.65	2.15	GYRO	None
42	583.92	64.31	241.44	9.64	523.91	161.86	−83.98	−138.51	161.98	238.77	2.29	GYRO	None
43	593.56	64.94	241.50	9.64	528.04	170.54	−88.14	−146.17	170.68	238.91	0.66	GYRO	None
44	603.17	65.46	242.25	9.61	532.08	179.22	−92.25	−153.86	179.40	239.05	0.89	GYRO	None
45	612.79	67.36	242.52	9.62	535.92	187.99	−96.33	−161.67	188.20	239.21	1.99	GYRO	None
46	622.42	69.45	243.10	9.63	539.47	196.89	−100.43	−169.64	197.13	239.37	2.24	GYRO	None
47	632.05	71.85	243.39	9.63	542.66	205.92	−104.52	−177.75	206.20	239.54	2.51	GYRO	None
48	641.65	73.95	242.70	9.60	545.48	215.03	−108.67	−185.93	215.36	239.69	2.29	GYRO	None
49	651.26	76.30	241.46	9.61	547.95	224.28	−113.02	−194.13	224.64	239.79	2.74	GYRO	None
50	660.89	77.49	241.55	9.63	550.13	233.62	−117.50	−202.38	234.01	239.86	1.24	GYRO	None
51	670.52	78.54	240.82	9.63	552.13	243.01	−122.04	−210.63	243.43	239.91	1.32	GYRO	None
52	680.16	80.37	240.13	9.64	553.90	252.46	−126.71	−218.88	252.91	239.93	2.02	GYRO	None
53	689.79	81.27	240.34	9.63	555.43	261.95	−131.43	−227.13	262.41	239.94	0.96	GYRO	None
54	702.00	82.61	240.96	12.21	557.14	274.01	−137.35	−237.67	274.50	239.98	1.21	GYRO	None
55	731.61	82.57	242.66	29.61	560.96	303.24	−151.22	−263.54	303.85	240.15	0.57	MWD−I	0.02
56	760.44	83.41	243.48	28.83	564.48	331.67	−164.18	−289.06	332.43	240.40	0.41	MWD−I	0.02
57	789.80	83.92	243.72	29.36	567.72	360.63	−177.16	−315.19	361.57	240.66	0.19	MWD−I	0.02
58	819.61	84.33	243.67	29.81	570.77	390.06	−190.30	−341.78	391.18	240.89	0.14	MWD−I	0.02
59	848.28	84.04	242.61	28.67	573.68	418.39	−203.19	−367.22	419.68	241.04	0.38	MWD−I	0.02
60	878.56	83.78	242.74	30.28	576.89	448.32	−217.01	−393.97	449.78	241.15	0.10	MWD−I	0.02
61	906.63	82.77	242.44	28.07	580.18	476.05	−229.84	−418.72	477.65	241.24	0.38	MWD−I	0.02
62	935.67	82.34	241.95	29.04	583.94	504.70	−243.27	−444.19	506.44	241.29	0.22	MWD−I	0.02
63	964.49	82.74	241.30	28.82	587.68	533.16	−256.85	−469.33	535.02	241.31	0.26	MWD−I	0.02
64	993.19	82.08	241.48	28.70	591.47	561.51	−270.47	−494.30	563.46	241.31	0.24	MWD−I	0.02
65	1022.00	80.63	241.42	28.81	595.80	589.89	−284.09	−519.32	591.95	241.32	0.50	MWD−I	0.02
66	1050.01	79.81	241.45	28.01	600.56	617.39	−297.28	−543.57	619.55	241.33	0.29	MWD−I	0.02
67	1079.00	79.87	241.49	28.99	605.68	645.82	−310.91	−568.64	648.08	241.33	0.02	MWD−I	0.02
68	1108.15	80.17	241.77	29.15	610.73	674.42	−324.55	−593.90	676.79	241.34	0.14	MWD−I	0.02
69	1136.63	79.87	241.60	28.48	615.66	702.35	−337.86	−618.59	704.84	241.36	0.12	MWD−I	0.02
70	1164.16	79.81	241.74	27.53	620.52	729.34	−350.72	−642.44	731.94	241.37	0.05	MWD−I	0.02
71	1195.46	80.42	241.80	31.30	625.89	760.05	−365.30	−669.61	762.77	241.39	0.20	MWD−I	0.02
72	1223.16	81.00	241.65	27.70	630.36	787.27	−378.25	−693.68	790.11	241.40	0.22	MWD−I	0.02
73	1249.70	82.16	240.03	26.54	634.25	813.45	−391.05	−716.61	816.36	241.38	0.75	MWD−I	0.02
74	1283.50	83.04	237.45	33.80	638.60	846.94	−408.44	−745.26	849.84	241.28	0.80	MWD−I	0.01
75	1310.16	83.29	235.43	26.66	641.78	873.41	−423.07	−767.32	876.22	241.13	0.76	MWD−I	0.02
76	1334.84	83.23	233.85	24.68	644.67	897.91	−437.25	−787.30	900.58	240.95	0.64	MWD−I	0.02
77	1364.84	83.14	233.59	30.00	648.23	927.66	−454.88	−811.32	930.13	240.72	0.09	MWD−I	0.03
78	1394.75	82.73	233.54	29.91	651.91	957.30	−472.51	−835.20	959.59	240.50	0.14	MWD−I	0.03
79	1424.29	81.77	233.40	29.54	655.90	986.53	−489.93	−858.72	988.65	240.29	0.33	MWD−I	0.02
80	1452.78	81.47	233.04	28.49	660.05	1014.67	−506.81	−881.29	1016.63	240.10	0.16	MWD−I	0.02
81	1481.47	81.43	232.20	28.69	664.31	1042.97	−524.03	−903.84	1044.76	239.90	0.29	MWD−I	0.02
82	1508.70	81.53	231.80	27.23	668.35	1069.82	−540.61	−925.06	1071.44	239.70	0.15	MWD−I	0.02
83	1535.81	81.67	231.24	27.11	672.31	1096.53	−557.30	−946.05	1098.00	239.50	0.21	MWD−I	0.02
84	1562.22	81.87	230.85	26.41	676.09	1122.55	−573.73	−966.38	1123.86	239.30	0.16	MWD−I	0.02
85	1591.19	82.39	231.01	28.97	680.06	1151.11	−591.82	−988.66	1152.26	239.09	0.19	MWD−I	0.02
86	1619.48	82.42	230.70	28.29	683.79	1179.01	−609.52	−1010.41	1180.01	238.90	0.11	MWD−I	0.02

86	1619.48	82.42	230.70	28.29	683.79	1179.01	−609.52	−1010.41	1180.01	238.90	0.11	MWD−I	0.02
87	1646.78	81.70	230.29	27.30	687.57	1205.90	−626.72	−1031.27	1206.77	238.71	0.30	MWD−I	0.02
88	1677.16	80.92	230.59	30.38	692.16	1235.76	−645.85	−1054.42	1236.50	238.51	0.27	MWD−I	0.02
89	1707.15	80.69	230.54	29.99	696.95	1265.21	−664.65	−1077.28	1265.82	238.33	0.08	MWD−I	0.02
90	1736.63	81.59	230.66	29.48	701.49	1294.18	−683.14	−1099.79	1294.69	238.15	0.31	MWD−I	0.02
91	1765.16	83.00	231.09	28.53	705.31	1322.31	−700.98	−1121.73	1322.74	238.00	0.52	MWD−I	0.02
92	1793.80	84.76	231.63	28.64	708.37	1350.67	−718.76	−1143.97	1351.03	237.86	0.64	MWD−I	0.02
93	1821.68	86.72	232.17	27.88	710.44	1378.38	−735.92	−1165.85	1378.68	237.74	0.73	MWD−I	0.01
94	1851.10	88.88	232.86	29.42	711.57	1407.71	−753.81	−1189.17	1407.96	237.63	0.77	MWD−I	0.03
95	1873.21	89.38	232.65	22.11	711.90	1429.76	−767.19	−1206.77	1429.99	237.55	0.25	MWD−I	0.02
96	1904.82	88.39	232.85	31.61	712.52	1461.30	−786.31	−1231.93	1461.48	237.45	0.32	MWD	None
97	1933.88	88.28	232.85	29.06	713.36	1490.29	−803.86	−1255.08	1490.44	237.36	0.04	MWD	None
98	1962.47	89.05	233.43	28.59	714.03	1518.82	−821.00	−1277.95	1518.95	237.28	0.34	MWD	None
99	2000.17	89.31	233.58	37.70	714.57	1556.46	−843.42	−1308.25	1556.56	237.19	0.08	MWD	None
100	2029.18	89.63	234.03	29.01	714.84	1585.44	−860.55	−1331.66	1585.52	237.13	0.19	MWD	None
101	2058.39	89.74	233.39	29.21	715.00	1614.61	−877.84	−1355.21	1614.68	237.07	0.22	MWD	None
102	2087.22	89.54	233.14	28.83	715.18	1643.39	−895.08	−1378.31	1643.45	237.00	0.11	MWD	None
103	2115.64	90.11	233.12	28.42	715.26	1671.76	−912.14	−1401.05	1671.80	236.93	0.20	MWD	None
104	2144.55	89.40	233.24	28.91	715.39	1700.62	−929.46	−1424.19	1700.65	236.87	0.25	MWD	None
105	2173.03	88.94	233.45	28.48	715.80	1729.05	−946.46	−1447.03	1729.07	236.81	0.18	MWD	None
106	2201.69	89.17	233.55	28.66	716.27	1757.67	−963.51	−1470.07	1757.68	236.76	0.09	MWD	None
107	2230.24	89.31	233.75	28.55	716.65	1786.18	−980.43	−1493.06	1786.19	236.71	0.09	MWD	None
108	2263.70	89.77	234.05	33.46	716.92	1819.61	−1000.14	−1520.10	1819.61	236.66	0.16	MWD	None
109	2272.56	90.14	234.01	8.86	716.93	1828.46	−1005.35	−1527.27	1828.46	236.64	0.42	MWD	None
110	2290.00	89.70	234.00	17.44	716.95	1845.88	−1015.60	−1541.38	1845.88	236.62	0.25	Proj. to TD	

Company: **OMV Australia Pty Ltd**

Schlumberger

Well: **Baleen−4**

Field: **Baleen Field**

Rig: **Ocean Bounty**

State: **Victoria**

PERFORM − APWD
Time Based − 2" per 3600’
Real Time & Recorded Memory Data