

Depth logged:	5481.0 m To 6446.2 m	Mag decl:	13.001 deg.	Other services:
Date logged:	09-Dec-08 To 11-Dec-08	Mag dip:	-68.689 deg.	See Remarks

## Bit Run Summary

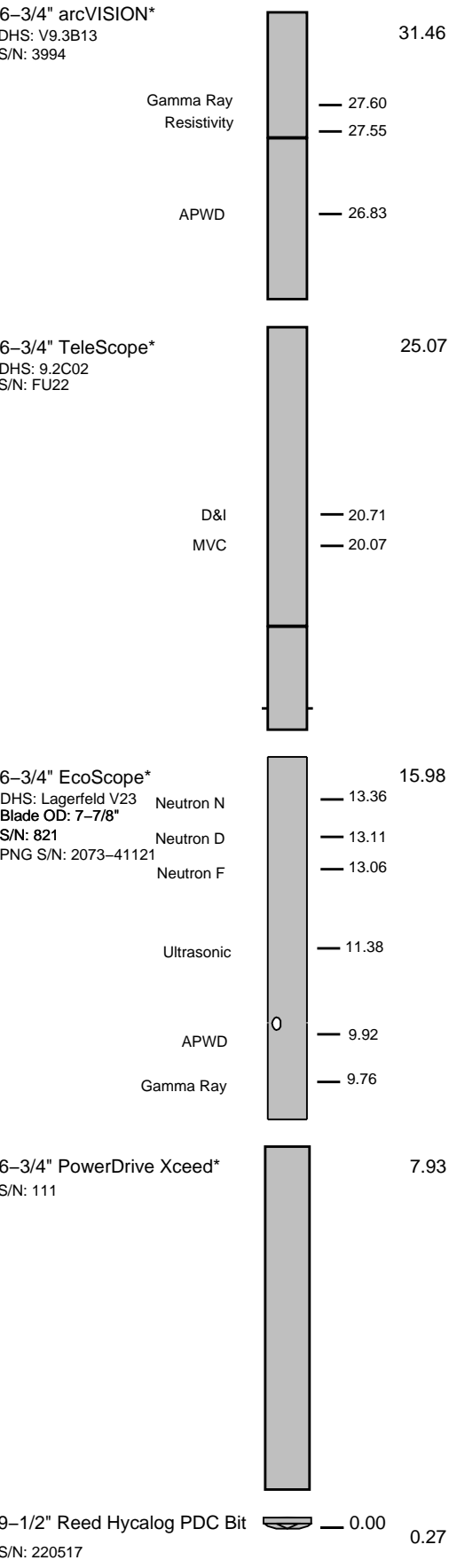
Run number		4								
Bit size	in	9.50								
Bit start depth	m	5388.0								
Bit end depth	m	6456.0								
Top interval logged	m	5481.0								
Bottom interval logged	m	6446.2								
Begin log: time		03:19								
Begin log: date		09-Dec-08								
End log: time		17:57								
End log: date		11-Dec-08								
Mud data										
Depth	m	6135.0								
Type		Accolade SBM								
Mud weight	ppg	10.8								
Solids	%	18.3								
Chlorides	mg/L	47,599								
Rm	ohm.m@°C	n.a								
Rmf	ohm.m@°C	n.a								
Rmc	ohm.m@°C	n.a								

Potassium	%	n.a									
<b>Environmental data</b>											
<b>GR</b>											
Mud weight	ppg	10.8									
Bit size	in	9.50									
<b>Resistivity</b>											
<b>Neutron porosity</b>											
Hole Size	in	9.50									
Mud weight	ppg	10.8									
Temperature	°C	106.0									
Mud salinity	ppk	59.967									
Formation salinity		n.a									
Recording rate 1	SEC	6 (arcVISION)									
Recording rate 2	SEC	2 (EcoScope)									
Filtering GR		3 pts.									
Filtering density		3 pts.									
Filtering Neutron		3 pts.									
Company representative		R. Spence	M. Calicutt								
Anadrill personnel		M. Amarasena	J. Oldridge	M. Sihite	C. Soper	D.B. Khanh					

<p style="text-align: center;"><b>DISCLAIMER</b></p> <p>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.</p>											
<b>OTHER SERVICES FOR RUN4</b> Directional Drilling Directional Surveys Annular Pressure & Temperature Shock & Vibrations											
<b>REMARKS: RUN NUMBER 4</b> Depth is referenced to Driller's depth Gamma ray is corrected for mud weight, tool size and bit size Resistivity is borehole compensated and environmentally corrected Neutron porosity is corrected for the effects of borehole size (bit size), temperature, mud salinity and mud hydrogen index (a factor of mud weight, mud temperature and pressure) Neutron porosity is calculated by using a limestone matrix density of 2.71 g/cm3 EcoScope stabilizer size 7-7/8" EcoScope was run sourceless Ecoscope sourceless density run in realtime Bit size 9.5" POOH due to well TD											

<b>EQUIPMENT DESCRIPTION</b>											
RUN4											
DOWNHOLE EQUIPMENT											

DOWNHOLE EQUIPMENT



Maximum string diameter 9.50 in.  
All lengths in Meters

Variable Name	Variable Description	Run Name & Value	
	Run Number		4
	General Information		
BHT_RM	Bottom Hole Temperature (RM)	DEGC	106.000
BSAL_RM	Mud Salinity (RM)	PPK	59.967
BS_RM	Bit Size (RM)	IN	9.500
COEF_M	User Defined FEXP in Clean Sand	----	1.650
C_WS	Overpressure correction to Sw and M	----	1.000
FEXP	Formation Factor Exponent(RM)	----	2.000
FNUM	Formation Factor Enumerator(RM)	----	1.000
FPHI_RM	Formation Factor Porosity Source (RM)	----	XPLOT
MST_RM	Mud Sample temperature (RM)	DEGC	60.000
MW_RM	Mud Weight (RM)	LB/G	10.800
OBMF_RM	Oil Based Mud (RM)	----	YES
RHOF_RM	Mud Filtrate Density (RM)	G/C3	1.000
RHOM_RM	Matrix density (RM)	G/C3	2.710
RMS_RM	Resistivity of Mud Sample (RM)	OHMM	1000.000
RWA_COMP_M	Rwa computation model		
RWA_DEN_AD	Rwa Density Input ADN		
RWA_DEN_CD	Rwa Density Input CDN		
RWA_DEN_IN	Rwa Density Input		
RWA_FORM_M	Rwa computation formation model		
RWA_RES_IN	Rwa computation resistivity input		
RWS_RM	Resistivity of Connate Water (RM)	OHMM	1.000
SHT_RM	Ground Level Temperature (Mud-Line When Offshore ) (RM)	DEGC	10.000
TD_RM	Total Measured Depth (RM)	M	6456.000
TWS_RM	Temperature of Connate Water (RM)	DEGC	23.889
VF_ILLI	Fraction of illite in shales	----	0.500
VF_KAOL	Fraction of kaolinite in shales	----	0.500
VF_MONT	Fraction of montmorillonite in shales	----	0.000
XPDM_RM	Cross plot density porosity multiplier	----	0.675
XPNM_RM	Cross plot neutron porosity multiplier	----	0.325
	ARC		
A12A	ARC Air Cal Attenuation From T1 at 2 MHz	DB	8.526
A14A	ARC Air Cal Attenuation From T1 at 400 KHz	DB	8.535
A22A	ARC Air Cal Attenuation From T2 at 2 MHz	DB	5.890
A24A	ARC Air Cal Attenuation From T2 at 400 KHz	DB	5.903
A32A	ARC Air Cal Attenuation From T3 at 2 MHz	DB	5.129
A34A	ARC Air Cal Attenuation From T3 at 400 KHz	DB	5.131
A42A	ARC Air Cal Attenuation From T4 at 2 MHz	DB	4.291
A44A	ARC Air Cal Attenuation From T4 at 400 KHz	DB	4.297
A52A	ARC Air Cal Attenuation From T5 at 2 MHz	DB	3.686
A54A	ARC Air Cal Attenuation From T5 at 400 KHz	DB	3.690
ABNT	Abnormal Transmitter Indicator	----	No_Tx_Failed
ADHS	ARC Down Hole Software Version	----	No_Tx_Failed
AM2A	ARC Air Cal Amplitude Offset at 2 MHz	----	-50000.000
ANISO_COMPUTE	Anisotropy Computation Option	----	YES
APICG	ARC5 Gamma Ray Gain Factor	----	1.054
APIG	ARC Gamma Ray API Gain Factor	----	-1.000
ARC_DATA_FIX	ARC: Create A Corrected ARC Time Data File	----	NO
ARC_DATA_LTB	ARC: Create An ARC LTB Data File	----	NO
ATMP_ARC	ARC Select Temperature Channel	----	Annulus_Temp
ATRN	ARC Tool Run Number	----	4
ATSN	ARC Tool Serial Number	----	3994
AZMF	Formation DIP Azimuth	DEG	0.000
BH_COMPUTE	Borehole Inversion Computation Option	----	YES
CALG	ARC Gamma Ray Cal Gain Factor	----	1.054
CALI_SLCT_ARC	ARC Caliper Selection	----	BITSIZE
CDPTH_ARC	Process Start Depth	M	30.480
DIELEC_COMPUTE	Dielectric Computation Option	----	YES
DIPF	Formation DIP Angle	DEG	0.000
ERRCT	Percentage Error Cutoff	----	4.500
GRSH	GR Shale (Invasion Computation Cutoff)	GAPI	1000.000
HIGH_BLEND	High Resistivity Threshold for Blending	OHMM	2.000
INCLIN_B0	ARC Bias Constant (mg)	----	0.000
INCLIN_B1	ARC Bias First-order Coefficient (mg/degC)	----	0.000
INCLIN_B2	ARC Bias Secod-order Coeeficient (mg/degC)	----	0.000
INCLIN_B3	ARC Bias Third-order Coeeficient (mg/degC)	----	0.000
INCLIN_C0	ARC Current Scale Factor Constant (mA/g)	----	1.000
INCLIN_C1	ARC Scale First-order Coefficient (mA/g/degC)	----	0.000
INCLIN_C2	ARC Scale Second-order Coefficient (mA/g/degC)	----	0.000
INCLIN_C3	ARC Scale Third-order Coefficient (mA/g/degC)	----	0.000
INVAS_COMPUTE	Invasion Computation Option	----	YES
JSD_ARC	ARC Acquisition start date	----	09-Dec-08
KPER	Potassium Concentration (RM)	----	0.000
LOW_BLEND	Low Resistivity Threshold for Blending	OHMM	1.000
MSWS	ARC Wizard Model Switch Window	M	1.524
MULTIEFFECT_COM	Multi Effect Option	----	YES
P11AC_RM	ARC: Air Calibration For Phase T1 to R1	DEG	-999.250
P12A	ARC Air Cal Phase-Shift From T1 at 2 MHz	DEG	3.747
P14A	ARC Air Cal Phase-Shift From T1 at 400 KHz	DEG	-1.655
P22A	ARC Air Cal Phase-Shift From T2 at 2 MHz	DEG	-3.865
P24A	ARC Air Cal Phase-Shift From T2 at 400 KHz	DEG	1.625
P32A	ARC Air Cal Phase-Shift From T3 at 2 MHz	DEG	3.723
P34A	ARC Air Cal Phase-Shift From T3 at 400 KHz	DEG	-1.635
P42A	ARC Air Cal Phase-Shift From T4 at 2 MHz	DEG	-3.858
P44A	ARC Air Cal Phase-Shift From T4 at 400 KHz	DEG	1.642
P52A	ARC Air Cal Phase-Shift From T5 at 2 MHz	DEG	3.743
P54A	ARC Air Cal Phase-Shift From T5 at 400 KHz	DEG	-1.630

POFFSET_ARC	ARC: Pressure Offset	PSI	0.000
PRTD	Preferred Resistivity Log for Rt Display while Multi-Effects	----	P34B
PSOF_ADJ_T1	ARC: User Input Phase offset	DEG	0.000
RESTIK	ARC resistivity tick source	----	Phase
RSD	LWD run start date dd-mmm-yy	----	09-Dec-08
RWA_COMP_MOD	Rwa computation model	----	BASIC
RWA_DEN_ADN	Rwa Density Input	----	RHOB
RWA_DEN_CDN	Rwa Density Input	----	RHOB
RWA_DEN_INPUT	Rwa Density Input	----	RHOB
RWA_FORM_MOD	Rwa computation formation model	----	CLASTIC
RWA_RES_INPUT	Rwa computation resistivity input	----	RT
SHIG	ARC High Shock Risk Level	CPS	0.500
SMED	ARC Medium Shock Risk Level	CPS	0.330
SMIN	ARC Minimum Shock Risk Level	CPS	0.160
SUPD	ARC Real Time Shock Update Rate	S	30.000
TCODE_ARC	ARC Tool File Code	S	30.000
TSIZ_ARC	ARC Tool Size	IN	6.900
UNIFORM_COMPUTE	Uniform Rock Option	----	YES
VERS_ARC	ARC Down hole software version Number	----	2.300
WRK	to Report Potassium Concentration (RM)	----	K_by_Wgt_%
DVD			
-----	Parameters-----	Parameters-----	-----Sigma
-----	Parameters-----	Parameters-----	-----Sigma
ALPHA_DEN_OPT	Density Enhanced Vertical Resolution Processing Switch	----	NO
CHI_RM	Caliper High Limit from BS (RM)	IN	10.000
CLO_RM	Caliper Low Limit from BS (RM)	IN	-5.000
DTMUD	Delta-T for Mud (RM)	US/F	206.000
DTMUD_DH	Delta-T for Mud Downhole (RT)	US/F	227.400
DVDM DHS	DVDM Down Hole Software Version	US/F	227.400
DVDM_DATA_LTB	DVDM: Create An DVDM LTB Data File	----	NO
DVD_DATA_FIX	DVDM: Create A Corrected DVDM Time Data File	----	NO
DYN_IMAGE_OPT	Generate Dynamic Normalized Image?	----	YES
EDPTH	Wizard Process Stop Depth	----	50000
EN_WIZARD	Enable ARC Wizard Processing	----	NO
EURL	EVR Process averaging number of samples (RM)	----	49
FWVN	Firmware Version Number	----	2.300
GCSE	Generalized Caliper Selection	----	BS
GR_CF	Gamma Ray Correction Factor	----	1.800
GR_O2COR_OPT	Enable Gamma Ray Oxygen Activation Correction	----	YES
IDQT	Image Derived Quality Threshold	----	2.000
IMAGE_MAX_DCRA	Image Density Caliper Right Scale	IN	8.000
IMAGE_MAX_IDDQ	Image Density Quality Right Scale	----	1.000
IMAGE_MAX_SPEF	Image PEF(Segment) Right Scale	----	6.000
IMAGE_MAX_SRHOB	Image RHOB(Segment) Right Scale	G/C3	2.650
IMAGE_MIN_DCRA	Image Density Caliper Left Scale	IN	2.000
IMAGE_MIN_IDDQ	Image Density Quality Left Scale	----	0.000
IMAGE_MIN_SPEF	Image PEF(Segment) Left Scale	----	2.000
IMAGE_MIN_SRHOB	Image RHOB(Segment) Left Scale	G/C3	2.050
JSD	Acquisition start date	----	09-Dec-08
MATR	Rock Matrix for Neutron Porosity Corrections	----	LIMESTONE
NEU_DCOR_OPT	Density Correction Source for Neutron Processing	----	Neutron
NEU_FTUBE_OPT	Far Thermal Tube Selection	----	Both
NEU_PRESCOR_OPT	Pressure Correction Source for Neutron Processing	----	Annulus_Press
NEU_TEMPCOR_OPT	Temperature Correction Source for Neutron Processing	----	Tool_Temp
NTIK_SEL	Neutron Tick Channel Name	----	FAZ1
OACF	Oxygen Activation Correction Factor (RM)	----	8.000
PMUD	Potassium Concentration in Mud	----	0.000
RUN_DURATION_OP	Run Duration Type ?	----	Normal
SDPTH	Wizard Process Start Depth	----	100
SIG_PCOR_OPT	Porosity Correction Source for Sigma Processing	----	Best
SPEC_CSG_DEPTH	Casing Depth for Spectroscopy Processing	M	30.480
SPL_CLAY_MODEL	SpectroLith Clay Model	----	SUBARKOSE
SPL_MG_OPT	Magnesium Flag Switch ?	----	OFF
SPL_NL_COEFF	Non Linearity Coefficient for Downhole Spectroscopy Processing	----	147.000
SPL_SULFUR_MIN	SpectroLith Sulfur Mineral Option	----	PYRITE
STAB_SIZE	Stabilizer Size	IN	7.875
STOH	Top of Hole Sector	----	SECTOR_0
TRNO	Tool Run Number	----	4
TSNO	Tool Serial Number	----	821
WPPV	Water Phase as Percent of Total Volume in OBM	----	22.000
WPSL	Salinity of the Water Phase Emulsified within the OBM	PPK	272.576
WSDI	Window Size of Dynamic Normalization Image	M	4.572
Schlumberger Drilling & Measurements			
ID13 Parameter Insert Header Software version 3.0c			

## IDEAL Version: ID14\_0C\_02

IDF

Format: ECOSCOPE Service RM Log      Vertical Scale: 1:500      Graphics File Created: 08-Jun-2009 15:46

### PIP SUMMARY

Neutron Ticks, 0.1 ft

Gamma Ray Samples

Resistivity Samples

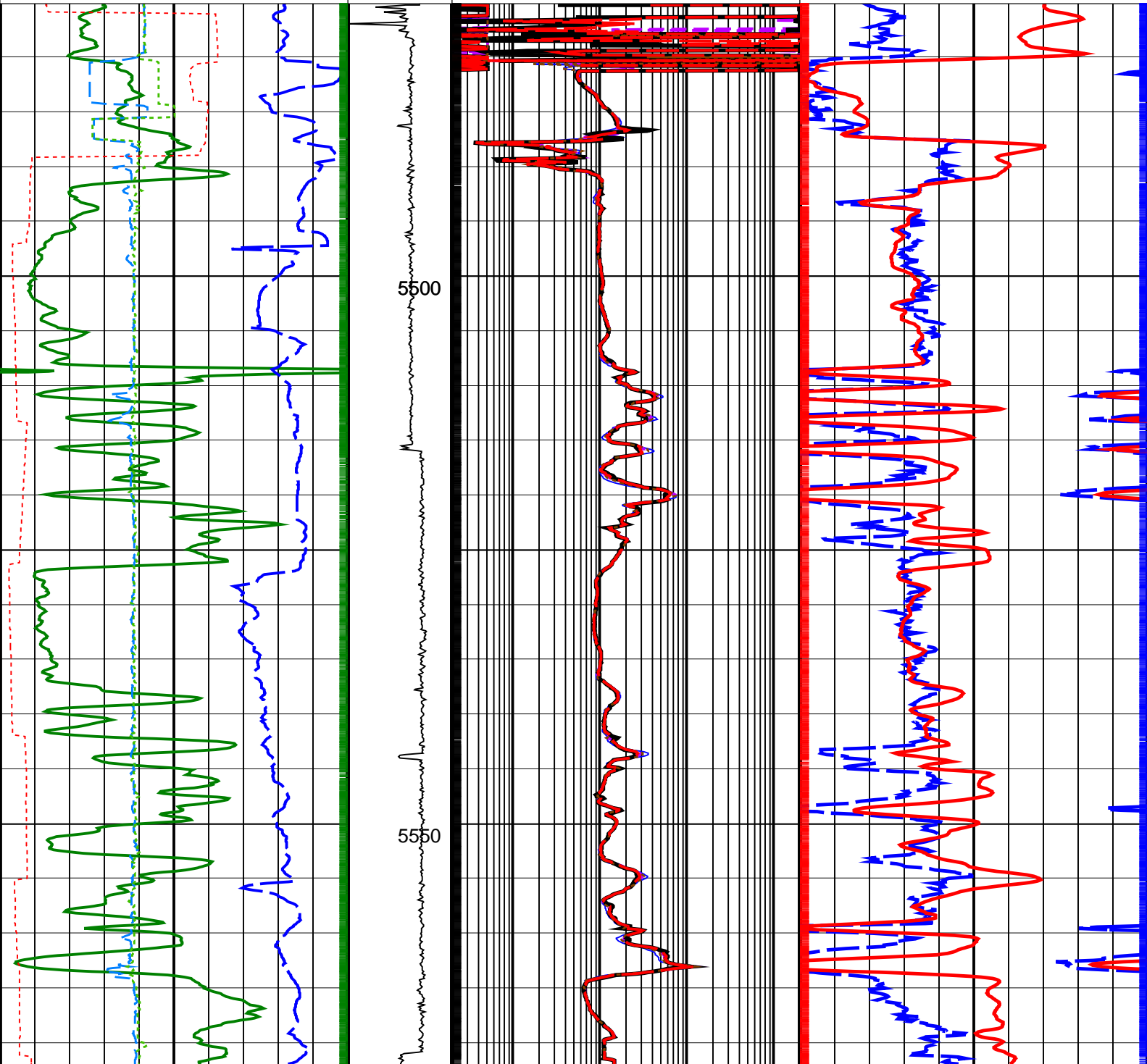
Density Ticks, 0.1 ft

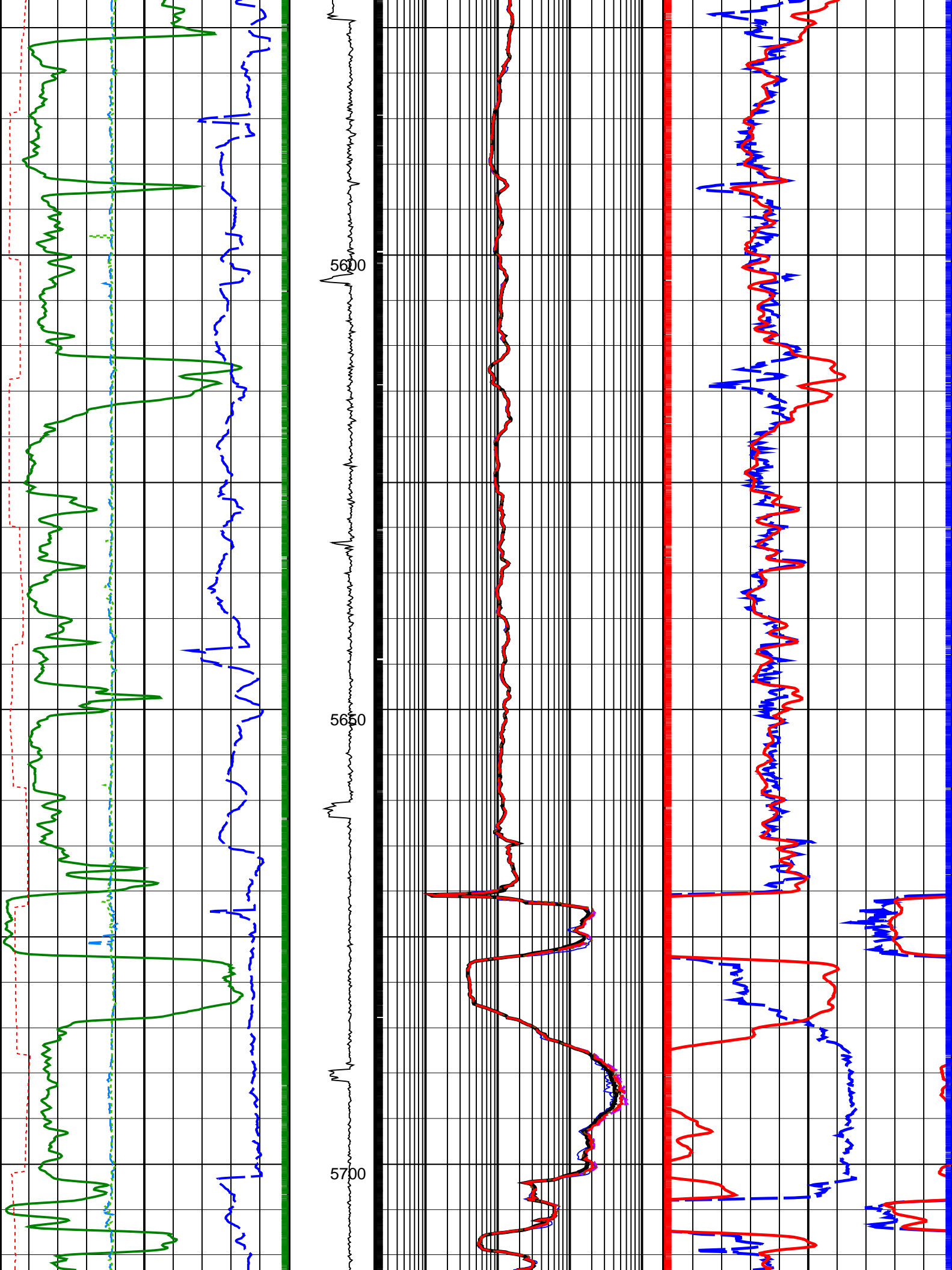
Rate of Penetration Averaged over Last

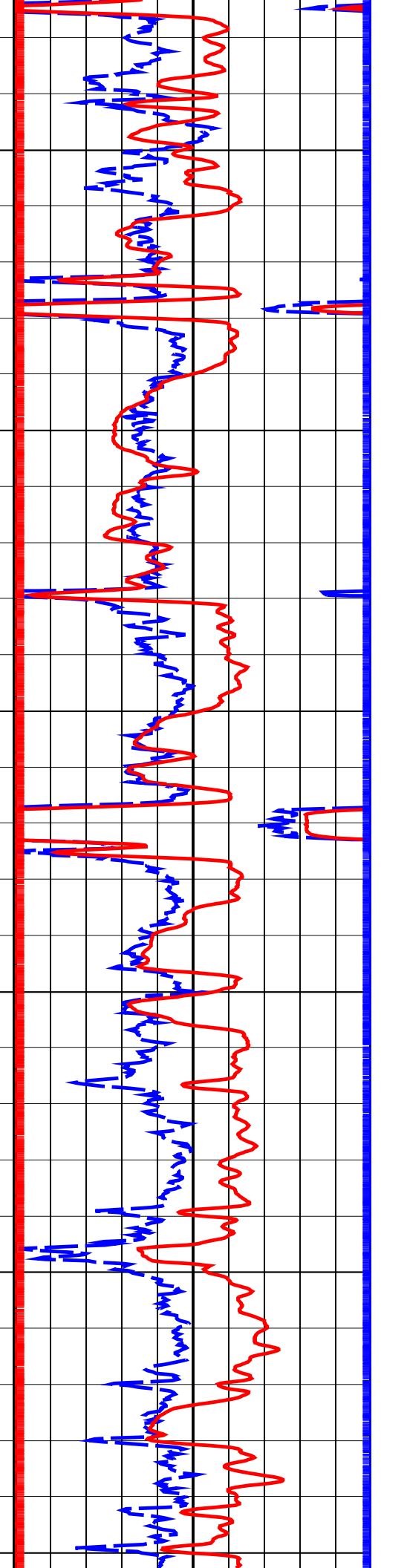
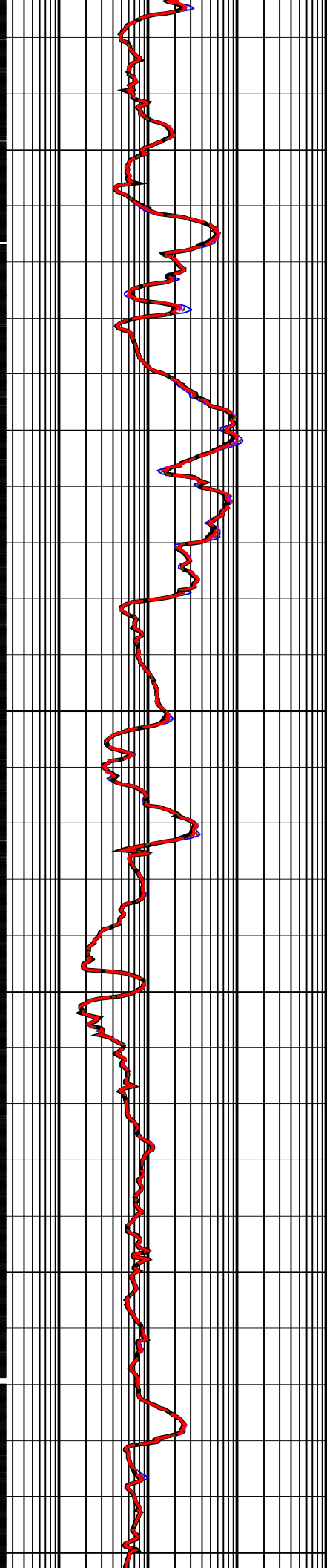
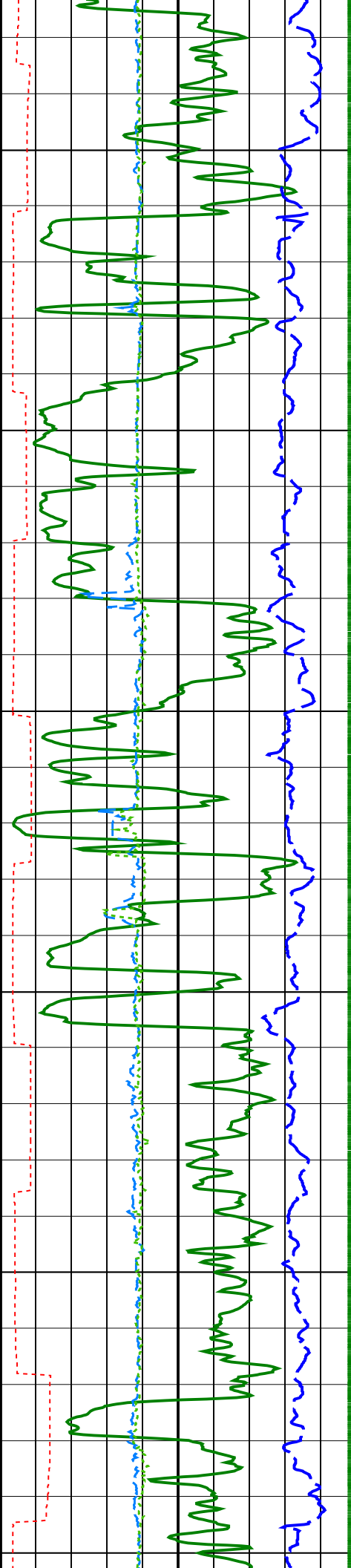
ARC Phase Shift Resistivity 40 inch at 2

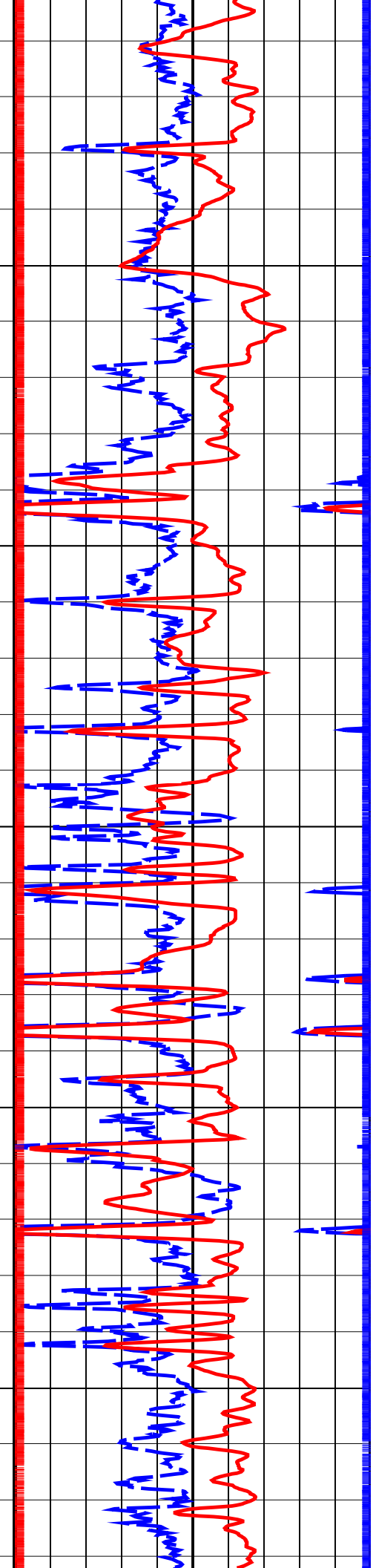
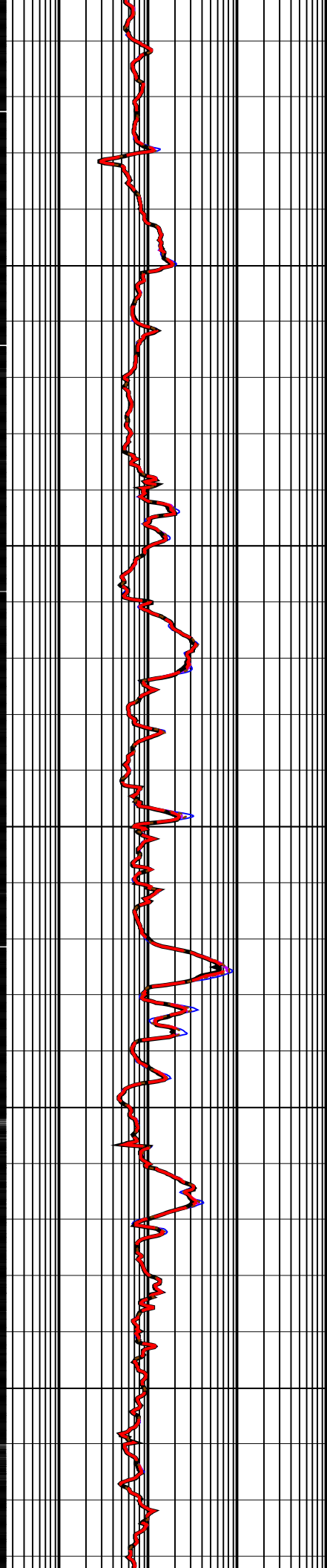
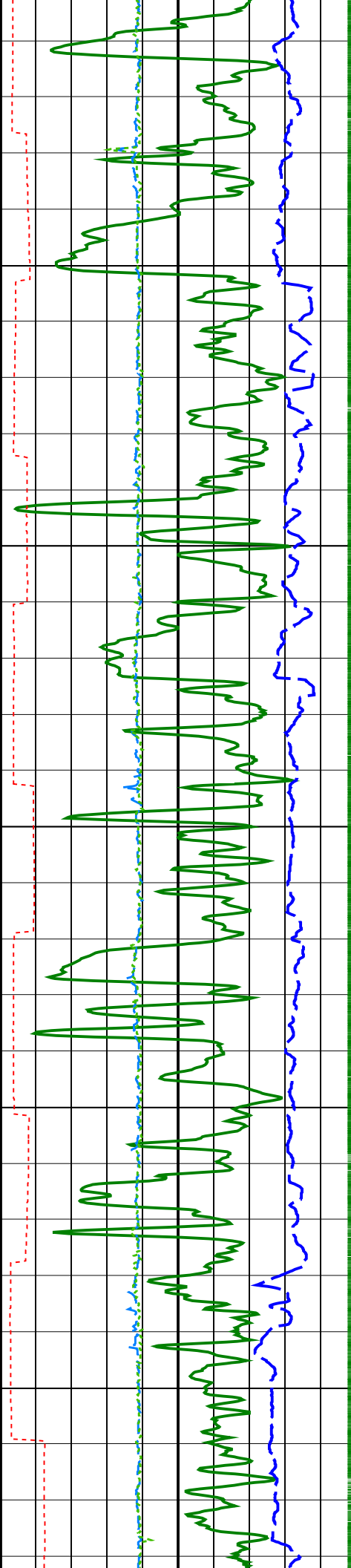
Rate of Penetration, Averaged Over Last 5ft (ROP5_RM)		ARC Phase Shift Resistivity 40 inch at 2 MHz (P40H)		
200	(M/HR)	0	0.2 (OHMM)	2000
Ultrasonic Caliper, Vertical Diameter (UCVE)		ARC Phase Shift Resistivity 34 inch at 2 MHz (P34H)		
6	(IN)	16	0.2 (OHMM)	2000
Ultrasonic Caliper, Horizontal Diameter (UCHO)		ARC Phase Shift Resistivity 28 inch at 2 MHz (P28H)		
6	(IN)	16	0.2 (OHMM)	2000
Gamma Ray, Average (GRMA)		ARC Phase Shift Resistivity 22 inch at 2 MHz (P22H)		Bulk Density from Neutron, Average (RHON)
0	(GAPI)	200	0.2 (OHMM)	2000
				1.85 (G/C3) 2.85

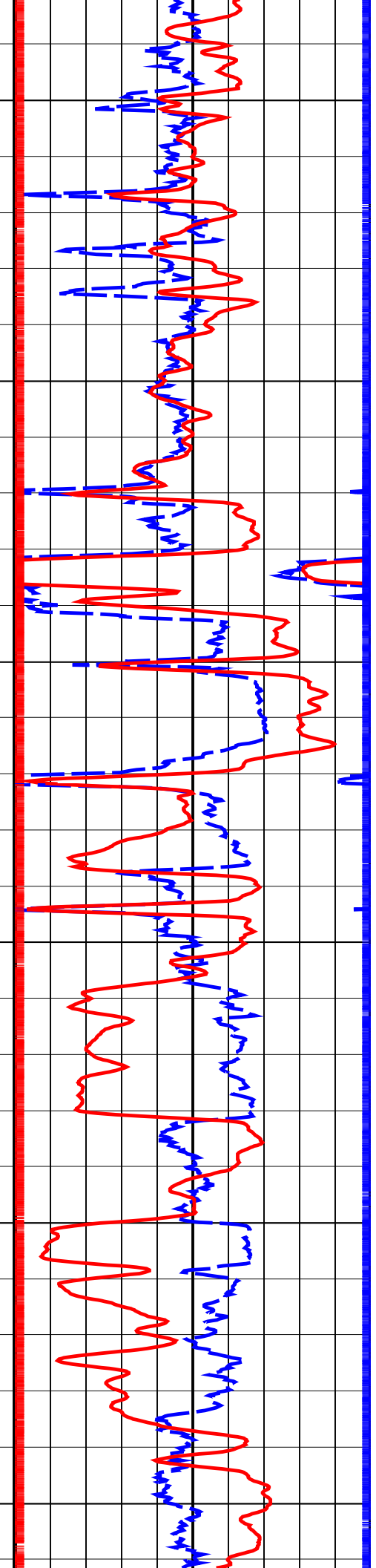
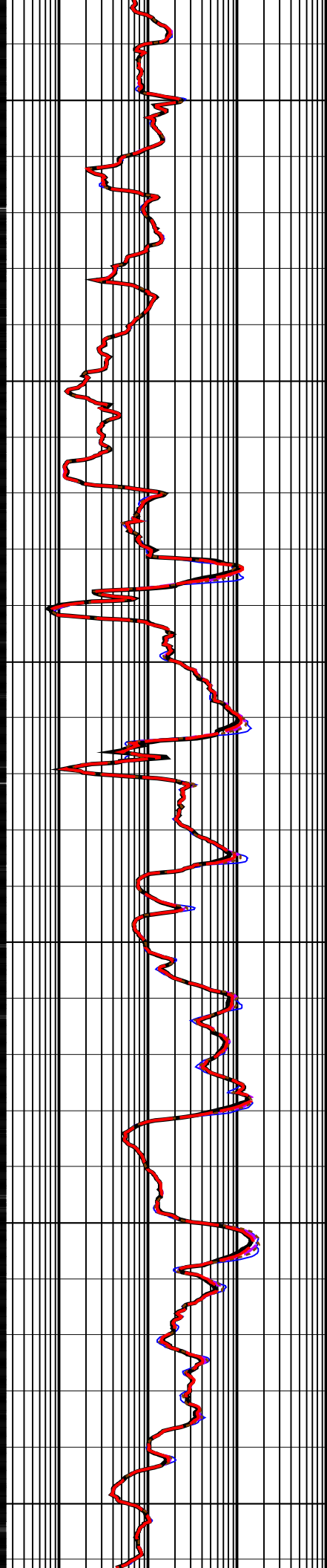
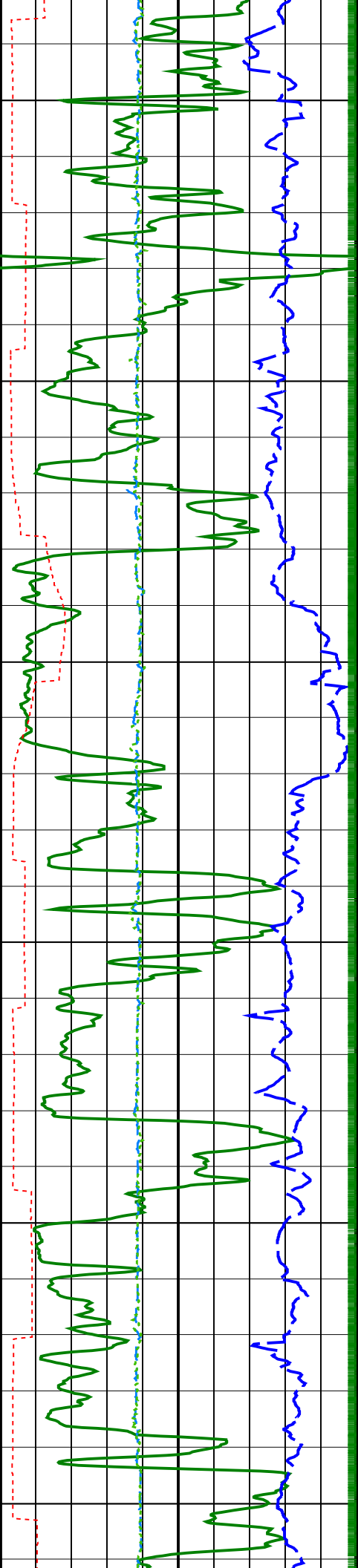
Neutron Time After Bit (TAB_NEU) (HR)	0	10	Collar Rotational Speed (CRPM) (RPM)	0	200	ARC Phase Shift Resistivity 16 inch at 2 MHz (P16H) (OHMM)	0.2	2000	Best Thermal Neutron Porosity, Average (BPHI) (PU)	45	-15
--	---	----	---	---	-----	---	-----	------	---	----	-----

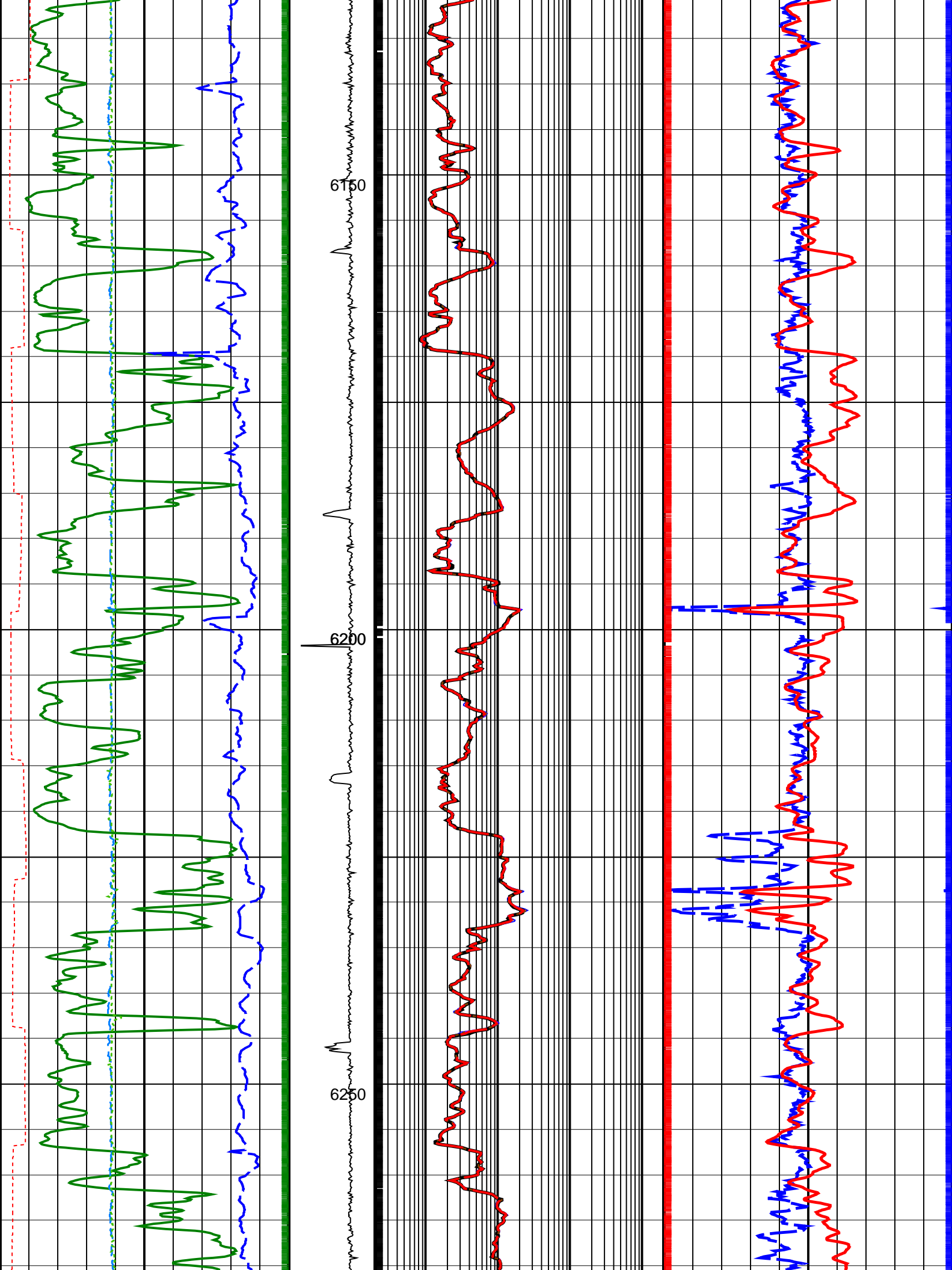


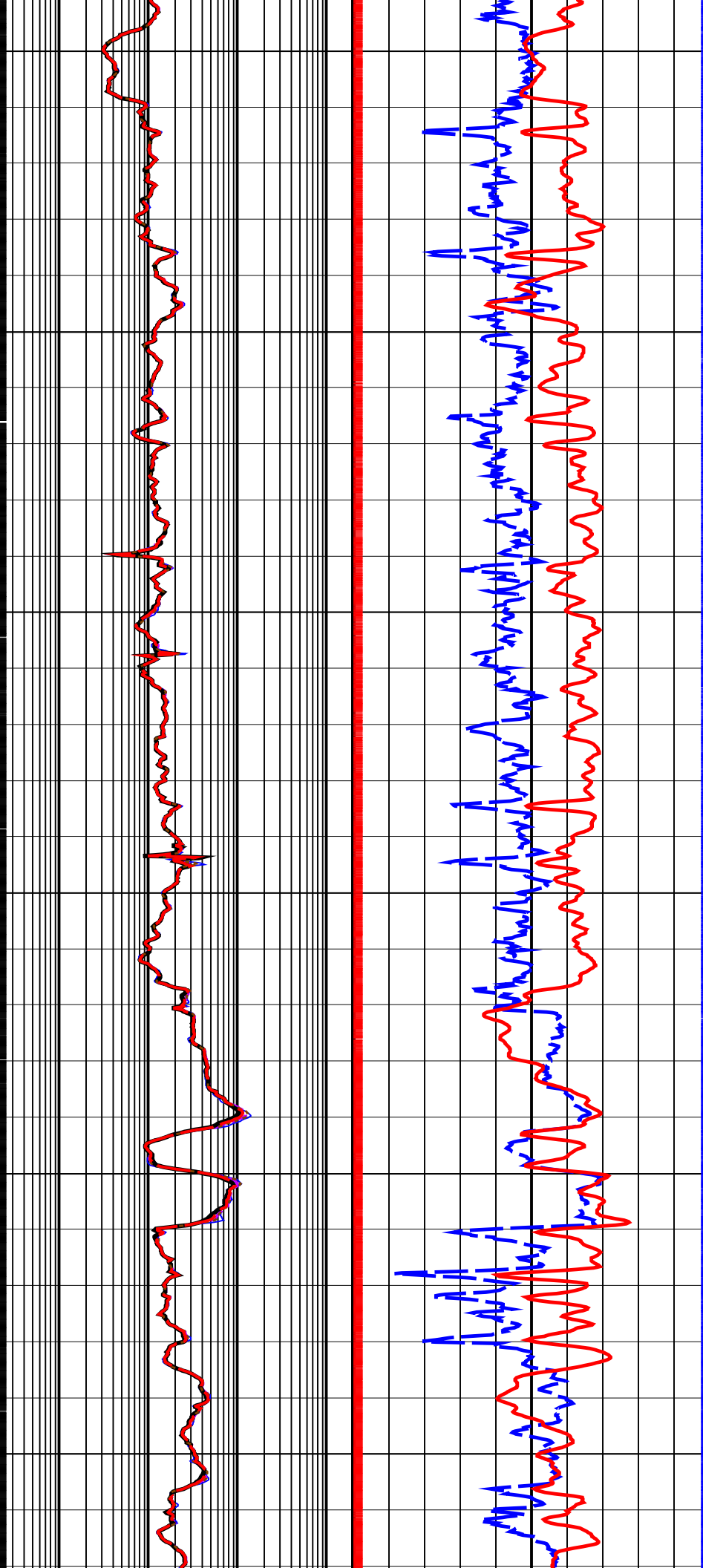
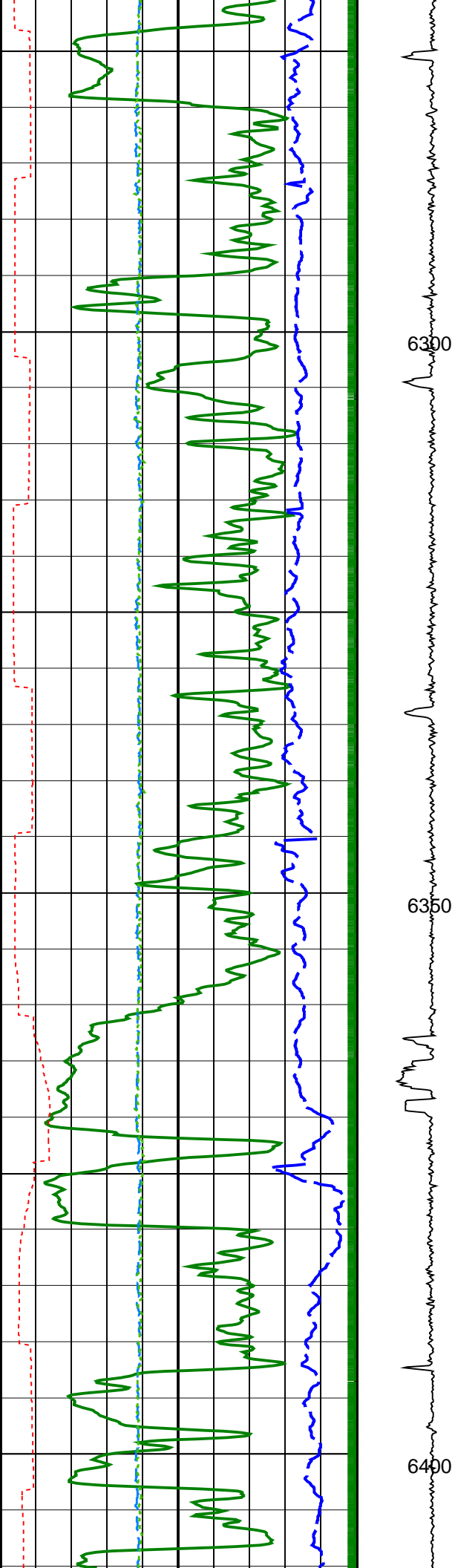


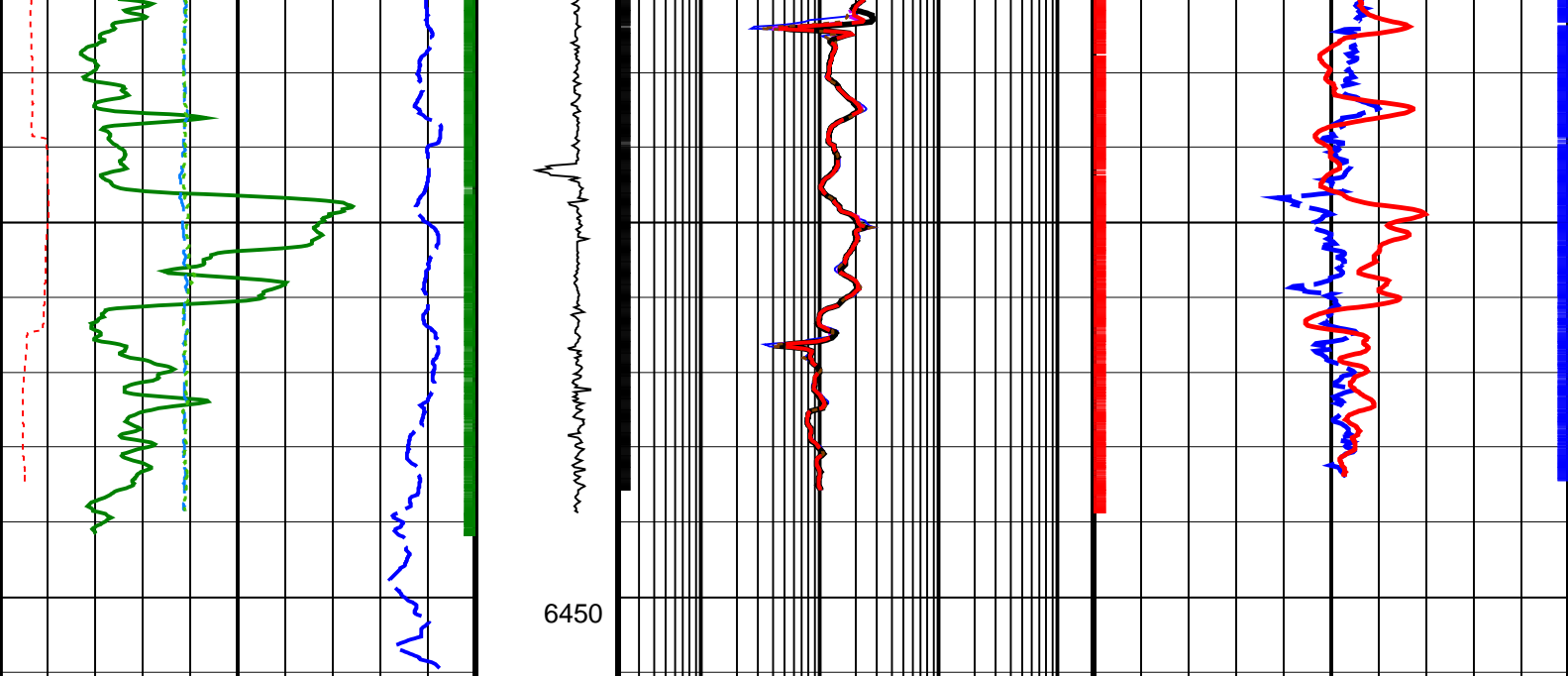












Neutron Time After Bit (TAB_NEU) (HR)	Collar Rotational Speed (CRPM) (RPM)	ARC Phase Shift Resistivity 16 inch at 2 MHz (P16H)	Best Thermal Neutron Porosity, Average (BPHI)
		(OHMM)	(PU)
0	0	2000	45
10	200		-15
Gamma Ray, Average (GRMA) (GAPI)		ARC Phase Shift Resistivity 22 inch at 2 MHz (P22H)	Bulk Density from Neutron, Average (RHON)
		(OHMM)	(G/C3)
0		2000	1.85
200			2.85
Ultrasonic Caliper, Horizontal Diameter (UCHO) (IN)		ARC Phase Shift Resistivity 28 inch at 2 MHz (P28H)	
		(OHMM)	
6		2000	
16			
Ultrasonic Caliper, Vertical Diameter (UCVE) (IN)		ARC Phase Shift Resistivity 34 inch at 2 MHz (P34H)	
		(OHMM)	
6		2000	
16			
Rate of Penetration, Averaged over Last 5ft (ROP5_RM) (M/HR)		ARC Phase Shift Resistivity 40 inch at 2 MHz (P40H)	
		(OHMM)	
200		2000	
0			

PIP SUMMARY

Gamma Ray Samples  
Resistivity Samples  
Density Ticks, 0.1 ft

IDEAL Version: ID14\_OC\_02  
IDF

6.75-in. Array Resistivity Compensated / Equipment Identification

Primary Equipment:

Tool Name and Serial Number  
ARC675 Calibration Status

ARC6 – BA  
AUTO –

447

Master: 19-Nov-2008 19:29

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		0.4435	Master		0.4753	Master		0.5035

Master	<div><div></div></div>	-0.4433	Master	<div><div></div></div>	0.4733	Master	<div><div></div></div>	-0.5023			
	-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	<div><div></div></div>	0.4377	Master	<div><div></div></div>	-0.5039	Master	<div><div></div></div>	0.8857			
	-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	<div><div></div></div>	-0.9448	Master	<div><div></div></div>	0.9314	Master	<div><div></div></div>	-0.9603			
	-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	<div><div></div></div>	0.8903									
	-3.900 (Minimum)0.1000 (Nominal)4.100 (Maximum)										

Master: 19-Nov-2008 19:29														
6.75-in. Array Resistivity Compensated Calibration														
Resistivity: Air														
Phase	Attenuation T1			Value	Phase	Attenuation T2			Value	Phase	Attenuation T3			Value
Master	<div><div></div></div>			8.252	Master	<div><div></div></div>			6.680	Master	<div><div></div></div>			4.885
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	<div><div></div></div>			4.589	Master	<div><div></div></div>			3.439	Master	<div><div></div></div>			8.242
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	<div><div></div></div>			6.701	Master	<div><div></div></div>			4.865	Master	<div><div></div></div>			4.602
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	<div><div></div></div>			3.426										
1.600 (Minimum)      3.600 (Nominal)      5.600 (Maximum)														

Master: 20-Nov-2008 11:20									
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								5.059	
	2.780 (Minimum)		4.800 (Nominal)			6.000 (Maximum)			

EcoScope Integrated Logging-While-Drilling Tool – 6.75 inch / Equipment Identification													
Primary Equipment:													
Tool Name and Serial Number													
Calibration Status													
Neutron Logging Source													
Density Logging Source													
Stabilizer Size													
ECO – 675 817													
AUTO –													
PNG – C 2073-41121													
n.a													
7.81 – in.													

Master: 27-Nov-2008 1:27													
EcoScope Integrated Logging-While-Drilling Tool – 6.75 inch Calibration													
SSn LSn : Water Tank													
Phase	SSn Gain ----			Value	Phase	SSn Offset ----			Value				
Master				1.087	Master				791.5				
	0.9300 (Minimum)					-137.0 (Minimum)							
Phase	LSn Gain ----			Value	Phase	LSn Offset ----			Value				
Master				1.102	Master				0				
	0.9100 (Minimum)					-45.00 (Minimum)							

Master: 27–Nov–2008 1:27															
EcoScope Integrated Logging–While–Drilling Tool – 6.75 inch Calibration															
Neutron: Water Tank															
Phase		Far 2 Gain -----			Value		Phase		Far 2 Offset -----			Value			
Master					1.027		Master					0.6601			
		0.7000 (Minimum)		1.000 (Nominal)		1.300 (Maximum)				-3.000 (Minimum)		0 (Nominal)		3.000 (Maximum)	
Phase		Far 1 Gain -----			Value		Phase		Far 1 Offset -----			Value			
Master					1.056		Master					0.7263			
		0.7000 (Minimum)		1.000 (Nominal)		1.300 (Maximum)				-3.000 (Minimum)		0 (Nominal)		3.000 (Maximum)	
Phase		Thermal Near gain -----			Value		Phase		Thermal Near offset -----			Value			
Master					1.135		Master					45.20			
		0.7000 (Minimum)		1.000 (Nominal)		1.300 (Maximum)				-500.0 (Minimum)		0 (Nominal)		500.0 (Maximum)	
Phase		Epithermal Near gain -----			Value		Phase		Epithermal Near offset -----			Value			
Master					1.172		Master					80.38			
		0.7000 (Minimum)		1.000 (Nominal)		1.300 (Maximum)				-300.0 (Minimum)		0 (Nominal)		300.0 (Maximum)	

Master: Calibration out of date 15-Sep-2007 17:26									
EcoScope Integrated Logging-While-Drilling Tool – 6.75 inch Calibration									
Gamma Density: Magnesium Block									
Phase	LS window 3 – Mg CPS			Value	Phase	SS window 1 – Mg CPS			Value
Master				3661	Master				7515
	2200 (Minimum)	3350 (Nominal)	4500 (Maximum)			4560 (Minimum)	6830 (Nominal)	9100 (Maximum)	
Phase					Phase	SS window 3 – Mg CPS			Value
Master					Master				17510
						11100 (Minimum)	16700 (Nominal)	22300 (Maximum)	

Master: Calibration out of date 15-Sep-2007 17:26									
EcoScope Integrated Logging-While-Drilling Tool – 6.75 inch Calibration									
Gamma Density: Aluminum Block									
Phase	LS window 3 – Al CPS			Value	Phase	SS window 1 – Al CPS			Value
Master				600.9	Master				3777
	350.0 (Minimum)	575.0 (Nominal)	800.0 (Maximum)			2300 (Minimum)	3550 (Nominal)	4800 (Maximum)	
Phase					Phase	SS window 3 – Al CPS			Value
Master					Master				12040
						7600 (Minimum)	11550 (Nominal)	15500 (Maximum)	

Master: Calibration out of date 15-Sep-2007 17:26									
EcoScope Integrated Logging-While-Drilling Tool – 6.75 inch Calibration									
Gamma Density: Background									
Phase	LS window 3 – Background CPS			Value	Phase	SS window 1 – Background CPS			Value
Master				60.74	Master				84.85
	50.00 (Minimum)	70.00 (Nominal)	90.00 (Maximum)			50.00 (Minimum)	75.00 (Nominal)	100.0 (Maximum)	
Phase					Phase	SS window 3 – Background CPS			Value
Master					Master				401.4
						270.0 (Minimum)	370.0 (Nominal)	470.0 (Maximum)	

Master: Calibration out of date 15-Sep-2007 17:26									
EcoScope Integrated Logging-While-Drilling Tool – 6.75 inch Calibration									
Gamma Density: Water Block Check									
Phase	Long spacing water density G/C3			Value	Phase	Short spacing water density G/C3			Value
Master				1.039	Master				1.298
	1.021 (Minimum)	1.038 (Nominal)	1.054 (Maximum)			1.043 (Minimum)	1.078 (Nominal)	1.113 (Maximum)	

Master: 17-Nov-2008 17:50									
EcoScope Integrated Logging-While-Drilling Tool – 6.75 inch Calibration									
Resistivity: Air									
Phase	Phase-Shift T1			Value	Phase	Phase-Shift T2			Value
Master				3.747	Master				-3.865
	-4.000 (Minimum)	0 (Nominal)	4.000 (Maximum)			-4.000 (Minimum)	0 (Nominal)	4.000 (Maximum)	
Phase	Phase-Shift T4			Value	Phase	Phase-Shift T5			Value
Master				-3.858	Master				3.743
	-4.000 (Minimum)	0 (Nominal)	4.000 (Maximum)			-4.000 (Minimum)	0 (Nominal)	4.000 (Maximum)	
Phase	Phase-Shift T1 at 400KHz			Value	Phase	Phase-Shift T3 at 400KHz			Value
Master				-1.655	Master				1.298
	-4.000 (Minimum)	0 (Nominal)	4.000 (Maximum)			-4.000 (Minimum)	0 (Nominal)	4.000 (Maximum)	

Master		1.625	Master		-1.635	Master		1.642
	-4.000 (Minimum)	0 (Nominal)	4.000 (Maximum)		-4.000 (Minimum)	0 (Nominal)	4.000 (Maximum)	
Phase	Phase-Shift T5 at 400KHz		Value					
Master			-1.630					
	-4.000 (Minimum)	0 (Nominal)	4.000 (Maximum)					

Master: 17-Nov-2008 17:50											
EcoScope Integrated Logging-While-Drilling Tool – 6.75 inch Calibration											
Resistivity: Air											
Phase	Attenuation T1		Value	Phase	Attenuation T2		Value	Phase	Attenuation T3		Value
Master			8.526	Master			5.890	Master			5.129
	7.000 (Minimum)	9.000 (Nominal)	11.00 (Maximum)		4.000 (Minimum)	6.000 (Nominal)	8.000 (Maximum)		3.500 (Minimum)	5.500 (Nominal)	7.500 (Maximum)
Phase	Attenuation T4		Value	Phase	Attenuation T5		Value	Phase	Attenuation T1 at 400KHz		Value
Master			4.291	Master			3.686	Master			8.535
	2.500 (Minimum)	4.500 (Nominal)	6.500 (Maximum)		2.000 (Minimum)	4.000 (Nominal)	6.000 (Maximum)		7.000 (Minimum)	9.000 (Nominal)	11.00 (Maximum)
Phase	Attenuation T2 at 400KHz		Value	Phase	Attenuation T3 at 400KHz		Value	Phase	Attenuation T4 at 400KHz		Value
Master			5.903	Master			5.131	Master			4.297
	4.000 (Minimum)	6.000 (Nominal)	8.000 (Maximum)		3.500 (Minimum)	5.500 (Nominal)	7.500 (Maximum)		2.500 (Minimum)	4.500 (Nominal)	6.500 (Maximum)
Phase	Attenuation T5 at 400KHz		Value								
Master			3.690								
	2.000 (Minimum)	4.000 (Nominal)	6.000 (Maximum)								

SCHLUMBERGER

Survey report

14-Dec-2008 17:15:56

Client.....: ESSO AUSTRALIA PTY LTD  
Field.....: MOONFISH

Well.....: SNA A-26A  
API number.....: 08ASQ0030  
Engineer.....: MA/MRG/JO

RIG:.....: ISDL 175  
STATE:.....: VICTORIA

Spud date.....: 10-NOV-08  
Last survey date.....: 11-Dec-08  
Total accepted surveys...: 363  
MD of first survey.....: 0.00 m  
MD of last survey.....: 6456.00 m

----- Survey calculation methods-----  
Method for positions.....: Minimum curvature  
Method for DLS.....: Mason & Taylor

----- Depth reference -----  
Permanent datum.....: MEAN SEA LEVEL  
Depth reference.....: DRILLER'S DEPTH  
GL above permanent.....: -55.00 m  
KB above permanent.....: TOP DRIVE  
DF above permanent.....: 41.70 m

----- Vertical section origin-----  
Latitude (+N/S-).....: 15.35 m  
Departure (+E/W-).....: -2.36 m

----- Platform reference point-----  
Latitude (+N/S-).....:  
Departure (+E/W-).....:

Azimuth from Vsect Origin to target: 15.36 degrees

----- Geomagnetic data -----  
Magnetic model.....: BGGM version 2008  
Magnetic date.....: 05-Dec-2008  
Magnetic field strength..: 1197.99 HCNT  
Magnetic dec (+E/W-).....: 13.00 degrees  
Magnetic dip.....: -68.69 degrees

----- MWD survey Reference Criteria -----  
Reference G.....: 1000.02 mGal  
Reference H.....: 1197.99 HCNT  
Reference Dip.....: -68.69 degrees  
Tolerance of G.....: (+/-) 2.50 mGal  
Tolerance of H.....: (+/-) 6.00 HCNT  
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Corrections -----  
Magnetic dec (+E/W-).....: 13.00 degrees  
Grid convergence (+E/W-)..: -0.63 degrees  
Total az corr (+E/W-).....: 13.63 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

==	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
Seq	Measured	Incl	Azimuth	Course	TVD	Vertical	Displ	Displ	Total	At	DLS	Srvy	Tool	Corr	
#	depth	angle	angle	length	depth	section	N/S	E/W	displ	trim	/deg/	tool	corr		

#	depth	angle	angle	length	depth	section	+N/S-	+E/W-	displ	Azim	(deg/	tool	corr
-	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(m)	(m)	(deg)	100f)	type	(deg)
---	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1	0.00	0.00	0.00	0.00	0.00	-14.80	0.00	-2.36	2.36	270.00	0.00	TIP	None
2	9.08	0.00	0.00	9.08	9.08	-14.80	0.00	-2.36	2.36	270.00	0.00	MWD_M	None
3	59.08	0.58	240.11	50.00	59.08	-14.98	-0.13	-2.58	2.58	267.20	0.35	MWD_M	None
4	64.08	0.57	237.77	5.00	64.08	-15.02	-0.15	-2.62	2.63	266.68	0.16	MWD_M	None
5	69.08	0.57	235.38	5.00	69.08	-15.06	-0.18	-2.66	2.67	266.15	0.14	MWD_M	None
6	74.08	0.56	232.95	5.00	74.08	-15.09	-0.21	-2.70	2.71	265.60	0.16	MWD_M	None
7	79.08	0.56	230.49	5.00	79.08	-15.13	-0.24	-2.74	2.75	265.03	0.15	MWD_M	None
8	84.08	0.56	228.01	5.00	84.08	-15.17	-0.27	-2.78	2.79	264.44	0.15	MWD_M	None
9	89.08	0.62	224.12	5.00	89.08	-15.22	-0.31	-2.82	2.83	263.80	0.44	MWD_M	None
10	94.08	0.63	213.04	5.00	94.08	-15.27	-0.35	-2.85	2.87	263.03	0.74	MWD_M	None
11	99.08	0.68	206.26	5.00	99.08	-15.32	-0.40	-2.88	2.91	262.12	0.56	MWD_M	None
12	104.08	0.74	198.91	5.00	104.08	-15.38	-0.46	-2.90	2.94	261.08	0.66	MWD_M	None
13	109.08	0.87	187.03	5.00	109.08	-15.45	-0.52	-2.92	2.96	259.82	1.29	MWD_M	None
14	114.08	0.92	187.58	5.00	114.08	-15.53	-0.60	-2.93	2.99	258.39	0.31	MWD_M	None
15	119.08	1.18	171.81	5.00	119.07	-15.62	-0.69	-2.92	3.01	256.69	2.36	MWD_M	None
16	124.08	1.15	177.50	5.00	124.07	-15.71	-0.79	-2.92	3.02	254.78	0.73	MWD_M	None
17	129.08	1.45	168.32	5.00	129.07	-15.82	-0.91	-2.90	3.04	252.67	2.22	MWD_M	None
18	134.08	1.51	168.00	5.00	134.07	-15.93	-1.03	-2.87	3.05	250.26	0.37	MWD_M	None
19	139.08	1.63	169.37	5.00	139.07	-16.05	-1.17	-2.85	3.08	247.73	0.77	MWD_M	None
20	144.08	1.80	165.89	5.00	144.07	-16.19	-1.31	-2.81	3.11	245.01	1.21	MWD_M	None
21	149.08	1.87	165.61	5.00	149.06	-16.33	-1.47	-2.78	3.14	242.14	0.43	MWD_M	None
22	154.08	2.12	159.45	5.00	154.06	-16.47	-1.63	-2.72	3.17	239.05	2.01	MWD_M	None
23	159.08	2.26	157.59	5.00	159.06	-16.62	-1.81	-2.65	3.21	235.69	0.96	MWD_M	None
24	164.08	2.43	153.14	5.00	164.05	-16.78	-2.00	-2.57	3.25	232.13	1.52	MWD_M	None
25	169.08	2.69	147.79	5.00	169.05	-16.94	-2.19	-2.46	3.29	228.28	2.15	MWD_M	None
26	174.08	2.91	141.78	5.00	174.04	-17.09	-2.39	-2.32	3.33	224.11	2.23	MWD_M	None
27	179.08	3.23	135.78	5.00	179.04	-17.24	-2.59	-2.14	3.36	219.55	2.76	MWD_M	None
28	184.08	3.40	133.46	5.00	184.03	-17.38	-2.79	-1.93	3.40	214.69	1.32	MWD_M	None
29	189.08	3.47	132.44	5.00	189.02	-17.52	-3.00	-1.71	3.45	209.76	0.57	MWD_M	None
30	194.08	3.53	132.35	5.00	194.01	-17.66	-3.20	-1.49	3.53	204.92	0.37	MWD_M	None
31	199.08	3.54	132.38	5.00	199.00	-17.80	-3.41	-1.26	3.64	200.28	0.06	MWD_M	None
32	204.08	3.59	131.53	5.00	203.99	-17.94	-3.62	-1.03	3.76	195.88	0.44	MWD_M	None
33	209.08	3.58	132.77	5.00	208.98	-18.08	-3.83	-0.80	3.91	191.77	0.48	MWD_M	None
34	214.08	3.61	131.87	5.00	213.97	-18.22	-4.04	-0.57	4.08	187.97	0.39	MWD_M	None
35	219.08	3.67	131.81	5.00	218.96	-18.36	-4.25	-0.33	4.26	184.43	0.37	MWD_M	None
36	224.08	3.61	130.96	5.00	223.95	-18.50	-4.46	-0.09	4.46	181.17	0.49	MWD_M	None
37	229.08	3.59	130.21	5.00	228.94	-18.64	-4.66	0.15	4.67	178.19	0.31	MWD_M	None
38	234.08	3.40	128.42	5.00	233.93	-18.76	-4.86	0.38	4.87	175.49	1.34	MWD_M	None
39	239.08	3.38	127.46	5.00	238.92	-18.87	-5.04	0.62	5.08	173.03	0.37	MWD_M	None
40	244.08	3.12	126.03	5.00	243.91	-18.98	-5.21	0.84	5.28	170.80	1.66	MWD_M	None
41	249.08	2.95	125.30	5.00	248.91	-19.07	-5.36	1.06	5.47	168.84	1.06	MWD_M	None
42	254.08	2.63	124.32	5.00	253.90	-19.15	-5.50	1.26	5.64	167.12	1.97	MWD_M	None
43	259.08	2.49	123.71	5.00	258.90	-19.22	-5.63	1.44	5.81	165.62	0.87	MWD_M	None
44	264.08	2.14	123.21	5.00	263.89	-19.28	-5.74	1.61	5.96	164.31	2.14	MWD_M	None
45	269.08	2.04	122.13	5.00	268.89	-19.34	-5.84	1.77	6.10	163.18	0.66	MWD_M	None
46	274.08	2.20	119.82	5.00	273.88	-19.39	-5.93	1.92	6.24	162.03	1.11	MWD_M	None
47	279.08	1.79	120.65	5.00	278.88	-19.43	-6.02	2.07	6.37	160.99	2.51	MWD_M	None
48	284.08	1.55	121.14	5.00	283.88	-19.47	-6.09	2.20	6.48	160.16	1.47	MWD_M	None
49	289.08	1.45	117.86	5.00	288.88	-19.50	-6.16	2.31	6.58	159.42	0.80	MWD_M	None
50	294.08	1.25	116.65	5.00	293.88	-19.53	-6.21	2.42	6.67	158.74	1.23	MWD_M	None
51	299.08	1.15	115.17	5.00	298.88	-19.55	-6.26	2.51	6.74	158.13	0.64	MWD_M	None
52	304.08	1.03	110.72	5.00	303.87	-19.56	-6.30	2.60	6.81	157.57	0.89	MWD_M	None
53	309.08	1.05	109.80	5.00	308.87	-19.57	-6.33	2.68	6.87	157.01	0.16	MWD_M	None
54	314.08	1.02	110.36	5.00	313.87	-19.57	-6.36	2.77	6.94	156.47	0.19	MWD_M	None
55	319.08	1.01	107.44	5.00	318.87	-19.58	-6.39	2.85	7.00	155.93	0.32	MWD_M	None
56	324.08	0.97	106.83	5.00	323.87	-19.58	-6.41	2.94	7.05	155.40	0.25	MWD_M	None
57	329.08	0.96	102.31	5.00	328.87	-19.58	-6.43	3.02	7.11	154.88	0.47	MWD_M	None
58	334.08	0.91	101.40	5.00	333.87	-19.58	-6.45	3.10	7.16	154.36	0.32	MWD_M	None
59	339.08	0.94	89.80	5.00	338.87	-19.56	-6.46	3.18	7.20	153.81	1.15	MWD_M	None
60	344.08	0.95	85.21	5.00	343.87	-19.54	-6.46	3.26	7.23	153.21	0.47	MWD_M	None
61	349.08	1.09	63.96	5.00	348.87	-19.49	-6.43	3.34	7.25	152.53	2.44	MWD_M	None
62	354.08	1.23	59.45	5.00	353.87	-19.42	-6.38	3.43	7.25	151.73	1.02	MWD_M	None
63	359.08	1.53	47.32	5.00	358.87	-19.33	-6.31	3.53	7.23	150.79	2.54	MWD_M	None
64	364.08	1.66	44.19	5.00	363.86	-19.21	-6.21	3.63	7.19	149.72	0.95	MWD_M	None
65	369.08	1.95	37.33	5.00	368.86	-19.06	-6.09	3.73	7.14	148.53	2.20	MWD_M	None
66	374.08	2.14	33.74	5.00	373.86	-18.90	-5.95	3.83	7.08	147.20	1.40	MWD_M	None
67	379.08	2.50	32.64	5.00	378.85	-18.70	-5.78	3.94	7.00	145.69	2.21	MWD_M	None
68	384.08	2.71	29.00	5.00	383.85	-18.49	-5.58	4.06	6.90	143.98	1.63	MWD_M	None
69	389.08	3.13	26.71	5.00	388.84	-18.24	-5.36	4.18	6.79	142.05	2.66	MWD_M	None
70	394.08	3.37	24.24	5.00	393.83	-17.96	-5.10	4.30	6.67	139.88	1.69	MWD_M	None
71	399.08	3.70	22.28	5.00	398.82	-17.65	-4.82	4.42	6.54	137.46	2.14	MWD_M	None
72	404.08	3.93	20.75	5.00	403.81	-17.32	-4.51	4.54	6.40	134.79	1.53	MWD_M	None
73	409.08	4.40	20.41	5.00	408.80	-16.96	-4.17	4.67	6.26	131.75	2.87	MWD_M	None
74	414.08	4.59	20.18	5.00	413.78	-16.57	-3.80	4.81	6.13	128.34	1.16	MWD_M	None
75	419.08	5.03	19.34	5.00	418.77	-16.15	-3.41	4.95	6.01	124.55	2.72	MWD_M	None
76	424.08	5.27	19.31	5.00	423.75	-15.70	-2.98	5.10	5.91	120.35	1.46	MWD_M	None
77	429.08	5.60	19.04	5.00	428.72	-15.23	-2.54	5.25	5.83	115.78	2.02	MWD_M	None
78	434.08	5.96	18.28	5.00	433.70	-14.73	-2.06	5.41	5.79	110.83	2.24	MWD_M	None

80	439.08	6.39	17.47	5.00	438.67	-14.19	-1.55	5.58	5.79	105.50	2.67	MWD_M	None
	444.08	6.82	15.96	5.00	443.64	-13.62	-1.00	5.74	5.83	99.84	2.83	MWD_M	None
81	449.08	7.25	15.10	5.00	448.60	-13.00	-0.41	5.91	5.92	93.94	2.70	MWD_M	None
82	454.08	7.60	14.33	5.00	453.56	-12.36	0.22	6.07	6.08	87.94	2.22	MWD_M	None
83	459.08	7.96	13.75	5.00	458.51	-11.68	0.88	6.24	6.30	82.01	2.25	MWD_M	None
84	464.08	8.44	13.43	5.00	463.46	-10.97	1.57	6.40	6.59	76.24	2.94	MWD_M	None
85	469.08	8.92	12.86	5.00	468.40	-10.21	2.30	6.57	6.97	70.69	2.97	MWD_M	None
86	474.08	9.40	12.31	5.00	473.34	-9.42	3.08	6.75	7.42	65.47	2.97	MWD_M	None
87	479.08	9.85	11.95	5.00	478.27	-8.58	3.90	6.92	7.94	60.62	2.77	MWD_M	None
88	484.08	10.24	11.95	5.00	483.19	-7.71	4.75	7.10	8.55	56.23	2.38	MWD_M	None
89	489.08	10.66	11.77	5.00	488.11	-6.81	5.64	7.29	9.22	52.28	2.57	MWD_M	None
90	494.08	11.08	11.79	5.00	493.02	-5.87	6.56	7.48	9.95	48.75	2.56	MWD_M	None
91	499.08	11.53	11.83	5.00	497.92	-4.89	7.52	7.68	10.75	45.61	2.74	MWD_M	None
92	504.08	12.20	11.77	5.00	502.82	-3.86	8.53	7.89	11.62	42.79	4.09	MWD_M	None
93	509.08	12.72	11.78	5.00	507.70	-2.79	9.58	8.11	12.56	40.25	3.17	MWD_M	None
94	514.08	13.18	11.95	5.00	512.57	-1.67	10.68	8.34	13.55	38.00	2.81	MWD_M	None
95	519.08	13.63	11.61	5.00	517.43	-0.51	11.81	8.58	14.60	35.99	2.78	MWD_M	None
96	524.08	14.09	11.55	5.00	522.29	0.68	12.99	8.82	15.70	34.18	2.81	MWD_M	None
97	529.08	14.50	11.48	5.00	527.13	1.92	14.20	9.07	16.85	32.57	2.50	MWD_M	None
98	534.08	14.92	11.90	5.00	531.97	3.18	15.44	9.32	18.04	31.13	2.64	MWD_M	None
99	539.08	15.36	11.71	5.00	536.80	4.49	16.72	9.59	19.27	29.84	2.70	MWD_M	None
100	544.08	15.76	12.02	5.00	541.61	5.82	18.03	9.87	20.55	28.69	2.49	MWD_M	None
101	549.08	16.15	12.28	5.00	546.42	7.20	19.37	10.16	21.88	27.67	2.42	MWD_M	None
102	554.08	16.63	12.98	5.00	551.22	8.61	20.75	10.47	23.24	26.76	3.16	MWD_M	None
103	559.08	17.06	12.96	5.00	556.00	10.05	22.16	10.79	24.65	25.96	2.62	MWD_M	None
104	564.08	17.49	13.07	5.00	560.78	11.54	23.61	11.13	26.10	25.23	2.63	MWD_M	None
105	569.08	17.97	13.22	5.00	565.54	13.06	25.09	11.47	27.59	24.57	2.94	MWD_M	None
106	574.08	18.39	13.17	5.00	570.29	14.62	26.61	11.83	29.12	23.96	2.56	MWD_M	None
107	579.08	18.79	13.22	5.00	575.03	16.21	28.16	12.19	30.69	23.41	2.44	MWD_M	None
108	584.08	19.22	13.20	5.00	579.76	17.84	29.75	12.56	32.29	22.90	2.62	MWD_M	None
109	589.08	19.56	13.54	5.00	584.47	19.50	31.36	12.95	33.93	22.43	2.18	MWD_M	None
110	594.08	19.95	13.19	5.00	589.18	21.19	33.01	13.34	35.60	22.00	2.48	MWD_M	None
111	599.08	20.33	13.16	5.00	593.87	22.91	34.68	13.73	37.30	21.60	2.32	MWD_M	None
112	604.08	20.74	13.17	5.00	598.56	24.66	36.39	14.13	39.04	21.22	2.50	MWD_M	None
113	609.08	21.04	13.19	5.00	603.23	26.44	38.13	14.54	40.81	20.87	1.83	MWD_M	None
114	614.08	21.50	13.22	5.00	607.89	28.25	39.89	14.95	42.60	20.54	2.80	MWD_M	None
115	619.08	21.94	13.33	5.00	612.53	30.10	41.69	15.38	44.44	20.24	2.69	MWD_M	None
116	624.08	22.39	13.17	5.00	617.16	31.99	43.53	15.81	46.31	19.96	2.77	MWD_M	None
117	629.08	22.74	13.37	5.00	621.78	33.90	45.40	16.25	48.22	19.69	2.18	MWD_M	None
118	634.08	23.24	13.26	5.00	626.38	35.86	47.30	16.70	50.16	19.44	3.06	MWD_M	None
119	639.08	23.59	13.38	5.00	630.97	37.84	49.23	17.16	52.14	19.21	2.15	MWD_M	None
120	644.08	24.12	13.25	5.00	635.54	39.86	51.20	17.62	54.15	18.99	3.25	MWD_M	None
121	649.08	24.46	13.58	5.00	640.10	41.92	53.20	18.10	56.19	18.79	2.23	MWD_M	None
122	654.08	24.89	13.55	5.00	644.64	44.00	55.23	18.59	58.27	18.60	2.62	MWD_M	None
123	659.08	25.18	13.79	5.00	649.17	46.12	57.29	19.09	60.38	18.43	1.87	MWD_M	None
124	664.08	25.74	13.77	5.00	653.69	48.27	59.37	19.60	62.52	18.27	3.41	MWD_M	None
125	669.08	26.12	14.13	5.00	658.18	50.45	61.49	20.13	64.71	18.12	2.51	MWD_M	None
126	674.08	26.66	14.31	5.00	662.66	52.68	63.65	20.67	66.92	17.99	3.33	MWD_M	None
127	679.08	26.97	14.34	5.00	667.13	54.93	65.83	21.23	69.17	17.87	1.89	MWD_M	None
128	684.08	27.45	14.63	5.00	671.57	57.22	68.05	21.80	71.46	17.77	3.04	MWD_M	None
129	689.08	27.68	15.50	5.00	676.01	59.53	70.28	22.40	73.77	17.68	2.83	MWD_M	None
130	694.08	28.28	14.99	5.00	680.42	61.88	72.55	23.02	76.11	17.61	3.94	MWD_M	None
131	699.08	28.76	15.19	5.00	684.81	64.26	74.85	23.64	78.50	17.53	2.98	MWD_M	None
132	704.08	29.36	15.37	5.00	689.18	66.69	77.19	24.28	80.92	17.46	3.70	MWD_M	None
133	709.08	29.91	15.44	5.00	693.53	69.16	79.58	24.94	83.39	17.40	3.36	MWD_M	None
134	714.08	30.46	15.51	5.00	697.85	71.68	82.00	25.61	85.91	17.35	3.36	MWD_M	None
135	719.08	30.98	15.88	5.00	702.15	74.23	84.46	26.30	88.46	17.30	3.37	MWD_M	None
136	724.08	31.50	15.91	5.00	706.43	76.83	86.95	27.01	91.05	17.26	3.17	MWD_M	None
137	729.08	32.15	16.13	5.00	710.67	79.46	89.49	27.74	93.69	17.22	4.02	MWD_M	None
138	734.08	32.53	16.22	5.00	714.90	82.14	92.06	28.48	96.36	17.19	2.34	MWD_M	None
139	739.08	33.12	16.56	5.00	719.10	84.85	94.66	29.25	99.07	17.17	3.77	MWD_M	None
140	744.08	33.58	16.63	5.00	723.28	87.59	97.29	30.03	101.82	17.16	2.81	MWD_M	None
141	749.08	34.23	16.64	5.00	727.43	90.38	99.96	30.83	104.61	17.14	3.96	MWD_M	None
142	754.08	34.68	16.71	5.00	731.55	93.21	102.67	31.64	107.44	17.13	2.75	MWD_M	None
143	759.08	35.33	16.71	5.00	735.64	96.08	105.42	32.47	110.31	17.12	3.96	MWD_M	None
144	764.08	35.74	16.90	5.00	739.71	98.98	108.20	33.31	113.21	17.11	2.59	MWD_M	None
145	769.08	36.44	16.94	5.00	743.75	101.93	111.02	34.17	116.16	17.11	4.27	MWD_M	None
146	774.08	36.88	17.00	5.00	747.77	104.91	113.87	35.04	119.14	17.10	2.69	MWD_M	None
147	779.08	37.65	17.10	5.00	751.74	107.94	116.77	35.93	122.17	17.10	4.71	MWD_M	None
148	784.08	37.96	17.09	5.00	755.69	111.00	119.70	36.83	125.24	17.10	1.89	MWD_M	None
149	789.08	38.71	17.08	5.00	759.62	114.10	122.66	37.74	128.34	17.10	4.57	MWD_M	None
150	794.08	39.01	17.21	5.00	763.51	117.24	125.66	38.66	131.47	17.10	1.90	MWD_M	None
151	799.08	39.73	17.32	5.00	767.38	120.41	128.69	39.60	134.65	17.11	4.41	MWD_M	None
152	804.08	40.04	17.35	5.00	771.21	123.61	131.75	40.56	137.85	17.11	1.89	MWD_M	None
153	809.08	40.79	17.37	5.00	775.02	126.85	134.84	41.53	141.09	17.12	4.57	MWD_M	None
154	814.08	41.26	16.88	5.00	778.79	130.13	137.98	42.49	144.38	17.12	3.47	MWD_M	None
155	819.08	41.82	17.36	5.00	782.53	133.44	141.15	43.47	147.69	17.12	3.93	MWD_M	None
156	824.08	42.27	17.45	5.00	786.25	136.79	144.34	44.47	151.04	17.12	2.77	MWD_M	None
157	829.08	42.86	17.48	5.00	789.93	140.17	147.57	45.49	154.42	17.13	3.60	MWD_M	None
158	834.08	43.41	17.44	5.00	793.58	143.59	150.83	46.51	157.84	17.14	3.36	MWD_M	None

159	839.08	43.87	17.47	5.00	797.20	147.04	154.12	47.55	161.29	17.14	2.81	MWD_M	None
160	844.08	44.42	17.45	5.00	800.78	150.52	157.44	48.59	164.77	17.15	3.35	MWD_M	None
161	849.08	44.93	17.49	5.00	804.34	154.03	160.80	49.65	168.29	17.16	3.11	MWD_M	None
	854.08	45.62	17.46	5.00	807.86	157.58	164.19	50.71	171.84	17.16	4.21	MWD_M	None
	859.08	46.11	17.41	5.00	811.34	161.16	167.61	51.79	175.43	17.17	3.00	MWD_M	None
	864.08	46.86	17.42	5.00	814.78	164.79	171.07	52.87	179.05	17.18	4.57	MWD_M	None
	869.08	47.24	17.38	5.00	818.19	168.45	174.56	53.97	182.71	17.18	2.32	MWD_M	None
166	874.08	48.14	17.36	5.00	821.56	172.14	178.09	55.07	186.41	17.18	5.49	MWD_M	None
167	879.08	48.59	17.53	5.00	824.88	175.88	181.66	56.19	190.15	17.19	2.85	MWD_M	None
168	884.08	49.52	17.60	5.00	828.15	179.65	185.26	57.33	193.93	17.20	5.68	MWD_M	None
169	889.08	49.88	17.60	5.00	831.39	183.46	188.89	58.49	197.74	17.20	2.19	MWD_M	None
170	894.08	50.70	17.56	5.00	834.58	187.30	192.56	59.65	201.59	17.21	5.00	MWD_M	None
171	899.08	50.97	17.67	5.00	837.74	191.18	196.25	60.82	205.46	17.22	1.73	MWD_M	None
	904.08	51.84	17.65	5.00	840.86	195.08	199.98	62.01	209.37	17.23	5.30	MWD_M	None
	909.08	51.98	17.68	5.00	843.94	199.01	203.73	63.20	213.30	17.23	0.87	MWD_M	None
	925.83	52.78	16.71	16.75	854.17	212.27	216.40	67.12	226.57	17.23	2.02	MWD_M	None
	942.60	56.44	15.08	16.77	863.88	225.94	229.55	70.86	240.24	17.16	7.08	MWD_M	None
176	985.12	61.91	10.72	42.52	885.67	262.39	265.12	78.97	276.63	16.59	4.75	MWD_M	None
177	1014.73	64.76	8.76	29.61	898.95	288.72	291.20	83.44	302.92	15.99	3.44	MWD_M	None
178	1043.64	66.87	7.23	28.91	910.80	314.87	317.31	87.10	329.05	15.35	2.67	MWD_M	None
179	1072.81	69.09	5.78	29.17	921.73	341.59	344.18	90.16	355.79	14.68	2.71	MWD_M	None
180	1101.53	71.57	3.80	28.72	931.40	368.17	371.12	92.42	382.46	13.98	3.29	MWD_M	None
181	1131.12	74.14	2.13	29.59	940.12	395.78	399.36	93.88	410.24	13.23	3.12	MWD_M	None
182	1160.48	76.77	0.56	29.36	947.50	423.35	427.77	94.54	438.09	12.46	3.15	MWD_M	None
183	1189.75	79.35	358.98	29.27	953.55	450.93	456.40	94.42	466.06	11.69	3.13	MWD_M	None
184	1218.32	81.27	359.33	28.57	958.36	477.97	484.56	94.01	493.59	10.98	2.08	MWD_M	None
185	1247.65	82.54	358.97	29.33	962.49	505.86	513.59	93.58	522.05	10.33	1.37	MWD_M	None
186	1276.98	83.95	358.89	29.33	965.94	533.79	542.71	93.04	550.63	9.73	1.47	MWD_M	None
187	1306.40	83.61	358.52	29.42	969.13	561.81	571.95	92.37	579.36	9.17	0.52	MWD_M	None
188	1335.18	83.58	358.72	28.78	972.34	589.20	600.54	91.69	607.50	8.68	0.21	MWD_M	None
189	1364.58	83.72	357.92	29.40	975.59	617.14	629.75	90.83	636.27	8.21	0.84	MWD_M	None
190	1393.68	83.61	357.93	29.10	978.80	644.73	658.65	89.78	664.74	7.76	0.12	MWD_M	None
191	1423.26	83.49	357.72	29.58	982.13	672.76	688.02	88.67	693.71	7.34	0.25	MWD_M	None
192	1451.95	83.52	357.71	28.69	985.37	699.92	716.51	87.53	721.83	6.96	0.03	MWD_M	None
193	1481.51	83.93	357.89	29.56	988.60	727.94	745.87	86.40	750.86	6.61	0.46	MWD_M	None
194	1510.51	83.64	358.18	29.00	991.74	755.46	774.68	85.41	779.38	6.29	0.43	MWD_M	None
195	1539.79	83.67	357.97	29.28	994.98	783.24	803.76	84.44	808.19	6.00	0.22	MWD_M	None
196	1568.63	83.72	358.01	28.84	998.14	810.60	832.41	83.43	836.58	5.72	0.07	MWD_M	None
197	1597.73	83.89	357.90	29.10	1001.28	838.21	861.32	82.40	865.26	5.46	0.21	MWD_M	None
198	1627.14	83.95	357.90	29.41	1004.40	866.10	890.55	81.33	894.26	5.22	0.06	MWD_M	None
199	1656.35	83.75	358.23	29.21	1007.53	893.83	919.57	80.35	923.08	4.99	0.40	MWD_M	None
200	1685.17	83.81	358.13	28.82	1010.65	921.21	948.21	79.44	951.53	4.79	0.12	MWD_M	None
201	1714.54	83.95	358.06	29.37	1013.78	949.09	977.40	78.46	980.54	4.59	0.16	MWD_M	None
202	1744.05	83.89	357.99	29.51	1016.91	977.10	1006.72	77.45	1009.70	4.40	0.09	MWD_M	None
203	1773.27	83.81	358.17	29.22	1020.04	1004.84	1035.76	76.48	1038.58	4.22	0.20	MWD_M	None
204	1801.85	83.81	358.45	28.58	1023.12	1032.01	1064.16	75.64	1066.84	4.07	0.30	MWD_M	None
205	1830.92	83.87	358.29	29.07	1026.24	1059.65	1093.05	74.82	1095.61	3.92	0.18	MWD_M	None
206	1860.59	83.83	358.31	29.67	1029.42	1087.85	1122.54	73.94	1124.97	3.77	0.05	MWD_M	None
207	1889.80	83.89	358.19	29.21	1032.54	1115.61	1151.57	73.06	1153.88	3.63	0.14	MWD_M	None
208	1918.20	83.98	358.28	28.40	1035.54	1142.60	1179.79	72.19	1182.00	3.50	0.14	MWD_M	None
209	1947.29	83.92	358.03	29.09	1038.61	1170.23	1208.71	71.26	1210.80	3.37	0.27	MWD_M	None
210	1976.94	83.75	358.20	29.65	1041.79	1198.38	1238.17	70.29	1240.16	3.25	0.25	MWD_M	None
211	2006.35	83.84	357.62	29.41	1044.97	1226.28	1267.39	69.22	1269.28	3.13	0.60	MWD_M	None
212	2035.33	83.75	357.60	28.98	1048.10	1253.71	1296.17	68.02	1297.96	3.00	0.10	MWD_M	None
213	2064.96	83.78	357.54	29.63	1051.32	1281.76	1325.60	66.77	1327.28	2.88	0.07	MWD_M	None
214	2093.93	83.95	357.77	28.97	1054.42	1309.20	1354.38	65.59	1355.97	2.77	0.30	MWD_M	None
215	2123.22	83.98	357.50	29.29	1057.50	1336.94	1383.48	64.39	1384.98	2.66	0.28	MWD_M	None
216	2152.02	83.95	357.57	28.80	1060.53	1364.21	1412.10	63.16	1413.51	2.56	0.08	MWD_M	None
217	2181.27	83.75	357.55	29.25	1063.66	1391.90	1441.15	61.92	1442.48	2.46	0.21	MWD_M	None
218	2210.82	83.98	357.42	29.55	1066.82	1419.86	1470.50	60.63	1471.75	2.36	0.27	MWD_M	None
219	2240.04	83.81	357.91	29.22	1069.93	1447.54	1499.53	59.45	1500.71	2.27	0.54	MWD_M	None
220	2268.82	83.72	358.04	28.78	1073.05	1474.84	1528.13	58.44	1529.24	2.19	0.17	MWD_M	None
221	2297.96	83.87	358.30	29.14	1076.20	1502.52	1557.08	57.51	1558.14	2.12	0.31	MWD_M	None
222	2327.20	83.72	358.23	29.24	1079.36	1530.30	1586.14	56.63	1587.15	2.04	0.17	MWD_M	None
223	2356.53	83.81	358.16	29.33	1082.55	1558.16	1615.28	55.71	1616.24	1.98	0.12	MWD_M	None
224	2385.14	83.87	358.00	28.61	1085.62	1585.32	1643.71	54.76	1644.62	1.91	0.18	MWD_M	None
225	2414.60	83.78	358.05	29.46	1088.79	1613.28	1672.98	53.75	1673.84	1.84	0.11	MWD_M	None
226	2443.99	83.84	358.07	29.39	1091.95	1641.18	1702.18	52.76	1703.00	1.78	0.07	MWD_M	None
227	2473.13	83.83	358.05	29.14	1095.08	1668.84	1731.14	51.78	1731.91	1.71	0.02	MWD_M	None
228	2501.94	83.89	357.98	28.81	1098.17	1696.18	1759.76	50.79	1760.50	1.65	0.10	MWD_M	None
229	2531.15	83.83	357.97	29.21	1101.29	1723.90	1788.79	49.76	1789.48	1.59	0.06	MWD_M	None
230	2560.36	83.69	357.86	29.21	1104.46	1751.60	1817.81	48.71	1818.46	1.53	0.19	MWD_M	None
231	2589.71	83.75	358.08	29.35	1107.67	1779.44	1846.96	47.67	1847.58	1.48	0.24	MWD_M	None
232	2618.49	83.72	358.05	28.78	1110.82	1806.75	1875.55	46.71	1876.13	1.43	0.04	MWD_M	None
233	2647.50	83.66	358.08	29.01	1114.00	1834.28	1904.37	45.73	1904.92	1.38	0.07	MWD_M	None
234	2676.96	83.66	358.05	29.46	1117.26	1862.24	1933.63	44.74	1934.15	1.33	0.03	MWD_M	None
235	2705.94	83.63	358.14	28.98	1120.47	1889.74	1962.42	43.79	1962.91	1.28	0.10	MWD_M	None
236	2735.06	83.75	358.31	29.12	1123.67	1917.40	1991.35	42.89	1991.81	1.23	0.22	MWD_M	None
237	2764.38	83.90	358.23	29.32	1126.82	1945.27	2020.48	42.01	2020.92	1.19	0.18	MWD_M	None
238	2793.63	83.93	358.23	29.35	1130.05	1973.66	2049.55	41.14	2049.97	1.15	0.14	MWD_M	None

238	2793.63	83.81	358.33	29.25	1129.95	1973.06	2049.55	41.14	2049.97	1.15	0.14	MWD_M	None
239	2822.87	83.75	358.06	29.24	1133.12	2000.84	2078.61	40.22	2079.00	1.11	0.29	MWD_M	None
240	2851.62	83.78	358.11	28.75	1136.24	2028.13	2107.17	39.27	2107.54	1.07	0.06	MWD_M	None
241	2879.56	83.75	357.94	27.94	1139.28	2054.64	2134.93	38.31	2135.27	1.03	0.19	MWD_M	None
242	2910.12	83.83	357.88	30.56	1142.58	2083.62	2165.29	37.20	2165.61	0.98	0.10	MWD_M	None
243	2939.72	83.83	356.99	29.60	1145.76	2111.62	2194.69	35.88	2194.98	0.94	0.91	MWD_M	None
244	2967.89	83.81	357.60	28.17	1148.80	2138.25	2222.66	34.56	2222.93	0.89	0.66	MWD_M	None
245	2997.83	83.81	357.91	29.94	1152.02	2166.62	2252.41	33.40	2252.65	0.85	0.31	MWD_M	None
246	3026.45	83.78	357.90	28.62	1155.12	2193.76	2280.84	32.36	2281.07	0.81	0.03	MWD_M	None
247	3056.43	83.75	357.79	29.98	1158.37	2222.18	2310.62	31.24	2310.83	0.77	0.12	MWD_M	None
248	3084.75	83.72	357.72	28.32	1161.46	2249.02	2338.75	30.13	2338.94	0.74	0.08	MWD_M	None
249	3113.98	83.78	357.85	29.23	1164.65	2276.72	2367.78	29.01	2367.96	0.70	0.15	MWD_M	None
250	3143.28	83.69	357.64	29.30	1167.84	2304.48	2396.89	27.86	2397.05	0.67	0.24	MWD_M	None
251	3172.76	83.81	357.78	29.48	1171.05	2332.40	2426.17	26.69	2426.32	0.63	0.19	MWD_M	None
252	3201.21	83.66	357.50	28.45	1174.16	2359.34	2454.42	25.53	2454.56	0.60	0.34	MWD_M	None
253	3230.78	83.78	357.84	29.57	1177.39	2387.34	2483.79	24.33	2483.91	0.56	0.37	MWD_M	None
254	3260.24	83.75	357.88	29.46	1180.59	2415.27	2513.06	23.24	2513.17	0.53	0.05	MWD_M	None
255	3289.18	83.69	357.86	28.94	1183.76	2442.71	2541.80	22.17	2541.90	0.50	0.07	MWD_M	None
256	3318.13	83.69	358.42	28.95	1186.94	2470.19	2570.56	21.24	2570.65	0.47	0.59	MWD_M	None
257	3347.57	83.81	358.66	29.44	1190.14	2498.21	2599.82	20.49	2599.90	0.45	0.28	MWD_M	None
258	3377.12	83.69	358.85	29.55	1193.36	2526.36	2629.19	19.85	2629.26	0.43	0.23	MWD_M	None
259	3406.44	83.78	358.79	29.32	1196.56	2554.29	2658.33	19.25	2658.40	0.41	0.11	MWD_M	None
260	3435.20	83.78	359.05	28.76	1199.68	2581.72	2686.91	18.71	2686.98	0.40	0.27	MWD_M	None
261	3464.13	83.81	359.07	28.93	1202.80	2609.32	2715.67	18.24	2715.73	0.38	0.04	MWD_M	None
262	3493.42	83.86	359.20	29.29	1205.95	2637.28	2744.79	17.80	2744.84	0.37	0.14	MWD_M	None
263	3522.89	83.90	359.25	29.47	1209.09	2665.43	2774.08	17.41	2774.14	0.36	0.07	MWD_M	None
264	3551.59	83.84	359.18	28.70	1212.16	2692.84	2802.62	17.02	2802.67	0.35	0.10	MWD_M	None
265	3580.88	83.84	359.05	29.29	1215.30	2720.80	2831.73	16.57	2831.78	0.34	0.13	MWD_M	None
266	3610.21	83.84	359.07	29.33	1218.45	2748.79	2860.89	16.09	2860.94	0.32	0.02	MWD_M	None
267	3639.20	83.75	358.93	28.99	1221.58	2776.44	2889.71	15.58	2889.75	0.31	0.17	MWD_M	None
268	3667.94	83.83	359.08	28.74	1224.69	2803.86	2918.27	15.09	2918.31	0.30	0.18	MWD_M	None
269	3697.38	83.72	358.90	29.44	1227.88	2831.94	2947.54	14.57	2947.57	0.28	0.22	MWD_M	None
270	3726.30	83.84	358.61	28.92	1231.01	2859.49	2976.28	13.95	2976.31	0.27	0.33	MWD_M	None
271	3755.91	83.78	358.49	29.61	1234.21	2887.67	3005.71	13.20	3005.74	0.25	0.14	MWD_M	None
272	3784.42	83.52	358.58	28.51	1237.36	2914.79	3034.03	12.48	3034.06	0.24	0.29	MWD_M	None
273	3813.73	83.52	358.49	29.31	1240.67	2942.66	3063.15	11.73	3063.17	0.22	0.09	MWD_M	None
274	3843.18	83.61	358.25	29.45	1243.97	2970.65	3092.40	10.90	3092.42	0.20	0.26	MWD_M	None
275	3872.58	83.58	358.27	29.40	1247.25	2998.58	3121.60	10.01	3121.62	0.18	0.04	MWD_M	None
276	3901.17	83.63	358.36	28.59	1250.43	3025.74	3150.00	9.18	3150.01	0.17	0.11	MWD_M	None
277	3930.54	83.55	358.00	29.37	1253.71	3053.62	3179.17	8.25	3179.18	0.15	0.38	MWD_M	None
278	3959.96	83.43	358.01	29.42	1257.05	3081.52	3208.39	7.23	3208.39	0.13	0.12	MWD_M	None
279	3989.15	83.55	358.11	29.19	1260.36	3109.21	3237.37	6.25	3237.38	0.11	0.16	MWD_M	None
280	4017.43	83.69	358.25	28.28	1263.50	3136.06	3265.46	5.36	3265.47	0.09	0.21	MWD_M	None
281	4047.15	83.66	358.27	29.72	1266.77	3164.30	3294.99	4.46	3294.99	0.08	0.04	MWD_M	None
282	4076.39	83.69	357.94	29.24	1269.99	3192.05	3324.03	3.50	3324.04	0.06	0.34	MWD_M	None
283	4105.12	83.66	357.67	28.73	1273.16	3219.28	3352.57	2.41	3352.57	0.04	0.29	MWD_M	None
284	4134.59	83.52	357.69	29.47	1276.45	3247.18	3381.83	1.22	3381.83	0.02	0.15	MWD_M	None
285	4163.51	83.61	357.96	28.92	1279.69	3274.58	3410.55	0.13	3410.55	0.00	0.30	MWD_M	None
286	4192.60	83.55	357.78	29.09	1282.94	3302.15	3439.43	-0.94	3439.43	359.98	0.20	MWD_M	None
287	4221.10	83.55	357.98	28.50	1286.15	3329.16	3467.73	-1.99	3467.73	359.97	0.21	MWD_M	None
288	4250.55	83.55	357.75	29.45	1289.45	3357.07	3496.98	-3.08	3496.98	359.95	0.24	MWD_M	None
289	4279.61	83.55	357.64	29.06	1292.72	3384.59	3525.83	-4.24	3525.83	359.93	0.11	MWD_M	None
290	4308.95	83.55	358.01	29.34	1296.01	3412.39	3554.96	-5.35	3554.97	359.91	0.38	MWD_M	None
291	4337.80	83.40	357.78	28.85	1299.29	3439.73	3583.61	-6.40	3583.61	359.90	0.29	MWD_M	None
292	4367.03	83.63	357.70	29.23	1302.59	3467.41	3612.63	-7.55	3612.63	359.88	0.25	MWD_M	None
293	4396.41	83.60	357.78	29.38	1305.86	3495.24	3641.80	-8.70	3641.81	359.86	0.09	MWD_M	None
294	4425.87	83.66	358.03	29.46	1309.13	3523.17	3671.06	-9.77	3671.07	359.85	0.26	MWD_M	None
295	4454.60	83.72	357.76	28.73	1312.29	3550.41	3699.60	-10.82	3699.61	359.83	0.29	MWD_M	None
296	4483.91	83.78	357.58	29.31	1315.48	3578.17	3728.71	-12.00	3728.73	359.82	0.20	MWD_M	None
297	4513.33	83.72	357.44	29.42	1318.68	3606.00	3757.93	-13.27	3757.95	359.80	0.16	MWD_M	None
298	4542.48	83.75	357.29	29.15	1321.86	3633.56	3786.87	-14.60	3786.90	359.78	0.16	MWD_M	None
299	4571.38	83.66	357.37	28.90	1325.03	3660.88	3815.57	-15.94	3815.60	359.76	0.13	MWD_M	None
300	4600.33	83.69	357.39	28.95	1328.22	3688.25	3844.31	-17.26	3844.35	359.74	0.04	MWD_M	None
301	4630.05	83.78	357.52	29.72	1331.46	3716.36	3873.82	-18.57	3873.87	359.73	0.16	MWD_M	None
302	4659.08	83.69	357.71	29.03	1334.63	3743.84	3902.65	-19.77	3902.70	359.71	0.22	MWD_M	None
303	4687.99	83.52	357.57	28.91	1337.85	3771.21	3931.36	-20.95	3931.42	359.69	0.23	MWD_M	None
304	4717.29	83.90	357.98	29.30	1341.06	3798.97	3960.46	-22.08	3960.52	359.68	0.58	MWD_M	None
305	4746.43	83.81	358.01	29.14	1344.18	3826.62	3989.42	-23.10	3989.48	359.67	0.10	MWD_M	None
306	4775.73	83.72	357.84	29.30	1347.36	3854.41	4018.52	-24.15	4018.60	359.66	0.20	MWD_M	None
307	4804.51	83.81	357.54	28.78	1350.49	3881.67	4047.11	-25.31	4047.19	359.64	0.33	MWD_M	None
308	4833.86	83.84	358.67	29.35	1353.65	3909.54	4076.27	-26.27	4076.36	359.63	1.17	MWD_M	None
309	4863.36	83.60	358.34	29.50	1356.87	3937.60	4105.59	-27.04	4105.68	359.62	0.42	MWD_M	None
310	4892.48	83.83	358.33	29.12	1360.06	3965.28	4134.52	-27.88	4134.61	359.61	0.24	MWD_M	None
311	4921.35	83.69	358.21	28.87	1363.20	3992.71	4163.21	-28.74	4163.30	359.60	0.19	MWD_M	None
312	4950.53	83.84	358.42	29.18	1366.37	4020.44	4192.20	-29.60	4192.30	359.60	0.27	MWD_M	None
313	4980.12	83.66	358.43	29.59	1369.59	4048.58	4221.60	-30.40	4221.71	359.59	0.19	MWD_M	None
314	5009.46	83.78	358.89	29.34	1372.80	4076.51	4250.76	-31.09	4250.87	359.58	0.49	MWD_M	None
315	5037.97	83.66	359.11	28.51	1375.92	4103.71	4279.09	-31.58	4279.21	359.58	0.27	MWD_M	None
316	5067.57	83.66	359.33	29.60	1379.19	4131.96	4308.51	-31.98	4308.63	359.57	0.23	MWD_M	None
317	5096.52	83.61	359.54	28.95	1382.40	4159.63	4337.28	-32.26	4337.40	359.57	0.23	MWD_M	None

318	5126.20	83.63	359.95	29.68	1385.69	4188.04	4366.78	-32.40	4366.90	359.58	0.42	MWD_M	None
319	5154.85	82.91	0.04	28.65	1389.05	4215.48	4395.23	-32.40	4395.35	359.58	0.77	MWD_M	None
320	5184.26	79.96	359.88	29.41	1393.43	4243.51	4424.31	-32.42	4424.43	359.58	3.06	MWD_M	None
321	5242.51	72.28	358.99	58.25	1407.39	4297.85	4480.81	-32.97	4480.93	359.58	4.04	MWD_M	None
322	5271.33	69.03	358.04	28.82	1416.94	4323.87	4507.99	-33.67	4508.12	359.57	3.57	MWD_M	None
323	5300.84	66.13	356.70	29.51	1428.19	4349.82	4535.24	-34.92	4535.37	359.56	3.26	MWD_M	None
324	5329.62	63.37	355.77	28.78	1440.47	4374.41	4561.21	-36.63	4561.36	359.54	3.06	MWD_M	None
325	5359.12	60.23	355.31	29.50	1454.41	4398.86	4587.13	-38.65	4587.29	359.52	3.27	MWD_M	None
326	5388.65	57.25	355.08	29.53	1469.73	4422.56	4612.28	-40.76	4612.46	359.49	3.08	MWD_M	None
327	5417.97	53.51	355.34	29.32	1486.39	4445.20	4636.32	-42.77	4636.51	359.47	3.89	MWD_M	None
328	5447.17	49.80	357.07	29.20	1504.50	4466.83	4659.16	-44.30	4659.37	359.46	4.12	MWD_M	None
329	5465.29	47.44	358.20	18.12	1516.48	4479.78	4672.75	-44.86	4672.96	359.45	4.22	MWD_M	None
330	5504.48	44.01	358.64	39.19	1543.83	4506.61	4700.79	-45.64	4701.01	359.44	2.68	MWD_M	None
331	5532.97	40.34	358.53	28.49	1564.94	4524.93	4719.91	-46.11	4720.13	359.44	3.93	MWD_M	None
332	5562.30	36.75	358.53	29.33	1587.88	4542.42	4738.18	-46.58	4738.41	359.44	3.73	MWD_M	None
333	5591.53	34.63	358.43	29.23	1611.62	4558.73	4755.22	-47.03	4755.45	359.43	2.21	MWD_M	None
334	5620.80	32.71	358.02	29.27	1635.97	4574.24	4771.44	-47.53	4771.68	359.43	2.01	MWD_M	None
335	5649.72	31.49	358.04	28.92	1660.47	4588.91	4786.80	-48.06	4787.04	359.42	1.29	MWD_M	None
336	5679.01	31.44	357.12	29.29	1685.46	4603.47	4802.07	-48.71	4802.32	359.42	0.50	MWD_M	None
337	5708.73	31.64	356.93	29.72	1710.79	4618.23	4817.60	-49.51	4817.85	359.41	0.23	MWD_M	None
338	5737.78	31.67	356.55	29.05	1735.51	4632.67	4832.82	-50.38	4833.08	359.40	0.21	MWD_M	None
339	5766.77	29.44	355.60	28.99	1760.48	4646.58	4847.52	-51.39	4847.79	359.39	2.40	MWD_M	None
340	5795.91	27.64	356.38	29.14	1786.07	4659.72	4861.41	-52.36	4861.69	359.38	1.92	MWD_M	None
341	5825.35	26.89	355.68	29.44	1812.24	4672.44	4874.86	-53.29	4875.15	359.37	0.84	MWD_M	None
342	5854.53	27.34	355.94	29.18	1838.22	4684.98	4888.13	-54.27	4888.43	359.36	0.49	MWD_M	None
343	5883.50	27.60	357.84	28.97	1863.92	4697.65	4901.47	-54.99	4901.78	359.36	0.96	MWD_M	None
344	5912.24	27.77	359.77	28.74	1889.37	4710.45	4914.82	-55.27	4915.13	359.36	0.97	MWD_M	None
345	5941.77	27.64	359.21	29.53	1915.52	4723.65	4928.55	-55.39	4928.86	359.36	0.30	MWD_M	None
346	5971.02	27.38	359.28	29.25	1941.46	4736.63	4942.06	-55.57	4942.37	359.36	0.27	MWD_M	None
347	6000.53	27.41	359.59	29.51	1967.66	4749.69	4955.63	-55.70	4955.95	359.36	0.15	MWD_M	None
348	6029.73	27.69	1.31	29.20	1993.55	4762.74	4969.14	-55.59	4969.45	359.36	0.88	MWD_M	None
349	6059.06	27.62	0.02	29.33	2019.53	4775.91	4982.75	-55.44	4983.06	359.36	0.63	MWD_M	None
350	6088.26	27.80	359.49	29.20	2045.38	4788.98	4996.33	-55.49	4996.63	359.36	0.32	MWD_M	None
351	6117.69	27.61	357.48	29.43	2071.43	4802.08	5010.00	-55.86	5010.31	359.36	0.99	MWD_M	None
352	6146.78	27.48	355.74	29.09	2097.23	4814.81	5023.43	-56.65	5023.75	359.35	0.85	MWD_M	None
353	6176.12	27.44	356.35	29.34	2123.26	4827.58	5036.93	-57.58	5037.26	359.35	0.30	MWD_M	None
354	6205.61	27.56	354.21	29.49	2149.42	4840.37	5050.50	-58.70	5050.84	359.33	1.03	MWD_M	None
355	6234.75	27.37	353.94	29.14	2175.28	4852.89	5063.86	-60.09	5064.22	359.32	0.24	MWD_M	None
356	6263.96	27.52	354.19	29.21	2201.20	4865.43	5077.25	-61.48	5077.63	359.31	0.20	MWD_M	None
357	6293.53	27.37	355.16	29.57	2227.44	4878.18	5090.82	-62.75	5091.21	359.29	0.49	MWD_M	None
358	6322.54	27.53	357.02	29.01	2253.19	4890.81	5104.16	-63.66	5104.56	359.29	0.92	MWD_M	None
359	6351.94	27.49	357.66	29.40	2279.26	4903.72	5117.73	-64.29	5118.13	359.28	0.31	MWD_M	None
360	6381.24	27.31	357.62	29.30	2305.28	4916.56	5131.20	-64.85	5131.61	359.28	0.19	MWD_M	None
361	6410.48	27.54	358.05	29.24	2331.23	4929.41	5144.66	-65.35	5145.07	359.27	0.32	MWD_M	None
362	6434.27	27.52	356.65	23.79	2352.32	4939.86	5155.64	-65.86	5156.06	359.27	0.83	MWD_M	None
363	6456.00	27.50	358.00	21.73	2371.60	4949.41	5165.67	-66.33	5166.09	359.26	0.88	Proj. to TD	

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Company:

ESSO Australia Pty Ltd

Well:

SNA A26A

Field:

Moonfish

Rig:

ISDL 175

State:

Victoria

EcoScope\* Service

1:500 Measured Depth

Recorded Mode Log

Schlumberger

9.50 In. Section

