


Rig: **ISDL 453** State: **Victoria**

Rig: ISDL 453 Field: Tuna Location: Bass Strait Well: WTN W38A Company: Esso Australia Ltd.			VISION Density Neutron				
			1:500 Measured Depth				
	Recorded Mode Log						
	Location	Total depth:	1730 m		Elevation	K.B.	Top Drive
		Spud date:	17-May-02			G.L.	-60.26 m
		Runs:	2	To 2		D.F.	34.69 m
		Permanent datum:	Mean Sea Level		Elev.:	60.26 m	
		Log measured from:	Drill Floor		34.69m above Perm. datum		
	Depth reference:	Driller's Pipe Tally					
	API serial no.	x=5771796.08m (North) y=621531.7m (East)		Longitude		Latitude	
				E 148° 23' 16.169 S 38° 11' 36.515			
Depth logged: 740 m To 1716 m		Mag decl: 13.16°		Other services:			
Date logged: 19-May-02To 21-May-02		Mag dip: -68.7°		Directional Drilling			
Bore hole record			Casing record				
Hole size	from	to	Size	Density	from	to	
8 1/2	726.8 m	1730 m	20	84 ppf	0 m	166.8 m	
			10 3/4	47 ppf	0 m	726.8 m	
Mud record			Borehole deviation record				
Type	from	to	Min	Max	from	to	
KCL/PHPA/GYCOL	760 m	1730 m	35.0°	41.5°	760 m	1730	
Surface equipment		Software record		<div>IDEAL</div> <div>services from</div> <div>Anadrill</div>			
Unit	OLU-FB-924	IDEAL Wis	ID6_1C_10r				
Depth system	PDA	SPM	ID6_1C_10r				
		LWD	See toolsketch				
		MWD	See toolsketch				

Bit Run Summary

[illegible]

Type	KQL/PHPA/GLYCOL									
Mud weight	ppg	10.5								
Solids	%vol	9.8								
Chlorides	mg/l	48,500								
Rm	Ohmm @ degC	0.1243@21								
Rmf	Ohmm @ degC	0.0966@21								
Rmc	Ohmms @ degC	0.1631@21								
Potassium	%vol	6.9								
Environmental data										
GR										
Mud weight	ppg	10.5								
Bit size	in	8.5								
Resistivity										
Neutron porosity										
Hole Size	in	8.5								
Mud weight	ppg	10.5								
Temperature	degC	60								
Mud salinity	mg/l	80,000								
Formation salinity										
Recording rate 1	SEC	10 s								
Recording rate 2	SEC	10 s								
Filtering GR										
Filtering density		3 pt								
Filtering Neutron		3 pt								
Company representative	J. Booker	B. Davies								
Anadrill personnel	J. Chong	J. Walta	L. Bon							

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OTHER SERVICES FOR RUN2 Directional Surveys	OTHER SERVICES FOR RUN	OTHER SERVICES FOR RUN
REMARKS: RUN NUMBER 2 8-1/2in Hole Section was logged from 740 m to 1730 m MD. Depth is referenced to the Driller's pipe tally. All data presented is from tool memory. GR is corrected for mud weight and bit size. RAB6 Resistivity is corrected for the bit size, mud resistivity and borehole temperature. Bottom quadrant density is presented. Neutron porosity is calculated with limestone matrix and is corrected for the bit size, borehome salinity, temperature and mud hydrogen index (from mud weight, temperature and pressure) Mud type is water based KCl/PHPA/GLYCOL. Barite is present in the mud. RAB6C Downhole Software 6C-V6.1 ADN6C Downhole Software 6.2B08	REMARKS: RUN NUMBER	REMARKS: RUN NUMBER

EQUIPMENT DESCRIPTION

RUN2

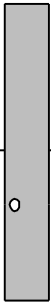
RUN

RUN

DOWNHOLE EQ

31.32

6 3/4 in. ADN6* Neutron
ADSE 289 Neutron
8 1/4 in. Stab Density
NSR-M A161 Density
GSR-J A2125 UltraSo
Soft: 6.2B08 R-O P



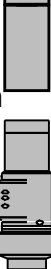
29.34
29.19
28.32
28.22
27.84
27.08

6 3/4 in. PowerPulse*
MDC Z408
MDI 626BC
MEC 612BB
Soft: 6.100C00 D&I



25.07
20.91

6 3/4 in. GVR6*
S/N 136
Soft: 6C-V61
Shallo
Medium
Deep
Ring R
R-O p
GR



16.74
15.27
15.15
14.97
14.80
14.66
14.44

Cross Over S/N 9916



13.68

NM Pony Collar



13.07

S/N 6649

NM Pony Collar



9.29

S/N H956

PowerPak* Mud Motor



7.88

A675XP S/N 3604

1.15 deg bend



Bit-PDC

Geo-Diamond Model: S75HPX

MAXIMUM STRING DI

ALL LENGTHS I

IDEAL Version: ID6_1C_10

IDF

RAB	id6_1c_10	MWD_10	id6_1c_10
ADN	id6_1c_10		

Format: W38A RM Density Neutron Vertical Scale: 1:500

Graphics File Created: 22-May-2002 23:24

Parameters

DLIS Name	Description	Value
ALPHA_COMPUTE_DEN_ADN	Perform Density Enhanced Vertical Resolution process ?	NO
AVE_ADN	ADN/Array Channels: perform averaging(RM) :	YES
BHT_RM	Bottom Hole Temperature (RM)	140.0 degF
BSAL_RM	Mud Salinity (RM)	80.000 ppk
BS_RM	Bit Size (RM)	8.500 in
CHI_RM	Caliper High Limit from BS(RM) for Neutron BH Corr	2.000 in
CLO_RM	Caliper Low Limit from BS(RM) for Neutron BH Corr	0.000 in
COEF_M	User Defined FEXP in Clean Sand	1.650
C_WS	Overpressure correction to Sw and M	1.000
DEVI	Average angle of the hole (RM)	35.210 deg
DO	Depth Offset	0.0 m
DTMUD	Delta-T for Mud	190.3 us/m
DYN_IMG_COMPUTE_ADN	Generate Dynamic Normalized Image?	NO
ENVCOR	Neutron Quadrant Processing: Environmental Correction?	YES
EVRL	EVR Process averaging level (RM)	49
FEXP	Formation Factor Exponent(RM)	2.000
FNUM	Formation Factor Enumerator(RM)	1.000
FPHI_RM	Formation Factor Porosity Source (RM)	XPLOT
GCSE	Caliper for Neutron BH Corr	BS
IMAGE_MAX_SOA	Image SOA (Quadrant) Right Scale	2.500 in
IMAGE_MAX_SPEF	Image PEF(Segment) Right Scale	6.000
IMAGE_MAX_SRHOB	Image RHOB(Segment) Right Scale	2.650 g/cm3
IMAGE_MIN_SOA	Image SOA (Quadrant) Left Scale	0.000 in
IMAGE_MIN_SPEF	Image PEF(Segment) Left Scale	2.000
IMAGE_MIN_SRHOB	Image RHOB(Segment) Left Scale	2.050 g/cm3
LITHO_TYPE_ADN	Lithology (RM)	LIME
MST_RM	Mud Sample temperature (RM)	70.700 degF
MW_RM	Mud Weight (RM)	10.500 lbm/gal
OBMF_RM	Oil Based Mud	NO
RHOF_RM	Mud Filtrate Density (RM)	1.000 g/cm3
RHOM_RM	Matrix density (RM)	2.710 g/cm3
RMS_RM	Resistivity of Mud Sample (RM)	0.124 ohm.m
RWA_COMP_MOD	Rwa computation model	BASIC
RWA_DEN_INPUT	Rwa Density Input	RHOB
RWA_FORM_MOD	Rwa computation formation model	CLASTIC
RWA_RES_INPUT	Rwa computation resistivity input	RT
RWS_RM	Resistivity of Connate Water (RM)	1.000 ohm.m
SHT_RM	Surface Hole Temperature (RM)	68.000 degF
SSIZ_ADN	ADN:Stabilizer Size (RM)	8.250 in
STOH	ADN Density Top of Hole Sector (Left Boundary):	SECTOR_0

SSIZ_ADN	ADN:Stabilizer Size (RM)	8.250	in
STOH	ADN Density Top of Hole Sector (Left Boundary):	SECTOR_0	
TD_RM	Total Measured Depth (RM)	1730.0	m
TRPM_RM	Average Tool rotational Speed (RM)	20.000	c/min
TWS_RM	Temperature of Connate Water (RM)	75.000	degF
USMIN_RM	ADN:Minimum ultra-sonic standoff (RM)	0.300	in
VERS_ADN	ADN downhole software	6.200	
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	
WSDI	Window Size of Dynamic Normalization Image	4.572	m
XPDM_RM	Cross plot density proosity multiplier	0.675	
XPNM_RM	Cross plot neutron proosity multiplier	0.325	

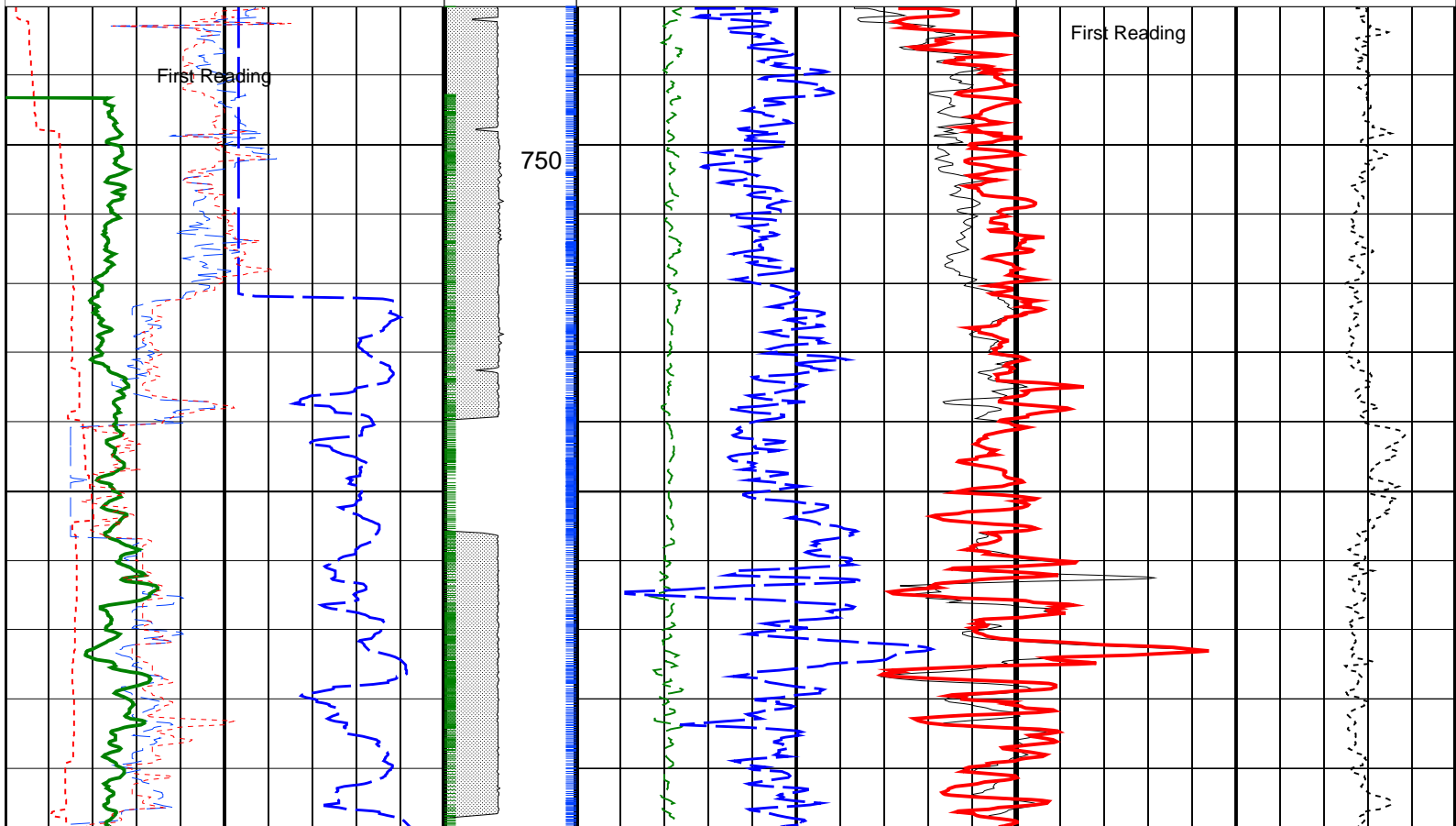
PIP SUMMARY

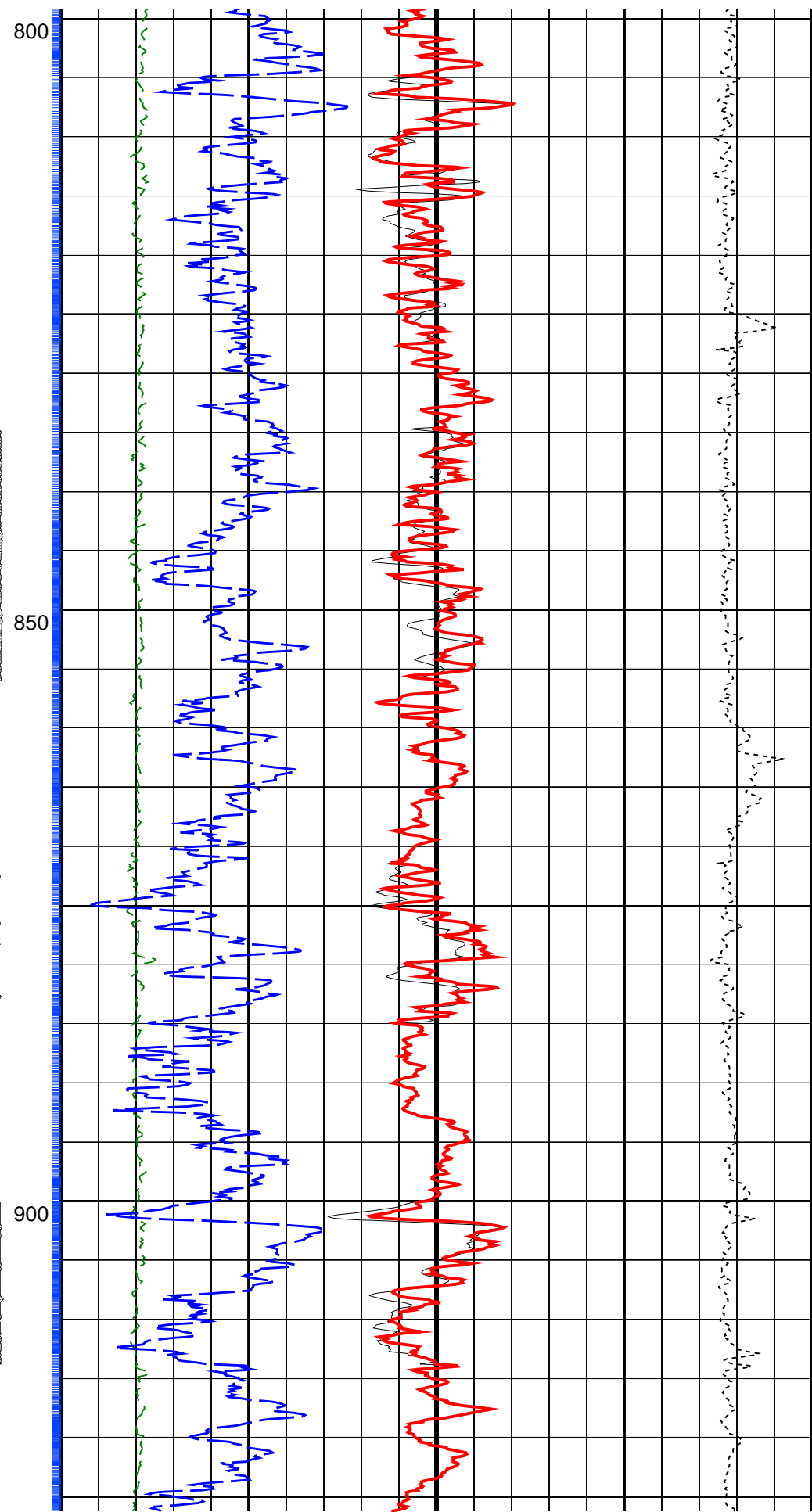
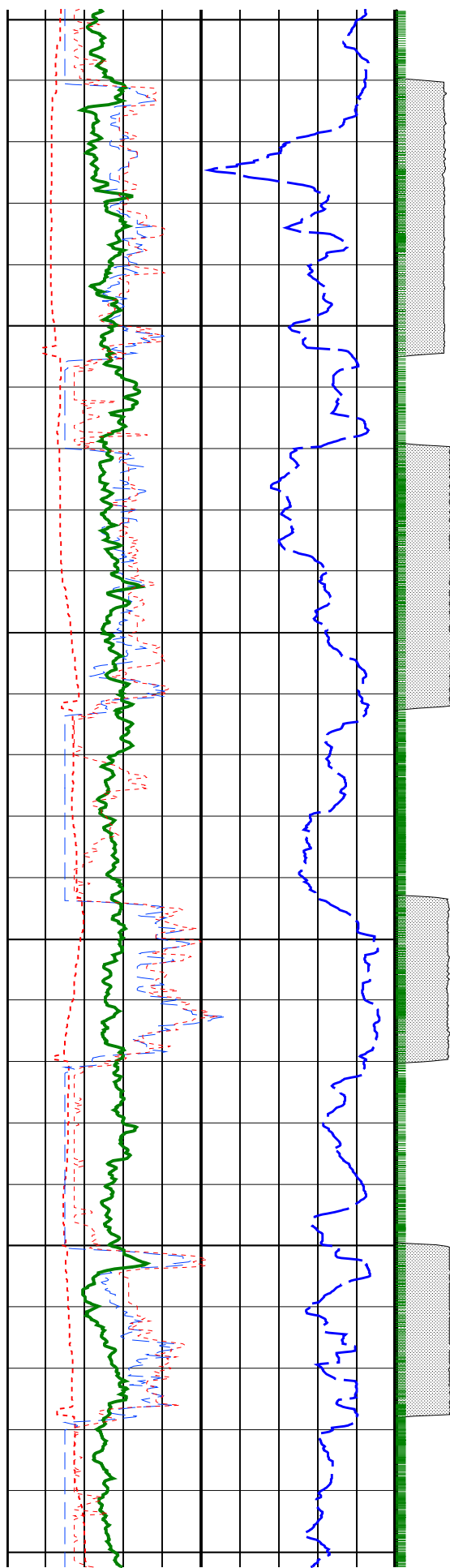
+ Neutron Samples

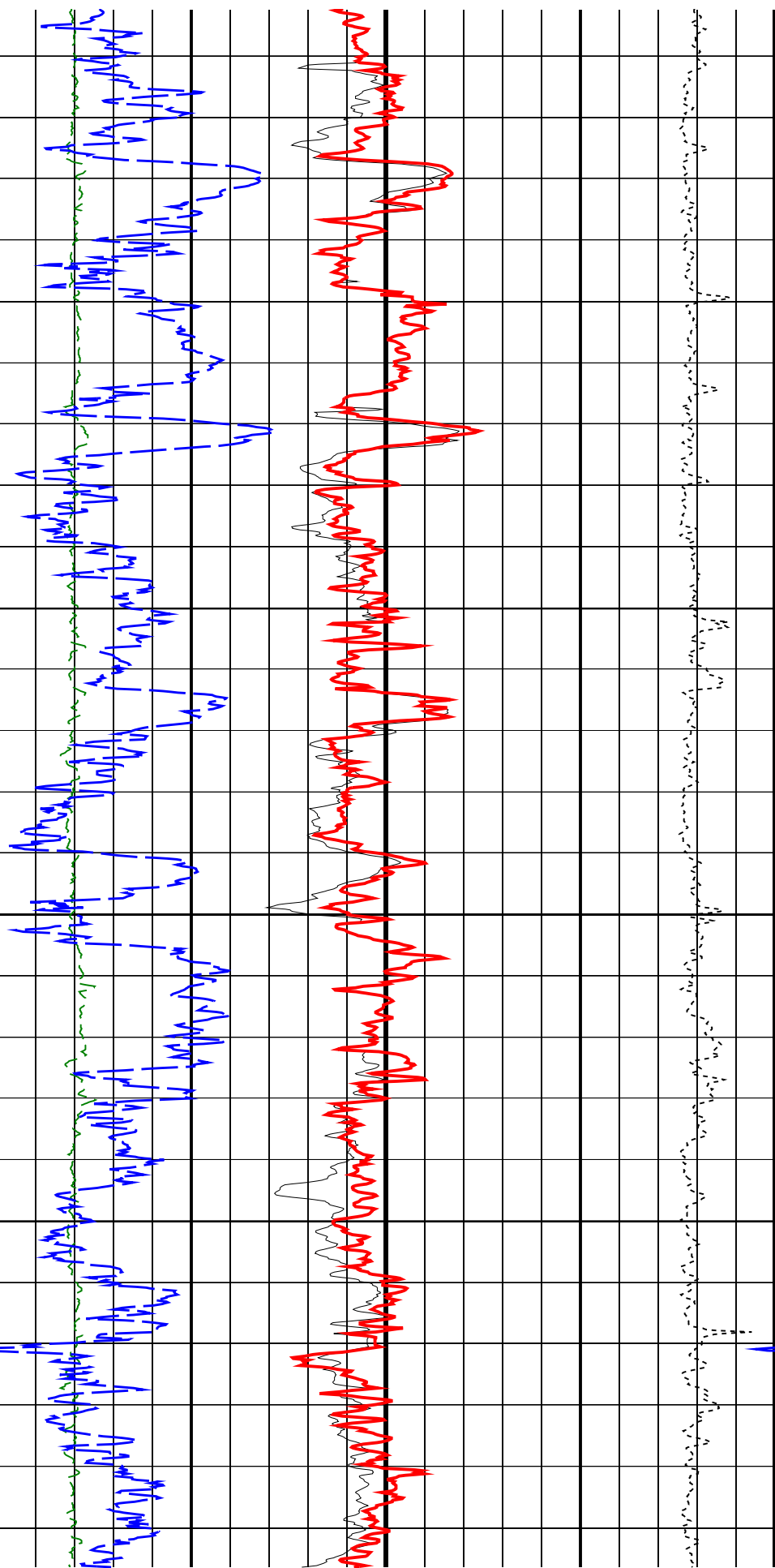
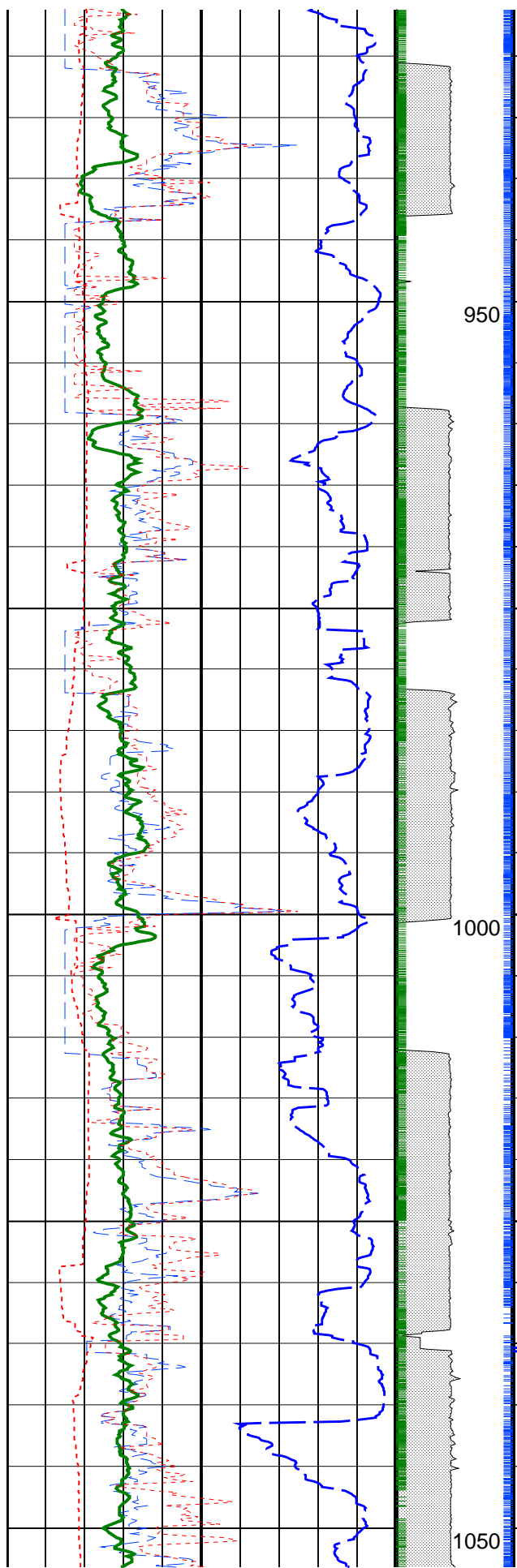
Density Samples

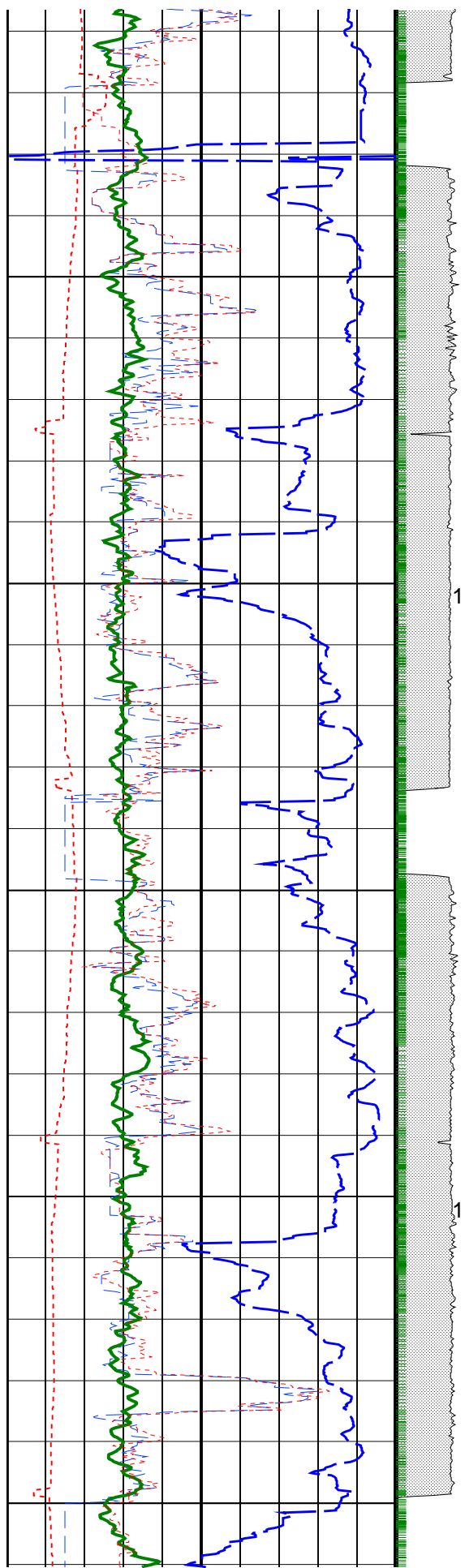
+ Gamma Ray Samples

Rate of Penetration, Averaged over Last 5ft (ROP5_RM) 200 (M/HR) 0		Gas Area From ROBB to TNPH	
RAB Gamma Ray (GR_RAB) 0 (GAPI) 200		Bulk Density, Bottom (ROBB) 1.85 (G/C3) 2.85	
Density Time After Bit (TAB_DEN) 0 (HR) 10		Thermal Neutron Porosity (TNPH) 45 (PU) -15	
Vertical Hole Diameter (VERD) 6 (IN) 16		Bulk Density (RHOB) 1.85 (G/C3) 2.85	
Horizontal Hole Diameter (HORD) 6 (IN) 16	ADN Rotational Speed (RPM_ADN) (RPM) 0 200	Photoelectric Factor, Bottom (PEB) 0 (----) 20	Bulk Density Correction, Bottom (DRHB) (G/C3) -0.75 0.25



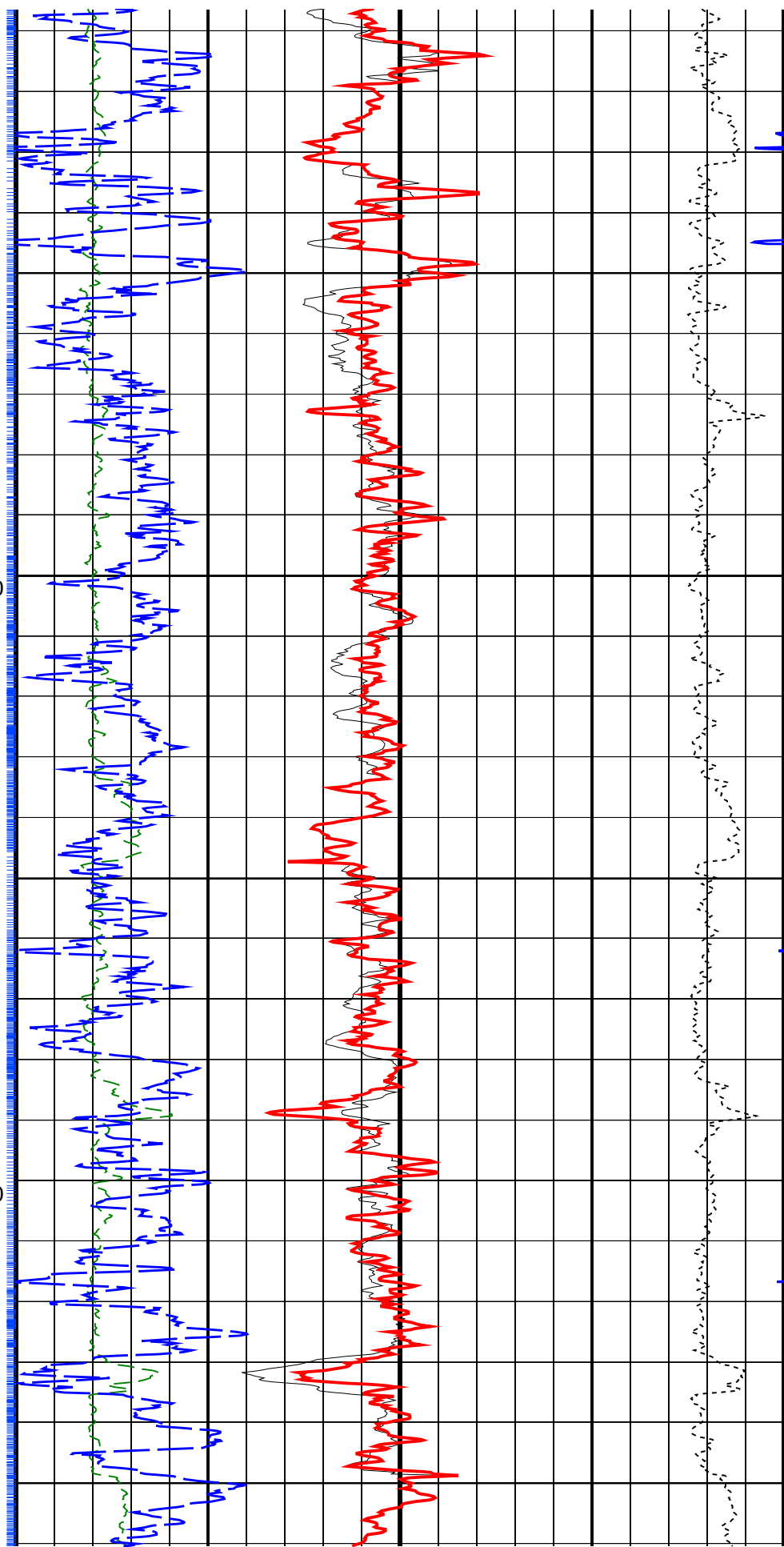


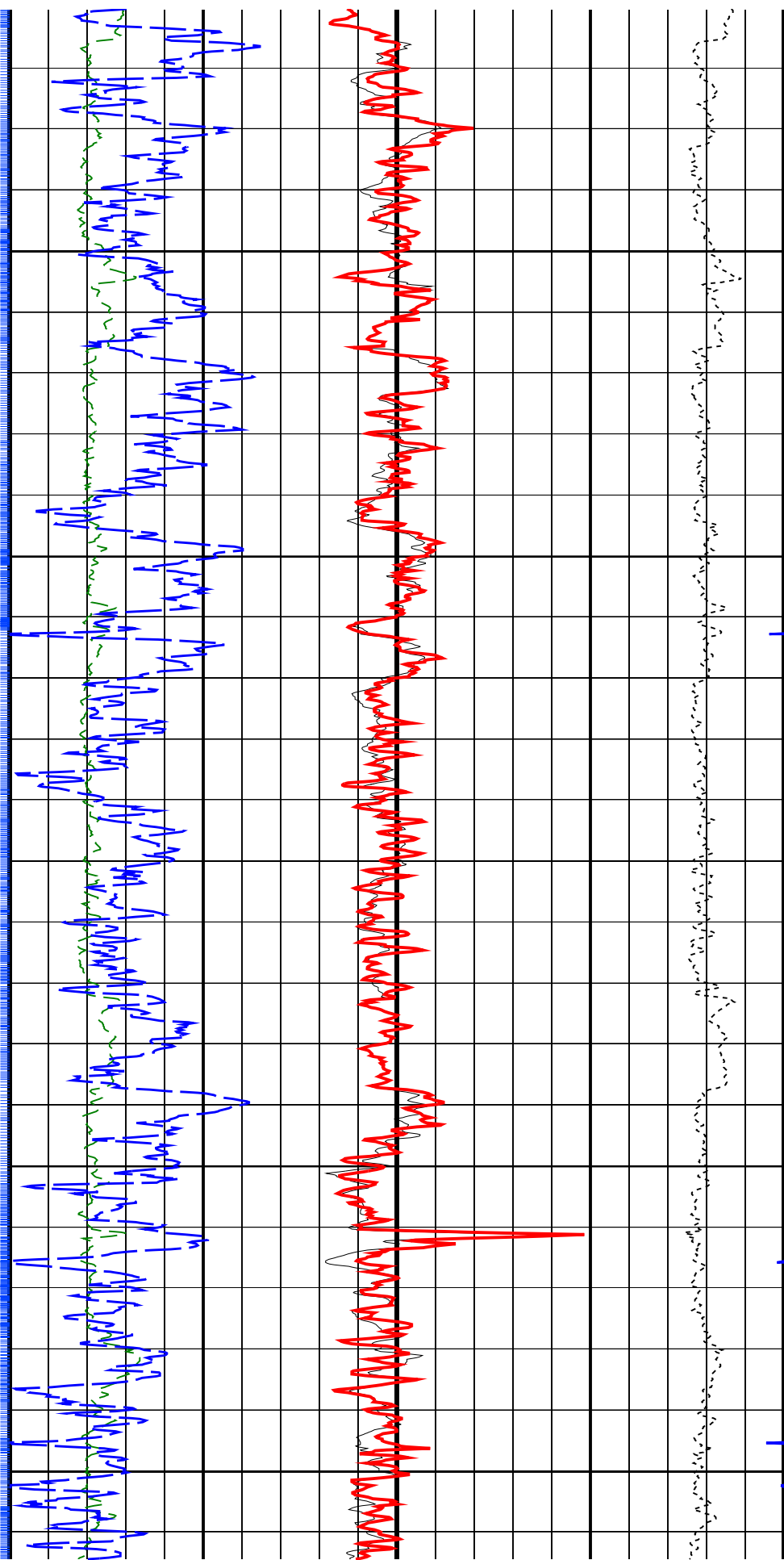
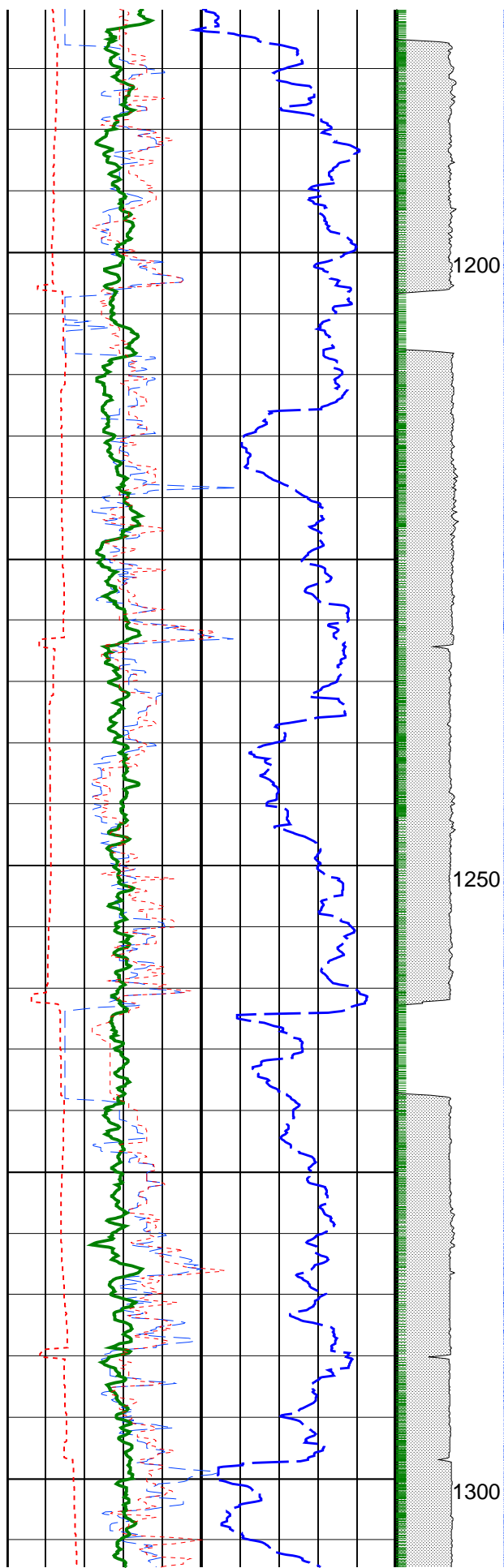


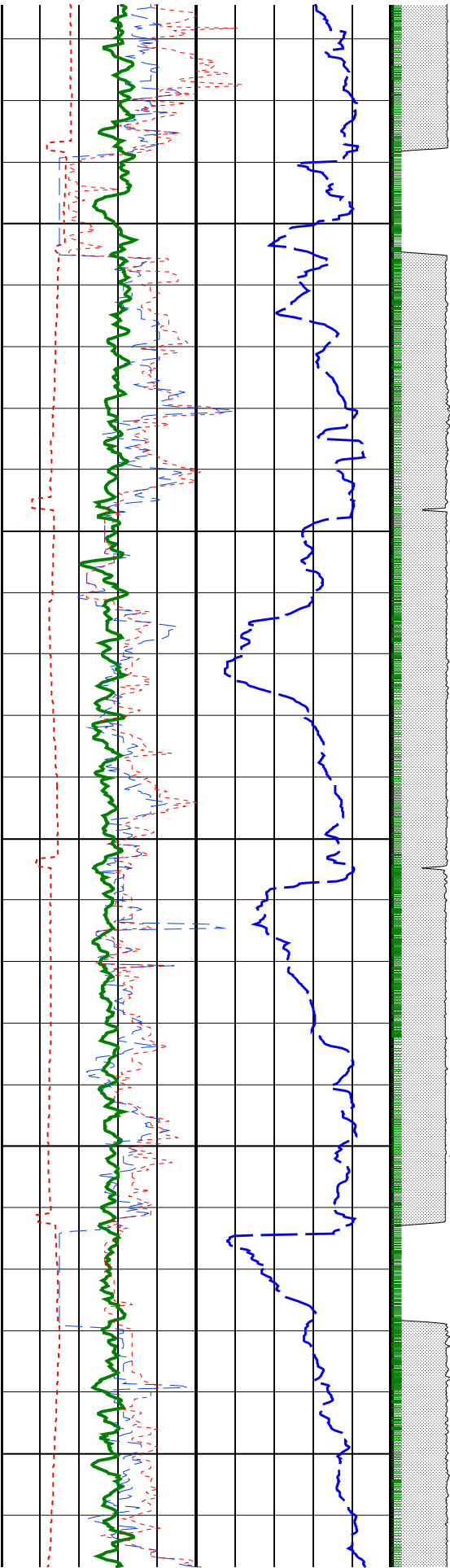


1100

1150

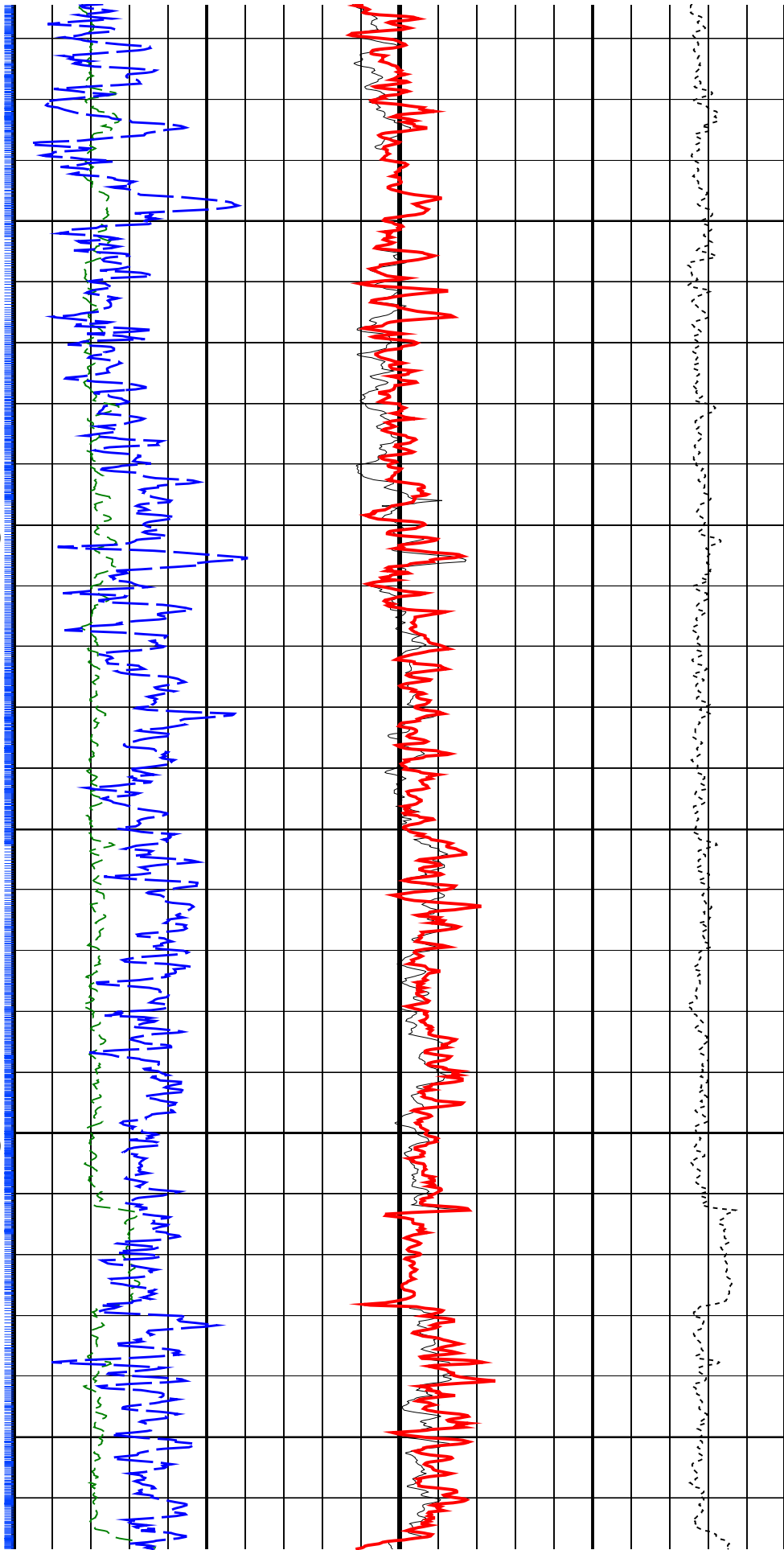


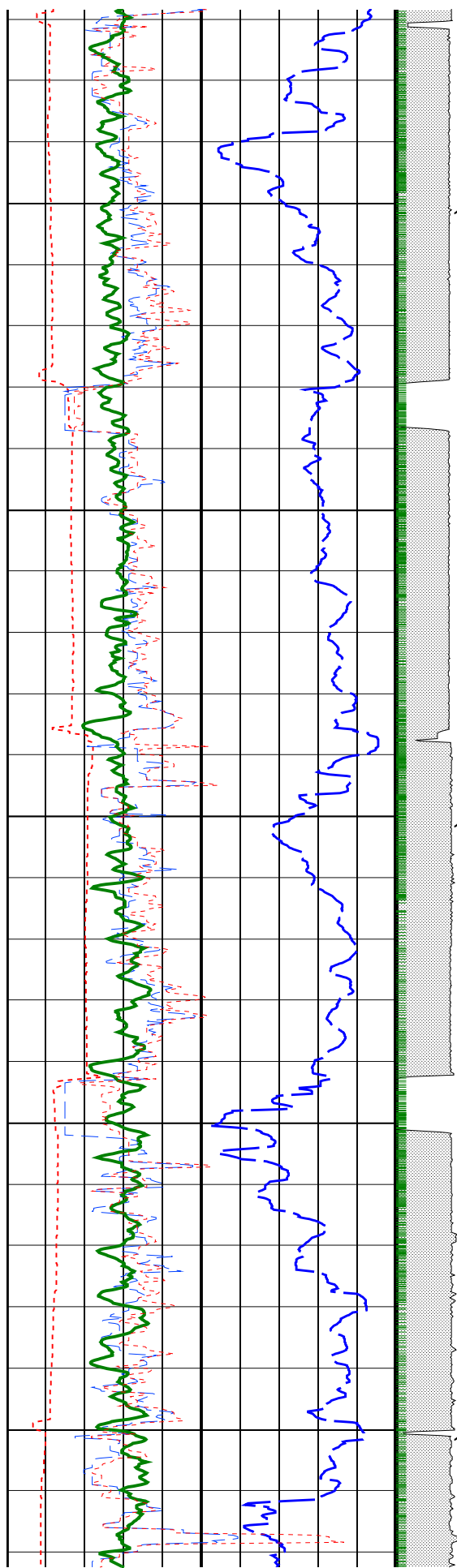




1350

1400

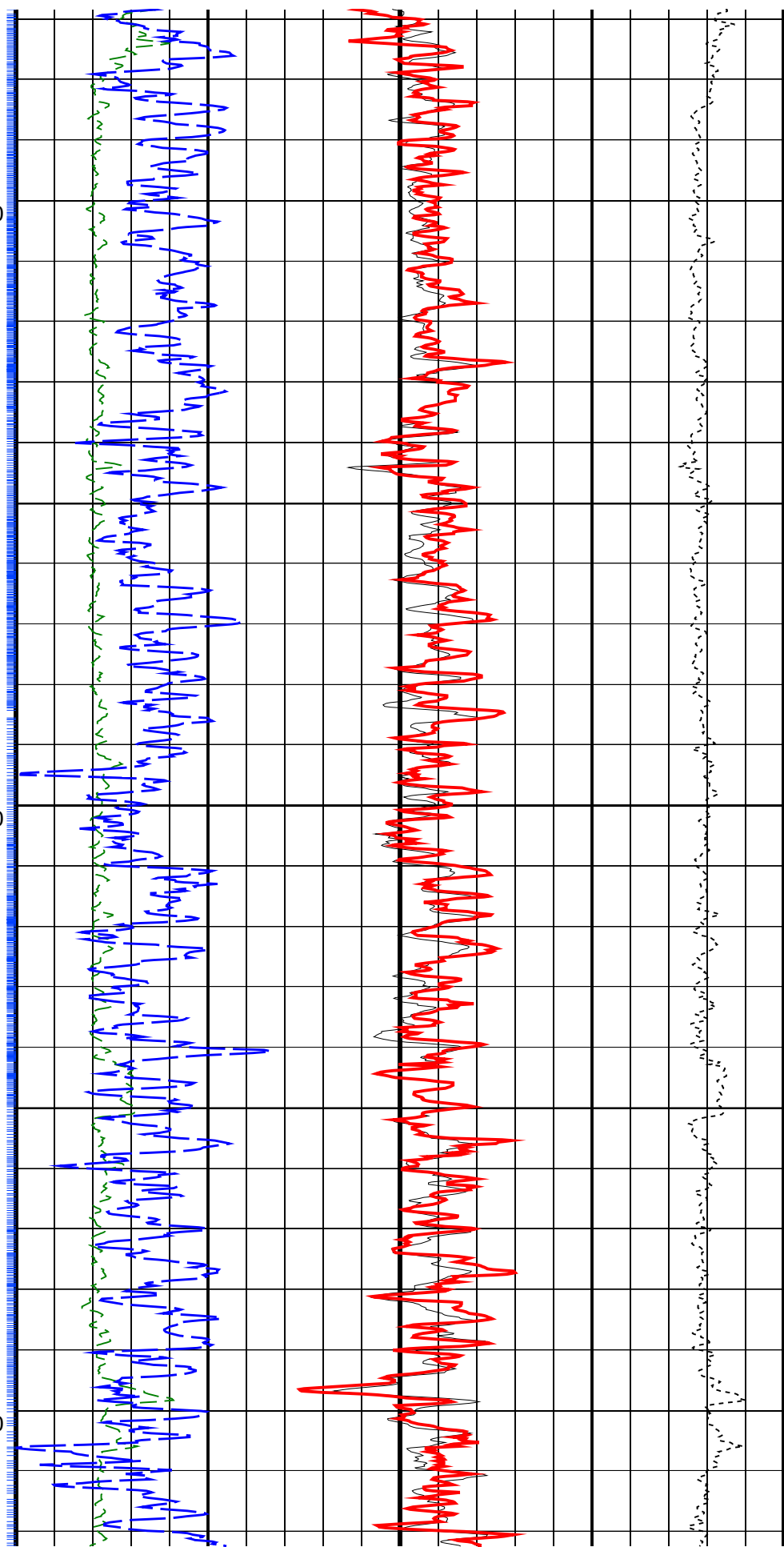


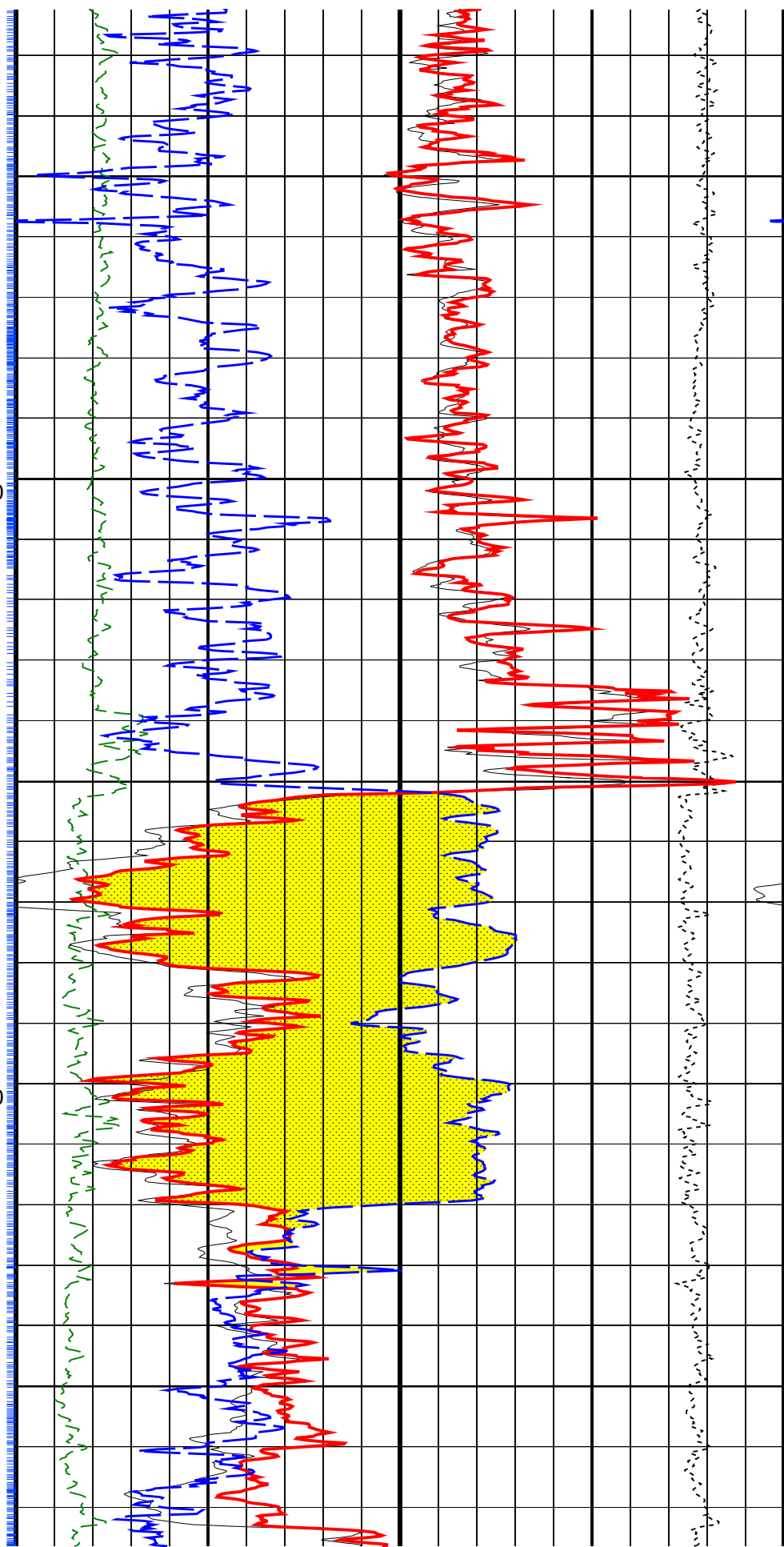
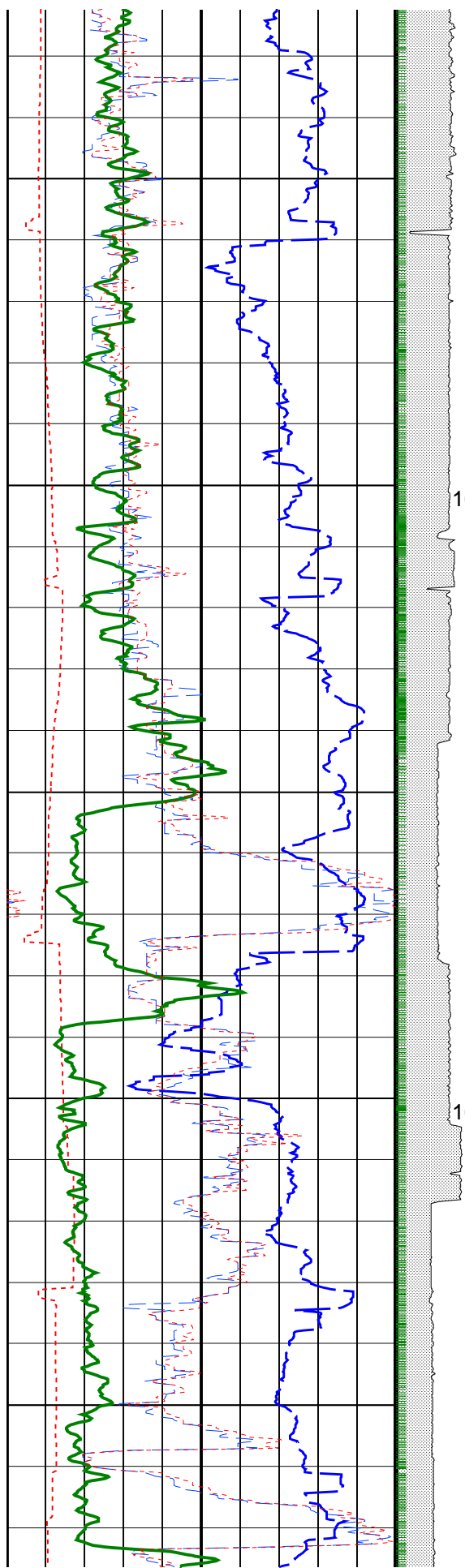


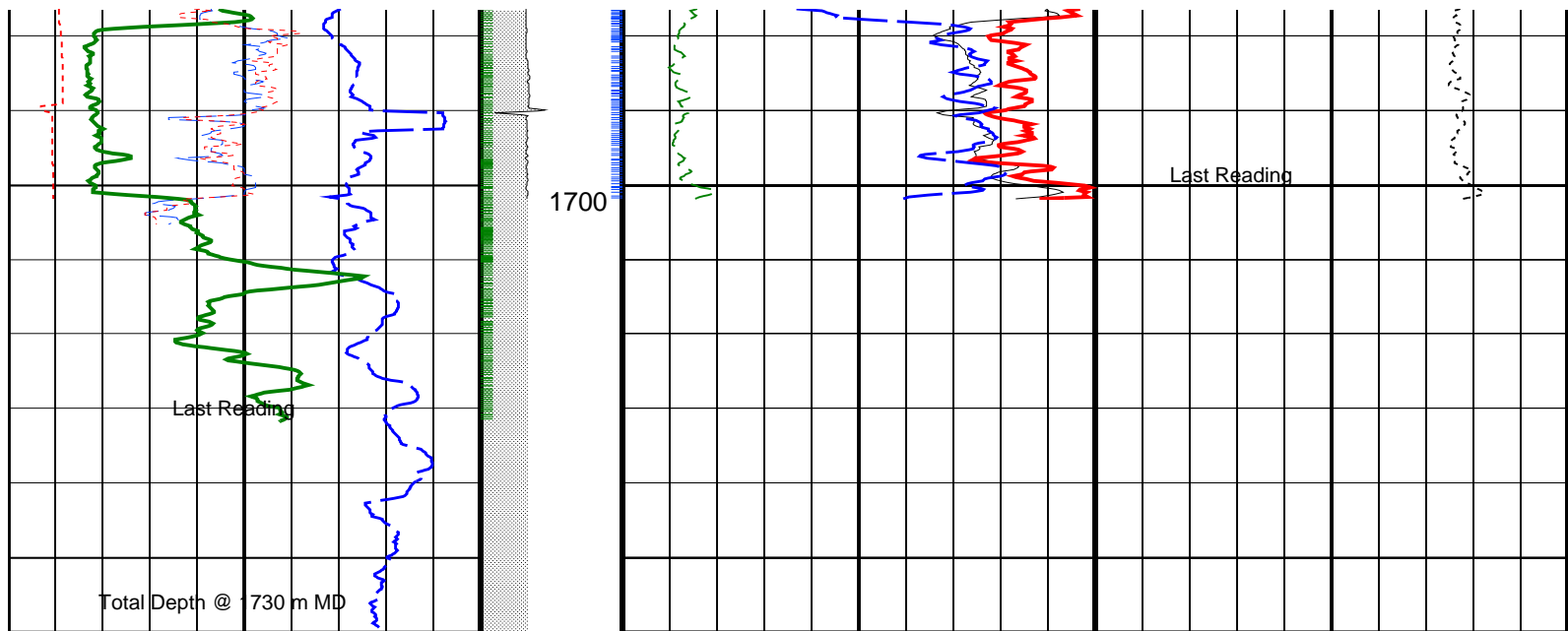
1450

1500

1550







<div>Horizontal Hole Diameter (HORD)</div> <div>6 (IN) 16</div>		<div>ADN</div> <div>Rotational</div> <div>Speed</div> <div>(RPM_ADN)</div> <div>(RPM)</div> <div>0 200</div>	<div>Photoelectric Factor, Bottom (PEB)</div> <div>0 (----) 20</div>		<div>Bulk Density Correction, Bottom</div> <div>(DRHB)</div> <div>(G/C3)</div> <div>-0.75 0.25</div>	
<div>Vertical Hole Diameter (VERD)</div> <div>6 (IN) 16</div>			<div>Bulk Density (RHOB)</div> <div>(G/C3)</div> <div>1.85 2.85</div>			
<div>Density Time After Bit (TAB_DEN)</div> <div>0 (HR) 10</div>			<div>Thermal Neutron Porosity (TNPH)</div> <div>45 (PU) -15</div>			
<div>RAB Gamma Ray (GR_RAB)</div> <div>0 (GAPI) 200</div>			<div>Bulk Density, Bottom (ROBB)</div> <div>(G/C3)</div> <div>1.85 2.85</div>			
<div>Rate of Penetration, Averaged over Last</div> <div>5ft (ROP5_RM)</div> <div>200 (M/HR) 0</div>			<div>Gas Area</div> <div>From ROBB to TNPH</div>			

PIP SUMMARY

└ Neutron Samples

└ Gamma Ray Samples

Density Samples

IDEAL Version: ID6_1C_10

IDF

RAB id6_1c_10 MWD_10 id6_1c_10
ADN id6_1c_10

6.75-in. Azimuthal Density Neutron / Equipment Identification

Primary Equipment:
Tool Name and Serial Number
Neutron Logging Source
Density Logging Source
Stabilizer Size
Calibration Status




ADN6 - CA 289
NSR - M 161
GSR - J/Z 2125
8.25 - in.
Good

Master: 5-MAY-2002 12:34

6.75-in. Azimuthal Density Neutron Calibration

Density: Magnesium Block




Density: Magnesium Block

Phase	LS window 3 – Mg CPS	Value	Phase	SS window 1 – Mg CPS	Value	Phase	SS window 3 – Mg CPS	Value
Master		1304	Master		3005	Master		7415
	250.0 (Minimum) 4125 (Nominal) 8000 (Maximum)			700.0 (Minimum) 9350 (Nominal) 18000 (Maximum)			2500 (Minimum) 23750 (Nominal) 45000 (Maximum)	

Master: 5-MAY-2002 12:34

6.75-in. Azimuthal Density Neutron Calibration




Density: Aluminum Block

Phase	LS window 3 – Al CPS	Value	Phase	SS window 1 – Al CPS	Value	Phase	SS window 3 – Al CPS	Value
Master		201.7	Master		1593	Master		4761
	50.00 (Minimum) 725.0 (Nominal) 1400 (Maximum)			500.0 (Minimum) 4250 (Nominal) 8000 (Maximum)			1500 (Minimum) 15750 (Nominal) 30000 (Maximum)	

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6.75-in. Azimuthal Density Neutron Calibration



Density: Background

Phase	LS window 3 – Background CPS	Value	Phase	SS window 1 – Background CPS	Value	Phase	SS window 3 – Background CPS	Value
Master		52.44	Master		125.1	Master		546.0
	15.00 (Minimum) 82.50 (Nominal) 150.0 (Maximum)			40.00 (Minimum) 220.0 (Nominal) 400.0 (Maximum)			150.0 (Minimum) 825.0 (Nominal) 1500 (Maximum)	

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6.75-in. Azimuthal Density Neutron Calibration






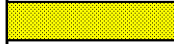







Density: Water Block Check


Phase	Long spacing water density G/C3	Value	Phase	Short spacing water density G/C3	Value
Master		1.035	Master		1.136
	1.011 (Minimum) 1.026 (Nominal) 1.041 (Maximum)			1.093 (Minimum) 1.118 (Nominal) 1.143 (Maximum)	

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6.75-in. Azimuthal Density Neutron Calibration

Neutron: Water Tank

Phase	Far 1 tube 1 gain	Value	Phase	Far 1 tube 1 offset CPS	Value
Master		1.123	Master		-0.8040
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)			-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	
Phase	Far 1 tube 2 gain	Value	Phase	Far 1 tube 2 offset CPS	Value
Master		1.054	Master		-0.9360
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)			-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	
Phase	Far 1 tube 3 gain	Value	Phase	Far 1 tube 3 offset CPS	Value
Master		1.093	Master		-0.6810
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)			-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	
Phase	Far 2 tube 1 gain	Value	Phase	Far 2 tube 1 offset CPS	Value
Master		1.114	Master		-0.7390
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)			-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	
Phase	Far 2 tube 2 gain	Value	Phase	Far 2 tube 2 offset CPS	Value
Master		0.9960	Master		-0.9070
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)			-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	
Phase	Far 2 tube 3 gain	Value	Phase	Far 2 tube 3 offset CPS	Value
Master		1.117	Master		-0.7540
	0.9000 (Minimum) 1.100 (Nominal) 1.300 (Maximum)			-1.200 (Minimum) -0.9000 (Nominal) -0.6000 (Maximum)	
Phase	Near 1 tube 1 gain	Value			
Master		1.091			
	0.9000 1.100 1.300				

0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)
Phase	Near 2 tube 1 gain	Value
Master		1.070
0.9000 (Minimum)	1.100 (Nominal)	1.300 (Maximum)

6.75-in. Resistivity At-the-Bit / Equipment Identification

Primary Equipment:

Tool Name and Serial Number

RAB6 - CA

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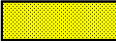








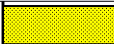

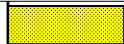
Calibration Status

Good

Master: 1-MAY-2002 20:48

6.75-in. Resistivity At-the-Bit Calibration


Resistivity: Fixture

Phase	Ring/T1 factor	Value	Phase	Ring/T2 factor	Value	Phase	M0/T1 factor	Value
Master		0.9800	Master		0.9890	Master		0.9940
0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)	0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)	0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)
Phase	M0/T2 factor	Value	Phase	M2/T1 factor	Value	Phase	M2/T2 factor	Value
Master		0.9990	Master		0.9960	Master		1.001
0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)	0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)	0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)
Phase	BTN shallow/T1 factor	Value	Phase	BTN shallow/T2 factor	Value	Phase	BTN medium/T1 factor	Value
Master		1.014	Master		1.020	Master		1.017
0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)	0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)	0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)
Phase	BTN medium/T2 factor	Value	Phase	BTN deep/T1 factor	Value	Phase	BTN deep/T2 factor	Value
Master		1.024	Master		1.014	Master		1.020
0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)	0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)	0.9750 (Minimum)	1.000 (Nominal)	1.025 (Maximum)

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6.75-in. Resistivity At-the-Bit Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor	Value
Master		0.9060
0.7500 (Minimum)	1.000 (Nominal)	1.250 (Maximum)

ANADRILL

SCHLUMBERGER

Survey report

21-May-2002 22:45:56

Page 1 of 3

Client.....: ESSO AUSTRALIA LTD
Field.....: TUNA

Well.....: WTN W-38 A
API number.....:
Engineer.....: JC/LB/JW

RIG.....: ISDL 453
STATE.....: Victoria

Spud date.....: 17-MAY-02
Last survey date.....: 21-May-02
Total accepted surveys...: 36
MD of first survey.....: 727.80 m
MD of last survey.....: 1730.00 m

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

----- Geomagnetic data -----
Magnetic model.....: BGGM version 2001
Magnetic date.....: 20-Apr-2002
Magnetic field strength..: 1200.71 HCNT

Method for DLS.....: Mason & Taylor

----- Depth reference -----

Permanent datum.....: MEAN SEA LEVEL

Depth reference.....: DRILLER'S PIPE TALLY

GL above permanent.....: -60.26 m

KB above permanent.....: 34.70 m

DF above permanent.....: 34.70 m

----- Vertical section origin-----

Latitude (+N/S-).....: 0.00 m

Departure (+E/W-).....: 0.00 m

----- Platform reference point-----

Latitude (+N/S-).....: -3.61 m

Departure (+E/W-).....: 47.09 m

Azimuth from rotary table to target: 265.95 degrees

Magnetic date.....: 20-Apr-2002

Magnetic field strength..: 1200.71 HCNT

Magnetic dec (+E/W-).....: 13.16 degrees

Magnetic dip.....: -68.71 degrees

----- MWD survey Reference Criteria -----

Reference G.....: 1000.02 mGal

Reference H.....: 1200.71 HCNT

Reference Dip.....: -68.71 degrees

Tolerance of G.....: (+/-) 2.50 mGal

Tolerance of H.....: (+/-) 6.00 HCNT

Tolerance of Dip.....: (+/-) 0.45 degrees

----- Corrections -----

Magnetic dec (+E/W-).....: 13.16 degrees

Grid convergence (+E/W-).....: -0.86 degrees

Total az corr (+E/W-).....: 14.02 degrees

(Total az corr = magnetic dec - grid conv)

Sag applied (Y/N).....: No degree: 0.00

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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	Tool qual type
1	727.80	35.00	244.30	0.00	689.49	139.20	-78.25	-87.17	153.62	228.09	0.91	TIP	-
2	747.80	35.40	249.67	20.00	705.84	150.09	-82.75	-97.77	165.07	229.76	4.70	MWD	6-axis
3	776.56	35.42	252.91	28.76	729.28	166.21	-88.09	-113.55	181.51	232.20	1.96	MWD	6-axis
4	805.18	36.70	255.01	28.62	752.42	182.69	-92.74	-129.74	198.03	234.44	1.87	MWD	6-axis
5	833.73	37.88	256.50	28.55	775.13	199.71	-97.00	-146.51	214.95	236.49	1.56	MWD	6-axis
6	862.72	37.22	258.68	28.99	798.12	217.19	-100.80	-163.76	232.17	238.39	1.54	MWD	6-axis
7	891.61	37.97	262.00	28.89	821.01	234.72	-103.75	-181.13	249.23	240.20	2.22	MWD	6-axis
8	920.64	40.34	266.11	29.03	843.52	253.03	-105.64	-199.35	266.73	242.08	3.65	MWD	6-axis
9	949.70	41.54	270.05	29.06	865.48	272.05	-106.27	-218.38	284.62	244.05	2.94	MWD	6-axis
10	982.75	41.41	275.40	33.05	890.25	293.77	-105.23	-240.22	304.76	246.34	3.22	MWD	6-axis
11	1007.05	40.30	275.57	24.30	908.63	309.45	-103.71	-256.05	319.14	247.95	1.38	MWD	6-axis
12	1036.61	38.12	277.21	29.56	931.53	327.83	-101.64	-274.62	336.31	249.69	2.45	MWD	6-axis
13	1065.48	37.34	277.36	28.87	954.36	345.15	-99.40	-292.14	352.49	251.21	0.82	MWD	6-axis
14	1094.62	38.44	278.38	29.14	977.36	362.66	-96.94	-309.87	368.96	252.63	1.30	MWD	6-axis
15	1123.67	37.67	278.14	29.05	1000.24	380.15	-94.37	-327.59	385.51	253.93	0.81	MWD	6-axis
16	1152.47	38.48	276.87	28.80	1022.91	397.55	-92.05	-345.20	402.13	255.07	1.17	MWD	6-axis
17	1181.11	37.84	277.20	28.64	1045.43	414.92	-89.89	-362.76	418.83	256.08	0.70	MWD	6-axis
18	1209.97	38.87	275.31	28.86	1068.06	432.54	-87.94	-380.56	435.88	256.99	1.62	MWD	6-axis
19	1238.78	39.15	273.45	28.81	1090.45	450.47	-86.56	-398.64	453.38	257.75	1.25	MWD	6-axis
20	1267.65	38.34	273.70	28.87	1112.96	468.38	-85.43	-416.67	470.92	258.41	0.86	MWD	6-axis
21	1296.56	39.55	273.44	28.91	1135.44	486.39	-84.30	-434.81	488.61	259.03	1.27	MWD	6-axis
22	1325.42	39.04	273.18	28.86	1157.78	504.52	-83.24	-453.05	506.44	259.59	0.56	MWD	6-axis
23	1354.65	38.66	275.86	29.23	1180.55	522.65	-81.80	-471.33	524.28	260.15	1.77	MWD	6-axis
24	1383.79	38.34	275.89	29.14	1203.35	540.52	-79.94	-489.37	541.87	260.72	0.33	MWD	6-axis
25	1412.68	37.73	275.91	28.89	1226.11	558.05	-78.11	-507.08	559.16	261.24	0.63	MWD	6-axis
26	1442.31	39.21	275.11	29.63	1249.30	576.22	-76.35	-525.43	577.12	261.73	1.58	MWD	6-axis
27	1470.96	39.08	274.64	28.56	1271.52	594.09	-74.81	-543.45	594.81	262.16	0.34	MWD	6-axis
28	1499.43	39.03	275.70	28.56	1293.63	611.80	-73.19	-561.31	612.37	262.57	0.71	MWD	6-axis
29	1528.19	38.85	275.61	28.76	1316.00	629.61	-71.41	-579.30	630.05	262.97	0.20	MWD	6-axis
30	1557.23	39.69	275.78	29.04	1338.48	647.73	-69.59	-597.59	648.05	263.36	0.87	MWD	6-axis

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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	Tool qual type
31	1586.04	39.26	275.76	28.81	1360.72	665.78	-67.74	-615.81	666.00	263.72	0.45	MWD	6-axis
32	1615.48	38.87	275.66	29.44	1383.58	684.06	-65.90	-634.27	684.21	264.07	0.40	MWD	6-axis
33	1644.11	38.89	275.87	28.63	1405.87	701.77	-64.09	-652.15	701.86	264.39	0.14	MWD	6-axis
34	1673.54	39.10	275.64	29.43	1428.74	720.02	-62.24	-670.58	720.06	265.00	0.23	MWD	6-axis
35	1702.07	39.12	275.30	28.53	1450.88	737.77	-60.52	-688.50	737.78	265.00	0.23	MWD	6-axis
36	1730.00	39.19	275.10	27.93	1472.54	755.17	-58.93	-706.06	755.18	265.23	0.17	Bit	Projection

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Company: Esso Australia Ltd.

Well: WTN W38A

Field: Tuna
Rig: ISDL 453
State: Victoria

IDEAL services from **Anadrill**

**VISION Density Neutron
1:500 Measured Depth
Recorded Mode Log**

Schlumberger