

[illegible]

Schlumberger

Company: Rosetta Resources Operating, LP

Well: **Smith 28-3**

Field: **Wildcat**County: **Yuma**

State: Colorado

Platform Express

Compensated Neutron

Litho Density

NENW Sec. 28, T3N, R45W
400' FNL & 2375' FWL

Elev.:	K.B.	3853 ft
	G.L.	3841 ft
	D.F.	3852 ft

Permanent Datum: Ground Level Elev.: 3841 ft

Log Measured From: Kelly Bushing 12.0 ft above Perm. Datum

Field: Wildcat
Location: NENW Sec. 28, T3N, R45W
Well: Smith 28-3
Company: Rosetta Resources Operating, LP

Platform Express Compensated Neutron Litho Density			
NENW Sec. 28, T3N, R45W 400' FNL & 2375' FWL		Elev.: K.B. 3853 ft G.L. 3841 ft D.F. 3852 ft	
Permanent Datum:	Ground Level	Elev.: 3841 ft	
Log Measured From:	Kelly Bushing	12.0 ft above Perm. Datum	
Drilling Measured From:	Kelly Bushing		
API Serial No. 05-125-09721-0C	Section 28	Township 3N	Range 45W

[illegible]

Logging Date	14-Jun-2006					
Run Number	1					
Depth Driller	2830 ft					
Schlumberger Depth	2838 ft					
Bottom Log Interval	2830 ft					
Top Log Interval	417 ft					
Casing Driller Size @ Depth	7.000 in @ 415 ft					
Casing Schlumberger	417 ft					
Bit Size	6.125 in					
Type Fluid In Hole	Gel & Chemical					
Density	9.9 lbm/gal				36 s	
Fluid Loss	PH					
Source Of Sample	AIT Sensor					
RM @ Measured Temperature	0.360 ohm.m				@	77 degF
RMF @ Measured Temperature	0.288 ohm.m				@	77 degF
RMC @ Measured Temperature	0.432 ohm.m				@	77 degF
Source RMF	RMC		Calculated			
RM @ MRT	RMF @ MRT		0.254 @ 112		0.203 @ 112	
Maximum Recorded Temperatures	112 degF					
Circulation Stopped	Time		2:00			
Logger On Bottom	Time		4:15			
Unit Number	Location		3055 Ft. Morgan, CO			
Recorded By	Lee Hyson					
Witnessed By	Don Drommond					

Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Driller Size @ Depth		@		
Casing Schlumberger				
Bit Size				
Type Fluid In Hole				
Density	Viscosity			
Fluid Loss	PH			
Source Of Sample				
RM @ Measured Temperature		@		
RMF @ Measured Temperature		@		
RMC @ Measured Temperature		@		
Source RMF	RMC			
RM @ MRT	RMF @ MRT	@	@	@
Maximum Recorded Temperatures				
Circulation Stopped	Time			
Logger On Bottom	Time			
Unit Number	Location			
Recorded By				
Witnessed By				

Crew: Tim Ludgate & Brent Westhoff	

RUN 1			RUN 2		
SERVICE ORDER #:		11208125	SERVICE ORDER #:		
PROGRAM VERSION:		13C0-300	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1

RUN 2

SURFACE EQUIPMENT	
WITM (CTS)-A	NCS-VB
GSR-U 390	
NCT-B	
CNB-AB	

DOWNHOLE EQUIPMENT	
LEH-QT	40.6
LEH-QT 2429	
HGNS HTEM	
HMCA	
TelStatus	
CTEM	37.6
Gamma-Ray	36.9
HILTB-CTS	37.6
HGNSC-B 940	
HMCA	
TCC-B	
HGNH	
NLS-KL	
NSR-F 5068	
HACCZ	
HCNT	
HGR	
HRCC-B 1866	
HRMS-B 1929	
HRGD-B 1921	
GLS-V 1827	
MCFL Device	
HILT Nucl. LS	
HILT Nucl. SS	
HILT Nucl. BS	
AIT-H 392	
AHIS-BA 392	
AHRM-A	
NPV-N	
Neutron F	31.1
Neutron N	30.6
HGNS sens	28.2
HRCC cart	24.2
MCFL	18.8
HILT cali	18.3
HRDD-LS	
HRDD-SS	
HRDD-BS	17.9

Induction
Temperatu
Power Sup

7.9

SP SENSOR
HTEN HMAS
Accelerom HV
Mud Resis
Tension

0.1

0.0

TOOL ZERO

MAXIMUM STRING DIAMETER 4.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Production String

(in) (ft)
OD ID MD

Well Schematic

(ft) (in)
MD OD ID

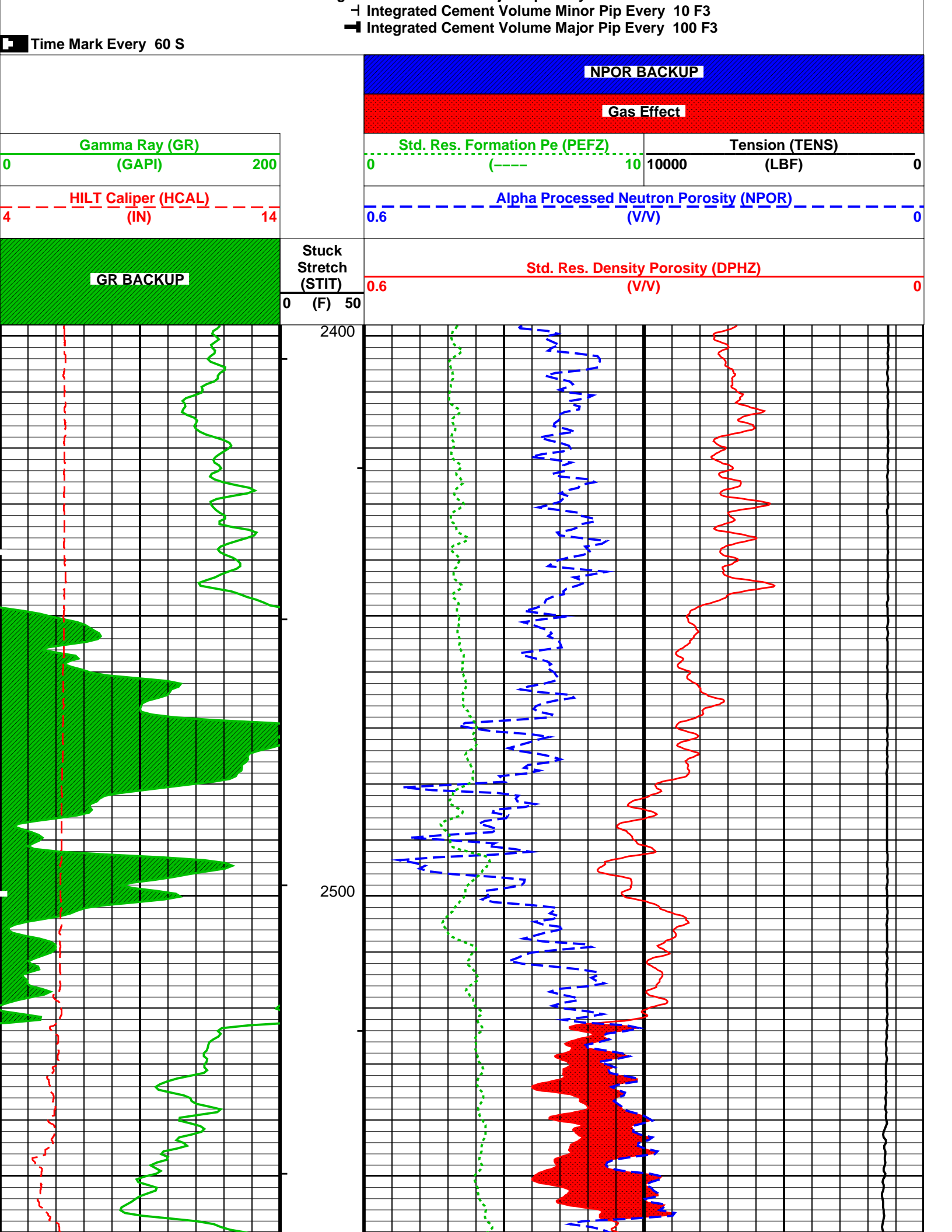
Casing String

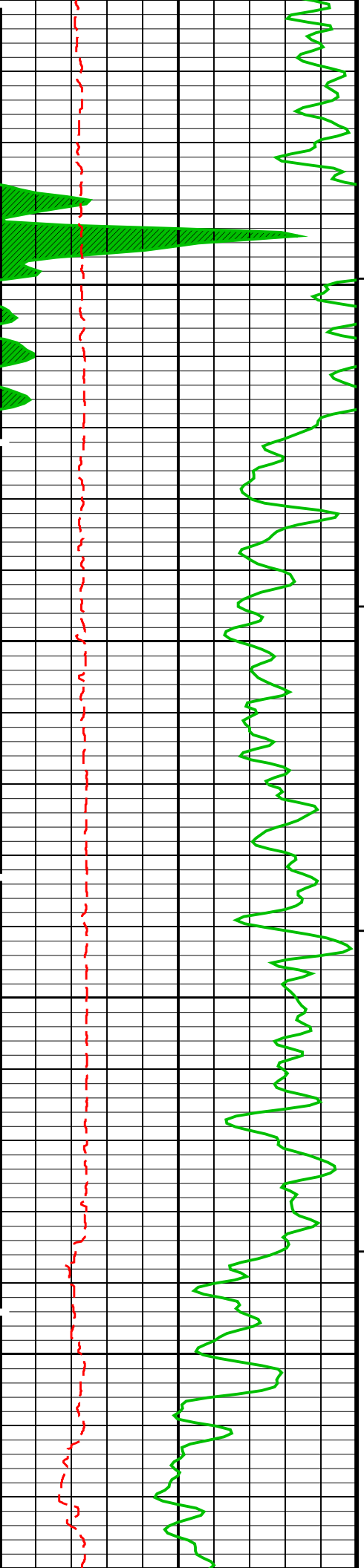
0.0 7.000

Casing String

415.0 7.000
415.0 6.125

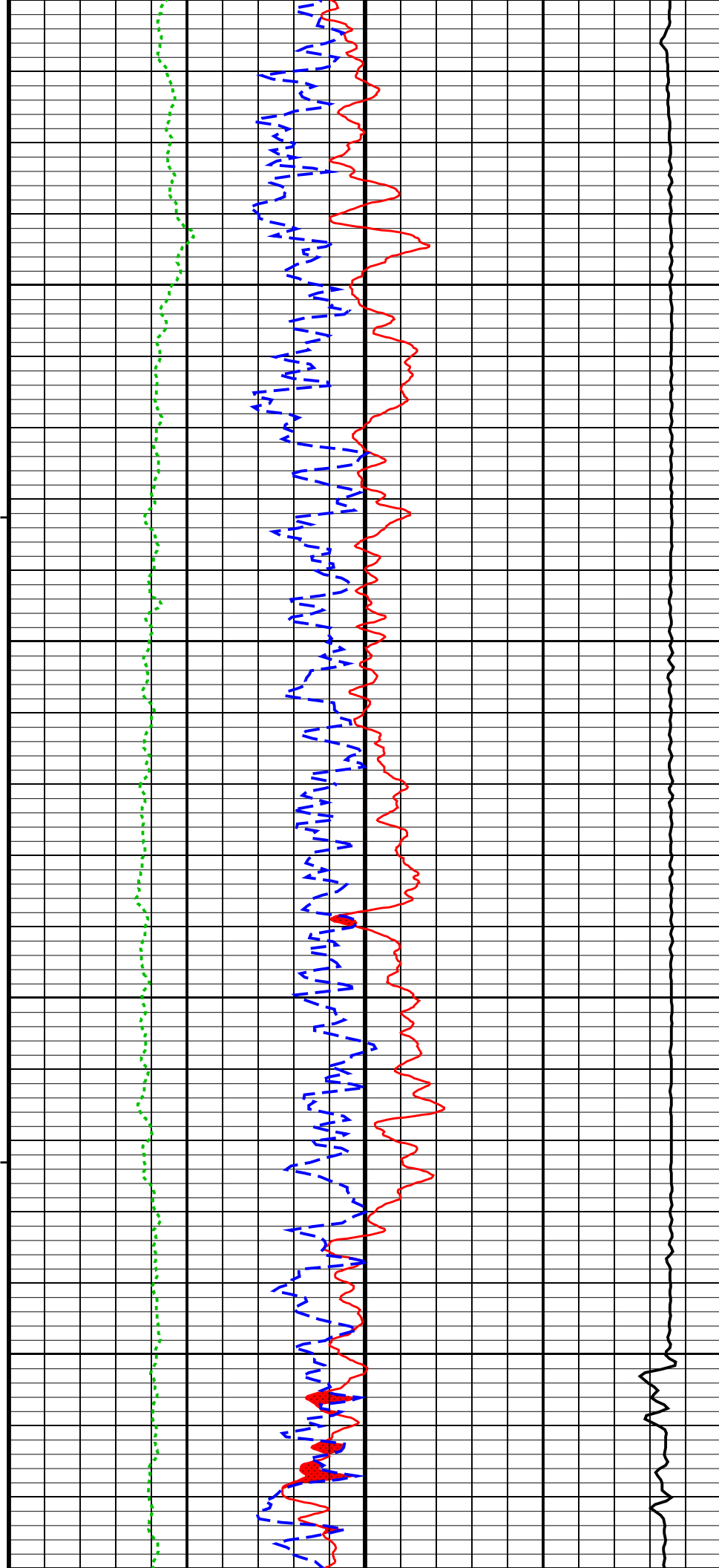
Casing Shoe
Borehole Segment

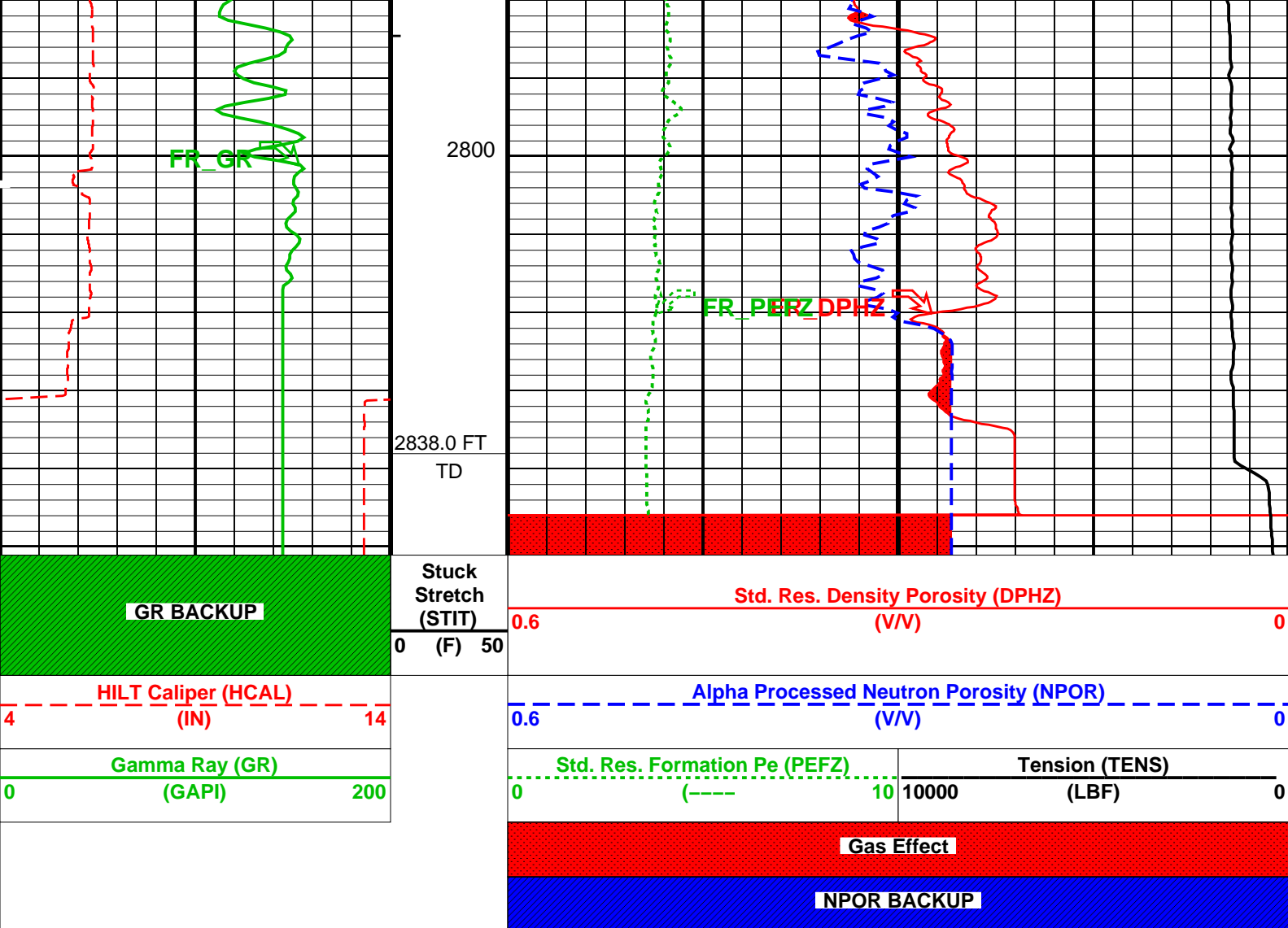




2600

2700





PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HILTB-CTS: High resolution Integrated Logging Tool-CTS			
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
FD	Fluid Density	1.000	g/cm3
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MDEN	Matrix Density	2.710	g/cm3
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	STDRES	
NSAR	HRDD Depth Sampling Rate	1.000	in
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	77.000	degF
SOCN	Standoff Distance	0.125	in

SOCN	Standoff Distance	0.125	in
SOCO	Standoff Correction Option	YES	
	HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	77.000	degF
	PERT: Preliminary Evaluation – Real Time		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0.000	deg
GGRD	Geothermal Gradient	0.010	degF/ft
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	77.000	degF
	STI: Stuck Tool Indicator		
STKT	STI Stuck Threshold	2.500	ft
TDD	Total Depth – Driller	2830.0	ft
TDL	Total Depth – Logger	2838.0	ft
	System and Miscellaneous		
BS	Bit Size	6.125	in
BSAL	Borehole Salinity		
CSIZ	Current Casing Size	7.000	in
CWEI	Casing Weight	20.000	lbm/ft
DFD	Drilling Fluid Density	9.900	lbm/gal
FSAL	Formation Salinity		
MST	Mud Sample Temperature	77.000	degF
RMFS	Resistivity of Mud Filtrate Sample	0.288	ohm.m

Format: Z_PORO_S5 Vertical Scale: 5" per 100' Graphics File Created: 14-Jun-2006 05:20

OP System Version: 13C0-300

MCM

HILTC SRPC-2788-HILT

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_012PUP	FN:11	PRODUCER	14-Jun-2006 04:58	2851.0 FT	141.5 FT
---------	-------------------------	-------	----------	-------------------	-----------	----------

Schlumberger

REPEAT ANALYSIS

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_004PUP	FN:3	PRODUCER	14-Jun-2006 04:11	2851.0 FT	2444.0 FT
DEFAULT	AIT_TLD_MCFL_CNL_006LUP	FN:5	PRODUCER	14-Jun-2006 04:12	2850.0 FT	135.5 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_012PUP	FN:11	PRODUCER	14-Jun-2006 04:58
---------	-------------------------	-------	----------	-------------------

OP System Version: 13C0-300

MCM

HILTB-CTS SRPC-2788-HILT

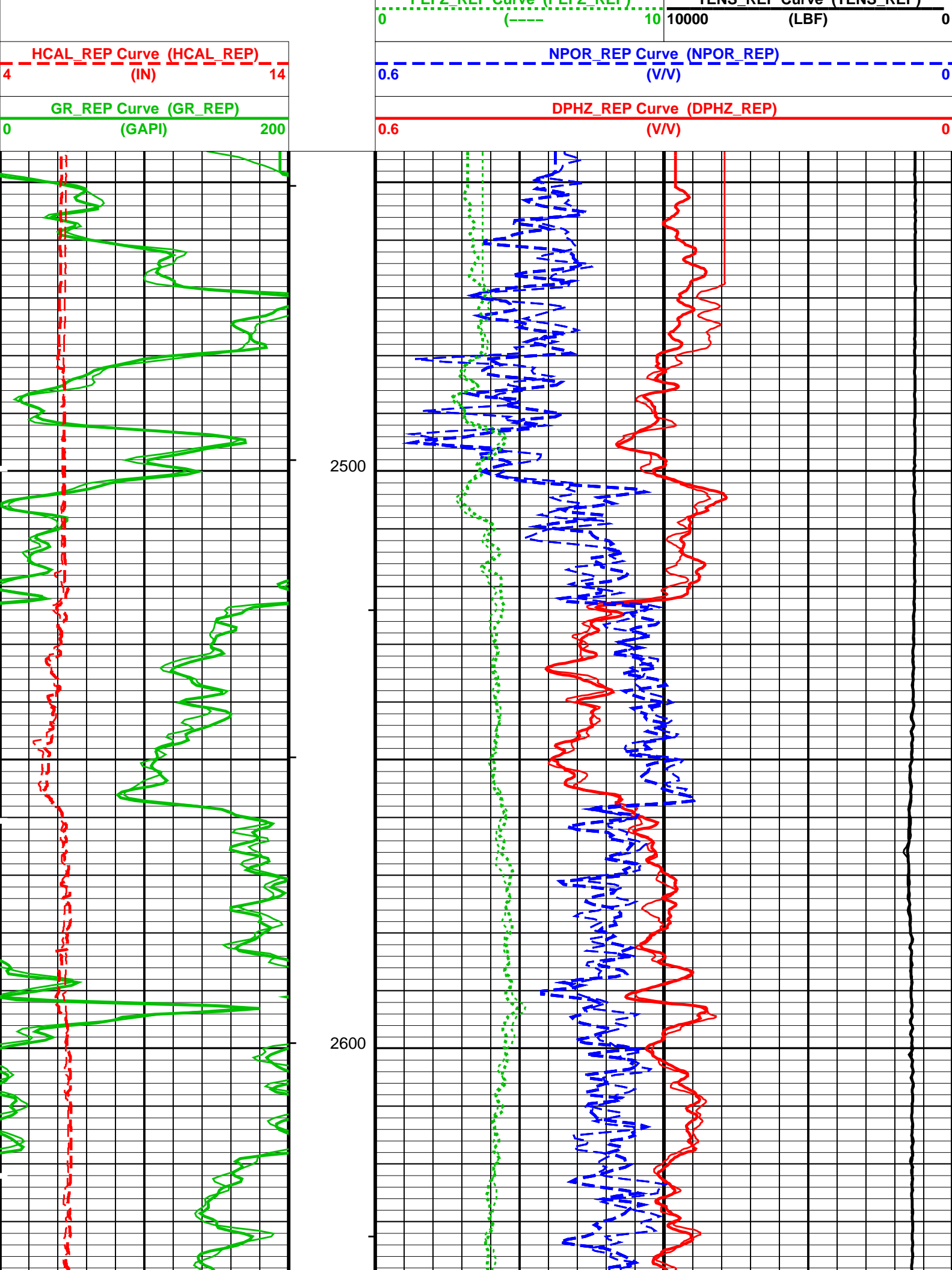
PIP SUMMARY

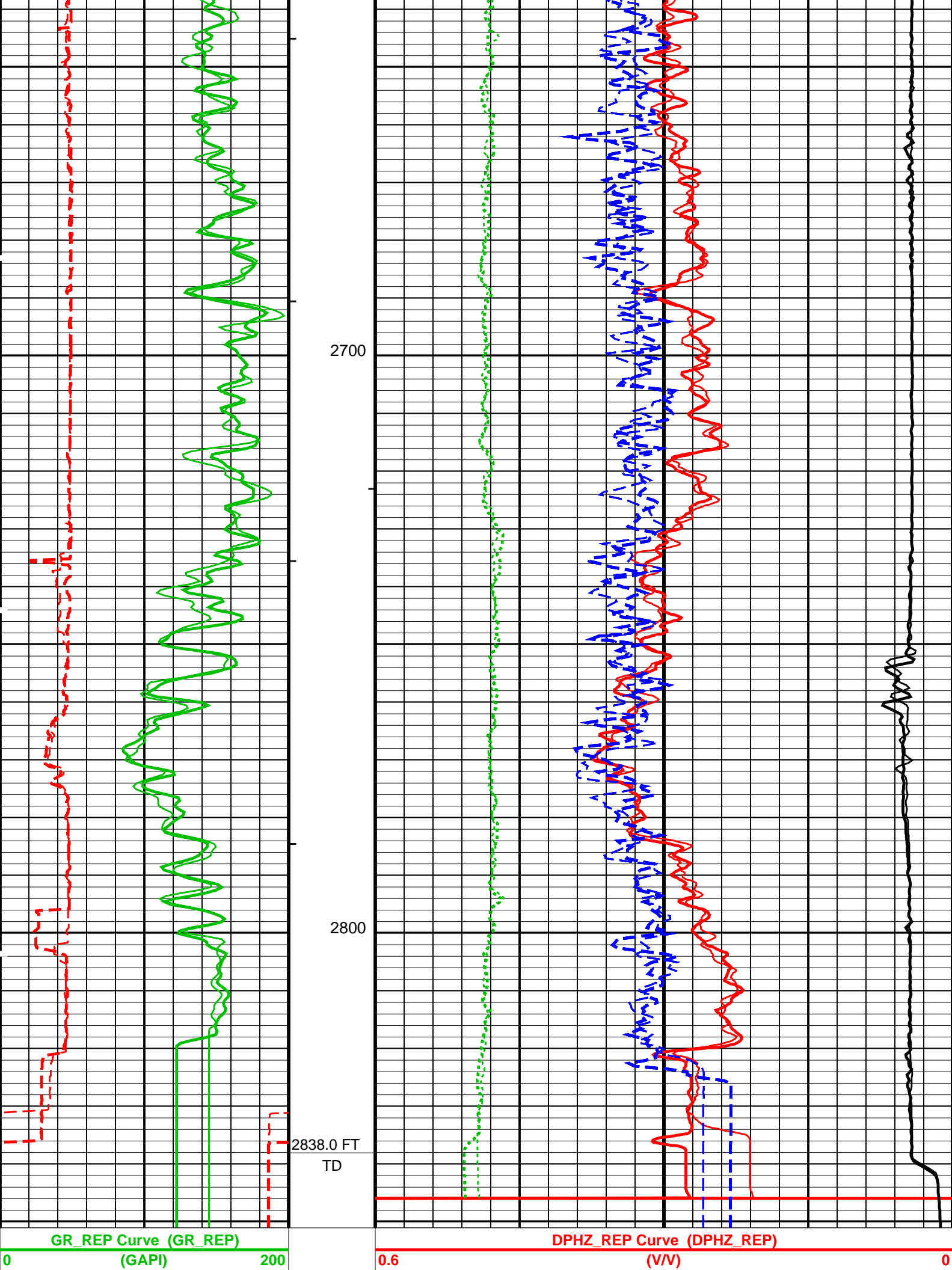
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

PEE7 PER Curve (PEE7 PER)

TENS PER Curve (TENS PER)





<div> <div> <div>HCAL_REP Curve (HCAL_REP)</div> <div>4</div> <div>(IN)</div> <div>14</div> </div> <div> <div>NPOR_REP Curve (NPOR_REP)</div> <div>0.6</div> <div>(V/V)</div> <div>0</div> </div> </div>		<div> <div>PEFZ_REP Curve (PEFZ_REP)</div> <div>0</div> <div>(----</div> <div>10</div> </div> <div> <div>TENS_REP Curve (TENS_REP)</div> <div>10000</div> <div>(LBF)</div> <div>0</div> </div>
--	--	--

HILTB-CTS

SRPC-2788-HILT

Input DLIS Files

DEFAULT

AIT_TLD_MCFL_CNL_004PUP

FN:3

PRODUCER

14-Jun-2006 04:11

2851.0 FT

2444.0 FT

DEFAULT

AIT_TLD_MCFL_CNL_006LUP

FN:5

PRODUCER

14-Jun-2006 04:12

2850.0 FT

135.5 FT

Output DLIS Files

DEFAULT

AIT_TLD_MCFL_CNL_012PUP

FN:11

PRODUCER

14-Jun-2006 04:58

Schlumberger

MAIN DENSITY LOG 5" = 100'

MAXIS Field Log

Input DLIS Files

DEFAULT

AIT_TLD_MCFL_CNL_012PUP

FN:11

PRODUCER

14-Jun-2006 04:58

2851.0 FT

141.5 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 92.35 ft3

Cement Volume = 43.20 ft3 (assuming 4.50 in casing O.D.)

Computed from 2838.0 ft to 2393.5 ft

OP System Version: 13C0-300

MCM

HILTC

SRPC-2788-HILT

PIP SUMMARY

└ Integrated Hole Volume Minor Pip Every 10 F3

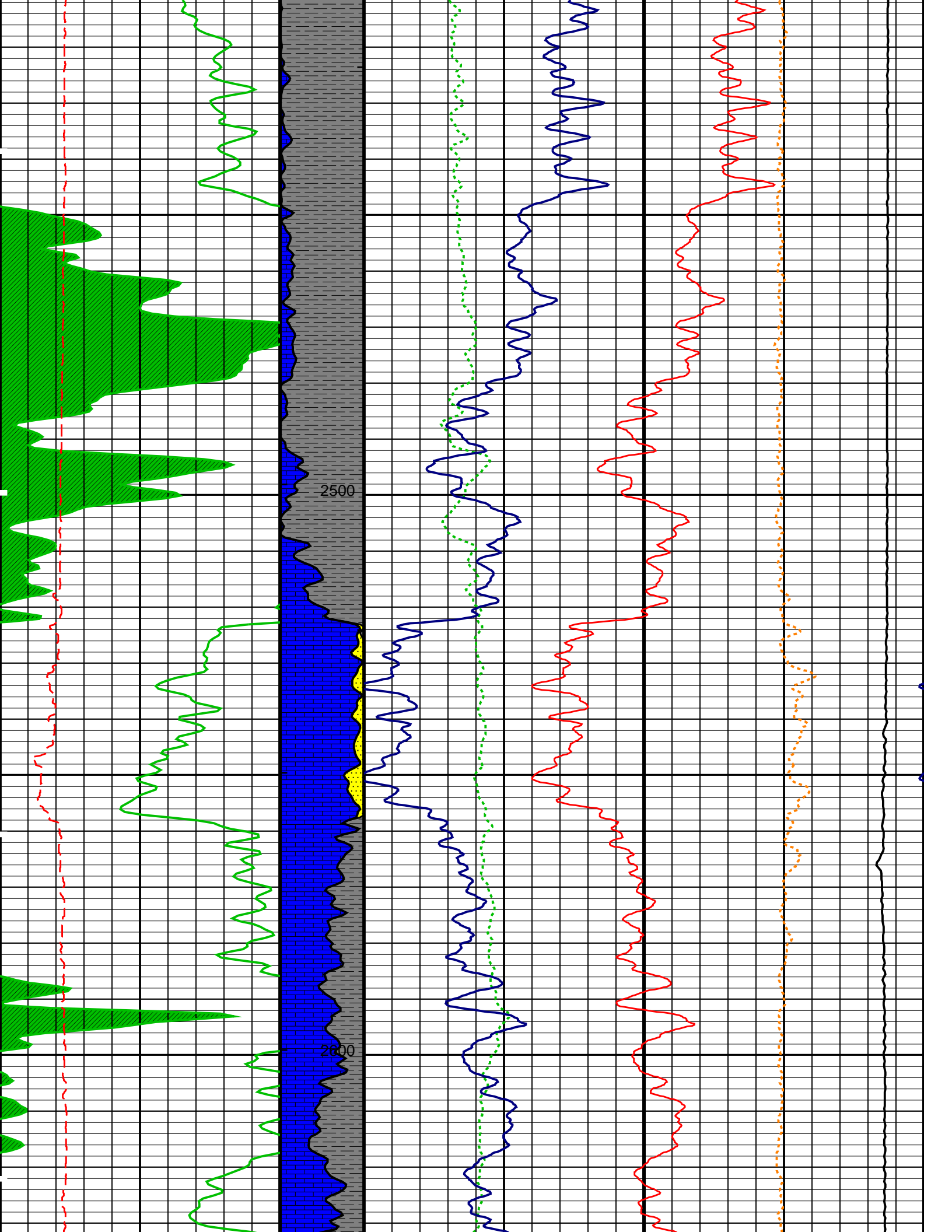
└ Integrated Hole Volume Major Pip Every 100 F3

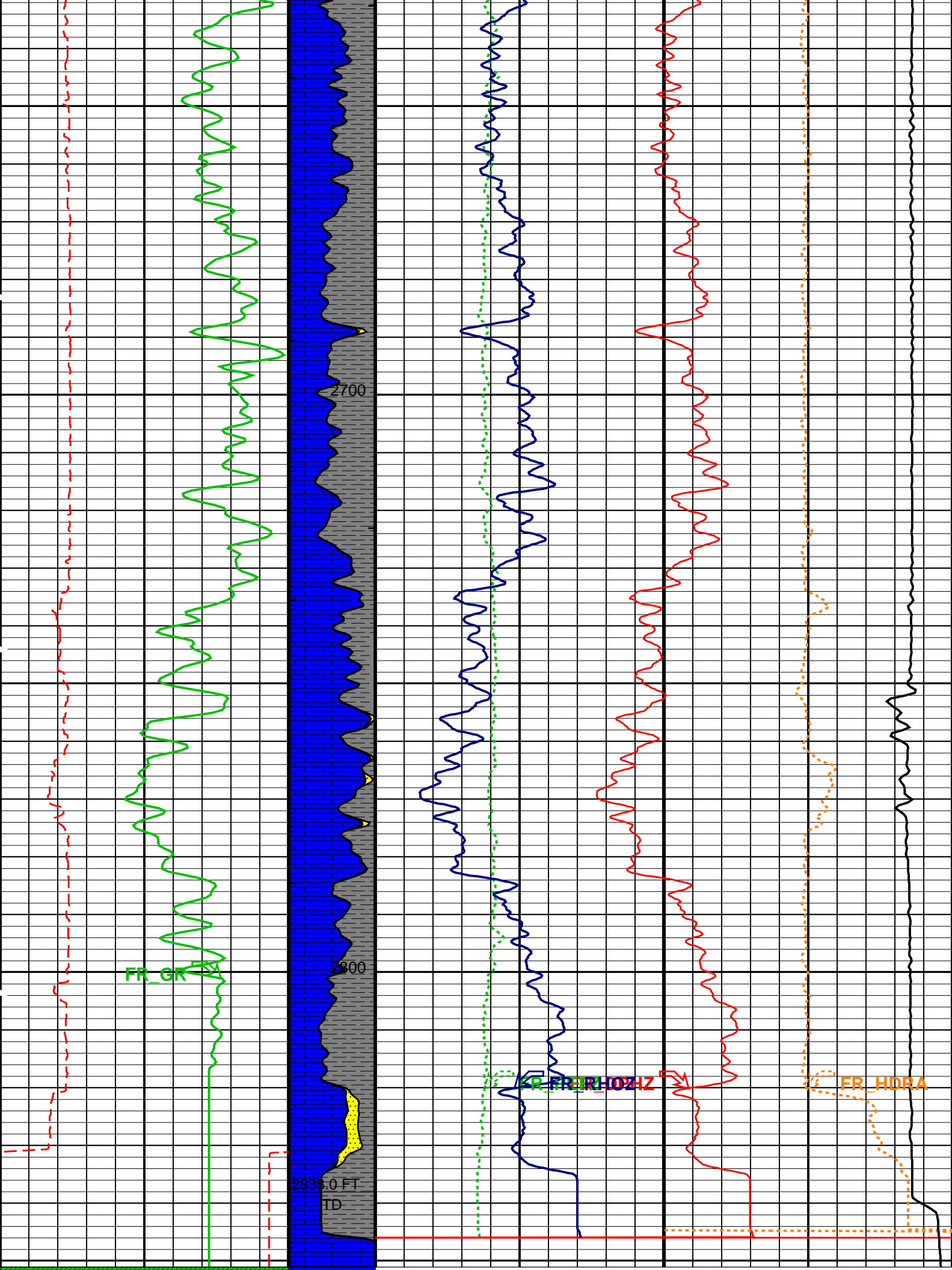
└ Integrated Cement Volume Minor Pip Every 10 F3

└ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

	<div>Stuck Stretch (STIT)</div> <div>0 (F) 50</div>		<div>Tension (TENS)</div> <div>10000 (LBF) 0</div>
<div>Gamma Ray (GR)</div> <div>(GAPI)</div> <div>0 200</div>	<div>Mineral 3</div> <div>From MP3 to D3T</div>	<div>Std. Res. Formation Density (RHOZ)</div> <div>(G/C3)</div> <div>2 3</div>	
<div>HILT Caliper (HCAL)</div> <div>(IN)</div> <div>4 14</div>	<div>Mineral 2</div> <div>From MP1 to MP3</div>	<div>Std. Res. Formation Pe (PEFZ)</div> <div>(-----)</div> <div>0 10</div>	<div>Density Correction (HDRA)</div> <div>(G/C3)</div> <div>-0.25 0.25</div>
<div>GR BACKUP</div>	<div>Mineral 1</div> <div>From D3T to MP1</div>	<div>Std. Res. Density Porosity (DPHZ)</div> <div>(V/V)</div> <div>0.6 0</div>	
	2400		





GR BACKUP	Mineral 1 From D3T to MP1	Std. Res. Density Porosity (DPHZ) (V/V)			
	0.6				0
HILT Caliper (HCAL) (IN)	Mineral 2 From MP1 to MP3	Std. Res. Formation Pe (PEFZ) (---		Density Correction (HDRA) (G/C3)	
4	0	14	10	-0.25	0.25
Gamma Ray (GR) (GAPI)	Mineral 3 From MP3 to D3T	Std. Res. Formation Density (RHOZ) (G/C3)			
0	2	200	3		
Stuck Stretch (STIT)				Tension (TENS) (LBF)	
0 (F) 50				10000	0

PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HILTB-CTS: High resolution Integrated Logging Tool-CTS			
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHT	Bottom Hole Temperature (used in calculations)	112.0	degF
DHC	Density Hole Correction	BS	
FD	Fluid Density	1.000	g/cm3
FEXP	Form Factor Exponent	2.000	
FNUM	Form Factor Numerator	1.000	
GGRD	Geothermal Gradient	0.010	degF/ft
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
MDEN	Matrix Density	2.710	g/cm3
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	STDRES	
NSAR	HRDD Depth Sampling Rate	1.000	in
SHT	Surface Hole Temperature	77.000	degF
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	112.0	degF
GGRD	Geothermal Gradient	0.010	degF/ft
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
SHT	Surface Hole Temperature	77.000	degF
PERT: Preliminary Evaluation - Real Time			
BDPS	Bulk Density Processing Selector	STANDARD	
BHT	Bottom Hole Temperature (used in calculations)	112.0	degF
CLIM	Caliper Limit for Bad Hole	999.0	in
CNPS	Corrected Neutron Porosity Selector	NPHI	
DRUL	DRHO Upper Limit	999.0	g/cm3
FCAL	Caliper Presence Flag	PRESENT	
FCGR	CGR Presence Flag	PRESENT	
FEXP	Form Factor Exponent	2.000	
FLDT	Bulk Density Presence Flag	PRESENT	
FNUM	Form Factor Numerator	1.000	
FSON	Sonic Presence Flag	ABSENT	
GGRD	Geothermal Gradient	0.010	degF/ft
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	LIME	
PMAX	PHI Maximum	0.500	ft3/ft3
POUT	Porosity Output Lithology	LIMESTONE	
RG21	RHO Grain (2-Mineral Model, Min-1)	2.710	g/cm3
RG22	RHO Grain (2-Mineral Model, Min-2)	2.644	g/cm3
RG23	RHO Grain (2-Mineral Model, Min-3)	2.877	g/cm3
RG31	RHO Grain (3-Mineral Model, Min-1)	2.710	g/cm3
RG32	RHO Grain (3-Mineral Model, Min-2)	2.644	g/cm3
RG33	RHO Grain (3-Mineral Model, Min-3)	2.877	g/cm3
RTLF	RT Limit Flag	NO_LIMIT	
RWF	Resistivity of Free Water	0.020	ohm.m
SHT	Surface Hole Temperature	77.000	degF
UF	U Fluid	0.398	
UM21	U Matrix (2-Mineral Model, Min-1)	13.770	
UM22	U Matrix (2-Mineral Model, Min-2)	4.770	

UM22	U Matrix (2-Mineral Model, Min-2)	4.779	
UM23	U Matrix (2-Mineral Model, Min-3)	8.997	
UM31	U Matrix (3-Mineral Model, Min-1)	13.770	
UM32	U Matrix (3-Mineral Model, Min-2)	4.779	
UM33	U Matrix (3-Mineral Model, Min-3)	8.997	
STI: Stuck Tool Indicator			
STKT	STI Stuck Threshold	2.500	ft
TDD	Total Depth - Driller	2830.0	ft
TDL	Total Depth - Logger	2838.0	ft
System and Miscellaneous			
BS	Bit Size	6.125	in
DFD	Drilling Fluid Density	9.900	lbm/gal
RMFS	Resistivity of Mud Filtrate Sample	0.288	ohm.m
TD	Total Depth	2838.0	ft
TWS	Temperature of Connate Water Sample	100.0	degF

Format: Z_DENS_S5 Vertical Scale: 5" per 100' Graphics File Created: 14-Jun-2006 05:20

OP System Version: 13C0-300

MCM

HILTC SRPC-2788-HILT

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_012PUP FN:11 PRODUCER 14-Jun-2006 04:58 2851.0 FT 141.5 FT

Schlumberger

BEFORE CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High resolution Integrated Logging Tool-CTS Wellsite Calibration - Electronics Calibration Check - Thru Cal Mag. & Phase							
Master: 7-Apr-2006 16:47 Before: 13-Jun-2006 17:24							
Thru Cal Magnitude - 0	0	0.6148	0.6147	N/A	N/A	N/A	V
Thru Cal Magnitude - 1	0	1.260	1.259	N/A	N/A	N/A	V
Thru Cal Magnitude - 2	0	0.6263	0.6262	N/A	N/A	N/A	V
Thru Cal Magnitude - 3	0	0.7065	0.7063	N/A	N/A	N/A	V
Thru Cal Magnitude - 4	0	1.322	1.322	N/A	N/A	N/A	V
Thru Cal Magnitude - 5	0	1.915	1.915	N/A	N/A	N/A	V
Thru Cal Magnitude - 6	0	1.920	1.920	N/A	N/A	N/A	V
Thru Cal Magnitude - 7	0	1.350	1.347	N/A	N/A	N/A	V
Phase - 0	0	68.55	68.30	N/A	N/A	N/A	DEG
Phase - 1	0	67.56	67.30	N/A	N/A	N/A	DEG
Phase - 2	0	63.58	63.30	N/A	N/A	N/A	DEG
Phase - 3	0	62.75	62.47	N/A	N/A	N/A	DEG
Phase - 4	0	56.17	55.87	N/A	N/A	N/A	DEG
Phase - 5	0	54.06	53.72	N/A	N/A	N/A	DEG
Phase - 6	0	54.00	53.66	N/A	N/A	N/A	DEG
Phase - 7	0	48.40	47.88	N/A	N/A	N/A	DEG
High resolution Integrated Logging Tool-CTS Wellsite Calibration - Electronics Calibration Check - Auxilliary							
Master: 7-Apr-2006 16:47 Before: 13-Jun-2006 17:24							
Array Induction SPA Plus	990.5	994.3	994.2	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	0.1626	0.1646	N/A	N/A	N/A	MV
Array Induction Temperature PI	0.9150	0.9209	0.9209	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	0.0001712	0.0001682	N/A	N/A	N/A	V
High resolution Integrated Logging Tool-CTS Wellsite Calibration - Test Loop Gain Correction							
Master: 7-Apr-2006 16:47							
Test Loop Gain Magnitude - 0	0	1.013	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 1	0	1.017	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 2	0	1.016	N/A	N/A	N/A	N/A	V

Master: 31-May-2006 10:48 Before: 13-Jun-2006 17:33							
CNTC Background	27.00	27.00	27.52	N/A	N/A	4.050	CPS
CFTC Background	28.35	28.35	29.21	N/A	N/A	4.253	CPS
High resolution Integrated Logging Tool-CTS Wellsite Calibration – Ratio Measurement							
Master: 31-May-2006 10:48							
Thermal Near Corr. (Tank)	6031	5311	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2793	2209	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.404	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool-CTS Wellsite Calibration – Accelerometer Calibration							
Before: 14-Jun-2006 3:45							
Z-Axis Acceleration	32.19	N/A	32.18	N/A	N/A	N/A	F/S2
High resolution Integrated Logging Tool-CTS Master Calibration – Inversion results							
Master: 30-May-2006 15:38							
Rho Aluminum	2.596	2.591	--	--	--	--	G/C3
Rho Magnesium	1.686	1.689	--	--	--	--	G/C3
Pe Aluminum	2.570	2.537	--	--	--	--	
Pe Magnesium	2.650	2.640	--	--	--	--	
High resolution Integrated Logging Tool-CTS Master Calibration – Deviation Summary							
Master: 30-May-2006 15:38							
BS Average Deviation	0	0.4895	--	--	--	--	%
BS Max Deviation	0	1.017	--	--	--	--	%
SS Average Deviation	0	0.8797	--	--	--	--	%
SS Max Deviation	0	1.458	--	--	--	--	%
LS Average Deviation	0	1.283	--	--	--	--	%
LS Max Deviation	0	2.579	--	--	--	--	%

The GLS-VJ source activity is acceptable.

The HGNS Neutron Master Calibration was done with the following parameters :

NCT-B Water Temperature	73.0	DEGF.
Thermal Housing Size	3.354	IN.
NSR-F serial number	5068	





High resolution Integrated Logging Tool-CTS / Equipment Identification			
Primary Equipment:			
Array Induction Tool – H	AIT – H	392	
Rm/SP Bottom Nose	AHRM – A		
Array Induction Sonde	AHIS – BA	392	
HILT high-Resolution Mechanical Sonde	HRMS – B	1929	
HILT Rxo Gamma-ray Device	HRGD – B	1921	
HILT Micro Cylindrically Focused Log Dev	MCFL –		
GR Logging Source	GLS – V	1827	
HILT High Res. Control Cartridge	HRCC – B	1866	
Auxiliary Equipment:			

High resolution Integrated Logging Tool-CTS Wellsite Calibration							
Electronics Calibration Check – Thru Cal Mag. & Phase							
Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Master	0.6148		0.6050	68.55		71.00
	Before	0.6147			68.30		
1	Master	1.260		1.270	67.56		70.00
	Before	1.259			67.30		
2	Master	0.6263		0.6230	63.58		66.00
	Before	0.6262			63.30		
3	Master	0.7065		0.7040	62.75		65.00
	Before	0.7063			62.47		
4	Master	1.322		1.337	56.17		59.00
	Before						

5	Before	1.322		1.955	55.87		57.00
	Master	1.915			54.06		
	Before	1.915			53.72		
6	Master	1.920		1.955	54.00		57.00
	Before	1.920			53.66		
7	Master	1.350		1.415	48.40		53.00
	Before	1.347			47.88		
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)	Nom -60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)
Master: 7-Apr-2006 16:47					Before: 13-Jun-2006 17:24		







High resolution Integrated Logging Tool-CTS Wellsite Calibration												
Electronics Calibration Check – Auxilliary												
Phase	Array Induction SPA Plus MV			Value	Phase	Array Induction SPA Zero MV			Value			
Master				994.3	Master				0.1626			
Before				994.2	Before				0.1646			
941.0 (Minimum)				990.5 (Nominal)	1040 (Maximum)				-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)	
Phase	Array Induction Temperature Plus V			Value	Phase	Array Induction Temperature Zero V			Value			
Master				0.9209	Master				0.0001712			
Before				0.9209	Before				0.0001682			
0.8700 (Minimum)				0.9150 (Nominal)	0.9600 (Maximum)				-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)	
Master: 7-Apr-2006 16:47					Before: 13-Jun-2006 17:24							

High resolution Integrated Logging Tool-CTS Wellsite Calibration							
Test Loop Gain Correction							
Idx	Value	Test Loop Gain Magnitude V			Value	Phase DEG	
0	1.013				0.8643		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
1	1.017				0.6810		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
2	1.016				0.07313		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
3	1.010				0.1104		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
4	0.9965				0.05826		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
5	0.9861				-0.1957		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
6	0.9960				0.1911		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
7	0.9940				-0.2309		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
Master: 7-Apr-2006 16:47							

High resolution Integrated Logging Tool-CTS Wellsite Calibration							
Sonde Error Correction							
Idx	Value	R Sonde Error Correction MM/M			Value	X Sonde Error Correction MM/M	
0	-85.65				-228.4		
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)		0 (Nominal)	2250 (Maximum)
1	185.8				171.6		
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)		0 (Nominal)	2250 (Maximum)

2	109.0			-55.32		
	66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)	-350.0 (Minimum)	0 (Nominal)	350.0 (Maximum)
3	63.31			-13.00		
	39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)	-250.0 (Minimum)	0 (Nominal)	250.0 (Maximum)
4	25.95			23.77		
	15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)	-63.00 (Minimum)	0 (Nominal)	63.00 (Maximum)
5	12.39			-7.886		
	4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)	-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
6	9.316			-4.210		
	5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)
7	-0.4177			-5.950		
	-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)

Master: 7-Apr-2006 16:47

High resolution Integrated Logging Tool-CTS Wellsite Calibration								
Mud Gain Correction								
Idx	Value	Coarse – Mag, Real, Imag			Value	Fine – Mag, Real, Imag		
0	1.070				1.069			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
1	1.070				1.069			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	1.070				1.069			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
Master: 7-Apr-2006 16:47								

Master: 7-Apr-2006 16:47

High resolution Integrated Logging Tool-CTS Wellsite Calibration									
Stab Measurement Summary									
Phase	BS Window Ratio			Value	Phase	SS Window Ratio			Value
Before				0.7377	Before				0.4795
	0.7049 (Minimum)	0.7420 (Nominal)	0.7791 (Maximum)			0.4586 (Minimum)	0.4827 (Nominal)	0.5069 (Maximum)	
Phase	BS Window Sum CPS			Value	Phase	SS Window Sum CPS			Value
Before				11940	Before				11890
	11360 (Minimum)	11960 (Nominal)	12560 (Maximum)			11290 (Minimum)	11890 (Nominal)	12480 (Maximum)	
Phase	LS Window Ratio			Value	Phase	LS Window Sum CPS			Value
Before				0.2927	Before				1270
	0.2782 (Minimum)	0.2929 (Nominal)	0.3075 (Maximum)			1213 (Minimum)	1276 (Nominal)	1340 (Maximum)	

Before: 13-Jun-2006 17:54




High resolution Integrated Logging Tool-CTS Wellsite Calibration									
Photo-multiplier High Voltages Calibrations									
Phase	BS PM High Voltage (Command) V			Value	Phase	SS PM High Voltage (Command) V			Value
Before				1502	Before				1994
	1395 (Minimum)	1495 (Nominal)	1595 (Maximum)			1909 (Minimum)	2009 (Nominal)	2109 (Maximum)	
Phase	LS PM High Voltage (Command) V			Value	Phase	LS PM High Voltage (Command) V			Value
Before				1986	Before				1986
	1887 (Minimum)	1987 (Nominal)	2087 (Maximum)			1887 (Minimum)	1987 (Nominal)	2087 (Maximum)	

Before: 13-Jun-2006 17:54



High resolution Integrated Logging Tool-CTS Wellsite Calibration									
Crystal Quality Resolutions Calibration									
Phase	BS Crystal Resolution %			Value	Phase	SS Crystal Resolution %			Value
Before				11.90	Before				9.612
	10.73 (Minimum)	11.73 (Nominal)	12.73 (Maximum)			8.672 (Minimum)	9.672 (Nominal)	10.67 (Maximum)	
Phase	LS Crystal Resolution %			Value	Phase	LS Crystal Resolution %			Value
Before				9.924	Before				9.924
	8.398 (Minimum)	9.398 (Nominal)	10.40 (Maximum)			8.398 (Minimum)	9.398 (Nominal)	10.40 (Maximum)	

Before: 13-Jun-2006 17:54




High resolution Integrated Logging Tool-CTS Wellsite Calibration									
MCFL Calibration									
Phase	Raw B2 Resistivity OHMM			Value	Phase	Raw B1 Resistivity OHMM			Value
Before				11.90	Before				9.612
	10.73 (Minimum)	11.73 (Nominal)	12.73 (Maximum)			8.672 (Minimum)	9.672 (Nominal)	10.67 (Maximum)	

Phase	Raw B0 Resistivity OHMM	value	Phase	Raw B1 Resistivity OHMM	value	Phase	Raw B2 Resistivity OHMM	value	
Before		3874	Before		3810	Before		3809	
	3565 (Minimum)	3875 (Nominal)	4185 (Maximum)	3524 (Minimum)	3830 (Nominal)	4136 (Maximum)	3524 (Minimum)	3830 (Nominal)	4136 (Maximum)





Before: 13-Jun-2006 17:57

High resolution Integrated Logging Tool-CTS Wellsite Calibration							
HILT Caliper Calibration							
Phase	HILT Caliper Zero Measurement IN		Value	Phase	HILT Caliper Plus Measurement IN		Value
Before			8.002	Before			12.22
	6.000 (Minimum)	8.000 (Nominal)	10.00 (Maximum)		9.000 (Minimum)	12.00 (Nominal)	15.00 (Maximum)
Before: 13-Jun-2006 17:50							

Before: 13-Jun-2006 17:50




High resolution Integrated Logging Tool-CTS Wellsite Calibration									
Detector Calibration									
Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value	
Before		81.27	Before		167.2	Before		165.0	
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)	152.0 (Minimum)	167.2 (Nominal)	182.4 (Maximum)	150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)

Before: 13-Jun-2006 17:31


High resolution Integrated Logging Tool-CTS Wellsite Calibration							
Zero Measurement							
Phase	CNTC Background CPS		Value	Phase	CFTC Background CPS		Value
Master			27.00	Master			28.35
Before			27.52	Before			29.21
5.000 (Minimum)			27.00 (Nominal)	40.00 (Maximum)			
Master: 31-May-2006 10:48				Before: 13-Jun-2006 17:33			

Master: 31-May-2006 10:48

















Before: 13-Jun-2006 17:33

High resolution Integrated Logging Tool-CTS Wellsite Calibration									
Ratio Measurement									
Phase	Thermal Near Corr. (Tank) CPS	Value	Phase	Thermal Far Corr. (Tank) CPS	Value	Phase	CNTC/CFTC (Tank)	Value	
Master		5311	Master		2209	Master		2.404	
	5000 (Minimum)	6031 (Nominal)	7200 (Maximum)	2075 (Minimum)	2793 (Nominal)	3125 (Maximum)	2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)





Master: 31-May-2006 10:48

















High resolution Integrated Logging Tool-CTS Wellsite Calibration			
Accelerometer Calibration			
Phase	Z-Axis Acceleration F/S2	Value	
Before		32.18	
	31.53 (Minimum)	32.19 (Nominal)	32.84 (Maximum)















Before: 14-Jun-2006 3:45

High resolution Integrated Logging Tool-CTS Master Calibration							
Electronics Calibration Check - Thru Cal Mag. & Phase							
Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Master	0.6148		0.6050	68.55		71.00
1	Master	1.260		1.270	67.56		70.00
2	Master	0.6263		0.6230	63.58		66.00
3	Master	0.7065		0.7040	62.75		65.00
4	Master	1.322		1.337	56.17		59.00
5	Master	1.915		1.955	54.06		57.00
6	Master	1.920		1.955	54.00		57.00
7	Master	1.350		1.415	48.40		53.00
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)	Nom -60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)

Master: 7-Apr-2006 16:47

High resolution Integrated Logging Tool—CTS Master Calibration							
Electronics Calibration Check – Auxilliary							
Phase	Array Induction SPA Plus MV		Value	Phase	Array Induction SPA Zero MV		Value
Master			994.3	Master			0.1626
	941.0 (Minimum)	990.5 (Nominal)			1040 (Maximum)	-50.00 (Minimum)	
Phase	Array Induction Temperature Plus V		Value	Phase	Array Induction Temperature Zero V		Value
Master			0.9209	Master			0.0001712
	0.8700 (Minimum)	0.9150 (Nominal)			0.9600 (Maximum)	-0.05000 (Minimum)	
Master: 7–Apr–2006 16:47							

High resolution Integrated Logging Tool–CTS Master Calibration							
Test Loop Gain Correction							
Idx	Value	Test Loop Gain Magnitude V			Value	Phase DEG	
0	1.013				0.8643		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
1	1.017				0.6810		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
2	1.016				0.07313		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
3	1.010				0.1104		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
4	0.9965				0.05826		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
5	0.9861				-0.1957		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
6	0.9960				0.1911		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
7	0.9940				-0.2309		
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
Master: 7–Apr–2006 16:47							

High resolution Integrated Logging Tool–CTS Master Calibration							
Sonde Error Correction							
Idx	Value	R Sonde Error Correction MM/M			Value	X Sonde Error Correction MM/M	
0	-85.65				-228.4		
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)		-2250 (Minimum)	0 (Nominal)
1	185.8				171.6		
		114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)		-625.0 (Minimum)	0 (Nominal)
2	109.0				-55.32		
		66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)		-350.0 (Minimum)	0 (Nominal)
3	63.31				-13.00		
		39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)		-250.0 (Minimum)	0 (Nominal)
4	25.95				23.77		
		15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)		-63.00 (Minimum)	0 (Nominal)
5	12.39				-7.886		
		4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)		-50.00 (Minimum)	0 (Nominal)
6	9.316				-4.210		
		5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)		-30.00 (Minimum)	0 (Nominal)

Master: 7-Apr-2006 16:47

Master: 7-Apr-2006 16:47

Master: 30-May-2006 15:38

Master: 30-May-2006 15:38

Master: 31-May-2006 10:48

Master: 31-May-2006 10:48

Company: Rosetta Resources Operating, LP

Schlumberger

Well: Smith 28–3

Field: Wildcat

County: Yuma

State: Colorado

Platform Express

Compensated Neutron

Litho Density