

Company: Vecta Oil & Gas LTD

Well: Maroon 24-20

Field: Wildcat

County: Cheyenne State: Colorado

County: Cheyenne Field: Wildcat Location: SE/SW Sec. 20, Twn 14 S, Rng 47 W Well: Maroon 24-20 Company: Vecta Oil & Gas LTD	Platform Express		
	Triple Combo		
	High Resolution		
	Location:		
	SE/SW Sec. 20, Twn 14 S, Rng 47 W SHL: 888' FSL & 1,499' FWL	Elev. K.B. 4253.00 ft G.L. 4242.00 ft D.F. 4252.00 ft	
Logging Date	Permanent Datum:	Ground Level	Elev.: 4242.00 f
	Log Measured From:	Kelly Bushing	11.00 ft above Perm.Datum
	Drilling Measured From:	Kelly Bushing	
	API Serial No. 05-017-07718-0000	Section: 20	Township: 47 W Range: 47 W

Run Number	Run-1		
Depth Driller	5445.00 ft		
Schlumberger Depth	5442.00 ft		
Bottom Log Interval	5442.00 ft		
Top Log Interval	431.00 ft		
Casing Driller Size @ Depth	8.625 in @ 434.00 ft		
Casing Schlumberger	431 ft		
Bit Size	7.875 in		
Type Fluid In Hole	Gel Chemical		
Density	Viscosity	58 s	
Fluid Loss	PH	9	
MUD			
Source of Sample			
RM @ Meas Temp	2.59 ohm.m @ 51.6 degF		
RMF @ Meas Temp	1.94 ohm.m @ 51.6 degF		
RMC @ Meas Temp	3.24 ohm.m @ 51.6 degF		
Source RMF	RMC	Calculated	
RM @ BHT	RMF @ BHT	0.81 @ 180	0.61 @ 180
Max Recorded Temperatures			
Circulation Stopped		Time	14:00:00
Logger on Bottom		Time	
Unit Number	Location:	2135	Fort Morgan, CO
Recorded By	Stan Thompson		
Witnessed By	Larry Schneider & Ryan		

Disclaimer

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Well Sketch

Driller Depth

0.00 ft

434.00 ft

Casing 8.625in
24lbm/ft



Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	7.875					
Top Driller (ft)	434					
Top Logger (ft)	434					
Bottom Driller (ft)	5445					
Bottom Logger (ft)	5442					
Casing						
Size (in)	8.625					
Weight (lbm/ft)	24					
Inner Diameter (in)	8.099					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	434					
Bottom Logger (ft)	431					

Run-1

HiRes Triple Combo 5"

Integration Summary

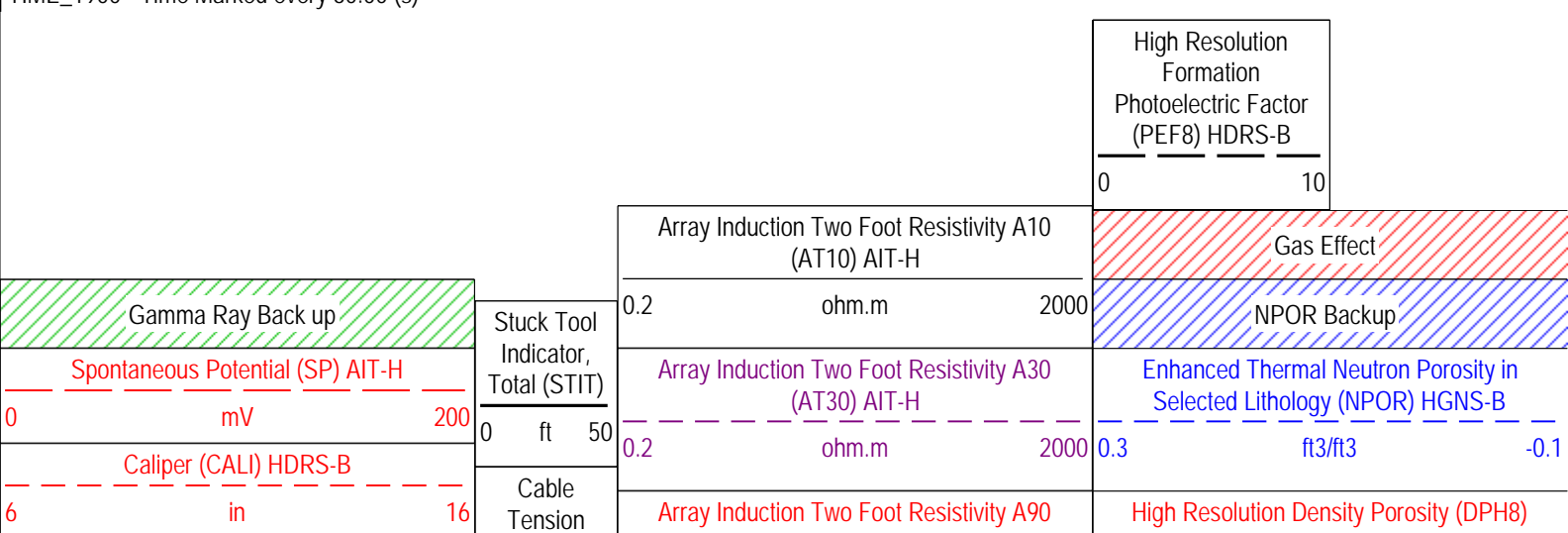
Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
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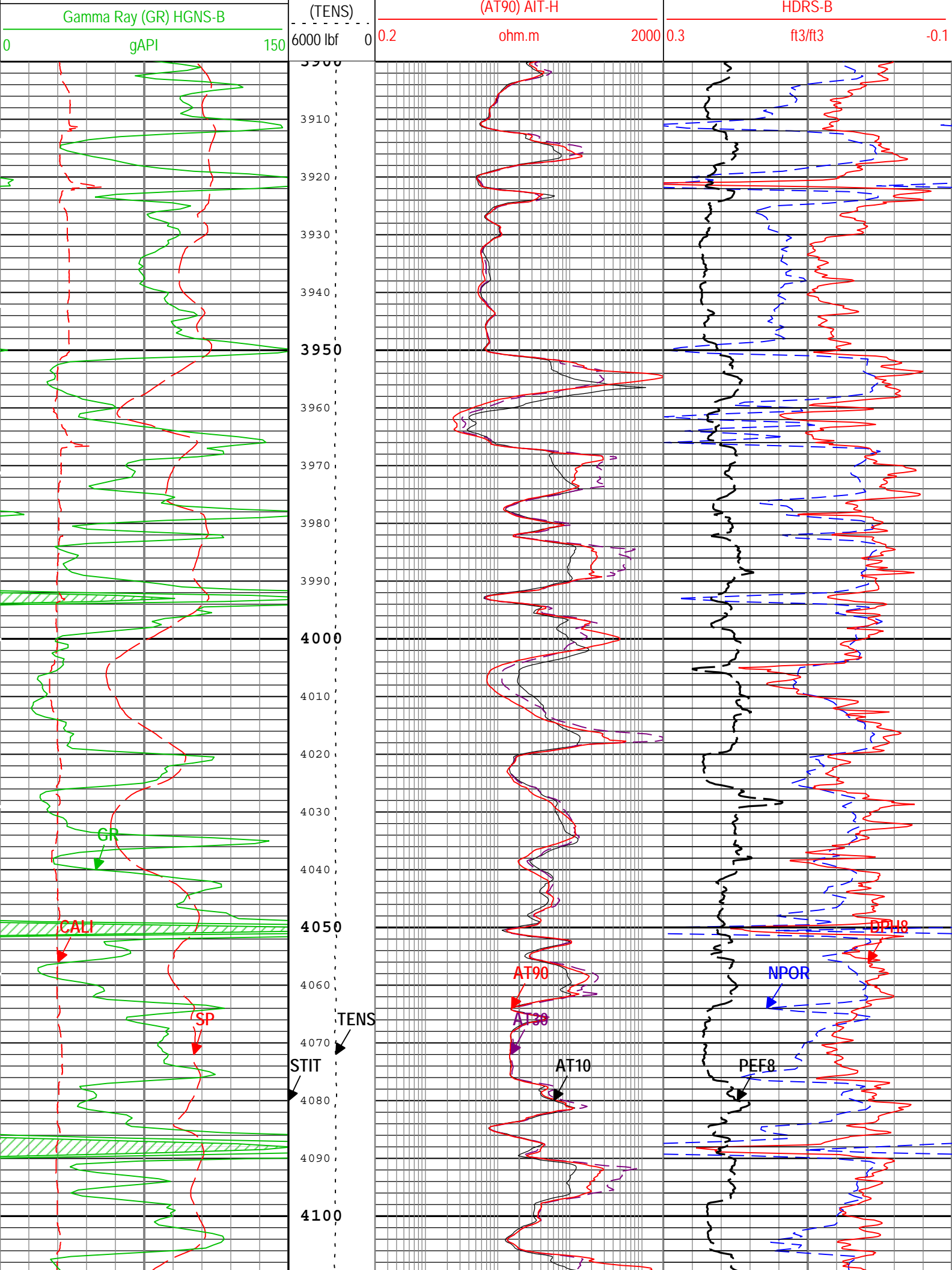
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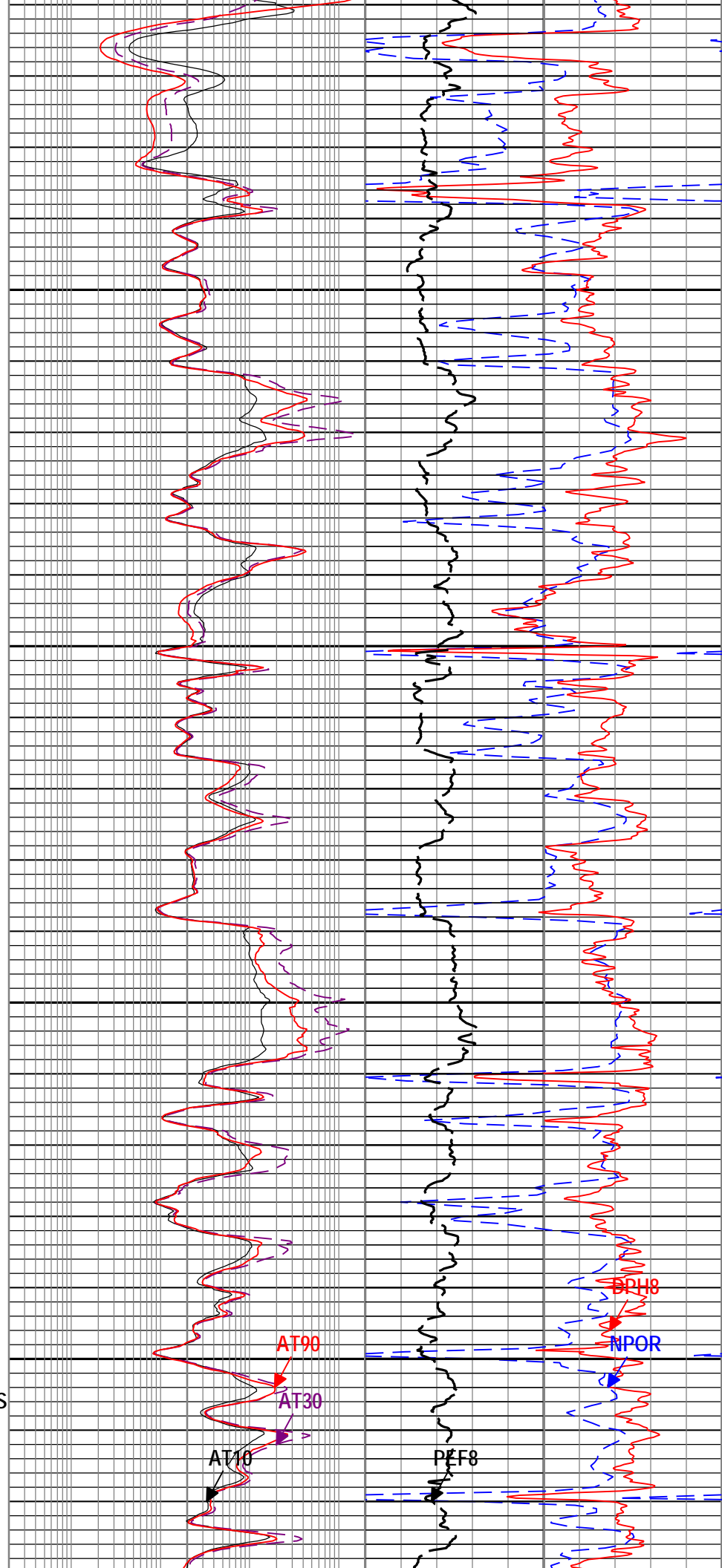
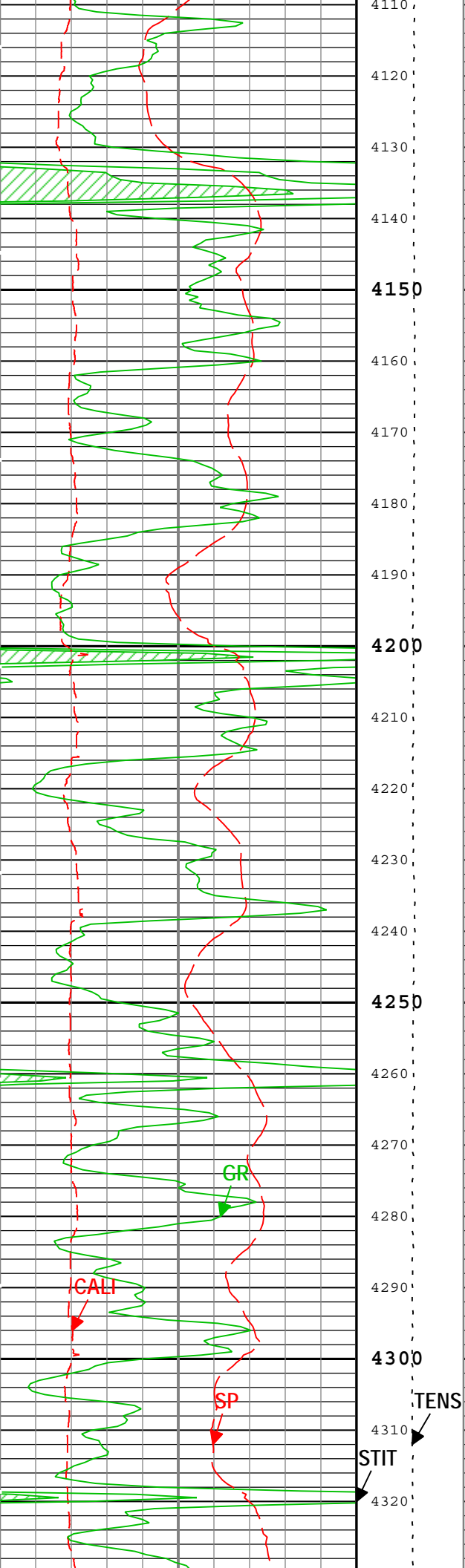
Run-1: Log[3]:Up

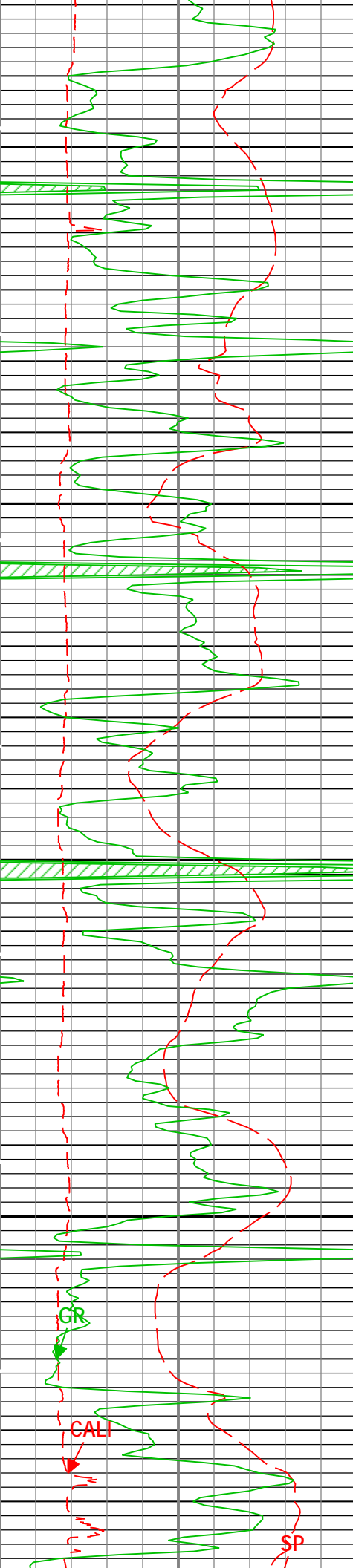
Description: HGNS standard resolution porosities for Platform Express Format: Log (HiRes EMD 5in Triple Combo) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 19-Nov-2012 22:19:48

TIME_1900 - Time Marked every 60.00 (s)



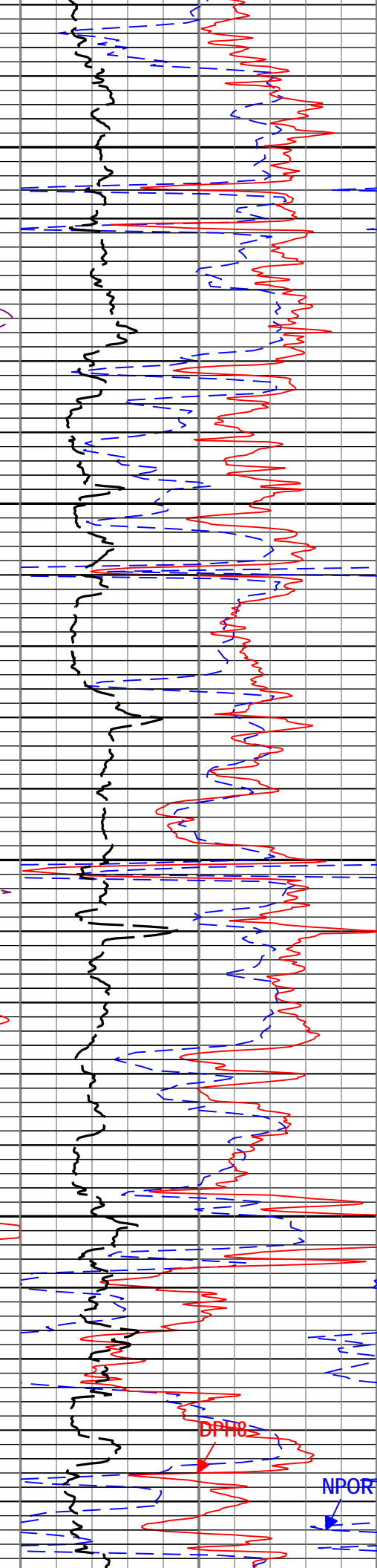
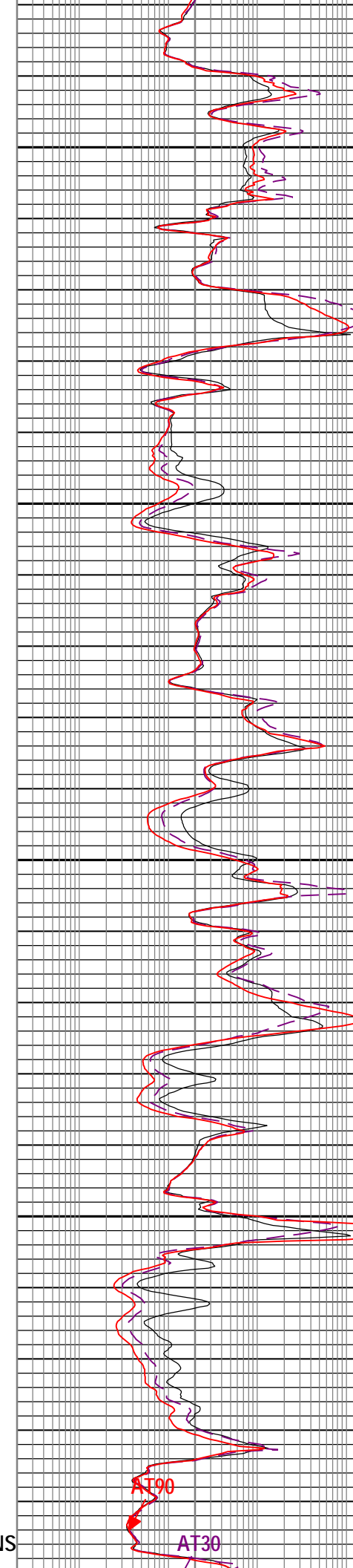


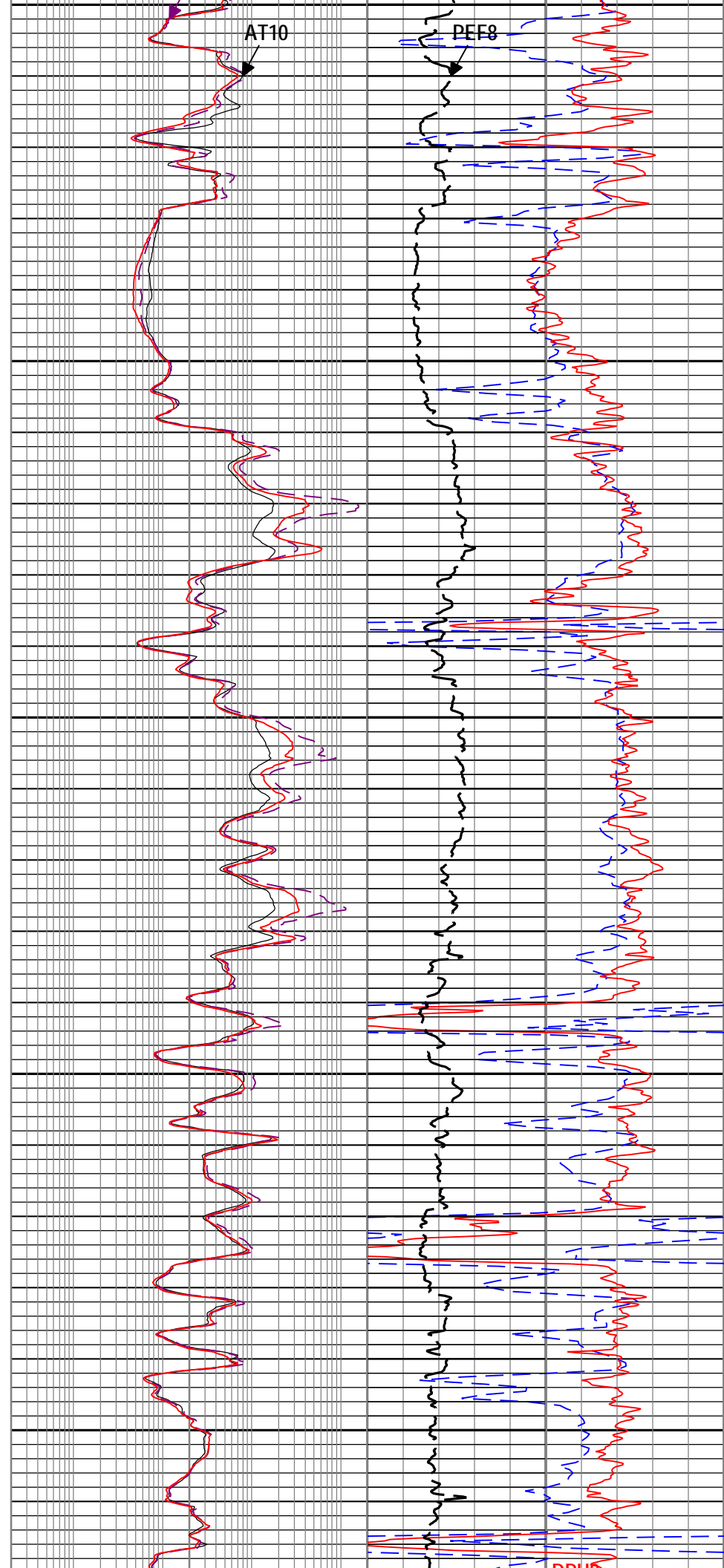
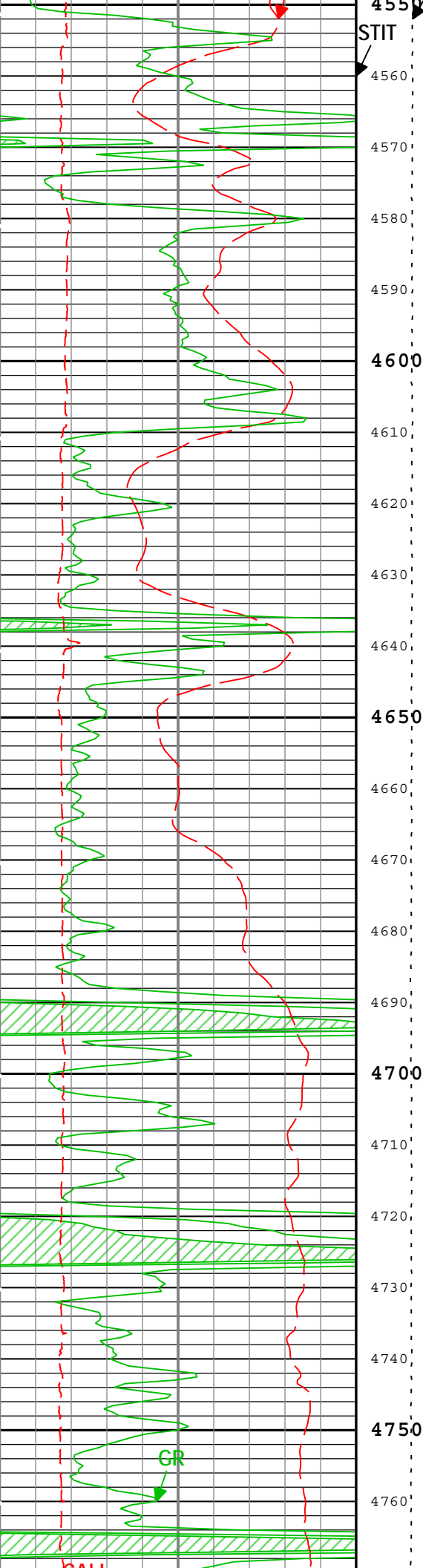


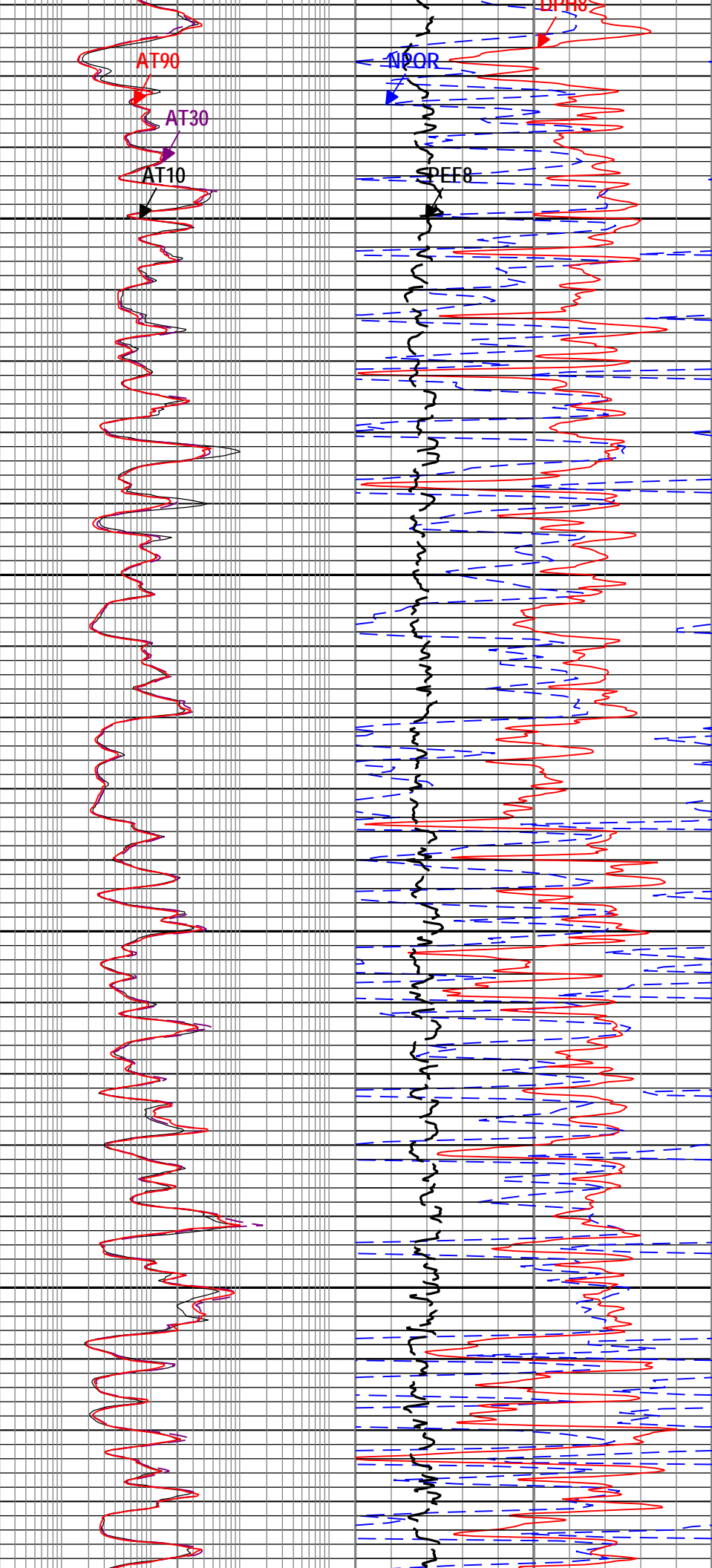
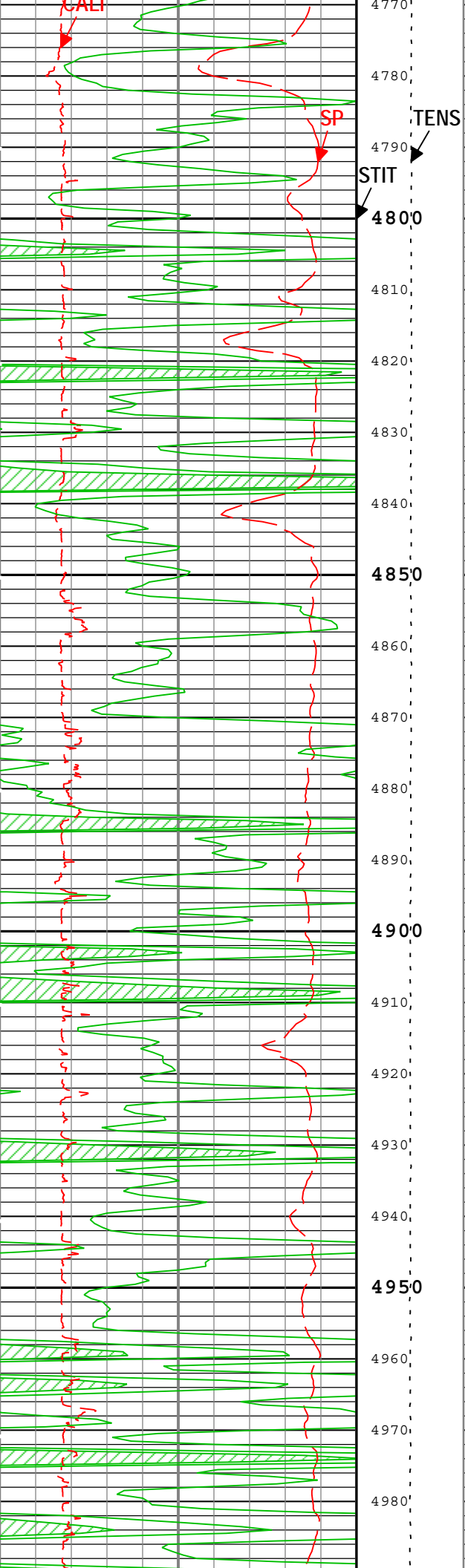


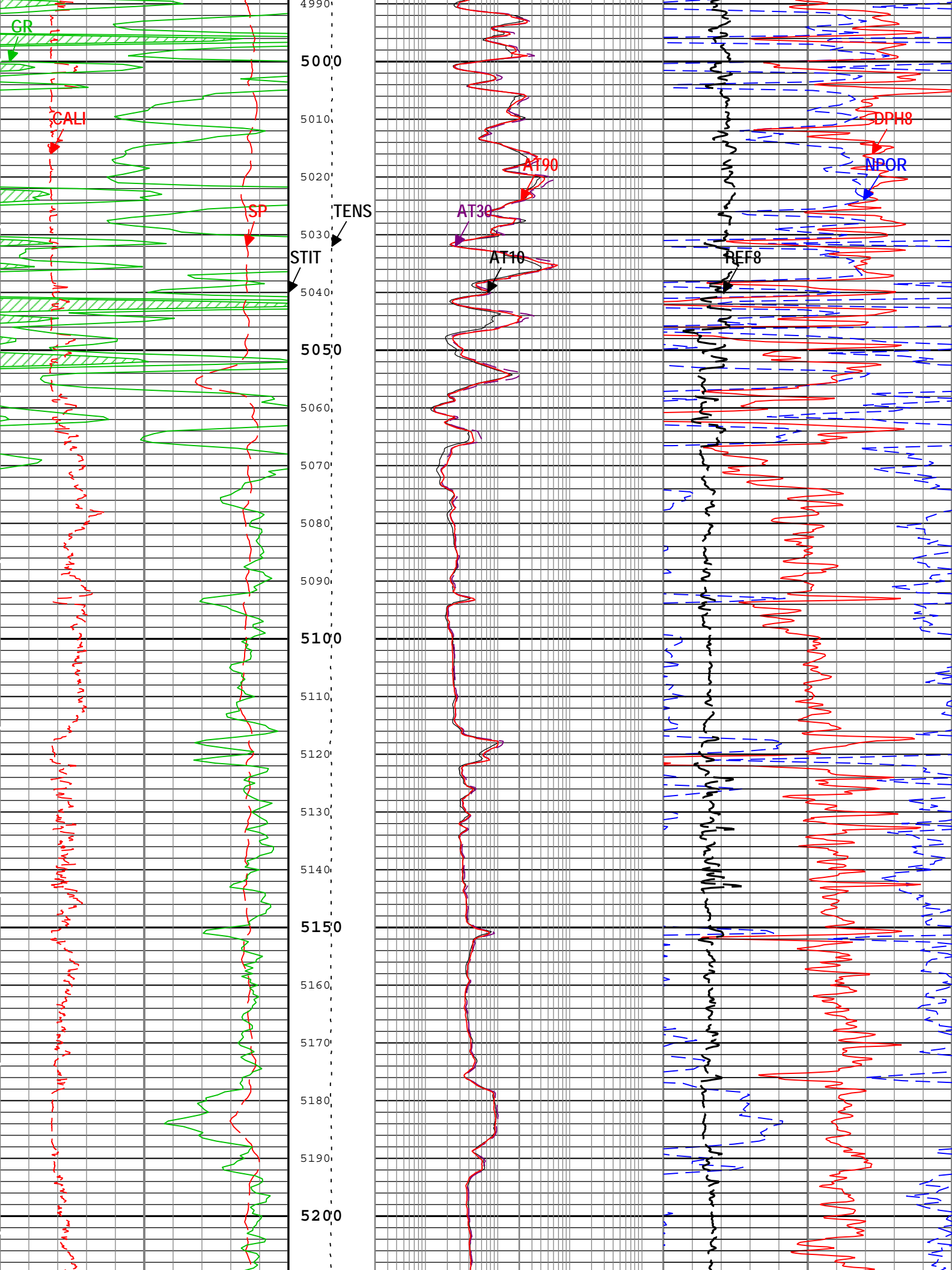
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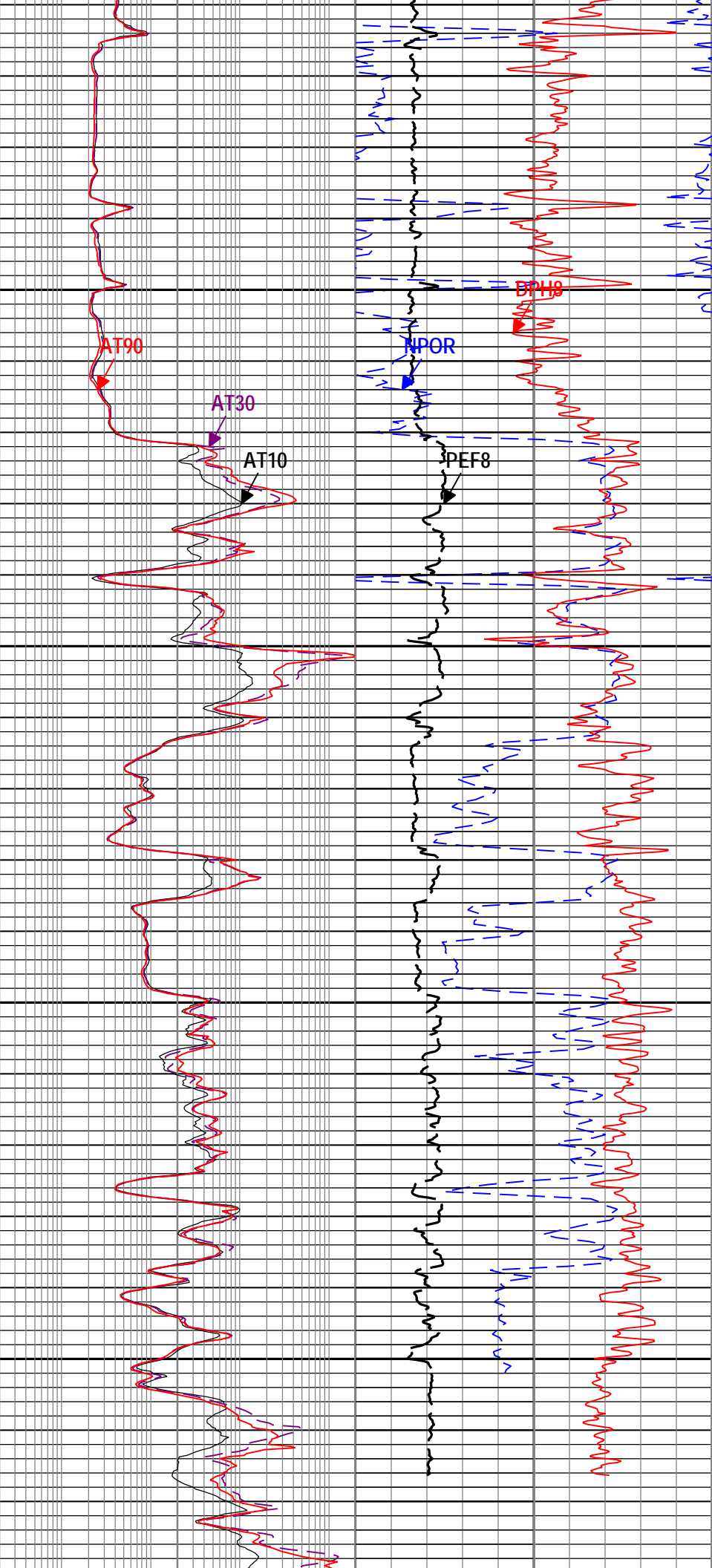
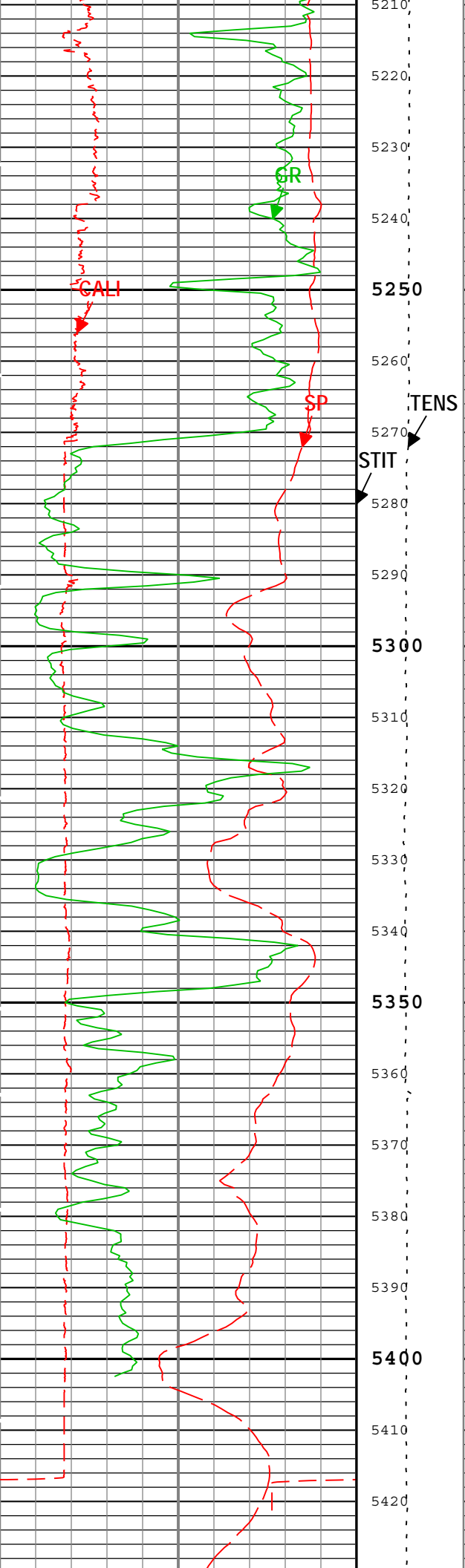
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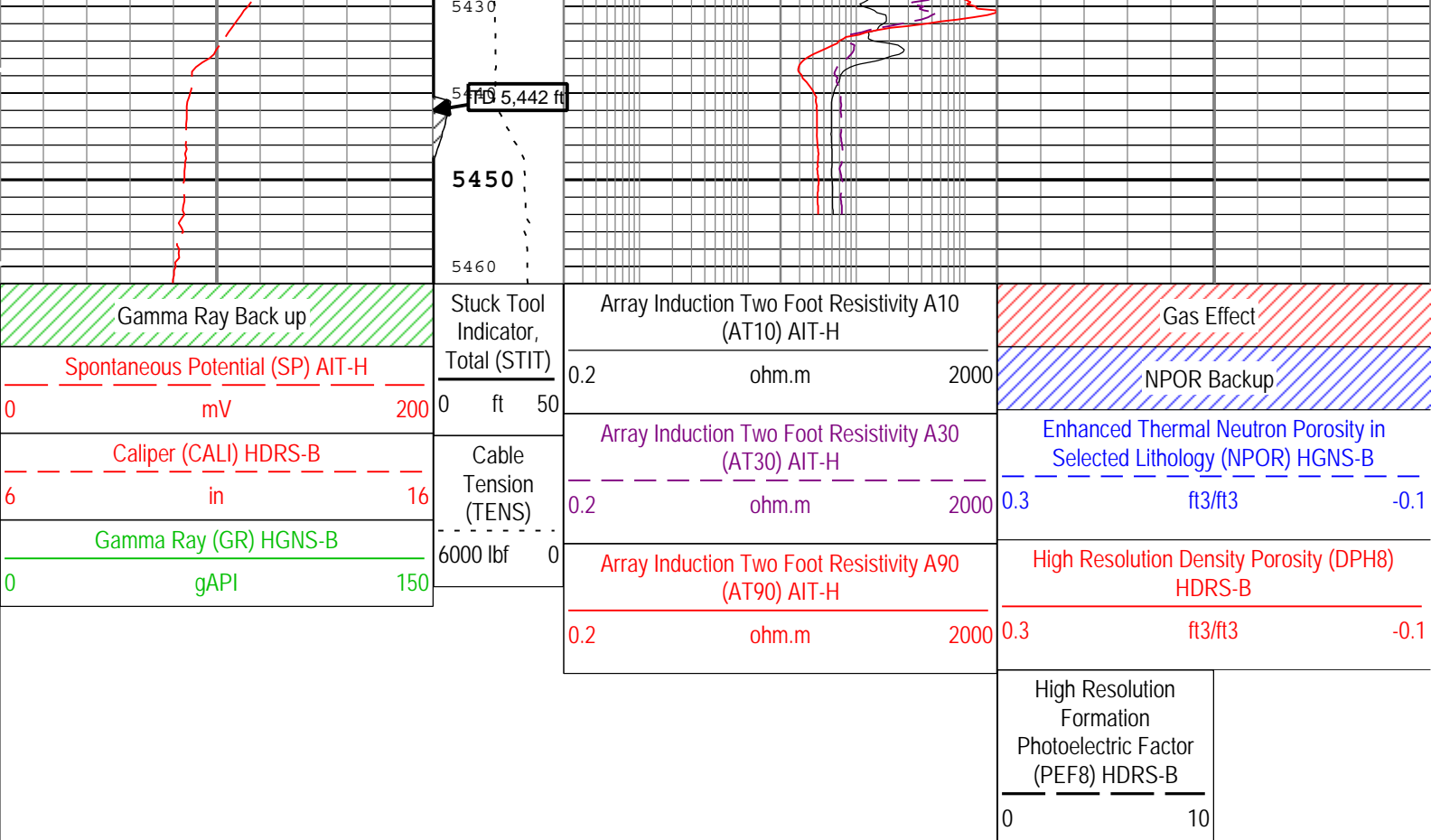












Description: HGNS standard resolution porosities for Platform Express Format: Log (HiRes EMD 5in Triple Combo) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 19-Nov-2012 22:19:48

Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
ABHM	Array Induction Borehole Correction Mode	AIT-H	Compute Standoff	
ABLM	Array Induction Basic Logs Mode	AIT-H	Normal	
ACDE	Array Induction Casing Detection Enable	AIT-H	Yes	
ASTA	Array Induction Tool Standoff	AIT-H	0.625	in
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	Depth Zoned	in
BSAL	Borehole Salinity	Borehole	2837.71	ppm
CALI_SHIFT	CALI Supplementary Offset	HDRS-B	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	431	ft
CDEN	Cement Density	HGNS-B	2	g/cm3
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	9.2	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DFT_WATER	Drilling Fluid Water Type	Borehole	Gel Chemical	
DHC	Density Hole Correction	HDRS-B	Bit Size	
FD	Fluid Density	Borehole	1	g/cm3
FSAL	Formation Salinity	Borehole	0	ppm
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	CALI	
GRSE	Generalized Mud Resistivity Selection, from Measured or Computed Mud Resistivity	Borehole	AMF	
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	CTEM	
HGNS	HGNS Standard Resolution Porosities	HGNS-B	5	

HSCO	Hole Size Correction Option	HGNS-B	Yes	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	
MDEN	Matrix Density for Density Porosity	Borehole	2.71	g/cm3
MFST	Mud Filtrate Sample Temperature	Borehole	51.6	degF
NPRM	HRDD Nuclear Processing Mode	HDRS-B	High Resolution	
RMFS	Resistivity of Mud Filtrate Sample	Borehole	1.94	ohm.m
SOCO	Standoff Correction Option	HGNS-B	Yes	
SPDR	SP Drift Per Foot	AIT-H	0	mV/ft
TD	Total Measured Depth	Borehole	5442	ft

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	0	0	434
BS	7.875	434	5462

All depth are actual.

Tool Control Parameters	
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Parameter	Description	Tool	Value	Unit
HMCA_BRD_TYPE	HMCA Board Type	HGNS-B	0	
HRGD_BRD_TYPE	HRGD Board Type	HDRS-B	WITHOUT_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h
STSO_HRDD	Temperature Source for the Density Algorithm	HDRS-B	Decaytime algorithm	

Calibration Report

AIT-H (Array Induction Tool - H) Calibration - Run Run-1

Primary Equipment :			
	Array Induction Sonde - H	AHIS	398
Auxiliary Equipment :			
	AITH Rm/SP Bottom Nose	AHRM	398

AIT Sonde Calibration - Test Loop Gain

Master (EEPROM): 10:54:27 13-Sep-2012							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Test Loop Gain - 0		Master	1.000	0.950	1.018	1.050	
Test Loop Phase - 0	deg	Master	0	-3.000	0.588	3.000	
Test Loop Gain - 1		Master	1.000	0.950	1.019	1.050	
Test Loop Phase - 1	deg	Master	0	-3.000	0.646	3.000	
Test Loop Gain - 2		Master	1.000	0.950	1.020	1.050	
Test Loop Phase - 2	deg	Master	0	-3.000	-0.013	3.000	
Test Loop Gain - 3		Master	1.000	0.950	1.018	1.050	
Test Loop Phase - 3	deg	Master	0	-3.000	0.040	3.000	
Test Loop Gain - 4		Master	1.000	0.950	0.999	1.050	
Test Loop Phase - 4	deg	Master	0	-3.000	-0.034	3.000	
Test Loop Gain - 5		Master	1.000	0.950	0.992	1.050	
Test Loop Phase - 5	deg	Master	0	-3.000	-0.222	3.000	
Test Loop Gain - 6		Master	1.000	0.950	1.000	1.050	
Test Loop Phase - 6	deg	Master	0	-3.000	0.151	3.000	
Test Loop Gain - 7		Master	1.000	0.950	1.015	1.050	
Test Loop Phase - 7	deg	Master	0	-3.000	-0.171	3.000	

AIT Sonde Calibration - Sonde Error Correction

Master (EEPROM): 10:54:27 13-Sep-2012							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Sonde Error Correction Real - 0	mS/m	Master	-----	-231.000	-83.485	119.000	
Sonde Error Correction Quad - 0		Master	-----	-2250.000	113.456	2250.000	
Sonde Error Correction Real - 1	mS/m	Master	-----	114.000	170.122	204.000	
Sonde Error Correction Quad - 1		Master	-----	-625.000	141.828	625.000	
Sonde Error Correction Real - 2	mS/m	Master	-----	66.000	113.188	156.000	
Sonde Error Correction Quad - 2		Master	-----	-350.000	31.028	350.000	
Sonde Error Correction Real - 3	mS/m	Master	-----	39.000	59.559	89.000	

		After-Before	----	----	----	----	
Thru Cal Mag - 5	V	Master	----	1.173	1.947	2.737	
		Before	----	1.173	1.946	2.737	
		After	----	----	----	----	
		Before-Master	----	----	-0.001	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 5	deg	Master	----	-3.000	59.409	117.000	
		Before	----	-3.000	59.659	117.000	
		After	----	----	----	----	
		Before-Master	----	----	0.250	----	
		After-Before	----	----	----	----	
Thru Cal Mag - 6	V	Master	----	1.173	1.943	2.737	
		Before	----	1.173	1.942	2.737	
		After	----	----	----	----	
		Before-Master	----	----	-0.001	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 6	deg	Master	----	-3.000	59.473	117.000	
		Before	----	-3.000	59.723	117.000	
		After	----	----	----	----	
		Before-Master	----	----	0.250	----	
		After-Before	----	----	----	----	
Thru Cal Mag - 7	V	Master	----	0.849	1.382	1.981	
		Before	----	0.849	1.381	1.981	
		After	----	----	----	----	
		Before-Master	----	----	-0.001	----	
		After-Before	----	----	----	----	
Thru Cal Phase - 7	deg	Master	----	-7.000	53.953	113.000	
		Before	----	-7.000	54.249	113.000	
		After	----	----	----	----	
		Before-Master	----	----	0.296	----	
		After-Before	----	----	----	----	
SPA Zero	mV	Master		-50.000	-0.053	50.000	
		Before		-50.000	-0.061	50.000	
		After	----	----	----	----	
		Before-Master	----	----	-0.008	----	
		After-Before	----	----	----	----	
SPA Plus	mV	Master		941.000	993.658	1040.000	
		Before		941.000	993.363	1040.000	
		After	----	----	----	----	
		Before-Master	----	----	-0.295	----	
		After-Before	----	----	----	----	
Temperature Zero	V	Master		-0.050	0.000	0.050	
		Before		-0.050	0.000	0.050	
		After	----	----	----	----	
		Before-Master	----	----	0.000	----	
		After-Before	----	----	----	----	
Temperature Plus	V	Master		0.870	0.920	0.960	
		Before		0.870	0.920	0.960	
		After	----	----	----	----	
		Before-Master	----	----	0.000	----	
		After-Before	----	----	----	----	

DSLT-H (Digitizing Sonic Logging Tool - H) Calibration - Run Run-1

Primary Equipment :			
Sonic Logging Sonde E supports 3'-5'BHC DT and CBL/VDL	SLS-E		8011

CBL Normalization - CBL Accumulations

Master:								
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
Upper Far Amplitude - 0		Master	----	----	----	----		
Upper Near Raw Amplitude - 0	mV	Master	----	----	----	----		
Lower Far Amplitude - 0		Master	----	----	----	----		
Lower Near Raw Amplitude - 0	mV	Master	----	----	----	----		

CBL Normalization - CBL/VDL Coefficients

Master:							
MM	DD	YY	HH	MM	SS	MM	DD
01	01	01	00	00	00	01	01

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Correction Factor for UT		Master	3.500	2.700	NOT DONE	4.300	
CBL Correction Factor for LT		Master	2.500	1.700	NOT DONE	4.300	
VDL Ratio between UT and LT for CBLB Mode		Master	1.000		NOT DONE		

CBL Free Pipe Adjustment - Free Pipe Measurement

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Amplitude - 0	mV	Before	-----	-----	-----	-----	
CBL Reference Amplitude (CBRA) - 0	mV	Before	-----	-----	-----	-----	
Measurement Depth - 0	ft	Before	-----	-----	-----	-----	

CBL Free Pipe Adjustment - CBL Amplitude Coefficient

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Adjustment Factor		Before	1.000	0.200	NOT DONE	5.000	
Depth of Before Calibration	ft	Before			NOT DONE		

HDRS-B (HILT Density and Rxo Sonde, 125 degC) Calibration - Run Run-1

Primary Equipment :							
	HILT High-Resolution Control Cartridge, 125 degC		HRCC-B			791	
	HILT Resistivity Gamma-Ray Density Device, 125 degC		HRGD-B			1849	
Auxiliary Equipment :							
	HRDD Backscatter Detector		Backscatter				
	HRDD Long Spacing Detector		Long Spacing				
	HRDD Short Spacing Detector		Short Spacing				
	Cesium 137 Gamma-Ray Logging Source		GSR-J			5094	
	HILT High-Resolution Control Cartridge, 125 degC		HRCC-B			791	
	HILT High-Resolution Mechanical Sonde, 125 degC		HRMS-B			1754	
Calibration Parameter :							
	Small Ring Size (Caliper Calibration Small Ring)		8.00				
	Large Ring Size (Caliper Calibration Large Ring)		12.00				

HDRS Caliper Calibration - Caliper Accumulations

Before (Measured):		11:01:07 19-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Small Ring	in	Before	8.00	6.00	8.02	10.00	
Large Ring	in	Before	12.00	9.00	12.20	15.00	

HDRS Density Calibration - Inversion Results

Master (EEPROM):		15:32:56 16-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Rho Aluminum	g/cm3	Master	2.596	2.586	2.600	2.606	
Rho Magnesium	g/cm3	Master	1.686	1.676	1.686	1.696	
Pe Aluminum		Master	2.570	2.470	2.563	2.670	
Pe Magnesium		Master	2.650	2.550	2.632	2.750	

HDRS Density Calibration - Deviation Summary

Master (EEPROM):		15:32:56 16-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Average Deviation	%	Master	0	-0.6000	0.4813	0.6000	
BS Max Deviation	%	Master	0	-1.6000	1.0620	1.6000	
SS Average Deviation	%	Master	0	-1.0000	0.3288	1.0000	
SS Max Deviation	%	Master	0	-2.5000	1.5436	2.5000	
LS Average Deviation	%	Master	0	-1.5000	0.5170	1.5000	
LS Max Deviation	%	Master	0	-3.5000	1.2479	3.5000	

HDRS Density Calibration - Background Summary

Master (EEPROM):		15:32:56 16-Nov-2012		Before (Measured):		11:04:03 19-Nov-2012	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Window Ratio		Master	1.0000		0.7367		
		Before	0.7367	0.6998	0.7377	0.7735	
		Before-Master	-----	-----	0.0010	-----	

AZ Vertical Measurement	ft/s2	Before	32.2	31.5	32.2	32.8	
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HGNS Accelerometer EEPROM - Accelerometer EEPROM Read

Master (EEPROM):		00:00:00 15-Mar-2001					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Accelerometer Manufacturer		Master			Sunstrand		
Accelerometer Reference Temperature	degF	Master		30.2	68.0	122.0	
Accelerometer Coefficients - 0		Master	----	----	-5693.000	----	
Accelerometer Coefficients - 1		Master	----	----	20.390	----	
Accelerometer Coefficients - 2		Master	----	----	-0.031	----	
Accelerometer Coefficients - 3		Master	----	----	0.000	----	
Accelerometer Coefficients - 4		Master	----	----	2.141	----	
Accelerometer Coefficients - 5		Master	----	----	0.000	----	
Accelerometer Coefficients - 6		Master	----	----	0.000	----	
Accelerometer Coefficients - 7		Master	----	----	0.000	----	
Accelerometer Coefficients - 8		Master	----	----	295.800	----	
Accelerometer Coefficients - 9		Master	----	----	1.031	----	

HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM):		12:04:40 16-Nov-2012	Before (Measured):		10:57:38 19-Nov-2012	After:	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Zero Measurement	1/s	Master	0	5.0	27.1	40.0	
		Before	0	5.0	26.6	40.0	
		After	----	----	----	----	
		Before-Master	----	-4.1	-0.5	4.1	
		After-Before	----	----	----	----	
Far Zero Measurement	1/s	Master	0	5.0	26.8	40.0	
		Before	0	5.0	27.4	40.0	
		After	----	----	----	----	
		Before-Master	----	-4.0	0.6	4.0	
		After-Before	----	----	----	----	
Near Plus Measurement - 0	1/s	Master	6031.0	4700.0	4898.0	6900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Plus Measurement - 0	1/s	Master	2793.0	1900.0	2070.0	2900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Near Corrected Plus Measurement - 0	1/s	Master		4700.0	4970.0	6900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Corrected Plus Measurement - 0	1/s	Master		1900.0	2107.0	2900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations

Before (Measured):		11:02:29 19-Nov-2012		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement	gAPI	Before	30.0	0	73.3	120.0	
		After	----	----	----	----	
		After-Before	----	----	----	----	
RGR Plus Measurement	gAPI	Before	185.4	157.1	170.6	206.3	
		After	----	----	NOT DONE	----	
		After-Before	----	----	----	----	
GR Calibration Gain		Before	0.89	0.80	0.97	1.05	
		After	----	----	----	----	
		After-Before	----	----	----	----	

LEH-QT (Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor) Calibration - Run Run-1

Primary Equipment :	Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor	LEH-QT
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HTEN Master Calibration - HTEN Master Calibration

Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>
HTEN Shop Gain		Master	1.000	0.800	NOT DONE	4.500	<div></div>
HTEN Shop Offset	lbf	Master	0	-1000.000	NOT DONE	1000.000	<div></div>

HTEN Before Calibration - HTEN Before Calibration

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>
RHTE Zero Measurement - 0	lbf	Before	-----	-----	-----	-----	<div></div>
RHTE Plus Measurement - 0	lbf	Before	-----	-----	-----	-----	<div></div>
HTEN Gain - 0		Before	-----	-----	-----	-----	<div></div>
HTEN Offset - 0	lbf	Before	-----	-----	-----	-----	<div></div>

Company:

Vecta Oil & Gas LTD

Well:

Maroon 24-20

Field:

Wildcat

County:

Cheyenne

State:

Colorado

Platform Express

Triple Combo

High Resolution

Schlumberger