Company	CARRIZO NIOBRARA LLC
Well	BRINGELSON RANCH 17-20-9-58
Field	WATTENBERG
County	WELD
State	CO

PIONEER

Pioneer Energy Services

DUAL INDUCTION GAMMA RAY

Company	CARRIZO NIOBRARA LLC
Well	BRINGELSON RANCH 17-20-9-58
Field	WATTENBERG
County	WELD State CO

Location: API # : 05-123-41153

SHL: 2081' FNL 573' FWL SWNW

SEC 20 TWP 9N RGE 58W

Other Services

NONE

Permanent Datum	GL	Elevation	4872'
Log Measured From	KB		
Drilling Measured From	KB		

Elevation

K.B. 4889'
D.F. 4888'
G.L. 4872'

Date	APRIL 1, 2015			
Run Number	1			
Depth Driller	6152'			
Depth Logger	5220'			
Bottom Logged Interval	5220'			
Top Log Interval	SURFACE CASING			
Casing Driller	1440'			
Casing Logger	1440'			
Bit Size	8.75"			
Type Fluid in Hole	WBM			
Density / Viscosity	9.5 / 46			
pH / Fluid Loss	8.5 / 8.6			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	2.85 @ 68 F			
Rmf @ Meas. Temp	2.14 @ 68 F			
Rmc @ Meas. Temp	3.56 @ 68 F			
Source of Rmf / Rmc	CALC / CALC			
Rm @ BHT	1.31 @ 148 F			
Time Circulation Stopped	1700			
Time Logger on Bottom	2215			
Maximum Recorded Temperature	148 F			
Equipment Number	52			
Location	FT. MORGAN			
Recorded By	CLINT CHRISTENSEN			
Witnessed By	JEFF MEYERS			

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

XTREME RIG #19

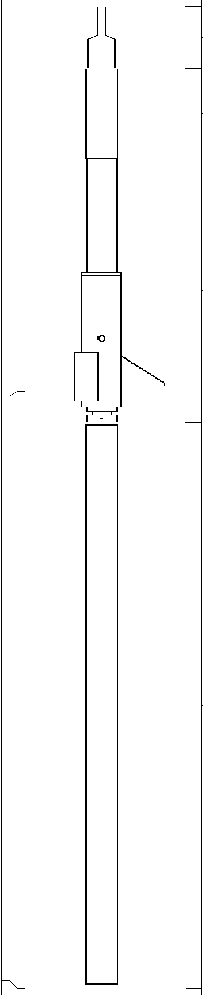
NO REPEAT DUE TO HOLE CONDITIONS

THANK YOU FOR USING PIONEER ENERGY SERVICES

SO# 2-013993

Sensor	Offset (ft)
GR	0.00
DCAL	6.84
LSD	7.67
SSD	8.17
RLL3	12.52
CILD	19.97
CILM	23.42
SP	27.42

Schematic



Description	Length (ft)	O.D. (in)	Weight (lb
CHD (~0)	2.00	3.50	30.00
GR-PSI (939)	2.92	3.50	40.00
CDL-PSI (770)	8.50	5.00	285.00
DIL-PSI (1011)	18.25	3.75	175.00

Dataset: 13993.db: field/well/run1/pass1
Total length: 31.67 ft
Total weight: 530.00 lb
O.D.: 5.00 in

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MAIN PASS

Database File	13993.db
Dataset Pathname	FINAL
Presentation Format	dilin5
Dataset Creation	Wed Apr 01 23:14:14 2015
Charted by	Depth in Feet scaled 1:600

0 SP (mV) 200

0 Gamma Ray (GAPI) 200

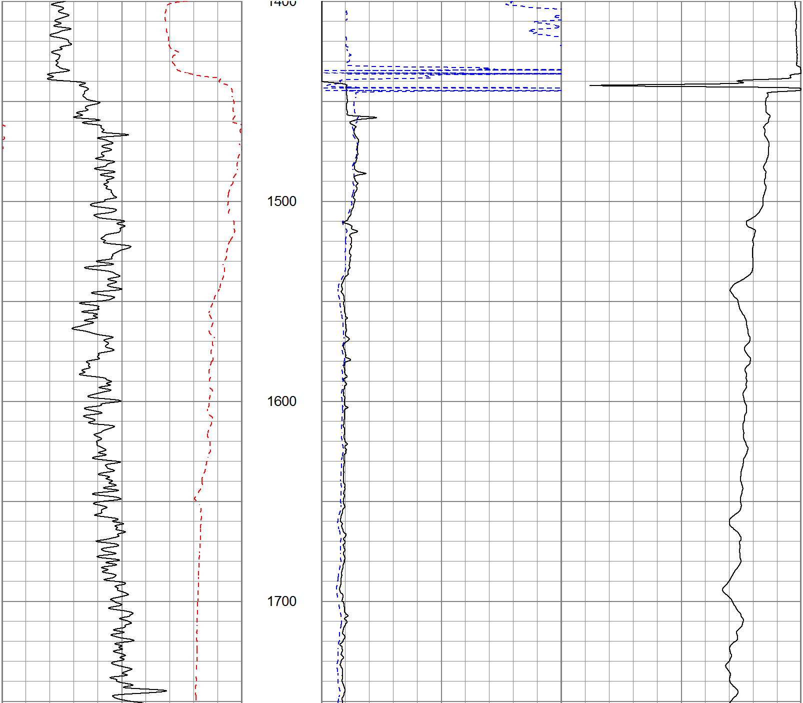
0 Deep Resistivity (Ohm-m) 50

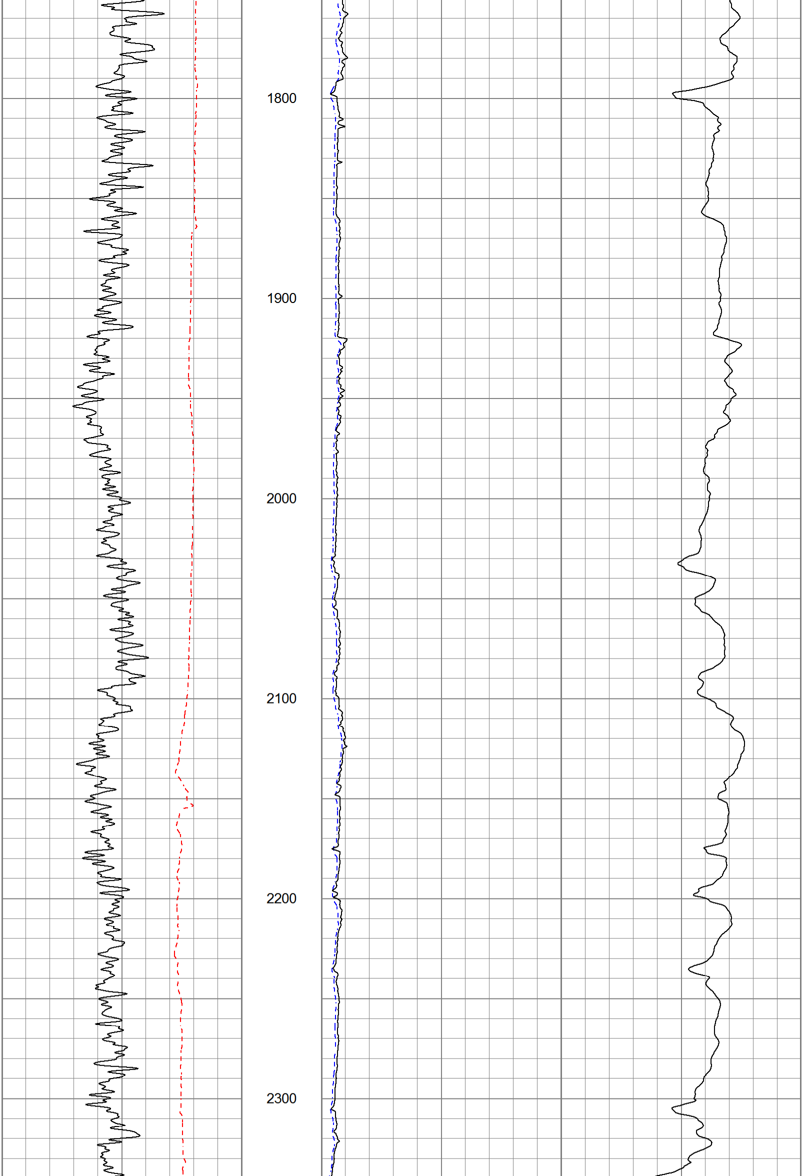
0 Shallow Resistivity (Ohm-m) 50

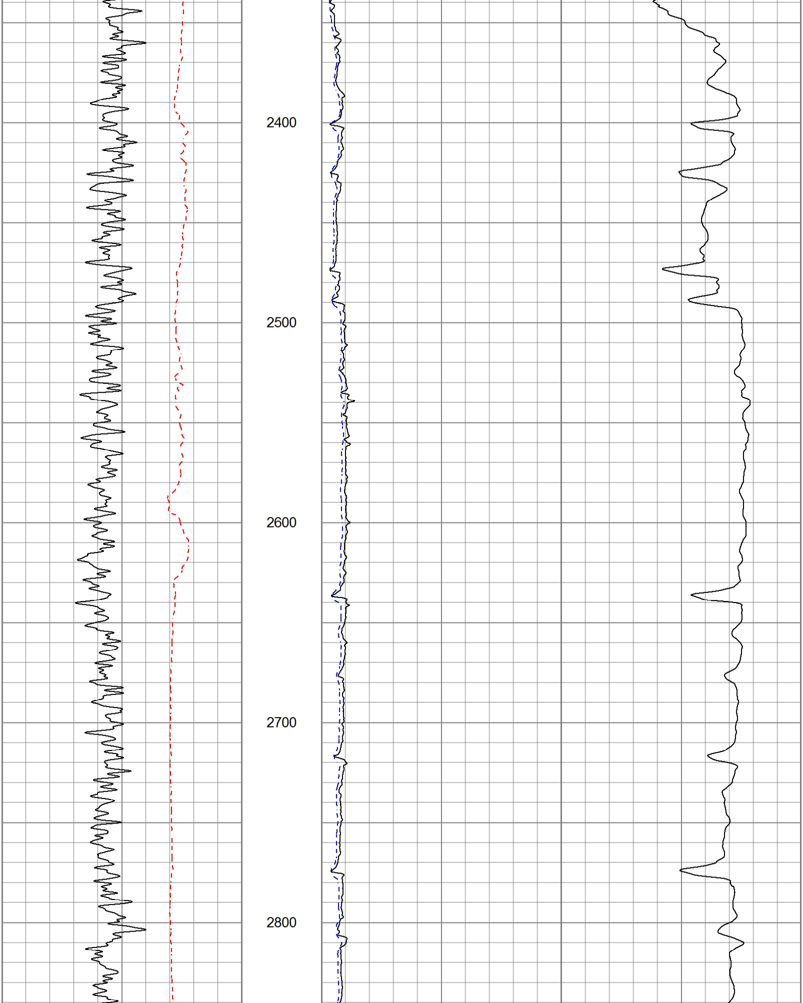
50 RILD (Ohm-m) 500

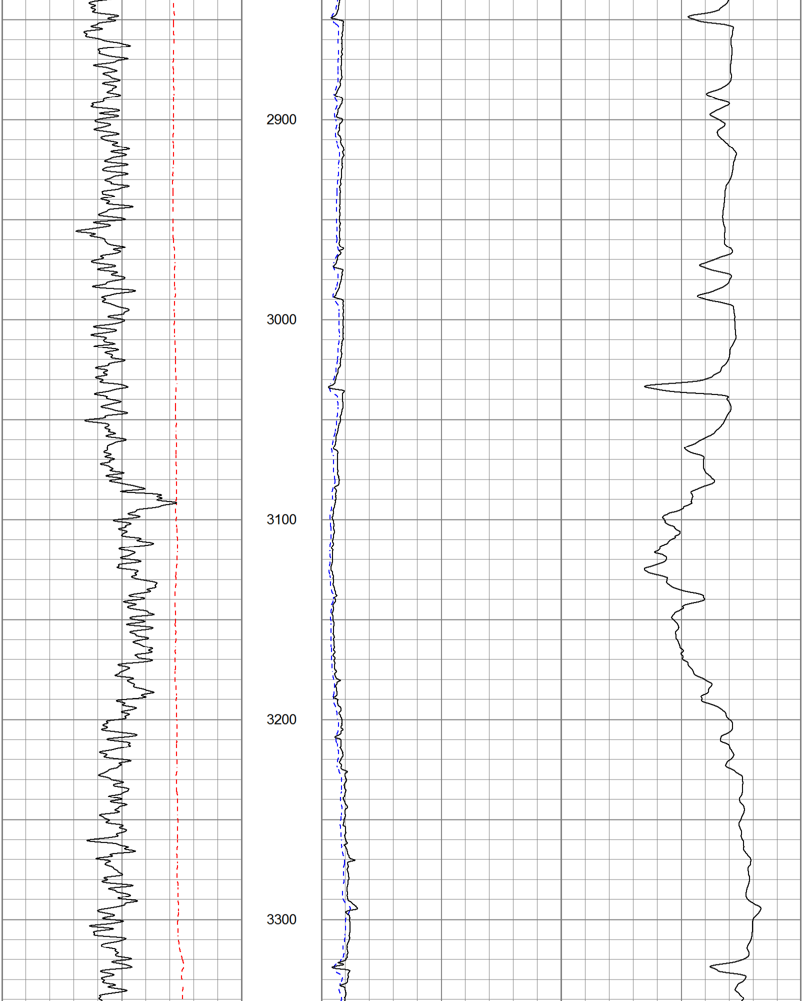
50 RLL3 (Ohm-m) 500

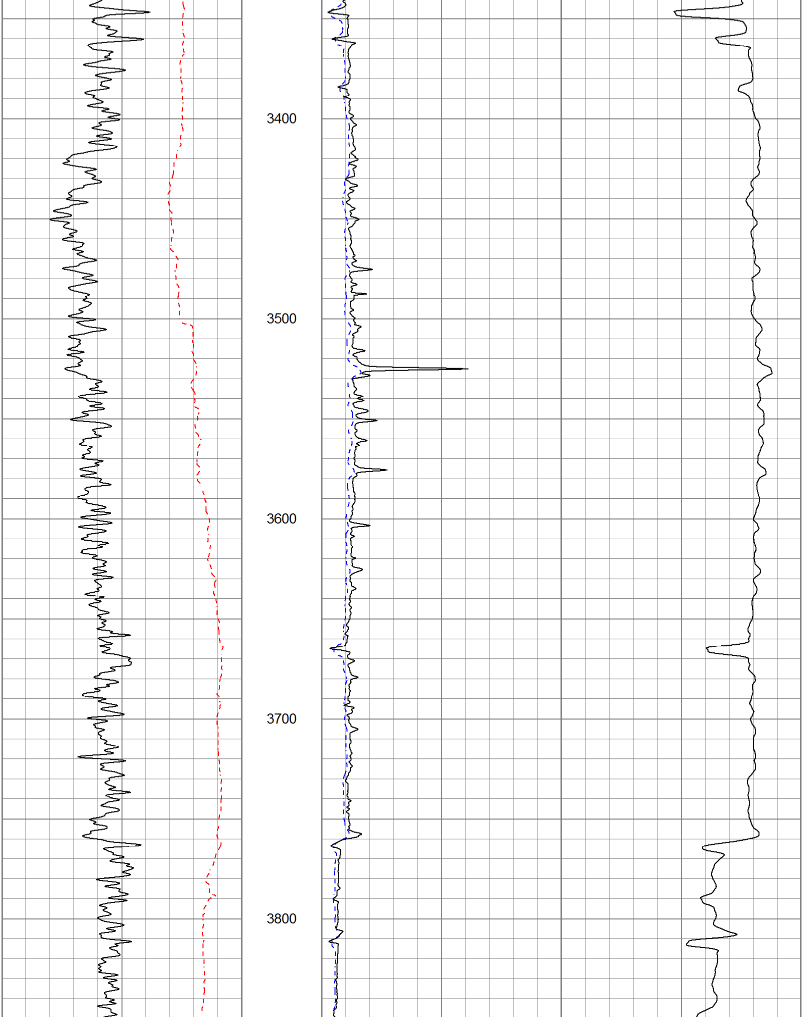
1000 CILD (mmho/m) 0

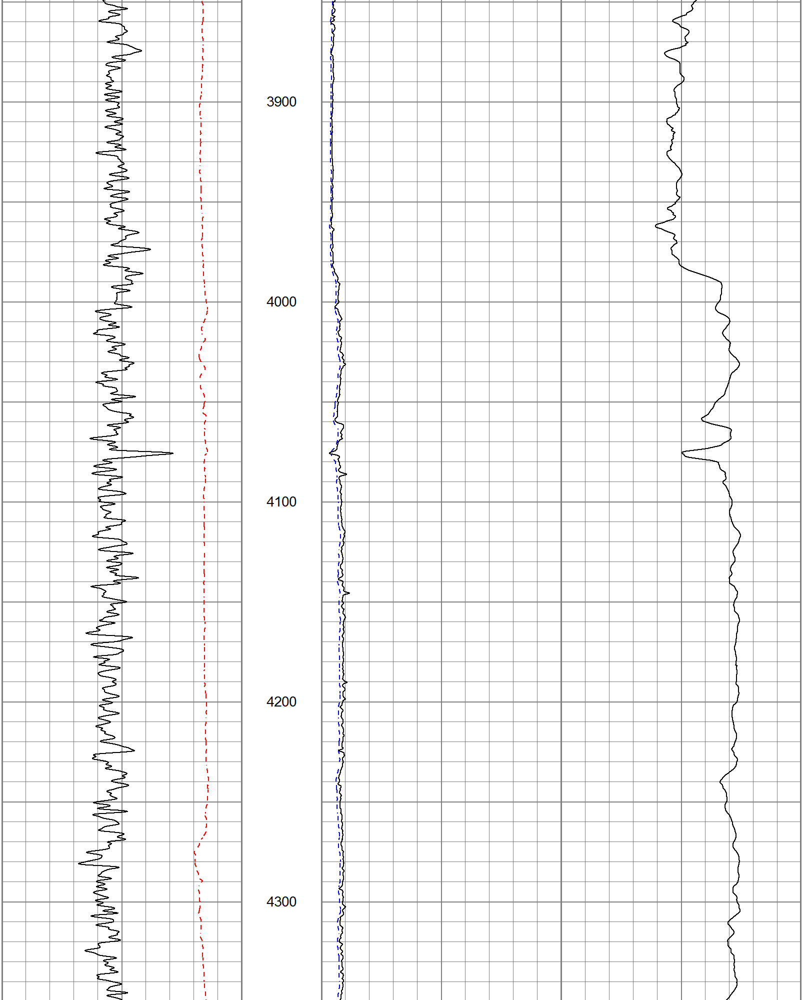


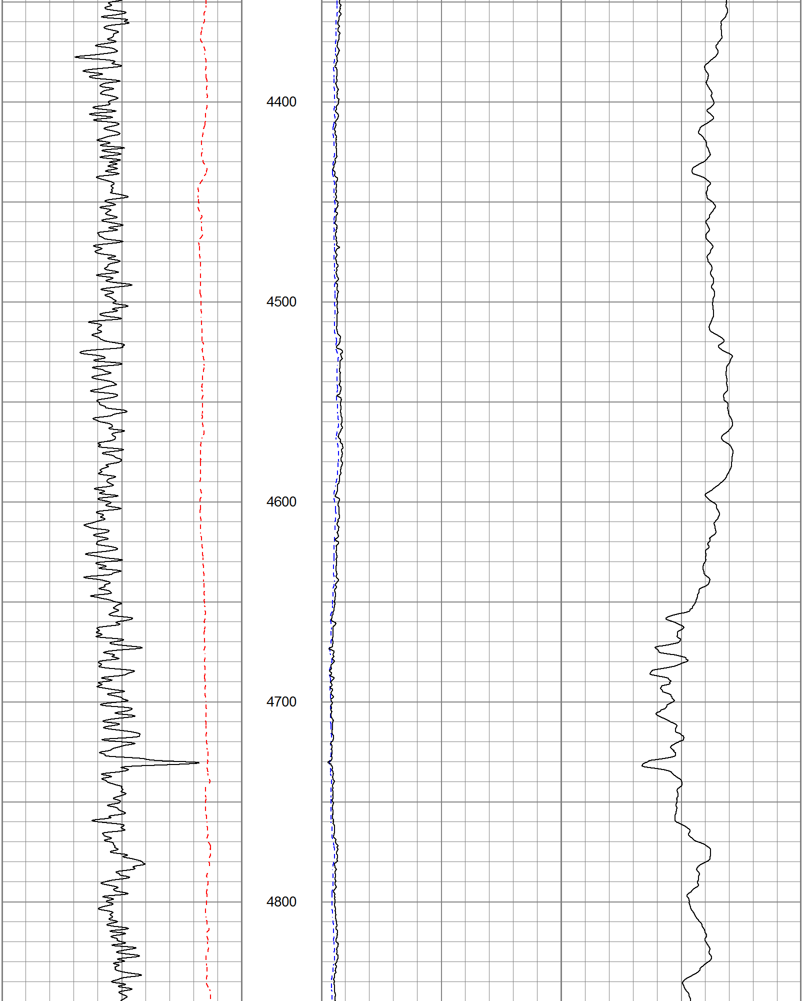


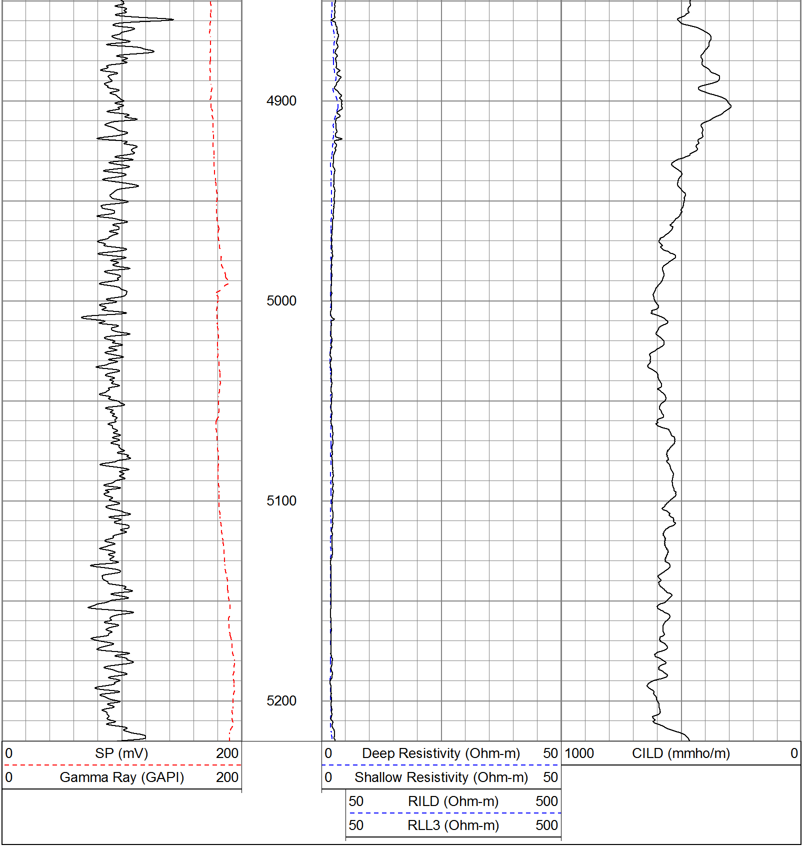










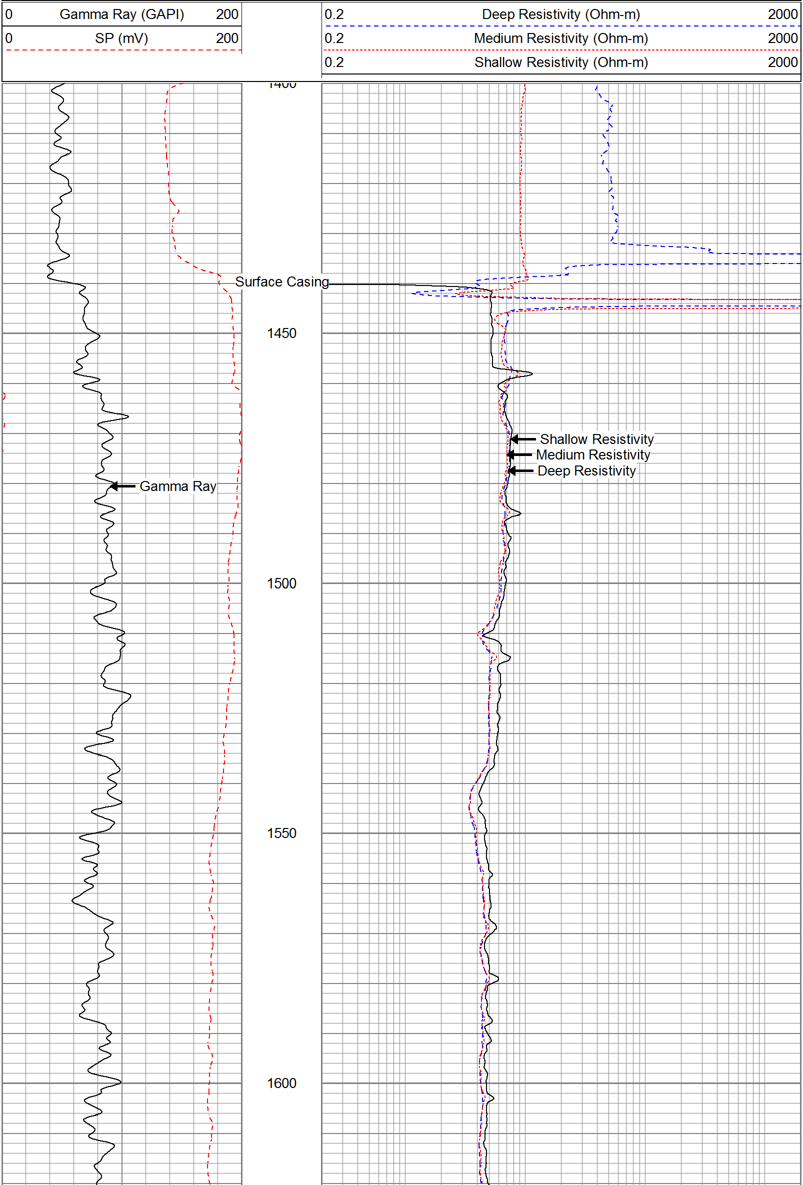


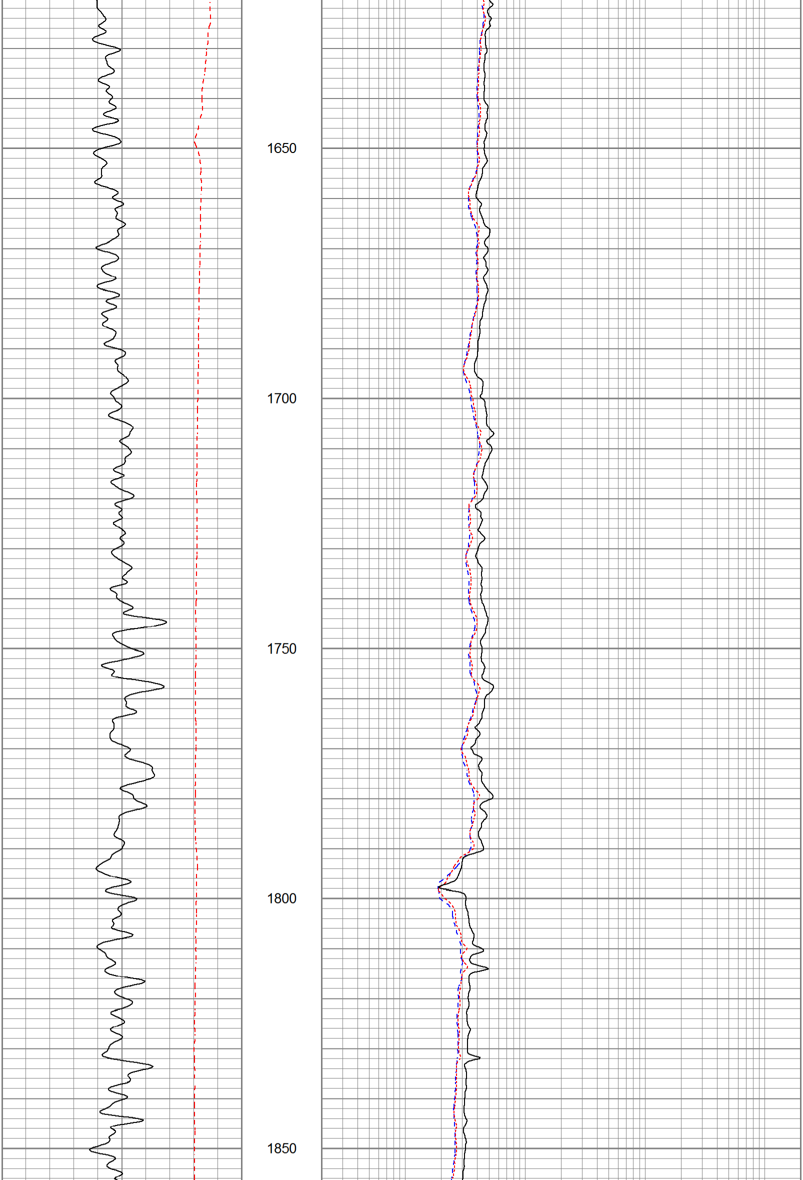
PIONEER

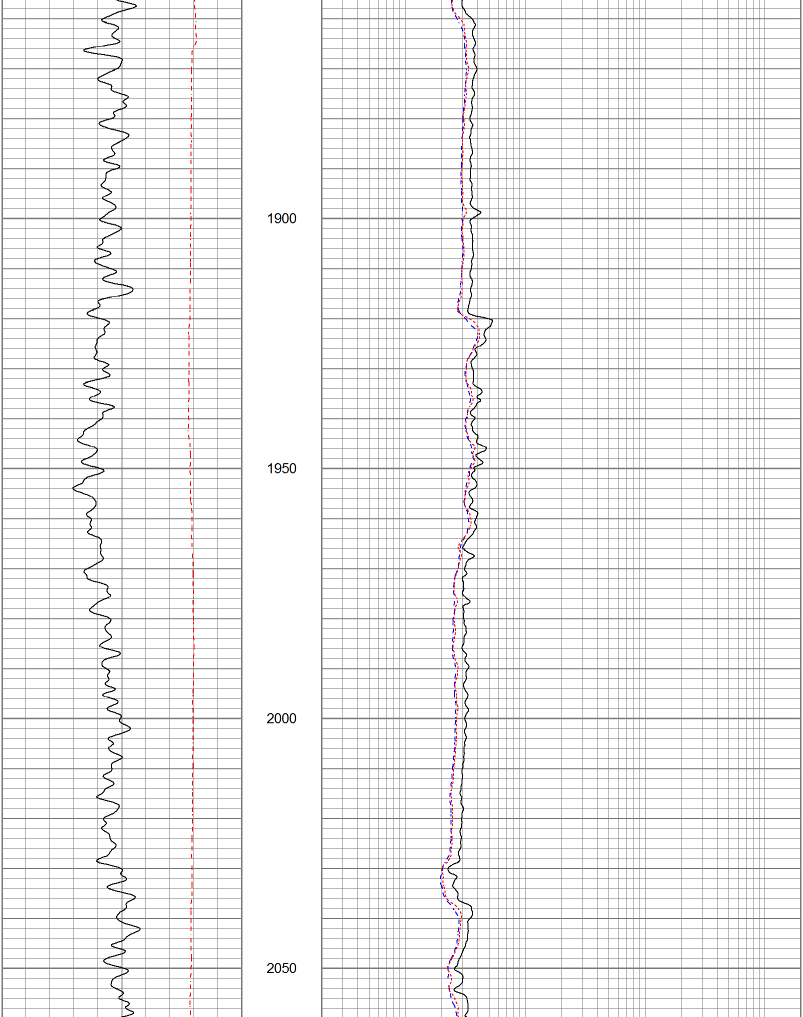
Pioneer Energy Services

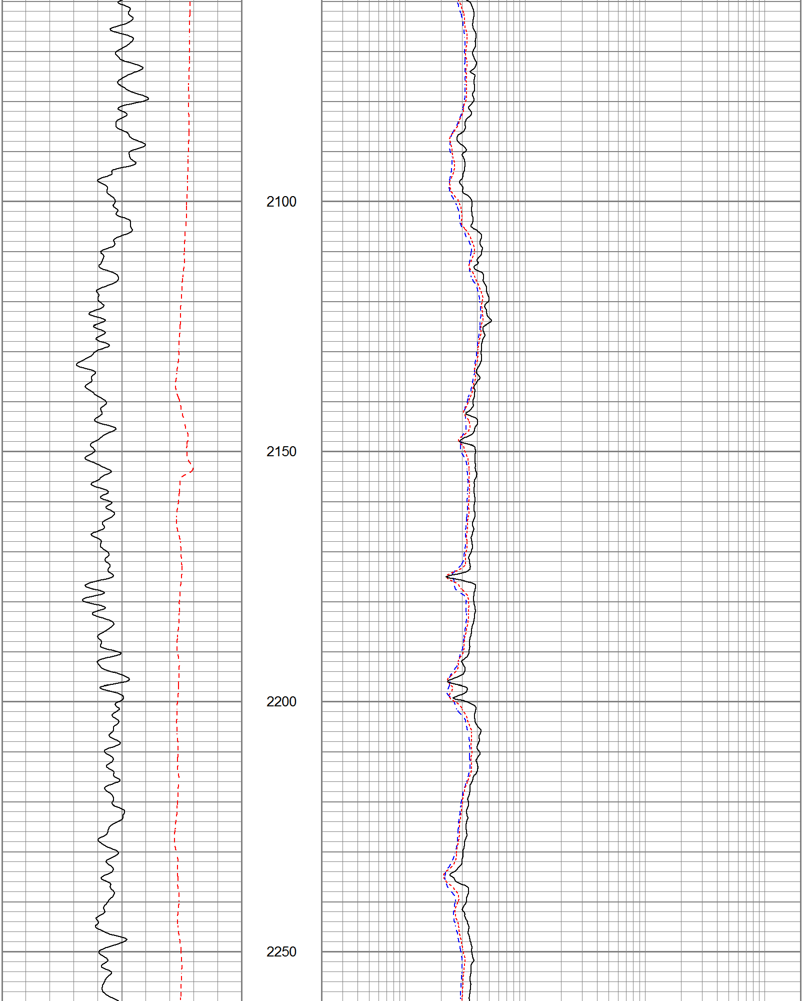
MAIN PASS

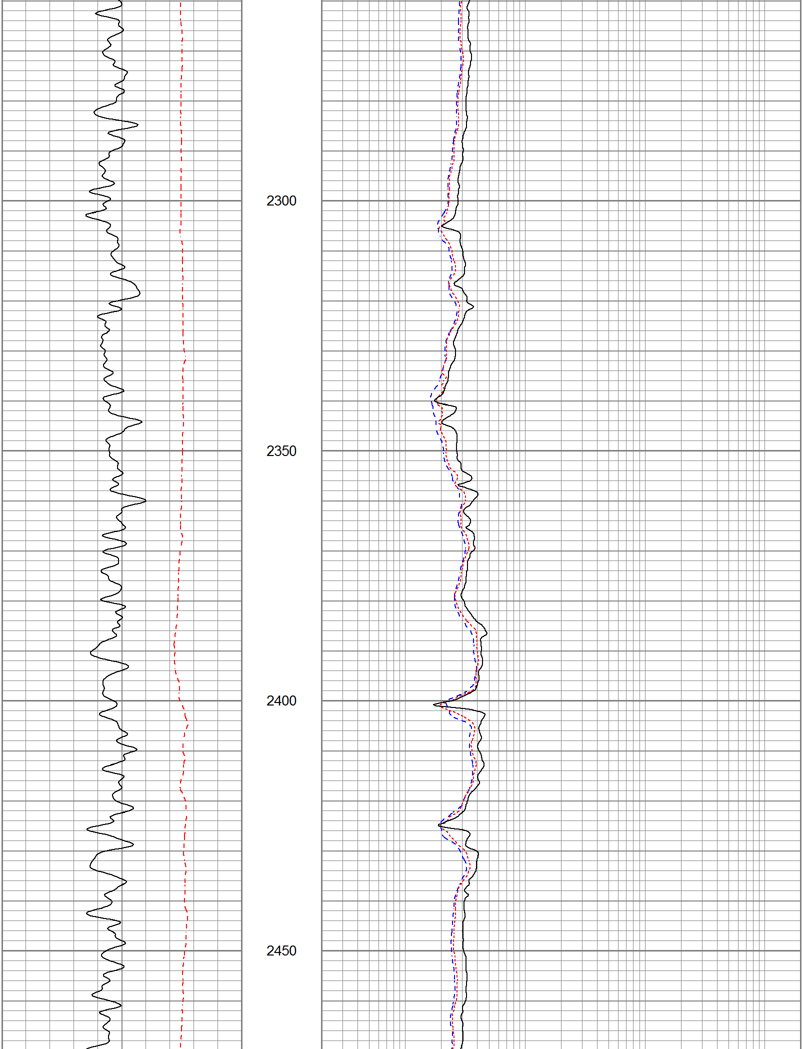
Database File	13993.db
Dataset Pathname	FINAL
Presentation Format	ccdilgr
Dataset Creation	Wed Apr 01 23:14:14 2015
Charted by	Depth in Feet scaled 1:240

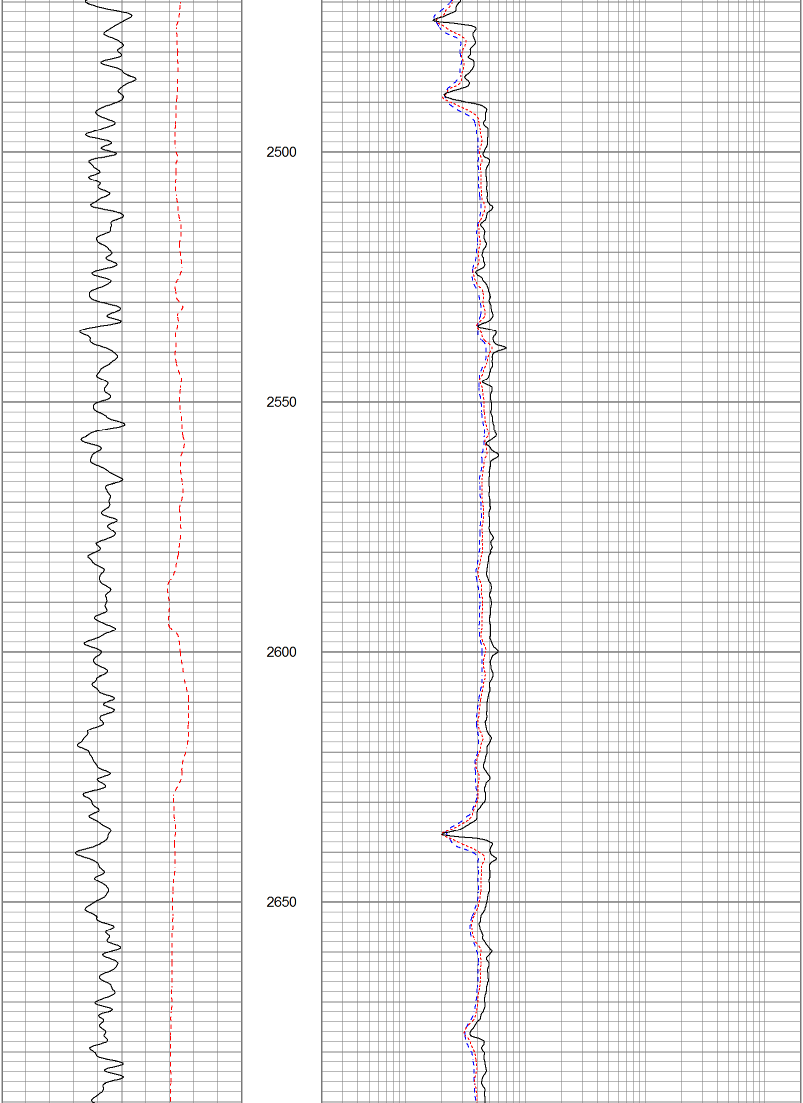


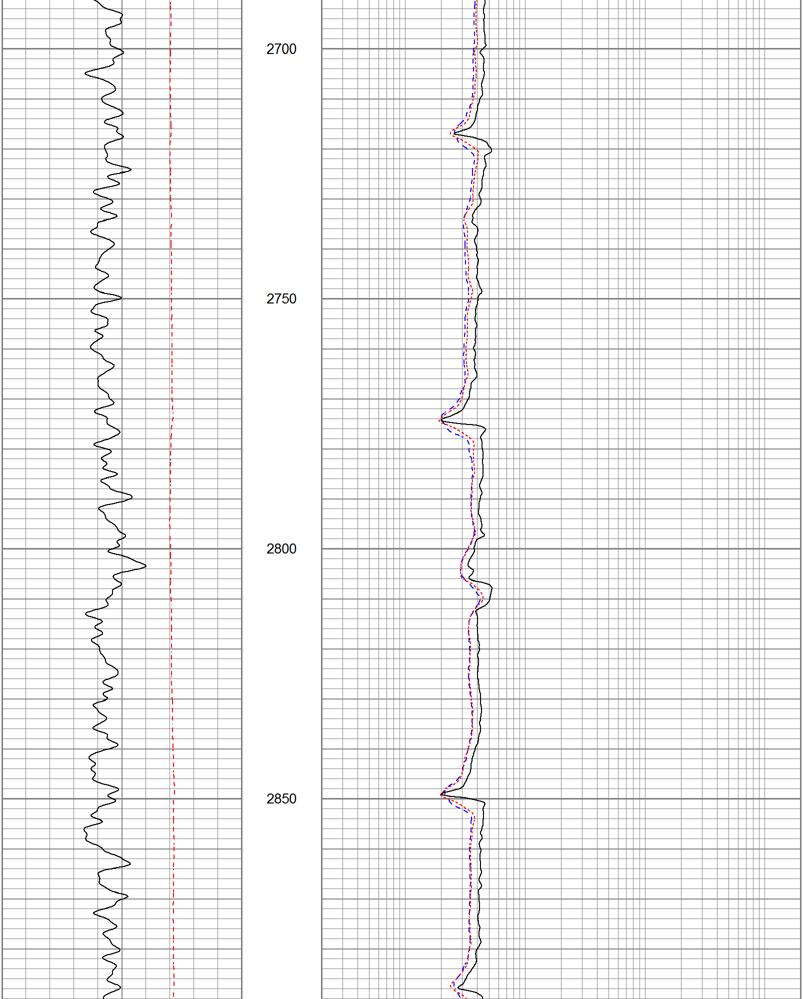


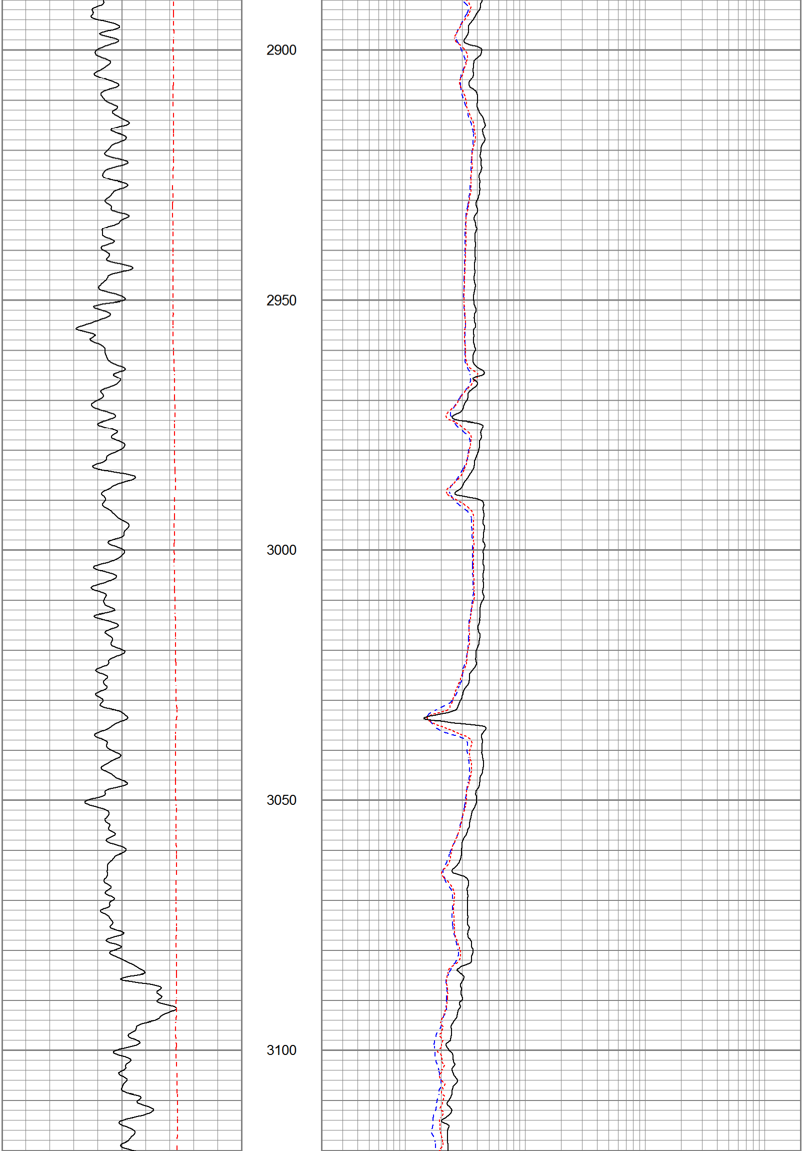


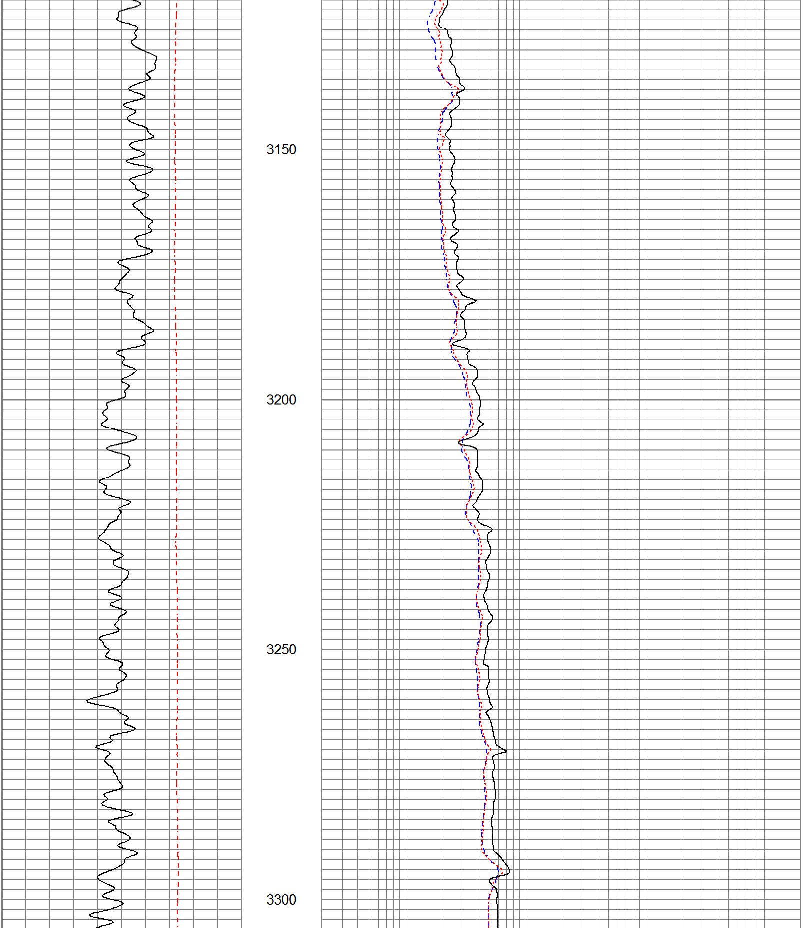












Calibration Report

Database File	13993.db
Dataset Pathname	pass1
Dataset Creation	Wed Apr 01 21:49:14 2015

Dual Induction Calibration Report

Serial-Model:	1011-PSI
Surface Cal Performed:	

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	0.000	1.000	0.000	1.000	mmho/m	0.540	-27.000
Medium	0.000	1.000	0.000	1.000	mmho/m	0.470	-28.000

Gamma Ray Calibration Report

Serial Number:	939	
Tool Model:	PSI	
Performed:	Sun Mar 29 10:32:11 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6300	GAPI/cps