PIONEER
Pioneer Energy Services

INDUCTION LOG
GUARD LOG SP
GAMMA RAY

Company	Fritzler Resources, Inc./Winslow
Well	Agnas Friedly #1
Field	Sioux
County	Washington
State	Colorado

Company Fritzler Resources, Inc./Winslow Resources, Inc.
Well Agnas Friedly #1
Field Sioux
County Washington **State** Colorado

Location: API #: 05121110230000
1800' FNL & 660' FWL
SW NW
SEC 5 TWP 2N RGE 51W

Other Services
Density
Neutron

Elevation
K.B. 4502
D.F. 4501
G.L. 4490

Permanent Datum GL Elevation 4490
Log Measured From KB
Drilling Measured From KB

Date	May 22, 2013			
Run Number	1			
Depth Driller	4550			
Depth Logger	4565			
Bottom Logged Interval	4565			
Top Log Interval	Surface			
Casing Driller	222			
Casing Logger	222			
Bit Size	7-7/8"			
Type Fluid in Hole	Chem Gel			
Density / Viscosity	9.7 / 54			
pH / Fluid Loss	9.0 / 14.4			
Source of Sample	Flowline			
Rm @ Meas. Temp	1.30 @ 63° F			
Rmf @ Meas. Temp	1.04 @ 63° F			
Rmc @ Meas. Temp	1.56 @ 63° F			
Source of Rmf / Rmc	Measure / Calc			
Rm @ BHT	0.53 @ 155° F			
Time Circulation Stopped	2300 5/21/2013			
Time Logger on Bottom	0600			
Maximum Recorded Temperature	155° F			
Equipment Number	50			
Location	Brighton, CO			
Recorded By	Kelly Keever			
Witnessed By	Dave Winslow			

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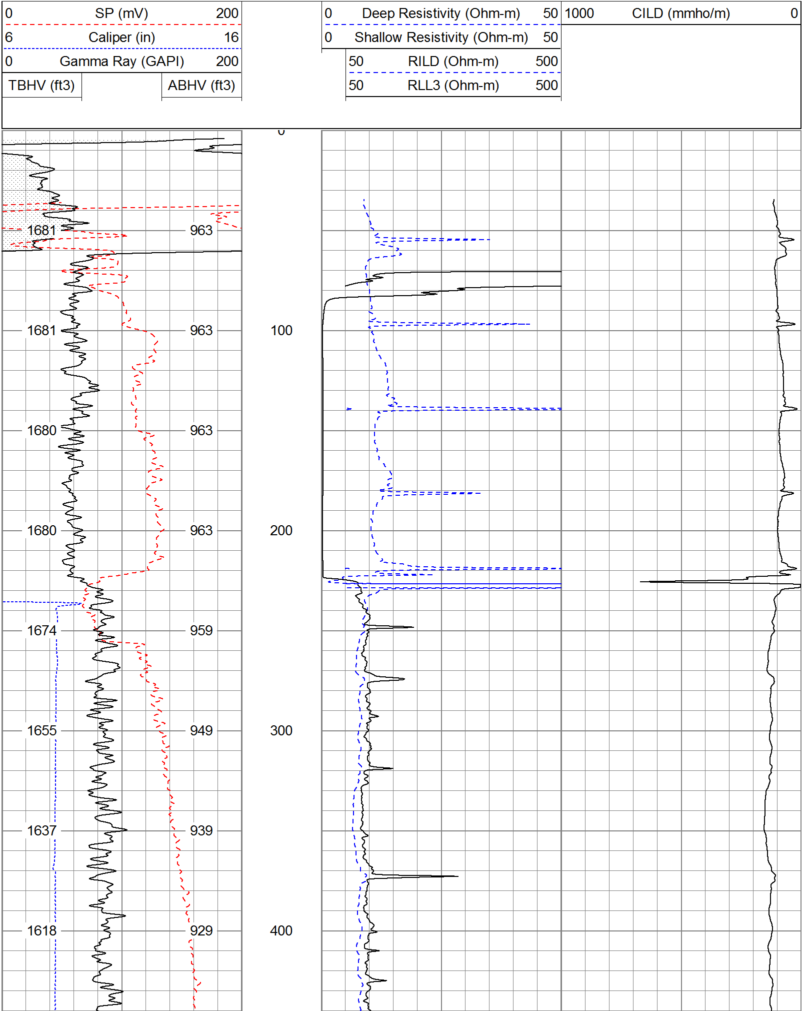
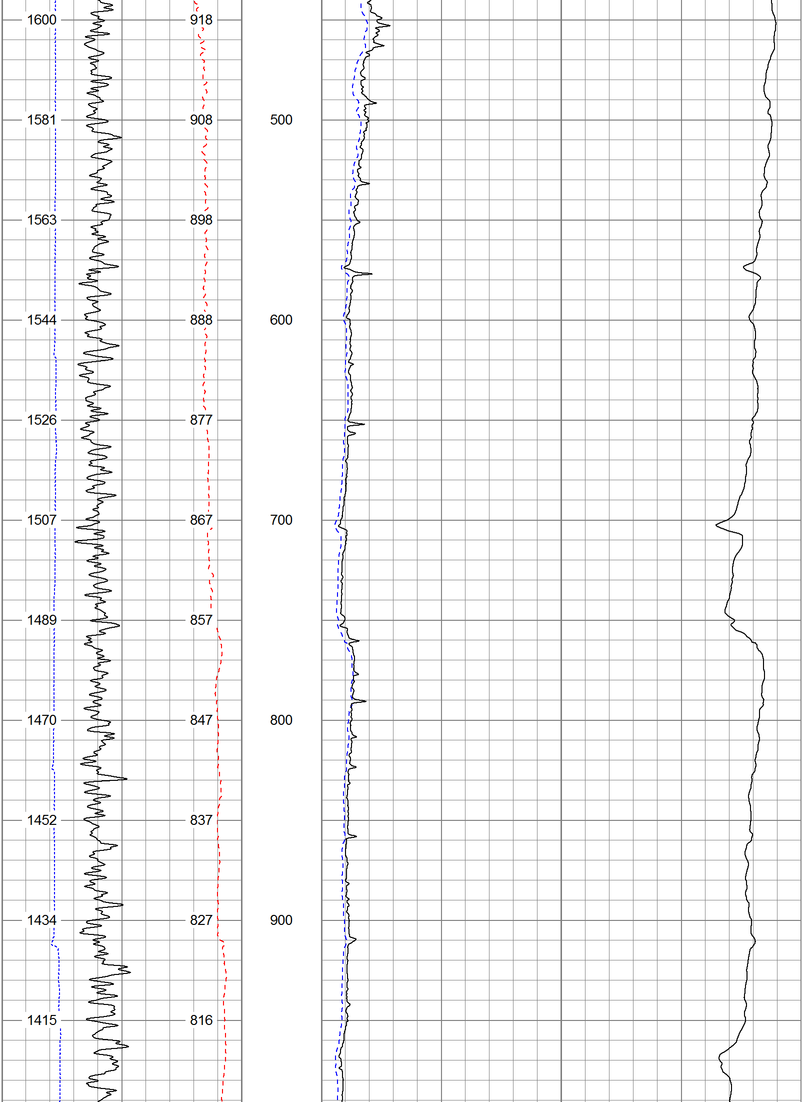
All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages,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

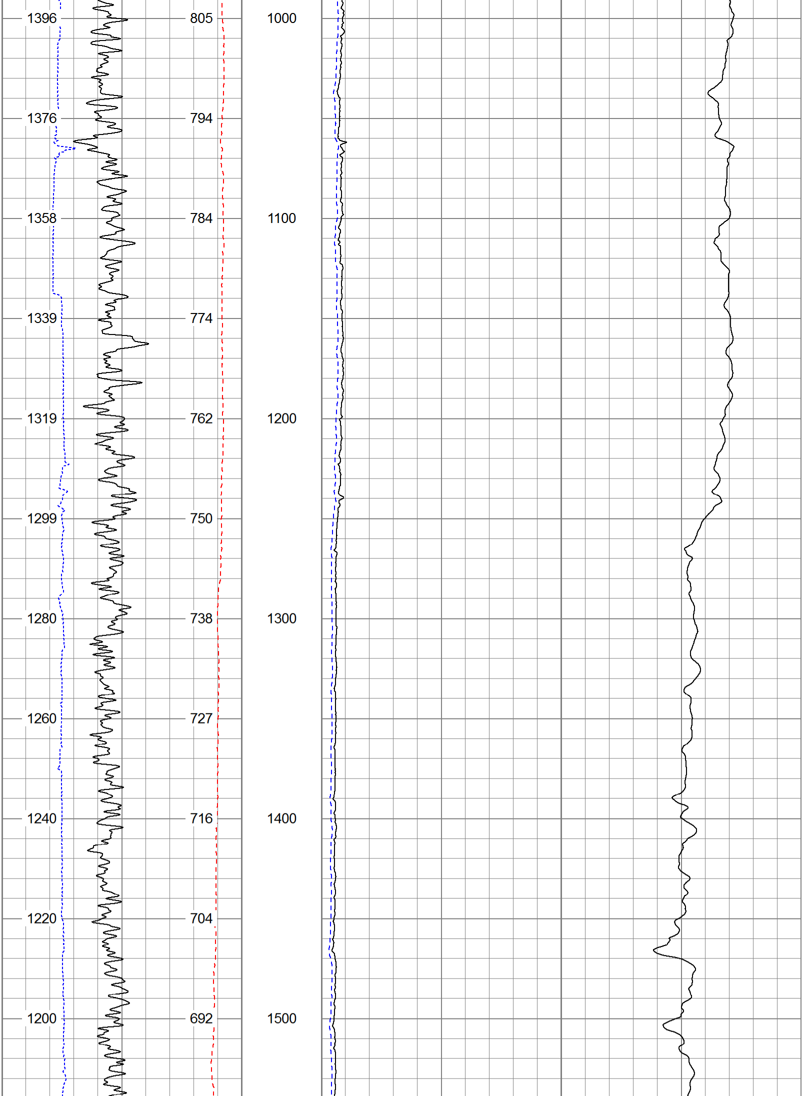
Comments

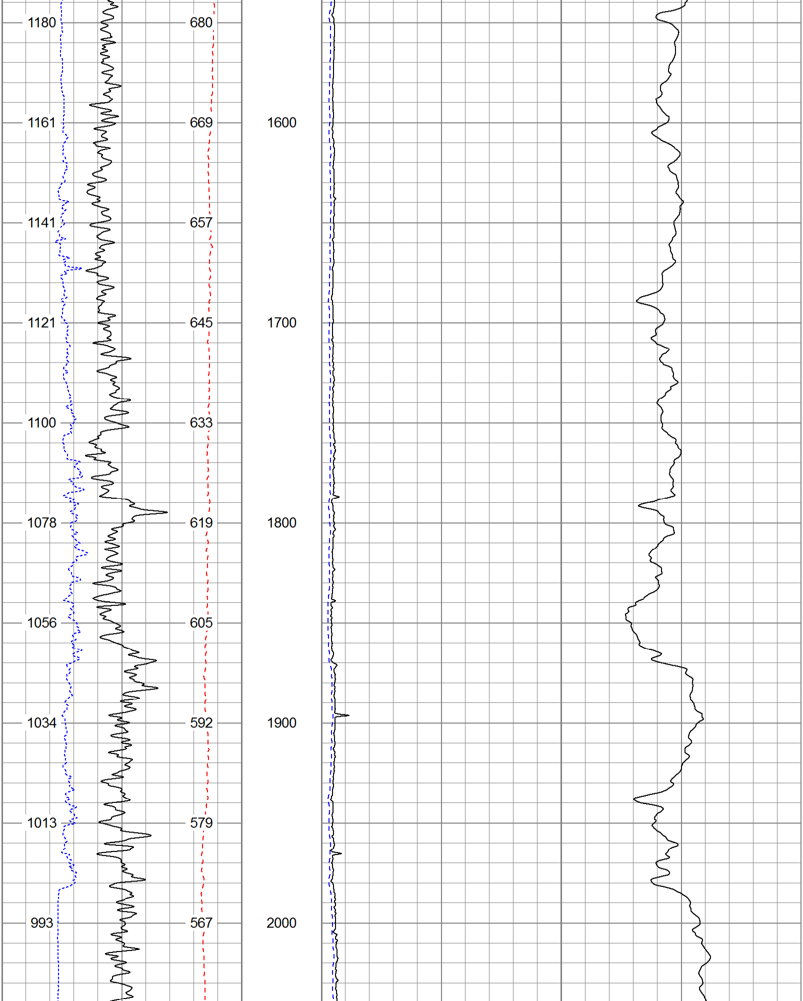
Annular volume calculated for 5-1/2" casing
NEBCO Drilling Rig 8
Thank you for using Pioneer Energy Services.

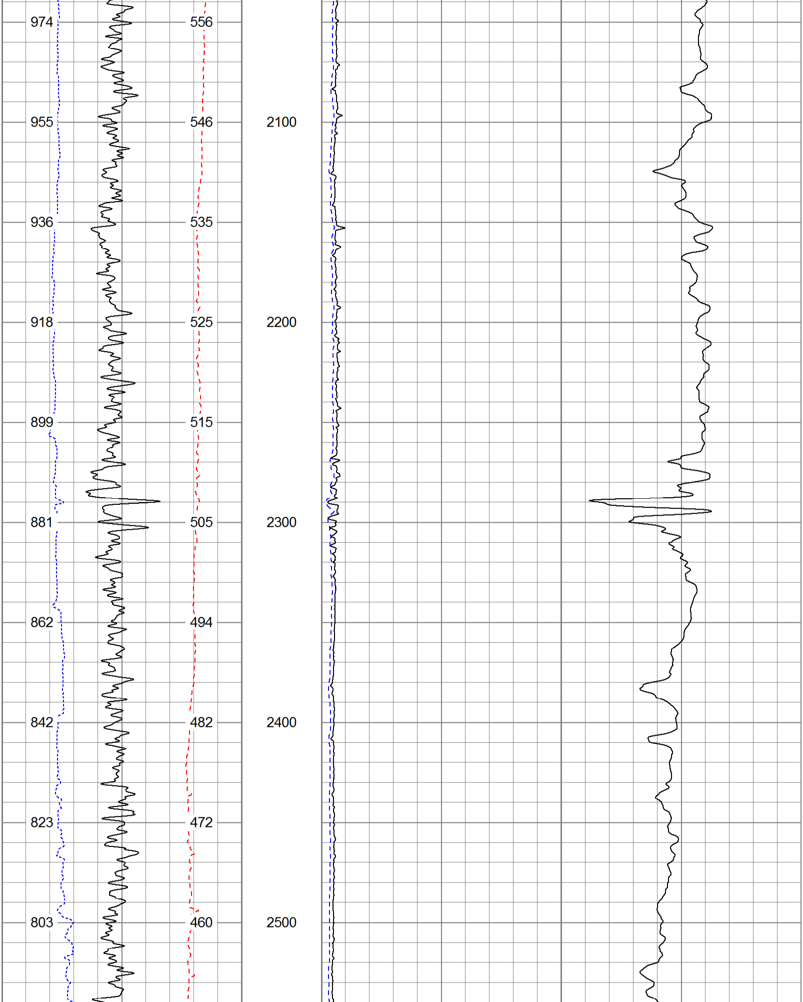
Database File:	12769.db
Dataset Pathname:	MAIN
Presentation Format:	dilin5
Dataset Creation:	Wed May 22 07:34:01 2013
Charted by:	Depth in Feet scaled 1:600

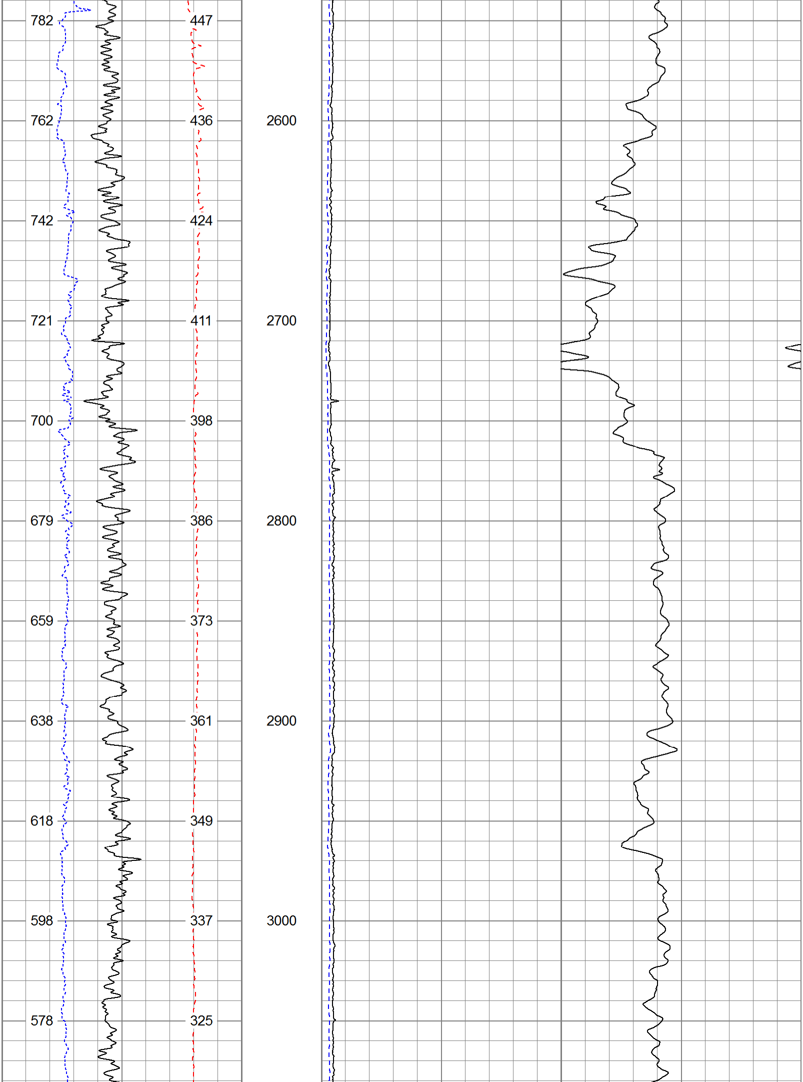


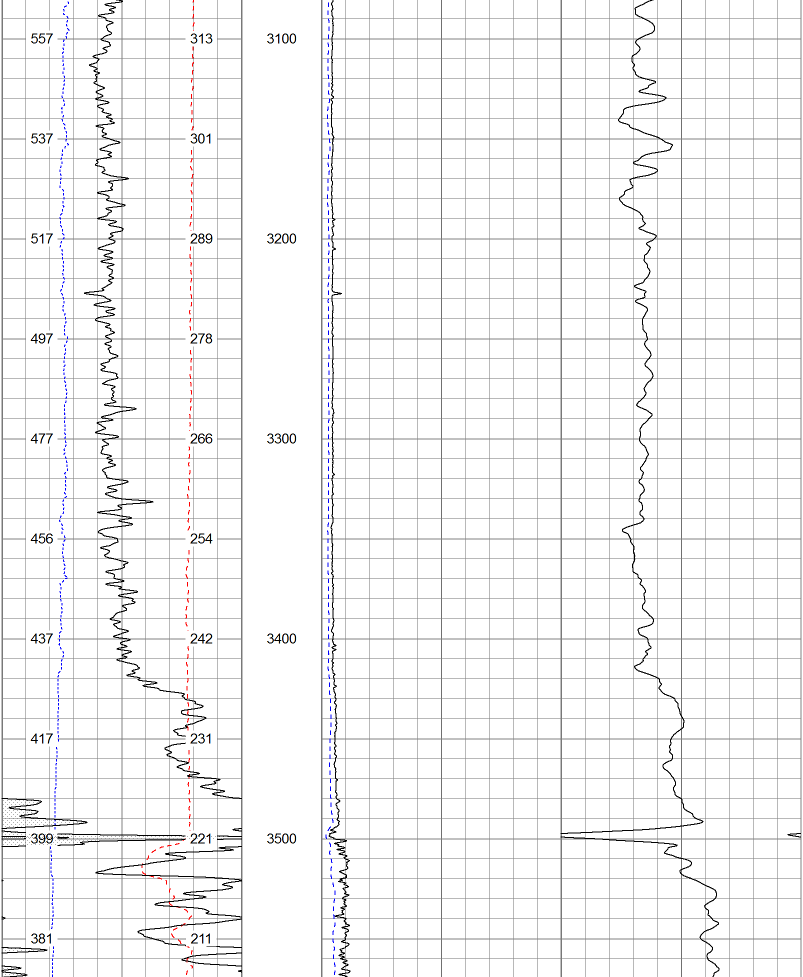


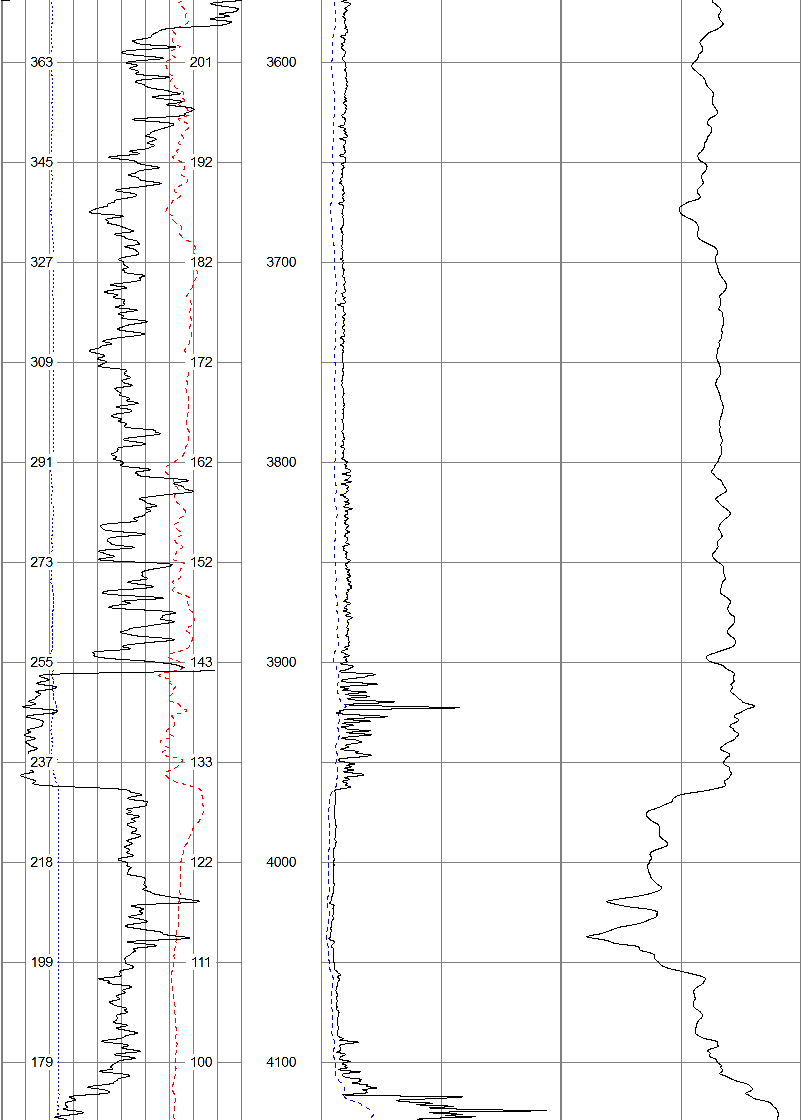


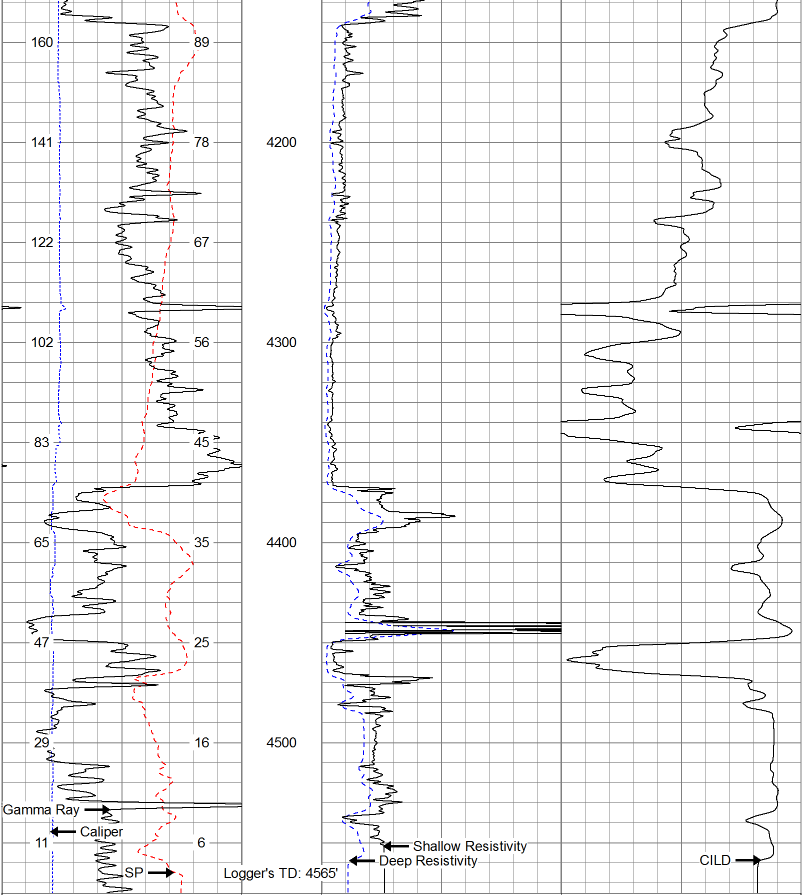






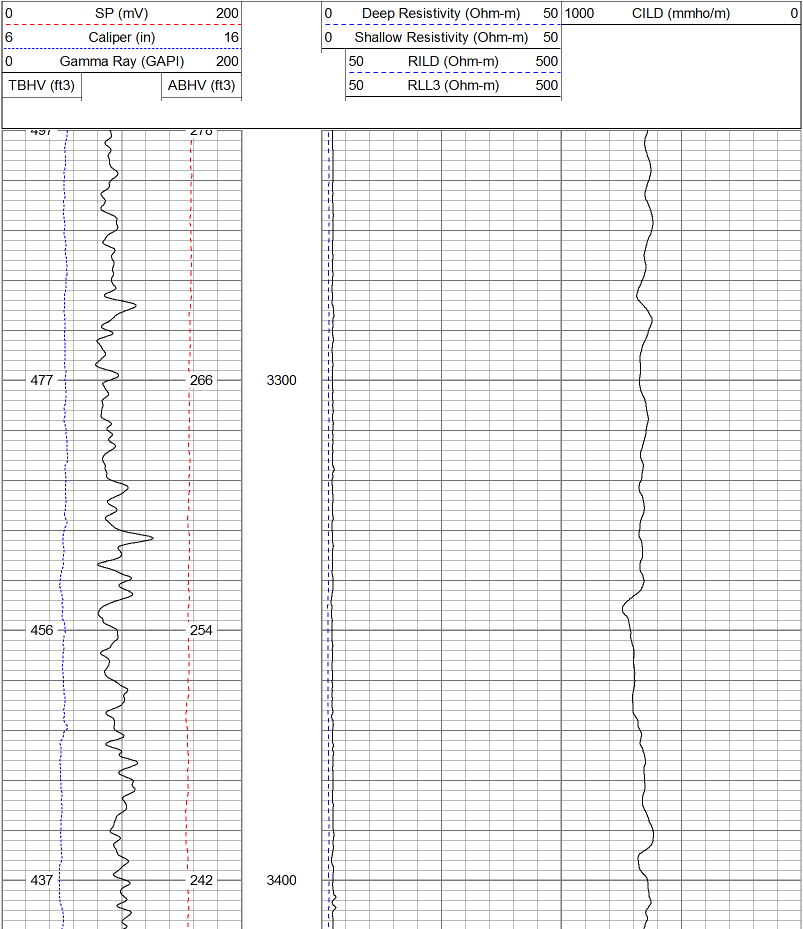


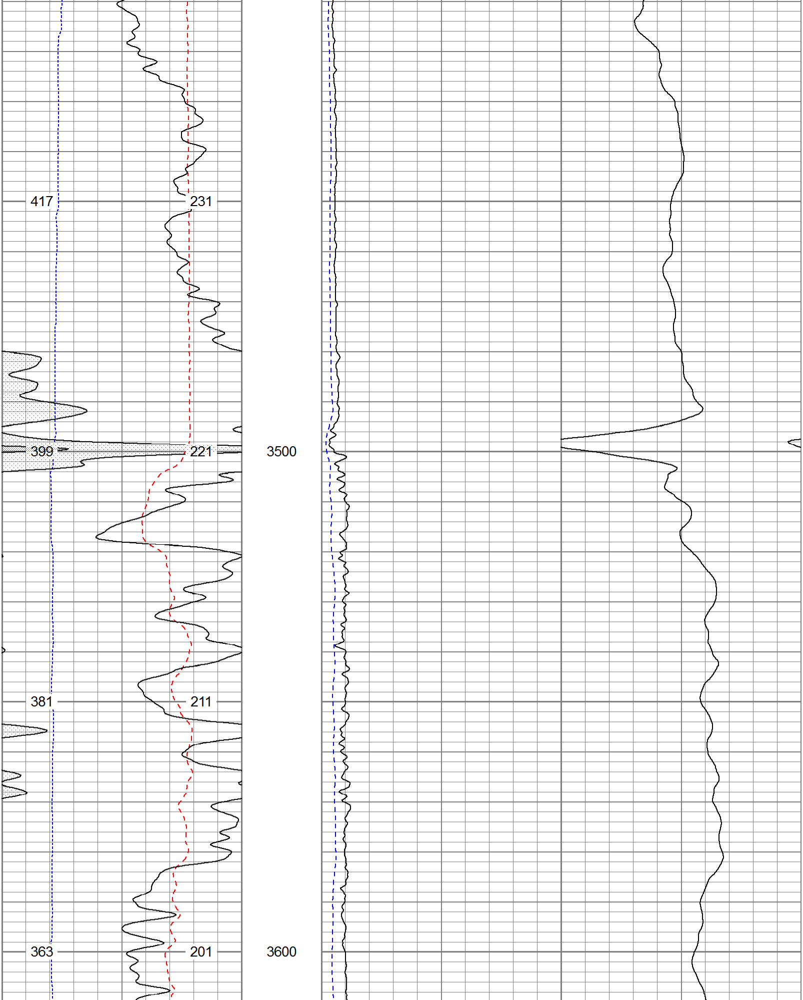


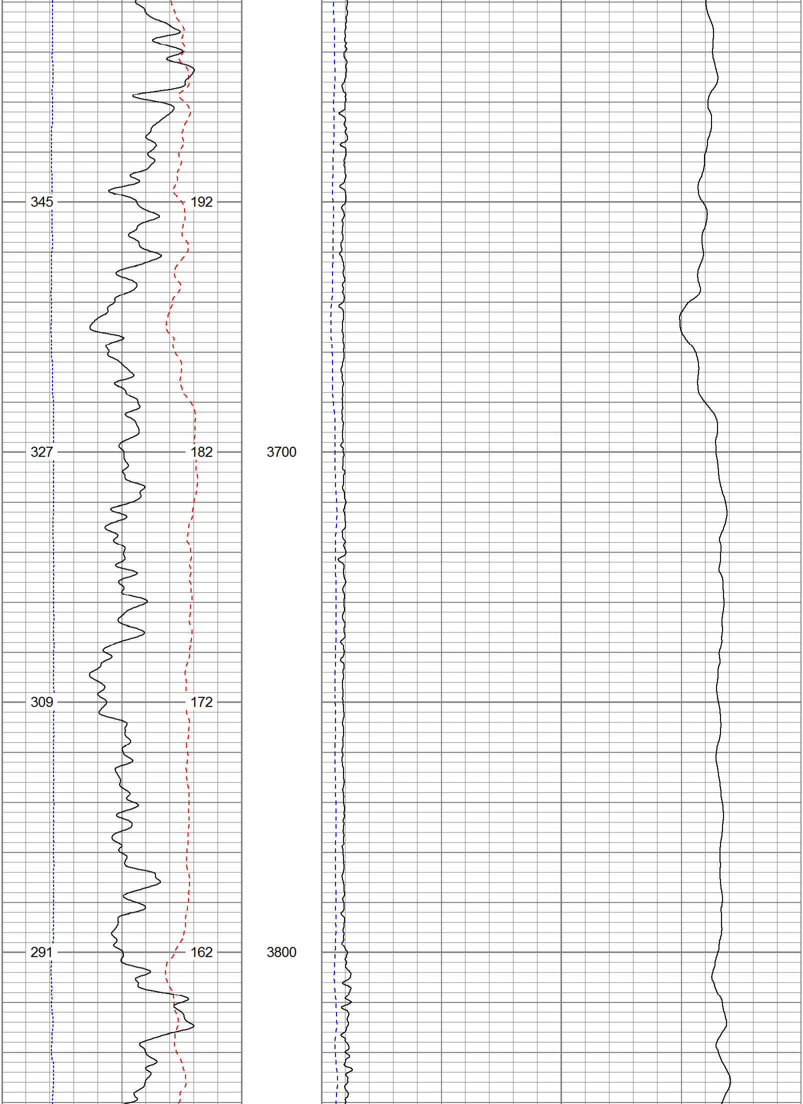


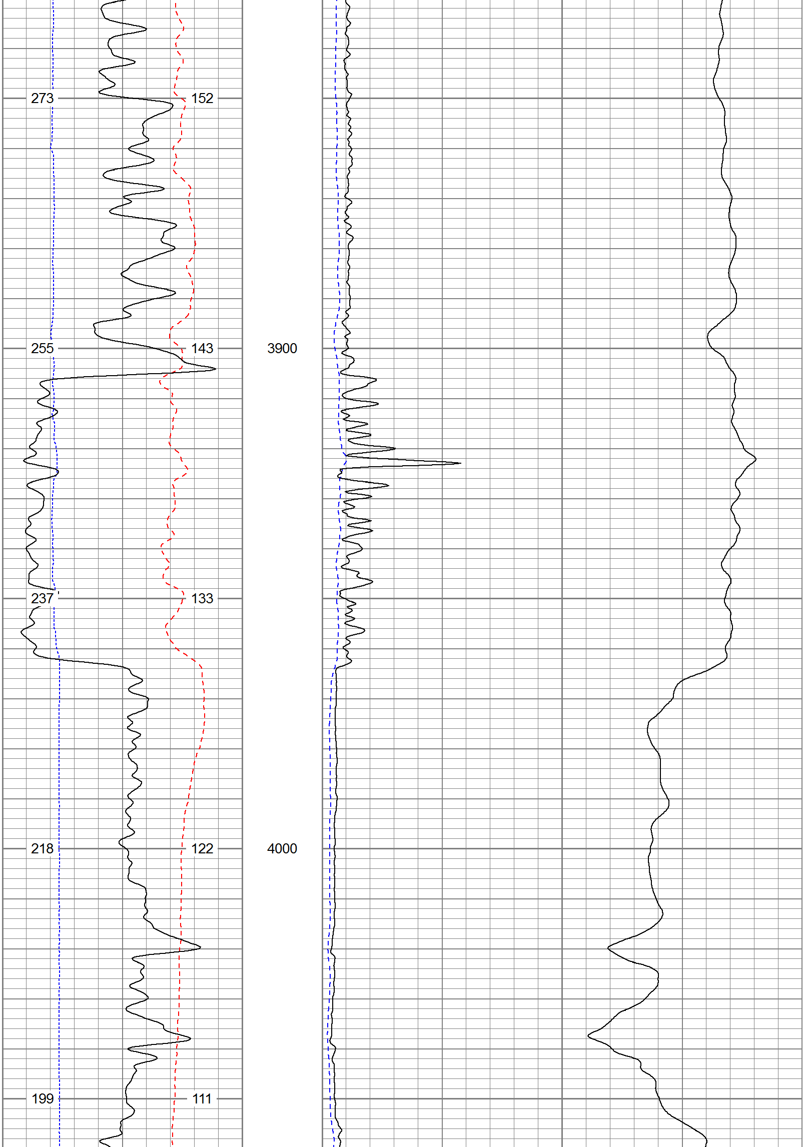
0 SP (mV) 200	0 Deep Resistivity (Ohm-m) 50	1000 CILD (mmho/m) 0
6 Caliper (in) 16	0 Shallow Resistivity (Ohm-m) 50	
0 Gamma Ray (GAPI) 200	50 RILD (Ohm-m) 500	
TBHV (ft3) ABHV (ft3)	50 RLL3 (Ohm-m) 500	

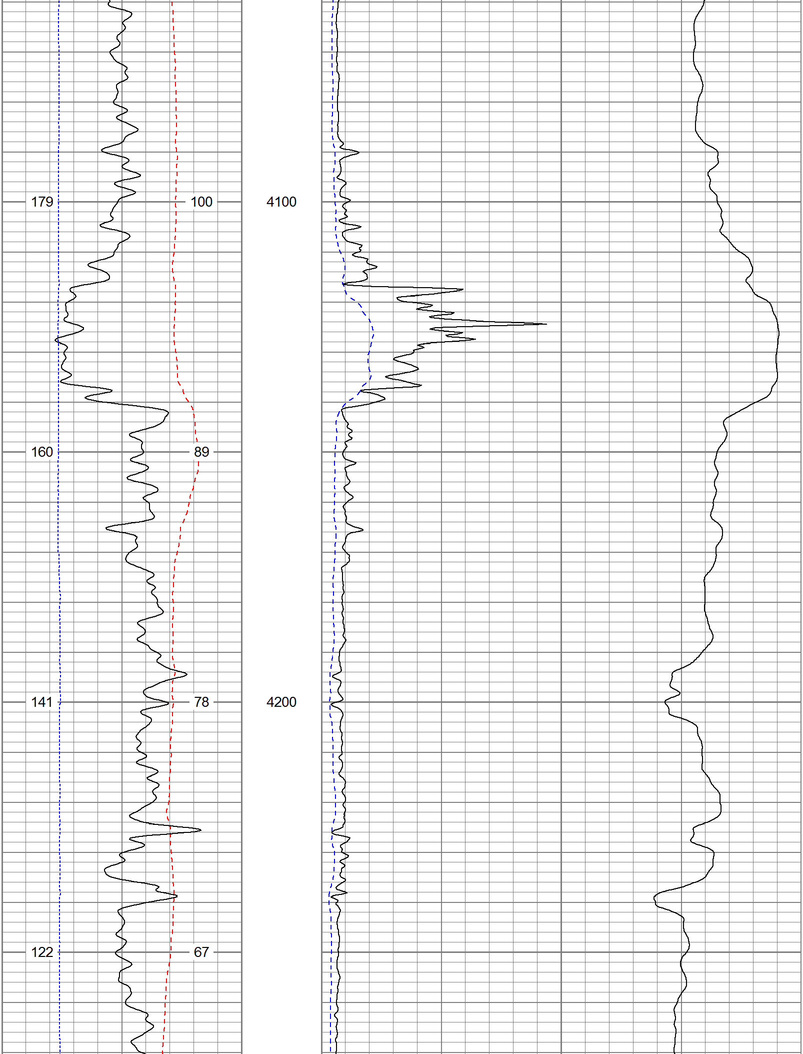
Database File:	12769.db
Dataset Pathname:	MAIN
Presentation Format:	dilin5
Dataset Creation:	Wed May 22 07:34:01 2013
Charted by:	Depth in Feet scaled 1:240

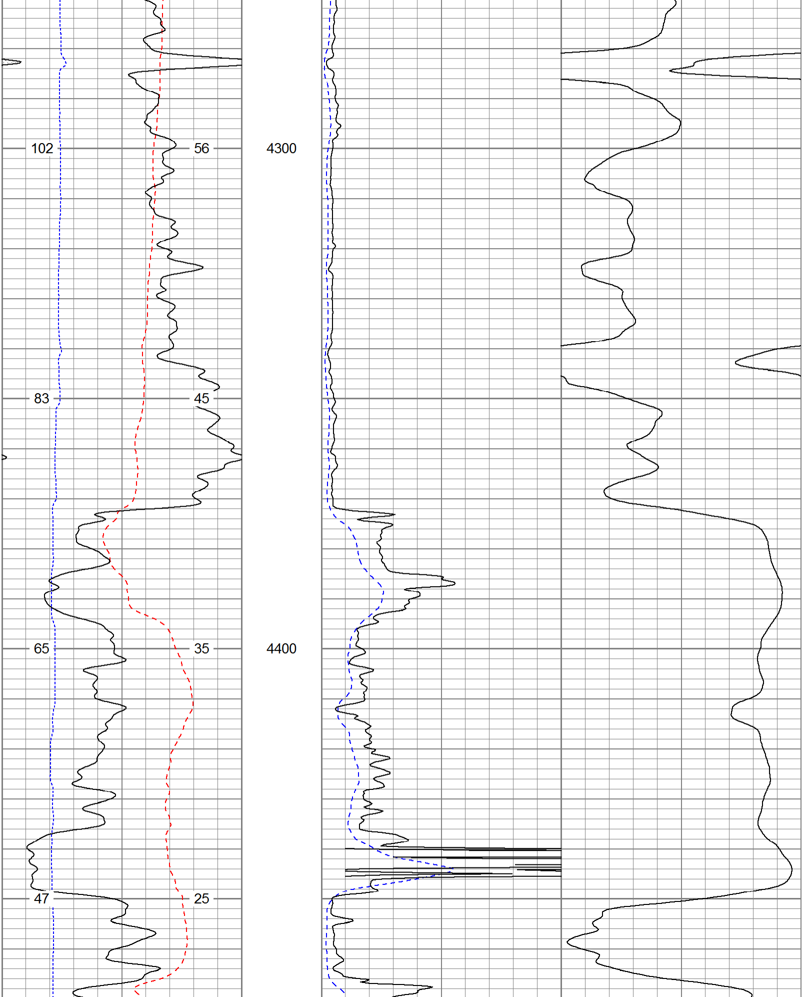


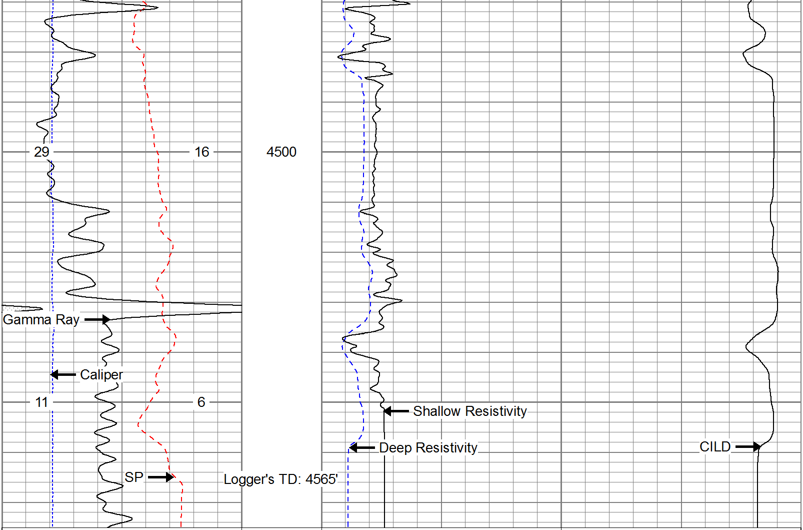












0	SP (mV)	200
6	Caliper (in)	16
0	Gamma Ray (GAPI)	200
TBHV (ft3)		ABHV (ft3)
0	Deep Resistivity (Ohm-m)	50
0	Shallow Resistivity (Ohm-m)	50
50	RILD (Ohm-m)	500
50	RLL3 (Ohm-m)	500
1000	CILD (mmho/m)	0

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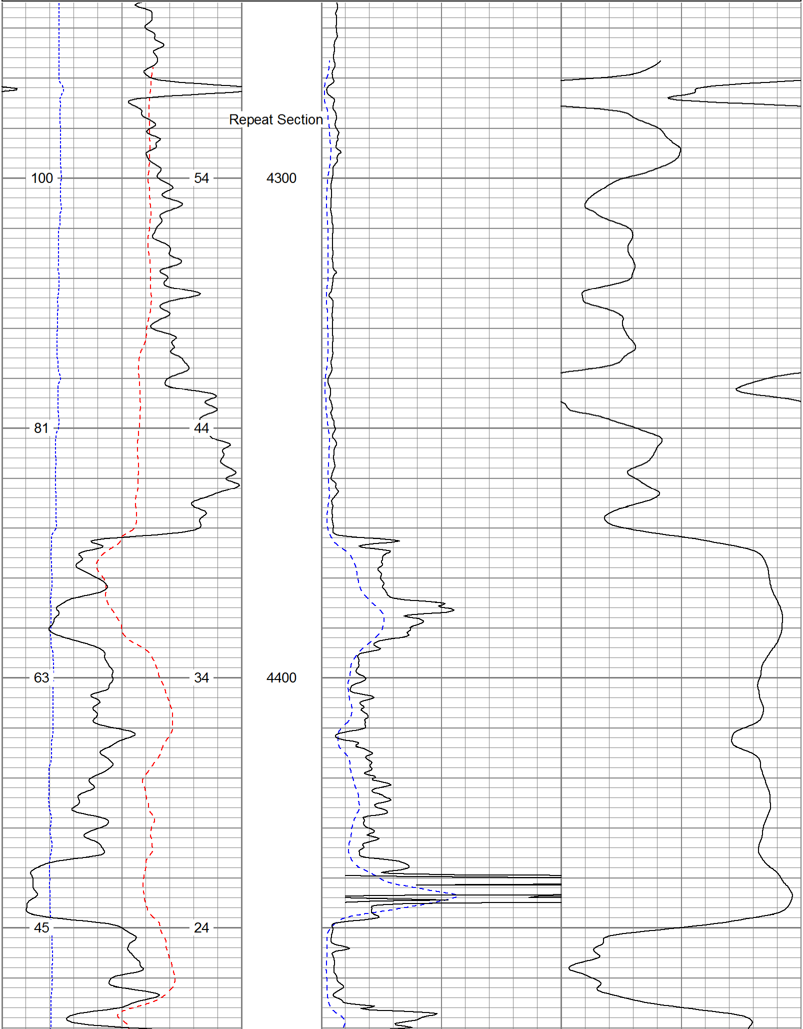
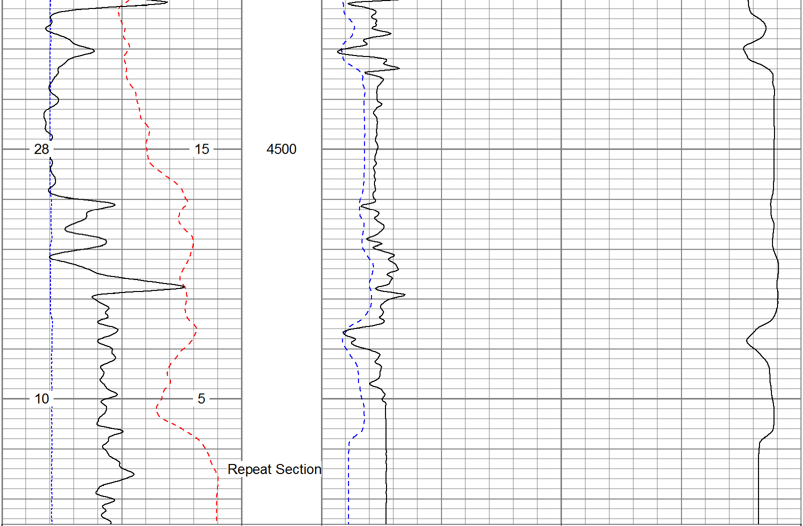
REPEAT SECTION

Database File:	12769.db
Dataset Pathname:	pass3
Presentation Format:	dilin5
Dataset Creation:	Wed May 22 05:58:35 2013 by Log 0
Charted by:	Depth in Feet scaled 1:240

0	SP (mV)	200
6	Caliper (in)	16
0	Gamma Ray (GAPI)	200
TBHV (ft3)		ABHV (ft3)
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





0	SP (mV)	200	
6	Caliper (in)	16	
0	Gamma Ray (GAPI)	200	
TBHV (ft3)		ABHV (ft3)	

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

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REPEAT SECTION

Calibration Report

Database File: 12769.db
Dataset Pathname: pass1
Dataset Creation: Wed May 22 02:17:44 2013 by Log 0

Dual Induction Calibration Report

Serial-Model: 1017-PSI
Surface Cal Performed:

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	4908.160	12644.400	9.000	365.000	mmho/m	0.620	-45.000
Medium	2818.360	8491.080	9.000	288.000	mmho/m	0.532	-39.000

Compensated Density Calibration Report

Serial-Model:	128-PSI
Master Calibration Performed:	Tue May 07 09:27:22 2013

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	5228.74	2679.22	cps
Aluminum	2.690	g/cc	986.64	1690.57	cps

	Size		Reading
Small Ring		in	
Medium Ring		in	
Large Ring		in	

Compensated Neutron Calibration Report

Serial Number:	853
Tool Model:	PSI

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	1.00	cps	1.00	cps	1.9000
Long Space	1.00	cps	1.00	cps	2.0250

Gamma Ray Calibration Report

Serial Number:	921	
Tool Model:	PSI	
Performed:	Mon May 13 11:24:27 2013	
Calibrator Value:	248.0	GAPI
Background Reading:	35.0	cps
Calibrator Reading:	350.0	cps
Sensitivity:	0.5700	GAPI/cps