



SUPERIOR
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

COMPENSATED DENSITY NEUTRON LOG

Company Pioneer Natural Resources
Well Hopscotch Deep 41-16
Field Purgatoire River
County Las Animas State Colorado

Location: API # : 05 071 09299 00

352' FNL & 1202' FEL

SEC 16 TWP 32S RGE 68W

Permanent Datum Ground Level Elevation 8691'
Log Measured From Kelly Bushing 15' Above G.L.
Drilling Measured From Kelly Bushing

Other Services
Elevation
K.B. 8706'
D.F. -----
G.L. 8691'

Date	4-19-08	4-19-08	
Run Number	Two	Four	
Depth Driller	6400'	6400'	
Depth Logger	3930'	4049'	
Bottom Logged Interval	3928'	4047'	
Top Log Interval	5 1/2" Casing	5 1/2" Casing	
Casing Driller	5.5" @ 3483'	5.5" @ 3942'	
Casing Logger	3500'	3942'	
Bit Size	7 7/8"	7 7/8"	
Type Fluid in Hole	Water	Water	
Density / Viscosity	///	///	
pH / Fluid Loss	///	///	
Source of Sample	///	///	
Rm @ Meas. Temp	///	///	
Rmf @ Meas. Temp	///	///	
Rmc @ Meas. Temp	///	///	
Source of Rmf / Rmc	///	///	
Rm @ BHT	///	///	
Time Circulation Stopped	6:00 P.M.	6:00P.M.	
Time Logger on Bottom	1:15 P.M.	6:15 P.M.	
Maximum Recorded Temperature	///	///	
Equipment Number	T0701	T0701	
Location	Trinidad	Trinidad	
Recorded By	C. Sisneros	C. Sisneros	
Witnessed By	Mr. Dean Sipe	Mr. Dean Sipe	

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

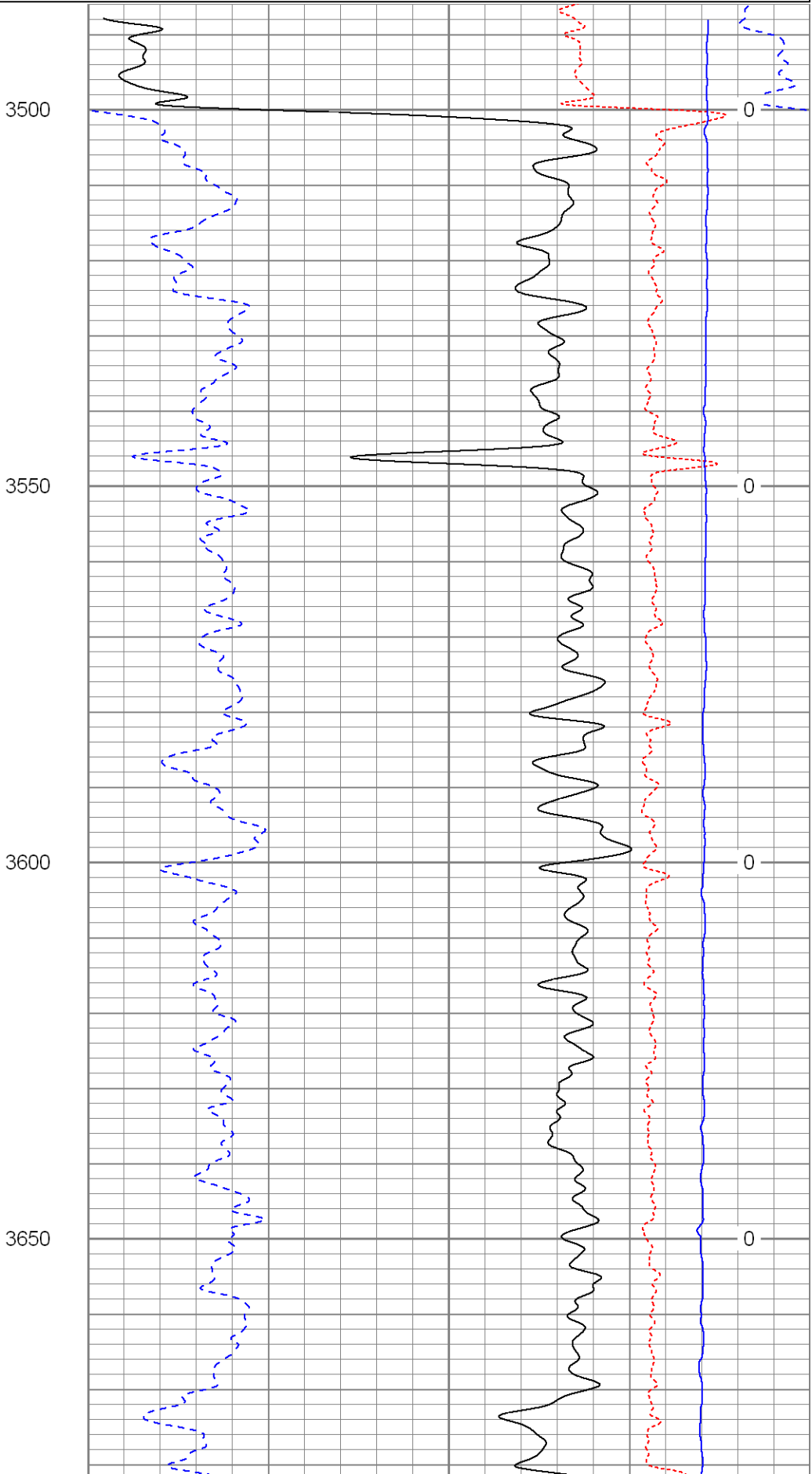
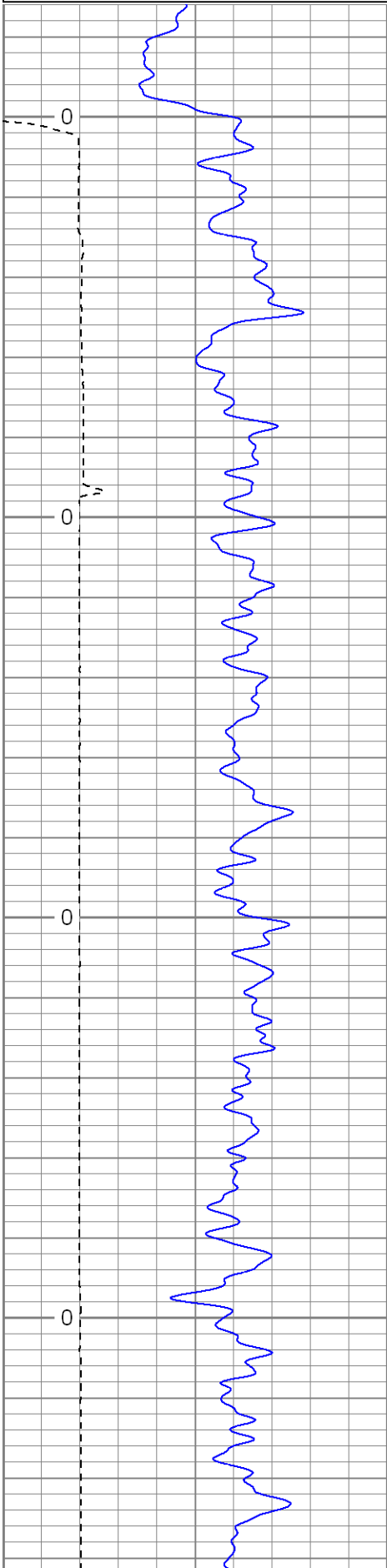
Comments

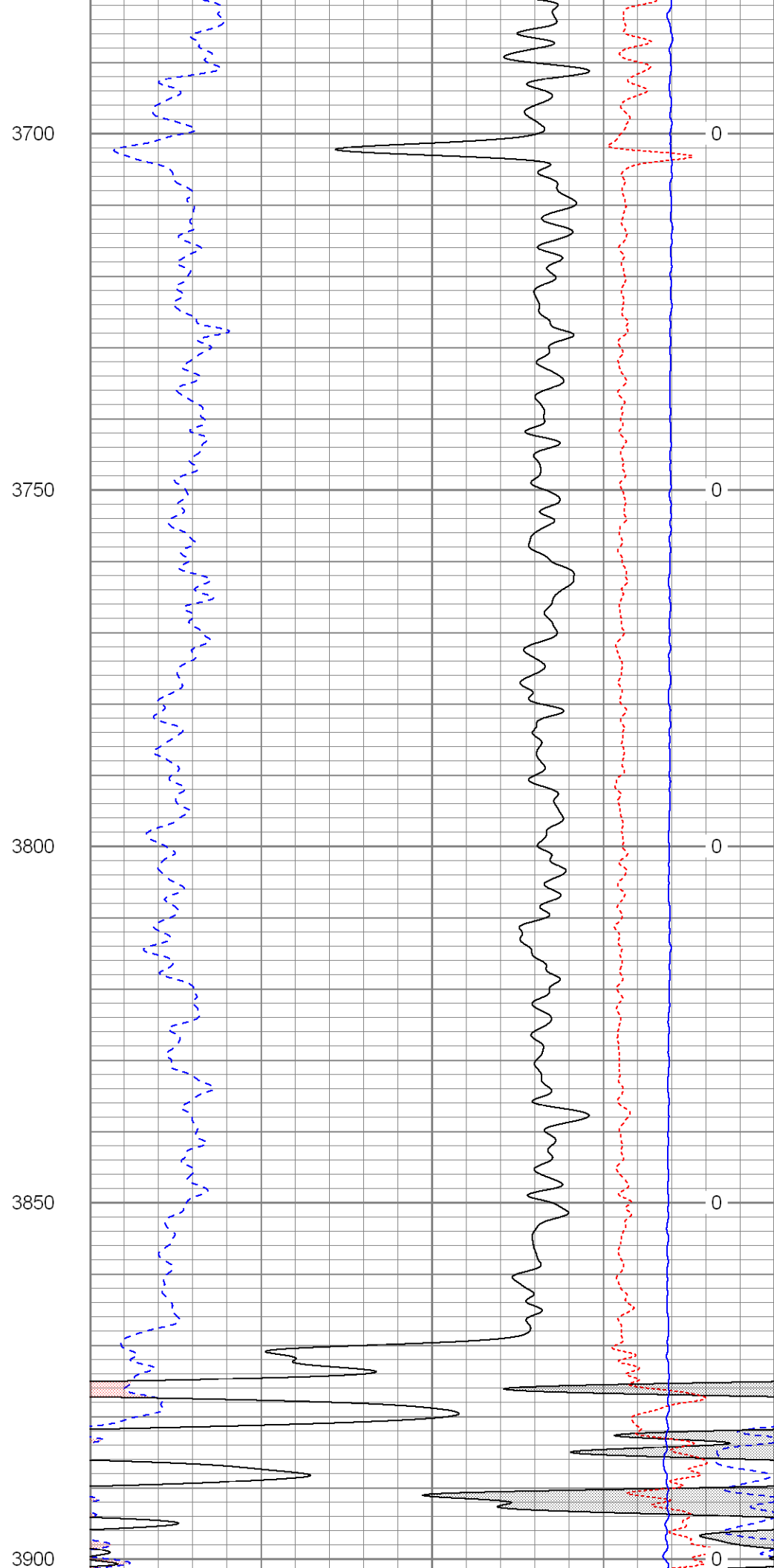
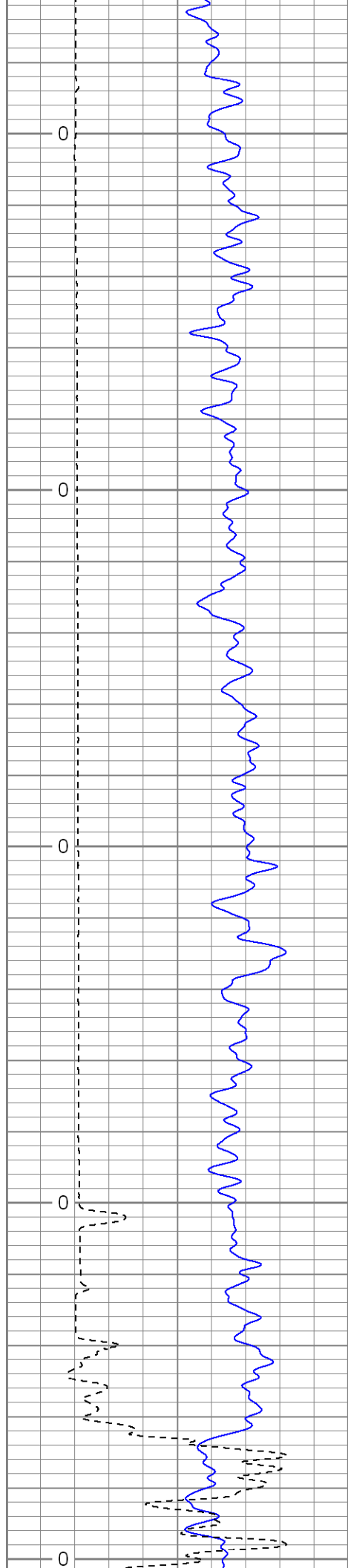
8 5/8" Surface Casing set @ 1247'.
Compensated Density Neutron Porosity Presented On Sandstone Matrix.
Multiple passes made thru 5.5" Casing. Merged all data.
Well Directions:
Wet Canyon turn left at Hick School, first right after four way,
go thru gate, drive thru a location, at T go right, at Y go left,
go thru three gates (0000), after third gate drive thru a location,
dead end on location.

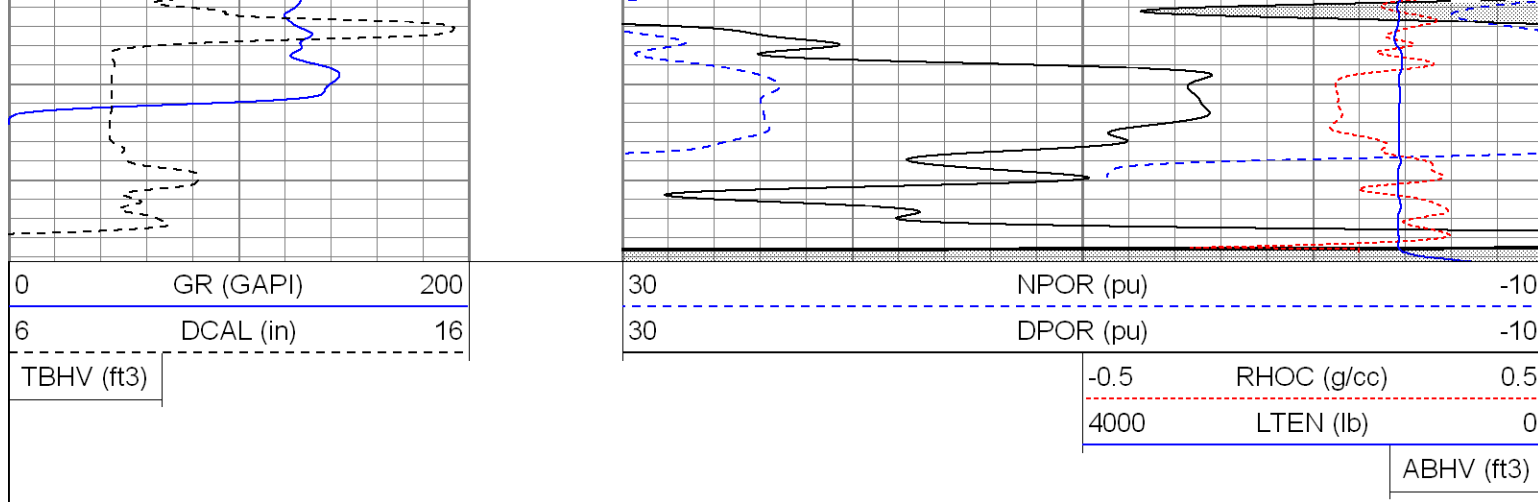
Database File: hopscotchdeep.db
Dataset Pathname: pass6.1
Presentation Format: cdnl
Dataset Creation: Sat Apr 19 15:05:49 2008 by Calc Open-Cased 070814
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200
6	DCAL (in)	16
TBHV (ft3)		

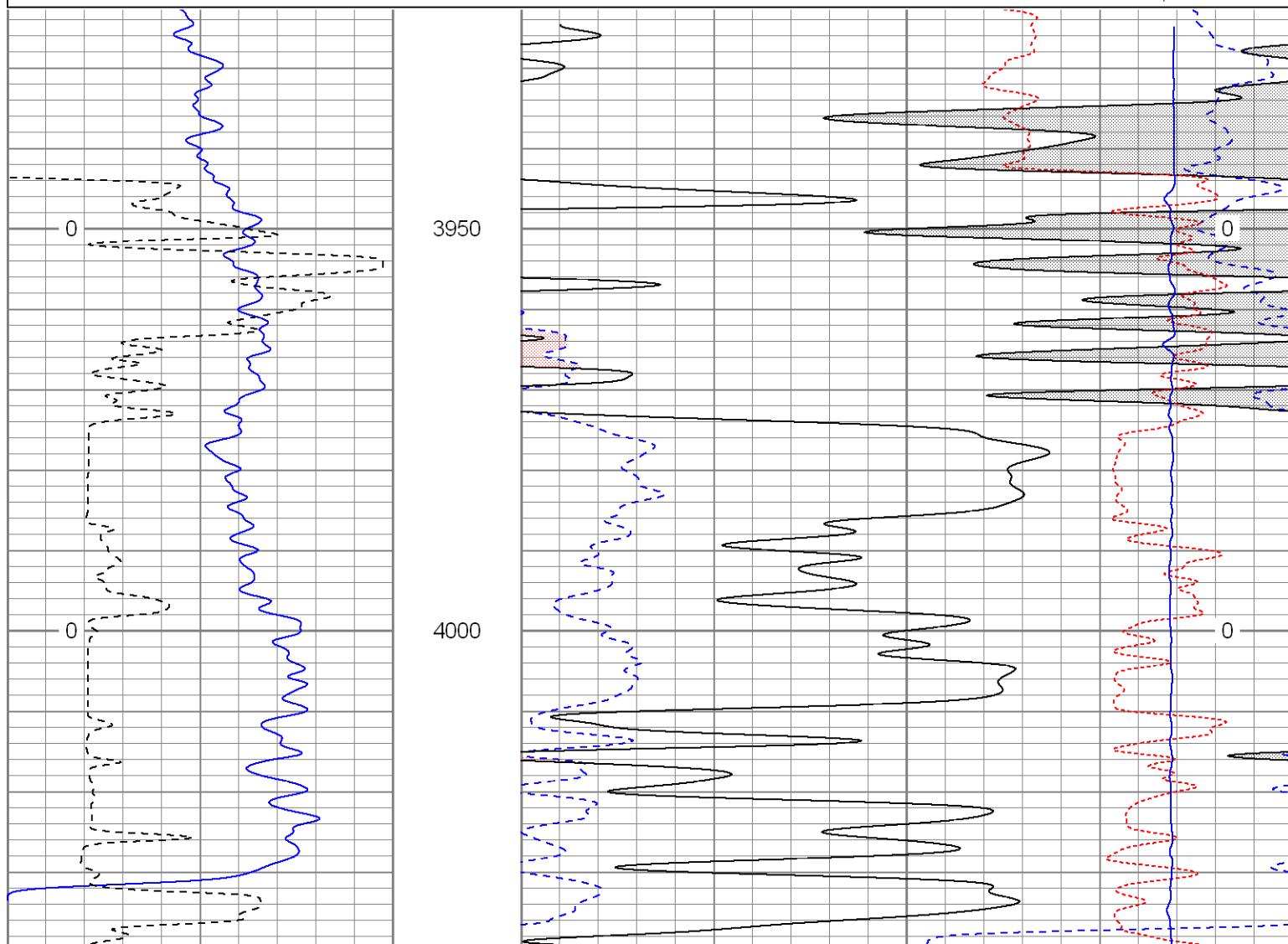
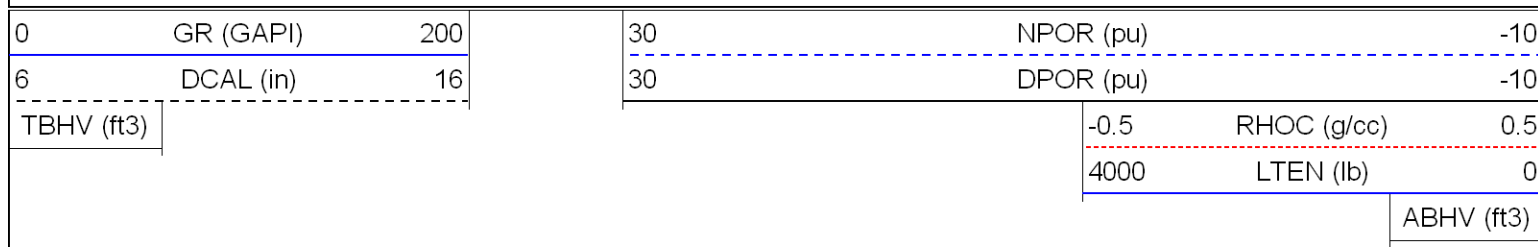
30	NPOR (pu)	-10
30	DPOR (pu)	-10
-0.5	RHOC (g/cc)	0.5
4000	LTEN (lb)	0
ABHV (ft3)		

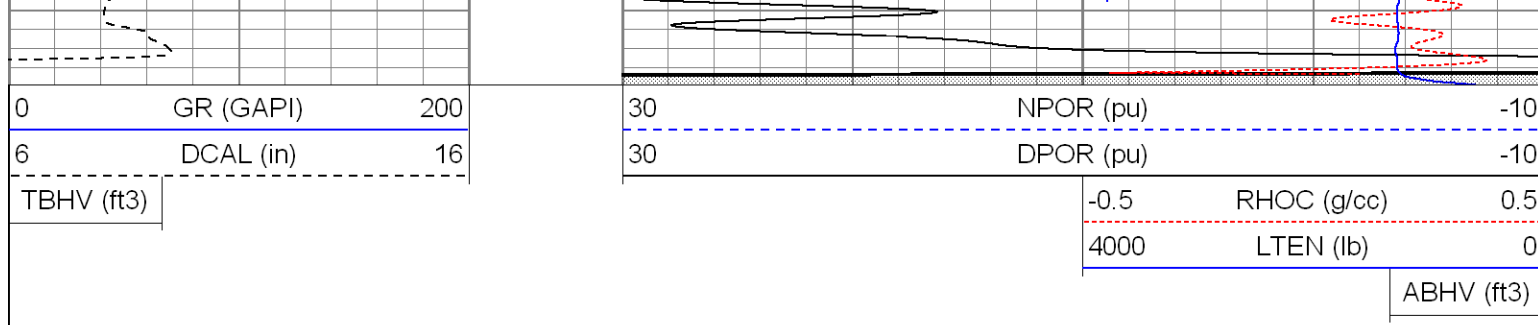






Database File: hopscotchdeep.db
Dataset Pathname: pass9
Presentation Format: cdnl
Dataset Creation: Sat Apr 19 19:13:27 2008 by Log Open-Cased 070814
Charted by: Depth in Feet scaled 1:240



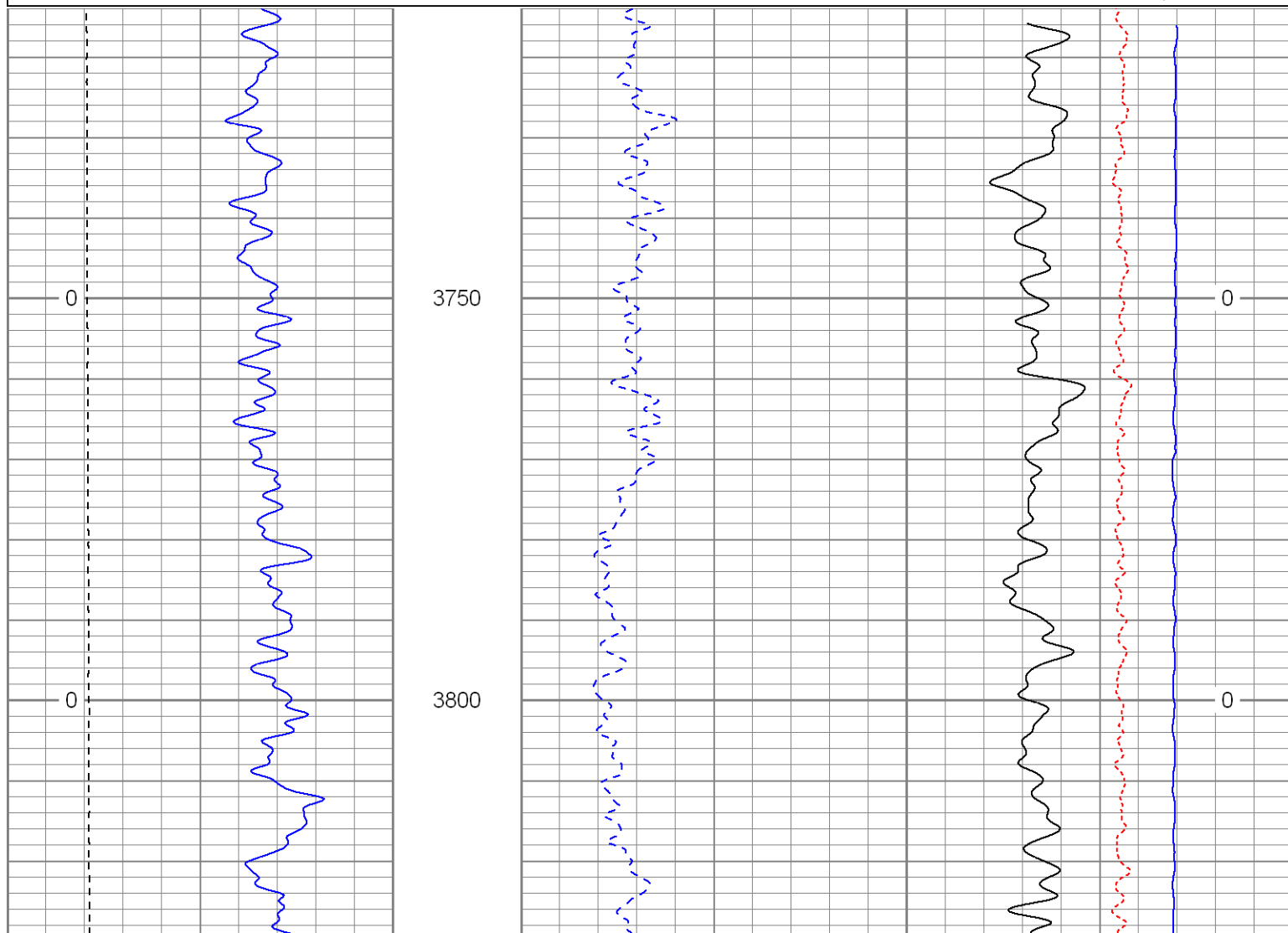
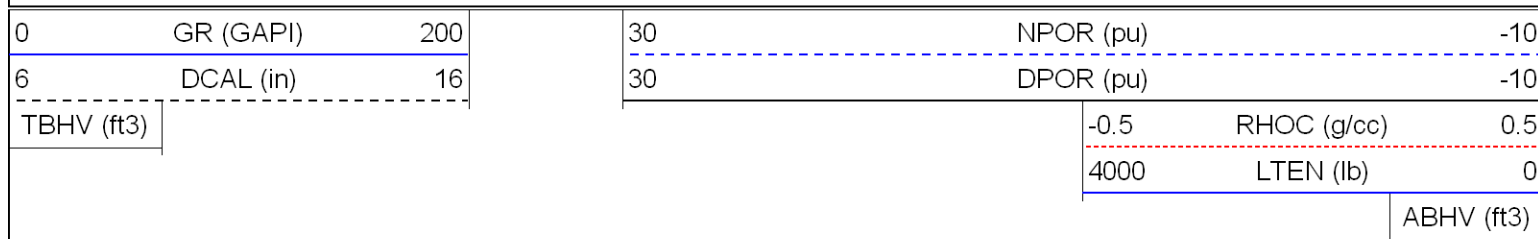


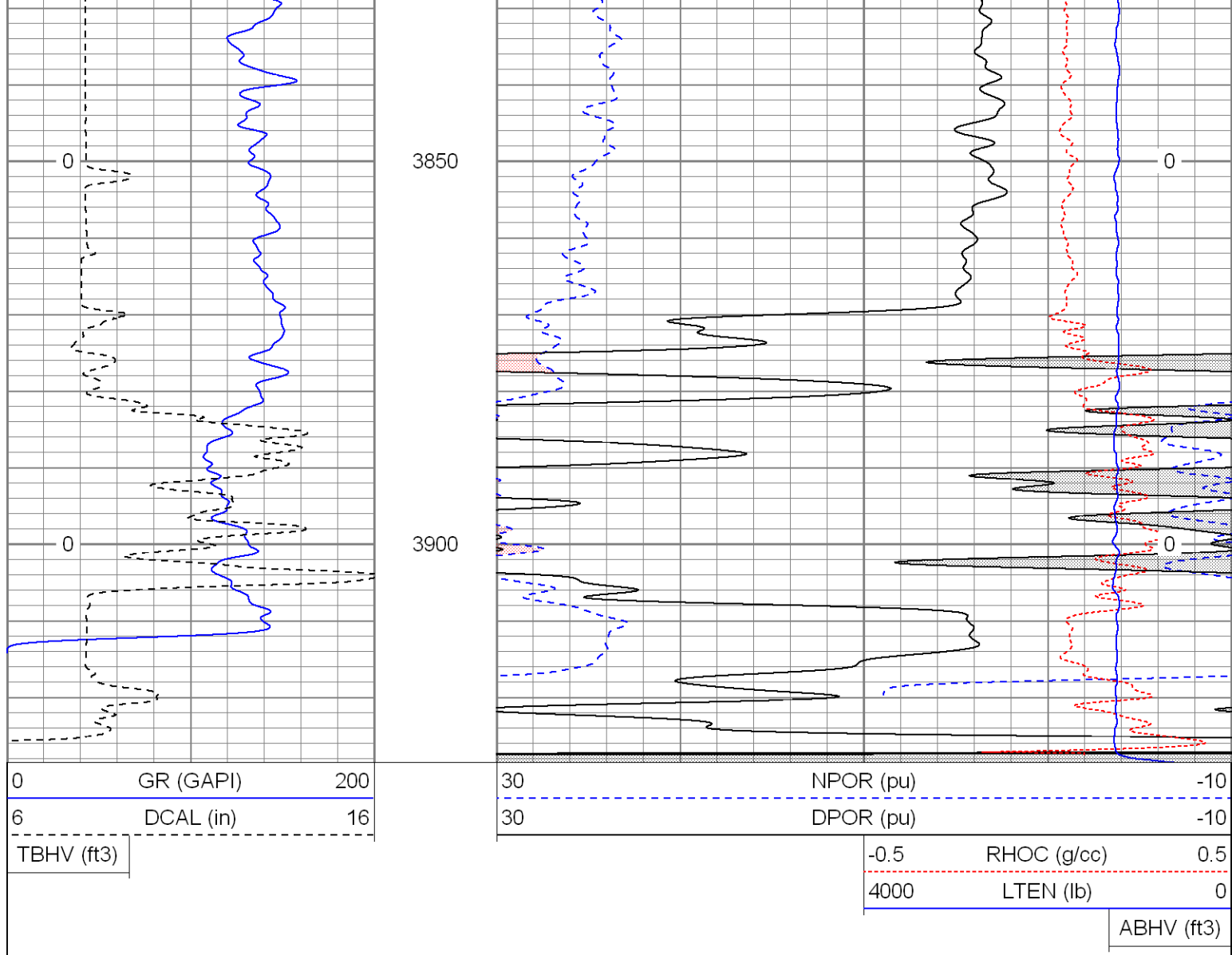
SUPERIOR

Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

Repeat Pass

Database File: hopscotchdeep.db
 Dataset Pathname: pass5.1
 Presentation Format: cdnl
 Dataset Creation: Sat Apr 19 15:08:24 2008 by Calc Open-Cased 070814
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File: hopscotchdeep.db
 Dataset Pathname: pass1
 Dataset Creation: Sat Apr 19 13:32:10 2008 by Log Open-Cased 070814

Induction Tool Calibration Report

Serial Number: 040903
 Tool Model: Probe
 Downhole Cal Performed: Thu Apr 17 14:00:25 2008
 Surface Cal Performed: Thu Apr 17 14:00:48 2008

Surface Calibration:	Air	Loop	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	-0.045	0.649	V
Internal Reference:	Zero	Cal	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.015	0.649	V

Downhole Calibration:	Internal Zero	Internal Cal	
Conductivity Reference:	0.534	500.385	mmho
Conductivity Reading:	-0.361	500.250	V
Short Normal Reference:	0.000	20.000	Ohm-m
Short Normal Reading:	0.006	0.234	V

Results:	Gain	Offset
Loop Conductivity:	720.595	32.427
Downhole Correction:	0.000	0.000

0.894
-3.000

-3.000

Gamma Ray Calibration Report

Serial Number: 801
Tool Model: 2.75POH
Performed: Thu Apr 03 07:26:49 2008

Calibrator Value:	1.0	GAPI
-------------------	-----	------

Background Reading: 0.0 cps

Calibrator Reading: 1.0 cps

Sensitivity: 0.8000 GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	16.13		None	0.75	1.50	5.00
			GR-2.75POH (804) Probe	3.73	2.75	43.00
NEU	10.58		NEU-2.75POH (803) Probe Epithermal	4.75	2.75	58.00
LSD	2.75		CDL-2.75POH (901) Probe	8.43	2.75	106.00
DCAL SSD	2.48 2.23					
Dataset: hopscotchdeep.db: field/well/run1/pass3 Total Length: 17.66 ft Total Weight: 212.00 lb O.D. 2.75 in						