SUPERIOR
WELL SERVICES

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

DUAL INDUCTION LOG

Company XTO Energy Inc.
Well Apache Canyon 08-12
Field Purgatoire River
County Las Animas
State Colorado

Company	XTO Energy Inc.
Well	Apache Canyon 08-12
Field	Purgatoire River
County	Las Animas
State	Colorado

Location: API # : 05 071 09280 00

1861' FSL & 851' FWL

SEC 8 TWP 34S RGE 67W

Other Services
CDL
NEUTRON

Permanent Datum	Ground Level	Elevation	7597'
Log Measured From	Ground Level		
Drilling Measured From	Ground Level		

Elevation
K.B. ------
D.F. ------
G.L. 7597'

Date	7-12-07		
Run Number	One		
Depth Driller	2185'		
Depth Logger	2180'		
Bottom Logged Interval	2178'		
Top Log Interval	Surface Casing		
Casing Driller	8 5/8" @ 496'		
Casing Logger	496'		
Bit Size	7 7/8"		
Type Fluid in Hole	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	4:30 A.M.		
Time Logger on Bottom	7:00 A.M.		
Maximum Recorded Temperature	103 DEG F		
Equipment Number	T697		
Location	Trinidad		
Recorded By	M. Norton		
Witnessed By	Mr. Joe Smith		

<<< 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

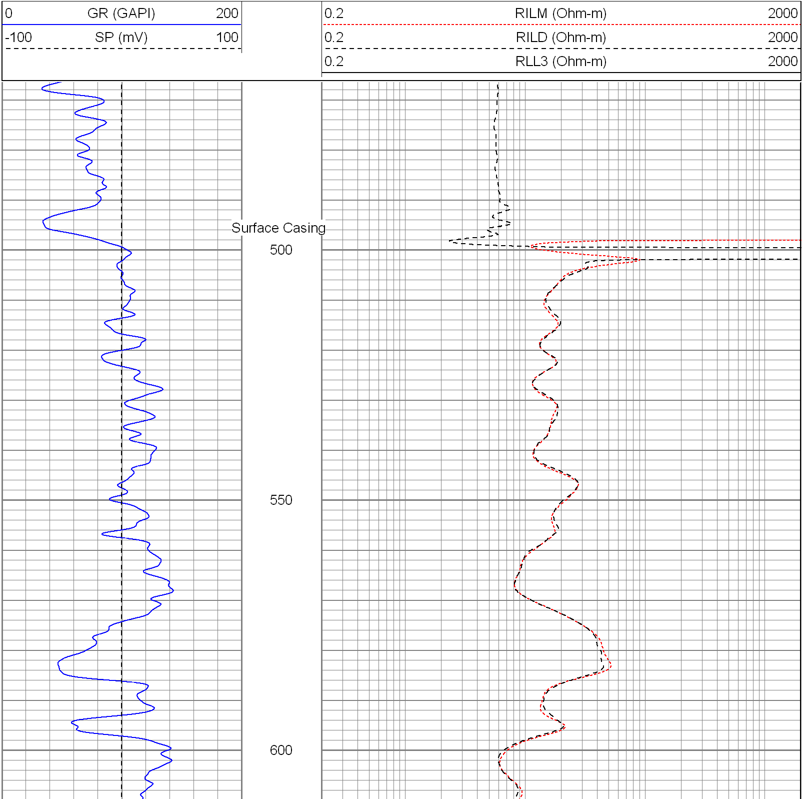
Well Directions:
First Bosque entrance just before Weston, turn right on Torres, first drive thru location.

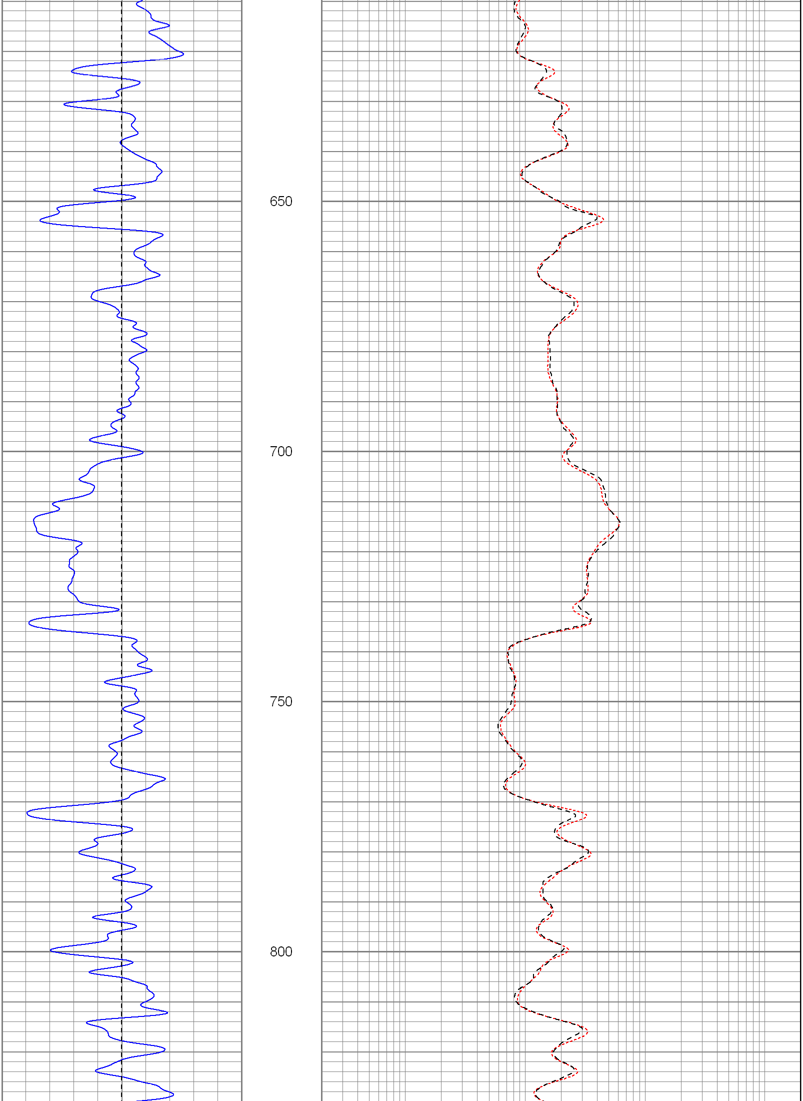
SUPERIOR WELL SERVICES

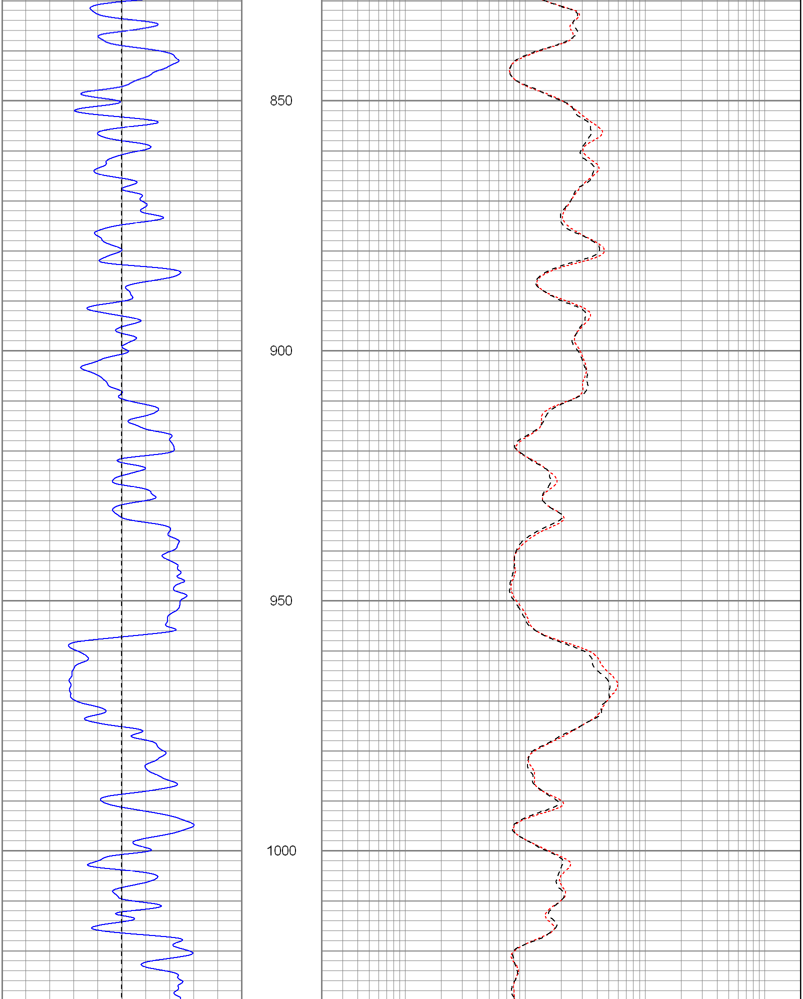
SUPERIOR
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

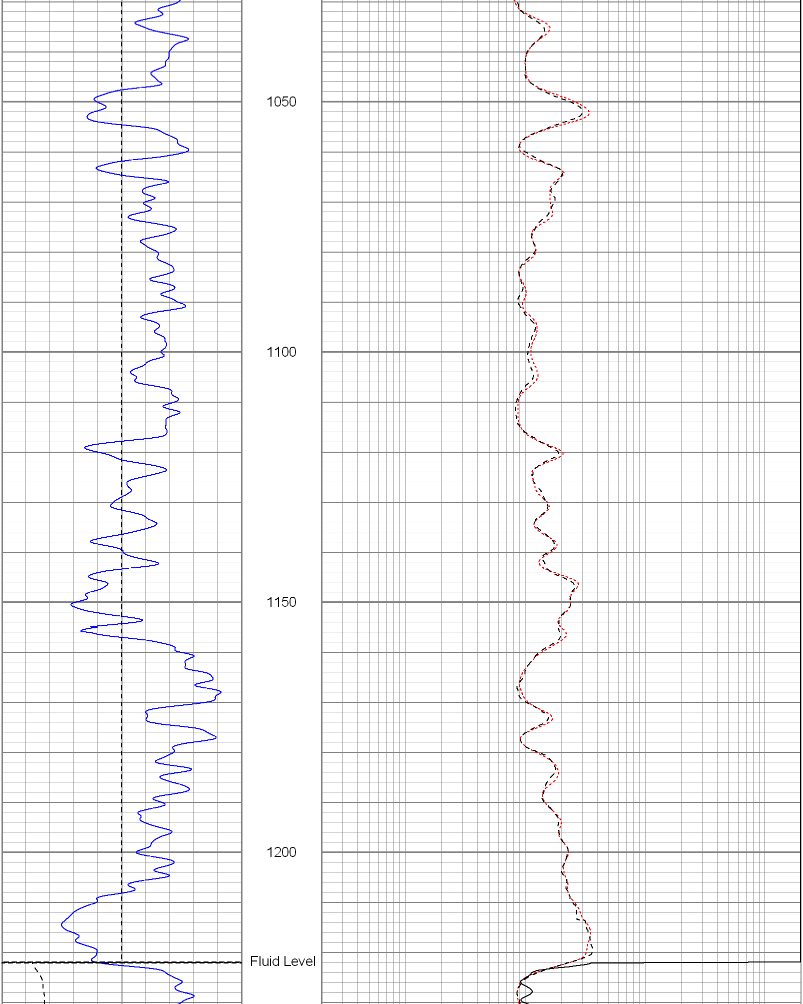
Main Pass

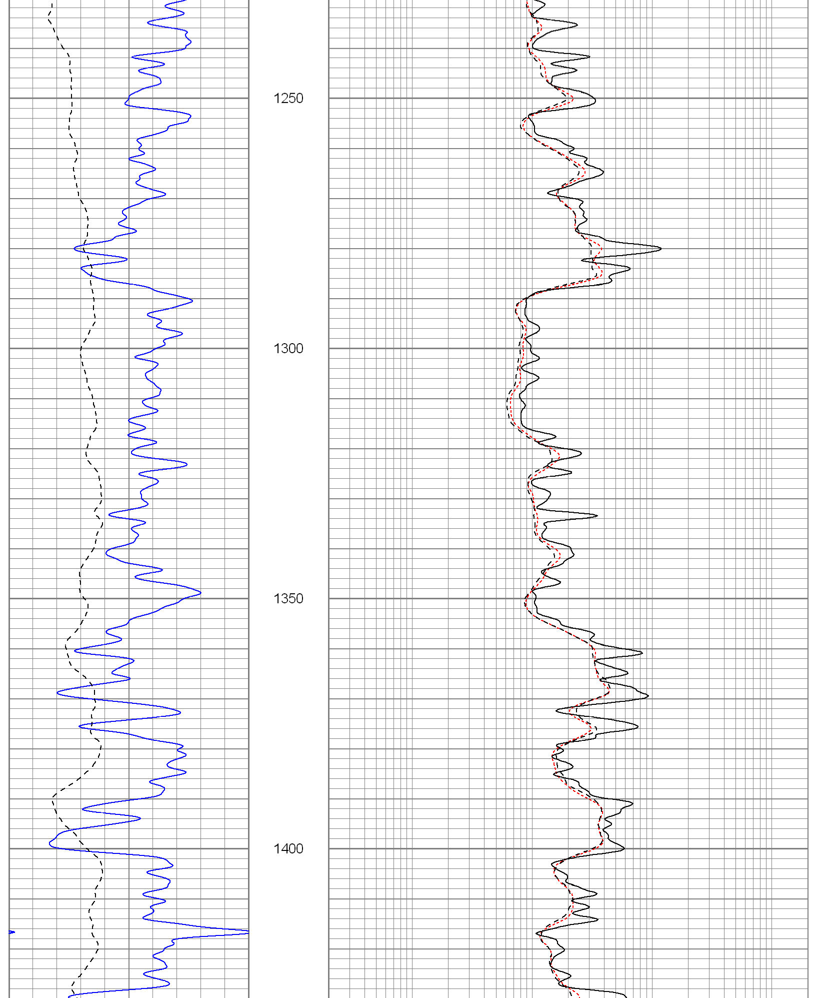
Database File:	xtoac0812.db
Dataset Pathname:	pass2.1
Presentation Format:	dil
Dataset Creation:	Thu Jul 12 08:49:03 2007 by Calc Open-Cased 061129
Charted by:	Depth in Feet scaled 1:240

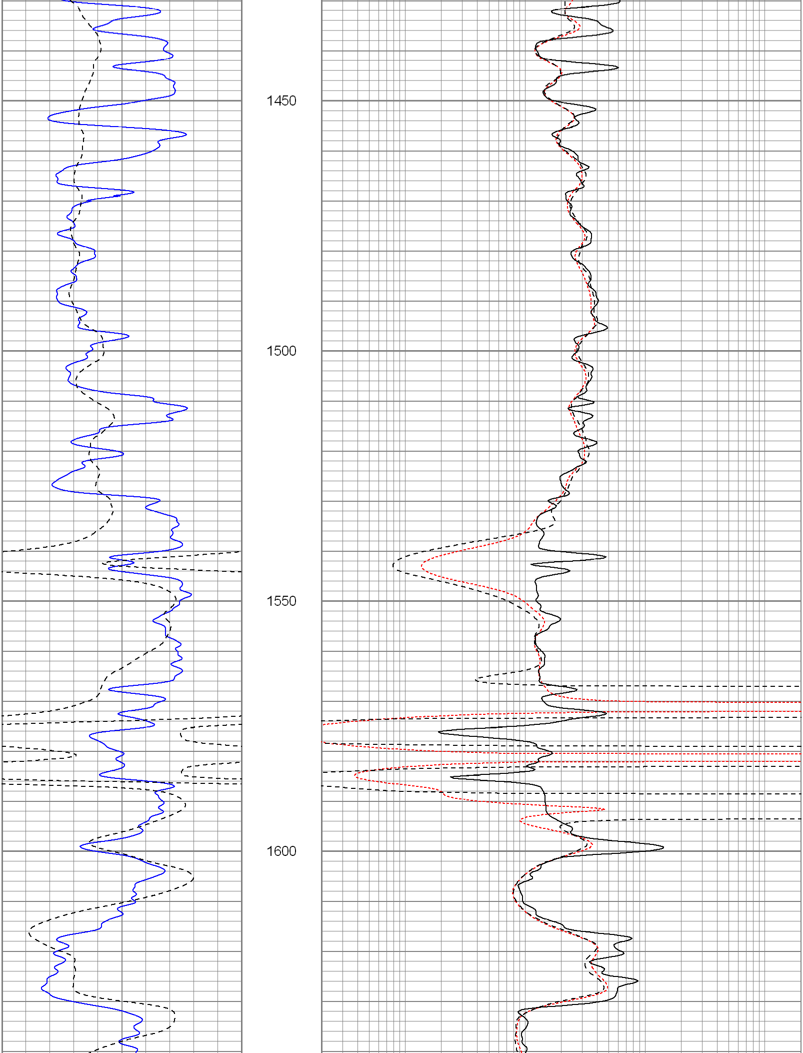


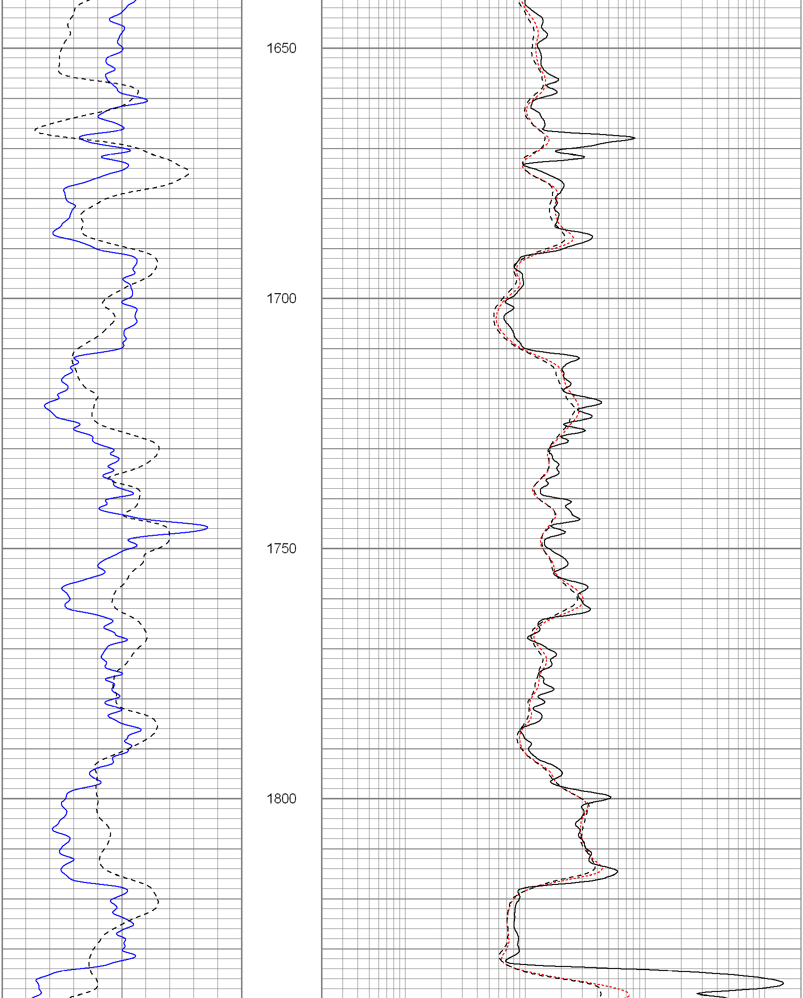


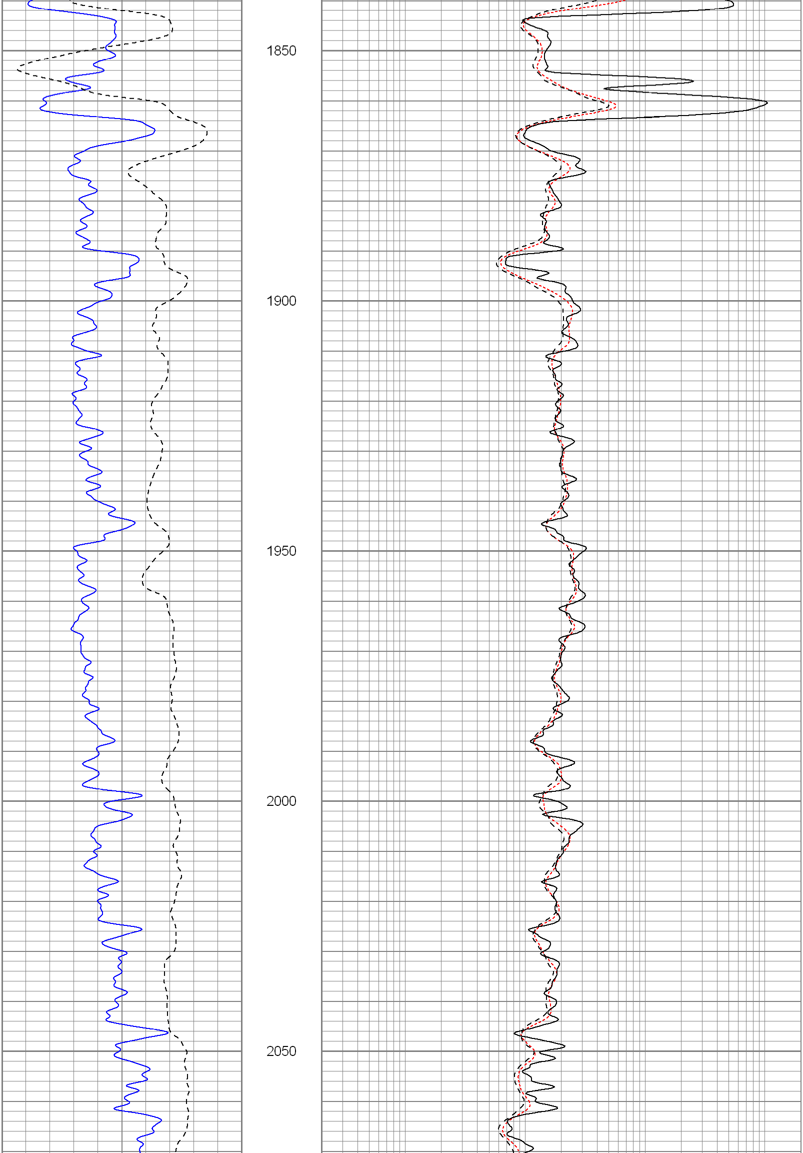


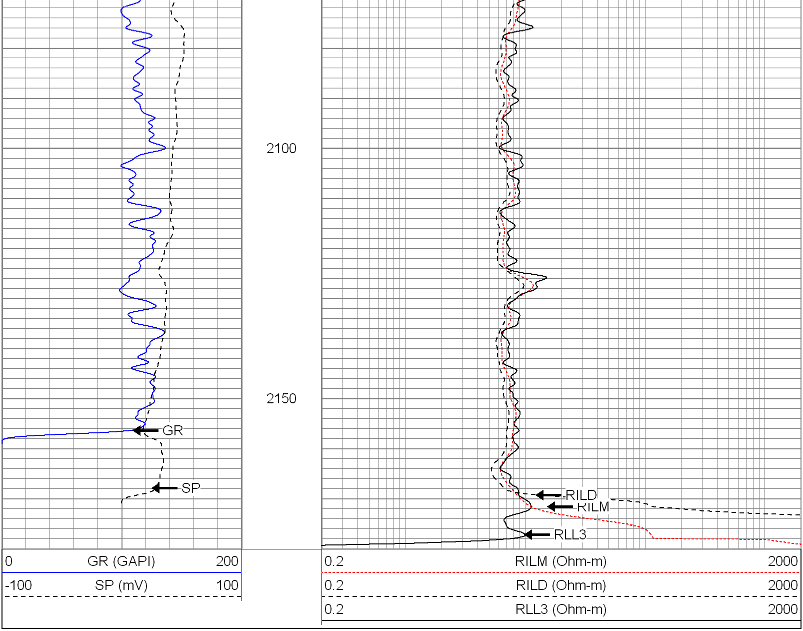












SUPERIOR WELL SERVICES

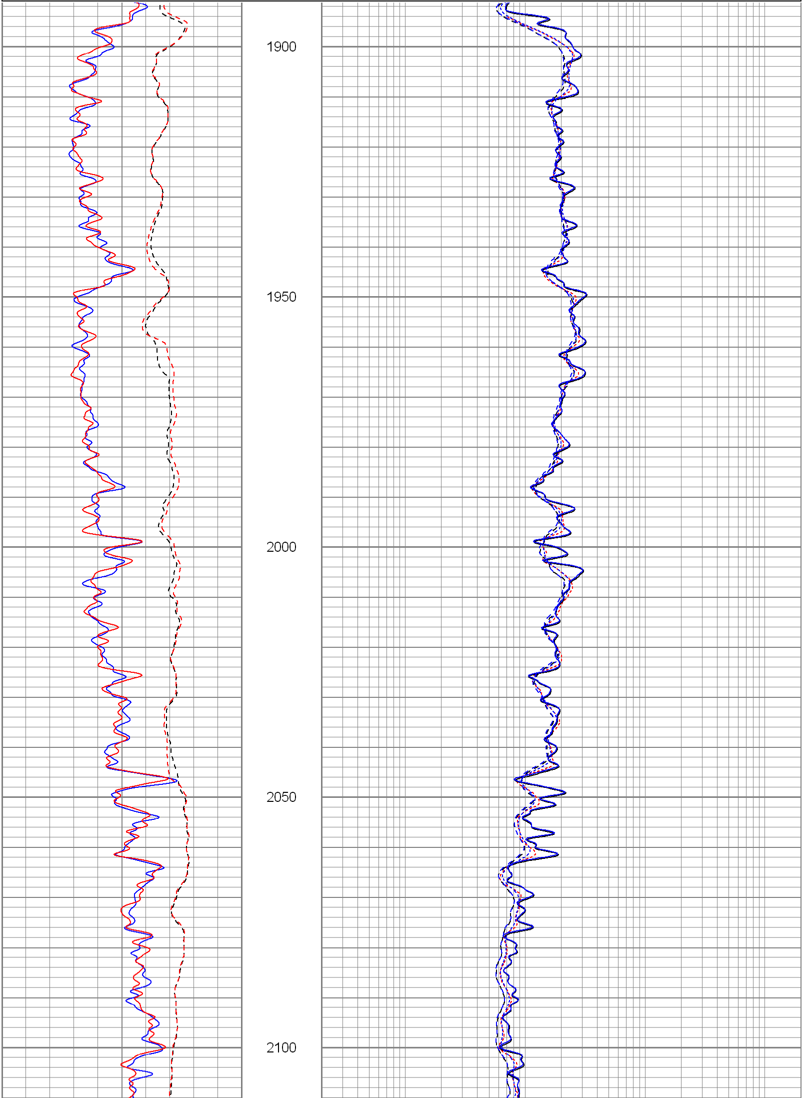
SUPERIOR
Black Lick, Pa.
Mercer, Pa.
Wooster, Oh.
Cleveland, Ok.
Trinidad, Co.

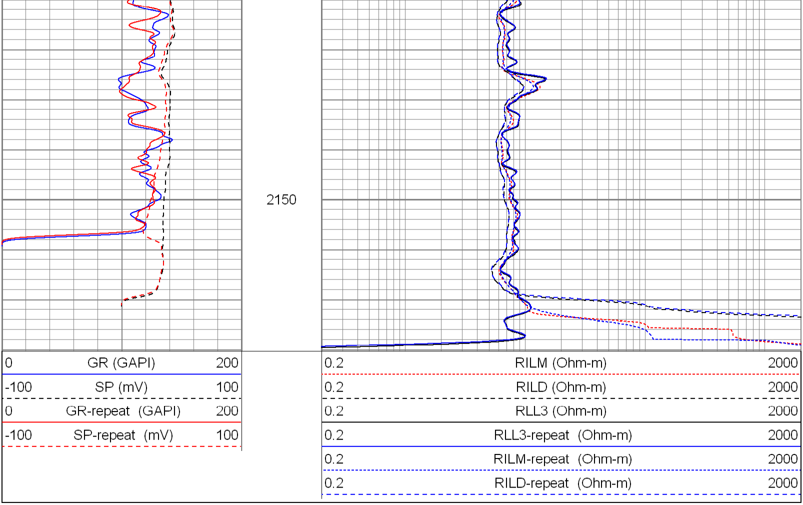
Repeat Section

Database File:	xtoac0812.db
Dataset Pathname:	pass1.1
Presentation Format:	dil
Dataset Creation:	Thu Jul 12 08:48:13 2007 by Calc Open-Cased 061129
Charted by:	Depth in Feet scaled 1:240

0	GR (GAPI)	200
-100	SP (mV)	100
0	GR-repeat (GAPI)	200
-100	SP-repeat (mV)	100

0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RLL3-repeat (Ohm-m)	2000
0.2	RILM-repeat (Ohm-m)	2000
0.2	RILD-repeat (Ohm-m)	2000





Calibration Report

Database File: xtoac0812.db
Dataset Pathname: pass2
Dataset Creation: Thu Jul 12 07:03:42 2007 by Log Open-Cased 061129

Dual Induction Calibration Report

Serial-Model: 5375-G
Surface Cal Performed: Thu Jul 05 11:35:02 2007
Downhole Cal Performed: Thu Jul 05 11:35:16 2007

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.001	0.620	V	0.000	500.000	mmho-m	807.659	-1.119
Medium	0.005	0.743	V	0.000	550.000	mmho-m	744.727	-3.505
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.620	V	0.000	500.000	mmho-m	807.698	-1.159
Medium	0.005	0.743	V	0.000	550.000	mmho-m	744.801	-3.569

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.123	499.901	mmho-m	0.039	500.015	mmho-m	1.000	-0.084
Medium	0.245	549.982	mmho-m	0.064	550.009	mmho-m	1.000	-0.182
Shallow	2.506	0.009	V	500.000	2.000	Ohm-m	150.000	0.000

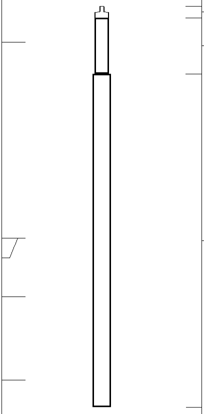
Gamma Ray Calibration Report

Serial Number: 2001
Tool Model: OH
Performed: Tue May 29 19:51:06 2007

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.1700 GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			None	0.75	1.50	5.00
GR	22.83		GR-OH (2001) SIE	3.50	3.25	40.00
CILD SP CILM RLL3	10.60 10.60 6.89 1.70		DIL-G (5375) Gearhart	20.83	4.00	345.00

Dataset: xtoac0812.db: field/well/run1/pass2
Total Length: 25.08 ft
Total Weight: 390.00 lb
O.D. 4.00 in