The Perforators LLC

COMPENSATED DENSITY NEUTRON LOG

Company	Werth Exploration Trust
Well	Walz-Star #1
Field	Trico
County	Graham
State	Kansas

Company Werth Exploration Trust
Well Walz-Star #1
Field Trico
County Graham State Kansas

Location: API # : 15 065 23785
783' FSL & 4950' FEL
SEC 36 TWP 10S RGE 21W

Other Services: DIL, ML, BCS

Permanent Datum: Ground Level; Elevation 2091'
Log Measured From: KB 6' AGL
Drilling Measured From: KB

Elevation: K.B. 2097'; D.F. 2096'; G.L. 2091'

Date	12-19-11
Run Number	One
Depth Driller	3692'
Depth Logger	3687'
Bottom Logged Interval	3681'
Top Log Interval	3000'
Casing Driller	220'
Casing Logger	220'
Bit Size	7 7/8"
Type Fluid in Hole	Chemical Mud
Density / Viscosity	8.8/68
pH / Fluid Loss	11.0/8.8
Source of Sample	Pit
Rm @ Meas. Temp	4.05@65degf
Rmf @ Meas. Temp	3.04@65degf
Rmc @ Meas. Temp	6.48@65degf
Source of Rmf / Rmc	Calculated
Rm @ BHT	2.35@112degf
Time Circulation Stopped	8:30 p.m.
Time Logger on Bottom	11:00 p.m
Maximum Recorded Temperature	112
Equipment Number	T045
Location	Hays, KS.
Recorded By	L. Smith
Witnessed By	Mr. Roger Moses

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Comments

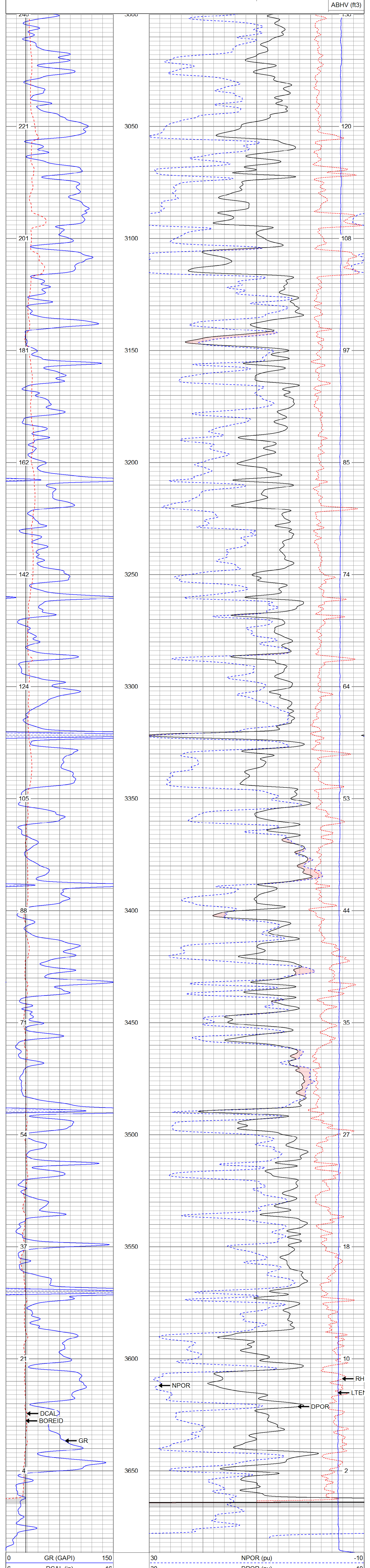
N of Ellis to cnty. line, E on rd. EE 2 mi., N 1/4, E into.

Thank you for using The Perforators LLC
Hays, KS (785) 621-4604

Main Pass

Database File:	wtwalzstar#1oh.db
Dataset Pathname:	pass2.1
Presentation Format:	kcdnl
Dataset Creation:	Tue Dec 20 01:15:56 2011 by Calc Open-Cased 100827
Charted by:	Depth in Feet scaled 1:240

0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30
TBHV (ft3)			-0.25	RHOC (g/cc)	0.25
			8000	LTEN (lb)	0
				ABHV (ft3)	

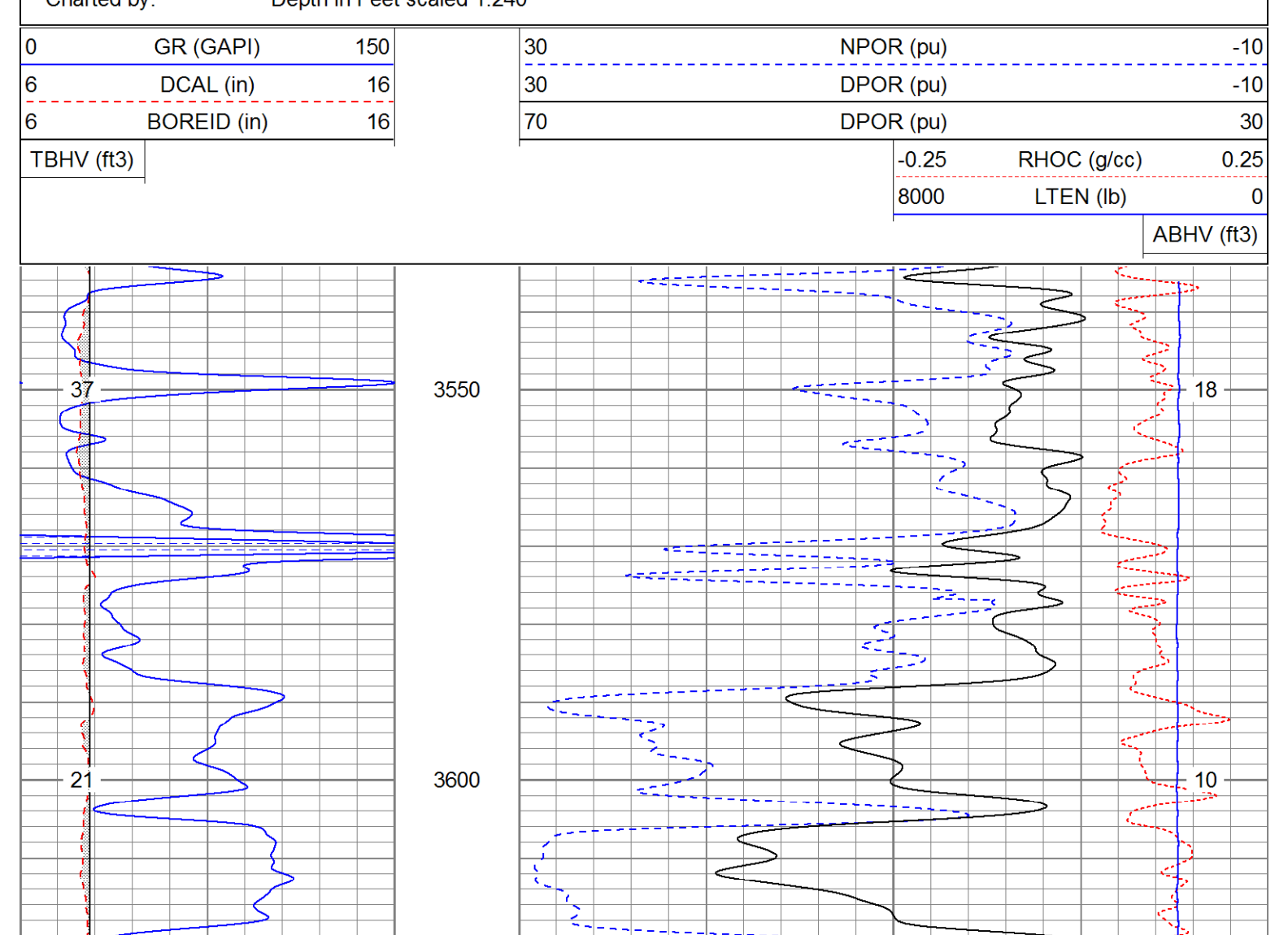


0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30
TBHV (ft3)			-0.25	RHOC (g/cc)	0.25
			8000	LTEN (lb)	0
				ABHV (ft3)	

Repeat Pass

Database File:	wtwalzstar#1oh.db
Dataset Pathname:	pass1.1
Presentation Format:	kcdnl
Dataset Creation:	Tue Dec 20 00:39:26 2011 by Calc Open-Cased 100827
Charted by:	Depth in Feet scaled 1:240

0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30
TBHV (ft3)			-0.25	RHOC (g/cc)	0.25
			8000	LTEN (lb)	0
				ABHV (ft3)	



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6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30
TBHV (ft3)			-0.25	RHOC (g/cc)	0.25
			8000	LTEN (lb)	0
				ABHV (ft3)	

Calibration Report

Database File:	wtwalzstar#1oh.db
Dataset Pathname:	pass1.1
Dataset Creation:	Tue Dec 20 00:39:26 2011 by Calc Open-Cased 100827

Dual Induction Calibration Report

Serial-Model:	5375-G
Surface Cal Performed:	Thu Dec 15 13:39:20 2011
Downhole Cal Performed:	Thu Dec 01 13:36:14 2011
After Survey Verification Performed:	Thu Dec 01 13:36:14 2011

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.002	0.639	V	0.000	350.000	mmho/m	549.151	-1.079
Medium	0.005	0.739	V	0.000	400.000	mmho/m	544.703	-2.736
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.639	V	0.000	350.000	mmho/m	549.404	-1.046
Medium	0.005	0.740	V	0.000	550.000	mmho/m	747.594	-3.573

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-0.345	349.695	mmho/m	-0.034	349.806	mmho/m	0.999	0.312
Medium	-0.369	400.389	mmho/m	-0.133	400.602	mmho/m	1.000	0.236
Shallow	2.474	0.009	V	500.000	2.000	Ohm-m	180.022	0.263

After Survey Verification

	Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.345	349.695	mmho/m	0.999	0.312
Medium	0.000	0.000	mmho/m	-0.369	400.389	mmho/m	1.000	0.236
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Compensated Density Calibration Report

Serial-Model:	2388DHT-DHT
Source / Verifier:	/
Master Calibration Performed:	Wed Nov 30 13:35:48 2011
Before Survey Verification Performed:	
After Survey Verification Performed:	

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	688.93	303.28	cps
Aluminum	2.670	g/cc	128.53	194.02	cps

Spine Angle = 75.10 Density/Spine Ratio = 0.530

	Size		Reading
Small Ring	8.15	in	5771.32
Large Ring	14.00	in	10165.20

Before Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

After Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

Gamma Ray Calibration Report

Serial Number:	2000	
Tool Model:	P2000	
Performed:	Thu Dec 01 13:12:17 2011	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2200	GAPI/cps

Neutron Calibration Report

Serial Number:	5108	
Tool Model:	PROBE	
Performed:	Wed Nov 30 13:40:27 2011	
Calibrator Value:	1	NAPI
Calibrator Reading:	1	cps
Sensitivity:	1	NAPI/cps

Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		None	0.75	1.50	5.00
NEU	37.96	NEU-PROBE (5108) Probe	4.92	3.63	85.00
GR	32.57	GR-P2000 (2000)	3.67	3.25	40.00
LSD	23.78	CDL-DHT (2388DHT) Digital High Temp CDL Tool	9.69	4.00	201.00
DCAL	23.49				
SSD	23.24				
HEADVOLT	21.47				
CILD	10.60	DIL-G (5375) Gearhart	21.47	4.00	345.00
SP	10.60				
CILM	6.89				
RLL3	1.70				

Dataset:	wtwalzstar#1oh.db: field/well/run1/pass1.1
Total Length:	40.49 ft
Total Weight:	676.00 lb
O.D.	4.00 in