The Perforators LLC

DUAL INDUCTION LOG

Company	Mikol Oil LLC
Well	Haberer #2-27
Field	Unnamed
County	Rooks
State	Kansas

Company Mikol Oil LLC

Well Haberer #2-27

Field Unnamed

County Rooks State Kansas

Location: API # : 15 163 24040

1420' FSL & 495' FEL

SEC 27 TWP 10S RGE 16W

Other Services

CDNL

ML

Permanent Datum Ground Level Elevation 2077'

Log Measured From KB 8' AGL

Drilling Measured From KB

Elevation

K.B. 2085'

D.F. 2084'

G.L. 2077'

Date	5-29-12
Run Number	One
Depth Driller	3730'
Depth Logger	3717'
Bottom Logged Interval	3715'
Top Log Interval	2900'
Casing Driller	222'
Casing Logger	222'
Bit Size	7 7/8"
Type Fluid in Hole	Chemical
Density / Viscosity	9.0/63
pH / Fluid Loss	9.5/8.0
Source of Sample	Pit
Rm @ Meas. Temp	.7@82degf
Rmf @ Meas. Temp	.56@82degf
Rmc @ Meas. Temp	.9@82degf
Source of Rmf / Rmc	Calculated
Rm @ BHT	.51@112degf
Time Circulation Stopped	7:30 p.m.
Time Logger on Bottom	9:00 p.m.
Maximum Recorded Temperature	112degf
Equipment Number	T045
Location	Hays, KS
Recorded By	L. Smith
Witnessed By	Mr. Bob Stolze

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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

K18 E of Plainvillie, S on CR. 31, 1/2 S on CC Rd., E into.

Thanks for using The Perforators LLC
785-621-4604

The Perforators LLC

Main Pass

Database File: mohaberer#2oh.db
Dataset Pathname: pass2
Presentation Format: kdillin2
Dataset Creation: Tue May 29 21:24:14 2012 by Log Open-Cased 100827
Charted by: Depth in Feet scaled 1:600

0 GR (GAPI) 150
-200 SP (mV) 0
0 RILD (Ohm-m) 50
0 RLL3 (Ohm-m) 50
1000 CILD (mmho/m) 0
10000 LTEN (lb) 0
50 RILD x 10 (Ohm-m) 500
50 RLL3 x 10 (Ohm-m) 500

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-200 SP (mV) 0
0 RILD (Ohm-m) 50
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1000 CILD (mmho/m) 0
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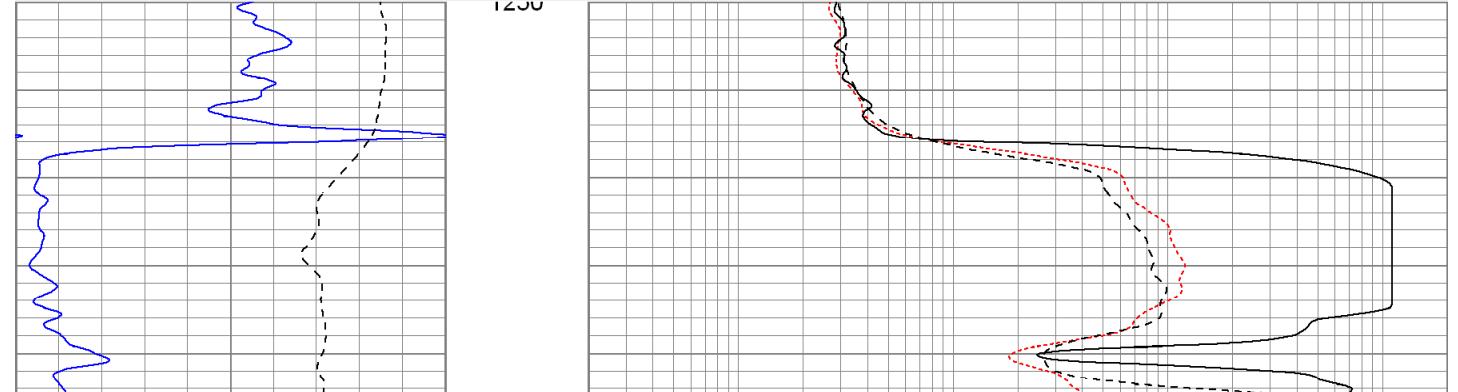
Main Pass

Database File: mohaberer#2oh.db
Dataset Pathname: pass2
Presentation Format: kdil
Dataset Creation: Tue May 29 21:24:14 2012 by Log Open-Cased 100827
Charted by: Depth in Feet scaled 1:240

0 GR (GAPI) 150
-100 SP (mV) 100
0.2 RILM (Ohm-m) 2000
0.2 RILD (Ohm-m) 2000
0.2 RLL3 (Ohm-m) 2000



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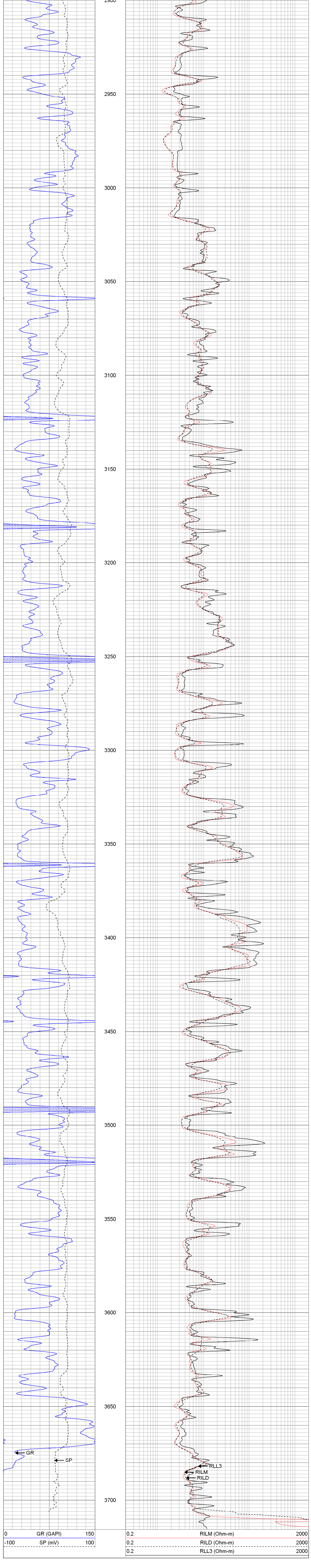

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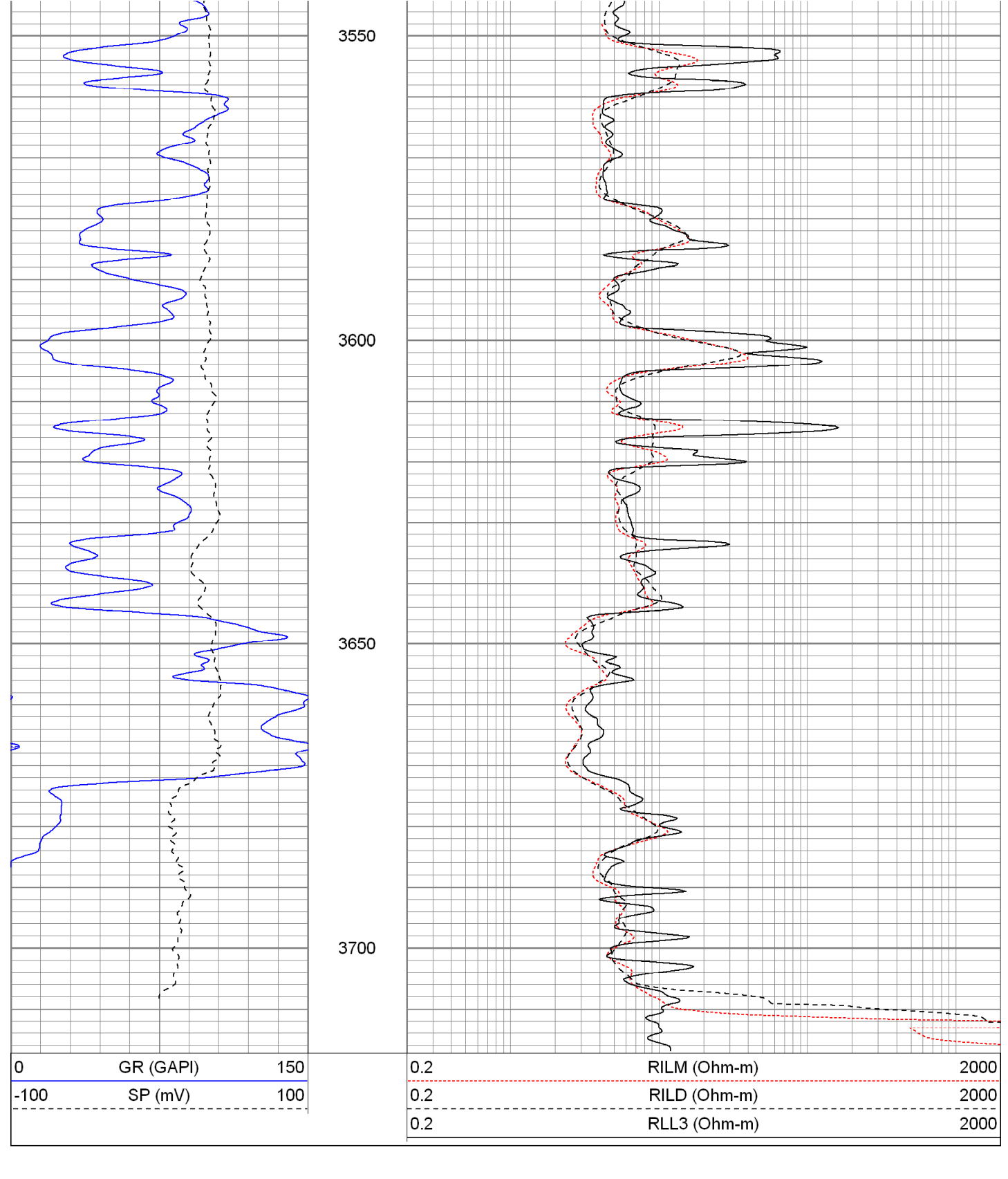
0.2 RLL3 (Ohm-m) 2000

The Perforators LLC

Repeat Pass

Database File: mohaberer#2oh.db
Dataset Pathname: pass1
Presentation Format: kdil
Dataset Creation: Tue May 29 21:14:20 2012 by Log Open-Cased 100827
Charted by: Depth in Feet scaled 1:240

0 GR (GAPI) 150
-100 SP (mV) 100
0.2 RILM (Ohm-m) 2000
0.2 RILD (Ohm-m) 2000
0.2 RLL3 (Ohm-m) 2000



0 GR (GAPI) 150
-100 SP (mV) 100
0.2 RILM (Ohm-m) 2000
0.2 RILD (Ohm-m) 2000
0.2 RLL3 (Ohm-m) 2000

Calibration Report

Database File: mohaberer#2oh.db
Dataset Pathname: pass1
Dataset Creation: Tue May 29 21:14:20 2012 by Log Open-Cased 100827

Dual Induction Calibration Report

Serial-Model: 080522-Probe
Surface Cal Performed: Mon May 21 20:42:56 2012
Downhole Cal Performed: Mon May 21 20:42:59 2012
After Survey Verification Performed: Mon May 21 20:43:01 2012

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.001	0.639	V	0.000	400.000	mmho/m	627.163	-0.574
Medium	0.002	0.738	V	0.000	464.000	mmho/m	630.206	-1.062
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.638	V	0.000	400.000	mmho/m	628.131	-0.717
Medium	0.002	0.738	V	0.000	464.000	mmho/m	630.237	-1.192

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.283	399.724	mmho/m	0.142	399.525	mmho/m	1.000	-0.142
Medium	0.315	464.258	mmho/m	0.131	464.108	mmho/m	1.000	-0.185
LL3		7.287	V		750.000	Ohm-m		
		-0.000	V		12.000	Ohm-m		
		-7.425	V		3745.000	mmho-m		

Compensated Density Calibration Report

Serial-Model: 2501DHT-DHT
Source / Verifier: /
Master Calibration Performed: Thu May 24 05:04:22 2012

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	744.27	293.58	cps
Aluminum	2.680	g/cc	138.48	189.15	cps

Spine Angle = 75.35 Density/Spine Ratio = 0.535

	Size		Reading
Small Ring	8.05	in	6064.22
Large Ring	14.00	in	10296.80

Gamma Ray Calibration Report

Serial Number: 2001
Tool Model: OH
Performed: Thu May 24 05:04:30 2012

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.2300 GAPI/cps

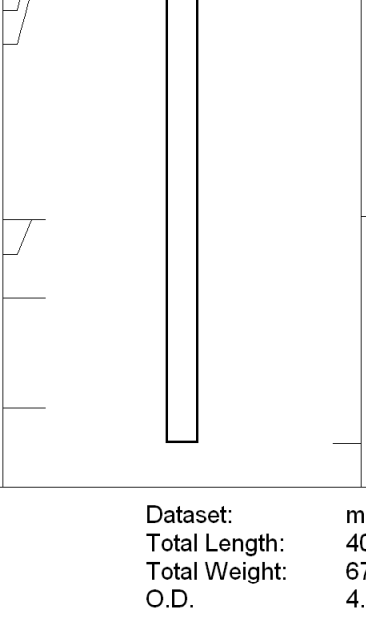
Neutron Calibration Report

Serial Number: 5108
Tool Model: PROBE
Performed: Tue May 29 17:59:56 2012

Calibrator Value: 1 NAPI

Calibrator Reading: 1 cps

Sensitivity: 1 NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			None	0.75	1.50	5.00
NEU	37.85		NEU-PROBE (5108) Probe	4.92	3.63	85.00
GR	32.32		GR-OH (2001) 2001	3.56	3.25	40.00
			CDL-DHT (2501DHT) Digital High Temp CDL Tool	9.69	4.00	201.00
LSD	23.78					
DCAL	23.49					
SSD	23.24					
HEADVOLT	21.47					
CILD	10.60		DIL-Probe (080522) Probe Dual Induction	21.47	4.00	345.00
SP	10.60					
CILM	6.89					
RLL3	1.70					

Dataset: mohaberer#2oh.db: field/well/run1/pass1
Total Length: 40.39 ft
Total Weight: 676.00 lb
O.D. 4.00 in