



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY/NEUTRON
LOG**

Company NORSTAR PETROLEUM, INC.
Well NORTON #1-28
Field WILDCAT
County HODGEMAN
State KANSAS

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Location: API # : 15-083-21667-0000
838' FNL & 2306' FWL
SEC 28 TWP 21S RGE 23W
Permanent Datum GROUND LEVEL Elevation 2354
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services DIL/MEL
Elevation K.B. 2359
D.F. 2357
G.L. 2354

Date	8-16-10
Run Number	ONE
Depth Driller	4665
Depth Logger	4667
Bottom Logged Interval	4643
Top Log Interval	3600
Casing Driller	8 5/8" @ 209
Casing Logger	206
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1/46
pH / Fluid Loss	9.0/13.6
Source of Sample	FLOWLINE
Rim @ Meas. Temp	.60 @ 83F
Rmf @ Meas. Temp	.45 @ 83F
Rmc @ Meas. Temp	.72 @ 83F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	.41 @ 121F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	121F
Equipment Number	680
Location	HAYS, KS.
Recorded By	JASON CAPPELLUCCI
Witnessed By	TIM LAUER

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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

THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
NESS CITY KS. - 14 S. TO UNION SCHOOL (RD V) - 1 E. - 1 S. - 1 1/2 E. - S. INTO

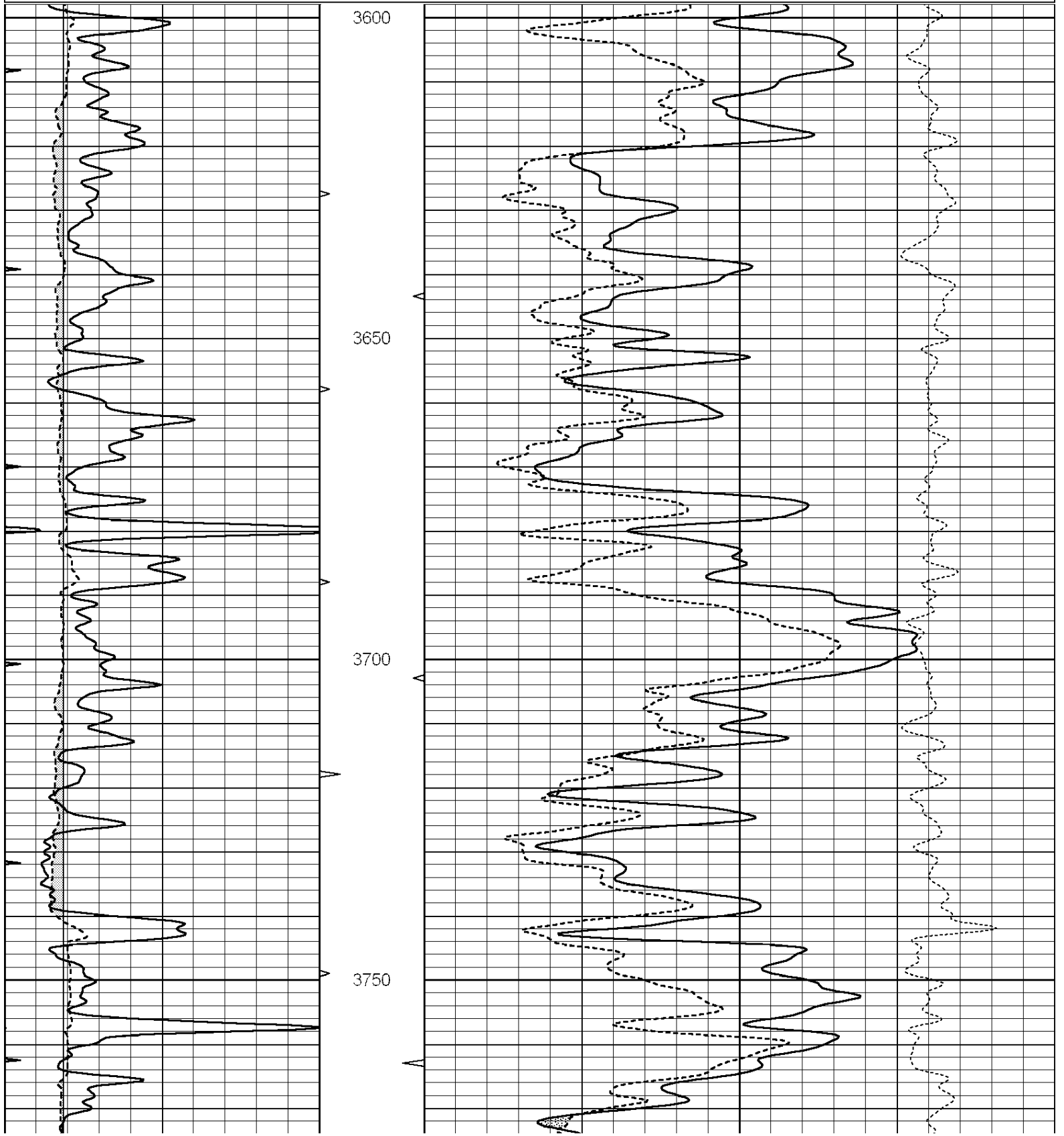


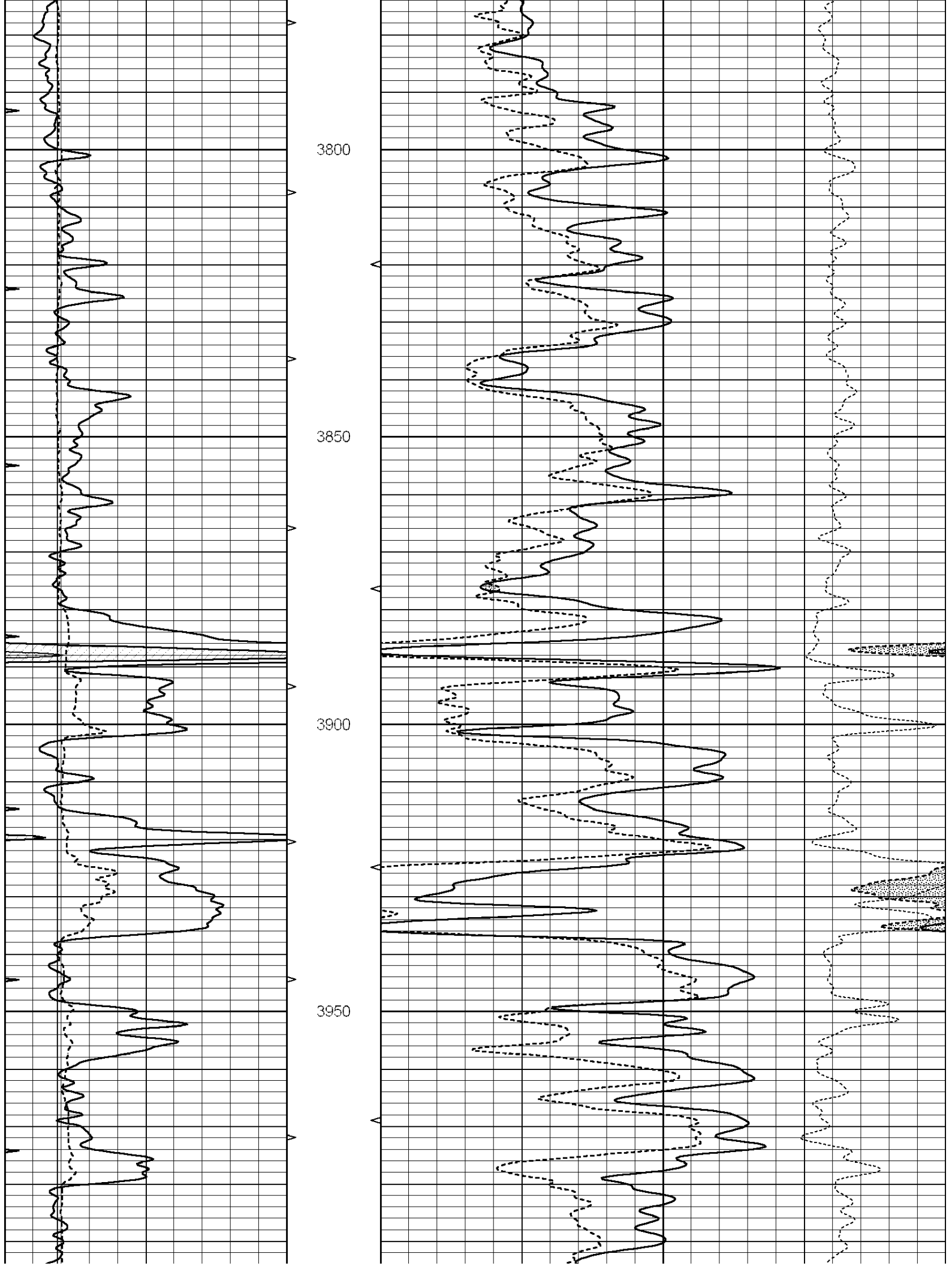
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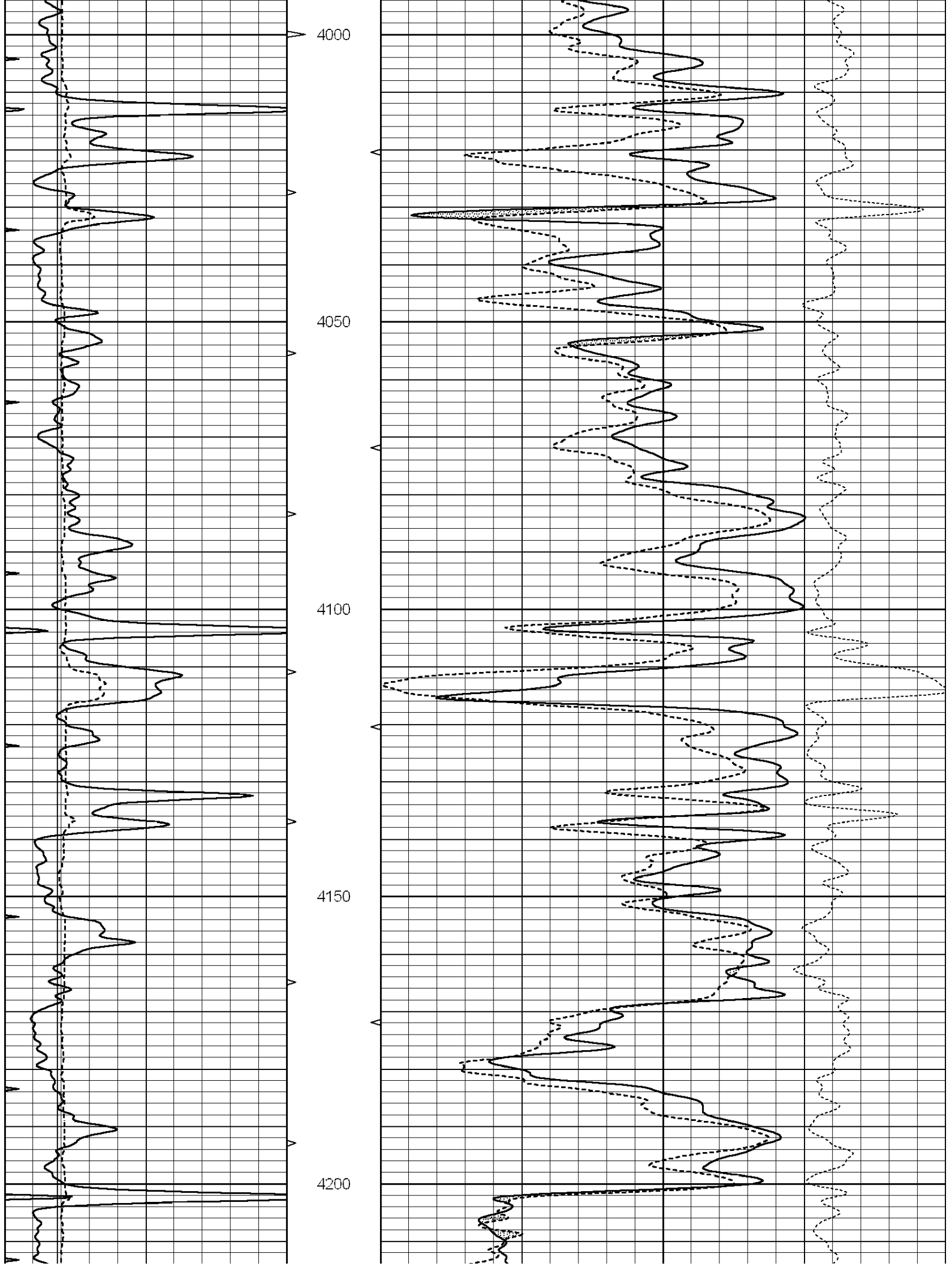
MAIN SECTION

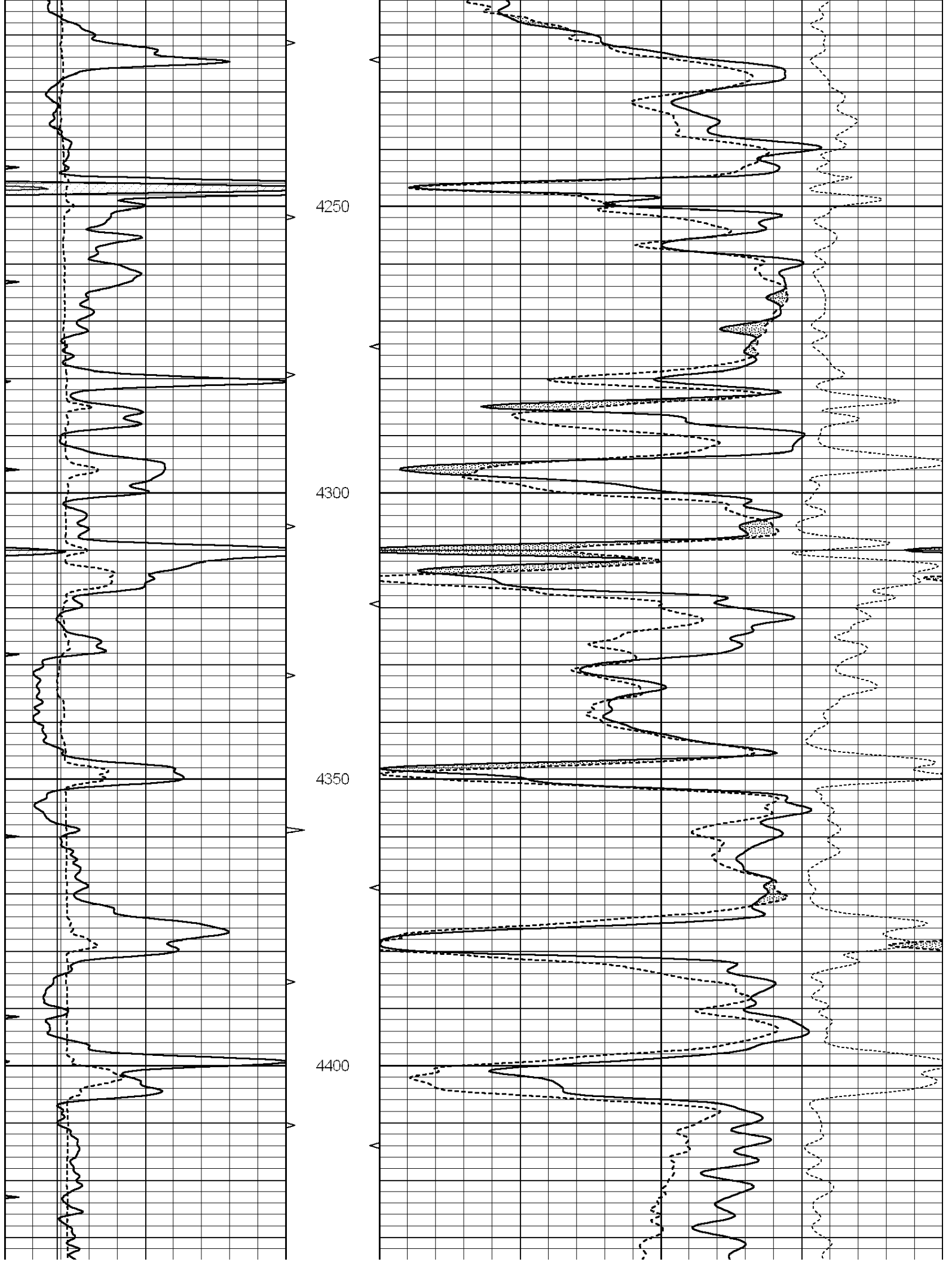
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 Dataset Pathname: pass4.1
 Presentation Format: _den_neu
 Dataset Creation: Mon Aug 16 11:21:44 2010
 Charted by: Depth in Feet scaled 1:240

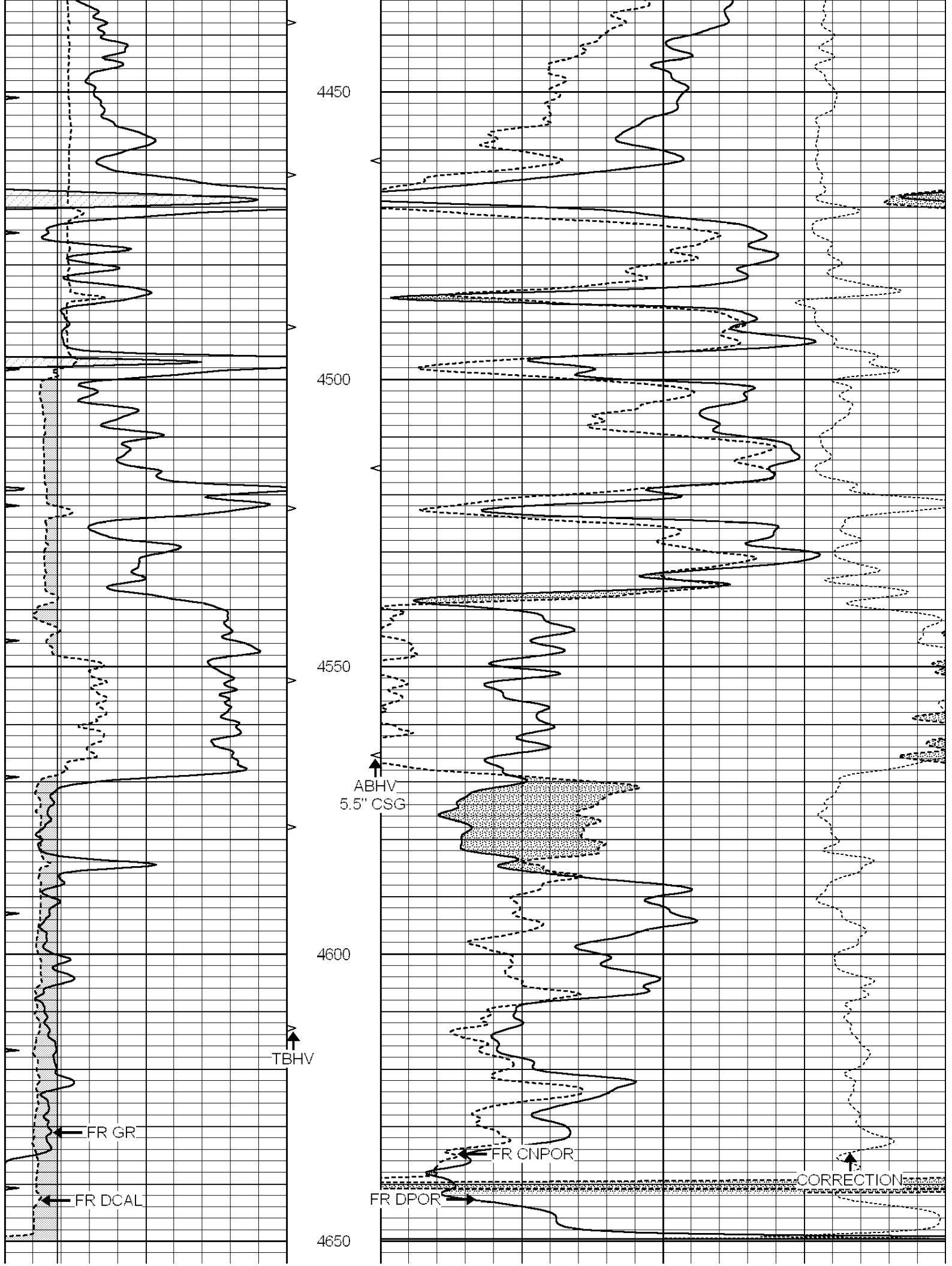
0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		











2.71 LIMESTONE MATRIX

LTD 4667

0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

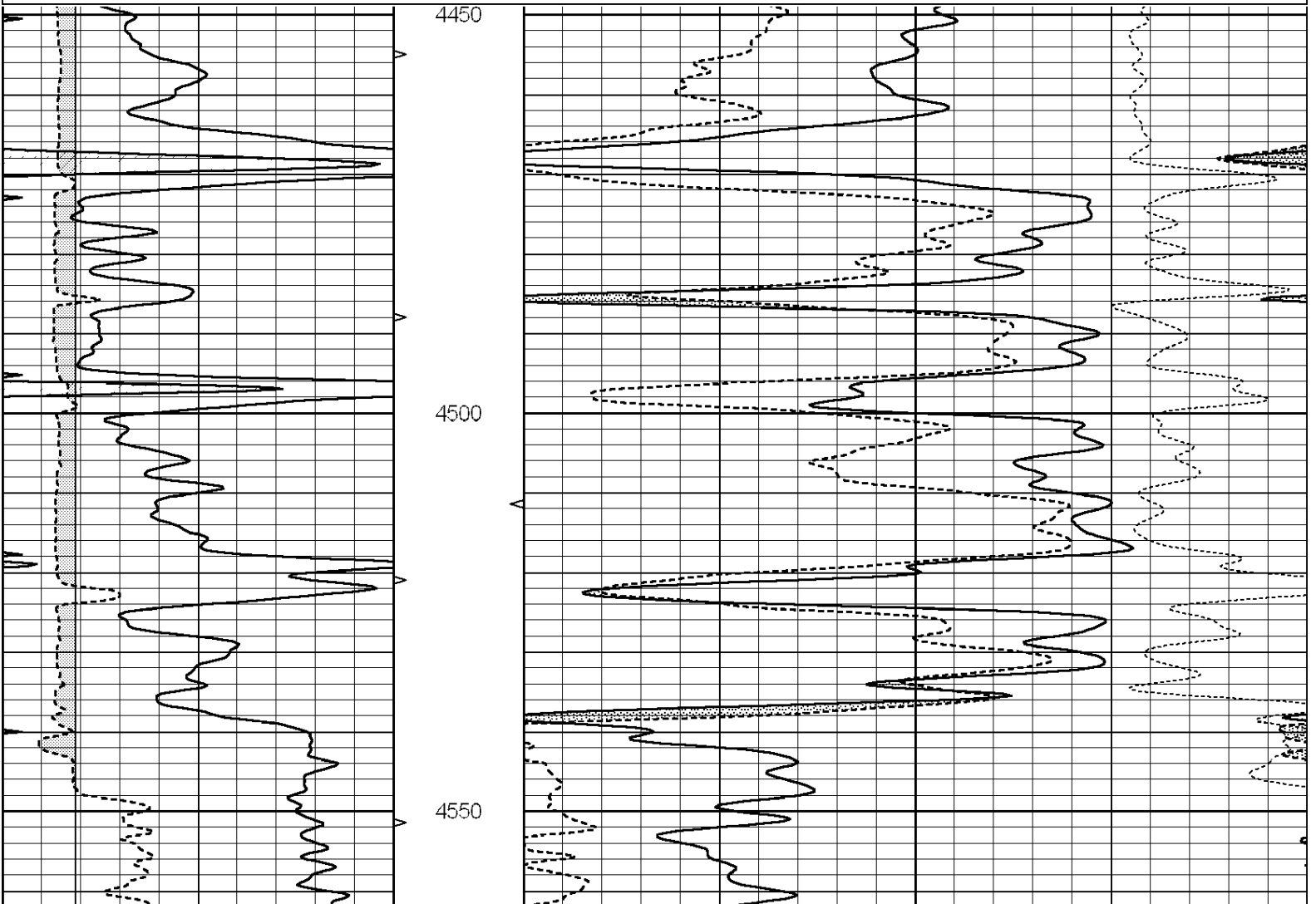


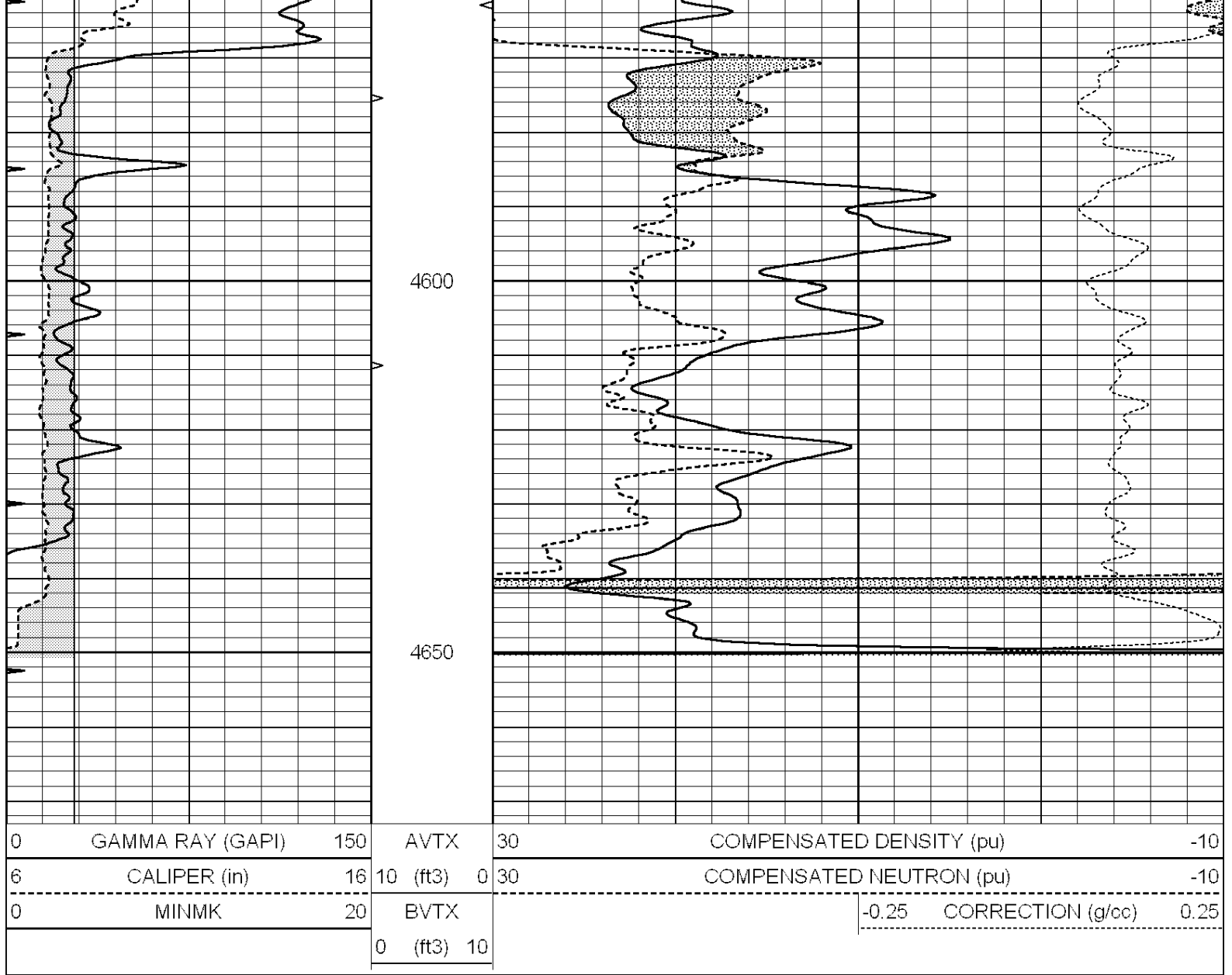
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REPEAT SECTION

Database File: 004946pe.db
 Dataset Pathname: pass2.1
 Presentation Format: _den_neu
 Dataset Creation: Mon Aug 16 10:52:00 2010 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		





Calibration Report

Database File: 004946pe.db
 Dataset Pathname: pass2.1
 Dataset Creation: Mon Aug 16 10:52:00 2010 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Fri Aug 01 06:33:19 2008
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

Loop:	Readings			V	References			Results	
	Air	Loop			Air	Loop	mmho/m	m	b
Deep	0.015	0.648		V	0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796		V	0.000	464.000	mmho/m	605.049	-17.680
Internal:	Zero	Cal		V	Zero	Cal		m	b
Deep	0.017	0.657		V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757		V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-6.500	V		3800.000	mmho-m		

After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report
 Serial: 002 Model: PRB
 Performed Mon Oct 29 15:40:49 2007

Litho Density Calibration						
	Background	Magnesium	Aluminum	Sandstone		
Window 1	1056.3	9118.0	2809.7	10378.4		cps
Window 2	969.9	7671.9	2431.6	8565.8		cps
Window 3	683.8	2939.8	1161.0	3161.8		cps
Window 4	231.4	231.6	226.7	230.8		cps
Long Space	0.0	6702.0	1461.7	7595.9		cps
Short Space	1.2	1433.6	959.4	1568.6		cps
Rho		1.7100	2.5900	1.3800		g/cc
Pe			2.5700	1.5500		
Rib Angle	: 45.2	Rib Slope	: 1.008	Density/Spine Ratio		: 0.559
Spine Angle	: 75.2	Spine Slope	: 3.791	Spine Intercept		: -18.7

Caliper			
	Readings	Reference	
Low Ref	2.3	8.0	
High Ref	4.3	14.0	
	Gain: 3.1		Offset: -0.3

Compensated Neutron Calibration Report

Serial Number: 5I
 Tool Model: G

CALIBRATION						
	Detector	Readings		Target		Normalization
	Short Space	1.00	cps	1.00	cps	1.0000
	Long Space	1.00	cps	1.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR6
 Tool Model: OPEN
 Performed: Wed Jul 14 14:14:30 2010

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps

Calibrator Reading:

276.0

cps

Sensitivity:

0.5335

GAPI/cps