



Casedhole Solutions

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company RED OAK ENERGY, INC.
Well JOHNSON VIEW#1-30
Field WILDCAT
County WALLACE
State KANSAS

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Location: API # : 15-199-20434-0000
115' FSL & 1940' FWL
SE - SW - SE - SW
Permanent Datum GROUND LEVEL Elevation 3239
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Elevation
K.B. 3244
D.F. 3242
G.L. 3239

Date	12/7/15
Run Number	ONE
Depth Driller	4810
Depth Logger	4812
Bottom Logged Interval	4788
Top Log Interval	3400
Casing Driller	8 5/8" @ 346'
Casing Logger	336
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.3/54
pH / Fluid Loss	9.0/9.6
Source of Sample	FLOWLINE
Rim @ Meas. Temp	.600 @ 70F
Rmf @ Meas. Temp	.450 @ 70F
Rmc @ Meas. Temp	.720 @ 70F
Source of Rmf / Rmc	MEASUREMENT
Rim @ BHT	.341 @ 123F
Time Circulation Stopped	2.5 HOURS
Time Logger on Bottom	11:45 P.M.
Maximum Recorded Temperature	123F
Equipment Number	22339
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	SEAN DEENIHAN

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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

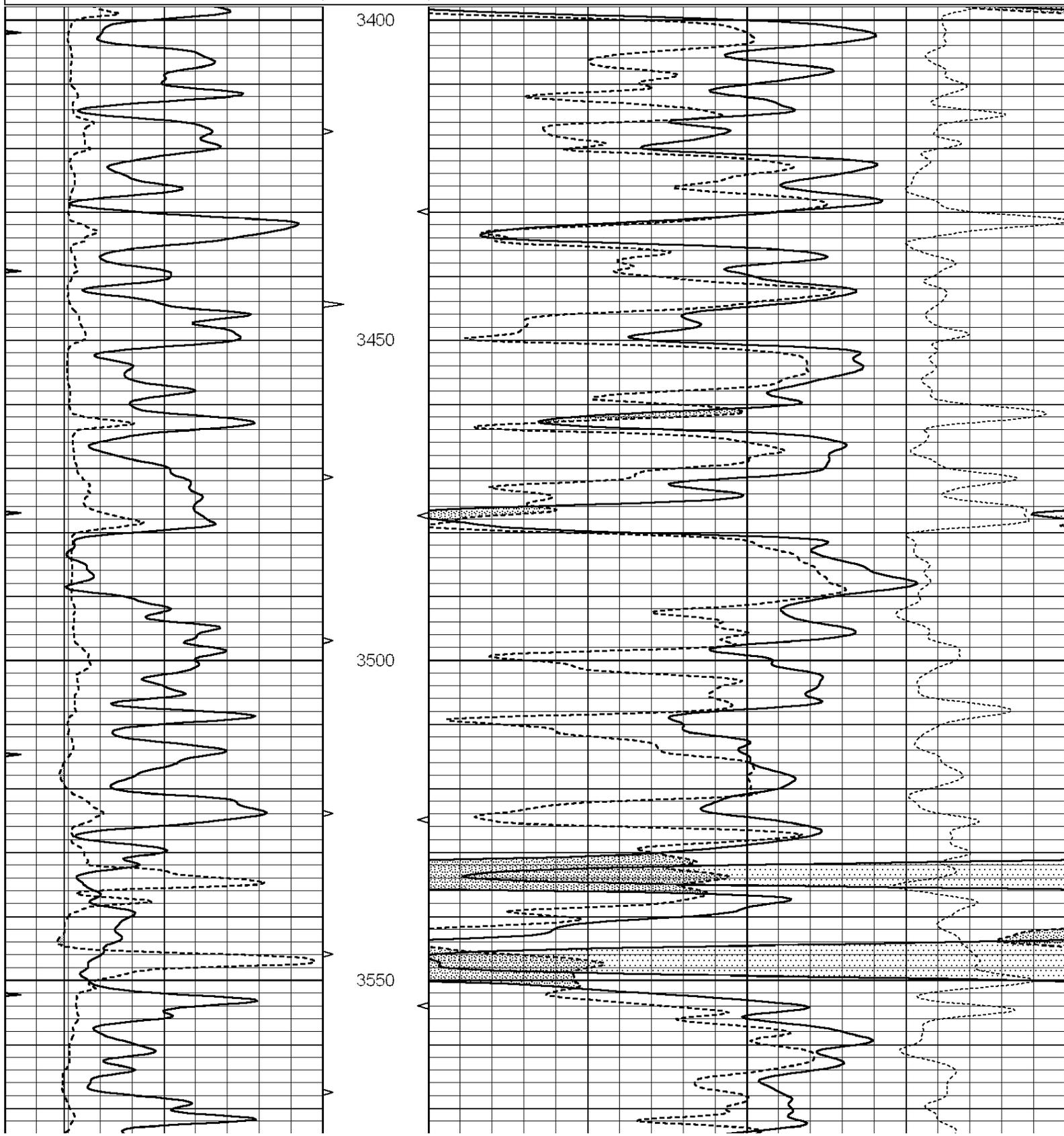
THANK YOU FOR USING C & J ENERGY (CASED HOLE SOLUTIONS) HAYS, KANSAS (785) 628-6395
DIRECTIONS
WALLACE, KS., 1 1/2S. OF OLD 40 HWY, 1/2E. INTO

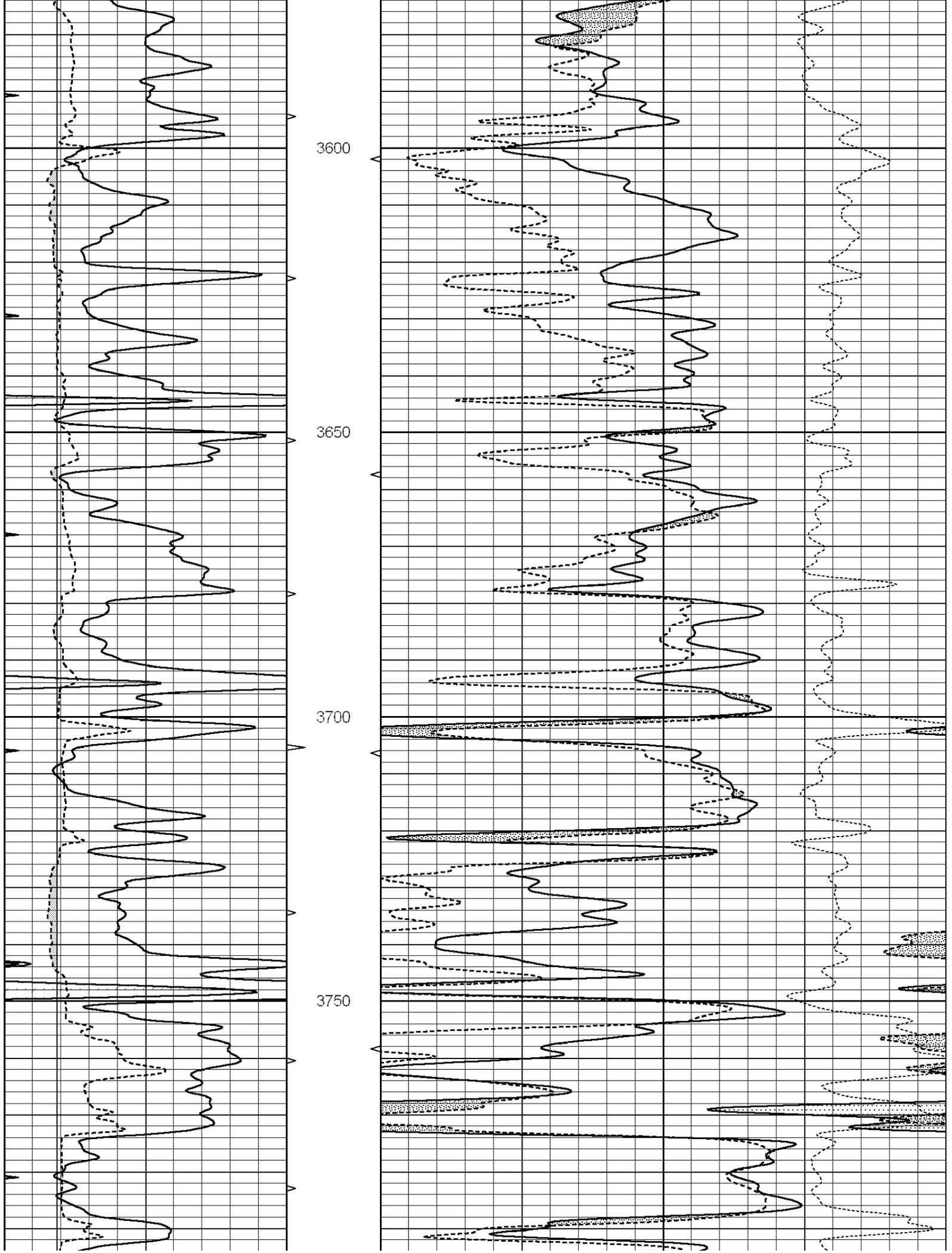


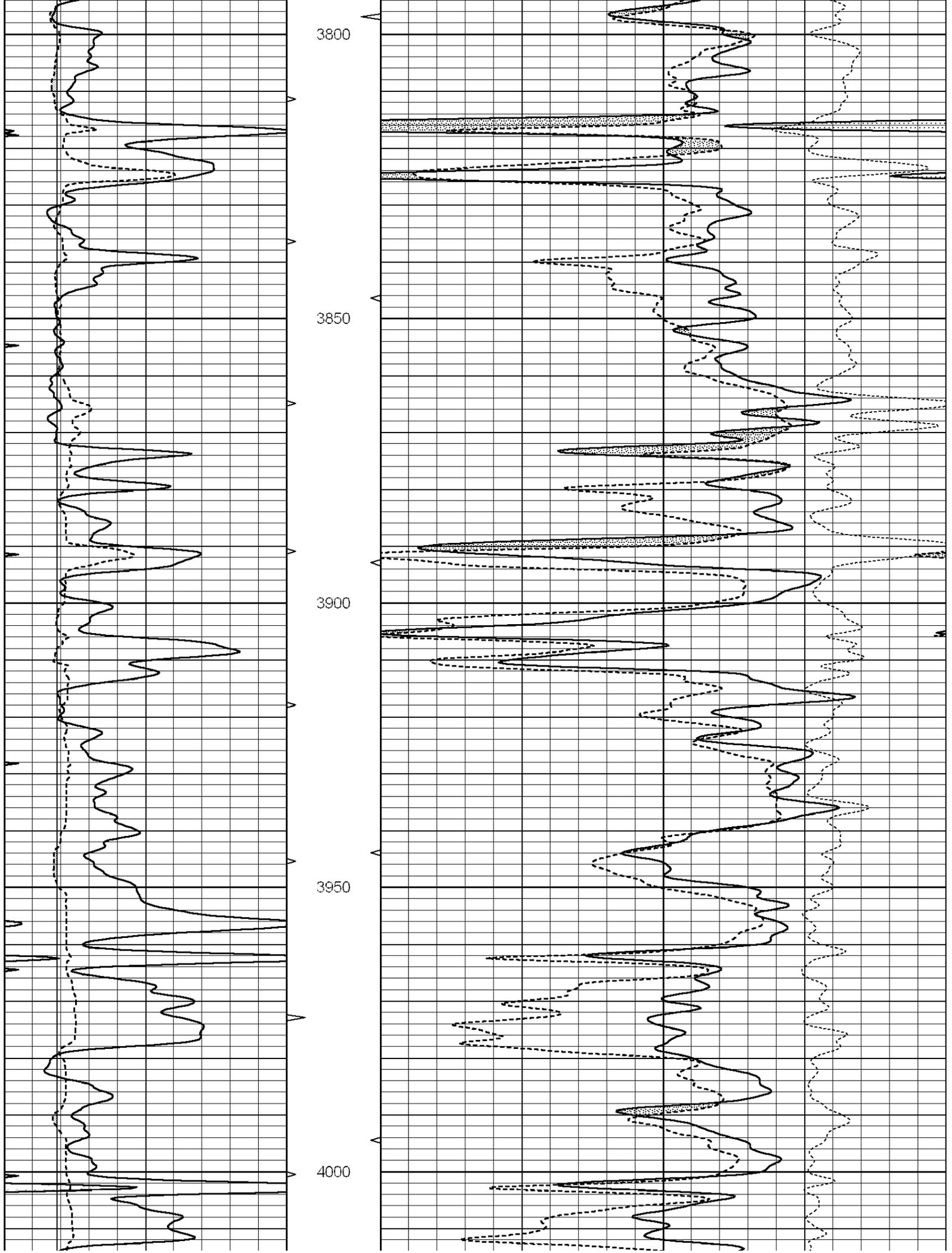
MAIN SECTION

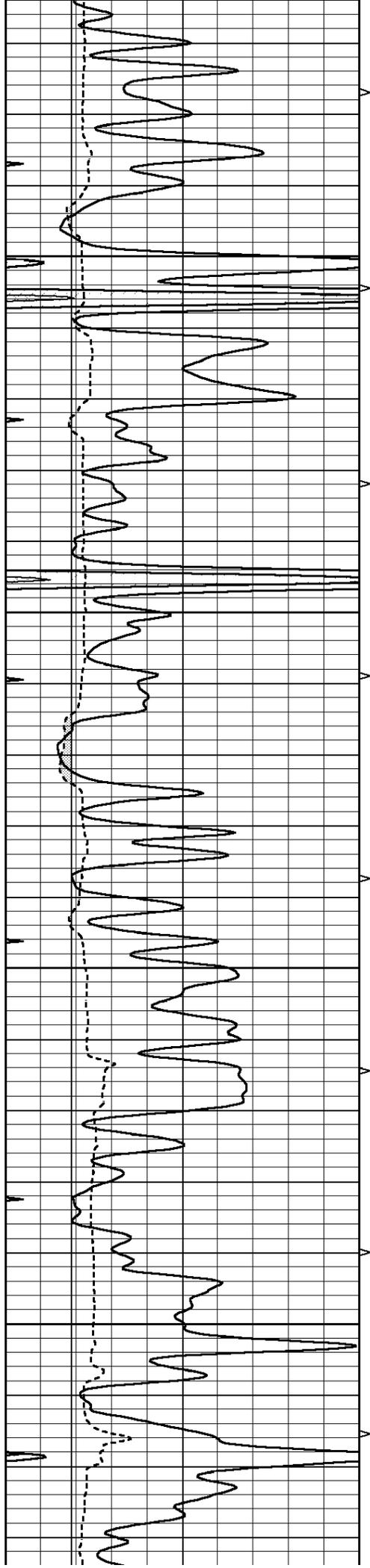
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 Presentation Format: den_neu
 Dataset Creation: Tue Dec 08 01:25:43 2015
 Charted by: Depth in Feet scaled 1:240

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







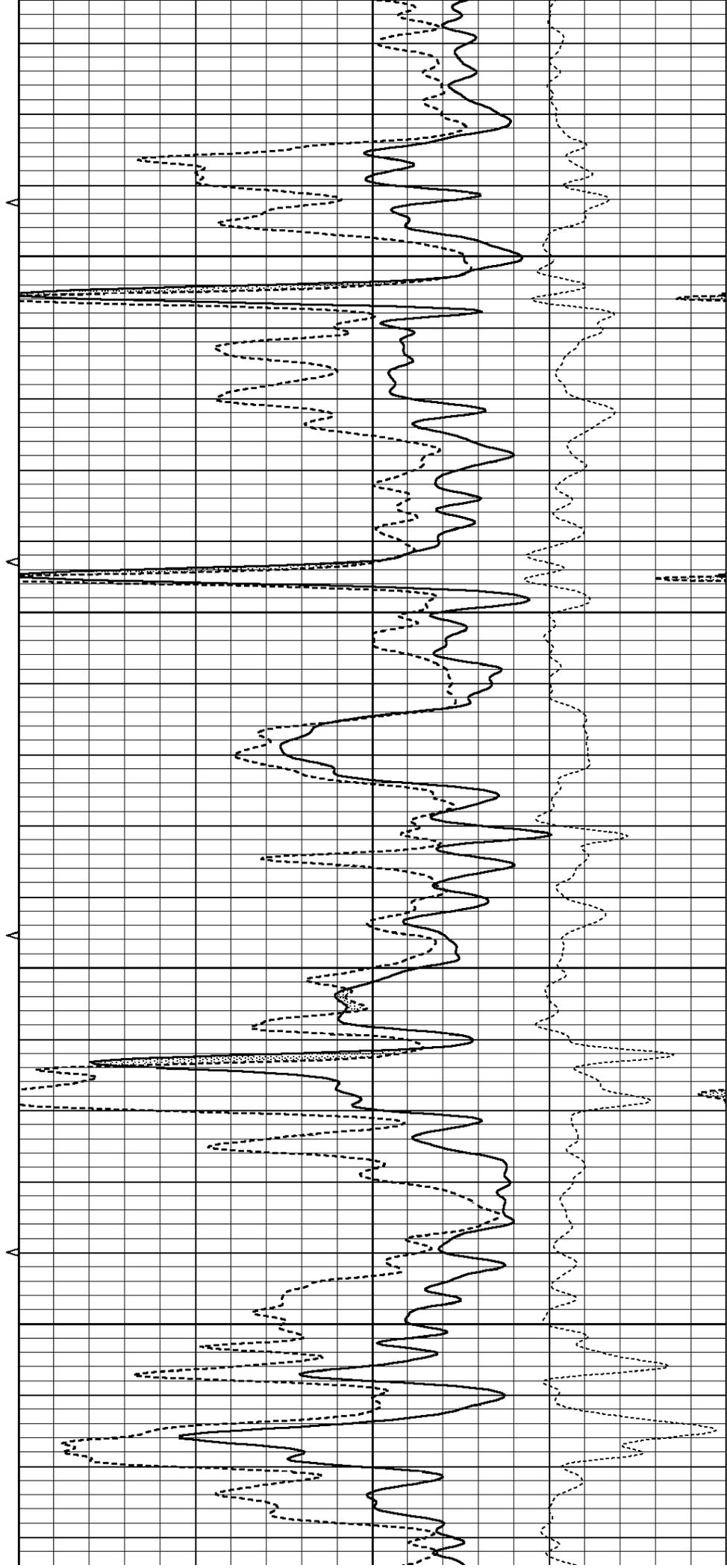


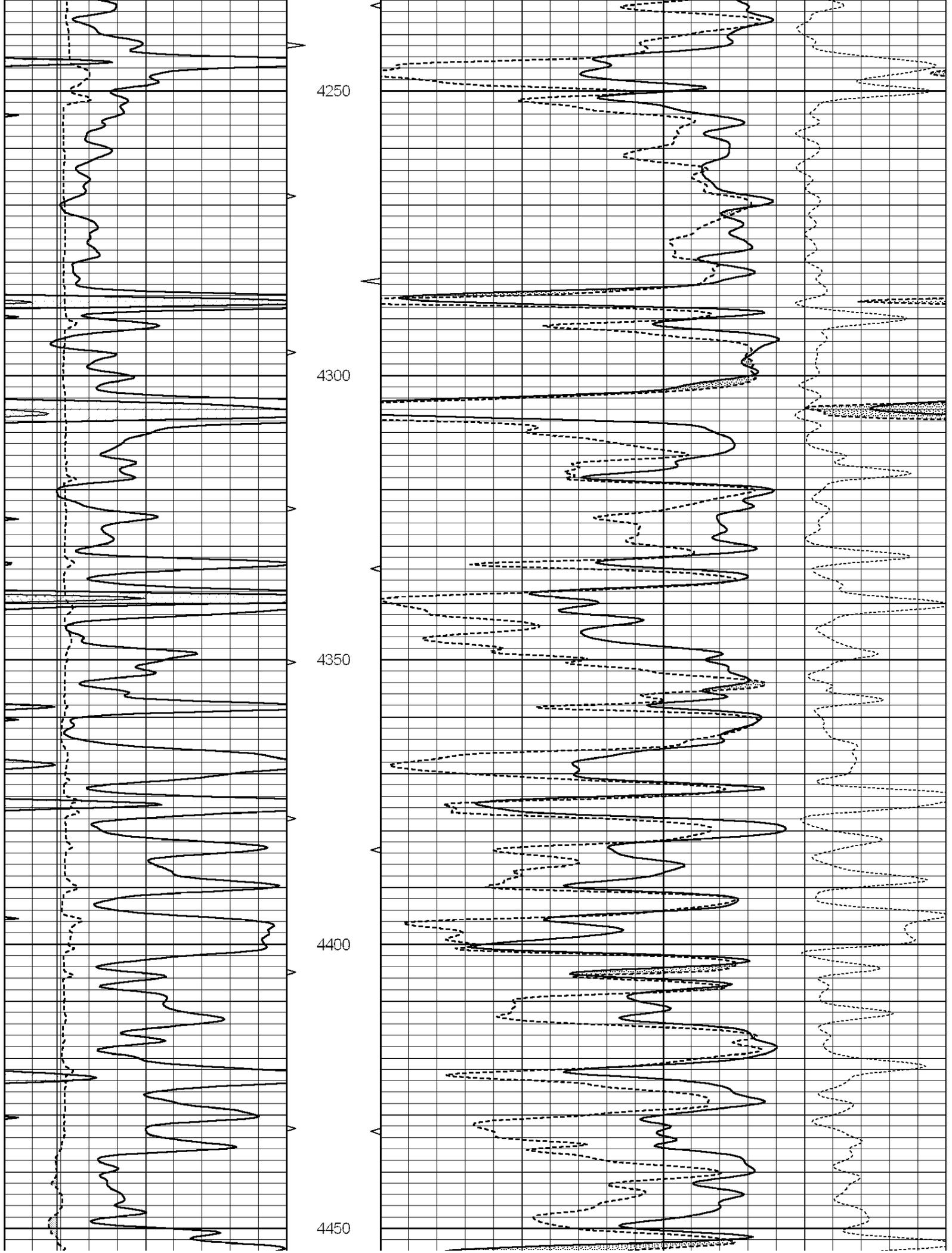
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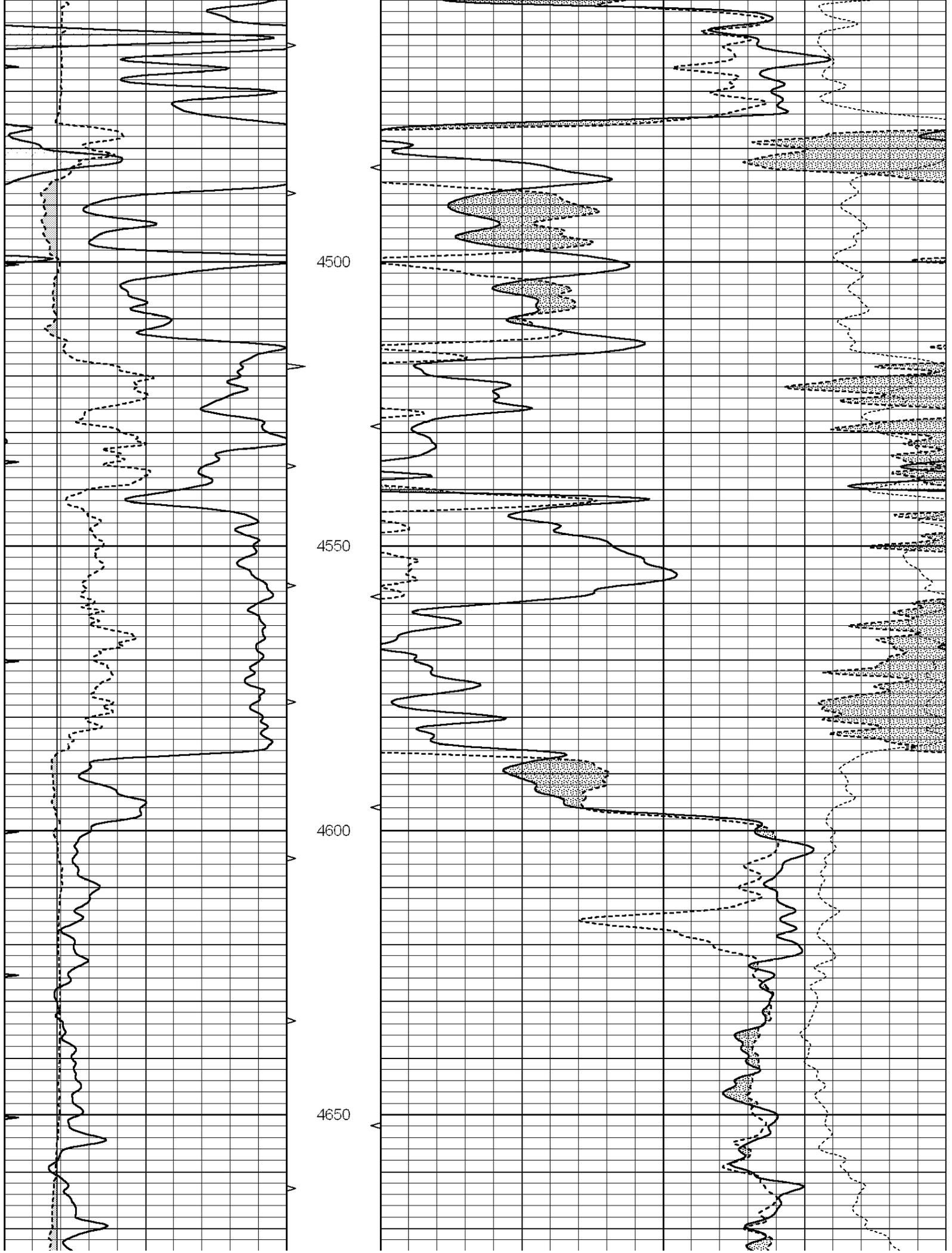
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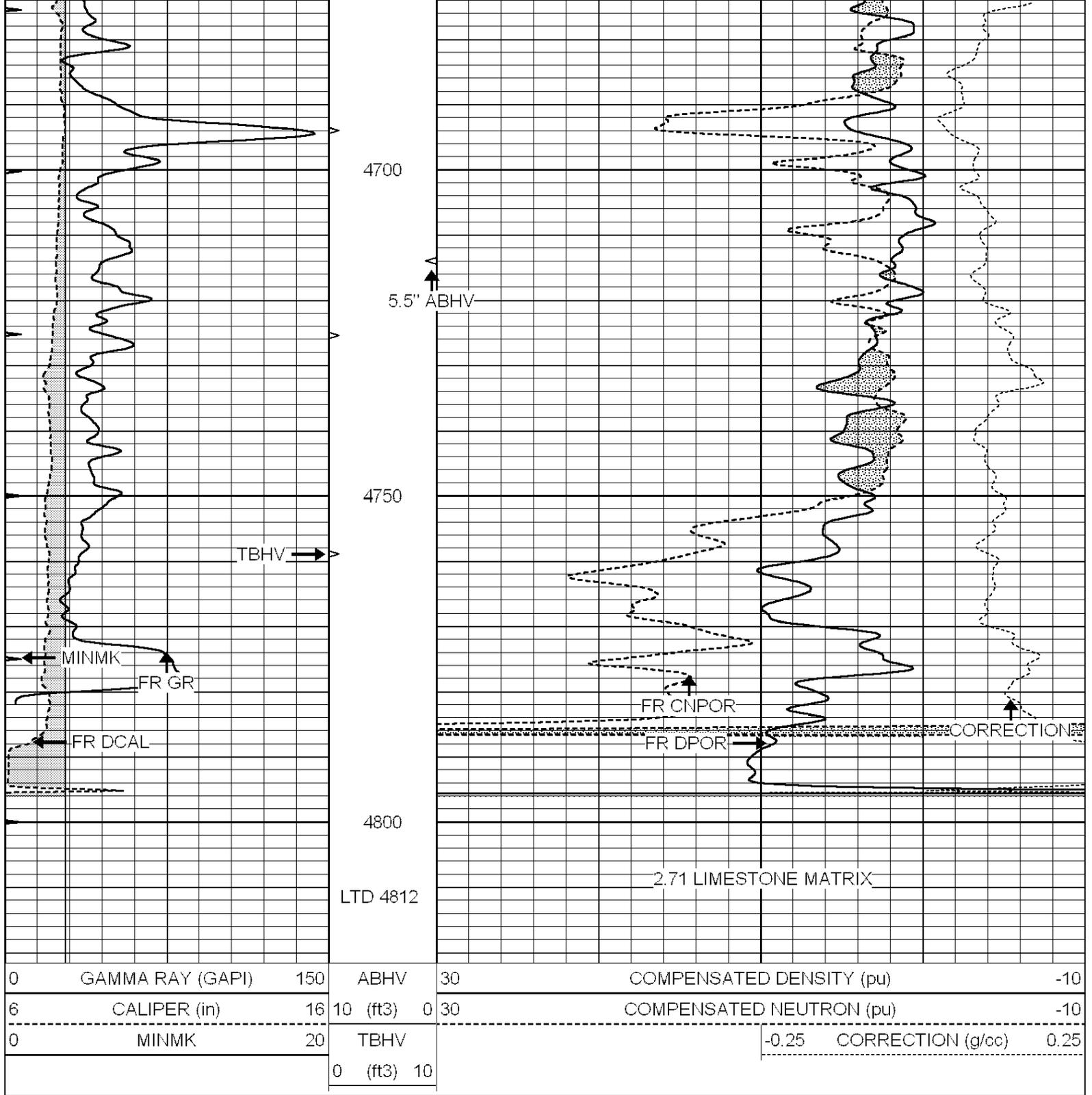
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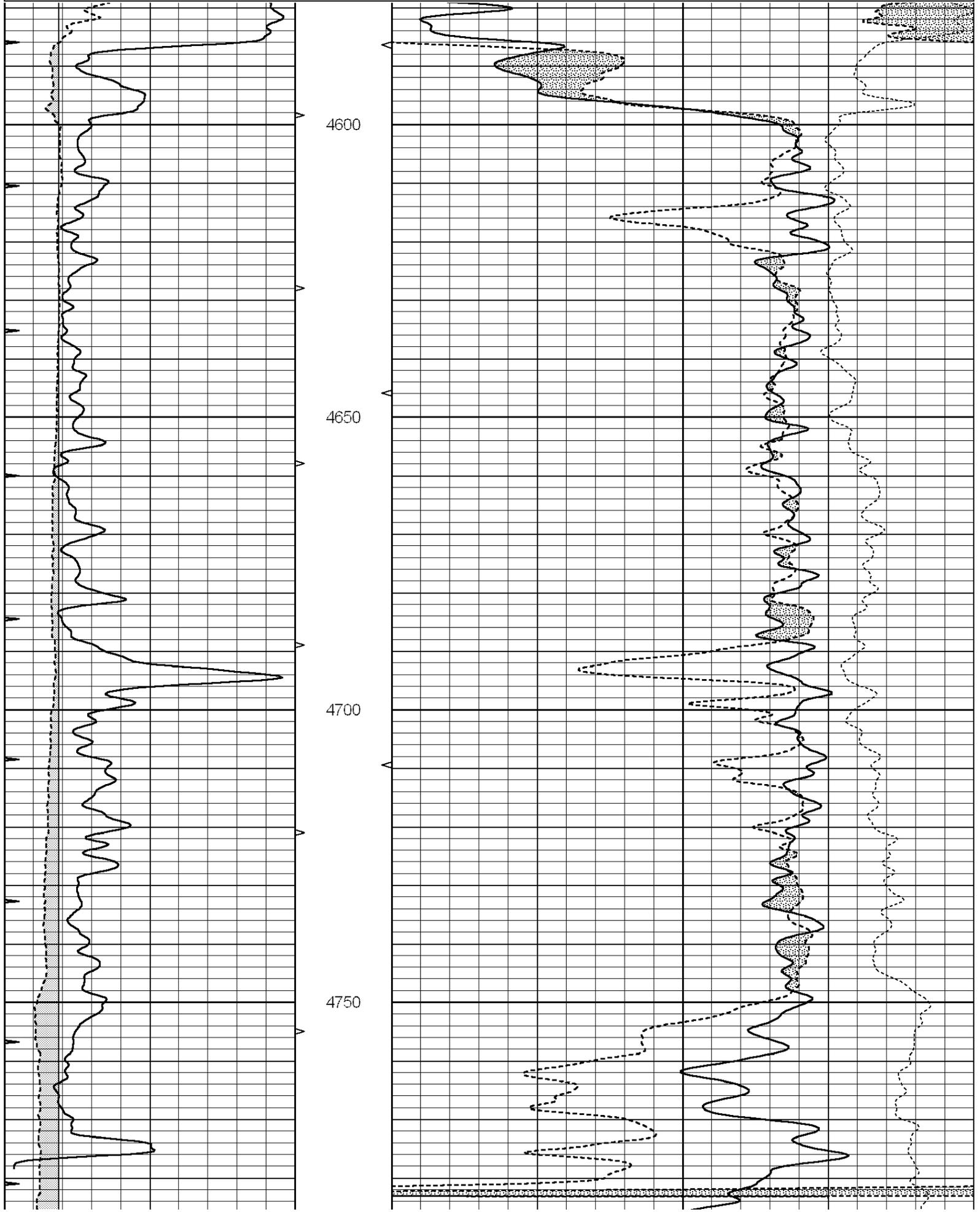
**Casedhole
Solutions**

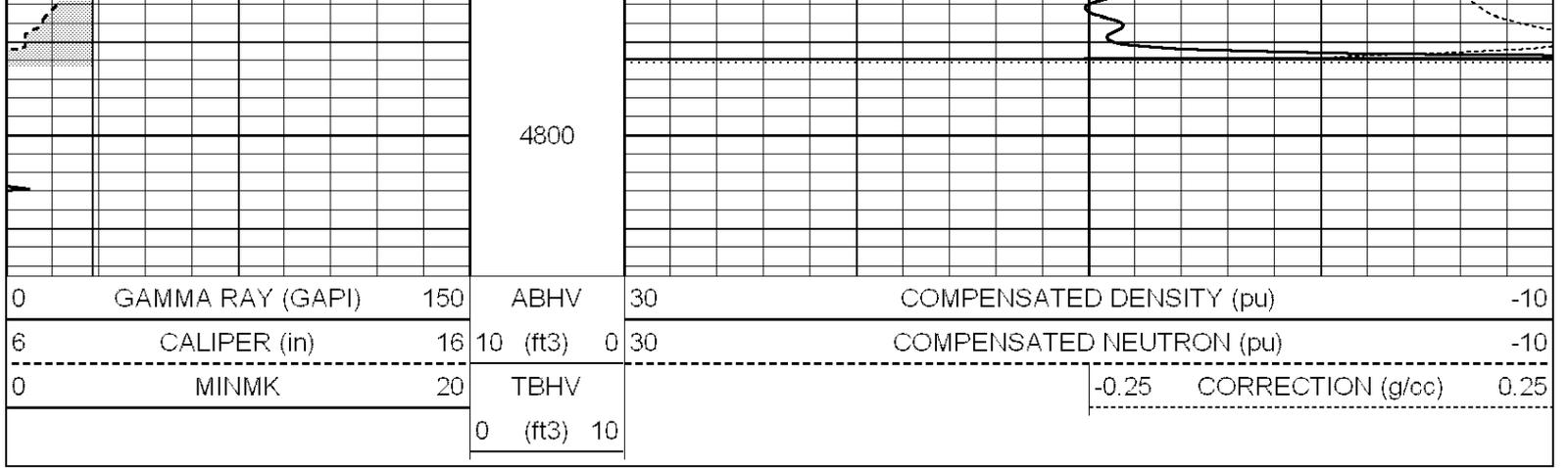
REPEAT SECTION

Database File: 30679ddn.db
 Dataset Pathname: pass2.8
 Presentation Format: den_neu
 Dataset Creation: Tue Dec 08 02:05:57 2015 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

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

6	CALIPER (in)	10	10	(ft3)	0	30	COMPENSATED NEUTRON (pp)	-10	
0	MINMK	20	TBHV				-0.25	CORRECTION (g/cc)	0.25
			0	(ft3)	10				





Calibration Report

Database File: 30679ddn.db
 Dataset Pathname: pass3.12
 Dataset Creation: Tue Dec 08 01:25:43 2015

Dual Induction Calibration Report

Serial-Model: PROBE9-DILG
 Surface Cal Performed: Mon Dec 07 23:48:27 2015
 Downhole Cal Performed: Mon Jul 28 12:02:56 2008
 After Survey Verification Performed: Mon Jul 28 12:02:56 2008

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	670.000	-5.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	685.000	-19.500
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		4000.000	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: 004N Model: PRB

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1378.8	10804.6	3492.0	12453.4	cps
Window 2	1262.4	9313.5	3076.7	10594.7	cps
Window 3	1077.6	5668.7	2076.0	6314.8	cps
Window 4	306.4	313.0	306.4	315.6	cps
Long Space	0.0	8051.0	1814.3	9332.3	cps
Short Space	1.9	1706.1	1146.0	1707.6	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe		0.0000	2.5700	1.5500	
Rib Angle	: 45.0	Rib Slope	: 1.002	Density/Spine Ratio	: 0.571
Spine Angle	: 75.0	Spine Slope	: 3.745	Spine Intercept	: -18.9

Before Survey Verification		Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

After Survey Verification		Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

Compensated Neutron Calibration Report

Serial Number: 070808
Tool Model: Probe

PRE-SURVEY VERIFICATION			
Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION			
Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number: 070558
Tool Model: OPEN_GR

Performed: Wed Dec 02 21:48:59 2015

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps

Calibrator Reading: 1.0 cps

Sensitivity: 0.2800 GAPI/cps