



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
NEUTRON / DENSITY
LOG**

Company MAI OIL OPERATIONS, INC.
Well FLEGLER A#3
Field
County RUSSELL State KANSAS

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Field
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State KANSAS

Location: API #: 15-167-23797-0000
SEC 3 TWP 15S RGE 14W
875' FSL & 725' FVL
SW - NE - SW - SW
Permanent Datum GROUND LEVEL Elevation 1760
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
MICRO
Elevation
K.B. 1768
D.F.
G.L. 1760

Date	5-22-12
Run Number	ONE
Depth Driller	3310
Depth Logger	3310
Bottom Logged Interval	3286
Top Log Interval	2250
Casing Driller	375
Casing Logger	375
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.3 / 53
pH / Fluid Loss	11.5 / 10.0
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.54 @ 82F
Rmf @ Meas. Temp	0.41 @ 82F
Rmc @ Meas. Temp	0.65 @ 82F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	0.40 @ 110F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	1:20 P.M.
Maximum Recorded Temperature	110F
Equipment Number	860
Location	HAYS, KS.
Recorded By	DAN GOTTSCHALK
Witnessed By	JIM MUSGROVE
	ALLEN BANGERT

<<< Fold Here >>>

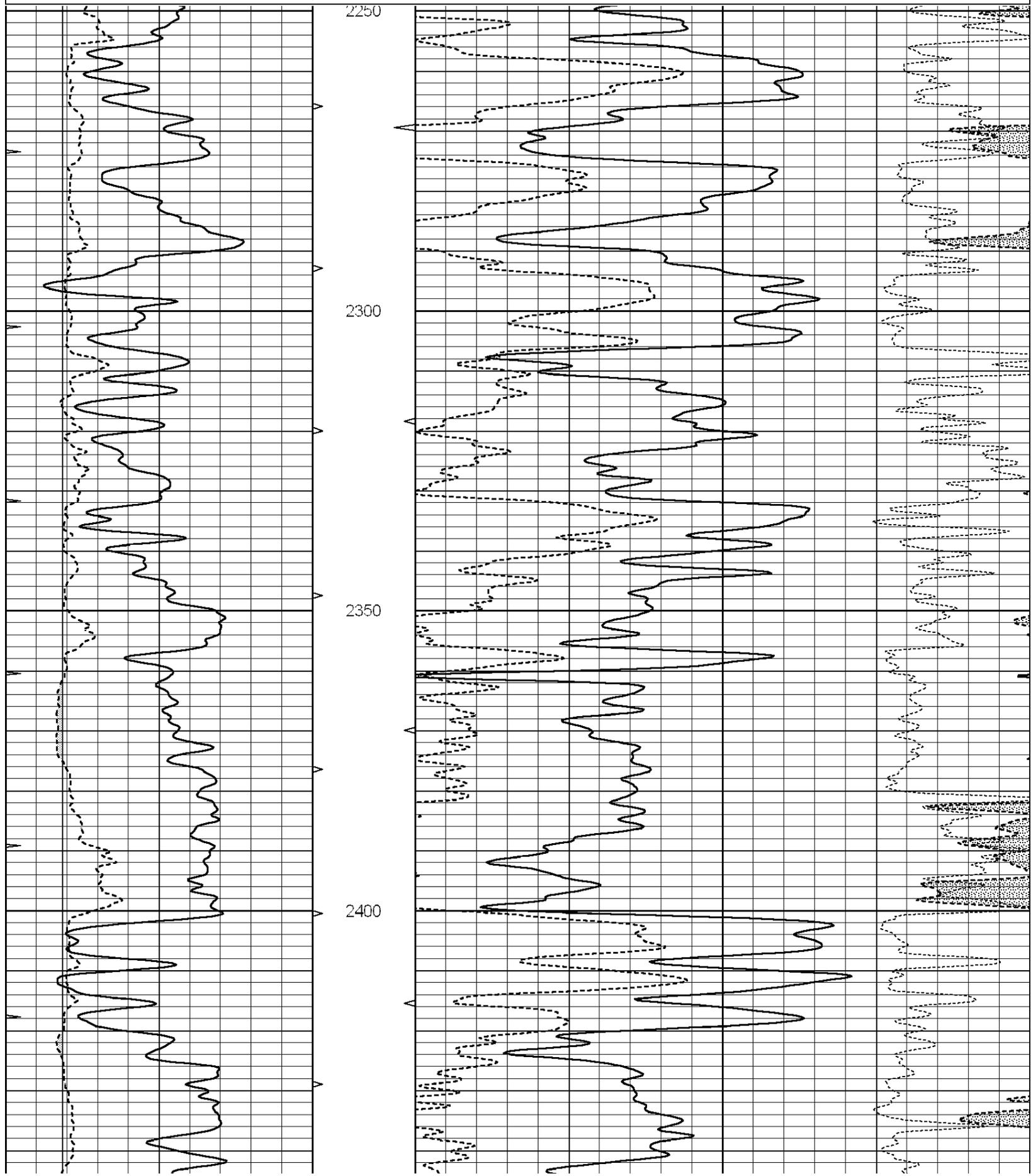
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

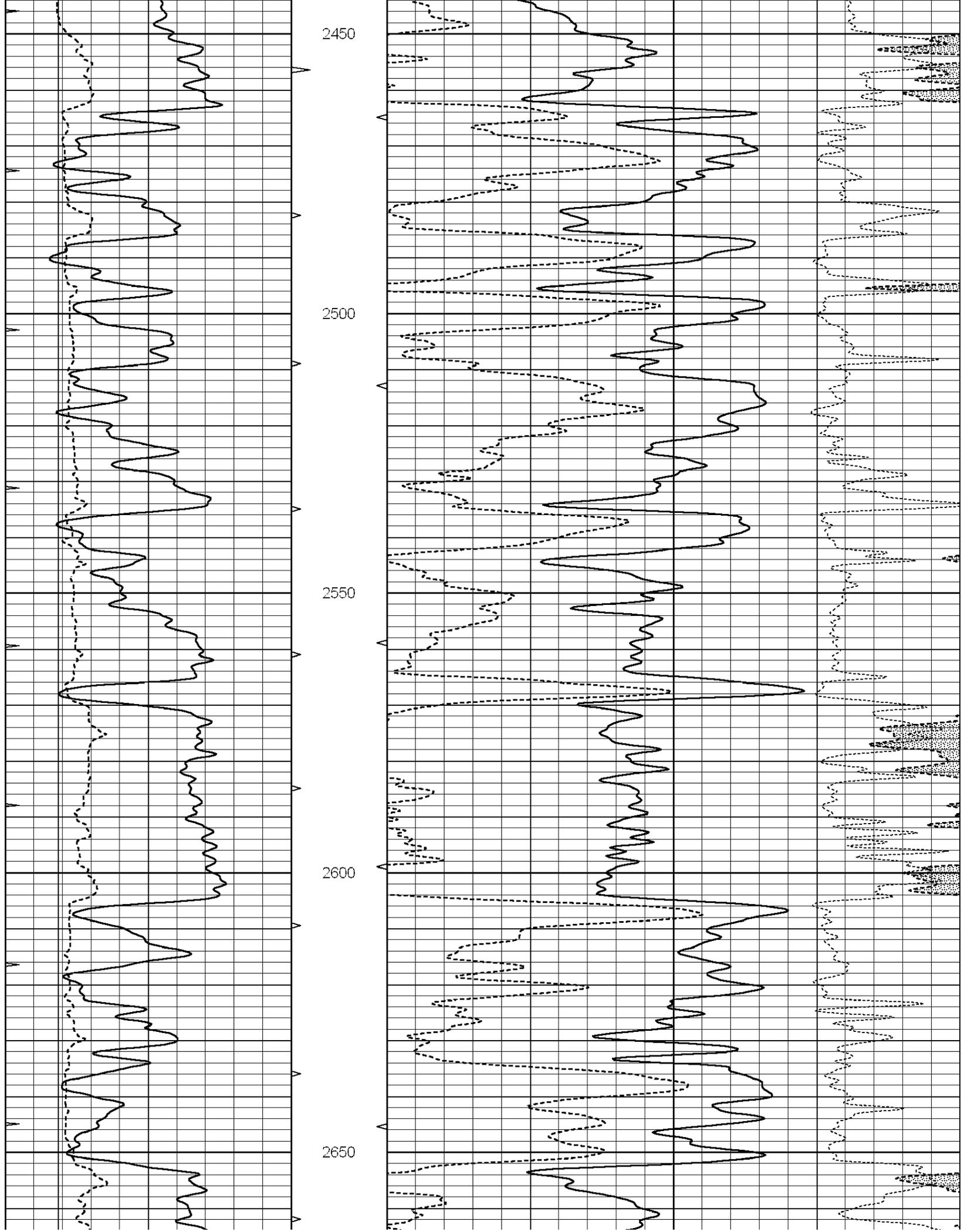
Comments

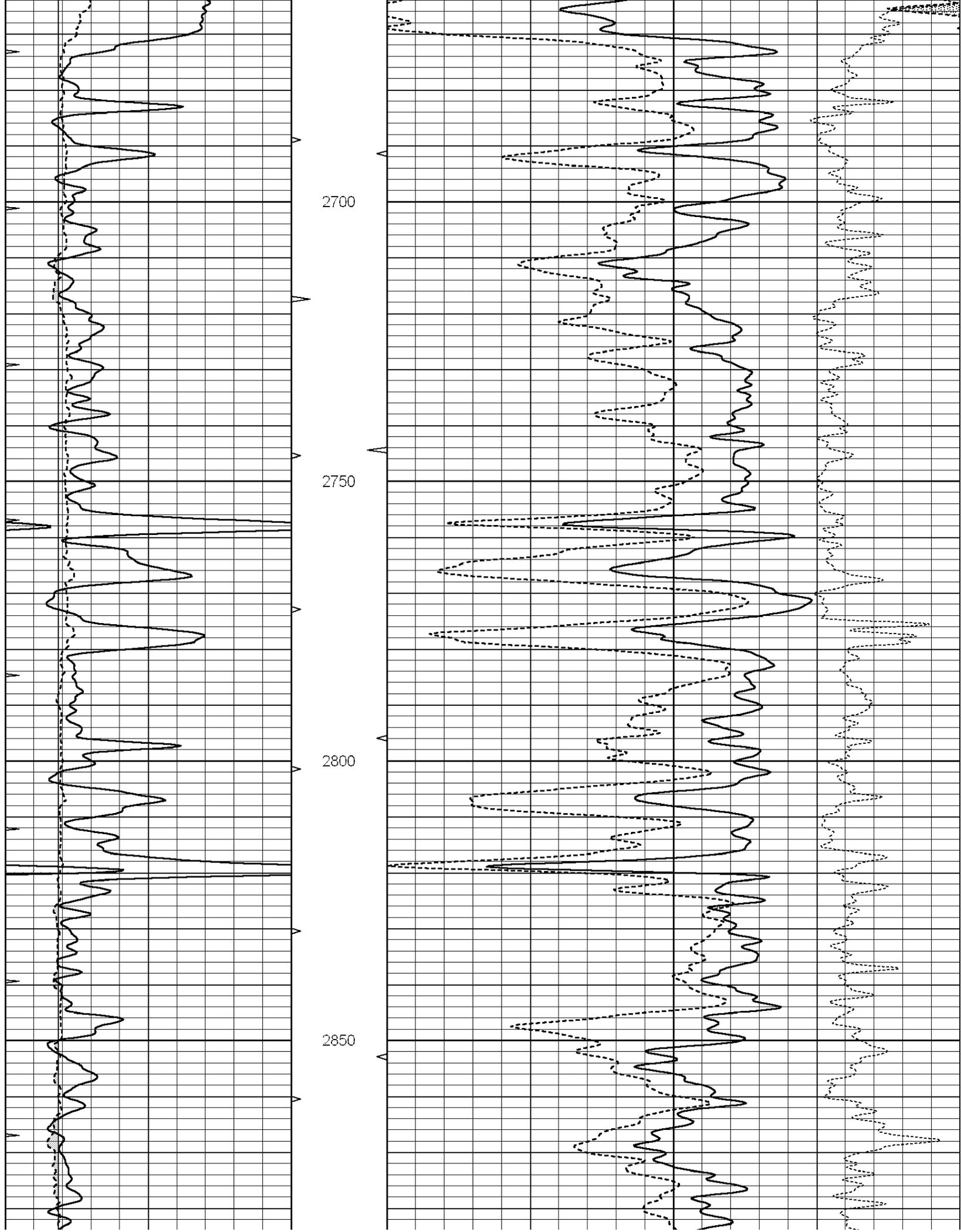
THANK YOU FOR USING SUPERIOR WELL SERVICES
HAYS, KS. 785-628-6395

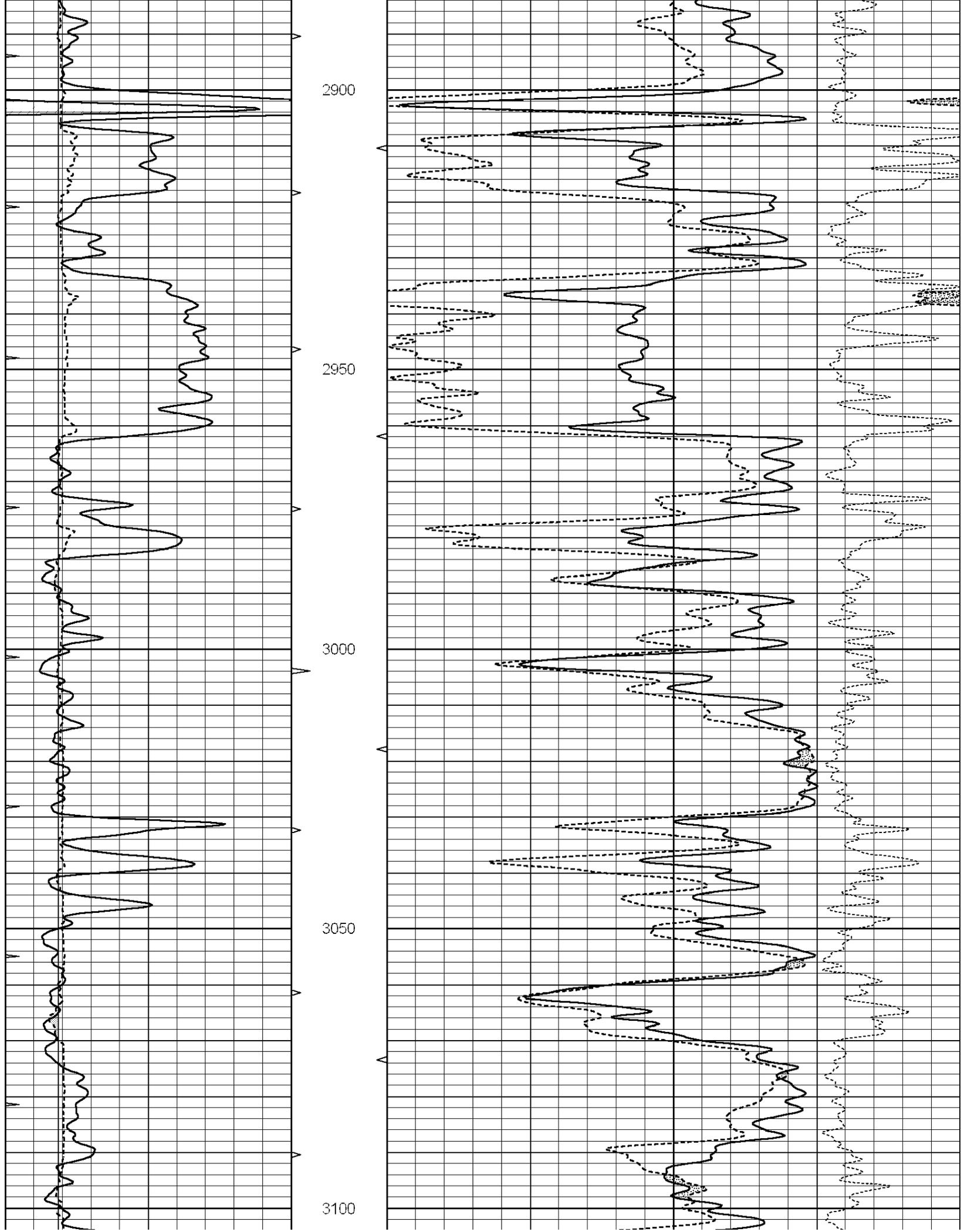
DIRECTIONS: RUSSELL - SOUTH TO WALTERS RD. - 3/4 WEST - NORTH INTO

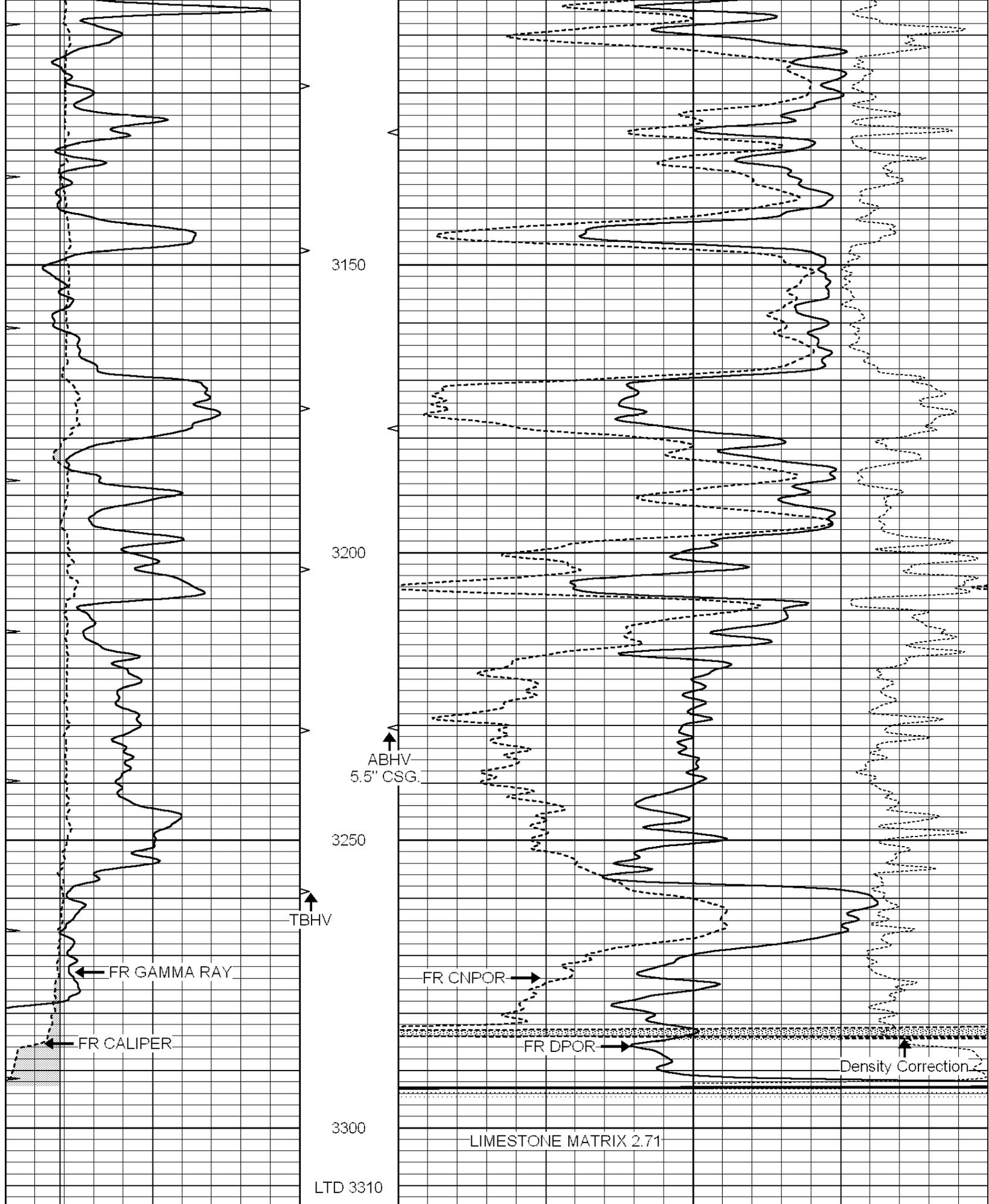
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		











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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				

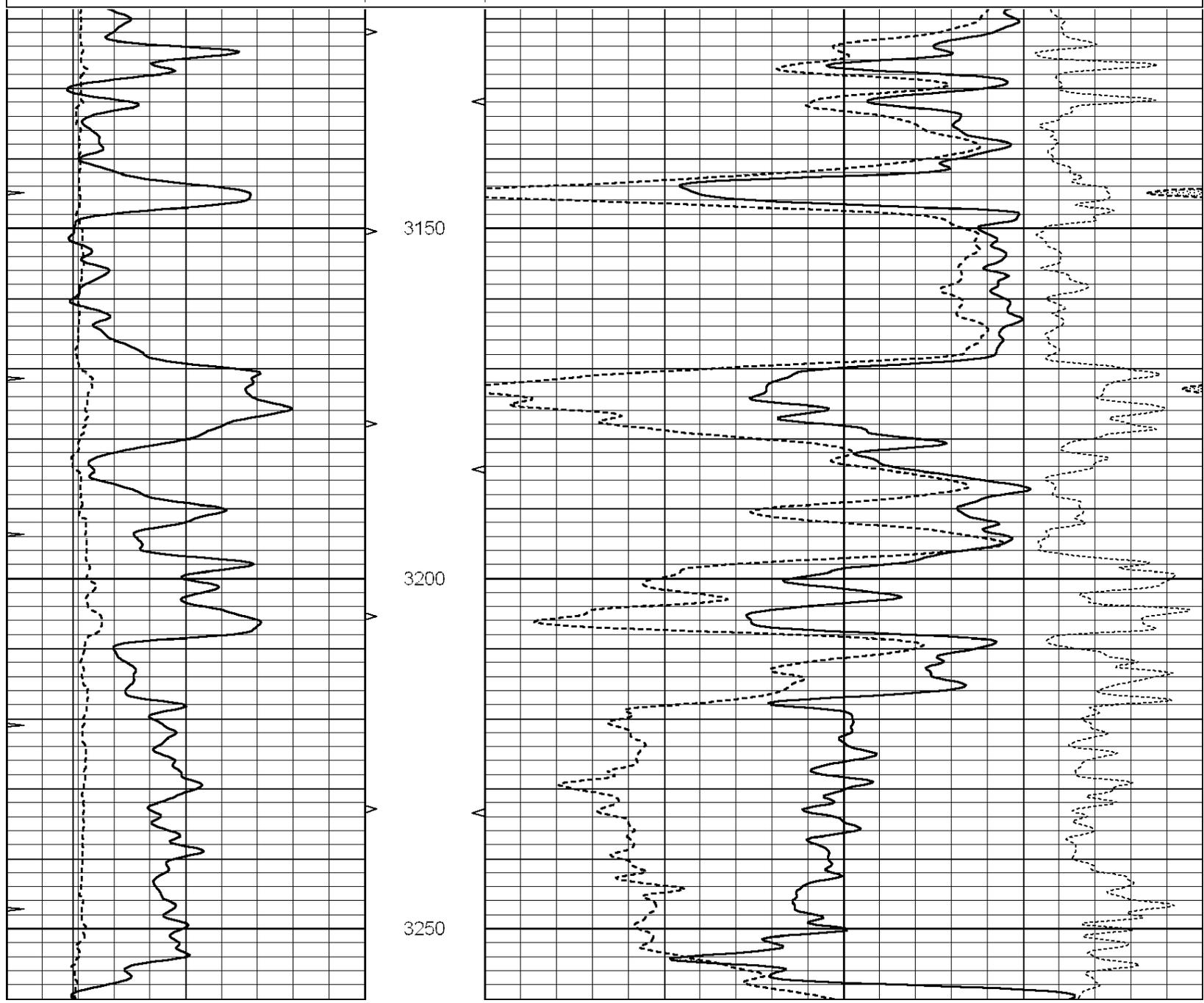


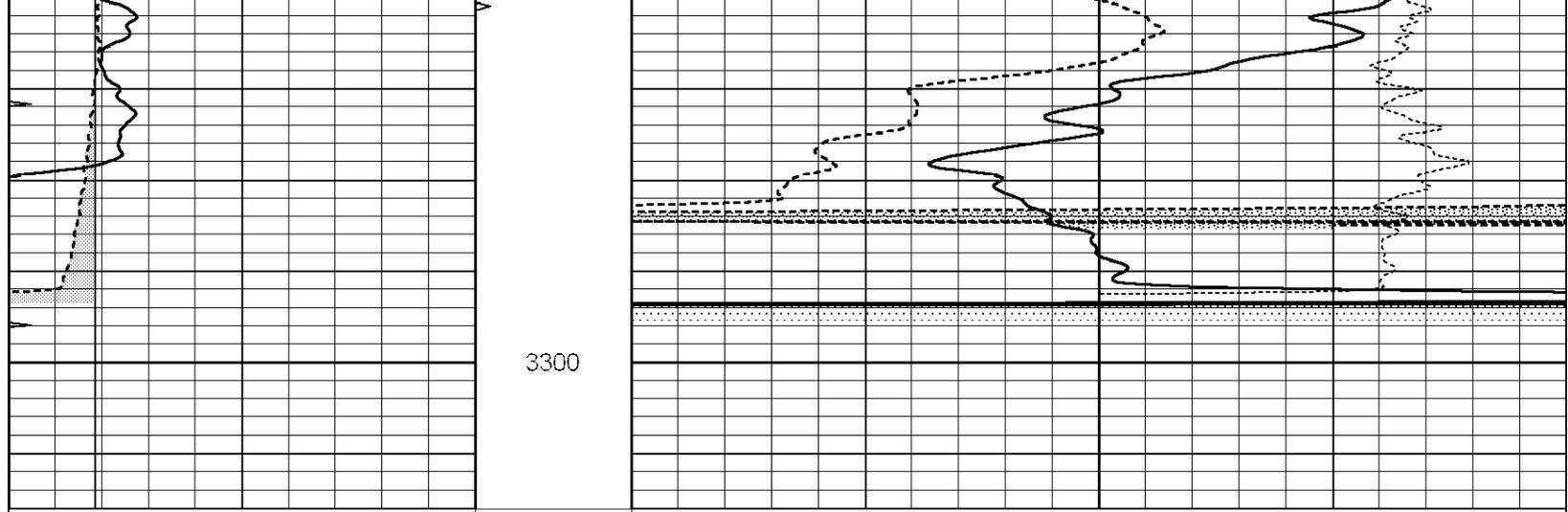
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 9124ddn.db
 Dataset Pathname: pass4.3
 Presentation Format: den_neu
 Dataset Creation: Tue May 22 14:47:46 2012 by Calc Open-Cased 090629
 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			





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			

Calibration Report

Database File: 9124ddn.db
 Dataset Pathname: pass1
 Dataset Creation: Tue May 22 13:08:12 2012 by Log Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE9-DILG
 Surface Cal Performed: Mon May 21 22:21:01 2012
 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	V	Air	Loop	mmho/m	m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	550.000	-14.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	540.000	-18.000
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	V	Zero	Cal	mmho/m	m'	b'
Deep	0.000	0.000	V	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	V	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		3970.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal	V	Zero	Cal	mmho/m	m'	b'
Deep	0.000	0.000	V	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	V	0.000	0.000	mmho/m	0.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3970.000	mmho-m		

LL3

1.000 Ohm-m
0.000 Ohm-m
1.000 mmho-m

1.000 Ohm-m
0.000 Ohm-m
1.000 mmho-m

Compensated Density Calibration Report

Serial-Model: GEAR1-GEARHART
Source / Verifier: 147 / 147
Master Calibration Performed: Mon May 21 22:04:25 2012

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1243.76	629.14	cps
Aluminum	2.590	g/cc	282.16	435.01	cps
Spine Angle = 76.03			Density/Spine Ratio = 0.576		
	Size		Reading		
Small Ring	8.40	in	4.01	V	
Large Ring	14.00	in	5.67	V	

Compensated Neutron Calibration Report

Serial Number: NUE_2I
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: GR5
Tool Model: OPEN
Performed: Tue May 22 00:12:50 2012

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.7000 GAPI/cps