



COMPENSATED DENSITY/NEUTRON LOG

Company	JONES OIL, LLC.
Well	DUNN #1
Field	BRENN
County	STAFFORD
State	KANSAS
Location:	AP1 # : 15-185-24007-00-00 969' FNL & 330' FEL
Permanent Datum Log Measured From Drilling Measured From	GROUND LEVEL KELLY BUSHING 7' A.G.L. KELLY BUSHING
Other Services DIL/MEL SONIC	Elevation K.B. 1943 D.F. 1941 G.L. 1936
Date	02/10/18
Run Number	ONE
Depth Driller	4040
Depth Logger	4041
Bottom Logged Interval	4018
Top Log Interval	3100
Casing Driller	8 5/8" @ 639
Casing Logger	639
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.365
pH / Fluid Loss	10.0/10.4
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.70@54
Rmt @ Meas. Temp	.53@54
Rmc @ Meas. Temp	.84@54
Source of Rmt / Rmc	MEASURED
Rm @ BHT	.33@115
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	///
Maximum Recorded Temperature	115F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	GUS PFANENSTIEL
Witnessed By	KEATON JONES

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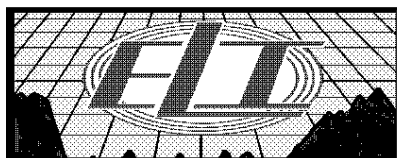
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 ELI WIRELINE, HAYS, KS. (785) 628-6395

DIRECTIONS

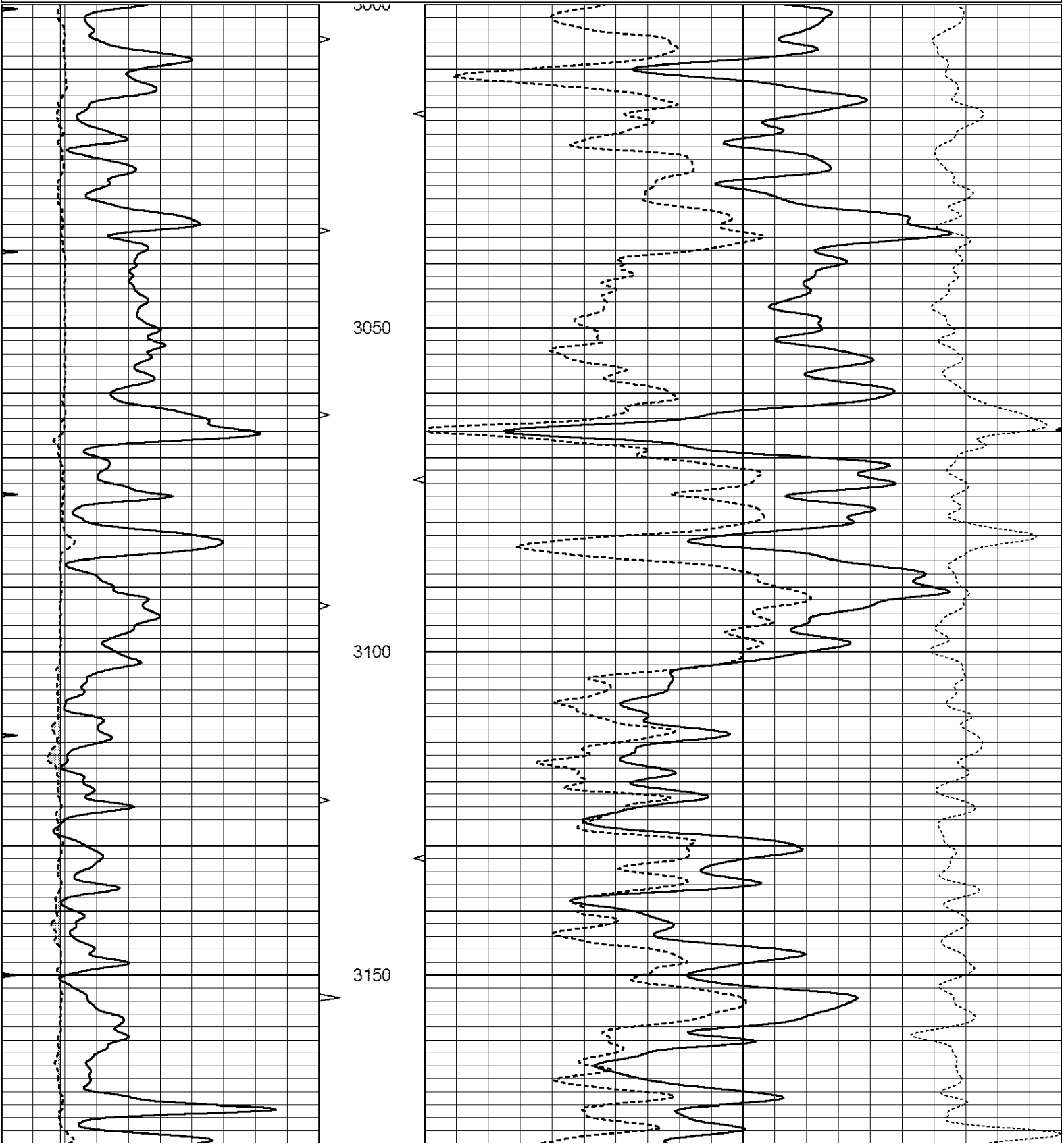
SOUTH SIDE OF ST. JOHN 3 WEST, NORTH ON BLACK TOP 3.5 MILES
WEST INTO.

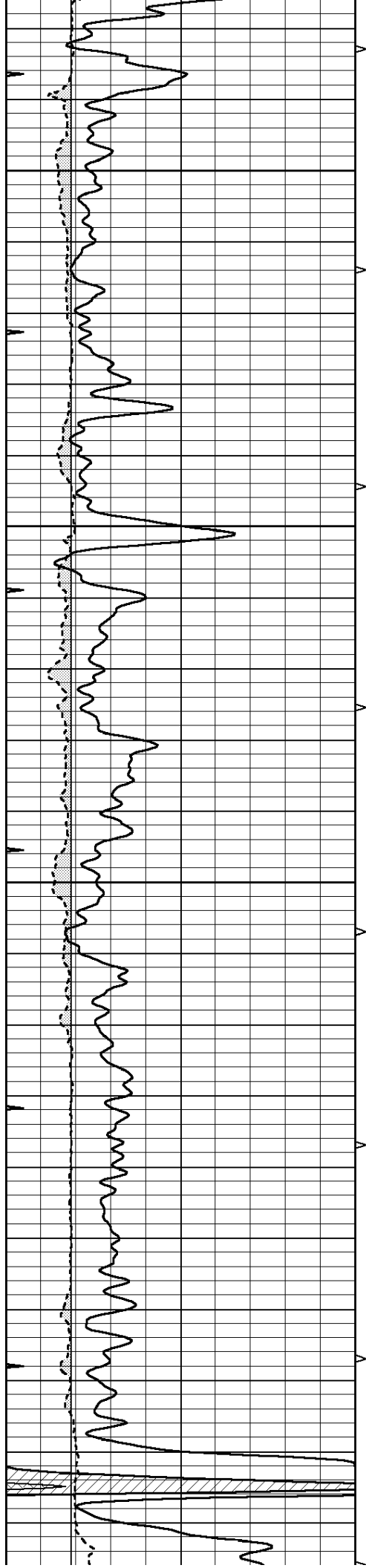


MAIN PASS

Database File: 2408ddn.db
Dataset Pathname: pass3.1
Presentation Format: den_neu
Dataset Creation: Sat Feb 10 19:26:34 2018 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		



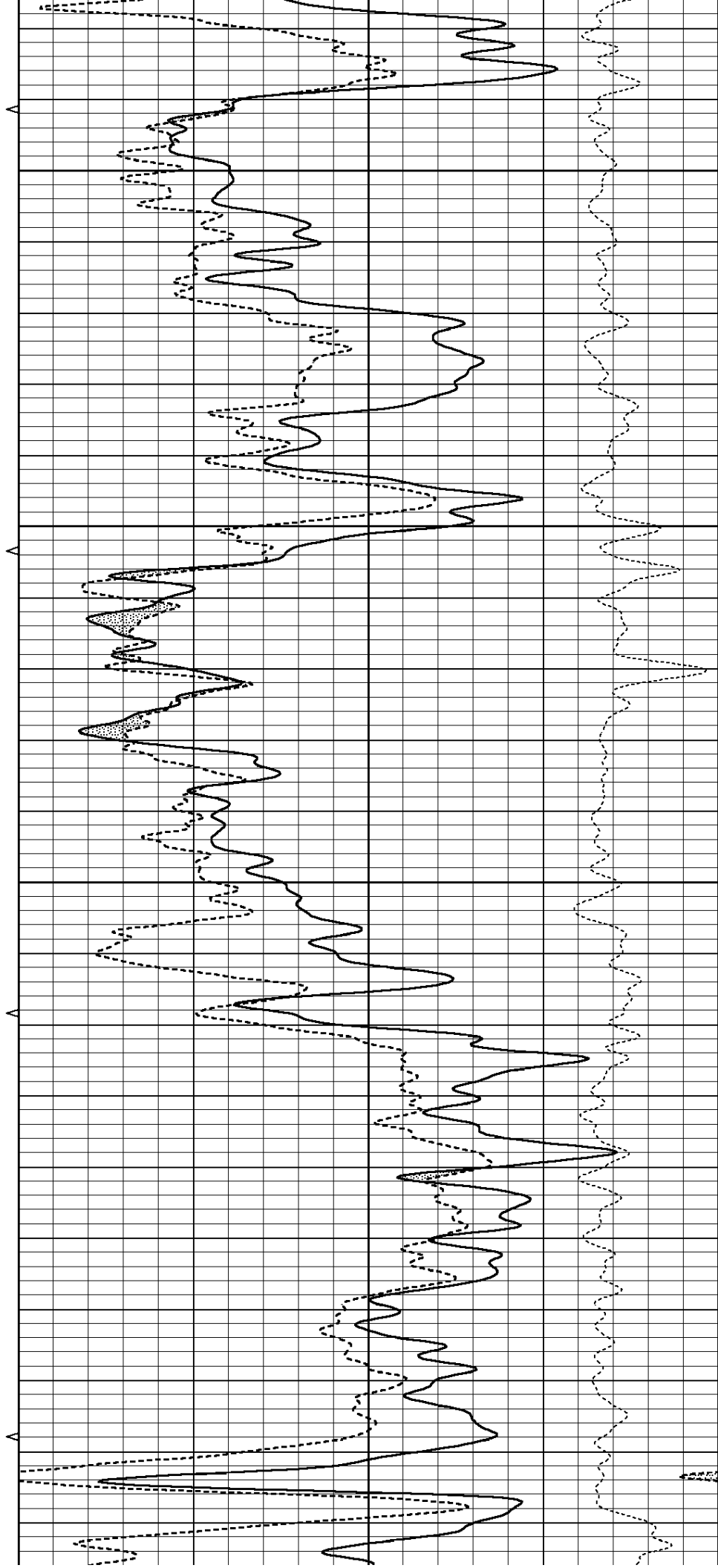


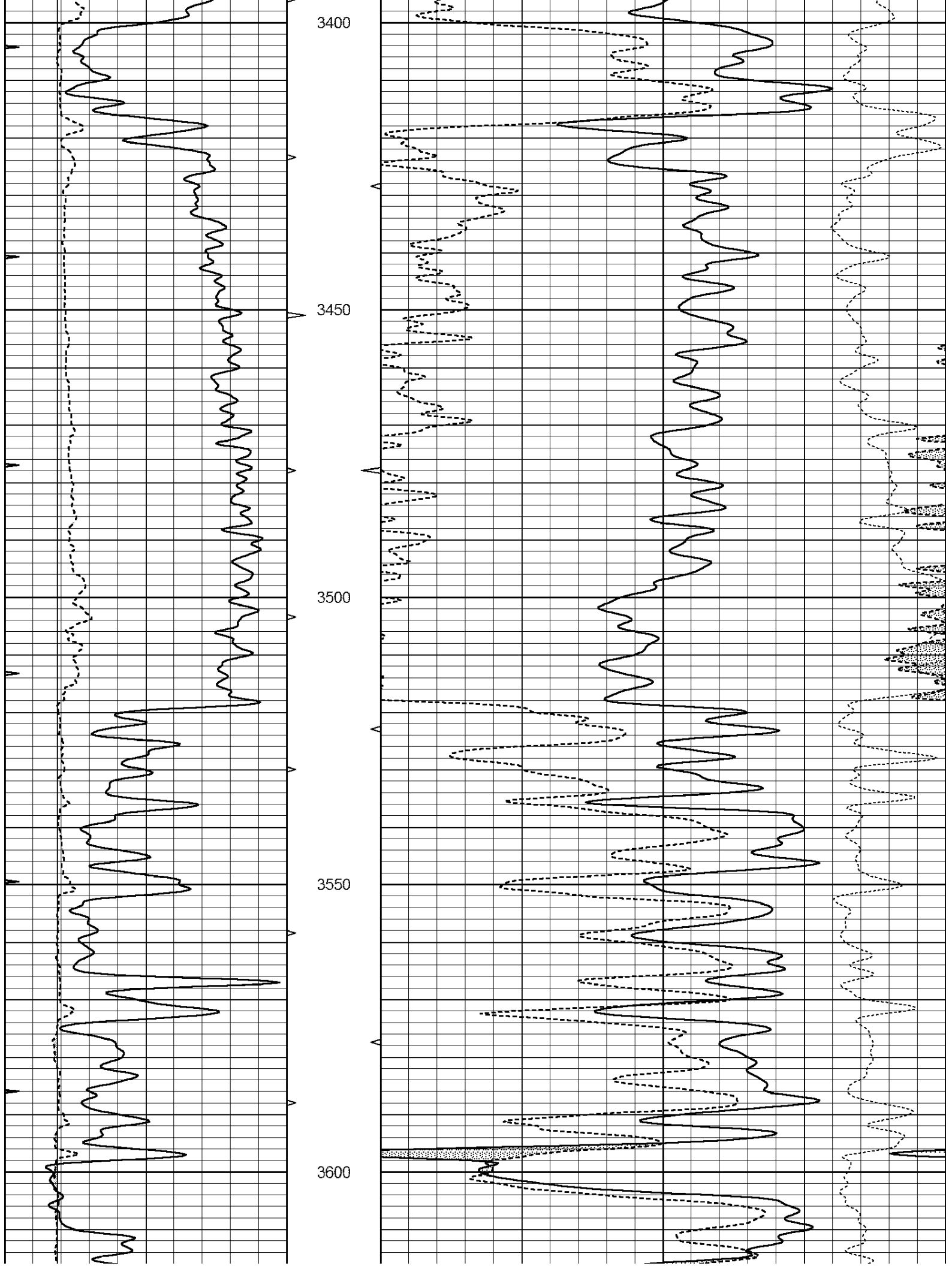
3200

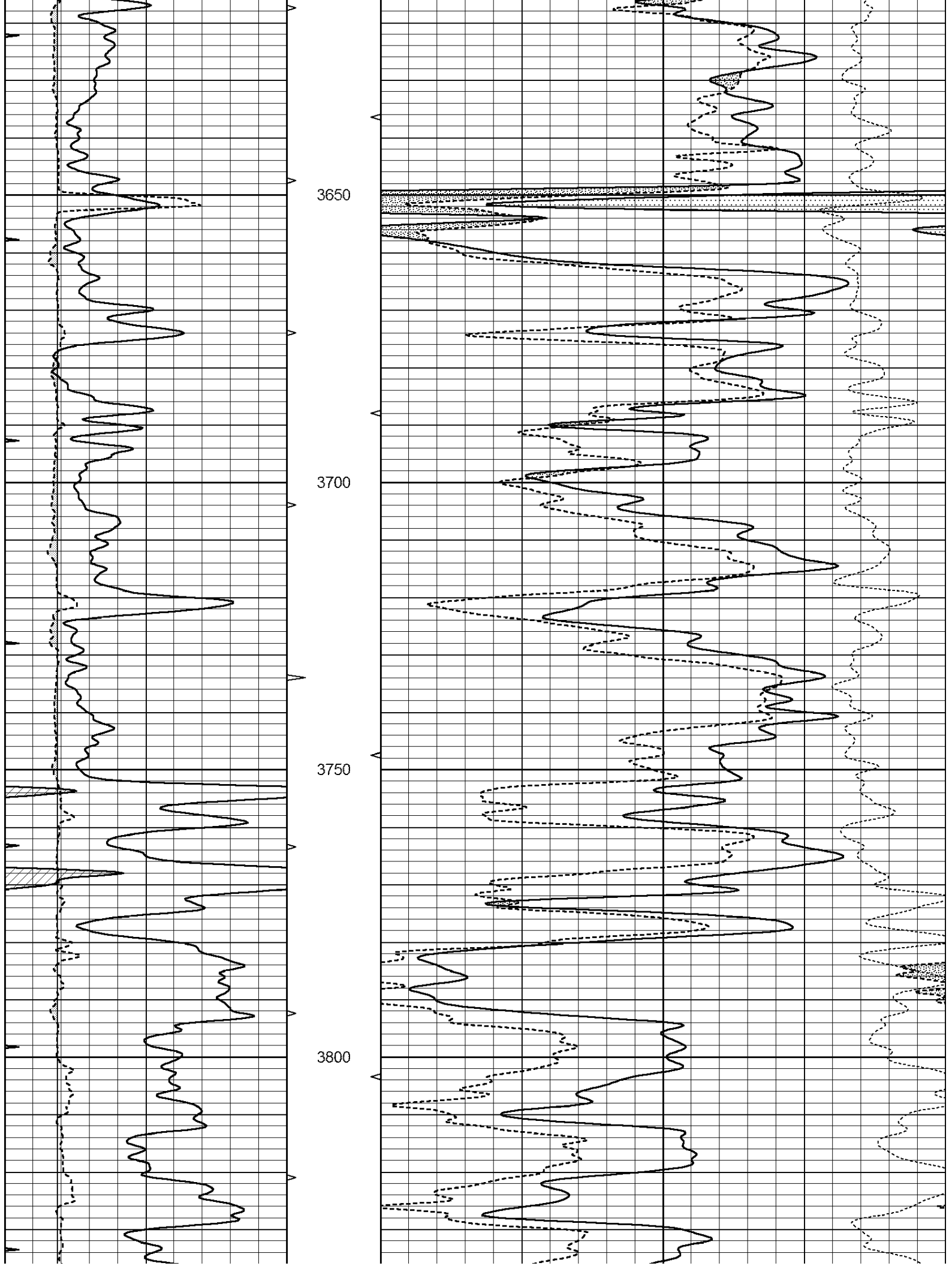
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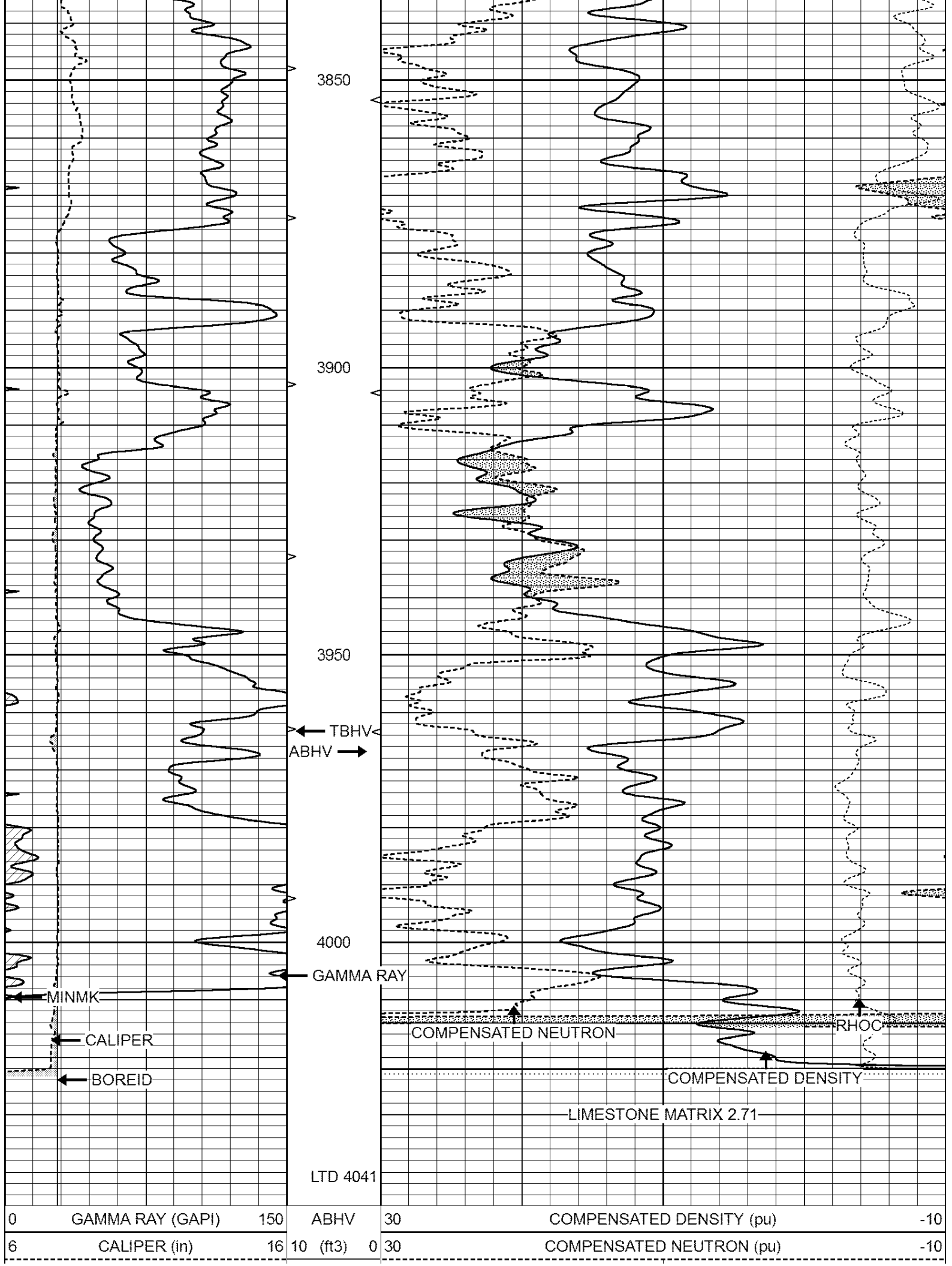
3300

3350

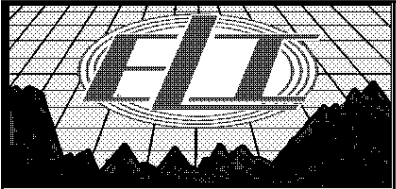








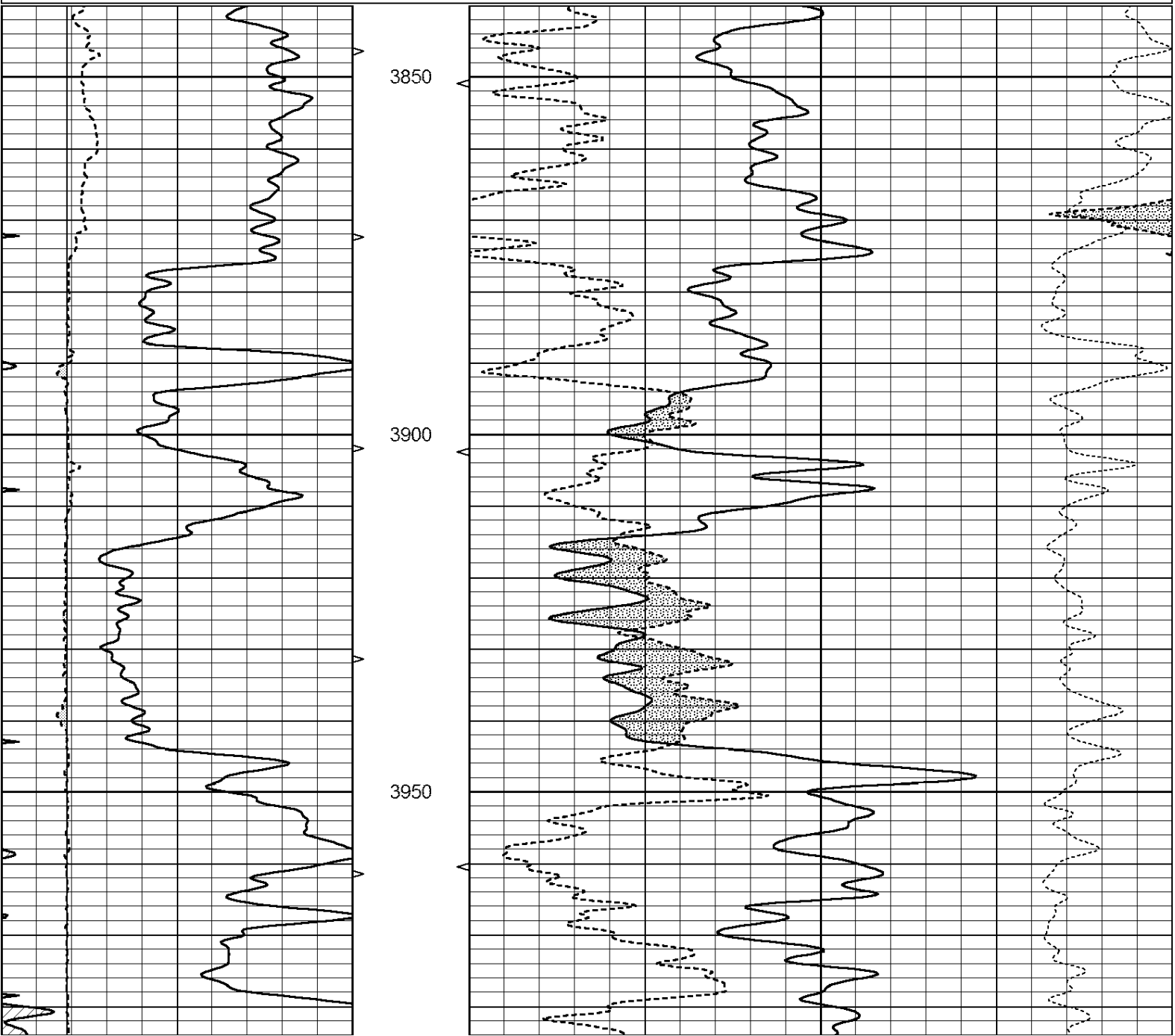
0	MINMK	20	TBHV	-0.25	CORRECTION (g/cc)	0.25
		0	(ft3) 10			

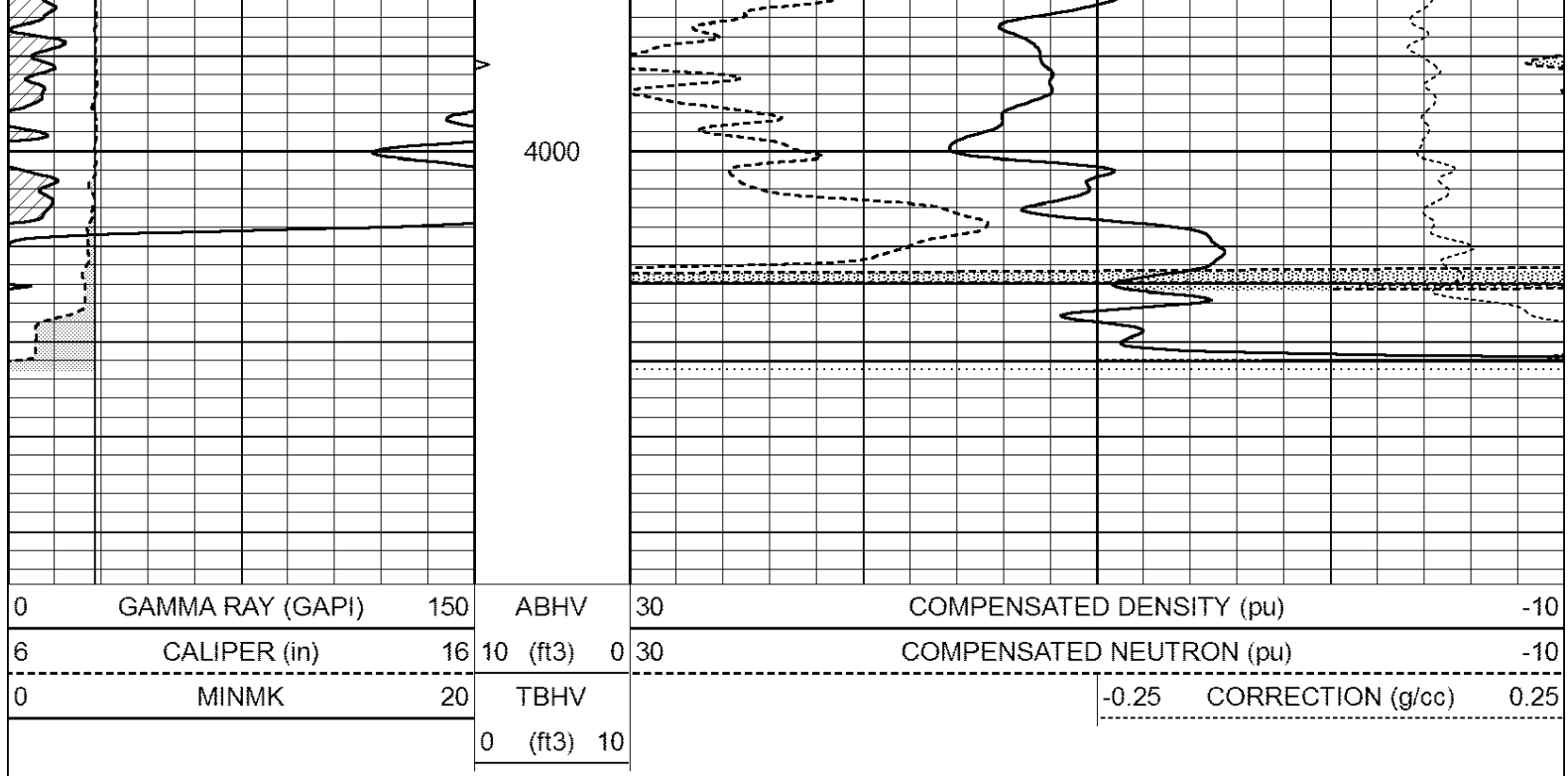


REPEAT SECTION

Database File:	2408ddn.db
Dataset Pathname:	pass2.1
Presentation Format:	den_neu
Dataset Creation:	Sat Feb 10 19:37:25 2018 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			





Calibration Report

Database File: pe2.db
 Dataset Pathname: pass2
 Dataset Creation: Mon Aug 21 11:58:02 2017 by Log Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Mon Aug 21 11:58:18 2017
 Downhole Cal Performed: Mon Aug 21 11:58:21 2017
 After Survey Verification Performed: Mon Aug 21 11:58:23 2017

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	0.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-12.000
Internal:	Zero	Cal		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		
		-7.200	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

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

Master Calibration		Performed Mon Aug 21 11:56:41 2017						
	Background	Magnesium		Aluminum		Sandstone		
Window 1	833.6	7394.2		2287.3		8111.8		cps
Window 2	768.9	6322.3		1995.6		6800.0		cps
Window 3	621.5	3261.9		1186.4		3380.9		cps
Window 4	184.2	185.7		184.9		184.8		cps
Long Space	0.0	5553.4		1226.6		6031.1		cps
Short Space	1.2	1307.5		903.9		1387.7		cps
Rho		1.7100		2.5900		1.3800		g/cc
Pe		0.0000		2.5700		1.5500		
Rib Angle	: 46.3	Rib Slope		: 1.045		Density/Spine Ratio		: 0.566
Spine Angle	: 76.3	Spine Slope		: 4.090		Spine Intercept		: -20.7

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: 6I

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

PRE-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	
3)	Short Space Long Space	cps cps	pu	
POST-SURVEY VERIFICATION				
	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps cps	pu	pu
Gamma Ray Calibration Report				
Serial Number:		GR6		
Tool Model:		OPEN		
Performed:		Mon Aug 21 11:59:01 2017		
Calibrator Value:		150.0	GAPI	
Background Reading:		0.0	cps	
Calibrator Reading:		276.0	cps	
Sensitivity:		0.5500	GAPI/cps	