

COMPENSATED
DENSITY/NEUTRON
LOG

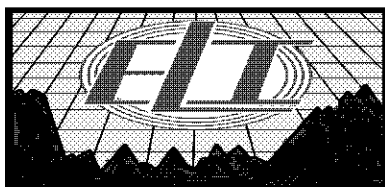
Company VAL ENERGY, INC.		Company VAL ENERGY, INC.	
Well KUHLMEIR "V" #1-20		Well KUHLMEIR "V" #1-20	
Field		Field	
County McPHERSON	State KANSAS	County McPHERSON	State KANSAS
Location: 2100' FNL & 1530' FEL		Other Services DIL/MEL SONIC	
Permanent Datum SEC 20 TWP 20S RGE 1W		Elevation	
Log Measured From GROUND LEVEL Elevation 1550		K.B. 1559	
Drilling Measured From KELLY BUSHING 9' A.G.L		D.F. 1557	
		G.L. 1550	
Date 10/11/17	Run Number ONE		
Depth Driller	3657		
Depth Logger	3659		
Bottom Logged Interval	3635		
Top Log Interval	2200		
Casing Driller	8 5/8" @ 221		
Casing Logger	220		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 1700 PPM	
Density / Viscosity	9.3/52		
pH / Fluid Loss	10.0/8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.5 @ 75F		
Rmf @ Meas. Temp	1.1 @ 75F		
Rmc @ Meas. Temp	1.8 @ 75		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	1.0 @ 112F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	112F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	DOUG DAVIS		

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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

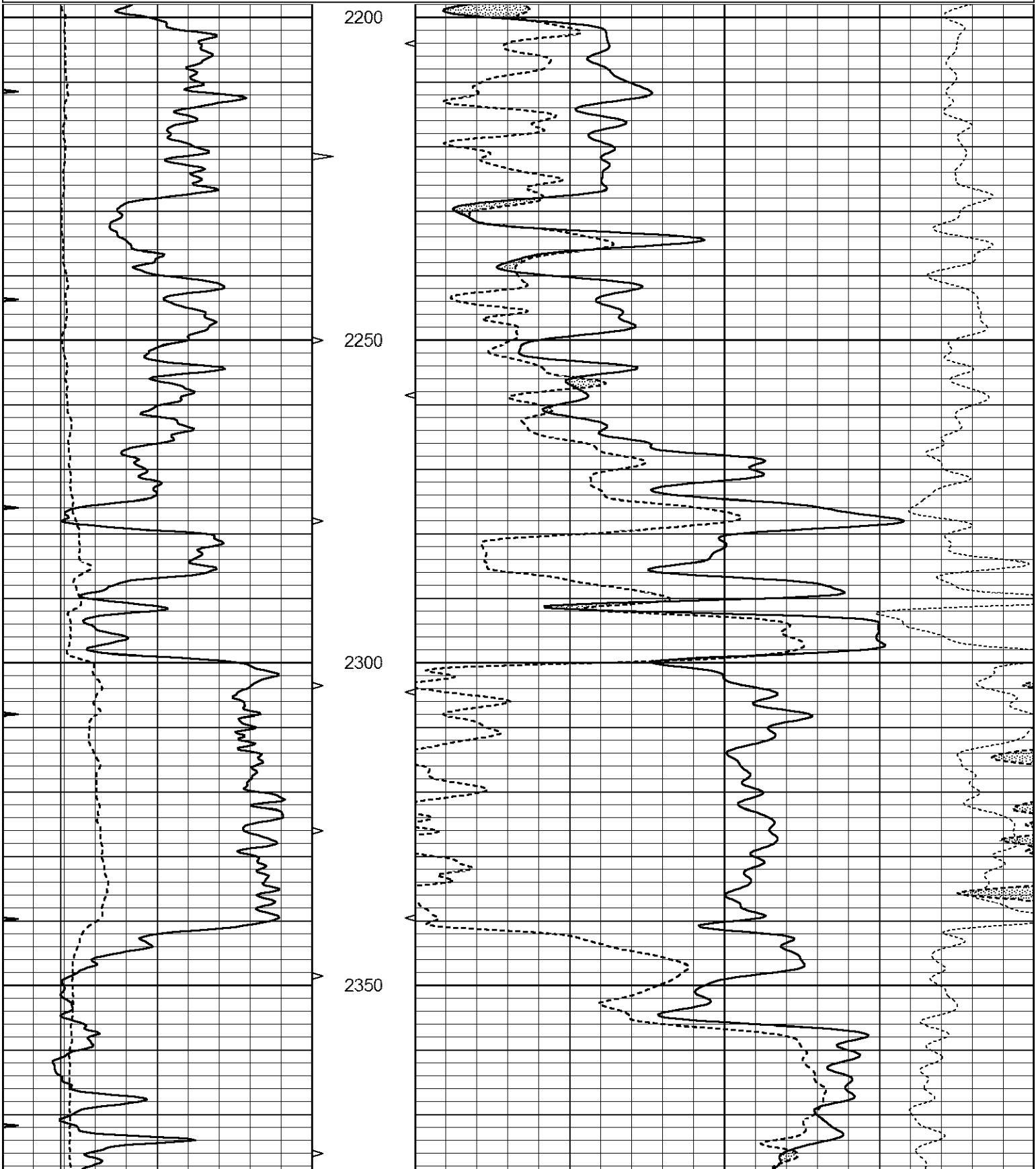
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
McPHERSON, KS. - 9 1/2 EAST TO 26TH RD. - 5 1/2 SOUTH - WEST INTO

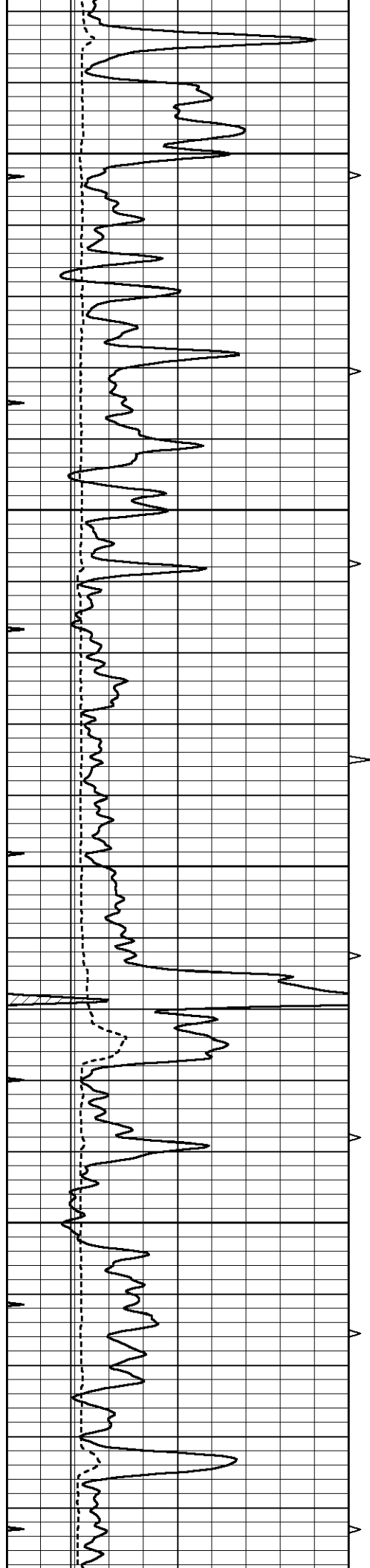


MAIN SECTION

Database File	1788ddn8.db
Dataset Pathname	pass3.1
Presentation Format	_den_neu
Dataset Creation	Wed Oct 11 20:45:51 2017
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					



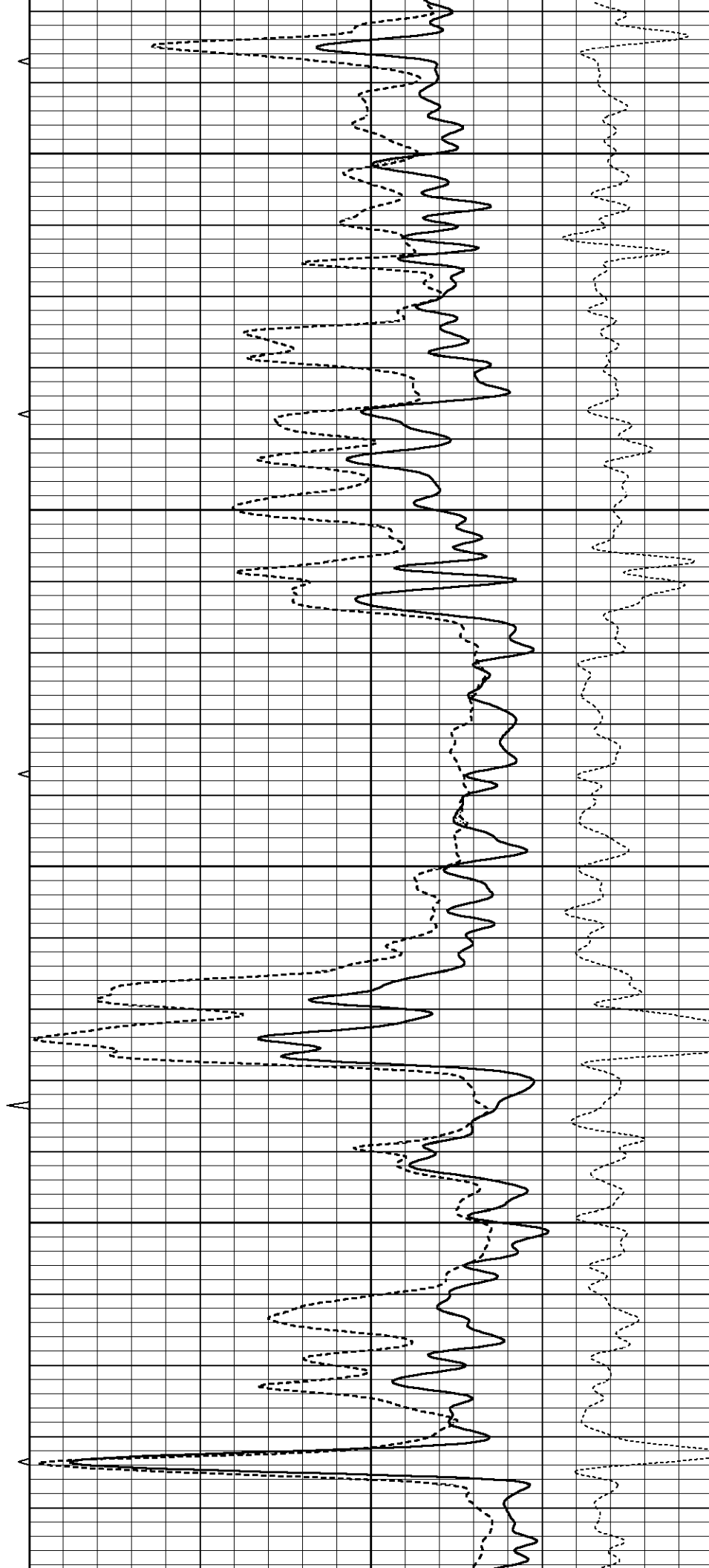


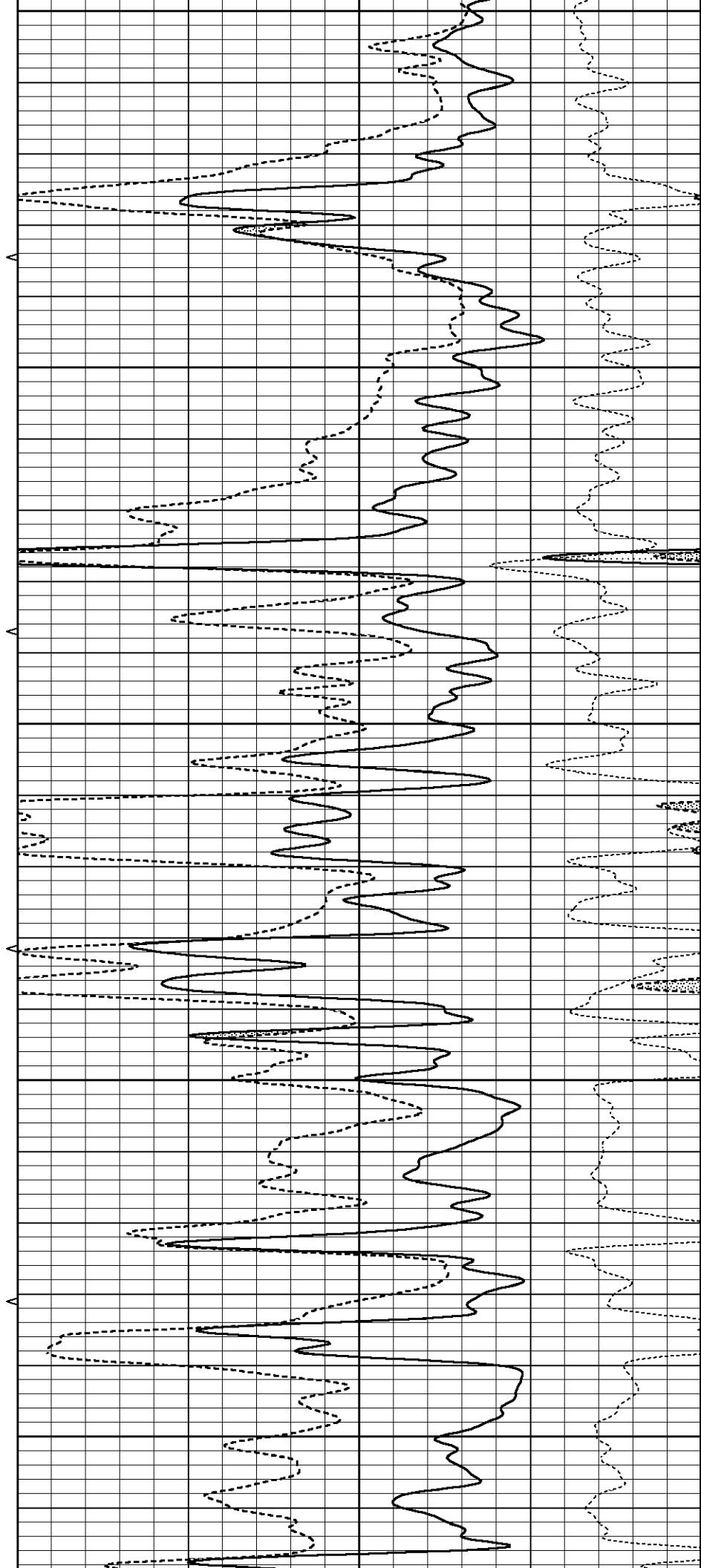
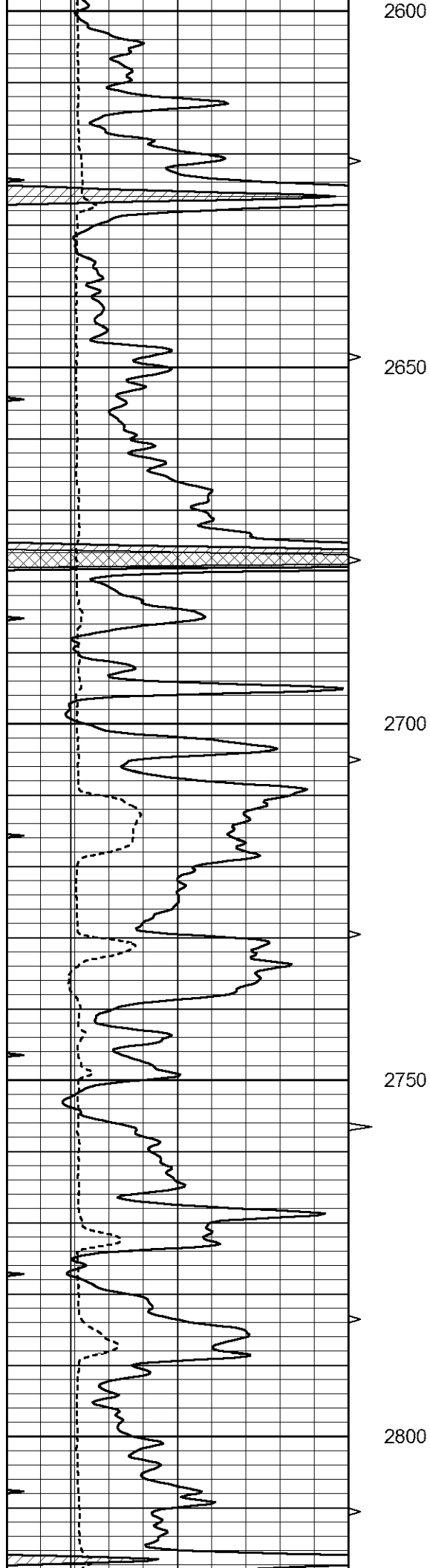
2400

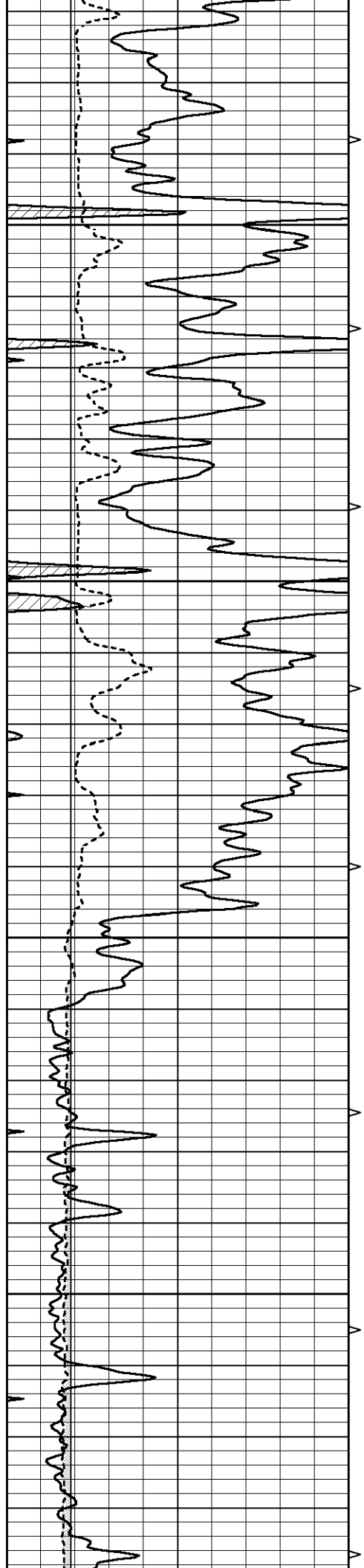
2450

2500

2550





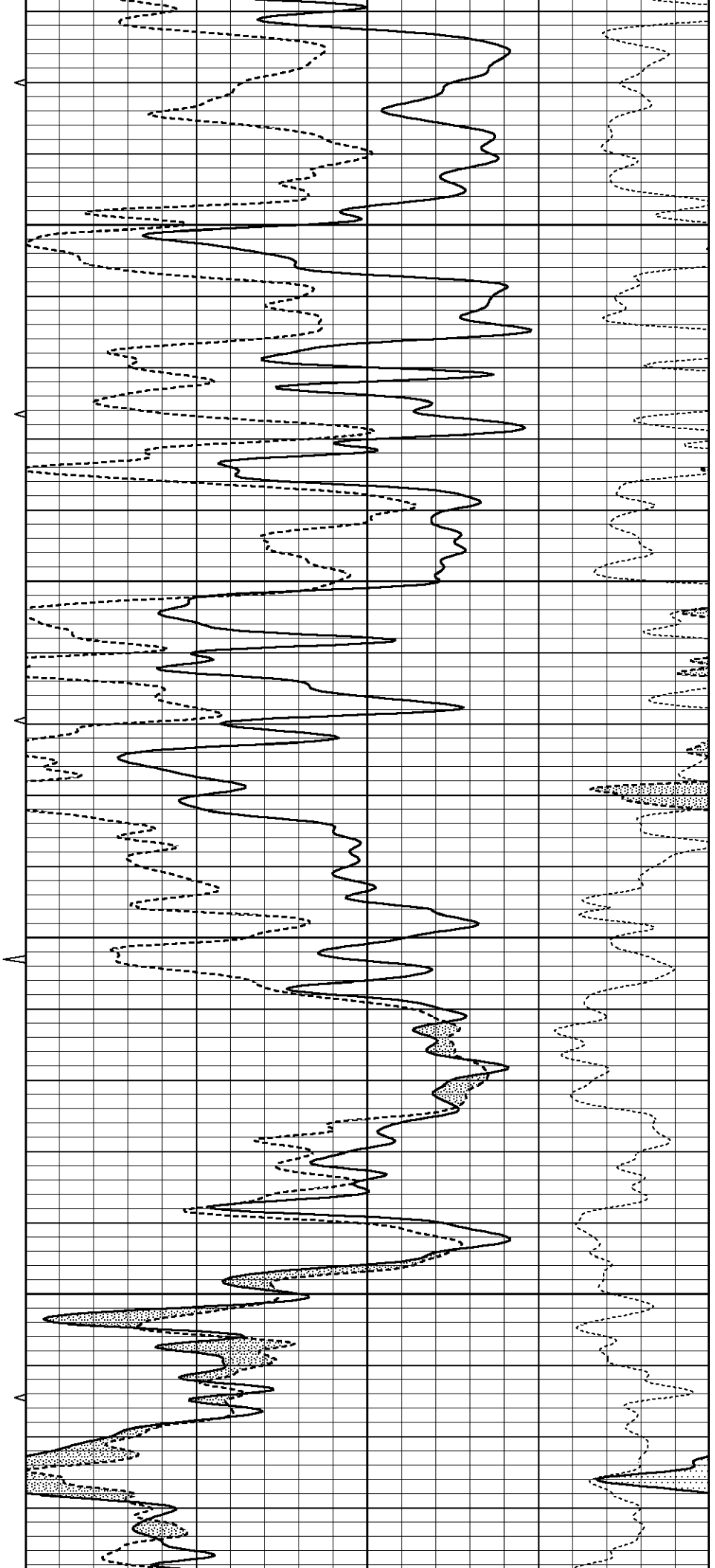


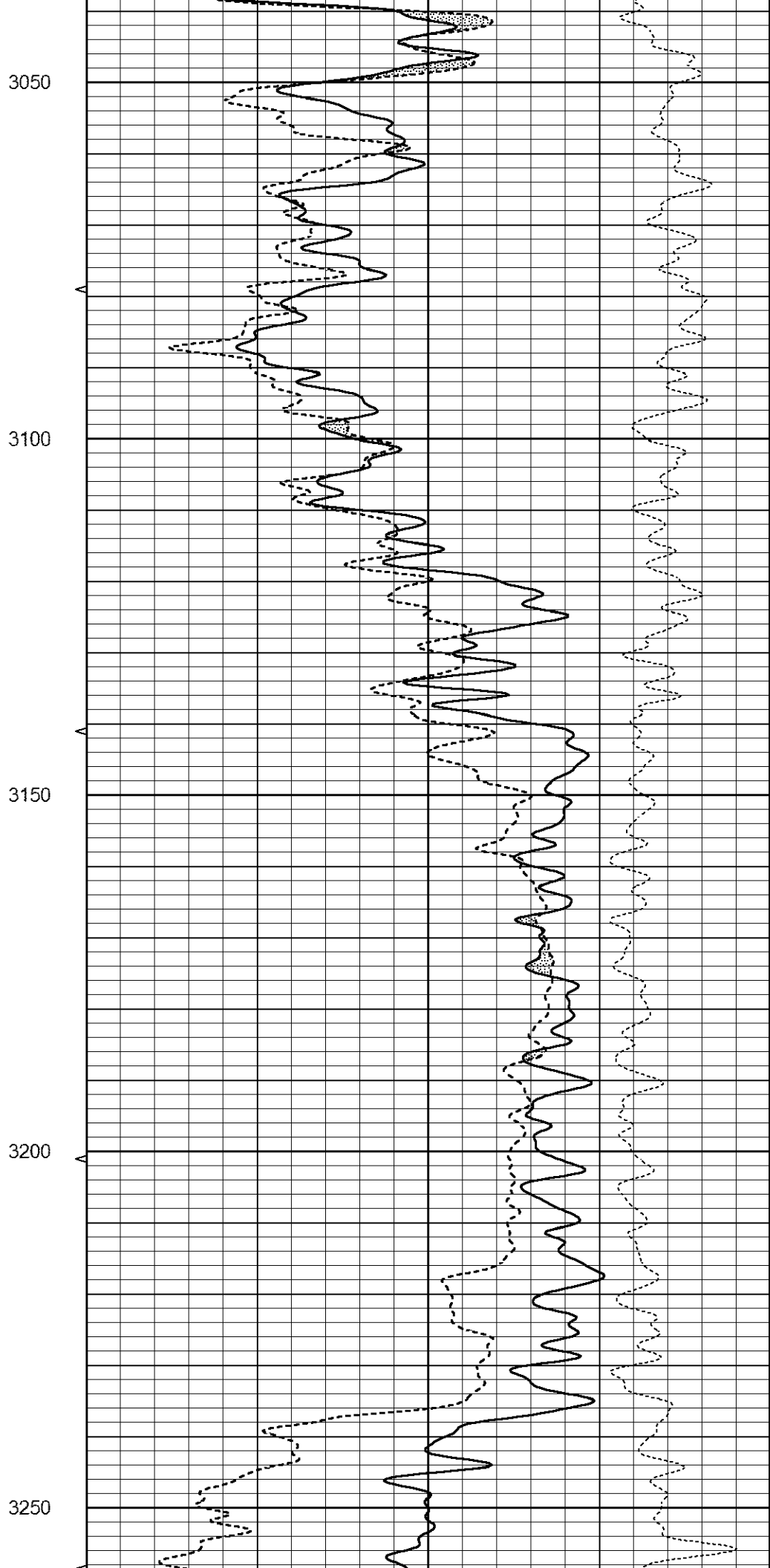
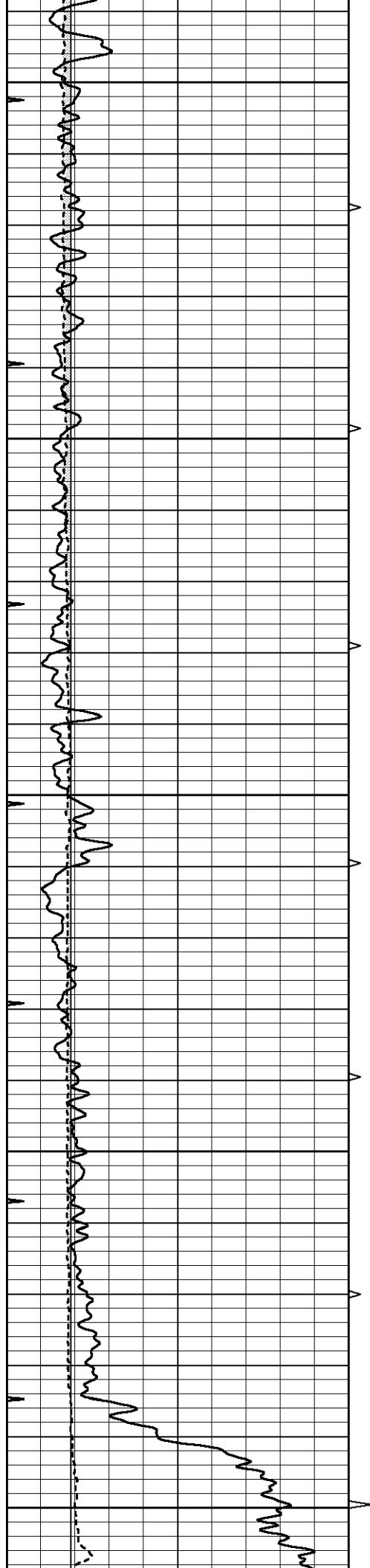
2850

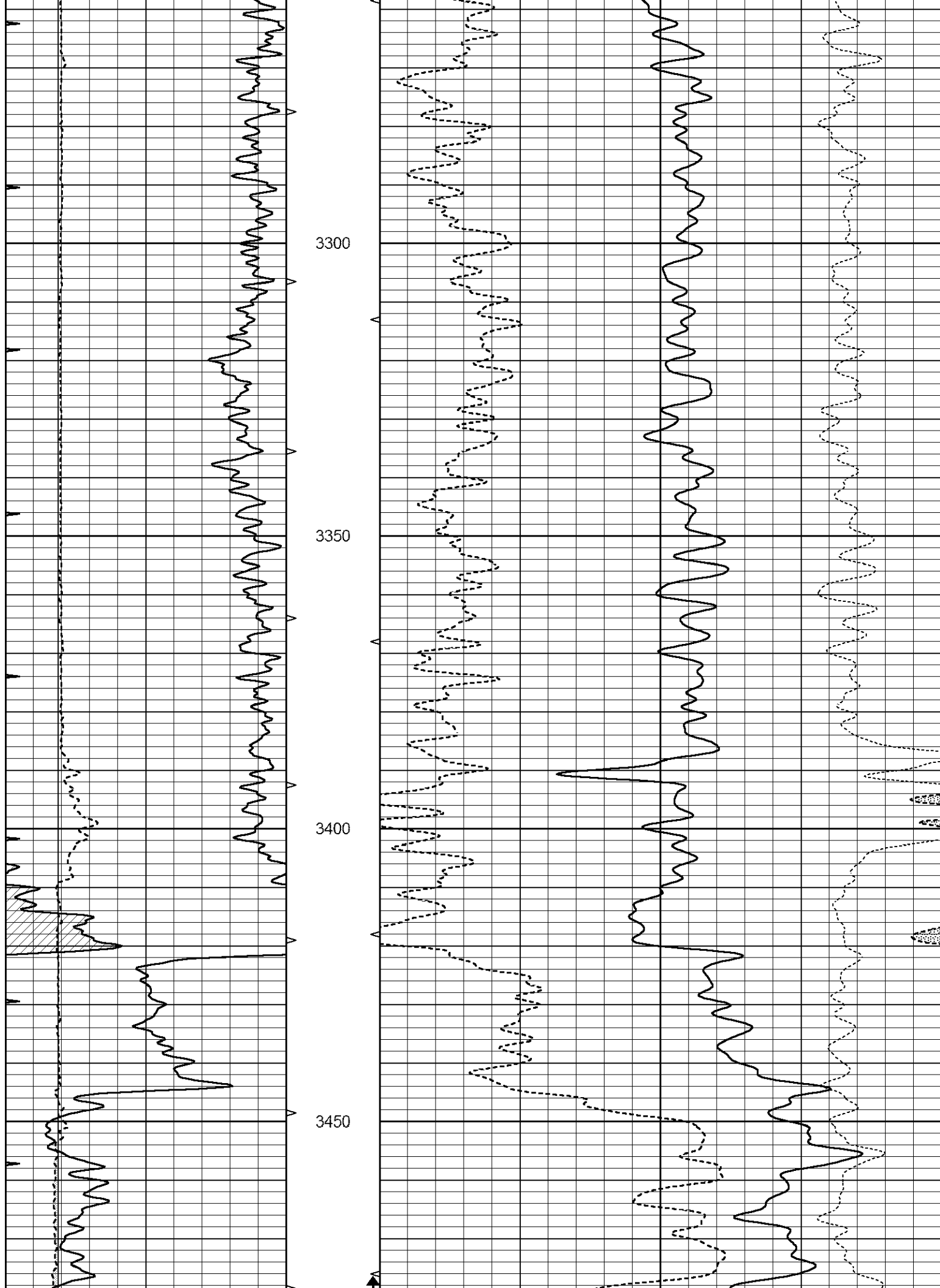
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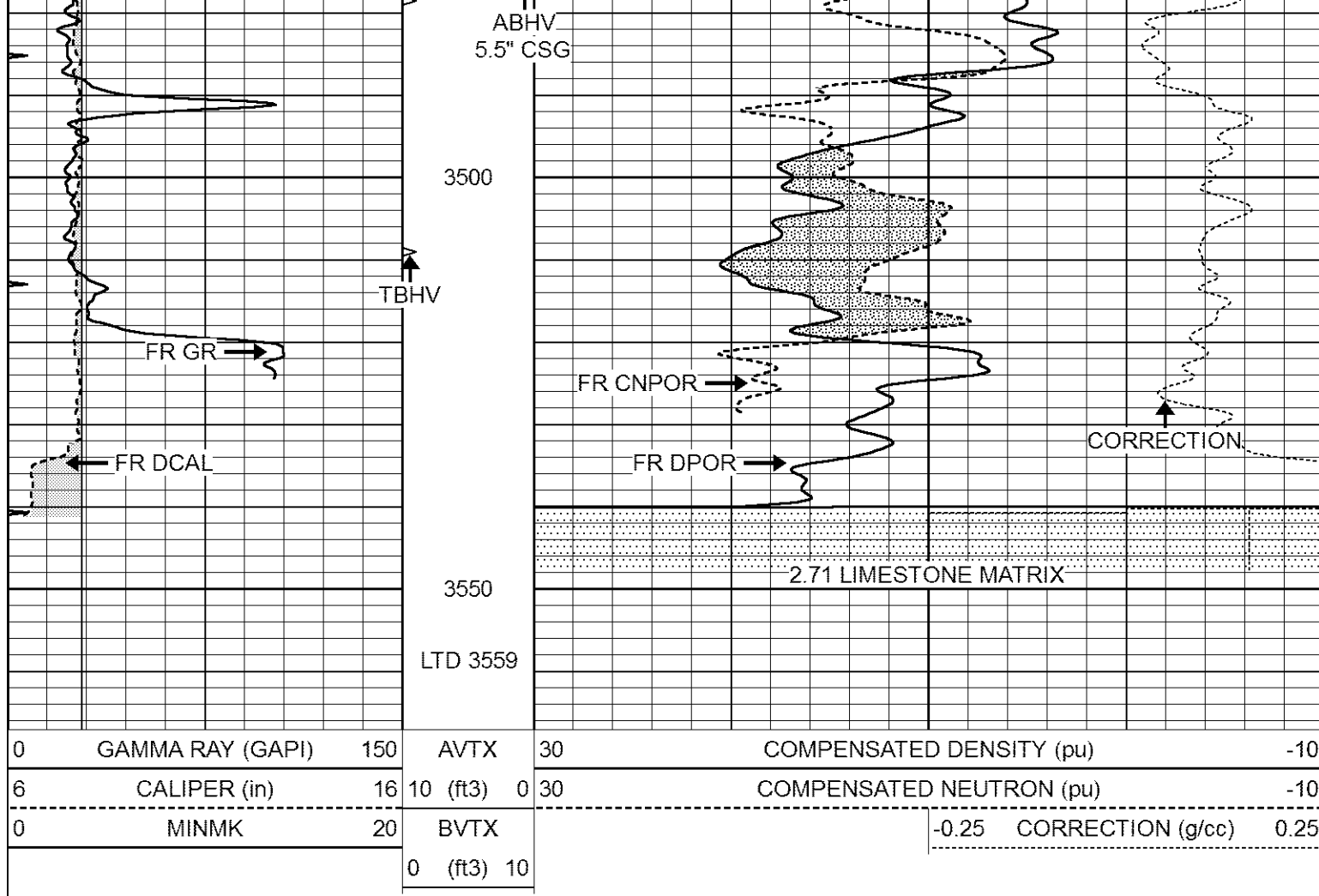
2950

3000





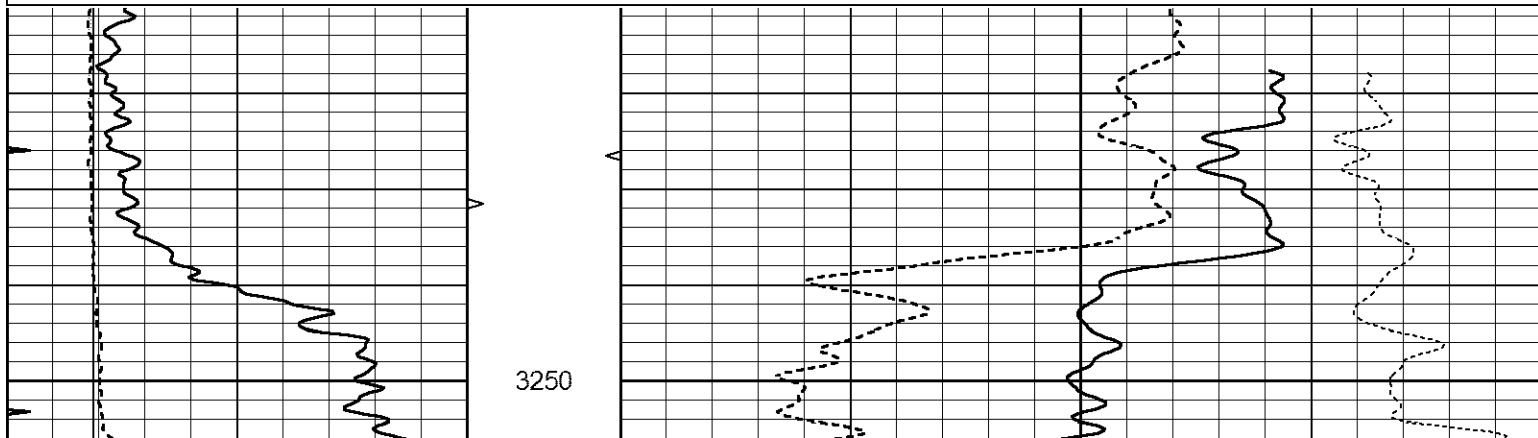


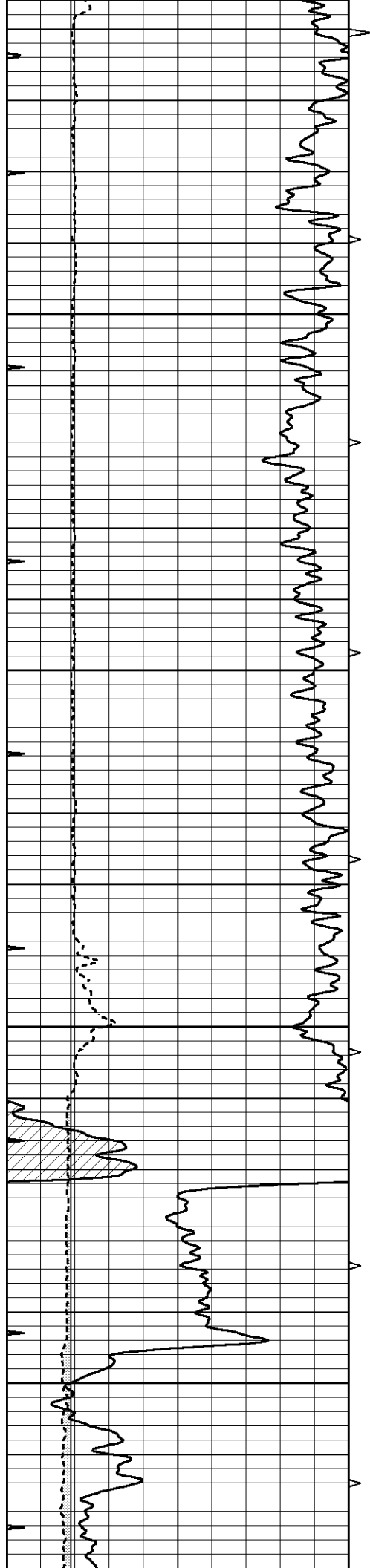


REPEAT SECTION

Database File 1788ddn8.db
 Dataset Pathname pass2.1
 Presentation Format _den_neu
 Dataset Creation Wed Oct 11 19:50:10 2017
 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			



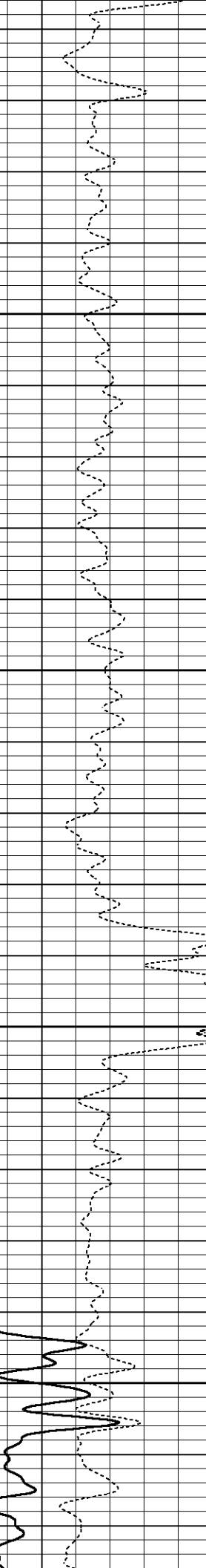
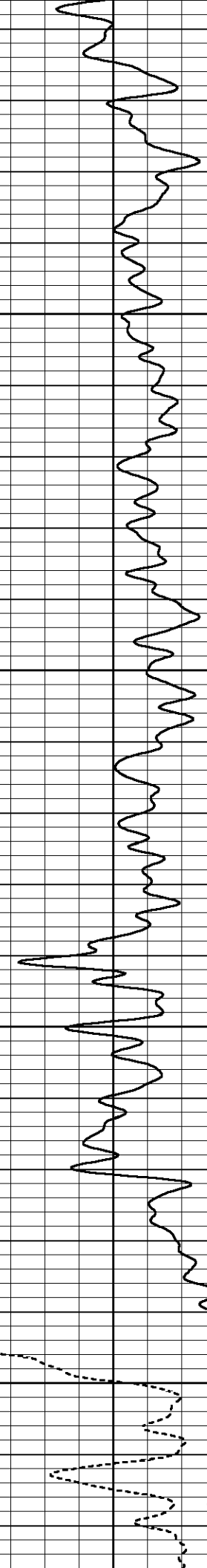
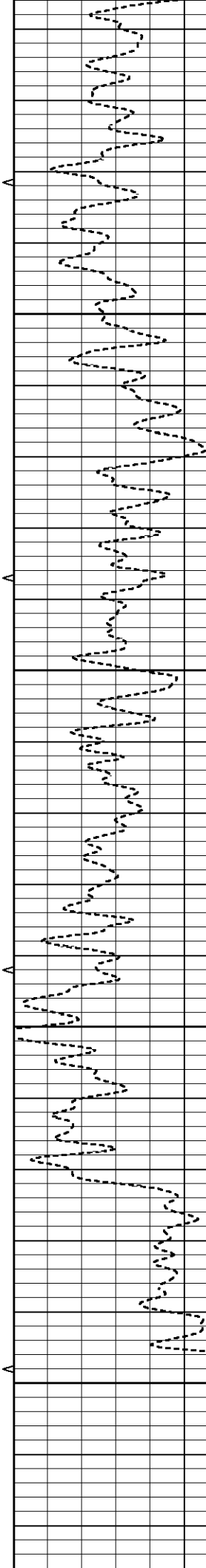


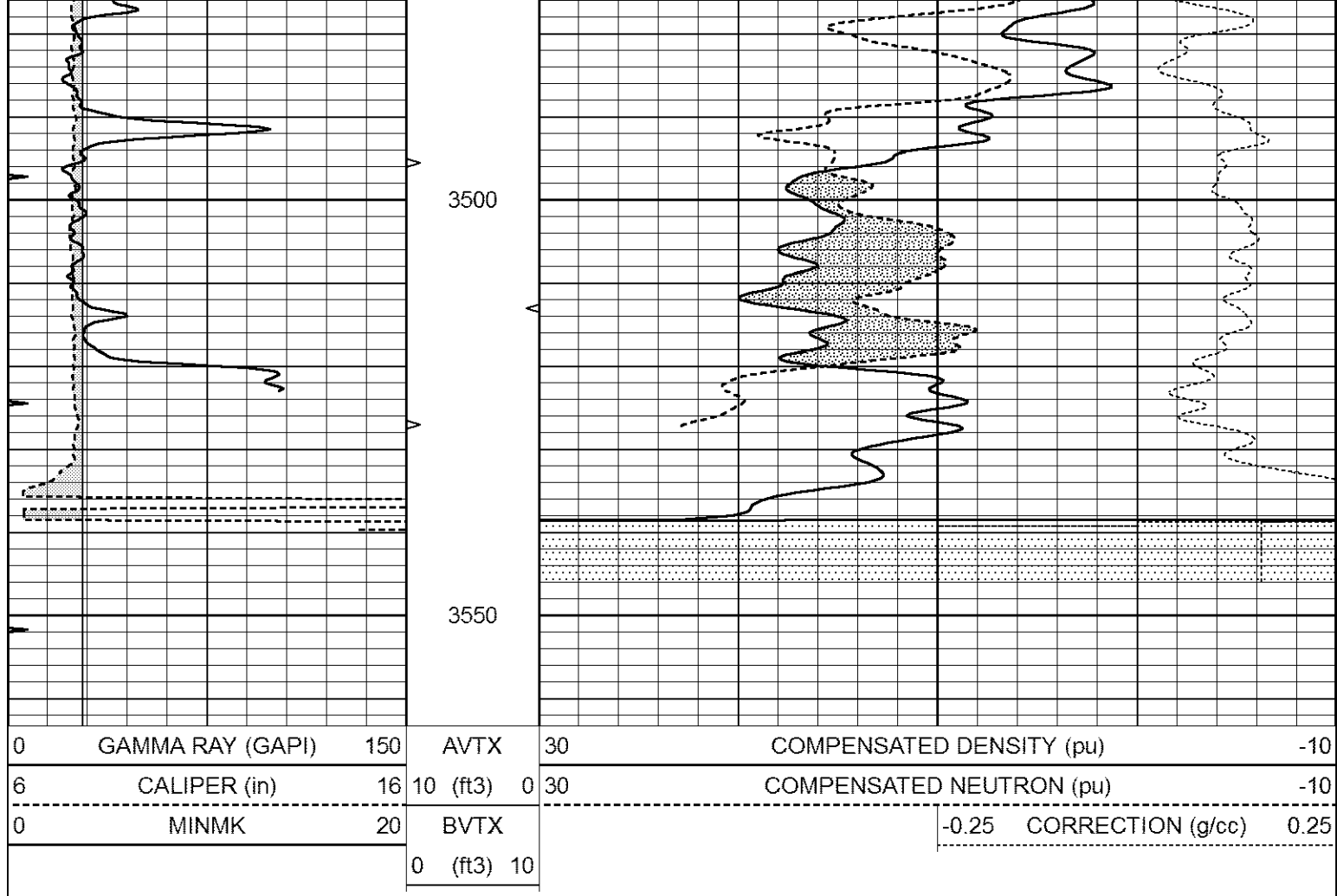
3300

3350

3400

3450





Calibration Report								
Database File	1788ddn8.db							
Dataset Pathname	pass2.1							
Dataset Creation	Wed Oct 11 19:50:10 2017							
Dual Induction Calibration Report								
Serial-Model:			FW1410-56-Probe					
Surface Cal Performed:			Tue Jul 25 12:15:33 2017					
Downhole Cal Performed:			Tue Jul 25 12:15:37 2017					
After Survey Verification Performed:			Tue Jul 25 12:15:38 2017					
Surface Calibration								
Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.008	0.765	V	1.000	400.000	mmho/m	527.061	-3.201
Medium	-0.056	0.761	V	1.000	464.000	mmho/m	567.187	32.510
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.005	0.624	V	0.000	400.000	mmho/m	645.611	-3.034
Medium	0.012	0.721	V	0.000	464.000	mmho/m	653.591	-7.532
Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.647	301.329	mmho/m	-0.780	336.378	mmho/m	1.117	-0.058
Medium	38.256	411.013	mmho/m	39.046	441.706	mmho/m	1.080	-2.280
113		7.471	V		1500.000	Ohm-m		

LL3	0.001	V	20.000	Ohm-m				
	-7.085	V	6000.000	mmho-m				
After Survey Verification								
	Readings		Targets		Results			
	Zero	Cal		Zero	Cal	m'	b'	
Deep	0.000	0.000	mmho/m	-0.647	301.329	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	38.256	411.013	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		
Litho Density Calibration Report								
Serial: 140704								
Model: V4_10P								
Source Number: 74GBq-19								
Master Calibration			Performed: Wed Feb 11 18:53:41 2015					
	Background		Aluminum		Magnesium			
Window 1	613.01		6027.40		27508.60	cps		
Window 2	48.21		1424.77		7132.66	cps		
Window 4	266.48		1373.19		5767.15	cps		
Window 5	622.07		10090.30		18937.90	cps		
Window 6	49.07		1682.84		3271.18	cps		
Window 8	298.04		3248.38		5980.58	cps		
Bulk Density	-		2.6020		1.6830	g/cc		
Pe	-		3.0000		2.5070	b/e		
LS Alpha:	: -1.8451		SS Alpha:	: -0.7542		LS CPE:	: 1.0882	
LS Beta:	: 138648.8473		SS Beta:	: 21960.9250		SS CPE:	: 1.5181	
Before Survey Background Counts Verification			Performed: Wed Dec 31 18:00:00 1969					
Window 1	0.00		cps					
Window 2	0.00		cps					
Window 4	0.00		cps					
Window 5	0.00		cps					
Window 6	0.00		cps					
Window 8	0.00		cps					
After Survey Background Counts Verification			Performed: Wed Dec 31 18:00:00 1969					
Window 1	0.00		cps					
Window 2	0.00		cps					
Window 4	0.00		cps					
Window 5	0.00		cps					
Window 6	0.00		cps					
Window 8	0.00		cps					
Lithodensity Caliper Calibration			Performed: Wed Feb 11 18:53:41 2015					
Results	Readings		References (in)		Gain		Offset	
	Low	High	Low	High				
	1107.5	7124.1	8.0	15.0	0.0		6.3	
Before Survey Caliper Verification			Performed:					

	Reference	Reading
Caliper (in)		

After Survey Caliper Verification	Performed:
Reference	Reading
Caliper (in)	

Compensated Neutron Calibration Report			
Serial Number:		080621PMC	
Tool Model:		NABORS	
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:	Probe1		
Performed:	Tue Jul 25 12:16:33 2017		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.4000	GAPI/cps	