

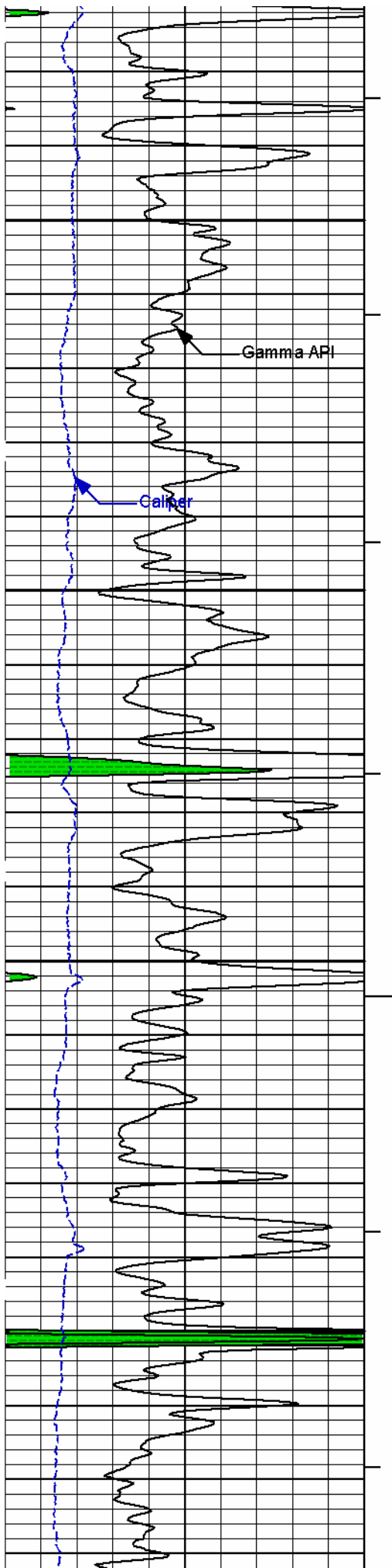
HALLIBURTON

DUAL SPACED NEUTRON
SPECTRAL DENSITY
LOG

COMPANY		RAYDON EXPLORATION, INC.	
WELL		JOSEFIAK TRUST 1-22	
FIELD/BLOCK		WILDCAT	
COUNTY		PAWNEE	
STATE		KANSAS	
Permanent Datum		GL	Elev. 2069.0 ft
Log measured from		KB	Elev. 2078.0 ft
Drilling measured from		KB	D.F. 2076.0 ft
Date		08-Mar-13	G.L. 2069.0 ft
Run No.		ONE	
Depth - Driller		4387.00 ft	
Depth - Logger		4390.0 ft	
Bottom - Logged Interval		4346.0 ft	
Top - Logged Interval		3300.0 ft	
Casing - Driller		8.626 in	@
Casing - Logger		1218.0 ft	@
Bit Size		7.875 in	@
Type Fluid in Hole		WATER BASED MUD	
Density	Viscosity	9.2 ppq	56.00 s/qt
PH	Fluid Loss	11.50 pH	1.1 optm
Source of Sample		FLOWLINE	
Rm @ Meas. Temperature		0.570 ohmm	@ 70.00 degF
Rmf @ Meas. Temperature		0.48 ohmm	@ 70.00 degF
Rmc @ Meas. Temperature		0.650 ohmm	@ 70.00 degF
Source Rmf	Rmc	MEASURED	MEASURED
Rm @ BHT		0.38 ohmm	@ 108.0 degF
Time Since Circulation		6.0 hr	
Time on Bottom		08-Mar-13 16:28	
Max. Rec. Temperature		108.0 degF	@ 4390.0 ft
Equipment	Location	10546696	LIBERAL
Recorded By		THOMAS HYDE	
Witnessed By		E. GRIEVES	

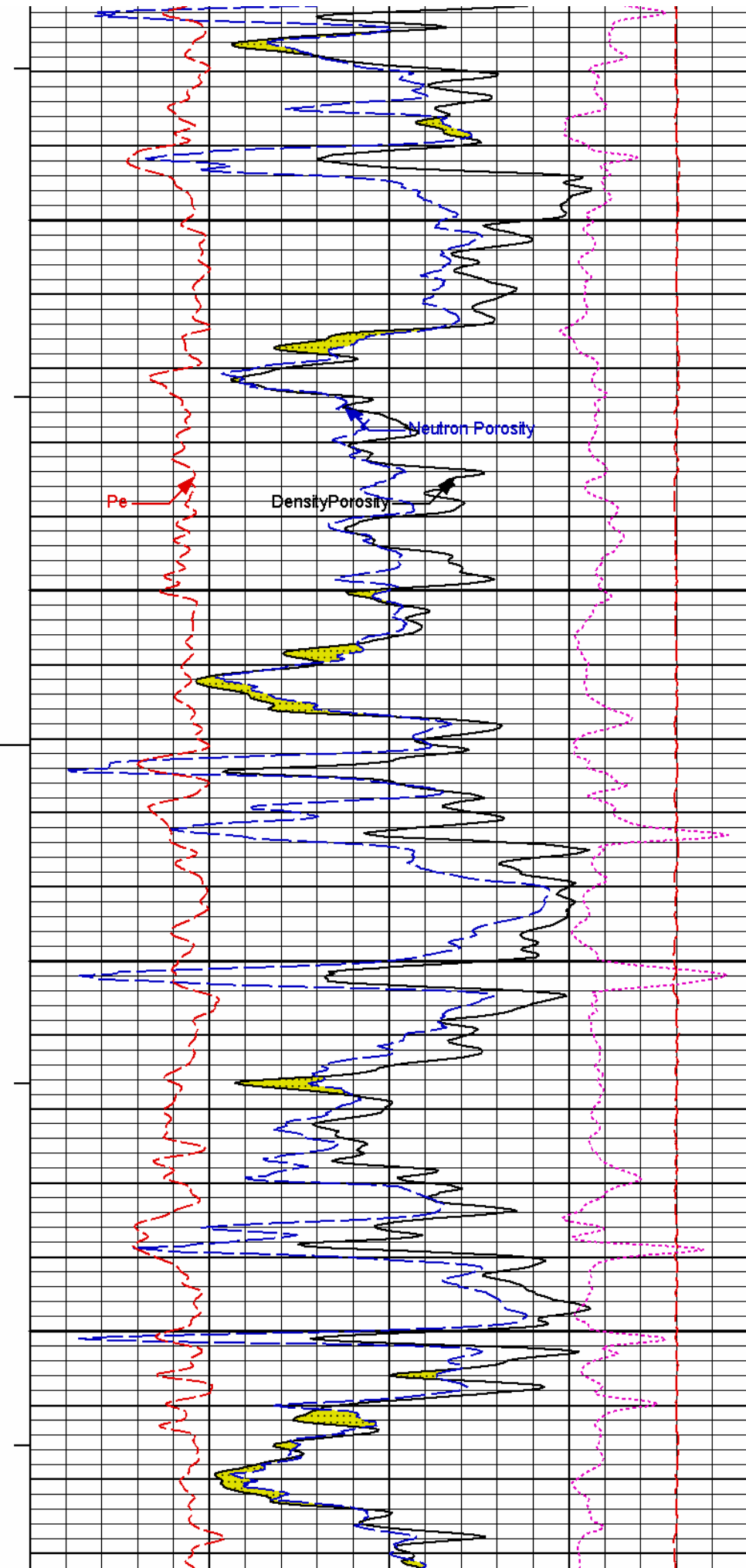
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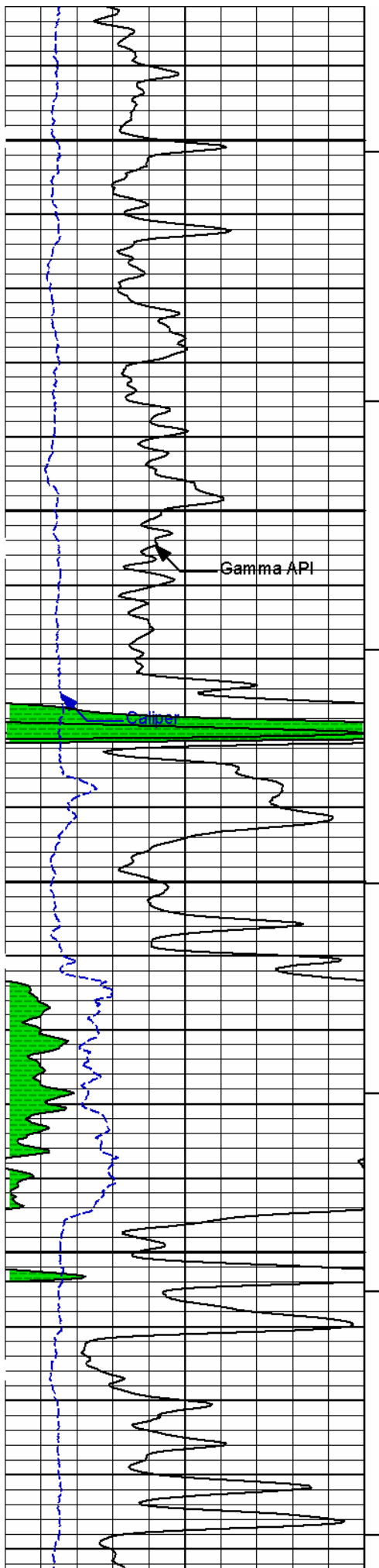
Service Ticket No.: 900263666				API Serial No.: 15-145-21709-00-00				PGM Version: WL INSITE R3.8.0 (Build 2)							
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE								RESISTIVITY SCALE CHANGES							
Date		Sample No.						Type Log		Depth		Scale Up Hole		Scale Down Hole	
Depth-Driller															
Type Fluid in Hole															
Density		Viscosity													
Ph		Fluid Loss													
Source of Sample								RESISTIVITY EQUIPMENT DATA							
Rm @ Meas. Temp		@		@				Run No.		Tool Type & No.		Pad Type		Tool Pos.	
Rmf @ Meas. Temp.		@		@											
Rmc @ Meas. Temp.		@		@											
Source Rmf		Rmc													
Rm @ BHT		@		@											
Rmf @ BHT		@		@											
Rmc @ BHT		@		@											
EQUIPMENT DATA															
GAMMA				ACOUSTIC				DENSITY				NEUTRON			
Run No.		ONE		Run No.				Run No.		ONE		Run No.		ONE	
Serial No.		11048627		Serial No.				Serial No.		10950489		Serial No.		11019643	
Model No.		GTET		Model No.				Model No.		SDLT		Model No.		DSNT	
Diameter		3.625"		No. of Cent.				Diameter		4.5"		Diameter		3.625"	
Detector Model No.		T-102		Spacing				Log Type		GAM-GAM		Log Type		NEU-NEU	
Type		SCINT						Source Type		Cs137		Source Type		Am 241Be	



3400

3500



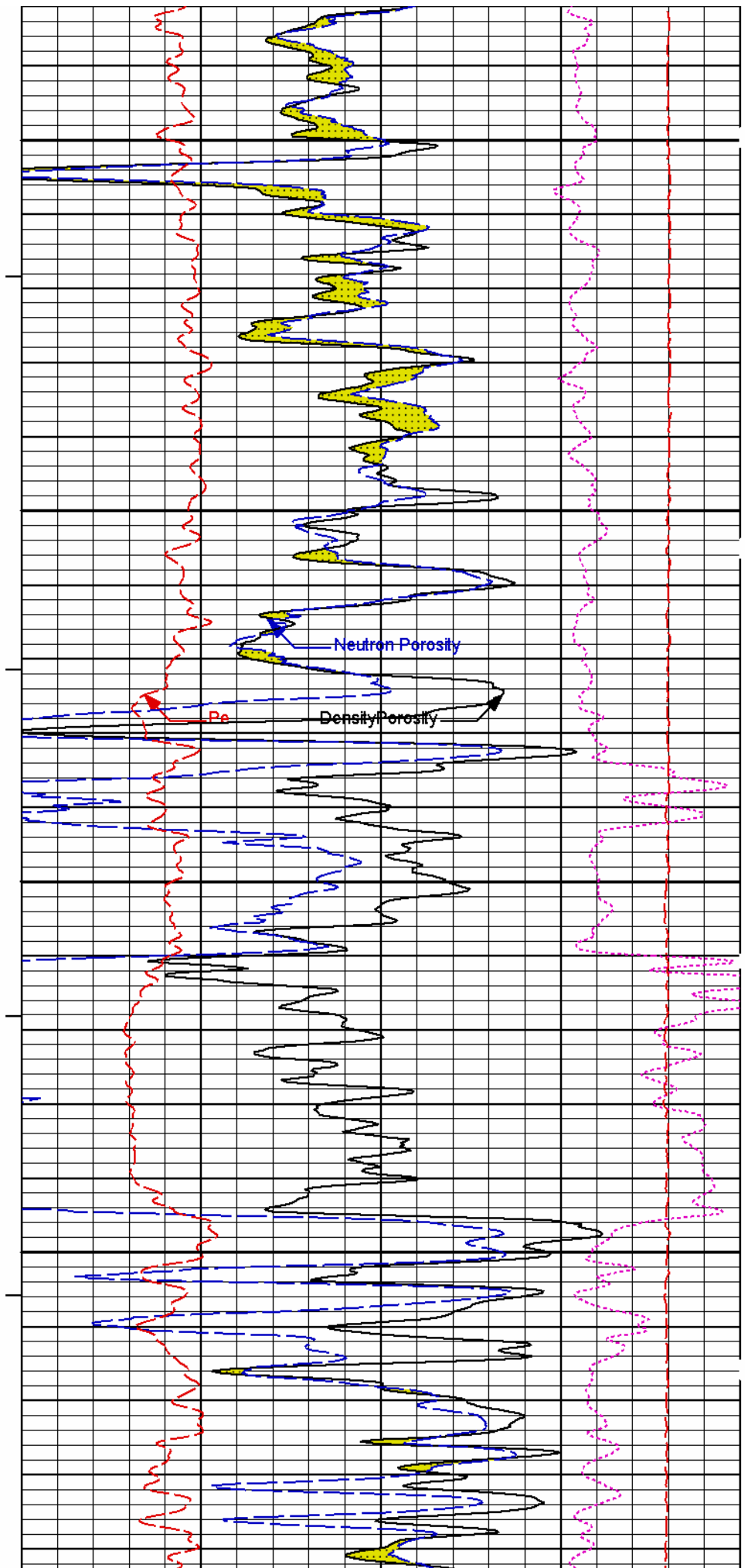


3600

Gamma API

Caliper

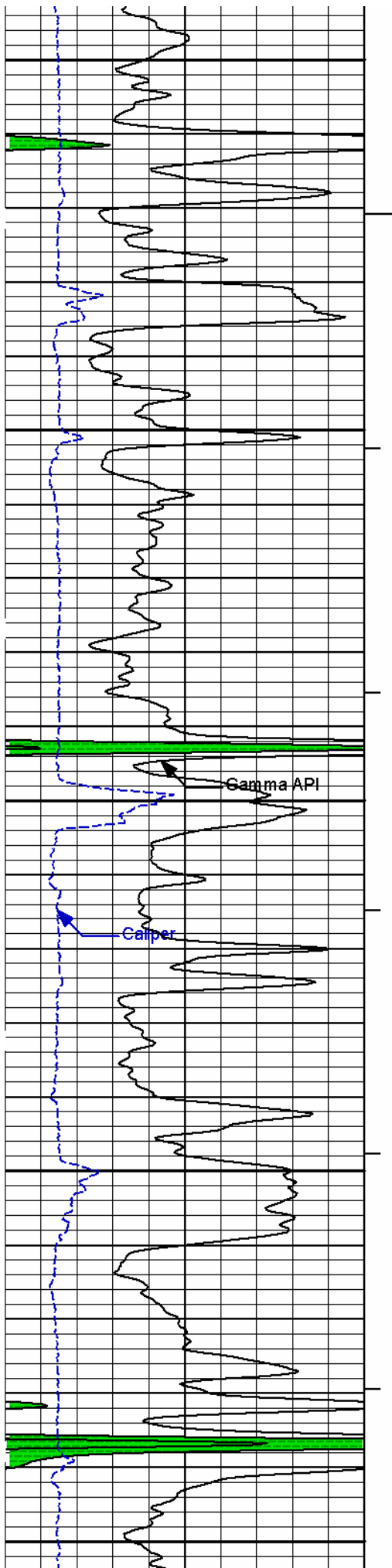
3700



Neutron Porosity

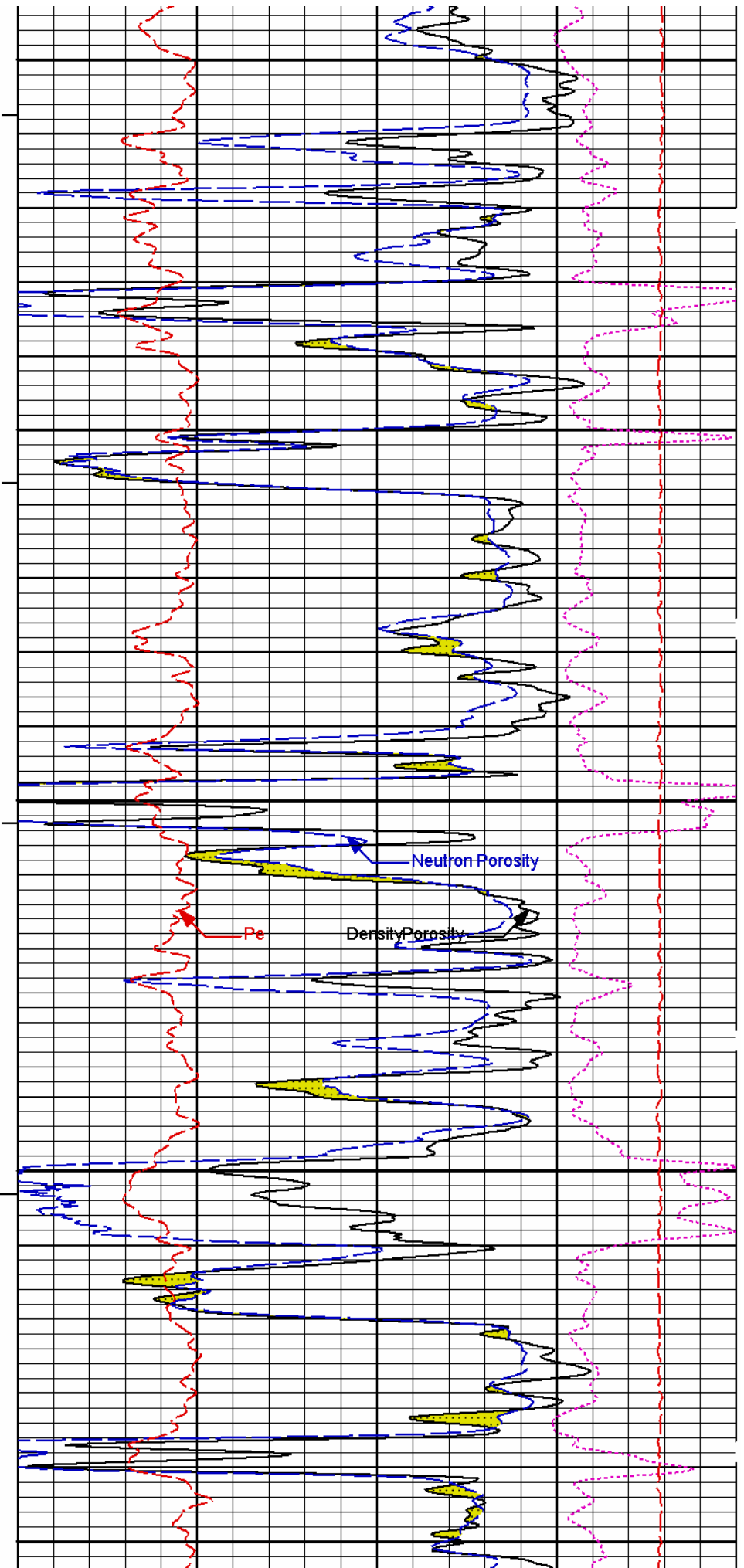
Density Porosity

Po



3800

3900



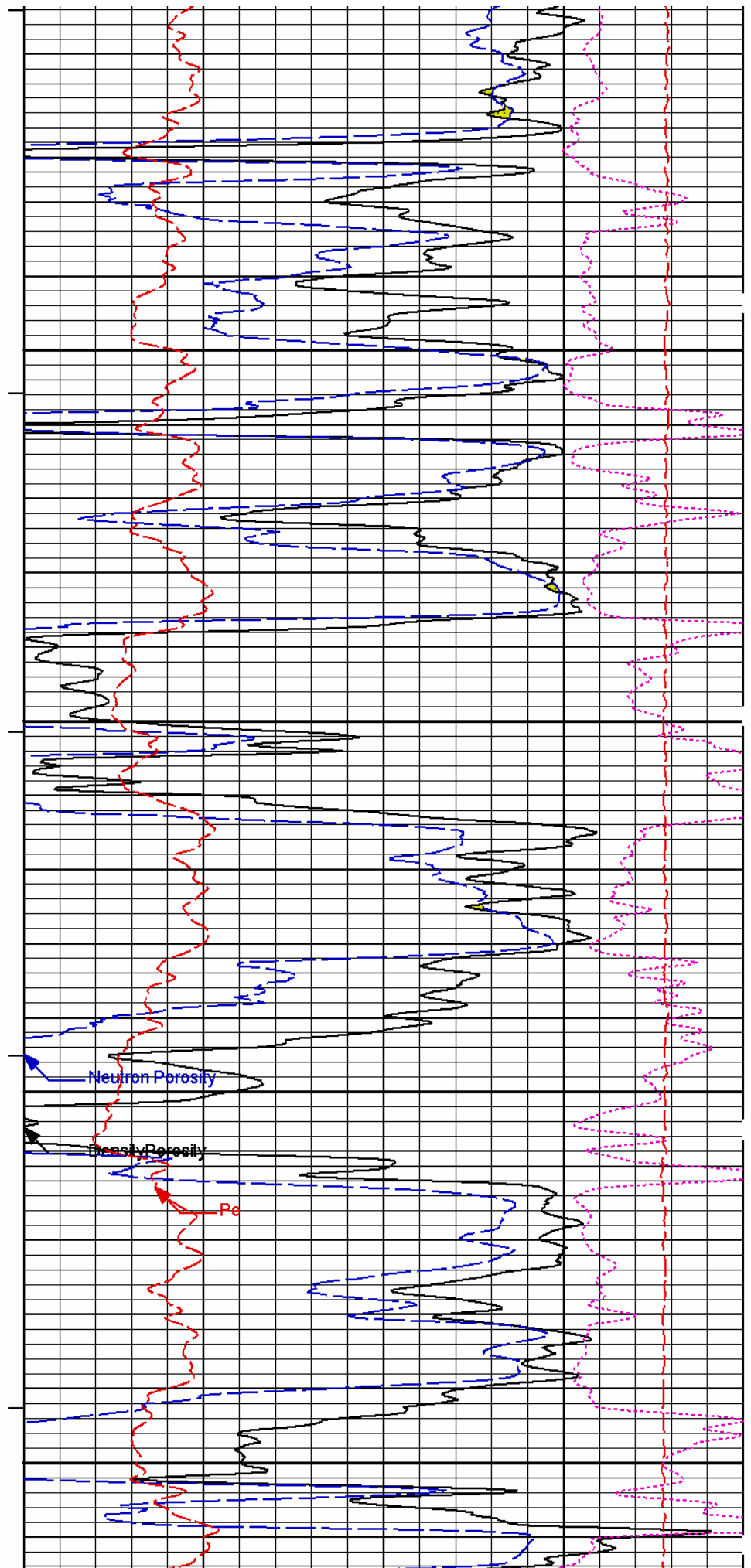
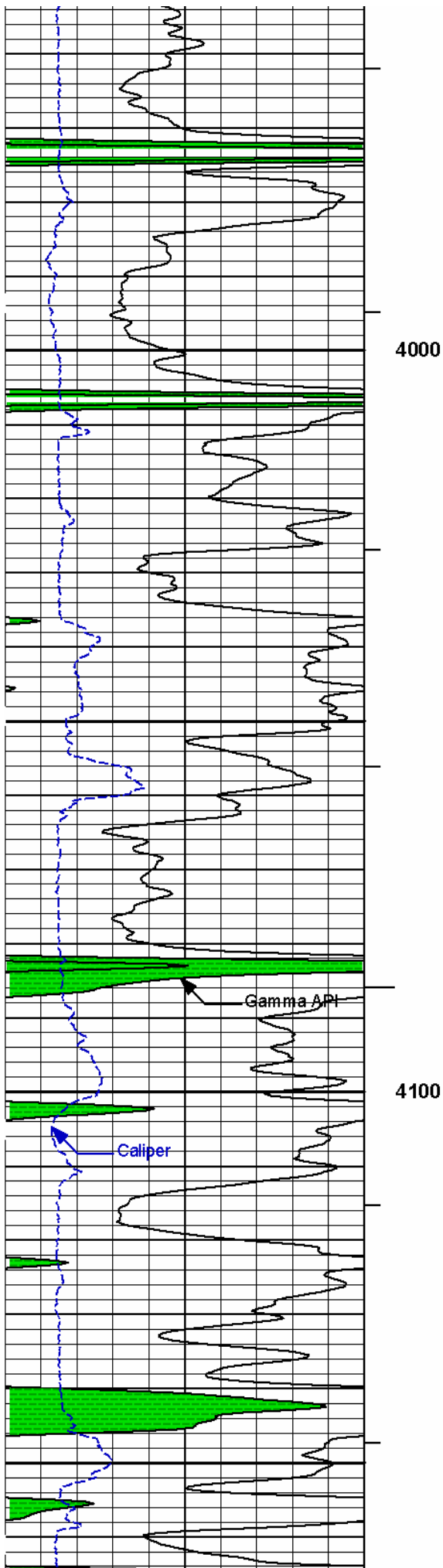
Gamma API

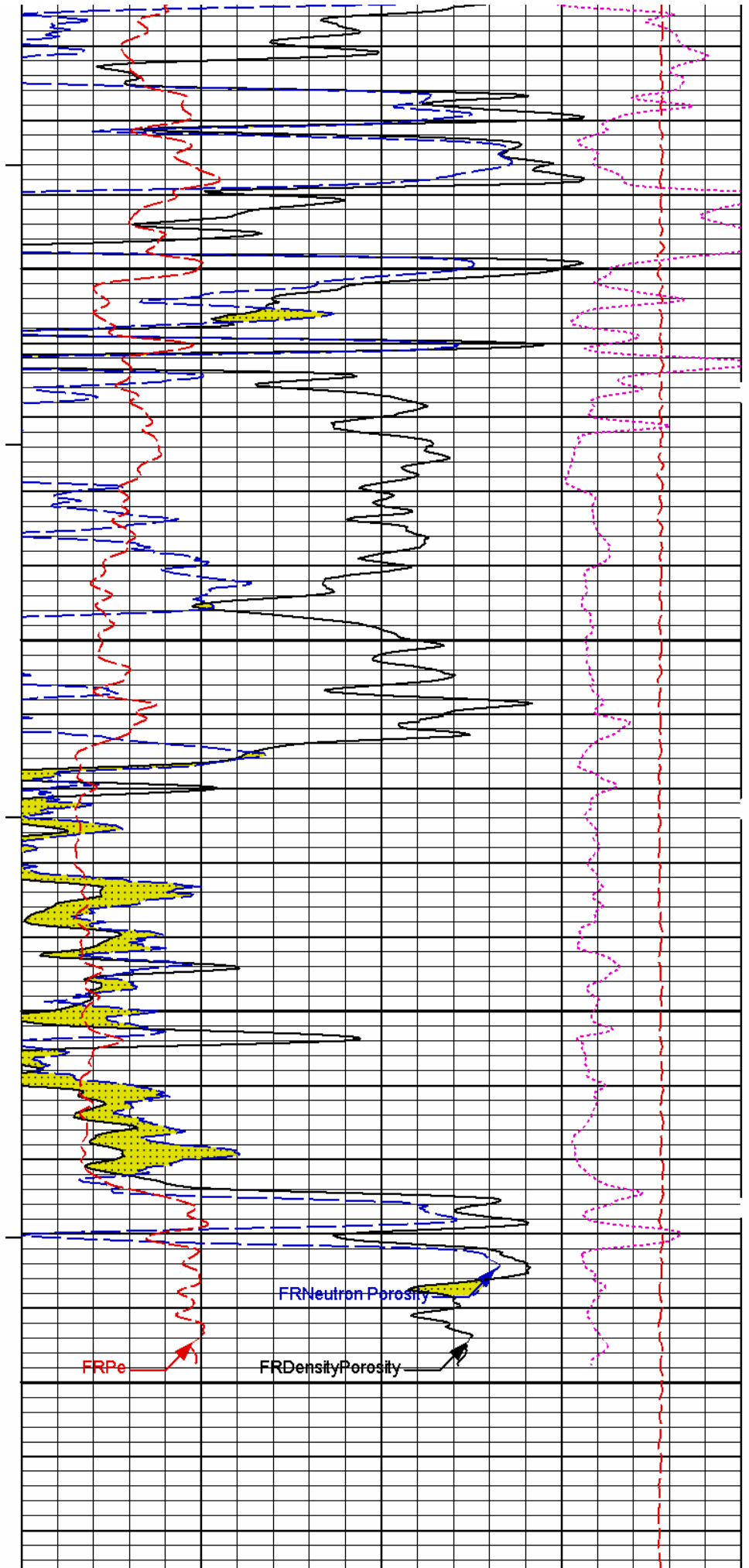
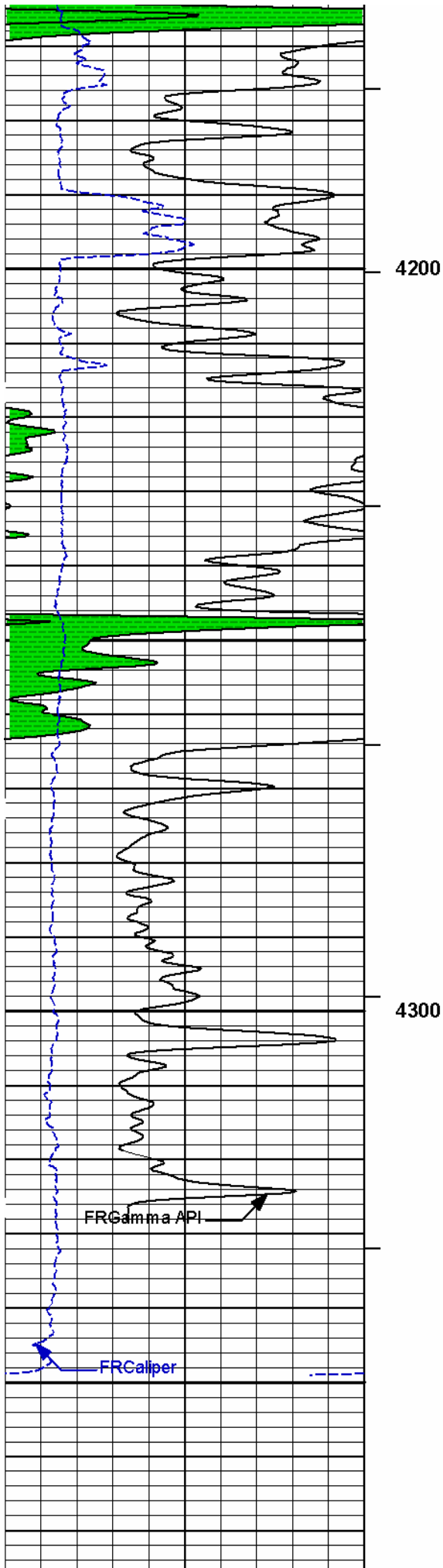
Caliper

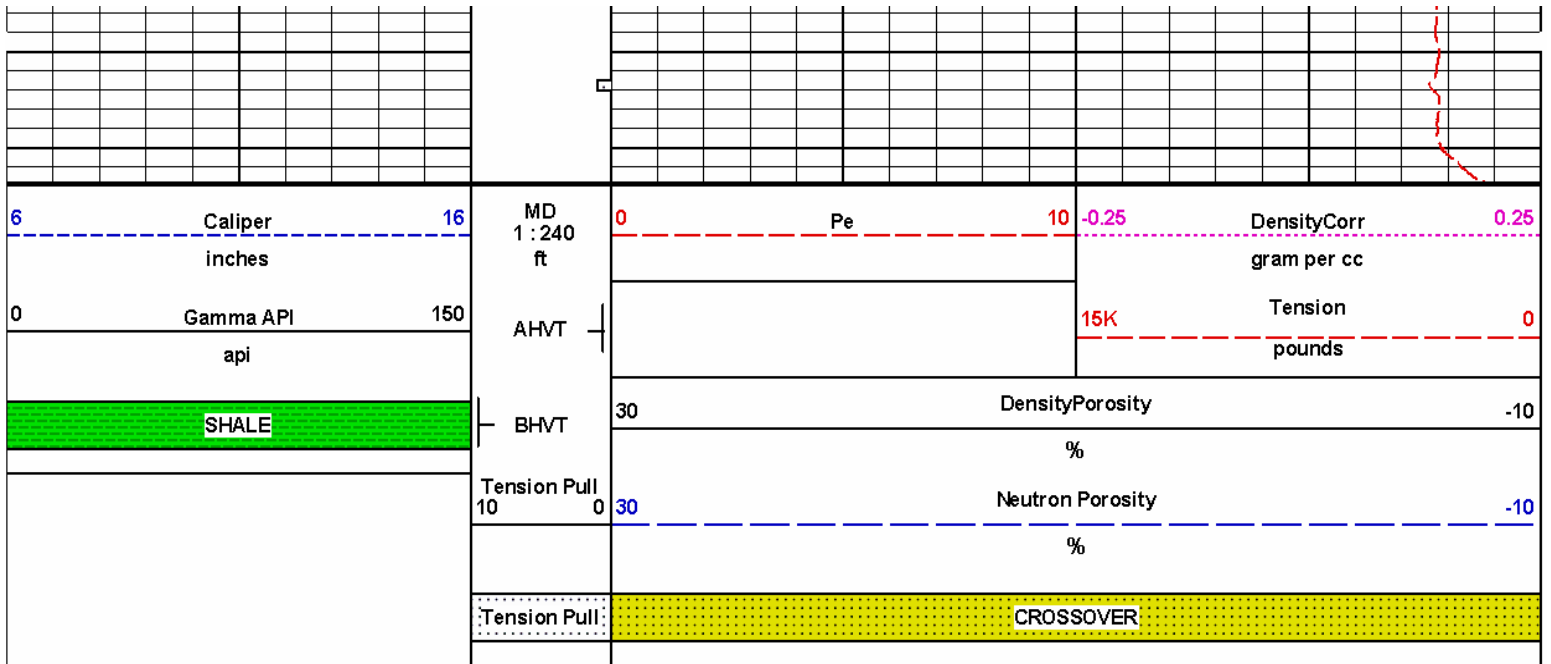
Neutron Porosity

Density Porosity

Pe







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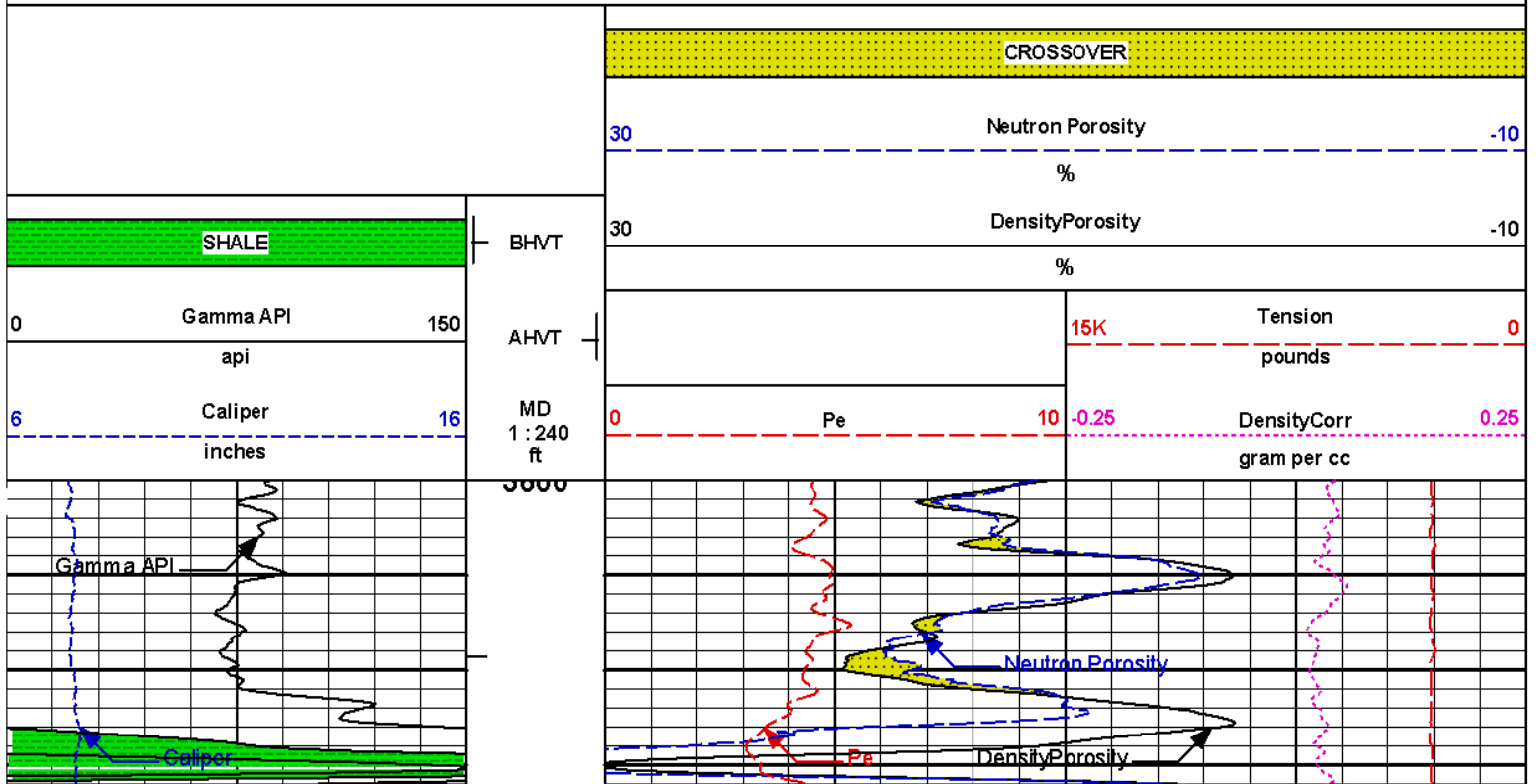
Plot Time: 08-Mar-13 20:03:07
Plot Range: 3300 ft to 4393.67 ft
Data: JOSEFIAK_T_1_22\Well Based\DAQ-0001-004\
Plot File: \\PORO\Poros_IQ_5_MAIN_LIB

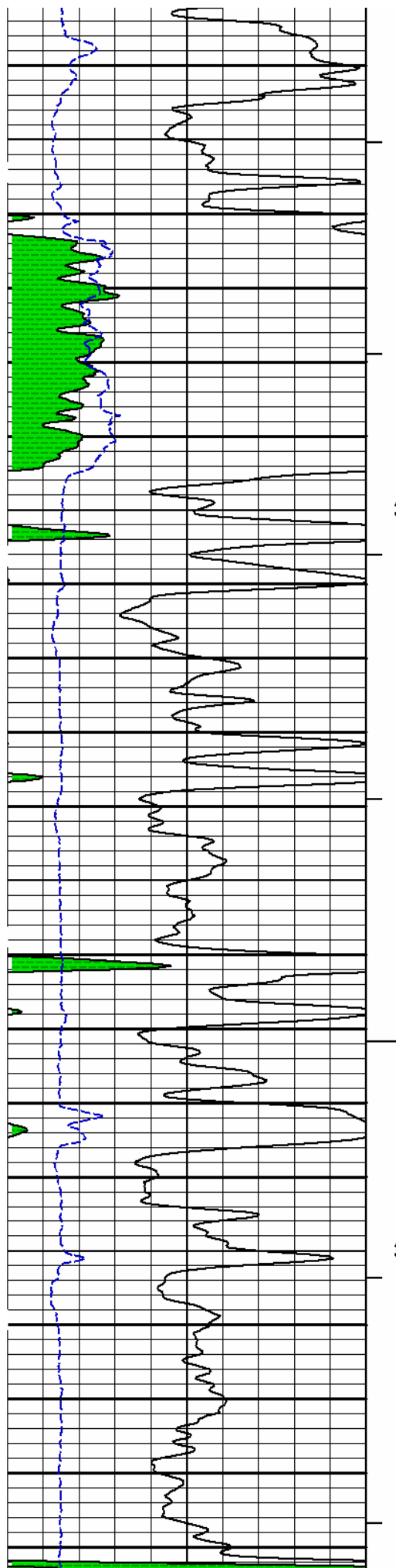
5 INCH MAIN LOG

HALLIBURTON

Plot Time: 08-Mar-13 20:03:08
Plot Range: 3600 ft to 4394.5 ft
Data: JOSEFIAK_T_1_22\Well Based\DAQ-0001-003\
Plot File: \\PORO\Poros_IQ_5_REP_LIB

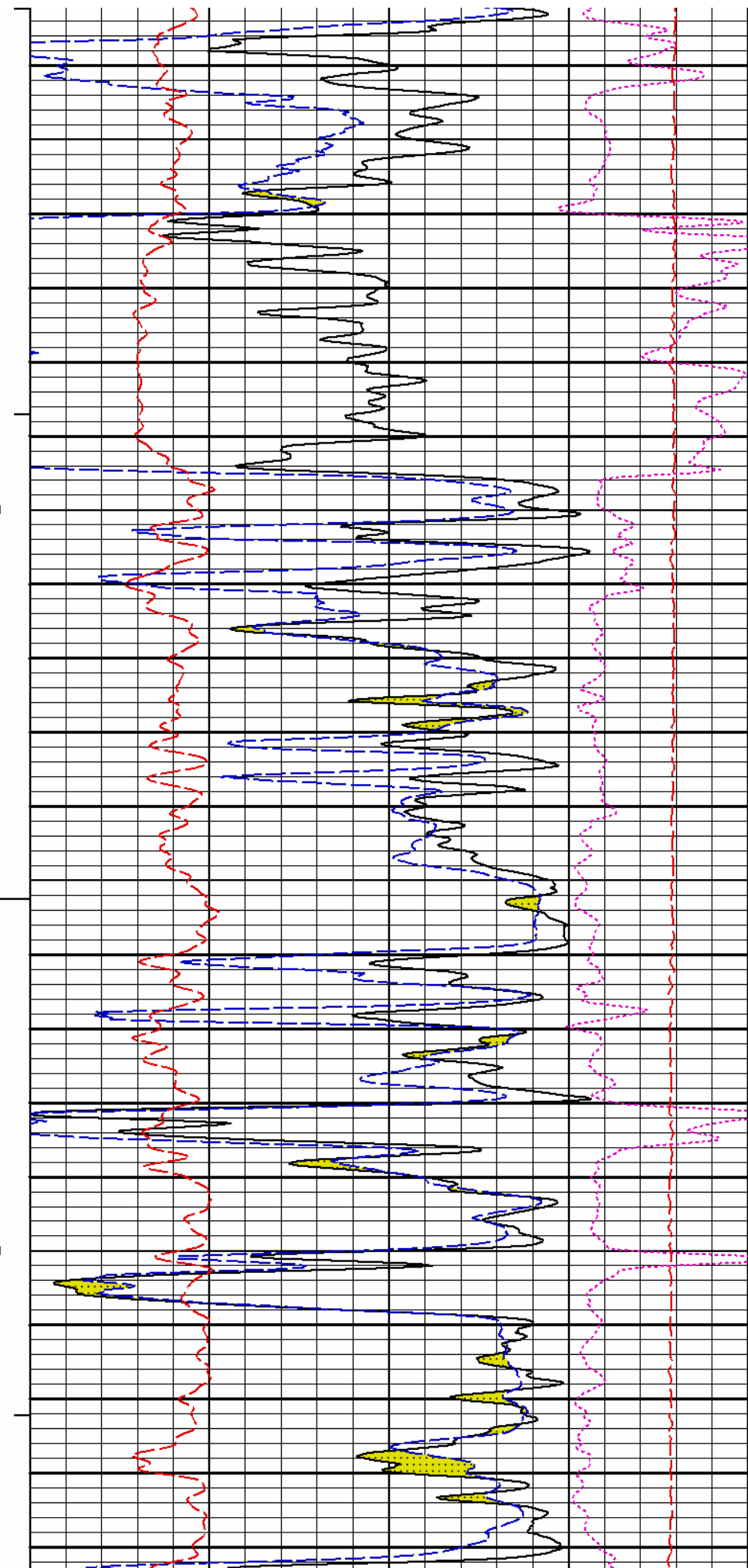
REPEAT SECTION

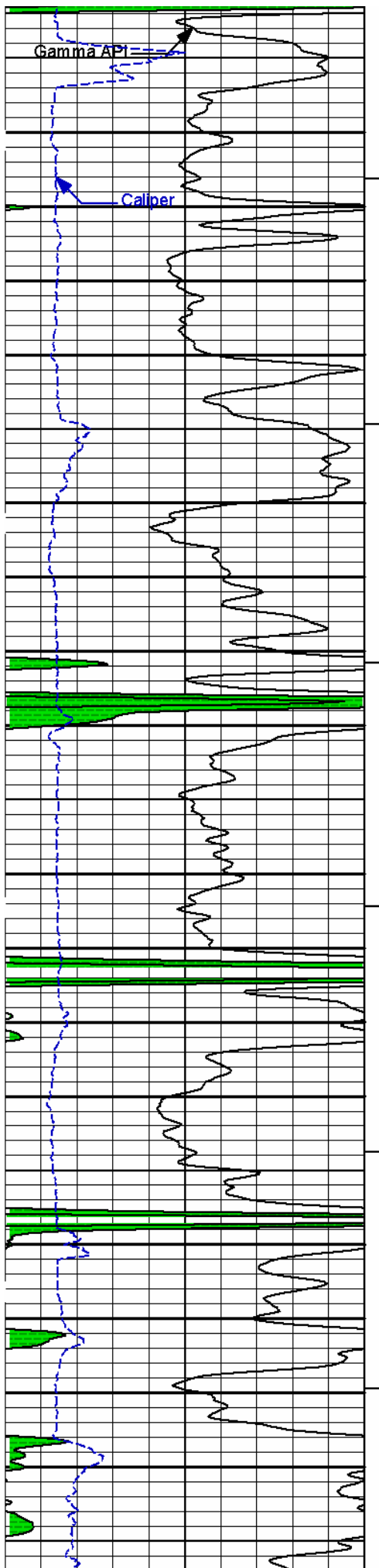




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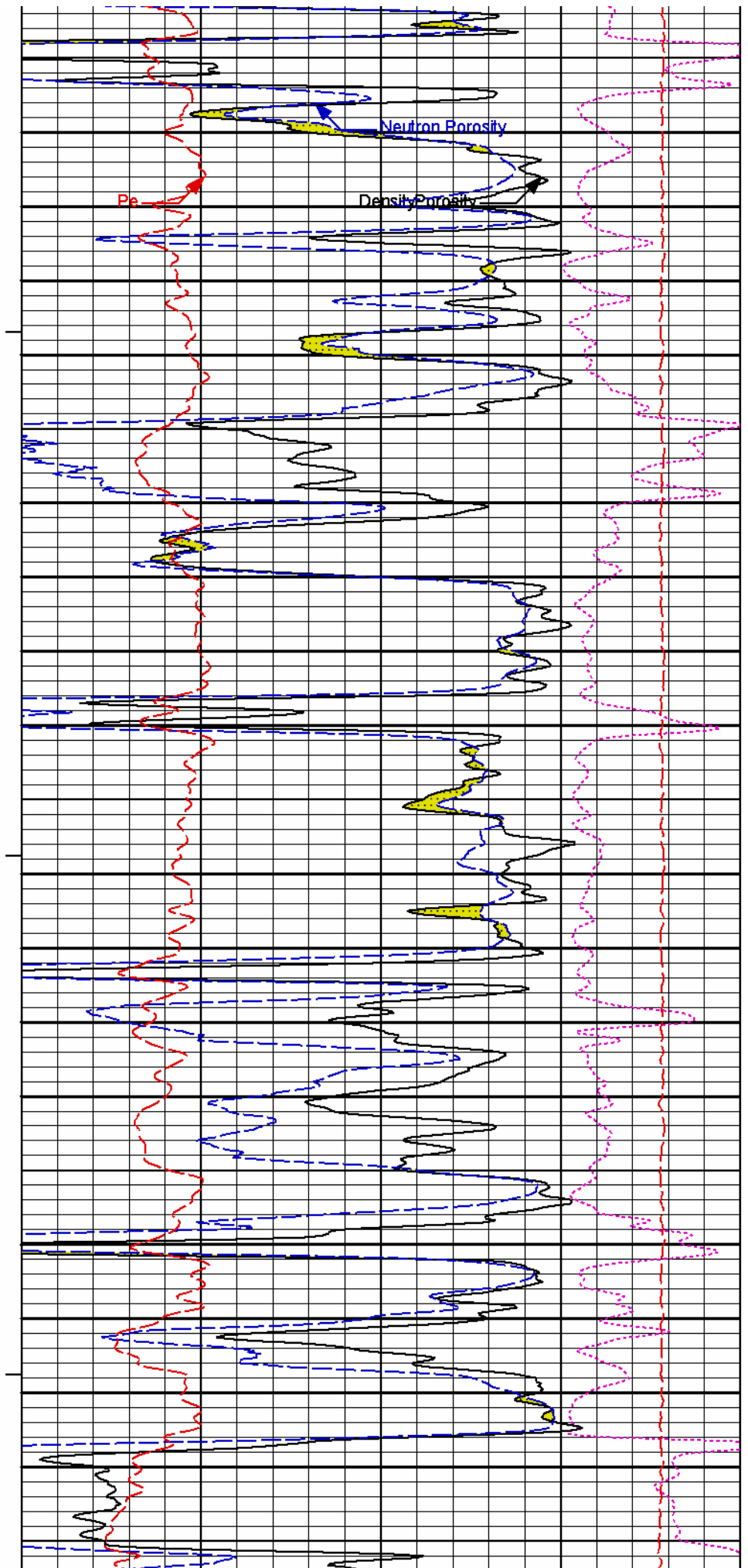
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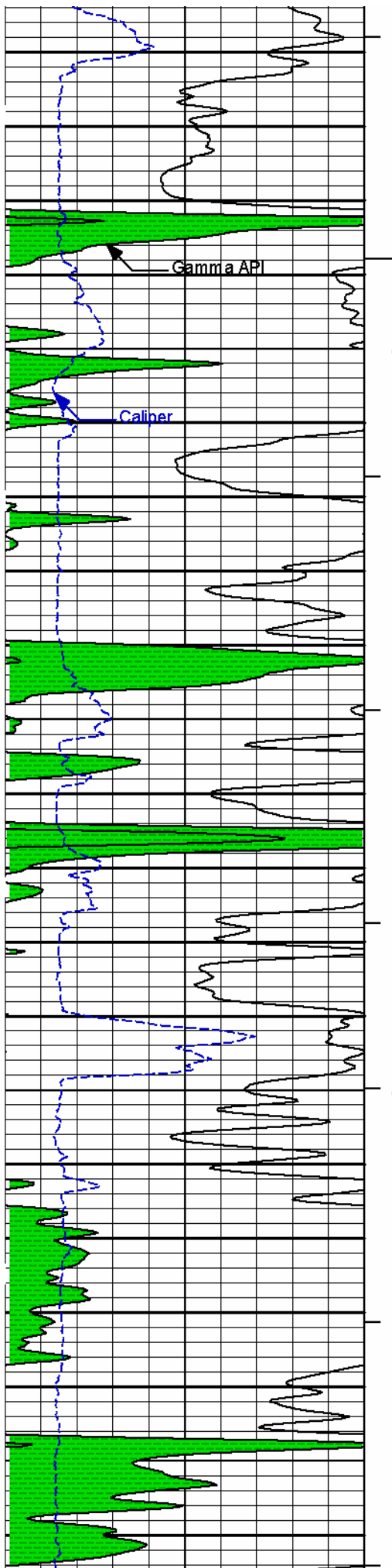




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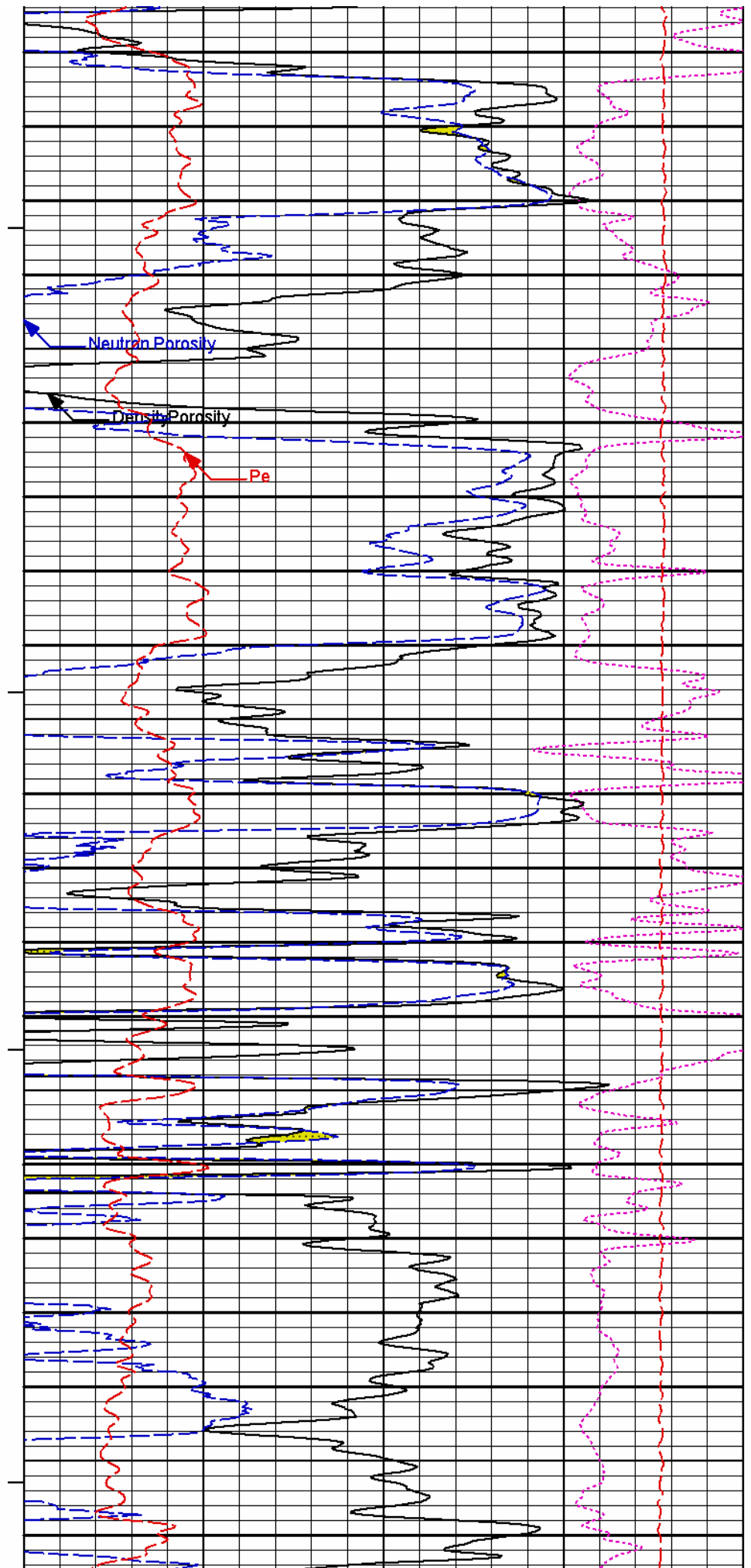
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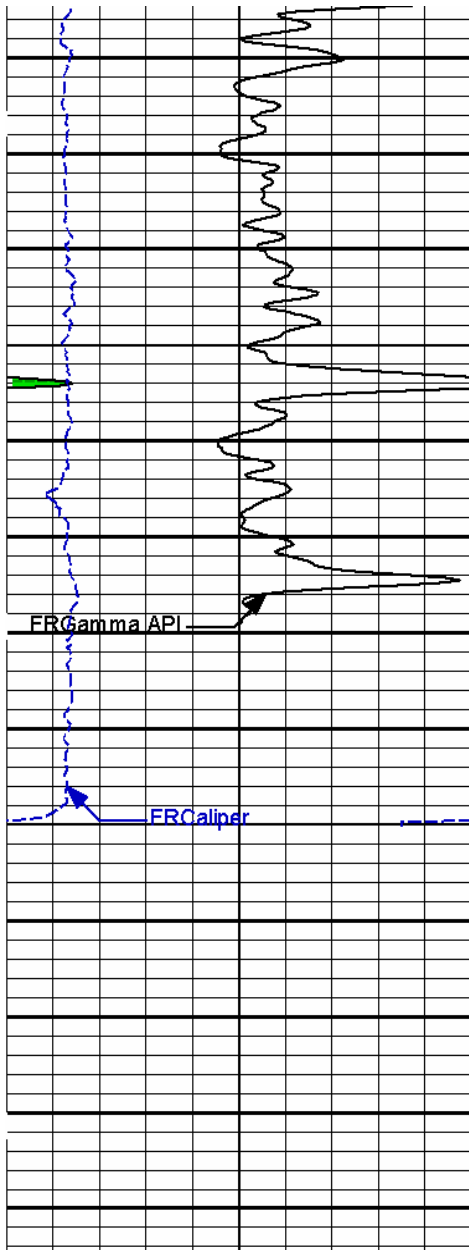




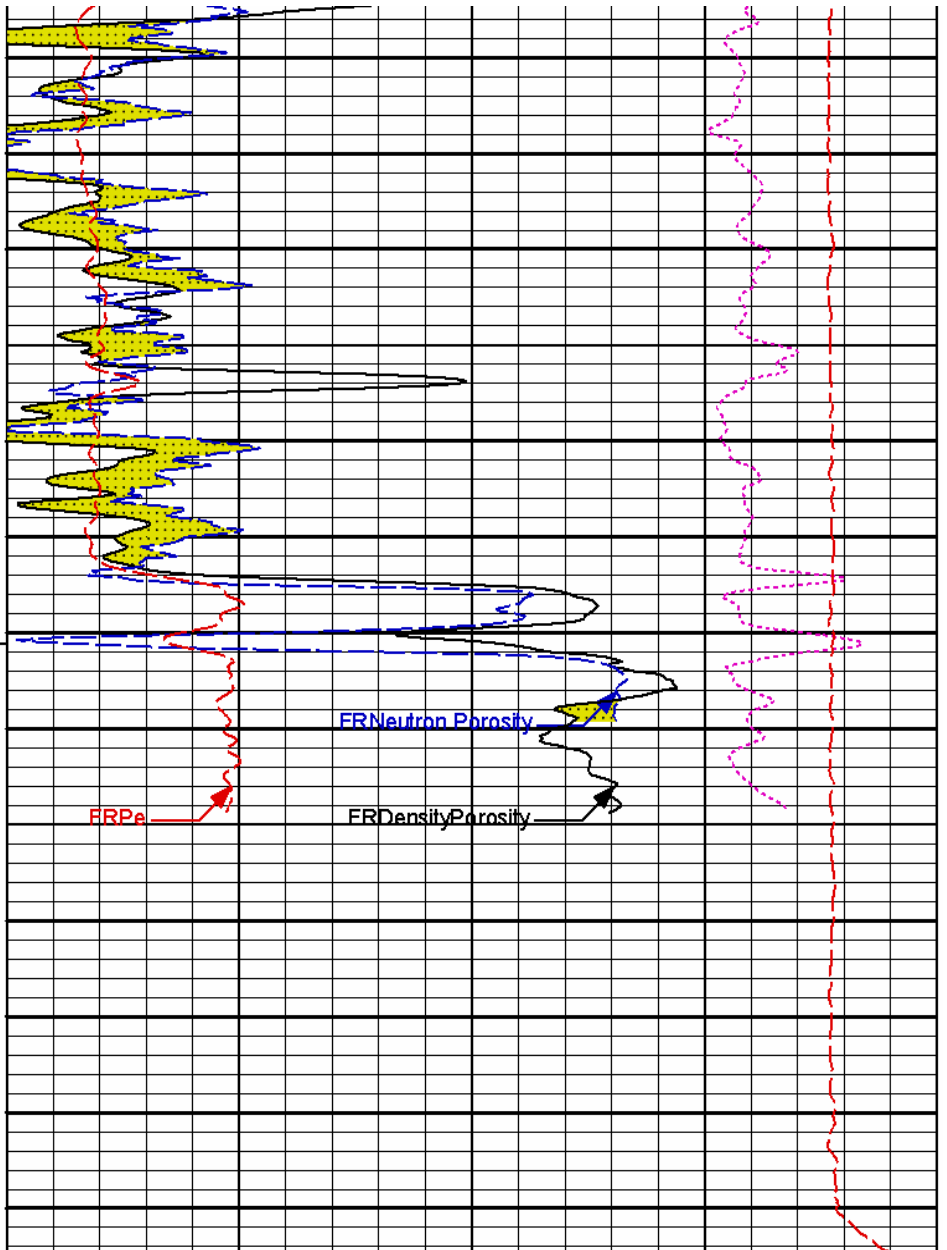
4100

4200





4300



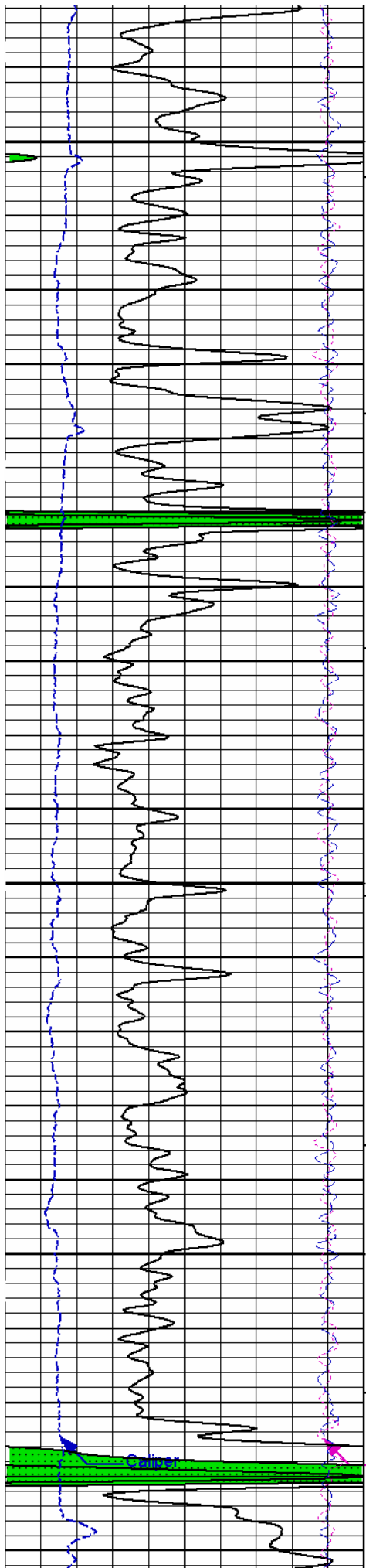
6	Caliper	16	MD	0	Pe	10	-0.25	DensityCorr	0.25
	inches		1 : 240					gram per cc	
0	Gamma API	150	AHVT				15K	Tension	0
	api							pounds	
	SHALE		BHVT	30	DensityPorosity				-10
					%				
				30	Neutron Porosity				-10
					%				
					CROSSOVER				

HALLIBURTON

Plot Time: 08-Mar-13 20:03:11
 Plot Range: 3600 ft to 4394.5 ft
 Data: JOSEFIAK_T_1_22\Well Based\DAQ-0001-003\
 Plot File: \\PORO\Porosity_Q_5_REP_LIB

REPEAT SECTION

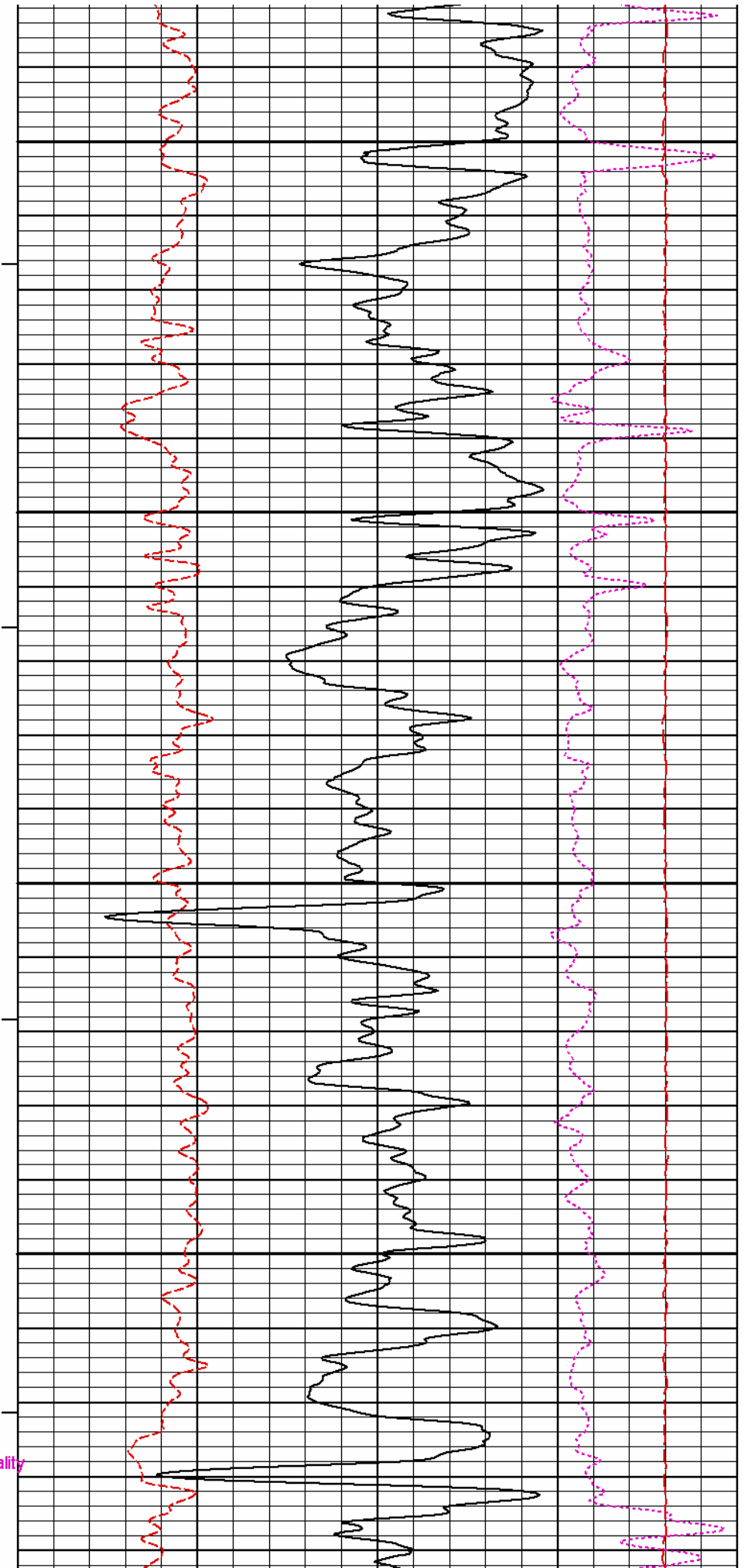
SHALE			Tension Pull		
0	Gamma Ray	150	Tension Pull 10 0		
api					
18	FarQuality	-2	BHV ft3	Bulk Density 3	
			g/cc		
-18	NearQuality	2	AHV ft3	15K	Tension 0
			pounds		
6	Caliper	16	MD 1:240 ft	0	DensityCorr 0.25
inches			g/cc		

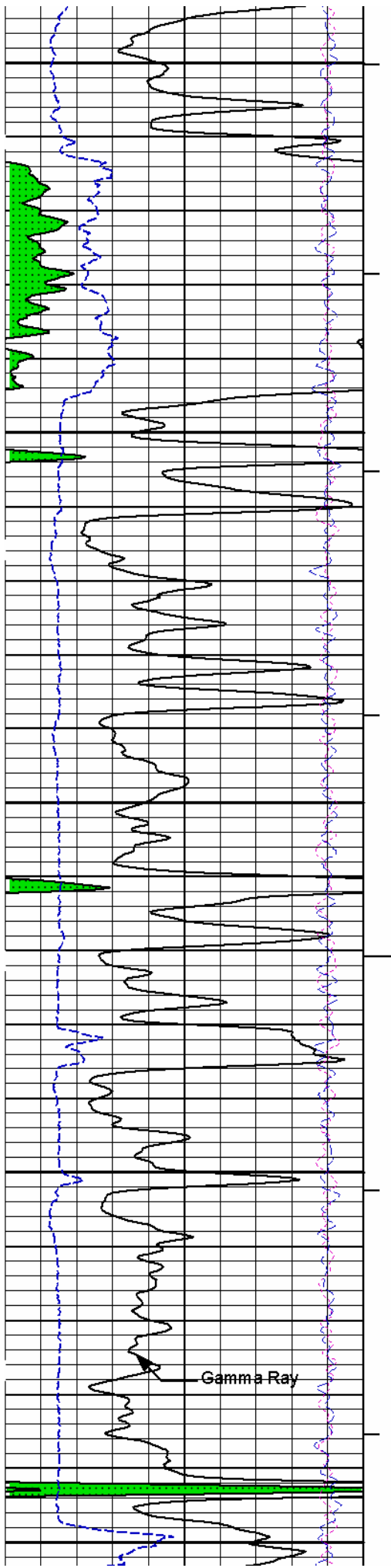


3500

3600

NearQuality

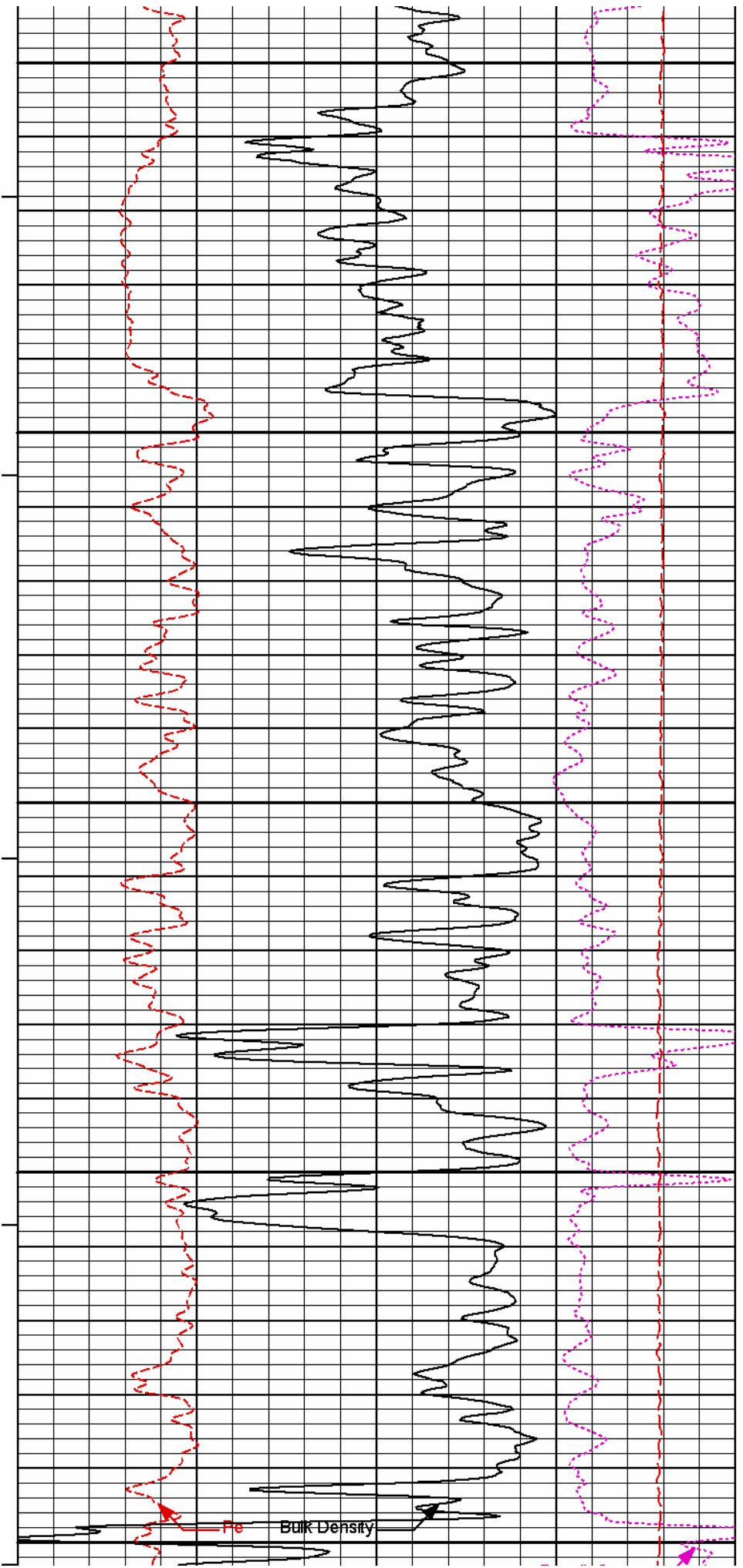




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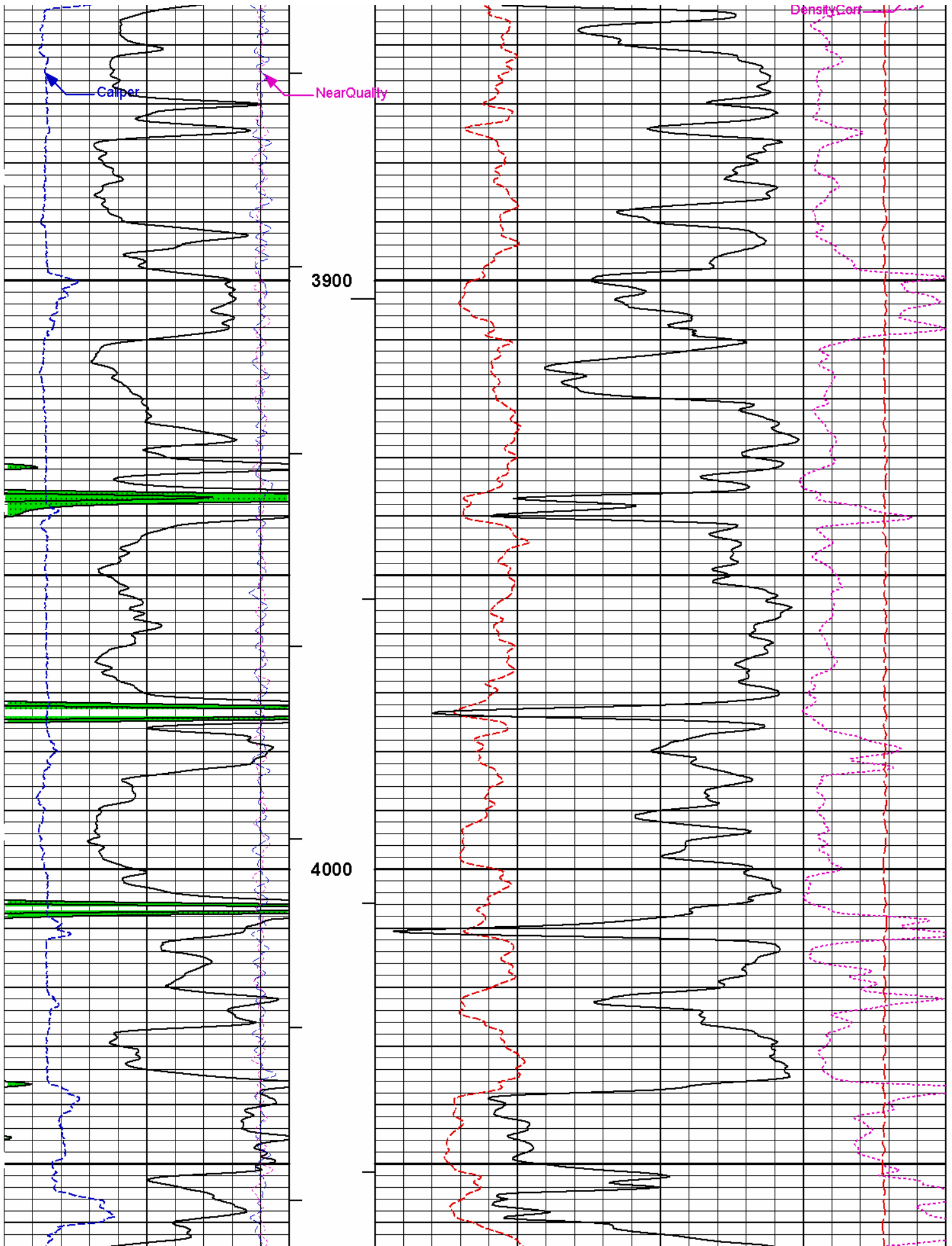
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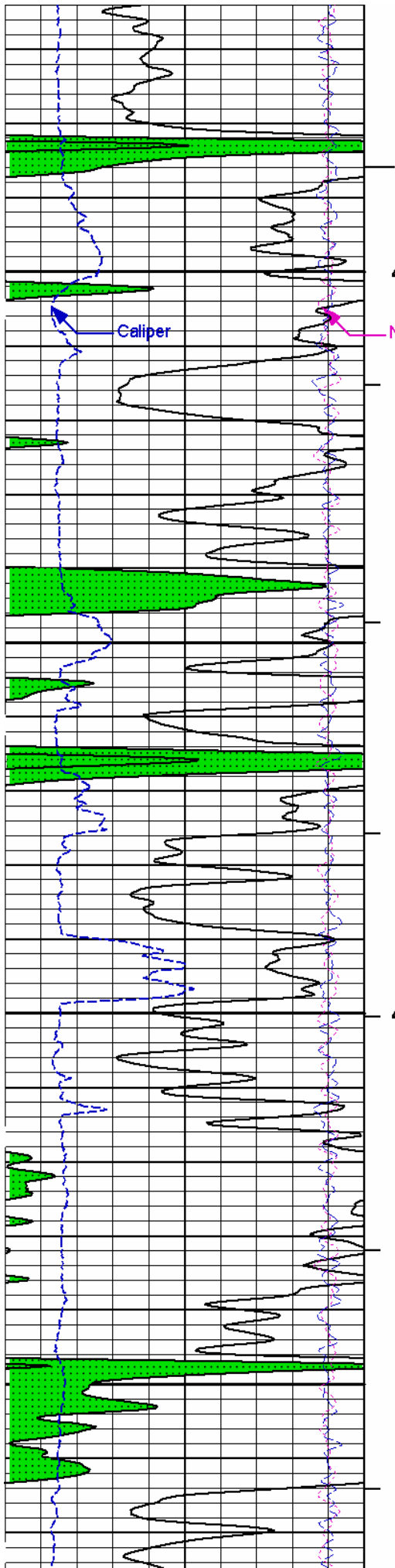
Gamma Ray



Fe

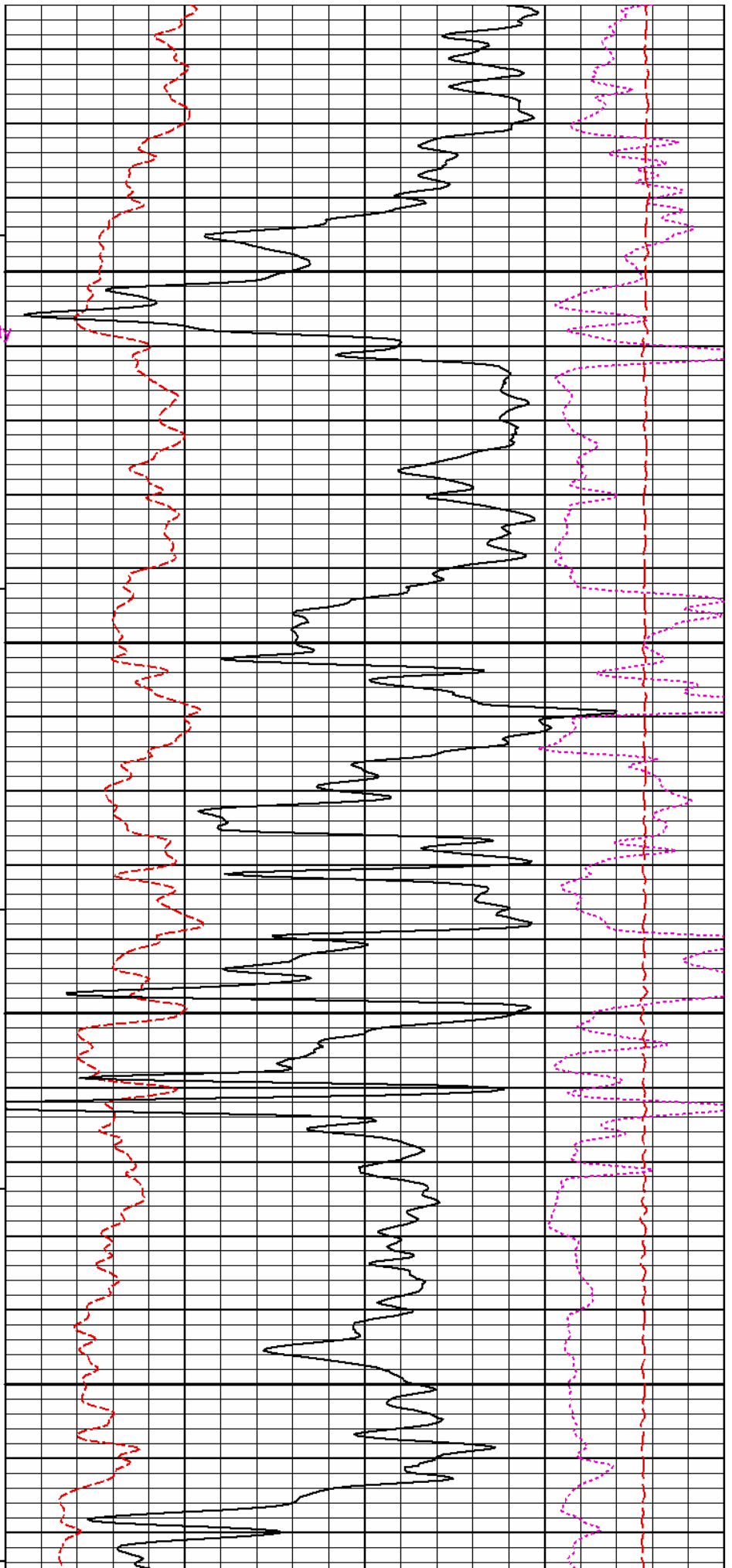
Bulk Density

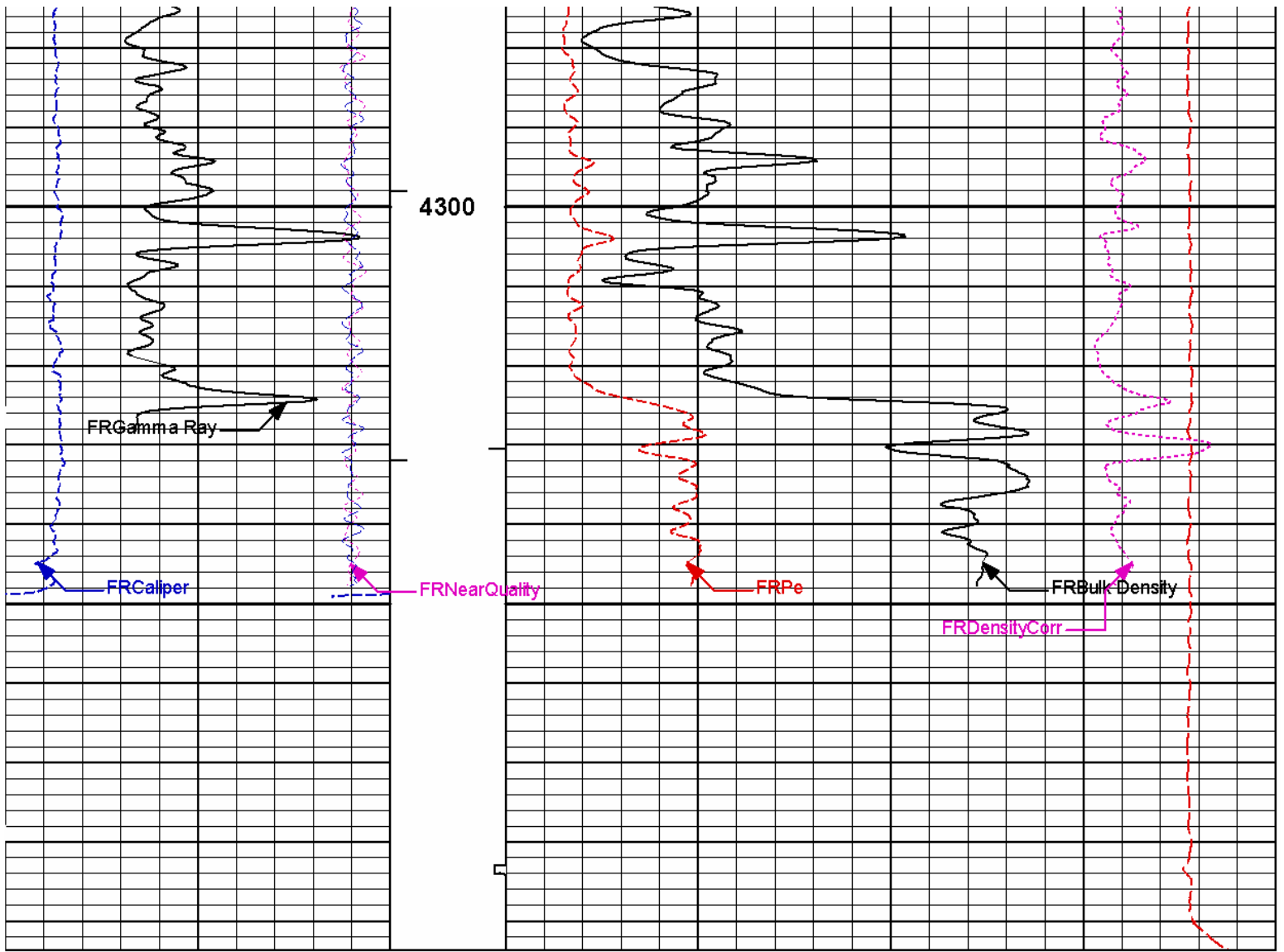




4100

4200





6	Caliper	16	MD	1 : 240	0	Pe	10	-0.25	DensityCorr	0.25
	inches		ft						g/cc	
-18	NearQuality	2	AHV	ft3				15K	Tension	0
									pounds	
18	FarQuality	-2	BHV	ft3	2	Bulk Density			3	
						g/cc				
0	Gamma Ray	150	Tension Pull	10	0					
	api									
	SHALE		Tension Pull							

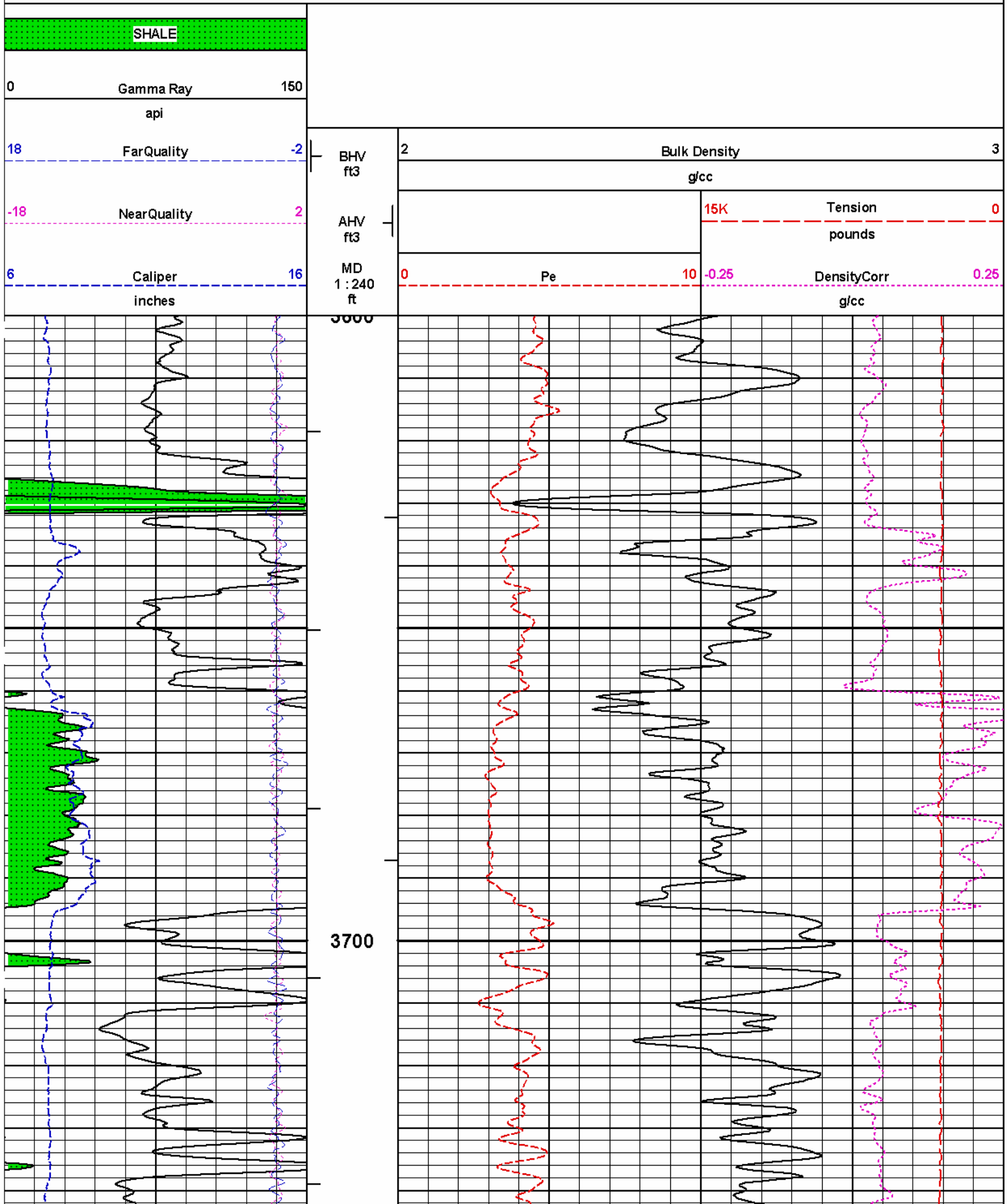
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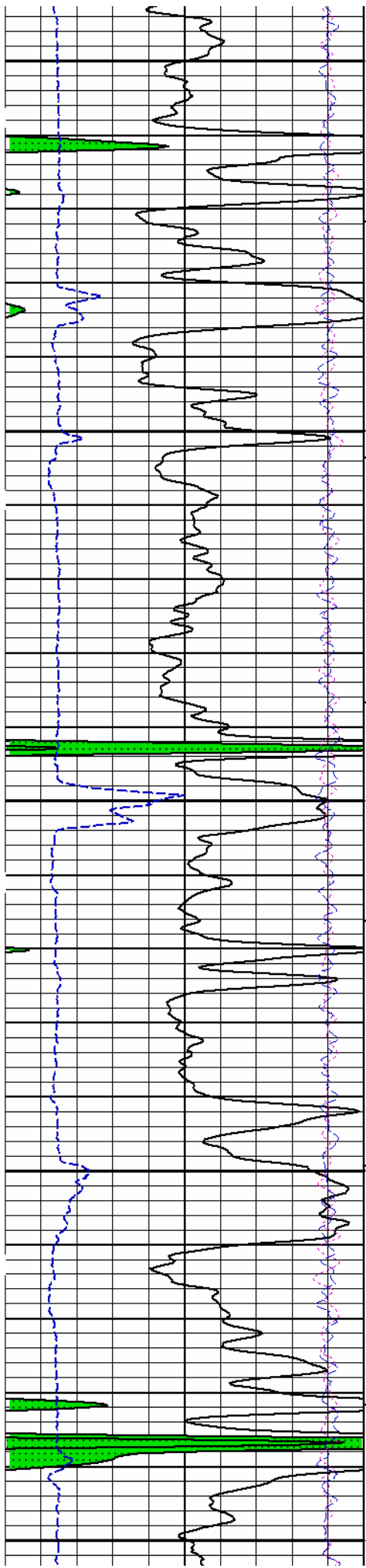
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5 INCH MAIN LOG

HALLIBURTON

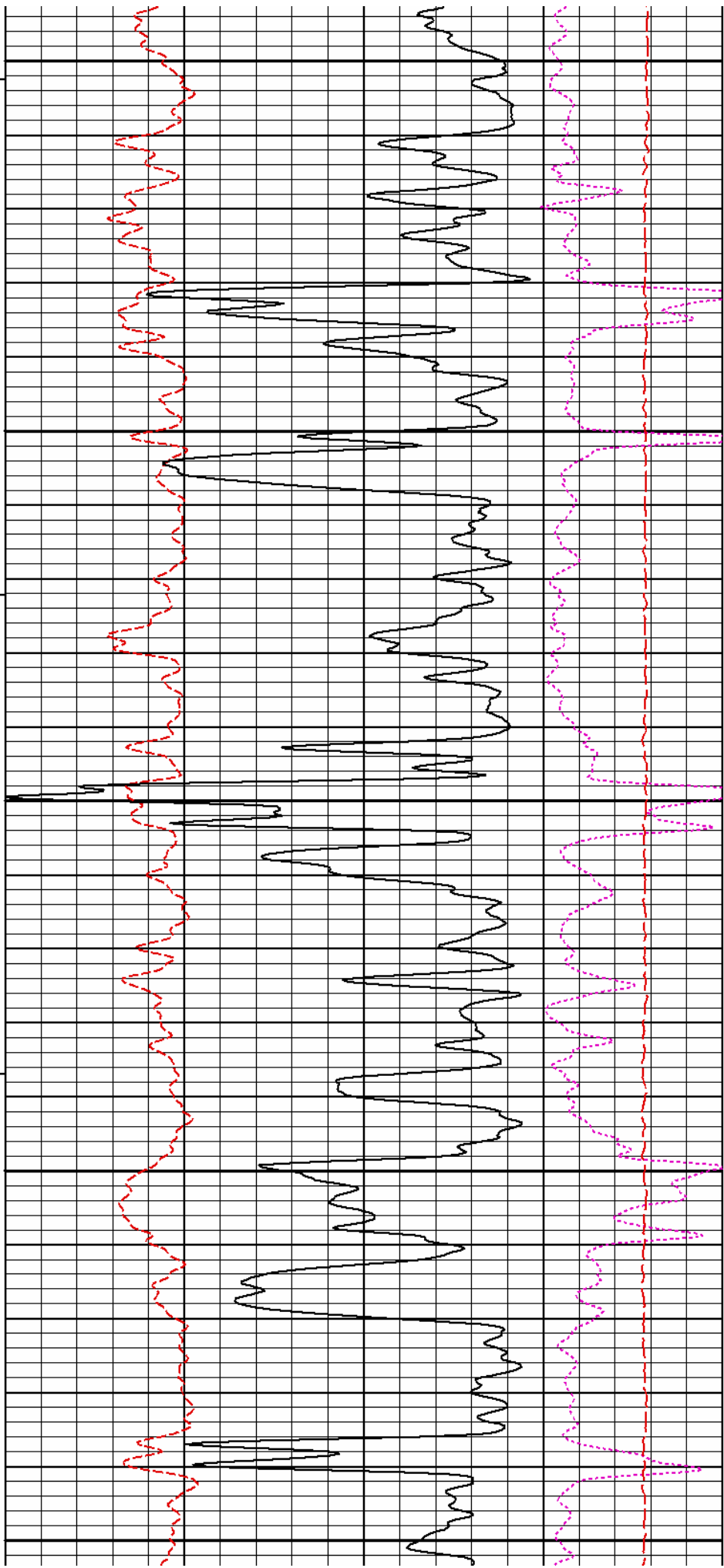
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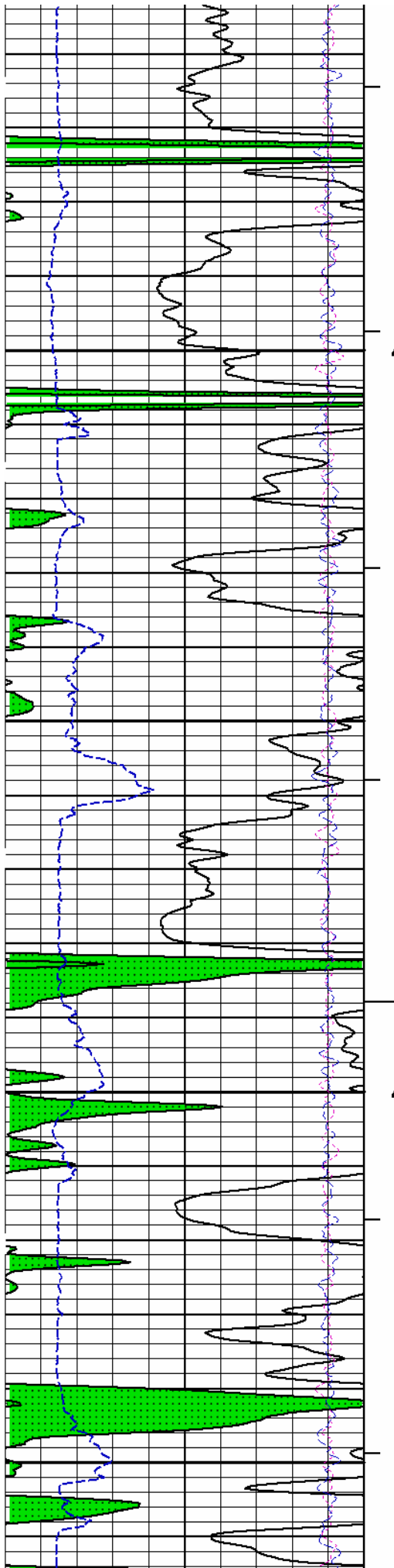




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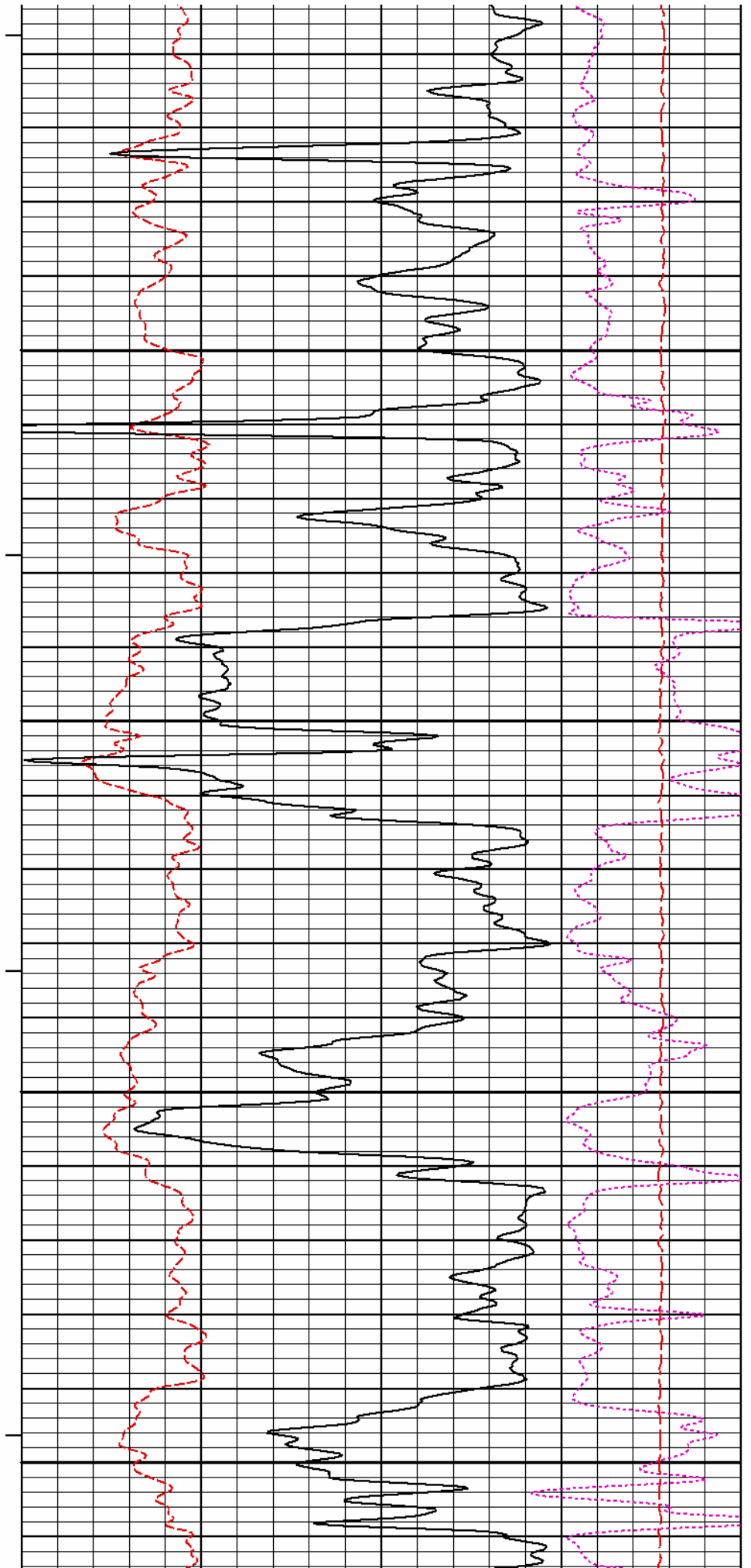
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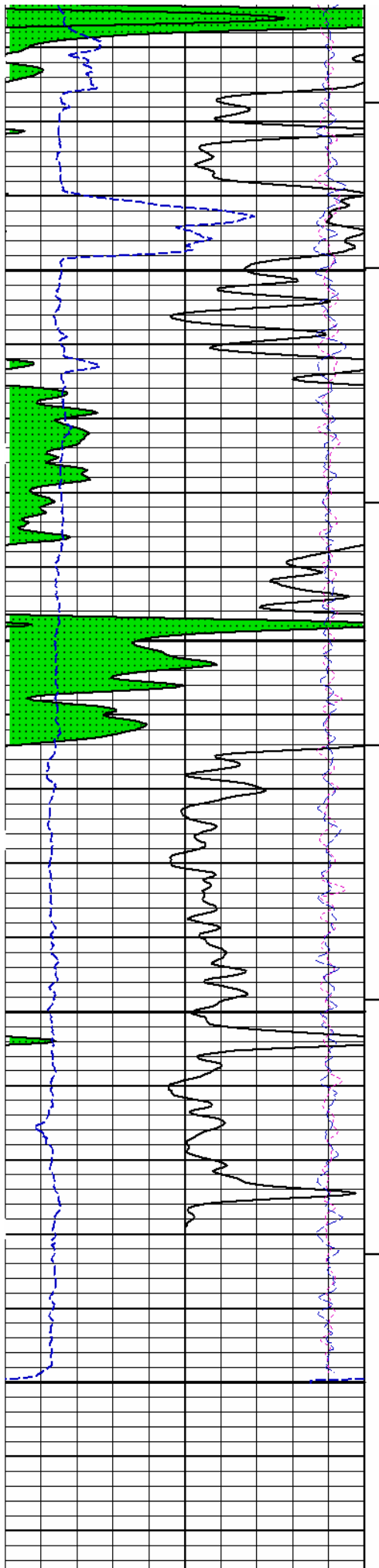




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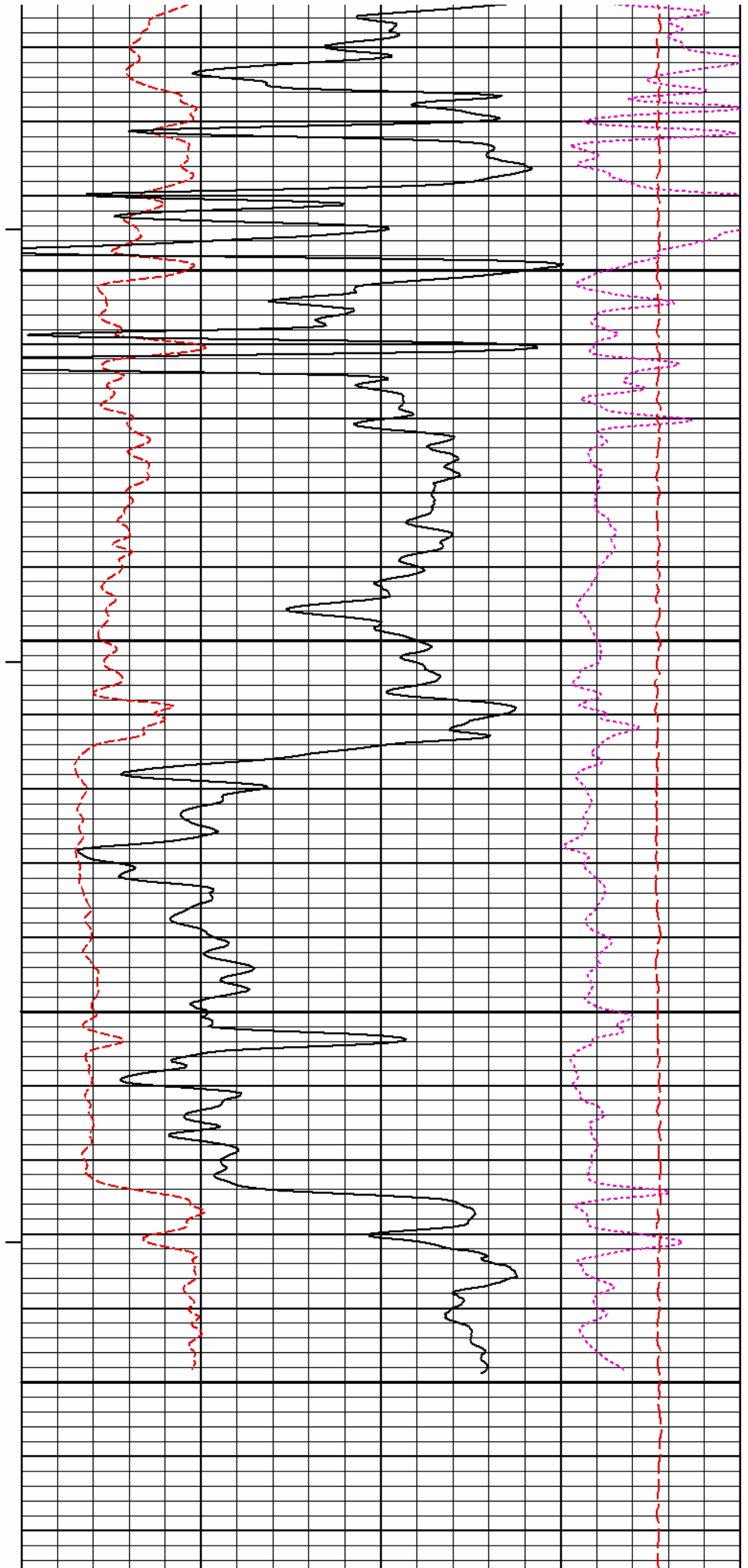
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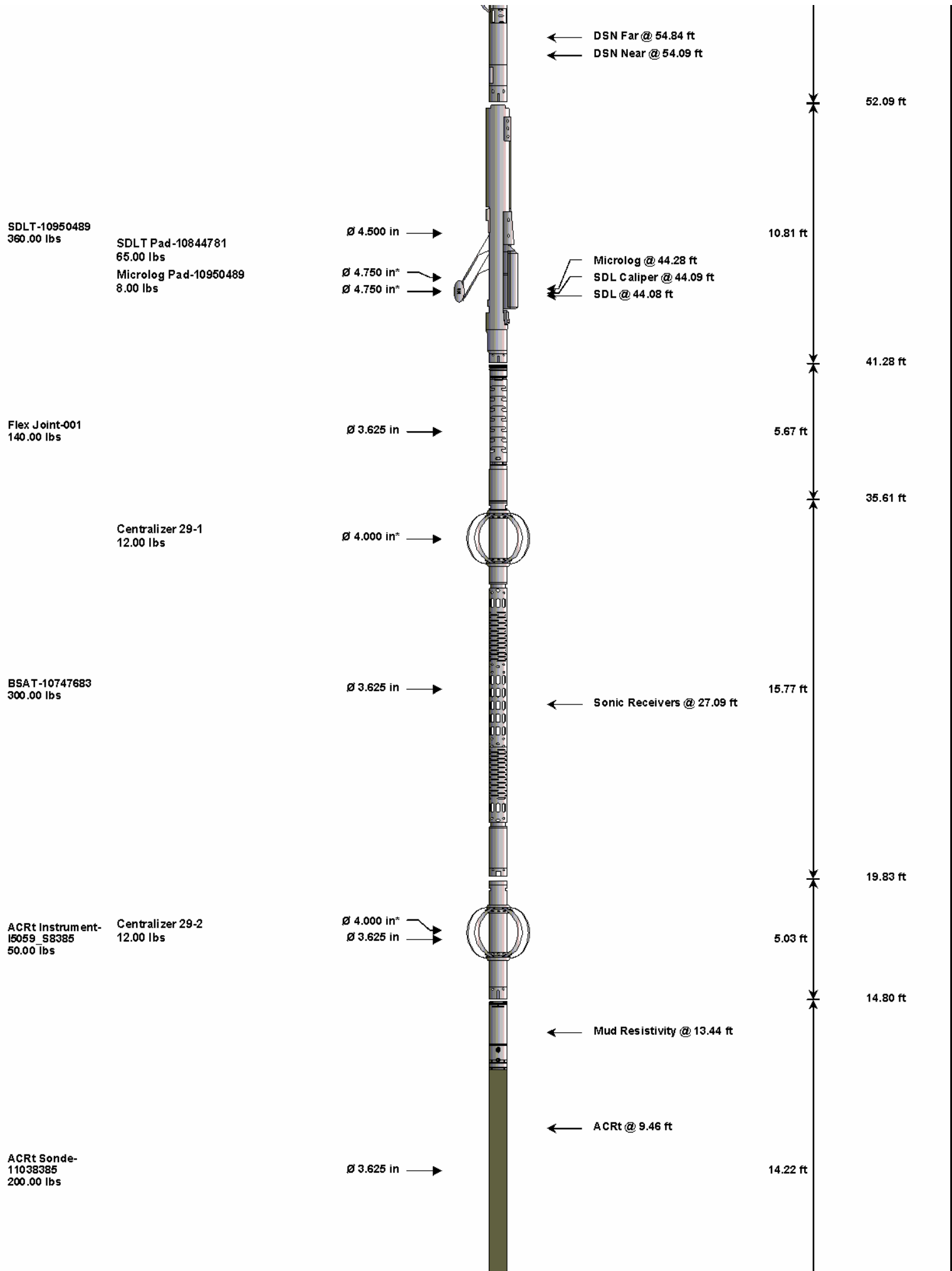




4200

4300





Cabbage Head-
TRK696
10.00 lbs

Ø 3.625 in
Ø 6.000 in



0.58 ft
0.58 ft
0.00 ft

Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)	
CH_HOS	Hostile Cable Head with Load Cell	CH_696	37.50	3.03	74.03	300.00	
SP	SP Sub	11441455	60.00	3.74	70.30	300.00	
GTET	Gamma Telemetry Tool	11048627	165.00	8.52	61.78	60.00	
DSNT	Dual Spaced Neutron	11019643	174.00	9.69	52.09	60.00	
DCNT	DSN Decentralizer	11019643	6.60	5.13	*	55.42	300.00
SDLT	Spectral Density Tool	10950489	360.00	10.81	41.28	60.00	
MICP	Microlog Pad	10950489	8.00	1.00	*	43.78	60.00
SDLP	Density Insite Pad	10844781	65.00	2.55	*	43.49	60.00
FLEX	Flex Joint	001	140.00	5.67	35.61	300.00	
BSAT	Borehole Sonic Array Tool	10747683	300.00	15.77	19.83	60.00	
OBCEN	Centralizer - 29 in.Overbody	1	12.00	2.42	*	32.77	300.00
ACRt	Array Compensated True Resistivity Instrument Section	I5059_S8385	50.00	5.03	14.80	300.00	
OBCEN	Centralizer - 29 in.Overbody	2	12.00	2.42	*	16.39	300.00
ACRt	Array Compensated True Resistivity Sonde Section	11038385	200.00	14.22	0.58	300.00	
CBHD	Cabbage Head	TRK696	10.00	0.58	0.00	300.00	
Total			1,600.10	77.06			
* Not included in Total Length and Length Accumulation.							
Data: JOSEFIAK_T_1_2210001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIDLE					Date: 08-Mar-13 16:18:30		

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11048627

Reference Calibration Date: 13-Feb-13 14:00:35

Engineer: J. BOLLUM

Calibration Date: 05-Mar-13 09:33:28

Software Version: WL INSITE R3.8.0 (Build 2)

Calibration Version: 1

Calibrator Source S/N: TB146

Calibrator API Reference:265.00 api

Equivalent Calibrator API Reference:269.6 api

Measurement	Measured	Calibrated	Units
Background	50.6	51.6	api
Background + Calibrator	315.2	321.3	api
Calibrator	264.6	269.6	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 11048627

Reference Calibration Date: 05-Mar-13 09:33:28

Engineer: THOMAS HYDE

Calibration Date: 07-Mar-13 23:46:13

Software Version: WL INSITE R3.8.0 (Build 2)

Calibration Version: 1

Calibrator Source S/N: TB146

Calibrator API Reference:265.00 api

Equivalent Calibrator API Reference:269.6 api

Field Verification	Shop	Field	Units
Background	51.6	50.2	api

Background + Calibrator	321.3	322.3	api
Calibrator	269.6	272.1	api

Shop	Field	Difference	Tolerance
269.6	272.1	-2.5	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name:	DSNT - 11019643	Reference Calibration Date:	05-Mar-13 09:55:34
Engineer:	J. BOLLUM	Calibration Date:	05-Mar-13 10:09:49
Software Version:	WL INSITE R3.8.0 (Build 2)	Calibration Version:	1

Logging Source S/N: 696
 Tank Serial Number: LIBERAL_NEUTRON
 Reference value assigned to Tank: 51.680
 Snow Block S/N: 696
 Calibration Tank Water Temperature: 65 degF
 Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.945	0.949	0.900 - 1.100

WATER TANK SUMMARY (Horizontal Water Tank)				
Measurement	Current Reading (Previous Coef.)	Calibrated (New Coef.)	Change	Control Limit On Change
Porosity (decip):	0.2098	0.2110	0.0012	+/- 0.0020
Calibrated Ratio:	9.69	9.73	0.039	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decip):	0.0573	0.02000 - 0.09000

PASS/FAIL SUMMARY	
Background Check:	Passed
Gain-Range Check:	Passed
Snow-Block Check:	Passed

DUAL SPACED NEUTRON FIELD CALIBRATION

Tool Name:	DSNT - 11019643	Reference Calibration Date:	05-Mar-13 10:09:49
Engineer:	THOMAS HYDE	Calibration Date:	07-Mar-13 23:57:30
Software Version:	WL INSITE R3.8.0 (Build 2)	Calibration Version:	1

Logging Source S/N: 696
 Snow Block S/N: 696

NEUTRON FIELD-CHECK SUMMARY				
	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decip):	0.0573	0.0630	0.0057	+/- 0.0150

PASS/FAIL SUMMARY	
Block Change Check:	Passed

Snow Block Stat Check:

Passed

Temperature Check:

Passed

DENSITY CALIPER SHOP CALIBRATION**Tool Name:** SDLT - 10950489**Reference Calibration Date:** 07-Mar-13 09:55:09**Engineer:** J. BOLLUM**Calibration Date:** 07-Mar-13 10:03:24**Software Version:** WL INSITE R3.8.0 (Build 2)**Calibration Version:** 1**Host Tool Name:** DSNT - 11019643**CALIBRATION COEFFICIENTS**

Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-1782.49	-1752.48	-7000.00 - -1000.00
Pad Gain	0.0003933	0.0003885	0.000200 - 0.000600
Arm Offset	-1168.26	-1689.88	-5000.00 - 3000.00
Arm Gain	0.0004633	0.0005298	0.000300 - 0.000700
Arm Power	-0.000001258	-0.000005780	-0.000010000 - 0.000010000

The ring diameter is computed from: $\text{DIAMETER} = \text{PAD EXTENSION} + \text{ARM EXTENSION} + \text{TOOL DIAMETER}$

Tool Diameter: 4.50 in

CALIBRATION RINGS

Measurement	Current Reading (Previous Coeff.)	Calibrated (New Coeff.)	Change	Control Limit On New Value
PAD EXTENSION:				
Small Ring (in)	2.01	2.00	-0.01	+/- 0.20
Medium Ring (in)	3.78	3.75	-0.03	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.54	6.50	-0.04	+/- 0.20
Medium Ring (in)	8.14	8.25	0.11	+/- 0.20
Large Ring (in)	14.97	15.00	0.03	+/- 0.20

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check: Passed

Ring-Measurement Check: Passed

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check: Passed

SPECTRAL DENSITY SHOP CALIBRATION**Tool Name:** SDLT Pad - 10844781**Reference Calibration Date:** 17-Jan-13 14:21:35**Engineer:** J. BOLLUM**Calibration Date:** 05-Mar-13 11:01:55**Software Version:** WL INSITE R3.8.0 (Build 2)**Calibration Version:** 1

Logging Source S/N: 5168GW

Aluminum Block S/N: LIBERAL

Density: 2.598g/cc

Pe: 3.170

Magnesium Block S/N: LIBERAL

Density: 1.684g/cc

Pe: 2.598

DENSITY CALIBRATION SUMMARY

Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	1.0434	1.0190	0.90 - 1.10
Near Dens Gain	1.0101	1.0001	0.90 - 1.10
Near Peak Gain	1.0002	0.9771	0.90 - 1.10
Near Lith Gain	0.9736	0.9818	0.90 - 1.10
Far Bar Gain	1.0096	1.0161	0.90 - 1.10

Far Dens Gain	0.9991	1.0035	0.90 - 1.10
Far Peak Gain	0.9920	0.9974	0.90 - 1.10
Far Lith Gain	0.9714	0.9744	0.90 - 1.10
Near Bar Offset	-0.1830	0.0500	NONE
Near Dens Offset	0.1114	0.2016	NONE
Near Peak Offset	0.2008	0.3863	NONE
Near Lith Offset	0.4173	0.3415	NONE
Far Bar Offset	0.0534	0.0099	NONE
Far Dens Offset	0.1337	0.1093	NONE
Far Peak Offset	0.1632	0.1328	NONE
Far Lith Offset	0.2973	0.2908	NONE
Near Bar Background	809.28	804.29	700 - 1450
Near Dens Background	265.36	265.46	230 - 480
Near Peak Background	115.37	115.14	100 - 210
Near Lith Background	142.88	142.71	125 - 260
Far Bar Background	526.94	523.45	450 - 900
Far Dens Background	207.77	206.08	175 - 345
Far Peak Background	82.16	82.40	70 - 140
Far Lith Background	86.57	85.02	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.695	1.684	-0.011	+/- 0.015
Pe	2.462	2.552	0.090	+/- 0.150
ALUMINUM				
Density (g/cc)	2.597	2.598	0.001	+/- 0.01500
Pe	2.977	3.120	0.143	+/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	-0.0009	+/- 0.0110	-0.0026	+/- 0.0140
Magnesium Block	-0.0007	+/- 0.0110	-0.0020	+/- 0.0140
Aluminum Block	-0.0013	+/- 0.0110	-0.0013	+/- 0.0140
Resolution	9.48	6.00 - 11.50	8.88	6.00 - 11.50
Internal Verifier(B+D+P+L)	1328	1200 - 2700	897	800 - 1700

PASS/FAIL SUMMARY	
Background Quality Check:	Passed
Background Range Check:	Passed
Background Resolution Check:	Passed
Background Verification Check:	Passed
Magnesium Quality Check:	Passed
Aluminum Quality Check:	Passed
Gains Check:	Passed
Changes in Calibration Blocks:	Passed

SPECTRAL DENSITY FIELD CHECK

Tool Name: SDLT Pad - 10844781

Reference Calibration Date: 05-Mar-13 11:01:55

Engineer: THOMAS HYDE

Calibration Date: 07-Mar-13 23:43:37

Software Version: WL INSITE R3.8.0 (Build 2)

Calibration Version: 1

Pad Temperature: 70.5 degF

DENSITY FIELD CALIBRATION SUMMARY

Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1327.598	1323.267	-4.331	14.741
Far (B+D+P+L) cps	896.943	896.460	-0.483	16.294
Near Resolution	9.48	9.35	-0.130	0.50
Far Resolution	8.88	8.89	0.010	1.00

PASS/FAIL SUMMARY

Bkg Quality Check:	Passed
Bkg Resolution Check:	Passed
Bkg Verification Check:	Passed

SDLT CALIPER FIELD CALIBRATION

Tool Name: SDLT - 10950489

Reference Calibration Date: 07-Mar-13 10:03:24

Engineer: THOMAS HYDE

Calibration Date: 07-Mar-13 23:49:51

Software Version: WL INSITE R3.8.0 (Build 2)

Calibration Version: 1

MEASURED CALIPER VALUES

Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	3.75	3.71	-0.04	+/- 0.10
Ring Diameter	8.25	8.11	-0.14	+/- 0.15

PASS/FAIL SUMMARY

Pad Extension Check:	Passed
Diameter Check:	Passed

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11048627						
Gamma Ray Calibrator	269.6	272.1	-----	-2.5	+/- 9.00	api
DSNT-11019643						
Snow-Block Porosity	0.0573	0.0630	-----	-0.0057	+/- 0.0150	decP
SDLT-10950489						
Pad Extension	3.75	3.71	-----	0.04	+/-0.10	in
Ring Diameter	8.25	8.11	-----	0.14	+/-0.15	in
SDLT Pad-10844781						
Near(B+D+P+L)	1327.598	1323.267	-----	4.331	+/-14.741	cps
Far(B+D+P+L)	896.943	896.460	-----	0.483	+/-16.294	cps

Data: JOSEFFIAK T 1 2210001 SP-GTET-DSN-SDLT-FLEX-RSAT-ACRT-CHUDLE

Date: 08-Mar-13 16:47:02

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PARAMETERS REPORT

PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	7.875	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	9.200	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	0.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	2.000	ohmm
	SHARED	TRM	Temperature of Mud	70.0	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	5.500	in
	SHARED	ST	Surface Temperature	70.0	degF
	SHARED	TD	Total Well Depth	4387.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
	Rwa / CrossPlot	AFAC	Archie A factor	0.6200	
	Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
	Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
	Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
	Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
	Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
	GTET	GROK	Process Gamma Ray?	Yes	
	GTET	GRSO	Gamma Tool Standoff	0.000	in
	GTET	GEOK	Process Gamma Ray EVR?	No	
	GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
	DSNT	DNOK	Process DSN?	Yes	
	DSNT	DEOK	Process DSN EVR?	No	
	DSNT	NLIT	Neutron Lithology	Limestone	
	DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
	DSNT	DNTP	Temperature Correction Type	None	
	DSNT	DPRS	DSN Pressure Correction Type	None	
	DSNT	SHCO	View More Correction Options	No	
	DSNT	UTVD	Use TVD for Gradient Corrections?	No	
	DSNT	LHWT	Logging Horizontal Water Tank?	No	
	SDLT	CLOK	Process Caliper Outputs?	Yes	
	SDLT Pad	DNOK	Process Density?	Yes	
	SDLT Pad	DNOK	Process Density EVR?	No	
	SDLT Pad	CB	Logging Calibration Blocks?	No	
	SDLT Pad	SDVT	SDLT Pad Temperature Valid?	Yes	

SDLT Pad	DTWN	Disable temperature warning	No	
SDLT Pad	DMA	Formation Density Matrix	2.710	g/cc
SDLT Pad	DFL	Formation Density Fluid	1.000	g/cc
Microlog Pad	MLOK	Process MicroLog Outputs?	Yes	
BSAT	MBOK	Compute BCAS Results?	Yes	
BSAT	FLLO	Frequency Filter Low Pass Value?	5000	Hz
BSAT	FLHI	Frequency Filter High Pass Value?	27000	Hz
BSAT	DTFL	Delta -T Fluid	189.00	uspf
BSAT	DTMT	Delta -T Matrix Type	User define	
BSAT	DTMA	Delta -T Matrix	47.60	uspf
BSAT	DTSH	Delta -T Shale	100.00	uspf
BSAT	SPEQ	Acoustic Porosity Equation	Wyllie	
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Upr	
ACRt Sonde	TPOS	Tool Position	Free Hanging	
ACRt Sonde	RMOP	Rmud Source	Mud Cell	
ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	THQY	Threshold Quality	0.50	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm

BOTTOM

Data: JOSEFIAT_1_2210001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIDLE

Date : 08-Mar-13 16:47:56

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INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
CH_HOS				
DHTN	DownholeTension	0.00	BLK	0.000
SP Sub				
PLTC	Plot Control Mask	72.25	NO	
SP	Spontaneous Potential	72.25	BLK	1.250
SPR	Raw Spontaneous Potential	72.25	NO	
SPO	Spontaneous Potential Offset	72.25	NO	
GTET				
TPUL	Tension Pull	64.23	NO	
GR	Natural Gamma Ray API	64.23	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	64.23	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	64.23	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
DSNT				
TPUL	Tension Pull	53.99	NO	

RNDS	Near Detector Telemetry Counts	54.09	BLK	1.417
RFDS	Far Detector Telemetry Counts	54.84	TRI	0.583
DNTT	DSN Tool Temperature	54.09	NO	
DSNS	DSN Tool Status	53.99	NO	
ERND	Near Detector Telemetry Counts EVR	54.09	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	54.84	BLK	0.000
ENTM	DSN Tool Temperature EVR	54.09	NO	
SDLT				
TPUL	Tension Pull	44.09	NO	
PCAL	Pad Caliper	44.09	TRI	0.250
ACAL	Arm Caliper	44.09	TRI	0.250
BSAT				
TPUL	Tension Pull	27.09	NO	
STAT	Status	27.09	NO	
DLYT	Delay Time	27.09	NO	
SI	Sample Interval	27.09	NO	
TXRX	Raw Telemetry 10 Receivers	27.09	NO	
FRMC	Tool Frame Count	27.09	NO	
GMOD	Gain processing mode	19.83	NO	
ACRt Sonde				
TPUL	Tension Pull	2.97	NO	
F1R1	ACRT 12KHz - 80in R value	9.22	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	9.22	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.72	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.72	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	5.22	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	5.22	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	4.22	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	4.22	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.72	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.72	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.47	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.47	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	9.22	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	9.22	BLK	0.000
F2R2	ACRT 36KHz - 50in R value	6.72	BLK	0.000
F2X2	ACRT 36KHz - 50in X value	6.72	BLK	0.000
F2R3	ACRT 36KHz - 29in R value	5.22	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	5.22	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	4.22	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	4.22	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.72	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.72	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.47	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.47	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	9.22	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	9.22	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.72	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.72	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	5.22	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	5.22	BLK	0.000

F3X3	ACRT 72KHz - 29in X value	5.22	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	4.22	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	4.22	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.72	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.72	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.47	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.47	BLK	0.000
RMUD	Mud Resistivity	12.76	BLK	0.000
F1RT	Transmitter Current Raw 12K X Receiver	2.97	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.97	BLK	0.000
F2RT	Transmitter Reference 36 KHz Real Signal	2.97	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.97	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.97	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.97	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.97	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.97	BLK	0.000
ITMP	Instrument Temperature	2.97	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.97	NO	
TIDV	Instrument Temperature Derivative	2.97	NO	
TUDV	Upper Temperature Derivative	2.97	NO	
TLDV	Lower Temperature Derivative	2.97	NO	
TRBD	Receiver Board Temperature	2.97	NO	
SDLT Pad				
TPUL	Tension Pull	44.08	NO	
NAB	Near Above	43.90	BLK	0.920
NHI	Near Cesium High	43.90	BLK	0.920
NLO	Near Cesium Low	43.90	BLK	0.920
NVA	Near Valley	43.90	BLK	0.920
NBA	Near Barite	43.90	BLK	0.920
NDE	Near Density	43.90	BLK	0.920
NPK	Near Peak	43.90	BLK	0.920
NLI	Near Lithology	43.90	BLK	0.920
NBAU	Near Barite Unfiltered	43.90	BLK	0.250
NLIU	Near Lithology Unfiltered	43.90	BLK	0.250
FAB	Far Above	44.26	BLK	0.250
FHI	Far Cesium High	44.26	BLK	0.250
FLO	Far Cesium Low	44.26	BLK	0.250
FVA	Far Valley	44.26	BLK	0.250
FBA	Far Barite	44.26	BLK	0.250
FDE	Far Density	44.26	BLK	0.250
FPK	Far Peak	44.26	BLK	0.250
FLI	Far Lithology	44.26	BLK	0.250
PTMP	Pad Temperature	44.09	BLK	0.920
NHV	Near Detector High Voltage	43.49	NO	
FHV	Far Detector High Voltage	43.49	NO	
ITMP	Instrument Temperature	43.49	NO	
DDHV	Detector High Voltage	43.49	NO	
Microlog Pad				
TPUL	Tension Pull	44.28	NO	
MINV	Microlog Lateral	44.28	BLK	0.750
MNOR	Microlog Normal	44.28	BLK	0.750

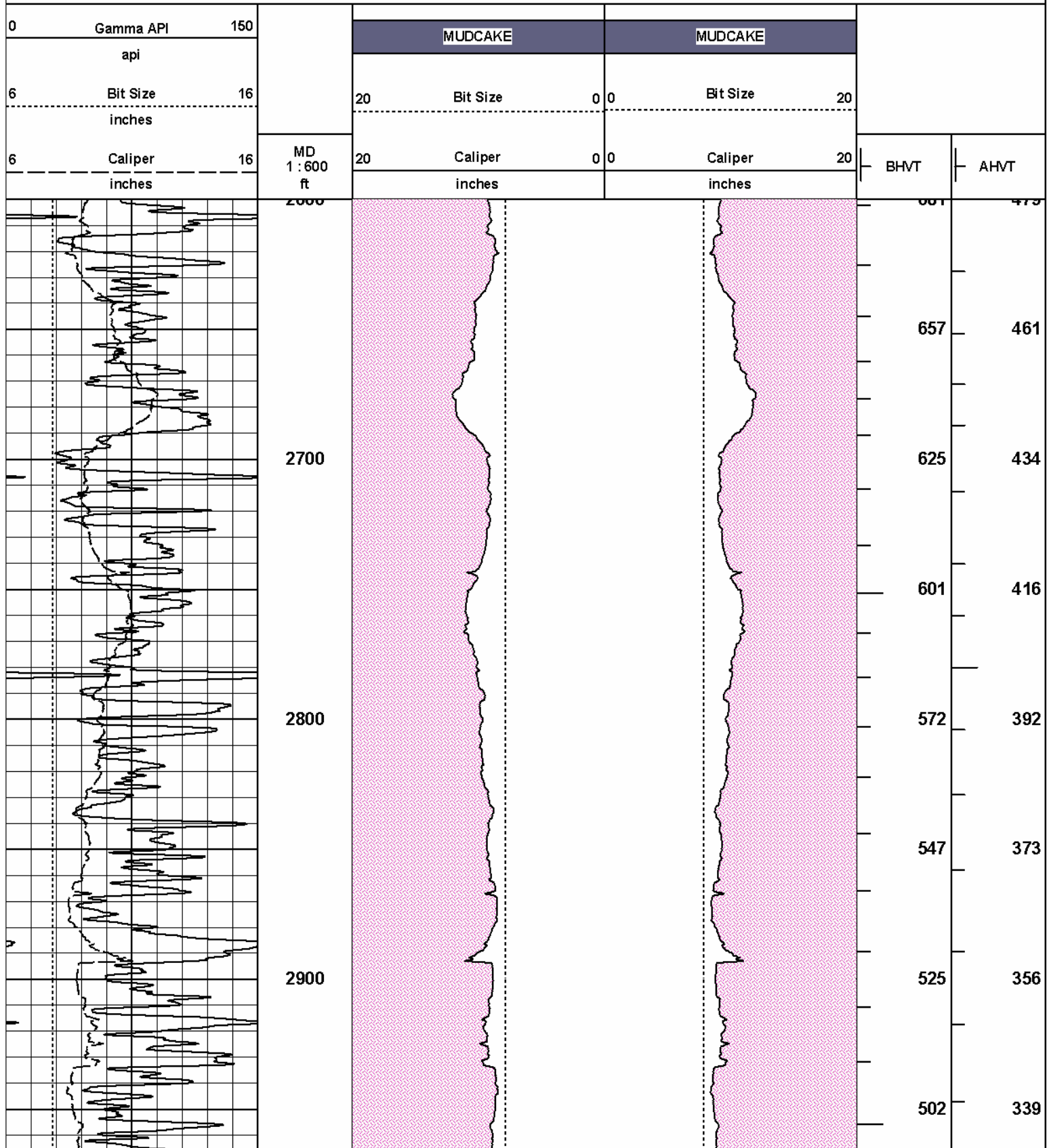
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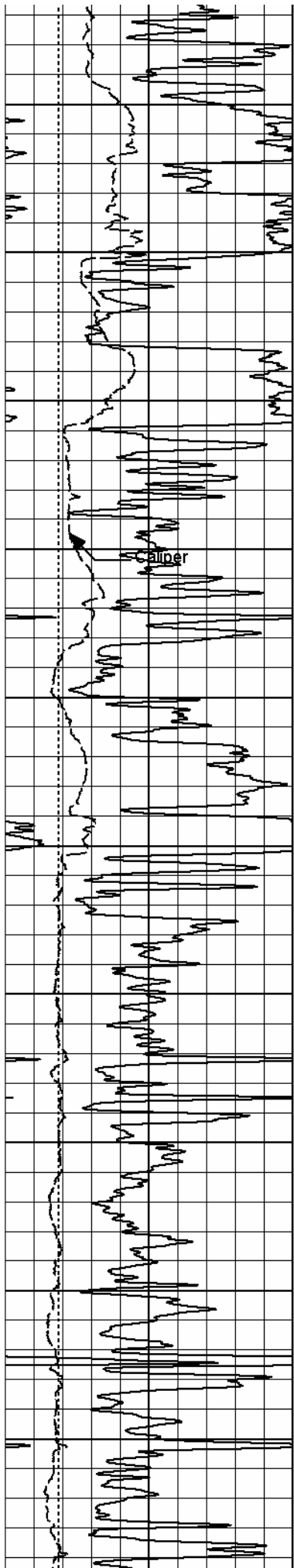
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Plot Range: 2600 ft to 4393.67 ft

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Plot File: \\LOCAL-\\JOSEFIK_T_1_22\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIPOROHV_2_IQ_LIB

ANNULAR HOLE VOLUME PLOT



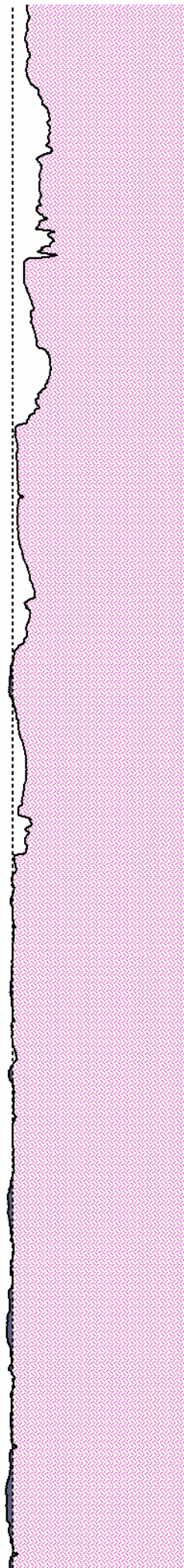
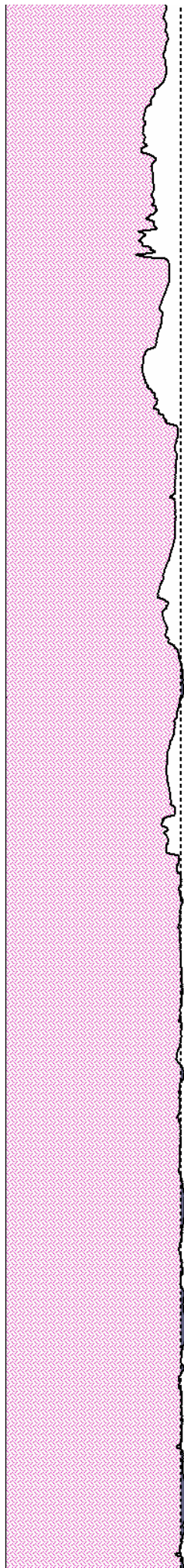
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3200

3300

3400



480

453

428

409

389

369

351

334

318

302

323

300

281

267

253

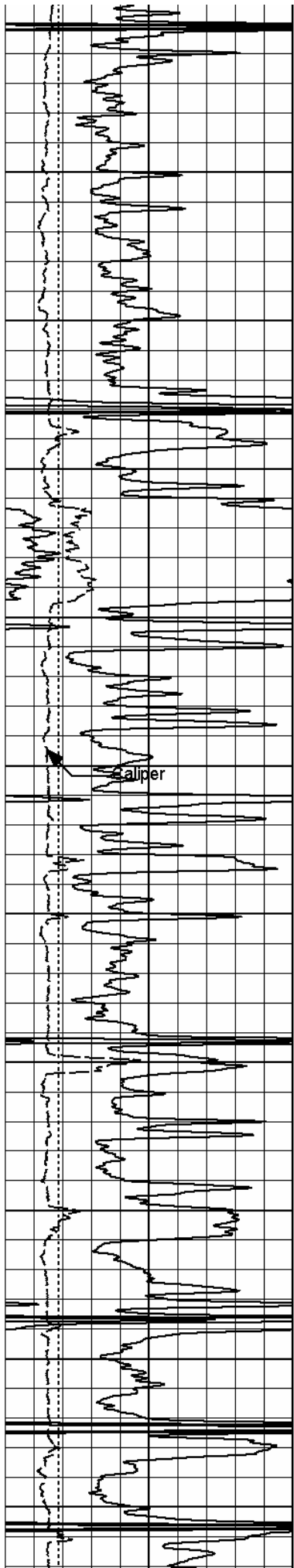
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227

215

204

194



3500

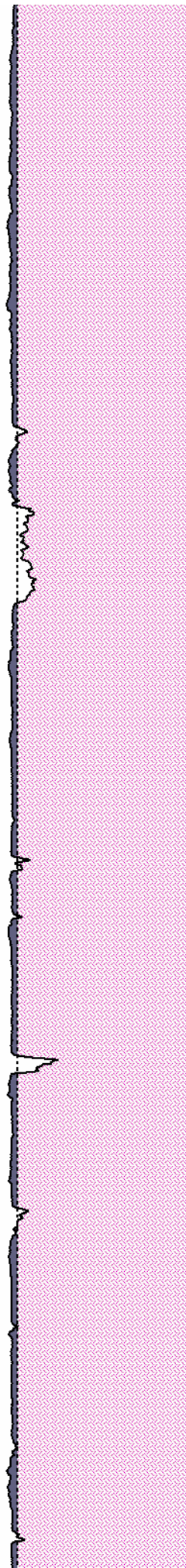
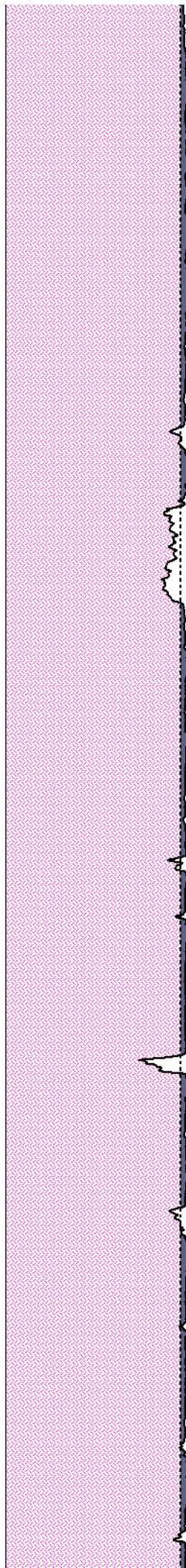
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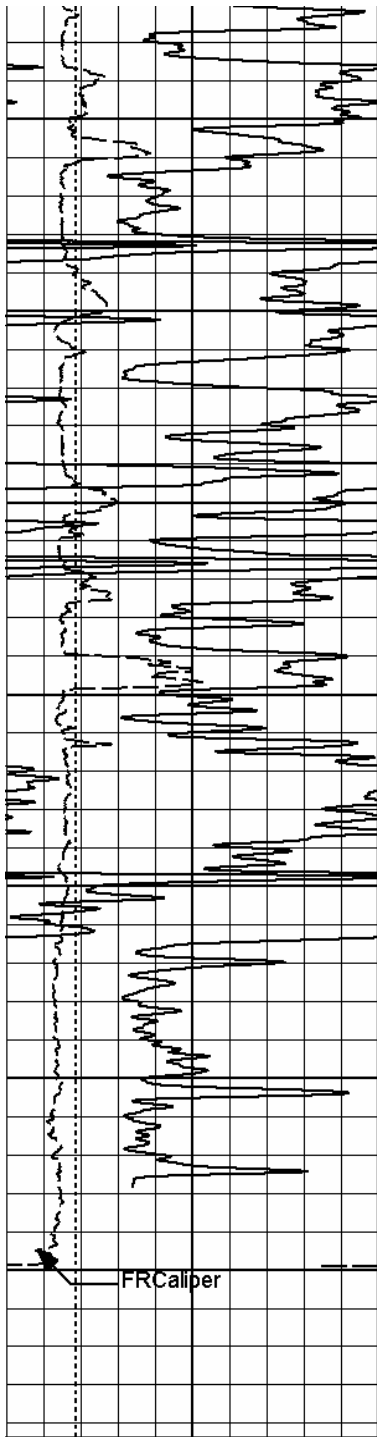
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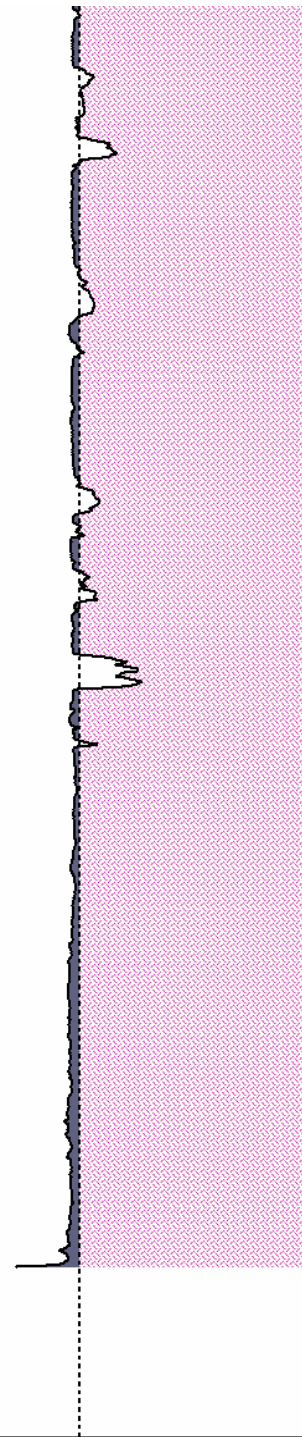
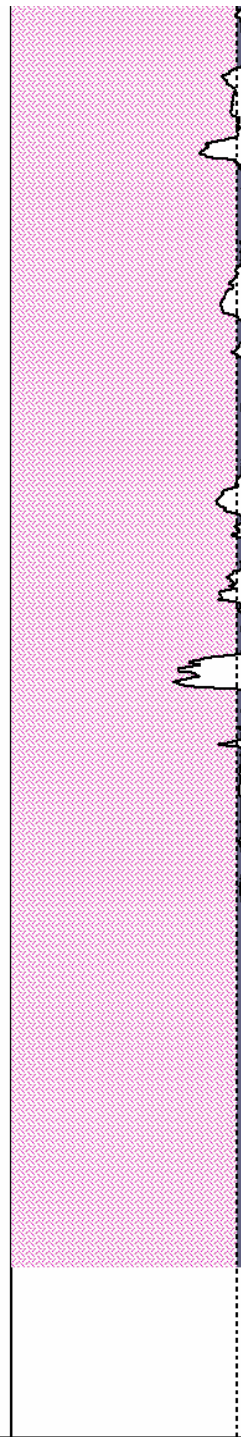


4100

4200

4300

FRCaliper



112 70

95 59

79 48

60 35

44 25

29 15

15 8

6	Caliper	16	MD 1 : 600 ft	20	Caliper	0 0	20	Caliper	20	BHVT	AHVT
	inches				inches			inches			
6	Bit Size	16		20	Bit Size	0 0	20	Bit Size	20		
	inches										
0	Gamma API	150									
	api										
					MUDCAKE			MUDCAKE			

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Plot Time: 08-Mar-13 20:03:19

Plot Range: 2600 ft to 4393.67 ft

Data: JOSEFIAK_T_1_22\Well Based\DAQ-0001-004\

Plot File: \\LOCAL-\\JOSEFIAK_T_1_22\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIPOROV\HV_2_IQ_LIB

ANNULAR HOLE VOLUME PLOT

COMPANY	RAYDON EXPLORATION, INC.		
WELL	JOSEFIAK TRUST 1-22		
FIELD	WILDCAT		
COUNTY	PAWNEE	STATE	KANSAS
HALLIBURTON		DUAL SPACED NEUTRON SPECTRAL DENSITY LOG	