

Tucker
ENERGY SERVICES

COMPENSATED NEUTRON

PEL DENSITY LOG

Company ANDERSON ENERGY INC.
Well EATON TRUST #1
Field WILDCAT
County ROOKS
State KANSAS
Country USA
API No. 15-163-24050

File No : TUL-56974
Company : ANDERSON ENERGY INC.
Well : EATON TRUST #1
Field : WILDCAT
County : ROOKS
State : KANSAS
Country : USA
API No : 15-163-24050

Location :
1430' FSL & 510' FEL
SW SE NE SE

LSD : Sect : 18 Twp : 10S Rge : 20W

Permanent Datum:	GL	Elevations:	Ft	Services:	
Drilling Measured From:	KB	KB 2151.00	Ft	CNT	
Log Measured From:	KB	DF 2150.00	Ft	LDT	
Above Permanent Datum:	0.00 Ft	GL 2142.00	Ft	MLT	
Date	2012-06-29				
Run Number	1				
Depth--Driller	3900.0 Ft				
Depth--Logger	3900.0 Ft				
First Reading	3853.0 Ft				
Last Reading	310.0 Ft				
Casing--Driller	310.0 Ft				
Casing--Logger	310.0 Ft				
Bit Size	7.875 In				
Casing Size	8.625 In				
Hole Fluid Type	WBM				
Density	9.2 LBS/GAL				
Fluid Loss	7.2 CC				
PH/Viscosity	10.5 58.0 SEC				
Sample Source	MEASURED				
RM@Measured Temp.	1.400 @ 78 F				
RMF@Measured Temp	1.190 @ 78 F				
RMG@Measured Temp.	1.610 @ 78 F				
Source RMF/RMG	CALCULATED/CALCULATED				
RM@BHT	0.970 @ 115 F				
Time Circulation Stopped					
Max Recorded Temp.	115 F				
Equipment/Base	TRUCK 119 TULSA				
Recorded By	S. DAVIS				
Witnessed By	R. MARTIN				

The customer is hereby warned that by providing the log data herein, T. E. S. does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. T. E. S. does not guarantee or warrant either expressly or impliedly, the accuracy of any interpretation of log data, conversion of log data to physical rock parameters or recommendations which may be given by T. E. S. personnel. Any interpretation, conversion or recommendation is not part of the consideration for the agreement between the parties and is not part of any part of the charge by T. E. S. for its services. Any user of the log data is warned that said user is not entitled to rely on interpretations, conversions or recommendations as aforesaid.

Bitsize Intervals		Casing Strings		
Size (In)	Bottom (Ft)	Size (In)	Weight (Lbs)	Bottom (Ft)
7.875	3900.00	8.625	30.00	310.00

Run Number	1	
Date	2012-06-29	
Date/Time On Bottom	2012-06-29 09:00	
Depth to Fluid	0.0	Ft
Salinity	1800.000	PPM
RMF@BHT	0.820	@ 115 F
RMC@BHT	1.110	@ 115 F

Run Number 1

Comments

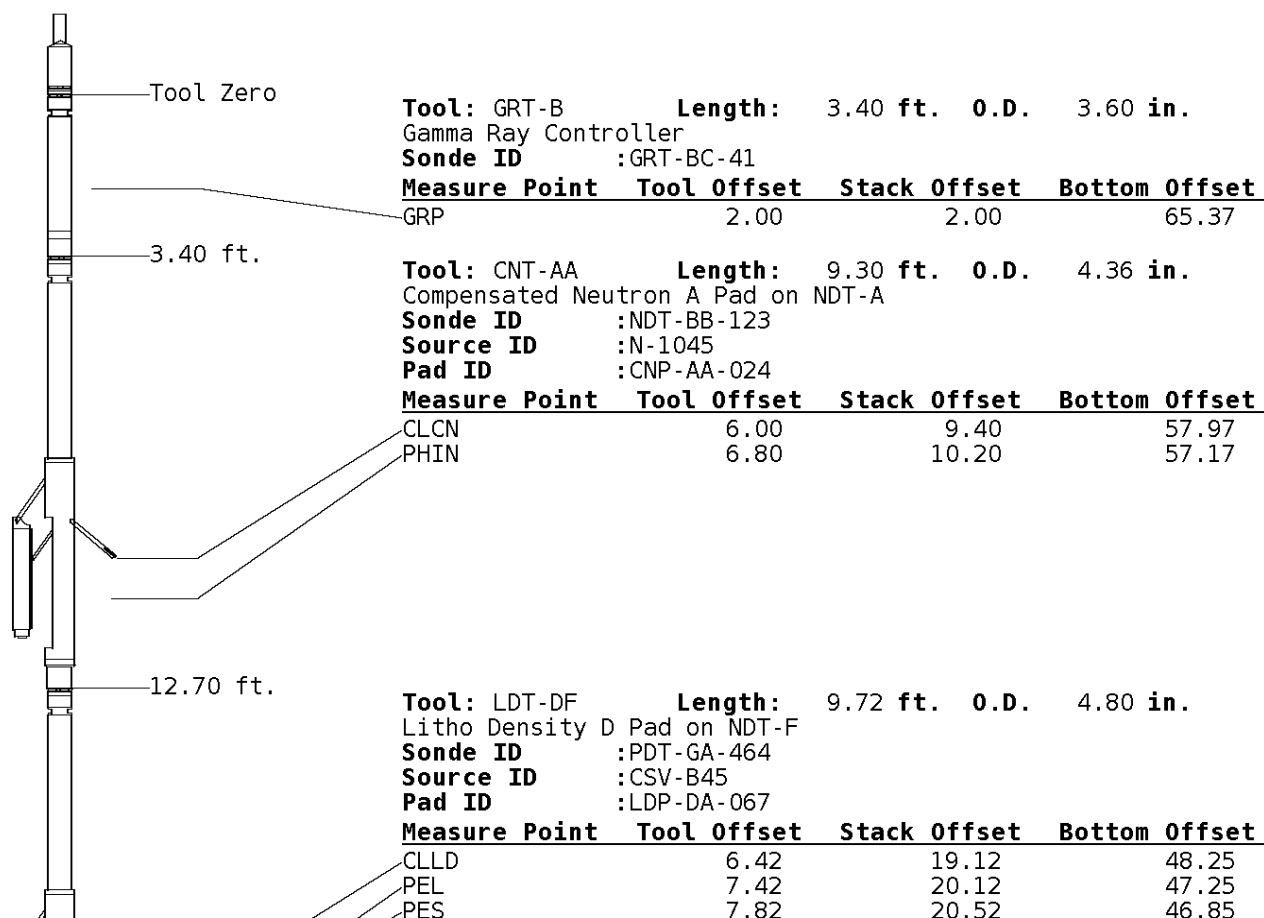
ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, MLT, CST AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED USING 5.50 PRODUCTION CASING.
 CLOSED CALIPERS @ 2010' DUE TO WEIGHT & HOLE CONDITIONS
 ANHYDRITE SECTION @ 1640'

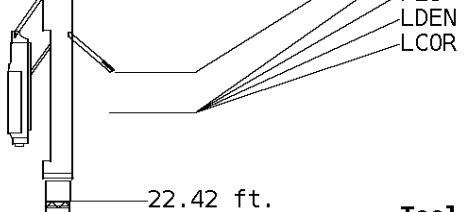
GRT: GRP.
 CNT: PHIN, CLCNIN
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 MLT: NOR_R, INV_R, MSCLPIN.
 CST: PORS, DDCDTF, TT1PF, TT3PF, ITT.
 PIT: ILD, ILM, SPU, SFLAEC

OPERATORS:
 B. COLWILL
 R. BAKE

Tool String Schematic

Total Tool Length - 67.37 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 1171.00 lbs.

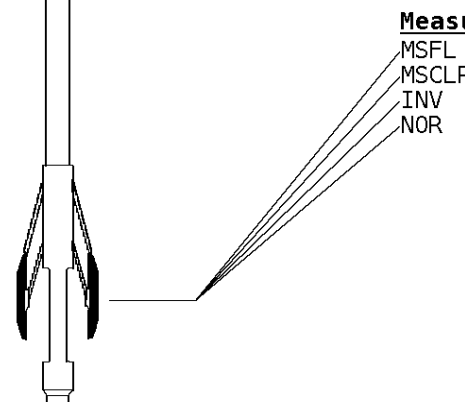




7.62 20.32 47.05
 7.62 20.32 47.05

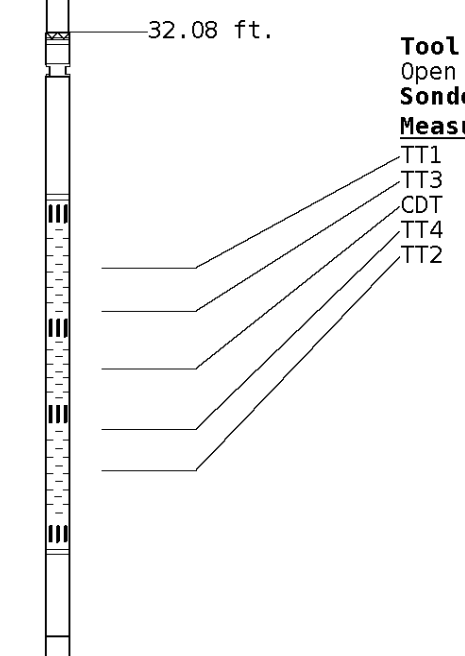
Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
 Micro Spherically Focused (IC)
Sonde ID :MST-DA-36

Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	30.02	37.35
MSCLP	7.60	30.02	37.35
INV	7.60	30.02	37.35
NOR	7.60	30.02	37.35



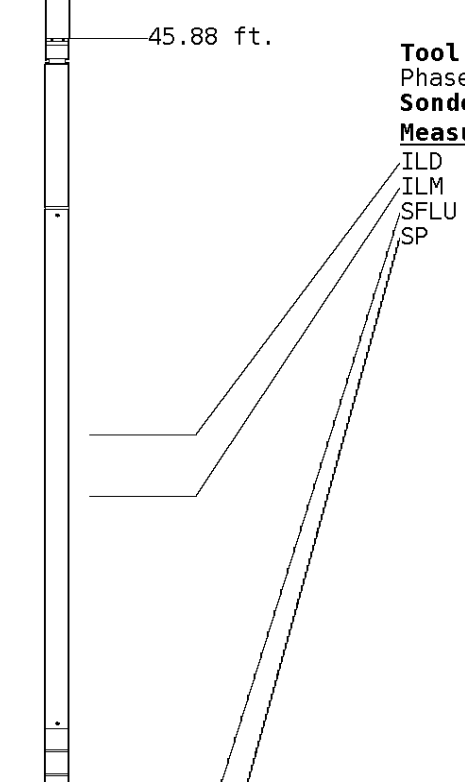
Tool: CST-AD **Length:** 13.80 ft. **O.D.** 3.60 in.
 Open Hole Sonic
Sonde ID :CST-AD-38

Measure Point	Tool Offset	Stack Offset	Bottom Offset
TT1	4.80	36.88	30.49
TT3	5.80	37.88	29.49
CDT	7.30	39.38	27.99
TT4	8.80	40.88	26.49
TT2	9.80	41.88	25.49



Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID :PIT-AC-022

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	54.80	12.56
ILM	10.10	55.98	11.39
SFLU	17.49	63.37	4.00
SP	20.60	66.48	0.88



LWT 67.37 ft.

Well File: and-ene-eat-tr-1-quint-jun-29

Scale: 1:240

Segment: V1.D1.S5 MN

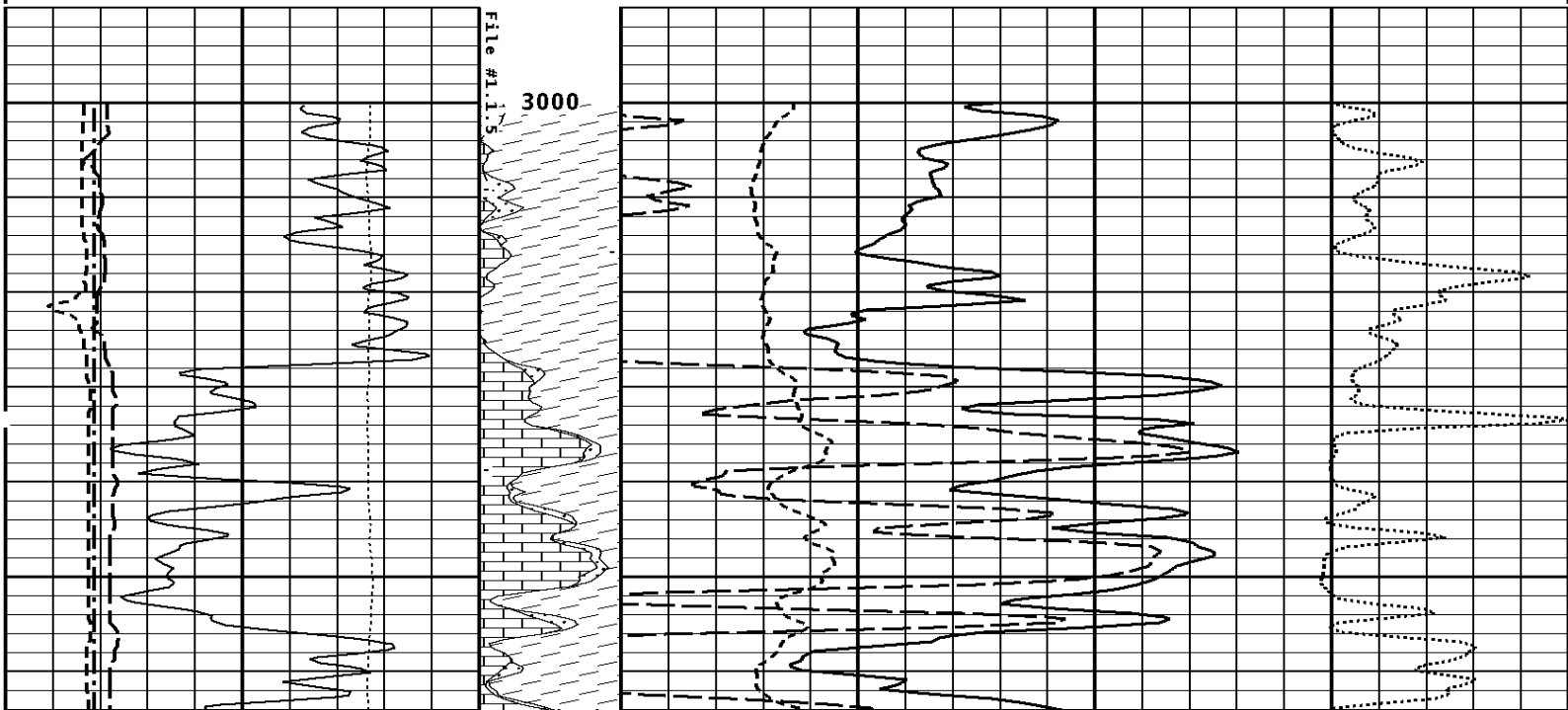
Acquired: 2012-06/29 09:23 3.2.0-10932

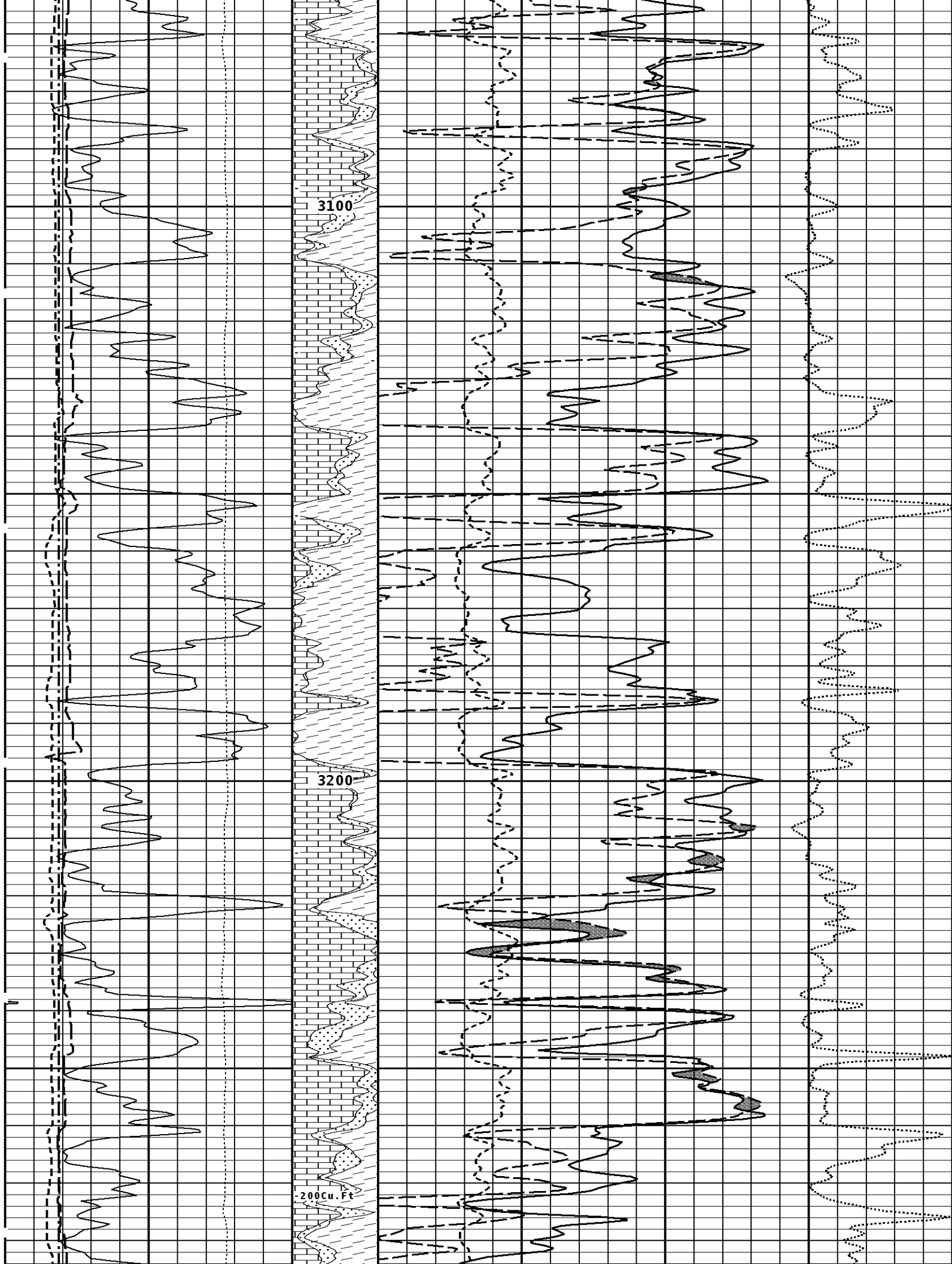
Reference: 0

Processed: 2012-06/29 11:06 3.2.0-10932

TENSION LBS								
10000	0							
BIT SIZE INCHES (IN)		Volume Dolo/Shale						
6	16							
DENSITY (X) CALIPER INCHES (IN)		Volume Quartz	PE CROSS-SECTION BARNs/ELECTRON		DENSITY CORRECTION G/CC			
16	26		0	10	-0.25	0.25		
6	16							
NEUTRON (Y) CALIPER INCHES (IN)		Volume Calcite	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)					
16	26		30					-10
6	16							
GAMMA RAY API UNITS		- BHV AHV - CU. FT	DENSITY POROSITY PERCENT (2.71 g/cc)					
150	300		70					30
0	150		30					-10
			-10					-50

1:240 MAIN SECTION





3100

3200

200 Cu. Ft

100 Cu. Ft.
3300

← GR

← N CAL

← LD CAL

3400

← BIT

← LWT

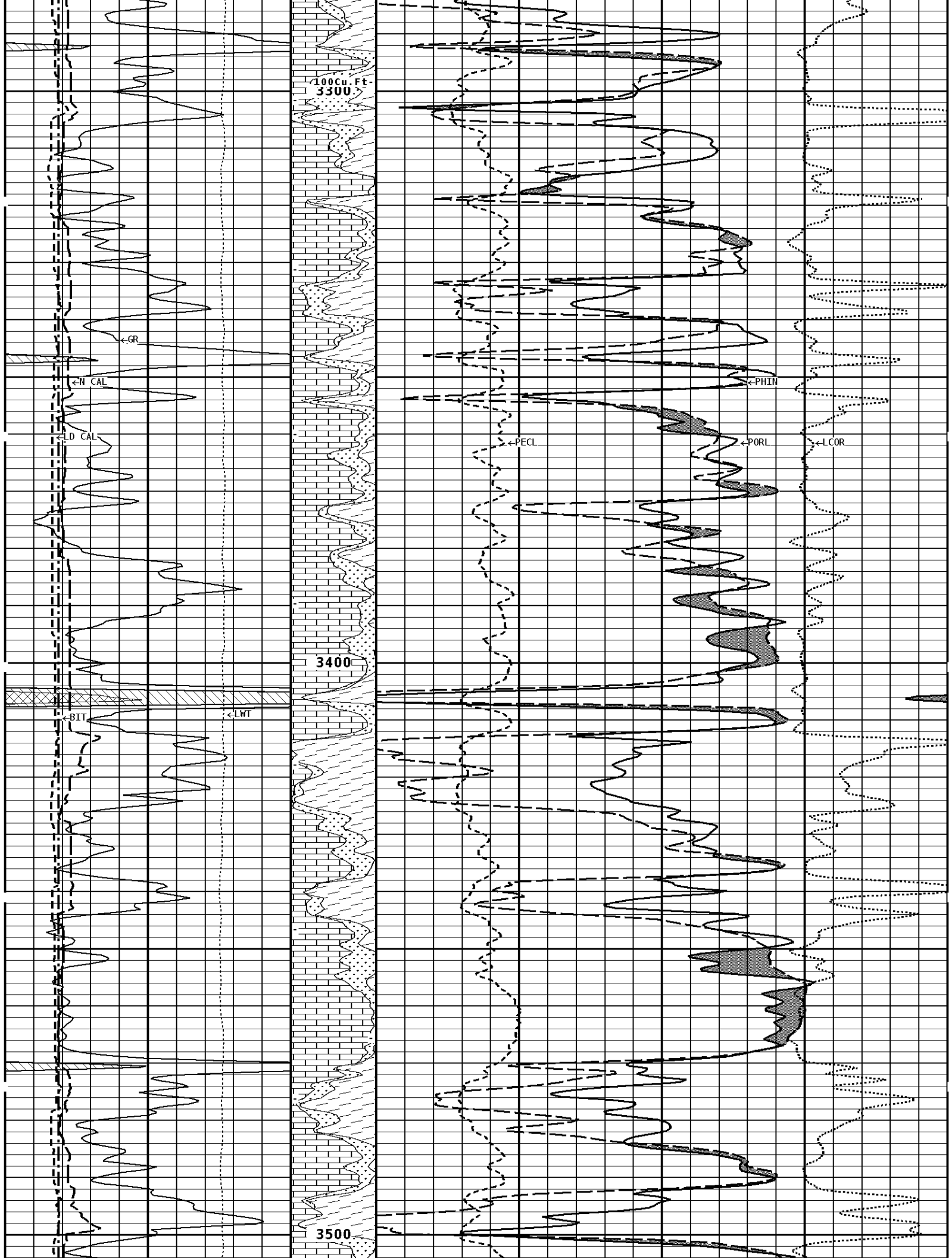
3500

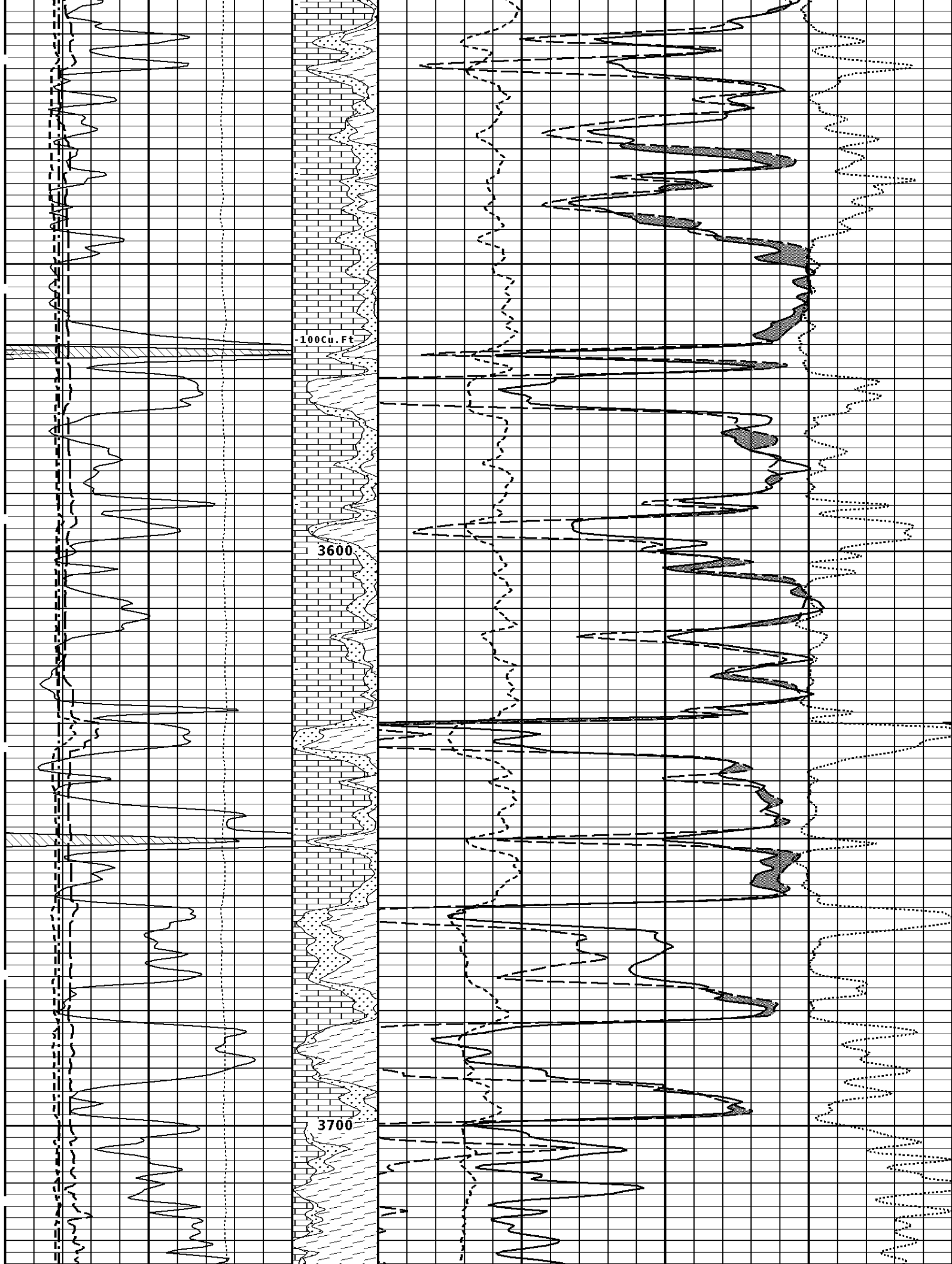
← PECL

← PHIN

← PORL

← L COR

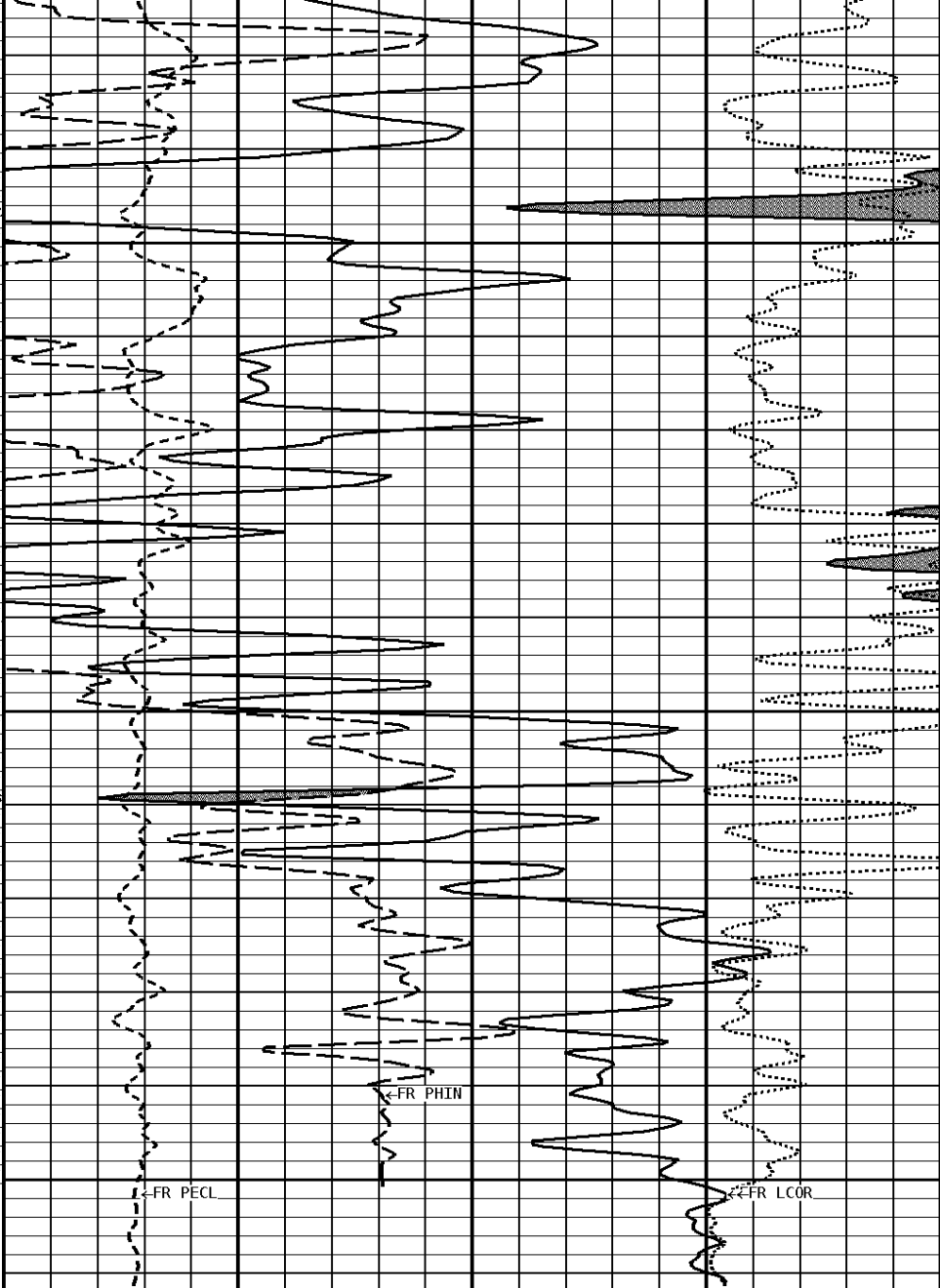
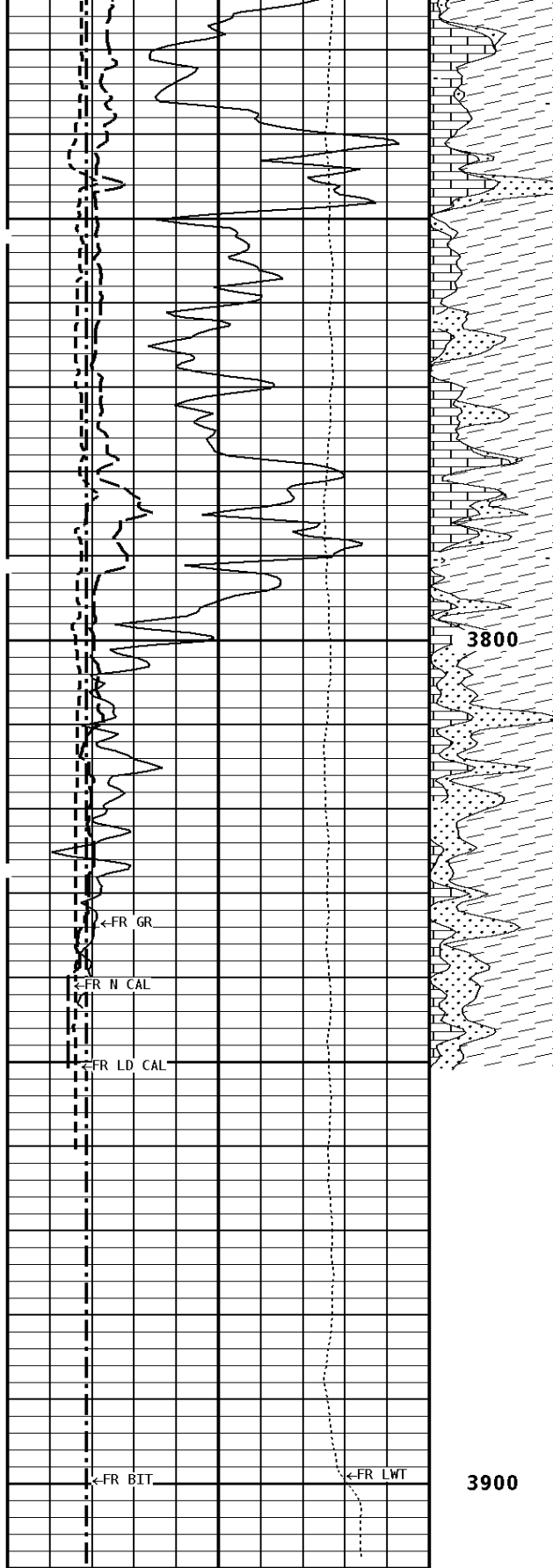




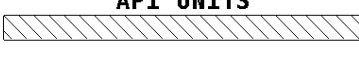
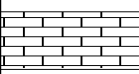

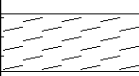
100Cu. Ft

3600

3700



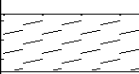
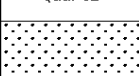
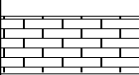

1:240 MAIN SECTION

GAMMA RAY API UNITS 	- BHV AHV - CU. FT	DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 -10	30 -10 -50
NEUTRON (Y) CALIPER INCHES (IN) 16 6 ----- 16	Volume Calcite 	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX) 30 ----- -10	
DENSITY (X) CALIPER INCHES (IN) 16 6 ----- 16	Volume Quartz 	PE CROSS-SECTION BARNS/ELECTRON 0 ----- 10	DENSITY CORRECTION G/CC -0.25 ----- 0.25
BIT SIZE INCHES (IN) 6 ----- 16	Volume Dolo/Shale 		
TENSION LBS 10000 ----- 0			

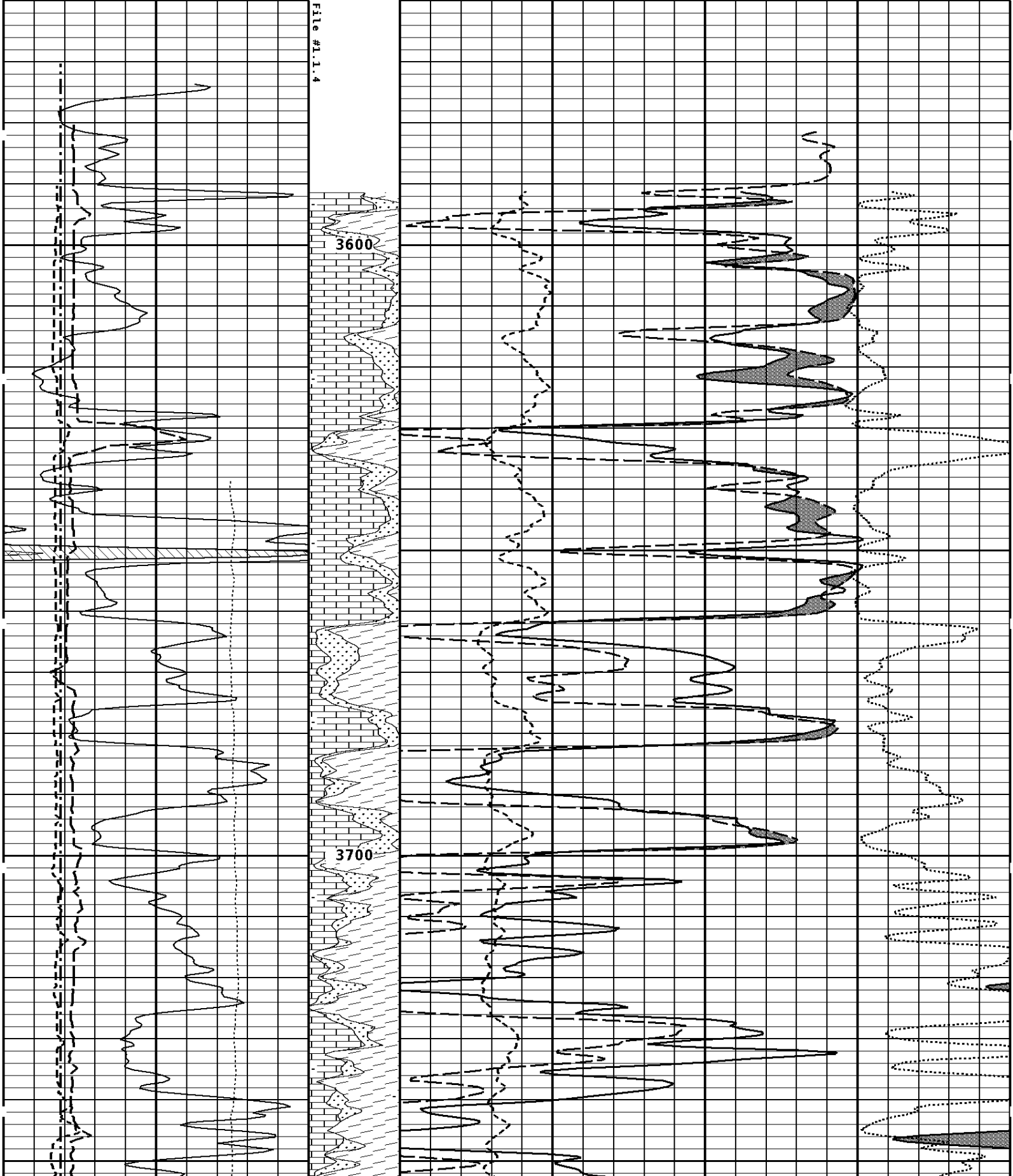
* Borehole Zone Factors *

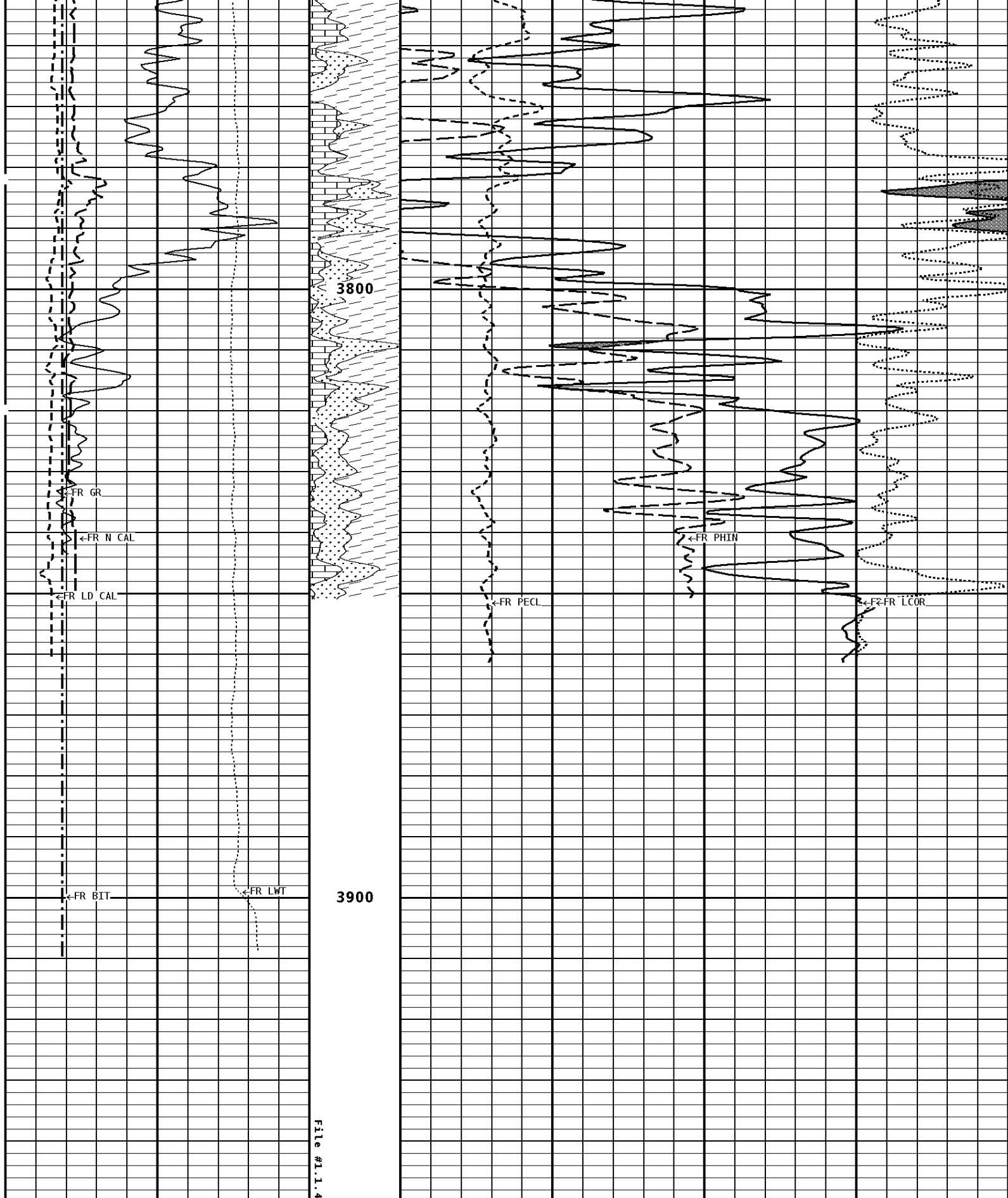
Zone 1 99999.0 to 0.0 Feet
Matrix Density _____ 2.71 g/cc Fluid Density _____ 1.00 g/cc Formation Matrix _____ Limestone Drill Bit Size _____ 7.875 in Casing Diameter _____ 5.500 in Casing Correction (PHI N) _____ Disable

Well File: and-ene-eat-tr-1-quint-jun-29	Scale: 1:240
Segment: V1.D1.S4 RP	Acquired: 2012-06/29 09:07 3.2.0-10932
Reference: 0	Processed: 2012-06/29 11:06 3.2.0-10932

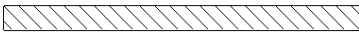
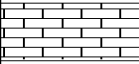


TENSION LBS 10000 ----- 0			
BIT SIZE INCHES (IN) 6 ----- 16	Volume Dolo/Shale 		
DENSITY (X) CALIPER INCHES (IN) 16 6 ----- 16	Volume Quartz 	PE CROSS-SECTION BARNS/ELECTRON 0 ----- 10	DENSITY CORRECTION G/CC -0.25 ----- 0.25
NEUTRON (Y) CALIPER INCHES (IN) 16 6 ----- 16	Volume Calcite 	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX) 30 ----- -10	
GAMMA RAY API UNITS 	- BHV AHV - CU. FT	DENSITY POROSITY PERCENT (2.71 g/cc) 70 30	30 -10

1:240 REPEAT SECTION






1:240 REPEAT SECTION

GAMMA RAY API UNITS 150  300 0 150		- BHV AHV - CU. FT 70 30 -10	DENSITY POROSITY PERCENT (2.71 g/cc) 30 -10 -50	
NEUTRON (Y) CALIPER INCHES (IN) 16 6 26 16		Volume Calcite 	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX) 30 -10	
DENSITY (X) CALIPER INCHES (IN) 16 6 26 16		Volume Quartz 	PE CROSS-SECTION BARNS/ELECTRON 0 10	DENSITY CORRECTION G/CC -0.25 0.25
BIT SIZE INCHES (IN) 6 16		Volume Dolo/Shale 		
TENSION LBS 10000 0				

*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet	
Matrix Density _____	2.71 g/cc
Fluid Density _____	1.00 g/cc
Formation Matrix _____	Limestone
Drill Bit Size _____	7.875 in
Casing Diameter _____	5.500 in
Casing Correction (PHI N) _____	Disable

Well File: and-ene-eat-tr-1-quint-jun-29	Scale: 1:240
Segment: V1.D1.S5 MN	Acquired: 2012-06/29 09:23 3.2.0-10932
Reference: 0	Processed: 2012-06/29 11:06 3.2.0-10932

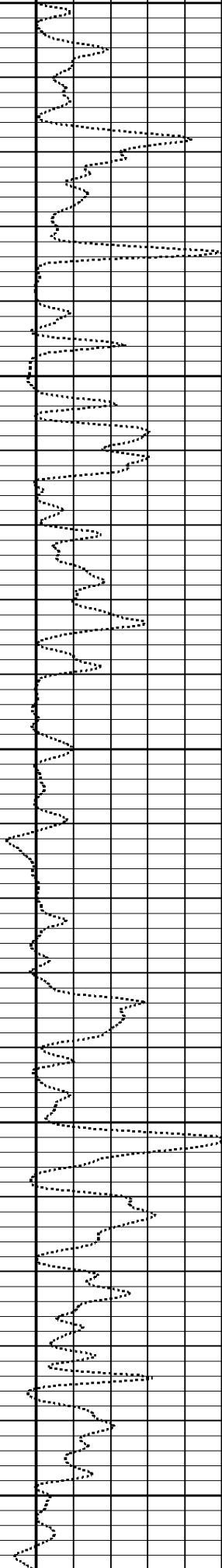
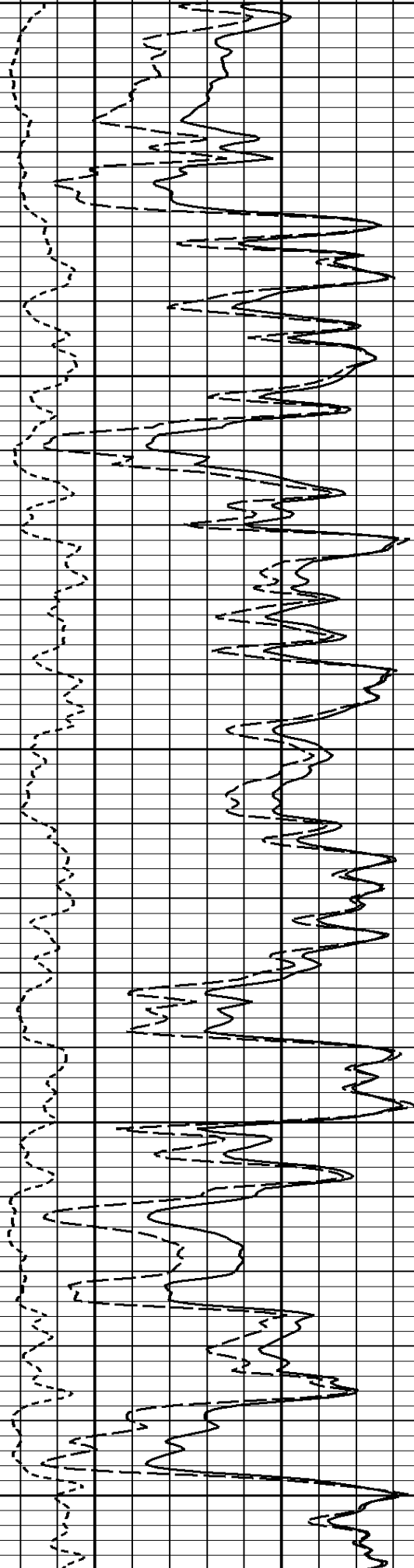
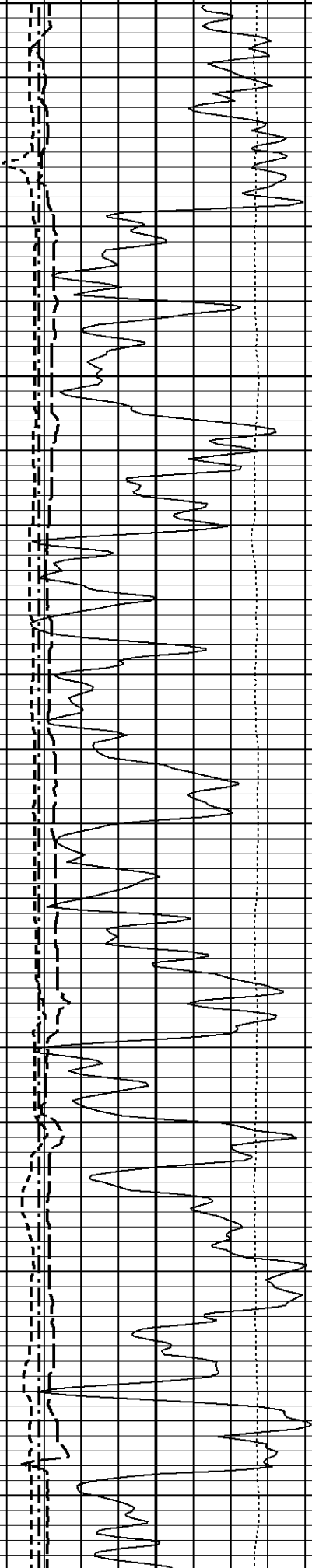
TENSION LBS 10000 0			
BIT SIZE INCHES (IN) 6 16			
DENSITY (X) CALIPER INCHES (IN) 16 6 26 16		PE CROSS-SECTION BARNS/ELECTRON 0 10	DENSITY CORRECTION G/CC -0.25 0.25
NEUTRON (Y) CALIPER INCHES (IN) 16 6 26 16		DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 30 -10 -10 -50	
GAMMA RAY API UNITS 150  300 0 150		- BHV AHV - CU. FT 3.0 4.0 2.0 3.0 1.0 2.0	COMPENSATED BULK DENSITY G/CC

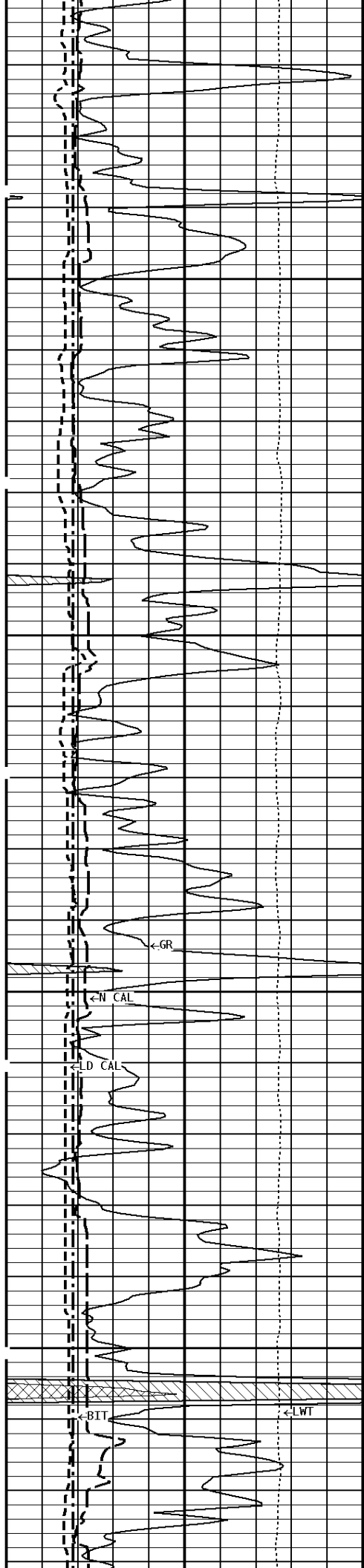
**1:240 MAIN SECTION
BULK DENSITY**

3000

3100

3200

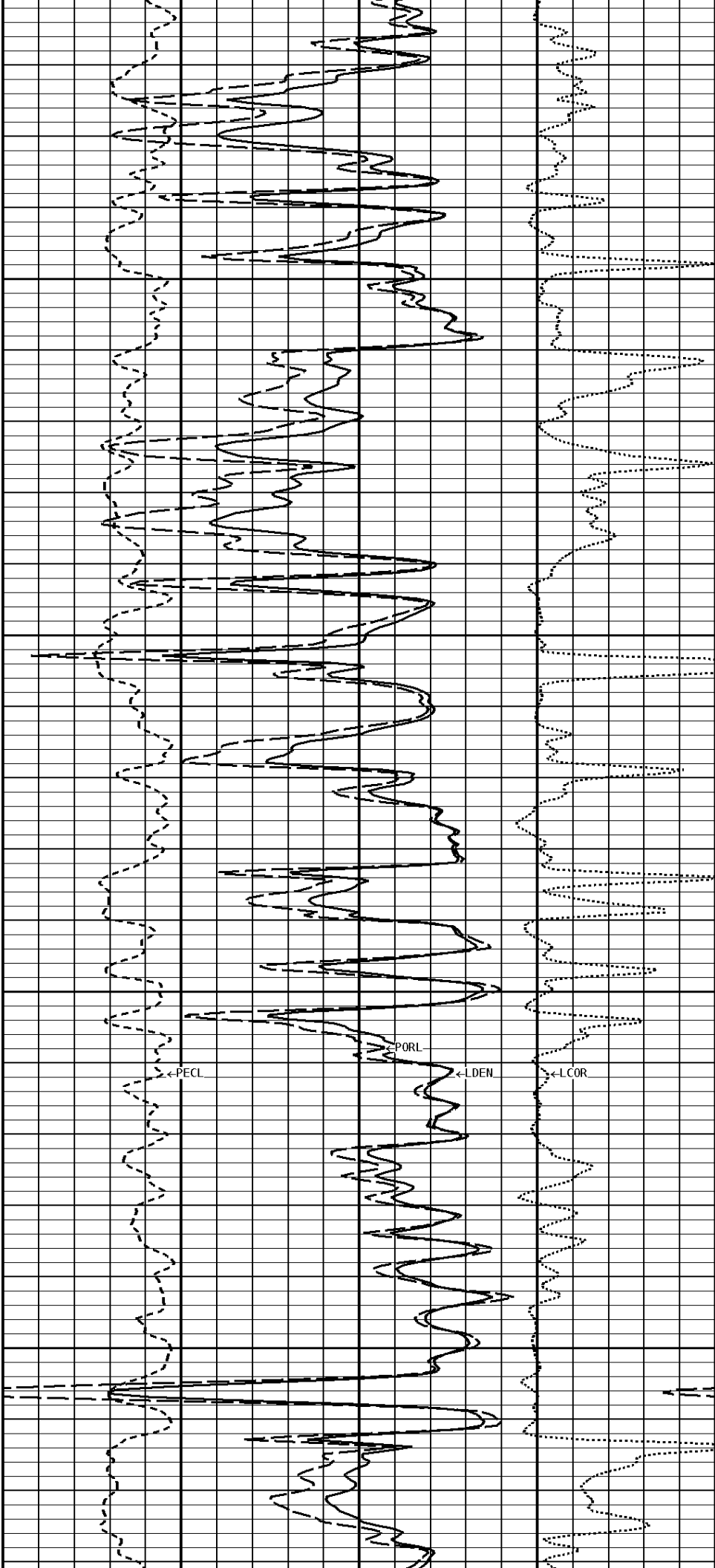


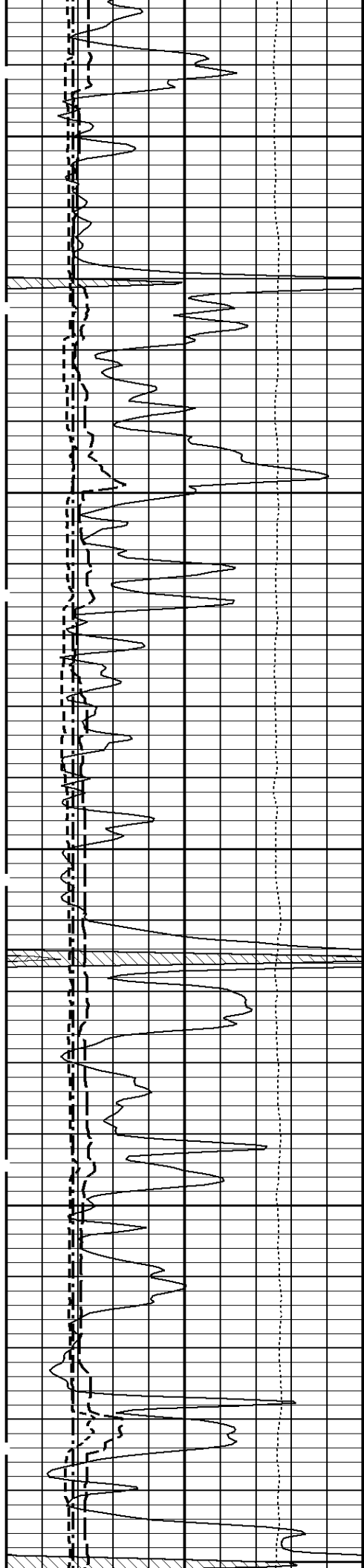


--200Cu.Ft

100Cu.Ft--
3300

3400

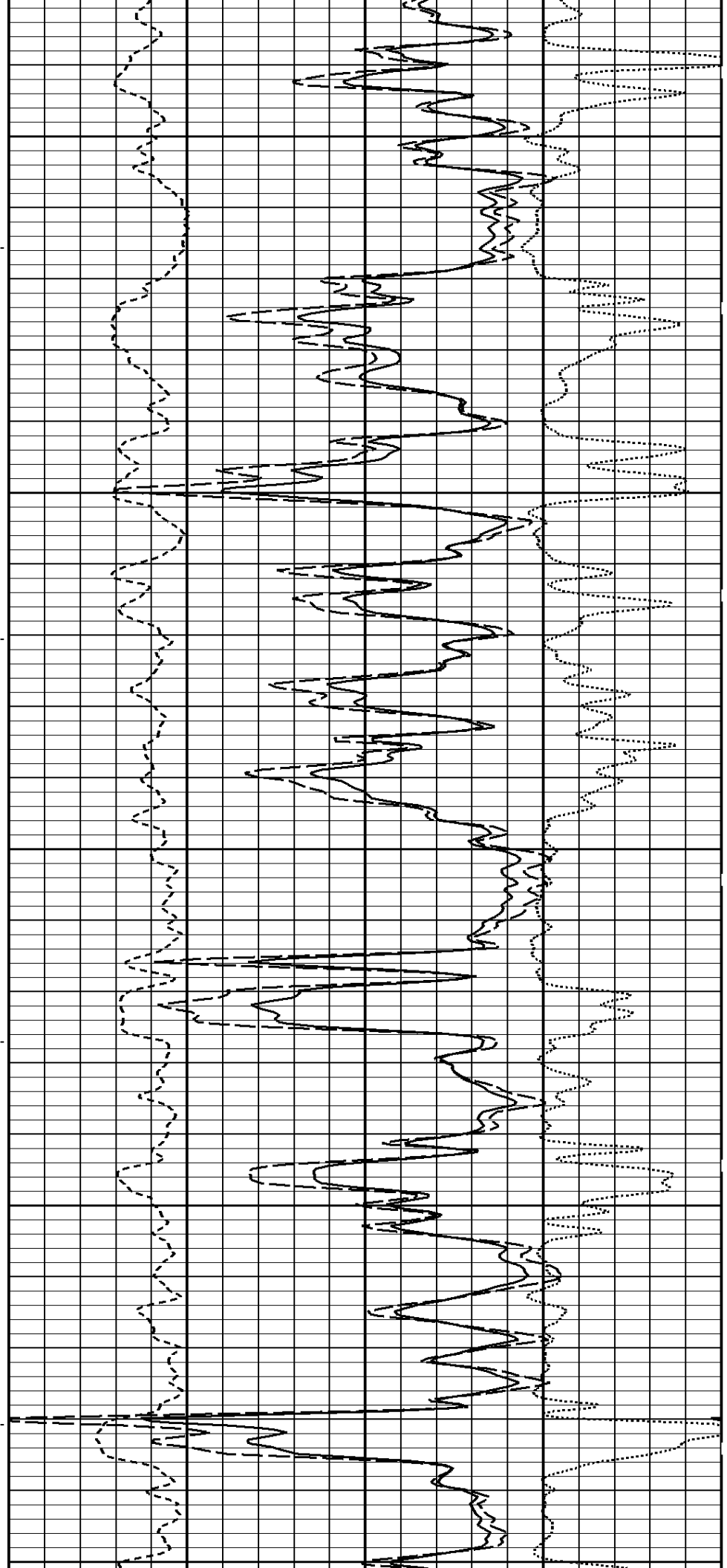


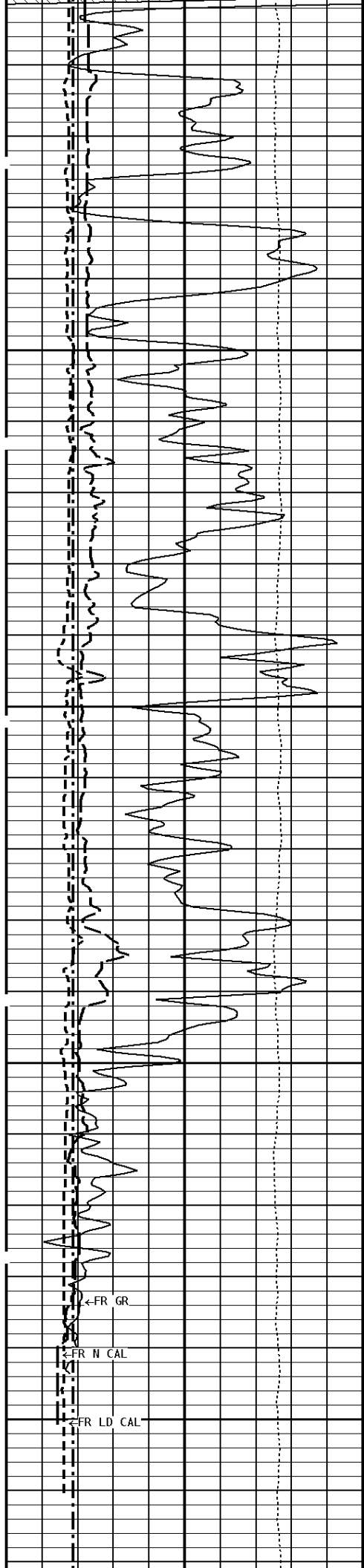


3500

-100Cu. Ft

3600





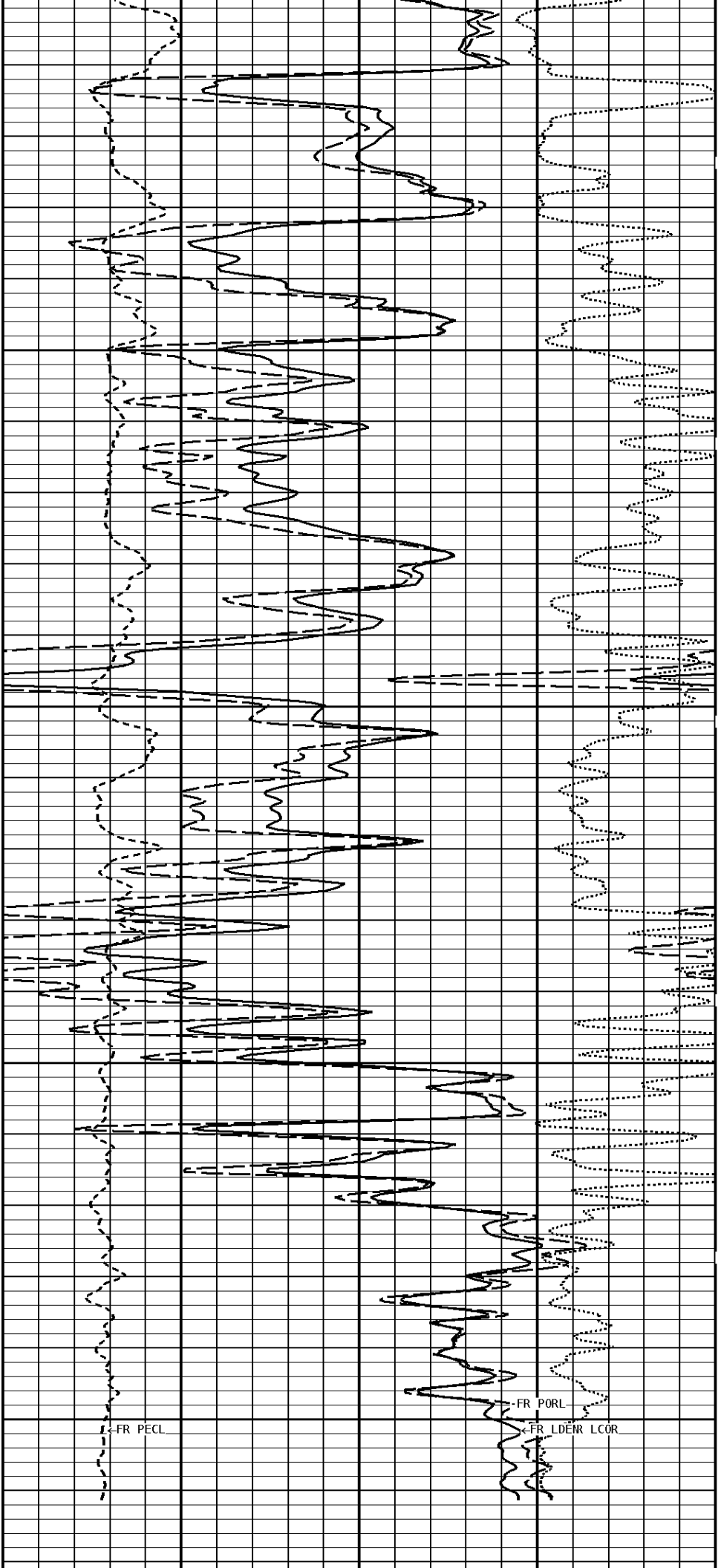
3700

3800

<FR GR

<FR N CAL

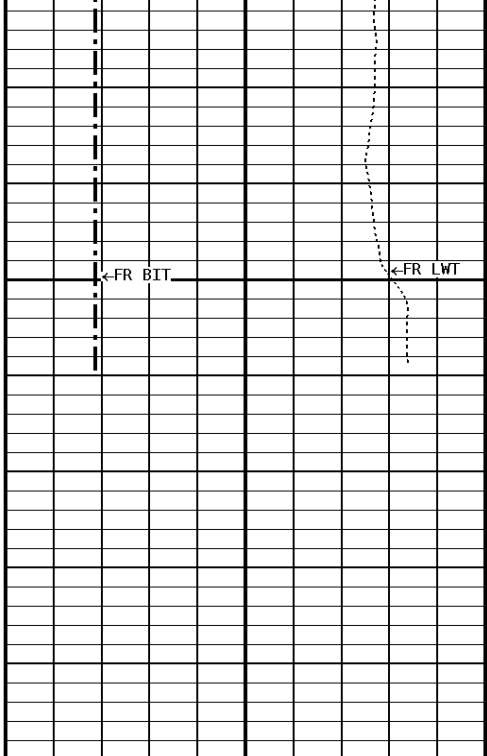
<FR LD CAL



<FR PECL

<FR PORL

<FR LDEN L COR



3900

File #1.1.5

1:240 MAIN SECTION BULK DENSITY

GAMMA RAY API UNITS 150 300 0 150	
NEUTRON (Y) CALIPER INCHES (IN) 16 26 6 16	
DENSITY (X) CALIPER INCHES (IN) 16 26 6 16	
BIT SIZE INCHES (IN) 6 16	
TENSION LBS 10000 0	

- BHV AHV - CU. FT	COMPENSATED BULK DENSITY G/CC	
	3.0	4.0
	2.0	3.0
	1.0	2.0
	DENSITY POROSITY PERCENT (2.71 g/cc)	
	70	30
	30	-10
	-10	-50
	PE CROSS-SECTION BARN/ELECTRON	DENSITY CORRECTION G/CC
	0	-0.25
	10	0.25

*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet		
Matrix Density	_____	2.71 g/cc
Fluid Density	_____	1.00 g/cc
Formation Matrix	_____	Limestone
Drill Bit Size	_____	7.875 in
Casing Diameter	_____	5.500 in
Casing Correction (PHI N)	_____	Disable

*** Calibration Summary ***

Shop Calibration GRT-B					
Performed : 04-APR-2011			Time : 19:28		
Sensor Suite : GR-GR5			ID : GRT-BC-41		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig		GRAPI
	46	346	175		

Shop Calibration CNT-AA					
Performed : 24-OCT-2011			Time : 08:41		
Sensor Suite : CALI-BCN			ID : NDT-BB-123		
	Jig - Measured		Jig - Calibrated		Units
CL # 1	Ring#1	Ring#2	Ring#1	Ring#2	IN.
	6.2	12.2	6.0	12.0	

Shop Calibration LDT-DF					
Performed : 17-May-2012			Time : 12:59		
Sensor Suite : BHC NEUT			ID : CNP-AA-024		
Source ID : N-1045					
	Tank		Verification		Units
N/F	Measured	Calibrated	Jig		
Porosity	3.8748	3.6893	3.6852		%
	23.4	20.5	20.4		

Shop Calibration LDT-DF					
Performed : 01-MAR-2011			Time : 04:24		
Sensor Suite : CALI-LTH			ID : PDT-GA-464		
	Jig - Measured		Jig - Calibrated		Units
CL # 1	Ring#1	Ring#2	Ring#1	Ring#2	IN.
	7.1	13.1	6.0	12.0	

Shop Calibration MST-DA					
Performed : 17-May-2012			Time : 10:51		
Sensor Suite : BHCPENLNG			ID : LDP-DA-067		
Source ID : CSV-B45					
	Short Space				Units
LSW1	BKGD	Al	Mg	Al+Fe	CPS
	65	919	1491	593	
LSW2		1027	1644	747	CPS
LSW3	256	2342	3792	1992	CPS
LSW4	308	2114	3072	1858	CPS
LSW5	42	61	63	58	CPS
LSW6	70	73	73	73	CPS
LSW7	52	55	55	54	CPS
LSW8	9	10	11	10	CPS
QS	0.144	0.134	0.137	0.144	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC
	Long Space				Units
LLW1	BKGD	Al	Mg	Al+Fe	CPS
	94	1117	4649	667	
LLW2	103	1826	7322	1336	CPS
LLW3	397	3225	12338	2778	CPS
LLW4	503	1553	4739	1418	CPS
LLW5	54	62	97	61	CPS
LLW6	172	169	157	166	CPS
LLW7	105	103	100	105	CPS
LLW8	3	5	14	5	CPS
QL	0.243	0.241	0.221	0.226	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC

Shop Calibration MST-DA					
Performed : 19-SEP-2007			Time : 18:02		
Sensor Suite : CALI-MSN			ID : MST-DA-36		
	Jig - Measured		Jig - Calibrated		Units
CL # 1	Ring#1	Ring#2	Ring#1	Ring#2	IN.
	4.5	10.5	6.0	12.0	

Shop Calibration MST-DA					
Performed : 23-Aug-2011			Time : 09:18		
Sensor Suite : MSTDA-NI			ID : MST-DA-36		
	Internal				Units
INV-V	Measured	Units	Calibrated	Units	
	Zero	Reference	Zero	Reference	
	221.0	21282.7	0.00	1946.00	MV
	164.0	21140.6	0.00	1546.00	MV

NOR-V	184.0	21140.8		0.00	1548.00	MV
IN-C	157.3	21367.2		0.00	15.46	UA
INV-R					40.71	OHMM
NOR-R					55.11	OHMM
Performed : 09-SEP-2007				Time : 14:53		
Sensor Suite : MSTDAMSF				ID : MST-DA-36		
			Internal			
		Measured		Calibrated		
	Zero	Reference	Units	Zero	Reference	Units
MSFC	150.0	58600.0		0.00	1522.00	UA
MSFB	32800.0	62500.0		0.00	1522.00	MA
MOM1	150.0	5950.0		0.00	1522.00	MV
MSFRA					43.30	OHMM