

Tucker
ENERGY SERVICES

COMPENSATED NEUTRON

PEL DENSITY LOG

Company RUNNING FOXES PETROLEUM Well NEW HORIZONS #4-35A-4		File No : TUL-58034	
Field BOURBON		Company : RUNNING FOXES PETROLEUM INC.	
County KANSAS		Well : NEW HORIZONS #4-35A-4	
Country USA		Field : BOURBON	
API No. 15-011-24258		County : KANSAS	
Country : USA		State : KANSAS	
API No : 15-011-24258		Country : USA	
Location : 495' FNL & 1155' FWL SE NE NW NW		Country : USA	
LSD :		Sect : 35 Twp : 24S Rge : 22E	
Permanent Datum: GL		Elevations: KB 0.00	
Drilling Measured From: GL		DF 0.00	
Log Measured From: GL		GL 1021.00	
Above Permanent Datum: 0.00 Ft		Ft	
Date 05-17-2013		Services: CNT	
Run Number 1		LDT	
Depth--Driller 761.0 Ft		PIT	
Depth--Logger 748.0 Ft			
First Reading 725.0 Ft			
Last Reading 20.0 Ft			
Casing--Driller 20.0 Ft			
Casing--Logger 20.0 Ft			
Bit Size 6.750 In			
Casing Size 8.625 In			
Hole Fluid Type FRESH / NATIVE			
Density 0.0 LBS/GAL			
Fluid Loss 0.0 CC			
PH/Viscosity 0.0		0.0 SEC	
Sample Source MEASURED			
RM@Measured Temp. 5.000 @ 70 F			
RMF@Measured Temp. 4.300 @ 70 F			
RMC@Measured Temp. 5.800 @ 70 F			
Source RMF/RMC CALCULATED		CALCULATED	
RM@BHT 4.100 @ 86 F			
Time Circulation Stopped			
Max Recorded Temp. 86 F			
Equipment/Base 127 TULSA			
Recorded By S. DAVIS			
Witnessed By K. HODGES			

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)
6.750	748.00	8.625	20.00	20.00

Run Number	1	
Date	05-17-2013	
Date/Time On Bottom	05-17-2013 11:15 am	
Depth to Fluid	0.0 Ft	
Salinity	0.000 PPM	
RMF@BHT	3.500 @ 86 F	
RMC@BHT	4.800 @ 86 F	

Run Number 1

Comments

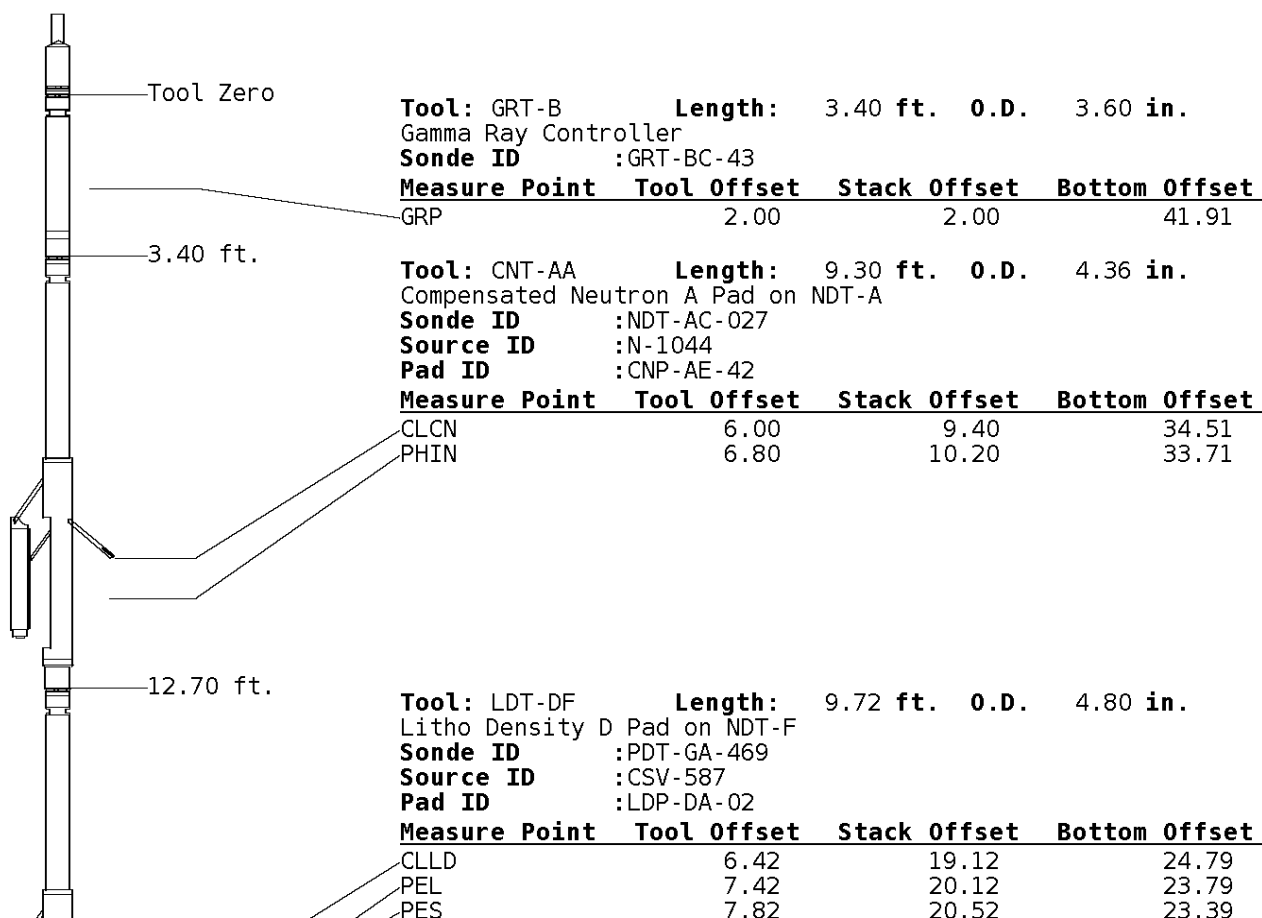
ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED 2.875" PRODUCTION CASING.
 PHIN IS CALIPER CORRECTED.
 SP & SFL CUT OFF @ 120' DUE TO LACK OF FLUID

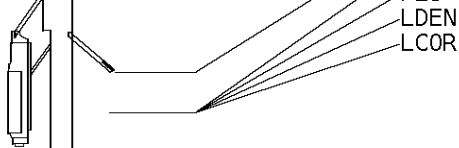
GRT: GRP.
 CNT: PHINLS, CLCNIN.
 LDT: LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 PIT: ILD, ILM, SPU, SFLAEC, CIRD.

OPERATORS:
 J.THOMAS
 J. KLINE

Tool String Schematic

Total Tool Length - 43.91 ft.
Maximum Outside diameter - 4.80 in.
Net Weight in Air - 743.00 lbs.





7.62	20.32	23.59
7.62	20.32	23.59

22.42 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID :PIT-AB-18

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	31.34	12.56
ILM	10.10	32.52	11.39
SFLU	17.49	39.91	4.00
SP	20.60	43.02	0.88

LWT 43.91 ft.

Well File: rfp-new-hor-4-35a-4-stk-may17

Scale: 1:240

Segment: V1.D1.S5 MN

Acquired: 2013-05/17 11:25 3.2.0-11535

Reference: 0

Processed: 2013-05/17 11:52 3.2.0-11535

**BIT SIZE
INCHES (IN)**

4 14

**NEUTRON (Y) CALIPER
INCHES (IN)**

14 24
4 14

**DENSITY (X) CALIPER
INCHES (IN)**

14 24
4 14

Volume
Quartz

**PE CROSS-SECTION
BARNs/ELECTRON**

**DENSITY CORRECTION
G/CC**

0 10 -0.25 0.25

**TENSION
LBS**

10000 0

Volume
Calcite

**DENSITY POROSITY (2.71g/cc)
PERCENT**

70 30
30 -10
-10 -50

**GAMMA RAY
API UNITS**

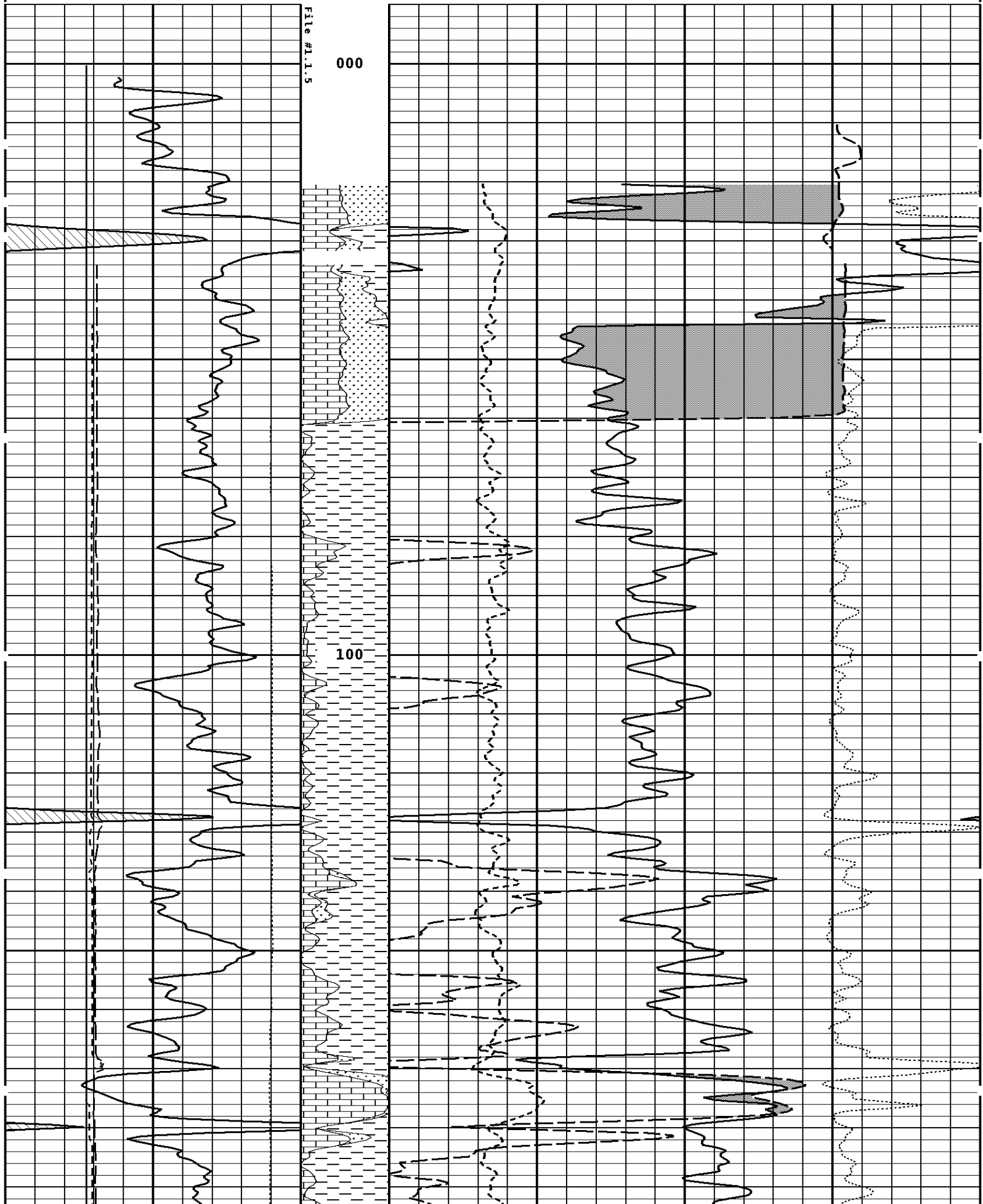
200 400
0 200

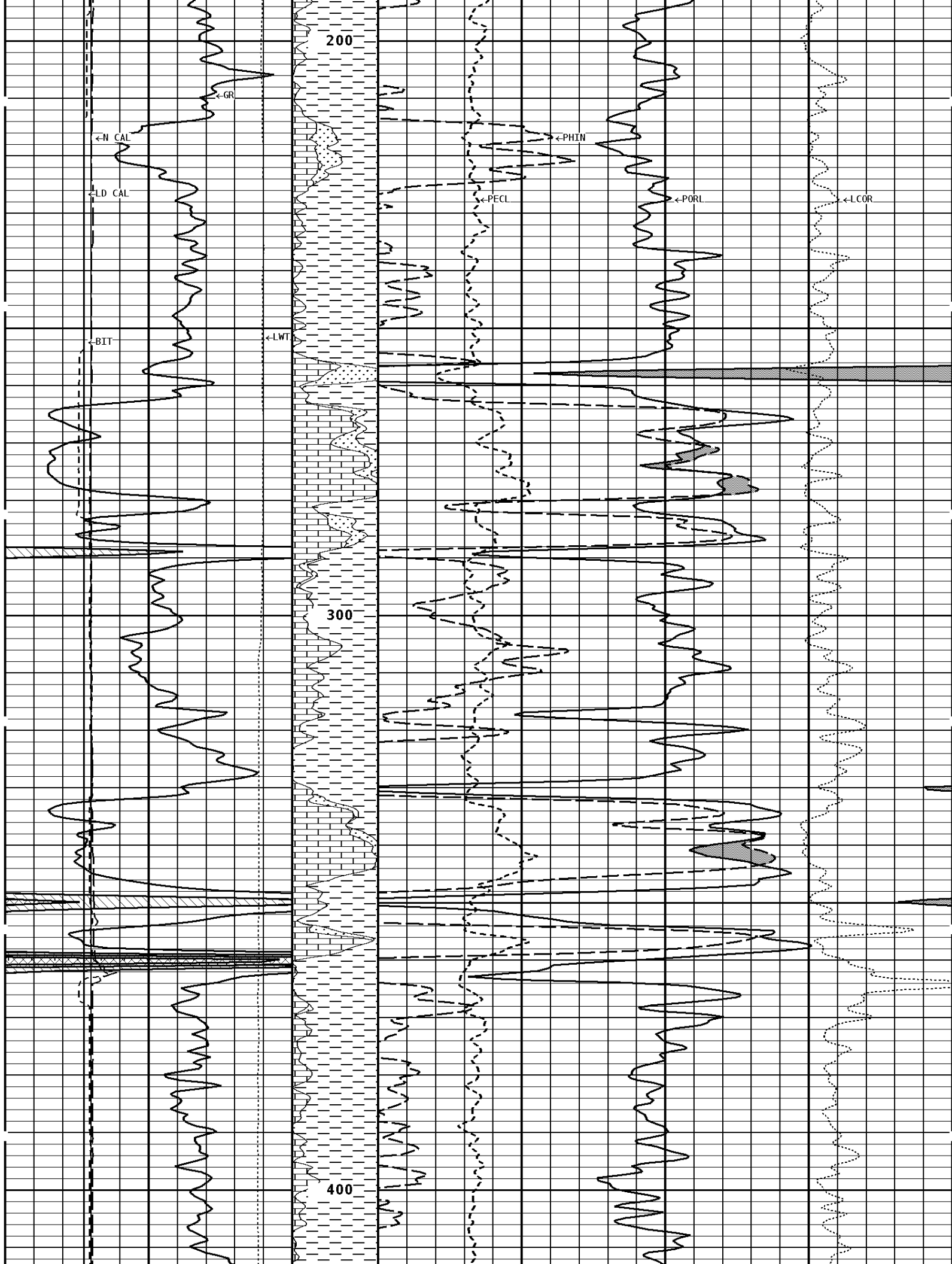
Volume
Dolo/Shale

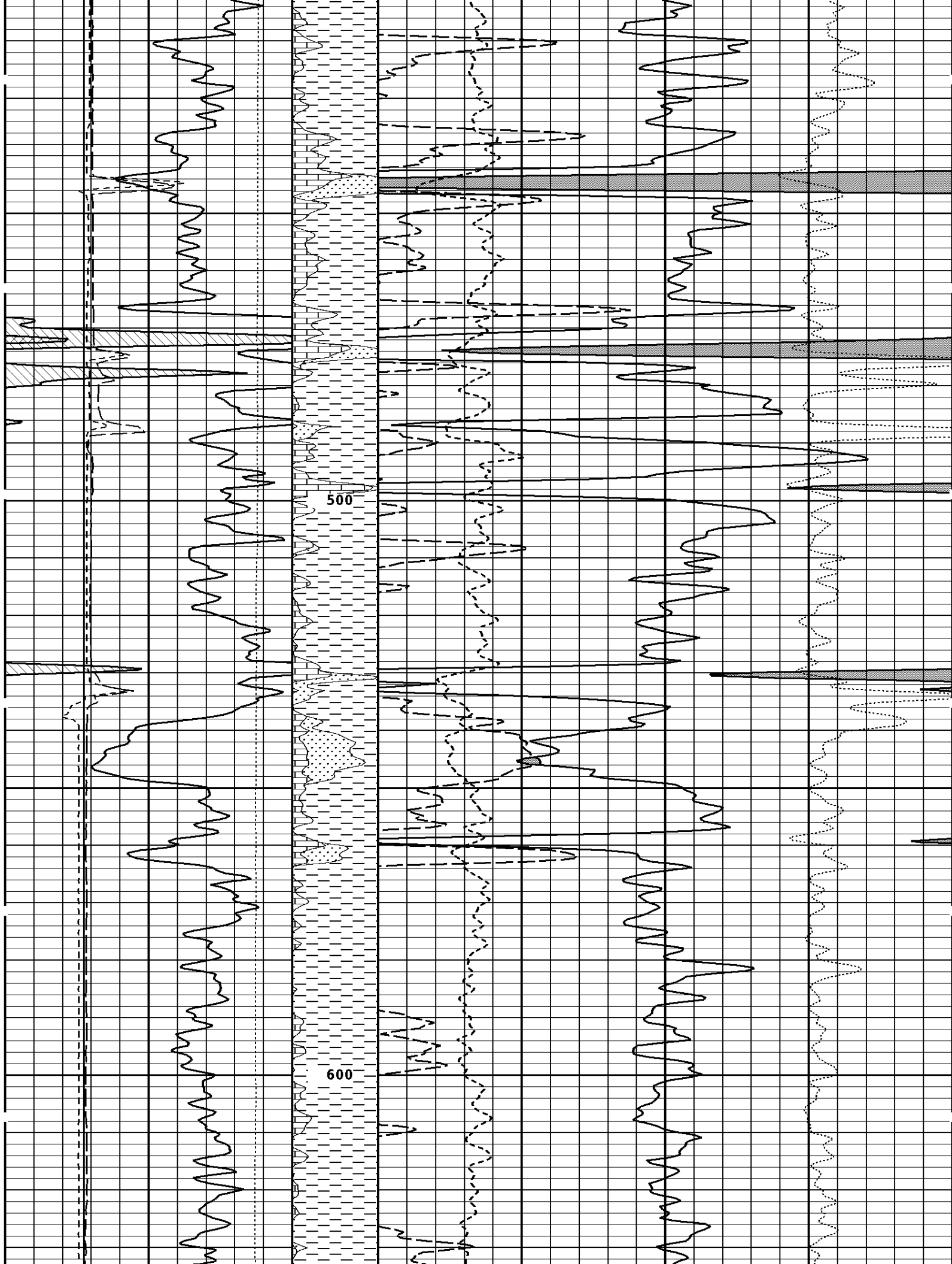
**NEUTRON POROSITY (LIMESTONE)
PERCENT**

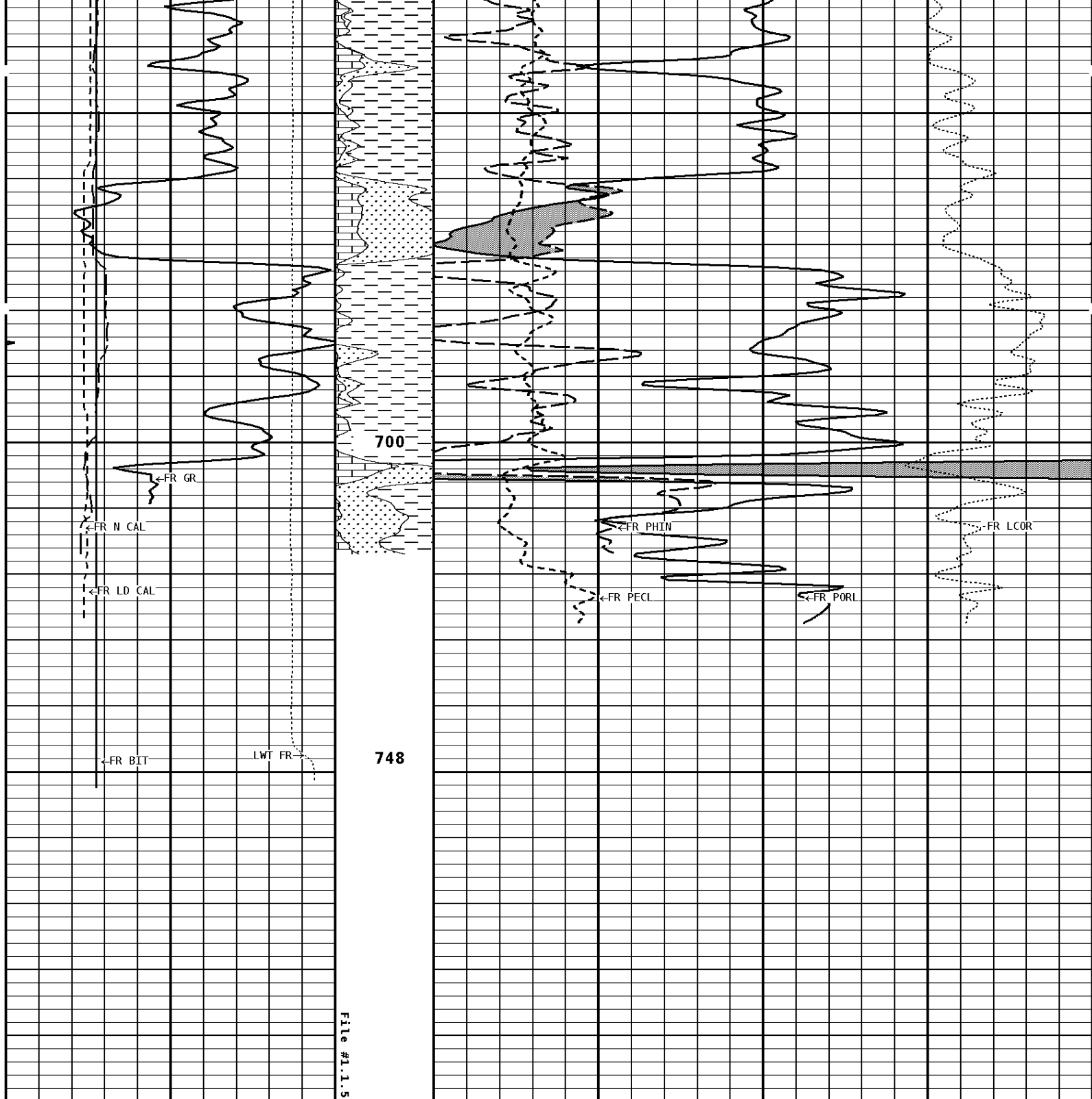
30 -10

1:240 MAIN SECTION



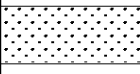






1:240 MAIN SECTION

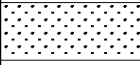
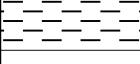
GAMMA RAY API UNITS 200 400	Volume Dolo/Shale 	NEUTRON POROSITY (LIMESTONE) PERCENT 30 -10	
TENSION LBS 10000 0	Volume Calcite 	DENSITY POROSITY (2.71g/cc) PERCENT 70 30 -10 30 -10 -50	
DENSITY (X) CALIPER INCHES (IN) 1.1 2.1	Volume Quartz 	PE CROSS-SECTION BARN/ELECTRON	DENSITY CORRECTION G/CC

14 4	24 14		0	10	-0.25	0.25
NEUTRON (Y) CALIPER INCHES (IN)						
14 4	24 14					
BIT SIZE INCHES (IN)						
4	14					

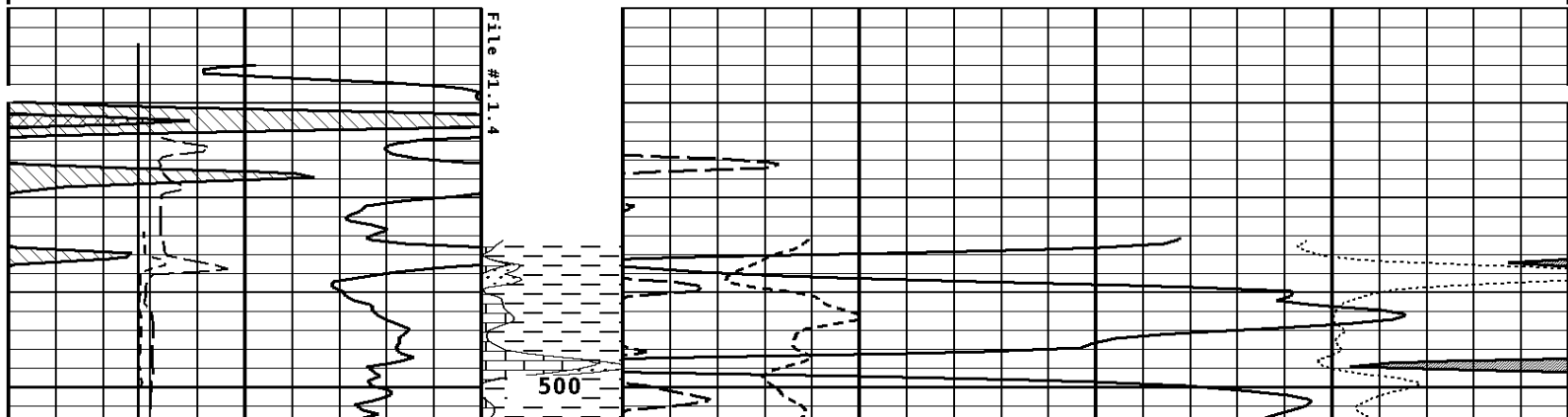
* Borehole Zone Factors *

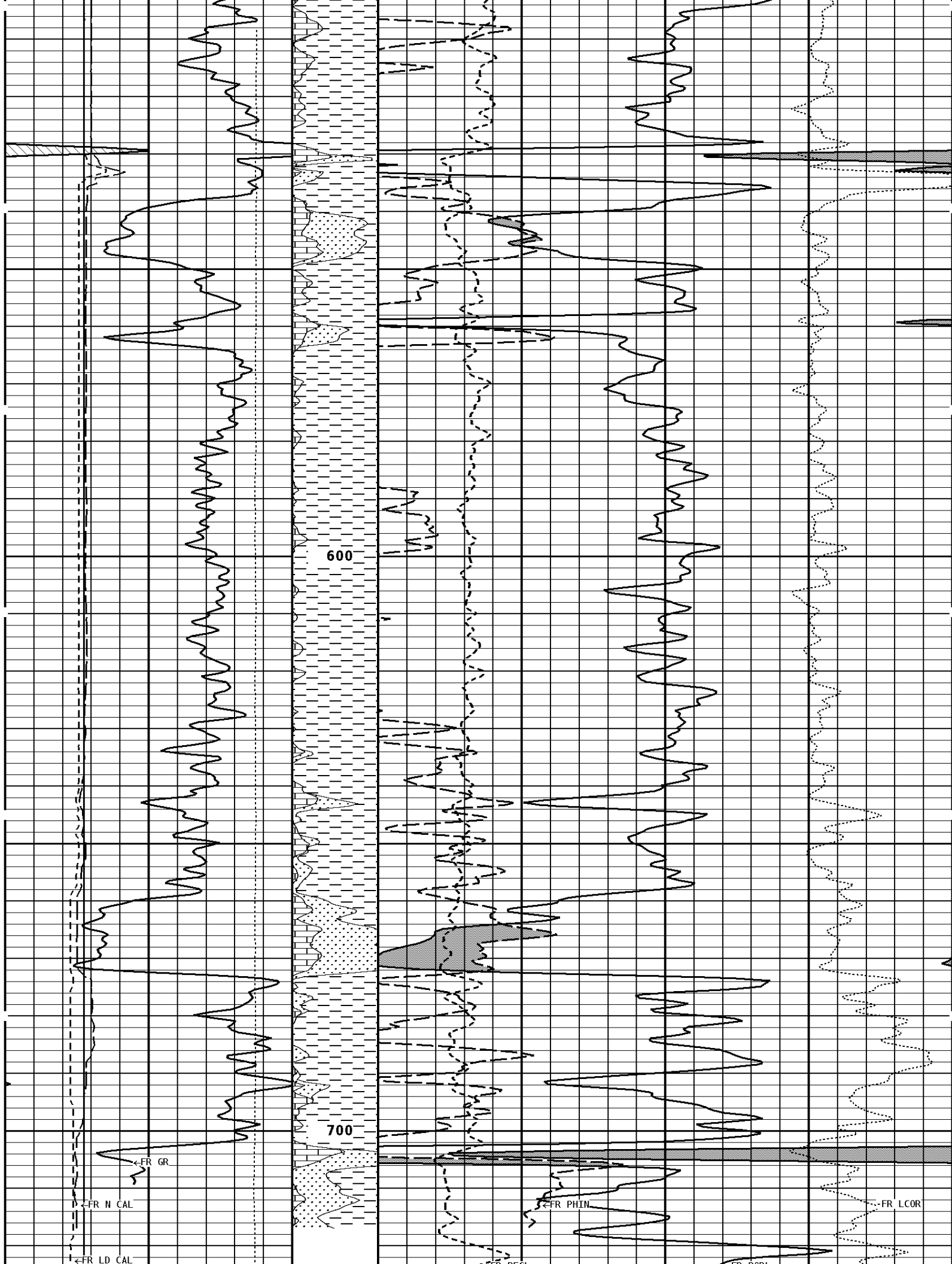
Zone 1 99999.0 to 0.0 Feet		
Matrix Density		2.71 g/cc
Fluid Density		1.00 g/cc
Formation Matrix		Limestone
Drill Bit Size		6.750 in
Casing Diameter		4.500 in
Casing Thickness		0.250 in
Casing Correction (PHI N)		Disable

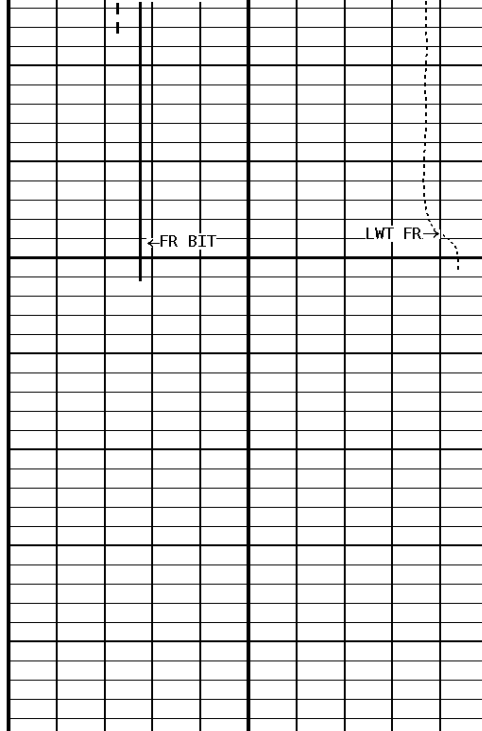
Well File: rfp-new-hor-4-35a-4-stk-may17	Scale: 1:240
Segment: V1.D1.S4 RP	Acquired: 2013-05/17 11:13 3.2.0-11535
Reference: 0	Processed: 2013-05/17 11:52 3.2.0-11535

BIT SIZE INCHES (IN)	4	14			
NEUTRON (Y) CALIPER INCHES (IN)	14 4	24 14			
DENSITY (X) CALIPER INCHES (IN)	14 4	24 14	Volume Quartz 	PE CROSS-SECTION BARNs/ELECTRON 0-----10	DENSITY CORRECTION G/CC -0.25-----0.25
TENSION LBS	10000	0	Volume Calcite 	DENSITY POROSITY (2.71g/cc) PERCENT 70 30 -10	30 -10 -50
GAMMA RAY API UNITS	200 0	400 200	Volume Dolo/Shale 	NEUTRON POROSITY (LIMESTONE) PERCENT 30	-10

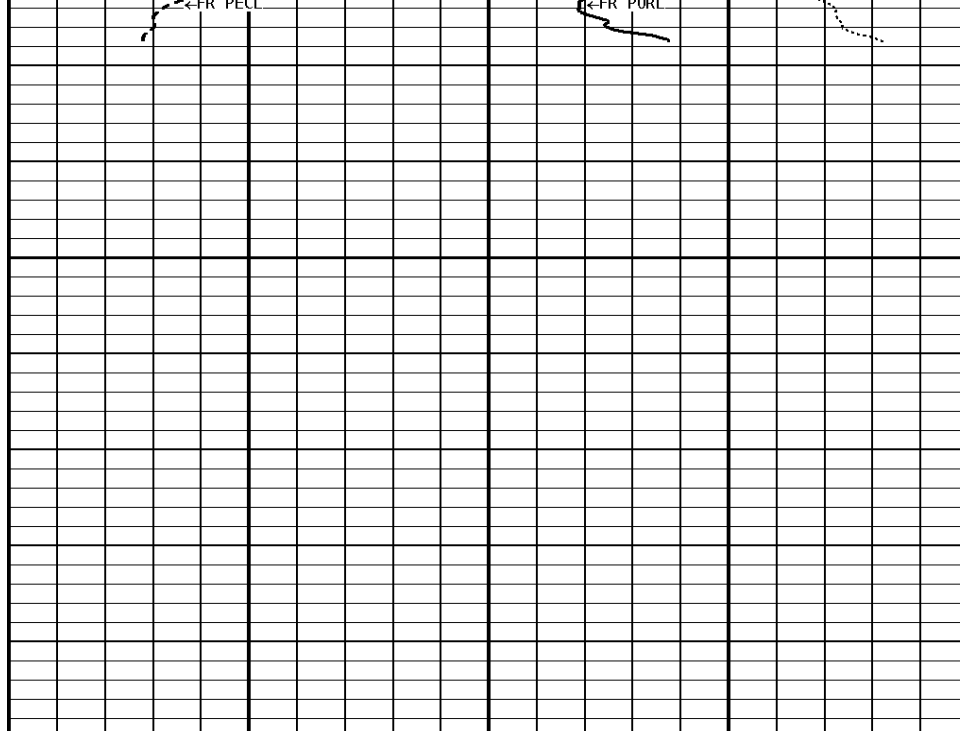
1:240 REPEAT SECTION







748



1:240 REPEAT SECTION

GAMMA RAY API UNITS 200 0 400 200	Volume Dolo/Shale	NEUTRON POROSITY (LIMESTONE) PERCENT 30 -10	
TENSION LBS 10000 0	Volume Calcite	DENSITY POROSITY (2.71g/cc) PERCENT 70 30 -10 -50	
DENSITY (X) CALIPER INCHES (IN) 14 4 24 14	Volume Quartz	PE CROSS-SECTION BARNs/ELECTRON 0 10	DENSITY CORRECTION G/CC -0.25 0.25
NEUTRON (Y) CALIPER INCHES (IN) 14 4 24 14			
BIT SIZE INCHES (IN) 4 14			

* 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		6.750	in
Casing Diameter		4.500	in
Casing Thickness		0.250	in
Casing Correction (PHI N)		Disable	

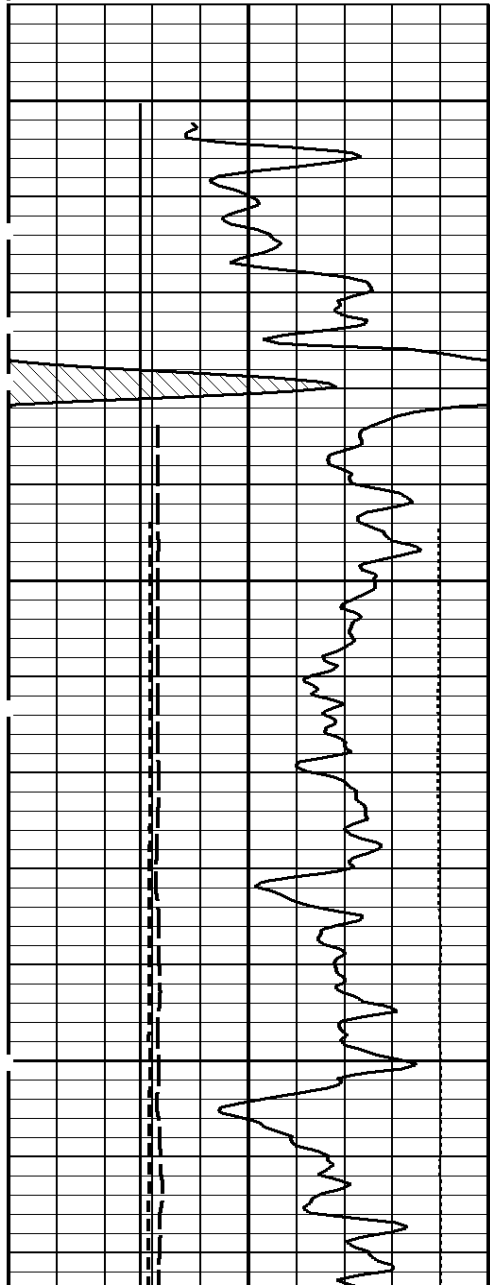
Well File: rfp-new-hor-4-35a-4-stk-may17 Scale: 1:240
Segment: V1.D1.S5 MN Acquired: 2013-05/17 11:25 3.2.0-11535
Reference: 0 Processed: 2013-05/17 11:52 3.2.0-11535

BIT SIZE
INCHES (IN)

4		14	
NEUTRON (Y) CALIPER INCHES (IN)			
14		24	
4		14	
DENSITY (X) CALIPER INCHES (IN)			
14		24	
4		14	
TENSION LBS			
10000		0	
GAMMA RAY API UNITS			
200		400	
0		200	

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

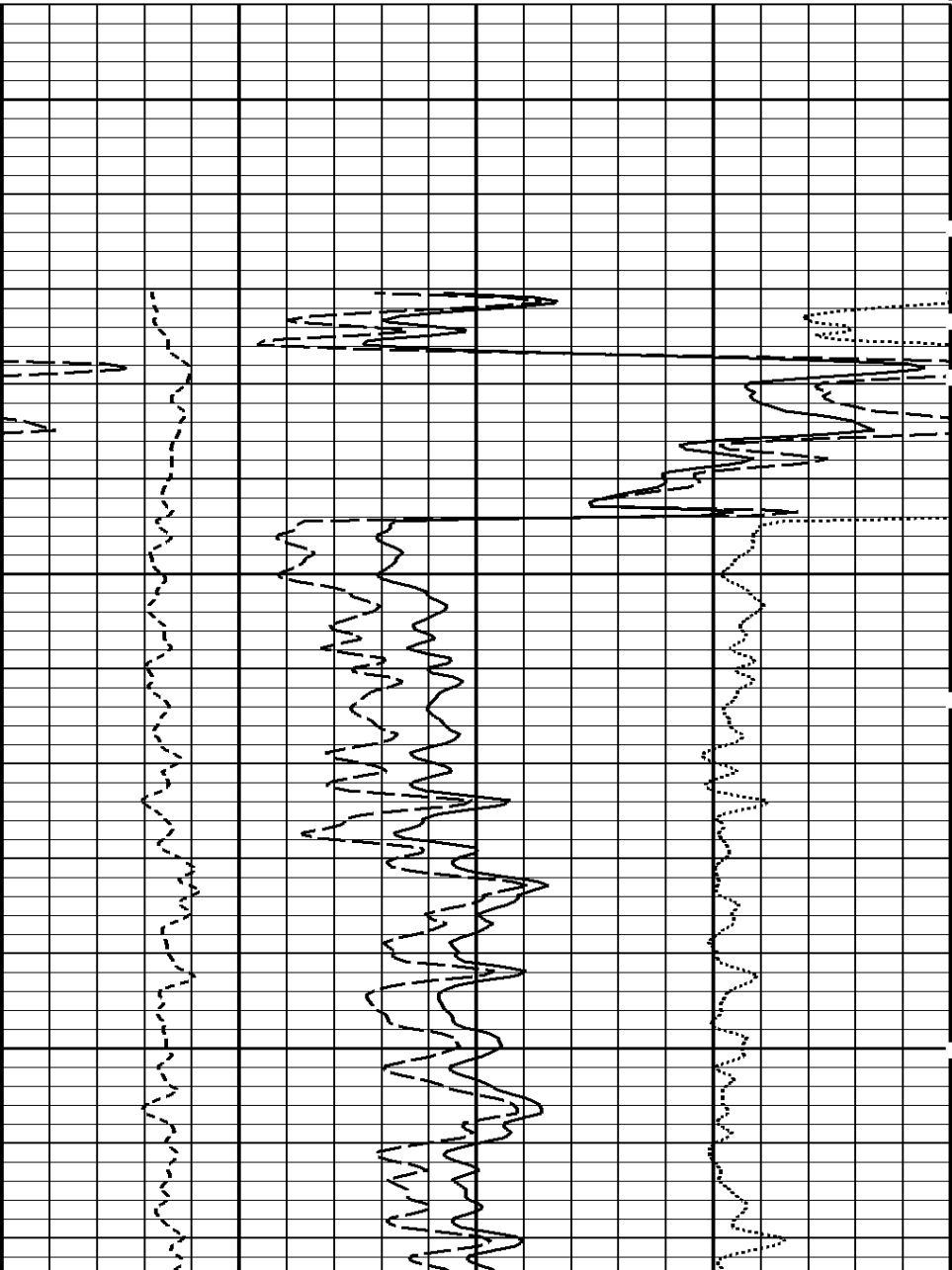
1:240 MAIN SECTION
BULK DENSITY

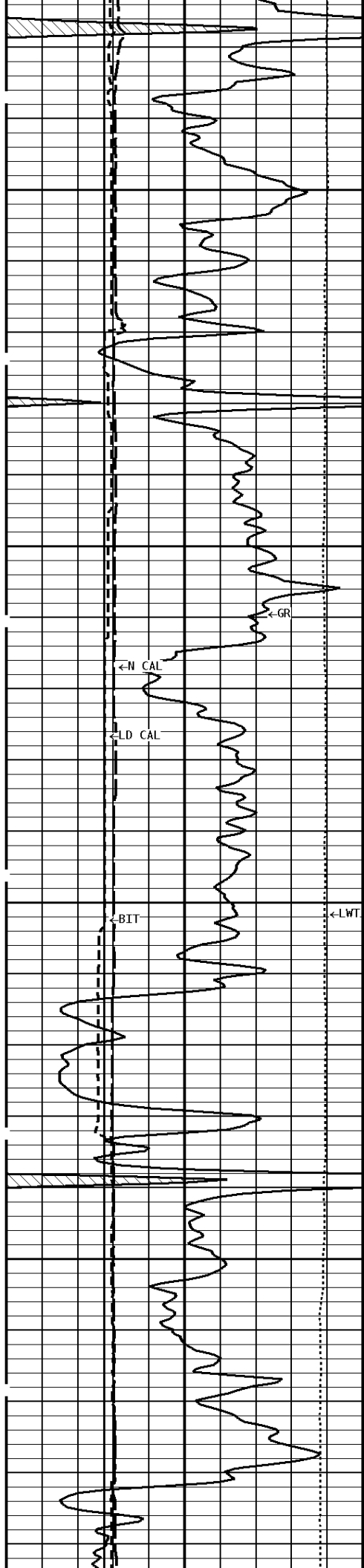


000

100Cu.Ft--

100

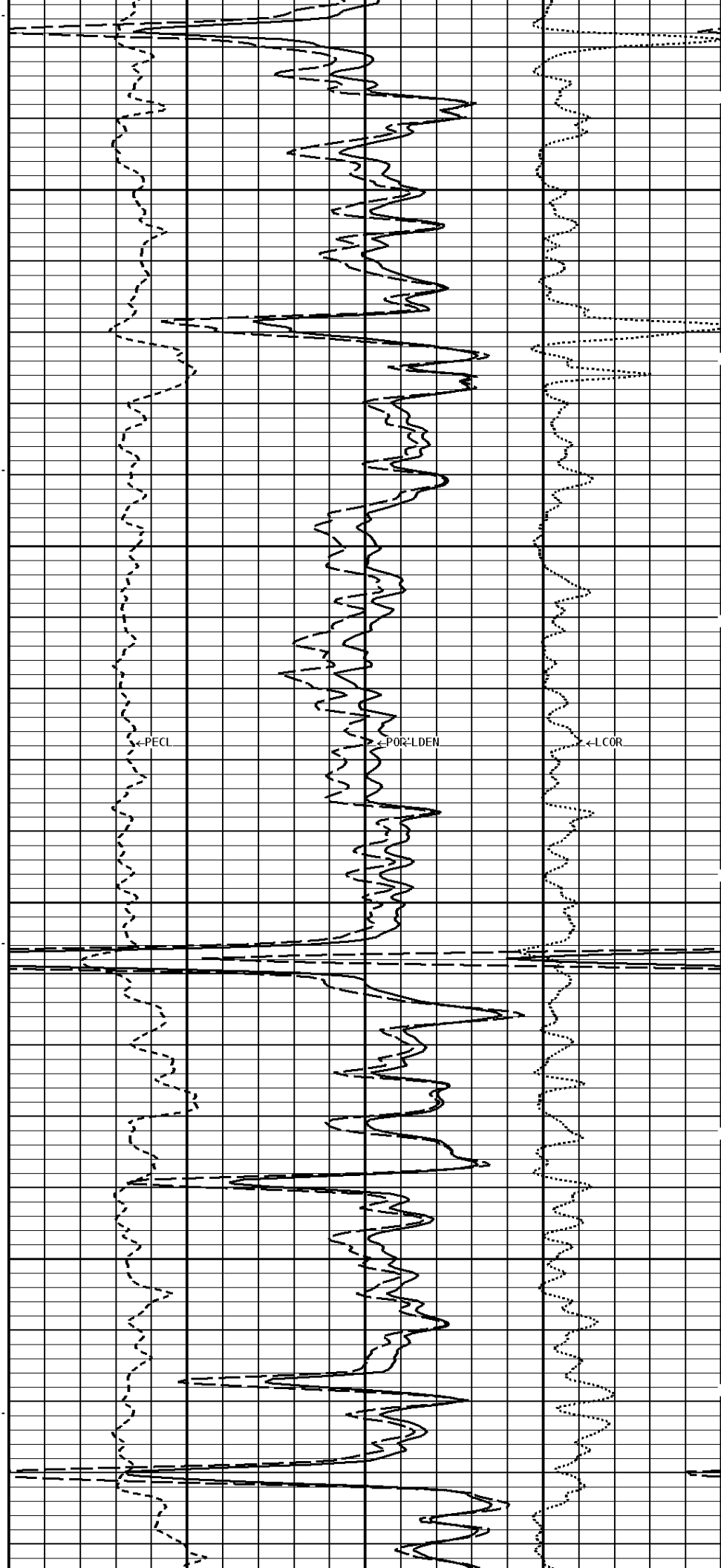


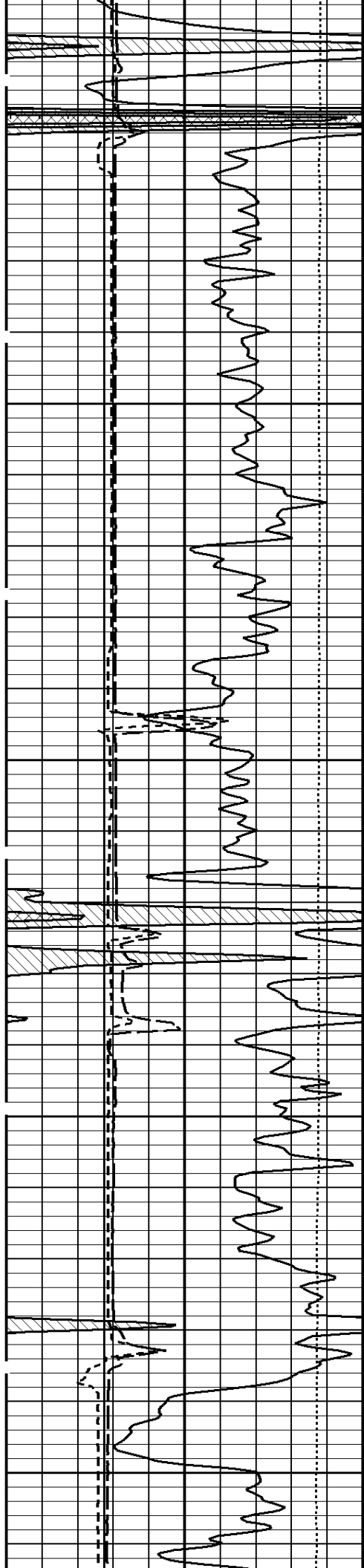


200

300

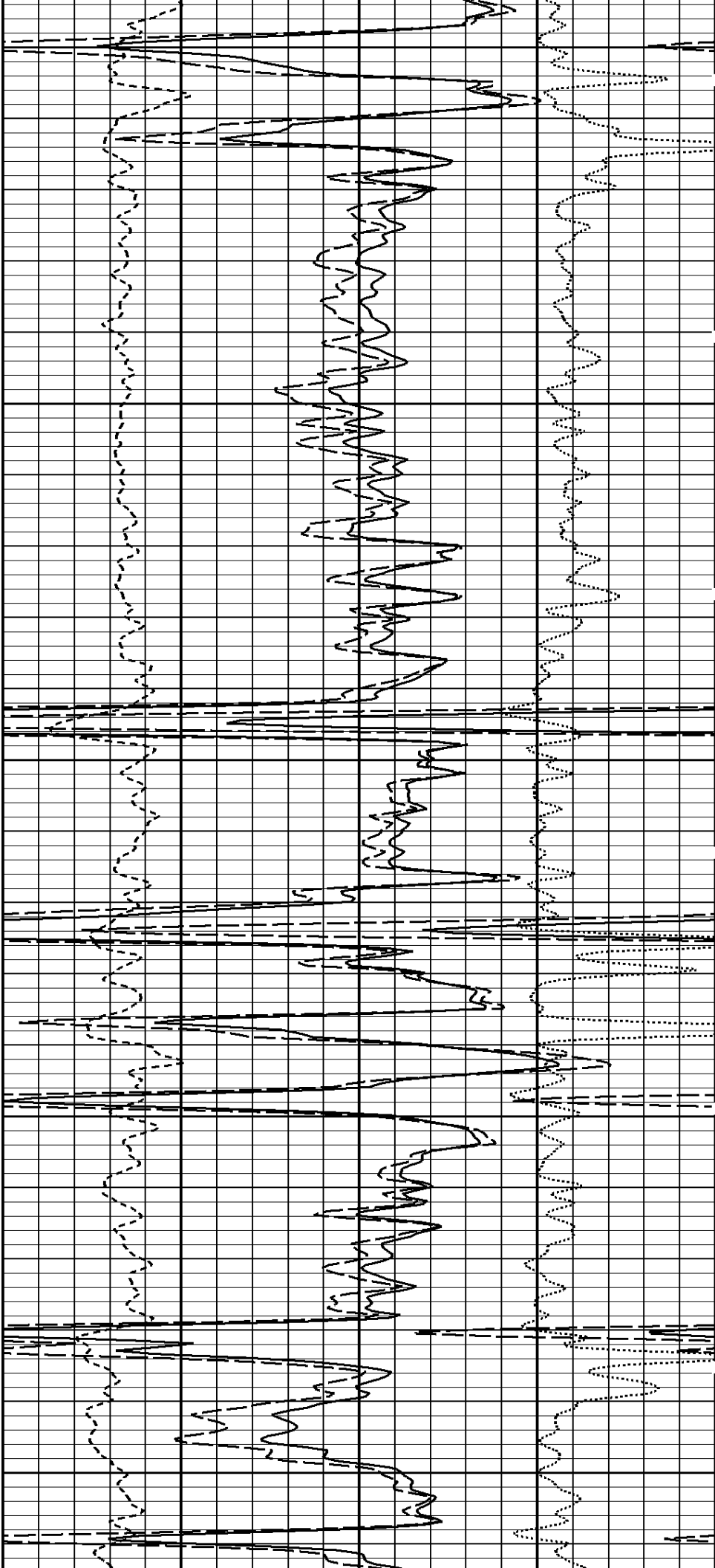
--100Cu.Ft

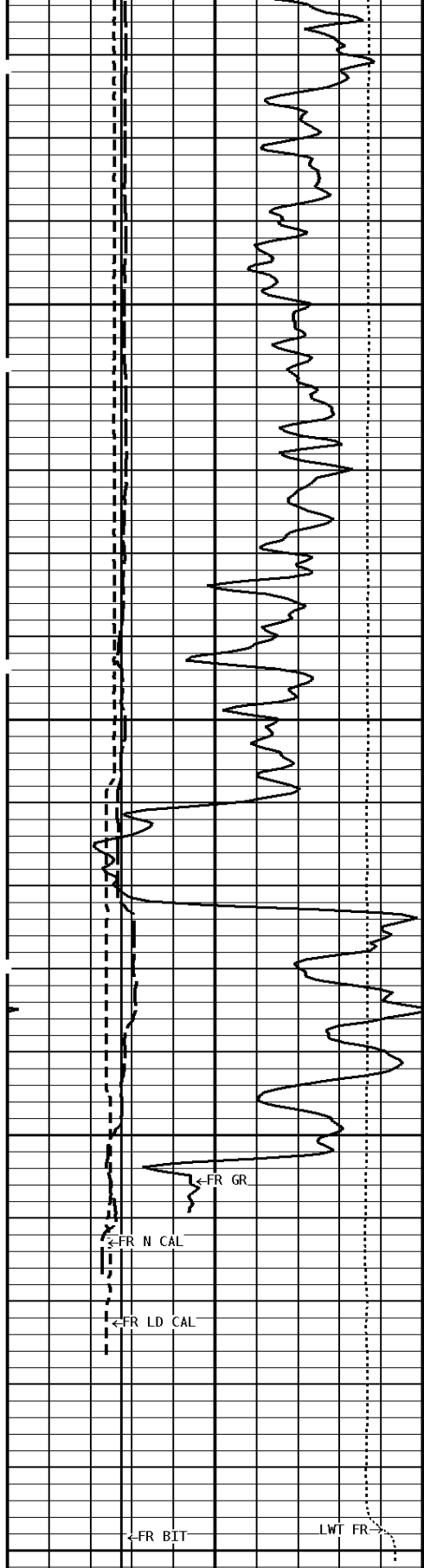




400

500

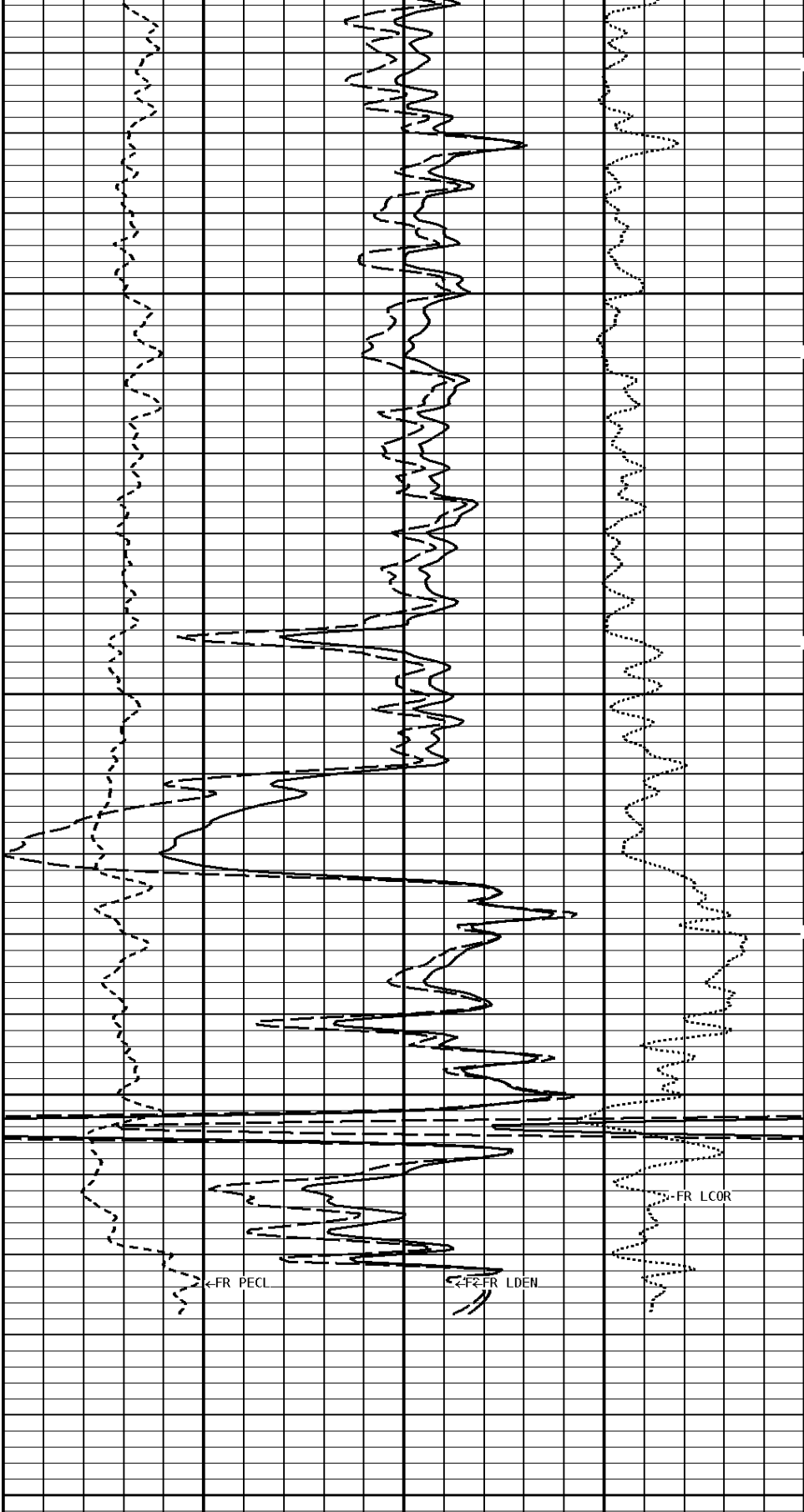




600

700

748



1:240 MAIN SECTION

BULK DENSITY

GAMMA RAY API UNITS		- BHV AHV - CU.FT	DENSITY POROSITY (2.71g/cc) PERCENT	
200 0	400 200		70 30	30 -10 -50
			-10	
TENSION LBS			COMPENSATED BULK DENSITY G/CC	
10000	0		3.0 2.0	4.0 3.0
			1.0	2.0
DENSITY (X) CALIPER INCHES (IN)			PE CROSS-SECTION BARNs/ELECTRON	
14 4	24 14		DENSITY CORRECTION G/CC	
			010	-0.250.25
NEUTRON (Y) CALIPER INCHES (IN)				
14 4	24 14			
BIT SIZE INCHES (IN)				
4	14			

* 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				6.750	in
Casing Diameter				4.500	in
Casing Correction (PHI N)				Disable	

* Calibration Summary *

Shop Calibration GRT-B Performed : 28-APR-2013 Time : 13:26 Sensor Suite : GR-GR5 ID : GRT-BC-43					
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig		
	46	309	175	GRAPI	
Shop Calibration CNT-AA Performed : 02-May-2013 Time : 12:07 Sensor Suite : CALI-BCN ID : NDT-AC-027					
	Jig - Measured		Jig - Calibrated	Units	
	Ring#1 Ring#2		Ring#1 Ring#2		
CL # 1	8.1 14.6		6.0 12.0	IN.	
Performed : 28-Apr-2013 Time : 14:59 Sensor Suite : BHC NEUT ID : CNP-AE-42 Source ID : N-1044					
	Tank		Verification	Units	
	Measured	Calibrated	Jig		
N/F	3.6002	3.6893	3.7383		
Porosity	19.2	20.5	21.3	%	

Shop Calibration LDT-DF

Performed : 02-May-2013 Time : 12:13
Sensor Suite : CALI-LTH ID : PDT-GA-469

	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	7.4	10.6	6.0	12.0	IN.

Performed : 28-Apr-2013 Time : 13:41
Sensor Suite : BHCPELNG ID : LDP-DA-02
Source ID : CSV-587

	BKGD	Al	Mg	Al+Fe	Units
Short Space					
LSW1	65	433	698	297	CPS
LSW2	70	525	844	377	CPS
LSW3	272	1305	2053	1123	CPS
LSW4	340	1253	1737	1116	CPS
LSW5	32	41	43	40	CPS
LSW6	90	90	90	89	CPS
LSW7	54	57	57	59	CPS
LSW8	2	3	3	2	CPS
QS	0.249	0.226	0.221	0.207	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC

	BKGD	Al	Mg	Al+Fe	Units
Long Space					
LLW1	104	565	2321	357	CPS
LLW2	113	977	4068	711	CPS
LLW3	430	1905	7041	1653	CPS
LLW4	559	1124	2853	1043	CPS
LLW5	61	65	78	64	CPS
LLW6	180	176	174	179	CPS
LLW7	111	113	106	114	CPS
LLW8	4	5	9	4	CPS
QL	0.238	0.215	0.244	0.223	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC



Company: RUNNING FOXES PETROLEUM INC.

Well: NEW HORIZONS #4-35A-4

Location: 495' FNL & 1155' FWL

Logged: 05-17-2013

K.B. Elev: 0.0 Ft