

Tucker
ENERGY SERVICES

COMPENSATED NEUTRON

PEL DENSITY LOG

Company RUNNING FOXES PETROLEUM N	
Well GUY #5-28B-3	
Field NA	
County CRAWFORD	
State KANSAS	
Country USA	
API No. 15-037-22320-0000	
File No : TUL-60952	Company : RUNNING FOXES PETROLEUM INC.
Well : GUY #5-28B-3	Field : NA
County : CRAWFORD	State : KANSAS
Country : USA	API No : 15-037-22320-0000
Location : 1886' FNL & 165' FWL SW NW SW NW	
LSD :	Sect : 28 Twp : 28S Rge : 22E
Permanent Datum:	Elevations:
Drilling Measured From: GL	KB 0.00
Log Measured From: GL	DF 0.00
Above Permanent Datum: 0.00 Ft	GL 926.00
Services:	CNT PIT
LDT	CST
Date 03-01-2016	
Run Number 1	
Depth--Driller 647.0 Ft	
Depth--Logger 647.0 Ft	
First Reading 611.0 Ft	
Last Reading 24.0 Ft	
Casing--Driller 24.0 Ft	
Casing--Logger 24.0 Ft	
Bit Size 5.875 In	
Casing Size 8.625 In	
Hole Fluid Type NATIVE	
Density 0.0	
Fluid Loss 0.0	
PH/Viscosity 0.0	0.0
Sample Source MEASURED	
RM@Measured Temp. 1.000 @ 70 F	
RMF@Measured Temp 0.800 @ 70 F	
RMC@Measured Temp. 1.200 @ 70 F	
Source RMF/RMC CALCULATED/CALCULATED	
RM@BHT 0.910 @ 79 F	
Time Circulation Stopped 03-01-2016 08:15	
Max Recorded Temp. 79 F	
Equipment/Base 1022 TULSA, OK	
Recorded By SHELDON TYLER	
Witnessed By CARL TAYLOR	

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)	Top (Ft)
5.875	647.00	8.625	32.00	24.00	0.00

Run Number	1	
Date	03-01-2016	
Date/Time On Bottom	03-01-2016 10:15	
Depth to Fluid	0.0 Ft	
Salinity	0.000	
RMF@BHT	0.730 @ 79 F	
RMC@BHT	1.090 @ 79 F	

Run Number 1

Comments

ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, CST, AND PIT RUN IN COMBINATION
 CALIPERS ORIENTED ON X-Y AXIS
 2.71 G/CC USED TO CALCULATE POROSITY
 ANNULAR HOLE VOLUME CALCULATED USING 2.875" PRODUCTION CASING
 PHIN IS CALIPER CORRECTED

A LOT OF OIL IN HOLE AS IN THE PIT AND COVERING LOGGING TOOLS

GRT: GRP, GRX

CST: PORS, CDTF, TTIPF, TT2PF, TT3PF, TT4PF, ITT

CNT: PHIN, CLCNIN, PHXN

LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN, PRXL, PECLX, LDENNX, LCORX

MLT: NOR_RF, INV_RF, MSCLPIN

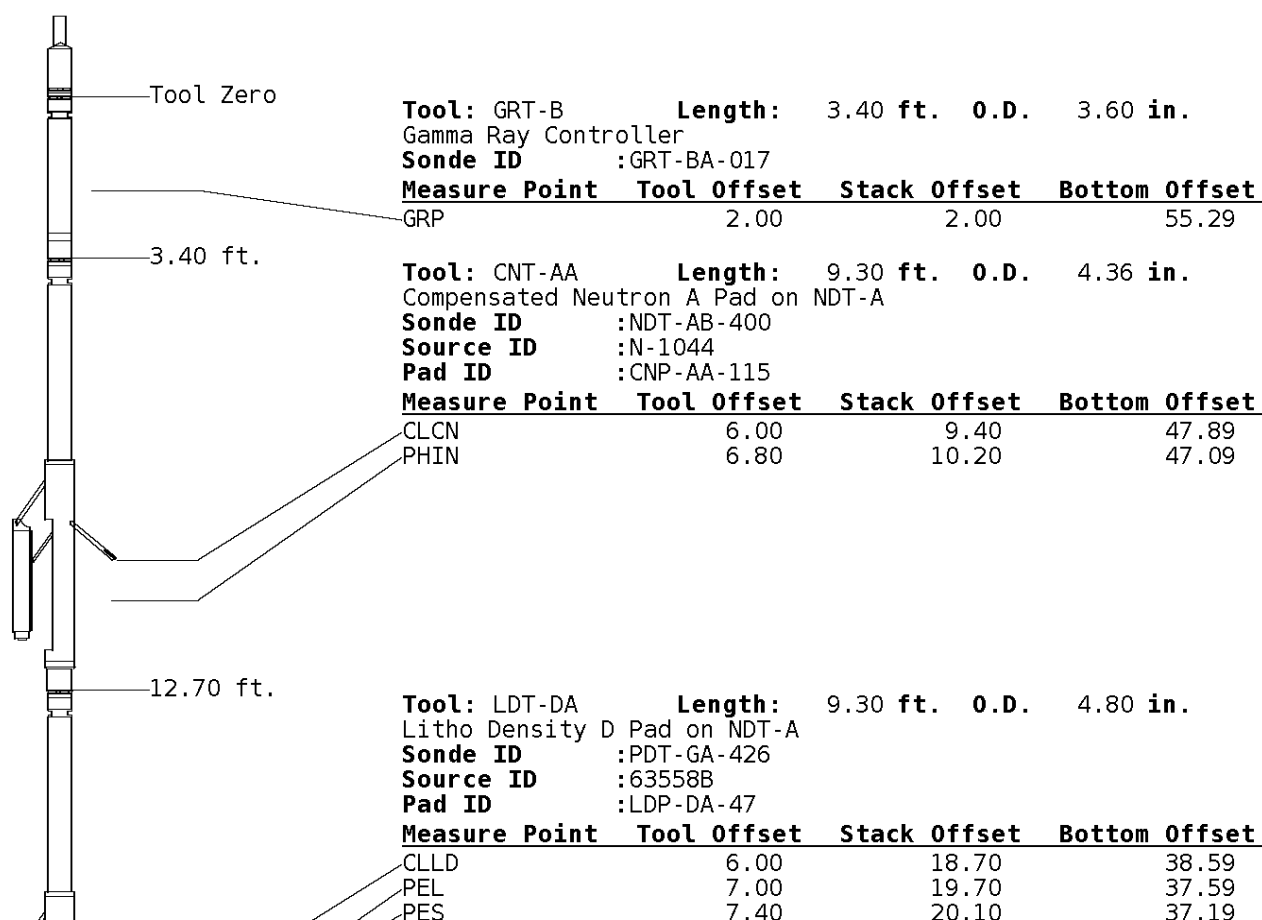
PIT: ILD, ILM, SPU, SFLAEC, CIRD

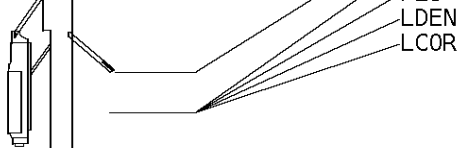
OPERATORS:

S.DAVIS

Tool String Schematic

Total Tool Length - 57.29 ft.
Maximum Outside diameter - 4.80 in.
Net Weight in Air - 971.00 lbs.



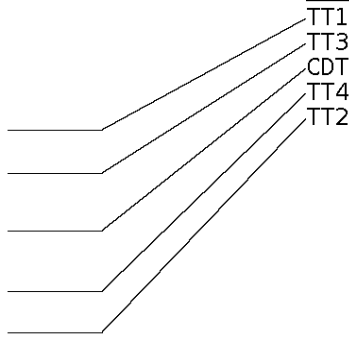


LDEN	7.20	19.90	37.39
LCOR	7.20	19.90	37.39

22.00 ft.

Tool: CST-AD **Length:** 13.80 ft. **O.D.** 3.60 in.
 Open Hole Sonic
Sonde ID : CST-AD-078

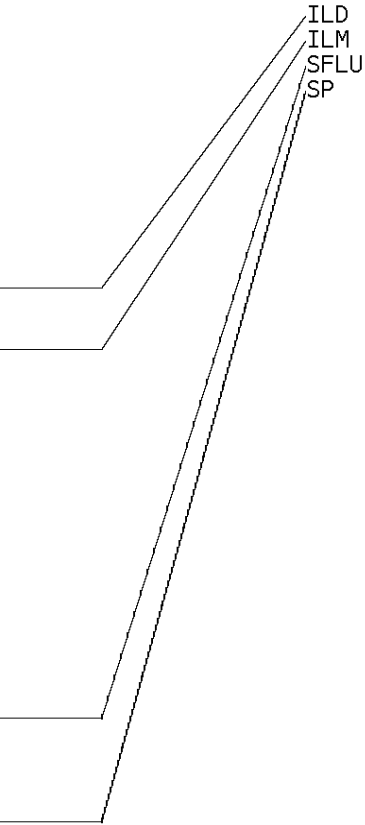
Measure Point	Tool Offset	Stack Offset	Bottom Offset
TT1	4.80	26.80	30.49
TT3	5.80	27.80	29.49
CDT	7.30	29.30	27.99
TT4	8.80	30.80	26.49
TT2	9.80	31.80	25.49



35.80 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID : PIT-CA-075

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	44.72	12.56
ILM	10.10	45.90	11.39
SFLU	17.49	53.29	4.00
SP	20.60	56.40	0.88



LWT 57.29 ft.

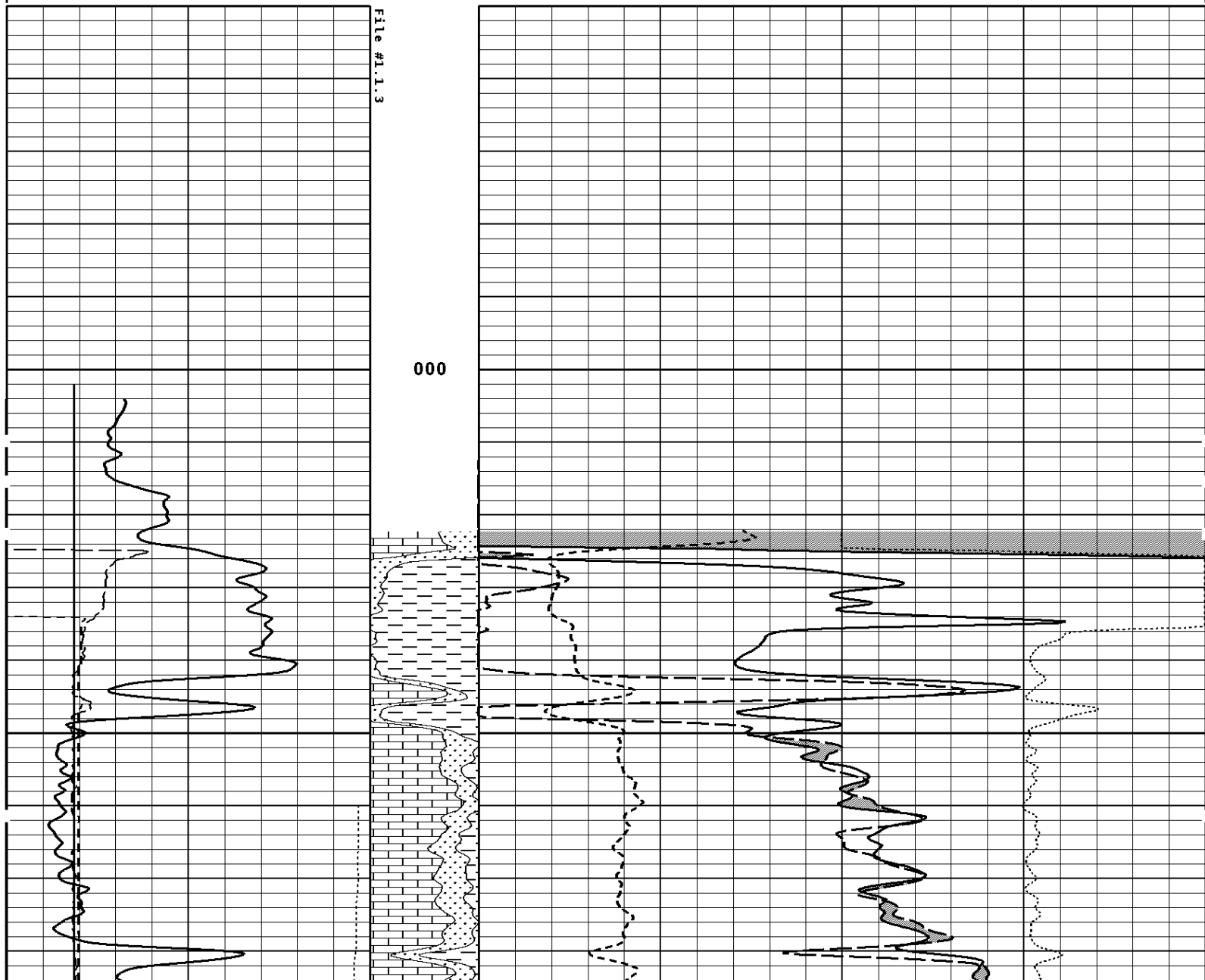
Well File: RUNNING FOXES_GUY_5-28B-3_MAR_1_CST-STACK
Segment: V1.D1.S3 Reprocess of MAIN
Reference: 0

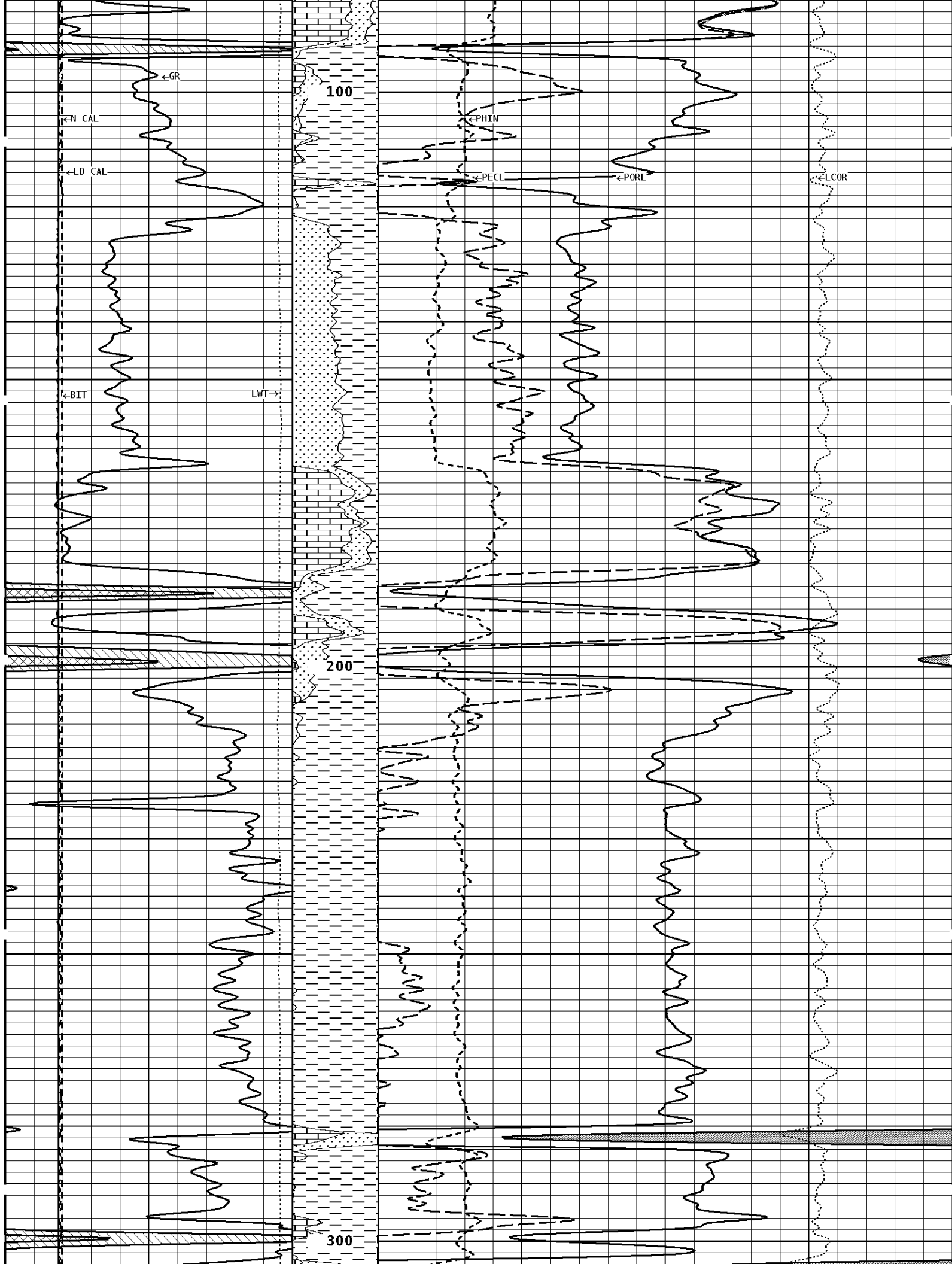
Scale: 1:240 **Format:** NLD-240
Acquired: 2016-03/01 10:16 3.4.0-13544
Processed: 2016-03/01 11:13 3.4.0-13544

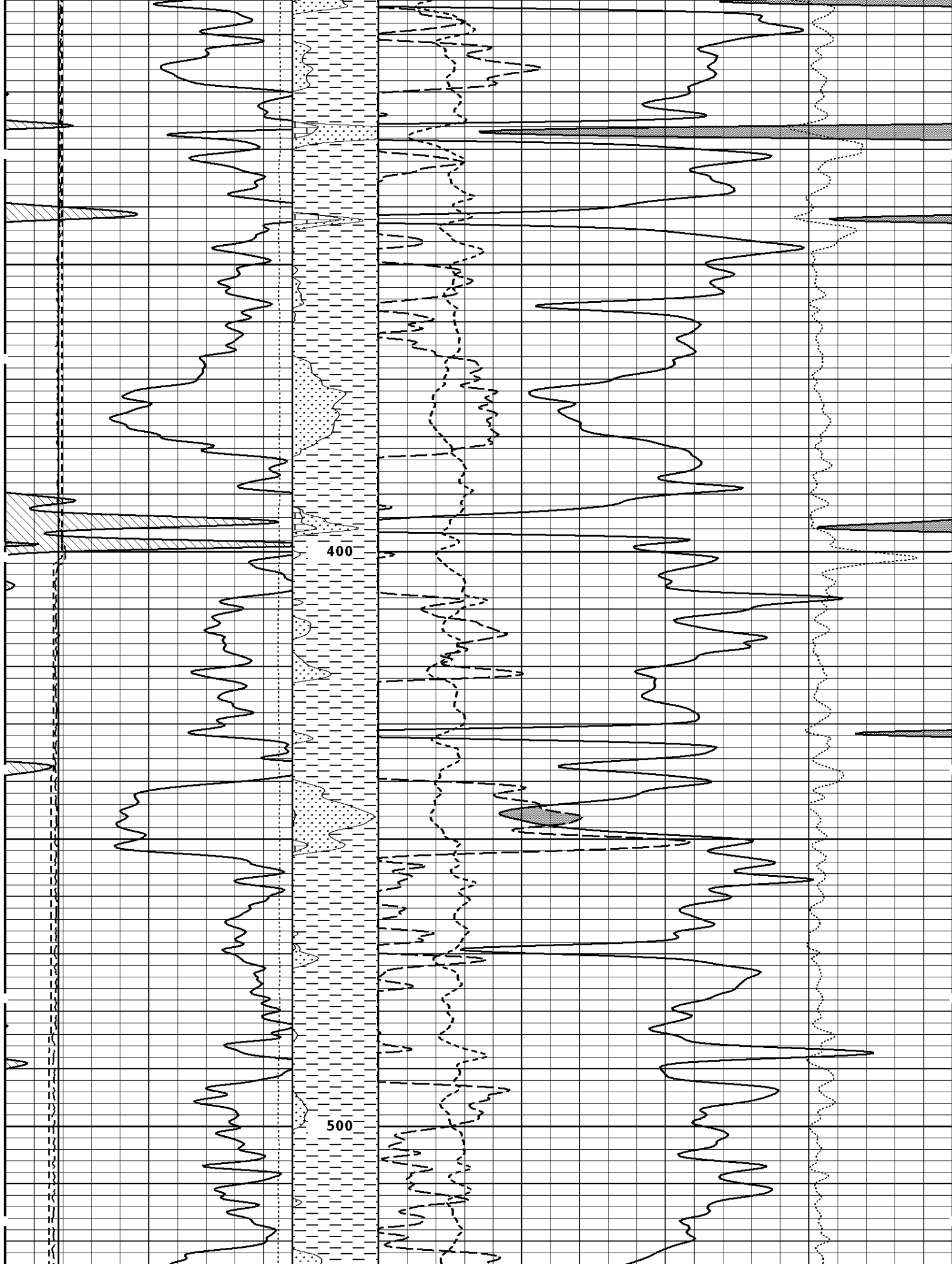
BIT SIZE
INCHES (IN)

414					
NEUTRON (Y) CALIPER INCHES (IN)					
14	24				
4	14				
DENSITY (X) CALIPER INCHES (IN)		Volume Quartz	PE CROSS-SECTION BARNs/ELECTRON	DENSITY CORRECTION G/CC	
14	24		010	-0.250.25	
4	14				
TENSION LBS		Volume Calcite	DENSITY POROSITY (2.71g/cc) PERCENT		
10000	0		70	30	
			30	-10	
			-10	-50	
GAMMA RAY API UNITS		Volume Dolo/Shale	NEUTRON POROSITY (LIMESTONE) PERCENT		
200	400		30	-10	
0	200				

1:240 MAIN SECTION







				-10		-50	
DENSITY (X) CALIPER INCHES (IN)		Volume Quartz	PE CROSS-SECTION BARNs/ELECTRON			DENSITY CORRECTION G/CC	
14	24						
4	14		010			-0.250.25	
NEUTRON (Y) CALIPER INCHES (IN)							
14	24						
4	14						
BIT SIZE INCHES (IN)							
4	14						

*** Borehole Zone Factors ***

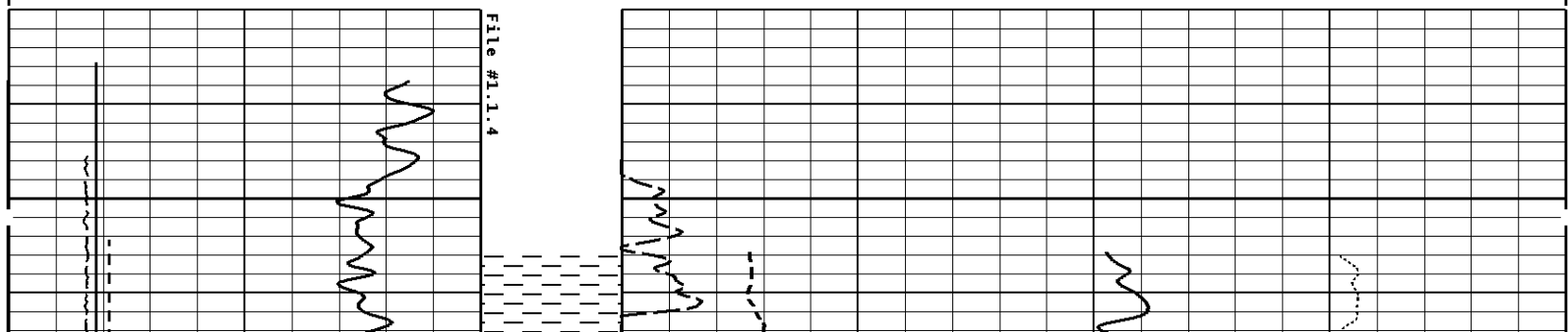
Zone 1 99999.0 to 0.0 Feet		
Matrix Density	2.71	g/cc
Fluid Density	1.00	g/cc
Formation Matrix	Limestone	
Drill Bit Size	5.875	in
Casing Diameter	2.875	in
Casing Thickness	0.250	in
Casing Correction (PHI N)	Disable	

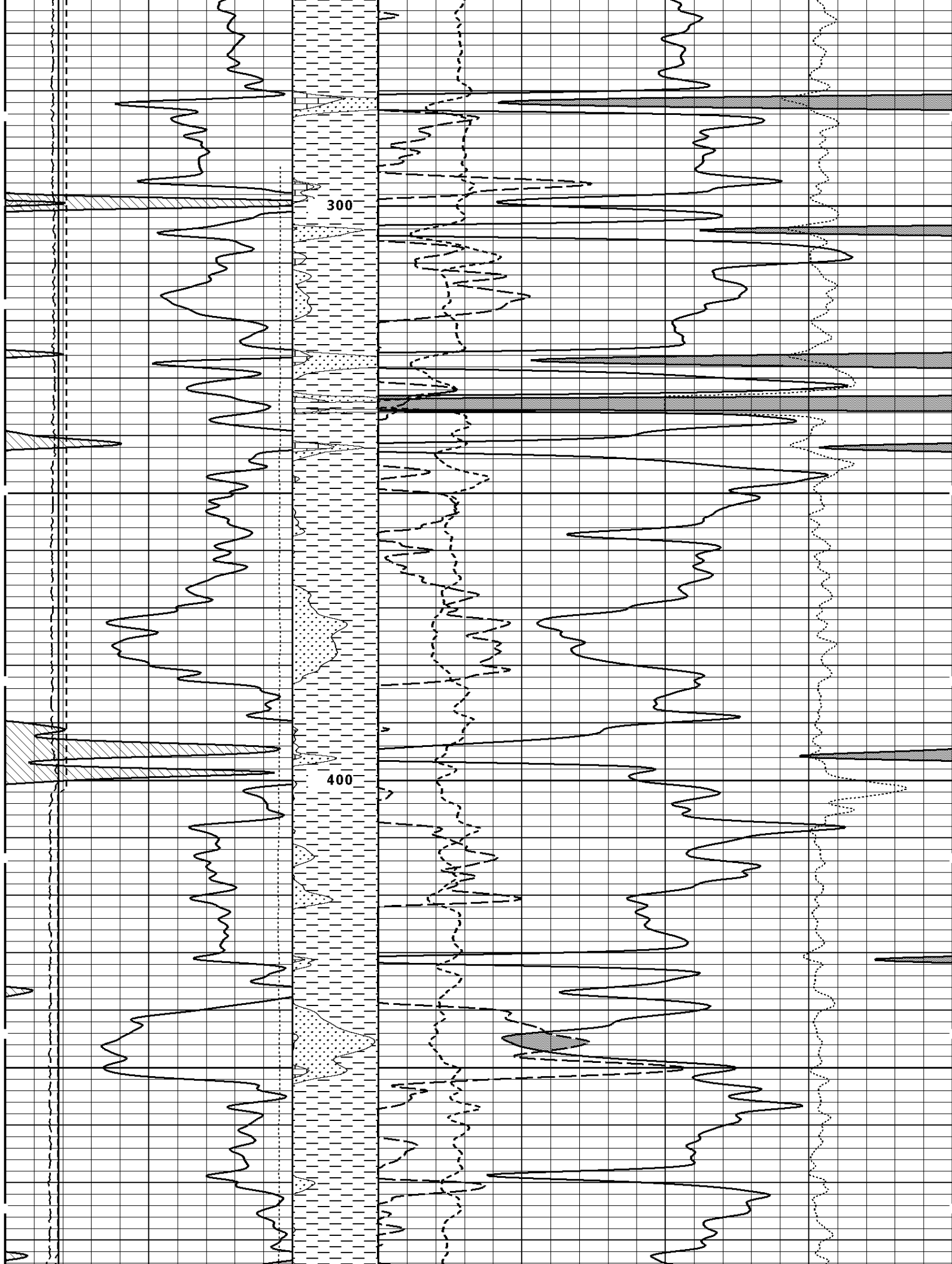
Well File: RUNNING FOXES GUY 5-28B-3 MAR 1 CST-STACK	Scale: 1:240	Format: NLD-240
Segment: V1.D1.S4 Reprocess of REPEAT	Acquired: 2016-03/01 10:43 3.4.0-13544	
Reference: 0	Processed: 2016-03/01 10:43 3.4.0-13544	

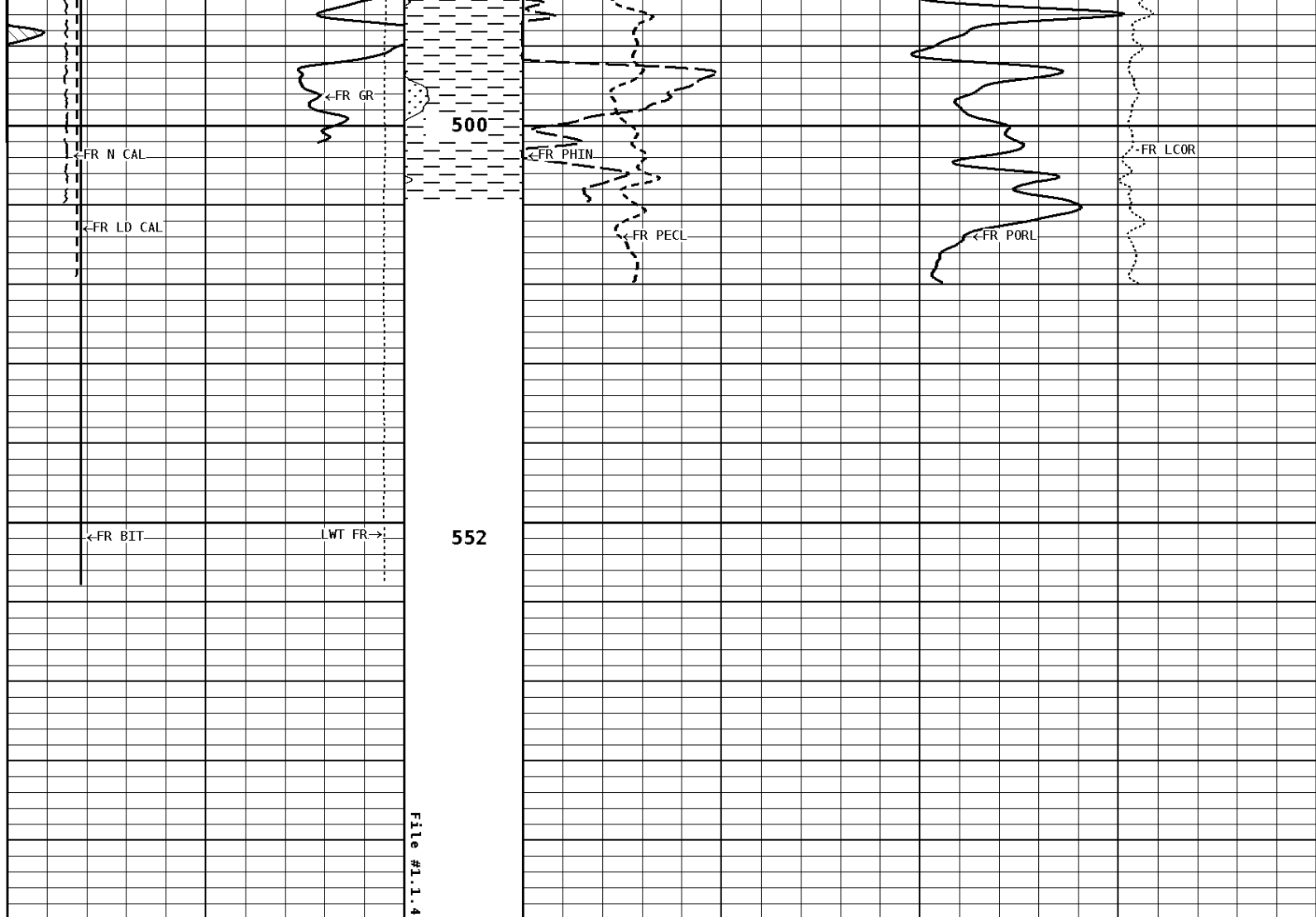
BIT SIZE INCHES (IN)					
4	14				
NEUTRON (Y) CALIPER INCHES (IN)					
14	24				
4	14				
DENSITY (X) CALIPER INCHES (IN)	Volume Quartz	PE CROSS-SECTION BARNs/ELECTRON	DENSITY CORRECTION G/CC		
14					
4					

TENSION LBS	Volume Calcite	DENSITY POROSITY (2.71g/cc) PERCENT			
10000		70	30		
		30	-10		
		-10	-50		
GAMMA RAY API UNITS	Volume Dolo/Shale	NEUTRON POROSITY (LIMESTONE) PERCENT			
200					
0		30	-10		

1:240 REPEAT SECTION







1:240 REPEAT SECTION

GAMMA RAY API UNITS		Volume Dolo/Shale	NEUTRON POROSITY (LIMESTONE) PERCENT	
200	400		30	-10
0	200			
TENSION LBS		Volume Calcite	DENSITY POROSITY (2.71g/cc) PERCENT	
10000	0	70	30	30
		30	-10	-10
		-10		-50
DENSITY (X) CALIPER INCHES (IN)		Volume Quartz	PE CROSS-SECTION BARN/ELECTRON	DENSITY CORRECTION G/CC
14	24	0	10	-0.25
4	14			0.25
NEUTRON (Y) CALIPER INCHES (IN)				
14	24			
4	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	5.875	in
Casing Diameter	2.875	in
Casing Thickness	0.250	in
Casing Correction (PHI N)	Disable	

Well File: RUNNING FOXES GUY 5-28B-3 MAR_1 CST-STACK

Scale: 1:240

Format: LDT-240

Segment: V1.D1.S3 Reprocess of MAIN

Acquired: 2016-03/01 10:16 3.4.0-13544

Reference: 0

Processed: 2016-03/01 11:13 3.4.0-13544

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
BARN/ ELECTRON

0 10 -0.25 0.25

DENSITY CORRECTION
G/CC

COMPENSATED BULK DENSITY
G/CC

3.0 4.0
2.0 3.0
1.0 2.0

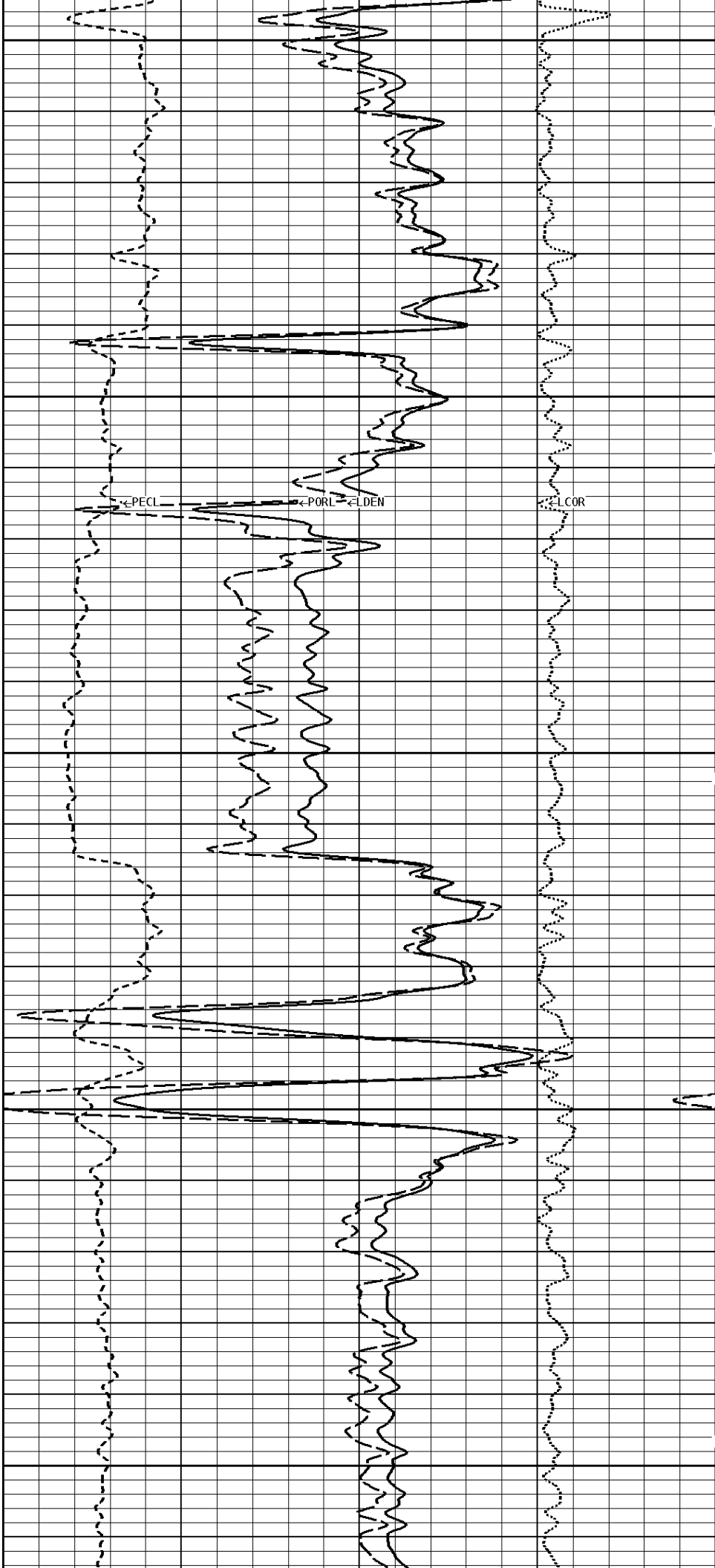
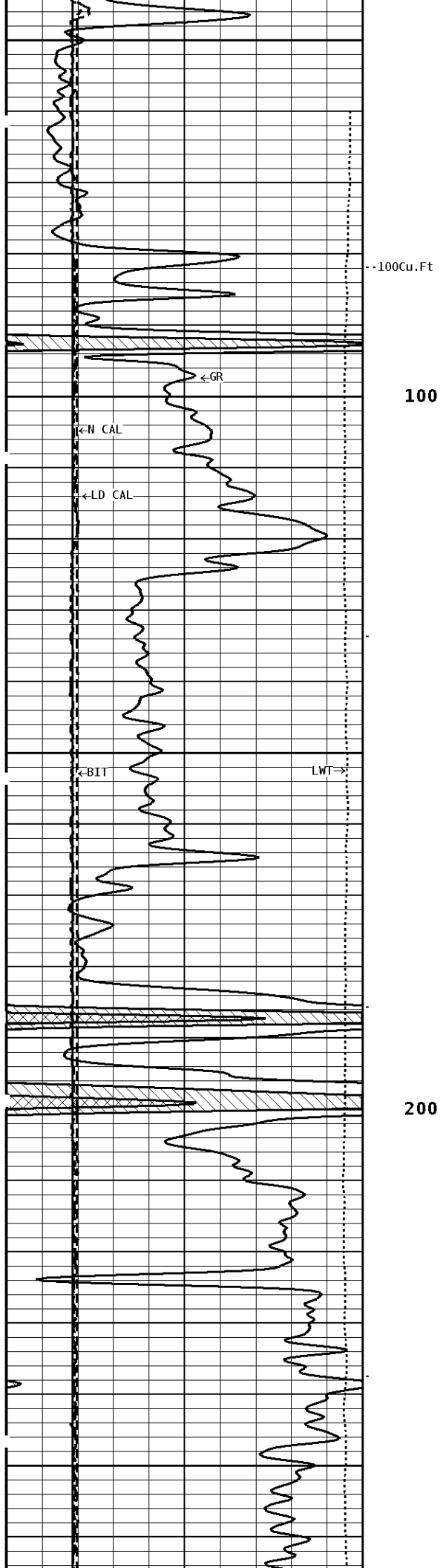
DENSITY POROSITY (2.71g/cc)
PERCENT

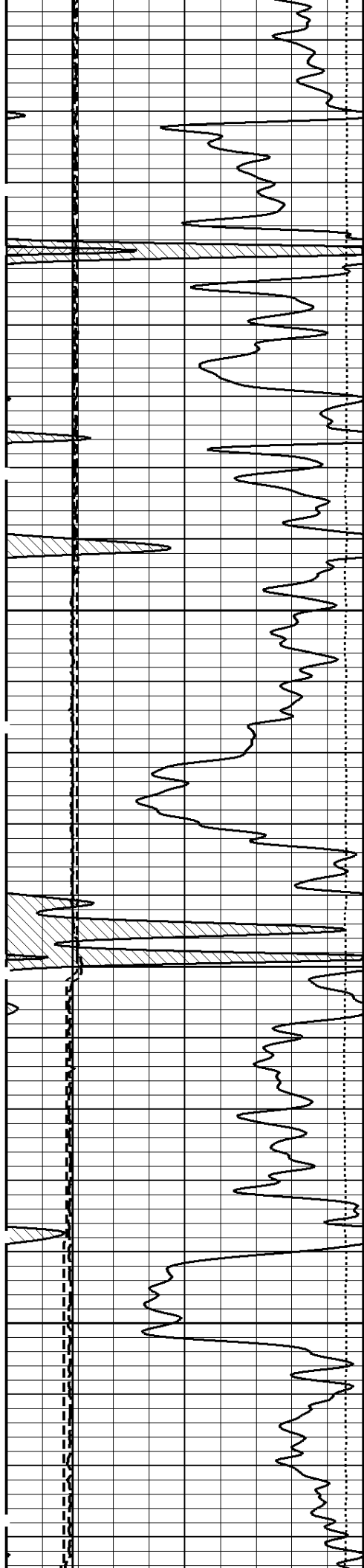
70 30
30 -10
-10 -50

1:240 MAIN SECTION
BULK DENSITY

File #1.1.3

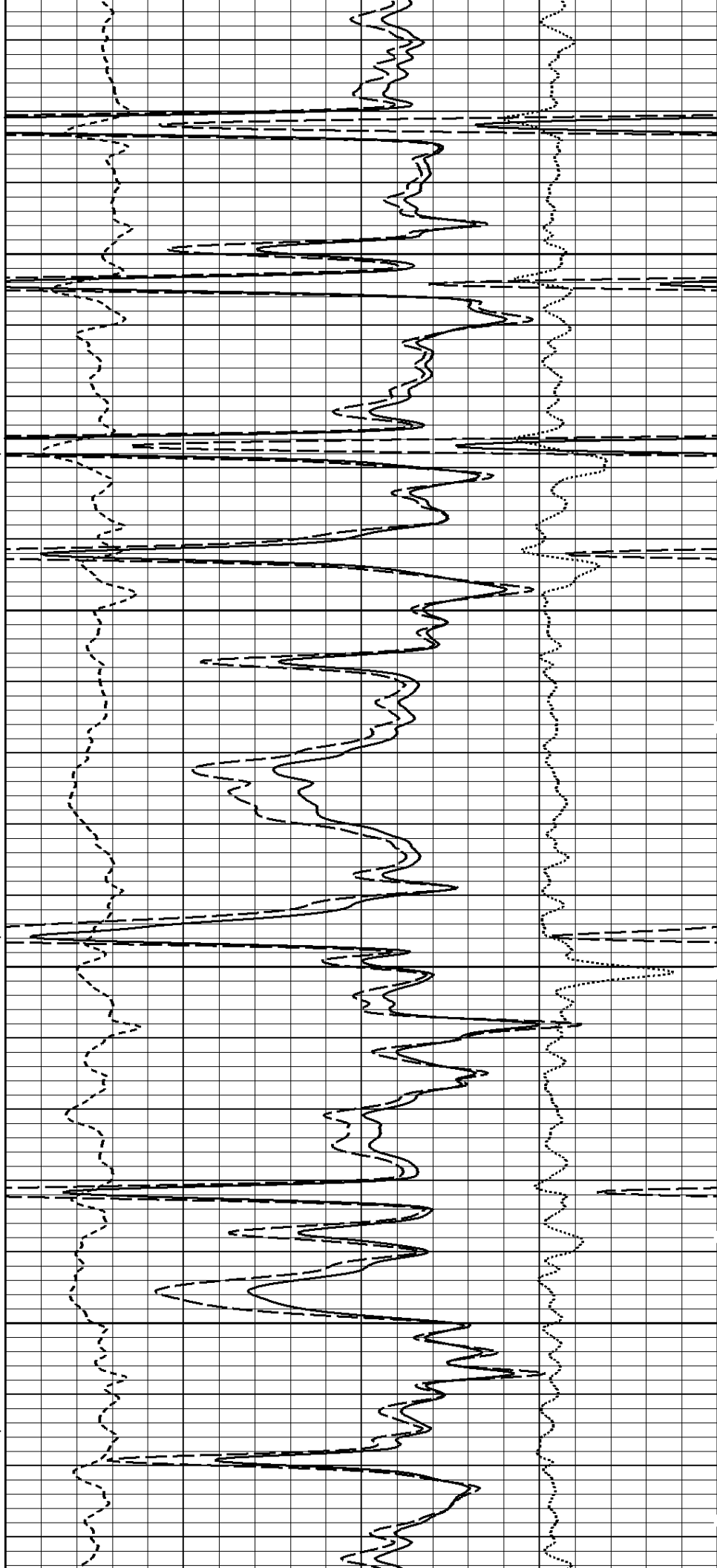
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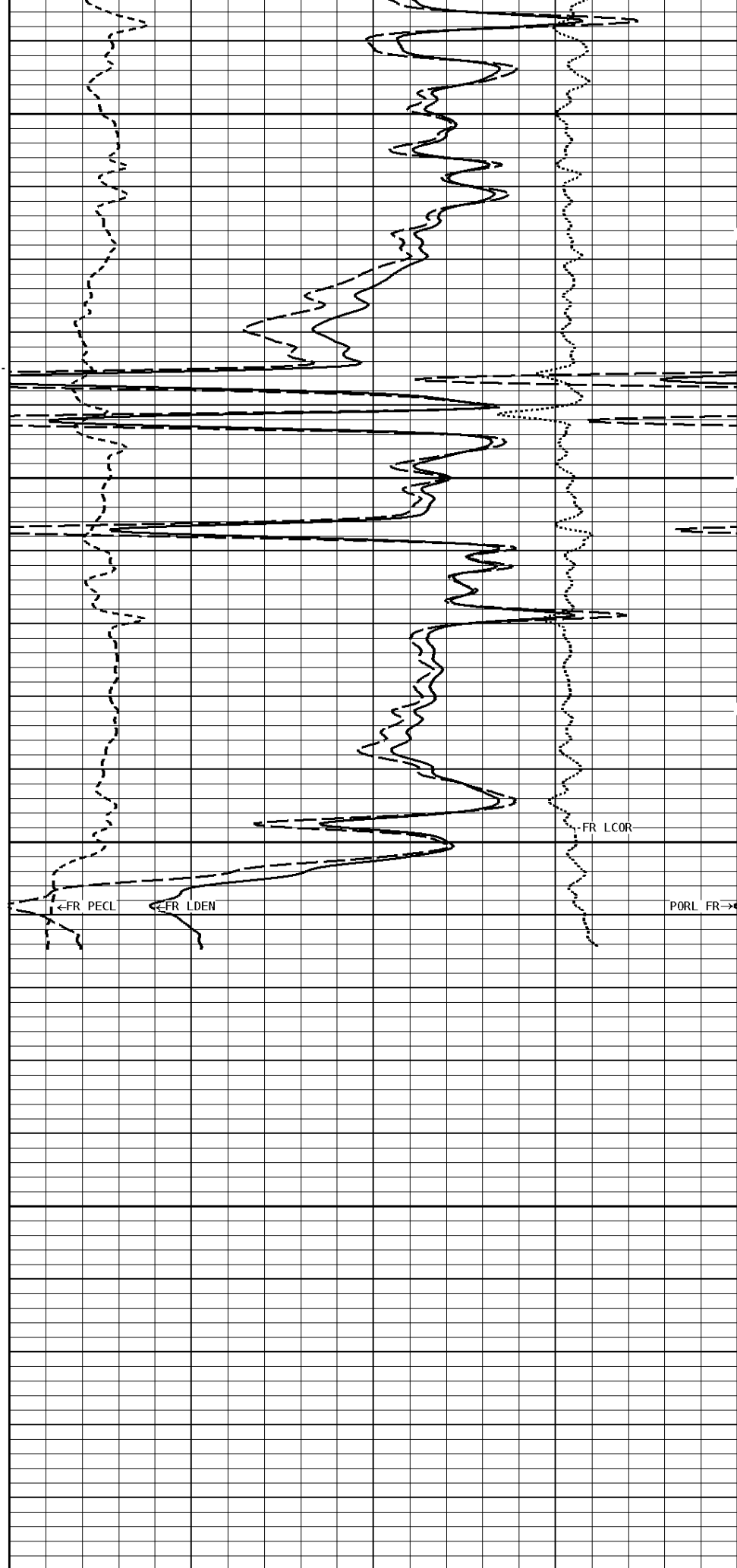
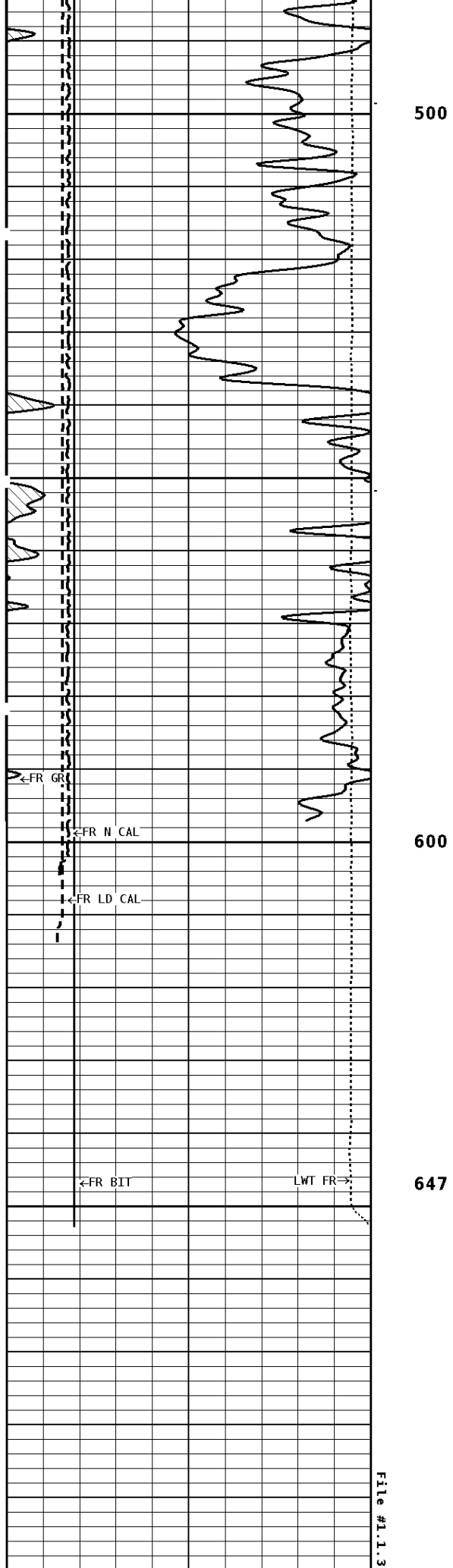




300

400





1:240 MAIN SECTION

BULK DENSITY			
GAMMA RAY API UNITS 200 0 400 200		- BHV ANV - CU. FT	DENSITY POROSITY (2.71g/cc) PERCENT 70 30 -10 30 -10 -50
TENSION LBS 10000 0			COMPENSATED BULK DENSITY G/CC 3.0 2.0 1.0 4.0 3.0 2.0
DENSITY (X) CALIPER INCHES (IN) 14 4 24 14			PE CROSS-SECTION BARN/ ELECTRON 0 10 -0.25 0.25
NEUTRON (Y) CALIPER INCHES (IN) 14 4 24 14			
BIT SIZE INCHES (IN) 4 14			

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_____	5.875	in
Casing Diameter_____	2.875	in
Casing Correction (PHI N)_____	Disable	

Shop Calibration GRT-B					
Performed : 02-Oct-2015			Time : 10:46		
Sensor Suite : GR-GR5			ID : GRT-BA-017		
	Measured	Units	Calibrated		Units
	Background	Jig	Jig		
GR	54	337	175		GRAPI
Shop Calibration CNT-AA					
Performed : 16-FEB-2016			Time : 09:30		
Sensor Suite : CALI-BCN			ID : NDT-AB-400		
	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	8.3	12.7	6.0	12.0	IN.
Shop Calibration CNT-AA					
Performed : 16-Feb-2016			Time : 09:40		
Sensor Suite : BHC NEUT			ID : CNP-AA-115		
Source ID : N-1044					
	Tank		Verification		Units
	Measured	Calibrated	Jig		
N/F	3.9843	3.6893	3.6870		
Porosity	25.3	20.5	20.5		%
Shop Calibration LDT-DA					
Performed : 16-FEB-2016			Time : 10:36		
Sensor Suite : CALI-LTH			ID : PDT-GA-426		
	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	7.6	11.5	6.0	12.0	IN.

Performed : 16-Feb-2016		Time : 11:03			
Sensor Suite : BHCPELNG		ID : LDP-DA-47			
Source ID : 63558B					
Short Space					
	BKGD	Al	Mg	Al+Fe	Units
LSW1	66	917	1404	648	CPS
LSW2	70	1251	1950	931	CPS
LSW3	260	3259	5204	2783	CPS
LSW4	323	2969	4256	2598	CPS
LSW5	47	81	89	77	CPS
LSW6	66	73	72	73	CPS
LSW7	50	56	56	54	CPS
LSW8	11	15	17	15	CPS
QS	0.144	0.134	0.119	0.143	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC
Long Space					
	BKGD	Al	Mg	Al+Fe	Units
LLW1	98	1124	4473	700	CPS
LLW2	111	2248	8661	1615	CPS
LLW3	425	4598	17210	3957	CPS
LLW4	558	2274	7375	2048	CPS
LLW5	63	75	154	72	CPS
LLW6	176	172	161	171	CPS
LLW7	110	109	108	109	CPS
LLW8	3	8	22	7	CPS
QL	0.233	0.225	0.196	0.220	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC



Tucker
ENERGY SERVICES

Company: RUNNING FOXES PETROLEUM INC.

Well: GUY #5-28B-3

Location: 1886' FNL & 165' FWL

Logged: 03-01-2016

K.B. Elev: 0.0 Ft