

Tucker
WIRELINE SERVICES

COMPENSATED NEUTRON

PEL DENSITY LOG

Company RUNNING FOXES PETROLEUM,
Well SHAW #3-4-25 TWIN
Field WILDCAT
County BOURBON
State KANSAS
Country USA
API No. 15-011-23777-00-00

File No : TUL-566695
Company : RUNNING FOXES PETROLEUM, INC.
Well : SHAW #3-4-25 TWIN
Field : WILDCAT
County : BOURBON
State : KANSAS
Country : USA
API No : 15-011-23777-00-00

Location :
495' FNL & 800' FEL
SE NW NE NE

LSD : Sect : 25 Twp : 24S Rge : 25E

Permanent Datum: GL Elevations: KB 0.00 Ft CNT
Drilling Measured From: GL DF 0.00 Ft LDT
Log Measured From: GL DF 0.00 Ft PTT
Above Permanent Datum: 0.00 Ft GL 864.00 Ft

Date	Jul 27 2011	
Run Number	1	
Depth--Driller	423.0	Ft
Depth--Logger	405.0	Ft
First Reading	382.0	Ft
Last Reading	22.0	Ft
Casing--Driller	22.0	Ft
Casing--Logger	22.0	Ft
Bit Size	5.625	In
Casing Size	8.625	In
Hole Fluid Type	NATIVE / FRESH	
Density	0.0 LBS/GAL	
Fluid Loss	0.0 CC	
PH/Viscosity	0.0 @ 0.0 SEC	
Sample Source	MEASURED	
RM@Measured Temp.	1.200	@ 90 F
RMF@Measured Temp	1.020	@ 90 F
RMG@Measured Temp.	1.380	@ 90 F
Source RMF/RMC	CALCULATED/CALCULATED	
RM@BHT	1.450	@ 73 F
Time Circulation Stopped		
Max Recorded Temp.	73	F
Equipment/Base	TRK123	TULSA
Recorded By	R. FRANKLIN	
Witnessed By	C. COUNTS	

The customer is hereby warned that by providing the log data herein, T. W. S. does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. T. W. 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. W. 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. W. 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)
5.625	423.00	8.625	24.00	22.00

Run Number	1	
Date	Jul 27 2011	
Date/Time On Bottom	Jul 27 2011 10:15	
Depth to Fluid	0.0	Ft
Salinity	0.000	PPM
RMF@BHT	1.230 @ 73	F
RMC@BHT	1.670 @ 73	F

Run Number 1

Comments

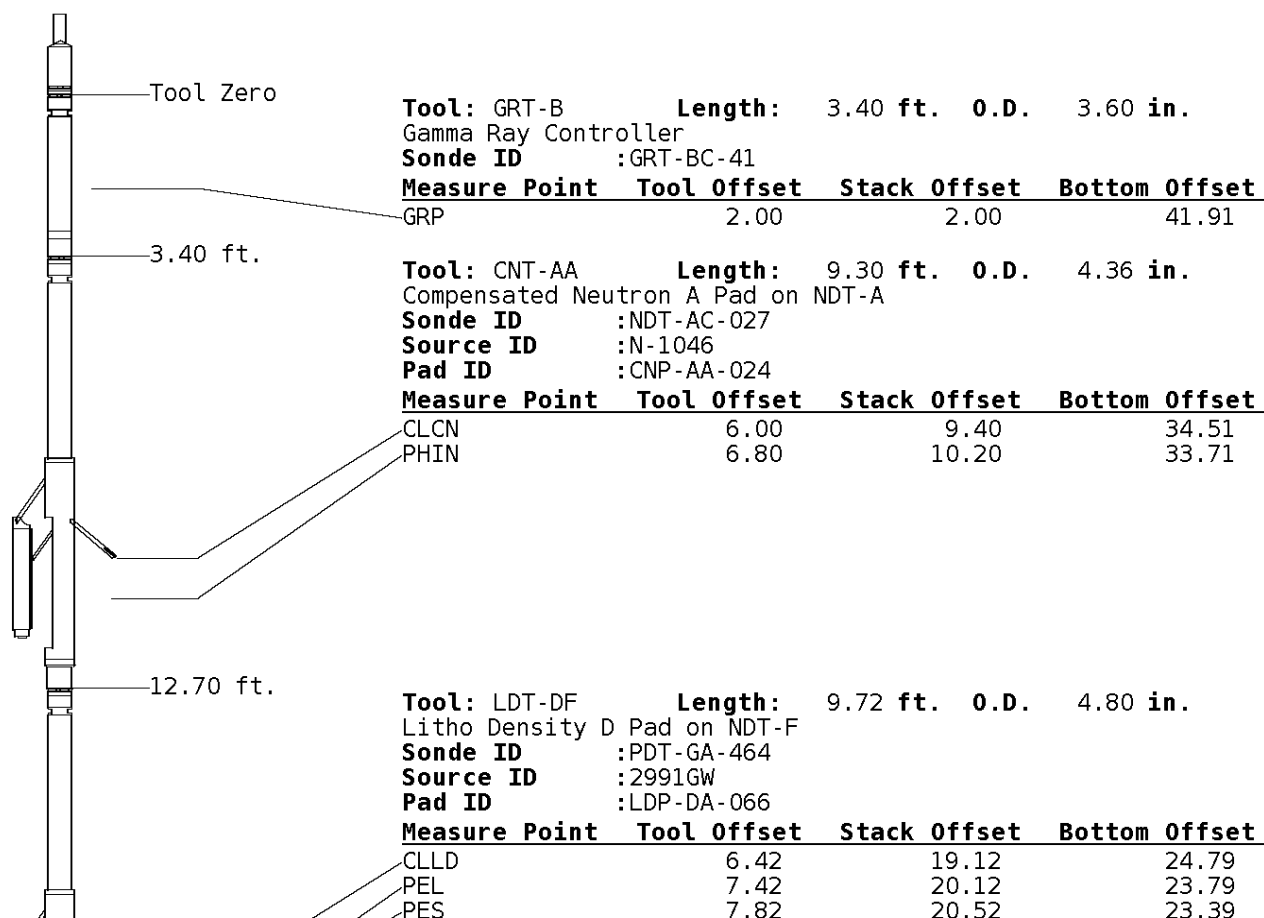
ALL PRESENTATIONS AS PER CUSTOMER REQUEST.
 GRT, CNT, LDT, AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED USING 2.875" PRODUCTION CASING.
 REPEAT PULLED UP HOLE DUE TO TIGHT TD PICKUP.

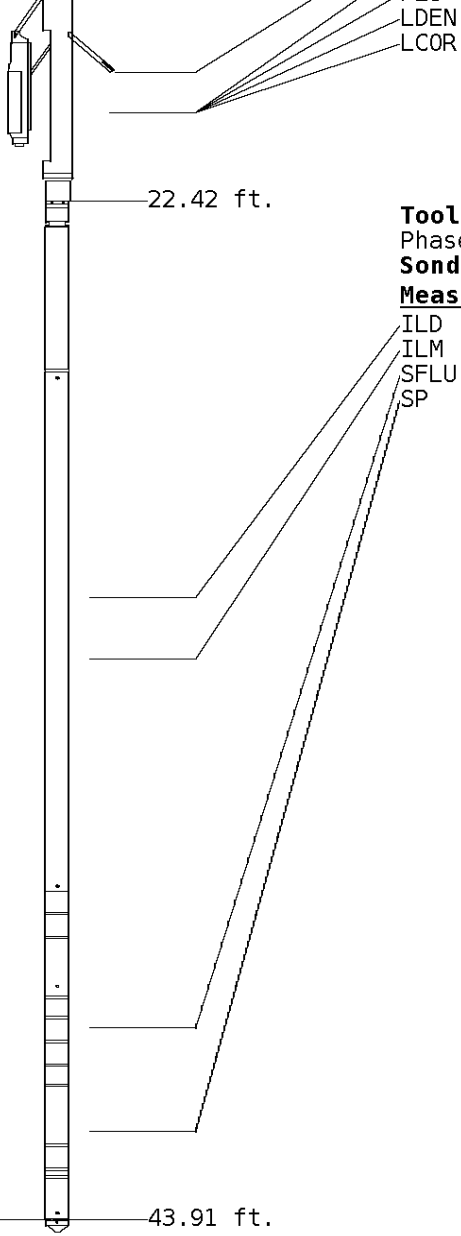
GRT: GRP.
 CNT: PHIN, CLCNIN.
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 PIT: ILD, ILM, SPU, SFLAEC.

OPERATORS:
 S. DAVIS
 T. HOBBS

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

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID :PIT-CA-069

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

Well File: run_sha_3-4-25t_jul_27_stk

Scale: 1:240

Segment: V1.D1.S4 MAIN

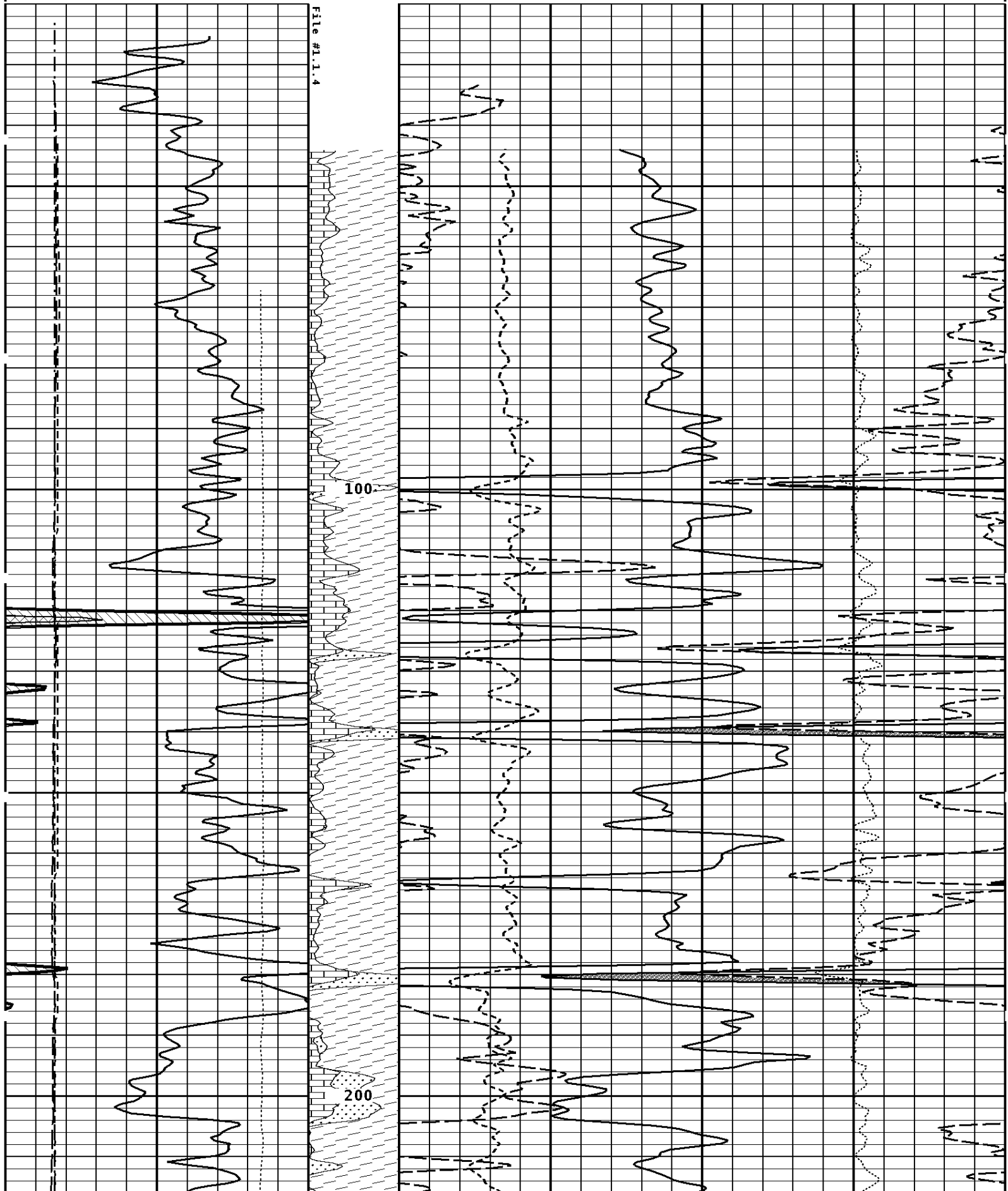
Acquired: 2011-07/27 10:09 3.2.0-9963

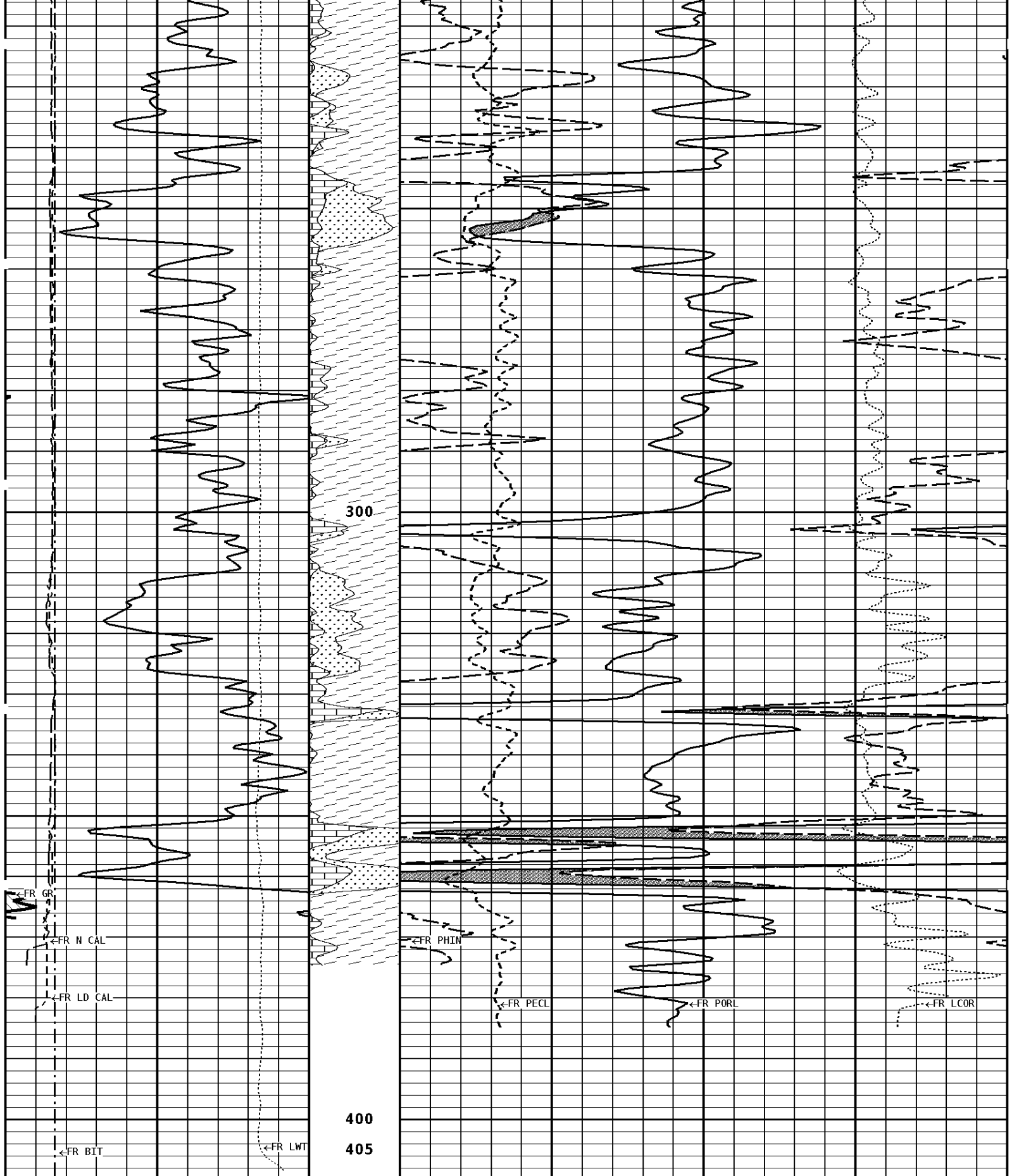
Reference: 0

Processed: 2011-07/27 11:22 3.2.0-9963

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

1:240 MAIN SECTION





300

400

405

←FR GR

←FR N CAL

←FR LD CAL

←FR BIT

←FR LWT

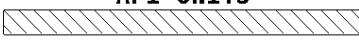


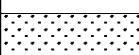
←FR PHIN

←FR PECL

←FR PORL

←FR LCOR

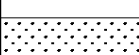
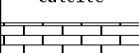
1:240 MAIN SECTION

GAMMA RAY API UNITS 200  400 0 200		Volume Dolo/Shale 	DENSITY POROSITY PERCENT (2.71 g/cc)	
		70	30	
		30	-10	
		-10	-50	
NEUTRON (Y) CALIPER INCHES (IN) 14 24 4 14		Volume Calcite 	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)	
		70	30	
		30	-10	
		-10	-50	
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
BIT SIZE INCHES (IN) 4 14				
TENSION LBS 10000 0				

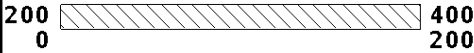
*** Borehole Zone Factors ***

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 _____	5.625 in
Casing Diameter _____	2.875 in
Casing Correction (PHI N) _____	Disable

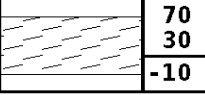
Well File: run_sha_3-4-25t_jul_27_stk Segment: V1.D1.S5 REPEAT Reference: 0	Scale: 1:240 Acquired: 2011-07/27 10:28 3.2.0-9963 Processed: 2011-07/27 11:22 3.2.0-9963
--	--

TENSION LBS 10000 0				
BIT SIZE INCHES (IN) 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
NEUTRON (Y) CALIPER INCHES (IN) 14 24 4 14		Volume Calcite 	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)	
		70	30	
		30	-10	
		-10	-50	
GAMMA RAY		Volume	DENSITY POROSITY	

API UNITS



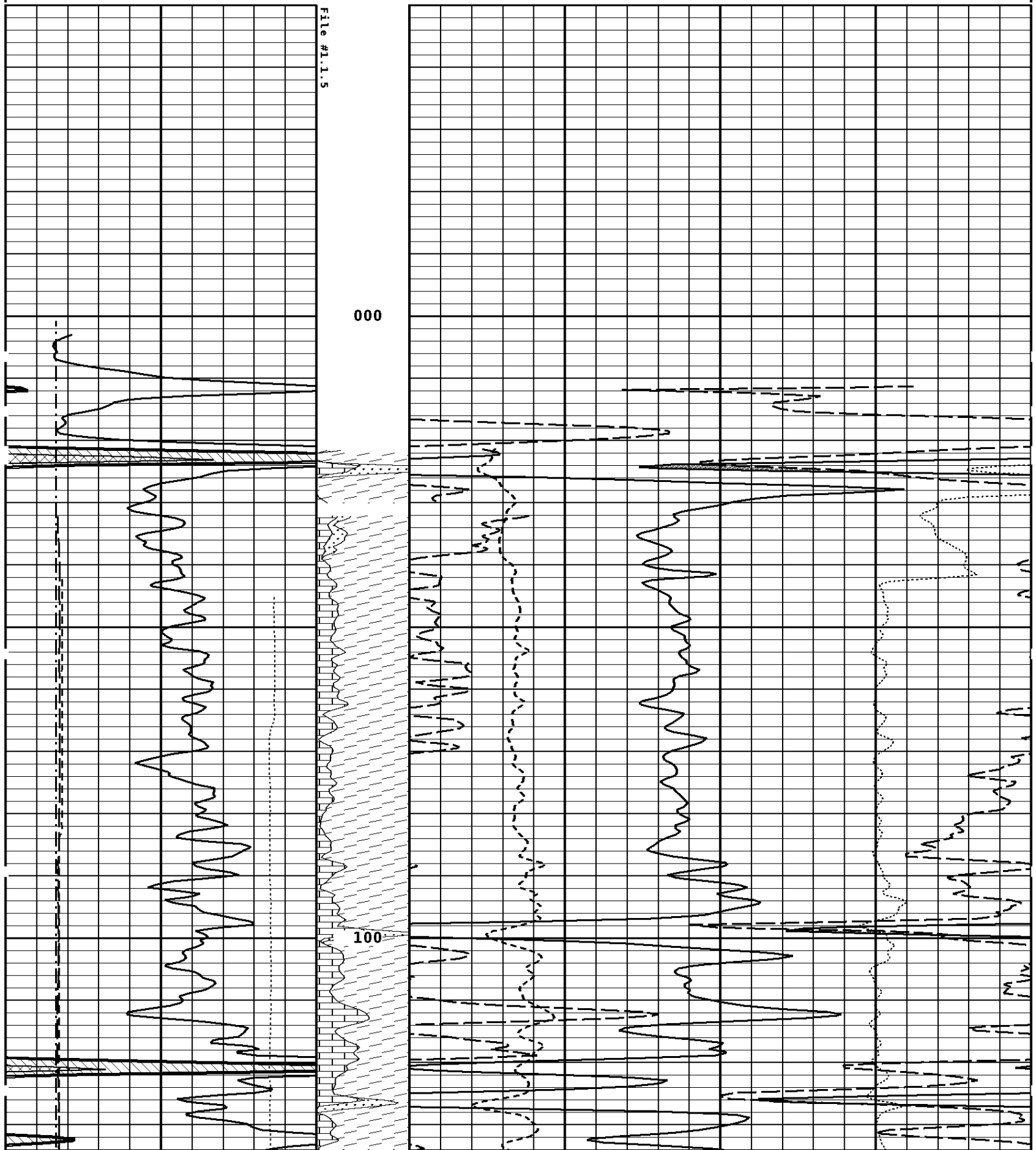
Dolo/Shale



PERCENT (2.71 g/cc)

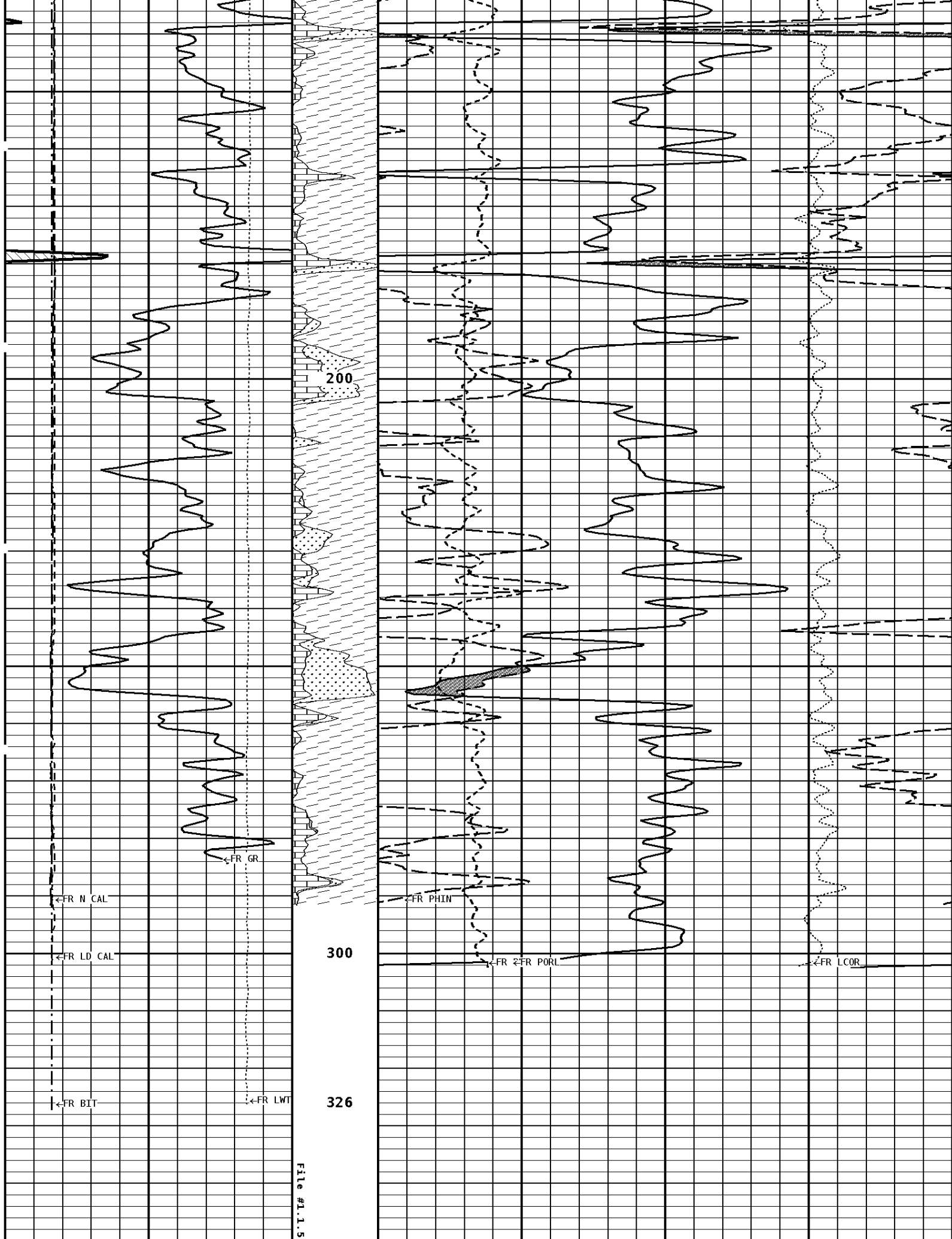
30
-10
-50

1:240 REPEAT SECTION



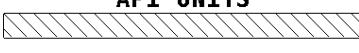
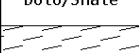
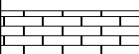
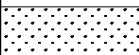
000

100



File #1.1.5

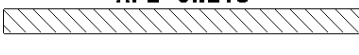
1:240 REPEAT SECTION

GAMMA RAY API UNITS 		Volume Dolo/Shale 	DENSITY POROSITY PERCENT (2.71 g/cc)	
200	400		70	30
0	200		30	-10
			-10	-50
NEUTRON (Y) CALIPER INCHES (IN)		Volume Calcite 	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)	
14	24		70	30
4	14		30	-10
			-10	-50
DENSITY (X) CALIPER INCHES (IN)		Volume Quartz 	PE CROSS-SECTION BARNs/ELECTRON	DENSITY CORRECTION G/CC
14	24		0	10
4	14		-0.25	0.25
BIT SIZE INCHES (IN)				
4	14			
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 _____	5.625 in
Casing Diameter _____	2.875 in
Casing Correction (PHI N) _____	Disable

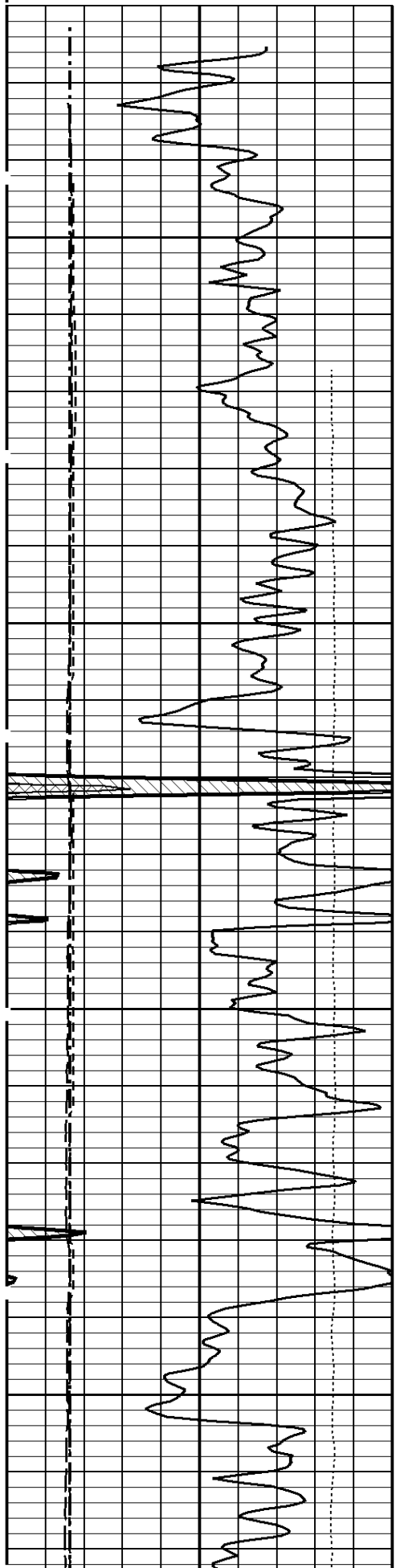
Well File: run_sha_3-4-25t_jul_27_stk	Scale: 1:240
Segment: V1.D1.S4 MAIN	Acquired: 2011-07/27 10:09 3.2.0-9963
Reference: 0	Processed: 2011-07/27 11:22 3.2.0-9963

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

**1:240 MAIN SECTION
BULK DENSITY**

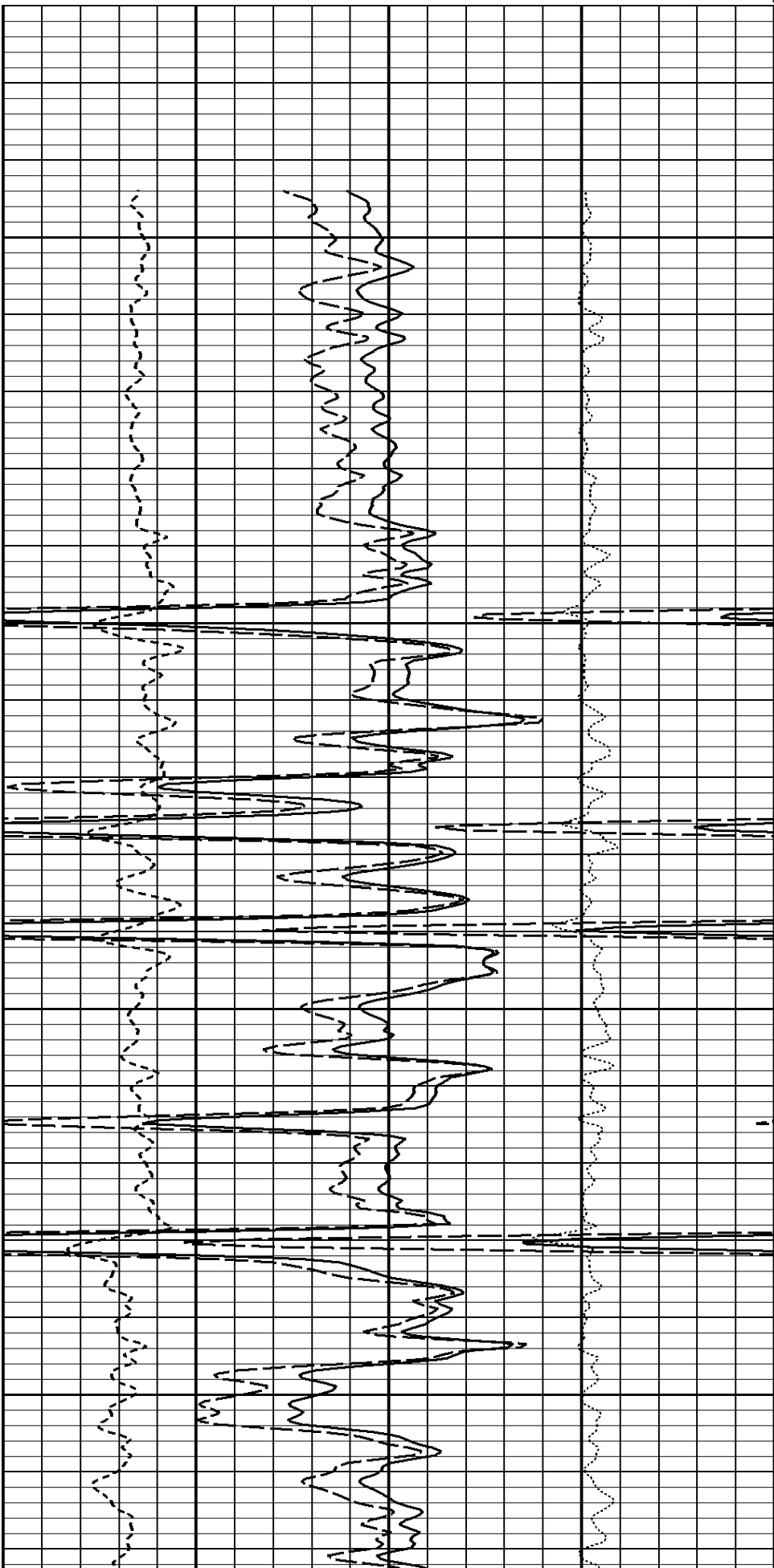
BULK DENSITY

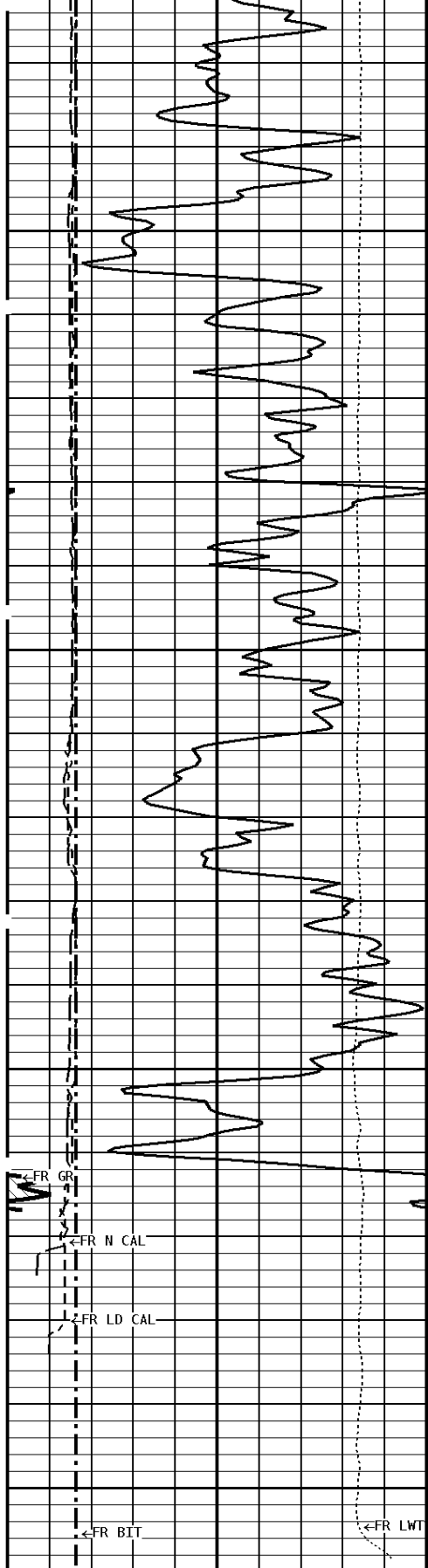
File #1.1.4



100

200

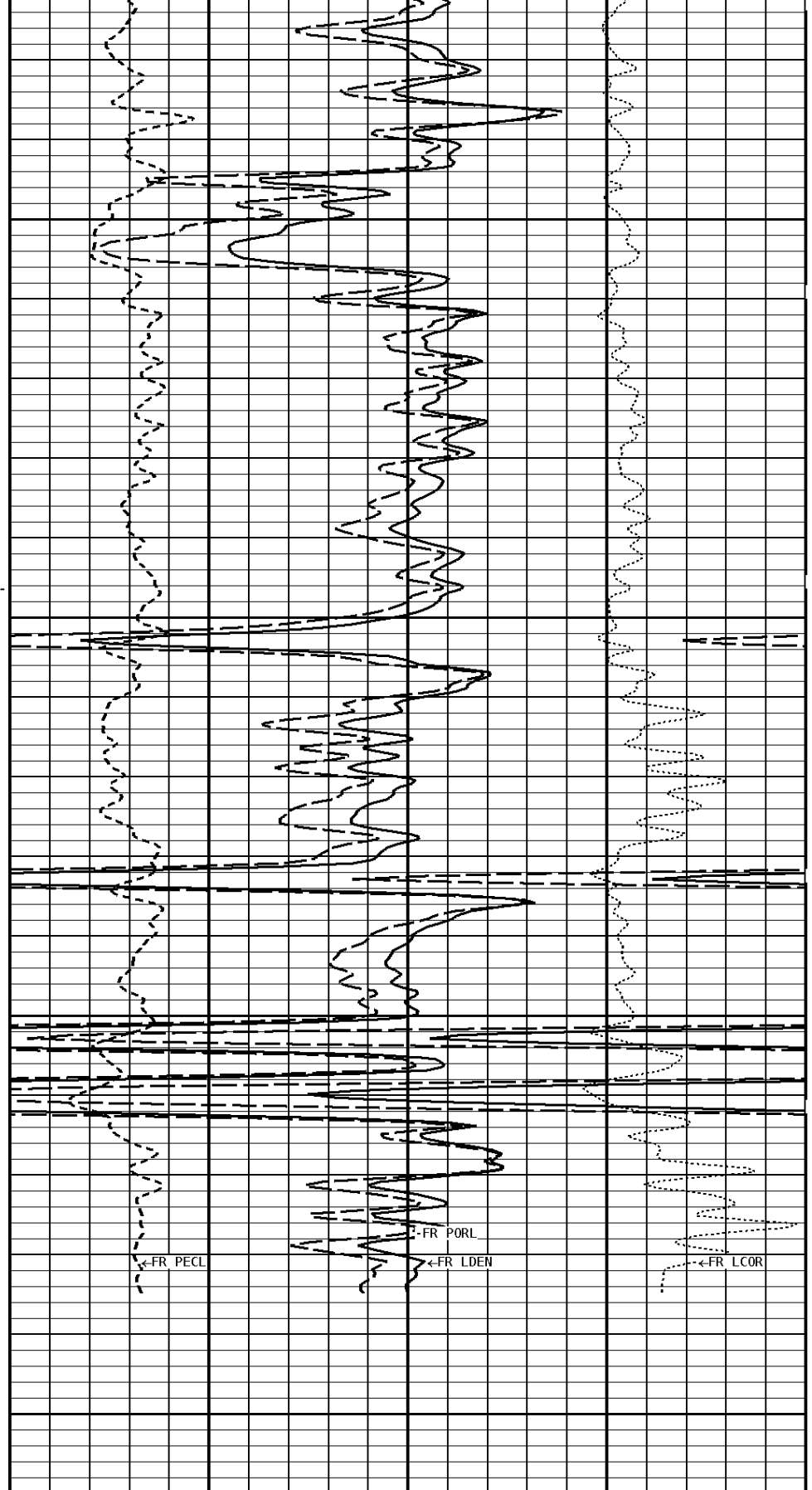




300

400

405



1:240 MAIN SECTION BULK DENSITY

GAMMA RAY API UNITS 200 400 0 200	-BHV AHV- CU. FT	COMPENSATED BULK DENSITY G/CC	
		3.0	4.0
		2.0	3.0
		1.0	2.0
NEUTRON (Y) CALIPER INCHES (IN) 14 24 4 14		DENSITY POROSITY PERCENT (2.71 g/cc)	
		70	30
		30	-10
		-10	-50
DENSITY (X) CALIPER INCHES (IN) 14 24 4 14		PE CROSS-SECTION BARNS/ELECTRON	DENSITY CORRECTION G/CC
		0	0.25
		10	-0.25
		-0.25	0.25
BIT SIZE INCHES (IN) 4 14			
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	_____	5.625 in
Casing Diameter	_____	2.875 in
Casing Correction (PHI N)	_____	Disable

*** Calibration Summary ***

Shop Calibration					
GRT-B					
Performed : 29-Apr-2010			Time : 11:02		
Sensor Suite : GR-GR5			ID : GRT-BC-41		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig		
	46	346	175	GRAPI	
Shop Calibration					
CNT-AA					
Performed : 30-APR-2011			Time : 18:55		
Sensor Suite : CALI-BCN			ID : NDT-AC-027		
	Jig - Measured		Jig - Calibrated	Units	
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	7.3	14.1	6.0	12.0	IN.
Shop Calibration					
CNP-AA-024					
Performed : 15-Jul-2011			Time : 11:29		
Sensor Suite : BHC NEUT			ID : CNP-AA-024		
Source ID : N-1046					
	Measured	Tank	Calibrated	Verification	Units
N/F	3.8791		3.6893	Jig	
Porosity	23.5		20.5	3.6842	%
				20.4	

**Shop Calibration
LDT-DF**

Performed : 26-APR-2011 Time : 13:10
 Sensor Suite : CALI-LTH ID : PDT-GA-464

CL # 1	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
	6.9	10.3	6.0	12.0	IN.

Performed : 15-Jul-2011 Time : 10:34
 Sensor Suite : BHCPELNG ID : LDP-DA-066
 Source ID : 2991GW

	BKGD	Short Space			Units
		Al	Mg	Al+Fe	
LSW1	70	1133	1834	740	CPS
LSW2	73	1332	2113	975	CPS
LSW3	270	3079	4974	2624	CPS
LSW4	329	2745	3958	2401	CPS
LSW5	31	57	65	54	CPS
LSW6	89	94	92	96	CPS
LSW7	57	63	62	63	CPS
LSW8	2	4	6	4	CPS
QS	0.221	0.202	0.192	0.212	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC

	BKGD	Long Space			Units
		Al	Mg	Al+Fe	
LLW1	103	1228	5073	754	CPS
LLW2	116	2197	8637	1609	CPS
LLW3	435	4122	15628	3575	CPS
LLW4	561	1988	6291	1797	CPS
LLW5	59	73	130	69	CPS
LLW6	181	174	167	178	CPS
LLW7	114	112	107	111	CPS
LLW8	3	7	18	6	CPS
QL	0.224	0.218	0.216	0.230	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC