

Tucker
WIRELINE SERVICES

COMPOSITE LOG

Company RUNNING FOXES PETROLEUM Well C HEIM #2-19D Field LEAVENWORTH NORTHEAST County LEAVENWORTH State KANSAS Country USA API No. 15-103-21381-00-00		File No : TUL-58008 Company : RUNNING FOXES PETROLEUM INC. Well : C HEIM #2-19D Field : LEAVENWORTH NORTHEAST County : LEAVENWORTH State : KANSAS Country : USA API No : 15-103-21381-00-00	
Location : 990' FNL & 1650' FEL SE NW NE		LSD : Sect : 19 Twp : 08S Rge : 22E	
Permanent Datum: Drilling Measured From: Log Measured From: Above Permanent Datum:	GL KB KB 9.00 Ft	Elevations: KB 870.00 DF 869.00 GL 861.00	Services: Ft Ft Ft GRT CNT LDT MLT CST PTT
Date	08-24-2013		
Run Number	0		
Depth--Driller	2415.0	Ft	
Depth--Logger	2415.0	Ft	
First Reading	2414.0	Ft	
Last Reading	308.0	Ft	
Casing--Driller	308.0	Ft	
Casing--Logger	308.0	Ft	
Bit Size	7.875	In	
Casing Size	8.625	In	
Hole Fluid Type	WBM		
Density	9.2 LBS/GAL		
Fluid Loss	8.8 CC		
PH/Viscosity	9.0	MEASURED	49.0 SEC
Sample Source	MEASURED		
RM@Measured Temp.	0.950	@ 78 F	
RMF@Measured Temp	0.810	@ 78 F	
RMG@Measured Temp.	1.090	@ 78 F	
Source RMF/RMG	CALCULATED/CALCULATED		
RM@BHT	0.740 @ 102 F		
Time Circulation Stopped			
Max Recorded Temp.	102	F	
Equipment/Base	TRK 127	TULSA	
Recorded By	Z. HICKMAN		
Witnessed By	J. TAGLEIRI		

The customer is hereby warned that by providing the log data herein, Tucker Technologies, Inc. does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. Tucker Technologies, Inc. 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 Tucker Technologies, Inc. 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 Tucker Technologies, Inc. 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)
7.875	2415.00	8.625	24.00	308.00	0.00

Run Number	0	
Date	08-24-2013	
Date/Time On Bottom	08-24-2013 12:30 am	
Depth to Fluid	0.0	Ft
Salinity	0.000	
RMF@BHT	0.631	@ 102 F
RMC@BHT	0.849	@ 102 F

Run Number 0

Comments

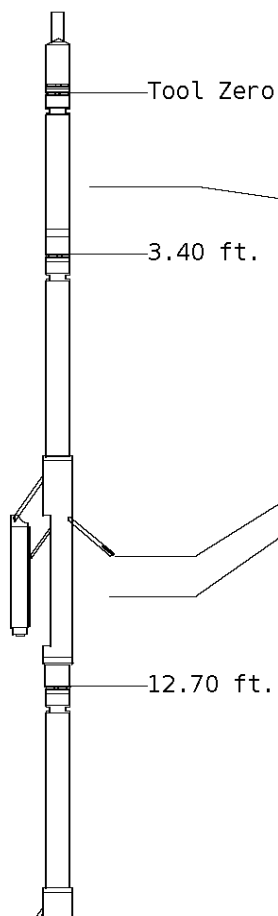
ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, MLT, CST AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED USING 5.500" PRODUCTION CASING.
 PHIN IS CALIPER CORRECTED

GRT: GRP.
 CNT: PHIN, CLCNIN.
 LDT: PORL,LCORN,PECLN,LDENN,PORLLS,CLLDIN.
 MLT: NOR_RF, INV_RF, MSCLPIN.
 CST: PORS, CDTF, TT1PF, TT2PF, TT3PF, TT4PF, ITT.
 PIT: ILD, ILM, SPU, SFLAEC, CIRD

OPERATORS:
 P.JACOBS
 A. DJAHO

Tool String Schematic

Total Tool Length - 66.95 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 1171.00 lbs.



Tool: GRT-B **Length:** 3.40 ft. **O.D.** 3.60 in.
 Gamma Ray Controller

Sonde ID :GRT-BB-006

Measure Point	Tool Offset	Stack Offset	Bottom Offset
GRP	2.00	2.00	64.95

Tool: CNT-AA **Length:** 9.30 ft. **O.D.** 4.36 in.
 Compensated Neutron A Pad on NDT-A

Sonde ID :NDT-AE-403

Source ID :N-1044

Pad ID :CNP-AA-103

Measure Point	Tool Offset	Stack Offset	Bottom Offset
CLCN	6.00	9.40	57.55
PHIN	6.80	10.20	56.75

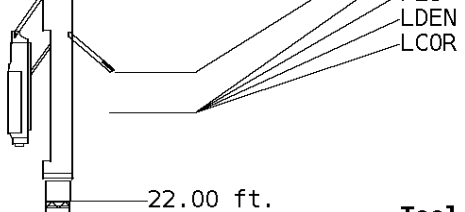
Tool: LDT-DA **Length:** 9.30 ft. **O.D.** 4.80 in.
 Litho Density D Pad on NDT-A

Sonde ID :NDT-AH-116

Source ID :CSV-587

Pad ID :LDP-DA-47

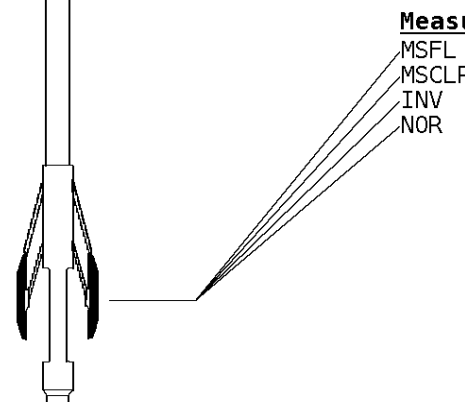
Measure Point	Tool Offset	Stack Offset	Bottom Offset
CLLD	6.00	18.70	48.25
PEL	7.00	19.70	47.25
PES	7.40	20.10	46.85



7.20 19.90 47.05
 7.20 19.90 47.05

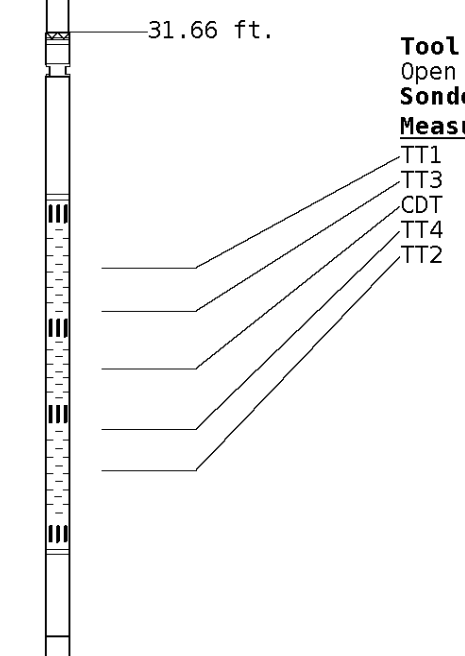
Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
 Micro Spherically Focused (IC)
Sonde ID :MST-DA-36

Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	29.60	37.35
MSCLP	7.60	29.60	37.35
INV	7.60	29.60	37.35
NOR	7.60	29.60	37.35



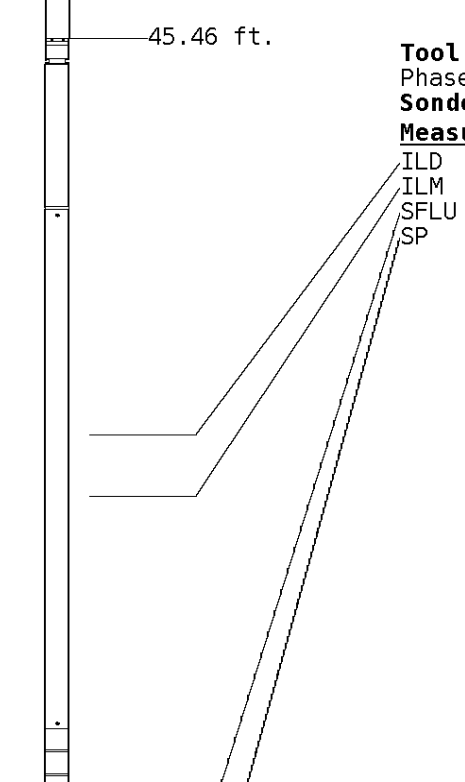
Tool: CST-AD **Length:** 13.80 ft. **O.D.** 3.60 in.
 Open Hole Sonic
Sonde ID :CST-AB-012

Measure Point	Tool Offset	Stack Offset	Bottom Offset
TT1	4.80	36.46	30.49
TT3	5.80	37.46	29.49
CDT	7.30	38.96	27.99
TT4	8.80	40.46	26.49
TT2	9.80	41.46	25.49



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	54.38	12.56
ILM	10.10	55.56	11.39
SFLU	17.49	62.95	4.00
SP	20.60	66.06	0.88



LWT 66.95 ft.

Well File: RFP C HEIM 2-19D AUG 24 QUINT

Scale: 1:240




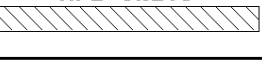
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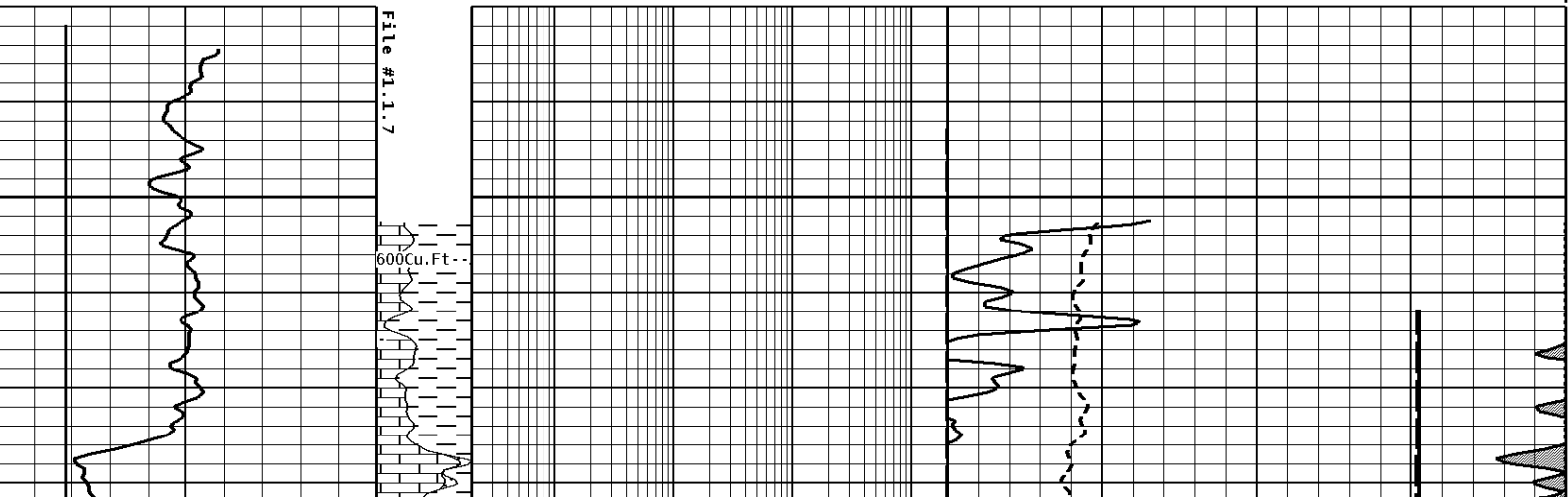
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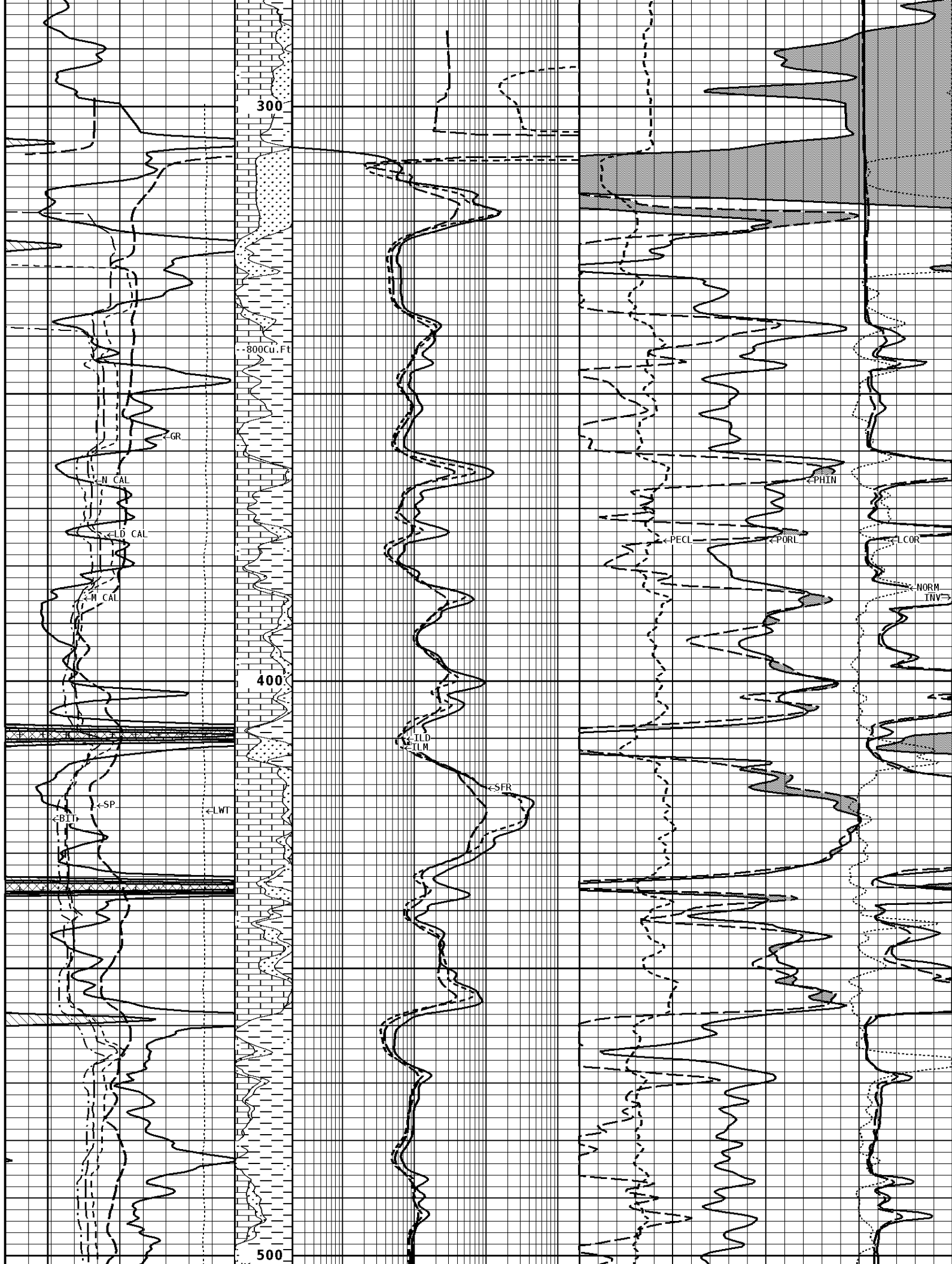
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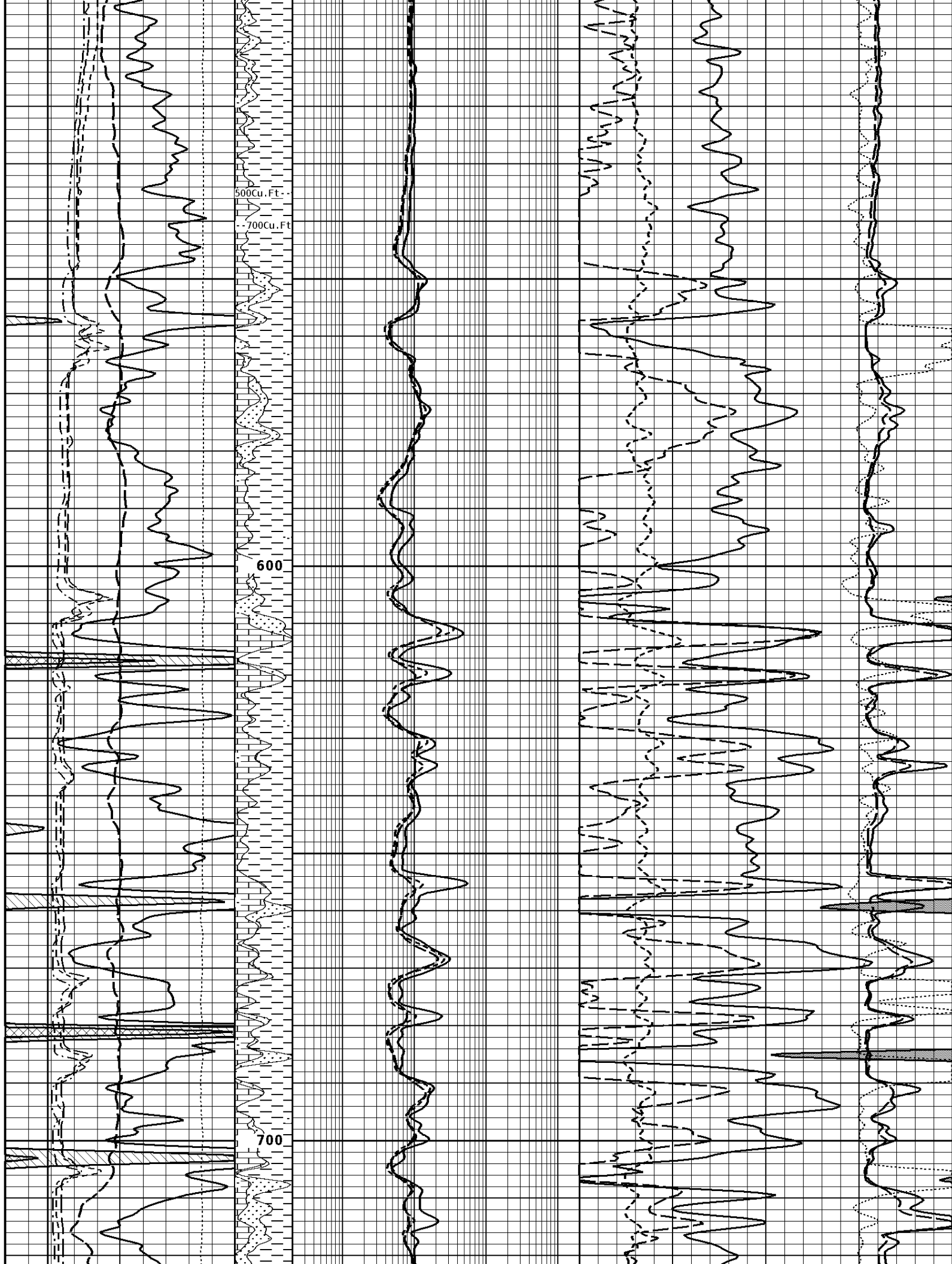
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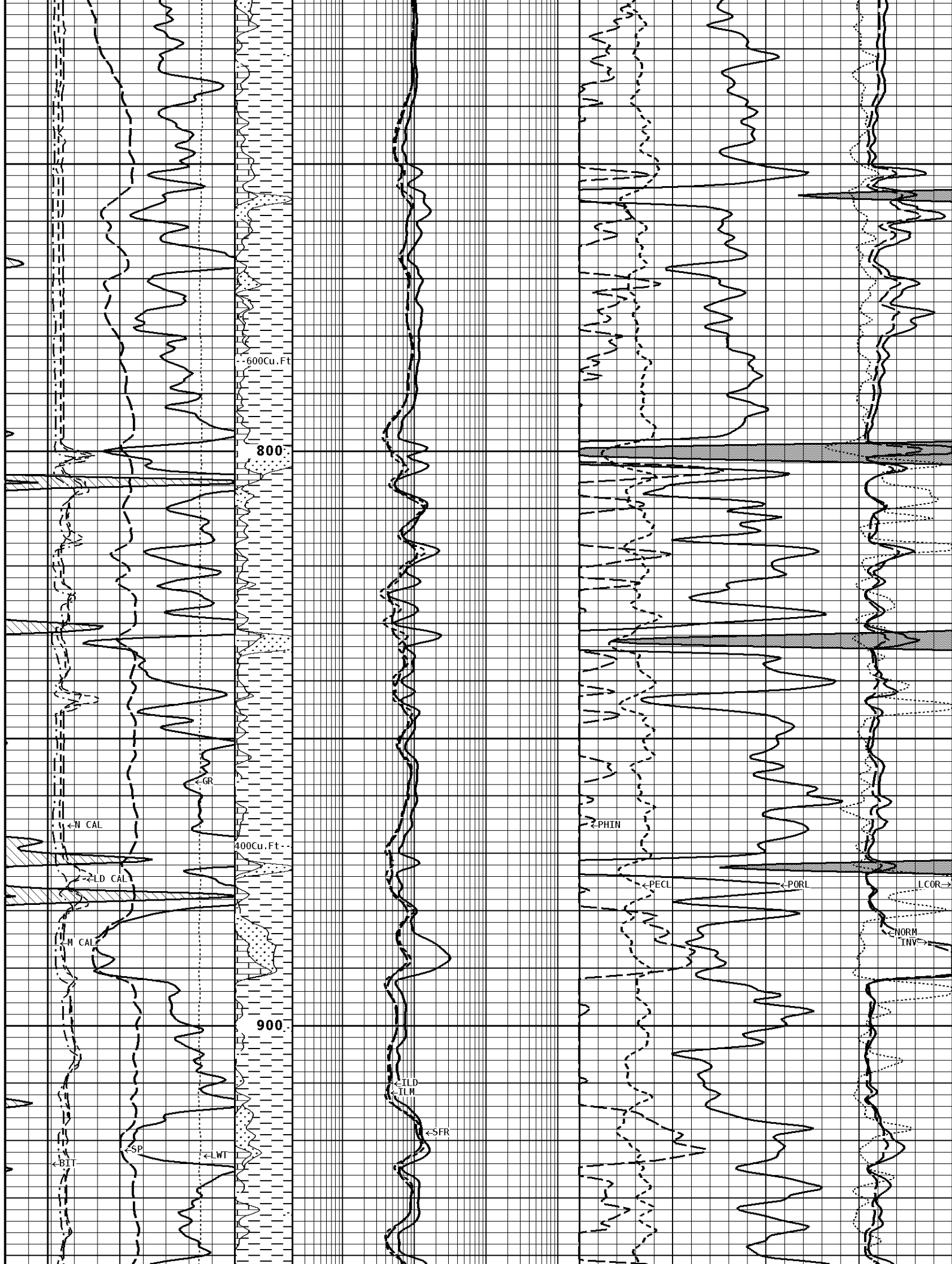
CALIPER MICRO INCHES (IN) 16 26 6 16					
BIT SIZE INCHES (IN) 6 16				NORMAL OHMM 0 40	
NEUTRON (Y) CALIPER INCHES (IN) 16 26 6 16				INVERSE OHMM 0 40	
DENSITY (X) CALIPER INCHES (IN) 16 26 6 16		Volume Quartz 	DENSITY CORRECTION G/CC -0.75 0.25		
TENSION LBS 10000 0		Volume Calcite 	SHALLOW FOCUSED RESISTIVITY OHMM 0.2 2000.0 0		PE CROSS-SECTION BARNES/ELECTRON 20
SPONTANEOUS POTENTIAL mV → ← 20		Volume Dolo/Shale 	DEEP INDUCTION OHMM 0.2 2000.0		DENSITY POROSITY (2.71g/cc) PERCENT 70 30 30 -10 -10 -50
GAMMA RAY API UNITS 150 300 0 150		BHV AHV CU. FT 	MEDIUM INDUCTION OHMM 0.2 2000.0 30		NEUTRON POROSITY (LIMESTONE) PERCENT -10

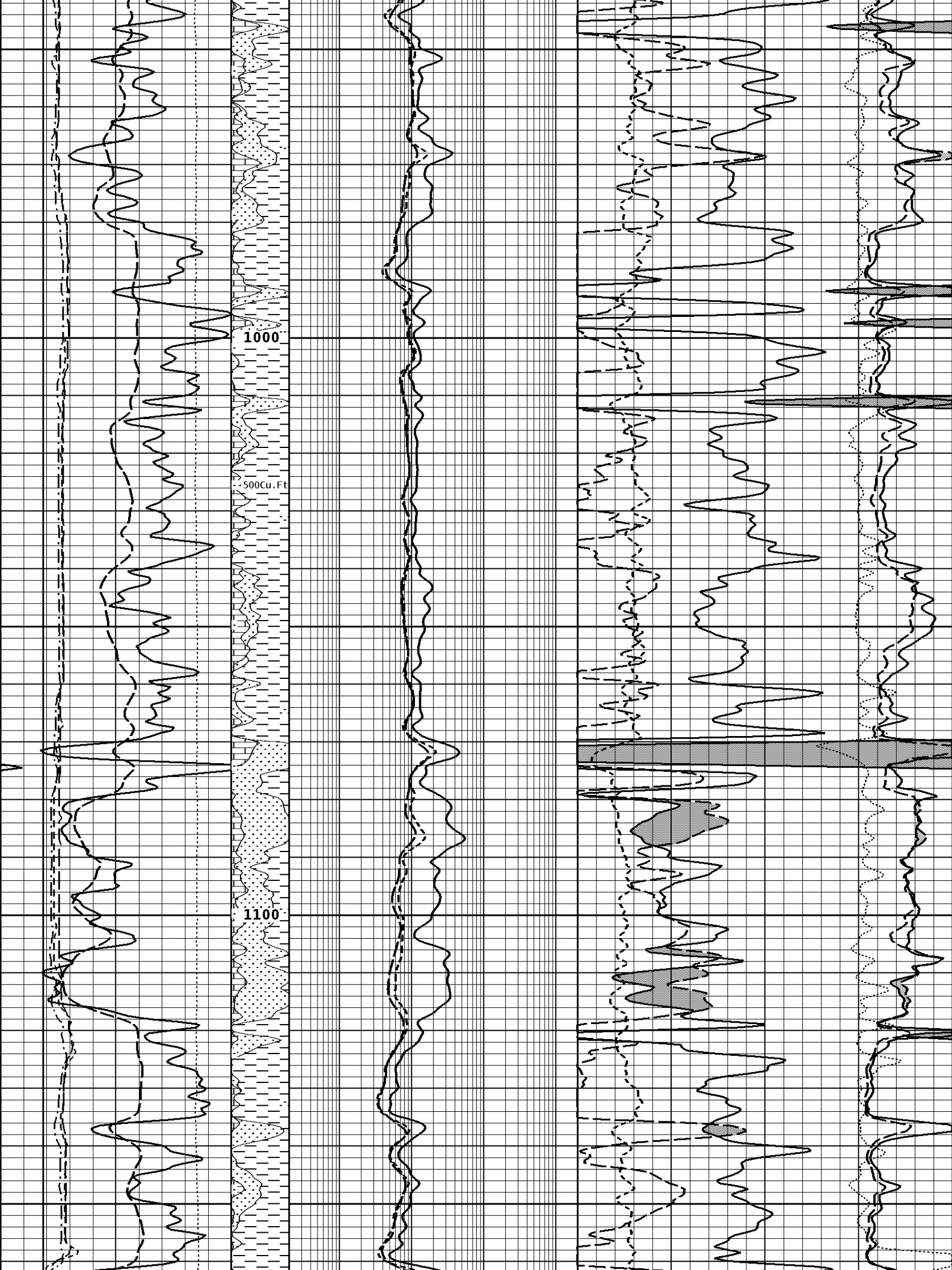
1:240 MAIN SECTION

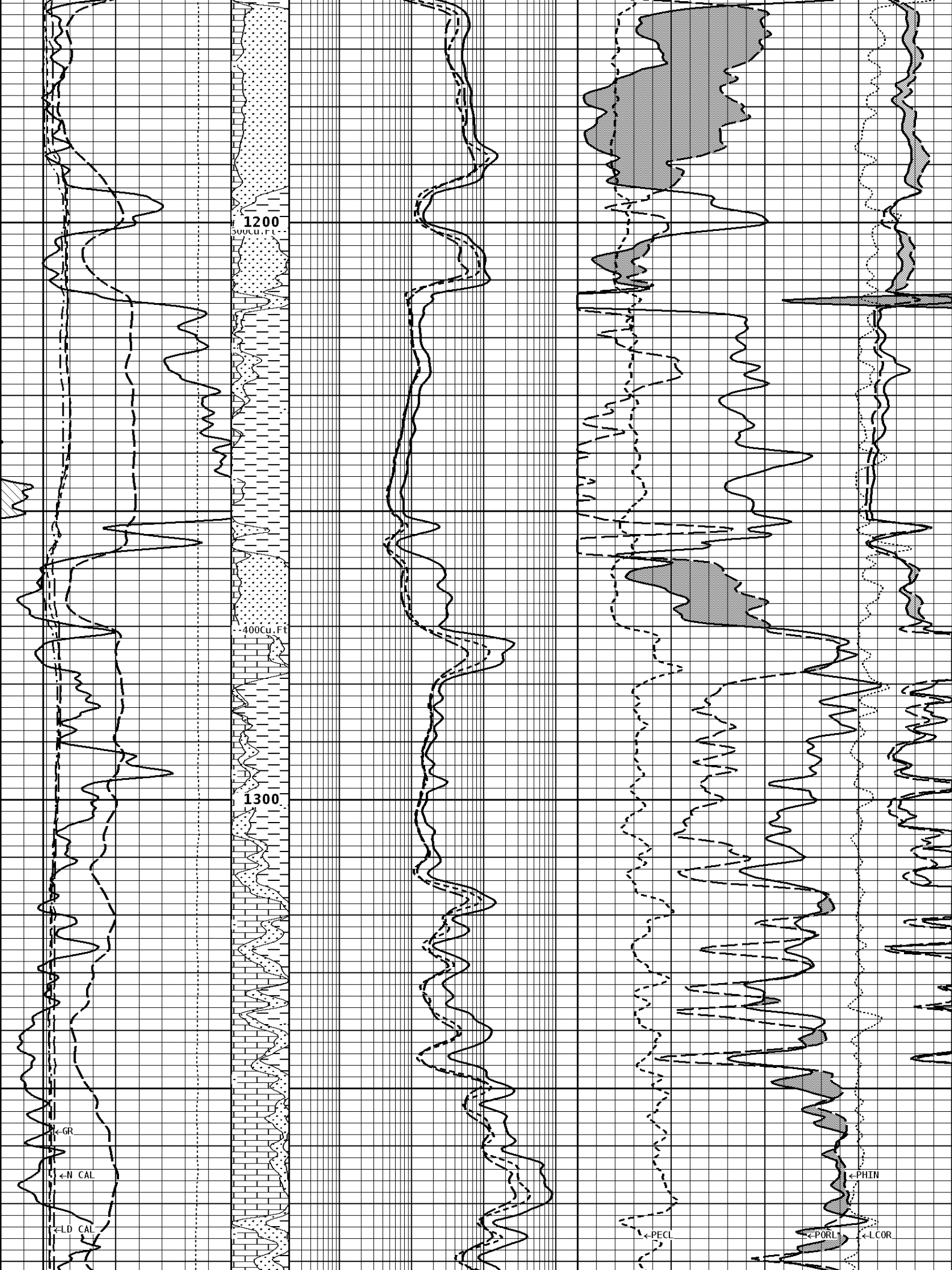












1200
500Cu. Ft.

400Cu. Ft.

1300

← GR

← N CAL

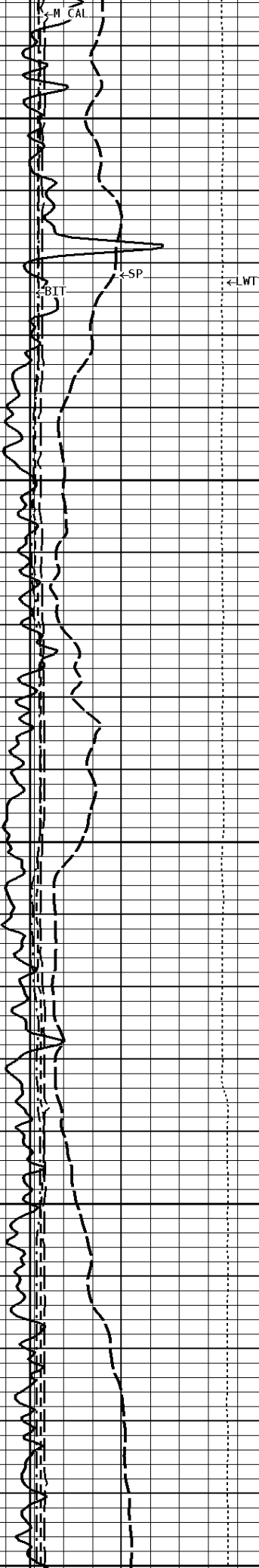
← LD CAL

← PHIN

← PECL

← PORL

← LCOR



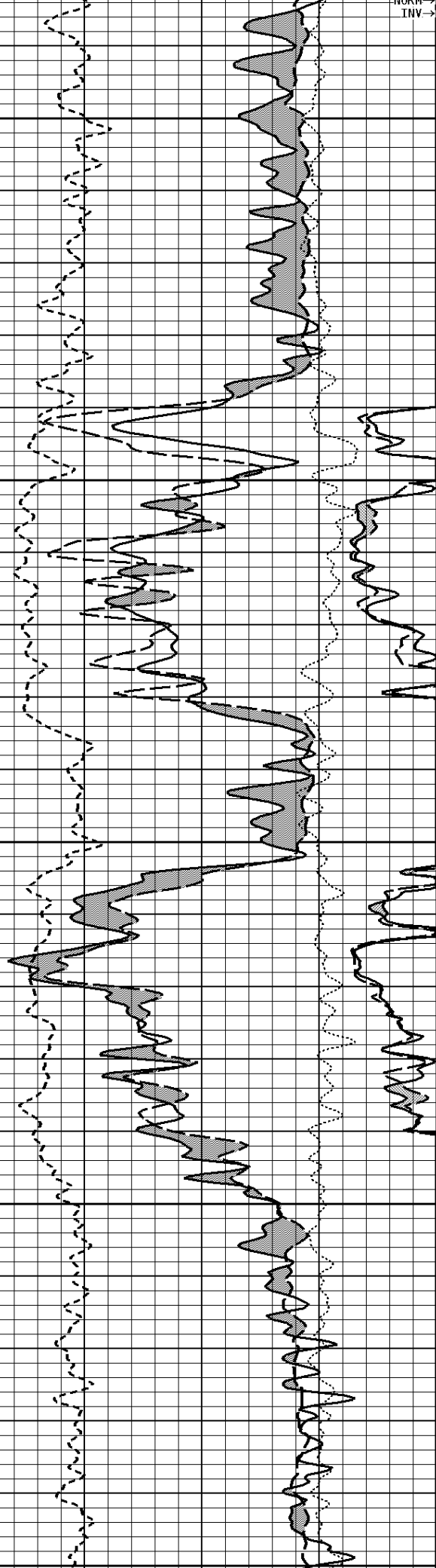
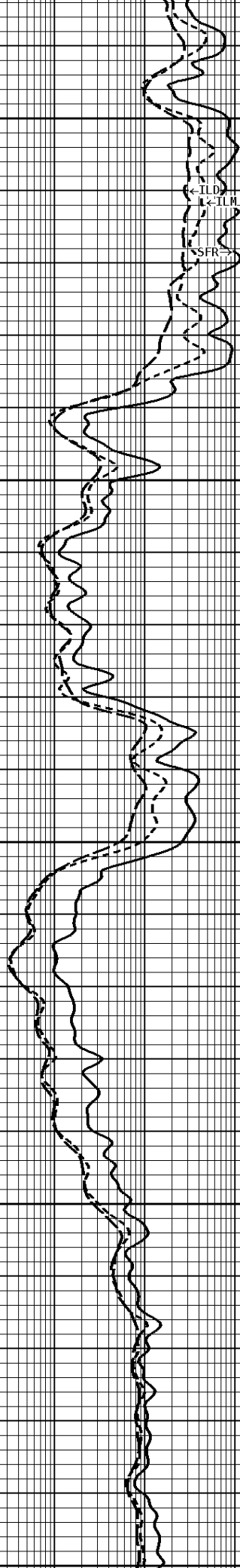
1400

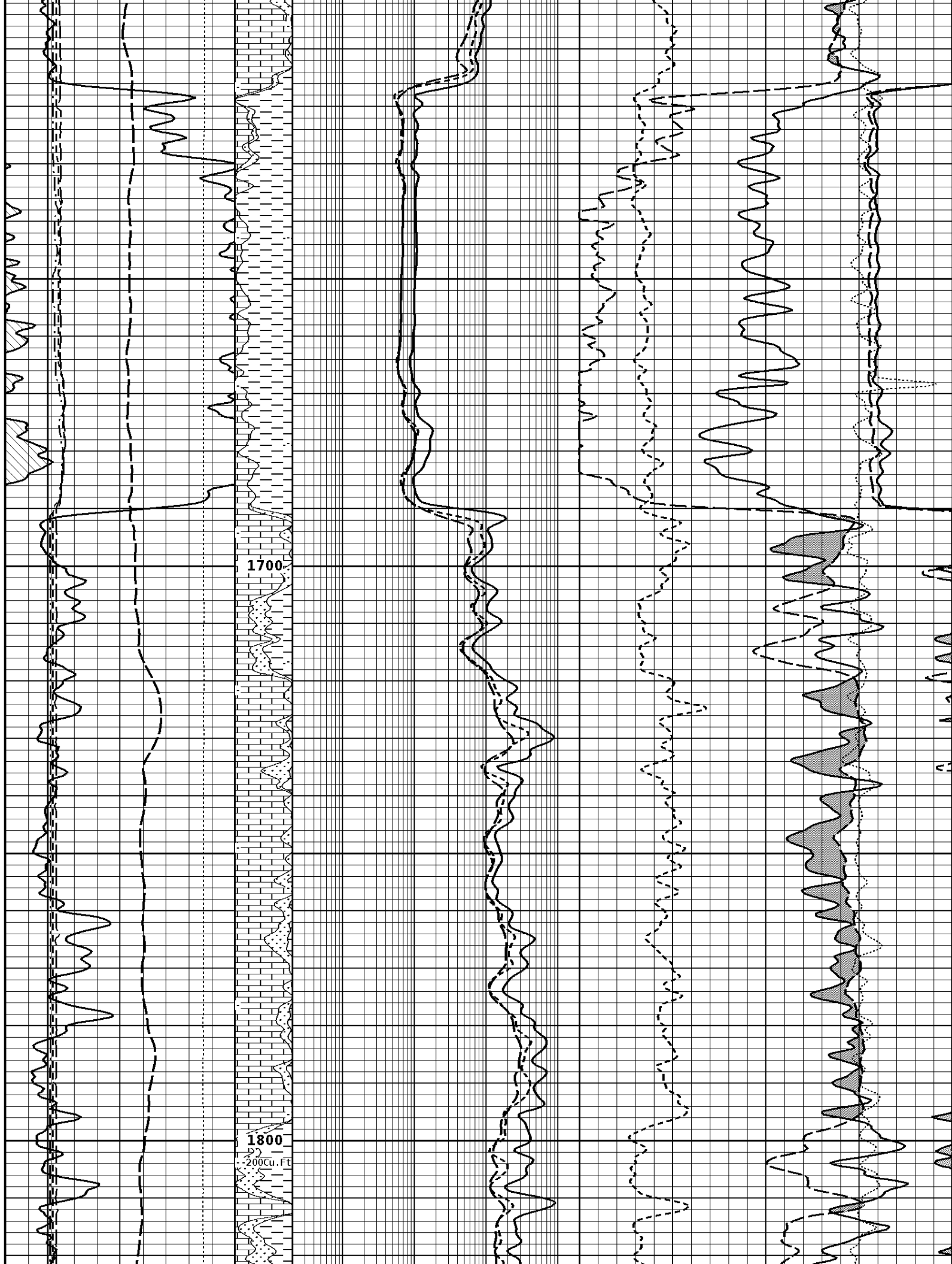
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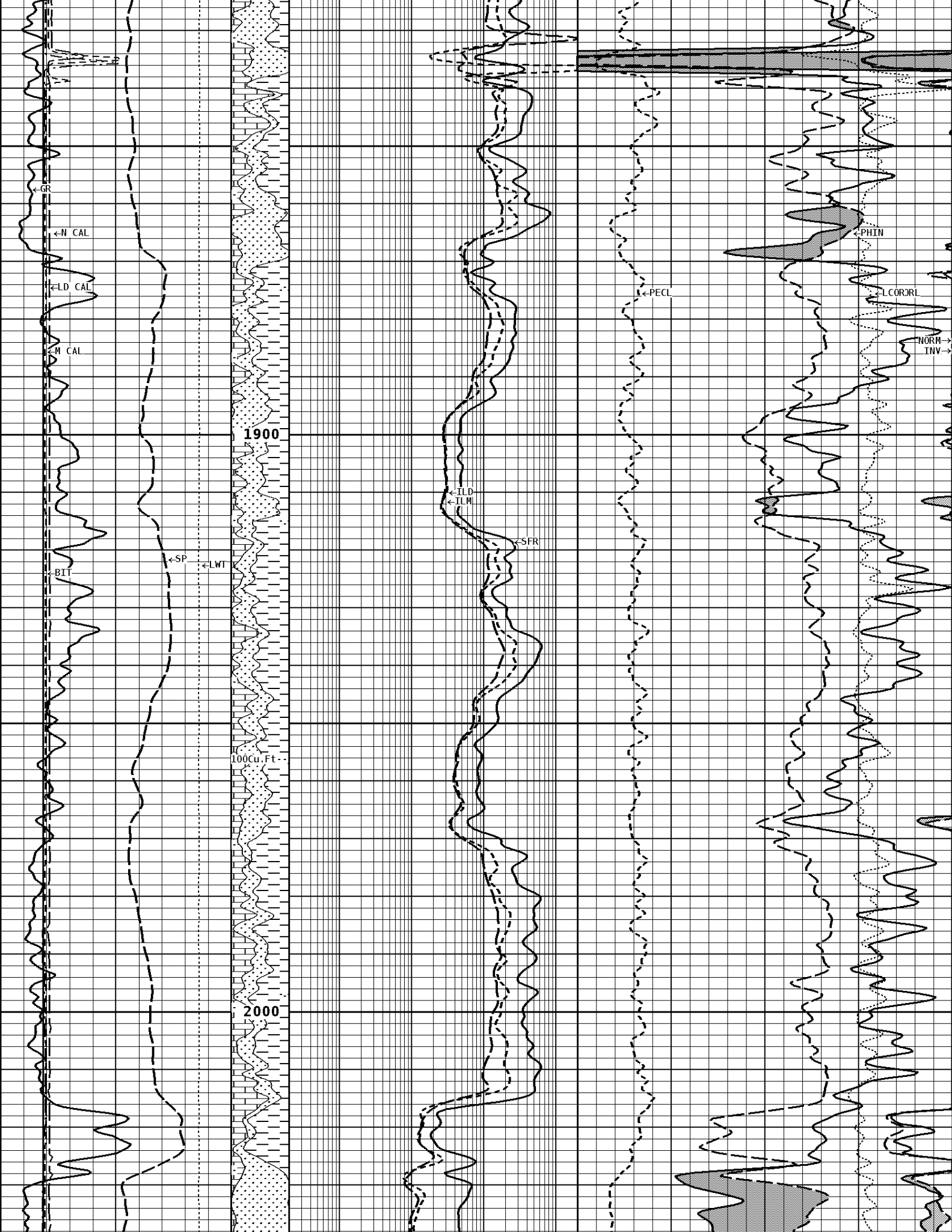
1600

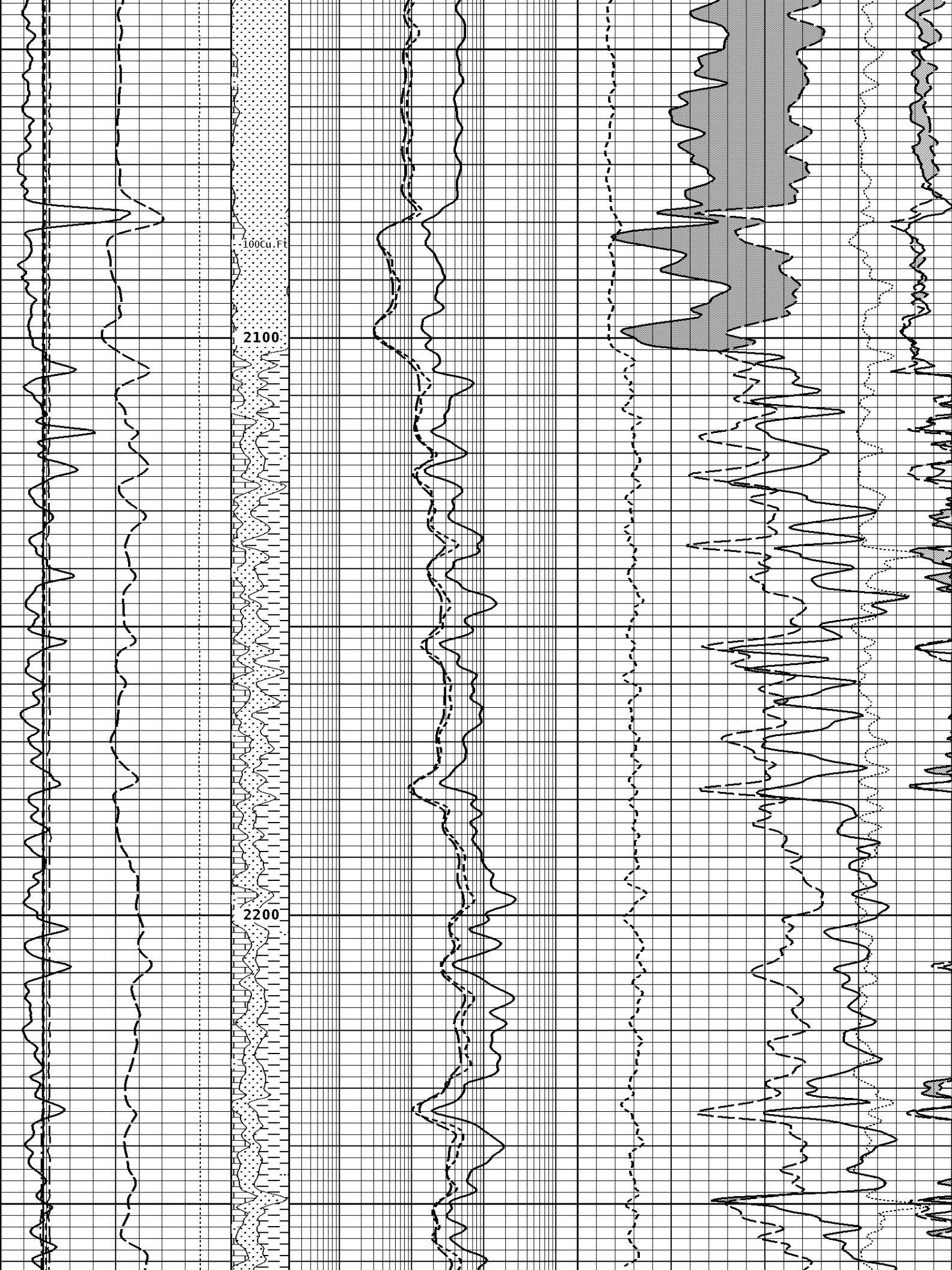
300Cu. Ft

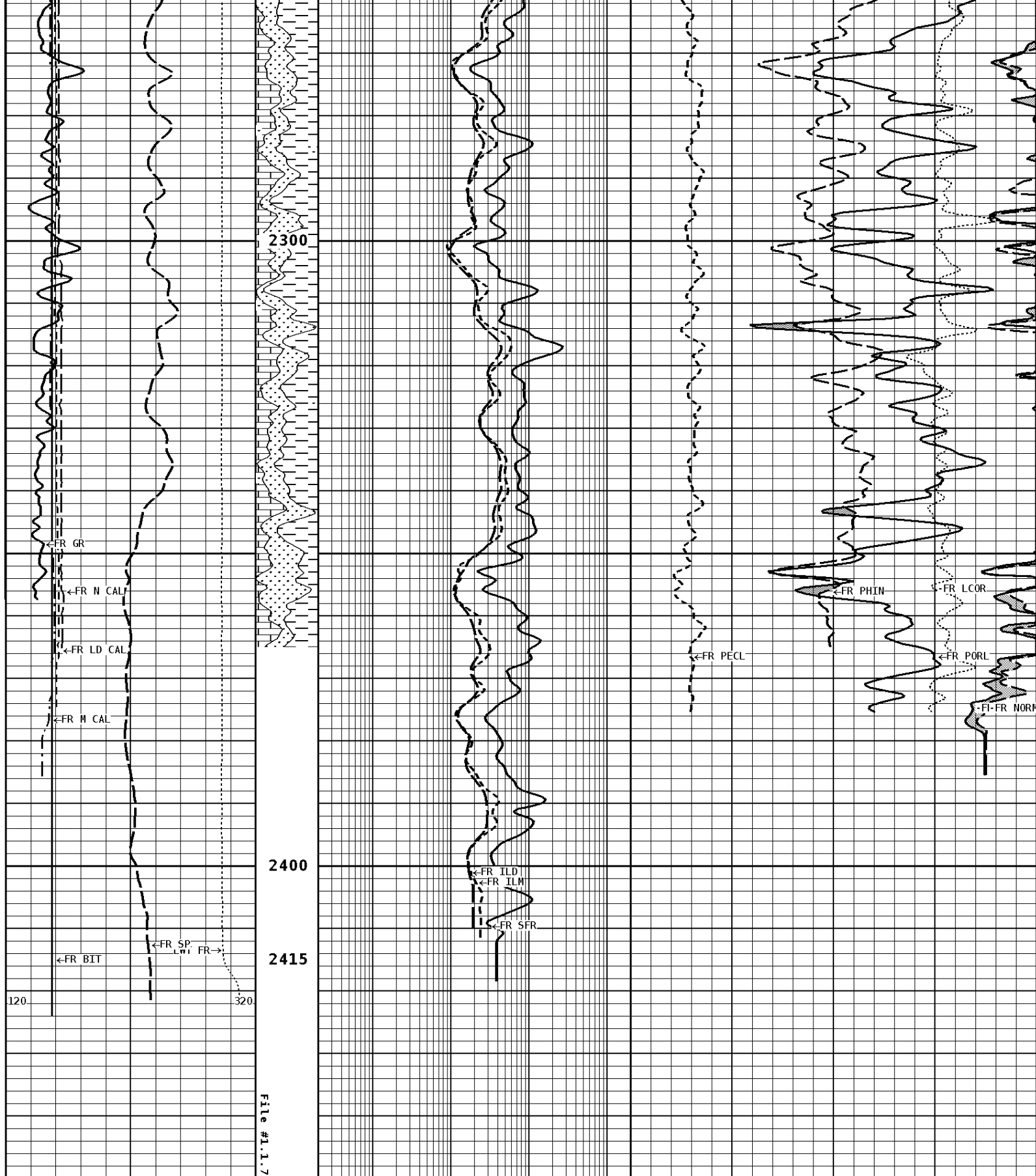
200Cu. Ft





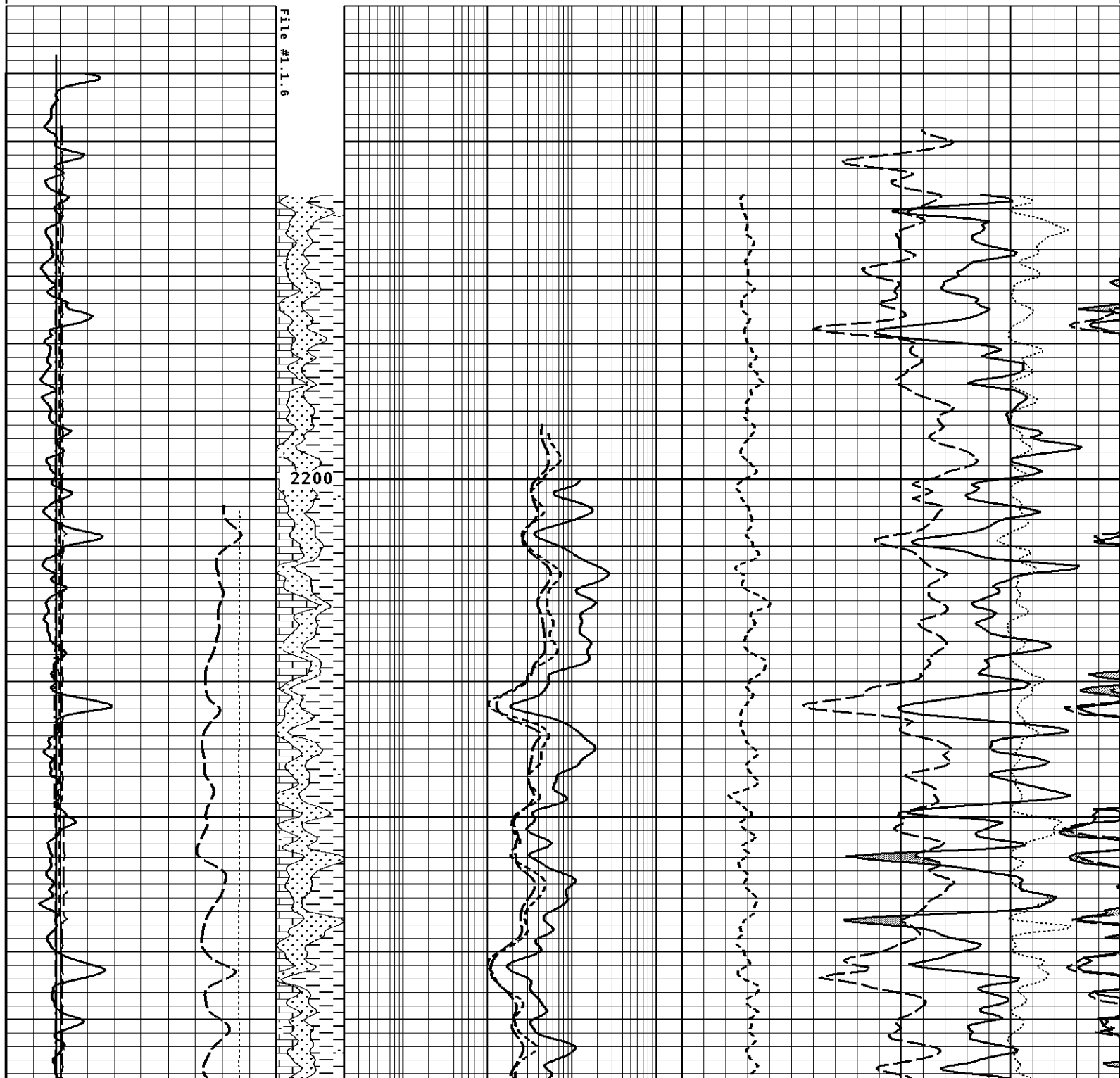


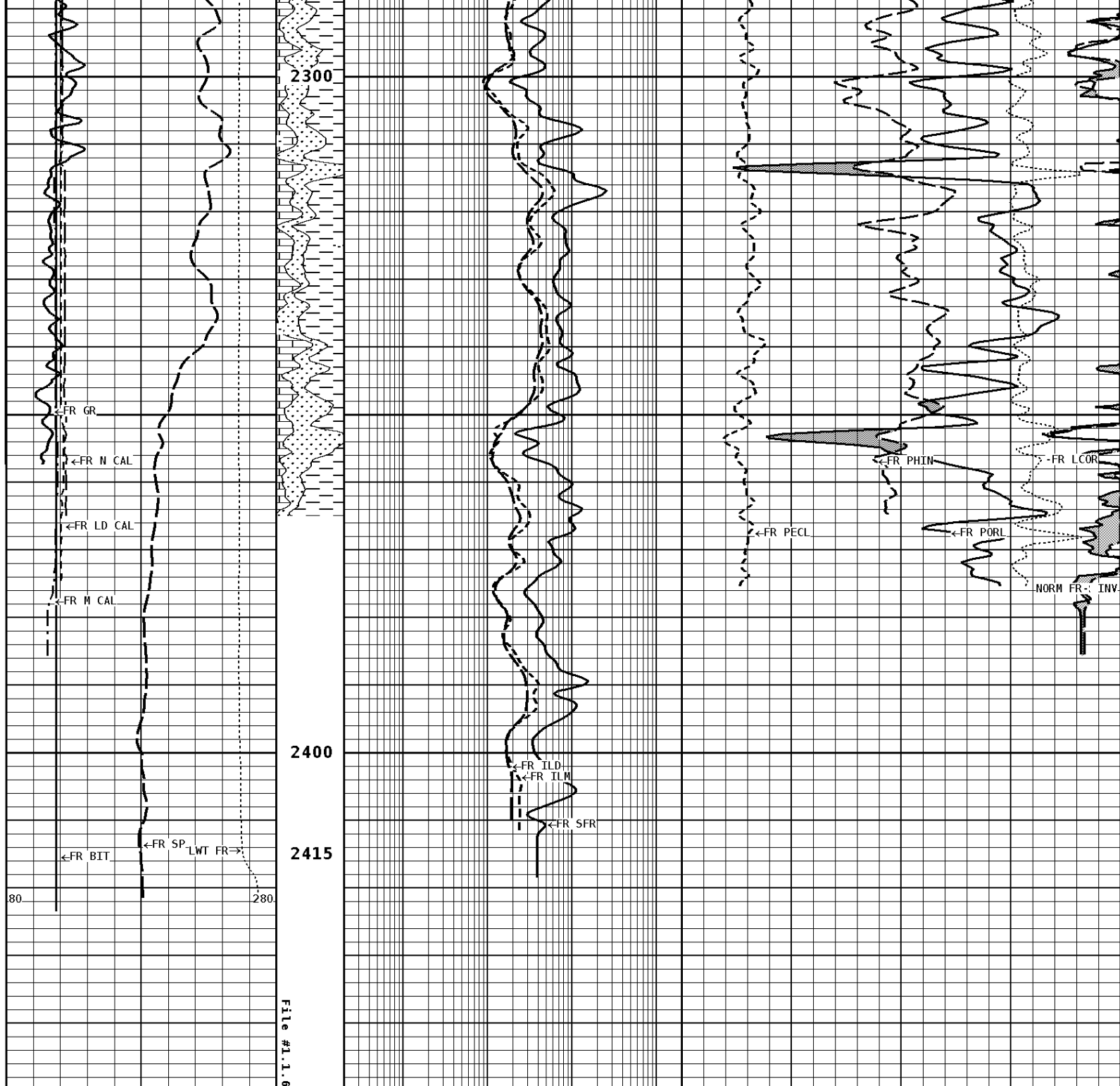





TENSION LBS	Volume Calcite	SHALLOW FOCUSED RESISTIVITY OHMM	PE CROSS-SECTION BARNES/ELECTRON
10000	0	0.2	2000.0 0
SPONTANEOUS POTENTIAL mV	Volume Dolo/Shale	DEEP INDUCTION OHMM	DENSITY POROSITY (2.71g/cc) PERCENT
→ ← 20		0.2	70 30
		2000.0	-10 -50
GAMMA RAY API UNITS	BHV AHV CU. FT	MEDIUM INDUCTION OHMM	NEUTRON POROSITY (LIMESTONE) PERCENT
150 0 300 150		0.2	30 -10
		2000.0	

1:240 REPEAT SECTION





GAMMA RAY API UNITS 150 0 300 150	BHV ANV CU. FT	MEDIUM INDUCTION OHMM 0.2 2000.0 30	NEUTRON POROSITY (LIMESTONE) PERCENT -10
		DEEP INDUCTION OHMM 0.2 2000.0 30	DENSITY POROSITY (2.71g/cc) PERCENT 70 30 -10 -50
SPONTANEOUS POTENTIAL mV → ← 20	Volume Dolo/Shale	SHALLOW FOCUSED RESISTIVITY OHMM 0.2 2000.0 0	PE CROSS-SECTION BARNS/ELECTRON 20
TENSION LBS 10000 0	Volume Calcite		

DENSITY (X) CALIPER INCHES (IN)		Volume Quartz 	DENSITY CORRECTION G/CC	
16 6	26 16		-0.75	0.25
NEUTRON (Y) CALIPER INCHES (IN)			INVERSE OHMM	
16 6	26 16		0	40
BIT SIZE INCHES (IN)			NORMAL OHMM	
6	16		0	40
CALIPER MICRO INCHES (IN)				
16 6	26 16			

*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet		
Matrix Density	2.71	g/cc
Fluid Density	1.00	g/cc
Matrix Transit Time	47.5	us/ft
Fluid Transit Time	189.0	us/ft
Formation Matrix	Limestone	
Drill Bit Size	7.875	in
Casing Diameter	4.500	in
Casing Thickness	0.250	in
Casing Correction (PHI N)	Disable	
Hole Substance	Fluid	
BHT Depth	2415.000	ft
Borehole Temperature	102.0	degF
Temperature Gradient	1.00	DFHF
Resistivity Of Mud	0.950	ohm/m
MSTNG Normal Correction	0.00	ohm/m
MSTNG Inverse Correction	-0.50	ohm/m

*** Calibration Summary ***

Shop Calibration GRT-B					
Performed : 05-Aug-2013			Time : 09:36		
Sensor Suite : GR-GR5			ID : GRT-BB-006		
	Measured	Units	Calibrated	Units	
GR	Background 60	Jig 375	Jig 175	GRAPI	
Shop Calibration CNT-AA					
Performed : 04-AUG-2013			Time : 21:33		
Sensor Suite : CALI-BCN			ID : NDT-AE-403		
	Jig - Measured		Jig - Calibrated		Units
CL # 1	Ring#1 7.7	Ring#2 13.7	Ring#1 6.0	Ring#2 12.0	IN.
Shop Calibration LDT-DA					
Performed : 04-Aug-2013			Time : 21:25		
Sensor Suite : CALI-LTH			ID : NDT-AH-116		
	Tank		Verification		Units
N/F	Measured 4.1030	Calibrated 3.6893	Jig 3.7078		
Porosity	27.3	20.5	20.8		%

CL # 1	8.0	11.0	6.0	12.0	IN.
Performed : 04-Aug-2013		Time : 20:12			
Sensor Suite : BHCPELNG		ID : LDP-DA-47			
Source ID : CSV-587					
Short Space					
	BKGD	Al	Mg	Al+Fe	Units
LSW1	71	397	631	282	CPS
LSW2	77	488	770	365	CPS
LSW3	282	1252	1956	1077	CPS
LSW4	348	1208	1681	1078	CPS
LSW5	33	42	42	39	CPS
LSW6	91	93	91	92	CPS
LSW7	55	61	60	60	CPS
LSW8	2	3	3	3	CPS
QS	0.241	0.208	0.207	0.216	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC
Long Space					
	BKGD	Al	Mg	Al+Fe	Units
LLW1	102	448	1770	299	CPS
LLW2	114	837	3443	611	CPS
LLW3	444	1841	6717	1610	CPS
LLW4	597	1164	2951	1084	CPS
LLW5	67	70	83	69	CPS
LLW6	188	186	179	185	CPS
LLW7	118	117	117	119	CPS
LLW8	4	5	10	5	CPS
QL	0.230	0.228	0.209	0.219	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC

**Shop Calibration
MST-DA**

Performed : 30-MAY-2013 Time : 14:43
 Sensor Suite : CALI-MSN ID : MST-DA-36

CL # 1	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
	6.8	12.8	6.0	12.0	IN.

Performed : 30-MAY-2013 Time : 14:44
 Sensor Suite : MSTDA-NI ID : MST-DA-36

	Internal			Calibrated		
	Zero	Measured Reference	Units	Zero	Reference	Units
INV-V	221.0	21282.7		0.00	1946.00	MV
NOR-V	164.0	21140.6		0.00	1546.00	MV
IN-C	157.3	21367.2		0.00	15.46	UA
INV-R					40.71	OHMM
NOR-R					55.11	OHMM

**Shop Calibration
CST-AD**

Performed : 30-MAY-2013 Time : 15:49
 Sensor Suite : SON-ANA ID : CST-AB-012

T/R Pair	Transit Time		Units
	Measured	Calibrated	
T1R1	208.5	208.5	uS
T2R2	208.5	208.5	uS
T1R2	322.5	322.5	uS
T2R1	322.5	322.5	uS
T/R Pair	Amplitude		Units
	Measured	Calibrated	
T1R1	90.00	90.00	mV
T2R2	90.00	90.00	mV
T1R2	78.00	78.00	mV
T2R1	78.00	78.00	mV

**Shop Calibration
PIT-CA**

Performed : 10-JUL-2013 Time : 11:19
 Sensor Suite : P-IND-T ID : PIT-AB-18

	Measured		Calibrated		Units
	R	X	R	X	
Air	131384	129986	3.8	4.6	MMHOS
Zero	131067	131064	-9.2	44.2	MMHOS
Reference	252222	253263	4990.8	5044.2	MMHOS

Loop	128539	217451	3465.2	3700.8	MMHOS
Sonde Error			-2.9	-5.4	MMHOS
Cond			4990.8	5044.2	MMHOS

Deep

	Measured		Calibrated		Units
	R	X	R	X	
Air	129398	131212	0.6	0.2	MMHOS
Zero	131085	131069	32.5	-4.7	MMHOS
Reference	230469	232593	2032.5	1995.3	MMHOS
Loop	126018	216942	1621.5	1757.1	MMHOS
Sonde Error			-3.9	-0.7	MMHOS
Cond			2032.5	1995.3	MMHOS

Temperature

	Measured		Calibrated		Units
	Low	High	Low	High	
	16980.0	56920.0	70.0	350.0	DEGF

Performed : 10-Jul-2013 Time : 11:07
 Sensor Suite : SFL ID : PIT-AB-18

Internal

	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
Im	32769.2	49588.2	0.0	7028.0	uA
Ib	32770.9	49430.6	0.0	1750.0	mA
MOM1	32814.1	56064.4	0.0	175.0	mV
Equivalent SFL				43.97	OHMM

Performed : 10-Jul-2013 Time : 11:04
 Sensor Suite : P-SP ID : PIT-AB-18

Internal

	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
	32788.4	58999.8	0.0	1000.0	mV



Tucker
 WIRELINE SERVICES

Company: RUNNING FOXES PETROLEUM INC.
 Well: C HEIM #2-19D
 Location: 990' FNL & 1650' FEL
 Logged: 08-24-2013
 K.B. Elev: 870.0 Ft