Tucker WIRELINE SERVICES

COMPENSATED NEUTRON

PEL DENSITY MICRO LOG

Company	AMERICAN ENERGIES CORPOR
Well	ADE #1-6
Field	WILDCAT
County	MARION
State	KANSAS
Country	USA
API No.	15-115-21422

File No : 55600
Company : AMERICAN ENERGIES CORPORATION
Well : ADE #1-6
Field : WILDCAT
County : MARION
State : KANSAS
Country : USA
API No : 15-115-21422

Location :
1650' FSL & 1650' FEL
SE NW SE

LSD : **Sect :** 6 **Twp :** 19S **Rge :** 1E

Permanent Datum:	GL	**Elevations:**		**Services:**	
Drilling Measured From:	KB	**KB**	1560.00 Ft	GRT	MLT
Log Measured From:	KB	**DF**	1559.00 Ft	CNT	CST
Above Permanent Datum:	9.00 Ft	**GL**	1551.00 Ft	LDT	PIT

Date	May 20 2011						
Run Number	1						
Depth--Driller	2959.0 Ft						
Depth--Logger	2961.0 Ft						
First Reading	2925.0 Ft						
Last Reading	1900.0 Ft						
Casing--Driller	222.0 Ft						
Casing--Logger	222.0 Ft						
Bit Size	7.875 In						
Casing Size	8.625 In						
Hole Fluid Type	WBM						
Density	8.5 LBS/GAL						
Fluid Loss	0.0 CC						
PH/Viscosity	0.0	50.0 SEC					
Sample Source	MEASURED						
RM@Measured Temp.	1.000 @ 45 F						
RMF@Measured Temp	0.850 @ 45 F						
RMC@Measured Temp.	1.150 @ 45 F						
Source RMF/RMC	CALCULATED	CALCULATED					
RM@BHT	0.000 @ 80 F						
Time Circulation Stopped							
Max Recorded Temp.	80 F						
Equipment/Base	TRK123	TULSA					
Recorded By	T. MONTGOMERY						
Witnessed By	D. BARKER						

Bitsize Intervals

Size (In)	Bottom (Ft)
7.875	2959.00

Casing Strings

Size (In)	Weight (Lbs)	Bottom (Ft)
8.625	24.00	222.00

Run Number	1						
Date	May 20 2011						
Date/Time On Bottom							
Depth to Fluid	0.0 Ft						
Salinity	0.000 PPM						
RMF@BHT	0.000 @ 80 F						
RMC@BHT	0.000 @ 80 F						

Run Number 1

Comments

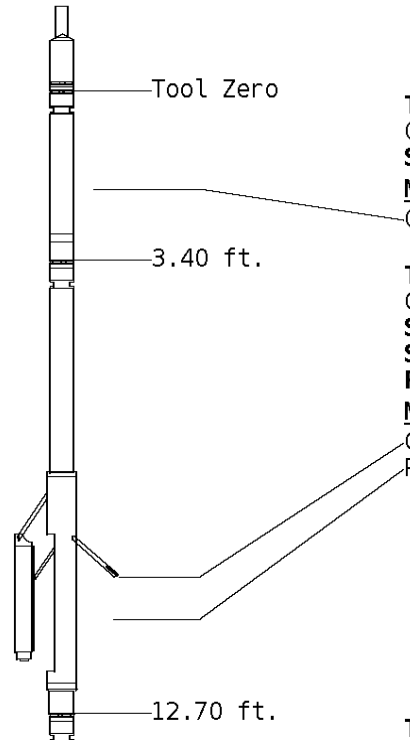
ALL PRESENTATIONS AS PER CUSTOMER REQUEST
GRT, CNT, LDT, MLT, CST, AND PIT RUN IN COMBINATION.
CALIPERS ORIENTED ON X-Y AXIS.
2.71 G/CC USED TO CALCULATED POROSITY.
ANNULAR HOLE VOLUME CALCULATED UISING 5.50" PRODUCTION CASING.
DETAIL PRESENTED FROM TD 2700' AS PER CUSTOMER REQUEST.

GRT: GRP.
CNT: PHIN, CLCNIN.
LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN.
MLT: NOR_R, INV_R, MSCLPIN.
CST: PORS, ITT, CDTF, TT1, TT2, TT3, TT4.
PIT: ILD, ILM, SPU, SFLAEC.

OPERATORS:
M. GARNER
S. DAVIS

Tool String Schematic

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



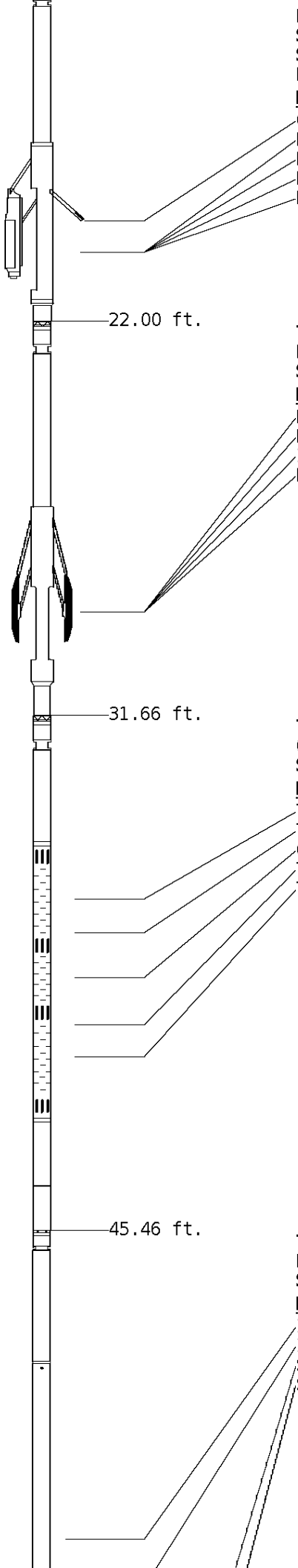
Tool: GRT-B **Length:** 3.40 **ft.** **O.D.** 3.60 **in.**
Gamma Ray Controller
Sonde ID :GRT-BA-15

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-AC-027
Source ID :N-1046
Pad ID :CNP-AA-112

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 :PDT-GA-472
Source ID :2991GW
Pad ID :LDP-DA-067

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
LDEN	7.20	19.90	47.05
LCOR	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-NG-26

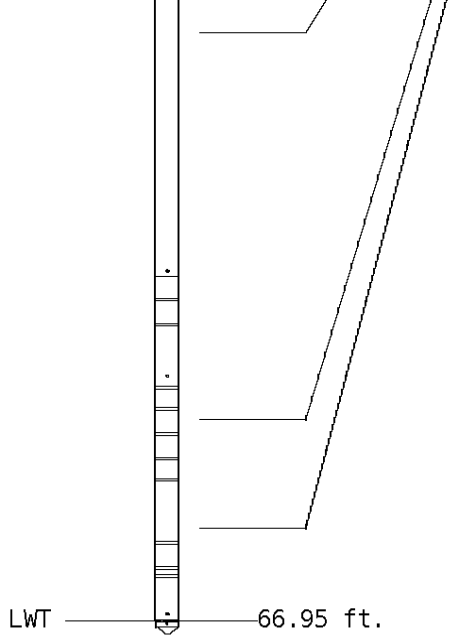
Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	29.60	37.35
MSCLP	7.60	29.60	37.35
INV	7.60	29.60	37.35
NOR	7.60	29.60	37.35

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

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-CA-069

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

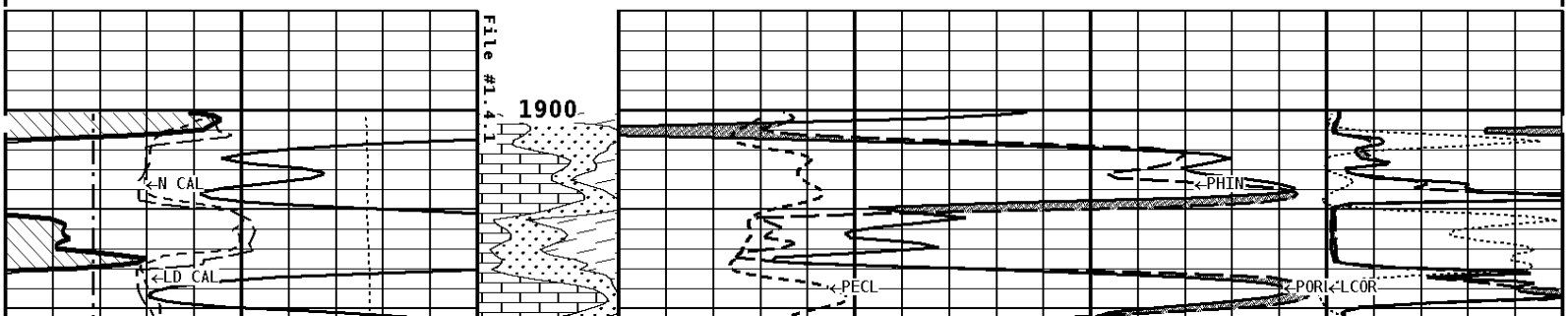


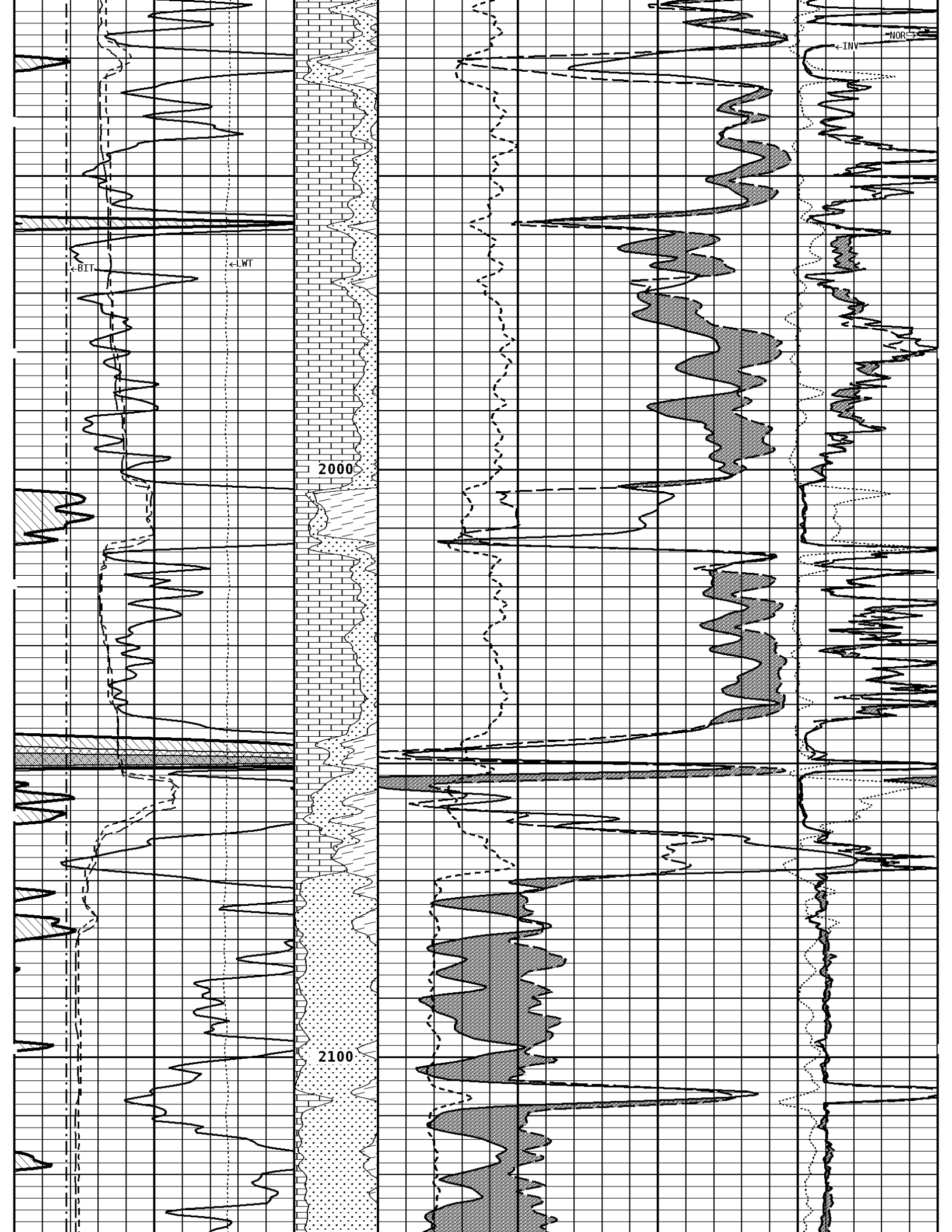
Well File: 123_AMER_ADE_1-6_MAY_20_QUINT
Segment: V1.D4.S1 MN
Reference: 0

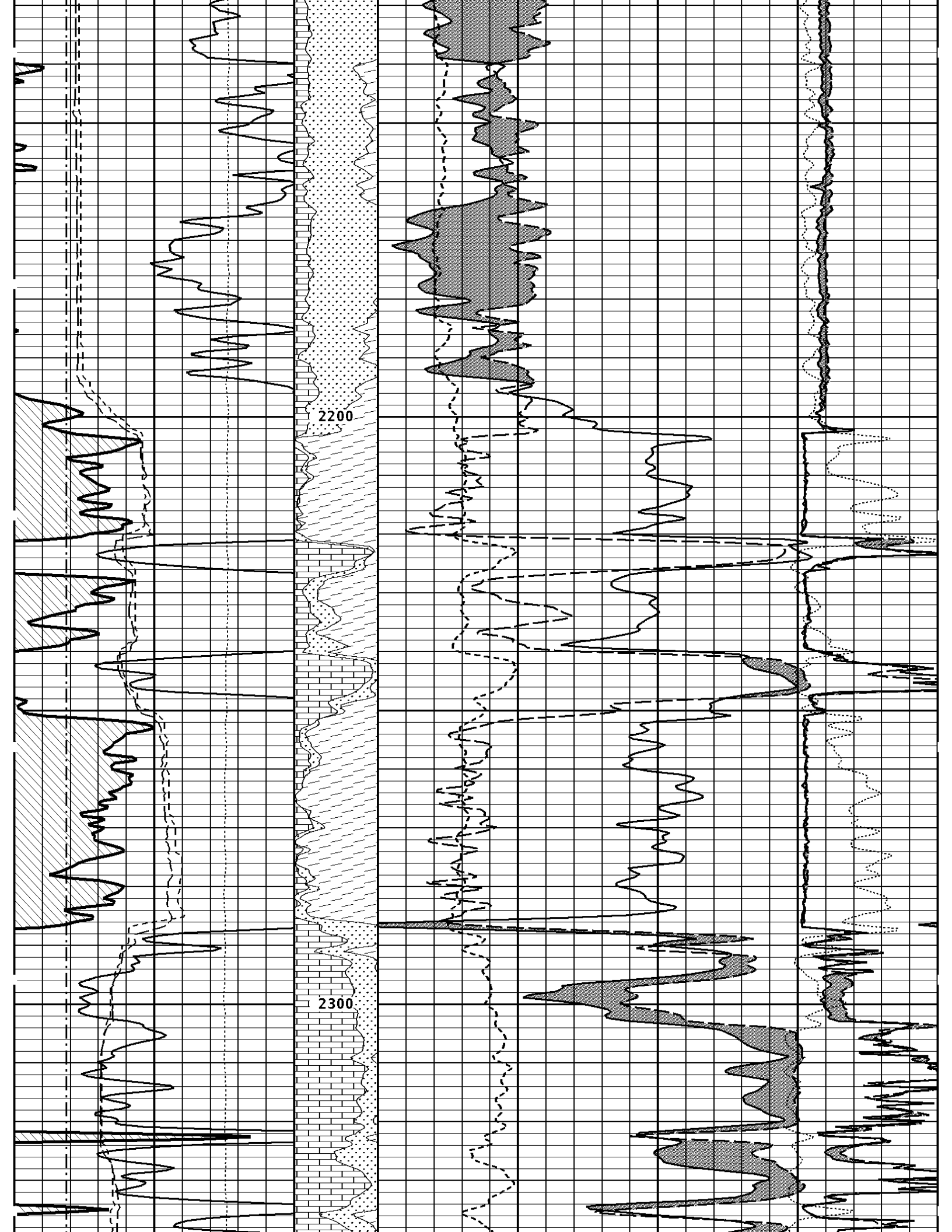
Scale: 1:240
Acquired: 2011-05-20 03:48 3.2.0-9901
Processed: 2011-05-20 03:48 3.2.0-9901

TENSION LBS 10000 — 0			**MICRO-INVERSE OHMM** 0 — 40
BIT SIZE INCHES (IN) 6 — 16			**MICRO-NORMAL OHMM** 0 — 40
DENSITY (X) CALIPER INCHES (IN) 16 — 26 / 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 — 26 / 6 — 16	Volume Calcite	**NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)** 30 — -10	
GAMMA RAY API UNITS 150 — 300 / 0 — 150	Volume Dolo/Shale	**DENSITY POROSITY PERCENT (2.71 g/cc)** 70 — 30 / 30 — -10 / -10 — -50	

1:240 MAIN SECTION




←BIT
←LWT
2000
2100
←INV
NOR→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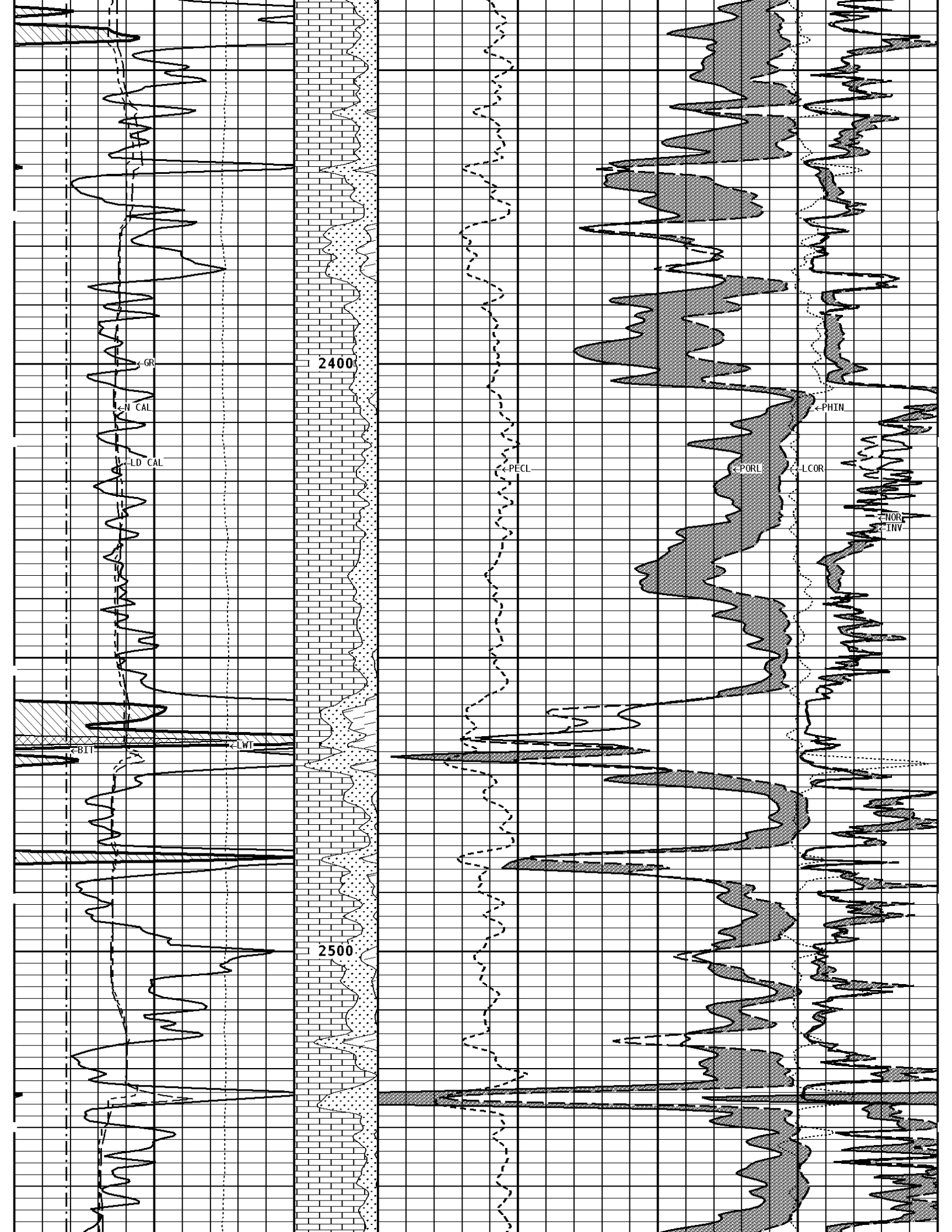
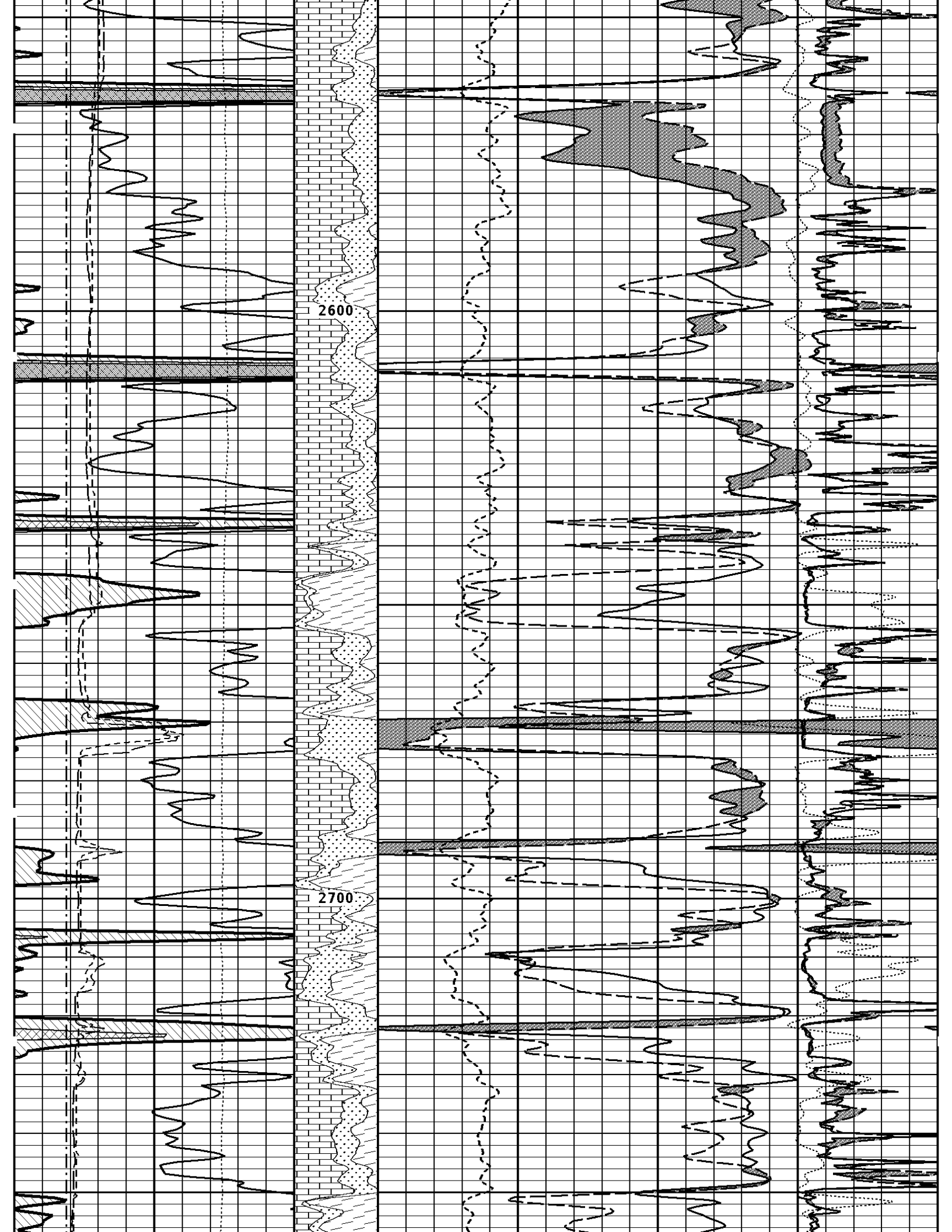
2300


GR
N CAL
LD CAL
BIT
CWT
2400
2500
PECL
PHIN
PORL
LCOR
NOR
INV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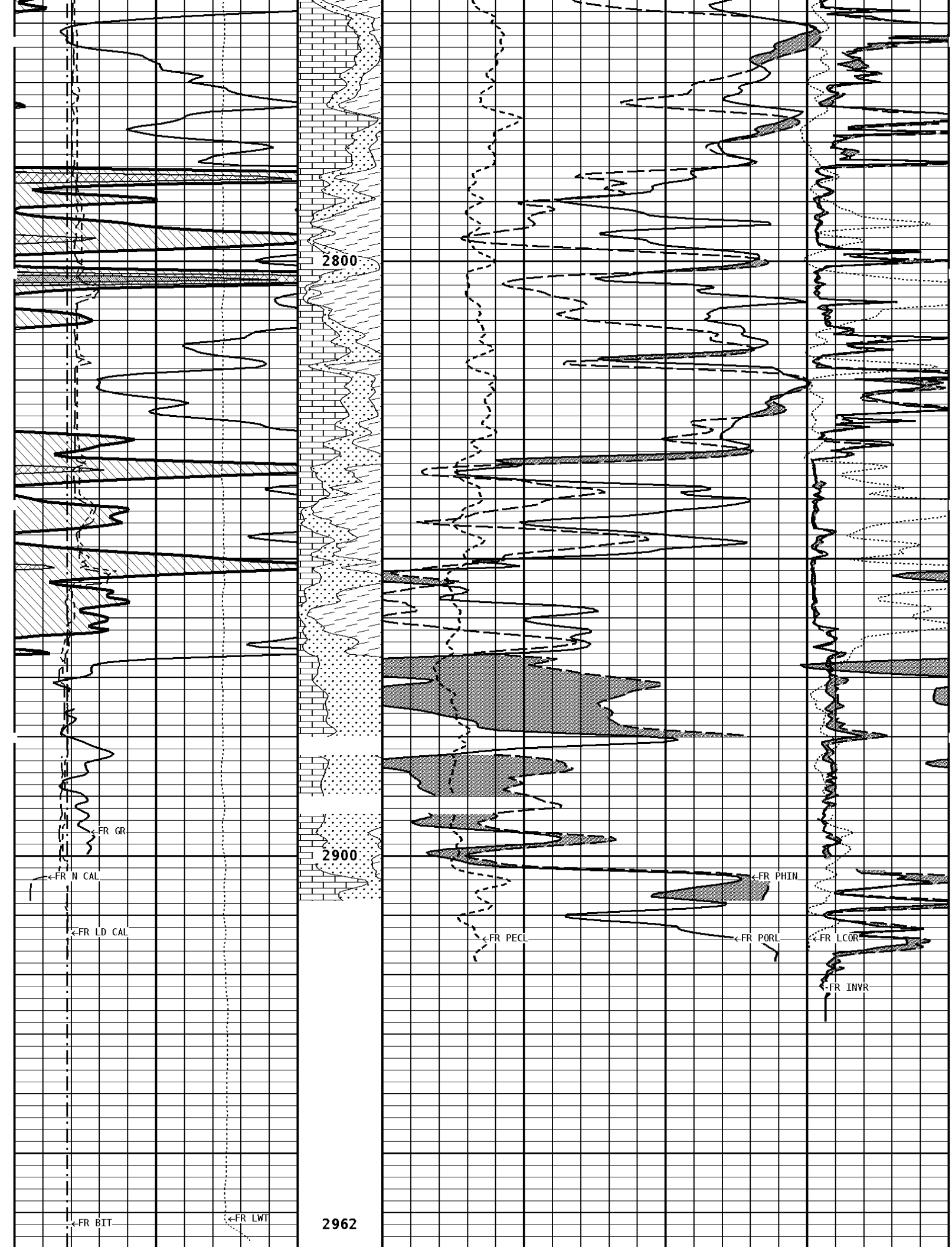
2700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2900
FR GR
FR N CAL
FR LD CAL
FR BIT
FR LWT
FR PECL
FR PHIN
FR PORL
FR LCOR
FR INVR
2962

File #1.4.1

1:240 MAIN SECTION

GAMMA RAY API UNITS	Volume Dolo/Shale	DENSITY POROSITY PERCENT (2.71 g/cc)
150 — 300		70 — 30
0 — 150		30 — -10
		-10 — -50

NEUTRON (Y) CALIPER INCHES (IN)	Volume Calcite	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)
16 — 26		
6 — 16		30 — -10

DENSITY (X) CALIPER INCHES (IN)	Volume Quartz	PE CROSS-SECTION BARNS/ELECTRON	DENSITY CORRECTION G/CC
16 — 26			
6 — 16		0 — 10	-0.25 — 0.25

BIT SIZE INCHES (IN)	MICRO-NORMAL OHMM
6 — 16	0 — 40

TENSION LBS	MICRO-INVERSE OHMM
10000 — 0	0 — 40

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

Well File: 123_AMER_ADE_1-6_MAY_20_QUINT **Scale:** 1:240
Segment: V1.D3.S3 RPT **Acquired:** 2011-05/20 03:09 3.2.0-9901
Reference: 0 **Processed:** 2011-05/20 03:09 3.2.0-9901

TENSION LBS	MICRO-INVERSE OHMM
10000 — 0	0 — 40

BIT SIZE INCHES (IN)	MICRO-NORMAL OHMM
6 — 16	0 — 40

DENSITY (X) CALIPER	Volume	PE CROSS-SECTION	DENSITY CORRECTION

DENSITY (X) CALIPER
INCHES (IN)
16 26
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 26
6 16

Volume
Calcite

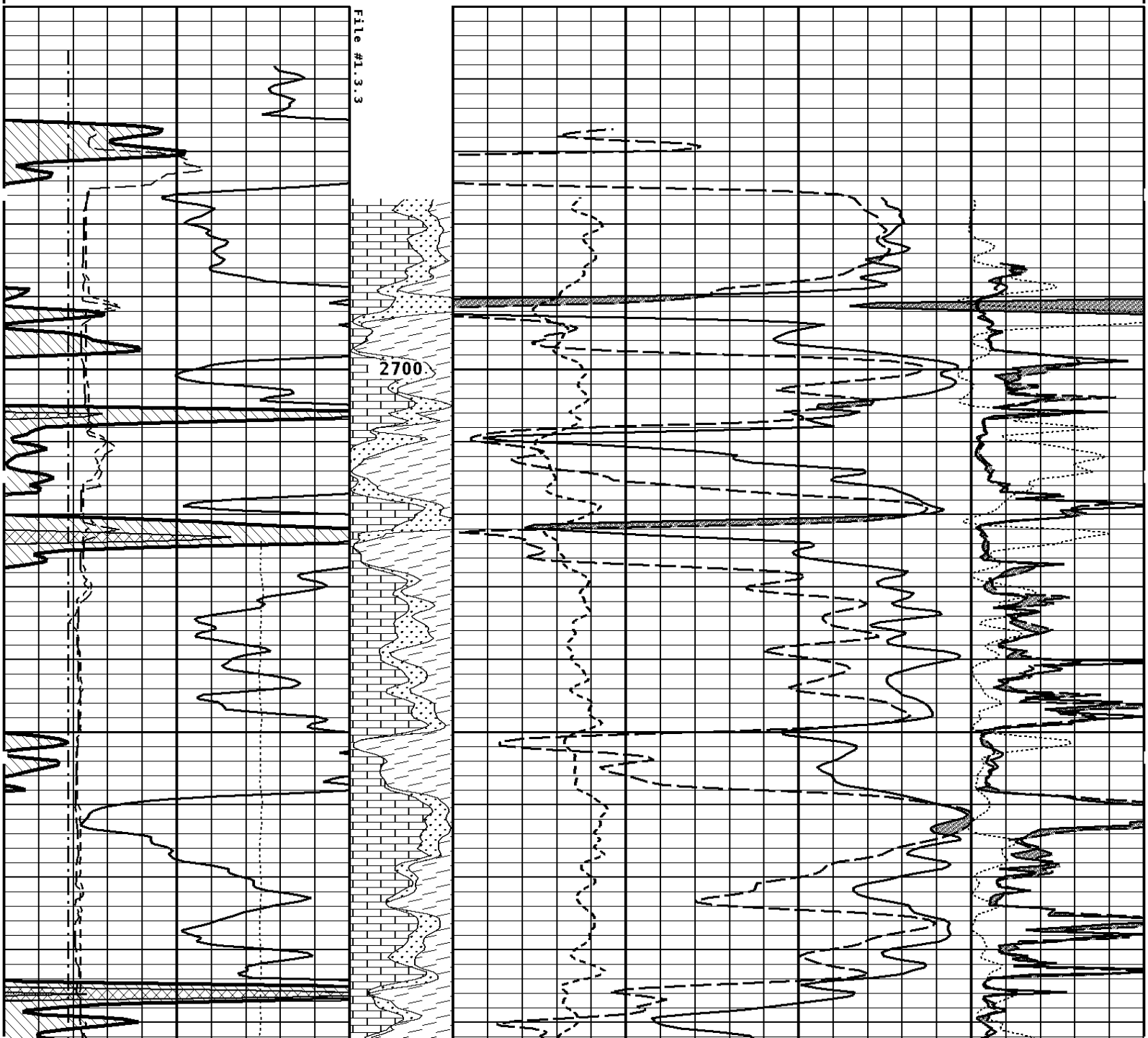
NEUTRON POROSITY
PERCENT (LIMESTONE MATRIX)
30 -10

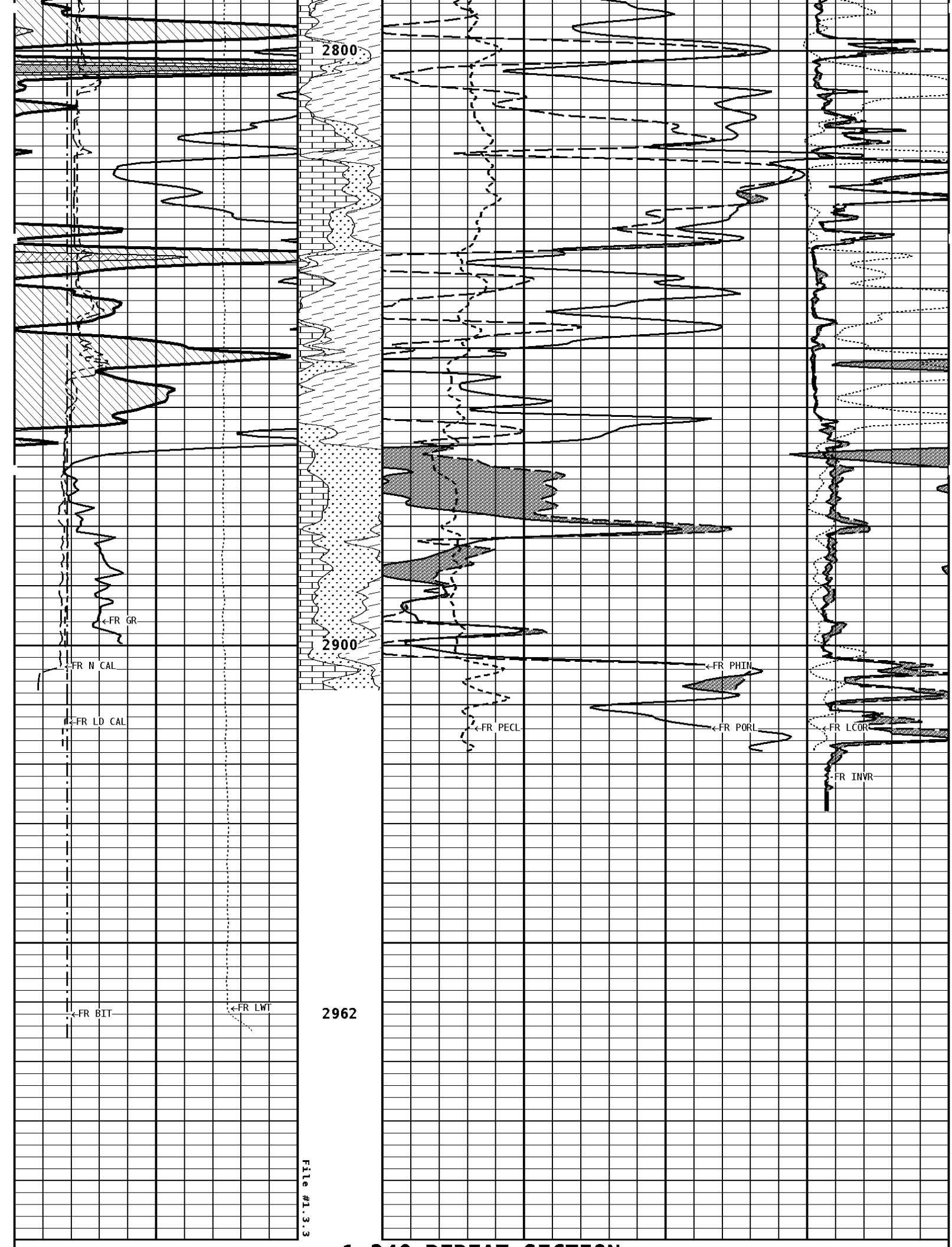
GAMMA RAY
API UNITS
150 300
0 150

Volume
Dolo/Shale

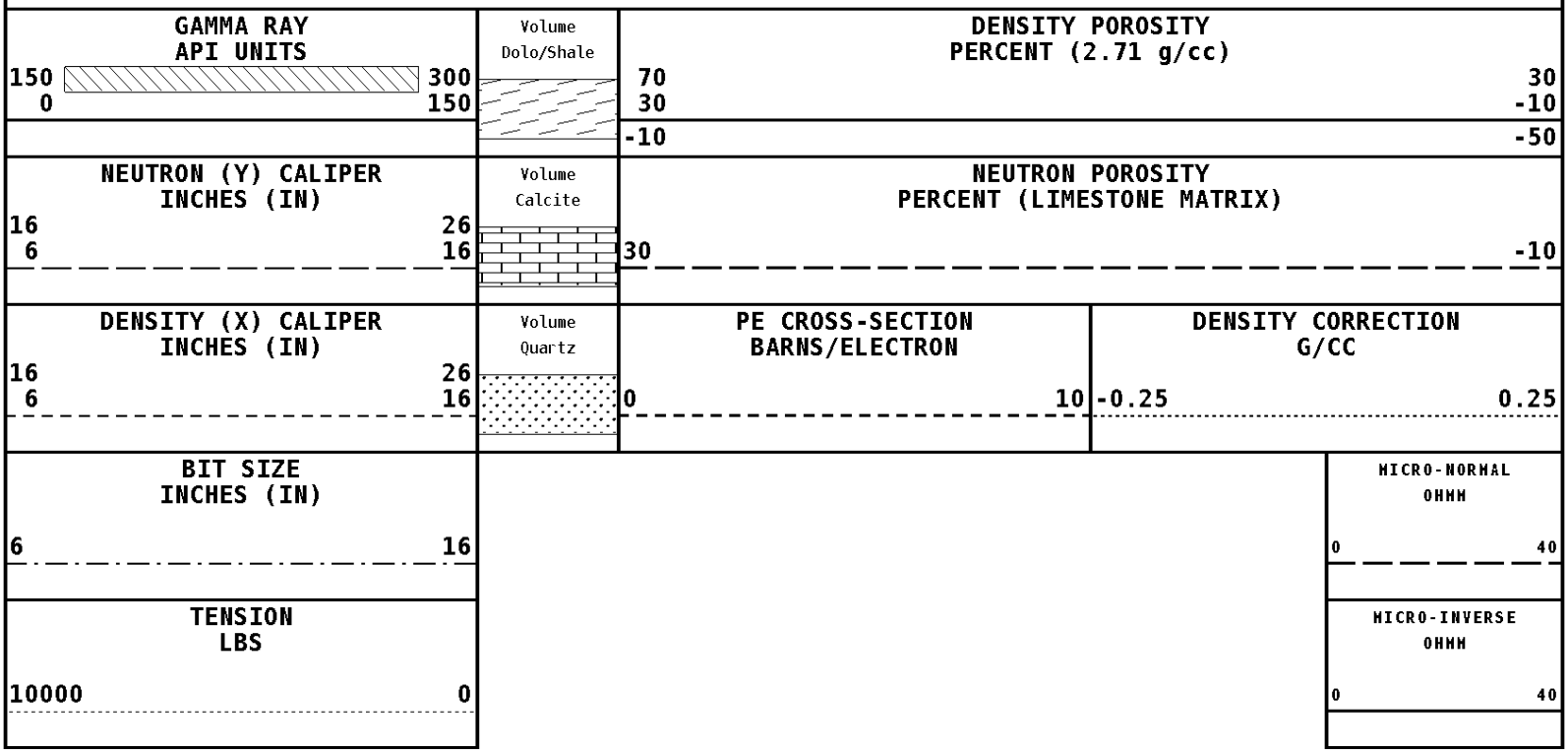
DENSITY POROSITY
PERCENT (2.71 g/cc)
70 30
30 -10
-10 -50

1:240 REPEAT SECTION




2800
2900
2962
FR GR
FR N CAL
FR LD CAL
FR BIT
FR LWT
FR PECL
FR PHIN
FR PORL
FR LCOR
FR INVR
File #1.3.3

1:240 REPEAT SECTION

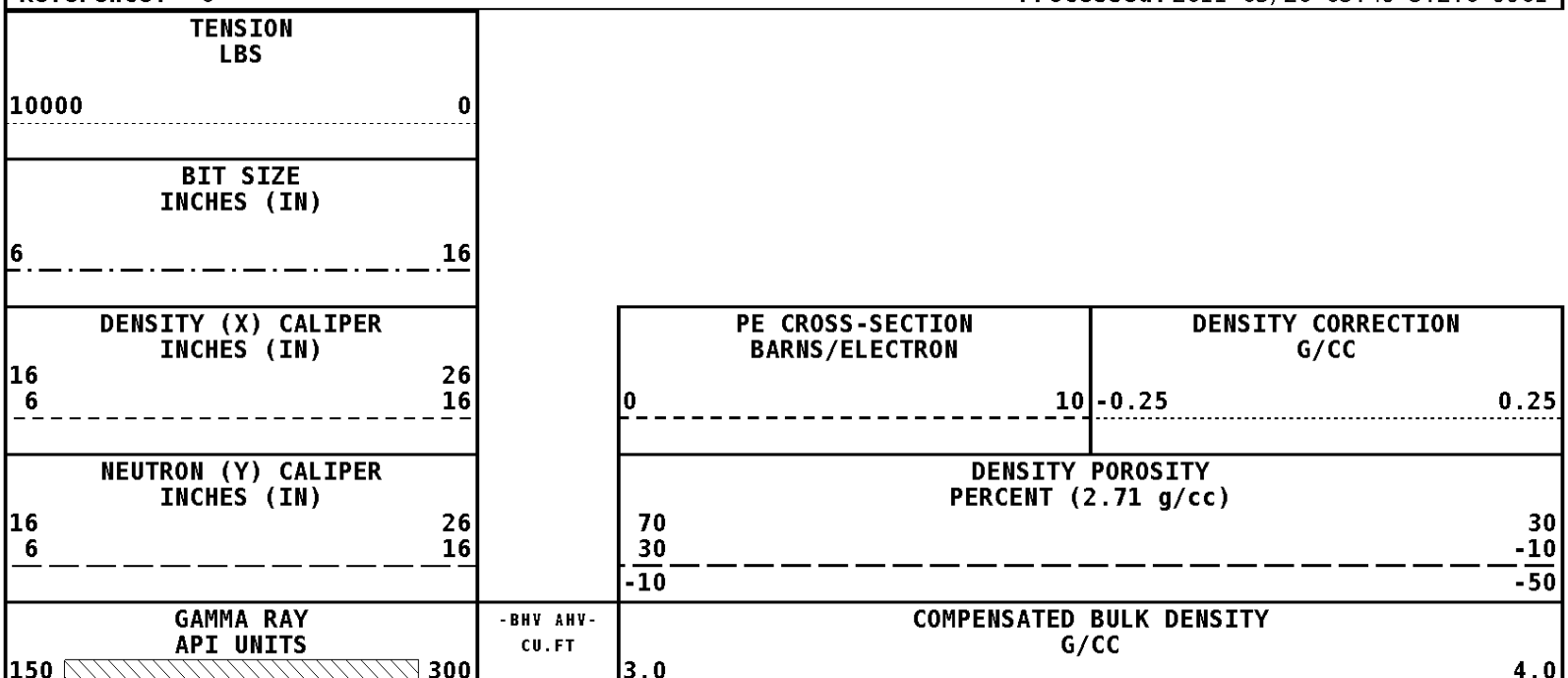


*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet

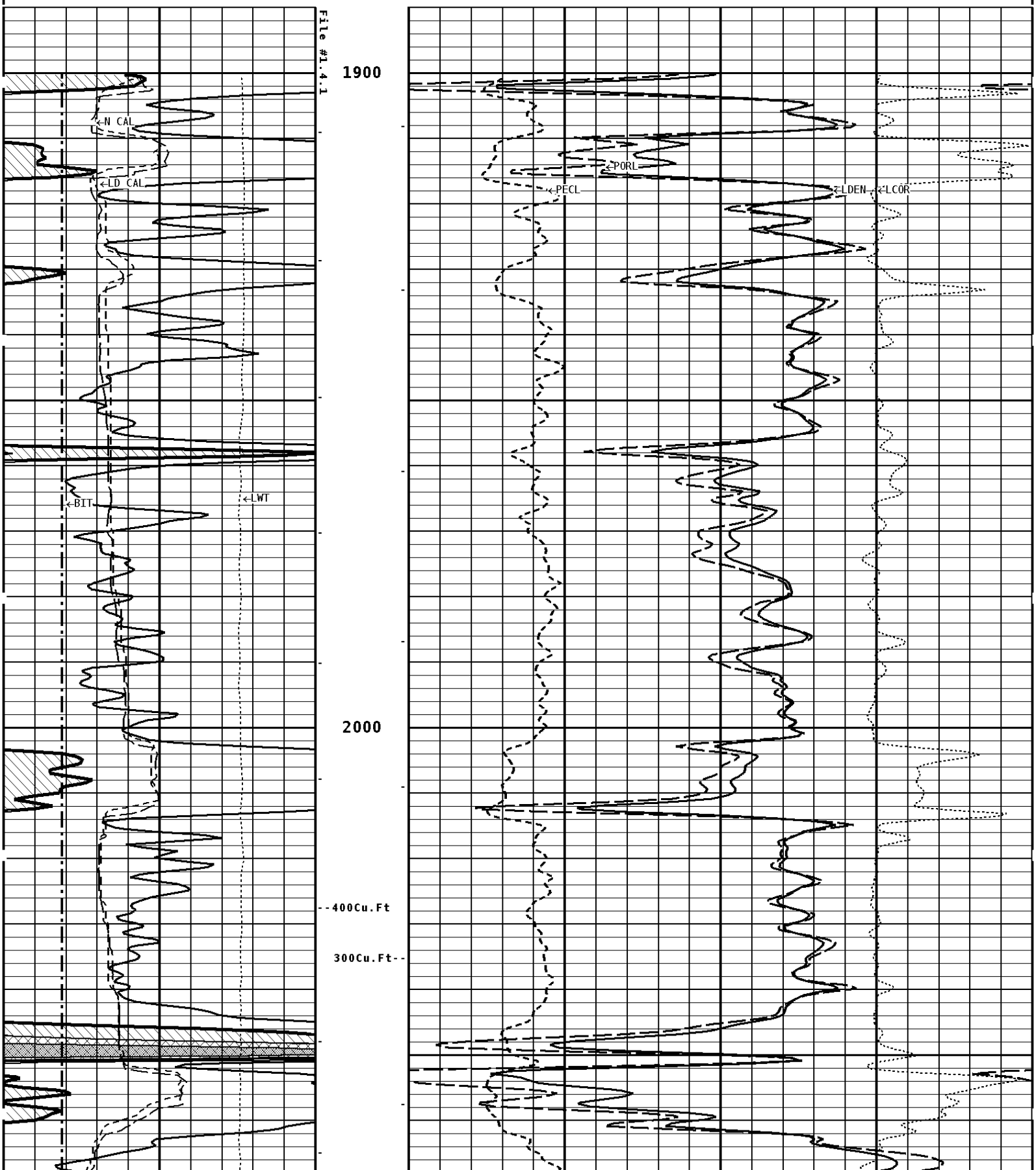
Matrix Density	2.71	g/cc
Fluid Density	1.00	g/cc
Formation Matrix	Limestone	
Drill Bit Size	7.875	in
Casing Diameter	4.500	in
Casing Correction (PHI N)	Disable	

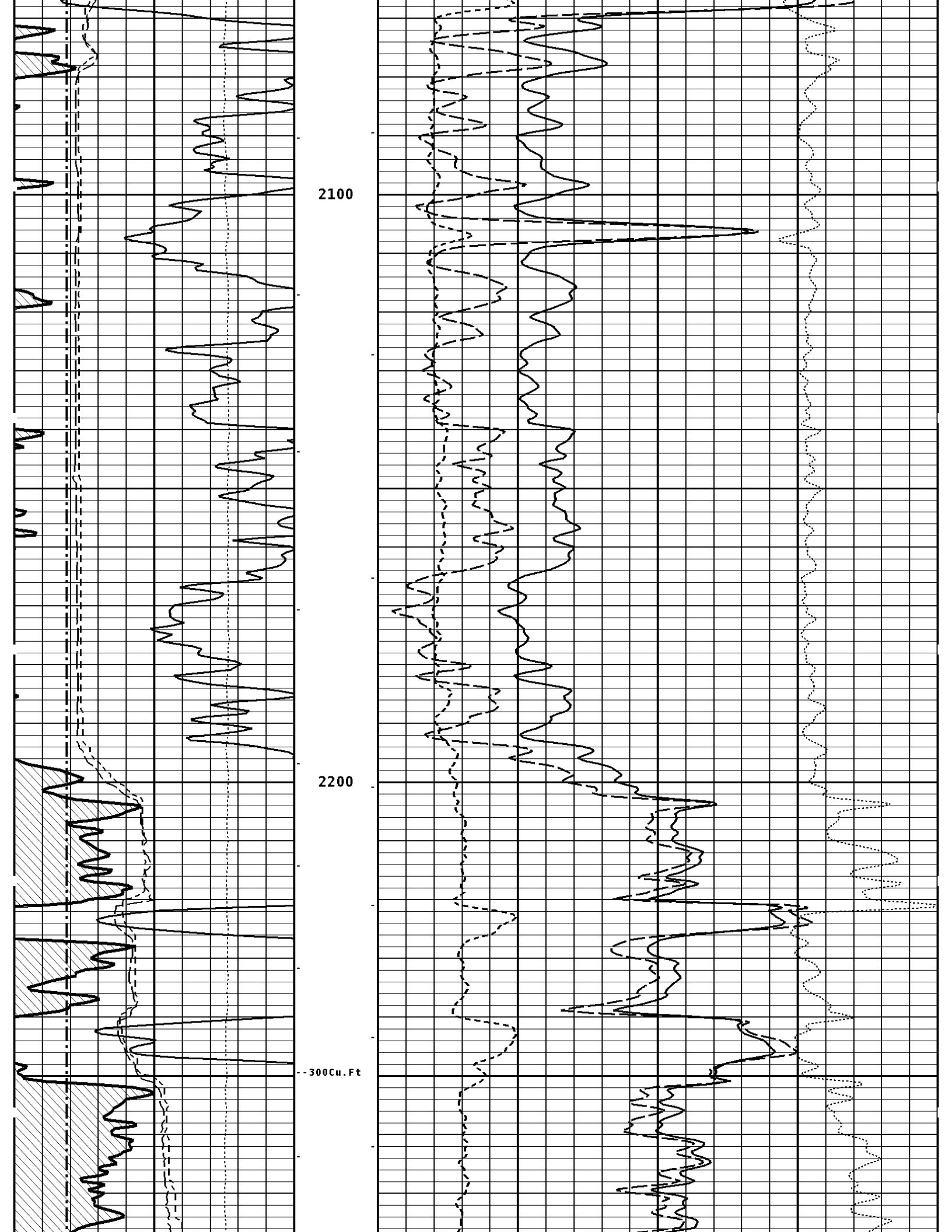
Well File: 123_AMER_ADE_1-6_MAY_20_QUINT **Scale:** 1:240
Segment: V1.D4.S1 MN **Acquired:** 2011-05-20 03:48 3.2.0-9901
Reference: 0 **Processed:** 2011-05-20 03:48 3.2.0-9901

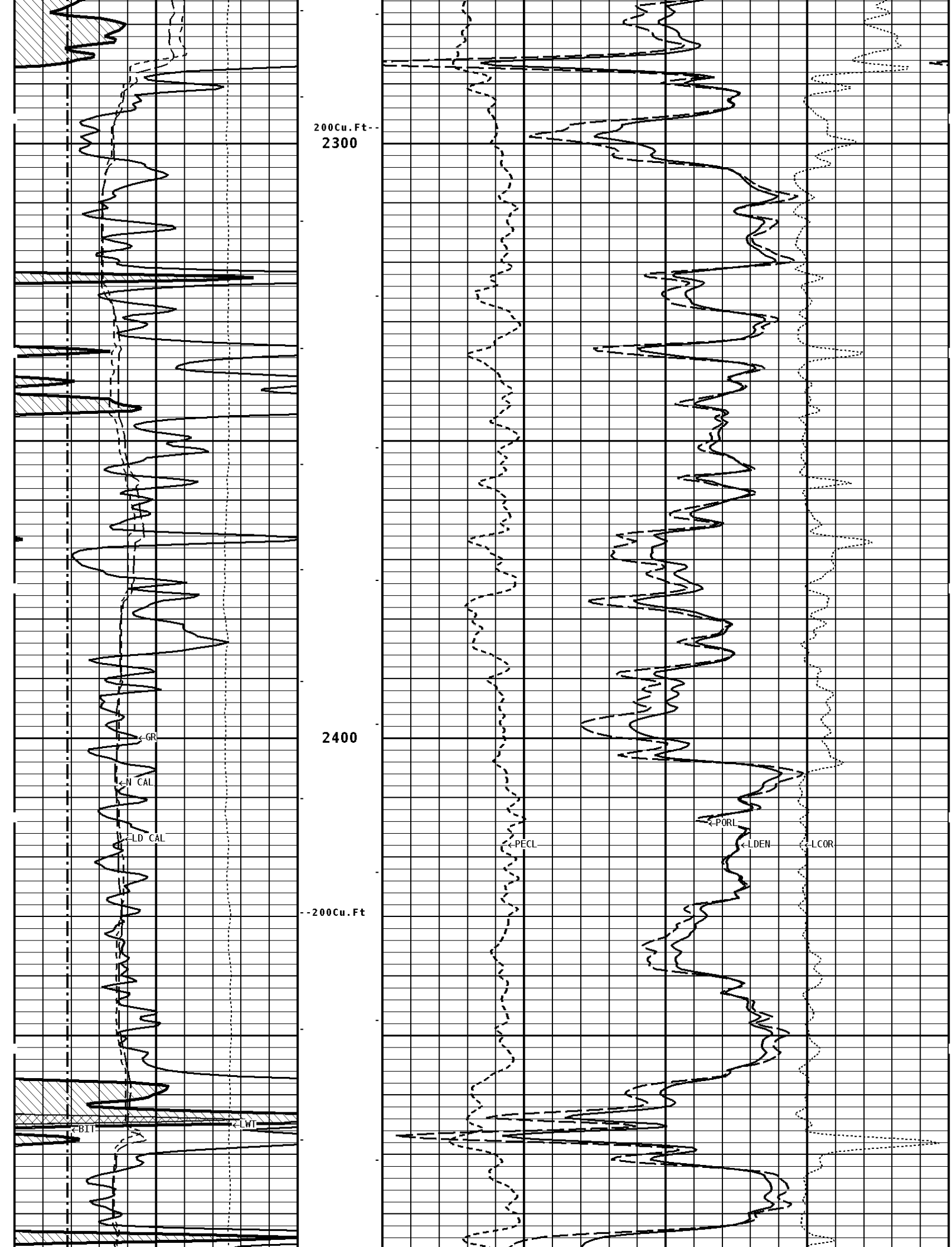


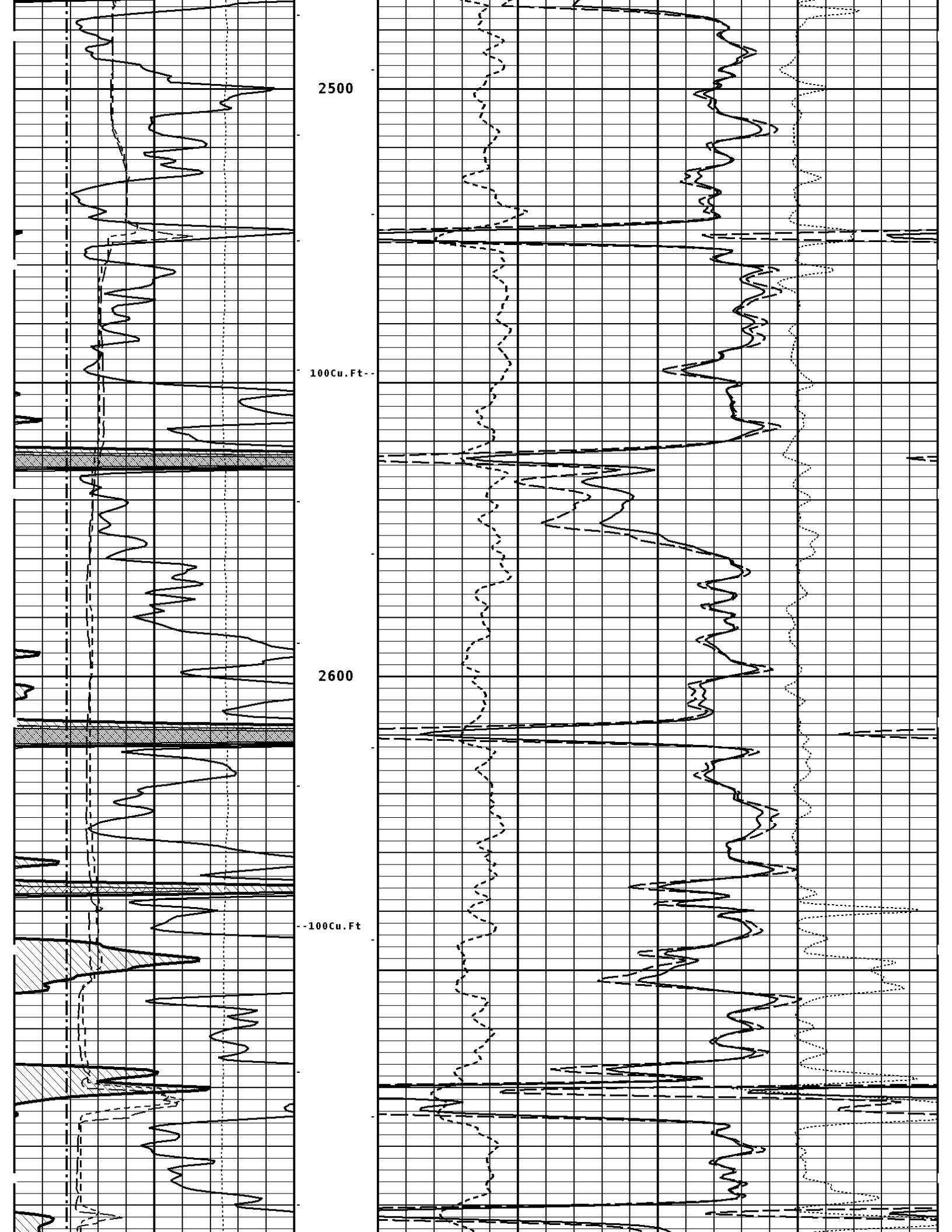
150 300
0 150
3.0 4.0
2.0 3.0
1.0 2.0

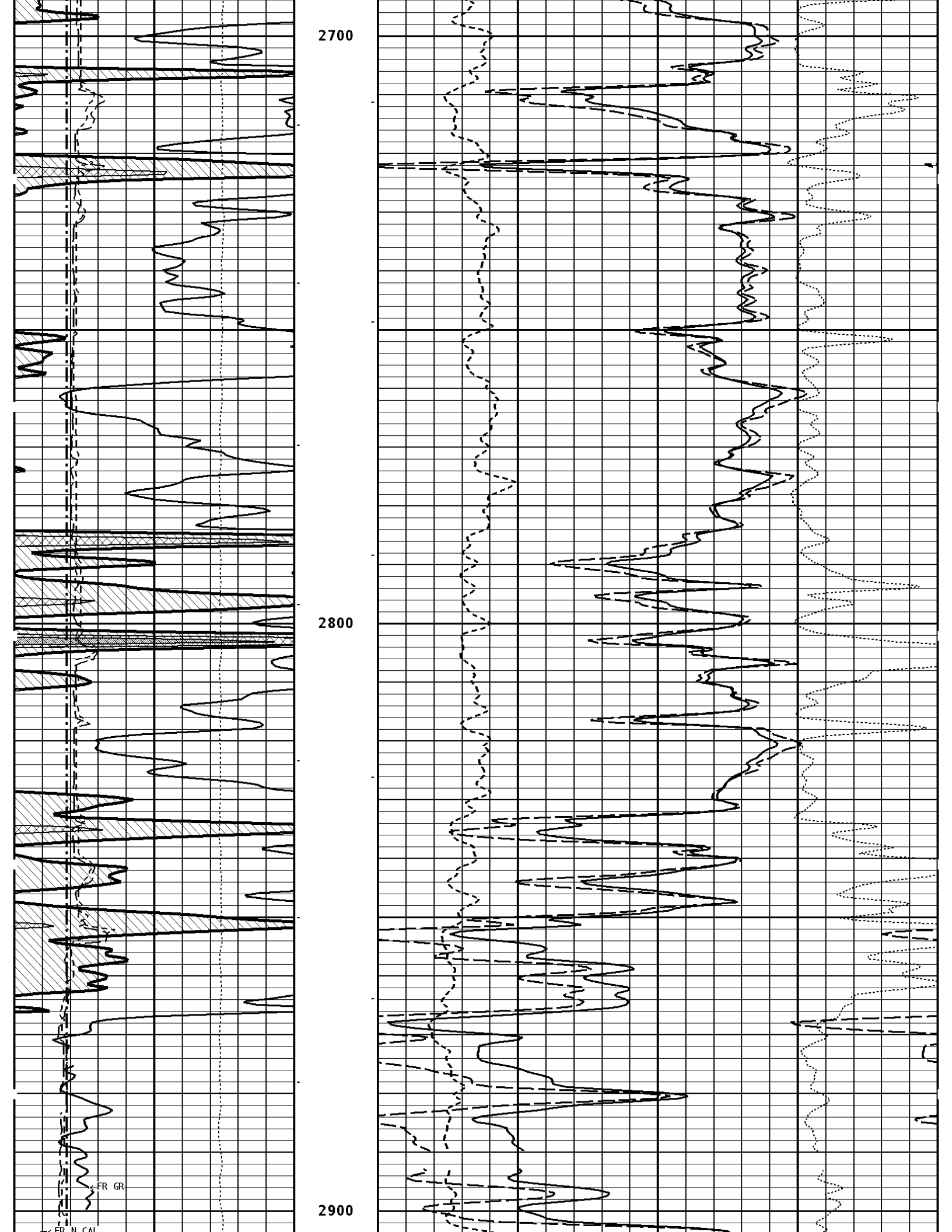
1:240 MAIN SECTION
BULK DENSITY

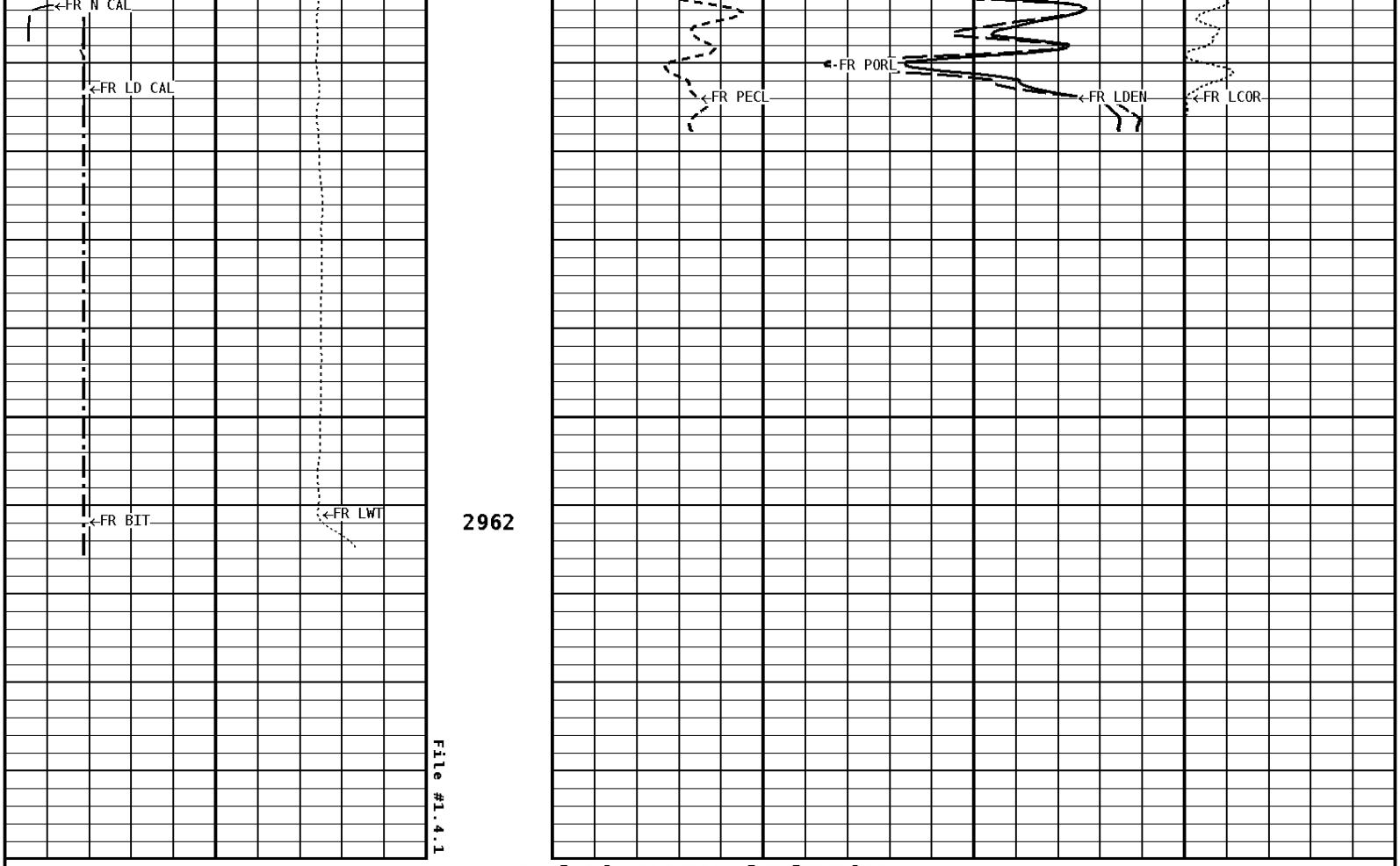



2100
2200
--300Cu.Ft


200Cu.Ft--
2300
2400
--200Cu.Ft
GR
N CAL
LD CAL
BIT
LWT
PECL
PORL
LDEN
LCOR


2500
100Cu.Ft--
2600
--100Cu.Ft


2700
2800
2900
FR GR
FR N CAL



1:240 MAIN SECTION
BULK DENSITY

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

* Calibration Summary *

Shop Calibration
GRT-B

Performed : 00-xxx-0000 Time : 00:00
Sensor Suite : GR-GR5 ID : GRT-BA-15

	Measured		Units	Calibrated	Units
	Background	Jig		Jig	
GR	0	200	CPS	200	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.

Performed : 26-Apr-2011 Time : 10:12
Sensor Suite : BHC NEUT ID : CNP-AA-112
Source ID : N-1046

	Tank		Verification	Units
	Measured	Calibrated	Jig	
N/F	4.0513	3.6893	3.6858	
Porosity	26.4	20.5	20.4	%

Shop Calibration
LDT-DA

Performed : 18-MAY-2011 Time : 17:34
Sensor Suite : CALI-LTH ID : PDT-GA-472

	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	5.9	9.6	6.0	12.0	IN.

Performed : 26-Apr-2011 Time : 11:26
Sensor Suite : BHCPELNG ID : LDP-DA-067
Source ID : 2991GW

Short Space

	BKGD	Al	Mg	Al+Fe	Units
LSW1	65	1176	1913	756	CPS
LSW2	72	1350	2147	973	CPS
LSW3	262	3080	4973	2605	CPS
LSW4	323	2759	4001	2412	CPS
LSW5	39	67	74	63	CPS
LSW6	76	82	84	84	CPS
LSW7	55	58	58	57	CPS
LSW8	7	9	10	9	CPS
QS	0.161	0.174	0.183	0.193	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC

Long Space

	BKGD	Al	Mg	Al+Fe	Units
LLW1	96	1305	5305	785	CPS
LLW2	106	2331	9081	1684	CPS
LLW3	402	4233	16063	3622	CPS
LLW4	522	1992	6430	1788	CPS
LLW5	57	67	130	65	CPS
LLW6	176	168	159	171	CPS
LLW7	108	105	100	107	CPS
LLW8	3	6	18	6	CPS
QL	0.240	0.231	0.226	0.232	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC

Shop Calibration

MST-DA

Performed : 14-OCT-2007 Time : 12:54
Sensor Suite : CALI-MSN ID : MST-NG-26

	Jig - Measured Ring#1	Jig - Measured Ring#2	Jig - Calibrated Ring#1	Jig - Calibrated Ring#2	Units
CL # 1	7.1	13.1	6.0	12.0	IN.

Performed : 01-MAY-2007 Time : 11:46
Sensor Suite : MSTDA-NI ID : MST-NG-26

Internal

	Measured Zero	Measured Reference	Units	Calibrated Zero	Calibrated Reference	Units
INV-V	0.0	30325.6		0.00	1546.00	MV
NOR-V	3.2	30476.3		0.00	1585.00	MV
IN-C	1.5	60152.2		0.00	15.46	UA
INV-R					32.34	OHMM
NOR-R					55.11	OHMM

Performed : 14-OCT-2007 Time : 12:55
Sensor Suite : MSTDAMSF ID : MST-NG-26

Internal

	Measured Zero	Measured Reference	Units	Calibrated Zero	Calibrated 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

Well File: 123_AMER_ADE_1-6_MAY_20_QUINT **Scale:** 1:240
Segment: V1.D3.S3 RPT **Acquired:** 2011-05/20 03:09 3.2.0-9901
Reference: 0 **Processed:** 2011-05/20 03:09 3.2.0-9901

TENSION
LBS
10000 0

BIT SIZE
INCHES (IN)
6 16

DENSITY (X) CALIPER
INCHES (IN)
16 26
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 26
6 16

Volume
Calcite

DENSITY POROSITY
PERCENT (2.87 G/CC)
30 -10

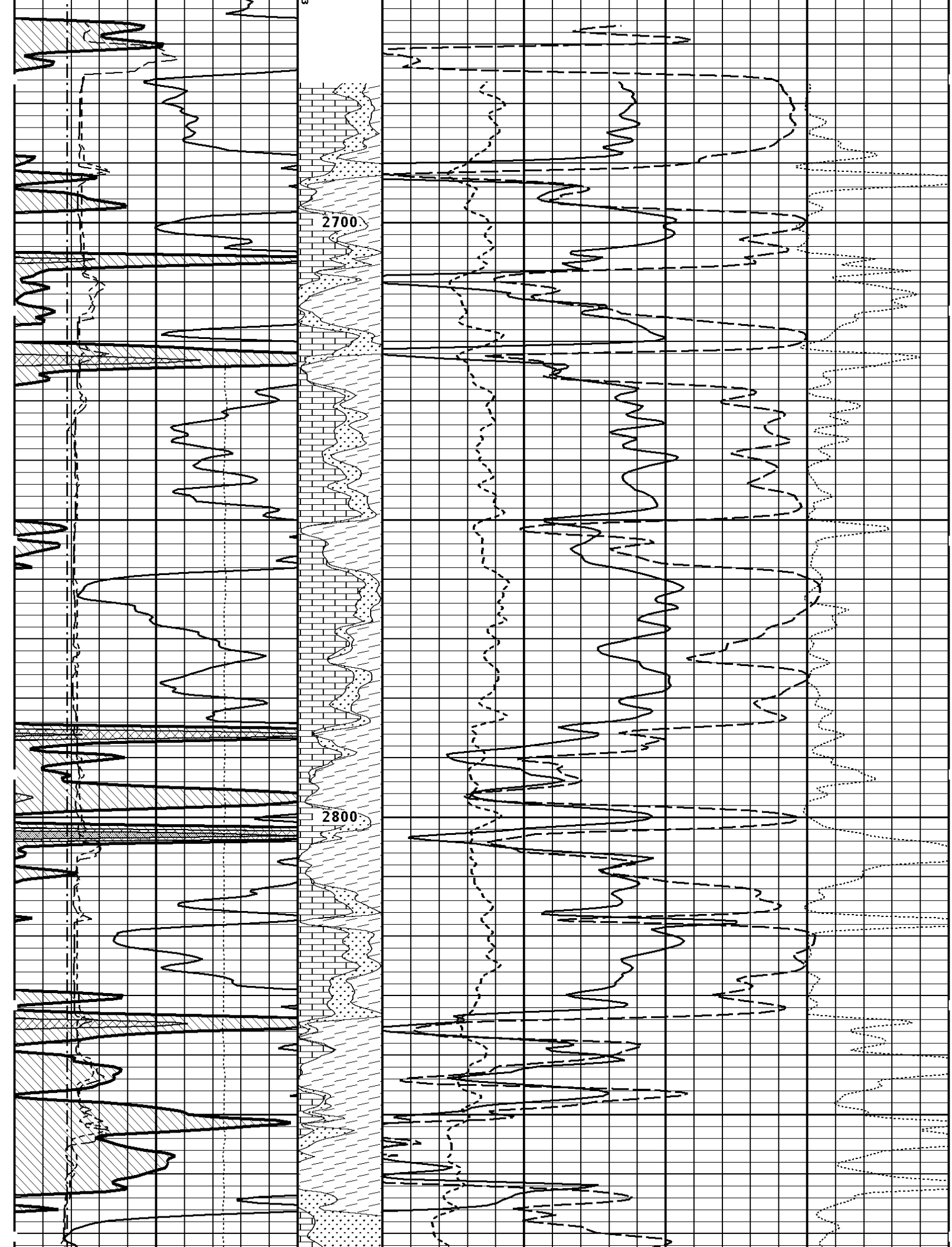
GAMMA RAY
API UNITS
150 300
0 150

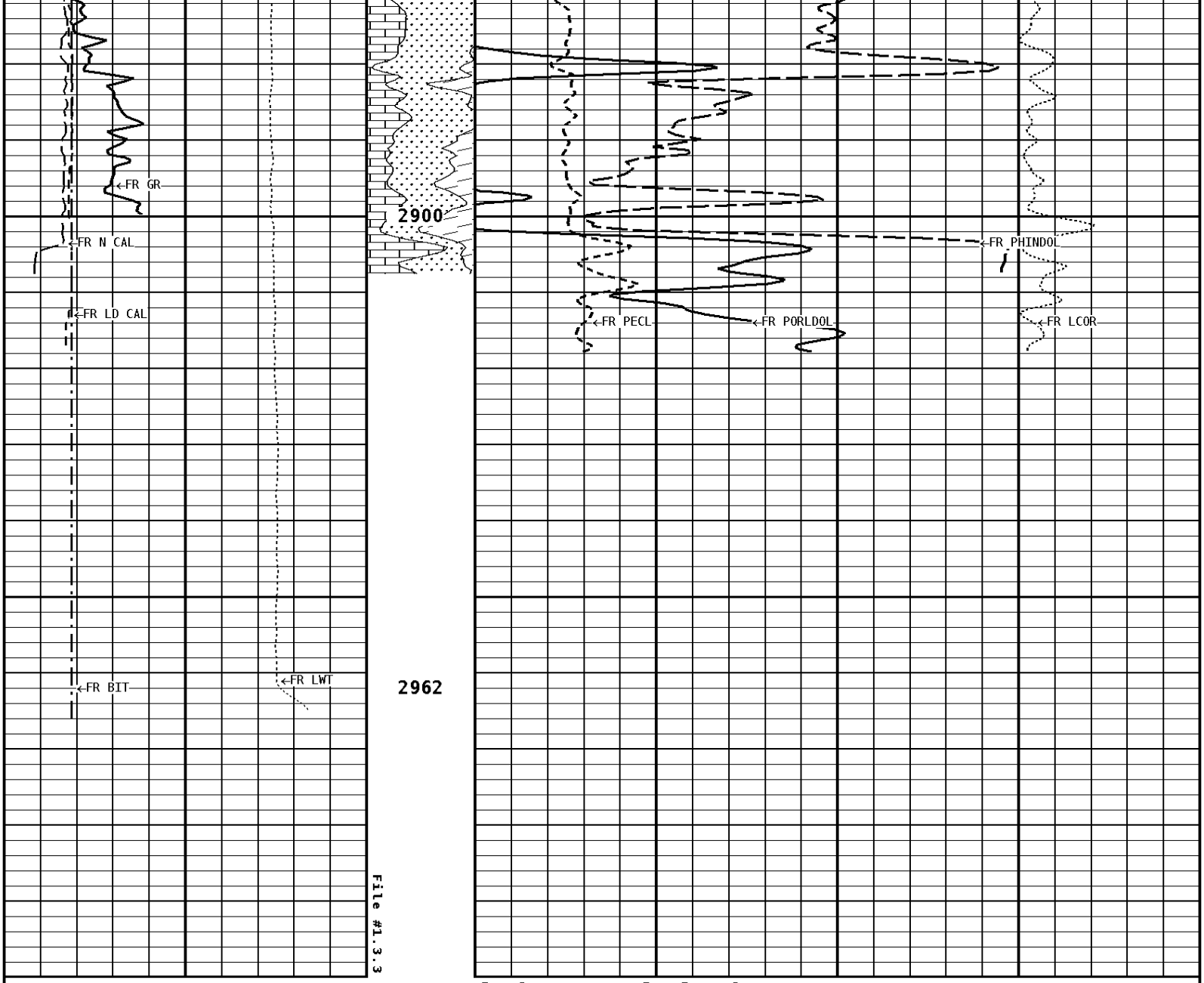
Volume
Dolo/Shale

NEUTRON POROSITY
PERCENT (DOLOMITE MATRIX)
30 -10

1:240 MAIN SECTION

File #1.3.3


2700
2800



1:240 MAIN SECTION

GAMMA RAY API UNITS	Volume Dolo/Shale	NEUTRON POROSITY PERCENT (DOLOMITE MATRIX)
150 300 0 150		30 -10
NEUTRON (Y) CALIPER INCHES (IN)	**Volume Calcite**	**DENSITY POROSITY PERCENT (2.87 G/CC)**
16 26 6 16		30 -10
DENSITY (X) CALIPER INCHES (IN)	**Volume Quartz**	**PE CROSS-SECTION BARNS/ELECTRON** / **DENSITY CORRECTION G/CC**
16 26 6 16		0 10 / -0.25 0.25
BIT SIZE INCHES (IN)		
6 16		

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	4.500	in
Casing Correction (PHI N)	Disable	