Tucker WIRELINE SERVICES

COMPENSATED NEUTRON
PEL DENSITY LOG

N

Company	RUNNING FOXES PETROLEUM
Well	SNYDER #2-1A
Field	CHEROKEE BASIN COAL AREA
County	BOURBON
State	KANSAS
Country	USA
API No.	15-011-23881-0000

File No : TUL-57384
Company : RUNNING FOXES PETROLEUM INC.
Well : SNYDER #2-1A
Field : CHEROKEE BASIN COAL AREA
County : BOURBON
State : KANSAS
Country : USA
API No : 15-011-23881-0000

Location :
330' FNL & 1650' FEL
NE NW NE

LSD : **Sect :** 1 **Twp :** 24S **Rge :** 23E

Permanent Datum:	GL	**Elevations:**				**Services:**
Drilling Measured From:	GL	**KB**	0.00	Ft		CNT
Log Measured From:	GL	**DF**	0.00	Ft		LDT
Above Permanent Datum:	0.00 Ft	**GL**	862.00	Ft		PIT

Date	2012-06-06		
Run Number	1		
Depth--Driller	521.0 Ft		
Depth--Logger	520.0 Ft		
First Reading	497.0 Ft		
Last Reading	27.0 Ft		
Casing--Driller	27.0 Ft		
Casing--Logger	27.0 Ft		
Bit Size	6.750 In		
Casing Size	8.625 In		
Hole Fluid Type	FRESH		
Density	0.0 LBS/GAL		
Fluid Loss	0.0 CC		
PH/Viscosity	0.0 / 0.0 SEC		
Sample Source	MEASURED		
RM@Measured Temp.	4.000 @ 80 F		
RMF@Measured Temp	3.200 @ 80 F		
RMC@Measured Temp.	4.800 @ 80 F		
Source RMF/RMC	CALCULATED / CALCULATED		
RM@BHT	4.080 @ 78 F		
Time Circulation Stopped	2012-06-06 07:38		
Max Recorded Temp.	78 F		
Equipment/Base	TRK 127 / TULSA		
Recorded By	SHELDON TYLER		
Witnessed By	K. HODGES		

Bitsize Intervals		Casing Strings		
Size (In)	**Bottom (Ft)**	**Size (In)**	**Weight (Lbs)**	**Bottom (Ft)**
6.750	521.00	8.625	32.00	27.00

Run Number	1		
Date	2012-06-06		
Date/Time On Bottom	2012-06-06 08:38		
Depth to Fluid	0.0 Ft		
Salinity	0.000 PPM		
RMF@BHT	3.260 @ 78 F		
RMC@BHT	4.900 @ 78 F		

Run Number 1

Comments

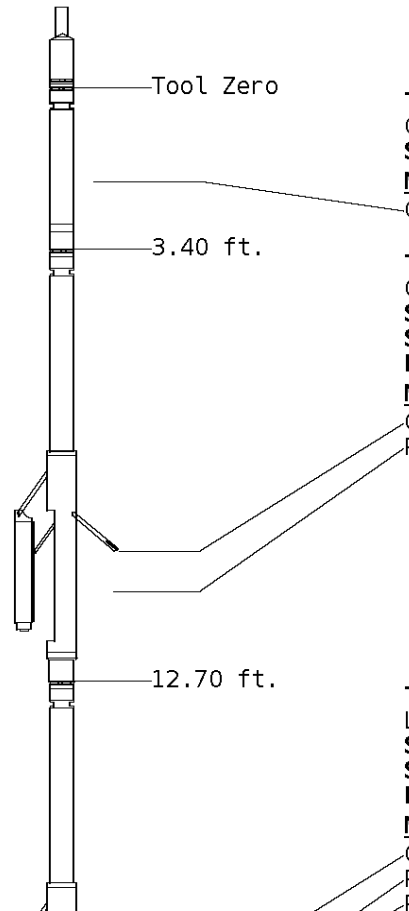
ALL PRESENTATIONS AS PER CUSTOMER REQUEST
GRT, CNT, LDT, AND PIT RUN IN COMBINATION.
CALIPERS ORIENTED ON X-Y AXIS.
2.71 G/CC USED TO CALCULATED POROSITY.
ANNULAR HOLE VOLUME CALCULATED UISING 4.500" PRODUCTION CASING.

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

OPERATORS:
JOHN THOMAS
M.BURKE
R. BAKE

Tool String Schematic

Total Tool Length - 43.49 **ft.**
Maximum Outside diameter - 4.80 **in.**
Net Weight in Air - 743.00 **lbs.**



Tool: GRT-B **Length:** 3.40 **ft.** **O.D.** 3.60 **in.**
Gamma Ray Controller
Sonde ID :GRT-BA-121

Measure Point	Tool Offset	Stack Offset	Bottom Offset
GRP	2.00	2.00	41.49

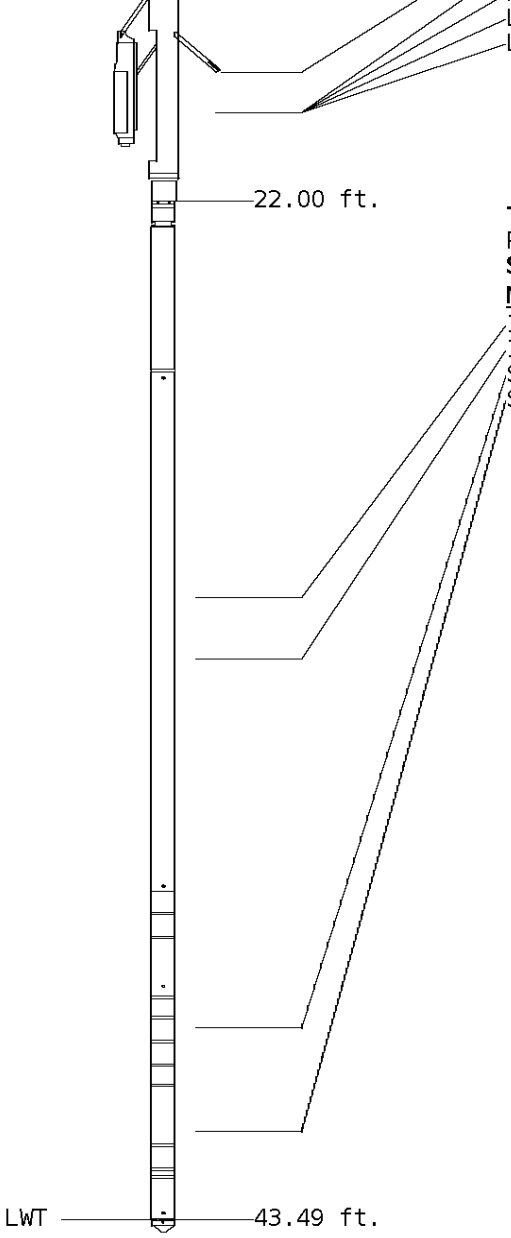
Tool: CNT-AA **Length:** 9.30 **ft.** **O.D.** 4.36 **in.**
Compensated Neutron A Pad on NDT-A
Sonde ID :NDT-AB-400
Source ID :N-1044
Pad ID :CNP-AA-116

Measure Point	Tool Offset	Stack Offset	Bottom Offset
CLCN	6.00	9.40	34.09
PHIN	6.80	10.20	33.29

Tool: LDT-DA **Length:** 9.30 **ft.** **O.D.** 4.80 **in.**
Litho Density D Pad on NDT-A
Sonde ID :PDT-GA-469
Source ID :CSV-587
Pad ID :LDP-DA-02

Measure Point	Tool Offset	Stack Offset	Bottom Offset
CLLD	6.00	18.70	24.79
PEL	7.00	19.70	23.79
PES	7.40	20.10	23.39

LDEN	7.20	19.90	23.59
LCOR	7.20	19.90	23.59



Tool: PIT-CA **Length:** 21.49 **ft.** **O.D.** 3.62 **in.**
Phased Dual Induction w/ RM & D
Sonde ID :PIT-AC-13

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	30.92	12.56
ILM	10.10	32.10	11.39
SFLU	17.49	39.49	4.00
SP	20.60	42.60	0.88

Well File: RFP_SNYDER_2-1A_JUNE6_STK **Scale:** 1:240
Segment: V1.D1.S5 Reprocess of MAIN **Acquired:** 2012-06/06 09:17 3.2.0-10990
Reference: 0 **Processed:** 2012-06/06 09:32 3.2.0-10990

TENSION LBS
10000 — 0

BIT SIZE INCHES (IN)
4 — 14

Volume Dolo/Shale

DENSITY (X) CALIPER INCHES (IN)
14 — 24
4 — 14

Volume Quartz

PE CROSS-SECTION BARNS/ELECTRON
0 — 10

DENSITY CORRECTION G/CC
-0.25 — 0.25

NEUTRON (Y) CALIPER INCHES (IN)
14 — 24
4 — 14

Volume Calcite

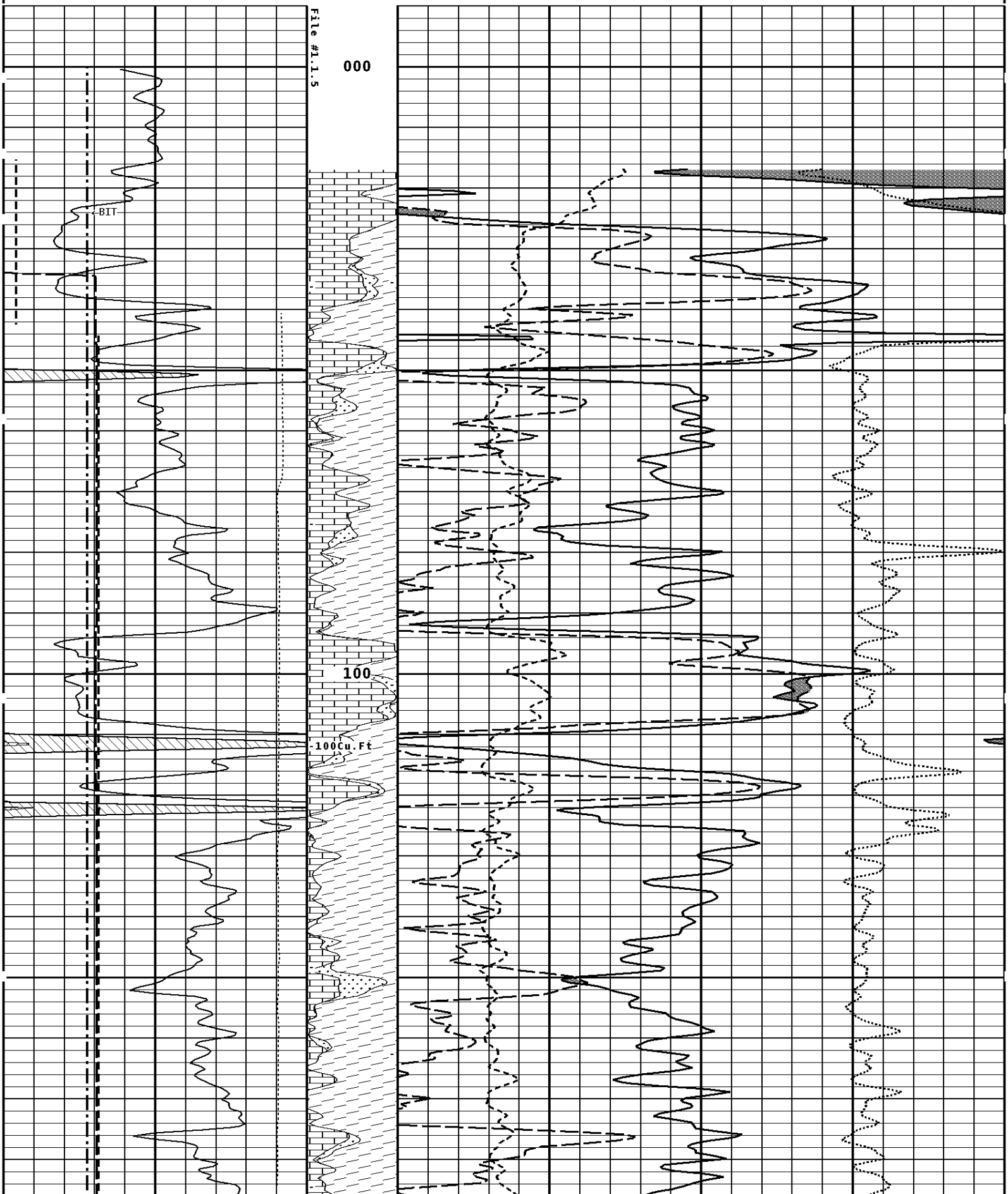
NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)
30 — -10

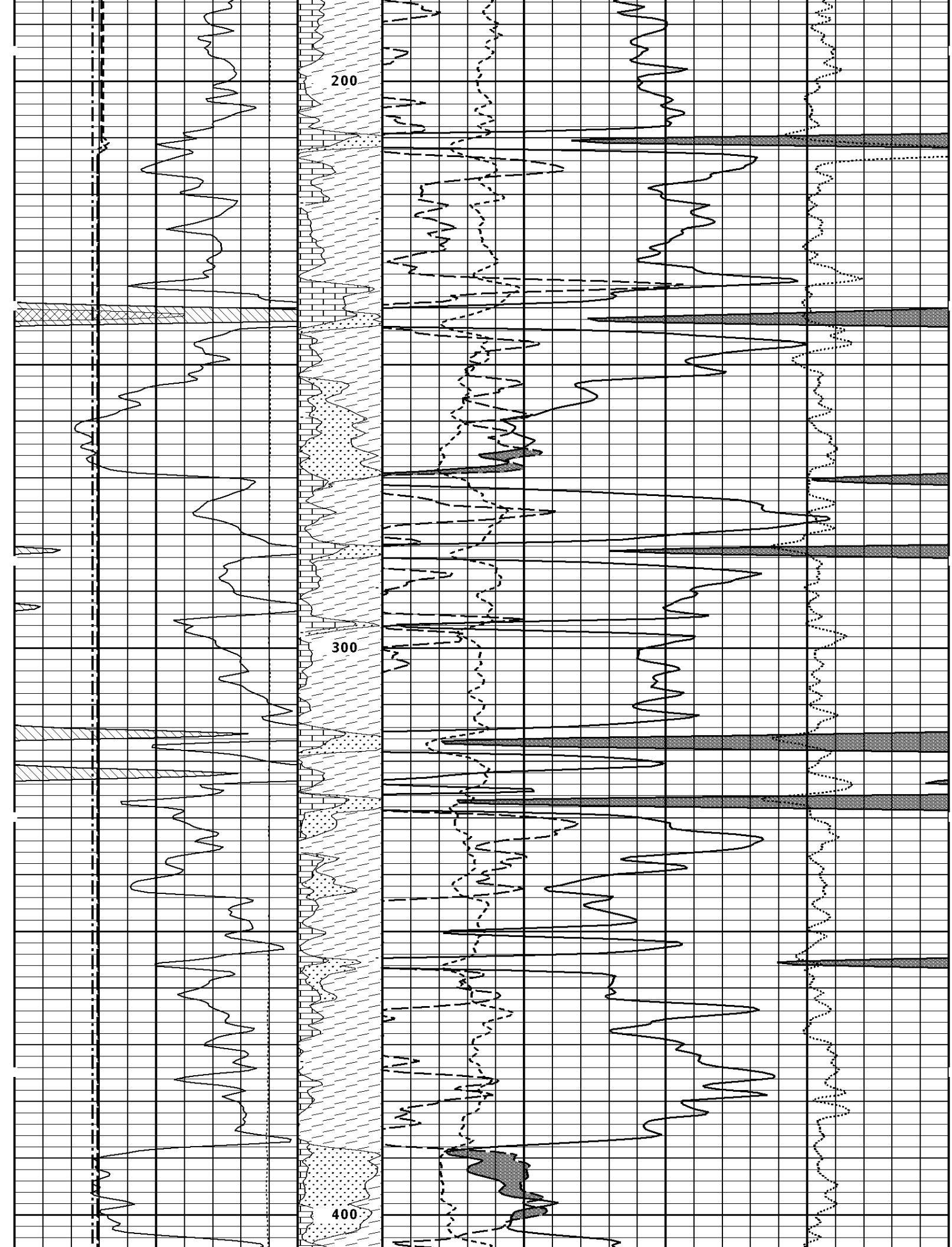
GAMMA RAY API UNITS
200 — 400
0 — 200

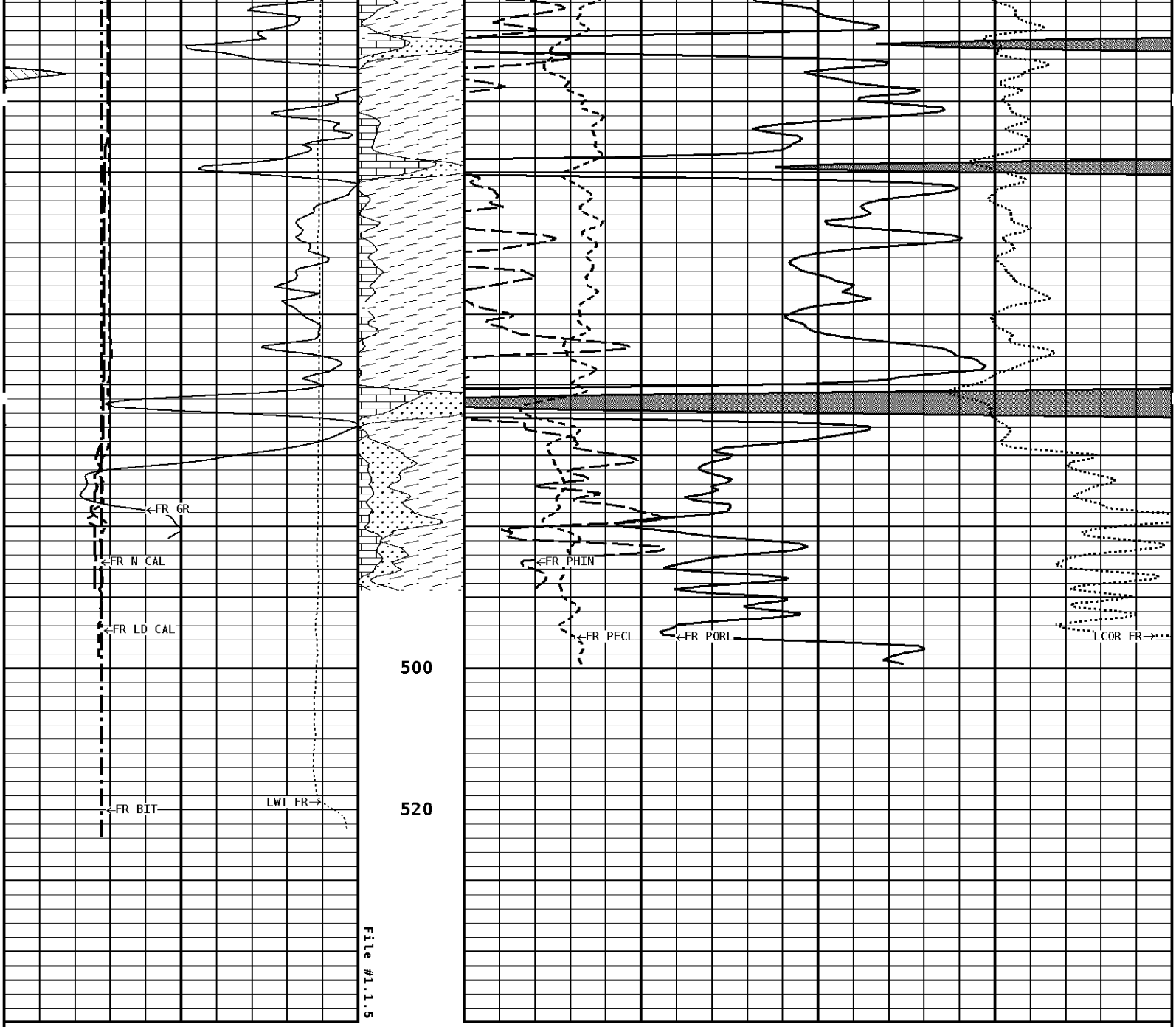
-BHV AHV- CU.FT

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

1:240 MAIN SECTION




200
300
400



1:240 MAIN SECTION

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

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

Well File: RFP_SNYDER_2-1A_JUNE6_STK **Scale:** 1:240
Segment: V1.D1.S3 Reprocess of REPEAT **Acquired:** 2012-06/06 09:06 3.2.0-10990
Reference: 0 **Processed:** 2012-06/06 09:14 3.2.0-10990

TENSION
LBS
10000 0

BIT SIZE
INCHES (IN)
4 14

Volume
Dolo/Shale

DENSITY (X) CALIPER
INCHES (IN)
14 24
4 14

Volume
Quartz

PE CROSS-SECTION
BARNS/ELECTRON
0 10

DENSITY CORRECTION
G/CC
-0.25 0.25

NEUTRON (Y) CALIPER
INCHES (IN)
14 24
4 14

Volume
Calcite

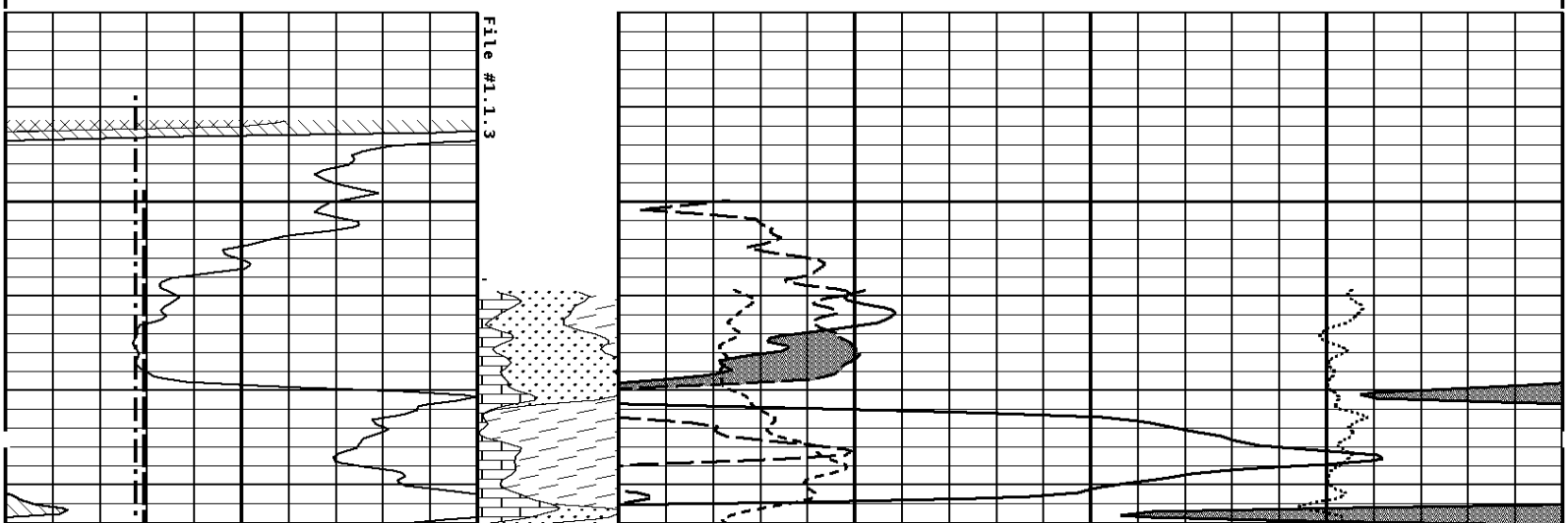
NEUTRON POROSITY
PERCENT (LIMESTONE MATRIX)
30 -10

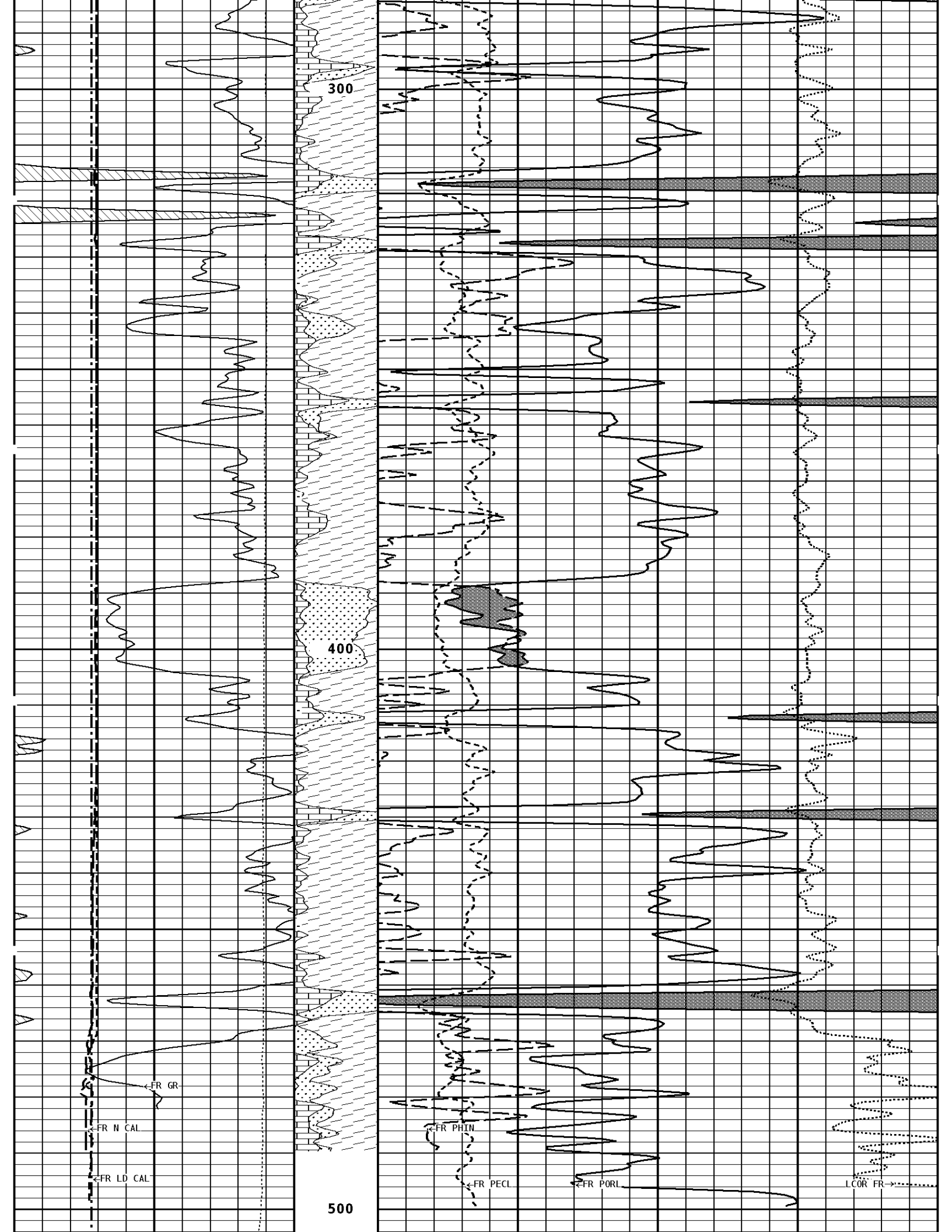
GAMMA RAY
API UNITS
200 400
0 200

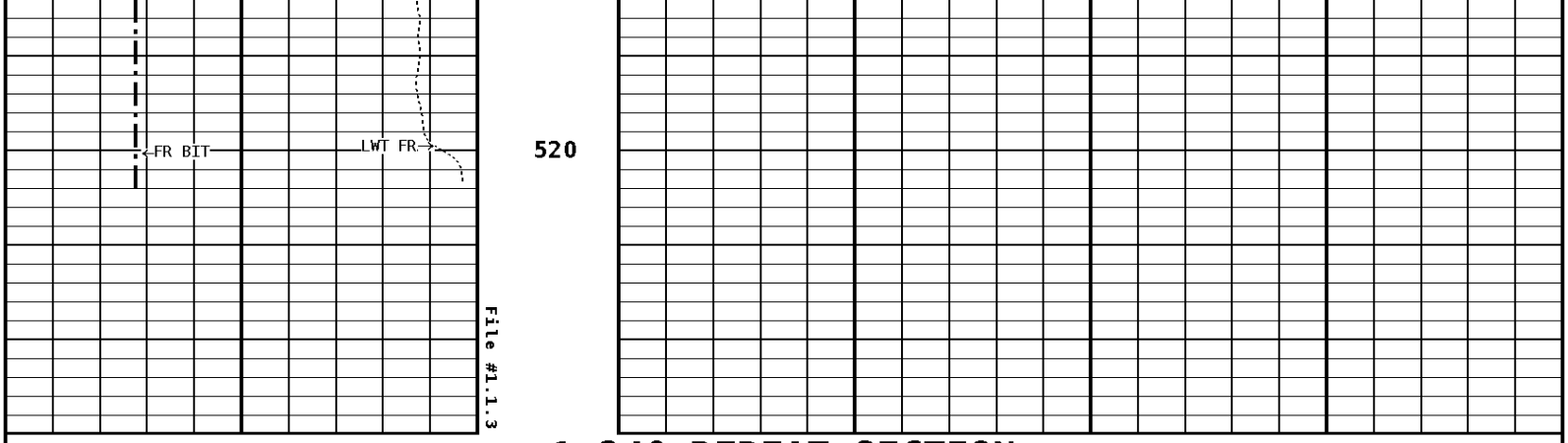
-BHV AHV-
CU.FT

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

1:240 REPEAT SECTION




300
400
500
FR GR
FR N CAL
FR LD CAL
FR PHIN
FR PECL
FR PORL
LCOR FR



1:240 REPEAT SECTION

GAMMA RAY API UNITS	-BHV AHV- CU.FT	DENSITY POROSITY PERCENT (2.71 g/cc)
200 400 0 200		70 30 30 -10 -10 -50
NEUTRON (Y) CALIPER INCHES (IN)	Volume Calcite	**NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)**
14 24 4 14		30 -10
DENSITY (X) CALIPER INCHES (IN)	Volume Quartz	**PE CROSS-SECTION BARNS/ELECTRON** / **DENSITY CORRECTION G/CC**
14 24 4 14		0 10 / -0.25 0.25
BIT SIZE INCHES (IN)	Volume Dolo/Shale	
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	6.750	in
Casing Diameter	4.500	in
Casing Correction (PHI N)	Disable	

Well File: RFP_SNYDER_2-1A_JUNE6_STK **Scale:** 1:240
Segment: V1.D1.S5 Reprocess of MAIN **Acquired:** 2012-06/06 09:17 3.2.0-10990
Reference: 0 **Processed:** 2012-06/06 09:32 3.2.0-10990

TENSION LBS	BIT SIZE INCHES (IN)	DENSITY (X) CALIPER INCHES (IN)	PE CROSS-SECTION BARNS/ELECTRON / DENSITY CORRECTION G/CC
10000 0	4 14	14 24 4 14	0 10 / -0.25 0.25

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

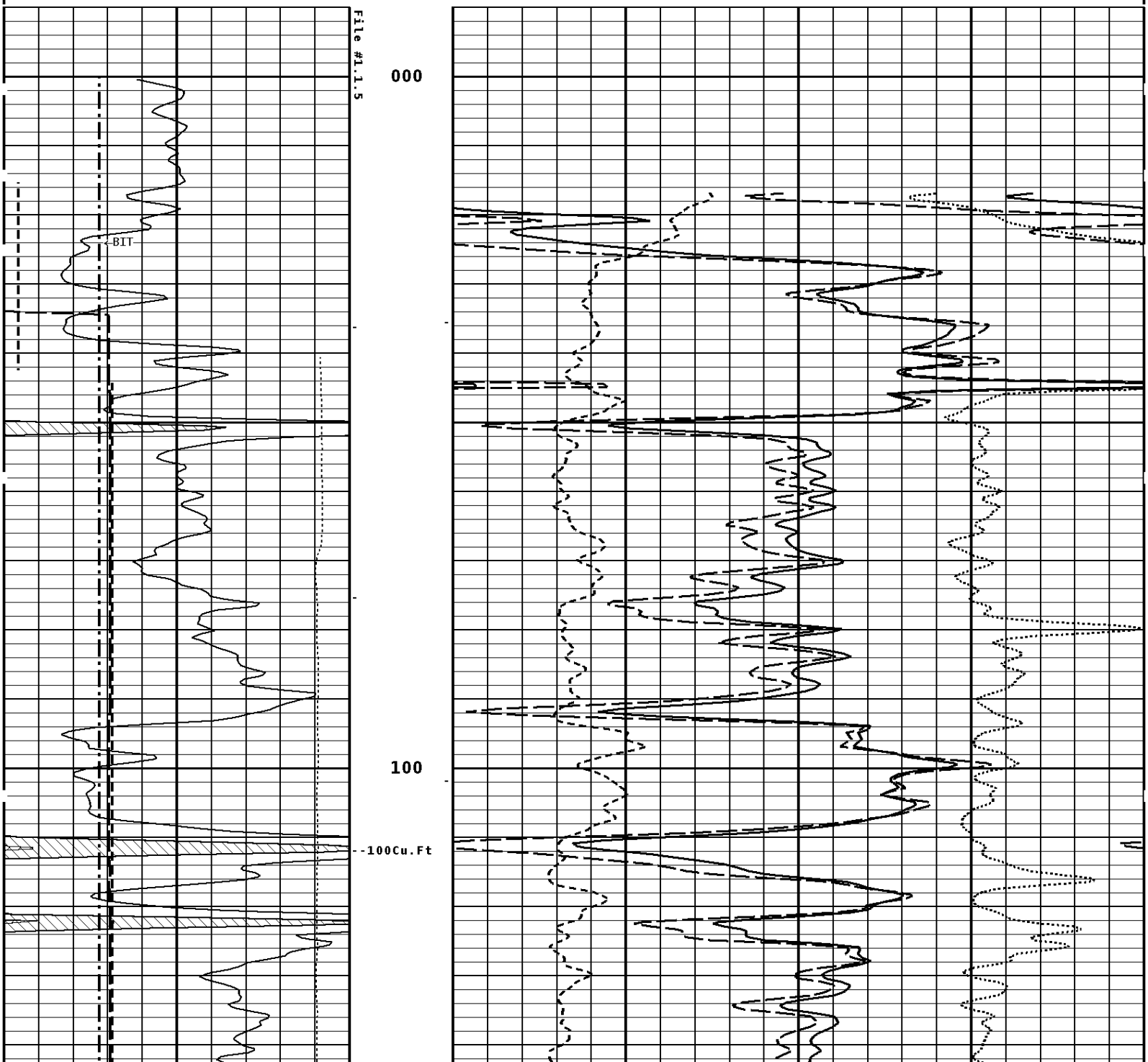
DENSITY POROSITY
PERCENT (2.71 g/cc)
70 30
30 -10
-10 -50

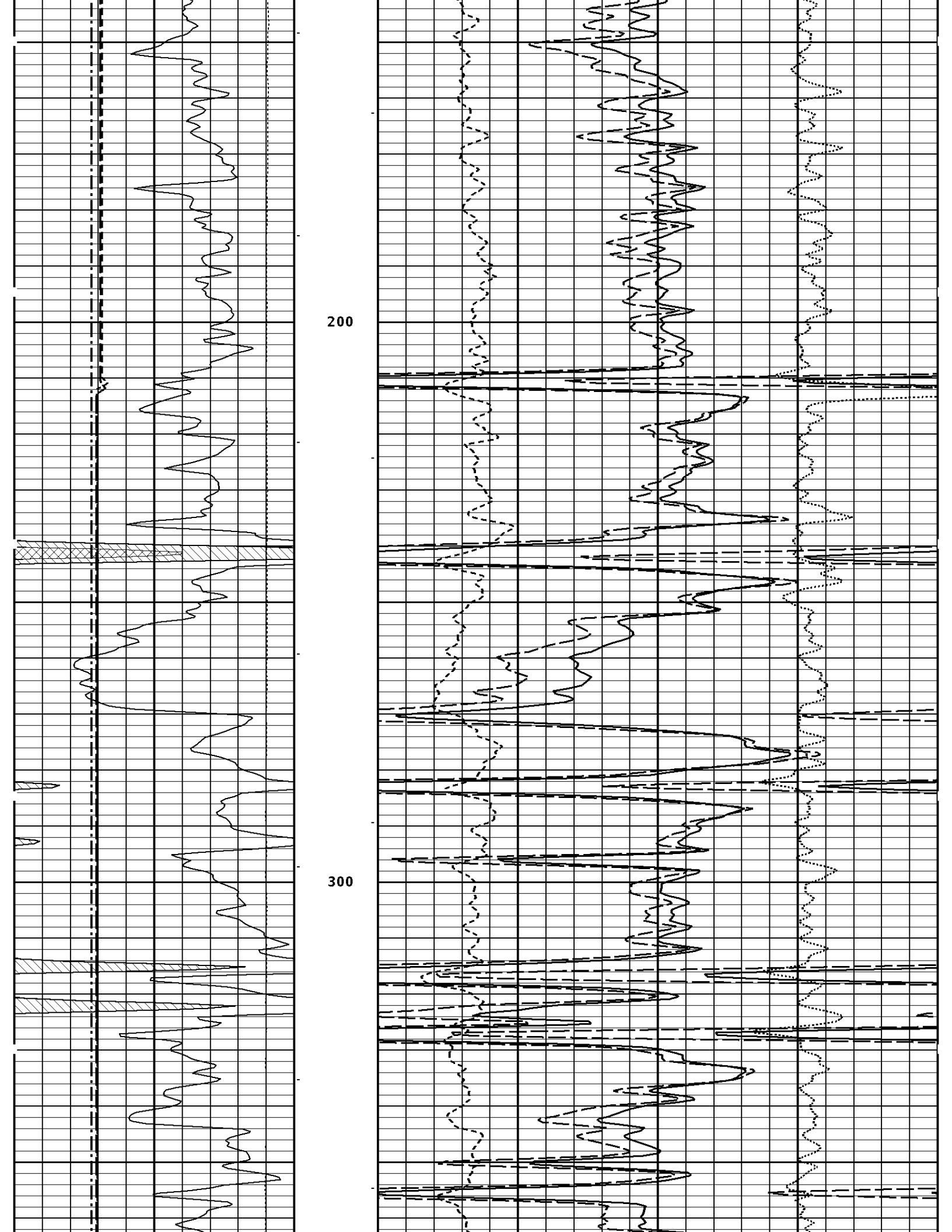
GAMMA RAY
API UNITS
200 400
0 200

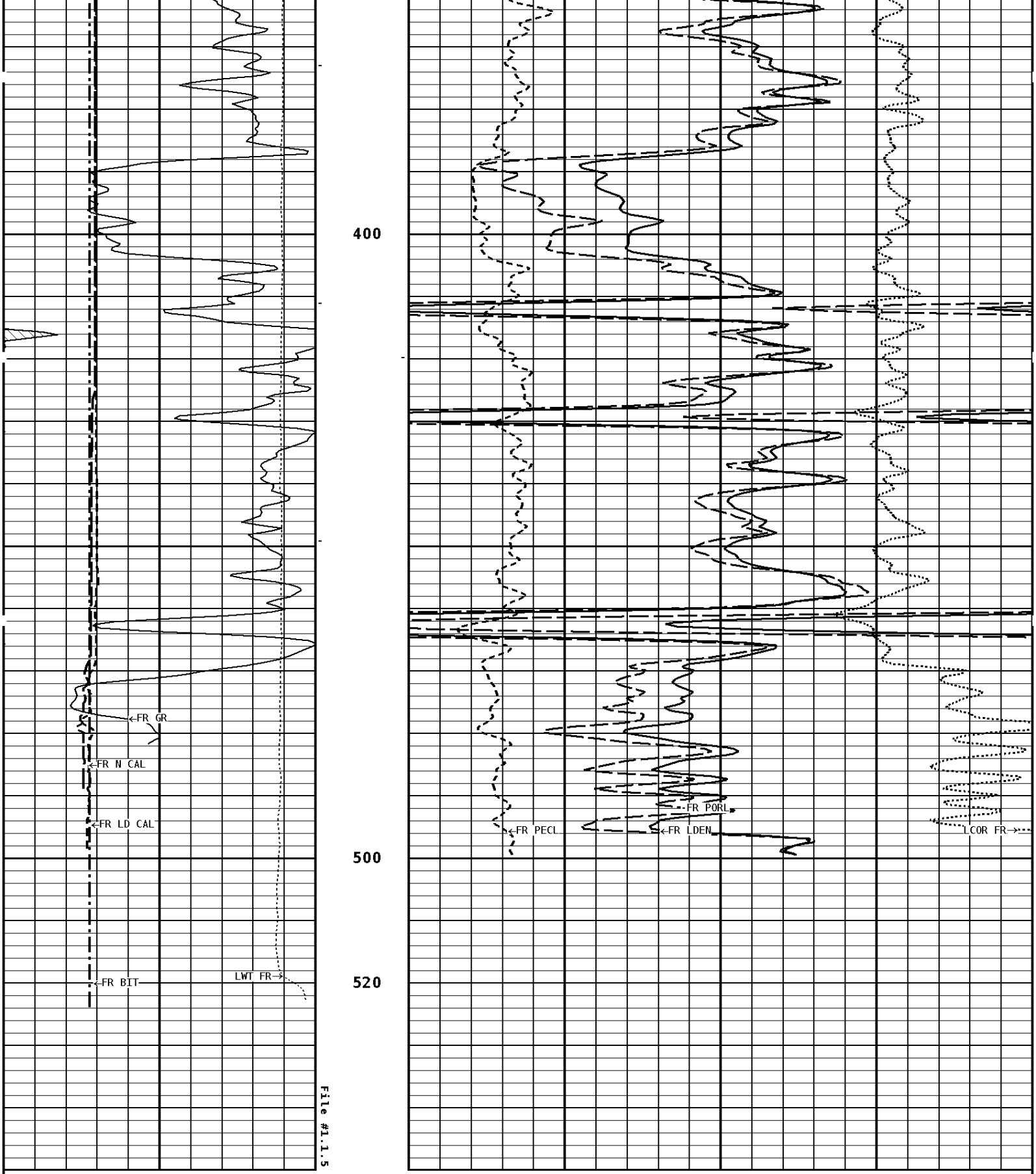
-BHV AHV-
CU.FT

COMPENSATED BULK DENSITY
G/CC
3.0 4.0
2.0 3.0
1.0 2.0

1:240 MAIN SECTION
BULK DENSITY




200
300



1:240 MAIN SECTION
BULK DENSITY

GAMMA RAY API UNITS	-BHV AHV- CU.FT	COMPENSATED BULK DENSITY G/CC
200 400		3.0 4.0

0	200

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

0	10

DENSITY CORRECTION G/CC

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

* Calibration Summary *

Shop Calibration
GRT-B

Performed : 25-MAY-2012 Time : 12:30
Sensor Suite : GR-GR5 ID : GRT-BA-121

	Measured Background	Measured Jig	Units	Calibrated Jig	Units
GR	51	355	CPS	175	GRAPI

Shop Calibration
CNT-AA

Performed : 21-MAR-2012 Time : 11:09
Sensor Suite : CALI-BCN ID : NDT-AB-400

	Jig - Measured Ring#1	Jig - Measured Ring#2	Jig - Calibrated Ring#1	Jig - Calibrated Ring#2	Units
CL # 1	8.3	14.3	6.0	12.0	IN.

Performed : 28-Mar-2012 Time : 12:06
Sensor Suite : BHC NEUT ID : CNP-AA-116
Source ID : N-1044

	Tank Measured	Tank Calibrated	Verification Jig	Units
N/F	3.8736	3.6893	3.6981	
Porosity	23.4	20.5	20.6	%

Shop Calibration
LDT-DA

Performed : 25-MAR-2012 Time : 13:55
Sensor Suite : CALI-LTH ID : PDT-GA-469

	Jig - Measured Ring#1	Jig - Measured Ring#2	Jig - Calibrated Ring#1	Jig - Calibrated Ring#2	Units
CL # 1	6.5	12.5	6.0	12.0	IN.

Performed : 28-Mar-2012 Time : 09:53
Sensor Suite : BHCPELNG ID : LDP-DA-02
Source ID : CSV-587

	Short Space BKGD	Short Space Al	Short Space Mg	Short Space Al+Fe	Units
LSW1	68	456	733	308	CPS

LSW2	71	547	885	395	CPS
LSW3	275	1366	2152	1171	CPS
LSW4	355	1317	1849	1171	CPS
LSW5	34	43	45	43	CPS
LSW6	92	92	90	92	CPS
LSW7	58	59	58	60	CPS
LSW8	2	3	3	2	CPS
QS	0.226	0.219	0.217	0.209	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC

Long Space

	BKGD	Al	Mg	Al+Fe	Units
LLW1	105	617	2536	388	CPS
LLW2	118	1052	4340	761	CPS
LLW3	442	2013	7435	1745	CPS
LLW4	576	1176	3041	1083	CPS
LLW5	63	68	84	65	CPS
LLW6	188	182	175	182	CPS
LLW7	113	115	111	115	CPS
LLW8	4	5	10	5	CPS
QL	0.250	0.226	0.225	0.227	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC

Tucker
WIRELINE SERVICES

Company: RUNNING FOXES PETROLEUM INC.

Well: SNYDER #2-1A

Location: 330' FNL & 1650' FEL

Logged: 2012-06-06

K.B. Elev: 0.0