

Tucker
ENERGY SERVICES

PHASED INDUCTION

SHALLOW FOCUS SP LOG

Company RUNNING FOXES PETROLEUM
Well HOLEMAN #1-22A-1
Field BRONSON-XENIA
County ALLEN
State KANSAS
Country USA
API No. 15-001-30603

File No : TUL-58218
Company : RUNNING FOXES PETROLEUM
Well : HOLEMAN #1-22A-1
Field : BRONSON-XENIA
County : ALLEN
State : KANSAS
Country : USA
API No : 15-001-30603

Location :
165' FNL & 165' FEL
NE NE NE NE

LSD : Sect : 22 Twp : 24S Rge : 21E

Permanent Datum: GL Elevations: KB 0.00 Ft
Drilling Measured From: GL DF 0.00 Ft
Log Measured From: GL GL 1101.00 Ft
Above Permanent Datum: 0.00 Ft

Services: CNT
LDT
PIT

Date	04-25-2013	
Run Number	1	
Depth--Driller	878.0	Ft
Depth--Logger	878.0	Ft
First Reading	877.0	Ft
Last Reading	20.0	Ft
Casing--Driller	20.0	Ft
Casing--Logger	20.0	Ft
Bit Size	6.750	In
Casing Size	8.625	In
Hole Fluid Type	FRESH / NATIVE	
Density	0.0 LBS/GAL	
Fluid Loss	0.0 CC	
PH/Viscosity	0.0 @ 0.0 SEC	
Sample Source	MEASURED	
RM@Measured Temp.	10.000 @ 70 F	
RMF@Measured Temp	8.500 @ 70 F	
RMG@Measured Temp.	11.500 @ 70 F	
Source RMF/RMG	CALCULATED/CALCULATED	
RM@BHT	0.000 @ 80 F	
Time Circulation Stopped		
Max Recorded Temp.	80	F
Equipment/Base	TRK 123	TULSA
Recorded By	S. DAVIS	
Witnessed By	K. HODGED	

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)
6.750	878.00	8.625	24.00	20.00

Run Number	1	
Date	04-25-2013	
Date/Time On Bottom	04-25-2013 1:00 pm	
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

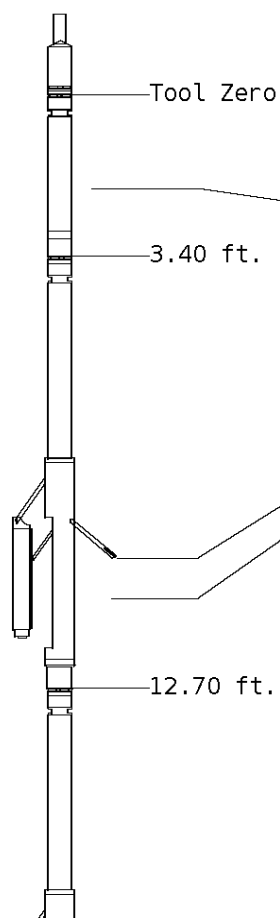
ALL PRESENTATIONS AS PER CUSTOMER REQUEST.
 GRT, CNT, LDT, AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.17 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED USING 2.875" PRODUCTION CASING.

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

OPERATORS:
 J. THOMAS
 D. HOPPER

Tool String Schematic

Total Tool Length - 43.91 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-BC-41

Measure Point	Tool Offset	Stack Offset	Bottom Offset
GRP	2.00	2.00	41.91

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

Sonde ID :NDT-BB-123

Source ID :N-1045

Pad ID :CNP-AA-024

Measure Point	Tool Offset	Stack Offset	Bottom Offset
CLCN	6.00	9.40	34.51
PHIN	6.80	10.20	33.71

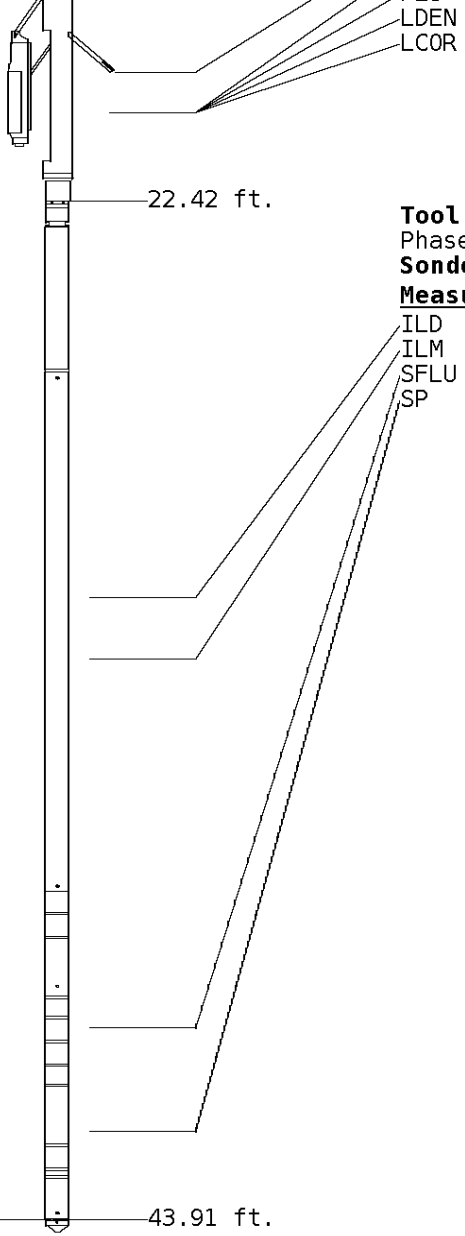
Tool: LDT-DF **Length:** 9.72 ft. **O.D.** 4.80 in.
 Litho Density D Pad on NDT-F

Sonde ID :PDT-GA-465

Source ID :2991GW

Pad ID :LDP-DA-067

Measure Point	Tool Offset	Stack Offset	Bottom Offset
CLLD	6.42	19.12	24.79
PEL	7.42	20.12	23.79
PES	7.82	20.52	23.39



7.62 20.32 23.59
7.62 20.32 23.59

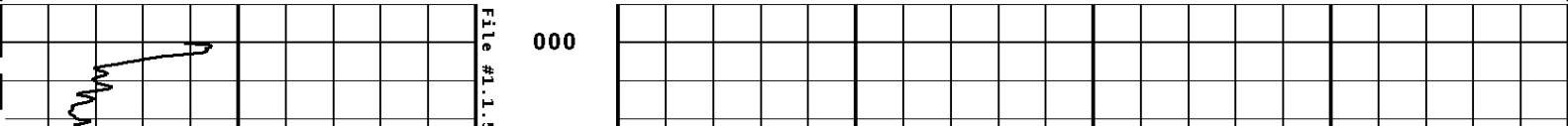
Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
Phased Dual Induction w/ RM & D
Sonde ID :PIT-AB-005

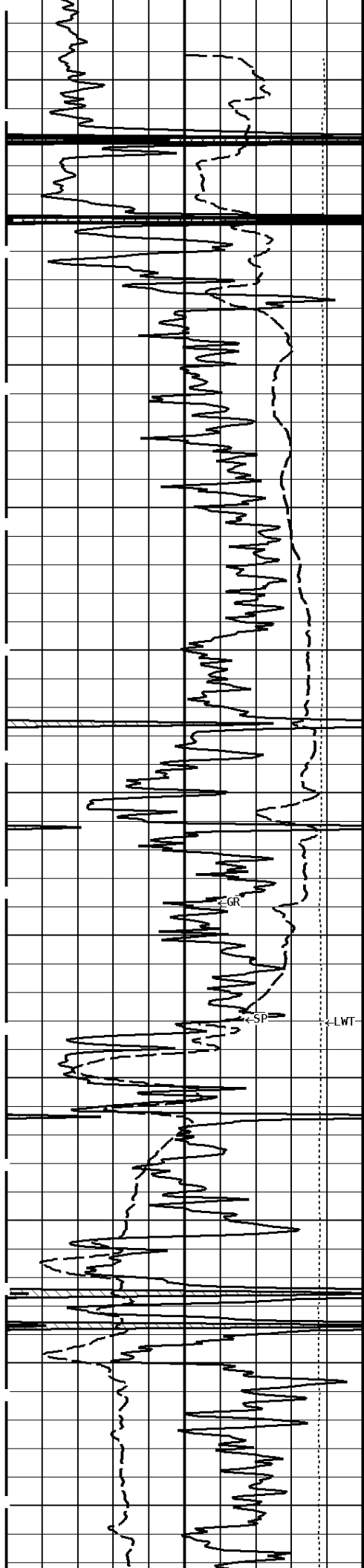
Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	31.34	12.56
ILM	10.10	32.52	11.39
SFLU	17.49	39.91	4.00
SP	20.60	43.02	0.88

Well File: rfp-hol-1-22a-1-stk-apr-25 **Scale:** 1:600
Segment: V1.D1.S5 MN **Acquired:** 2013-04/25 13:07 3.2.0-11401
Reference: 0 **Processed:** 2013-04/25 13:33 3.2.0-11401

TENSION LBS	DEEP INDUCTION OHMM
10000 0	0.0 500.0 0.0 50.0
SPONTANEOUS POTENTIAL mV	SHALLOW FOCUSED RESISTIVITY OHMM
→ ← 20	0.0 500.0 0.0 50.0
GAMMA RAY API UNITS	DEEP CONDUCTIVITY MMHO
200 0 400 200	2000 1000 1000 0

1:600 MAIN SECTION





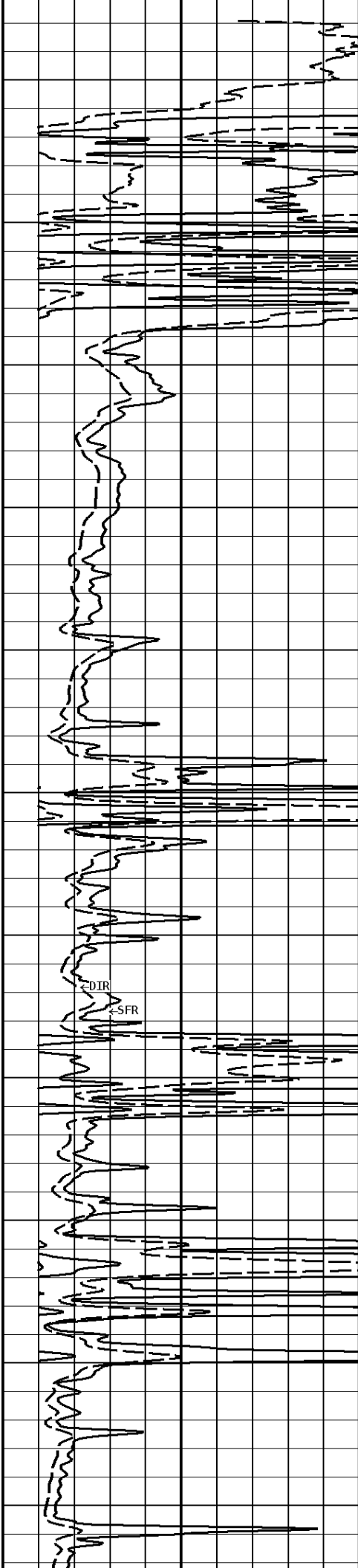
100

200

300

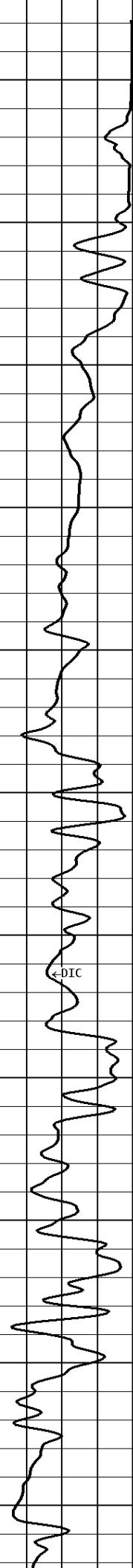
400

500

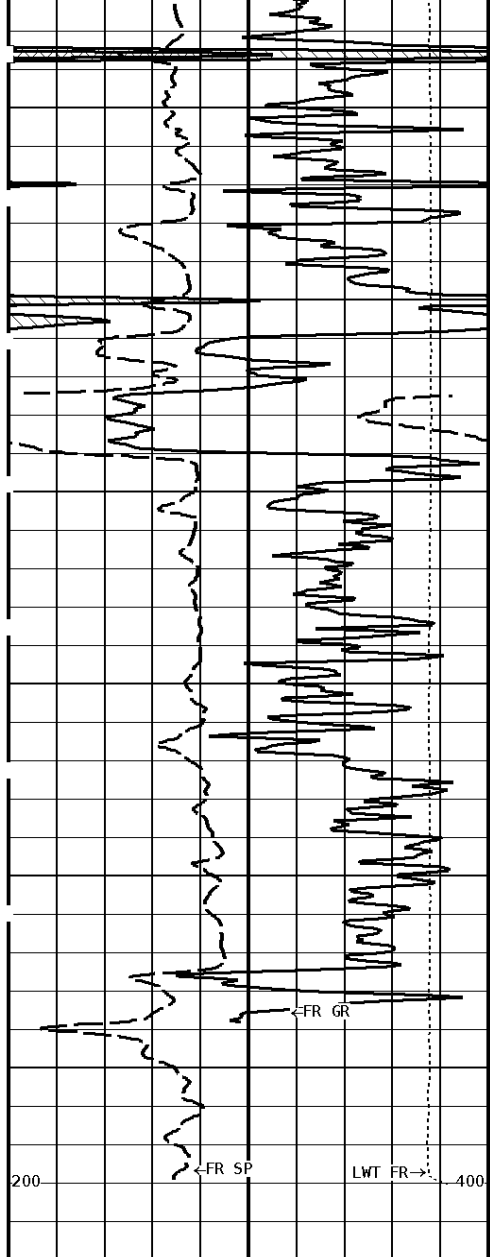


DIR

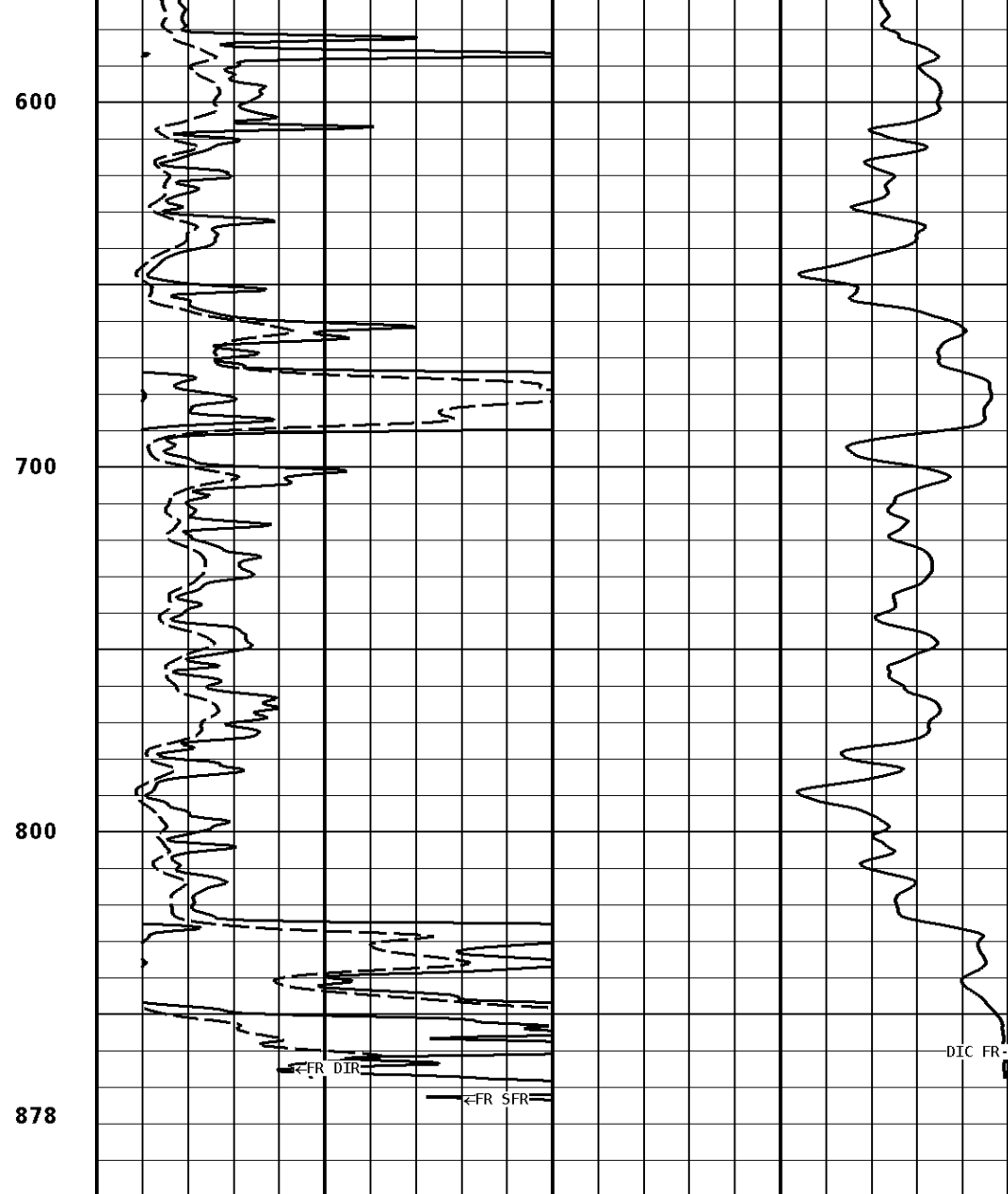
SFR



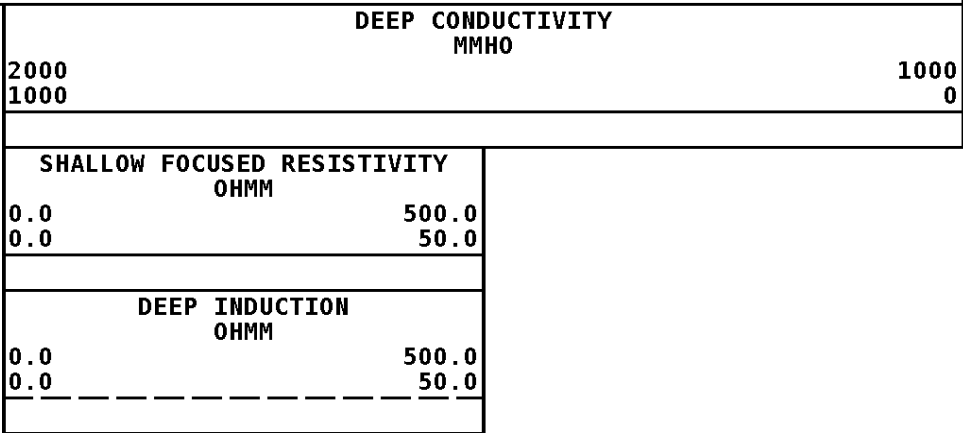
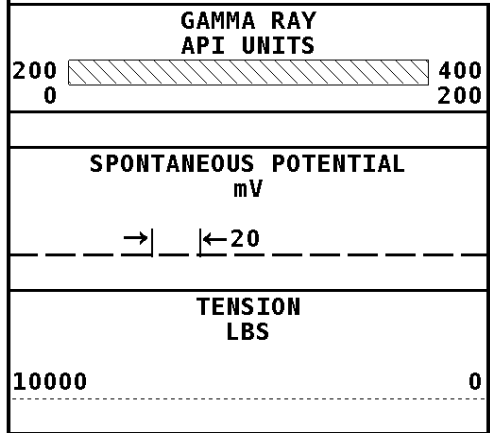
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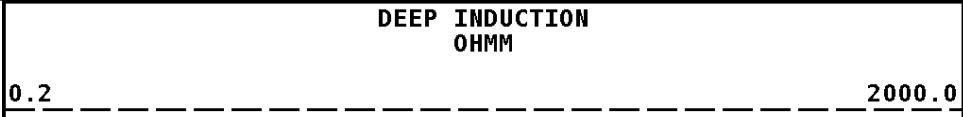
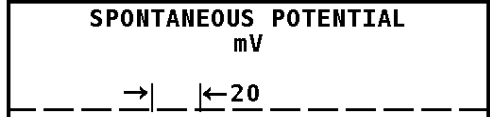
File #1.1.5



1:600 MAIN SECTION



Well File: rfp-hol-1-22a-1-stk-apr-25	Scale: 1:240
Segment: V1.D1.S5 MN	Acquired: 2013-04/25 13:07 3.2.0-11401
Reference: 0	Processed: 2013-04/25 13:33 3.2.0-11401



TENSION
LBS

10000 0

GAMMA RAY
API UNITS

200 0 400 200

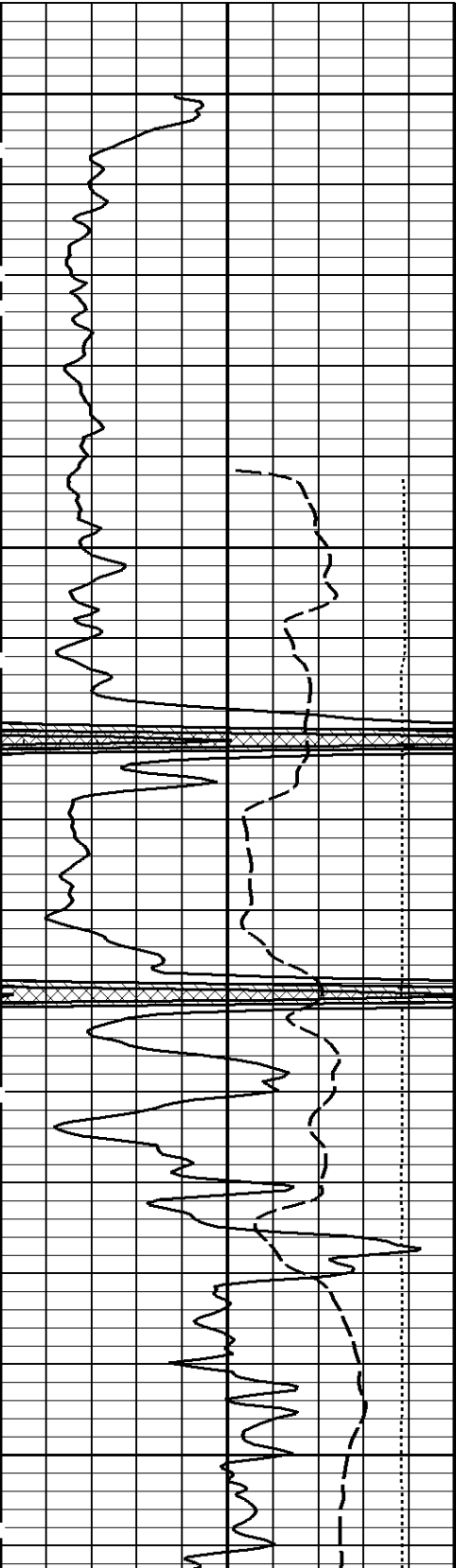
MEDIUM INDUCTION
OHMM

0.2 2000.0

SHALLOW FOCUSED RESISTIVITY
OHMM

0.2 2000.0

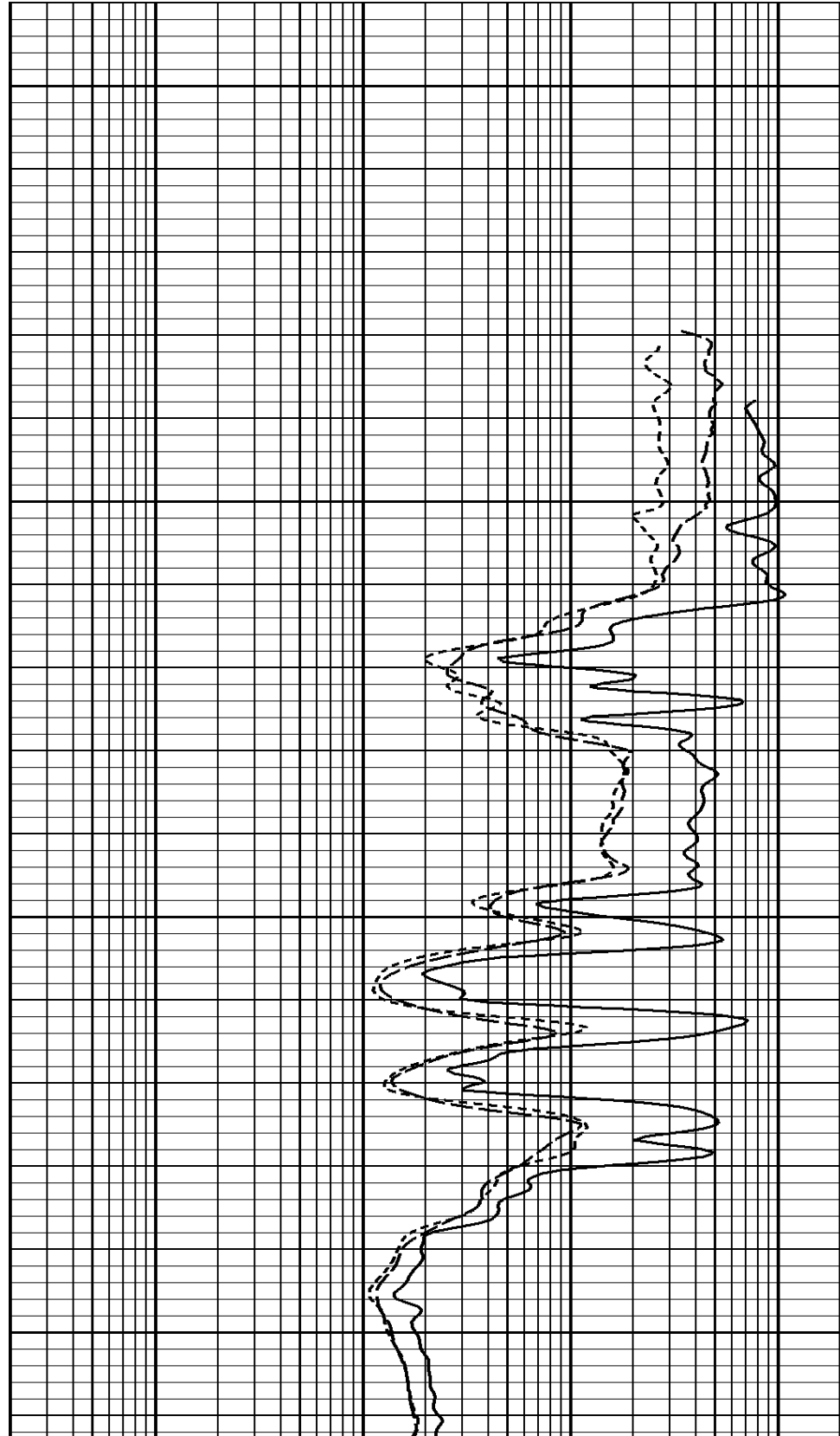
1:240 MAIN SECTION

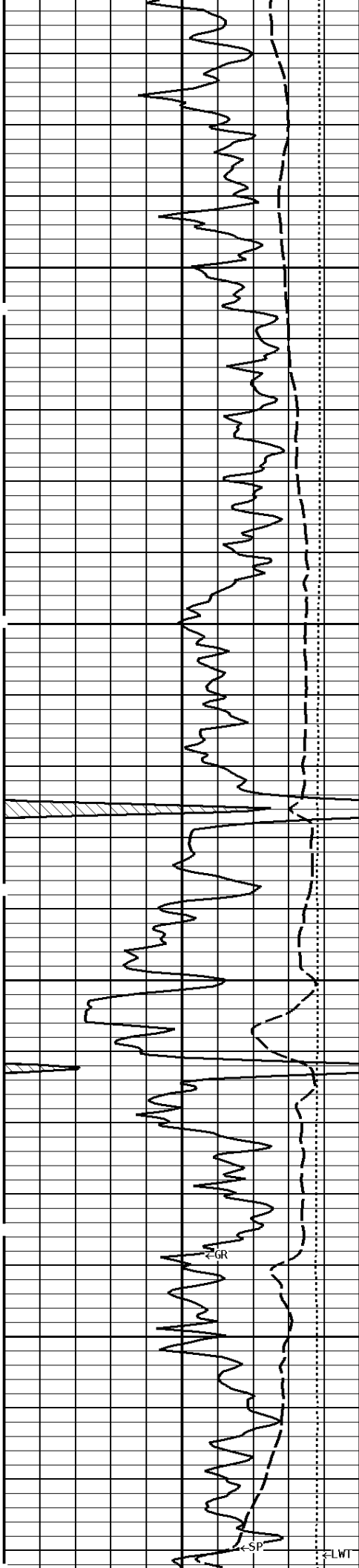


File #1.1.5

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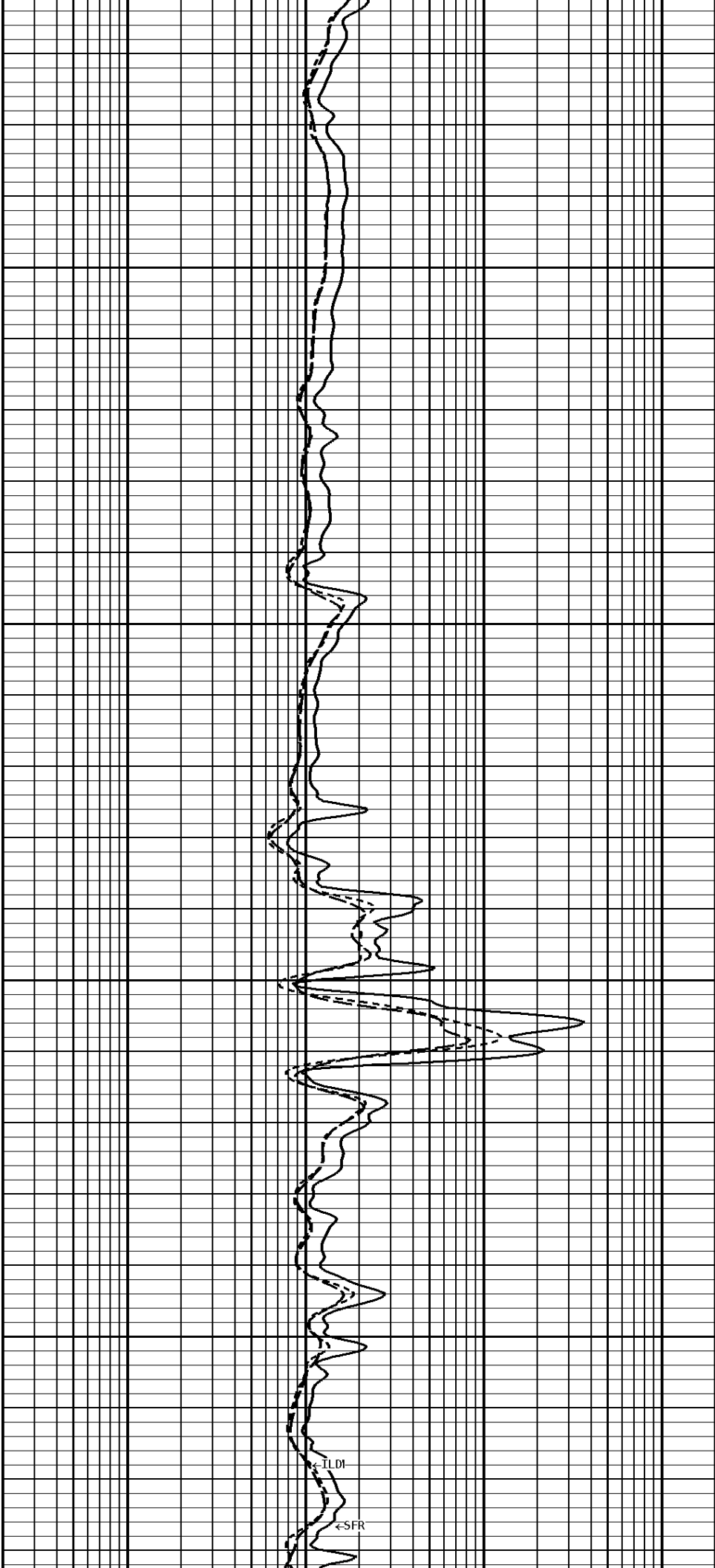
100





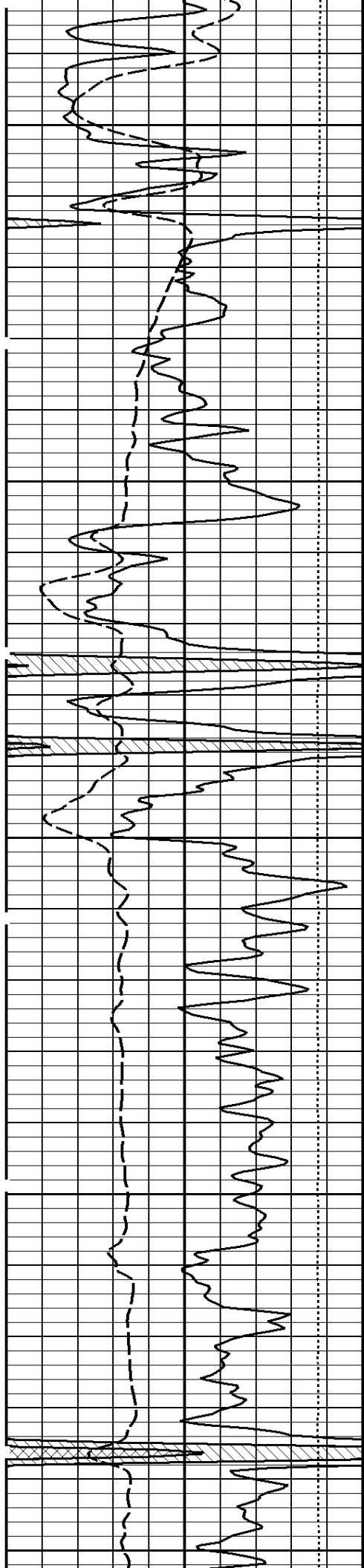
200

300



LDI

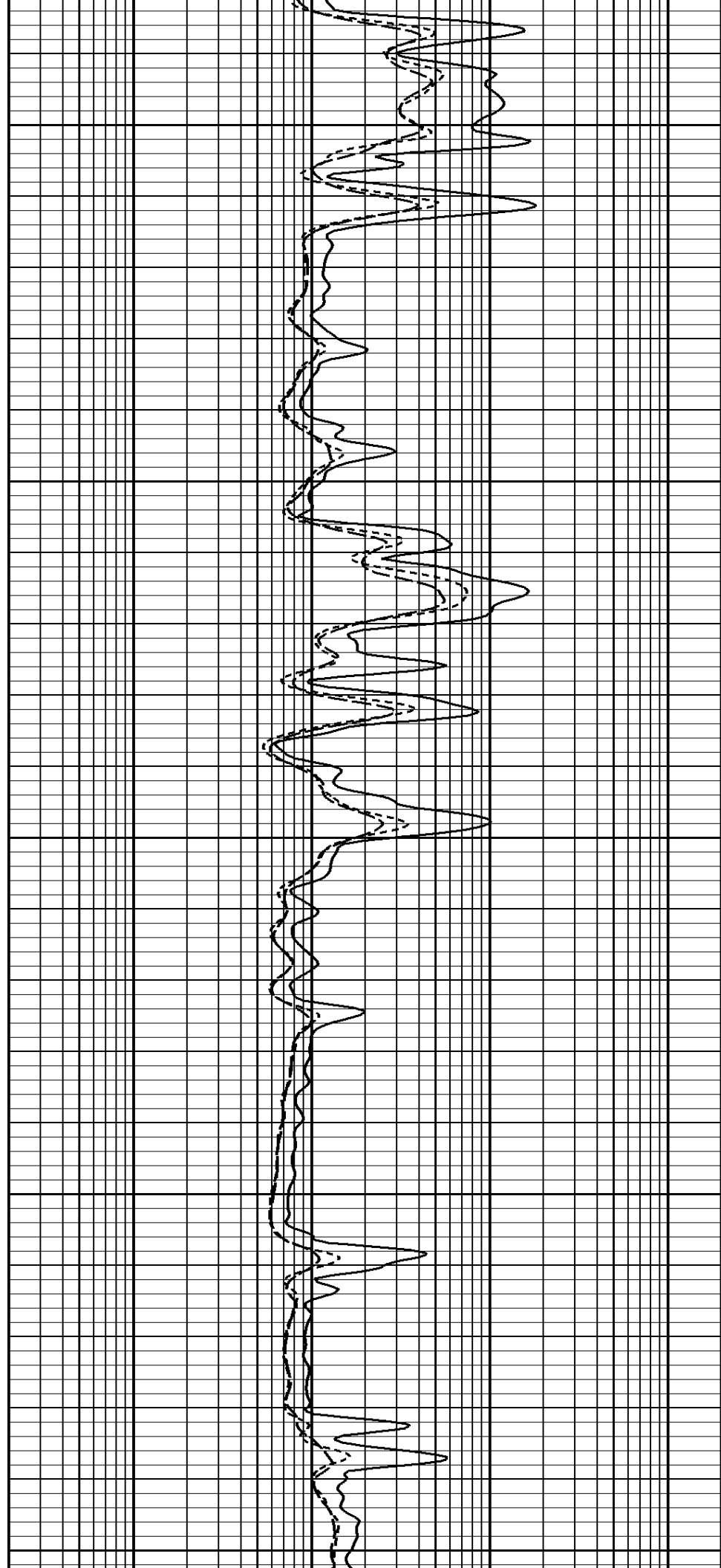
SFR

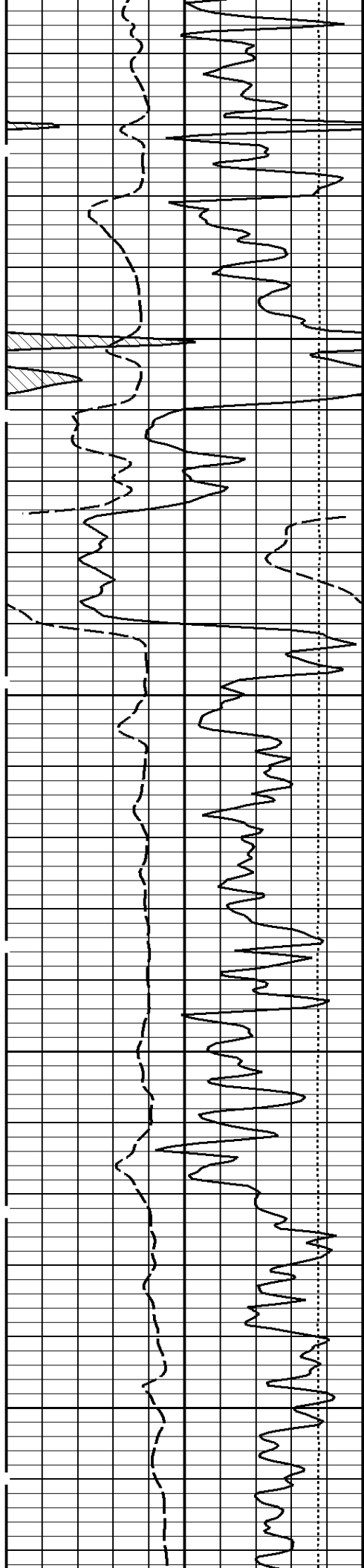


400

500

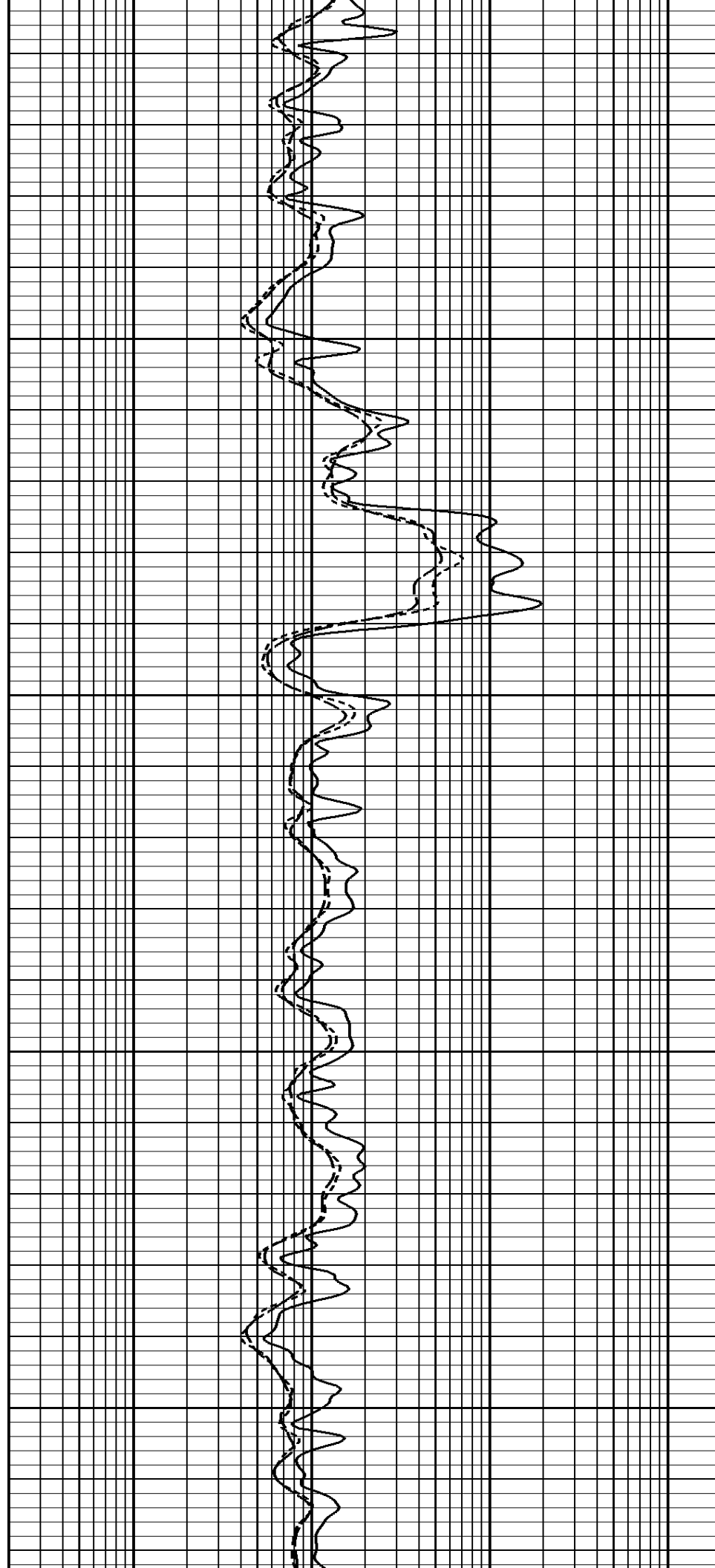
600

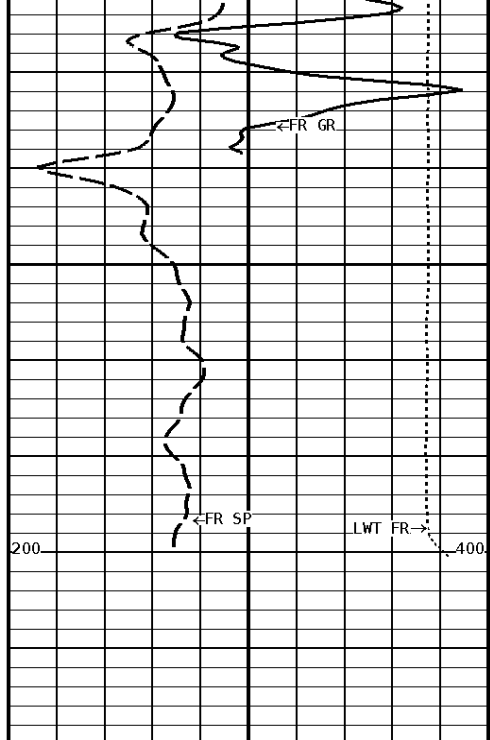




700

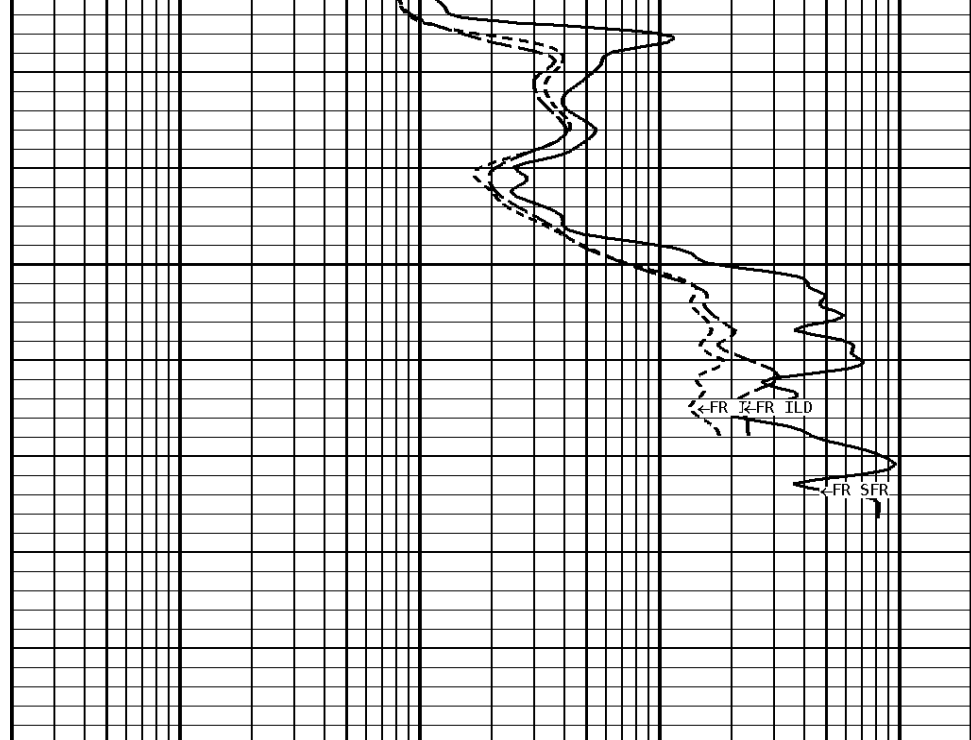
800





File #1.1.5

878



1:240 MAIN SECTION

GAMMA RAY API UNITS	
200 0	400 200
TENSION LBS	
10000	0
SPONTANEOUS POTENTIAL mV	
→	←20

SHALLOW FOCUSED RESISTIVITY OHMM	
0.2	2000.0
MEDIUM INDUCTION OHMM	
0.2	2000.0
DEEP INDUCTION OHMM	
0.2	2000.0

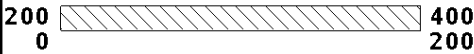
*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet	
Drill Bit Size _____	6.750 in
Casing Diameter _____	2.875 in
BHT Depth _____	878.000 ft
Borehole Temperature _____	80.0 degF
Temperature Gradient _____	1.00 DFHF
Resistivity Of Mud _____	10.000 ohm/m
Resistivity Of Mud Temperature _____	70.00 degF

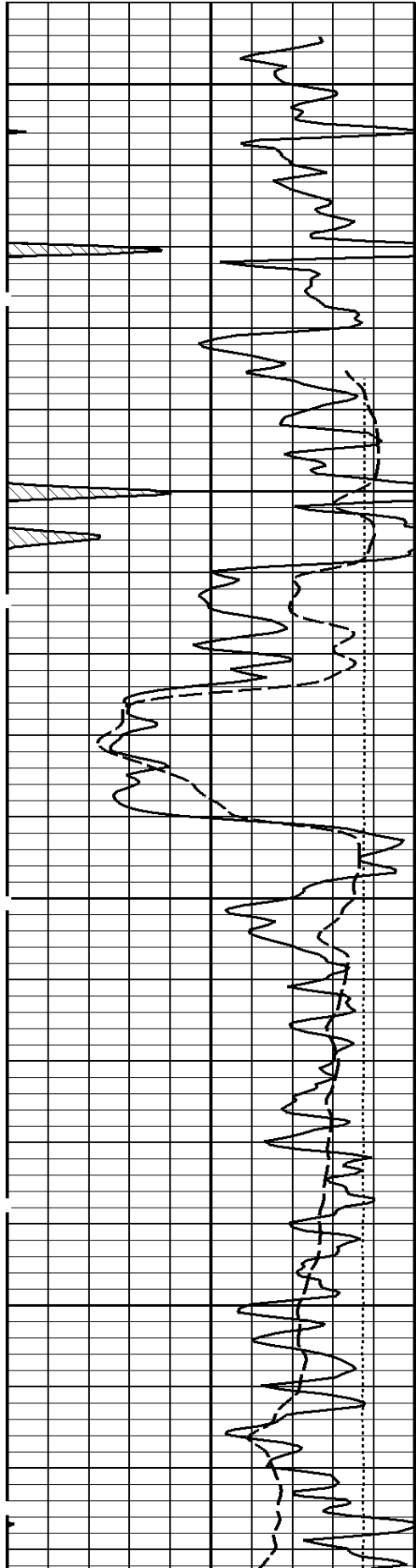
Well File: rfp-hol-1-22a-1-stk-apr-25 **Scale:** 1:240
Segment: V1.D1.S4 RP **Acquired:** 2013-04/25 12:53 3.2.0-11401
Reference: 0 **Processed:** 2013-04/25 13:33 3.2.0-11401

SPONTANEOUS POTENTIAL mV	
→	←20
TENSION LBS	
10000	0
GAMMA RAY API UNITS	

DEEP INDUCTION OHMM	
0.2	2000.0
MEDIUM INDUCTION OHMM	
0.2	2000.0
SHALLOW FOCUSED RESISTIVITY OHMM	

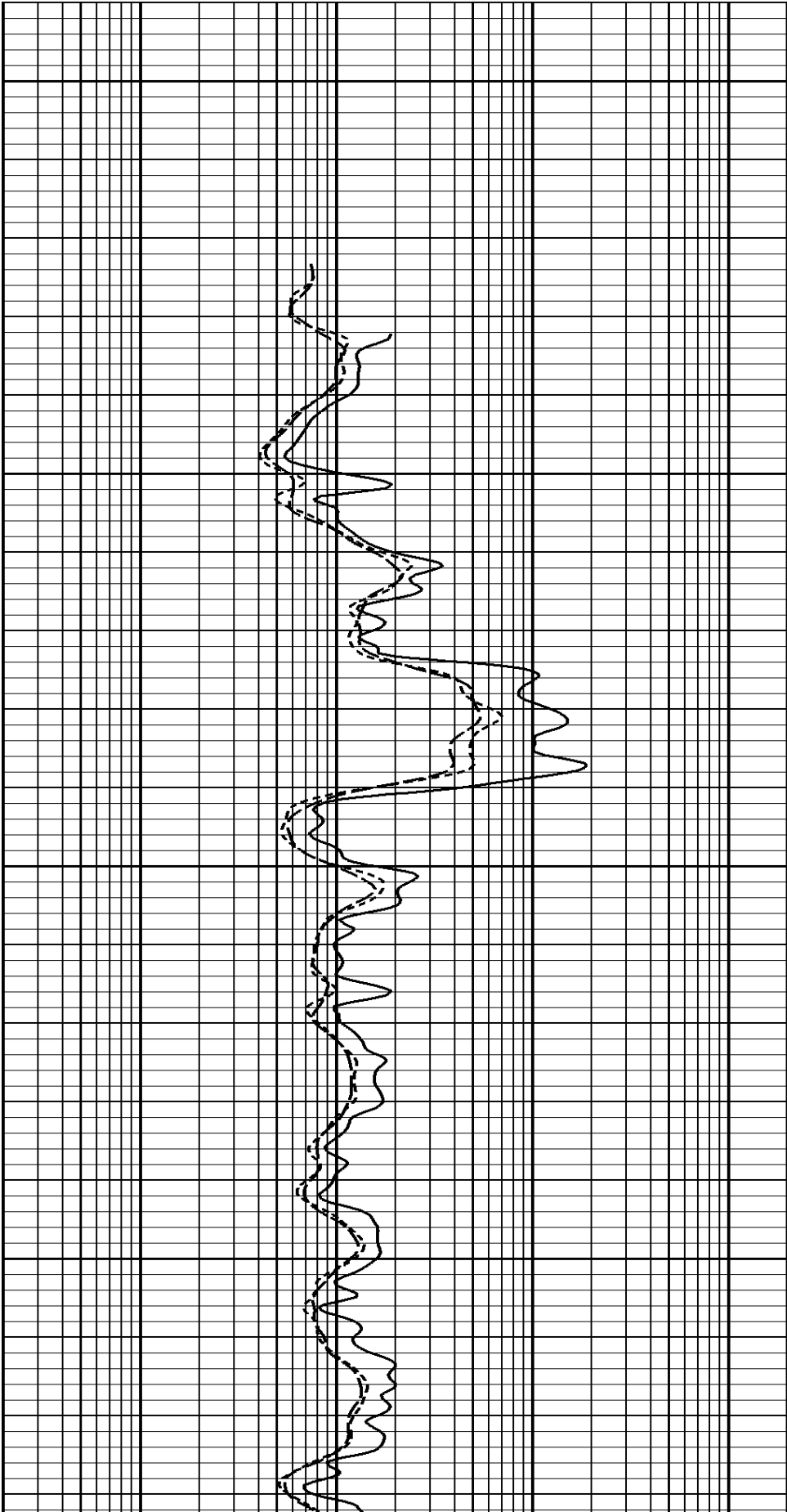


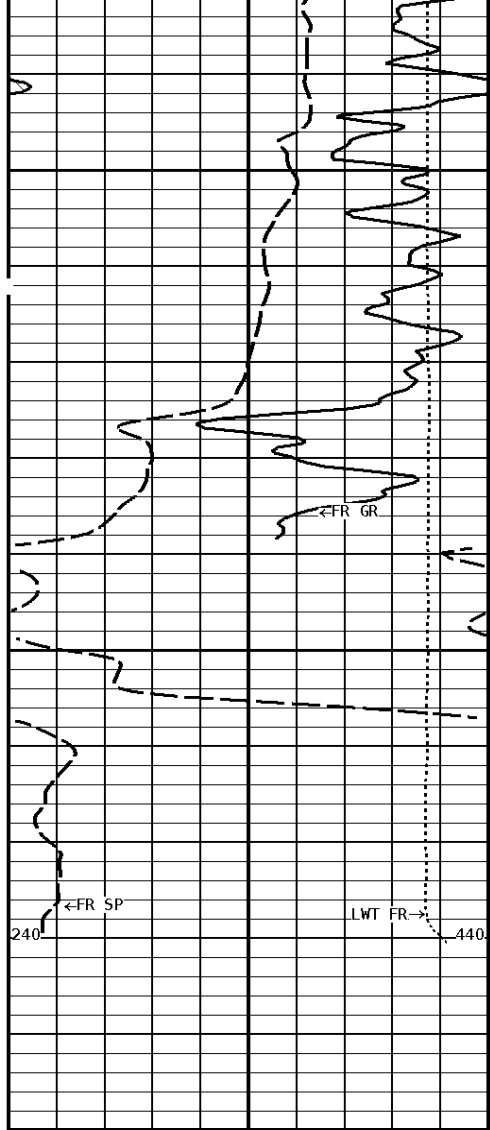
1:240 REPEAT SECTION



600

700

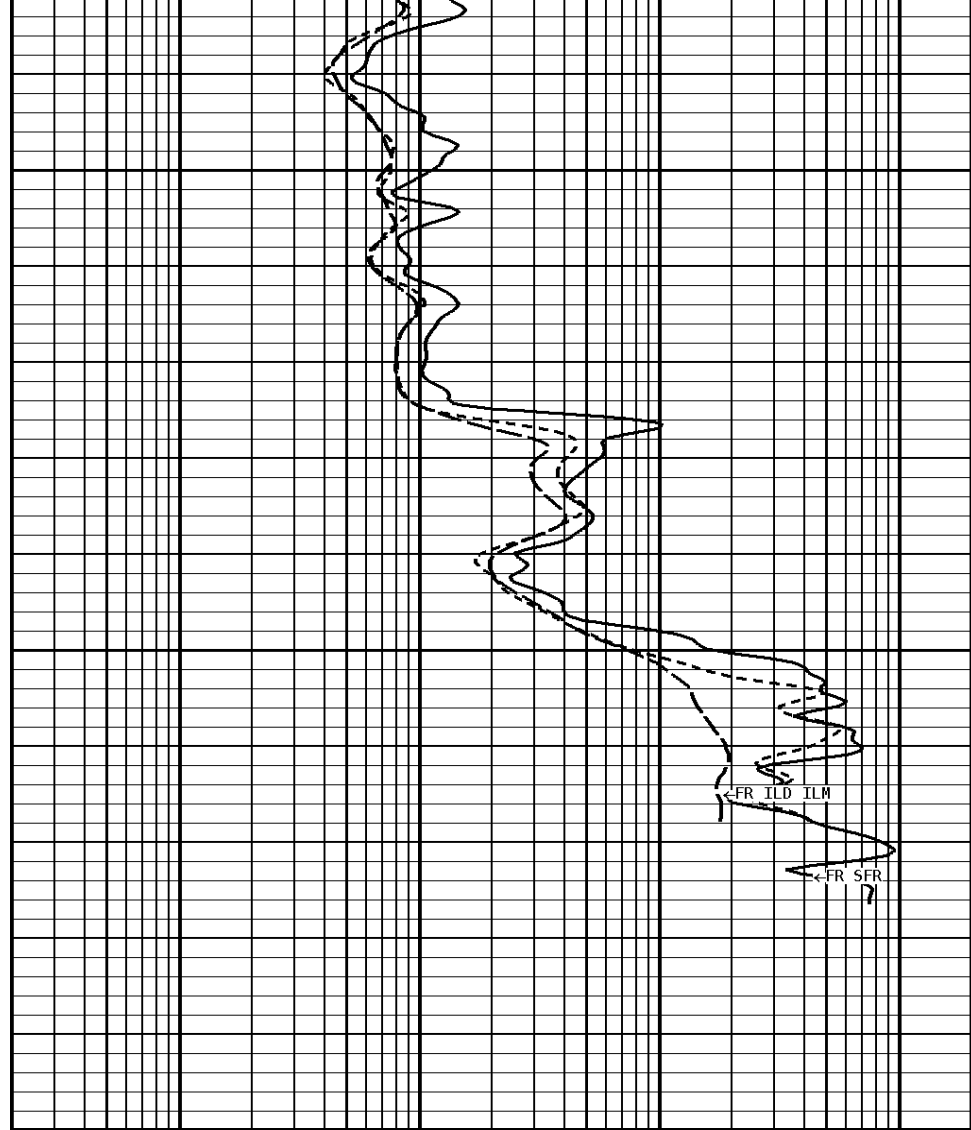




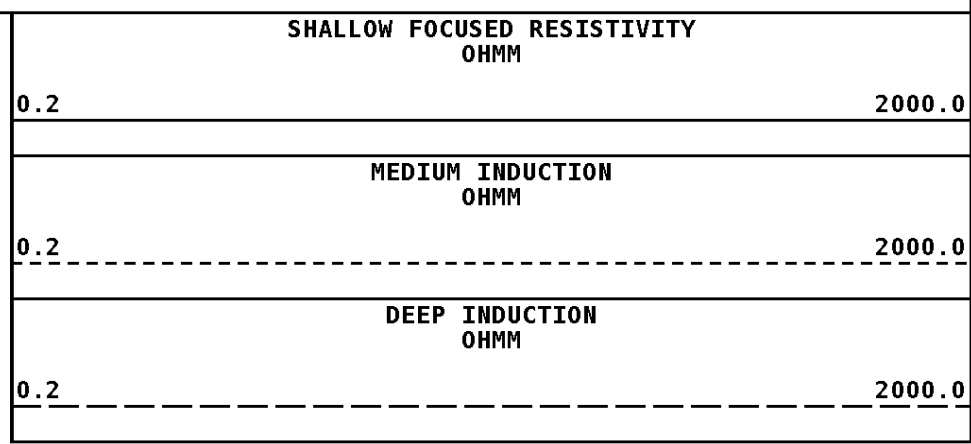
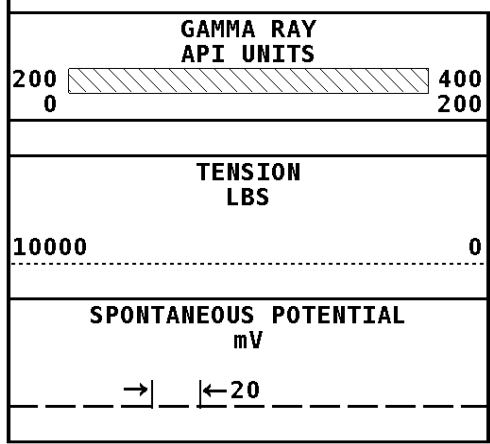
File #1.1.4

800

878



1:240 REPEAT SECTION



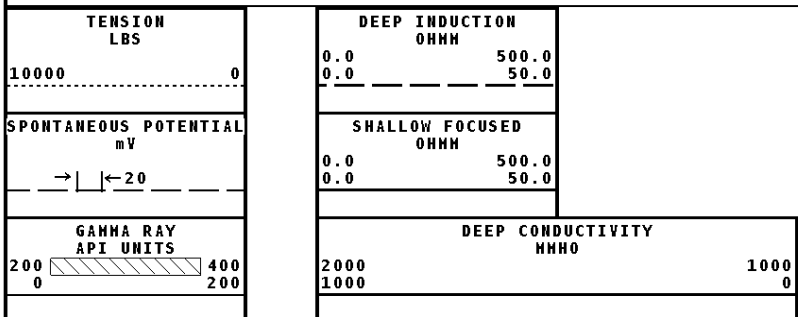
*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet	
Drill Bit Size	6.750 in
Casing Diameter	2.875 in
BHT Depth	878.000 ft
Borehole Temperature	80.0 degF
Temperature Gradient	1.00 DFHF
Resistivity Of Mud	10.000 ohm/m
Resistivity Of Mud Temperature	70.00 degF

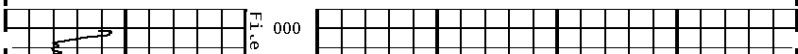
*** Calibration Summary ***

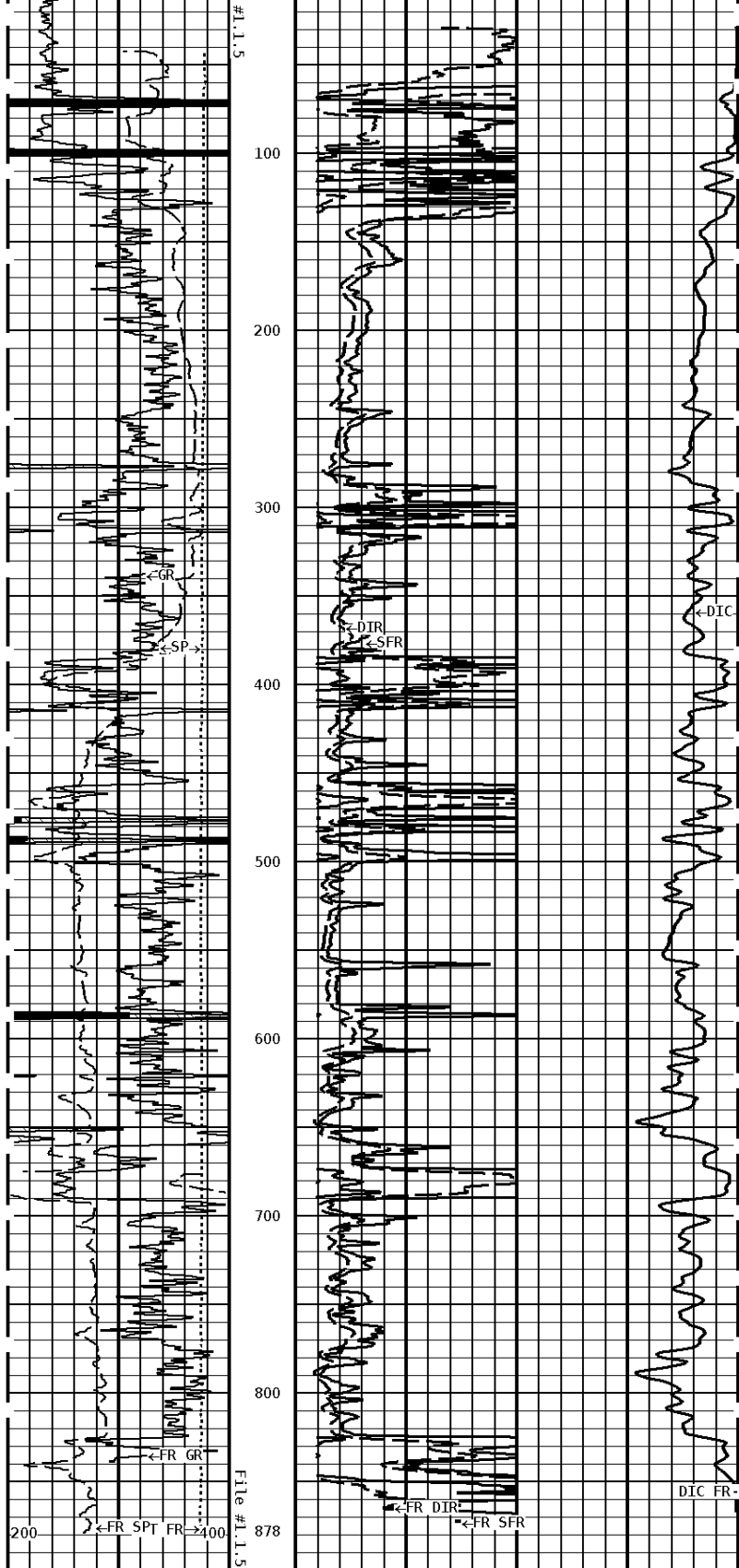
Shop Calibration					
GRT-B					
Performed : 15-Mar-2013			Time : 11:26		
Sensor Suite : GR-GR5			ID : GRT-BC-41		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig	GRAPI	
	54	360	175		
Shop Calibration					
PIT-CA					
Performed : 21-NOV-2012			Time : 14:36		
Sensor Suite : P-IND-T			ID : PIT-AB-005		
Medium					
	Measured		Calibrated		Units
	R	X	R	X	
Air	130351	131011	-0.2	-0.2	MMHOS
Zero	131064	131068	26.7	1.9	MMHOS
Reference	250174	250556	5026.7	5001.9	MMHOS
Loop	128308	218141	3560.1	3731.6	MMHOS
Sonde Error			-3.6	3.0	MMHOS
Cond			5026.7	5001.9	MMHOS
Deep					
	Measured		Calibrated		Units
	R	X	R	X	
Air	128932	131135	-0.1	-0.0	MMHOS
Zero	131084	131072	43.9	-7.2	MMHOS
Reference	233274	233952	2043.9	1992.8	MMHOS
Loop	126596	219999	1681.7	1773.2	MMHOS
Sonde Error			-4.1	-7.7	MMHOS
Cond			2043.9	1992.8	MMHOS
Temperature					
	Measured		Calibrated		Units
	Low	High	Low	High	
	16980.0	56920.0	70.0	350.0	DEGF
Performed : 21-Nov-2012			Time : 14:39		
Sensor Suite : SFL			ID : PIT-AB-005		
Internal					
	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
Im	32765.9	49467.5	0.0	7028.0	uA
Ib	32769.2	48720.1	0.0	1750.0	mA
MOM1	32713.4	56534.1	0.0	175.0	mV
Equivalent SFL				43.97	OHMM
Performed : 21-NOV-2012			Time : 14:40		
Sensor Suite : P-SP			ID : PIT-AB-005		
Internal					
	Measured		Calibrated		Units
	Zero	Reference	Zero	Reference	
	32768.6	58921.2	0.0	1000.0	mV

Well File: rfp-hol-1-22a-1-stk-apr-25	Scale: 1:1200
Segment: V1.D1.S5 MN	Acquired: 2013-04/25 13:07 3.2.0-11401
Reference: 0	Processed: 2013-04/25 13:33 3.2.0-11401

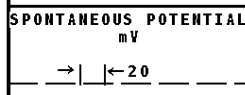


1:1200 MAIN SECTION





1:1200 MAIN SECTION



1.0000 0

0.0 50.0



Tucker
ENERGY SERVICES

Company: RUNNING FOXES PETROLEUM

Well: HOLEMAN #1-22A-1

Location: 165' FNL & 165' FEL

Logged: 04-25-2013

K.B. Elev: 0.0 Ft