

Tucker

ENERGY SERVICES

PHASED INDUCTION SHALLOW FOCUS SP LOG

Company RUNNING FOXES PETROLEUM Well NEW HORIZONS #4-35A-4		File No : TUL-58034
Field BOURBON		Company : RUNNING FOXES PETROLEUM INC.
County KANSAS		Well : NEW HORIZONS #4-35A-4
State USA		Field : BOURBON
Country 15-011-24258		County : KANSAS
API No. 15-011-24258		State : USA
Location : 495' FNL & 1155' FWL SE NE NW NW		Country : USA
API No : 15-011-24258		API No : 15-011-24258

Permanent Datum:	GL	Elevations:	KB 0.00	Services:	CNT
Drilling Measured From:	GL	DF	0.00	LDT	
Log Measured From:	GL	GL	1021.00	PIT	
Above Permanent Datum:	0.00 Ft				
Date	05-17-2013				
Run Number	1				
Depth--Driller	761.0	Ft			
Depth--Logger	748.0	Ft			
First Reading	748.0	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				
RMF@Measured Temp.	5.000	@ 70 F			
RMF@Measured Temp	4.300	@ 70 F			
RMF@Measured Temp.	5.800	@ 70 F			
Source RMF/RMC	CALCULATED	CALCULATED			
RM@BHT	4.100	@ 86 F			
Time Circulation Stopped					
Max Recorded Temp.	86	F			
Equipment/Base	127	TULSA			
Recorded By	S. DAVIS				
Witnessed By	K. HODGES				

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	748.00	8.625	20.00	20.00

Run Number	1	
Date	05-17-2013	
Date/Time On Bottom	05-17-2013 11:15 am	
Depth to Fluid	0.0 Ft	
Salinity	0.000 PPM	
RMF@BHT	3.500 @ 86 F	
RMC@BHT	4.800 @ 86 F	

Run Number 1

Comments

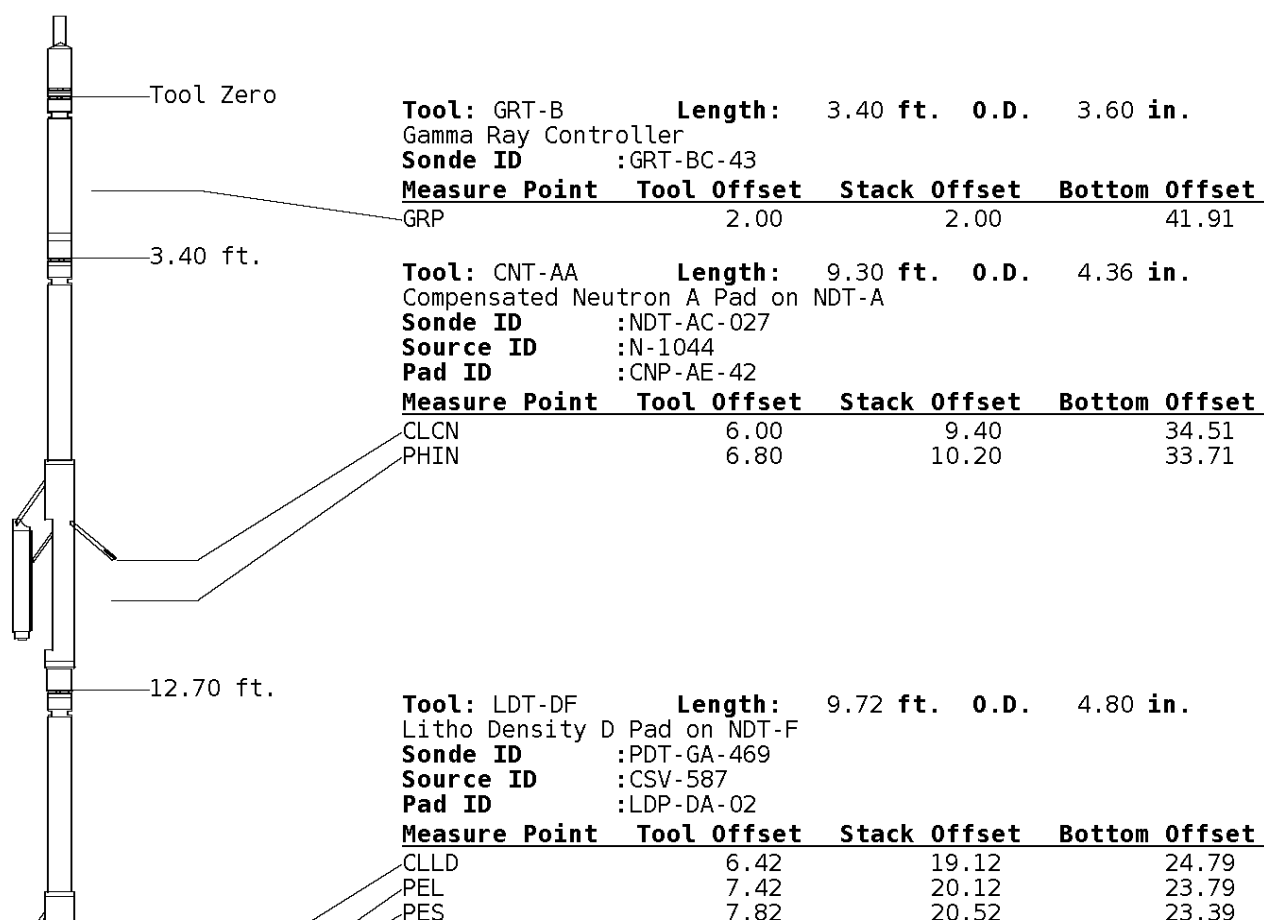
ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED 2.875" PRODUCTION CASING.
 PHIN IS CALIPER CORRECTED.
 SP & SFL CUT OFF @ 120' DUE TO LACK OF FLUID

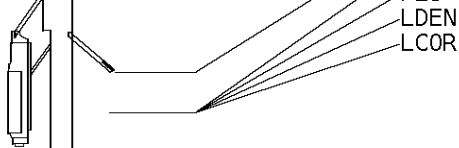
GRT: GRP.
 CNT: PHINLS, CLCNIN.
 LDT: LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 PIT: ILD, ILM, SPU, SFLAEC, CIRD.

OPERATORS:
 J.THOMAS
 J. KLINE

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

22.42 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
Sonde ID :PIT-AB-18
 Phased Dual Induction w/ RM & D

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

LWT 43.91 ft.

Well File: rfp-new-hor-4-35a-4-stk-may17

Scale: 1:600

Segment: V1.D1.S5 MN

Acquired: 2013-05/17 11:25 3.2.0-11535

Reference: 0

Processed: 2013-05/17 11:52 3.2.0-11535

TENSION
LBS

10000

0

DEEP INDUCTION
OHMM

0.0 500.0
0.0 50.0

SPONTANEOUS POTENTIAL
mV

→ | | ← 20

SHALLOW FOCUSED RESISTIVITY
OHMM

0.0 500.0
0.0 50.0

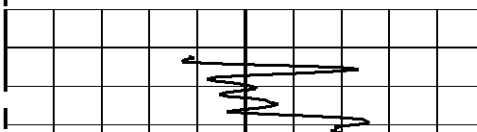
GAMMA RAY
API UNITS

200 0 400 200

DEEP CONDUCTIVITY
MMHO

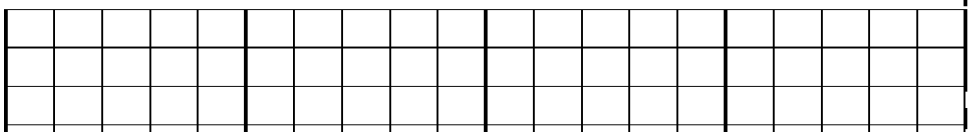
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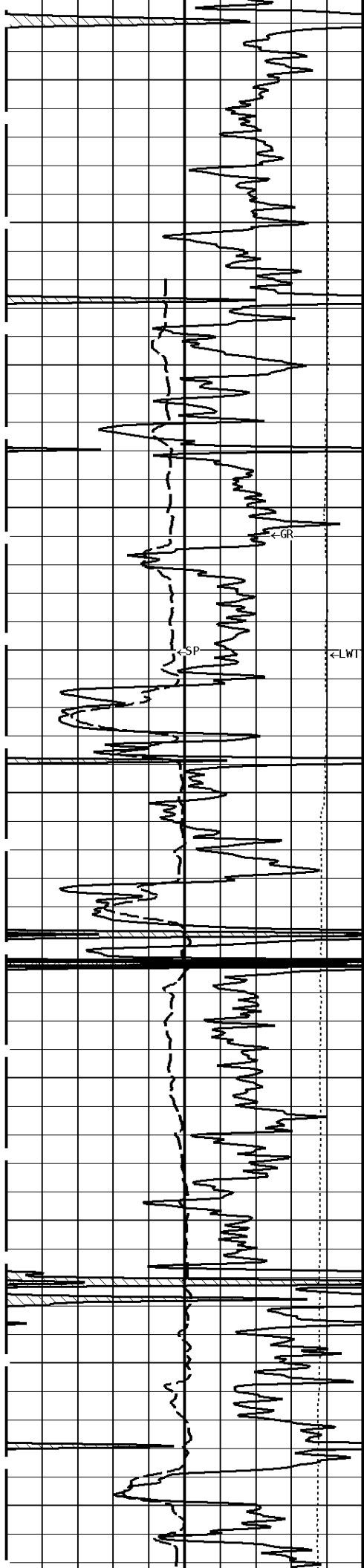
1:600 MAIN SECTION



File #1.1.1

000





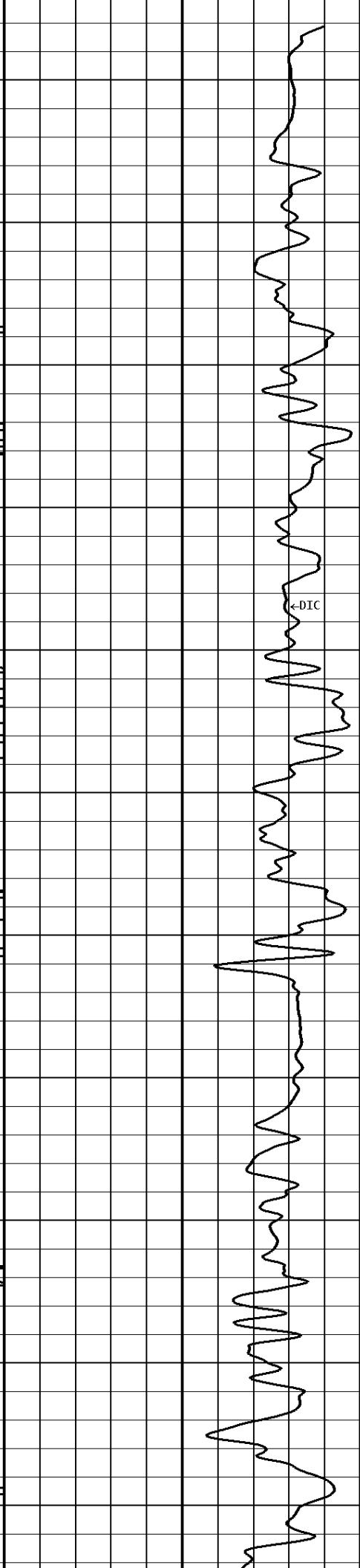
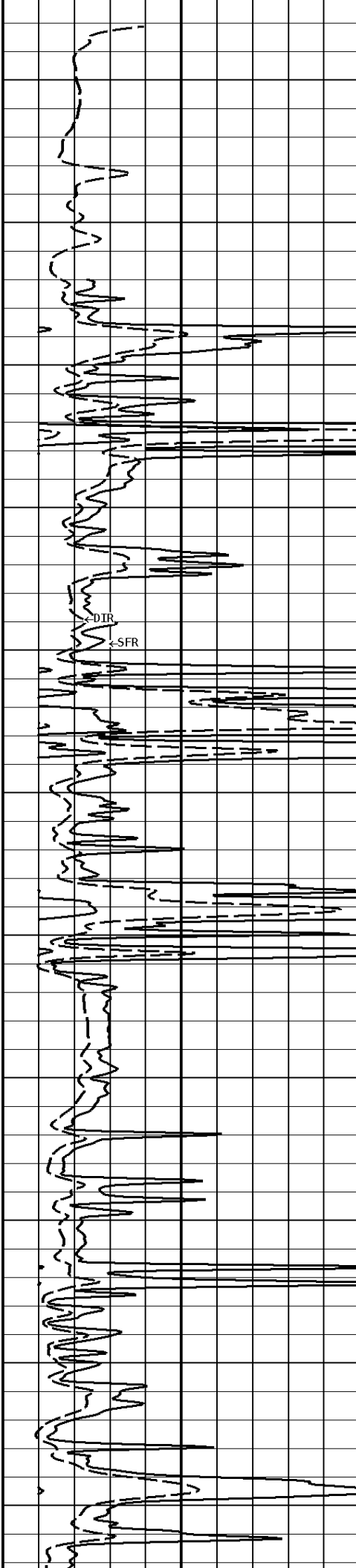
100

200

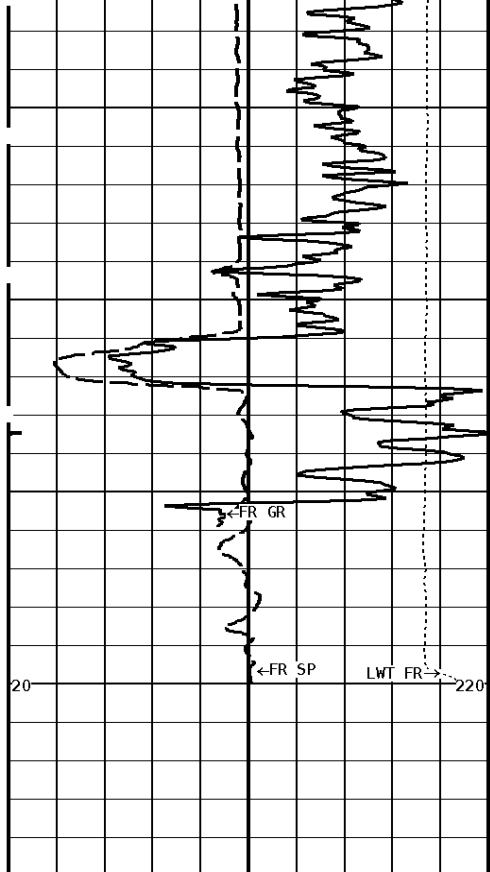
300

400

500



DIC

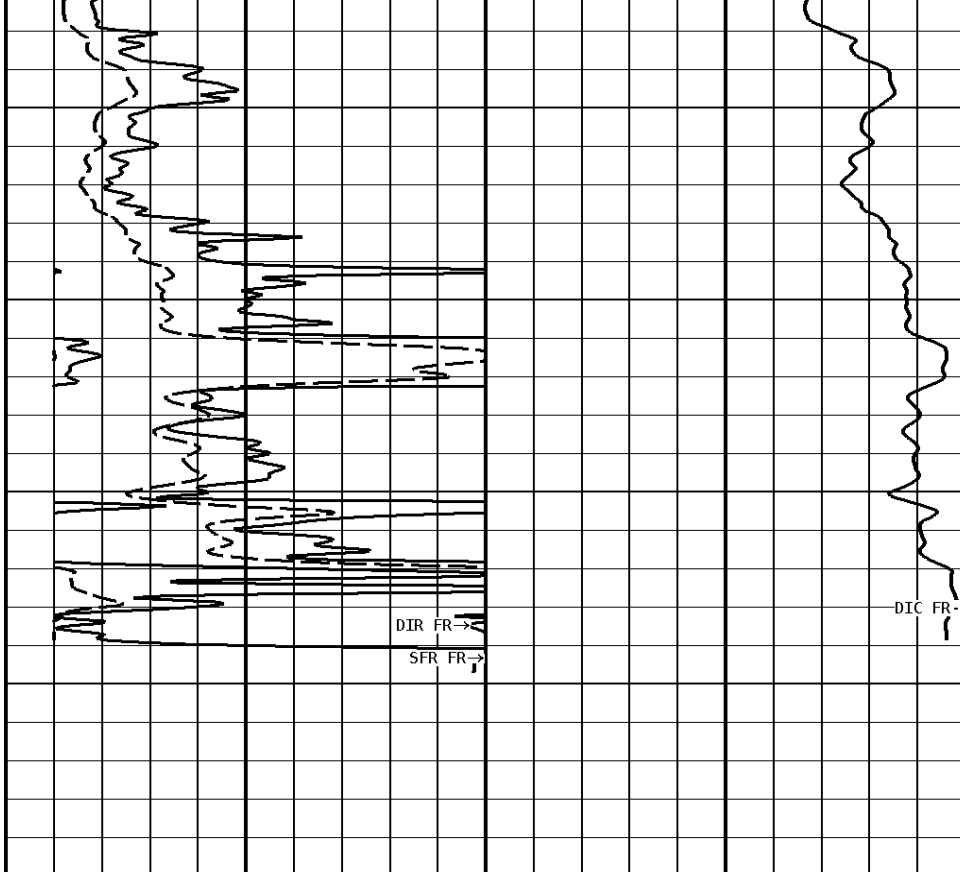
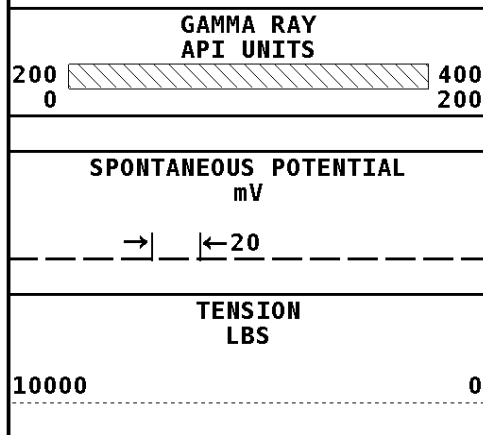


600

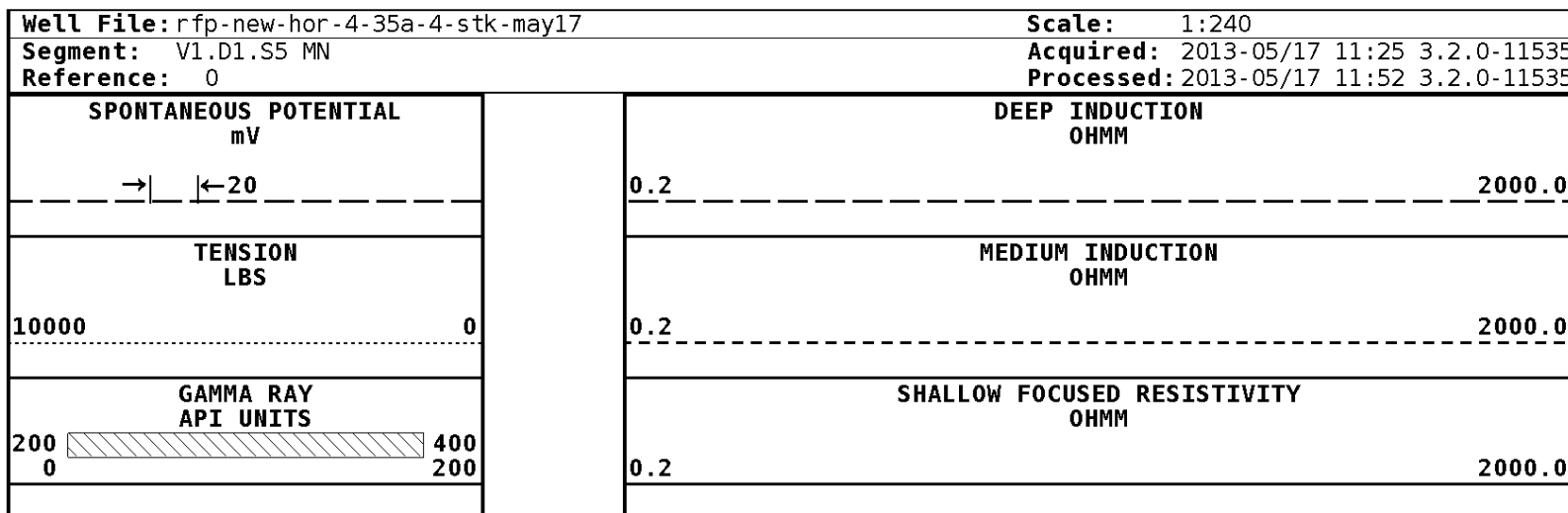
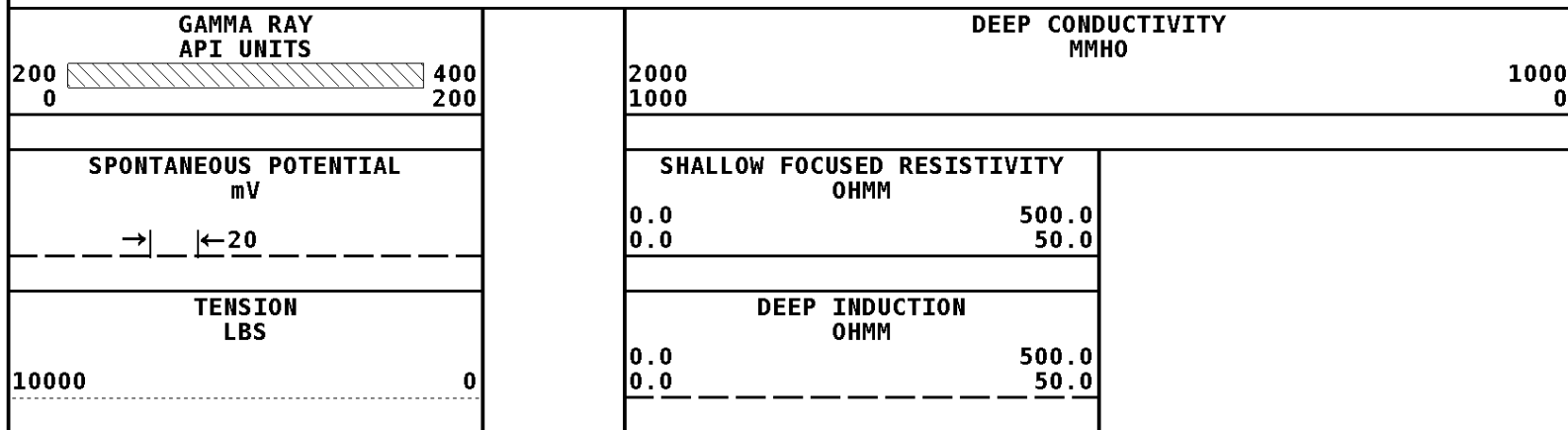
700

748

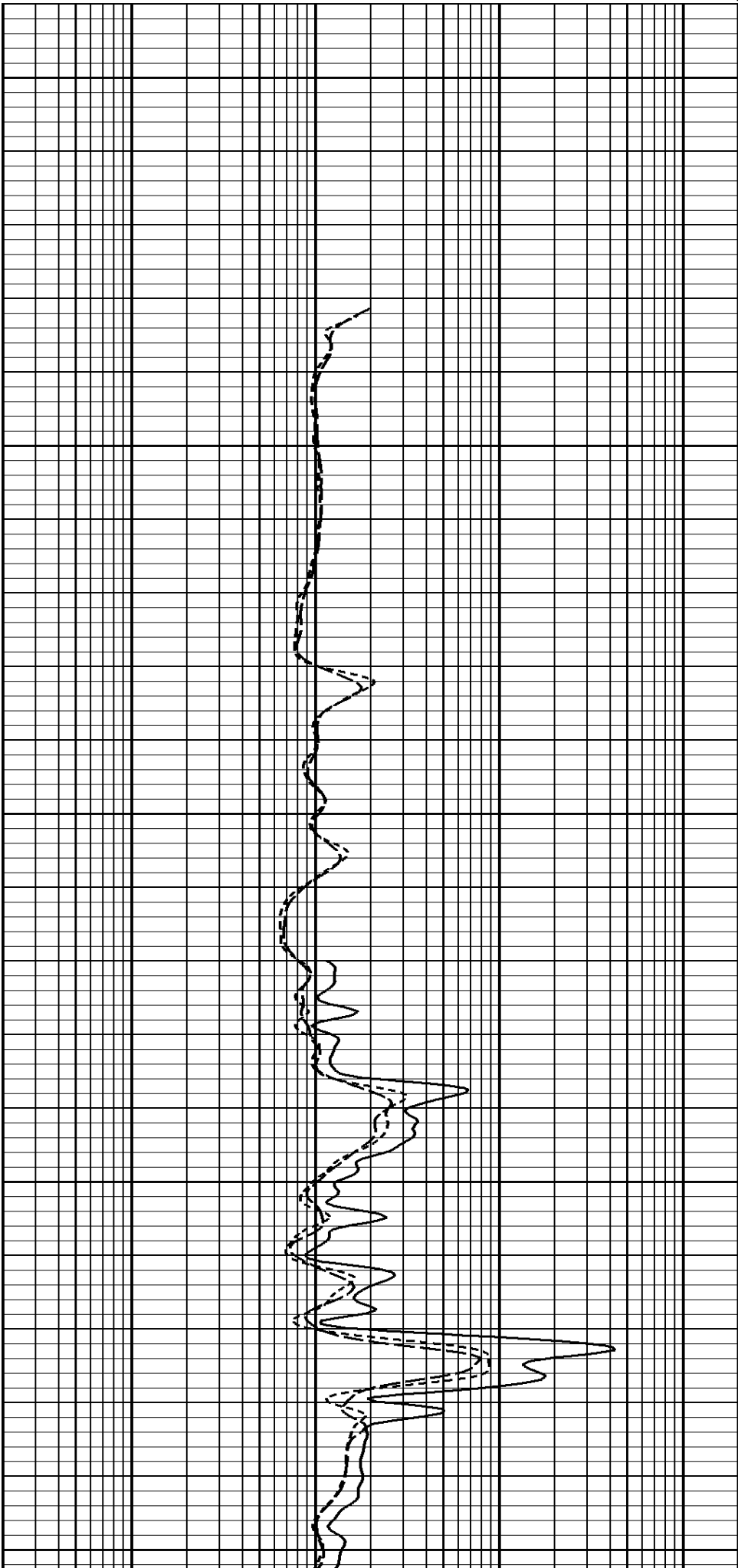
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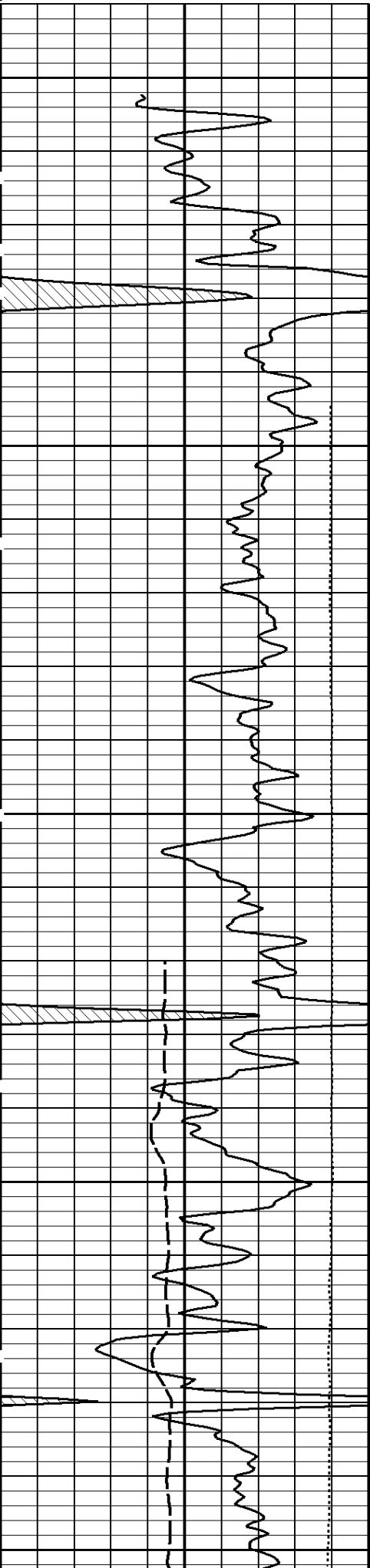
1:240 MAIN SECTION

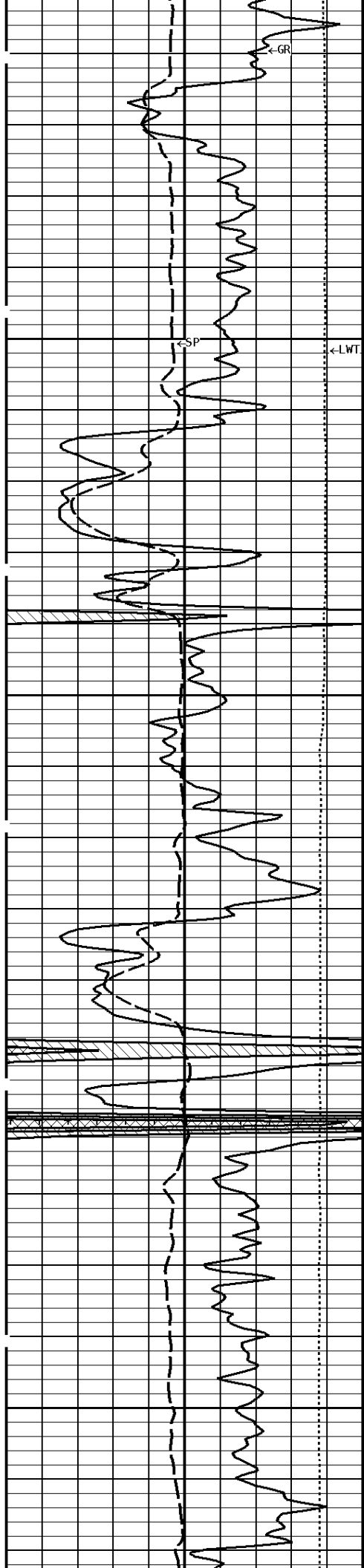


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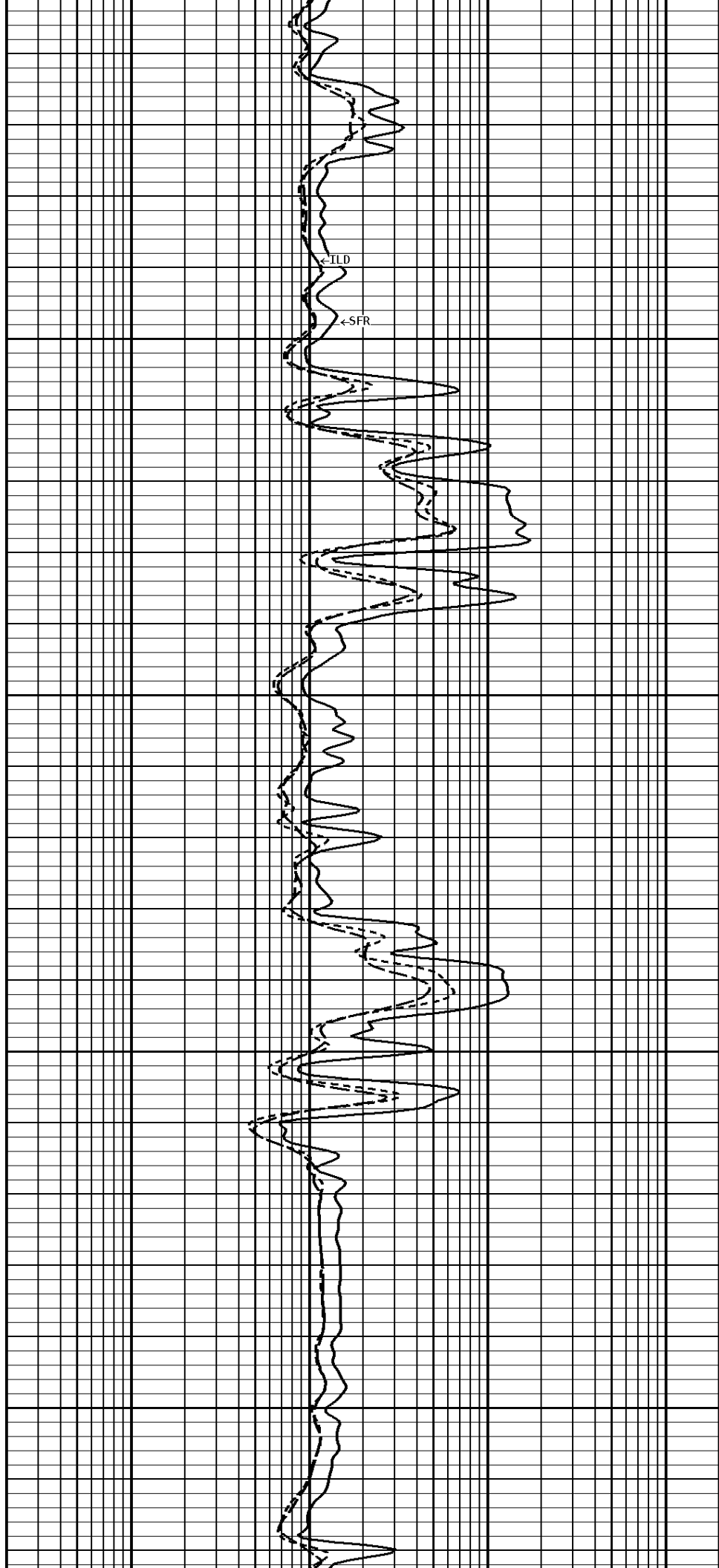
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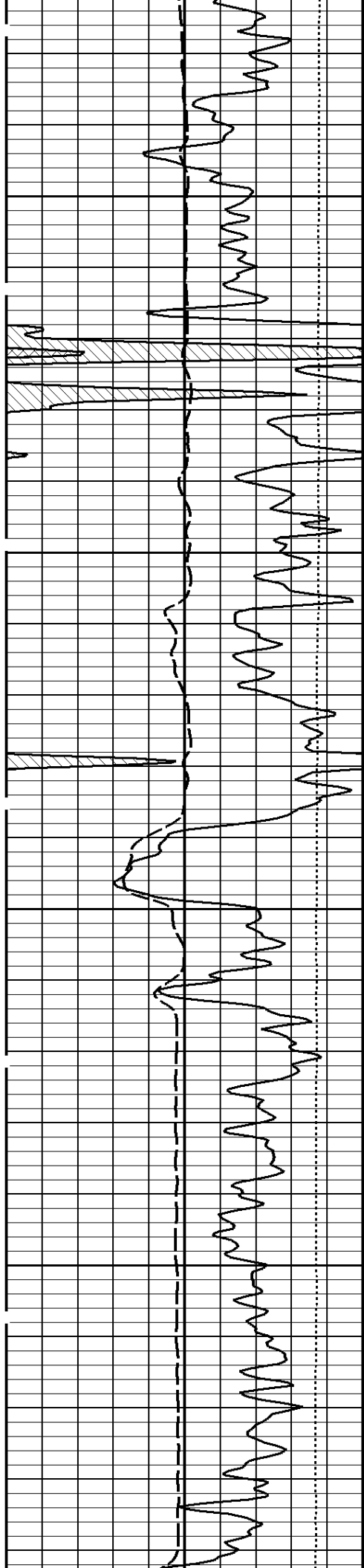




300

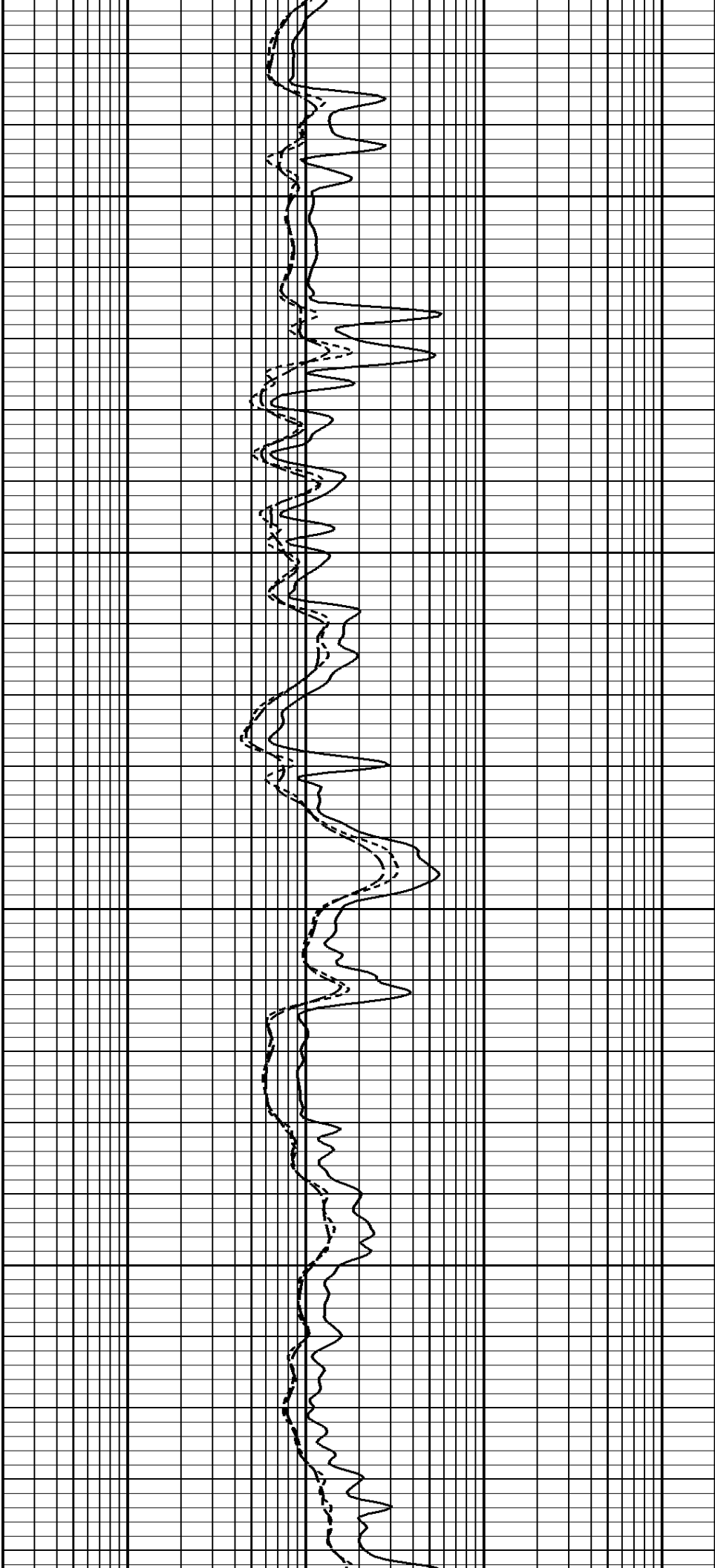
400

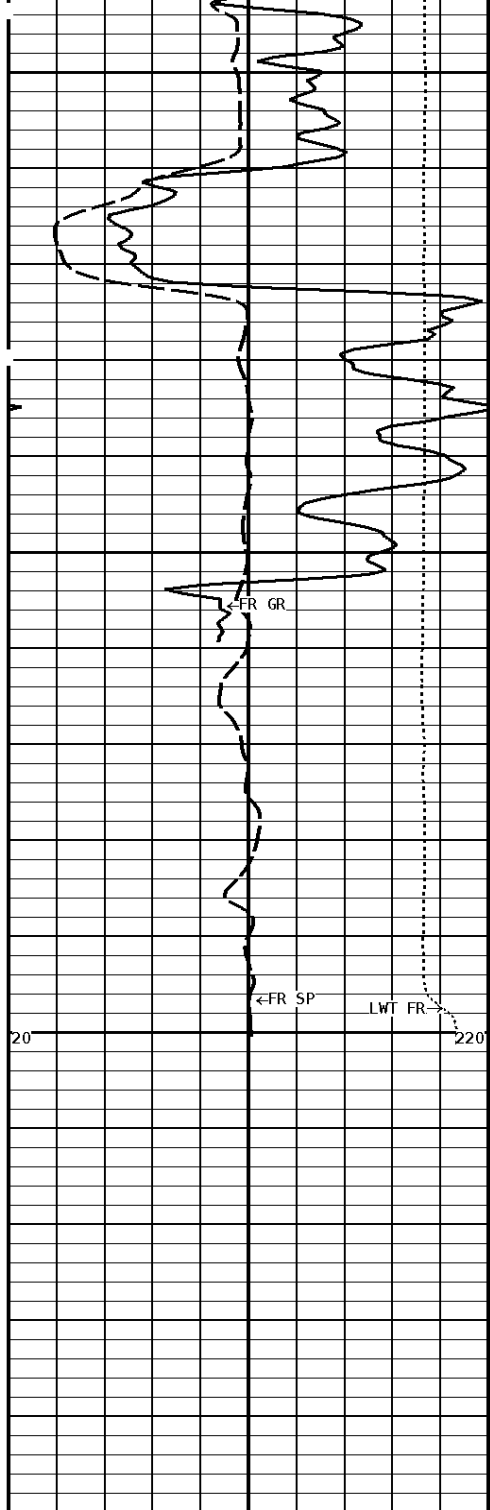




500

600

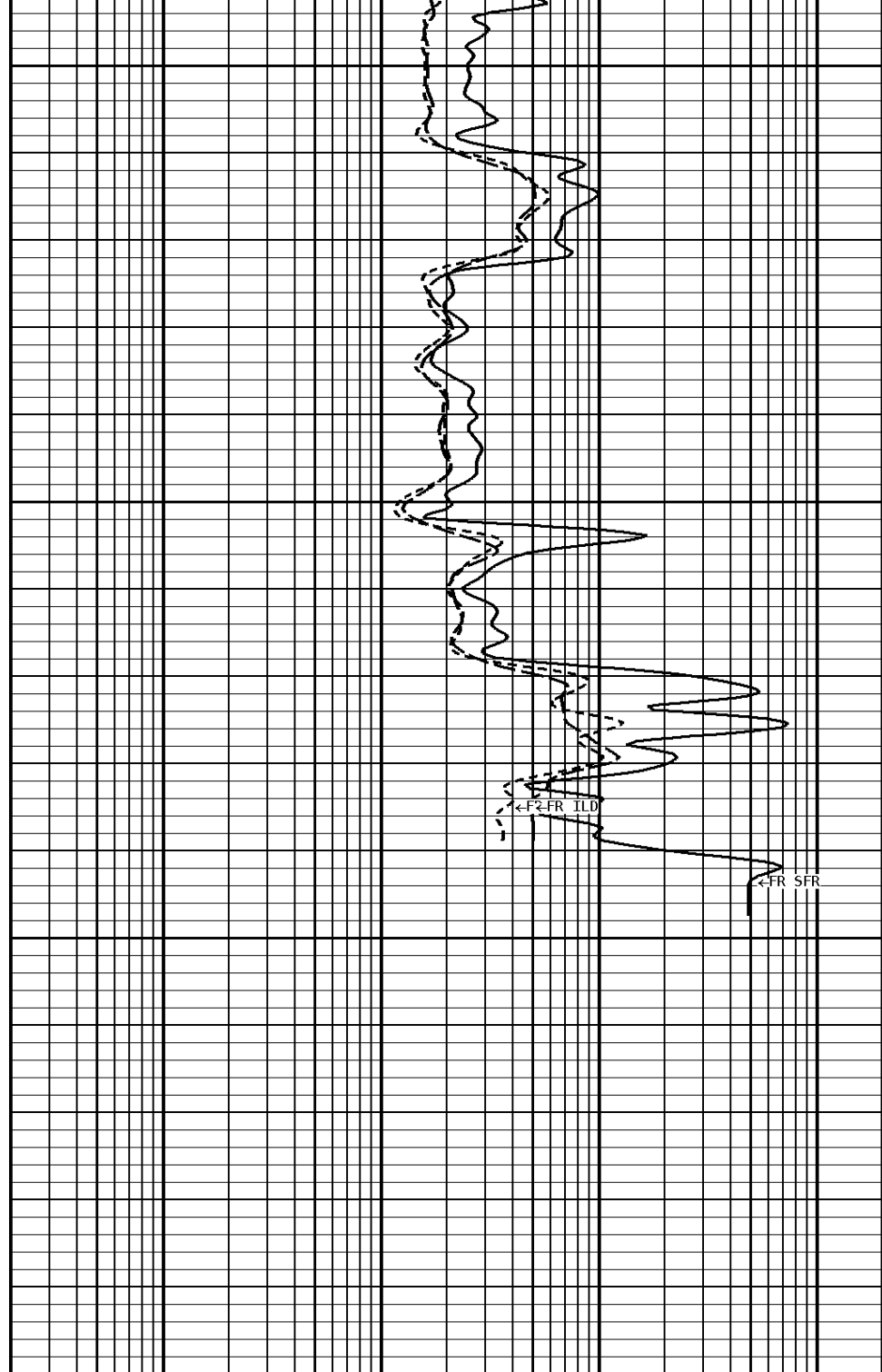




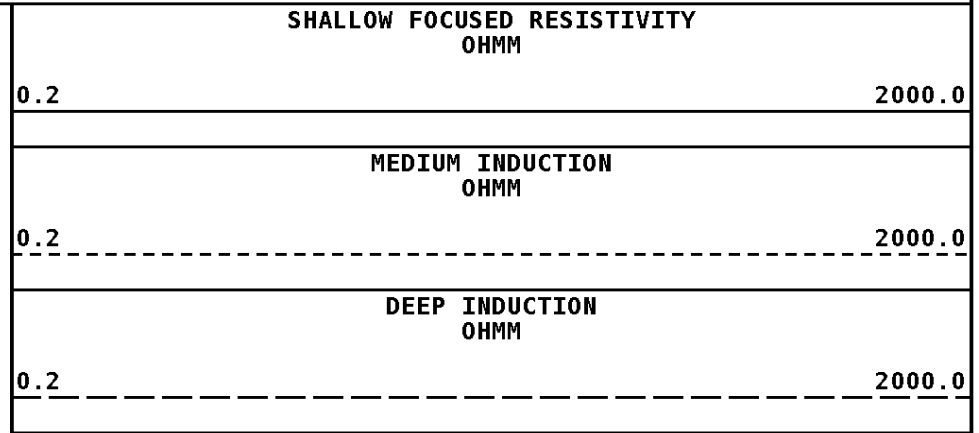
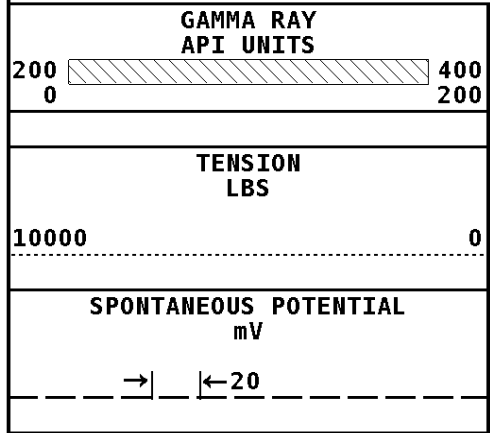
File #1.1.5

700

748



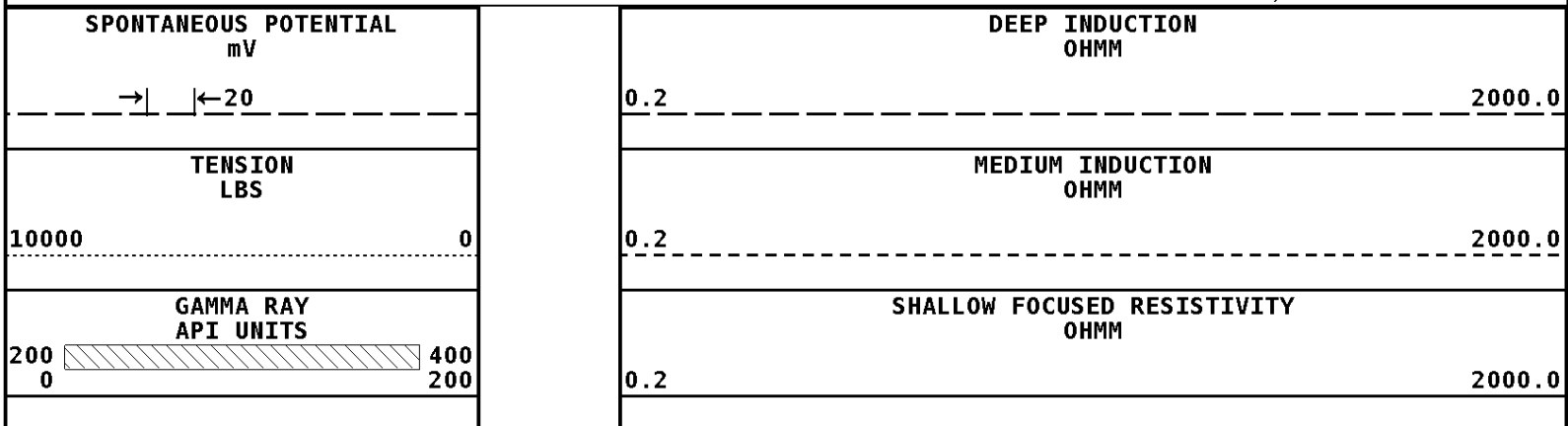
1:240 MAIN SECTION



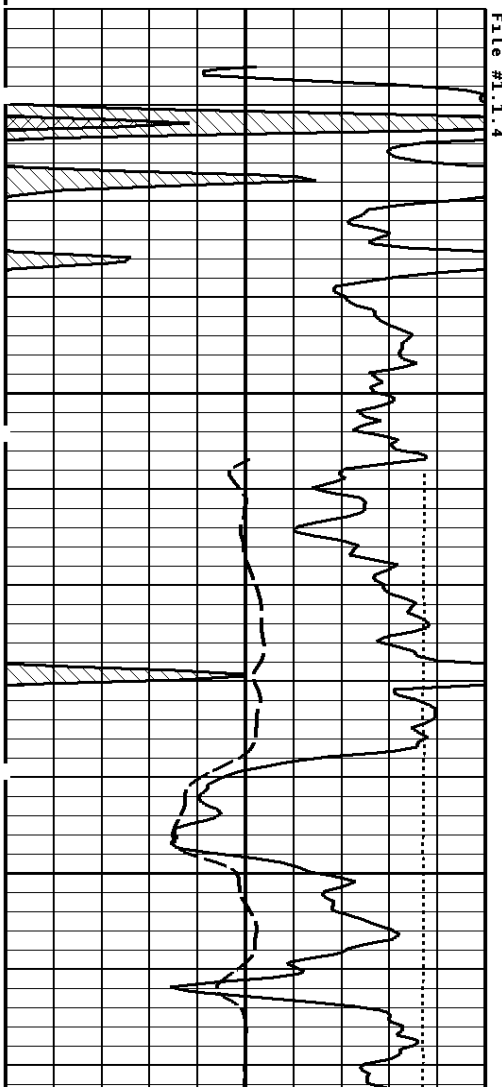
*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet		
Drill Bit Size _____	6.750	in
Casing Diameter _____	4.500	in
BHT Depth _____	748.000	ft
Borehole Temperature _____	86.0	degF
Temperature Gradient _____	1.00	DFHF
Resistivity Of Mud _____	5.000	ohm/m
Resistivity Of Mud Temperature _____	70.00	degF

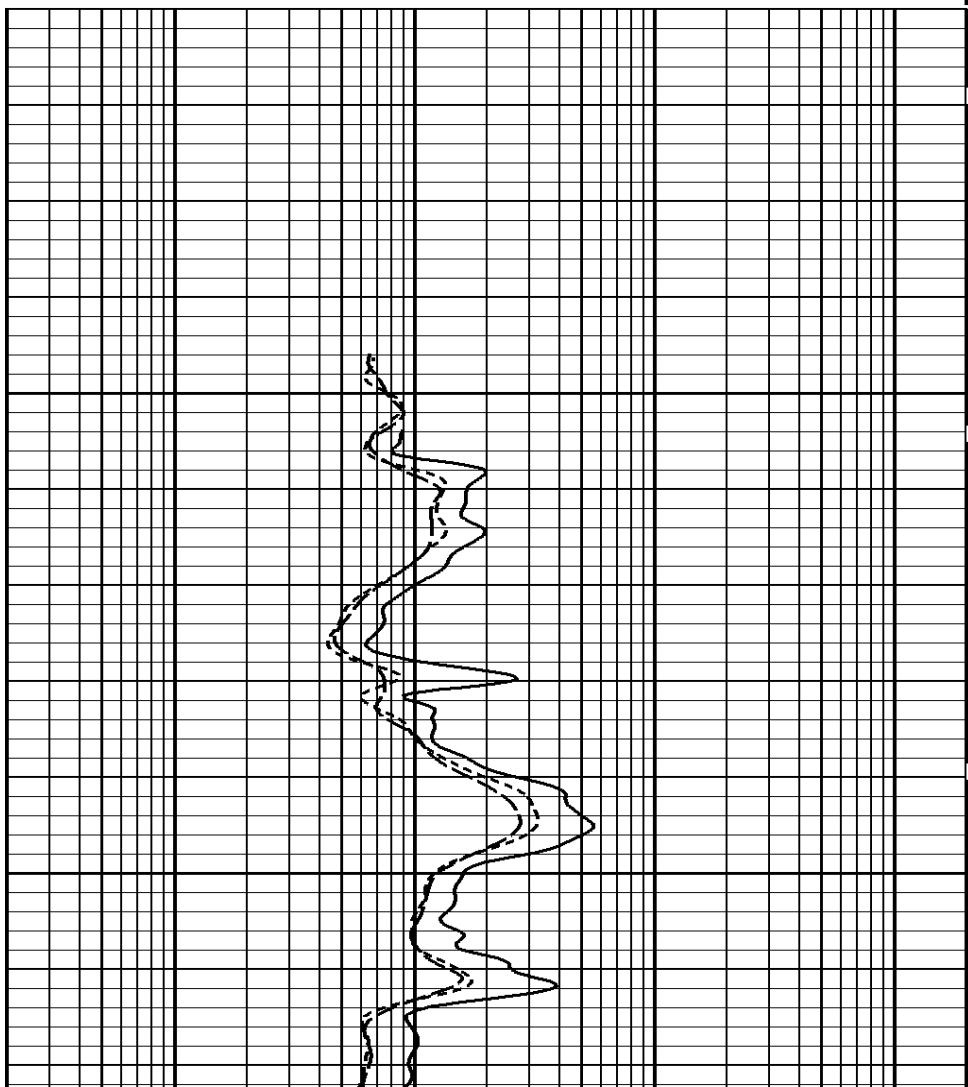
Well File: rfp-new-hor-4-35a-4-stk-may17	Scale: 1:240
Segment: V1.D1.S4 RP	Acquired: 2013-05/17 11:13 3.2.0-11535
Reference: 0	Processed: 2013-05/17 11:52 3.2.0-11535

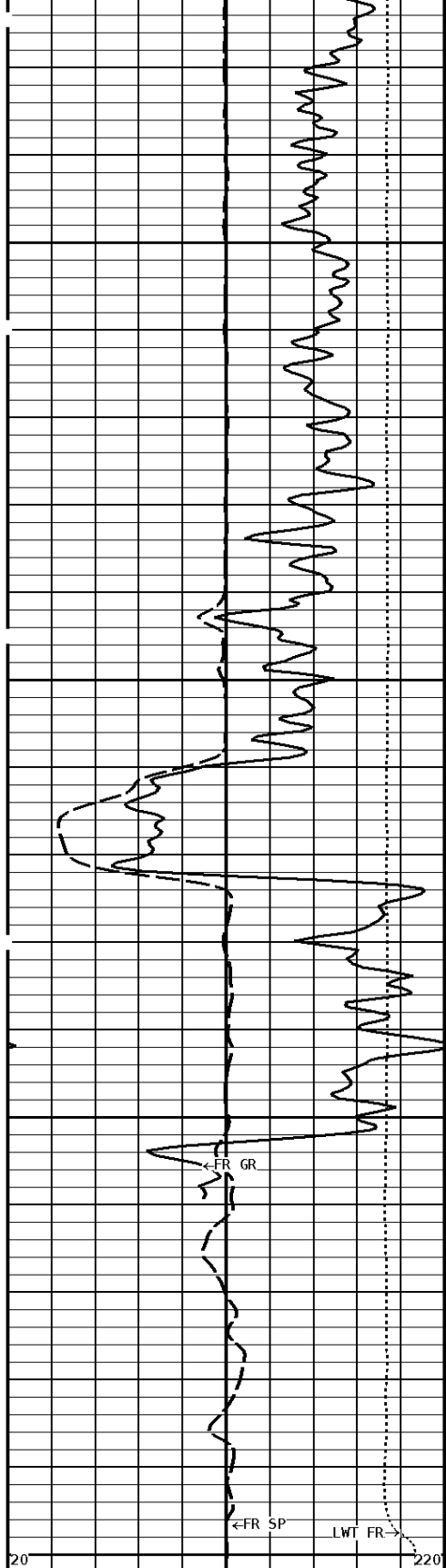


1:240 REPEAT SECTION



500



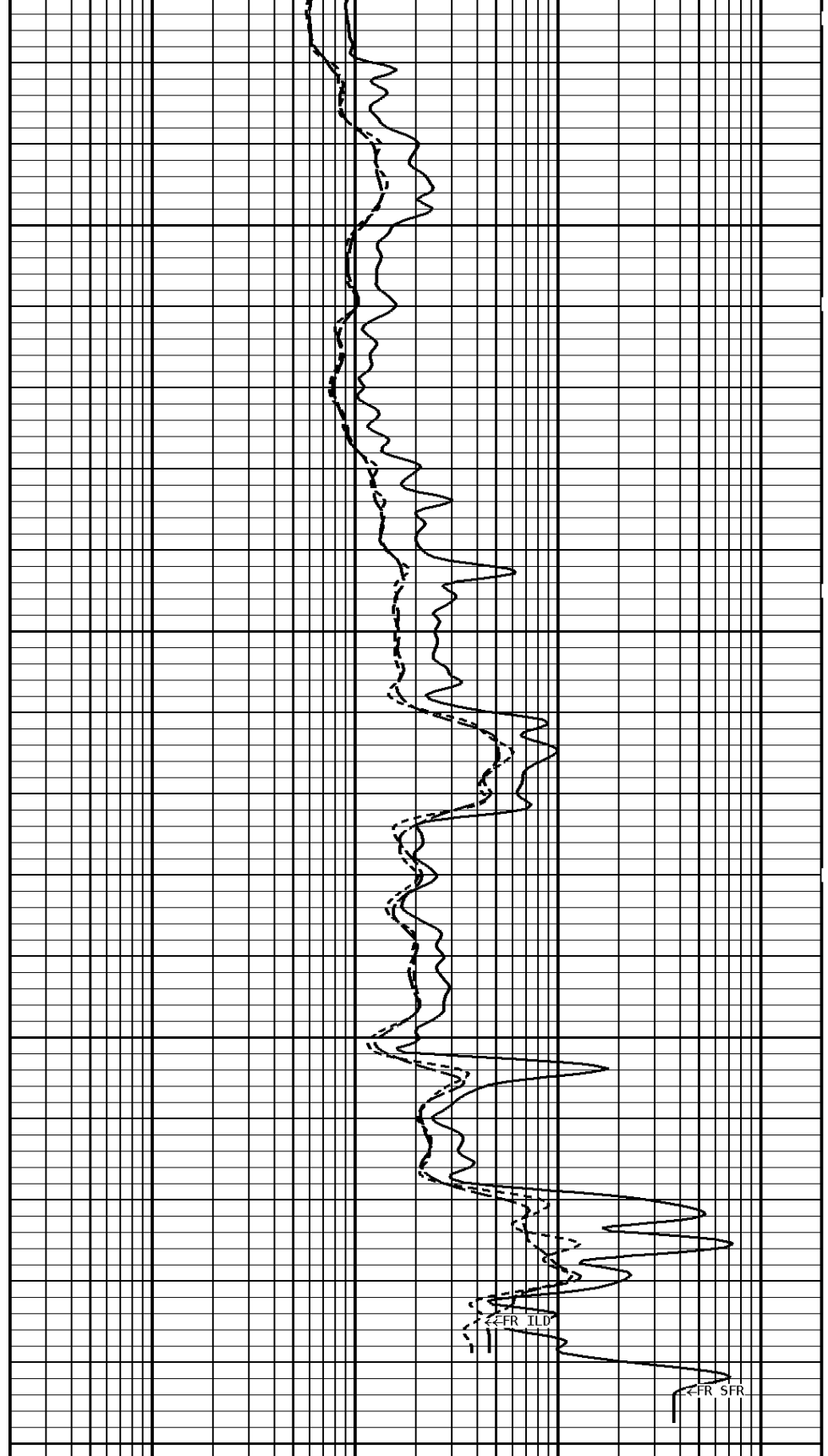


File

600

700

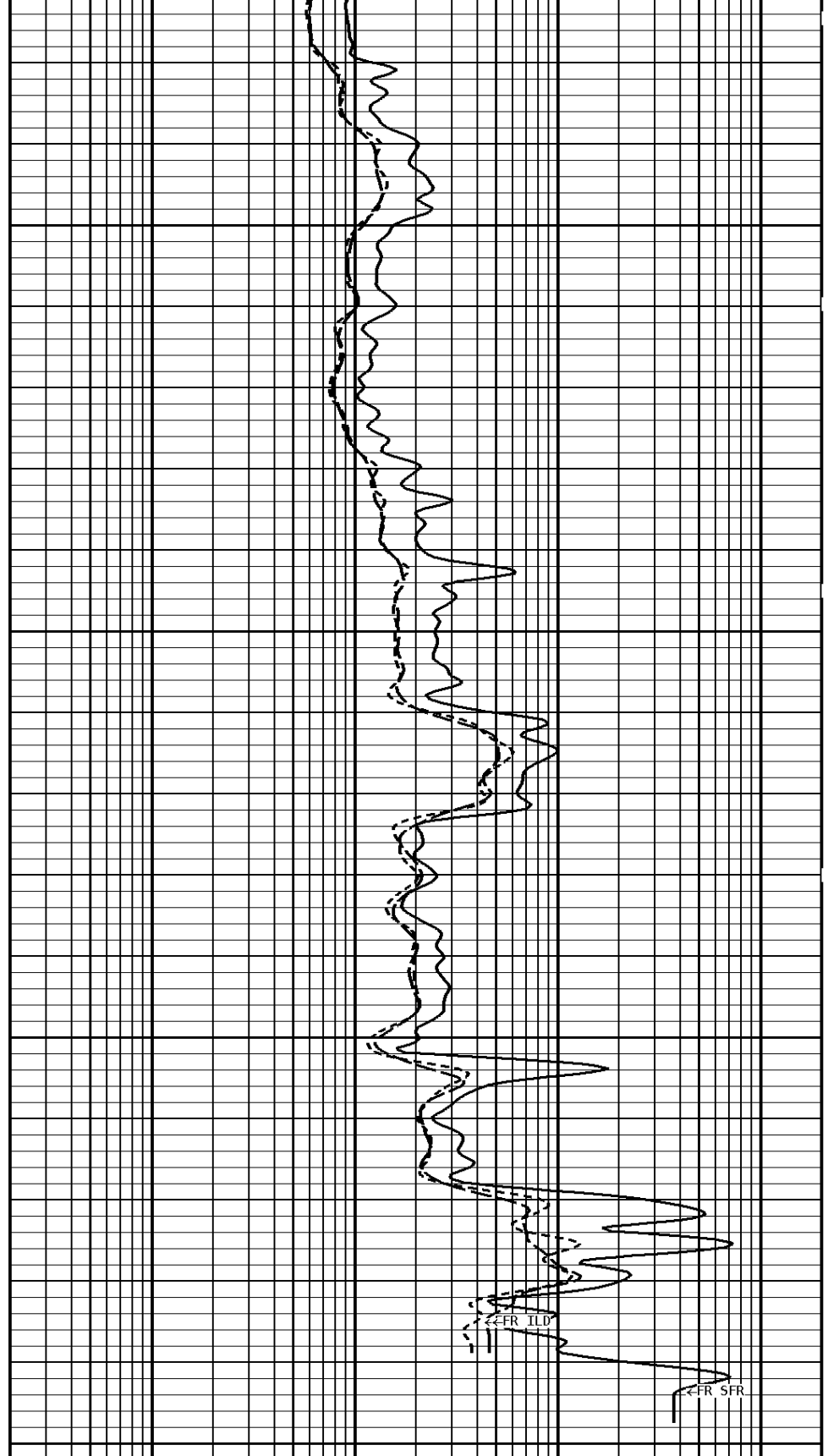
748



600

700

748



600

700

748

1:240 REPEAT SECTION

GAMMA RAY API UNITS	
200	400
0	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		4.500	in		
BHT Depth		748.000	ft		
Borehole Temperature		86.0	degF		
Temperature Gradient		1.00	DFHF		
Resistivity Of Mud		5.000	ohm/m		
Resistivity Of Mud Temperature		70.00	degF		

* Calibration Summary *

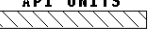
Shop Calibration					
GRT-B					
Performed : 28-APR-2013			Time : 13:26		
Sensor Suite : GR-GR5			ID : GRT-BC-43		
	Measured		Units	Calibrated	
	Background	Jig		Jig	Units
GR	46	309	CPS	175	GRAPI

Shop Calibration					
PIT-CA					
Performed : 19-NOV-2012			Time : 11:34		
Sensor Suite : P-IND-T			ID : PIT-AB-18		
Medium					
	Measured		Calibrated		
	R	X	R	X	Units
Air	131374	130016	3.0	3.0	MMHOS
Zero	131066	131065	-8.7	43.2	MMHOS
Reference	252769	252602	4991.3	5043.2	MMHOS
Loop	128981	217810	3516.5	3713.1	MMHOS
Sonde Error			-2.1	-3.9	MMHOS
Cond			4991.3	5043.2	MMHOS
Deep					
	Measured		Calibrated		
	R	X	R	X	Units
Air	129398	131249	0.0	0.0	MMHOS
Zero	131083	131069	32.1	-5.1	MMHOS
Reference	230982	232061	2032.1	1994.9	MMHOS
Loop	126476	217376	1647.1	1764.1	MMHOS
Sonde Error			-3.1	0.0	MMHOS
Cond			2032.1	1994.9	MMHOS
Temperature					
	Measured		Calibrated		
	Low	High	Low	High	Units
	16980.0	56920.0	70.0	350.0	DEGF

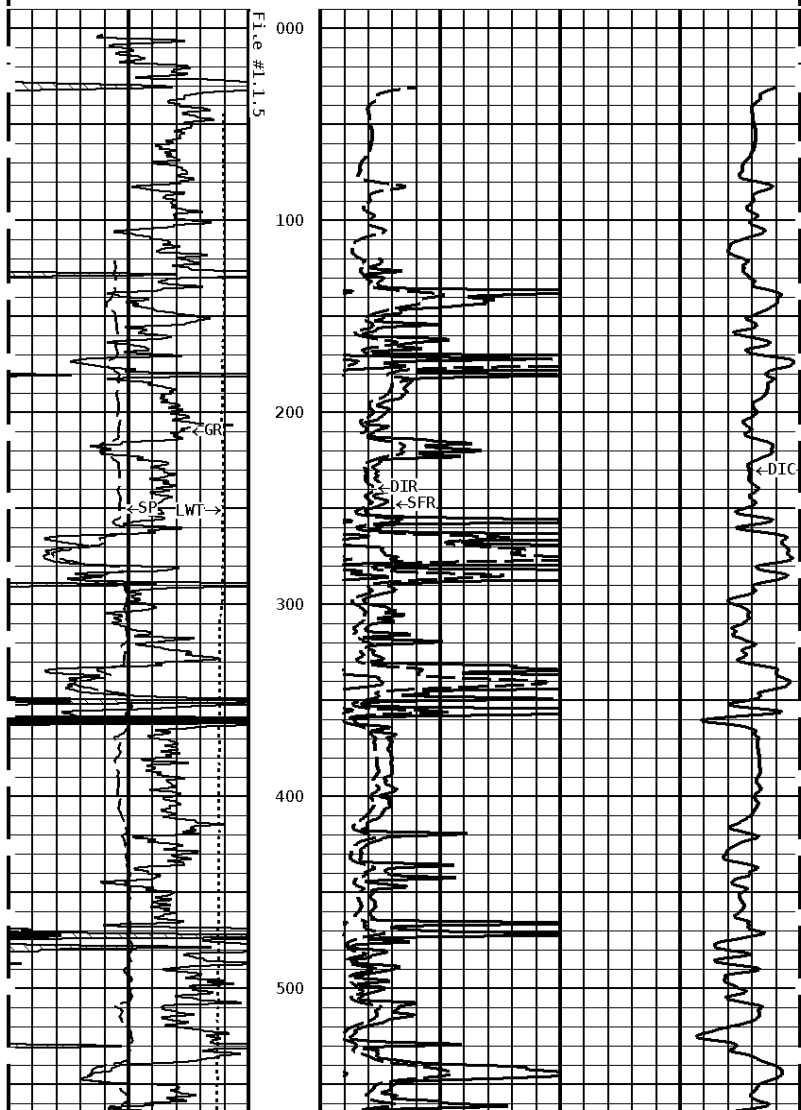
Performed : 19-Nov-2012			Time : 11:23		
Sensor Suite : SEI			ID : PIT AB 18		

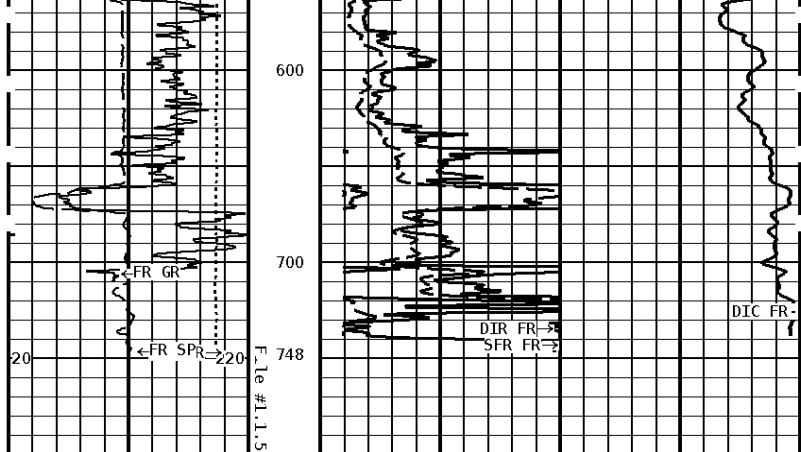
Sensor Suite : SFL			ID : PIT-AB-18		
			Internal		
	Measured		Calibrated		
	Zero	Reference	Zero	Reference	Units
Im	32771.0	50298.7	0.0	7028.0	uA
Ib	32767.7	50023.7	0.0	1750.0	mA
MOM1	32826.7	56900.7	0.0	175.0	mV
Equivalent SFL				43.97	OHMM
Performed : 19-Nov-2012			Time : 11:24		
Sensor Suite : P-SP			ID : PIT-AB-18		
			Internal		
	Measured		Calibrated		
	Zero	Reference	Zero	Reference	Units
	32791.2	58995.1	0.0	1000.0	mV

Well File: rfp-new-hor-4-35a-4-stk-may17	Scale: 1:1200
Segment: V1.D1.S5 MN	Acquired: 2013-05/17 11:25 3.2.0-11535
Reference: 0	Processed: 2013-05/17 11:52 3.2.0-11535

TENSION LBS 10000 ----- 0		DEEP INDUCTION OHMM 0.0 ----- 500.0 0.0 ----- 50.0	
SPONTANEOUS POTENTIAL mV -----> <----- 20		SHALLOW FOCUSED OHMM 0.0 ----- 500.0 0.0 ----- 50.0	
GAMMA RAY API UNITS 200  400 0 ----- 200		DEEP CONDUCTIVITY MHMO 2000 ----- 1000 1000 ----- 0	

1:1200 MAIN SECTION





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

 Tucker ENERGY SERVICES	Company:	RUNNING FOXES PETROLEUM INC.
	Well:	NEW HORIZONS #4-35A-4
	Location:	495' FNL & 1155' FWL
	Logged:	05-17-2013
	K.B. Elev:	0.0 Ft