



Tucker

ENERGY SERVICES

PHASED INDUCTION

SHALLOW FOCUS SP LOG

Company RUNNING FOX PETROLEUM INC Well HILL 7-22D-1 Field OSAGE County BOURBON State KANSAS Country USA API No. 15-011-24455		File No : TUL-59792 Company : RUNNING FOX PETROLEUM INC Well : HILL 7-22D-1 Field : OSAGE County : BOURBON State : KANSAS Country : USA API No : 15-011-24455	
Location : 2145 FNL & 1640 FEL		LSD : Sect : 22 Twp : 245 Rge : 25E	
Permanent Datum:	GL	Elevations:	
Drilling Measured From:	GL	KB 0.00	Services:
Log Measured From:	GL	DF 0.00	CNT
Above Permanent Datum:	0.00 Ft	GL 871.00	LDT
Date	09-09-2014		PIT
Run Number	1		
Depth--Driller	460.0	Ft	
Depth--Logger	455.0	Ft	
First Reading	455.0	Ft	
Last Reading	20.0	Ft	
Casing--Driller	20.0	Ft	
Casing--Logger	20.0	Ft	
Bit Size	6.500	In	
Casing Size	8.625	In	
Hole Fluid Type	FRESH / NATIVE		
Density	0.0		
Fluid Loss	0.0		
PH/Viscosity	0.0	0.0	
Sample Source	MEASURED		
RMF@Measured Temp.	0.900 @ 70 F		
RMF@Measured Temp	0.900 @ 70 F		
RMF@Measured Temp.	1.200 @ 70 F		
Source RMF/RMC	CALCULATED/CALCULATED		
RM@BHT	0.900 @ 0 F		
Time Circulation Stopped	09-09-2014 7:00 am		
Max Recorded Temp.	0 F		
Equipment/Base	T-126 TULSA		
Recorded By	S.K DAVIS / A. S. DIAHO		
Witnessed By	C. TAYLOR		

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)	Top (Ft)
6.500	455.00	8.625	24.00	20.00	0.00

Run Number	1	
Date	09-09-2014	
Date/Time On Bottom		
Depth to Fluid	0.0 Ft	
Salinity	0.000	
RMF@BHT	0.800 @ 0 F	
RMC@BHT	1.000 @ 0 F	

Run Number 1

Comments

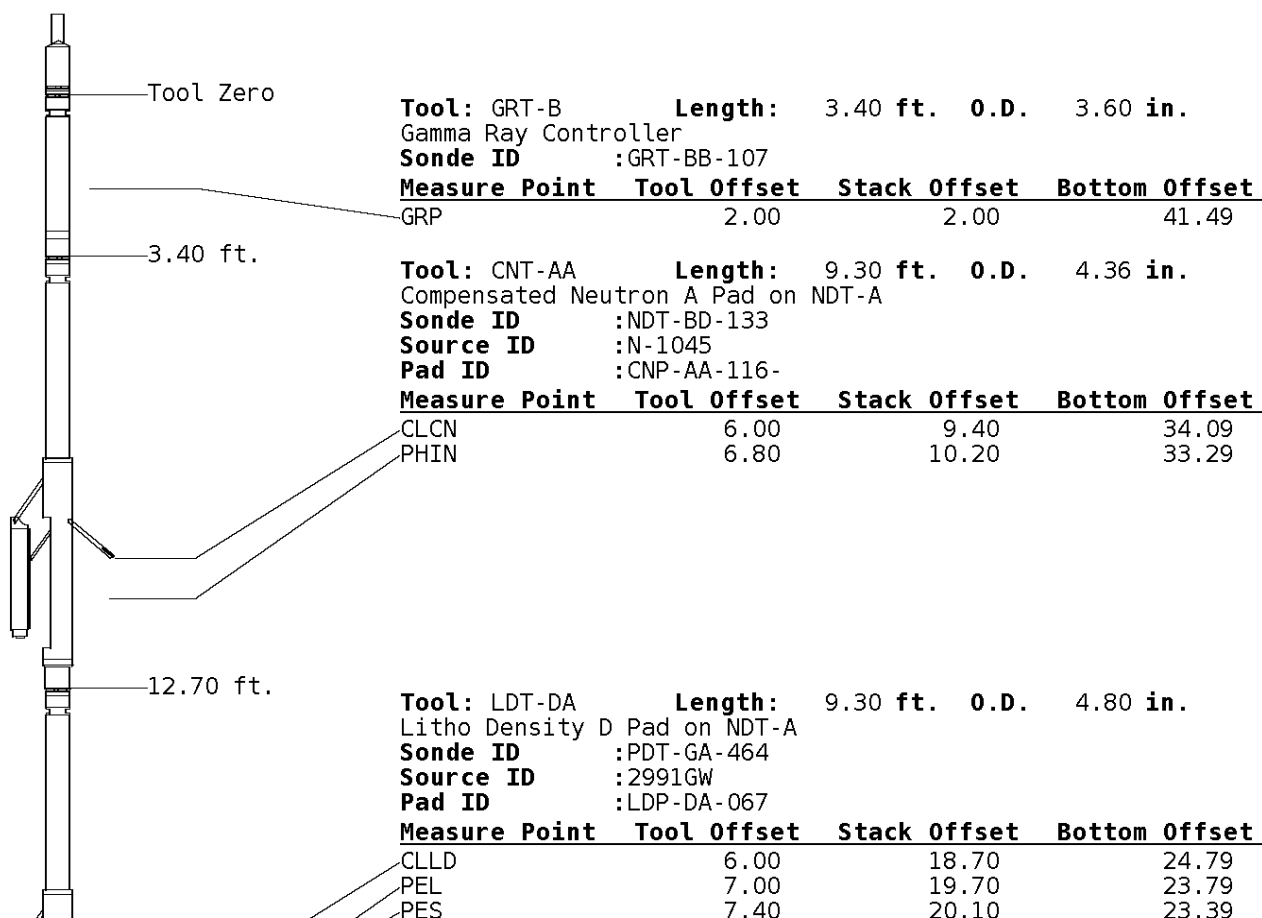
ALL PRESENTATION PER CUSTOMER REQUEST
 GRT,CNT,LDT,PIT RUN IN COMBINATION
 CALIPERS ORIENTED ON X-Y AXIS
 2.71 G/CC USED TO CALCULATE POROSITY
 ANNULAR & BOREHOLE VOLUME CALCULATED USING 2.875 PRODUCTION CASING
 PHIN IS CALIPER CORRECTED

GRT; GRP
 CNT; PHIN, CLCNIN
 LDT; PORL, LCORN, PECLN, LDENN, CLLDIN
 PIT; ILD, ILM, SPU, SFLAEC, CIRD

OPERATORS;
 C. GONZALES
 J. OFFEIGBU

Tool String Schematic

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





7.20 19.90 23.59
7.20 19.90 23.59

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
Sonde ID :PIT-AB-005

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

LWT 43.49 ft.

Well File: rfp-hill-7-22d-1-stk-sept-9

Scale: 1:600 **Format:** DIL-600

Segment: V1.D1.S5 MN

Acquired: 2014-09/09 09:33 3.3.0-12594

Reference: 0

Processed: 2014-09/09 09:52 3.3.0-12594

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

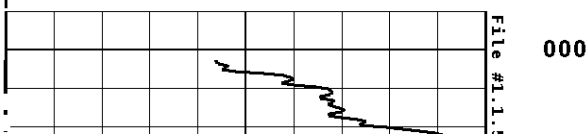
GAMMA RAY
API UNITS

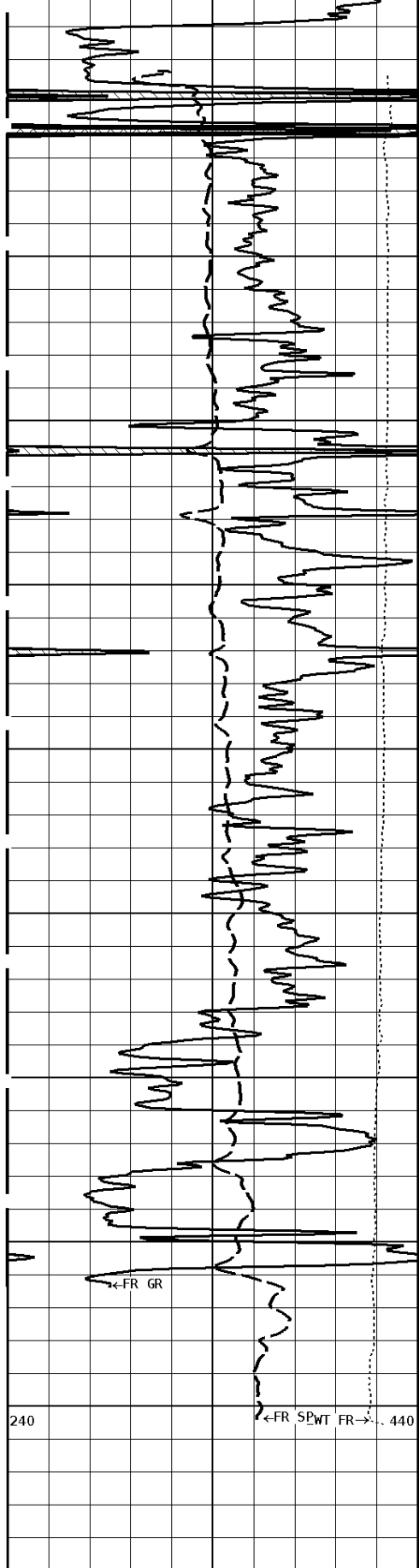
200 400
0 200

DEEP CONDUCTIVITY
MMHO

2000 1000
1000 0

1:600 MAIN SECTION





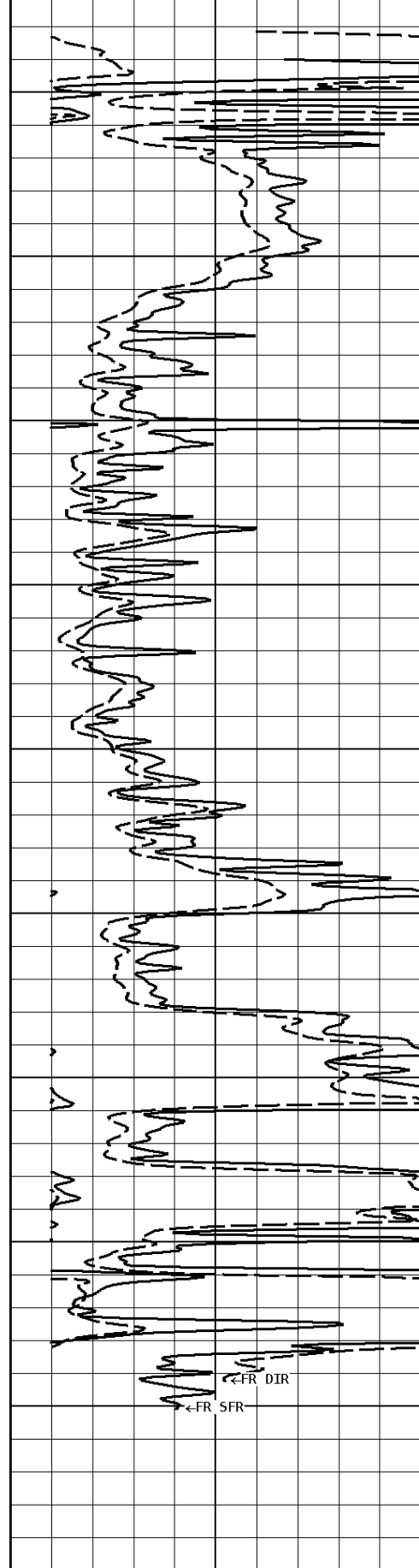
100

200

300

400

455



DIP FR-

1:600 MAIN SECTION



SPONTANEOUS POTENTIAL mV	
→	←20
TENSION LBS	
10000	0

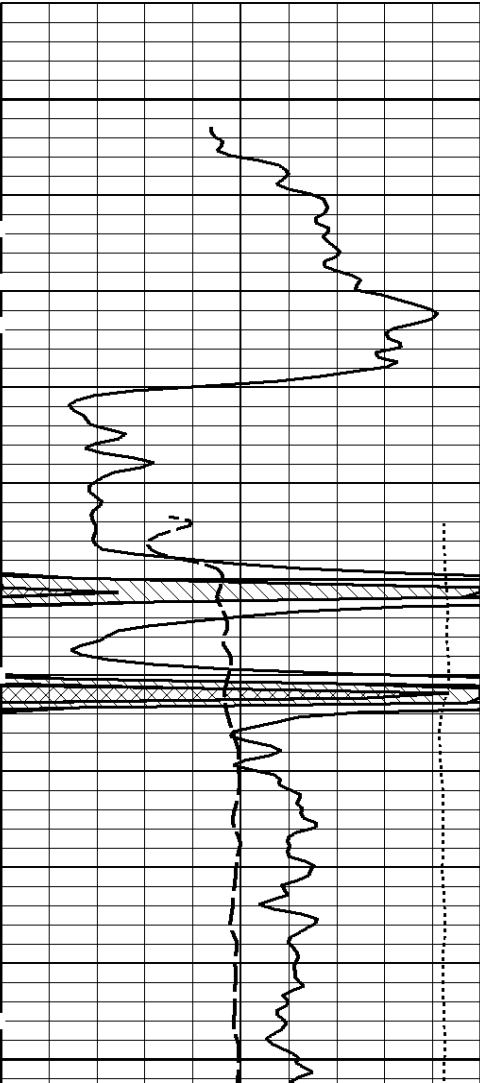
SHALLOW FOCUSED RESISTIVITY OHMM	
0.0	500.0
0.0	50.0
DEEP INDUCTION OHMM	
0.0	500.0
0.0	50.0

Well File: rfp-hill-7-22d-1-stk-sept-9
Segment: V1.D1.S5 MN
Reference: 0

Scale: 1:240
Format: DIL-240
Acquired: 2014-09/09 09:33 3.3.0-12594
Processed: 2014-09/09 09:52 3.3.0-12594

SPONTANEOUS POTENTIAL mV → ←20 TENSION LBS 100000 GAMMA RAY API UNITS 2000400	DEEP INDUCTION OHMM	
	0.2	2000.0
	MEDIUM INDUCTION OHMM	
	0.2	2000.0
	SHALLOW FOCUSED RESISTIVITY OHMM	
	0.2	2000.0

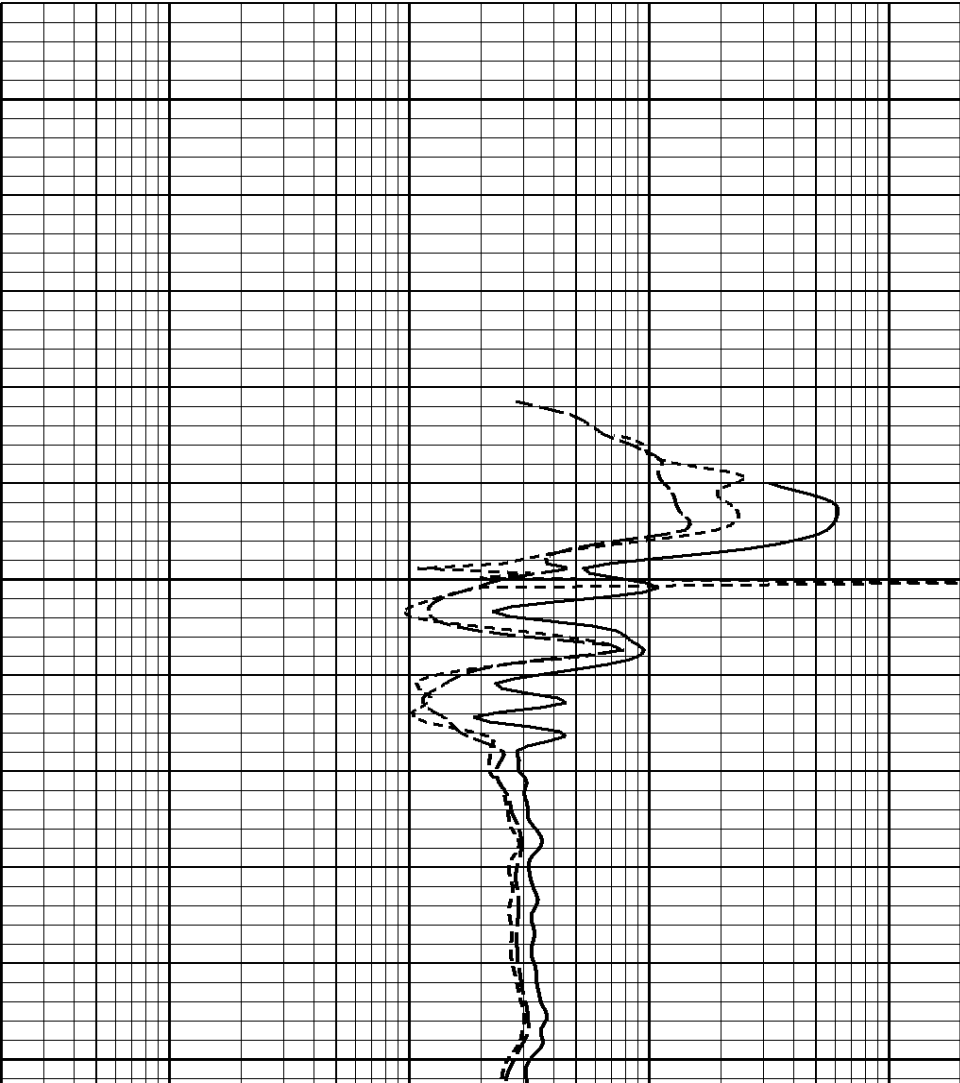
1:240 MAIN SECTION

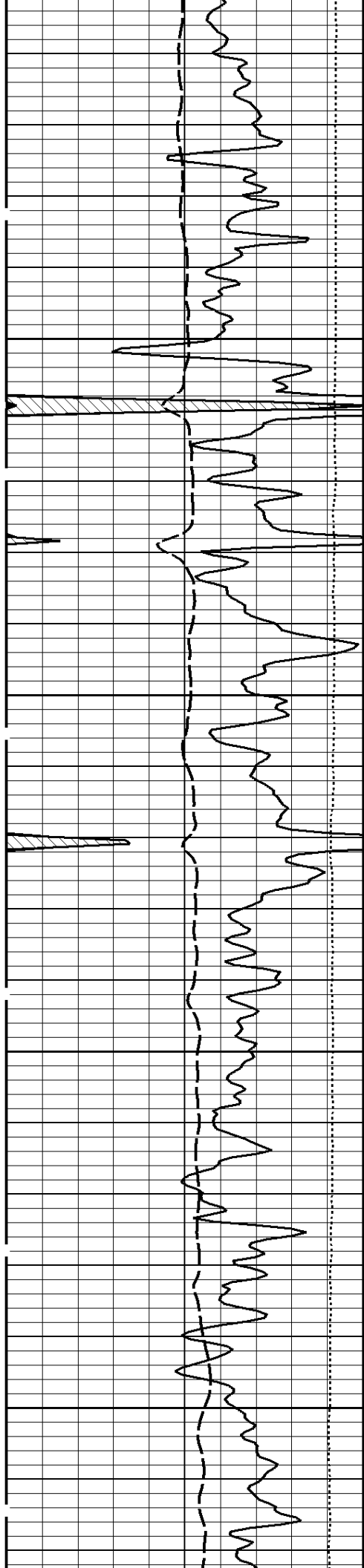


File #1.1.5

000

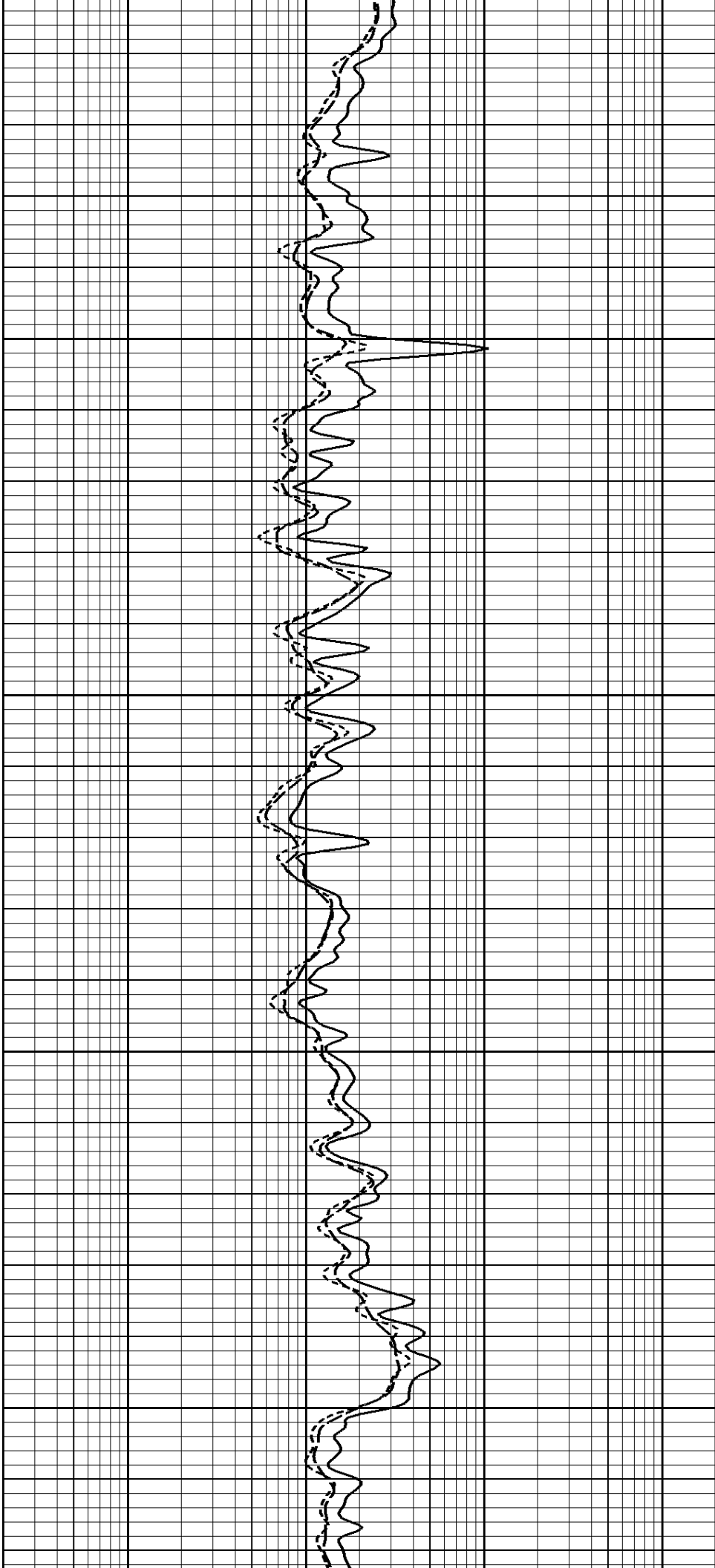
100

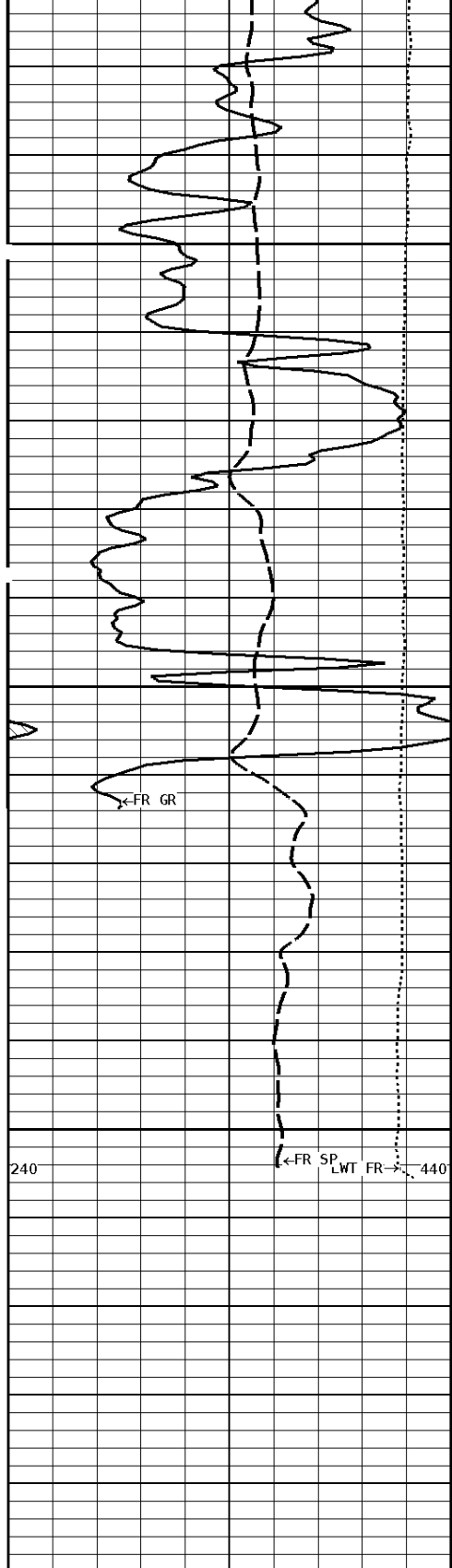




200

300

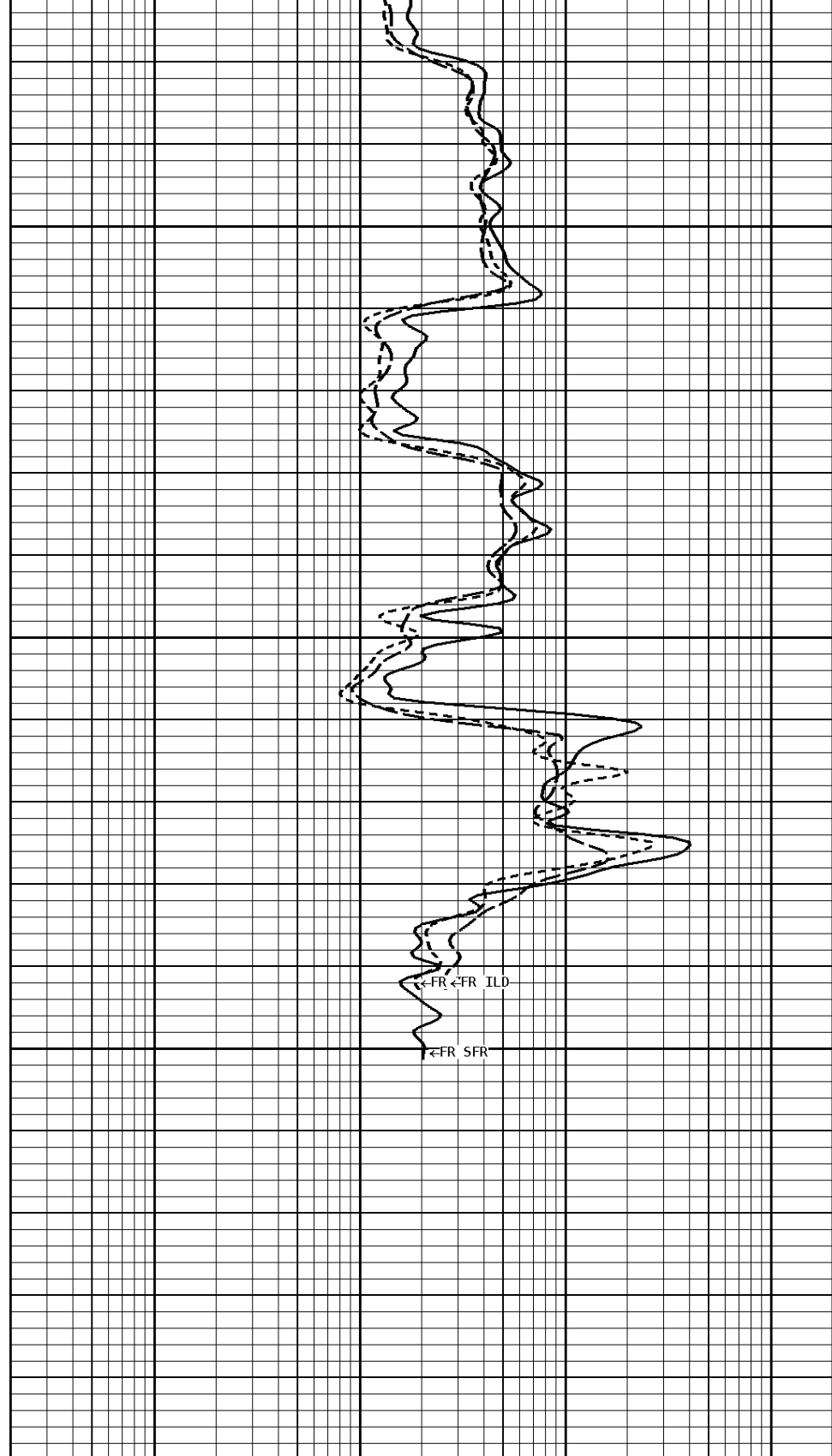




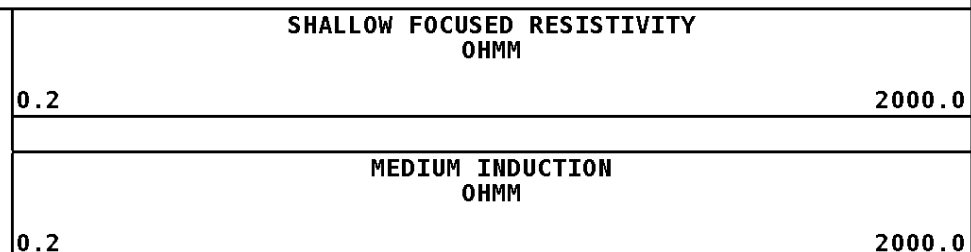
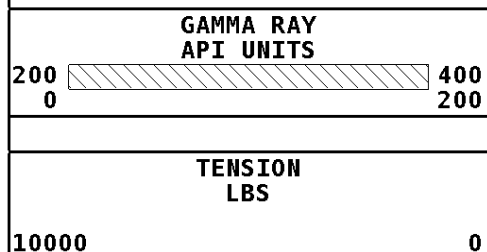
400

455

File #1.1.5



1:240 MAIN SECTION



SPONTANEOUS POTENTIAL mV	
→	←20

DEEP INDUCTION OHMM	
0.2	2000.0

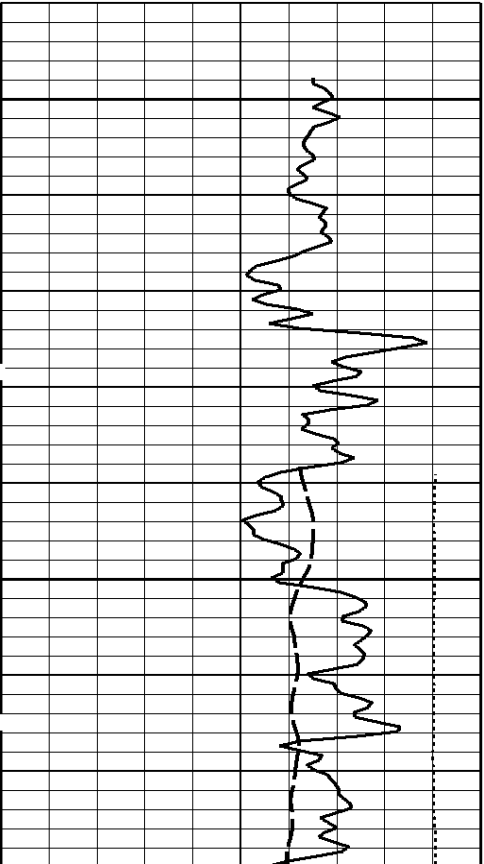
*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 Feet	
Drill Bit Size	6.500 in
Casing Diameter	2.875 in
BHT Depth	455.000 ft
Borehole Temperature	80.0 degF
Temperature Gradient	1.00 DFHF
Resistivity Of Mud	0.900 ohm/m
Standoff	1.5
Resistivity Of Mud Temperature	70.00 degF

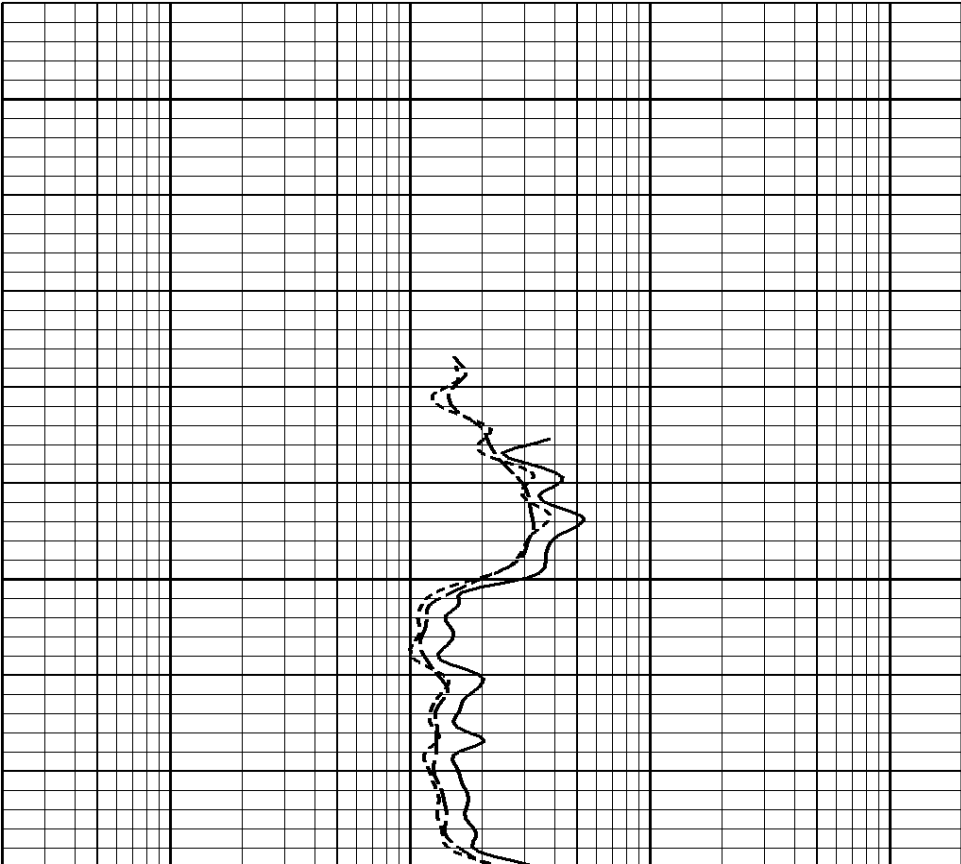
Well File: rfp-hill-7-22d-1-stk-sept-9 **Scale:** 1:240 **Format:** DIL-240
Segment: V1.D1.S3 RE **Acquired:** 2014-09/09 09:20 3.3.0-12594
Reference: 0 **Processed:** 2014-09/09 09:51 3.3.0-12594

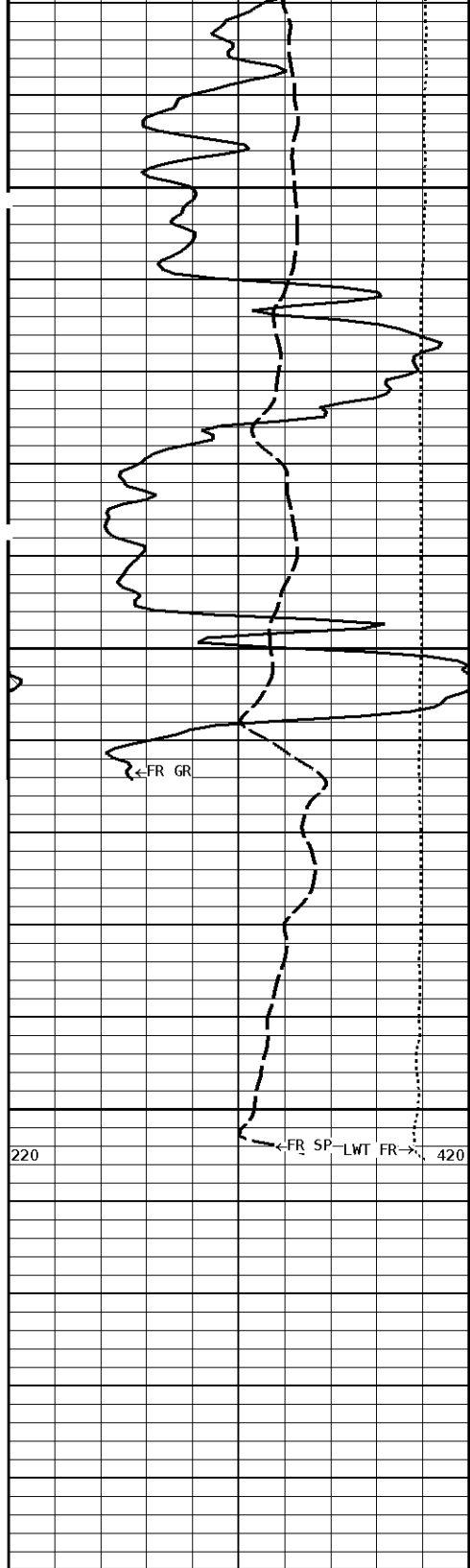
SPONTANEOUS POTENTIAL mV		DEEP INDUCTION OHMM	
→	←20	0.2	2000.0
TENSION LBS		MEDIUM INDUCTION OHMM	
10000	0	0.2	2000.0
GAMMA RAY API UNITS		SHALLOW FOCUSED RESISTIVITY OHMM	
200	400	0.2	2000.0
0	200		

1:240 REPEAT SECTION



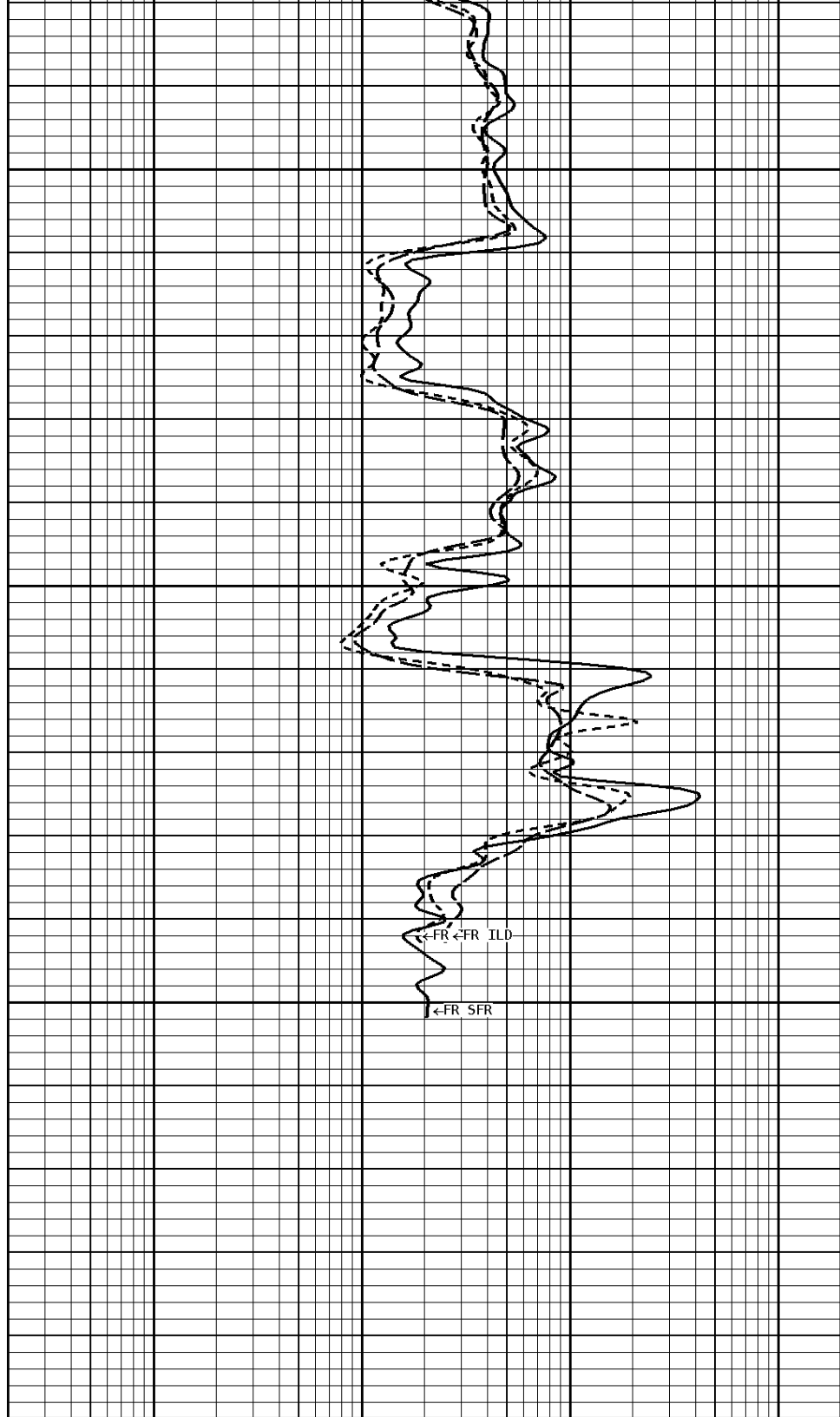
300





400

455



1:240 REPEAT SECTION

GAMMA RAY
API UNITS

200 0 400 200

TENSION
LBS

10000 0

SPONTANEOUS POTENTIAL

SHALLOW FOCUSED RESISTIVITY
OHMM

0.2 2000.0

MEDIUM INDUCTION
OHMM

0.2 2000.0

DEEP INDUCTION

mV

→ | ← 20

OHMM

0.2

2000.0

* Borehole Zone Factors *

Zone 1	99999.0	to	0.0	Feet
Drill Bit Size			6.500	in
Casing Diameter			2.875	in
BHT Depth			455.000	ft
Borehole Temperature			80.0	degF
Temperature Gradient			1.00	DFHF
Resistivity Of Mud			0.900	ohm/m
Standoff			1.5	
Resistivity Of Mud Temperature			70.00	degF

* Calibration Summary *

Shop Calibration GRT-B						
Performed : 21-APR-2014			Time : 11:21			
Sensor Suite : GR-GR5			ID : GRT-BB-107			
	Measured	Units	Calibrated	Units		
	Background	Jig	Jig			
GR	75	381	CPS	175	GRAPI	

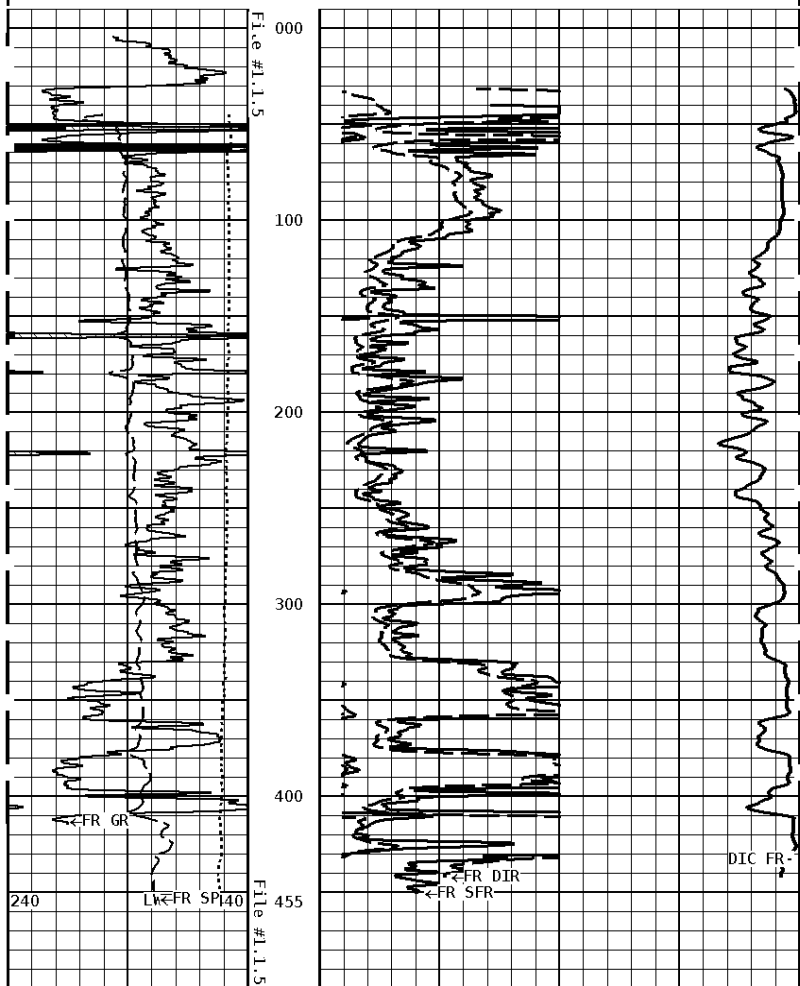
Shop Calibration PIT-CA						
Performed : 20-MAY-2014			Time : 12:16			
Sensor Suite : P-IND-T			ID : PIT-AB-005			
Medium						
	Measured		Calibrated		Units	
	R	X	R	X		
Air	130436	130973	0.3	0.3	MMHOS	
Zero	131064	131069	27.2	2.3	MMHOS	
Reference	250278	251098	5142.2	4745.2	MMHOS	
Loop	127822	217880	3591.7	3538.5	MMHOS	
Sonde Error			-1.6	-2.1	MMHOS	
Cond			5142.2	4745.2	MMHOS	
Deep						
	Measured		Calibrated		Units	
	R	X	R	X		
Air	128989	131106	-3.7	-3.9	MMHOS	
Zero	131083	131072	40.1	-10.7	MMHOS	
Reference	232597	234445	2030.7	1916.3	MMHOS	
Loop	125792	219397	1633.8	1702.6	MMHOS	
Sonde Error			-3.5	-9.0	MMHOS	
Cond			2030.7	1916.3	MMHOS	
Temperature						
	Measured		Calibrated		Units	
	Low	High	Low	High		
	16980.0	56920.0	70.0	350.0	DEGF	

Performed : 20-MAY-2014			Time : 12:07			
Sensor Suite : SFL			ID : PIT-AB-005			
Internal						
	Measured		Calibrated		Units	
	Zero	Reference	Zero	Reference		
Im	32773.9	49477.8	0.0	7028.0	uA	
Ib	32760.9	48718.2	0.0	1750.0	mA	
MOM1	32720.3	56560.2	0.0	175.0	mV	
Equivalent SFL				43.97	OHMM	

Performed : 20-MAY-2014			Time : 12:05			
Sensor Suite : P-SP			ID : PIT-AB-005			
Internal						
	Measured		Calibrated		Units	
	Zero	Reference	Zero	Reference		
	32770.1	58920.2	0.0	1000.0	mV	

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 0

1:1200 MAIN SECTION



1:1200 MAIN SECTION

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

**Tucker**

Company: RUNNING FOX PETROLEUM INC

Well: HILL 7-22D-1

Location: 2145 FNL & 1640 FEL

Logged: 09-09-2014



ENERGY SERVICES

Logged: 05/05/2014
K.B. Elev: 0.0 Ft