Tucker WIRELINE SERVICES

DUAL INDUCTION RESISTIVITY LOG

Company RUNNING FOXES PETROLEUM
Well LIN LEA #7-12
Field WILDCAT
County LINN
State KANSAS
Country USA
API No. 15-107-24521

File No : TUL-57531
Company : RUNNING FOXES PETROLEUM
Well : LIN LEA #7-12
Field : WILDCAT
County : LINN
State : KANSAS
Country : USA
API No : 15-107-24521

Location :
1980' FEL & 1980' FNL
SW NE

LSD : **Sect :** 12 **Twp :** 23S **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**	913.00	Ft	PIT

Date	Oct 04 2011			
Run Number	1			
Depth--Driller	662.0 Ft			
Depth--Logger	660.0 Ft			
First Reading	659.0 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	NATIVE / FRESH			
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 @ 65 F			
RMF@Measured Temp	8.000 @ 65 F			
RMC@Measured Temp.	12.000 @ 65 F			
Source RMF/RMC	CALCULATED	CALCULATED		
RM@BHT	7.920 @ 82 F			
Time Circulation Stopped				
Max Recorded Temp.	82 F			
Equipment/Base	TRK123	TULSA		
Recorded By	S. DAVIS / R. AUSTIN			
Witnessed By	A. GREENE			

Bitsize Intervals

Size (In)	Bottom (Ft)
6.750	662.00

Casing Strings

Size (In)	Weight (Lbs)	Bottom (Ft)
8.625	20.00	20.00

Run Number	1
Date	Oct 04 2011
Date/Time On Bottom	Oct 04 2011 09:30
Depth to Fluid	60.0 Ft
Salinity	0.000 PPM
RMF@BHT	6.340 @ 82 F
RMC@BHT	9.510 @ 82 F

Run Number 1

Comments

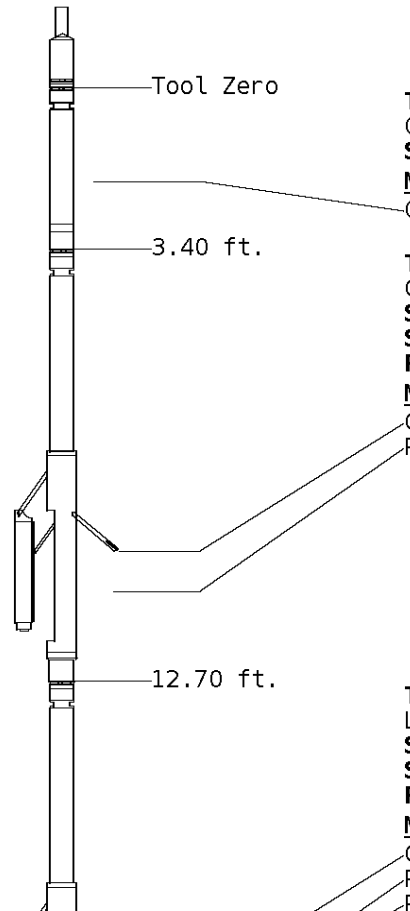
ALL PRESENTATIONS AS PER CUSTOMER REQUEST.
GRT, CNT, LDT, AND PIT RUN IN COMBINATION.
CALIPERS ORIENTED ON X-Y AXIS.
2.71 G/CC USED TO CALCULATED POROSITY.
ANNULAR HOLE VOLUME CALCULATED UISING 4.0" PRODUCTION CASING.

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

OPERATORS:
J.THOMAS
S. DAVIS
T. HOBBS

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

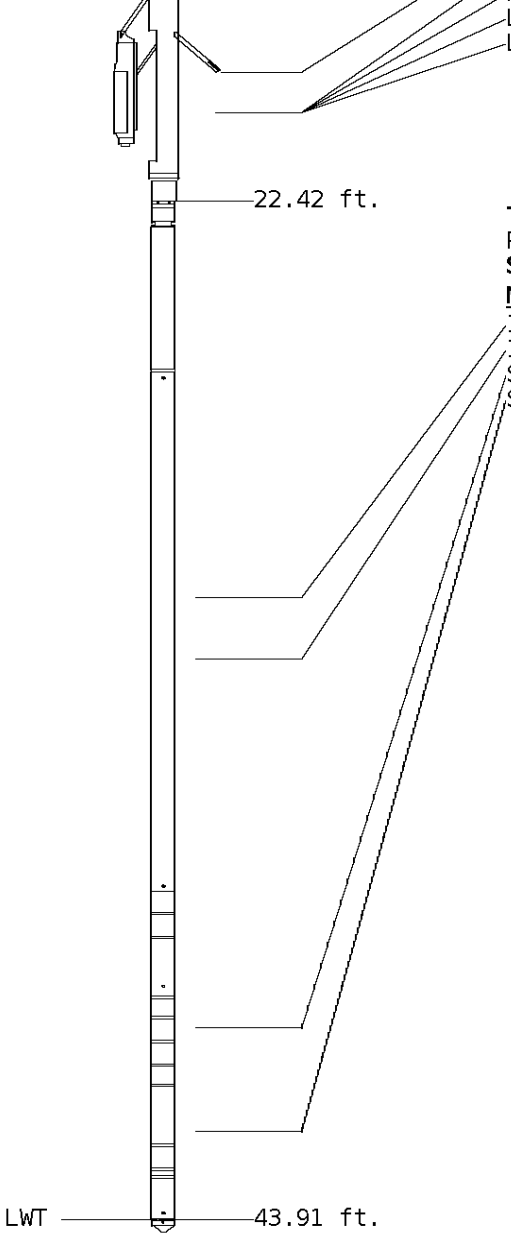
Tool: CNT-AA **Length:** 9.30 **ft.** **O.D.** 4.36 **in.**
Compensated Neutron A Pad on NDT-A
Sonde ID :NDT-BB-129
Source ID :N-1046
Pad ID :CNP-AA-112

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-464
Source ID :2991GW
Pad ID :LDP-DA-066

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

LDEN	7.62	20.32	23.59
LCOR	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-BA-20

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: lin_lea_7-12_oct_4_11Stk **Scale:** 1:600
Segment: V1.D1.S5 MN **Acquired:** 2011-10/04 09:31 3.2.0-9963
Reference: 0 **Processed:** 2011-10/04 09:57 3.2.0-9963

TENSION
LBS
10000 0

SHALLOW FOCUSED RESISTIVITY
OHMM
0.0 500.0
0.0 50.0

SPONTANEOUS POTENTIAL
mV
→| |←20

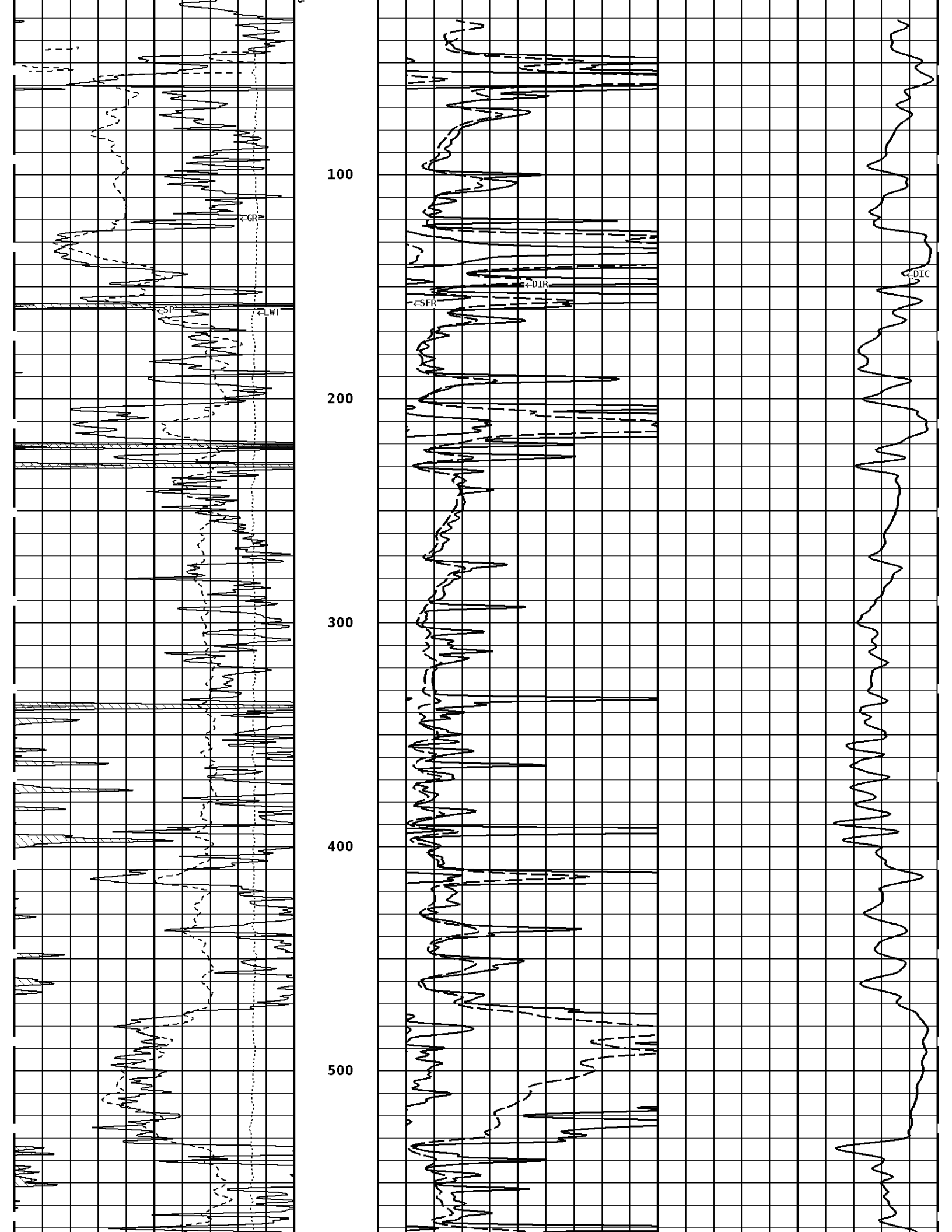
DEEP INDUCTION
OHMM
0.0 500.0
0.0 50.0

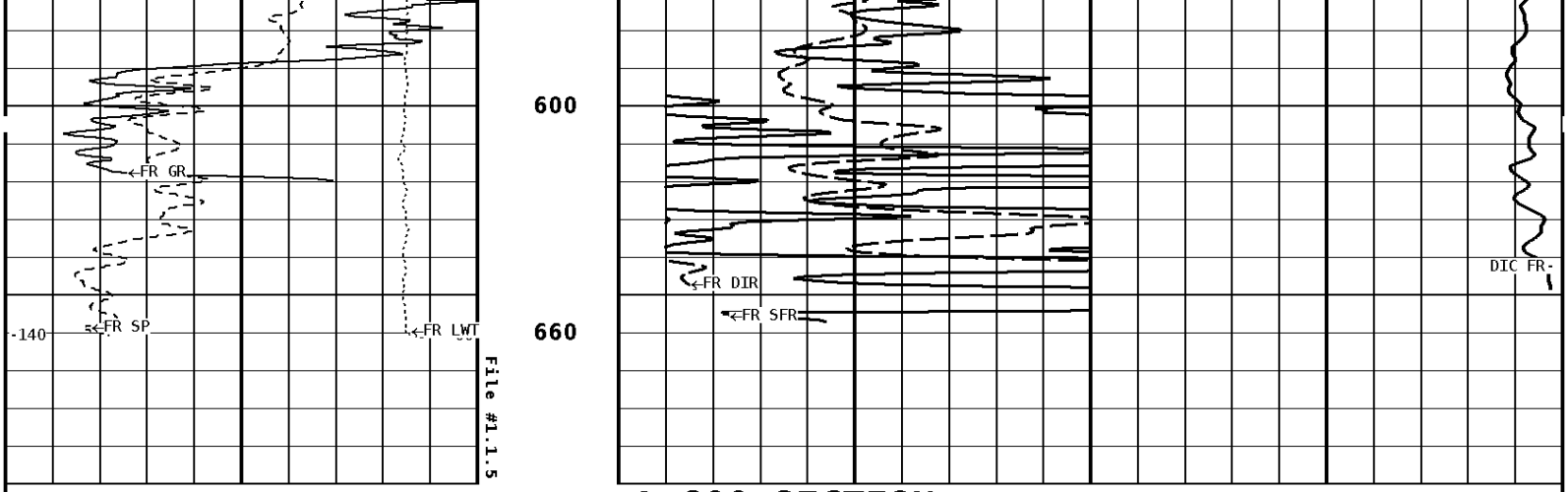
GAMMA RAY
API UNITS
150 300
0 150

DEEP CONDUCTIVITY
MMHO
2000 1000
1000 0

1:600 SECTION
2 INCH

File #1.1.1
000


100
200
300
400
500
GR
SP
LWT
SFR
DIR
DIC



1:600 SECTION

2 INCH

GAMMA RAY
API UNITS
150 300
0 150

SPONTANEOUS POTENTIAL
mV
→| |←20

TENSION
LBS
10000 0

DEEP CONDUCTIVITY
MMHO
2000 1000
1000 0

DEEP INDUCTION
OHMM
0.0 500.0
0.0 50.0

SHALLOW FOCUSED RESISTIVITY
OHMM
0.0 500.0
0.0 50.0

Well File: lin_lea_7-12_oct_4_11Stk
Segment: V1.D1.S5 MN
Reference: 0
Scale: 1:240
Acquired: 2011-10/04 09:31 3.2.0-9963
Processed: 2011-10/04 09:57 3.2.0-9963

TENSION
LBS
10000 0

SPONTANEOUS POTENTIAL
mV
→| |←20

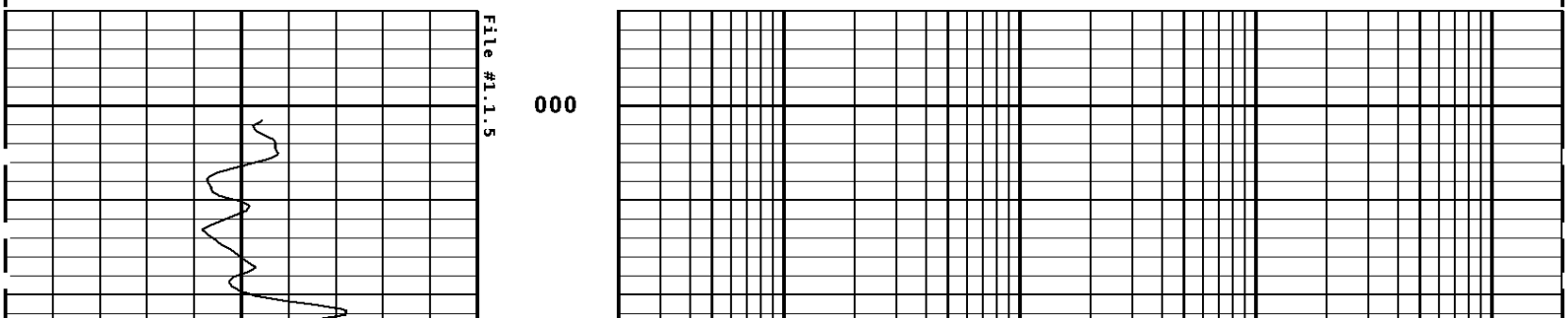
GAMMA RAY
API UNITS
150 300
0 150

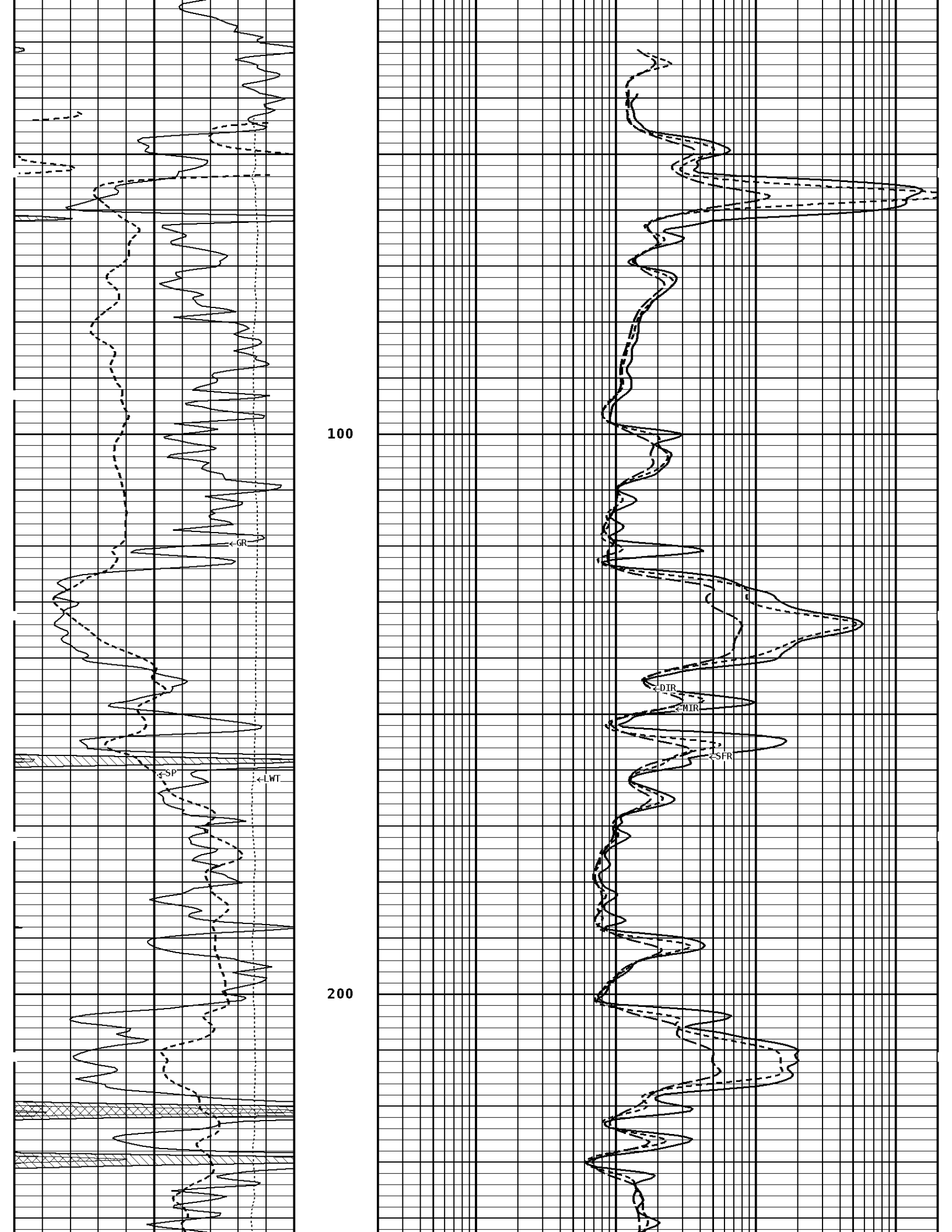
SHALLOW FOCUSED RESISTIVITY
OHMM
0.2 2000.0

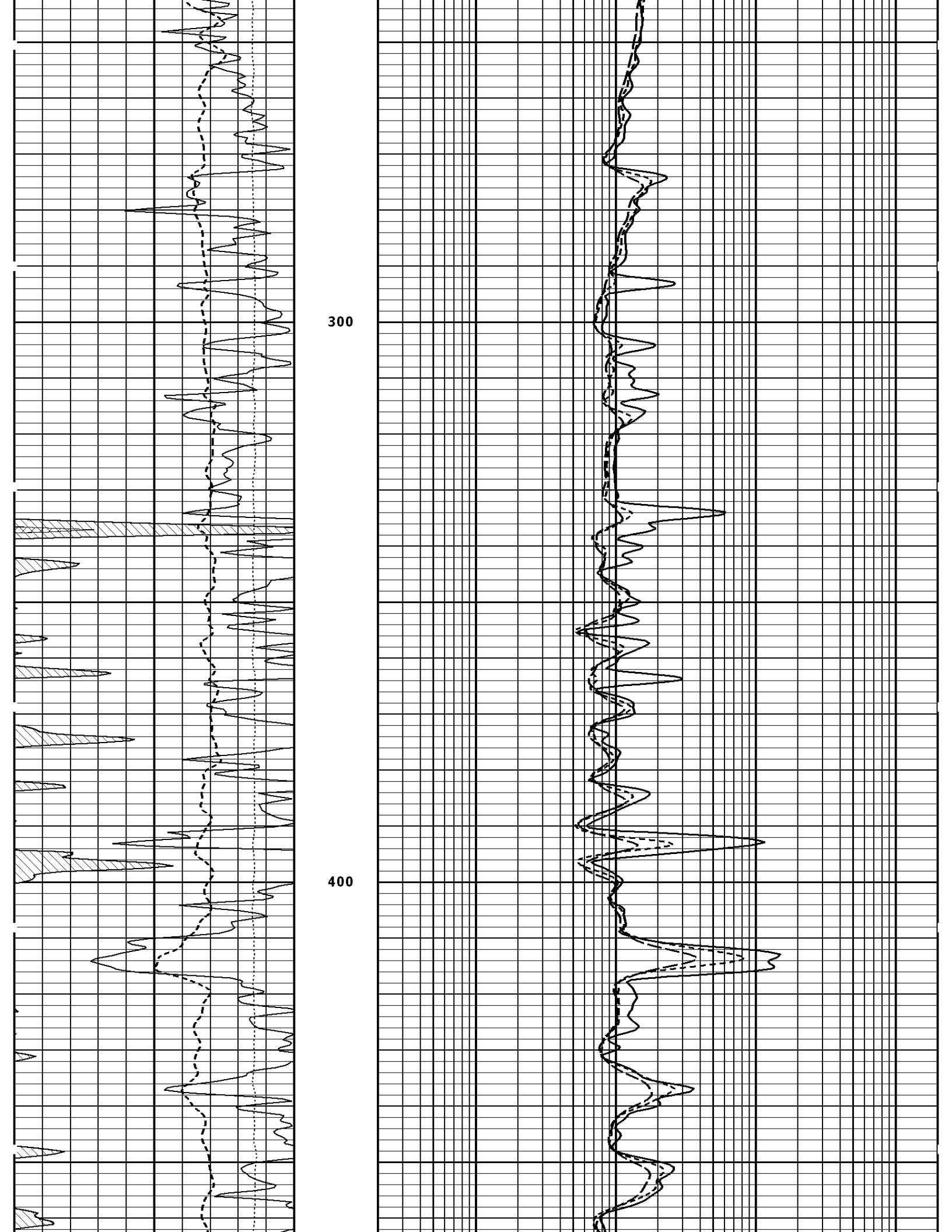
MEDIUM INDUCTION
OHMM
0.2 2000.0

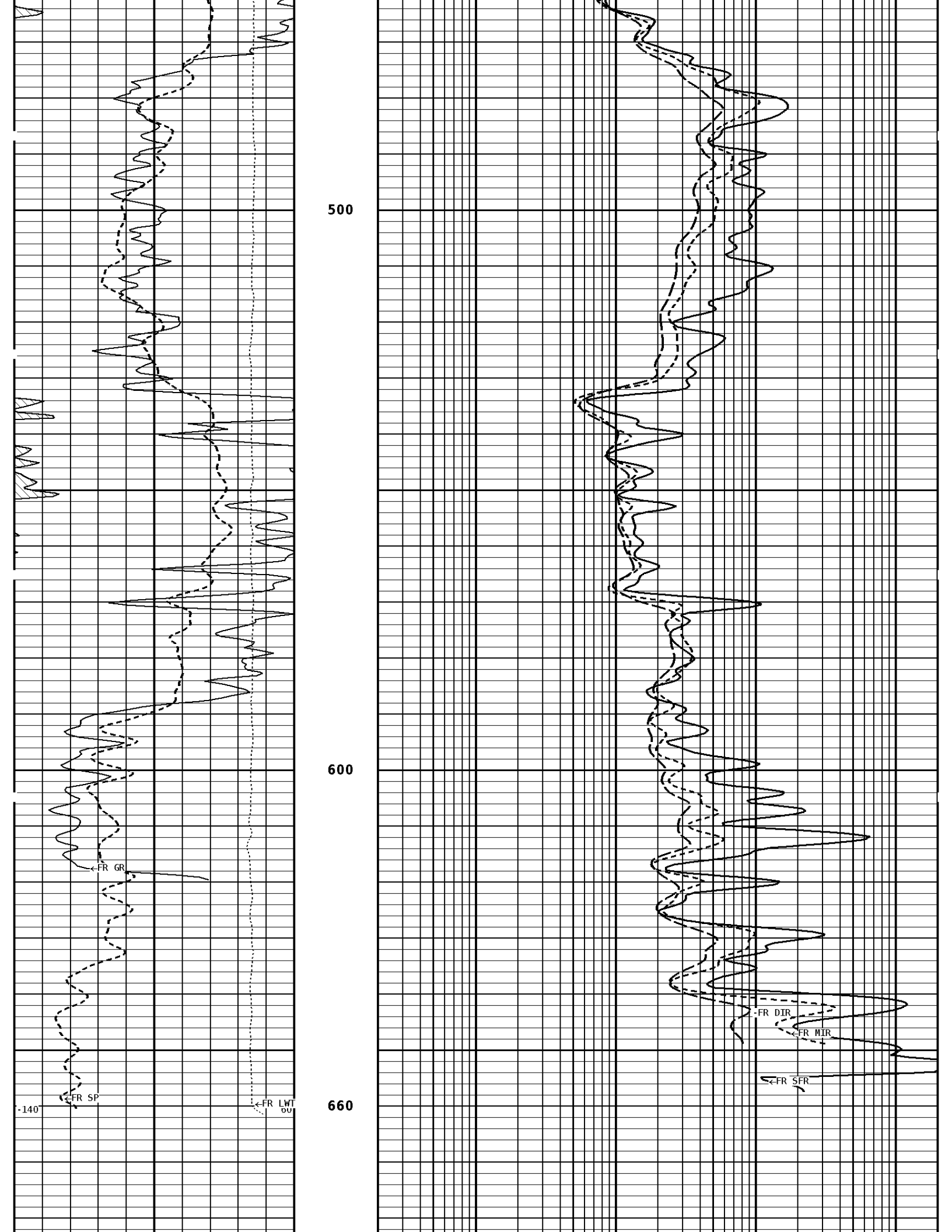
DEEP INDUCTION
OHMM
0.2 2000.0

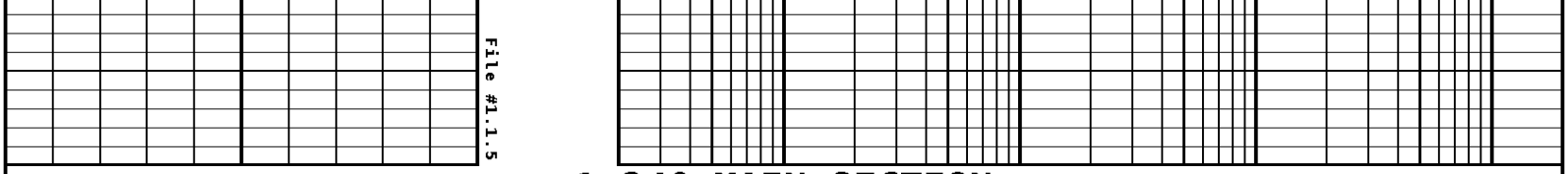
1:240 MAIN SECTION




100
GR
SP
LWT
DIR
MIR
SFR
200


300
400


500
600
660
FR GR
FR SP
FR LWT
-140
FR DIR
FR MIR
FR SFR



1:240 MAIN SECTION

GAMMA RAY API UNITS	DEEP INDUCTION OHMM
150 300 0 150	0.2 2000.0
SPONTANEOUS POTENTIAL mV	**MEDIUM INDUCTION OHMM**
→| |←20	0.2 2000.0
TENSION LBS	**SHALLOW FOCUSED RESISTIVITY OHMM**
10000 0	0.2 2000.0

*** Borehole Zone Factors ***

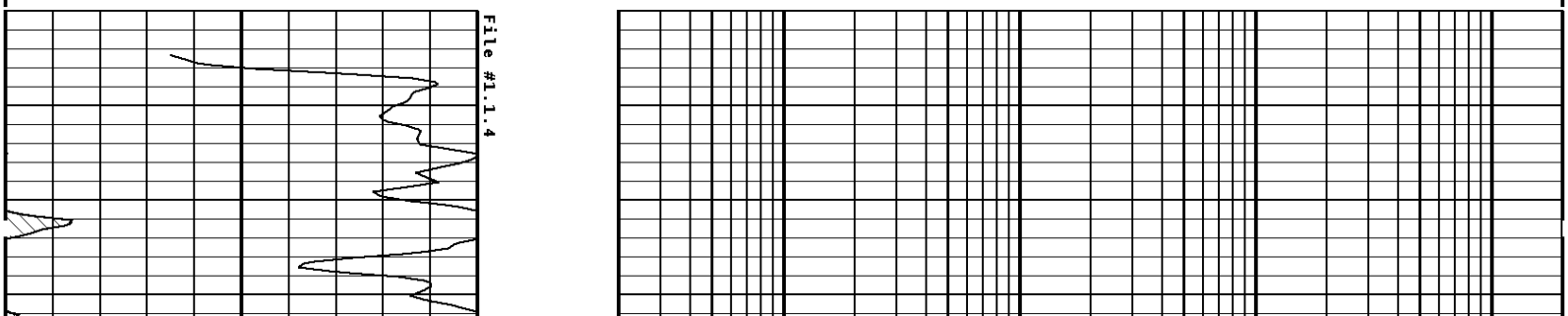
Zone 1 99999.0 to 0.0 Feet

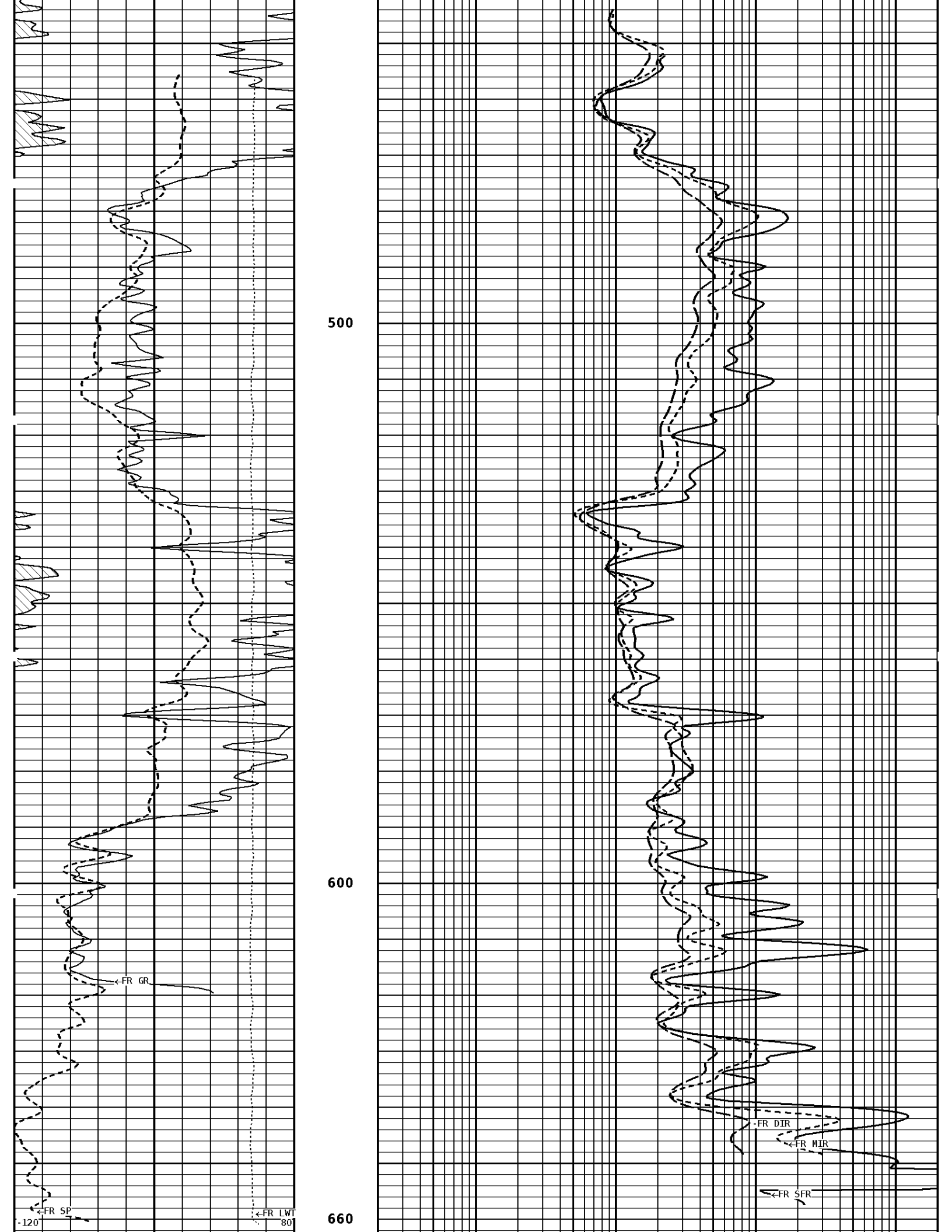
Drill Bit Size	6.750	in
BHT Depth	660.000	ft
Borehole Temperature	82.0	degF
Temperature Gradient	10.00	DFHF
Resistivity Of Mud	0.200	ohm/m
Standoff	0.0	
Resistivity Of Mud Temperature	65.00	degF

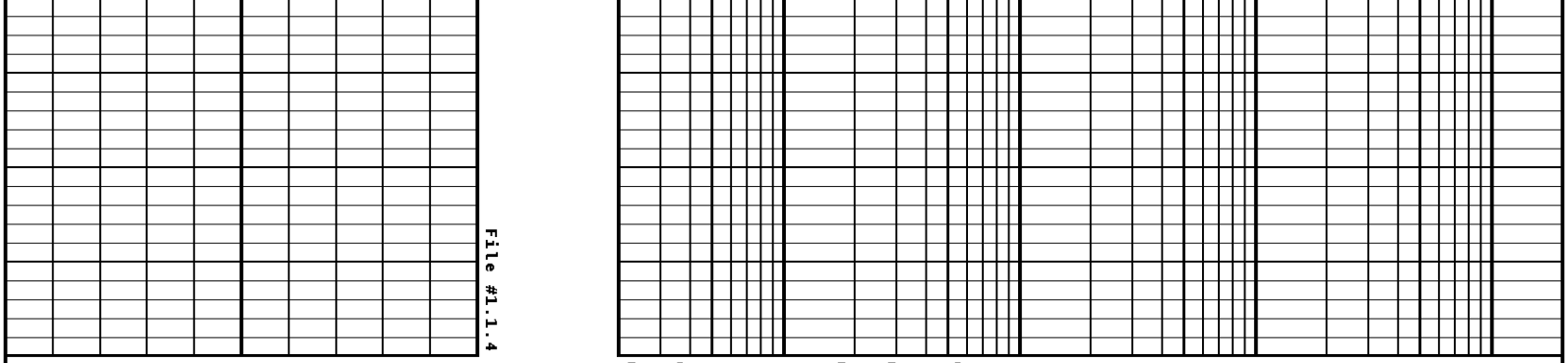
Well File: lin_lea_7-12_oct_4_11Stk **Scale:** 1:240
Segment: V1.D1.S4 RP **Acquired:** 2011-10/04 09:20 3.2.0-9963
Reference: 0 **Processed:** 2011-10/04 09:57 3.2.0-9963

TENSION LBS	SHALLOW FOCUSED RESISTIVITY OHMM
10000 0	0.2 2000.0
SPONTANEOUS POTENTIAL mV	**MEDIUM INDUCTION OHMM**
→| |←20	0.2 2000.0
GAMMA RAY API UNITS	**DEEP INDUCTION OHMM**
150 300 0 150	0.2 2000.0

1:240 MAIN SECTION




500
600
660
←FR GR
←FR SP
-120
←FR LWT
80
-FR DIR
←FR MIR
←FR SFR



1:240 MAIN SECTION

GAMMA RAY **API UNITS** 150 300 0 150	**DEEP INDUCTION** **OHMM** 0.2 2000.0
SPONTANEOUS POTENTIAL **mV** →| |←20	**MEDIUM INDUCTION** **OHMM** 0.2 2000.0
TENSION **LBS** 10000 0	**SHALLOW FOCUSED RESISTIVITY** **OHMM** 0.2 2000.0

*** Borehole Zone Factors ***

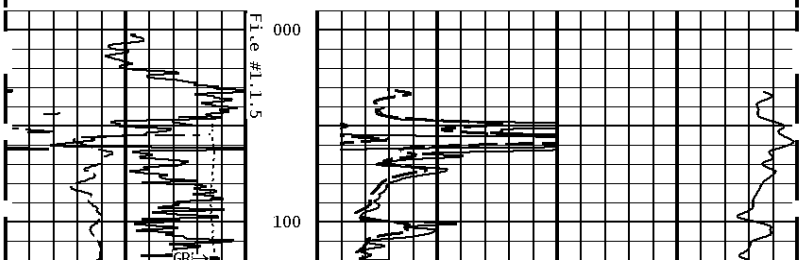
Zone 1 99999.0 to 0.0 Feet

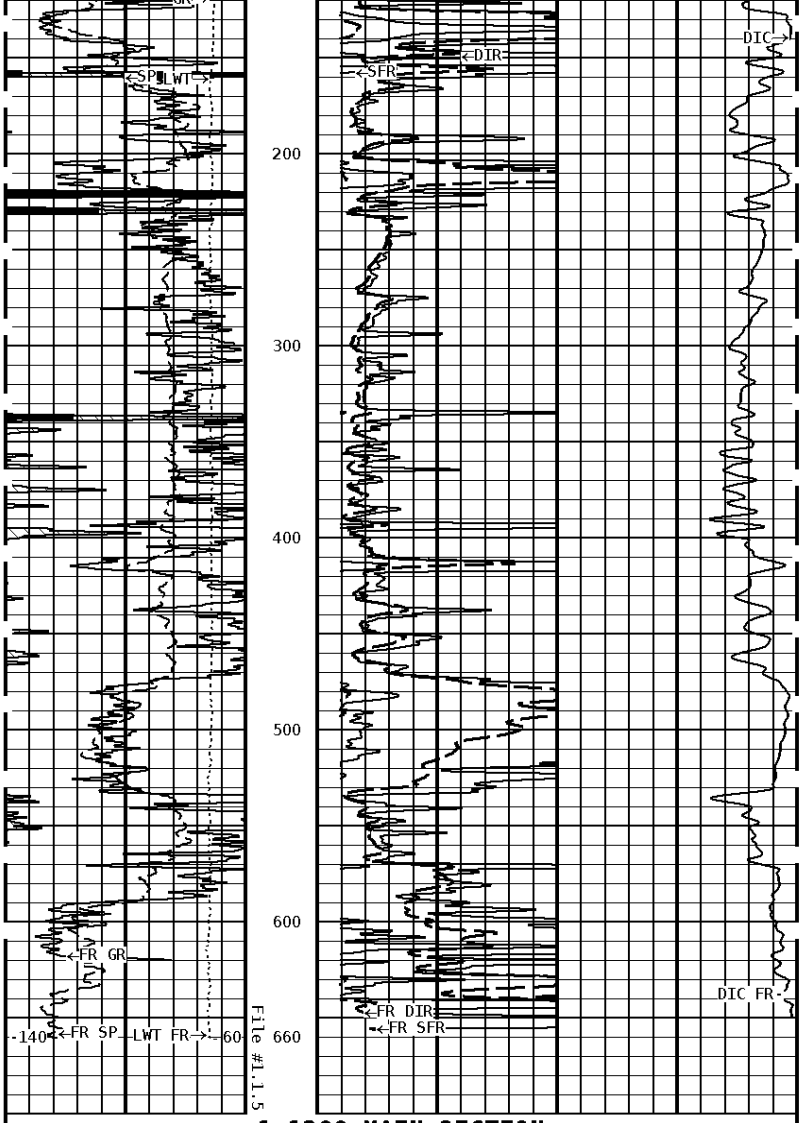
Drill Bit Size	6.750	in
BHT Depth	660.000	ft
Borehole Temperature	82.0	degF
Temperature Gradient	10.00	DFHF
Resistivity Of Mud	0.200	ohm/m
Standoff	0.0	
Resistivity Of Mud Temperature	65.00	degF

Well File: lin_lea 7-12_oct_4_11Stk **Scale:** 1:1200
Segment: V1.D1.S5 MN **Acquired:** 2011-10/04 09:31 3.2.0-9963
Reference: 0 **Processed:** 2011-10/04 09:57 3.2.0-9963

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** 150 300 0 150	**DEEP CONDUCTIVITY** **MMHO** 2000 1000 1000 0

1:1200 MAIN SECTION





1:1200 MAIN SECTION

GAMMA RAY
API UNITS
150 300
0 150

DEEP CONDUCTIVITY
MMHO
2000 1000
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