

Tucker

ENERGY SERVICES

BOREHOLE VOLUME CALIPER LOG

Company STEPHEN C. JONES
Well J BIRK #8A
Field WILDCAT
County COFFEY
State KANSAS
Country USA
API No. 15-031-24177-01-00

File No : TUL-60728
Company : STEPHEN C. JONES
Well : J BIRK #8A
Field : WILDCAT
County : COFFEY
State : KANSAS
Country : USA
API No : 15-031-24177-01-00

Location :
2100' FNL 1490' FWL
NW SW SE NW

LSD : Sect : 28 Twp : 22S Rge : 14E

Permanent Datum: GL Elevations: KB 0.00 Ft CNT Services:
Drilling Measured From: GL DF 0.00 Ft LDT
Log Measured From: GL 1119.00 Ft MLT
Above Permanent Datum: 0.00 Ft

Date 09-24-2015

Run Number	1		
Depth--Driller	1486.0	Ft	
Depth--Logger	1486.0	Ft	
First Reading	1454.0	Ft	
Last Reading	40.0	Ft	
Casing--Driller	40.0	Ft	
Casing--Logger	40.0	Ft	
Bit Size	9.875	in	
Casing Size	10.750	in	
Hole Fluid Type	WBM		
Density	9.4		
Fluid Loss	11.8		
PH/Viscosity	10.2	46.0	
Sample Source	MEASURED		
RMF@Measured Temp.	2.000	@ 75 F	
RMF@Measured Temp	1.600	@ 75 F	
RMC@Measured Temp.	2.400	@ 75 F	
Source RMF/RMC	CALCULATED	CALCULATED	
RM@BHT	0.000	@ 88 F	
Time Circulation Stopped	09-24-2015 17:30		
Max Recorded Temp.	88	F	
Equipment/Base	1022	TULSA, OK	
Recorded By	SHELDON TYLER		
Witnessed By			

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)
9.875	1486.00	10.750	40.00	32.00	0.00

Run Number	1		
Date	09-24-2015		
Date/Time On Bottom	09-24-2015 20:30		
Depth to Fluid	0.0 Ft		
Salinity	680.000		
RMF@BHT	0.000 @ 88 F		
RMC@BHT	0.000 @ 88 F		

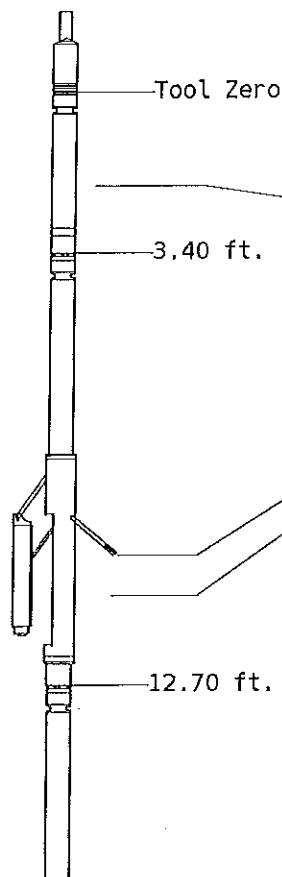
GRT, CNT, LDT, CST, MLT AND PIT RUN IN COMBINATION
 CALIPERS ORIENTED ON X-Y AXIS
 2.71 G/CC USED TO CALCULATE POROSITY
 ANNULAR HOLE VOLUME CALCULATED USING 7.0" PRODUCTION CASING
 PHIN IS CALIPER CORRECTED

GRT: GRP, GRX
 CST: PORS, CDTF, TTIPF, TT2PF, TT3PF, TT4PF, ITT
 CNT: PHIN, CLCNIN, PHXN
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN, PRXL, PECLX, LDENNX, LCORX
 MLT: NOR_RF, INV_RF, MSCLPIN
 PIT: ILD, ILM, SPU, SFLAEC, CIRD

OPERATORS:
 B.BROWN
 J.McCANN

Tool String Schematic

Total Tool Length - 53.15 ft.
 Maximum Outside diameter - 6.00 in.
 Net Weight in Air - 943.00 lbs.



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

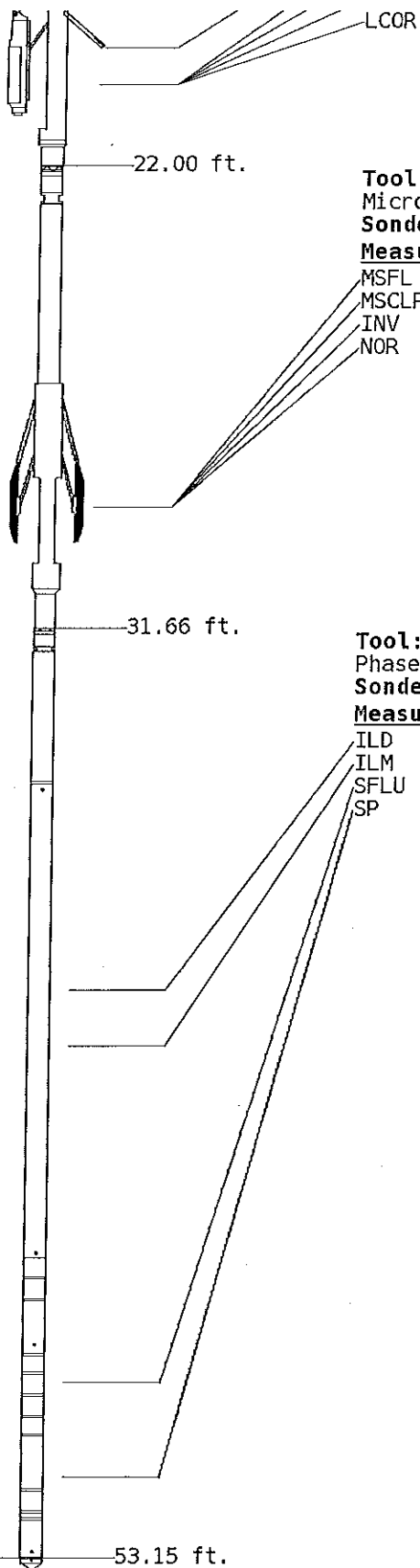
Measure Point	Tool Offset	Stack Offset	Bottom Offset
GRP	2.00	2.00	51.15

Tool: CNT-AA Length: 9.30 ft. O.D. 4.36 in.
 Compensated Neutron A Pad on NDT-A
 Sonde ID :NDT-BB-122
 Source ID :N-1044
 Pad ID :CNP-AA-115

Measure Point	Tool Offset	Stack Offset	Bottom Offset
CLCN	6.00	9.40	43.75
PHIN	6.80	10.20	42.95

Tool: LDT-DA Length: 9.30 ft. O.D. 4.80 in.
 Litho Density D Pad on NDT-A
 Sonde ID :PDT-GA-426
 Source ID :CSV-587
 Pad ID :LDP-DA-065

Measure Point	Tool Offset	Stack Offset	Bottom Offset
CLLD	6.00	18.70	34.45
DEI	7.00	19.70	33.45



7.20

19.90

33.25

Tool: MST-DA Length: 9.66 ft. O.D. 6.00 in.
Micro Spherically Focused (IC)
Sonde ID :MLT-DA-21

Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	29.60	23.55
MSCLP	7.60	29.60	23.55
INV	7.60	29.60	23.55
NOR	7.60	29.60	23.55

Tool: PIT-CA Length: 21.49 ft. O.D. 3.62 in.
Phased Dual Induction w/ RM & D
Sonde ID :PIT-CA-075

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	40.58	12.56
ILM	10.10	41.76	11.39
SFLU	17.49	49.15	4.00
SP	20.60	52.26	0.88

Well File: JJ LATERAL BIRK 8A SEP24 MSTK
Segment: V1.D1.S5 Reprocess of MAIN
Reference: 0

Scale: 1:240 Format: CAL-240
Acquired: 2015-09/24 21:01 3.4.0-13487
Processed: 2015-09/24 21:41 3.4.0-13487

BIT SIZE
INCHES (IN)

16

Y CALIPER

X CALIPER
INCHES (IN)

16 26
6 16

TENSION
LBS

10000 0

GAMMA RAY
API UNITS

150 300
0 150

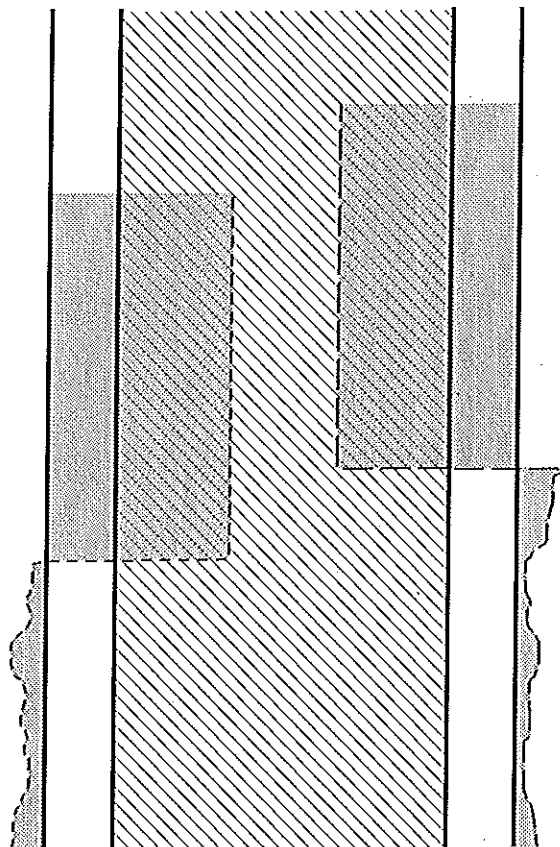
BOREHOLE VOLUME
CU.FT

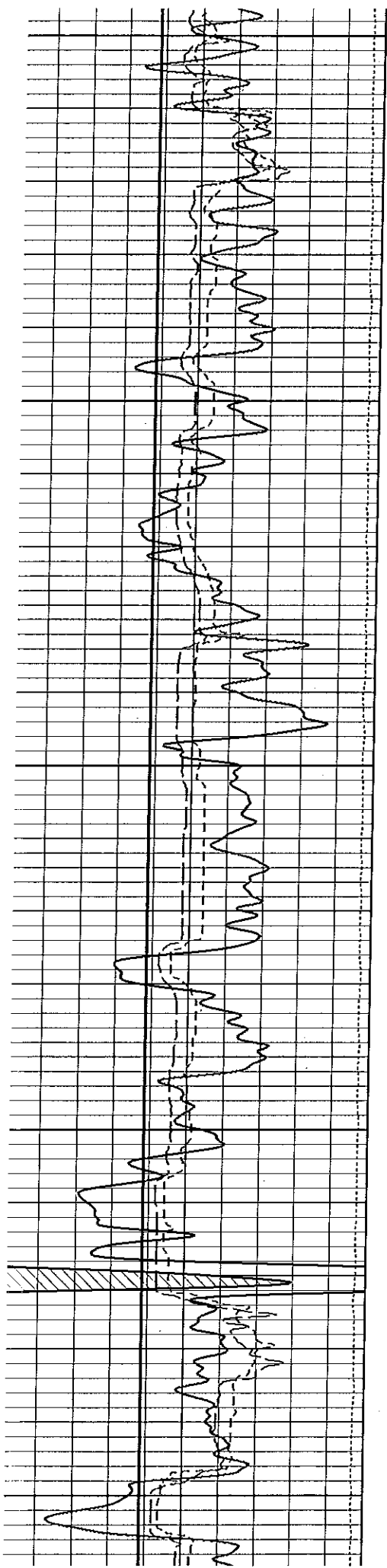
ANNULAR HOLE VOLUME
CU.FT.

1:240 MAIN SECTION

File #1.1.5

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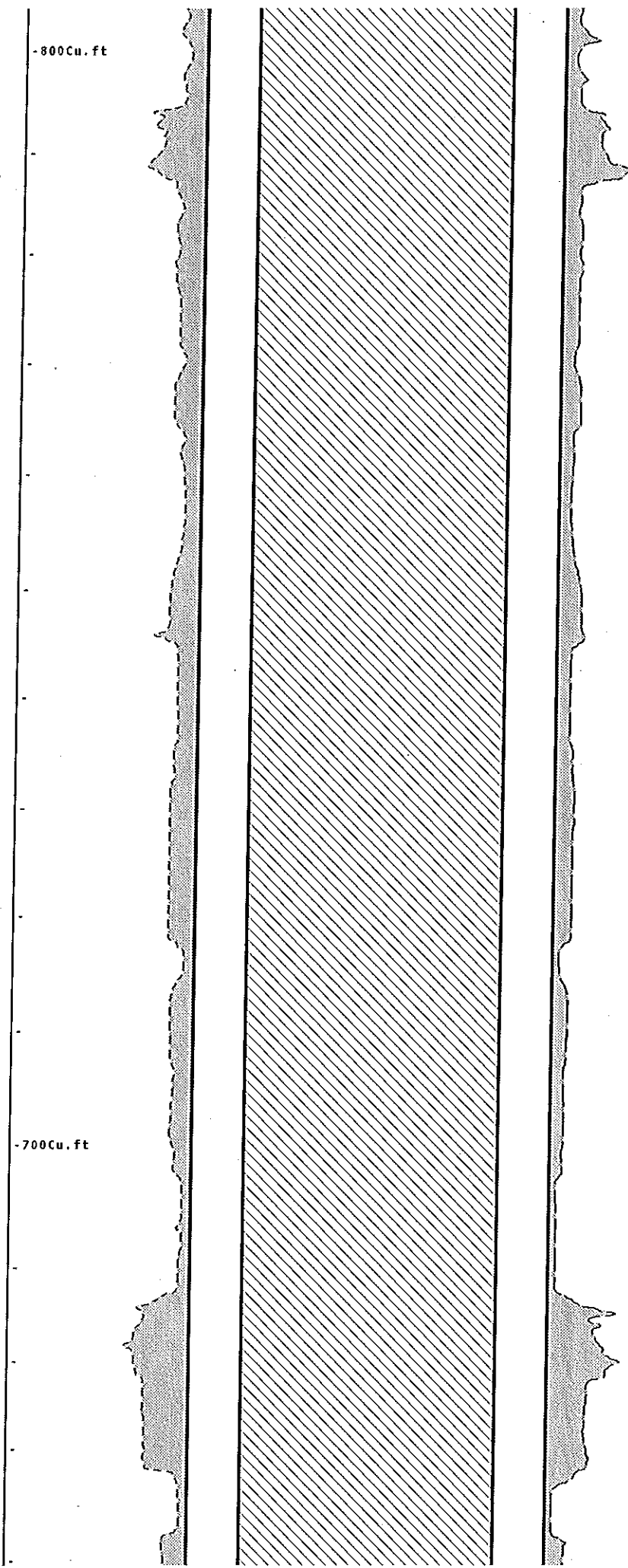
100

-800Cu. ft

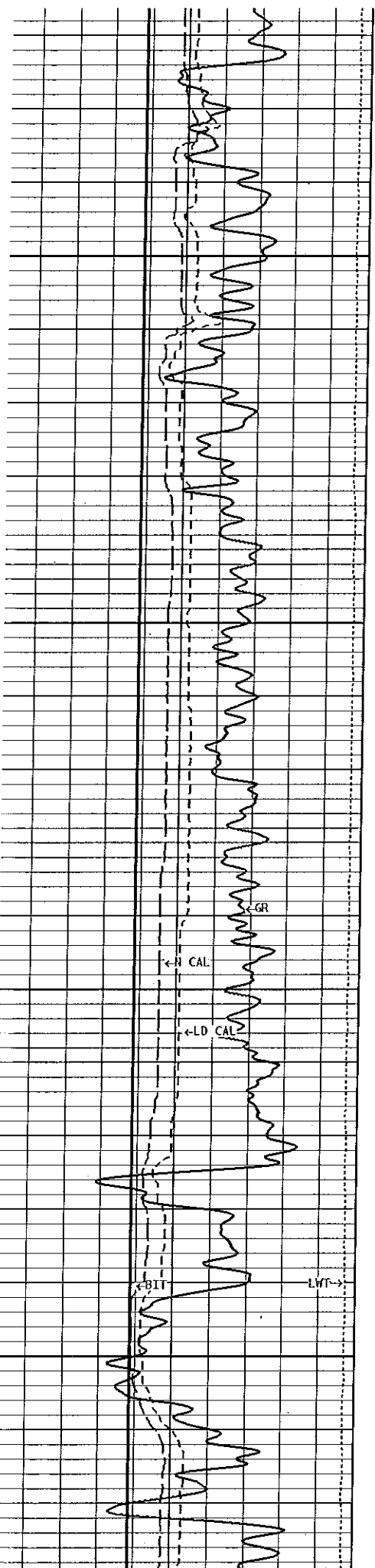
200

-700Cu. ft

300



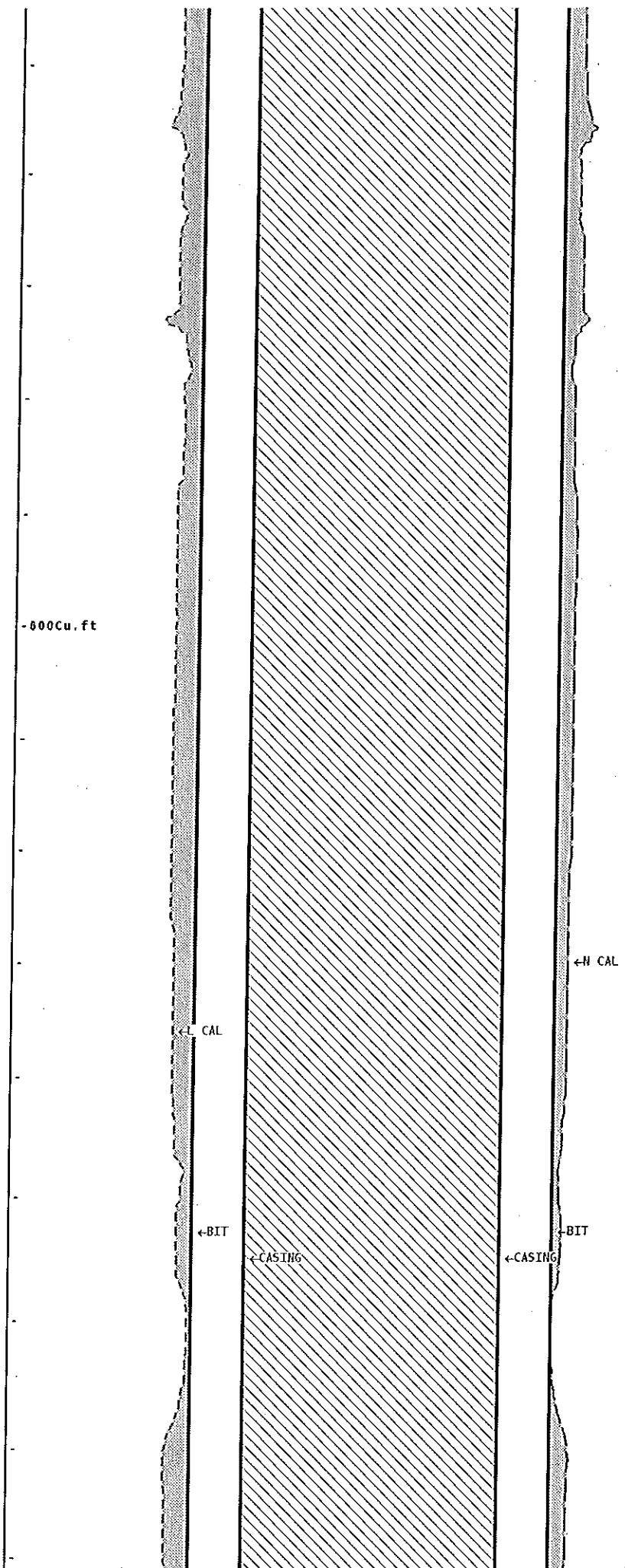
400Cu. ft-



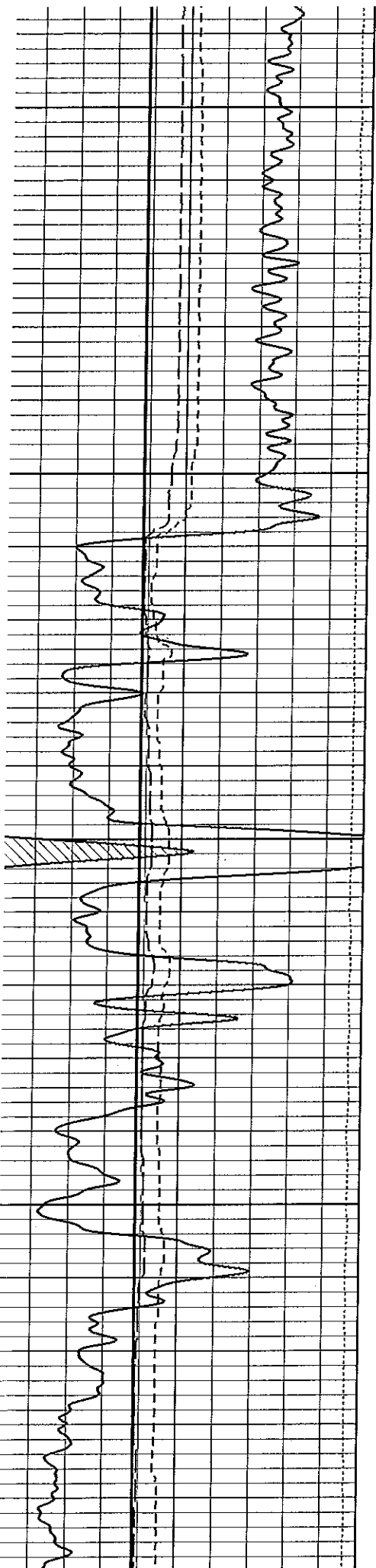
400

-600Cu.ft

500



300Cu.ft-



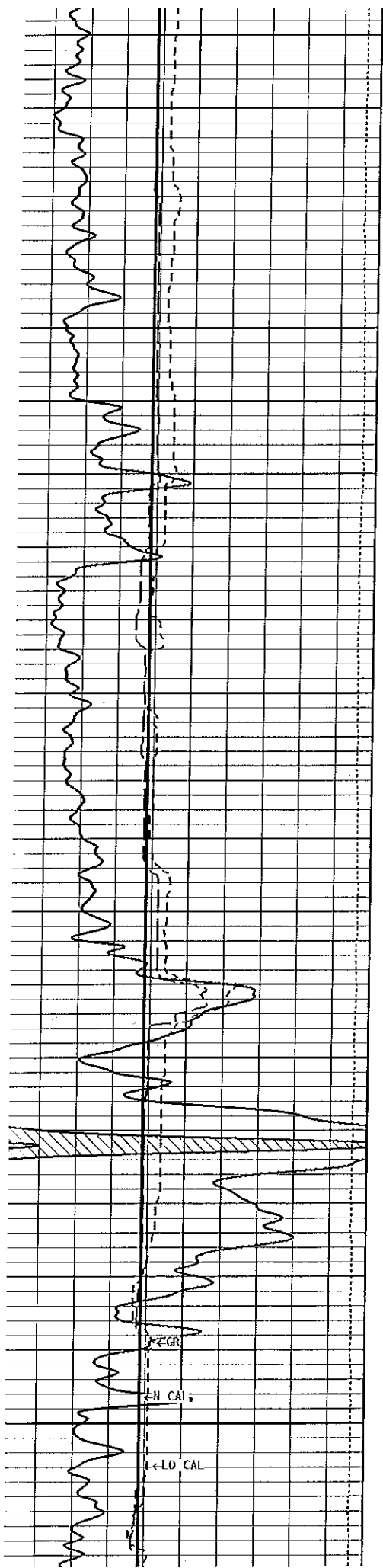
600

700

-500Cu.ft

-400Cu.ft

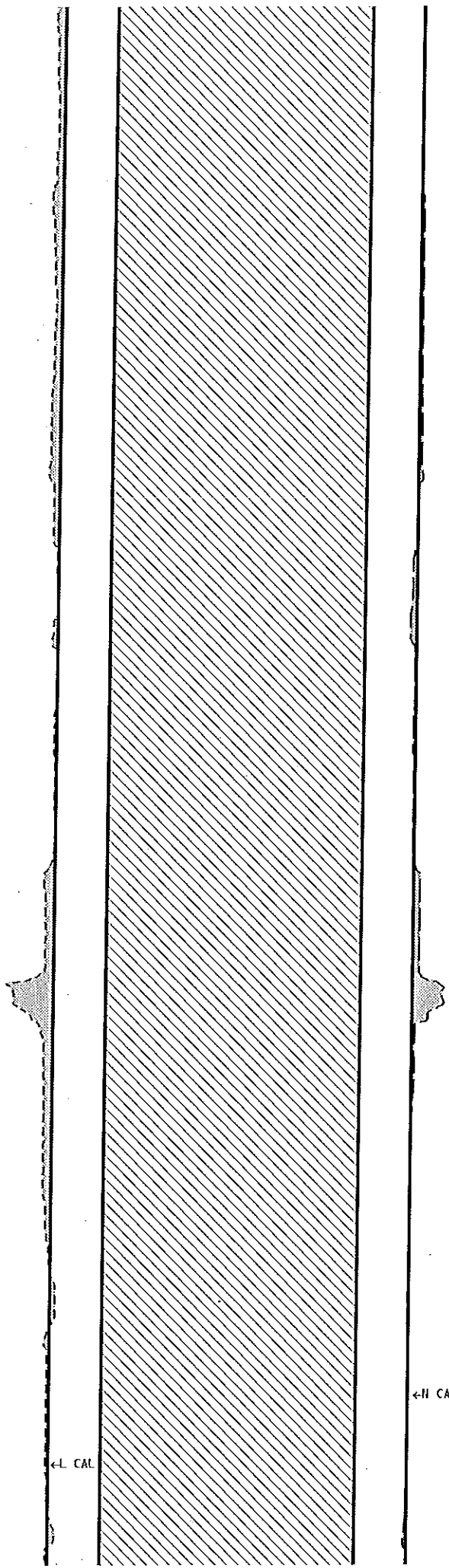
200Cu.ft-

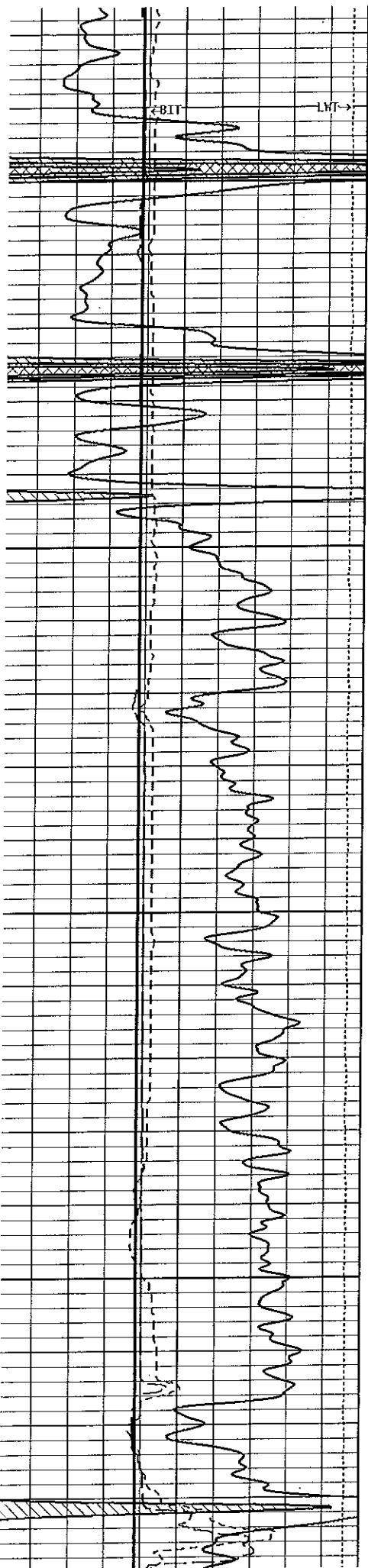


800

900

-300 Cu. ft

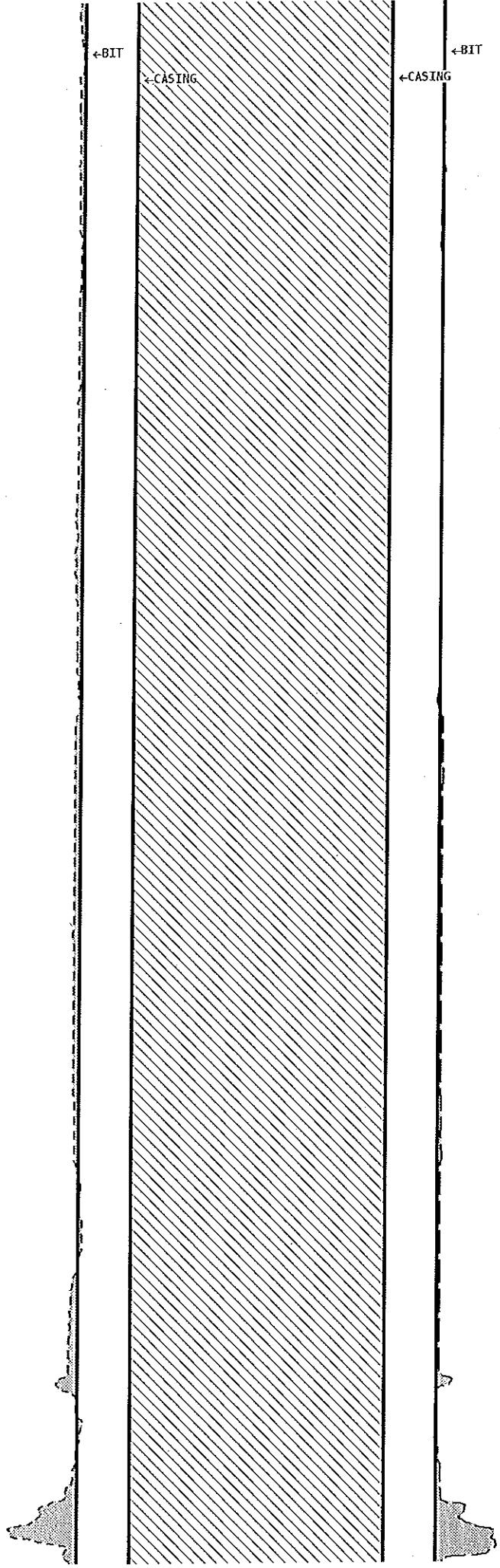




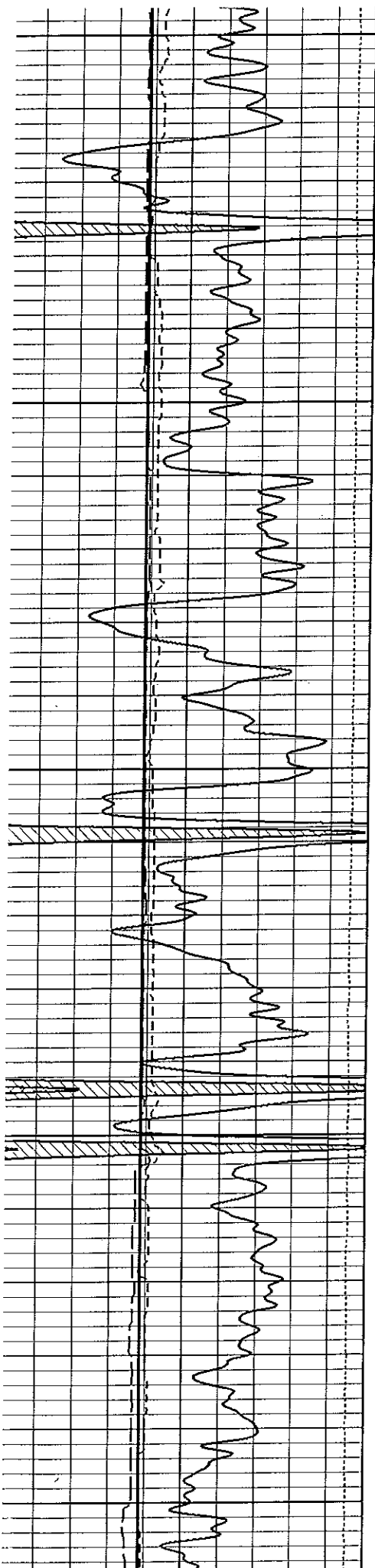
1000

1100

-200Cu. ft



100Cu. ft-

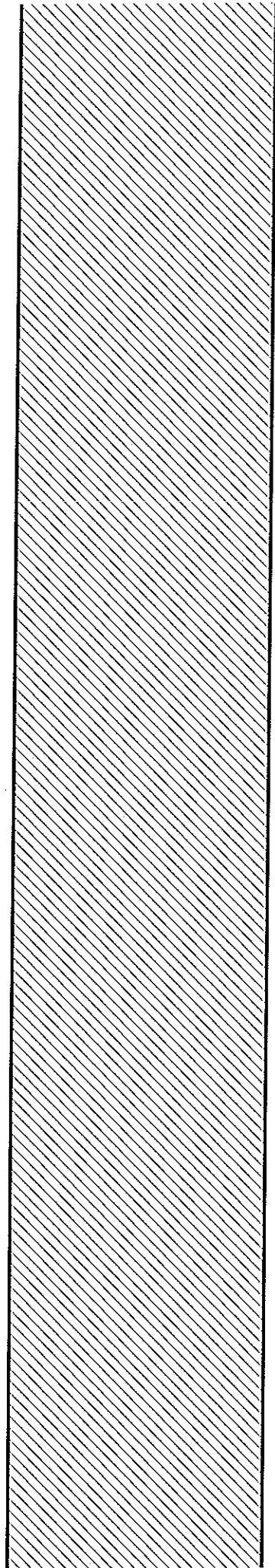


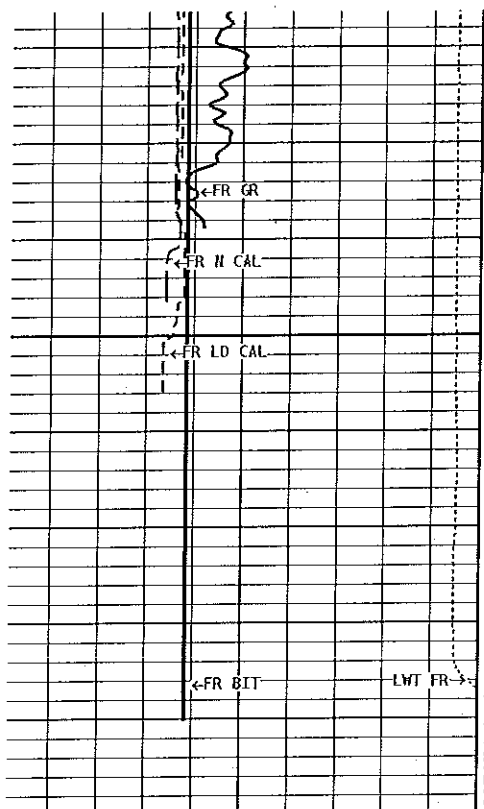
1200

-100Cu.ft

1300

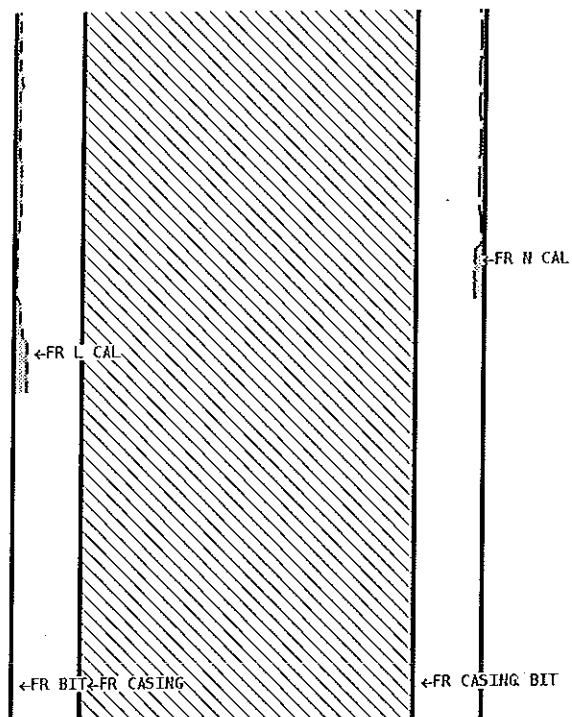
1400





1486

1:240 MAIN SECTION



GAMMA RAY API UNITS	
150 0	300 150
TENSION LBS	
10000	0
X CALIPER INCHES (IN)	
16 6	26 16
Y CALIPER INCHES (IN)	
16 6	26 16
BIT SIZE INCHES (IN)	
6	16

BOREHOLE VOLUME CU.FT	ANNULAR HOLE VOLUME CU.FT.

* Borehole Zone Factors *

Zone 1		99999.0	to	0.0	Feet
Drill Bit Size		9.875 in			
Casing Diameter		7.000 in			

* Calibration Summary *

Performed : 19-May-2015		Time : 11:16	
Sensor Suite : GR-GR5		ID : GRT-BA-121	
	Measured	Units	Calibrated
	Jig		Jig
GR	Background 43	343 CPS	175 GRAP1
Shop Calibration			
CNT-AA			
Performed : 14-SEP-2015		Time : 09:52	
Sensor Suite : CALI-BCN		ID : NDT-BB-122	
	Jig - Measured	Jig - Calibrated	Units
	Ring#1 Ring#2	Ring#1 Ring#2	
CL # 1	8.9 13.6	6.0 12.0	IN.
Shop Calibration			
LDT-DA			
Performed : 14-SEP-2015		Time : 10:39	
Sensor Suite : CALI-LTH		ID : PDT-GA-426	
	Jig - Measured	Jig - Calibrated	Units
	Ring#1 Ring#2	Ring#1 Ring#2	
CL # 1	7.8 11.5	6.0 12.0	IN.



Tucker
ENERGY SERVICES

Company: STEPHEN C. JONES
Well: J BIRK #8A
Location: 2100' FNL 1490' FWL
Logged: 09-24-2015
K.B. Elev: 0.0 Ft