Tucker WIRELINE SERVICES

COMPENSATED NEUTRON PEL DENSITY LOG

217-22671
6/8/12

File No. :	TUL-56724
Company :	RUNNING FOXES PETROLEUM, LLC
Well :	EMMERSON 6-6B-2
Field :	
County :	VERNON
State :	MISSOURI
Country :	USA
Location :	PERMIT#: 22671, 1450' FNL & 1530' FWL
	Sect : 6 Twp : 36N Rge : 33W

RECEIVED
JUN 20 2011
Mo Oil & Gas Council

Recorded By :	B.BAILEY	
Witnessed By :	C.COUNTS	
Date :	DEC 23 2010	
Run No. :	1	
Permanent Datum :	GL	
Drilling Measured From :	GL	
Log Measured From:	GL	
Above Permanent Datum :	0.00	FT
Depth--Driller :	450.0	FT
Depth--Logger :	446.0	FT
Bottom Log Interval :	423.0	FT
Top Log Interval :	20.0	FT
Casing Depth--Driller:	20.0	FT
Casing Depth--Logger :	20.0	FT
Casing Diameter :	8.625	IN
Bit Size :	6.125	IN
Unit No. :	127	
Location :	TULSA	

Elevations :
KB : FT
DF : FT
GL : 879.00 FT

Additional Services
PIT

The customer is hereby warned that by providing the log data herein, T. W. S. does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. T. W. 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. W. 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. W. S. for its services. Any user of the log data is warned that said user is not entitled to rely on intepretations, conversions or recommendations as aforesaid.

Run Number 1

Depth To Fluid	0.0	FT		
Fluid Type In Hole :	NATIVE			
Density :	0.000	SG		
Viscosity :	0.000	SEC		
pH :	0.000			
Fluid Loss :	0.000			
Salinity :	0.000	KPPM		
RM Source :	MEASURED			
RM :	10.000	OHMM at	60	F
RM at BHT :	10.000	OHMM at	60	F
RMF Source :	CALCULATED			
RMF :	8.500	OHMM at	60	F
RMF at BHT :	8.500	OHMM at	60	F
RMC Source :	CALCULATED			
RMC :	11.500	OHMM at	60	F
RMC at BHT :	11.500	OHMM at	60	F
Max Recorded Temp. :			60	F
Time Circulation Stopped :				
Operating Rig Time, Hrs. :			2.0	

- Source Serial Numbers -

Gamma	CSV-587
Neutron	N-1044

- Sonde Serial Numbers -

GRTB	GRT-BA-14
CNT	CNP-AA-111
LDTNG	LDP-DA-01
PIT_B	PIT-CA-074

Casing Strings

Size (IN)	Weight (LB/FT)	Bottom (FT)
8.625	32.00	20.00

- Comments -

ALL PRESENTATIONS AS PER CUSTOMER REQUEST.

GRT, CNT, LDT, PIT RAN IN COMBINATION
CALIPERS ORIENTED ON THE X-Y AXIS.
PHIN IS CALIPER CORRECTED.
2.71 G/CC USED TO CALCULATE POROSITY.
ANNULAR HOLE VOLUME CALCULATED USING 2.875" PRODUCTION CASING.

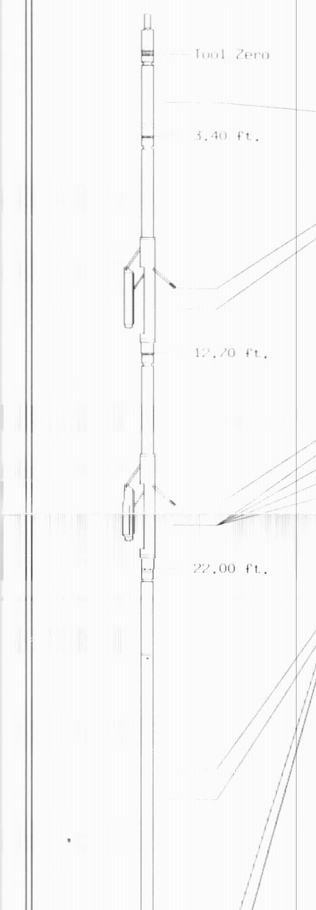
GRT: GRP.
CNT: PHIN, CLCNIN.
LDT: PORL, LCORN, PECLN, CLLDIN, LDENN, PORLLS, PECSN.
PIT: ILD, ILM, CIRD, SFLAEC, SPU.

OPERATORS:
M.BURKE
S.DAVIS

THANK YOU FOR USING TUCKER WIRELINE SERVICES!

Tool String Schematic

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



Tool: GRTB Length: 3.40 ft. O.D.: 3.60 in.
Sonde ID : GRT-BA-14

Measure Point	Stack Offset	Tool Offset	Bottom Offset
GRP	2.00	2.00	41.49

Tool: CNT Length: 9.30 ft. O.D.: 4.36 in.
Sonde ID : CNP-AA-111
Source ID : N-1044
Pad ID : CNP-AA-111

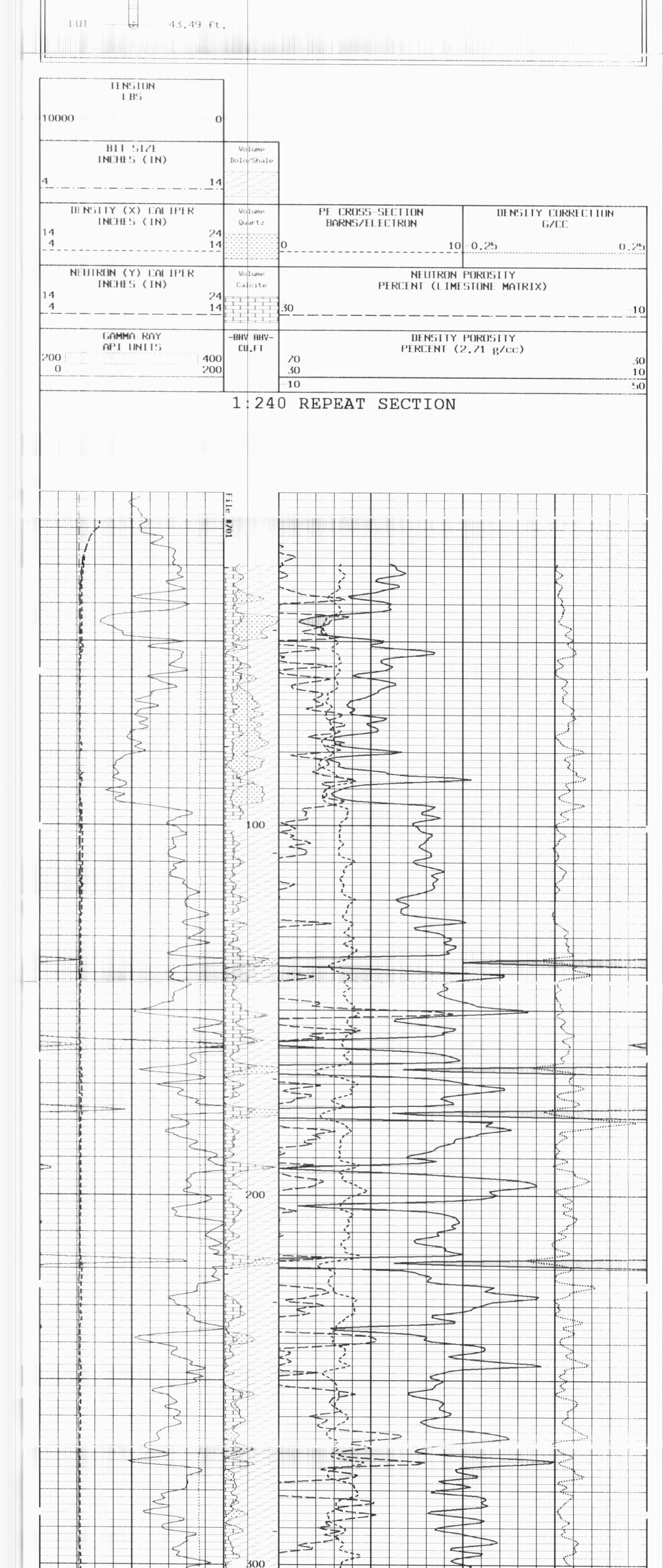
Measure Point	Stack Offset	Tool Offset	Bottom Offset
CLCN	9.40	6.00	34.09
PHIN	10.24	6.84	33.25

Tool: LDTNG Length: 9.30 ft. O.D.: 4.80 in.
Sonde ID : LDP-DA-01
Source ID : CSV-587
Pad ID : LDP-DA-01

Measure Point	Stack Offset	Tool Offset	Bottom Offset
CLLD	18.70	6.00	24.79
PEL	19.70	7.00	23.79
PES	20.10	7.40	23.39
LDEN	19.70	7.00	23.79
LCOR	19.70	7.00	23.79

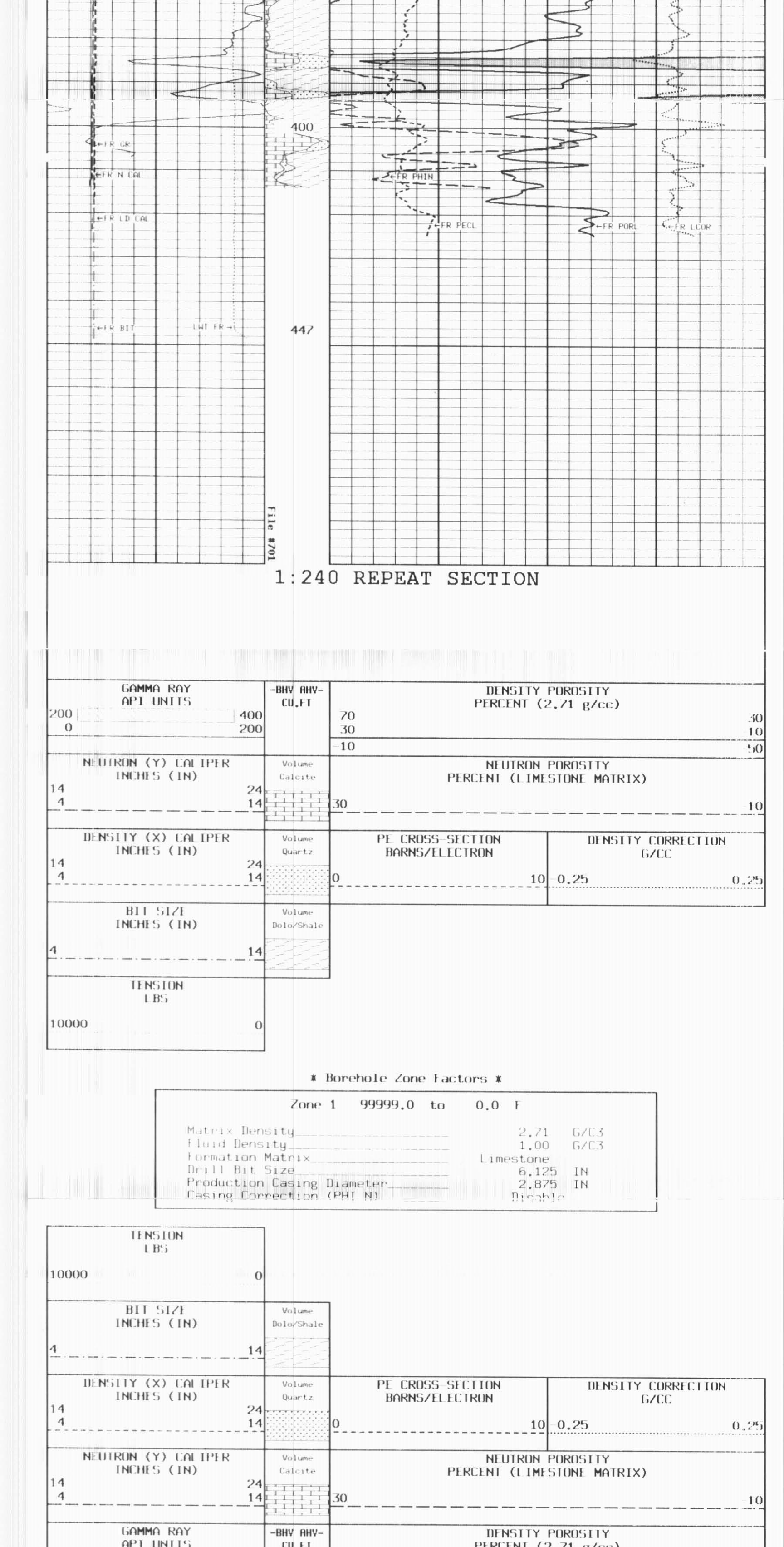
Tool: PIT Length: 21.49 ft. O.D.: 3.62 in.
Sonde ID : PIT-CA-074

Measure Point	Stack Offset	Tool Offset	Bottom Offset
ILD	30.92	8.92	12.56
ILM	32.10	10.10	11.39
SFLU	39.49	17.49	4.00
SP	42.60	20.60	0.88



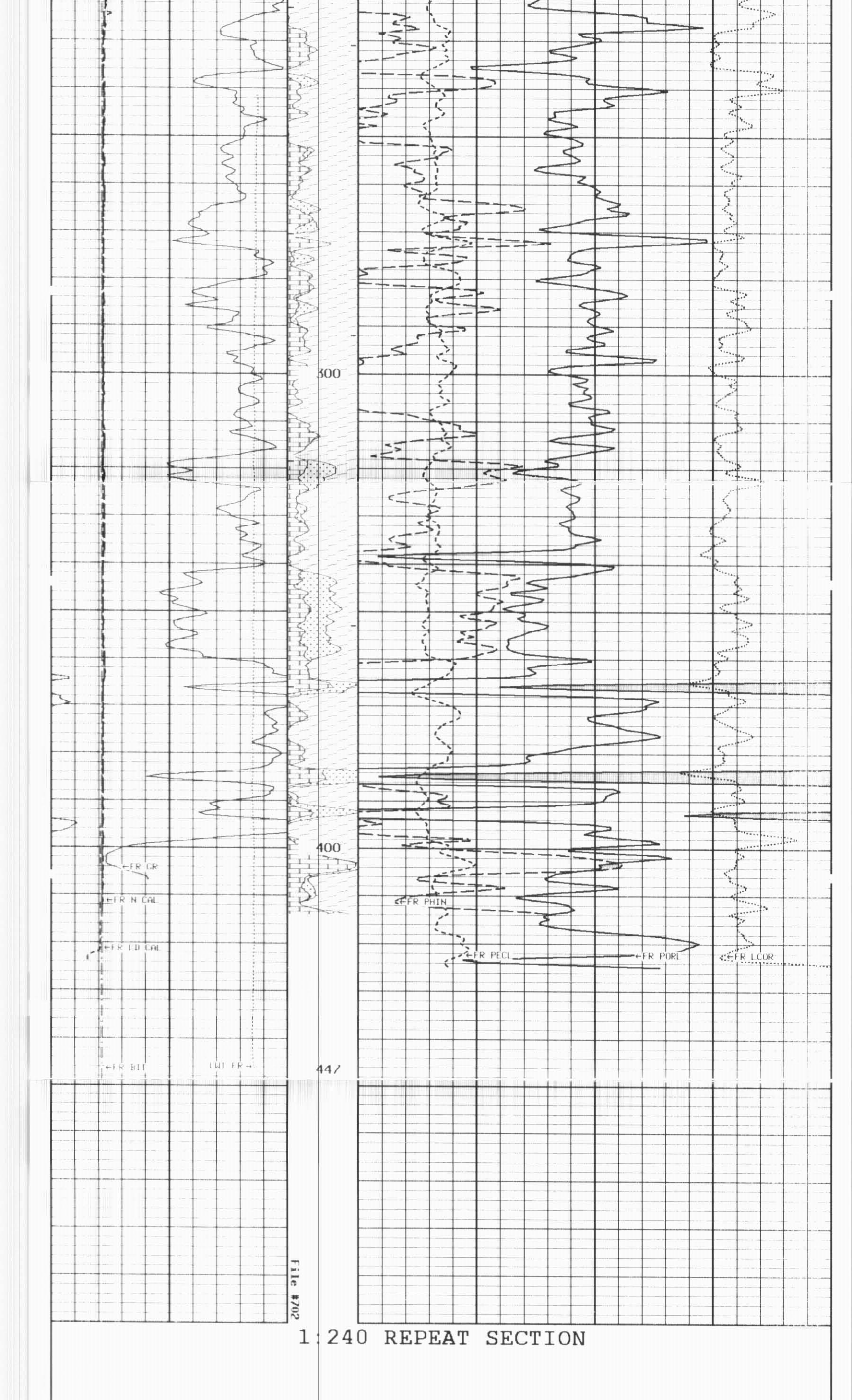
1:240 REPEAT SECTION

* Borehole Zone Factors *

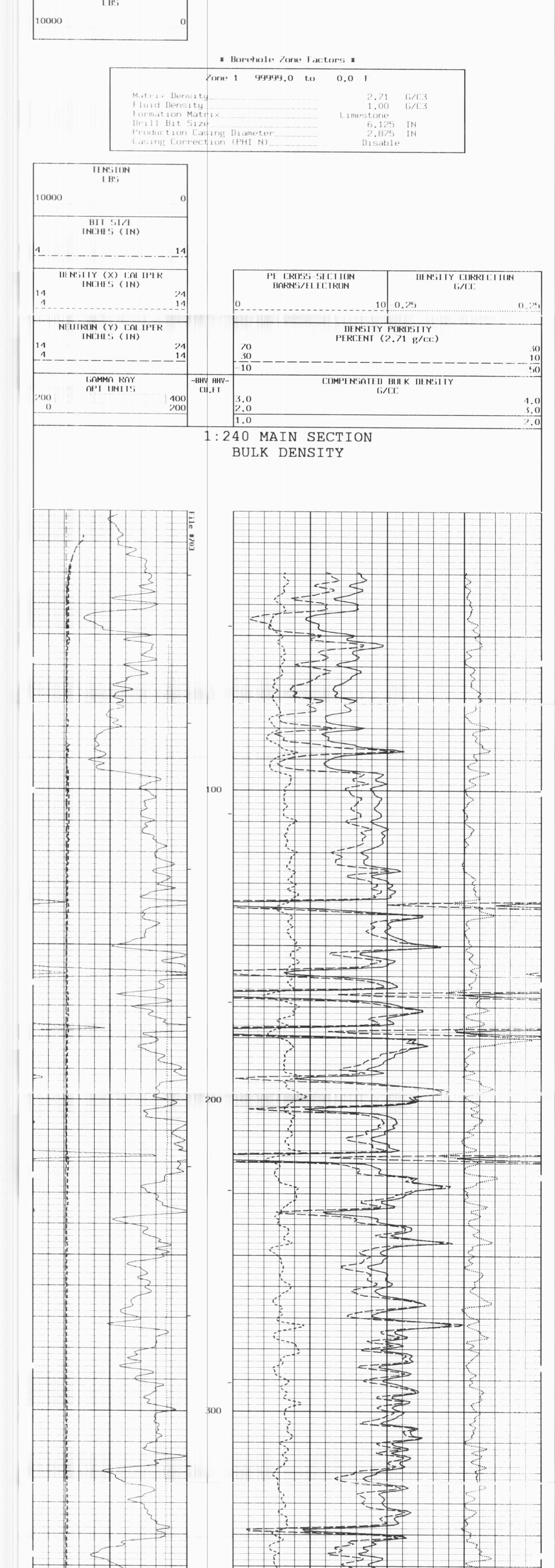


1:240 REPEAT SECTION

* Borehole Zone Factors *



1:240 MAIN SECTION
HOLE DENSITY



1:240 MAIN SECTION
HOLE DENSITY

GAMMA RAY API UNITS		-BHV AHV- CU.FT	COMPENSATED BULK DENSITY G/CC	
200	400		3.0	4.0
0	200		2.0	3.0
			1.0	2.0

NEUTRON (Y) CALIPER INCHES (IN)		DENSITY POROSITY PERCENT (2.71 g/cc)	
14	24	70	30
4	14	30	10
		-10	50

DENSITY (X) CALIPER INCHES (IN)		PE CROSS-SECTION BARNS/ELECTRON		DENSITY CORRECTION G/CC	
14	24				
4	14	0	10	-0.25	0.25

BIT SIZE INCHES (IN): 4 — 14
TENSION LBS: 10000 — 0

* Borehole Zone Factors *

Zone 1 99999.0 to 0.0 F

Matrix Density	2.71	G/C3
Fluid Density	1.00	G/C3
Formation Matrix	Limestone	
Drill Bit Size	6.125	IN
Production Casing Diameter	2.875	IN
Casing Correction (PHI N)	Disable	

* Calibration Summary *

Shop Calibration GRTB

Performed : 21-Aug-2009 Time : 15:26
Sensor Suite : GR-GR5 ID : GRT-BA-14

	Background	Measured Jig	Units	Calibrated Jig	Units
GR	49	347	CPS	175	GRAPI

Shop Calibration CNT

Performed : 23-Nov-2010 Time : 11:13
Sensor Suite : BHC NEUT ID : CNP-AA-111
Source ID : N-1044

	Tank Measured	Tank Calibrated	Verification Jig	Units
N/F	3.6301	3.6888	3.7041	
Porosity	19.6	20.5	20.7	%

Performed : 16-AUG-2009 Time : 10:24
Sensor Suite : CALI-BCN ID : CNP-AA-111

	Jig - Measured Ring#1	Ring#2	Jig - Calibrated Ring#1	Ring#2	Units
CL # 1	8.3	14.3	6.0	12.0	IN.

Shop Calibration LDTNG

Performed : 19-OCT-2009 Time : 10:55
Sensor Suite : CALIPEL ID : LDP-DA-01

	Jig - Measured Ring#1	Ring#2	Jig - Calibrated Ring#1	Ring#2	Units
CL # 1	6.2	12.2	6.0	12.0	IN.

Performed : 23-Nov-2010 Time : 13:42
Sensor Suite : BHCPELNG ID : LDP-DA-01
Source ID : CSV-587

Short Space

	BKGD	Al	Mg	Al+Fe	Units
LSW1	63	499	814	328	CPS
LSW2	72	563	917	410	CPS
LSW3	254	1332	2112	1141	CPS
LSW4	314	1226	1705	1080	CPS
LSW5	31	38	40	38	CPS
LSW6	79	80	80	80	CPS
LSW7	53	52	52	52	CPS
LSW8	2	2	3	2	CPS
QS	0.197	0.212	0.212	0.212	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC

Long Space

	BKGD	Al	Mg	Al+Fe	Units
LLW1	112	642	2650	403	CPS
LLW2	126	1055	4339	774	CPS
LLW3	482	2012	7336	1748	CPS
LLW4	602	1163	2909	1082	CPS
LLW5	71	74	87	74	CPS
LLW6	187	188	180	189	CPS
LLW7	116	116	112	116	CPS
LLW8	11	13	18	12	CPS
QL	0.234	0.237	0.233	0.239	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC