RELEASED

217-22417

COMPENSATED NEUTRON
PEL DENSITY LOG

~~CONFIDENTIAL~~ until 10-22-10

Tucker WIRELINE SERVICES

File No. :	TUL-54787
Company :	RUNNING FOXES PETROLEUM, INC.
Well :	EMMERSON 12-6B INJ
Field :	
County :	VERNON
State :	MISSOURI
Country :	USA

RECEIVED
OCT 22 2009
Mo Oil & Gas Council

Location : PERMIT# 22417
2015' FSL & 365' FWL

Sect : 6 Twp : 36N Rge : 33W

Recorded By : B.BAILEY
Witnessed By : B.WALSH

Date :	JUL 2 2009
Run No. :	1
Permanent Datum :	GL
Drilling Measured From :	GL
Log Measured From:	GL
Above Permanent Datum :	0.00 FT
Depth--Driller :	408.0 FT
Depth--Logger :	408.0 FT
Bottom Log Interval :	385.0 FT
Top Log Interval :	21.0 FT
Casing Depth--Driller:	21.0 FT
Casing Depth--Logger :	21.0 FT
Casing Diameter :	7.000 IN
Bit Size :	5.875 IN
Unit No. :	122
Location :	TULSA

Elevations :
KB : FT
DF : FT
GL : 865.00 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 :	FRESH/NATIVE			
Density :	0.000	SG		
Viscosity :	0.000	SEC		
pH :	0.000			
Fluid Loss :	0.000			
Salinity :	0.000	KPPM		
RM Source :	MEASURED			
RM :	16.700	OHMM at	71	F
RM at BHT :	15.321	OHMM at	78	F
RMF Source :	CALCULATED			
RMF :	14.195	OHMM at	71	F
RMF at BHT :	13.023	OHMM at	78	F
RMC Source :	CALCULATED			
RMC :	19.205	OHMM at	71	F
RMC at BHT :	13.619	OHMM at	78	F
Max Recorded Temp. :			78	F
Time Circulation Stopped :				
Operating Rig Time, Hrs. :			1.0	

- Source Serial Numbers -

Gamma CSV587
Neutron N-1044

- Sonde Serial Numbers -

GRTB GRT-BA-103
CNT CNP-AA-103
LDTNG LDP-NG-35
PIT_B PIT-AB-18

Casing Strings

Size (IN)	Weight (LB/FT)	Bottom (FT)
7.000	32.00	21.00

- 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 4.500" PRODUCTION CASING.

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

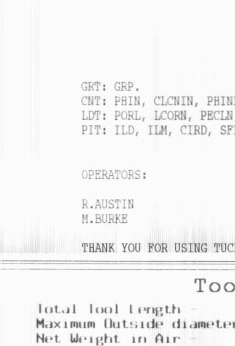
OPERATORS:

R.AUSTIN
M.BURKE

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-103

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-103
Source ID : N-1044
Pad ID : CNP-AA-103

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-NG-35
Source ID : CSV587
Pad ID : LDP-NG-35

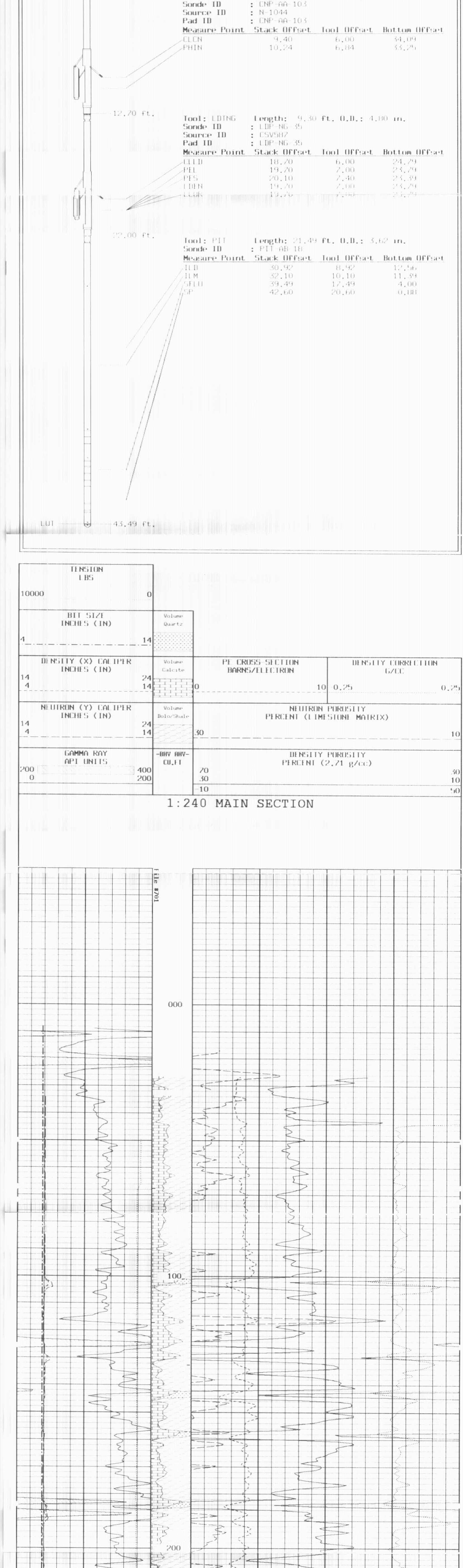
Measure Point	Stack Offset	Tool Offset	Bottom Offset
CLLD	18.70	6.00	24.79
PEL	19.70	7.00	23.79
PES	20.10	7.40	23.39
LDEN	19.70	7.00	23.79
LCOR	19.70	7.00	23.79

Tool: PIT Length: 21.49 ft. O.D.: 3.62 in.
Sonde ID : PIT-AB-18

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

TENSION LBS 10000 0
BIT SIZE INCHES (IN) 4 14 — Volume Quartz
DENSITY (X) CALIPER INCHES (IN) 14 24 / 4 14 — Volume Calcite — PE CROSS SECTION BARNS/ELECTRON 0 10 — DENSITY CORRECTION G/CC 0.25 0.25
NEUTRON (Y) CALIPER INCHES (IN) 14 24 / 4 14 — Volume Dolo/Shale — NEUTRON POROSITY PERCENT (LIMESTONE MATRIX) 30 10
GAMMA RAY API UNITS 200 400 / 0 200 — -BHV AHV- CU.FT — DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 / 30 10 / 10 50

1:240 MAIN SECTION



1:240 MAIN SECTION

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BIT SIZE INCHES (IN) 4 14 — Volume Quartz
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	5.875	IN
Production Casing Diameter	4.500	IN
Casing Correction (PHI N)	Disable	

TENSION LBS 10000 0
BIT SIZE INCHES (IN) 4 14 — Volume Quartz
DENSITY (X) CALIPER INCHES (IN) 14 24 / 4 14 — Volume Calcite — PE CROSS SECTION BARNS/ELECTRON 0 10 — DENSITY CORRECTION G/CC 0.25 0.25
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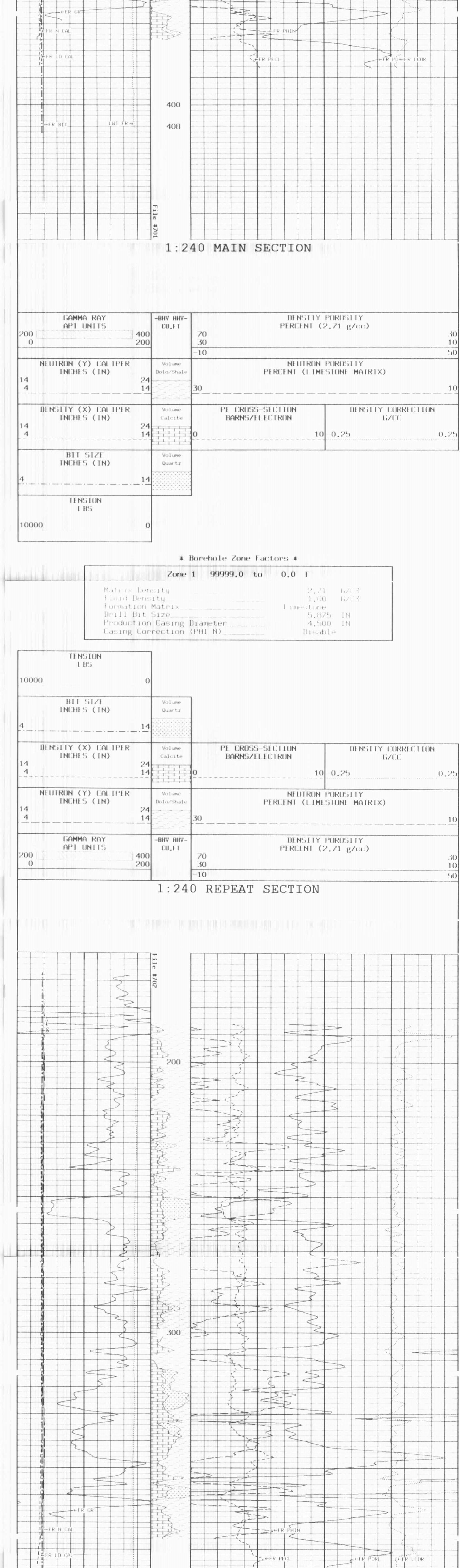
1:240 REPEAT SECTION



1:240 REPEAT SECTION

GAMMA RAY API UNITS 200 400 / 0 200 — -BHV AHV- CU.FT — DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 / 30 10 / 10 50
NEUTRON (Y) CALIPER INCHES (IN) 14 24 / 4 14 — Volume Dolo/Shale — NEUTRON POROSITY PERCENT (LIMESTONE MATRIX) 30 10
DENSITY (X) CALIPER INCHES (IN) 14 24 / 4 14 — Volume Calcite — PE CROSS SECTION BARNS/ELECTRON 0 10 — DENSITY CORRECTION G/CC 0.25 0.25
BIT SIZE INCHES (IN) 4 14 — Volume Quartz
TENSION LBS 10000 0

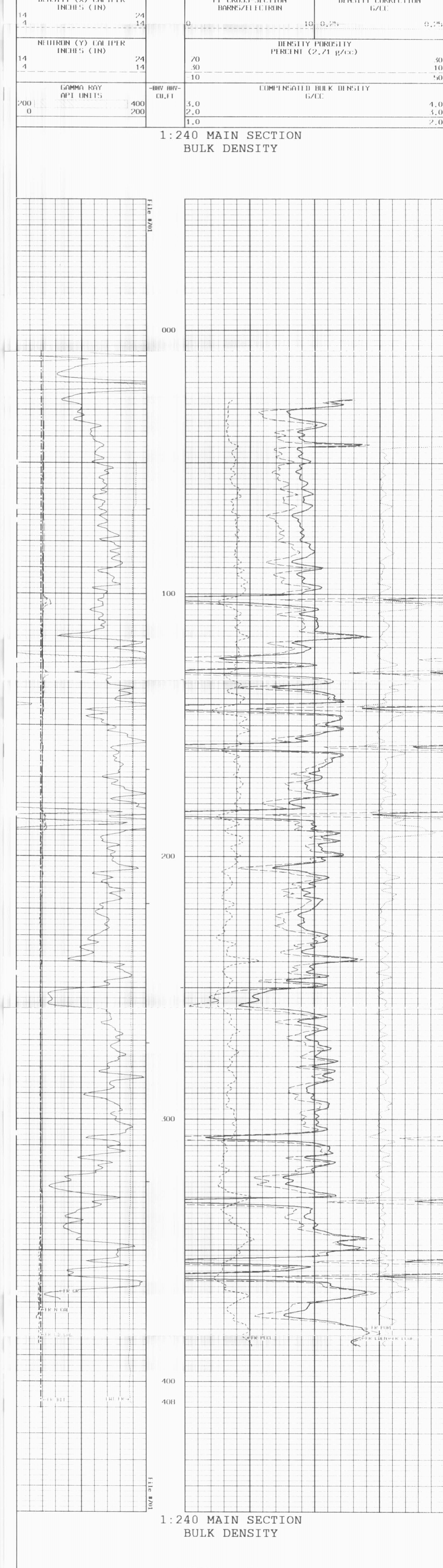
*** Borehole Zone Factors ***

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	5.875	IN
Production Casing Diameter	4.500	IN
Casing Correction (PHI N)	Disable	

TENSION LBS 10000 0
BIT SIZE INCHES (IN) 4 14
DENSITY (X) CALIPER INCHES (IN) 14 24 / 4 14 — PE CROSS SECTION BARNS/ELECTRON 0 10 — DENSITY CORRECTION G/CC 0.25 0.25
NEUTRON (Y) CALIPER INCHES (IN) 14 24 / 4 14 — DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 / 30 10 / 10 50
GAMMA RAY API UNITS 200 400 / 0 200 — -BHV AHV- CU.FT — COMPENSATED BULK DENSITY G/CC 3.0 4.0 / 2.0 3.0 / 1.0 2.0

1:240 MAIN SECTION
BULK DENSITY



1:240 MAIN SECTION
BULK DENSITY

GAMMA RAY API UNITS 200 400 / 0 200 — -BHV AHV- CU.FT — COMPENSATED BULK DENSITY G/CC 3.0 4.0 / 2.0 3.0 / 1.0 2.0
NEUTRON (Y) CALIPER INCHES (IN) 14 24 / 4 14 — DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 / 30 10 / 10 50
DENSITY (X) CALIPER INCHES (IN) 14 24 / 4 14 — PE CROSS SECTION BARNS/ELECTRON 0 10 — DENSITY CORRECTION G/CC 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	5.875	IN
Production Casing Diameter	4.500	IN
Casing Correction (PHI N)	Disable	

*** Calibration Summary ***

Shop Calibration GRTB

Performed : 19 May 2008 Time : 10:16
Sensor Suite : GR GRS ID : GRT BA 103

	Measured Background	Measured Jig	Units	Calibrated Jig	Units
GR	51	341	CPS	175	GRAPI

Shop Calibration CNT

Performed : 27 Apr 2009 Time : 09:24
Sensor Suite : BHC NEUT ID : CNP AA 103
Source ID : N 1044

	Tank Measured	Tank Calibrated	Verification Jig	Units
N/F	4.0854	3.6888	3.7022	
Porosity	27.0	20.5	20.7	%

Performed : 17 MAR 2009 Time : 08:38
Sensor Suite : CALI BCN ID : CNP AA 103

	Jig - Measured Ring#1	Jig - Measured Ring#2	Jig - Calibrated Ring#1	Jig - Calibrated Ring#2	Units
CL # 1	6.3	12.3	6.0	12.0	IN.

Shop Calibration LDTNG

Performed : 02 FEB 2008 Time : 04:41
Sensor Suite : CALIPEL ID : LDP NG 35

	Jig - Measured Ring#1	Jig - Measured Ring#2	Jig - Calibrated Ring#1	Jig - Calibrated Ring#2	Units
CL # 1	8.0	14.0	6.0	12.0	IN.

Performed : 04 May 2009 Time : 10:30
Sensor Suite : BHCPELNG ID : LDP NG 35
Source ID : CSV587

Short Space

	BKGD	Al	Mg	Al+Fe	Units
LSW1	76	509	826	344	CPS
LSW2	78	616	989	441	CPS
LSW3	302	1476	2336	1279	CPS
LSW4	372	1377	1910	1236	CPS
LSW5	36	48	48	46	CPS
LSW6	96	94	94	95	CPS
LSW7	62	63	62	64	CPS
LSW8	2	3	4	3	CPS
QS	0.215	0.197	0.205	0.198	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC

Long Space

	BKGD	Al	Mg	Al+Fe	Units
LLW1	117	572	2229	368	CPS
LLW2	125	1060	4379	758	CPS
LLW3	487	2135	7793	1858	CPS
LLW4	629	1252	3162	1159	CPS
LLW5	69	75	90	73	CPS
LLW6	200	198	190	196	CPS
LLW7	125	127	119	126	CPS
LLW8	4	6	11	6	CPS
QL	0.231	0.218	0.230	0.217	
PEL			2.692	5.458	
LSDN		2.600	1.680		G/CC