File No. : TUL-55622
Company : RUNNING FOXES PETROLEUM INC.
Well : EMMERSON 12-6A-4
Field :
County : VERNON
State : MISSOURI
Country : USA

Tucker WIRELINE SERVICES

CONFIDENTIAL
COMPENSATED NEUTRON
PEL DENSITY LOG

RECEIVED
SEP 27 2010
Mo Oil & Gas Council

Location : PERMIT: 22442
2180' FSL & 1200' FWL

Sect : 6 Twp : 36N Rge : 33W

Recorded By : B.BAILEY
Witnessed By : G.BRATTON

Date : MAY 7 2010
Run No. : 1

Permanent Datum : GL
Drilling Measured From : GL
Log Measured From: GL
Above Permanent Datum : 0.00 FT

Elevations :
KB : FT
DF : FT
GL : 873.00 FT

Depth--Driller : 435.0 FT
Depth--Logger : 434.0 FT
Bottom Log Interval : 411.0 FT
Top Log Interval : 23.0 FT

Casing Depth--Driller: 23.0 FT
Casing Depth--Logger : 23.0 FT
Casing Diameter : 7.000 IN

Bit Size : 6.125 IN
Unit No. : 122
Location : TULSA

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			
Density :	0.000	SG		
Viscosity :	0.000	SEC		
pH :	0.000			
Fluid Loss :	0.000			
Salinity :	0.000	KPPM		
RM Source :	FLOW LINE			
RM :	10.000	OHMM at	82	F
RM at BHT :	9.549	OHMM at	78	F
RMF Source :	PRESS			
RMF :	8.500	OHMM at	82	F
RMF at BHT :	8.117	OHMM at	78	F
RMC Source :	PRESS			
RMC :	11.500	OHMM at	82	F
RMC at BHT :	10.981	OHMM at	78	F
Max Recorded Temp. :			78	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-116
LDTNG	LDP-NG-02
PIT	PIT-AB-14

Casing Strings

Size (IN)	Weight (LB/FT)	Bottom (FT)
7.000	32.00	23.00

- 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.

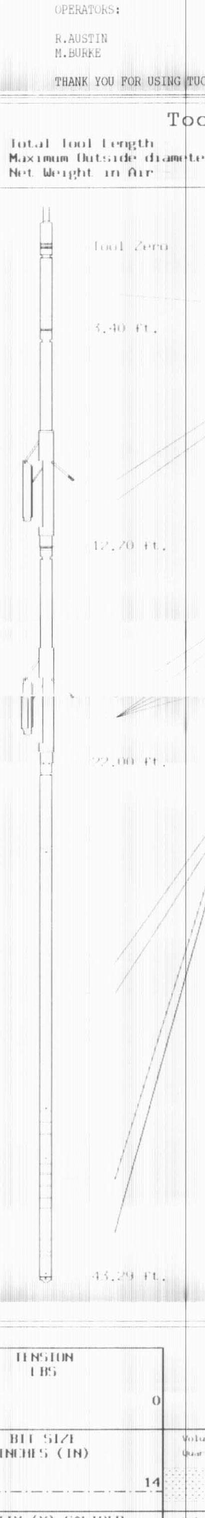
OPERATORS:

R.AUSTIN
M.BURKE

THANK YOU FOR USING TUCKER WIRELINE SERVICES!

Tool String Schematic

Total Tool Length 43.29 ft.
Maximum Outside diameter 4.00 in.
Net Weight in Air 243.00 lbs.



Tool Zero

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	41.29

3.40 ft.

Tool: CNT Length: 9.30 ft. O.D.: 4.36 in.
Sonde ID : CNP-AA-116
Source ID : N-1044
Pad ID : CNP-AA-116

Measure Point	Stack Offset	Tool Offset	Bottom Offset
CLCN	9.40	6.00	33.89
PHIN	10.24	6.84	33.05

12.70 ft.

Tool: LDTNG Length: 9.30 ft. O.D.: 4.00 in.
Sonde ID : LDP-NG-02
Source ID : CSV-587
Pad ID : LDP-NG-02

Measure Point	Stack Offset	Tool Offset	Bottom Offset
CLLD	18.70	6.00	24.59
PEL	19.70	7.00	23.59
PES	20.10	7.40	23.19
LDEN	19.70	7.00	23.59
LCOR	19.70	7.00	23.59

22.00 ft.

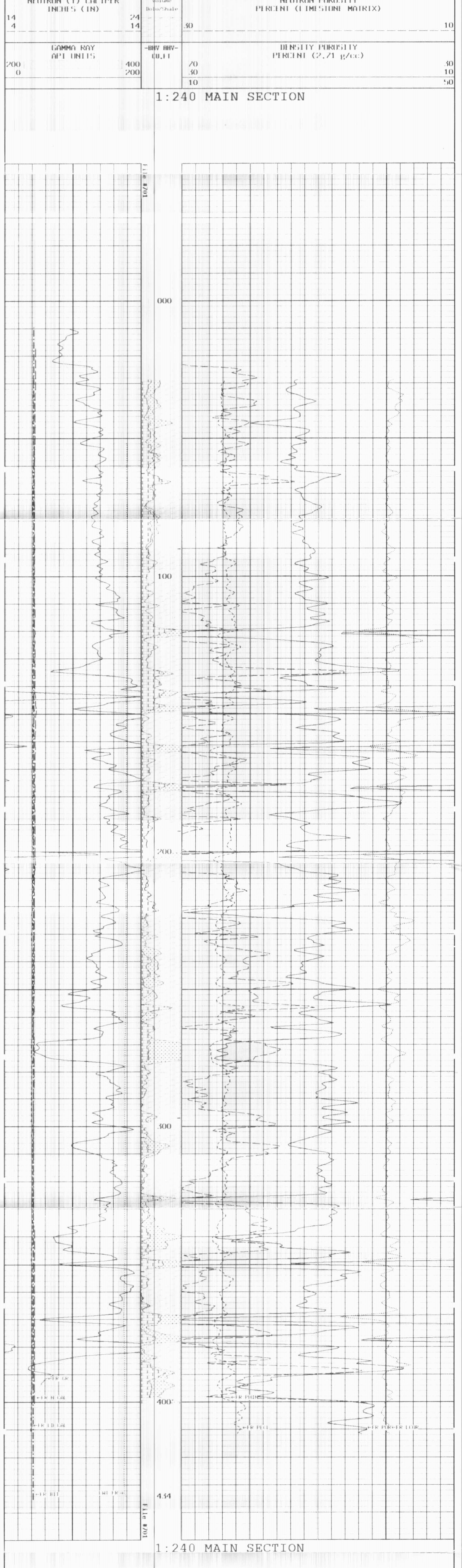
Tool: PIT Length: 21.29 ft. O.D.: 3.62 in.
Sonde ID : PIT-AB-14

Measure Point	Stack Offset	Tool Offset	Bottom Offset
ILD	30.92	8.92	12.37
ILM	32.10	10.10	11.20
SFLU	39.49	17.49	3.81
SP	42.60	20.60	0.69

TWT 43.29 ft.

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

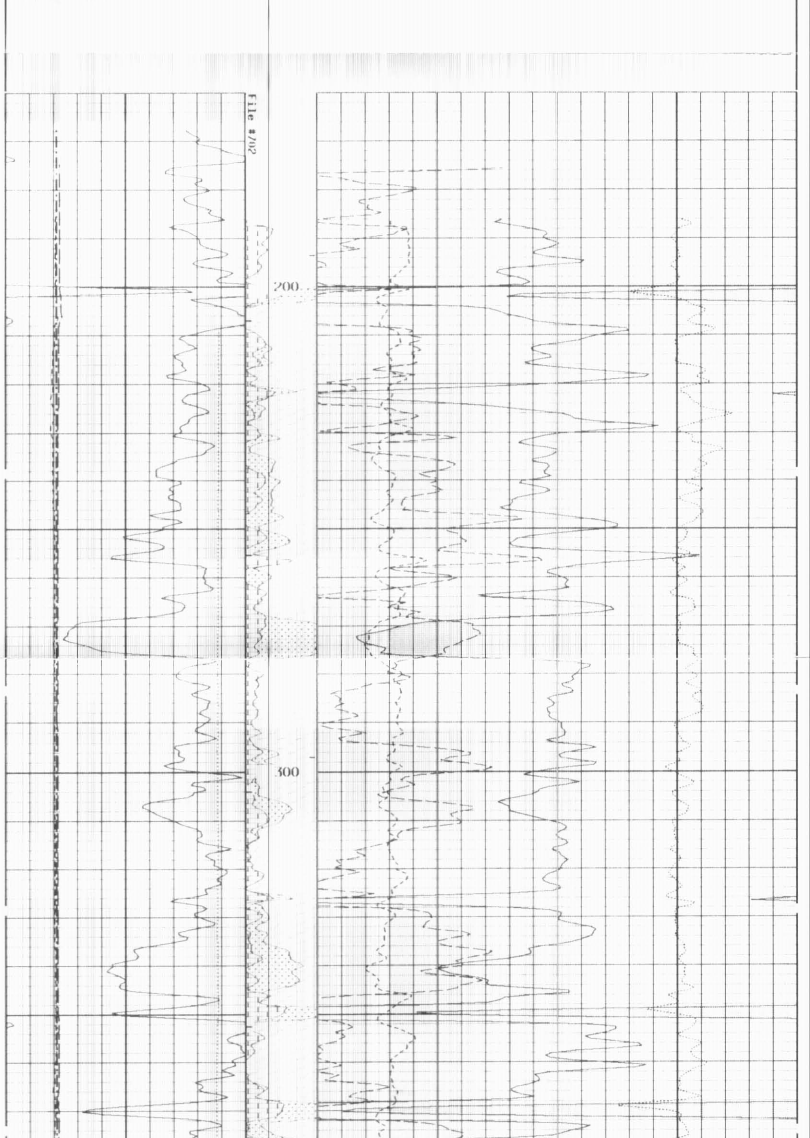
1:240 MAIN SECTION



1:240 MAIN SECTION

* Borehole Zone Factors *

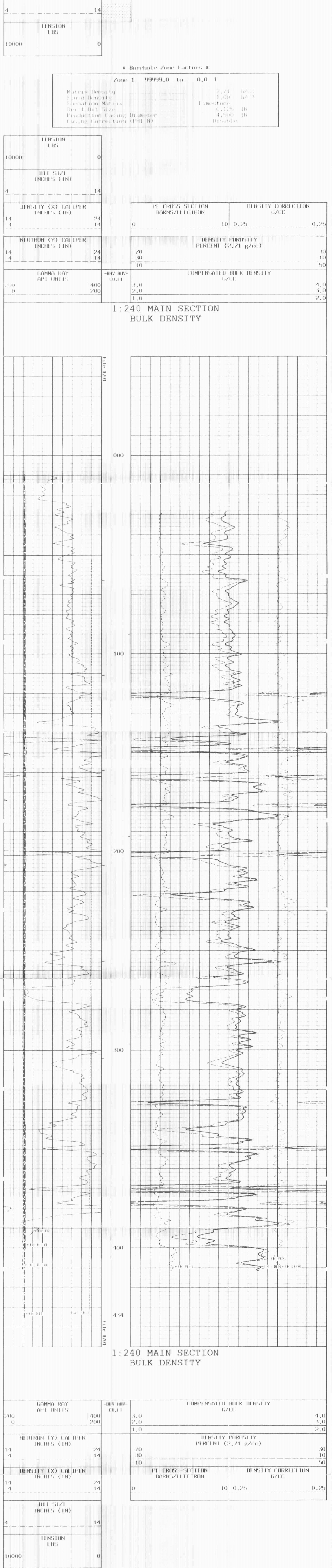
1:240 REPEAT SECTION



1:240 REPEAT SECTION

* Borehole Zone Factors *

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

* Calibration Summary *

Shop Calibration
GRTB
Performed : 21 Aug 2009 Time : 15:26
Sensor Suite : GR GRS ID : GRT-BA-14

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

Shop Calibration
CNT
Performed : 05 May 2010 Time : 11:02
Sensor Suite : BHC NEUT ID : CNP-AA-116
Source ID : N-1044

	Tank Measured	Tank Calibrated	Verification Jig	Units
N/F	3.8722	3.6901	3.7010	
Porosity	23.4	20.5	20.7	%

Performed : 07 MAR 2010 Time : 09:04
Sensor Suite : CALI BCN ID : CNP-AA-116

	Jig Measured Ring#1	Ring#2	Jig Calibrated Ring#1	Ring#2	Units
CL # 1	8.2	14.2	6.0	12.0	IN.

Shop Calibration
LDTNG
Performed : 14 APR 2009 Time : 14:57
Sensor Suite : CALIPER ID : LDP-NG-02

	Jig Measured Ring#1	Ring#2	Jig Calibrated Ring#1	Ring#2	Units
CL # 1	6.9	12.9	6.0	12.0	IN.

Performed : 05 May 2010 Time : 09:47
Sensor Suite : BHCPELNG ID : LDP-NG-02
Source ID : CSV-587

Short Space

	BKGD	Al	Mg	Alite	Units
LSW1	71	482	772	323	CPS
LSW2	23	584	933	417	CPS
LSW3	292	1457	2201	1232	CPS
LSW4	370	1392	1931	1252	CPS
LSW5	35	45	46	44	CPS
LSW6	96	97	97	98	CPS
LSW7	60	62	61	61	CPS
LSW8	2	3	3	3	CPS
QS	0.231	0.220	0.228	0.233	
PES			2.776	5.567	
SSDN		2.600	1.680		G/CC

Long Space

	BKGD	Al	Mg	Alite	Units
LLW1	109	629	2543	332	CPS
LLW2	123	1084	4422	734	CPS
LLW3	456	2105	7702	1817	CPS
LLW4	600	1229	3164	1132	CPS
LLW5	66	71	87	70	CPS
LLW6	197	190	184	191	CPS
LLW7	119	122	116	121	CPS
LLW8	3	5	10	5	CPS
QL	0.247	0.218	0.222	0.224	
PEL			2.697	5.408	
LSDN		2.600	1.680		G/CC