Tucker WIRELINE SERVICES

DUAL INDUCTION RESISTIVITY LOG

File No. : TUL-56635
Company : RUNNING FOXES PETROLEUM INC.
Well : EMMERSON #5-6A-2
Field : BUCHANAN
County : VERNON
State : MISSOURI
Country : USA

Location : PERMIT #22661
1450' FNL & 870' FWL

Sect : 06 Twp : 36N Rge : 33W

RECEIVED JUN 20 2011 Mo Oil & Gas Council

6/8/12

Recorded By : R. FRANKLIN
Witnessed By : C. COUNTS

Date : DEC 21 2010		
Run No. : 1		
Permanent Datum :	GL	
Drilling Measured From :	GL	
Log Measured From:	GL	
Above Permanent Datum :	0.00	FT
Depth--Driller :	460.0	FT
Depth--Logger :	458.0	FT
Bottom Log Interval :	457.0	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 : 880.00 FT

Additional Services
CNT
LDT

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 :	10.000	OHMM at	60	F
RM at BHT :	8.370	OHMM at	73	F
RMF Source :	CALCULATED			
RMF :	8.500	OHMM at	60	F
RMF at BHT :	7.110	OHMM at	73	F
RMC Source :	CALCULATED			
RMC :	11.500	OHMM at	60	F
RMC at BHT :	9.620	OHMM at	73	F
Max Recorded Temp. :			73	F
Time Circulation Stopped :				
Operating Rig Time, Hrs. :			1.5	

- 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-AB-12

Casing Strings

Size (IN)	Weight (LB/FT)	Bottom (FT)
8.625	26.00	20.00

- Comments -

ALL PRESENTATIONS AS PER CUSTOMER REQUEST.

GRT, CNT, LDT, AND 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 2.785" PRODUCTION CASING.

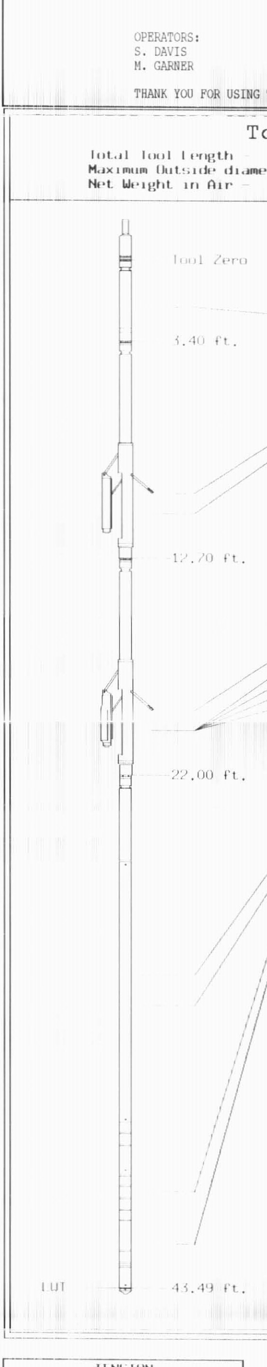
GRT: GRP.
CNT: PHIN, CLCNIN.
LDT: PORL, LCORN, PECLN, CLLDIN, LDENN, PORLLS, PECSN.
PIT: ILD, ILM, CIRD, SFLAEC, SPU.

OPERATORS:
S. DAVIS
M. GARNER

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

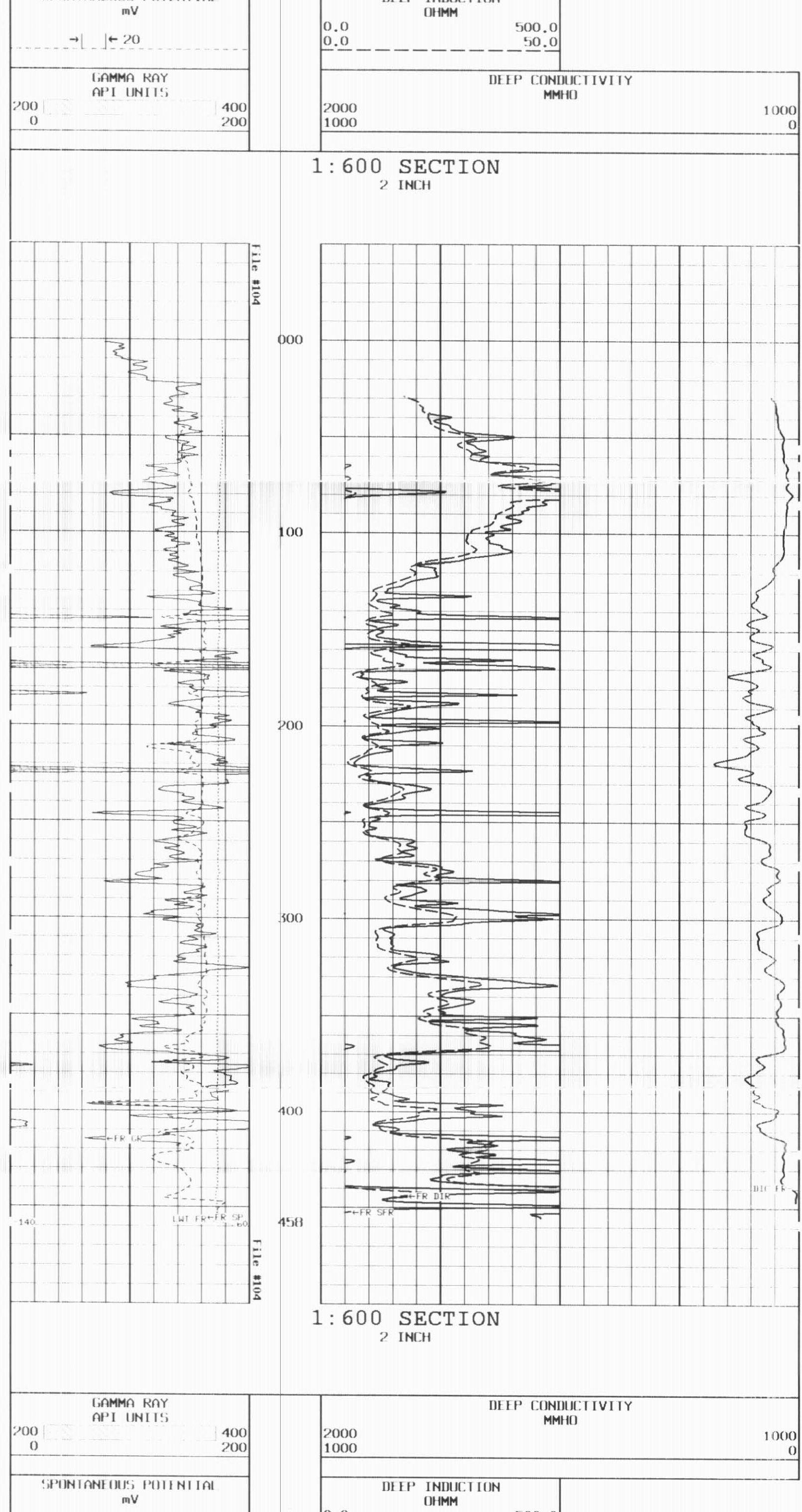
Measure Point	Stack Offset	Tool Offset	Bottom Offset
CLLD	18.70	6.00	24.79
PEL	19.70	7.00	23.79
PES	20.10	7.40	23.39
LDEN	19.70	7.00	23.79
LCOR	19.70	7.00	23.79

Tool: PIT Length: 21.49 ft. O.D.: 3.62 in.
Sonde ID : PIT-AB-12

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
SPONTANEOUS POTENTIAL mV →| |← 20
GAMMA RAY API UNITS 200 — 400; 0 — 200
SHALLOW FOCUSED RESISTIVITY OHMM 0.0 — 500.0; 0.0 — 50.0
DEEP INDUCTION OHMM 0.0 — 500.0; 0.0 — 50.0
DEEP CONDUCTIVITY MMHO 2000 — 1000; 1000 — 0

1:600 SECTION
2 INCH



1:600 SECTION
2 INCH

1:240 MAIN SECTION

1:240 MAIN SECTION

GAMMA RAY API UNITS 200 — 400; 0 — 200
SPONTANEOUS POTENTIAL mV →| |← 20
TENSION LBS 10000 — 0
DEEP INDUCTION OHMM 0.2 — 2000.0
MEDIUM INDUCTION OHMM 0.2 — 2000.0
SHALLOW FOCUSED RESISTIVITY OHMM 0.2 — 2000.0

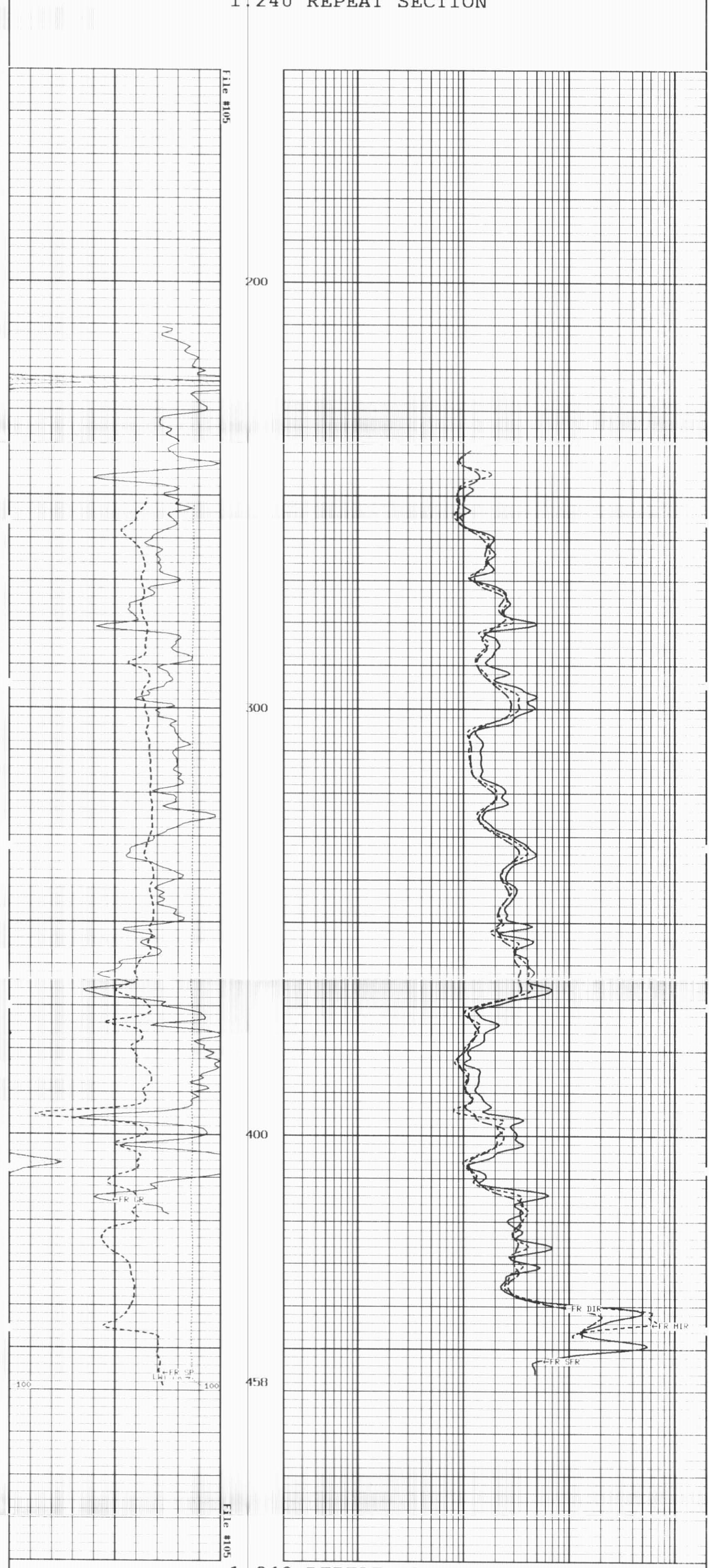
*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 F

Drill Bit Size	6.125	IN
BHT Depth	458.000	F
Borehole Temperature	73.0	DEGF
Temperature Gradient	1.00	DFHF
Resistivity Of Mud	10.00	OHMM
Resistivity Of Mud Temperature	60.00	DEGF

TENSION LBS 10000 — 0
SPONTANEOUS POTENTIAL mV →| |← 20
GAMMA RAY API UNITS 200 — 400; 0 — 200
SHALLOW FOCUSED RESISTIVITY OHMM 0.2 — 2000.0
MEDIUM INDUCTION OHMM 0.2 — 2000.0
DEEP INDUCTION OHMM 0.2 — 2000.0

1:240 REPEAT SECTION



1:240 REPEAT SECTION

TENSION LBS 10000 — 0
SHALLOW FOCUSED RESISTIVITY OHMM 0.2 — 2000.0

*** Borehole Zone Factors ***

Zone 1 99999.0 to 0.0 F

Drill Bit Size	6.125	IN
BHT Depth	458.000	F
Borehole Temperature	73.0	DEGF
Temperature Gradient	1.00	DFHF
Resistivity Of Mud	10.00	OHMM
Resistivity Of Mud Temperature	60.00	DEGF

*** 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 PIT_B

Performed : 12-Nov-2009 Time : 12:53
Sensor Suite : P-IND-T ID : PIT-AB-12

Medium

	Measured R	Measured X	Calibrated R	Calibrated X	Units
Air	132122	129435	0.0	0.0	MMHOS
Zero	131065	131068	0.0	0.0	MMHOS
Reference	246953	246327	5000.0	5000.0	MMHOS
Loop	151860	171700	2685.1	981.9	MMHOS
Sonde Error			-0.4	2.8	MMHOS
Cond			5000.0	5000.0	MMHOS

Deep

	Measured R	Measured X	Calibrated R	Calibrated X	Units
Air	129258	130928	0.0	0.0	MMHOS
Zero	131078	131073	0.0	0.0	MMHOS
Reference	233123	232037	2000.0	2000.0	MMHOS
Loop	149794	174665	1268.9	463.9	MMHOS
Sonde Error			-2.8	0.8	MMHOS
Cond			2000.0	2000.0	MMHOS

Temperature

Measured Low	Measured High	Calibrated Low	Calibrated High	Units
16980.0	56920.0	70.0	350.0	DEGF

Performed : 12-Nov-2009 Time : 12:50
Sensor Suite : SFL ID : PIT-AB-12

Internal

	Measured Zero	Measured Reference	Calibrated Zero	Calibrated Reference	Units
Im	32775.4	49495.8	0.0	7028.0	uA
Ib	32766.0	49842.1	0.0	1750.0	mA
MOM1	32803.3	56544.4	0.0	175.0	mV
Equivalent SFL				43.97	OHMM

Performed : 12-Nov-2009 Time : 11:58
Sensor Suite : P-SP ID : PIT-AB-12

Internal

Measured Zero	Measured Reference	Calibrated Zero	Calibrated Reference	Units
32796.1	58985.5	0.0	1000.0	mV

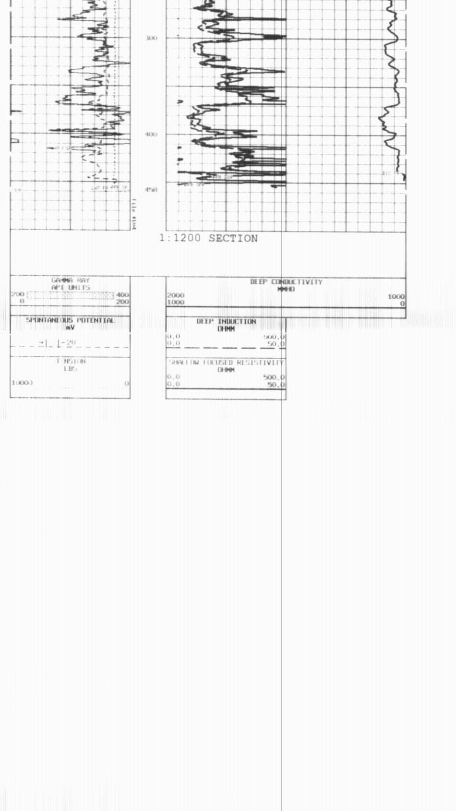
Performed : 27-Nov-2007 Time : 14:12
Sensor Suite : P-RMUD ID : PIT-AB-12

Internal

	Measured Zero	Measured Reference	Calibrated Zero	Calibrated Reference	Units
Rmi	17920.0	32747.0	0.0	290.6	mA
Rmv	17920.0	28538.9	0.0	290.6	mV
Equivalent Rm				0.9037	OHMM

TENSION LBS 10000 — 0
SPONTANEOUS POTENTIAL mV
GAMMA RAY API UNITS 200 — 400; 0 — 200
SHALLOW FOCUSED RESISTIVITY OHMM 0.0 — 500.0; 0.0 — 50.0
DEEP INDUCTION OHMM 0.0 — 500.0; 0.0 — 50.0
DEEP CONDUCTIVITY MMHO 2000 — 1000; 1000 — 0

1:1200 SECTION



1:1200 SECTION

GAMMA RAY API UNITS 200 — 400; 0 — 200
DEEP CONDUCTIVITY MMHO 2000 — 1000; 1000 — 0
SPONTANEOUS POTENTIAL mV
DEEP INDUCTION OHMM