



DRILL STEM TEST REPORT

Prepared For: **Palmer Oil Inc.**

3118 N Cummings Rd
Garden City KS 67846

ATTN: Keith Reavis

UPC #23-6

23-32s-37w Stevens,KS

Start Date: 2014.01.19 @ 02:48:15

End Date: 2014.01.19 @ 13:37:30

Job Ticket #: 56735 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.01.23 @ 15:02:17

Palmer Oil Inc.
23-32s-37w Stevens,KS
UPC #23-6
DST # 1
St. Louis
2014.01.19



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Palmer Oil Inc.
3118 N Cummings Rd
Garden City KS 67846
ATTN: Keith Reavis

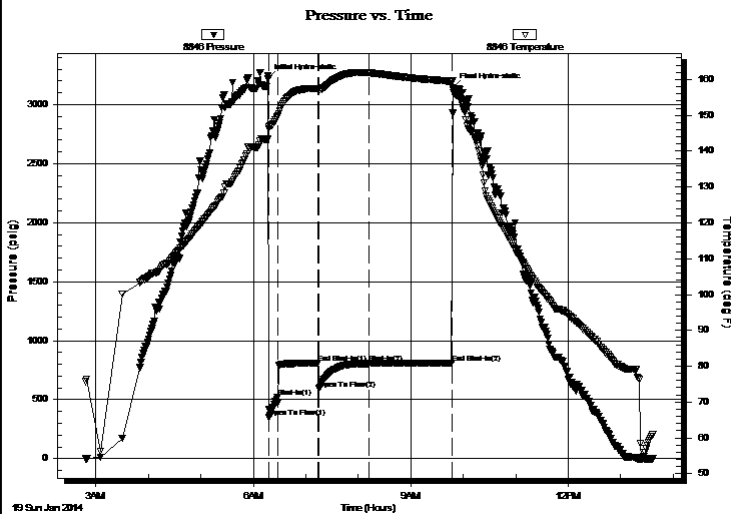
23-32s-37w Stevens,KS
UPC #23-6
Job Ticket: 56735 **DST#: 1**
Test Start: 2014.01.19 @ 02:48:15

GENERAL INFORMATION:

Formation: **St. Louis**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:18:00
Time Test Ended: 13:37:30
Interval: **6354.00 ft (KB) To 6400.00 ft (KB) (TVD)**
Total Depth: 6400.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Mike Roberts
Unit No: 65
Reference Elevations: 3124.00 ft (KB)
3112.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8846 Inside
Press@RunDepth: 807.19 psig @ 6355.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.01.19 End Date: 2014.01.19 Last Calib.: 2014.01.20
Start Time: 02:48:15 End Time: 13:37:30 Time On Btm: 2014.01.19 @ 06:16:45
Time Off Btm: 2014.01.19 @ 09:48:15

TEST COMMENT: IF:BOB in 1 min.
IS:No return blow
FF:BOB in 2 min.
FS:No retrurn blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3219.73	143.29	Initial Hydro-static
2	352.85	146.69	Open To Flow (1)
11	521.86	149.72	Shut-In(1)
58	808.54	157.39	End Shut-In(1)
59	593.32	157.31	Open To Flow (2)
116	807.19	161.85	Shut-In(2)
211	808.81	159.50	End Shut-In(2)
212	3145.34	157.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1118.00	mcw 5% m 95% w	13.97
248.00	w cm 30% w 70% m	3.48
310.00	mud 100% m	4.35
0.00	GIP = 62 ft.	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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Garden City KS 67846
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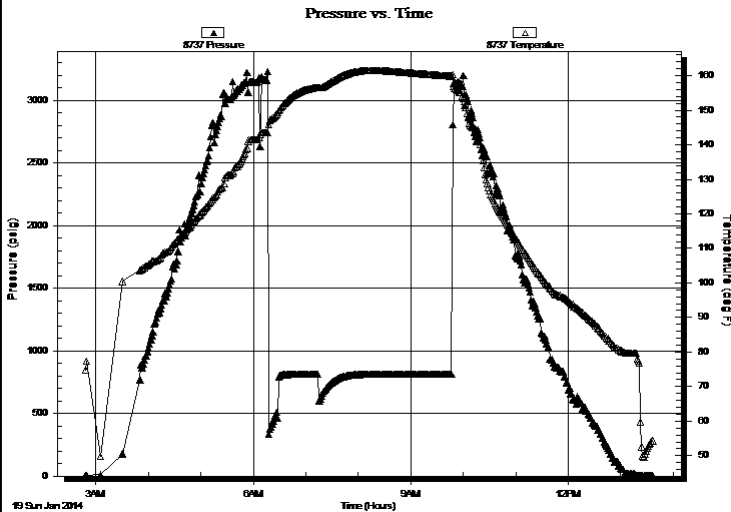
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Test Type: Conventional Bottom Hole (Initial)
Tester: Mike Roberts
Unit No: 65
Reference Elevations: 3124.00 ft (KB)
3112.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8737 Outside
Press@RunDepth: psig @ 6355.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.01.19 End Date: 2014.01.19 Last Calib.: 2014.01.20
Start Time: 02:48:15 End Time: 13:37:30 Time On Btm:
Time Off Btm:

TEST COMMENT: IF:BOB in 1 min.
IS:No return blow
FF:BOB in 2 min.
FS:No retrurn blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
1118.00	mcw 5% m 95% w	13.97
248.00	w cm 30% w 70% m	3.48
310.00	mud 100% m	4.35
0.00	GIP = 62 ft.	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Palmer Oil Inc.

23-32s-37w Stevens,KS

3118 N Cummings Rd
Garden City KS 67846

UPC #23-6

Job Ticket: 56735

DST#: 1

ATTN: Keith Reavis

Test Start: 2014.01.19 @ 02:48:15

Tool Information

Drill Pipe:	Length: 6155.00 ft	Diameter: 3.80 inches	Volume: 86.34 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 188.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 140000.0 lb
			<u>Total Volume: 87.26 bbl</u>	Tool Chased 20.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	6354.00 ft			Final 91000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	75.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			6326.00	
Shut In Tool	5.00			6331.00	
Hydraulic tool	5.00			6336.00	
Jars	5.00			6341.00	
Safety Joint	3.00			6344.00	
Packer	5.00			6349.00	29.00 Bottom Of Top Packer
Packer	5.00			6354.00	
Stubb	1.00			6355.00	
Recorder	0.00	8846	Inside	6355.00	
Recorder	0.00	8737	Outside	6355.00	
Perforations	7.00			6362.00	
Change Over Sub	1.00			6363.00	
Drill Pipe	31.00			6394.00	
Change Over Sub	1.00			6395.00	
Bullnose	5.00			6400.00	46.00 Bottom Packers & Anchor

Total Tool Length: 75.00



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FLUID SUMMARY

Palmer Oil Inc.

23-32s-37w Stevens,KS

3118 N Cummings Rd
Garden City KS 67846

UPC #23-6

Job Ticket: 56735

DST#: 1

ATTN: Keith Reavis

Test Start: 2014.01.19 @ 02:48:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

10000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1118.00	mcw 5%m 95%w	13.970
248.00	w cm 30%w 70%m	3.479
310.00	mud 100%m	4.348
0.00	GIP = 62 ft.	0.000

Total Length: 1676.00 ft Total Volume: 21.797 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .823@ 54.8* = 10,000 ppm

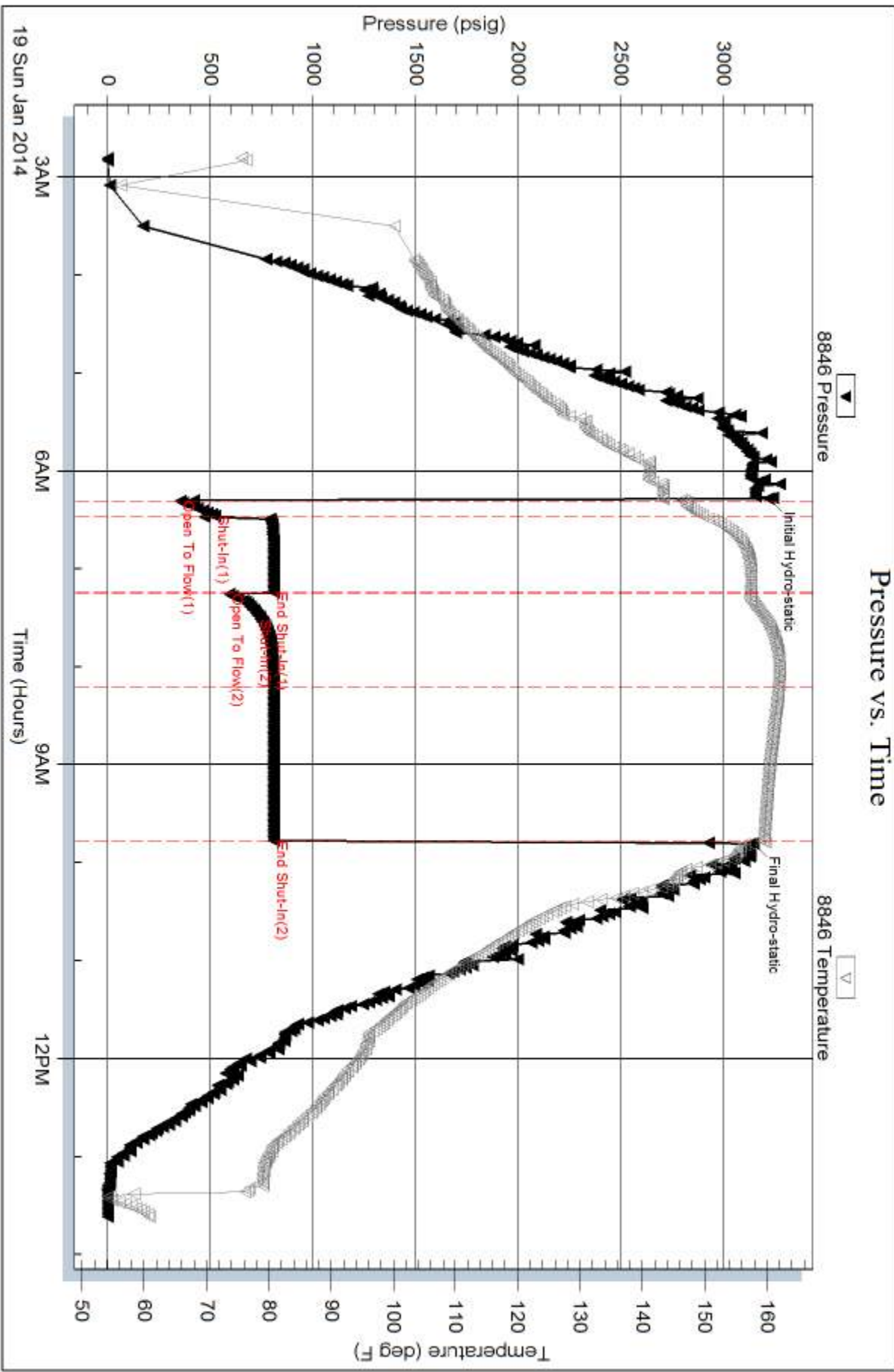
Serial #: 8846

Inside

Palmer Oil Inc.

UFC #23-6

DST Test Number: 1

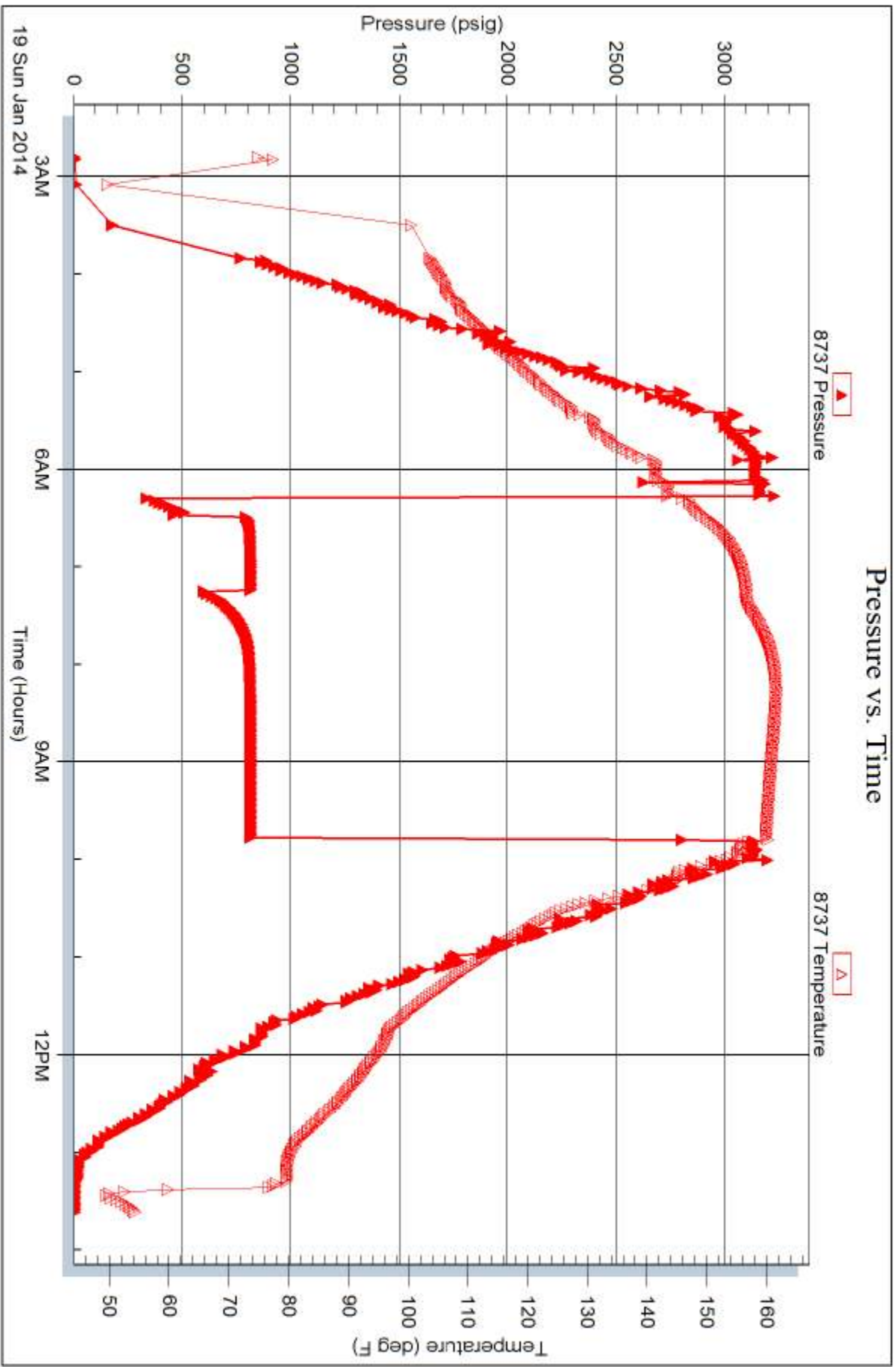


Serial #: 8737

Outside Palmer Oil Inc.

UPC #23-6

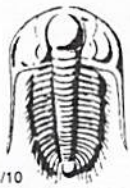
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 56735

Printed: 2014.01.23 @ 15:02:19



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56735

Well Name & No. UPC #23-6 Test No. 1 Date 1-20-14
 Company Palmer Oil Inc. Elevation 3124 KB 3112 GL
 Address 3118 N. Cummings Rd Garden City KS 67846
 Co. Rep / Geo. Keith Reavis Rig Duke #9
 Location: Sec. 23 Twp. 32S Rge. 37W Co. Stevens State KS

Interval Tested 6354-6400 Zone Tested St. Louis
 Anchor Length 46 Drill Pipe Run 6155 Mud Wt. 9.4
 Top Packer Depth 6350 Drill Collars Run 188 Vis 50
 Bottom Packer Depth 6354 Wt. Pipe Run Ø WL 7.2
 Total Depth 6400 Chlorides 1600 ppm System LCM 2
 Blow Description IF: BOB in 1 Min
IS: NO Return Blow
FF: BOB in 2 Min
FS: NO Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>Ø</u>	<u>61P = 62 FT</u>	<u>100</u>			
<u>310</u>	<u>MUD</u>			<u>100</u>	
<u>248</u>	<u>WCM</u>		<u>30</u>	<u>70</u>	
<u>1118</u>	<u>MCW</u>		<u>95</u>	<u>5</u>	

Rec Total 1676 BHT 160 Gravity — API RW 1,823 @ 54.8° F Chlorides 10,000 ppm

(A) Initial Hydrostatic <u>3219</u>	<input checked="" type="checkbox"/> Test <u>1450.00</u>	T-On Location <u>01:00</u>
(B) First Initial Flow <u>352</u>	<input checked="" type="checkbox"/> Jars <u>250.00</u>	T-Started <u>02:48</u>
(C) First Final Flow <u>521</u>	<input checked="" type="checkbox"/> Safety Joint <u>75.00</u>	T-Open <u>06:18</u>
(D) Initial Shut-In <u>808</u>	<input checked="" type="checkbox"/> Circ Sub	T-Pulled <u>09:43</u>
(E) Second Initial Flow <u>593</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>13:37</u>
(F) Second Final Flow <u>807</u>	<input checked="" type="checkbox"/> Mileage <u>220 RT 341.00</u>	Comments
(G) Final Shut-In <u>808</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>3145</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby	Total <u>2116</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>2116.00/-</u>	

Approved By _____ Our Representative Mike Robert

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