



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita, KS 67208

ATTN: Mike Maune

D-B Unit A #1-14

14-20s-26w Ness,KS

Start Date: 2013.01.21 @ 17:53:46

End Date: 2013.01.22 @ 05:36:16

Job Ticket #: 50124 DST #: 1

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

Printed: 2013.01.22 @ 08:28:12

Cobalt Energy LLC
14-20s-26w Ness,KS
D-B Unit A #1-14
DST # 1
Miss
2013.01.21



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy LLC

14-20s-26w Ness, KS

PO Box 8037
Wichita, KS 67208

D-B Unit A #1-14

ATTN: Mike Maune

Job Ticket: 50124

DST#: 1

Test Start: 2013.01.21 @ 17:53:46

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:33:46

Time Test Ended: 05:36:16

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 60

Interval: 4435.00 ft (KB) To 4495.00 ft (KB) (TVD)

Reference Elevations: 2501.00 ft (KB)

Total Depth: 4495.00 ft (KB) (TVD)

2491.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8373 Inside

Press @ Run Depth: 154.02 psig @ 4436.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.01.21

End Date:

2013.01.22

Last Calib.:

2013.01.22

Start Time: 17:53:51

End Time:

05:36:16

Time On Btm:

2013.01.21 @ 22:31:16

Time Off Btm:

2013.01.22 @ 02:37:16

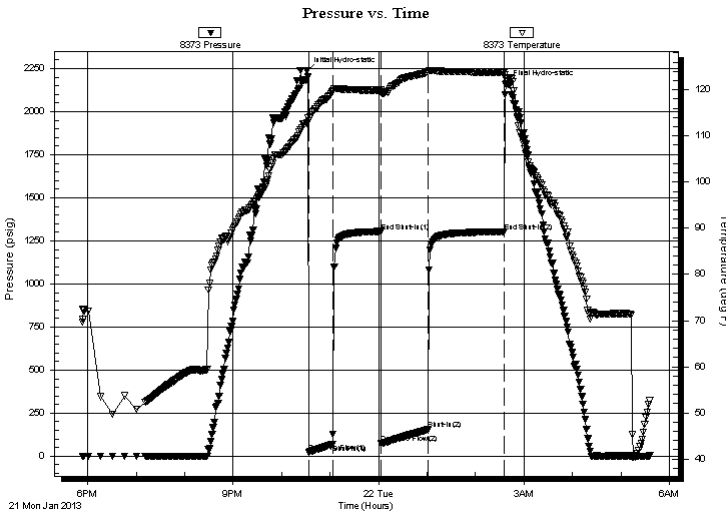
TEST COMMENT: IF: 1/4" blow built to 8" in 30 min.

IS: No return.

FF: BOB in 40 min.

FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2235.02	112.85	Initial Hydro-static
3	24.30	113.31	Open To Flow (1)
32	70.40	119.68	Shut-In(1)
92	1304.69	119.92	End Shut-In(1)
92	73.69	119.34	Open To Flow (2)
150	154.02	123.81	Shut-In(2)
245	1303.84	123.80	End Shut-In(2)
246	2158.25	122.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	mcw 70%w 30%m	1.74
62.00	mud show of oil 100%m	0.87
112.00	ocm 2%o 98%m	1.57

Gas Rates

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



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D-B Unit A #1-14

Job Ticket: 50124

DST#: 1

ATTN: Mike Maune

Test Start: 2013.01.21 @ 17:53:46

GENERAL INFORMATION:

Formation: **Miss**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:33:46
 Time Test Ended: 05:36:16
 Interval: **4435.00 ft (KB) To 4495.00 ft (KB) (TVD)**
 Total Depth: 4495.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Brandon Turley
 Unit No: 60
 Reference Elevations: 2501.00 ft (KB)
 2491.00 ft (CF)
 KB to GR/CF: 10.00 ft

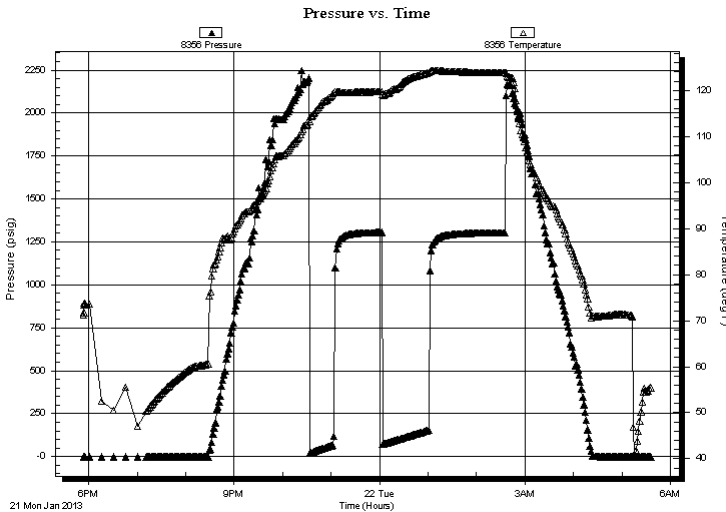
Serial #: 8356

Outside

Press @ Run Depth: psig @ 4436.00 ft (KB)
 Start Date: 2013.01.21 End Date: 2013.01.22
 Start Time: 17:53:51 End Time: 05:36:16
 Capacity: 8000.00 psig
 Last Calib.: 2013.01.22
 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: 1/4" blow built to 8" in 30 min.
 IS: No return.
 FF: BOB in 40 min.
 FS: No return.

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
124.00	mcw 70%w 30%m	1.74
62.00	mud show of oil 100%m	0.87
112.00	ocm 2%o 98%m	1.57

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy LLC

14-20s-26w Ness, KS

PO Box 8037
Wichita, KS 67208

D-B Unit A #1-14

Job Ticket: 50124

DST#: 1

ATTN: Mike Maune

Test Start: 2013.01.21 @ 17:53:46

Tool Information

Drill Pipe:	Length: 4420.00 ft	Diameter: 3.80 inches	Volume: 62.00 bbl	Tool Weight: 2000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 62.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	4435.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	88.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4408.00	
Shut In Tool	5.00			4413.00	
Hydraulic tool	5.00			4418.00	
Jars	5.00			4423.00	
Safety Joint	3.00			4426.00	
Packer	5.00			4431.00	28.00 Bottom Of Top Packer
Packer	4.00			4435.00	
Stubb	1.00			4436.00	
Recorder	0.00	8373	Inside	4436.00	
Recorder	0.00	8356	Outside	4436.00	
Perforations	20.00			4456.00	
Change Over Sub	1.00			4457.00	
Drill Pipe	32.00			4489.00	
Change Over Sub	1.00			4490.00	
Bullnose	5.00			4495.00	60.00 Bottom Packers & Anchor

Total Tool Length: 88.00



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FLUID SUMMARY

Cobalt Energy LLC

14-20s-26w Ness,KS

PO Box 8037
Wichita, KS 67208

D-B Unit A #1-14

Job Ticket: 50124

DST#: 1

ATTN: Mike Maune

Test Start: 2013.01.21 @ 17:53:46

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:

23000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	mcw 70%w 30%m	1.739
62.00	mud show of oil 100%m	0.870
112.00	ocm 2%o 98%m	1.571

Total Length: 298.00 ft Total Volume: 4.180 bbl

Num Fluid Samples: 0

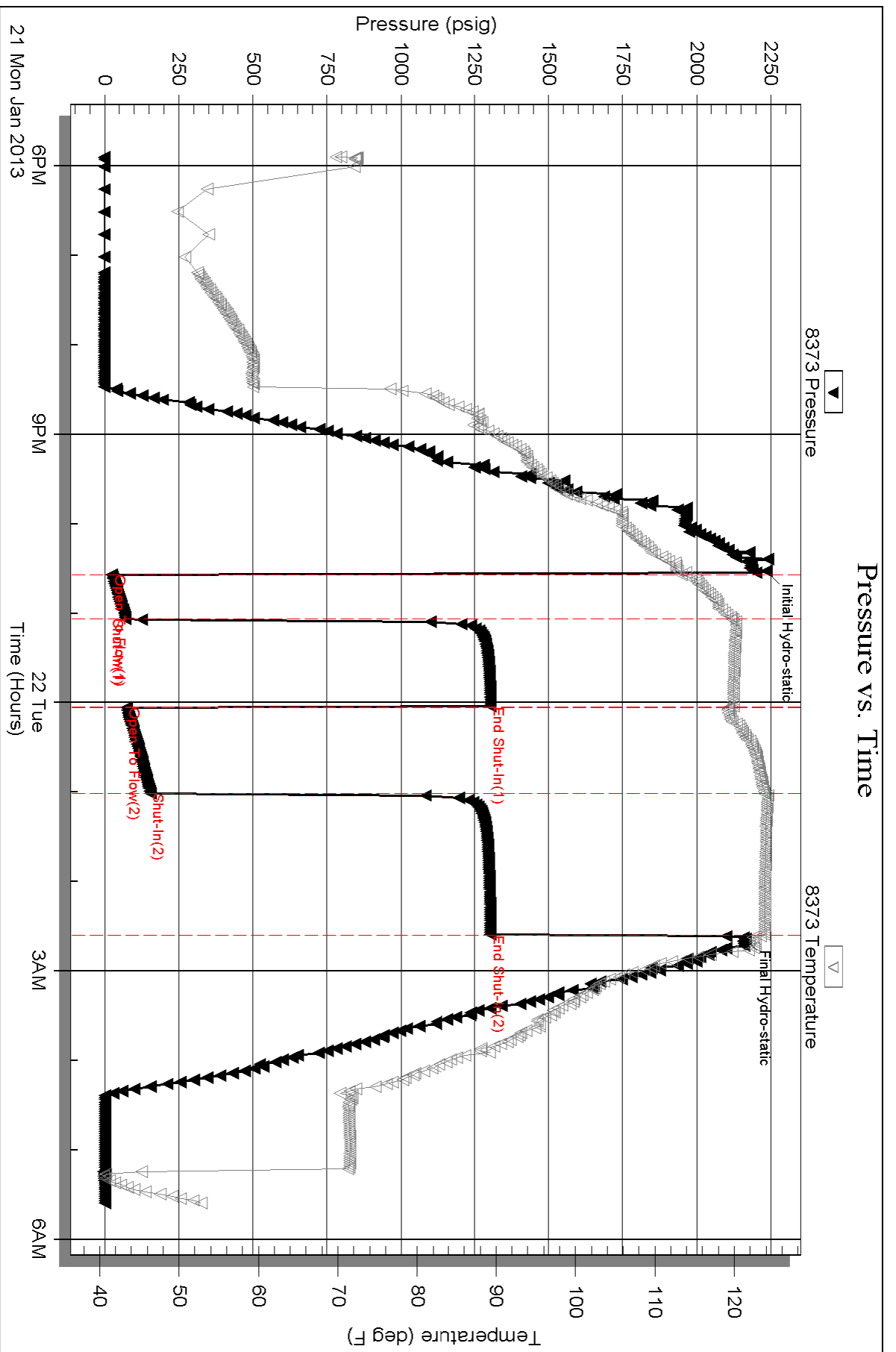
Num Gas Bombs: 0

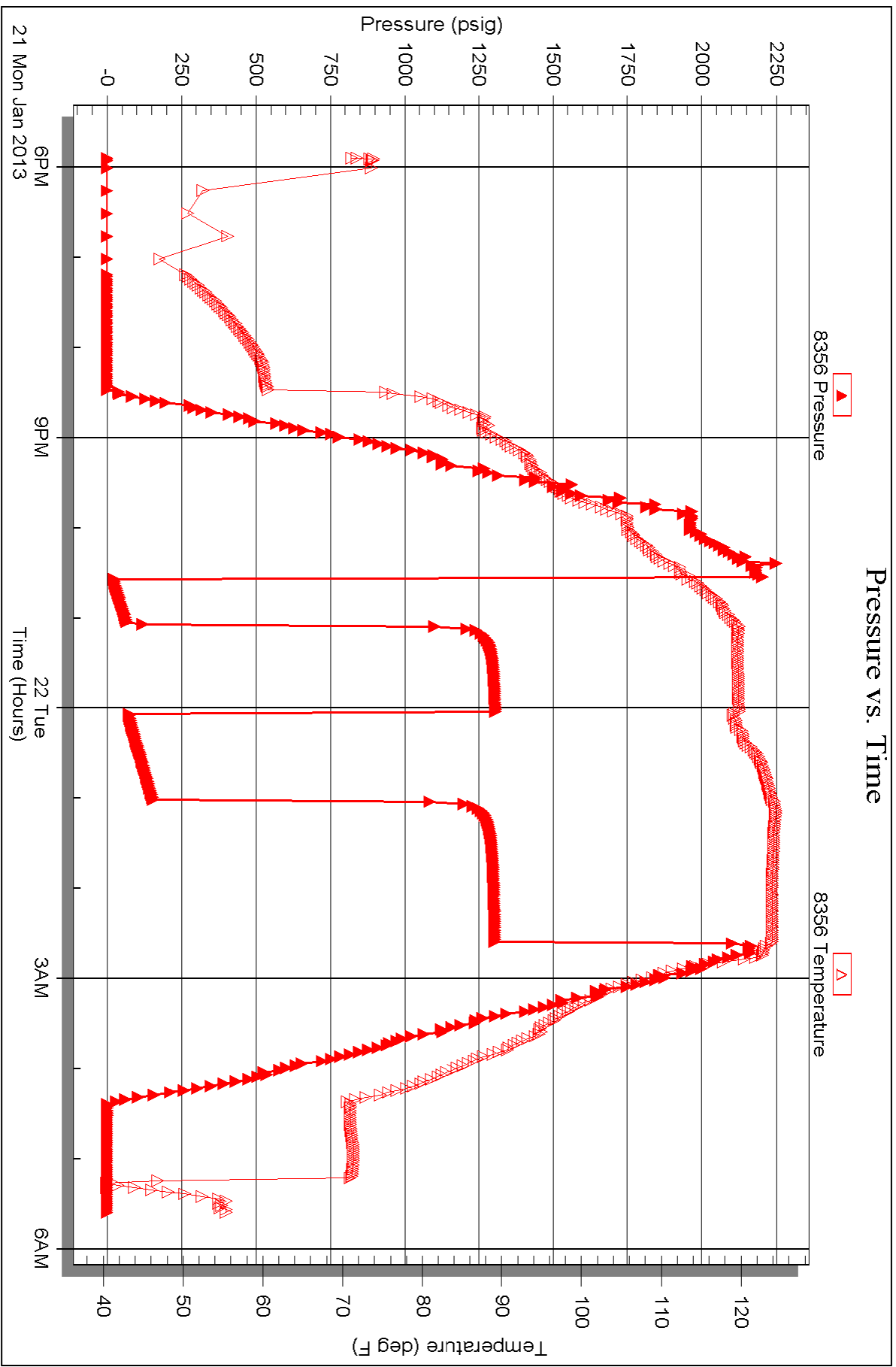
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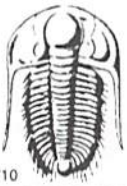
Laboratory Name:

Laboratory Location:

Recovery Comments: .51@42=23000







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50124

Well Name & No. D-B unit A 1-14 Test No. 1 Date 1-21-13
 Company Cobalt Energy LLC Elevation 2501 KB 2491 GL
 Address 1155, Belmont #12 Wichita, KS 67208
 Co. Rep / Geo. Mike Mauer Rig Southwind 70
 Location: Sec. 14 Twp. 20S Rge. 26W Co. Ness State KS

Interval Tested 4435 4495 Zone Tested Miss
 Anchor Length 60 Drill Pipe Run 4420 Mud Wt. 9.4
 Top Packer Depth 4430 Drill Collars Run — Vis 51
 Bottom Packer Depth 4435 Wt. Pipe Run — WL 5.6
 Total Depth 4495 Chlorides 3000 ppm System LCM 1
 Blow Description IF: 1/4 blow built to 8 min 30 min.
IS: No return.
FK: BOB in 40 min.
FS: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>112</u>	<u>ocm</u>	<u>2</u>		<u>98</u>	
<u>62</u>	<u>mud show of oil</u>			<u>100</u>	
<u>124</u>	<u>MCW</u>		<u>70</u>	<u>30</u>	

Rec Total 298 BHT 123 Gravity — API RW .51 @ 42° F Chlorides 23,000 ppm

(A) Initial Hydrostatic <u>2235</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>16:30</u>
(B) First Initial Flow <u>24</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>17:53</u>
(C) First Final Flow <u>70</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>22:32</u>
(D) Initial Shut-In <u>1304</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>2:32</u>
(E) Second Initial Flow <u>73</u>	<input checked="" type="checkbox"/> Hourly Standby <u>2-200.00</u>	T-Out <u>5:40</u>
(F) Second Final Flow <u>154</u>	<input checked="" type="checkbox"/> Mileage <u>100 - 155</u>	Comments <u>Rig had to wait</u>
(G) Final Shut-In <u>1303</u>	<input type="checkbox"/> Sampler	<u>one hour to run</u>
(H) Final Hydrostatic <u>2158</u>	<input type="checkbox"/> Straddle	<u>for Hydr. Parts</u>
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Initial Open <u>30</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
Initial Shut-In <u>60</u>	<input type="checkbox"/> Accessibility	Total <u>1930</u>
Final Flow <u>60</u>	Sub Total <u>1930</u>	MP/DST Disc't
Final Shut-In <u>90</u>		

Approved By Michael K Mauer Our Representative [Signature]

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