



## DRILL STEM TEST REPORT

Prepared For: **McCoy Petro. Corp.**

8080 E. Central Ste. 300  
Wichita, KS 67206-2366

ATTN: Evan Stone

### **Eck V #2-22**

#### **22-32s.-10w. Barber,KS**

Start Date: 2013.10.01 @ 06:29:41

End Date: 2013.10.01 @ 14:57:56

Job Ticket #: 52457                      DST #: 1

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

Printed: 2013.10.03 @ 11:01:39



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

McCoy Petro. Corp.  
8080 E. Central Ste. 300  
Wichita, KS 67206-2366  
ATTN: Evan Stone

**22-32s.-10w. Barber, KS**

**Eck V #2-22**

Job Ticket: 52457

**DST#: 1**

Test Start: 2013.10.01 @ 06:29:41

## GENERAL INFORMATION:

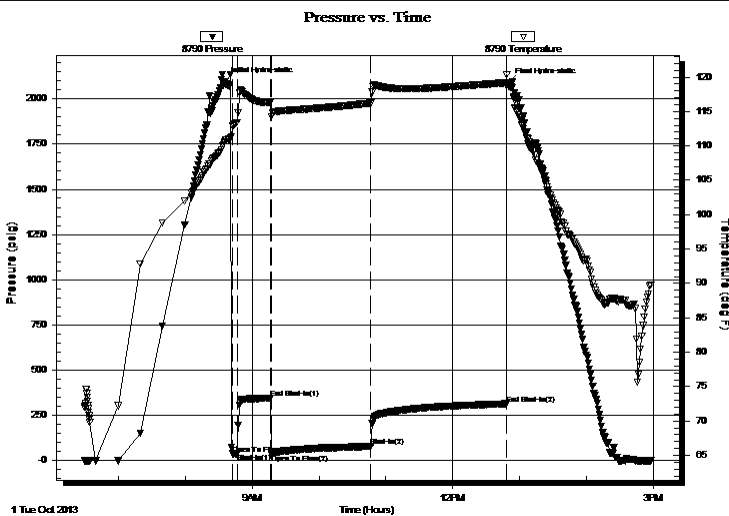
Formation: **Miss**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 08:42:26  
 Time Test Ended: 14:57:56  
 Interval: **4362.00 ft (KB) To 4398.00 ft (KB) (TVD)**  
 Total Depth: 4398.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ryan Reynolds  
 Unit No: 48  
 Reference Elevations: 1471.00 ft (KB)  
 1462.00 ft (CF)  
 KB to GR/CF: 9.00 ft

## Serial #: 8790

Inside

Press @ Run Depth: 77.72 psig @ 4363.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.10.01 End Date: 2013.10.01 Last Calib.: 2013.10.01  
 Start Time: 06:29:46 End Time: 14:57:55 Time On Btm: 2013.10.01 @ 08:35:11  
 Time Off Btm: 2013.10.01 @ 12:49:41

**TEST COMMENT:** IF: Strong blow . BOB @ 1min. No GTS.  
 IS: No blow  
 FF: Strong blow . BOB immed. GTS @ 9min. Gauged throughout.  
 FS: No blow .



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2095.66	110.46	Initial Hydro-static
8	36.12	112.88	Open To Flow (1)
12	38.24	113.38	Shut-In(1)
42	345.41	116.26	End Shut-In(1)
43	34.37	114.28	Open To Flow (2)
132	77.72	116.22	Shut-In(2)
253	313.44	119.18	End Shut-In(2)
255	2090.54	118.68	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
178.00	GCM 5%gas, 95%mud	0.88

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	8.00	35.54
Last Gas Rate	0.25	13.00	43.47
Max. Gas Rate	0.25	15.00	46.64



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TESTING, INC.**

# DRILL STEM TEST REPORT

McCoy Petro. Corp.  
8080 E. Central Ste. 300  
Wichita, KS 67206-2366  
ATTN: Evan Stone

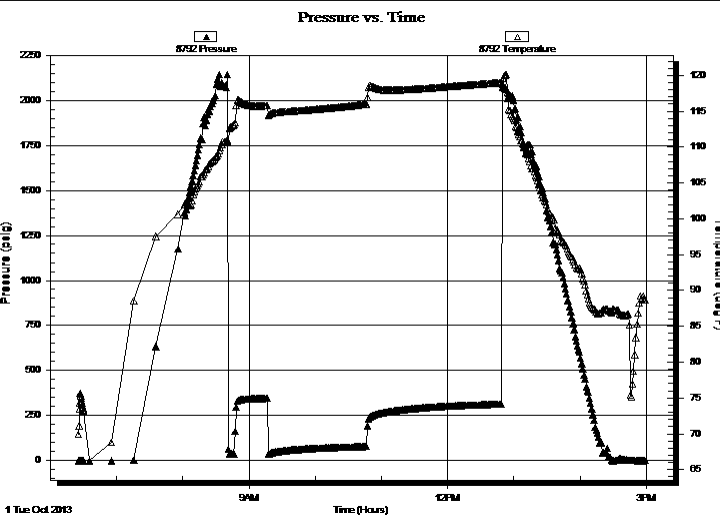
**22-32s.-10w. Barber, KS**  
**Eck V #2-22**  
Job Ticket: 52457      **DST#: 1**  
Test Start: 2013.10.01 @ 06:29:41

## GENERAL INFORMATION:

Formation: **Miss**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 08:42:26  
Time Test Ended: 14:57:56  
**Interval: 4362.00 ft (KB) To 4398.00 ft (KB) (TVD)**  
Total Depth: 4398.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Ryan Reynolds  
Unit No: 48  
Reference Elevations: 1471.00 ft (KB)  
1462.00 ft (CF)  
KB to GR/CF: 9.00 ft

**Serial #: 8792      Outside**  
Press @ Run Depth:                      psig @ 4363.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2013.10.01      End Date: 2013.10.01      Last Calib.: 2013.10.01  
Start Time: 06:25:45      End Time: 14:58:40      Time On Btm:  
Time Off Btm:

**TEST COMMENT:** IF: Strong blow . BOB @ 1min. No GTS.  
IS: No blow  
FF: Strong blow . BOB immed. GTS @ 9min. Gauged throughout.  
FS: No blow .



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
178.00	GCM 5%gas, 95%mud	0.88

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	8.00	35.54
Last Gas Rate	0.25	13.00	43.47
Max. Gas Rate	0.25	15.00	46.64



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

McCoy Petro. Corp.

**22-32s.-10w. Barber,KS**

8080 E. Central Ste. 300  
Wichita, KS 67206-2366

**Eck V #2-22**

Job Ticket: 52457

**DST#: 1**

ATTN: Evan Stone

Test Start: 2013.10.01 @ 06:29:41

## Tool Information

Drill Pipe:	Length: 4143.00 ft	Diameter: 3.80 inches	Volume: 58.12 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: 207.00 ft	Diameter: 2.25 inches	Volume: 1.02 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 59.14 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 86000.00 lb
Depth to Top Packer:	4362.00 ft			Final 86500.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	62.00 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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Shut In Tool	5.00			4341.00	
Hydraulic tool	5.00			4346.00	
Jars	5.00			4351.00	
Safety Joint	2.00			4353.00	
Packer	5.00			4358.00	26.00 Bottom Of Top Packer
Packer	4.00			4362.00	
Stubb	1.00			4363.00	
Recorder	0.00	8790	Inside	4363.00	
Recorder	0.00	8792	Outside	4363.00	
Perforations	32.00			4395.00	
Bullnose	3.00			4398.00	36.00 Bottom Packers & Anchor

**Total Tool Length: 62.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

McCoy Petro. Corp.

**22-32s.-10w. Barber, KS**

8080 E. Central Ste. 300  
Wichita, KS 67206-2366

**Eck V #2-22**

Job Ticket: 52457

**DST#: 1**

ATTN: Evan Stone

Test Start: 2013.10.01 @ 06:29:41

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

5000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
178.00	GCM 5%gas, 95%mud	0.875

Total Length: 178.00 ft

Total Volume: 0.875 bbl

Num Fluid Samples: 1

Num Gas Bombs: 1

Serial #: RR-1

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



**TRILOBITE  
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## DRILL STEM TEST REPORT

**GAS RATES**

McCoy Petro. Corp.

**22-32s.-10w. Barber, KS**

8080 E. Central Ste. 300  
Wichita, KS 67206-2366

**Eck V #2-22**

Job Ticket: 52457

**DST#: 1**

ATTN: Evan Stone

Test Start: 2013.10.01 @ 06:29:41

### Gas Rates Information

Temperature: 59 (deg F)

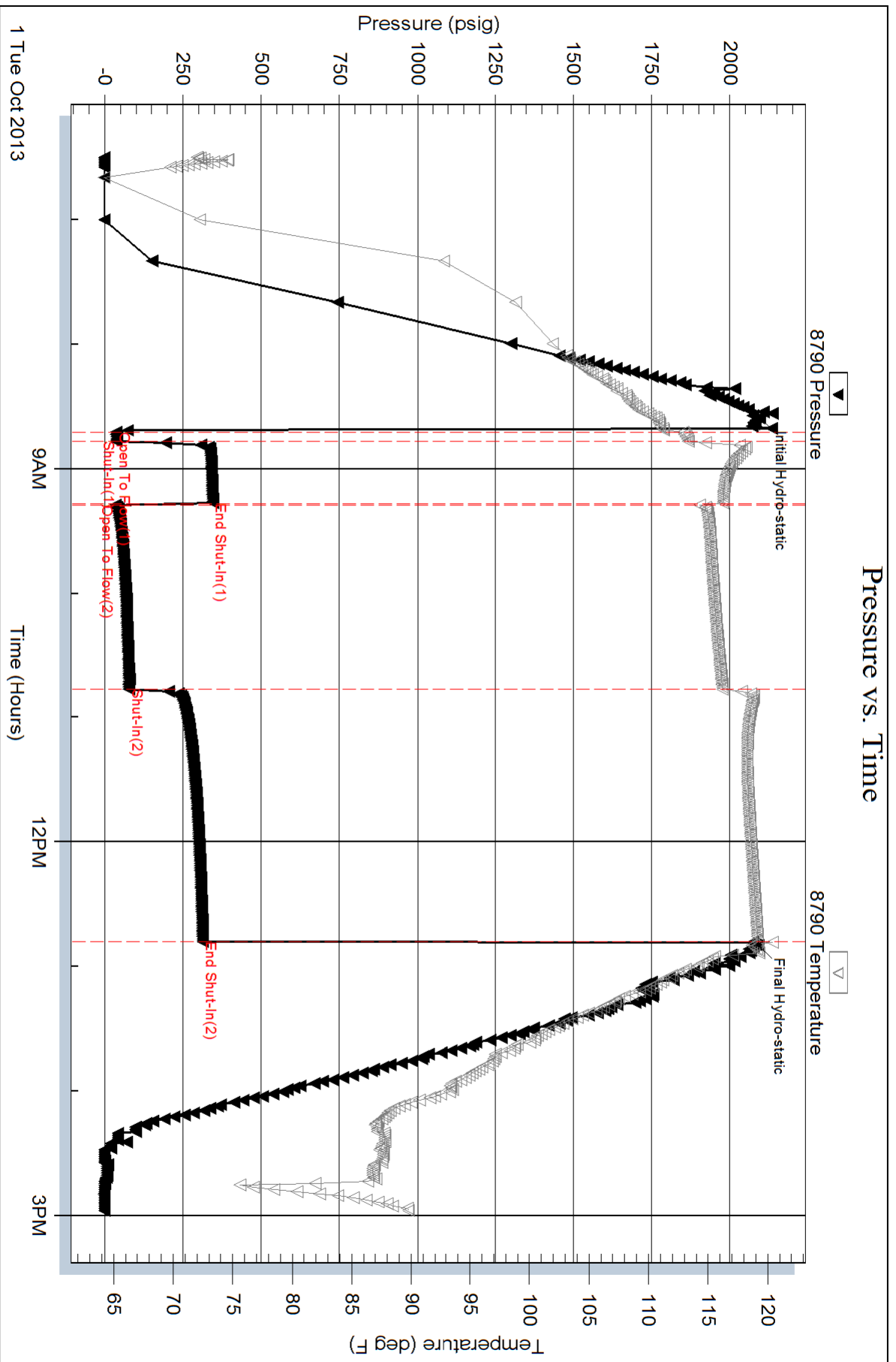
Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.25	8.00	35.54
2	10	0.25	8.00	35.54
2	20	0.25	12.00	41.88
2	30	0.25	14.00	45.05
2	40	0.25	15.00	46.64
2	50	0.25	14.00	45.05
2	60	0.25	13.00	43.47
2	70	0.25	13.00	43.47
2	80	0.25	13.00	43.47

### Pressure vs. Time

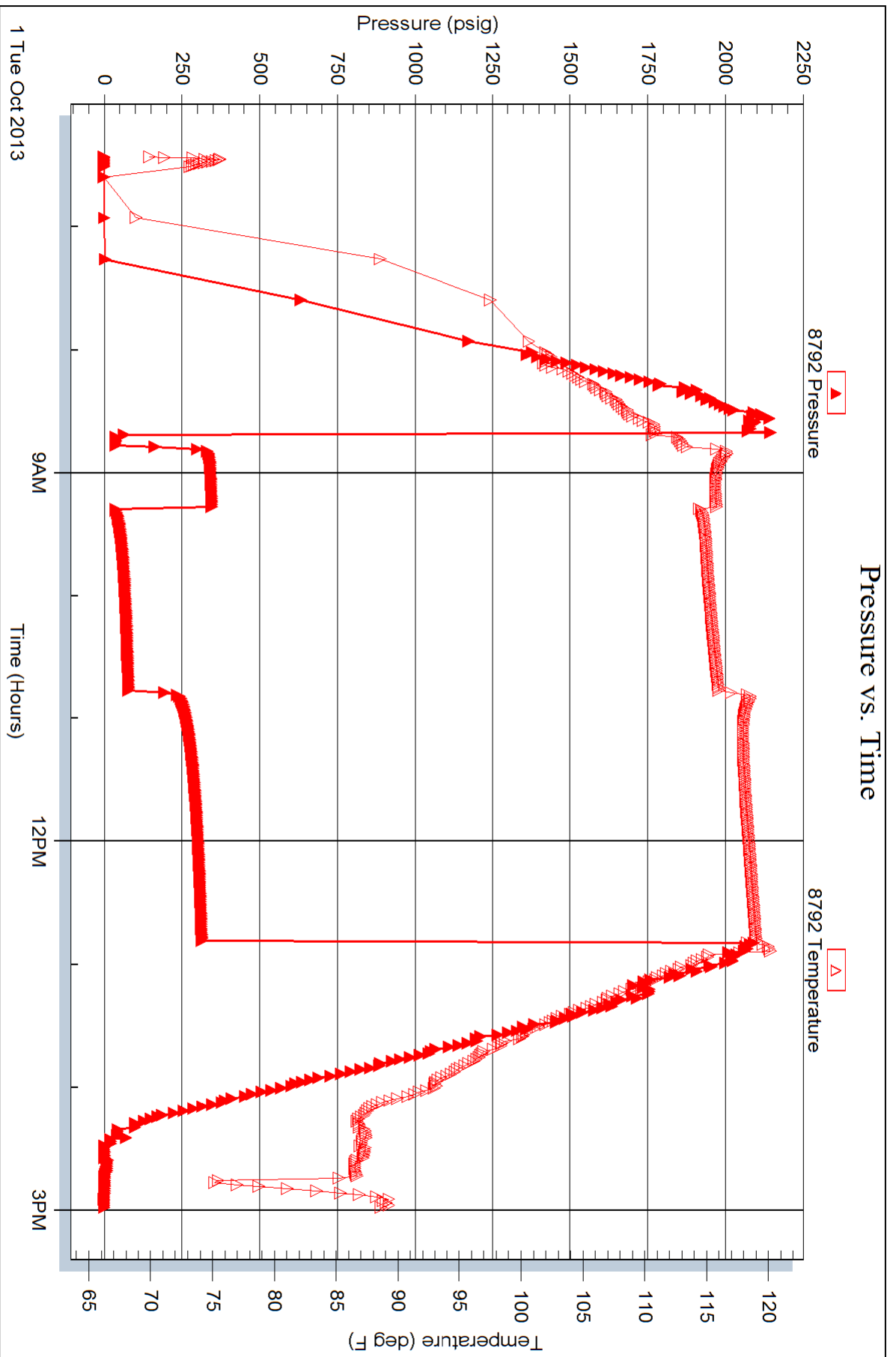


Serial #: 8792

Outside McCoy Petro. Corp.

EcK V #2-22

DST Test Number: 1







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 52457

Well Name & No. Eck "V" 2-22 Test No. 1 Date 10-1-13  
 Company McCoy Petro. Corp. Elevation 1471 KB 1462 GL  
 Address 8080 E. Central Ste. 300 Wichita, KS 67206-2366  
 Co. Rep / Geo. Evan Stone Rig Sterling 4  
 Location: Sec. 22 Twp. 32s. Rge. 10w. Co. Barber State KS

Interval Tested 4362 - 4398 Zone Tested Miss.  
 Anchor Length 36 Drill Pipe Run 4143 Mud Wt. 9.4  
 Top Packer Depth 4357 Drill Collars Run 207 Vis 49  
 Bottom Packer Depth 4362 Wt. Pipe Run Ø WL 9.6  
 Total Depth 4398 Chlorides 5000 ppm System LCM Ø

Blow Description IF: Strong blow. BOB @ 1 min. JST: No blow  
FF: Strong blow. BOB immed. GTS @ 9 min. Gauged throughout  
FST: No blow.

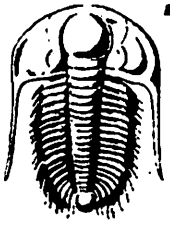
Rec	Feet of	%gas	%oil	%water	%mud
<u>178</u>	<u>6LM</u>	<u>5</u>			<u>95</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 178 BHT 119 Gravity N/C API RW N/C @ N/C °F Chlorides 5000 ppm

(A) Initial Hydrostatic <u>2096</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>0545</u>
(B) First Initial Flow <u>36</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0630</u>
(C) First Final Flow <u>38</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0842</u>
(D) Initial Shut-In <u>345</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>1248</u>
(E) Second Initial Flow <u>34</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1458</u>
(F) Second Final Flow <u>78</u>	<input checked="" type="checkbox"/> Mileage <u>100</u> 310	Comments
(G) Final Shut-In <u>313</u>	<input type="checkbox"/> Sampler	<u>loaded tools 23:30 10/1</u>
(H) Final Hydrostatic <u>2091</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>5</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>90</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>120</u>	<input type="checkbox"/> Day Standby	Total <u>1885</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1885</u>	

Approved By [Signature] Our Representative Ryan Reynolds

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601 • (785) 625-4778

## GAS VOLUME REPORT

McCoy Petro. Corp. Eck "V" 2-22

OPERATOR

WELL NAME AND NO.

1  
DST NO.

FF: GTS @ 9 min.

Min.	Ins. of Water PSIG	Orifice Size	M CF/D	Min.	Ins. of Water PSIG	Orifice Size	CF/D
10	8#	1/4"	27.000				
20	12#	1/4"	34.000				
30	14#	1/4"	37.600				
40	15#	1/4"	39.200				
50	14#	1/4"	37.600				
60	13#	1/4"	35.900				
70	13#	1/4"	35.900				
80	13#	1/4"	35.900				
90	13#	1/4"	35.900				

Remarks: