



DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Co**

125 N Market Ste 1000
Wichita, KS 67202

ATTN: Bill Klaver

Ricke A #2

13-34S-11W Barber,KS

Start Date: 2014.05.20 @ 20:37:29

End Date: 2014.05.21 @ 06:20:59

Job Ticket #: 58990 DST #: 1

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

Printed: 2014.05.21 @ 11:49:11



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Woolsey Operating Co
125 N Market Ste 1000
Wichita, KS 67202
ATTN: Bill Klaver

13-34S-11W Barber,KS

Ricke A #2

Job Ticket: 58990

DST#: 1

Test Start: 2014.05.20 @ 20:37:29

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:29:14

Time Test Ended: 06:20:59

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

Interval: 4570.00 ft (KB) To 4722.00 ft (KB) (TVD)

Reference Elevations: 1408.00 ft (KB)

Total Depth: 4722.00 ft (KB) (TVD)

1396.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 6798

Inside

Press@RunDepth: 137.81 psig @ 4571.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.05.20

End Date:

2014.05.21

Last Calib.:

2014.05.21

Start Time: 20:37:30

End Time:

06:20:59

Time On Btm:

2014.05.20 @ 23:20:44

Time Off Btm:

2014.05.21 @ 04:04:59

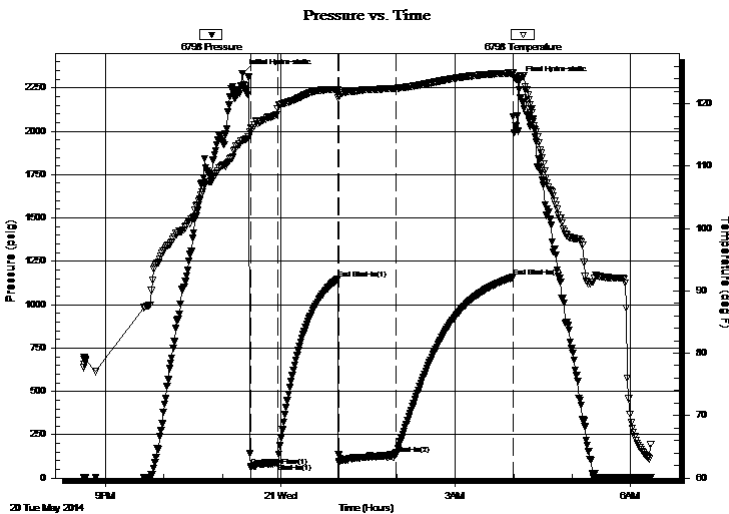
TEST COMMENT: IF: Strong Blow , BOB in 90 seconds

IS: No Blow Back

FF: Strong Blow , BOB immediate, GTS in 25 minutes, TSTM, Caught Sample

FS: No Blow Back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2333.91	114.08	Initial Hydro-static
9	66.86	116.13	Open To Flow (1)
37	85.01	119.25	Shut-In(1)
98	1147.91	122.30	End Shut-In(1)
100	91.39	121.12	Open To Flow (2)
159	137.81	122.45	Shut-In(2)
279	1158.28	124.93	End Shut-In(2)
285	2289.98	124.04	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	4311 GIP	0.00
261.00	GCM 10%G 90% M	1.56

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Woolsey Operating Co
125 N Market Ste 1000
Wichita, KS 67202
ATTN: Bill Klaver

13-34S-11W Barber,KS

Ricke A #2

Job Ticket: 58990

DST#: 1

Test Start: 2014.05.20 @ 20:37:29

GENERAL INFORMATION:

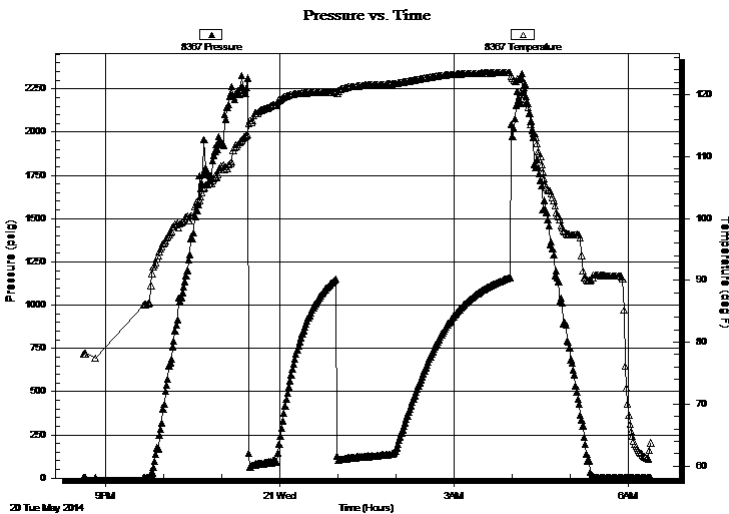
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 23:29:14
 Time Test Ended: 06:20:59
 Interval: **4570.00 ft (KB) To 4722.00 ft (KB) (TVD)**
 Total Depth: 4722.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Leal Cason
 Unit No: 74
 Reference Elevations: 1408.00 ft (KB)
 1396.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 8367

Outside

Press@RunDepth: psig @ 4571.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.05.20 End Date: 2014.05.21 Last Calib.: 2014.05.21
 Start Time: 20:37:30 End Time: 06:23:29 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Strong Blow , BOB in 90 seconds
 IS: No Blow Back
 FF: Strong Blow , BOB immediate, GTS in 25 minutes, TSTM, Caught Sample
 FS: No Blow Back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	4311 GIP	0.00
261.00	GCM 10%G 90% M	1.56

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Co

13-34S-11W Barber,KS

125 N Market Ste 1000
Wichita, KS 67202

Ricke A #2

Job Ticket: 58990

DST#: 1

ATTN: Bill Klaver

Test Start: 2014.05.20 @ 20:37:29

Tool Information

Drill Pipe:	Length: 4341.00 ft	Diameter: 3.80 inches	Volume: 60.89 bbl	Tool Weight:	2100.00 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: 231.00 ft	Diameter: 2.25 inches	Volume: 1.14 bbl	Weight to Pull Loose:	95000.00 lb
			<u>Total Volume: 62.03 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial	75000.00 lb
Depth to Top Packer:	4570.00 ft			Final	75000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	152.00 ft				
Tool Length:	178.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4549.00	
Hydraulic tool	5.00			4554.00	
Jars	5.00			4559.00	
Safety Joint	2.00			4561.00	
Packer	5.00			4566.00	26.00 Bottom Of Top Packer
Packer	4.00			4570.00	
Stubb	1.00			4571.00	
Recorder	0.00	6798	Inside	4571.00	
Recorder	0.00	8367	Outside	4571.00	
Perforations	4.00			4575.00	
Change Over Sub	1.00			4576.00	
Drill Pipe	127.00			4703.00	
Change Over Sub	1.00			4704.00	
Perforations	15.00			4719.00	
Bullnose	3.00			4722.00	152.00 Bottom Packers & Anchor

Total Tool Length: 178.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co

13-34S-11W Barber,KS

125 N Market Ste 1000
Wichita, KS 67202

Ricke A #2

Job Ticket: 58990

DST#: 1

ATTN: Bill Klaver

Test Start: 2014.05.20 @ 20:37:29

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:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	4311 GIP	0.000
261.00	GCM 10%G 90% M	1.557

Total Length: 261.00 ft Total Volume: 1.557 bbl

Num Fluid Samples: 0

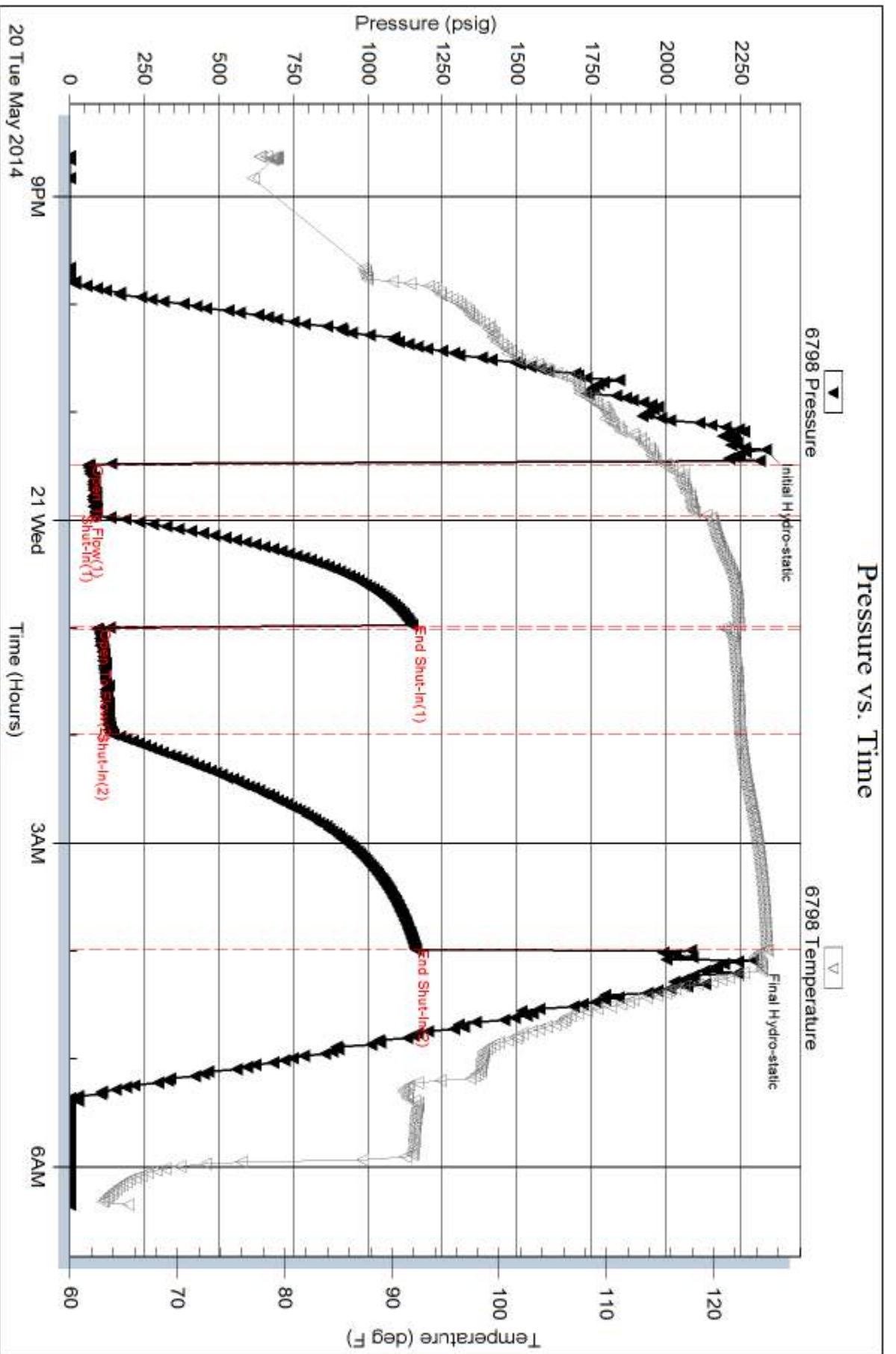
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

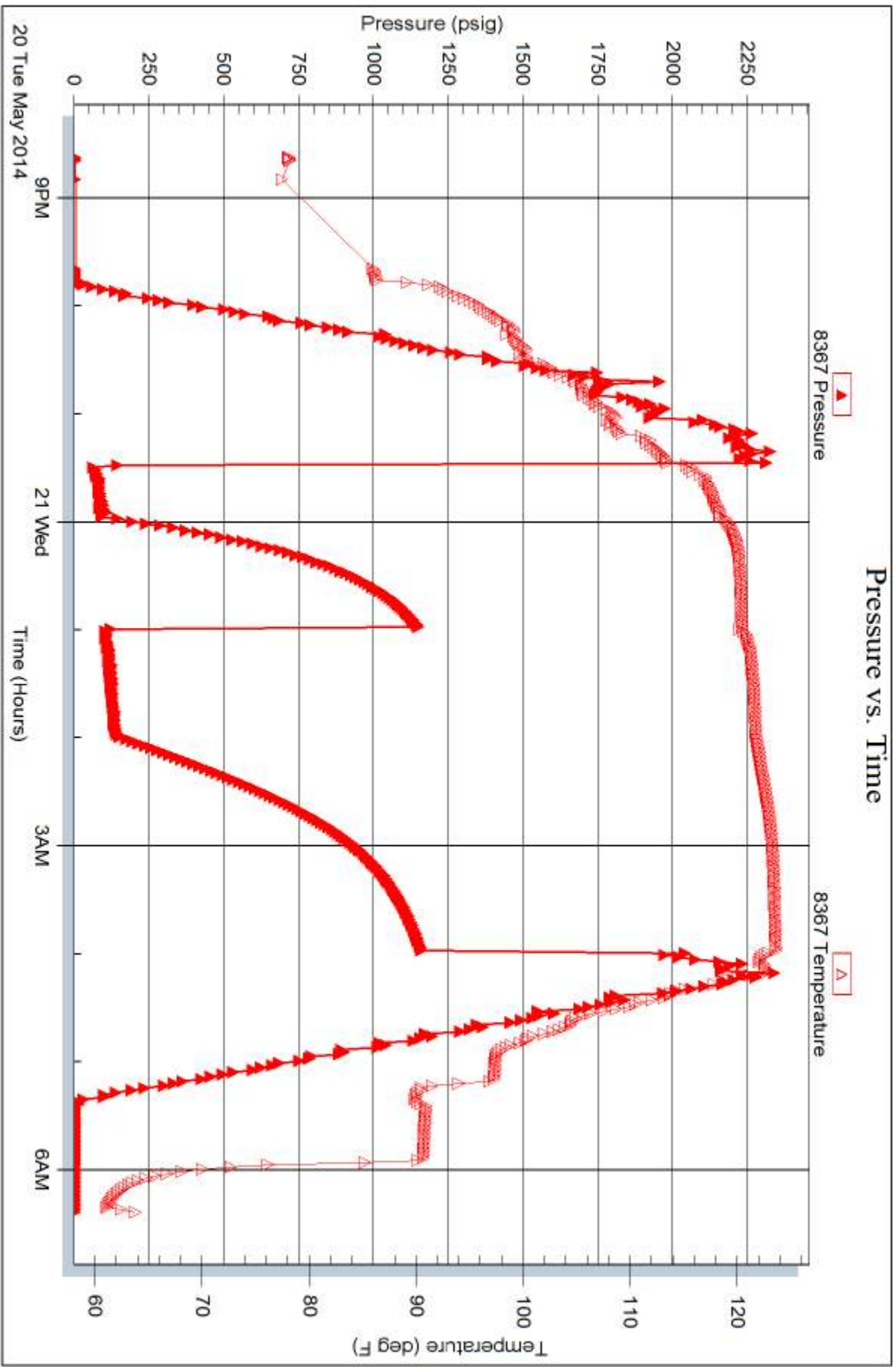


Serial #: 8367

Outside Woodsey Operating Co

Ricke A #2

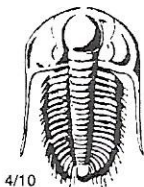
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 58990

Printed: 2014.05.21 @ 11:49:12



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58990

Well Name & No. Ricke A-1 Test No. 1 Date 05/20/14
 Company Woolsey Operating CO Elevation 1408 KB 1396 GL
 Address 125 N. Market Ste 1000 Wichita, KS 67202
 Co. Rep / Geo. Bill Klaver Rig Fossil 3
 Location: Sec. 13 Twp. 34S Rge. 11W Co. Barber State KS

Interval Tested 4570 - 4722 Zone Tested Mississippi
 Anchor Length 152 Drill Pipe Run 4341 Mud Wt. 9.1
 Top Packer Depth 4565 Drill Collars Run 231 Vis 54
 Bottom Packer Depth 4570 Wt. Pipe Run 0 WL 9.6
 Total Depth 4722 Chlorides 6000 ppm System LCM 3

Blow Description IF: strong blow, BOB in 90 seconds
ISI: NO Blow Back
FF: strong blow, BOB immediate, GTS in 25 minutes, TSTM, caught sample
FST: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>4311</u>	<u>GTP</u>				
<u>261</u>	<u>GCM</u>	<u>10%</u>			<u>90</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 261 BHT 125 Gravity NIC API RW NIC @ NIC °F Chlorides NIC ppm

(A) Initial Hydrostatic 2334 Test 1250 T-On Location 19:30
 (B) First Initial Flow 67 Jars 250 T-Started 20:37
 (C) First Final Flow 85 Safety Joint 75 T-Open 23:29
 (D) Initial Shut-In 1148 Circ Sub _____ T-Pulled 03:58
 (E) Second Initial Flow 91 Hourly Standby 1 T-Out 06:20
 (F) Second Final Flow 138 Mileage 1109 170.50
 (G) Final Shut-In 1158 Sampler _____
 (H) Final Hydrostatic 2290 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 120
 Sub Total 1745.50
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1745.50
 MP/DST Disc't _____

Approved By Bill Klaver Our Representative [Signature]

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.