

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc**

8100 E 22nd St N #700
Wichita, KS 67278

ATTN: Pat Deenihan

Farmer 25 A #1

25-29S-4W Sedgwick,KS

Start Date: 2013.02.07 @ 06:42:55

End Date: 2013.02.07 @ 12:42:25

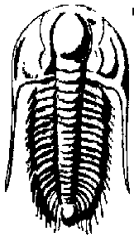
Job Ticket #: 50887 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.02.12 @ 11:14:48



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration Inc

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25-29S-4W Sedgwick,KS

Farmer 25 A #1

Job Ticket: 50887

DST#: 1

Test Start: 2013.02.07 @ 06:42:55

GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:52:10

Time Test Ended: 12:42:25

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 45

Interval: 4314.00 ft (KB) To 4326.00 ft (KB) (TVD)

Reference Elevations: 1362.00 ft (KB)

Total Depth: 4326.00 ft (KB) (TVD)

1352.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 6798 Inside

Press@RunDepth: 40.84 psig @ 4315.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.02.07

End Date:

2013.02.07

Last Calib.: 2013.02.07

Start Time: 06:42:56

End Time:

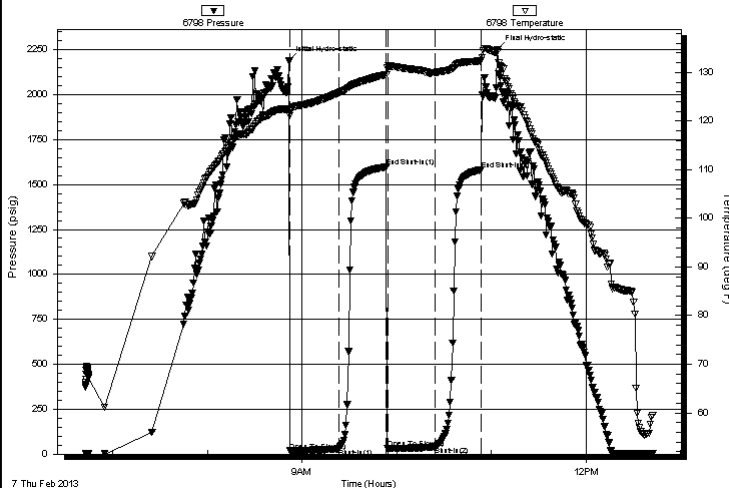
12:42:25

Time On Btm: 2013.02.07 @ 08:51:55

Time Off Btm: 2013.02.07 @ 11:03:55

TEST COMMENT: IF: Weak Surface Blow
IS: No Blow Back
FF: Weak Surface Blow
FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

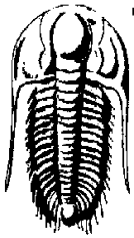
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2187.28	122.31	Initial Hydro-static
1	18.73	121.16	Open To Flow (1)
32	31.43	125.83	Shut-In(1)
62	1597.42	129.58	End Shut-In(1)
63	30.03	131.05	Open To Flow (2)
93	40.84	129.98	Shut-In(2)
122	1583.05	132.38	End Shut-In(2)
132	2252.15	134.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	MCW 15%M 85%W	0.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Total Depth: 4326.00 ft (KB) (TVD)

1352.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8367 Outside

Press@RunDepth: psig @ 4315.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.02.07

End Date:

2013.02.07

Last Calib.:

2013.02.07

Start Time: 06:42:56

End Time:

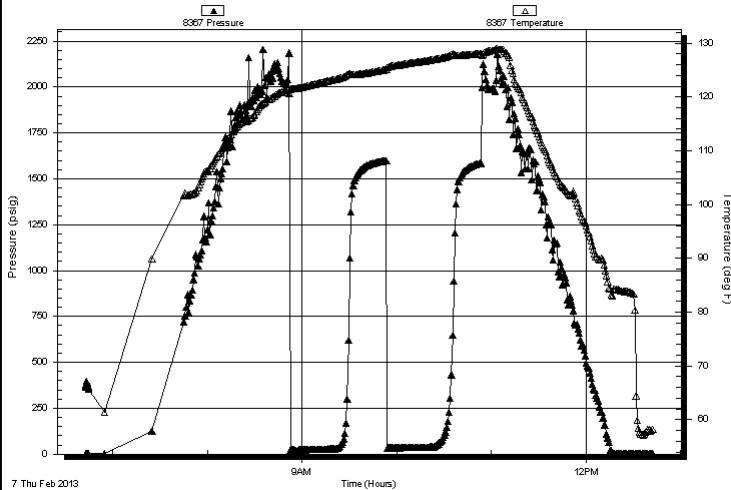
12:42:25

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Weak Surface Blow
IS: No Blow Back
FF: Weak Surface Blow
FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

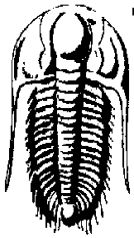
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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Recovery

Length (ft)	Description	Volume (bbl)
10.00	MCW 15%M 85%W	0.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc

25-29S-4W Sedgwick,KS

8100 E 22nd St N #700
Wichita, KS 67278

Farmer 25 A #1

Job Ticket: 50887

DST#: 1

ATTN: Pat Deenihan

Test Start: 2013.02.07 @ 06:42:55

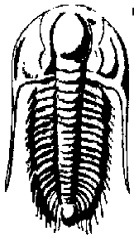
Tool Information

Drill Pipe:	Length:	4313.00 ft	Diameter:	3.80 inches	Volume:	60.50 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:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	75000.00 lb
					Total Volume:	60.50 bbl	Tool Chased	ft
Drill Pipe Above KB:		26.00 ft					String Weight: Initial	66000.00 lb
Depth to Top Packer:		4314.00 ft					Final	66000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		12.00 ft						
Tool Length:		39.00 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			4292.00	
Hydraulic tool	5.00			4297.00	
Jars	5.00			4302.00	
Safety Joint	2.00			4304.00	
Packer	5.00			4309.00	27.00 Bottom Of Top Packer
Packer	5.00			4314.00	
Stubb	1.00			4315.00	
Recorder	0.00	6798	Inside	4315.00	
Recorder	0.00	8367	Outside	4315.00	
Perforations	8.00			4323.00	
Bullnose	3.00			4326.00	12.00 Bottom Packers & Anchor

Total Tool Length: 39.00



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FLUID SUMMARY

Ritchie Exploration Inc

25-29S-4W Sedgwick,KS

8100 E 22nd St N #700
Wichita, KS 67278

Farmer 25 A #1

Job Ticket: 50887

DST#: 1

ATTN: Pat Deenihan

Test Start: 2013.02.07 @ 06:42:55

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:

56000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	MCW 15%M 85%W	0.140

Total Length: 10.00 ft

Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW was .17 @ 55 degrees

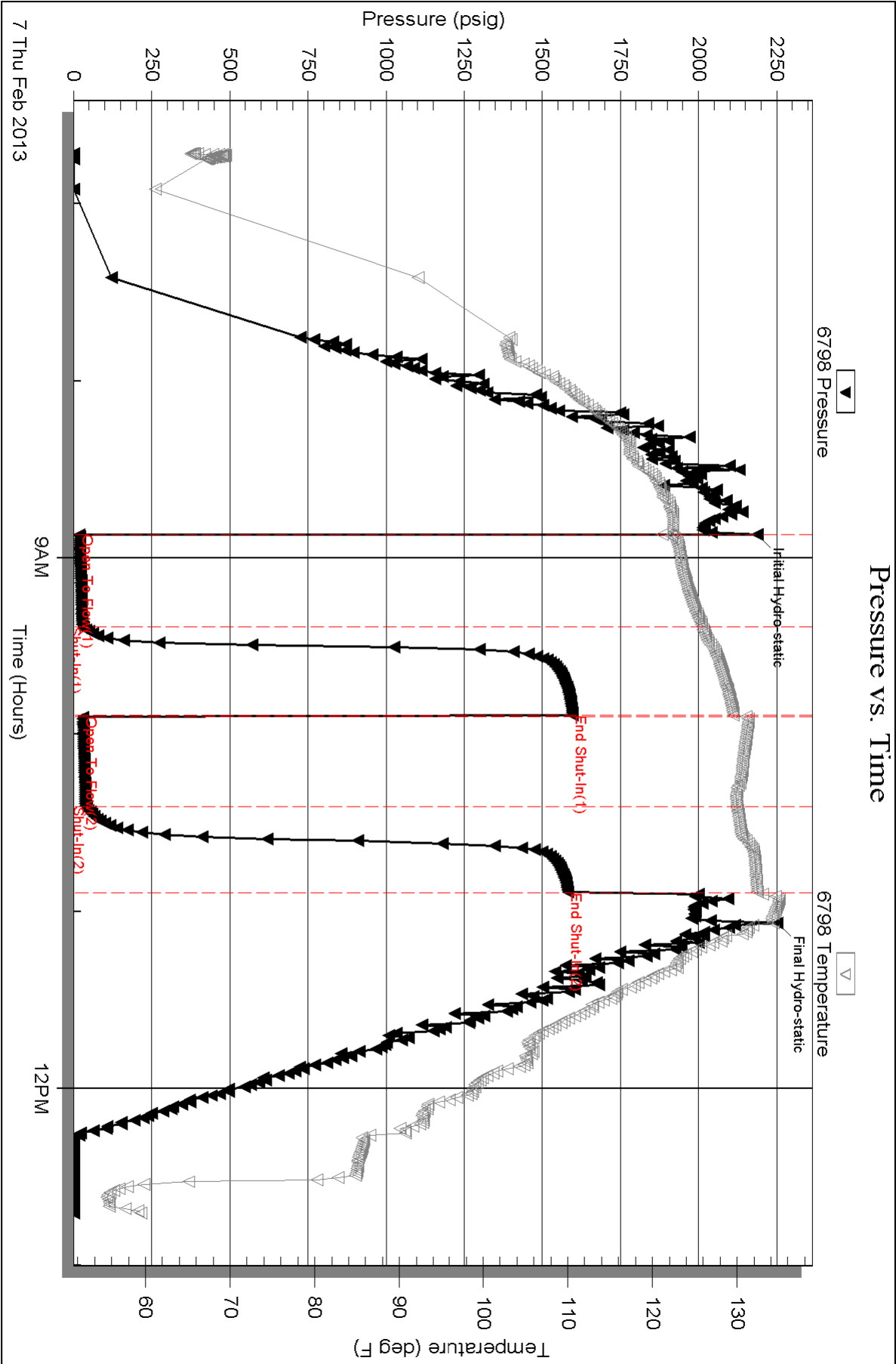
Serial #: 6798

Inside

Ritchie Exploration Inc

Farmer 25 A #1

DST Test Number: 1

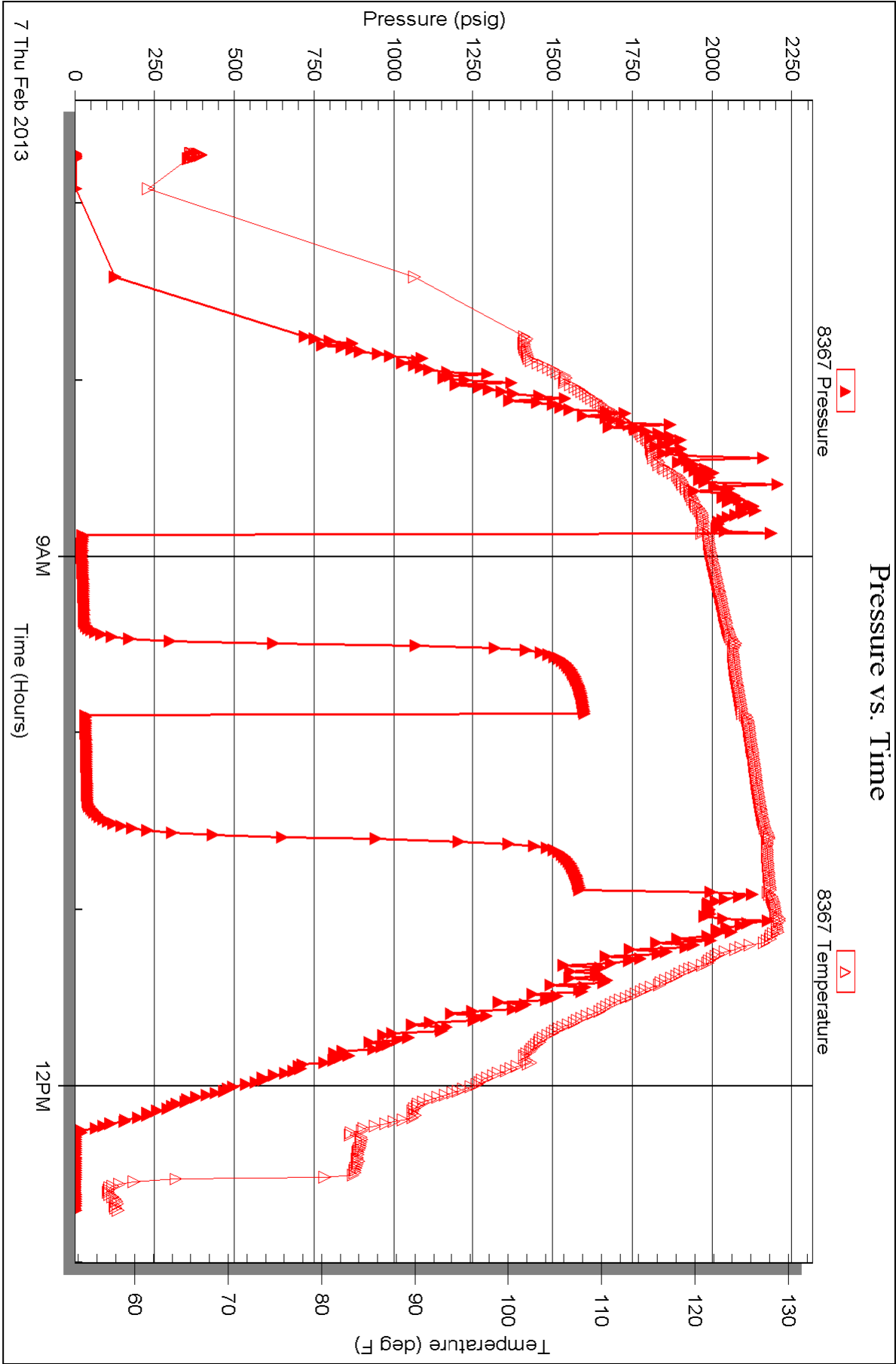


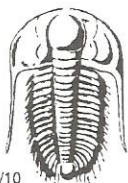
Serial #: 8367

Outside Ritchie Exploration Inc

Farmer 25 A #1

DST Test Number: 1





4/10

**TRILOBITE
TESTING INC.**

1515 Commerce Parkway • Hays, Kansas 67601

Test TicketNO. **50887**

Well Name & No. 1 Farmer 25 A Test No. 1 Date 02/07/13
 Company Ritchie Exploration Elevation 1362 KB 1352 GL
 Address 8100 E 22nd St N #700 Wichita, KS 67278
 Co. Rep / Geo. Pat Deenihan Rig VAL 3
 Location: Sec. 25 Twp. 29S Rge. 4W Co. Sedgwick State KS

Interval Tested 4314 - 4326 Zone Tested Simpson
 Anchor Length 12 Drill Pipe Run 4313 Mud Wt. 9.3
 Top Packer Depth 4309 Drill Collars Run 0 Vis 52
 Bottom Packer Depth 4314 Wt. Pipe Run 0 WL 9.0
 Total Depth 4326 Chlorides 2500 ppm System LCM 2

Blow Description IF: weak surface BlowISI: NO Blow BackFF: weak surface BlowFSI: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>MCW</u>			<u>85</u>	<u>15</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 10 BHT 132° Gravity N/C API RW .17 @ 55 °F Chlorides 56000 ppm

(A) Initial Hydrostatic 2187
 (B) First Initial Flow 19
 (C) First Final Flow 31
 (D) Initial Shut-In 1597
 (E) Second Initial Flow 30
 (F) Second Final Flow 41
 (G) Final Shut-In 1583
 (H) Final Hydrostatic 2252

☒ Test 1250
☒ Jars 250
☒ Safety Joint 75
☐ Circ Sub
☐ Hourly Standby
☒ Mileage 160 248
☐ Sampler
☐ Straddle
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility
 Sub Total 1823

T-On Location 05:30
 T-Started 06:42
 T-Open 08:52
 T-Pulled 10:53
 T-Out 12:42
 Comments _____
☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
 Sub Total 0
 Total 1823
 MP/DST Disc't _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

Approved By Pat DeenihanOur Representative [Signature]

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