



## DRILL STEM TEST REPORT

Prepared For: **Bayhorse Petroleum, LLC**

2528 E Portsmouth Ave.  
Salt Lake City, Utah 84121

ATTN: Josh Kliesan

### **Trade Winds #5-21**

### **21-18s 47w Kiowa,CO**

Start Date: 2015.03.09 @ 17:05:00

End Date: 2015.03.09 @ 22:45:30

Job Ticket #: 59574                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.03.16 @ 14:15:59



**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Bayhorse Petroleum, LLC

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ATTN: Josh Kliesan

**21-18s 47w Kiowa, CO**

**Trade Winds #5-21**

Job Ticket: 59574

**DST#: 1**

Test Start: 2015.03.09 @ 17:05:00

### GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:27:30

Time Test Ended: 22:45:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 69

**Interval: 4289.00 ft (KB) To 4307.00 ft (KB) (TVD)**

Total Depth: 4307.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 4160.00 ft (KB)

4148.00 ft (CF)

KB to GR/CF: 12.00 ft

**Serial #: 8365 Inside**

Press@RunDepth: 47.49 psig @ 4281.00 ft (KB)

Start Date: 2015.03.09

End Date:

2015.03.09

Start Time: 17:05:05

End Time:

22:45:29

Capacity: 8000.00 psig

Last Calib.: 2015.03.09

Time On Btm: 2015.03.09 @ 19:27:15

Time Off Btm: 2015.03.09 @ 20:31:00

TEST COMMENT: IF: Surface blow, died @ 5 min.

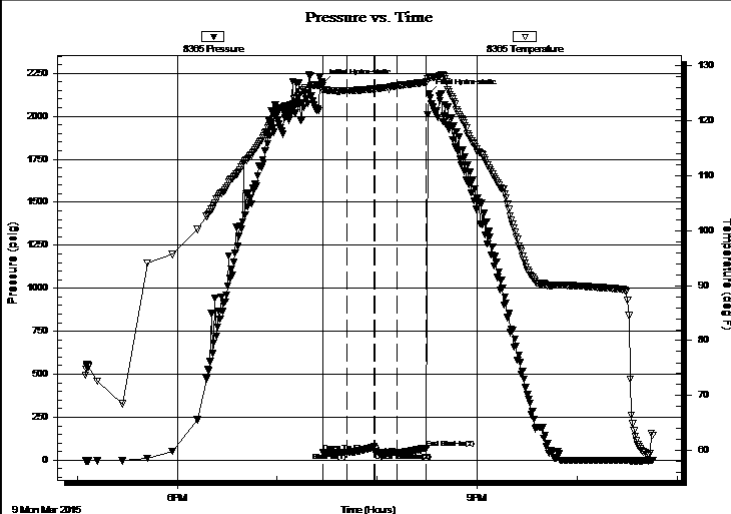
IS: No return.

FF: No blow. Flushed no help.

FS: No return.

### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2188.37	126.32	Initial Hydro-static
1	46.81	125.50	Open To Flow (1)
15	45.17	125.42	Shut-In(1)
31	78.68	125.79	End Shut-In(1)
32	46.23	125.80	Open To Flow (2)
45	47.49	126.35	Shut-In(2)
63	69.90	126.99	End Shut-In(2)
64	2129.21	127.72	Final Hydro-static



### Recovery

Length (ft)	Description	Volume (bbl)
30.00	mc sc 30m 70sc	0.15

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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4148.00 ft (CF)

KB to GR/CF: 12.00 ft

**Serial #: 8677 Outside**

Press@RunDepth: psig @ 4281.00 ft (KB)

Start Date: 2015.03.09

End Date:

2015.03.09

Start Time: 17:05:05

End Time:

22:44:29

Capacity: 8000.00 psig

Last Calib.:

2015.03.09

Time On Btm:

Time Off Btm:

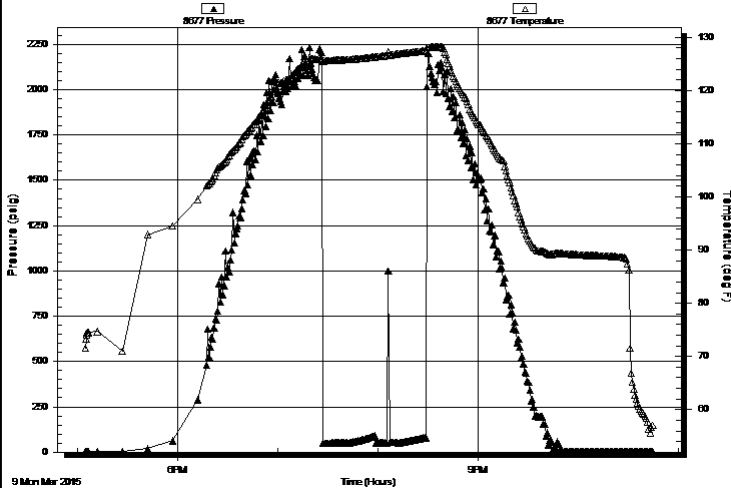
TEST COMMENT: IF: Surface blow, died @ 5 min.

IS: No return.

FF: No blow. Flushed no help.

FS: No return.

Pressure vs. Time



### PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
30.00	mc sc 30m 70sc	0.15

### Gas Rates

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

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bayhorse Petroleum, LLC

**21-18s 47w Kiowa, CO**

2528 E Portsmouth Ave.  
Salt Lake City, Utah 84121

**Trade Winds #5-21**

Job Ticket: 59574

**DST#: 1**

ATTN: Josh Kliesan

Test Start: 2015.03.09 @ 17:05:00

### Tool Information

Drill Pipe:	Length:	3909.00 ft	Diameter:	3.80 inches	Volume:	54.83 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:	365.00 ft	Diameter:	2.25 inches	Volume:	1.80 bbl	Weight to Pull Loose:	85000.00 lb
					Total Volume:	56.63 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		23.00 ft					String Weight: Initial	69000.00 lb
Depth to Top Packer:		4280.00 ft					Final	69000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		27.00 ft						
Tool Length:		56.00 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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Change Over Sub	1.00			4252.00	
Shut In Tool	5.00			4257.00	
Sampler	2.00			4259.00	
Hydraulic tool	5.00			4264.00	
Jars	5.00			4269.00	
Safety Joint	2.00			4271.00	
Packer	5.00			4276.00	29.00 Bottom Of Top Packer
Packer	4.00			4280.00	
Stubb	1.00			4281.00	
Recorder	0.00	8365	Inside	4281.00	
Recorder	0.00	8677	Outside	4281.00	
Perforations	23.00			4304.00	
Bullnose	3.00			4307.00	27.00 Bottom Packers & Anchor

**Total Tool Length: 56.00**



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## DRILL STEM TEST REPORT

### FLUID SUMMARY

Bayhorse Petroleum, LLC

**21-18s 47w Kiowa, CO**

2528 E Portsmouth Ave.  
Salt Lake City, Utah 84121

**Trade Winds #5-21**

Job Ticket: 59574

**DST#: 1**

ATTN: Josh Kliesan

Test Start: 2015.03.09 @ 17:05:00

### Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 7.99 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

0 deg API

0 ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	mc sc 30m 70sc	0.148

Total Length: 30.00 ft      Total Volume: 0.148 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: sc - Scavenger a h2s dispersing agent put in pipe by company  
Sampler - 70m 30sc @ 20psi

Serial #: 8365

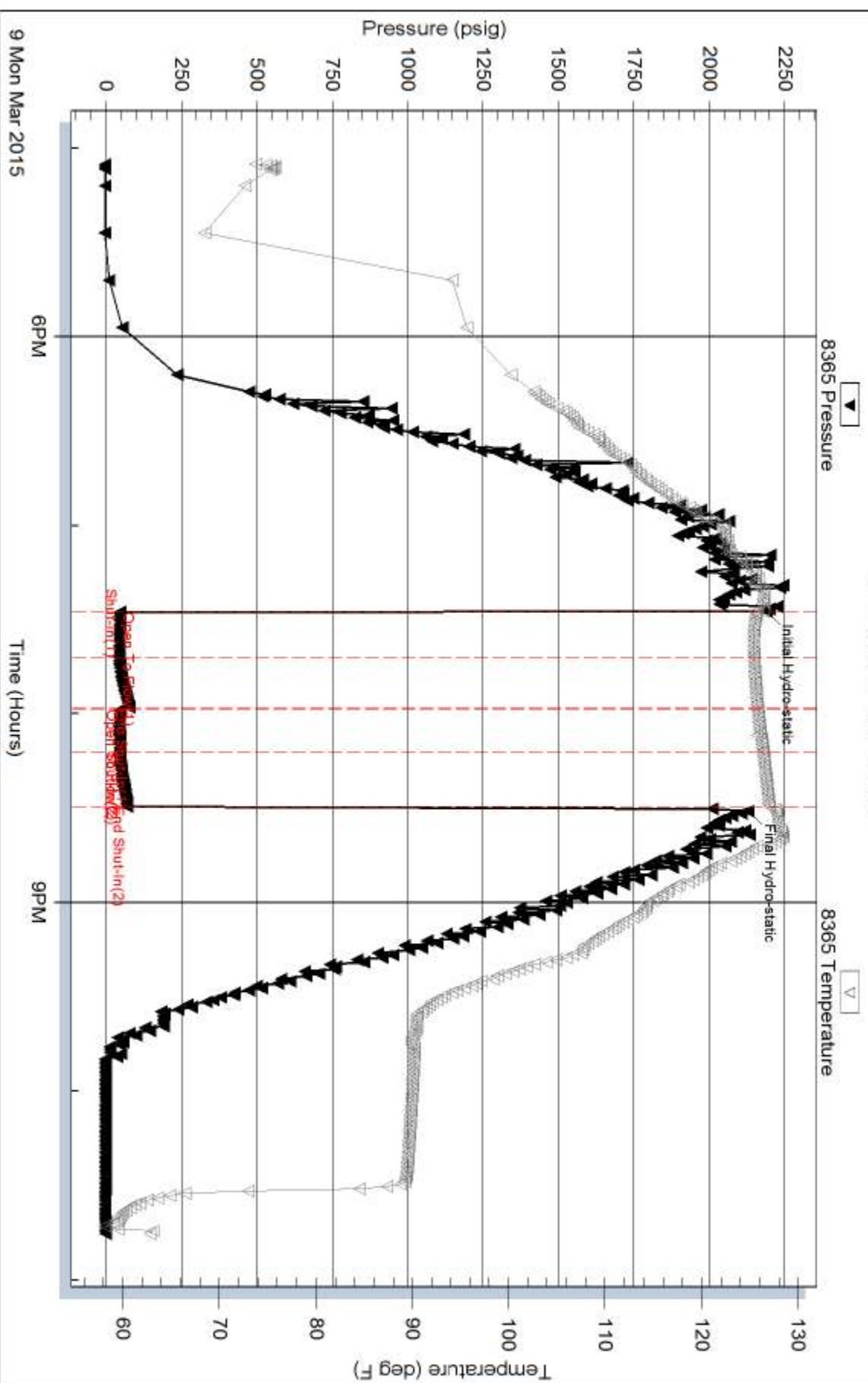
Inside

Bayhorse Petroleum, LLC

Trade Winds #5-21

DST Test Number: 1

# Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 59574

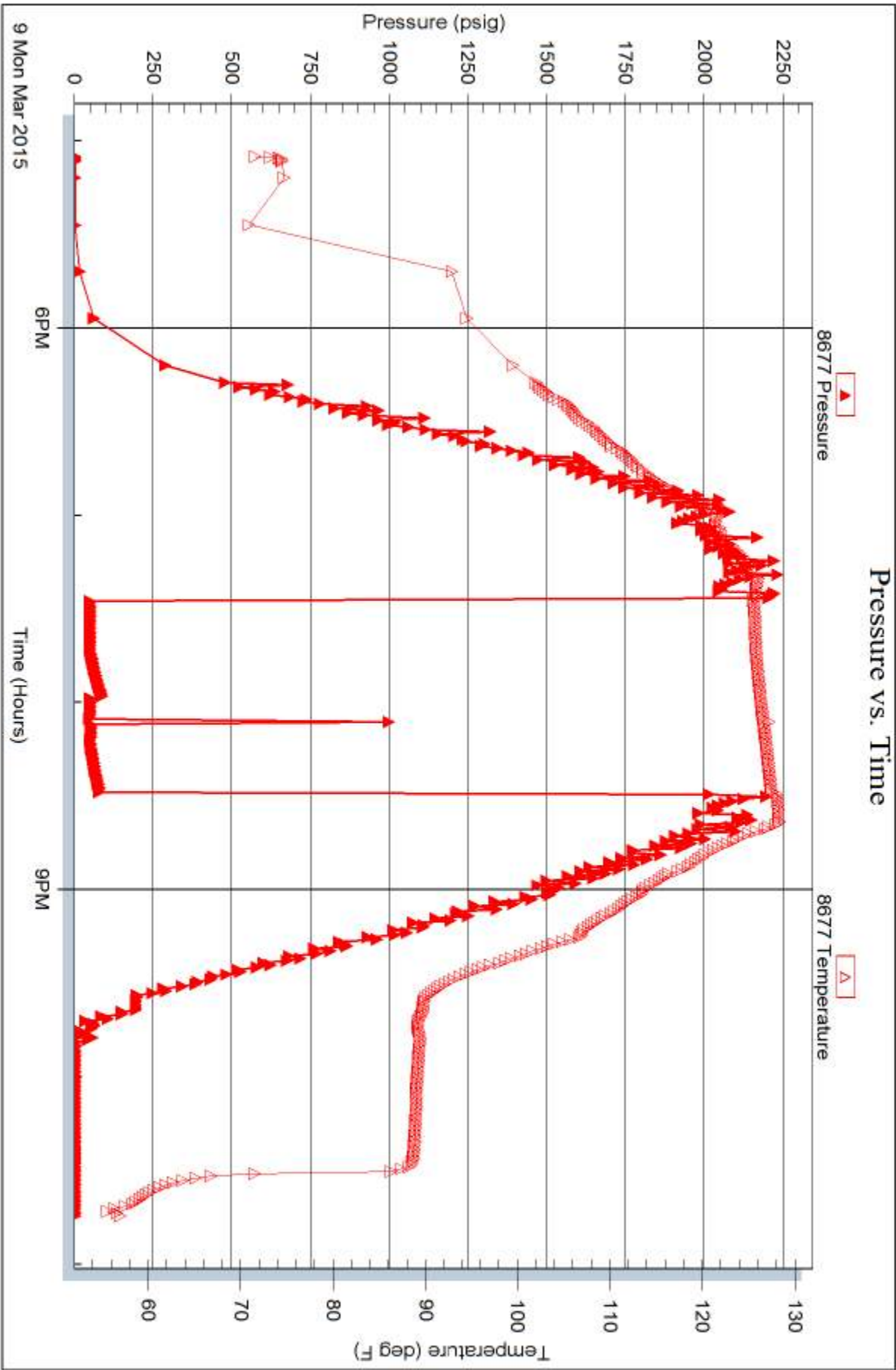
Printed: 2015.03.16 @ 14:16:01

Serial #: 8677

Outside Bayhorse Petroleum, LLC

Trade Winds #5-21

DST Test Number: 1





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **59575**

Well Name & No. Trade Wind 5-21 Test No. 1 Date 3/9/15  
 Company Bayhorse Petroleum Elevation 4160 KB 4148 GL  
 Address 2528 Portsmouth Ave Salt Lake City Utah 84121  
 Co. Rep / Geo. Josh Klieson Rig #12 #1  
 Location: Sec. 21 Twp. 18S Rge. 47 Co. Kowa State CO

Interval Tested 418 4260 - 4307 Zone Tested Pawnee  
 Anchor Length 27 Drill Pipe Run 3909 Mud Wt. 9.3  
 Top Packer Depth 4275 Drill Collars Run 242 Vis SS  
 Bottom Packer Depth 4280 Wt. Pipe Run 0 WL 8.0  
 Total Depth 4307 Chlorides 5,000 ppm System LCM 5#

Blow Description IF Surface blow died @ 5 min

ISI No return

FF No blow Flushed No help.

FSI No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>mud cut Scavenger</u>			<u>30</u>	
	<u>Scavenger is h2s</u>				
	<u>dispersion agent</u>				
	<u>Company Put in</u>				
Rec Total	<u>30</u> BHT <u>127</u>	Gravity	API RW	@	F Chlorides

(A) Initial Hydrostatic 2188  
 (B) First Initial Flow 47  
 (C) First Final Flow 45  
 (D) Initial Shut-In 79  
 (E) Second Initial Flow 46  
 (F) Second Final Flow 47  
 (G) Final Shut-In 70  
 (H) Final Hydrostatic 2129

☒ Test 1350  
☒ Jars 250  
☒ Safety Joint 75  
☒ Circ Sub 11C  
☐ Hourly Standby  
☒ Mileage 78A 196 RTX2 392  
☒ Sampler 250  
☐ Straddle  
☒ Shale Packer 250  
☐ Extra Packer  
☐ Extra Recorder  
☐ Day Standby  
☒ Accessibility No stairs 150  
 Sub Total 2717

T-On Location 1500  
 T-Started 1205  
 T-Open 1927  
 T-Pulled 2027  
 T-Out 2246

Comments 1 Night Hotel

☐ Ruined Shale Packer  
☐ Ruined Packer  
☐ Extra Copies  
 Sub Total 0  
 Total 2717

Initial Open 15  
 Initial Shut-In 15  
 Final Flow 15  
 Final Shut-In 15

Approved By

Our Representative

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.

1515 Commerce Parkway • Hays, Kansas 67601

## FLUID SAMPLER DATA

Ticket No. 59575 Date 3/9/15

Company Name Bayhorse Petroleum

Lease Trade Winds 5-21 Test No. 1

County Kiowa, Co. Sec. 21 Twp. 18 Rng.

## SAMPLER RECOVERY

Gas  ML Chlorides 3000 ppm.

Oil  ML Resistivity  ohms @  F

Mud 600 1400 ML Viscosity 53

Water  ML Mud Weight 9.3

Other Scavenger 600 ML Filtrate 8.0

Pressure  ML Other

Total  ML

## PIT MUD ANALYSIS

## SAMPLER ANALYSIS

Resistivity  ohms @  F

Chlorides 3000 ppm.

Gravity  corrected @60F

## PIPE RECOVERY

### TOP

Resistivity  ohms @  F

Chlorides 3000 ppm.

### MIDDLE

Resistivity  ohms @  F

Chlorides  ppm.

### BOTTOM

Resistivity  ohms @  F

Chlorides  ppm.