



## DRILL STEM TEST REPORT

Prepared For: **Bear Petroleum LLC**  
PO Box 438  
Haysville, KS 67060+0438

ATTN: Rod Anderson

### **Stejskal #1**

#### **16-21S-20W Pawnee,KS**

Start Date: 2018.03.16 @ 06:13:00

End Date: 2018.03.16 @ 10:25:17

Job Ticket #: 63065                      DST #: 1

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

Printed: 2018.03.19 @ 11:00:33



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Bear Petroleum LLC  
 PO Box 438  
 Haysville, KS 67060+0438  
 ATTN: Rod Anderson

**16-21S-20W Pawnee, KS**  
**Stejskal #1**  
 Job Ticket: 63065 **DST#: 1**  
 Test Start: 2018.03.16 @ 06:13:00

## GENERAL INFORMATION:

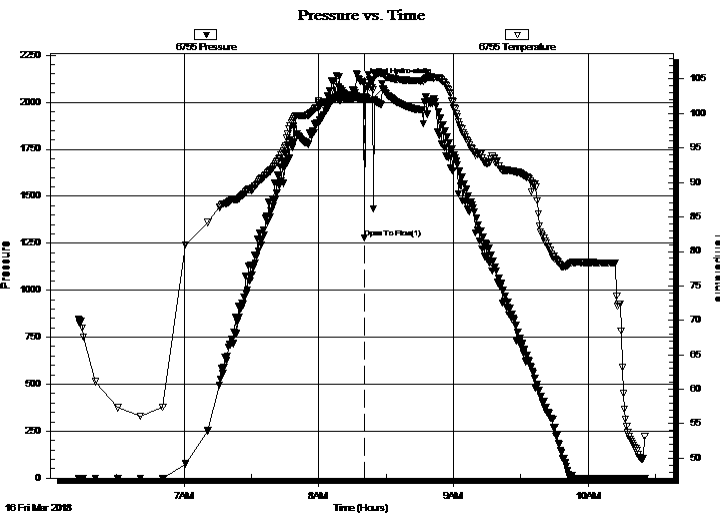
Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 08:20:17  
 Time Test Ended: 10:25:17  
 Interval: **4223.00 ft (KB) To 4276.00 ft (KB) (TVD)**  
 Total Depth: 4276.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72  
 Reference Elevations: 2112.00 ft (KB)  
 2106.00 ft (CF)  
 KB to GR/CF: 6.00 ft

## Serial #: 6755

Inside

Press@RunDepth: psig @ 4271.80 ft (KB) Capacity: psig  
 Start Date: 2018.03.16 End Date: 2018.03.16 Last Calib.: 2018.03.16  
 Start Time: 06:13:01 End Time: 10:25:17 Time On Btm: 2018.03.16 @ 08:19:47  
 Time Off Btm: 2018.03.16 @ 08:28:32

TEST COMMENT: Packer Failure on initial set/ Pull test



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2103.29	102.38	Initial Hydro-static
1	1278.76	102.10	Open To Flow (1)
9	2074.20	105.85	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
150.00	Mud 100%	2.10

## Gas Rates

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



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 PO Box 438  
 Haysville, KS 67060+0438  
 ATTN: Rod Anderson

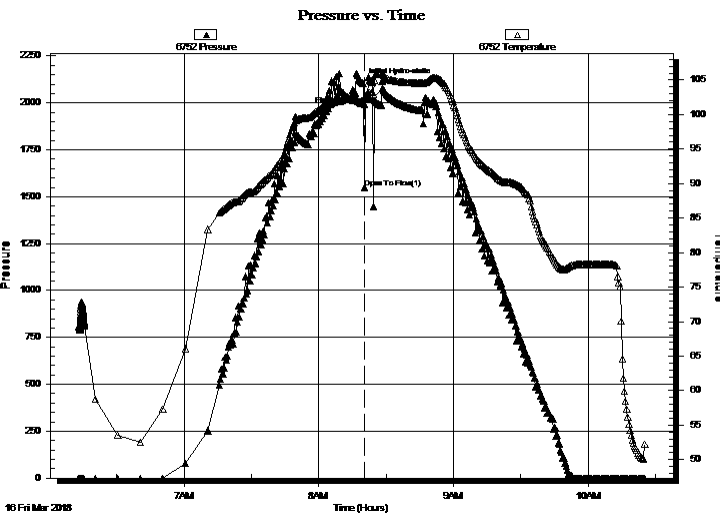
**16-21S-20W Pawnee, KS**  
**Stejskal #1**  
 Job Ticket: 63065 **DST#: 1**  
 Test Start: 2018.03.16 @ 06:13:00

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 08:20:17 Tester: Ken Swinney  
 Time Test Ended: 10:25:17 Unit No: 72  
 Interval: **4223.00 ft (KB) To 4276.00 ft (KB) (TVD)** Reference Elevations: 2112.00 ft (KB)  
 Total Depth: 4276.00 ft (KB) (TVD) 2106.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 6.00 ft

**Serial #: 6752 Outside**  
 Press@RunDepth: psig @ 4272.80 ft (KB) Capacity: psig  
 Start Date: 2018.03.16 End Date: 2018.03.16 Last Calib.: 2018.03.16  
 Start Time: 06:13:01 End Time: 10:25:17 Time On Btm: 2018.03.16 @ 08:19:32  
 Time Off Btm: 2018.03.16 @ 08:28:32

TEST COMMENT: Packer Failure on initial set/ Pull test



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2106.47	101.56	Initial Hydro-static
1	1549.17	101.49	Open To Flow (1)
9	2074.90	105.80	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
150.00	Mud 100%	2.10

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bear Petroleum LLC  
 PO Box 438  
 Haysville, KS 67060+0438  
 ATTN: Rod Anderson

**16-21S-20W Pawnee,KS**  
**Stejskal #1**  
 Job Ticket: 63065 **DST#: 1**  
 Test Start: 2018.03.16 @ 06:13:00

**Tool Information**

Drill Pipe:	Length: 4208.00 ft	Diameter: 3.80 inches	Volume: 59.03 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: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 59.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4223.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.80 ft			
Tool Length:	80.80 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Shut-In Tool	5.00			4200.00	
Hydraulic tool	5.00			4205.00	
Jars	6.00			4211.00	
Safety Joint	2.00			4213.00	
Top Packer	5.00			4218.00	
Packer	5.00			4223.00	28.00 Bottom Of Top Packer
Anchor	14.00			4237.00	
Change Over Sub	1.00			4238.00	
Drill Pipe	31.80			4269.80	
Change Over Sub	1.00			4270.80	
Recorder	1.00	6755	Inside	4271.80	
Recorder	1.00	6752	Outside	4272.80	
Bullnose	3.00			4275.80	52.80 Anchor Tool

**Total Tool Length: 80.80**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bear Petroleum LLC  
PO Box 438  
Haysville, KS 67060+0438  
ATTN: Rod Anderson

**16-21S-20W Pawnee,KS**  
**Stejskal #1**  
Job Ticket: 63065      **DST#: 1**  
Test Start: 2018.03.16 @ 06:13:00

## Mud and Cushion Information

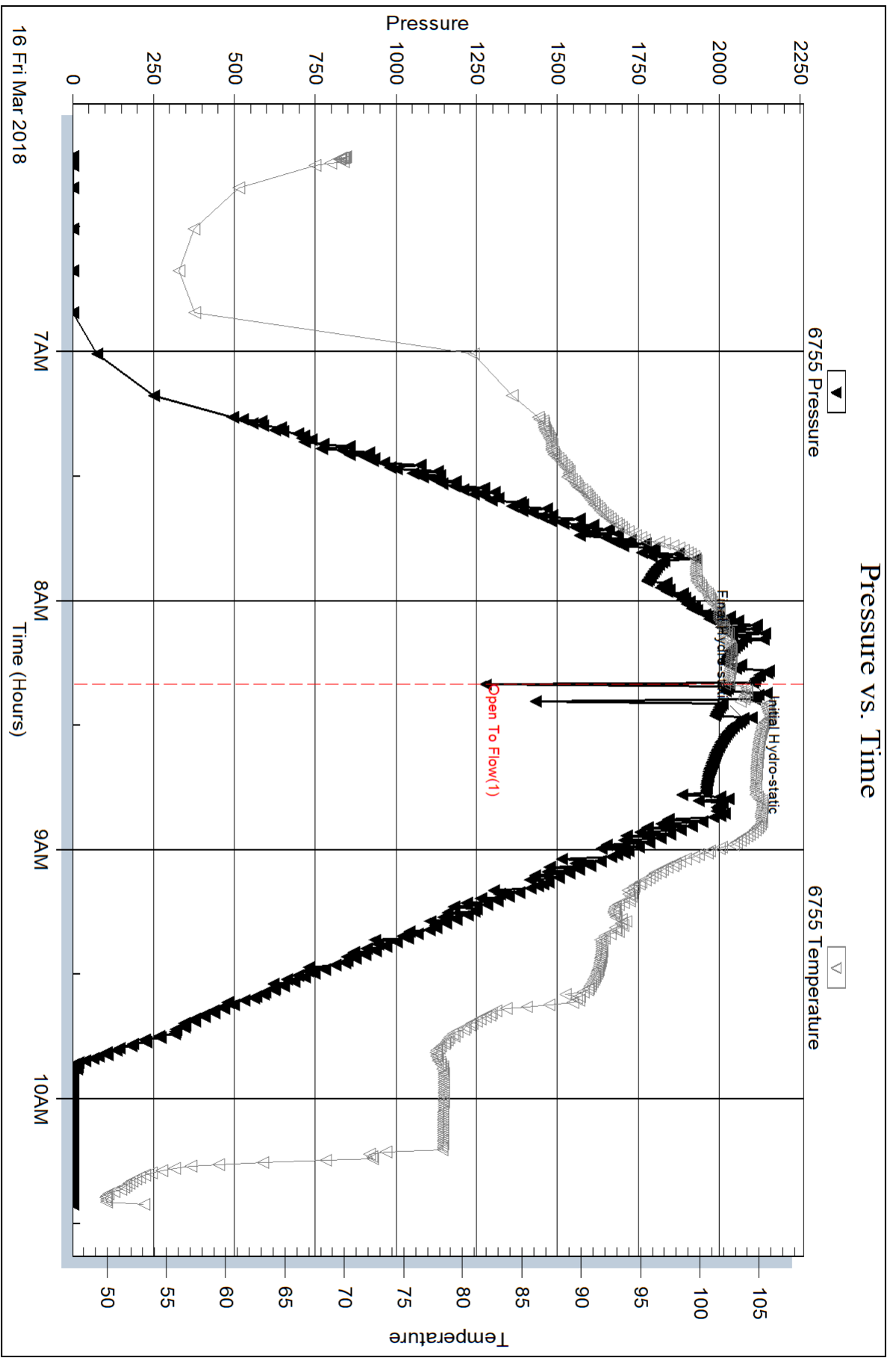
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.38 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 1.00 inches			

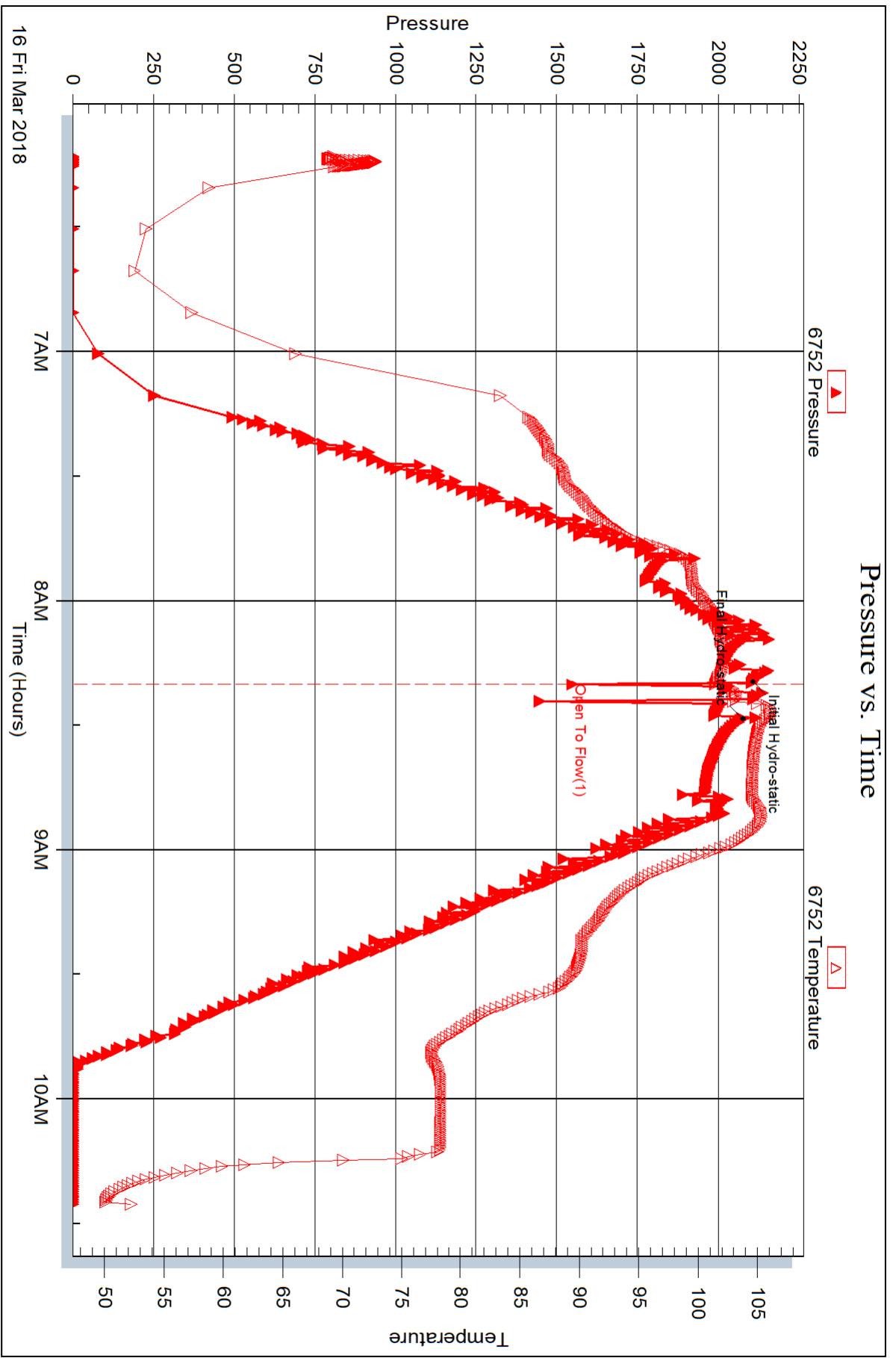
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	Mud 100%	2.104

Total Length: 150.00 ft      Total Volume: 2.104 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Bear Petroleum LLC**  
PO Box 438  
Haysville, KS 67060+0438

ATTN: Rod Anderson

### **Stejskal #1**

#### **16-21S-20W Pawnee,KS**

Start Date: 2018.03.16 @ 10:49:00

End Date: 2018.03.16 @ 16:41:02

Job Ticket #: 63066                      DST #: 2

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

Printed: 2018.03.19 @ 11:00:09





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Bear Petroleum LLC  
 PO Box 438  
 Haysville, KS 67060+0438  
 ATTN: Rod Anderson

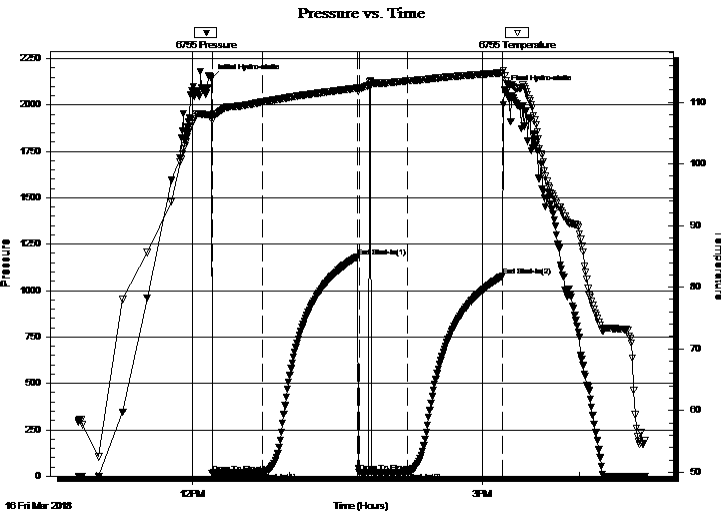
**16-21S-20W Pawnee,KS**  
**Stejskal #1**  
 Job Ticket: 63066 **DST#: 2**  
 Test Start: 2018.03.16 @ 10:49:00

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:12:02  
 Time Test Ended: 16:41:02  
 Interval: **4253.00 ft (KB) To 4276.00 ft (KB) (TVD)**  
 Total Depth: 4276.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72  
 Reference Elevations: 2112.00 ft (KB)  
 2106.00 ft (CF)  
 KB to GR/CF: 6.00 ft

**Serial #: 6755 Inside**  
 Press@RunDepth: 21.92 psig @ 4272.00 ft (KB) Capacity: psig  
 Start Date: 2018.03.16 End Date: 2018.03.16 Last Calib.: 2018.03.16  
 Start Time: 10:49:01 End Time: 16:41:02 Time On Btm: 2018.03.16 @ 12:11:47  
 Time Off Btm: 2018.03.16 @ 15:13:47

**TEST COMMENT:** IFP 30 Minutes Blow built to 1/2"  
 ISI 60 Minutes No blow back  
 FFP 30 Minutes Dead no blow / Flush tool no help  
 FSI 60 Minutes No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2140.65	107.88	Initial Hydro-static
1	16.87	106.96	Open To Flow (1)
32	18.71	110.02	Shut-In(1)
91	1183.10	112.27	End Shut-In(1)
92	19.11	112.14	Open To Flow (2)
122	21.92	113.43	Shut-In(2)
181	1079.26	114.78	End Shut-In(2)
182	2082.49	114.27	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%	0.07

## Gas Rates

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



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 PO Box 438  
 Haysville, KS 67060+0438  
 ATTN: Rod Anderson

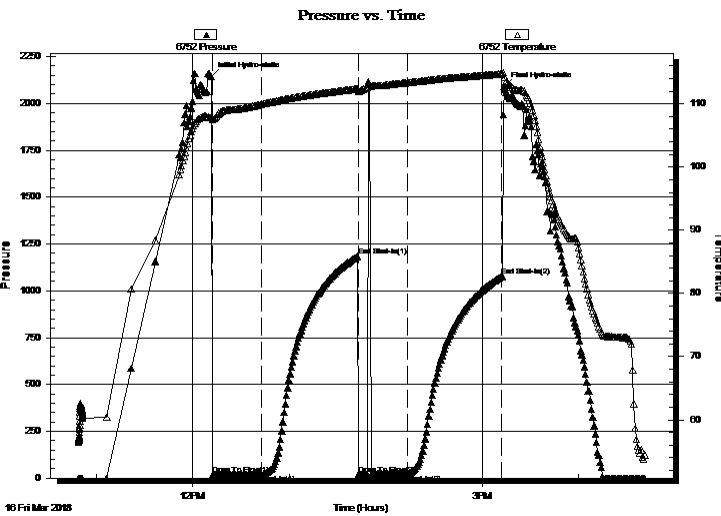
**16-21S-20W Pawnee, KS**  
**Stejskal #1**  
 Job Ticket: 63066 **DST#: 2**  
 Test Start: 2018.03.16 @ 10:49:00

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:12:02  
 Time Test Ended: 16:41:02  
 Interval: **4253.00 ft (KB) To 4276.00 ft (KB) (TVD)**  
 Total Depth: 4276.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72  
 Reference Elevations: 2112.00 ft (KB)  
 2106.00 ft (CF)  
 KB to GR/CF: 6.00 ft

**Serial #: 6752 Outside**  
 Press@RunDepth: 1078.65 psig @ 4273.00 ft (KB) Capacity: psig  
 Start Date: 2018.03.16 End Date: 2018.03.16 Last Calib.: 2018.03.16  
 Start Time: 10:49:01 End Time: 16:41:02 Time On Btm: 2018.03.16 @ 12:11:47  
 Time Off Btm: 2018.03.16 @ 15:13:32

**TEST COMMENT:** IFP 30 Minutes Blow built to 1/2"  
 ISI 60 Minutes No blow back  
 FFP 30 Minutes Dead no blow / Flush tool no help  
 FSI 60 Minutes No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2141.52	107.86	Initial Hydro-static
1	18.41	107.55	Open To Flow (1)
32	19.77	109.98	Shut-In(1)
91	1184.97	112.35	End Shut-In(1)
92	20.06	112.00	Open To Flow (2)
122	22.87	113.36	Shut-In(2)
181	1078.65	114.74	End Shut-In(2)
182	2090.18	114.94	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%	0.07

## Gas Rates

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



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# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bear Petroleum LLC  
 PO Box 438  
 Haysville, KS 67060+0438  
 ATTN: Rod Anderson

**16-21S-20W Pawnee,KS**  
**Stejskal #1**  
 Job Ticket: 63066      **DST#: 2**  
 Test Start: 2018.03.16 @ 10:49:00

**Tool Information**

Drill Pipe:	Length: 4243.00 ft	Diameter: 3.80 inches	Volume: 59.52 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: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 59.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4253.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Shut-In Tool	5.00			4231.00	
Hydraulic tool	5.00			4236.00	
Jars	5.00			4241.00	
Safety Joint	2.00			4243.00	
Packer - Shale	5.00			4248.00	
Packer	5.00			4253.00	27.00      Bottom Of Top Packer
Anchor	18.00			4271.00	
Recorder	1.00	6755	Inside	4272.00	
Recorder	1.00	6752	Outside	4273.00	
Bullnose	3.00			4276.00	23.00      Anchor Tool
<b>Total Tool Length:</b>	<b>50.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bear Petroleum LLC  
 PO Box 438  
 Haysville, KS 67060+0438  
 ATTN: Rod Anderson

**16-21S-20W Pawnee,KS**  
**Stejskal #1**  
 Job Ticket: 63066      **DST#: 2**  
 Test Start: 2018.03.16 @ 10:49:00

## 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: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.38 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100%	0.070

Total Length: 5.00 ft      Total Volume: 0.070 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

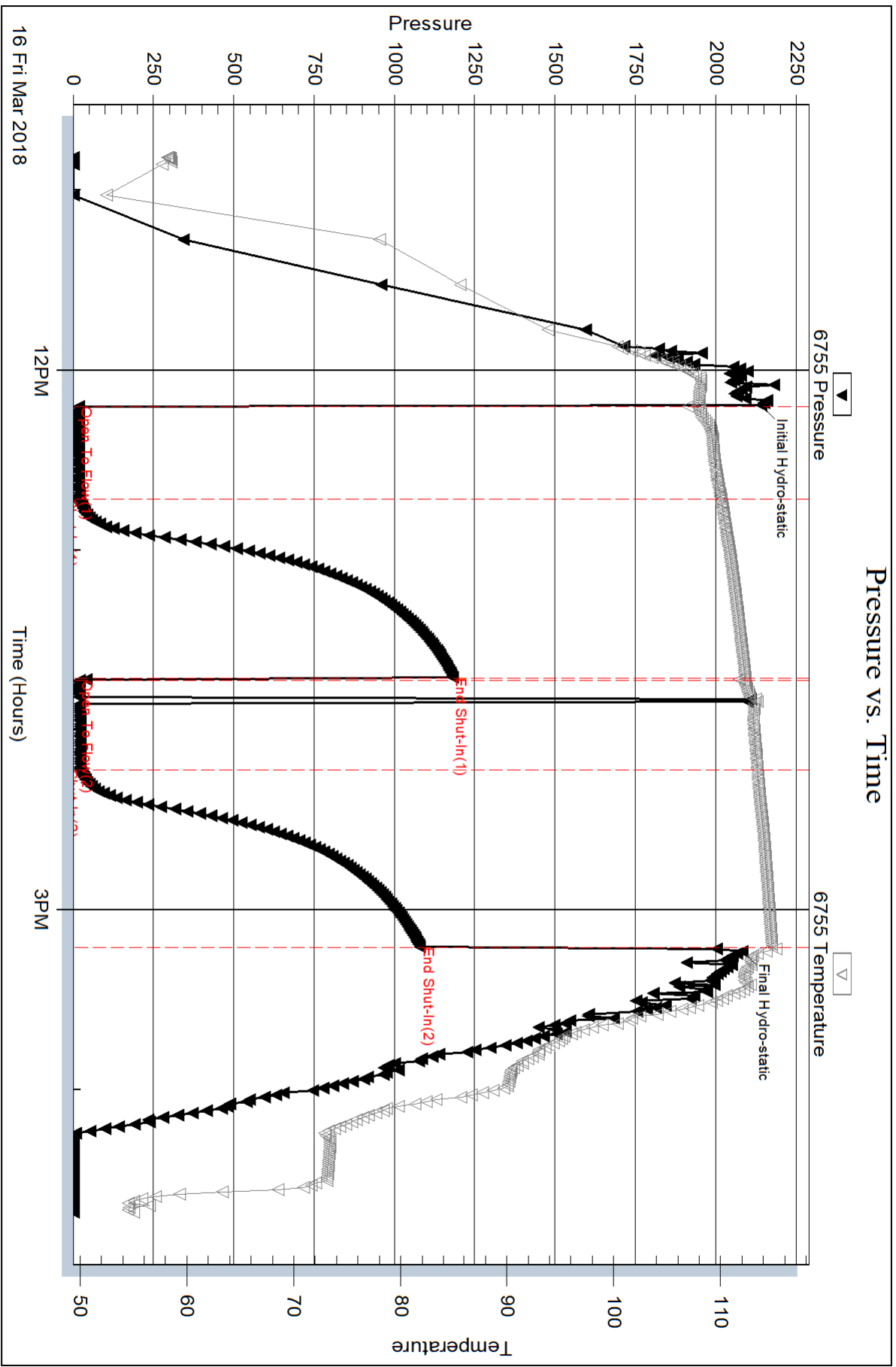
Serial #: 6755

Inside

Bear Petroleum LLC

Seiskal #1

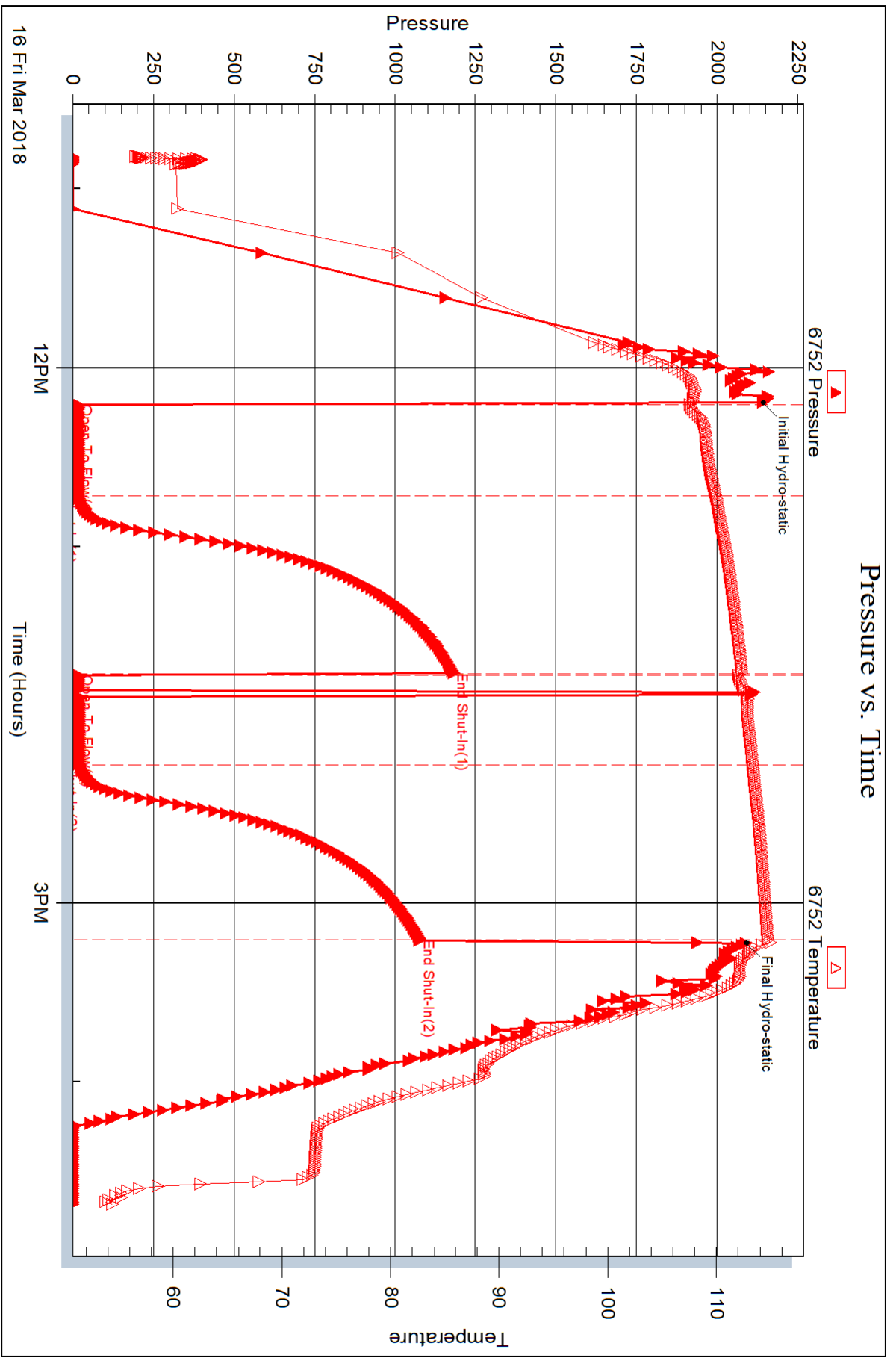
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 63066

Printed: 2018.03.19 @ 11:00:10





## DRILL STEM TEST REPORT

Prepared For: **Bear Petroleum LLC**

PO Box 438  
Haysville, KS 67060+0438

ATTN: Rod Anderson

### **Stejskal #1**

#### **16-21S-20W Pawnee,KS**

Start Date: 2018.03.17 @ 04:11:00

End Date: 2018.03.17 @ 10:51:02

Job Ticket #: 63067                      DST #: 3

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

Printed: 2018.03.19 @ 10:59:17

Bear Petroleum LLC  
16-21S-20W Pawnee,KS  
Stejskal #1  
DST # 3  
Viola  
2018.03.17



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Bear Petroleum LLC  
 PO Box 438  
 Haysville, KS 67060+0438  
 ATTN: Rod Anderson

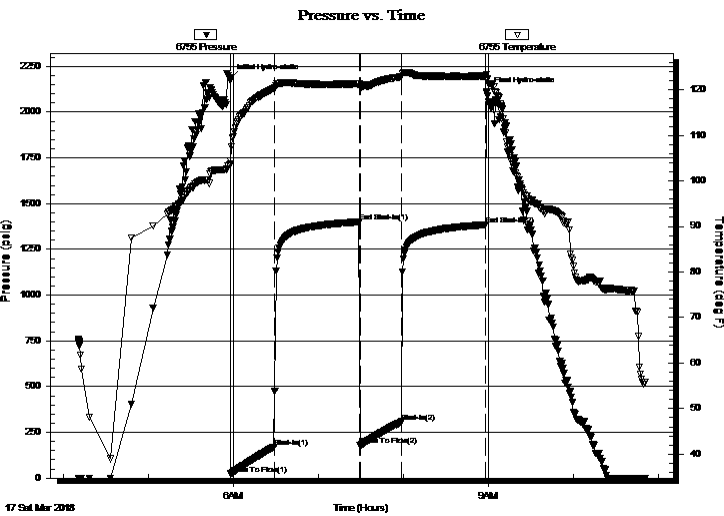
**16-21S-20W Pawnee, KS**  
**Stejskal #1**  
 Job Ticket: 63067 **DST#: 3**  
 Test Start: 2018.03.17 @ 04:11:00

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 05:58:32 Tester: Ken Swinney  
 Time Test Ended: 10:51:02 Unit No: 72  
 Interval: **4343.00 ft (KB) To 4367.00 ft (KB) (TVD)** Reference Elevations: 2112.00 ft (KB)  
 Total Depth: 4367.00 ft (KB) (TVD) 2106.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 6.00 ft

**Serial #: 6755 Inside**  
 Press@RunDepth: 307.42 psig @ 4363.00 ft (KB) Capacity: psig  
 Start Date: 2018.03.17 End Date: 2018.03.17 Last Calib.: 2018.03.17  
 Start Time: 04:11:01 End Time: 10:51:02 Time On Btm: 2018.03.17 @ 05:58:17  
 Time Off Btm: 2018.03.17 @ 08:59:17

**TEST COMMENT:** IFP 30 Minutes Blow built to 6"  
 ISI 60 Minutes No blow back  
 FFP 30 Minutes Blow built to BOB in 14 minutes  
 FSI 60 minutes No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2185.02	103.67	Initial Hydro-static
1	23.37	104.29	Open To Flow (1)
31	170.82	120.20	Shut-In(1)
91	1399.23	121.24	End Shut-In(1)
92	177.38	120.78	Open To Flow (2)
121	307.42	122.89	Shut-In(2)
180	1384.49	123.00	End Shut-In(2)
181	2112.22	122.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
315.00	MW Mud 30% Water 70%	4.42
310.00	SMW Mud 5% Water 95%	4.35

## Gas Rates

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





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Bear Petroleum LLC  
 PO Box 438  
 Haysville, KS 67060+0438  
 ATTN: Rod Anderson

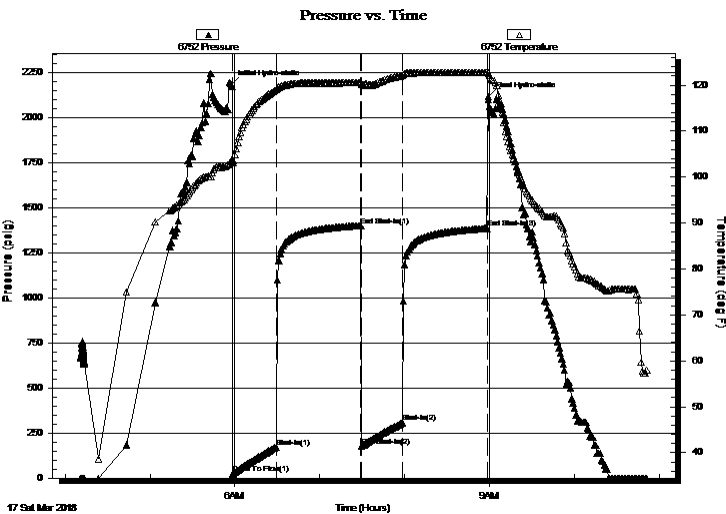
**16-21S-20W Pawnee, KS**  
**Stejskal #1**  
 Job Ticket: 63067 **DST#: 3**  
 Test Start: 2018.03.17 @ 04:11:00

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 05:58:32 Tester: Ken Swinney  
 Time Test Ended: 10:51:02 Unit No: 72  
 Interval: **4343.00 ft (KB) To 4367.00 ft (KB) (TVD)** Reference Elevations: 2112.00 ft (KB)  
 Total Depth: 4367.00 ft (KB) (TVD) 2106.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 6.00 ft

**Serial #: 6752 Outside**  
 Press@RunDepth: 1385.12 psig @ 4364.00 ft (KB) Capacity: psig  
 Start Date: 2018.03.17 End Date: 2018.03.17 Last Calib.: 2018.03.17  
 Start Time: 04:11:01 End Time: 10:51:02 Time On Btm: 2018.03.17 @ 05:57:32  
 Time Off Btm: 2018.03.17 @ 08:59:17

**TEST COMMENT:** IFP 30 Minutes Blow built to 6"  
 ISI 60 Minutes No blow back  
 FFP 30 Minutes Blow built to BOB in 14 minutes  
 FSI 60 minutes No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2180.26	103.37	Initial Hydro-static
1	24.00	103.06	Open To Flow (1)
32	171.82	118.96	Shut-In(1)
92	1400.01	120.50	End Shut-In(1)
92	178.45	120.20	End Shut-In(2)
121	307.23	122.12	Shut-In(2)
181	1385.12	122.65	End Shut-In(3)
182	2115.60	122.59	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
315.00	MW Mud 30% Water 70%	4.42
310.00	SMW Mud 5% Water 95%	4.35

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bear Petroleum LLC  
PO Box 438  
Haysville, KS 67060+0438  
ATTN: Rod Anderson

**16-21S-20W Pawnee,KS**  
**Stejskal #1**  
Job Ticket: 63067      **DST#: 3**  
Test Start: 2018.03.17 @ 04:11:00

**Tool Information**

Drill Pipe:	Length: 4338.00 ft	Diameter: 3.80 inches	Volume: 60.85 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: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 60.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	4343.00 ft			Final 78000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	51.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Shut-In Tool	5.00			4321.00	
Hydraulic tool	5.00			4326.00	
Jars	5.00			4331.00	
Safety Joint	2.00			4333.00	
Top Packer	5.00			4338.00	
Packer	5.00			4343.00	27.00      Bottom Of Top Packer
Anchor	19.00			4362.00	
Recorder	1.00	6755	Inside	4363.00	
Recorder	1.00	6752	Outside	4364.00	
Bullnose	3.00			4367.00	24.00      Anchor Tool
<b>Total Tool Length:</b>	<b>51.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bear Petroleum LLC  
PO Box 438  
Haysville, KS 67060+0438  
ATTN: Rod Anderson

**16-21S-20W Pawnee,KS**  
**Stejskal #1**  
Job Ticket: 63067      **DST#: 3**  
Test Start: 2018.03.17 @ 04:11:00

## Mud and Cushion Information

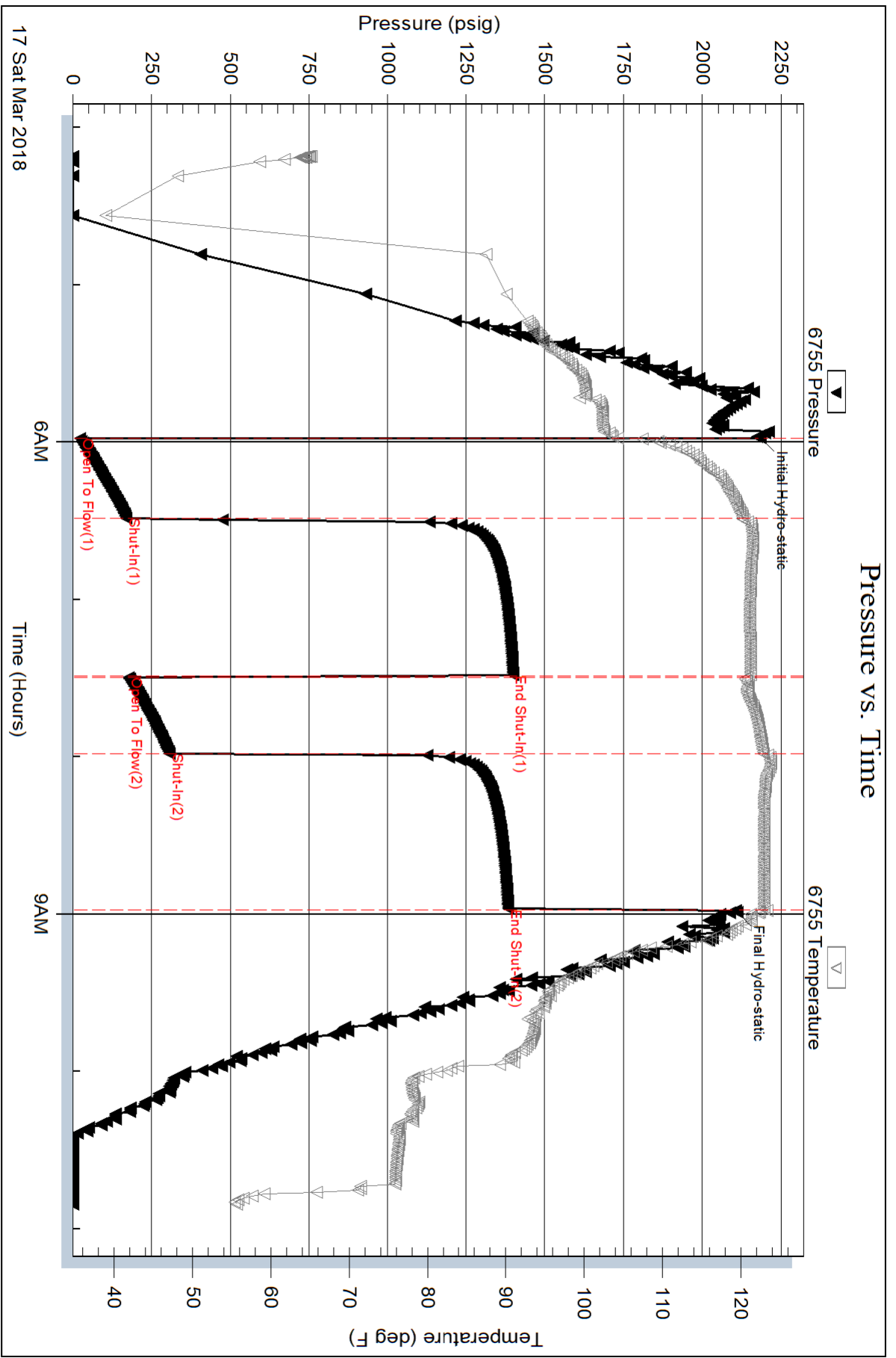
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 17000 ppm	
Viscosity: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.39 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 1.00 inches			

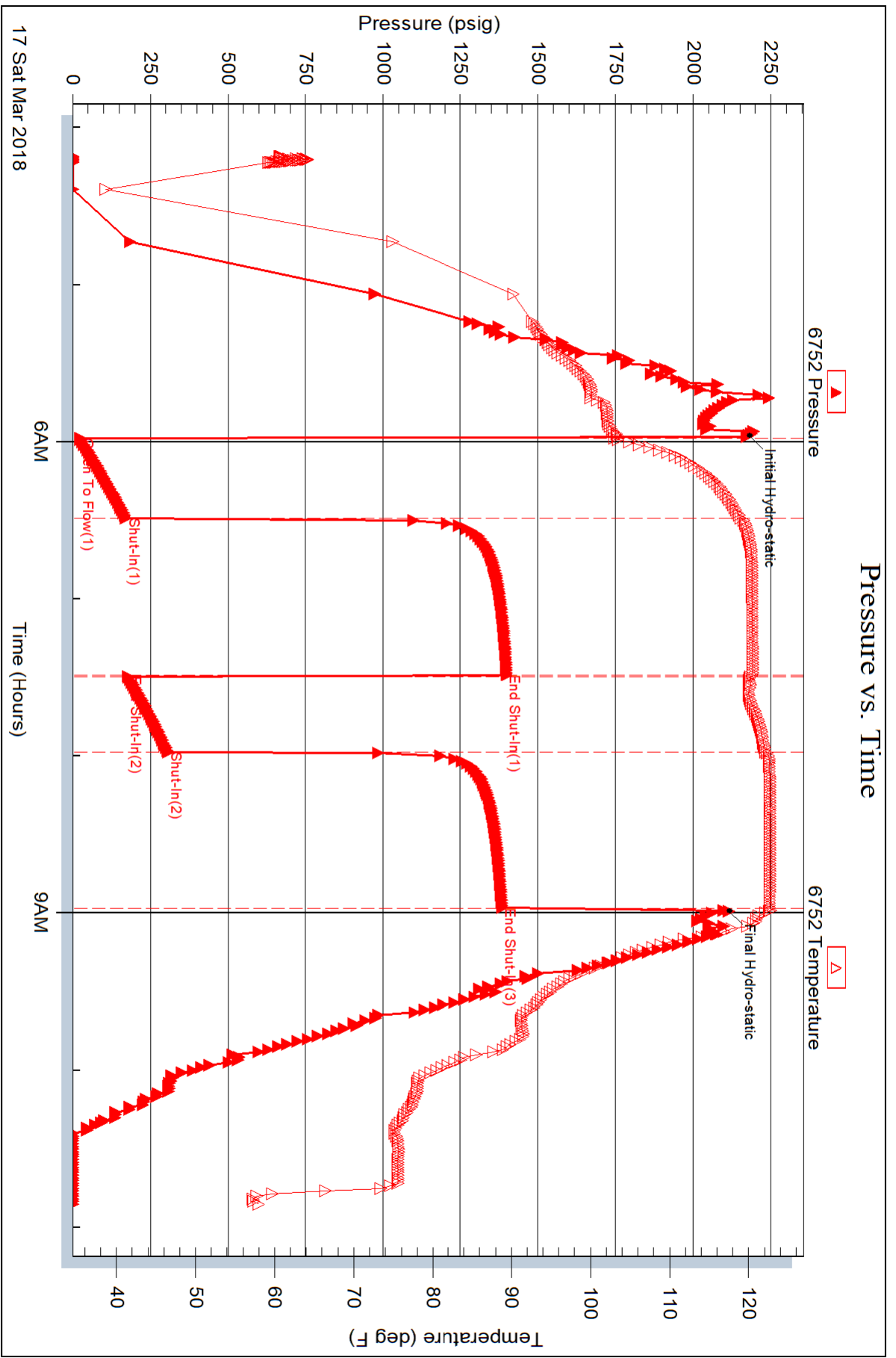
## Recovery Information

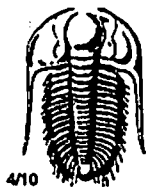
Recovery Table

Length ft	Description	Volume bbl
315.00	MW Mud 30% Water 70%	4.419
310.00	SMW Mud 5% Water 95%	4.348

Total Length: 625.00 ft      Total Volume: 8.767 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: Recovery Resistivity .471 ohms @ 56 deg.







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 63065

Well Name & No. Stejskal #1 Test No. 1 Date 16 MAR 18  
 Company Bear Petroleum LLC Elevation 2112 KB 2106 GL  
 Address PO Box 438 Haysville Kansas 67060-0438  
 Co. Rep / Geo. Red Andersen Rig Royal 1  
 Location: Sec. 16 Twp. 21S Rge. 20W Co. Pawnee State KS

Interval Tested 4223-4276 Zone Tested Mississippi  
 Anchor Length ~~5276~~ 53 Drill Pipe Run 4208 Mud Wt. 9.0  
 Top Packer Depth 4218 Drill Collars Run — Vis 5-1  
 Bottom Packer Depth 4223 Wt. Pipe Run — WL 8.4  
 Total Depth 4276 Chlorides 4000 ppm System LCM 2#  
 Blow Description Packer Failure

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>Mud 100%</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 150 BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

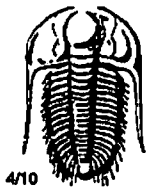
(A) Initial Hydrostatic 2103  Test 1150 T-On Location 5:32 am  
 (B) First Initial Flow 1278  Jars 250 T-Started 6:13 am  
 (C) First Final Flow \_\_\_\_\_  Safety Joint 75 T-Open 8:20 am  
 (D) Initial Shut-In \_\_\_\_\_  Circ Sub \_\_\_\_\_ T-Pulled 8:48 am  
 (E) Second Initial Flow \_\_\_\_\_  Hourly Standby \_\_\_\_\_ T-Out 10:27 am  
 (F) Second Final Flow \_\_\_\_\_  Mileage 92 92 Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2074  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open \_\_\_\_\_  
 Initial Shut-In \_\_\_\_\_  
 Final Flow \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_

Sub Total 1567

Approved By \_\_\_\_\_

Our Representative



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 63066

Well Name & No. Stejskal #1 Test No. 2 Date 16 MAR 18  
 Company Bear Petroleum LLC Elevation 2112 KB 2106 GL  
 Address PO Box 438 Haysville Kansas 67060+0438  
 Co. Rep / Geo. Rod Anderson Rig Royal Rig 1  
 Location: Sec. 16 Twp. 21S Rge. 20W Co. Pownee State KS

Interval Tested 4253-4276 Zone Tested Mississippi  
 Anchor Length 25 Drill Pipe Run 4243 Mud Wt. 9.0  
 Top Packer Depth 4248 Drill Collars Run — Vis 51  
 Bottom Packer Depth 4253 Wt. Pipe Run — WL 8.4  
 Total Depth 4276 Chlorides 4000 ppm System LCM 2#

Blow Description I.F. Blow built to 1/2 inch  
I.S.I No blow back  
F.F. Dead no blow / Flush tool no help  
F.S.I No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud</u>				<u>100</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 5 BHT 114 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

- (A) Initial Hydrostatic 2140
- (B) First Initial Flow 1.6
- (C) First Final Flow 18 A
- (D) Initial Shut-In 1183
- (E) Second Initial Flow 19
- (F) Second Final Flow 21
- (G) Final Shut-In 1079
- (H) Final Hydrostatic 2082

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 30  
 Final Shut-In 60

- Test 1150
- Jars 250
- Safety Joint 75
- Circ Sub \_\_\_\_\_
- Hourly Standby \_\_\_\_\_
- Mileage 92 92
- Sampler \_\_\_\_\_
- Straddle \_\_\_\_\_
- Shale Packer 250
- Extra Packer \_\_\_\_\_
- Extra Recorder \_\_\_\_\_
- Day Standby \_\_\_\_\_
- Accessibility \_\_\_\_\_
- Sub Total 1817

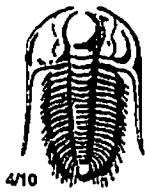
T-On Location Recon  
 T-Started 10:49 am  
 T-Open 12:12 pm  
 T-Pulled 3:12 pm  
 T-Out 4:41 pm

Comments \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_  
 Sub Total 0  
 Total 1817  
 MP/DST Disc't \_\_\_\_\_

Approved By Rod Anderson

Our Representative

*[Signature]*



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 63067

Well Name & No. Stejskal #1 Test No. 3 Date 17 MAR 18  
 Company Beac Petroleum LLC Elevation 2112 KB 2106 GL  
 Address PO Box 458 Haysville, Kansas 67060 10438  
 Co. Rep / Geo. Rod Andersen Rig Royal Rig 1  
 Location: Sec. 16 Twp. 21S Rge. 20W Co. Pawnee State KS

Interval Tested 4343-4367 Zone Tested Viola  
 Anchor Length 24 Drill Pipe Run 4338 Mud Wt. 9.1  
 Top Packer Depth 4338 Drill Collars Run - Vis 55  
 Bottom Packer Depth 4343 Wt. Pipe Run - WL 8.4  
 Total Depth 4367 Chlorides 5000 ppm System LCM 2#

Blow Description I.F. Blow built to 6 inches  
F.S.I. No blow back  
F.F. Blow built to BOB in 14 minutes  
F.S.I. No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>315</u>	<u>Muddy Water</u>			<u>70</u>	<u>30</u>
<u>310</u>	<u>Muddy Water</u>			<u>75</u>	<u>5</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 625 BHT 123 Gravity \_\_\_\_\_ API RW .471 @ 56 °F Chlorides 17000 ppm

(A) Initial Hydrostatic <u>2185</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>3:30 am</u>
(B) First Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>4:08 am</u>
(C) First Final Flow <u>170</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>5:59 am</u>
(D) Initial Shut-In <u>1399</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>8:59 am</u>
(E) Second Initial Flow <u>177</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>10:53 am</u>
(F) Second Final Flow <u>307</u>	<input checked="" type="checkbox"/> Mileage <u>184 92</u>	Comments _____
(G) Final Shut-In <u>1384</u>	<input type="checkbox"/> Sampler _____	<u>Loaded tools 3/18 6:00</u>
(H) Final Hydrostatic <u>2112</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 30  
 Final Shut-In 60

Approved By Rod Andersen

Shale Packer 250  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1909

Our Representative

*[Signature]*

Sub Total 0  
 Total 1909  
 MP/DST Disc't \_\_\_\_\_