



DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 West State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Phyllis "B" #1-4

4-19s-29w Lane,KS

Start Date: 2013.10.13 @ 05:29:00

End Date: 2013.10.13 @ 10:18:15

Job Ticket #: 54738 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.16 @ 09:52:44



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Larson Engineering, Inc.

4-19s-29w Lane, KS

562 West State Rd 4
Olmitz, KS 67564

Phyllis "B" #1-4

Job Ticket: 54738

DST#: 1

ATTN: Vern Schrag

Test Start: 2013.10.13 @ 05:29:00

GENERAL INFORMATION:

Formation: " H "

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:27:30

Time Test Ended: 10:18:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Sam Esparza

Unit No: 64

Interval: 4170.00 ft (KB) To 4197.00 ft (KB) (TVD)

Reference Elevations: 2841.00 ft (KB)

Total Depth: 4197.00 ft (KB) (TVD)

2834.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8845 Outside

Press @ Run Depth: 42.32 psig @ 4171.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.13

End Date: 2013.10.13

Last Calib.: 2013.10.13

Start Time: 05:29:05

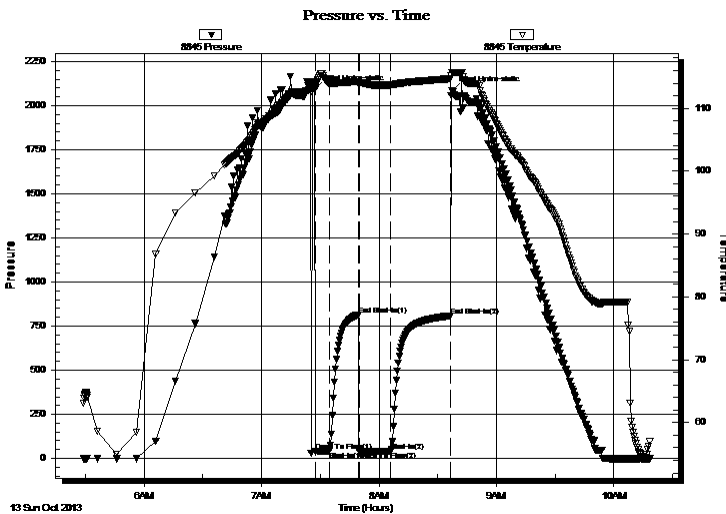
End Time: 10:18:14

Time On Btm: 2013.10.13 @ 07:27:15

Time Off Btm: 2013.10.13 @ 08:37:15

TEST COMMENT: IF: 1/2" Blow .
IS: No Return.
FF: Weak Surface Blow .
FS: No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2091.06	114.20	Initial Hydro-static
1	38.84	113.27	Open To Flow (1)
8	40.92	113.98	Shut-In(1)
23	814.67	114.26	End Shut-In(1)
23	39.54	113.86	Open To Flow (2)
39	42.32	113.71	Shut-In(2)
69	808.24	114.70	End Shut-In(2)
70	2086.99	115.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud 100m	0.15

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

4-19s-29w Lane,KS

562 West State Rd 4
Olmitz, KS 67564

Phyllis "B" #1-4

Job Ticket: 54738

DST#: 1

ATTN: Vern Schrag

Test Start: 2013.10.13 @ 05:29:00

Tool Information

Drill Pipe:	Length: 4014.00 ft	Diameter: 3.80 inches	Volume: 56.31 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:	30000.00 lb
Drill Collar:	Length: 148.00 ft	Diameter: 2.25 inches	Volume: 0.73 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 57.04 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	56000.00 lb
Depth to Top Packer:	4170.00 ft			Final	56000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	27.00 ft				
Tool Length:	55.00 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			4143.00	
Shut In Tool	5.00			4148.00	
Hydraulic tool	5.00			4153.00	
Jars	5.00			4158.00	
Safety Joint	3.00			4161.00	
Packer	5.00			4166.00	28.00 Bottom Of Top Packer
Packer	4.00			4170.00	
Stubb	1.00			4171.00	
Recorder	0.00	6772	Inside	4171.00	
Recorder	0.00	8845	Outside	4171.00	
Perforations	21.00			4192.00	
Bullnose	5.00			4197.00	27.00 Bottom Packers & Anchor

Total Tool Length: 55.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

4-19s-29w Lane,KS

562 West State Rd 4
Olmitz, KS 67564

Phyllis "B" #1-4

Job Ticket: 54738

DST#: 1

ATTN: Vern Schrag

Test Start: 2013.10.13 @ 05:29:00

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: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud 100m	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

Num Fluid Samples: 0

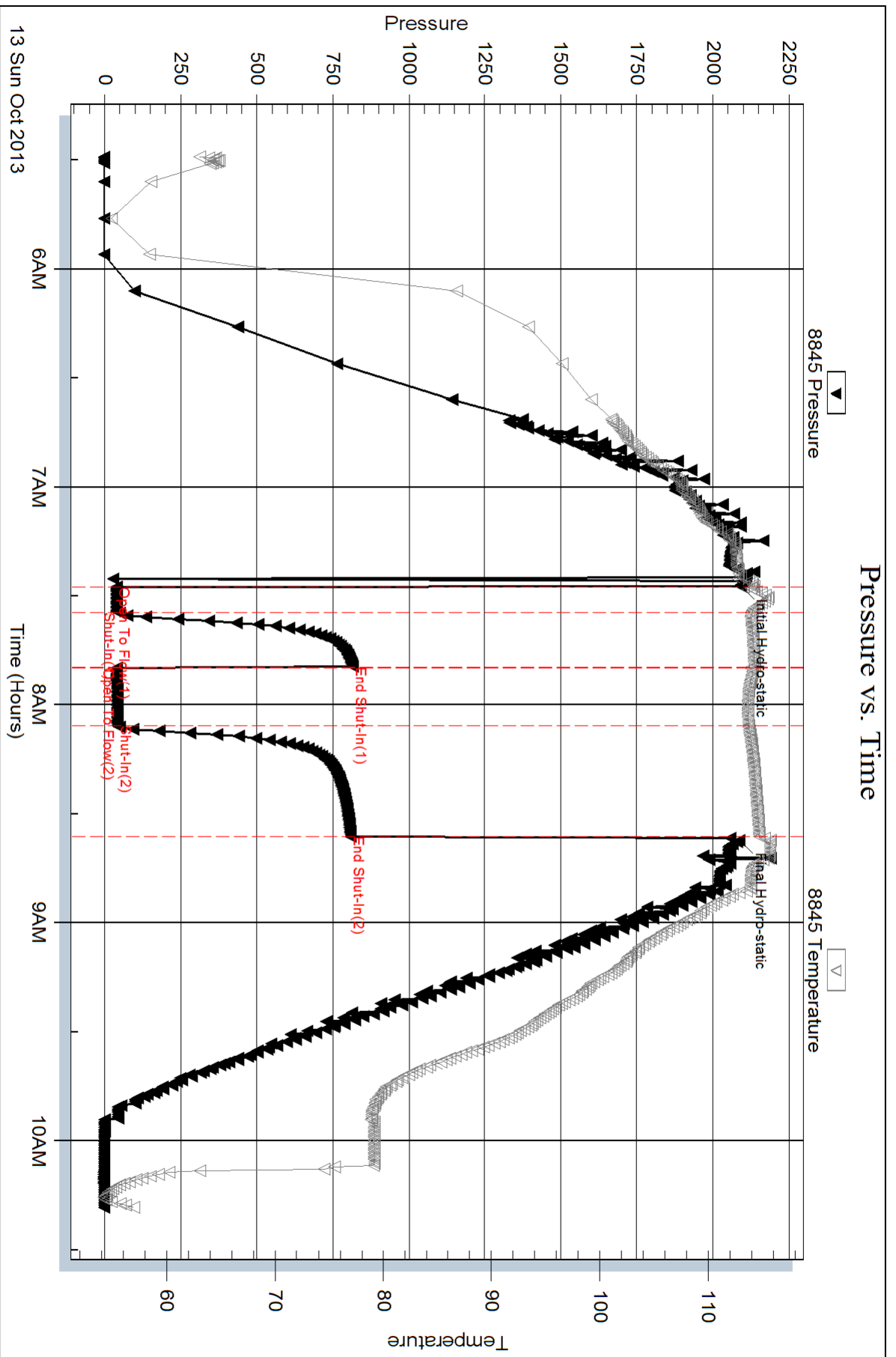
Num Gas Bombs: 0

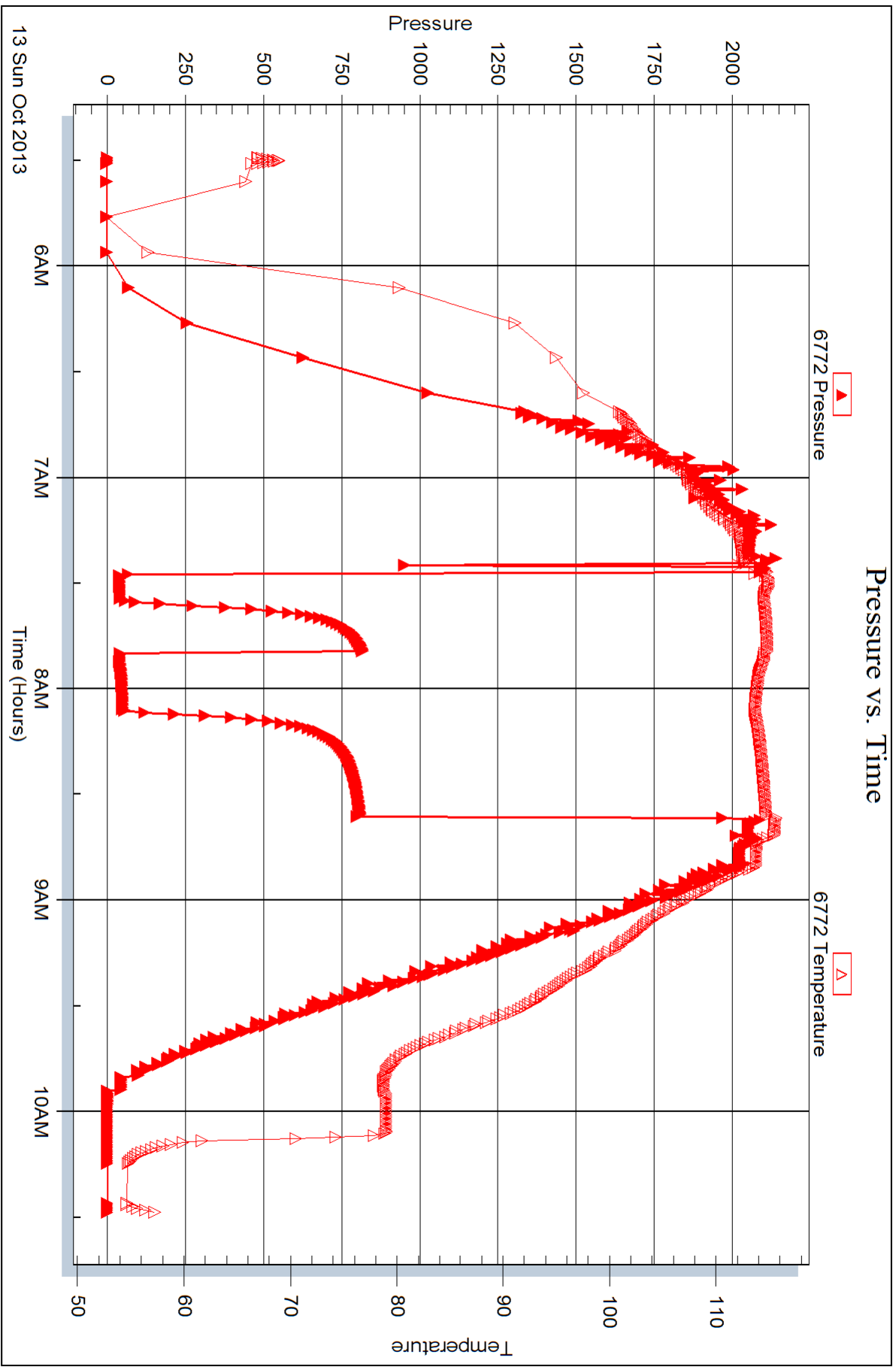
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 West State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Phyllis "B" #1-4

4-19s-29w Lane,KS

Start Date: 2013.10.15 @ 07:41:00

End Date: 2013.10.15 @ 13:56:00

Job Ticket #: 54520 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.16 @ 09:52:18



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Larson Engineering, Inc.

4-19s-29w Lane, KS

562 West State Rd 4
Olmitz, KS 67564

Phyllis "B" #1-4

ATTN: Vern Schrag

Job Ticket: 54520

DST#: 2

Test Start: 2013.10.15 @ 07:41:00

GENERAL INFORMATION:

Formation: **Pawnee-Myric Station**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:33:45

Time Test Ended: 13:56:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Cornelio Landa III (

Unit No: 64

Interval: 4462.00 ft (KB) To 4545.00 ft (KB) (TVD)

Reference Elevations: 2841.00 ft (KB)

Total Depth: 4545.00 ft (KB) (TVD)

2834.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6772 Inside

Press @ Run Depth: 97.79 psig @ 4465.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.15 End Date: 2013.10.15

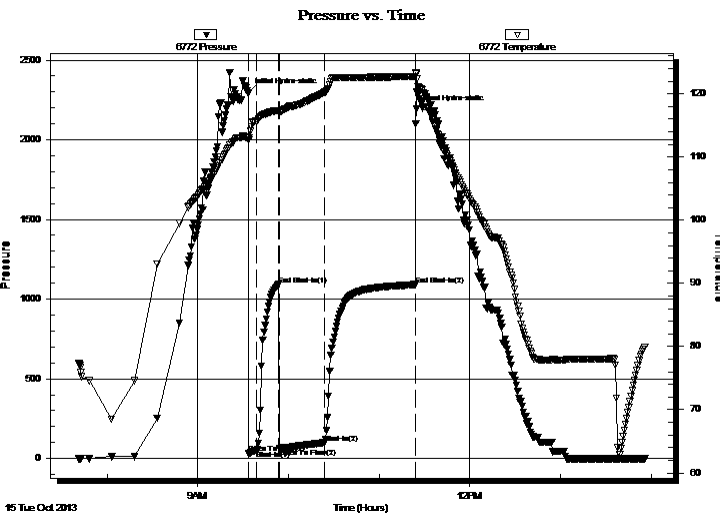
Last Calib.: 2013.10.15

Start Time: 07:41:05 End Time: 13:55:59

Time On Btm: 2013.10.15 @ 09:33:15

Time Off Btm: 2013.10.15 @ 11:24:30

TEST COMMENT: IF: 7" blow
IS: Bled off in 2 mins.- Surface blow back
FF: BOB in 5 mins.-
FS: Bled off in 3 mins.- Surface blow back-built to 1/8"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2293.67	113.07	Initial Hydro-static
1	30.01	112.72	Open To Flow (1)
6	50.96	115.67	Shut-In(1)
21	1091.60	117.39	End Shut-In(1)
21	62.86	116.98	Open To Flow (2)
51	97.79	120.17	Shut-In(2)
111	1091.75	122.74	End Shut-In(2)
112	2192.07	123.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
148.00	Mog 30m 30o 40g	0.73
31.00	Mog 30m 30o 40g	0.43
58.00	Go 10g 90o	0.81
5.00	Oil 100o	0.07

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

4-19s-29w Lane, KS

562 West State Rd 4
Olmitz, KS 67564

Phyllis "B" #1-4

Job Ticket: 54520

DST#: 2

ATTN: Vern Schrag

Test Start: 2013.10.15 @ 07:41:00

Tool Information

Drill Pipe:	Length: 4294.00 ft	Diameter: 3.80 inches	Volume: 60.23 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: 30000.00 lb
Drill Collar:	Length: 148.00 ft	Diameter: 2.25 inches	Volume: 0.73 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 60.96 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4462.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	83.00 ft			
Tool Length:	110.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4436.00	
Shut In Tool	5.00			4441.00	
Hydraulic tool	5.00			4446.00	
Jars	5.00			4451.00	
Safety Joint	2.00			4453.00	
Packer	5.00			4458.00	27.00 Bottom Of Top Packer
Packer	4.00			4462.00	
Stubb	1.00			4463.00	
Perforations	2.00			4465.00	
Recorder	0.00	6772	Inside	4465.00	
Recorder	0.00	8845	Outside	4465.00	
Perforations	10.00			4475.00	
Change Over Sub	1.00			4476.00	
Drill Pipe	63.00			4539.00	
Change Over Sub	1.00			4540.00	
Bullnose	5.00			4545.00	83.00 Bottom Packers & Anchor
Total Tool Length:	110.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

4-19s-29w Lane,KS

562 West State Rd 4
Olmitz, KS 67564

Phyllis "B" #1-4

Job Ticket: 54520

DST#: 2

ATTN: Vern Schrag

Test Start: 2013.10.15 @ 07:41:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

41 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 64.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.94 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
148.00	Mog 30m 30o 40g	0.728
31.00	Mog 30m 30o 40g	0.435
58.00	Go 10g 90o	0.814
5.00	Oil 100o	0.070

Total Length: 242.00 ft

Total Volume: 2.047 bbl

Num Fluid Samples: 0

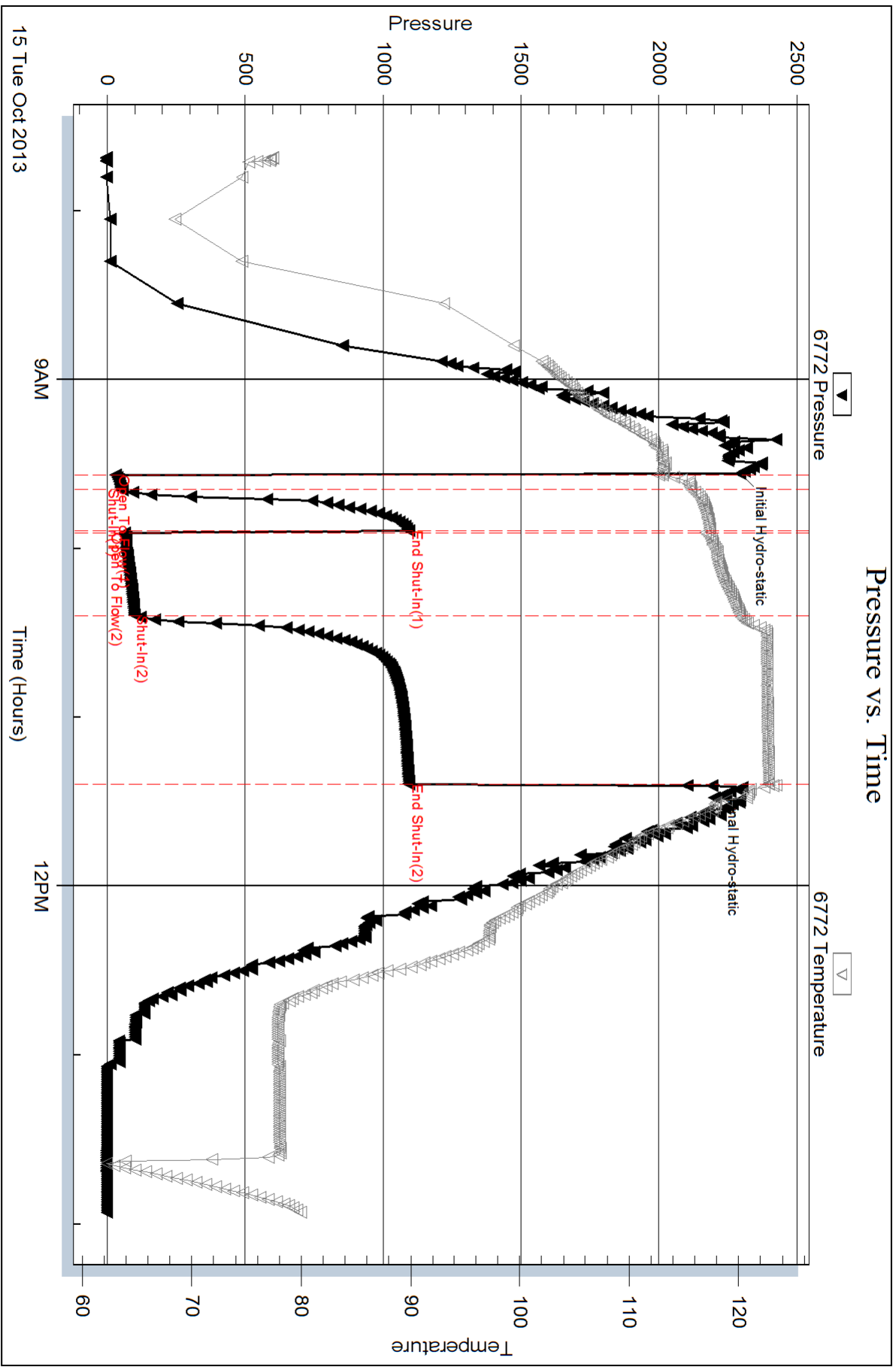
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

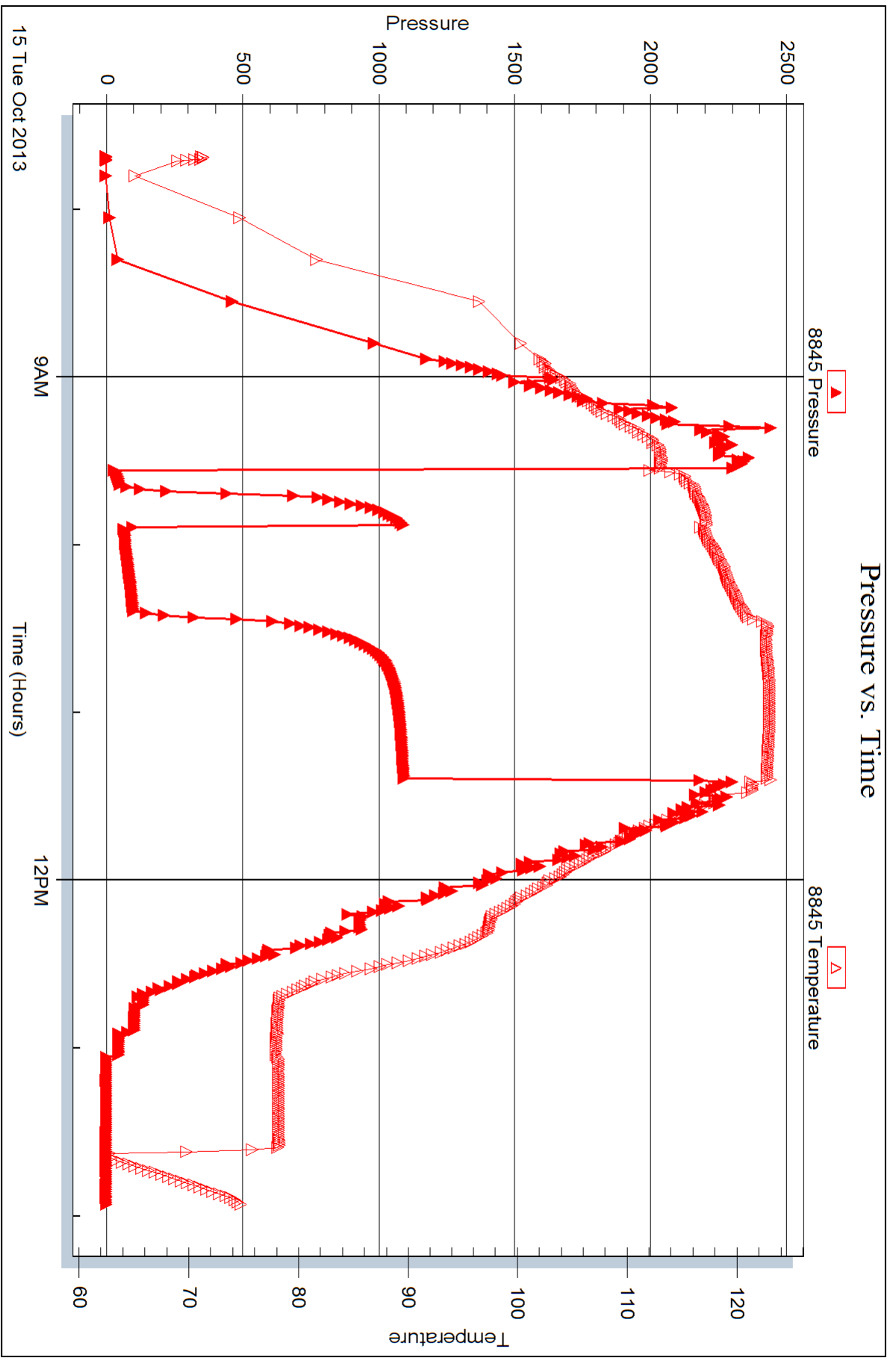


Serial #: 8845

Outside Larson Engineering, Inc.

Phyllis "B" #1-4

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 54520

Printed: 2013.10.16 @ 09:52:20



DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 West State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Phyllis "B" #1-4

4-19s-29w Lane,KS

Start Date: 2013.10.16 @ 01:20:51

End Date: 2013.10.16 @ 07:05:36

Job Ticket #: 54521 DST #: 3

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

Printed: 2013.10.16 @ 09:51:50



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Larson Engineering, Inc.

4-19s-29w Lane, KS

562 West State Rd 4
Olmitz, KS 67564

Phyllis "B" #1-4

Job Ticket: 54521

DST#: 3

ATTN: Vern Schrag

Test Start: 2013.10.16 @ 01:20:51

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:52:06

Time Test Ended: 07:05:36

Test Type: Conventional Bottom Hole (Reset)

Tester: Cornelio Landa III (

Unit No: 64

Interval: **4540.00 ft (KB) To 4605.00 ft (KB) (TVD)**

Reference Elevations: 2841.00 ft (KB)

Total Depth: 4605.00 ft (KB) (TVD)

2834.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6772 Inside

Press @ Run Depth: 25.06 psig @ 4547.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.16

End Date:

2013.10.16

Last Calib.:

2013.10.16

Start Time: 01:20:56

End Time:

07:05:35

Time On Btm:

2013.10.16 @ 03:51:36

Time Off Btm:

2013.10.16 @ 04:58:21

TEST COMMENT:

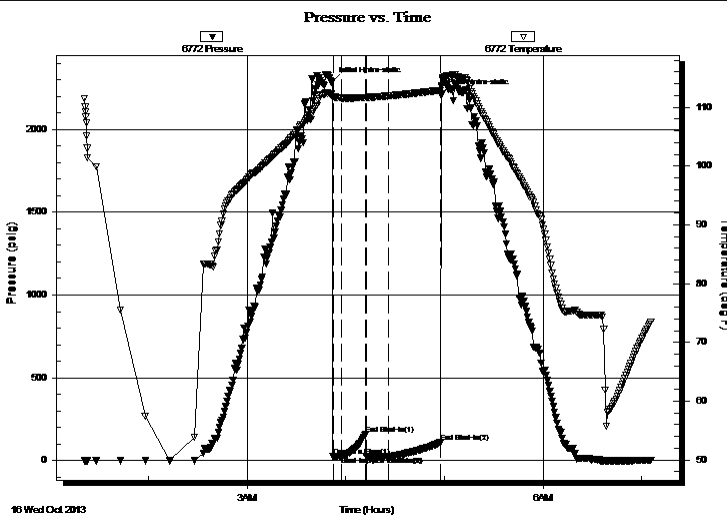
IF: 1/2" Blow

IS: Weak surface Blow back

FF: Weak surface blow -died in 8 mins.

FS: No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2288.36	112.24	Initial Hydro-static
1	23.02	111.76	Open To Flow (1)
6	23.61	111.57	Shut-In(1)
21	155.71	111.70	End Shut-In(1)
21	23.66	111.66	Open To Flow (2)
35	25.06	111.93	Shut-In(2)
66	109.06	112.89	End Shut-In(2)
67	2214.27	113.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Ocm 5o 95m	0.15

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

4-19s-29w Lane,KS

562 West State Rd 4
Olmitz, KS 67564

Phyllis "B" #1-4

Job Ticket: 54521

DST#: 3

ATTN: Vern Schrag

Test Start: 2013.10.16 @ 01:20:51

Tool Information

Drill Pipe:	Length: 4389.00 ft	Diameter: 3.80 inches	Volume: 61.57 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:	32000.00 lb
Drill Collar:	Length: 148.00 ft	Diameter: 2.25 inches	Volume: 0.73 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 62.30 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	4540.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	65.00 ft				
Tool Length:	92.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4514.00	
Shut In Tool	5.00			4519.00	
Hydraulic tool	5.00			4524.00	
Jars	5.00			4529.00	
Safety Joint	2.00			4531.00	
Packer	5.00			4536.00	27.00 Bottom Of Top Packer
Packer	4.00			4540.00	
Stubb	1.00			4541.00	
Perforations	4.00			4545.00	
Perforations	2.00			4547.00	
Recorder	0.00	6772	Inside	4547.00	
Recorder	0.00	8845	Outside	4547.00	
Perforations	20.00			4567.00	
Change Over Sub	1.00			4568.00	
Drill Pipe	31.00			4599.00	
Change Over Sub	1.00			4600.00	
Bullnose	5.00			4605.00	65.00 Bottom Packers & Anchor
Total Tool Length:	92.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

4-19s-29w Lane, KS

562 West State Rd 4
Olmitz, KS 67564

Phyllis "B" #1-4

Job Ticket: 54521

DST#: 3

ATTN: Vern Schrag

Test Start: 2013.10.16 @ 01:20:51

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: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Ocm 5o 95m	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

Num Fluid Samples: 0

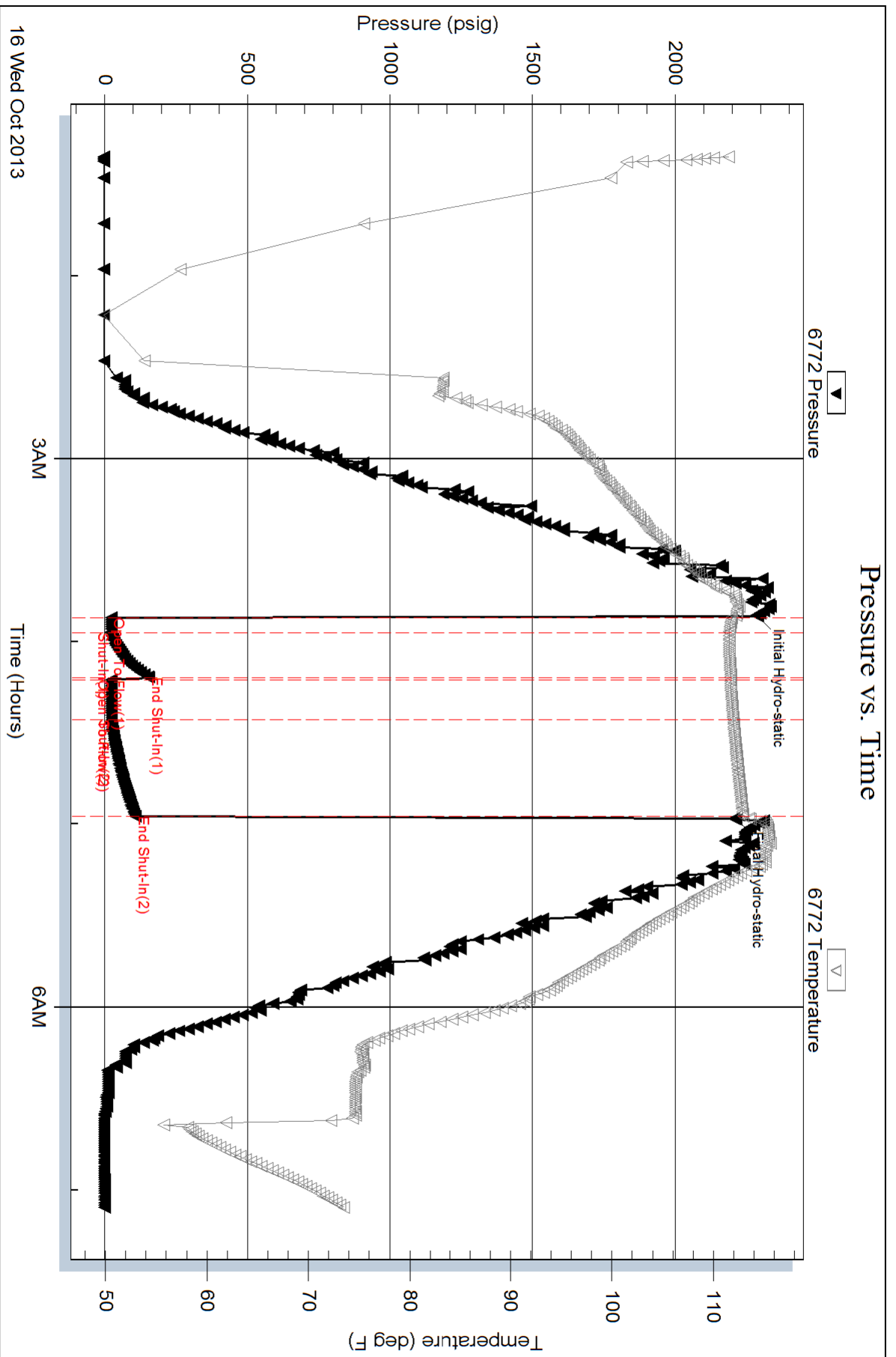
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

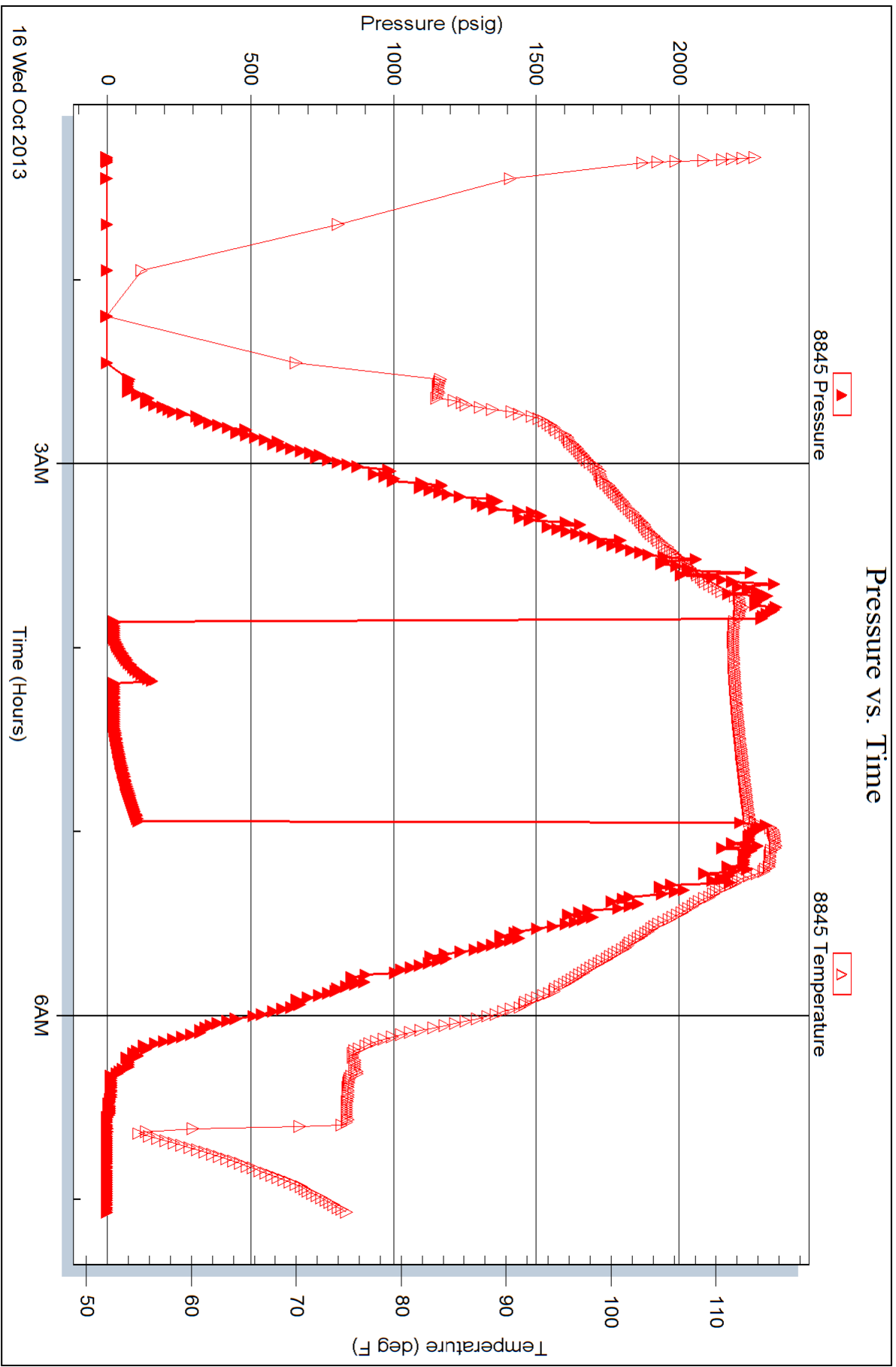


Serial #: 8845

Outside Larson Engineering, Inc.

Phyllis "B" #1-4

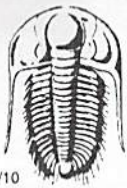
DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 54521

Printed: 2013.10.16 @ 09:51:52



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **54738**

Well Name & No. Phyllis "B" #1-4 Test No. 1 Date 10/13/13
 Company Larson Engineering, Inc. Elevation 2841 KB 2834 GL
 Address 562 West State Rd 4 Olinite, KS 67564
 Co. Rep / Geo. Vern Schrag Rig HD #3
 Location: Sec. 4 Twp. 19S Rge. 29W Co. Lane State KS

Interval Tested 4170 - 4197 Zone Tested "H"
 Anchor Length 27' Drill Pipe Run 4014 Mud Wt. 8.9
 Top Packer Depth 4166 Drill Collars Run 148 Vis 65
 Bottom Packer Depth 4170 Wt. Pipe Run 0 WL 8.0
 Total Depth 4197 Chlorides 1700 ppm System LCM 2

Blow Description IF: 1/2" Blow.
ISI: No Return.
FF: Weak surface Blow
FST: No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</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 Total 30 BHT 115 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2091</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>4:50</u>
(B) First Initial Flow <u>39</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>5:29</u>
(C) First Final Flow <u>41</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>7:27</u>
(D) Initial Shut-In <u>815</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/K</u>	T-Pulled <u>8:36</u>
(E) Second Initial Flow <u>40</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>10:18</u>
(F) Second Final Flow <u>42</u>	<input checked="" type="checkbox"/> Mileage <u>50 R/T</u> 77.50	Comments
(G) Final Shut-In <u>808</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2087</u>	<input type="checkbox"/> Straddle	

Initial Open <u>5</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>15</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>15</u>	<input type="checkbox"/> Extra Recorder	Extra Copies
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1652.50</u>
	Sub Total <u>1652.50</u>	MP/DST Disc't

Approved By Vern Schrag 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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54520

Well Name & No. Phyllis "B" #1-4 Test No. 2 Date 10/15/13
 Company Larson Engineering Inc. Elevation 2841 KB 2834 GL
 Address 562 West State Rd 4 - Olinite, KS 67564
 Co. Rep / Geo. Vern Schrag Rig HD #3
 Location: Sec. 4 Twp. 19S Rge. 29W Co. Lane State KS

Interval Tested 4462-4545 Zone Tested Pawnee-Mynre Station - Ft. Scott
 Anchor Length 83' Drill Pipe Run 4294' Mud Wt. 9.3
 Top Packer Depth 4458 Drill Collars Run 148 Vis 64
 Bottom Packer Depth 4462 Wt. Pipe Run Ø WL 8.0
 Total Depth 4545 Chlorides 2,000 ppm System LCM #1

Blow Description FF: 7 in. of Blow

ISI: Bled off in 2 mins. - surface Blowback

FF: B.O. in 5 mins.

FSI: Bled off in 3 mins. - surface Blowback - Built to 1/2 Blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>148</u>	<u>MOG</u>	<u>40</u>	<u>30</u>	<u>30</u>	<u>30</u>
<u>31</u>	<u>MOG</u>	<u>40</u>	<u>30</u>	<u>30</u>	<u>30</u>
<u>58</u>	<u>GO</u>	<u>10</u>	<u>90</u>		
<u>9</u>	<u>Clear oil</u>		<u>100</u>		
	<u>693 GIP</u>				
Rec Total	<u>242</u>	BHT	<u>123</u>	Gravity	<u>41</u>
		API RW		@	
				° F	Chlorides

(A) Initial Hydrostatic 2293 Test 1250 T-On Location 07:24
 (B) First Initial Flow 30 Jars 250 T-Started 07:41
 (C) First Final Flow 30 Safety Joint 75 T-Open 09:33
 (D) Initial Shut-In 1091 Circ Sub NTC T-Pulled 11:23
 (E) Second Initial Flow 62 Hourly Standby 21 Hrs T-Out 13:56
 (F) Second Final Flow 97 Mileage 50 RIT 77.50
 (G) Final Shut-In 1091 Sampler
 (H) Final Hydrostatic 2192 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies

Initial Open 5
 Initial Shut-In 15
 Final Flow 30
 Final Shut-In 60
 Sub Total 708.33
 Total 2360.83
 MP/DST Disc't

Sub Total 1652.50

Approved By Vern Schrag Our Representative Carlton

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

Test Ticket

NO. 54521

Well Name & No. Phyllo "B" #1-4 Test No. 3 Date 10-16-13
 Company Larsen Engineering Inc. Elevation 2841 KB 2834 GL
 Address 562 West State Rd 4 - Olin, KS 67564
 Co. Rep / Geo. Vern Schrag Rig HD#3
 Location: Sec. 4 Twp. 19S Rge. 29W Co. Lanc State KS

Interval Tested 4540-4605 Zone Tested Cherokee
 Anchor Length 65' Drill Pipe Run 4389' Mud Wt. 9.6
 Top Packer Depth 4536 Drill Collars Run 148' Vis 65
 Bottom Packer Depth 4540 Wt. Pipe Run Ø WL 7.6
 Total Depth 4605 Chlorides 2400 ppm System LCM #1

Blow Description IF: 1/2 m. Blow
ISD: Weak surface Blowback
FF: Weak surface Blow - Dried in 8 mins.
ESD: No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>0cm</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 Total 30 BHT 113 Gravity API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 2228 Test 1250 T-On Location 01:03
 (B) First Initial Flow 23 Jars 250 T-Started 01:20
 (C) First Final Flow 23 Safety Joint 75 T-Open 03:51
 (D) Initial Shut-In 155 Circ Sub N/C T-Pulled 04:56
 (E) Second Initial Flow 23 Hourly Standby T-Out 07:05
 (F) Second Final Flow 25 Mileage 77.50 Comments
 (G) Final Shut-In 109 Sampler
 (H) Final Hydrostatic 2214 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 0
 Day Standby Total 1652.50
 Accessibility MP/DST Disc't
 Sub Total 1652.50

Initial Open 5
 Initial Shut-In 15
 Final Flow 15
 Final Shut-In 30
 Approved By Vernon C. Schrag Our Representative [Signature]

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