



DRILL STEM TEST REPORT

Prepared For: **Larson Engineering Inc**

562 W State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Ramsey-Wilson Unit 1

12-18s-31w Scott,KS

Start Date: 2016.10.12 @ 07:38:24

End Date: 2016.10.12 @ 12:47:24

Job Ticket #: 65519 DST #: 1

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

Printed: 2016.10.14 @ 10:23:04



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Larson Engineering Inc

12-18s-31w Scott,KS

562 W State Rd 4
Olmitz, KS 67564

Ramsey-Wilson Unit 1

ATTN: Vern Schrag

Job Ticket: 65519

DST#: 1

Test Start: 2016.10.12 @ 07:38:24

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:07:24

Time Test Ended: 12:47:24

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 79

Interval: 4310.00 ft (KB) To 4410.00 ft (KB) (TVD)

Reference Elevations: 2916.00 ft (KB)

Total Depth: 4410.00 ft (KB) (TVD)

2906.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8166 Outside

Press@RunDepth: 20.42 psig @ 4311.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.10.12

End Date:

2016.10.12

Last Calib.: 2016.10.12

Start Time: 07:38:29

End Time:

12:47:23

Time On Btm: 2016.10.12 @ 10:06:24

Time Off Btm: 2016.10.12 @ 11:14:54

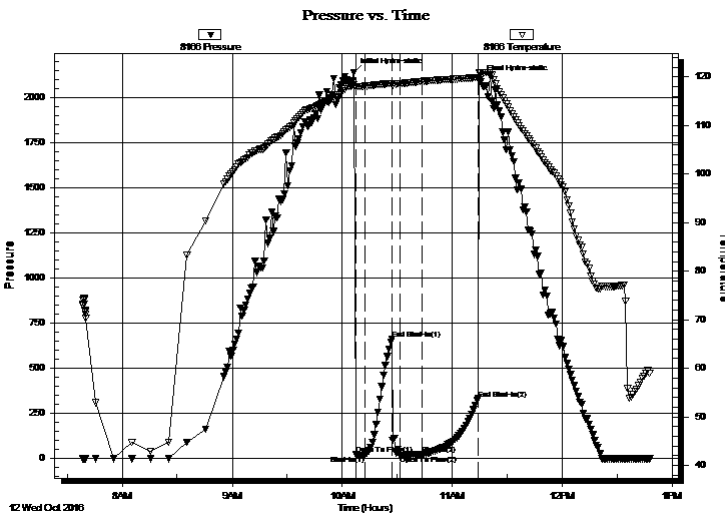
TEST COMMENT: IF: 1/4" blow died in surface.

IS: No return.

FF: No blow.

FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2139.77	118.43	Initial Hydro-static
1	20.34	118.02	Open To Flow (1)
6	18.30	118.10	Shut-In(1)
21	660.48	118.68	End Shut-In(1)
25	19.02	118.58	Open To Flow (2)
37	20.42	119.09	Shut-In(2)
68	330.57	119.89	End Shut-In(2)
69	2100.78	120.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	ocm 10%o 90%m	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering Inc

12-18s-31w Scott,KS

562 W State Rd 4
Olmitz, KS 67564

Ramsey-Wilson Unit 1

Job Ticket: 65519

DST#: 1

ATTN: Vern Schrag

Test Start: 2016.10.12 @ 07:38:24

Tool Information

Drill Pipe:	Length: 4308.00 ft	Diameter: 3.80 inches	Volume: 60.43 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: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 60.43 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	4310.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	100.00 ft			
Tool Length:	127.00 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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Stubb	1.00			4284.00	
Shut In Tool	5.00			4289.00	
Hydraulic tool	5.00			4294.00	
Jars	5.00			4299.00	
Safety Joint	2.00			4301.00	
Packer	5.00			4306.00	27.00 Bottom Of Top Packer
Packer	4.00			4310.00	
Stubb	1.00			4311.00	
Recorder	0.00	8875	Inside	4311.00	
Recorder	0.00	8166	Outside	4311.00	
Perforations	28.00			4339.00	
Change Over Sub	1.00			4340.00	
Drill Pipe	64.00			4404.00	
Change Over Sub	1.00			4405.00	
Bullnose	5.00			4410.00	100.00 Bottom Packers & Anchor

Total Tool Length: 127.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

12-18s-31w Scott,KS

562 W State Rd 4
Olmitz, KS 67564

Ramsey-Wilson Unit 1

Job Ticket: 65519

DST#: 1

ATTN: Vern Schrag

Test Start: 2016.10.12 @ 07:38:24

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	ocm 10%o 90%m	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

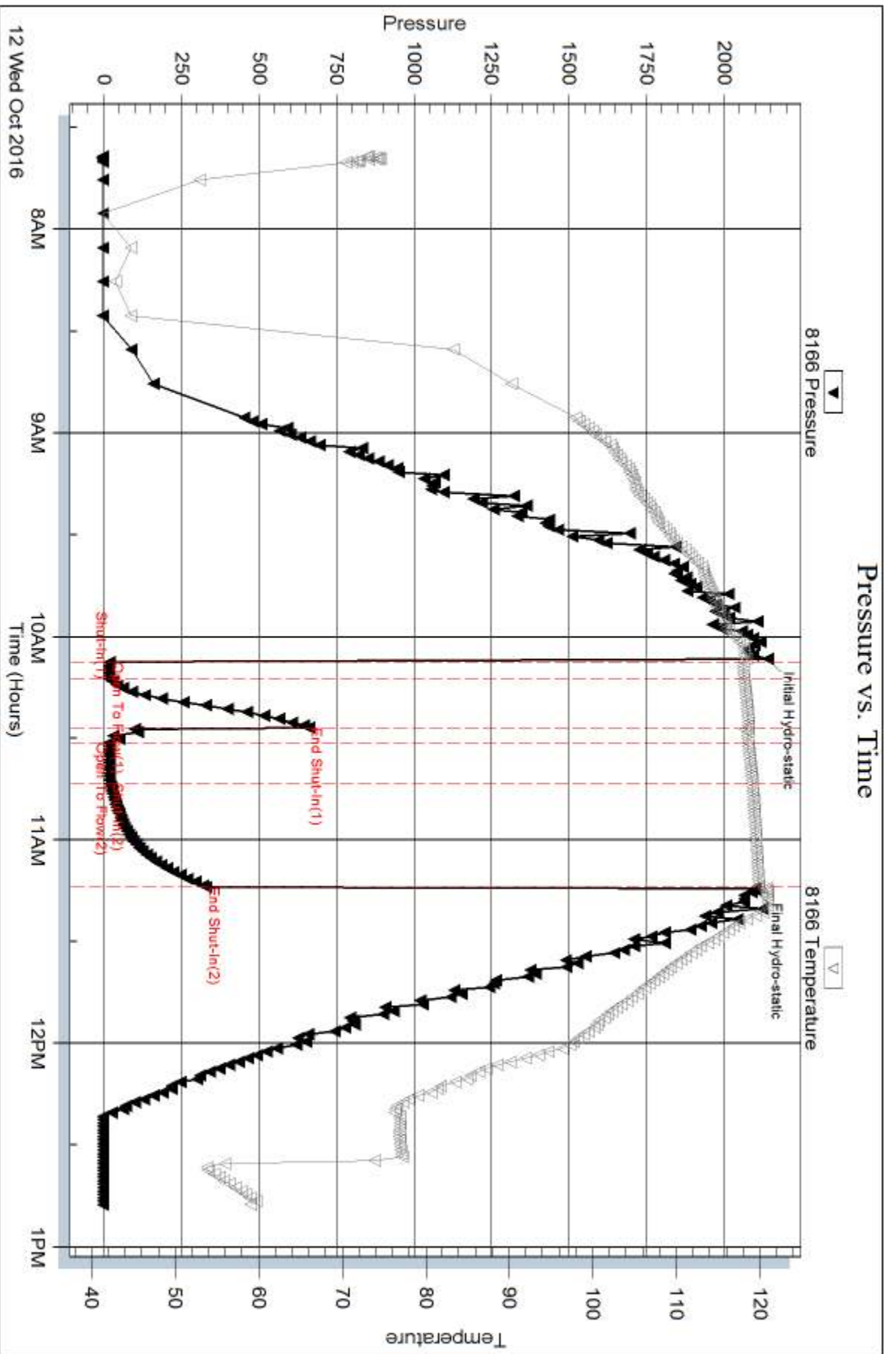
Num Gas Bombs: 0

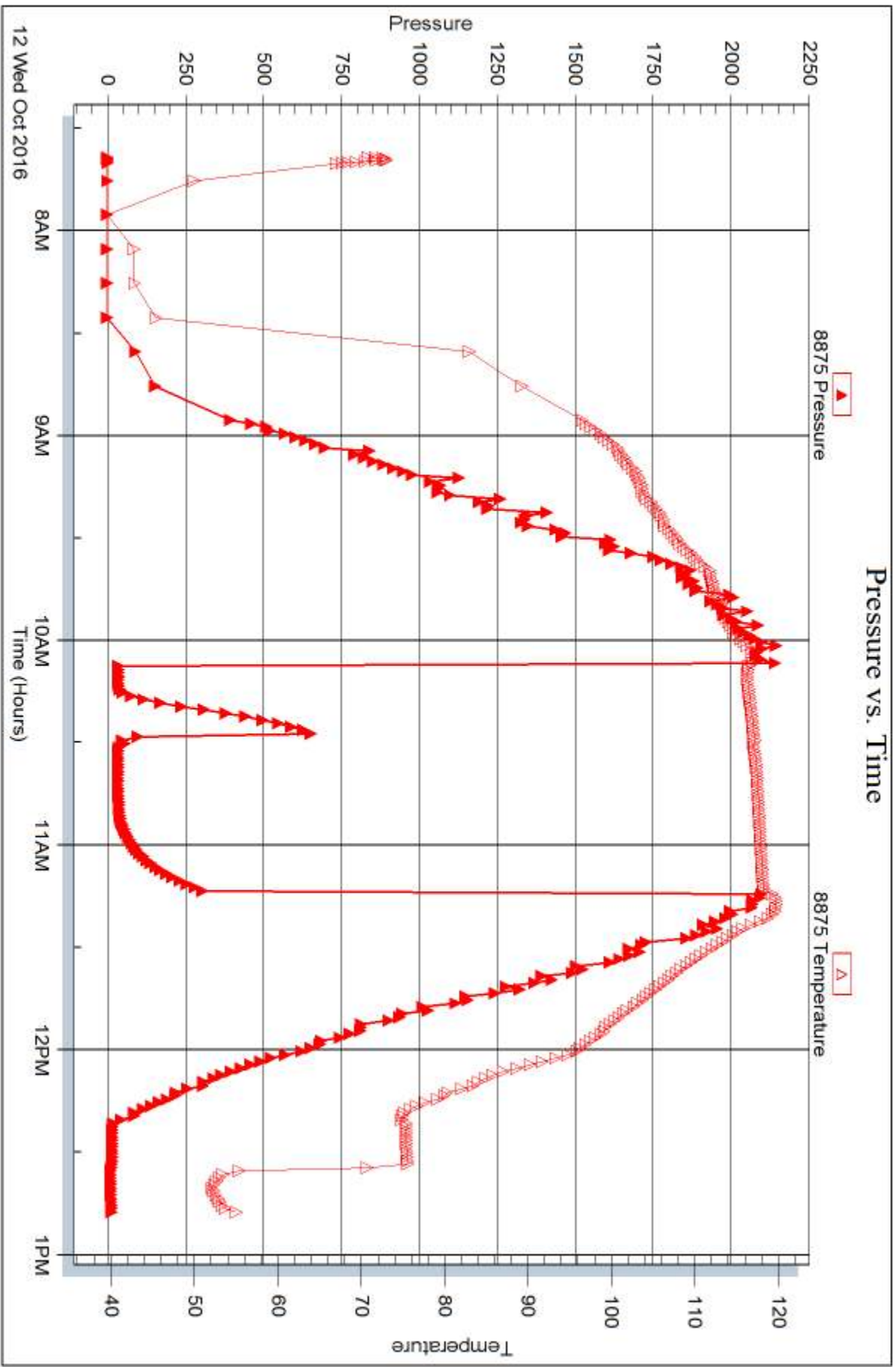
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Larson Engineering Inc**

562 W State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Ramsey-Wilson Unit 1

12-18s-31w Scott,KS

Start Date: 2016.10.13 @ 02:28:03

End Date: 2016.10.13 @ 07:25:33

Job Ticket #: 65520 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2016.10.14 @ 10:21:50



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Larson Engineering Inc

12-18s-31w Scott,KS

562 W State Rd 4
Olmitz, KS 67564

Ramsey-Wilson Unit 1

ATTN: Vern Schrag

Job Ticket: 65520

DST#: 2

Test Start: 2016.10.13 @ 02:28:03

GENERAL INFORMATION:

Formation: **Pawnee Ft Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:34:33

Time Test Ended: 07:25:33

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: 4426.00 ft (KB) To 4500.00 ft (KB) (TVD)

Reference Elevations: 2916.00 ft (KB)

Total Depth: 4500.00 ft (KB) (TVD)

2906.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8166 Outside

Press@RunDepth: 19.68 psig @ 4427.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.10.13

End Date: 2016.10.13

Last Calib.: 2016.10.13

Start Time: 02:28:08

End Time: 07:25:32

Time On Btm: 2016.10.13 @ 04:33:33

Time Off Btm: 2016.10.13 @ 05:44:03

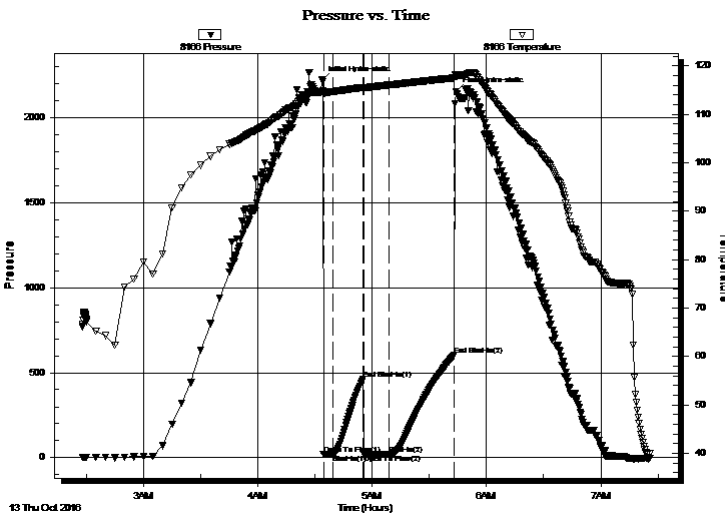
TEST COMMENT: IF: 1/8" blow died to weak surface.

IS: No return.

FF: No blow.

FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2221.16	114.73	Initial Hydro-static
1	18.55	114.23	Open To Flow (1)
6	19.09	114.67	Shut-In(1)
22	460.43	115.53	End Shut-In(1)
22	19.14	115.36	Open To Flow (2)
36	19.68	116.03	Shut-In(2)
70	602.61	117.49	End Shut-In(2)
71	2154.93	117.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100% m	0.07

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering Inc

12-18s-31w Scott,KS

562 W State Rd 4
Olmitz, KS 67564

Ramsey-Wilson Unit 1

Job Ticket: 65520

DST#: 2

ATTN: Vern Schrag

Test Start: 2016.10.13 @ 02:28:03

Tool Information

Drill Pipe:	Length: 4430.00 ft	Diameter: 3.80 inches	Volume: 62.14 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: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 62.14 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	4426.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.00 ft			
Tool Length:	101.00 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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Stubb	1.00			4400.00	
Shut In Tool	5.00			4405.00	
Hydraulic tool	5.00			4410.00	
Jars	5.00			4415.00	
Safety Joint	2.00			4417.00	
Packer	5.00			4422.00	27.00 Bottom Of Top Packer
Packer	4.00			4426.00	
Stubb	1.00			4427.00	
Recorder	0.00	8875	Inside	4427.00	
Recorder	0.00	8166	Outside	4427.00	
Perforations	3.00			4430.00	
Change Over Sub	1.00			4431.00	
Drill Pipe	63.00			4494.00	
Change Over Sub	1.00			4495.00	
Bullnose	5.00			4500.00	74.00 Bottom Packers & Anchor

Total Tool Length: 101.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

12-18s-31w Scott,KS

562 W State Rd 4
Olmitz, KS 67564

Ramsey-Wilson Unit 1

Job Ticket: 65520

DST#: 2

ATTN: Vern Schrag

Test Start: 2016.10.13 @ 02:28:03

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%m	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

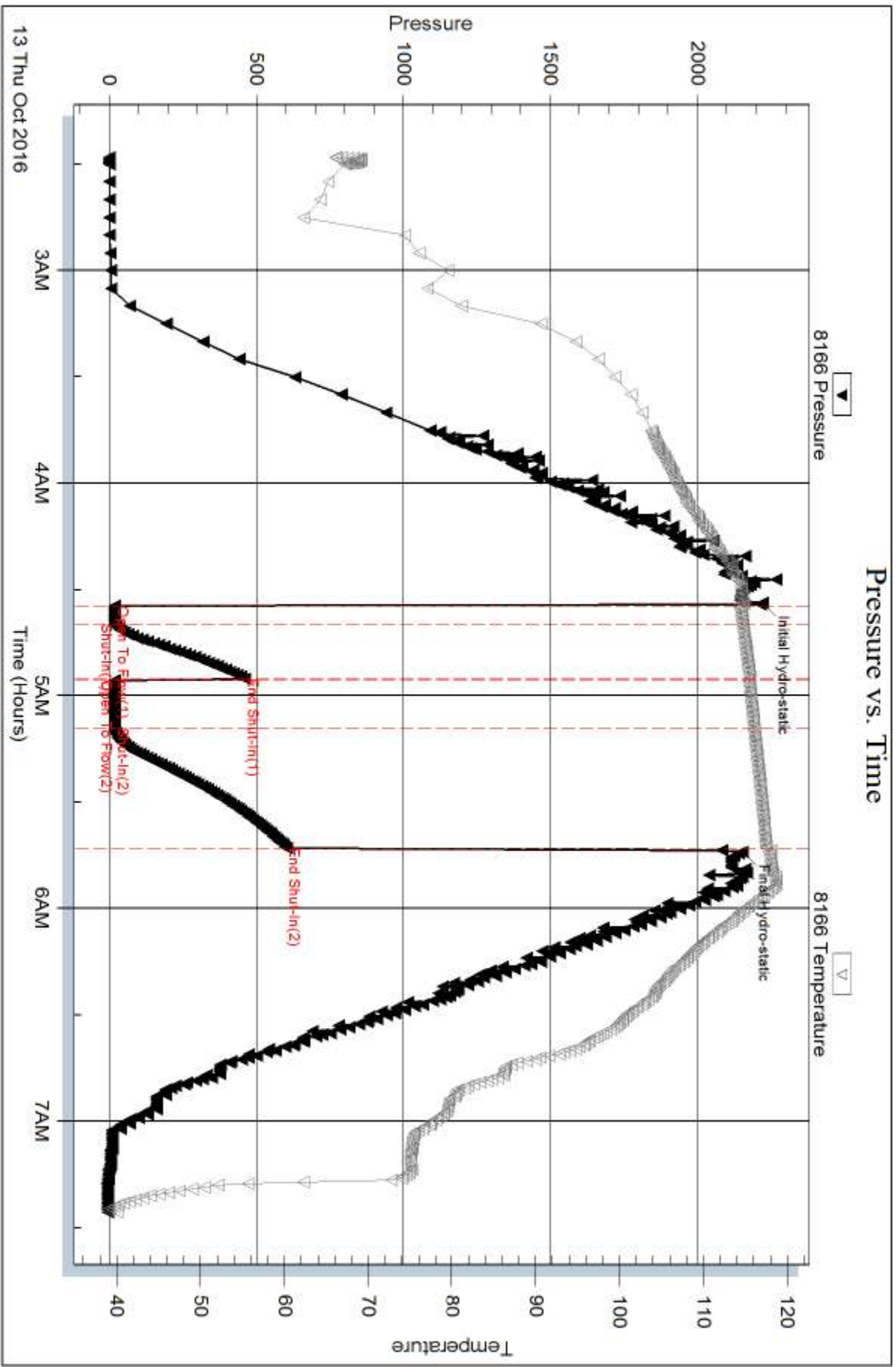
Num Gas Bombs: 0

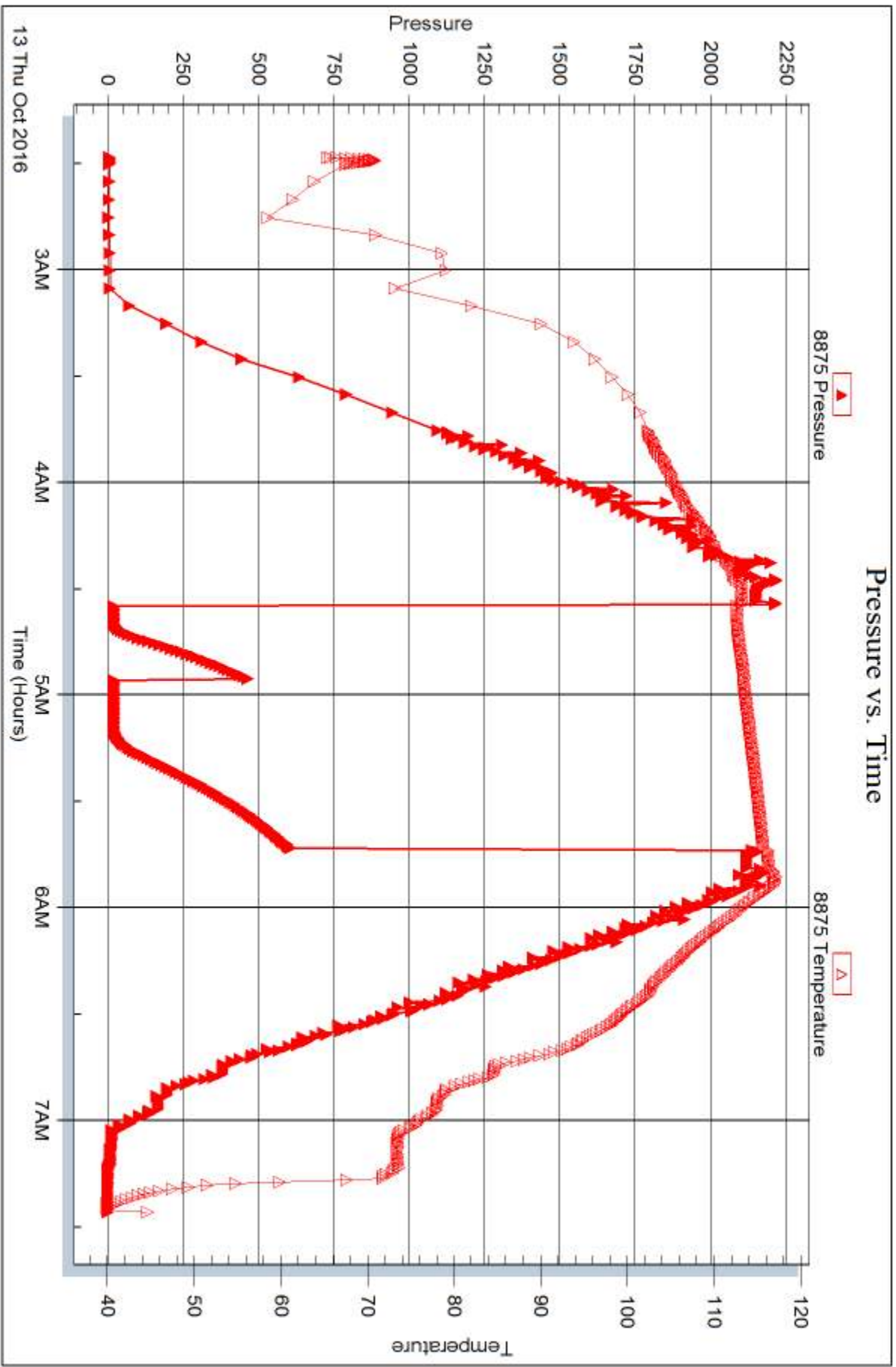
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Larson Engineering Inc**

562 W State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Ramsey-Wilson Unit 1

12-18s-31w Scott,KS

Start Date: 2016.10.13 @ 19:04:25

End Date: 2016.10.13 @ 23:59:55

Job Ticket #: 65521 DST #: 3

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

Printed: 2016.10.14 @ 10:20:07

Larson Engineering Inc
12-18s-31w Scott,KS
Ramsey-Wilson Unit 1
DST # 3
Cherokee
2016.10.13



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering Inc

12-18s-31w Scott,KS

562 W State Rd 4
Olmitz, KS 67564

Ramsey-Wilson Unit 1

ATTN: Vern Schrag

Job Ticket: 65521

DST#: 3

Test Start: 2016.10.13 @ 19:04:25

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:06:55

Time Test Ended: 23:59:55

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: 4498.00 ft (KB) To 4575.00 ft (KB) (TVD)

Total Depth: 4575.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2916.00 ft (KB)

2906.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8166 Outside

Press@RunDepth: 17.66 psig @ 4499.00 ft (KB)

Start Date: 2016.10.13

End Date: 2016.10.13

Start Time: 19:04:30

End Time: 23:59:54

Capacity: 8000.00 psig

Last Calib.: 2016.10.14

Time On Btm: 2016.10.13 @ 21:05:25

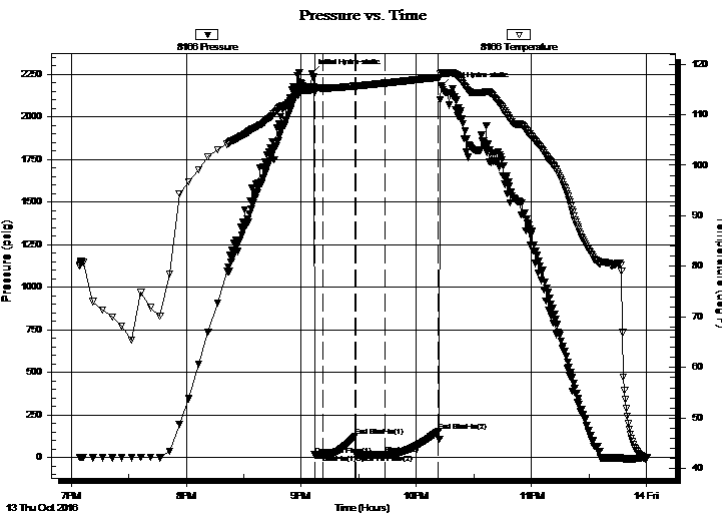
Time Off Btm: 2016.10.13 @ 22:12:55

TEST COMMENT: IF: 1/4" blow died to surface.

IS: No return.

FF: No blow.

FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2255.88	114.94	Initial Hydro-static
2	16.54	114.46	Open To Flow (1)
6	17.11	115.27	Shut-In(1)
23	125.23	115.68	End Shut-In(1)
23	17.16	115.65	Open To Flow (2)
38	17.66	116.23	Shut-In(2)
66	155.07	117.40	End Shut-In(2)
68	2181.23	118.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	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

12-18s-31w Scott,KS

562 W State Rd 4
Olmitz, KS 67564

Ramsey-Wilson Unit 1

Job Ticket: 65521

DST#: 3

ATTN: Vern Schrag

Test Start: 2016.10.13 @ 19:04:25

Tool Information

Drill Pipe:	Length: 4491.00 ft	Diameter: 3.80 inches	Volume: 63.00 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: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 63.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4498.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	77.00 ft			
Tool Length:	104.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4472.00	
Shut In Tool	5.00			4477.00	
Hydraulic tool	5.00			4482.00	
Jars	5.00			4487.00	
Safety Joint	2.00			4489.00	
Packer	5.00			4494.00	27.00 Bottom Of Top Packer
Packer	4.00			4498.00	
Stubb	1.00			4499.00	
Recorder	0.00	8875	Inside	4499.00	
Recorder	0.00	8166	Outside	4499.00	
Perforations	6.00			4505.00	
Change Over Sub	1.00			4506.00	
Drill Pipe	63.00			4569.00	
Change Over Sub	1.00			4570.00	
Bullnose	5.00			4575.00	77.00 Bottom Packers & Anchor

Total Tool Length: 104.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

12-18s-31w Scott,KS

562 W State Rd 4
Olmitz, KS 67564

Ramsey-Wilson Unit 1

Job Ticket: 65521

DST#: 3

ATTN: Vern Schrag

Test Start: 2016.10.13 @ 19:04:25

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
5.00	mud 100%m	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbf

Num Fluid Samples: 0

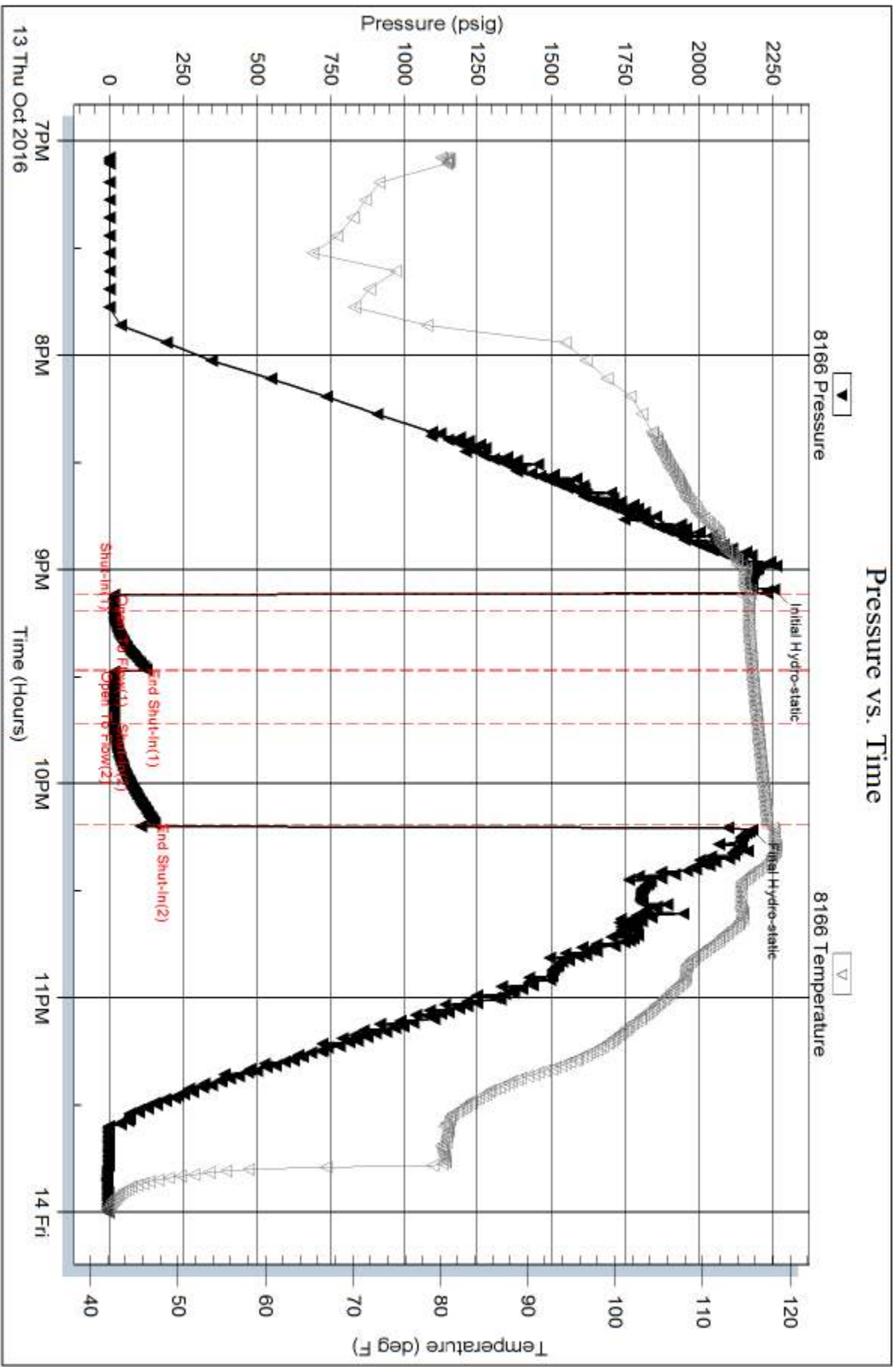
Num Gas Bombs: 0

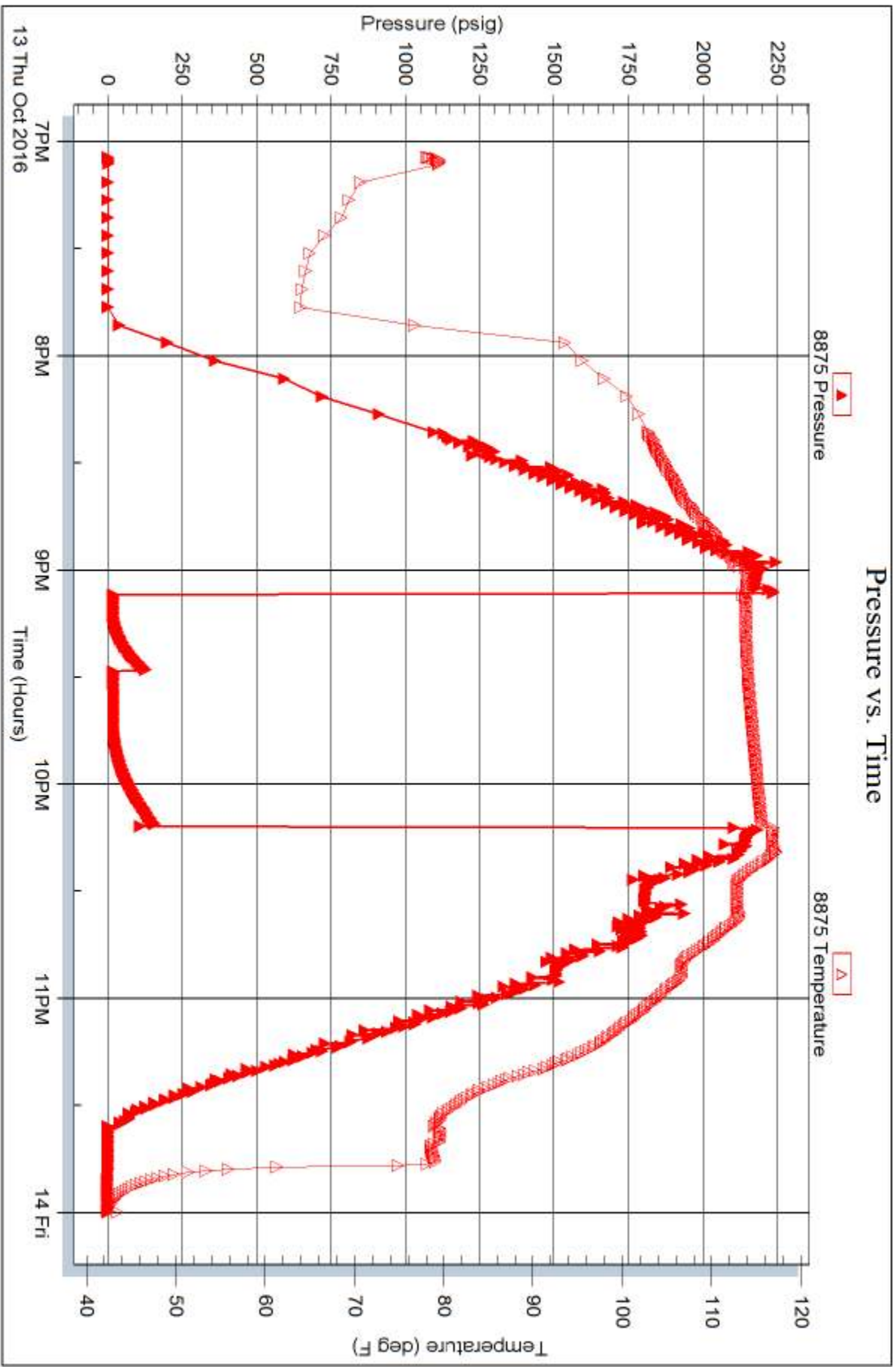
Serial #:

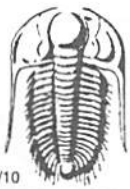
Laboratory Name:

Laboratory Location:

Recovery Comments:







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65519**

Well Name & No. Ramsey-Wilson unit 1-12 Test No. 1 Date 10-12-16
 Company Larson Engineering Inc Elevation 2916 KB 2906 GL
 Address 562 W State Rd 4 Olmitz, KS 67564
 Co. Rep / Geo. Vern Schrag Rig Southwind 1
 Location: Sec. 12 Twp. 18^s Rge. 31^w Co. Scott State KS

Interval Tested 4310 4410 Zone Tested Marmaton
 Anchor Length 100 Drill Pipe Run 4308 Mud Wt. 9.3
 Top Packer Depth 4305 Drill Collars Run — Vis 50
 Bottom Packer Depth 4310 Wt. Pipe Run — WL 6.8
 Total Depth 4410 Chlorides 2200 ppm System LCM 2
 Blow Description IF: 1/4 blow died to surface,
IS: No return,
FI: No blow,
FS: No return,

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>ocm</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	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 119 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2139 Test 1150 T-On Location 6:05
 (B) First Initial Flow 20 Jars 250 T-Started 7:38
 (C) First Final Flow 18 Safety Joint 75 T-Open 10:06
 (D) Initial Shut-In 660 Circ Sub N/L T-Pulled 11:06
 (E) Second Initial Flow 19 Hourly Standby _____ T-Out 12:49
 (F) Second Final Flow 20 Mileage 31 - 23.25 Comments _____
 (G) Final Shut-In 330 Sampler _____
 (H) Final Hydrostatic 2100 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 5
 Initial Shut-In 15
 Final Flow 15
 Final Shut-In 30

Sub Total 1498.25

Approved By Vern C Schrag Our Representative [Signature]
 TriLOBITE TESTING INC. shall not be liable for damaged or 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. **65520**

Well Name & No. Ramsey-wilson Unit 1-12 Test No. 2 Date 10-13-16
 Company LARSON Engineering Inc Elevation 2916 KB 2906 GL
 Address _____
 Co. Rep / Geo. Vern Schrag Rig Southwind #1
 Location: Sec. 12 Twp. 185 Rge. 31W Co. Scott State KS

Interval Tested 4426 4500 Zone Tested Pawnee Ft Scott
 Anchor Length 74 Drill Pipe Run 4430 Mud Wt. 9.2
 Top Packer Depth 4421 Drill Collars Run — Vis 56
 Bottom Packer Depth 4426 Wt. Pipe Run — WL 8.0
 Total Depth 4500 Chlorides 3000 ppm System LCM 2

Blow Description IF: 1/8 blow died to work surface,
IS: No return.
FF: No blow.
FS: No return.

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 117 Gravity — API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic 2221 Test 1150 T-On Location 1:00
 (B) First Initial Flow 18 Jars 250 T-Started 2:28
 (C) First Final Flow 19 Safety Joint 75 T-Open 4:34
 (D) Initial Shut-In 460 Circ Sub NIL T-Pulled 5:39
 (E) Second Initial Flow 19 Hourly Standby _____ T-Out 7:26
 (F) Second Final Flow 19 Mileage 31 23.25 Comments _____
 (G) Final Shut-In 602 Sampler _____
 (H) Final Hydrostatic 2154 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 5 Ruined Shale Packer _____
 Initial Shut-In 15 Ruined Packer _____
 Final Flow 15 Extra Copies _____
 Final Shut-In 30 Sub Total 0
 Total 1498.25
 MP/DST Disc't _____

Approved By Vernon C 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. **65521**

Well Name & No. Ramsey-wilson unit 1-12 Test No. 3 Date 10-13-16
 Company Larson Engineering Inc Elevation 2916 KB 2906 GL
 Address _____
 Co. Rep / Geo. Vern Schrag Rig Southwind #1
 Location: Sec. 12 Twp. 18S Rge. 31W Co. Scott State KS

Interval Tested ~~4498~~ 4498 4575 Zone Tested Cherokee
 Anchor Length 77 Drill Pipe Run 4491 Mud Wt. 9.3
 Top Packer Depth 4493 Drill Collars Run — Vis 51
 Bottom Packer Depth 4498 Wt. Pipe Run — WL 8.8
 Total Depth 4575 Chlorides 3200 ppm System LCM 1

Blow Description IF: 1/4 blow died to surface,
IS: No return.
FF: No blow,
FS: No return.

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 117 Gravity _____ API RW _____ @ _____ F Chlorides _____ ppm

(A) Initial Hydrostatic 2255 Test 1150 T-On Location 18:15
 (B) First Initial Flow 16 Jars 250 T-Started 19:04
 (C) First Final Flow 17 Safety Joint 75 T-Open 21:06
 (D) Initial Shut-In 125 Circ Sub NIL T-Pulled 22:11
 (E) Second Initial Flow 17 Hourly Standby _____ T-Out 00:00
 (F) Second Final Flow 17 Mileage 31- 23.25 Comments _____
 (G) Final Shut-In 155 Sampler _____
 (H) Final Hydrostatic 2181 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 5
 Initial Shut-In 15
 Final Flow 15
 Final Shut-In 30

Approved By Vern C Schrag Sub Total 1498.25 Our Representative [Signature]

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