



DRILL STEM TEST REPORT

Prepared For: **John O. Farmer, Inc.**

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Bowman A #1

31-4s-20w Graham,KS

Start Date: 2013.02.01 @ 13:25:00

End Date: 2013.02.01 @ 19:15:30

Job Ticket #: 51188 DST #: 1

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

Printed: 2013.02.05 @ 11:00:49



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer, Inc.

31-4s-20w Graham,KS

PO Box 352
Russell, KS 67665

Bowman A #1

Job Ticket: 51188

DST#: 1

ATTN: Austin Klaus

Test Start: 2013.02.01 @ 13:25:00

GENERAL INFORMATION:

Formation: **LKC "A-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:27:15

Time Test Ended: 19:15:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 3321.00 ft (KB) To 3373.00 ft (KB) (TVD)

Reference Elevations: 2076.00 ft (KB)

Total Depth: 3373.00 ft (KB) (TVD)

2068.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 6799

Inside

Press @ Run Depth: 200.89 psig @ 3322.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.02.01

End Date:

2013.02.01

Last Calib.:

2013.02.01

Start Time: 13:25:05

End Time:

19:15:29

Time On Btm:

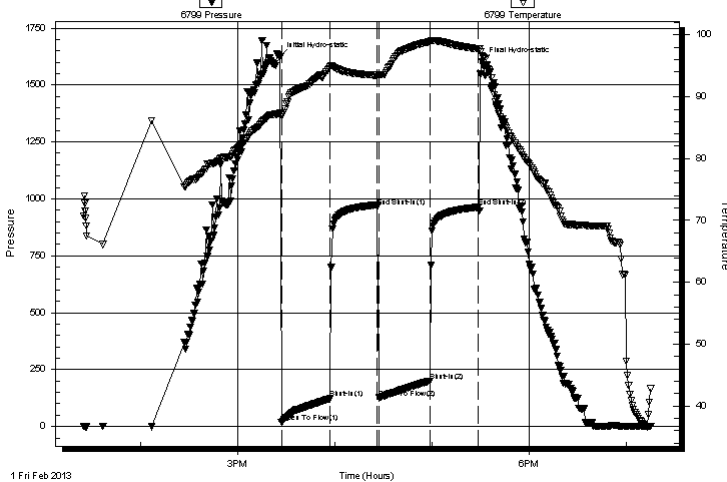
2013.02.01 @ 15:26:30

Time Off Btm:

2013.02.01 @ 17:31:00

TEST COMMENT: 30 - IF- BoB in 13 min.
30 - IS- No Return
30 - FF- BoB in 13 min.
30 - FS- No Return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1623.37	87.34	Initial Hydro-static
1	18.11	87.00	Open To Flow (1)
31	122.60	94.83	Shut-In(1)
60	966.35	93.49	End Shut-In(1)
61	126.05	93.51	Open To Flow (2)
93	200.89	98.89	Shut-In(2)
123	963.41	97.75	End Shut-In(2)
125	1604.25	96.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Heavy Mud 100M	0.02
115.00	MW 5M 95W	0.57
186.00	MW 20M 80W	2.58
94.00	MW 40M 60W	1.32

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer, Inc.

31-4s-20w Graham,KS

PO Box 352
Russell, KS 67665

Bowman A #1

Job Ticket: 51188

DST#: 1

ATTN: Austin Klaus

Test Start: 2013.02.01 @ 13:25:00

Tool Information

Drill Pipe:	Length: 3197.00 ft	Diameter: 3.80 inches	Volume: 44.85 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: 25000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 45.45 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3321.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	73.00 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			3301.00	
Shut In Tool	5.00			3306.00	
Hydraulic tool	5.00			3311.00	
Packer	5.00			3316.00	21.00 Bottom Of Top Packer
Packer	5.00			3321.00	
Stubb	1.00			3322.00	
Recorder	0.00	6799	Inside	3322.00	
Recorder	0.00	8648	Inside	3322.00	
Perforations	12.00			3334.00	
Change Over Sub	1.00			3335.00	
Drill Pipe	32.00			3367.00	
Change Over Sub	1.00			3368.00	
Bullnose	5.00			3373.00	52.00 Bottom Packers & Anchor

Total Tool Length: 73.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer, Inc.

31-4s-20w Graham,KS

PO Box 352
Russell, KS 67665

Bowman A #1

Job Ticket: 51188

DST#: 1

ATTN: Austin Klaus

Test Start: 2013.02.01 @ 13:25:00

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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	Heavy Mud 100M	0.025
115.00	MW 5M 95W	0.566
186.00	MW 20M 80W	2.582
94.00	MW 40M 60W	1.319

Total Length: 400.00 ft

Total Volume: 4.492 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

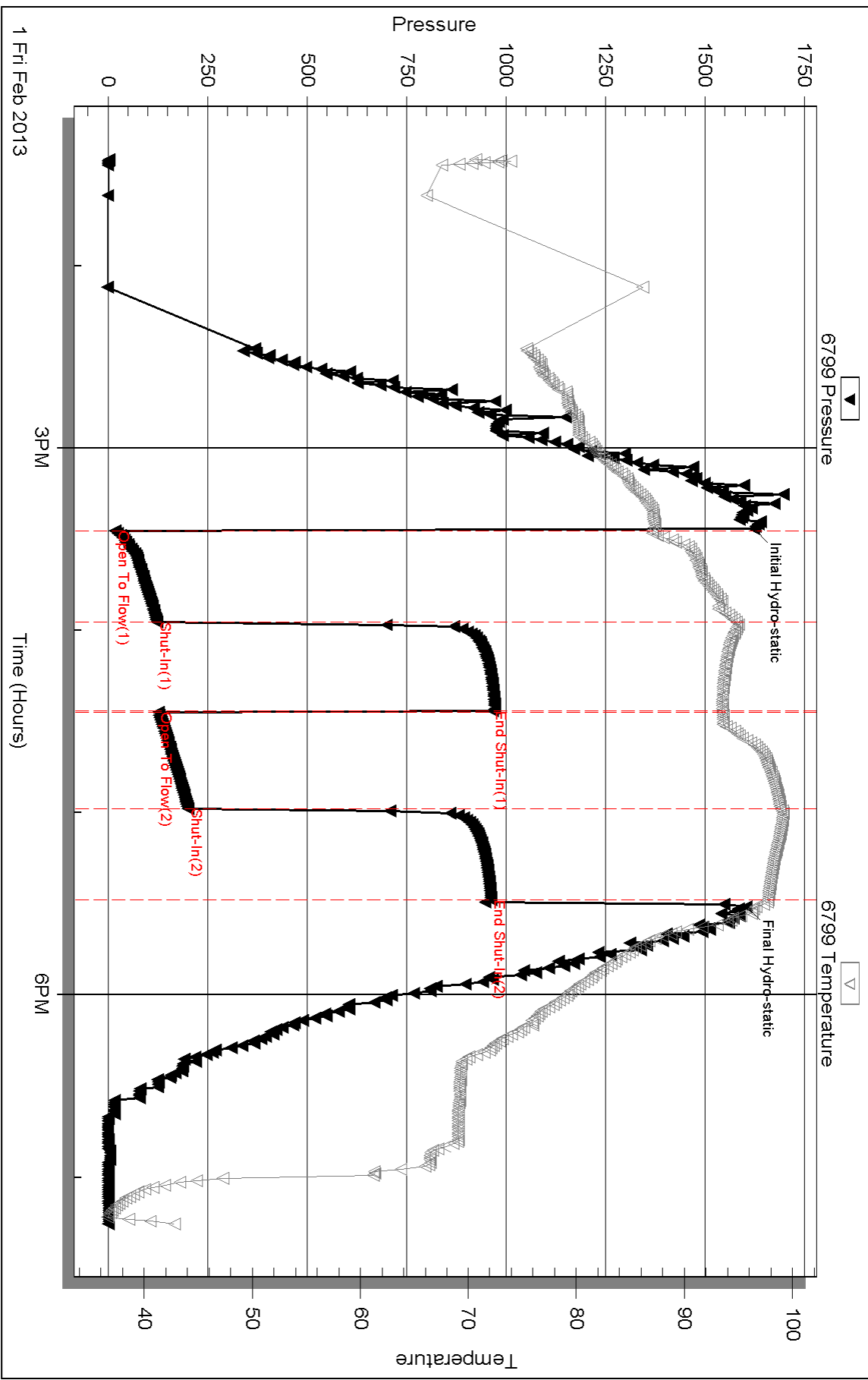
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



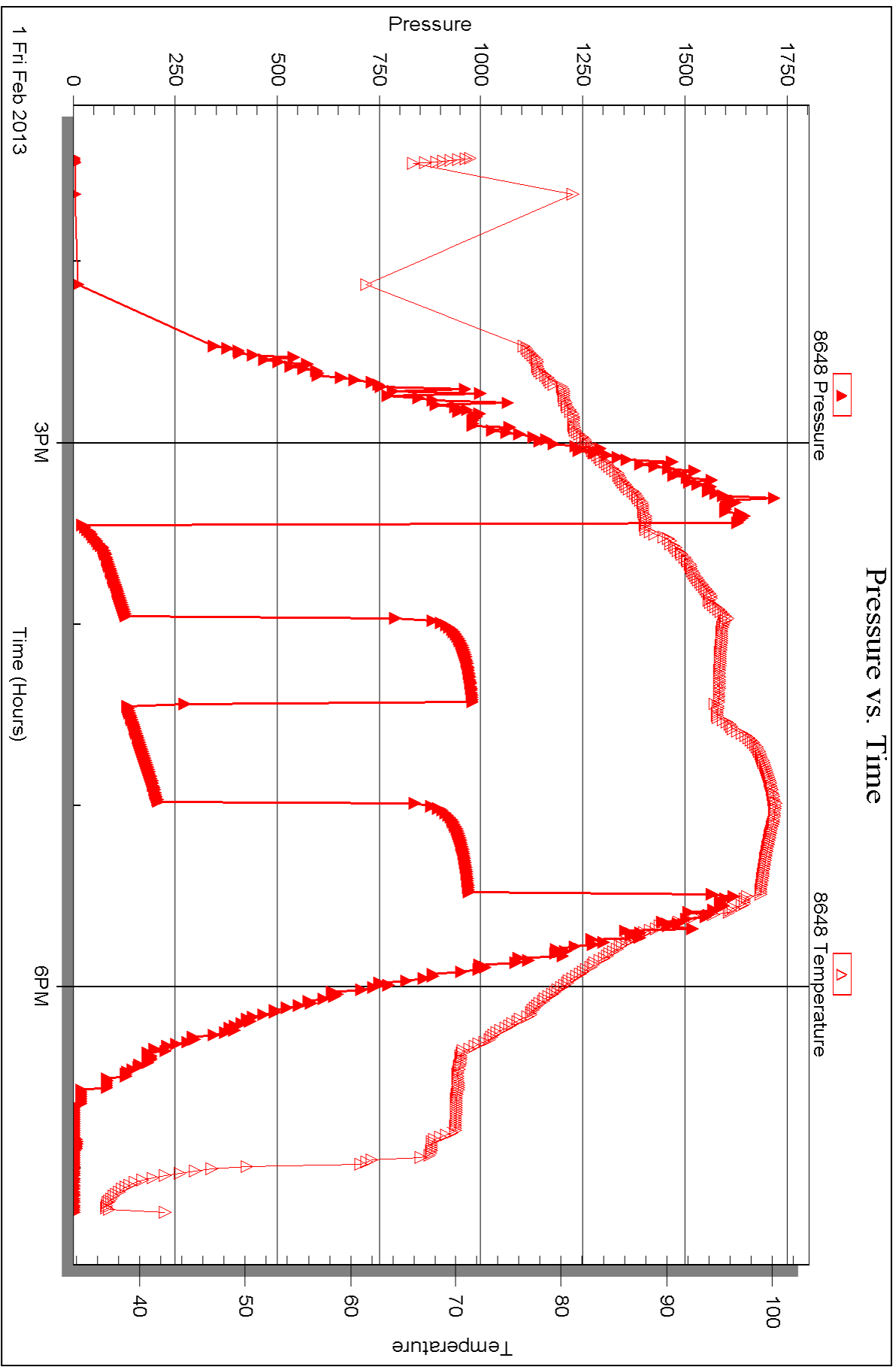
Serial #: 8648

Inside

John O. Farmer, Inc.

Bowman A #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **John O. Farmer, Inc.**

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Bowman A #1

31-4s-20w Graham,KS

Start Date: 2013.02.02 @ 09:17:00

End Date: 2013.02.02 @ 13:19:30

Job Ticket #: 51189 DST #: 2

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

Printed: 2013.02.05 @ 11:00:08



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O. Farmer, Inc.

31-4s-20w Graham,KS

PO Box 352
Russell, KS 67665

Bowman A #1

Job Ticket: 51189

DST#: 2

ATTN: Austin Klaus

Test Start: 2013.02.02 @ 09:17:00

GENERAL INFORMATION:

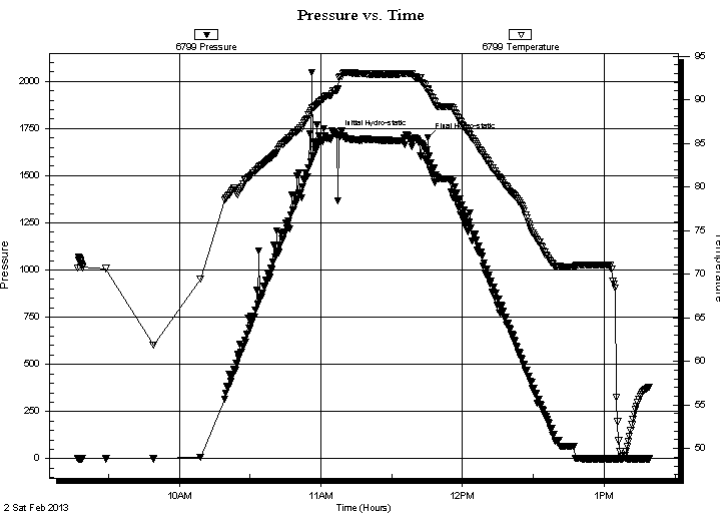
Formation: **LKC**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened:
 Tester: Kevin Mack
 Time Test Ended: 13:19:30
 Unit No: 43
 Interval: **3448.00 ft (KB) To 3510.00 ft (KB) (TVD)**
 Reference Elevations: 2076.00 ft (KB)
 Total Depth: 3510.00 ft (KB) (TVD)
 2068.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 8.00 ft

Serial #: 6799

Inside

Press @ Run Depth: psig @ 3449.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.02.02 End Date: 2013.02.02 Last Calib.: 2013.02.02
 Start Time: 09:17:05 End Time: 13:19:30 Time On Btm: 2013.02.02 @ 11:07:00
 Time Off Btm: 2013.02.02 @ 11:45:30

TEST COMMENT: Packer Failure - Attempted to set packers tw ice, Failed both times.
 Tripped out of hole to change anchor.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1715.53	91.09	Initial Hydro-static
39	1699.67	91.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	Mud 100M	0.98

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer, Inc.

31-4s-20w Graham,KS

PO Box 352
Russell, KS 67665

Bowman A #1

Job Ticket: 51189

DST#: 2

ATTN: Austin Klaus

Test Start: 2013.02.02 @ 09:17:00

Tool Information

Drill Pipe:	Length: 3319.00 ft	Diameter: 3.80 inches	Volume: 46.56 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: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 47.16 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3448.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	83.00 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			3428.00	
Shut In Tool	5.00			3433.00	
Hydraulic tool	5.00			3438.00	
Packer	5.00			3443.00	21.00 Bottom Of Top Packer
Packer	5.00			3448.00	
Stubb	1.00			3449.00	
Recorder	0.00	6799	Inside	3449.00	
Recorder	0.00	8648	Inside	3449.00	
Perforations	22.00			3471.00	
Change Over Sub	1.00			3472.00	
Drill Pipe	32.00			3504.00	
Change Over Sub	1.00			3505.00	
Bullnose	5.00			3510.00	62.00 Bottom Packers & Anchor

Total Tool Length: 83.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer, Inc.

31-4s-20w Graham,KS

PO Box 352
Russell, KS 67665

Bowman A #1

Job Ticket: 51189

DST#: 2

ATTN: Austin Klaus

Test Start: 2013.02.02 @ 09:17:00

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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	Mud 100M	0.984

Total Length: 150.00 ft Total Volume: 0.984 bbl

Num Fluid Samples: 0

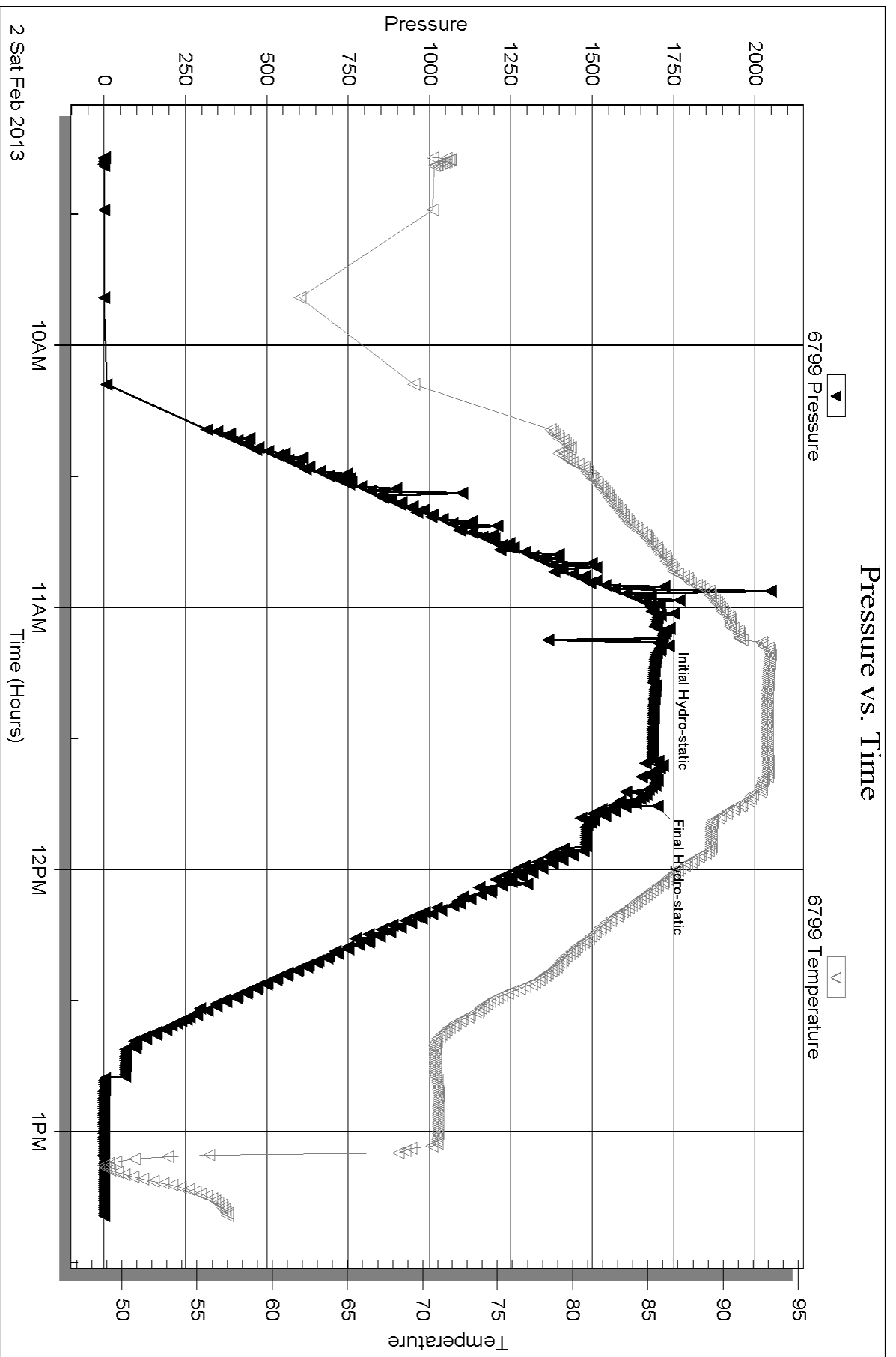
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



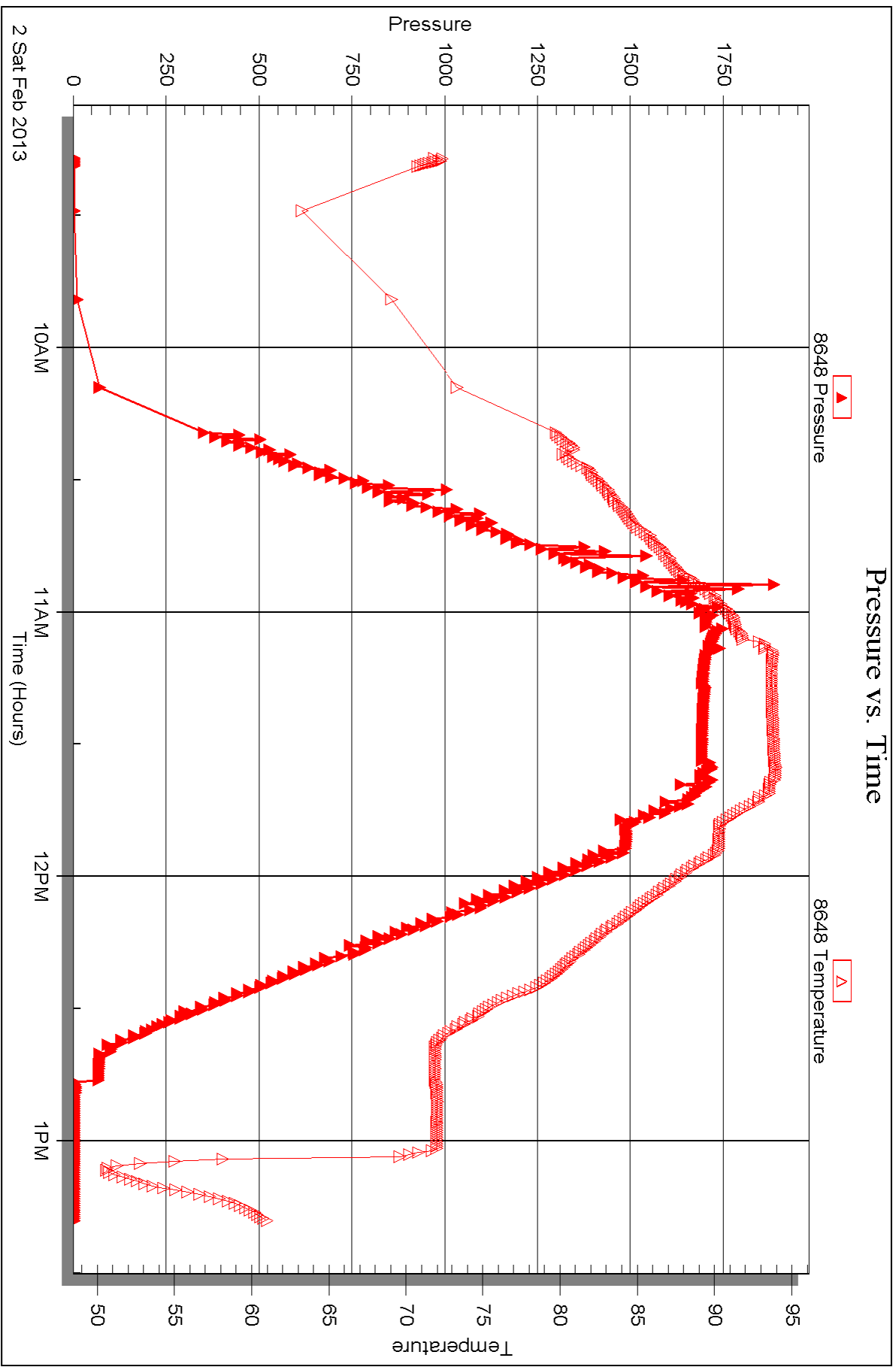
Serial #: 8648

Inside

John O. Farmer, Inc.

Bowman A #1

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **John O. Farmer, Inc.**

PO Box 352
Russell, KS 67665

ATTN: Austin Klaus

Bowman A #1

31-4s-20w Graham,KS

Start Date: 2013.02.02 @ 13:35:00

End Date: 2013.02.02 @ 18:53:30

Job Ticket #: 51190 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.02.05 @ 10:59:30

John O. Farmer, Inc.
31-4s-20w Graham,KS
Bowman A #1
DST # 3
LKC "I,J,K"
2013.02.02



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer, Inc.

31-4s-20w Graham,KS

PO Box 352
Russell, KS 67665

Bowman A #1

Job Ticket: 51190

DST#: 3

ATTN: Austin Klaus

Test Start: 2013.02.02 @ 13:35:00

GENERAL INFORMATION:

Formation: **LKC "I,J,K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:52:15

Time Test Ended: 18:53:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 3438.00 ft (KB) To 3510.00 ft (KB) (TVD)

Reference Elevations: 2076.00 ft (KB)

Total Depth: 3510.00 ft (KB) (TVD)

2068.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 6799

Inside

Press @ Run Depth: 24.48 psig @ 3439.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.02.02

End Date:

2013.02.02

Last Calib.:

2013.02.02

Start Time: 13:35:05

End Time:

18:53:29

Time On Btm:

2013.02.02 @ 14:51:30

Time Off Btm:

2013.02.02 @ 16:56:30

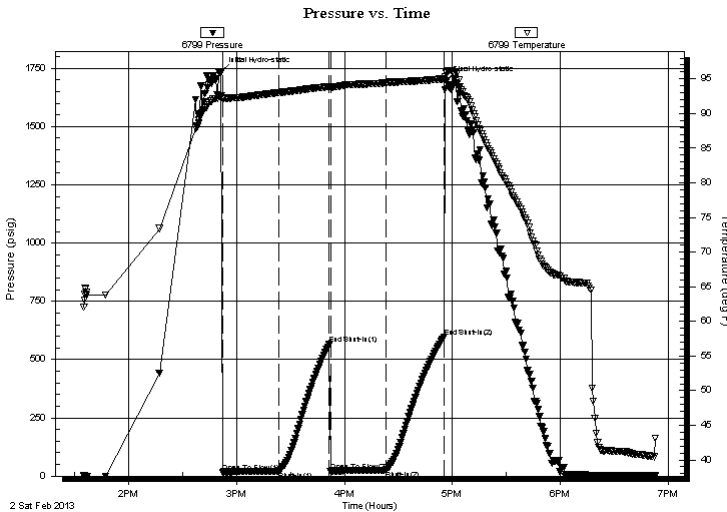
TEST COMMENT: 30 - IF- Blow built to 1", then died back to 1/2"

30 - IS- No Return

30 - FF- No Blow

30 - FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1734.55	92.57	Initial Hydro-static
1	17.46	92.08	Open To Flow (1)
32	21.46	93.02	Shut-In(1)
60	566.32	93.89	End Shut-In(1)
61	21.85	93.74	Open To Flow (2)
92	24.48	94.46	Shut-In(2)
124	596.08	95.00	End Shut-In(2)
125	1694.82	95.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OSM 100M (oil spots)	0.05

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer, Inc.

31-4s-20w Graham,KS

PO Box 352
Russell, KS 67665

Bowman A #1

Job Ticket: 51190

DST#: 3

ATTN: Austin Klaus

Test Start: 2013.02.02 @ 13:35:00

Tool Information

Drill Pipe:	Length: 3319.00 ft	Diameter: 3.80 inches	Volume: 46.56 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: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	50000.00 lb
		Total Volume: 47.16 bbl		Tool Chased	5.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3438.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	72.00 ft				
Tool Length:	93.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments: tool slid approx 5' to bottom, then opened approx 5' early and had to be chased to bottom.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3418.00	
Shut In Tool	5.00			3423.00	
Hydraulic tool	5.00			3428.00	
Packer	5.00			3433.00	21.00 Bottom Of Top Packer
Packer	5.00			3438.00	
Stubb	1.00			3439.00	
Recorder	0.00	6799	Inside	3439.00	
Recorder	0.00	8648	Inside	3439.00	
Perforations	2.00			3441.00	
Change Over Sub	1.00			3442.00	
Drill Pipe	64.00			3506.00	
Change Over Sub	1.00			3507.00	
Bullnose	3.00			3510.00	72.00 Bottom Packers & Anchor

Total Tool Length: 93.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer, Inc.

31-4s-20w Graham,KS

PO Box 352
Russell, KS 67665

Bowman A #1

Job Ticket: 51190

DST#: 3

ATTN: Austin Klaus

Test Start: 2013.02.02 @ 13:35:00

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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	OSM 100M (oil spots)	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

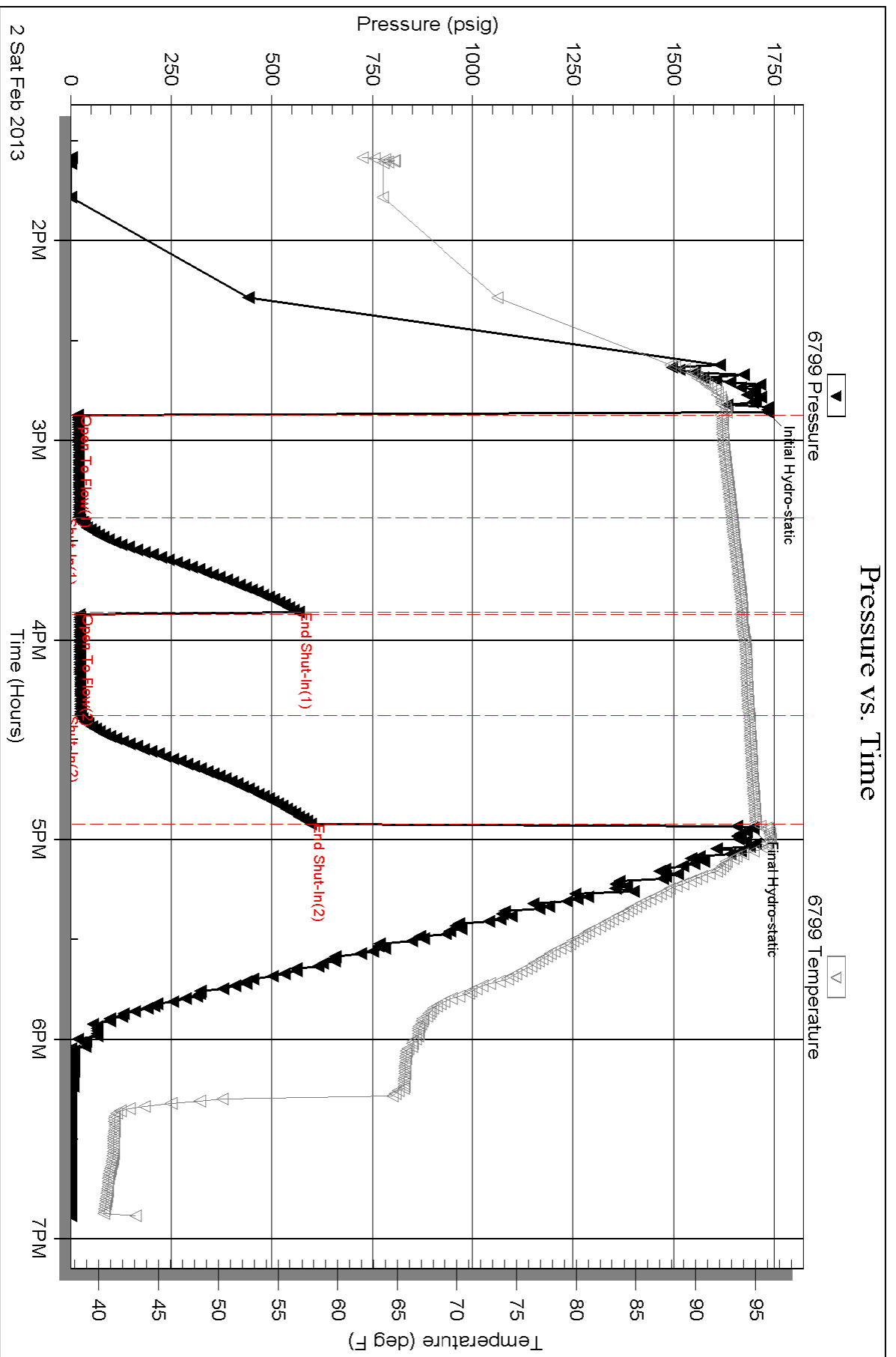
Serial #: 6799

Inside

John O. Farmer, Inc.

Bowman A #1

DST Test Number: 3



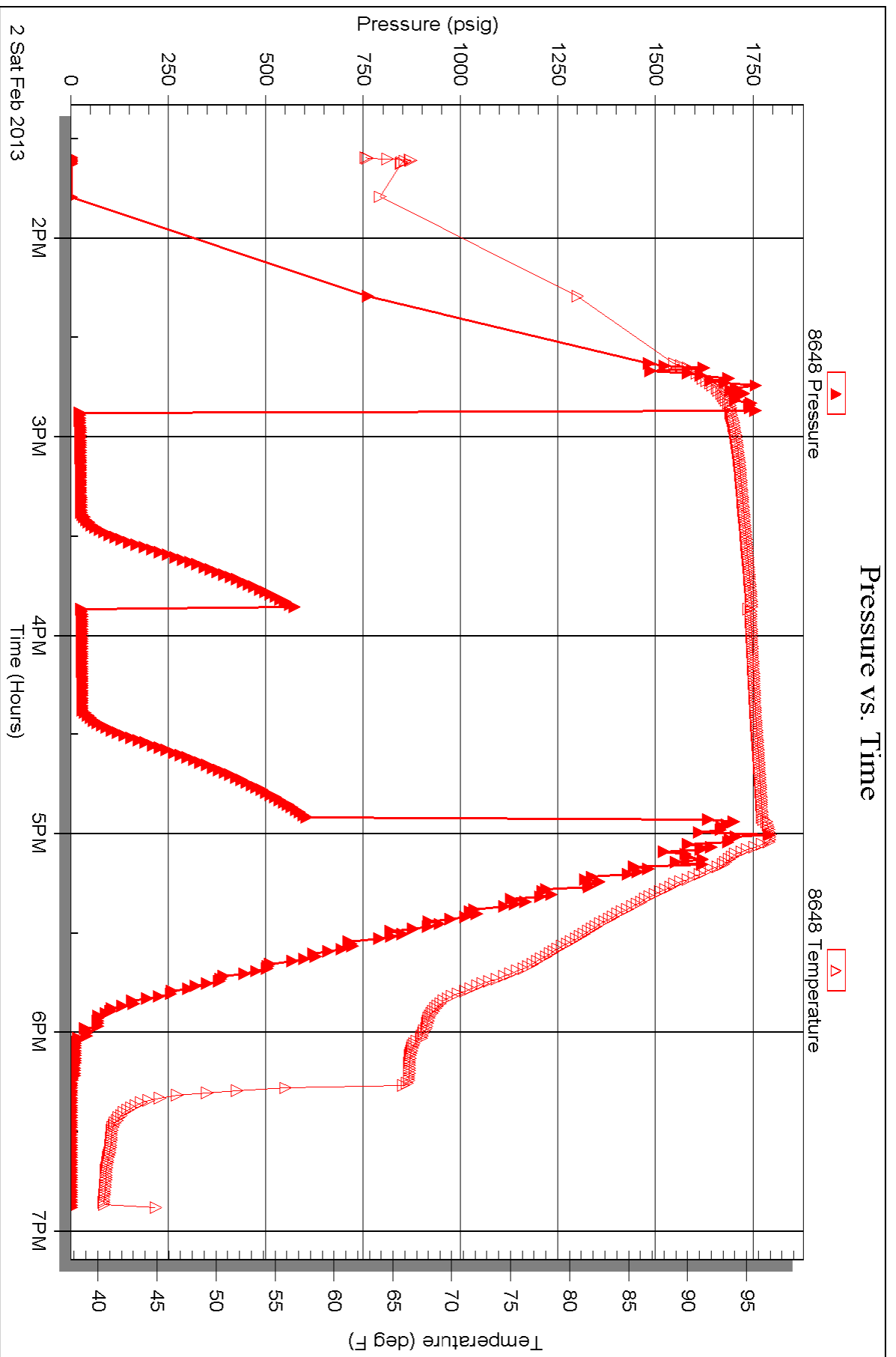
Serial #: 8648

Inside

John O. Farmer, Inc.

Bowman A #1

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 51188

4/10

Well Name & No. Bowman A#1 Test No. 1 Date 2-1-13
 Company John O. Farmer, Inc Elevation 2076 KB 2068 GL
 Address 370 W Wichita Ave Russell KS 67665
 Co. Rep / Geo. Austin Klaus Rig WW #12
 Location: Sec. 31 Twp. 4S Rge. 20W Co. _____ State KS

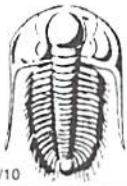
Interval Tested 3321-3373 Zone Tested LKC "A-D"
 Anchor Length 52' Drill Pipe Run 3197 Mud Wt. 8.9
 Top Packer Depth 3317 Drill Collars Run 123' Vis 59
 Bottom Packer Depth 3321 Wt. Pipe Run 0 WL 6.4
 Total Depth 3373 Chlorides 400 ppm System LCM 2#
 Blow Description IF - BOB in 13 min.
ISI - NO Return
FF - BOB in 13 min.
FST - NO Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>94</u>	<u>MW</u>		<u>60</u>	<u>40</u>	
<u>186</u>	<u>MW</u>		<u>80</u>	<u>20</u>	
<u>120115</u>	<u>MW</u>		<u>95</u>	<u>5</u>	
<u>5</u>	<u>Heavy mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 400 BHT 98 Gravity — API RW — @ 53 °F Chlorides — ppm
 (A) Initial Hydrostatic 1623 Test 1150 T-On Location 11:45 AM
 (B) First Initial Flow 18 Jars T-Started 1:25 PM
 (C) First Final Flow 122 Safety Joint T-Open 3:26 PM
 (D) Initial Shut-In 966 Circ Sub N/C T-Pulled 5:26 PM
 (E) Second Initial Flow 126 Hourly Standby T-Out 7:15 PM
 (F) Second Final Flow 2100 Mileage 133 RT 206.15 Comments _____
 (G) Final Shut-In 963 Sampler _____
 (H) Final Hydrostatic 1604 Straddle _____
 Ruined Shale Packer _____
 Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1356.15 MP/DST Disc't _____

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

Test Ticket

NO. 51189

Well Name & No. Bowman A#1 Test No. 2 Date 2-2-13
 Company John O. Farmer, Inc Elevation 2076 KB 2068 GL
 Address 370 W Wichita Ave Russell, KS 67665
 Co. Rep / Geo. Austin Klaus Rig WW #12
 Location: Sec. 31 Twp. 45 Rge. 20W Co. Phillips State KS

Interval Tested 3448-3510 Zone Tested L1K "I, J, K"
 Anchor Length 62' Drill Pipe Run 3319 Mud Wt. 8.9
 Top Packer Depth 3444 Drill Collars Run 123' Vis 59
 Bottom Packer Depth 3448 Wt. Pipe Run 0 WL 6.4
 Total Depth 3510 Chlorides 4000 ppm System LCM 2#

Blow Description IF- ISI- Packer Failure
FF- attempted to set packers twice, Failed both times
FSI- Tripped out to change anchor length.

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</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 150 BHT 91 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 1715 Test 950 T-On Location 7:00 AM
 (B) First Initial Flow _____ Jars _____ T-Started 9:17 AM
 (C) First Final Flow _____ Safety Joint _____ T-Open 11:07 AM
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled 11:30 AM
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 1:20 PM
 (F) Second Final Flow _____ Mileage 133RT 206.15 Comments Packer Failure
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 1699 Straddle _____
 Shale Packer _____
 Ruined Shale Packer _____
 Ruined Packer _____

Initial Open _____ Extra Packer _____
 Initial Shut-In _____ Extra Recorder _____
 Final Flow _____ Day Standby _____
 Final Shut-In _____ Accessibility _____
 Sub Total 1156.15 MP/DST Disc't _____

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

Test Ticket

NO. 51190

Well Name & No. Bowman A #1 Test No. 3 Date 2-2-13
 Company John O. Farmer, Inc. Elevation 2076 KB 2068 GL
 Address 370 W Wichita Ave. Russell, KS 67665
 Co. Rep / Geo. Austin Klaus Rig WW #12
 Location: Sec. 31 Twp. 4S Rge. 20W Co. Phillips State KS

Interval Tested 3438-3510 Zone Tested Lkc "I, J, K"
 Anchor Length 72' Drill Pipe Run 33/4 Mud Wt. 8.9
 Top Packer Depth ~~3438~~ 3434 Drill Collars Run 123 Vis 59
 Bottom Packer Depth ~~3438~~ 3438 Wt. Pipe Run 0 WL 6.4
 Total Depth 3510 Chlorides 400 ppm System LCM 2#

Blow Description IF - Blow built to 1" then died back to 1/2"
ISI - NO Return
FF - NO Blow
FST - NO Return

Rec	Feet of	%gas	spots	%oil	%water	%mud
<u>10</u>	<u>OSM</u>				<u>lead</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 95 Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 1734 Test 1150 T-On Location 7:00 AM
 (B) First Initial Flow 17 Jars - T-Started 1:35 PM
 (C) First Final Flow 21 Safety Joint - T-Open 2:53 PM
 (D) Initial Shut-In 566 Circ Sub N/C T-Pulled 4:53 PM
 (E) Second Initial Flow 21 Hourly Standby - T-Out 6:55 PM
 (F) Second Final Flow 24 Mileage - Comments Had to chase tool approx 5' to Bottom
 (G) Final Shut-In 596 Sampler -
 (H) Final Hydrostatic 1694 Straddle - Ruined Shale Packer -
 Ruined Packer X2 640

Initial Open - Extra Packer - Extra Copies -
 Initial Shut-In - Extra Recorder - Sub Total 640
 Final Flow - Day Standby - Total 1790
 Final Shut-In - Accessibility - MP/DST Disc't -
 Sub Total 1150

Approved By _____ Our Representative [Signature]

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