



DRILL STEM TEST REPORT

Prepared For: **Baird Oil Company**

PO Box 428
Logan KS 67646

ATTN: Richard Bell

Velma Lowry #1-34

34-3s-22w Norton KS

Start Date: 2013.04.22 @ 21:55:00

End Date: 2013.04.23 @ 05:14:30

Job Ticket #: 50659 DST #: 1

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

Printed: 2013.04.29 @ 11:42:35

Baird Oil Company
34-3s-22w Norton KS
Velma Lowry #1-34
DST # 1
LKC-D
2013.04.22



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50659

DST#: 1

ATTN: Richard Bell

Test Start: 2013.04.22 @ 21:55:00

GENERAL INFORMATION:

Formation: **LKC-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:32:00

Time Test Ended: 05:14:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3563.00 ft (KB) To 3583.00 ft (KB) (TVD)

Reference Elevations: 2293.00 ft (KB)

Total Depth: 3583.00 ft (KB) (TVD)

2283.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8791

Inside

Press @ Run Depth: 40.13 psig @ 3565.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.04.22

End Date:

2013.04.23

Last Calib.:

2013.04.23

Start Time: 21:55:01

End Time:

05:14:30

Time On Btm:

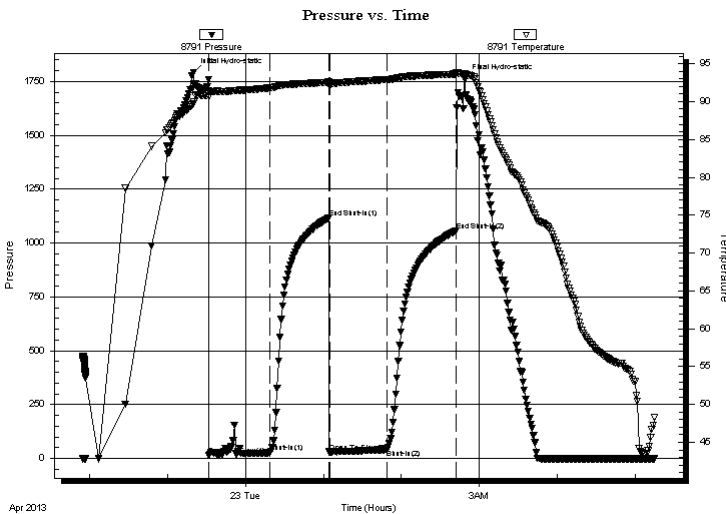
2013.04.22 @ 23:20:00

Time Off Btm:

2013.04.23 @ 02:48:30

TEST COMMENT: IF: Weak blow, Built to 1/4 in. over 45 mins.
IS: No blow back over 45 mins.
FF: Weak blow, After 15 mins. Died after 40 mins.
FS: No blow back after 45 mins.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1792.48	89.73	Initial Hydro-static
12	14.75	90.73	Open To Flow (1)
59	27.33	91.83	Shut-In(1)
104	1116.31	92.57	End Shut-In(1)
105	30.58	92.31	Open To Flow (2)
149	40.13	92.91	Shut-In(2)
202	1058.13	93.63	End Shut-In(2)
209	1762.01	93.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
68.00	HOCM-40% m 60% o	0.33

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Baird Oil Company
 PO Box 428
 Logan KS 67646
 ATTN: Richard Bell

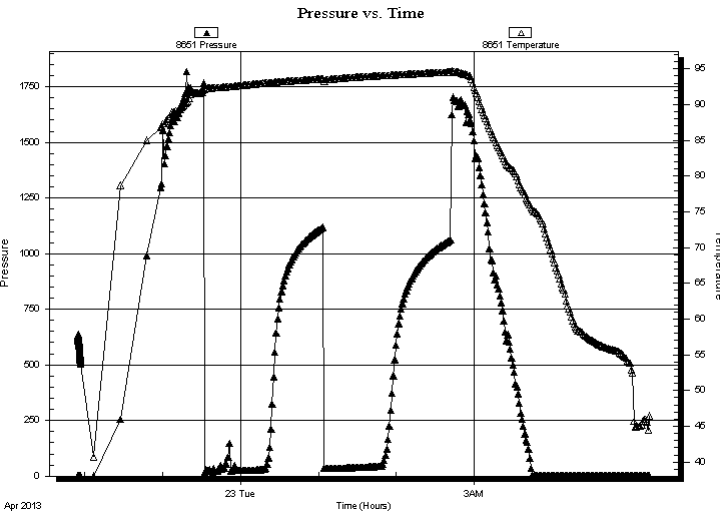
34-3s-22w Norton KS
Velma Lowry #1-34
 Job Ticket: 50659 **DST#: 1**
 Test Start: 2013.04.22 @ 21:55:00

GENERAL INFORMATION:

Formation: **LKC-D**
 Deviated: **No Whipstock:** ft (KB)
 Test Type: **Conventional Bottom Hole (Reset)**
 Time Tool Opened: 23:32:00
 Tester: **Chuck Kreutzer Jr.**
 Time Test Ended: 05:14:30
 Unit No: **61**
Interval: 3563.00 ft (KB) To 3583.00 ft (KB) (TVD)
 Reference Elevations: 2293.00 ft (KB)
 Total Depth: 3583.00 ft (KB) (TVD) 2283.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: **Good** KB to GR/CF: 10.00 ft

Serial #: 8651 Outside
 Press @ RunDepth: psig @ 3565.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.04.22 End Date: 2013.04.23 Last Calib.: 2013.04.23
 Start Time: 21:55:01 End Time: 05:14:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Weak blow , Built to 1/4 in. over 45 mins.
 IS: No blow back over 45 mins.
 FF: Weak blow , After 15 mins. Died after 40 mins.
 FS: No blow back after 45 mins.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
68.00	HOCM-40% m 60% o	0.33

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50659

DST#: 1

ATTN: Richard Bell

Test Start: 2013.04.22 @ 21:55:00

Tool Information

Drill Pipe:	Length: 3444.00 ft	Diameter: 3.80 inches	Volume: 48.31 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: 25000.00 lb
Drill Collar:	Length: 119.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 48.90 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3563.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	40.00 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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Shut In Tool	5.00			3548.00	
Hydraulic tool	5.00			3553.00	
Packer	5.00			3558.00	20.00 Bottom Of Top Packer
Packer	5.00			3563.00	
Stubb	1.00			3564.00	
Perforations	1.00			3565.00	
Recorder	0.00	8791	Inside	3565.00	
Recorder	0.00	8651	Outside	3565.00	
Perforations	15.00			3580.00	
Bullnose	3.00			3583.00	20.00 Bottom Packers & Anchor
Total Tool Length:	40.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50659

DST#: 1

ATTN: Richard Bell

Test Start: 2013.04.22 @ 21:55:00

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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
68.00	HOCM-40% <i>m</i> 60% <i>o</i>	0.334

Total Length: 68.00 ft Total Volume: 0.334 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

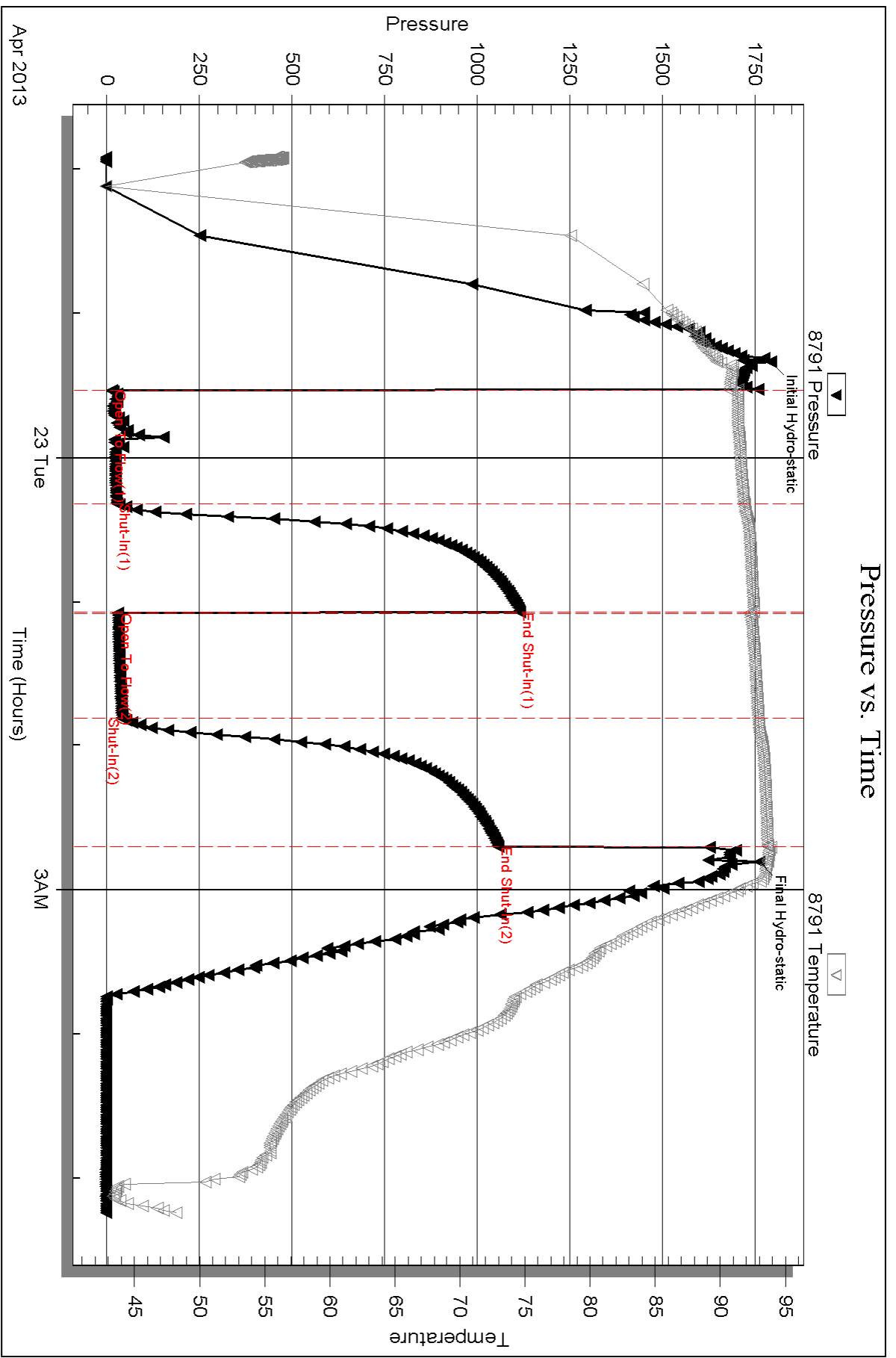
Serial #: 8791

Inside

Baird Oil Company

Velma Low ry #1-34

DST Test Number: 1

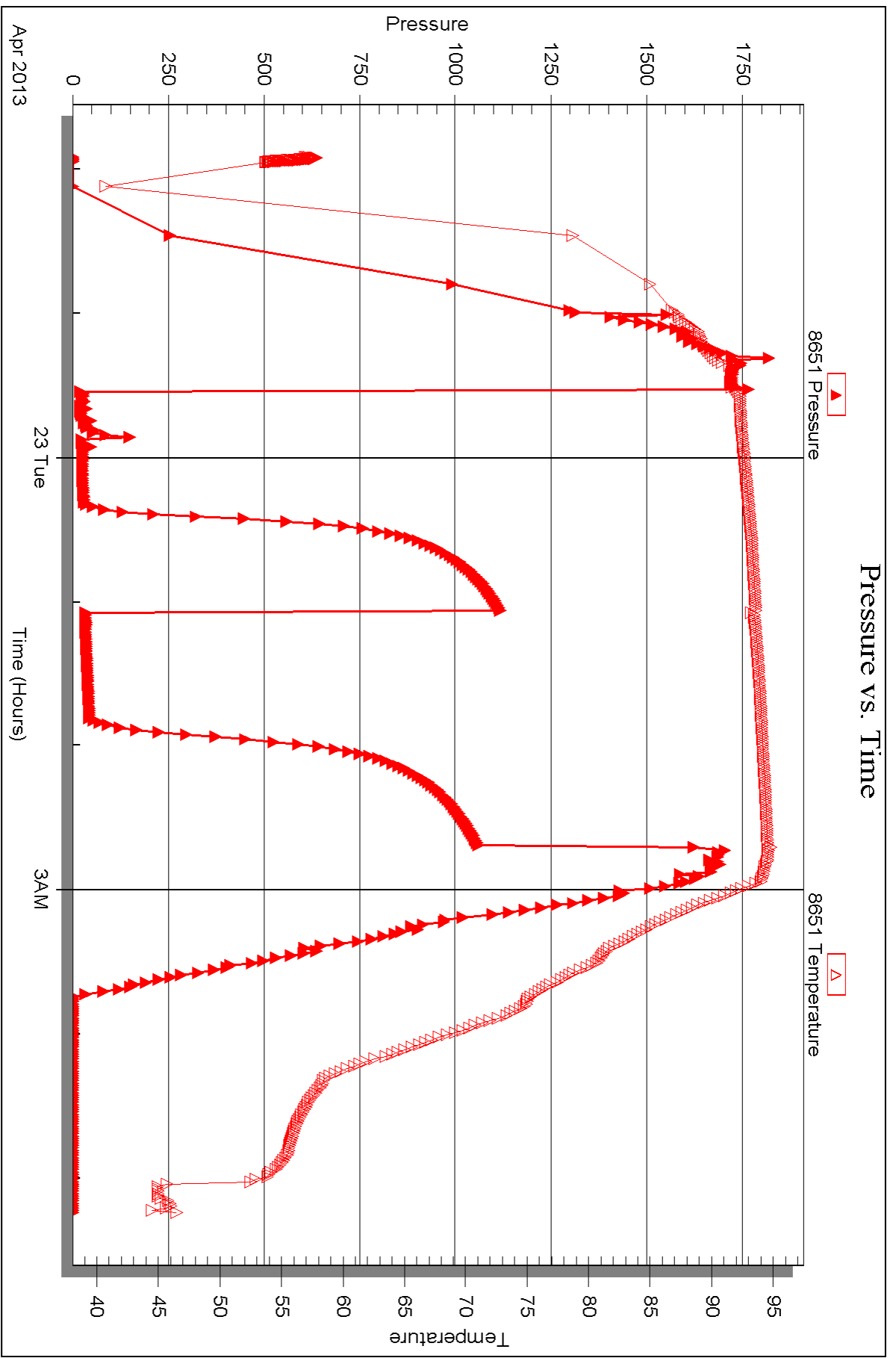


Serial #: 8651

Outside Baird Oil Company

Velma Low ry #1-34

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Baird Oil Company**

PO Box 428
Logan KS 67646

ATTN: Richard Bell

Velma Lowry #1-34

34-3s-22w Norton KS

Start Date: 2013.04.23 @ 11:30:00

End Date: 2013.04.23 @ 17:00:30

Job Ticket #: 50660 DST #: 2

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

Printed: 2013.04.29 @ 11:41:55

Baird Oil Company
34-3s-22w Norton KS
Velma Lowry #1-34
DST # 2
LKC-EJF
2013.04.23



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

ATTN: Richard Bell

Job Ticket: 50660

DST#: 2

Test Start: 2013.04.23 @ 11:30:00

GENERAL INFORMATION:

Formation: **LKC-EF**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:21:00

Time Test Ended: 17:00:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3581.00 ft (KB) To 3603.00 ft (KB) (TVD)

Reference Elevations: 2293.00 ft (KB)

Total Depth: 3603.00 ft (KB) (TVD)

2283.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8791

Inside

Press @ Run Depth: 95.95 psig @ 3585.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.04.23

End Date:

2013.04.23

Last Calib.:

2013.04.23

Start Time: 11:30:01

End Time:

17:00:30

Time On Btm:

2013.04.23 @ 13:03:30

Time Off Btm:

2013.04.23 @ 15:32:30

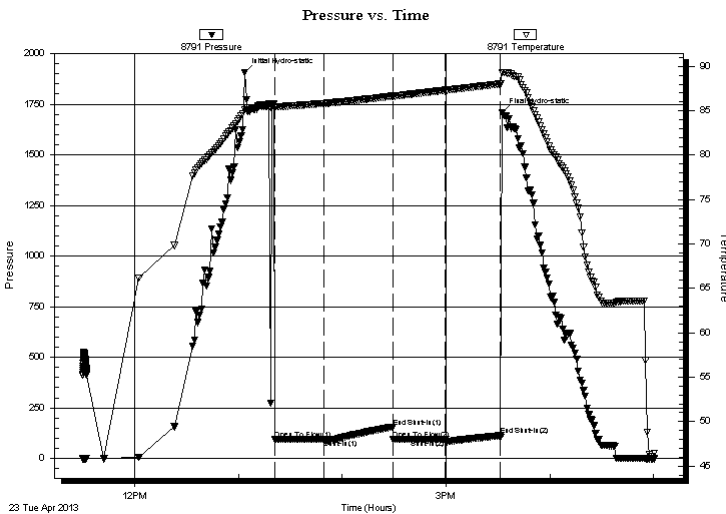
TEST COMMENT: IF: Set tool lost mud, picked up filled hole reset tool. Mud held, Weak blow surface over 30 mins.

IS: No blow back

FF: No blow .

FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1907.42	85.09	Initial Hydro-static
18	95.22	85.39	Open To Flow (1)
46	95.61	85.83	Shut-In(1)
86	155.16	86.64	End Shut-In(1)
86	95.58	86.64	Open To Flow (2)
116	95.95	87.31	Shut-In(2)
148	112.27	88.01	End Shut-In(2)
149	1706.76	89.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
174.00	Mud w ith oil specs-99%m1%	1.36

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50660

DST#: 2

ATTN: Richard Bell

Test Start: 2013.04.23 @ 11:30:00

Tool Information

Drill Pipe:	Length: 3447.00 ft	Diameter: 3.80 inches	Volume: 48.35 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: 119.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	45000.00 lb
			<u>Total Volume: 48.94 bbl</u>	Tool Chased	2.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3581.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	22.00 ft				
Tool Length:	42.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3566.00	
Hydraulic tool	5.00			3571.00	
Packer	5.00			3576.00	20.00 Bottom Of Top Packer
Packer	5.00			3581.00	
Stubb	1.00			3582.00	
Perforations	3.00			3585.00	
Recorder	0.00	8791	Inside	3585.00	
Recorder	0.00	8651	Outside	3585.00	
Perforations	15.00			3600.00	
Bullnose	3.00			3603.00	22.00 Bottom Packers & Anchor
Total Tool Length:	42.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50660

DST#: 2

ATTN: Richard Bell

Test Start: 2013.04.23 @ 11:30:00

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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
174.00	Mud w ith oil specs-99%m1%o	1.357

Total Length: 174.00 ft Total Volume: 1.357 bbl

Num Fluid Samples: 0

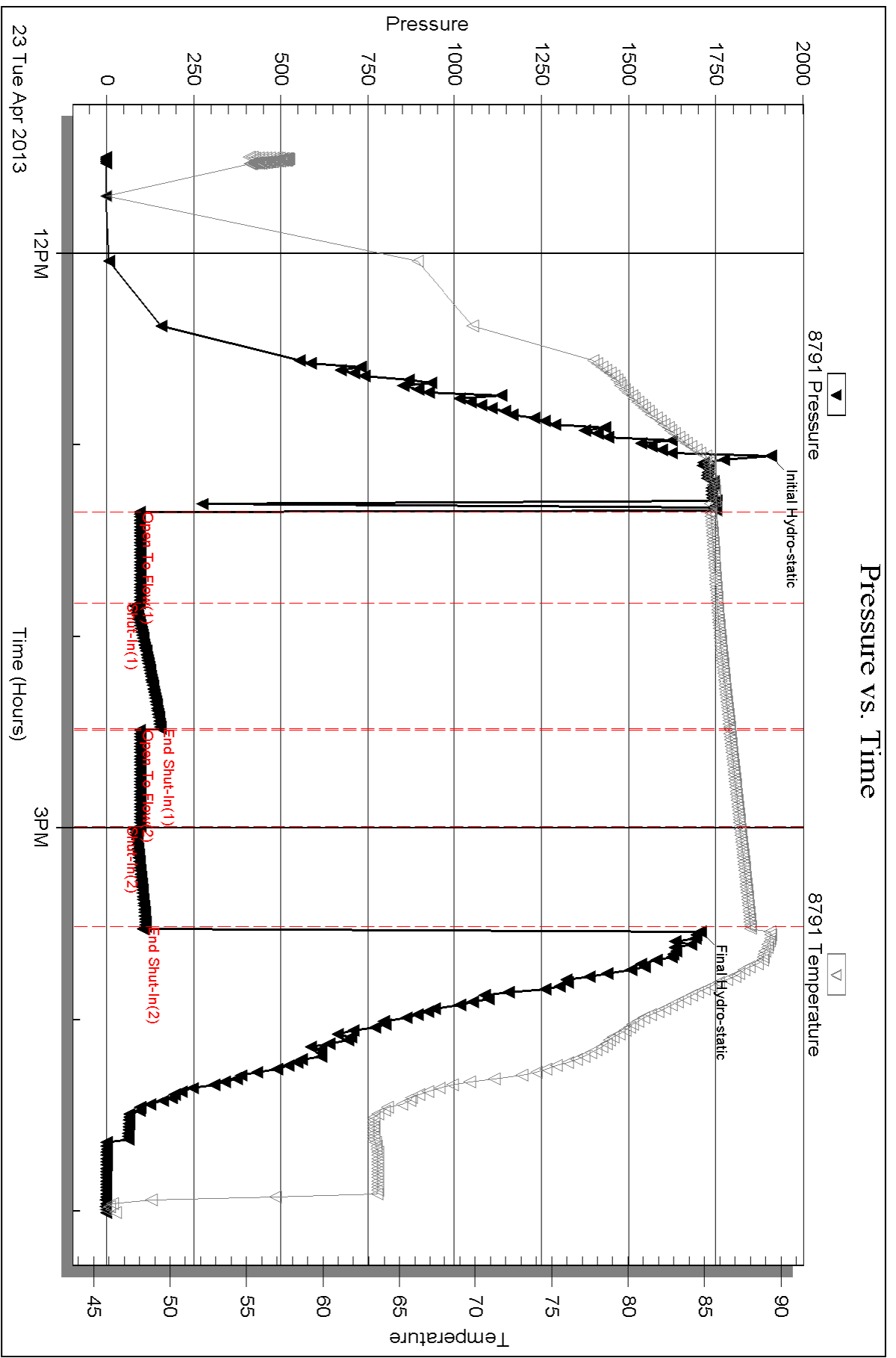
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

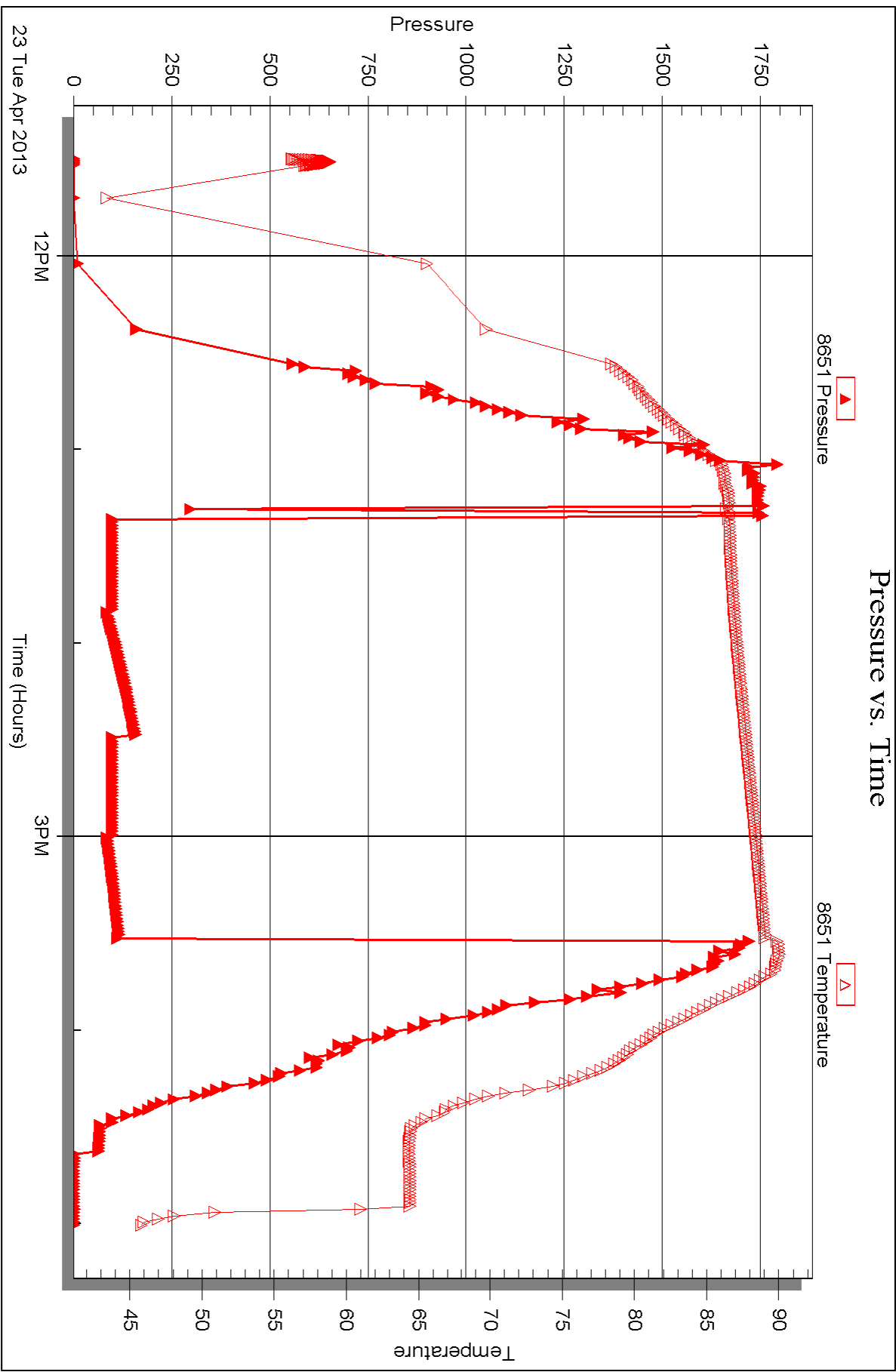


Serial #: 8651

Outside Baird Oil Company

Velma Low ry #1-34

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Baird Oil Company**

PO Box 428
Logan KS 67646

ATTN: Richard Bell

Velma Lowry #1-34

34-3s-22w Norton KS

Start Date: 2013.04.24 @ 02:30:00

End Date: 2013.04.24 @ 08:43:30

Job Ticket #: 50661 DST #: 3

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

Printed: 2013.04.29 @ 11:41:13

Baird Oil Company
34-3s-22w Norton KS
Velma Lowry #1-34
DST # 3
LKC-J
2013.04.24



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50661

DST#: 3

ATTN: Richard Bell

Test Start: 2013.04.24 @ 02:30:00

GENERAL INFORMATION:

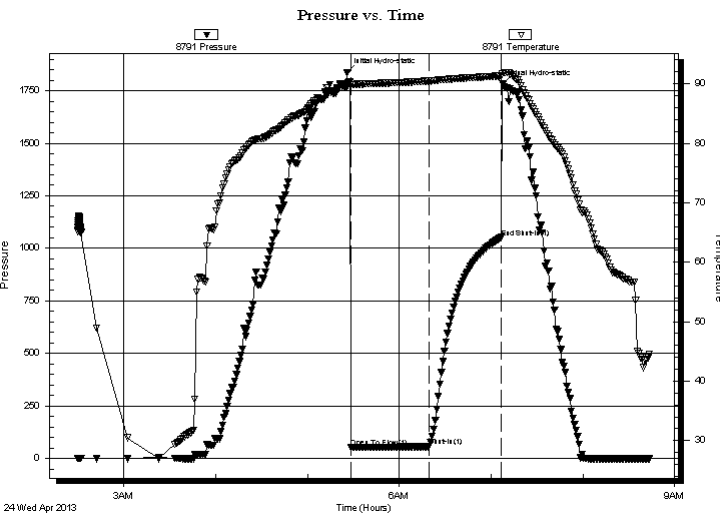
Formation: **LKC-J**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:28:30
 Time Test Ended: 08:43:30
 Interval: **3650.00 ft (KB) To 3681.00 ft (KB) (TVD)**
 Total Depth: 3681.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chuck Kreutzer Jr
 Unit No: 61
 Reference Elevations: 2293.00 ft (KB)
 2283.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8791

Inside

Press @ Run Depth: 56.12 psig @ 3653.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.04.24 End Date: 2013.04.24 Last Calib.: 2013.04.24
 Start Time: 02:30:01 End Time: 08:43:30 Time On Btm: 2013.04.24 @ 05:26:00
 Time Off Btm: 2013.04.24 @ 07:07:30

TEST COMMENT: IF: Weak blow , After 20 mins. Surface after 45 mins.
 IS: No blow back over 45 mins.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1837.55	90.09	Initial Hydro-static
3	53.35	89.92	Open To Flow (1)
54	56.12	90.47	Shut-In(1)
101	1051.30	91.33	End Shut-In(1)
102	1782.09	91.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	ocm-10%o90%m	0.30
10.00	Hocm-30%m70%o	0.05

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50661

DST#: 3

ATTN: Richard Bell

Test Start: 2013.04.24 @ 02:30:00

Tool Information

Drill Pipe:	Length: 3536.00 ft	Diameter: 3.80 inches	Volume: 49.60 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: 119.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 50.19 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3650.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	51.00 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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Shut In Tool	5.00			3635.00	
Hydraulic tool	5.00			3640.00	
Packer	5.00			3645.00	20.00 Bottom Of Top Packer
Packer	5.00			3650.00	
Stubb	1.00			3651.00	
Perforations	2.00			3653.00	
Recorder	0.00	8791	Inside	3653.00	
Recorder	0.00	8651	Outside	3653.00	
Perforations	25.00			3678.00	
Bullnose	3.00			3681.00	31.00 Bottom Packers & Anchor
Total Tool Length:	51.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50661

DST#: 3

ATTN: Richard Bell

Test Start: 2013.04.24 @ 02:30:00

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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	o _{cm} -10%o ₉₀ %m	0.295
10.00	H _o cm-30%m ₇₀ %o	0.049

Total Length: 70.00 ft Total Volume: 0.344 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

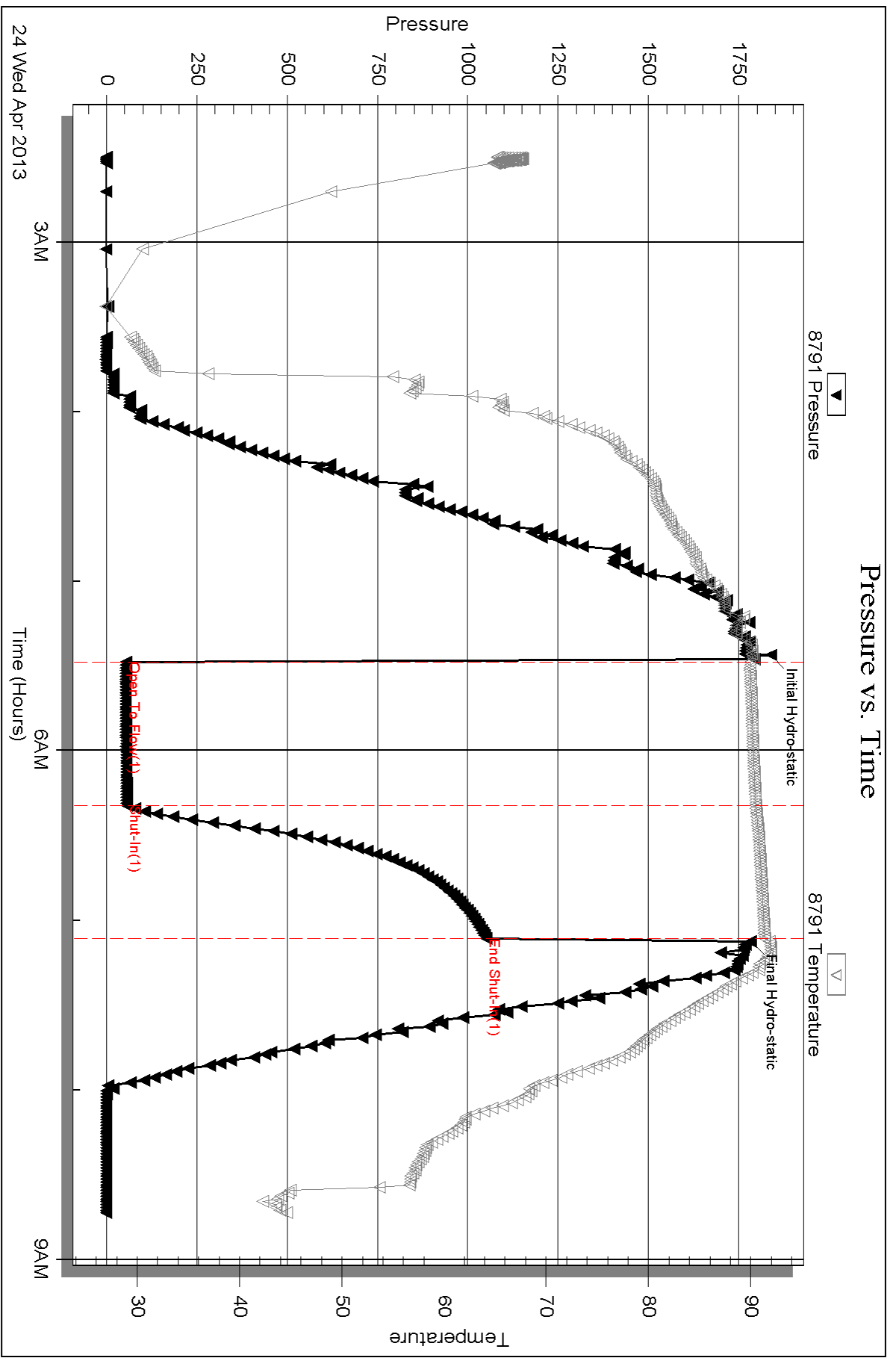
Serial #: 8791

Inside

Baird Oil Company

Velma Low ry #1-34

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 50661

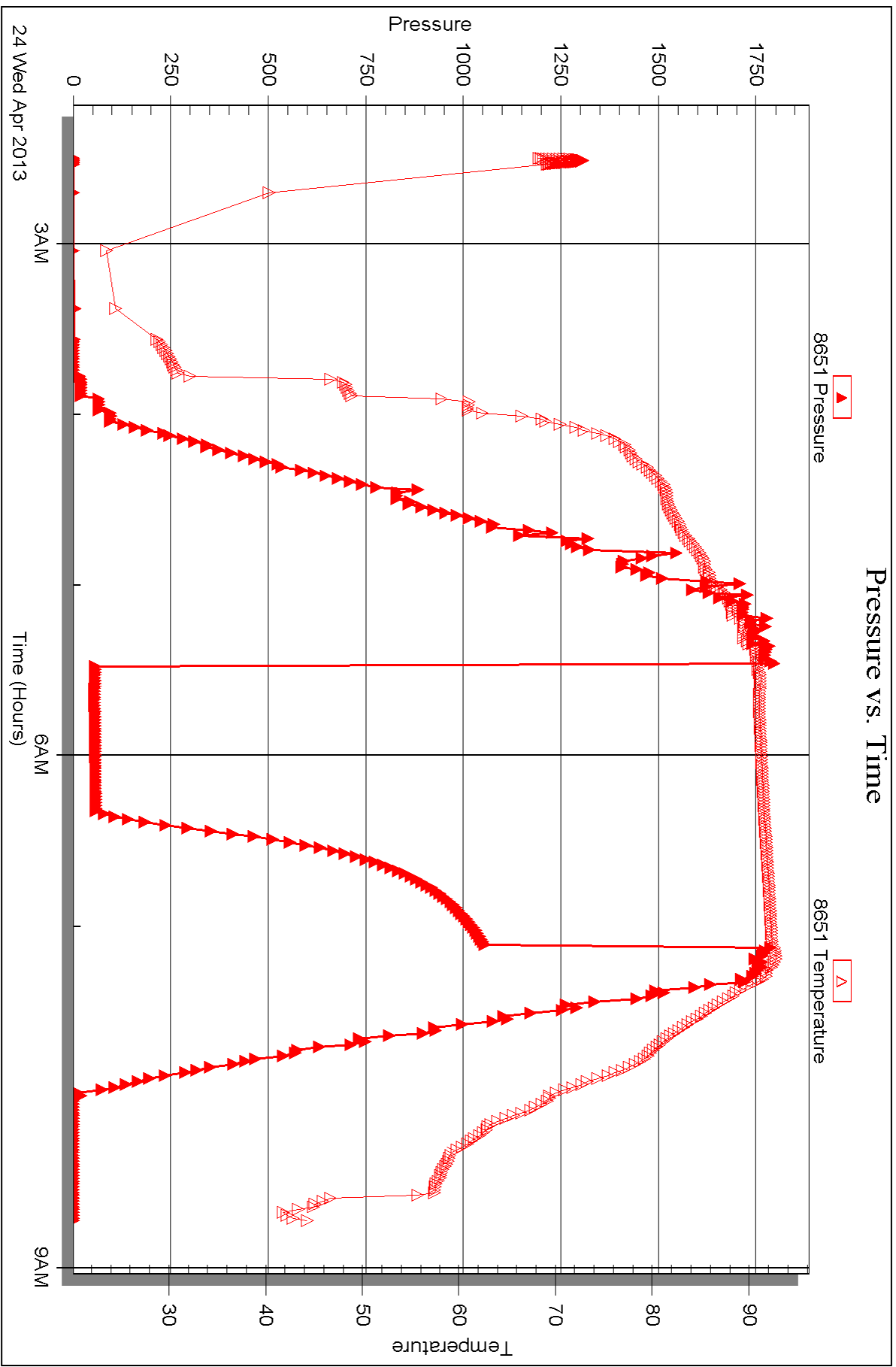
Printed: 2013.04.29 @ 11:41:15

Serial #: 8651

Outside Baird Oil Company

Velma Low ry #1-34

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Baird Oil Company**

PO Box 428
Logan KS 67646

ATTN: Richard Bell

Velma Lowry #1-34

34-3s-22w Norton KS

Start Date: 2013.04.24 @ 15:40:00

End Date: 2013.04.24 @ 21:34:30

Job Ticket #: 50662 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.04.29 @ 11:40:10

Baird Oil Company

34-3s-22w Norton KS

Velma Lowry #1-34

DST # 4

LKC-K

2013.04.24



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50662

DST#: 4

ATTN: Richard Bell

Test Start: 2013.04.24 @ 15:40:00

GENERAL INFORMATION:

Formation: **LKC-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:54:30

Time Test Ended: 21:34:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3678.00 ft (KB) To 3705.00 ft (KB) (TVD)

Reference Elevations: 2293.00 ft (KB)

Total Depth: 3705.00 ft (KB) (TVD)

2283.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8791

Inside

Press @ Run Depth: 127.37 psig @ 3680.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.04.24

End Date:

2013.04.24

Last Calib.:

2013.04.24

Start Time: 15:40:01

End Time:

21:34:30

Time On Btm:

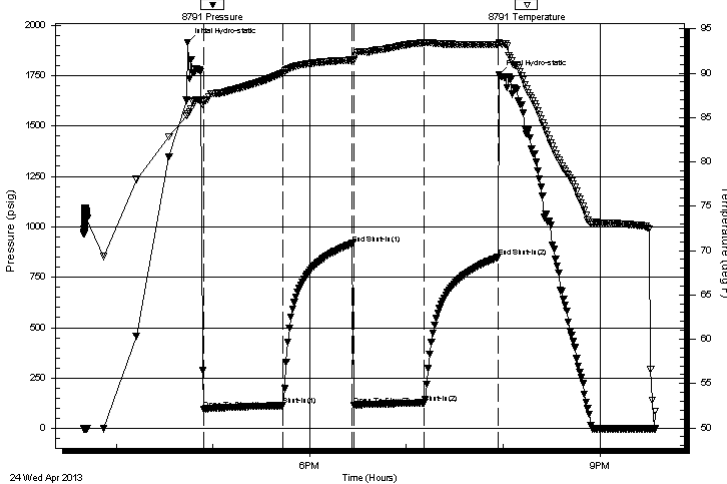
2013.04.24 @ 16:44:30

Time Off Btm:

2013.04.24 @ 19:57:30

TEST COMMENT: IF: Weak blow , Built to 5 in. over 45 mins.
IS: No blow back
FF: Weak blow , Built to 2 in. over 45 mins.
FS: No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1914.38	85.38	Initial Hydro-static
10	96.31	86.86	Open To Flow (1)
59	113.88	90.08	Shut-In(1)
102	917.26	91.49	End Shut-In(1)
103	116.69	91.41	Open To Flow (2)
147	127.37	93.44	Shut-In(2)
193	849.82	93.24	End Shut-In(2)
193	1754.23	93.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	vsocw -2%o98%w	0.30
60.00	vsocmw -2%o10%w 88%m	0.30
124.00	ocm-10%o90%m	1.74

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50662

DST#: 4

ATTN: Richard Bell

Test Start: 2013.04.24 @ 15:40:00

Tool Information

Drill Pipe:	Length: 3569.00 ft	Diameter: 3.80 inches	Volume: 50.06 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: 119.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 50.65 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3678.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	47.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3663.00	
Hydraulic tool	5.00			3668.00	
Packer	5.00			3673.00	20.00 Bottom Of Top Packer
Packer	5.00			3678.00	
Stubb	1.00			3679.00	
Perforations	1.00			3680.00	
Recorder	0.00	8791	Inside	3680.00	
Recorder	0.00	8651	Outside	3680.00	
Perforations	22.00			3702.00	
Bullnose	3.00			3705.00	27.00 Bottom Packers & Anchor
Total Tool Length:	47.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Baird Oil Company

34-3s-22w Norton KS

PO Box 428
Logan KS 67646

Velma Lowry #1-34

Job Ticket: 50662

DST#: 4

ATTN: Richard Bell

Test Start: 2013.04.24 @ 15:40:00

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	vsoscw -2%o98%w	0.295
60.00	vsocmw -2%o10%w 88%m	0.304
124.00	ocm-10%o90%m	1.739

Total Length: 244.00 ft

Total Volume: 2.338 bbl

Num Fluid Samples: 0

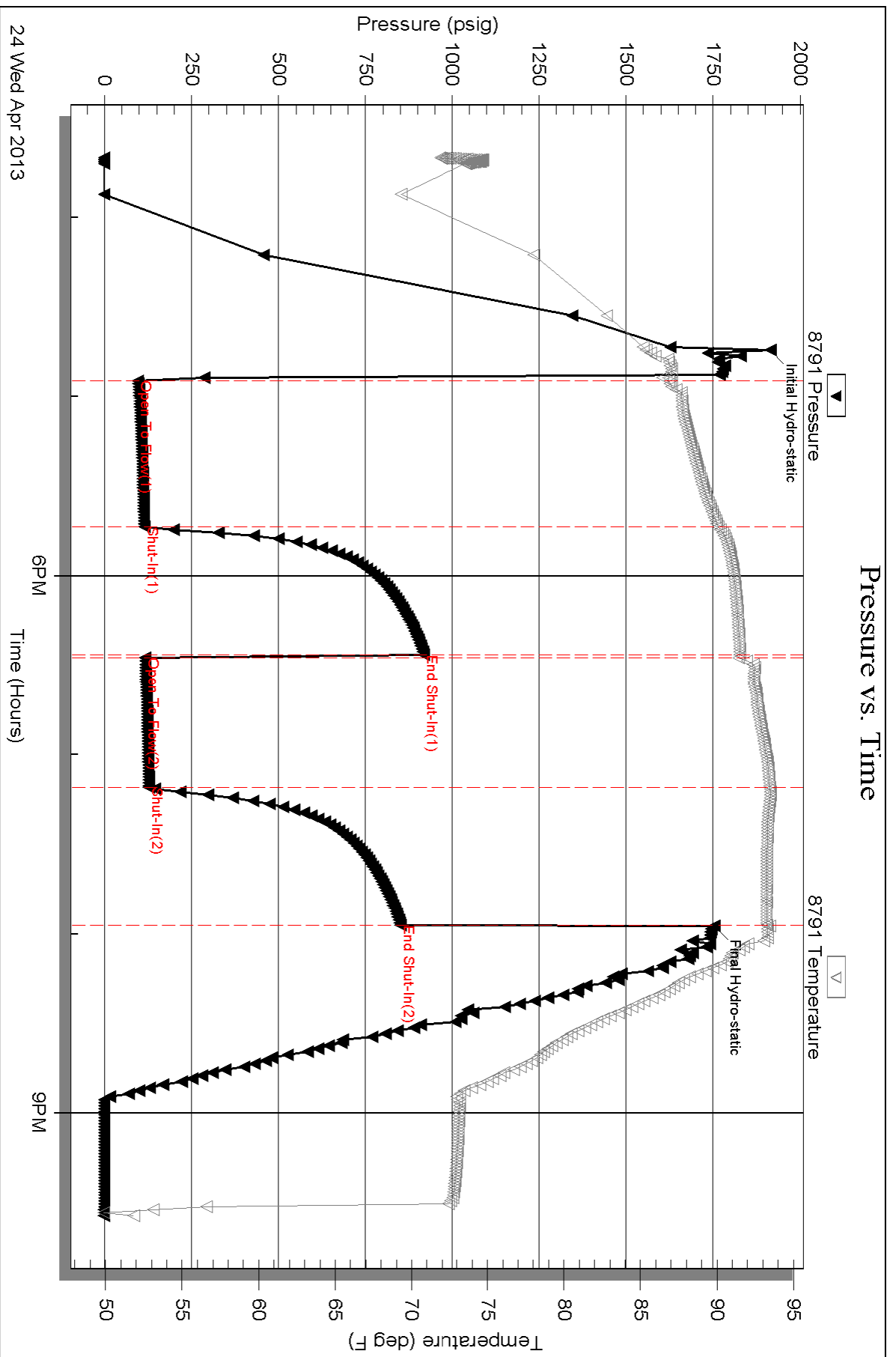
Num Gas Bombs: 0

Serial #:

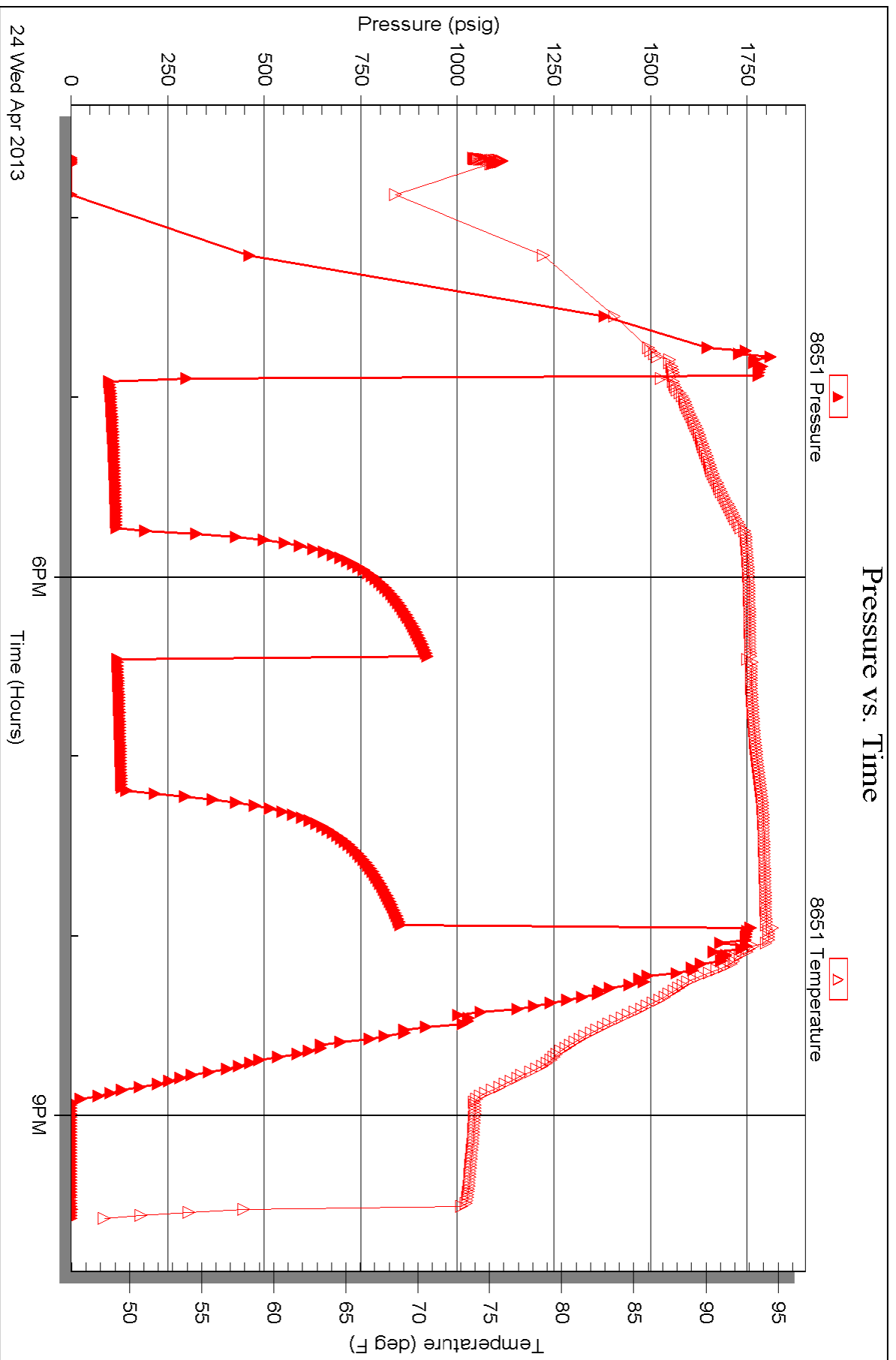
Laboratory Name:

Laboratory Location:

Recovery Comments:



Pressure vs. Time



24 Wed Apr 2013



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50659

4/10

Well Name & No. Barb Velma Lowry #1-34 Test No. 1 Date 04-22-2013
 Company Barb Oil Company Elevation 2293 KB 2283 GL
 Address 113 W main P.O. Box 428 Logan KS. 67646
 Co. Rep / Geo. Richard Bell Rig _____
 Location: Sec. 34 Twp. 3 Rge. 22 Co. Morton State Ks

Interval Tested 3563 3583 Zone Tested LKC-0
 Anchor Length _____ 20 Drill Pipe Run 3444 Mud Wt. 8.8
 Top Packer Depth _____ 3558 Drill Collars Run 119 Vis 55
 Bottom Packer Depth _____ 3563 Wt. Pipe Run -0- WL 6.4
 Total Depth _____ 3583 Chlorides 800 ppm System LCM 1.5#

Blow Description IF: Weak blow 1/4 in over 45 mins.
ESI: No blow back
FF: No blow for ~~2000~~ First 15 mins. weak surface ^{for} ~~2000~~ next 30 mins.
FSI: no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>68</u>	<u>HOCM</u>		<u>60</u>	<u>0</u>	<u>40</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 68 BHT 93 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic _____ <u>1792</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location _____ <u>21:20</u>
(B) First Initial Flow _____ <u>15</u>	<input type="checkbox"/> Jars _____	T-Started _____ <u>21:55</u>
(C) First Final Flow _____ <u>27</u>	<input type="checkbox"/> Safety Joint _____	T-Open _____ <u>23:32</u>
(D) Initial Shut-In _____ <u>1116</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled _____ <u>2:45</u>
(E) Second Initial Flow _____ <u>31</u>	<input type="checkbox"/> Hourly Standby _____	T-Out _____ <u>5:14</u>
(F) Second Final Flow _____ <u>40</u>	<input checked="" type="checkbox"/> Mileage <u>45 x 2 = 90 x 1.55</u> 139.50	Comments _____
(G) Final Shut-In _____ <u>1058</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic _____ <u>1762</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open _____ <u>45</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In _____ <u>45</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow _____ <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In _____ <u>45</u>	<input type="checkbox"/> Day Standby _____	Total <u>1289.50</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1289.50</u>	

Approved By _____ Our Representative Chad Hoge

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. 50660

Well Name & No. Velma Lowry #1-34 Test No. 2 Date 4-23-2013
 Company Burd oil company Elevation 3581 KB 3603 GL
 Address 113 W. Main P.O. Box 428 Logan KS. 67646
 Co. Rep / Geo. Richard Bell Rig WW#12
 Location: Sec. 34 Twp. 3S Rge. 22W Co. Norton State KS

Interval Tested 3581 3603 Zone Tested LKC - E, F
 Anchor Length 22 Drill Pipe Run 3447 Mud Wt. 8.8
 Top Packer Depth 3576 Drill Collars Run 119 Vis 55
 Bottom Packer Depth 3581 Wt. Pipe Run 0 WL 6.4
 Total Depth 3603 Chlorides 500 ppm System LCM 1.5#

Blow Description IF: set tool last mud pick-up fill hole reset tool. mud held weak surface blow over 30 min
ISF: No blow back

FF: No blow

FSF: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>174</u>	<u>mud with oil specs</u>		<u>1</u>		<u>99</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 174 BHT 88 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1907 Test 1150 T-On Location 11:00
 (B) First Initial Flow 95 Jars _____ T-Started 11:30
 (C) First Final Flow 96 Safety Joint _____ T-Open 13:21
 (D) Initial Shut-In 155 Circ Sub _____ T-Pulled 15:26
 (E) Second Initial Flow 96 Hourly Standby _____ T-Out 17:00
 (F) Second Final Flow 96 Mileage 45 x 2 = 90 x 1.55 = 139.50 Comments _____
 (G) Final Shut-In 112 Sampler _____
 (H) Final Hydrostatic 1707 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 30 Day Standby _____ Total 1289.50
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 30 Sub Total 1289.50

Approved By _____ Our Representative Chuck Hoge

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50661

Well Name & No. Velma Lowry #1-34 Test No. 3 Date 4-24-2013
 Company Bard oil company Elevation 3581 KB 3603 GL
 Address 113 W. Main P.O. Box 428 Logan KS. 67646
 Co. Rep / Geo. Richard Bel' Rig ww #12
 Location: Sec. 34 Twp. 3S Rge. 22W Co. Norton State KS

Interval Tested 3650 3681 Zone Tested LKL - J
 Anchor Length 31 Drill Pipe Run 3536 Mud Wt. 8.8
 Top Packer Depth 3655 Drill Collars Run 119 Vis 55
 Bottom Packer Depth 3650 Wt. Pipe Run 0 WL 6.4
 Total Depth 3681 Chlorides 800 ppm System LCM 1.5#

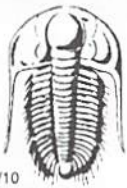
Blow Description IF: Weak blow after 20 min, surface over 45 min.
SSJ: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Horn</u>		<u>70</u>		<u>30</u>
<u>60</u>	<u>ocm</u>		<u>10</u>		<u>90</u>

Rec Total 70 BHT 90 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1878 Test 1150 T-On Location 4:20
 (B) First Initial Flow 54 Jars _____ T-Started 2:30
 (C) First Final Flow 56 Safety Joint _____ T-Open _____
 (D) Initial Shut-In 1051 Circ Sub _____ T-Pulled 7:05
 (E) Second Initial Flow 1782 Hourly Standby _____ T-Out _____
 (F) Second Final Flow _____ Mileage 45 x 2 = 90 x 1.55 139.50 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic _____ Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 45 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1289.50
 Final Flow _____ Accessibility _____ MP/DST Disc't _____
 Final Shut-In _____ Sub Total 1289.50

Approved By _____ Our Representative Chub Myer
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **50662**

4/10

Well Name & No. Velma Lowry #134 Test No. 4 Date 4-24-2013
 Company Beard oil company Elevation 3581 KB 3607 GL
 Address 113 W. Main P.O. Box 428 Logan KS-67646
 Co. Rep / Geo. Richard Bell Rig WW#10
 Location: Sec. 34 Twp. 35 Rge. 22w Co. Norton State Ks

Interval Tested 3678 3705 Zone Tested LLC-K
 Anchor Length 27 Drill Pipe Run 3569 Mud Wt. 8.9
 Top Packer Depth 3673 Drill Collars Run 119 Vis 48
 Bottom Packer Depth 3678 Wt. Pipe Run 0 WL 7.8
 Total Depth 3705 Chlorides 1400 ppm System LCM .5#

Blow Description IF: Weak blow built to 5 in. over 45 mins.

ISF: No blow back

FF: Weak blow built to 2 in. over 45 mins.

FSI: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>124</u>	<u>OCM</u>		<u>10</u>		<u>90</u>
<u>60</u>	<u>vsacma</u>		<u>2</u>	<u>10</u>	<u>88</u>
<u>60</u>	<u>vsosew</u>		<u>2</u>	<u>98</u>	

Rec Total 244 BHT 93 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1914 Test 1150 T-On Location 15:40
 (B) First Initial Flow 96 Jars T-Started 15:40
 (C) First Final Flow 114 Safety Joint T-Open 16:54
 (D) Initial Shut-In 917 Circ Sub T-Pulled 20:00
 (E) Second Initial Flow 117 Hourly Standby T-Out 21:34
 (F) Second Final Flow 127 Mileage 45 x 2 = 90 x 1.55 = 279 Comments _____
 (G) Final Shut-In 850 Sampler loaded tools @ 14:00 on 4/25
 (H) Final Hydrostatic 1754 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Initial Open 45 Extra Recorder Sub Total 0
 Initial Shut-In 45 Day Standby Total 1429
 Final Flow 45 Accessibility MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1429

Approved By _____ Our Representative Chuck Huffer

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