



DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating LLC**

7154 W. State St. #302
Boise, ID 83714

ATTN: Sid Tomlinson

Jensen #2

35-11s-19w Ellis,KS

Start Date: 2013.04.17 @ 04:10:21

End Date: 2013.04.17 @ 10:21:30

Job Ticket #: 52566 DST #: 1

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

Printed: 2013.04.22 @ 15:52:05



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Tomlinson Operating LLC

35-11s-19w Ellis,KS

7154 W. State St. #302
Boise, ID 83714

Jensen #2

Job Ticket: 52566

DST#: 1

ATTN: Sid Tomlinson

Test Start: 2013.04.17 @ 04:10:21

GENERAL INFORMATION:

Formation: **LKC A-B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:01:31

Time Test Ended: 10:21:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 42

Interval: 3414.00 ft (KB) To 3470.00 ft (KB) (TVD)

Reference Elevations: 2156.00 ft (KB)

Total Depth: 3470.00 ft (KB) (TVD)

2144.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

Serial #: 8369

Inside

Press @ Run Depth: 23.23 psig @ 3416.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.04.17

End Date:

2013.04.17

Last Calib.: 2013.04.17

Start Time: 04:10:21

End Time:

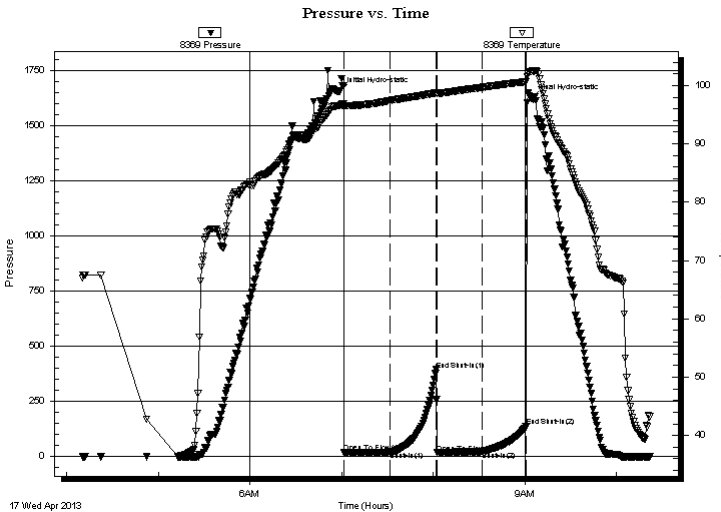
10:21:30

Time On Btm: 2013.04.17 @ 06:58:46

Time Off Btm: 2013.04.17 @ 09:04:15

TEST COMMENT: 30-IFP-w k bl thru-out 1/8" bl
30-ISIP-no bl
30-FFP-surface bl thru-out
30-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1653.21	96.57	Initial Hydro-static
3	18.52	96.41	Open To Flow (1)
33	22.22	97.44	Shut-In(1)
63	393.54	98.73	End Shut-In(1)
64	17.63	98.63	Open To Flow (2)
94	23.23	99.67	Shut-In(2)
122	135.81	100.64	End Shut-In(2)
126	1619.95	102.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	OCM 8%O92%M	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tomlinson Operating LLC

35-11s-19w Ellis,KS

7154 W. State St. #302
Boise, ID 83714

Jensen #2

Job Ticket: 52566

DST#: 1

ATTN: Sid Tomlinson

Test Start: 2013.04.17 @ 04:10:21

Tool Information

Drill Pipe:	Length: 3406.00 ft	Diameter: 3.80 inches	Volume: 47.78 bbl	Tool Weight: 2200.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 47.78 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3414.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	84.00 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			3387.00	
Shut In Tool	5.00			3392.00	
Hydraulic tool	5.00			3397.00	
Jars	5.00			3402.00	
Safety Joint	2.00			3404.00	
Packer	5.00			3409.00	28.00 Bottom Of Top Packer
Packer	5.00			3414.00	
Stubb	1.00			3415.00	
Perforations	1.00			3416.00	
Recorder	0.00	8369	Inside	3416.00	
Recorder	0.00	8700	Outside	3416.00	
Blank Spacing	31.00			3447.00	
Perforations	20.00			3467.00	
Bullnose	3.00			3470.00	56.00 Bottom Packers & Anchor

Total Tool Length: 84.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Tomlinson Operating LLC

35-11s-19w Ellis,KS

7154 W. State St. #302
Boise, ID 83714

Jensen #2

Job Ticket: 52566

DST#: 1

ATTN: Sid Tomlinson

Test Start: 2013.04.17 @ 04:10:21

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	OCM 8%O92%M	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0

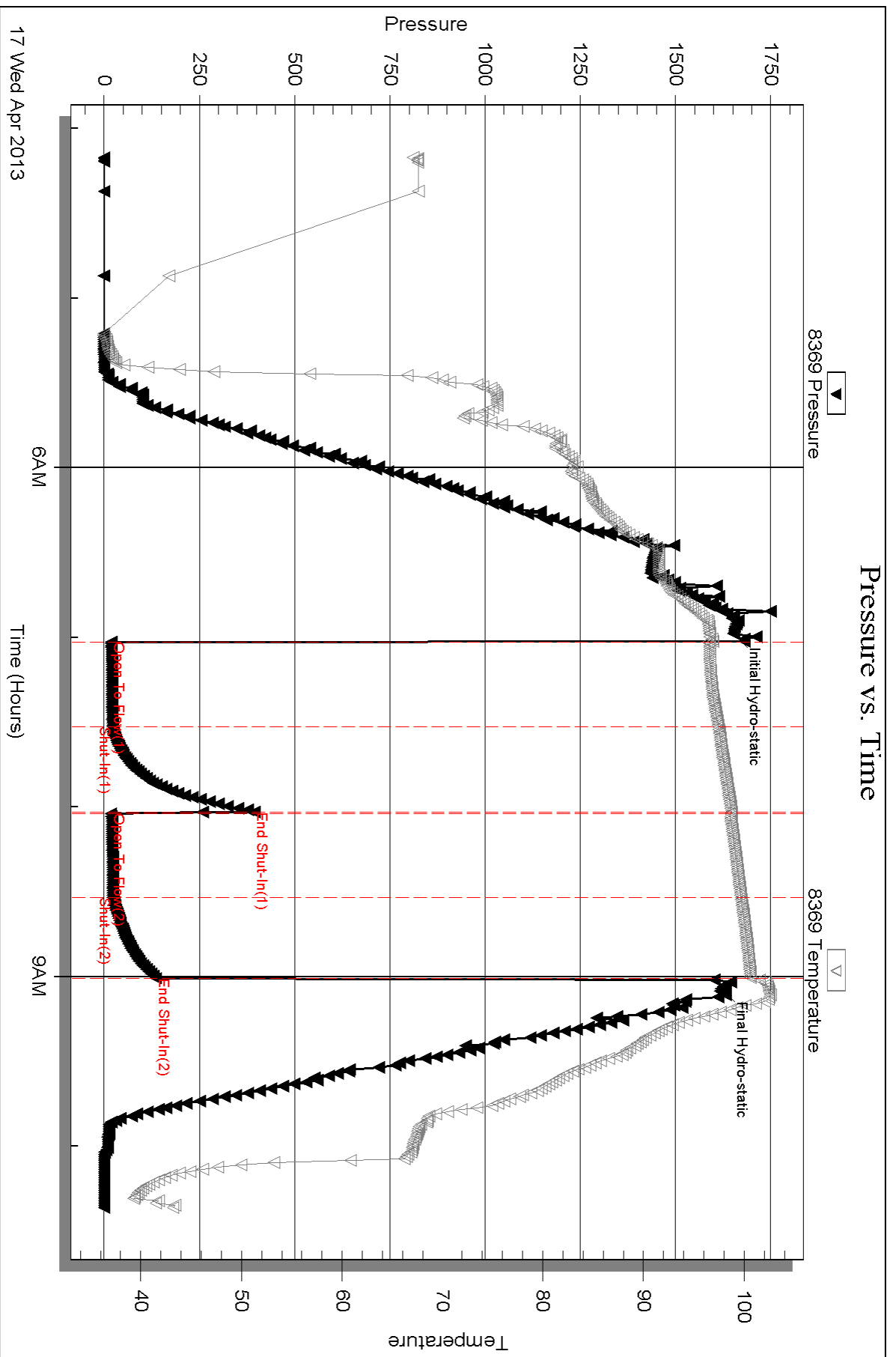
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

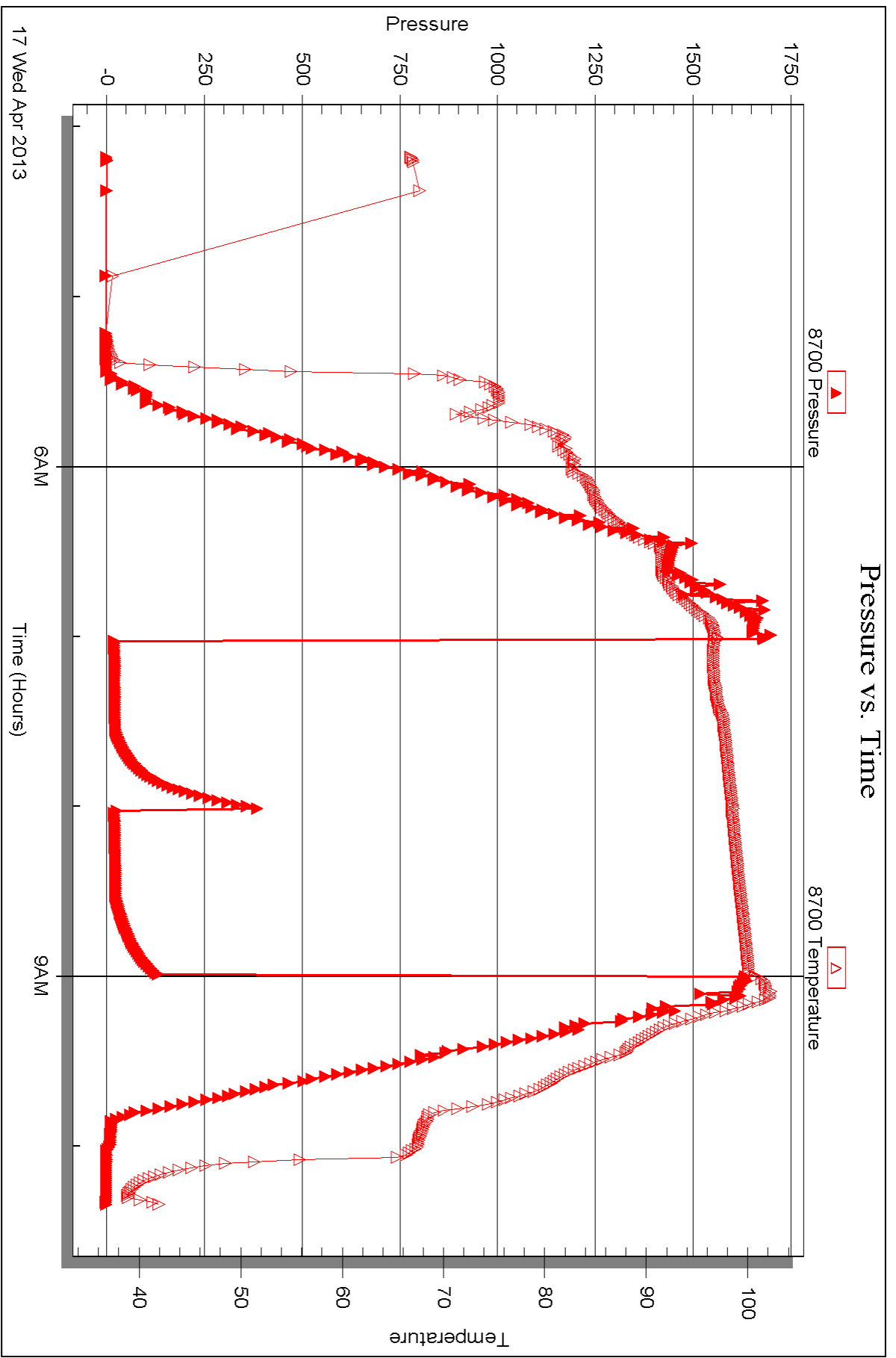


Serial #: 8700

Outside Tonkinson Operating LLC

Jensen #2

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 52566

Printed: 2013.04.22 @ 15:52:08



DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating LLC**

7154 W. State St. #302
Boise, ID 83714

ATTN: Sid Tomlinson

Jensen #2

35-11s-19w Ellis,KS

Start Date: 2013.04.18 @ 00:35:56

End Date: 2013.04.18 @ 09:18:21

Job Ticket #: 52567 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.04.22 @ 15:48:04



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Tomlinson Operating LLC
 7154 W. State St. #302
 Boise, ID 83714
 ATTN: Sid Tomlinson

35-11s-19w Ellis,KS
Jensen #2
 Job Ticket: 52567 **DST#: 2**
 Test Start: 2013.04.18 @ 00:35:56

GENERAL INFORMATION:

Formation: **LKC I,J,K**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 04:03:06 Tester: Ray Schwager
 Time Test Ended: 09:18:21 Unit No: 42
 Interval: **3572.00 ft (KB) To 3630.00 ft (KB) (TVD)** Reference Elevations: 2156.00 ft (KB)
 Total Depth: 3630.00 ft (KB) (TVD) 2144.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 12.00 ft

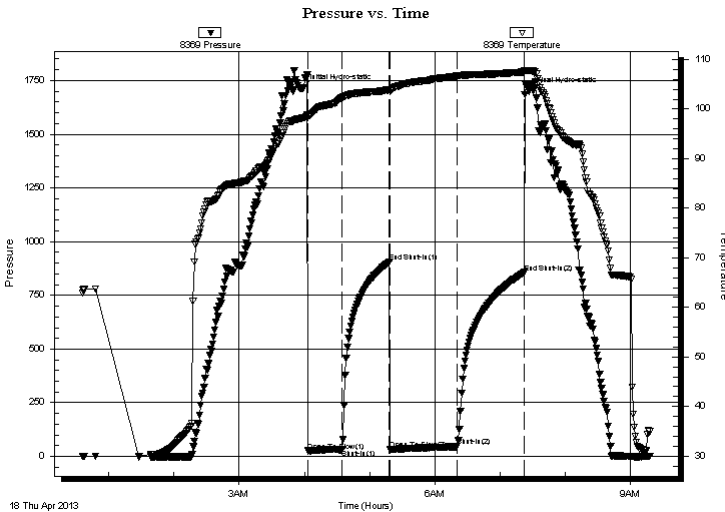
Serial #: 8369

Inside

Press @ RunDepth: 47.47 psig @ 3574.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.04.18 End Date: 2013.04.18 Last Calib.: 2013.04.18
 Start Time: 00:35:56 End Time: 09:18:21 Time On Btm: 2013.04.18 @ 03:58:36
 Time Off Btm: 2013.04.18 @ 07:26:35

TEST COMMENT: 30-IFP-w k bl thru-out 1/2" to 1" bl
 45-ISIP-no bl
 60-FFP-w k bl thru-out 1/2" bl
 60-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1714.51	98.20	Initial Hydro-static
5	25.94	98.36	Open To Flow (1)
37	32.15	102.32	Shut-In(1)
80	905.69	103.87	End Shut-In(1)
80	33.47	103.65	Open To Flow (2)
142	47.47	106.66	Shut-In(2)
204	855.89	107.48	End Shut-In(2)
208	1699.66	107.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
55.00	SOCMW 1%O30%M69%W	0.77

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tomlinson Operating LLC

35-11s-19w Ellis,KS

7154 W. State St. #302
Boise, ID 83714

Jensen #2

Job Ticket: 52567

DST#: 2

ATTN: Sid Tomlinson

Test Start: 2013.04.18 @ 00:35:56

Tool Information

Drill Pipe:	Length: 3564.00 ft	Diameter: 3.80 inches	Volume: 49.99 bbl	Tool Weight: 2200.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 49.99 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3572.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	86.00 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			3545.00	
Shut In Tool	5.00			3550.00	
Hydraulic tool	5.00			3555.00	
Jars	5.00			3560.00	
Safety Joint	2.00			3562.00	
Packer	5.00			3567.00	28.00 Bottom Of Top Packer
Packer	5.00			3572.00	
Stubb	1.00			3573.00	
Perforations	1.00			3574.00	
Recorder	0.00	8369	Inside	3574.00	
Recorder	0.00	8700	Outside	3574.00	
Blank Spacing	33.00			3607.00	
Perforations	20.00			3627.00	
Bullnose	3.00			3630.00	58.00 Bottom Packers & Anchor

Total Tool Length: 86.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Tomlinson Operating LLC

35-11s-19w Ellis,KS

7154 W. State St. #302
Boise, ID 83714

Jensen #2

Job Ticket: 52567

DST#: 2

ATTN: Sid Tomlinson

Test Start: 2013.04.18 @ 00:35:56

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:

70000 ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
55.00	SOCMW 1%O30%M69%W	0.772

Total Length: 55.00 ft Total Volume: 0.772 bbl

Num Fluid Samples: 0

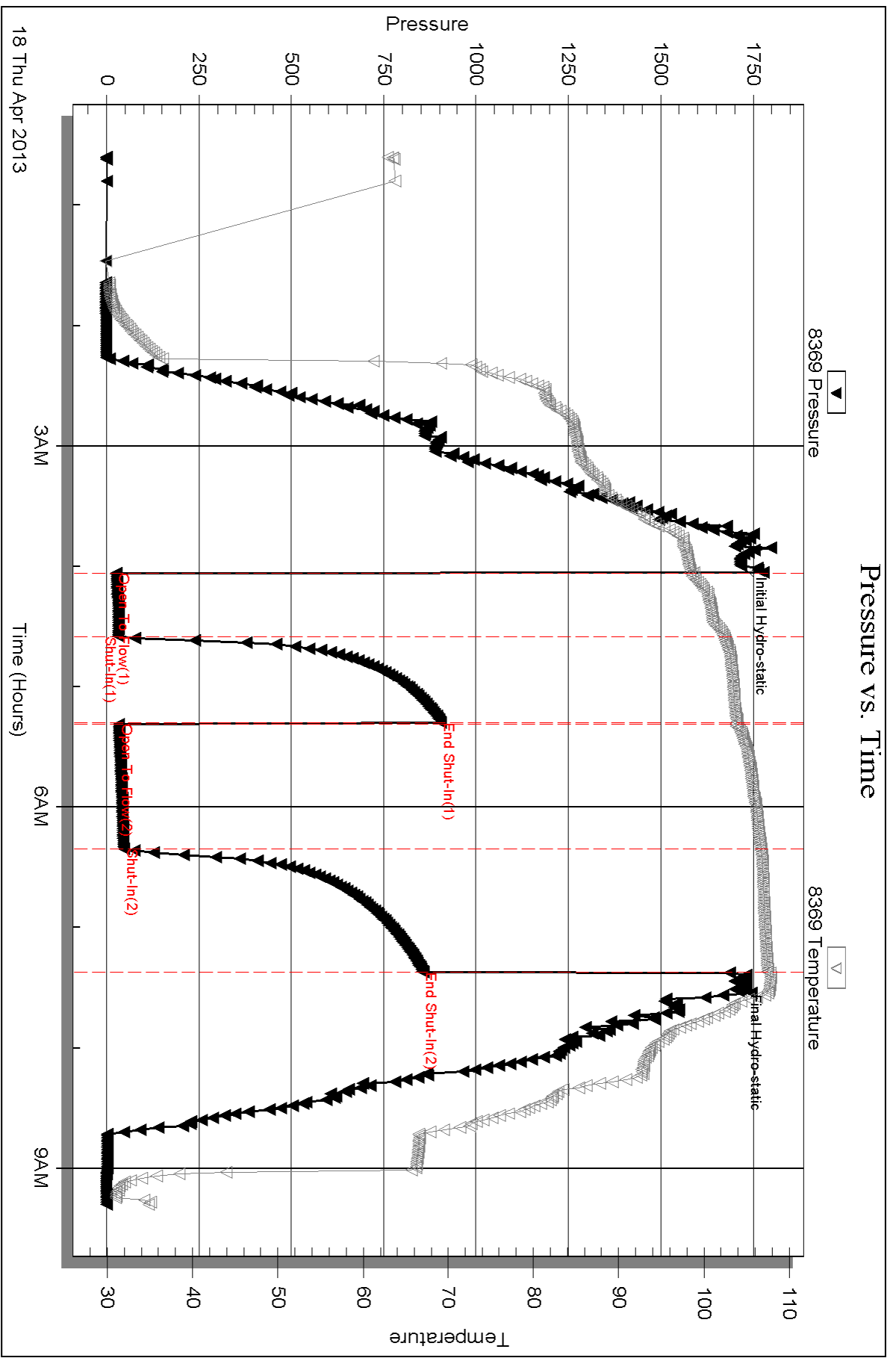
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .15@50F

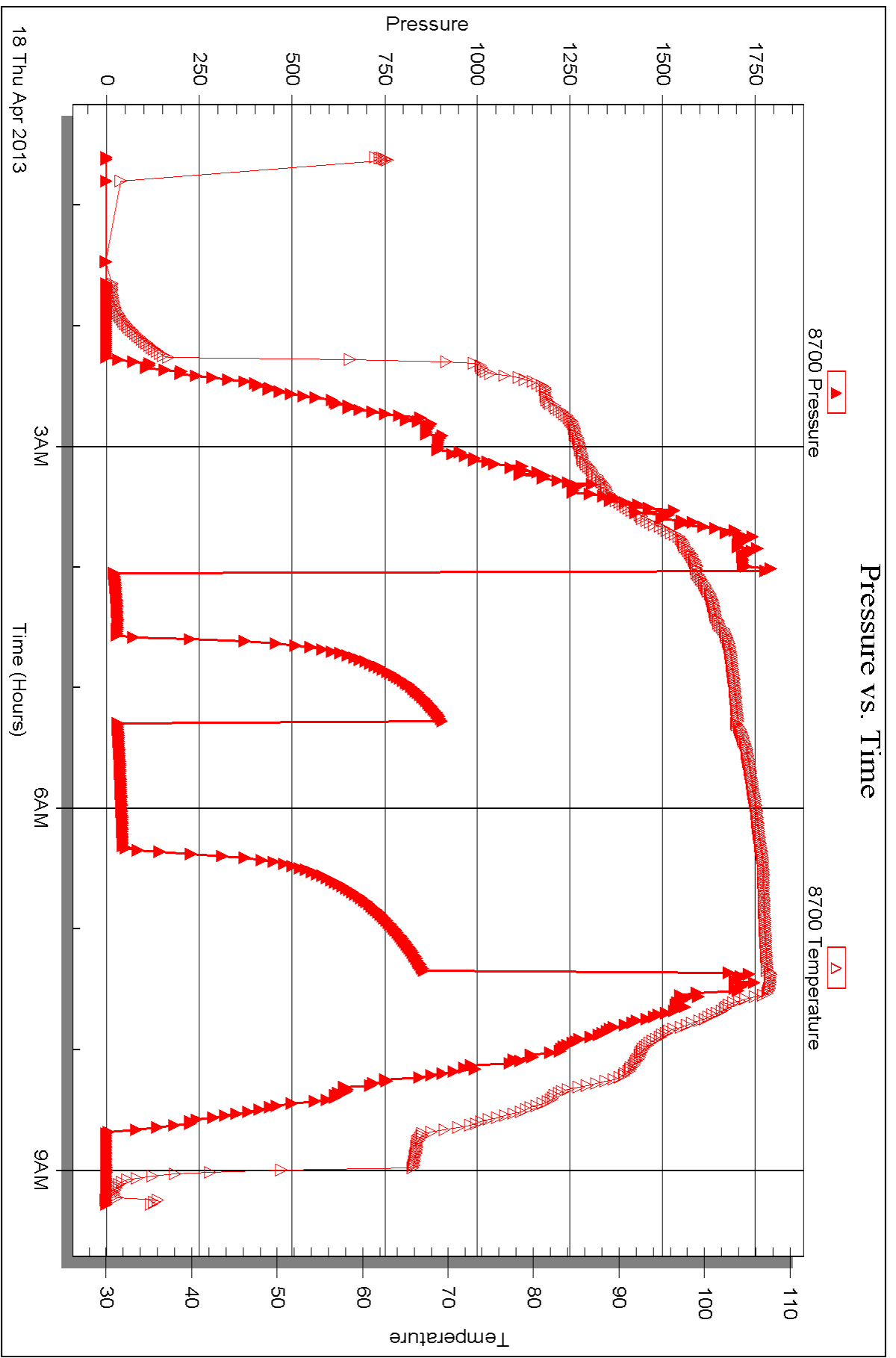


Serial #: 8700

Outside Tonkinson Operating LLC

Jensen #2

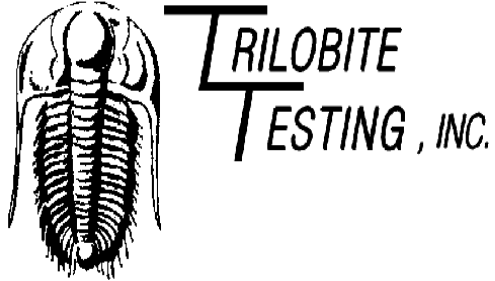
DST Test Number: 2



Triobite Testing, Inc

Ref. No: 52567

Printed: 2013.04.22 @ 15:48:08



DRILL STEM TEST REPORT

Prepared For: **Tomlinson Operating LLC**

7154 W. State St. #302
Boise, ID 83714

ATTN: Sid Tomlinson

Jensen #2

35-11s-19w Ellis,KS

Start Date: 2013.04.18 @ 18:55:49

End Date: 2013.04.19 @ 03:34:29

Job Ticket #: 52568 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.04.22 @ 15:43:18



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Tomlinson Operating LLC
 7154 W. State St. #302
 Boise, ID 83714
 ATTN: Sid Tomlinson

35-11s-19w Ellis,KS

Jensen #2

Job Ticket: 52568

DST#: 3

Test Start: 2013.04.18 @ 18:55:49

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 21:32:44
 Tester: Ray Schwager
 Time Test Ended: 03:34:29
 Unit No: 42
 Interval: **3652.00 ft (KB) To 3707.00 ft (KB) (TVD)**
 Reference Elevations: 2156.00 ft (KB)
 Total Depth: 3707.00 ft (KB) (TVD)
 2144.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 12.00 ft

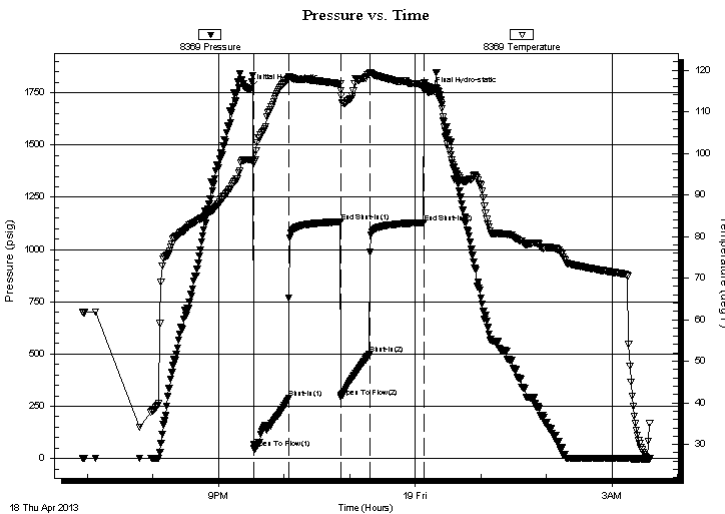
Serial #: 8369

Inside

Press @ Run Depth: 500.19 psig @ 3654.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.04.18 End Date: 2013.04.19 Last Calib.: 2013.04.19
 Start Time: 18:55:49 End Time: 03:34:29 Time On Btm: 2013.04.18 @ 21:28:29
 Time Off Btm: 2013.04.19 @ 00:12:13

TEST COMMENT: 30-IFP-w k to strg in 4 min
 45-ISIP-no bl
 30-FFP-w k to strg in 8 min
 45-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1768.95	98.41	Initial Hydro-static
5	48.23	98.04	Open To Flow (1)
36	287.13	117.99	Shut-In(1)
84	1132.20	116.67	End Shut-In(1)
84	294.03	115.07	Open To Flow (2)
110	500.19	119.20	Shut-In(2)
160	1128.13	116.62	End Shut-In(2)
164	1755.57	115.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
495.00	MGO 20%G10%M70%O	6.94
435.00	HO&GCMW 20%G10%M30%O40%W	6.10
124.00	OCW 3%O97%W	1.74

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tomlinson Operating LLC

35-11s-19w Ellis,KS

7154 W. State St. #302
Boise, ID 83714

Jensen #2

Job Ticket: 52568

DST#: 3

ATTN: Sid Tomlinson

Test Start: 2013.04.18 @ 18:55:49

Tool Information

Drill Pipe:	Length: 3655.00 ft	Diameter: 3.80 inches	Volume: 51.27 bbl	Tool Weight: 2200.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 51.27 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3652.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	83.00 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			3625.00	
Shut In Tool	5.00			3630.00	
Hydraulic tool	5.00			3635.00	
Jars	5.00			3640.00	
Safety Joint	2.00			3642.00	
Packer	5.00			3647.00	28.00 Bottom Of Top Packer
Packer	5.00			3652.00	
Stubb	1.00			3653.00	
Perforations	1.00			3654.00	
Recorder	0.00	8369	Inside	3654.00	
Recorder	0.00	8700	Outside	3654.00	
Blank Spacing	32.00			3686.00	
Perforations	18.00			3704.00	
Bullnose	3.00			3707.00	55.00 Bottom Packers & Anchor

Total Tool Length: 83.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Tomlinson Operating LLC

35-11s-19w Ellis,KS

7154 W. State St. #302
Boise, ID 83714

Jensen #2

Job Ticket: 52568

DST#: 3

ATTN: Sid Tomlinson

Test Start: 2013.04.18 @ 18:55:49

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:

30000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
495.00	MGO 20%G10%M70%O	6.944
435.00	HO&GCMW 20%G10%M30%O40%W	6.102
124.00	OCW 3%O97%W	1.739

Total Length: 1054.00 ft Total Volume: 14.785 bbl

Num Fluid Samples: 0

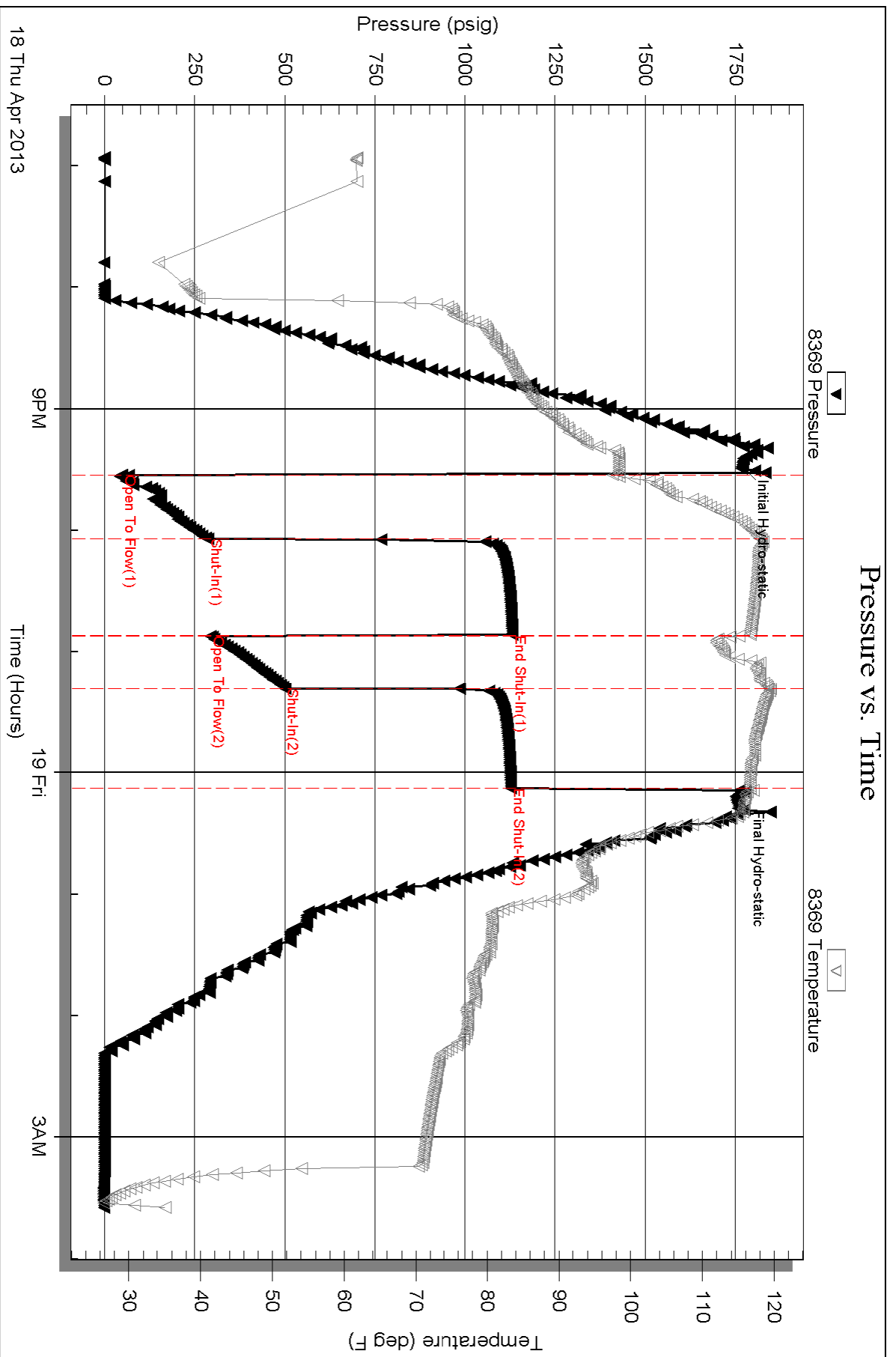
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .24@70F



Serial #: 8700

Outside Tonkinson Operating LLC

Jensen #2

DST Test Number: 3

