



DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd.
Hays KS 67601

ATTN: Tom Denning / Herb D

Bieler #1

9-15s-19w Eliis,KS

Start Date: 2013.07.17 @ 02:21:01

End Date: 2013.07.17 @ 08:43:01

Job Ticket #: 53996 DST #: 1

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

Printed: 2013.07.22 @ 09:56:51

TDI Inc
9-15s-19w Eliis,KS
Bieler #1
DST # 1
"C"
2013.07.17



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc
 1310 Bison Rd.
 Hays KS 67601
 ATTN: Tom Denning / Herb D

9-15s-19w Eliis,KS
Bieler #1
 Job Ticket: 53996 **DST#: 1**
 Test Start: 2013.07.17 @ 02:21:01

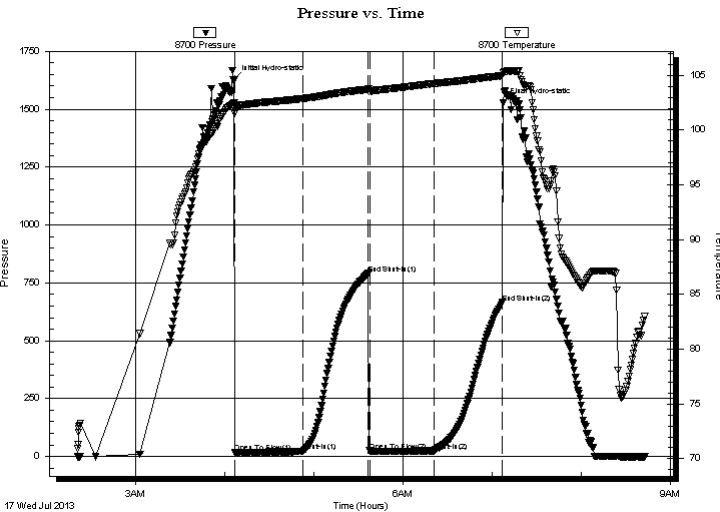
GENERAL INFORMATION:

Formation: "C"
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:06:46
 Time Test Ended: 08:43:01
 Interval: **3314.00 ft (KB) To 3365.00 ft (KB) (TVD)**
 Total Depth: 3365.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Tate Lang
 Unit No: 70
 Reference Elevations: 2034.00 ft (KB)
 2023.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8700 Outside

Press @ Run Depth: 24.23 psig @ 3318.00 ft (KB)
 Start Date: 2013.07.17 End Date: 2013.07.17
 Start Time: 02:21:06 End Time: 08:43:00
 Capacity: 8000.00 psig
 Last Calib.: 2013.07.17
 Time On Btm: 2013.07.17 @ 04:06:31
 Time Off Btm: 2013.07.17 @ 07:07:31

TEST COMMENT: Weak surface blow built to 2 in.
 Dead no blow back
 Weak surface blow built to 1 in.
 Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1625.61	102.46	Initial Hydro-static
1	16.17	101.49	Open To Flow (1)
46	21.44	102.88	Shut-In(1)
91	789.92	103.73	End Shut-In(1)
91	23.95	103.54	Open To Flow (2)
135	24.23	104.24	Shut-In(2)
181	664.09	104.97	End Shut-In(2)
181	1526.63	105.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	2%O 98%M (Skim of oil on top of tool)	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc
1310 Bison Rd.
Hays KS 67601
ATTN: Tom Denning / Herb D

9-15s-19w Eliis,KS
Bieler #1
Job Ticket: 53996 **DST#: 1**
Test Start: 2013.07.17 @ 02:21:01

Tool Information

Drill Pipe:	Length: 3310.00 ft	Diameter: 3.80 inches	Volume: 46.43 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:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	45000.00 lb
			<u>Total Volume: 46.43 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3314.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	51.00 ft				
Tool Length:	72.00 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			3294.00	
Shut In Tool	5.00			3299.00	
Hydraulic tool	5.00			3304.00	
Packer	5.00			3309.00	21.00 Bottom Of Top Packer
Packer	5.00			3314.00	
Stubb	1.00			3315.00	
Perforations	3.00			3318.00	
Recorder	0.00	8369	Inside	3318.00	
Recorder	0.00	8700	Outside	3318.00	
Change Over Sub	1.00			3319.00	
Drill Pipe	32.00			3351.00	
Change Over Sub	1.00			3352.00	
Perforations	10.00			3362.00	
Bullnose	3.00			3365.00	51.00 Bottom Packers & Anchor

Total Tool Length: 72.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc

9-15s-19w Eliis,KS

1310 Bison Rd.
Hays KS 67601

Bieler #1

Job Ticket: 53996

DST#: 1

ATTN: Tom Denning / Herb D

Test Start: 2013.07.17 @ 02:21:01

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: 60.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
30.00	2%O 98%M (Skim of oil on top of tool)	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbf

Num Fluid Samples: 0

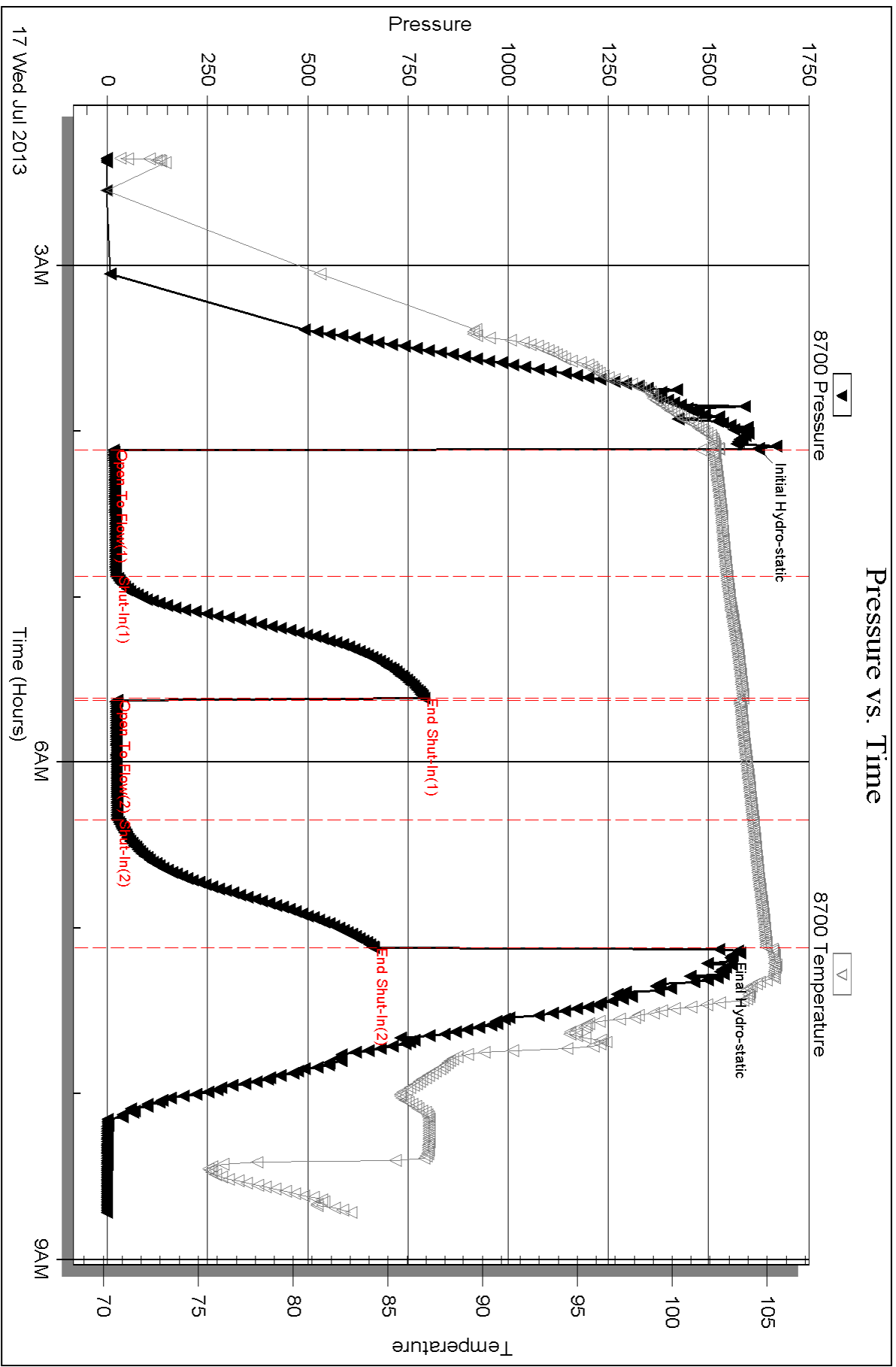
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



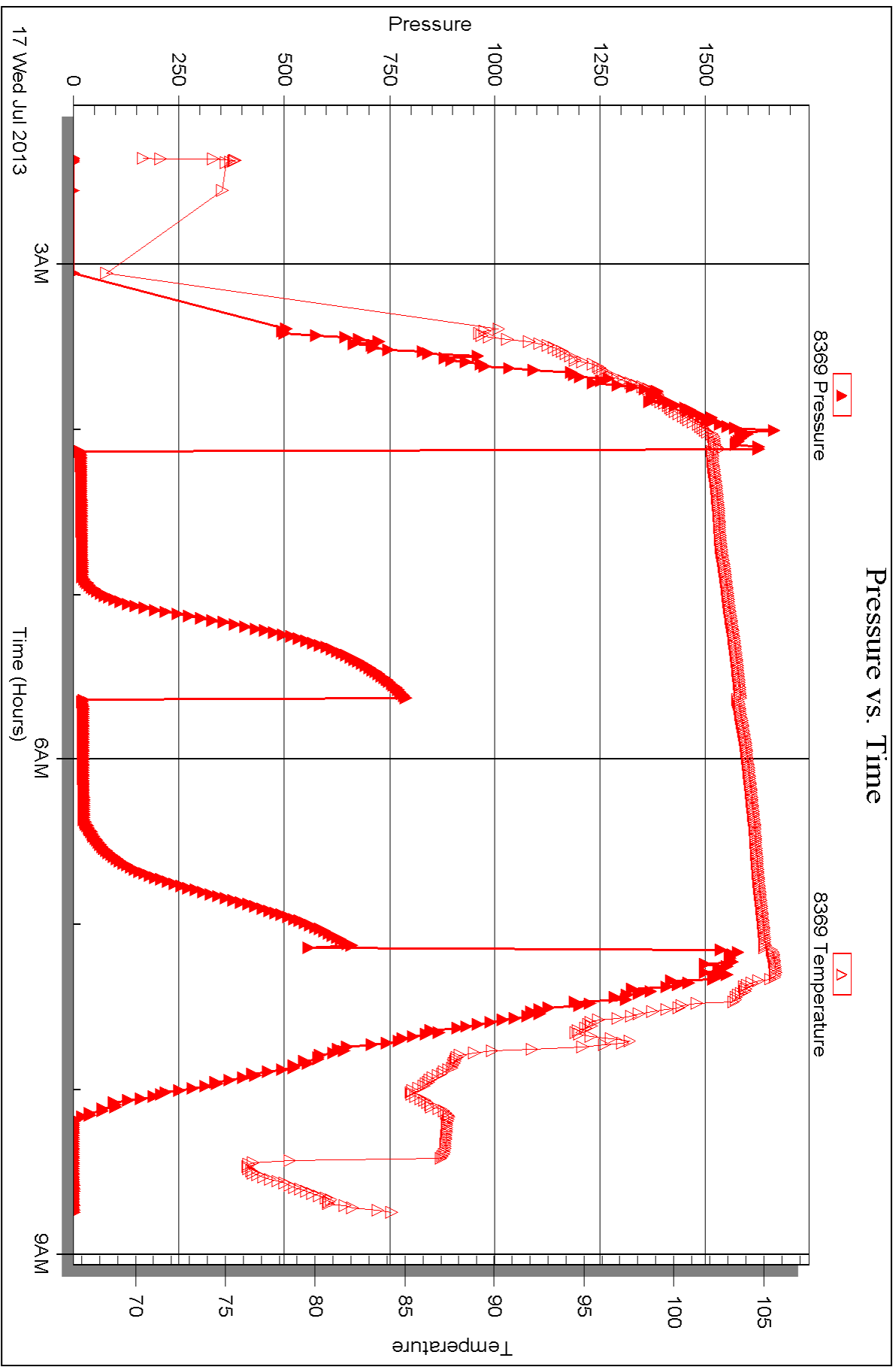
Serial #: 8369

Inside

TDI Inc

Bieler #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd.
Hays KS 67601

ATTN: Tom Denning / Herb D

Bieler #1

9-15s-19w Eliis,KS

Start Date: 2013.07.18 @ 02:30:39

End Date: 2013.07.18 @ 09:57:24

Job Ticket #: 53997 DST #: 2

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

Printed: 2013.07.22 @ 09:56:12

TDI Inc
9-15s-19w Eliis,KS
Bieler #1
DST # 2
I-J
2013.07.18



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc
1310 Bison Rd.
Hays KS 67601
ATTN: Tom Denning / Herb D

9-15s-19w Eliis,KS
Bieler #1
Job Ticket: 53997 **DST#: 2**
Test Start: 2013.07.18 @ 02:30:39

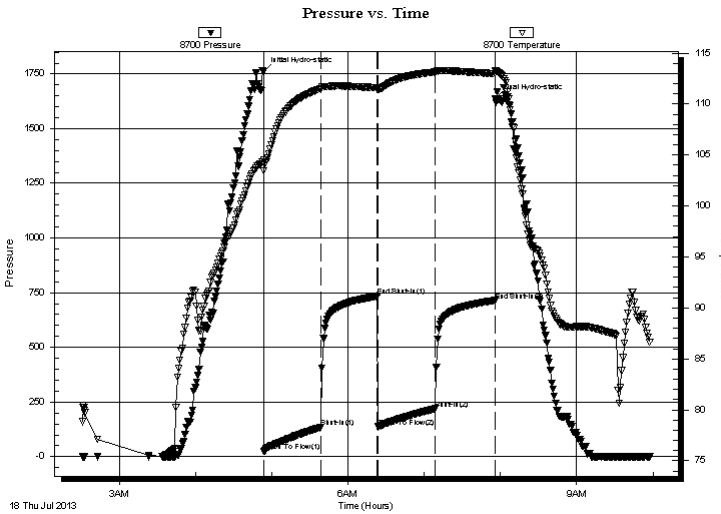
GENERAL INFORMATION:

Formation: **I-J**
Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole (Reset)**
Time Tool Opened: **04:53:39** Tester: **Tate Lang**
Time Test Ended: **09:57:24** Unit No: **70**
Interval: 3478.00 ft (KB) To 3530.00 ft (KB) (TVD) Reference Elevations: **2034.00 ft (KB)**
Total Depth: **3530.00 ft (KB) (TVD)** **2023.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Good** KB to GR/CF: **11.00 ft**

Serial #: 8700 **Outside**
Press @ RunDepth: **219.08 psig @ 3483.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2013.07.18** End Date: **2013.07.18** Last Calib.: **2013.07.18**
Start Time: **02:30:44** End Time: **09:57:23** Time On Btm: **2013.07.18 @ 04:53:24**
Time Off Btm: **2013.07.18 @ 07:55:54**

TEST COMMENT: B.O.B. In 14 mins.
Dead no blow back
B.O.B. In 24 mins
Dead no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.58	104.47	Initial Hydro-static
1	24.31	103.45	Open To Flow (1)
45	133.87	111.55	Shut-In(1)
90	733.03	111.62	End Shut-In(1)
90	136.13	111.42	Open To Flow (2)
136	219.08	113.15	Shut-In(2)
182	713.84	112.97	End Shut-In(2)
183	1636.43	113.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	2%M 98%W	2.52
120.00	15%M 85%W	1.68
115.00	50%M 50%W	1.61
5.00	100% Free Oil	0.07
0.00	60 GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc
1310 Bison Rd.
Hays KS 67601
ATTN: Tom Denning / Herb D

9-15s-19w Eliis,KS
Bieler #1
Job Ticket: 53997 **DST#: 2**
Test Start: 2013.07.18 @ 02:30:39

Tool Information

Drill Pipe:	Length: 3468.00 ft	Diameter: 3.80 inches	Volume: 48.65 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:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 48.65 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	41000.00 lb
Depth to Top Packer:	3478.00 ft			Final	43000.00 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	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3458.00	
Shut In Tool	5.00			3463.00	
Hydraulic tool	5.00			3468.00	
Packer	5.00			3473.00	21.00 Bottom Of Top Packer
Packer	5.00			3478.00	
Stubb	1.00			3479.00	
Perforations	4.00			3483.00	
Recorder	0.00	8369	Inside	3483.00	
Recorder	0.00	8700	Outside	3483.00	
Change Over Sub	1.00			3484.00	
Drill Pipe	32.00			3516.00	
Change Over Sub	1.00			3517.00	
Perforations	10.00			3527.00	
Bullnose	3.00			3530.00	52.00 Bottom Packers & Anchor

Total Tool Length: 73.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc

9-15s-19w Eliis,KS

1310 Bison Rd.
Hays KS 67601

Bieler #1

Job Ticket: 53997

DST#: 2

ATTN: Tom Denning / Herb D

Test Start: 2013.07.18 @ 02:30:39

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	2%M 98%W	2.525
120.00	15%M 85%W	1.683
115.00	50%M 50%W	1.613
5.00	100% Free Oil	0.070
0.00	60 GIP	0.000

Total Length: 420.00 ft Total Volume: 5.891 bbl

Num Fluid Samples: 0

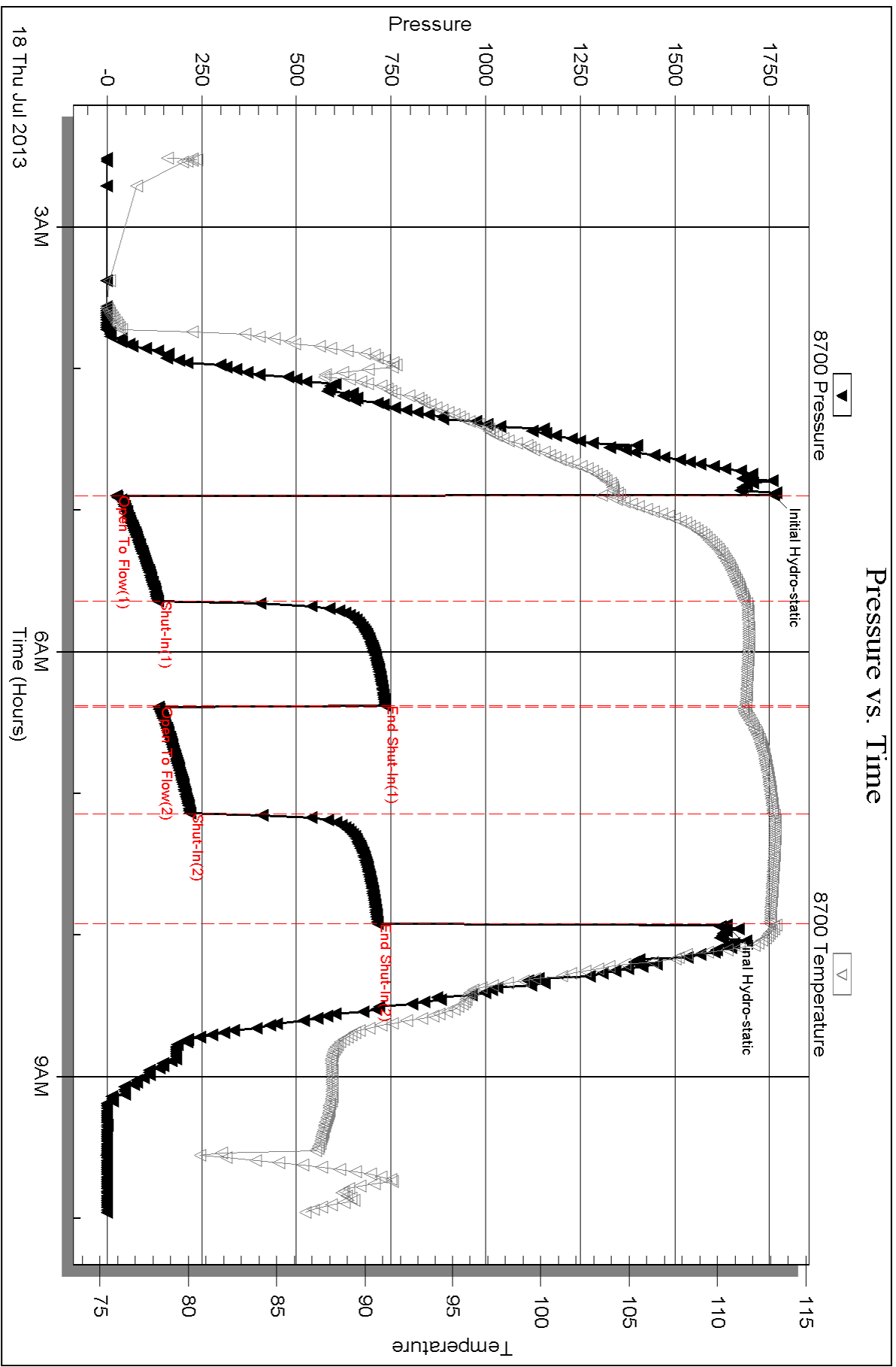
Num Gas Bombs: 0

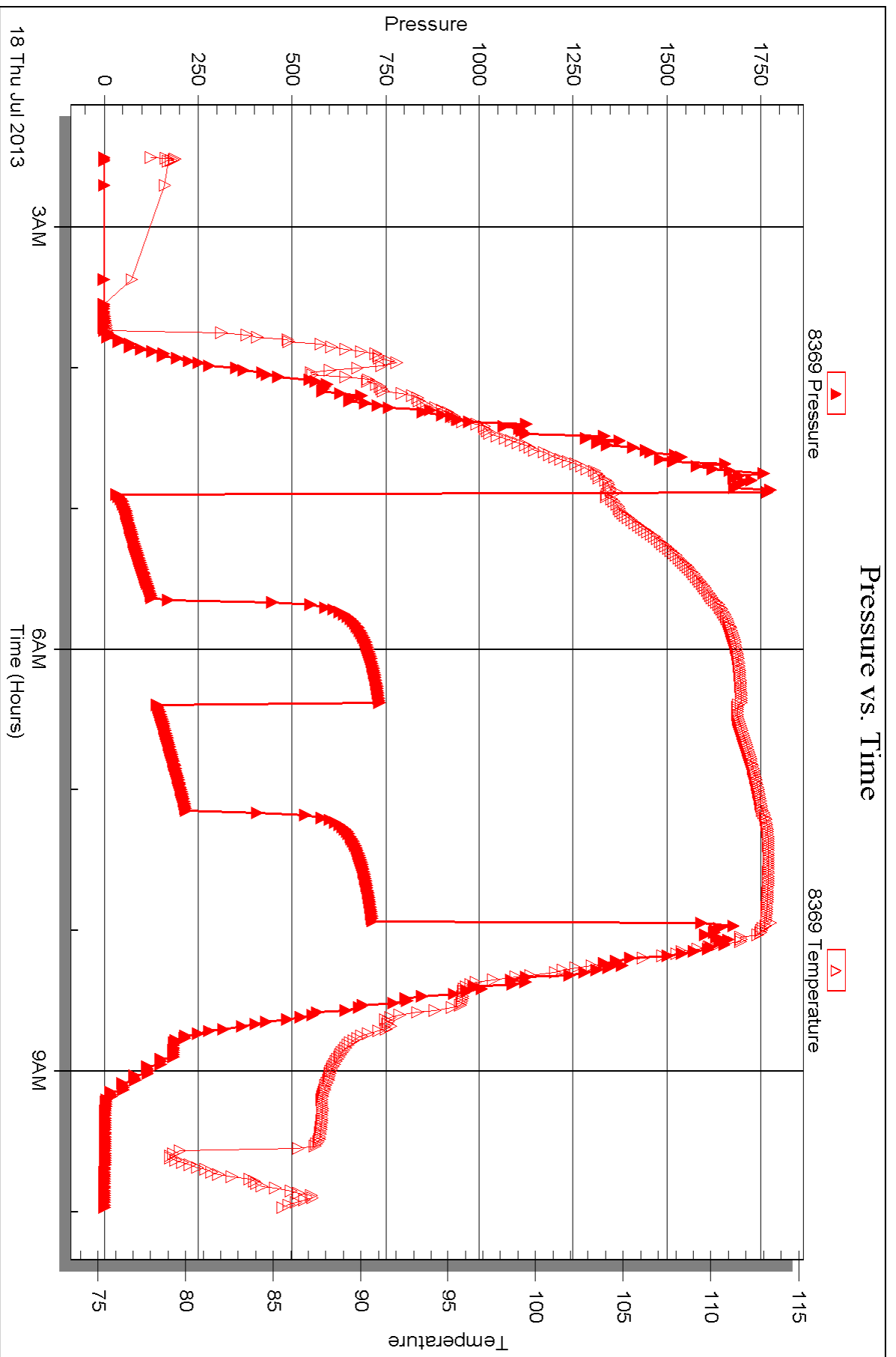
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .066 @ 83 F 130,000







DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd.
Hays KS 67601

ATTN: Tom Denning / Herb D

Bieler #1

9-15s-19w Eliis,KS

Start Date: 2013.07.19 @ 11:26:12

End Date: 2013.07.19 @ 17:30:57

Job Ticket #: 53998 DST #: 3

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

Printed: 2013.07.22 @ 09:54:36

TDI Inc
9-15s-19w Eliis,KS
Bieler #1
DST # 3
G
2013.07.19



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc
1310 Bison Rd.
Hays KS 67601
ATTN: Tom Denning / Herb D

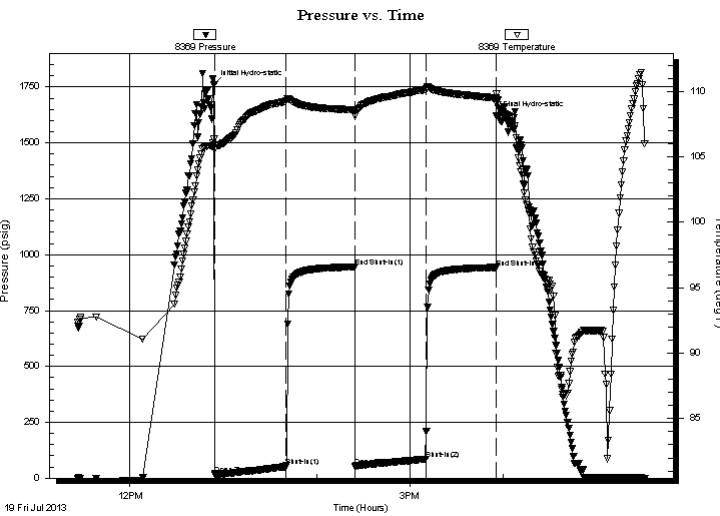
9-15s-19w Eliis,KS
Bieler #1
Job Ticket: 53998 **DST#: 3**
Test Start: 2013.07.19 @ 11:26:12

GENERAL INFORMATION:

Formation: **G**
Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Straddle (Reset)**
Time Tool Opened: 12:54:12 Tester: **Tate Lang**
Time Test Ended: 17:30:57 Unit No: **70**
Interval: 3410.00 ft (KB) To 3430.00 ft (KB) (TVD) Reference Elevations: **2034.00 ft (KB)**
Total Depth: **3750.00 ft (KB) (TVD)** **2023.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Good** KB to GR/CF: **11.00 ft**

Serial #: 8369 **Inside**
Press @ Run Depth: **85.68 psig @ 3411.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2013.07.19** End Date: **2013.07.19** Last Calib.: **2013.07.19**
Start Time: **11:26:17** End Time: **17:30:56** Time On Btm: **2013.07.19 @ 12:53:57**
Time Off Btm: **2013.07.19 @ 15:55:27**

TEST COMMENT: Fair surface blow built to 7 in.
Dead no blow back.
Fair surface blow built to 4 in.
Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1762.56	106.37	Initial Hydro-static
1	16.99	105.56	Open To Flow (1)
47	51.10	109.25	Shut-In(1)
91	944.71	108.56	End Shut-In(1)
91	54.39	108.11	Open To Flow (2)
136	85.68	110.13	Shut-In(2)
182	942.52	109.48	End Shut-In(2)
182	1623.39	109.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	2%M 98%W	0.84
80.00	20%M 80%W	1.12

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc
1310 Bison Rd.
Hays KS 67601
ATTN: Tom Denning / Herb D

9-15s-19w Eliis,KS
Bieler #1
Job Ticket: 53998 **DST#: 3**
Test Start: 2013.07.19 @ 11:26:12

Tool Information

Drill Pipe:	Length: 3411.00 ft	Diameter: 3.80 inches	Volume: 47.85 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:	30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 47.85 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3410.00 ft			Final	52000.00 lb
Depth to Bottom Packer:	3427.00 ft				
Interval between Packers:	17.00 ft				
Tool Length:	361.00 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			3390.00	
Shut In Tool	5.00			3395.00	
Hydraulic tool	5.00			3400.00	
Packer	5.00			3405.00	21.00 Bottom Of Top Packer
Packer	5.00			3410.00	
Stubb	1.00			3411.00	
Recorder	0.00	8369	Inside	3411.00	
Recorder	0.00	8700	Outside	3411.00	
Perforations	15.00			3426.00	
Blank Off Sub	1.00			3427.00	17.00 Tool Interval
Packer	3.00			3430.00	
Stubb	1.00			3431.00	
Perforations	4.00			3435.00	
Change Over Sub	1.00			3436.00	
Drill Pipe	310.00			3746.00	
Change Over Sub	1.00			3747.00	
Recorder	0.00	8374	Below	3747.00	
Bullnose	3.00			3750.00	323.00 Bottom Packers & Anchor

Total Tool Length: 361.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc

9-15s-19w Eliis,KS

1310 Bison Rd.
Hays KS 67601

Bieler #1

Job Ticket: 53998

DST#: 3

ATTN: Tom Denning / Herb D

Test Start: 2013.07.19 @ 11:26:12

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	2%M 98%W	0.842
80.00	20%M 80%W	1.122

Total Length: 140.00 ft Total Volume: 1.964 bbl

Num Fluid Samples: 0

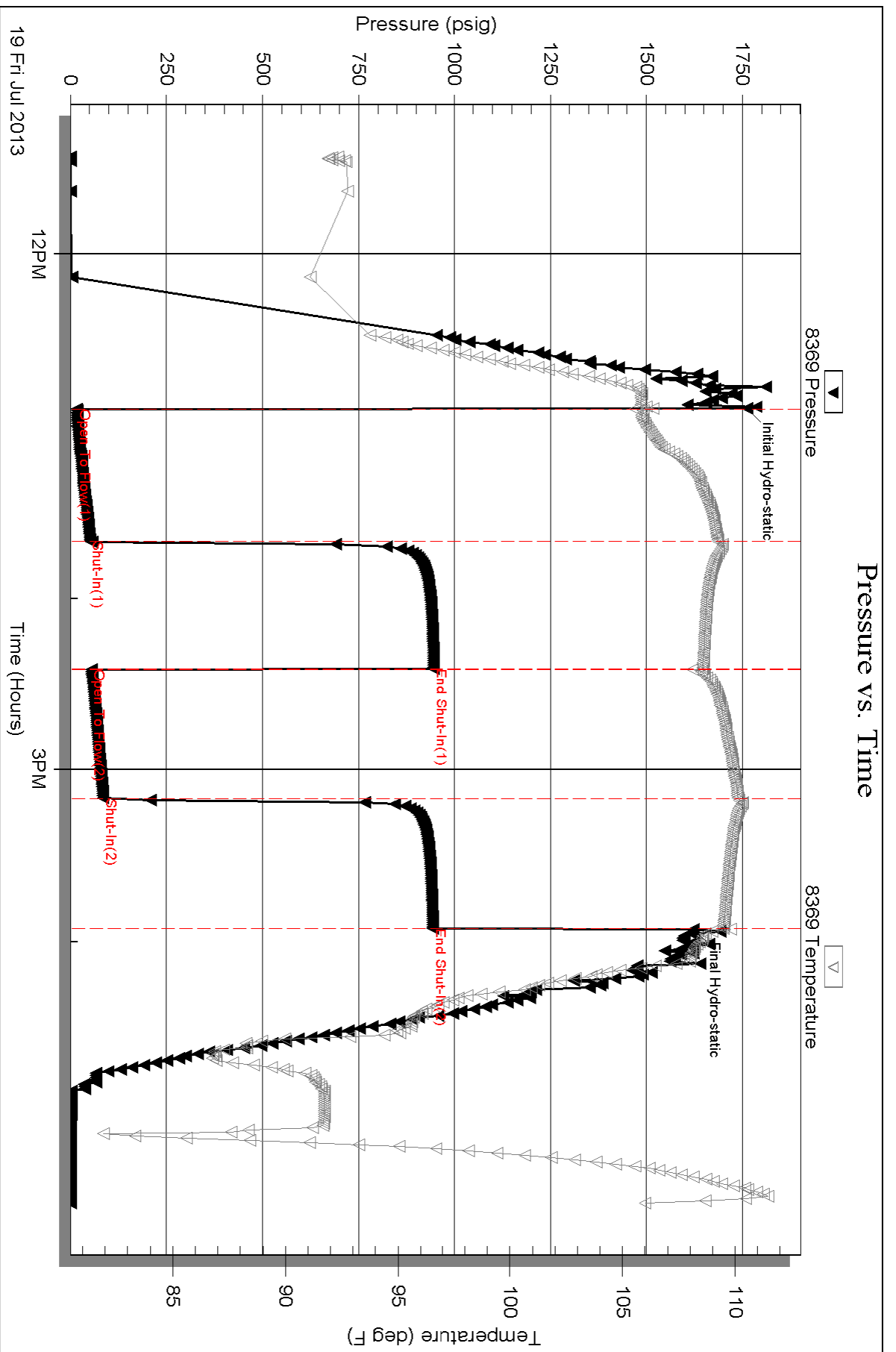
Num Gas Bombs: 0

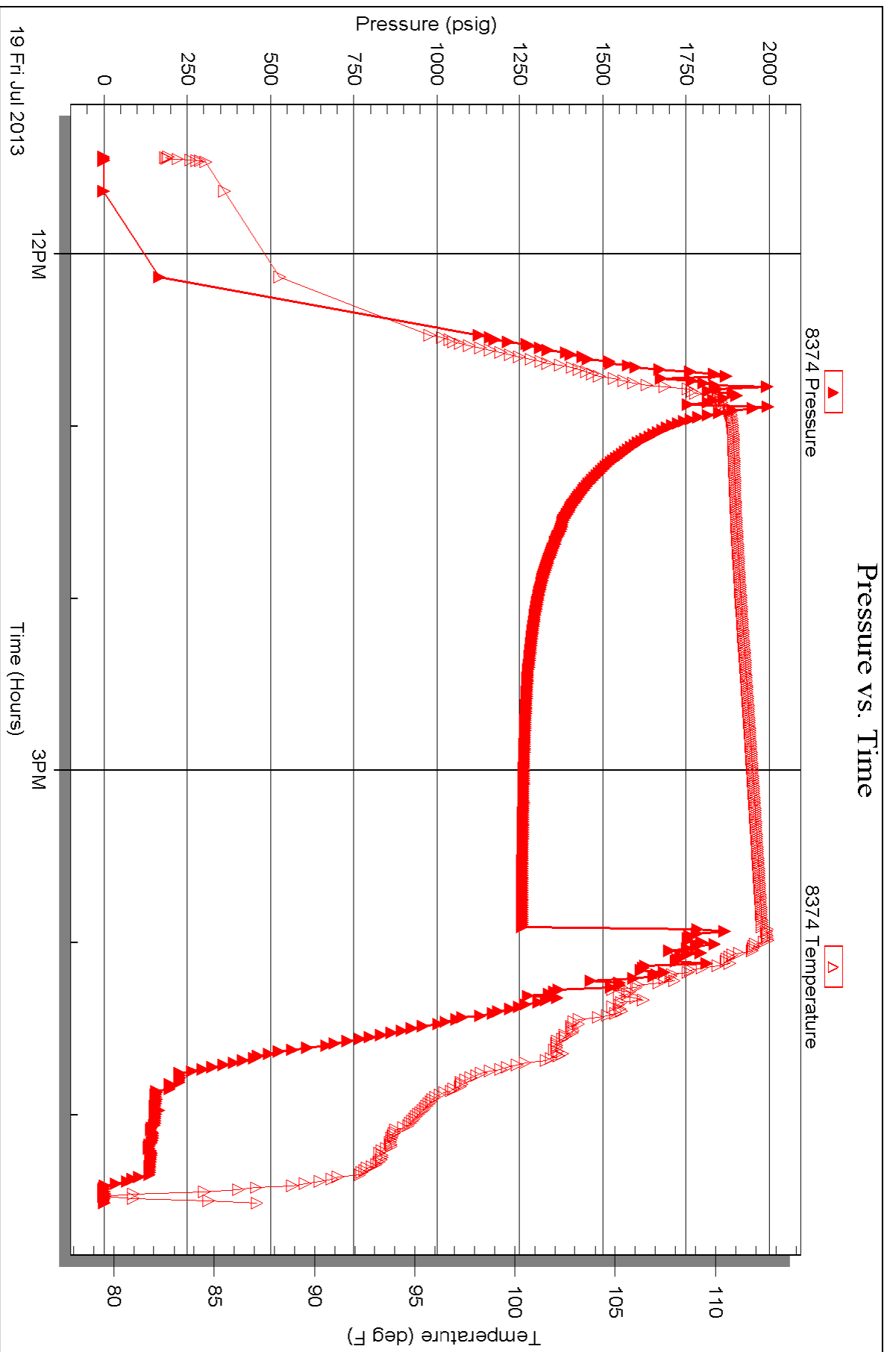
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .050 @ 105 F = 110,000



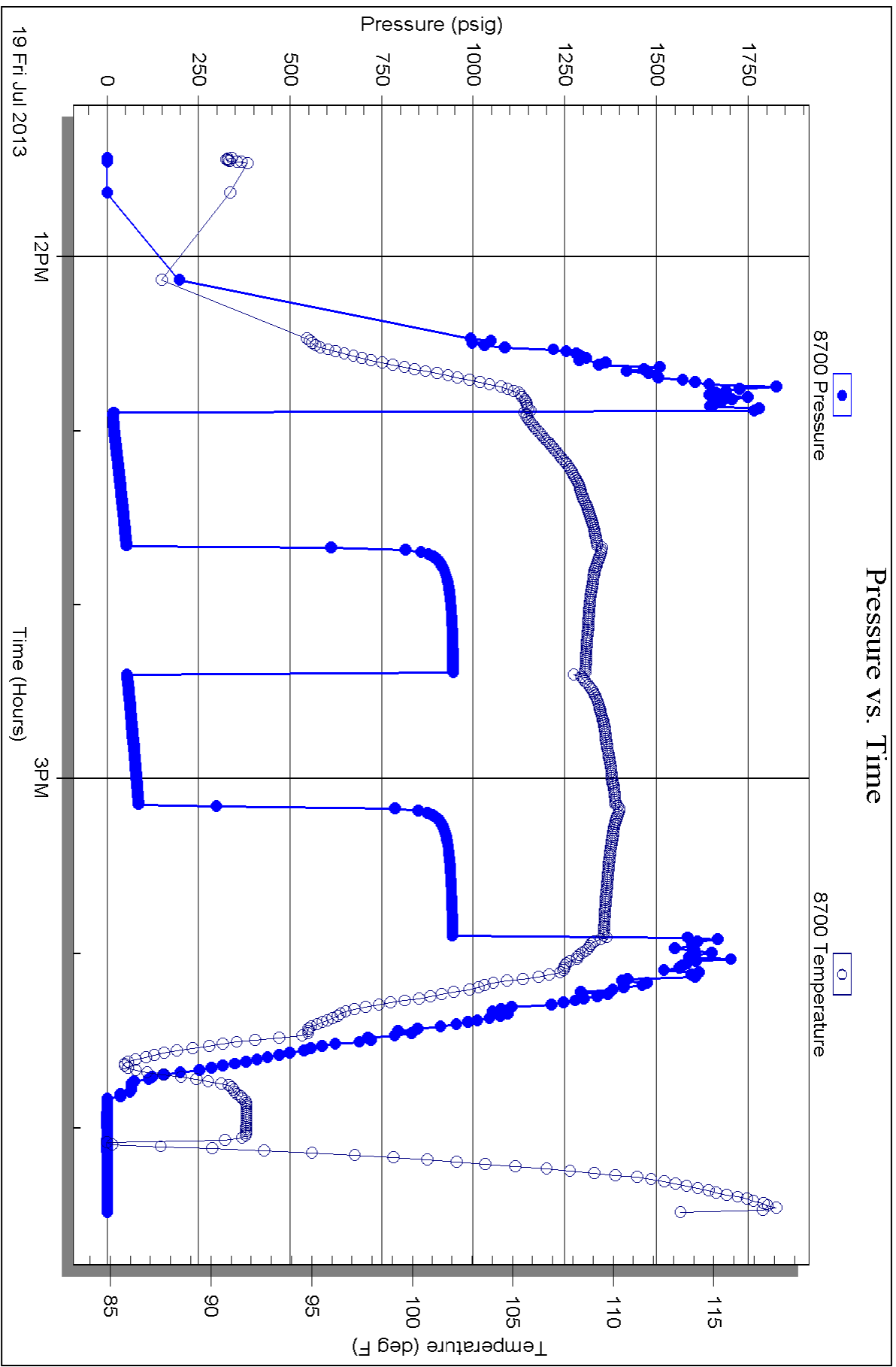


Serial #: 8700

Outside TDI Inc

Bieler #1

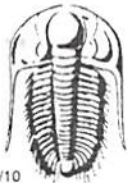
DST Test Number: 3



Triobite Testing, Inc

Ref. No: 53998

Printed: 2013.07.22 @ 09:54:40



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53996

Well Name & No. Bieder #1 Test No. 1 Date 7-17-13
 Company JDI INC Elevation 2034 KB 2023 GL
 Address 1310 Bison Rd, Hays KS, 67601
 Co. Rep / Geo. Tom Deming / Herb Deines Rig Southwings Rig #1
 Location: Sec. 9 Twp. 15 Rge. 19 Co. Ellis State Ks

Interval Tested 3314 3365 Zone Tested "C"
 Anchor Length 51 Drill Pipe Run 3310 Mud Wt. 8.9
 Top Packer Depth 3310 Drill Collars Run 0 Vis 60
 Bottom Packer Depth 3314 Wt. Pipe Run 0 WL 7.2
 Total Depth 3365 Chlorides 1600 ppm System LCM 1#

Blow Description Weak surface blow built to 2in
Dead no blow back
Weak surface blow built to 1in.
Dead no blow back

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>30</u>	Feet of <u>150cm (skin oil on top tool)</u>	%gas <u>2</u>	%oil <u>98</u>	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 105 Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 1625 Test 1150 T-On Location 12:00:30
 (B) First Initial Flow 16 Jars T-Started 02:21
 (C) First Final Flow 21 Safety Joint T-Open 04:07
 (D) Initial Shut-In 790 Circ Sub T-Pulled 07:07
 (E) Second Initial Flow 24 Hourly Standby T-Out 08:45
 (F) Second Final Flow 24 Mileage 34 R/T 52.70
 (G) Final Shut-In 664 Sampler
 (H) Final Hydrostatic 1527 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45

Sub Total 1202.70

Approved By [Signature] 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. 53997

Well Name & No. Bieler #1 Test No. 2 Date 7-18-13
 Company TDI INC. Elevation 2034 KB 2023 GL
 Address _____
 Co. Rep / Geol. Tom Deming Herb Deines Rig Southwind #1
 Location: Sec. 9 Twp. 15 Rge. 19 Co. Ellis State KS

Interval Tested 3478 3530 Zone Tested "I+J"
 Anchor Length _____ Drill Pipe Run 3468 Mud Wt. 9.1
 Top Packer Depth _____ Drill Collars Run 0 Vis 52
 Bottom Packer Depth _____ Wt. Pipe Run 0 WL 7.8
 Total Depth 3530 Chlorides 1900 ppm System LCM 1 #

Blow Description B.O.B. In 14 mins.
Dead no blow back
B.O.D. In 24 mins.
Dead no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>60 GTP</u>	<u>100</u>			
<u>5</u>	<u>Free Oil</u>		<u>100</u>		
<u>180/15</u>	<u>AB MW</u>			<u>50</u>	<u>50</u>
<u>180</u>	<u>SMCW</u>			<u>98</u>	<u>2</u>
<u>120</u>	<u>MCW</u>			<u>85</u>	<u>15</u>

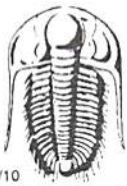
Rec Total 420 BHT 113 Gravity _____ API RW 266 @ 83 °F Chlorides 130 ppm

(A) Initial Hydrostatic 1761 Test 1150 T-On Location 02:20
 (B) First Initial Flow 24 Jars T-Started 02:30
 (C) First Final Flow 134 Safety Joint T-Open 04:52
 (D) Initial Shut-In 733 Circ Sub T-Pulled 07:52
 (E) Second Initial Flow 136 Hourly Standby T-Out 09:57
 (F) Second Final Flow 219 Mileage 34 RT 52.70 Comments _____
 (G) Final Shut-In 714 Sampler _____
 (H) Final Hydrostatic 1636 Straddle _____ Ruined Shale Packer _____

Initial Open 45 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 45 Extra Packer _____ Extra Copies _____
 Final Flow 45 Extra Recorder _____ Sub Total 0
 Final Shut-In 45 Day Standby _____ Total 1202.70
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1202.70

Approved By [Signature] 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. 53998

Well Name & No. Bieler # Test No. 7-19-13 Date 3
 Company TDI INC. Elevation 2034 KB 2023 GL
 Address _____
 Co. Rep / Geo. Tom Denning Herb Deins Rig Southwind #1
 Location: Sec. 9 Twp. 15 Rge. 19 Co. Ellis State KS

Interval Tested 3410 3430 Zone Tested G
 Anchor Length 20' 220 Drill Pipe Run 3411 Mud Wt. 9.3
 Top Packer Depth 3406 Drill Collars Run 0 Vis 56
 Bottom Packer Depth 3410 Wt. Pipe Run 0 WL 8.0
 Total Depth 3750 Chlorides 3200 ppm System LCM 1^u

Blow Description Fair surface blow built to 7 in
Dead No blow back
Fair surface blow built to 4 in
Dead No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>80</u>	<u>MCW</u>			<u>80</u>	<u>20</u>
<u>60</u>	<u>VS MCW</u>			<u>92</u>	<u>298</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Rec Total 140 BHT 110 Gravity - API RW 0.50 @ 105° F Chlorides 110000 ppm
 (A) Initial Hydrostatic 1763 Test 1150 T-On Location 10:45
 (B) First Initial Flow 17 Jars _____ T-Started 11:26
 (C) First Final Flow 51 Safety Joint _____ T-Open 12:54
 (D) Initial Shut-In 945 Circ Sub _____ T-Pulled 15:54
 (E) Second Initial Flow 54 Hourly Standby _____ T-Out 17:32
 (F) Second Final Flow 86 Mileage 34 R/A 52.70 Comments _____
 (G) Final Shut-In 8947 Sampler _____
 (H) Final Hydrostatic 11023 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 45 Extra Packer _____ Extra Copies _____
 Initial Shut-In 45 Extra Recorder _____ Sub Total 0
 Final Flow 45 Day Standby _____ Total 1802.70
 Final Shut-In 45 Accessibility _____ MP/DST Disc't _____
 Sub Total 1802.70

Approved By [Signature] Our Representative [Signature]

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