

DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

Lilly #1

1-15s-20w Ellis,KS

Start Date: 2013.04.09 @ 02:58:45

End Date: 2013.04.09 @ 09:30:05

Job Ticket #: 45520 DST #: 1

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

Printed: 2013.04.16 @ 11:22:55



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc
 1310 Bison Rd
 Hays KS 67601
 ATTN: Herb Deines

1-15s-20w Ellis,KS
Lilly #1
 Job Ticket: 45520 **DST#: 1**
 Test Start: 2013.04.09 @ 02:58:45

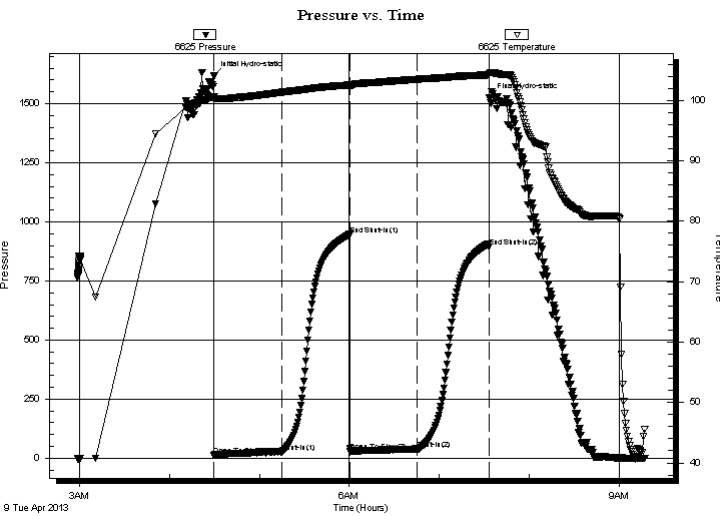
GENERAL INFORMATION:

Formation: **Topeka-Oread**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:29:55
 Time Test Ended: 09:30:05
 Interval: **3220.00 ft (KB) To 3264.00 ft (KB) (TVD)**
 Total Depth: 3264.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jeff Brown
 Unit No: 67
 Reference Elevations: 2055.00 ft (KB)
 2044.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6625 Outside

Press @ Run Depth: 39.35 psig @ 3256.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.04.09 End Date: 2013.04.09 Last Calib.: 2013.04.09
 Start Time: 02:58:46 End Time: 09:17:05 Time On Btm: 2013.04.09 @ 04:29:45
 Time Off Btm: 2013.04.09 @ 07:33:35

TEST COMMENT: IFP-Fair blow built to 6 1/4"
 ISI-Dead no blow back
 FFP-Fair blow built to 9 1/2"
 FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1616.98	100.55	Initial Hydro-static
1	13.46	100.26	Open To Flow (1)
46	26.91	101.33	Shut-In(1)
91	946.54	102.53	End Shut-In(1)
91	28.46	102.45	Open To Flow (2)
136	39.35	103.48	Shut-In(2)
184	895.08	104.20	End Shut-In(2)
184	1524.34	104.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
66.00	V SOCGM 5%G 5%O 90%M	0.93

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: Herb Deines

1-15s-20w Ellis, KS
Lilly #1
Job Ticket: 45520 **DST#: 1**
Test Start: 2013.04.09 @ 02:58:45

Tool Information

Drill Pipe:	Length: 3214.00 ft	Diameter: 3.80 inches	Volume: 45.08 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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:	46000.00 lb
			<u>Total Volume: 45.08 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3220.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	44.00 ft				
Tool Length:	64.00 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			3201.00	
Shut In Tool	5.00			3206.00	
Hydraulic tool	5.00			3211.00	
Packer	4.00			3215.00	20.00 Bottom Of Top Packer
Packer	5.00			3220.00	
Stubb	1.00			3221.00	
Perforations	2.00			3223.00	
Change Over Sub	1.00			3224.00	
Drill Pipe	31.00			3255.00	
Change Over Sub	1.00			3256.00	
Recorder	0.00	6625	Outside	3256.00	
Recorder	0.00	8679	Inside	3256.00	
Perforations	5.00			3261.00	
Bullnose	3.00			3264.00	44.00 Bottom Packers & Anchor

Total Tool Length: 64.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc	1-15s-20w Ellis,KS
1310 Bison Rd Hays KS 67601	Lilly #1
ATTN: Herb Deines	Job Ticket: 45520 DST#: 1
	Test Start: 2013.04.09 @ 02:58:45

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: 61.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

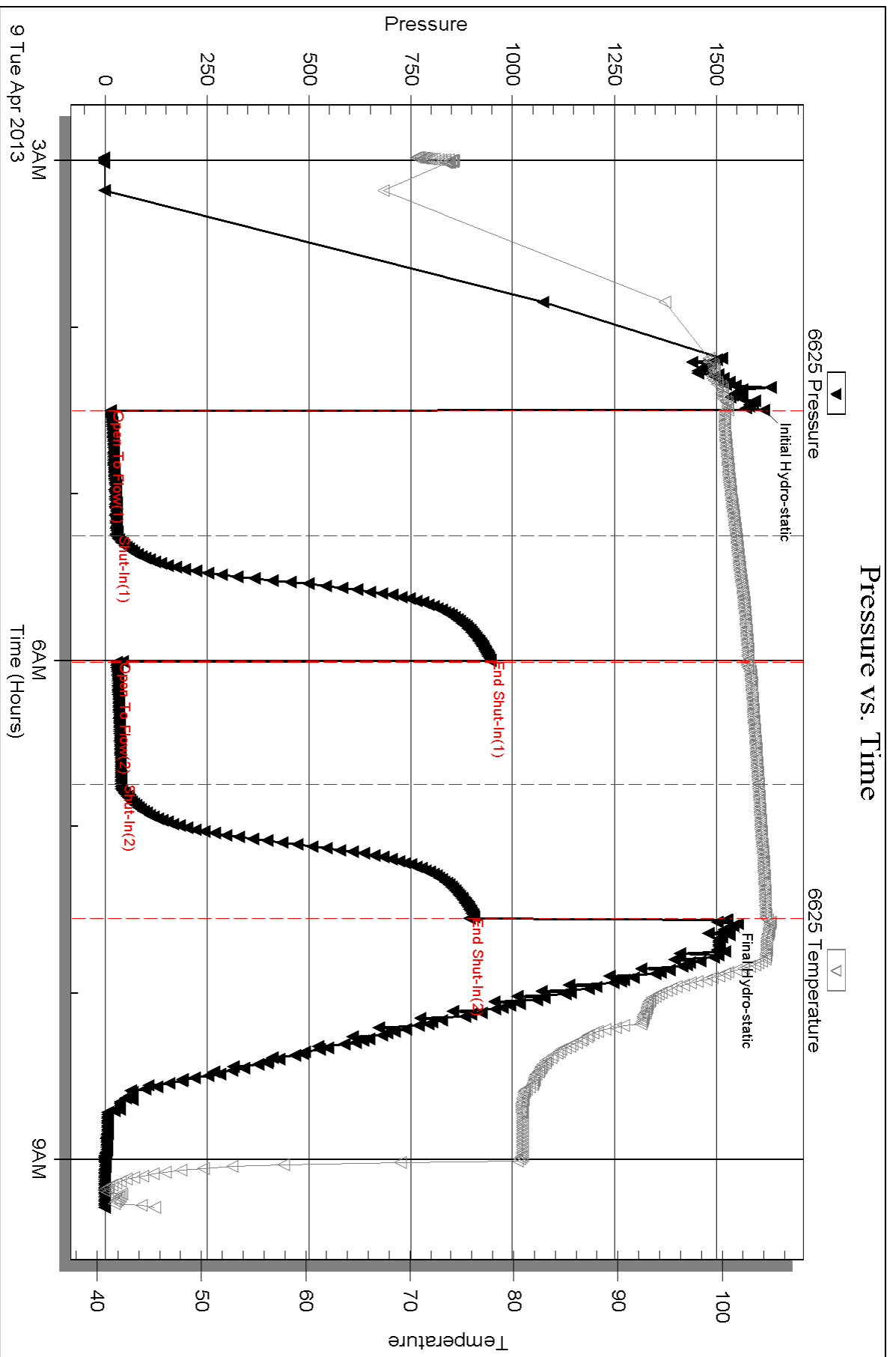
Length ft	Description	Volume bbl
66.00	VSOCGM 5%G 5%O 90%M	0.926

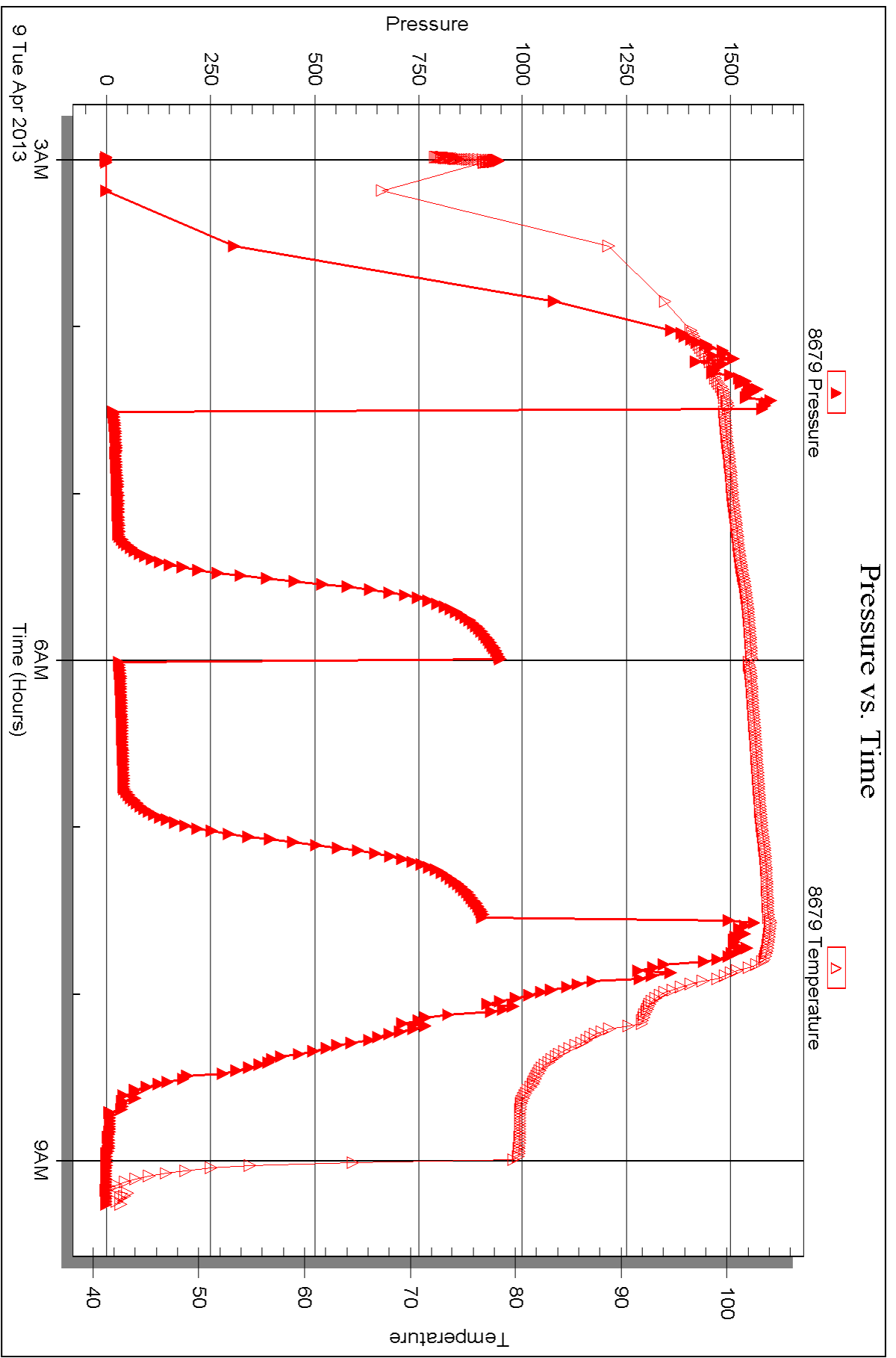
Total Length: 66.00 ft Total Volume: 0.926 bbl

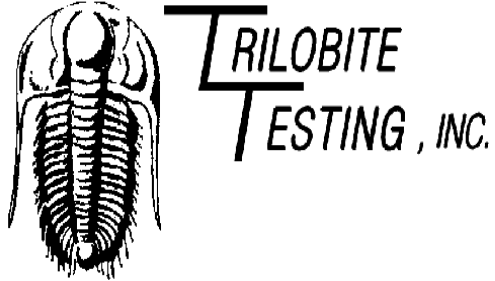
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

Lilly #1

1-15s-20w Ellis,KS

Start Date: 2013.04.10 @ 02:17:37

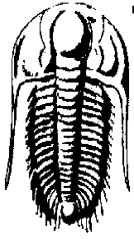
End Date: 2013.04.10 @ 10:38:57

Job Ticket #: 48521 DST #: 2

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

Printed: 2013.04.16 @ 11:22:08

TDI Inc
1-15s-20w Ellis,KS
Lilly #1
DST # 2
Lansing-C-D
2013.04.10



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc
 1310 Bison Rd
 Hays KS 67601
 ATTN: Herb Deines

1-15s-20w Ellis,KS
Lilly #1
 Job Ticket: 48521 **DST#: 2**
 Test Start: 2013.04.10 @ 02:17:37

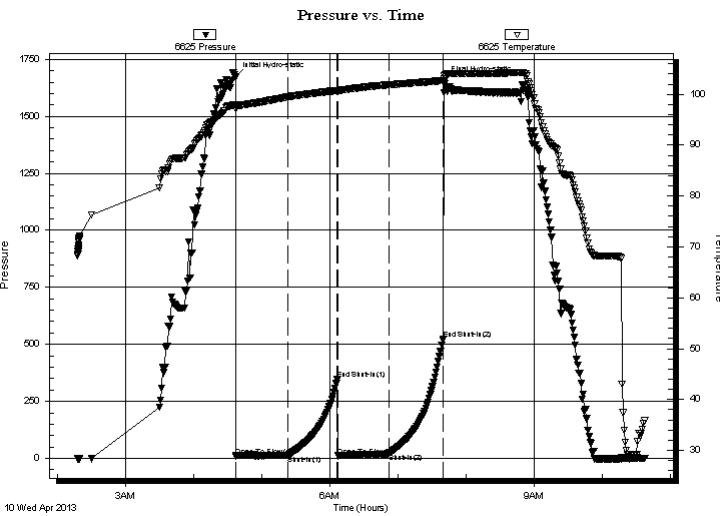
GENERAL INFORMATION:

Formation: **Lansing-C-D**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:37:17
 Time Test Ended: 10:38:57
 Interval: **3364.00 ft (KB) To 3404.00 ft (KB) (TVD)**
 Total Depth: 3404.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jeff Brown
 Unit No: 67
 Reference Elevations: 2055.00 ft (KB)
 2044.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6625 Outside

Press @ Run Depth: 21.61 psig @ 3399.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.04.10 End Date: 2013.04.10 Last Calib.: 2013.04.10
 Start Time: 02:17:38 End Time: 10:37:57 Time On Btm: 2013.04.10 @ 04:37:07
 Time Off Btm: 2013.04.10 @ 07:41:07

TEST COMMENT: IFP-Good blow BOB in 44 min
 ISI-Dead no blow back
 FFP-Good blow BOB in 6 1/2 min
 FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1672.59	98.02	Initial Hydro-static
1	9.96	97.09	Open To Flow (1)
46	13.38	99.44	Shut-In(1)
90	348.30	100.74	End Shut-In(1)
90	10.65	100.75	Open To Flow (2)
135	21.61	101.85	Shut-In(2)
183	521.80	102.72	End Shut-In(2)
184	1656.77	103.55	Final Hydro-static

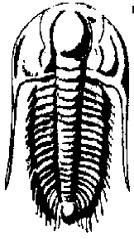
Recovery

Length (ft)	Description	Volume (bbl)
31.00	SOCM 10%O 90%M	0.43
0.00	157-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: Herb Deines

1-15s-20w Ellis,KS
Lilly #1
Job Ticket: 48521 **DST#: 2**
Test Start: 2013.04.10 @ 02:17:37

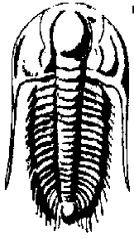
Tool Information

Drill Pipe:	Length: 3372.00 ft	Diameter: 3.80 inches	Volume: 47.30 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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:	48000.00 lb
			<u>Total Volume: 47.30 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial	38000.00 lb
Depth to Top Packer:	3364.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	40.00 ft				
Tool Length:	60.00 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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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3345.00	
Shut In Tool	5.00			3350.00	
Hydraulic tool	5.00			3355.00	
Packer	4.00			3359.00	20.00 Bottom Of Top Packer
Packer	5.00			3364.00	
Stubb	1.00			3365.00	
Perforations	2.00			3367.00	
Change Over Sub	1.00			3368.00	
Drill Pipe	30.00			3398.00	
Change Over Sub	1.00			3399.00	
Recorder	0.00	6625	Outside	3399.00	
Recorder	0.00	8679	Inside	3399.00	
Perforations	2.00			3401.00	
Bullnose	3.00			3404.00	40.00 Bottom Packers & Anchor

Total Tool Length: 60.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

1-15s-20w Ellis,KS
Lilly #1
Job Ticket: 48521 **DST#: 2**
Test Start: 2013.04.10 @ 02:17:37

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: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.59 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

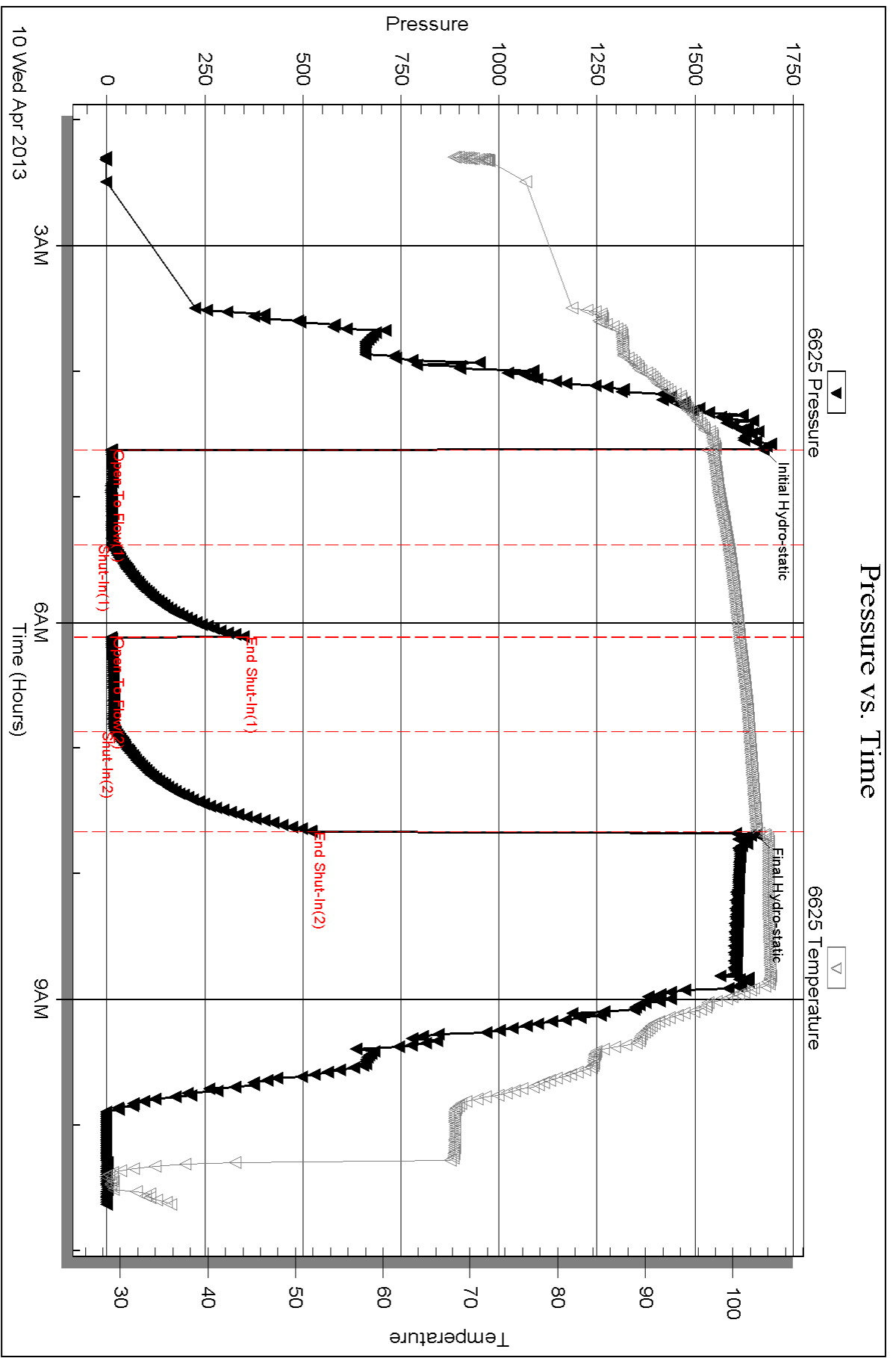
Length ft	Description	Volume bbl
31.00	SOCM 10%O 90%M	0.435
0.00	157-GIP	0.000

Total Length: 31.00 ft Total Volume: 0.435 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:



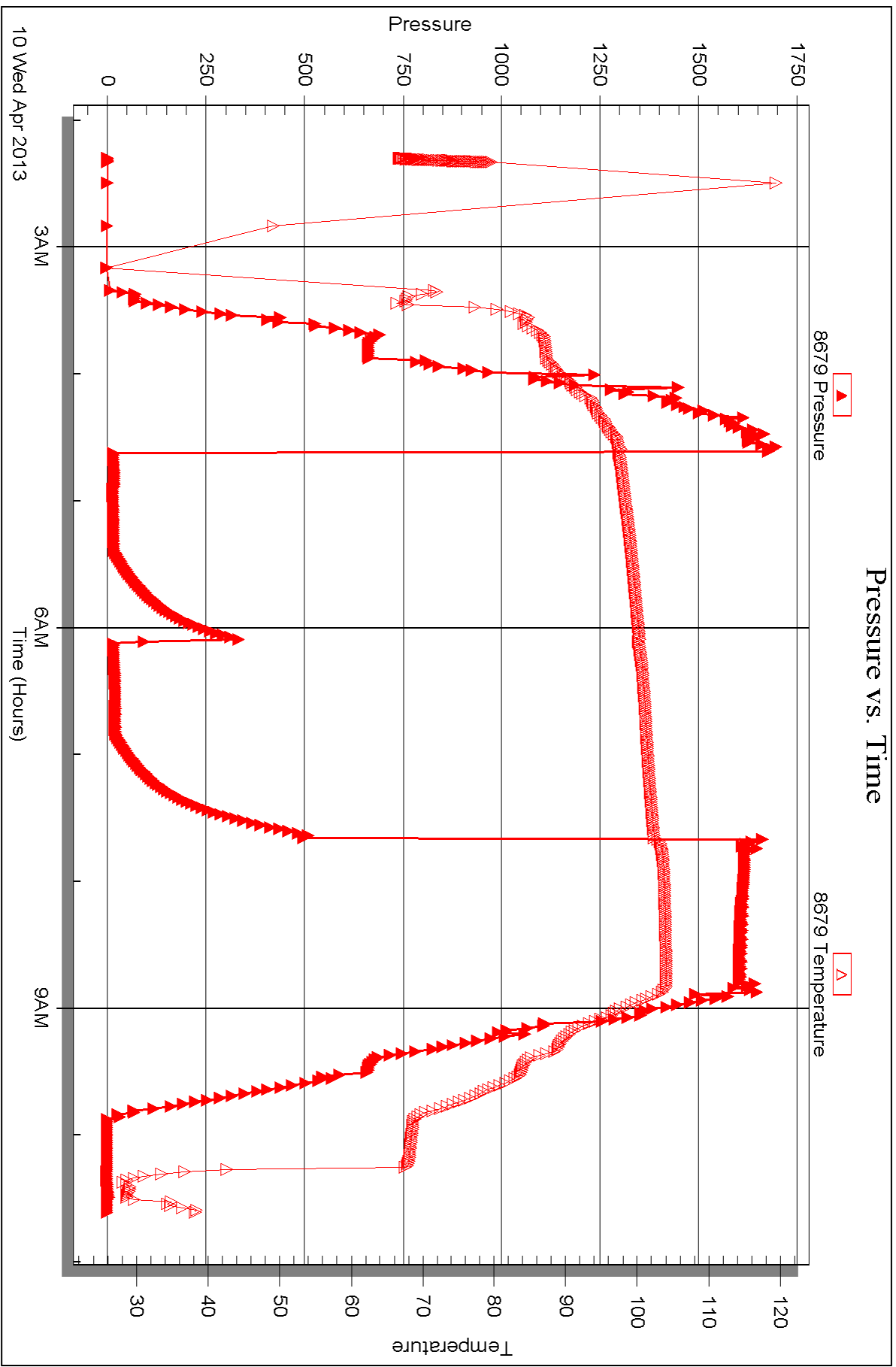
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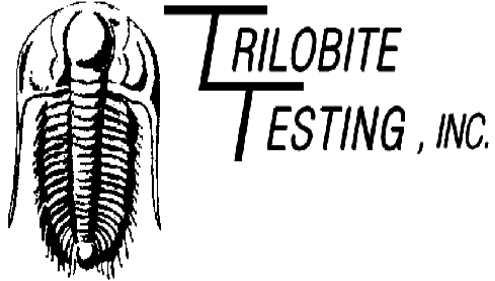
Inside

TDI Inc

Lilly #1

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

Lilly #1

1-15s-20w Ellis,KS

Start Date: 2013.04.11 @ 20:01:12

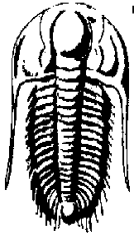
End Date: 2013.04.12 @ 03:05:06

Job Ticket #: 48522 DST #: 3

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

Printed: 2013.04.16 @ 11:21:14

TDI Inc
1-15s-20w Ellis,KS
Lilly #1
DST # 3
LKC-H-I-J
2013.04.11



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

1-15s-20w Ellis,KS
Lilly #1
Job Ticket: 48522 **DST#: 3**
Test Start: 2013.04.11 @ 20:01:12

GENERAL INFORMATION:

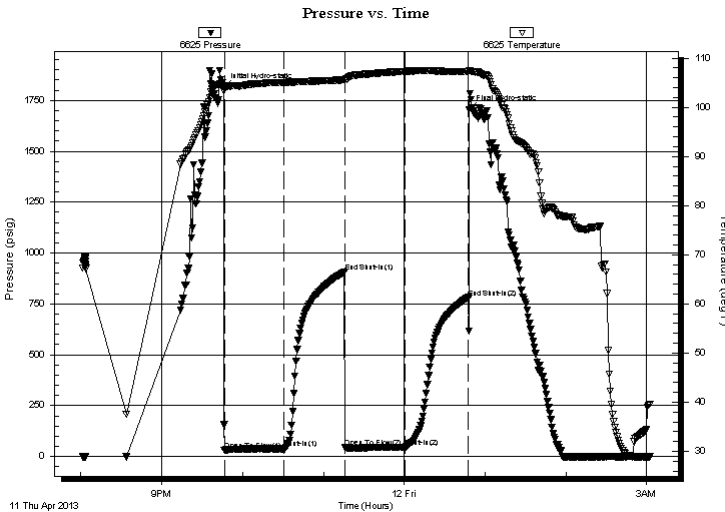
Formation: **LKC-H-I-J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:46:27
Time Test Ended: 03:05:06
Interval: **3492.00 ft (KB) To 3540.00 ft (KB) (TVD)**
Total Depth: 3748.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Straddle (Reset)
Tester: Jeff Brown
Unit No: 67
Reference Elevations: 2055.00 ft (KB)
2044.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6625 Outside

Press @ Run Depth: 46.35 psig @ 3528.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.04.11 End Date: 2013.04.12 Last Calib.: 2013.04.12
Start Time: 20:01:13 End Time: 03:02:07 Time On Btm: 2013.04.11 @ 21:46:07
Time Off Btm: 2013.04.12 @ 00:48:17

TEST COMMENT: IFP-Weak blow built to 3 1/2"
ISI-Dead no blow back
FFP-Weak surface blow built to 1"
FSI-Dead no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1814.77	104.16	Initial Hydro-static
1	30.70	103.87	Open To Flow (1)
45	37.99	105.08	Shut-In(1)
90	906.19	105.61	End Shut-In(1)
90	44.96	105.54	Open To Flow (2)
135	46.35	107.32	Shut-In(2)
182	777.81	107.28	End Shut-In(2)
183	1703.91	107.51	Final Hydro-static

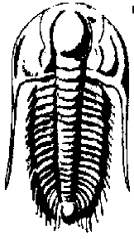
Recovery

Length (ft)	Description	Volume (bbl)
41.00	Mud with oil spot's	0.58

* 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: Herb Deines

1-15s-20w Ellis, KS
Lilly #1
Job Ticket: 48522 **DST#: 3**
Test Start: 2013.04.11 @ 20:01:12

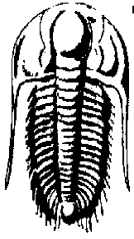
Tool Information

Drill Pipe:	Length: 3498.00 ft	Diameter: 3.80 inches	Volume: 49.07 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 49.07 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3492.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	3540.00 ft			
Interval between Packers:	48.00 ft			
Tool Length:	276.00 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			3473.00	
Shut In Tool	5.00			3478.00	
Hydraulic tool	5.00			3483.00	
Packer	4.00			3487.00	20.00 Bottom Of Top Packer
Packer	5.00			3492.00	
Stubb	1.00			3493.00	
Perforations	2.00			3495.00	
Change Over Sub	1.00			3496.00	
Drill Pipe	31.00			3527.00	
Change Over Sub	1.00			3528.00	
Recorder	0.00	8679	Inside	3528.00	
Recorder	0.00	6625	Outside	3528.00	
Perforations	8.00			3536.00	
Blank Off Sub	1.00			3537.00	
Stubb	3.00			3540.00	48.00 Tool Interval
Packer	1.00			3541.00	
Stubb	1.00			3542.00	
Perforations	12.00			3554.00	
Recorder	0.00	8167	Below	3554.00	
Change Over Sub	1.00			3555.00	
Drill Pipe	189.00			3744.00	
Change Over Sub	1.00			3745.00	
Bullnose	3.00			3748.00	208.00 Bottom Packers & Anchor
Total Tool Length:		276.00			



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc	1-15s-20w Ellis,KS
1310 Bison Rd Hays KS 67601	Lilly #1
ATTN: Herb Deines	Job Ticket: 48522 DST#: 3
	Test Start: 2013.04.11 @ 20:01:12

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: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.59 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

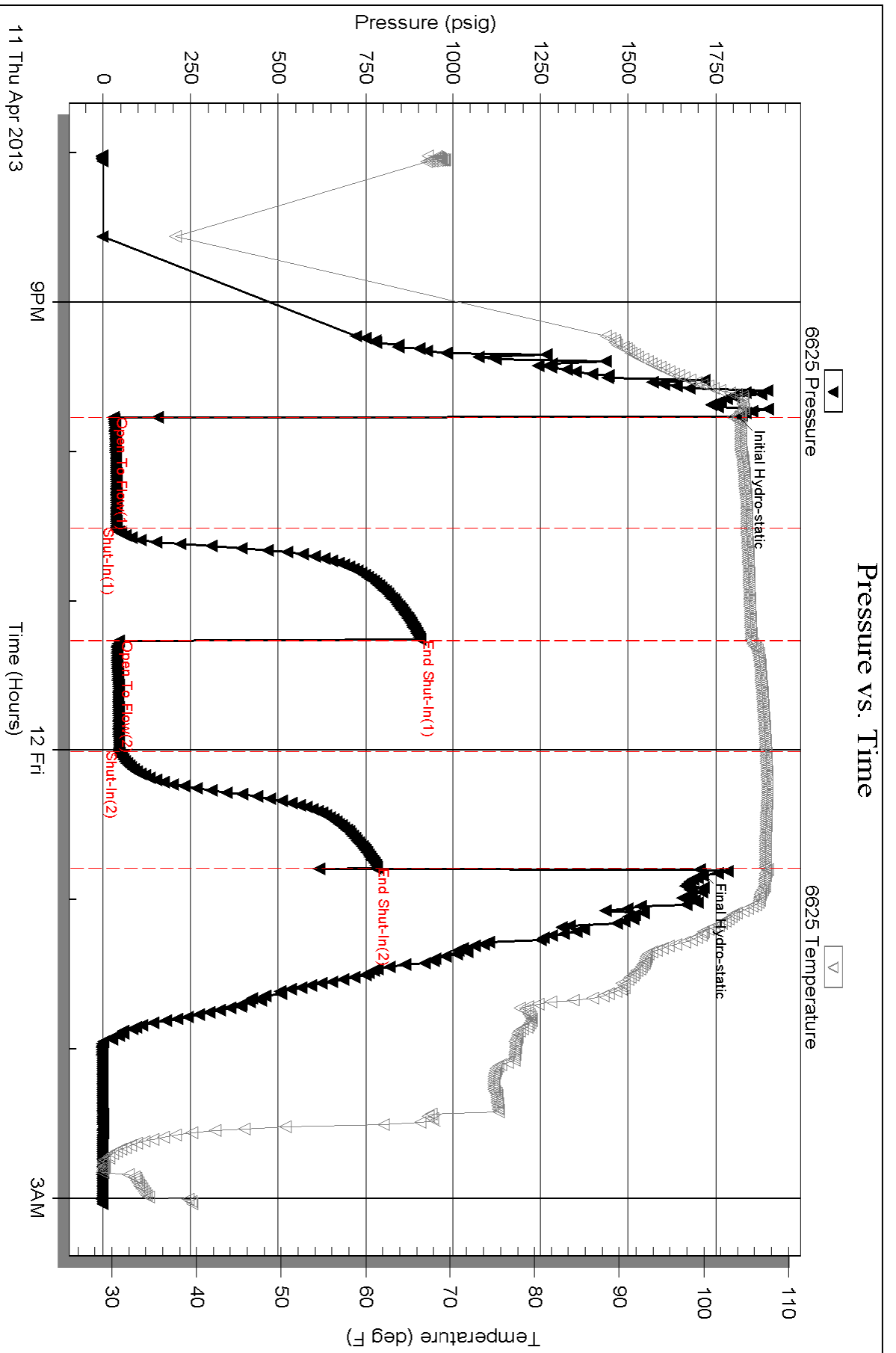
Length ft	Description	Volume bbl
41.00	Mud w ith oil spot's	0.575

Total Length: 41.00 ft Total Volume: 0.575 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:



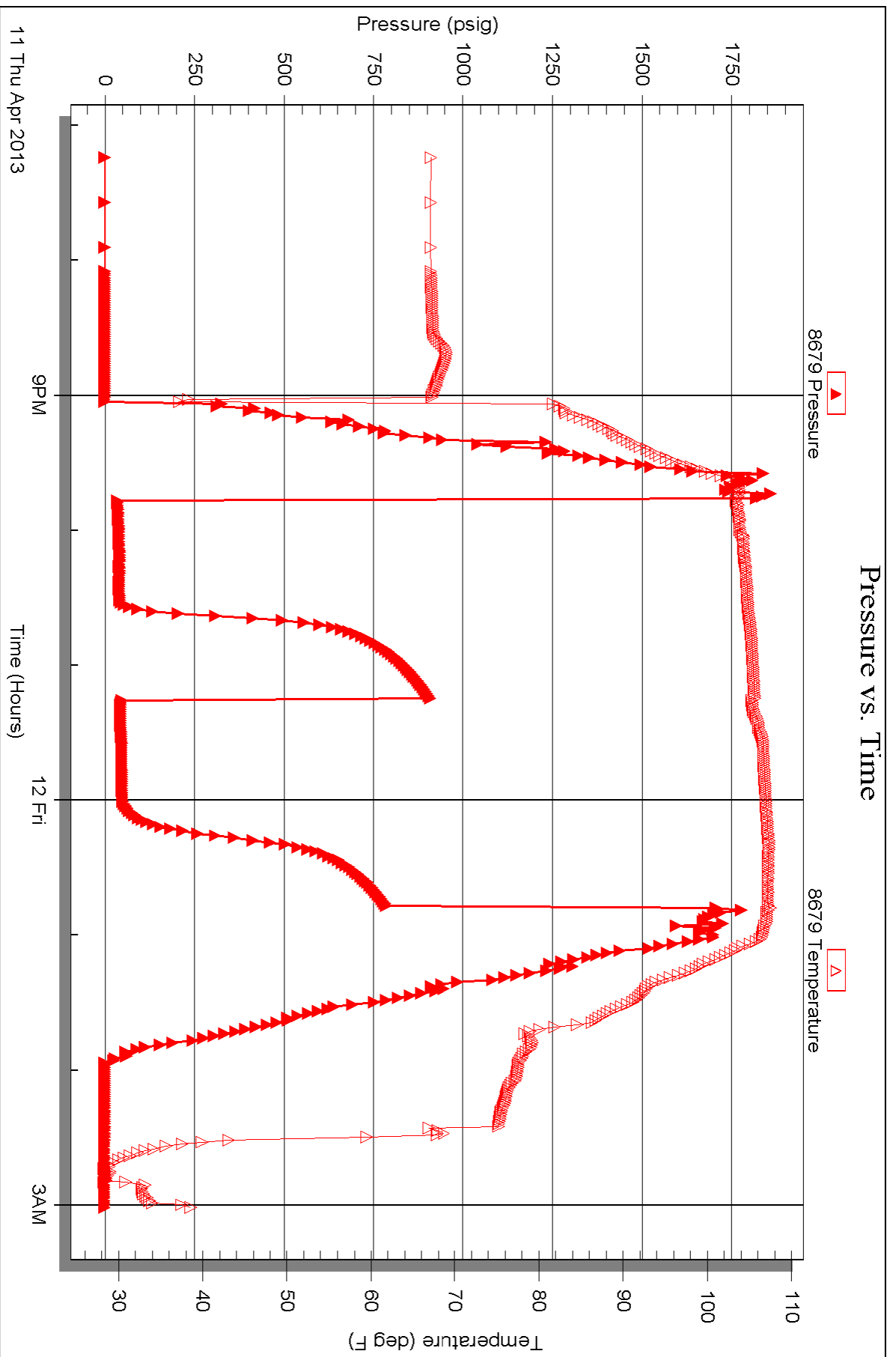
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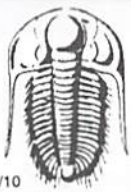
Inside

TDI Inc

Lilly #1

DST Test Number: 3





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48520

Well Name & No. Lilly #1 Test No. 1 Date 4-9-13
 Company IDE INC Elevation 2055 KB 2045 GL
 Address 1310 BISON RD Hays KS 67601
 Co. Rep / Geo. Herb Deines Rig SOUTHWD #1
 Location: Sec. 1 Twp. 15S Rge. 20 W Co. ELLIS State KS

Interval Tested 3220 - 3264 Zone Tested Topeka - Oread
 Anchor Length 44 Drill Pipe Run 3214 Mud Wt. 8.9
 Top Packer Depth 3215 Drill Collars Run 0 Vis 61
 Bottom Packer Depth 3220 Wt. Pipe Run 0 WL 8.0
 Total Depth 3264 Chlorides 5500 ppm System LCM TR

Blow Description FP - Fair Blow Built To 6 1/4 IN
IST - Dead No Blow Back
FP - Fair Blow Built To 9 1/2 IN
FST - Dead No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>600</u>	<u>VSOC GM</u>	<u>5</u>	<u>5</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

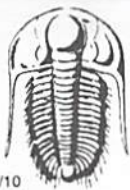
Rec Total 600 BHT 104 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1417 Test 1150 T-On Location 2:32
 (B) First Initial Flow 13 Jars _____ T-Started 2:58
 (C) First Final Flow 27 Safety Joint _____ T-Open 4:30
 (D) Initial Shut-In 947 Circ Sub _____ T-Pulled 9:30
 (E) Second Initial Flow 28 Hourly Standby _____ T-Out 9:30
 (F) Second Final Flow 39 Mileage 36 RT 55.80 Comments _____
 (G) Final Shut-In 895 Sampler _____
 (H) Final Hydrostatic 1524 Straddle _____

Initial Open 45 Shale Packer _____
 Initial Shut-In 45 Ruined Packer _____
 Final Flow 45 Extra Packer _____
 Final Shut-In 45 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1205.80
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1205.80

Approved By _____ Our Representative Jeff Brown

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.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48521

Well Name & No. Lilly #1 Test No. 2 Date 4-10-13
 Company TDI INC Elevation 2055 KB 2045 GL
 Address 1310 Bison RD Hays KS 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #1
 Location: Sec. 1 Twp. 15S Rge. 20W Co. ELLIS State KS

Interval Tested 3364-3404 Zone Tested 4" Sing - C-D
 Anchor Length 40 Drill Pipe Run 3372 Mud Wt. 9.1
 Top Packer Depth 3359 Drill Collars Run 0 Vis 53
 Bottom Packer Depth 3364 Wt. Pipe Run 0 WL 7.4
 Total Depth 3404 Chlorides 5500 ppm System LCM 1

Blow Description FP-GOOD Blow BOB IN 44 min
ISI-Dead No Blow Back
FP-GOOD Blow BOB IN 6 1/2 min
ISI-Dead No Blow Back

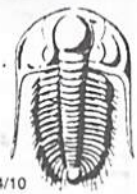
Rec	Feet of	%gas	%oil	%water	%mud
<u>31</u>	<u>Sacm</u>	<u>10</u>		<u>90</u>	
	<u>157-GIP</u>				

Rec Total 31 BHT 103 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1673 Test 1150 T-On Location 1:18
 (B) First Initial Flow 10 Jars _____ T-Started 2:17
 (C) First Final Flow 13 Safety Joint _____ T-Open 4:38
 (D) Initial Shut-In 348 Circ Sub _____ T-Pulled 7:38
 (E) Second Initial Flow 11 Hourly Standby _____ T-Out 10:38
 (F) Second Final Flow 22 Mileage 55.80 Comments _____
 (G) Final Shut-In 522 Sampler _____
 (H) Final Hydrostatic 1657 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 1205.80
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1205.80

Approved By _____ Our Representative Jeff Brown

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48522

Well Name & No. Lilly #1 Test No. 3 Date 4-11-13
 Company TDI INC Elevation 2055 KB 2045 GL
 Address 1310 BISON RD HAYS KS 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #1
 Location: Sec. 1 Twp. 15S Rge. 20 W Co. Ellis State Ks

Interval Tested 3492-3540 Zone Tested LKC-I+J
 Anchor Length 43' Anchor 208' Tail Drill Pipe Run 3498 Mud Wt. 9.3
 Top Packer Depth 3487 Drill Collars Run 0 Vis 50
 Bottom Packer Depth 3492 Wt. Pipe Run 0 WL 7.6
 Total Depth 3748 Chlorides 5500 ppm System LCM 2
 Blow Description FP-Weak Blow Built To 3 1/2 IN
1ST-Dead No Blow Back
FP-Weak Surface Blow Built To 1 IN
1ST-Dead No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>41</u>	<u>MUD WITH OIL SPOT'S</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 41 BHT 107 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 1815 Test 1150 T-On Location 19:48
 (B) First Initial Flow 31 Jars _____ T-Started 20:01
 (C) First Final Flow 38 Safety Joint _____ T-Open 21:40
 (D) Initial Shut-In 906 Circ Sub _____ T-Pulled 00:46
 (E) Second Initial Flow 45 Hourly Standby _____ T-Out 3:05
 (F) Second Final Flow 46 Mileage 55.80 Comments _____
 (G) Final Shut-In 778 Sampler _____
 (H) Final Hydrostatic 1704 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 300
 Day Standby 1d 9h Total 2105.80
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1805.80

Approved By _____ Our Representative Jeff Brown

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