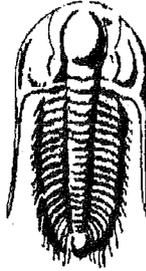


1S-101-22011

23-19s-30w

IND



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Exploration**

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

23 19 30 Lane KS

Moomaw #1-23

Start Date: 2007.05.23 @ 07:29:00

End Date: 2007.05.23 @ 14:56:00

Job Ticket #: 27727 DST #: 1

**KCC
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KANSAS CORPORATION COMMISSION

SEP 13 2007

CONSERVATION DIVISION
WICHITA, KS

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

Larson Exploration

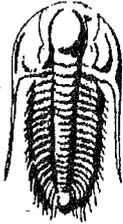
Moomaw #1-23

23 19 30 Lane KS

DST # 1

Altamont

2007.05.23



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Exploration
562 W State Rd 4
Olmitz KS 67564-8561
ATTN: Bob Lewellyn

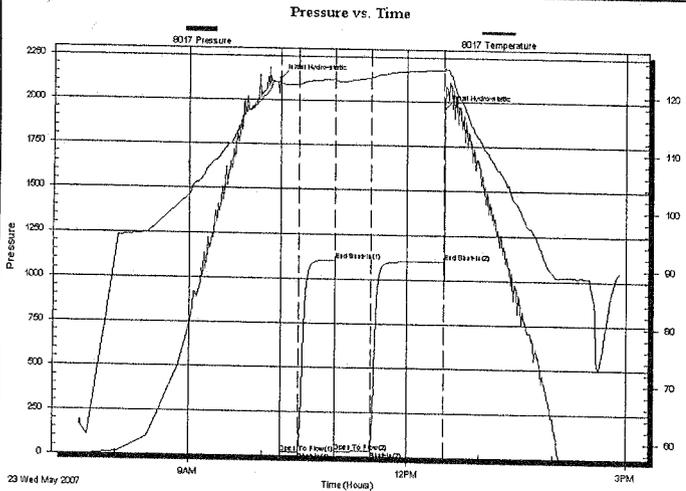
Moomaw #1-23
23 19 30 Lane KS
Job Ticket: 27727 DST#: 1
Test Start: 2007.05.23 @ 07:29:00

GENERAL INFORMATION:

Formation: **Altamont**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:15:30
Time Test Ended: 14:56:00
Interval: **4370.00 ft (KB) To 4419.00 ft (KB) (TVD)**
Total Depth: 4419.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37
Reference Elevations: 2884.00 ft (KB)
2879.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8017 Inside
Press@RunDepth: 33.57 psig @ 4371.00 ft (KB)
Start Date: 2007.05.23 End Date: 2007.05.23
Start Time: 07:29:01 End Time: 14:56:00
Capacity: 7000.00 psig
Last Calib.: 2007.05.23
Time On Btm: 2007.05.23 @ 10:15:20
Time Off Btm: 2007.05.23 @ 12:32:00

TEST COMMENT: IF Weak surface blow
ISI No return
FF No blow
FSI No return



PRESSURE SUMMARY

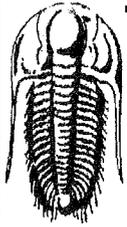
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2121.52	122.41	Initial Hydro-static
1	16.81	121.33	Open To Flow (1)
16	21.54	121.77	Shut-In(1)
45	1103.96	122.77	End Shut-In(1)
46	23.27	122.33	Open To Flow (2)
75	33.57	123.02	Shut-In(2)
136	1103.74	124.55	End Shut-In(2)
137	1960.16	124.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	M 100%M	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Exploration

Moomaw #1-23

562 W State Rd 4
Olmritz KS 67564-8561

23 19 30 Lane KS

Job Ticket: 27727

DST#: 1

ATTN: Bob Lewellyn

Test Start: 2007.05.23 @ 07:29:00

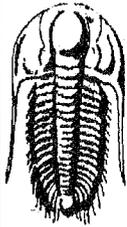
Tool Information

Drill Pipe:	Length: 4161.00 ft	Diameter: 3.89 inches	Volume: 61.17 bbl	Tool Weight:	1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	28000.00 lb
Drill Collar:	Length: 188.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose:	70000.00 lb
			Total Volume: 62.09 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	62000.00 lb
Depth to Top Packer:	4370.00 ft			Final	62000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	49.00 ft				
Tool Length:	77.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4343.00	
Shut In Tool	5.00			4348.00	
Hydraulic tool	5.00			4353.00	
Jars	5.00			4358.00	
Safety Joint	3.00			4361.00	
Packer	5.00			4366.00	28.00 Bottom Of Top Packer
Packer	4.00			4370.00	
Stubb	1.00			4371.00	
Recorder	0.00	8017	inside	4371.00	
Perforations	10.00			4381.00	
Change Over Sub	1.00			4382.00	
Drill Pipe	31.00			4413.00	
Change Over Sub	1.00			4414.00	
Recorder	0.00	13276	inside	4414.00	
Bullnose	5.00			4419.00	49.00 Bottom Packers & Anchor

Total Tool Length: 77.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Exploration
562 W State Rd 4
Olmitz KS 67564-8561
ATTN: Bob Lewellyn

Moomaw #1-23
23 19 30 Lane KS
Job Ticket: 27727 DST#: 1
Test Start: 2007.05.23 @ 07:29:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3500.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	M 100%M	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Spots of Oil in tool.

Serial #: 8017

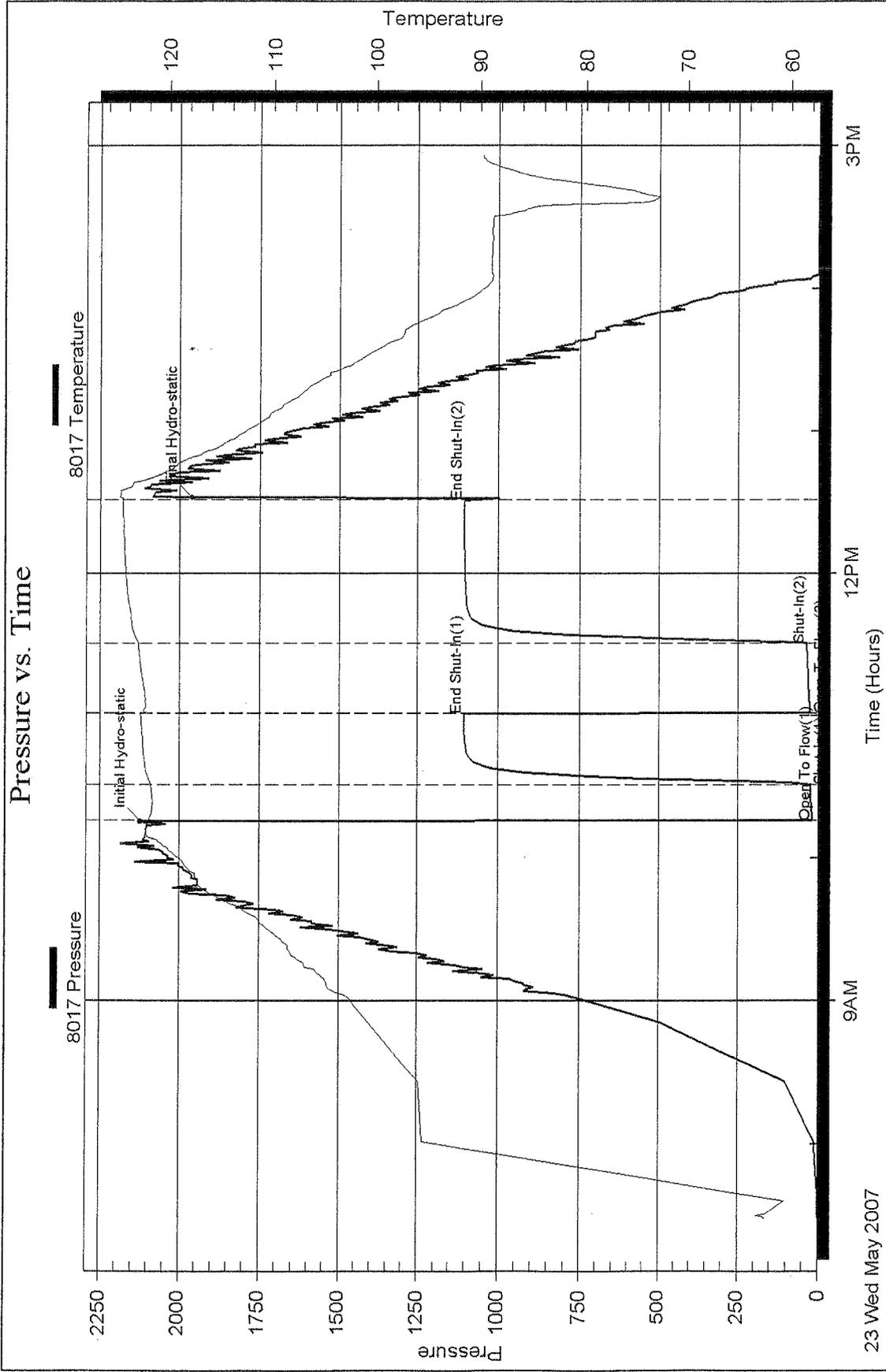
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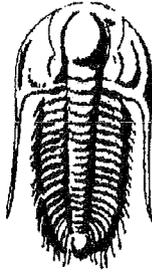
Larson Exploration

23 19 30 Lane KS

DST Test Number: 1

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Exploration**

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

23 19 30 Lane KS

Moomaw #1-23

Start Date: 2007.05.24 @ 10:26:00

End Date: 2007.05.24 @ 18:05:30

Job Ticket #: 27728 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Larson Exploration

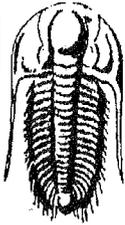
Moomaw #1-23

23 19 30 Lane KS

DST # 2

Altamont-Ft. Scott

2007.05.24



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Larson Exploration
 562 W State Rd 4
 Olmitz KS 67564-8561
 ATTN: Bob Lewellyn

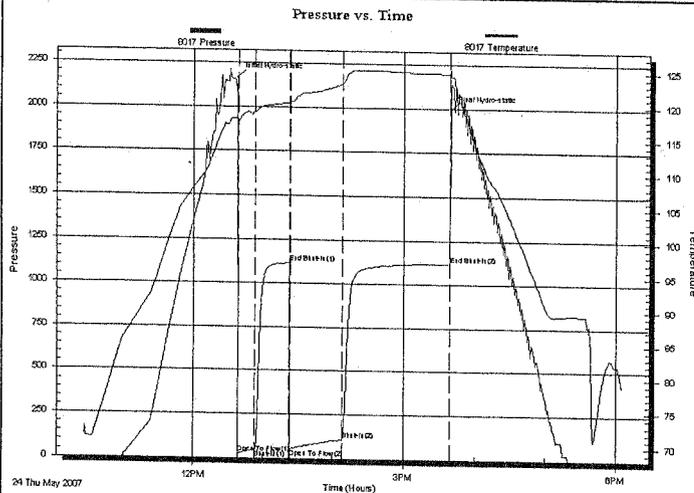
Moomaw #1-23
23 19 30 Lane KS
 Job Ticket: 27728 **DST#: 2**
 Test Start: 2007.05.24 @ 10:26:00

GENERAL INFORMATION:

Formation: **Altamont-Ft. Scott**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:38:00
 Time Test Ended: 18:05:30
 Interval: **4408.00 ft (KB) To 4544.00 ft (KB) (TVD)**
 Total Depth: 4544.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole
 Tester: Chuck Smith
 Unit No: 37
 Reference Elevations: 2884.00 ft (KB)
 2879.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8017 Inside
 Press@RunDepth: 106.84 psig @ 4409.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2007.05.24 End Date: 2007.05.24 Last Calib.: 2007.05.24
 Start Time: 10:26:01 End Time: 18:05:30 Time On Btm: 2007.05.24 @ 12:37:40
 Time Off Btm: 2007.05.24 @ 15:39:30

TEST COMMENT: IF 1/4 " blow built to 1 1/2 "
 ISI No return
 FF Surface blow built to > 2 "
 FSI No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2166.84	118.06	Initial Hydro-static
1	24.69	117.60	Open To Flow (1)
16	47.01	118.82	Shut-In(1)
46	1115.21	120.26	End Shut-In(1)
46	53.78	120.17	Open To Flow (2)
91	106.84	123.20	Shut-In(2)
182	1118.17	124.77	End Shut-In(2)
182	1994.47	125.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
68.00	M 100%M	0.33
120.00	WCM 20%W 80%M	0.59

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Exploration

Moomaw #1-23

562 W State Rd 4
Olmitz KS 67564-8561

23 19 30 Lane KS

Job Ticket: 27728

DST#: 2

ATTN: Bob Lewellyn

Test Start: 2007.05.24 @ 10:26:00

Tool Information

Drill Pipe:	Length: 4196.00 ft	Diameter: 3.89 inches	Volume: 61.68 bbl	Tool Weight:	1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	28000.00 lb
Drill Collar:	Length: 188.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose:	73000.00 lb
			<u>Total Volume: 62.60 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial	63000.00 lb
Depth to Top Packer:	4408.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	136.00 ft				
Tool Length:	164.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4381.00	
Shut In Tool	5.00			4386.00	
Hydraulic tool	5.00			4391.00	
Jars	5.00			4396.00	
Safety Joint	3.00			4399.00	
Packer	5.00			4404.00	28.00 Bottom Of Top Packer
Packer	4.00			4408.00	
Stubb	1.00			4409.00	
Recorder	0.00	8017	Inside	4409.00	
Perforations	5.00			4414.00	
Change Over Sub	1.00			4415.00	
Drill Pipe	123.00			4538.00	
Change Over Sub	1.00			4539.00	
Recorder	0.00	13309	Inside	4539.00	
Bullnose	5.00			4544.00	136.00 Bottom Packers & Anchor

Total Tool Length: 164.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Exploration
562 W State Rd 4
Olmitz KS 67564-8561
ATTN: Bob Lewellyn

Moomaw #1-23
23 19 30 Lane KS
Job Ticket: 27728 **DST#: 2**
Test Start: 2007.05.24 @ 10:26:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 15000 ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.79 in ³	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 3000.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
68.00	M 100%M	0.334
120.00	WCM 20%W 80%M	0.590

Total Length: 188.00 ft Total Volume: 0.924 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Spots of Oil in 188 feet.
 RW: .374 @ 89 degrees F = 15000 chlorides.

Serial #: 8017

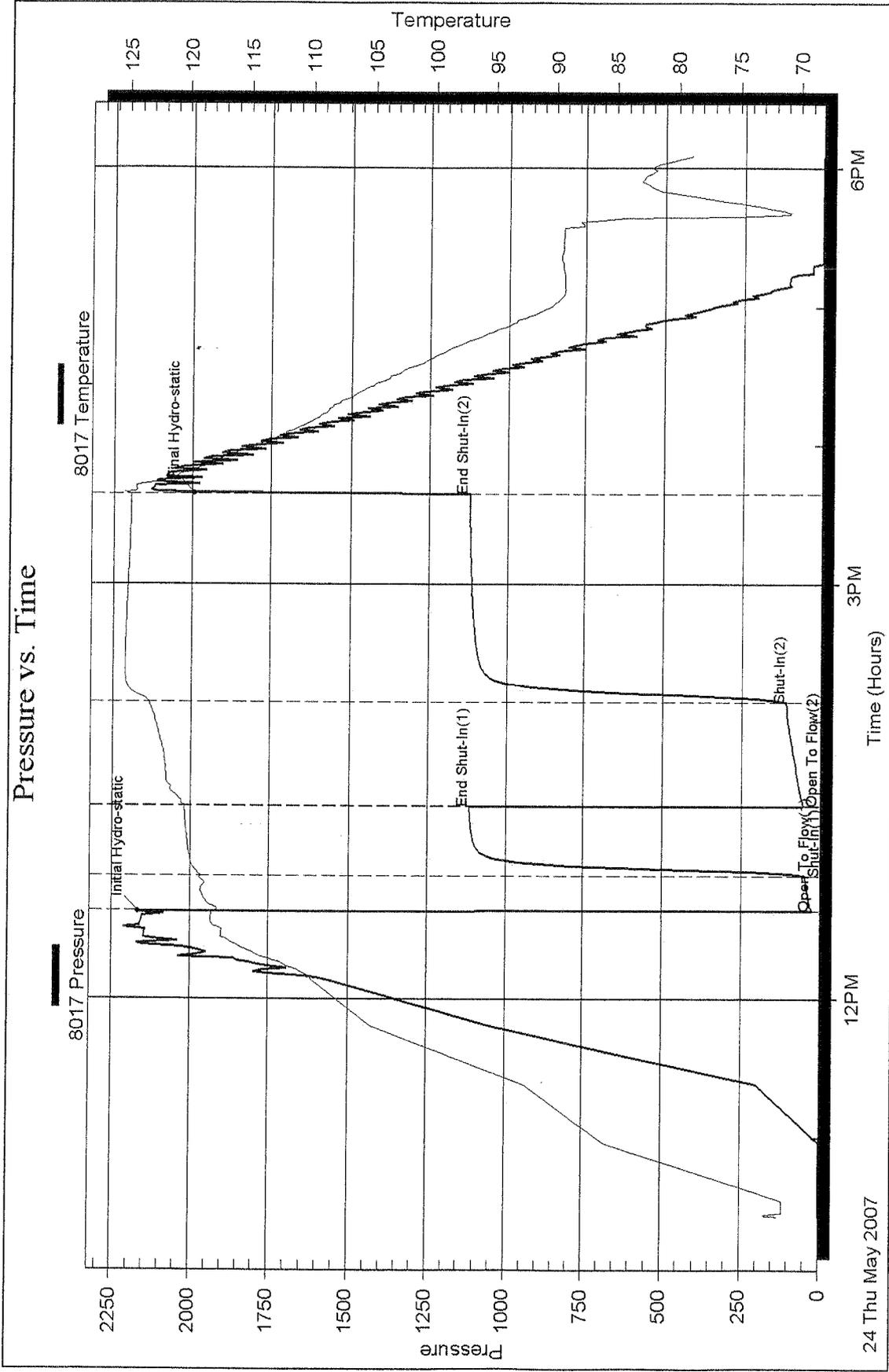
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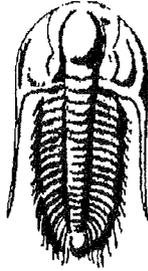
Larson Exploration

23 19 30 Lane KS

DST Test Number: 2

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Exploration**

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

23 19 30 Lane KS

Moomaw #1-23

Start Date: 2007.05.25 @ 06:02:00

End Date: 2007.05.25 @ 13:09:00

Job Ticket #: 27729 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Larson Exploration

Moomaw #1-23

23 19 30 Lane KS

DST # 3

Johnson

2007.05.25



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Larson Exploration
 562 W State Rd 4
 Olmitz KS 67564-8561
 ATTN: Bob Lewellyn

Moomaw #1-23
23 19 30 Lane KS
 Job Ticket: 27729 **DST#: 3**
 Test Start: 2007.05.25 @ 06:02:00

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:36:10
 Time Test Ended: 13:09:00
 Interval: **4539.00 ft (KB) To 4595.00 ft (KB) (TVD)**
 Total Depth: 4595.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good

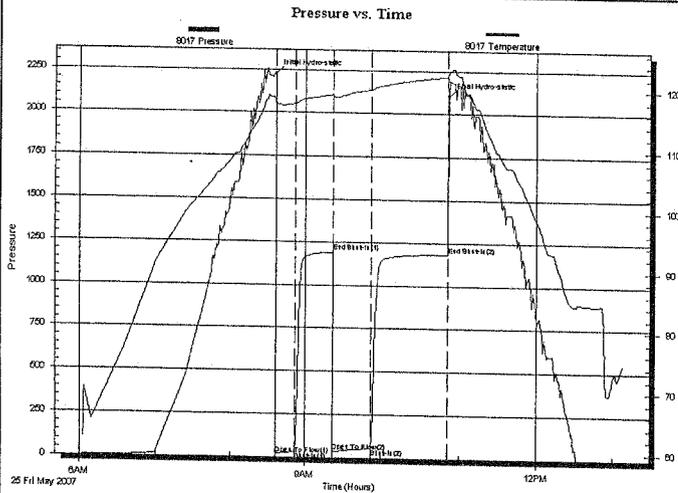
Test Type: Conventional Bottom Hole
 Tester: Chuck Smith
 Unit No: 37
 Reference Elevations: 2884.00 ft (KB)
 2879.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8017 Inside

Press@RunDepth: 56.27 psig @ 4542.00 ft (KB)
 Start Date: 2007.05.25 End Date: 2007.05.25
 Start Time: 06:02:01 End Time: 13:09:00

Capacity: 7000.00 psig
 Last Calib.: 2007.05.25
 Time On Btm: 2007.05.25 @ 08:36:00
 Time Off Btm: 2007.05.25 @ 10:51:40

TEST COMMENT: IF: Surface blow built to 1".
 IS: No return.
 FF: Surface blow.
 FS: No return.



PRESSURE SUMMARY

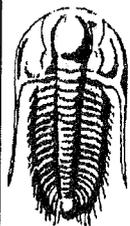
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2223.52	118.37	Initial Hydro-static
1	18.61	117.16	Open To Flow (1)
16	33.39	117.63	Shut-in(1)
46	1190.07	119.17	End Shut-in(1)
46	35.30	118.52	Open To Flow (2)
76	56.27	120.02	Shut-in(2)
135	1183.14	122.31	End Shut-in(2)
136	2105.07	122.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	M 100%M	0.34

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Exploration
562 W State Rd 4
Olmitz KS 67564-8561
ATTN: Bob Lewellyn

Moomaw #1-23
23 19 30 Lane KS
Job Ticket: 27729 **DST#: 3**
Test Start: 2007.05.25 @ 06:02:00

Tool Information

Drill Pipe:	Length: 4349.00 ft	Diameter: 3.89 inches	Volume: 63.93 bbl	Tool Weight:	1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	28000.00 lb
Drill Collar:	Length: 188.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose:	73000.00 lb
		Total Volume:	64.85 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial	63000.00 lb
Depth to Top Packer:	4539.00 ft			Final	63000.00 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			4512.00	
Shut In Tool	5.00			4517.00	
Hydraulic tool	5.00			4522.00	
Jars	5.00			4527.00	
Safety Joint	3.00			4530.00	
Packer	5.00			4535.00	28.00 Bottom Of Top Packer
Packer	4.00			4539.00	
Stubb	1.00			4540.00	
Perforations	2.00			4542.00	
Recorder	0.00	8017	Inside	4542.00	
Perforations	15.00			4557.00	
Change Over Sub	1.00			4558.00	
Drill Pipe	31.00			4589.00	
Change Over Sub	1.00			4590.00	
Recorder	0.00	13309	Inside	4590.00	
Bullnose	5.00			4595.00	56.00 Bottom Packers & Anchor
Total Tool Length:	84.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Exploration
562 W State Rd 4
Olmitz KS 67564-8561
ATTN: Bob Lewellyn

Moomaw #1-23
23 19 30 Lane KS
Job Ticket: 27729 **DST#: 3**
Test Start: 2007.05.25 @ 06:02:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.59 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2600.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	M 100%M	0.344

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: Spots of oil in 70 feet.

Serial #: 8017

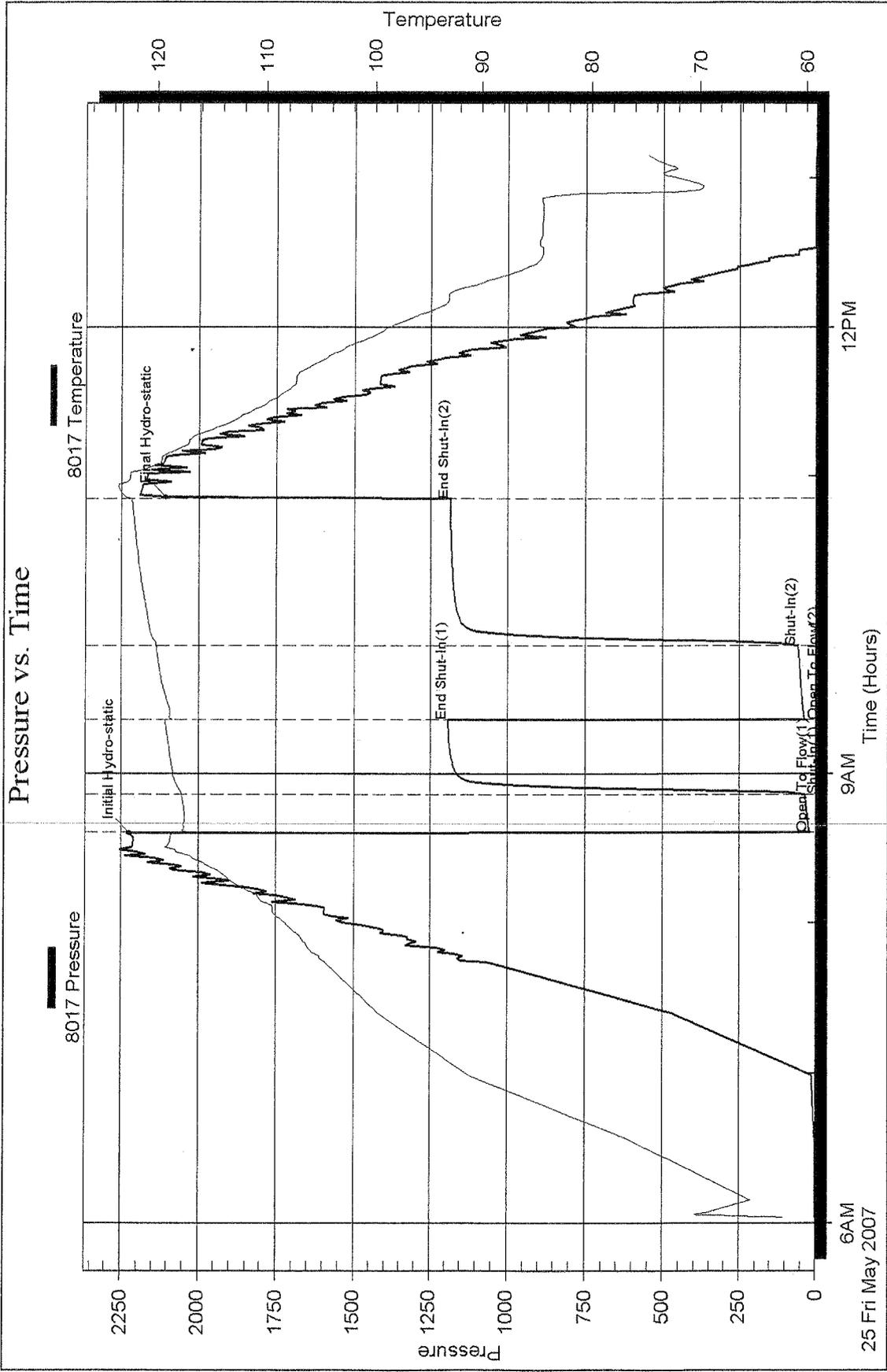
Inside

Larson Exploration

23 19 30 Lane KS

DST Test Number: 3

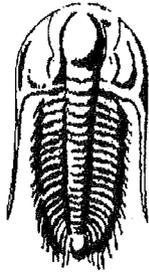
Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 27729

Printed: 2007.05.31 @ 15:07:17 Page 5



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Exploration**

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

23 19 30 Lane KS

Moomaw #1-23

Start Date: 2007.05.26 @ 12:44:00

End Date: 2007.05.26 @ 19:30:20

Job Ticket #: 27730 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Larson Exploration

Moomaw #1-23

23 19 30 Lane KS

DST # 4

Mississippian

2007.05.26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Exploration

Moomaw #1-23

562 W State Rd 4
Olmritz KS 67564-8561

23 19 30 Lane KS

Job Ticket: 27730

DST#: 4

ATTN: Bob Lewellyn

Test Start: 2007.05.26 @ 12:44:00

Tool Information

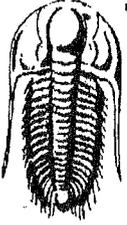
Drill Pipe:	Length: 4416.00 ft	Diameter: 3.89 inches	Volume: 64.91 bbl	Tool Weight: 1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 188.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 65.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 63000.00 lb
Depth to Top Packer:	4606.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	65.00 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			4579.00	
Shut In Tool	5.00			4584.00	
Hydraulic tool	5.00			4589.00	
Jars	5.00			4594.00	
Safety Joint	3.00			4597.00	
Packer	5.00			4602.00	28.00 Bottom Of Top Packer
Packer	4.00			4606.00	
Stubb	1.00			4607.00	
Recorder	0.00	8017	Inside	4607.00	
Perforations	31.00			4638.00	
Recorder	0.00	13309	Inside	4638.00	
Bullnose	5.00			4643.00	37.00 Bottom Packers & Anchor

Total Tool Length: 65.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Exploration

Moomaw #1-23

562 W State Rd 4
Olmitz KS 67564-8561

23 19 30 Lane KS

Job Ticket: 27730

DST#: 4

ATTN: Bob Lewellyn

Test Start: 2007.05.26 @ 12:44:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 9.59 in³

Resistivity: 0.00 ohm.m

Salinity: 2800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

0 deg API

Water Salinity:

0 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	100%M	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

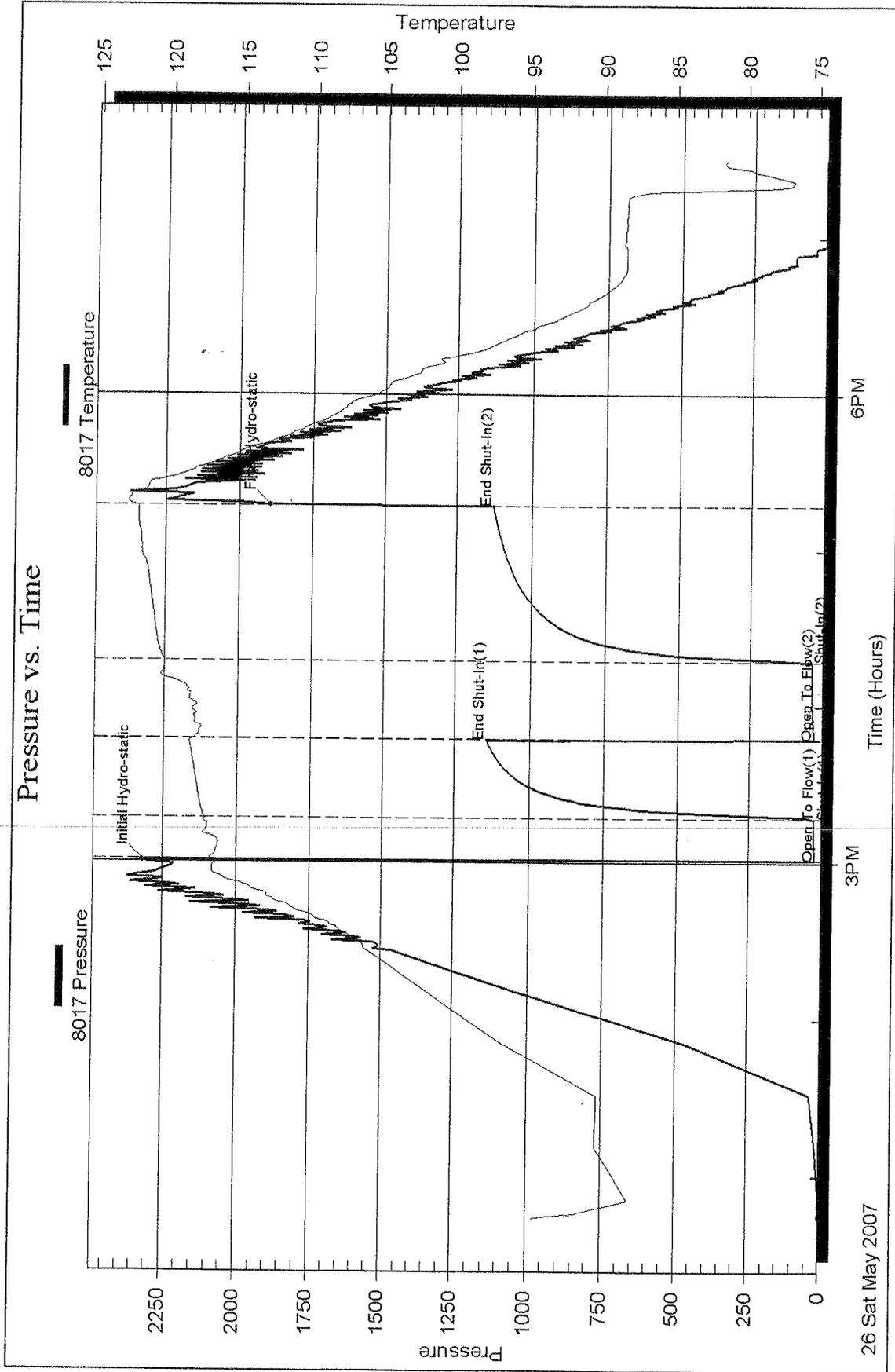
Recovery Comments: Spot of Oil in tool.

Serial #: 8017

Inside Larson Exploration

23 19 30 Lane KS

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 27730

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