



DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 W Hwy 4
Olmitz KS 67564-8561

ATTN: Tom Funk

34 18S 29W Lane KS

Keenan - Stucky #1-34

Start Date: 2006.10.05 @ 13:34:55

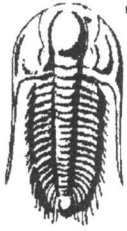
End Date: 2006.10.05 @ 20:55:55

Job Ticket #: 26027 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Operating Co
562 W Hwy 4
Olmitz KS 67564-8561
ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 26027 **DST#: 1**
Test Start: 2006.10.05 @ 13:34:55

GENERAL INFORMATION:

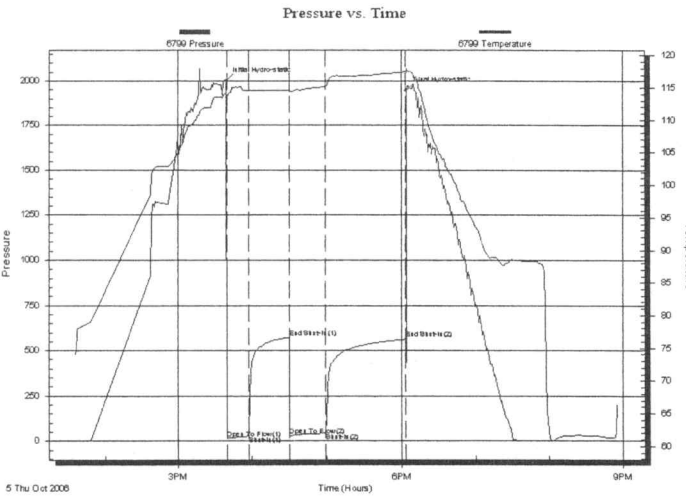
Formation: **Kansas City "I"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:39:45
Time Test Ended: 20:55:55
Test Type: Conventional Bottom Hole
Tester: Jake Fahrenbruch
Unit No: 22
Interval: **4182.00 ft (KB) To 4213.00 ft (KB) (TVD)**
Total Depth: 4213.00 ft (KB) (TVD)
Reference Elevations: 2815.00 ft (KB)
Hole Diameter: 7.88 inches Hole Condition: Fair
KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press@RunDepth: 43.05 psig @ 4183.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2006.10.05 End Date: 2006.10.05 Last Calib.: 2006.10.05
Start Time: 13:34:57 End Time: 20:55:55 Time On Btm: 2006.10.05 @ 15:39:35
Time Off Btm: 2006.10.05 @ 18:03:45

TEST COMMENT: IF Weak blow @ 1/2 " bucket
ISI Bled off no blow back
FF No blow
FSI No blow back



PRESSURE SUMMARY

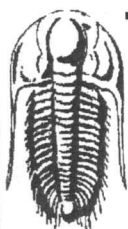
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2001.95	114.26	Initial Hydro-static
1	13.44	113.28	Open To Flow (1)
18	26.25	114.56	Shut-In(1)
51	572.36	114.63	End Shut-In(1)
51	28.80	114.45	Open To Flow (2)
80	43.05	115.13	Shut-In(2)
144	563.30	117.47	End Shut-In(2)
145	1944.02	117.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Mud w/very few Oil specs 100%M	0.30
0.00	No GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co

562 W Hwy 4
Olmitz KS 67564-8561

ATTN: Tom Funk

Keenan - Stucky #1-34

34 18S 29W Lane KS

Job Ticket: 26027

DST#: 1

Test Start: 2006.10.05 @ 13:34:55

Tool Information

Drill Pipe:	Length: 4040.00 ft	Diameter: 3.80 inches	Volume: 56.67 bbl	Tool Weight: 2100.00 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: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 62000.00 lb
			Total Volume: 57.28 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4182.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	59.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4159.00	
Hydraulic tool	5.00			4164.00	
Jars	5.00			4169.00	
Safety Joint	3.00			4172.00	
Packer	5.00			4177.00	28.00 Bottom Of Top Packer
Packer	5.00			4182.00	
Stubb	1.00			4183.00	
Recorder	0.00	6799	Inside	4183.00	
Perforations	27.00			4210.00	
Recorder	0.00	10270	Outside	4210.00	
Bullnose	3.00			4213.00	31.00 Bottom Packers & Anchor

Total Tool Length: 59.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co
562 W Hwy 4
Olmitz KS 67564-8561
ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 26027 **DST#: 1**
Test Start: 2006.10.05 @ 13:34:55

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: bbl		
Water Loss: 8.76 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: 0.04 inches			

Recovery Information

Recovery Table

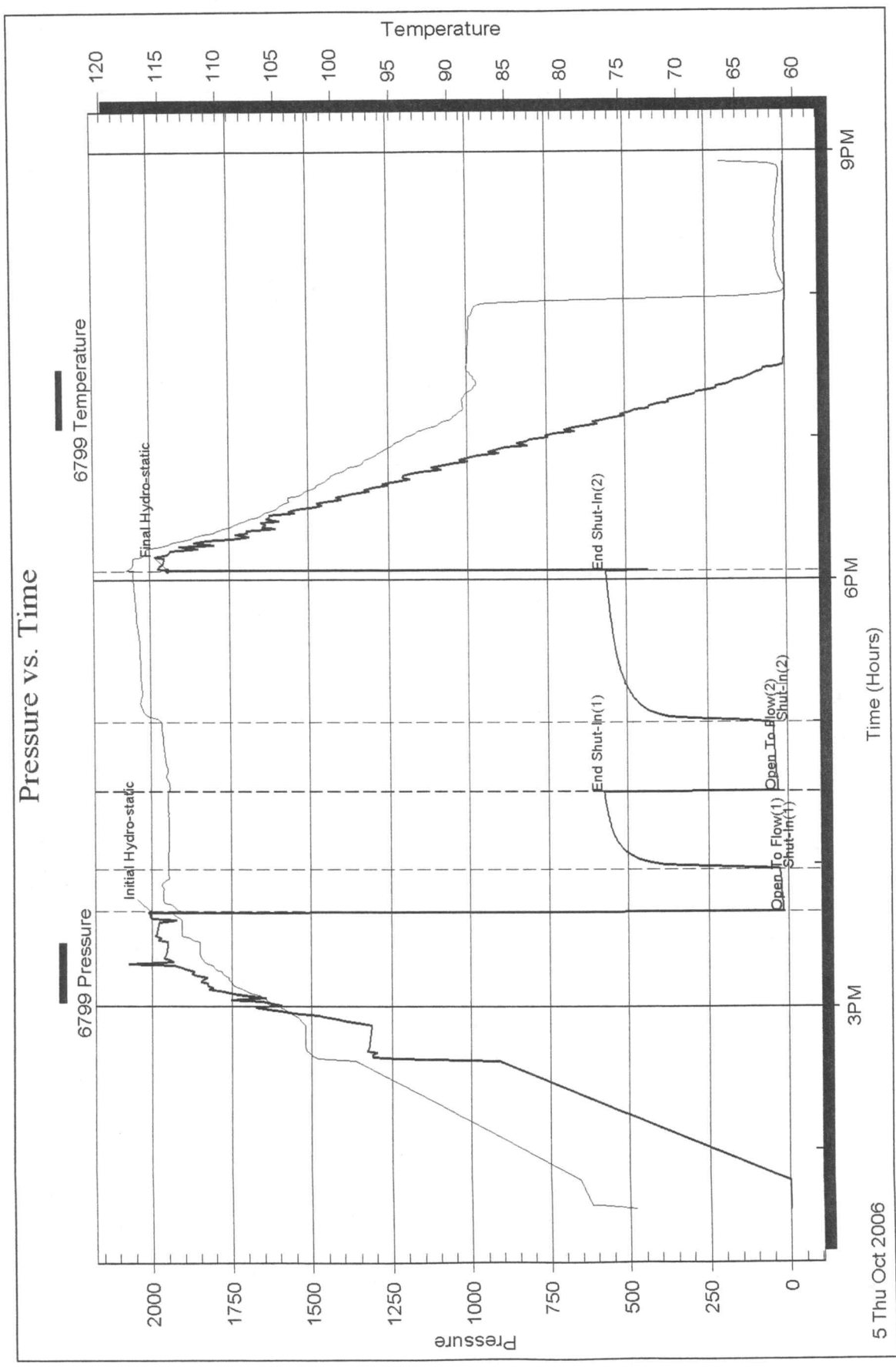
Length ft	Description	Volume bbl
60.00	Mud w/very few Oil specs 100%M	0.295
0.00	No GIP	0.000

Total Length: 60.00 ft Total Volume: 0.295 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 W Hwy 4
Olmitz KS 67564-8561

ATTN: Tom Funk

34 18S 29W Lane KS

Keenan - Stucky #1-34

Start Date: 2006.10.06 @ 08:30:00

End Date: 2006.10.06 @ 16:50:45

Job Ticket #: 25624 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
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DRILL STEM TEST REPORT

Larson Operating Co
562 W Hwy 4
Olmitz KS 67564-8561
ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 25624 **DST#: 2**
Test Start: 2006.10.06 @ 08:30:00

GENERAL INFORMATION:

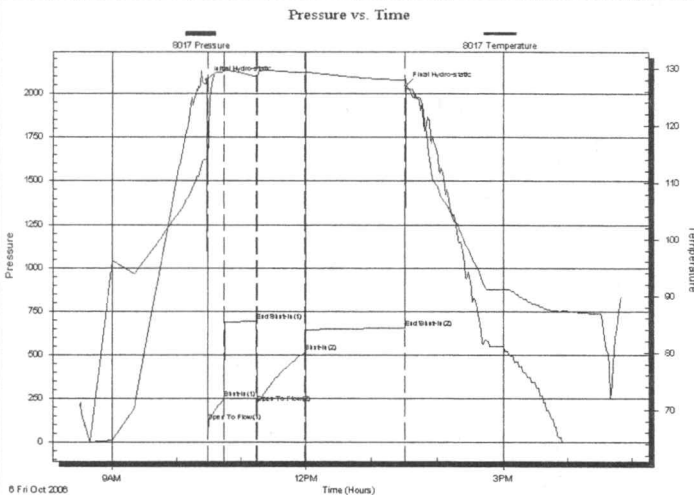
Formation: **Middle Creek**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:29:00
Time Test Ended: 16:50:45
Interval: **4284.00 ft (KB) To 4295.00 ft (KB) (TVD)**
Total Depth: 4295.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Reference Elevations: 2815.00 ft (KB)
2810.00 ft (CF)
KB to GR/CF: 5.00 ft
Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37

Serial #: 8017

Inside

Press@RunDepth: 516.21 psig @ 4287.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2006.10.06 End Date: 2006.10.06 Last Calib.: 2006.10.06
Start Time: 08:30:01 End Time: 16:50:45 Time On Btm: 2006.10.06 @ 10:28:00
Time Off Btm: 2006.10.06 @ 13:32:00

TEST COMMENT: IF BOB @ 5 min.
ISI No return
FF BOB @ 6 min.
FSI Surface return died @ 32 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2078.09	114.14	Initial Hydro-static
1	117.33	112.73	Open To Flow (1)
17	248.77	129.46	Shut-In(1)
47	692.48	128.55	End Shut-In(1)
47	221.81	128.32	Open To Flow (2)
92	516.21	129.24	Shut-In(2)
184	654.89	127.93	End Shut-In(2)
184	2043.60	128.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	M 100%M	0.02
496.00	W 100%W	5.86
124.00	SOMCW 1%O 5%M 94%W	1.74
310.00	GMOCW 15%G 5%M 35%O 45%W	4.35
82.00	FO 100%O	1.15

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co
562 W Hwy 4
Olmitz KS 67564-8561

ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 25624 **DST#: 2**
Test Start: 2006.10.06 @ 08:30:00

Tool Information

Drill Pipe:	Length: 4161.00 ft	Diameter: 3.80 inches	Volume: 58.37 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: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 58.98 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4284.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	11.00 ft			
Tool Length:	39.00 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			4257.00	
Shut In Tool	5.00			4262.00	
Hydraulic tool	5.00			4267.00	
Jars	5.00			4272.00	
Safety Joint	3.00			4275.00	
Packer	5.00			4280.00	28.00 Bottom Of Top Packer
Packer	4.00			4284.00	
Stubb	1.00			4285.00	
Perforations	2.00			4287.00	
Recorder	0.00	8017	Inside	4287.00	
Perforations	3.00			4290.00	
Recorder	0.00	13309	Inside	4290.00	
Bullnose	5.00			4295.00	11.00 Bottom Packers & Anchor

Total Tool Length: 39.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co
562 W Hwy 4
Olmitz KS 67564-8561
ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 25624 **DST#: 2**
Test Start: 2006.10.06 @ 08:30:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	35 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	40000 ppm
Viscosity:	49.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	7.19 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
5.00	M 100%M	0.025
496.00	W 100%W	5.864
124.00	SOMCW 1%O 5%M 94%W	1.739
310.00	GMOCW 15%G 5%M 35%O 45%W	4.348
82.00	FO 100%O	1.150

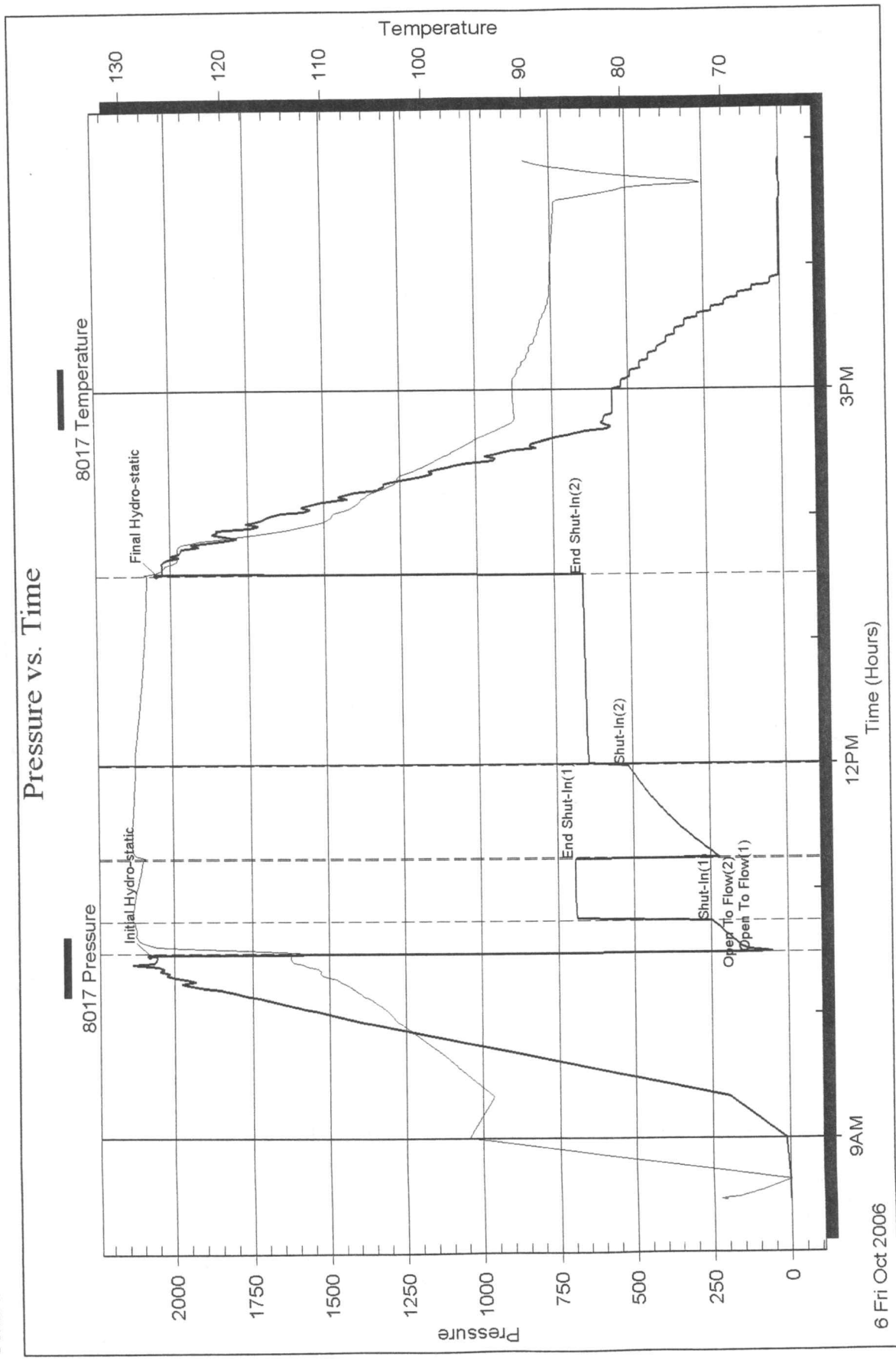
Total Length: 1017.00 ft Total Volume: 13.126 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API; 37 @ 90 degrees F = 35
RW; .147 @ 90 degrees F = 40,000 chlorides.

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 W Hwy 4
Olmitz KS 67564-8561

ATTN: Tom Funk

34 18S 29W Lane KS

Keenan - Stucky #1-34

Start Date: 2006.10.07 @ 01:44:00

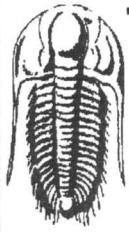
End Date: 2006.10.07 @ 09:55:00

Job Ticket #: 25625 DST #: 3

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DRILL STEM TEST REPORT

Larson Operating Co
562 W Hwy 4
Olmitz KS 67564-8561
ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 25625 **DST#: 3**
Test Start: 2006.10.07 @ 01:44:00

GENERAL INFORMATION:

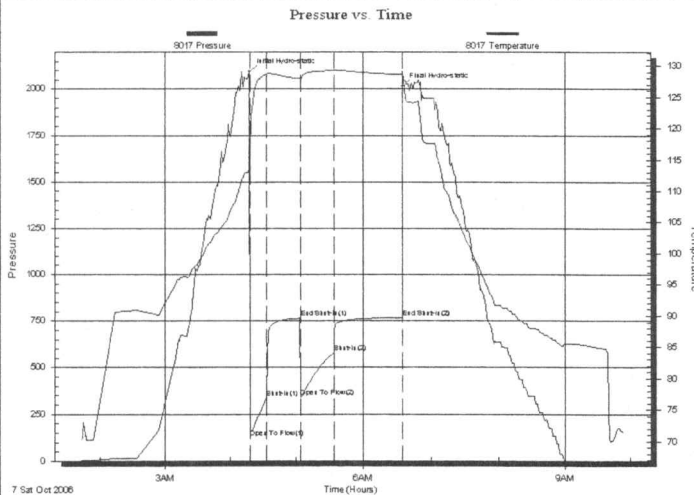
Formation: **KC "L"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:17:45
Time Test Ended: 09:55:00
Interval: **4300.00 ft (KB) To 4320.00 ft (KB) (TVD)**
Total Depth: 4320.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Reference Elevations: 2815.00 ft (KB)
2810.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8017

Inside

Press@RunDepth: 580.11 psig @ 4303.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2006.10.07 End Date: 2006.10.07 Last Calib.: 2006.10.07
Start Time: 01:44:01 End Time: 09:55:00 Time On Btm: 2006.10.07 @ 04:17:30
Time Off Btm: 2006.10.07 @ 06:35:00

TEST COMMENT: IF BOB @ 2 1/2 min.
ISI Weak surface return died @ 15 min.
FF BOB @ 3 3/4 min.
FSI No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2091.42	113.58	Initial Hydro-static
1	122.06	112.89	Open To Flow (1)
16	334.18	128.63	Shut-In(1)
47	765.37	127.93	End Shut-In(1)
47	339.15	127.78	Open To Flow (2)
77	580.11	129.22	Shut-In(2)
138	767.89	128.61	End Shut-In(2)
138	2013.37	129.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%M	0.05
978.00	W 100%W	12.67
186.00	MOCW 5%M 25%O 70%W	2.61
62.00	GOCM 5%G 5%O 90%M	0.87
12.00	FO 100%O	0.17

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co
562 W Hwy 4
Olmitz KS 67564-8561

ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 25625 **DST#: 3**
Test Start: 2006.10.07 @ 01:44:00

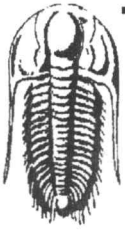
Tool Information

Drill Pipe:	Length: 4165.00 ft	Diameter: 3.80 inches	Volume: 58.42 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: 27000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 59.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4300.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	47.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4278.00	
Hydraulic tool	5.00			4283.00	
Jars	5.00			4288.00	
Safety Joint	3.00			4291.00	
Packer	5.00			4296.00	27.00 Bottom Of Top Packer
Packer	4.00			4300.00	
Stubb	1.00			4301.00	
Perforations	2.00			4303.00	
Recorder	0.00	8017	Inside	4303.00	
Perforations	12.00			4315.00	
Recorder	0.00	13309	Inside	4315.00	
Bullnose	5.00			4320.00	20.00 Bottom Packers & Anchor

Total Tool Length: 47.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co

Keenan - Stucky #1-34

562 W Hwy 4
Olmitz KS 67564-8561

34 18S 29W Lane KS

Job Ticket: 25625 **DST#: 3**

ATTN: Tom Funk

Test Start: 2006.10.07 @ 01:44:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 32 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 39000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.19 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
10.00	Mud 100%M	0.049
978.00	W 100%W	12.671
186.00	MOCW 5%M 25%O 70%W	2.609
62.00	GOCM 5%G 5%O 90%M	0.870
12.00	FO 100%O	0.168

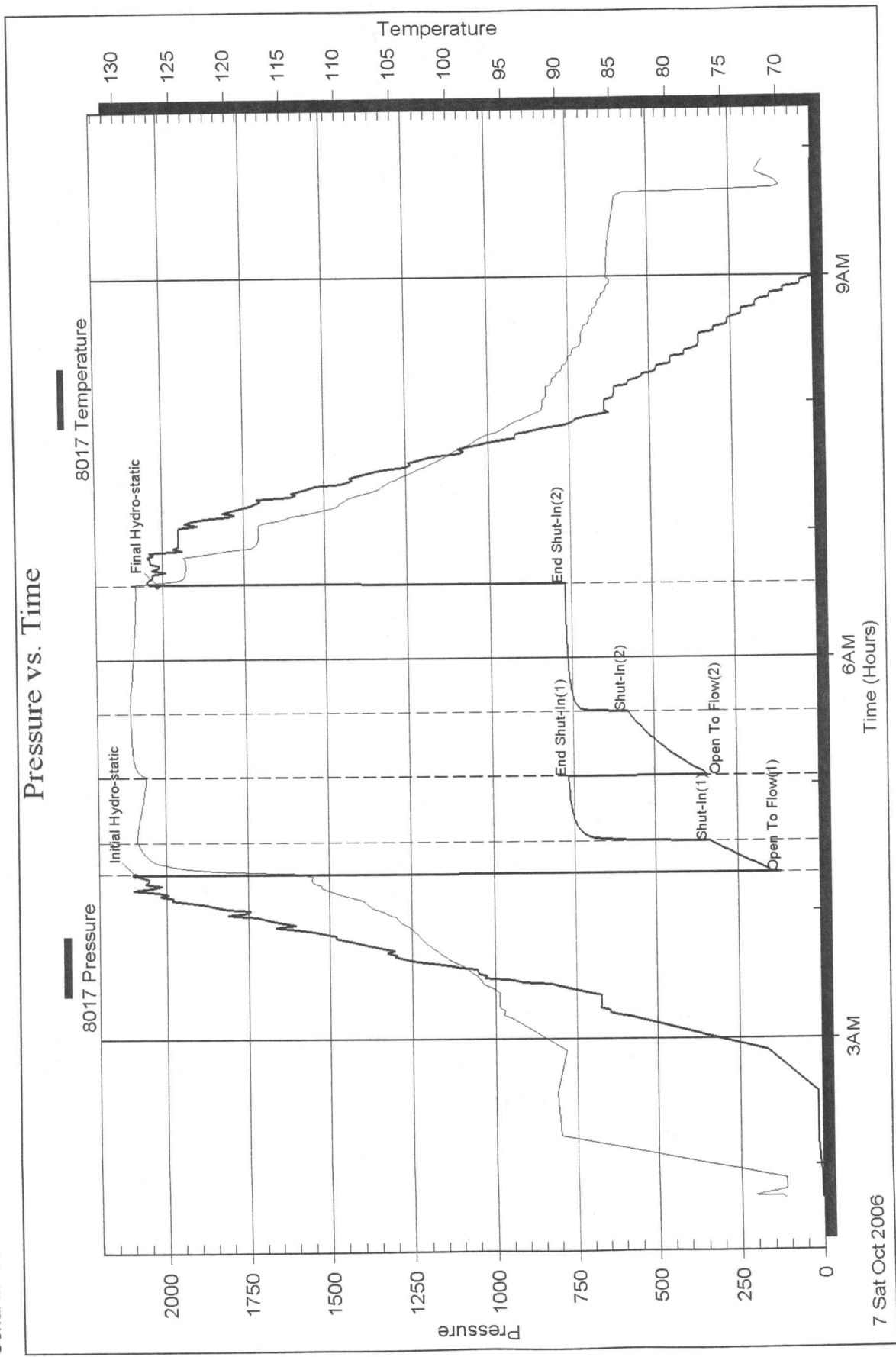
Total Length: 1248.00 ft Total Volume: 16.367 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API; 33 @ 70 degrees F = 32.
RW; .195 @ 70 degrees F = 39000 chlorides.

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 W Hwy 4
Olmitz KS 67564-8561

ATTN: Tom Funk

34 18S 29W Lane KS

Keenan - Stucky #1-34

Start Date: 2006.10.07 @ 20:30:00

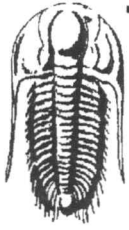
End Date: 2006.10.08 @ 04:44:30

Job Ticket #: 25626 DST #: 4

Trilobite Testing, Inc

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**TRILOBITE
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DRILL STEM TEST REPORT

Larson Operating Co
562 W Hwy 4
Olmritz KS 67564-8561
ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 25626 **DST#: 4**
Test Start: 2006.10.07 @ 20:30:00

GENERAL INFORMATION:

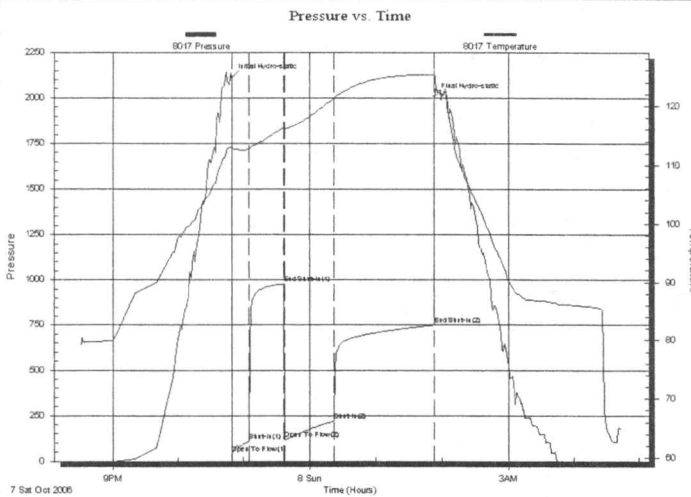
Formation: **Pleasanton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:49:45
Time Test Ended: 04:44:30
Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37
Interval: **4323.00 ft (KB) To 4363.00 ft (KB) (TVD)**
Total Depth: 4363.00 ft (KB) (TVD)
Reference Elevations: 2815.00 ft (KB)
2810.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good
KB to GR/CF: 5.00 ft

Serial #: 8017

Inside

Press@RunDepth: 219.29 psig @ 4326.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2006.10.07 End Date: 2006.10.08 Last Calib.: 2006.10.08
Start Time: 20:30:01 End Time: 04:44:30 Time On Btm: 2006.10.07 @ 22:49:30
Time Off Btm: 2006.10.08 @ 01:53:15

TEST COMMENT: IF BOB @ 7 min.
ISI Surface return built to 4 1/2 "
FF Starting with 4 1/2 " BOB @ 6 min.
FSI Surface return built to 3 ".



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2112.58	113.19	Initial Hydro-static
1	42.82	112.38	Open To Flow (1)
16	110.99	112.63	Shut-In (1)
48	978.11	116.27	End Shut-In (1)
48	119.71	116.06	Open To Flow (2)
93	219.29	121.19	Shut-In (2)
184	750.35	125.28	End Shut-In (2)
184	2005.75	125.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	GMCO 40%G 15%M 45%O	0.61
124.00	GO 50%G 50%O	1.73
305.00	GO 60%G 40%O	4.28

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co

Keenan - Stucky #1-34

562 W Hwy 4
Olmitz KS 67564-8561

34 18S 29W Lane KS

Job Ticket: 25626

DST#: 4

ATTN: Tom Funk

Test Start: 2006.10.07 @ 20:30:00

Tool Information

Drill Pipe:	Length: 4197.00 ft	Diameter: 3.80 inches	Volume: 58.87 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: 30000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 59.48 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4323.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	67.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4301.00	
Hydraulic tool	5.00			4306.00	
Jars	5.00			4311.00	
Safety Joint	3.00			4314.00	
Packer	5.00			4319.00	27.00 Bottom Of Top Packer
Packer	4.00			4323.00	
Stubb	1.00			4324.00	
Perforations	2.00			4326.00	
Recorder	0.00	8017	Inside	4326.00	
Change Over Sub	1.00			4327.00	
Drill Pipe	30.00			4357.00	
Change Over Sub	1.00			4358.00	
Recorder	0.00	13309	Inside	4358.00	
Bullnose	5.00			4363.00	40.00 Bottom Packers & Anchor

Total Tool Length: 67.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co
562 W Hwy 4
Olmitz KS 67564-8561
ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 25626 **DST#: 4**
Test Start: 2006.10.07 @ 20:30:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 36 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 0 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.99 in ³	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 3200.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	GMCO 40%G 15%M 45%O	0.610
124.00	GO 50%G 50%O	1.730
305.00	GO 60%G 40%O	4.278

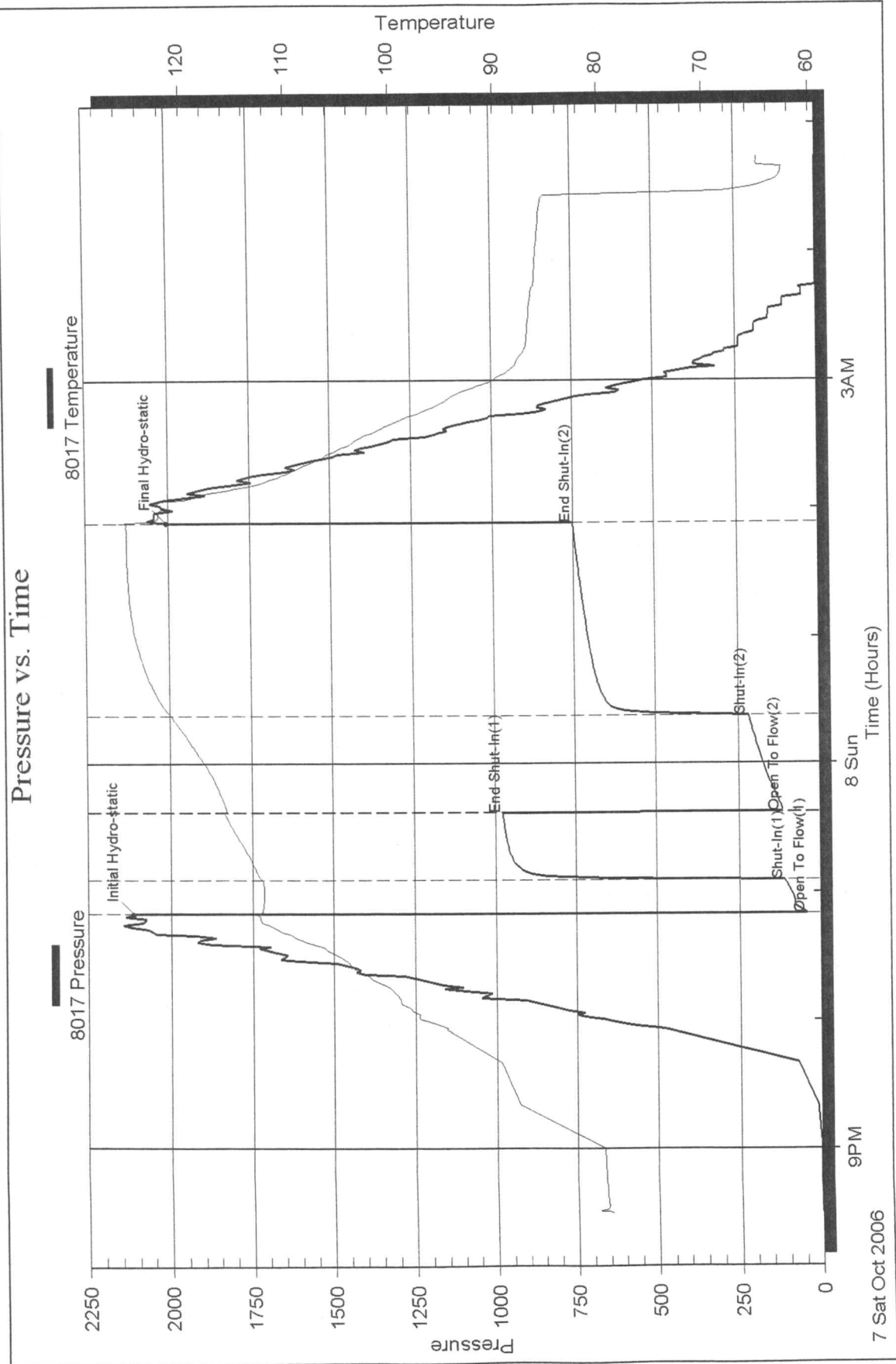
Total Length: 553.00 ft Total Volume: 6.618 bbl

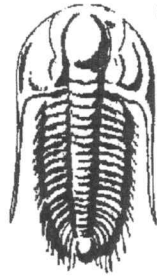
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: API; 37 @ 70 degrees F = 36
687 Feet of gas in pipe.

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 W Hwy 4
Olmitz KS 67564-8561

ATTN: Tom Funk

34 18S 29W Lane KS

Keenan - Stucky #1-34

Start Date: 2006.10.08 @ 14:07:00

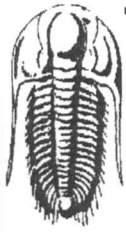
End Date: 2006.10.09 @ 00:07:30

Job Ticket #: 25627 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Operating Co
562 W Hwy 4
Olmritz KS 67564-8561
ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 25627 **DST#: 5**
Test Start: 2006.10.08 @ 14:07:00

GENERAL INFORMATION:

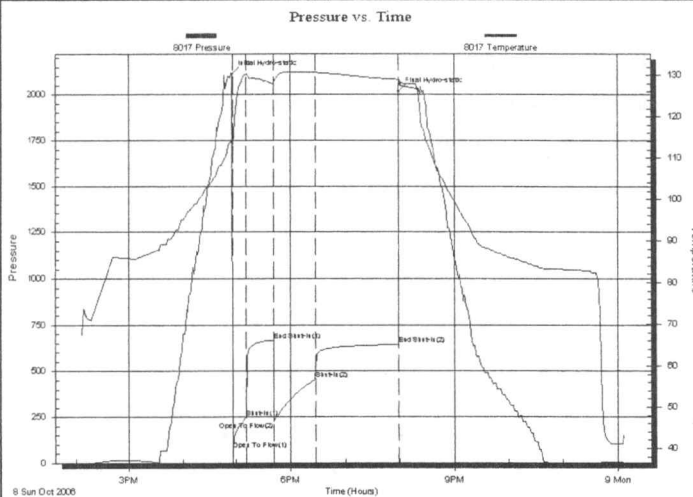
Formation: **Altamont**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:56:00
Time Test Ended: 00:07:30
Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37
Interval: **4388.00 ft (KB) To 4415.00 ft (KB) (TVD)**
Reference Elevations: 2815.00 ft (KB)
Total Depth: 4415.00 ft (KB) (TVD)
2810.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good
KB to GR/CF: 5.00 ft

Serial #: 8017

Inside

Press@RunDepth: 455.91 psig @ 4391.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2006.10.08 End Date: 2006.10.09 Last Calib.: 2006.10.09
Start Time: 14:07:01 End Time: 00:07:30 Time On Btm: 2006.10.08 @ 16:55:45
Time Off Btm: 2006.10.08 @ 19:58:45

TEST COMMENT: IF BOB @ 6 min.
ISI No return
FF BOB @ 6 min.
FSI No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2110.17	114.32	Initial Hydro-static
1	73.99	113.38	Open To Flow (1)
16	245.14	130.19	Shut-In(1)
46	667.40	127.87	End Shut-In(1)
46	226.31	127.56	Open To Flow(2)
92	455.91	130.67	Shut-In(2)
183	644.06	128.99	End Shut-In(2)
183	2017.74	129.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
372.00	OMCW 5%O 10%M 85%W	4.08
248.00	GMWCO 10%G 15%M 35%W 40%O	3.48
372.00	GO 35%O 65%G	5.22
62.00	GO 35%G 65%O	0.87
62.00	GWMCO 10%G 10%W 15%M 65%O	0.87

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co

Keenan - Stucky #1-34

562 W Hwy 4
Olmitz KS 67564-8561

34 18S 29W Lane KS

Job Ticket: 25627

DST#: 5

ATTN: Tom Funk

Test Start: 2006.10.08 @ 14:07:00

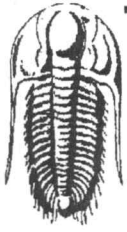
Tool Information

Drill Pipe:	Length: 4257.00 ft	Diameter: 3.80 inches	Volume: 59.71 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: 27000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 60.32 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	4388.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	54.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4366.00	
Hydraulic tool	5.00			4371.00	
Jars	5.00			4376.00	
Safety Joint	3.00			4379.00	
Packer	5.00			4384.00	27.00 Bottom Of Top Packer
Packer	4.00			4388.00	
Stubb	1.00			4389.00	
Perforations	2.00			4391.00	
Recorder	0.00	8017	Inside	4391.00	
Perforations	19.00			4410.00	
Recorder	0.00	13309	Inside	4410.00	
Bullnose	5.00			4415.00	27.00 Bottom Packers & Anchor

Total Tool Length: 54.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co
562 W Hwy 4
Olmitz KS 67564-8561
ATTN: Tom Funk

Keenan - Stucky #1-34
34 18S 29W Lane KS
Job Ticket: 25627 **DST#: 5**
Test Start: 2006.10.08 @ 14:07:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 37 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 48000 ppm
Viscosity: 49.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.20 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
372.00	OMCW 5%O 10%M 85%W	4.079
248.00	GMWCO 10%G 15%M 35%W 40%O	3.479
372.00	GO 35%O 65%G	5.218
62.00	GO 35%G 65%O	0.870
62.00	GWMCO 10%G 10%W 15%M 65%O	0.870

Total Length: 1116.00 ft Total Volume: 14.516 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API; 36 @ 50 degrees F = 37.
RW; .235 @ 47 degrees F = chlorides.

Serial #: 8017

Inside

Larson Operating Co

34 18S 29W Lane KS

DST Test Number: 5

Pressure vs. Time

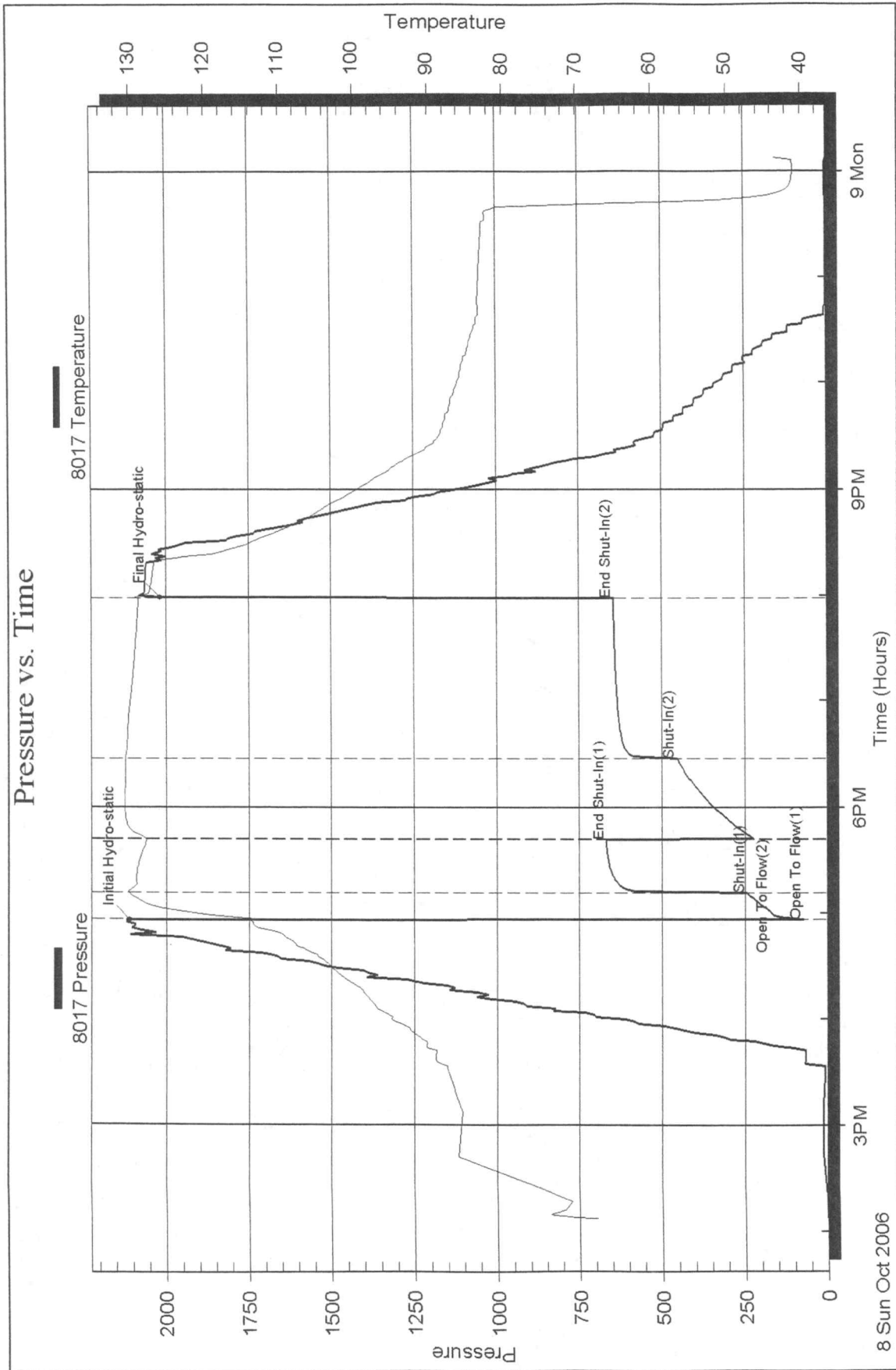


CHART PAGE

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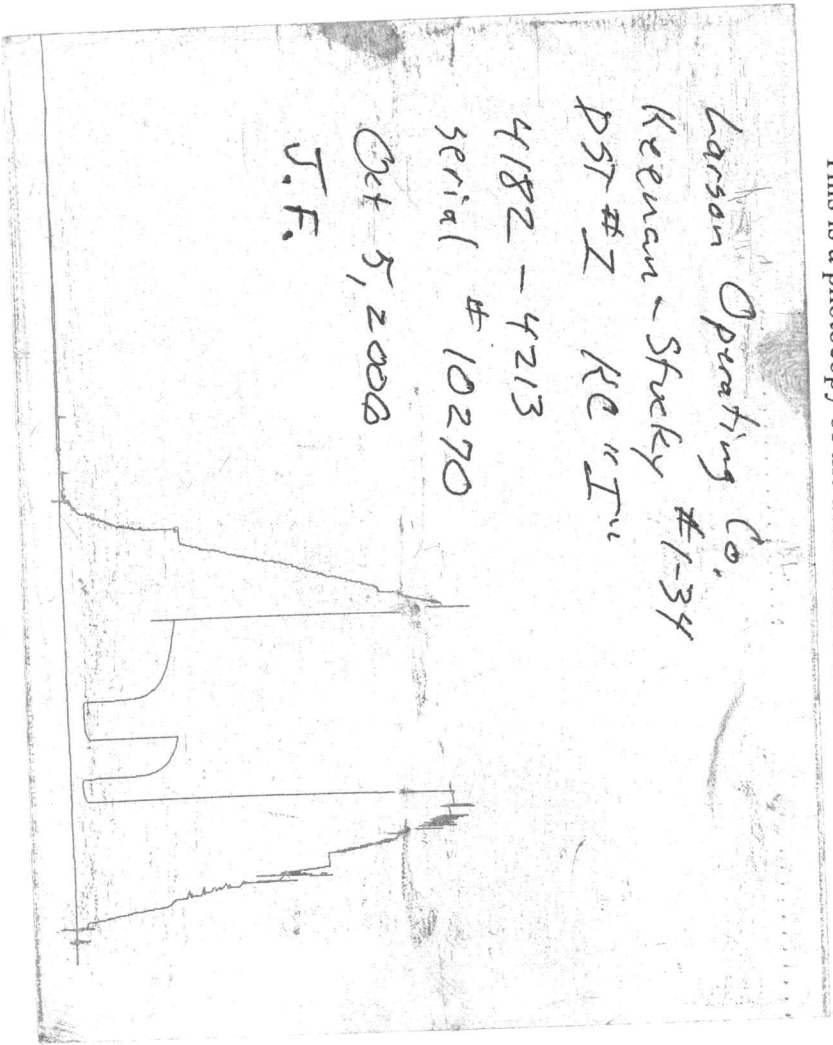


CHART PAGE
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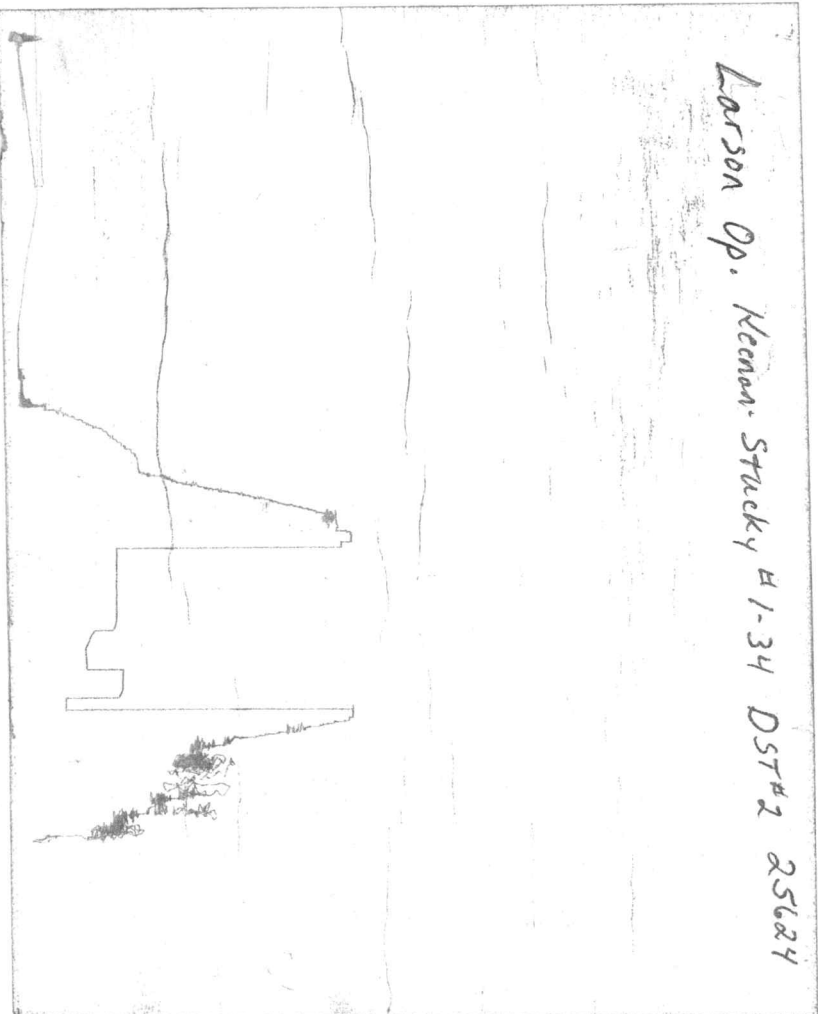


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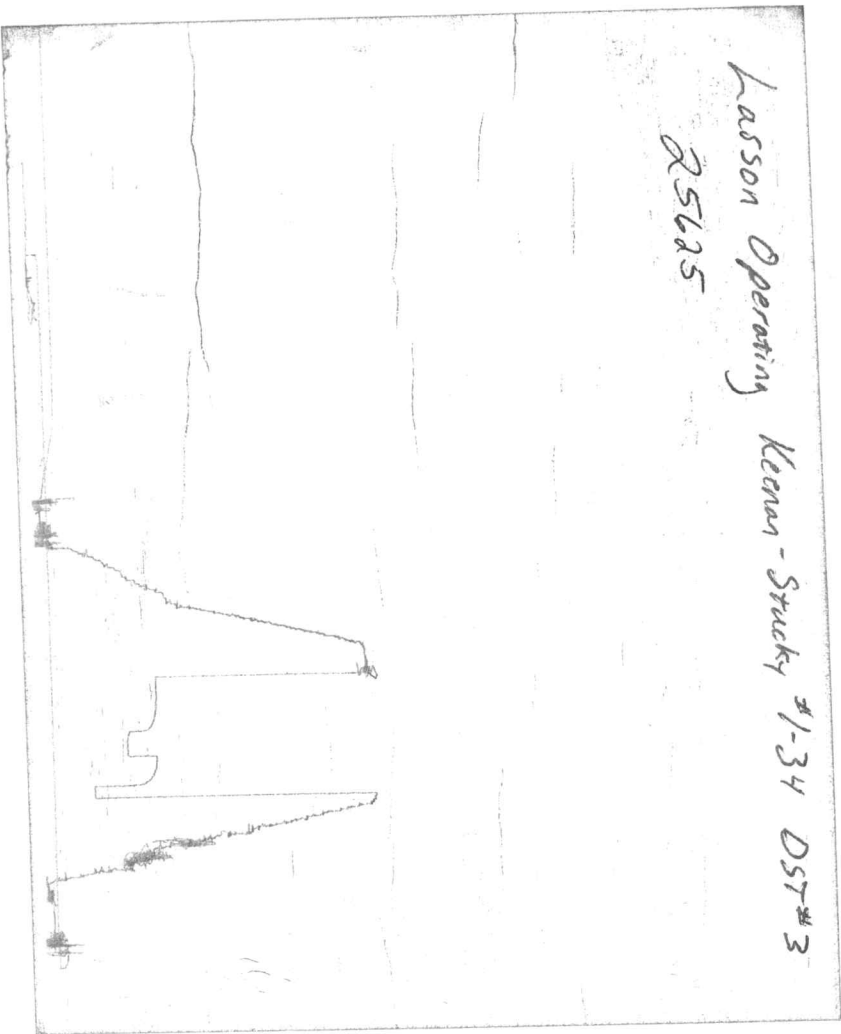


CHART PAGE

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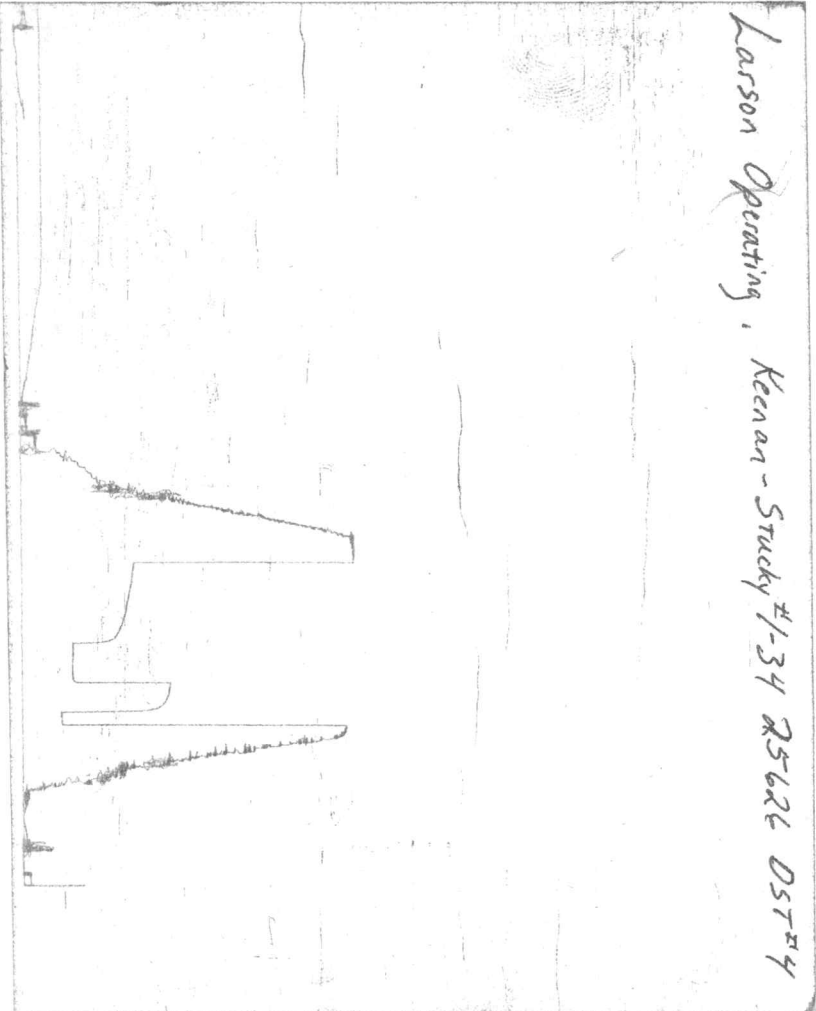


CHART PAGE

This is a photocopy of the actual AK-1 recorder chart.

