

TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

8 17 27 Lane KS

Johnson #2-8

Start Date: 2006.11.22 @ 14:40:25

End Date: 2006.11.22 @ 21:10:34

Job Ticket #: 26613 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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TESTING, INC.

DRILL STEM TEST REPORT

Larson Operating Co

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

Johnson #2-8

8 17 27 Lane KS

Job Ticket: 26613

DST#: 1

Test Start: 2006.11.22 @ 14:40:25

GENERAL INFORMATION:

Formation: **KC**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 16:41:20

Time Test Ended: 21:10:34

Test Type: **Conventional Bottom Hole**

Tester: **Shane McBride**

Unit No: **Murfin #24**

Interval: 4162.00 ft (KB) To 4190.00 ft (KB) (TVD)

Total Depth: **4190.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2707.00 ft (KB)**

2702.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6667

Inside

Press@RunDepth: **24.91 psig @ 4163.00 ft (KB)**

Start Date: **2006.11.22**

End Date:

2006.11.22

Capacity: **7000.00 psig**

Last Calib.: **2006.11.22**

Start Time: **14:40:25**

End Time:

21:00:34

Time On Btm: **2006.11.22 @ 16:41:05**

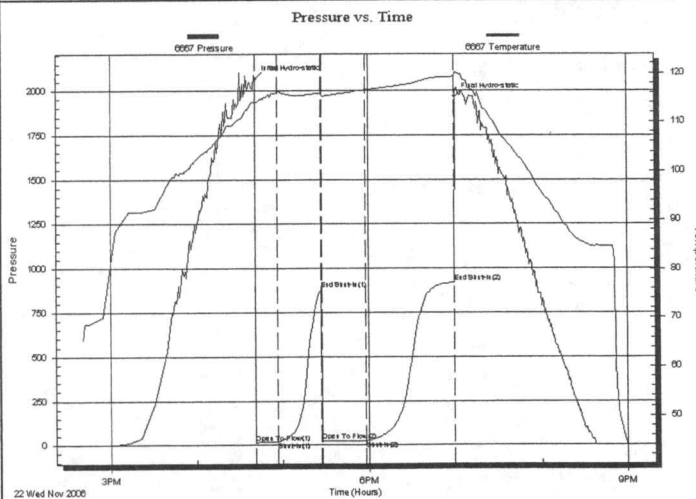
Time Off Btm: **2006.11.22 @ 19:00:19**

TEST COMMENT: **Weak blow died in 7 min.**

No return

No blow

No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2064.11	114.17	Initial Hydro-static
1	14.81	113.73	Open To Flow (1)
16	18.94	116.25	Shut-In (1)
46	878.33	115.81	End Shut-In (1)
46	22.45	115.47	Open To Flow (2)
77	24.91	116.48	Shut-In (2)
139	919.98	119.23	End Shut-In (2)
140	1962.03	119.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	100%M	0.01

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

Johnson #2-8

8 17 27 Lane KS

Job Ticket: 26613

DST#: 1

Test Start: 2006.11.22 @ 14:40:25

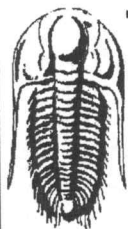
Tool Information

Drill Pipe:	Length: 4034.00 ft	Diameter: 3.80 inches	Volume: 56.59 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	57.20 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial	49000.00 lb
Depth to Top Packer:	4162.00 ft			Final	49000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	28.00 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
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Shut In Tool	5.00			4141.00	
Hydraulic tool	5.00			4146.00	
Jars	5.00			4151.00	
Safety Joint	2.00			4153.00	
Packer	5.00			4158.00	26.00 Bottom Of Top Packer
Packer	4.00		Inside	4162.00	
Stubb	1.00			4163.00	
Recorder	0.00	6667	Inside	4163.00	
Perforations	22.00			4185.00	
Recorder	0.00	11058		4185.00	
Bullnose	5.00			4190.00	28.00 Bottom Packers & Anchor

Total Tool Length: 54.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co

Johnson #2-8

562 West Hwy 4
Olmitz KS 67564

8 17 27 Lane KS

Job Ticket: 26613

DST#: 1

ATTN: Bob Lew ellyn

Test Start: 2006.11.22 @ 14:40:25

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: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.16 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	100%M	0.015

Total Length: 3.00 ft

Total Volume: 0.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

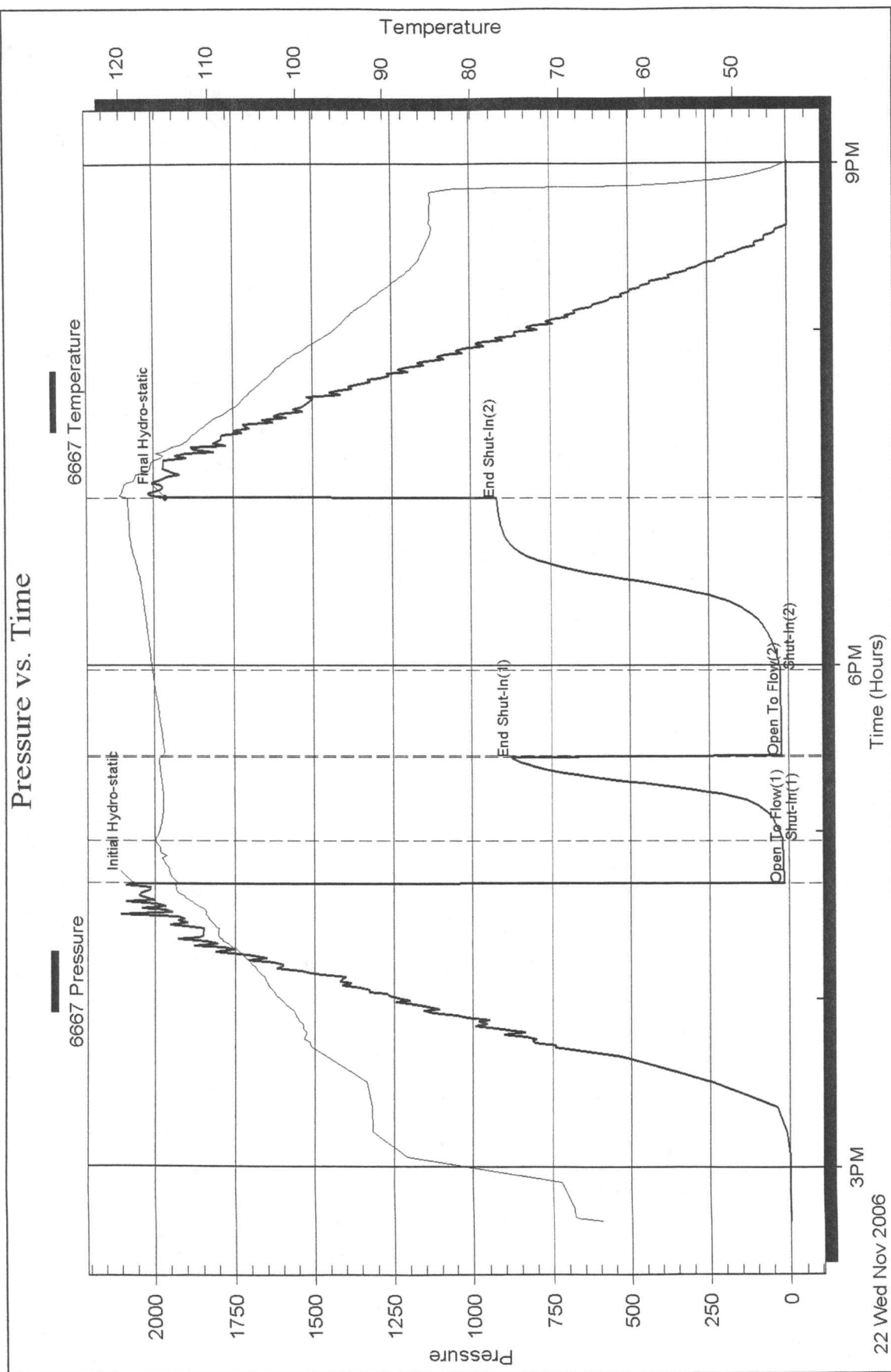
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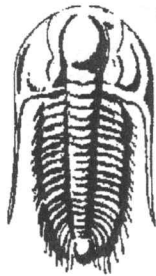
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
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DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

8 17 27 Lane KS

Johnson #2-8

Start Date: 2006.11.23 @ 12:15:54

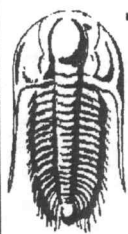
End Date: 2006.11.23 @ 18:40:33

Job Ticket #: 26614 DST #: 2

Trilobite Testing, Inc

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DRILL STEM TEST REPORT

Larson Operating Co

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

Johnson #2-8

8 17 27 Lane KS

Job Ticket: 26614

DST#: 2

Test Start: 2006.11.23 @ 12:15:54

GENERAL INFORMATION:

Formation: **K**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: 14:00:49
Time Test Ended: 18:40:33

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: Murfin #24

Interval: **4238.00 ft (KB) To 4284.00 ft (KB) (TVD)**
Total Depth: **4284.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2707.00 ft (KB)**
2702.00 ft (CF)
KB to GR/CF: **5.00 ft**

Serial #: 6667

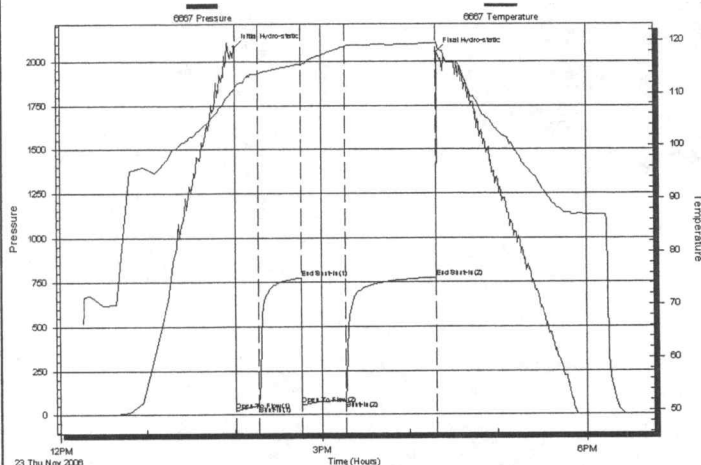
Inside

Press@RunDepth: **80.52 psig @ 4239.00 ft (KB)**
Start Date: **2006.11.23** End Date: **2006.11.23**
Start Time: **12:15:54** End Time: **18:27:33**

Capacity: **7000.00 psig**
Last Calib.: **2006.11.23**
Time On Btm: **2006.11.23 @ 14:00:34**
Time Off Btm: **2006.11.23 @ 16:19:04**

TEST COMMENT: Weak blow died in 10 min.
No return
No blow for 5 min hose loose on head 1 1/4 " blow
No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2083.19	110.70	Initial Hydro-static
1	21.63	109.80	Open To Flow (1)
16	50.92	113.61	Shut-In(1)
46	775.16	115.48	End Shut-In(1)
46	55.81	115.24	Open To Flow (2)
76	80.52	118.81	Shut-In(2)
138	776.01	119.45	End Shut-In(2)
139	2053.23	119.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MCW 20%M 80%W	0.59

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

Johnson #2-8

8 17 27 Lane KS

Job Ticket: 26614

DST#: 2

Test Start: 2006.11.23 @ 12:15:54

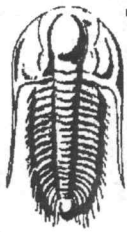
Tool Information

Drill Pipe:	Length: 4097.00 ft	Diameter: 3.80 inches	Volume: 57.47 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 58.08 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4238.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 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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Shut In Tool	5.00			4217.00	
Hydraulic tool	5.00			4222.00	
Jars	5.00			4227.00	
Safety Joint	2.00			4229.00	
Packer	5.00			4234.00	26.00 Bottom Of Top Packer
Packer	4.00		Inside	4238.00	
Stubb	1.00			4239.00	
Recorder	0.00	6667	Inside	4239.00	
Perforations	7.00			4246.00	
Change Over Sub	1.00			4247.00	
Drill Pipe	31.00			4278.00	
Change Over Sub	1.00			4279.00	
Recorder	0.00	11058		4279.00	
Bullnose	5.00			4284.00	46.00 Bottom Packers & Anchor

Total Tool Length: 72.00



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FLUID SUMMARY

Larson Operating Co

Johnson #2-8

562 West Hwy 4
Olmitz KS 67564

8 17 27 Lane KS

Job Ticket: 26614

DST#: 2

ATTN: Bob Lewellyn

Test Start: 2006.11.23 @ 12:15:54

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:

53500 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.16 in³

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
120.00	MCW 20%M 80%W	0.590

Total Length: 120.00 ft

Total Volume: 0.590 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6667

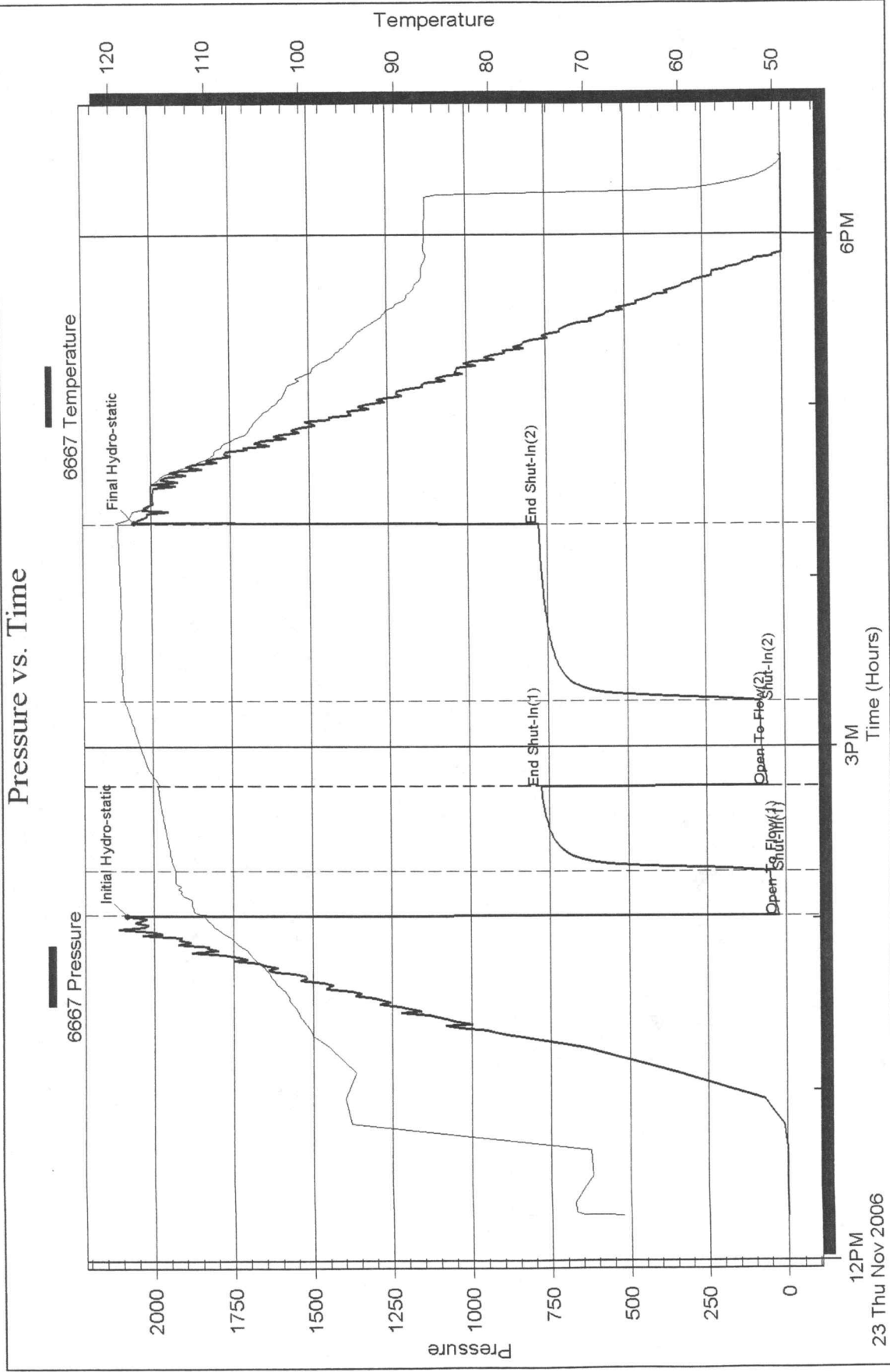
Inside

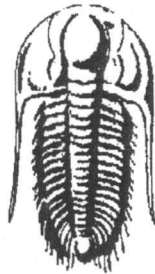
Larson Operating Co

8 17 27 Lane KS

DST Test Number: 2

Pressure vs. Time





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DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

8 17 27 Lane KS

Johnson #2-8

Start Date: 2006.11.24 @ 14:55:46

End Date: 2006.11.24 @ 21:55:25

Job Ticket #: 26615 DST #: 3

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 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

Johnson #2-8

8 17 27 Lane KS

Job Ticket: 26615

DST#: 3

Test Start: 2006.11.24 @ 14:55:46

GENERAL INFORMATION:

Formation: **altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:55:56

Time Test Ended: 21:55:25

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: Murfin #24

Interval: **4365.00 ft (KB) To 4420.00 ft (KB) (TVD)**

Total Depth: 4420.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2707.00 ft (KB)

2702.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6667 Inside

Press@RunDepth: 116.15 psig @ 4366.00 ft (KB)

Start Date: 2006.11.24

End Date:

2006.11.24

Capacity: 7000.00 psig

Last Calib.: 2006.11.24

Start Time: 14:55:46

End Time:

21:42:25

Time On Btm: 2006.11.24 @ 16:55:41

Time Off Btm: 2006.11.24 @ 19:11:41

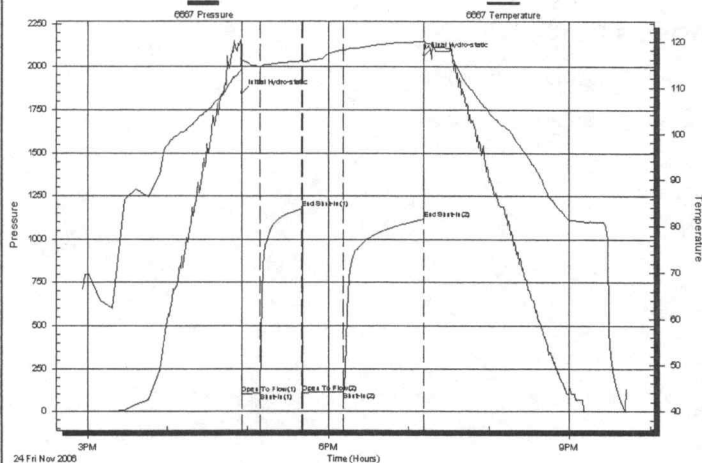
TEST COMMENT: Mud dropped 50' @ open 7" blow died back to 4 1/2"

No return

No blow

No return

Pressure vs. Time



PRESSURE SUMMARY

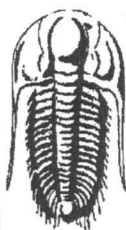
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1847.31	114.23	Initial Hydro-static
1	100.12	115.41	Open To Flow (1)
14	107.03	114.48	Shut-In (1)
45	1176.43	115.72	End Shut-In (1)
46	108.29	115.47	Open To Flow (2)
76	116.15	118.14	Shut-In (2)
136	1115.14	119.95	End Shut-In (2)
136	2065.44	120.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
195.00	100%M	1.60

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

Johnson #2-8

8 17 27 Lane KS

Job Ticket: 26615

DST#: 3

Test Start: 2006.11.24 @ 14:55:46

Tool Information

Drill Pipe:	Length: 4221.00 ft	Diameter: 3.80 inches	Volume: 59.21 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose:	67000.00 lb
			<u>Total Volume: 59.82 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	4365.00 ft			Final	57000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	55.00 ft				
Tool Length:	81.00 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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Shut In Tool	5.00			4344.00	
Hydraulic tool	5.00			4349.00	
Jars	5.00			4354.00	
Safety Joint	2.00			4356.00	
Packer	5.00			4361.00	26.00 Bottom Of Top Packer
Packer	4.00		Inside	4365.00	
Stubb	1.00			4366.00	
Recorder	0.00	6667	Inside	4366.00	
Perforations	16.00			4382.00	
Change Over Sub	1.00			4383.00	
Drill Pipe	31.00			4414.00	
Change Over Sub	1.00			4415.00	
Recorder	0.00	11058		4415.00	
Bullnose	5.00			4420.00	55.00 Bottom Packers & Anchor

Total Tool Length: 81.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co

Johnson #2-8

562 West Hwy 4
Olmitz KS 67564

8 17 27 Lane KS

Job Ticket: 26615

DST#: 3

ATTN: Bob Lewellyn

Test Start: 2006.11.24 @ 14:55:46

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: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
195.00	100%M	1.597

Total Length: 195.00 ft

Total Volume: 1.597 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6667

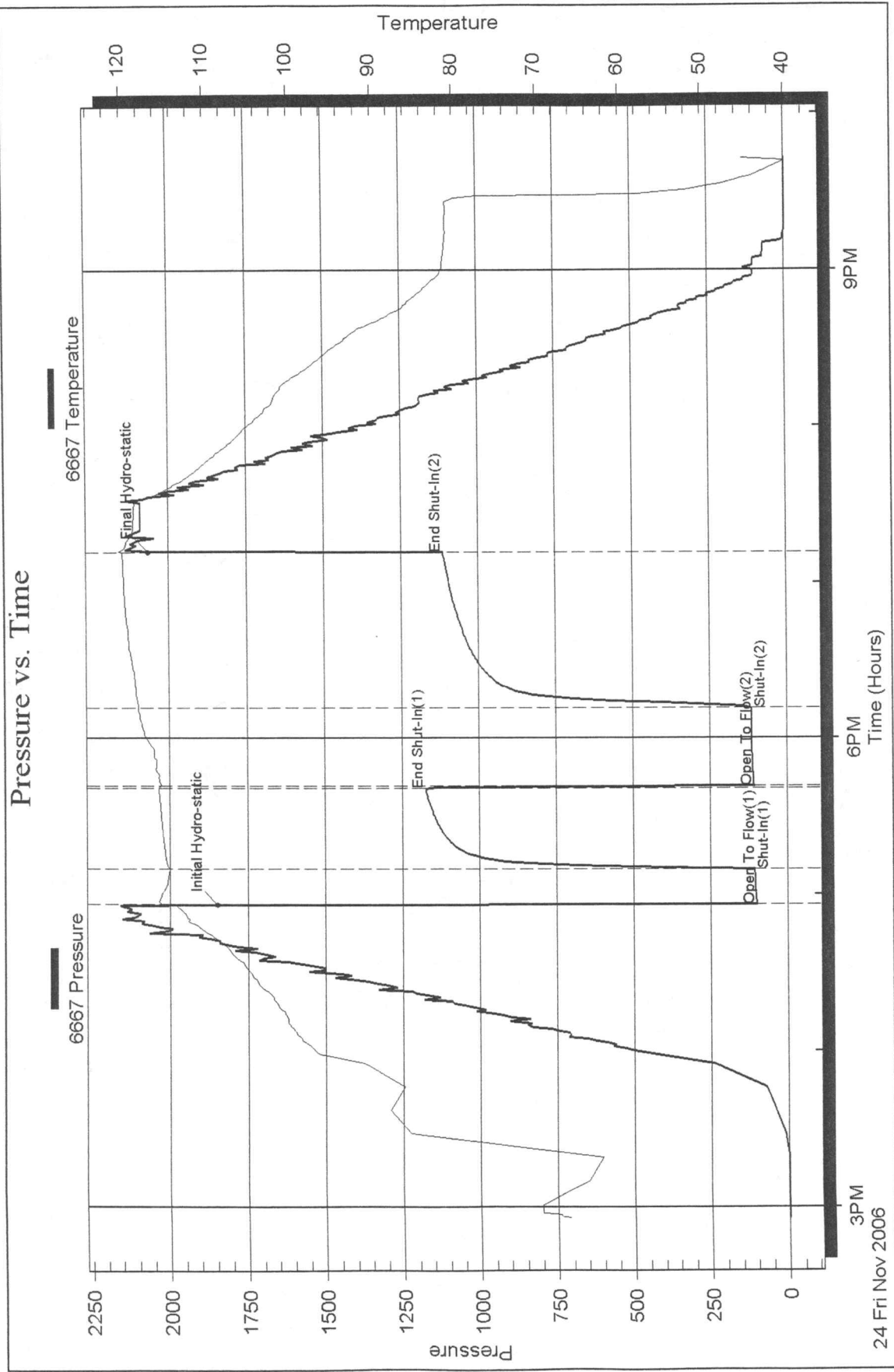
Inside

Larson Operating Co

8 17 27 Lane KS

DST Test Number: 3

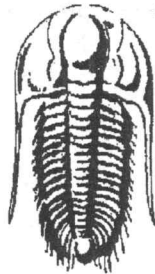
Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 26615

Printed: 2006.11.29 @ 12:26:07 Page 5



TRILOBITE
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DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

8 17 27 Lane KS

Johnson #2-8

Start Date: 2006.11.25 @ 12:40:25

End Date: 2006.11.25 @ 19:55:04

Job Ticket #: 26616 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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DRILL STEM TEST REPORT

Larson Operating Co

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

Johnson #2-8

8 17 27 Lane KS

Job Ticket: 26616

DST#: 4

Test Start: 2006.11.25 @ 12:40:25

GENERAL INFORMATION:

Formation: **Ft Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:43:20

Time Test Ended: 19:55:04

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: Murfin #24

Interval: 4460.00 ft (KB) To 4520.00 ft (KB) (TVD)

Total Depth: 4520.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2707.00 ft (KB)

2702.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6667

Inside

Press@RunDepth: 106.22 psig @ 4461.00 ft (KB)

Start Date: 2006.11.25

End Date:

2006.11.25

Start Time: 12:40:25

End Time:

19:35:04

Capacity: 7000.00 psig

Last Calib.: 2006.11.25

Time On Btm: 2006.11.25 @ 14:42:50

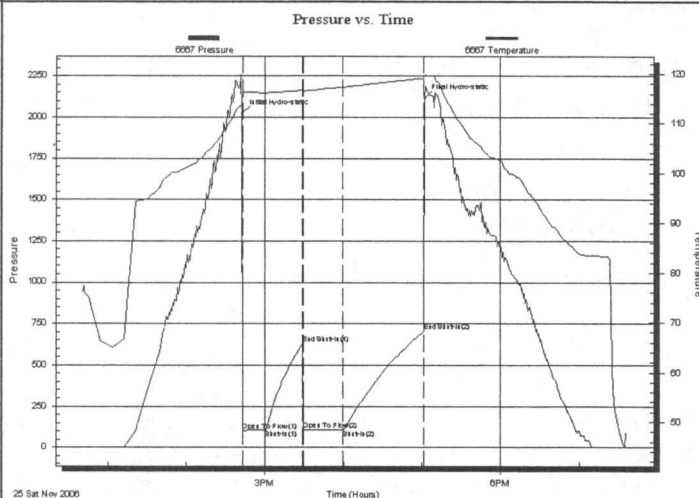
Time Off Btm: 2006.11.25 @ 17:02:19

TEST COMMENT: Mud dropped 50' @ open 6" blow died back to 3"

No return

No blow

No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2020.76	114.21	Initial Hydro-static
1	103.17	116.28	Open To Flow (1)
18	105.45	116.19	Shut-In (1)
46	630.86	116.72	End Shut-In (1)
47	104.51	116.56	Open To Flow (2)
77	106.22	117.31	Shut-In (2)
139	704.56	119.15	End Shut-In (2)
140	2114.73	119.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
160.00	100%M	1.11

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

Johnson #2-8

8 17 27 Lane KS

Job Ticket: 26616

DST#: 4

Test Start: 2006.11.25 @ 12:40:25

Tool Information

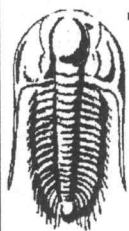
Drill Pipe:	Length: 4314.00 ft	Diameter: 3.80 inches	Volume: 60.51 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose:	75000.00 lb
		Total Volume:	61.12 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial	65000.00 lb
Depth to Top Packer:	4460.00 ft			Final	67000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	60.00 ft				
Tool Length:	86.00 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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Shut In Tool	5.00			4439.00	
Hydraulic tool	5.00			4444.00	
Jars	5.00			4449.00	
Safety Joint	2.00			4451.00	
Packer	5.00			4456.00	26.00 Bottom Of Top Packer
Packer	4.00		Inside	4460.00	
Stubb	1.00			4461.00	
Recorder	0.00	6667	Inside	4461.00	
Perforations	21.00			4482.00	
Change Over Sub	1.00			4483.00	
Drill Pipe	31.00			4514.00	
Change Over Sub	1.00			4515.00	
Recorder	0.00	11058		4515.00	
Bullnose	5.00			4520.00	60.00 Bottom Packers & Anchor

Total Tool Length: 86.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co

Johnson #2-8

562 West Hwy 4
Olmitz KS 67564

8 17 27 Lane KS

Job Ticket: 26616

DST#: 4

ATTN: Bob Lewellyn

Test Start: 2006.11.25 @ 12:40:25

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.98 in³

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
160.00	100%M	1.106

Total Length: 160.00 ft

Total Volume: 1.106 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

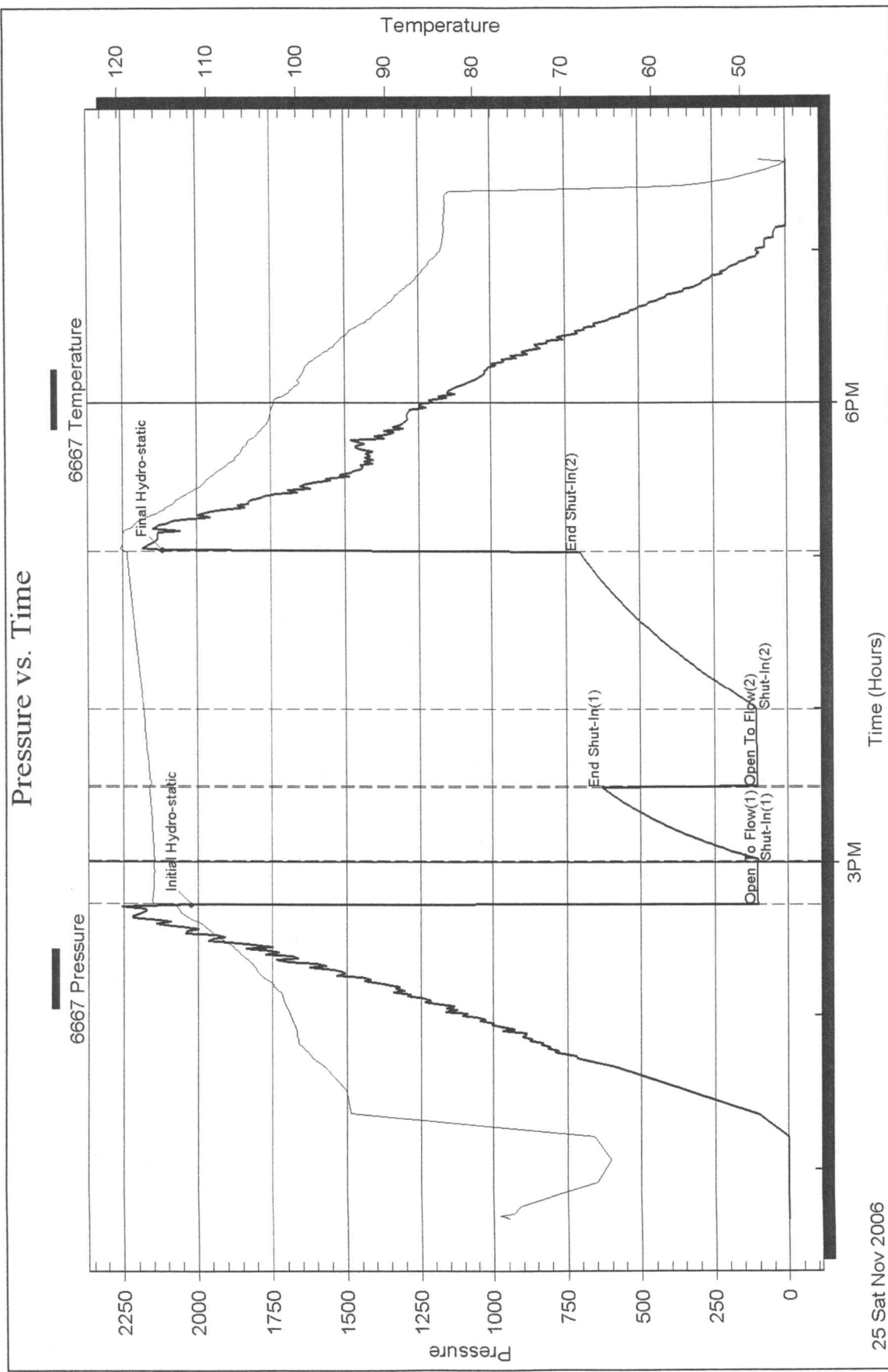
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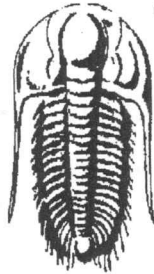
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co**

562 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

8 17 27 Lane KS

Johnson #2-8

Start Date: 2006.11.26 @ 18:13:01

End Date: 2006.11.27 @ 02:30:10

Job Ticket #: 25541 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 West Hwy 4
Olmitz KS 67564

ATTN: Bob Lewellyn

Johnson #2-8

8 17 27 Lane KS

Job Ticket: 25541

DST#: 5

Test Start: 2006.11.26 @ 18:13:01

GENERAL INFORMATION:

Formation: **LKC-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:14:41

Time Test Ended: 02:30:10

Test Type: Conventional Straddle

Tester: Brandon Turley

Unit No: 35

Interval: **4055.00 ft (KB) To 4085.00 ft (KB) (TVD)**

Total Depth: 4635.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2707.00 ft (KB)

2702.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6772

Inside

Press@RunDepth: 160.48 psig @ 4056.00 ft (KB)

Start Date: 2006.11.26

End Date:

2006.11.27

Capacity: 7000.00 psig

Last Calib.: 2006.11.27

Start Time: 18:13:01

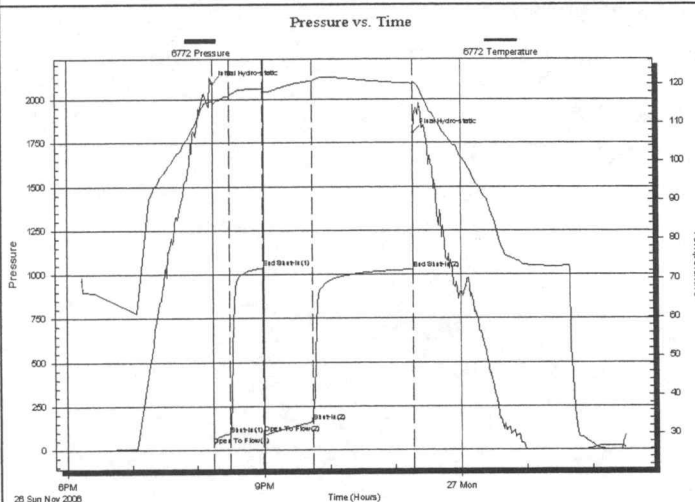
End Time:

02:30:10

Time On Btm: 2006.11.26 @ 20:14:26

Time Off Btm: 2006.11.26 @ 23:16:40

TEST COMMENT: IF 1/4 blow BOB in 12 min.
IS Surface blow built to 1/4
FF BOB in 7 min.
FS 1/4 blow built to 6 in 90 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2092.19	115.47	Initial Hydro-static
1	27.76	115.01	Open To Flow (1)
16	90.36	116.70	Shut-In (1)
46	1037.40	118.54	End Shut-In (1)
47	92.46	118.11	Open To Flow (2)
90	160.48	120.70	Shut-In (2)
182	1028.45	119.99	End Shut-In (2)
183	1805.16	120.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	WMCO 25%G 50%O 5%W 20%M	0.62
124.00	MCO 30%G 30%O 40%M	1.74
134.00	Oil 100%O	1.88

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co

Johnson #2-8

562 West Hwy 4
Olmitz KS 67564

8 17 27 Lane KS

Job Ticket: 25541

DST#: 5

ATTN: Bob Lewellyn

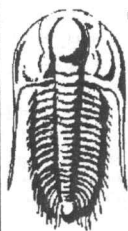
Test Start: 2006.11.26 @ 18:13:01

Tool Information

Drill Pipe:	Length:	3909.00 ft	Diameter:	3.80 inches	Volume:	54.83 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	126.00 ft	Diameter:	2.25 inches	Volume:	0.62 bbl	Weight to Pull Loose:	80000.00 lb
					Total Volume:	55.45 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		7.00 ft					String Weight: Initial	55000.00 lb
Depth to Top Packer:		4055.00 ft					Final	58000.00 lb
Depth to Bottom Packer:		4081.00 ft						
Interval between Packers:		26.00 ft						
Tool Length:		607.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4029.00	
Shut In Tool	5.00			4034.00	
Hydraulic tool	5.00			4039.00	
Jars	5.00			4044.00	
Safety Joint	2.00			4046.00	
Packer	5.00			4051.00	27.00 Bottom Of Top Packer
Packer	4.00			4055.00	
Stubb	1.00			4056.00	
Recorder	0.00	6772	Inside	4056.00	
Perforations	24.00			4080.00	
Recorder	0.00	1074	Outside	4080.00	
Blank Off Sub	1.00			4081.00	26.00 Tool Interval
Packer	4.00			4085.00	
Stubb	1.00			4086.00	
Perforations	13.00			4099.00	
Change Over Sub	1.00			4100.00	
Drill Pipe	529.00			4629.00	
Change Over Sub	1.00			4630.00	
Recorder	0.00	7437	Below	4630.00	
Bullnose	5.00			4635.00	554.00 Bottom Packers & Anchor

Total Tool Length: 607.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co

Johnson #2-8

562 West Hwy 4
Olmitz KS 67564

8 17 27 Lane KS

Job Ticket: 25541

DST#: 5

ATTN: Bob Lewellyn

Test Start: 2006.11.26 @ 18:13:01

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 8.78 in³

Resistivity: 0.00 ohm.m

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

35 deg API

0 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
126.00	WMCO 25%G 50%O 5%W 20%M	0.620
124.00	MCO 30%G 30%O 40%M	1.739
134.00	Oil 100%O	1.880

Total Length: 384.00 ft

Total Volume: 4.239 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

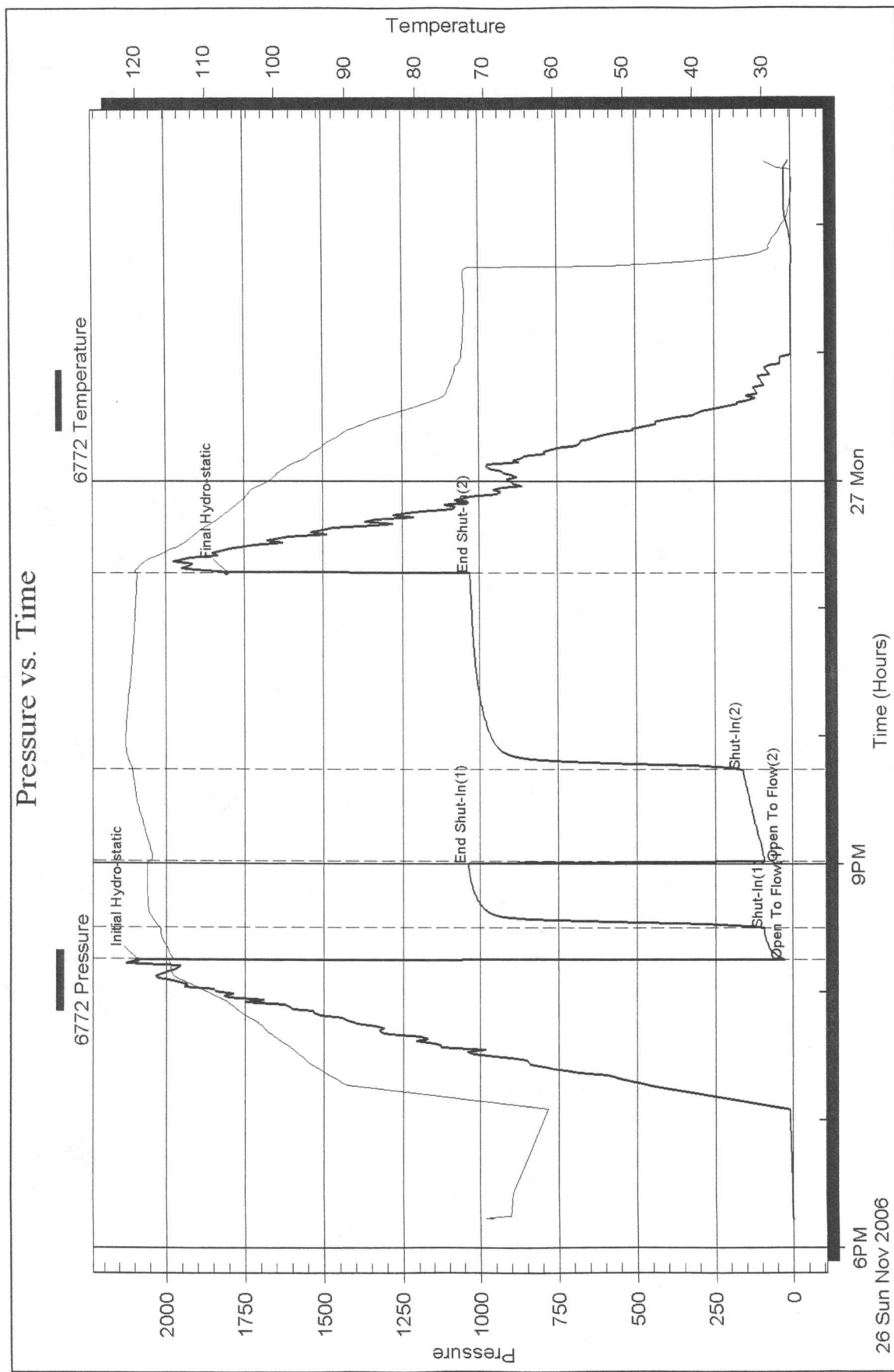


CHART PAGE

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

10558 Johnson 2-8
DST #1 Larson Operating

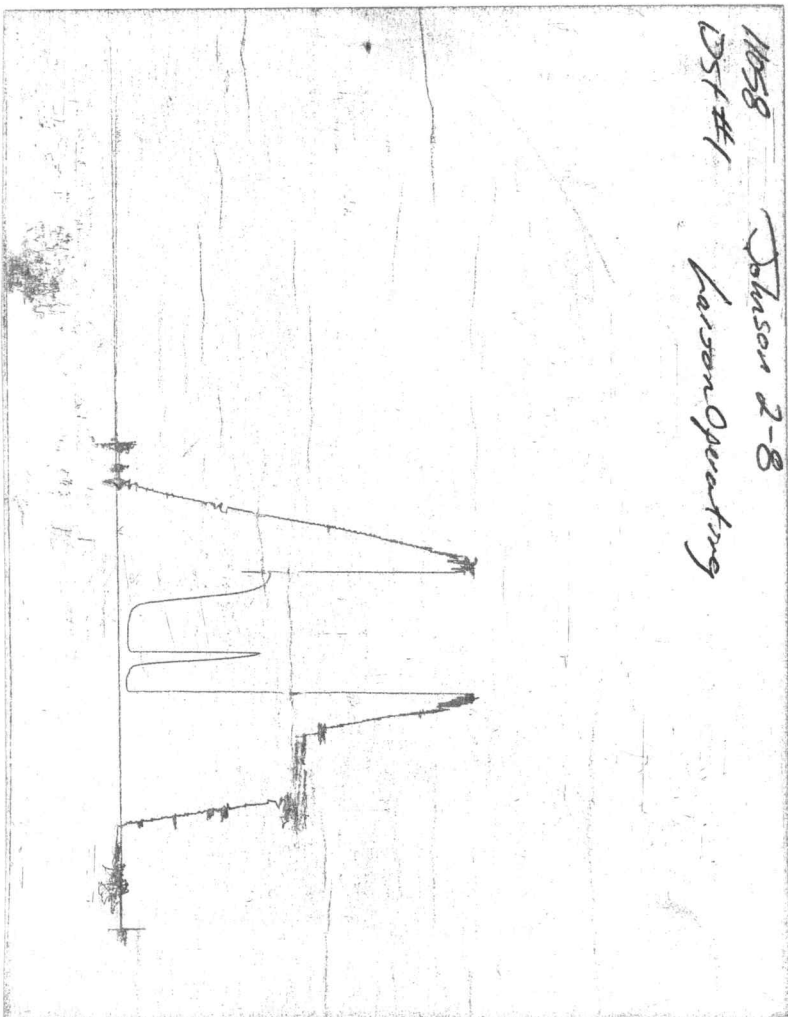


CHART PAGE

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

11058

Johnson Z-8

D51#2 Larson Operating Co

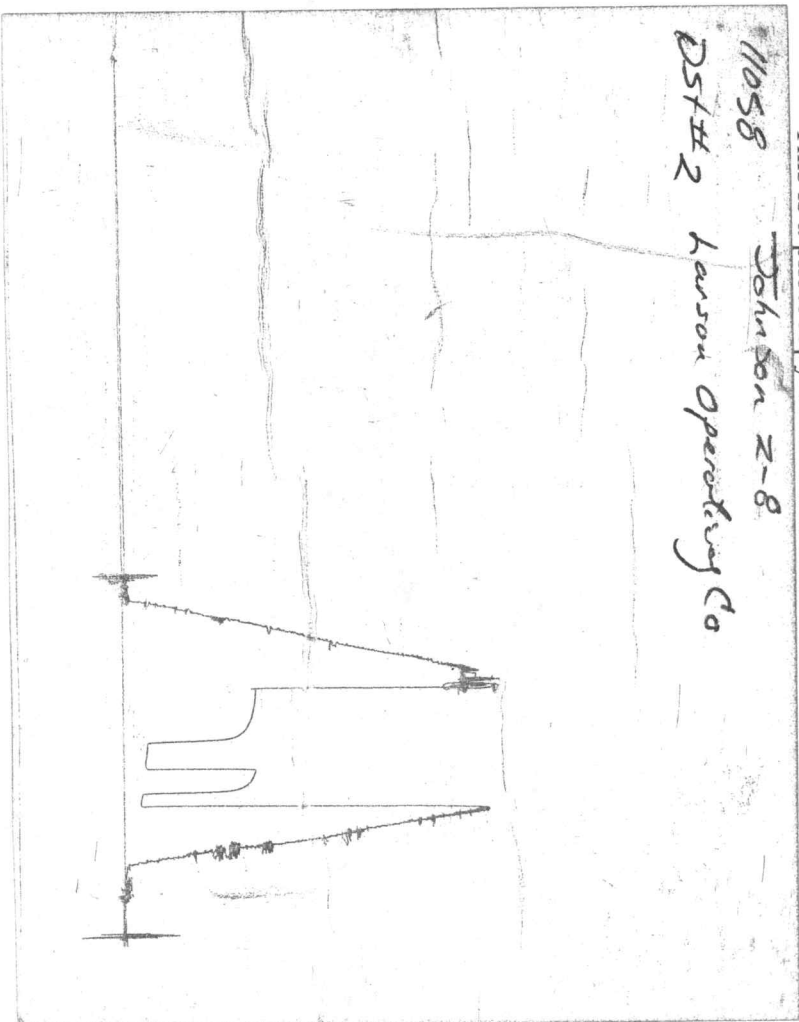


CHART PAGE

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

11058 *Shawson 2-8*
D54#3 *harson Operating*

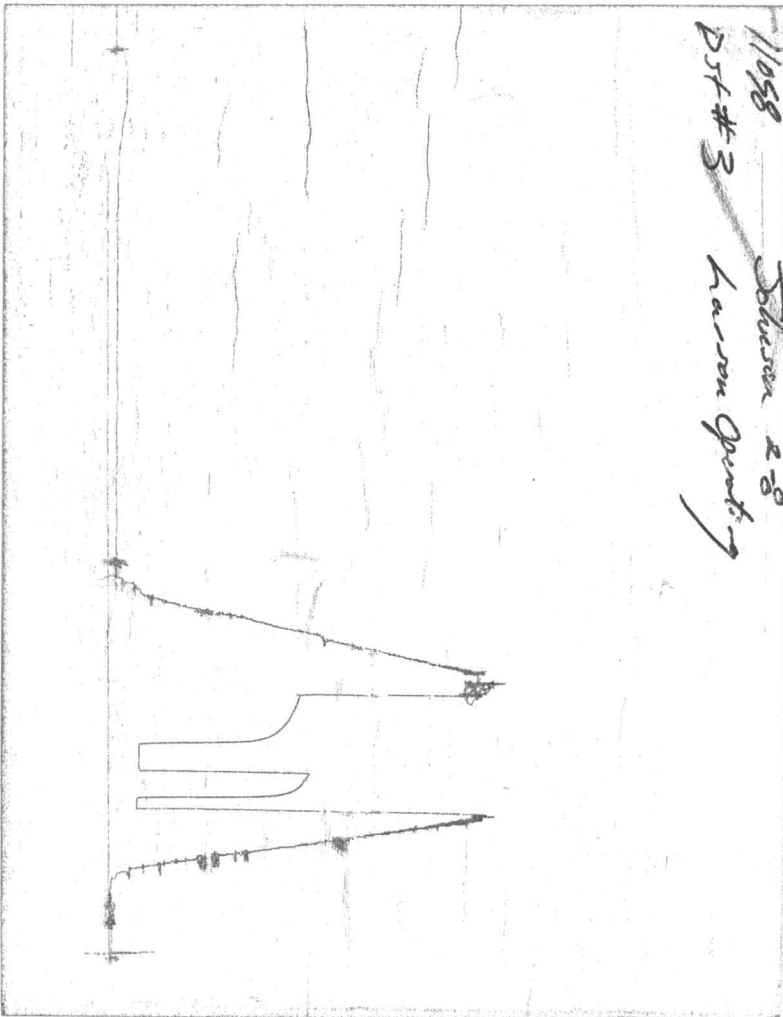


CHART PAGE

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

11/5/58
Dytch

Johnson 2-8
Johnson Operating

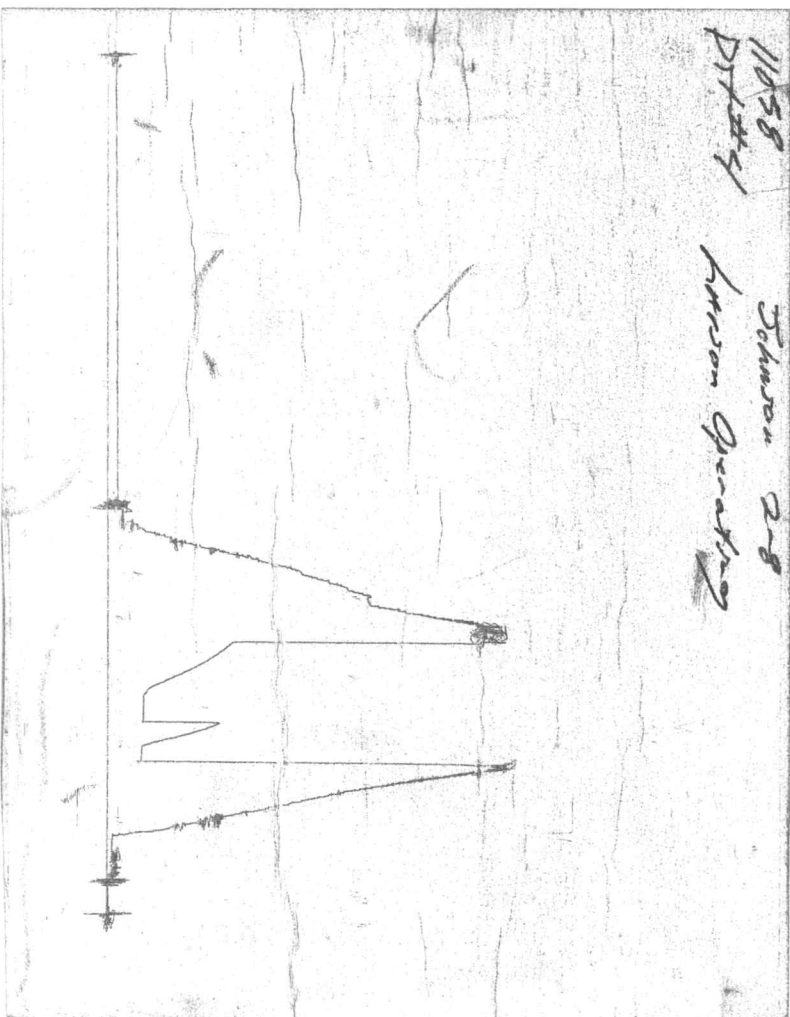


CHART PAGE

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

7437
#5
Larson operating
Johnson 2-8
TOP

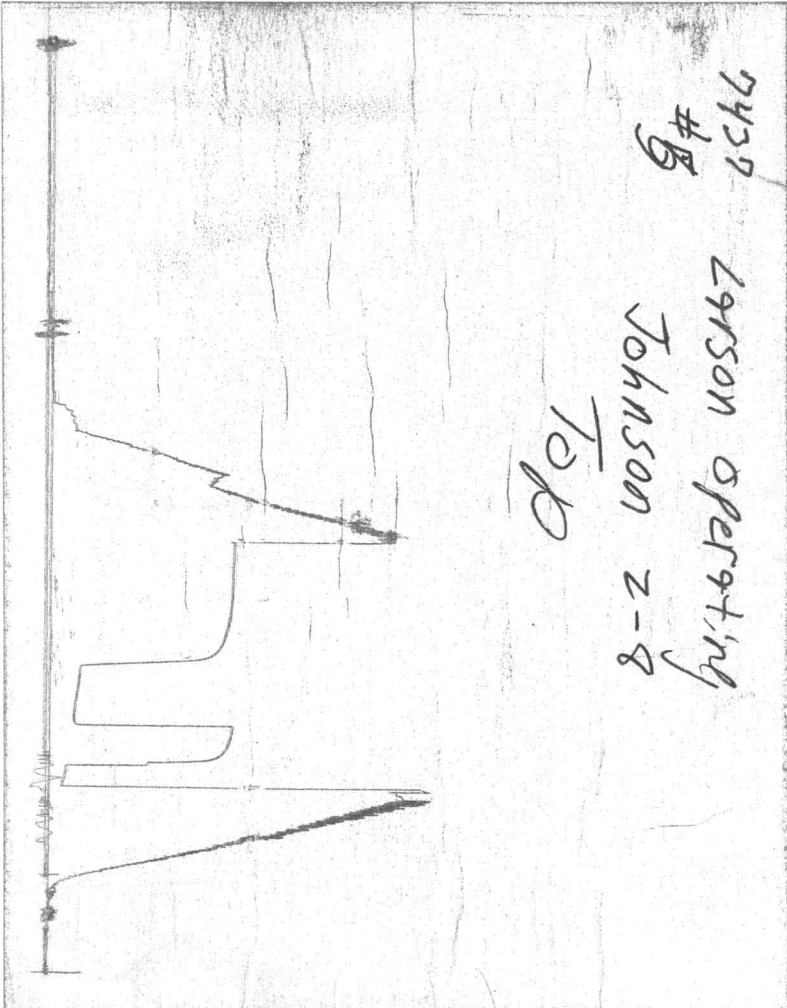


CHART PAGE

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

