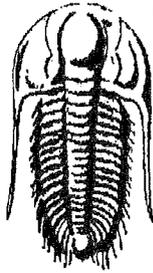


15-159-22600

6-19s-9w

*Good*



**TRILOBITE  
TESTING, INC.**

### DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Operating, LLC**

1801 Broadway Ste. 450  
Denver, CO 80202

ATTN: Adam Kennedy

#### 6-19s-9w Rice KS

#### Lincoln #2

Start Date: 2009.11.15 @ 22:20:39

End Date: 2009.11.16 @ 04:13:33

Job Ticket #: 36604                      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Gilbert & Stewart Operating, LLC

Lincoln #2

6-19s-9w Rice KS

DST # 1

Topoka

2009.11.15



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

Job Ticket: 36604

**DST#: 1**

ATTN: Adam Kennedy

Test Start: 2009.11.15 @ 22:20:39

## GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:58:04

Time Test Ended: 04:13:33

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: **2668.00 ft (KB) To 2713.00 ft (KB) (TVD)**

Total Depth: 2713.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1717.00 ft (KB)

1710.00 ft (CF)

KB to GR/CF: 7.00 ft

**Serial #: 8371**

**Inside**

Press@RunDepth: 42.29 psig @ 2672.00 ft (KB)

Start Date: 2009.11.15

End Date:

2009.11.16

Capacity: 8000.00 psig

Last Calib.: 2009.11.16

Start Time: 22:20:39

End Time:

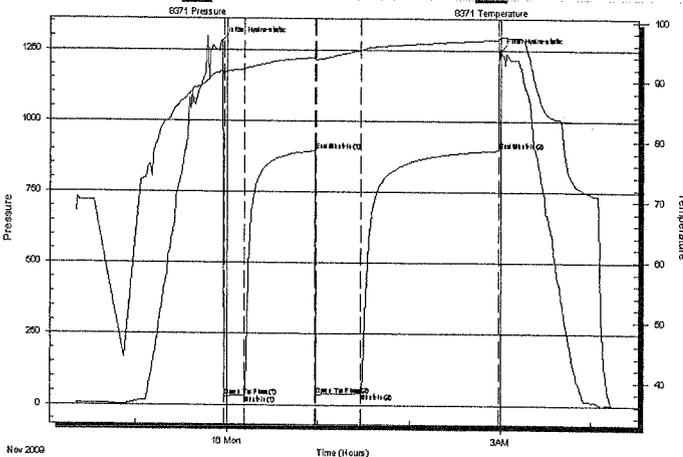
04:13:33

Time On Btm: 2009.11.15 @ 23:56:34

Time Off Btm: 2009.11.16 @ 02:59:33

TEST COMMENT: IFP - weak blow throughout 1" - 2 1/2"  
ISI - no blow back  
FFP - weak blow throughout 1/4" - 1/2"  
FSI - no blow back

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1279.46	91.69	Initial Hydro-static
2	27.35	90.93	Open To Flow (1)
15	33.33	91.90	Shut-In(1)
62	895.24	93.92	End Shut-In(1)
62	36.07	93.54	Open To Flow(2)
92	42.29	95.11	Shut-In(2)
182	897.27	96.97	End Shut-In(2)
183	1246.99	97.29	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
40.00	mud 100%	0.56

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

Job Ticket: 36604

**DST#: 1**

ATTN: Adam Kennedy

Test Start: 2009.11.15 @ 22:20:39

### Tool Information

Drill Pipe:	Length: 2656.00 ft	Diameter: 3.80 inches	Volume: 37.26 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
		<b>Total Volume:</b>	<b>37.26 bbl</b>	Tool Chased 2.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 41000.00 lb
Depth to Top Packer:	2668.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	72.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				
Tool slid 2' to bottom				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2646.00	
Hydraulic tool	5.00			2651.00	
Jars	5.00			2656.00	
Safety Joint	2.00			2658.00	
Packer	5.00			2663.00	27.00 Bottom Of Top Packer
Packer	5.00			2668.00	
Stubb	1.00			2669.00	
Perforations	2.00			2671.00	
Change Over Sub	1.00			2672.00	
Recorder	0.00	8018	Inside	2672.00	
Recorder	0.00	8371	Inside	2672.00	
Blank Spacing	32.00			2704.00	
Change Over Sub	1.00			2705.00	
Perforations	5.00			2710.00	
Bullnose	3.00			2713.00	45.00 Bottom Packers & Anchor

**Total Tool Length: 72.00**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

FLUID SUMMARY

Gilbert & Stewart Operating, LLC

Lincoln #2

1801 Broadway Ste. 450  
Denver, CO 80202

6-19s-9w Rice KS

ATTN: Adam Kennedy

Job Ticket: 36604

DST#: 1

Test Start: 2009.11.15 @ 22:20:39

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.88 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4700.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	mud 100%	0.561

Total Length: 40.00 ft

Total Volume: 0.561 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

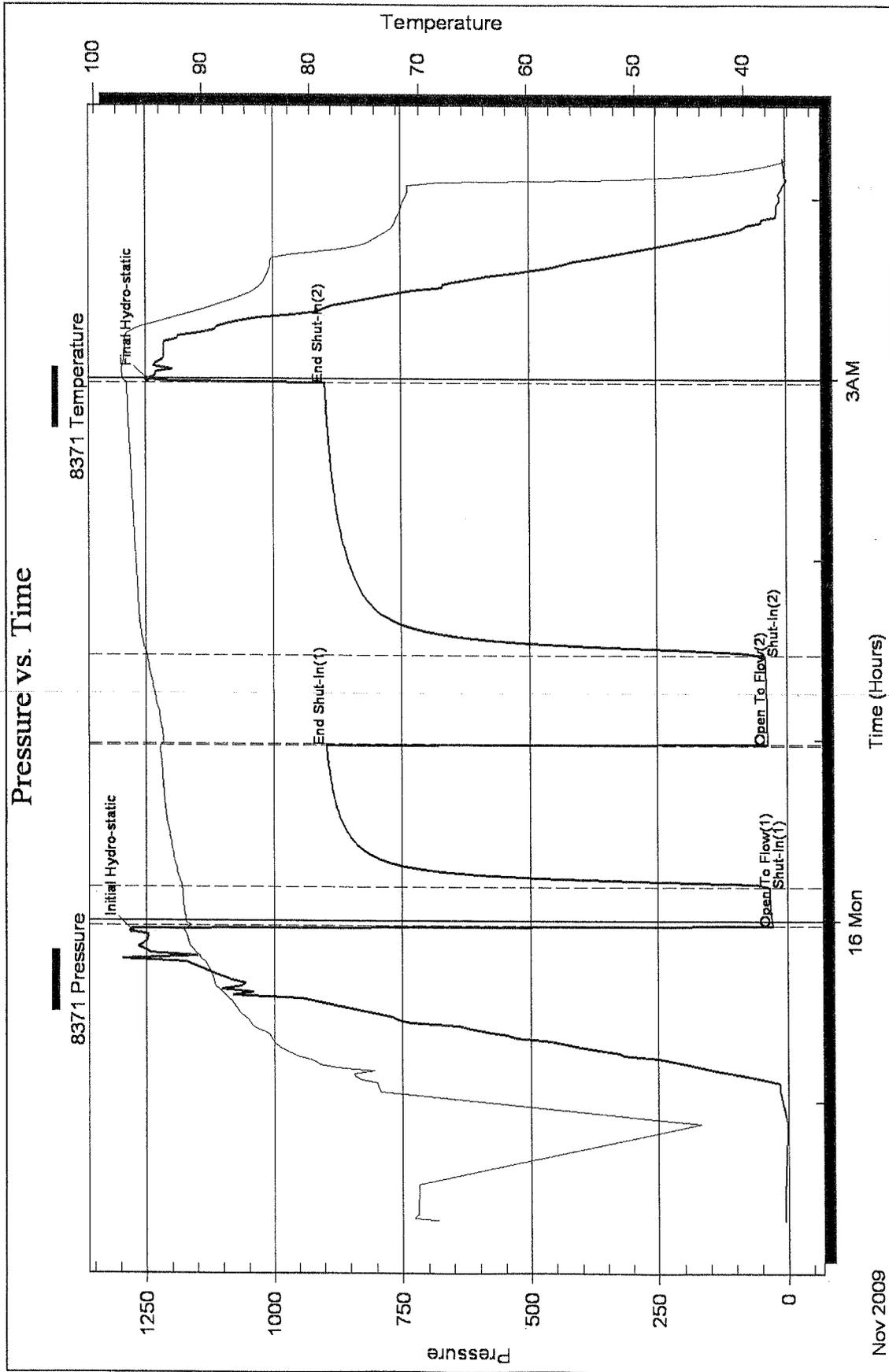
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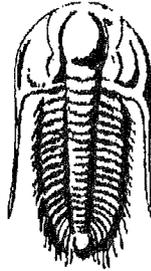
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Operating, LLC**

1801 Broadway Ste. 450  
Denver, CO 80202

ATTN: Adam Kennedy

### 6-19s-9w Rice KS

#### Lincoln #2

Start Date: 2009.11.16 @ 20:23:51

End Date: 2009.11.17 @ 01:52:15

Job Ticket #: 36605                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

ATTN: Adam Kennedy

Job Ticket: 36605

**DST#: 2**

Test Start: 2009.11.16 @ 20:23:51

## GENERAL INFORMATION:

Formation: **LKC "A-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:41:46

Time Test Ended: 01:52:15

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: **2868.00 ft (KB) To 2946.00 ft (KB) (TVD)**

Total Depth: 2946.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1717.00 ft (KB)

1710.00 ft (CF)

KB to GR/CF: 7.00 ft

**Serial #: 8371** Inside

Press@RunDepth: 25.08 psig @ 2875.00 ft (KB)

Start Date: 2009.11.16

End Date: 2009.11.17

Capacity: 8000.00 psig

Last Calib.: 2009.11.17

Start Time: 20:23:51

End Time: 01:52:15

Time On Btm: 2009.11.16 @ 21:40:16

Time Off Btm: 2009.11.17 @ 00:42:16

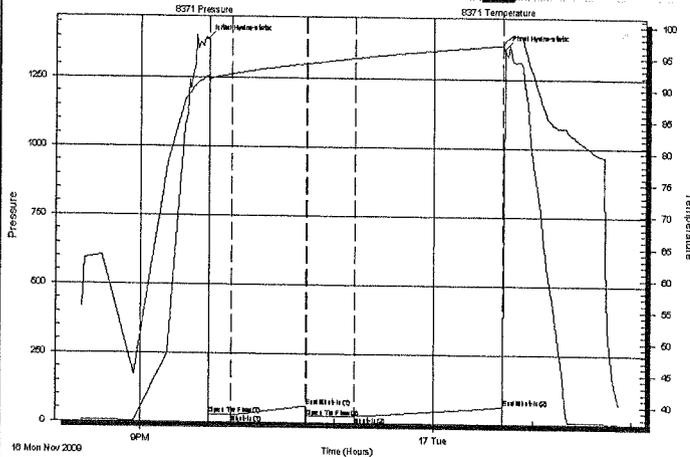
TEST COMMENT: IFP - weak blow throughout 1/2" - 3/4"

ISI - no blow back

FFP - 1" blow - died 17 min.

FSI - no blow back

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1390.02	91.81	Initial Hydro-static
2	27.17	91.05	Open To Flow (1)
15	28.01	92.20	Shut-In(1)
62	58.70	93.96	End Shut-In(1)
62	21.31	93.95	Open To Flow (2)
92	25.08	94.86	Shut-In(2)
181	61.22	97.06	End Shut-In(2)
182	1360.61	97.61	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%	0.07

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

Job Ticket: 36605

**DST#: 2**

ATTN: Adam Kennedy

Test Start: 2009.11.16 @ 20:23:51

### Tool Information

Drill Pipe:	Length: 2856.00 ft	Diameter: 3.80 inches	Volume: 40.06 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 40.06 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	2868.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	78.00 ft			
Tool Length:	105.00 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			2846.00	
Hydraulic tool	5.00			2851.00	
Jars	5.00			2856.00	
Safety Joint	2.00			2858.00	
Packer	5.00			2863.00	27.00 Bottom Of Top Packer
Packer	5.00			2868.00	
Stubb	1.00			2869.00	
Perforations	5.00			2874.00	
Change Over Sub	1.00			2875.00	
Recorder	0.00	8018	Inside	2875.00	
Recorder	0.00	8371	Inside	2875.00	
Blank Spacing	62.00			2937.00	
Change Over Sub	1.00			2938.00	
Perforations	5.00			2943.00	
Bullnose	3.00			2946.00	78.00 Bottom Packers & Anchor

**Total Tool Length: 105.00**



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Gilbert & Stewart Operating, LLC

Lincoln #2

1801 Broadway Ste. 450  
Denver, CO 80202

6-19s-9w Rice KS

Job Ticket: 36605

DST#: 2

ATTN: Adam Kennedy

Test Start: 2009.11.16 @ 20:23:51

### 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: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.85 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6600.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	mud 100%	0.070

Total Length:

5.00 ft

Total Volume:

0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

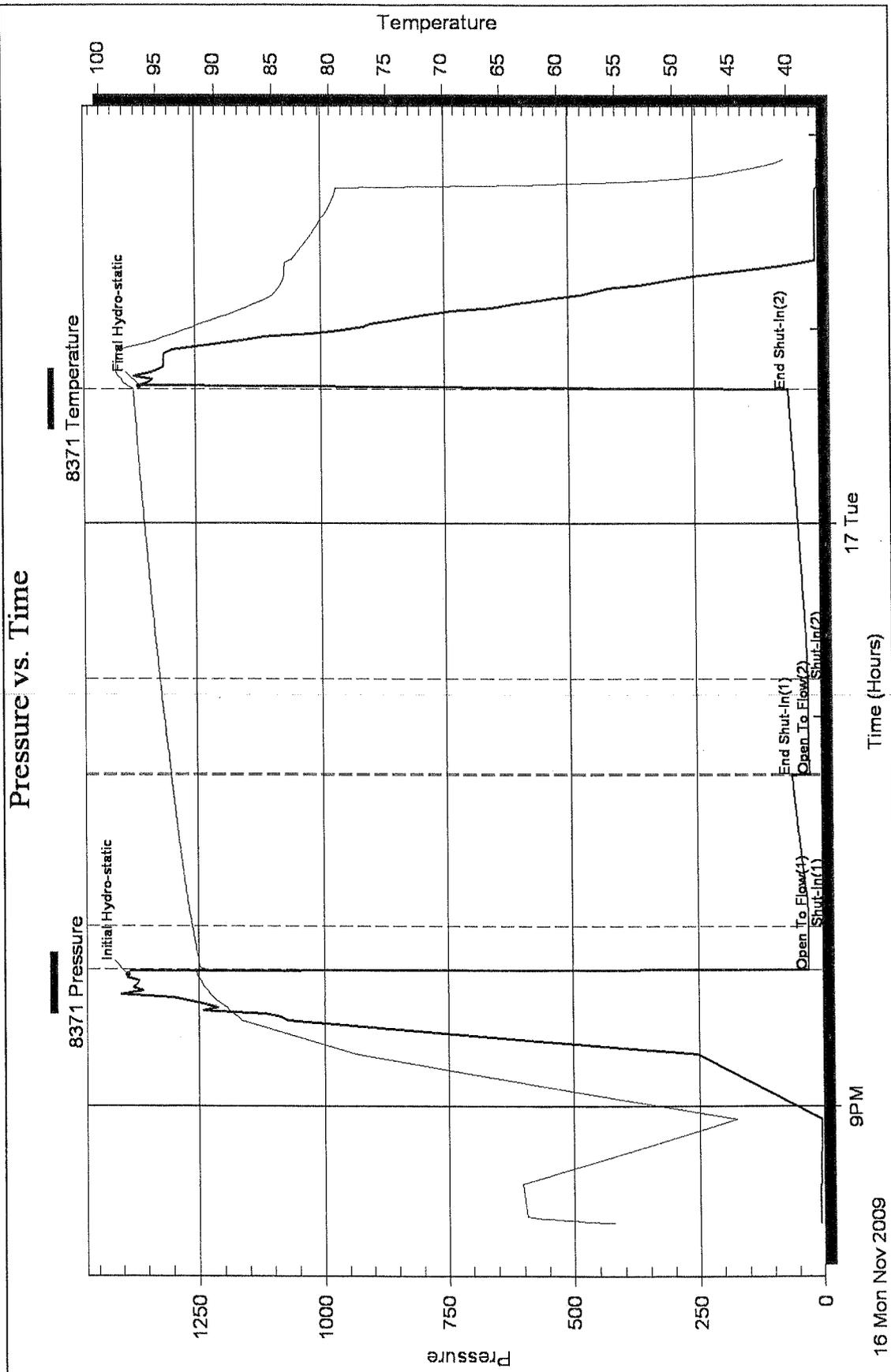
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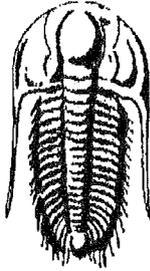
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Operating, LLC**

1801 Broadway Ste. 450  
Denver, CO 80202

ATTN: Adam Kennedy

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### 6-19s-9w Rice KS

#### Lincoln #2

Start Date: 2009.11.17 @ 08:51:33

End Date: 2009.11.17 @ 14:12:57

Job Ticket #: 36606                      DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

ATTN: Adam Kennedy

Job Ticket: 36606

**DST#: 3**

Test Start: 2009.11.17 @ 08:51:33

## GENERAL INFORMATION:

Formation: **LKC "E-F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:13:28

Time Test Ended: 14:12:57

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: **2941.00 ft (KB) To 2974.00 ft (KB) (TVD)**

Total Depth: 2974.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1717.00 ft (KB)

1710.00 ft (CF)

KB to GR/CF: 7.00 ft

**Serial #: 8371**

**Inside**

Press@RunDepth: 32.76 psig @ 2946.00 ft (KB)

Start Date: 2009.11.17

End Date: 2009.11.17

Start Time: 08:51:33

End Time: 14:12:57

Capacity: 8000.00 psig

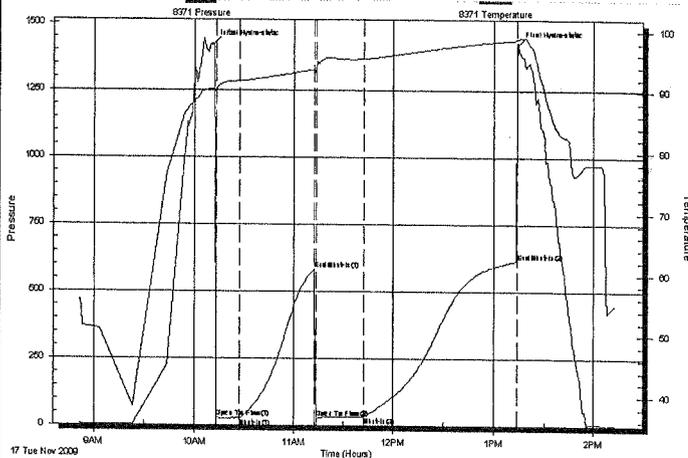
Last Calib.: 2009.11.17

Time On Btm: 2009.11.17 @ 10:11:28

Time Off Btm: 2009.11.17 @ 13:14:27

**TEST COMMENT:** IFP - weak to good blow 1" - 6"  
ISI - no blow 7 min. - weak sur blow - died 34 min.  
FFP - BOB 8 min.  
FSI - weak sur blow black - died 17 min.

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1420.89	90.42	Initial Hydro-static
2	27.52	90.25	Open To Flow (1)
16	25.72	91.75	Shut-In (1)
61	581.04	93.61	End Shut-In (1)
62	27.33	93.87	Open To Flow (2)
91	32.76	95.40	Shut-In (2)
182	613.37	98.52	End Shut-In (2)
183	1422.37	98.77	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	GM / scum O 10%G, 90%M	0.42
0.00	120' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

Job Ticket: 36606

**DST#: 3**

ATTN: Adam Kennedy

Test Start: 2009.11.17 @ 08:51:33

### Tool Information

Drill Pipe:	Length: 2943.00 ft	Diameter: 3.80 inches	Volume: 41.28 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 52000.00 lb
			<b>Total Volume: 41.28 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	2941.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 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
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			2919.00	
Hydraulic tool	5.00			2924.00	
Jars	5.00			2929.00	
Safety Joint	2.00			2931.00	
Packer	5.00			2936.00	27.00 Bottom Of Top Packer
Packer	5.00			2941.00	
Stubb	1.00			2942.00	
Perforations	4.00			2946.00	
Recorder	0.00	8018	Inside	2946.00	
Recorder	0.00	8371	Inside	2946.00	
Perforations	25.00			2971.00	
Bullnose	3.00			2974.00	33.00 Bottom Packers & Anchor

**Total Tool Length: 60.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

Job Ticket: 36606

**DST#: 3**

ATTN: Adam Kennedy

Test Start: 2009.11.17 @ 08:51:33

### 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: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.86 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6600.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	GM / scum O 10%G, 90%M	0.421
0.00	120' GIP	0.000

Total Length: 30.00 ft

Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

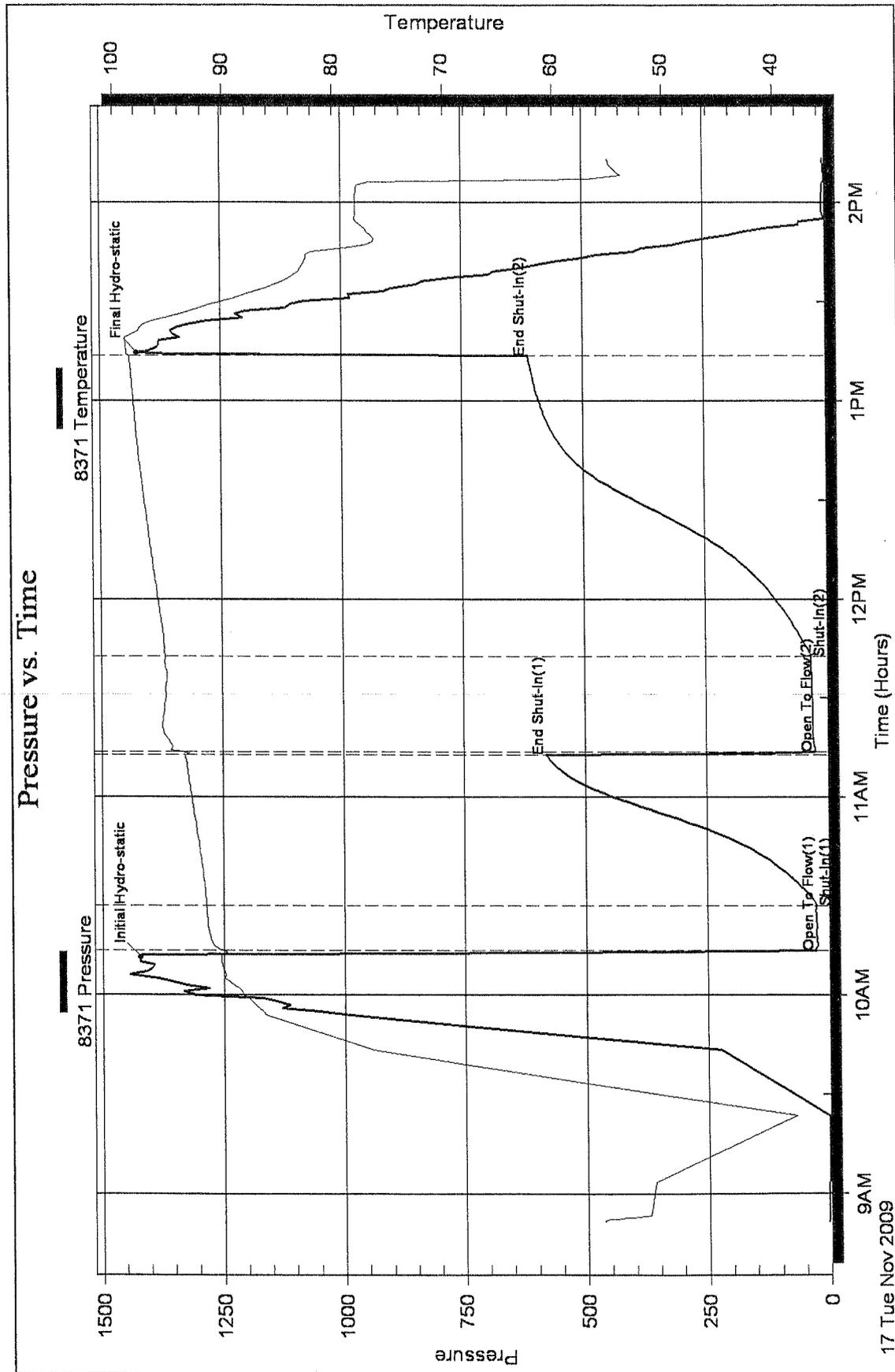
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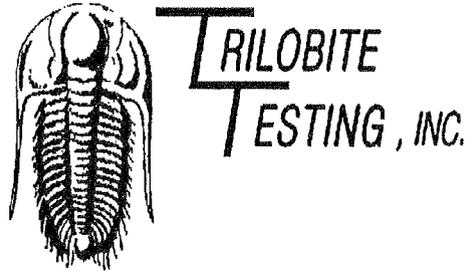
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Operating, LLC**

1801 Broadway Ste. 450  
Denver, CO 80202

ATTN: Adam Kennedy

### 6-19s-9w Rice KS

#### Lincoln #2

Start Date: 2009.11.17 @ 20:05:13

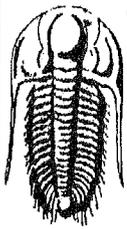
End Date: 2009.11.18 @ 01:51:37

Job Ticket #: 36607                      DST #: 4

Trilobite Testing, Inc

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

ATTN: Adam Kennedy

Job Ticket: 36607

**DST#: 4**

Test Start: 2009.11.17 @ 20:05:13

## GENERAL INFORMATION:

Formation: **LKC "G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:27:38

Time Test Ended: 01:51:37

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: **2971.00 ft (KB) To 2989.00 ft (KB) (TVD)**

Total Depth: 2989.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1717.00 ft (KB)

1710.00 ft (CF)

KB to GR/CF: 7.00 ft

**Serial #: 8371** Inside

Press@RunDepth: 154.17 psig @ 2976.00 ft (KB)

Start Date: 2009.11.17 End Date: 2009.11.18

Start Time: 20:05:13 End Time: 01:51:37

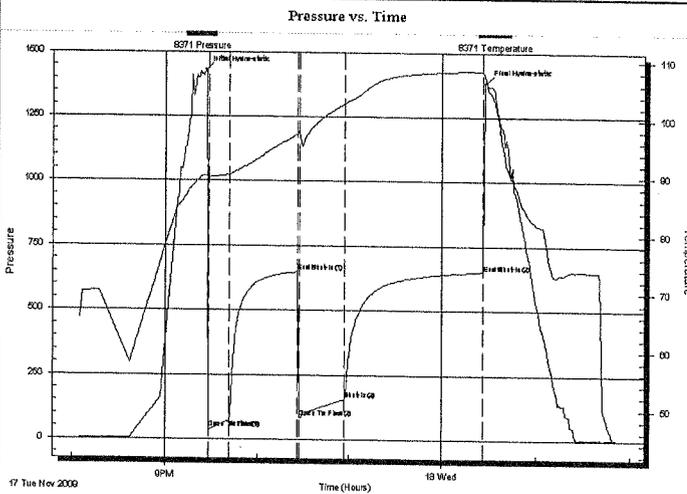
Capacity: 8000.00 psig

Last Calib.: 2009.11.18

Time On Btm: 2009.11.17 @ 21:26:08

Time Off Btm: 2009.11.18 @ 00:28:08

**TEST COMMENT:** IFF - BOB 4 min.  
ISI - 1" blow back - died 37 min.  
FFP - BOB 8 min.  
FSI - 2" blow back - died 29 min.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1428.82	90.23	Initial Hydro-static
2	39.12	89.79	Open To Flow (1)
15	72.03	90.43	Shut-In(1)
61	648.12	97.40	End Shut-In(1)
62	84.77	97.97	Open To Flow (2)
91	154.17	102.64	Shut-In(2)
181	650.79	108.43	End Shut-In(2)
182	1383.28	106.75	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%	0.14
130.00	MV 95%W, 5%M	1.82
129.00	MV 70%W, 30%M	1.81
1.00	M&WCO 75%O, 15%W, 10%M	0.01
0.00	255' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

Job Ticket: 36607

**DST#: 4**

ATTN: Adam Kennedy

Test Start: 2009.11.17 @ 20:05:13

### Tool Information

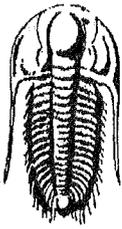
Drill Pipe:	Length: 2974.00 ft	Diameter: 3.80 inches	Volume: 41.72 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 2500.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 53000.00 lb
			<b>Total Volume: 41.72 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	2971.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2949.00	
Hydraulic tool	5.00			2954.00	
Jars	5.00			2959.00	
Safety Joint	2.00			2961.00	
Packer	5.00			2966.00	27.00 Bottom Of Top Packer
Packer	5.00			2971.00	
Stubb	1.00			2972.00	
Perforations	4.00			2976.00	
Recorder	0.00	8018	Inside	2976.00	
Recorder	0.00	8371	Inside	2976.00	
Perforations	10.00			2986.00	
Bullnose	3.00			2989.00	18.00 Bottom Packers & Anchor

**Total Tool Length: 45.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

Job Ticket: 36607

**DST#: 4**

ATTN: Adam Kennedy

Test Start: 2009.11.17 @ 20:05:13

### 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:	95000 ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.28 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7000.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	MUD 100%	0.140
130.00	MW 95%W, 5%M	1.824
129.00	MW 70%W, 30%M	1.810
1.00	M&WCO 75%O, 15%W, 10%M	0.014
0.00	255' GIP	0.000

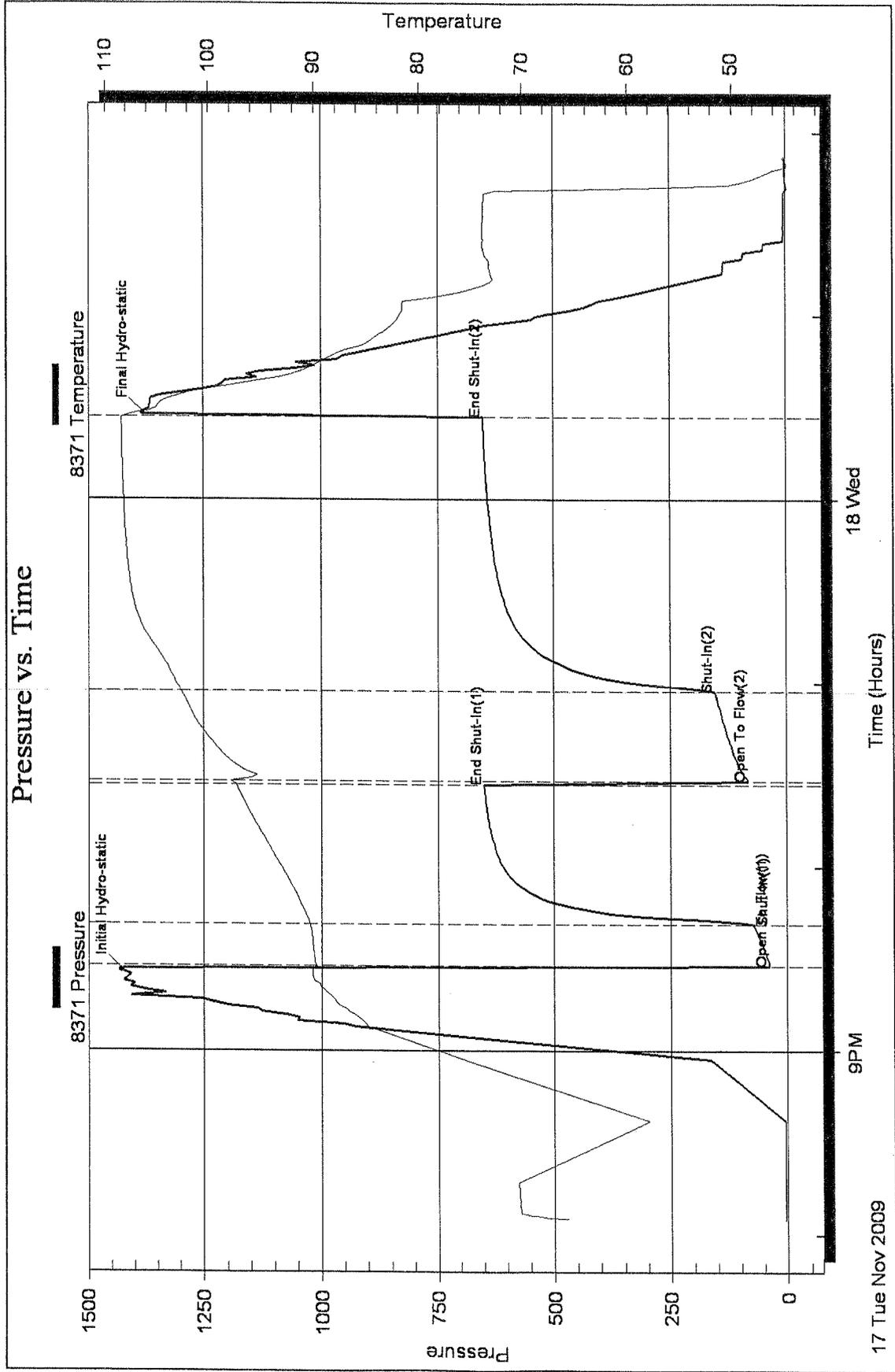
Total Length: 270.00 ft      Total Volume: 3.788 bbl

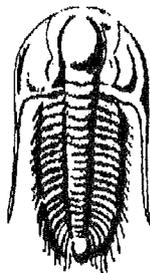
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments: RW .194 @ 30F = 95000 chlorides

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Operating, LLC**

1801 Broadway Ste. 450  
Denver, CO 80202

ATTN: Adam Kennedy

### 6-19s-9w Rice KS

#### Lincoln #2

Start Date: 2009.11.18 @ 17:59:15

End Date: 2009.11.19 @ 00:13:39

Job Ticket #: 36608                      DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

ATTN: Adam Kennedy

Job Ticket: 36608

**DST#: 5**

Test Start: 2009.11.18 @ 17:59:15

## GENERAL INFORMATION:

Formation: **LKC "H-L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:37:40

Time Test Ended: 00:13:39

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: **3036.00 ft (KB) To 3162.00 ft (KB) (TVD)**

Total Depth: 3162.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1717.00 ft (KB)

1710.00 ft (CF)

KB to GR/CF: 7.00 ft

**Serial #: 8371**

**Inside**

Press@RunDepth: 35.47 psig @ 3043.00 ft (KB)

Start Date: 2009.11.18

End Date:

2009.11.19

Capacity: 8000.00 psig

Last Calib.: 2009.11.19

Start Time: 17:59:15

End Time:

00:13:39

Time On Btm: 2009.11.18 @ 19:36:10

Time Off Btm: 2009.11.18 @ 22:38:10

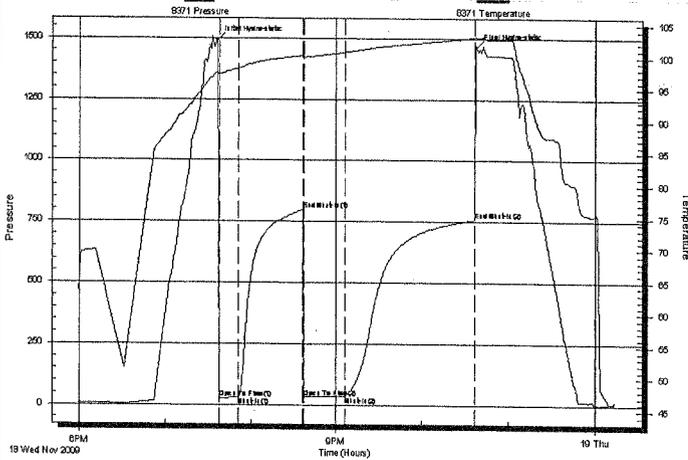
TEST COMMENT: IFP - weak blow throughout 1/2" - 1 1/2"

ISI - no blow back

FFP - no blow 2 min. - 1"

FSI - no blow back

Pressure vs. Time



## PRESSURE SUMMARY

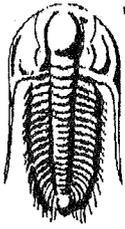
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1491.71	97.57	Initial Hydro-static
2	26.63	97.25	Open To Flow (1)
15	29.46	98.23	Shut-In(1)
61	799.43	100.23	End Shut-In(1)
61	31.95	99.84	Open To Flow(2)
90	35.47	100.75	Shut-In(2)
181	756.79	103.08	End Shut-In(2)
182	1463.90	103.14	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	GM w/ O spts 10%G, 90%M	0.42
0.00	60' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

Job Ticket: 36608

**DST#: 5**

ATTN: Adam Kennedy

Test Start: 2009.11.18 @ 17:59:15

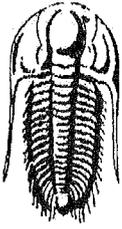
**Tool Information**

Drill Pipe:	Length: 3039.00 ft	Diameter: 3.80 inches	Volume: 42.63 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 42.63 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3036.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	126.00 ft			
Tool Length:	153.00 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			3014.00	
Hydraulic tool	5.00			3019.00	
Jars	5.00			3024.00	
Safety Joint	2.00			3026.00	
Packer	5.00			3031.00	27.00 Bottom Of Top Packer
Packer	5.00			3036.00	
Stubb	1.00			3037.00	
Perforations	5.00			3042.00	
Change Over Sub	1.00			3043.00	
Recorder	0.00	8018	Inside	3043.00	
Recorder	0.00	8371	Inside	3043.00	
Blank Spacing	95.00			3138.00	
Change Over Sub	1.00			3139.00	
Perforations	20.00			3159.00	
Bullnose	3.00			3162.00	126.00 Bottom Packers & Anchor

**Total Tool Length: 153.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, CO 80202

**6-19s-9w Rice KS**

Job Ticket: 36608

**DST#: 5**

ATTN: Adam Kennedy

Test Start: 2009.11.18 @ 17:59:15

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 7.90 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 7400.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	GM w/ O spts 10%G, 90%M	0.421
0.00	60' GIP	0.000

Total Length: 30.00 ft      Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

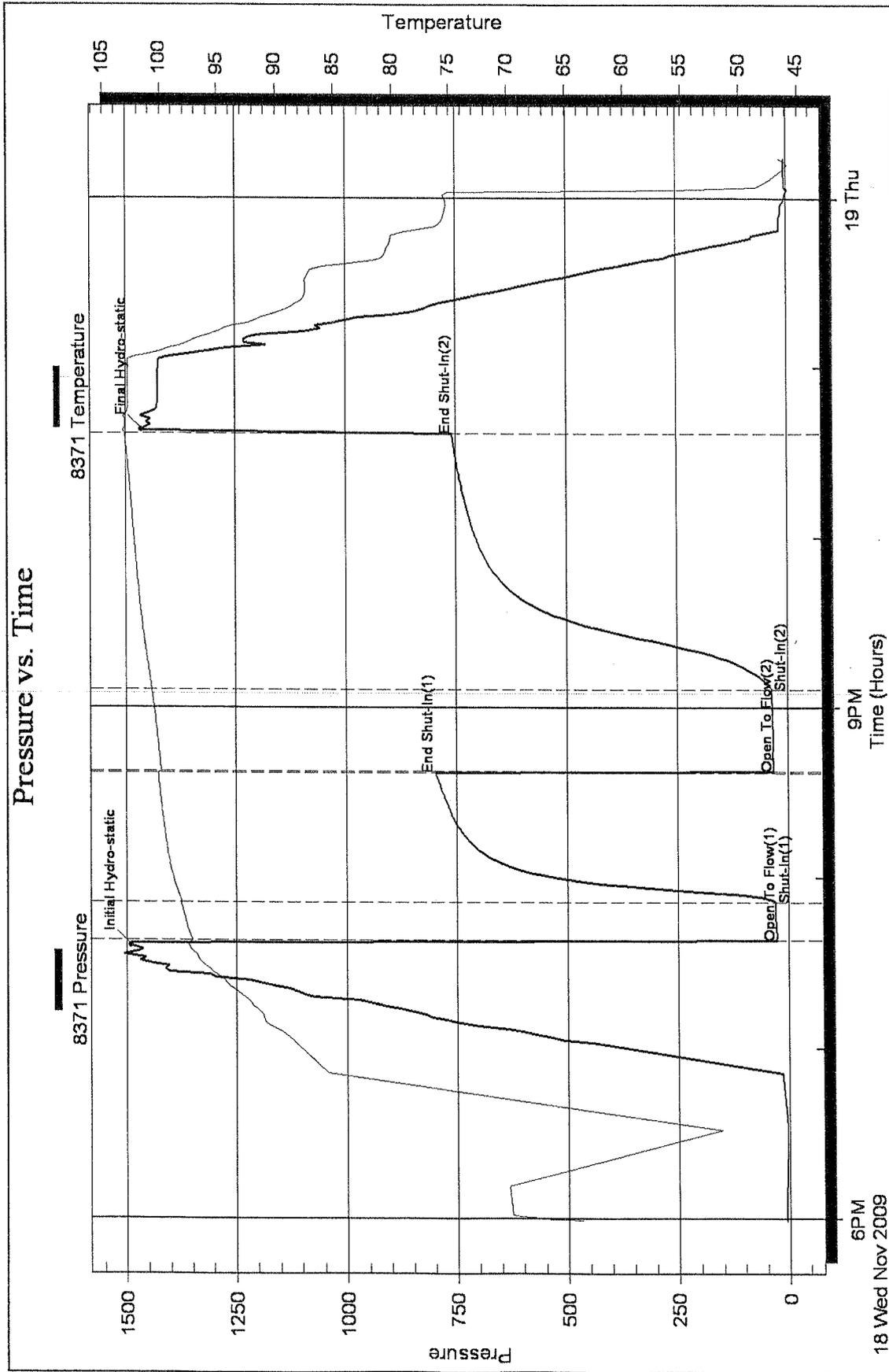
Serial #:

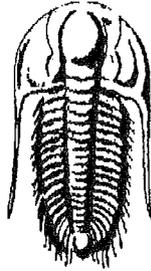
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Operating, LLC**

1801 Broadway Ste. 450  
Denver, Co  
80202

ATTN: Adam Kennedy

### 6-19s-9w Rice KS

#### Lincoln #2

Start Date: 2009.11.19 @ 10:27:28

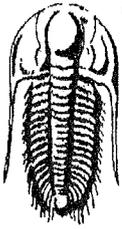
End Date: 2009.11.19 @ 16:15:52

Job Ticket #: 36609                      DST #: 6

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, Co  
80202  
ATTN: Adam Kennedy

**6-19s-9w Rice KS**

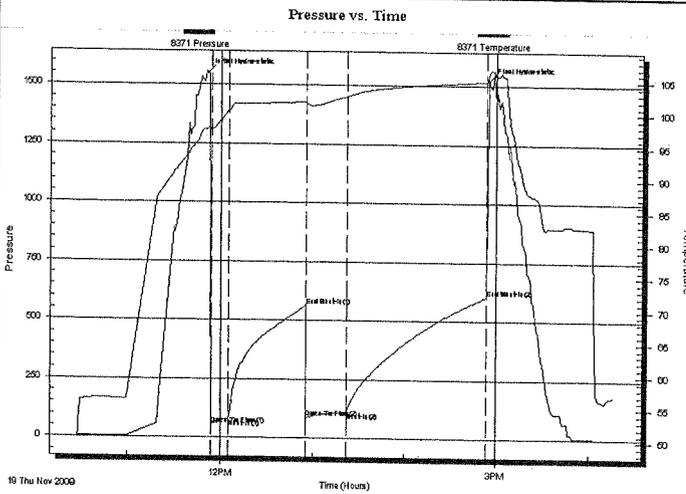
Job Ticket: 36609      **DST#: 6**  
Test Start: 2009.11.19 @ 10:27:28

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 11:53:53  
Time Test Ended: 16:15:52  
Interval: **3154.00 ft (KB) To 3230.00 ft (KB) (TVD)**  
Total Depth: 3230.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition:  
Test Type: Conventional Bottom Hole  
Tester: Brian Fairbank  
Unit No: 41  
Reference Elevations: 1717.00 ft (KB)  
1710.00 ft (CF)  
KB to GR/CF: 7.00 ft

**Serial #: 8371      Inside**  
Press@RunDepth: 110.71 psig @ 3159.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2009.11.19      End Date: 2009.11.19      Last Calib.: 2009.11.19  
Start Time: 10:27:28      End Time: 16:15:52      Time On Btm: 2009.11.19 @ 11:51:53  
Time Off Btm: 2009.11.19 @ 14:55:22

**TEST COMMENT:** IFP - BOB 3 min.  
ISI - 2 1/2" blow back  
FFP - BOB 9 min.  
FSI - 5 1/2" blow back - died 85 min.



## PRESSURE SUMMARY

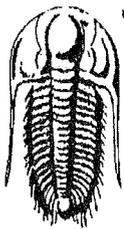
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1548.43	97.80	Initial Hydro-static
2	53.64	97.49	Open To Flow (1)
14	79.99	100.45	Shut-In (1)
63	561.53	101.85	End Shut-In (1)
64	88.23	101.57	Open To Flow (2)
91	110.71	102.72	Shut-In (2)
182	603.45	105.09	End Shut-In (2)
184	1520.68	106.08	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOCM 50%G, 20%O, 30%M	0.84
60.00	GSOCM 30%G, 10%O, 60%M	0.84
90.00	G FREE OIL 15%G, 80%O 5%M	1.26
0.00	250' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, Co  
80202

**6-19s-9w Rice KS**

Job Ticket: 36609

**DST#: 6**

ATTN: Adam Kennedy

Test Start: 2009.11.19 @ 10:27:28

### Tool Information

Drill Pipe:	Length: 3135.00 ft	Diameter: 3.80 inches	Volume: 43.98 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 43.98 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3154.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	76.00 ft			
Tool Length:	103.00 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			3132.00	
Hydraulic tool	5.00			3137.00	
Jars	5.00			3142.00	
Safety Joint	2.00			3144.00	
Packer	5.00			3149.00	27.00 Bottom Of Top Packer
Packer	5.00			3154.00	
Stubb	1.00			3155.00	
Perforations	3.00			3158.00	
Change Over Sub	1.00			3159.00	
Recorder	0.00	8018	Inside	3159.00	
Recorder	0.00	8371	Inside	3159.00	
Blank Spacing	62.00			3221.00	
Change Over Sub	1.00			3222.00	
Perforations	5.00			3227.00	
Bullnose	3.00			3230.00	76.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>103.00</b>				



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, Co  
80202

**6-19s-9w Rice KS**

ATTN: Adam Kennedy

Job Ticket: 36609

**DST#: 6**

Test Start: 2009.11.19 @ 10:27:28

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

45 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.92 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7800.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GOCM 50%G, 20%O, 30%M	0.842
60.00	GSOCM 30%G, 10%O, 60%M	0.842
90.00	G FREE OIL 15%G, 80%O 5%M	1.262
0.00	250' GIP	0.000

Total Length: 210.00 ft

Total Volume: 2.946 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

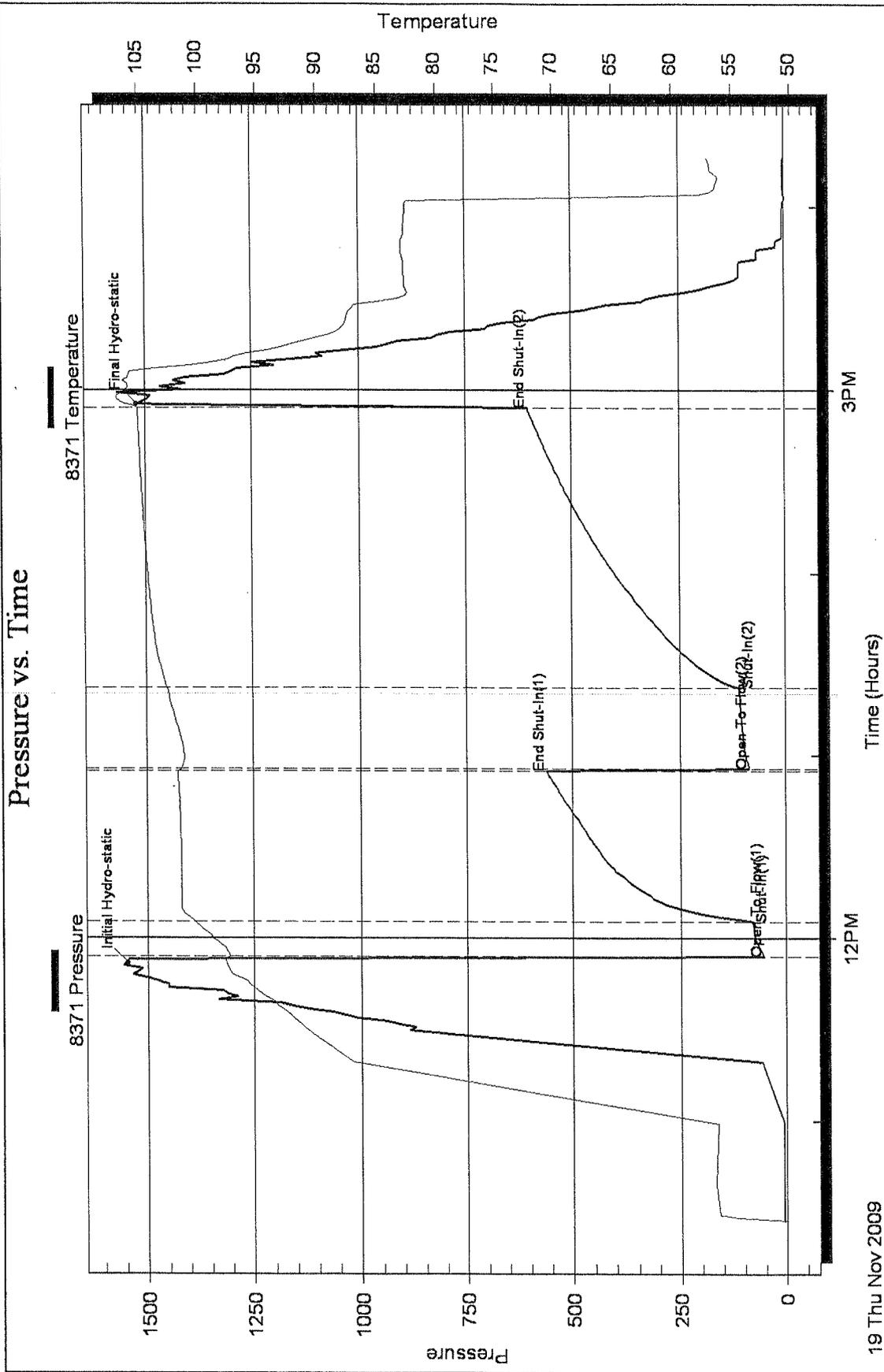
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

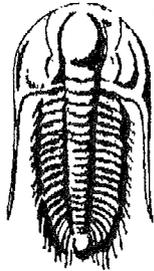


19 Thu Nov 2009

3PM

12PM

Time (Hours)



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Operating, LLC**

1801 Broadway Ste. 450  
Denver, Co  
80202

ATTN: Adam Kennedy

### 6-19s-9w Rice KS

#### Lincoln #2

Start Date: 2009.11.19 @ 21:33:19

End Date: 2009.11.20 @ 04:21:43

Job Ticket #: 36610                      DST #: 7

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, Co  
80202  
ATTN: Adam Kennedy

**6-19s-9w Rice KS**

Job Ticket: 36610      **DST#: 7**  
Test Start: 2009.11.19 @ 21:33:19

## GENERAL INFORMATION:

Formation: **Arbuckle (2)**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 22:54:14  
Time Test Ended: 04:21:43  
**Interval: 3152.00 ft (KB) To 3244.00 ft (KB) (TVD)**  
Total Depth: 3244.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition:

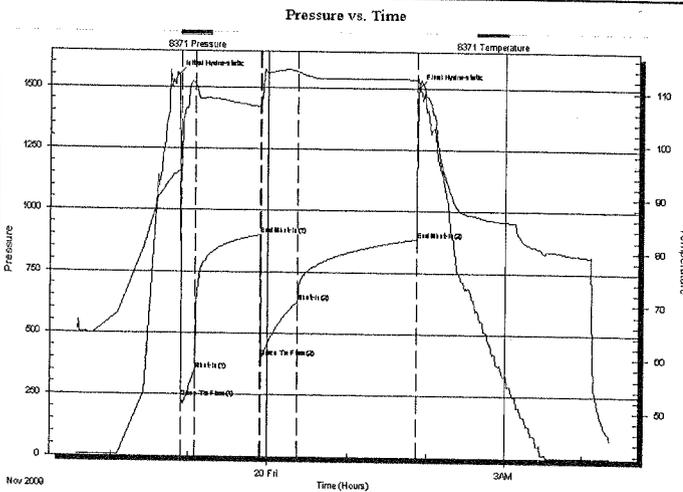
Test Type: Conventional Bottom Hole  
Tester: Brian Fairbank  
Unit No: 41  
Reference Elevations: 1717.00 ft (KB)  
1710.00 ft (CF)  
KB to GR/CF: 7.00 ft

**Serial #: 8371      Inside**

Press@RunDepth: 628.03 psig @ 3158.00 ft (KB)  
Start Date: 2009.11.19      End Date: 2009.11.20  
Start Time: 21:33:19      End Time: 04:21:43

Capacity: 8000.00 psig  
Last Calib.: 2009.11.20  
Time On Btm: 2009.11.19 @ 22:51:44  
Time Off Btm: 2009.11.20 @ 01:53:43

**TEST COMMENT:** IFP - BOB 45 sec.  
ISI - 3/4" blow back - died 18 min.  
FFP - BOB 1 1/2 min.  
FSI - no blow back



## PRESSURE SUMMARY

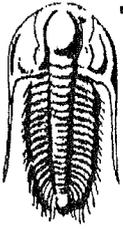
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1549.40	94.75	Initial Hydro-static
3	235.57	94.72	Open To Flow (1)
13	347.75	111.34	Shut-In(1)
62	899.50	107.09	End Shut-In(1)
63	401.97	107.70	Open To Flow(2)
91	628.03	113.61	Shut-In(2)
181	885.44	112.30	End Shut-In(2)
182	1500.20	111.08	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
185.00	MW 85%W, 15%M	2.60
250.00	GWCO 50%G, 30%O, 20%W	3.51
750.00	GOCM 50%G, 25%O, 25%M	10.52
325.00	GHOCM 10%G, 30%O, 60%M	4.56
0.00	75' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, Co  
80202

**6-19s-9w Rice KS**

Job Ticket: 36610

**DST#: 7**

ATTN: Adam Kennedy

Test Start: 2009.11.19 @ 21:33:19

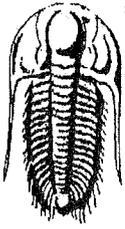
**Tool Information**

Drill Pipe:	Length: 3135.00 ft	Diameter: 3.80 inches	Volume: 43.98 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 43.98 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3152.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	92.00 ft			
Tool Length:	119.00 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			3130.00	
Hydraulic tool	5.00			3135.00	
Jars	5.00			3140.00	
Safety Joint	2.00			3142.00	
Packer	5.00			3147.00	27.00 Bottom Of Top Packer
Packer	5.00			3152.00	
Stubb	1.00			3153.00	
Perforations	4.00			3157.00	
Change Over Sub	1.00			3158.00	
Recorder	0.00	8018	Inside	3158.00	
Recorder	0.00	8371	Inside	3158.00	
Blank Spacing	62.00			3220.00	
Change Over Sub	1.00			3221.00	
Perforations	20.00			3241.00	
Bullnose	3.00			3244.00	92.00 Bottom Packers & Anchor

**Total Tool Length: 119.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, Co  
80202

**6-19s-9w Rice KS**

Job Ticket: 36610

**DST#: 7**

ATTN: Adam Kennedy

Test Start: 2009.11.19 @ 21:33:19

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 7.95 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 7800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

deg API

Water Salinity: 33000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
185.00	MV 85%W, 15%M	2.595
250.00	GWCO 50%G, 30%O, 20%W	3.507
750.00	GOCM 50%G, 25%O, 25%M	10.521
325.00	GHOcm 10%G, 30%O, 60%M	4.559
0.00	75' GIP	0.000

Total Length: 1510.00 ft      Total Volume: 21.182 bbl

Num Fluid Samples: 0

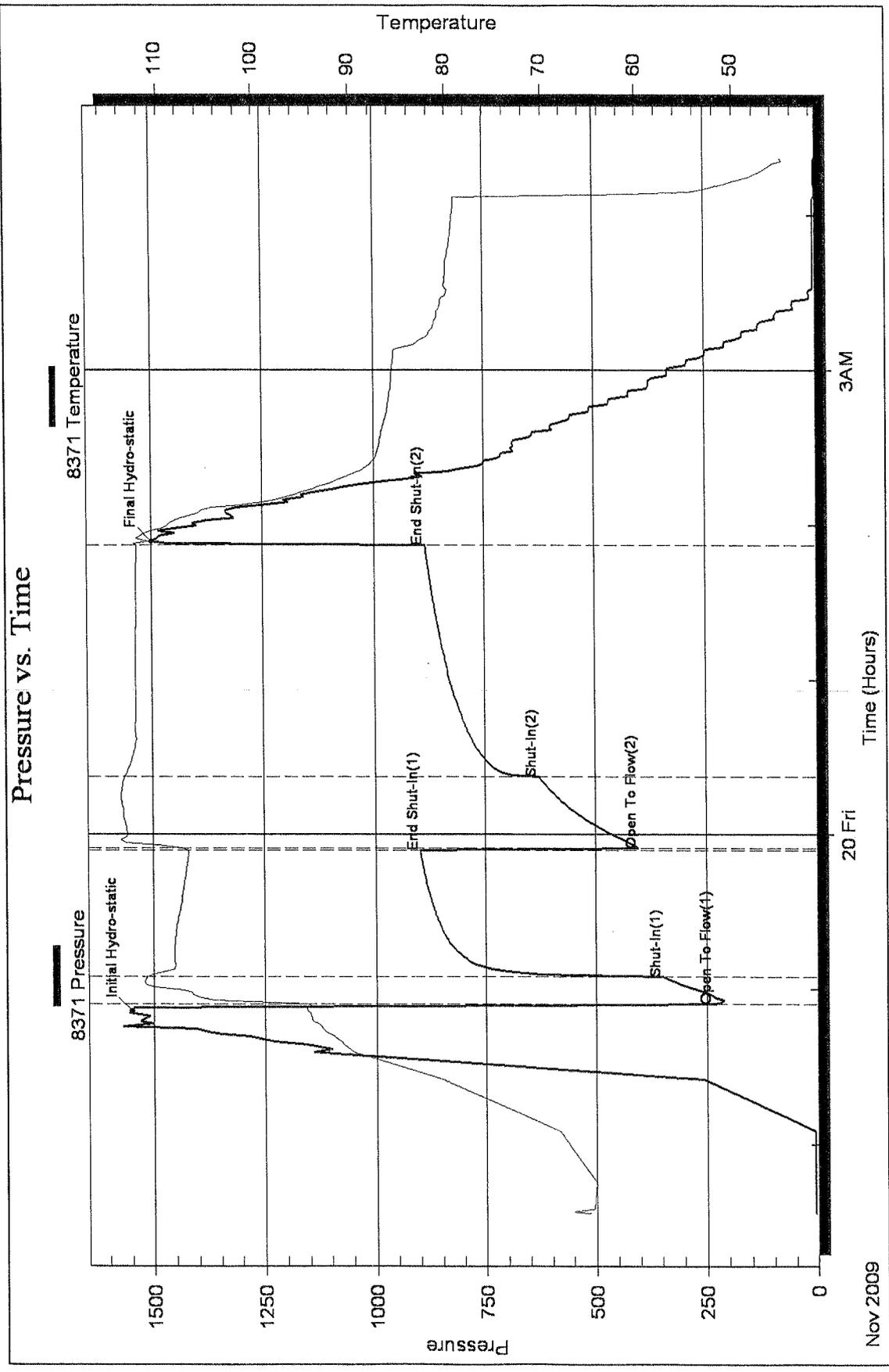
Num Gas Bombs: 0

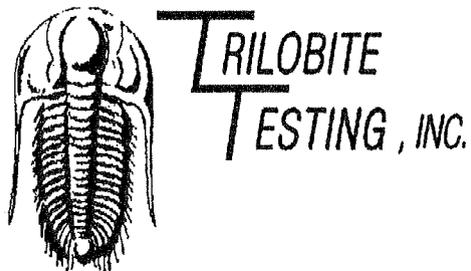
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .436 @ 34F = 33000 chlorides





## DRILL STEM TEST REPORT

Prepared For: **Gilbert & Stewart Operating, LLC**

1801 Broadway Ste. 450  
Denver, Co  
80202

ATTN: Adam Kennedy

### 6-19s-9w Rice KS

#### Lincoln #2

Start Date: 2009.11.20 @ 10:00:08

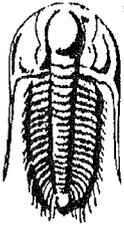
End Date: 2009.11.20 @ 15:03:32

Job Ticket #: 36611                      DST #: 8

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, Co  
80202  
ATTN: Adam Kennedy

**6-19s-9w Rice KS**

Job Ticket: 36611      **DST#: 8**  
Test Start: 2009.11.20 @ 10:00:08

## GENERAL INFORMATION:

Formation: **Arbuckle (3)**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 11:24:03  
Time Test Ended: 15:03:32

Test Type: Conventional Bottom Hole  
Tester: Brian Fairbank  
Unit No: 41

Interval: **3242.00 ft (KB) To 3252.00 ft (KB) (TVD)**  
Total Depth: 2713.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition:

Reference Elevations: 1717.00 ft (KB)  
1710.00 ft (CF)  
KB to GR/CF: 7.00 ft

## Serial #: 8371

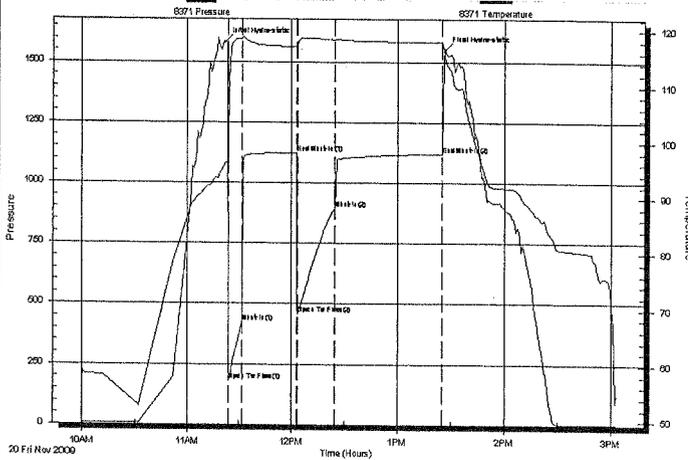
**Inside**

Press@RunDepth: 892.77 psig @ 3246.00 ft (KB)  
Start Date: 2009.11.20      End Date: 2009.11.20  
Start Time: 10:00:08      End Time: 15:03:32

Capacity: 8000.00 psig  
Last Calib.: 2009.11.20  
Time On Btm: 2009.11.20 @ 11:22:33  
Time Off Btm: 2009.11.20 @ 13:27:03

**TEST COMMENT:** IFF - BOB 45 sec.  
ISI - strong sur blow back - died 12 min.  
FFP - BOB 30 sec.  
FSI - no blow back

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1581.24	96.35	Initial Hydro-static
2	182.44	98.29	Open To Flow (1)
10	423.73	118.61	Shut-In (1)
41	1124.65	117.23	End Shut-In (1)
42	459.60	117.37	Open To Flow (2)
62	892.77	118.40	Shut-In (2)
123	1120.77	117.98	End Shut-In (2)
125	1549.82	115.53	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	MV 90%W, 10%M	1.68
1680.00	Reversed out	23.57
90.00	MV 90%W, 10%M	1.26

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gilbert & Stewart Operating, LLC

**Lincoln #2**

1801 Broadway Ste. 450  
Denver, Co  
80202

**6-19s-9w Rice KS**

Job Ticket: 36611

**DST#: 8**

ATTN: Adam Kennedy

Test Start: 2009.11.20 @ 10:00:08

### Tool Information

Drill Pipe:	Length: 3225.00 ft	Diameter: 3.80 inches	Volume: 45.24 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 45.24 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3242.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	36.00 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			3220.00	
Hydraulic tool	5.00			3225.00	
Jars	5.00			3230.00	
Safety Joint	2.00			3232.00	
Packer	5.00			3237.00	27.00 Bottom Of Top Packer
Packer	5.00			3242.00	
Stubb	1.00			3243.00	
Perforations	3.00			3246.00	
Recorder	0.00	8018	Inside	3246.00	
Recorder	0.00	8371	Inside	3246.00	
Perforations	2.00			3248.00	
Bullnose	3.00			3251.00	9.00 Bottom Packers & Anchor

**Total Tool Length: 36.00**



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**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

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80202

**6-19s-9w Rice KS**

ATTN: Adam Kennedy

Job Ticket: 36611

**DST#: 8**

Test Start: 2009.11.20 @ 10:00:08

**Mud and Cushion Information**

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 52.00 sec/qt  
Water Loss: 7.95 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 7800.00 ppm  
Filter Cake: inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: 16000 ppm

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
120.00	MW 90%W, 10%M	1.683
1680.00	Reversed out	23.566
90.00	MW 90%W, 10%M	1.262

Total Length: 1890.00 ft      Total Volume: 26.511 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .478 @ 60F = 16000 chlorides

### Pressure vs. Time

