

**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **Hutchinson Oil Co**

PO Box 521  
Derby KS 67037

ATTN: Josh Austin

**24 23 13 Stafford K**

**Schlochtermeyer #1-24**

Start Date: 2007.11.05 @ 08:51:16

End Date: 2007.11.05 @ 12:21:01

Job Ticket #: 29293                      DST #: 1

15-185-23482-0000

**CONFIDENTIAL  
FEB 08 2008  
KCC**

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

Hutchinson Oil Co

Schlochtermeyer #1-24

24 23 13 Stafford K

DST # 1

Savery Sand

2007.11.05

24-235-13W





**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Hutchinson Oil Co

**Schlochtermeier #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

Job Ticket: 29293      **DST#: 1**

ATTN: Josh Austin

Test Start: 2007.11.05 @ 08:51:16

**Tool Information**

Drill Pipe:	Length: 2711.00 ft	Diameter: 3.80 inches	Volume: 38.03 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:	23000.00 lb
Drill Collar:	Length: 217.00 ft	Diameter: 2.25 inches	Volume: 1.07 bbl	Weight to Pull Loose:	lb
			<b>Total Volume: 39.10 bbl</b>	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	2930.00 ft			Final	lb
Depth to Bottom Packer:	ft				
Interval between Packers:	30.00 ft				
Tool Length:	50.00 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			2911.00	
Shut In Tool	5.00			2916.00	
Hydraulic tool	5.00			2921.00	
Packer	4.00			2925.00	20.00      Bottom Of Top Packer
Packer	5.00			2930.00	
Stubb	1.00			2931.00	
Recorder	0.00	8319	Inside	2931.00	
Recorder	0.00	8289	Inside	2931.00	
Perforations	24.00			2955.00	
Recorder	0.00	13789	Outside	2955.00	
Bullnose	5.00			2960.00	30.00      Bottom Packers & Anchor

**Total Tool Length: 50.00**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Hutchinson Oil Co

**Schlochtermeyer #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

Job Ticket: 29293

**DST#: 1**

ATTN: Josh Austin

Test Start: 2007.11.05 @ 08:51:16

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 34.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 0.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 50000.00 ppm

Filter Cake: 0.20 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbbl

Total Length:

ft

Total Volume:

bbbl

Num Fluid Samples: 0

Num Gas Bombs: 0

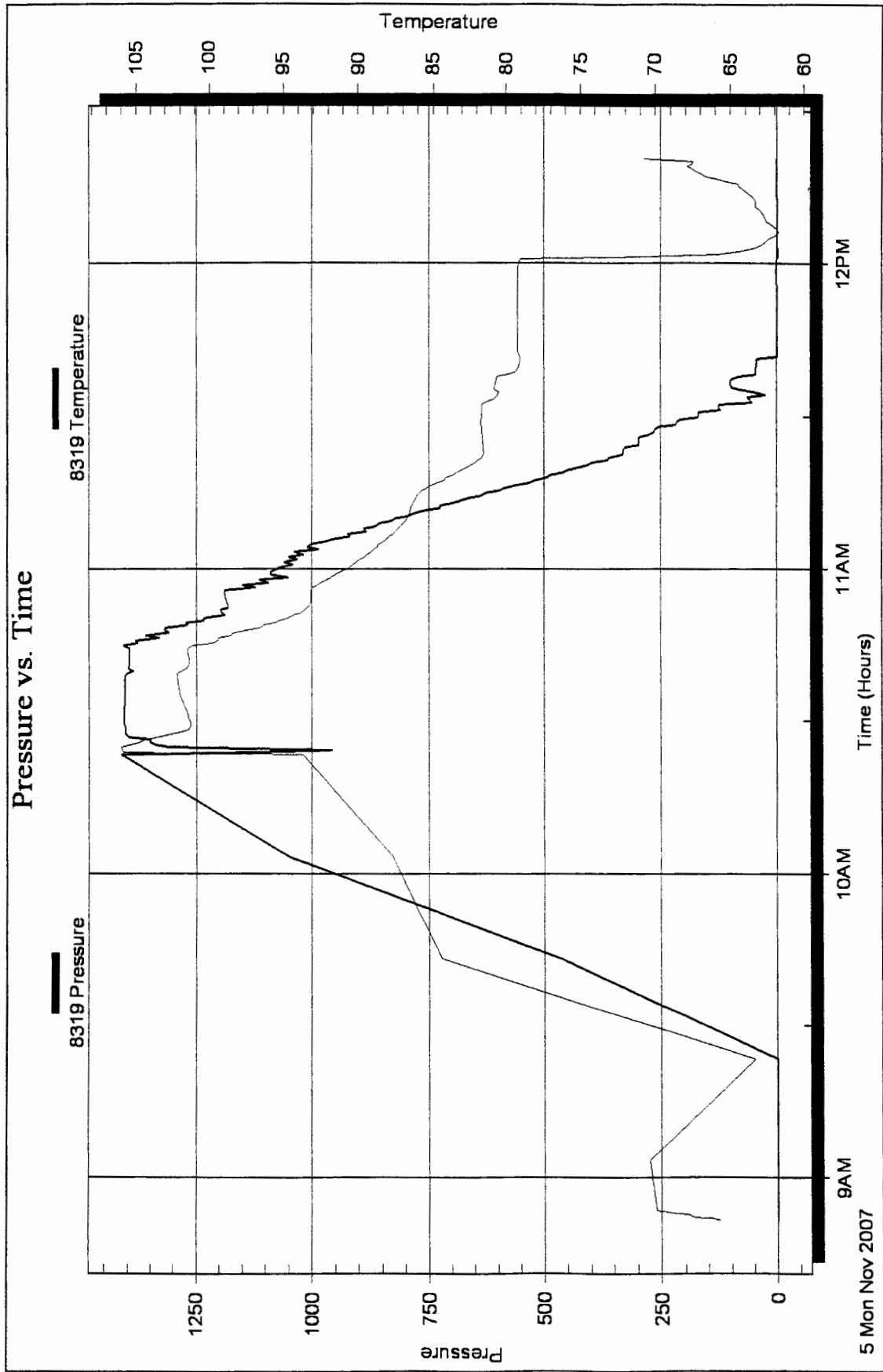
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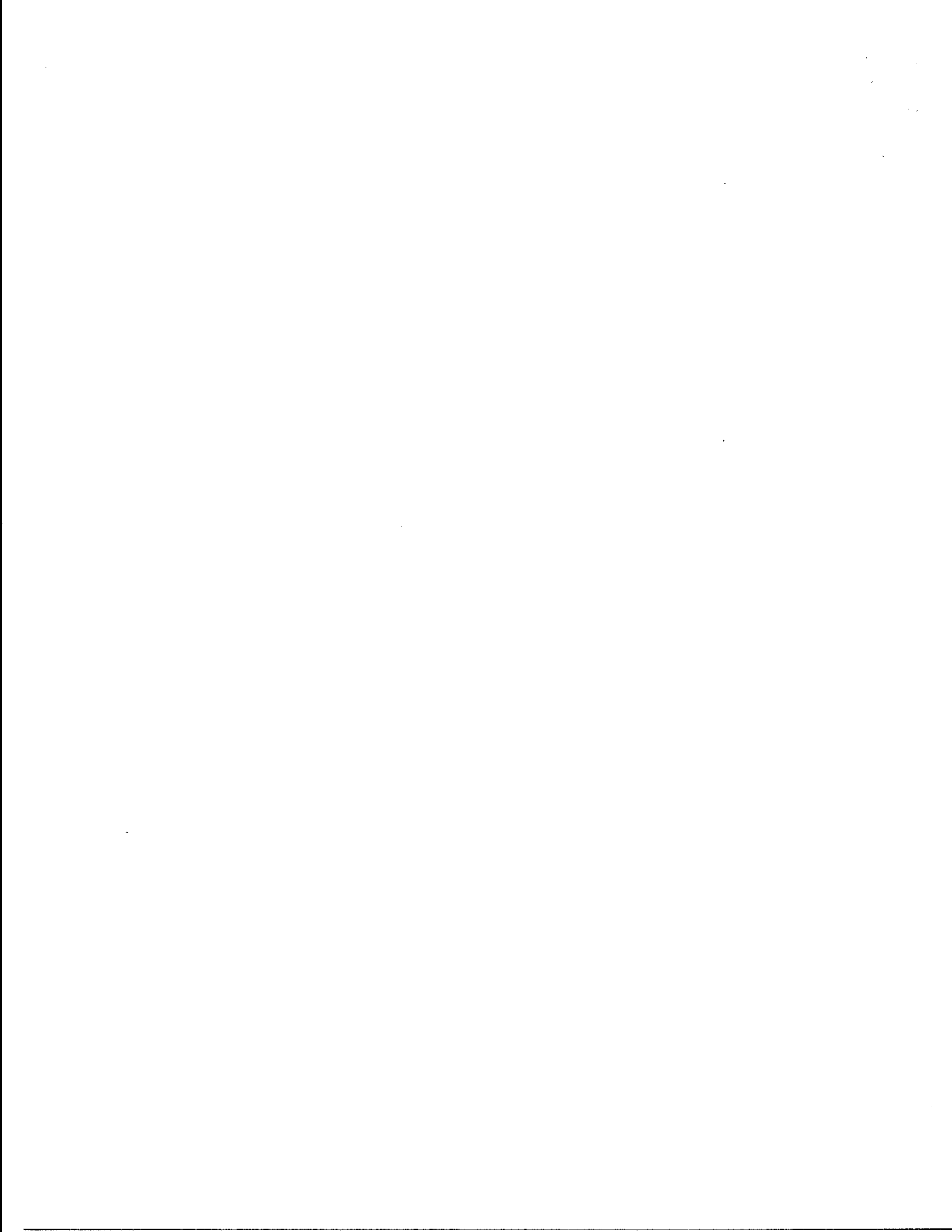
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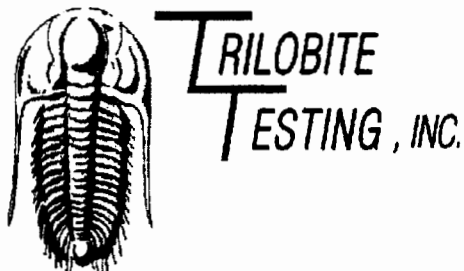
Laboratory Location:

Recovery Comments:

### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **Hutchinson Oil Co**

PO Box 521  
Derby KS 67037

ATTN: Josh Austin

**24 23 13 Stafford K**

**Schlochtermeyer #1-24**

Start Date: 2007.11.06 @ 19:43:47

End Date: 2007.11.07 @ 03:30:02

Job Ticket #: 29294                      DST #: 2

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

Hutchinson Oil Co

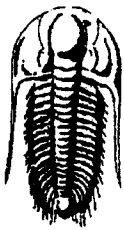
Schlochtermeyer #1-24

24 23 13 Stafford K

DST # 2

Lansing

2007.11.06



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Hutchinson Oil Co

PO Box 521  
Derby KS 67037

ATTN: Josh Austin

**Schlochtermeier #1-24**

**24 23 13 Stafford K**

Job Ticket: 29294

**DST#: 2**

Test Start: 2007.11.06 @ 19:43:47

## GENERAL INFORMATION:

Formation: **Lansing**  
 Deviated: No Whipstock: ft (CF)  
 Time Tool Opened: 21:55:32  
 Time Test Ended: 03:30:02

Test Type: Conventional Bottom Hole  
 Tester: Esak Hadley  
 Unit No: 23

Interval: **3457.00 ft (CF) To 3520.00 ft (CF) (TVD)**  
 Total Depth: 2960.00 ft (CF) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1891.00 ft (KB)  
 1882.00 ft (CF)  
 KB to GR/CF: 9.00 ft

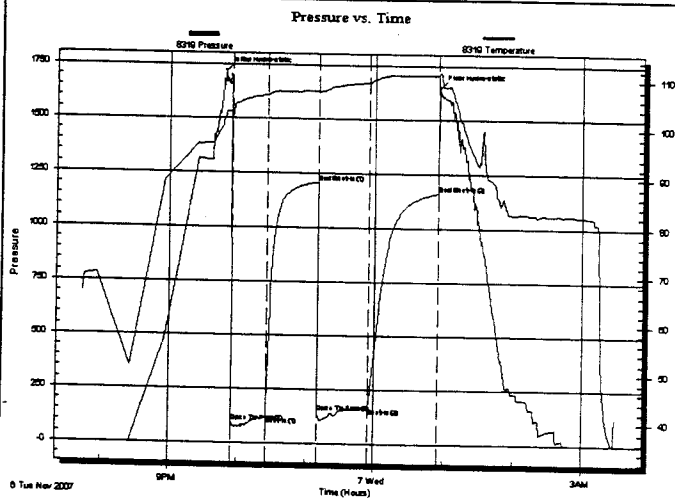
**Serial #: 8319**

**Inside**

Press@RunDepth: 165.37 psig @ 3458.00 ft (CF)  
 Start Date: 2007.11.06 End Date: 2007.11.07  
 Start Time: 19:43:52 End Time: 03:30:01

Capacity: 7000.00 psig  
 Last Calib.: 2007.11.07  
 Time On Btm: 2007.11.06 @ 21:49:32  
 Time Off Btm: 2007.11.07 @ 00:55:47

**TEST COMMENT:** IF Strong blow BOB in 10 secs. GTS in 8 mins. (see gas flow report)  
 ISI Weak blow Slow increase to 6"  
 FF Strong blow (see gas flow report)  
 FSI Weak blow Slow increase to 9"



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1718.51	102.88	Initial Hydro-static
6	90.72	103.05	Open To Flow (1)
36	121.61	106.77	Shut-in(1)
81	1206.62	107.73	End Shut-in(1)
81	140.13	107.42	Open To Flow (2)
126	165.37	109.54	Shut-in(2)
186	1160.28	111.17	End Shut-in(2)
187	1646.40	111.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
465.00	WM&GO 15%W 15%M 20%G 50%O	4.55

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	10.00	9.13
Last Gas Rate	0.25	30.00	70.44
Max. Gas Rate	0.25	33.00	75.20



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Hutchinson Oil Co

**Schlochtermeyer #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

ATTN: Josh Austin

Job Ticket: 29294

**DST#: 2**

Test Start: 2007.11.06 @ 19:43:47

### Tool Information

Drill Pipe:	Length: 3223.00 ft	Diameter: 3.80 inches	Volume: 45.21 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: 22000.00 lb
Drill Collar:	Length: 217.00 ft	Diameter: 2.25 inches	Volume: 1.07 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 46.28 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3457.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	63.00 ft			
Tool Length:	83.00 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			3438.00	
Shut in Tool	5.00			3443.00	
Hydraulic tool	5.00			3448.00	
Packer	4.00			3452.00	20.00 Bottom Of Top Packer
Packer	5.00			3457.00	
Stubb	1.00			3458.00	
Recorder	0.00	8319	Inside	3458.00	
Recorder	0.00	8289	Inside	3458.00	
Change Over Sub	1.00			3459.00	
Blank Spacing	31.00			3490.00	
Change Over Sub	1.00			3491.00	
Perforations	24.00			3515.00	
Bullnose	5.00			3520.00	63.00 Bottom Packers & Anchor

**Total Tool Length: 83.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Hutchinson Oil Co

**Schlochtermeier #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

ATTN: Josh Austin

Job Ticket: 29294

**DST#: 2**

Test Start: 2007.11.06 @ 19:43:47

**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: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5100.00 ppm

Filter Cake: 0.20 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
465.00	WM&GO 15%W 15%M 20%G 50%O	4.546

Total Length: 465.00 ft

Total Volume: 4.546 bbl

Num Fluid Samples: 0

Num Gas Bombs: 1

Serial #: eh-1

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

Hutchinson Oil Co

**Schlochtermeyer #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

ATTN: Josh Austin

Job Ticket: 29294

DST#: 2

Test Start: 2007.11.06 @ 19:43:47

### Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
1	13	0.13	10.00	9.13
1	13	0.13	10.00	9.13
1	13	0.13	10.00	9.13
1	18	0.13	20.00	12.88
1	23	0.25	25.00	62.50
1	28	0.25	28.00	67.26
2	5	0.25	28.00	67.26
2	10	0.25	32.00	73.61
2	15	0.25	33.00	75.20
2	25	0.25	32.00	73.61
2	45	0.25	30.00	70.44

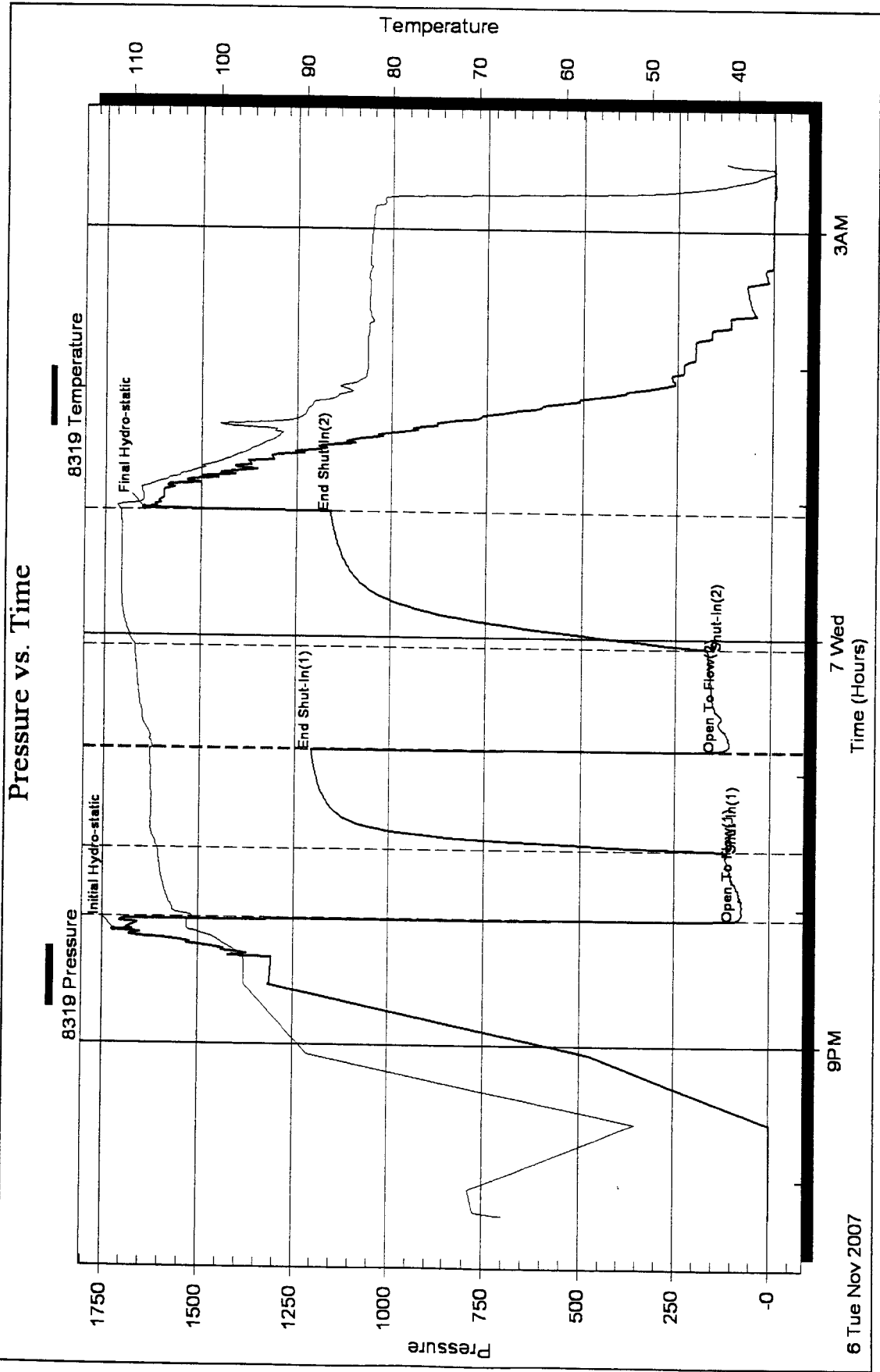
DST Test Number: 2

24 23 13 Stafford K

Hutchinson Oil Co

Inside

Serial #: 8319





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Hutchinson Oil Co**

PO Box 521  
Derby KS 67037

ATTN: Josh Austin

**24 23 13 Stafford K**

**Schlochtermeyer #1-24**

Start Date: 2007.11.07 @ 16:26:42

End Date: 2007.11.07 @ 23:27:42

Job Ticket #: 29295                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Hutchinson Oil Co

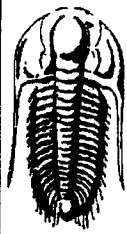
Schlochtermeyer #1-24

24 23 13 Stafford K

DST # 3

Lansing H-1

2007.11.07



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Hutchinson Oil Co

PO Box 521  
Derby KS 67037

ATTN: Josh Austin

**Schlochtermeyer #1-24**

**24 23 13 Stafford K**

Job Ticket: 29295

**DST#: 3**

Test Start: 2007.11.07 @ 16:26:42

## GENERAL INFORMATION:

Formation: **Lansing H-I**  
 Deviated: No Whipstock: ft (CF)  
 Time Tool Opened: 18:21:27  
 Time Test Ended: 23:27:42

Test Type: Conventional Bottom Hole  
 Tester: Esak Hadley  
 Unit No: 23

Interval: **3568.00 ft (CF) To 3610.00 ft (CF) (TVD)**  
 Total Depth: 2960.00 ft (CF) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1891.00 ft (KB)  
 1882.00 ft (CF)  
 KB to GR/CF: 9.00 ft

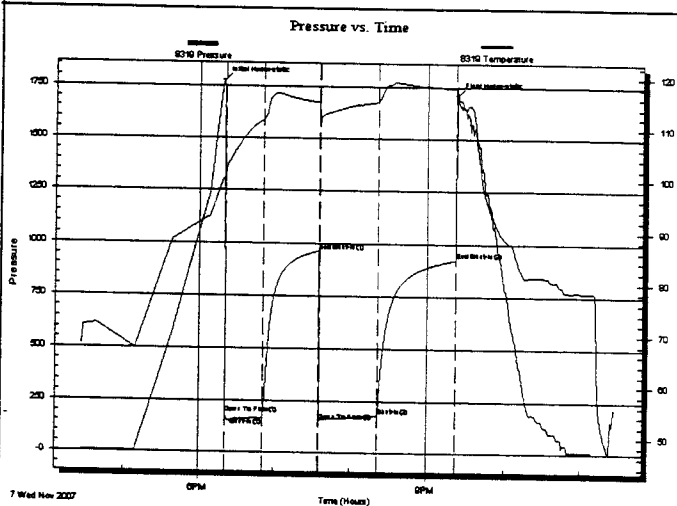
**Serial #: 8319**

Inside

Press@RunDepth: 178.40 psig @ 3569.00 ft (CF)  
 Start Date: 2007.11.07 End Date: 2007.11.07  
 Start Time: 16:26:47 End Time: 23:27:41

Capacity: 7000.00 psig  
 Last Calib.: 2007.11.07  
 Time On Btm: 2007.11.07 @ 18:19:27  
 Time Off Btm: 2007.11.07 @ 21:22:57

**TEST COMMENT:** IF Strong blow BOB in 2 secs. GTS in 2 min. (see gas flow report)  
 ISI Weak to fair blow BOB in 45 mins.  
 FF Strong blow (see gas flow report)  
 FSI Weak blow Slow increase to 5 "



## PRESSURE SUMMARY

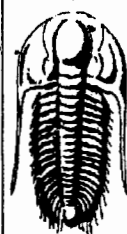
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1772.97	99.91	Initial Hydro-static
2	184.57	100.20	Open To Flow (1)
32	164.89	111.66	Shut-In(1)
76	964.00	115.22	End Shut-In(1)
76	151.98	111.51	Open To Flow (2)
122	178.40	115.26	Shut-In(2)
184	923.74	117.95	End Shut-In(2)
184	1708.69	118.38	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	10%O 10%M 15%G 65%W	0.61
62.00	5%O 5%W 25%G 65%M	0.30
124.00	20%G 30%W 50%M	1.46
82.00	10%G 20%W 70%M	1.15

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	28.00	662.28
Last Gas Rate	0.75	18.00	506.08
Max. Gas Rate	0.75	28.00	662.28



**TRIOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Hutchinson Oil Co

**Schlochtermeyer #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

Job Ticket: 29295      **DST#: 3**

ATTN: Josh Austin

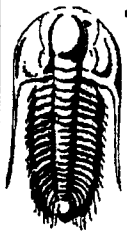
Test Start: 2007.11.07 @ 16:26:42

**Tool Information**

Drill Pipe:	Length: 3348.00 ft	Diameter: 3.80 inches	Volume: 46.96 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: 22000.00 lb
Drill Collar:	Length: 217.00 ft	Diameter: 2.25 inches	Volume: 1.07 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 48.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	3568.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	62.00 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			3549.00	
Shut In Tool	5.00			3554.00	
Hydraulic tool	5.00			3559.00	
Packer	4.00			3563.00	20.00      Bottom Of Top Packer
Packer	5.00			3568.00	
Stubb	1.00			3569.00	
Recorder	0.00	8319	Inside	3569.00	
Recorder	0.00	8289	Inside	3569.00	
Perforations	36.00			3605.00	
Bullnose	5.00			3610.00	42.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>62.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Hutchinson Oil Co

**Schlochtermeier #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

Job Ticket: 29295

**DST#: 3**

ATTN: Josh Austin

Test Start: 2007.11.07 @ 16:26:42

## 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: 45.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5700.00 ppm			
Filter Cake: 0.20 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	10%O 10%M 15%G 65%W	0.610
62.00	5%O 5%W 25%G 65%M	0.305
124.00	20%G 30%W 50%M	1.457
82.00	10%G 20%W 70%M	1.150

Total Length: 392.00 ft      Total Volume: 3.522 bbl

Num Fluid Samples: 0

Num Gas Bombs: 2

Serial #: eh-2 & eh-3

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

Hutchinson Oil Co

**Schlochtermeier #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

Job Ticket: 29295

**DST#: 3**

ATTN: Josh Austin

Test Start: 2007.11.07 @ 16:26:42

### Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
1	20	0.75	28.00	662.28
1	20	0.75	28.00	662.28
1	25	0.75	26.00	631.04
1	30	0.75	25.00	615.42
2	5	0.75	18.00	506.08
2	10	0.75	20.00	537.32
2	15	0.75	20.00	537.32
2	25	0.75	19.00	521.70
2	35	0.75	18.00	506.08

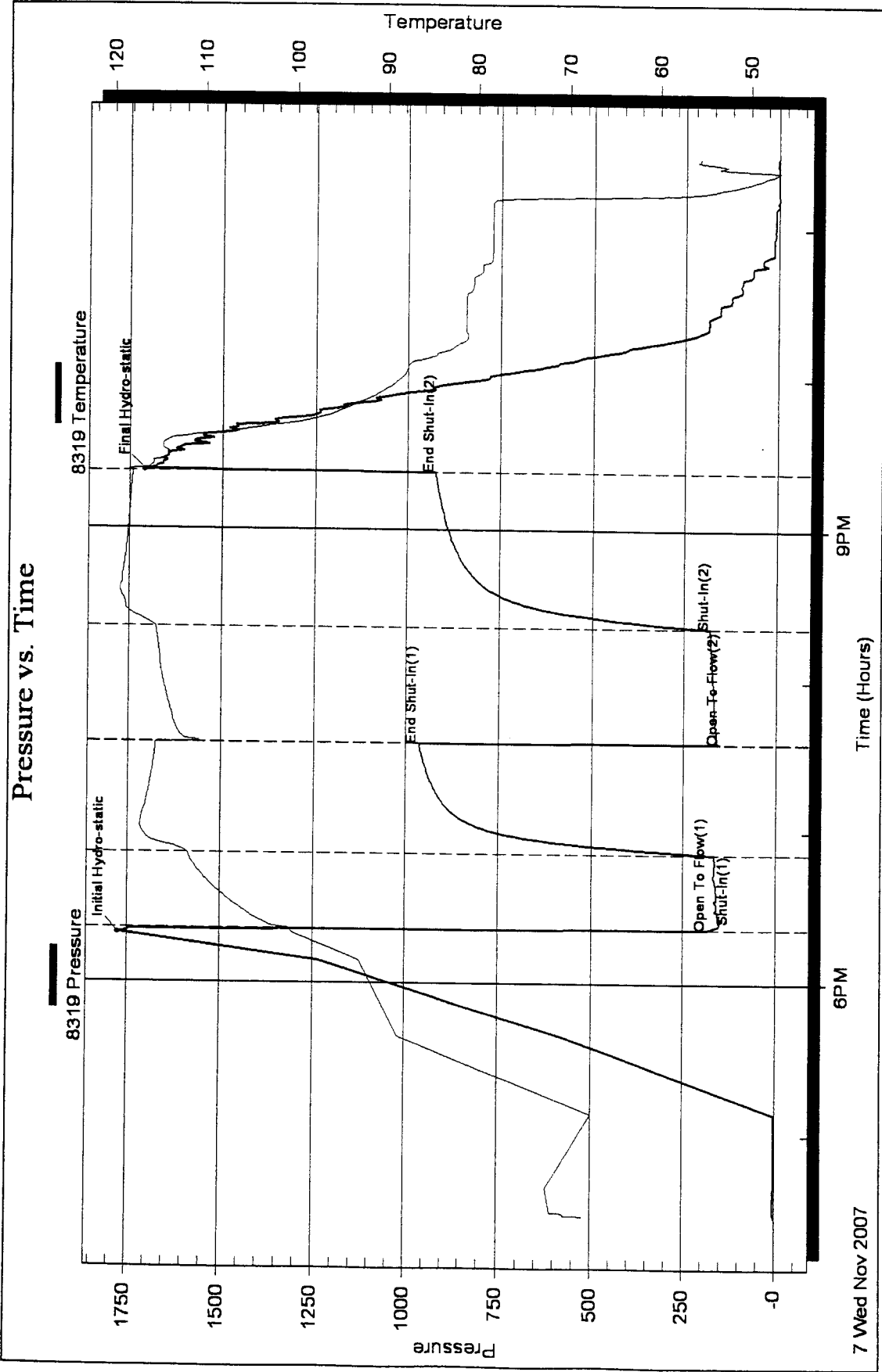
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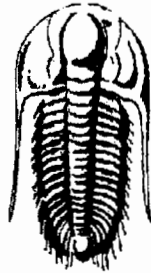
24 23 13 Stafford K

Hutchinson Oil Co

Inside

Serial #: 8319





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Hutchinson Oil Co**

PO Box 521  
Derby KS 67037

ATTN: Josh Austin

**24 23 13 Stafford K**

**Schlochtermeyer #1-24**

Start Date: 2007.11.08 @ 07:48:02

End Date: 2007.11.08 @ 14:13:47

Job Ticket #: 29296          DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Hutchinson Oil Co

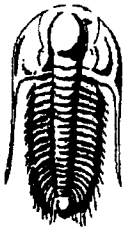
Schlochtermeyer #1-24

24 23 13 Stafford K

DST # 4

Lansing

2007.11.08



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Hutchinson Oil Co

**Schlochtermeier #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

ATTN: Josh Austin

Job Ticket: 29296

**DST#: 4**

Test Start: 2007.11.08 @ 07:48:02

## GENERAL INFORMATION:

Formation: **Lansing**  
 Deviated: **No** Whipstock: **ft (CF)**  
 Time Tool Opened: 09:40:17  
 Time Test Ended: 14:13:47

Test Type: **Conventional Bottom Hole**  
 Tester: **Esak Hadley**  
 Unit No: **23**

Interval: **3612.00 ft (CF) To 3660.00 ft (CF) (TVD)**  
 Total Depth: **2960.00 ft (CF) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **1891.00 ft (KB)**  
**1882.00 ft (CF)**  
 KB to GRVCF: **9.00 ft**

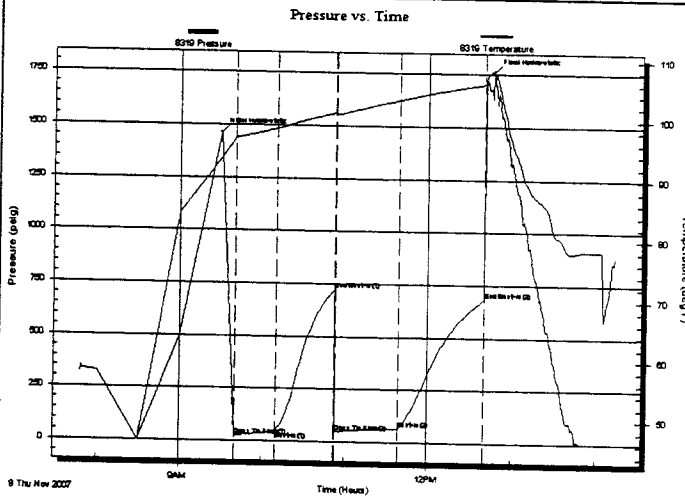
**Serial #: 8319**

**Inside**

Press@RunDepth: **65.43 psig @ 3613.00 ft (CF)**  
 Start Date: **2007.11.08** End Date: **2007.11.08**  
 Start Time: **07:48:07** End Time: **14:13:46**

Capacity: **7000.00 psig**  
 Last Calib.: **2007.11.08**  
 Time On Btm: **2007.11.08 @ 09:30:02**  
 Time Off Btm: **2007.11.08 @ 12:46:32**

TEST COMMENT: IF Weak blow Slow increase to 4 "  
 ISI No blow  
 FF Weak blow Slow increase to 4 "  
 FSI No blow



## PRESSURE SUMMARY

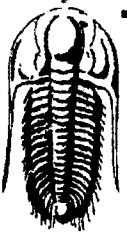
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1460.96	93.36	Initial Hydro-static
11	23.80	96.89	Open To Flow (1)
40	47.08	98.44	Shut-In(1)
83	721.15	101.12	End Shut-In(1)
83	46.23	100.96	Open To Flow(2)
129	65.43	103.32	Shut-In(2)
190	679.55	106.05	End Shut-In(2)
197	1761.12	107.66	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	30%M 70%W Rw .4 OHMS@73 deg	0.30
62.00	30%W 70%M	0.30

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Hutchinson Oil Co

**Schlochtermeyer #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

Job Ticket: 29296

**DST#: 4**

ATTN: Josh Austin

Test Start: 2007.11.08 @ 07:48:02

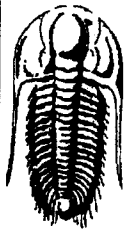
**Tool Information**

Drill Pipe:	Length: 3380.00 ft	Diameter: 3.80 inches	Volume: 47.41 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: 22000.00 lb
Drill Collar:	Length: 217.00 ft	Diameter: 2.25 inches	Volume: 1.07 bbl	Weight to Pull Loose: 63000.00 lb
		Total Volume: 48.48 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	3612.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	68.00 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			3593.00	
Shut In Tool	5.00			3598.00	
Hydraulic tool	5.00			3603.00	
Packer	4.00			3607.00	20.00 Bottom Of Top Packer
Packer	5.00			3612.00	
Stubb	1.00			3613.00	
Recorder	0.00	8319	Inside	3613.00	
Recorder	0.00	8289	Inside	3613.00	
Perforations	8.00			3621.00	
Change Over Sub	1.00			3622.00	
Blank Spacing	32.00			3654.00	
Change Over Sub	1.00			3655.00	
Bullnose	5.00			3660.00	48.00 Bottom Packers & Anchor

**Total Tool Length: 68.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Hutchinson Oil Co

**Schlochtermeyer #1-24**

PO Box 521  
Derby KS 67037

**24 23 13 Stafford K**

Job Ticket: 29296

**DST#: 4**

ATTN: Josh Austin

Test Start: 2007.11.08 @ 07:48:02

## 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: 45.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5700.00 ppm			
Filter Cake: 0.20 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	30%M 70%W Rw .4 OHMS@73 deg	0.305
62.00	30%W 70%M	0.305

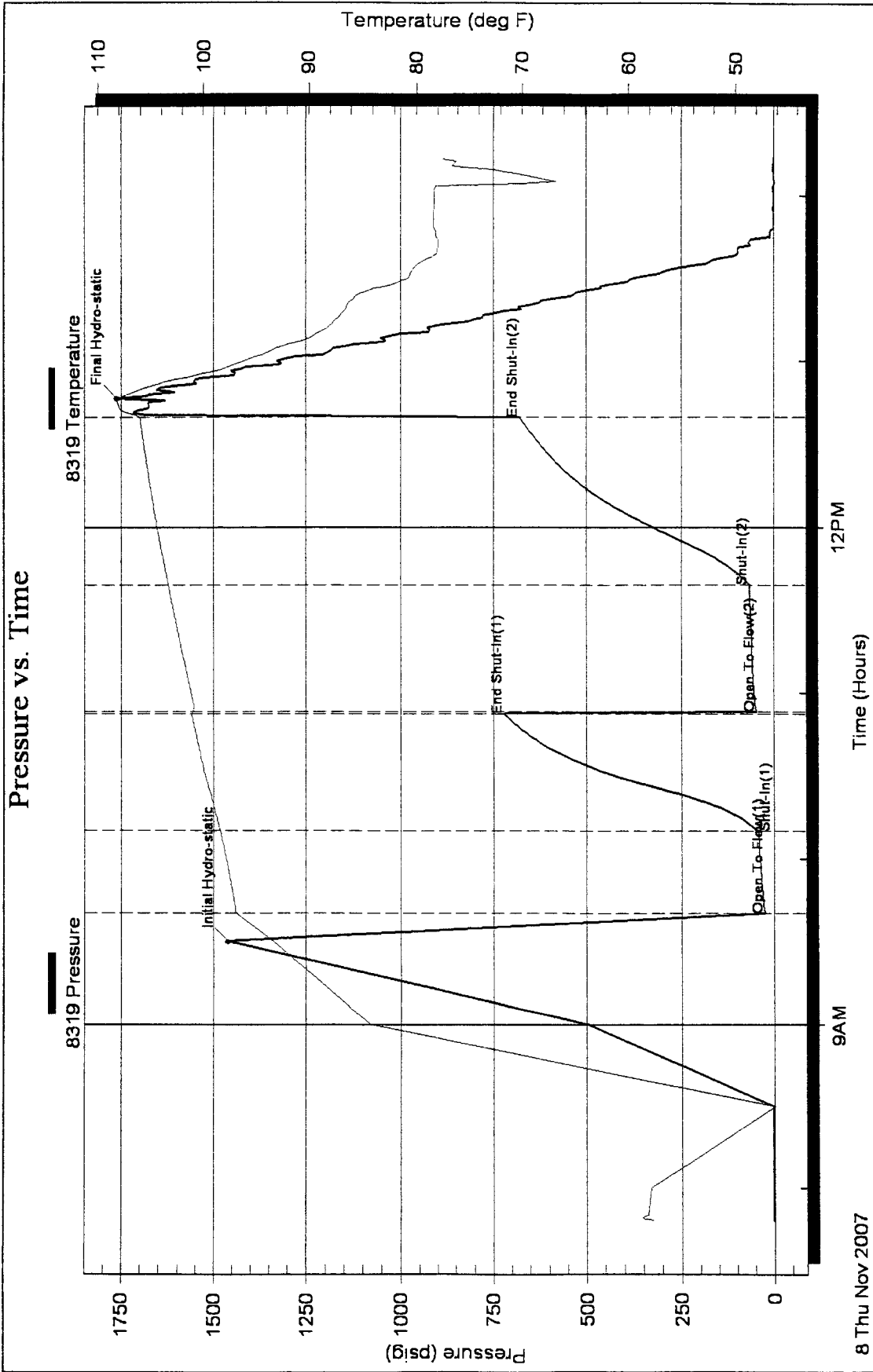
Total Length: 124.00 ft      Total Volume: 0.610 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

### Pressure vs. Time

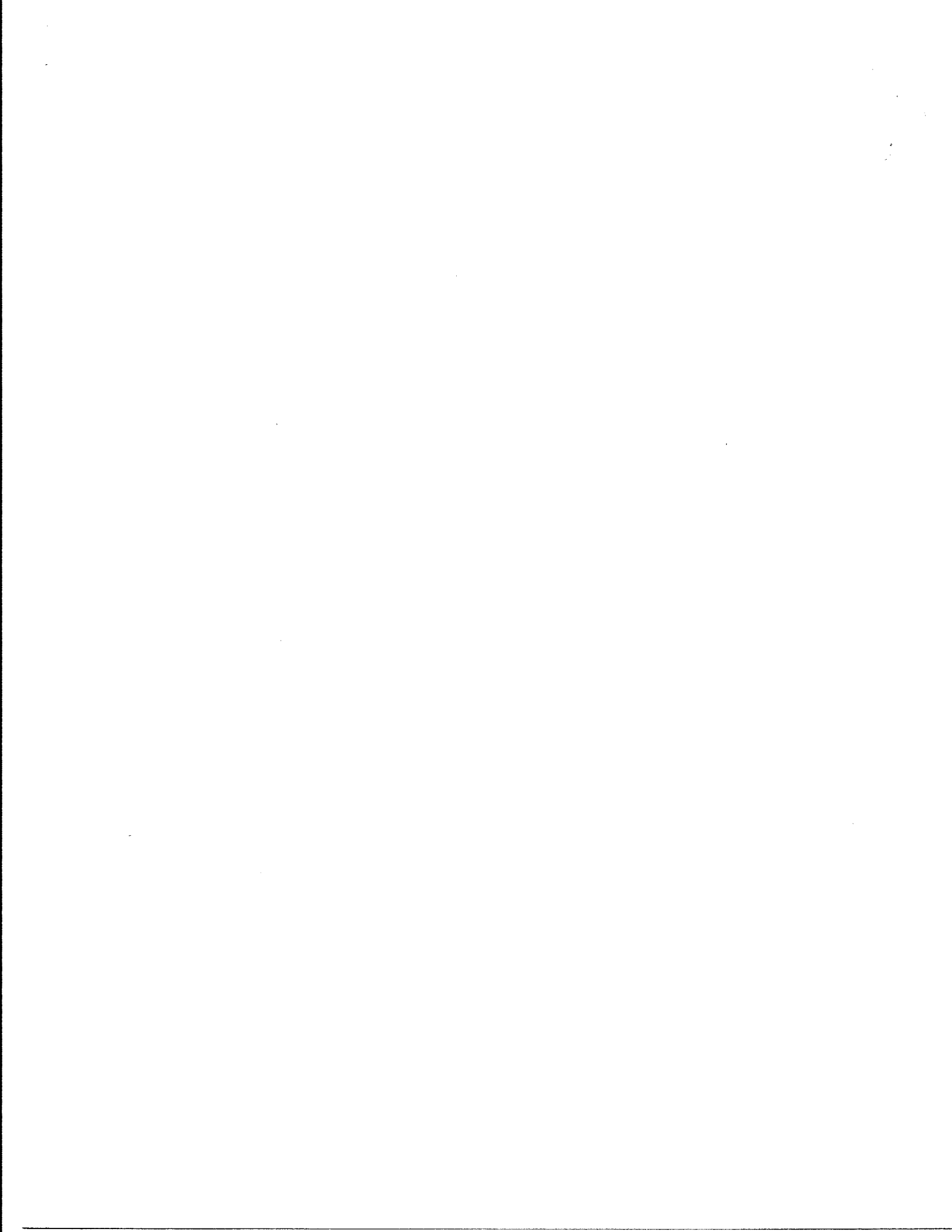


8 Thu Nov 2007

9AM

Time (Hours)

12PM





**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **McCoy Petroleum CO**

8080 E Central Ste 300  
Wichita KS 67206

**KCC**  
**FEB 09 2007**  
**CONFIDENTIAL**

ATTN: Tim Priest

**16 26S19W Edwards KS**

**Miller A #2-16**

Start Date: 2007.01.26 @ 11:12:39

End Date: 2007.01.26 @ 21:31:54

Job Ticket #: 27045

DST #: 1

*15-047-21542-0000*

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

**RECEIVED**  
**KANSAS CORPORATION COMMISSION**

**FEB 13 2007**

**CONSERVATION DIVISION**  
**WICHITA, KS**

McCoy Petroleum CO

Miller A #2-16

16 26S19W Edwards KS

DST # 1

Mississippi

2007.01.26

*16-26S-19W*



**TRIOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

McCoy Petroleum CO  
8080 E Central Ste 300  
Wichita KS 67206  
ATTN: Tim Priest

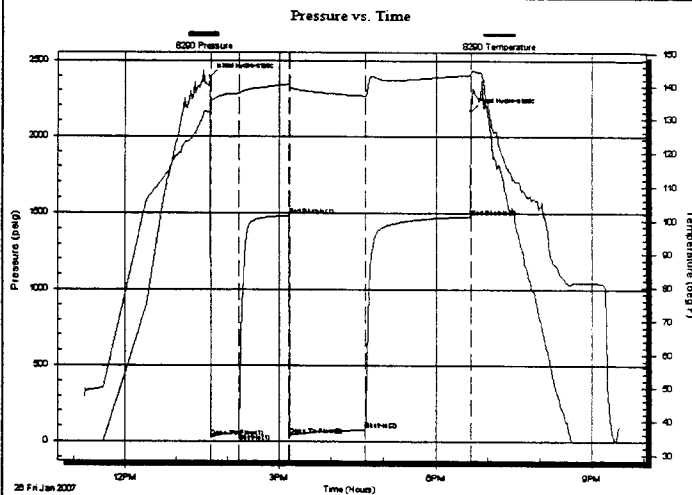
**Miller A #2-16**  
**16 26S19W Edwards KS**  
Job Ticket: 27045      **DST#: 1**  
Test Start: 2007.01.26 @ 11:12:39

## GENERAL INFORMATION:

Formation: **Mississippi**  
Deviated: No Whipstock: ft (CF)  
Time Tool Opened: 13:39:54  
Time Test Ended: 21:31:54  
Interval: **4730.00 ft (CF) To 4754.00 ft (CF) (TVD)**  
Total Depth: 4754.00 ft (CF) (TVD)  
Hole Diameter: 7.79 inches Hole Condition: Fair  
Reference Elevations: 2239.00 ft (KB)  
2228.00 ft (CF)  
KB to GR/CF: 11.00 ft  
Test Type: Conventional Bottom Hole  
Tester: Zach Stover  
Unit No: 23

**Serial #: 8290**      **Inside**  
Press@RunDepth: 77.08 psig @ 4734.00 ft (CF)      Capacity: 7000.00 psig  
Start Date: 2007.01.26      End Date: 2007.01.26      Last Calib.: 2007.01.26  
Start Time: 11:12:44      End Time: 21:31:54      Time On Btm: 2007.01.26 @ 13:39:09  
Time Off Btm: 2007.01.26 @ 18:39:53

**TEST COMMENT:** IF Strong blow BOB immediately  
ISI No blow  
FF Strong blow BOB immediately GTS in 4 min. Gauged gas to 23# on 1/4 in. choke  
FSI No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2393.24	132.09	Initial Hydro-static
1	25.65	134.05	Open To Flow (1)
34	53.06	137.69	Shut-In (1)
92	1481.63	140.58	End Shut-In (1)
93	35.94	139.28	Open To Flow (2)
181	77.08	137.08	Shut-In (2)
301	1476.51	143.46	End Shut-In (2)
301	2164.58	143.99	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
130.00	GSY Mud 5%G 95%M	0.64
0.00		0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	4.00	29.19
Last Gas Rate	0.25	23.00	59.33
Max. Gas Rate	0.25	23.00	59.33



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

McCoy Petroleum CO  
8080 E Central Ste 300  
Wichita KS 67206  
  
ATTN: Tim Priest

**Miller A #2-16**  
**16 26S19W Edwards KS**  
Job Ticket: 27045      **DST#: 1**  
Test Start: 2007.01.26 @ 11:12:39

**Tool Information**

Drill Pipe:	Length: 4486.00 ft	Diameter: 3.80 inches	Volume: 62.93 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: 256.00 ft	Diameter: 2.25 inches	Volume: 1.26 bbl	Weight to Pull Loose: 70000.00 lb
			<b>Total Volume: 64.19 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4730.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	44.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4711.00	
Shut In Tool	5.00			4716.00	
Hydraulic tool	5.00			4721.00	
Packer	4.00			4725.00	20.00 Bottom Of Top Packer
Packer	5.00			4730.00	
Stubb	1.00			4731.00	
Perforations	3.00			4734.00	
Recorder	0.00	8290	Inside	4734.00	
Perforations	15.00			4749.00	
Recorder	0.00	13789	Outside	4749.00	
Bullnose	5.00			4754.00	24.00 Bottom Packers & Anchor

**Total Tool Length: 44.00**



**TRIOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

McCoy Petroleum CO

**Miller A #2-16**

8080 E Central Ste 300  
Wichita KS 67206

**16 26S19W Edwards KS**

ATTN: Tim Priest

Job Ticket: 27045

**DST#: 1**

Test Start: 2007.01.26 @ 11:12:39

## 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: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 0.20 inches			

## Recovery Information

Recovery Table

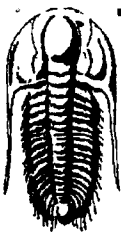
Length ft	Description	Volume bbl
130.00	GSY Mud 5%G 95%M	0.639
0.00		0.000

Total Length: 130.00 ft      Total Volume: 0.639 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**GAS RATES**

McCoy Petroleum CO

Miller A #2-16

8080 E Central Ste 300  
Wichita KS 67206

16 26S19W Edwards KS

Job Ticket: 27045

DST#: 1

ATTN: Tim Priest

Test Start: 2007.01.26 @ 11:12:39

## Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
2	10	0.25	4.00	29.19
2	10	0.25	4.00	29.19
2	20	0.25	9.50	37.92
2	30	0.25	13.00	43.47
2	40	0.25	18.00	51.40
2	50	0.25	20.00	54.57
2	60	0.25	22.00	57.75
2	70	0.25	22.00	57.75
2	80	0.25	22.00	57.75
2	90	0.25	23.00	59.33

**KCC**  
**FEB 09 2007**  
**CONFIDENTIAL**

Serial #: 8290    Inside    McCoy Petroleum CO    16 26S19W Edwards KS    DST Test Number: 1

