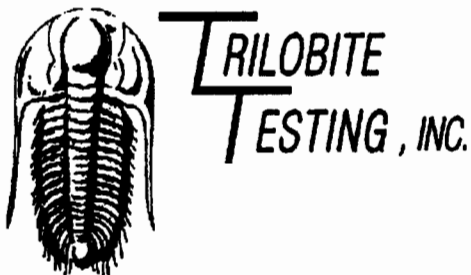


15-009-25146

08-18s-13w  
E2 W2 W2 NE



### DRILL STEM TEST REPORT

Prepared For: **Pioneer Oil Co**

RR4 Box 142B  
Lawrenceville IL 62439

ATTN: Jim Musgrove

**8 18 13 Barton KS**

**Hlavaty #1**

Start Date: 2008.02.23 @ 20:20:02

End Date: 2008.02.24 @ 01:16:02

Job Ticket #: 28834                      DST #: 1

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**JUN 24 2008**

CONSERVATION DIVISION  
WICHITA, KS

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Pioneer Oil Co

Hlavaty #1

8 18 13 Barton KS

DST # 1

Lansing A-F

2008.02.23





**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439

ATTN: Jim Musgrove

**Hlavaty #1**

**8 18 13 Barton KS**

Job Ticket: 28834

DST#: 1

Test Start: 2008.02.23 @ 20:20:02

### Tool Information

Drill Pipe:	Length: 2962.00 ft	Diameter: 3.80 inches	Volume: 41.55 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: lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 42.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial lb
Depth to Top Packer:	3077.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	88.00 ft			
Tool Length:	108.00 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			3058.00	
Shut In Tool	5.00			3063.00	
Hydraulic tool	5.00			3068.00	
Packer	4.00			3072.00	20.00 Bottom Of Top Packer
Packer	5.00			3077.00	
Stubb	1.00			3078.00	
Recorder	0.00	8319	inside	3078.00	
Recorder	0.00	8289	inside	3078.00	
Perforations	17.00			3095.00	
Change Over Sub	1.00			3096.00	
Blank Spacing	63.00			3159.00	
Change Over Sub	1.00			3160.00	
Bullnose	5.00			3165.00	88.00 Bottom Packers & Anchor

**Total Tool Length: 108.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28834      DST#: 1  
Test Start: 2008.02.23 @ 20:20:02

**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: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.96 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 8600.00 ppm			
Filter Cake: 0.20 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl

Total Length:                      ft      Total Volume:                      bbl  
 Num Fluid Samples: 0                      Num Gas Bombs: 0                      Serial #:  
 Laboratory Name:                      Laboratory Location:  
 Recovery Comments:

Serial #: 8319

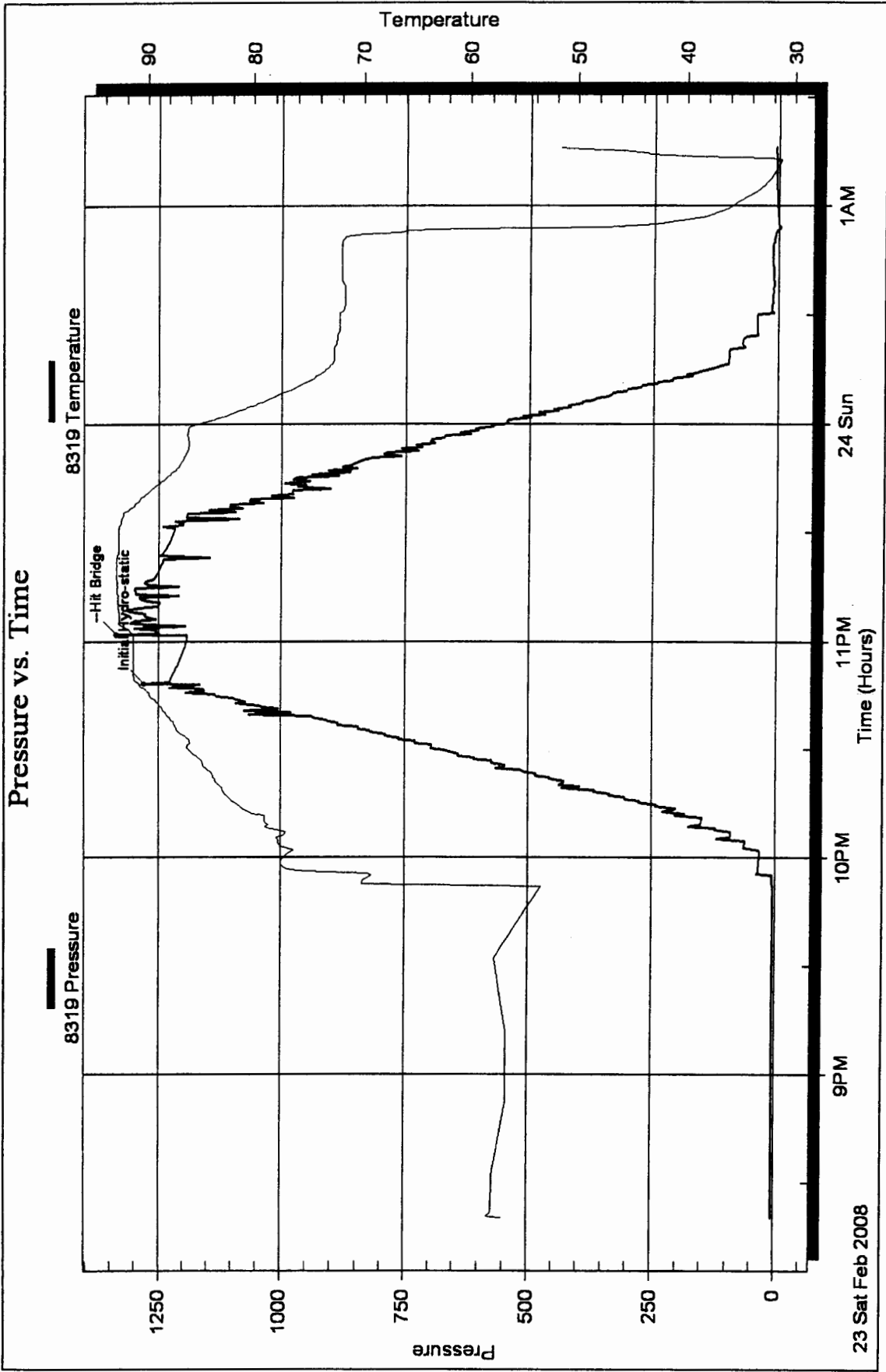
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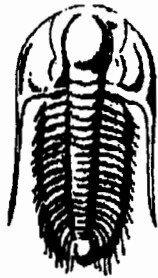
Pioneer Oil Co

8 18 13 Barton KS

DST Test Number: 1

### Pressure vs. Time





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

## DRILL STEM TEST REPORT

Prepared For: **Pioneer Oil Co**

RR4 Box 142B  
Lawrenceville IL 62439

ATTN: Jim Musgrove

**8 18 13 Barton KS**

**Hlavaty #1**

Start Date: 2008.02.24 @ 08:28:53

End Date: 2008.02.24 @ 14:52:38

Job Ticket #: 28835                      DST #: 2

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

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**JUN 24 2008**

CONSERVATION DIVISION  
WICHITA, KS



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

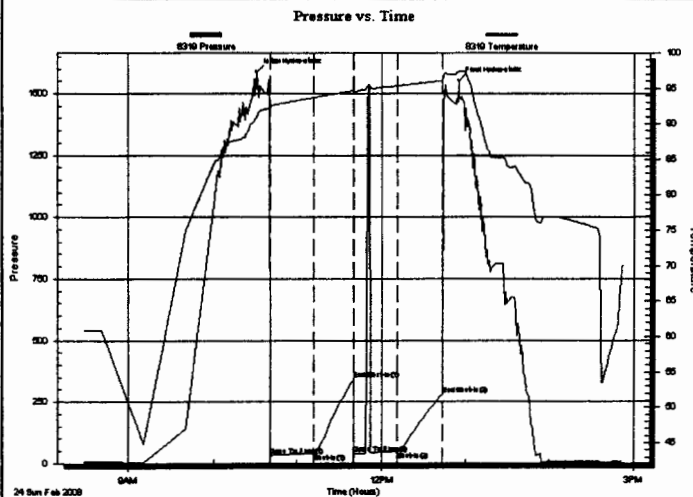
**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28835      **DST#: 2**  
Test Start: 2008.02.24 @ 08:28:53

## GENERAL INFORMATION:

Formation: **Lansing A-F**  
 Deviated: **No Whipstock:**                      ft (KB)  
 Time Tool Opened: 10:40:53  
 Time Test Ended: 14:52:38  
 Interval: **3077.00 ft (KB) To 3165.00 ft (KB) (TVD)**  
 Total Depth: **3165.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Fair  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Esak Hadley**  
 Unit No: **23**  
 Reference Elevations: **1826.00 ft (KB)**  
                                          **1818.00 ft (CF)**  
 KB to GR/CF: **8.00 ft**

**Serial #: 8319      Inside**  
 Press@RunDepth: **44.85 psig @ 3078.00 ft (KB)**  
 Start Date: **2008.02.24**      End Date: **2008.02.24**  
 Start Time: **08:28:58**      End Time: **14:52:37**  
 Capacity: **7000.00 psig**  
 Last Calib.: **2008.02.24**  
 Time On Btm: **2008.02.24 @ 10:31:08**  
 Time Off Btm: **2008.02.24 @ 12:54:38**

TEST COMMENT: IF Weak blow No more than 1 "  
 ISI No blow  
 FF No blow  
 FSI No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1587.40	90.94	Initial Hydro-static
10	30.58	92.15	Open To Flow (1)
41	37.26	93.69	Shut-In(1)
69	340.40	94.66	End Shut-In(1)
70	36.50	94.58	Open To Flow (2)
100	44.85	95.32	Shut-In(2)
133	279.71	96.07	End Shut-In(2)
144	1551.51	97.32	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	DM	0.31

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28835      **DST#: 2**  
Test Start: 2008.02.24 @ 08:28:53

**Tool Information**

Drill Pipe:	Length: 2967.00 ft	Diameter: 3.80 inches	Volume: 41.62 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 75000.00 lb
			<b>Total Volume: 42.22 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3077.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	88.00 ft			
Tool Length:	108.00 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			3058.00	
Shut In Tool	5.00			3063.00	
Hydraulic tool	5.00			3068.00	
Packer	4.00			3072.00	20.00 Bottom Of Top Packer
Packer	5.00			3077.00	
Stubb	1.00			3078.00	
Recorder	0.00	8319	inside	3078.00	
Recorder	0.00	8289	inside	3078.00	
Perforations	17.00			3095.00	
Change Over Sub	1.00			3096.00	
Blank Spacing	63.00			3159.00	
Change Over Sub	1.00			3160.00	
Bullnose	5.00			3165.00	88.00 Bottom Packers & Anchor

**Total Tool Length: 108.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28835      DST#: 2  
Test Start: 2008.02.24 @ 08:28:53

### 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: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.96 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 8600.00 ppm			
Filter Cake: 0.20 inches			

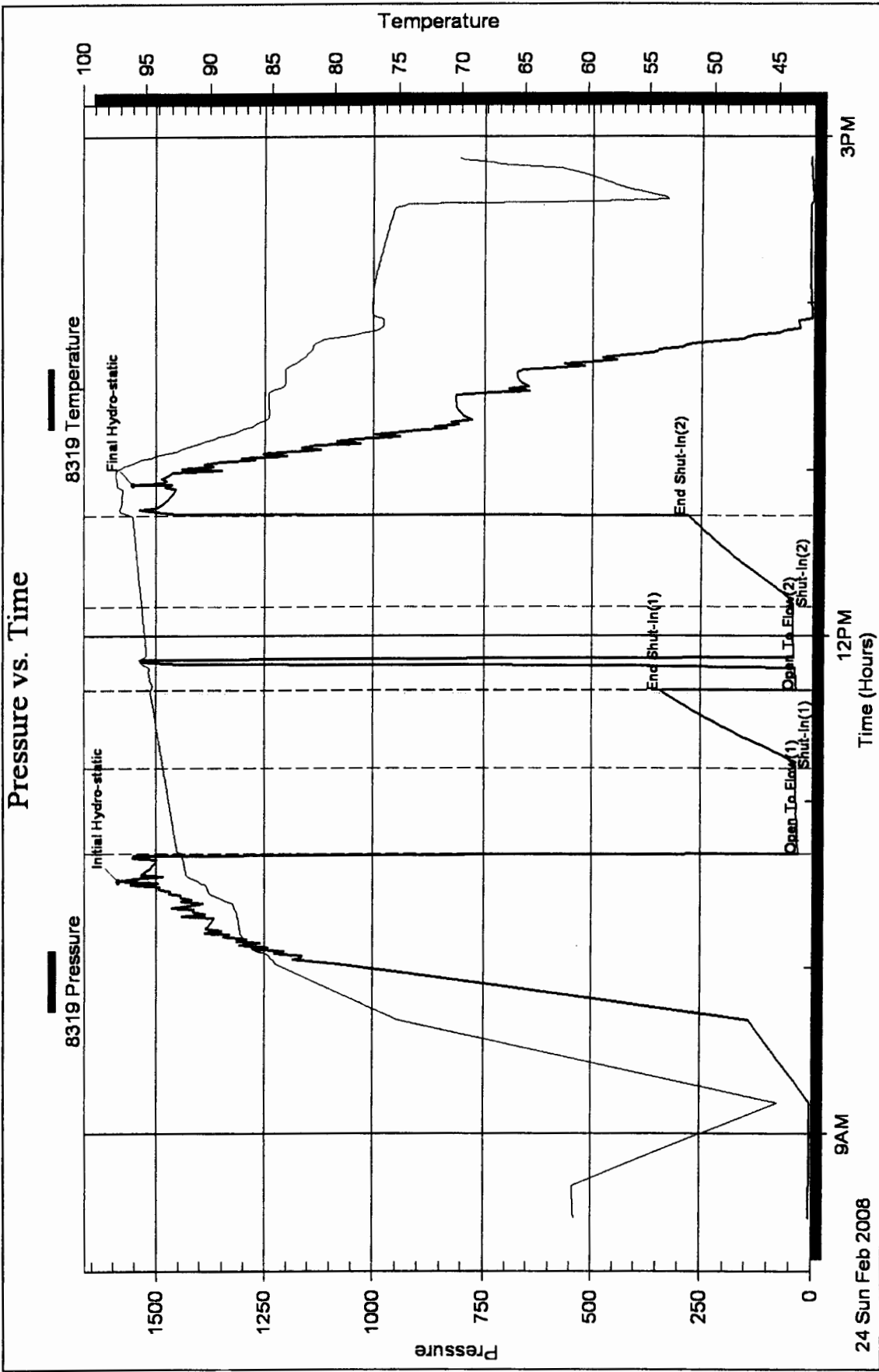
### Recovery Information

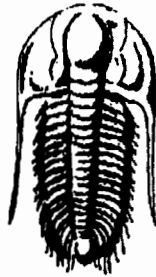
Recovery Table

Length ft	Description	Volume bbl
63.00	DM	0.310

Total Length: 63.00 ft      Total Volume: 0.310 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: **Pioneer Oil Co**

RR4 Box 142B  
Lawrenceville IL 62439

ATTN: Jim Musgrove

**8 18 13 Barton KS**

**Hlavaty #1**

Start Date: 2008.02.25 @ 04:41:22

End Date: 2008.02.25 @ 13:45:22

Job Ticket #: 28836                      DST #: 3

**RECEIVED**  
KANSAS CORPORATION COMMISSION

**JUN 24 2008**

CONSERVATION DIVISION  
WICHITA, KS

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

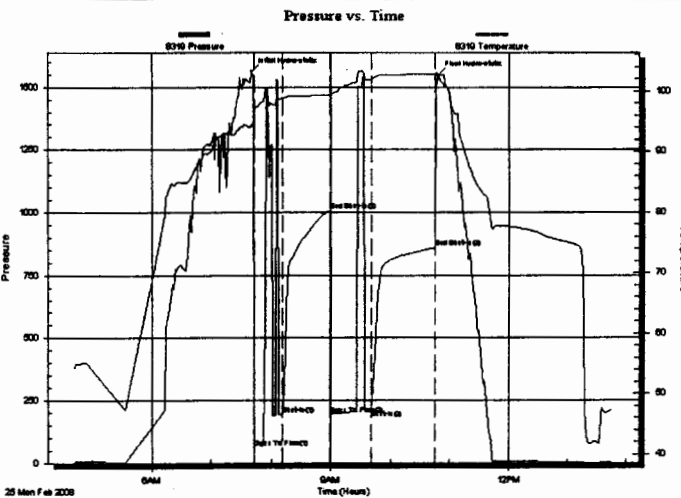
**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28836      **DST#: 3**  
Test Start: 2008.02.25 @ 04:41:22

## GENERAL INFORMATION:

Formation: **Lansing H-K**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 07:42:52  
Time Test Ended: 13:45:22  
Interval: **3200.00 ft (KB) To 3280.00 ft (KB) (TVD)**  
Total Depth: **3280.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: Fair  
Test Type: Conventional Bottom Hole  
Tester: Esak Hadley  
Unit No: 23  
Reference Elevations: **1826.00 ft (KB)**  
**1818.00 ft (CF)**  
KB to GR/CF: **8.00 ft**

**Serial #: 8319      Inside**  
Press@RunDepth: **212.02 psig @ 3201.00 ft (KB)**  
Start Date: **2008.02.25**      End Date: **2008.02.25**  
Start Time: **04:41:27**      End Time: **13:45:22**  
Capacity: **7000.00 psig**  
Last Calib.: **2008.02.25**  
Time On Btm: **2008.02.25 @ 07:40:22**  
Time Off Btm: **2008.02.25 @ 10:48:07**

**TEST COMMENT:** IF Weak to fair blow BOB in 10 min.  
ISI No blow  
FF Weak to fair blow BOB in 15 min.  
FSI Weak blow No more than 1 "



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1561.39	94.54	Initial Hydro-static
3	60.09	95.03	Open To Flow (1)
31	192.28	98.88	Shut-In (1)
78	1007.41	99.42	End Shut-In (1)
79	192.47	99.00	Open To Flow (2)
120	212.02	101.87	Shut-In (2)
186	860.16	102.89	End Shut-In (2)
188	1549.62	102.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
250.00	OCGM 20%O 30%G 50%M	2.40
125.00	OCGM 10%G 80%M	1.75
125.00	OCGM 2%O 5%G 93%M	1.75

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28836      **DST#: 3**  
Test Start: 2008.02.25 @ 04:41:22

### Tool Information

Drill Pipe:	Length: 3062.00 ft	Diameter: 3.80 inches	Volume: 42.95 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 43.55 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3200.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.00 ft			
Tool Length:	100.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3181.00	
Shut In Tool	5.00			3186.00	
Hydraulic tool	5.00			3191.00	
Packer	4.00			3195.00	20.00      Bottom Of Top Packer
Packer	5.00			3200.00	
Stubb	1.00			3201.00	
Recorder	0.00	8319	inside	3201.00	
Recorder	0.00	8289	inside	3201.00	
Perforations	9.00			3210.00	
Change Over Sub	1.00			3211.00	
Blank Spacing	63.00			3274.00	
Change Over Sub	1.00			3275.00	
Bullnose	5.00			3280.00	80.00      Bottom Packers & Anchor

**Total Tool Length: 100.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28836      DST#: 3  
Test Start: 2008.02.25 @ 04:41:22

### 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:	44.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	11.16 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	8900.00 ppm				
Filter Cake:	0.20 inches				

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	OCCM 20%O 30%G 50%M	2.395
125.00	OCCM 10%G 80%M	1.753
125.00	OCCM 2%O 5%G 93%M	1.753

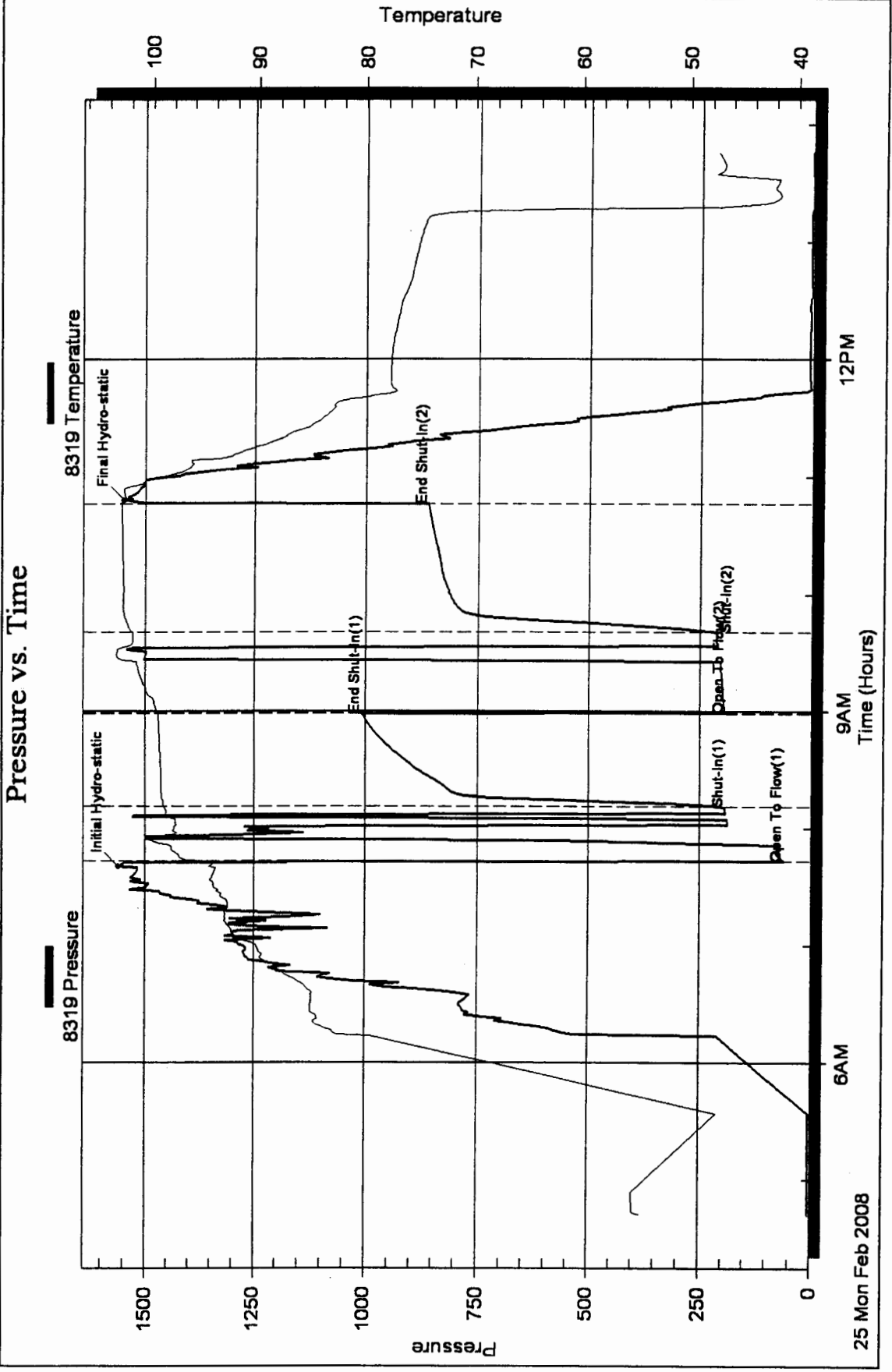
Total Length: 500.00 ft      Total Volume: 5.901 bbl

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: **Pioneer Oil Co**

RR4 Box 142B  
Lawrenceville IL 62439

ATTN: Jim Musgrove

**8 18 13 Barton KS**

**Hlavaty #1**

Start Date: 2008.02.26 @ 03:52:10

End Date: 2008.02.26 @ 10:41:25

Job Ticket #: 28837                      DST #: 4

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

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**JUN 24 2008**

CONSERVATION DIVISION  
WICHITA, KS



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Pioneer Oil Co  
 RR4 Box 142B  
 Lawrenceville IL 62439  
 ATTN: Jim Musgrove

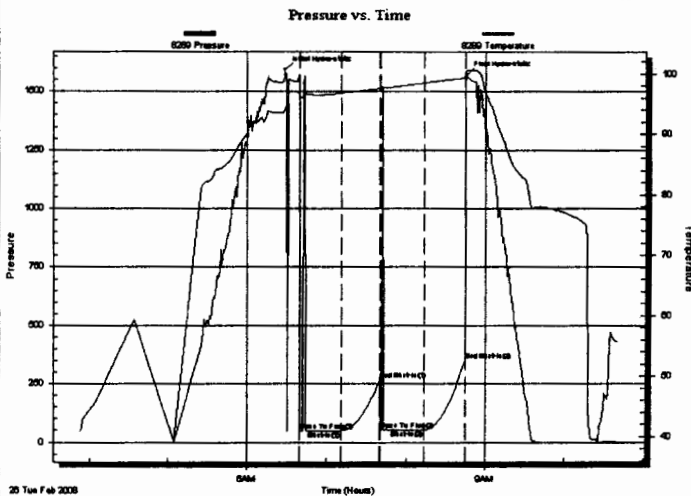
**Hlavaty #1**  
**8 18 13 Barton KS**  
 Job Ticket: 28837      **DST#: 4**  
 Test Start: 2008.02.26 @ 03:52:10

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened: 06:39:55  
 Time Test Ended: 10:41:25  
 Interval: **3296.00 ft (KB) To 3313.00 ft (KB) (TVD)**  
 Total Depth: **3313.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Esak Hadley  
 Unit No: 23  
 Reference Elevations: **1826.00 ft (KB)**  
**1818.00 ft (CF)**  
 KB to GR/CF: **8.00 ft**

**Serial #: 8289**      **Inside**  
 Press@RunDepth: **50.47 psig @ 3297.00 ft (KB)**  
 Start Date: **2008.02.26**      End Date: **2008.02.26**      Capacity: **7000.00 psig**  
 Start Time: **03:52:15**      End Time: **10:41:24**      Last Calib.: **2008.02.26**  
 Time On Btrr: **2008.02.26 @ 06:28:25**  
 Time Off Btrr: **2008.02.26 @ 08:45:25**

TEST COMMENT: IF Weak blow Surface blow (Died off at 15 min.)  
 ISI No blow  
 FF No blow  
 FSI No blow



## PRESSURE SUMMARY

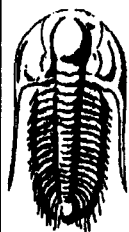
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1592.89	93.95	Initial Hydro-static
12	49.14	96.10	Open To Flow (1)
43	48.09	96.78	Shut-In (1)
72	269.11	97.52	End Shut-In (1)
72	50.11	97.47	Open To Flow (2)
105	50.47	98.46	Shut-In (2)
136	348.28	99.29	End Shut-In (2)
137	1572.68	100.59	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	SOCGM 5%G 95%M w/O specs	0.34

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28837      DST#: 4  
Test Start: 2008.02.26 @ 03:52:10

**Tool Information**

Drill Pipe:	Length: 3185.00 ft	Diameter: 3.80 inches	Volume: 44.68 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 56000.00 lb
			<u>Total Volume: 45.28 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3296.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	17.00 ft			
Tool Length:	37.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

**Tool Description**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3277.00	
Shut In Tool	5.00			3282.00	
Hydraulic tool	5.00			3287.00	
Packer	4.00			3291.00	20.00      Bottom Of Top Packer
Packer	5.00			3296.00	
Stubb	1.00			3297.00	
Recorder	0.00	8319	Inside	3297.00	
Recorder	0.00	8289	Inside	3297.00	
Perforations	11.00			3308.00	
Bullnose	5.00			3313.00	17.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>37.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28837      **DST#: 4**  
Test Start: 2008.02.26 @ 03:52:10

## 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: 9.57 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 8500.00 ppm			
Filter Cake: 0.20 inches			

## Recovery Information

Recovery Table

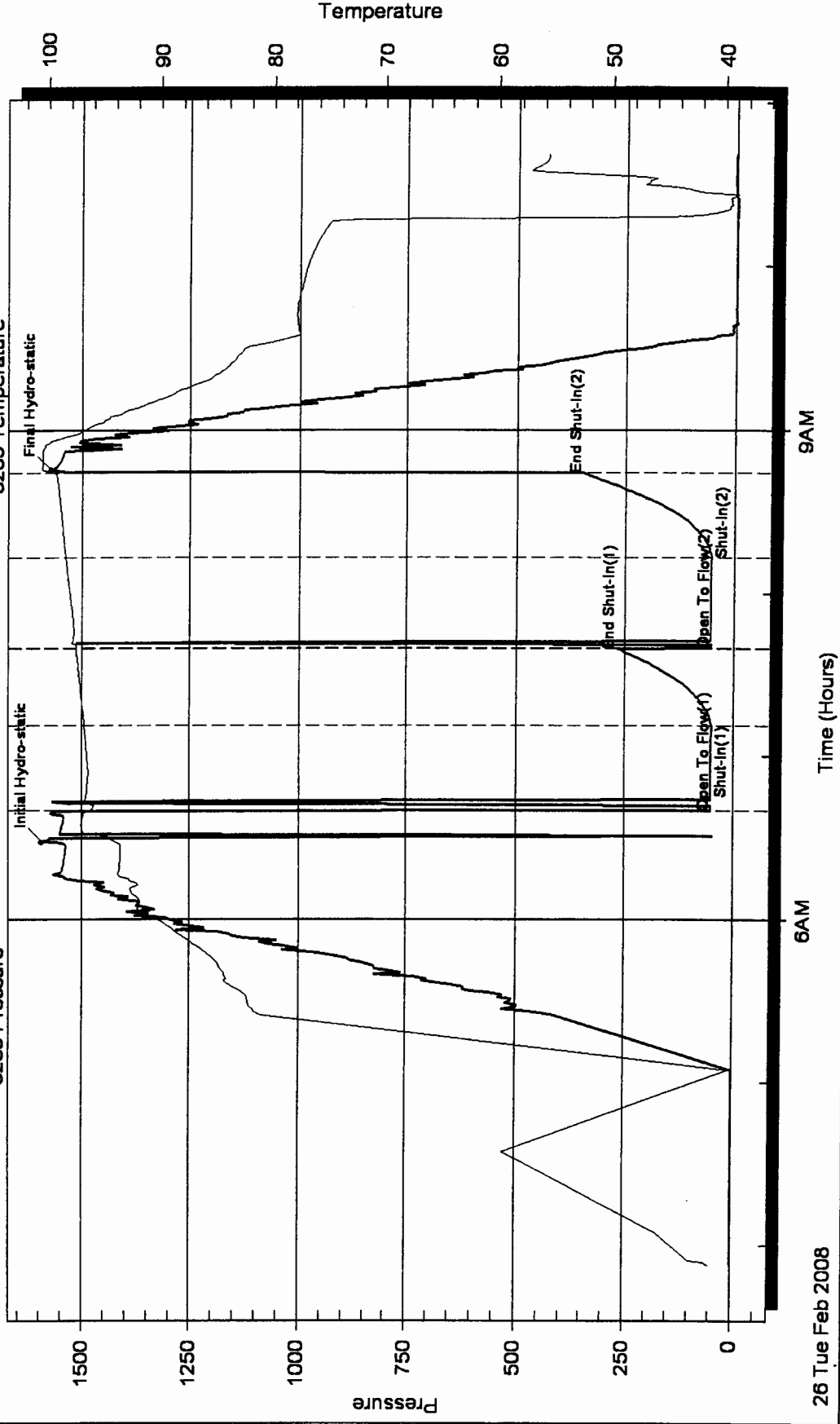
Length ft	Description	Volume bbl
70.00	SOCGM 5%G 95%M w/O specs	0.344

Total Length: 70.00 ft      Total Volume: 0.344 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

# Pressure vs. Time

8289 Pressure

8289 Temperature

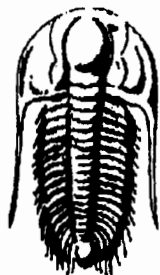


26 Tue Feb 2008

6AM

9AM

Time (Hours)



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Pioneer Oil Co**

RR4 Box 142B  
Lawrenceville IL 62439

ATTN: Jim Musgrove

**8 18 13 Barton KS**

**Hlavaty #1**

Start Date: 2008.02.26 @ 19:29:01

End Date: 2008.02.27 @ 03:44:10

Job Ticket #: 28838                      DST #: 5

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

RECEIVED  
KANSAS CORPORATION COMMISSION

**JUN 24 2008**

CONSERVATION DIVISION  
WICHITA, KS



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28838      **DST#: 5**  
Test Start: 2008.02.26 @ 19:29:01

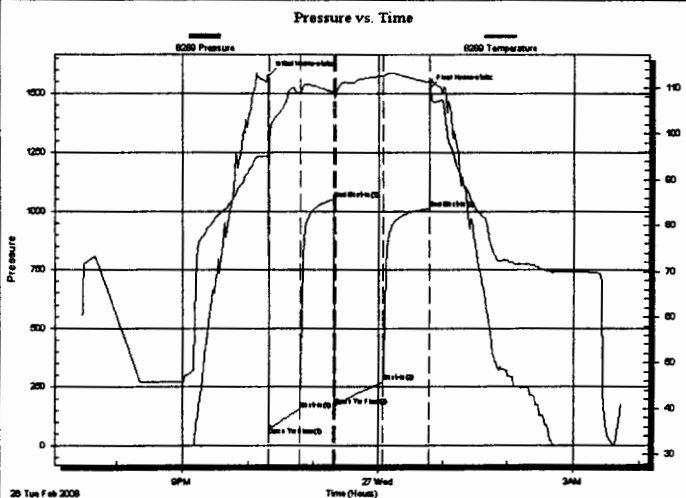
## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 22:18:26  
Time Test Ended: 03:44:10  
Interval: **3296.00 ft (KB) To 3321.00 ft (KB) (TVD)**  
Total Depth: 3321.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole  
Tester: Esak Hadley  
Unit No: 23  
Reference Elevations: 1826.00 ft (KB)  
1818.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8289      Inside**  
Press@RunDepth: 272.83 psig @ 3297.00 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2008.02.26      End Date: 2008.02.27      Last Calib.: 2008.02.27  
Start Time: 19:29:01      End Time: 03:44:10      Time On Btm: 2008.02.26 @ 22:18:11  
Time Off Btm: 2008.02.27 @ 00:47:25

**TEST COMMENT:** IF Fair blow BOB in 5 min.  
ISI Weak blow Surface blow (no more than 1/4 " )  
FF Fair blow BOB in 9 min.  
FSI Weak blow Surface blow (no more than 1/4 " )

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1579.83	95.64	Initial Hydro-static
1	42.37	95.25	Open To Flow (1)
30	154.98	108.95	Shut-in(1)
60	1050.34	108.99	End Shut-in(1)
62	170.87	108.00	Open To Flow (2)
107	272.83	112.59	Shut-in(2)
149	1011.05	111.13	End Shut-in(2)
150	1521.82	111.30	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
130.00	GOOD 5%G 10%O 85%M	0.71
645.00	Clean GO 10%G 90%O	9.05

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28838      **DST#: 5**  
Test Start: 2008.02.26 @ 19:29:01

**Tool Information**

Drill Pipe:	Length: 3183.00 ft	Diameter: 3.80 inches	Volume: 44.65 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 65000.00 lb
			<b>Total Volume: 45.25 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3296.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	46.00 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			3277.00	
Shut In Tool	5.00			3282.00	
Hydraulic tool	5.00			3287.00	
Packer	4.00			3291.00	20.00      Bottom Of Top Packer
Packer	5.00			3296.00	
Stubb	1.00			3297.00	
Recorder	0.00	8319	Inside	3297.00	
Recorder	0.00	8289	Inside	3297.00	
Perforations	20.00			3317.00	
Bullnose	5.00			3322.00	26.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>46.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Pioneer Oil Co  
RR4 Box 142B  
Lawrenceville IL 62439  
ATTN: Jim Musgrove

**Hlavaty #1**  
**8 18 13 Barton KS**  
Job Ticket: 28838      **DST#: 5**  
Test Start: 2008.02.26 @ 19:29:01

**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: 9.19 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 8300.00 ppm			
Filter Cake: 0.20 inches			

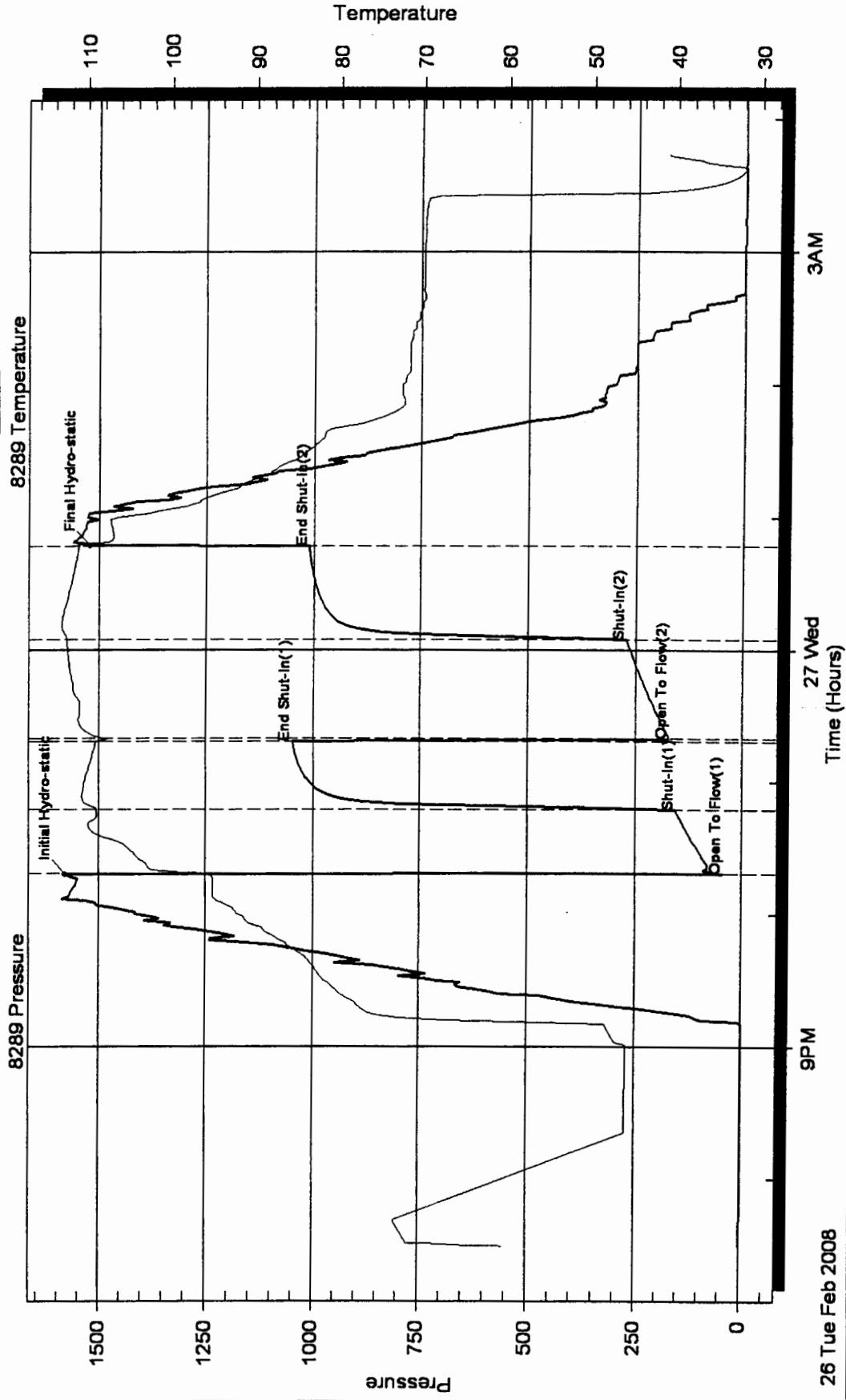
**Recovery Information**

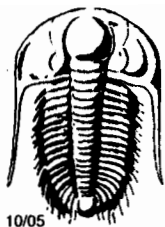
Recovery Table

Length ft	Description	Volume bbl
130.00	GOCM 5%G 10%O 85%M	0.712
645.00	Clean GO 10%G 90%O	9.048

Total Length: 775.00 ft      Total Volume: 9.760 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

# Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

28834

RECEIVED  
FEB 29 2008

## Test Ticket

Well Name & No. Haverty #1 Test No. 1 Date 02.23.08  
 Company Pioneer Oil Co. Zone Tested Lansing A-F  
 Address RR4 Box 142B Lawrenceville IL 62439 Elevation 1826 KB 1818 GL  
 Co. Rep / Geo. Jim Musgrove Rig Terra Drlg. #1  
 Location: Sec. 8 Twp. 18s Rge. 13w Co. Barton State KS  
 Comment: Mis-run. Hit bridge about 8 stands from bottom. Couldn't break through the bridge. Release date / time: \_\_\_\_\_

Interval Tested 3077'-3165' Initial Str Wt./Lbs. 44000 Unseated Str Wt./Lbs. 44000  
 Anchor Length 88' Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 95000  
 Top Packer Depth 3072' Tool Weight 2100  
 Bottom Packer Depth 3077' Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3165' Wt. Pipe Run 0 Drill Collar Run 122  
 Mud Wt. 9.3 LCM 0 Vis. 49 WL 10.0 Drill Pipe Size 4 1/2 Ft. Run \_\_\_\_\_

Blow Description IF: ~~Washed~~ ~~Aluminum~~ ~~1"~~  
ISI: ~~Washed~~  
FF: ~~Washed~~  
FSI: ~~Washed~~

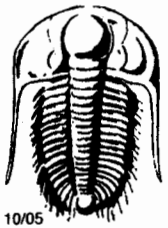
Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>63</u>	<u>—</u>	<u>63</u>	<u>—</u>
Rec. _____ Feet of _____	%gas _____ %oil _____ %water _____ %mud _____		
Rec. _____ Feet of _____	%gas _____ %oil _____ %water _____ %mud _____		
Rec. _____ Feet of _____	%gas _____ %oil _____ %water _____ %mud _____		
Rec. _____ Feet of _____	%gas _____ %oil _____ %water _____ %mud _____		
Rec. _____ Feet of _____	%gas _____ %oil _____ %water _____ %mud _____		

BHT N/C @ \_\_\_\_\_ °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW N/C @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 8600 ppm System

	AK-1	Alpine	PSI	Recorder No.	Test
(A) Initial Hydrostatic Mud	<del>1878</del>	<del>1878</del>	<del>—</del>	<u>8319</u>	✓
(B) First Initial Flow Pressure	<del>1878</del>	<del>1878</del>	<del>—</del>	<u>3078'</u>	Jars
(C) First Final Flow Pressure	<del>1878</del>	<del>1878</del>	<del>—</del>	<u>8289</u>	RECEIVED
(D) Initial Shut-In Pressure	<del>1878</del>	<del>1878</del>	<del>—</del>	<u>3078'</u>	KANSAS CORPORATION COMMISSION
(E) Second Initial Flow Pressure	<del>1878</del>	<del>1878</del>	<del>—</del>	<u>—</u>	Circ Sub
(F) Second Final Flow Pressure	<del>1878</del>	<del>1878</del>	<del>—</del>	<u>—</u>	Sampler <u>JUN 24 2008</u>
(G) Final Shut-In Pressure	<del>1878</del>	<del>1878</del>	<del>—</del>	<u>—</u>	Straddle CONSERVATION DIVISION
(Q) Final Hydrostatic Mud	<del>1878</del>	<del>1878</del>	<del>—</del>	<u>80</u>	Ext. Packer WICHITA, KS

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Approved By \_\_\_\_\_ T-Open \_\_\_\_\_  
 Our Representative Esalt Hadley T-Pulled 1843 T-Out \_\_\_\_\_  
 Mileage 125 ✓  
 Sub Total: \_\_\_\_\_  
 Std. By: \_\_\_\_\_  
 Acc. Chg: \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Total: \_\_\_\_\_



# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

28835

RECEIVED  
FEB 25 2008

## Test Ticket

LY: \_\_\_\_\_

Well Name & No. Hovaty #1 Test No. 2 Date 02.24.08  
 Company Pioneer Oil Co. Zone Tested Lansing A-F  
 Address RR4 Box 142B Lawrenceville IL 62439 Elevation 1826 KB 1818 GL  
 Co. Rep / Geo. Jim Musagore Rig Terra Drlg. #1  
 Location: Sec. 8 Twp. 18S Rge. 13W Co. Barton State KS  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

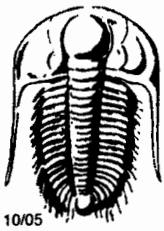
Interval Tested 3077'-3165' Initial Str Wt./Lbs. 14000 Unseated Str Wt./Lbs. 16000  
 Anchor Length 88' Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 75000  
 Top Packer Depth 3072' Tool Weight 2100  
 Bottom Packer Depth 3077' Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3165' Wt. Pipe Run Φ Drill Collar Run 122  
 Mud Wt. 9.3 LCM Φ Vis. 49 WL 10.0 Drill Pipe Size 4 1/2 Ft. Run 2967  
 Blow Description IF: Weak blow. No more than 1"  
ISI: No blow.  
FF: No blow.  
FSL: No blow.

Recovery - Total Feet 63 GIP — Ft. in DC 63 Ft. in DP —  
 Rec. 63 Feet of drlg. mud %gas %oil %water %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas %oil %water %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas %oil %water %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas %oil %water %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas %oil %water %mud  
 BHT 96 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW N/C @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 8600 ppm System

	AK-1	Alpine				
(A) Initial Hydrostatic Mud		<u>1587</u>	PSI	Recorder No.	<u>8319</u>	Test <input checked="" type="checkbox"/>
(B) First Initial Flow Pressure		<u>31</u>	PSI	(depth)	<u>3078'</u>	Jars <u>RECEIVED</u>
(C) First Final Flow Pressure		<u>37</u>	PSI	Recorder No.	<u>8289</u>	Safety <u>KANSAS CORPORATION COMMISSION</u>
(D) Initial Shut-In Pressure		<u>340</u>	PSI	(depth)	<u>3078'</u>	Circ Sub <u>JUN 24 2008</u>
(E) Second Initial Flow Pressure		<u>36</u>	PSI	Recorder No.	<u>—</u>	Sampler <u>—</u>
(F) Second Final Flow Pressure		<u>45</u>	PSI	(depth)	<u>—</u>	Straddle <u>CONSERVATION DIVISION</u>
(G) Final Shut-In Pressure		<u>280</u>	PSI	Initial Opening	<u>30</u>	Ext. Packer <u>WICHITA, KS</u>
(Q) Final Hydrostatic Mud		<u>1552</u>	PSI	Initial Shut-In	<u>30</u>	Shale Packer <u>—</u>
				Final Flow	<u>30</u>	Ruined Packer <u>—</u>
				Final Shut-In	<u>30</u>	Mileage <u>125</u> ✓
				T-On Location	<u>0800</u>	Sub Total: _____
				T-Started	<u>0828</u>	Std. By _____
				T-Open	<u>1040</u>	Acc. Chg: _____
				T-Pulled	<u>1243</u>	Other: _____
				T-Out	<u>1452</u>	Total: _____

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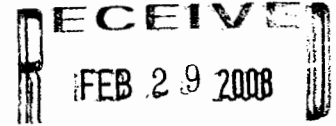
Approved By \_\_\_\_\_  
 Our Representative Esal Hovaty



# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

28836



## Test Ticket

BY: \_\_\_\_\_

Well Name & No. Hlavaty #1 Test No. 3 Date 02.25.08  
 Company Pioneer Oil Co. Zone Tested Lansing H-K  
 Address RR4 Box 142B Lawrenceville K 62439 Elevation 1826 KB 1818 GL  
 Co. Rep / Geo. Jim Musgrove Rig Terra Drlg. #1  
 Location: Sec. 8 Twp. 18s Rge. 13w Co. Barton State KS  
 Comment: Tool slid roughly 8' in Final Open Release date / time: \_\_\_\_\_

Interval Tested 3200'-3280' Initial Str Wt./Lbs. 44000 Unseated Str Wt/Lbs. 52000  
 Anchor Length 80' Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 65000  
 Top Packer Depth 3195' Tool Weight 2100  
 Bottom Packer Depth 3200' Hole Size 7 7/8"  Rubber Size 6 3/4"   
 Total Depth 3280' Wt. Pipe Run Ø Drill Collar Run 122  
 Mud Wt. 9.2 LCM Ø Vis. 44 WL 11.2 Drill Pipe Size 4 1/2 Ft. Run 3062

Blow Description IF: Weak to fair blow. B.O.B. in 10 min.  
ISI: No blow.  
FF: Weak to fair blow. B.O.B. in 15 min.  
FSI: Weak blow. No more than 1."

Recovery - Total Feet 500 GIP 2300' Ft. in DC 122 Ft. in DP 378  
 Rec. 125 Feet of OCGM 5 %gas 2 %oil %water 93 %mud  
 Rec. 125 Feet of OCGM 10 %gas 10 %oil %water 80 %mud  
 Rec. 250 Feet of OCGM 30 %gas 20 %oil %water 50 %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas %oil %water %mud  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas %oil %water %mud  
 BHT 103 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW N/C @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 8900 ppm System

	AK-1	Alpine	Recorder No.		Test
(A) Initial Hydrostatic Mud	<u>1561</u>	PSI	<u>8319</u>		<input checked="" type="checkbox"/>
(B) First Initial Flow Pressure	<u>60</u>	PSI	(depth)	<u>3201'</u>	Jars <u>RECEIVED</u>
(C) First Final Flow Pressure	<u>192</u>	PSI	Recorder No.	<u>8289</u>	<u>KANSAS CORPORATION COMMISSION</u>
(D) Initial Shut-In Pressure	<u>1007</u>	PSI	(depth)	<u>3201'</u>	Circ Sub <u>JUN 24 2008</u>
(E) Second Initial Flow Pressure	<u>192</u>	PSI	Recorder No.	_____	Sampler _____
(F) Second Final Flow Pressure	<u>212</u>	PSI	(depth)	_____	Straddle <u>CONSERVATION DIVISION</u>
(G) Final Shut-In Pressure	<u>860</u>	PSI	Initial Opening	<u>30</u>	Ext. Packer <u>WICHITA, KS</u>
(Q) Final Hydrostatic Mud	<u>1550</u>	PSI	Initial Shut-In	<u>45</u>	Shale Packer _____
			Final Flow	<u>45</u>	Ruined Packer <input checked="" type="checkbox"/>
			Final Shut-In	<u>60</u>	Mileage <u>125</u> <input checked="" type="checkbox"/>
			T-On Location	<u>0430</u>	Sub Total: _____
			T-Started	<u>0441</u>	Std. By _____
			T-Open	<u>0742</u>	Acc. Chg: _____
			T-Pulled	<u>1045</u>	Other: _____
			T-Out	<u>1345</u>	Total: _____

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Approved By [Signature]

Our Representative [Signature]