

**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **CMX, Inc.**

1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206

ATTN: Ken LeBlanc

**35-31s-13w**

**Catlin #1-35**

Start Date: 2005.10.25 @ 14:38:43

End Date: 2005.10.25 @ 21:33:43

Job Ticket #: 21525                      DST #: 1

15-007-22935

RECEIVED

FEB 10 2006

KCC WICHITA

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

**CONFIDENTIAL**

FEB 09 2006

**KCC**

CMX, Inc.

Catlin #1-35

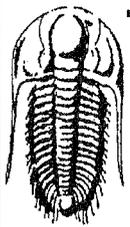
35-31s-13w

DST # 1

Topeka

2005.10.25

35-31s-13w



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

CMX, Inc.  
1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

**Catlin #1-35**  
**35-31s-13w**  
Job Ticket: 21525      **DST#: 1**  
Test Start: 2005.10.25 @ 14:38:43

## GENERAL INFORMATION:

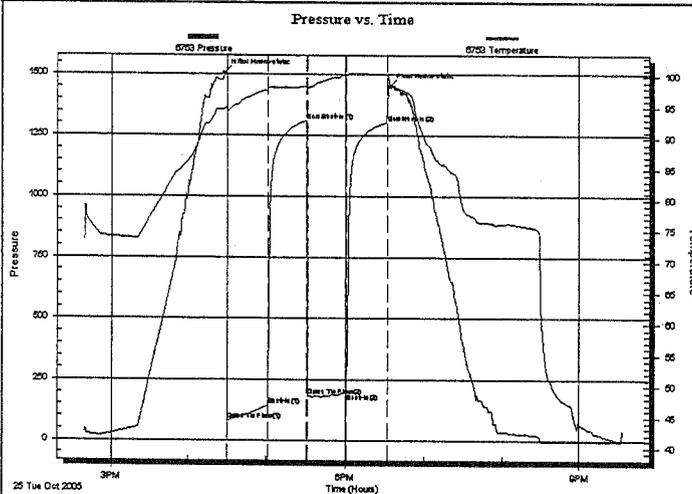
Formation: **Topeka**  
Deviated: **No Whipstock:**      **ft (KB)**  
Time Tool Opened: 16:30:43  
Time Test Ended: 21:33:43  
Interval: **3165.00 ft (KB) To 3187.00 ft (KB) (TVD)**  
Total Depth: **3380.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
Test Type: **Conventional Straddle**  
Tester: **Davy Cline**  
Unit No: **24**  
Reference Elevations: **1585.00 ft (KB)**  
**1574.00 ft (CF)**  
KB to GR/CF: **11.00 ft**

## Serial #: 6753

Inside

Press@RunDepth: **194.26 psig @ 3166.00 ft (KB)**      Capacity: **7000.00 psig**  
Start Date: **2005.10.25**      End Date: **2005.10.25**      Last Calib.: **2005.10.25**  
Start Time: **14:38:44**      End Time: **21:33:43**      Time On Btrr: **2005.10.25 @ 16:28:13**  
Time Off Btrr: **2005.10.25 @ 18:33:43**

TEST COMMENT: IF: Weak blow. Slow increasing blow to BOB in 30 min.  
IS: Bled off. No blow back.  
FF: Weak blow. Slow increasing blow to 8 inches.  
FS: Bled off. No blow back.



## PRESSURE SUMMARY

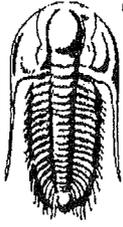
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1506.24	94.68	Initial Hydro-static
3	81.18	94.38	Open To Flow (1)
34	146.28	97.94	Shut-In(1)
63	1310.14	98.34	End Shut-In(1)
63	184.63	98.06	Open To Flow (2)
93	194.26	100.18	Shut-In(2)
124	1303.04	100.40	End Shut-In(2)
126	1450.36	98.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	SI GCMW 55%w 45%m	0.30
261.00	MCW 85%w 15%m	1.61

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

CMX, Inc.  
1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

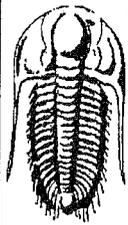
**Catlin #1-35**  
**35-31s-13w**  
Job Ticket: 21525      **DST#: 1**  
Test Start: 2005.10.25 @ 14:38:43

**Tool Information**

Drill Pipe:	Length: 2893.00 ft	Diameter: 3.25 inches	Volume: 29.68 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: 261.00 ft	Diameter: 2.25 inches	Volume: 1.28 bbl	Weight to Pull Loose: 45000.00 lb
		Total Volume: 30.96 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3165.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	3187.00 ft			
Interval between Packers:	22.00 ft			
Tool Length:	239.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3143.00	
Shut In Tool	5.00			3148.00	
Hydraulic tool	5.00			3153.00	
Safety Joint	2.00			3155.00	
Packer	5.00			3160.00	23.00      Bottom Of Top Packer
Packer	5.00			3165.00	
Stubb	1.00			3166.00	
Recorder	0.00	6753	Inside	3166.00	
Perforations	17.00			3183.00	
Recorder	0.00	13400	Outside	3183.00	
Blank Off Sub	4.00			3187.00	22.00      Tool Interval
Packer	1.00			3188.00	
Stubb	1.00			3189.00	
Change Over Sub	1.00			3190.00	
Blank Spacing	187.00			3377.00	
Change Over Sub	1.00			3378.00	
Recorder	0.00	13249	Outside	3378.00	
Bullnose	3.00			3381.00	194.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>239.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

CMX, Inc.  
1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

**Catlin #1-35**  
**35-31s-13w**  
Job Ticket: 21525      **DST#: 1**  
Test Start: 2005.10.25 @ 14:38:43

## 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:	107250 ppm
Viscosity: 45.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.16 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5200.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	SI GCMW 55%w 45%m	0.305
261.00	MCW 85%w 15%m	1.615

Total Length: 323.00 ft      Total Volume: 1.920 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

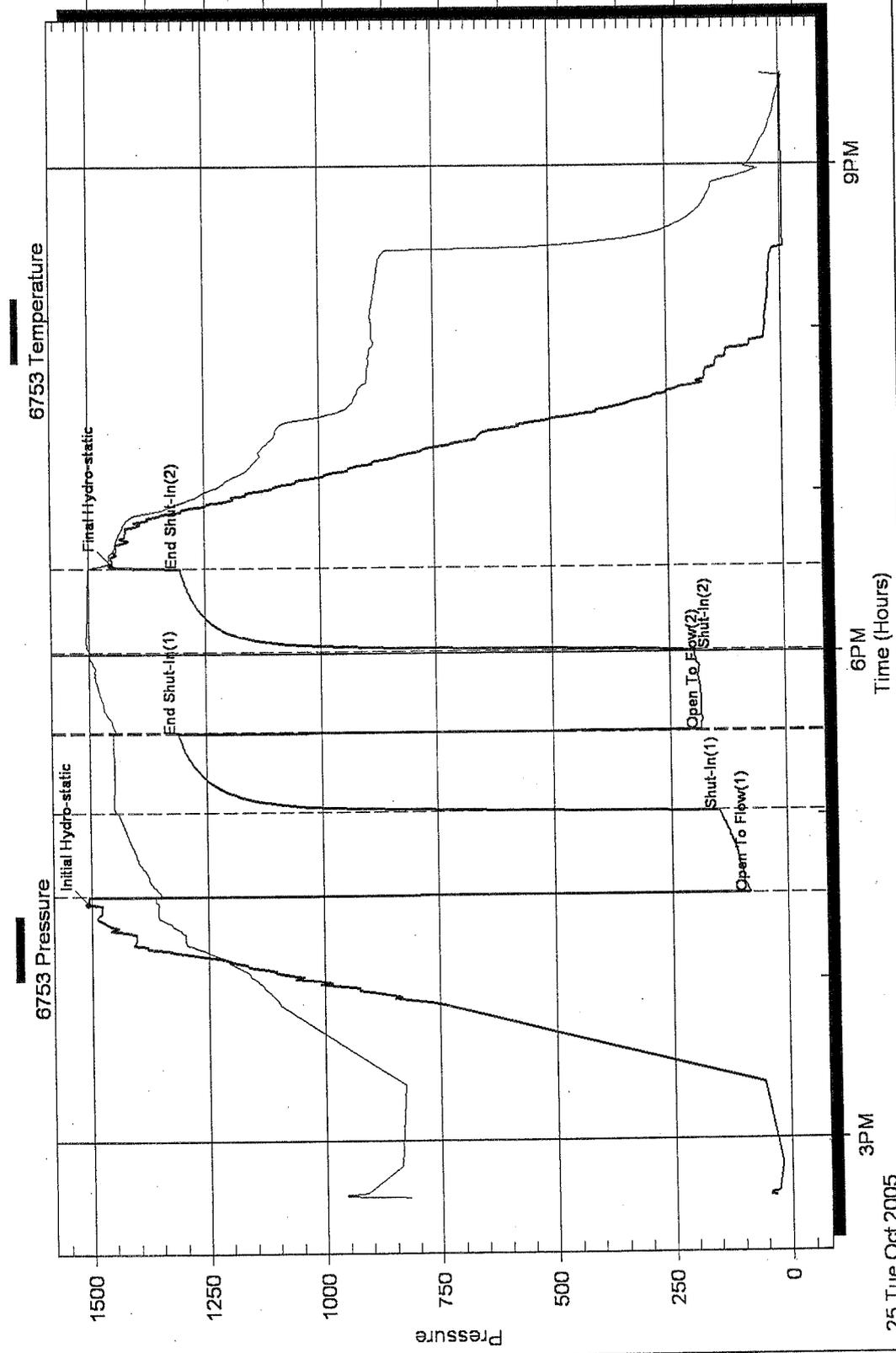
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Water Recovery- .17 ohms @ 40 deg.

### Pressure vs. Time

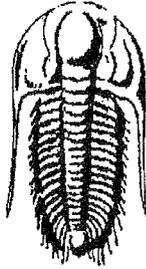


25 Tue Oct 2005

6PM  
Time (Hours)

9PM





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **CMX, Inc.**

1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206

ATTN: Ken LeBlanc

**35-31s-13w**

**Catlin #1-35**

Start Date: 2005.10.27 @ 15:35:35

End Date: 2005.10.27 @ 23:23:20

Job Ticket #: 21425                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

CMX, Inc.

Catlin #1-35

35-31s-13w

DST # 2

Kansas City - Swope

2005.10.27



**TRILOBITE  
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# DRILL STEM TEST REPORT

CMX, Inc.  
1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

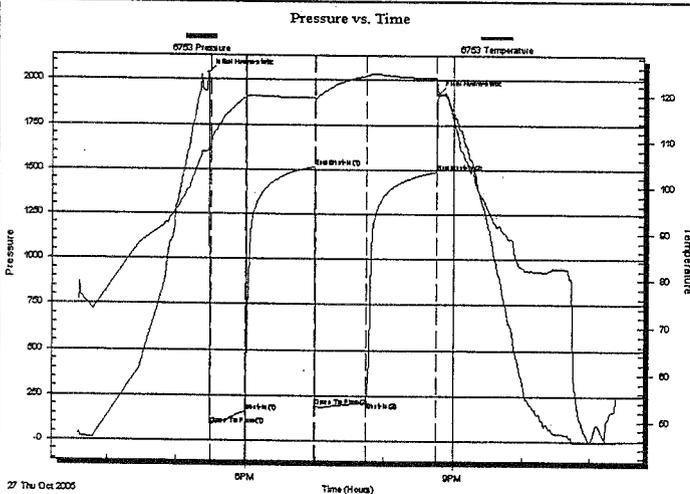
**Catlin #1-35**  
**35-31s-13w**  
Job Ticket: 21425      DST#: 2  
Test Start: 2005.10.27 @ 15:35:35

## GENERAL INFORMATION:

Formation: **Kansas City - Swope**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 17:29:20  
 Time Test Ended: 23:23:20  
 Interval: **4080.00 ft (KB) To 4100.00 ft (KB) (TVD)**  
 Total Depth: 3380.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Davy Cline  
 Unit No: 24  
 Reference Elevations: 1585.00 ft (KB)  
 1574.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 6753**      **Inside**  
 Press@RunDepth: 217.61 psig @ 4081.00 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2005.10.27      End Date: 2005.10.27      Last Calib.: 2005.10.27  
 Start Time: 15:35:36      End Time: 23:23:20      Time On Btm: 2005.10.27 @ 17:27:05  
 Time Off Btm: 2005.10.27 @ 20:46:50

**TEST COMMENT:** IF: Fair blow. Slow increasing blow to BOB in 7 min.  
 IS: Bled off. Had a weak surface blow.  
 FF: Fair blow. Slow increasing blow to BOB in 14 min.  
 FSI: Bled off. Had a weak blow that built to 1 in



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2034.50	108.15	Initial Hydro-static
3	87.47	109.56	Open To Flow (1)
32	158.14	119.42	Shut-In(1)
92	1515.90	119.66	End Shut-In(1)
93	192.69	119.14	Open To Flow (2)
138	217.61	124.26	Shut-In(2)
198	1486.79	123.77	End Shut-In(2)
200	1921.65	120.72	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
40.00	SI OCWM 13%g 2%o 50%w 35%m	0.20
233.00	SI MCW 95%w 5m	1.36
0.00	200' Gas in pipe	0.00

## Gas Rates

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



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**TOOL DIAGRAM**

CMX, Inc.  
1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

**Catlin #1-35**  
**35-31s-13w**  
Job Ticket: 21425      **DST#: 2**  
Test Start: 2005.10.27 @ 15:35:35

**Tool Information**

Drill Pipe:	Length: 3832.00 ft	Diameter: 3.25 inches	Volume: 39.32 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: 233.00 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 40.47 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	4080.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	43.00 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			4058.00	
Shut In Tool	5.00			4063.00	
Hydraulic tool	5.00			4068.00	
Safety Joint	2.00			4070.00	
Packer	5.00			4075.00	23.00      Bottom Of Top Packer
Packer	5.00			4080.00	
Stubb	1.00			4081.00	
Recorder	0.00	6753	Inside	4081.00	
Perforations	16.00			4097.00	
Recorder	0.00	13400	Outside	4097.00	
Bullnose	3.00			4100.00	20.00      Bottom Packers & Anchor

**Total Tool Length: 43.00**



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FLUID SUMMARY

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1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

Catlin #1-35  
35-31s-13w  
Job Ticket: 21425      DST#: 2  
Test Start: 2005.10.27 @ 15:35:35

## 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: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2600.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	SI OCWM 13%g 2%o 50%w 35%m	0.197
233.00	SI MCW 95%w 5m	1.360
0.00	200' Gas in pipe	0.000

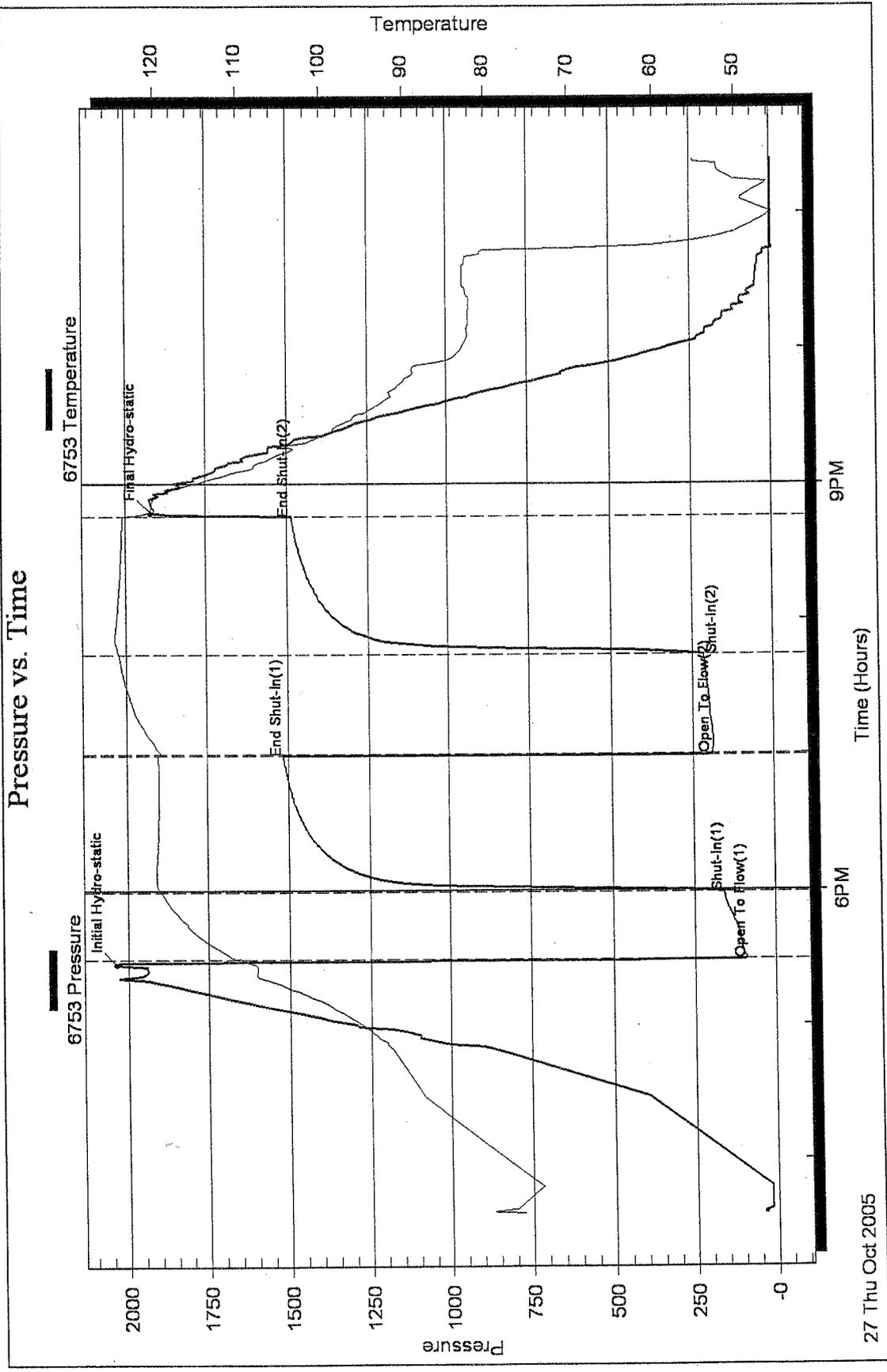
Total Length: 273.00 ft      Total Volume: 1.557 bbl

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

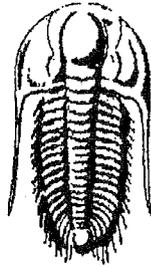
Laboratory Name:      Laboratory Location:

Recovery Comments:

### Pressure vs. Time







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

## DRILL STEM TEST REPORT

Prepared For: **CMX, Inc.**

1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206

ATTN: Ken LeBlanc

**35-31s-13w**

**Catlin #1-35**

Start Date: 2005.10.28 @ 15:54:57

End Date: 2005.10.29 @ 03:41:57

Job Ticket #: 21428                      DST #: 3

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

CMX, Inc.

Catlin #1-35

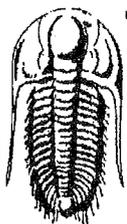
35-31s-13w

DST # 3

Marmaton

2005.10.28





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

CMX, Inc.  
1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

**Catlin #1-35**  
**35-31s-13w**  
Job Ticket: 21428      **DST#: 3**  
Test Start: 2005.10.28 @ 15:54:57

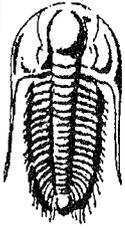
### Tool Information

Drill Pipe:	Length: 3956.00 ft	Diameter: 3.25 inches	Volume: 40.59 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: 233.00 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 41.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4185.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 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
Change Over Sub	1.00			4163.00	
Shut In Tool	5.00			4168.00	
Hydraulic tool	5.00			4173.00	
Safety Joint	2.00			4175.00	
Packer	5.00			4180.00	23.00      Bottom Of Top Packer
Packer	5.00			4185.00	
Stubb	1.00			4186.00	
Recorder	0.00	6753	Inside	4186.00	
Perforations	1.00			4187.00	
Change Over Sub	1.00			4188.00	
Blank Spacing	30.00			4218.00	
Change Over Sub	1.00			4219.00	
Recorder	0.00	13400	Outside	4219.00	
Bullnose	3.00			4222.00	37.00      Bottom Packers & Anchor

**Total Tool Length: 60.00**



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

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

CMX, Inc.  
1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

**Catlin #1-35**  
**35-31s-13w**  
Job Ticket: 21428      DST#: 3  
Test Start: 2005.10.28 @ 15:54:57

**Mud and Cushion Information**

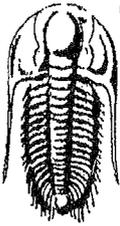
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 41.00 sec/qt	Cushion Volume: bbl		
Water Loss: 12.77 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
430.00	Gassy Oil 40%g 60%o	3.167
300.00	G & SI MCO 25%g 65%o 10%m	3.078
0.00	Gas in all fluid free pipe.	0.000

Total Length: 730.00 ft      Total Volume: 6.245 bbl  
 Num Fluid Samples: 1      Num Gas Bombs: 0      Serial #: DC  
 Laboratory Name: Caraway      Laboratory Location: Liberal, KS  
 Recovery Comments:



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

CMX, Inc.

**Catlin #1-35**

1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

**35-31s-13w**

Job Ticket: 21428

DST#: 3

Test Start: 2005.10.28 @ 15:54:57

### 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	5	0.25	12.00	41.88
2	10	0.25	20.00	54.57
2	15	0.25	22.00	57.74
2	20	0.25	23.50	60.12
2	25	0.25	23.00	59.33
2	30	0.25	21.50	56.95
2	35	0.25	18.50	52.19
2	40	0.25	17.00	49.81
2	45	0.25	15.00	46.64
2	50	0.25	13.00	43.47
2	55	0.25	12.00	41.88
2	60	0.25	10.00	38.71

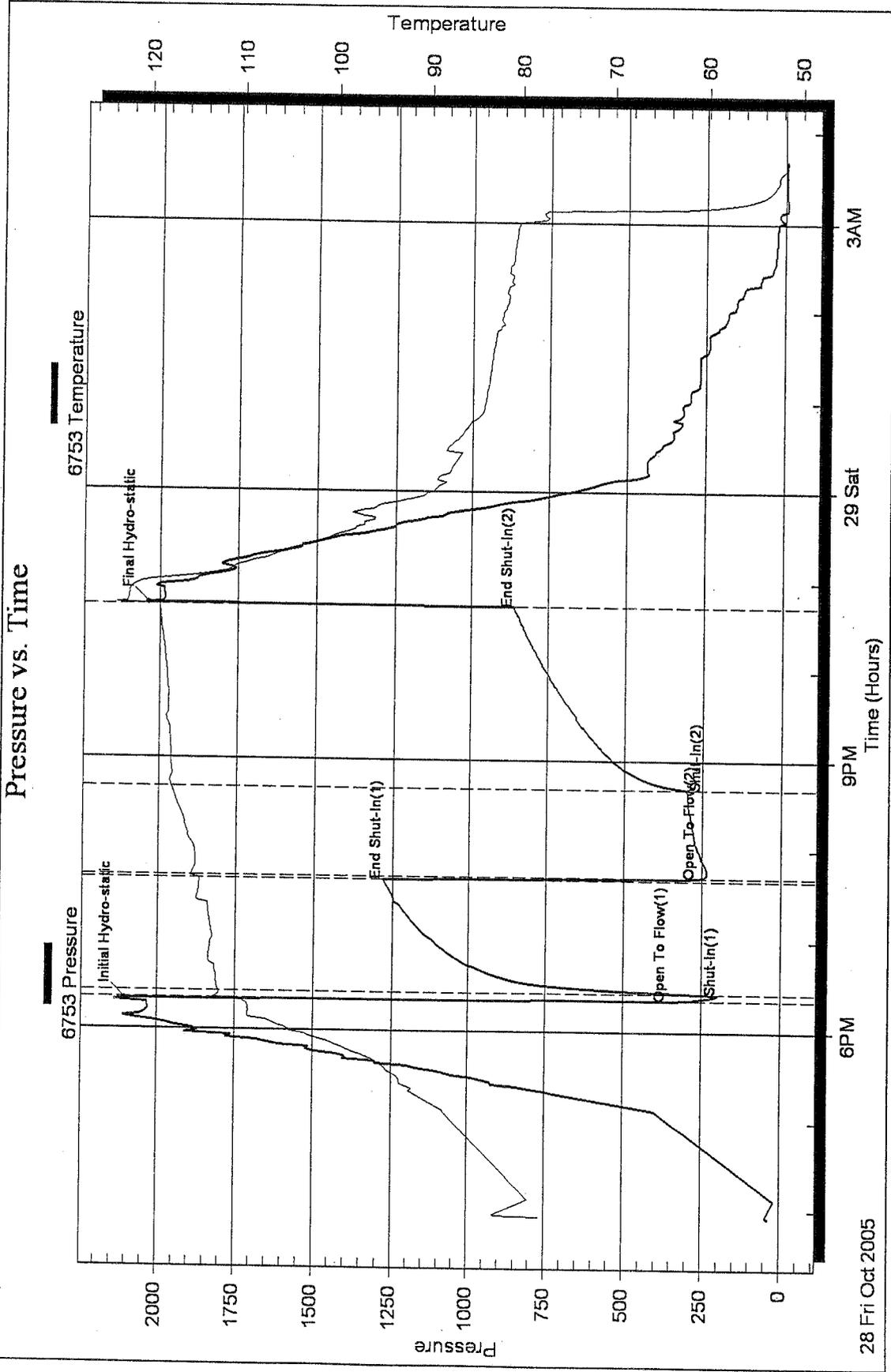
Serial #: 6753

Inside CMX, Inc.

35-31s-13w

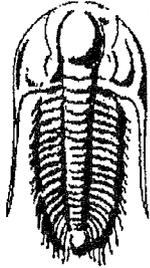
DST Test Number: 3

### Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 21428



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

## DRILL STEM TEST REPORT

Prepared For: **CMX, Inc.**

1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206

ATTN: Ken LeBlanc

**35-31s-13w**

**Catlin #1-35**

Start Date: 2005.10.29 @ 13:55:40

End Date: 2005.10.29 @ 23:33:10

Job Ticket #: 21429                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

CMX, Inc.

Catlin #1-35

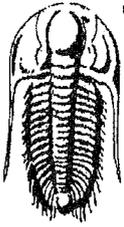
35-31s-13w

DST # 4

Miss.

2005.10.29





**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

CMX, Inc.  
1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

**Catlin #1-35**  
**35-31s-13w**  
Job Ticket: 21429      **DST#: 4**  
Test Start: 2005.10.29 @ 13:55:40

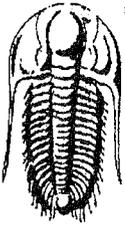
**Tool Information**

Drill Pipe:	Length: 3986.00 ft	Diameter: 3.25 inches	Volume: 40.90 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: 233.00 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 64000.00 lb
		<u>Total Volume:</u>	<u>42.05 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4235.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	48.00 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			4213.00	
Shut In Tool	5.00			4218.00	
Hydraulic tool	5.00			4223.00	
Safety Joint	2.00			4225.00	
Packer	5.00			4230.00	23.00      Bottom Of Top Packer
Packer	5.00			4235.00	
Stubb	1.00			4236.00	
Recorder	0.00	6753	Inside	4236.00	
Perforations	21.00			4257.00	
Recorder	0.00	13400	Outside	4257.00	
Bullnose	3.00			4260.00	25.00      Bottom Packers & Anchor

**Total Tool Length: 48.00**



**TRILOBITE**  
TESTING, INC.

# DRILL STEM TEST REPORT

FLUID SUMMARY

CMX, Inc.  
1551 N. Waterfront Parkway  
Ste. 150  
Wichita, KS 67206  
ATTN: Ken LeBlanc

**Catlin #1-35**  
**35-31s-13w**  
Job Ticket: 21429      DST#: 4  
Test Start: 2005.10.29 @ 13:55:40

## 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: 37.00 sec/qt	Cushion Volume: bbl		
Water Loss: 15.16 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7600.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	G&WCM 5%g 25%w 70%m	0.074
60.00	G&WCM 20%g 30%w 50%m	0.295
0.00	250' Gas in pipe.	0.000

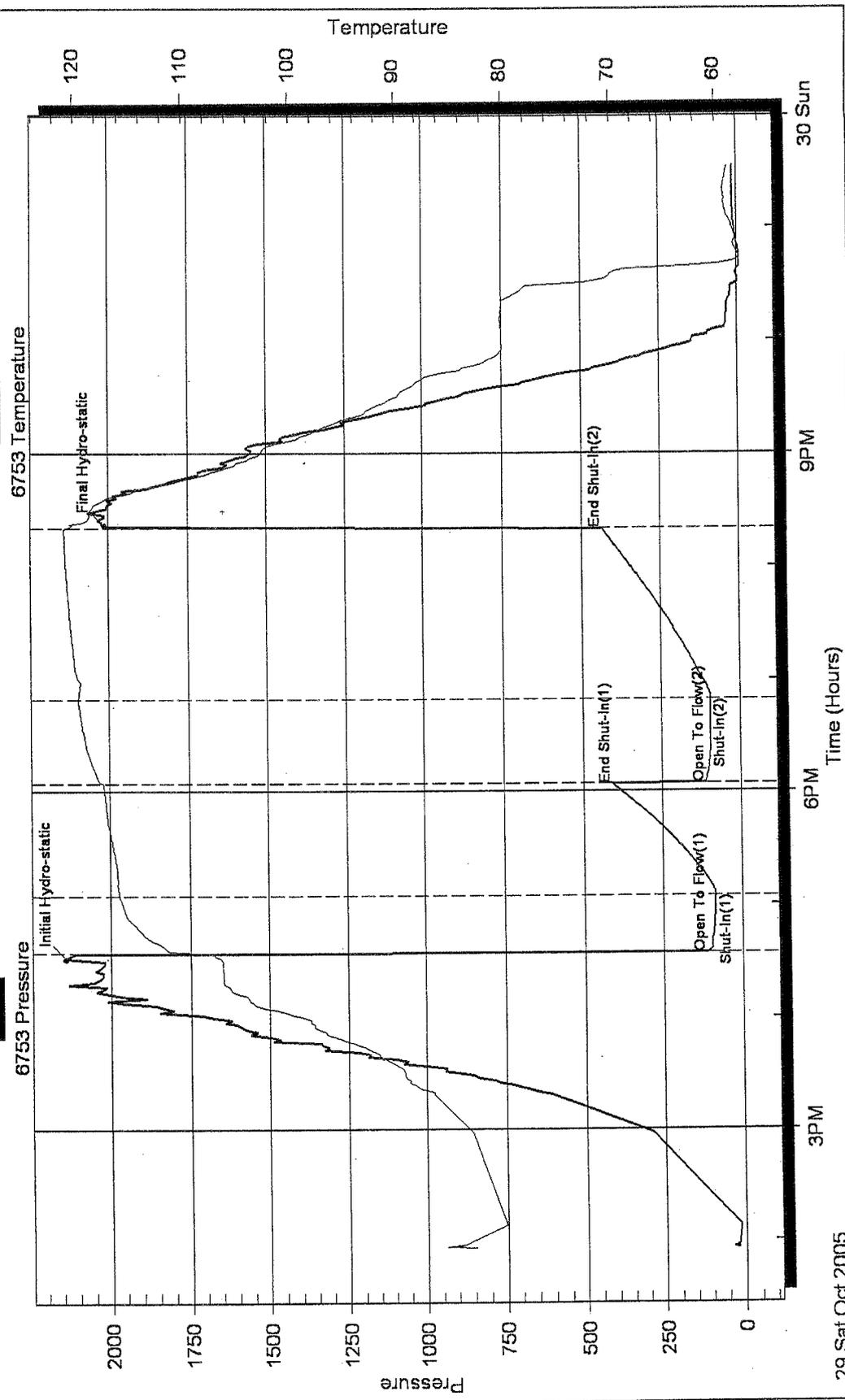
Total Length: 75.00 ft      Total Volume: 0.369 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: E-Mail DST #3 & #4 to dmcginness@cox.net  
Bill Johnson and to Northstar

### Pressure vs. Time



29 Sat Oct 2005

3PM

6PM

9PM

30 Sun

