

DRILL STEM TEST REPORT

Prepared For: **CMX, Inc.**

150 North Main Suite 1026
Wichita, Ks 67202

ATTN: Ken LeBlanc

18-31s-11w

Chain Ranch #1

Start Date: 2004.01.16 @ 13:42:23

End Date: 2004.01.17 @ 12:14:28

Job Ticket #: 17216 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

CMX, Inc.

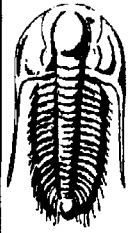
Chain Ranch #1

18-31s-11w

DST # 1

KC Swope

2004.01.16



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

CMX, Inc.
 150 North Main Suite 1026
 Wichita, Ks 67202
 ATTN: Ken LeBlanc

Chain Ranch #1
18-31s-11w
 Job Ticket: 17216 **DST#: 1**
 Test Start: 2004.01.16 @ 13:42:23

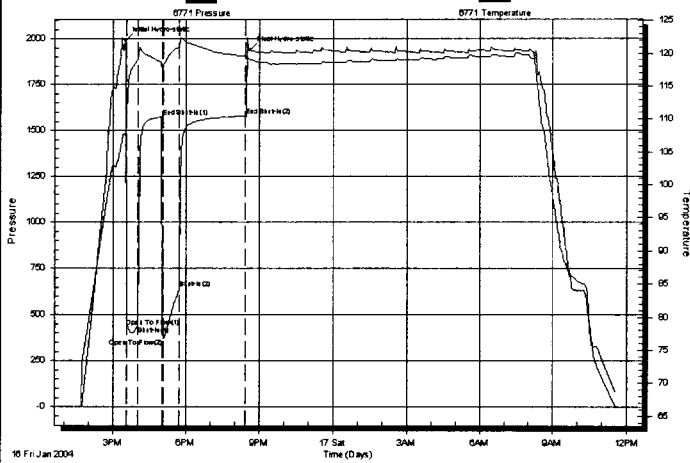
GENERAL INFORMATION:

Formation: **KC Swope**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:32:09
 Time Test Ended: 12:14:28
 Interval: **4080.00 ft (KB) To 4100.00 ft (KB) (TVD)**
 Total Depth: 4100.00 ft (KB) (TVD)
 Hole Diameter: 7.78 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Nick Budig
 Unit No: 17
 Reference Elevations: 1592.00 ft (KB)
 1583.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 6771 Inside
 Press@RunDepth: 642.37 psig @ 4081.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2004.01.16 End Date: 2004.01.17 Last Calib.: 2004.01.17
 Start Time: 13:42:28 End Time: 12:14:29 Time On Btm: 2004.01.16 @ 15:29:39
 Time Off Btm: 2004.01.16 @ 20:37:09

TEST COMMENT: IF- Strong Blow obb in 5 sec, gts in 5.5 min
 IS- Strong Blow obb
 FF- Strong Blow obb as soon as tool opened, oil to surface in 40 min
 FS- Oil to surface had to shut valves

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1991.06	107.61	Initial Hydro-static
3	434.73	111.09	Open To Flow (1)
32	440.72	119.00	Shut-In(1)
91	1576.07	118.63	End Shut-In(1)
94	368.88	117.95	Open To Flow (2)
134	642.37	121.10	Shut-In(2)
295	1579.70	119.60	End Shut-In(2)
308	1939.65	119.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
4014.00	oil to surface	44.55
61.00	gassy oily water	0.68

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	4.00	67.40
Last Gas Rate	0.25	2.50	26.81
Max. Gas Rate	0.38	4.00	67.40



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

CMX, Inc.
150 North Main Suite 1026
Wichita, Ks 67202
ATTN: Ken LeBlanc

Chain Ranch #1
18-31s-11w
Job Ticket: 17216 **DST#: 1**
Test Start: 2004.01.16 @ 13:42:23

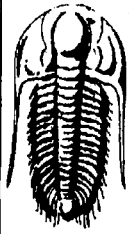
Tool Information

Drill Pipe:	Length: 4078.00 ft	Diameter: 3.38 inches	Volume: 45.26 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 26000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 45.26 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4080.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	42.00 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			4059.00	
Shut In Tool	5.00			4064.00	
Hydraulic tool	5.00			4069.00	
Safety Joint	2.00			4071.00	
Packer	5.00			4076.00	22.00 Bottom Of Top Packer
Packer	4.00			4080.00	
Stubb	1.00			4081.00	
Recorder	0.00	6771	Inside	4081.00	
Perforations	16.00			4097.00	
Recorder	0.00	13761	Inside	4097.00	
Bullnose	3.00			4100.00	20.00 Bottom Packers & Anchor

Total Tool Length: 42.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

CMX, Inc.
150 North Main Suite 1026
Wichita, Ks 67202

ATTN: Ken LeBlanc

Chain Ranch #1
18-31s-11w
Job Ticket: 17216 **DST#: 1**
Test Start: 2004.01.16 @ 13:42:23

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 8.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 80.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.94 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
4014.00	oil to surface	44.547
61.00	gassy oily water	0.677

Total Length: 4075.00 ft Total Volume: 45.224 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

CMX, Inc.
150 North Main Suite 1026
Wichita, Ks 67202
ATTN: Ken LeBlanc

Chain Ranch #1
18-31s-11w
Job Ticket: 17216 **DST#: 1**
Test Start: 2004.01.16 @ 13:42:23

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 ³ /d)
1	7	0.38	4.00	67.40
1	10	0.38	3.50	65.57
1	20	0.25	2.50	26.81

Serial #: 6771

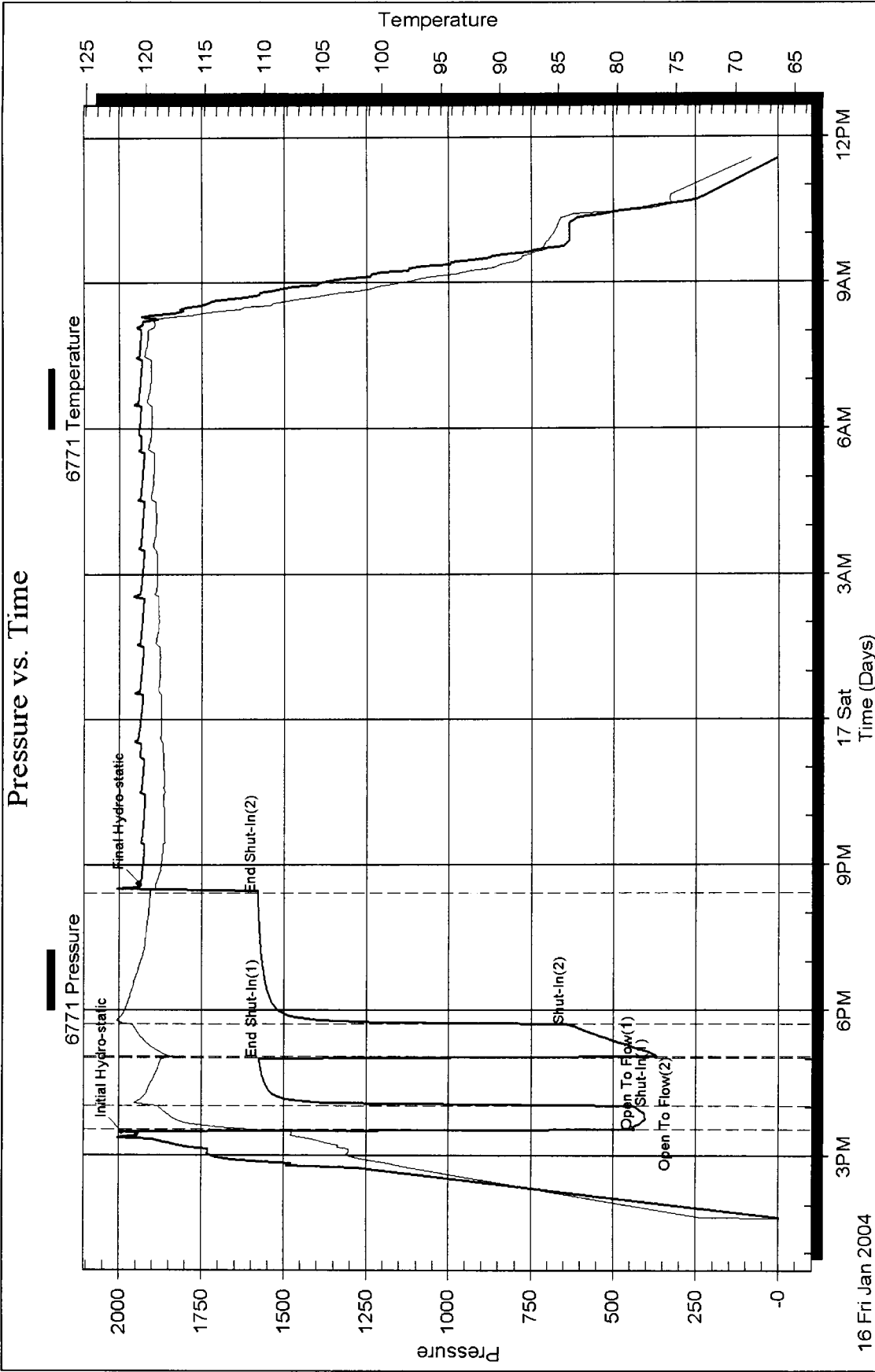
Inside

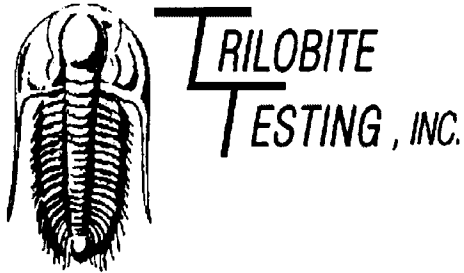
CMX, Inc.

18-31s-11w

DST Test Number: 1

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **CMX, Inc.**

150 North Main Suite 1026
Wichita, Ks 67202

ATTN: Ken LeBlanc

18-31s-11w

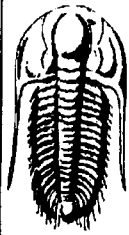
Chain Ranch #1

Start Date: 2004.01.18 @ 03:59:02

End Date: 2004.01.18 @ 12:33:57

Job Ticket #: 17217 DST #: 2

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

CMX, Inc.
150 North Main Suite 1026
Wichita, Ks 67202
ATTN: Ken LeBlanc

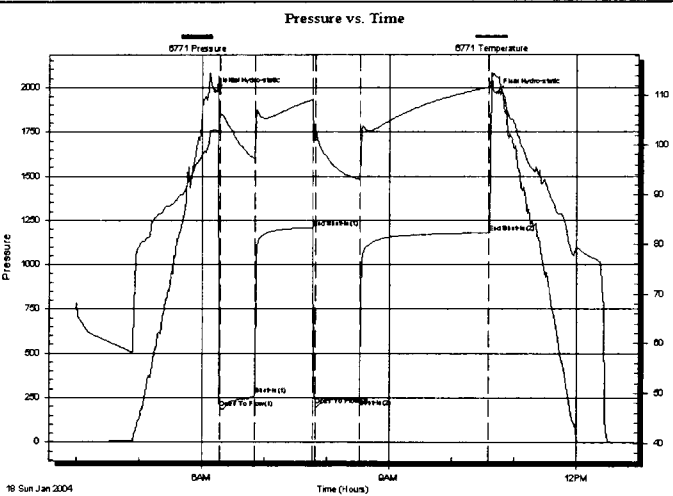
Chain Ranch #1
18-31s-11w
Job Ticket: 17217 **DST#: 2**
Test Start: 2004.01.18 @ 03:59:02

GENERAL INFORMATION:

Formation: **Mississippi A**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:17:27
Time Test Ended: 12:33:57
Interval: **4256.00 ft (KB) To 4290.00 ft (KB) (TVD)**
Total Depth: 4290.00 ft (KB) (TVD)
Hole Diameter: 7.78 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Nick Budig
Unit No: 17
Reference Elevations: 1592.00 ft (KB)
1583.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6771 Inside
Press@RunDepth: 243.27 psig @ 4257.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2004.01.18 End Date: 2004.01.18 Last Calib.: 2004.01.18
Start Time: 03:59:07 End Time: 12:33:56 Time On Btm: 2004.01.18 @ 06:12:27
Time Off Btm: 2004.01.18 @ 10:42:26

TEST COMMENT: IF-Strong Blow obb in 15 sec, GTS in 3 min
IS- No Blow
FF- Strong Blow obb as soon as tool opened
FS- No Blow



PRESSURE SUMMARY

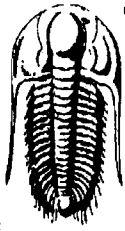
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1978.24	103.03	Initial Hydro-static
5	190.63	106.29	Open To Flow (1)
38	266.34	97.13	Shut-In(1)
94	1208.19	109.24	End Shut-In(1)
96	204.47	103.50	Open To Flow (2)
139	243.27	93.15	Shut-In(2)
263	1179.36	111.73	End Shut-In(2)
270	1971.51	113.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Gas cut mud	0.91

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	38.00	818.48
Last Gas Rate	0.75	63.00	1208.98
Max. Gas Rate	0.75	63.00	1208.98



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

CMX, Inc.
150 North Main Suite 1026
Wichita, Ks 67202
ATTN: Ken LeBlanc

Chain Ranch #1
18-31s-11w
Job Ticket: 17217 **DST#: 2**
Test Start: 2004.01.18 @ 03:59:02

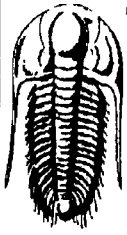
Tool Information

Drill Pipe:	Length: 4264.00 ft	Diameter: 3.80 inches	Volume: 59.81 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 26000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 59.81 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4256.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	56.00 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			4235.00	
Shut In Tool	5.00			4240.00	
Hydraulic tool	5.00			4245.00	
Safety Joint	2.00			4247.00	
Packer	5.00			4252.00	22.00 Bottom Of Top Packer
Packer	4.00			4256.00	
Stubb	1.00			4257.00	
Recorder	0.00	6771	Inside	4257.00	
Perforations	30.00			4287.00	
Recorder	0.00	13761	Inside	4287.00	
Bullnose	3.00			4290.00	34.00 Bottom Packers & Anchor

Total Tool Length: 56.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

CMX, Inc.
150 North Main Suite 1026
Wichita, Ks 67202

ATTN: Ken LeBlanc

Chain Ranch #1
18-31s-11w
Job Ticket: 17217 **DST#: 2**
Test Start: 2004.01.18 @ 03:59:02

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 8.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 63.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.75 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Gas cut mud	0.912

Total Length: 65.00 ft Total Volume: 0.912 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

CMX, Inc.
150 North Main Suite 1026
Wichita, Ks 67202
ATTN: Ken LeBlanc

Chain Ranch #1
18-31s-11w
Job Ticket: 17217 **DST#: 2**
Test Start: 2004.01.18 @ 03:59:02

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 ³ /d)
1	10	0.75	38.00	818.48
1	20	0.75	50.00	1005.92
1	30	0.75	55.00	1084.02
2	10	0.75	56.00	1099.64
2	20	0.75	62.00	1193.36
2	30	0.75	63.00	1208.98
2	40	0.75	63.00	1208.98
2	50	0.75	63.00	1208.98

Serial #: 6771

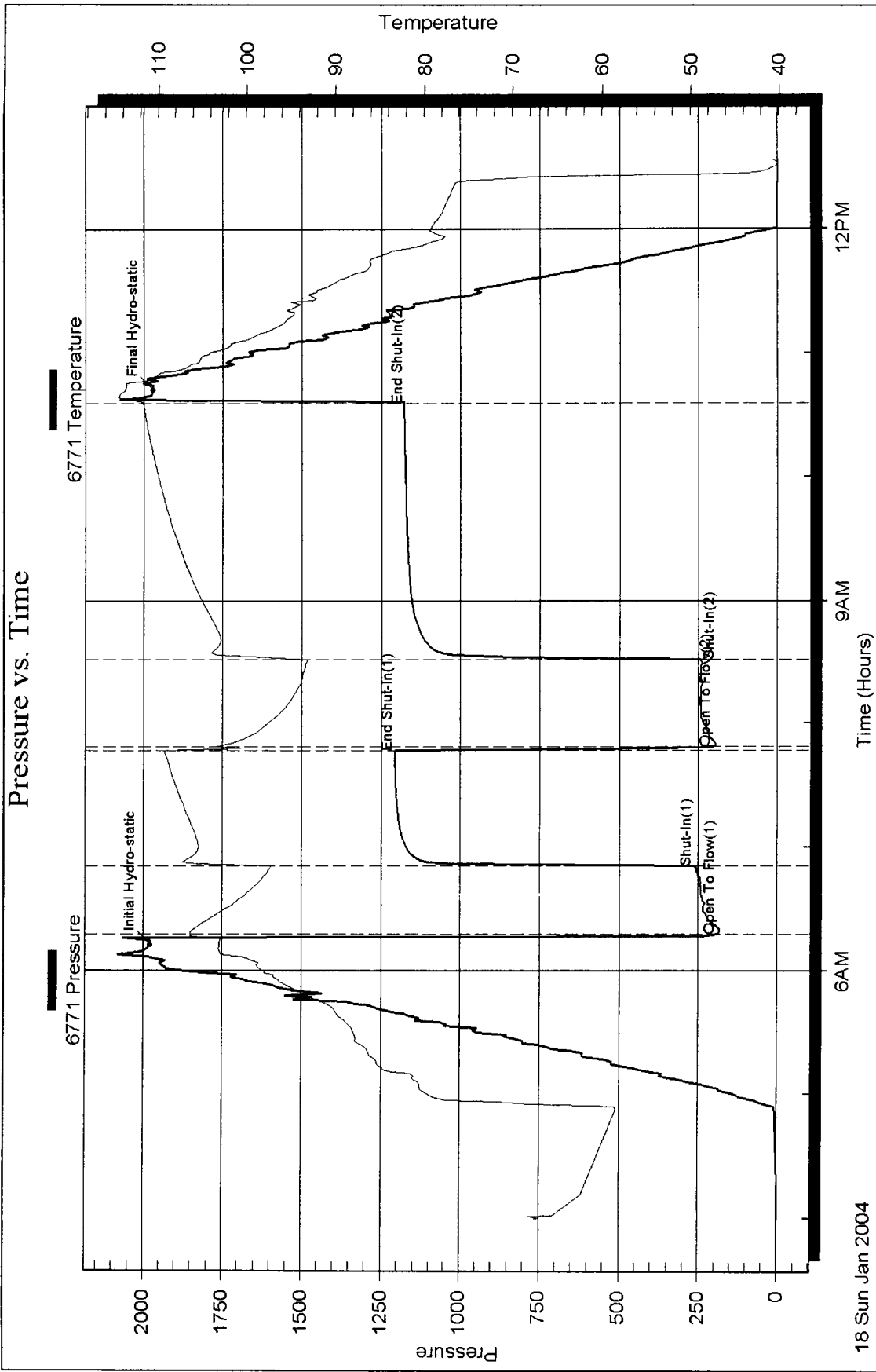
Inside

CMX, Inc.

18-31s-11w

DST Test Number: 2

Pressure vs. Time

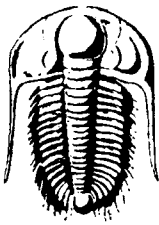


18 Sun Jan 2004

6AM

9AM

12PM



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV 0153

No 17216

12/02

Test Ticket

Well Name & No. Chain Ranch #1 Test No. 1 Date 1-16-04
 Company CMX, Inc. Zone Tested KC Swope
 Address 150 North Main Suite 1026 Wichita, KS 67202 Elevation 1592 KB 1583 GL
 Co. Rep / Geo. Ken LeBlanc Cont. Duke #4 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 18 Twp. 31s Rge. 11w Co. Barber State Ks
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 4080 - 4100 Initial Str Wt./Lbs. 52,000 Unseated Str Wt/Lbs. 56,000
 Anchor Length 20' Wt. Set Lbs. 26,000 Wt. Pulled Loose/Lbs. 60,000
 Top Packer Depth 4075 Tool Weight 2200
 Bottom Packer Depth 4080 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 4100 Wt. Pipe Run 0 Drill Collar Run 0
 Mud Wt. 8.0 LCM _____ Vis. 80 WL 8.0 Drill Pipe Size 4 1/2 Ft. Run 4078

Blow Description IF - Strong Blow O.B.B. in 5 sec, gas to surface in 5.5 min
ISI - Strong Blow O.B.B. as soon as tool opened
FF - Strong Blow O.B.B. as soon as tool opened, oil to surface in 40 min
FSI - Oil to surface had to shut valves

Recovery - Total Feet 4078 GIP GTS Ft. in DC 0 Ft. in DP 4078
 Rec. 4017 Feet of Oil to Surface
 Rec. 61 Feet of Gassy oily muddy water 10% mud, 20% water
 Rec. _____ Feet of 35% oil, 45% GAS
 Rec. _____ Feet of _____
 BHT 120 °F Gravity 30 °API D @ 30 °F Corrected Gravity 33 °API
 RW .432 @ 46.1 °F Chlorides 30,000 ppm Recovery _____ Chlorides 5,000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		1991	6771	800
(B) First Initial Flow Pressure		435	(depth) 4081	Elec. Rec. 150
(C) First Final Flow Pressure		441	Recorder No. 13761	Jars _____
(D) Initial Shut-In Pressure		1576	(depth) 4093	Safety Jt. 50
(E) Second Initial Flow Pressure		369	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure		642	(depth) _____	Sampler _____
(G) Final Shut-In Pressure		1580	PSI Initial Opening 30	Straddle _____
(Q) Final Hydrostatic Mud		1940	PSI Initial Shut-In 60	Ext. Packer _____
			Final Flow 45	Shale Packer _____
			Final Shut-In 120	Mileage 43

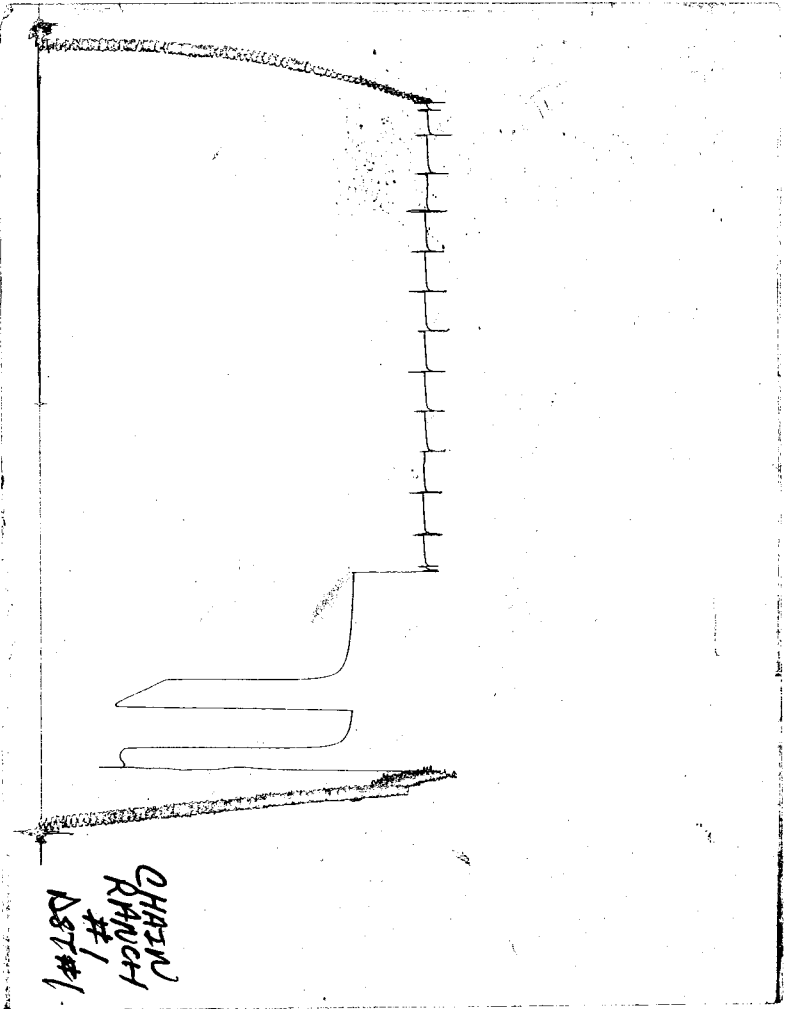
TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

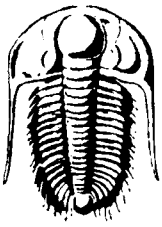
Approved By Ken LeBlanc
 Our Representative Nick Budig

T-On Location 12:30 P.M. 1-16 Sub Total: 1073.10
 T-Started 1:42 Std. By 4hr 120.00
 T-Open 3:31 Other 600.00
 T-Pulled 7:30 Total: 1793.10
 T-Out 12:00 P.M. 1-17

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 17217

12/02

Test Ticket

Well Name & No. CHAIN RANCH #1 Test No. 2 Date 1-18-04
 Company CMX, INC. Zone Tested Mississippi A
 Address 150 North Main Suite 1026 Wichita, KS 67202 Elevation 1592 KB 1583 GL
 Co. Rep / Geo. Ken LeBlanc Cont. Duke #4 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 18 Twp. 31s Rge. 11w Co. Barber State Ks
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 4256 - 4290 Initial Str Wt./Lbs. 56,000 Unseated Str Wt./Lbs. 56,000
 Anchor Length 34' Wt. Set Lbs. 26,000 Wt. Pulled Loose/Lbs. 60,000
 Top Packer Depth 4251 Tool Weight 2200
 Bottom Packer Depth 4256 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 4290 Wt. Pipe Run 0 Drill Collar Run 0
 Mud Wt. 8.2 LCM _____ Vis. 63 WL 8.8 Drill Pipe Size 4 1/2 Ft. Run 4264

Blow Description IF - Strong Blow ORB in 15 sec, GTS in 3 min
ISI - No Blow
FF - Strong Blow ORB as soon as tool opened
FSI - No Blow

Recovery - Total Feet 65 GIP GTS Ft. in DC 0 Ft. in DP 65
 Rec. 65 Feet of Gas cut mud
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____

BHT 112 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW .63 @ 46 °F Chlorides 21,000 ppm Recovery _____ Chlorides 6,000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1978</u> PSI	<u>6771</u>	<u>800</u>
(B) First Initial Flow Pressure		<u>191</u> PSI	<u>4857</u>	Elec. Rec. <u>150</u>
(C) First Final Flow Pressure		<u>266</u> PSI	<u>13761</u>	Jars <u>50</u>
(D) Initial Shut-In Pressure		<u>1208</u> PSI	<u>4287</u>	Safety Jt. _____
(E) Second Initial Flow Pressure		<u>204</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure		<u>243</u> PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure		<u>1179</u> PSI	Initial Opening <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud		<u>1972</u> PSI	Initial Shut-In <u>60</u>	Ext. Packer _____
			Final Flow <u>45</u>	Shale Packer _____
			Final Shut-In <u>120</u>	Mileage <u>43</u>

TRILOBITES TESTING INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Ken LeBlanc
 Our Representative Nick Budy
 T-On Location 3:10 A.M.
 T-Started 3:59
 T-Open 6:21
 T-Pulled 10:36
 T-Out 12:33
 Sub Total: _____
 Std. By 1073.10
 Other _____
 Total: _____

CHART PAGE

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

