



DRILL STEM TEST REPORT

Prepared For: **CMX inc**

1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206

ATTN: Ken LeBlanc

Coats Knob #1

25-29S-14W Pratt,KS

Start Date: 2017.02.22 @ 21:15:23

End Date: 2017.02.23 @ 04:18:38

Job Ticket #: 63564 DST #: 1

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

Printed: 2017.02.27 @ 10:53:31

CMX inc
25-29S-14W Pratt,KS
Coats Knob #1
DST # 1
Topeka
2017.02.22



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

CMX inc
 1700 N Waterfront Pkw y
 Bldg 300B
 Wichita, KS 67206
 ATTN: Ken LeBlanc

25-29S-14W Pratt,KS

Coats Knob #1

Job Ticket: 63564

DST#: 1

Test Start: 2017.02.22 @ 21:15:23

GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:23:08

Time Test Ended: 04:18:38

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

Interval: 3598.00 ft (KB) To 3642.00 ft (KB) (TVD)

Reference Elevations: 1945.00 ft (KB)

Total Depth: 3642.00 ft (KB) (TVD)

1937.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8159

Inside

Press@RunDepth: 125.77 psig @ 3599.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.02.22

End Date:

2017.02.23

Last Calib.:

2017.02.23

Start Time: 21:15:24

End Time:

04:18:38

Time On Btm:

2017.02.22 @ 23:22:38

Time Off Btm:

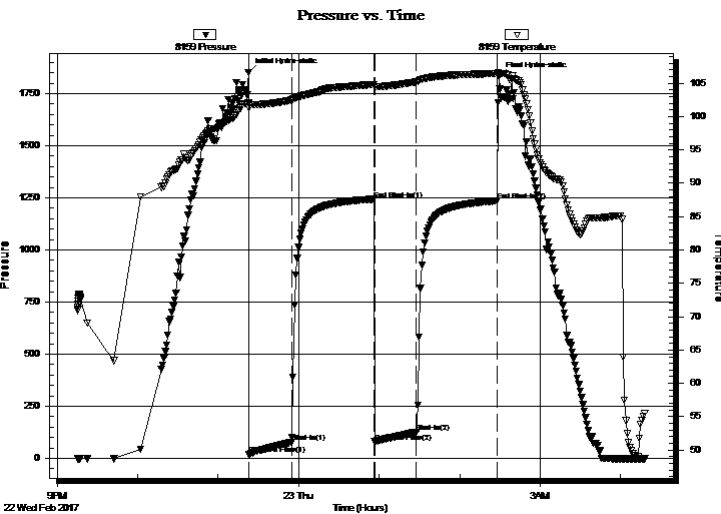
2017.02.23 @ 02:29:08

TEST COMMENT: IF: Fair Blow , Built to 9"

IS: No Blow Back

FF: Fair Blow , Built to 7 1/2"

FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1851.22	102.01	Initial Hydro-static
1	19.68	101.34	Open To Flow (1)
32	77.43	102.45	Shut-In(1)
94	1242.55	104.82	End Shut-In(1)
94	79.36	104.49	Open To Flow (2)
126	125.77	105.21	Shut-In(2)
186	1235.14	106.43	End Shut-In(2)
187	1831.00	106.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	Water	1.77
73.00	GMCW 2%G 28%M 70%W	1.02
1.00	Oil	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

CMX inc
1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206
ATTN: Ken LeBlanc

25-29S-14W Pratt, KS
Coats Knob #1
Job Ticket: 63564 **DST#: 1**
Test Start: 2017.02.22 @ 21:15:23

Tool Information

Drill Pipe:	Length: 3601.00 ft	Diameter: 3.80 inches	Volume: 50.51 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: 25000.00 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: 50.51 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3598.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	65.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3582.00	
Hydraulic tool	5.00			3587.00	
Safety Joint	2.00			3589.00	
Packer	5.00			3594.00	21.00 Bottom Of Top Packer
Packer	4.00			3598.00	
Stubb	1.00			3599.00	
Recorder	0.00	8159	Inside	3599.00	
Recorder	0.00	6806	Outside	3599.00	
Recorder	0.00	8358	Fluid	3599.00	
Perforations	6.00			3605.00	
Change Over Sub	1.00			3606.00	
Drill Pipe	31.00			3637.00	
Change Over Sub	2.00			3639.00	
Bullnose	3.00			3642.00	44.00 Bottom Packers & Anchor

Total Tool Length: 65.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

CMX inc

25-29S-14W Pratt,KS

1700 N Waterfront Pkw y
Bldg 300B
Wichita, KS 67206
ATTN: Ken LeBlanc

Coats Knob #1

Job Ticket: 63564

DST#: 1

Test Start: 2017.02.22 @ 21:15:23

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 56.00 sec/qt

Water Loss: 9.58 in³

Resistivity: ohm.m

Salinity: 7200.00 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: 64000 ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
126.00	Water	1.767
73.00	GMCW 2%G 28%M 70%W	1.024
1.00	Oil	0.014

Total Length: 200.00 ft Total Volume: 2.805 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

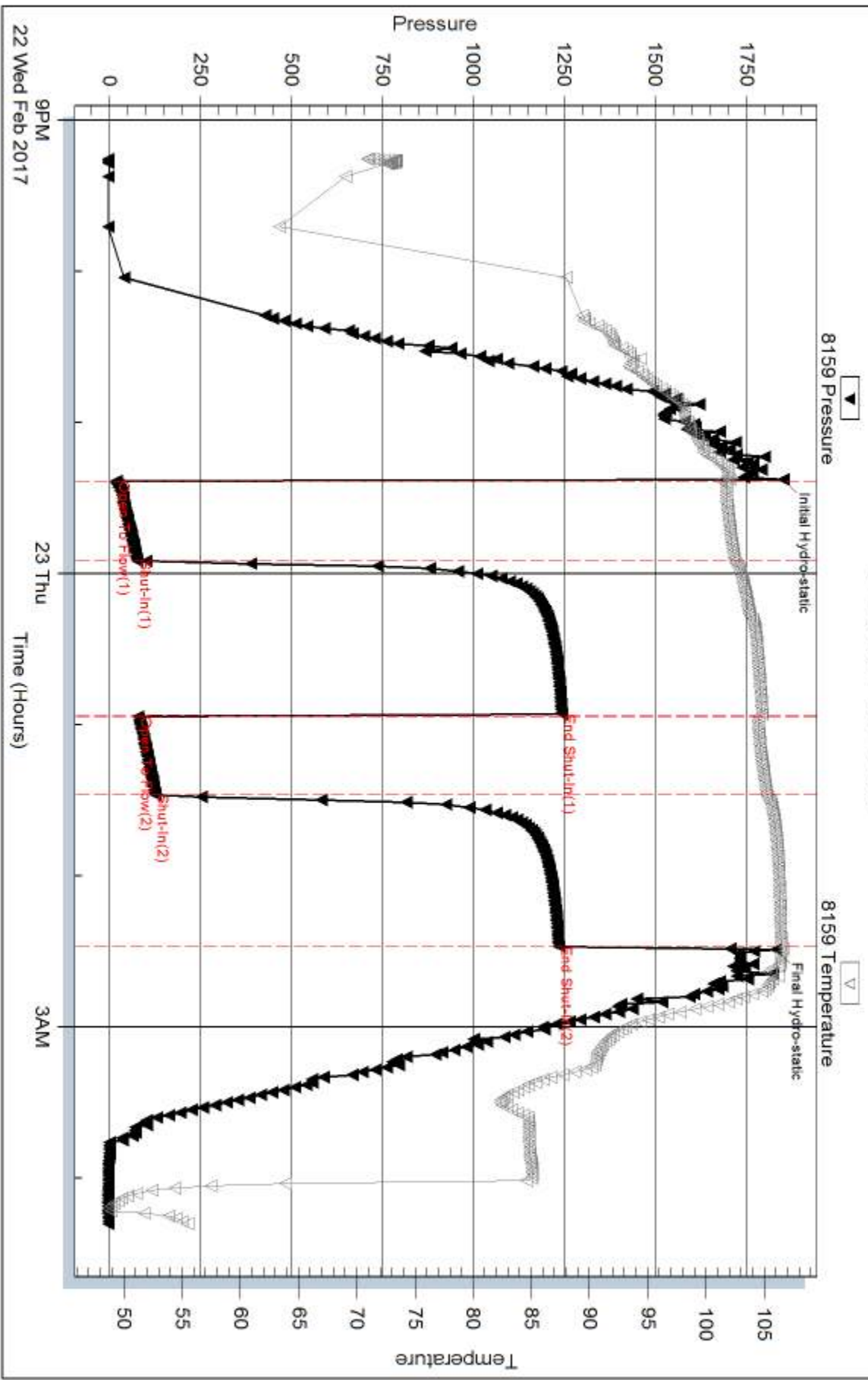
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .2 @ 42 degrees

Pressure vs. Time



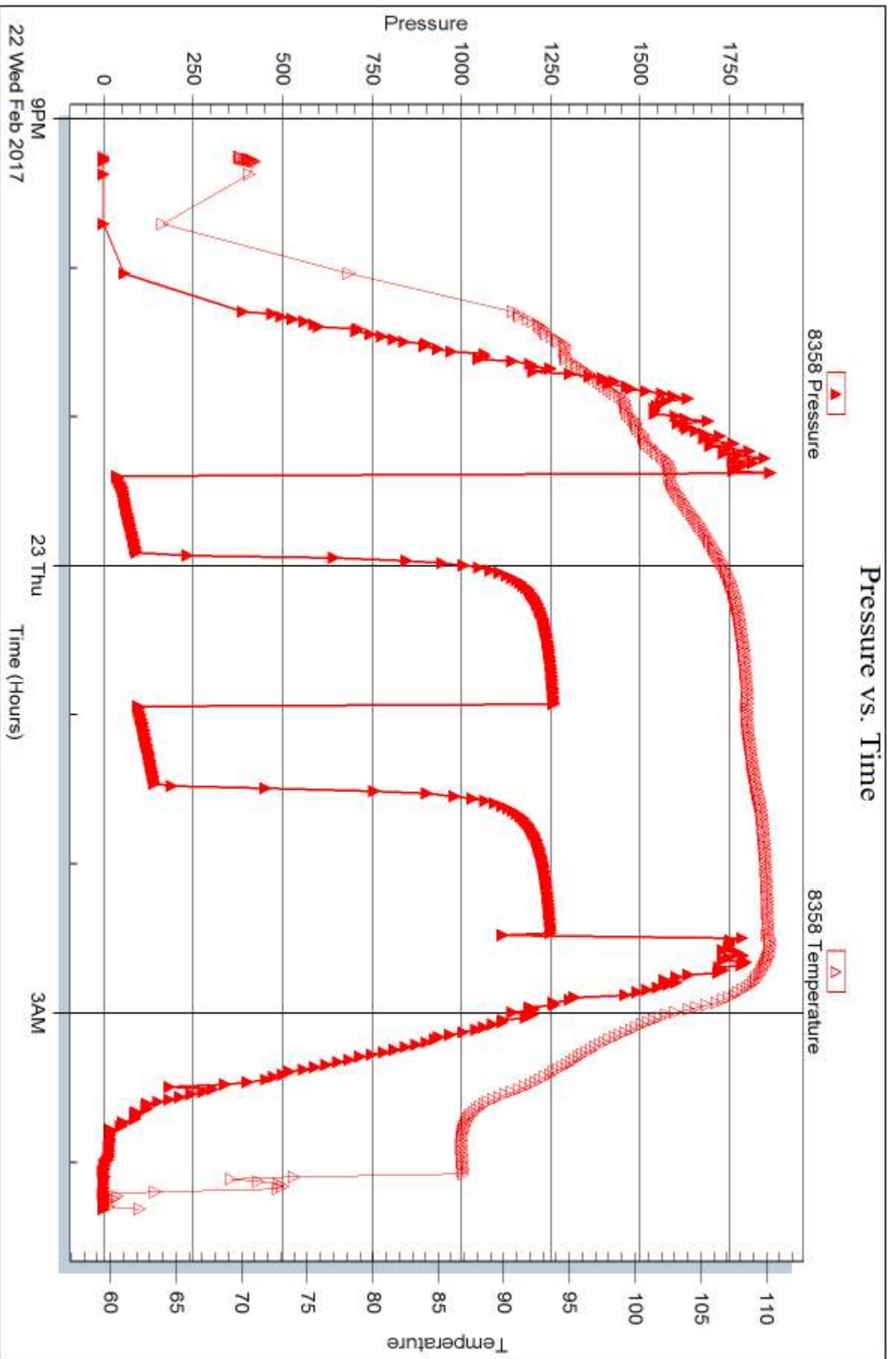
Serial #: 8358

Fluid

CMX inc

Coats Knob #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 63564

Printed: 2017.02.27 @ 10:53:32



DRILL STEM TEST REPORT

Prepared For: **CMX inc**

1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206

ATTN: Ken LeBlanc

Coats Knob #1

25-29S-14W Pratt,KS

Start Date: 2017.02.24 @ 13:59:05

End Date: 2017.02.24 @ 20:40:35

Job Ticket #: 63565 DST #: 2

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

Printed: 2017.02.27 @ 10:50:52

CMX inc
25-29S-14W Pratt,KS
Coats Knob #1
DST # 2
LKC "G"
2017.02.24



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

CMX inc
 1700 N Waterfront Pkw y
 Bldg 300B
 Wichita, KS 67206
 ATTN: Ken LeBlanc

25-29S-14W Pratt,KS

Coats Knob #1

Job Ticket: 63565

DST#: 2

Test Start: 2017.02.24 @ 13:59:05

GENERAL INFORMATION:

Formation: **LKC "G"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:39:50
 Time Test Ended: 20:40:35
 Interval: **4116.00 ft (KB) To 4140.00 ft (KB) (TVD)**
 Total Depth: 4140.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Leal Cason
 Unit No: 74
 Reference Elevations: 1945.00 ft (KB)
 1937.00 ft (CF)
 KB to GR/CF: 8.00 ft

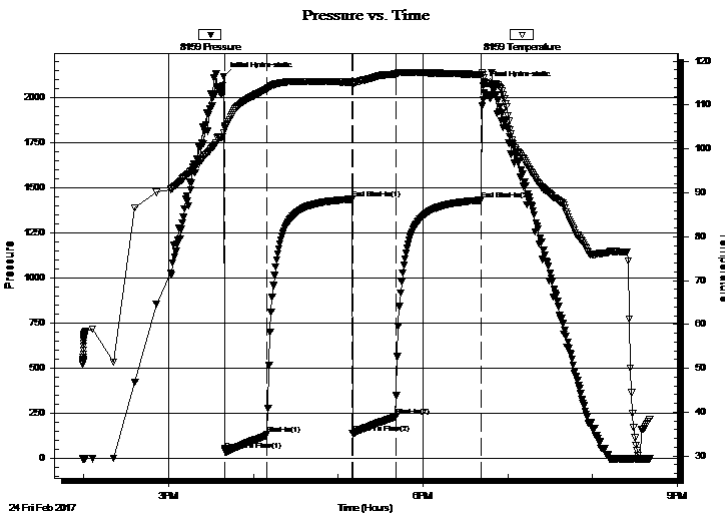
Serial #: 8159

Inside

Press@RunDepth: 231.41 psig @ 4117.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.02.24 End Date: 2017.02.24 Last Calib.: 2017.02.24
 Start Time: 13:59:06 End Time: 20:40:35 Time On Btm: 2017.02.24 @ 15:38:50
 Time Off Btm: 2017.02.24 @ 18:42:50

TEST COMMENT: IF: Strong Blow , BOB in 2 minutes, Died Off to 7"
 IS: No Blow Back
 FF: Fair Blow , BOB in 18 minutes
 FS: No Blow Back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2116.67	103.65	Initial Hydro-static
1	43.28	105.24	Open To Flow (1)
31	132.36	113.72	Shut-In(1)
91	1436.71	115.22	End Shut-In(1)
92	139.10	114.61	Open To Flow (2)
122	231.41	117.10	Shut-In(2)
183	1431.22	116.96	End Shut-In(2)
184	2064.45	116.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	120 GIP	0.00
315.00	Water	4.42
60.00	OMCW 10%O 30%M 60%W	0.84

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

CMX inc
1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206
ATTN: Ken LeBlanc

25-29S-14W Pratt, KS
Coats Knob #1
Job Ticket: 63565 **DST#: 2**
Test Start: 2017.02.24 @ 13:59:05

Tool Information

Drill Pipe:	Length: 4102.00 ft	Diameter: 3.80 inches	Volume: 57.54 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: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume: 57.54 bbl		Tool Chased ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4116.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4100.00	
Hydraulic tool	5.00			4105.00	
Safety Joint	2.00			4107.00	
Packer	5.00			4112.00	21.00 Bottom Of Top Packer
Packer	4.00			4116.00	
Stubb	1.00			4117.00	
Recorder	0.00	8159	Inside	4117.00	
Recorder	0.00	6806	Outside	4117.00	
Perforations	20.00			4137.00	
Bullnose	3.00			4140.00	24.00 Bottom Packers & Anchor
Total Tool Length:	45.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

CMX inc

25-29S-14W Pratt,KS

1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206
ATTN: Ken LeBlanc

Coats Knob #1

Job Ticket: 63565

DST#: 2

Test Start: 2017.02.24 @ 13:59:05

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 56.00 sec/qt
Water Loss: 9.58 in³
Resistivity: ohm.m
Salinity: 7200.00 ppm
Filter Cake: 0.02 inches

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

Oil API: deg API
Water Salinity: 75000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	120 GIP	0.000
315.00	Water	4.419
60.00	OMCW 10%O 30%M 60%W	0.842

Total Length: 375.00 ft Total Volume: 5.261 bbl

Num Fluid Samples: 0

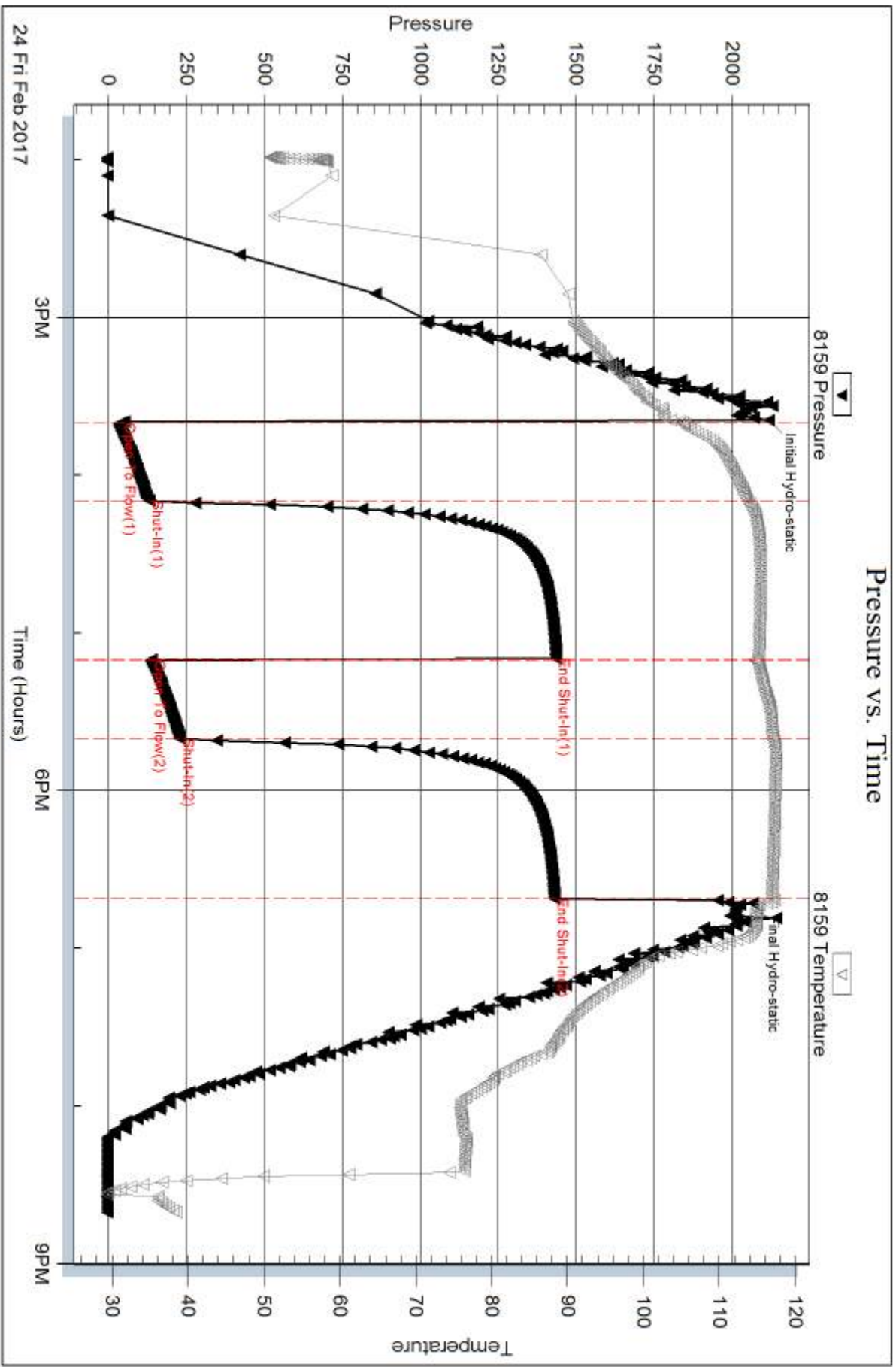
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .18 @ 40 degrees

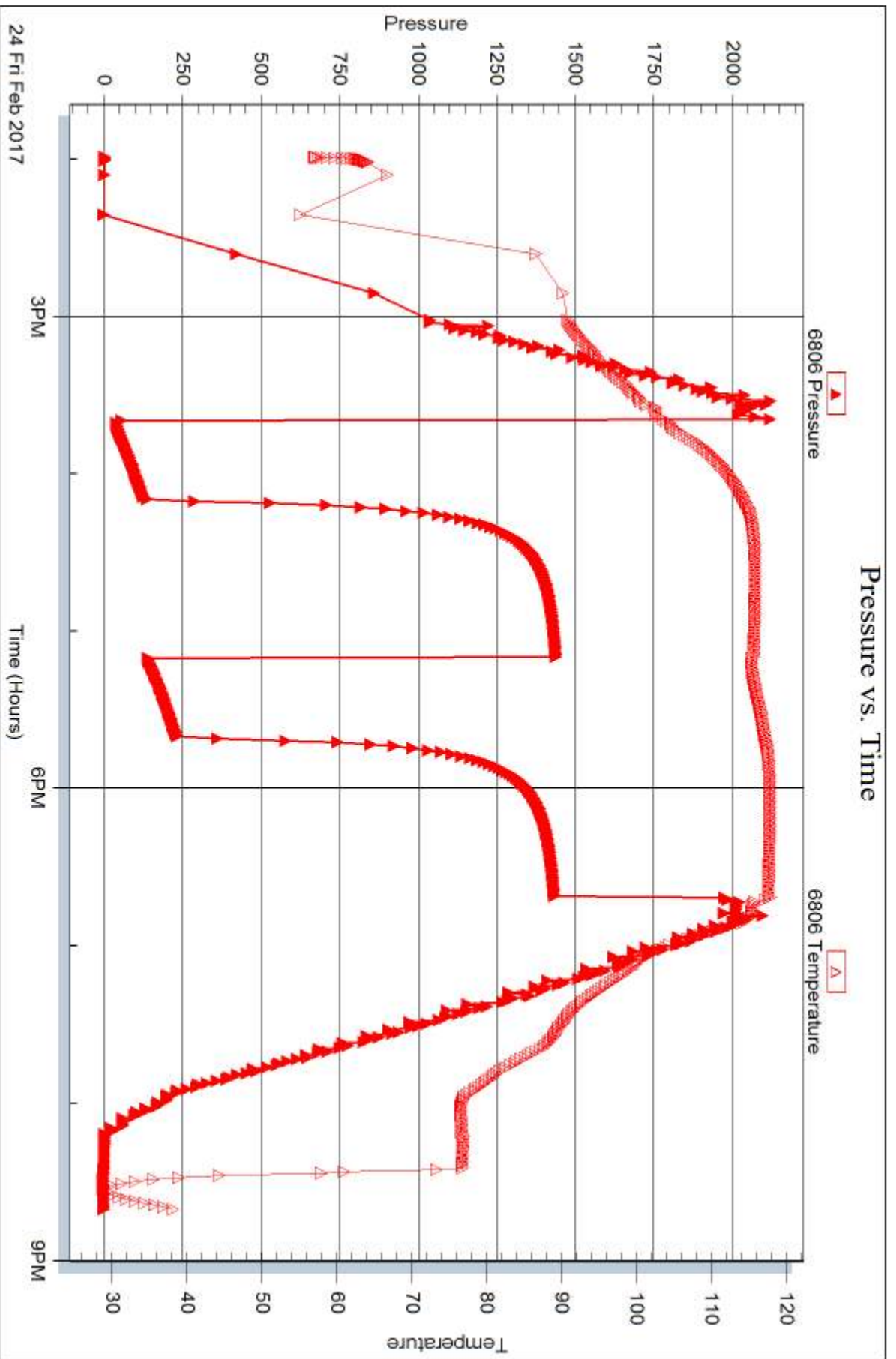


Serial #: 6806

Outside CMX inc

Coats Knob #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 63565

Printed: 2017.02.27 @ 10:50:52



DRILL STEM TEST REPORT

Prepared For: **CMX inc**

1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206

ATTN: Ken LeBlanc

Coats Knob #1

25-29S-14W Pratt,KS

Start Date: 2017.02.25 @ 05:32:58

End Date: 2017.02.25 @ 12:39:43

Job Ticket #: 63566 DST #: 3

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

Printed: 2017.02.27 @ 10:50:04

CMX inc
25-29S-14W Pratt,KS
Coats Knob #1
DST # 3
LKC "H"
2017.02.25



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

CMX inc
 1700 N Waterfront Pkw y
 Bldg 300B
 Wichita, KS 67206
 ATTN: Ken LeBlanc

25-29S-14W Pratt,KS

Coats Knob #1

Job Ticket: 63566

DST#: 3

Test Start: 2017.02.25 @ 05:32:58

GENERAL INFORMATION:

Formation: **LKC "H"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:52:58
 Time Test Ended: 12:39:43
 Interval: **4146.00 ft (KB) To 4160.00 ft (KB) (TVD)**
 Total Depth: 4160.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Leal Cason
 Unit No: 74
 Reference Elevations: 1945.00 ft (KB)
 1937.00 ft (CF)
 KB to GR/CF: 8.00 ft

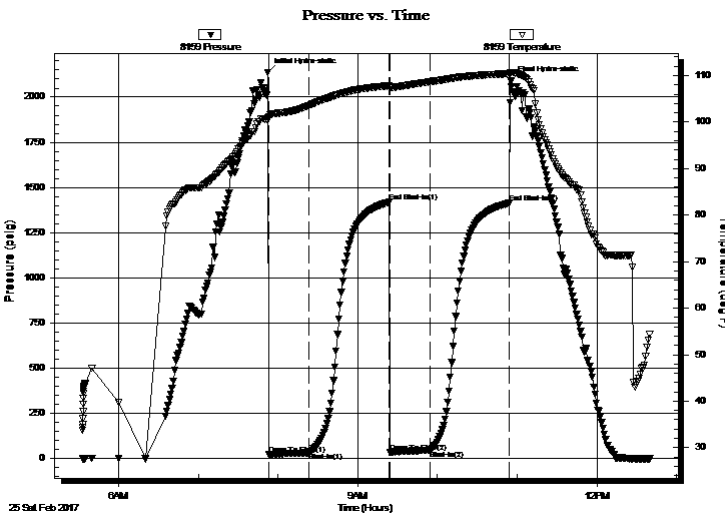
Serial #: 8159

Inside

Press@RunDepth: 45.39 psig @ 4147.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.02.25 End Date: 2017.02.25 Last Calib.: 2017.02.25
 Start Time: 05:32:59 End Time: 12:39:43 Time On Btm: 2017.02.25 @ 07:52:13
 Time Off Btm: 2017.02.25 @ 10:55:13

TEST COMMENT: IF: Strong Blow , BOB in 2 minutes
 IS: No Blow Back
 FF: Fair Blow , Built to 7"
 FS: No Blow Back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2136.63	100.93	Initial Hydro-static
1	21.89	100.77	Open To Flow (1)
32	32.78	103.57	Shut-In(1)
92	1417.71	107.79	End Shut-In(1)
92	33.74	107.36	Open To Flow (2)
123	45.39	108.66	Shut-In(2)
182	1412.60	110.38	End Shut-In(2)
183	2089.09	110.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	180 GIP	0.00
65.00	GOMCW 10%G 5%O 35%M 50%W	0.91

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

CMX inc
1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206
ATTN: Ken LeBlanc

25-29S-14W Pratt, KS
Coats Knob #1
Job Ticket: 63566 **DST#: 3**
Test Start: 2017.02.25 @ 05:32:58

Tool Information

Drill Pipe:	Length: 4133.00 ft	Diameter: 3.80 inches	Volume: 57.98 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: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume: 57.98 bbl		Tool Chased ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4146.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	14.00 ft			
Tool Length:	35.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4130.00	
Hydraulic tool	5.00			4135.00	
Safety Joint	2.00			4137.00	
Packer	5.00			4142.00	21.00 Bottom Of Top Packer
Packer	4.00			4146.00	
Stubb	1.00			4147.00	
Recorder	0.00	8159	Inside	4147.00	
Recorder	0.00	6806	Outside	4147.00	
Perforations	10.00			4157.00	
Bullnose	3.00			4160.00	14.00 Bottom Packers & Anchor
Total Tool Length:	35.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

CMX inc
1700 N Waterfront Pkw y
Bldg 300B
Wichita, KS 67206
ATTN: Ken LeBlanc

25-29S-14W Pratt,KS
Coats Knob #1
Job Ticket: 63566 **DST#: 3**
Test Start: 2017.02.25 @ 05:32:58

Mud and Cushion Information

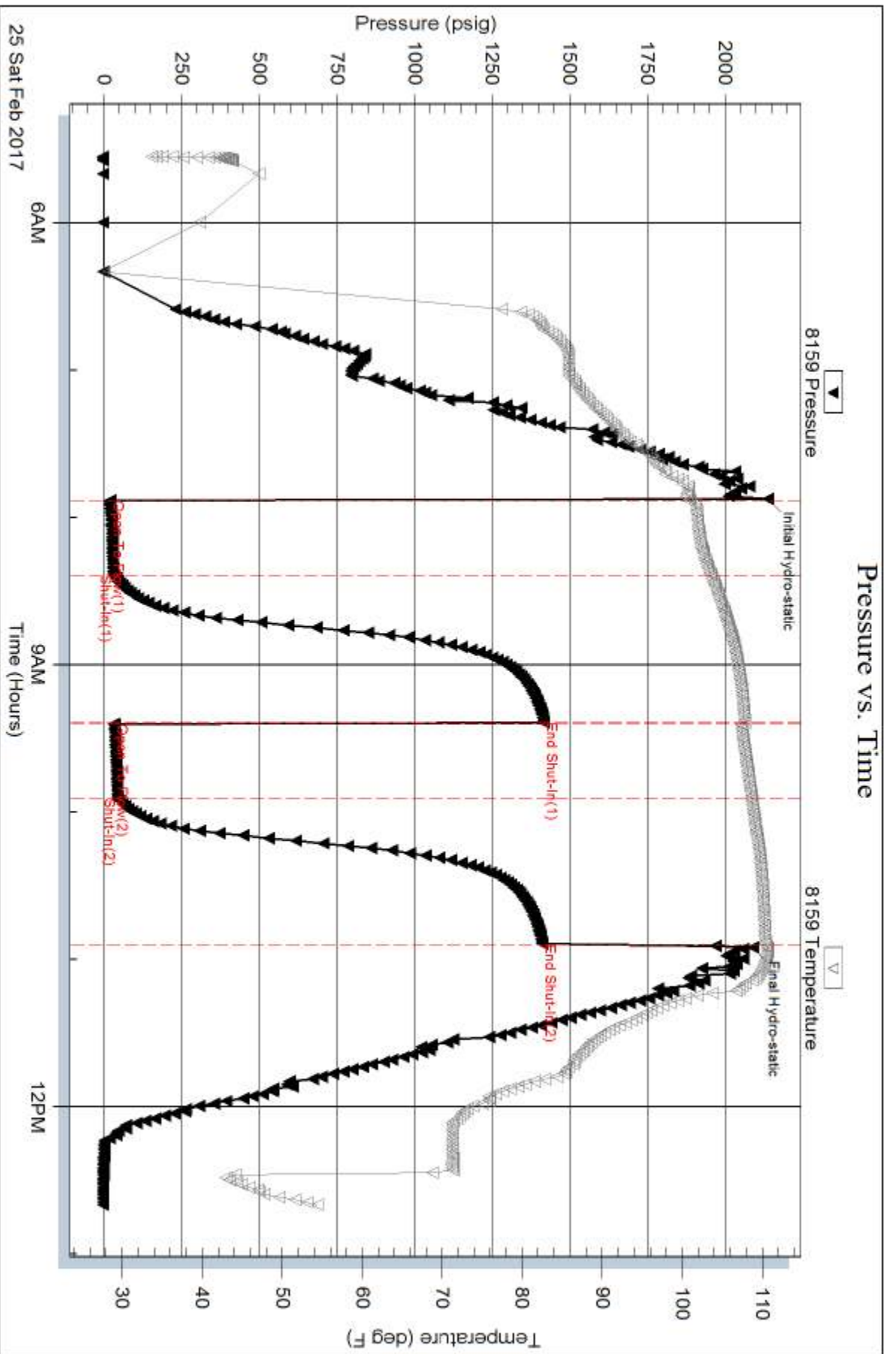
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	59000 ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7200.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	180 GIP	0.000
65.00	GOMCW 10%G 5%O 35%M 50%W	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: RW w as .21 @ 43 degrees

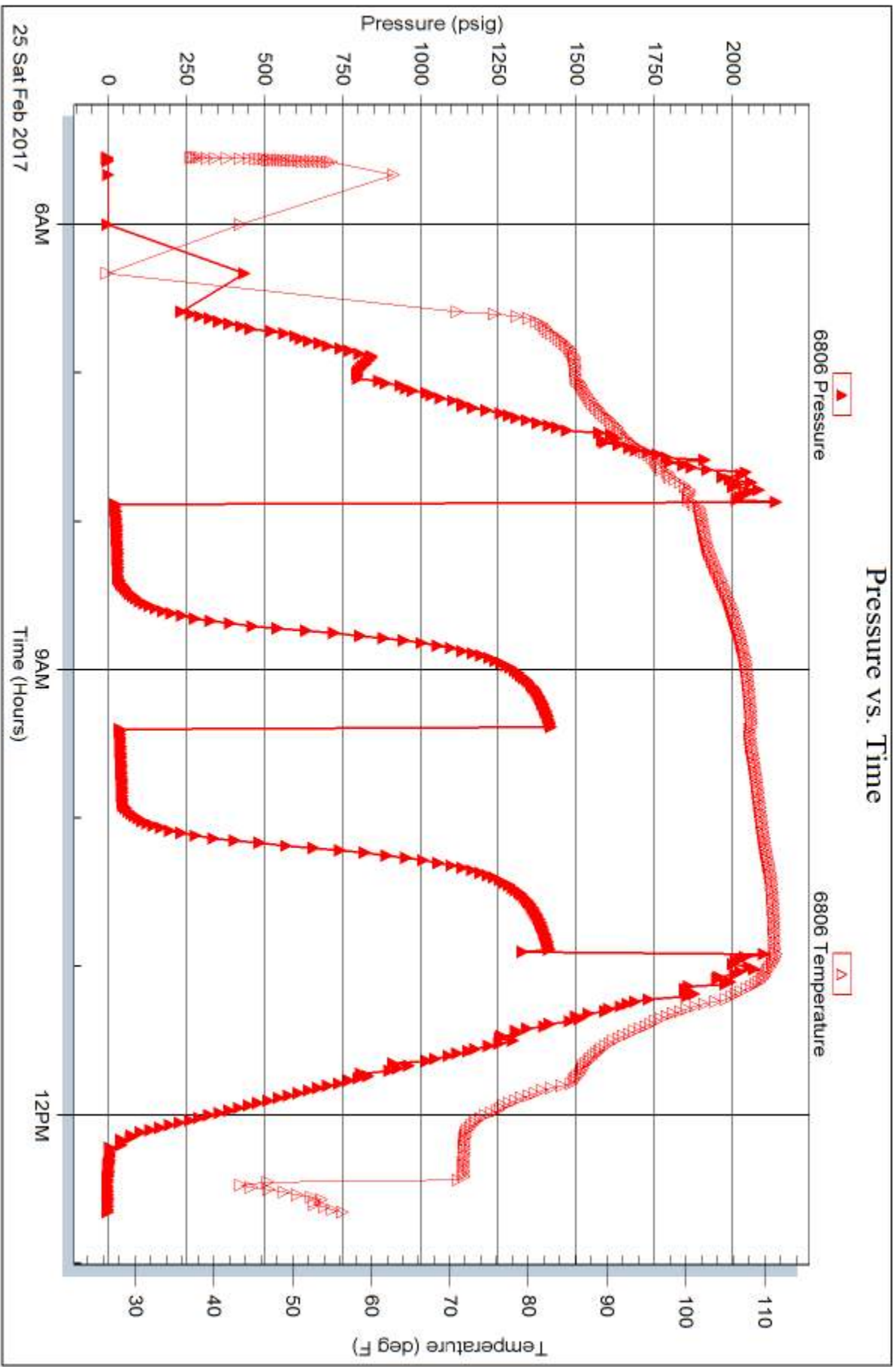


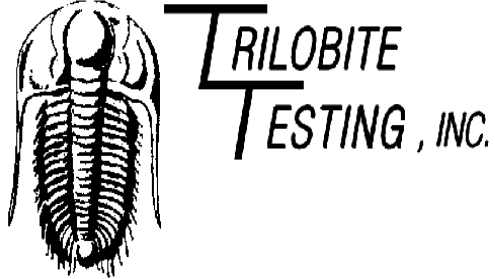
Serial #: 6806

Outside CMX inc

Coats Knob #1

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **CMX inc**

1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206

ATTN: Ken LeBlanc

Coats Knob #1

25-29S-14W Pratt,KS

Start Date: 2017.02.28 @ 02:04:00

End Date: 2017.02.28 @ 09:06:30

Job Ticket #: 61323 DST #: 4

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

Printed: 2017.03.01 @ 09:16:17

CMX inc
25-29S-14W Pratt,KS
Coats Knob #1
DST # 4
Simpson Sand
2017.02.28



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

CMX inc
 1700 N Waterfront Pkw y
 Bldg 300B
 Wichita, KS 67206
 ATTN: Ken LeBlanc

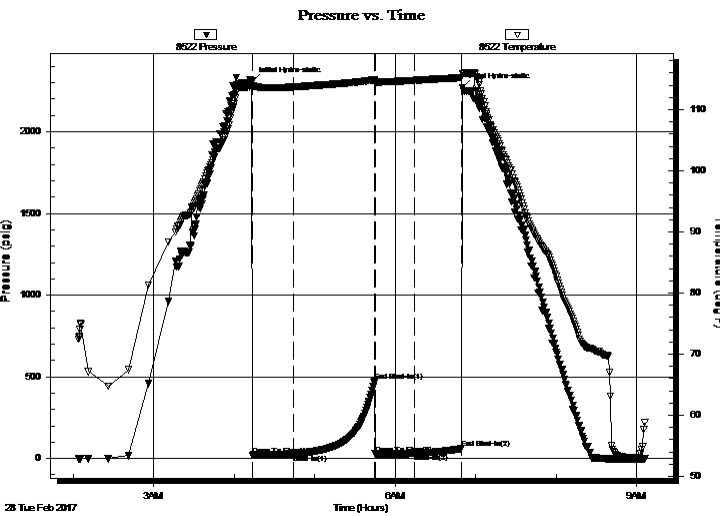
25-29S-14W Pratt,KS
Coats Knob #1
 Job Ticket: 61323 **DST#: 4**
 Test Start: 2017.02.28 @ 02:04:00

GENERAL INFORMATION:

Formation: **Simpson Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:13:30
 Time Test Ended: 09:06:30
 Interval: **4530.00 ft (KB) To 4565.00 ft (KB) (TVD)**
 Total Depth: 4682.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Bradley Walter
 Unit No: 78
 Reference Elevations: 1945.00 ft (KB)
 1937.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8522 Outside
 Press@RunDepth: 29.70 psig @ 4531.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.02.28 End Date: 2017.02.28 Last Calib.: 2017.02.28
 Start Time: 02:04:05 End Time: 09:06:29 Time On Btm: 2017.02.28 @ 04:13:15
 Time Off Btm: 2017.02.28 @ 06:50:15

TEST COMMENT: IF: 1/2" blow , died @ 10 min.
 IS: No return.
 FF: No blow .
 FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2303.59	114.53	Initial Hydro-static
1	21.30	113.69	Open To Flow (1)
32	25.49	113.73	Shut-In(1)
92	471.69	114.86	End Shut-In(1)
92	27.75	114.50	Open To Flow (2)
122	29.70	114.81	Shut-In(2)
157	62.59	115.24	End Shut-In(2)
157	2268.38	115.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100m (oil spots in tool)	0.28

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

CMX inc
1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206
ATTN: Ken LeBlanc

25-29S-14W Pratt,KS
Coats Knob #1
Job Ticket: 61323 **DST#: 4**
Test Start: 2017.02.28 @ 02:04:00

Tool Information

Drill Pipe:	Length: 4540.00 ft	Diameter: 3.80 inches	Volume: 63.68 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 63.68 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4530.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	152.00 ft			
Tool Length:	174.00 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			4509.00	
Shut In Tool	5.00			4514.00	
Hydraulic tool	5.00			4519.00	
Safety Joint	2.00			4521.00	
Packer	5.00			4526.00	22.00 Bottom Of Top Packer
Packer	4.00			4530.00	
Stubb	1.00			4531.00	
Recorder	0.00	8365	Inside	4531.00	
Recorder	0.00	8522	Outside	4531.00	
Perforations	30.00			4561.00	
Blank Off Sub	1.00			4562.00	152.00 Tool Interval
Packer	3.00			4565.00	
Blank Spacing	1.00			4566.00	
Perforations	17.00			4583.00	
Change Over Sub	1.00			4584.00	
Recorder	0.00	8845	Below	4584.00	
Drill Pipe	94.00			4678.00	
Change Over Sub	1.00			4679.00	
Bullnose	3.00			4682.00	1000173.00 Bottom Packers & Anchor

Total Tool Length: 174.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

CMX inc
1700 N Waterfront Pkwy
Bldg 300B
Wichita, KS 67206
ATTN: Ken LeBlanc

25-29S-14W Pratt, KS
Coats Knob #1
Job Ticket: 61323 **DST#: 4**
Test Start: 2017.02.28 @ 02:04:00

Mud and Cushion Information

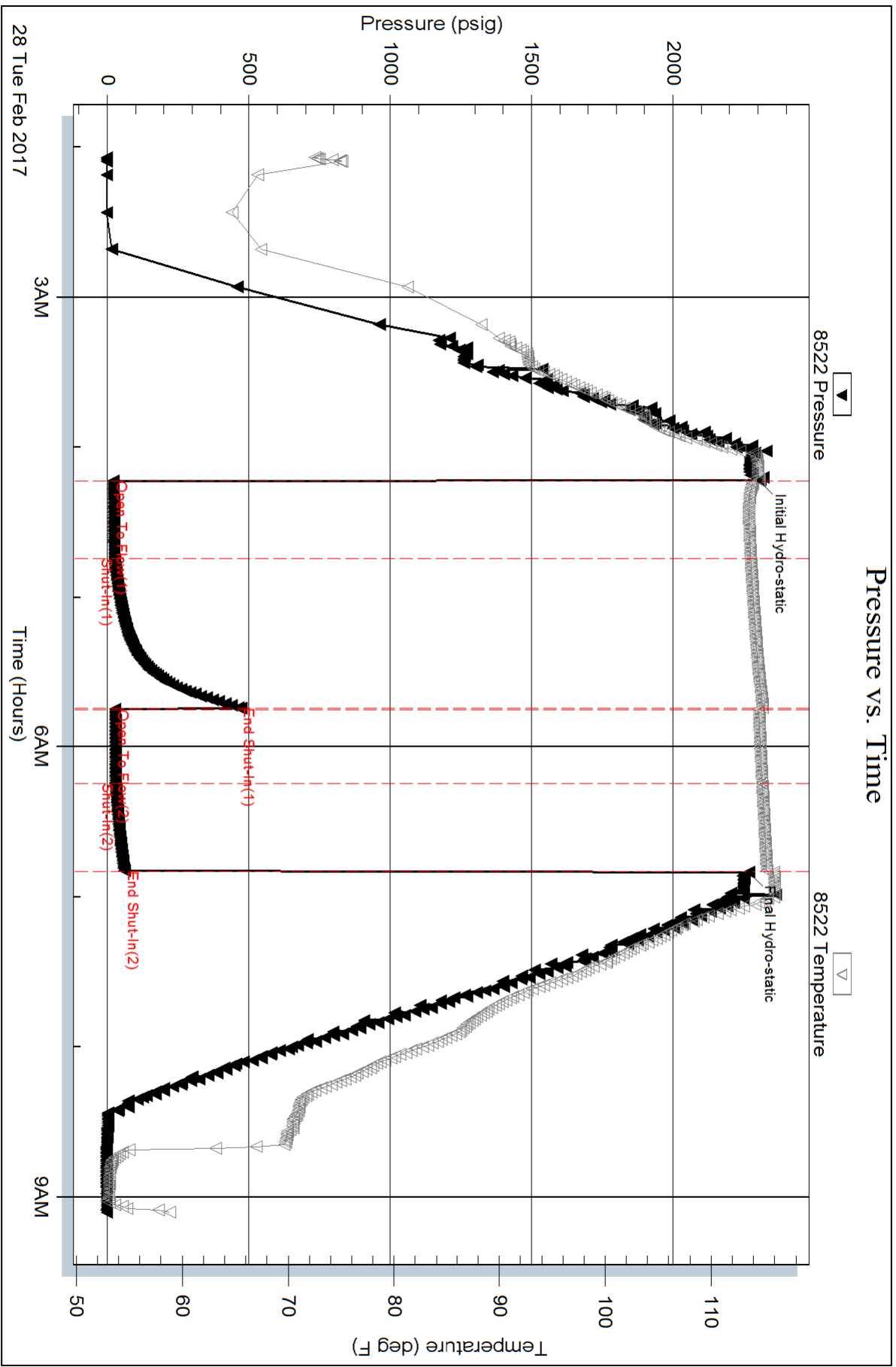
Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.60 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5200.00 ppm			
Filter Cake: 2.00 inches			

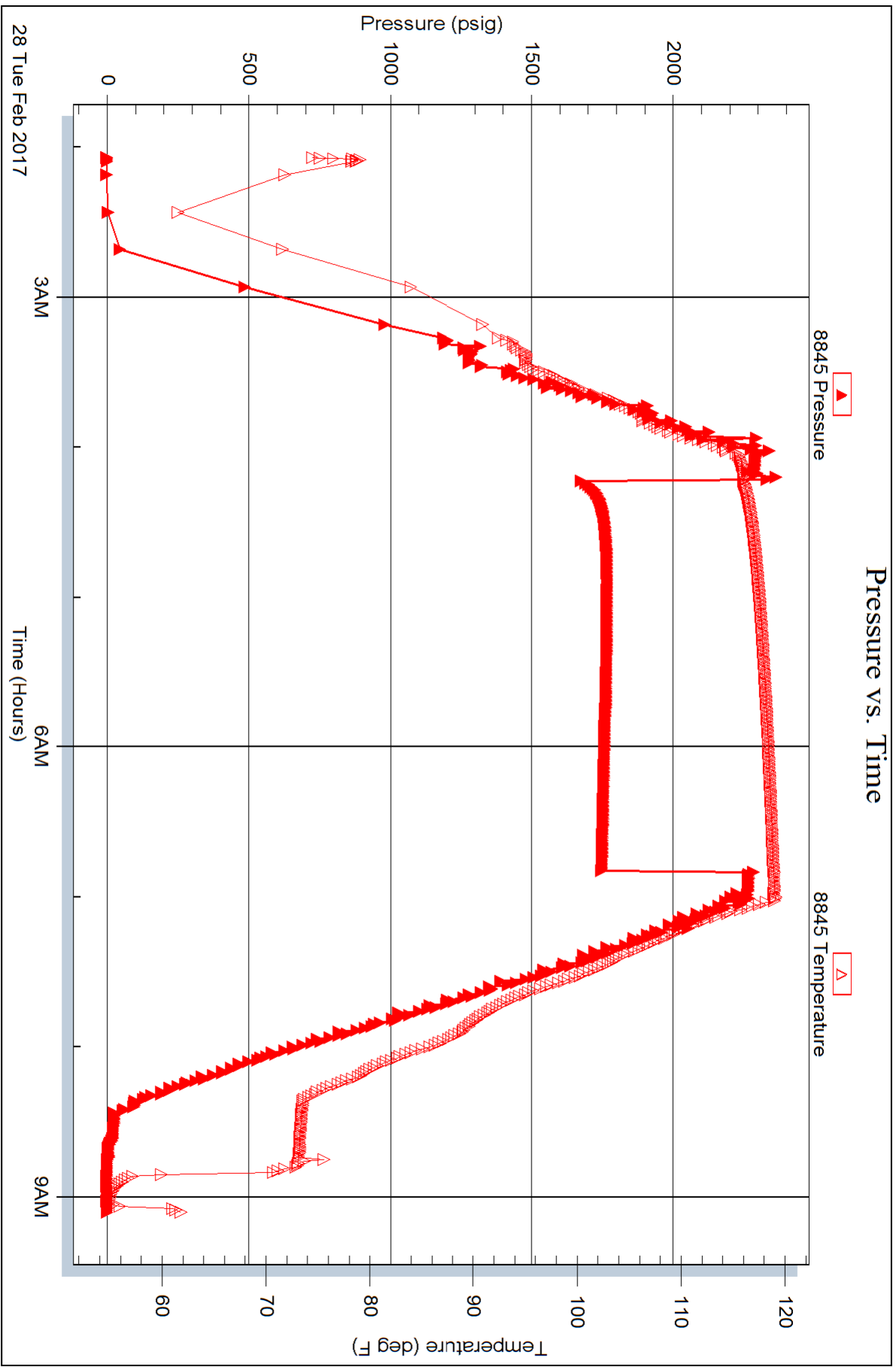
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud 100m (oil spots in tool)	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





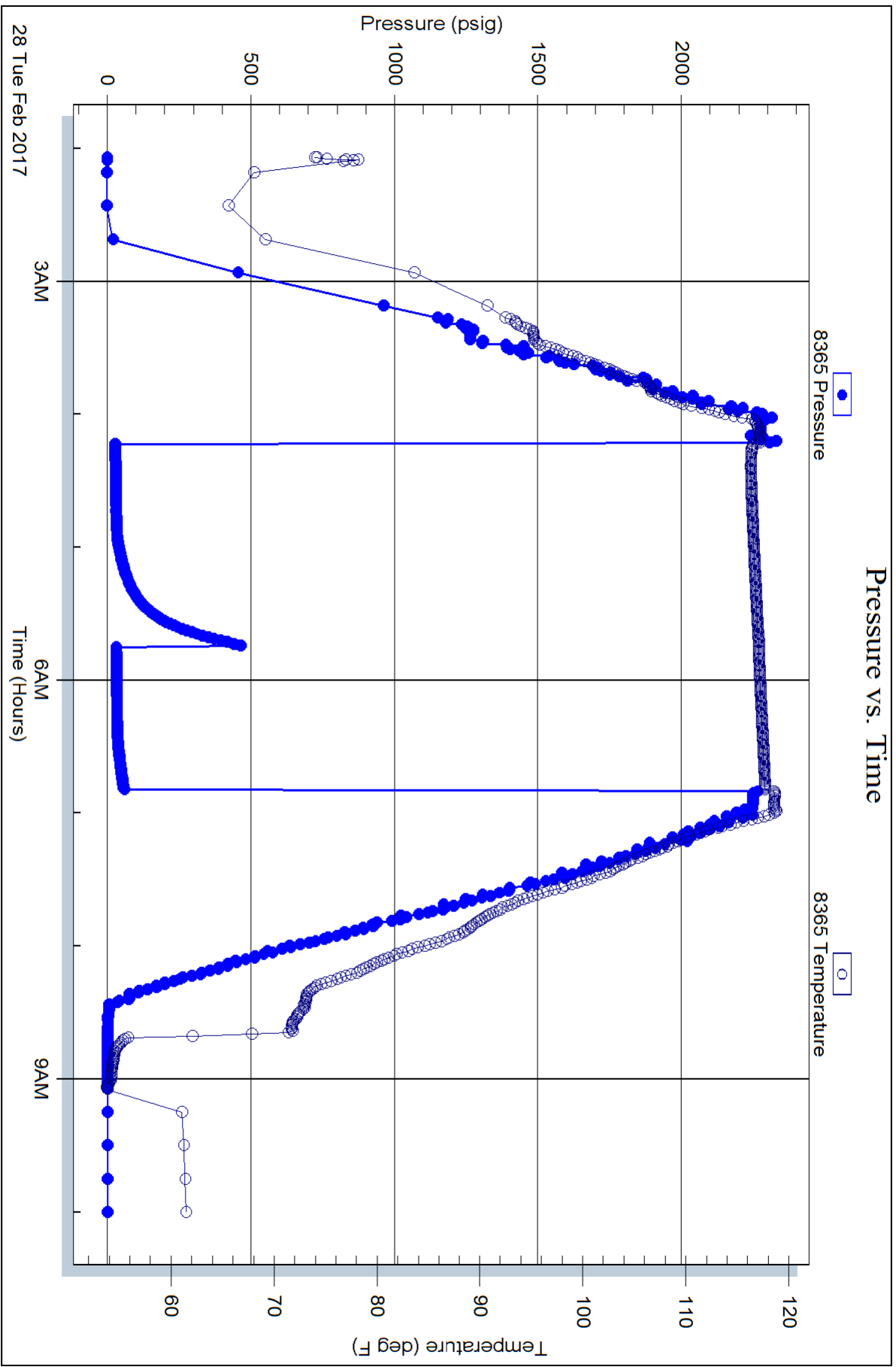
Serial #: 8365

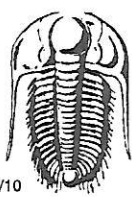
Inside

CMX inc

Coats Knob #1

DST Test Number: 4





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63564** 23538

Well Name & No. Coats Knob 1 Test No. 1 Date 02/22/17
 Company CMX inc Elevation 1945 KB 1937 GL
 Address 1700 N. Waterfront Pkwy Bldg 300B Wichita, KS 67206
 Co. Rep / Geo. Ken LeBlanc Rig Duke 2
 Location: Sec. 25 Twp. 29S Rge. 14W Co. Pratt State KS

Interval Tested 3598 - 3642 Zone Tested Topeka
 Anchor Length 44 Drill Pipe Run 3601 Mud Wt. 9.3
 Top Packer Depth 3593 Drill Collars Run 00 Vis 56
 Bottom Packer Depth 3598 Wt. Pipe Run 0 WL 9.6
 Total Depth 3642 Chlorides 7200 ppm System LCM

Blow Description IE: Fair Blow, Built to 9 inches
ISF: NO BLOW BACK
FF: Fair Blow, Built to 7 1/2 inches
FSI: NO BLOW BACK

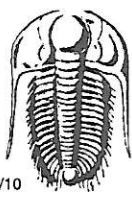
Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>Oil</u>				
<u>73</u>	<u>GMCW</u>	<u>2</u>		<u>70</u>	<u>28</u>
<u>126</u>	<u>Water</u>				

Rec Total 200 BHT 106 Gravity N/C API RW .2 @ 42 °F Chlorides 64000 ppm

(A) Initial Hydrostatic <u>1851</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>20:00</u>
(B) First Initial Flow <u>20</u>	<input type="checkbox"/> Jars	T-Started <u>21:15</u>
(C) First Final Flow <u>77</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>23:23</u>
(D) Initial Shut-In <u>1242</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>02:28</u>
(E) Second Initial Flow <u>79</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>04:18</u>
(F) Second Final Flow <u>126</u>	<input checked="" type="checkbox"/> Mileage <u>(40)</u> <u>30</u>	Comments
(G) Final Shut-In <u>1235</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1831</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1155</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1155</u>	

Approved By Ken LeBlanc Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63565**

Well Name & No. Coats Knob 1 Test No. 2 Date 02/24/17
 Company CMX IAC Elevation 1945 KB 1937 GL
 Address 1700 N. Waterfront Pkwy Bldg 300 B Wichita, KS 67206
 Co. Rep / Geo. Ken LeBlanc Rig Duke 2
 Location: Sec. 25 Twp. 29S Rge. 14W Co. Pratt State KS

Interval Tested 4116 - 4140 Zone Tested Lansing "G"
 Anchor Length 24 Drill Pipe Run 4102 Mud Wt. 9.3
 Top Packer Depth 4111 Drill Collars Run 0 Vis 68
 Bottom Packer Depth 4116 Wt. Pipe Run 0 WL 10.0
 Total Depth 4140 Chlorides 8000 ppm System LCM

Blow Description IF: Strong Blow, BOB in 2 minutes, Died off to 7 inches
FSI: No Blow Back
FF: Fair Blow, BOB in 18 minutes
FSI: NO BLOW BACK

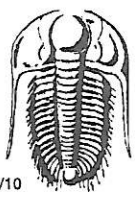
Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>GIP</u>				
<u>60</u>	<u>OMCW</u>		<u>10</u>	<u>60</u>	<u>30</u>
<u>315</u>	<u>water</u>				

Rec Total 375 BHT 117 Gravity NIC API RW .18 @ 40 ° F Chlorides 75000 ppm

(A) Initial Hydrostatic <u>2117</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>13:00</u>
(B) First Initial Flow <u>43</u>	<input type="checkbox"/> Jars	T-Started <u>13:59</u>
(C) First Final Flow <u>132</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>15:39</u>
(D) Initial Shut-In <u>1437</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>18:41</u>
(E) Second Initial Flow <u>139</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>20:40</u>
(F) Second Final Flow <u>231</u>	<input checked="" type="checkbox"/> Mileage <u>40</u> <u>30</u>	Comments
(G) Final Shut-In <u>1431</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2064</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1255</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1255</u>	

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63566**

Well Name & No. Coats Knob 1 Test No. 3 Date 02/25/17
 Company CMX inc Elevation 1945 KB 1937 GL
 Address 1700 N. Waterfront Pkwy Bldg 300B Wichita, KS 67206
 Co. Rep/Geo. Ken LeBlanc Rig Duke 2
 Location: Sec. 25 Twp. 29S Rge. 14W Co. Pratt State KS

Interval Tested 4146 - 4160 Zone Tested Lansing "H"
 Anchor Length 14 Drill Pipe Run 4133 Mud Wt. 9.4
 Top Packer Depth 4141 Drill Collars Run 0 Vis 59
 Bottom Packer Depth 4146 Wt. Pipe Run 0 WL 8.4
 Total Depth 4160 Chlorides 6100 ppm System LCM

Blow Description IF: strong Blow, BOB in 2 minutes
ISF: NO Blow Back
FF: Fair Blow, Built to 7 inches

FSE: NO Blow Back

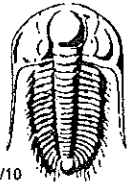
Rec	Feet of	%gas	%oil	%water	%mud
<u>180</u>	<u>GIP</u>				
<u>65</u>	<u>GO MCW</u>	<u>10</u>	<u>5</u>	<u>50</u>	<u>35</u>

Rec Total 65 BHT 110 Gravity N/C API RW .21 @ 43 ° F Chlorides 59000 ppm

(A) Initial Hydrostatic <u>2137</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>04:30</u>
(B) First Initial Flow <u>22</u>	<input type="checkbox"/> Jars	T-Started <u>05:32</u>
(C) First Final Flow <u>33</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>07:52</u>
(D) Initial Shut-In <u>1418</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>10:53</u>
(E) Second Initial Flow <u>34</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>12:39</u>
(F) Second Final Flow <u>45</u>	<input checked="" type="checkbox"/> Mileage <u>400</u> <u>60</u>	Comments <u>Loaded Tools @</u>
(G) Final Shut-In <u>1413</u>	<input type="checkbox"/> Sampler	<u>00:15 on 02/27</u>
(H) Final Hydrostatic <u>2089</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1285</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1285</u>	

Approved By [Signature] Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61323

Well Name & No. Coats Knob #1 Test No. 4 Date 2/28/2017
 Company CMX, Inc Elevation 1945 KB 1937 GL
 Address 1700 N Waterfront Pkwy Bldg 300 B Wichita, Ks 67206
 Co. Rep / Geo. Ken Leblant Rig Duke #2
 Location: Sec. 25 Twp. 29 S Rge. 14 W Co. Pratt State Ks

Interval Tested 4350 - 4565 Zone Tested Simpson Sand
 Anchor Length 35 / 117 tail Drill Pipe Run 4540 Mud Wt. 9.1
 Top Packer Depth 4345 Drill Collars Run 0 Vis 60
 Bottom Packer Depth 4350 / 4565 strat Wt. Pipe Run 0 WL 7.6
 Total Depth 4682 Chlorides 5200 ppm System LCM 2#
 Blow Description IF 1/2" blow died @ 10 min.
TSI No return.
PF No blow
FSI No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>Mud</u>			<u>100</u>	
	<u>oil spots in tool</u>				

Rec Total 20 BHT 115 Gravity — API RW — @ —°F Chlorides — ppm

(A) Initial Hydrostatic <u>2304</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0115</u>
(B) First Initial Flow <u>21</u>	<input checked="" type="checkbox"/> Test <u>No</u>	T-Started <u>0204</u>
(C) First Final Flow <u>25</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0415</u>
(D) Initial Shut-In <u>472</u>	<input checked="" type="checkbox"/> Circ Sub <u>11c</u>	T-Pulled <u>0645</u>
(E) Second Initial Flow <u>28</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0907</u>
(F) Second Final Flow <u>30</u>	<input checked="" type="checkbox"/> Mileage <u>30</u>	Comments
(G) Final Shut-In <u>63</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2268</u>	<input checked="" type="checkbox"/> Straddle <u>600</u>	<input type="checkbox"/> Ruined Shale Packer
	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>2105</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>2105</u>	

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