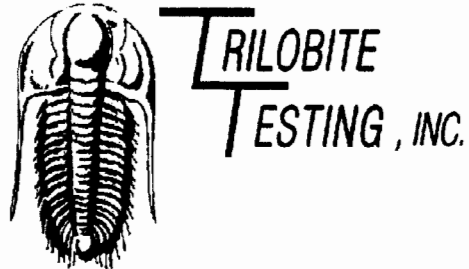


15-195-22563



DRILL STEM TEST REPORT

Prepared For: **Crawford Oil & Gas Co LLC**

PO Box 1366
El Dorado KS 67042

ATTN: Larry Crawford

1 15 22 Trego KS

Schmidt West # 1-1

Start Date: 2008.07.12 @ 16:06:13

End Date: 2008.07.12 @ 23:32:13

Job Ticket #: 32490 DST #: 1

RECEIVED
KANSAS CORPORATION COMMISSION

JUL 30 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

Crawford Oil & Gas Co LLC

PO Box 1366
El Dorado KS 67042

ATTN: Larry Crawford

Schmidt West # 1-1

1 15 22 Trego KS

Job Ticket: 32490

DST#: 1

Test Start: 2008.07.12 @ 16:06:13

GENERAL INFORMATION:

Formation: **Cherokee B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:19:43

Time Test Ended: 23:32:13

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: **3947.00 ft (KB) To 4026.00 ft (KB) (TVD)**

Total Depth: 4026.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2143.00 ft (KB)

2138.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8372 Inside

Press@RunDepth: 225.77 psig @ 4012.00 ft (KB)

Start Date: 2008.07.12

End Date: 2008.07.12

Start Time: 16:06:14

End Time: 23:32:13

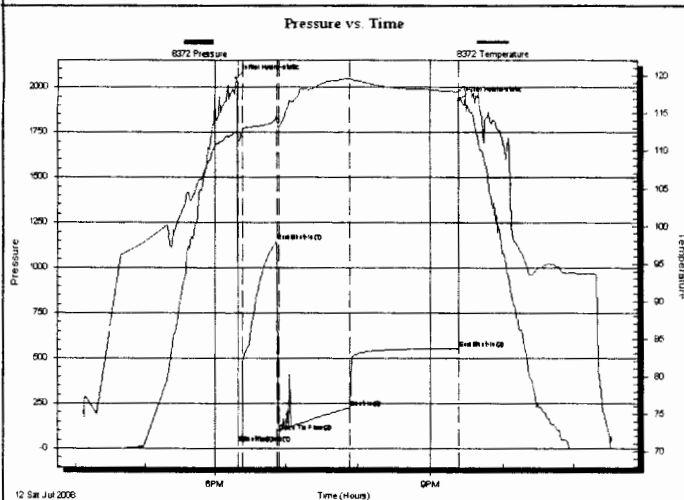
Capacity: 7000.00 psig

Last Calib.: 2008.07.12

Time On Btm: 2008.07.12 @ 18:18:13

Time Off Btm: 2008.07.12 @ 21:23:13

TEST COMMENT: IF Weak building to 3 "
FF Strong BB in 18 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2049.88	112.45	Initial Hydro-static
2	28.42	111.15	Open To Flow (1)
6	72.15	112.67	Shut-In (1)
35	1142.27	114.52	End Shut-In (1)
37	93.21	113.11	Open To Flow (2)
96	225.77	119.60	Shut-In (2)
185	554.50	117.91	End Shut-In (2)
185	1925.65	118.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
495.00	MWw/show Oon top	5.82

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Crawford Oil & Gas Co LLC

Schmidt West # 1-1

PO Box 1366
El Dorado KS 67042

1 15 22 Trego KS

Job Ticket: 32490

DST#: 1

ATTN: Larry Crawford

Test Start: 2008.07.12 @ 16:06:13

Tool Information

Drill Pipe:	Length: 3808.00 ft	Diameter: 3.80 inches	Volume: 53.42 bbl	Tool Weight:	2000.00 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: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	70000.00 lb
			Total Volume: 54.02 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3947.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	79.00 ft				
Tool Length:	108.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					
Some plugging					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3919.00	
Shut In Tool	5.00			3924.00	
Hydraulic tool	5.00			3929.00	
Jars	5.00			3934.00	
Safety Joint	3.00			3937.00	
Packer	5.00			3942.00	29.00 Bottom Of Top Packer
Packer	5.00			3947.00	
Stubb	1.00			3948.00	
Perforations	1.00			3949.00	
Drill Pipe	62.00			4011.00	
Change Over Sub	1.00			4012.00	
Recorder	0.00	8372	Inside	4012.00	
Recorder	0.00	8368	Outside	4012.00	
Perforations	11.00			4023.00	
Bullnose	3.00			4026.00	79.00 Bottom Packers & Anchor

Total Tool Length: 108.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Crawford Oil & Gas Co LLC

Schmidt West # 1-1

PO Box 1366
El Dorado KS 67042

1 15 22 Trego KS

Job Ticket: 32490

DST#: 1

ATTN: Larry Crawford

Test Start: 2008.07.12 @ 16:06:13

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 7.99 in³

Resistivity: ohm.m

Salinity: 2900.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

30000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
495.00	M/W/show Oon top	5.823

Total Length: 495.00 ft

Total Volume: 5.823 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .20 @ 80 = 30000ppm

DST Test Number: 1

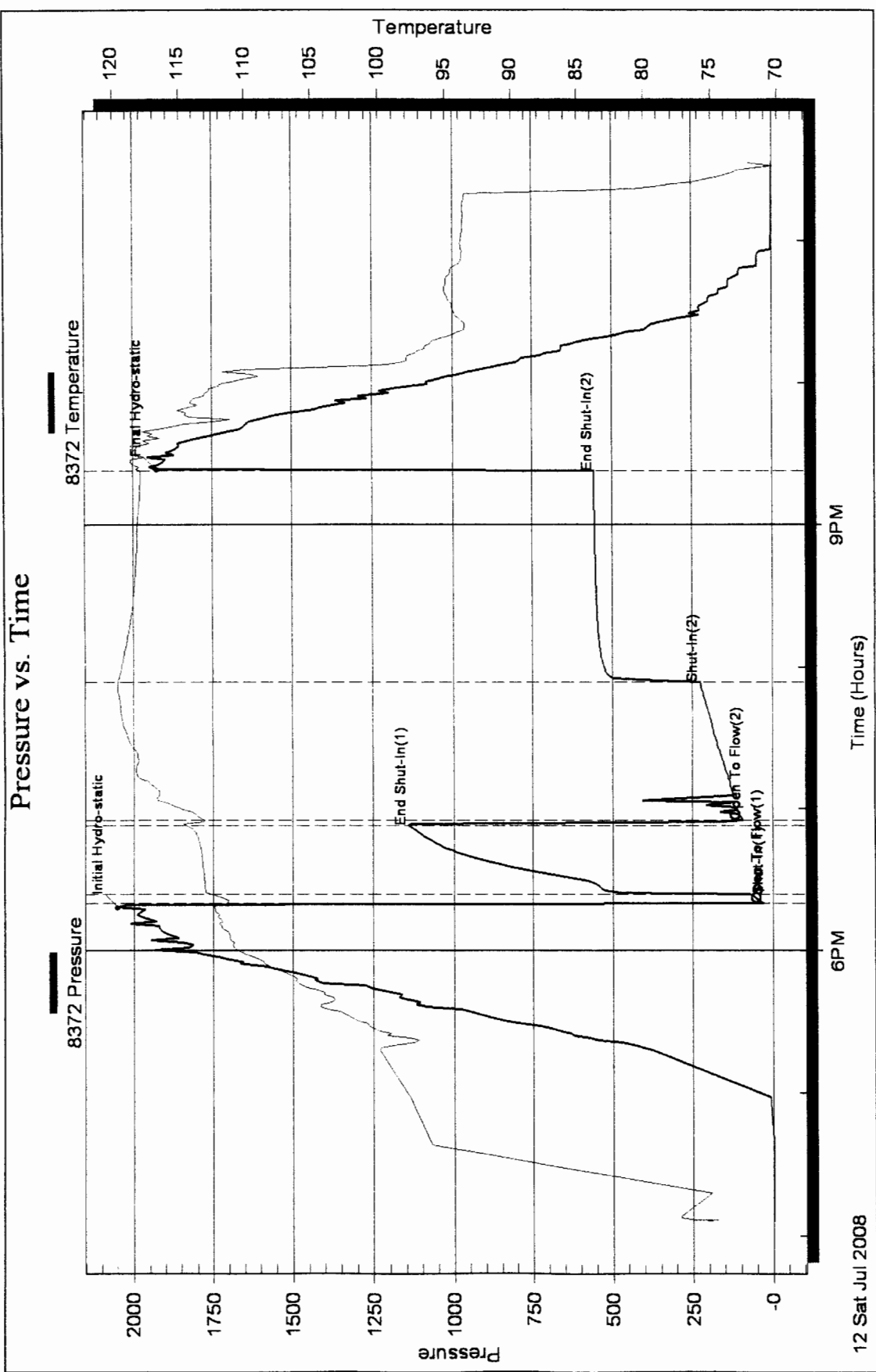
1 15 22 Trego KS

Crawford Oil & Gas Co LLC

Inside

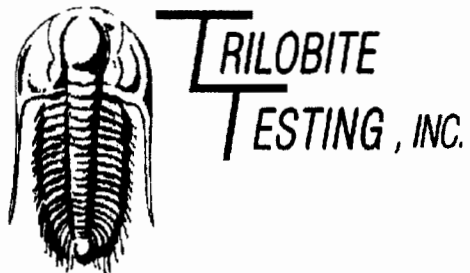
Serial #: 8372

Pressure vs. Time



Ref. No: 32490

Trilobite Testing, Inc



DRILL STEM TEST REPORT

Prepared For: **Crawford Oil & Gas Co LLC**

PO Box 1366
El Dorado KS 67042

ATTN: Larry Crawford

1 15 22 Trego KS

Schmidt West # 1-1

Start Date: 2008.07.13 @ 09:08:37

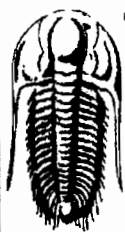
End Date: 2008.07.13 @ 13:58:07

Job Ticket #: 32491 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Crawford Oil & Gas Co LLC

Schmidt West # 1-1

PO Box 1366
El Dorado KS 67042

1 15 22 Trego KS

Job Ticket: 32491

DST#: 2

ATTN: Larry Crawford

Test Start: 2008.07.13 @ 09:08:37

GENERAL INFORMATION:

Formation: **Cher E/ Kutina**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:48:37

Time Test Ended: 13:58:07

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: **4036.00 ft (KB) To 4062.00 ft (KB) (TVD)**

Total Depth: 4062.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2143.00 ft (KB)

2138.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8372 Inside

Press@RunDepth: 29.62 psig @ 4037.00 ft (KB)

Start Date: 2008.07.13

End Date:

2008.07.13

Start Time: 09:08:38

End Time:

13:58:07

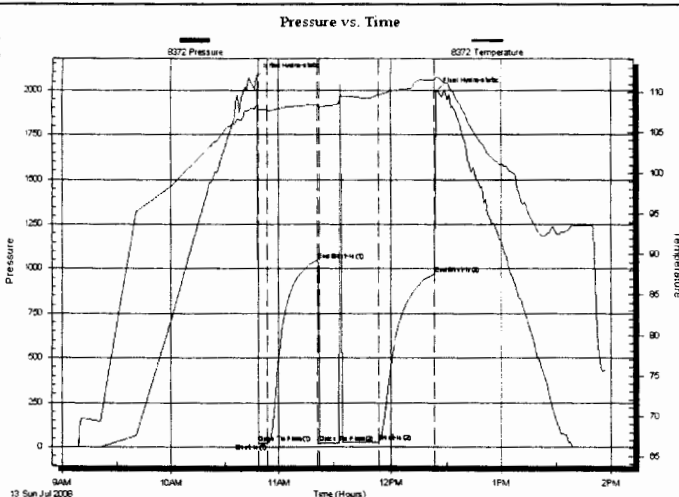
Capacity: 7000.00 psig

Last Calib.: 2008.07.13

Time On Btm: 2008.07.13 @ 10:48:07

Time Off Btm: 2008.07.13 @ 12:24:37

TEST COMMENT: IF Weak steady surface blow
FF No blow flushed tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2075.83	108.39	Initial Hydro-static
1	19.44	107.82	Open To Flow (1)
6	19.75	107.78	Shut-In(1)
33	1047.97	108.51	End Shut-In(1)
34	21.18	108.10	Open To Flow (2)
66	29.62	109.65	Shut-In(2)
96	972.45	111.55	End Shut-In(2)
97	1993.92	111.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	DM	0.05

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Crawford Oil & Gas Co LLC

Schmidt West # 1-1

PO Box 1366
El Dorado KS 67042

1 15 22 Trego KS

Job Ticket: 32491

DST#: 2

ATTN: Larry Crawford

Test Start: 2008.07.13 @ 09:08:37

Tool Information

Drill Pipe:	Length: 3902.00 ft	Diameter: 3.80 inches	Volume: 54.73 bbl	Tool Weight:	2000.00 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: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	60000.00 lb
		Total Volume:	55.33 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	4036.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	26.00 ft				
Tool Length:	55.00 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			4008.00	
Shut In Tool	5.00			4013.00	
Hydraulic tool	5.00			4018.00	
Jars	5.00			4023.00	
Safety Joint	3.00			4026.00	
Packer	5.00			4031.00	29.00 Bottom Of Top Packer
Packer	5.00			4036.00	
Stubb	1.00			4037.00	
Recorder	0.00	8372	Inside	4037.00	
Recorder	0.00	8368	Outside	4037.00	
Perforations	22.00			4059.00	
Bullnose	3.00			4062.00	26.00 Bottom Packers & Anchor

Total Tool Length: 55.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Crawford Oil & Gas Co LLC

Schmidt West # 1-1

PO Box 1366
El Dorado KS 67042

1 15 22 Trego KS

Job Ticket: 32491

DST#: 2

ATTN: Larry Crawford

Test Start: 2008.07.13 @ 09:08:37

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: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	DM	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

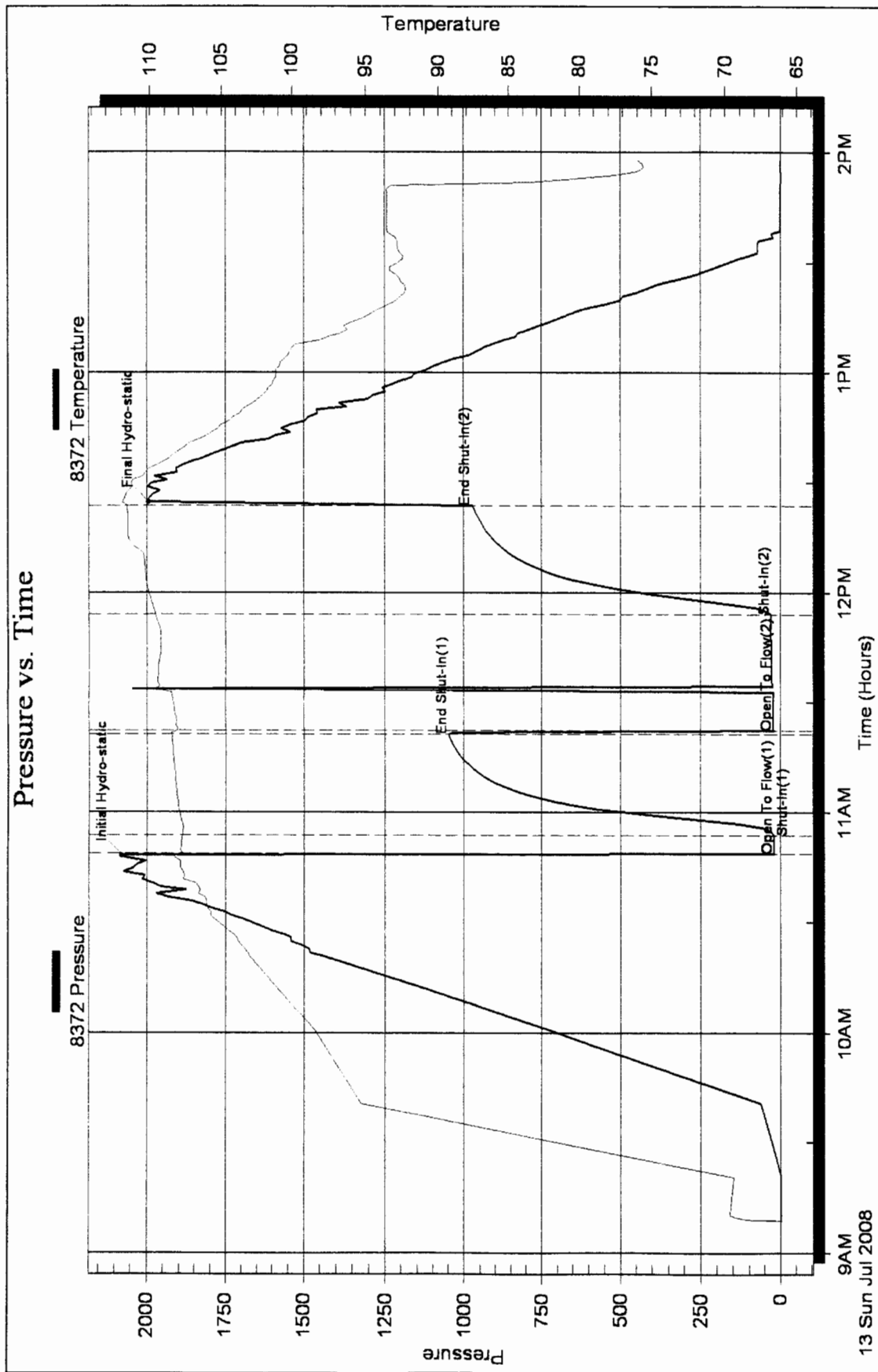
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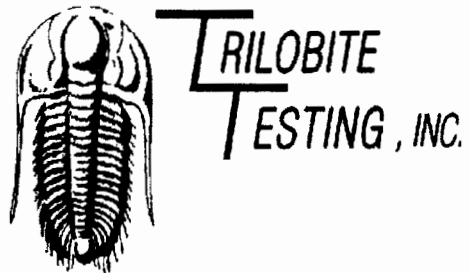
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Crawford Oil & Gas Co LLC**

PO Box 1366
El Dorado KS 67042

ATTN: Larry Crawford

1 15 22 Trego KS

Schmidt West # 1-1

Start Date: 2008.07.13 @ 20:23:22

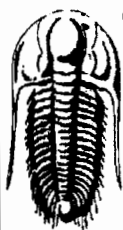
End Date: 2008.07.14 @ 00:56:22

Job Ticket #: 32492 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Crawford Oil & Gas Co LLC

PO Box 1366
El Dorado KS 67042

ATTN: Larry Crawford

Schmidt West # 1-1

1 15 22 Trego KS

Job Ticket: 32492

DST#: 3

Test Start: 2008.07.13 @ 20:23:22

GENERAL INFORMATION:

Formation: **Kutina**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:27:52

Time Test Ended: 00:56:22

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: **4036.00 ft (KB) To 4080.00 ft (KB) (TVD)**

Total Depth: 4080.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2143.00 ft (KB)

2138.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8372 Inside

Press@RunDepth: psig @ 4073.00 ft (KB)

Start Date: 2008.07.13

End Date:

2008.07.14

Start Time: 20:23:23

End Time:

00:56:22

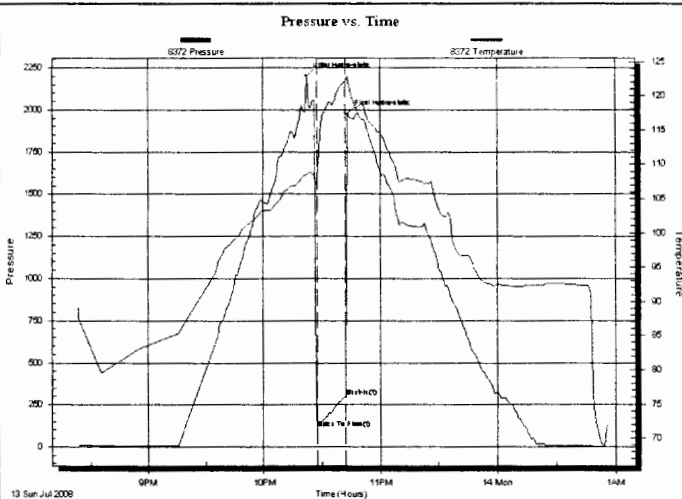
Capacity: 7000.00 psig

Last Calib.: 2008.07.14

Time On Btm: 2008.07.13 @ 22:22:22

Time Off Btm: 2008.07.13 @ 22:43:22

TEST COMMENT: IF Strong BB in 3 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2200.64	108.50	Initial Hydro-static
6	108.36	107.80	Open To Flow (1)
20	299.57	122.05	Shut-In(1)
21	1974.94	122.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
620.00	MW	7.58

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Crawford Oil & Gas Co LLC

Schmidt West # 1-1

PO Box 1366
El Dorado KS 67042

1 15 22 Trego KS

Job Ticket: 32492

DST#: 3

ATTN: Larry Crawford

Test Start: 2008.07.13 @ 20:23:22

Tool Information

Drill Pipe:	Length: 3902.00 ft	Diameter: 3.80 inches	Volume: 54.73 bbl	Tool Weight:	2000.00 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: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	90000.00 lb
		Total Volume:	55.33 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	4036.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	44.00 ft				
Tool Length:	73.00 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			4008.00	
Shut In Tool	5.00			4013.00	
Hydraulic tool	5.00			4018.00	
Jars	5.00			4023.00	
Safety Joint	3.00			4026.00	
Packer	5.00			4031.00	29.00 Bottom Of Top Packer
Packer	5.00			4036.00	
Stubb	1.00			4037.00	
Perforations	5.00			4042.00	
Drill Pipe	31.00			4073.00	
Recorder	0.00	8372	Inside	4073.00	
Recorder	0.00	8368	Outside	4073.00	
Perforations	4.00			4077.00	
Bullnose	3.00			4080.00	44.00 Bottom Packers & Anchor

Total Tool Length: 73.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Crawford Oil & Gas Co LLC

Schmidt West # 1-1

PO Box 1366
El Dorado KS 67042

1 15 22 Trego KS

Job Ticket: 32492

DST#: 3

ATTN: Larry Crawford

Test Start: 2008.07.13 @ 20:23:22

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:

25000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
620.00	MW	7.576

Total Length: 620.00 ft

Total Volume: 7.576 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .23 @ 80 = 25000ppm

Pressure vs. Time

