

DRILL STEM TEST REPORT

Prepared For: **Crawford Oil CO**

PO Box 1366
Eldorado KS 67042

ATTN: Larry Crawford

5 15S 21W Trego KS

Schuster #1-5

Start Date: 2007.02.17 @ 09:43:37

End Date: 2007.02.17 @ 15:51:31

Job Ticket #: 28210 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

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Job Ticket: 28210

DST#: 1

Test Start: 2007.02.17 @ 09:43:37

GENERAL INFORMATION:

Formation: **Cher Sd "B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:24:02

Time Test Ended: 15:51:31

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 28

Interval: **3954.00 ft (KB) To 3969.00 ft (KB) (TVD)**

Total Depth: 3969.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2121.00 ft (KB)

2116.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6753

Inside

Press@RunDepth: 383.15 psig @ 3955.01 ft (KB)

Start Date: 2007.02.17

End Date:

2007.02.17

Capacity: 7000.00 psig

Last Calib.: 2007.02.17

Start Time: 09:43:37

End Time:

15:51:31

Time On Btm: 2007.02.17 @ 11:23:32

Time Off Btm: 2007.02.17 @ 13:29:32

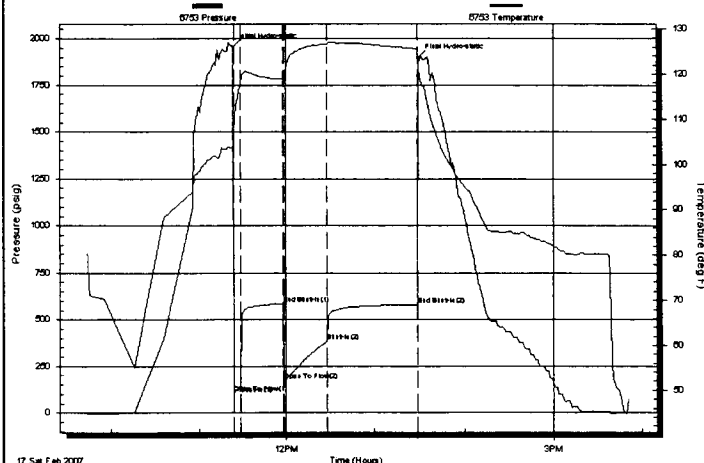
TEST COMMENT: IFP Strg bl in 1 min 30 sec

FFP Strg bl thru-out Times 5 30 30 60

ISIP Strg bl bk in 10 min

FSIP Strg bl bk in 7min

Pressure vs. Time



17 Sat Feb 2007

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1955.02	103.55	Initial Hydro-static
1	107.14	101.46	Open To Flow (1)
5	145.50	117.90	Shut-In (1)
35	584.84	118.80	End Shut-In (1)
35	170.75	117.97	Open To Flow (2)
65	383.15	126.67	Shut-In (2)
126	581.43	125.59	End Shut-In (2)
126	1899.07	121.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MGO 15%G 12%M 73%O	0.59
60.00	MGO 30%G 7%M 63%O	0.84
825.00	CO	11.57
0.00	855' GIP	0.00

Gas Rates

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

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TOOL DIAGRAM

Crawford Oil CO

PO Box 1366
Edorado KS 67042

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Schuster #1-5

5 15S 21W Trego KS

Job Ticket: 28210

DST#: 1

Test Start: 2007.02.17 @ 09:43:37

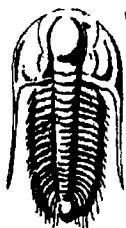
Tool Information

Drill Pipe:	Length: 3816.00 ft	Diameter: 3.80 inches	Volume: 53.53 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:	25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	55000.00 lb
		Total Volume:	54.12 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	3954.00 ft			Final	49000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	15.02 ft				
Tool Length:	43.02 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			3927.00	
Shut In Tool	5.00			3932.00	
Hydraulic tool	5.00			3937.00	
Jars	5.00			3942.00	
Safety Joint	2.00			3944.00	
Packer	5.00			3949.00	28.00 Bottom Of Top Packer
Packer	5.00			3954.00	
Stubb	1.00			3955.00	
Recorder	0.01	6753	Inside	3955.01	
Perforations	11.00			3966.01	
Recorder	0.01	13534	Outside	3966.02	
Bullnose	3.00			3969.02	15.02 Bottom Packers & Anchor

Total Tool Length: 43.02



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FLUID SUMMARY

Crawford Oil CO

Schuster #1-5

PO Box 1366
Eldorado KS 67042

5 15S 21W Trego KS

Job Ticket: 28210

DST#: 1

ATTN: Larry Crawford

Test Start: 2007.02.17 @ 09:43:37

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	MGO 15%G 12%M 73%O	0.590
60.00	MGO 30%G 7%M 63%O	0.842
825.00	CO	11.573
0.00	855' GIP	0.000

Total Length: 1005.00 ft

Total Volume: 13.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6753

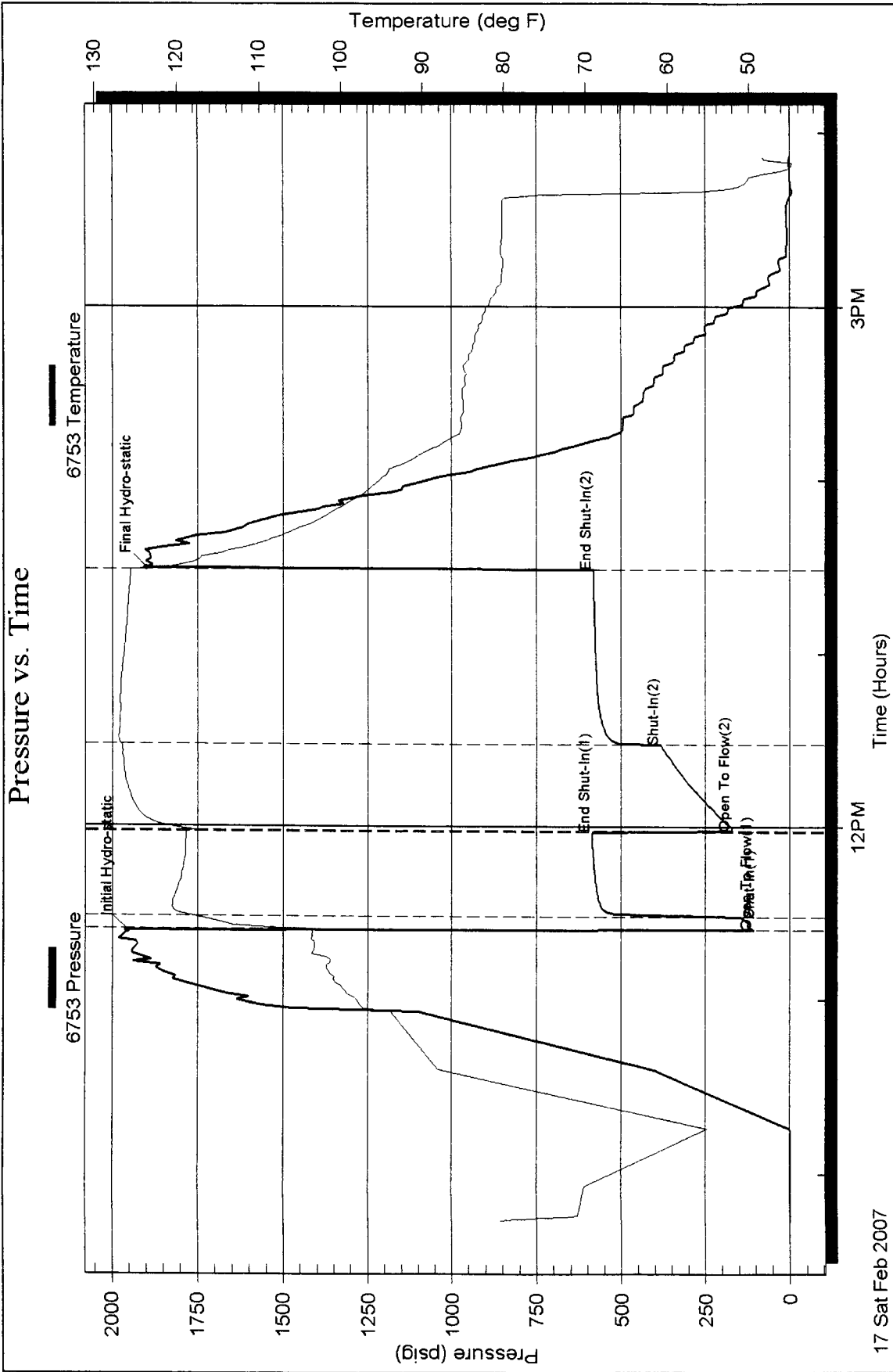
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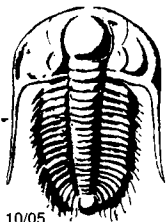
Crawford Oil Co

5 15S 21W Trego KS

DST Test Number: 1

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

28210

9864

Test Ticket

Well Name & No. <u>Schuster #1-5</u>	Test No. <u>1</u>	Date <u>2-17-07</u>
Company <u>Crawford Oil Company</u>	Zone Tested <u>Cher SD "B"</u>	
Address <u>P.O. Box 1366 Eldorado, Ks 67042</u>	Elevation <u>2121</u> KB <u>2116</u> GL	
Co. Rep / Geo. <u>Bob Peterson</u>	Rig <u>WW rig 6</u>	
Location: Sec. <u>5</u> Twp. <u>15^s</u> Rge. <u>21^w</u>	Co. <u>7090</u>	State <u>Ks</u>
Comment: _____		Release date / time: _____

Interval Tested <u>3954-3969</u>	Initial Str Wt./Lbs. <u>45000</u>	Unseated Str Wt/Lbs. <u>49000</u>
Anchor Length <u>15</u>	Wt. Set Lbs. <u>25600</u>	Wt. Pulled Loose/Lbs. <u>55000</u>
Top Packer Depth <u>3949</u>	Tool Weight <u>2200</u>	
Bottom Packer Depth <u>3954</u>	Hole Size <u>7 7/8"</u>	Rubber Size <u>6 3/4"</u>
Total Depth <u>3969</u>	Wt. Pipe Run _____	Drill Collar Run <u>120</u>
Mud Wt. <u>9.1</u> LCM <u>2#</u> Vis. <u>59</u> WL <u>8</u>	Drill Pipe Size <u>4 1/2 FH</u>	Ft. Run <u>3816</u>
Blow Description <u>IFP - STRONG BLOW IN 1 min 30 sec</u>		
<u>FFP - STRONG Blow Thru-out</u>		
<u>ISIP - STRONG Blow BACK IN 10 min</u>		
<u>FSIP - STRONG Blow BACK IN 7 min</u>		

Recovery - Total Feet <u>1005</u>	GIP <u>855</u>	Ft. in DC <u>120</u>	Ft. in DP <u>885</u>
Rec. <u>825</u>	Feet of <u>CO</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. <u>60</u>	Feet of <u>MGO</u>	<u>30</u> %gas <u>63</u> %oil _____ %water <u>7</u> %mud _____	
Rec. <u>120</u>	Feet of <u>MGO</u>	<u>15</u> %gas <u>23</u> %oil _____ %water <u>12</u> %mud _____	
Rec. _____	Feet of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____	Feet of _____	%gas _____ %oil _____ %water _____ %mud _____	
BHT <u>125</u> °F Gravity <u>40</u>	*API D @ <u>60</u>	*F Corrected Gravity <u>40</u>	*API _____
RW _____ @ _____ °F	Chlorides _____ ppm Recovery _____	Chlorides <u>4800</u> ppm System	

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>1925</u>	PSI	Recorder No.	<u>6753</u>	Test ☒
(B) First Initial Flow Pressure	<u>107</u>	PSI	(depth)	<u>3955</u>	Jars ☒
(C) First Final Flow Pressure	<u>145</u>	PSI	Recorder No.	<u>13534</u>	Safety Jt. ☒
(D) Initial Shut-In Pressure	<u>585</u>	PSI	(depth)	<u>3966</u>	Circ Sub _____
(E) Second Initial Flow Pressure	<u>171</u>	PSI	Recorder No.	<u> </u>	Sampler _____
(F) Second Final Flow Pressure	<u>383</u>	PSI	(depth)	<u> </u>	Straddle _____
(G) Final Shut-In Pressure	<u>581</u>	PSI	Initial Opening	<u>5</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>1883</u>	PSI	Initial Shut-In	<u>30</u>	Shale Packer _____
			Final Flow	<u>30</u>	Ruined Packer _____
			Final Shut-In	<u>60</u>	Mileage ☒ <u>70 RT</u>
			T-On Location	<u>0915</u>	Sub Total: <u>5</u>
			T-Started	<u>0943</u>	Std. By _____
			T-Open	<u>1125</u>	Acc. Chg: _____
			T-Pulled	<u>1330</u>	Other: _____
			T-Out	<u>1551</u>	Total: _____

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Approved By [Signature]

Our Representative RAY Schwager Thank you

CHART PAGE

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

