

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Crawford Oil**

PO Box 1366
El Dorado KS 67042

ATTN: Bob Peterson

31 14 21W Trego KS

CBCF #4-31

Start Date: 2007.10.18 @ 06:37:56

End Date: 2007.10.18 @ 11:57:26

Job Ticket #: 30070 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Crawford Oil

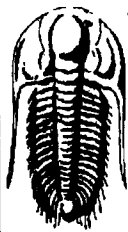
CBCF #4-31

31 14 21W Trego KS

DST # 1

Char B

2007.10.18



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Crawford Oil
 PO Box 1366
 El Dorado KS 67042
 ATTN: Bob Peterson

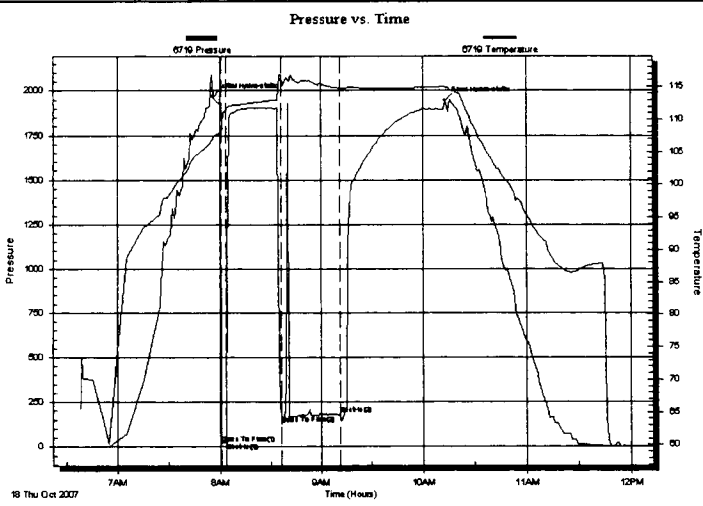
CBCF #4-31
31 14 21W Trego KS
 Job Ticket: 30070 **DST#: 1**
 Test Start: 2007.10.18 @ 06:37:56

GENERAL INFORMATION:

Formation: **Cher B**
 Deviated: **No Whipstock** ft (KB)
 Time Tool Opened: 08:00:56
 Time Test Ended: 11:57:26
 Interval: **3908.00 ft (KB) To 3917.00 ft (KB) (TVD)**
 Total Depth: **3917.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good**
 Test Type: **Conventional Bottom Hole**
 Tester: **Kyle Kinderknecht**
 Unit No: **32**
 Reference Elevations: **2067.00 ft (KB)**
2062.00 ft (CF)
 KB to GR/CF: **5.00 ft**

Serial #: 6719 **Inside**
 Press@RunDepth: psig @ **3909.00 ft (KB)** Capacity: **7000.00 psig**
 Start Date: **2007.10.18** End Date: **2007.10.18** Last Calib.: **2007.10.18**
 Start Time: **06:37:58** End Time: **11:57:26** Time On Btm: **2007.10.18 @ 07:55:56**
 Time Off Btm: **2007.10.18 @ 10:12:56**

TEST COMMENT: IF 1/2 "
 ISI No blow
 FF Packers gave reset w eak surface 15 min thru 20 min
 FSI No blow



PRESSURE SUMMARY

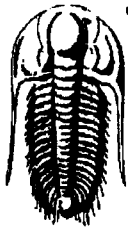
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1966.92	107.18	Initial Hydro-static
5	16.07	107.46	Open To Flow (1)
8	25.70	111.47	Shut-In(1)
40	127.13	116.82	Open To Flow(2)
75	178.18	114.77	Shut-In(2)
137	1942.64	114.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
280.00	M	2.81

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Crawford Oil
 PO Box 1366
 El Dorado KS 67042
 ATTN: Bob Peterson

CBCF #4-31
31 14 21W Trego KS
 Job Ticket: 30070 **DST#: 1**
 Test Start: 2007.10.18 @ 06:37:56

Tool Information

Drill Pipe:	Length: 3785.00 ft	Diameter: 3.82 inches	Volume: 53.65 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: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume:	54.26 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3908.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	37.00 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			3881.00	
Shut In Tool	5.00			3886.00	
Hydraulic tool	5.00			3891.00	
Jars	5.00			3896.00	
Safety Joint	2.00			3898.00	
Packer	5.00			3903.00	28.00 Bottom Of Top Packer
Packer	5.00			3908.00	
Stubb	1.00			3909.00	
Recorder	0.00	6719	Inside	3909.00	
Perforations	5.00			3914.00	
Recorder	0.00	13221	Outside	3914.00	
Bullnose	3.00			3917.00	9.00 Bottom Packers & Anchor

Total Tool Length: 37.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Crawford Oil

CBCF #4-31

PO Box 1366
El Dorado KS 67042

31 14 21W Trego KS

ATTN: Bob Peterson

Job Ticket: 30070

DST#: 1

Test Start: 2007.10.18 @ 06:37:56

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
280.00	M	2.812

Total Length: 280.00 ft

Total Volume: 2.812 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

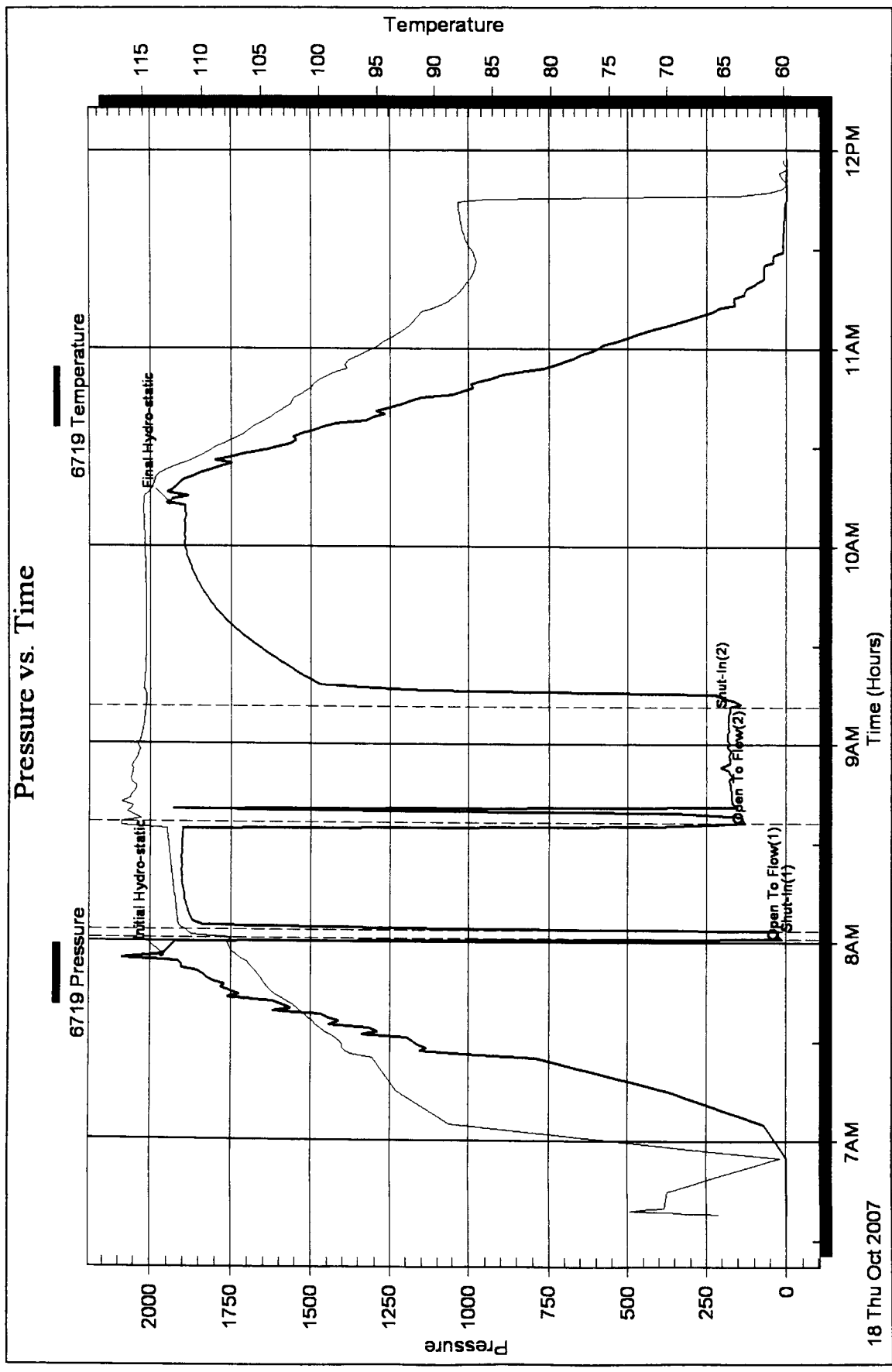
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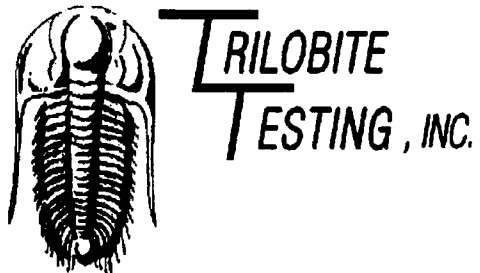
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Crawford Oil**

PO Box 1366
El Dorado KS 67042

ATTN: Bob Peterson

31 14 21W Trego KS

CBCF #4-31

Start Date: 2007.10.18 @ 13:28:51

End Date: 2007.10.18 @ 19:04:21

Job Ticket #: 30071 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Crawford Oil

CBCF #4-31

31 14 21W Trego KS

DST # 2

Cher B

2007.10.18



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Crawford Oil

CBCF #4-31

PO Box 1366
E Dorado KS 67042

31 14 21W Trego KS

ATTN: Bob Peterson

Job Ticket: 30071

DST#: 2

Test Start: 2007.10.18 @ 13:28:51

GENERAL INFORMATION:

Formation: **Cher B**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 14:49:51

Time Test Ended: 19:04:21

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 32

Interval: **3910.00 ft (KB) To 3917.00 ft (KB) (TVD)**

Total Depth: 3917.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2067.00 ft (KB)

2062.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6719

Inside

Press@RunDepth: 172.84 psig @ 3911.00 ft (KB)

Start Date: 2007.10.18

End Date:

2007.10.18

Start Time: 13:28:53

End Time:

19:04:21

Capacity: 7000.00 psig

Last Calib.: 2007.10.18

Time On Btm: 2007.10.18 @ 14:45:51

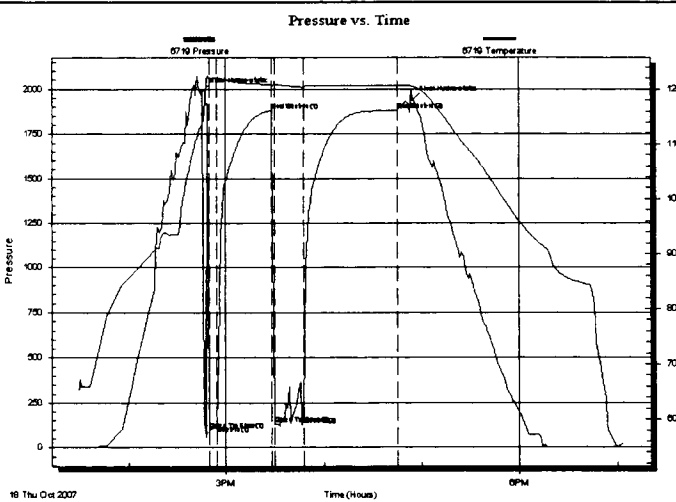
Time Off Btm: 2007.10.18 @ 16:54:51

TEST COMMENT: IF Opened tool packers gave bled off reset-1 1/2 "

ISI No blow

FF Weak surface died 8 min

FSI No blow



PRESSURE SUMMARY

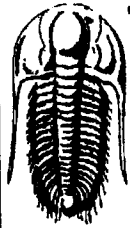
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1988.10	113.42	Initial Hydro-static
4	96.84	121.94	Open To Flow (1)
9	124.56	121.95	Shut-in(1)
43	1880.35	120.84	End Shut-in(1)
44	128.92	120.83	Open To Flow (2)
62	172.84	120.40	Shut-in(2)
120	1878.63	120.62	End Shut-in(2)
129	1937.36	120.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
	M	2.81

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Crawford Oil
PO Box 1366
El Dorado KS 67042

ATTN: Bob Peterson

CBCF #4-31
31 14 21W Trego KS
Job Ticket: 30071 **DST#: 2**
Test Start: 2007.10.18 @ 13:28:51

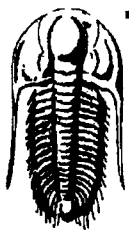
Tool Information

Drill Pipe:	Length: 3785.00 ft	Diameter: 3.82 inches	Volume: 53.65 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: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume:	54.26 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3910.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	7.00 ft			
Tool Length:	35.00 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			3883.00	
Shut In Tool	5.00			3888.00	
Hydraulic tool	5.00			3893.00	
Jars	5.00			3898.00	
Safety Joint	2.00			3900.00	
Packer	5.00			3905.00	28.00 Bottom Of Top Packer
Packer	5.00			3910.00	
Stubb	1.00			3911.00	
Recorder	0.00	6719	Inside	3911.00	
Perforations	3.00			3914.00	
Recorder	0.00	13221	Outside	3914.00	
Bullnose	3.00			3917.00	7.00 Bottom Packers & Anchor

Total Tool Length: 35.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Crawford Oil

CBCF #4-31

PO Box 1366
El Dorado KS 67042

31 14 21W Trego KS

Job Ticket: 30071

DST#: 2

ATTN: Bob Peterson

Test Start: 2007.10.18 @ 13:28:51

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: 45.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
	M	2.812

Total Length: ft Total Volume: 2.812 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

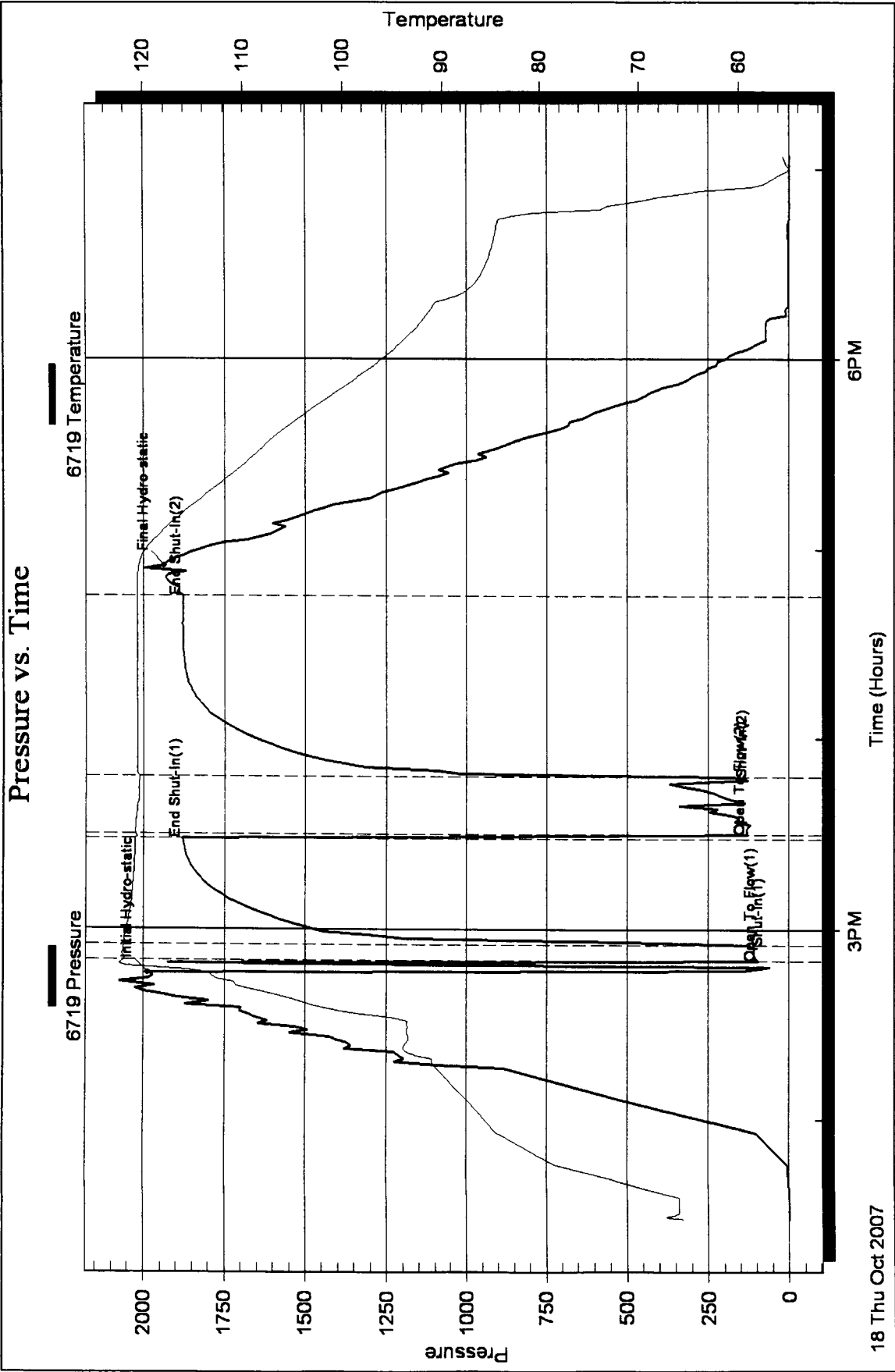
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

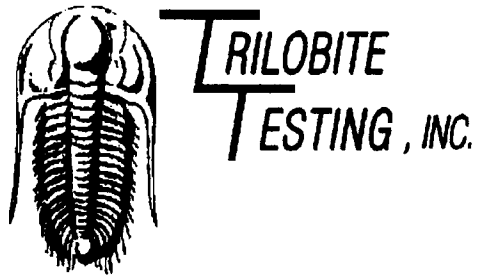


18 Thu Oct 2007

Trilobite Testing, Inc

Ref. No: 30071

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DRILL STEM TEST REPORT

Prepared For: **Crawford Oil**

PO Box 1366
El Dorado KS 67042

ATTN: Bob Peterson

31 14 21W Trego KS

CBCF #4-31

Start Date: 2007.10.19 @ 02:45:59

End Date: 2007.10.19 @ 09:39:29

Job Ticket #: 30072 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Crawford Oil

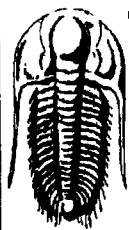
CBCF #4-31

31 14 21W Trego KS

DST # 3

Cher E / Kutina

2007.10.19



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Crawford Oil

CBCF #4-31

PO Box 1366
El Dorado KS 67042

31 14 21W Trego KS

ATTN: Bob Peterson

Job Ticket: 30072

DST#: 3

Test Start: 2007.10.19 @ 02:45:59

GENERAL INFORMATION:

Formation: **Cher E/ Kutina**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:11:59
 Time Test Ended: 09:39:29

Test Type: Conventional Bottom Hole
 Tester: Kyle Kinderknecht
 Unit No: 32

Interval: **3940.00 ft (KB) To 3950.00 ft (KB) (TVD)**
 Total Depth: 3950.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2067.00 ft (KB)
 2062.00 ft (CF)
 KB to GR/CF: 5.00 ft

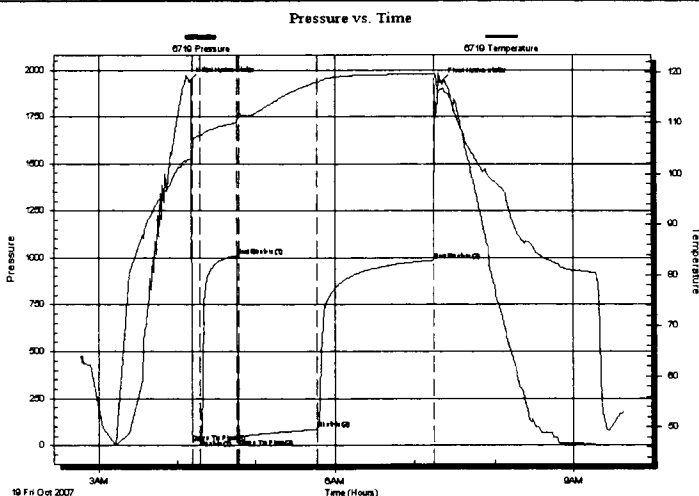
Serial #: 6719

Inside

Press@RunDepth: 86.83 psig @ 3941.00 ft (KB)
 Start Date: 2007.10.19 End Date: 2007.10.19
 Start Time: 02:46:01 End Time: 09:39:29

Capacity: 7000.00 psig
 Last Calib.: 2007.10.19
 Time On Btm: 2007.10.19 @ 04:09:59
 Time Off Btm: 2007.10.19 @ 07:19:59

TEST COMMENT: IF 2 " building
 ISI No blow
 FF 10 1/2 "
 FSI Weak surface died 10 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1939.82	102.92	Initial Hydro-static
2	19.44	102.74	Open To Flow (1)
8	33.59	107.45	Shut-In(1)
36	1011.65	110.01	End Shut-In(1)
38	39.36	111.80	Open To Flow (2)
97	86.83	118.03	Shut-In(2)
185	986.69	119.58	End Shut-In(2)
190	1935.26	116.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	GMO 5%G 50%O 45%M	0.37
125.00	GCO 5%G 95%O	1.31
100.00	GIP	1.42

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Crawford Oil

CBCF #4-31

PO Box 1366
El Dorado KS 67042

31 14 21W Trego KS

Job Ticket: 30072

DST#: 3

ATTN: Bob Peterson

Test Start: 2007.10.19 @ 02:45:59

Tool Information

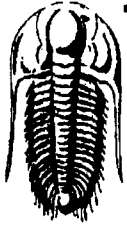
Drill Pipe:	Length: 3820.00 ft	Diameter: 3.82 inches	Volume: 54.15 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 80000.00 lb
		<u>Total Volume:</u>	<u>54.76 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3940.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	38.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3913.00	
Shut In Tool	5.00			3918.00	
Hydraulic tool	5.00			3923.00	
Jars	5.00			3928.00	
Safety Joint	2.00			3930.00	
Packer	5.00			3935.00	28.00 Bottom Of Top Packer
Packer	5.00			3940.00	
Stubb	1.00			3941.00	
Recorder	0.00	6719	Inside	3941.00	
Perforations	6.00			3947.00	
Recorder	0.00	13221	Outside	3947.00	
Bullnose	3.00			3950.00	10.00 Bottom Packers & Anchor

Total Tool Length: 38.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Crawford Oil

CBCF #4-31

PO Box 1366
El Dorado KS 67042

31 14 21W Trego KS

Job Ticket: 30072

DST#: 3

ATTN: Bob Peterson

Test Start: 2007.10.19 @ 02:45:59

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	GMO 5%G 50%O 45%M	0.369
125.00	GCO 5%G 95%O	1.309
100.00	GIP	1.418

Total Length: 300.00 ft

Total Volume: 3.096 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6719

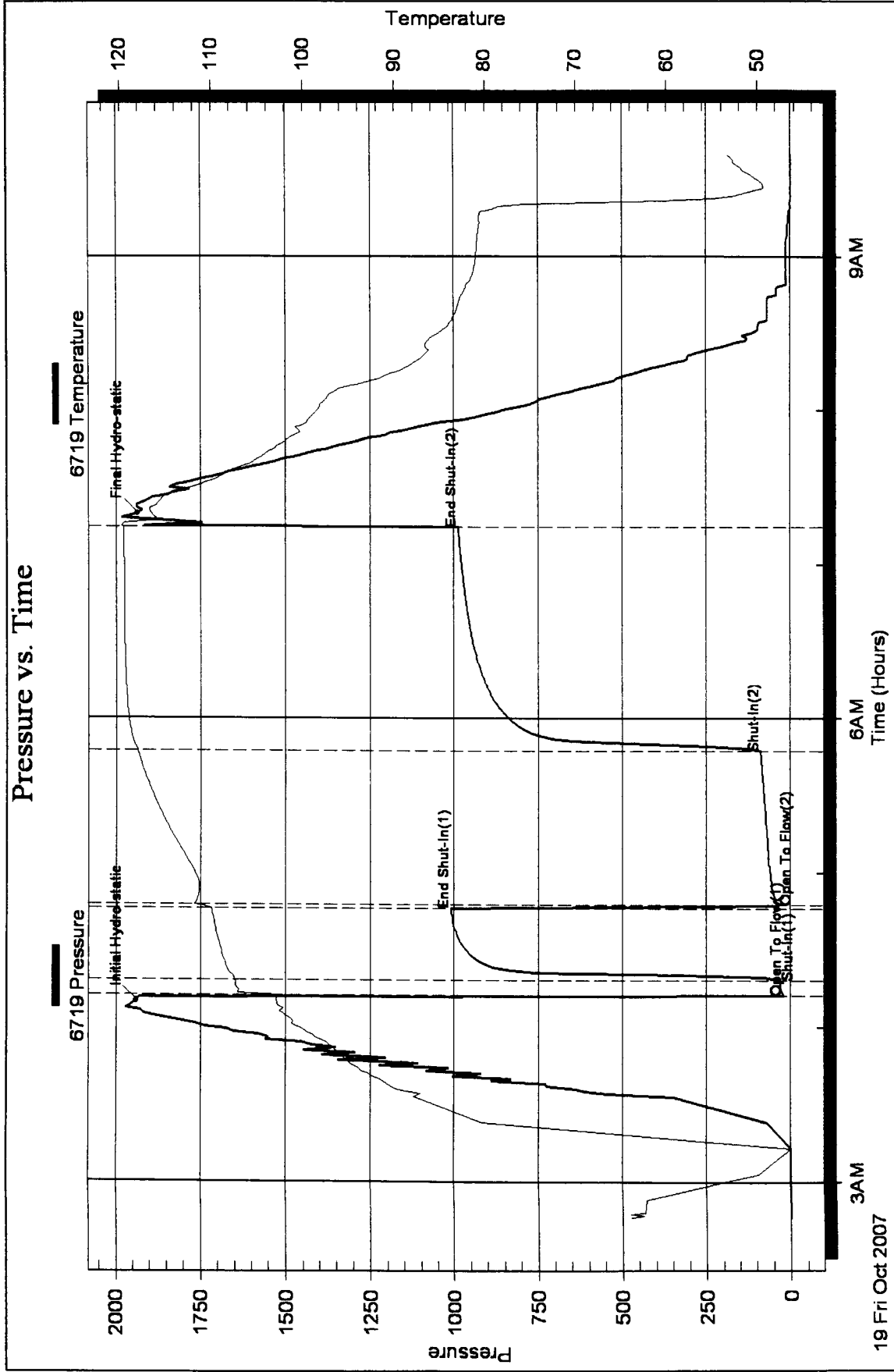
Inside

Crawford Oil

31 14 21W Trego KS

DST Test Number: 3

Pressure vs. Time

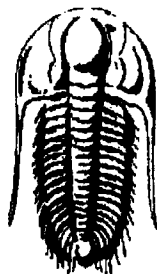


19 Fri Oct 2007

3AM

6AM

9AM



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Crawford Oil**

PO Box 1366
El Dorado KS 67042

ATTN: Bob Peterson

31 14 21W Trego KS

CBCF #4-31

Start Date: 2007.10.19 @ 16:33:19

End Date: 2007.10.19 @ 23:20:49

Job Ticket #: 30073 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Crawford Oil

CBCF #4-31

31 14 21W Trego KS

DST # 4

Kutina

2007.10.19



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Crawford Oil

CBCF #4-31

PO Box 1366
El Dorado KS 67042

31 14 21W Trego KS

ATTN: Bob Peterson

Job Ticket: 30073

DST#: 4

Test Start: 2007.10.19 @ 16:33:19

GENERAL INFORMATION:

Formation: **Kutina**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:21:19

Time Test Ended: 23:20:49

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 32

Interval: **3954.00 ft (KB) To 3961.00 ft (KB) (TVD)**

Total Depth: 3961.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2067.00 ft (KB)

2062.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6719 Inside

Press@RunDepth: 76.88 psig @ 3955.00 ft (KB)

Start Date: 2007.10.19

End Date:

2007.10.19

Start Time: 16:33:21

End Time:

23:20:49

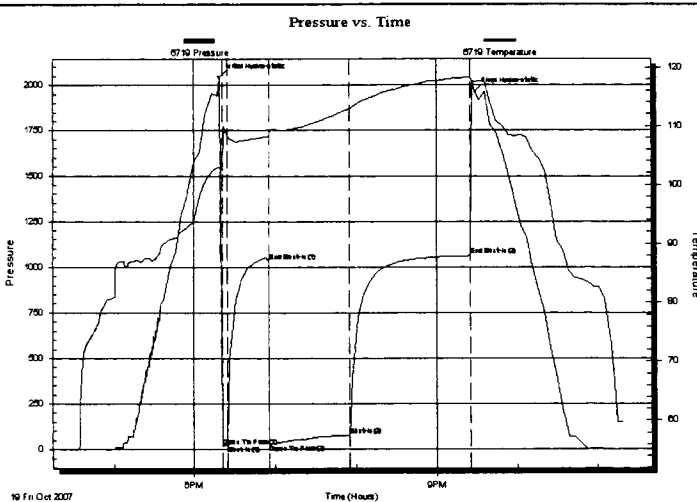
Capacity: 7000.00 psig

Last Calib.: 2007.10.19

Time On Btm: 2007.10.19 @ 18:19:19

Time Off Btm: 2007.10.19 @ 21:28:49

TEST COMMENT: IF 1/2 "
ISI No blow
FF 1/4 "
FSI No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2045.14	102.90	Initial Hydro-static
2	17.65	102.39	Open To Flow (1)
6	24.56	108.35	Shut-In(1)
37	1031.17	108.25	End Shut-In(1)
37	28.05	108.98	Open To Flow (2)
96	76.88	112.93	Shut-In(2)
186	1060.16	118.33	End Shut-In(2)
190	1963.17	117.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	MW scum of Oil 55%W 45%M	0.97

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Crawford Oil
PO Box 1366
El Dorado KS 67042

ATTN: Bob Peterson

CBCF #4-31
31 14 21W Trego KS
Job Ticket: 30073 **DST#: 4**
Test Start: 2007.10.19 @ 16:33:19

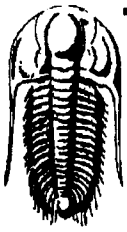
Tool Information

Drill Pipe:	Length: 3815.00 ft	Diameter: 3.82 inches	Volume: 54.08 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: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume:	54.69 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3954.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	7.00 ft			
Tool Length:	35.00 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			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	0.00	6719	Inside	3955.00	
Perforations	3.00			3958.00	
Recorder	0.00	13221	Outside	3958.00	
Bullnose	3.00			3961.00	7.00 Bottom Packers & Anchor

Total Tool Length: 35.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Crawford Oil

CBCF #4-31

PO Box 1366
El Dorado KS 67042

31 14 21W Trego KS

Job Ticket: 30073

DST#: 4

ATTN: Bob Peterson

Test Start: 2007.10.19 @ 16:33:19

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:

13000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
150.00	MW scum of Oil 55%W 45%M	0.969

Total Length: 150.00 ft Total Volume: 0.969 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

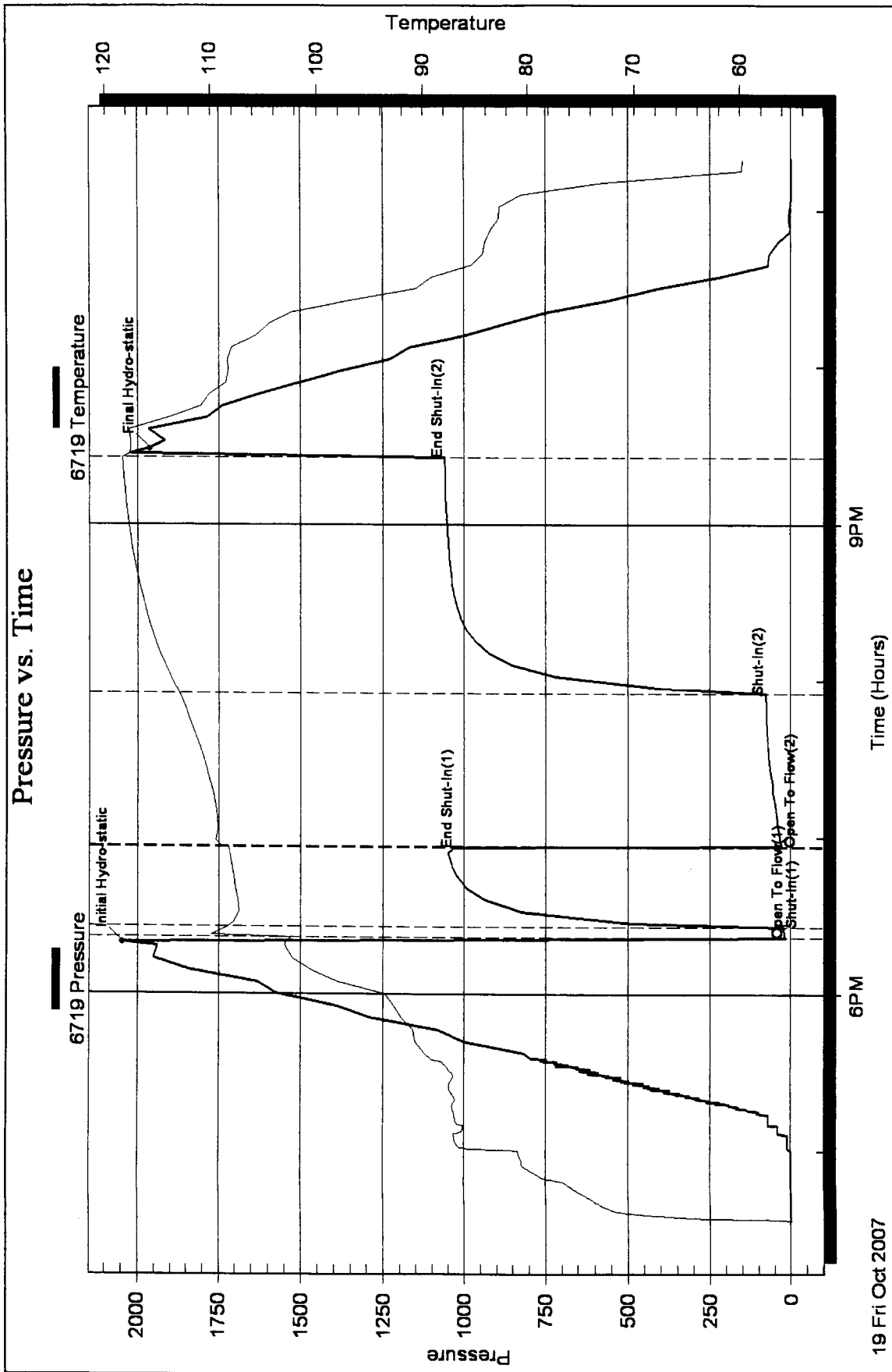
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .58 @ 61 deg.

Pressure vs. Time

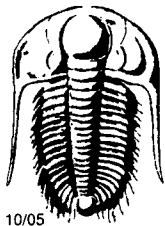


19 Fri Oct 2007

9PM

6PM

Time (Hours)



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30070

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OCT 22 2007

Test Ticket

BY: _____

Well Name & No. COCF 4-31 Test No. 1 Date 10-18-07
 Company Crawford Oil Zone Tested Cher B
 Address P.O. Box 1366 El Dorado, KS 67042 Elevation 2067 KB 2062 GL
 Co. Rep / Geo. Bob Peterson Rig WW #8
 Location: Sec. 31 Twp. 14S Rge. 21W Co. Trego State KS
 Comment: _____ Release date / time: _____

Interval Tested 3908 - 3917 Initial Str Wt./Lbs. 51K Unseated Str Wt./Lbs. 51K
 Anchor Length 9' Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60K
 Top Packer Depth 3903 Tool Weight 2500
 Bottom Packer Depth 3908 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 3917 Wt. Pipe Run _____ Drill Collar Run 125
 Mud Wt. 9.3 LCM _____ Vis. 50 WL 9.2 Drill Pipe Size 4 1/2 x H Ft. Run 3785
 Blow Description IF - 1/2"
ISI - Q
FF - Opened tool lost Packers Reset + Vent Surface 15-20 min
FSI - Q

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>280</u>	<u>Mud</u>	<u>125</u>	<u>145</u>
Rec. <u>280</u>	Feet of _____	%gas _____	%oil _____
Rec. _____	Feet of _____	%gas _____	%oil _____
Rec. _____	Feet of _____	%gas _____	%oil _____
Rec. _____	Feet of _____	%gas _____	%oil _____
Rec. _____	Feet of _____	%gas _____	%oil _____
BHT <u>114</u>	°F Gravity _____	°API D @ _____	°F Corrected Gravity _____
RW _____	@ _____ °F	Chlorides _____ ppm	Recovery _____ Chlorides _____ ppm

(A) Initial Hydrostatic Mud	Alpine	Recorder No.	Test
<u>1966</u> PSI	<u>6719</u>	<u>3909</u>	✓ <u>900</u>
(B) First Initial Flow Pressure	<u>16</u> PSI	(depth) <u>3909</u>	Jars ✓ <u>250</u>
(C) First Final Flow Pressure	<u>25</u> PSI	Recorder No. <u>13221</u>	Safety Jt. ✓ <u>75</u>
(D) Initial Shut-In Pressure	PSI	(depth) <u>3914</u>	Circ Sub _____
(E) Second Initial Flow Pressure	<u>127</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	<u>178</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	PSI	Initial Opening <u>3</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>1942</u> PSI	Initial Shut-In <u>30</u>	Shale Packer _____

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Approved By _____

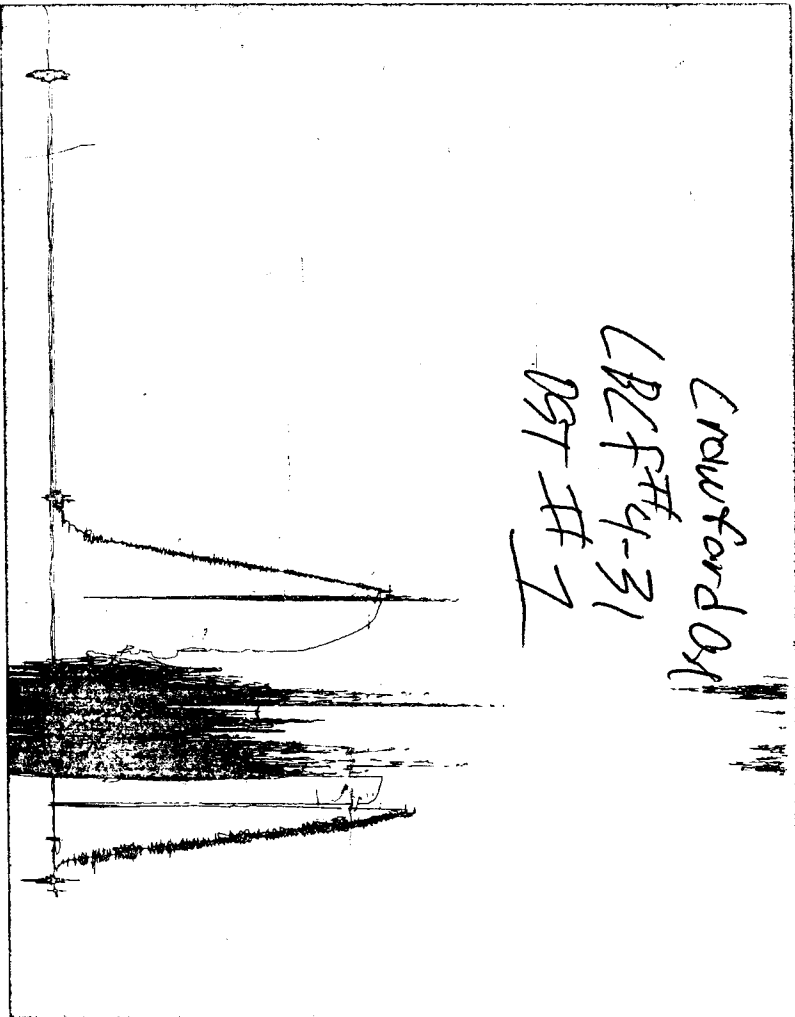
Our Representative Kyle K

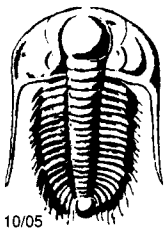
T-On Location 6:00
 T-Started 6:45
 T-Open 7:59
 T-Pulled 10:10
 T-Out _____

Mileage 40x2 100
 Sub Total: _____
 Std. By: _____
 Acc. Chg: _____
 Other: _____
 Total: \$1325.00

CHART PAGE

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30071

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OCT 22 2007

BY: _____

Test Ticket

Well Name & No. UCCF # 4-31 Test No. 2 Date 10-18-07
 Company Crawford Oil Zone Tested Cher B
 Address _____ Elevation 2067 KB 2062 GL _____
 Co. Rep / Geo. Bob Petersen Rig W W # 2
 Location: Sec. 31 Twp. 14s Rge. 21w Co. Trego State KS
 Comment: _____ Release date / time: _____

Interval Tested 3910-3917 Initial Str Wt./Lbs. 50000 Unseated Str Wt./Lbs. 50000
 Anchor Length 7' Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000
 Top Packer Depth 3909 Tool Weight 2500
 Bottom Packer Depth 3910 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 3917 Wt. Pipe Run _____ Drill Collar Run 125
 Mud Wt. 9.1 LCM _____ Vis. 45 WL 8.8 Drill Pipe Size 4 1/2 X H Ft. Run 3785
 Blow Description IF - Packers Gave Baset - 1 1/2"

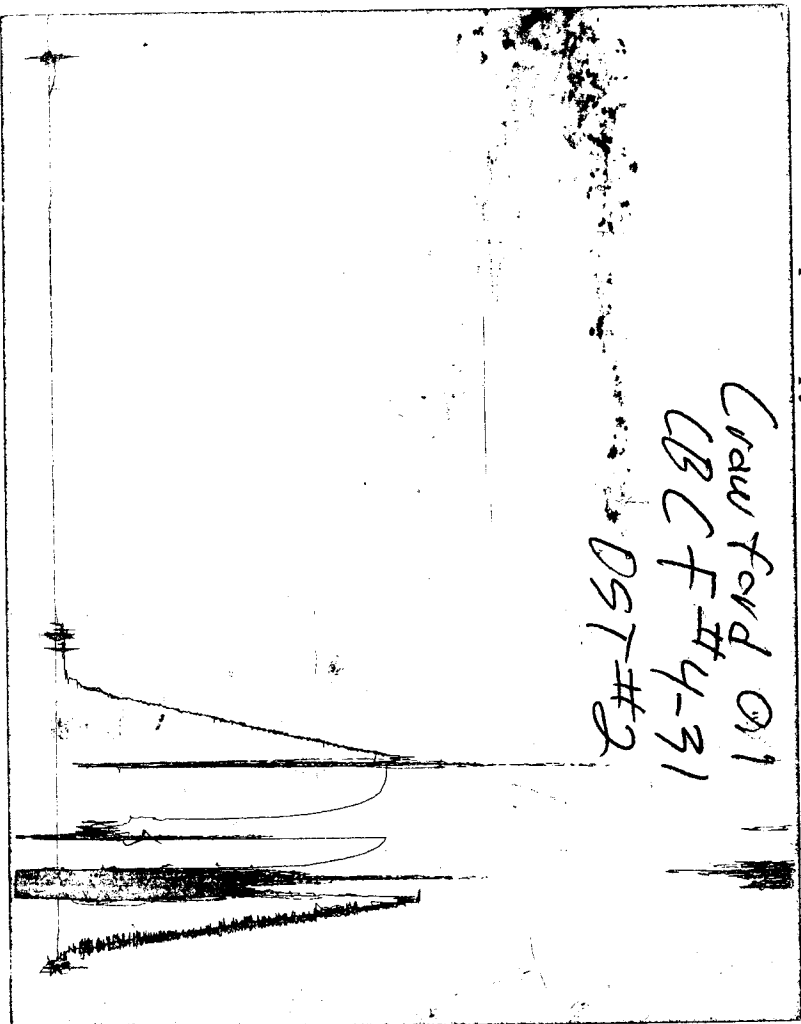
ISI - No Blow
FF - Work surface Vied Gum
FSL - No Blow
 Recovery - Total Feet 190 GIP _____ Ft. in DC 125 Ft. in DP 25
 Rec. 150 Feet of Mud %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT 120 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

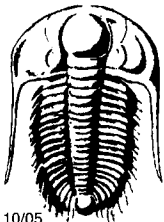
	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1958</u> PSI	<u>6119</u>	✓ <u>1100</u>
(B) First Initial Flow Pressure		<u>96</u> PSI	(depth) <u>3911</u>	Jars ✓ <u>250</u>
(C) First Final Flow Pressure		<u>124</u> PSI	Recorder No. <u>13221</u>	Safety Jt. ✓ <u>75</u>
(D) Initial Shut-In Pressure		<u>1880</u> PSI	(depth) <u>3914</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>128</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>172</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>1878</u> PSI	Initial Opening <u>3</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1937</u> PSI	Initial Shut-In <u>30</u>	Shale Packer ✓ <u>250</u>
			Final Flow <u>15</u>	Ruined Packer _____
			Final Shut-In <u>60</u>	Mileage <u>10</u>
			T-On Location _____	Sub Total: _____
			<u>1:27</u> Started <u>13:45</u>	Std. By _____
			T-Open <u>14:50</u>	Acc. Chg: _____
			T-Pulled <u>16:45</u>	Other: _____
			T-Out <u>19:00</u>	Total: <u>9710</u> <u>75</u>

Approved By _____
 Our Representative Kyle R

CHART PAGE

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BY: _____

Test Ticket

Well Name & No. CBCF #4-31 Test No. 3 Date 10-19-07
 Company Cowford Oil Zone Tested Cher E/Kotind
 Address _____ Elevation 2067 KB 2062 GL
 Co. Rep / Geo. Bob Peterson Rig WW 8
 Location: Sec. 31 Twp. 145 Rge. 21W Co. Trego State KS
 Comment: _____ Release date / time: _____

Interval Tested 3940-3950 Initial Str Wt./Lbs. 91000 Unseated Str Wt/Lbs. 52,000
 Anchor Length 10' Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 40,000
 Top Packer Depth 3935 Tool Weight 2500
 Bottom Packer Depth 3940 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 3950 Wt. Pipe Run 5 Drill Collar Run 125
 Mud Wt. _____ LCM _____ Vis. _____ WL _____ Drill Pipe Size 4 1/2 XH Ft. Run 3820
 Blow Description IF-2"
ISI-Q
FF-10 1/2"

FSI - weak surface died 10 min
 Recovery - Total Feet 300 GIP 100 Ft. in DC 125 Ft. in DP 175
 Rec. 75 Feet of Gsy MO %gas 50 %oil _____ %water 45 %mud _____
 Rec. 125 Feet of Gsy CO %gas 95 %oil _____ %water _____ %mud _____
 Rec. 100 Feet of GIP %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT 119 °F Gravity _____ °API D @ _____ °F Corrected Gravity 90 °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	1939	PSI	6719	✓ 1100
(B) First Initial Flow Pressure	19	PSI	3941	✓ 250
(C) First Final Flow Pressure	33	PSI	13221	✓ 25
(D) Initial Shut-In Pressure	1011	PSI	3947	
(E) Second Initial Flow Pressure	39	PSI		
(F) Second Final Flow Pressure	46	PSI		
(G) Final Shut-In Pressure	986	PSI		
(Q) Final Hydrostatic Mud	1935	PSI		

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Recorder No. 6719 Test ✓
 Recorder No. 13221 Safety Jt. ✓
 Recorder No. _____ Circ Sub _____
 Recorder No. _____ Sampler _____
 Recorder No. _____ Straddle _____
 Recorder No. _____ Ext. Packer _____
 Recorder No. _____ Shale Packer X 350
 Recorder No. _____ Ruined Packer _____
 Recorder No. _____ Mileage 40 x 2 100
 Recorder No. _____ Sub Total: _____
 Recorder No. _____ Std. By: _____
 Recorder No. _____ Acc. Chg: _____
 Recorder No. _____ Other: _____
 Recorder No. _____ Total: 11775

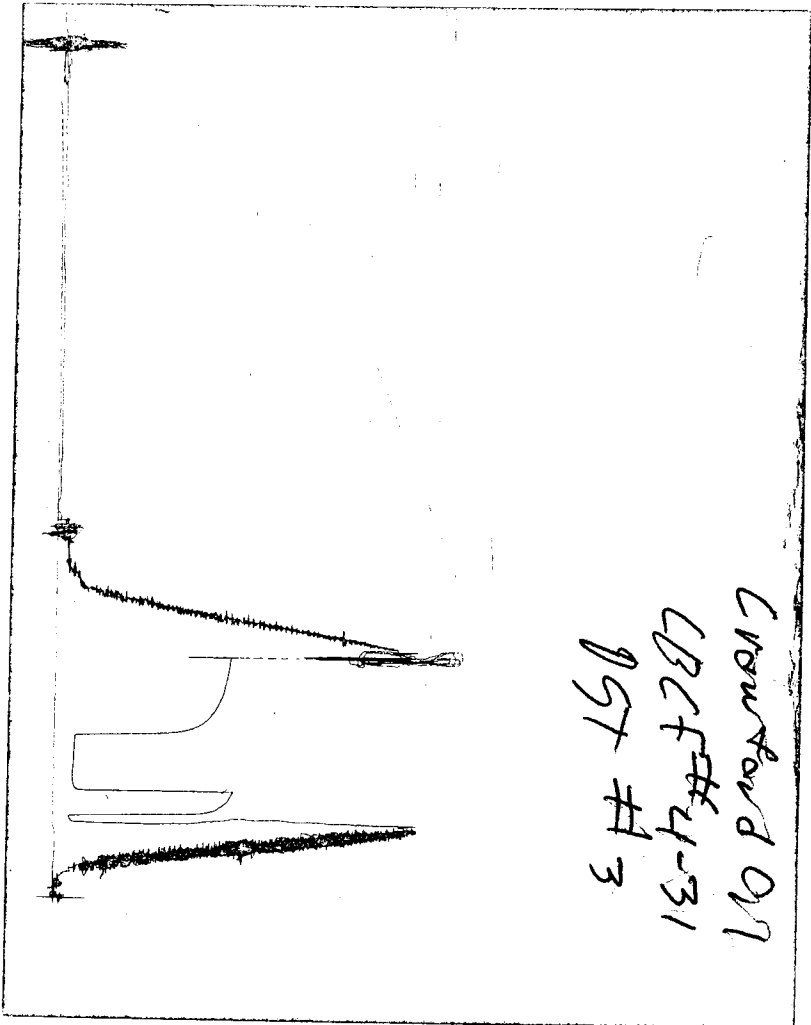
T-On Location 2:15
 T-Started 2:46
 T-Open 4:12
 T-Pulled 7:47
 T-Out 9:30

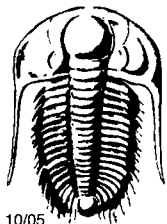
Approved By _____
 Our Representative Kyle R

CHART PAGE

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Crowford 017
LBCT #4-31
95T #43





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OCT 22 2007

BY: _____

Test Ticket

Well Name & No. LBCF #4-31 Test No. 4 Date 10-19-07
 Company Crawford Oil Zone Tested Kutina
 Address _____ Elevation 2067 KB 2062 GL _____
 Co. Rep / Geo. Bob Peterson Rig WV 8
 Location: Sec. 31 Twp. 14S Rge. 21W Co. Trep State KS
 Comment: _____ Release date / time: _____

Interval Tested 3954-3961 Initial Str Wt./Lbs. 51000 Unseated Str Wt/Lbs. 51000
 Anchor Length 7' Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000
 Top Packer Depth 3949 Tool Weight 2500
 Bottom Packer Depth 3954 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 3961 Wt. Pipe Run _____ Drill Collar Run 125
 Mud Wt. 9.1 LCM _____ Vis. 45 WL 8.8 Drill Pipe Size 4 1/2 x 11 Ft. Run 3815
 Blow Description IF - 1/2"
ISL - 0
FF - 1/4"
F9I - 0

Recovery - Total Feet 190 GIP _____ Ft. in DC 125 Ft. in DP 25
 Rec. 150 Feet of MW scum of oil %gas _____ %oil 55 %water 45 %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT 118 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW .58 @ 61 °F Chlorides 13000 ppm Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>2045</u> PSI	<u>6719</u>	✓ <u>1100</u>
(B) First Initial Flow Pressure		<u>17</u> PSI	(depth) <u>3955</u>	Jars ✓ <u>250</u>
(C) First Final Flow Pressure		<u>24</u> PSI	Recorder No. <u>13221</u>	Safety Jt. ✓ <u>75</u>
(D) Initial Shut-In Pressure		<u>1031</u> PSI	(depth) <u>3958</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>28</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>76</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>1060</u> PSI	Initial Opening <u>3</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1963</u> PSI	Initial Shut-In <u>30</u>	Shale Packer ✓ <u>250</u>

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Approved By _____
 Our Representative Kyle K.

Final Flow	<u>60</u>	Ruined Packer	_____
Final Shut-In	<u>90</u>	Mileage	<u>21072</u> <u>100</u>
T-On Location	<u>09:45</u>	Sub Total:	_____
4:33T-Started	<u>16:45</u>	Std. By	_____
T-Open	<u>18:21</u>	Acc. Chg:	_____
T-Pulled	<u>21:24</u>	Other:	_____
T-Out	<u>23:00</u>	Total:	<u>11775</u>

CHART PAGE

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