

TRILOBITE TESTING L.L.C.

ORIGINAL

OPERATOR : Crawford Oil & Gas Inc.
WELL NAME: Hoffman Trust #2
LOCATION : 7-34s-18w Comanche co KS
INTERVAL : 5307.00 To 5354.00 ft

DATE 5-15-2000
KB 1906.00 ft TICKET NO: 12542 DST # 1
GR 1895.00 ft FORMATION: Mississippi
TD 5354.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13278	13278	2357			PF Fr. 1110 to 1140 hr
SI 45 Range (Psi)	4400.0	4400.0	5000.0	0.0	0.0	IS Fr. 1140 to 1225 hr
SF 60 Clock (hrs)	12HR	12HR	ELECT			SF Fr. 1225 to 1325 hr
FS 90 Depth (ft)	5351.0	5351.0	5308.0	0.0	0.0	FS Fr. 1325 to 1455 hr

	Field	1	2	3	4	
A. Init Hydro	2548.0	2562.0	2567.0	0.0	0.0	T STARTED 0851 hr
B. First Flow	132.0	142.0	20.0	0.0	0.0	T ON BOTM 1108 hr
B1. Final Flow	121.0	113.0	16.0	0.0	0.0	T OPEN 1110 hr
C. In Shut-in	275.0	275.0	271.0	0.0	0.0	T PULLED 1455 hr
D. Init Flow	132.0	134.0	10.0	0.0	0.0	T OUT 1800 hr
E. Final Flow	121.0	111.0	15.0	0.0	0.0	
F. Fl Shut-in	429.0	415.0	410.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2548.0	2562.0	2536.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	I	I	I			Wt Set On Packer 25000.00 lbs
						Wt Pulled Loose 10000.00 lbs
						Initial Str Wt 70000.00 lbs
						Unseated Str Wt 78000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 120.00 ft
						D.P. Length 5177.00 ft

RECOVERY

Tot Fluid 10.00 ft of 10.00 ft in DC and 0.00 ft in DP
2275.00 ft of Gas in pipe.
10.00 ft of Drilling mud
0.00 ft of 100% mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Strong blow. Bottom of bucket in 30 seconds.
Initial Shut-In:
No blow back.
Final Flow:
Strong blow. Bottom of bucket immediately. Decreased slightly.
Final Shut-In:
No blow back.

CONSERVATION DIVISION
Wichita, Kansas

AUG - 9 2000

RECEIVED
STATE CORPORATION COMMISSION

MUD DATA-----
Mud Type Chemical
Weight 9.20 lb/cf
Vis. 50.00 S/L
W.L. 8.20 in3
F.C. 0.00 in
Mud Drop Y 30.0 ft

Amt. of fill 0.00 ft
Btm. H. Temp. 121.00 F
Hole Condition Good
% Porosity 12.00
Packer Size 6.75 in
No. of Packers 2
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Brad Bortz
Co. Rep. Jon Christensen
Contr. Duke
Rig # 5
Unit #
Pump T.

SAMPLES: None
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Hoffman Trust #2

LOCATION : 7-34s-18w Comanche co KS

TICKET No. 12542 D.S.T. No. 1 DATE 5-15-2000

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 47

TOTAL TOOL 74

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands 2 Single Total 120

D.P. ABOVE TOOLS.Stands 83 Single Total 5177

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5371

TOTAL DEPTH 5354

TOTAL DRILL PIPE ABOVE K.B. 17

REMARKS:

P.O. SUB Cir sub. 5220
C.O. SUB Top of tool 5280
Double pin 5281
S.I. TOOL Sterling 5286

HMV Sterling 5291

JARS Sterling 5296

SAFETY JOINT Sterling 5298

PACKER Sparton 5303

PACKER Sparton 5307

DEPTH 1 Ft. 5308

ANCHOR Alpine 5308

Pu. sub 5313
AK-1 5351
8 Ft. perfs 5321
31 Ft. jt. pipe 5352

BULLNOSE 2 Ft. perfs.
T.D. 5354

TEST HISTORY

12542 DST #1 Hoffman Trust #2 Crawford Oil & Gas Inc.

Flag Points
t(Min.) P(PSig)

A:	0.00	2567.84
B:	0.00	20.65
C:	29.00	16.51
D:	44.75	271.43
E:	0.00	10.08
F:	59.50	15.57
G:	92.00	410.56
Q:	0.00	2536.31

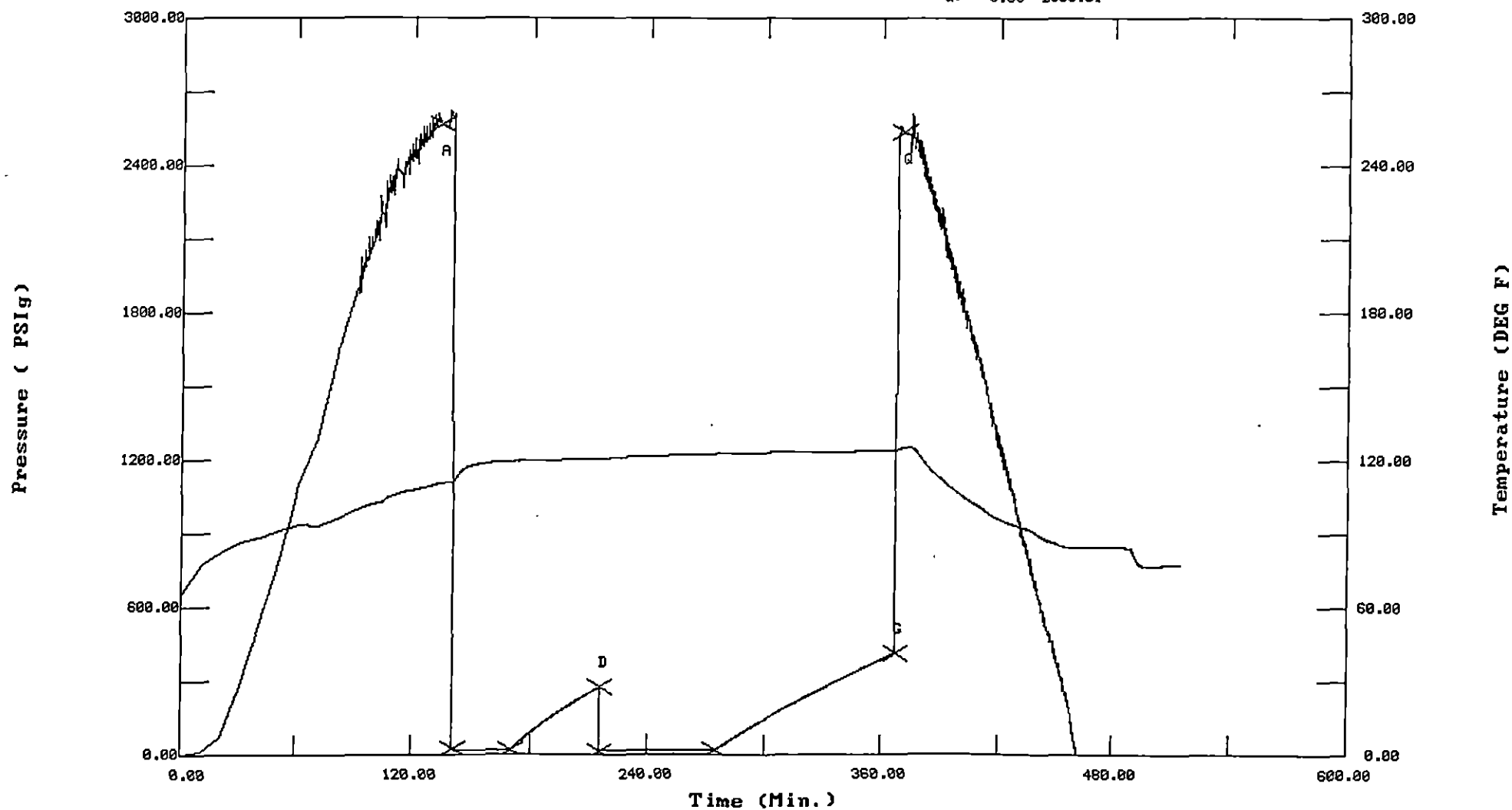
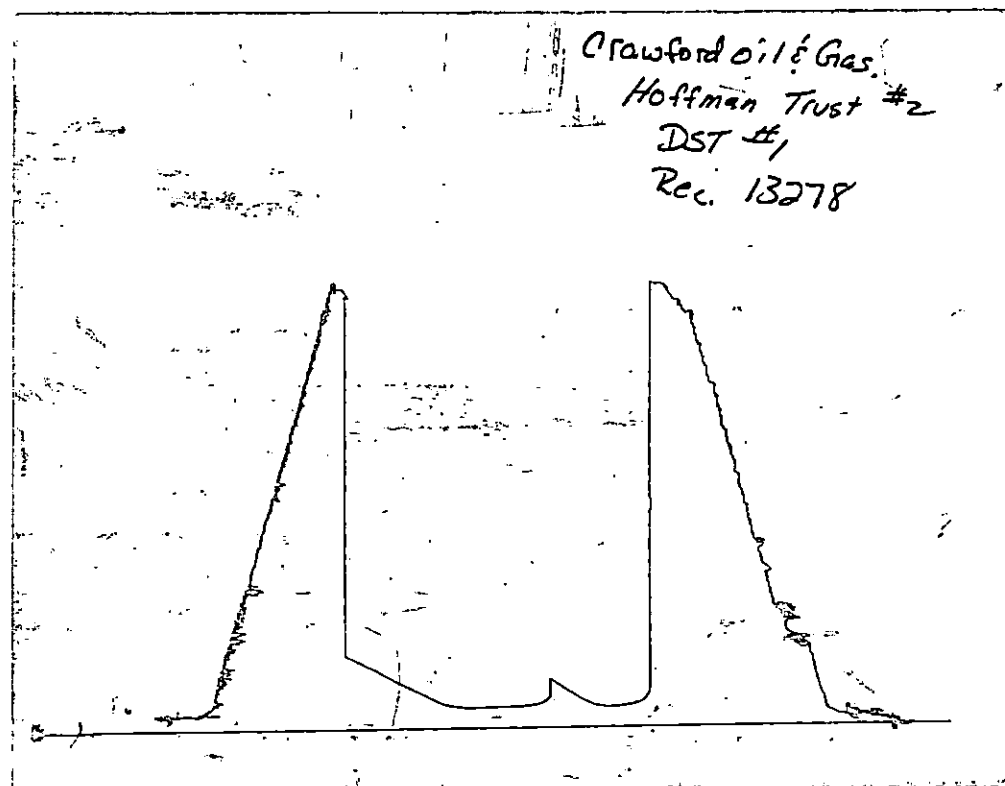


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

Nº 12542

Well Name & No. <u>Hoffman Trust #2</u>	Test No. <u>1</u>	Date <u>5-15-2000</u>
Company <u>Crawford oil & Gas Inc.</u>	Zone Tested <u>Mississippi</u>	
Address <u>P.O. Box 454 Mooreland ok, 73843</u>	Elevation <u>1906</u> KB <u>1895</u> GL	
Co. Rep / Geo. <u>Jon Christensen</u>	Cont. <u>Duke #5</u>	Est. Ft. of Pay <u>17</u> Por. <u>12</u> %
Location: Sec. <u>7</u>	Twp. <u>34S</u>	Rge. <u>18W</u> Co. <u>Comanche</u> State <u>Ks</u>
No. of Copies <u>R</u>	Distribution Sheet (Y, N) <u>R</u>	Turnkey (Y, N) <u>—</u> Evaluation (Y, N) <u>—</u>

Interval Tested <u>5307- 5354</u>	Initial Str Wt./Lbs. <u>70,000</u>	Unseated Str Wt./Lbs. <u>78,000</u>
Anchor Length <u>47' 1-34 DP. 27' tool</u>	Wt. Set Lbs. <u>25,000</u>	Wt. Pulled Loose/Lbs. <u>10,000</u>
Top Packer Depth <u>5302</u>	Tool Weight <u>1,800</u>	
Bottom Packer Depth <u>5307</u>	Hole Size — <u>7 7/8"</u>	Rubber Size — <u>6 3/4"</u>
Total Depth <u>5354</u>	Wt. Pipe Run <u>—</u>	Drill Collar Run <u>120'</u>
Mud Wt. <u>9.2</u> LCM <u>2"</u> Vis. <u>50</u> WL <u>8.2</u>	Drill Pipe Size <u>4 1/2 XH</u>	Ft. Run <u>5177 17' up</u>

Blow Description Strong blow O.B.B. in 30 sec I.F.P.
no Blow back I.S.T.P.
Strong Blow O.B.B. Immediately Decreased Slightly F.F.P.
no Blow back F.S.T.P.

Recovery — Total Feet <u>10'</u>	GIP <u>2275</u>	Ft. in DC <u>10</u>	Ft. in DP <u>—</u>
Rec. <u>10'</u>	Feet Of <u>Orig mud</u>	%gas	%oil
Rec. <u>—</u>	Feet Of <u>—</u>	%gas	%oil
Rec. <u>—</u>	Feet Of <u>—</u>	%gas	%oil
Rec. <u>—</u>	Feet Of <u>—</u>	%gas	%oil
Rec. <u>—</u>	Feet Of <u>—</u>	%gas	%oil

BHT <u>121°</u>	°F Gravity <u>—</u>	°API D@ <u>—</u>	°F Corrected Gravity <u>—</u>	°API
RW <u>—</u>	@ <u>—</u>	°F Chlorides <u>—</u>	ppm Recovery	Chlorides <u>5,900</u> ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2548</u>	<u>2567</u>		<u>2357</u>	<u>6:00 Am</u>
(B) First Initial Flow Pressure	<u>132</u>	<u>20</u>	PSI	(depth) <u>5308'</u>	T-Started <u>8:51 Am</u>
(C) First Final Flow Pressure	<u>121</u>	<u>16</u>	PSI	Recorder No. <u>13278</u>	T-Open <u>11:10 Am</u>
(D) Initial Shut-In Pressure	<u>275</u>	<u>271</u>	PSI	(depth) <u>5351</u>	T-Pulled <u>2:55 Pm</u>
(E) Second Initial Flow Pressure	<u>132</u>	<u>10</u>	PSI	Recorder No. <u>—</u>	T-Out <u>6:00 Pm</u>
(F) Second Final Flow Pressure	<u>121</u>	<u>15</u>	PSI	(depth) <u>—</u>	T-Off Location <u>7:00 Pm</u>
(G) Final Shut-in Pressure	<u>429</u>	<u>410</u>	PSI	Initial Opening <u>30</u>	Test <u>✓</u>
(Q) Final Hydrostatic Mud	<u>2548</u>	<u>2536</u>	PSI	Initial Shut-in <u>45</u>	Jars <u>✓</u>

Final Flow <u>60</u>	Safety Joint <u>✓</u>
Final Shut-in <u>90</u>	Straddle <u>—</u>

TRILOBITE TESTING L.L.C. 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 Jon Christensen

Our Representative Brad Bortz

Circ. Sub <u>—</u>
Sampler <u>—</u>
Extra Packer <u>—</u>
Elec. Rec. <u>✓</u>
Mileage <u>—</u>
Other <u>—</u>
TOTAL PRICE \$ <u>—</u>

TRILOBITE TESTING L.L.C.

OPERATOR : Crawford Oil & Gas Inc.

DATE 05-18-000

WELL NAME: Hoffman Trust #2

KB 1906.00 ft

TICKET NO: 12798

DST #2

LOCATION : 7-34s-18w Comanche co KS

GR 1895.00 ft

FORMATION: Viola

INTERVAL : 6087.00 To 6150.00 ft

TD 6150.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	10248	10248	2342			PF Fr. 1730 to 1800 hr
SI 45 Range(Psi)	4400.0	4400.0	4995.0	0.0	0.0	IS Fr. 1800 to 1845 hr
SF 60 Clock(hrs)	12 hr	12 hr	batt.			SF Fr. 1845 to 1945 hr
FS 90 Depth(ft)	6095.0	6095.0	6147.0	0.0	0.0	FS Fr. 1945 to 2115 hr

	Field	1	2	3	4	
A. Init Hydro	3090.0	3071.0	3053.0	0.0	0.0	T STARTED 1445 hr
B. First Flow	46.0	49.0	24.0	0.0	0.0	T ON BOTM 1725 hr
B1. Final Flow	46.0	38.0	21.0	0.0	0.0	T OPEN 1730 hr
C. In Shut-in	216.0	194.0	188.0	0.0	0.0	T PULLED 2115 hr
D. Init Flow	48.0	38.0	18.0	0.0	0.0	T OUT 0010 hr
E. Final Flow	48.0	34.0	25.0	0.0	0.0	
F. Fl Shut-in	395.0	390.0	388.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2978.0	3009.0	2943.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	0	0	I	T		Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 97000.00 lbs
						Initial Str Wt 82000.00 lbs
						Unseated Str Wt 82000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 120.00 ft
						D.P. Length 5947.00 ft

RECOVERY

Tot Fluid 20.00 ft of 20.00 ft in DC and 0.00 ft in DP

100.00 ft of Gas in pipe.

20.00 ft of Drilling mud

0.00 ft of 100% mud

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of Rw n.c. ohms @ degrees F.

0.00 ft of EST.FT. of PAY-----7

SALINITY 6000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:

Weak bow. Slow increase to 3".

Initial Shut-In:

No blow.

Final Flow:

Fair blow. 4 - 8".

Final Shut-In:

No blow.

SAMPLES: none

SENT TO: Caraway/Liberal

Test Successful: Y

MUD DATA-----

Mud Type	Chemical
Weight	9.40 lb/cf
Vis.	59.00 S/L
W.L.	8.00 in3
F.C.	0.20 in
Mud Drop N	
Amt. of fill	1.00 ft
Btm. H. Temp.	131.00 F
Hole Condition	good
% Porosity	10.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00 N
Cushion Type	None
Reversed Out N	
Tool Chased N	
Tester	Gary Pevoteaux
Co. Rep.	Jon Christensen
Contr.	Duke Drlg.
Rig #	5
Unit #	
Pump T.	LCM 6 #/bl

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Hoffman Trust #2

LOCATION : 7-34s-18w Comanche co KS

TICKET No. 12798 D.S.T. No. 2 DATE 05-18-000

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 33

TOTAL TOOL 60

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR	STND.Stands	Single	Total
1	1	1	1
2	1	1	1
3	1	1	1
4	1	1	1
5	1	1	1
6	1	1	1
7	1	1	1
8	1	1	1
9	1	1	1
10	1	1	1
11	1	1	1
12	1	1	1
13	1	1	1
14	1	1	1
15	1	1	1
16	1	1	1
17	1	1	1
18	1	1	1
19	1	1	1
20	1	1	1
21	1	1	1
22	1	1	1
23	1	1	1
24	1	1	1
25	1	1	1
26	1	1	1
27	1	1	1
28	1	1	1
29	1	1	1
30	1	1	1
31	1	1	1
32	1	1	1
33	1	1	1
34	1	1	1
35	1	1	1
36	1	1	1
37	1	1	1
38	1	1	1
39	1	1	1
40	1	1	1
41	1	1	1
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44	1	1	1
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89	1	1	1
90	1	1	1
91	1	1	1
92	1	1	1
93	1	1	1
94	1	1	1
95	1	1	1
96	1	1	1
97	1	1	1
98	1	1	1
99	1	1	1
100	1	1	1

D.P. ANCHOR STND.Stands	Single 1	Total 30
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TOTAL ASSEMBLY 90

D.C. ABOVE TOOLS.Stands2	Single	Total 120
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D.P. ABOVE TOOLS.Stands96 Single 1 Total 5947

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 6157

TOTAL DEPTH 6150

TOTAL DRILL PIPE ABOVE K.B. 7

REMARKS:

Comments:

FLUID SAMPLER DATA (not run)

GAS-----	cubic ft
OIL-----	ML.
MUD-----	ML.
WATER-----	ML.
OTHER-----	
PRESSURE-----	PSI
Rw ----- ohms @	deg. F.
CHLORIDES-----	ppm.
GRAVITY-----	deg.API

P.O. SUB		
C.O. SUB	@ top of tool	6060
S.I. TOOL	Sterling	6066
HMV	Sterling	6071
JARS	bowen	6076
SAFETY JOINT	bowen	6078
PACKER Top		6082
PACKER Btm.		6087
DEPTH	6087	
1 ft.		6088
ANCHOR		
4'perfs & sub to		6092
Alpine rec. @	6095	
1 jt. pipe to		6122
23'perfs & sub to		6145
AK-1 rec. @	6147	
BULLNOSE 5 ft. perforated		6150
T.D.		

TEST HISTORY

12798 DST#2 HOFFMAN TRUST #2 CRAWFORD OIL & GAS, INC.

Flag Points

t(Min.) P(PSIg)

A:	0.00	3052.61
B:	0.00	23.99
C:	30.50	20.81
D:	45.00	188.24
E:	0.00	17.70
F:	59.50	25.42
G:	92.50	388.24
Q:	0.00	2943.89

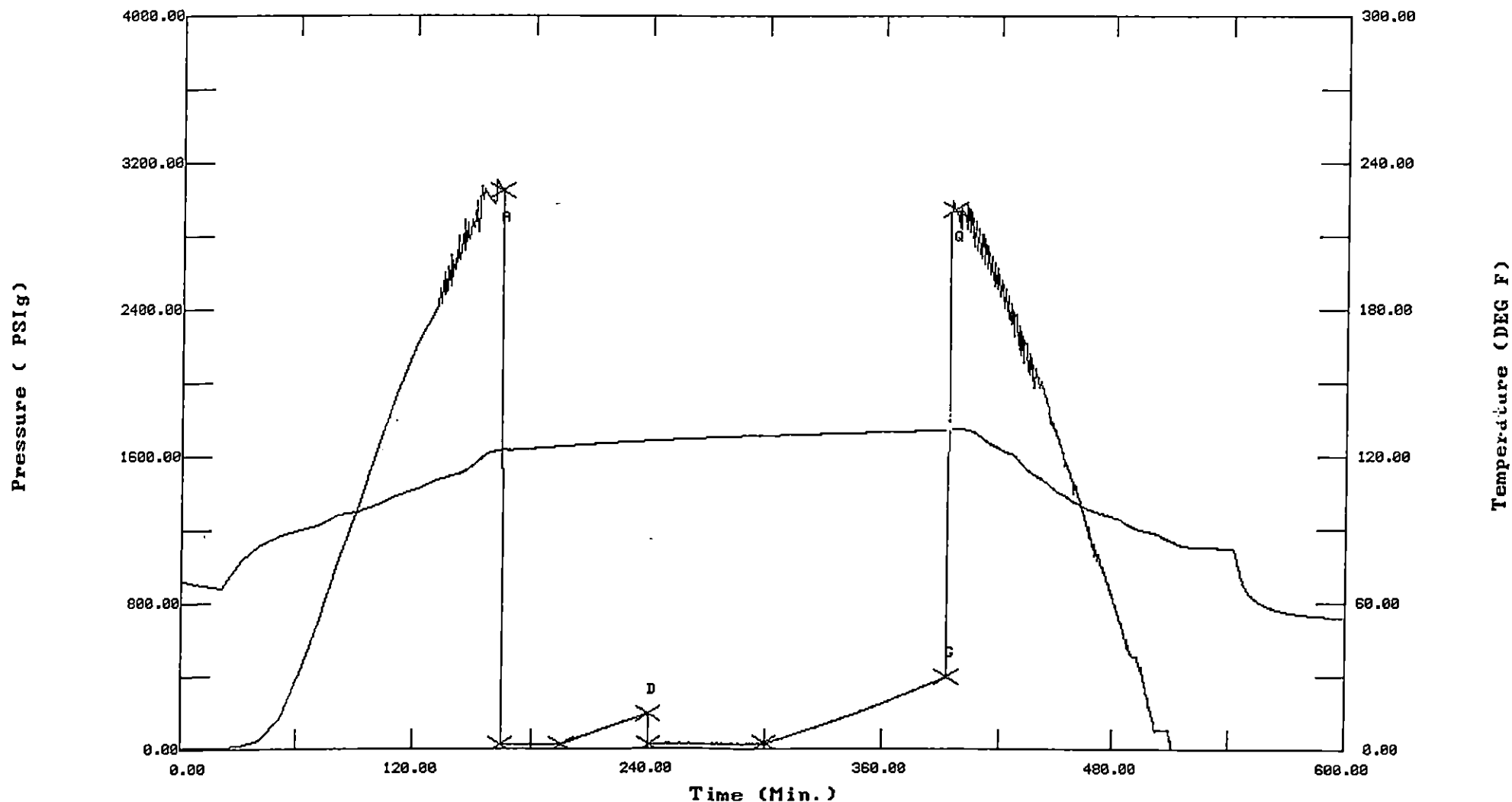
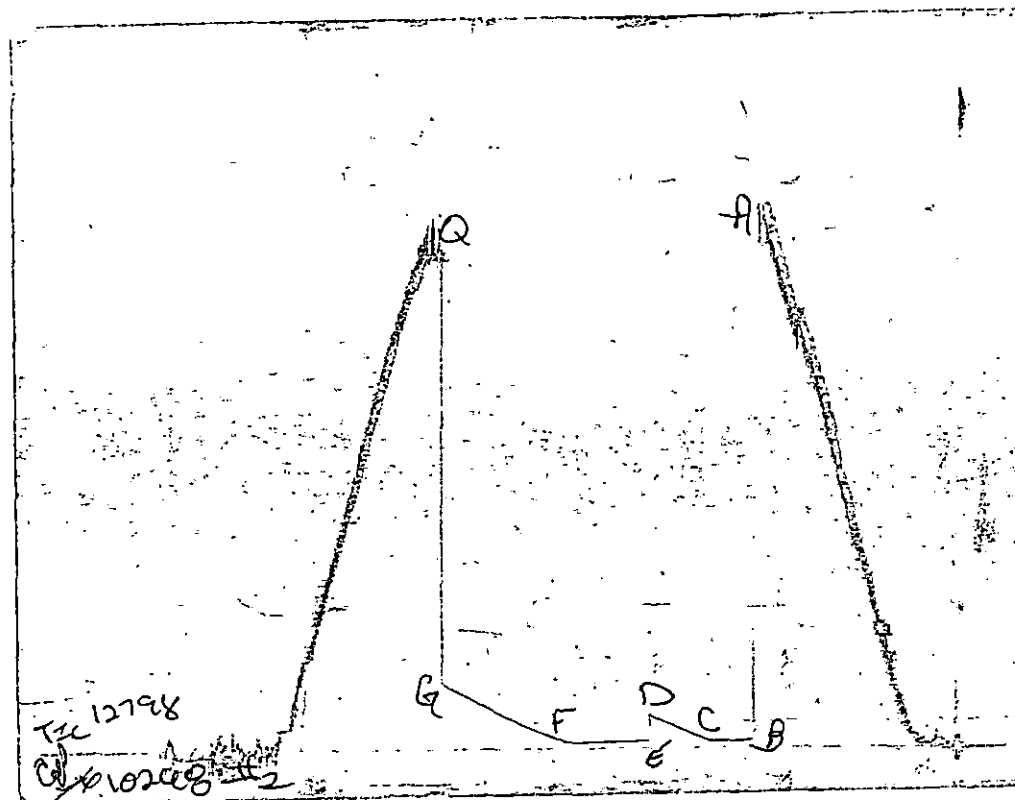


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

#2 Test Ticket

Nº 12798

Well Name & No. Hoffman Trust Test No. 2 Date 5-18-2000
 Company Crawford Oil & Gas Inc. Zone Tested Viola
 Address P.O. Box 51, Caldwellwater Ks. 67029 Elevation 1906 KB 1895 GL
 Co. Rep / Geo. Jon Christensen Cont. Duke Dely # 5 Est. Ft. of Pay 7 Por. %
 Location: Sec. 7 Twp. 34S Rge. 18W Co. Comanche State Ks.
 No. of Copies 5 Distribution Sheet (Y, N) N Turnkey (Y, N) yes Evaluation (Y, N)

Interval Tested 6087 - 6150' Initial Str Wt./Lbs. 82,000 Unseated Str Wt./Lbs. 82,000
 Anchor Length 63' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 97,000
 Top Packer Depth 6082' Tool Weight 2100 #
 Bottom Packer Depth 6087' Hole Size — 7 7/8" ✓ Rubber Size — 6 3/4" ✓
 Total Depth 6150 Wt. Pipe Run NONE Drill Collar Run 120'
 Mud Wt. 9.4 LCM 6# Vis. 59 WL 8.0cc Drill Pipe Size 4 1/2" x 11 Ft. Run 5947'
 Blow Description IF: Weak below, slow increase to 3".
ISI: No blow.
FF: Fair blow. 4 - 8" FSI: No blow

Recovery — Total Feet 20 GIP 100 Ft. in DC 20 Ft. in DP
 Rec. 20 Feet Of Oreg. 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 131 °F Gravity N/A °API D@ °F Corrected Gravity N/A °API
 RW N.C. @ °F Chlorides 6,000 ppm Recovery Chlorides 6,000 ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	3050	3053		3342	1245
(B) First Initial Flow Pressure	46	24	PSI	(depth) 6095'	T-Started 1445
(C) First Final Flow Pressure	46	21	PSI	Recorder No. 10248	T-Open 1730
(D) Initial Shut-In Pressure	216	188	PSI	(depth) 6147'	T-Pulled 2115
(E) Second Initial Flow Pressure	48	18	PSI	Recorder No. <u> </u>	T-Out 0010
(F) Second Final Flow Pressure	48	25	PSI	(depth) <u> </u>	T-Off Location 0115
(G) Final Shut-in Pressure	395	368	PSI	Initial Opening 30	Test <u>✓</u> 900 ⁰⁰
(Q) Final Hydrostatic Mud	2978	2943	PSI	Initial Shut-in 45	Jars <u>✓</u> 200 ⁰⁰
				Final Flow 60	Safety Joint <u>✓</u> 300 ⁰⁰
				Final Shut-in 90	Straddle <u> </u>
					Circ. Sub <u> </u>
					Sampler <u> </u>
					Extra Packer <u> </u>
					Elec. Rec. <u>✓</u> 150 ⁰⁰
					Mileage <u> </u>
					Other <u> </u>
					TOTAL PRICE \$ <u>1300⁰⁰</u>

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Approved By GP. for Jon Christensen
 Our Representative Gary Christensen

Well Name Hoffman

DST Number 1

Recorder Number 132 78

A: 2.323 2562

B: .129 142

C: .103 113

D: .250 275

E: .122 131

F: .101 111

G: .377 415

Q: 2.323 2562

Well Name Hoffman Trust
DST Number _____
Recorder Number 12248

A: 2.785 3071

B: .043 49

C: .033 38

D: .171 194

E: .033 38

F: .030 34

G: 346 390

Q: 2.729 3009