

15-081-21269

TRILOBITE TESTING L.L.C.

13-27s-34w

OPERATOR : Oxy U.S.A. Inc.
WELL NAME: Frey "F-4"
LOCATION : 13-27s-34w Haskell co KS
INTERVAL : 5126.00 To 5156.00 ft

DATE 1-15-2000
KB 2994.00 ft TICKET NO: 12484 DST # 1
GR 2980.00 ft FORMATION: Lower Morrow
TD 5156.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13278	13278	3030			PF Fr. 2150 to 2225 hr
SI 60 Range(Psi)	4400.0	4400.0	5000.0	0.0	0.0	IS Fr. 2225 to 2325 hr
SF 30 Clock(hrs)	12HR	12HR	ELECT			SF Fr. 2325 to 2355 hr
FS 60 Depth(ft)	5153.0	5153.0	5127.0	0.0	0.0	FS Fr. 2355 to 0055 hr

	Field	1	2	3	4	
A. Init Hydro	2427.0	2432.0	2398.0	0.0	0.0	T STARTED 1950 hr
B. First Flow	154.0	176.0	16.0	0.0	0.0	T ON BOTM 2147 hr
B1. Final Flow	154.0	169.0	28.0	0.0	0.0	T OPEN 2150 hr
C. In Shut-in	1148.0	1143.0	1224.0	0.0	0.0	T PULLED 0055 hr
D. Init Flow	187.0	196.0	31.0	0.0	0.0	T OUT 0345 hr
E. Final Flow	187.0	179.0	36.0	0.0	0.0	
F. Fl Shut-in	893.0	887.0	934.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2284.0	2275.0	2379.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	I	I	I			Wt Set On Packer 25000.00 lbs
						Wt Pulled Loose 7000.00 lbs
						Initial Str Wt 118000.00 lbs
						Unseated Str Wt 118000.00 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 643.00 ft
						D.P. Length 4473.00 ft

RECOVERY

Tot Fluid 10.00 ft of 10.00 ft in DC and 0.00 ft in DP
10.00 ft of 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 1100.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Very weak surface blow.
Initial Shut-In:
No blow back.
Final Flow:
No blow.
Final Shut-In:
No blow back.

SAMPLES: None
SENT TO:

MUD DATA-----

Mud Type Chemical
Weight 9.10 lb/c
Vis. 52.00 S/L
W.L. 9.00 in3
F.C. 0.00 in
Mud Drop Y 30.0 ft

Amt. of fill 0.00 ft
Btm. H. Temp. 116.00 F
Hole Condition GOOD
% Porosity 8.00
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. Tom Heflin
Contr. Cheyenne
Rig # 12
Unit #
Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Frey "F-4"

LOCATION : 13-27s-34w Haskell co KS

TICKET No. 12484 D.S.T. No. 1 DATE 1-15-2000

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 30

TOTAL TOOL 60

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 7 Single Total 643

D.P. ABOVE TOOLS.Stands 48 Single Total 4473

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5176

TOTAL DEPTH 5156

TOTAL DRILL PIPE ABOVE K.B. 20

REMARKS:

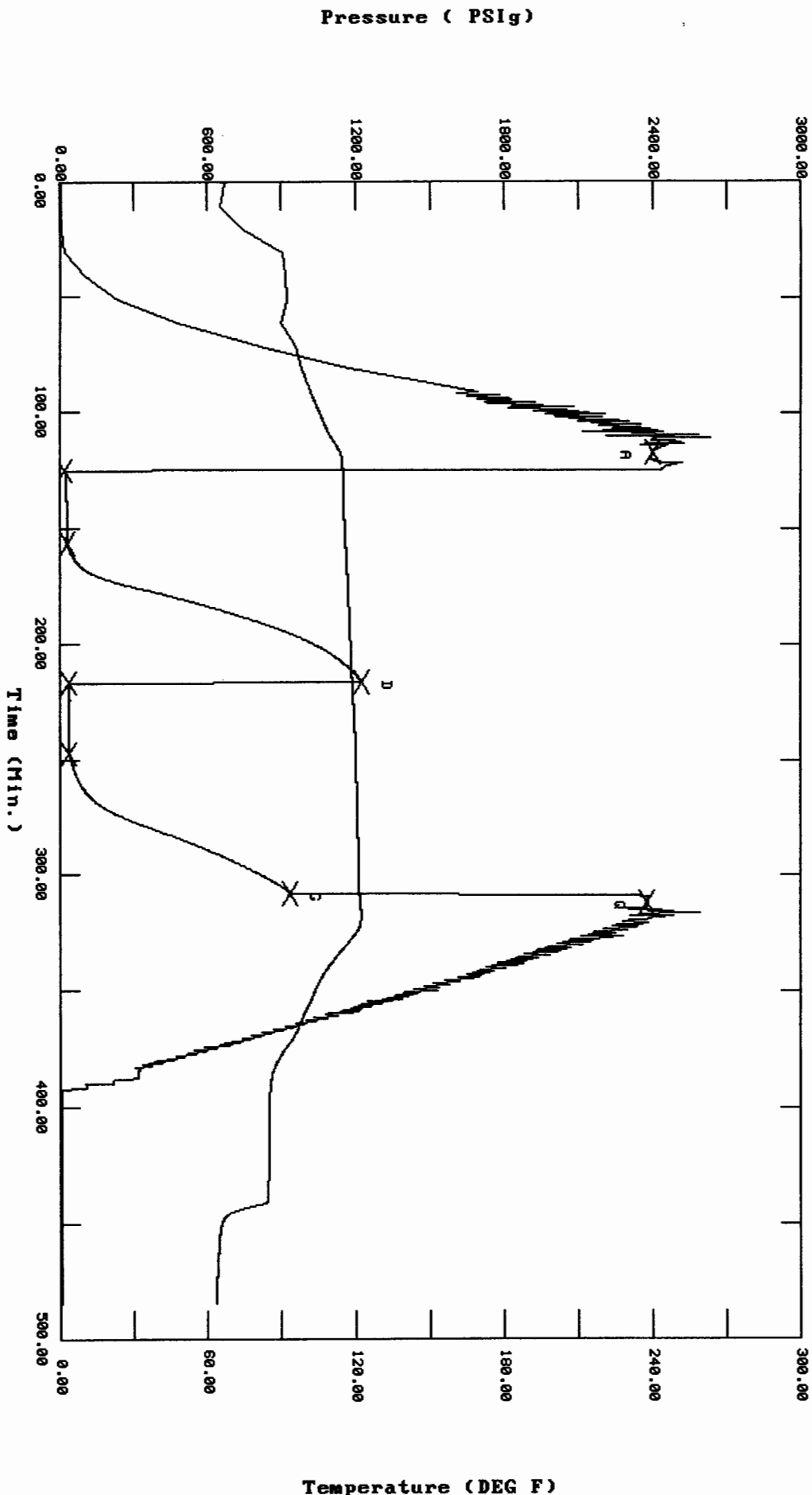
FLUID SAMPLER DATA

Total Vol. 4000 ML.
 Total Vol. Rec. 2000 ML.
 Oil ML.
 Mud 1800 ML.
 Wtr. 200 ML.
 Gas 0 CF.
 Psi. 100
 Bht. 116 F.
 Pit RW. Ohms at F. PPM.
 Rec RW..000 Ohms At 40 F. 1100 PPM.

P.O. SUB Cir.sub	5006
C.O. SUB Top of tool	5096
Double pin	5097
S.I. TOOL Sterling	5102
Sampler	5105
HMV Sterling	5110
JARS Sterling	5115
SAFETY JOINT Sterling	5117
PACKER Sparton	5122
PACKER Sparton	5126
DEPTH 1 Ft.	5127
ANCHOR Alpine	5127
Pu. sub	5132
AK-1	5153
24 ft. of perfs.	5154
BULLNOSE 2 ft. perfs	
T.D.	5156

TEST HISTORY

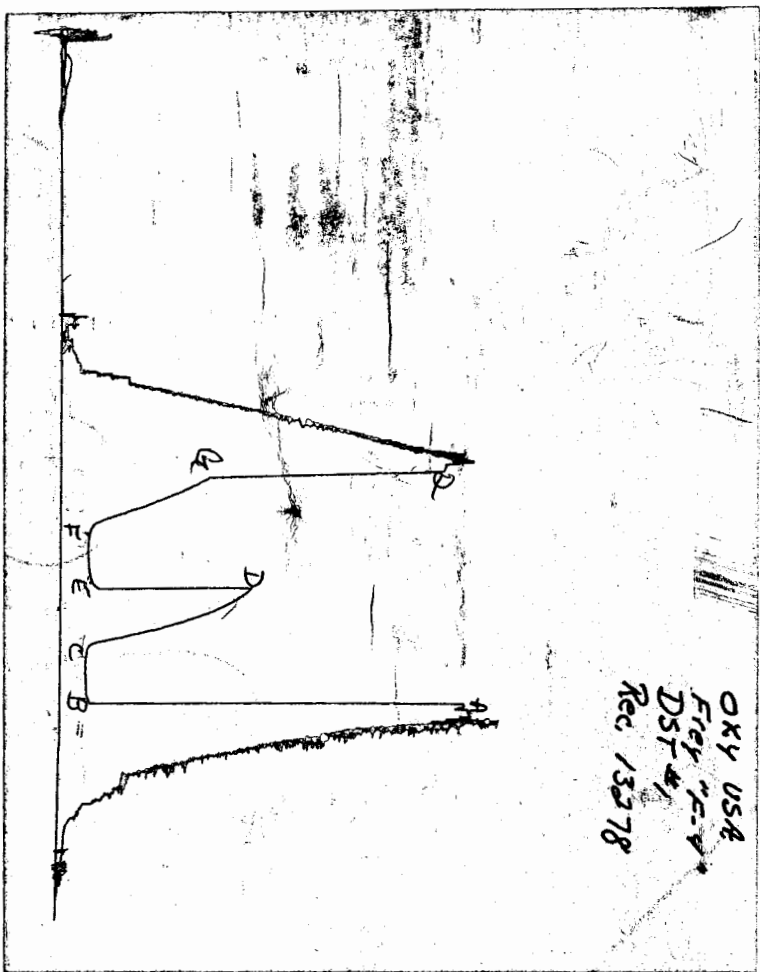
12484 DST #1 Frey "F-4" Oxy U.S.A. Inc.



Flag Points

(Min.)	P (PSig)
A	0.00
B	2398.93
C	16.85
D	31.50
E	28.12
F	60.25
G	1224.43
H	0.00
I	31.47
J	30.50
K	36.27
L	60.50
M	934.33
N	0.00
O	2379.62

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 12484

Well Name & No. <u>Frey "F-4"</u>	Test No. <u>1</u>	Date <u>1-15-2000</u>
Company <u>Qxy U.S.A.</u>	Zone Tested <u>Lower morrow</u>	
Address <u>Liberal Ks, 67906</u>	Elevation <u>2994</u>	KB <u>2980</u> GL
Co. Rep / Geo. _____	Cont. _____	Est. Ft. of Pay <u>18</u> Por. <u>8</u> %
Location: Sec. <u>13</u>	Twp. <u>27S</u>	Rge. <u>34 W</u> Co. <u>Haskell</u> State <u>Ks</u>
No. of Copies <u>Reg</u> Distribution Sheet (Y, N) <u>—</u>	Turnkey (Y, N) <u>—</u>	Evaluation (Y, N) <u>—</u>

Interval Tested <u>5126 - 5156</u>	Initial Str Wt./Lbs. <u>118,000</u>	Unseated Str Wt./Lbs. <u>118,000</u>
Anchor Length <u>30'</u> <u>30 tool</u>	Wt. Set Lbs. <u>25,000</u>	Wt. Pulled Loose/Lbs. <u>7,000</u>
Top Packer Depth <u>5121</u>	Tool Weight <u>4,800</u>	
Bottom Packer Depth <u>5126</u>	Hole Size — <u>7 7/8"</u>	Rubber Size — <u>6 3/4"</u>
Total Depth <u>5156</u>	Wt. Pipe Run <u>48,775</u>	Drill Collar Run <u>6.43'</u>
Mud Wt. <u>9.1</u> LCM <u>4</u> Vis. <u>52</u> WL <u>9.0</u>	Drill Pipe Size <u>4 1/2 X H</u>	Ft. Run <u>4473'</u>

Blow Description Very weak surface Blow I.F.P.
no- Blow Back, I. S. I. P.
NO-Blow F.F.P.
NO Blow Back F. S. I. P.

Recovery — Total Feet <u>10'</u>	GIP <u>—</u>	Ft. in DC <u>10'</u>	Ft. in DP <u>—</u>
Rec. <u>10'</u> Feet Of _____	%gas _____	%oil _____	%water <u>100</u> %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 116° °F Gravity — °API D@ — °F Corrected Gravity — °API
 RW 0 @ 40° °F Chlorides 1100 ppm Recovery Chlorides 1100 ppm System

	AK-1	Alpine	PSI Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2427</u>	<u>2398</u>	<u>3030</u>	<u>6:30 PM</u>
(B) First Initial Flow Pressure	<u>154</u>	<u>16</u>	(depth) <u>5127</u>	T-Started <u>7:50 AM</u>
(C) First Final Flow Pressure	<u>154</u>	<u>28</u>	PSI Recorder No. <u>13278</u>	T-Open <u>9:55 PM</u>
(D) Initial Shut-In Pressure	<u>1148</u>	<u>1224</u>	(depth) <u>5153</u>	T-Pulled <u>12:55 AM</u>
(E) Second Initial Flow Pressure	<u>187</u>	<u>31</u>	PSI Recorder No. <u>—</u>	T-Out <u>3:45 AM</u>
(F) Second Final Flow Pressure	<u>187</u>	<u>36</u>	(depth) <u>—</u>	T-Off Location _____
(G) Final Shut-in Pressure	<u>893</u>	<u>934</u>	PSI Initial Opening <u>30</u>	Test - <input checked="" type="checkbox"/> <u>800</u>
(Q) Final Hydrostatic Mud	<u>2284</u>	<u>2379</u>	PSI Initial Shut-in <u>60</u>	Jars - <input checked="" type="checkbox"/> <u>200</u>
			Final Flow <u>30</u>	Safety Joint - <input checked="" type="checkbox"/> <u>50</u>
			Final Shut-in <u>60</u>	Straddle _____
				Circ. Sub = _____
				Sampler - <input checked="" type="checkbox"/> <u>200</u>
				Extra Packer _____
				Elec. Rec. - <input checked="" type="checkbox"/> <u>150</u>
				Mileage _____
				Other _____
				TOTAL PRICE \$ <u>1400</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 Tom Hoffman
 Our Representative Brad Boy