

Well Name: Mirt #1
Company: Noble Petroleum Inc
Location: 15-34s-1w
Sumner County Kansas
Date: 10/26/98

TRILOBITE TESTING L.L.C.

OPERATOR : Noble Petroleum INC
 WELL NAME: Mirt #1
 LOCATION : 15-34s-1w Sumner co. KS
 INTERVAL : 2778.00 To 2797.00 ft

DATE 10-15-98
 KB 1152.00 ft
 GR 1144.00 ft
 TD 2797.00 ft

TICKET NO: 11558 DST #1
 FORMATION: Stalnaker
 TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	10248	10248	2342			PF Fr. 0149 to 0219 hr
SI 60 Range(Psi)	4400.0	4400.0	4995.0	0.0	0.0	IS Fr. 0219 to 0319 hr
SF 30 Clock(hrs)	12 hr	12 hr	batt.			SF Fr. 0319 to 0349 hr
FS 60 Depth(ft)	2794.0	2794.0	2783.0	0.0	0.0	FS Fr. 0349 to 0449 hr

	Field	1	2	3	4	
A. Init Hydro	1395.0	1368.0	1363.0	0.0	0.0	T STARTED 0025 hr
B. First Flow	34.0	40.0	28.0	0.0	0.0	T ON BOTM 0145 hr
B1. Final Flow	145.0	139.0	155.0	0.0	0.0	T OPEN 0149 hr
C. In Shut-in	1069.0	1082.0	1086.0	0.0	0.0	T PULLED 0450 hr
D. Init Flow	155.0	172.0	159.0	0.0	0.0	T OUT 0645 hr
E. Final Flow	250.0	241.0	277.0	0.0	0.0	
F. Fl Shut-in	1069.0	1082.0	1087.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1351.0	1343.0	1350.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	O	r	I	T		Wt Set On Packer 20000.00 lbs

RECOVERY

Tot Fluid 480.00 ft of 0.00 ft in DC and 480.00 ft in DP
 880.00 ft of Gas in pipe.
 70.00 ft of Gassy mud cut oil 20%gas 7%mud 73%oil
 110.00 ft of Gassy oil cut muddy water
 0.00 ft of 10% gas 5% oil 65% water 20% mud
 300.00 ft of Muddy water with oil specs 95% water 5% mud
 0.00 ft of
 0.00 ft of Rw .13 ohms @ 60 degrees F.
 0.00 ft of EST.FT. of PAY-----6
 SALINITY 88000.00 P.P.M. A.P.I. Gravity 34.00

TOOL DATA-----
 Tool Wt. 2100.00 lbs
 Wt Set On Packer 20000.00 lbs
 Wt Pulled Loose 40000.00 lbs
 Initial Str Wt 34000.00 lbs
 Unseated Str Wt 34000.00 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 0.00 ft
 D.P. Length 2766.00 ft

MUD DATA-----

Mud Type Chemical
 Weight 9.20 lb/c
 Vis. 38.00 S/L
 W.L. 12.80 in3
 F.C. 0.20 in
 Mud Drop N
 Amt. of fill 0.00 ft
 Btm. H. Temp. 112.00 F
 Hole Condition Good
 % Porosity 16.00
 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. Ablah / Honas
 Contr. Duke Drlg.
 Rig # 4
 Unit #
 Pump T. LCM 0#/bl

BLOW DESCRIPTION

Initial Flow:
 Strong blow bottom of bucket in
 5.5 mins.
 Initial Shut-in:
 Fair to strong blow. bottom of
 bucket in 30 mins
 Final Flow;
 Strong blow. bottom of bucket in
 8 mins.
 Final Shut-in:
 Fair blow 1-10"

SAMPLES: none
 SENT TO:Caraway/Liberal

Test Successful: Y

Operator.....: Noble Petroleum Inc.
Well Name.....: Mirt #1
DST Number.....: 1

Location.: 15-34s-1w Recorder No...: 2342
Test Type: conv Recorder Depth: 2783
Formation: Stalnaker Test Interval.: 2778-2797

RESERVOIR CALCULATIONS: Fluid calculations based on shut-in #2

RESERVOIR PARAMETERS USED:

Net Pay.....: 6.00 ft
Porosity.....: 10.00 %
Bottom Hole Temp.....: 112.00 F
Specific Gravity.....: 0.032
API Gravity.....: 34.00
Compressibility.....: 0.000001 /psi
Viscosity.....: 8.7021 cp
Total Recovery.....: 480.00 ft
Total Flowing Time.....: 60.00 min.
Flow Rate.....: 336.54 bbls/d
Final Flowing Pressure.....: 277.00 psi
Horner Slope.....: 15.8799 psi/cycle
Extrapolated Pressure.....: 1091.20 psi
Formation Volume Factor.....: 1.03 Reservoir/Surface
Well Bore Radius.....: 3.94 in

RESULTS:

Effective Permeability.....: 5131.220620 md
Flow Capacity.....: 30787.3237 md.ft
Transmissibility.....: 3537.9189 md.ft/cp
Skin Factor.....: 50.7553
Radius of Investigation.....: 2347.33488 ft
Damage Ratio.....: 7.1451
Productivity Index.....: 0.4133 bbls/psi.d
Productivity Index W/O Damage.: 2.9533 bbls/psi.d

CALCULATED RECOVERY ANALYSIS

DST # 1 TICKET 11558

Drill Pipe #	TOTAL FEET	GAS		OIL		WATER		MUD		
		%	FEET	%	FEET	%	FEET	%	FEET	
1	880	100	880	100	880		0		0	
2	70	20	14	73	51.1		0	7	4.9	
3	110	10	11	50	55	65	71.5	20	22	
4	300		0		0	95	285	5	15	
5			0		0		0		0	
6			0		0		0		0	
Drill Collars										
1			0		0		0		0	
2			0		0		0		0	
3			0		0		0		0	
4			0		0		0		0	
5			0		0		0		0	
TOTAL	1360	66.54	905	72.51	986.1	26.21	356.5	3.081	41.9	

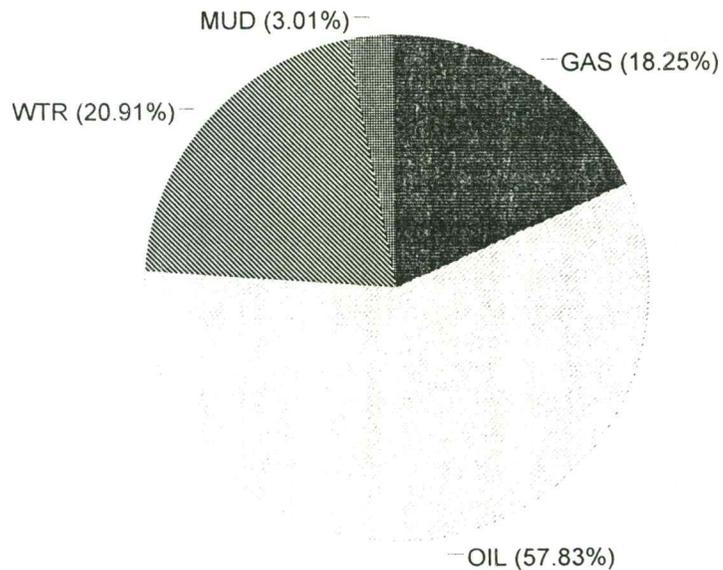
HRS OP BBL/DAY

BBL OIL= 14.022342 * 1 336.536

BBL WATER= 5.06943 * 121.666

BBL MUD= 0.731031

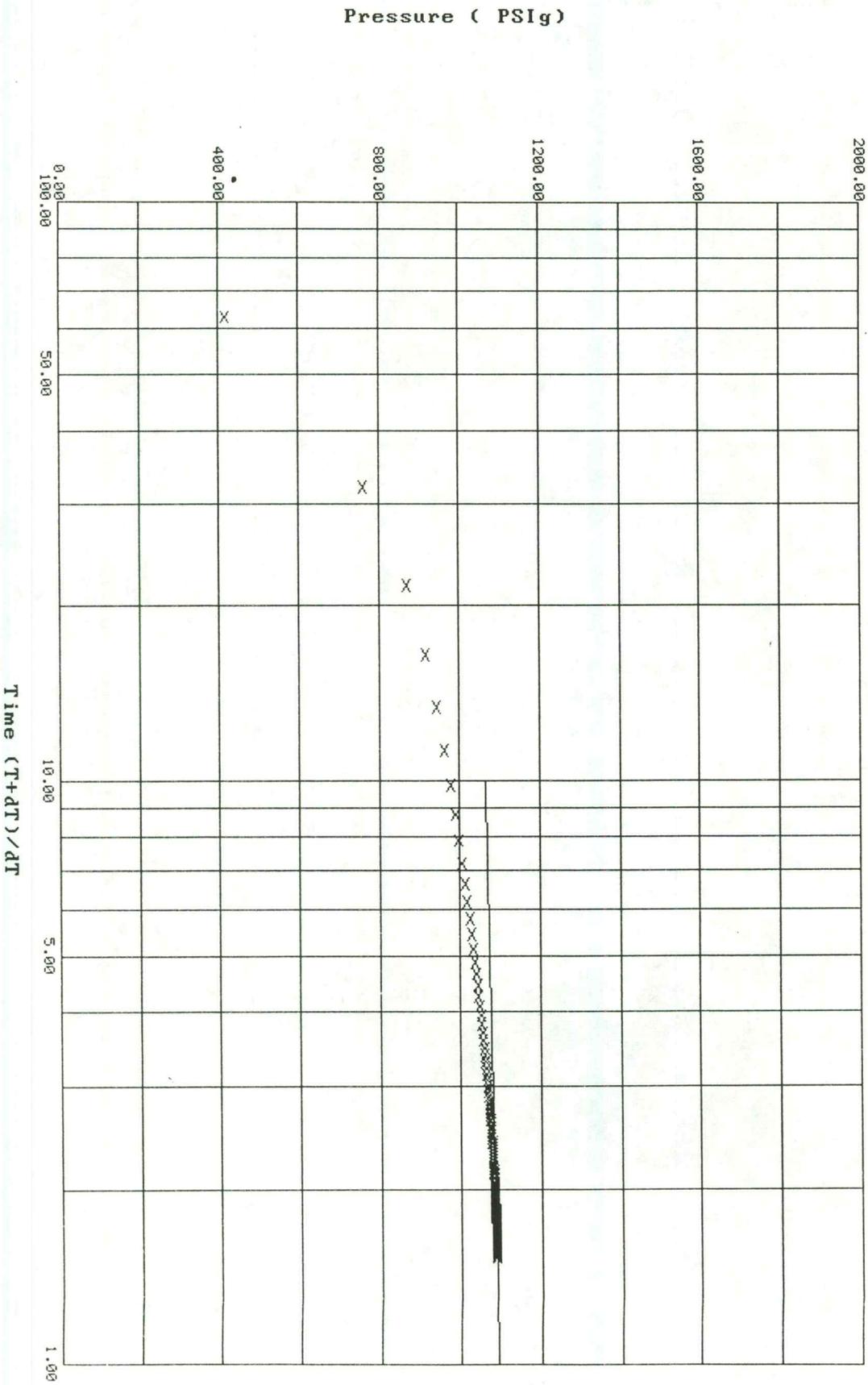
BBL GAS 4.42545



Horner Plot: Shut-in #1

11558 DST#1 MIRT#1 NOBLE PETL. INC.

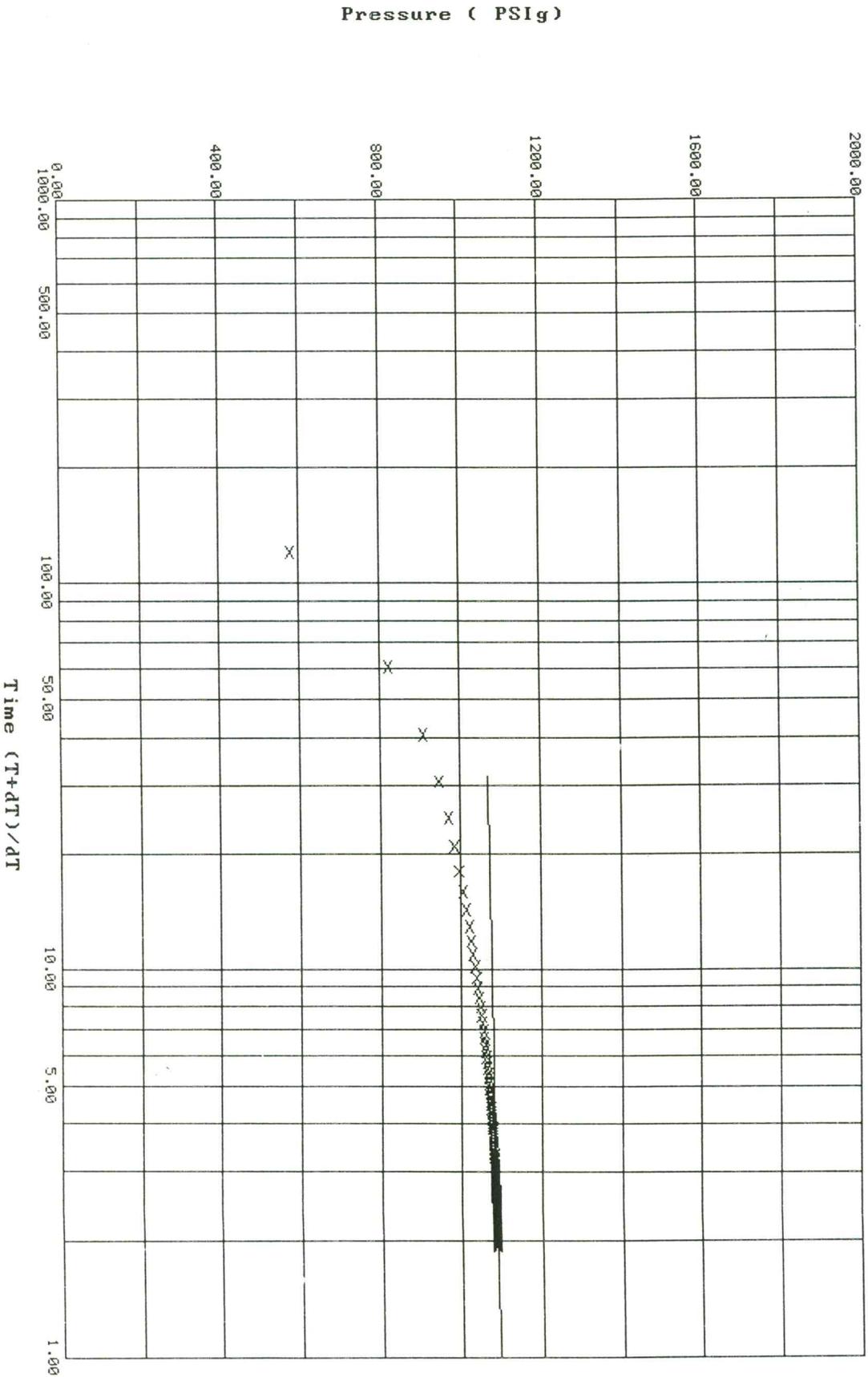
Slope: 27.9869 PSig/cycle
Ext. Pressure: 1091.5349 PSig



Horner Plot: Shut-in #2

11558 DST#1 MIRT#1 NOBLE PETL. INC.

Slope: 15.8799 PSig/cycle
Ext. Pressure: 1091.2034 PSig



TRILOBITE TESTING L.L.C.

OPERATOR : Noble Petl.Inc.

DATE 10-16-98

WELL NAME: Mirt #1

KB 1152.00 ft

TICKET NO: 11559 DST #2

LOCATION : Sec.15 Twp.34s Rg. 1w Ks

GR 1144.00 ft

FORMATION: Layton

INTERVAL : 3122.00 To 3152.00 ft

TD 3152.00 ft

TEST TYPE: CONVENTIONAL

RECORDED DATA

Mins		Field	1	2	3	4	TIME DATA-----
F 30	Rec.	10248	10248	2342			PF Fr. 0644 to 0714 hr
I 60	Range(Psi)	4400.0	4400.0	4995.0	0.0	0.0	IS Fr. 0714 to 0814 hr
F 30	Clock(hrs)	12 hr	12 hr	batt.			SF Fr. 0814 to 0844 hr
S 60	Depth(ft)	3149.0	3149.0	3127.0	0.0	0.0	FS Fr. 0844 to 0944 hr

	Field	1	2	3	4	
Init Hydro	1592.0	0.0	1587.0	0.0	0.0	T STARTED 0451 hr
First Flow	18.0	0.0	20.0	0.0	0.0	T ON BOTM 0635 hr
Final Flow	25.0	0.0	43.0	0.0	0.0	T OPEN 0644 hr
In Shut-in	1244.0	0.0	1252.0	0.0	0.0	T PULLED 0944 hr
Init Flow	71.0	0.0	69.0	0.0	0.0	T OUT 1130 hr
Final Flow	82.0	0.0	67.0	0.0	0.0	
Fl Shut-in	1240.0	0.0	1244.0	0.0	0.0	
Final Hydro	1570.0	0.0	1526.0	0.0	0.0	
Inside/Outside	O	O	I	T		

RECOVERY

Total Fluid	130.00 ft of	0.00 ft in DC and	130.00 ft in DP
730.00	ft of Gas in pipe.		
30.00	ft of Gas Oil Cut Mud	23%g 17%o 60%m	
0.00	ft of		
0.00	ft of Rw n.c. ohms @	degrees F.	
0.00	ft of EST.FT. of PAY-----	14	
SALINITY	6000.00 P.P.M.	A.P.I. Gravity	34.00

BLOW DESCRIPTION

Initial Flow:
Fair to strong blow - bottom of bucket in 12 minutes

Initial Shutin:
Weak blow (1 1/2")

Final Flow:
Strong blow - bottom of bucket in 5 seconds

Final Shutin:
No blow

SAMPLES: none
SENT TO: Caraway/Liberal

MUD DATA-----

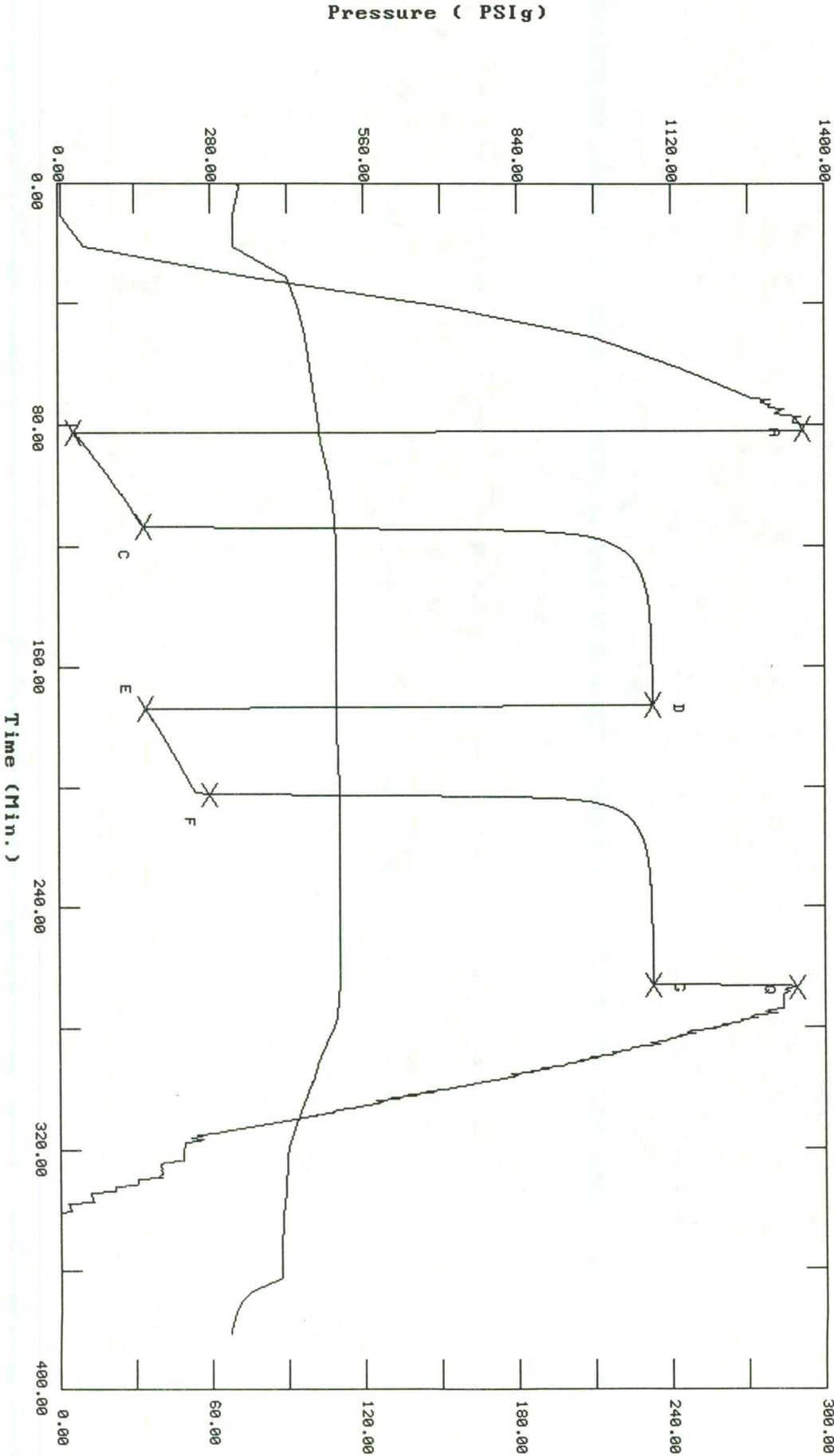
Mud Type	Chemical
Weight	9.40 lb/cf
Vis.	42.00 S/L
W.L.	12.00 in3
F.C.	0.20 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	114.00 F
Hole Condition	Good
% Porosity	12.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00 N
Cushion Type	None
Reversed Out N	
Tool Chased N	
Tester	Gary Pevoteaux
Co. Rep.	Ablah / Honas
Contr.	Duke Drlg.
Rig #	4
Unit #	
Pump T.	LCM 0#/bl

Test Successful: Y

TEST HISTORY
 11558 DST#1 MIRT#1 NOBLE PETL. INC.

Flag Points

t (Min.)	P (PSIg)
A: 0.00	1362.64
B: 0.00	28.19
C: 31.00	154.59
D: 59.50	1086.25
E: 0.00	158.53
F: 28.50	277.29
G: 63.50	1086.51
Q: 0.00	1349.63

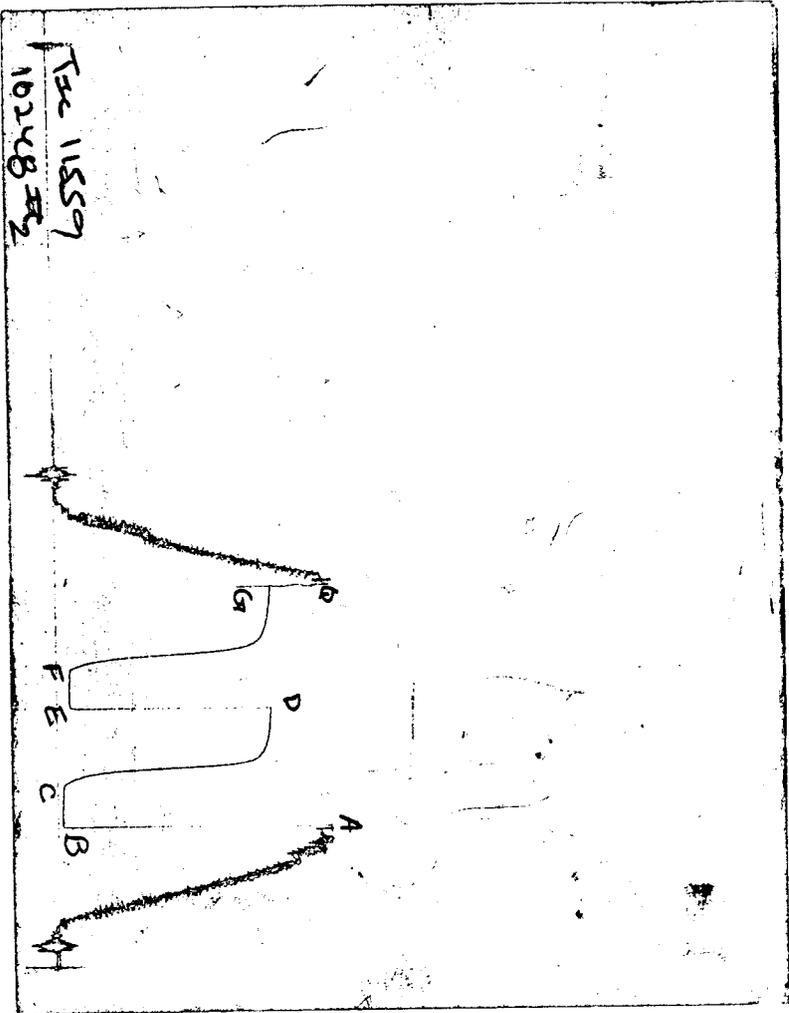


Temperature (DEG F)

Pressure (PSIg)

Time (Min.)

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 11558

Well Name & No. <u>MERT #1</u>	Test No. <u>1</u>	Date <u>10-15-98</u>
Company <u>NOBLE PETRO-INC.</u>	Zone Tested <u>STALMAKER</u>	
Address <u>2101 N. ROCK RD. STE. 125, WACHUSA, KS. 67224</u>	Elevation <u>1152</u>	KB <u>1144GL</u>
Co. Rep / Geo. <u>ABLAH / HONAS</u>	Cont. <u>Duke DRLG #4</u>	Est. Ft. of Pay <u>6</u> Por. <u>16</u> %
Location: Sec. <u>15</u> Twp. <u>34^S</u> Rge. <u>1^W</u>	Co. <u>SUMNER</u>	State <u>KS.</u>
No. of Copies <u>5</u>	Distribution Sheet (Y, N) <u>N</u>	Turnkey (Y, N) <u>Y</u> Evaluation (Y, N) _____

Interval Tested <u>2778 - 2797'</u>	Initial Str Wt./Lbs. <u>24,000</u>	Unseated Str Wt./Lbs. <u>35,000</u>
Anchor Length <u>19'</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u>49,000</u>
Top Packer Depth <u>2773'</u>	Tool Weight <u>2100 II</u>	
Bottom Packer Depth <u>2778'</u>	Hole Size — 7 7/8" <u>✓</u>	Rubber Size — 6 3/4" <u>✓</u>
Total Depth <u>2797'</u>	Wt. Pipe Run <u>None</u>	Drill Collar Run <u>None</u>
Mud Wt. <u>9.2 LCM ~</u> Vis. <u>38</u> WL <u>12.8</u>	Drill Pipe Size <u>4 1/2" x 4.</u>	Ft. Run <u>2766'</u>
Blow Description <u>IF: Strong blow. B.O.B. in 5.5 mins.</u>		
<u>ISI: Fair to strong blow. B.O.B. in 30 mins.</u>		
<u>FF: Strong blow. B.O.B. in 8 mins. FSI: Fair below.</u>		
<u>(1-10")</u>		

Recovery — Total Feet <u>480' Fluid GIP 880</u>	Ft. in DC <u>2</u>	Ft. in DP <u>480'</u>
Rec. <u>70</u> Feet Of <u>G.M.C.O.</u>	<u>20</u> %gas <u>73</u> %oil	%water <u>7</u> %mud
Rec. <u>110'</u> Feet Of <u>G.O.C. M.W.</u>	<u>10</u> %gas <u>5</u> %oil	<u>65</u> %water <u>20</u> %mud
Rec. <u>300'</u> Feet Of <u>M.W. @ oil spec.</u>	%gas %oil <u>95</u>	%water <u>5</u> %mud
Rec. _____ Feet Of _____	%gas %oil _____	%water _____ %mud
Rec. _____ Feet Of _____	%gas %oil _____	%water _____ %mud
BHT <u>112</u> °F Gravity <u>N/A</u>	°API D@ <u>~</u>	°F Corrected Gravity <u>N/A</u> °API
RW <u>.13</u> @ <u>60</u> °F	Chlorides <u>88,000</u> ppm	Recovery Chlorides <u>2,000</u> ppm System

	AK-1	Alpine	PSI Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>1395</u>	<u>1363</u>	<u>1342</u>	<u>2325</u>
(B) First Initial Flow Pressure	<u>34</u>	<u>28</u>	(depth) <u>2783'</u>	T-Started <u>0025</u>
(C) First Final Flow Pressure	<u>145</u>	<u>155</u>	PSI Recorder No. <u>10248</u>	T-Open <u>0149</u>
(D) Initial Shut-In Pressure	<u>1069</u>	<u>1086</u>	(depth) <u>2794'</u>	T-Pulled <u>0450</u>
(E) Second Initial Flow Pressure	<u>155</u>	<u>159</u>	PSI Recorder No. <u>~</u>	T-Out <u>0645</u>
(F) Second Final Flow Pressure	<u>250</u>	<u>277</u>	(depth) <u>~</u>	T-Off Location <u>0740</u>
(G) Final Shut-in Pressure	<u>1069</u>	<u>1087</u>	PSI Initial Opening <u>30</u>	Test <u>✓ 600⁰⁰</u>
(Q) Final Hydrostatic Mud	<u>1351</u>	<u>1350</u>	PSI Initial Shut-in <u>60</u>	Jars _____
			Final Flow <u>30</u>	Safety Joint <u>✓ 50⁰⁰</u>
			Final Shut-in <u>60</u>	Straddle _____
			_____	Circ. Sub _____
			_____	Sampler _____
				Extra Packer _____
				Elec. Rec. <u>✓ 150⁰⁰</u>
				Mileage _____
				Other _____
				TOTAL PRICE \$ <u>✓ 800⁰⁰</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 [Signature]
 Our Representative [Signature]

TRILOBITE TESTING L.L.C.

OPERATOR : Noble Petl.Inc. DATE 10-16-98
 WELL NAME: Mirt #1 KB 1152.00 ft TICKET NO: 11559 DST #2
 LOCATION : 15-34s-1w Sumner co. KS GR 1144.00 ft FORMATION: Layton
 INTERVAL : 3122.00 To 3152.00 ft TD 3152.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	10248	10248	2342			PF Fr. 0644 to 0714 hr
SI 60 Range(Psi)	4400.0	4400.0	4995.0	0.0	0.0	IS Fr. 0714 to 0814 hr
SF 30 Clock(hrs)	12 hr	12 hr	batt.			SF Fr. 0814 to 0844 hr
FS 60 Depth(ft)	3149.0	3149.0	3127.0	0.0	0.0	FS Fr. 0844 to 0944 hr

	Field	1	2	3	4	
A. Init Hydro	1592.0	1581.0	1587.0	0.0	0.0	T STARTED 0451 hr
B. First Flow	18.0	32.0	20.0	0.0	0.0	T ON BOTM 0635 hr
B1. Final Flow	25.0	32.0	43.0	0.0	0.0	T OPEN 0644 hr
C. In Shut-in	1244.0	1241.0	1252.0	0.0	0.0	T PULLED 0944 hr
D. Init Flow	71.0	78.0	69.0	0.0	0.0	T OUT 1130 hr
E. Final Flow	82.0	78.0	67.0	0.0	0.0	
F. Fl Shut-in	1240.0	1246.0	1244.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1570.0	1553.0	1526.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	O	O	I	T		Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 40000.00 lbs
						Initial Str Wt 35000.00 lbs
						Unseated Str Wt 35500.00 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 0.00 ft
						D.P. Length 3106.00 ft

RECOVERY

Tot Fluid 130.00 ft of 0.00 ft in DC and 130.00 ft in DP
 1730.00 ft of Gas in pipe.
 130.00 ft of Gas Oil Cut Mud 23%gas 17%oil 60%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-----14
 SALINITY 6000.00 P.P.M. A.P.I. Gravity 34.00

MUD DATA-----

Mud Type	Chemical
Weight	9.40 lb/c
Vis.	42.00 S/L
W.L.	12.00 in3
F.C.	0.20 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	114.00 F
Hole Condition	Good
% Porosity	12.00
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.	Ablah / Honas
Contr.	Duke Drlg.
Rig #	4
Unit #	
Pump T.	LCM 0#/bl

BLOW DESCRIPTION

Initial Flow:
 Fair to strong blow - bottom of bucket in 12 minutes

Initial Shutin:
 Weak blow (1 1/2")

Final Flow:
 Strong blow - bottom of bucket in 5 seconds

Final Shutin:
 No blow

SAMPLES: none
 SENT TO:Caraway/Liberal

Test Successful: Y

CALCULATED RECOVERY ANALYSIS

DST # 2 TICKET 11559

Drill Pipe #	TOTAL	GAS		OIL		WATER		MUD		
	FEET	%	FEET	%	FEET	%	FEET	%	FEET	
1	1730	100	1730		0		0		0	
2	130	23	29.9	17	22.1		0	60	78	
3			0		0		0		0	
4			0		0		0		0	
5			0		0		0		0	
6			0		0		0		0	
Drill Collars										
1			0		0		0		0	
2			0		0		0		0	
3			0		0		0		0	
4			0		0		0		0	
5			0		0		0		0	
TOTAL	1860	94.62	1759.9	1.19	22.1	0.00	0	4.194	78	

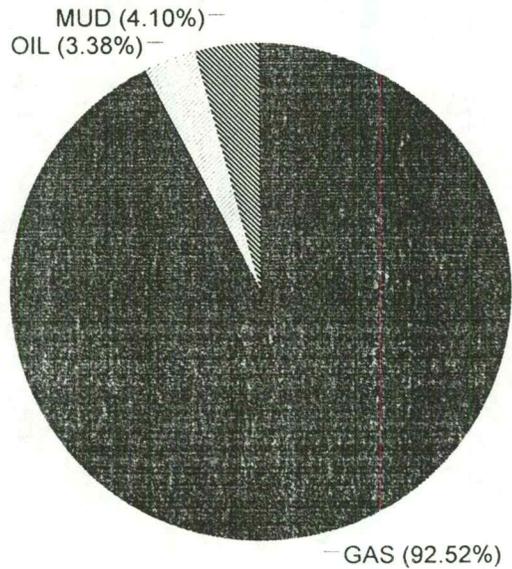
HRS OP BBL/DAY

BBL OIL= 0.314262 * 1 7.54229

BBL WATER= 0 * 0

BBL MUD= 0.38142

BBL GAS 8.605911



Operator.....: Noble Petroleum Inc.
Well Name.....: Mirt #1
DST Number.....: 2

Location.: 15-34s-1w Recorder No...: 2342
Test Type: conv Recorder Depth: 3127
Formation: Layton Test Interval.: 3122-3152

RESERVOIR CALCULATIONS: Fluid calculations based on shut-in #2

RESERVOIR PARAMETERS USED:

Net Pay.....: 16.00 ft
Porosity.....: 21.00 %
Bottom Hole Temp.....: 114.00 F
Specific Gravity.....: 0.032
API Gravity.....: 34.00
Compressibility.....: 0.000013 /psi
Viscosity.....: 3.1747 cp
Total Recovery.....: 130.00 ft
Total Flowing Time.....: 60.00 min.
Flow Rate.....: 7.42 bbls/d
Final Flowing Pressure.....: 67.00 psi
Horner Slope.....: 142.8931 psi/cycle
Extrapolated Pressure.....: 1385.12 psi
Formation Volume Factor.....: 1.09 Reservoir/Surface
Well Bore Radius.....: 3.94 in

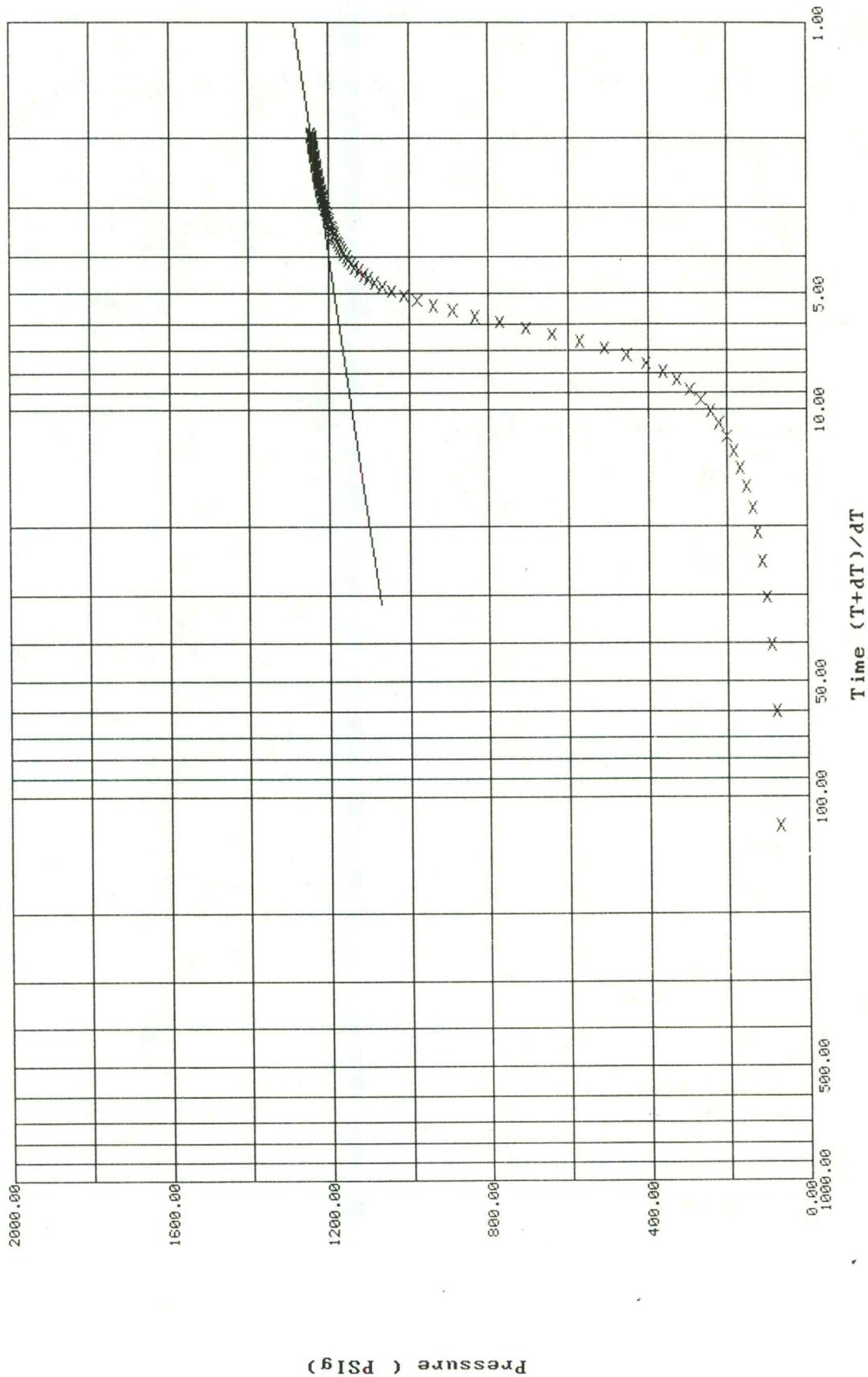
RESULTS:

Effective Permeability.....: 1.826091 md
Flow Capacity.....: 29.2175 md.ft
Transmissibility.....: 9.2032 md.ft/cp
Skin Factor.....: 7.5290
Radius of Investigation.....: 13.31149 ft
Damage Ratio.....: 3.4378
Productivity Index.....: 0.0056 bbls/psi.d
Productivity Index W/O Damage.: 0.0194 bbls/psi.d

Horner Plot: shut-in #2

11559 DST#2 MIRT#1 NOBLE PETL. INC.

Slope: 142.8931 PSig/cycle
Ext. Pressure: 1285.1222 PSig

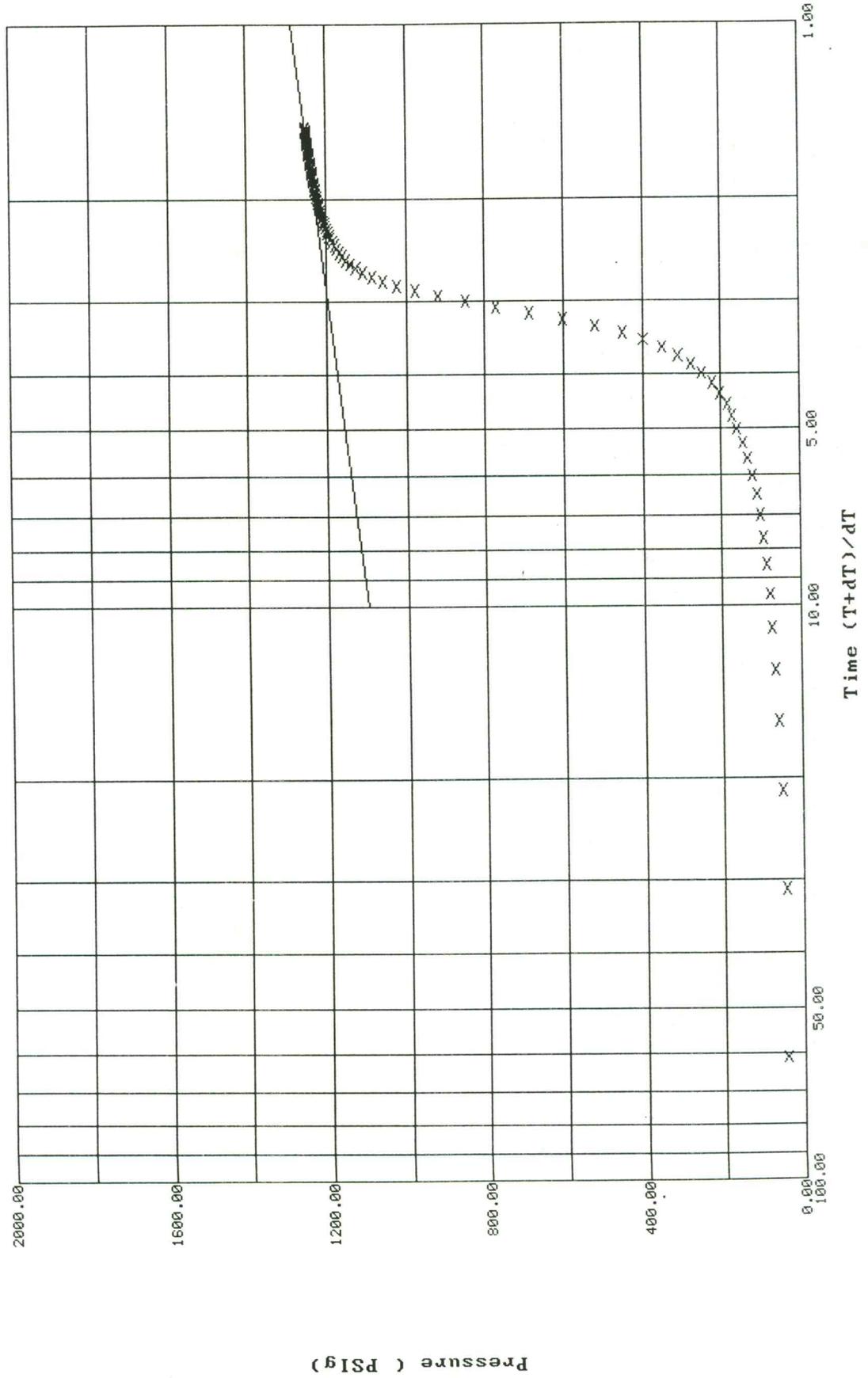


Horner Plot: shut-in #1

11559 DST#2 MIRT#1 NOBLE PETL. INC.

Slope: 187.1410 PSig/cycle

Ext. Pressure: 1285.0774 PSig



*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Mirt #1

LOCATION : Sec.15 Twp.34s Rg. 1w Ks

TICKET No. 11559 D.S.T. No. 2 DATE 10-16-98

TOTAL TOOL TO BOTTOM OF TOP PACKERS 22

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 30

TOTAL TOOL 52

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 52

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands50 Single Total 3106

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3158

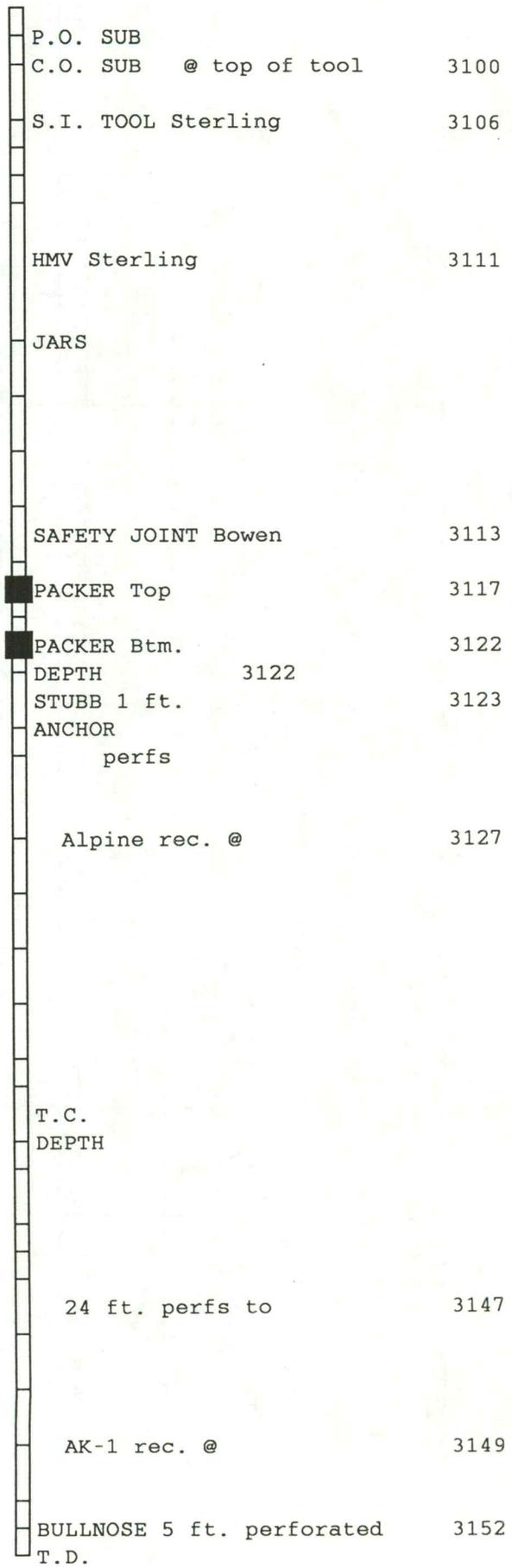
TOTAL DEPTH 3152

TOTAL DRILL PIPE ABOVE K.B. 6

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



TEST HISTORY

1559 DST#2 MIRT#1 NOBLE PETL. INC.

Flag Points

Flag Points	Time (Min.)	Pressure (PSig)
R	0.00	1586.73
B	0.00	20.47
C	30.00	43.13
D	59.50	1251.86
E	0.00	68.73
F	29.00	67.30
G	62.50	1243.80
Q	0.00	1525.97

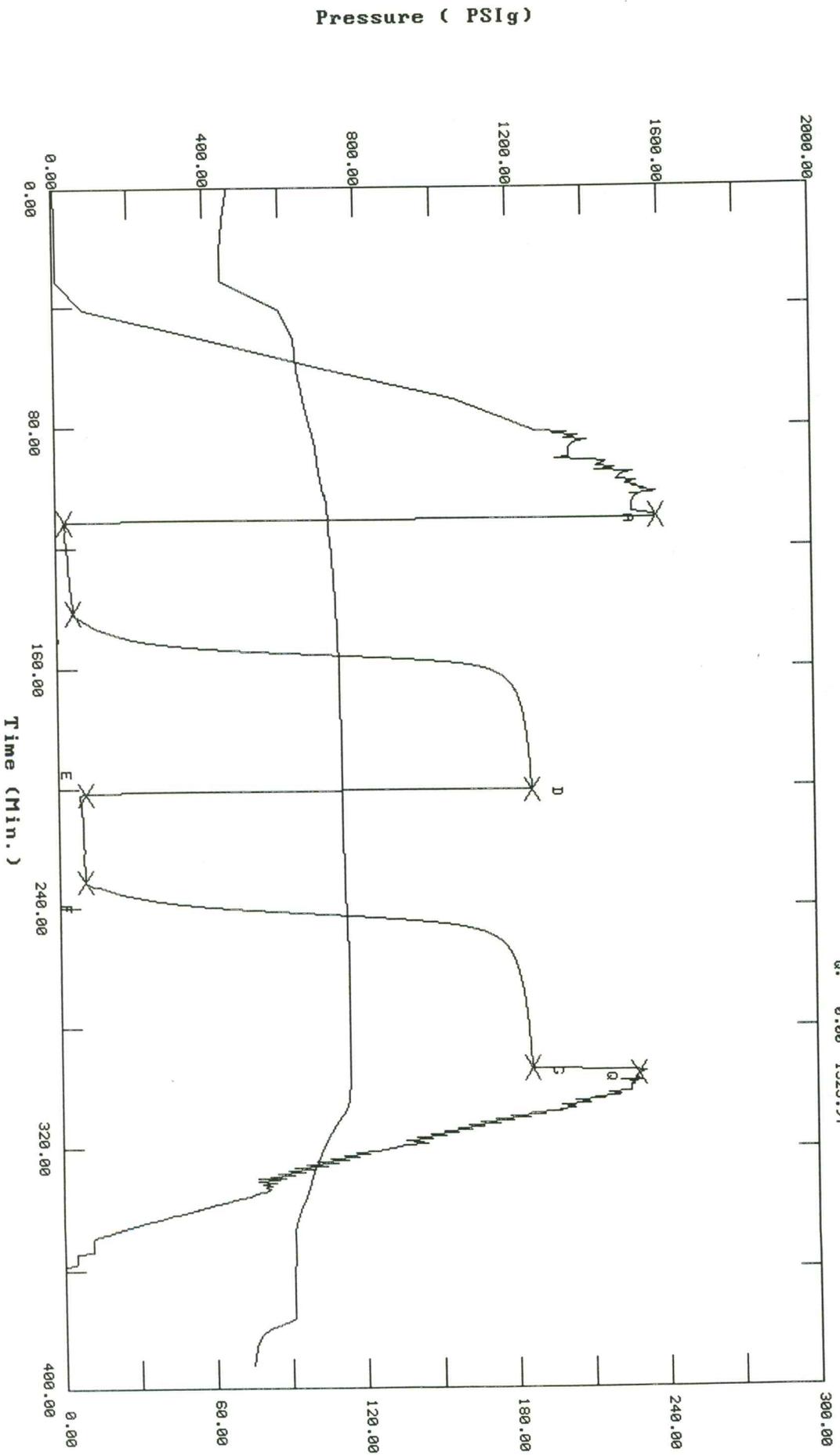
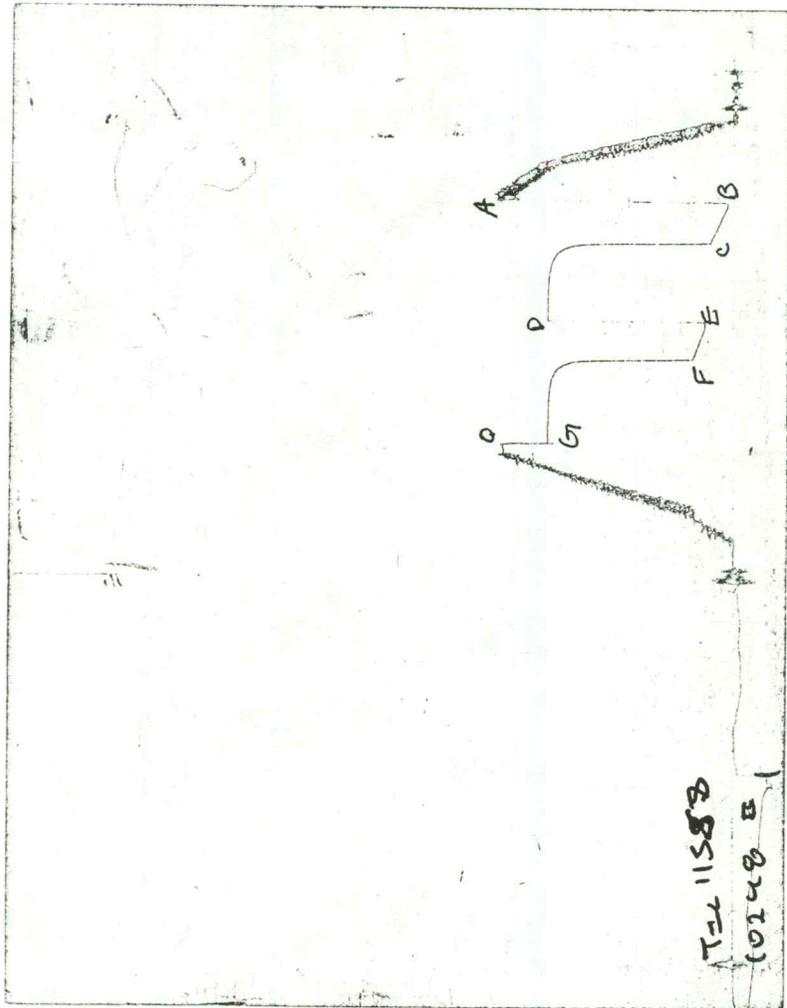


CHART PAGE



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

GARY SHARP
262 3506
267 7184

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 11559

Well Name & No. MERT # 1 Test No. 2 Date 10-11-98
 Company NOBLE PET. INC. Zone Tested LAYTON
 Address 3101 N. ROCK RD. STE. 125, WENZELT, KS. 67226 Elevation 1152 KB 1144 est. GL
 Co. Rep / Geo. ABLUH / HONAS Cont. DUKE DRUG #4 Est. Ft. of Pay 7 Por. 12 %
 Location: Sec. 15 Twp. 34S Rge. 1W Co. SUMNER State KS
 No. of Copies 5 Distribution Sheet (Y, N) N Turnkey (Y, N) Y Evaluation (Y, N) _____

Interval Tested 3122 - 3152' Initial Str Wt./Lbs. 35,000 Unseated Str Wt./Lbs. 35,500
 Anchor Length 30' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 40,000
 Top Packer Depth 3117' Tool Weight 2,100#
 Bottom Packer Depth 3122' Hole Size — 7 7/8" ✓ Rubber Size — 6 3/4" ✓
 Total Depth 3152' Wt. Pipe Run None Drill Collar Run None
 Mud Wt. 9.4 LCM ~ Vis. 42 WL 120cc Drill Pipe Size 4 1/2" x 14' Ft. Run 3106'
 Blow Description IF: Fair to Strong below. B.O.B. in 12 mins.
ISI: weak below (1 1/2")
FF: strong below. B.O.B. in 5 secs. FSI: No below

Recovery — Total Feet 130 GIP 1730' Ft. in DC ~ Ft. in DP 130
 Rec. 130 Feet Of GOCM 23 %gas 17 %oil %water 60 %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 114 °F Gravity N/A °API D@ ~ °F Corrected Gravity N/A °API
 RW N.C. @ ~ °F Chlorides 4,000 ppm Recovery Chlorides 4,000 ppm System

	AK-1	Alpine	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	1592	1587	<u>alpine 2342</u>	<u>0432</u>
(B) First Initial Flow Pressure	18	29	(depth) <u>3127'</u>	T-Started <u>0451</u>
(C) First Final Flow Pressure	25	43	Recorder No. <u>10248</u>	T-Open <u>0644</u>
(D) Initial Shut-In Pressure	1244	1252	(depth) <u>3149'</u>	T-Pulled <u>0944</u>
(E) Second Initial Flow Pressure	71	69	Recorder No. <u>~</u>	T-Out <u>1130</u>
(F) Second Final Flow Pressure	82	67	(depth) <u>~</u>	T-Off Location <u>11310</u>
(G) Final Shut-in Pressure	1249	1244	Initial Opening <u>30</u>	Test <u>✓ 600</u>
(Q) Final Hydrostatic Mud	1570	1526	Initial Shut-in <u>60</u>	Jars _____

Final Flow 30 Safety Joint ✓ N.C.
 Final Shut-in 60 Straddle _____
 _____ } Circ. Sub _____
 _____ } Sampler _____
 Extra Packer _____
 Elec. Rec. ✓ 150
 Mileage _____
 Other _____
 TOTAL PRICE ✓ 750.00

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 [Signature]
 Our Representative [Signature]

TRILOBITE TESTING L.L.C.

OPERATOR : Noble Petroleum Inc. DATE 10-19-98
 WELL NAME: Mirt #1 KB 1152.00 ft TICKET NO: 11560 DST #3
 LOCATION : 15-34s-1w Sumner co. KS GR 1144.00 ft FORMATION: Mississippi
 INTERVAL : 3850.00 To 3961.00 ft TD 3961.00 ft TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	13788	13788	10248			PF Fr. 0735 to 0750 hr
SI 60 Range(Psi)	4650.0	4650.0	4400.0	0.0	0.0	IS Fr. 0750 to 0850 hr
SF 30 Clock(hrs)	12	12	12			SF Fr. 0850 to 0910 hr
FS 60 Depth(ft)	3953.0	3953.0	3958.0	0.0	0.0	FS Fr. 0910 to 1010 hr

	Field	1	2	3	4	
A. Init Hydro	2014.0	2027.0	0.0	0.0	0.0	T STARTED 0525 hr
B. First Flow	91.0	98.0	0.0	0.0	0.0	T ON BOTM 0730 hr
B1. Final Flow	81.0	98.0	0.0	0.0	0.0	T OPEN 0735 hr
C. In Shut-in	1634.0	1647.0	0.0	0.0	0.0	T PULLED 1022 hr
D. Init Flow	87.0	90.0	0.0	0.0	0.0	T OUT 1210 hr
E. Final Flow	93.0	90.0	0.0	0.0	0.0	
F. Fl Shut-in	1641.0	1652.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1962.0	1929.0	0.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 48000.00 lbs
						Initial Str Wt 41000.00 lbs
						Unseated Str Wt 42000.00 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 0.00 ft
						D.P. Length 3853.00 ft

RECOVERY

Tot Fluid	65.00 ft of	0.00 ft in DC and	65.00 ft in DP
65.00	ft of Heavy drilling mud		
0.00	ft of		
SALINITY	3000.00 P.P.M.	A.P.I. Gravity	0.00

MUD DATA-----

Mud Type	Chemical
Weight	9.30 lb/c
Vis.	44.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	117.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Gary Pevoteaux
Co. Rep.	Ablah/Honas
Contr.	Duke Drilling
Rig #	1
Unit #	
Pump T.	

BLOW DESCRIPTION

Initial Flow:
 Strong blow Gas to surface in 8 mins.
 (see gas volume report)
 Initial Shut-in:
 Fair blow throughout
 Final Flow:
 Strong blow (see gas volume report)
 Final Shut-in:
 Fair blow throughout

SAMPLES:
 SENT TO:

Test Successful: Y

GAS RECOVERY

COMPANY: Noble Petroleum Inc.

DATE: 10-19-98

WELL NAME: Mirt #1

KB Elev: 1152.00 ft TICKET #11560 DST #3

WELL LOCATION: 15-34s-1w Sumner co. KS

GR Elev: 1144.00 ft FORMATION: Mississippi

INTERVAL Fr.: 3850.00 To 3961.00 T.D.: 3961.00 ft TEST TYPE: CONV

AS RECOVERY MEASURED WITH Merla Gauge

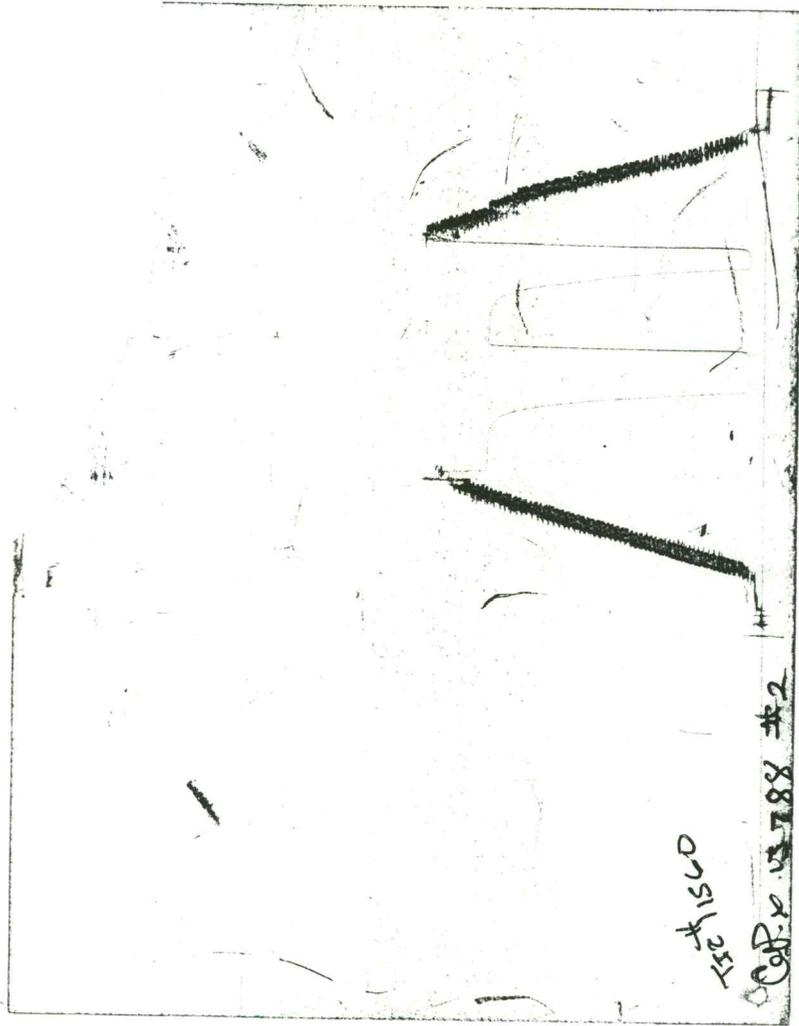
**** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
8	0.75	0	0	0.0
10	0.50	0	32	35500.0
15	0.38	0	76	31000.0

**** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
10	0.38	0	16	86800.0
20	0.38	0	12	72600.0
30	0.38	0	12	72600.0

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 11560

Well Name & No. <u>M 137 #1</u>	Test No. <u>3</u>	Date <u>10-19-98</u>
Company <u>Noble Pet. Inc.</u>	Zone Tested <u>MISS.</u>	
Address <u>Wichita KS 67206</u>	Elevation <u>1152</u> KB <u>1144</u> GL <u>est</u>	
Co. Rep / Geo. <u>ABLAH / HONAS</u> Cont. <u>Duke Drelb #4</u>	Est. Ft. of Pay <u>2.</u> Ppr. <u>11</u> %	
Location: Sec. <u>15</u> Twp. <u>34S</u> Rge. <u>1W</u>	Co. <u>SUMNER</u> State <u>KS.</u>	
No. of Copies <u>5</u> Distribution Sheet (Y, N) <u>N</u>	Turnkey (Y, N) <u>X</u>	Evaluation (Y, N) _____

Interval Tested <u>3950 - 3961'</u>	Initial Str Wt./Lbs. <u>41,000</u>	Unseated Str Wt./Lbs. <u>42,000</u>		
Anchor Length <u>111'</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u>48,000</u>		
Top Packer Depth <u>3845'</u>	Tool Weight <u>2100 II</u>			
Bottom Packer Depth <u>3850'</u>	Hole Size — 7 7/8" <input checked="" type="checkbox"/>	Rubber Size — 6 3/4" <input checked="" type="checkbox"/>		
Total Depth <u>3961'</u>	Wt. Pipe Run <u>None</u>	Drill Collar Run <u>None</u>		
Mud Wt. <u>9.3</u> LCM <u>34th</u> Vis. <u>44</u> WL <u>B.8cc.</u>	Drill Pipe Size <u>4 1/2" x 11 Ft.</u>	Run <u>3853'</u>		
Blow Description <u>IF: Strong blow. GTS in 8mins. (see gas volume report) ISI: Fair blow throughout. FF: Strong blow. (see gas volume report) FSI: Fair blow throughout.</u>				
Recovery — Total Feet <u>65'</u>	GIP <u>yes</u>	Ft. in DC <u>~</u>	Ft. in DP <u>65</u>	
Rec. <u>65</u> Feet Of <u>Heavy dry. Mud</u>	%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 <u>117</u> °F Gravity <u>N/A</u>	°API D@ <u>~</u>	°F Corrected Gravity <u>N/A</u>	°API	
RW <u>N.C.</u> @ <u>~</u> °F Chlorides <u>3,000</u> ppm Recovery	Chlorides <u>3,000</u> ppm System			

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>2014</u>		PSI Recorder No. <u>13788</u>	T-On Location <u>0440</u>	
(B) First Initial Flow Pressure	<u>91</u>		PSI (depth) <u>3953'</u>	T-Started <u>0525</u>	
(C) First Final Flow Pressure	<u>81</u>		PSI Recorder No. <u>10248</u>	T-Open <u>0735</u>	
(D) Initial Shut-In Pressure	<u>1634</u>		PSI (depth) <u>3958'</u>	T-Pulled <u>1022</u>	
(E) Second Initial Flow Pressure	<u>87</u>		PSI Recorder No. <u>~</u>	T-Out <u>1210</u>	
(F) Second Final Flow Pressure	<u>93</u>		PSI (depth) <u>~</u>	T-Off Location <u>1240</u>	
(G) Final Shut-in Pressure	<u>1641</u>		PSI Initial Opening <u>15</u>	Test <input checked="" type="checkbox"/>	
(Q) Final Hydrostatic Mud	<u>1962</u>		PSI Initial Shut-in <u>60</u>	Jars _____	

Final Flow <u>30</u>	Safety Joint _____
Final Shut-in <u>60</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Elec. Rec. _____
	Mileage _____
	Other _____

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Approved By [Signature]

Our Representative [Signature]

TOTAL PRICE \$ 4600.00

