

# Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530  
(316) 792-6902

Date August 13-1987 Location C-412-SW/4 25-17-10 Elevation 1789 K.B. County Ellsworth

Company NATIONAL PETROLEUM RESERVES INC. Number of Copies 5

Charts Mailed to 260 N. Rock Road Suite 215 Wichita Kansas 67206

Drilling Contractor Red Tiger Rig #3

Length Drill Pipe 1129 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X.H.

Length Weight Pipe 920 I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2" X.H.

Length Drill Collars NONE I.D. Drill Collars NONE Tool Joint Size NONE

Top Packer Depth 2065 Bottom Packer Depth 2070 Number of Packers 2 Packer Size 6 3/4

TESTED FROM 2070 TO 2134 ANCHOR LENGTH 64 TOTAL DEPTH 2134 Hole Size 2 7/8

LEASE & WELL NO. Hoffman #2 FORMATION TESTED Red Eagle TEST NO. INDIAN CASE 1

Mud Weight 97 Viscosity 31 Water Loss \_\_\_\_\_ Chlorides - Pits 88,000 D.S.T. \_\_\_\_\_

Maximum Temp. \_\_\_\_\_ °F Initial Hydrostatic Pressure (A) \_\_\_\_\_ P.S.I. Final Hydrostatic Pressure (H) \_\_\_\_\_ P.S.I.

Tool Open I.F.P. from \_\_\_\_\_ m to \_\_\_\_\_ m \_\_\_\_\_ min  
Tool Closed I.C.I.P. from \_\_\_\_\_ m to \_\_\_\_\_ m \_\_\_\_\_ min  
Tool Open F.F.P. from \_\_\_\_\_ m to \_\_\_\_\_ m \_\_\_\_\_ min  
Tool Closed F.C.I.P. from \_\_\_\_\_ m to \_\_\_\_\_ m \_\_\_\_\_ min  
Initial Blow \_\_\_\_\_  
Final Blow \_\_\_\_\_

from [B] _____ P.S.I. to [C] _____ P.S.I.
[D] _____ P.S.I.
from [E] _____ P.S.I. to [F] _____ P.S.I.
[G] _____ P.S.I.

Total Feet Recovered \_\_\_\_\_ Gravity of Oil \_\_\_\_\_ Corrected

Feet of	% Gas	% Oil	% Mud	% Water
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Feet of <u>Miss Run tight hole couldn't</u>	_____	_____	_____	_____
Feet of <u>get to bottom Hit bridge 60 feet</u>	_____	_____	_____	_____
Feet of <u>off bottom worked on it for 15-</u>	_____	_____	_____	_____
Feet of <u>20 min got to 50 feet on bottom</u>	_____	_____	_____	_____
Feet of <u>opened tool twice couldn't get</u>	_____	_____	_____	_____
Feet of <u>through bridge so came out of</u>	_____	_____	_____	_____
Feet of <u>hole.</u>	_____	_____	_____	_____

Remarks \_\_\_\_\_

Extra Equipment - Jars \_\_\_\_\_ Safety Joint \_\_\_\_\_ Extra Packer \_\_\_\_\_ Straddle \_\_\_\_\_ Hook Wall \_\_\_\_\_

Top Recorder No. 11087 Clock No. \_\_\_\_\_ Depth \_\_\_\_\_ Cir. Sub \_\_\_\_\_ Sampler \_\_\_\_\_

Bottom Recorder No. 11087 Clock No. \_\_\_\_\_ Depth \_\_\_\_\_ Insurance \_\_\_\_\_

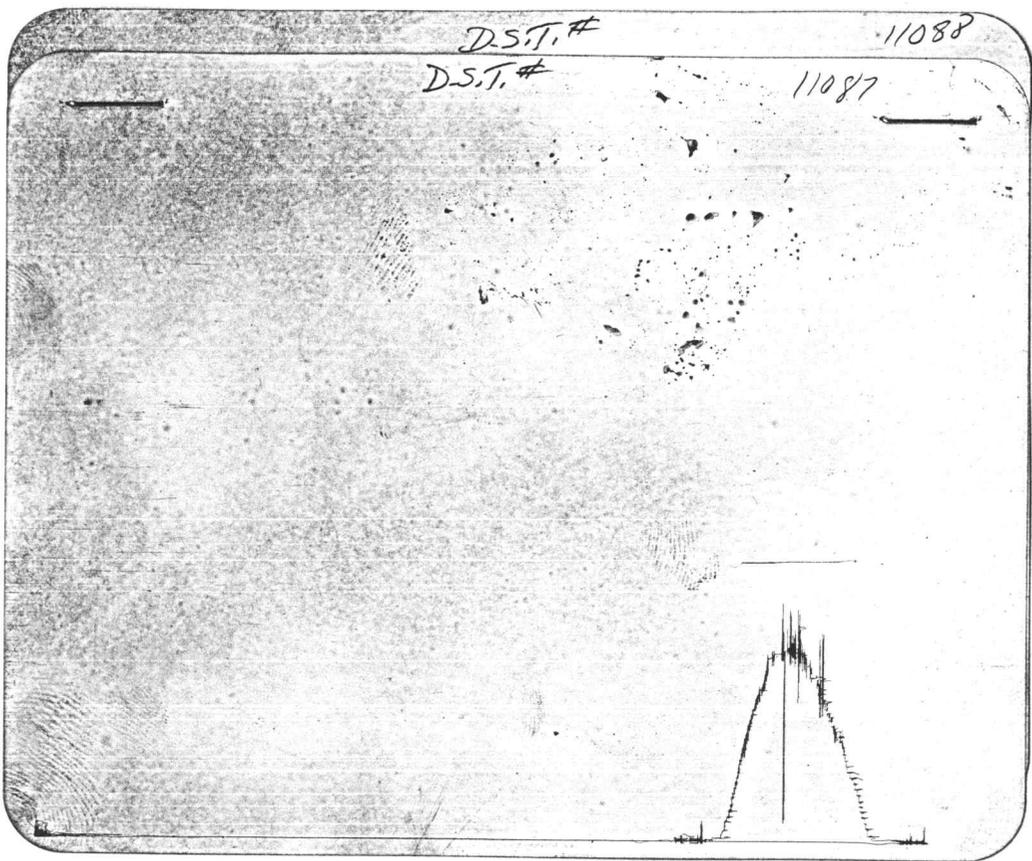
Price of Job 250<sup>00</sup>

Tool Operator Dave Sulig

Approved By \_\_\_\_\_

Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to 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.

No 10451



POINT	PRESSURE		P.S.I.
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud .....	_____	_____	P.S.I.
(B) First Initial Flow Pressure .....	MISS RUN BRIDGED OFF		P.S.I.
(C) First Final Flow Pressure .....	50 FEET FROM BOTTOM		P.S.I.
(D) Initial Closed-in Pressure .....	COULDN'T WORK THROUGH		P.S.I.
(E) Second Initial Flow Pressure .....	IT.		P.S.I.
(F) Second Final Flow Pressure .....	_____	_____	P.S.I.
(G) Final Closed-in Pressure .....	_____	_____	P.S.I.
(H) Final Hydrostatic Mud .....	_____	_____	P.S.I.

# Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

Date 8-17-87 Location C 1/2 S 1/4 25-17-10 Elevation 1789<sup>KB</sup> County ELLISWORTH

Company NATIONAL PETROLEUM RESERVES INC Number of Copies 5

Charts Mailed to 260 N. Rock Rd. Ste 215 WICHITA, KS 67206

Drilling Contractor Red TIGER Drilling Co

Length Drill Pipe 2695 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2 x 4

Length Weight Pipe 928 I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2 x 4

Length Drill Collars — I.D. Drill Collars — Tool Joint Size —

Top Packer Depth 2995 Bottom Packer Depth 3000 Number of Packers 2 Packer Size 63

TESTED FROM 3006 TO 3012 ANCHOR LENGTH 12 TOTAL DEPTH 3012 Hole Size 17

LEASE & WELL NO. Hoffman #2 FORMATION TESTED Lansing TEST NO. 2

Mud Weight 9.9 Viscosity 40 Water Loss 13.4 Chlorides - Pits 69,000 S.T.

Maximum Temp. 101 °F Initial Hydrostatic Pressure (A) 1662 P.S.I. Final Hydrostatic Pressure (H) 1644 P.S.I.

Tool Open I.F.P. from 400 m to 430 m 30 min

Tool Closed I.C.I.P. from 430 m to 500 m 30 min

Tool Open F.F.P. from 500 m to 530 m 30 min

Tool Closed F.C.I.P. from 530 m to 600 m 30 min

Initial Blow WEAK INTERMITTENT BLOW BUILDING SLOW 3" INTO WATER DECREASING

Final Blow WEAK BUILDING SLOWLY 6" INTO WATER

Total Feet Recovered \_\_\_\_\_ Gravity of Oil \_\_\_\_\_ Corrected \_\_\_\_\_

90 Feet of GAS IN PIP % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

30 Feet of GAS CUT MUP TRACE OF OIL IN TOOL % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Remarks \_\_\_\_\_

Extra Equipment - Jars yes Safety Joint yes Extra Packer — Straddle — Hook Wall —

Top Recorder No. 5463 Clock No. 20692 Depth 3006 Cir. Sub \_\_\_\_\_ Sampler \_\_\_\_\_

Bottom Recorder No. 1320g Clock No. 24737 Depth 3009 Insurance \_\_\_\_\_

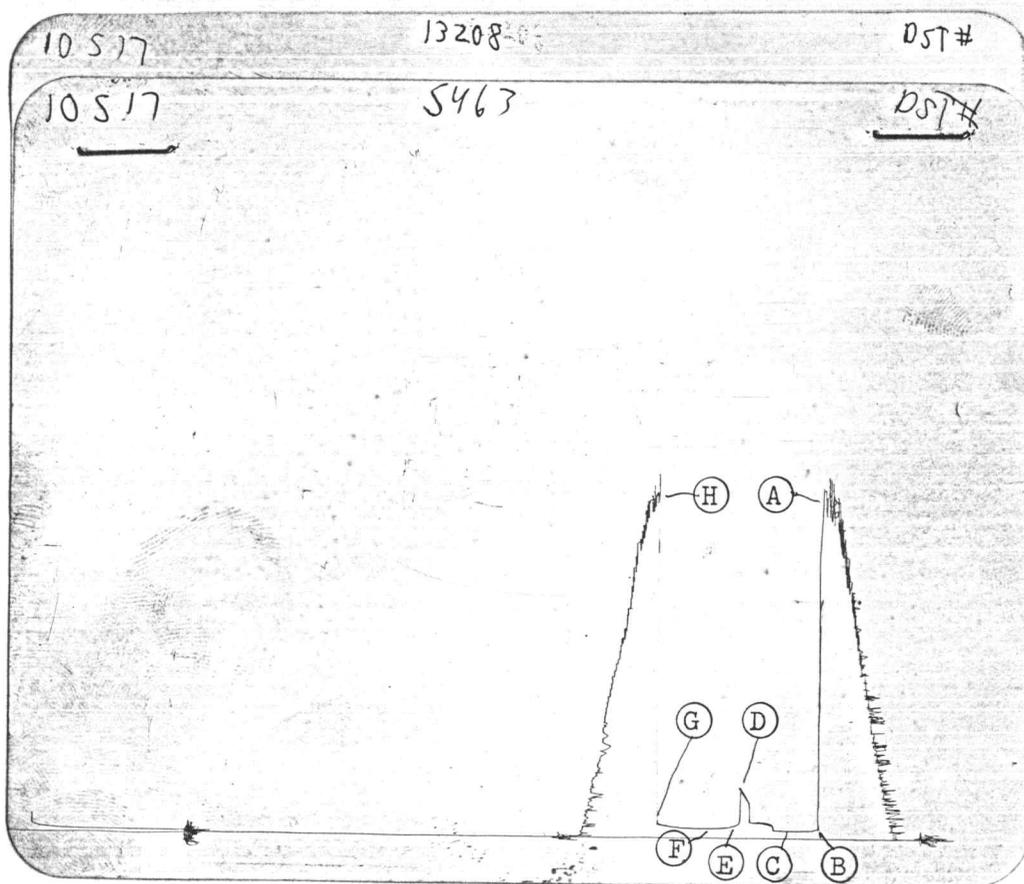
Price of Job \_\_\_\_\_

Tool Operator Pat Stevenson

Approved By \_\_\_\_\_

No 10517

Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to 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.



POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud .....	<u>1663</u>	<u>1664</u>	P.S.I.
(B) First Initial Flow Pressure .....	<u>36</u>	<u>44</u>	P.S.I.
(C) First Final Flow Pressure .....	<u>36</u>	<u>37</u>	P.S.I.
(D) Initial Closed-in Pressure .....	<u>219</u>	<u>229</u>	P.S.I.
(E) Second Initial Flow Pressure .....	<u>45</u>	<u>50</u>	P.S.I.
(F) Second Final Flow Pressure .....	<u>45</u>	<u>45</u>	P.S.I.
(G) Final Closed-in Pressure .....	<u>54</u>	<u>64</u>	P.S.I.
(H) Final Hydrostatic Mud .....	<u>1644</u>	<u>1640</u>	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : NATIONAL PET.RESERVES WELL NAME : HOFFMAN #2  
ADDRESS : 260 N.ROCK ROAD,WICHITA LOCATION : C-W/2-SW/4 25-17-10  
STATE & COUNTY : KANSAS,ELLSWORTH FIELD :  
ELEV.(GR) : 1784 (KB) : 1789 TEST DATE : 8-17-1987

EQUIPMENT AND HOLE DATA

FORMATION TESTED : LANSING DRILL PIPE LENGTH(ft) : 2095  
TEST INT. KB : 3000 to 3012 DRILL PIPE O.D.(in) : 3.82  
ANCHOR LENGTH(ft) : 12 WEIGHT PIPE LENGTH(ft) : 920  
TYPE OF TEST : Conventional WEIGHT PIPE ID : 2.75  
TOTAL DEPTH(ft-kb) : 3012 DRILL COLLAR LENGTH(ft) : 0  
MAIN HOLE SIZE(in) : 7 7/8 DRILL COLLAR I.D.(in) : 2.259  
MUD WEIGHT : 9.9 TOP PACKER DEPTH(kb) : 2995  
MUD VISCOSITY : 40 BOTTOM PACKER DEPTH(kb) : 3000  
MUD CHLORIDES : 69000 DUAL PACKERS : YES  
SURFACE CHOKE : 3/4 PACKER SIZE(in) : 6 3/4  
BOTTOM CHOKE(in) : 3/4 PACKER HOLD : Yes  
TOOL SIZE(O.D.) : 5 1/2 TOOL FLUG : No  
TOOL JOINT SIZE(F.H.) : 4 1/2 REVERSED OUT : No  
RESERVOIR TEMPERATURE(F) : 101 TEST TICKET NUMBER : 10517

EXTRA EQUIPMENT :

ELEMENT SERIAL NO. : 5463  
RANGE : 0 - 3650 CLOCK RANGE : 12 HOURS  
CAL. EQU. : 922.07 \* Defl. - 2.47

SURFACE BLOW

1st Opening : WEAK BLOW BUILT TO 3 INCHES INTO THE WATER  
2nd Opening : WEAK BLOW BUILT TO 6 INCHES INTO THE WATER

RECOVERY

Recovered 30 feet of GAS CUT MUD W/TRACE OF OIL IN THE TOOL

REMARKS :

WITNESSED BY : -

TOOL OPERATOR : PAT STEVENSON

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : NATIONAL PET.RESERVES  
 DATE OF TEST : 8-17-1987  
 DEPTH : 3006.0

WELL NAME : HOFFMAN #2  
 LOCATION : C-W/2-SW/4 25-17-10  
 SERIAL NO. : 5463

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	CORRECTED
TEST NO.: 2					
Depth : 3006.0 ft-kb					
- 0:00	0.0	1.809	1665.56	-2.27	1663.28
-1ST HYDROSTATIC	0.0	1.810	1666.48	-2.27	1664.21
-4:00 1ST FLOW	0.0	.048	41.79	2.24	44.04
- 4:05	5.0	.042	36.26	2.27	38.53
- 4:10	10.0	.040	34.42	2.28	36.70
- 4:15	15.0	.039	33.49	2.29	35.78
- 4:20	20.0	.039	33.49	2.29	35.78
- 4:25	25.0	.039	33.49	2.29	35.78
- 4:30	30.0	.040	34.42	2.28	36.70
- 4:33	33.0	.041	35.34	2.28	37.61
-4:33 END FLOW	0.0	.041	35.34	2.28	37.61
- 4:38	5.0	.073	64.84	2.13	66.97
- 4:43	10.0	.080	71.30	2.10	73.39
- 4:48	15.0	.081	72.22	2.09	74.31
- 4:53	20.0	.199	181.03	1.54	182.57
-4:58 1ST SHUT-IN	24.9	.250	228.05	1.31	229.36
-4:58 2ND FLOW	0.0	.055	48.25	2.21	50.46
- 5:03	5.0	.055	48.25	2.21	50.46
- 5:08	10.0	.055	48.25	2.21	50.46
- 5:13	15.0	.052	45.48	2.23	47.71
- 5:18	20.0	.050	43.64	2.23	45.87
- 5:23	25.0	.050	43.64	2.23	45.87
- 5:28	30.0	.050	43.64	2.23	45.87
-5:28 END FLOW	0.0	.050	43.64	2.23	45.87
- 5:33	5.0	.050	43.64	2.23	45.87
- 5:38	10.0	.051	44.56	2.23	46.79
- 5:43	15.0	.052	45.48	2.23	47.71
- 5:48	20.0	.058	51.01	2.20	53.21
- 5:53	25.0	.063	55.62	2.17	57.80
- 5:58	30.0	.070	62.08	2.14	64.22
-5:58 2ND SHUT-IN	0.0	.070	62.08	2.14	64.22
-2ND HYDROSTATIC	0.0	1.784	1642.51	-2.29	1640.22

# Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

Date 8 18 87 Location 25-17 10<sup>w</sup> Elevation 1759<sup>HP</sup> County FALLS WORTH

Company NATIONAL PETR. Res INC Number of Copies 5

Charts Mailed to 260 N Rock Rd, Ste 215 WICHITA KS 67206

Drilling Contractor Red Tiger

Length Drill Pipe 2967 I.D. Drill Pipe 3 80 Tool Joint Size 4 1/2 XH

Length Weight Pipe 860 I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2 XH

Length Drill Collars — I.D. Drill Collars — Tool Joint Size —

Top Packer Depth 3191 Bottom Packer Depth 3196 Number of Packers TWO Packer Size 6 3/4

TESTED FROM 3196 TO 3277 ANCHOR LENGTH 81 TOTAL DEPTH 3272 Hole Size 7 7/8

LEASE & WELL NO. HOFFMAN #2 FORMATION TESTED ARBUCKLE TEST NO. 3

Mud Weight 9.4 Viscosity 43 Water Loss 19.0 Chlorides - Pits 28,000 D.S.T. 38,000

Maximum Temp. 108 °F Initial Hydrostatic Pressure (A) 1635 P.S.I. Final Hydrostatic Pressure (H) 1617 P.S.I.

Tool Open I.F.P. from 730 p.m. to 745 m 15 min

Tool Closed I.C.I.P. from 745 m to 815 m 30 min

Tool Open F.F.P. from 815 m to 845 m 30 min

Tool Closed F.C.I.P. from 845 m to 930 m 45 min

Initial Blow PAIT Building to Bottom of 5<sup>th</sup> bucket 8<sup>th</sup>

Final Blow WEAK Building Bottom 21<sup>st</sup>

Total Feet Recovered 360 OF OIL CUT WATERY MUD Gravity of Oil \_\_\_\_\_ Corrected

60 Feet of	Slight gas & oil cut watery mud	15% Gas	10% Oil	55% Mud	20% Water
60 Feet of	Slight oil cut watery mud	% Gas	20% Oil	55% Mud	25% Water
60 Feet of	oil cut watery mud	% Gas	40% Oil	45% Mud	15% Water
60 Feet of	" " " "	5% Gas	40% Oil	35% Mud	20% Water
60 Feet of	" " " "	% Gas	40% Oil	30% Mud	30% Water
60 Feet of	" " " "	5% Gas	50% Oil	25% Mud	20% Water
Feet of		% Gas	% Oil	% Mud	% Water
Feet of		% Gas	% Oil	% Mud	% Water
Feet of		% Gas	% Oil	% Mud	% Water

Remarks \_\_\_\_\_

Extra Equipment - Jars yes Safety Joint yes Extra Packer — Straddle — Hook Wall —

Top Recorder No. 5463 Clock No. 20672 Depth 3271 Cir. Sub — Sampler —

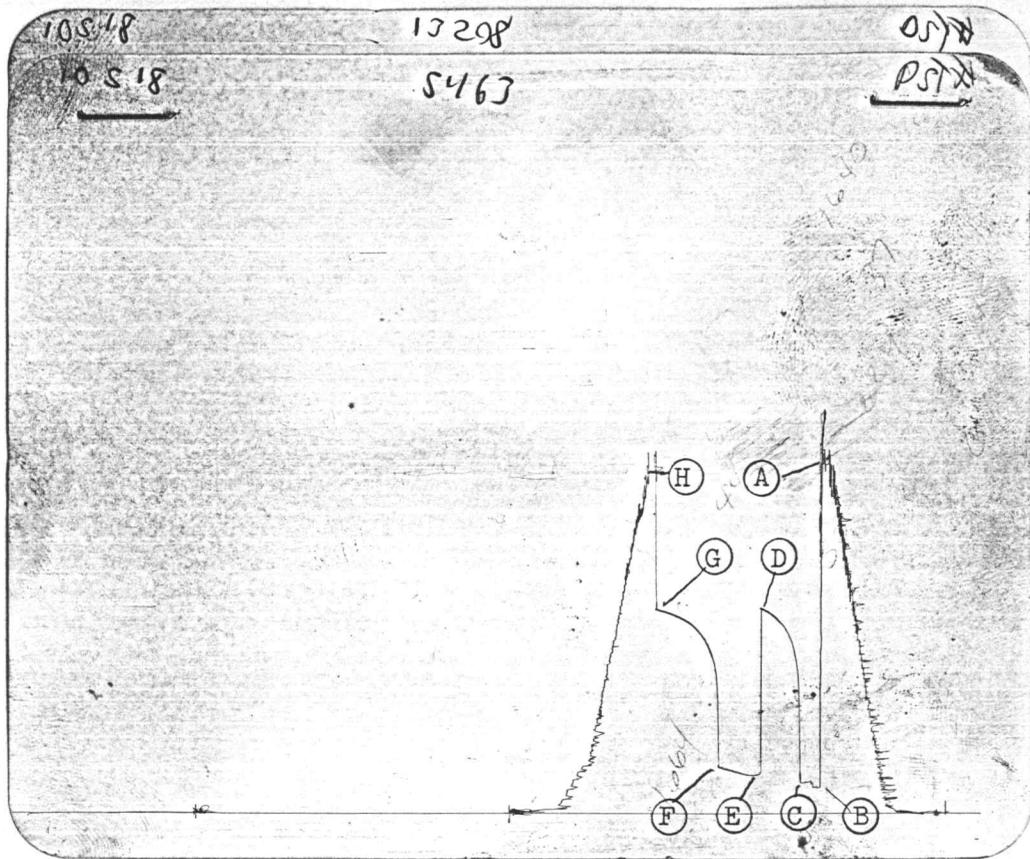
Bottom Recorder No. 13295 Clock No. 24737 Depth 3274 Insurance \_\_\_\_\_

Price of Job \_\_\_\_\_ Tool Operator Pat Stearns

Approved By \_\_\_\_\_

No. 10518

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POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud .....	<u>1635</u>	<u>1714</u>	P.S.I.
(B) First Initial Flow Pressure .....	<u>119</u>	<u>122</u>	P.S.I.
(C) First Final Flow Pressure .....	<u>146</u>	<u>145</u>	P.S.I.
(D) Initial Closed-in Pressure .....	<u>972</u>	<u>977</u>	P.S.I.
(E) Second Initial Flow Pressure .....	<u>183</u>	<u>181</u>	P.S.I.
(F) Second Final Flow Pressure .....	<u>219</u>	<u>221</u>	P.S.I.
(G) Final Closed-in Pressure .....	<u>972</u>	<u>969</u>	P.S.I.
(H) Final Hydrostatic Mud .....	<u>1617</u>	<u>1626</u>	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : NATIONAL PET.RESERVES WELL NAME : HOFFMAN #2  
ADDRESS : 260 N.ROCK ROAD,WICHITA LOCATION : C-W/2-SW/4 25-17-10  
STATE & COUNTY : KANSAS,ELLSWORTH FIELD :  
ELEV.(GR) : 1784 (KB) : 1789 TEST DATE : 8-18-1987

EQUIPMENT AND HOLE DATA

FORMATION TESTED : ARBUCKLE DRILL PIPE LENGTH(ft) : 2367  
TEST INT. KB : 3196 to 3277 DRILL PIPE O.D.(in) : 3.82  
ANCHOR LENGTH(ft) : 81 WEIGHT PIPE LENGTH(ft) : 860  
TYPE OF TEST : Conventional WEIGHT PIPE ID : 2.75  
TOTAL DEPTH(ft-kb) : 3277 DRILL COLLAR LENGTH(ft) : 0  
MAIN HOLE SIZE(in) : 7 7/8 DRILL COLLAR I.D.(in) : 2.259  
MUD WEIGHT : 9.4 TOP PACKER DEPTH(kb) : 3191  
MUD VISCOSITY : 43 BOTTOM PACKER DEPTH(kb) : 3196  
MUD CHLORIDES : 28000 DUAL PACKERS : YES  
SURFACE CHOKE : 3/4 PACKER SIZE(in) : 6 3/4  
BOTTOM CHOKE(in) : 3/4 PACKER HOLD : Yes  
TOOL SIZE(O.D.) : 5 1/2 TOOL PLUG : No  
TOOL JOINT SIZE(F.H.) : 4 1/2 REVERSED OUT : No  
RESERVOIR TEMPERATURE(F) : 108 TEST TICKET NUMBER : 10518

EXTRA EQUIPMENT :

ELEMENT SERIAL NO. : 5463  
RANGE : 0 - 3650 CLOCK RANGE : 12 HOURS  
CAL. EQU. : 922.07 \* Defl. - 2.47

SURFACE BLOW

1st Opening : FAIR BLOW-BUILT TO BOTTOM OF THE BUCKET IN 8 MIN.  
2nd Opening : WEAK BUILDING BLOW-BOTTOM OF THE BUCKET IN 21 MIN.

RECOVERY

Recovered 360 feet of OIL CUT WATERY MUD

REMARKS :

WITNESSED BY : -

TOOL OPERATOR : PAT STEVENSON

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : NATIONAL PET.RESERVES  
 DATE OF TEST : 8-18-1987  
 DEPTH : 3271.0

WELL NAME : HOFFMAN #2  
 LOCATION : C-W/2-SW/4 25-17-10  
 SERIAL NO. : 5463

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	CORRECTED
TEST NO.:3					
Depth : 3271.0 ft-kb					
-1ST HYDROSTATIC	0.0	1.864	1716.27	-2.25	1714.02
-7:30 1ST FLOW	0.0	.134	121.09	1.84	122.94
- 7:35	5.0	.137	123.86	1.83	125.69
- 7:40	10.0	.160	145.06	1.72	146.79
- 7:44	14.0	.159	144.14	1.73	145.87
-7:44 END FLOW	0.0	.159	144.14	1.73	145.87
- 7:47	3.0	.802	737.03	-1.25	735.78
- 7:50	6.0	.887	815.41	-1.65	813.76
- 7:53	9.0	.934	858.75	-1.87	856.88
- 7:56	12.0	.971	892.86	-2.04	890.83
- 7:59	15.0	.994	914.07	-2.14	911.93
- 8:02	18.0	1.015	933.43	-2.24	931.19
- 8:05	21.0	1.030	947.27	-2.31	944.95
- 8:08	24.0	1.046	962.02	-2.39	959.63
- 8:11	27.0	1.058	973.08	-2.44	970.64
- 8:13	29.0	1.066	980.46	-2.48	977.98
-8:13 1ST SHUT-IN	0.0	1.066	980.46	-2.48	977.98
-8:13 2ND FLOW	0.0	.198	180.10	1.55	181.65
- 8:18	5.0	.199	181.03	1.54	182.57
- 8:23	10.0	.199	181.03	1.54	182.57
- 8:28	15.0	.207	188.40	1.51	189.91
- 8:33	20.0	.219	199.47	1.45	200.92
- 8:38	25.0	.225	205.00	1.42	206.42
- 8:43	30.0	.239	217.91	1.36	219.27
- 8:44	31.0	.241	219.75	1.35	221.10
-8:44 END FLOW	0.0	.241	219.75	1.35	221.10
- 8:47	3.0	.782	718.59	-1.16	717.43
- 8:50	6.0	.845	776.68	-1.45	775.23
- 8:53	9.0	.887	815.41	-1.65	813.76
- 8:56	12.0	.921	846.76	-1.81	844.95
- 8:59	15.0	.947	870.73	-1.93	868.81
- 9:02	18.0	.967	889.18	-2.02	887.16
- 9:05	21.0	.986	906.69	-2.11	904.59
- 9:08	24.0	.998	917.76	-2.16	915.60
- 9:11	27.0	1.009	927.90	-2.21	925.69
- 9:14	30.0	1.018	936.20	-2.26	933.94
- 9:17	33.0	1.026	943.58	-2.29	941.28
- 9:20	36.0	1.035	951.88	-2.33	949.54
- 9:23	39.0	1.042	958.33	-2.37	955.96
- 9:26	42.0	1.049	964.78	-2.40	962.39

SUPERIOR TESTERS ENTERPRISES INC.

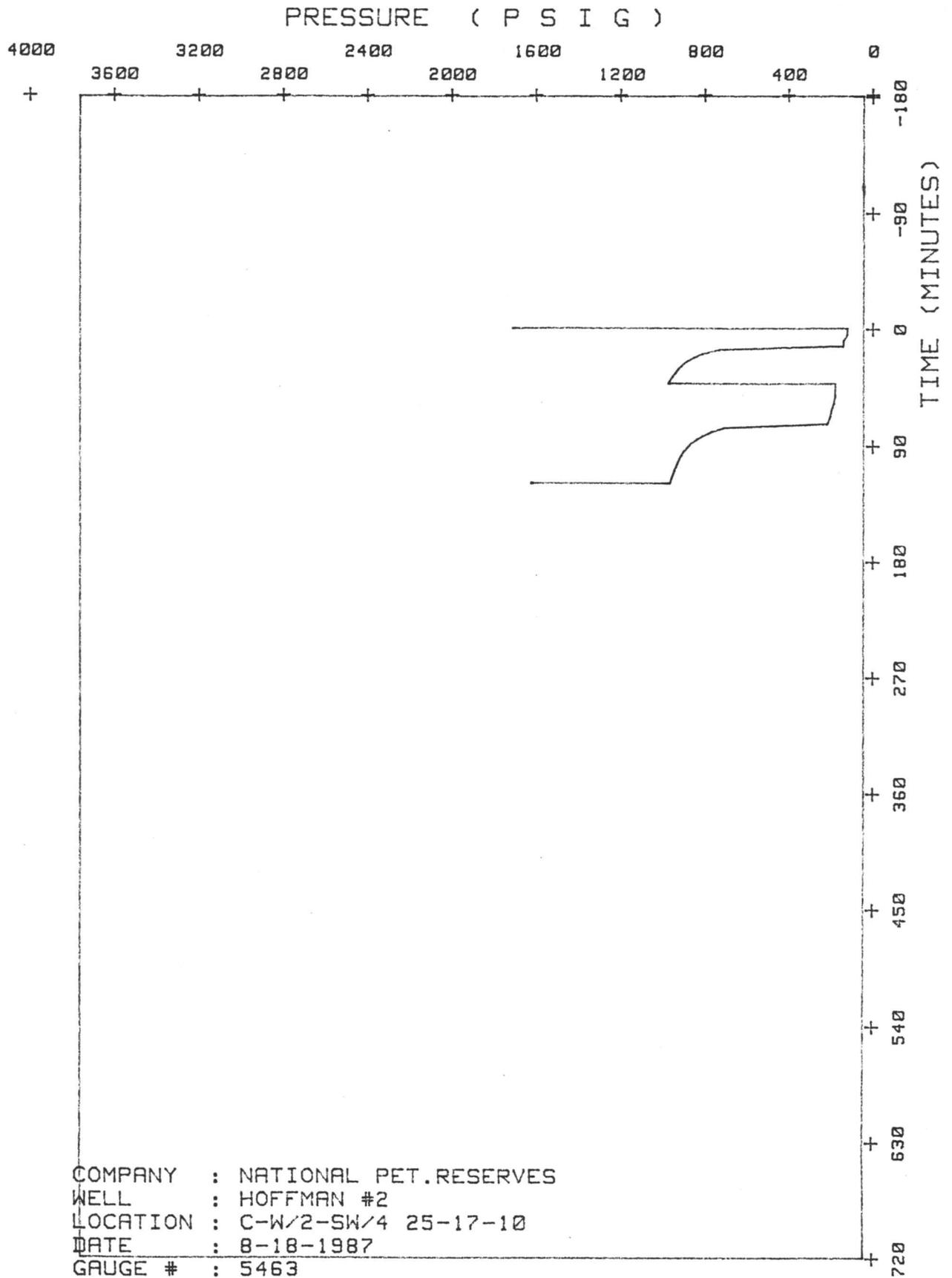
SUBSURFACE PRESSURE MEASUREMENTS

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COMPANY : NATIONAL PET.RESERVES  
 DATE OF TEST : 8-18-1987  
 DEPTH : 3271.0

WELL NAME : HOFFMAN #2  
 LOCATION : C-W/2-SW/4 25-17-10  
 SERIAL NO. : 5463

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	----- CORRECTED
TEST NO.:3					
- 9:29	45.0	1.055	970.32	-2.43	967.89
- 9:30	46.0	1.057	972.16	-2.44	969.72
-9:30 2ND SHUT-IN	0.0	1.057	972.16	-2.44	969.72
-2ND HYDROSTATIC	0.0	1.769	1628.68	-2.29	1626.38

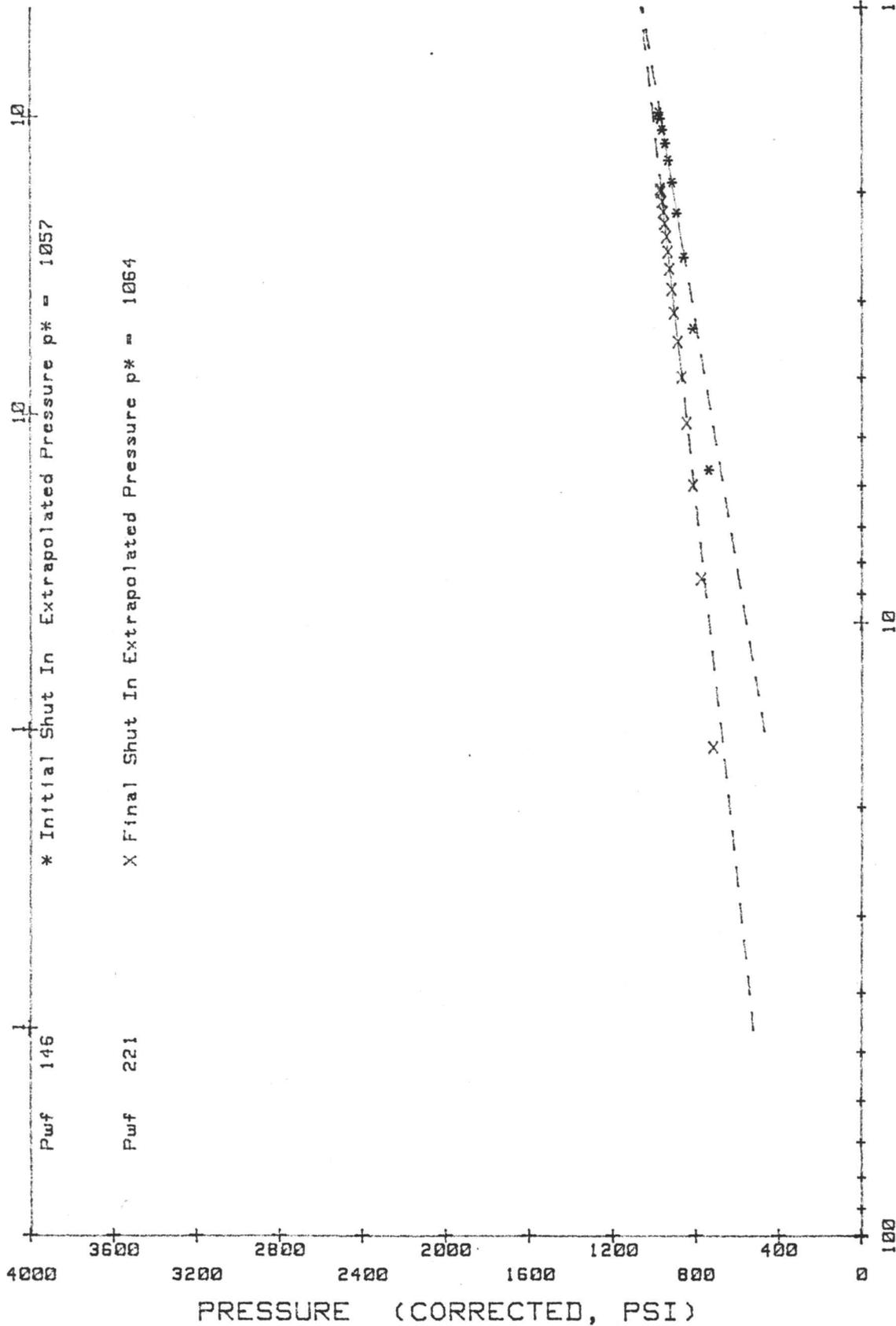


COMPANY : NATIONAL PET.RESERVES  
 WELL : HOFFMAN #2  
 LOCATION : C-W/2-SW/4 25-17-10  
 DATE : 8-18-1987  
 GAUGE # : 5463

GAUGE # : 5463

DATE : 8-18-1987

LOCATION : C-W/2-SW/4 25-17-10



Pwf 146

Pwf 221

PRESSURE (CORRECTED, PSI)

TIME (MINUTES) : (T+dt)/dt - (Semilog scale)

SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : NATIONAL PET.RESERVES  
 WELL NAME : HOFFMAN #2  
 LOCATION : C-W/2-SW/4 25-17-10  
 STATE & COUNTY : KANSAS, ELLSWORTH  
 DATE OF TEST : 8-18-1987  
 TEST INT. KB : 3196 to 3277  
 TOTAL INTERVAL (ft) K.B. : 81.00  
 ELEV.(GR) : 1784 (KB) : 1789  
 FIELD :

ELEMENT SERIAL NO. : 5463  
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG	-----
Refer. depth :	3271.0 ft-kb			
-7:44 END FLOW	0.00	0.00	145.87	
	3.00	5.67	735.78	
	6.00	3.33	813.76	
	9.00	2.56	856.88	
	12.00	2.17	890.83	
	15.00	1.93	911.93	
	18.00	1.78	931.19	
	21.00	1.67	944.95	
	24.00	1.58	959.63	
	27.00	1.52	970.64	
	29.00	1.48	977.98	
-8:13 1ST SHUT-IN	0.00	0.00	977.98	

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : NATIONAL PET.RESERVES  
 WELL NAME : HOFFMAN #2  
 LOCATION : C-W/2-SW/4 25-17-10  
 STATE & COUNTY : KANSAS, ELLSWORTH  
 DATE OF TEST : 8-18-1987  
 TEST INT. KB : 3196 to 3277  
 TOTAL INTERVAL (ft) K.B. : 81.00  
 ELEV.(GR) : 1784 (KB) : 1789  
 FIELD :

ELEMENT SERIAL NO. : 5463  
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG
Refer. depth :	3271.0 ft-kb		
-8:44 END FLOW	0.00	0.00	221.10
	3.00	16.00	717.43
	6.00	8.50	775.23
	9.00	6.00	813.76
	12.00	4.75	844.95
	15.00	4.00	868.81
	18.00	3.50	887.16
	21.00	3.14	904.59
	24.00	2.88	915.60
	27.00	2.67	925.69
	30.00	2.50	933.94
	33.00	2.36	941.28
	36.00	2.25	949.54
	39.00	2.15	955.96
	42.00	2.07	962.39
	45.00	2.00	967.89
	46.00	1.98	969.72
-9:30 2ND SHUT-IN	0.00	0.00	969.72

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : NATIONAL PET.RESERVES  
 DATE OF TEST : 8-18-1987  
 DST. NO : 3

WELL NAME : HOFFMAN #2  
 LOCATION : C-W/2-SW/4 25-17-10  
 SHUT-IN PERIOD : 2

INTERPRETIVE DATA (OIL)

TRANSMISSIBILITY

Oil (md.ft/cp): .....	14.03
Gas (md.ft/cp): .....	0.00

EFFECTIVE PERMEABILITY

Oil (md): .....	1.25
Gas (md): .....	0.00

TOTAL MOBILITY (md/cp): .....	2.47
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TOTAL COMPRESSIBILITY (psi-1): .....	7.56E-06
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ESTIMATED DAMAGE RATIO: .....	.60
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CALCULATED DAMAGE RATIO: .....	.67
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Reservoir Temperature (F): .....	108.00
Formation Porosity : .....	.18
Formation Thickness (ft): .....	10.00
Wellbore Radius (in): .....	3.94
Reservoir Compressibility (psi-1): .....	4.80E-07
Calculated Skin Factor : .....	-1.47

PRODUCTION WITH DAMAGE REMOVED (bbl/D): .....	28.03
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PRODUCTIVITY INDEX (bbl/psi): .....	.03
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Final Flow Pressure (psi): .....	221.00
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APPROXIMATE RADIUS OF INVESTIGATION (ft): .....	37.65
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Total Flowing Time (min): .....	45.00
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EXTRAPOLATED RESERVOIR PRESSURE (psi): .....	1064.00
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Slope of Build-up Curve (psi/log cycle): .....	324.83
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Effective Producing Time (min): .....	45.00
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