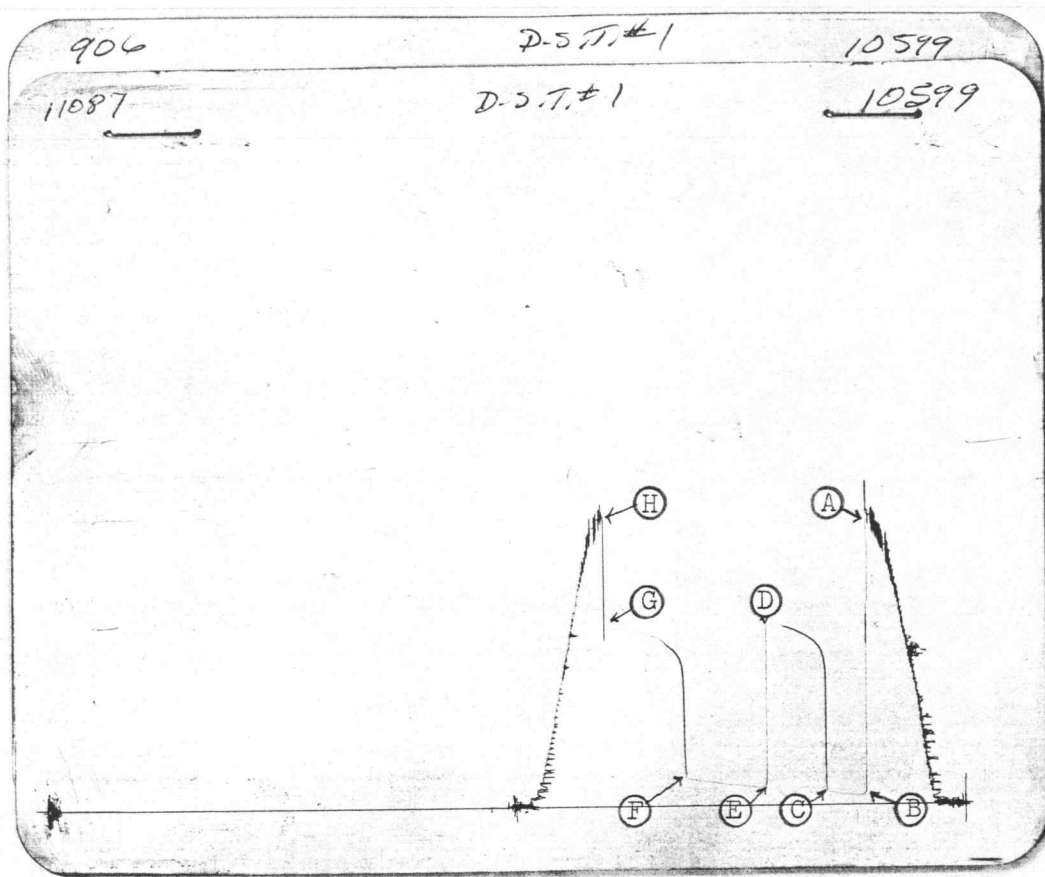




This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	1649	1643	P.S.I.
(B) First Initial Flow Pressure	33	48	P.S.I.
(C) First Final Flow Pressure	77	61	P.S.I.
(D) Initial Closed-in Pressure	1068	1028	P.S.I.
(E) Second Initial Flow Pressure	99	109	P.S.I.
(F) Second Final Flow Pressure	165	145	P.S.I.
(G) Final Closed-in Pressure	1034	1015	P.S.I.
(H) Final Hydrostatic Mud	1638	1632	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
ADDRESS : 7310 EAST KELLOGG, WICHITA LOCATION : C-SW/4 11-17S-15W
STATE & COUNTY : KANSAS, BARTON FIELD : MATER
ELEV. (GR) : 1933 (KB) : 1938 TEST DATE : 5-8-1989

EQUIPMENT AND HOLE DATA

FORMATION TESTED : TOPEKA	DRILL PIPE LENGTH(ft) : 2175
TEST INT. KB : 3072 to 3100	DRILL PIPE O.D.(in) : 3.82
ANCHOR LENGTH(ft) : 28	WEIGHT PIPE LENGTH(ft) : 942
TYPE OF TEST : Conventional	WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft-kb) : 3100	DRILL COLLAR LENGTH(ft) :
MAIN HOLE SIZE(in) : 7 7/8	DRILL COLLAR I.D.(in) : 2.259
MUD WEIGHT : 9.7	TOP PACKER DEPTH(kb) : 3067
MUD VISCOSITY : 39	BOTTOM PACKER DEPTH(kb) : 3072
MUD CHLORIDES : 66000	DUAL PACKERS :
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) : 106	TEST TICKET NUMBER : 10599

EXTRA EQUIPMENT :

ELEMENT SERIAL NO. : 11087
RANGE : 0 - 4350 CLOCK RANGE : 12 HOURS
CAL. EQU. : 1094.24 * Defl. + 5.06

SURFACE BLOW

1st Opening : FAIR BLOW BUILT TO 9 1/2 INCHES INTO THE WATER
2nd Opening : FAIR BLOW BUILT TO 8 INCHES INTO THE WATER

RECOVERY

Recovered 155 feet of VERY SLIGHTLY OIL AND GAS CUT MUDDY WATER
Recovered 120 feet of VERY SLIGHTLY OIL AND GAS CUT WATER

REMARKS :

WITNESSED BY : JON WILLIAMS TOOL OPERATOR : GENE BUDIG

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-8-1989 LOCATION : C-SW/4 11-17S-15W
 DEPTH : 3094.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.:1					
Depth : 3094.0 ft-kb					
-1ST HYDROSTATIC	0.0	1.494	1639.85	4.11	1643.96
-8:15 1ST FLOW	0.0	.044	53.21	-4.75	48.46
- 8:20	5.0	.044	53.21	-4.75	48.46
- 8:25	10.0	.044	53.21	-4.75	48.46
- 8:30	15.0	.046	55.40	-4.74	50.66
- 8:35	20.0	.050	59.77	-4.71	55.07
- 8:40	25.0	.053	63.06	-4.69	58.37
- 8:45	30.0	.056	66.34	-4.66	61.67
-8:45 END FLOW	0.0	.056	66.34	-4.66	61.67
- 8:48	3.0	.763	839.96	.34	840.31
- 8:51	6.0	.816	897.96	.72	898.68
- 8:54	9.0	.840	924.22	.89	925.11
- 8:57	12.0	.854	939.54	.99	940.53
- 9:00	15.0	.869	955.95	1.10	957.05
- 9:03	18.0	.882	970.18	1.19	971.37
- 9:06	21.0	.892	981.12	1.26	982.38
- 9:09	24.0	.901	990.97	1.32	992.29
- 9:12	27.0	.908	998.63	1.37	1000.00
- 9:15	30.0	.915	1006.29	1.40	1007.69
- 9:18	33.0	.921	1012.85	1.43	1014.29
- 9:21	36.0	.926	1018.32	1.46	1019.78
- 9:24	39.0	.930	1022.70	1.47	1024.18
- 9:27	42.0	.933	1025.98	1.49	1027.47
- 9:29	44.0	.934	1027.08	1.49	1028.57
-9:29 1ST SHUT-IN	0.0	.934	1027.08	1.49	1028.57
-9:29 2ND FLOW	0.0	.099	113.39	-4.36	109.03
- 9:34	5.0	.099	113.39	-4.36	109.03
- 9:39	10.0	.099	113.39	-4.36	109.03
- 9:44	15.0	.099	113.39	-4.36	109.03
- 9:49	20.0	.099	113.39	-4.36	109.03
- 9:54	25.0	.100	114.49	-4.35	110.13
- 9:59	30.0	.102	116.67	-4.34	112.33
- 10:04	35.0	.106	121.05	-4.31	116.74
- 10:09	40.0	.111	126.52	-4.27	122.25
- 10:14	45.0	.116	131.99	-4.24	127.75
- 10:19	50.0	.123	139.65	-4.19	135.46
- 10:24	55.0	.129	146.22	-4.15	142.07
- 10:29	60.0	.132	149.50	-4.13	145.37
-10:29 END FLOW	0.0	.132	149.50	-4.13	145.37
- 10:32	3.0	.707	778.69	-.05	778.63

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-8-1989 LOCATION : C-SW/4 11-17S-15W
 DEPTH : 3094.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.: 1					
- 10:35	6.0	.771	848.72	.40	849.12
- 10:38	9.0	.797	877.17	.59	877.75
- 10:41	12.0	.812	893.58	.69	894.27
- 10:43	14.0	.828	911.09	.80	911.89
- 10:44	15.0	.835	918.75	.85	919.60
- 10:47	18.0	.855	940.63	1.00	941.63
- 10:50	21.0	.867	953.76	1.08	954.85
- 10:53	24.0	.873	960.33	1.12	961.45
- 10:56	27.0	.880	967.99	1.17	969.16
- 10:59	30.0	.887	975.65	1.22	976.87
- 11:02	33.0	.892	981.12	1.26	982.38
- 11:05	36.0	.894	983.31	1.27	984.58
- 11:08	39.0	.897	986.59	1.29	987.89
- 11:11	42.0	.902	992.06	1.33	993.39
- 11:14	45.0	.906	996.44	1.36	997.80
- 11:17	48.0	.909	999.72	1.38	1001.10
- 11:20	51.0	.913	1004.10	1.39	1005.49
- 11:23	54.0	.915	1006.29	1.40	1007.69
- 11:26	57.0	.910	1000.82	1.38	1002.20
- 11:29	60.0	.922	1013.95	1.44	1015.38
-11:29 2ND SHUT-IN	0.0	.922	1013.95	1.44	1015.38
-2ND HYDROSTATIC	0.0	1.484	1628.91	4.06	1632.97

CALCULATED RECOVERY ANALYSIS

DST Number:1

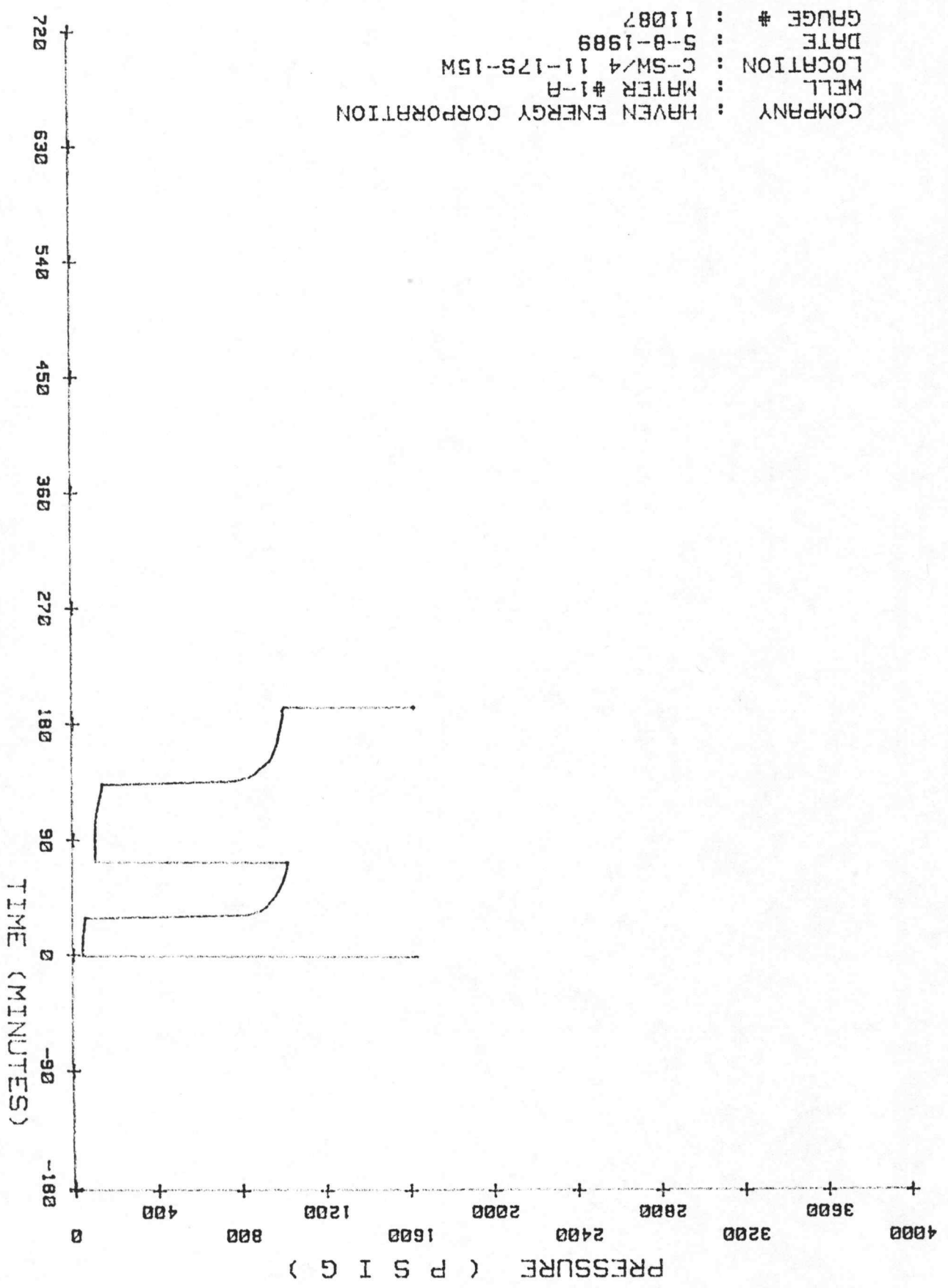
Test ticket number:10599

Sample #	Total Feet	***** Gas ***** %	***** Gas ***** Feet	***** Oil ***** %	***** Oil ***** Feet	***** Mud ***** %	***** Mud ***** Feet
1	35	39.00	13.65	4.00	1.40	25.00	8.75
2	120	3.00	3.60	3.00	3.60	24.00	28.80
3	120	3.00	3.60	2.00	2.40	15.00	18.00
TOTAL	275	7.58	20.85	2.69	7.40	20.20	55.55

Sample #	Total Feet	**** WATER **** %	**** WATER **** Feet	Chlorides (ppm)	Resistivity (ohms)	Temperature (deg)
1	35	32.00	11.20	102000.00	0.00	0.00
2	120	70.00	84.00	102000.00	0.00	0.00
3	120	80.00	96.00	102000.00	0.00	0.00
TOTAL	275	69.53	191.20			

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

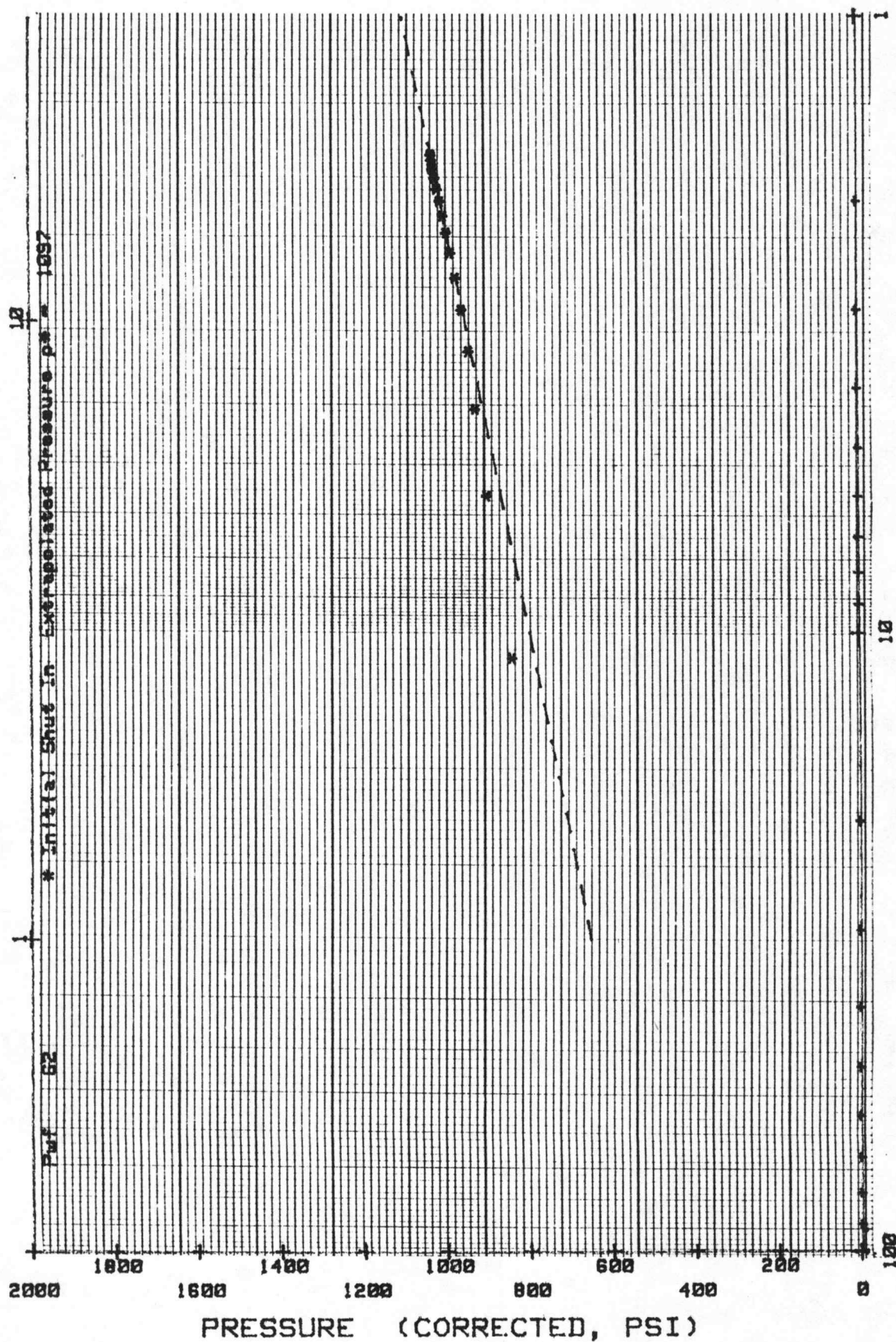
COMPANY : HAVEN ENERGY CORPORATION
 WELL : WATER #1-R
 LOCATION : C-SW/4 11-17S-15W
 DATE : 5-8-1989
 GAUGE # : 11087



GAUGE # : 11087

DATE : 5-8-1989

LOCATION : C-SW/4 11-17S-15W



SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : HAVEN ENERGY CORPORATION
 WELL NAME : MATER #1-A
 LOCATION : C-SW/4 11-17S-15W
 STATE & COUNTY : KANSAS, BARTON
 DATE OF TEST : 5-8-1989
 TEST INT. KB : 3072 to 3100
 TOTAL INTERVAL (ft) K.B. : 28.00
 ELEV. (GR) : 1933 (KB) : 1938
 FIELD : MATER

ELEMENT SERIAL NO. : 11087
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES ----- CORR PSIG
Refer. depth : 3094.0 ft-kb			
-8:45 END FLOW	0.00	0.00	61.67
	3.00	11.00	840.31
	6.00	6.00	898.68
	9.00	4.33	925.11
	12.00	3.50	940.53
	15.00	3.00	957.05
	18.00	2.67	971.37
	21.00	2.43	982.38
	24.00	2.25	992.29
	27.00	2.11	1000.00
	30.00	2.00	1007.71
	33.00	1.91	1014.32
	36.00	1.83	1019.82
	39.00	1.77	1024.23
	42.00	1.71	1027.53
	44.00	1.68	1028.63
-9:29 1ST SHUT-IN	0.00	0.00	1028.63

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
DATE OF TEST : 5-8-1989 LOCATION : C-SW/4 11-17S-15W
DST. NO : 1 SHUT-IN PERIOD : 1

INTERPRETIVE DATA (OIL)

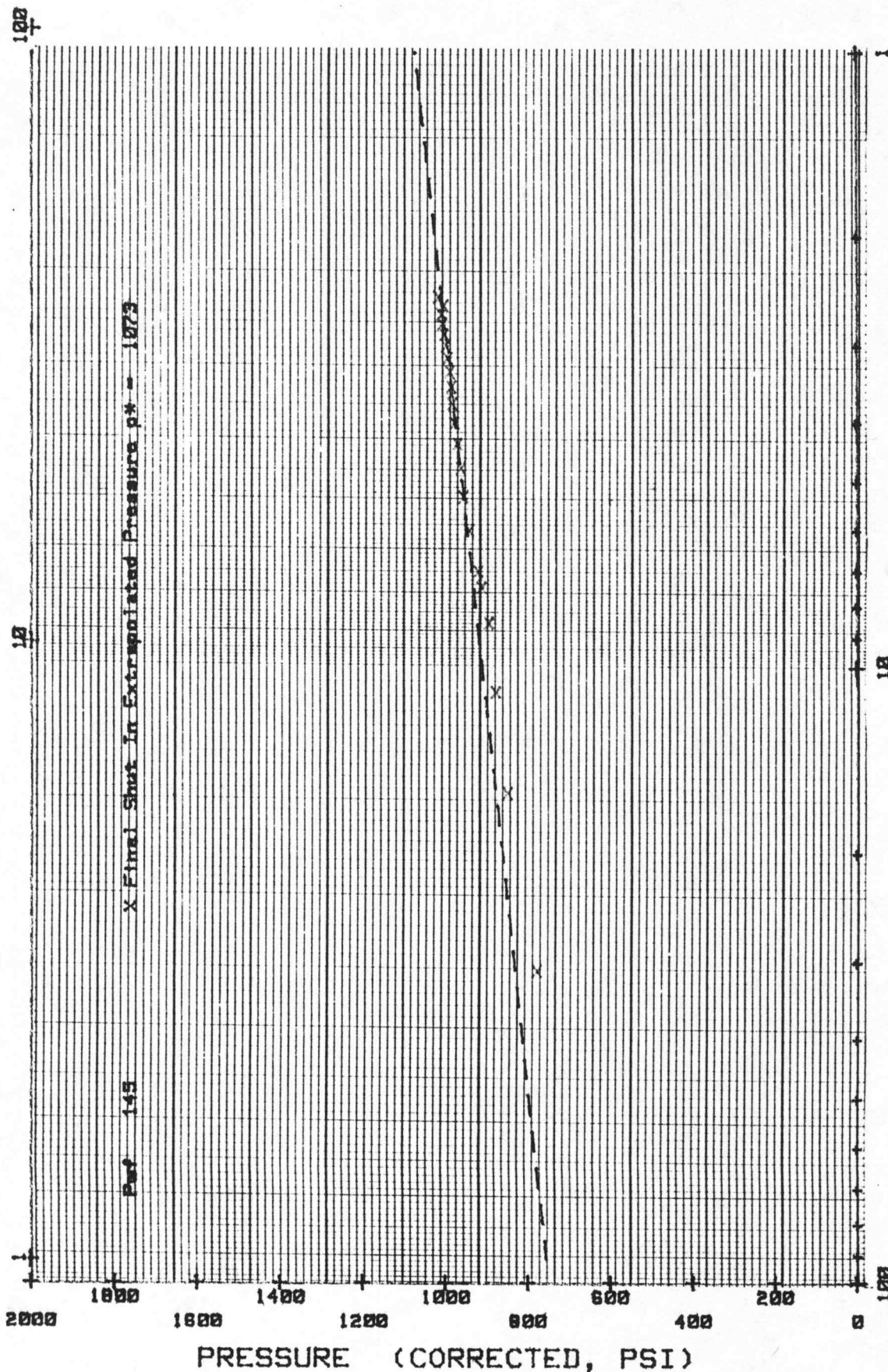
EXTRAPOLATED RESERVOIR PRESSURE (psi):	1097.00
Slope of Build-up Curve (psi/log cycle):	298.11
Effective Producing Time (min):	30.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

GAUGE # : 11087

DATE : 5-8-1989

LOCATION : C-SW/4 11-17S-15W



SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : HAVEN ENERGY CORPORATION
 WELL NAME : MATER #1-A
 LOCATION : C-SW/4 11-17S-15W
 STATE & COUNTY : KANSAS, BARTON
 DATE OF TEST : 5-8-1989
 TEST INT. KB : 3072 to 3100
 TOTAL INTERVAL (ft) K.B. : 28.00
 ELEV. (GR) : 1933 (KB) : 1938
 FIELD : MATER

ELEMENT SERIAL NO. : 11087
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES ----- CORR PSIG
Refer. depth : 3094.0 ft-kb			
-10:29 END FLOW	0.00	0.00	145.37
	3.00	31.00	778.63
	6.00	16.00	849.12
	9.00	11.00	877.75
	12.00	8.50	894.27
	14.00	7.43	911.89
	15.00	7.00	919.60
	18.00	6.00	941.63
	21.00	5.29	954.85
	24.00	4.75	961.45
	27.00	4.33	969.16
	30.00	4.00	976.87
	33.00	3.73	982.38
	36.00	3.50	984.58
	39.00	3.31	987.89
	42.00	3.14	993.39
	45.00	3.00	997.80
	48.00	2.88	1001.10
	51.00	2.76	1005.51
	54.00	2.67	1007.71
	57.00	2.58	1002.20
	60.00	2.50	1015.42
-11:29 2ND SHUT-IN	0.00	0.00	1015.42

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-8-1989 LOCATION : C-SW/4 11-17S-15W
 DST. NO : 1 SHUT-IN PERIOD : 2

INTERPRETIVE DATA (OIL)

TRANSMISSIBILITY

Oil (md.ft/cp): 1.69
 Gas (md.ft/cp): 0.00

EFFECTIVE PERMEABILITY

Oil (md):14
 Gas (md): 0.00

TOTAL MOBILITY (md/cp): 4.54

TOTAL COMPRESSIBILITY (psi⁻¹): 5.72E-06

ESTIMATED DAMAGE RATIO: 1.25

CALCULATED DAMAGE RATIO: 1.26

Reservoir Temperature (F): 106.00

Formation Porosity :18

Formation Thickness (ft): 10.00

Wellbore Radius (in): 3.94

Reservoir Compressibility (psi⁻¹): 4.80E-07

Calculated Skin Factor : 1.36

PRODUCTION WITH DAMAGE REMOVED (bbl/D): 2.12

PRODUCTIVITY INDEX (bbl/psi): 0.00

Final Flow Pressure (psi): 145.00

APPROXIMATE RADIUS OF INVESTIGATION (ft): 83.01

Total Flowing Time (min): 90.00

EXTRAPOLATED RESERVOIR PRESSURE (psi): 1073.00

Slope of Build-up Curve (psi/log cycle): 161.62

Effective Producing Time (min): 90.00

Superior Testers Enterprises, Inc.

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

(316) 792-6902

Date 5 8 89 Location C-SW/4 11 17 15 Elevation 1930K^B County BARTON
Number of Copies 5

Company HAVEN ENERGY Corporation

Charts Mailed to 2310 EAST Kellogg Wichita, KS 67207 1695

Drilling Contractor DUKE Drilling Co. Inc Tool Joint Size 4 1/2 FH

Length Drill Pipe 2175 I.D. Drill Pipe 3 80 Tool Joint Size 4 1/2 FH

Length Weight Pipe 942 I.D. Weight Pipe 2 75 Tool Joint Size —

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

Top Packer Depth 3062 Bottom Packer Depth 3072 Number of Packers Two Packer Size 6 3/4

TESTED FROM 3072 TO 3100 ANCHOR LENGTH 28 TOTAL DEPTH 3100 Hole Size 7 1/2

LEASE & WELL NO. MATER FORMATION TESTED Topok TEST NO. 1

Mud Weight 9.7 Viscosity 39 Water Loss 13.6 Chlorides - Pits 66,000 D.S.T. 102,000

Maximum Temp. 104 °F Initial Hydrostatic Pressure (A) 1649 P.S.I. Final Hydrostatic Pressure (H) 1638 P.S.I.

Tool Open I.F.P. from 8:15 p.m. to 8:45 p.m. 30 min

Tool Closed I.C.I.P. from 8:45 p.m. to 9:30 p.m. 45 min

Tool Open F.F.P. from 9:30 p.m. to 10:30 p.m. 60 min

Tool Closed F.C.I.P. from 10:30 p.m. to 11:30 p.m. 60 min

Initial Blow Fair blow - built to 9 1/2 inches into the water

Final Blow Fair blow - built to 8 inches into the water

Total Feet Recovered 275 Gravity of Oil — Corrected

35 Feet of Very slightly oil gas cut muddy water 39 % Gas 4 % Oil 25 % Mud 32 % Water

120 Feet of Very slightly oil gas cut muddy water 3 % Gas 3 % Oil 24 % Mud 70 % Water

120 Feet of Very slightly oil gas cut water 3 % Gas 2 % Oil 15 % Mud 80 % 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 None Safety Joint None Extra Packer None Straddle None Hook Wall None

Top Recorder No. 11087 Clock No. 47441 Depth 30 94 Cir. Sub None Sampler None

Bottom Recorder No. 906 Clock No. 47442 Depth 30 97 Insurance None

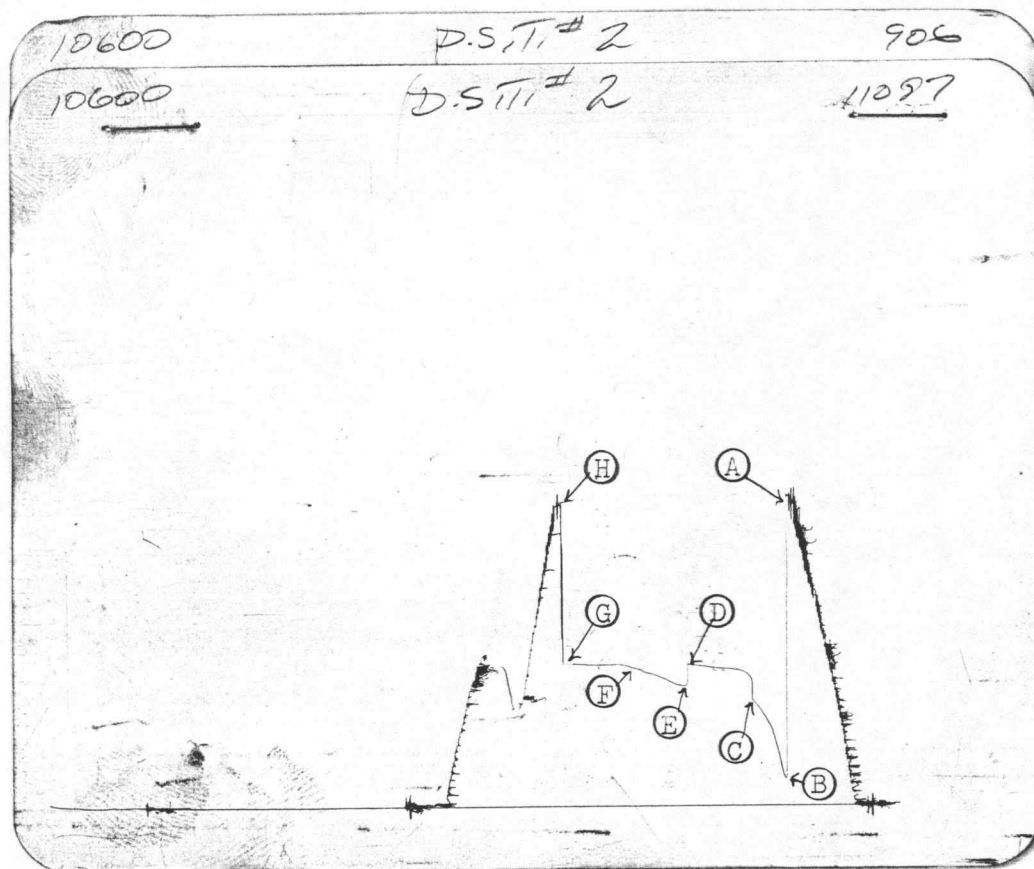
Price of Job —

Tool Operator None Budig

Approved By None William

No 10599

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.



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	1781	1747	P.S.I.
(B) First Initial Flow Pressure	143	143	P.S.I.
(C) First Final Flow Pressure	596	591	P.S.I.
(D) Initial Closed-in Pressure	804	793	P.S.I.
(E) Second Initial Flow Pressure	684	671	P.S.I.
(F) Second Final Flow Pressure	761	749	P.S.I.
(G) Final Closed-in Pressure	804	798	P.S.I.
(H) Final Hydrostatic Mud	1770	1705	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
ADDRESS : 7310 EAST KELLOGG, WICHITA LOCATION : C-SW/4 11-17S-15W
STATE & COUNTY : KANSAS, BARTON FIELD : MATER
ELEV. (GR) : 1933 (KB) : 1938 TEST DATE : 5-9-1989

EQUIPMENT AND HOLE DATA

FORMATION TESTED : KANSAS CITY	DRILL PIPE LENGTH(ft) : 2252
TEST INT. KB : 3214 to 3236	DRILL PIPE O.D.(in) : 3.82
ANCHOR LENGTH(ft) : 22	WEIGHT PIPE LENGTH(ft) : 942
TYPE OF TEST : Conventional	WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft-kb) : 3236	DRILL COLLAR LENGTH(ft) :
MAIN HOLE SIZE(in) : 7 7/8	DRILL COLLAR I.D.(in) : 2.259
MUD WEIGHT : 9.9	TOP PACKER DEPTH(kb) : 3209
MUD VISCOSITY : 41	BOTTOM PACKER DEPTH(kb) : 3214
MUD CHLORIDES : 49000	DUAL PACKERS :
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 : YES
RESERVOIR TEMPERATURE(F) : 106	TEST TICKET NUMBER : 10600

EXTRA EQUIPMENT : -CIRC.SUB

ELEMENT SERIAL NO. : 11087
RANGE : 0 - 4350 CLOCK RANGE : 12 HOURS
CAL. EQU. : 1094.24 * Defl. + 5.06

SURFACE BLOW

1st Opening : GOOD BLOW-OFF THE BOTTOM OF BUCKET IN 1 1/2 MIN.
2nd Opening : GOOD BLOW-OFF THE BOTTOM OF THE BUCKET IN 3 MIN.

RECOVERY

Recovered 40 feet of VERY SLIGHTLY OIL CUT MUDDY WATER
Recovered 810 feet of VERY SLIGHTLY OIL AND MUD CUT WATER
Recovered 800 feet of VERY SLIGHTLY OIL CUT WATER

REMARKS :

WITNESSED BY : JON WILLIAMS TOOL OPERATOR : GENE BUDIG

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-9-1989 LOCATION : C-SW/4 11-17S-15W
 DEPTH : 3230.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	CORRECTED
TEST NO.: 2					
Depth : 3230.0 ft-kb					
-1ST HYDROSTATIC	0.0	1.588	1742.71	4.54	1747.25
-4:30 1ST FLOW	0.0	.130	147.31	-4.14	143.17
- 4:35	5.0	.236	263.30	-3.39	259.91
- 4:40	10.0	.359	397.89	-2.52	395.37
- 4:45	15.0	.433	478.87	-1.99	476.87
- 4:50	20.0	.488	539.05	-1.60	537.44
- 4:56	26.0	.537	592.67	-1.26	591.41
-4:56 END FLOW	0.0	.537	592.67	-1.26	591.41
- 4:59	3.0	.668	736.01	-.33	735.68
- 5:02	6.0	.681	750.24	-.24	750.00
- 5:05	9.0	.689	758.99	-.18	758.81
- 5:08	12.0	.693	763.37	-.15	763.22
- 5:11	15.0	.697	767.74	-.12	767.62
- 5:14	18.0	.698	768.84	-.12	768.72
- 5:17	21.0	.699	769.93	-.11	769.82
- 5:20	24.0	.700	771.03	-.10	770.93
- 5:23	27.0	.703	774.31	-.08	774.23
- 5:26	30.0	.707	778.69	-.05	778.63
- 5:31	35.0	.712	784.16	-.02	784.14
- 5:36	40.0	.715	787.44	0.00	787.44
- 5:42	46.0	.720	792.91	.04	792.95
-5:42 1ST SHUT-IN	0.0	.720	792.91	.04	792.95
-5:42 2ND FLOW	0.0	.609	671.45	-.75	670.70
- 5:47	5.0	.612	674.73	-.73	674.01
- 5:52	10.0	.625	688.96	-.63	688.33
- 5:57	15.0	.640	705.37	-.53	704.85
- 6:02	20.0	.656	722.88	-.41	722.47
- 6:07	25.0	.667	734.92	-.34	734.58
- 6:12	30.0	.676	744.77	-.27	744.49
- 6:15	33.0	.680	749.14	-.24	748.90
-6:15 END FLOW	0.0	.680	749.14	-.24	748.90
- 6:18	3.0	.693	763.37	-.15	763.22
- 6:21	6.0	.698	768.84	-.12	768.72
- 6:24	9.0	.707	778.69	-.05	778.63
- 6:27	12.0	.713	785.25	-.01	785.24
- 6:30	15.0	.719	791.82	.03	791.85
- 6:35	20.0	.721	794.01	.05	794.05
- 6:40	25.0	.721	794.01	.05	794.05
- 6:45	30.0	.721	794.01	.05	794.05
- 6:50	35.0	.721	794.01	.05	794.05

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-9-1989 LOCATION : C-SW/4 11-17S-15W
 DEPTH : 3230.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	CORRECTED
TEST NO.: 2					
- 6:55	40.0	.721	794.01	.05	794.05
- 7:00	45.0	.724	797.29	.07	797.36
- 7:05	50.0	.725	798.38	.08	798.46
- 7:10	55.0	.725	798.38	.08	798.46
- 7:15	60.0	.725	798.38	.08	798.46
-7:15 2ND SHUT-IN	0.0	.725	798.38	.08	798.46
-2ND HYDROSTATIC	0.0	1.550	1701.13	4.37	1705.49

CALCULATED RECOVERY ANALYSIS

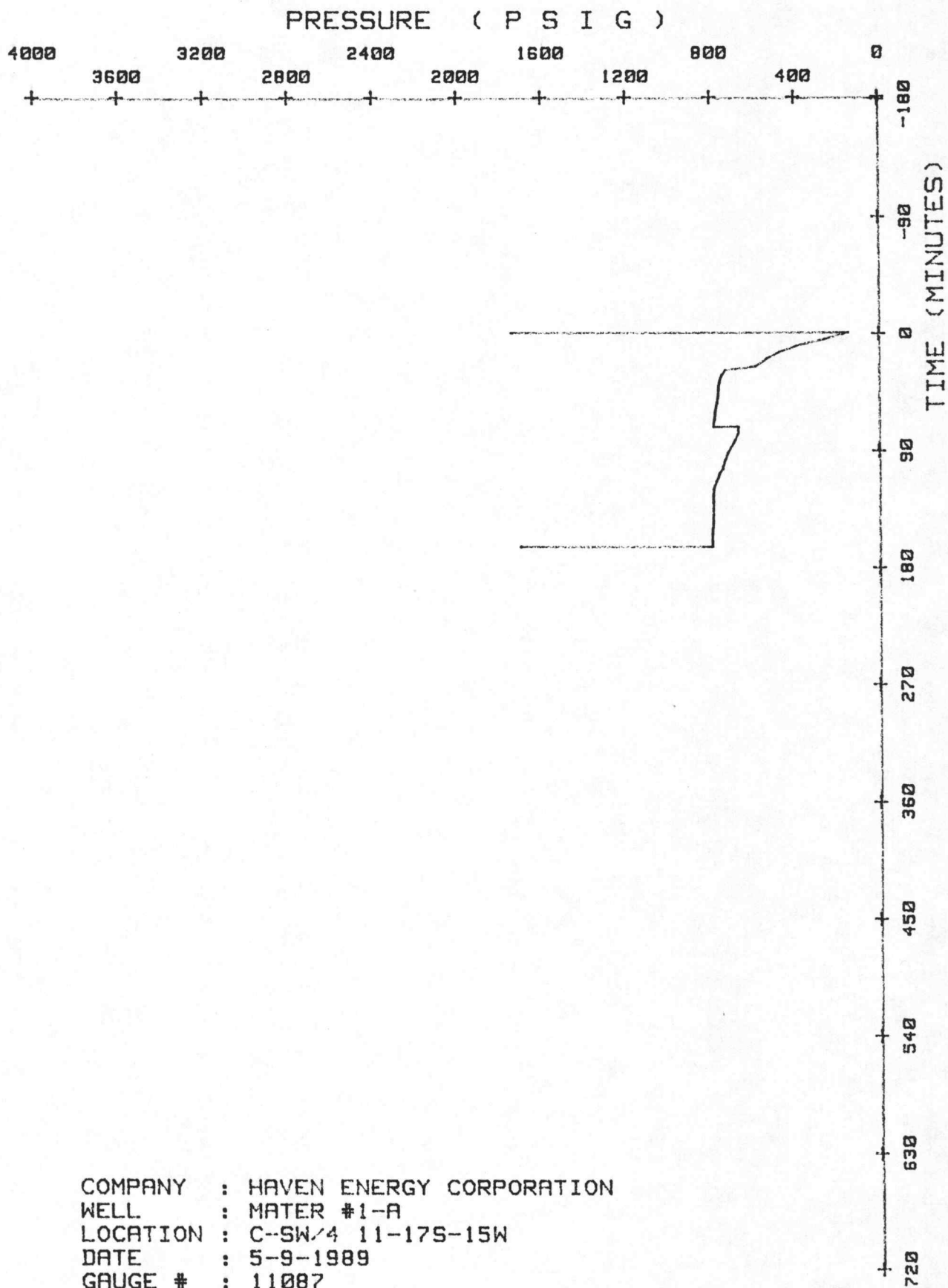
DST Number:2

Test ticket number:10600

Sample #	Total Feet	***** Gas %	***** Gas Feet	***** Oil %	***** Oil Feet	***** Mud %	***** Mud Feet
1	40	0.00	0.00	4.00	1.60	32.00	12.80
2	810	0.00	0.00	3.00	24.30	3.00	24.30
3	800	0.00	0.00	3.00	24.00	1.00	8.00
TOTAL	1650	0.00	0.00	3.02	49.90	2.73	45.10

Sample #	Total Feet	***** WATER %	***** WATER Feet	Chlorides (ppm)	Resistivity (ohms)	Temperature (deg)
1	40	64.00	25.60	77000.00	0.00	0.00
2	810	94.00	761.40	77000.00	0.00	0.00
3	800	96.00	768.00	77000.00	0.00	0.00
TOTAL	1650	94.24	1555.00			

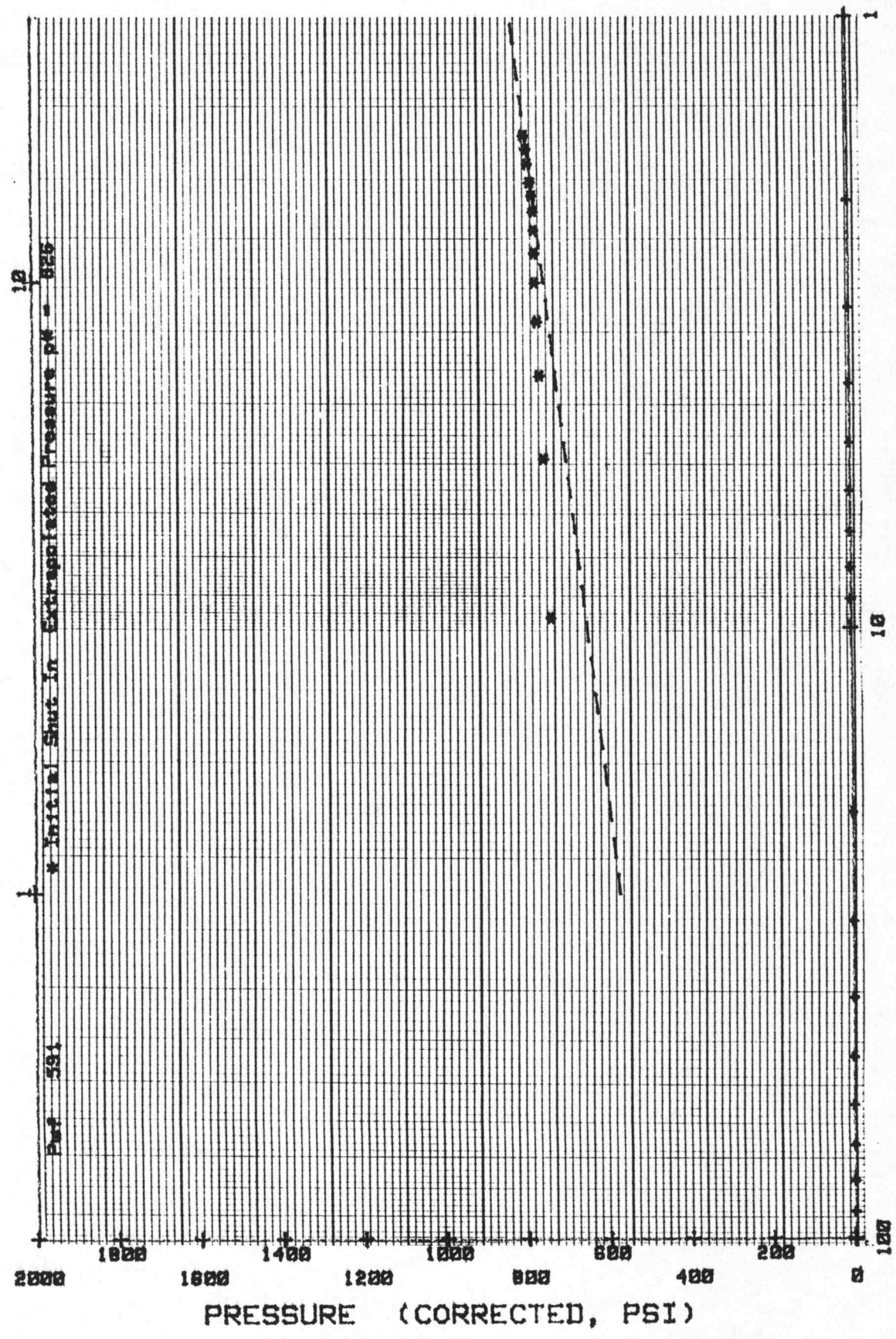
INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.



GAUGE # : 11007

DATE : 5-9-1989

LOCATION : C-SW/4 11-17S-15W



TIME (MINUTES) : (T+dt)/dt - (Semi log scale)

SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : HAVEN ENERGY CORPORATION
 WELL NAME : MATER #1-A
 LOCATION : C-SW/4 11-17S-15W
 STATE & COUNTY : KANSAS, BARTON
 DATE OF TEST : 5-9-1989
 TEST INT. KB : 3214 to 3236
 TOTAL INTERVAL (ft) K.B. : 22.00
 ELEV. (GR) : 1933 (KB) : 1938
 FIELD : MATER

ELEMENT SERIAL NO. : 11087
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG
Refer. depth :	3230.0 ft-kb		
-4:56 END FLOW	0.00	0.00	591.41
	3.00	9.67	735.68
	6.00	5.33	750.00
	9.00	3.89	758.81
	12.00	3.17	763.22
	15.00	2.73	767.62
	18.00	2.44	768.72
	21.00	2.24	769.82
	24.00	2.08	770.93
	27.00	1.96	774.23
	30.00	1.87	778.63
	35.00	1.74	784.14
	40.00	1.65	787.44
	46.00	1.57	792.95
-5:42 1ST SHUT-IN	0.00	0.00	792.95

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
DATE OF TEST : 5-9-1989 LOCATION : C-SW/4 11-17S-15W
DST. NO : 2 SHUT-IN PERIOD : 1

INTERPRETIVE DATA (OIL)

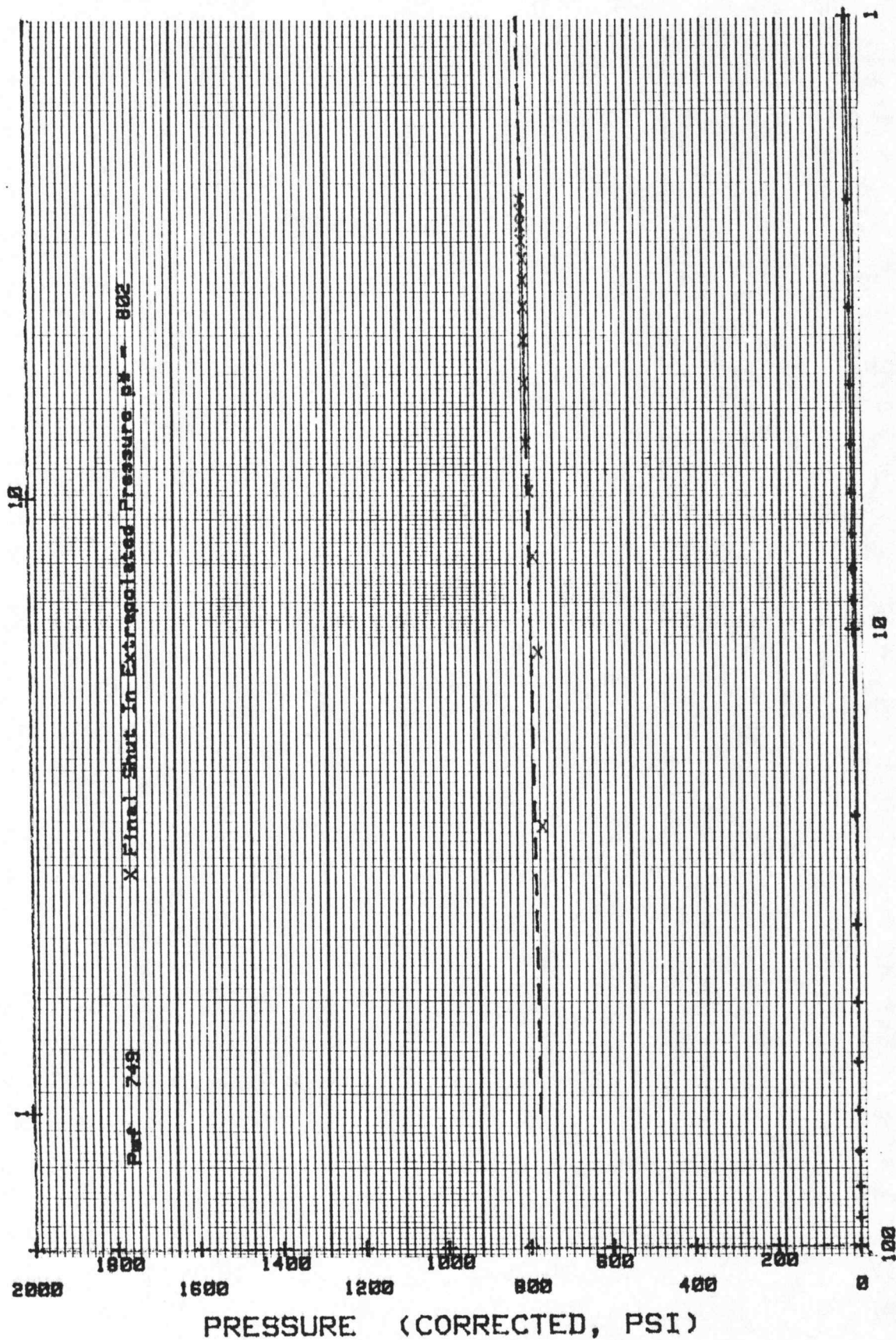
EXTRAPOLATED RESERVOIR PRESSURE (psi):	826.00
Slope of Build-up Curve (psi/log cycle):	176.29
Effective Producing Time (min):	26.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

GAUGE # : 11087

DATE : 5-9-1989

LOCATION : C-SW/4 11-17S-15W



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

SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : HAVEN ENERGY CORPORATION
 WELL NAME : MATER #1-A
 LOCATION : C-SW/4 11-17S-15W
 STATE & COUNTY : KANSAS, BARTON
 DATE OF TEST : 5-9-1989
 TEST INT. KB : 3214 to 3236
 TOTAL INTERVAL (ft) K.B. : 22.00
 ELEV. (GR) : 1933 (KB) : 1938
 FIELD : MATER

ELEMENT SERIAL NO. : 11087
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG
Refer. depth :	3230.0 ft-kb		
-6:15 END FLOW	0.00	0.00	748.90
	3.00	20.67	763.22
	6.00	10.83	768.72
	9.00	7.56	778.63
	12.00	5.92	785.24
	15.00	4.93	791.85
	20.00	3.95	794.05
	25.00	3.36	794.05
	30.00	2.97	794.05
	35.00	2.69	794.05
	40.00	2.48	794.05
	45.00	2.31	797.36
	50.00	2.18	798.46
	55.00	2.07	798.46
	60.00	1.98	798.46
-7:15 2ND SHUT-IN	0.00	0.00	798.46

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-9-1989 LOCATION : C-SW/4 11-17S-15W
 DST. NO : 2 SHUT-IN PERIOD : 2

INTERPRETIVE DATA (OIL)

TRANSMISSIBILITY

Oil (md.ft/cp): 177.47
 Gas (md.ft/cp): 0.00

EFFECTIVE PERMEABILITY

Oil (md): 14.34
 Gas (md): 0.00

TOTAL MOBILITY (md/cp): 570.83

TOTAL COMPRESSIBILITY (psi⁻¹): 4.65E-06

ESTIMATED DAMAGE RATIO:77

CALCULATED DAMAGE RATIO:52

Reservoir Temperature (F): 106.00

Formation Porosity :18

Formation Thickness (ft): 10.00

Wellbore Radius (in): 3.94

Reservoir Compressibility (psi⁻¹): 4.80E-07

Calculated Skin Factor : -3.64

PRODUCTION WITH DAMAGE REMOVED (bbl/D): 17.01

PRODUCTIVITY INDEX (bbl/psi):32

Final Flow Pressure (psi): 749.00

APPROXIMATE RADIUS OF INVESTIGATION (ft): 835.81

Total Flowing Time (min): 59.00

EXTRAPOLATED RESERVOIR PRESSURE (psi): 802.00

Slope of Build-up Curve (psi/log cycle): 15.58

Effective Producing Time (min): 59.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

Superior Testers Enterprises, Inc.

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

(316) 792-6902

Date 5-9-1969 Location C-5W/4 11-17^s-15^w Elevation 1938 K⁶ County Larton

Company Haven Energy Corporation Number of Copies 5

Charts Mailed to 7310 East Kellogg Wichita Kansas 67207-1695

Drilling Contractor Duke Drilling Rig #1

Length Drill Pipe 2252 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" F.H.

Length Weight Pipe 942 I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2" F.H.

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

Top Packer Depth 3209 Bottom Packer Depth 3214 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 3214 TO 3236 ANCHOR LENGTH 22 TOTAL DEPTH 3236 Hole Size 7 7/8"

LEASE & WELL NO. Water # 1-A FORMATION TESTED Kansas City TEST NO. 2

Mud Weight 9.9 Viscosity 41 Water Loss 15.3 Chlorides - Pits 49000 D.S.T. 77000

Maximum Temp. 106 °F Initial Hydrostatic Pressure (A) 1781 P.S.I. Final Hydrostatic Pressure (H) 1770 P.S.I.

Tool Open I.F.P. from 4:30 pm to 5:00 pm 30 min

Tool Closed I.C.I.P. from 5:00 pm to 5:45 pm 45 min

Tool Open F.F.P. from 5:45 pm to 6:15 pm 30 min

Tool Closed F.C.I.P. from 6:15 pm to 7:15 pm 60 min

Initial Blow Hard blow - off the bottom of a 5 gallon bucket in 1 1/2 min.

Final Blow Hard blow - off the bottom of a 5 gallon bucket in 3 min.

Total Feet Recovered 1650 Gravity of Oil _____ Corrected

40 Feet of Very slightly oil cut muddy water 0% Gas 4 % Oil 32 % Mud 64 % Water

810 Feet of Very slightly oil & mud cut water 0% Gas 3 % Oil 3 % Mud 94 % Water

800 Feet of Very slightly oil cut water 0% Gas 3 % Oil 1 % Mud 96 % 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 Reversed fluid out

Extra Equipment - Jars None Safety Joint None Extra Packer None Straddle None Hook Wall None

Top Recorder No. 11087 Clock No. 47441 Depth 3230 Cir. Sub None Sampler None

Bottom Recorder No. 906 Clock No. 47442 Depth 3233 Insurance None

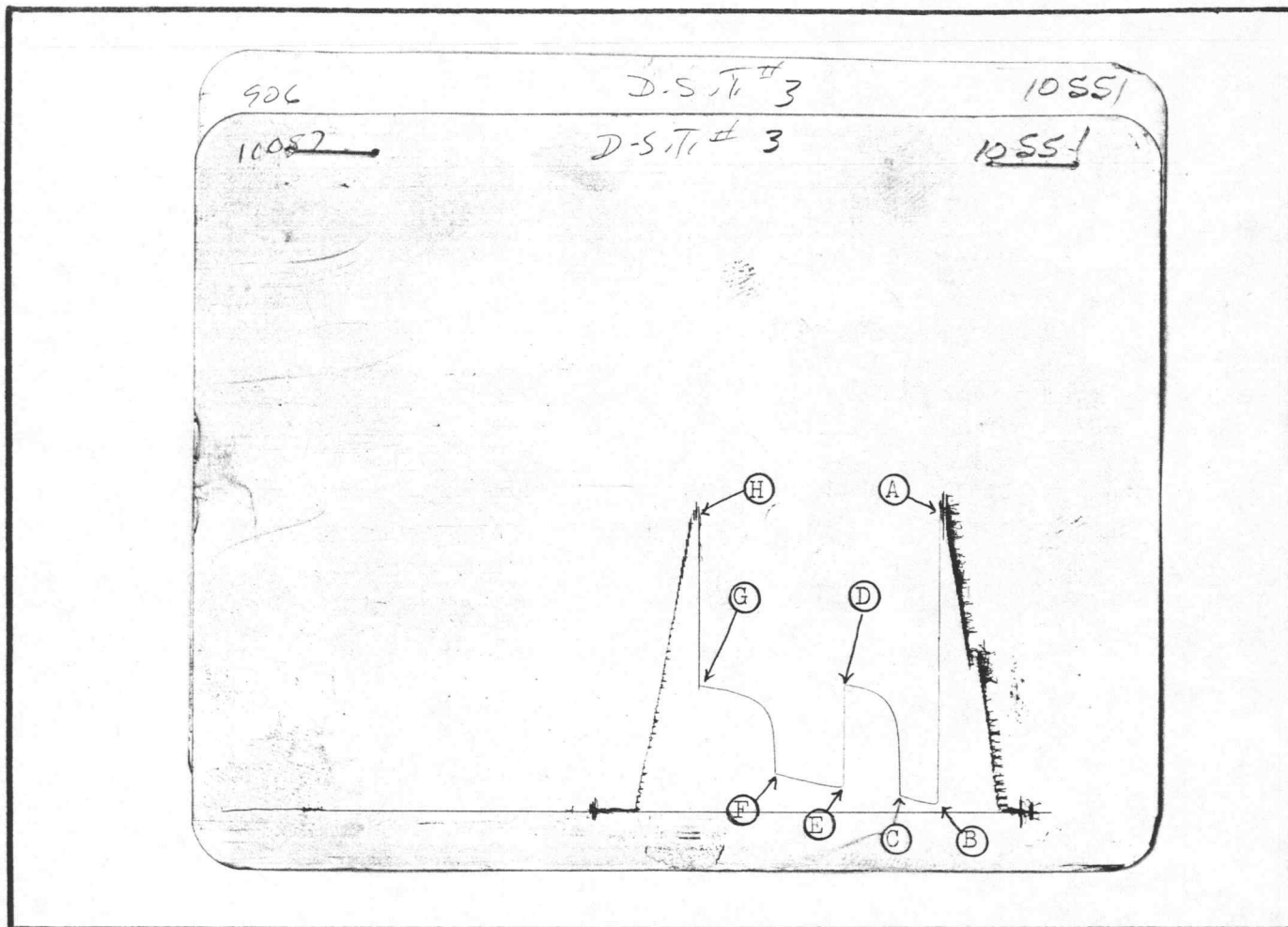
Price of Job _____

Tool Operator Gene Ludwig

Approved By _____

NO 10600

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, of 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.



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	1814	1861	P.S.I.
(B) First Initial Flow Pressure		57	P.S.I.
(C) First Final Flow Pressure		95	P.S.I.
(D) Initial Closed-in Pressure		776	P.S.I.
(E) Second Initial Flow Pressure		154	P.S.I.
(F) Second Final Flow Pressure		233	P.S.I.
(G) Final Closed-in Pressure		763	P.S.I.
(H) Final Hydrostatic Mud	1792	1828	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
ADDRESS : 7310 EAST KELLOGG, WICHITA LOCATION : C-SW/4 11-17S-15W
STATE & COUNTY : KANSAS, BARTON FIELD : MATER
ELEV. (GR) : 1933 (KB) : 1938 TEST DATE : 5-10-1989

EQUIPMENT AND HOLE DATA

FORMATION TESTED : KANSAS CITY	DRILL PIPE LENGTH(ft) : 2406
TEST INT. KB : 3367 to 3380	DRILL PIPE O.D.(in) : 3.82
ANCHOR LENGTH(ft) : 13	WEIGHT PIPE LENGTH(ft) : 942
TYPE OF TEST : Conventional	WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft-kb) : 3380	DRILL COLLAR LENGTH(ft) :
MAIN HOLE SIZE(in) : 7 7/8	DRILL COLLAR I.D.(in) : 2.259
MUD WEIGHT : 9.9	TOP PACKER DEPTH(kb) : 3362
MUD VISCOSITY : 45	BOTTOM PACKER DEPTH(kb) : 3367
MUD CHLORIDES : 100000	DUAL PACKERS :
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) : 103	TEST TICKET NUMBER : 10551

EXTRA EQUIPMENT :

ELEMENT SERIAL NO. : 11087
RANGE : 0 - 4350 CLOCK RANGE : 12 HOURS
CAL. EQU. : 1094.24 * Defl. + 5.06

SURFACE BLOW

1st Opening : FAIR BLOW-BUILT TO BOTTOM OF THE BUCKET IN 22 MIN.
2nd Opening : FAIR BLOW-BUILT TO 8 1/2 INCHES INTO THE WATER

RECOVERY

Recovered 30 feet of SLIGHTLY OIL CUT MUDDY WATER
Recovered 180 feet of SLIGHTLY MUDDY WATER WITH A TRACE OF OIL
Recovered 240 feet of WATER WITH A TRACE OF OIL

REMARKS :

WITNESSED BY : JON WILLIAMS TOOL OPERATOR : GENE BUDIG

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-10-1989 LOCATION : C-SW/4 11-17S-15W
 DEPTH : 3374.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	CORRECTED
TEST NO.:3					
Depth : 3374.0 ft-kb					
-1ST HYDROSTATIC	0.0	1.664	1825.87	4.90	1830.77
-2:45 1ST FLOW	0.0	.052	61.96	-4.69	57.27
- 2:50	5.0	.052	61.96	-4.69	57.27
- 2:55	10.0	.055	65.24	-4.67	60.57
- 3:00	15.0	.060	70.72	-4.64	66.08
- 3:05	20.0	.066	77.28	-4.59	72.69
- 3:10	25.0	.076	88.22	-4.52	83.70
- 3:15	30.0	.087	100.26	-4.45	95.81
-3:15 END FLOW	0.0	.087	100.26	-4.45	95.81
- 3:18	3.0	.474	523.73	-1.70	522.03
- 3:21	6.0	.541	597.04	-1.23	595.81
- 3:24	9.0	.583	643.00	-.93	642.07
- 3:27	12.0	.612	674.73	-.73	674.01
- 3:30	15.0	.628	692.24	-.61	691.63
- 3:33	18.0	.645	710.84	-.49	710.35
- 3:36	21.0	.658	725.07	-.40	724.67
- 3:39	24.0	.667	734.92	-.34	734.58
- 3:42	27.0	.676	744.77	-.27	744.49
- 3:45	30.0	.682	751.33	-.23	751.10
- 3:48	33.0	.687	756.80	-.19	756.61
- 3:51	36.0	.695	765.56	-.14	765.42
- 3:54	39.0	.699	769.93	-.11	769.82
- 3:57	42.0	.704	775.40	-.07	775.33
- 3:59	44.0	.705	776.50	-.07	776.43
-3:59 1ST SHUT-IN	0.0	.705	776.50	-.07	776.43
-3:59 2ND FLOW	0.0	.140	158.25	-4.07	154.19
- 4:04	5.0	.140	158.25	-4.07	154.19
- 4:09	10.0	.143	161.54	-4.05	157.49
- 4:14	15.0	.147	165.91	-4.02	161.89
- 4:19	20.0	.154	173.57	-3.97	169.60
- 4:24	25.0	.160	180.14	-3.93	176.21
- 4:29	30.0	.167	187.80	-3.88	183.92
- 4:34	35.0	.174	195.46	-3.83	191.63
- 4:39	40.0	.181	203.12	-3.78	199.34
- 4:44	45.0	.191	214.06	-3.71	210.35
- 4:49	50.0	.200	223.91	-3.64	220.26
- 4:53	54.0	.212	237.04	-3.56	233.48
-4:53 END FLOW	0.0	.212	237.04	-3.56	233.48
- 4:56	3.0	.489	540.14	-1.60	538.55
- 4:59	6.0	.538	593.76	-1.25	592.51

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-10-1989 LOCATION : C-SW/4 11-17S-15W
 DEPTH : 3374.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.:3					
- 5:02	9.0	.566	624.40	-1.05	623.35
- 5:05	12.0	.593	653.94	-.86	653.08
- 5:08	15.0	.608	670.36	-.75	669.60
- 5:11	18.0	.621	684.58	-.66	683.92
- 5:14	21.0	.630	694.43	-.60	693.83
- 5:17	24.0	.639	704.28	-.53	703.74
- 5:20	27.0	.646	711.94	-.48	711.45
- 5:23	30.0	.653	719.60	-.43	719.16
- 5:26	33.0	.659	726.16	-.39	725.77
- 5:29	36.0	.665	732.73	-.35	732.38
- 5:32	39.0	.671	739.29	-.31	738.99
- 5:35	42.0	.675	743.67	-.28	743.39
- 5:38	45.0	.676	744.77	-.27	744.49
- 5:41	48.0	.680	749.14	-.24	748.90
- 5:44	51.0	.684	753.52	-.22	753.30
- 5:47	54.0	.688	757.90	-.19	757.71
- 5:50	57.0	.690	760.08	-.17	759.91
- 5:53	60.0	.693	763.37	-.15	763.22
-5:53 2ND SHUT-IN	0.0	.693	763.37	-.15	763.22
-2ND HYDROSTATIC	0.0	1.662	1823.68	4.89	1828.57

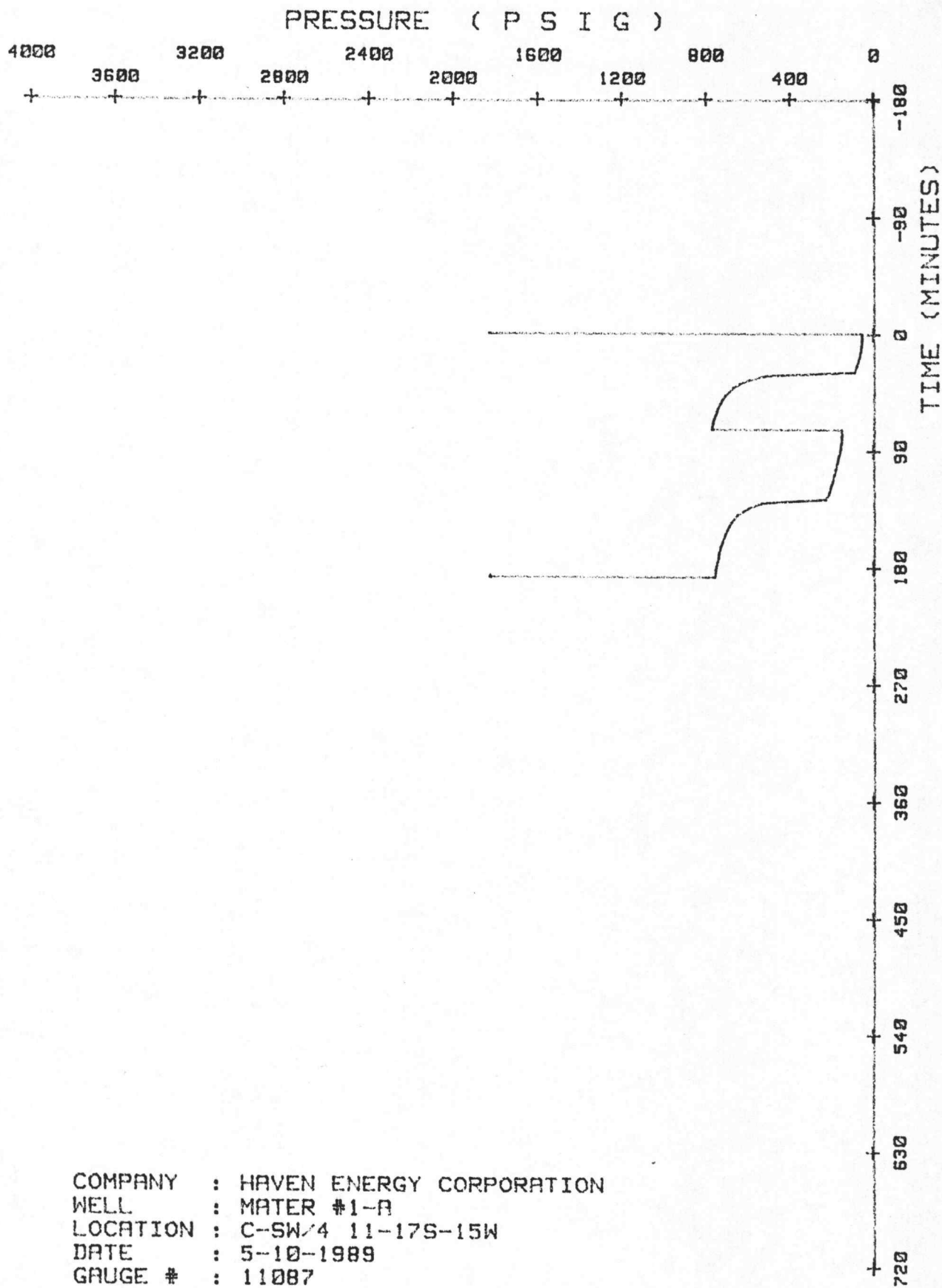
DST Number:3

Test ticket number:10551

Sample #	Total Feet	***** Gas %	***** Gas Feet	***** Oil %	***** Oil Feet	***** Mud %	***** Mud Feet
1	30	0.00	0.00	2.00	.60	38.00	11.40
2	180	0.00	0.00	0.00	0.00	12.00	21.60
3	240	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	450	0.00	0.00	.13	.60	7.33	33.00

Sample #	Total Feet	**** WATER %	**** WATER Feet	Chlorides (ppm)	Resistivity (ohms)	Temperature (deg)
1	30	60.00	18.00	77000.00	0.00	0.00
2	180	78.00	140.40	77000.00	0.00	0.00
3	240	100.00	240.00	77000.00	0.00	0.00
TOTAL	450	88.53	398.40			

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

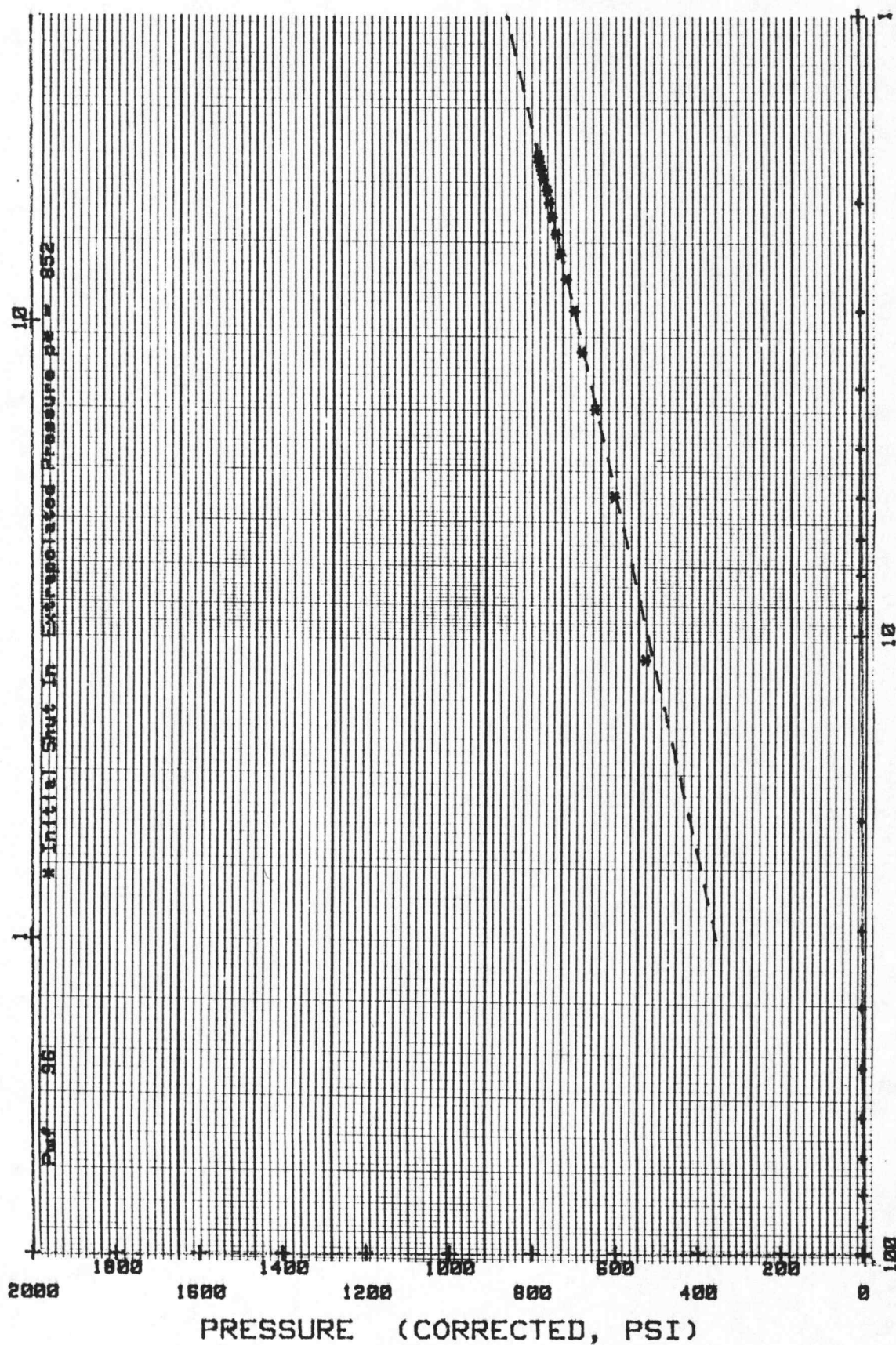


COMPANY : HAVEN ENERGY CORPORATION
WELL : MATER #1-A
LOCATION : C-SW/4 11-17S-15W
DATE : 5-10-1989
GAUGE # : 11087

GAUGE # : 11087

DATE : 5-10-1989

LOCATION : C-SW/4 11-17S-15W



SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : HAVEN ENERGY CORPORATION
 WELL NAME : MATER #1-A
 LOCATION : C-SW/4 11-17S-15W
 STATE & COUNTY : KANSAS, BARTON
 DATE OF TEST : 5-10-1989
 TEST INT. KB : 3367 to 3380
 TOTAL INTERVAL (ft) K.B. : 13.00
 ELEV. (GR) : 1933 (KB) : 1938
 FIELD : MATER

ELEMENT SERIAL NO. : 11087
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG
Refer. depth :	3374.0 ft-kb		
-3:15 END FLOW	0.00	0.00	95.81
	3.00	11.00	522.03
	6.00	6.00	595.81
	9.00	4.33	642.07
	12.00	3.50	674.01
	15.00	3.00	691.63
	18.00	2.67	710.35
	21.00	2.43	724.67
	24.00	2.25	734.58
	27.00	2.11	744.49
	30.00	2.00	751.10
	33.00	1.91	756.61
	36.00	1.83	765.42
	39.00	1.77	769.82
	42.00	1.71	775.33
	44.00	1.68	776.43
-3:59 1ST SHUT-IN	0.00	0.00	776.43

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
DATE OF TEST : 5-10-1989 LOCATION : C-SW/4 11-17S-15W
DST. NO : 3 SHUT-IN PERIOD : 1

INTERPRETIVE DATA (OIL)

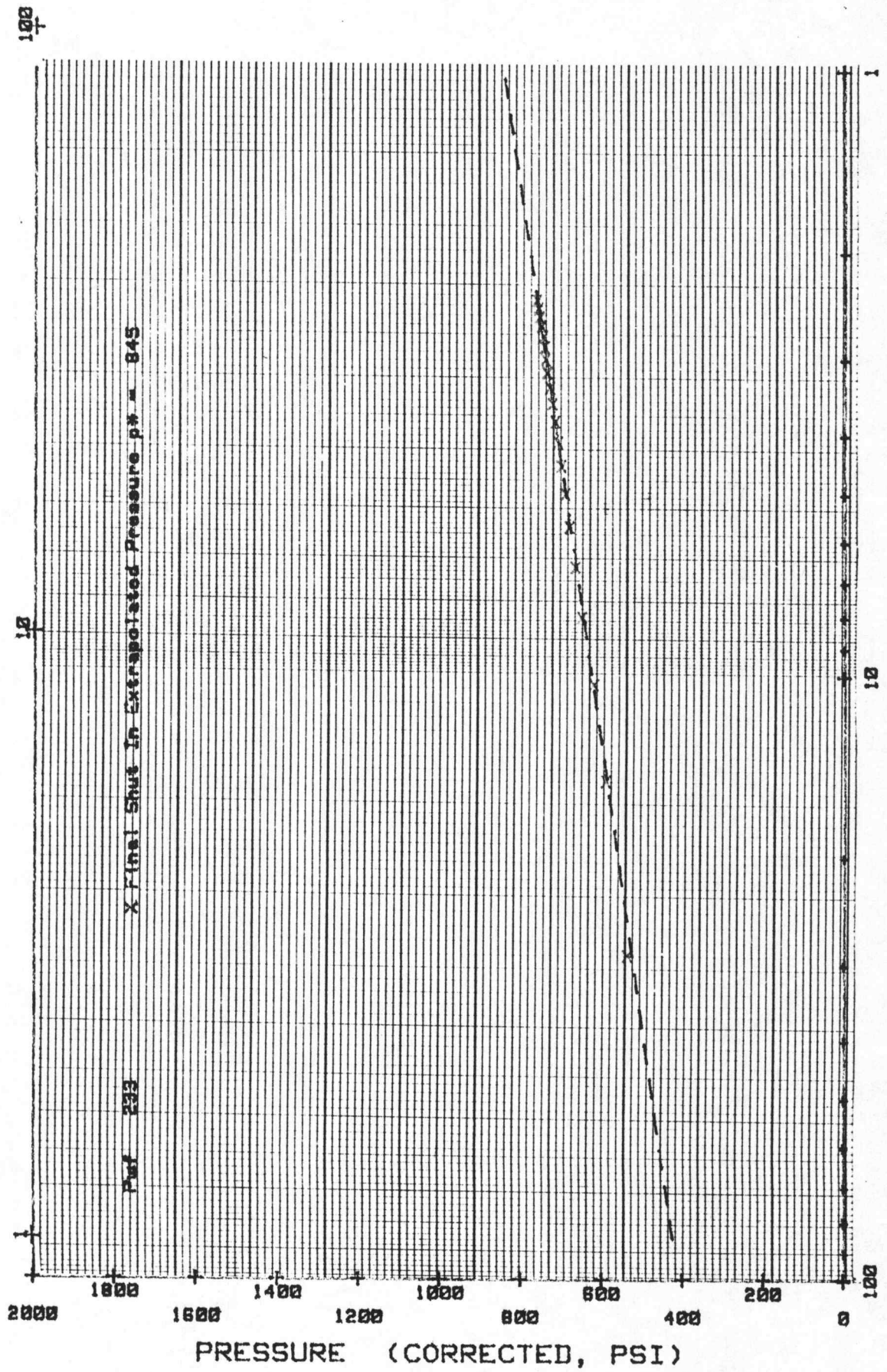
EXTRAPOLATED RESERVOIR PRESSURE (psi):	852.00
Slope of Build-up Curve (psi/log cycle):	333.68
Effective Producing Time (min):	30.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

LOCATION : C-SW/4 11-17S-15W

DATE : 5-10-1989

GAUGE # : 11087



SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : HAVEN ENERGY CORPORATION
 WELL NAME : MATER #1-A
 LOCATION : C-SW/4 11-17S-15W
 STATE & COUNTY : KANSAS, BARTON
 DATE OF TEST : 5-10-1989
 TEST INT. KB : 3367 to 3380
 TOTAL INTERVAL (ft) K.B. : 13.00
 ELEV. (GR) : 1933 (KB) : 1938
 FIELD : MATER

ELEMENT SERIAL NO. : 11087
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	PRESSURES CORR PSIG
Refer. depth :	3374.0 ft-kb		
-4:53 END FLOW	0.00	0.00	233.48
	3.00	29.00	538.55
	6.00	15.00	592.51
	9.00	10.33	623.35
	12.00	8.00	653.08
	15.00	6.60	669.60
	18.00	5.67	683.92
	21.00	5.00	693.83
	24.00	4.50	703.74
	27.00	4.11	711.45
	30.00	3.80	719.16
	33.00	3.55	725.77
	36.00	3.33	732.38
	39.00	3.15	738.99
	42.00	3.00	743.39
	45.00	2.87	744.49
	48.00	2.75	748.90
	51.00	2.65	753.30
	54.00	2.56	757.71
	57.00	2.47	759.91
	60.00	2.40	763.22
-5:53 2ND SHUT-IN	0.00	0.00	763.22

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-10-1989 LOCATION : C-SW/4 11-17S-15W
 DST. NO : 3 SHUT-IN PERIOD : 2

INTERPRETIVE DATA (OIL)

TRANSMISSIBILITY

Oil (md.ft/cp):46
 Gas (md.ft/cp): 0.00

EFFECTIVE PERMEABILITY

Oil (md):02
 Gas (md): 0.00

TOTAL MOBILITY (md/cp): 6.82

TOTAL COMPRESSIBILITY (psi-1): 4.65E-06

ESTIMATED DAMAGE RATIO:62

CALCULATED DAMAGE RATIO:59

Reservoir Temperature (F): 103.00

Formation Porosity :18

Formation Thickness (ft): 10.00

Wellbore Radius (in): 3.94

Reservoir Compressibility (psi-1): 4.80E-07

Calculated Skin Factor : -2.28

PRODUCTION WITH DAMAGE REMOVED (bbl/D):61

PRODUCTIVITY INDEX (bbl/psi): 0.00

Final Flow Pressure (psi): 233.00

APPROXIMATE RADIUS OF INVESTIGATION (ft): 108.98

Total Flowing Time (min): 84.00

EXTRAPOLATED RESERVOIR PRESSURE (psi): 845.00

Slope of Build-up Curve (psi/log cycle): 217.39

Effective Producing Time (min): 84.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC

Superior Testers Enterprises, Inc.

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

(316) 792-6902

Date 5-10-1989 Location C-511/4 11-17^S-15^W Elevation 1938 K.H. County Darton

Company Haven Energy Corporation Number of Copies 5

Charts Mailed to 7310 East Valley Wichita Kansas 67207-1695

Drilling Contractor Duke Drilling Rig #1

Length Drill Pipe 2406 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" F.H.

Length Weight Pipe 942 I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2" F.H.

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

Top Packer Depth 3362 Bottom Packer Depth 3367 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 3367 TO 3380 ANCHOR LENGTH 13 TOTAL DEPTH Hole Size 7 7/8

LEASE & WELL NO. Water #A-1 FORMATION TESTED Kansas City TEST NO. 3

Mud Weight 99 Viscosity 45 Water Loss 10.5 Chlorides - Pits 100000 D.S.T. 77000

Maximum Temp. 103 °F Initial Hydrostatic Pressure (A) 1814 P.S.I. Final Hydrostatic Pressure (H) 1792 P.S.I.

Tool Open I.F.P. from 2:45 p.m. to 3:15 p.m. 30 min

Tool Closed I.C.I.P. from 3:15 p.m. to 4:00 p.m. 45 min

Tool Open F.F.P. from 4:00 p.m. to 5:00 p.m. 60 min

Tool Closed F.C.I.P. from 5:00 p.m. to 6:00 p.m. 60 min

Initial Blow Fair blow built to the bottom of a 5 Gallon bucket in 10 min

Final Blow Fair blow built to 8 1/2 inches into the water

Total Feet Recovered 450 Gravity of Oil Corrected

30 Feet of Slightly Oil cut muddy water 0% Gas 2 % Oil 38 % Mud 60 % Water

180 Feet of Slightly muddy water with a trace of oil 0% Gas 0 % Oil 12 % Mud 78 % Water

240 Feet of water with a trace of oil 0% Gas 0 % Oil 0 % Mud 100 % 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 None Safety Joint None Extra Packer None Straddle None Hook Wall None

Top Recorder No. 11087 Clock No. 47441 Depth 3374 Cir. Sub None Sampler None

Bottom Recorder No. 906 Clock No. 47442 Depth 3377 Insurance None

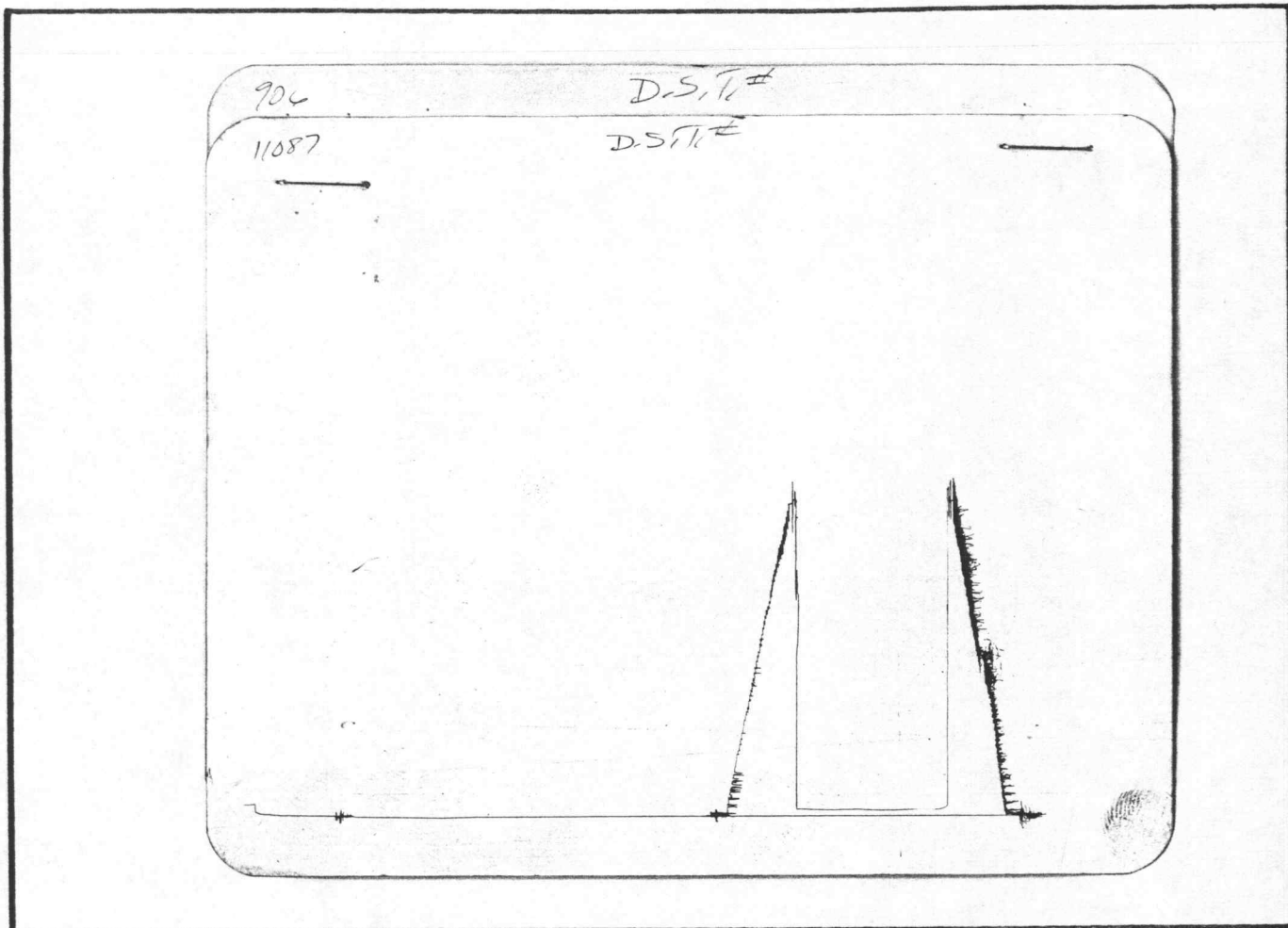
Price of Job

Tool Operator Jane Ludwig

Approved By

No 10551

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.



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	1902	1929	P.S.I.
(B) First Initial Flow Pressure	33	46	P.S.I.
(C) First Final Flow Pressure	33	41	P.S.I.
(D) Initial Closed-in Pressure	33	41	P.S.I.
(E) Second Initial Flow Pressure	33	41	P.S.I.
(F) Second Final Flow Pressure	33	41	P.S.I.
(G) Final Closed-in Pressure	33	41	P.S.I.
(H) Final Hydrostatic Mud	1891	1892	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
ADDRESS : 7310 EAST KELLOGG, WICHITA LOCATION : C-SW/4 11-17S-15W
STATE & COUNTY : KANSAS, BARTON FIELD : MATER
ELEV. (GR) : 1933 (KB) : 1938 TEST DATE : 5-11-1989

EQUIPMENT AND HOLE DATA

FORMATION TESTED : ARBUCKLE	DRILL PIPE LENGTH(ft) : 2504
TEST INT. KB : 3465 to 3475	DRILL PIPE O.D. (in) : 3.82
ANCHOR LENGTH(ft) : 10	WEIGHT PIPE LENGTH(ft) : 942
TYPE OF TEST : Conventional	WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft-kb) : 3475	DRILL COLLAR LENGTH(ft) :
MAIN HOLE SIZE(in) : 7 7/8	DRILL COLLAR I.D. (in) : 2.259
MUD WEIGHT : 10.0	TOP PACKER DEPTH(kb) : 2460
MUD VISCOSITY : 47	BOTTOM PACKER DEPTH(kb) : 3465
MUD CHLORIDES : 67000	DUAL PACKERS :
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) : 100	TEST TICKET NUMBER : 10522

EXTRA EQUIPMENT :

ELEMENT SERIAL NO. : 11087
RANGE : 0 - 4350 CLOCK RANGE : 12 HOURS
CAL. EQU. : 1094.24 * Defl. + 5.06

SURFACE BLOW

1st Opening : WEAK BLOW FOR 6 MINUTES AND DIED
2nd Opening : NO BLOW

RECOVERY

Recovered 10 feet of MUD

REMARKS :

WITNESSED BY : JON WILLIAMS

TOOL OPERATOR : GENE BUDIG

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-11-1989 LOCATION : C-SW/4 11-17S-15W
 DEPTH : 3469.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.: 4					
Depth : 3469.0 ft-kb					
-1ST HYDROSTATIC	0.0	1.754	1924.35	5.32	1929.67
-10:45 1ST FLOW	0.0	.042	51.02	-4.76	46.26
- 10:55	10.0	.039	47.74	-4.79	42.95
- 11:05	20.0	.038	46.64	-4.79	41.85
- 11:15	30.0	.037	45.55	-4.80	40.75
-11:15 END FLOW	0.0	.037	45.55	-4.80	40.75
- 11:25	10.0	.037	45.55	-4.80	40.75
- 11:35	20.0	.037	45.55	-4.80	40.75
- 11:45	30.0	.037	45.55	-4.80	40.75
-11:45 2ND FLOW	0.0	.037	45.55	-4.80	40.75
- 11:55	10.0	.037	45.55	-4.80	40.75
- 12:05	20.0	.037	45.55	-4.80	40.75
- 12:15	30.0	.037	45.55	-4.80	40.75
-12:15 END FLOW	0.0	.037	45.55	-4.80	40.75
- 12:25	10.0	.037	45.55	-4.80	40.75
- 12:35	20.0	.037	45.55	-4.80	40.75
- 12:45	30.0	.038	46.64	-4.79	41.85
-12:45 2ND SHUT-IN	0.0	.038	46.64	-4.79	41.85
-2ND HYDROSTATIC	0.0	1.720	1887.15	5.16	1892.31

Superior Testers Enterprises, Inc.

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

(316) 792-6902

Date 5/11-1989 Location C-SW-4 11-17⁵ 15^W Elevation 1938 K.B. County LeFlore

Company Haven Energy Corporation Number of Copies 5

Charts Mailed to 7310 East Valley Pl Wichita, Kansas 67207-1695

Drilling Contractor Duke Drilling Rig #1

Length Drill Pipe 2504 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" F.H.

Length Weight Pipe 942 I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2" F.H.

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

Top Packer Depth 3460 Bottom Packer Depth 3465 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 3465 TO 3475 ANCHOR LENGTH 10 TOTAL DEPTH 3475 Hole Size 7 7/8"

LEASE & WELL NO. Water #1-A FORMATION TESTED Arbuckle TEST NO. 4

Mud Weight 10.9 Viscosity 47 Water Loss 12 Chlorides - Pits 67000 D.S.T. _____

Maximum Temp. 100 °F Initial Hydrostatic Pressure (A) 1902 P.S.I. Final Hydrostatic Pressure (H) 1891 P.S.I.

Tool Open I.F.P. from 10:45 A.m. to 11:15 A.m. 30 min

Tool Closed I.C.I.P. from 11:15 A.m. to 11:45 A.m. 30 min

Tool Open F.F.P. from 11:45 A.m. to 12:15 P.m. 30 min

Tool Closed F.C.I.P. from 12:15 P.m. to 12:45 P.m. 30 min

Initial Blow West Blower 6 mins. & died

Final Blow West Blower no blow

Total Feet Recovered 10 Gravity of Oil _____ Corrected _____

10 Feet of mud % 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 None Safety Joint None Extra Packer None Straddle None Hook Wall None

Top Recorder No. 11087 Clock No. 47441 Depth 3469 Cir. Sub None Sampler None

Bottom Recorder No. 906 Clock No. 47442 Depth 3472 Insurance None

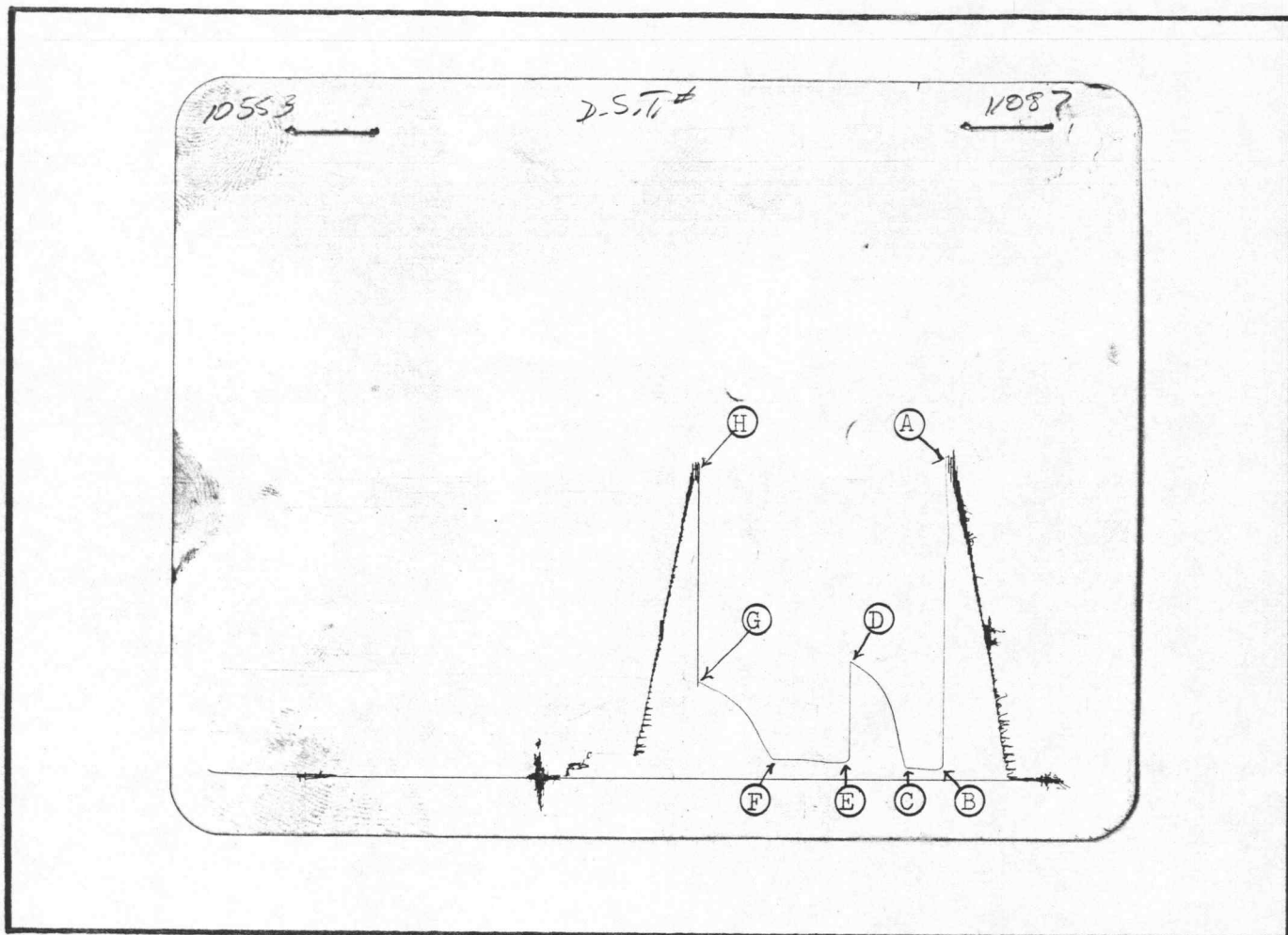
Price of Job _____

Tool Operator None Budig

Approved By _____

Nº 10552

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.



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	1913	1952	P.S.I.
(B) First Initial Flow Pressure	55	60	P.S.I.
(C) First Final Flow Pressure	77	62	P.S.I.
(D) Initial Closed-in Pressure	717	709	P.S.I.
(E) Second Initial Flow Pressure	99	103	P.S.I.
(F) Second Final Flow Pressure	132	110	P.S.I.
(G) Final Closed-in Pressure	585	578	P.S.I.
(H) Final Hydrostatic Mud	1902	1871	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
ADDRESS : 7310 EAST KELLOGG, WICHITA LOCATION : C-SW/4 11-17S-15W
STATE & COUNTY : KANSAS, BARTON FIELD : MATER
ELEV. (GR) : 1933 (KB) : 1938 TEST DATE : 5-12-1989

EQUIPMENT AND HOLE DATA

FORMATION TESTED : ARBUCKLE	DRILL PIPE LENGTH(ft) : 2504
TEST INT. KB : 3476 to 3598	DRILL PIPE O.D.(in) : 3.82
ANCHOR LENGTH(ft) : 22	WEIGHT PIPE LENGTH(ft) : 942
TYPE OF TEST : Conventional	WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft- kb) : 3598	DRILL COLLAR LENGTH(ft) :
MAIN HOLE SIZE(in) : 7 7/8	DRILL COLLAR I.D.(in) : 2.259
MUD WEIGHT : 10.0	TOP PACKER DEPTH(kb) : 3471
MUD VISCOSITY : 47	BOTTOM PACKER DEPTH(kb) : 3476
MUD CHLORIDES : 67000	DUAL PACKERS :
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) : 100	TEST TICKET NUMBER : 10553

EXTRA EQUIPMENT :

ELEMENT SERIAL NO. : 11087
RANGE : 0 - 4350 CLOCK RANGE : 12 HOURS
CAL. EQU. : 1094.24 * Defl. + 5.06

SURFACE BLOW

1st Opening : WEAK BUILDING BLOW-BUILT TO 9 1/2 INCHES IN WATER
2nd Opening : WEAK BUILDING BLOW-BUILT TO 9 INCHES IN THE WATER

RECOVERY

Recovered	10	feet of	HEAVY OIL CUT MUD
Recovered	60	feet of	SLIGHTLY MUDDY OIL
Recovered	60	feet of	MUDDY OIL
Recovered	100	feet of	SLIGHTLY MUDDY OIL
Recovered	20	feet of	CLEAN OIL

REMARKS :

WITNESSED BY : JON WILLIAMS TOOL OPERATOR : GENE BUDIG

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-12-1989 LOCATION : C-SW/4 11-175-15W
 DEPTH : 3492.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	----- CALC	PRESSURE PSIG CORR	----- CORRECTED
TEST NO.:5					
Depth : 3492.0 ft-kb					
-1ST HYDROSTATIC	0.0	1.775	1947.33	5.42	1952.75
-9:00 1ST FLOW	0.0	.055	65.24	-4.67	60.57
- 9:05	5.0	.055	65.24	-4.67	60.57
- 9:10	10.0	.055	65.24	-4.67	60.57
- 9:15	15.0	.055	65.24	-4.67	60.57
- 9:20	20.0	.056	66.34	-4.66	61.67
- 9:25	25.0	.057	67.43	-4.66	62.78
- 9:28	28.0	.057	67.43	-4.66	62.78
-9:28 END FLOW	0.0	.057	67.43	-4.66	62.78
- 9:31	3.0	.115	130.90	-4.25	126.65
- 9:34	6.0	.215	240.32	-3.54	236.78
- 9:37	9.0	.303	336.62	-2.91	333.70
- 9:40	12.0	.386	427.44	-2.33	425.11
- 9:43	15.0	.430	475.58	-2.01	473.57
- 9:46	18.0	.475	524.82	-1.70	523.13
- 9:49	21.0	.504	556.56	-1.49	555.07
- 9:52	24.0	.538	593.76	-1.25	592.51
- 9:55	27.0	.554	611.27	-1.14	610.13
- 9:58	30.0	.574	633.15	-.99	632.16
- 10:01	33.0	.592	652.85	-.87	651.98
- 10:04	36.0	.609	671.45	-.75	670.70
- 10:07	39.0	.622	685.68	-.65	685.02
- 10:10	42.0	.637	702.09	-.55	701.54
- 10:13	45.0	.644	709.75	-.50	709.25
-10:13 1ST SHUT-IN	0.0	.644	709.75	-.50	709.25
-10:13 2ND FLOW	0.0	.095	109.01	-4.39	104.63
- 10:18	5.0	.095	109.01	-4.39	104.63
- 10:23	10.0	.094	107.92	-4.40	103.52
- 10:28	15.0	.094	107.92	-4.40	103.52
- 10:33	20.0	.095	109.01	-4.39	104.63
- 10:38	25.0	.096	110.11	-4.38	105.73
- 10:43	30.0	.097	111.20	-4.37	106.83
- 10:48	35.0	.100	114.49	-4.35	110.13
- 10:53	40.0	.100	114.49	-4.35	110.13
- 10:58	45.0	.100	114.49	-4.35	110.13
- 11:03	50.0	.101	115.58	-4.35	111.23
- 11:08	55.0	.100	114.49	-4.35	110.13
- 11:12	59.0	.100	114.49	-4.35	110.13
-11:12 END FLOW	0.0	.100	114.49	-4.35	110.13
- 11:15	3.0	.126	142.94	-4.17	138.77

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-12-1987 LOCATION : C-SW/4 11-17S-15W
 DEPTH : 3492.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	CORRECTED
TEST NO.:5					
- 11:18	6.0	.159	179.05	-3.93	175.11
- 11:21	9.0	.194	217.34	-3.69	213.66
- 11:24	12.0	.241	268.77	-3.35	265.42
- 11:27	15.0	.275	305.98	-3.11	302.86
- 11:30	18.0	.310	344.27	-2.87	341.41
- 11:33	21.0	.337	373.82	-2.67	371.15
- 11:36	24.0	.368	407.74	-2.45	405.29
- 11:39	27.0	.390	431.81	-2.30	429.52
- 11:42	30.0	.409	452.60	-2.16	450.44
- 11:45	33.0	.425	470.11	-2.05	468.06
- 11:48	36.0	.440	486.53	-1.94	484.58
- 11:51	39.0	.454	501.84	-1.84	500.00
- 11:54	42.0	.465	513.88	-1.77	512.11
- 11:57	45.0	.477	527.01	-1.68	525.33
- 12:00	48.0	.486	536.86	-1.62	535.24
- 12:03	51.0	.496	547.80	-1.55	546.26
- 12:06	54.0	.507	559.84	-1.47	558.37
- 12:09	57.0	.518	571.88	-1.39	570.48
- 12:12	60.0	.525	579.54	-1.34	578.19
-12:12 2ND SHUT-IN	0.0	.525	579.54	-1.34	578.19
-2ND HYDROSTATIC	0.0	1.701	1866.36	5.07	1871.43

CALCULATED RECOVERY ANALYSIS

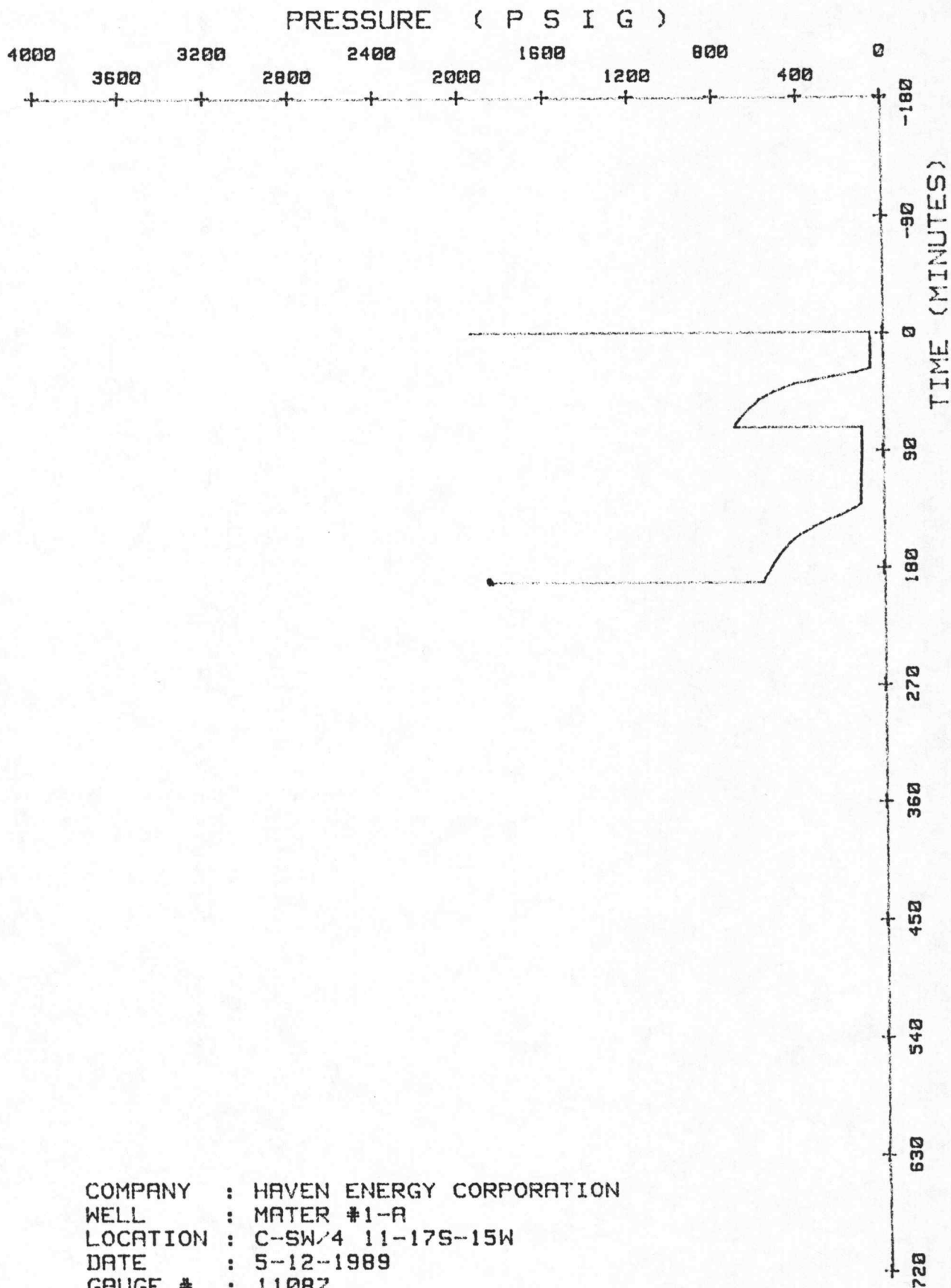
DST Number:5

Test ticket number:10553

Sample #	Total Feet	***** Gas ***** %	***** Gas ***** Feet	***** Oil ***** %	***** Oil ***** Feet	***** Mud ***** %	***** Mud ***** Feet
1	10	2.00	2.00	47.00	4.70	40.00	4.00
2	60	4.00	2.40	80.00	48.00	10.00	6.00
3	60	4.00	2.40	64.00	38.40	15.00	9.00
4	100	9.00	9.00	80.00	80.00	5.00	5.00
5	20	6.00	1.20	94.00	18.80	0.00	0.00
TOTAL	250	6.08	15.20	75.96	189.90	9.60	24.00

Sample #	Total Feet	***** WATER ***** %	***** WATER ***** Feet	Chlorides (ppm)	Resistivity (ohms)	Temperature (deg)
1	10	11.00	1.10	0.00	0.00	0.00
2	60	6.00	3.60	0.00	0.00	0.00
3	60	17.00	10.20	0.00	0.00	0.00
4	100	6.00	6.00	0.00	0.00	0.00
5	20	0.00	0.00	0.00	0.00	0.00
TOTAL	250	8.36	20.90			

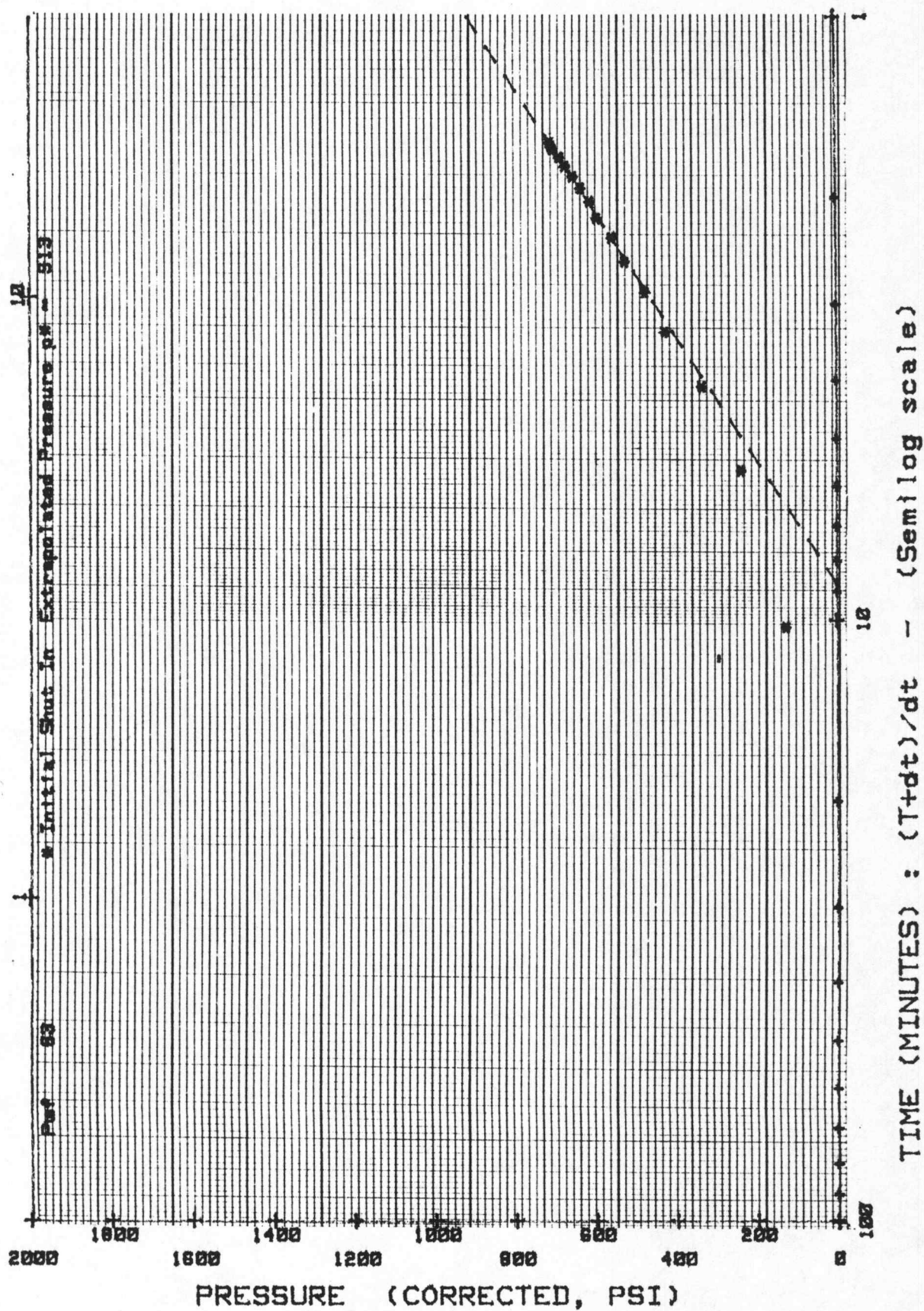
INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.



GAUGE # : 11087

DATE : 5-12-1988

LOCATION : C-SW/4 11-17S-15W



SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : HAVEN ENERGY CORPORATION
 WELL NAME : MATER #1-A
 LOCATION : C-SW/4 11-17S-15W
 STATE & COUNTY : KANSAS, BARTON
 DATE OF TEST : 5-12-1989
 TEST INT. KB : 3476 to 3598
 TOTAL INTERVAL (ft) K.B. : 122.00
 ELEV. (GR) : 1933 (KB) : 1938
 FIELD : MATER

ELEMENT SERIAL NO. : 11087
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG	-----
Refer. depth :	3492.0 ft-kb			
-9:28 END FLOW	0.00	0.00	62.78	
	3.00	10.33	126.65	
	6.00	5.67	236.78	
	9.00	4.11	333.70	
	12.00	3.33	425.11	
	15.00	2.87	473.57	
	18.00	2.56	523.13	
	21.00	2.33	555.07	
	24.00	2.17	592.51	
	27.00	2.04	610.13	
	30.00	1.93	632.16	
	33.00	1.85	651.98	
	36.00	1.78	670.70	
	39.00	1.72	685.02	
	42.00	1.67	701.54	
	45.00	1.62	709.25	
-10:13 1ST SHUT-IN	0.00	0.00	709.25	

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
DATE OF TEST : 5-12-1989 LOCATION : C-SW/4 11-17S-15W
DST. NO : 5 SHUT-IN PERIOD : 1

INTERPRETIVE DATA (OIL)

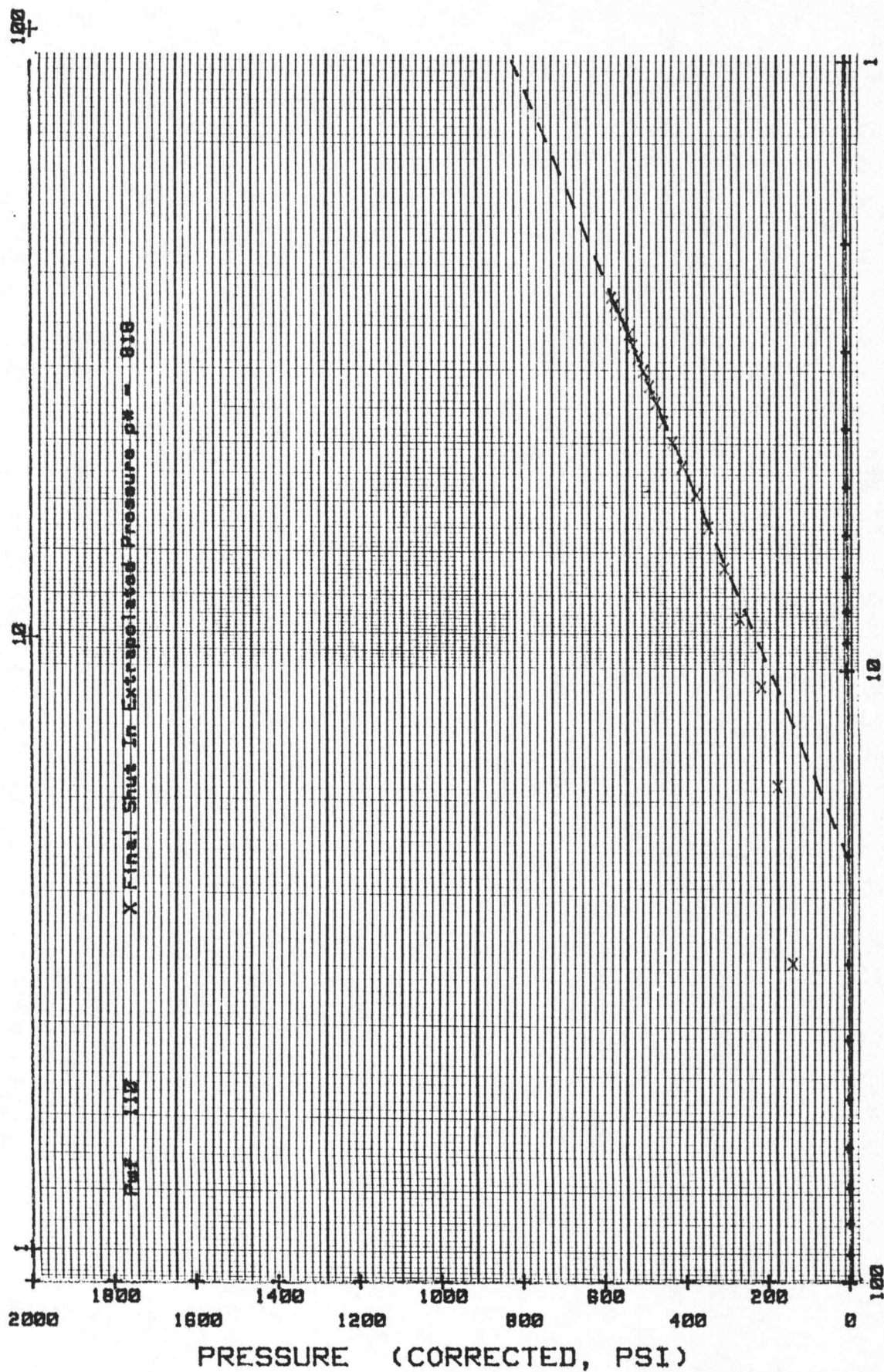
EXTRAPOLATED RESERVOIR PRESSURE (psi):	913.00
Slope of Build-up Curve (psi/log cycle):	970.44
Effective Producing Time (min):	28.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

GAUGE # : 11087

DATE : 5-12-1989

LOCATION : C-SW/4 11-17S-15W



SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : HAVEN ENERGY CORPORATION
 WELL NAME : MATER #1-A
 LOCATION : C-SW/4 11-17S-15W
 STATE & COUNTY : KANSAS, BARTON
 DATE OF TEST : 5-12-1989
 TEST INT. KB : 3476 to 3598
 TOTAL INTERVAL (ft) K.B. : 122.00
 ELEV.(GR) : 1933 (KB) : 1938
 FIELD : MATER

ELEMENT SERIAL NO. : 11087
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES ----- CORR PSIG
Refer. depth : 3492.0 ft-kb			
-11:12 END FLOW	0.00	0.00	110.13
	3.00	30.00	138.77
	6.00	15.50	175.11
	9.00	10.67	213.66
	12.00	8.25	265.42
	15.00	6.80	302.86
	18.00	5.83	341.41
	21.00	5.14	371.15
	24.00	4.63	405.29
	27.00	4.22	429.52
	30.00	3.90	450.44
	33.00	3.64	468.06
	36.00	3.42	484.58
	39.00	3.23	500.00
	42.00	3.07	512.11
	45.00	2.93	525.33
	48.00	2.81	535.24
	51.00	2.71	546.26
	54.00	2.61	558.37
	57.00	2.53	570.48
	60.00	2.45	578.19
-12:12 2ND SHUT-IN	0.00	0.00	578.19

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SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : HAVEN ENERGY CORPORATION WELL NAME : MATER #1-A
 DATE OF TEST : 5-12-1989 LOCATION : C-SW/4 11-17S-15W
 DST. NO : 5 SHUT-IN PERIOD : 2

INTERPRETIVE DATA (OIL)

TRANSMISSIBILITY

Oil (md.ft/cp): 11.62
 Gas (md.ft/cp): 0.00

EFFECTIVE PERMEABILITY

Oil (md): 1.00
 Gas (md): 0.00

TOTAL MOBILITY (md/cp): 1.38

TOTAL COMPRESSIBILITY (psi⁻¹): 7.86E-06

ESTIMATED DAMAGE RATIO:25

CALCULATED DAMAGE RATIO:29

Reservoir Temperature (F): 100.00

Formation Porosity :18

Formation Thickness (ft): 10.00

Wellbore Radius (in): 3.94

Reservoir Compressibility (psi⁻¹): 4.80E-07

Calculated Skin Factor : -3.17

PRODUCTION WITH DAMAGE REMOVED (bbl/D): 44.63

PRODUCTIVITY INDEX (bbl/psi):06

Final Flow Pressure (psi): 110.00

APPROXIMATE RADIUS OF INVESTIGATION (ft): 38.42

Total Flowing Time (min): 87.00

EXTRAPOLATED RESERVOIR PRESSURE (psi): 818.00

Slope of Build-up Curve (psi/log cycle): 624.60

Effective Producing Time (min): 87.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

Superior Testers Enterprises, Inc.

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

(316) 792-6902

Date 5-12-1989 Location C-SW14 11-17^s 15^w Elevation 1938 K.B. County Easton
 Company Nova Energy Corporation Number of Copies 5
 Charts Mailed to 7310 East Kellogg Wichita Kansas 67207-1695
 Drilling Contractor Duke Drilling, Inc. #1
 Length Drill Pipe 2515 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" F.H.
 Length Weight Pipe 942 I.D. Weight Pipe 2.75 Tool Joint Size 4 1/2" F.H.
 Length Drill Collars None I.D. Drill Collars None Tool Joint Size None
 Top Packer Depth 3471 Bottom Packer Depth 3476 Number of Packers 2 Packer Size 6 3/4"
 TESTED FROM 3476 TO 3498 ANCHOR LENGTH 22 TOTAL DEPTH 3498 Hole Size 7 7/8"
 LEASE & WELL NO. Water #1-A FORMATION TESTED Arkuckle TEST NO. 5
 Mud Weight 10.9 Viscosity 47 Water Loss 12 Chlorides - Pits 67000 D.S.T.
 Maximum Temp. 100 °F Initial Hydrostatic Pressure (A) 1913 P.S.I. Final Hydrostatic Pressure (H) 1902 P.S.I.

Tool Open I.F.P. from 9:00 p.m. to 9:30 p.m. 30 min
 Tool Closed I.C.I.P. from 9:30 p.m. to 10:15 p.m. 45 min
 Tool Open F.F.P. from 10:15 p.m. to 11:15 p.m. 60 min
 Tool Closed F.C.I.P. from 11:15 p.m. to 12:15 p.m. 60 min

from [B] 55 P.S.I. to [C] 77 P.S.I.
 [D] 717 P.S.I.
 from [E] 99 P.S.I. to [F] 132 P.S.I.
 [G] (APPROX. 45 min) 530 585 P.S.I.

Initial Blow weak building blow - built to 9 1/2 inches into the water

Final Blow weak building blow - built to 9 inches into the water

Total Feet Recovered 250 Gravity of Oil _____ Corrected

<u>10</u> Feet of <u>Heavy Oil cut mud</u>	<u>2</u> % Gas	<u>47</u> % Oil	<u>40</u> % Mud	<u>11</u> % Water
<u>60</u> Feet of <u>Slightly muddy Oil</u>	<u>4</u> % Gas	<u>80</u> % Oil	<u>10</u> % Mud	<u>6</u> % Water
<u>60</u> Feet of <u>Muddy Oil</u>	<u>4</u> % Gas	<u>64</u> % Oil	<u>15</u> % Mud	<u>17</u> % Water
<u>100</u> Feet of <u>Slightly muddy Oil</u>	<u>9</u> % Gas	<u>80</u> % Oil	<u>5</u> % Mud	<u>6</u> % Water
<u>20</u> Feet of <u>Clear Oil</u>	<u>6</u> % Gas	<u>94</u> % Oil	<u>0</u> % Mud	<u>0</u> % 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 None Safety Joint None Extra Packer None Straddle None Hook Wall None
 Top Recorder No. 11087 Clock No. 47441 Depth 3492 Cir. Sub None Sampler None
 Bottom Recorder No. 906 Clock No. 47442 Depth 3495 Insurance None

Price of Job _____

Tool Operator Steve Ludwig

Approved By _____

No 10553

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