

WELL NAME: Loomis #11-21
COMPANY: D.C. Dudley & Assoc.
LOCATION: Sec. 21 Twp. 27s Rge. 4e
Butler County Kansas
DATE: 10-9-96

TRILOBITE TESTING L.L.C.

OPERATOR : D.C.Dudley & Assoc.
WELL NAME: Loomis #11-21
LOCATION : Sec21 Twp27S Rge4E
INTERVAL : 2746.00 To 2841.00 ft

DATE 10/9/96
KB 1272.00 ft TICKET NO: 9321 DST #1
GR 1262.00 ft FORMATION: Simpson Sand
TD 2841.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	10994	10994	2350			PF Fr. 0629 to 0644 hr
SI 30 Range(Psi)	4200.0	4200.0	4995.0	0.0	0.0	IS Fr. 0644 to 0714 hr
SF 45 Clock(hrs)	12hr.	12hr.	ELECT			SF Fr. 0714 to 0759 hr
FS 90 Depth(ft)	2838.0	2838.0	2817.0	0.0	0.0	FS Fr. 0759 to 0929 hr

	Field	1	2	3	4	
A. Init Hydro	1399.0	1408.0	1387.0	0.0	0.0	T STARTED 0316 hr
B. First Flow	170.0	152.0	127.0	0.0	0.0	T ON BOTM 0626 hr
Bl. Final Flow	372.0	373.0	388.0	0.0	0.0	T OPEN 0629 hr
C. In Shut-in	1093.0	1097.0	1094.0	0.0	0.0	T PULLED 0930 hr
D. Init Flow	421.0	424.0	419.0	0.0	0.0	T OUT 1325 hr
E. Final Flow	828.0	822.0	841.0	0.0	0.0	
F. Fl Shut-in	1082.0	1087.0	1094.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1378.0	1387.0	1363.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	O	O	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 52000.00 lbs
						Initial Str Wt 48000.00 lbs
						Unseated Str Wt 52000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.34 in
						D.C. Length 298.00 ft
						D.P. Length 2425.00 ft

RECOVERY

Tot Fluid 1700.00 ft of 298.00 ft in DC and 1402.00 ft in DP
310.00 ft of Drilling Mud
940.00 ft of Muddy Water 22%Mud 78%Water
450.00 ft of Salt Water
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of EST FT.OF PAY-----6
SALINITY 17000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
Strong blow - bottom of bucket in
2 minutes

Final Flow -
Strong blow - bottom of bucket in
2 minutes

SAMPLES:
SENT TO:

MUD DATA-----
Mud Type Chemical
Weight 9.30 lb/cf
Vis. 42.00 S/L
W.L. 8.00 in3
F.C. 0.00 in
Mud Drop

Amt. of fill 0.00 ft
Btm. H. Temp. 110.00 F
Hole Condition Good
% Porosity 15.00
Packer Size 6.75 in
No. of Packers 2
Cushion Amt. 0.00
Cushion Type none
Reversed Out Y
Tool Chased N
Tester Darren Amerine
Co. Rep. Rick Popp
Contr. Summit Drilling
Rig # 1
Unit #
Pump T.

Test Successful: Y

Operator.....: D.C. Dudley & Associates
Well Name.....: Loomis #11-21
DST Number.....: 1

Location.: 21-27S-4E Recorder No....: 2350
Test Type: Conventional Recorder Depth: 2817
Formation: Simpson Sand Test Interval.: 2746-2841

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

RESERVOIR PARAMETERS USED:

Net Pay.....	8.00 ft
Porosity.....	15.00 %
Bottom Hole Temp.....	110.00 F
Specific Gravity.....	1.070
API Gravity.....	1.00
Compressibility.....	0.000900 /psi
Viscosity.....	0.6144 cp
Total Recovery.....	1700.00 ft
Total Flowing Time.....	60.00 min.
Flow Rate.....	105.00 bbls/d
Final Flowing Pressure.....	828.00 psi
Horner Slope.....	41.2842 psi/cycle
Extrapolated Pressure.....	1102.34 psi
Formation Volume Factor.....	2.38 Reservoir/Surface
Well Bore Radius.....	3.94 in

RESULTS:

Effective Permeability.....	75.675718 md
Flow Capacity.....	605.4057 md.ft
Transmissibility.....	985.3609 md.ft/cp
Skin Factor.....	3.8275
Radius of Investigation.....	27.70026 ft
Damage Ratio.....	2.0017
Productivity Index.....	0.3827 bbls/psi.d
Productivity Index W/O Damage..	0.7661 bbls/psi.d

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Loomis #11-21

LOCATION : Sec21 Twp27S Rge4E

TICKET No. 9321 D.S.T. No. 1 DATE 10/9/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 29

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 35

TOTAL TOOL 64

DRILL COLLAR ANCHOR IN INTERVAL 95

D.C. ANCHOR STND.Stands Single 2 Total 60

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 124

D.C. ABOVE TOOLS.Stands Single 10 Total 298

D.P. ABOVE TOOLS.Stands Single 77 Total 2425

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 2847

TOTAL DEPTH 2841

TOTAL DRILL PIPE ABOVE K.B. 6

REMARKS:

FLUID SAMPLER DATA

GAS-----none
OIL-----none
MUD-----trace
WATER-----2600 ML
OTHER-----
PRESSURE----- 25 PSI
Rw----- .49 ohms @
 76 dgrees F.
Chlorides ppm.----- 17,000

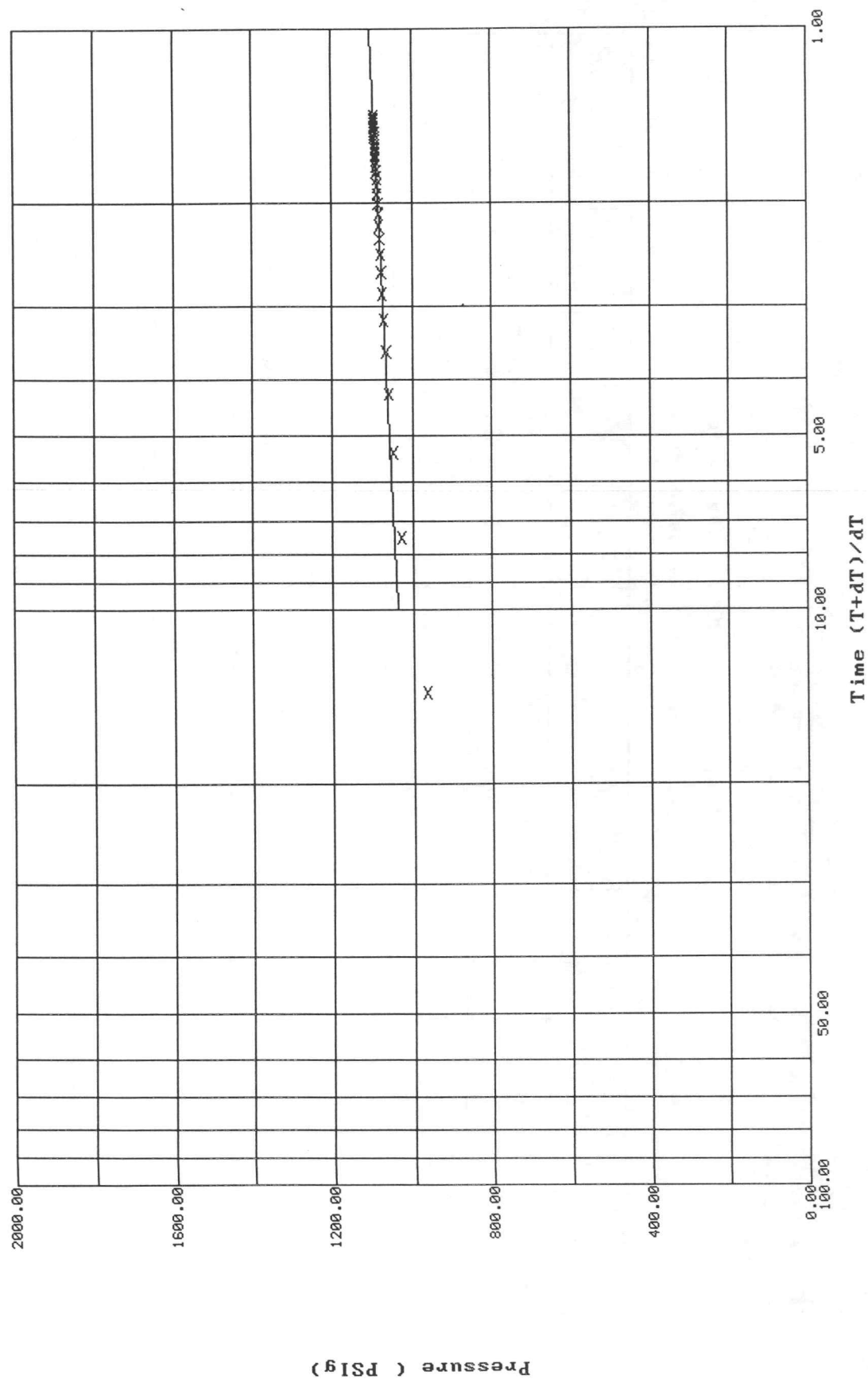
P.O. SUB	2717
C.O. SUB @ top of tool	
S.I. TOOL	2723
Sampler	2726
HMV	2731
JARS	2735
SAFETY JOINT	2737
PACKER	2741
PACKER	2746
DEPTH 2746	
STUBB 1'	2747
ANCHOR	
4 ft. perfs to	2751
2 jts. drill collar to	2811
T.C. DEPTH	
Alpine rec. @	2817
perfs 25 ft. to	2836
Ak-1 recorder	2838
BULLNOSE 5'perforated to T.D.	2841

Horner Plot: shut-in #1

9321 DST#1 LOOMIS#11-21 D.C.DUDLEY & ASSOC.

Slope: 66.3125 PSig/cycle

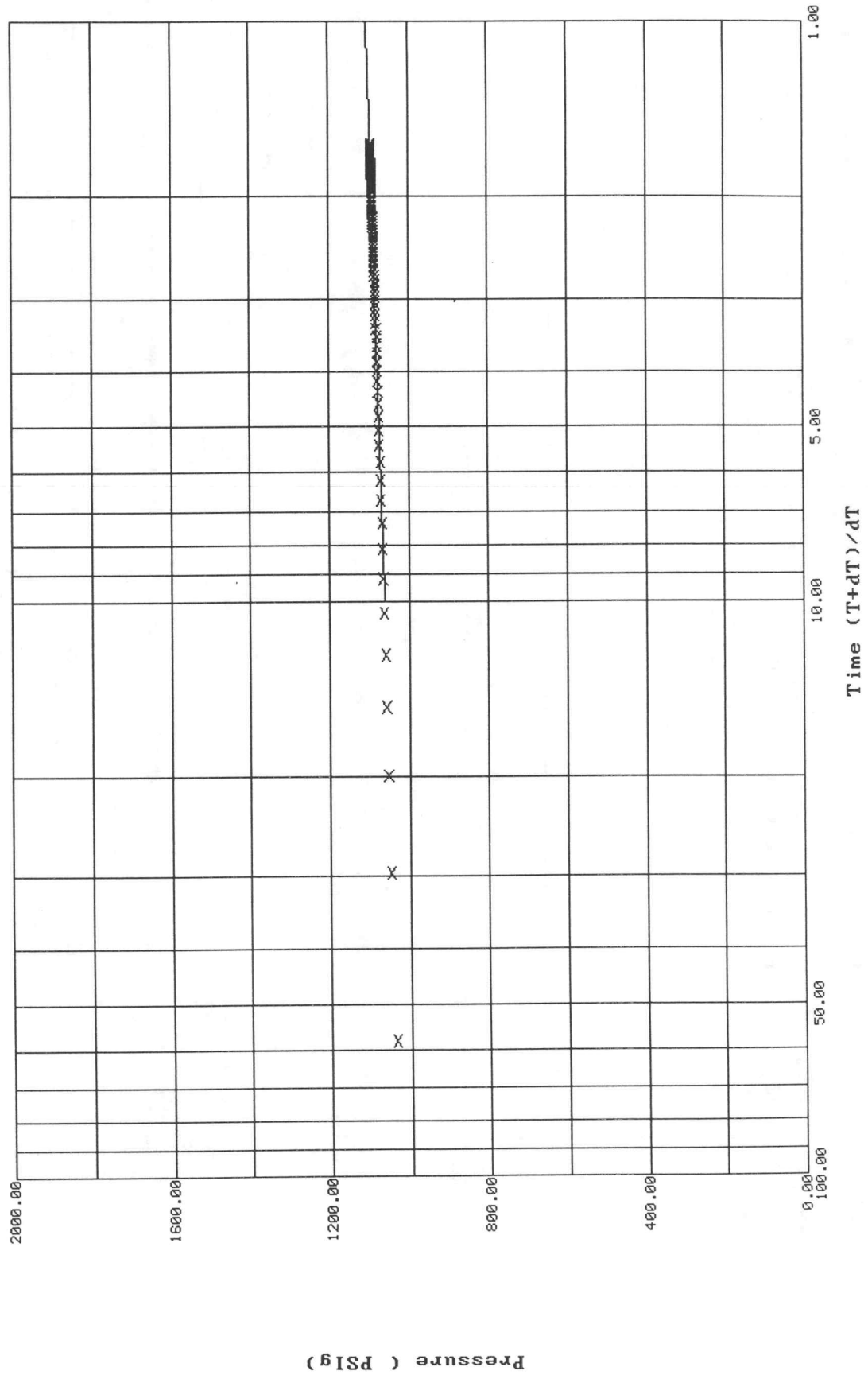
Ext. Pressure: 1104.3964 PSig



Horner Plot: shut-in #2

9321 DST#1 LOOMIS#11-21 D.C.DUDLEY & ASSOC.

Slope: 41.2842 PSig/cycle
Ext. Pressure: 1102.3475 PSig



TEST HISTORY

9321 DST#1 LOOMIS#11-21 D.C.DUDLEY & ASSOC.

Flag Points

t (Min.)	P (PSig)
A: 0.00	1387.07
B: 0.00	126.97
C: 13.00	387.91
D: 31.00	1094.33
E: 0.00	419.04
F: 44.00	840.95
G: 91.00	1093.91
Q: 0.00	1362.64

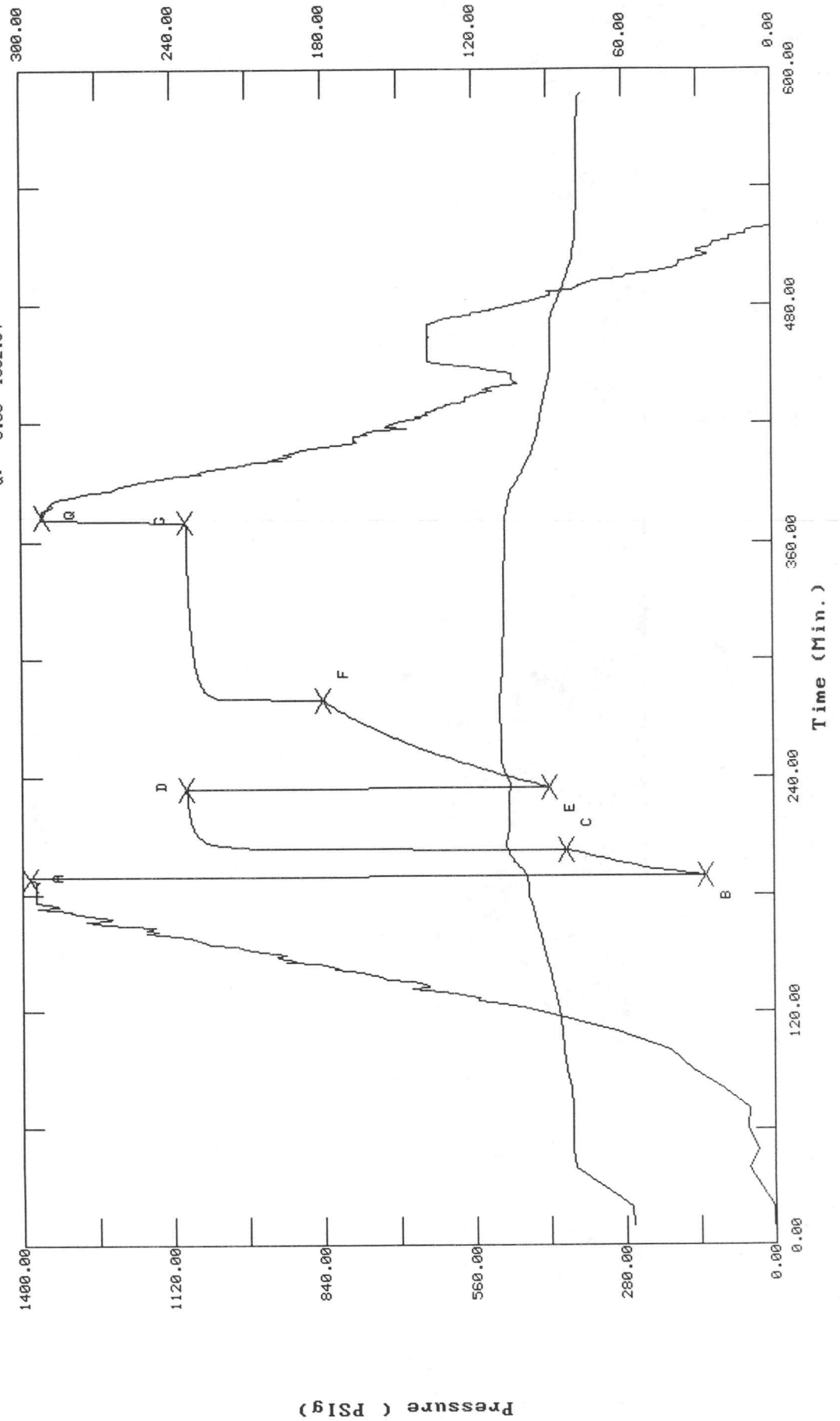
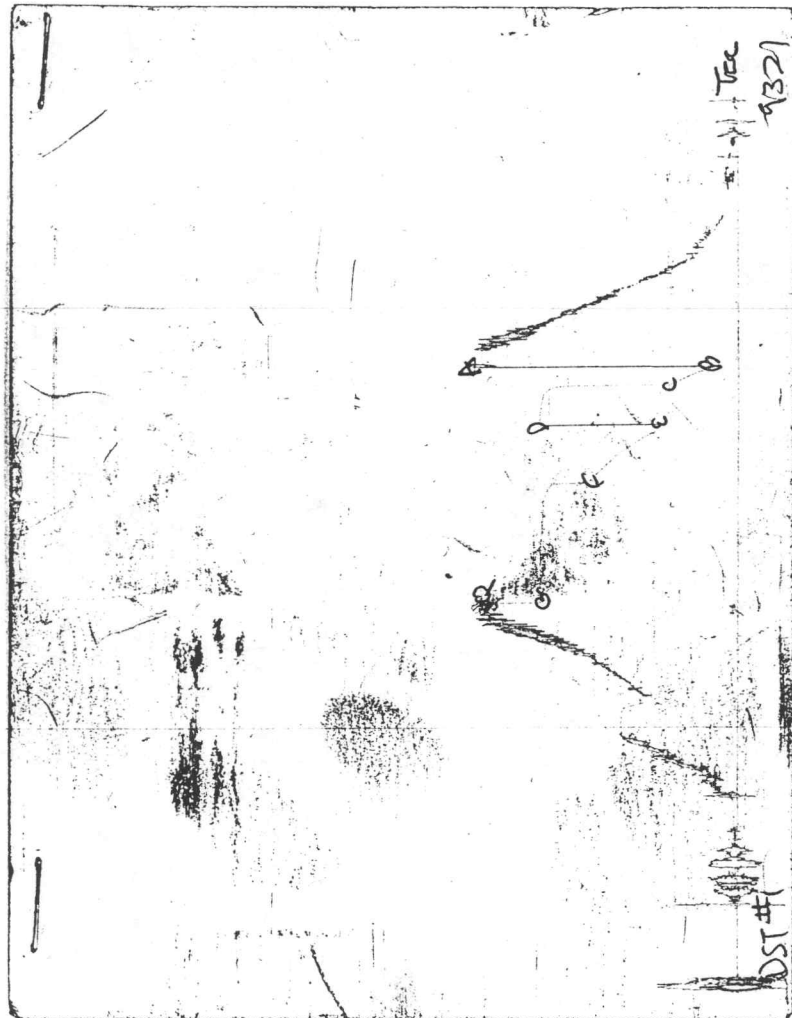


CHART PAGE



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

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9321 DST#1 LOOMIS#11-21 D.C.DUDLEY & ASSOC.
 DATE: 10/09/96 TIME: 03:17:07

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	188.00	1387.1	0.0	98.72		
***** Start Flow 1	0.00	127.0	0.0	99.09		
	1.00	157.3	30.3	99.38		
	2.00	192.9	65.9	99.83		
	3.00	225.1	98.1	100.62		
	4.00	241.5	114.6	101.65		
	5.00	260.0	133.0	102.59		
	6.00	277.5	150.6	103.36		
	7.00	294.1	167.1	104.02		
	8.00	310.6	183.6	104.59		
	9.00	327.0	200.0	105.09		
	10.00	342.2	215.2	105.56		
	11.00	357.4	230.5	105.99		
	12.00	372.7	245.7	106.38		
***** End Flow 1	13.00	387.9	260.9	106.70		
***** Start Shutin 1	0.00	387.9	0.0	106.70	0.0000	0.150
	1.00	964.7	576.8	106.98	14.0000	0.931
	2.00	1027.7	639.8	107.21	7.5000	1.056
	3.00	1047.6	659.7	107.26	5.3333	1.097
	4.00	1057.9	670.0	107.17	4.2500	1.119
	5.00	1064.5	676.6	106.98	3.6000	1.133
	6.00	1069.5	681.6	106.78	3.1667	1.144
	7.00	1073.3	685.4	106.61	2.8571	1.152
	8.00	1076.2	688.3	106.44	2.6250	1.158
	9.00	1078.5	690.6	106.32	2.4444	1.163
	10.00	1080.4	692.5	106.23	2.3000	1.167
	11.00	1082.0	694.1	106.15	2.1818	1.171
	12.00	1083.2	695.3	106.08	2.0833	1.173
	13.00	1084.4	696.5	106.03	2.0000	1.176
	14.00	1085.5	697.6	105.98	1.9286	1.178
	15.00	1086.4	698.5	105.97	1.8667	1.180
	16.00	1087.3	699.4	105.93	1.8125	1.182
	17.00	1088.1	700.2	105.92	1.7647	1.184
	18.00	1088.6	700.7	105.91	1.7222	1.185
	19.00	1089.4	701.5	105.90	1.6842	1.187
	20.00	1090.0	702.1	105.90	1.6500	1.188
	21.00	1090.5	702.6	105.89	1.6190	1.189
	22.00	1091.0	703.1	105.87	1.5909	1.190
	23.00	1091.5	703.6	105.86	1.5652	1.191
	24.00	1092.1	704.2	105.84	1.5417	1.193
	25.00	1092.2	704.3	105.84	1.5200	1.193
	26.00	1092.7	704.8	105.83	1.5000	1.194
	27.00	1093.2	705.2	105.82	1.4815	1.195
	28.00	1093.5	705.6	105.80	1.4643	1.196
	29.00	1093.7	705.7	105.80	1.4483	1.196
	30.00	1094.0	706.1	105.80	1.4333	1.197
***** End Shut-in 1	31.00	1094.3	706.4	105.79	1.4194	1.198
***** Start Flow 2	0.00	419.0	0.0	105.75		
	1.00	433.9	14.9	105.73		
	2.00	448.8	29.7	105.76		
	3.00	462.3	43.3	105.93		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9321 DST#1 LOOMIS#11-21 D.C.DUDLEY & ASSOC.

DATE: 10/09/96

TIME: 03:17:07

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
4.00	476.2	57.2	106.28		
5.00	489.7	70.7	106.69		
6.00	503.6	84.6	107.13		
7.00	516.6	97.5	107.52		
8.00	529.2	110.1	107.88		
9.00	542.1	123.0	108.18		
10.00	554.3	135.2	108.46		
11.00	566.0	147.0	108.69		
12.00	577.8	158.7	108.84		
13.00	589.2	170.1	108.90		
14.00	600.2	181.1	108.93		
15.00	611.0	191.9	108.96		
16.00	621.2	202.2	108.98		
17.00	632.3	213.3	109.02		
18.00	642.5	223.4	109.06		
19.00	652.3	233.2	109.10		
20.00	662.2	243.1	109.14		
21.00	671.2	252.1	109.18		
22.00	680.5	261.4	109.21		
23.00	689.8	270.8	109.25		
24.00	698.0	279.0	109.28		
25.00	707.1	288.0	109.31		
26.00	715.6	296.6	109.32		
27.00	724.0	305.0	109.34		
28.00	732.6	313.6	109.36		
29.00	740.1	321.0	109.37		
30.00	748.1	329.1	109.39		
31.00	755.8	336.8	109.39		
32.00	763.5	344.4	109.40		
33.00	771.0	352.0	109.41		
34.00	777.6	358.5	109.43		
35.00	785.0	365.9	109.44		
36.00	791.6	372.6	109.45		
37.00	798.8	379.8	109.47		
38.00	804.7	385.6	109.48		
39.00	811.4	392.4	109.48		
40.00	817.6	398.6	109.49		
41.00	823.8	404.8	109.49		
42.00	829.6	410.6	109.49		
43.00	835.1	416.0	109.49		
44.00	840.9	421.9	109.50		

***** End Flow 2

***** Start Shutin 2	0.00	840.9	0.0	109.50	0.0000	0.707
	1.00	1037.1	196.1	109.59	58.0000	1.076
	2.00	1047.4	206.5	109.49	29.5000	1.097
	3.00	1053.0	212.1	109.45	20.0000	1.109
	4.00	1057.2	216.3	109.37	15.2500	1.118
	5.00	1060.3	219.3	109.28	12.4000	1.124
	6.00	1062.9	221.9	109.19	10.5000	1.130
	7.00	1064.9	223.9	109.10	9.1429	1.134
	8.00	1066.6	225.7	109.03	8.1250	1.138
	9.00	1068.2	227.3	108.97	7.3333	1.141

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9321 DST#1 LOOMIS#11-21 D.C.DUDLEY & ASSOC.
 DATE: 10/09/96 TIME: 03:17:07

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
10.00	1069.7	228.7	108.90	6.7000	1.144
11.00	1070.9	230.0	108.85	6.1818	1.147
12.00	1072.0	231.1	108.80	5.7500	1.149
13.00	1073.0	232.1	108.74	5.3846	1.151
14.00	1073.9	233.0	108.70	5.0714	1.153
15.00	1074.8	233.8	108.64	4.8000	1.155
16.00	1075.6	234.7	108.60	4.5625	1.157
17.00	1076.4	235.5	108.56	4.3529	1.159
18.00	1077.1	236.2	108.54	4.1667	1.160
19.00	1077.8	236.8	108.46	4.0000	1.162
20.00	1078.4	237.4	108.44	3.8500	1.163
21.00	1079.1	238.1	108.41	3.7143	1.164
22.00	1079.6	238.6	108.39	3.5909	1.165
23.00	1080.0	239.0	108.36	3.4783	1.166
24.00	1080.6	239.6	108.33	3.3750	1.168
25.00	1081.1	240.1	108.31	3.2800	1.169
26.00	1081.4	240.5	108.30	3.1923	1.169
27.00	1081.9	241.0	108.30	3.1111	1.171
28.00	1082.2	241.3	108.29	3.0357	1.171
29.00	1082.8	241.9	108.29	2.9655	1.173
30.00	1083.2	242.2	108.26	2.9000	1.173
31.00	1083.5	242.6	108.23	2.8387	1.174
32.00	1083.8	242.9	108.20	2.7812	1.175
33.00	1084.3	243.3	108.19	2.7273	1.176
34.00	1084.7	243.7	108.15	2.6765	1.177
35.00	1084.8	243.9	108.12	2.6286	1.177
36.00	1085.2	244.2	108.09	2.5833	1.178
37.00	1085.5	244.6	108.06	2.5405	1.178
38.00	1085.9	245.0	108.04	2.5000	1.179
39.00	1086.0	245.1	108.01	2.4615	1.179
40.00	1086.4	245.4	108.00	2.4250	1.180
41.00	1086.6	245.7	107.99	2.3902	1.181
42.00	1086.8	245.8	107.96	2.3571	1.181
43.00	1087.0	246.1	107.93	2.3256	1.182
44.00	1087.4	246.4	107.91	2.2955	1.182
45.00	1087.5	246.6	107.91	2.2667	1.183
46.00	1087.8	246.8	107.90	2.2391	1.183
47.00	1087.9	246.9	107.89	2.2128	1.183
48.00	1088.2	247.3	107.89	2.1875	1.184
49.00	1088.3	247.3	107.89	2.1633	1.184
50.00	1088.5	247.6	107.89	2.1400	1.185
51.00	1088.7	247.8	107.91	2.1176	1.185
52.00	1089.0	248.0	107.90	2.0962	1.186
53.00	1089.1	248.2	107.89	2.0755	1.186
54.00	1089.4	248.4	107.85	2.0556	1.187
55.00	1089.4	248.4	107.86	2.0364	1.187
56.00	1089.7	248.8	107.83	2.0179	1.187
57.00	1090.0	249.0	107.81	2.0000	1.188
58.00	1090.1	249.2	107.79	1.9828	1.188
59.00	1090.1	249.2	107.76	1.9661	1.188
60.00	1090.3	249.3	107.75	1.9500	1.189

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

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DATE: 10/09/96

TIME: 03:17:07

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	61.00	1090.5	249.6	107.73	1.9344	1.189
	62.00	1090.6	249.7	107.72	1.9194	1.189
	63.00	1090.8	249.9	107.72	1.9048	1.190
	64.00	1090.9	249.9	107.70	1.8906	1.190
	65.00	1091.1	250.1	107.69	1.8769	1.190
	66.00	1091.2	250.3	107.67	1.8636	1.191
	67.00	1091.2	250.3	107.66	1.8507	1.191
	68.00	1091.4	250.4	107.64	1.8382	1.191
	69.00	1091.6	250.7	107.62	1.8261	1.192
	70.00	1091.6	250.7	107.61	1.8143	1.192
	71.00	1091.8	250.9	107.61	1.8028	1.192
	72.00	1091.9	250.9	107.60	1.7917	1.192
	73.00	1092.1	251.1	107.58	1.7808	1.193
	74.00	1092.1	251.1	107.59	1.7703	1.193
	75.00	1092.2	251.3	107.59	1.7600	1.193
	76.00	1092.3	251.4	107.59	1.7500	1.193
	77.00	1092.5	251.5	107.60	1.7403	1.194
	78.00	1092.6	251.7	107.59	1.7308	1.194
	79.00	1092.8	251.8	107.57	1.7215	1.194
	80.00	1092.9	251.9	107.56	1.7125	1.194
	81.00	1092.9	251.9	107.56	1.7037	1.194
	82.00	1093.1	252.1	107.54	1.6951	1.195
	83.00	1093.2	252.2	107.53	1.6867	1.195
	84.00	1093.2	252.3	107.52	1.6786	1.195
	85.00	1093.4	252.4	107.50	1.6706	1.195
	86.00	1093.4	252.4	107.48	1.6628	1.195
	87.00	1093.4	252.4	107.46	1.6552	1.195
	88.00	1093.6	252.6	107.48	1.6477	1.196
	89.00	1093.7	252.7	107.46	1.6404	1.196
	90.00	1093.7	252.8	107.43	1.6333	1.196
***** End Shut-in 2	91.00	1093.9	253.0	107.43	1.6264	1.197

***** Final Hydro. 373.00 1362.6 0.0 107.17