

WELL NAME: Keenen # 1
COMPANY: Abercrombie Drilling Inc
LOCATION: 34-18S-29W
Lane County Kansas
DATE: 04/09/97

TRILOBITE TESTING L.L.C.

OPERATOR : Abercrombie Drlg. Inc. DATE 4-2-97
 WELL NAME: Keenan #1 KB 2814.00 ft TICKET NO: 9919 DST #1
 LOCATION : 34-18-S-29W Lane KS. GR 2809.00 ft FORMATION: Lans/KC "I"
 INTERVAL : 4175.00 To 4200.00 ft TD 4200.00 ft TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339	13339	2341			PF Fr. 0934 to 1004 hr
SI 45 Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0	IS Fr. 1004 to 1049 hr
SF 60 Clock(hrs)	12 HR	12 HR	Elec			SF Fr. 1049 to 1149 hr
FS 45 Depth(ft)	4195.0	4195.0	4177.0	0.0	0.0	FS Fr. 1149 to 1234 hr

	Field	1	2	3	4	
A. Init Hydro	2053.0	2058.0	2027.0	0.0	0.0	T STARTED 0800 hr
B. First Flow	10.0	8.0	12.0	0.0	0.0	T ON BOTM 0932 hr
B1. Final Flow	31.0	21.0	32.0	0.0	0.0	T OPEN 0934 hr
C. In Shut-in	979.0	1008.0	1005.0	0.0	0.0	T PULLED 1234 hr
D. Init Flow	31.0	102.0	31.0	0.0	0.0	T OUT 1415 hr
E. Final Flow	62.0	98.0	68.0	0.0	0.0	

	Field	1	2	3	4	TOOL DATA-----
F. Fl Shut-in	959.0	996.0	991.0	0.0	0.0	Tool Wt. 1800.00 lbs
G. Final Hydro	2043.0	2058.0	2003.0	0.0	0.0	Wt Set On Packer 30000.00 lbs
Inside/Outside	0	0	I			Wt Pulled Loose 50000.00 lbs

RECOVERY

Tot Fluid 125.00 ft of	0.00 ft in DC and	125.00 ft in DP	Unseated Str Wt	40000.00 lbs
125.00 ft of Water			Bot Choke	0.75 in
0.00 ft of			Hole Size	7.88 in
0.00 ft of			D Col. ID	0.00 in
0.00 ft of			D. Pipe ID	3.80 in
0.00 ft of			D.C. Length	0.00 ft
0.00 ft of			D.P. Length	3553.00 ft
0.00 ft of RW .31 @ 80 deg =			H.W. I.D	2.80 in
SALINITY 20000.00 P.P.M. A.P.I. Gravity 0.00			H.W. Length	630.00 ft

BLOW DESCRIPTION

Initial Flow:
 Weak surface blow steady throughout

Initial Shut In:

Final Flow:
 Surface return in 15 min, built to
 1/4" throughout

Final Flow:

SAMPLES:

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	44.00 S/L
W.L.	9.60 in3
F.C.	0.00 in
Mud Drop N	

Amt. of fill	0.00 ft
Btm. H. Temp.	117.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Rod Steinbrink
Co. Rep.	Steve Davis
Contr.	Abercrombie
Rig #	8
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Keenan #1

LOCATION : 34-18-S-29W Lane KS.

TICKET No. 9919 D.S.T. No. 1 DATE 4-2-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL 25

BOTTOM PACKERS AND ANCHOR

TOTAL TOOL 45

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 45

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands67 Single 1 Total 4183

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4228

TOTAL DEPTH 4200

TOTAL DRILL PIPE ABOVE K.B. 28

REMARKS:

P.O. SUB 1' Above 120' WP	4035
C.O. SUB 1'	4155
S.I. TOOL 5'	4161
HMV 5'	4166
JARS N/A	
SAFETY JOINT N/A	
PACKER 4'	4170
PACKER 5'	4175
DEPTH STUBB 1'	4176
ANCHOR	
Alp. Rec. @	4177
19' Perf.	4195
T.C. DEPTH	
AK-1 Rec. @	4195
BULLNOSE 5'	
T.D.	4200

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9919 DST #1 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/02/97

TIME: 08:00:33

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	94.00	2026.6	0.0	110.31		
***** Start Flow 1	0.00	12.1	0.0	110.28		
	1.00	12.6	0.4	110.34		
	2.00	13.3	1.2	110.36		
	3.00	14.3	2.2	110.37		
	4.00	15.6	3.5	110.37		
	5.00	16.5	4.3	110.36		
	6.00	16.9	4.8	110.36		
	7.00	18.0	5.9	110.39		
	8.00	19.0	6.9	110.38		
	9.00	19.8	7.6	110.39		
	10.00	20.3	8.2	110.39		
	11.00	20.3	8.2	110.39		
	12.00	20.9	8.8	110.42		
	13.00	22.0	9.9	110.42		
	14.00	21.8	9.6	110.44		
	15.00	21.8	9.7	110.46		
	16.00	22.4	10.3	110.47		
	17.00	23.0	10.9	110.51		
	18.00	23.7	11.6	110.53		
	19.00	24.3	12.1	110.55		
	20.00	24.9	12.8	110.59		
	21.00	25.5	13.4	110.61		
	22.00	26.0	13.9	110.64		
	23.00	26.6	14.5	110.67		
	24.00	27.2	15.1	110.71		
	25.00	28.0	15.9	110.74		
	26.00	28.7	16.6	110.78		
	27.00	29.4	17.3	110.82		
	28.00	30.1	17.9	110.86		
	29.00	30.8	18.7	110.89		
***** End Flow 1	30.00	31.6	19.5	110.93		
***** Start Shutin 1	0.00	31.6	0.0	110.93	0.0000	0.001
	1.00	92.1	60.5	110.98	31.0000	0.008
	2.00	752.7	721.1	111.07	16.0000	0.567
	3.00	893.2	861.7	111.15	11.0000	0.798
	4.00	921.9	890.3	111.23	8.5000	0.850
	5.00	936.3	904.7	111.30	7.0000	0.877
	6.00	945.8	914.2	111.39	6.0000	0.895
	7.00	953.0	921.4	111.45	5.2857	0.908
	8.00	958.7	927.1	111.49	4.7500	0.919
	9.00	963.4	931.8	111.59	4.3333	0.928
	10.00	967.4	935.8	111.64	4.0000	0.936
	11.00	970.9	939.3	111.71	3.7273	0.943
	12.00	973.9	942.3	111.76	3.5000	0.948
	13.00	976.7	945.1	111.81	3.3077	0.954
	14.00	979.1	947.5	111.86	3.1429	0.959
	15.00	981.3	949.7	111.91	3.0000	0.963
	16.00	983.4	951.8	111.96	2.8750	0.967
	17.00	985.2	953.6	112.02	2.7647	0.971
	18.00	986.9	955.3	112.05	2.6667	0.974

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9919 DST #1 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/02/97

TIME: 08:00:33

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	19.00	988.4	956.9	112.09	2.5789	0.977
	20.00	990.0	958.4	112.14	2.5000	0.980
	21.00	991.3	959.7	112.17	2.4286	0.983
	22.00	992.5	960.9	112.22	2.3636	0.985
	23.00	993.7	962.1	112.28	2.3043	0.987
	24.00	994.8	963.2	112.32	2.2500	0.990
	25.00	995.9	964.3	112.37	2.2000	0.992
	26.00	996.8	965.2	112.45	2.1538	0.994
	27.00	997.7	966.1	112.46	2.1111	0.995
	28.00	998.5	967.0	112.55	2.0714	0.997
	29.00	999.4	967.8	112.59	2.0345	0.999
	30.00	1000.1	968.5	112.63	2.0000	1.000
	31.00	1000.9	969.3	112.68	1.9677	1.002
	32.00	1001.7	970.1	112.71	1.9375	1.003
	33.00	1002.2	970.6	112.76	1.9091	1.004
	34.00	1002.9	971.3	112.83	1.8824	1.006
	35.00	1003.5	971.9	112.85	1.8571	1.007
	36.00	1004.1	972.5	112.90	1.8333	1.008
	37.00	1004.6	973.0	112.95	1.8108	1.009
	38.00	1002.7	971.1	113.01	1.7895	1.005
	39.00	1003.2	971.6	113.05	1.7692	1.006
	40.00	1003.6	972.0	113.07	1.7500	1.007
	41.00	1004.1	972.5	113.11	1.7317	1.008
	42.00	1004.5	972.9	113.12	1.7143	1.009
	43.00	1004.9	973.3	113.16	1.6977	1.010
***** End Shut-in 1	44.00	1005.3	973.7	113.21	1.6818	1.011
***** Start Flow 2	0.00	31.2	0.0	113.22		
	1.00	31.8	0.6	113.19		
	2.00	32.5	1.3	113.16		
	3.00	33.2	2.0	113.13		
	4.00	33.9	2.7	113.13		
	5.00	34.5	3.3	113.13		
	6.00	35.2	4.0	113.13		
	7.00	35.9	4.8	113.14		
	8.00	36.6	5.4	113.17		
	9.00	37.3	6.1	113.22		
	10.00	37.8	6.6	113.25		
	11.00	38.5	7.3	113.30		
	12.00	39.2	8.0	113.35		
	13.00	39.8	8.6	113.40		
	14.00	40.5	9.3	113.44		
	15.00	41.1	9.9	113.49		
	16.00	41.8	10.6	113.54		
	17.00	42.5	11.3	113.59		
	18.00	43.1	11.9	113.64		
	19.00	43.8	12.6	113.68		
	20.00	44.4	13.2	113.72		
	21.00	45.0	13.9	113.78		
	22.00	45.7	14.5	113.82		
	23.00	46.3	15.1	113.87		
	24.00	47.0	15.8	113.91		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9919 DST #1 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/02/97

TIME: 08:00:33

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶	
25.00	47.6	16.4	113.96			
26.00	48.2	17.1	114.00			
27.00	48.9	17.7	114.05			
28.00	49.6	18.4	114.09			
29.00	50.2	19.0	114.14			
30.00	50.8	19.6	114.18			
31.00	51.3	20.1	114.23			
32.00	51.9	20.7	114.26			
33.00	52.5	21.3	114.31			
34.00	53.0	21.8	114.35			
35.00	53.7	22.5	114.40			
36.00	54.4	23.2	114.43			
37.00	55.0	23.8	114.47			
38.00	55.5	24.3	114.52			
39.00	56.1	24.9	114.55			
40.00	56.8	25.6	114.60			
41.00	57.4	26.2	114.63			
42.00	58.0	26.8	114.68			
43.00	58.6	27.4	114.72			
44.00	59.2	28.0	114.75			
45.00	59.8	28.6	114.79			
46.00	60.4	29.2	114.83			
47.00	60.9	29.7	114.87			
48.00	61.6	30.4	114.91			
49.00	62.2	31.0	114.94			
50.00	62.8	31.6	114.98			
51.00	63.4	32.2	115.03			
52.00	64.0	32.8	115.06			
53.00	64.6	33.4	115.10			
54.00	65.2	34.0	115.14			
55.00	65.8	34.6	115.17			
56.00	66.3	35.1	115.22			
57.00	67.0	35.8	115.24			
58.00	67.6	36.4	115.29			
59.00	68.1	36.9	115.32			
***** End Flow 2						
***** Start Shutin 2	0.00	68.1	0.0	115.32	0.0000	0.005
	1.00	134.8	66.8	115.37	90.0000	0.018
	2.00	602.0	533.9	115.44	45.5000	0.362
	3.00	846.6	778.5	115.53	30.6667	0.717
	4.00	889.3	821.2	115.63	23.2500	0.791
	5.00	906.4	838.3	115.73	18.8000	0.822
	6.00	917.1	849.0	115.81	15.8333	0.841
	7.00	925.0	856.9	115.90	13.7143	0.856
	8.00	931.2	863.1	115.97	12.1250	0.867
	9.00	936.5	868.4	116.05	10.8889	0.877
	10.00	940.9	872.8	116.10	9.9000	0.885
	11.00	944.8	876.7	116.16	9.0909	0.893
	12.00	948.2	880.1	116.20	8.4167	0.899
	13.00	951.3	883.2	116.24	7.8462	0.905
	14.00	954.2	886.1	116.28	7.3571	0.911
	15.00	956.7	888.6	116.32	6.9333	0.915

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9919 DST #1 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/02/97

TIME: 08:00:33

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
16.00	959.0	891.0	116.36	6.5625	0.920
17.00	961.2	893.1	116.38	6.2353	0.924
18.00	963.2	895.2	116.41	5.9444	0.928
19.00	965.1	897.0	116.44	5.6842	0.931
20.00	966.8	898.8	116.48	5.4500	0.935
21.00	968.4	900.4	116.51	5.2381	0.938
22.00	970.0	901.9	116.51	5.0455	0.941
23.00	971.5	903.4	116.55	4.8696	0.944
24.00	972.8	904.7	116.58	4.7083	0.946
25.00	974.0	905.9	116.62	4.5600	0.949
26.00	975.3	907.2	116.63	4.4231	0.951
27.00	976.5	908.4	116.67	4.2963	0.953
28.00	977.5	909.4	116.70	4.1786	0.956
29.00	978.6	910.5	116.74	4.0690	0.958
30.00	979.6	911.6	116.72	3.9667	0.960
31.00	980.6	912.5	116.75	3.8710	0.962
32.00	981.5	913.4	116.79	3.7812	0.963
33.00	982.4	914.3	116.81	3.6970	0.965
34.00	983.1	915.1	116.84	3.6176	0.967
35.00	983.9	915.8	116.88	3.5429	0.968
36.00	984.7	916.6	116.90	3.4722	0.970
37.00	985.4	917.4	116.94	3.4054	0.971
38.00	986.2	918.1	116.97	3.3421	0.973
39.00	986.9	918.8	116.99	3.2821	0.974
40.00	987.5	919.4	117.02	3.2250	0.975
41.00	988.2	920.1	117.06	3.1707	0.976
42.00	988.8	920.7	117.08	3.1190	0.978
43.00	989.3	921.2	117.12	3.0698	0.979
44.00	989.9	921.8	117.14	3.0227	0.980
45.00	990.5	922.4	117.16	2.9778	0.981
46.00	991.0	922.9	117.20	2.9348	0.982
***** End Shut-in 2					
***** Final Hydro.	278.00	2002.6	0.0	117.76	

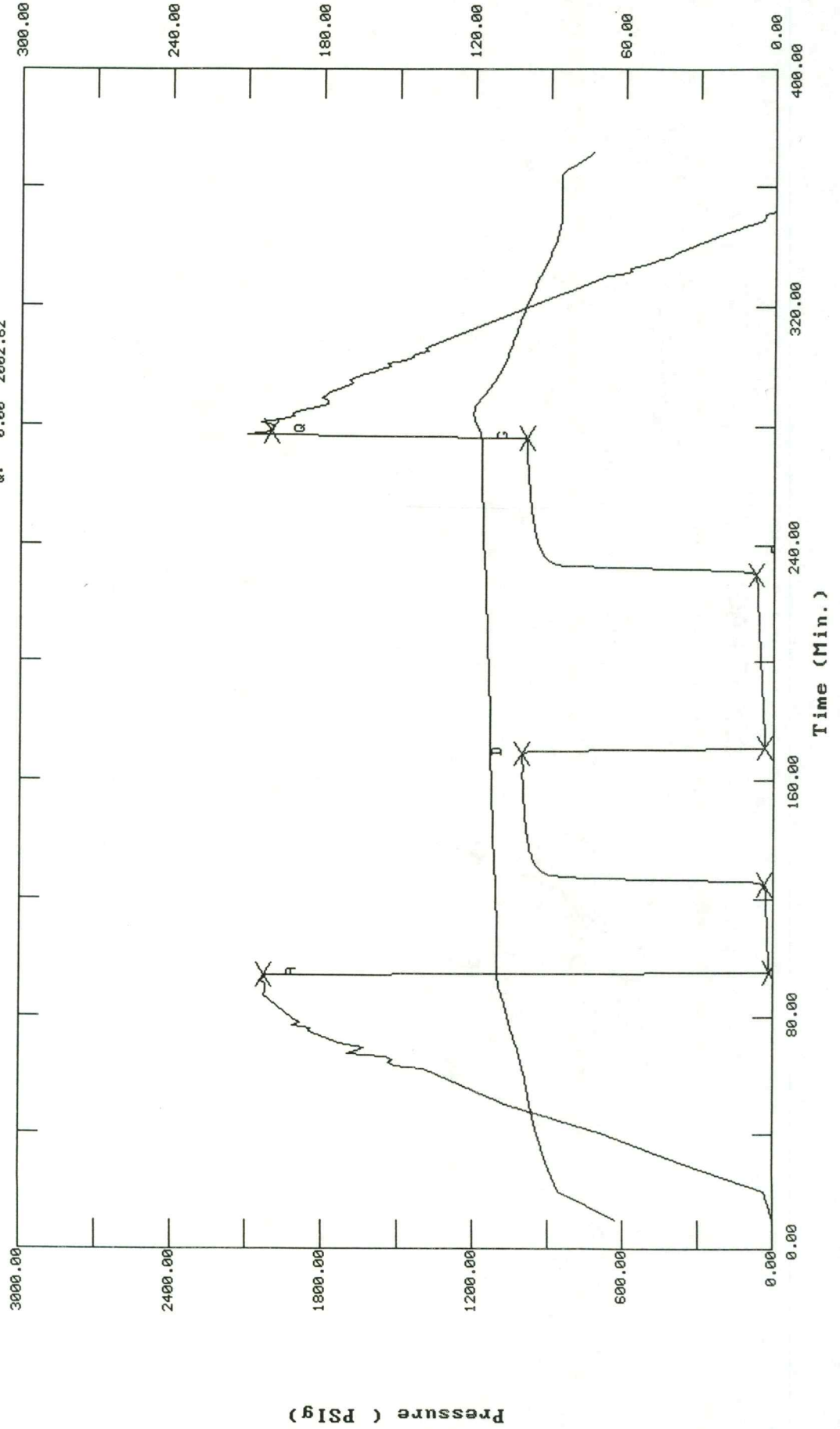
TEST HISTORY

9919 DST #1 Keenan #1 Abercrombie Drilg. Inc.

Flag Points

t (Min.) P (PSig)

A:	0.00	2026.58
B:	0.00	12.13
C:	30.00	31.59
D:	44.00	1005.27
E:	0.00	31.19
F:	59.00	68.07
G:	46.00	990.96
Q:	0.00	2002.62



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9920 DST #2 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/02/97

TIME: 21:45:36

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	66.00	800.3	0.0	97.08		
***** Start Flow 1	0.00	782.9	0.0	97.32		
***** End Flow 1	1.00	779.7	-3.1	97.38		
***** End Shut-in 1	71.00	779.7	0.0	97.38	0.0141	0.608
***** Final Hydro.	70.00	779.7	0.0	97.38		

TEST HISTORY

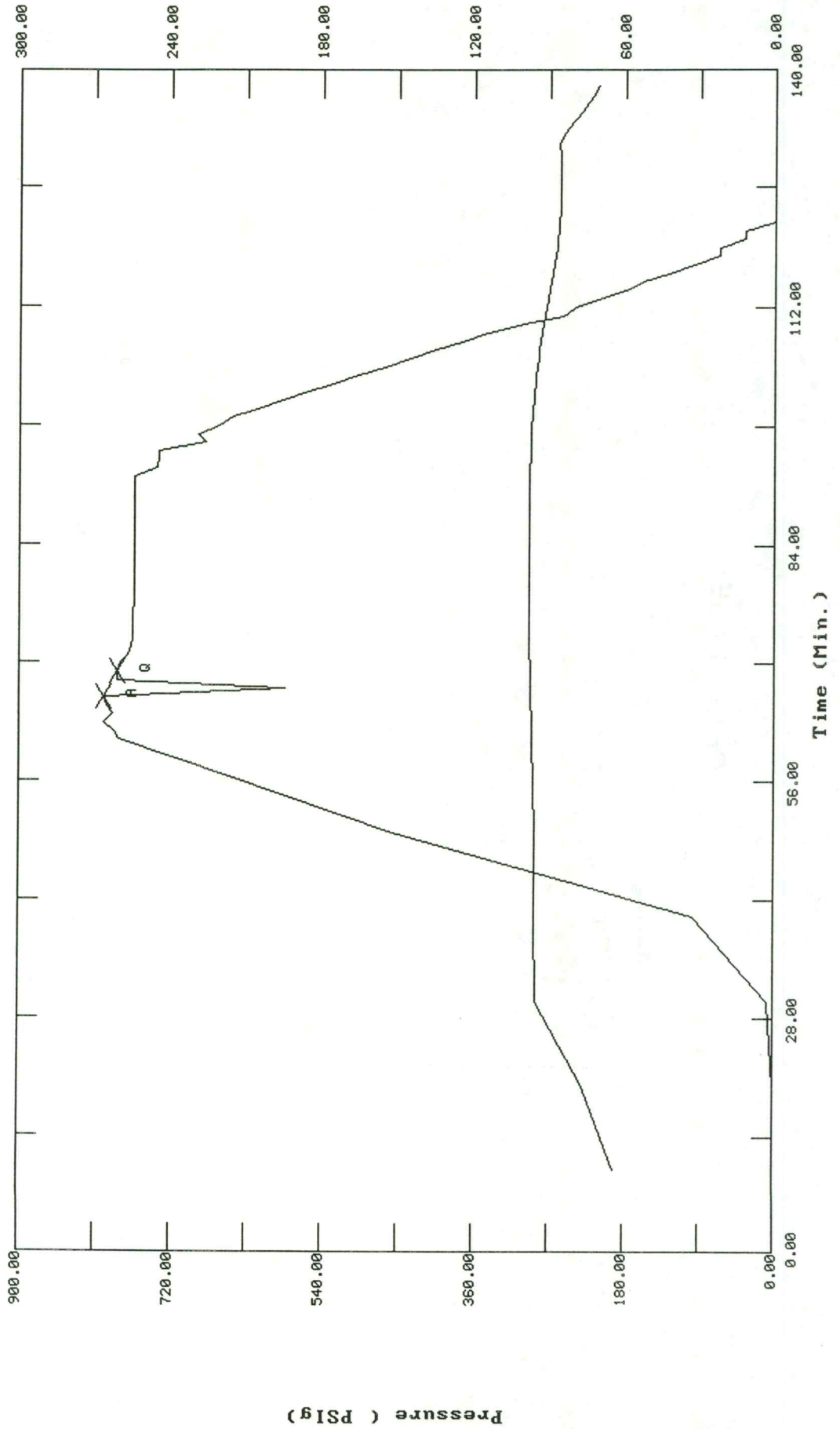
9920 DST #2 Keenan #1 Abercrombie Drlg. Inc.

Flag Points

t(Min.) P(PSig)

A: 0.00 800.30

Q: 0.00 782.87



TRILOBITE TESTING L.L.C.

OPERATOR : Abercrombie Drlg. Inc.
 WELL NAME: Keenan #1
 LOCATION : 34-18S-29W Lane KS.
 INTERVAL : 4202.00 To 4229.00 ft

DATE 4-3-97
 KB 2814.00 ft TICKET NO: 9921 DST #3
 GR 2809.00 ft FORMATION: Lans/KC "J"
 TD 4229.00 ft TEST TYPE: CONV

RECORDER DATA

mins		Field	1	2	3	4	TIME DATA-----
30	Rec.	13339	13339	2341			PF Fr. 0802 to 0832 hr
45	Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0	IS Fr. 0832 to 0917 hr
45	Clock(hrs)	12 HR	12 HR	Elec			SF Fr. 0917 to 1002 hr
45	Depth(ft)	4224.0	4224.0	4205.0	0.0	0.0	FS Fr. 1002 to 1047 hr

	Field	1	2	3	4	
Init Hydro	2093.0	2071.0	2043.0	0.0	0.0	T STARTED 0630 hr
First Flow	72.0	206.0	19.0	0.0	0.0	T ON BOTM 0800 hr
Final Flow	218.0	233.0	232.0	0.0	0.0	T OPEN 0802 hr
In Shut-in	939.0	943.0	929.0	0.0	0.0	T PULLED 1047 hr
Init Flow	301.0	326.0	242.0	0.0	0.0	T OUT 1230 hr
Final Flow	415.0	439.0	418.0	0.0	0.0	
Fl Shut-in	939.0	940.0	925.0	0.0	0.0	
Final Hydro	2073.0	2060.0	2038.0	0.0	0.0	
Inside/Outside	O	O	I			

TOOL DATA-----
 Tool Wt. 1800.00 lbs
 Wt Set On Packer 30000.00 lbs
 Wt Pulled Loose 60000.00 lbs
 Initial Str Wt 40000.00 lbs
 Unseated Str Wt 44000.00 lbs
 Bot Choke 0.75 in
 Hole Size 7.88 in
 D Col. ID 0.00 in
 D. Pipe ID 3.80 in
 D.C. Length 0.00 ft
 D.P. Length 4212.00 ft
 H.W. I.D 2.80 in
 H.W. Length 630.00 ft

RECOVERY

Net Fluid 995.00 ft of 0.00 ft in DC and 995.00 ft in DP
 95.00 ft of Muddy Water w/scum of oil @ top
 .00 ft of 20%mud 80%water
 .00 ft of
 .00 ft of
 .00 ft of
 .00 ft of
 .00 ft of
 .00 ft of RW .16 @ 80 deg =
 CALINITY 40000.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA-----
 Mud Type Chemical
 Weight 9.30 lb/c
 Vis. 49.00 S/L
 W.L. 9.60 in3
 F.C. 0.00 in
 Mud Drop N
 Amt. of fill 0.00 ft
 Btm. H. Temp. 130.00 F
 Hole Condition Good
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out Y
 Tool Chased N
 Tester Rod Steinbrink
 Co. Rep. Steve Davis
 Contr. Abercrombie
 Rig # 8
 Unit #
 Pump T.

BLOW DESCRIPTION

Initial Flow:
 Weak to fair blow off bottom in 12 min

Initial Shut In:
 Bled off blow - No return

Final Flow:
 Weak surface blow to fair off in
 bottom in 15 min

Final Shut In:
 Bled off blow - No return

SAMPLES:

SENT TO:

Test Successful: Y

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9921 DST #3 Keenan #1 Abeercrombie Drlg.Inc.

DATE: 04/03/97

TIME: 06:30:33

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	91.00	2043.7	0.0	106.69		
***** Start Flow 1	0.00	19.2	0.0	105.03		
	1.00	29.0	9.9	105.16		
	2.00	37.0	17.8	105.34		
	3.00	45.6	26.5	105.67		
	4.00	54.0	34.8	106.02		
	5.00	62.4	43.3	106.44		
	6.00	69.9	50.7	106.86		
	7.00	77.2	58.0	107.32		
	8.00	84.7	65.6	107.84		
	9.00	91.9	72.7	108.47		
	10.00	98.9	79.8	109.28		
	11.00	106.4	87.3	110.21		
	12.00	113.8	94.7	111.20		
	13.00	121.1	102.0	112.25		
	14.00	125.8	106.7	113.26		
	15.00	133.1	113.9	114.27		
	16.00	140.1	120.9	115.19		
	17.00	146.1	127.0	116.08		
	18.00	151.9	132.8	116.95		
	19.00	158.8	139.7	117.85		
	20.00	166.2	147.0	118.72		
	21.00	173.2	154.1	119.55		
	22.00	180.6	161.5	120.38		
	23.00	186.8	167.6	121.13		
	24.00	192.9	173.8	121.88		
	25.00	199.4	180.2	122.56		
	26.00	206.1	186.9	123.23		
	27.00	212.8	193.7	123.83		
	28.00	219.7	200.5	124.37		
	29.00	226.3	207.1	124.88		
***** End Flow 1	30.00	232.9	213.7	125.35		
***** Start Shutin 1	0.00	232.9	0.0	125.35	0.0000	0.054
	1.00	834.8	601.9	125.83	31.0000	0.697
	2.00	880.2	647.3	126.23	16.0000	0.775
	3.00	891.6	658.8	126.59	11.0000	0.795
	4.00	897.8	664.9	126.88	8.5000	0.806
	5.00	901.9	669.1	127.17	7.0000	0.813
	6.00	905.1	672.2	127.39	6.0000	0.819
	7.00	907.6	674.7	127.59	5.2857	0.824
	8.00	909.6	676.7	127.71	4.7500	0.827
	9.00	911.3	678.4	127.89	4.3333	0.831
	10.00	912.9	680.0	128.00	4.0000	0.833
	11.00	914.1	681.3	128.11	3.7273	0.836
	12.00	915.3	682.5	128.18	3.5000	0.838
	13.00	916.4	683.6	128.21	3.3077	0.840
	14.00	917.3	684.4	128.25	3.1429	0.841
	15.00	918.2	685.3	128.31	3.0000	0.843
	16.00	919.0	686.1	128.38	2.8750	0.845
	17.00	919.7	686.8	128.42	2.7647	0.846
	18.00	920.4	687.5	128.47	2.6667	0.847

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9921 DST #3 Keenan #1 Abeercrombie Drlg.Inc.

DATE: 04/03/97

TIME: 06:30:33

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶	
19.00	921.0	688.2	128.48	2.5789	0.848	
20.00	921.6	688.7	128.52	2.5000	0.849	
21.00	922.1	689.2	128.52	2.4286	0.850	
22.00	922.7	689.8	128.51	2.3636	0.851	
23.00	923.3	690.4	128.46	2.3043	0.852	
24.00	923.7	690.8	128.43	2.2500	0.853	
25.00	924.0	691.1	128.37	2.2000	0.854	
26.00	924.4	691.6	128.27	2.1538	0.855	
27.00	924.8	692.0	128.13	2.1111	0.855	
28.00	925.1	692.2	128.02	2.0714	0.856	
29.00	925.4	692.5	127.92	2.0345	0.856	
30.00	925.7	692.8	127.84	2.0000	0.857	
31.00	926.0	693.1	127.78	1.9677	0.857	
32.00	926.3	693.4	127.74	1.9375	0.858	
33.00	926.6	693.7	127.69	1.9091	0.859	
34.00	926.9	694.0	127.65	1.8824	0.859	
35.00	927.1	694.2	127.52	1.8571	0.859	
36.00	927.4	694.5	127.47	1.8333	0.860	
37.00	927.6	694.7	127.38	1.8108	0.860	
38.00	927.8	694.9	127.27	1.7895	0.861	
39.00	928.0	695.1	127.19	1.7692	0.861	
40.00	928.2	695.3	127.09	1.7500	0.861	
41.00	928.3	695.4	127.03	1.7317	0.862	
42.00	928.5	695.7	126.97	1.7143	0.862	
43.00	928.7	695.8	126.84	1.6977	0.862	
44.00	928.9	696.0	126.75	1.6818	0.863	
45.00	929.0	696.2	126.69	1.6667	0.863	
***** End Shut-in 1	46.00	929.2	696.3	126.57	1.6522	0.863
***** Start Flow 2	0.00	242.9	0.0	126.45		
	1.00	250.5	7.6	126.35		
	2.00	257.5	14.7	126.25		
	3.00	264.6	21.8	126.14		
	4.00	271.3	28.4	126.10		
	5.00	277.9	35.1	126.21		
	6.00	284.4	41.5	126.44		
	7.00	290.7	47.8	126.72		
	8.00	296.3	53.4	127.01		
	9.00	299.9	57.1	127.29		
	10.00	303.6	60.8	127.59		
	11.00	307.3	64.4	127.80		
	12.00	311.2	68.3	128.06		
	13.00	314.6	71.8	128.31		
	14.00	318.1	75.2	128.52		
	15.00	321.5	78.7	128.73		
	16.00	325.3	82.4	128.92		
	17.00	328.8	85.9	129.10		
	18.00	332.3	89.4	129.25		
	19.00	335.7	92.9	129.39		
	20.00	339.6	96.7	129.51		
	21.00	343.0	100.2	129.62		
	22.00	346.4	103.5	129.73		

 LUPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

21 DST #3 Keenan #1 Abercrombie Drlg.Inc.

1/03/97 TIME: 06:30:33

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	23.00	349.8	107.0	129.82		
	24.00	353.3	110.5	129.89		
	25.00	356.7	113.8	129.96		
	26.00	359.9	117.1	130.02		
	27.00	363.2	120.3	130.08		
	28.00	366.9	124.0	130.13		
	29.00	370.1	127.2	130.18		
	30.00	373.3	130.5	130.22		
	31.00	376.6	133.8	130.26		
	32.00	380.1	137.3	130.29		
	33.00	383.2	140.4	130.32		
	34.00	386.3	143.5	130.35		
	35.00	389.3	146.4	130.37		
	36.00	392.8	149.9	130.39		
	37.00	396.0	153.1	130.43		
	38.00	399.1	156.2	130.45		
	39.00	402.1	159.3	130.49		
	40.00	405.3	162.4	130.48		
	41.00	408.5	165.7	130.50		
	42.00	411.5	168.6	130.52		
	43.00	414.6	171.7	130.55		
d Flow 2	44.00	418.3	175.4	130.54		
art Shutin 2	0.00	418.3	0.0	130.54	0.0000	0.175
	1.00	878.9	460.6	130.59	75.0000	0.772
	2.00	890.0	471.7	130.62	38.0000	0.792
	3.00	895.4	477.2	130.63	25.6667	0.802
	4.00	899.1	480.9	130.65	19.5000	0.808
	5.00	901.9	483.6	130.64	15.8000	0.813
	6.00	904.1	485.8	130.64	13.3333	0.817
	7.00	905.8	487.6	130.64	11.5714	0.821
	8.00	907.5	489.2	130.63	10.2500	0.823
	9.00	908.8	490.5	130.62	9.2222	0.826
	10.00	910.0	491.7	130.62	8.4000	0.828
	11.00	911.1	492.8	130.59	7.7273	0.830
	12.00	912.0	493.7	130.58	7.1667	0.832
	13.00	912.9	494.7	130.56	6.6923	0.833
	14.00	913.7	495.4	130.54	6.2857	0.835
	15.00	914.5	496.2	130.51	5.9333	0.836
	16.00	915.2	496.9	130.48	5.6250	0.838
	17.00	915.9	497.6	130.47	5.3529	0.839
	18.00	916.5	498.3	130.43	5.1111	0.840
	19.00	917.1	498.8	130.38	4.8947	0.841
	20.00	917.6	499.3	130.36	4.7000	0.842
	21.00	918.1	499.8	130.33	4.5238	0.843
	22.00	918.6	500.3	130.31	4.3636	0.844
	23.00	918.9	500.7	130.28	4.2174	0.844
	24.00	919.4	501.2	130.26	4.0833	0.845
	25.00	919.8	501.5	130.25	3.9600	0.846
	26.00	920.2	501.9	130.16	3.8462	0.847
	27.00	920.6	502.3	130.12	3.7407	0.847
	28.00	921.0	502.7	130.07	3.6429	0.848

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9921 DST #3 Keenan #1 Abeercrombie Drlg.Inc.

DATE: 04/03/97

TIME: 06:30:33

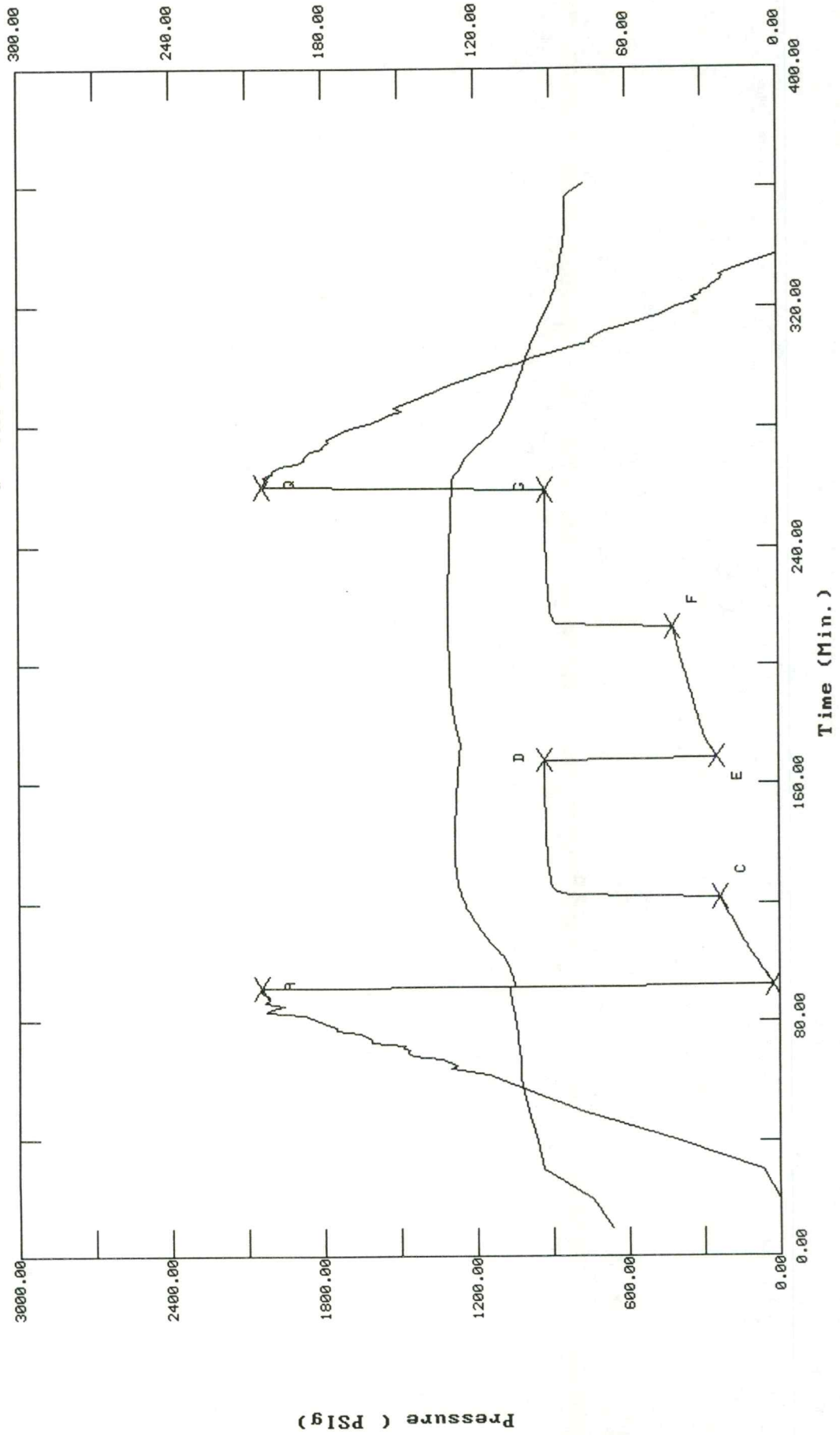
	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	29.00	921.2	502.9	130.01	3.5517	0.849
	30.00	921.6	503.3	129.94	3.4667	0.849
	31.00	921.9	503.7	129.87	3.3871	0.850
	32.00	922.3	504.0	129.79	3.3125	0.851
	33.00	922.5	504.2	129.73	3.2424	0.851
	34.00	922.7	504.5	129.69	3.1765	0.851
	35.00	923.0	504.7	129.63	3.1143	0.852
	36.00	923.2	504.9	129.59	3.0556	0.852
	37.00	923.5	505.2	129.54	3.0000	0.853
	38.00	923.7	505.4	129.49	2.9474	0.853
	39.00	923.9	505.6	129.45	2.8974	0.854
	40.00	924.1	505.8	129.38	2.8500	0.854
	41.00	924.3	506.0	129.34	2.8049	0.854
	42.00	924.5	506.2	129.29	2.7619	0.855
	43.00	924.7	506.4	129.25	2.7209	0.855
	44.00	924.9	506.6	129.21	2.6818	0.855
	45.00	925.1	506.9	129.18	2.6444	0.856
***** End Shut-in 2	46.00	925.3	507.0	129.14	2.6087	0.856
***** Final Hydro.	260.00	2038.8	0.0	129.19		

TEST HISTORY

9921 DST #3 Keenan #1 Abbeercrombie Drlg. Inc.

Flag Points

t (Min.)	P (PSig)
A: 0.00	2043.69
B: 0.00	19.15
C: 30.00	232.87
D: 46.00	929.20
E: 0.00	242.86
F: 44.00	418.28
G: 46.00	925.27
Q: 0.00	2038.79



TRILOBITE TESTING L.L.C.

OPERATOR : Abercrombie Drlg. Inc. DATE 4-4-97
 WELL NAME: Keenan #1 KB 2814.00 ft TICKET NO: 9922 DST #4
 LOCATION : 34-18S-29W Lane KS. GR 2809.00 ft FORMATION: Lans/KC "L"
 INTERVAL : 4285.00 To 4294.00 ft TD 4294.00 ft TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339	13339	2341			PF Fr. 0344 to 0414 hr
SI 45 Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0	IS Fr. 0414 to 0459 hr
SF 60 Clock(hrs)	12 HR	12 HR	Elec			SF Fr. 0459 to 0559 hr
FS 45 Depth(ft)	4289.0	4289.0	4272.0	0.0	0.0	FS Fr. 0559 to 0644 hr

	Field	1	2	3	4	
A. Init Hydro	2103.0	2124.0	2121.0	0.0	0.0	T STARTED 0140 hr
B. First Flow	10.0	16.0	7.0	0.0	0.0	T ON BOTM 0342 hr
B1. Final Flow	31.0	38.0	45.0	0.0	0.0	T OPEN 0344 hr
C. In Shut-in	969.0	996.0	1000.0	0.0	0.0	T PULLED 0644 hr
D. Init Flow	62.0	116.0	49.0	0.0	0.0	T OUT 0900 hr
E. Final Flow	93.0	127.0	113.0	0.0	0.0	
F. Fl Shut-in	959.0	990.0	995.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2043.0	2107.0	2062.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 50000.00 lbs
						Initial Str Wt 40000.00 lbs
						Unseated Str Wt 40000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 3644.00 ft
						H.W. I.D 2.80 in
						H.W. Length 630.00 ft

RECOVERY

Tot Fluid 270.00 ft of 0.00 ft in DC and 270.00 ft in DP
 150.00 ft of Gas In Pipe
 210.00 ft of Slightly Gassy Oil
 0.00 ft of 10%gas 80%oil
 60.00 ft of Slightly Gassy Oily Water Cut Mud
 0.00 ft of 10%gas 10%water 40%oil 40%mud
 0.00 ft of
 0.00 ft of
 0.00 ft of
 SALINITY 0.00 P.P.M. A.P.I. Gravity 34.40

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	48.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop N	

BLOW DESCRIPTION

Initial Flow:
 Weak to fair blow built to 3"

Initial Shut In:
 Bled off blow - No return

Final Flow:
 Weak to Fair blow built to 8"

Final Shut In:
 Bled off blow - No return

SAMPLES:
 SENT TO:

Amt. of fill	0.00 ft
Btm. H. Temp.	128.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Rod Steinbrink
Co. Rep.	Steve Davis
Contr.	Abercrombie
Rig #	8
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Keenan #1

LOCATION : 34-18S-29W Lane KS.

TICKET No. 9922 D.S.T. No. 4 DATE 4-4-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 25

INTERVAL TOOL 9

BOTTOM PACKERS AND ANCHOR

TOTAL TOOL 34

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 34

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands63 Single Total 4274

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4308

TOTAL DEPTH 4294

TOTAL DRILL PIPE ABOVE K.B. 14

REMARKS:

P.O. SUB 1' Above 120' WP	4140
C.O. SUB 1'	4260
S.I. TOOL 5'	4266
HMV 5'	4271
5' A/P Carrier w/ Alp. Rec. @ 4272	4276
JARS N/A	
SAFETY JOINT N/A	
PACKER 4'	4280
PACKER 5'	4285
DEPTH STUBB 1'	4286
ANCHOR	
3' AK-1 Rec. @ 4289	4289
T.C. DEPTH	
BULLNOSE 5'	4289
T.D.	4294

Operator.....: Abercrombie Drilling Inc
Well Name.....: Keenan #1
DST Number.....: 4

Location.: 34-18S-29W Lane Cty KS Recorder No...: 2341
Test Type: conventional Recorder Depth: 4273
Formation: Lansing KC L Test Interval.: 4285-4294

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

RESERVOIR PARAMETERS USED:

Net Pay.....: 4.00 ft
Porosity.....: 6.00 %
Bottom Hole Temp.....: 128.00 F
Specific Gravity.....: 0.031
API Gravity.....: 34.40
Compressibility.....: 0.000006 /psi
Viscosity.....: 5.8020 cp
Total Recovery.....: 270.00 ft
Total Flowing Time.....: 90.00 min.
Flow Rate.....: 43.68 bbls/d
Final Flowing Pressure.....: 113.00 psi
Horner Slope.....: 8.3804 psi/cycle
Extrapolated Pressure.....: 999.62 psi
Formation Volume Factor.....: 1.03 Reservoir/Surface
Well Bore Radius.....: 3.94 in

RESULTS:

Effective Permeability.....: 1268.742925 md
Flow Capacity.....: 5074.9717 md.ft
Transmissibility.....: 874.6935 md.ft/cp
Skin Factor.....: 114.5073
Radius of Investigation.....: 868.16253 ft
Damage Ratio.....: 16.7613
Productivity Index.....: 0.0493 bbls/psi.d
Productivity Index W/O Damage.: 0.8258 bbls/psi.d

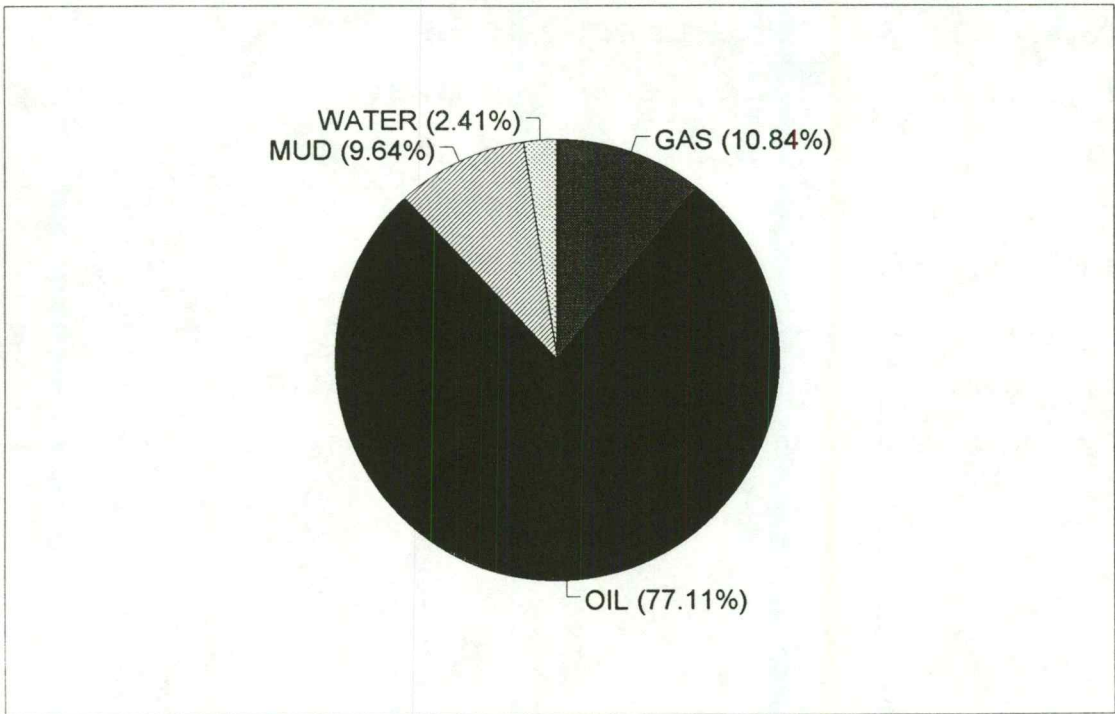
CALCULATED RECOVERY ANALYSIS - DRILL PIPE

DST 4

TICKET 9922

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
1			0		0		0		0
2	210	10	21	80	168		0		0
3	60	10	6	40	24	10	6	40	24
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
TOTAL	270		27		192		6		24

BBL OIL= 2.73024 * HRS OPEN 1.5 = BBL/DAY 43.68384
 BBL WATER= 0.08532 * = 1.36512
 BBL MUD= 0.34128
 BBL GAS = 0.38394



 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9922 DST #4 Keenan #1 Abercrombie Drlg Inc.

DATE: 04/04/97

TIME: 01:40:28

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	123.00	2121.3	0.0	110.18		
***** Start Flow 1	0.00	7.5	0.0	110.75		
	1.00	10	2.5	111.08		
	2.00	11.5	4.0	111.46		
	3.00	13.4	5.9	111.81		
	4.00	15.0	7.6	112.12		
	5.00	16.3	8.8	112.46		
	6.00	17.1	9.6	112.94		
	7.00	15.7	8.2	113.51		
	8.00	16.6	9.2	114.17		
	9.00	17.5	10.0	114.82		
	10.00	19.1	11.6	115.43		
	11.00	20.3	12.8	115.97		
	12.00	21.6	14.2	116.48		
	13.00	22.9	15.4	116.92		
	14.00	23.8	16.4	117.38		
	15.00	25.2	17.7	117.82		
	16.00	26.4	18.9	118.25		
	17.00	27.5	20.0	118.67		
	18.00	28.6	21.1	119.07		
	19.00	29.9	22.4	119.43		
	20.00	30.9	23.5	119.76		
	21.00	32.1	24.6	120.06		
	22.00	33.3	25.9	120.40		
	23.00	34.5	27.1	120.66		
	24.00	35.7	28.2	120.93		
	25.00	36.9	29.4	121.12		
	26.00	38.2	30.7	121.27		
	27.00	39.2	31.7	121.39		
	28.00	40.4	32.9	121.47		
	29.00	41.6	34.1	121.54		
	30.00	42.7	35.2	121.60		
	31.00	43.7	36.2	121.66		
***** End Flow 1	32.00	44.9	37.4	121.74		
***** Start Shutin 1	0.00	44.9	0.0	121.74	0.0000	0.002
	1.00	71.9	27.0	121.84	33.0000	0.005
	2.00	169.0	124.1	121.91	17.0000	0.029
	3.00	661.4	616.4	122.00	11.6667	0.437
	4.00	941.7	896.8	122.05	9.0000	0.887
	5.00	966.7	921.8	122.08	7.4000	0.935
	6.00	975.6	930.7	122.08	6.3333	0.952
	7.00	980.8	935.8	122.06	5.5714	0.962
	8.00	984.4	939.5	122.08	5.0000	0.969
	9.00	987.1	942.2	122.02	4.5556	0.974
	10.00	989.2	944.3	121.97	4.2000	0.979
	11.00	990.9	946.0	121.87	3.9091	0.982
	12.00	992.4	947.5	121.81	3.6667	0.985
	13.00	993.5	948.6	121.73	3.4615	0.987
	14.00	994.6	949.7	121.64	3.2857	0.989
	15.00	995.3	950.3	121.56	3.1333	0.991
	16.00	995.9	951.0	121.45	3.0000	0.992

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9922 DST #4 Keenan #1 Abercrombie Drlg Inc.

DATE: 04/04/97

TIME: 01:40:28

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
17.00	996.5	951.6	121.37	2.8824	0.993
18.00	997.0	952.1	121.29	2.7778	0.994
19.00	997.5	952.5	121.21	2.6842	0.995
20.00	997.9	952.9	121.12	2.6000	0.996
21.00	998.1	953.2	121.04	2.5238	0.996
22.00	998.4	953.4	120.96	2.4545	0.997
23.00	998.6	953.7	120.88	2.3913	0.997
24.00	998.9	953.9	120.79	2.3333	0.998
25.00	999.0	954.1	120.71	2.2800	0.998
26.00	999.2	954.3	120.64	2.2308	0.998
27.00	999.4	954.4	120.56	2.1852	0.999
28.00	999.4	954.5	120.49	2.1429	0.999
29.00	999.5	954.6	120.43	2.1034	0.999
30.00	999.6	954.7	120.41	2.0667	0.999
31.00	999.7	954.7	120.37	2.0323	0.999
32.00	999.9	954.9	120.31	2.0000	1.000
33.00	999.9	955.0	120.25	1.9697	1.000
34.00	1000.0	955.1	120.20	1.9412	1.000
35.00	1000.1	955.2	120.16	1.9143	1.000
36.00	1000.1	955.2	120.12	1.8889	1.000
37.00	1000.1	955.2	120.09	1.8649	1.000
38.00	1000.3	955.3	120.05	1.8421	1.001
39.00	1000.3	955.4	120.00	1.8205	1.001
40.00	1000.3	955.4	119.97	1.8000	1.001
41.00	1000.4	955.5	119.94	1.7805	1.001
42.00	1000.4	955.5	119.90	1.7619	1.001
***** End Shut-in 1					
***** Start Flow 2					
0.00	48.5	0.0	119.85		
1.00	49.3	0.7	120.04		
2.00	50.5	1.9	120.35		
3.00	51.6	3.1	120.63		
4.00	52.5	4.0	120.97		
5.00	53.7	5.2	121.34		
6.00	54.9	6.4	121.69		
7.00	55.7	7.2	122.06		
8.00	56.9	8.3	122.41		
9.00	58.1	9.6	122.78		
10.00	59.0	10.4	123.13		
11.00	59.9	11.4	123.43		
12.00	61.0	12.5	123.74		
13.00	62.3	13.7	124.03		
14.00	63.5	15.0	124.29		
15.00	64.4	15.8	124.53		
16.00	65.5	16.9	124.76		
17.00	66.7	18.2	124.97		
18.00	67.7	19.2	125.15		
19.00	68.7	20.2	125.32		
20.00	69.9	21.3	125.44		
21.00	71.0	22.4	125.55		
22.00	72.2	23.7	125.63		
23.00	73.5	24.9	125.67		
24.00	74.8	26.2	125.65		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9922 DST #4 Keenan #1 Abercrombie Drlg Inc.

DATE: 04/04/97

TIME: 01:40:28

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	75.9	27.4	125.63		
	26.00	77.0	28.5	125.57		
	27.00	77.9	29.4	125.53		
	28.00	78.9	30.4	125.51		
	29.00	80.5	31.9	125.49		
	30.00	81.7	33.1	125.51		
	31.00	82.7	34.2	125.54		
	32.00	83.9	35.3	125.59		
	33.00	84.8	36.3	125.63		
	34.00	85.8	37.2	125.69		
	35.00	87.0	38.4	125.74		
	36.00	88.1	39.6	125.81		
	37.00	89.0	40.5	125.88		
	38.00	90.0	41.5	125.96		
	39.00	90.8	42.3	126.04		
	40.00	91.8	43.3	126.12		
	41.00	92.8	44.3	126.21		
	42.00	93.7	45.2	126.30		
	43.00	94.8	46.3	126.38		
	44.00	95.9	47.4	126.47		
	45.00	97.0	48.5	126.58		
	46.00	97.9	49.3	126.67		
	47.00	98.9	50.3	126.76		
	48.00	99.7	51.1	126.85		
	49.00	100.9	52.3	126.95		
	50.00	102.0	53.4	127.04		
	51.00	103.1	54.6	127.14		
	52.00	104.0	55.5	127.22		
	53.00	105.1	56.6	127.30		
	54.00	106.0	57.4	127.38		
	55.00	107.0	58.4	127.47		
	56.00	108.1	59.6	127.55		
	57.00	108.9	60.3	127.62		
	58.00	109.8	61.3	127.69		
	59.00	110.4	61.8	127.72		
	60.00	111.3	62.7	127.79		
	61.00	112.3	63.7	127.87		
***** End Flow 2	62.00	112.8	64.3	127.94		
***** Start Shutin 2	0.00	112.8	0.0	127.94	0.0000	0.013
	1.00	182.4	69.5	128.03	95.0000	0.033
	2.00	387.2	274.3	128.04	48.0000	0.150
	3.00	794.5	681.7	128.12	32.3333	0.631
	4.00	938.8	825.9	128.13	24.5000	0.881
	5.00	964.1	851.2	128.12	19.8000	0.929
	6.00	972.8	860.0	128.09	16.6667	0.946
	7.00	977.6	864.8	128.05	14.4286	0.956
	8.00	980.9	868.1	128.00	12.7500	0.962
	9.00	983.2	870.4	127.95	11.4444	0.967
	10.00	985.1	872.2	127.90	10.4000	0.970
	11.00	986.6	873.8	127.84	9.5455	0.973
	12.00	987.9	875.1	127.78	8.8333	0.976

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9922 DST #4 Keenan #1 Abercrombie Drlg Inc.

DATE: 04/04/97

TIME: 01:40:28

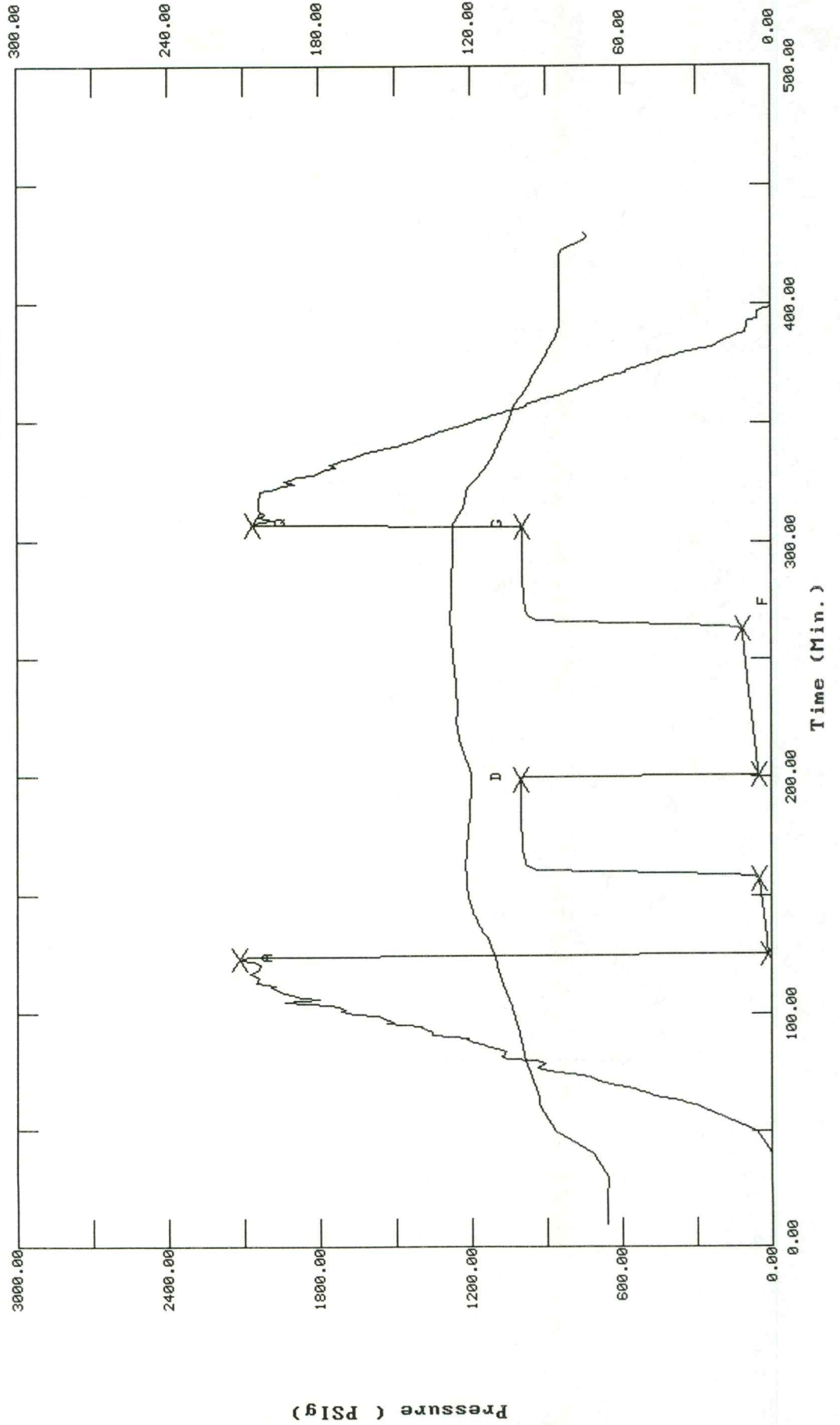
	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	13.00	989.0	876.1	127.74	8.2308	0.978
	14.00	989.8	877.0	127.70	7.7143	0.980
	15.00	990.5	877.7	127.70	7.2667	0.981
	16.00	991.1	878.3	127.69	6.8750	0.982
	17.00	991.6	878.8	127.67	6.5294	0.983
	18.00	992.1	879.2	127.64	6.2222	0.984
	19.00	992.4	879.6	127.61	5.9474	0.985
	20.00	992.8	879.9	127.59	5.7000	0.986
	21.00	993.0	880.1	127.56	5.4762	0.986
	22.00	993.3	880.4	127.53	5.2727	0.987
	23.00	993.5	880.7	127.49	5.0870	0.987
	24.00	993.7	880.9	127.46	4.9167	0.987
	25.00	993.8	881.0	127.44	4.7600	0.988
	26.00	994.0	881.1	127.42	4.6154	0.988
	27.00	994.1	881.3	127.39	4.4815	0.988
	28.00	994.3	881.5	127.36	4.3571	0.989
	29.00	994.5	881.6	127.33	4.2414	0.989
	30.00	994.5	881.6	127.30	4.1333	0.989
	31.00	994.6	881.8	127.27	4.0323	0.989
	32.00	994.7	881.9	127.24	3.9375	0.989
	33.00	994.8	882.0	127.21	3.8485	0.990
	34.00	994.8	882.0	127.20	3.7647	0.990
	35.00	994.9	882.0	127.17	3.6857	0.990
	36.00	994.9	882.1	127.15	3.6111	0.990
	37.00	995.1	882.2	127.13	3.5405	0.990
	38.00	995.1	882.3	127.10	3.4737	0.990
	39.00	995.2	882.3	127.08	3.4103	0.990
	40.00	995.2	882.3	127.06	3.3500	0.990
	41.00	995.3	882.4	127.02	3.2927	0.991
	42.00	995.3	882.4	126.99	3.2381	0.991
***** End Shut-in 2	43.00	995.3	882.5	126.97	3.1860	0.991
***** Final Hydro.	307.00	2062.0	0.0	126.93		

TEST HISTORY

9922 DST #4 Keenan #1 Abercrombie Drlg Inc.

Flag Points

t (Min.)	P (PSig)
A: 0.00	2121.29
B: 0.00	7.48
C: 32.00	44.92
D: 42.00	1000.40
E: 0.00	48.54
F: 62.00	112.85
G: 43.00	995.30
Q: 0.00	2062.03

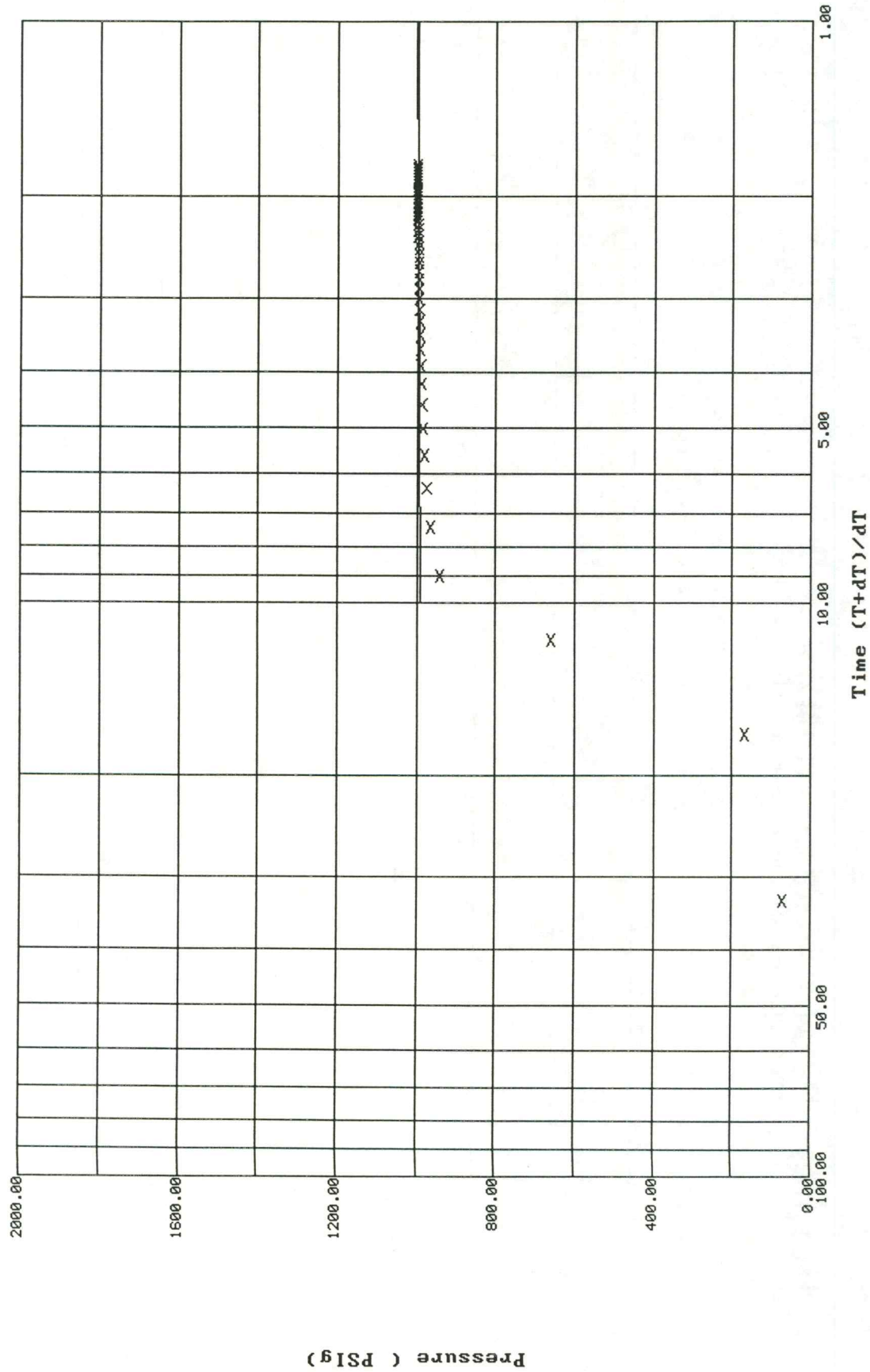


Horner Plot: shut-in #1

9922 DST #4 Keenan #1 Abercrombie Drlg Inc.

Slope: 13.0349 PSig/cycle

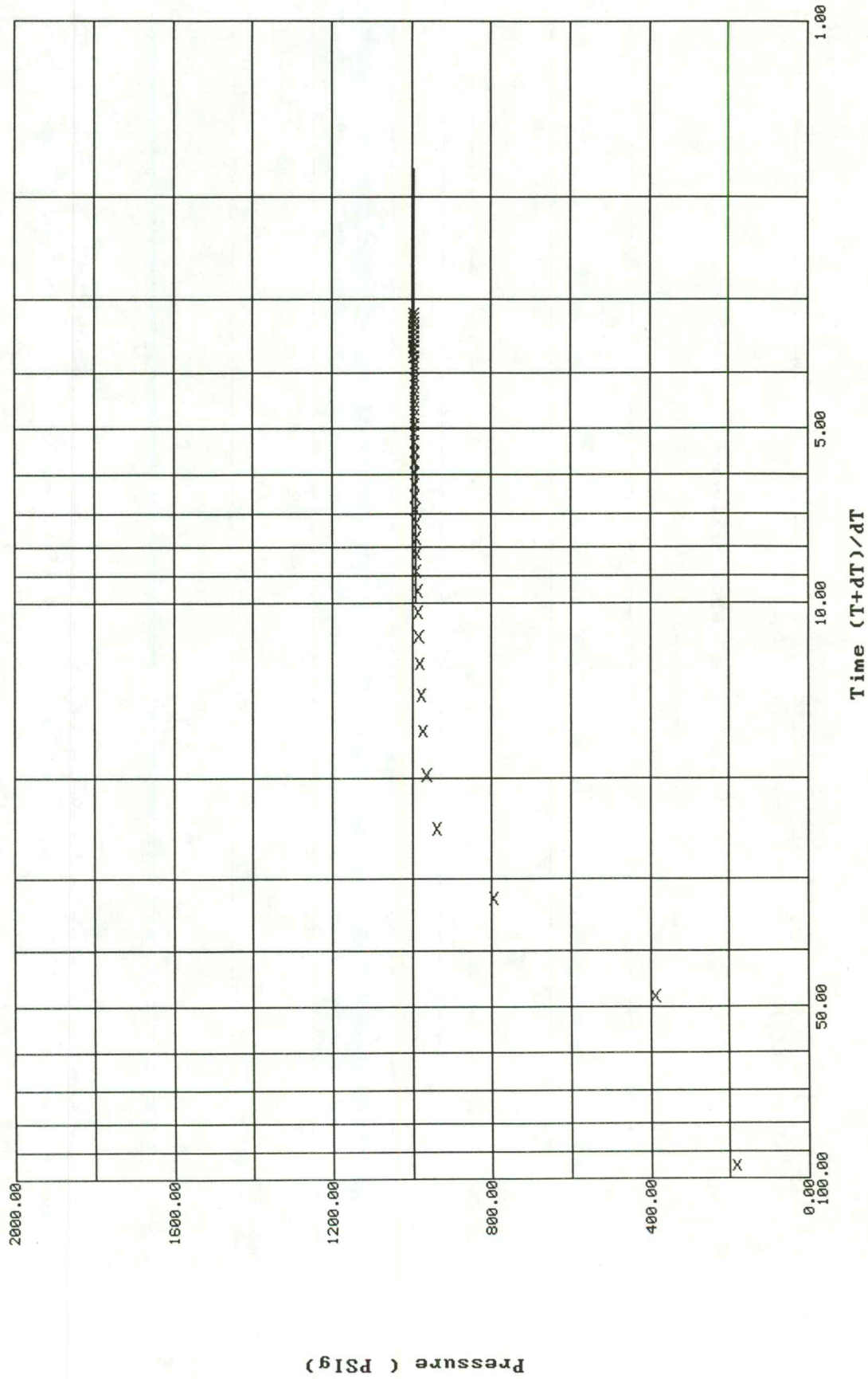
Ext. Pressure: 1003.7042 PSig



Horner Plot: shut-in #2

9922 DST #4 Keenan #1 Abercrombie Drlg Inc.

Slope: 8.3804 PSig/cycle
Ext. Pressure: 999.6216 PSig



TRILOBITE TESTING L.L.C.

OPERATOR : Abercrombie Drlg. Inc. DATE 4-4-97
 WELL NAME: Keenan #1 KB 2814.00 ft TICKET NO: 9923 DST #5
 LOCATION : 34-18S-29W Lane KS. GR 2809.00 ft FORMATION: Pleasaton
 INTERVAL : 4324.00 To 4346.00 ft TD 4346.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	13339	13339	2341			PF Fr. 2115 to 2145 hr
SI 30	Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0	IS Fr. 2145 to 2215 hr
SF 30	Clock(hrs)	12 HR	12 HR	Elec			SF Fr. 2215 to 2245 hr
FS 30	Depth(ft)	4341.0	4341.0	4326.0	0.0	0.0	FS Fr. 2245 to 2315 hr

	Field	1	2	3	4	
A. Init Hydro	2163.0	2158.0	2110.0	0.0	0.0	T STARTED 1930 hr
B. First Flow	10.0	59.0	10.0	0.0	0.0	T ON BOTM 2113 hr
B1. Final Flow	10.0	48.0	12.0	0.0	0.0	T OPEN 2115 hr
C. In Shut-in	10.0	48.0	12.0	0.0	0.0	T PULLED 2315 hr
D. Init Flow	10.0	48.0	9.0	0.0	0.0	T OUT 0115 hr
E. Final Flow	10.0	48.0	10.0	0.0	0.0	
F. Fl Shut-in	10.0	48.0	12.0	0.0	0.0	
G. Final Hydro	2153.0	2150.0	2073.0	0.0	0.0	

	Field	1	2	3	4	TOOL DATA-----
Inside/Outside	0	0	I			Tool Wt. 1800.00 lbs
						Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 45000.00 lbs
						Initial Str Wt 40000.00 lbs
						Unseated Str Wt 40000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 3674.00 ft
						H.W. I.D 2.80 in
						H.W. Length 630.00 ft

RECOVERY

Tot Fluid 1.00 ft of 0.00 ft in DC and 1.00 ft in DP
 1.00 ft of Drilling Mud
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
 Weak surface blow died in 10 mins.

Initial Shut In:

Final Flow:
 No return blow

Final Shut In:

SAMPLES:
 SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 9.30 lb/c
 Vis. 47.00 S/L
 W.L. 9.60 in3
 F.C. 0.00 in
 Mud Drop N
 Amt. of fill 0.00 ft
 Btm. H. Temp. 116.00 F
 Hole Condition Good
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out N
 Tool Chased N
 Tester Rod Steinbrink
 Co. Rep. Steve Davis
 Contr. Abercrombie
 Rig # 8
 Unit #
 Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Keenan #1
 LOCATION : 34-18S-29W Lane KS.
 TICKET No. 9923 D.S.T. No. 5 DATE 4-4-97
 TOTAL TOOL TO BOTTOM OF TOP PACKERS 25
 INTERVAL TOOL 22
 BOTTOM PACKERS AND ANCHOR
 TOTAL TOOL 47
 DRILL COLLAR ANCHOR IN INTERVAL
 D.C. ANCHOR STND.Stands Single Total
 D.P. ANCHOR STND.Stands Single Total
 TOTAL ASSEMBLY 47
 D.C. ABOVE TOOLS.Stands Single Total
 D.P. ABOVE TOOLS.Stands69 Single 1 Total 4304
 TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4351
 TOTAL DEPTH 4346
 TOTAL DRILL PIPE ABOVE K.B. 5
 REMARKS:

P.O. SUB 1' Above 120' WP	4178
C.O. SUB 1'	4298
S.I. TOOL 5'	4304
HMV 5'	4309
5' A/P Carrier	4314
JARS N/A	
SAFETY JOINT N/A	
PACKER 4'	4319
PACKER 5'	4324
DEPTH STUBB 1'	4325
ANCHOR	
Alp. Rec. @	4326
16' Perf	4341
T.C. DEPTH	
AK-1 Rec. @	4341
BULLNOSE 5'	
T.D.	4346

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9923 DST #5 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/04/97

TIME: 19:31:03

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	105.00	2110.9	0.0	110.28		
***** Start Flow 1	0.00	10.7	0.0	110.45		
	1.00	11.0	0.3	110.75		
	2.00	11.1	0.4	110.98		
	3.00	11.3	0.6	111.15		
	4.00	11.4	0.7	111.27		
	5.00	11.6	0.9	111.36		
	6.00	11.7	1	111.42		
	7.00	11.8	1.1	111.53		
	8.00	11.9	1.2	111.56		
	9.00	12.0	1.2	111.60		
	10.00	12.1	1.4	111.64		
	11.00	12.0	1.3	111.67		
	12.00	12.1	1.4	111.70		
	13.00	12.2	1.5	111.73		
	14.00	12.2	1.5	111.75		
	15.00	12.2	1.4	111.78		
	16.00	12.2	1.5	111.81		
	17.00	12.2	1.5	111.85		
	18.00	12.2	1.5	111.88		
	19.00	12.3	1.6	111.91		
	20.00	12.2	1.5	111.94		
	21.00	12.2	1.5	111.98		
	22.00	12.2	1.5	112.03		
	23.00	12.3	1.5	112.07		
	24.00	12.3	1.6	112.11		
	25.00	12.4	1.6	112.16		
	26.00	12.4	1.6	112.20		
	27.00	12.4	1.7	112.24		
	28.00	12.4	1.6	112.29		
	29.00	12.3	1.6	112.34		
***** End Flow 1	30.00	12.3	1.6	112.39		
***** Start Shutin 1	0.00	12.3	0.0	112.39	0.0000	0.000
	1.00	11.3	-1	112.44	31.0000	0.000
	2.00	11.6	-0.7	112.49	16.0000	0.000
	3.00	11.7	-0.6	112.54	11.0000	0.000
	4.00	11.9	-0.4	112.59	8.5000	0.000
	5.00	12.0	-0.3	112.64	7.0000	0.000
	6.00	12.1	-0.2	112.70	6.0000	0.000
	7.00	12.3	-0.0	112.76	5.2857	0.000
	8.00	12.4	0.1	112.81	4.7500	0.000
	9.00	12.6	0.2	112.87	4.3333	0.000
	10.00	12.8	0.4	112.94	4.0000	0.000
	11.00	12.8	0.5	112.98	3.7273	0.000
	12.00	10.5	-1.8	113.05	3.5000	0.000
	13.00	10.7	-1.7	113.10	3.3077	0.000
	14.00	10.8	-1.6	113.12	3.1429	0.000
	15.00	11.0	-1.3	113.16	3.0000	0.000
	16.00	11.1	-1.3	113.22	2.8750	0.000
	17.00	11.1	-1.2	113.29	2.7647	0.000
	18.00	11.3	-1.0	113.37	2.6667	0.000

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9923 DST #5 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/04/97

TIME: 19:31:03

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	19.00	11.5	-0.9	113.40	2.5789	0.000
	20.00	11.5	-0.8	113.46	2.5000	0.000
	21.00	11.7	-0.6	113.52	2.4286	0.000
	22.00	11.8	-0.5	113.59	2.3636	0.000
	23.00	12.0	-0.3	113.65	2.3043	0.000
	24.00	12.1	-0.2	113.71	2.2500	0.000
	25.00	12.3	-0.1	113.76	2.2000	0.000
	26.00	12.4	0.0	113.81	2.1538	0.000
	27.00	12.6	0.2	113.87	2.1111	0.000
	28.00	12.7	0.4	113.93	2.0714	0.000
	29.00	12.8	0.5	113.98	2.0345	0.000
***** End Shut-in 1	30.00	12.9	0.6	114.04	2.0000	0.000
***** Start Flow 2	0.00	9.7	0.0	114.09		
	1.00	9.8	0.1	114.16		
	2.00	10	0.3	114.22		
	3.00	9.8	0.1	114.26		
	4.00	9.5	-0.1	114.33		
	5.00	9.7	-0.0	114.38		
	6.00	9.7	0.1	114.43		
	7.00	9.8	0.2	114.49		
	8.00	9.8	0.1	114.53		
	9.00	9.8	0.1	114.58		
	10.00	9.8	0.1	114.62		
	11.00	9.7	0.0	114.71		
	12.00	9.7	0.0	114.75		
	13.00	9.7	0.1	114.81		
	14.00	9.7	0.0	114.86		
	15.00	9.7	0.0	114.92		
	16.00	9.7	0.0	114.97		
	17.00	9.8	0.1	115.00		
	18.00	9.8	0.1	115.08		
	19.00	9.8	0.1	115.12		
	20.00	9.8	0.1	115.17		
	21.00	9.9	0.2	115.20		
	22.00	9.9	0.2	115.28		
	23.00	9.9	0.3	115.35		
	24.00	9.9	0.3	115.39		
	25.00	9.9	0.2	115.46		
	26.00	9.9	0.2	115.51		
	27.00	9.9	0.2	115.57		
	28.00	10	0.3	115.60		
	29.00	10.1	0.4	115.66		
***** End Flow 2	30.00	10.1	0.4	115.72		
***** Start Shutin 2	0.00	10.1	0.0	115.72	0.0000	0.000
	1.00	9.3	-0.8	115.77	61.0000	0.000
	2.00	9.4	-0.7	115.84	31.0000	0.000
	3.00	9.6	-0.5	115.87	21.0000	0.000
	4.00	9.8	-0.3	115.90	16.0000	0.000
	5.00	9.8	-0.3	115.95	13.0000	0.000
	6.00	10.0	-0.1	115.99	11.0000	0.000
	7.00	10.1	-0.0	116.07	9.5714	0.000

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9923 DST #5 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/04/97

TIME: 19:31:03

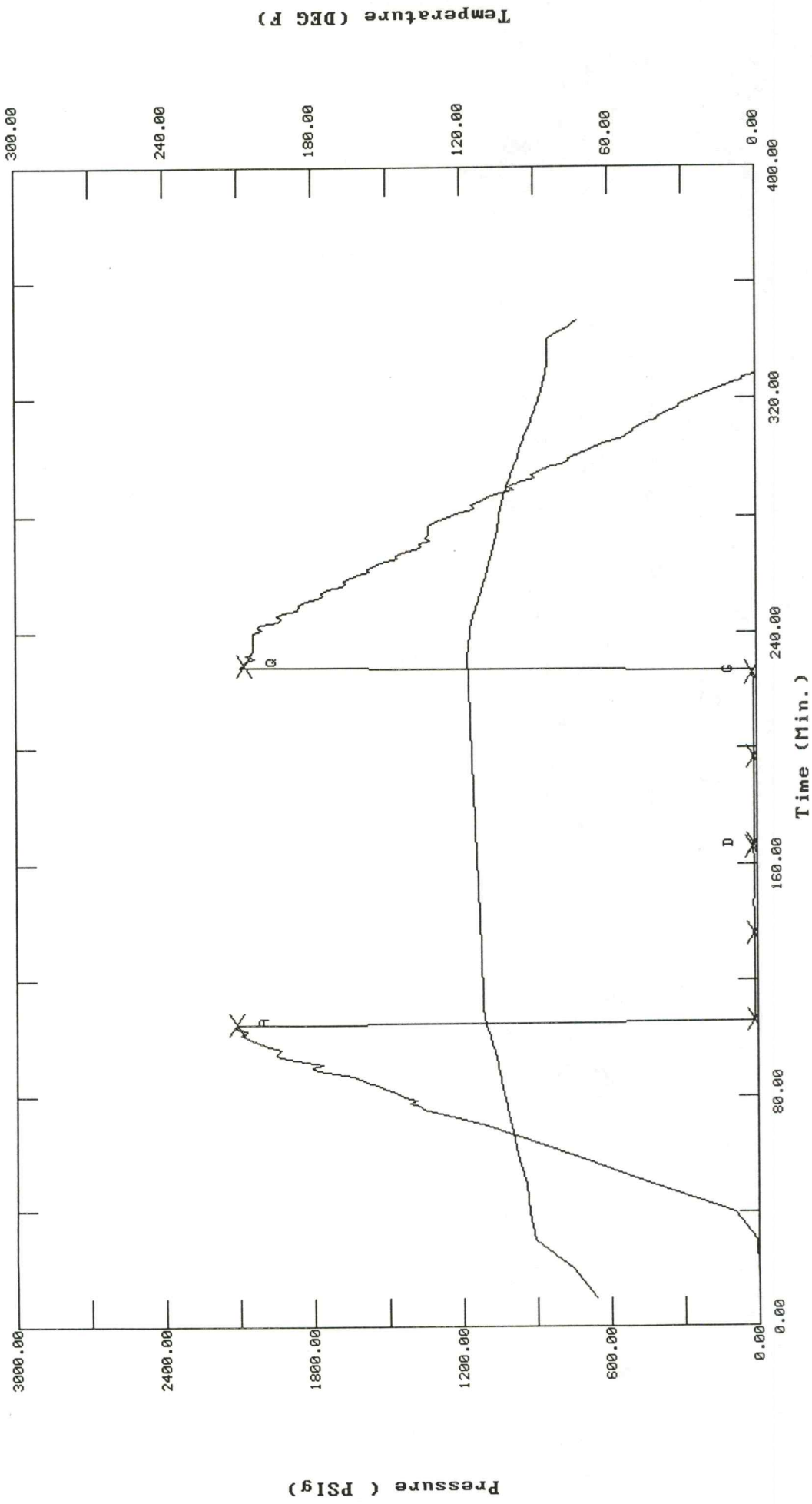
	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	8.00	10.2	0.1	116.11	8.5000	0.000
	9.00	10.3	0.2	116.15	7.6667	0.000
	10.00	10.5	0.4	116.19	7.0000	0.000
	11.00	10.6	0.5	116.24	6.4545	0.000
	12.00	10.7	0.6	116.29	6.0000	0.000
	13.00	10.8	0.7	116.33	5.6154	0.000
	14.00	11.0	0.9	116.37	5.2857	0.000
	15.00	11.0	0.9	116.41	5.0000	0.000
	16.00	11.2	1.1	116.46	4.7500	0.000
	17.00	11.4	1.3	116.51	4.5294	0.000
	18.00	11.4	1.3	116.56	4.3333	0.000
	19.00	11.6	1.5	116.60	4.1579	0.000
	20.00	11.7	1.6	116.64	4.0000	0.000
	21.00	11.8	1.7	116.69	3.8571	0.000
	22.00	12.0	1.9	116.73	3.7273	0.000
	23.00	12.1	2.0	116.76	3.6087	0.000
	24.00	12.2	2.1	116.80	3.5000	0.000
	25.00	12.3	2.2	116.84	3.4000	0.000
	26.00	12.4	2.3	116.89	3.3077	0.000
	27.00	12.6	2.5	116.92	3.2222	0.000
	28.00	12.7	2.5	116.97	3.1429	0.000
***** End Shut-in 2	29.00	12.8	2.7	117.01	3.0690	0.000
***** Final Hydro.	229.00	2073.9	0.0	117.32		

9923 DST #5 Keenan #1 Abercrombie Drlg. Inc.

LESLIE MILDENRY

t (Min.) P (PSig)

A:	0.00	2110.88
B:	0.00	10.72
C:	30.00	12.34
D:	30.00	12.93
E:	0.00	9.69
F:	30.00	10.10
G:	29.00	12.79
Q:	0.00	2073.95



TRILOBITE TESTING L.L.C.

OPERATOR : Abercrombie Drlg Inc. DATE 4-5-97
 WELL NAME: Keenan #1 KB 2814.00 ft TICKET NO: 9924 DST #6
 LOCATION : 34-18S-29W Lane KS. GR 2809.00 ft FORMATION: Marmaton
 INTERVAL : 4394.00 To 4412.00 ft TD 4412.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	13339	1339	2341			PF Fr. 1813 to 1843 hr
SI 30	Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0	IS Fr. 1843 to 1913 hr
SF 30	Clock(hrs)	12 HR	12 HR	Elec			SF Fr. 1913 to 1943 hr
FS 30	Depth(ft)	4407.0	4407.0	4396.0	0.0	0.0	FS Fr. 1943 to 2013 hr

	Field	1	2	3	4	
A. Init Hydro	2203.0	2228.0	2169.0	0.0	0.0	T STARTED 1630 hr
B. First Flow	31.0	55.0	9.0	0.0	0.0	T ON BOTM 1811 hr
B1. Final Flow	331.0	55.0	14.0	0.0	0.0	T OPEN 1813 hr
C. In Shut-in	1040.0	1060.0	1050.0	0.0	0.0	T PULLED 2013 hr
D. Init Flow	62.0	95.0	14.0	0.0	0.0	T OUT 2215 hr
E. Final Flow	62.0	95.0	17.0	0.0	0.0	
F. Fl Shut-in	1020.0	1030.0	1026.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2193.0	2221.0	2155.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 45000.00 lbs
						Initial Str Wt 40000.00 lbs
						Unseated Str Wt 40000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 3765.00 ft
						H.W. I.D 2.80 in
						H.W. Length 630.00 ft

RECOVERY

Tot Fluid 10.00 ft of 0.00 ft in DC and 10.00 ft in DP
 10.00 ft of Drilling Mud
 0.00 ft of with show of Oil on top
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

IF; Weak surface blow died in 15 mins.
 FF; No return blow

SAMPLES:
 SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 9.30 lb/c
 Vis. 49.00 S/L
 W.L. 9.60 in3
 F.C. 0.00 in
 Mud Drop N
 Amt. of fill 0.00 ft
 Btm. H. Temp. 118.00 F
 Hole Condition Good
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out N
 Tool Chased N
 Tester Rod Steinbrink
 Co. Rep. Steve Davis
 Contr. Abercrombie
 Rig # 8
 Unit #
 Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Keenan #1

LOCATION : 34-18S-29W Lane KS.

TICKET No. 9924 D.S.T. No. 6 DATE 4-5-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL 18

BOTTOM PACKERS AND ANCHOR

TOTAL TOOL 38

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 38

D.C. ABOVE TOOLS.Stands Single Total

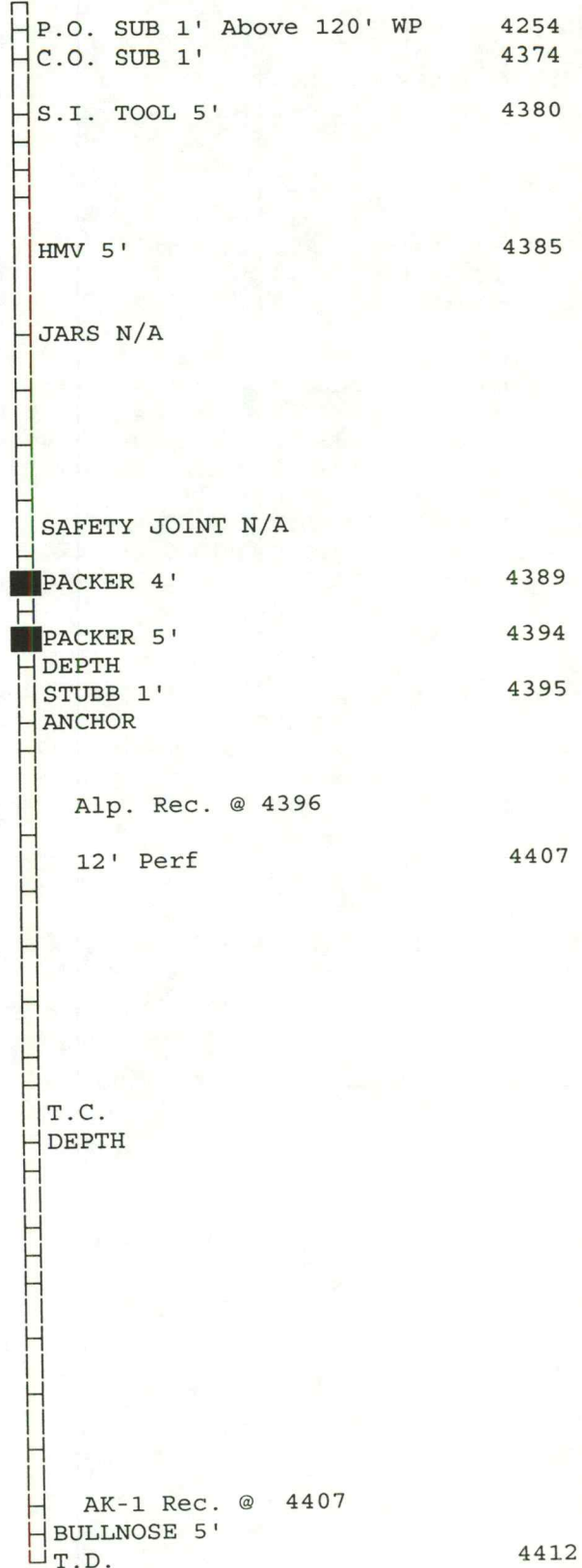
D.P. ABOVE TOOLS.Stands71 Single Total 4395

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4438

TOTAL DEPTH 4412

TOTAL DRILL PIPE ABOVE K.B. 26

REMARKS:



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9924 DST #6 Keenan #1 Abercromie Drlg Inc.

DATE: 04/05/97

TIME: 16:30:20

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	102.00	2169.2	0.0	110.98		
***** Start Flow 1	0.00	9.1	0.0	111.17		
	1.00	9.2	0.1	111.41		
	2.00	9.9	0.7	111.61		
	3.00	10.2	1.1	111.77		
	4.00	10.8	1.6	111.88		
	5.00	11.1	1.9	111.99		
	6.00	11.2	2.1	112.06		
	7.00	11.6	2.5	112.12		
	8.00	11.9	2.8	112.18		
	9.00	12.1	3.0	112.23		
	10.00	12.3	3.2	112.24		
	11.00	12.4	3.3	112.27		
	12.00	12.7	3.5	112.31		
	13.00	12.8	3.7	112.33		
	14.00	13.1	4.0	112.35		
	15.00	13.3	4.2	112.38		
	16.00	13.5	4.4	112.41		
	17.00	13.8	4.6	112.44		
	18.00	13.8	4.6	112.47		
	19.00	13.7	4.5	112.50		
	20.00	13.7	4.6	112.55		
	21.00	13.8	4.7	112.59		
	22.00	14.0	4.8	112.63		
	23.00	14.0	4.9	112.68		
	24.00	14.1	5.0	112.72		
	25.00	14.3	5.2	112.77		
	26.00	14.4	5.3	112.83		
	27.00	14.7	5.5	112.86		
	28.00	14.8	5.6	112.93		
	29.00	14.9	5.8	112.98		
***** End Flow 1	30.00	13.2	4.0	113.05		
***** Start Shutin 1	0.00	13.2	0.0	113.05	0.0000	0.000
	1.00	16.6	3.5	113.10	31.0000	0.000
	2.00	20.8	7.7	113.12	16.0000	0.000
	3.00	26.3	13.1	113.15	11.0000	0.001
	4.00	33.2	20.0	113.24	8.5000	0.001
	5.00	43.0	29.8	113.31	7.0000	0.002
	6.00	57.9	44.7	113.38	6.0000	0.003
	7.00	82.8	69.6	113.44	5.2857	0.007
	8.00	132.7	119.6	113.50	4.7500	0.018
	9.00	248.1	234.9	113.55	4.3333	0.062
	10.00	458.9	445.7	113.68	4.0000	0.211
	11.00	673.3	660.1	113.77	3.7273	0.453
	12.00	823.5	810.3	113.86	3.5000	0.678
	13.00	914.1	900.9	113.96	3.3077	0.836
	14.00	965.1	951.9	114.05	3.1429	0.931
	15.00	993.1	979.9	114.16	3.0000	0.986
	16.00	1008.3	995.2	114.23	2.8750	1.017
	17.00	1017.6	1004.4	114.32	2.7647	1.035
	18.00	1023.7	1010.5	114.40	2.6667	1.048

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9924 DST #6 Keenan #1 Abercromie Drlg Inc.

DATE: 04/05/97

TIME: 16:30:20

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	19.00	1028.4	1015.2	114.48	2.5789	1.058
	20.00	1032.1	1018.9	114.52	2.5000	1.065
	21.00	1035.1	1021.9	114.63	2.4286	1.071
	22.00	1037.7	1024.5	114.69	2.3636	1.077
	23.00	1040.0	1026.8	114.75	2.3043	1.082
	24.00	1042.0	1028.8	114.81	2.2500	1.086
	25.00	1043.8	1030.6	114.87	2.2000	1.090
	26.00	1045.4	1032.3	114.93	2.1538	1.093
	27.00	1046.9	1033.8	114.99	2.1111	1.096
	28.00	1048.2	1035.0	115.05	2.0714	1.099
	29.00	1049.4	1036.2	115.11	2.0345	1.101
	30.00	1050.6	1037.5	115.16	2.0000	1.104
***** End Shut-in 1	31.00	1046.8	1033.6	115.22	1.9677	1.096
***** Start Flow 2	0.00	14.6	0.0	115.21		
	1.00	14.8	0.3	115.24		
	2.00	14.8	0.3	115.27		
	3.00	14.9	0.3	115.26		
	4.00	15.0	0.5	115.30		
	5.00	15.0	0.5	115.33		
	6.00	15.0	0.5	115.37		
	7.00	15.0	0.5	115.39		
	8.00	15.1	0.5	115.47		
	9.00	15.2	0.6	115.45		
	10.00	15.2	0.7	115.54		
	11.00	15.2	0.6	115.58		
	12.00	15.2	0.7	115.64		
	13.00	15.3	0.8	115.68		
	14.00	15.5	1	115.74		
	15.00	15.7	1.1	115.80		
	16.00	15.8	1.2	115.86		
	17.00	15.9	1.4	115.92		
	18.00	16.0	1.5	115.96		
	19.00	16.2	1.6	116.02		
	20.00	16.3	1.7	116.06		
	21.00	16.4	1.9	116.12		
	22.00	16.5	2.0	116.19		
	23.00	16.6	2.0	116.25		
	24.00	16.6	2.1	116.31		
	25.00	16.7	2.2	116.35		
	26.00	16.9	2.4	116.40		
	27.00	17.0	2.5	116.46		
	28.00	17.2	2.6	116.53		
***** End Flow 2	29.00	17.6	3.1	116.58		
***** Start Shutin 2	0.00	17.6	0.0	116.58	0.0000	0.000
	1.00	20.8	3.2	116.64	60.0000	0.000
	2.00	24.5	6.9	116.70	30.5000	0.001
	3.00	28.8	11.2	116.74	20.6667	0.001
	4.00	34.0	16.4	116.79	15.7500	0.001
	5.00	40.5	22.9	116.85	12.8000	0.002
	6.00	48.8	31.2	116.91	10.8333	0.002
	7.00	59.7	42.1	116.97	9.4286	0.004

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9924 DST #6 Keenan #1 Abercromie Drlg Inc.

DATE: 04/05/97

TIME: 16:30:20

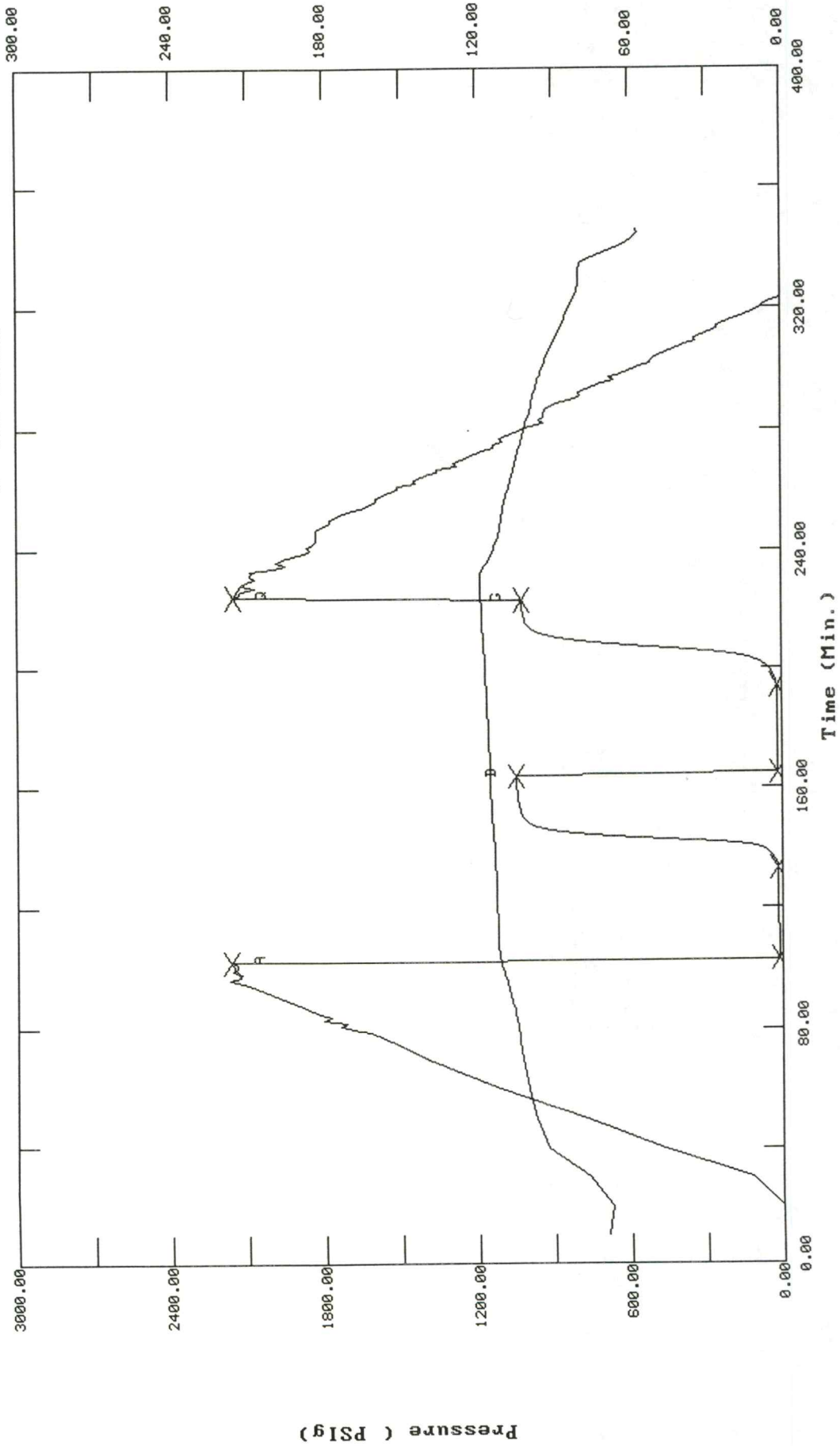
	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	8.00	74.9	57.3	117.04	8.3750	0.006
	9.00	97.3	79.7	117.08	7.5556	0.009
	10.00	132.3	114.7	117.14	6.9000	0.018
	11.00	191.2	173.6	117.20	6.3636	0.037
	12.00	291.0	273.4	117.27	5.9167	0.085
	13.00	439.3	421.7	117.34	5.5385	0.193
	14.00	603.5	585.9	117.42	5.2143	0.364
	15.00	742.9	725.3	117.50	4.9333	0.552
	16.00	844.0	826.4	117.58	4.6875	0.712
	17.00	911.7	894.1	117.69	4.4706	0.831
	18.00	954.2	936.6	117.76	4.2778	0.911
	19.00	980.0	962.4	117.85	4.1053	0.960
	20.00	995.5	977.9	117.94	3.9500	0.991
	21.00	1004.8	987.2	117.95	3.8095	1.010
	22.00	1010.7	993.1	118.05	3.6818	1.022
	23.00	1015.1	997.4	118.08	3.5652	1.030
	24.00	1018.3	1000.7	118.15	3.4583	1.037
	25.00	1021.0	1003.4	118.21	3.3600	1.043
	26.00	1023.4	1005.8	118.27	3.2692	1.047
	27.00	1025.4	1007.7	118.31	3.1852	1.051
	28.00	1027.2	1009.6	118.35	3.1071	1.055
***** End Shut-in 2	29.00	1026.8	1009.2	118.44	3.0345	1.054
***** Final Hydro.	224.00	2155.1	0.0	118.54		

TEST HISTORY

9924 DST #6 Keenan #1 Abercrombie Drlg Inc.

Flag Points

t (Min.)	P (PSig)
A: 0.00	2169.25
B: 0.00	9.14
C: 30.00	13.18
D: 31.00	1046.83
E: 0.00	14.55
F: 29.00	17.62
G: 29.00	1026.77
Q: 0.00	2155.08



TRILOBITE TESTING L.L.C.

OPERATOR : Abercrombie Drlg. Inc.
 WELL NAME: Keenan #1
 LOCATION : 34-18S-29W Lane KS.
 INTERVAL : 4245.00 To 4290.00 ft

DATE 4-7-97
 KB 2814.00 ft TICKET NO: 9925 DST #7
 GR 2809.00 ft FORMATION: Lans/KC "K"
 TD 4667.00 ft TEST TYPE: CONV STRADDLE

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13276	13276	2341		13339	PF Fr. 0715 to 0745 hr
SI 45 Range(Psi)	4000.0	4000.0	4995.0	0.0	4025.0	IS Fr. 0745 to 0815 hr
SF 60 Clock(hrs)	12 HR	12 HR	Elec		12 HR	SF Fr. 0815 to 0915 hr
FS 45 Depth(ft)	4280.0	4280.0	4247.0	0.0	4662.0	FS Fr. 0915 to 1000 hr

	Field	1	2	3	4	
A. Init Hydro	2161.0	2209.0	2121.0	0.0	2413.0	T STARTED 0331 hr
B. First Flow	80.0	100.0	38.0	0.0	0.0	T ON BOTM 0713 hr
B1. Final Flow	160.0	185.0	169.0	0.0	0.0	T OPEN 0715 hr
C. In Shut-in	890.0	966.0	932.0	0.0	0.0	T PULLED 1000 hr
D. Init Flow	199.0	218.0	176.0	0.0	0.0	T OUT 1230 hr
E. Final Flow	298.0	322.0	297.0	0.0	0.0	
F. Fl Shut-in	930.0	930.0	906.0	0.0	0.0	
G. Final Hydro	2063.0	2177.0	2088.0	0.0	2088.0	TOOL DATA-----
Inside/Outside	O	O	I		S	Tool Wt. 2500.00 lbs

RECOVERY

Tot Fluid 620.00 ft of 60.00 ft in DC and 560.00 ft in DP
 260.00 ft of Muddy Water
 360.00 ft of Water
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of RW .17 @ 70 deg =
 SALINITY 40000.00 P.P.M. A.P.I. Gravity 0.00

Unseated Str Wt 50000.00 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 60.00 ft
 D.P. Length 3889.00 ft
 H.W. I.D 2.80 in
 H.W. Length 252.00 ft

BLOW DESCRIPTION

Initial Flow -
 Weak to fair blow off bottom in 16 mins.

Initial Shut-in -
 Bled off blow - no return

Final Flow -
 Weak to fair blow off bottom in 25 minutes

Final Shut-in -
 Bled off blow - no return

SAMPLES:
 SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 9.40 lb/c
 Vis. 51.00 S/L
 W.L. 9.60 in3
 F.C. 0.00 in
 Mud Drop N
 Amt. of fill 0.00 ft
 Btm. H. Temp. 123.00 F
 Hole Condition Good
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 3
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out N
 Tool Chased N
 Tester Rod Steinbrink
 Co. Rep. Steve Davis
 Contr. Abercrombie
 Rig # 8
 Unit #
 Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONV STRADDLE

WELL NAME: Keenan #1

LOCATION : 34-18S-29W Lane KS.

TICKET No. 9925 D.S.T. No. 7 DATE 4-7-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL 14

BOTTOM PACKERS AND ANCHOR 32

TOTAL TOOL 66

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 6 Single Total 376

TOTAL ASSEMBLY 442

D.C. ABOVE TOOLS.Stands1 Single Total 60

D.P. ABOVE TOOLS.Stands63 Single 1 Total 4172

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4674

TOTAL DEPTH 4667

TOTAL DRILL PIPE ABOVE K.B. 7

REMARKS:

P.O. SUB 1' Above 120' DC/WP	4104
C.O. SUB 1'	4224
S.I. TOOL 5'	4230
HMV 5'	4235
JARS N/A	
SAFETY JOINT N/A	
PACKER top 4'	4240
PACKER bottom 5'	4245
DEPTH STUBB 1'	4246
ANCHOR 1' Perf	4247
Alp. Rec. @	4247
1' CO Sub	4248
31' WP	4279
1' CO Sub	4280
AK-1 Rec. @	4280
5' Perf.	4285
T.C. DEPTH	
PACKER 5'	4290
1' Stubb	4291
24' Perf'	4315
1' CO Sub	4316
345' WP	4661
1' CO Sub	4662
AK-1 Rec. @	4662
BULLNOSE 5'	
T.D.	4667

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9925 DST #7 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/07/97

TIME: 03:32:02

	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	146.00	2121.8	0.0	114.00		
***** Start Flow 1	0.00	38.9	0.0	113.90		
	1.00	46.6	7.8	113.98		
	2.00	51.9	13.0	114.04		
	3.00	56.3	17.4	114.11		
	4.00	61.3	22.4	114.22		
	5.00	66.4	27.5	114.26		
	6.00	71.4	32.5	114.31		
	7.00	76.5	37.6	114.35		
	8.00	81.7	42.8	114.39		
	9.00	86.5	47.6	114.42		
	10.00	91.2	52.3	114.46		
	11.00	96.0	57.1	114.49		
	12.00	100.8	61.9	114.52		
	13.00	105.6	66.7	114.57		
	14.00	110.7	71.8	114.60		
	15.00	115.3	76.4	114.64		
	16.00	120.0	81.1	114.67		
	17.00	124.5	85.6	114.71		
	18.00	128.9	90.0	114.76		
	19.00	133.3	94.4	114.80		
	20.00	137.7	98.8	114.84		
	21.00	141.9	103.0	114.89		
	22.00	145.9	107.0	114.93		
	23.00	149.9	111.0	114.98		
	24.00	153.6	114.7	115.02		
	25.00	156.3	117.4	115.08		
	26.00	158.6	119.7	115.12		
	27.00	160.6	121.7	115.17		
	28.00	162.5	123.6	115.21		
	29.00	164.5	125.6	115.26		
	30.00	166.7	127.8	115.32		
***** End Flow 1	31.00	169.3	130.4	115.38		
***** Start Shutin 1	0.00	169.3	0.0	115.38	0.0000	0.029
	1.00	822.4	653.1	115.51	32.0000	0.676
	2.00	848.8	679.5	115.90	16.5000	0.720
	3.00	863.3	694.0	116.40	11.3333	0.745
	4.00	873.0	703.7	116.90	8.7500	0.762
	5.00	879.4	710.1	117.38	7.2000	0.773
	6.00	884.7	715.4	117.76	6.1667	0.783
	7.00	889.3	720.0	118.08	5.4286	0.791
	8.00	892.8	723.5	118.35	4.8750	0.797
	9.00	895.7	726.5	118.55	4.4444	0.802
	10.00	898.4	729.1	118.72	4.1000	0.807
	11.00	900.7	731.4	118.86	3.8182	0.811
	12.00	902.9	733.6	118.97	3.5833	0.815
	13.00	904.8	735.5	119.06	3.3846	0.819
	14.00	906.6	737.3	119.14	3.2143	0.822
	15.00	908.3	739.1	119.20	3.0667	0.825
	16.00	909.8	740.5	119.27	2.9375	0.828
	17.00	911.2	741.9	119.32	2.8235	0.830

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9925 DST #7 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/07/97

TIME: 03:32:02

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	18.00	912.5	743.2	119.38	2.7222	0.833
	19.00	913.7	744.4	119.40	2.6316	0.835
	20.00	914.9	745.6	119.44	2.5500	0.837
	21.00	916.0	746.7	119.48	2.4762	0.839
	22.00	917.0	747.7	119.52	2.4091	0.841
	23.00	918.0	748.7	119.54	2.3478	0.843
	24.00	918.9	749.6	119.57	2.2917	0.844
	25.00	919.9	750.6	119.58	2.2400	0.846
	26.00	920.7	751.5	119.60	2.1923	0.848
	27.00	921.5	752.2	119.63	2.1481	0.849
	28.00	922.3	753.0	119.65	2.1071	0.851
	29.00	923.1	753.8	119.67	2.0690	0.852
	30.00	923.7	754.4	119.69	2.0333	0.853
	31.00	924.4	755.1	119.71	2.0000	0.854
	32.00	925.1	755.8	119.73	1.9688	0.856
	33.00	925.8	756.5	119.75	1.9394	0.857
	34.00	926.3	757.0	119.91	1.9118	0.858
	35.00	927.0	757.7	119.74	1.8857	0.859
	36.00	927.6	758.3	119.60	1.8611	0.860
	37.00	928.1	758.8	119.75	1.8378	0.861
	38.00	928.6	759.3	119.80	1.8158	0.862
	39.00	929.1	759.8	119.81	1.7949	0.863
	40.00	929.6	760.4	119.83	1.7750	0.864
	41.00	930.1	760.8	119.82	1.7561	0.865
	42.00	930.6	761.3	119.83	1.7381	0.866
	43.00	931.1	761.8	119.84	1.7209	0.867
	44.00	931.5	762.2	119.85	1.7045	0.868
	45.00	931.9	762.6	119.87	1.6889	0.868
***** End Shut-in 1	46.00	932.3	763.1	119.86	1.6739	0.869
***** Start Flow 2	0.00	176.6	0.0	119.85		
	1.00	178.6	2.0	119.82		
	2.00	180.6	4.0	119.78		
	3.00	183.1	6.5	119.79		
	4.00	185.4	8.8	119.73		
	5.00	187.9	11.3	119.72		
	6.00	190.3	13.7	119.72		
	7.00	192.7	16.1	119.72		
	8.00	195.2	18.6	119.70		
	9.00	197.8	21.2	119.70		
	10.00	200.2	23.6	119.69		
	11.00	202.5	25.9	119.69		
	12.00	204.9	28.3	119.70		
	13.00	207.1	30.5	119.71		
	14.00	209.6	33.0	119.73		
	15.00	211.9	35.3	119.72		
	16.00	214.1	37.5	119.74		
	17.00	216.3	39.6	119.75		
	18.00	218.3	41.7	119.76		
	19.00	220.4	43.7	119.77		
	20.00	222.6	45.9	119.80		
	21.00	224.9	48.2	119.83		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9925 DST #7 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/07/97 TIME: 03:32:02

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	22.00	226.9	50.3	119.87		
	23.00	229.0	52.4	119.90		
	24.00	231.0	54.4	119.92		
	25.00	233.0	56.3	119.97		
	26.00	235.0	58.4	119.99		
	27.00	237.3	60.7	120.02		
	28.00	239.2	62.6	120.06		
	29.00	241.2	64.5	120.11		
	30.00	243.1	66.5	120.14		
	31.00	245.0	68.4	120.19		
	32.00	246.9	70.3	120.23		
	33.00	251.4	74.7	120.26		
	34.00	251.8	75.2	120.33		
	35.00	253.9	77.3	120.38		
	36.00	255.8	79.2	120.40		
	37.00	257.7	81.1	120.42		
	38.00	259.7	83.1	120.46		
	39.00	261.6	85.0	120.53		
	40.00	263.8	87.2	120.59		
	41.00	265.6	89.0	120.63		
	42.00	267.4	90.8	120.70		
	43.00	269.3	92.7	120.75		
	44.00	271.0	94.4	120.80		
	45.00	272.8	96.2	120.85		
	46.00	274.7	98.0	120.90		
	47.00	276.7	100.1	120.96		
	48.00	278.5	101.9	121.02		
	49.00	280.3	103.6	121.08		
	50.00	282.0	105.4	121.13		
	51.00	283.8	107.2	121.18		
	52.00	285.5	108.9	121.24		
	53.00	287.3	110.7	121.30		
	54.00	289.2	112.6	121.35		
	55.00	291.1	114.5	121.41		
	56.00	292.9	116.2	121.46		
	57.00	294.6	118.0	121.52		
	58.00	296.2	119.6	121.57		
***** End Flow 2	59.00	298.0	121.3	121.63		
***** Start Shutin 2	0.00	298.0	0.0	121.63	0.0000	0.089
	1.00	787.9	489.9	121.72	91.0000	0.621
	2.00	810.0	512.1	121.81	46.0000	0.656
	3.00	823.9	526.0	121.90	31.0000	0.679
	4.00	835.3	537.4	122.00	23.5000	0.698
	5.00	844.2	546.2	122.13	19.0000	0.713
	6.00	849.8	551.8	122.19	16.0000	0.722
	7.00	854.2	556.2	122.28	13.8571	0.730
	8.00	858.2	560.2	122.36	12.2500	0.736
	9.00	861.4	563.4	122.42	11.0000	0.742
	10.00	864.3	566.3	122.52	10.0000	0.747
	11.00	866.9	568.9	122.58	9.1818	0.751
	12.00	869.2	571.3	122.65	8.5000	0.756

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9925 DST #7 Keenan #1 Abercrombie Drlg. Inc.

DATE: 04/07/97

TIME: 03:32:02

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	13.00	871.4	573.5	122.70	7.9231	0.759
	14.00	873.5	575.5	122.76	7.4286	0.763
	15.00	875.5	577.5	122.83	7.0000	0.766
	16.00	877.5	579.5	122.91	6.6250	0.770
	17.00	879.3	581.3	122.98	6.2941	0.773
	18.00	881.0	583.0	123.03	6.0000	0.776
	19.00	882.6	584.6	123.09	5.7368	0.779
	20.00	884.0	586.0	123.16	5.5000	0.781
	21.00	885.2	587.3	123.23	5.2857	0.784
	22.00	886.6	588.6	123.27	5.0909	0.786
	23.00	887.8	589.9	123.36	4.9130	0.788
	24.00	889.0	591.0	123.39	4.7500	0.790
	25.00	890.1	592.1	123.44	4.6000	0.792
	26.00	891.1	593.2	123.43	4.4615	0.794
	27.00	892.3	594.4	123.46	4.3333	0.796
	28.00	893.2	595.3	123.48	4.2143	0.798
	29.00	894.2	596.3	123.50	4.1034	0.800
	30.00	895.2	597.2	123.51	4.0000	0.801
	31.00	896.2	598.2	123.53	3.9032	0.803
	32.00	897.1	599.1	123.54	3.8125	0.805
	33.00	897.9	599.9	123.54	3.7273	0.806
	34.00	898.7	600.7	123.55	3.6471	0.808
	35.00	899.4	601.5	123.53	3.5714	0.809
	36.00	900.3	602.3	123.55	3.5000	0.811
	37.00	901.0	603.0	123.55	3.4324	0.812
	38.00	901.7	603.8	123.54	3.3684	0.813
	39.00	902.5	604.5	123.54	3.3077	0.815
	40.00	903.2	605.3	123.54	3.2500	0.816
	41.00	903.9	605.9	123.53	3.1951	0.817
	42.00	904.6	606.6	123.56	3.1429	0.818
	43.00	905.2	607.3	123.53	3.0930	0.819
	44.00	905.9	607.9	123.53	3.0455	0.821
***** End Shut-in 2	45.00	906.5	608.6	123.52	3.0000	0.822
***** Final Hydro.	332.00	2088.2	0.0	123.54		

TEST HISTORY

9925 DST #7 Keenan #1 Abercrombie Drlg. Inc.

Flag Points

t(Min.) P(PSIg)

A:	0.00	2121.85
B:	0.00	38.90
C:	31.00	169.27
D:	46.00	932.33
E:	0.00	176.63
F:	59.00	297.97
G:	45.00	906.52
Q:	0.00	2088.18

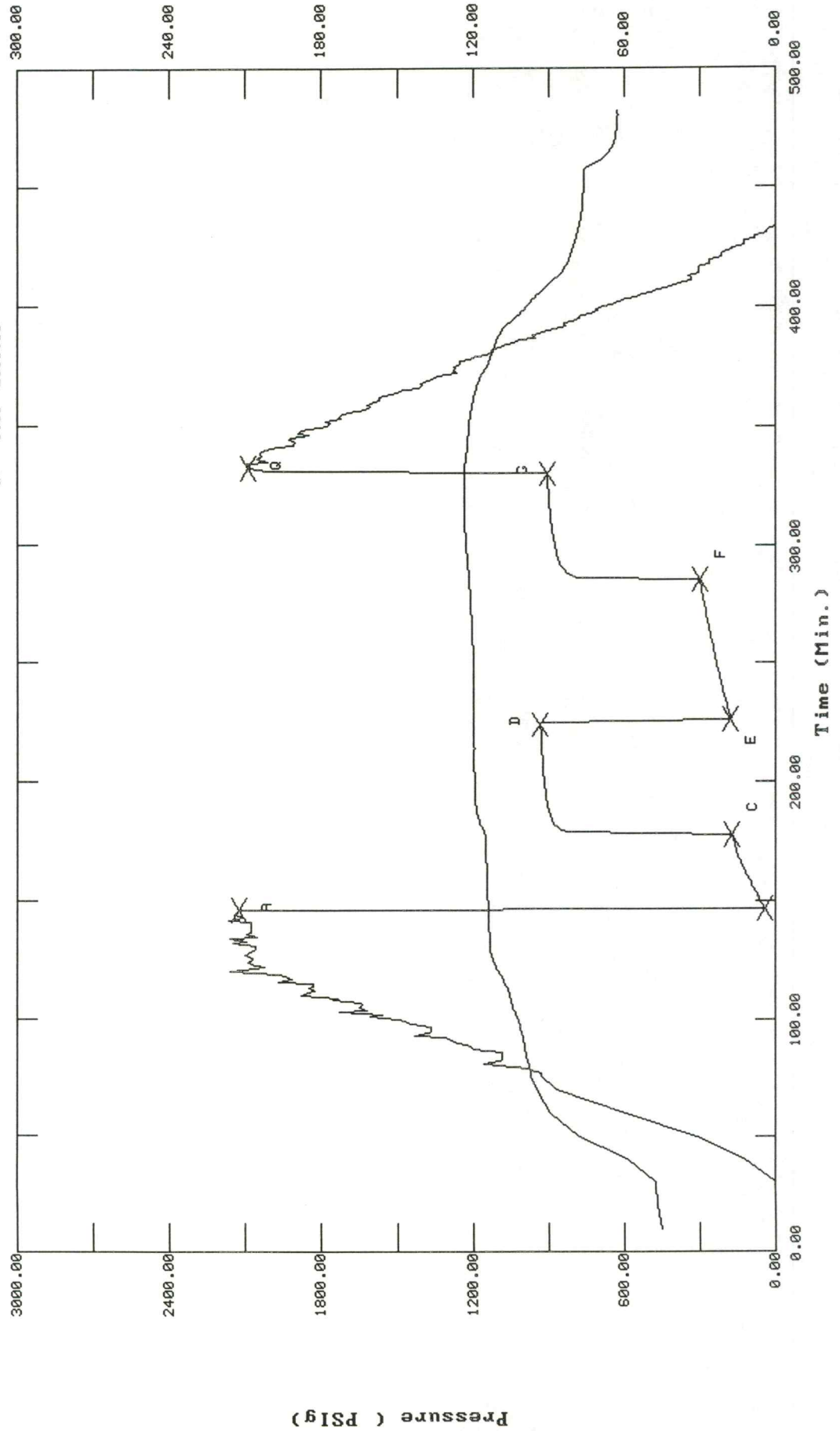
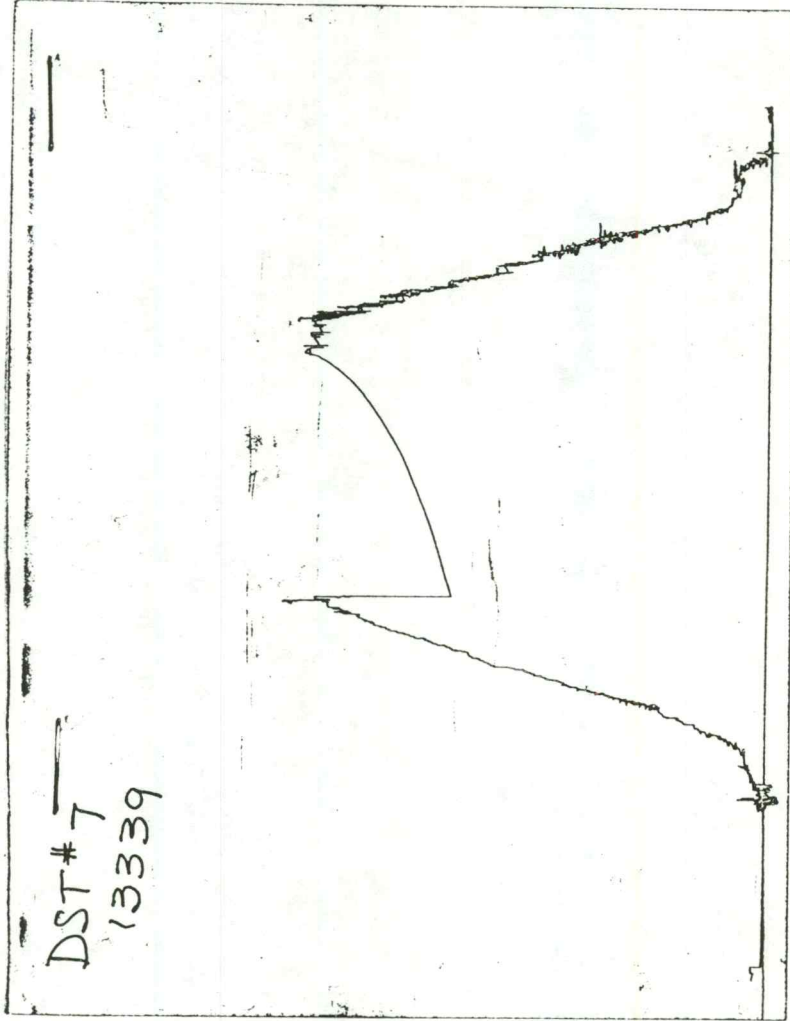


CHART PAGE



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