

WELL NAME: Mary Nation #4
COMPANY: Quinque Operating Company
LOCATION: 34-30S-33W
Haskell County Kansas
DATE: 07/21/97

TRILOBITE TESTING L.L.C.

OPERATOR : Quinque Oper. Comp.
 WELL NAME: Mary Nation #4
 LOCATION : 34-30S-33W
 INTERVAL : 5367.00 To 5447.00 ft

DATE 7-11-97
 KB 2936.00 ft TICKET NO: 9847 DST #1
 GR 2925.00 ft FORMATION: Morrow
 TD 5447.00 ft TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13615	13615	2351			PF Fr. 2203 to 2233 hr
SI 60 Range(Psi)	4575.0	4575.0	4995.0	0.0	0.0	IS Fr. 2233 to 2433 hr
SF 60 Clock(hrs)	12 hr	12 hr	Elec			SF Fr. 2433 to 0033 hr
FS 120 Depth(ft)	5444.0	5444.0	5375.0	0.0	0.0	FS Fr. 0033 to 0233 hr

	Field	1	2	3	4	
A. Init Hydro	0.0	0.0	2638.0	0.0	0.0	T STARTED 1900 hr
B. First Flow	0.0	0.0	25.0	0.0	0.0	T ON BOTM 2200 hr
B1. Final Flow	0.0	0.0	32.0	0.0	0.0	T OPEN 2203 hr
C. In Shut-in	0.0	0.0	302.0	0.0	0.0	T PULLED 0233 hr
D. Init Flow	0.0	0.0	29.0	0.0	0.0	T OUT 0500 hr
E. Final Flow	0.0	0.0	37.0	0.0	0.0	
F. Fl Shut-in	0.0	0.0	328.0	0.0	0.0	
G. Final Hydro	0.0	0.0	2584.0	0.0	0.0	
Inside/Outside	O	O	I			

RECOVERY

Tot Fluid 30.00 ft of 30.00 ft in DC and 0.00 ft in DP
 500.00 ft of Gas in pipe
 0.00 ft of
 30.00 ft of Drilling Mud
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of

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

BLOW DESCRIPTION

Initial Flow:
 Fair blow, built to 10 "

Final Flow:
 Weak blow built to 4 "

SAMPLES: NO
 SENT TO:

Test Successful: Y

TOOL DATA-----
 Tool Wt. 1800.00 lbs
 Wt Set On Packer 25000.00 lbs
 Wt Pulled Loose 105000.00 lbs
 Initial Str Wt 95000.00 lbs
 Unseated Str Wt 97000.00 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 620.00 ft
 D.P. Length 4800.00 ft

MUD DATA-----
 Mud Type Chemical
 Weight 9.00 lb/cf
 Vis. 48.00 S/L
 W.L. 8.00 in3
 F.C. 0.00 in
 Mud Drop Y 45.0 ft

Amt. of fill 0.00 ft
 Btm. H. Temp. 124.00 F
 Hole Condition Good
 % Porosity 6.75
 Packer Size 2.00 in
 No. of Packers 0
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out N
 Tool Chase: N
 Tester Mike Colantonio
 Co. Rep. Gary Wilkins
 Contr. Beredco
 Rig # 2
 Unit #
 Pump T.

*** TOOL DIAGRAM *** CONV

WELL NAME: Mary Nation #4

LOCATION : 34-30S-33W

TICKET No. 9847 D.S.T. No. 1 DATE 7-11-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL

BOTTOM PICKERS AND ANCHOR 19

TOTAL TOOL 46

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 2 Total 61

TOTAL ASSEMBLY 107

D.C. ABOVE TOOLS.Stands7 Single Total 620

D.P. ABOVE TOOLS.Stands50 Single Total 4739

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5466

TOTAL DEPTH 5447

TOTAL DRILL PIPE ABOVE K.B. 19

REMARKS:

P.O. SUB Top tool	5340
C.O. SUB 1ft	5341
S.I. TOOL Sterling	5346
HMV Sterling	5351
JARS Sterling	5356
SAFETY JOINT 2ft	5358
PACKER 5ft	5362
PACKER 5ft	5367
DEPTH	
STUBB 1ft	5368
ANCHOR	
2ft Perf	5370
Alpine Rec.	5371
T.C.	
DEPTH	
6ft P U sub	5376
6ft Perf	5382
61ft Drlg. Pipe	5443
1ft C\O Sub	5444
BULLNOSE AK-1 Rec.	5444
T.D. 3ft Bullplug	5447

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	173.25	2638.3	0.0	122.56		
***** Start Flow 1	0.00	24.8	0.0	122.60		
	0.25	24.8	0.1	122.61		
	0.50	25.3	0.5	122.65		
	0.75	25.3	0.5	122.70		
	1.00	25.3	0.6	122.77		
	1.25	25.5	0.8	122.84		
	1.50	25.1	0.3	122.93		
	1.75	25.3	0.6	123.02		
	2.00	25.8	1.0	123.12		
	2.25	25.8	1.0	123.22		
	2.50	25.8	1.1	123.32		
	2.75	26.3	1.5	123.43		
	3.00	25.9	1.2	123.52		
	3.25	26.2	1.4	123.62		
	3.50	26.3	1.5	123.71		
	3.75	26.3	1.5	123.80		
	4.00	26.6	1.8	123.88		
	4.25	27.1	2.3	123.96		
	4.50	27.0	2.3	124.04		
	4.75	27.0	2.3	124.12		
	5.00	27.4	2.6	124.19		
	5.25	27.4	2.7	124.25		
	5.50	27.7	2.9	124.31		
	5.75	27.7	2.9	124.37		
	6.00	27.9	3.2	124.43		
	6.25	28.3	3.5	124.48		
	6.50	28.4	3.7	124.53		
	6.75	28.6	3.9	124.57		
	7.00	28.3	3.5	124.62		
	7.25	28.7	3.9	124.66		
	7.50	29.1	4.4	124.70		
	7.75	28.3	3.5	124.73		
	8.00	28.5	3.8	124.76		
	8.25	28.9	4.1	124.80		
	8.50	29.0	4.3	124.84		
	8.75	29.1	4.4	124.86		
	9.00	29.4	4.6	124.89		
	9.25	30.3	5.5	124.92		
	9.50	29.2	4.4	124.95		
	9.75	29.5	4.8	124.96		
	10.00	29.7	5.0	124.99		
	10.25	29.9	5.1	125.01		
	10.50	29.6	4.9	125.03		
	10.75	30.0	5.2	125.05		
	11.00	30.4	5.6	125.06		
	11.25	29.8	5.0	125.08		
	11.50	29.8	5.0	125.10		
	11.75	30.8	6.0	125.11		
	12.00	29.5	4.7	125.13		
	12.25	30.4	5.6	125.14		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9#47 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
12.50	29.9	5.1	125.16		
12.75	30.4	5.6	125.17		
13.00	30.1	5.4	125.18		
13.25	31.0	6.2	125.19		
13.50	30.8	6.0	125.21		
13.75	29.8	5.0	125.22		
14.00	30.1	5.4	125.22		
14.25	30.5	5.7	125.23		
14.50	31.1	6.4	125.25		
14.75	30.0	5.3	125.26		
15.00	30.0	5.3	125.27		
15.25	30.4	5.6	125.27		
15.50	30.6	5.9	125.28		
15.75	31.0	6.2	125.29		
16.00	30.5	5.7	125.29		
16.25	30.2	5.5	125.31		
16.50	31.0	6.2	125.31		
16.75	31.3	6.5	125.32		
17.00	30.9	6.1	125.33		
17.25	31.0	6.2	125.33		
17.50	30.4	5.6	125.35		
17.75	30.9	6.1	125.35		
18.00	31.5	6.8	125.35		
18.25	32.1	7.3	125.36		
18.50	31.5	6.7	125.36		
18.75	30.8	6.0	125.37		
19.00	30.6	5.9	125.38		
19.25	31.3	6.5	125.39		
19.50	31.7	7.0	125.39		
19.75	32.0	7.2	125.40		
20.00	32.2	7.5	125.40		
20.25	32.5	7.7	125.40		
20.50	31.9	7.1	125.41		
20.75	31.0	6.3	125.42		
21.00	31.5	6.8	125.42		
21.25	31.7	7.0	125.42		
21.50	32.1	7.4	125.44		
21.75	33.1	8.3	125.44		
22.00	32.8	8.1	125.44		
22.25	32.8	8.1	125.45		
22.50	32.8	8.1	125.46		
22.75	32.3	7.6	125.46		
23.00	32.5	7.7	125.47		
23.25	32.3	7.6	125.47		
23.50	32.2	7.5	125.48		
23.75	32.5	7.7	125.48		
24.00	32.1	7.3	125.49		
24.25	31.4	6.6	125.49		
24.50	31.2	6.5	125.49		
24.75	31.6	6.9	125.50		
25.00	32.1	7.4	125.50		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:15

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.25	32.5	7.7	125.51		
	25.50	31.7	7.0	125.51		
	25.75	32.3	7.6	125.52		
	26.00	32.2	7.5	125.52		
	26.25	31.2	6.5	125.52		
	26.50	31.9	7.1	125.54		
	26.75	31.5	6.7	125.54		
	27.00	31.5	6.7	125.55		
	27.25	31.5	6.9	125.55		
	27.50	31.9	7.1	125.55		
	27.75	32.1	7.3	125.56		
	28.00	32.0	7.2	125.57		
	28.25	32.3	7.6	125.57		
	28.50	32.3	7.6	125.57		
	28.75	32.2	7.5	125.58		
	29.00	32.2	7.5	125.58		
	29.25	32.5	7.7	125.59		
	29.50	32.7	8.0	125.60		
	29.75	32.6	7.9	125.60		
***** End Flow 1	30.00	32.1	7.3	125.61		
***** Start Shutin 1	0.00	32.1	0.0	125.61	0.0000	0.001
	0.25	31.7	-0.3	125.61	121.0000	0.001
	0.50	31.5	-0.4	125.61	61.0000	0.001
	0.75	32.7	0.7	125.62	41.0000	0.001
	1.00	34.2	2.2	125.62	31.0000	0.001
	1.25	36.2	4.1	125.63	25.0000	0.001
	1.50	37.3	5.7	125.63	21.0000	0.001
	1.75	39.5	7.5	125.64	18.1429	0.002
	2.00	41.3	9.2	125.64	16.0000	0.002
	2.25	42.9	10.8	125.65	14.3333	0.002
	2.50	44.6	12.5	125.66	13.0000	0.002
	2.75	46.1	14.0	125.66	11.9091	0.002
	3.00	47.7	15.6	125.66	11.0000	0.002
	3.25	49.1	17.0	125.67	10.2308	0.002
	3.50	50.6	18.5	125.68	9.5714	0.003
	3.75	52.0	20.0	125.69	9.0000	0.003
	4.00	53.5	21.4	125.69	8.5000	0.003
	4.25	55.0	22.9	125.69	8.0588	0.003
	4.50	56.4	24.3	125.70	7.6667	0.003
	4.75	57.8	25.8	125.71	7.3158	0.003
	5.00	59.3	27.3	125.71	7.0000	0.004
	5.25	60.8	28.7	125.72	6.7143	0.004
	5.50	62.2	30.1	125.72	6.4545	0.004
	5.75	63.6	31.6	125.74	6.2174	0.004
	6.00	65.0	33.0	125.74	6.0000	0.004
	6.25	66.4	34.3	125.74	5.8000	0.004
	6.50	67.7	35.7	125.75	5.6154	0.005
	6.75	69.1	37.1	125.75	5.4444	0.005
	7.00	70.4	38.4	125.76	5.2857	0.005
	7.25	71.7	39.7	125.76	5.1379	0.005
	7.50	73.1	41.0	125.77	5.0000	0.005

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
7.75	74.4	42.4	125.78	4.8710	0.006
8.00	75.9	43.8	125.78	4.7500	0.006
8.25	77.3	45.2	125.79	4.6364	0.006
8.50	78.6	46.6	125.79	4.5294	0.006
8.75	79.9	47.8	125.80	4.4286	0.006
9.00	81.1	49.1	125.80	4.3333	0.007
9.25	82.6	50.5	125.81	4.2432	0.007
9.50	83.8	51.8	125.82	4.1579	0.007
9.75	85.0	53.0	125.83	4.0769	0.007
10.00	86.3	54.2	125.83	4.0000	0.007
10.25	87.5	55.5	125.84	3.9268	0.008
10.50	88.9	56.8	125.85	3.8571	0.008
10.75	90.2	58.2	125.85	3.7907	0.008
11.00	91.4	59.3	125.85	3.7273	0.008
11.25	92.7	60.7	125.86	3.6667	0.009
11.50	94.1	62.0	125.86	3.6087	0.009
11.75	95.3	63.3	125.88	3.5532	0.009
12.00	96.6	64.5	125.88	3.5000	0.009
12.25	97.8	65.7	125.88	3.4490	0.01
12.50	99.0	67.0	125.89	3.4000	0.01
12.75	100.3	68.2	125.89	3.3529	0.010
13.00	101.5	69.4	125.90	3.3077	0.010
13.25	102.7	70.7	125.91	3.2642	0.011
13.50	103.8	71.8	125.91	3.2222	0.011
13.75	105.1	73.0	125.92	3.1818	0.011
14.00	106.2	74.2	125.93	3.1429	0.011
14.25	107.4	75.4	125.93	3.1053	0.012
14.50	108.7	76.6	125.94	3.0690	0.012
14.75	109.9	77.8	125.95	3.0339	0.012
15.00	111.0	79.0	125.96	3.0000	0.012
15.25	112.3	80.2	125.96	2.9672	0.013
15.50	113.5	81.4	125.96	2.9355	0.013
15.75	114.7	82.7	125.97	2.9048	0.013
16.00	115.9	83.8	125.98	2.8750	0.013
16.25	117.1	85.0	125.99	2.8462	0.014
16.50	118.3	86.3	125.99	2.8182	0.014
16.75	119.5	87.5	126.00	2.7910	0.014
17.00	120.7	88.6	126.01	2.7647	0.015
17.25	121.9	89.8	126.01	2.7391	0.015
17.50	123.0	91.0	126.02	2.7143	0.015
17.75	124.2	92.2	126.02	2.6901	0.015
18.00	125.4	93.3	126.03	2.6667	0.016
18.25	126.6	94.6	126.04	2.6438	0.016
18.50	127.9	95.8	126.04	2.6216	0.016
18.75	129.1	97.0	126.05	2.6000	0.017
19.00	130.2	98.1	126.05	2.5789	0.017
19.25	131.3	99.2	126.06	2.5584	0.017
19.50	132.5	100.5	126.07	2.5385	0.018
19.75	133.6	101.6	126.08	2.5190	0.018
20.00	134.8	102.7	126.08	2.5000	0.018
20.25	136.0	103.9	126.09	2.4815	0.018

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
20.50	137.1	105.1	126.09	2.4634	0.019
20.75	138.2	106.2	126.10	2.4458	0.019
21.00	139.4	107.3	126.10	2.4286	0.019
21.25	140.5	108.4	126.11	2.4118	0.020
21.50	141.7	109.6	126.12	2.3955	0.020
21.75	142.8	110.8	126.13	2.3795	0.020
22.00	144.0	112.0	126.13	2.3634	0.021
22.25	145.2	113.1	126.14	2.3482	0.021
22.50	146.2	114.1	126.14	2.3335	0.021
22.75	147.4	115.3	126.15	2.3187	0.022
23.00	148.5	116.4	126.15	2.3043	0.022
23.25	149.6	117.5	126.16	2.2903	0.022
23.50	150.7	118.7	126.16	2.2766	0.023
23.75	151.9	119.8	126.17	2.2631	0.023
24.00	153.2	121.1	126.18	2.2501	0.023
24.25	154.3	122.2	126.18	2.2375	0.024
24.50	155.3	123.2	126.19	2.2248	0.024
24.75	156.3	124.3	126.19	2.2121	0.024
25.00	157.4	125.4	126.20	2.2001	0.025
25.25	158.6	126.6	126.20	2.1881	0.025
25.50	159.6	127.6	126.21	2.1763	0.025
25.75	160.8	128.7	126.22	2.1651	0.026
26.00	161.9	129.8	126.22	2.1538	0.026
26.25	163.1	131.0	126.23	2.1423	0.027
26.50	164.2	132.1	126.24	2.1321	0.027
26.75	165.4	133.4	126.24	2.1215	0.027
27.00	166.5	134.5	126.25	2.1111	0.028
27.25	167.5	135.5	126.25	2.1003	0.028
27.50	168.5	136.5	126.26	2.0903	0.028
27.75	169.6	137.6	126.26	2.0811	0.029
28.00	170.7	138.6	126.27	2.0714	0.029
28.25	171.8	139.7	126.28	2.0613	0.030
28.50	173.0	140.9	126.28	2.0525	0.030
28.75	174.1	142.0	126.29	2.0435	0.030
29.00	175.1	143.1	126.30	2.0345	0.031
29.25	176.4	144.4	126.30	2.0255	0.031
29.50	177.4	145.4	126.31	2.0163	0.031
29.75	178.5	146.5	126.32	2.0084	0.032
30.00	179.6	147.5	126.32	2.0000	0.032
30.25	180.7	148.6	126.33	1.9917	0.033
30.50	181.7	149.6	126.33	1.9835	0.033
30.75	182.8	150.7	126.34	1.9755	0.033
31.00	184.0	151.9	126.34	1.9677	0.034
31.25	184.9	152.8	126.35	1.9600	0.034
31.50	186.0	153.9	126.35	1.9524	0.035
31.75	187.1	155.0	126.36	1.9449	0.035
32.00	188.2	156.2	126.37	1.9375	0.035
32.25	189.2	157.2	126.37	1.9302	0.036
32.50	190.3	158.3	126.37	1.9231	0.036
32.75	191.5	159.5	126.38	1.9160	0.037
33.00	192.5	160.5	126.39	1.9091	0.037

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
33.25	193.4	161.4	126.39	1.9023	0.037
33.50	194.5	162.5	126.40	1.8955	0.038
33.75	195.6	163.6	126.40	1.8889	0.038
34.00	196.7	164.7	126.41	1.8824	0.039
34.25	197.7	165.7	126.42	1.8759	0.039
34.50	198.6	166.6	126.43	1.8696	0.039
34.75	199.7	167.7	126.43	1.8633	0.040
35.00	200.7	168.7	126.44	1.8571	0.040
35.25	201.8	169.7	126.44	1.8511	0.041
35.50	202.9	170.9	126.45	1.8451	0.041
35.75	204.0	172.0	126.45	1.8392	0.042
36.00	205.2	173.1	126.45	1.8333	0.042
36.25	206.2	174.2	126.46	1.8276	0.043
36.50	207.3	175.2	126.47	1.8219	0.043
36.75	208.4	176.3	126.47	1.8163	0.043
37.00	209.3	177.3	126.48	1.8108	0.044
37.25	210.3	178.3	126.48	1.8054	0.044
37.50	211.5	179.4	126.49	1.8000	0.045
37.75	212.4	180.4	126.50	1.7947	0.045
38.00	213.5	181.5	126.51	1.7895	0.046
38.25	214.6	182.5	126.51	1.7843	0.046
38.50	215.7	183.6	126.51	1.7792	0.047
38.75	216.7	184.6	126.52	1.7742	0.047
39.00	217.7	185.6	126.53	1.7692	0.047
39.25	218.8	186.7	126.53	1.7643	0.048
39.50	220.0	187.9	126.53	1.7595	0.048
39.75	221.0	188.9	126.54	1.7547	0.049
40.00	222.0	189.9	126.55	1.7500	0.049
40.25	222.9	190.9	126.55	1.7453	0.050
40.50	223.9	191.9	126.56	1.7407	0.050
40.75	224.9	192.9	126.56	1.7362	0.051
41.00	226.0	194.0	126.56	1.7317	0.051
41.25	226.8	194.8	126.58	1.7273	0.051
41.50	227.9	195.8	126.58	1.7229	0.052
41.75	228.9	196.9	126.58	1.7186	0.052
42.00	230.0	198.0	126.59	1.7143	0.053
42.25	231.0	199.0	126.59	1.7101	0.053
42.50	231.9	199.8	126.60	1.7059	0.054
42.75	233.2	201.2	126.60	1.7018	0.054
43.00	234.2	202.1	126.61	1.6977	0.055
43.25	235.2	203.1	126.62	1.6936	0.055
43.50	236.2	204.2	126.62	1.6897	0.056
43.75	237.3	205.2	126.62	1.6857	0.056
44.00	238.3	206.3	126.63	1.6818	0.057
44.25	239.4	207.4	126.64	1.6780	0.057
44.50	240.4	208.4	126.64	1.6742	0.058
44.75	241.5	209.5	126.65	1.6704	0.058
45.00	242.6	210.6	126.65	1.6667	0.059
45.25	243.6	211.6	126.66	1.6630	0.059
45.50	244.5	212.4	126.66	1.6593	0.060
45.75	245.4	213.3	126.67	1.6557	0.060

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quirque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
46.00	246.5	214.4	126.67	1.6522	0.061
46.25	247.5	215.4	126.68	1.6486	0.061
46.50	248.4	216.4	126.68	1.6452	0.062
46.75	249.5	217.5	126.69	1.6417	0.062
47.00	250.5	218.5	126.69	1.6383	0.063
47.25	251.5	219.5	126.70	1.6349	0.063
47.50	252.5	220.5	126.71	1.6316	0.064
47.75	253.5	221.4	126.71	1.6283	0.064
48.00	254.5	222.4	126.71	1.6250	0.065
48.25	255.4	223.3	126.72	1.6218	0.065
48.50	256.4	224.3	126.73	1.6186	0.066
48.75	257.4	225.3	126.73	1.6154	0.066
49.00	258.4	226.4	126.73	1.6122	0.067
49.25	259.5	227.4	126.74	1.6091	0.067
49.50	260.5	228.5	126.75	1.6061	0.068
49.75	261.5	229.5	126.75	1.6030	0.068
50.00	262.7	230.6	126.75	1.6000	0.069
50.25	263.6	231.6	126.75	1.5970	0.069
50.50	264.6	232.6	126.76	1.5941	0.070
50.75	265.5	233.5	126.77	1.5911	0.071
51.00	266.6	234.6	126.78	1.5882	0.071
51.25	267.6	235.5	126.78	1.5854	0.072
51.50	268.6	236.5	126.78	1.5825	0.072
51.75	269.6	237.5	126.79	1.5797	0.073
52.00	270.5	238.4	126.80	1.5769	0.073
52.25	271.6	239.5	126.80	1.5742	0.074
52.50	272.5	240.5	126.81	1.5714	0.074
52.75	273.4	241.4	126.81	1.5687	0.075
53.00	274.4	242.4	126.82	1.5660	0.075
53.25	275.4	243.4	126.82	1.5634	0.076
53.50	276.4	244.4	126.83	1.5607	0.076
53.75	277.5	245.4	126.84	1.5581	0.077
54.00	278.5	246.4	126.84	1.5556	0.078
54.25	279.4	247.3	126.85	1.5530	0.078
54.50	280.4	248.3	126.85	1.5505	0.079
54.75	281.5	249.4	126.85	1.5479	0.079
55.00	282.4	250.4	126.86	1.5455	0.080
55.25	283.4	251.4	126.87	1.5430	0.080
55.50	284.3	252.3	126.87	1.5405	0.081
55.75	285.3	253.3	126.88	1.5381	0.081
56.00	286.4	254.3	126.87	1.5357	0.082
56.25	287.3	255.2	126.88	1.5333	0.083
56.50	288.3	256.2	126.89	1.5310	0.083
56.75	289.3	257.2	126.90	1.5286	0.084
57.00	290.1	258.1	126.90	1.5263	0.084
57.25	291.1	259.1	126.91	1.5240	0.085
57.50	292.1	260.1	126.91	1.5217	0.085
57.75	293.1	261.0	126.92	1.5195	0.086
58.00	294.1	262.0	126.92	1.5172	0.086
58.25	295.0	262.9	126.93	1.5150	0.087
58.50	296.0	264.0	126.93	1.5128	0.088

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	58.75	297.0	265.0	126.93	1.5106	0.088
	59.00	297.9	265.8	126.94	1.5085	0.089
	59.25	298.9	266.8	126.95	1.5063	0.089
	59.50	299.9	267.8	126.95	1.5042	0.090
	59.75	300.8	268.7	126.96	1.5021	0.090
***** End Shut-in 1	60.00	301.6	269.6	126.96	1.5000	0.091
***** Start Flow 2	0.00	28.6	0.0	126.97		
	0.25	30.2	1.6	126.97		
	0.50	31.7	3.1	126.97		
	0.75	32.3	3.7	126.97		
	1.00	31.8	3.2	126.98		
	1.25	30.2	1.6	126.98		
	1.50	33.4	4.8	126.98		
	1.75	32.8	4.2	126.98		
	2.00	30.3	1.7	126.99		
	2.25	33.5	4.9	126.99		
	2.50	32.1	3.4	126.99		
	2.75	34.3	5.7	127.00		
	3.00	33.4	4.8	127.00		
	3.25	31.2	2.6	127.01		
	3.50	34.2	5.6	127.01		
	3.75	33.6	5.0	127.01		
	4.00	32.7	4.1	127.01		
	4.25	32.3	3.7	127.01		
	4.50	35.2	6.5	127.02		
	4.75	34.9	6.3	127.02		
	5.00	34.3	5.7	127.02		
	5.25	34.0	5.4	127.03		
	5.50	33.0	4.4	127.03		
	5.75	35.8	7.2	127.03		
	6.00	35.0	6.4	127.04		
	6.25	34.2	5.6	127.04		
	6.50	33.1	4.5	127.05		
	6.75	35.7	7.0	127.05		
	7.00	34.6	6.0	127.06		
	7.25	32.8	4.2	127.06		
	7.50	35.9	7.3	127.05		
	7.75	34.7	6.0	127.06		
	8.00	32.9	4.3	127.07		
	8.25	32.9	4.3	127.07		
	8.50	35.4	6.8	127.07		
	8.75	35.6	7.0	127.08		
	9.00	34.5	5.9	127.08		
	9.25	33.4	4.8	127.08		
	9.50	35.8	7.2	127.09		
	9.75	34.5	5.9	127.09		
	10.00	34.2	5.5	127.10		
	10.25	35.8	7.2	127.10		
	10.50	34.8	6.2	127.10		
	10.75	34.1	5.5	127.11		
	11.00	34.9	6.3	127.11		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
11.25	35.7	7.0	127.12		
11.50	35.2	6.6	127.11		
11.75	34.2	5.6	127.12		
12.00	33.1	4.4	127.12		
12.25	36.0	7.4	127.13		
12.50	34.8	6.2	127.14		
12.75	33.9	5.3	127.14		
13.00	35.7	7.0	127.14		
13.25	35.5	6.9	127.15		
13.50	35.3	6.7	127.16		
13.75	34.2	5.6	127.16		
14.00	36.0	7.4	127.16		
14.25	35.7	7.1	127.17		
14.50	34.2	5.6	127.17		
14.75	36.4	7.8	127.18		
15.00	35.5	6.9	127.18		
15.25	34.1	5.5	127.19		
15.50	34.7	6.1	127.19		
15.75	33.8	5.2	127.20		
16.00	36.3	7.7	127.20		
16.25	34.8	6.2	127.21		
16.50	36.8	8.1	127.22		
16.75	35.7	7.0	127.22		
17.00	35.5	6.9	127.23		
17.25	34.3	5.7	127.23		
17.50	36.6	8.0	127.24		
17.75	35.6	7.0	127.24		
18.00	33.8	5.2	127.24		
18.25	36.3	7.7	127.25		
18.50	35.0	6.4	127.26		
18.75	34.4	5.8	127.26		
19.00	35.8	7.2	127.26		
19.25	34.2	5.5	127.27		
19.50	36.4	7.8	127.28		
19.75	35.2	6.5	127.28		
20.00	34.1	5.5	127.29		
20.25	36.4	7.8	127.30		
20.50	35.7	7.1	127.30		
20.75	34.7	6.0	127.31		
21.00	35.8	7.2	127.31		
21.25	36.2	7.6	127.31		
21.50	35.0	6.4	127.32		
21.75	36.9	8.3	127.33		
22.00	35.8	7.2	127.33		
22.25	33.7	5.1	127.33		
22.50	36.4	7.8	127.34		
22.75	35.0	6.4	127.35		
23.00	36.8	8.2	127.35		
23.25	35.7	7.1	127.35		
23.50	33.6	5.0	127.36		
23.75	36.2	7.6	127.36		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
24.00	34.8	6.2	127.38		
24.25	36.8	8.2	127.38		
24.50	35.5	6.9	127.38		
24.75	34.3	5.7	127.40		
25.00	36.1	7.5	127.39		
25.25	34.2	5.6	127.40		
25.50	36.7	8.1	127.40		
25.75	35.3	6.7	127.41		
26.00	36.1	7.5	127.41		
26.25	36.0	7.4	127.42		
26.50	34.0	5.4	127.43		
26.75	36.5	7.9	127.44		
27.00	35.2	6.5	127.44		
27.25	36.8	8.2	127.45		
27.50	35.8	7.2	127.45		
27.75	35.0	6.4	127.46		
28.00	36.3	7.7	127.46		
28.25	34.1	5.5	127.47		
28.50	36.6	8.0	127.47		
28.75	34.8	6.2	127.48		
29.00	36.9	8.3	127.48		
29.25	36.3	7.7	127.49		
29.50	34.2	5.6	127.50		
29.75	36.2	7.6	127.50		
30.00	36.2	7.6	127.50		
30.25	34.7	6.0	127.51		
30.50	36.7	8.1	127.51		
30.75	34.7	6.0	127.52		
31.00	36.7	8.1	127.53		
31.25	35.2	6.5	127.54		
31.50	37.0	8.4	127.54		
31.75	35.8	7.2	127.54		
32.00	37.0	8.4	127.55		
32.25	36.3	7.7	127.56		
32.50	34.1	5.5	127.56		
32.75	36.7	8.1	127.57		
33.00	35.3	6.7	127.57		
33.25	37.4	8.8	127.57		
33.50	35.9	7.3	127.58		
33.75	37.5	8.9	127.59		
34.00	35.8	7.2	127.59		
34.25	37.5	8.9	127.60		
34.50	35.7	7.1	127.61		
34.75	36.8	8.2	127.61		
35.00	36.1	7.5	127.62		
35.25	34.1	5.5	127.62		
35.50	36.4	7.8	127.63		
35.75	34.5	5.9	127.63		
36.00	36.5	7.9	127.63		
36.25	34.5	5.9	127.64		
36.50	36.7	8.1	127.64		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 D3T#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/37

TIME: 19:00:16

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
36.75	34.2	5.6	127.65		
37.00	36.7	8.1	127.65		
37.25	34.9	6.3	127.66		
37.50	37.1	8.5	127.66		
37.75	35.2	6.5	127.67		
38.00	37.1	8.5	127.67		
38.25	35.2	6.5	127.68		
38.50	37.2	8.6	127.68		
38.75	35.1	6.5	127.69		
39.00	37.1	8.5	127.70		
39.25	35.0	6.4	127.71		
39.50	37.3	8.7	127.71		
39.75	35.7	7.1	127.71		
40.00	37.3	8.6	127.72		
40.25	36.0	7.4	127.72		
40.50	37.7	9.1	127.72		
40.75	35.7	7.1	127.74		
41.00	37.6	9.0	127.74		
41.25	35.5	6.9	127.74		
41.50	37.3	8.7	127.75		
41.75	35.6	7.0	127.76		
42.00	37.3	8.6	127.76		
42.25	35.6	7.0	127.76		
42.50	37.5	8.9	127.77		
42.75	35.7	7.0	127.77		
43.00	37.6	9.0	127.79		
43.25	35.7	7.0	127.78		
43.50	37.4	8.8	127.79		
43.75	35.6	7.0	127.80		
44.00	37.5	8.9	127.80		
44.25	36.7	8.1	127.81		
44.50	36.3	7.7	127.81		
44.75	36.8	8.2	127.82		
45.00	37.8	9.2	127.83		
45.25	36.8	8.2	127.83		
45.50	35.7	7.0	127.83		
45.75	36.7	8.1	127.84		
46.00	38.0	9.4	127.84		
46.25	36.4	7.8	127.85		
46.50	37.8	9.2	127.85		
46.75	36.2	7.6	127.86		
47.00	37.8	9.2	127.86		
47.25	36.0	7.4	127.86		
47.50	37.7	9.1	127.87		
47.75	35.7	7.1	127.88		
48.00	37.4	8.8	127.88		
48.25	35.0	6.4	127.89		
48.50	37.3	8.6	127.90		
48.75	35.1	6.5	127.90		
49.00	36.7	8.1	127.90		
49.25	37.6	9.0	127.91		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	49.50	36.5	7.9	127.92		
	49.75	38.0	9.4	127.92		
	50.00	36.2	7.6	127.92		
	50.25	37.7	9.1	127.92		
	50.50	35.7	7.1	127.93		
	50.75	37.5	8.9	127.94		
	51.00	35.6	7.0	127.94		
	51.25	37.5	8.9	127.95		
	51.50	36.1	7.5	127.95		
	51.75	37.9	9.3	127.95		
	52.00	35.3	6.7	127.96		
	52.25	37.4	8.8	127.97		
	52.50	35.3	6.7	127.98		
	52.75	37.4	8.8	127.97		
	53.00	35.4	6.8	127.98		
	53.25	36.9	8.3	127.99		
	53.50	38.3	9.7	128.00		
	53.75	36.7	8.1	127.99		
	54.00	38.1	9.5	127.99		
	54.25	36.2	7.6	128.01		
	54.50	37.8	9.1	128.01		
	54.75	35.3	6.7	128.01		
	55.00	37.6	9.0	128.02		
	55.25	35.8	7.2	128.03		
	55.50	37.1	8.5	128.02		
	55.75	38.5	9.9	128.04		
	56.00	36.4	7.8	128.03		
	56.25	38.0	9.4	128.04		
	56.50	36.0	7.4	128.04		
	56.75	37.7	9.1	128.05		
	57.00	35.6	7.0	128.05		
	57.25	37.7	9.1	128.06		
	57.50	35.3	6.7	128.07		
	57.75	37.3	8.6	128.07		
	58.00	38.4	9.8	128.08		
	58.25	36.8	8.2	128.09		
	58.50	38.3	9.7	128.08		
	58.75	36.1	7.5	128.09		
	59.00	37.8	9.2	128.10		
	59.25	35.3	6.7	128.10		
	59.50	37.4	8.8	128.10		
	59.75	36.1	7.5	128.11		
***** End Flow 2	60.00	37.2	8.6	128.11		
***** Start Shutin 2	0.00	37.2	0.0	128.11	0.0000	0.001
	0.25	38.3	1.2	128.12	361.0000	0.001
	0.50	39.3	2.1	128.12	181.0000	0.002
	0.75	40.2	3.0	128.13	121.0000	0.002
	1.00	41.5	4.4	128.14	91.0000	0.002
	1.25	42.3	5.1	128.14	73.0000	0.002
	1.50	43.5	6.3	128.14	61.0000	0.002
	1.75	44.3	7.1	128.15	52.4286	0.002

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
2.00	45.5	8.3	128.15	46.0000	0.002
2.25	46.2	9.1	128.16	41.0000	0.002
2.50	47.2	10	128.16	37.0000	0.002
2.75	48.0	10.8	128.17	33.7273	0.002
3.00	48.9	11.7	128.17	31.0000	0.002
3.25	49.8	12.6	128.18	28.6923	0.002
3.50	50.7	13.5	128.19	26.7143	0.003
3.75	51.6	14.4	128.18	25.0000	0.003
4.00	52.5	15.4	128.19	23.5000	0.003
4.25	53.4	16.2	128.20	22.1765	0.003
4.50	54.3	17.1	128.21	21.0000	0.003
4.75	55.1	18.0	128.21	19.9474	0.003
5.00	56.1	18.9	128.21	19.0000	0.003
5.25	56.8	19.6	128.21	18.1429	0.003
5.50	57.7	20.6	128.22	17.3636	0.003
5.75	58.5	21.3	128.22	16.6522	0.003
6.00	59.3	22.2	128.23	16.0000	0.004
6.25	60.2	23.0	128.24	15.4000	0.004
6.50	61.0	23.8	128.24	14.8462	0.004
6.75	61.8	24.7	128.24	14.3333	0.004
7.00	62.7	25.5	128.24	13.8571	0.004
7.25	63.6	26.4	128.25	13.4138	0.004
7.50	64.3	27.1	128.25	13.0000	0.004
7.75	65.0	27.9	128.26	12.6129	0.004
8.00	66.0	28.8	128.27	12.2500	0.004
8.25	66.8	29.6	128.27	11.9091	0.004
8.50	67.6	30.5	128.28	11.5882	0.005
8.75	68.4	31.2	128.28	11.2857	0.005
9.00	69.1	32.0	128.29	11.0000	0.005
9.25	70.1	32.9	128.29	10.7297	0.005
9.50	70.7	33.6	128.30	10.4737	0.005
9.75	71.6	34.4	128.30	10.2308	0.005
10.00	72.3	35.2	128.31	10.0000	0.005
10.25	73.2	36.0	128.31	9.7805	0.005
10.50	73.9	36.8	128.31	9.5714	0.005
10.75	74.7	37.5	128.32	9.3721	0.006
11.00	75.5	38.4	128.33	9.1818	0.006
11.25	76.3	39.1	128.33	9.0000	0.006
11.50	77.0	39.9	128.34	8.8261	0.006
11.75	77.7	40.5	128.34	8.6596	0.006
12.00	78.5	41.4	128.35	8.5000	0.006
12.25	79.3	42.1	128.35	8.3469	0.006
12.50	80.1	42.9	128.36	8.2000	0.006
12.75	80.9	43.7	128.35	8.0588	0.007
13.00	81.7	44.5	128.37	7.9231	0.007
13.25	82.4	45.2	128.37	7.7925	0.007
13.50	83.2	46.0	128.38	7.6667	0.007
13.75	84.0	46.8	128.37	7.5455	0.007
14.00	84.8	47.6	128.38	7.4286	0.007
14.25	85.5	48.3	128.38	7.3158	0.007
14.50	86.2	49.0	128.39	7.2069	0.007

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
14.75	86.9	49.8	128.39	7.1017	0.008
15.00	87.7	50.5	128.40	7.0000	0.008
15.25	88.5	51.3	128.41	6.9016	0.008
15.50	89.2	52.0	128.41	6.8065	0.008
15.75	90.0	52.9	128.42	6.7143	0.008
16.00	90.7	53.5	128.42	6.6250	0.008
16.25	91.6	54.4	128.43	6.5385	0.008
16.50	92.2	55.1	128.43	6.4545	0.009
16.75	92.9	55.7	128.43	6.3731	0.009
17.00	93.7	56.6	128.44	6.2941	0.009
17.25	94.4	57.2	128.45	6.2174	0.009
17.50	95.2	58.0	128.44	6.1429	0.009
17.75	95.9	58.7	128.46	6.0704	0.009
18.00	96.7	59.5	128.46	6.0000	0.009
18.25	97.3	60.2	128.46	5.9315	0.009
18.50	98.1	60.9	128.47	5.8649	0.01
18.75	98.8	61.6	128.47	5.8000	0.01
19.00	99.5	62.4	128.47	5.7368	0.01
19.25	100.2	63.0	128.48	5.6753	0.010
19.50	101.0	63.8	128.48	5.6154	0.010
19.75	101.7	64.5	128.49	5.5570	0.010
20.00	102.4	65.2	128.49	5.5000	0.010
20.25	103.1	66.0	128.51	5.4444	0.011
20.50	103.9	66.7	128.50	5.3902	0.011
20.75	104.6	67.4	128.51	5.3373	0.011
21.00	105.3	68.1	128.51	5.2857	0.011
21.25	106.1	68.9	128.51	5.2353	0.011
21.50	106.7	69.6	128.52	5.1860	0.011
21.75	107.4	70.2	128.52	5.1379	0.012
22.00	108.2	71.0	128.52	5.0909	0.012
22.25	108.9	71.8	128.53	5.0449	0.012
22.50	109.6	72.4	128.54	5.0000	0.012
22.75	110.4	73.2	128.54	4.9560	0.012
23.00	111.0	73.9	128.54	4.9130	0.012
23.25	111.8	74.6	128.56	4.8710	0.012
23.50	112.5	75.3	128.55	4.8298	0.013
23.75	113.1	76.0	128.56	4.7895	0.013
24.00	113.9	76.7	128.56	4.7500	0.013
24.25	114.7	77.5	128.57	4.7113	0.013
24.50	115.4	78.2	128.57	4.6735	0.013
24.75	116.1	78.9	128.57	4.6364	0.013
25.00	116.8	79.6	128.58	4.6000	0.014
25.25	117.5	80.3	128.58	4.5644	0.014
25.50	118.2	81.1	128.59	4.5294	0.014
25.75	118.9	81.7	128.59	4.4951	0.014
26.00	119.7	82.5	128.59	4.4615	0.014
26.25	120.3	83.2	128.60	4.4286	0.014
26.50	121.0	83.8	128.60	4.3962	0.015
26.75	121.7	84.5	128.61	4.3645	0.015
27.00	122.4	85.3	128.61	4.3333	0.015
27.25	123.0	85.9	128.62	4.3028	0.015

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
27.50	123.7	86.5	128.62	4.2727	0.015
27.75	124.4	87.2	128.63	4.2432	0.015
28.00	125.1	88.0	128.63	4.2143	0.016
28.25	125.7	88.5	128.63	4.1858	0.016
28.50	126.5	89.3	128.63	4.1579	0.016
28.75	127.1	89.9	128.64	4.1304	0.016
29.00	127.8	90.6	128.65	4.1034	0.016
29.25	128.5	91.3	128.65	4.0769	0.017
29.50	129.2	92.0	128.65	4.0508	0.017
29.75	129.8	92.7	128.66	4.0252	0.017
30.00	130.5	93.3	128.66	4.0000	0.017
30.25	131.1	93.9	128.67	3.9752	0.017
30.50	131.8	94.6	128.67	3.9508	0.017
30.75	132.4	95.3	128.67	3.9268	0.018
31.00	133.1	95.9	128.68	3.9032	0.018
31.25	133.9	96.7	128.68	3.8800	0.018
31.50	134.5	97.4	128.69	3.8571	0.018
31.75	135.2	98.0	128.69	3.8346	0.018
32.00	135.8	98.6	128.69	3.8125	0.018
32.25	136.5	99.3	128.70	3.7907	0.019
32.50	137.1	100	128.70	3.7692	0.019
32.75	137.8	100.6	128.71	3.7481	0.019
33.00	138.5	101.3	128.71	3.7273	0.019
33.25	139.1	102.0	128.71	3.7068	0.019
33.50	139.8	102.6	128.72	3.6866	0.020
33.75	140.4	103.2	128.73	3.6667	0.020
34.00	141.1	103.9	128.73	3.6471	0.020
34.25	141.7	104.6	128.73	3.6277	0.020
34.50	142.4	105.2	128.73	3.6087	0.020
34.75	143.1	105.9	128.74	3.5899	0.020
35.00	143.8	106.6	128.74	3.5714	0.021
35.25	144.4	107.3	128.75	3.5532	0.021
35.50	145.0	107.8	128.75	3.5352	0.021
35.75	145.7	108.5	128.76	3.5175	0.021
36.00	146.3	109.1	128.74	3.5000	0.021
36.25	146.9	109.8	128.76	3.4828	0.022
36.50	147.5	110.4	128.77	3.4658	0.022
36.75	148.3	111.1	128.77	3.4490	0.022
37.00	148.9	111.7	128.78	3.4324	0.022
37.25	149.6	112.4	128.78	3.4161	0.022
37.50	150.2	113.1	128.78	3.4000	0.023
37.75	150.8	113.6	128.79	3.3841	0.023
38.00	151.5	114.3	128.79	3.3684	0.023
38.25	152.1	114.9	128.79	3.3529	0.023
38.50	152.7	115.6	128.80	3.3377	0.023
38.75	153.3	116.2	128.81	3.3226	0.024
39.00	154.1	116.9	128.81	3.3077	0.024
39.25	154.7	117.5	128.81	3.2930	0.024
39.50	155.3	118.2	128.82	3.2785	0.024
39.75	156.0	118.8	128.82	3.2642	0.024
40.00	156.7	119.5	128.83	3.2500	0.025

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
40.25	157.4	120.2	128.83	3.2360	0.025
40.50	158.1	120.9	128.83	3.2222	0.025
40.75	158.8	121.6	128.84	3.2086	0.025
41.00	159.5	122.3	128.84	3.1951	0.025
41.25	160.1	123.0	128.84	3.1818	0.026
41.50	160.7	123.5	128.84	3.1687	0.026
41.75	161.4	124.2	128.85	3.1557	0.026
42.00	162.1	124.9	128.85	3.1429	0.026
42.25	162.8	125.6	128.86	3.1302	0.027
42.50	163.4	126.2	128.86	3.1176	0.027
42.75	164.0	126.8	128.87	3.1053	0.027
43.00	164.7	127.6	128.87	3.0930	0.027
43.25	165.3	128.2	128.86	3.0809	0.027
43.50	165.9	128.7	128.87	3.0690	0.028
43.75	166.6	129.4	128.88	3.0571	0.028
44.00	167.3	130.1	128.89	3.0455	0.028
44.25	167.8	130.7	128.88	3.0339	0.028
44.50	168.4	131.3	128.89	3.0225	0.028
44.75	169.2	132.0	128.89	3.0112	0.029
45.00	169.8	132.6	128.90	3.0000	0.029
45.25	170.3	133.1	128.91	2.9890	0.029
45.50	171.0	133.9	128.91	2.9780	0.029
45.75	171.7	134.5	128.91	2.9672	0.029
46.00	172.4	135.2	128.91	2.9565	0.030
46.25	173.0	135.8	128.91	2.9459	0.030
46.50	173.6	136.4	128.92	2.9355	0.030
46.75	174.2	137.1	128.92	2.9251	0.030
47.00	174.8	137.6	128.93	2.9149	0.031
47.25	175.4	138.2	128.93	2.9048	0.031
47.50	176.0	138.8	128.94	2.8947	0.031
47.75	176.6	139.4	128.94	2.8848	0.031
48.00	177.2	140.1	128.94	2.8750	0.031
48.25	177.8	140.7	128.95	2.8653	0.032
48.50	178.3	141.2	128.95	2.8557	0.032
48.75	179.0	141.8	128.95	2.8462	0.032
49.00	179.6	142.4	128.96	2.8367	0.032
49.25	180.2	143.0	128.96	2.8274	0.032
49.50	180.8	143.6	128.97	2.8182	0.033
49.75	181.5	144.4	128.97	2.8090	0.033
50.00	182.1	144.9	128.98	2.8000	0.033
50.25	182.6	145.4	128.98	2.7910	0.033
50.50	183.2	146.0	128.98	2.7822	0.034
50.75	184.0	146.8	128.98	2.7734	0.034
51.00	184.6	147.5	128.99	2.7647	0.034
51.25	185.1	148.0	128.99	2.7561	0.034
51.50	185.8	148.6	128.99	2.7476	0.035
51.75	186.4	149.2	129.00	2.7391	0.035
52.00	187.2	150.0	129.01	2.7308	0.035
52.25	187.7	150.5	129.00	2.7225	0.035
52.50	188.2	151.1	129.01	2.7143	0.035
52.75	188.8	151.7	129.02	2.7062	0.036

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
53.00	189.4	152.2	129.02	2.6981	0.036
53.25	190.0	152.8	129.02	2.6901	0.036
53.50	190.6	153.4	129.03	2.6822	0.036
53.75	191.2	154.0	129.03	2.6744	0.037
54.00	191.9	154.7	129.03	2.6667	0.037
54.25	192.4	155.2	129.04	2.6590	0.037
54.50	192.9	155.8	129.04	2.6514	0.037
54.75	193.6	156.4	129.04	2.6438	0.037
55.00	194.2	157.0	129.05	2.6364	0.038
55.25	194.8	157.6	129.05	2.6290	0.038
55.50	195.4	158.2	129.05	2.6216	0.038
55.75	195.9	158.7	129.06	2.6143	0.038
56.00	196.6	159.4	129.06	2.6071	0.039
56.25	197.1	160.0	129.07	2.6000	0.039
56.50	197.9	160.7	129.07	2.5929	0.039
56.75	198.4	161.2	129.09	2.5859	0.039
57.00	199.1	161.9	129.08	2.5789	0.040
57.25	199.7	162.5	129.08	2.5721	0.040
57.50	200.3	163.2	129.09	2.5652	0.040
57.75	200.7	163.6	129.09	2.5584	0.040
58.00	201.3	164.2	129.09	2.5517	0.041
58.25	201.8	164.7	129.09	2.5451	0.041
58.50	202.5	165.3	129.10	2.5385	0.041
58.75	203.1	165.9	129.11	2.5319	0.041
59.00	203.7	166.5	129.11	2.5254	0.041
59.25	204.2	167.0	129.11	2.5190	0.042
59.50	204.9	167.7	129.12	2.5126	0.042
59.75	205.4	168.3	129.12	2.5063	0.042
60.00	206.0	168.8	129.13	2.5000	0.042
60.25	206.5	169.4	129.13	2.4938	0.043
60.50	207.2	170.0	129.13	2.4876	0.043
60.75	207.7	170.5	129.14	2.4815	0.043
61.00	208.3	171.1	129.14	2.4754	0.043
61.25	208.9	171.7	129.14	2.4694	0.044
61.50	209.5	172.3	129.15	2.4634	0.044
61.75	210.0	172.8	129.15	2.4575	0.044
62.00	210.7	173.5	129.15	2.4516	0.044
62.25	211.2	174.0	129.16	2.4458	0.045
62.50	211.8	174.7	129.16	2.4400	0.045
62.75	212.2	175.1	129.16	2.4343	0.045
63.00	212.9	175.7	129.17	2.4286	0.045
63.25	213.6	176.4	129.17	2.4229	0.046
63.50	214.1	176.9	129.17	2.4173	0.046
63.75	214.7	177.5	129.18	2.4118	0.046
64.00	215.4	178.2	129.19	2.4062	0.046
64.25	215.9	178.7	129.18	2.4008	0.047
64.50	216.5	179.4	129.19	2.3953	0.047
64.75	216.9	179.8	129.19	2.3900	0.047
65.00	217.6	180.4	129.20	2.3846	0.047
65.25	218.1	180.9	129.19	2.3793	0.048
65.50	218.8	181.6	129.19	2.3740	0.048

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
65.75	219.4	182.2	129.20	2.3688	0.048
66.00	219.9	182.7	129.21	2.3636	0.048
66.25	220.5	183.3	129.21	2.3585	0.049
66.50	221.1	183.9	129.22	2.3534	0.049
66.75	221.6	184.5	129.22	2.3483	0.049
67.00	222.1	185.0	129.23	2.3433	0.049
67.25	222.7	185.6	129.23	2.3383	0.050
67.50	223.3	186.2	129.23	2.3333	0.050
67.75	224.0	186.8	129.23	2.3284	0.050
68.00	224.5	187.3	129.24	2.3235	0.050
68.25	225.1	187.9	129.24	2.3187	0.051
68.50	225.6	188.4	129.25	2.3139	0.051
68.75	226.1	188.9	129.25	2.3091	0.051
69.00	226.7	189.5	129.25	2.3043	0.051
69.25	227.3	190.1	129.26	2.2996	0.052
69.50	227.9	190.7	129.26	2.2950	0.052
69.75	228.4	191.3	129.26	2.2903	0.052
70.00	229.0	191.9	129.27	2.2857	0.052
70.25	229.5	192.4	129.27	2.2811	0.053
70.50	230.0	192.9	129.27	2.2766	0.053
70.75	230.6	193.5	129.28	2.2721	0.053
71.00	231.2	194.0	129.28	2.2676	0.053
71.25	231.8	194.6	129.28	2.2632	0.054
71.50	232.3	195.1	129.29	2.2587	0.054
71.75	233.0	195.8	129.29	2.2544	0.054
72.00	233.5	196.3	129.29	2.2500	0.055
72.25	234.0	196.8	129.30	2.2457	0.055
72.50	234.6	197.4	129.31	2.2414	0.055
72.75	235.2	198.0	129.31	2.2371	0.055
73.00	235.7	198.6	129.31	2.2329	0.056
73.25	236.4	199.2	129.31	2.2287	0.056
73.50	236.8	199.7	129.31	2.2245	0.056
73.75	237.4	200.3	129.32	2.2203	0.056
74.00	238.0	200.8	129.32	2.2162	0.057
74.25	238.5	201.3	129.33	2.2121	0.057
74.50	239.1	201.9	129.33	2.2081	0.057
74.75	239.7	202.5	129.33	2.2040	0.057
75.00	240.2	203.0	129.34	2.2000	0.058
75.25	240.7	203.5	129.34	2.1960	0.058
75.50	241.4	204.2	129.34	2.1921	0.058
75.75	241.8	204.6	129.34	2.1881	0.058
76.00	242.4	205.2	129.35	2.1842	0.059
76.25	243.0	205.8	129.35	2.1803	0.059
76.50	243.5	206.3	129.36	2.1765	0.059
76.75	244.1	206.9	129.36	2.1726	0.060
77.00	244.6	207.5	129.36	2.1688	0.060
77.25	245.1	208.0	129.37	2.1650	0.060
77.50	245.7	208.6	129.37	2.1613	0.060
77.75	246.3	209.1	129.37	2.1576	0.061
78.00	246.8	209.7	129.37	2.1538	0.061
78.25	247.4	210.2	129.38	2.1502	0.061

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
78.50	247.9	210.7	129.39	2.1465	0.061
78.75	248.5	211.3	129.39	2.1429	0.062
79.00	249.0	211.8	129.39	2.1392	0.062
79.25	249.5	212.3	129.39	2.1356	0.062
79.50	250.0	212.8	129.39	2.1321	0.063
79.75	250.5	213.3	129.40	2.1285	0.063
80.00	251.1	213.9	129.40	2.1250	0.063
80.25	251.6	214.4	129.41	2.1215	0.063
80.50	252.4	215.2	129.42	2.1180	0.064
80.75	252.9	215.7	129.41	2.1146	0.064
81.00	253.3	216.1	129.42	2.1111	0.064
81.25	253.9	216.7	129.42	2.1077	0.064
81.50	254.5	217.3	129.43	2.1043	0.065
81.75	254.8	217.6	129.42	2.1009	0.065
82.00	255.4	218.2	129.43	2.0976	0.065
82.25	256.0	218.8	129.44	2.0942	0.066
82.50	256.5	219.3	129.44	2.0909	0.066
82.75	257.0	219.8	129.45	2.0876	0.066
83.00	257.6	220.4	129.45	2.0843	0.066
83.25	258.1	220.9	129.45	2.0811	0.067
83.50	258.6	221.4	129.46	2.0778	0.067
83.75	259.1	221.9	129.46	2.0746	0.067
84.00	259.6	222.4	129.46	2.0714	0.067
84.25	260.2	223.0	129.47	2.0682	0.068
84.50	260.7	223.5	129.47	2.0651	0.068
84.75	261.3	224.1	129.47	2.0619	0.068
85.00	261.8	224.6	129.48	2.0588	0.069
85.25	262.3	225.2	129.47	2.0557	0.069
85.50	262.9	225.8	129.47	2.0526	0.069
85.75	263.4	226.2	129.48	2.0496	0.069
86.00	263.9	226.8	129.48	2.0465	0.070
86.25	264.4	227.2	129.48	2.0435	0.070
86.50	264.9	227.7	129.49	2.0405	0.070
86.75	265.5	228.3	129.50	2.0375	0.070
87.00	265.9	228.7	129.50	2.0345	0.071
87.25	266.5	229.3	129.50	2.0315	0.071
87.50	267.0	229.8	129.51	2.0286	0.071
87.75	267.6	230.4	129.51	2.0256	0.072
88.00	268.1	230.9	129.51	2.0227	0.072
88.25	268.6	231.4	129.52	2.0198	0.072
88.50	269.1	231.9	129.52	2.0169	0.072
88.75	269.7	232.5	129.53	2.0141	0.073
89.00	270.2	233.0	129.53	2.0112	0.073
89.25	270.7	233.5	129.53	2.0084	0.073
89.50	271.2	234.1	129.53	2.0056	0.074
89.75	271.8	234.7	129.54	2.0028	0.074
90.00	272.3	235.1	129.54	2.0000	0.074
90.25	272.8	235.6	129.55	1.9972	0.074
90.50	273.3	236.1	129.55	1.9945	0.075
90.75	273.8	236.6	129.55	1.9917	0.075
91.00	274.3	237.1	129.55	1.9890	0.075

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
91.25	274.9	237.7	129.56	1.9863	0.076
91.50	275.4	238.2	129.56	1.9836	0.076
91.75	275.9	238.8	129.57	1.9809	0.076
92.00	276.4	239.3	129.57	1.9783	0.076
92.25	277.0	239.8	129.57	1.9756	0.077
92.50	277.5	240.4	129.57	1.9730	0.077
92.75	278.1	241.0	129.58	1.9704	0.077
93.00	278.6	241.5	129.58	1.9677	0.078
93.25	279.1	242.0	129.58	1.9651	0.078
93.50	279.6	242.5	129.58	1.9626	0.078
93.75	280.1	243.0	129.59	1.9600	0.078
94.00	280.6	243.5	129.59	1.9574	0.079
94.25	281.1	243.9	129.59	1.9549	0.079
94.50	281.7	244.6	129.60	1.9524	0.079
94.75	282.2	245.0	129.61	1.9499	0.080
95.00	282.7	245.6	129.61	1.9474	0.080
95.25	283.3	246.2	129.61	1.9449	0.080
95.50	283.8	246.6	129.62	1.9424	0.081
95.75	284.3	247.2	129.61	1.9399	0.081
96.00	284.8	247.7	129.62	1.9375	0.081
96.25	285.3	248.1	129.62	1.9351	0.081
96.50	285.8	248.6	129.62	1.9326	0.082
96.75	286.3	249.1	129.63	1.9302	0.082
97.00	286.8	249.6	129.63	1.9278	0.082
97.25	287.2	250.0	129.64	1.9254	0.082
97.50	287.6	250.4	129.64	1.9231	0.083
97.75	288.2	251.0	129.64	1.9207	0.083
98.00	288.8	251.6	129.65	1.9184	0.083
98.25	289.3	252.1	129.64	1.9160	0.084
98.50	289.8	252.6	129.66	1.9137	0.084
98.75	290.3	253.1	129.65	1.9114	0.084
99.00	290.7	253.5	129.66	1.9091	0.085
99.25	291.3	254.1	129.67	1.9068	0.085
99.50	291.8	254.6	129.67	1.9045	0.085
99.75	292.3	255.1	129.67	1.9023	0.085
100.00	292.8	255.6	129.68	1.9000	0.086
100.25	293.3	256.1	129.68	1.8978	0.086
100.50	293.8	256.7	129.68	1.8955	0.086
100.75	294.3	257.2	129.69	1.8933	0.087
101.00	294.8	257.7	129.69	1.8911	0.087
101.25	295.3	258.2	129.69	1.8889	0.087
101.50	295.8	258.6	129.70	1.8867	0.087
101.75	296.3	259.1	129.70	1.8845	0.088
102.00	296.8	259.7	129.70	1.8824	0.088
102.25	297.4	260.3	129.70	1.8802	0.088
102.50	297.9	260.7	129.71	1.8780	0.089
102.75	298.4	261.2	129.71	1.8759	0.089
103.00	298.8	261.6	129.71	1.8738	0.089
103.25	299.3	262.1	129.72	1.8717	0.090
103.50	299.9	262.7	129.72	1.8696	0.090
103.75	300.3	263.1	129.72	1.8675	0.090

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
104.00	300.8	263.6	129.73	1.8614	0.090
104.25	301.4	264.2	129.73	1.8613	0.091
104.50	301.9	264.7	129.74	1.8612	0.091
104.75	302.3	265.1	129.74	1.8512	0.091
105.00	303.0	265.8	129.74	1.8511	0.092
105.25	303.4	266.2	129.74	1.8511	0.092
105.50	303.9	266.7	129.75	1.8511	0.092
105.75	304.4	267.2	129.76	1.8511	0.093
106.00	304.8	267.6	129.75	1.8411	0.093
106.25	305.3	268.1	129.76	1.8411	0.093
106.50	305.8	268.7	129.76	1.8411	0.094
106.75	306.3	269.2	129.76	1.8411	0.094
107.00	306.7	269.6	129.76	1.8411	0.094
107.25	307.3	270.2	129.78	1.8312	0.094
107.50	307.8	270.7	129.77	1.8312	0.095
107.75	308.3	271.2	129.77	1.8313	0.095
108.00	308.8	271.7	129.78	1.8313	0.095
108.25	309.3	272.2	129.78	1.8314	0.096
108.50	309.9	272.7	129.79	1.8215	0.096
108.75	310.3	273.1	129.79	1.8216	0.096
109.00	310.8	273.6	129.79	1.8217	0.097
109.25	311.3	274.1	129.80	1.8218	0.097
109.50	311.8	274.6	129.81	1.8219	0.097
109.75	312.3	275.1	129.81	1.8210	0.098
110.00	312.7	275.5	129.83	1.8112	0.098
110.25	313.2	276.0	129.81	1.8113	0.098
110.50	313.8	276.6	129.81	1.8115	0.098
110.75	314.3	277.1	129.81	1.8116	0.099
111.00	314.7	277.5	129.82	1.8118	0.099
111.25	315.1	278.0	129.82	1.8010	0.099
111.50	315.6	278.5	129.82	1.8012	0.10
111.75	316.1	279.0	129.83	1.8014	0.10
112.00	316.7	279.5	129.83	1.8016	0.100
112.25	317.2	280.1	129.84	1.8018	0.101
112.50	317.7	280.5	129.84	1.8010	0.101
112.75	318.2	281.1	129.84	1.7912	0.101
113.00	318.7	281.6	129.84	1.7915	0.102
113.25	319.2	282.0	129.85	1.7917	0.102
113.50	319.8	282.6	129.85	1.7910	0.102
113.75	320.2	283.0	129.86	1.7912	0.103
114.00	320.7	283.5	129.86	1.7815	0.103
114.25	321.2	284.0	129.86	1.7817	0.103
114.50	321.7	284.5	129.86	1.7810	0.103
114.75	322.2	285.0	129.87	1.7813	0.104
115.00	322.7	285.5	129.88	1.7816	0.104
115.25	323.1	285.9	129.87	1.7819	0.104
115.50	323.6	286.4	129.88	1.7712	0.105
115.75	324.1	286.9	129.88	1.7715	0.105
116.00	324.6	287.5	129.89	1.7719	0.105
116.25	325.0	287.9	129.89	1.7712	0.106
116.50	325.6	288.5	129.89	1.7715	0.106

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/11/97

TIME: 19:00:16

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	116.75	326.1	289.0	129.90	1.7769	0.106
	117.00	326.6	289.5	129.90	1.7652	0.107
	117.25	327.1	289.9	129.90	1.7676	0.107
	117.50	327.5	290.3	129.90	1.7660	0.107
***** End Shut-in 2	117.75	328.0	290.8	129.90	1.7643	0.108
***** Final Hydro.	444.50	2584.5	0.0	130.10		

TEST HISTORY

9847 DST#1 Mary Nation #4 Quinque Oper. Comp.

Flag Points

t<Min.> P<PSIg>

A:	0.00	2538.26
B:	0.00	24.75
C:	30.00	32.05
D:	60.00	301.63
E:	0.00	28.61
F:	60.00	37.17
G:	117.75	327.98
Q:	0.00	2584.55

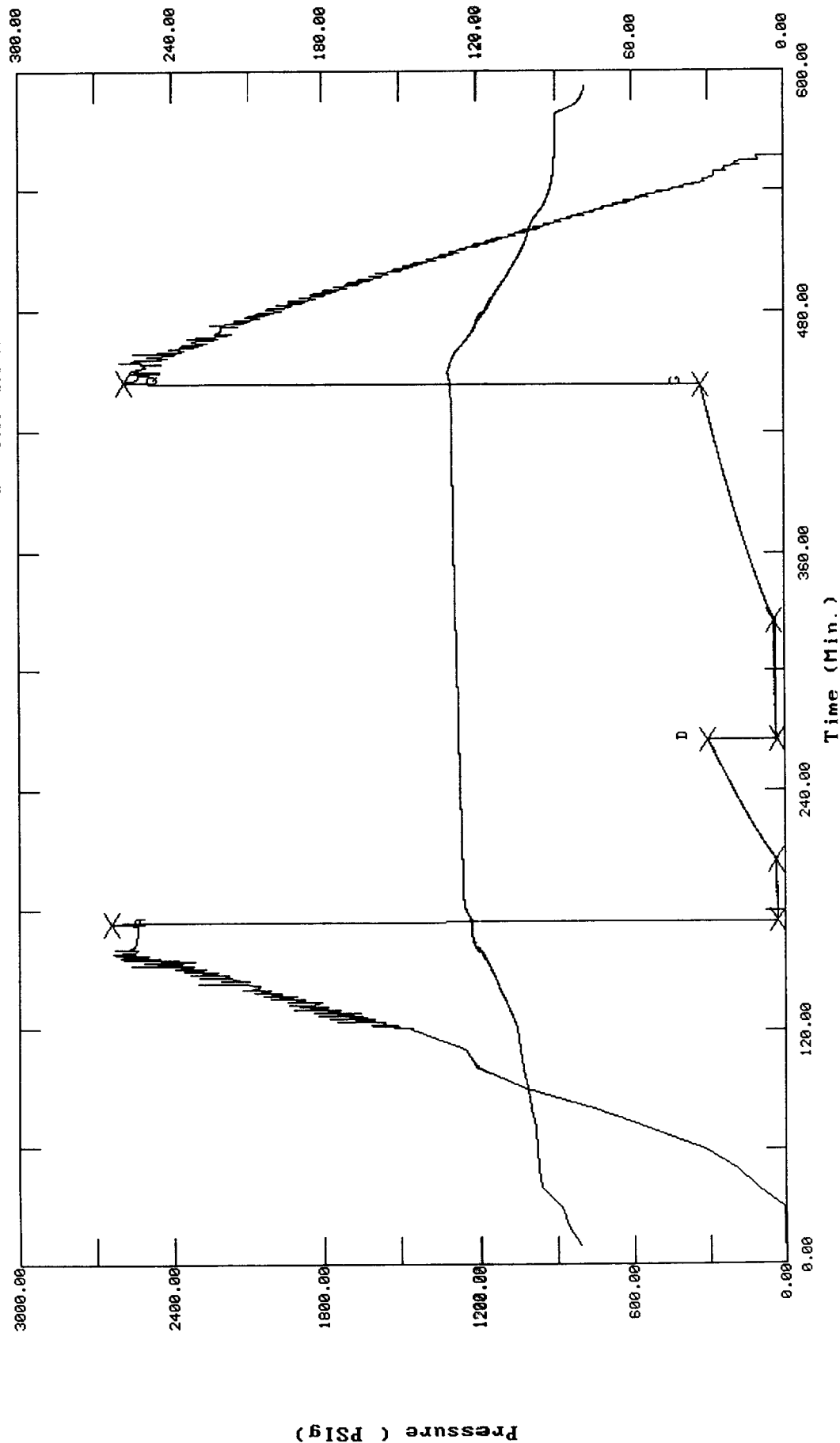
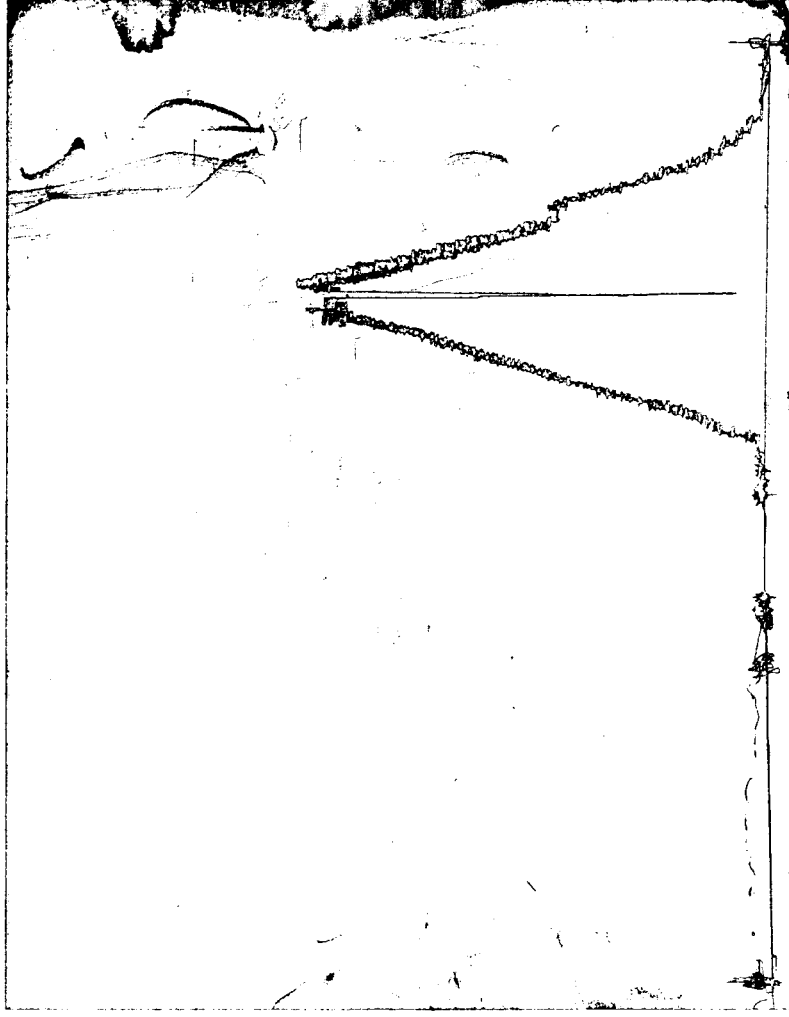


CHART PAGE



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

TRILOBITE TESTING L.L.C.

OPERATOR : Quinque Oper. Comp.

DATE 7-16-37

WELL NAME: Mary Nation #4

KB 2936.00 ft

TICKET NO: 9848 DST #2

LOCATION : 34-30S-33W

GR 2925.00 ft

FORMATION: Kansas City

INTERVAL : 4616.00 To 4656.00 ft

TD 6750.00 ft

TEST TYPE: CONV. HOOK STRADDLE

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	11038	11038	2351	5495		PF Fr. 1428 to 1443 hr
SI 30 Range(Psi)	5075.0	5075.0	4995.0	4200.0	0.0	IS Fr. 1443 to 1513 hr
SF 45 Clock(hrs)	12hr	12hr.	Elec	12hr.		SF Fr. 1513 to 1558 hr
FS 90 Depth(ft)	4649.0	4649.0	4622.0	4752.0	0.0	FS Fr. 1558 to 1728 hr

	Field	1	2	3	4	
A. Init Hydro	2349.0	2214.0	2296.0	0.0	0.0	T STARTED 1113 hr
B. First Flow	96.0	94.0	70.0	0.0	0.0	T ON BOTM 1415 hr
B1. Final Flow	163.0	132.0	143.0	0.0	0.0	T OPEN 1428 hr
C. In Shut-in	1008.0	1000.0	997.0	0.0	0.0	T PULLED 1732 hr
D. Init Flow	217.0	190.0	153.0	0.0	0.0	T OUT 2030 hr
E. Final Flow	337.0	310.0	335.0	0.0	0.0	
F. Fl Shut-in	1033.0	1003.0	1003.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2310.0	2171.0	2191.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	0	0	I	S		Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 97000.00 lbs
						Initial Str Wt 85000.00 lbs
						Unseated Str Wt 90000.00 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 618.00 ft
						D.P. Length 3979.00 ft

RECOVERY

Tot Fluid 610.00 ft of 618.00 ft in DC and 2.00 ft in JP

270.00 ft of Slight Oil Cut Gassy Mud

0.00 ft of 3%oil 20%gas 77%mud

176.00 ft of Gas Cut Muddy Water

0.00 ft of 15%gas 37%mud 48%water

174.00 ft of Salt Water with Oil Specs

0.00 ft of

0.00 ft of

0.00 ft of Est. ft. of pay-----10

SALINITY 58000.00 P.P.M. A.P.I. Gravity 38.00

MUD DATA-----

Mud Type	Chemical
Weight	9.10 lb/c
Vis.	54.00 S/L
W.L.	8.80 in3
F.C.	0.20 in
Mud Drop N	

BLOW DESCRIPTION

Initial Flow

Fair blow, 2 - 13" in water

Initial Shut In:

No blow

Final Flow:

Weak to strong blow, bottom of bucket in 41 mins

Final Shut In:

Very weak blow 1/4" or less.

SAMPLES: NO

SENT TO:

Test Successful: Y

Amt. of fill	0.00 ft
Btm. H. Temp.	122.00 F
Hole Condition	Good
% Porosity	12.00
Packer Size	6.75 in
No. of Packers	3
Cushion Amt.	0.00 n
Cushion Type	None
Reversed Out N	
Tool Chased N	
Tester	Gary Pevoteaux
Co. Rep.	Gary Wilkins
Contr.	Beredco
Rig #	2
Unit #	
Pump T.	LCM 11#/bl

*** TOOL DIAGRAM *** CONV. HOOK STRADDLE

WELL NAME: Mary Nation #4

LOCATION : 34-30S-33W

TICKET No. 9848 D.S.T. No. 2 DATE 7-16-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 41

TOTAL TOOL 71

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 71

D.C. ABOVE TOOLS.Stands7 Single Total 618

D.P. ABOVE TOOLS.Stands42 Single 2 Total 3979

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4668

TOTAL DEPTH 6750

TOTAL DRILL PIPE ABOVE K.B. 12

REMARKS:

FLUID SAMPLER DATA

Trace of gas @ 620 PSI

252 ML-----Oil

3348 ML-----Water

Trace -----LCM

Pressure-----620 PSI

Total Fluid-----3600 ML

Rw-----.19 ohms @ 78 dgrees F.

Gravity-----38 corrected @ 60 dgrees F.

P.O. SUB Top tool	4586
C.O. SUB 1ft	4587
S.I. TOOL Sterling	4592
SAMPLER	4595
HMV Sterling	4600
JARS Sterling	4605
SAFETY JOINT 2ft	4607
PACKER 5ft	4611
PACKER 5ft	4616
DEPTH	
STUBB 1ft	4617
ANCHOR	
3ft Perf	4620
Alpine Rec.	4622
AK-1 rec. @	4649
31 ft. perms to	4651
1 ft. blank off @	4652
T.C. 3 ft. to	4655
DEPTH 4655	
PACKER Btm. packer @	4656
Hook Wall @	4659
1 stand drill pipe and 2 subs to	4751
AK-1 rec. @Pipe	4752
BULLNOSE 3 ft. Bullplug to T.D.	4755 4755

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97

TIME: 11:13:34

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	180.00	2199.1	0.0	120.15		
***** Start Flow 1	0.00	70.2	0.0	120.22		
	0.25	69.7	-0.5	120.20		
	0.50	74.4	4.1	120.20		
	0.75	72.1	1.8	120.18		
	1.00	74.1	3.9	120.16		
	1.25	74.5	4.3	120.14		
	1.50	75.7	5.5	120.12		
	1.75	76.5	6.3	120.09		
	2.00	78.5	8.3	120.07		
	2.25	79.6	9.3	120.04		
	2.50	80.8	10.6	120.02		
	2.75	83.2	13.0	120.00		
	3.00	83.8	13.6	119.98		
	3.25	85.2	14.9	119.95		
	3.50	86.3	16.0	119.93		
	3.75	88.0	17.8	119.91		
	4.00	89.6	19.4	119.90		
	4.25	90.6	20.4	119.88		
	4.50	92.2	22.0	119.86		
	4.75	93.7	23.4	119.85		
	5.00	94.8	24.6	119.84		
	5.25	96.7	26.4	119.83		
	5.50	98.2	27.9	119.80		
	5.75	99.1	28.9	119.80		
	6.00	100.5	30.2	119.80		
	6.25	102.2	32.0	119.79		
	6.50	103.8	33.6	119.78		
	6.75	105.1	34.8	119.78		
	7.00	106.7	36.4	119.77		
	7.25	108.3	38.0	119.76		
	7.50	109.4	39.2	119.76		
	7.75	111.0	40.8	119.76		
	8.00	112.5	42.3	119.75		
	8.25	113.5	43.2	119.75		
	8.50	114.6	44.3	119.75		
	8.75	115.6	45.3	119.76		
	9.00	116.5	46.2	119.75		
	9.25	116.7	46.5	119.75		
	9.50	118.0	47.8	119.75		
	9.75	118.7	48.4	119.75		
	10.00	119.5	49.3	119.76		
	10.25	121.4	51.1	119.76		
	10.50	122.7	52.5	119.76		
	10.75	123.7	53.5	119.76		
	11.00	125.3	55.1	119.76		
	11.25	127.1	56.9	119.76		
	11.50	128.1	57.9	119.77		
	11.75	130.0	59.8	119.77		
	12.00	131.8	61.6	119.78		
	12.25	134.0	63.8	119.78		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97

TIME: 11:13:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	12.50	131.7	61.4	119.78		
	12.75	132.7	62.4	119.79		
	13.00	133.7	63.4	119.78		
	13.25	135.4	65.1	119.79		
	13.50	136.4	66.1	119.80		
	13.75	137.5	67.2	119.79		
	14.00	138.6	68.3	119.80		
	14.25	139.7	69.5	119.81		
	14.50	141.2	70.9	119.82		
***** End Flow 1	14.75	142.5	72.3	119.83		
***** Start Shutin :	0.00	142.5	0.0	119.83	0.0000	0.020
	0.25	159.0	16.5	119.83	50.0000	0.025
	0.50	286.1	143.6	119.83	30.5000	0.082
	0.75	482.8	340.3	119.85	20.6667	0.233
	1.00	626.3	483.8	119.85	15.7500	0.392
	1.25	692.7	550.2	119.86	12.8000	0.480
	1.50	728.5	586.0	119.88	10.8333	0.531
	1.75	752.8	610.3	119.88	9.4286	0.567
	2.00	771.6	629.1	119.90	8.3750	0.595
	2.25	786.8	644.3	119.92	7.5556	0.619
	2.50	800.3	657.8	119.93	6.9000	0.641
	2.75	811.9	669.4	119.94	6.3636	0.659
	3.00	822.1	679.6	119.96	5.9167	0.676
	3.25	831.5	689.0	119.97	5.5385	0.691
	3.50	839.9	697.4	119.98	5.2143	0.705
	3.75	847.6	705.1	119.99	4.9333	0.718
	4.00	854.6	712.1	120.00	4.6875	0.730
	4.25	861.2	718.7	120.03	4.4706	0.742
	4.50	867.2	724.7	120.04	4.2778	0.752
	4.75	872.5	730.0	120.05	4.1053	0.761
	5.00	878.0	735.5	120.06	3.9500	0.771
	5.25	883.2	740.7	120.08	3.8095	0.780
	5.50	887.8	745.3	120.09	3.6818	0.788
	5.75	892.2	749.7	120.11	3.5652	0.796
	6.00	896.4	753.9	120.12	3.4583	0.804
	6.25	900.3	757.8	120.13	3.3600	0.811
	6.50	904.0	761.5	120.14	3.2692	0.817
	6.75	907.5	765.0	120.16	3.1852	0.824
	7.00	910.9	768.4	120.17	3.1071	0.830
	7.25	914.0	771.5	120.18	3.0345	0.835
	7.50	917.0	774.5	120.19	2.9667	0.841
	7.75	919.9	777.4	120.20	2.9032	0.846
	8.00	922.6	780.1	120.21	2.8438	0.851
	8.25	925.1	782.6	120.22	2.7879	0.856
	8.50	927.6	785.1	120.23	2.7353	0.860
	8.75	930.0	787.5	120.25	2.6857	0.865
	9.00	932.3	789.8	120.25	2.6389	0.869
	9.25	934.4	791.9	120.27	2.5946	0.873
	9.50	936.5	794.0	120.27	2.5526	0.877
	9.75	938.4	795.9	120.29	2.5128	0.881
	10.00	940.3	797.8	120.30	2.4750	0.884

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.
 DATE: 07/16/97 TIME: 11:13:34

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
10.25	942.2	799.7	120.31	2.4390	0.888
10.50	943.9	801.4	120.32	2.4048	0.891
10.75	945.7	803.2	120.32	2.3721	0.894
11.00	947.3	804.8	120.33	2.3409	0.897
11.25	948.8	806.3	120.35	2.3111	0.900
11.50	950.3	807.8	120.36	2.2826	0.903
11.75	951.8	809.3	120.37	2.2553	0.906
12.00	953.2	810.7	120.37	2.2292	0.909
12.25	954.5	812.0	120.38	2.2041	0.911
12.50	955.8	813.3	120.39	2.1800	0.913
12.75	957.1	814.6	120.39	2.1569	0.916
13.00	958.3	815.8	120.41	2.1346	0.918
13.25	959.5	817.0	120.41	2.1132	0.921
13.50	960.7	818.2	120.43	2.0926	0.923
13.75	961.8	819.3	120.44	2.0727	0.925
14.00	962.9	820.4	120.44	2.0536	0.927
14.25	964.0	821.5	120.45	2.0351	0.929
14.50	965.0	822.5	120.45	2.0172	0.931
14.75	966.0	823.5	120.46	2.0000	0.933
15.00	966.9	824.4	120.47	1.9833	0.935
15.25	967.9	825.4	120.48	1.9672	0.937
15.50	968.7	826.2	120.53	1.9516	0.938
15.75	969.6	827.1	120.40	1.9365	0.940
16.00	970.4	827.9	120.49	1.9219	0.942
16.25	971.4	828.9	120.50	1.9077	0.944
16.50	972.2	829.7	120.51	1.8939	0.945
16.75	973.0	830.5	120.52	1.8806	0.947
17.00	973.7	831.2	120.53	1.8676	0.948
17.25	974.5	832.0	120.54	1.8551	0.950
17.50	975.2	832.7	120.54	1.8429	0.951
17.75	975.9	833.4	120.55	1.8310	0.952
18.00	976.7	834.2	120.56	1.8194	0.954
18.25	977.3	834.8	120.55	1.8082	0.955
18.50	978.0	835.5	120.57	1.7973	0.956
18.75	978.8	836.3	120.57	1.7867	0.958
19.00	979.3	836.8	120.58	1.7763	0.959
19.25	979.9	837.4	120.59	1.7662	0.960
19.50	980.5	838.0	120.59	1.7564	0.961
19.75	981.1	838.6	120.60	1.7468	0.963
20.00	981.6	839.1	120.61	1.7375	0.964
20.25	982.3	839.8	120.61	1.7284	0.965
20.50	982.7	840.2	120.61	1.7195	0.966
20.75	983.4	840.9	120.63	1.7108	0.967
21.00	983.9	841.4	120.63	1.7024	0.968
21.25	984.5	842.0	120.64	1.6941	0.969
21.50	985.0	842.5	120.65	1.6860	0.970
21.75	985.5	843.0	120.65	1.6782	0.971
22.00	985.9	843.4	120.66	1.6705	0.972
22.25	986.4	843.9	120.66	1.6629	0.973
22.50	986.8	844.3	120.67	1.6556	0.974
22.75	987.3	844.8	120.67	1.6484	0.975

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97

TIME: 11:13:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	23.00	987.8	845.3	120.68	1.6413	0.976
	23.25	988.2	845.7	120.69	1.6344	0.977
	23.50	988.7	846.2	120.69	1.6277	0.977
	23.75	989.1	846.6	120.70	1.6211	0.978
	24.00	989.5	847.0	120.70	1.6146	0.979
	24.25	989.8	847.3	120.71	1.6082	0.980
	24.50	990.4	847.9	120.72	1.6020	0.981
	24.75	990.8	848.3	120.72	1.5960	0.982
	25.00	991.1	848.6	120.73	1.5900	0.982
	25.25	991.5	849.0	120.73	1.5842	0.983
	25.50	991.9	849.3	120.74	1.5784	0.984
	25.75	992.3	849.8	120.73	1.5728	0.985
	26.00	992.6	850.1	120.74	1.5673	0.985
	26.25	992.9	850.4	120.75	1.5619	0.986
	26.50	993.2	850.7	120.76	1.5566	0.986
	26.75	993.6	851.1	120.78	1.5514	0.987
	27.00	993.9	851.4	120.76	1.5463	0.988
	27.25	994.3	851.8	120.77	1.5413	0.989
	27.50	994.6	852.1	120.78	1.5364	0.989
	27.75	994.9	852.4	120.79	1.5315	0.990
	28.00	995.2	852.7	120.79	1.5268	0.990
	28.25	995.5	853.0	120.79	1.5221	0.991
	28.50	995.8	853.3	120.79	1.5175	0.992
	28.75	996.1	853.6	120.81	1.5130	0.992
	29.00	996.5	854.0	120.82	1.5086	0.993
	29.25	996.7	854.2	120.82	1.5043	0.993
***** End Shut-in 1	29.50	997.1	854.6	120.82	1.5000	0.994
***** Start Flow :	0.00	153.0	0.0	120.82		
	0.25	154.3	1.3	120.82		
	0.50	155.1	2.1	120.81		
	0.75	157.3	4.3	120.81		
	1.00	158.2	5.2	120.81		
	1.25	160.0	7.0	120.80		
	1.50	160.9	7.9	120.79		
	1.75	162.1	9.1	120.79		
	2.00	163.1	10.1	120.78		
	2.25	164.6	11.6	120.78		
	2.50	165.7	12.8	120.78		
	2.75	166.8	13.8	120.77		
	3.00	167.8	14.9	120.76		
	3.25	171.1	18.1	120.76		
	3.50	172.4	19.4	120.76		
	3.75	173.1	20.1	120.75		
	4.00	173.3	20.3	120.75		
	4.25	174.5	21.5	120.75		
	4.50	175.9	22.9	120.74		
	4.75	177.8	24.8	120.74		
	5.00	179.3	26.3	120.74		
	5.25	178.9	25.9	120.74		
	5.50	181.9	28.9	120.74		
	5.75	184.3	31.3	120.74		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.
 DATE: 07/16/97 TIME: 11:13:34

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
6.00	185.6	32.6	120.74		
6.25	186.2	33.2	120.74		
6.50	187.3	34.3	120.74		
6.75	188.3	35.3	120.73		
7.00	188.8	35.8	120.73		
7.25	190.9	37.9	120.74		
7.50	199.2	46.2	120.73		
7.75	189.5	36.5	120.74		
8.00	190.5	37.5	120.74		
8.25	192.3	39.3	120.74		
8.50	196.1	43.1	120.74		
8.75	195.4	42.4	120.74		
9.00	196.1	43.1	120.75		
9.25	197.4	44.4	120.73		
9.50	197.6	44.6	120.75		
9.75	198.7	45.7	120.75		
10.00	199.6	46.6	120.75		
10.25	200.7	47.7	120.75		
10.50	201.8	48.8	120.75		
10.75	202.7	49.7	120.76		
11.00	203.8	50.8	120.76		
11.25	204.8	51.8	120.77		
11.50	205.9	52.9	120.76		
11.75	206.6	53.6	120.78		
12.00	207.7	54.7	120.77		
12.25	208.9	55.9	120.78		
12.50	209.6	56.7	120.79		
12.75	211.3	58.3	120.79		
13.00	212.0	59.0	120.79		
13.25	213.1	60.1	120.79		
13.50	213.8	60.8	120.80		
13.75	214.9	61.9	120.80		
14.00	216.0	63.0	120.81		
14.25	217.0	64.0	120.82		
14.50	218.0	65.0	120.82		
14.75	219.0	66.0	120.82		
15.00	220.0	67.0	120.83		
15.25	220.8	67.8	120.83		
15.50	221.9	68.9	120.83		
15.75	223.2	70.2	120.84		
16.00	224.1	71.1	120.85		
16.25	224.8	71.8	120.85		
16.50	225.5	72.5	120.85		
16.75	227.3	74.3	120.86		
17.00	228.8	75.8	120.86		
17.25	230.1	77.1	120.87		
17.50	231.0	78.0	120.88		
17.75	230.4	77.4	120.87		
18.00	231.7	78.7	120.89		
18.25	232.8	79.8	120.89		
18.50	235.7	82.8	120.89		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97 TIME: 11:13:34

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
18.75	238.3	85.3	120.90		
19.00	240.2	87.2	120.90		
19.25	242.1	89.1	120.90		
19.50	243.8	90.8	120.91		
19.75	245.3	92.3	120.92		
20.00	248.9	95.9	120.92		
20.25	239.9	86.9	120.93		
20.50	240.6	87.6	120.94		
20.75	241.6	88.6	120.94		
21.00	242.1	89.1	120.95		
21.25	243.3	90.3	120.95		
21.50	243.8	90.8	120.96		
21.75	245.0	92.0	120.96		
22.00	245.8	92.8	120.98		
22.25	246.9	93.9	120.97		
22.50	247.7	94.8	120.99		
22.75	248.7	95.7	120.99		
23.00	249.4	96.4	121.00		
23.25	250.4	97.4	121.00		
23.50	251.4	98.4	121.01		
23.75	251.8	98.8	121.02		
24.00	252.9	99.9	121.01		
24.25	253.7	100.7	121.02		
24.50	254.5	101.5	121.03		
24.75	255.7	102.7	121.04		
25.00	256.6	103.6	121.04		
25.25	257.2	104.2	121.05		
25.50	258.2	105.2	121.05		
25.75	258.7	105.7	121.06		
26.00	259.8	106.8	121.07		
26.25	260.5	107.5	121.08		
26.50	261.4	108.4	121.08		
26.75	262.2	109.2	121.09		
27.00	262.9	109.9	121.09		
27.25	263.9	110.9	121.10		
27.50	264.9	111.9	121.11		
27.75	265.5	112.5	121.11		
28.00	266.2	113.2	121.12		
28.25	267.0	114.0	121.12		
28.50	267.6	114.6	121.13		
28.75	268.4	115.4	121.13		
29.00	269.5	116.5	121.14		
29.25	269.8	116.8	121.15		
29.50	270.8	117.8	121.15		
29.75	271.7	118.7	121.16		
30.00	272.5	119.5	121.17		
30.25	273.3	120.4	121.17		
30.50	273.9	120.9	121.18		
30.75	274.5	121.5	121.19		
31.00	275.4	122.5	121.19		
31.25	276.4	123.4	121.19		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97 TIME: 11:13:34

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
31.50	277.0	124.0	121.21		
31.75	277.3	124.3	121.20		
32.00	278.3	125.3	121.21		
32.25	279.2	126.2	121.22		
32.50	279.9	126.9	121.22		
32.75	280.6	127.7	121.23		
33.00	281.3	128.3	121.25		
33.25	282.2	129.2	121.24		
33.50	282.7	129.8	121.25		
33.75	283.7	130.7	121.26		
34.00	283.9	130.9	121.26		
34.25	285.3	132.3	121.27		
34.50	286.1	133.1	121.28		
34.75	287.1	134.1	121.29		
35.00	287.7	134.7	121.29		
35.25	288.5	135.5	121.30		
35.50	289.6	136.6	121.30		
35.75	289.5	136.6	121.31		
36.00	290.5	137.6	121.31		
36.25	291.0	138.0	121.32		
36.50	292.1	139.1	121.33		
36.75	293.1	140.1	121.33		
37.00	293.8	140.8	121.34		
37.25	294.6	141.6	121.35		
37.50	295.3	142.3	121.36		
37.75	296.4	143.4	121.36		
38.00	296.8	143.9	121.37		
38.25	297.2	144.2	121.37		
38.50	298.2	145.2	121.38		
38.75	299.1	146.1	121.38		
39.00	299.8	146.8	121.39		
39.25	300.4	147.4	121.40		
39.50	301.2	148.2	121.40		
39.75	302.0	149.1	121.41		
40.00	303.0	150.0	121.41		
40.25	303.4	150.4	121.42		
40.50	304.2	151.2	121.43		
40.75	304.2	151.2	121.43		
41.00	303.3	150.3	121.44		
41.25	305.1	152.1	121.45		
41.50	306.2	153.3	121.45		
41.75	306.2	153.3	121.46		
42.00	305.6	152.6	121.47		
42.25	305.7	152.7	121.47		
42.50	306.7	153.8	121.48		
42.75	307.4	154.4	121.48		
43.00	307.2	154.2	121.49		
43.25	307.5	154.5	121.50		
43.50	308.0	155.0	121.50		
43.75	307.8	154.8	121.51		
44.00	308.3	155.3	121.52		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/15/97

TIME: 11:13:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	44.25	308.8	155.8	121.52		
	44.50	308.8	155.8	121.53		
	44.75	309.4	156.4	121.52		
	45.00	309.4	156.4	121.53		
	45.25	309.5	156.5	121.54		
	45.50	309.9	156.9	121.55		
	45.75	310.4	157.4	121.55		
***** End Flow 2	46.00	334.6	181.6	121.56		
***** Start Shutin 2	0.00	334.6	0.0	121.56	0.0000	0.112
	0.25	460.5	125.9	121.57	244.0000	0.212
	0.50	569.7	235.1	121.58	122.5000	0.325
	0.75	643.4	308.8	121.59	82.0000	0.414
	1.00	688.1	353.5	121.60	61.7500	0.474
	1.25	716.4	381.8	121.61	49.6000	0.513
	1.50	736.1	401.5	121.63	41.5000	0.542
	1.75	751.2	416.6	121.63	35.7143	0.564
	2.00	763.5	428.9	121.64	31.3750	0.583
	2.25	774.1	439.4	121.65	28.0000	0.599
	2.50	783.2	448.6	121.66	25.3000	0.613
	2.75	791.5	456.9	121.67	23.0909	0.626
	3.00	799.1	464.5	121.68	21.2500	0.639
	3.25	806.0	471.3	121.70	19.6923	0.650
	3.50	812.4	477.8	121.70	18.3571	0.660
	3.75	818.3	483.7	121.71	17.2000	0.670
	4.00	823.7	489.1	121.72	16.1875	0.679
	4.25	828.9	494.3	121.74	15.2941	0.687
	4.50	833.8	499.2	121.75	14.5000	0.695
	4.75	838.4	503.8	121.76	13.7895	0.703
	5.00	842.8	508.2	121.76	13.1500	0.710
	5.25	846.9	512.3	121.79	12.5714	0.717
	5.50	850.9	516.2	121.79	12.0455	0.724
	5.75	854.5	519.9	121.80	11.5652	0.730
	6.00	858.2	523.5	121.81	11.1250	0.736
	6.25	861.4	526.8	121.81	10.7200	0.742
	6.50	864.7	530.1	121.82	10.3462	0.748
	6.75	867.8	533.2	121.84	10.0000	0.753
	7.00	870.8	536.2	121.85	9.6786	0.758
	7.25	873.7	539.1	121.86	9.3793	0.763
	7.50	876.4	541.8	121.87	9.1000	0.768
	7.75	879.0	544.4	121.87	8.8387	0.773
	8.00	881.5	546.9	121.88	8.5938	0.777
	8.25	883.8	549.2	121.89	8.3636	0.781
	8.50	886.2	551.6	121.90	8.1471	0.785
	8.75	888.5	553.8	121.91	7.9429	0.789
	9.00	890.6	556.0	121.92	7.7500	0.793
	9.25	892.6	558.0	121.92	7.5676	0.797
	9.50	894.7	560.1	121.93	7.3947	0.800
	9.75	896.6	562.0	121.93	7.2308	0.804
	10.00	898.5	563.9	121.94	7.0750	0.807
	10.25	900.3	565.7	121.96	6.9268	0.811
	10.50	902.0	567.4	121.96	6.7857	0.814

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.
 DATE: 07/16/97 TIME: 11:13:34

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
10.75	903.7	569.1	121.99	6.6512	0.817
11.00	905.4	570.8	121.97	6.5227	0.820
11.25	907.0	572.4	121.98	6.4000	0.823
11.50	908.5	573.9	121.99	6.2826	0.825
11.75	910.1	575.5	122.00	6.1702	0.828
12.00	911.4	576.8	122.00	6.0625	0.831
12.25	913.0	578.3	122.02	5.9592	0.833
12.50	914.3	579.7	122.02	5.8600	0.836
12.75	915.6	581.0	122.02	5.7647	0.838
13.00	917.0	582.4	122.03	5.6731	0.841
13.25	918.2	583.6	122.03	5.5849	0.843
13.50	919.5	584.9	122.04	5.5000	0.845
13.75	920.8	586.2	122.05	5.4182	0.848
14.00	921.9	587.2	122.05	5.3393	0.850
14.25	923.0	588.4	122.07	5.2632	0.852
14.50	924.1	589.5	122.06	5.1897	0.854
14.75	925.3	590.7	122.07	5.1186	0.856
15.00	926.3	591.7	122.07	5.0500	0.858
15.25	927.4	592.8	122.08	4.9836	0.860
15.50	928.3	593.7	122.08	4.9194	0.862
15.75	929.2	594.6	122.09	4.8571	0.863
16.00	930.3	595.7	122.09	4.7969	0.866
16.25	931.3	596.7	122.10	4.7385	0.867
16.50	932.2	597.6	122.10	4.6818	0.869
16.75	933.0	598.4	122.12	4.6269	0.871
17.00	934.0	599.4	122.12	4.5735	0.872
17.25	934.9	600.3	122.13	4.5217	0.874
17.50	935.7	601.1	122.13	4.4714	0.876
17.75	936.5	601.9	122.12	4.4225	0.877
18.00	937.3	602.7	122.14	4.3750	0.879
18.25	938.1	603.5	122.14	4.3288	0.880
18.50	939.0	604.4	122.14	4.2838	0.882
18.75	939.6	605.0	122.15	4.2400	0.883
19.00	940.5	605.9	122.15	4.1974	0.885
19.25	941.2	606.5	122.16	4.1558	0.886
19.50	942.0	607.4	122.16	4.1154	0.887
19.75	942.7	608.1	122.17	4.0759	0.889
20.00	943.4	608.8	122.17	4.0375	0.890
20.25	944.2	609.6	122.18	4.0000	0.891
20.50	944.7	610.1	122.18	3.9634	0.892
20.75	945.4	610.7	122.18	3.9277	0.894
21.00	946.0	611.4	122.18	3.8929	0.895
21.25	946.6	612.0	122.19	3.8588	0.896
21.50	947.4	612.8	122.19	3.8256	0.898
21.75	948.0	613.3	122.20	3.7931	0.899
22.00	948.6	614.0	122.21	3.7614	0.900
22.25	949.2	614.6	122.21	3.7303	0.901
22.50	949.8	615.2	122.20	3.7000	0.902
22.75	950.4	615.8	122.22	3.6703	0.903
23.00	950.9	616.3	122.23	3.6413	0.904
23.25	951.6	617.0	122.22	3.6129	0.905

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97

TIME: 11:13:34

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
23.50	952.1	617.5	122.22	3.5851	0.906
23.75	952.6	618.0	122.23	3.5579	0.907
24.00	953.2	618.6	122.23	3.5312	0.909
24.25	953.7	619.1	122.23	3.5052	0.909
24.50	954.3	619.6	122.24	3.4796	0.911
24.75	954.7	620.1	122.24	3.4545	0.911
25.00	955.3	620.6	122.24	3.4300	0.913
25.25	955.7	621.1	122.25	3.4059	0.913
25.50	956.2	621.6	122.25	3.3824	0.914
25.75	956.7	622.1	122.25	3.3592	0.915
26.00	957.1	622.5	122.26	3.3365	0.916
26.25	957.6	623.0	122.25	3.3143	0.917
26.50	958.0	623.4	122.27	3.2925	0.918
26.75	958.5	623.9	122.27	3.2710	0.919
27.00	959.0	624.4	122.27	3.2500	0.920
27.25	959.5	624.8	122.27	3.2294	0.921
27.50	959.9	625.3	122.28	3.2091	0.921
27.75	960.3	625.7	122.28	3.1892	0.922
28.00	960.6	626.0	122.28	3.1696	0.923
28.25	961.0	626.4	122.29	3.1504	0.924
28.50	961.5	626.9	122.29	3.1316	0.924
28.75	961.9	627.3	122.29	3.1130	0.925
29.00	962.3	627.7	122.31	3.0948	0.926
29.25	962.6	628.0	122.32	3.0769	0.927
29.50	963.1	628.5	122.31	3.0593	0.927
29.75	963.6	629.0	122.30	3.0420	0.928
30.00	963.9	629.3	122.24	3.0250	0.929
30.25	964.3	629.7	122.30	3.0083	0.930
30.50	964.7	630.0	122.31	2.9918	0.931
30.75	965.0	630.4	122.31	2.9756	0.931
31.00	965.4	630.8	122.31	2.9597	0.932
31.25	965.7	631.1	122.32	2.9440	0.933
31.50	966.2	631.6	122.32	2.9286	0.933
31.75	966.5	631.9	122.32	2.9134	0.934
32.00	966.8	632.2	122.32	2.8984	0.935
32.25	967.2	632.6	122.33	2.8837	0.935
32.50	967.5	632.9	122.33	2.8692	0.936
32.75	967.9	633.3	122.33	2.8550	0.937
33.00	968.3	633.7	122.33	2.8409	0.938
33.25	968.5	633.9	122.33	2.8271	0.938
33.50	968.9	634.2	122.33	2.8134	0.939
33.75	969.2	634.6	122.34	2.8000	0.939
34.00	969.5	634.9	122.34	2.7868	0.940
34.25	969.9	635.2	122.34	2.7737	0.941
34.50	970.2	635.6	122.34	2.7609	0.941
34.75	970.5	635.9	122.35	2.7482	0.942
35.00	970.8	636.2	122.35	2.7357	0.942
35.25	971.1	636.5	122.36	2.7234	0.943
35.50	971.4	636.8	122.36	2.7113	0.944
35.75	971.7	637.1	122.36	2.6993	0.944
36.00	972.0	637.3	122.36	2.6875	0.945

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97

TIME: 11:13:34

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
36.25	972.2	637.6	122.36	2.6759	0.945
36.50	972.5	637.9	122.37	2.6644	0.946
36.75	972.9	638.3	122.36	2.6531	0.947
37.00	973.1	638.5	122.36	2.6419	0.947
37.25	973.5	638.9	122.37	2.6309	0.948
37.50	973.6	639.0	122.37	2.6200	0.948
37.75	973.9	639.3	122.37	2.6093	0.948
38.00	974.2	639.6	122.37	2.5987	0.949
38.25	974.5	639.9	122.37	2.5882	0.950
38.50	974.8	640.2	122.38	2.5779	0.950
38.75	975.1	640.5	122.38	2.5677	0.951
39.00	975.2	640.6	122.38	2.5577	0.951
39.25	975.6	641.0	122.38	2.5478	0.952
39.50	975.8	641.2	122.38	2.5380	0.952
39.75	976.1	641.5	122.39	2.5283	0.953
40.00	976.3	641.7	122.38	2.5187	0.953
40.25	976.6	642.0	122.38	2.5093	0.954
40.50	976.9	642.3	122.39	2.5000	0.954
40.75	977.1	642.5	122.39	2.4908	0.955
41.00	977.3	642.7	122.39	2.4817	0.955
41.25	977.6	643.0	122.39	2.4727	0.956
41.50	977.8	643.1	122.39	2.4639	0.956
41.75	978.0	643.4	122.39	2.4551	0.956
42.00	978.3	643.6	122.40	2.4464	0.957
42.25	978.5	643.9	122.40	2.4379	0.957
42.50	978.8	644.1	122.40	2.4294	0.958
42.75	979.0	644.4	122.40	2.4211	0.958
43.00	979.2	644.6	122.40	2.4128	0.959
43.25	979.4	644.8	122.40	2.4046	0.959
43.50	979.7	645.1	122.41	2.3966	0.960
43.75	979.8	645.2	122.40	2.3886	0.960
44.00	980.1	645.5	122.41	2.3807	0.961
44.25	980.4	645.7	122.41	2.3729	0.961
44.50	980.5	645.9	122.41	2.3652	0.961
44.75	980.8	646.2	122.41	2.3575	0.962
45.00	980.9	646.3	122.41	2.3500	0.962
45.25	981.1	646.5	122.41	2.3425	0.963
45.50	981.4	646.7	122.41	2.3352	0.963
45.75	981.5	646.9	122.42	2.3279	0.963
46.00	981.7	647.1	122.42	2.3207	0.964
46.25	981.9	647.3	122.42	2.3135	0.964
46.50	982.1	647.5	122.42	2.3065	0.965
46.75	982.4	647.8	122.42	2.2995	0.965
47.00	982.6	648.0	122.43	2.2926	0.966
47.25	982.7	648.1	122.42	2.2857	0.966
47.50	983.0	648.3	122.42	2.2789	0.966
47.75	983.2	648.6	122.42	2.2723	0.967
48.00	983.3	648.7	122.43	2.2656	0.967
48.25	983.5	648.9	122.43	2.2591	0.967
48.50	983.8	649.2	122.43	2.2526	0.968
48.75	983.9	649.3	122.42	2.2462	0.968

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97

TIME: 11:13:34

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
49.00	984.0	649.4	122.42	2.2398	0.968
49.25	984.2	649.6	122.43	2.2335	0.969
49.50	984.4	649.8	122.43	2.2273	0.969
49.75	984.6	650.0	122.43	2.2211	0.970
50.00	984.8	650.2	122.43	2.2150	0.970
50.25	985.0	650.4	122.43	2.2090	0.970
50.50	985.1	650.5	122.44	2.2030	0.970
50.75	985.3	650.7	122.44	2.1970	0.971
51.00	985.5	650.9	122.44	2.1912	0.971
51.25	985.6	651.0	122.44	2.1854	0.971
51.50	985.9	651.3	122.44	2.1796	0.972
51.75	986.0	651.4	122.44	2.1739	0.972
52.00	986.1	651.5	122.44	2.1683	0.972
52.25	986.4	651.8	122.45	2.1627	0.973
52.50	986.5	651.9	122.44	2.1571	0.973
52.75	986.6	652.0	122.45	2.1517	0.973
53.00	986.8	652.2	122.44	2.1462	0.974
53.25	986.9	652.3	122.45	2.1408	0.974
53.50	987.1	652.5	122.45	2.1355	0.974
53.75	987.2	652.6	122.45	2.1302	0.975
54.00	987.4	652.8	122.45	2.1250	0.975
54.25	987.6	653.0	122.45	2.1198	0.975
54.50	987.7	653.1	122.46	2.1147	0.976
54.75	987.8	653.2	122.45	2.1096	0.976
55.00	988.1	653.5	122.45	2.1045	0.976
55.25	988.2	653.6	122.45	2.0995	0.977
55.50	988.3	653.7	122.45	2.0946	0.977
55.75	988.6	654.0	122.45	2.0897	0.977
56.00	988.7	654.0	122.45	2.0848	0.977
56.25	988.7	654.1	122.46	2.0800	0.978
56.50	989.0	654.4	122.45	2.0752	0.978
56.75	989.0	654.4	122.46	2.0705	0.978
57.00	989.2	654.6	122.46	2.0658	0.979
57.25	989.4	654.8	122.45	2.0611	0.979
57.50	989.6	655.0	122.45	2.0565	0.979
57.75	989.7	655.1	122.46	2.0519	0.979
58.00	989.8	655.2	122.46	2.0474	0.980
58.25	990.0	655.4	122.46	2.0429	0.980
58.50	990.2	655.6	122.46	2.0385	0.980
58.75	990.3	655.6	122.46	2.0340	0.981
59.00	990.4	655.8	122.46	2.0297	0.981
59.25	990.6	656.0	122.46	2.0253	0.981
59.50	990.7	656.1	122.47	2.0210	0.981
59.75	990.8	656.2	122.47	2.0167	0.982
60.00	990.9	656.3	122.46	2.0125	0.982
60.25	991.1	656.5	122.46	2.0083	0.982
60.50	991.2	656.6	122.46	2.0041	0.982
60.75	991.3	656.7	122.46	2.0000	0.983
61.00	991.4	656.8	122.46	1.9959	0.983
61.25	991.6	657.0	122.47	1.9918	0.983
61.50	991.7	657.1	122.47	1.9878	0.983

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.
 DATE: 07/16/97 TIME: 11:13:34

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
61.75	991.9	657.2	122.47	1.9838	0.984
62.00	991.9	657.3	122.47	1.9798	0.984
62.25	992.1	657.5	122.47	1.9759	0.984
62.50	992.1	657.5	122.47	1.9720	0.984
62.75	992.3	657.7	122.47	1.9681	0.985
63.00	992.4	657.8	122.47	1.9643	0.985
63.25	992.5	657.9	122.47	1.9605	0.985
63.50	992.6	658.0	122.47	1.9567	0.985
63.75	992.8	658.2	122.47	1.9529	0.986
64.00	992.9	658.3	122.47	1.9492	0.986
64.25	993.0	658.4	122.47	1.9455	0.986
64.50	993.2	658.6	122.47	1.9419	0.986
64.75	993.4	658.7	122.47	1.9382	0.987
65.00	993.4	658.8	122.47	1.9346	0.987
65.25	993.5	658.9	122.46	1.9310	0.987
65.50	993.6	659.0	122.47	1.9275	0.987
65.75	993.9	659.3	122.47	1.9240	0.988
66.00	993.9	659.3	122.47	1.9205	0.988
66.25	994.0	659.4	122.47	1.9170	0.988
66.50	994.2	659.6	122.48	1.9135	0.988
66.75	994.2	659.6	122.48	1.9101	0.988
67.00	994.4	659.8	122.48	1.9067	0.989
67.25	994.5	659.9	122.47	1.9033	0.989
67.50	994.6	660.0	122.47	1.9000	0.989
67.75	994.7	660.1	122.47	1.8967	0.989
68.00	994.8	660.2	122.48	1.8934	0.990
68.25	995.0	660.3	122.47	1.8901	0.990
68.50	995.0	660.4	122.48	1.8869	0.990
68.75	995.2	660.6	122.47	1.8836	0.990
69.00	995.3	660.7	122.47	1.8804	0.991
69.25	995.4	660.8	122.47	1.8773	0.991
69.50	995.5	660.9	122.47	1.8741	0.991
69.75	995.5	660.9	122.48	1.8710	0.991
70.00	995.7	661.1	122.47	1.8679	0.991
70.25	995.8	661.2	122.48	1.8648	0.992
70.50	995.9	661.3	122.47	1.8617	0.992
70.75	996.0	661.4	122.48	1.8587	0.992
71.00	996.1	661.5	122.48	1.8556	0.992
71.25	996.3	661.7	122.48	1.8526	0.993
71.50	996.4	661.8	122.48	1.8497	0.993
71.75	996.5	661.9	122.49	1.8467	0.993
72.00	996.6	662.0	122.48	1.8438	0.993
72.25	996.7	662.1	122.48	1.8408	0.993
72.50	996.9	662.3	122.48	1.8379	0.994
72.75	996.9	662.3	122.48	1.8351	0.994
73.00	997.0	662.4	122.48	1.8322	0.994
73.25	997.2	662.5	122.48	1.8294	0.994
73.50	997.2	662.5	122.49	1.8265	0.994
73.75	997.2	662.6	122.48	1.8237	0.994
74.00	997.3	662.7	122.48	1.8209	0.995
74.25	997.4	662.8	122.48	1.8182	0.995

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97 TIME: 11:13:34

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
74.50	997.6	662.9	122.48	1.8154	0.995
74.75	997.6	663.0	122.49	1.8127	0.995
75.00	997.7	663.1	122.48	1.8100	0.995
75.25	997.8	663.2	122.49	1.8073	0.996
75.50	997.9	663.3	122.49	1.8046	0.996
75.75	998.1	663.4	122.48	1.8020	0.996
76.00	998.1	663.5	122.49	1.7993	0.996
76.25	998.2	663.6	122.48	1.7967	0.996
76.50	998.3	663.7	122.48	1.7941	0.997
76.75	998.5	663.9	122.48	1.7915	0.997
77.00	998.5	663.9	122.48	1.7890	0.997
77.25	998.5	663.9	122.48	1.7864	0.997
77.50	998.6	664.0	122.48	1.7839	0.997
77.75	998.8	664.2	122.49	1.7814	0.998
78.00	998.8	664.2	122.49	1.7788	0.998
78.25	998.8	664.2	122.48	1.7764	0.998
78.50	999.0	664.4	122.49	1.7739	0.998
78.75	999.1	664.5	122.48	1.7714	0.998
79.00	999.2	664.6	122.48	1.7690	0.998
79.25	999.2	664.6	122.49	1.7666	0.998
79.50	999.2	664.6	122.48	1.7642	0.998
79.75	999.5	664.9	122.48	1.7618	0.999
80.00	999.7	665.1	122.48	1.7594	0.999
80.25	999.7	665.1	122.49	1.7570	0.999
80.50	999.8	665.1	122.49	1.7547	1.00
80.75	999.9	665.3	122.49	1.7523	1.00
81.00	1000	665.4	122.48	1.7500	1.00
81.25	1000.1	665.5	122.48	1.7477	1.000
81.50	1000.2	665.5	122.47	1.7454	1.000
81.75	1000.2	665.6	122.48	1.7431	1.000
82.00	1000.3	665.7	122.48	1.7409	1.001
82.25	1000.4	665.8	122.48	1.7386	1.001
82.50	1000.5	665.9	122.49	1.7364	1.001
82.75	1000.5	665.9	122.48	1.7341	1.001
83.00	1000.6	666.0	122.48	1.7319	1.001
83.25	1000.7	666.1	122.48	1.7297	1.001
83.50	1000.7	666.1	122.49	1.7275	1.001
83.75	1000.9	666.3	122.48	1.7254	1.002
84.00	1000.9	666.3	122.48	1.7232	1.002
84.25	1001.1	666.5	122.48	1.7211	1.002
84.50	1001.2	666.6	122.48	1.7189	1.002
84.75	1001.2	666.6	122.48	1.7168	1.002
85.00	1001.3	666.7	122.49	1.7147	1.003
85.25	1001.4	666.8	122.48	1.7126	1.003
85.50	1001.4	666.8	122.49	1.7105	1.003
85.75	1001.5	666.9	122.48	1.7085	1.003
86.00	1001.5	666.9	122.49	1.7064	1.003
86.25	1001.6	667.0	122.48	1.7043	1.003
86.50	1001.8	667.2	122.48	1.7023	1.004
86.75	1001.8	667.2	122.48	1.7003	1.004
87.00	1001.8	667.2	122.48	1.6983	1.004

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

DATE: 07/16/97 TIME: 11:13:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	87.25	1001.9	667.3	122.49	1.6963	1.004
	87.50	1002.0	667.4	122.48	1.6943	1.004
	87.75	1002.1	667.5	122.48	1.6923	1.004
	88.00	1002.2	667.6	122.48	1.6903	1.004
	88.25	1002.3	667.7	122.49	1.6884	1.005
	88.50	1002.4	667.7	122.49	1.6864	1.005
	88.75	1002.4	667.7	122.49	1.6845	1.005
	89.00	1002.6	668.0	122.49	1.6826	1.005
	89.25	1002.6	668.0	122.49	1.6807	1.005
	89.50	1002.8	668.2	122.48	1.6788	1.006
	89.75	1002.8	668.2	122.48	1.6769	1.006
	90.00	1002.8	668.2	122.49	1.6750	1.006
	90.25	1002.9	668.2	122.49	1.6731	1.006
	90.50	1002.9	668.3	122.49	1.6713	1.006
	90.75	1003.0	668.4	122.48	1.6694	1.006
***** End Shut-in 2	91.00	1003.1	668.5	122.48	1.6676	1.006
***** Final Hydro.	365.25	2190.8	0.0	122.52		

TEST HISTORY

9848 DST#2 Mary Nation #4 Quinque Oper. Comp.

Flag Points

t (Min.) P (PSig)

A: 0.00 2199.07
 B: 0.00 70.24
 C: 14.75 142.50
 D: 29.50 997.05
 E: 0.00 152.99
 F: 46.00 334.61
 G: 91.00 1003.10
 Q: 0.00 2190.84

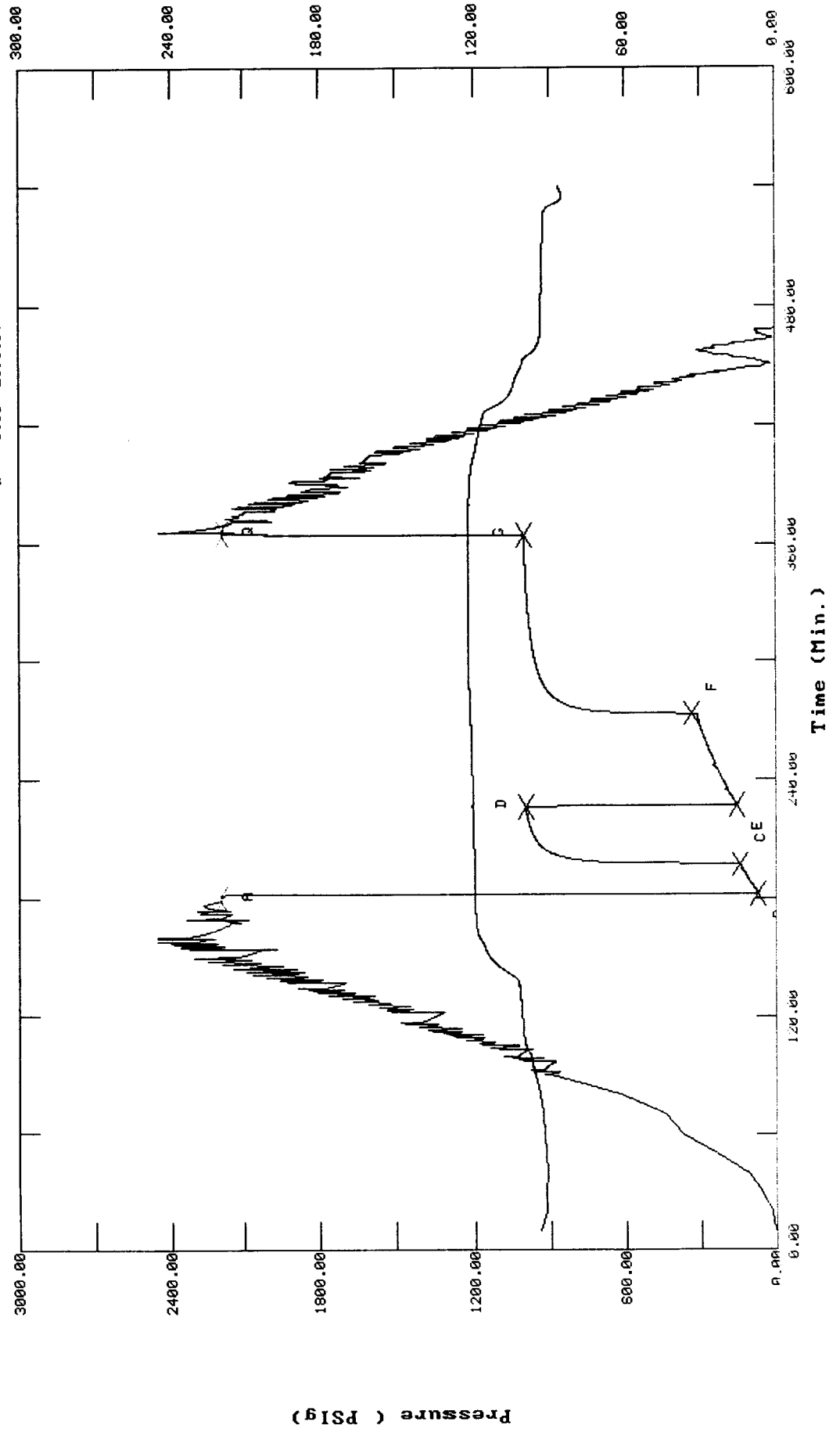
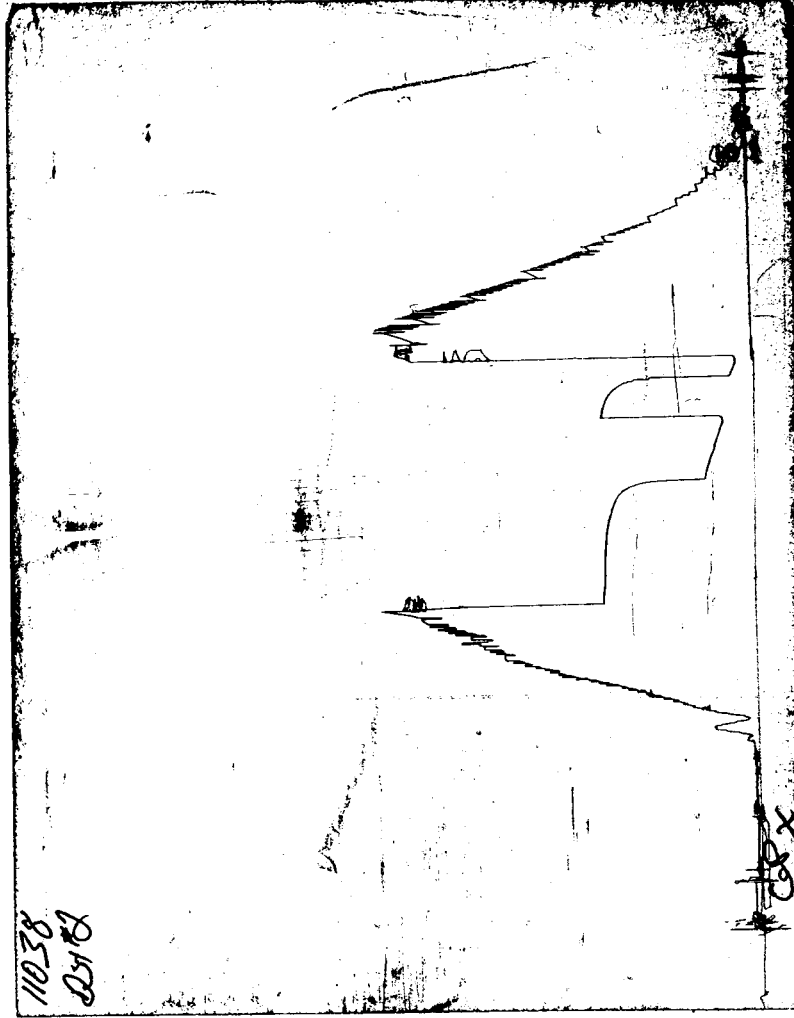


CHART PAGE



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

Copey cond. c.D.F.
oil content

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 9848 Date 7-16-97
Company Name Quinque OPER. Co.
Lease MARY NATTON #4-34 Test No. 2 Hawkwall STRADDLE
County HASKELL KS Sec. 34 Twp. 30S Rng. 33W

SAMPLER RECOVERY

Gas Trace @ 020 PSI ML
Oil 252 ML
Mud Trace ML
Water 3348 ML
Other LCM ML
Pressure 620 PSI
Total 3600 ML

PIT MUD ANALYSIS

Chlorides 1,500 ppm.
Resistivity 4.70 ohms @ 85 F
Viscosity 54
Mud Weight 9.1
Filtrate 8.8 cc.
Other LCM 11 #/BL

SAMPLER ANALYSIS

Resistivity .19 ohms @ 78 F
Chlorides 58,000 ppm.
Gravity 38 corrected @ 60 F

CAP

PIPE RECOVERY

TOP 270' S.O.C. Gassy Mud
Resistivity N.C. ohms @ ~ F
Chlorides N.C. ppm.

MIDDLE 176' G.C.M.W. @ oil speeds.
Resistivity .23 ohms @ 78 F
Chlorides 51,000 ppm.

BOTTOM 174' Salt Water @ oil speeds.
Resistivity .19 ohms @ 78 F
Chlorides 58,000 ppm.