

WELL NAME: Rusco C-1
COMPANY: Murfin Drilling Company Inc.
LOCATION: 36-11s-20W
Ellis County Kansas
DATE: 07/18/97

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co. Inc
 WELL NAME: Rusco C-1
 LOCATION : Sec36 T11s R20w Ellis KS
 INTERVAL : 3326.00 To 3380.00 ft

DATE 07/14/97
 KB 2032.00 ft
 GR 2027.00 ft
 TD 3380.00 ft

TICKET NO: 10191
 FORMATION: Lansing
 TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	11084	11084	Alpine			PF Fr. 1110 to 1140 hr
SI 60 Range(Psi)	4350.0	4350.0	4995.0	0.0	0.0	IS Fr. 1140 to 1240 hr
SF 60 Clock(hrs)	12hr.	12hr.	Elec			SF Fr. 1240 to 1340 hr
FS 120 Depth(ft)	3362.0	3362.0	3330.0	0.0	0.0	FS Fr. 1340 to 1540 hr

	Field	1	2	3	4	
A. Init Hydro	1702.0	1574.0	1653.0	0.0	0.0	T STARTED 1000 hr
B. First Flow	77.0	43.0	40.0	0.0	0.0	T ON BOTM 1108 hr
B1. Final Flow	143.0	121.0	145.0	0.0	0.0	T OPEN 1110 hr
C. In Shut-in	580.0	557.0	579.0	0.0	0.0	T PULLED 1540 hr
D. Init Flow	175.0	17.0	156.0	0.0	0.0	T OUT 1720 hr
E. Final Flow	252.0	136.0	258.0	0.0	0.0	
F. Fl Shut-in	569.0	553.0	577.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1681.0	1529.0	1623.0	0.0	0.0	Tool Wt. 2200.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 75000.00 lbs
						Initial Str Wt 70000.00 lbs
						Unseated Str Wt 72000.00 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 534.00 ft
						D.P. Length 2795.00 ft

RECOVERY

Tot Fluid 540.00 ft of 534.00 ft in DC and 6.00 ft in DP
 420.00 ft of Gas in Pipe
 96.00 ft of Clean Gassy Oil 5% gas 95% oil
 120.00 ft of Mud Cut Oil 50% mud 50% oil
 120.00 ft of Heavy Oil Cut Mid 40% oil 60% mud
 60.00 ft of Oil & Water Cut Mud 20% oil 40% water 40% mud
 144.00 ft of Oil specked Muddy Water
 0.00 ft of 5% oil 85% water 10% mud
 0.00 ft of Rw .115@90
 SALINITY 52000.00 P.P.M. A.P.I. Gravity 29.00

BLOW DESCRIPTION

Initial Flow-
 1" blow building to bottom of bucket in 15 minutes

Initial Shutin-
 surface blow building to 3 1/2"

Final Flow-
 3" blow building to bottom of bucket in 18 minutes

Final Shutin-
 surface blow building to 2'

SAMPLES:
 SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.10 lb/c
Vis.	51.00 S/L
W.L.	7.20 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	111.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Paul Simpson
Co. Rep.	Roger Welty
Contr.	Murfin
Rig #	3
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Rusco C-1

LOCATION : Sec36 T11s R20w Ellis KS

TICKET No. 10191 D.S.T. No. 1 DATE 07/14/97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 24 perf

TOTAL TOOL 44

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 30

TOTAL ASSEMBLY 74

D.C. ABOVE TOOLS.Stands9 Single Total 534

D.P. ABOVE TOOLS.Stands45 Single Total 2796

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3404

TOTAL DEPTH 3380

TOTAL DRILL PIPE ABOVE K.B. 24

REMARKS:

P.O. SUB		
C.O. SUB Top of tool @		3306
S.I. TOOL H & T		3312
HMV Sterling		3317
JARS Sterling		n/a
SAFETY JOINT Bowen		n/a
PACKER Top		3321
PACKER Bottom		3326
DEPTH	3326	
STUBB 1'		3327
ANCHOR		
3' perf		3330
Alpine rec. @	3330	
1 joint of pipe & subs to		3362
T.C.		
DEPTH		
AK-1 rec @	3362	
5' perf		3367
5' perf		3372
5' perf		3377
BULLNOSE 3' bullplug		
T.D. to		3380

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97 TIME: 09:20:54

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	113.75	1653.1	0.0	106.48		
***** Start Flow 1	0.00	40.2	0.0	106.51		
	0.25	43.1	2.9	106.54		
	0.50	46.1	5.9	106.57		
	0.75	48.7	8.5	106.60		
	1.00	51.1	10.9	106.63		
	1.25	53.4	13.2	106.65		
	1.50	55.4	15.2	106.67		
	1.75	57.3	17.1	106.69		
	2.00	59.1	18.9	106.70		
	2.25	60.7	20.6	106.72		
	2.50	62.6	22.4	106.74		
	2.75	63.7	23.6	106.74		
	3.00	64.4	24.3	106.76		
	3.25	65.3	25.1	106.77		
	3.50	66.5	26.3	106.78		
	3.75	67.9	27.7	106.79		
	4.00	69.1	28.9	106.80		
	4.25	69.6	29.4	106.80		
	4.50	71.1	30.9	106.81		
	4.75	71.5	31.3	106.82		
	5.00	73.0	32.8	106.82		
	5.25	73.4	33.3	106.83		
	5.50	74.9	34.7	106.83		
	5.75	76.5	36.3	106.83		
	6.00	77.3	37.2	106.83		
	6.25	78.0	37.9	106.84		
	6.50	79.2	39.0	106.85		
	6.75	79.9	39.8	106.85		
	7.00	81.7	41.5	106.85		
	7.25	83.0	42.8	106.86		
	7.50	83.2	43.0	106.86		
	7.75	83.7	43.5	106.86		
	8.00	84.3	44.1	106.86		
	8.25	85.0	44.8	106.87		
	8.50	85.2	45.0	106.88		
	8.75	86.1	45.9	106.88		
	9.00	86.9	46.7	106.88		
	9.25	87.7	47.5	106.89		
	9.50	88.6	48.5	106.88		
	9.75	89.6	49.4	106.88		
	10.00	90.5	50.3	106.89		
	10.25	91.3	51.1	106.89		
	10.50	92.1	51.9	106.89		
	10.75	93.1	52.9	106.90		
	11.00	93.9	53.7	106.90		
	11.25	94.5	54.3	106.90		
	11.50	95.1	54.9	106.90		
	11.75	95.8	55.6	106.91		
	12.00	96.7	56.6	106.91		
	12.25	97.3	57.2	106.91		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97 TIME: 09:20:54

Time	Pressure PSIG	delta P PSIG	Temp. DEG F	(T+dT)/dT	P^2/10^6
12.50	58.0	57.9	106.92		
12.75	58.8	58.6	106.92		
13.00	59.7	59.5	106.93		
13.25	60.2	60.1	106.94		
13.50	60.9	60.8	106.94		
13.75	61.8	61.6	106.94		
14.00	62.3	62.1	106.95		
14.25	63.6	63.4	106.96		
14.50	64.2	64.0	106.96		
14.75	65.5	65.3	106.96		
15.00	66.0	65.8	106.97		
15.25	66.2	66.0	106.98		
15.50	67.1	66.9	106.99		
15.75	67.8	67.6	106.99		
16.00	68.4	68.2	107.00		
16.25	69.2	69.0	107.01		
16.50	69.8	69.6	107.01		
16.75	70.6	70.4	107.02		
17.00	71.2	71.0	107.03		
17.25	72.2	72.0	107.04		
17.50	72.7	72.5	107.04		
17.75	73.7	73.5	107.06		
18.00	74.4	74.2	107.06		
18.25	75.1	74.9	107.07		
18.50	75.9	75.7	107.08		
18.75	76.6	76.4	107.09		
19.00	77.4	77.3	107.10		
19.25	78.2	78.0	107.10		
19.50	78.3	78.2	107.11		
19.75	78.9	78.7	107.12		
20.00	79.7	79.5	107.13		
20.25	80.4	80.2	107.14		
20.50	81.1	80.9	107.14		
20.75	82.4	82.3	107.15		
21.00	82.8	82.6	107.16		
21.25	83.1	82.9	107.17		
21.50	83.6	83.4	107.17		
21.75	84.5	84.3	107.19		
22.00	85.2	85.0	107.19		
22.25	85.9	85.7	107.21		
22.50	86.8	86.6	107.22		
22.75	87.2	87.0	107.22		
23.00	87.8	87.6	107.23		
23.25	88.4	88.3	107.23		
23.50	88.9	88.7	107.25		
23.75	89.6	89.4	107.25		
24.00	90.2	90.0	107.26		
24.25	90.9	90.7	107.27		
24.50	91.5	91.4	107.28		
24.75	92.2	92.1	107.29		
25.00	92.8	92.6	107.29		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1
 DATE: 07/14/97 TIME: 09:20:54

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	25.25	133.6	93.4	107.30		
	25.50	134.1	93.9	107.30		
	25.75	134.7	94.5	107.31		
	26.00	135.2	95.1	107.32		
	26.25	135.7	95.5	107.33		
	26.50	136.5	96.3	107.33		
	26.75	137.1	96.9	107.34		
	27.00	137.6	97.4	107.35		
	27.25	138.2	98.0	107.36		
	27.50	139.0	98.8	107.37		
	27.75	139.7	99.5	107.37		
	28.00	140.1	99.9	107.38		
	28.25	140.8	100.6	107.39		
	28.50	141.1	100.9	107.39		
	28.75	141.9	101.7	107.41		
	29.00	142.3	102.1	107.42		
	29.25	143.3	103.1	107.42		
	29.50	143.6	103.4	107.43		
	29.75	144.3	104.1	107.43		
	30.00	144.7	104.5	107.44		
***** End Flow 1	30.25	145.4	105.2	107.45		
***** Start Shutin 1	0.00	145.4	0.0	107.45	0.0000	0.021
	0.25	151.7	6.2	107.46	122.0000	0.023
	0.50	172.3	26.9	107.46	61.5000	0.030
	0.75	194.1	48.6	107.47	41.3333	0.038
	1.00	217.5	72.1	107.48	31.2500	0.047
	1.25	242.6	97.1	107.50	25.2000	0.059
	1.50	268.3	122.9	107.50	21.1667	0.072
	1.75	294.2	148.8	107.51	18.2857	0.087
	2.00	319.1	173.6	107.51	16.1250	0.102
	2.25	342.2	196.8	107.52	14.4444	0.117
	2.50	363.3	217.8	107.53	13.1000	0.132
	2.75	381.8	236.4	107.54	12.0000	0.146
	3.00	397.9	252.5	107.55	11.0833	0.158
	3.25	411.8	266.4	107.56	10.3077	0.170
	3.50	424.0	278.6	107.56	9.6429	0.180
	3.75	434.9	289.5	107.58	9.0667	0.189
	4.00	444.5	299.0	107.59	8.5625	0.198
	4.25	452.9	307.5	107.60	8.1176	0.205
	4.50	460.4	315.0	107.60	7.7222	0.212
	4.75	467.1	321.7	107.63	7.3684	0.218
	5.00	473.1	327.7	107.63	7.0500	0.224
	5.25	478.6	333.1	107.64	6.7619	0.229
	5.50	483.3	337.9	107.65	6.5000	0.234
	5.75	487.7	342.3	107.66	6.2609	0.238
	6.00	491.6	346.2	107.67	6.0417	0.242
	6.25	495.2	349.8	107.68	5.8400	0.245
	6.50	498.5	353.1	107.69	5.6538	0.249
	6.75	501.5	356.1	107.71	5.4815	0.252
	7.00	504.3	358.9	107.72	5.3214	0.254
	7.25	506.9	361.5	107.73	5.1724	0.257

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
7.50	509.3	363.9	107.74	5.0333	0.259
7.75	511.5	366.1	107.75	4.9032	0.262
8.00	513.5	368.1	107.76	4.7812	0.264
8.25	515.3	369.9	107.77	4.6667	0.266
8.50	517.1	371.7	107.77	4.5588	0.267
8.75	518.8	373.4	107.78	4.4571	0.269
9.00	520.4	375.0	107.79	4.3611	0.271
9.25	521.9	376.5	107.79	4.2703	0.272
9.50	523.4	377.9	107.82	4.1842	0.274
9.75	524.7	379.3	107.82	4.1026	0.275
10.00	526.1	380.7	107.83	4.0250	0.277
10.25	527.4	382.0	107.84	3.9512	0.278
10.50	528.4	383.0	107.85	3.8810	0.279
10.75	529.4	384.0	107.86	3.8140	0.280
11.00	530.3	384.9	107.86	3.7500	0.281
11.25	531.3	385.9	107.88	3.6889	0.282
11.50	532.1	386.7	107.88	3.6304	0.283
11.75	533.1	387.7	107.89	3.5745	0.284
12.00	534.0	388.5	107.90	3.5208	0.285
12.25	534.8	389.4	107.91	3.4694	0.286
12.50	535.7	390.3	107.95	3.4200	0.287
12.75	536.4	391.0	107.92	3.3725	0.288
13.00	537.2	391.8	107.93	3.3269	0.289
13.25	537.9	392.5	107.94	3.2830	0.289
13.50	538.7	393.3	107.95	3.2407	0.290
13.75	539.4	394.0	107.95	3.2000	0.291
14.00	540.1	394.7	107.96	3.1607	0.292
14.25	540.7	395.3	107.97	3.1228	0.292
14.50	541.3	395.9	107.98	3.0862	0.293
14.75	541.9	396.5	107.99	3.0508	0.294
15.00	542.5	397.1	107.99	3.0167	0.294
15.25	543.1	397.7	108.00	2.9836	0.295
15.50	543.7	398.2	108.01	2.9516	0.296
15.75	544.2	398.8	108.01	2.9206	0.296
16.00	544.8	399.4	108.02	2.8906	0.297
16.25	545.3	399.9	108.02	2.8615	0.297
16.50	545.9	400.4	108.04	2.8333	0.298
16.75	546.3	400.9	108.04	2.8060	0.298
17.00	546.9	401.5	108.04	2.7794	0.299
17.25	547.3	401.9	108.05	2.7536	0.300
17.50	547.9	402.5	108.07	2.7286	0.300
17.75	548.4	403.0	108.07	2.7042	0.301
18.00	548.9	403.4	108.08	2.6806	0.301
18.25	549.3	403.8	108.08	2.6575	0.302
18.50	549.7	404.3	108.10	2.6351	0.302
18.75	550.2	404.7	108.11	2.6133	0.303
19.00	550.5	405.1	108.10	2.5921	0.303
19.25	551.0	405.6	108.11	2.5714	0.304
19.50	551.3	405.9	108.12	2.5513	0.304
19.75	551.8	406.4	108.13	2.5316	0.304
20.00	552.1	406.7	108.13	2.5125	0.305

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

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Time	Pressure PSIg	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
20.25	552.5	407.1	108.14	2.4938	0.305
20.50	552.8	407.4	108.15	2.4756	0.306
20.75	553.2	407.8	108.15	2.4578	0.306
21.00	553.6	408.2	108.16	2.4405	0.306
21.25	554.0	408.5	108.17	2.4235	0.307
21.50	554.3	408.9	108.17	2.4070	0.307
21.75	554.7	409.2	108.18	2.3908	0.308
22.00	555.0	409.6	108.19	2.3750	0.308
22.25	555.3	409.9	108.20	2.3596	0.308
22.50	555.7	410.3	108.21	2.3444	0.309
22.75	556.0	410.5	108.21	2.3297	0.309
23.00	556.3	410.9	108.22	2.3152	0.309
23.25	556.6	411.2	108.22	2.3011	0.310
23.50	556.9	411.5	108.22	2.2872	0.310
23.75	557.2	411.8	108.24	2.2737	0.310
24.00	557.5	412.1	108.23	2.2604	0.311
24.25	557.9	412.4	108.25	2.2474	0.311
24.50	558.2	412.8	108.26	2.2347	0.312
24.75	558.4	413.0	108.26	2.2222	0.312
25.00	558.8	413.3	108.27	2.2100	0.312
25.25	558.9	413.5	108.27	2.1980	0.312
25.50	559.3	413.8	108.28	2.1863	0.313
25.75	559.5	414.1	108.29	2.1748	0.313
26.00	559.8	414.3	108.29	2.1635	0.313
26.25	560.0	414.6	108.30	2.1524	0.314
26.50	560.3	414.9	108.31	2.1415	0.314
26.75	560.5	415.1	108.30	2.1308	0.314
27.00	560.9	415.4	108.32	2.1204	0.315
27.25	561.0	415.6	108.31	2.1101	0.315
27.50	561.3	415.8	108.33	2.1000	0.315
27.75	561.5	416.1	108.33	2.0901	0.315
28.00	561.8	416.3	108.34	2.0804	0.316
28.25	562.0	416.5	108.34	2.0708	0.316
28.50	562.3	416.8	108.36	2.0614	0.316
28.75	562.5	417.1	108.35	2.0522	0.316
29.00	562.7	417.3	108.38	2.0431	0.317
29.25	562.9	417.5	108.38	2.0342	0.317
29.50	563.1	417.7	108.38	2.0254	0.317
29.75	563.4	418.0	108.39	2.0168	0.317
30.00	563.6	418.1	108.39	2.0083	0.318
30.25	563.8	418.4	108.40	2.0000	0.318
30.50	564.0	418.6	108.41	1.9918	0.318
30.75	564.2	418.8	108.41	1.9837	0.318
31.00	564.4	418.9	108.42	1.9758	0.318
31.25	564.7	419.2	108.43	1.9680	0.319
31.50	564.8	419.4	108.42	1.9603	0.319
31.75	565.0	419.6	108.44	1.9528	0.319
32.00	565.2	419.8	108.44	1.9453	0.319
32.25	565.4	420.0	108.45	1.9380	0.320
32.50	565.6	420.2	108.46	1.9308	0.320
32.75	565.7	420.3	108.46	1.9237	0.320

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
33.00	565.9	420.5	108.47	1.9167	0.320
33.25	566.1	420.7	108.47	1.9098	0.321
33.50	566.3	420.9	108.47	1.9030	0.321
33.75	566.5	421.1	108.48	1.8963	0.321
34.00	566.7	421.3	108.49	1.8897	0.321
34.25	566.8	421.4	108.50	1.8832	0.321
34.50	567.0	421.6	108.50	1.8768	0.322
34.75	567.2	421.7	108.51	1.8705	0.322
35.00	567.3	421.9	108.51	1.8643	0.322
35.25	567.4	422.0	108.52	1.8582	0.322
35.50	567.6	422.2	108.52	1.8521	0.322
35.75	567.8	422.4	108.54	1.8462	0.322
36.00	568.0	422.5	108.54	1.8403	0.323
36.25	568.2	422.8	108.54	1.8345	0.323
36.50	568.3	422.9	108.55	1.8288	0.323
36.75	568.4	423.0	108.55	1.8231	0.323
37.00	568.6	423.2	108.56	1.8176	0.323
37.25	568.9	423.5	108.56	1.8121	0.324
37.50	568.9	423.5	108.57	1.8067	0.324
37.75	569.1	423.7	108.58	1.8013	0.324
38.00	569.3	423.8	108.58	1.7961	0.324
38.25	569.4	424.0	108.58	1.7908	0.324
38.50	569.6	424.2	108.59	1.7857	0.324
38.75	569.7	424.3	108.60	1.7806	0.325
39.00	569.9	424.5	108.62	1.7756	0.325
39.25	570.0	424.6	108.62	1.7707	0.325
39.50	570.2	424.7	108.62	1.7658	0.325
39.75	570.3	424.9	108.62	1.7610	0.325
40.00	570.4	425.0	108.63	1.7563	0.325
40.25	570.5	425.1	108.63	1.7516	0.325
40.50	570.7	425.3	108.64	1.7469	0.326
40.75	570.9	425.4	108.65	1.7423	0.326
41.00	570.9	425.5	108.65	1.7378	0.326
41.25	571.1	425.7	108.66	1.7333	0.326
41.50	571.2	425.8	108.66	1.7289	0.326
41.75	571.5	426.1	108.67	1.7246	0.327
42.00	571.6	426.1	108.69	1.7202	0.327
42.25	571.7	426.3	108.69	1.7160	0.327
42.50	571.9	426.5	108.69	1.7118	0.327
42.75	571.9	426.5	108.70	1.7076	0.327
43.00	572.1	426.7	108.70	1.7035	0.327
43.25	572.3	426.8	108.72	1.6994	0.327
43.50	572.3	426.9	108.73	1.6954	0.328
43.75	572.4	427.0	108.72	1.6914	0.328
44.00	572.5	427.1	108.73	1.6875	0.328
44.25	572.7	427.3	108.72	1.6836	0.328
44.50	572.8	427.4	108.73	1.6798	0.328
44.75	572.9	427.5	108.73	1.6760	0.328
45.00	573.0	427.6	108.74	1.6722	0.328
45.25	573.1	427.7	108.74	1.6685	0.328
45.50	573.2	427.8	108.75	1.6648	0.329

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
45.75	573.3	427.9	108.75	1.6612	0.329
46.00	573.5	428.1	108.76	1.6576	0.329
46.25	573.6	428.2	108.76	1.6541	0.329
46.50	573.7	428.3	108.77	1.6505	0.329
46.75	573.8	428.3	108.78	1.6471	0.329
47.00	573.9	428.5	108.78	1.6436	0.329
47.25	574.0	428.6	108.79	1.6402	0.330
47.50	574.1	428.7	108.80	1.6368	0.330
47.75	574.3	428.8	108.80	1.6335	0.330
48.00	574.3	428.9	108.80	1.6302	0.330
48.25	574.5	429.0	108.81	1.6269	0.330
48.50	574.6	429.2	108.82	1.6237	0.330
48.75	574.7	429.3	108.83	1.6205	0.330
49.00	574.8	429.4	108.83	1.6173	0.330
49.25	574.9	429.5	108.83	1.6142	0.330
49.50	575.0	429.6	108.84	1.6111	0.331
49.75	575.1	429.6	108.85	1.6080	0.331
50.00	575.2	429.8	108.86	1.6050	0.331
50.25	575.3	429.9	108.86	1.6020	0.331
50.50	575.4	430.0	108.87	1.5990	0.331
50.75	575.5	430.1	108.87	1.5961	0.331
51.00	575.6	430.2	108.87	1.5931	0.331
51.25	575.7	430.3	108.88	1.5902	0.331
51.50	575.8	430.4	108.89	1.5874	0.332
51.75	575.9	430.5	108.89	1.5845	0.332
52.00	576.0	430.6	108.90	1.5817	0.332
52.25	576.1	430.7	108.90	1.5789	0.332
52.50	576.2	430.8	108.90	1.5762	0.332
52.75	576.3	430.9	108.90	1.5735	0.332
53.00	576.3	430.8	108.91	1.5708	0.332
53.25	576.4	431.0	108.91	1.5681	0.332
53.50	576.5	431.1	108.92	1.5654	0.332
53.75	576.6	431.1	108.93	1.5628	0.332
54.00	576.7	431.3	108.94	1.5602	0.333
54.25	576.7	431.3	108.94	1.5576	0.333
54.50	576.8	431.4	108.94	1.5550	0.333
54.75	576.9	431.5	108.95	1.5525	0.333
55.00	577.1	431.6	108.95	1.5500	0.333
55.25	577.2	431.8	108.96	1.5475	0.333
55.50	577.3	431.8	108.96	1.5450	0.333
55.75	577.4	431.9	108.97	1.5426	0.333
56.00	577.4	432.0	108.97	1.5402	0.333
56.25	577.5	432.1	108.98	1.5378	0.334
56.50	577.5	432.1	108.98	1.5354	0.334
56.75	577.7	432.3	108.99	1.5330	0.334
57.00	577.7	432.3	109.00	1.5307	0.334
57.25	577.9	432.5	109.00	1.5284	0.334
57.50	577.9	432.5	109.01	1.5261	0.334
57.75	578.0	432.6	109.01	1.5238	0.334
58.00	578.1	432.7	109.02	1.5216	0.334
58.25	578.2	432.7	109.03	1.5193	0.334

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	58.50	578.2	432.7	109.04	1.5171	0.334
	58.75	578.4	432.9	109.03	1.5149	0.334
	59.00	578.5	433.0	109.03	1.5127	0.335
	59.25	578.5	433.1	109.03	1.5105	0.335
	59.50	578.6	433.1	109.03	1.5084	0.335
	59.75	578.7	433.3	109.04	1.5063	0.335
	60.00	578.8	433.3	109.05	1.5042	0.335
	60.25	578.8	433.3	109.06	1.5021	0.335
	60.50	578.9	433.4	109.06	1.5000	0.335
	60.75	579.0	433.5	109.06	1.4979	0.335
	61.00	579.0	433.5	109.07	1.4959	0.335
***** End Shut-in 1	61.25	579.1	433.7	109.08	1.4939	0.335
***** Start Flow 2	0.00	155.9	0.0	109.09		
	0.25	155.2	-0.7	109.09		
	0.50	155.4	-0.5	109.09		
	0.75	156.0	0.1	109.09		
	1.00	156.7	0.8	109.09		
	1.25	157.9	2.0	109.09		
	1.50	158.9	3.0	109.10		
	1.75	159.8	3.9	109.09		
	2.00	160.6	4.7	109.10		
	2.25	161.5	5.6	109.09		
	2.50	162.3	6.4	109.10		
	2.75	163.1	7.2	109.10		
	3.00	163.7	7.8	109.10		
	3.25	164.3	8.4	109.10		
	3.50	165.0	9.1	109.10		
	3.75	165.6	9.7	109.09		
	4.00	166.3	10.4	109.10		
	4.25	167.0	11.1	109.10		
	4.50	167.7	11.8	109.10		
	4.75	168.5	12.6	109.10		
	5.00	169.2	13.3	109.10		
	5.25	169.8	13.9	109.11		
	5.50	170.3	14.4	109.11		
	5.75	171.0	15.1	109.11		
	6.00	171.7	15.8	109.11		
	6.25	172.5	16.6	109.11		
	6.50	173.2	17.3	109.12		
	6.75	173.8	17.9	109.12		
	7.00	174.5	18.6	109.12		
	7.25	175.2	19.3	109.12		
	7.50	175.9	20.0	109.12		
	7.75	176.4	20.5	109.13		
	8.00	177.0	21.1	109.13		
	8.25	177.6	21.7	109.13		
	8.50	178.3	22.4	109.14		
	8.75	179.0	23.1	109.14		
	9.00	179.5	23.6	109.14		
	9.25	180.1	24.3	109.15		
	9.50	180.9	25.0	109.15		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97 TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
9.75	181.5	25.6	109.15		
10.00	182.0	26.1	109.16		
10.25	182.6	26.7	109.16		
10.50	183.3	27.4	109.16		
10.75	184.1	28.2	109.17		
11.00	184.7	28.8	109.17		
11.25	185.2	29.3	109.18		
11.50	185.9	30.0	109.18		
11.75	186.5	30.6	109.18		
12.00	187.1	31.2	109.19		
12.25	187.8	31.9	109.19		
12.50	188.5	32.6	109.19		
12.75	189.0	33.1	109.20		
13.00	189.7	33.8	109.20		
13.25	190.5	34.6	109.21		
13.50	191.1	35.2	109.21		
13.75	191.7	35.8	109.22		
14.00	192.3	36.4	109.22		
14.25	192.9	37.0	109.22		
14.50	193.5	37.6	109.23		
14.75	194.0	38.1	109.23		
15.00	194.4	38.5	109.24		
15.25	194.7	38.8	109.25		
15.50	195.2	39.3	109.27		
15.75	195.5	39.6	109.25		
16.00	196.0	40.1	109.25		
16.25	196.4	40.5	109.26		
16.50	196.7	40.8	109.27		
16.75	197.1	41.2	109.27		
17.00	197.5	41.6	109.27		
17.25	197.7	41.8	109.28		
17.50	198.0	42.1	109.28		
17.75	198.3	42.4	109.30		
18.00	198.6	42.7	109.29		
18.25	198.9	43.0	109.30		
18.50	199.1	43.2	109.30		
18.75	199.5	43.6	109.30		
19.00	200.0	44.1	109.31		
19.25	200.2	44.3	109.31		
19.50	200.5	44.6	109.32		
19.75	200.9	45.0	109.33		
20.00	201.2	45.3	109.33		
20.25	201.8	45.9	109.33		
20.50	202.0	46.1	109.34		
20.75	202.3	46.4	109.35		
21.00	202.8	46.9	109.35		
21.25	202.8	46.9	109.35		
21.50	203.5	47.6	109.35		
21.75	203.7	47.8	109.36		
22.00	204.4	48.5	109.37		
22.25	204.9	49.0	109.37		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
22.50	205.2	49.3	109.37		
22.75	205.6	49.7	109.38		
23.00	206.1	50.2	109.38		
23.25	206.4	50.5	109.39		
23.50	207.1	51.2	109.39		
23.75	207.6	51.7	109.39		
24.00	208.0	52.1	109.41		
24.25	208.5	52.6	109.41		
24.50	209.1	53.3	109.42		
24.75	209.5	53.6	109.42		
25.00	209.9	54.0	109.42		
25.25	210.5	54.6	109.43		
25.50	210.7	54.8	109.43		
25.75	211.4	55.5	109.44		
26.00	212.0	56.1	109.44		
26.25	212.5	56.6	109.44		
26.50	212.6	56.7	109.45		
26.75	213.3	57.4	109.45		
27.00	213.8	57.9	109.46		
27.25	214.3	58.4	109.46		
27.50	214.6	58.7	109.46		
27.75	215.1	59.2	109.47		
28.00	215.9	60.0	109.48		
28.25	216.0	60.1	109.48		
28.50	216.3	60.4	109.49		
28.75	217.1	61.2	109.49		
29.00	217.1	61.2	109.50		
29.25	217.7	61.8	109.50		
29.50	218.2	62.3	109.50		
29.75	218.7	62.8	109.50		
30.00	219.1	63.2	109.51		
30.25	219.6	63.7	109.52		
30.50	220.2	64.3	109.52		
30.75	220.6	64.7	109.53		
31.00	221.0	65.1	109.53		
31.25	221.5	65.6	109.53		
31.50	222.0	66.1	109.54		
31.75	222.4	66.5	109.55		
32.00	222.9	67.0	109.55		
32.25	223.4	67.5	109.55		
32.50	223.9	68.0	109.56		
32.75	224.0	68.1	109.56		
33.00	224.6	68.7	109.57		
33.25	225.3	69.4	109.57		
33.50	225.5	69.6	109.57		
33.75	226.1	70.2	109.58		
34.00	226.6	70.7	109.59		
34.25	227.2	71.3	109.59		
34.50	227.6	71.7	109.60		
34.75	228.1	72.2	109.59		
35.00	228.6	72.7	109.60		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1
 DATE: 07/14/97 TIME: 09:20:54

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
35.25	228.9	73.0	109.61		
35.50	229.2	73.3	109.61		
35.75	229.8	73.9	109.62		
36.00	230.2	74.3	109.62		
36.25	230.9	75.0	109.62		
36.50	231.2	75.3	109.63		
36.75	231.6	75.7	109.63		
37.00	231.9	76.0	109.64		
37.25	232.5	76.6	109.64		
37.50	232.8	76.9	109.64		
37.75	233.0	77.1	109.65		
38.00	233.7	77.8	109.66		
38.25	233.9	78.0	109.66		
38.50	234.3	78.4	109.66		
38.75	234.8	78.9	109.66		
39.00	235.2	79.3	109.67		
39.25	235.5	79.6	109.68		
39.50	236.1	80.2	109.67		
39.75	236.3	80.4	109.69		
40.00	236.8	80.9	109.69		
40.25	237.2	81.3	109.69		
40.50	237.6	81.8	109.70		
40.75	238.1	82.2	109.70		
41.00	238.6	82.7	109.71		
41.25	238.9	83.0	109.71		
41.50	239.3	83.4	109.72		
41.75	239.8	83.9	109.72		
42.00	240.2	84.3	109.72		
42.25	240.4	84.5	109.73		
42.50	240.9	85.0	109.73		
42.75	241.3	85.4	109.73		
43.00	241.6	85.7	109.75		
43.25	241.9	86.0	109.74		
43.50	242.2	86.3	109.75		
43.75	242.5	86.6	109.76		
44.00	243.0	87.1	109.75		
44.25	243.7	87.8	109.76		
44.50	244.1	88.2	109.76		
44.75	244.5	88.6	109.78		
45.00	244.8	88.9	109.77		
45.25	245.2	89.3	109.78		
45.50	245.5	89.6	109.79		
45.75	246.0	90.1	109.79		
46.00	246.3	90.4	109.79		
46.25	246.8	90.9	109.80		
46.50	247.1	91.2	109.80		
46.75	247.4	91.5	109.80		
47.00	247.7	91.8	109.80		
47.25	248.2	92.3	109.82		
47.50	248.6	92.7	109.82		
47.75	249.0	93.1	109.87		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	48.00	249.3	93.4	109.80		
	48.25	249.7	93.8	109.82		
	48.50	249.8	93.9	109.83		
	48.75	250.5	94.6	109.83		
	49.00	250.9	95.0	109.84		
	49.25	251.1	95.2	109.84		
	49.50	251.3	95.4	109.84		
	49.75	251.8	95.9	109.85		
	50.00	252.1	96.2	109.86		
	50.25	252.3	96.5	109.86		
	50.50	252.9	97.0	109.86		
	50.75	253.4	97.5	109.87		
	51.00	253.8	97.9	109.87		
	51.25	253.9	98.0	109.88		
	51.50	254.0	98.1	109.88		
	51.75	254.2	98.3	109.88		
	52.00	254.5	98.6	109.89		
	52.25	254.6	98.7	109.89		
	52.50	254.6	98.7	109.90		
	52.75	254.7	98.8	109.91		
	53.00	255.1	99.2	109.91		
	53.25	255.3	99.4	109.92		
	53.50	255.4	99.5	109.91		
	53.75	255.6	99.7	109.92		
	54.00	255.7	99.8	109.92		
	54.25	255.9	100	109.92		
	54.50	256.1	100.2	109.93		
	54.75	256.2	100.3	109.93		
	55.00	256.6	100.7	109.93		
	55.25	256.6	100.7	109.94		
	55.50	257.0	101.1	109.94		
	55.75	257.0	101.1	109.95		
	56.00	257.1	101.2	109.96		
	56.25	257.2	101.3	109.96		
	56.50	257.5	101.6	109.96		
	56.75	257.2	101.3	109.97		
	57.00	257.3	101.4	109.97		
	57.25	257.3	101.4	109.98		
	57.50	257.4	101.5	109.98		
	57.75	257.5	101.6	109.98		
	58.00	257.7	101.8	109.99		
	58.25	257.6	101.7	109.99		
	58.50	257.6	101.7	109.99		
*****	End Flow 2	58.75	257.6	101.7	110.00	
*****	Start Shutin 2	0.00	257.6	0.0	110.00	0.066
		0.25	270.2	12.5	110.00	357.0000 0.073
		0.50	290.2	32.6	110.00	179.0000 0.084
		0.75	308.8	51.2	110.01	119.6667 0.095
		1.00	326.8	69.2	110.02	90.0000 0.107
		1.25	344.0	86.4	110.02	72.2000 0.118
		1.50	360.3	102.6	110.03	60.3333 0.130

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
1.75	375.4	117.8	110.00	51.8571	0.141
2.00	389.5	131.9	110.03	45.5000	0.152
2.25	402.4	144.8	110.04	40.5556	0.162
2.50	414.2	156.6	110.05	36.6000	0.172
2.75	424.7	167.1	110.05	33.3636	0.180
3.00	434.4	176.7	110.06	30.6667	0.189
3.25	443.0	185.4	110.07	28.3846	0.196
3.50	450.7	193.0	110.07	26.4286	0.203
3.75	457.5	199.9	110.08	24.7333	0.209
4.00	463.6	206.0	110.08	23.2500	0.215
4.25	469.0	211.4	110.09	21.9412	0.220
4.50	474.0	216.4	110.09	20.7778	0.225
4.75	478.4	220.8	110.10	19.7368	0.229
5.00	482.4	224.8	110.10	18.8000	0.233
5.25	486.1	228.5	110.11	17.9524	0.236
5.50	489.4	231.8	110.11	17.1818	0.239
5.75	492.4	234.8	110.13	16.4783	0.242
6.00	495.2	237.6	110.12	15.8333	0.245
6.25	497.8	240.2	110.13	15.2400	0.248
6.50	500.2	242.6	110.15	14.6923	0.250
6.75	502.4	244.8	110.14	14.1852	0.252
7.00	504.4	246.8	110.14	13.7143	0.254
7.25	506.3	248.7	110.15	13.2759	0.256
7.50	508.0	250.4	110.16	12.8667	0.258
7.75	509.6	252.0	110.17	12.4839	0.260
8.00	511.2	253.5	110.17	12.1250	0.261
8.25	512.6	254.9	110.18	11.7879	0.263
8.50	513.9	256.3	110.18	11.4706	0.264
8.75	515.2	257.6	110.19	11.1714	0.265
9.00	516.3	258.7	110.19	10.8889	0.267
9.25	517.4	259.8	110.20	10.6216	0.268
9.50	518.5	260.9	110.21	10.3684	0.269
9.75	519.5	261.9	110.21	10.1282	0.270
10.00	520.4	262.8	110.22	9.9000	0.271
10.25	521.3	263.7	110.22	9.6829	0.272
10.50	522.2	264.6	110.23	9.4762	0.273
10.75	523.0	265.4	110.24	9.2791	0.274
11.00	523.8	266.2	110.24	9.0909	0.274
11.25	524.6	267.0	110.25	8.9111	0.275
11.50	525.2	267.6	110.25	8.7391	0.276
11.75	526.0	268.4	110.25	8.5745	0.277
12.00	526.6	269.0	110.25	8.4167	0.277
12.25	527.3	269.7	110.26	8.2653	0.278
12.50	528.0	270.4	110.27	8.1200	0.279
12.75	528.6	270.9	110.27	7.9804	0.279
13.00	529.1	271.5	110.29	7.8462	0.280
13.25	529.7	272.1	110.29	7.7170	0.281
13.50	530.4	272.8	110.29	7.5926	0.281
13.75	530.8	273.2	110.27	7.4727	0.282
14.00	531.3	273.7	110.29	7.3571	0.282
14.25	531.9	274.3	110.29	7.2456	0.283

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
14.50	532.3	274.7	110.30	7.1379	0.283
14.75	532.8	275.2	110.31	7.0339	0.284
15.00	533.2	275.6	110.31	6.9333	0.284
15.25	533.8	276.2	110.32	6.8361	0.285
15.50	534.2	276.6	110.33	6.7419	0.285
15.75	534.7	277.1	110.33	6.6508	0.286
16.00	535.0	277.4	110.32	6.5625	0.286
16.25	535.6	277.9	110.34	6.4769	0.287
16.50	535.9	278.3	110.33	6.3939	0.287
16.75	536.2	278.6	110.34	6.3134	0.288
17.00	536.7	279.1	110.35	6.2353	0.288
17.25	537.1	279.4	110.35	6.1594	0.288
17.50	537.5	279.8	110.35	6.0857	0.289
17.75	537.8	280.2	110.36	6.0141	0.289
18.00	538.2	280.5	110.36	5.9444	0.290
18.25	538.5	280.8	110.37	5.8767	0.290
18.50	538.8	281.2	110.37	5.8108	0.290
18.75	539.2	281.6	110.38	5.7467	0.291
19.00	539.5	281.9	110.38	5.6842	0.291
19.25	539.8	282.2	110.38	5.6234	0.291
19.50	540.2	282.5	110.39	5.5641	0.292
19.75	540.5	282.9	110.39	5.5063	0.292
20.00	540.9	283.3	110.39	5.4500	0.293
20.25	541.1	283.5	110.40	5.3951	0.293
20.50	541.4	283.8	110.41	5.3415	0.293
20.75	541.7	284.0	110.41	5.2892	0.293
21.00	542.0	284.4	110.42	5.2381	0.294
21.25	542.3	284.7	110.42	5.1882	0.294
21.50	542.7	285.0	110.43	5.1395	0.294
21.75	542.9	285.3	110.43	5.0920	0.295
22.00	543.2	285.6	110.44	5.0455	0.295
22.25	543.5	285.9	110.43	5.0000	0.295
22.50	543.7	286.1	110.44	4.9556	0.296
22.75	544.0	286.4	110.44	4.9121	0.296
23.00	544.3	286.6	110.45	4.8696	0.296
23.25	544.5	286.9	110.45	4.8280	0.297
23.50	544.8	287.2	110.44	4.7872	0.297
23.75	545.0	287.4	110.45	4.7474	0.297
24.00	545.3	287.7	110.46	4.7083	0.297
24.25	545.6	288.0	110.46	4.6701	0.298
24.50	545.8	288.2	110.46	4.6327	0.298
24.75	546.0	288.4	110.47	4.5960	0.298
25.00	546.3	288.7	110.48	4.5600	0.298
25.25	546.5	288.9	110.48	4.5248	0.299
25.50	546.8	289.2	110.48	4.4902	0.299
25.75	547.0	289.4	110.49	4.4563	0.299
26.00	547.2	289.6	110.49	4.4231	0.299
26.25	547.4	289.8	110.50	4.3905	0.300
26.50	547.6	290.0	110.50	4.3585	0.300
26.75	547.9	290.3	110.51	4.3271	0.300
27.00	548.0	290.4	110.51	4.2963	0.300

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
27.25	548.3	290.7	110.51	4.2661	0.301
27.50	548.6	290.9	110.51	4.2364	0.301
27.75	548.8	291.1	110.51	4.2072	0.301
28.00	548.9	291.3	110.52	4.1786	0.301
28.25	549.1	291.5	110.52	4.1504	0.302
28.50	549.3	291.7	110.53	4.1228	0.302
28.75	549.5	291.9	110.53	4.0957	0.302
29.00	549.7	292.1	110.54	4.0690	0.302
29.25	549.9	292.3	110.53	4.0427	0.302
29.50	550.1	292.5	110.54	4.0169	0.303
29.75	550.4	292.7	110.55	3.9916	0.303
30.00	550.6	293.0	110.54	3.9667	0.303
30.25	550.7	293.1	110.55	3.9421	0.303
30.50	550.9	293.2	110.55	3.9180	0.303
30.75	551.0	293.4	110.56	3.8943	0.304
31.00	551.3	293.6	110.57	3.8710	0.304
31.25	551.5	293.8	110.57	3.8480	0.304
31.50	551.6	294.0	110.57	3.8254	0.304
31.75	551.9	294.3	110.57	3.8031	0.305
32.00	552.1	294.4	110.57	3.7812	0.305
32.25	552.1	294.5	110.58	3.7597	0.305
32.50	552.3	294.7	110.58	3.7385	0.305
32.75	552.4	294.8	110.59	3.7176	0.305
33.00	552.6	294.9	110.59	3.6970	0.305
33.25	552.8	295.2	110.59	3.6767	0.306
33.50	553.0	295.3	110.59	3.6567	0.306
33.75	553.1	295.4	110.61	3.6370	0.306
34.00	553.2	295.6	110.61	3.6176	0.306
34.25	553.4	295.8	110.61	3.5985	0.306
34.50	553.7	296.0	110.61	3.5797	0.307
34.75	553.7	296.1	110.62	3.5612	0.307
35.00	553.9	296.3	110.62	3.5429	0.307
35.25	554.0	296.4	110.63	3.5248	0.307
35.50	554.1	296.5	110.63	3.5070	0.307
35.75	554.3	296.7	110.63	3.4895	0.307
36.00	554.5	296.9	110.63	3.4722	0.307
36.25	554.6	297.0	110.64	3.4552	0.308
36.50	554.8	297.2	110.64	3.4384	0.308
36.75	554.9	297.3	110.64	3.4218	0.308
37.00	555.1	297.5	110.65	3.4054	0.308
37.25	555.2	297.6	110.65	3.3893	0.308
37.50	555.4	297.7	110.65	3.3733	0.308
37.75	555.5	297.9	110.66	3.3576	0.309
38.00	555.6	298.0	110.66	3.3421	0.309
38.25	555.7	298.1	110.67	3.3268	0.309
38.50	555.9	298.3	110.67	3.3117	0.309
38.75	556.1	298.4	110.68	3.2968	0.309
39.00	556.2	298.6	110.68	3.2821	0.309
39.25	556.4	298.7	110.68	3.2675	0.310
39.50	556.5	298.9	110.68	3.2532	0.310
39.75	556.6	299.0	110.69	3.2390	0.310

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
40.00	556.7	299.1	110.68	3.2250	0.310
40.25	556.9	299.3	110.69	3.2112	0.310
40.50	557.0	299.4	110.69	3.1975	0.310
40.75	557.1	299.5	110.70	3.1840	0.310
41.00	557.3	299.6	110.70	3.1707	0.311
41.25	557.4	299.8	110.69	3.1576	0.311
41.50	557.5	299.9	110.70	3.1446	0.311
41.75	557.7	300.1	110.70	3.1317	0.311
42.00	557.8	300.2	110.70	3.1190	0.311
42.25	557.9	300.3	110.71	3.1065	0.311
42.50	558.0	300.4	110.72	3.0941	0.311
42.75	558.2	300.6	110.72	3.0819	0.312
43.00	558.3	300.6	110.72	3.0698	0.312
43.25	558.4	300.7	110.73	3.0578	0.312
43.50	558.5	300.9	110.73	3.0460	0.312
43.75	558.7	301.0	110.74	3.0343	0.312
44.00	558.8	301.1	110.73	3.0227	0.312
44.25	558.8	301.2	110.74	3.0113	0.312
44.50	559.0	301.4	110.74	3.0000	0.312
44.75	559.1	301.5	110.74	2.9888	0.313
45.00	559.3	301.7	110.75	2.9778	0.313
45.25	559.5	301.9	110.76	2.9669	0.313
45.50	559.5	301.9	110.76	2.9560	0.313
45.75	559.6	302.0	110.76	2.9454	0.313
46.00	559.7	302.1	110.76	2.9348	0.313
46.25	559.8	302.2	110.77	2.9243	0.313
46.50	559.9	302.3	110.77	2.9140	0.314
46.75	560.1	302.5	110.78	2.9037	0.314
47.00	560.2	302.6	110.78	2.8936	0.314
47.25	560.3	302.7	110.79	2.8836	0.314
47.50	560.3	302.7	110.79	2.8737	0.314
47.75	560.6	303.0	110.79	2.8639	0.314
48.00	560.6	303.0	110.79	2.8542	0.314
48.25	560.7	303.1	110.78	2.8446	0.314
48.50	560.8	303.2	110.80	2.8351	0.314
48.75	560.9	303.3	110.79	2.8256	0.315
49.00	561.0	303.4	110.79	2.8163	0.315
49.25	561.1	303.5	110.80	2.8071	0.315
49.50	561.2	303.6	110.79	2.7980	0.315
49.75	561.3	303.7	110.80	2.7889	0.315
50.00	561.4	303.8	110.81	2.7800	0.315
50.25	561.5	303.9	110.81	2.7711	0.315
50.50	561.6	304.0	110.81	2.7624	0.315
50.75	561.7	304.1	110.81	2.7537	0.316
51.00	561.8	304.2	110.82	2.7451	0.316
51.25	562.0	304.4	110.82	2.7366	0.316
51.50	562.0	304.4	110.82	2.7282	0.316
51.75	562.1	304.5	110.82	2.7198	0.316
52.00	562.2	304.6	110.83	2.7115	0.316
52.25	562.3	304.7	110.83	2.7033	0.316
52.50	562.4	304.8	110.84	2.6952	0.316

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
52.75	562.5	304.9	110.84	2.6872	0.316
53.00	562.5	304.9	110.85	2.6792	0.316
53.25	562.6	305.0	110.83	2.6714	0.317
53.50	562.8	305.2	110.84	2.6636	0.317
53.75	562.8	305.2	110.85	2.6558	0.317
54.00	562.9	305.3	110.85	2.6481	0.317
54.25	563.0	305.4	110.86	2.6406	0.317
54.50	563.2	305.6	110.87	2.6330	0.317
54.75	563.2	305.6	110.87	2.6256	0.317
55.00	563.3	305.7	110.87	2.6182	0.317
55.25	563.4	305.8	110.87	2.6109	0.317
55.50	563.5	305.9	110.88	2.6036	0.317
55.75	563.6	306.0	110.88	2.5964	0.318
56.00	563.7	306.1	110.87	2.5893	0.318
56.25	563.8	306.1	110.88	2.5822	0.318
56.50	563.8	306.2	110.89	2.5752	0.318
56.75	563.9	306.3	110.89	2.5683	0.318
57.00	564.0	306.4	110.89	2.5614	0.318
57.25	564.1	306.5	110.89	2.5546	0.318
57.50	564.2	306.6	110.89	2.5478	0.318
57.75	564.3	306.7	110.90	2.5411	0.318
58.00	564.4	306.8	110.90	2.5345	0.319
58.25	564.4	306.8	110.91	2.5279	0.319
58.50	564.6	307.0	110.90	2.5214	0.319
58.75	564.7	307.1	110.91	2.5149	0.319
59.00	564.7	307.1	110.91	2.5085	0.319
59.25	564.8	307.2	110.91	2.5021	0.319
59.50	565.0	307.4	110.91	2.4958	0.319
59.75	565.0	307.4	110.91	2.4895	0.319
60.00	565.1	307.5	110.91	2.4833	0.319
60.25	565.2	307.6	110.92	2.4772	0.319
60.50	565.3	307.7	110.92	2.4711	0.320
60.75	565.3	307.7	110.92	2.4650	0.320
61.00	565.5	307.9	110.93	2.4590	0.320
61.25	565.5	307.9	110.93	2.4531	0.320
61.50	565.6	308.0	110.93	2.4472	0.320
61.75	565.7	308.1	110.93	2.4413	0.320
62.00	565.7	308.1	110.93	2.4355	0.320
62.25	565.9	308.2	110.94	2.4297	0.320
62.50	565.9	308.3	110.94	2.4240	0.320
62.75	566.0	308.4	110.95	2.4183	0.320
63.00	566.0	308.4	110.95	2.4127	0.320
63.25	566.1	308.5	110.95	2.4071	0.320
63.50	566.3	308.7	110.96	2.4016	0.321
63.75	566.3	308.6	110.96	2.3961	0.321
64.00	566.4	308.8	110.96	2.3906	0.321
64.25	566.5	308.9	110.96	2.3852	0.321
64.50	566.6	308.9	110.96	2.3798	0.321
64.75	566.7	309.0	110.96	2.3745	0.321
65.00	566.7	309.0	110.97	2.3692	0.321
65.25	566.7	309.1	110.97	2.3640	0.321

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
65.50	566.8	309.2	110.97	2.3588	0.321
65.75	566.9	309.2	110.98	2.3536	0.321
66.00	566.9	309.3	110.98	2.3485	0.321
66.25	567.0	309.4	110.99	2.3434	0.321
66.50	567.1	309.4	110.98	2.3383	0.322
66.75	567.1	309.5	110.99	2.3333	0.322
67.00	567.3	309.6	110.99	2.3284	0.322
67.25	567.3	309.6	110.98	2.3234	0.322
67.50	567.3	309.7	110.99	2.3185	0.322
67.75	567.4	309.8	111.00	2.3137	0.322
68.00	567.5	309.9	111.00	2.3088	0.322
68.25	567.6	309.9	111.00	2.3040	0.322
68.50	567.6	310.0	111.01	2.2993	0.322
68.75	567.7	310.1	111.00	2.2945	0.322
69.00	567.8	310.2	111.01	2.2899	0.322
69.25	567.8	310.2	111.01	2.2852	0.322
69.50	567.9	310.3	111.01	2.2806	0.323
69.75	568.0	310.4	111.01	2.2760	0.323
70.00	568.1	310.5	111.02	2.2714	0.323
70.25	568.1	310.5	111.02	2.2669	0.323
70.50	568.2	310.6	111.02	2.2624	0.323
70.75	568.2	310.6	111.02	2.2580	0.323
71.00	568.4	310.8	111.03	2.2535	0.323
71.25	568.4	310.7	111.03	2.2491	0.323
71.50	568.5	310.9	111.03	2.2448	0.323
71.75	568.5	310.9	111.04	2.2404	0.323
72.00	568.6	311.0	111.03	2.2361	0.323
72.25	568.6	311.0	111.04	2.2318	0.323
72.50	568.8	311.1	111.04	2.2276	0.323
72.75	568.8	311.2	111.04	2.2234	0.324
73.00	568.8	311.2	111.04	2.2192	0.324
73.25	568.9	311.3	111.05	2.2150	0.324
73.50	568.9	311.3	111.04	2.2109	0.324
73.75	569.0	311.4	111.05	2.2068	0.324
74.00	569.3	311.6	111.05	2.2027	0.324
74.25	569.2	311.6	111.06	2.1987	0.324
74.50	569.3	311.7	111.05	2.1946	0.324
74.75	569.4	311.7	111.06	2.1906	0.324
75.00	569.4	311.8	111.07	2.1867	0.324
75.25	569.5	311.8	111.06	2.1827	0.324
75.50	569.5	311.9	111.07	2.1788	0.324
75.75	569.6	312.0	111.07	2.1749	0.324
76.00	569.6	312.0	111.07	2.1711	0.324
76.25	569.7	312.1	111.08	2.1672	0.325
76.50	569.7	312.1	111.08	2.1634	0.325
76.75	569.8	312.2	111.08	2.1596	0.325
77.00	569.8	312.2	111.08	2.1558	0.325
77.25	569.9	312.3	111.08	2.1521	0.325
77.50	570.0	312.4	111.09	2.1484	0.325
77.75	570.1	312.5	111.09	2.1447	0.325
78.00	570.1	312.5	111.09	2.1410	0.325

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
78.25	570.2	312.6	111.10	2.1374	0.325
78.50	570.2	312.6	111.09	2.1338	0.325
78.75	570.3	312.7	111.10	2.1302	0.325
79.00	570.4	312.8	111.10	2.1266	0.325
79.25	570.4	312.8	111.10	2.1230	0.325
79.50	570.4	312.8	111.10	2.1195	0.325
79.75	570.5	312.9	111.10	2.1160	0.325
80.00	570.7	313.1	111.11	2.1125	0.326
80.25	570.7	313.1	111.11	2.1090	0.326
80.50	570.7	313.1	111.12	2.1056	0.326
80.75	570.8	313.1	111.11	2.1022	0.326
81.00	570.9	313.2	111.11	2.0988	0.326
81.25	570.9	313.3	111.12	2.0954	0.326
81.50	571.0	313.3	111.12	2.0920	0.326
81.75	571.0	313.4	111.12	2.0887	0.326
82.00	571.1	313.5	111.13	2.0854	0.326
82.25	571.2	313.6	111.12	2.0821	0.326
82.50	571.3	313.7	111.13	2.0788	0.326
82.75	571.3	313.7	111.12	2.0755	0.326
83.00	571.3	313.7	111.13	2.0723	0.326
83.25	571.3	313.7	111.14	2.0691	0.326
83.50	571.4	313.8	111.14	2.0659	0.326
83.75	571.5	313.8	111.14	2.0627	0.327
84.00	571.5	313.9	111.14	2.0595	0.327
84.25	571.5	313.9	111.14	2.0564	0.327
84.50	571.6	314.0	111.15	2.0533	0.327
84.75	571.6	314.0	111.14	2.0501	0.327
85.00	571.7	314.1	111.15	2.0471	0.327
85.25	571.8	314.1	111.15	2.0440	0.327
85.50	571.8	314.2	111.15	2.0409	0.327
85.75	571.9	314.2	111.15	2.0379	0.327
86.00	571.9	314.3	111.15	2.0349	0.327
86.25	571.9	314.3	111.16	2.0319	0.327
86.50	572.0	314.4	111.16	2.0289	0.327
86.75	572.0	314.4	111.16	2.0259	0.327
87.00	572.1	314.5	111.16	2.0230	0.327
87.25	572.2	314.5	111.16	2.0201	0.327
87.50	572.2	314.6	111.16	2.0171	0.327
87.75	572.3	314.6	111.17	2.0142	0.327
88.00	572.3	314.7	111.17	2.0114	0.328
88.25	572.3	314.7	111.17	2.0085	0.328
88.50	572.4	314.8	111.18	2.0056	0.328
88.75	572.4	314.8	111.18	2.0028	0.328
89.00	572.5	314.8	111.18	2.0000	0.328
89.25	572.5	314.9	111.18	1.9972	0.328
89.50	572.6	315.0	111.19	1.9944	0.328
89.75	572.6	315.0	111.19	1.9916	0.328
90.00	572.7	315.1	111.19	1.9889	0.328
90.25	572.8	315.2	111.20	1.9861	0.328
90.50	572.9	315.2	111.19	1.9834	0.328
90.75	572.9	315.3	111.21	1.9807	0.328

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
91.00	572.9	315.3	111.20	1.9780	0.328
91.25	573.0	315.3	111.21	1.9753	0.328
91.50	573.0	315.4	111.20	1.9727	0.328
91.75	573.0	315.4	111.20	1.9700	0.328
92.00	573.1	315.5	111.19	1.9674	0.328
92.25	573.1	315.5	111.19	1.9648	0.328
92.50	573.2	315.6	111.20	1.9622	0.329
92.75	573.2	315.6	111.19	1.9596	0.329
93.00	573.3	315.7	111.21	1.9570	0.329
93.25	573.3	315.7	111.20	1.9544	0.329
93.50	573.4	315.8	111.21	1.9519	0.329
93.75	573.4	315.8	111.21	1.9493	0.329
94.00	573.5	315.9	111.22	1.9468	0.329
94.25	573.5	315.9	111.22	1.9443	0.329
94.50	573.6	316.0	111.23	1.9418	0.329
94.75	573.7	316.1	111.22	1.9393	0.329
95.00	573.7	316.1	111.23	1.9368	0.329
95.25	573.7	316.1	111.22	1.9344	0.329
95.50	573.8	316.1	111.23	1.9319	0.329
95.75	573.8	316.2	111.23	1.9295	0.329
96.00	573.8	316.2	111.23	1.9271	0.329
96.25	573.9	316.3	111.23	1.9247	0.329
96.50	573.9	316.3	111.24	1.9223	0.329
96.75	573.9	316.3	111.24	1.9199	0.329
97.00	574.0	316.4	111.24	1.9175	0.329
97.25	574.1	316.5	111.25	1.9152	0.330
97.50	574.1	316.5	111.25	1.9128	0.330
97.75	574.2	316.6	111.25	1.9105	0.330
98.00	574.3	316.7	111.25	1.9082	0.330
98.25	574.3	316.7	111.25	1.9059	0.330
98.50	574.4	316.8	111.26	1.9036	0.330
98.75	574.4	316.8	111.25	1.9013	0.330
99.00	574.4	316.8	111.26	1.8990	0.330
99.25	574.5	316.9	111.26	1.8967	0.330
99.50	574.5	316.9	111.26	1.8945	0.330
99.75	574.5	316.9	111.27	1.8922	0.330
100.00	574.5	316.9	111.26	1.8900	0.330
100.25	574.6	317.0	111.27	1.8878	0.330
100.50	574.6	317.0	111.28	1.8856	0.330
100.75	574.7	317.1	111.27	1.8834	0.330
101.00	574.8	317.2	111.27	1.8812	0.330
101.25	574.9	317.3	111.28	1.8790	0.330
101.50	574.8	317.2	111.28	1.8768	0.330
101.75	574.9	317.3	111.28	1.8747	0.331
102.00	575.0	317.4	111.28	1.8725	0.331
102.25	574.9	317.3	111.28	1.8704	0.331
102.50	574.9	317.3	111.28	1.8683	0.331
102.75	575.1	317.5	111.29	1.8662	0.331
103.00	575.1	317.5	111.29	1.8641	0.331
103.25	575.1	317.5	111.28	1.8620	0.331
103.50	575.1	317.5	111.28	1.8599	0.331

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
103.75	575.2	317.6	111.29	1.8578	0.331
104.00	575.3	317.7	111.29	1.8558	0.331
104.25	575.3	317.7	111.30	1.8537	0.331
104.50	575.4	317.8	111.30	1.8517	0.331
104.75	575.4	317.8	111.30	1.8496	0.331
105.00	575.4	317.8	111.30	1.8476	0.331
105.25	575.5	317.9	111.30	1.8456	0.331
105.50	575.5	317.9	111.30	1.8436	0.331
105.75	575.5	317.9	111.30	1.8416	0.331
106.00	575.5	317.9	111.31	1.8396	0.331
106.50	575.7	318.1	111.31	1.8357	0.331
106.75	575.7	318.1	111.31	1.8337	0.331
107.00	575.8	318.2	111.32	1.8318	0.332
107.25	575.8	318.2	111.32	1.8298	0.332
107.50	575.8	318.2	111.32	1.8279	0.332
107.75	575.9	318.3	111.31	1.8260	0.332
108.00	576.0	318.4	111.32	1.8241	0.332
108.25	575.9	318.3	111.32	1.8222	0.332
108.50	576.0	318.4	111.32	1.8203	0.332
108.75	576.0	318.4	111.33	1.8184	0.332
109.00	576.0	318.4	111.33	1.8165	0.332
109.25	576.0	318.4	111.33	1.8146	0.332
109.50	576.1	318.5	111.33	1.8128	0.332
109.75	576.1	318.5	111.34	1.8109	0.332
110.00	576.2	318.6	111.34	1.8091	0.332
110.25	576.2	318.6	111.34	1.8073	0.332
110.50	576.2	318.6	111.34	1.8054	0.332
110.75	576.2	318.6	111.34	1.8036	0.332
111.00	576.4	318.8	111.34	1.8018	0.332
111.25	576.4	318.8	111.34	1.8000	0.332
111.50	576.4	318.8	111.35	1.7982	0.332
111.75	576.4	318.8	111.35	1.7964	0.332
112.00	576.5	318.9	111.36	1.7946	0.332
112.25	576.6	319.0	111.35	1.7929	0.332
112.50	576.6	319.0	111.35	1.7911	0.332
112.75	576.6	319.0	111.36	1.7894	0.332
113.00	576.6	319.0	111.36	1.7876	0.332
113.25	576.6	319.0	111.36	1.7859	0.333
113.50	576.7	319.1	111.37	1.7841	0.333
113.75	576.8	319.2	111.36	1.7824	0.333
114.00	576.8	319.2	111.37	1.7807	0.333
114.25	576.8	319.2	111.37	1.7790	0.333
114.50	576.9	319.3	111.37	1.7773	0.333
114.75	576.8	319.2	111.37	1.7756	0.333
115.00	576.9	319.3	111.38	1.7739	0.333
115.25	576.9	319.3	111.38	1.7722	0.333
115.50	577.0	319.4	111.38	1.7706	0.333
115.75	577.0	319.4	111.38	1.7689	0.333
116.00	577.0	319.4	111.38	1.7672	0.333
116.25	577.0	319.4	111.39	1.7656	0.333
116.50	577.1	319.5	111.38	1.7639	0.333

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	116.75	577.1	319.5	111.38	1.7623	0.333
	117.00	577.3	319.7	111.38	1.7607	0.333
	117.25	577.3	319.7	111.39	1.7591	0.333
	117.50	577.3	319.7	111.39	1.7574	0.333
	117.75	577.4	319.8	111.39	1.7558	0.333
	118.00	577.4	319.8	111.39	1.7542	0.333
	118.25	577.4	319.8	111.40	1.7526	0.333
	118.50	577.5	319.9	111.40	1.7511	0.333
	118.75	577.5	319.9	111.40	1.7495	0.333
	119.00	577.5	319.9	111.40	1.7479	0.334
	119.25	577.5	319.9	111.40	1.7463	0.334
	119.50	577.5	319.9	111.40	1.7448	0.334
***** End Shut-in 2	119.75	577.6	320.0	111.41	1.7432	0.334
***** Final Hydro.	385.25	1623.4	0.0	111.44		

TEST HISTORY

10191 Murfin Drly Co. Rusco C-1 DST #1

Flag Points

t (Min.)	P (PSig)
A: 0.00	1653.05
B: 0.00	40.18
C: 30.25	145.42
D: 61.25	579.09
E: 0.00	155.90
F: 58.75	257.61
G: 119.75	577.57
Q: 0.00	1623.37

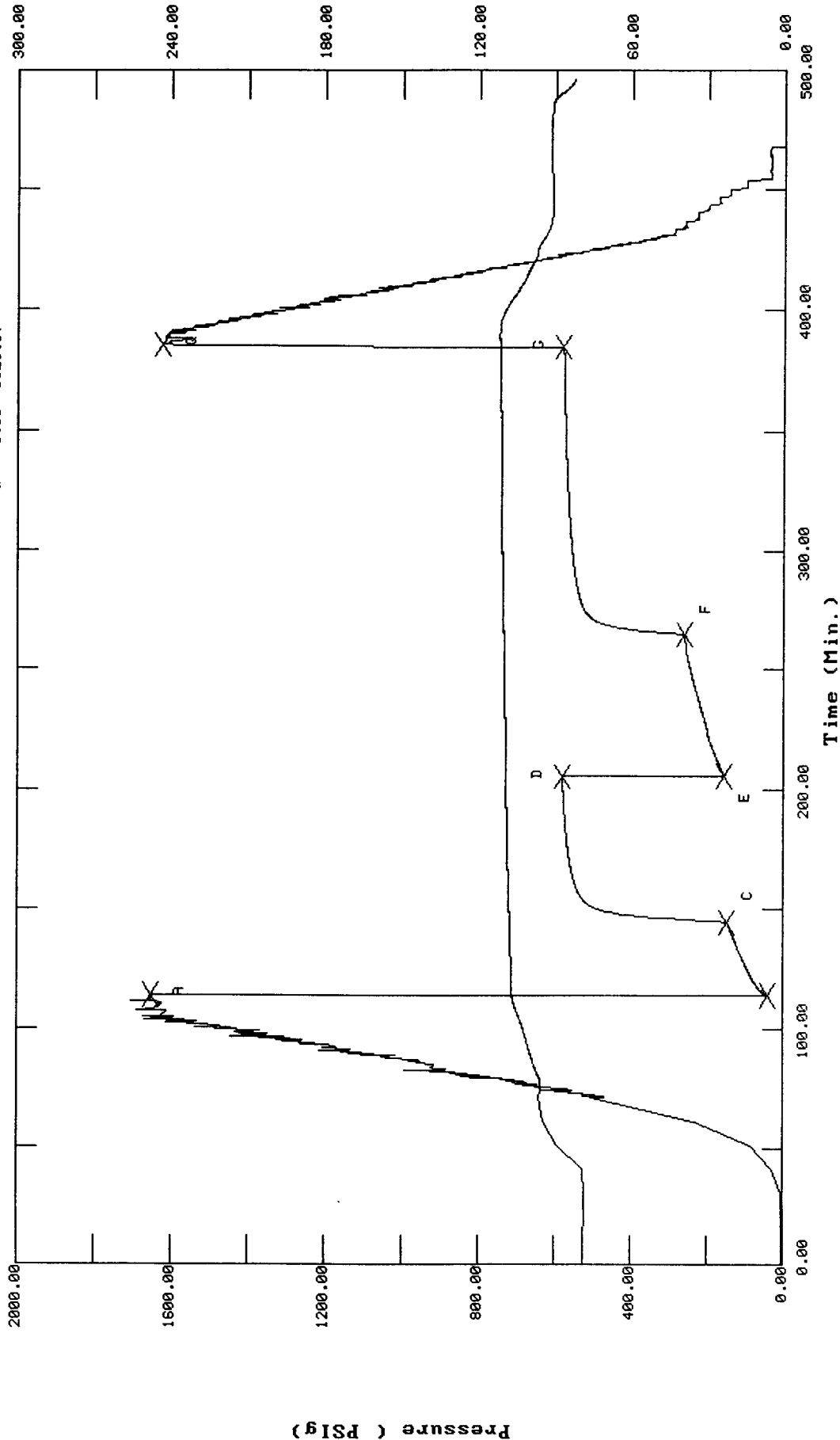
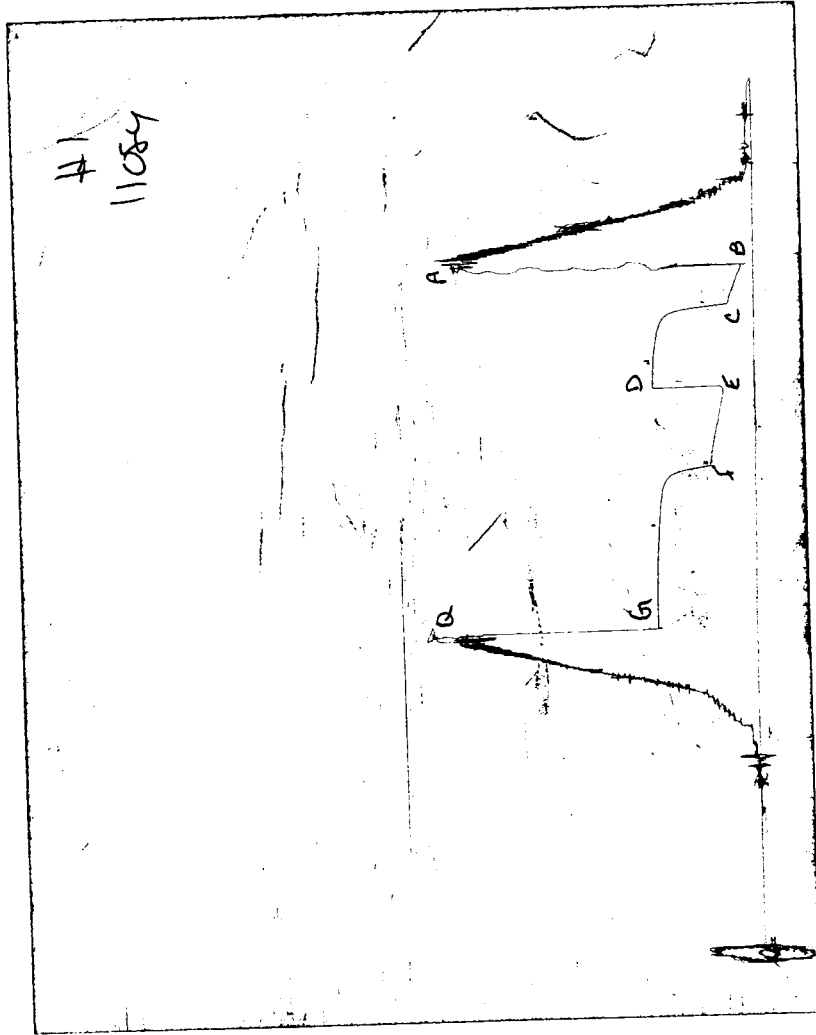


CHART PAGE



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

*** TOOL DIAGRAM *** CONV

WELL NAME: Rusco C-1

LOCATION : Sec36 T11s R20w Ellis KS

TICKET No. 10192 D.S.T. No. 2 DATE 07/15/97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 25 perf

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.Stands9 Single Total 534

D.P. ABOVE TOOLS.Stands46 Single Total 2855

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3434

TOTAL DEPTH 3404

TOTAL DRILL PIPE ABOVE K.B. 30

REMARKS:

P.O. SUB	
C.O. SUB Top of tool @	3359
S.I. TOOL H & T	3365
HMV Sterling	3370
JARS Sterling	n/a
SAFETY JOINT Bowen	n/a
PACKER Top	3374
PACKER Bottom	3379
DEPTH	3379
STUBB 1'	3380
ANCHOR	
1' perf	3381
Alpine rec. @	3381
5' perf	3386
5' perf	3391
5' perf	3396
T.C.	
DEPTH	
AK-1 rec @	3399
5' perf	3401
BULLNOSE 3' bullplug	
T.D. to	3404

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	89.25	1657.3	0.0	102.84		
***** Start Flow 1	0.00	33.1	0.0	102.85		
	0.25	37.9	4.8	102.87		
	0.50	42.7	9.6	102.90		
	0.75	48.8	15.7	102.92		
	1.00	53.0	19.9	102.95		
	1.25	54.4	21.3	102.99		
	1.50	53.3	20.2	103.04		
	1.75	52.2	19.1	103.09		
	2.00	53.3	20.2	103.14		
	2.25	55.6	22.5	103.20		
	2.50	56.8	23.7	103.27		
	2.75	58.3	25.2	103.35		
	3.00	60.1	27.0	103.44		
	3.25	62.1	29.0	103.53		
	3.50	64.1	31.0	103.62		
	3.75	66.7	33.6	103.71		
	4.00	68.8	35.7	103.82		
	4.25	71.0	37.9	103.91		
	4.50	73.2	40.1	104.02		
	4.75	75.6	42.5	104.13		
	5.00	77.5	44.4	104.24		
	5.25	79.3	46.1	104.35		
	5.50	81.2	48.1	104.46		
	5.75	83.3	50.1	104.57		
	6.00	85.4	52.3	104.69		
	6.25	87.6	54.5	104.80		
	6.50	89.1	56.0	104.91		
	6.75	90.8	57.7	105.02		
	7.00	92.4	59.3	105.12		
	7.25	94.1	61.0	105.23		
	7.50	95.5	62.4	105.33		
	7.75	96.9	63.7	105.43		
	8.00	98.1	65.0	105.53		
	8.25	99.4	66.3	105.62		
	8.50	100.9	67.8	105.71		
	8.75	102.4	69.3	105.81		
	9.00	103.9	70.8	105.91		
	9.25	105.3	72.2	106.00		
	9.50	107.1	74.0	106.10		
	9.75	109.1	76.0	106.19		
	10.00	110.9	77.8	106.27		
	10.25	112.8	79.7	106.36		
	10.50	114.9	81.8	106.45		
	10.75	116.4	83.3	106.53		
	11.00	118.0	84.9	106.61		
	11.25	119.6	86.5	106.69		
	11.50	121.0	87.9	106.77		
	11.75	122.4	89.3	106.85		
	12.00	123.9	90.8	106.92		
	12.25	125.1	92.0	107.00		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
12.50	126.2	93.0	107.07		
12.75	127.4	94.2	107.14		
13.00	128.9	95.8	107.21		
13.25	130.4	97.3	107.27		
13.50	131.8	98.7	107.34		
13.75	133.2	100.1	107.40		
14.00	134.7	101.6	107.47		
14.25	135.9	102.8	107.53		
14.50	137.6	104.5	107.58		
14.75	139.2	106.1	107.64		
15.00	140.8	107.6	107.69		
15.25	142.3	109.2	107.74		
15.50	143.7	110.6	107.79		
15.75	145.1	112.0	107.85		
16.00	146.6	113.5	107.89		
16.25	147.1	114.0	107.94		
16.50	147.8	114.7	107.99		
16.75	148.5	115.4	108.03		
17.00	149.2	116.1	108.08		
17.25	150.1	117.0	108.12		
17.50	150.9	117.8	108.17		
17.75	151.6	118.5	108.21		
18.00	152.6	119.5	108.25		
18.25	154.0	120.9	108.30		
18.50	155.2	122.1	108.34		
18.75	156.7	123.6	108.38		
19.00	158.3	125.2	108.42		
19.25	159.6	126.5	108.46		
19.50	161.0	127.9	108.50		
19.75	162.3	129.2	108.54		
20.00	163.7	130.6	108.58		
20.25	164.9	131.8	108.62		
20.50	166.1	133.0	108.66		
20.75	167.2	134.1	108.70		
21.00	168.4	135.3	108.73		
21.25	169.6	136.5	108.77		
21.50	170.8	137.7	108.82		
21.75	172.0	138.9	108.85		
22.00	173.2	140.1	108.88		
22.25	174.4	141.3	108.93		
22.50	175.6	142.5	108.96		
22.75	176.5	143.4	108.99		
23.00	177.5	144.4	109.02		
23.25	178.5	145.4	109.06		
23.50	179.6	146.5	109.09		
23.75	180.6	147.5	109.13		
24.00	181.7	148.5	109.15		
24.25	182.8	149.7	109.18		
24.50	183.8	150.7	109.21		
24.75	185.0	151.9	109.24		
25.00	185.8	152.6	109.27		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97 TIME: 00:28:30

Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
25.25	186.8	153.7	109.29		
25.50	187.9	154.8	109.32		
25.75	188.8	155.7	109.34		
26.00	189.9	156.8	109.36		
26.25	190.9	157.8	109.39		
26.50	192.0	158.9	109.41		
26.75	193.0	159.9	109.43		
27.00	194.0	160.9	109.46		
27.25	194.1	161.0	109.48		
27.50	193.7	160.6	109.49		
27.75	193.4	160.3	109.52		
28.00	193.7	160.6	109.54		
28.25	194.1	161.0	109.56		
28.50	194.5	161.4	109.58		
28.75	195.0	161.9	109.60		
29.00	195.6	162.4	109.61		
29.25	196.1	163.0	109.63		
29.50	196.7	163.6	109.65		
29.75	197.4	164.3	109.67		
30.00	198.1	165.0	109.68		
30.25	198.7	165.6	109.70		
30.50	199.5	166.4	109.72		
30.75	200.4	167.3	109.73		
31.00	201.3	168.1	109.75		
31.25	202.1	169.0	109.77		
31.50	202.9	169.8	109.78		
31.75	203.6	170.5	109.80		
32.00	204.3	171.2	109.80		
32.25	205.2	172.1	109.82		
32.50	205.8	172.7	109.84		
32.75	206.6	173.5	109.86		
33.00	207.3	174.2	109.87		
33.25	207.9	174.8	109.89		
33.50	208.6	175.5	109.90		
33.75	209.3	176.2	109.91		
34.00	209.9	176.8	109.93		
34.25	210.6	177.4	109.94		
34.50	211.2	178.0	109.96		
34.75	211.8	178.7	109.98		
35.00	212.4	179.3	109.99		
35.25	212.9	179.8	110.00		
35.50	213.4	180.3	110.02		
35.75	214.0	180.9	110.03		
36.00	214.7	181.6	110.05		
36.25	215.2	182.0	110.06		
36.50	215.6	182.5	110.07		
36.75	216.1	183.0	110.08		
37.00	216.4	183.3	110.10		
37.25	216.8	183.7	110.11		
37.50	217.3	184.2	110.13		
37.75	217.6	184.5	110.14		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	38.00	217.9	184.8	110.16		
	38.25	218.3	185.2	110.17		
	38.50	218.7	185.6	110.17		
	38.75	219.0	185.9	110.20		
	39.00	219.3	186.2	110.20		
	39.25	219.5	186.4	110.22		
	39.50	219.9	186.8	110.23		
	39.75	220.2	187.1	110.25		
	40.00	220.5	187.4	110.26		
	40.25	220.4	187.3	110.27		
	40.50	220.5	187.4	110.29		
	40.75	220.6	187.5	110.30		
	41.00	221.0	187.9	110.32		
	41.25	221.5	188.4	110.33		
	41.50	222.0	188.9	110.35		
	41.75	222.5	189.4	110.36		
	42.00	222.9	189.8	110.37		
	42.25	223.3	190.2	110.38		
	42.50	223.7	190.6	110.39		
	42.75	224.2	191.1	110.41		
	43.00	224.7	191.6	110.42		
	43.25	225.1	192.0	110.44		
	43.50	225.6	192.4	110.46		
	43.75	225.9	192.8	110.46		
	44.00	226.4	193.3	110.48		
	44.25	226.9	193.8	110.49		
	44.50	227.2	194.1	110.51		
	44.75	227.7	194.6	110.52		
	45.00	228.1	195.0	110.54		
***** End Flow 1	45.25	228.5	195.4	110.54		
***** Start Shutin 1	0.00	228.5	0.0	110.54	0.0000	0.052
	0.25	229.0	0.5	110.56	182.0000	0.052
	0.50	242.5	14.0	110.57	91.5000	0.059
	0.75	293.0	64.5	110.59	61.3333	0.086
	1.00	324.9	96.4	110.59	46.2500	0.106
	1.25	347.8	119.3	110.62	37.2000	0.121
	1.50	365.6	137.1	110.63	31.1667	0.134
	1.75	379.8	151.3	110.64	26.8571	0.144
	2.00	391.6	163.1	110.65	23.6250	0.153
	2.25	401.5	173.0	110.68	21.1111	0.161
	2.50	410.0	181.5	110.69	19.1000	0.168
	2.75	417.5	189.0	110.71	17.4545	0.174
	3.00	424.1	195.6	110.72	16.0833	0.180
	3.25	430.0	201.5	110.73	14.9231	0.185
	3.50	435.4	206.9	110.75	13.9286	0.190
	3.75	440.2	211.7	110.77	13.0667	0.194
	4.00	444.6	216.1	110.78	12.3125	0.198
	4.25	448.7	220.2	110.80	11.6471	0.201
	4.50	452.4	223.9	110.81	11.0556	0.205
	4.75	455.9	227.4	110.83	10.5263	0.208
	5.00	459.1	230.7	110.85	10.0500	0.211

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97 TIME: 00:28:30

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
5.25	462.2	233.7	110.87	9.6190	0.214
5.50	465.0	236.5	110.88	9.2273	0.216
5.75	467.7	239.2	110.89	8.8696	0.219
6.00	470.2	241.7	110.91	8.5417	0.221
6.25	472.6	244.2	110.93	8.2400	0.223
6.50	475.0	246.5	110.94	7.9615	0.226
6.75	477.1	248.6	110.96	7.7037	0.228
7.00	479.1	250.6	110.98	7.4643	0.230
7.25	481.1	252.6	110.99	7.2414	0.231
7.50	483.0	254.5	111.00	7.0333	0.233
7.75	484.7	256.2	111.02	6.8387	0.235
8.00	486.5	258.0	111.04	6.6562	0.237
8.25	488.1	259.6	111.06	6.4848	0.238
8.50	489.8	261.3	111.07	6.3235	0.240
8.75	491.3	262.8	111.09	6.1714	0.241
9.00	492.8	264.3	111.09	6.0278	0.243
9.25	494.2	265.7	111.11	5.8919	0.244
9.50	495.6	267.1	111.12	5.7632	0.246
9.75	496.8	268.3	111.14	5.6410	0.247
10.00	498.2	269.7	111.15	5.5250	0.248
10.25	499.5	271.0	111.16	5.4146	0.249
10.50	500.7	272.2	111.17	5.3095	0.251
10.75	501.9	273.4	111.19	5.2093	0.252
11.00	503.0	274.5	111.20	5.1136	0.253
11.25	504.2	275.7	111.21	5.0222	0.254
11.50	505.2	276.7	111.22	4.9348	0.255
11.75	506.3	277.8	111.24	4.8511	0.256
12.00	507.3	278.8	111.25	4.7708	0.257
12.25	508.2	279.7	111.26	4.6939	0.258
12.50	509.3	280.8	111.27	4.6200	0.259
12.75	510.3	281.8	111.28	4.5490	0.260
13.00	511.2	282.7	111.30	4.4808	0.261
13.25	512.1	283.6	111.30	4.4151	0.262
13.50	512.9	284.4	111.32	4.3519	0.263
13.75	513.8	285.3	111.33	4.2909	0.264
14.00	514.6	286.1	111.35	4.2321	0.265
14.25	515.6	287.1	111.35	4.1754	0.266
14.50	516.3	287.8	111.36	4.1207	0.267
14.75	517.1	288.6	111.38	4.0678	0.267
15.00	518.0	289.5	111.39	4.0167	0.268
15.25	518.7	290.2	111.40	3.9672	0.269
15.50	519.5	291.0	111.41	3.9194	0.270
15.75	520.1	291.6	111.42	3.8730	0.271
16.00	520.8	292.3	111.43	3.8281	0.271
16.25	521.5	293.0	111.43	3.7846	0.272
16.50	522.3	293.8	111.44	3.7424	0.273
16.75	523.0	294.5	111.45	3.7015	0.273
17.00	523.6	295.1	111.46	3.6618	0.274
17.25	524.3	295.8	111.47	3.6232	0.275
17.50	524.9	296.4	111.48	3.5857	0.275
17.75	525.5	297.0	111.49	3.5493	0.276

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
18.00	526.2	297.7	111.50	3.5139	0.277
18.25	526.8	298.3	111.52	3.4795	0.278
18.50	527.4	298.9	111.52	3.4459	0.278
18.75	527.9	299.4	111.51	3.4133	0.279
19.00	528.5	300.0	111.53	3.3816	0.279
19.25	529.0	300.5	111.54	3.3506	0.280
19.50	529.6	301.1	111.55	3.3205	0.281
19.75	530.2	301.8	111.56	3.2911	0.281
20.00	530.8	302.3	111.57	3.2625	0.282
20.25	531.3	302.8	111.57	3.2346	0.282
20.50	531.8	303.3	111.58	3.2073	0.283
20.75	532.4	303.9	111.58	3.1807	0.283
21.00	532.9	304.4	111.58	3.1548	0.284
21.25	533.4	304.9	111.59	3.1294	0.284
21.50	533.8	305.3	111.61	3.1047	0.285
21.75	534.3	305.8	111.61	3.0805	0.285
22.00	534.8	306.3	111.62	3.0568	0.286
22.25	535.3	306.8	111.62	3.0337	0.287
22.50	535.7	307.2	111.62	3.0111	0.287
22.75	536.2	307.7	111.63	2.9890	0.287
23.00	536.6	308.1	111.64	2.9674	0.288
23.25	537.1	308.6	111.65	2.9462	0.288
23.50	537.5	309.0	111.66	2.9255	0.289
23.75	537.9	309.4	111.66	2.9053	0.289
24.00	538.4	309.9	111.66	2.8854	0.290
24.25	538.9	310.4	111.66	2.8660	0.290
24.50	539.2	310.7	111.68	2.8469	0.291
24.75	539.7	311.2	111.68	2.8283	0.291
25.00	540.1	311.6	111.69	2.8100	0.292
25.25	540.5	312.0	111.70	2.7921	0.292
25.50	540.9	312.4	111.70	2.7745	0.293
25.75	541.3	312.8	111.71	2.7573	0.293
26.00	541.7	313.2	111.72	2.7404	0.293
26.25	542.1	313.6	111.72	2.7238	0.294
26.50	542.4	313.9	111.72	2.7075	0.294
26.75	542.8	314.3	111.73	2.6916	0.295
27.00	543.2	314.7	111.73	2.6759	0.295
27.25	543.5	315.0	111.73	2.6606	0.295
27.50	543.9	315.4	111.73	2.6455	0.296
27.75	544.2	315.7	111.74	2.6306	0.296
28.00	544.6	316.1	111.75	2.6161	0.297
28.25	545.0	316.5	111.75	2.6018	0.297
28.50	545.3	316.8	111.76	2.5877	0.297
28.75	545.7	317.2	111.76	2.5739	0.298
29.00	546.0	317.5	111.76	2.5603	0.298
29.25	546.3	317.8	111.77	2.5470	0.298
29.50	546.7	318.2	111.77	2.5339	0.299
29.75	547.0	318.5	111.78	2.5210	0.299
30.00	547.3	318.9	111.78	2.5083	0.300
30.25	547.6	319.1	111.79	2.4959	0.300
30.50	547.9	319.5	111.78	2.4836	0.300

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
30.75	548.2	319.7	111.79	2.4715	0.301
31.00	548.5	320.0	111.79	2.4597	0.301
31.25	548.9	320.4	111.80	2.4480	0.301
31.50	549.1	320.6	111.80	2.4365	0.302
31.75	549.5	321.0	111.80	2.4252	0.302
32.00	549.8	321.3	111.81	2.4141	0.302
32.25	550.1	321.6	111.81	2.4031	0.303
32.50	550.3	321.8	111.82	2.3923	0.303
32.75	550.7	322.2	111.82	2.3817	0.303
33.00	551.0	322.5	111.82	2.3712	0.304
33.25	551.2	322.7	111.82	2.3609	0.304
33.50	551.4	322.9	111.82	2.3507	0.304
33.75	551.8	323.3	111.82	2.3407	0.304
34.00	552.0	323.5	111.82	2.3309	0.305
34.25	552.3	323.8	111.83	2.3212	0.305
34.50	552.5	324.0	111.83	2.3116	0.305
34.75	552.8	324.3	111.83	2.3022	0.306
35.00	553.1	324.6	111.84	2.2929	0.306
35.25	553.3	324.8	111.84	2.2837	0.306
35.50	553.6	325.1	111.84	2.2746	0.307
35.75	553.9	325.4	111.84	2.2657	0.307
36.00	554.1	325.6	111.85	2.2569	0.307
36.25	554.4	325.9	111.85	2.2483	0.307
36.50	554.6	326.1	111.85	2.2397	0.308
36.75	554.8	326.3	111.84	2.2313	0.308
37.00	555.1	326.6	111.85	2.2230	0.308
37.25	555.4	326.9	111.85	2.2148	0.308
37.50	555.6	327.1	111.86	2.2067	0.309
37.75	555.9	327.4	111.86	2.1987	0.309
38.00	556.0	327.5	111.86	2.1908	0.309
38.25	556.3	327.8	111.85	2.1830	0.310
38.50	556.6	328.1	111.86	2.1753	0.310
38.75	556.7	328.2	111.86	2.1677	0.310
39.00	557.0	328.5	111.86	2.1603	0.310
39.25	557.2	328.7	111.86	2.1529	0.310
39.50	557.4	328.9	111.86	2.1456	0.311
39.75	557.7	329.2	111.87	2.1384	0.311
40.00	557.9	329.4	111.86	2.1313	0.311
40.25	558.1	329.6	111.87	2.1242	0.312
40.50	558.4	329.9	111.87	2.1173	0.312
40.75	558.5	330.0	111.87	2.1104	0.312
41.00	558.7	330.2	111.87	2.1037	0.312
41.25	558.9	330.4	111.88	2.0970	0.312
41.50	559.1	330.6	111.88	2.0904	0.313
41.75	559.4	330.9	111.88	2.0838	0.313
42.00	559.5	331.1	111.88	2.0774	0.313
42.25	559.8	331.3	111.88	2.0710	0.313
42.50	560.0	331.6	111.88	2.0647	0.314
42.75	560.2	331.7	111.88	2.0585	0.314
43.00	560.4	331.9	111.88	2.0523	0.314
43.25	560.6	332.1	111.88	2.0462	0.314

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	43.50	560.8	332.3	111.88	2.0402	0.315
	43.75	561.0	332.5	111.88	2.0343	0.315
	44.00	561.2	332.7	111.87	2.0284	0.315
	44.25	561.4	332.9	111.88	2.0226	0.315
	44.50	561.5	333.1	111.88	2.0169	0.315
	44.75	561.7	333.2	111.88	2.0112	0.316
	45.00	561.9	333.4	111.88	2.0056	0.316
	45.25	562.2	333.7	111.88	2.0000	0.316
	45.50	561.9	333.4	111.88	1.9945	0.316
***** End Shut-in 1	45.75	562.4	334.0	111.87	1.9891	0.316
***** Start Flow 2	0.00	241.5	0.0	111.88		
	0.25	241.7	0.2	111.87		
	0.50	242.2	0.7	111.87		
	0.75	242.8	1.3	111.87		
	1.00	243.4	1.9	111.87		
	1.25	243.9	2.4	111.86		
	1.50	244.3	2.8	111.86		
	1.75	244.7	3.2	111.85		
	2.00	245.2	3.7	111.85		
	2.25	245.8	4.3	111.84		
	2.50	246.3	4.8	111.83		
	2.75	246.8	5.3	111.83		
	3.00	247.4	5.9	111.82		
	3.25	247.9	6.4	111.82		
	3.50	248.4	6.9	111.81		
	3.75	249.0	7.5	111.81		
	4.00	249.5	8.0	111.80		
	4.25	250.1	8.6	111.80		
	4.50	250.7	9.3	111.80		
	4.75	251.3	9.9	111.79		
	5.00	252.0	10.5	111.79		
	5.25	252.5	11.0	111.78		
	5.50	253.1	11.6	111.78		
	5.75	253.6	12.1	111.77		
	6.00	254.1	12.6	111.77		
	6.25	254.5	13.0	111.77		
	6.50	254.8	13.3	111.76		
	6.75	255.2	13.7	111.75		
	7.00	255.7	14.2	111.75		
	7.25	256.2	14.7	111.74		
	7.50	256.7	15.2	111.75		
	7.75	257.2	15.7	111.74		
	8.00	257.7	16.2	111.74		
	8.25	258.2	16.7	111.74		
	8.50	258.8	17.3	111.74		
	8.75	259.2	17.7	111.75		
	9.00	259.5	18.0	111.74		
	9.25	259.8	18.3	111.74		
	9.50	260.2	18.7	111.74		
	9.75	260.7	19.2	111.74		
	10.00	261.2	19.7	111.73		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
10.25	261.6	20.1	111.72		
10.50	262.0	20.5	111.74		
10.75	262.4	20.9	111.74		
11.00	262.9	21.4	111.73		
11.25	263.1	21.6	111.74		
11.50	263.7	22.2	111.73		
11.75	264.1	22.6	111.74		
12.00	264.6	23.1	111.74		
12.25	264.9	23.4	111.73		
12.50	265.2	23.7	111.74		
12.75	265.8	24.3	111.74		
13.00	266.1	24.6	111.75		
13.25	266.4	24.9	111.74		
13.50	266.8	25.3	111.74		
13.75	267.1	25.6	111.75		
14.00	267.4	25.9	111.74		
14.25	267.8	26.3	111.75		
14.50	268.0	26.5	111.75		
14.75	268.2	26.7	111.75		
15.00	268.5	27.0	111.75		
15.25	269.0	27.5	111.75		
15.50	269.3	27.8	111.76		
15.75	269.4	27.9	111.76		
16.00	269.8	28.3	111.77		
16.25	270.1	28.6	111.76		
16.50	270.4	28.9	111.78		
16.75	271.0	29.5	111.77		
17.00	271.0	29.5	111.77		
17.25	271.5	30.0	111.78		
17.50	272.0	30.5	111.78		
17.75	272.3	30.8	111.78		
18.00	272.6	31.1	111.79		
18.25	272.9	31.4	111.78		
18.50	273.2	31.7	111.80		
18.75	273.4	31.9	111.80		
19.00	274.0	32.5	111.80		
19.25	274.2	32.7	111.80		
19.50	274.5	33.0	111.81		
19.75	274.9	33.4	111.82		
20.00	275.2	33.7	111.82		
20.25	275.6	34.1	111.82		
20.50	276.0	34.5	111.83		
20.75	276.5	35.0	111.83		
21.00	277.0	35.5	111.83		
21.25	277.4	35.9	111.84		
21.50	277.7	36.2	111.84		
21.75	278.1	36.6	111.85		
22.00	278.5	37.0	111.86		
22.25	278.8	37.3	111.86		
22.50	279.2	37.7	111.86		
22.75	279.6	38.1	111.88		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
23.00	280.1	38.6	111.87		
23.25	280.3	38.8	111.88		
23.50	280.7	39.2	111.89		
23.75	281.1	39.6	111.89		
24.00	281.4	39.9	111.90		
24.25	281.9	40.4	111.90		
24.50	282.3	40.8	111.90		
24.75	282.8	41.3	111.91		
25.00	283.2	41.7	111.92		
25.25	283.6	42.1	111.92		
25.50	284.0	42.5	111.93		
25.75	284.4	42.9	111.93		
26.00	284.7	43.2	111.93		
26.25	285.2	43.7	111.94		
26.50	285.7	44.2	111.95		
26.75	286.1	44.6	111.96		
27.00	286.4	44.9	111.96		
27.25	286.8	45.3	111.96		
27.50	287.3	45.8	111.97		
27.75	287.5	46.0	111.98		
28.00	287.9	46.4	111.99		
28.25	288.3	46.8	111.99		
28.50	288.5	47.0	112.00		
28.75	288.9	47.4	112.00		
29.00	289.3	47.8	112.01		
29.25	289.7	48.2	112.02		
29.50	289.9	48.4	112.03		
29.75	290.2	48.7	112.03		
30.00	290.4	48.9	112.04		
30.25	290.8	49.3	112.04		
30.50	291.0	49.5	112.04		
30.75	291.2	49.7	112.06		
31.00	291.5	50.0	112.06		
31.25	291.4	49.9	112.07		
31.50	291.8	50.3	112.07		
31.75	291.9	50.4	112.08		
32.00	292.2	50.7	112.08		
32.25	292.4	50.9	112.09		
32.50	292.7	51.2	112.11		
32.75	292.9	51.4	112.12		
33.00	293.1	51.7	112.11		
33.25	293.3	51.9	112.12		
33.50	293.6	52.2	112.12		
33.75	294.0	52.5	112.13		
34.00	294.2	52.7	112.14		
34.25	294.6	53.1	112.14		
34.50	294.9	53.4	112.15		
34.75	295.2	53.7	112.16		
35.00	295.5	54.0	112.17		
35.25	295.8	54.3	112.18		
35.50	296.0	54.6	112.18		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6	
35.75	296.4	54.9	112.19			
36.00	296.8	55.3	112.20			
36.25	297.2	55.7	112.20			
36.50	297.6	56.1	112.21			
36.75	298.0	56.5	112.22			
37.00	298.4	56.9	112.23			
37.25	298.8	57.3	112.24			
37.50	299.2	57.7	112.24			
37.75	299.5	58.0	112.25			
38.00	300.1	58.6	112.26			
38.25	300.5	59.0	112.26			
38.50	300.6	59.1	112.27			
38.75	301.2	59.7	112.28			
39.00	301.7	60.2	112.29			
39.25	302.1	60.6	112.29			
39.50	302.4	60.9	112.30			
39.75	302.8	61.3	112.31			
40.00	303.1	61.6	112.32			
40.25	303.5	62.0	112.33			
40.50	303.9	62.4	112.34			
40.75	304.4	62.9	112.34			
41.00	304.6	63.1	112.34			
41.25	304.9	63.4	112.36			
41.50	305.4	63.9	112.36			
41.75	305.6	64.1	112.36			
42.00	306.0	64.5	112.38			
42.25	306.4	64.9	112.39			
42.50	306.7	65.2	112.40			
42.75	307.1	65.6	112.40			
43.00	307.5	66.0	112.42			
43.25	307.8	66.3	112.41			
43.50	308.2	66.7	112.42			
43.75	308.5	67.0	112.43			
44.00	308.9	67.5	112.44			
44.25	309.3	67.8	112.44			
44.50	309.4	67.9	112.45			
44.75	309.6	68.1	112.46			
***** End Flow 2						
***** Start Shutin 2	0.00	309.6	0.0	112.46	0.0000	0.096
	0.25	308.2	-1.4	112.47	361.0000	0.095
	0.50	351.7	42.1	112.48	181.0000	0.124
	0.75	380.2	70.6	112.48	121.0000	0.145
	1.00	399.6	90.0	112.49	91.0000	0.160
	1.25	414.2	104.6	112.50	73.0000	0.172
	1.50	425.6	116.0	112.51	61.0000	0.181
	1.75	434.8	125.2	112.52	52.4286	0.189
	2.00	442.4	132.8	112.52	46.0000	0.196
	2.25	448.8	139.2	112.53	41.0000	0.201
	2.50	454.3	144.7	112.54	37.0000	0.206
	2.75	459.1	149.5	112.55	33.7273	0.211
	3.00	463.3	153.7	112.56	31.0000	0.215
	3.25	467.1	157.5	112.56	28.6923	0.218

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
3.50	470.5	160.9	112.58	26.7143	0.221
3.75	473.6	164.0	112.59	25.0000	0.224
4.00	476.5	166.9	112.59	23.5000	0.227
4.25	479.1	169.5	112.60	22.1765	0.230
4.50	481.5	171.9	112.60	21.0000	0.232
4.75	483.8	174.2	112.62	19.9474	0.234
5.00	485.9	176.3	112.63	19.0000	0.236
5.25	487.8	178.2	112.63	18.1429	0.238
5.50	489.7	180.1	112.64	17.3636	0.240
5.75	491.5	181.9	112.65	16.6522	0.242
6.00	493.1	183.5	112.65	16.0000	0.243
6.25	494.8	185.2	112.67	15.4000	0.245
6.50	496.2	186.6	112.67	14.8462	0.246
6.75	497.7	188.1	112.68	14.3333	0.248
7.00	499.0	189.4	112.69	13.8571	0.249
7.25	500.4	190.8	112.69	13.4138	0.250
7.50	501.7	192.1	112.70	13.0000	0.252
7.75	502.9	193.3	112.71	12.6129	0.253
8.00	504.1	194.5	112.71	12.2500	0.254
8.25	505.2	195.6	112.72	11.9091	0.255
8.50	506.3	196.7	112.73	11.5882	0.256
8.75	507.3	197.7	112.73	11.2857	0.257
9.00	508.4	198.8	112.74	11.0000	0.258
9.25	509.4	199.8	112.74	10.7297	0.260
9.50	510.3	200.7	112.74	10.4737	0.260
9.75	511.3	201.7	112.75	10.2308	0.261
10.00	512.2	202.6	112.76	10.0000	0.262
10.25	513.1	203.5	112.76	9.7805	0.263
10.50	514.0	204.4	112.77	9.5714	0.264
10.75	514.7	205.1	112.77	9.3721	0.265
11.00	515.6	206.0	112.78	9.1818	0.266
11.25	516.4	206.8	112.79	9.0000	0.267
11.50	517.2	207.6	112.79	8.8261	0.267
11.75	518.0	208.4	112.79	8.6596	0.268
12.00	518.7	209.1	112.80	8.5000	0.269
12.25	519.4	209.8	112.81	8.3469	0.270
12.50	520.2	210.5	112.81	8.2000	0.271
12.75	520.8	211.2	112.81	8.0588	0.271
13.00	521.6	212.0	112.82	7.9231	0.272
13.25	522.1	212.5	112.82	7.7925	0.273
13.50	522.8	213.1	112.83	7.6667	0.273
13.75	523.4	213.8	112.83	7.5455	0.274
14.00	524.1	214.5	112.93	7.4286	0.275
14.25	524.6	215.0	112.80	7.3158	0.275
14.50	525.2	215.6	112.84	7.2069	0.276
14.75	525.9	216.3	112.85	7.1017	0.277
15.00	526.4	216.8	112.85	7.0000	0.277
15.25	527.0	217.4	112.86	6.9016	0.278
15.50	527.5	217.9	112.86	6.8065	0.278
15.75	528.1	218.5	112.87	6.7143	0.279
16.00	528.6	219.0	112.87	6.6250	0.279

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2
 DATE: 07/15/97 TIME: 00:28:30

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
16.25	529.2	219.6	112.87	6.5385	0.280
16.50	529.6	220.0	112.87	6.4545	0.280
16.75	530.1	220.5	112.88	6.3731	0.281
17.00	530.6	221.0	112.88	6.2941	0.281
17.25	531.0	221.4	112.87	6.2174	0.282
17.50	531.5	221.9	112.88	6.1429	0.283
17.75	532.0	222.4	112.89	6.0704	0.283
18.00	532.5	222.9	112.90	6.0000	0.284
18.25	532.9	223.3	112.89	5.9315	0.284
18.50	533.3	223.7	112.89	5.8649	0.284
18.75	533.8	224.2	112.90	5.8000	0.285
19.00	534.3	224.7	112.90	5.7368	0.285
19.25	534.8	225.1	112.90	5.6753	0.286
19.50	535.1	225.5	112.91	5.6154	0.286
19.75	535.6	225.9	112.91	5.5570	0.287
20.00	535.9	226.3	112.91	5.5000	0.287
20.25	536.3	226.7	112.92	5.4444	0.288
20.50	536.8	227.1	112.92	5.3902	0.288
20.75	537.2	227.5	112.92	5.3373	0.289
21.00	537.6	228.0	112.93	5.2857	0.289
21.25	537.9	228.3	112.92	5.2353	0.289
21.50	538.3	228.7	112.92	5.1860	0.290
21.75	538.7	229.1	112.93	5.1379	0.290
22.00	539.0	229.4	112.93	5.0909	0.291
22.25	539.4	229.8	112.94	5.0449	0.291
22.50	539.7	230.1	112.94	5.0000	0.291
22.75	540.1	230.5	112.94	4.9560	0.292
23.00	540.4	230.8	112.95	4.9130	0.292
23.25	540.8	231.2	112.95	4.8710	0.292
23.50	541.1	231.5	112.95	4.8298	0.293
23.75	541.5	231.9	112.95	4.7895	0.293
24.00	541.8	232.2	112.94	4.7500	0.294
24.25	542.1	232.5	112.95	4.7113	0.294
24.50	542.4	232.8	112.95	4.6735	0.294
24.75	542.8	233.2	112.95	4.6364	0.295
25.00	543.0	233.4	112.95	4.6000	0.295
25.25	543.4	233.8	112.96	4.5644	0.295
25.50	543.8	234.2	112.96	4.5294	0.296
25.75	544.0	234.4	112.96	4.4951	0.296
26.00	544.3	234.7	112.96	4.4615	0.296
26.25	544.6	235.0	112.98	4.4286	0.297
26.50	544.8	235.2	112.95	4.3962	0.297
26.75	545.2	235.6	112.96	4.3645	0.297
27.00	545.4	235.8	112.97	4.3333	0.298
27.25	545.8	236.2	112.96	4.3028	0.298
27.50	546.0	236.4	112.97	4.2727	0.298
27.75	546.3	236.7	112.97	4.2432	0.298
28.00	546.6	237.0	112.97	4.2143	0.299
28.25	546.8	237.2	112.98	4.1858	0.299
28.50	547.1	237.5	112.97	4.1579	0.299
28.75	547.4	237.8	112.97	4.1304	0.300

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97

TIME: 00:28:30

Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
29.00	547.6	238.0	112.97	4.1034	0.300
29.25	547.8	238.2	112.97	4.0769	0.300
29.50	548.1	238.5	112.98	4.0508	0.300
29.75	548.4	238.8	112.98	4.0252	0.301
30.00	548.7	239.1	112.97	4.0000	0.301
30.25	548.9	239.3	112.98	3.9752	0.301
30.50	549.2	239.6	112.98	3.9508	0.302
30.75	549.4	239.8	112.98	3.9268	0.302
31.00	549.6	240.0	112.98	3.9032	0.302
31.25	550.0	240.4	112.98	3.8800	0.302
31.50	550.2	240.6	112.98	3.8571	0.303
31.75	550.5	240.9	112.98	3.8346	0.303
32.00	550.7	241.0	112.98	3.8125	0.303
32.25	550.9	241.3	112.98	3.7907	0.303
32.50	551.1	241.5	112.99	3.7692	0.304
32.75	551.3	241.7	112.98	3.7481	0.304
33.00	551.6	242.0	112.98	3.7273	0.304
33.25	551.8	242.2	112.98	3.7068	0.304
33.50	552.0	242.4	112.99	3.6866	0.305
33.75	552.3	242.7	112.99	3.6667	0.305
34.00	552.5	242.9	112.98	3.6471	0.305
34.25	552.6	243.0	112.99	3.6277	0.305
34.50	552.9	243.3	112.99	3.6087	0.306
34.75	553.1	243.5	112.99	3.5899	0.306
35.00	551.3	241.7	113.00	3.5714	0.304
35.25	553.5	243.9	112.99	3.5532	0.306
35.50	553.7	244.1	112.99	3.5352	0.307
35.75	554.0	244.4	112.99	3.5175	0.307
36.00	554.2	244.6	112.99	3.5000	0.307
36.25	554.4	244.8	112.99	3.4828	0.307
36.50	554.6	245.0	113.00	3.4658	0.308
36.75	554.8	245.2	112.99	3.4490	0.308
37.00	555.0	245.4	113.00	3.4324	0.308
37.25	555.2	245.6	112.99	3.4161	0.308
37.50	555.4	245.8	112.99	3.4000	0.308
37.75	555.6	246.0	112.99	3.3841	0.309
38.00	555.7	246.1	112.99	3.3684	0.309
38.25	555.9	246.3	112.99	3.3529	0.309
38.50	556.1	246.5	112.99	3.3377	0.309
38.75	556.3	246.7	112.98	3.3226	0.309
39.00	556.5	246.9	112.99	3.3077	0.310
39.25	556.8	247.2	113.00	3.2930	0.310
39.50	557.0	247.4	112.99	3.2785	0.310
39.75	557.1	247.5	113.00	3.2642	0.310
40.00	557.3	247.7	112.99	3.2500	0.311
40.25	557.4	247.8	113.00	3.2360	0.311
40.50	557.6	248.0	112.99	3.2222	0.311
40.75	557.8	248.2	112.99	3.2086	0.311
41.00	558.0	248.4	112.99	3.1951	0.311
41.25	558.1	248.5	112.98	3.1818	0.312
41.50	558.3	248.7	112.99	3.1687	0.312

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10192 Murfin Drlg Co. Rusco C-1 DST #2

DATE: 07/15/97 TIME: 00:28:30

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	41.75	558.5	248.9	113.00	3.1557	0.312
	42.00	558.6	249.0	112.98	3.1429	0.312
	42.25	558.8	249.2	112.99	3.1302	0.312
	42.50	559.0	249.4	112.99	3.1176	0.312
	42.75	559.2	249.6	112.99	3.1053	0.313
	43.00	559.4	249.8	112.99	3.0930	0.313
	43.25	559.5	249.9	112.98	3.0809	0.313
	43.50	559.6	250.0	112.98	3.0690	0.313
	43.75	559.8	250.2	112.99	3.0571	0.313
	44.00	560.0	250.4	112.99	3.0455	0.314
	44.25	560.2	250.6	112.99	3.0339	0.314
	44.50	560.3	250.7	112.99	3.0225	0.314
	44.75	560.4	250.8	112.98	3.0112	0.314
***** End Shut-in 2	45.00	560.6	251.0	112.98	3.0000	0.314
***** Final Hydro.	271.50	1631.5	0.0	113.01		

TEST HISTORY

10192 Murfin Drlg Co. Rusco C-1 DST #2

Flag Points

	t (Min.)	P (PSig)
A:	0.00	1657.28
B:	0.00	33.11
C:	45.25	228.49
D:	45.75	562.45
E:	0.00	241.49
F:	44.75	309.61
G:	45.00	560.59
Q:	0.00	1631.46

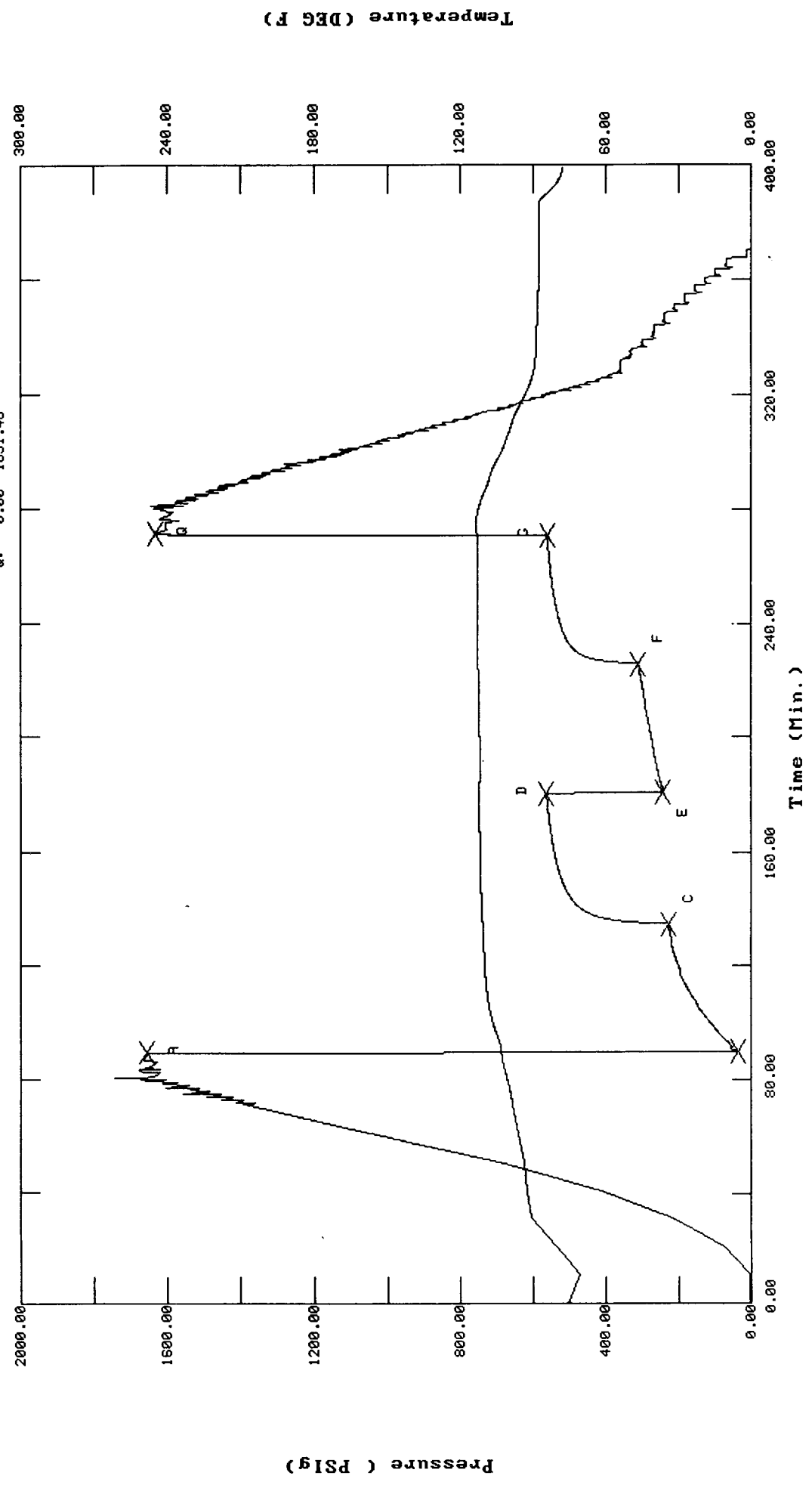
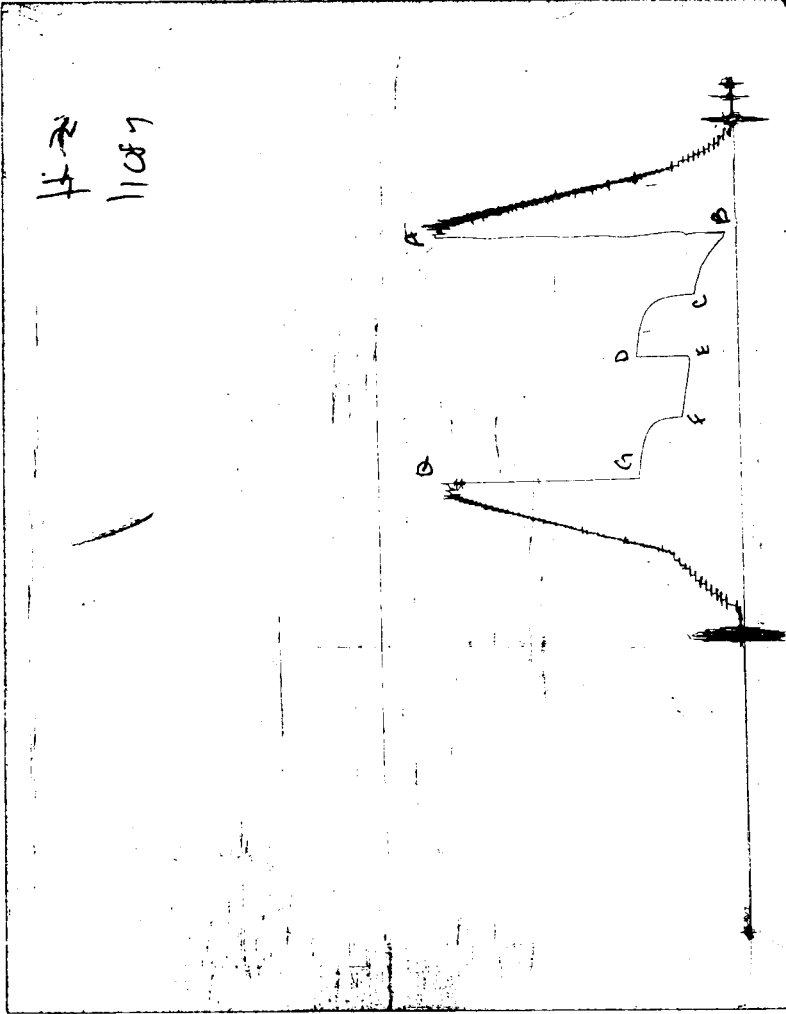


CHART PAGE



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

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co. Inc DATE 07/15/97
 WELL NAME: Rusco C-1 KB 2032.00 ft TICKET NO: 10193 DST #3
 LOCATION : Sec36 T11s R20w Ellis KS GR 2027.00 ft FORMATION: Lansing H-J
 INTERVAL : 3418.00 To 3488.00 ft TD 3488.00 ft TEST TYPE: CONV

RECORDED DATA

mins	Field	1	2	3	4	TIME DATA-----
45	Rec.	11084	11084	Alpine		PF Fr. 1957 to 2042 hr
45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0 IS Fr. 2042 to 2127 hr
45	Clock(hrs)	12hr.	12hr.	Elec		SF Fr. 2127 to 2212 hr
45	Depth(ft)	3455.0	3455.0	3422.0	0.0	0.0 FS Fr. 2212 to 2257 hr

	Field	1	2	3	4	
Init Hydro	1778.0	1741.0	1685.0	0.0	0.0	T STARTED 1850 hr
First Flow	77.0	49.0	21.0	0.0	0.0	T ON BOTM 1955 hr
Final Flow	99.0	67.0	58.0	0.0	0.0	T OPEN 1957 hr
In Shut-in	613.0	593.0	598.0	0.0	0.0	T PULLED 2257 hr
Init Flow	99.0	81.0	61.0	0.0	0.0	T OUT 0020 hr
Final Flow	110.0	93.0	81.0	0.0	0.0	
Fl Shut-in	515.0	505.0	512.0	0.0	0.0	
Final Hydro	1767.0	1692.0	1661.0	0.0	0.0	
Inside/Outside	0	0	I			

RECOVERY

Tool Fluid	120.00 ft of	120.00 ft in DC and	0.00 ft in DP	
0.00	ft of clean oil			Bot Choke 0.75 in
0.00	ft of			Hole Size 7.88 in
0.00	ft of slighty oil cut mud 10% oil 90% mud			D Col. ID 2.25 in
0.00	ft of			D. Pipe ID 3.80 in
0.00	ft of			D.C. Length 534.00 ft
0.00	ft of			D.P. Length 2886.00 ft
0.00	ft of			
0.00	ft of			

ALINITY 0.00 P.P.M. A.P.I. Gravity 19.00

LOW DESCRIPTION

Initial Flow-
 weak 3/4" blow throughout

Initial Shutin-

Final Flow-
 weak 1/4" blow died in 20 minutes

Final Shutin-

MUD DATA-----

Mud Type	Chemical
Weight	9.10 lb/c
Vis.	49.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	110.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Paul Simpson
Co. Rep.	Roger Welty
Contr.	Murfin
Rig #	3
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Rusco C-1

LOCATION : Sec36 T11s R20w Ellis KS

TICKET No. 10193 D.S.T. No. 3 DATE 07/15/97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 39 perf

TOTAL TOOL 66

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 31

TOTAL ASSEMBLY 97

D.C. ABOVE TOOLS.Stands9 Single Total 534

D.P. ABOVE TOOLS.Stands46 Single 1 Total 2886

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3517

TOTAL DEPTH 3488

TOTAL DRILL PIPE ABOVE K.B. 29

REMARKS:

P.O. SUB	
C.O. SUB Top of tool @	3391
S.I. TOOL H & T	3397
HMV Sterling	3402
JARS Sterling	3407
SAFETY JOINT Bowen	3409
PACKER Top	3413
PACKER Bottom	3418
DEPTH 3418	
STUBB 1'	3419
ANCHOR	
3' perf	3422
Alpine rec. @3422	
1 joint of pipe and subs to	3455
AK-1 rec & 3455	
5' perf	3460
T.C.	
DEPTH	
5'perf	3465
5'perf	3470
5'perf	3475
5' perf	3480
5' perf	3485
BULLNOSE 3' bullplug	
T.D. to	3488

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97 TIME: 09:20:54

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	113.75	1653.1	0.0	106.48		
***** Start Flow 1	0.00	40.2	0.0	106.51		
	0.25	43.1	2.9	106.54		
	0.50	46.1	5.9	106.57		
	0.75	48.7	8.5	106.60		
	1.00	51.1	10.9	106.63		
	1.25	53.4	13.2	106.65		
	1.50	55.4	15.2	106.67		
	1.75	57.3	17.1	106.69		
	2.00	59.1	18.9	106.70		
	2.25	60.7	20.6	106.72		
	2.50	62.6	22.4	106.74		
	2.75	63.7	23.6	106.74		
	3.00	64.4	24.3	106.76		
	3.25	65.3	25.1	106.77		
	3.50	66.5	26.3	106.78		
	3.75	67.9	27.7	106.79		
	4.00	69.1	28.9	106.80		
	4.25	69.6	29.4	106.80		
	4.50	71.1	30.9	106.81		
	4.75	71.5	31.3	106.82		
	5.00	73.0	32.8	106.82		
	5.25	73.4	33.3	106.83		
	5.50	74.9	34.7	106.83		
	5.75	76.5	36.3	106.83		
	6.00	77.3	37.2	106.83		
	6.25	78.0	37.9	106.84		
	6.50	79.2	39.0	106.85		
	6.75	79.9	39.8	106.85		
	7.00	81.7	41.5	106.85		
	7.25	83.0	42.8	106.86		
	7.50	83.2	43.0	106.86		
	7.75	83.7	43.5	106.86		
	8.00	84.3	44.1	106.86		
	8.25	85.0	44.8	106.87		
	8.50	85.2	45.0	106.88		
	8.75	86.1	45.9	106.88		
	9.00	86.9	46.7	106.88		
	9.25	87.7	47.5	106.89		
	9.50	88.6	48.5	106.88		
	9.75	89.6	49.4	106.88		
	10.00	90.5	50.3	106.89		
	10.25	91.3	51.1	106.89		
	10.50	92.1	51.9	106.89		
	10.75	93.1	52.9	106.90		
	11.00	93.9	53.7	106.90		
	11.25	94.5	54.3	106.90		
	11.50	95.1	54.9	106.90		
	11.75	95.8	55.6	106.91		
	12.00	96.7	56.6	106.91		
	12.25	97.3	57.2	106.91		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
12.50	98.0	57.9	106.92		
12.75	98.8	58.6	106.92		
13.00	99.7	59.5	106.93		
13.25	100.2	60.1	106.94		
13.50	100.9	60.8	106.94		
13.75	101.8	61.6	106.94		
14.00	102.3	62.1	106.95		
14.25	103.6	63.4	106.96		
14.50	104.2	64.0	106.96		
14.75	105.5	65.3	106.96		
15.00	106.0	65.8	106.97		
15.25	106.2	66.0	106.98		
15.50	107.1	66.9	106.99		
15.75	107.8	67.6	106.99		
16.00	108.4	68.2	107.00		
16.25	109.2	69.0	107.01		
16.50	109.8	69.6	107.01		
16.75	110.6	70.4	107.02		
17.00	111.2	71.0	107.03		
17.25	112.2	72.0	107.04		
17.50	112.7	72.5	107.04		
17.75	113.7	73.5	107.06		
18.00	114.4	74.2	107.06		
18.25	115.1	74.9	107.07		
18.50	115.9	75.7	107.08		
18.75	116.6	76.4	107.09		
19.00	117.4	77.3	107.10		
19.25	118.2	78.0	107.10		
19.50	118.3	78.2	107.11		
19.75	118.9	78.7	107.12		
20.00	119.7	79.5	107.13		
20.25	120.4	80.2	107.14		
20.50	121.1	80.9	107.14		
20.75	122.4	82.3	107.15		
21.00	122.8	82.6	107.16		
21.25	123.1	82.9	107.17		
21.50	123.6	83.4	107.17		
21.75	124.5	84.3	107.19		
22.00	125.2	85.0	107.19		
22.25	125.9	85.7	107.21		
22.50	126.8	86.6	107.22		
22.75	127.2	87.0	107.22		
23.00	127.8	87.6	107.23		
23.25	128.4	88.3	107.23		
23.50	128.9	88.7	107.25		
23.75	129.6	89.4	107.25		
24.00	130.2	90.0	107.26		
24.25	130.9	90.7	107.27		
24.50	131.5	91.4	107.28		
24.75	132.2	92.1	107.29		
25.00	132.8	92.6	107.29		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97 TIME: 09:20:54

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	25.25	133.6	93.4	107.30		
	25.50	134.1	93.9	107.30		
	25.75	134.7	94.5	107.31		
	26.00	135.2	95.1	107.32		
	26.25	135.7	95.5	107.33		
	26.50	136.5	96.3	107.33		
	26.75	137.1	96.9	107.34		
	27.00	137.6	97.4	107.35		
	27.25	138.2	98.0	107.36		
	27.50	139.0	98.8	107.37		
	27.75	139.7	99.5	107.37		
	28.00	140.1	99.9	107.38		
	28.25	140.8	100.6	107.39		
	28.50	141.1	100.9	107.39		
	28.75	141.9	101.7	107.41		
	29.00	142.3	102.1	107.42		
	29.25	143.3	103.1	107.42		
	29.50	143.6	103.4	107.43		
	29.75	144.3	104.1	107.43		
	30.00	144.7	104.5	107.44		
***** End Flow 1	30.25	145.4	105.2	107.45		
***** Start Shutin 1	0.00	145.4	0.0	107.45	0.0000	0.021
	0.25	151.7	6.2	107.46	122.0000	0.023
	0.50	172.3	26.9	107.46	61.5000	0.030
	0.75	194.1	48.6	107.47	41.3333	0.038
	1.00	217.5	72.1	107.48	31.2500	0.047
	1.25	242.6	97.1	107.50	25.2000	0.059
	1.50	268.3	122.9	107.50	21.1667	0.072
	1.75	294.2	148.8	107.51	18.2857	0.087
	2.00	319.1	173.6	107.51	16.1250	0.102
	2.25	342.2	196.8	107.52	14.4444	0.117
	2.50	363.3	217.8	107.53	13.1000	0.132
	2.75	381.8	236.4	107.54	12.0000	0.146
	3.00	397.9	252.5	107.55	11.0833	0.158
	3.25	411.8	266.4	107.56	10.3077	0.170
	3.50	424.0	278.6	107.56	9.6429	0.180
	3.75	434.9	289.5	107.58	9.0667	0.189
	4.00	444.5	299.0	107.59	8.5625	0.198
	4.25	452.9	307.5	107.60	8.1176	0.205
	4.50	460.4	315.0	107.60	7.7222	0.212
	4.75	467.1	321.7	107.63	7.3684	0.218
	5.00	473.1	327.7	107.63	7.0500	0.224
	5.25	478.6	333.1	107.64	6.7619	0.229
	5.50	483.3	337.9	107.65	6.5000	0.234
	5.75	487.7	342.3	107.66	6.2609	0.238
	6.00	491.6	346.2	107.67	6.0417	0.242
	6.25	495.2	349.8	107.68	5.8400	0.245
	6.50	498.5	353.1	107.69	5.6538	0.249
	6.75	501.5	356.1	107.71	5.4815	0.252
	7.00	504.3	358.9	107.72	5.3214	0.254
	7.25	506.9	361.5	107.73	5.1724	0.257

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
7.50	509.3	363.9	107.74	5.0333	0.259
7.75	511.5	366.1	107.75	4.9032	0.262
8.00	513.5	368.1	107.76	4.7812	0.264
8.25	515.3	369.9	107.77	4.6667	0.266
8.50	517.1	371.7	107.77	4.5588	0.267
8.75	518.8	373.4	107.78	4.4571	0.269
9.00	520.4	375.0	107.79	4.3611	0.271
9.25	521.9	376.5	107.79	4.2703	0.272
9.50	523.4	377.9	107.82	4.1842	0.274
9.75	524.7	379.3	107.82	4.1026	0.275
10.00	526.1	380.7	107.83	4.0250	0.277
10.25	527.4	382.0	107.84	3.9512	0.278
10.50	528.4	383.0	107.85	3.8810	0.279
10.75	529.4	384.0	107.86	3.8140	0.280
11.00	530.3	384.9	107.86	3.7500	0.281
11.25	531.3	385.9	107.88	3.6889	0.282
11.50	532.1	386.7	107.88	3.6304	0.283
11.75	533.1	387.7	107.89	3.5745	0.284
12.00	534.0	388.5	107.90	3.5208	0.285
12.25	534.8	389.4	107.91	3.4694	0.286
12.50	535.7	390.3	107.95	3.4200	0.287
12.75	536.4	391.0	107.92	3.3725	0.288
13.00	537.2	391.8	107.93	3.3269	0.289
13.25	537.9	392.5	107.94	3.2830	0.289
13.50	538.7	393.3	107.95	3.2407	0.290
13.75	539.4	394.0	107.95	3.2000	0.291
14.00	540.1	394.7	107.96	3.1607	0.292
14.25	540.7	395.3	107.97	3.1228	0.292
14.50	541.3	395.9	107.98	3.0862	0.293
14.75	541.9	396.5	107.99	3.0508	0.294
15.00	542.5	397.1	107.99	3.0167	0.294
15.25	543.1	397.7	108.00	2.9836	0.295
15.50	543.7	398.2	108.01	2.9516	0.296
15.75	544.2	398.8	108.01	2.9206	0.296
16.00	544.8	399.4	108.02	2.8906	0.297
16.25	545.3	399.9	108.02	2.8615	0.297
16.50	545.9	400.4	108.04	2.8333	0.298
16.75	546.3	400.9	108.04	2.8060	0.298
17.00	546.9	401.5	108.04	2.7794	0.299
17.25	547.3	401.9	108.05	2.7536	0.300
17.50	547.9	402.5	108.07	2.7286	0.300
17.75	548.4	403.0	108.07	2.7042	0.301
18.00	548.9	403.4	108.08	2.6806	0.301
18.25	549.3	403.8	108.08	2.6575	0.302
18.50	549.7	404.3	108.10	2.6351	0.302
18.75	550.2	404.7	108.11	2.6133	0.303
19.00	550.5	405.1	108.10	2.5921	0.303
19.25	551.0	405.6	108.11	2.5714	0.304
19.50	551.3	405.9	108.12	2.5513	0.304
19.75	551.8	406.4	108.13	2.5316	0.304
20.00	552.1	406.7	108.13	2.5125	0.305

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
20.25	552.5	407.1	108.14	2.4938	0.305
20.50	552.8	407.4	108.15	2.4756	0.306
20.75	553.2	407.8	108.15	2.4578	0.306
21.00	553.6	408.2	108.16	2.4405	0.306
21.25	554.0	408.5	108.17	2.4235	0.307
21.50	554.3	408.9	108.17	2.4070	0.307
21.75	554.7	409.2	108.18	2.3908	0.308
22.00	555.0	409.6	108.19	2.3750	0.308
22.25	555.3	409.9	108.20	2.3596	0.308
22.50	555.7	410.3	108.21	2.3444	0.309
22.75	556.0	410.5	108.21	2.3297	0.309
23.00	556.3	410.9	108.22	2.3152	0.309
23.25	556.6	411.2	108.22	2.3011	0.310
23.50	556.9	411.5	108.22	2.2872	0.310
23.75	557.2	411.8	108.24	2.2737	0.310
24.00	557.5	412.1	108.23	2.2604	0.311
24.25	557.9	412.4	108.25	2.2474	0.311
24.50	558.2	412.8	108.26	2.2347	0.312
24.75	558.4	413.0	108.26	2.2222	0.312
25.00	558.8	413.3	108.27	2.2100	0.312
25.25	558.9	413.5	108.27	2.1980	0.312
25.50	559.3	413.8	108.28	2.1863	0.313
25.75	559.5	414.1	108.29	2.1748	0.313
26.00	559.8	414.3	108.29	2.1635	0.313
26.25	560.0	414.6	108.30	2.1524	0.314
26.50	560.3	414.9	108.31	2.1415	0.314
26.75	560.5	415.1	108.30	2.1308	0.314
27.00	560.9	415.4	108.32	2.1204	0.315
27.25	561.0	415.6	108.31	2.1101	0.315
27.50	561.3	415.8	108.33	2.1000	0.315
27.75	561.5	416.1	108.33	2.0901	0.315
28.00	561.8	416.3	108.34	2.0804	0.316
28.25	562.0	416.5	108.34	2.0708	0.316
28.50	562.3	416.8	108.36	2.0614	0.316
28.75	562.5	417.1	108.35	2.0522	0.316
29.00	562.7	417.3	108.38	2.0431	0.317
29.25	562.9	417.5	108.38	2.0342	0.317
29.50	563.1	417.7	108.38	2.0254	0.317
29.75	563.4	418.0	108.39	2.0168	0.317
30.00	563.6	418.1	108.39	2.0083	0.318
30.25	563.8	418.4	108.40	2.0000	0.318
30.50	564.0	418.6	108.41	1.9918	0.318
30.75	564.2	418.8	108.41	1.9837	0.318
31.00	564.4	418.9	108.42	1.9758	0.318
31.25	564.7	419.2	108.43	1.9680	0.319
31.50	564.8	419.4	108.42	1.9603	0.319
31.75	565.0	419.6	108.44	1.9528	0.319
32.00	565.2	419.8	108.44	1.9453	0.319
32.25	565.4	420.0	108.45	1.9380	0.320
32.50	565.6	420.2	108.46	1.9308	0.320
32.75	565.7	420.3	108.46	1.9237	0.320

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	P	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
33.00	565.9	420.5	108.47	108.47	1.9167	0.320
33.25	566.1	420.7	108.47	108.47	1.9098	0.321
33.50	566.3	420.9	108.47	108.47	1.9030	0.321
33.75	566.5	421.1	108.48	108.48	1.8963	0.321
34.00	566.7	421.3	108.49	108.49	1.8897	0.321
34.25	566.8	421.4	108.50	108.50	1.8832	0.321
34.50	567.0	421.6	108.50	108.50	1.8768	0.322
34.75	567.2	421.7	108.51	108.51	1.8705	0.322
35.00	567.3	421.9	108.51	108.51	1.8643	0.322
35.25	567.4	422.0	108.52	108.52	1.8582	0.322
35.50	567.6	422.2	108.52	108.52	1.8521	0.322
35.75	567.8	422.4	108.54	108.54	1.8462	0.322
36.00	568.0	422.5	108.54	108.54	1.8403	0.323
36.25	568.2	422.8	108.54	108.54	1.8345	0.323
36.50	568.3	422.9	108.55	108.55	1.8288	0.323
36.75	568.4	423.0	108.55	108.55	1.8231	0.323
37.00	568.6	423.2	108.56	108.56	1.8176	0.323
37.25	568.9	423.5	108.56	108.56	1.8121	0.324
37.50	568.9	423.5	108.57	108.57	1.8067	0.324
37.75	569.1	423.7	108.58	108.58	1.8013	0.324
38.00	569.3	423.8	108.58	108.58	1.7961	0.324
38.25	569.4	424.0	108.58	108.58	1.7908	0.324
38.50	569.6	424.2	108.59	108.59	1.7857	0.324
38.75	569.7	424.3	108.60	108.60	1.7806	0.325
39.00	569.9	424.5	108.62	108.62	1.7756	0.325
39.25	570.0	424.6	108.62	108.62	1.7707	0.325
39.50	570.2	424.7	108.62	108.62	1.7658	0.325
39.75	570.3	424.9	108.62	108.62	1.7610	0.325
40.00	570.4	425.0	108.63	108.63	1.7563	0.325
40.25	570.5	425.1	108.63	108.63	1.7516	0.325
40.50	570.7	425.3	108.64	108.64	1.7469	0.326
40.75	570.9	425.4	108.65	108.65	1.7423	0.326
41.00	570.9	425.5	108.65	108.65	1.7378	0.326
41.25	571.1	425.7	108.66	108.66	1.7333	0.326
41.50	571.2	425.8	108.66	108.66	1.7289	0.326
41.75	571.5	426.1	108.67	108.67	1.7246	0.327
42.00	571.6	426.1	108.69	108.69	1.7202	0.327
42.25	571.7	426.3	108.69	108.69	1.7160	0.327
42.50	571.9	426.5	108.69	108.69	1.7118	0.327
42.75	571.9	426.5	108.70	108.70	1.7076	0.327
43.00	572.1	426.7	108.70	108.70	1.7035	0.327
43.25	572.3	426.8	108.72	108.72	1.6994	0.327
43.50	572.3	426.9	108.73	108.73	1.6954	0.328
43.75	572.4	427.0	108.72	108.72	1.6914	0.328
44.00	572.5	427.1	108.73	108.73	1.6875	0.328
44.25	572.7	427.3	108.72	108.72	1.6836	0.328
44.50	572.8	427.4	108.73	108.73	1.6798	0.328
44.75	572.9	427.5	108.73	108.73	1.6760	0.328
45.00	573.0	427.6	108.74	108.74	1.6722	0.328
45.25	573.1	427.7	108.74	108.74	1.6685	0.328
45.50	573.2	427.8	108.75	108.75	1.6648	0.329

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
45.75	573.3	427.9	108.75	1.6612	0.329
46.00	573.5	428.1	108.76	1.6576	0.329
46.25	573.6	428.2	108.76	1.6541	0.329
46.50	573.7	428.3	108.77	1.6505	0.329
46.75	573.8	428.3	108.78	1.6471	0.329
47.00	573.9	428.5	108.78	1.6436	0.329
47.25	574.0	428.6	108.79	1.6402	0.330
47.50	574.1	428.7	108.80	1.6368	0.330
47.75	574.3	428.8	108.80	1.6335	0.330
48.00	574.3	428.9	108.80	1.6302	0.330
48.25	574.5	429.0	108.81	1.6269	0.330
48.50	574.6	429.2	108.82	1.6237	0.330
48.75	574.7	429.3	108.83	1.6205	0.330
49.00	574.8	429.4	108.83	1.6173	0.330
49.25	574.9	429.5	108.83	1.6142	0.330
49.50	575.0	429.6	108.84	1.6111	0.331
49.75	575.1	429.6	108.85	1.6080	0.331
50.00	575.2	429.8	108.86	1.6050	0.331
50.25	575.3	429.9	108.86	1.6020	0.331
50.50	575.4	430.0	108.87	1.5990	0.331
50.75	575.5	430.1	108.87	1.5961	0.331
51.00	575.6	430.2	108.87	1.5931	0.331
51.25	575.7	430.3	108.88	1.5902	0.331
51.50	575.8	430.4	108.89	1.5874	0.332
51.75	575.9	430.5	108.89	1.5845	0.332
52.00	576.0	430.6	108.90	1.5817	0.332
52.25	576.1	430.7	108.90	1.5789	0.332
52.50	576.2	430.8	108.90	1.5762	0.332
52.75	576.3	430.9	108.90	1.5735	0.332
53.00	576.3	430.8	108.91	1.5708	0.332
53.25	576.4	431.0	108.91	1.5681	0.332
53.50	576.5	431.1	108.92	1.5654	0.332
53.75	576.6	431.1	108.93	1.5628	0.332
54.00	576.7	431.3	108.94	1.5602	0.333
54.25	576.7	431.3	108.94	1.5576	0.333
54.50	576.8	431.4	108.94	1.5550	0.333
54.75	576.9	431.5	108.95	1.5525	0.333
55.00	577.1	431.6	108.95	1.5500	0.333
55.25	577.2	431.8	108.96	1.5475	0.333
55.50	577.3	431.8	108.96	1.5450	0.333
55.75	577.4	431.9	108.97	1.5426	0.333
56.00	577.4	432.0	108.97	1.5402	0.333
56.25	577.5	432.1	108.98	1.5378	0.334
56.50	577.5	432.1	108.98	1.5354	0.334
56.75	577.7	432.3	108.99	1.5330	0.334
57.00	577.7	432.3	109.00	1.5307	0.334
57.25	577.9	432.5	109.00	1.5284	0.334
57.50	577.9	432.5	109.01	1.5261	0.334
57.75	578.0	432.6	109.01	1.5238	0.334
58.00	578.1	432.7	109.02	1.5216	0.334
58.25	578.2	432.7	109.03	1.5193	0.334

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	58.50	578.2	432.7	109.04	1.5171	0.334
	58.75	578.4	432.9	109.03	1.5149	0.334
	59.00	578.5	433.0	109.03	1.5127	0.335
	59.25	578.5	433.1	109.03	1.5105	0.335
	59.50	578.6	433.1	109.03	1.5084	0.335
	59.75	578.7	433.3	109.04	1.5063	0.335
	60.00	578.8	433.3	109.05	1.5042	0.335
	60.25	578.8	433.3	109.06	1.5021	0.335
	60.50	578.9	433.4	109.06	1.5000	0.335
	60.75	579.0	433.5	109.06	1.4979	0.335
	61.00	579.0	433.5	109.07	1.4959	0.335
***** End Shut-in 1	61.25	579.1	433.7	109.08	1.4939	0.335
***** Start Flow 2	0.00	155.9	0.0	109.09		
	0.25	155.2	-0.7	109.09		
	0.50	155.4	-0.5	109.09		
	0.75	156.0	0.1	109.09		
	1.00	156.7	0.8	109.09		
	1.25	157.9	2.0	109.09		
	1.50	158.9	3.0	109.10		
	1.75	159.8	3.9	109.09		
	2.00	160.6	4.7	109.10		
	2.25	161.5	5.6	109.09		
	2.50	162.3	6.4	109.10		
	2.75	163.1	7.2	109.10		
	3.00	163.7	7.8	109.10		
	3.25	164.3	8.4	109.10		
	3.50	165.0	9.1	109.10		
	3.75	165.6	9.7	109.09		
	4.00	166.3	10.4	109.10		
	4.25	167.0	11.1	109.10		
	4.50	167.7	11.8	109.10		
	4.75	168.5	12.6	109.10		
	5.00	169.2	13.3	109.10		
	5.25	169.8	13.9	109.11		
	5.50	170.3	14.4	109.11		
	5.75	171.0	15.1	109.11		
	6.00	171.7	15.8	109.11		
	6.25	172.5	16.6	109.11		
	6.50	173.2	17.3	109.12		
	6.75	173.8	17.9	109.12		
	7.00	174.5	18.6	109.12		
	7.25	175.2	19.3	109.12		
	7.50	175.9	20.0	109.12		
	7.75	176.4	20.5	109.13		
	8.00	177.0	21.1	109.13		
	8.25	177.6	21.7	109.13		
	8.50	178.3	22.4	109.14		
	8.75	179.0	23.1	109.14		
	9.00	179.5	23.6	109.14		
	9.25	180.1	24.3	109.15		
	9.50	180.9	25.0	109.15		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
9.75	181.5	25.6	109.15		
10.00	182.0	26.1	109.16		
10.25	182.6	26.7	109.16		
10.50	183.3	27.4	109.16		
10.75	184.1	28.2	109.17		
11.00	184.7	28.8	109.17		
11.25	185.2	29.3	109.18		
11.50	185.9	30.0	109.18		
11.75	186.5	30.6	109.18		
12.00	187.1	31.2	109.19		
12.25	187.8	31.9	109.19		
12.50	188.5	32.6	109.19		
12.75	189.0	33.1	109.20		
13.00	189.7	33.8	109.20		
13.25	190.5	34.6	109.21		
13.50	191.1	35.2	109.21		
13.75	191.7	35.8	109.22		
14.00	192.3	36.4	109.22		
14.25	192.9	37.0	109.22		
14.50	193.5	37.6	109.23		
14.75	194.0	38.1	109.23		
15.00	194.4	38.5	109.24		
15.25	194.7	38.8	109.25		
15.50	195.2	39.3	109.27		
15.75	195.5	39.6	109.25		
16.00	196.0	40.1	109.25		
16.25	196.4	40.5	109.26		
16.50	196.7	40.8	109.27		
16.75	197.1	41.2	109.27		
17.00	197.5	41.6	109.27		
17.25	197.7	41.8	109.28		
17.50	198.0	42.1	109.28		
17.75	198.3	42.4	109.30		
18.00	198.6	42.7	109.29		
18.25	198.9	43.0	109.30		
18.50	199.1	43.2	109.30		
18.75	199.5	43.6	109.30		
19.00	200.0	44.1	109.31		
19.25	200.2	44.3	109.31		
19.50	200.5	44.6	109.32		
19.75	200.9	45.0	109.33		
20.00	201.2	45.3	109.33		
20.25	201.8	45.9	109.33		
20.50	202.0	46.1	109.34		
20.75	202.3	46.4	109.35		
21.00	202.8	46.9	109.35		
21.25	202.8	46.9	109.35		
21.50	203.5	47.6	109.35		
21.75	203.7	47.8	109.36		
22.00	204.4	48.5	109.37		
22.25	204.9	49.0	109.37		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
22.50	205.2	49.3	109.37		
22.75	205.6	49.7	109.38		
23.00	206.1	50.2	109.38		
23.25	206.4	50.5	109.39		
23.50	207.1	51.2	109.39		
23.75	207.6	51.7	109.39		
24.00	208.0	52.1	109.41		
24.25	208.5	52.6	109.41		
24.50	209.1	53.3	109.42		
24.75	209.5	53.6	109.42		
25.00	209.9	54.0	109.42		
25.25	210.5	54.6	109.43		
25.50	210.7	54.8	109.43		
25.75	211.4	55.5	109.44		
26.00	212.0	56.1	109.44		
26.25	212.5	56.6	109.44		
26.50	212.6	56.7	109.45		
26.75	213.3	57.4	109.45		
27.00	213.8	57.9	109.46		
27.25	214.3	58.4	109.46		
27.50	214.6	58.7	109.46		
27.75	215.1	59.2	109.47		
28.00	215.9	60.0	109.48		
28.25	216.0	60.1	109.48		
28.50	216.3	60.4	109.49		
28.75	217.1	61.2	109.49		
29.00	217.1	61.2	109.50		
29.25	217.7	61.8	109.50		
29.50	218.2	62.3	109.50		
29.75	218.7	62.8	109.50		
30.00	219.1	63.2	109.51		
30.25	219.6	63.7	109.52		
30.50	220.2	64.3	109.52		
30.75	220.6	64.7	109.53		
31.00	221.0	65.1	109.53		
31.25	221.5	65.6	109.53		
31.50	222.0	66.1	109.54		
31.75	222.4	66.5	109.55		
32.00	222.9	67.0	109.55		
32.25	223.4	67.5	109.55		
32.50	223.9	68.0	109.56		
32.75	224.0	68.1	109.56		
33.00	224.6	68.7	109.57		
33.25	225.3	69.4	109.57		
33.50	225.5	69.6	109.57		
33.75	226.1	70.2	109.58		
34.00	226.6	70.7	109.59		
34.25	227.2	71.3	109.59		
34.50	227.6	71.7	109.60		
34.75	228.1	72.2	109.59		
35.00	228.6	72.7	109.60		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
35.25	228.9	73.0	109.61		
35.50	229.2	73.3	109.61		
35.75	229.8	73.9	109.62		
36.00	230.2	74.3	109.62		
36.25	230.9	75.0	109.62		
36.50	231.2	75.3	109.63		
36.75	231.6	75.7	109.63		
37.00	231.9	76.0	109.64		
37.25	232.5	76.6	109.64		
37.50	232.8	76.9	109.64		
37.75	233.0	77.1	109.65		
38.00	233.7	77.8	109.66		
38.25	233.9	78.0	109.66		
38.50	234.3	78.4	109.66		
38.75	234.8	78.9	109.66		
39.00	235.2	79.3	109.67		
39.25	235.5	79.6	109.68		
39.50	236.1	80.2	109.67		
39.75	236.3	80.4	109.69		
40.00	236.8	80.9	109.69		
40.25	237.2	81.3	109.69		
40.50	237.6	81.8	109.70		
40.75	238.1	82.2	109.70		
41.00	238.6	82.7	109.71		
41.25	238.9	83.0	109.71		
41.50	239.3	83.4	109.72		
41.75	239.8	83.9	109.72		
42.00	240.2	84.3	109.72		
42.25	240.4	84.5	109.73		
42.50	240.9	85.0	109.73		
42.75	241.3	85.4	109.73		
43.00	241.6	85.7	109.75		
43.25	241.9	86.0	109.74		
43.50	242.2	86.3	109.75		
43.75	242.5	86.6	109.76		
44.00	243.0	87.1	109.75		
44.25	243.7	87.8	109.76		
44.50	244.1	88.2	109.76		
44.75	244.5	88.6	109.78		
45.00	244.8	88.9	109.77		
45.25	245.2	89.3	109.78		
45.50	245.5	89.6	109.79		
45.75	246.0	90.1	109.79		
46.00	246.3	90.4	109.79		
46.25	246.8	90.9	109.80		
46.50	247.1	91.2	109.80		
46.75	247.4	91.5	109.80		
47.00	247.7	91.8	109.80		
47.25	248.2	92.3	109.82		
47.50	248.6	92.7	109.82		
47.75	249.0	93.1	109.87		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97 TIME: 09:20:54

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	48.00	249.3	93.4	109.80		
	48.25	249.7	93.8	109.82		
	48.50	249.8	93.9	109.83		
	48.75	250.5	94.6	109.83		
	49.00	250.9	95.0	109.84		
	49.25	251.1	95.2	109.84		
	49.50	251.3	95.4	109.84		
	49.75	251.8	95.9	109.85		
	50.00	252.1	96.2	109.86		
	50.25	252.3	96.5	109.86		
	50.50	252.9	97.0	109.86		
	50.75	253.4	97.5	109.87		
	51.00	253.8	97.9	109.87		
	51.25	253.9	98.0	109.88		
	51.50	254.0	98.1	109.88		
	51.75	254.2	98.3	109.88		
	52.00	254.5	98.6	109.89		
	52.25	254.6	98.7	109.89		
	52.50	254.6	98.7	109.90		
	52.75	254.7	98.8	109.91		
	53.00	255.1	99.2	109.91		
	53.25	255.3	99.4	109.92		
	53.50	255.4	99.5	109.91		
	53.75	255.6	99.7	109.92		
	54.00	255.7	99.8	109.92		
	54.25	255.9	100	109.92		
	54.50	256.1	100.2	109.93		
	54.75	256.2	100.3	109.93		
	55.00	256.6	100.7	109.93		
	55.25	256.6	100.7	109.94		
	55.50	257.0	101.1	109.94		
	55.75	257.0	101.1	109.95		
	56.00	257.1	101.2	109.96		
	56.25	257.2	101.3	109.96		
	56.50	257.5	101.6	109.96		
	56.75	257.2	101.3	109.97		
	57.00	257.3	101.4	109.97		
	57.25	257.3	101.4	109.98		
	57.50	257.4	101.5	109.98		
	57.75	257.5	101.6	109.98		
	58.00	257.7	101.8	109.99		
	58.25	257.6	101.7	109.99		
	58.50	257.6	101.7	109.99		
***** End Flow 2	58.75	257.6	101.7	110.00		
***** Start Shutin 2	0.00	257.6	0.0	110.00	0.0000	0.066
	0.25	270.2	12.5	110.00	357.0000	0.073
	0.50	290.2	32.6	110.00	179.0000	0.084
	0.75	308.8	51.2	110.01	119.6667	0.095
	1.00	326.8	69.2	110.02	90.0000	0.107
	1.25	344.0	86.4	110.02	72.2000	0.118
	1.50	360.3	102.6	110.03	60.3333	0.130

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	P	Temp. DEG F	(T+dT)/dT	P^2/10^6
1.75	375.4	117.8	110.00	51.8571	0.141	
2.00	389.5	131.9	110.03	45.5000	0.152	
2.25	402.4	144.8	110.04	40.5556	0.162	
2.50	414.2	156.6	110.05	36.6000	0.172	
2.75	424.7	167.1	110.05	33.3636	0.180	
3.00	434.4	176.7	110.06	30.6667	0.189	
3.25	443.0	185.4	110.07	28.3846	0.196	
3.50	450.7	193.0	110.07	26.4286	0.203	
3.75	457.5	199.9	110.08	24.7333	0.209	
4.00	463.6	206.0	110.08	23.2500	0.215	
4.25	469.0	211.4	110.09	21.9412	0.220	
4.50	474.0	216.4	110.09	20.7778	0.225	
4.75	478.4	220.8	110.10	19.7368	0.229	
5.00	482.4	224.8	110.10	18.8000	0.233	
5.25	486.1	228.5	110.11	17.9524	0.236	
5.50	489.4	231.8	110.11	17.1818	0.239	
5.75	492.4	234.8	110.13	16.4783	0.242	
6.00	495.2	237.6	110.12	15.8333	0.245	
6.25	497.8	240.2	110.13	15.2400	0.248	
6.50	500.2	242.6	110.15	14.6923	0.250	
6.75	502.4	244.8	110.14	14.1852	0.252	
7.00	504.4	246.8	110.14	13.7143	0.254	
7.25	506.3	248.7	110.15	13.2759	0.256	
7.50	508.0	250.4	110.16	12.8667	0.258	
7.75	509.6	252.0	110.17	12.4839	0.260	
8.00	511.2	253.5	110.17	12.1250	0.261	
8.25	512.6	254.9	110.18	11.7879	0.263	
8.50	513.9	256.3	110.18	11.4706	0.264	
8.75	515.2	257.6	110.19	11.1714	0.265	
9.00	516.3	258.7	110.19	10.8889	0.267	
9.25	517.4	259.8	110.20	10.6216	0.268	
9.50	518.5	260.9	110.21	10.3684	0.269	
9.75	519.5	261.9	110.21	10.1282	0.270	
10.00	520.4	262.8	110.22	9.9000	0.271	
10.25	521.3	263.7	110.22	9.6829	0.272	
10.50	522.2	264.6	110.23	9.4762	0.273	
10.75	523.0	265.4	110.24	9.2791	0.274	
11.00	523.8	266.2	110.24	9.0909	0.274	
11.25	524.6	267.0	110.25	8.9111	0.275	
11.50	525.2	267.6	110.25	8.7391	0.276	
11.75	526.0	268.4	110.25	8.5745	0.277	
12.00	526.6	269.0	110.25	8.4167	0.277	
12.25	527.3	269.7	110.26	8.2653	0.278	
12.50	528.0	270.4	110.27	8.1200	0.279	
12.75	528.6	270.9	110.27	7.9804	0.279	
13.00	529.1	271.5	110.29	7.8462	0.280	
13.25	529.7	272.1	110.29	7.7170	0.281	
13.50	530.4	272.8	110.29	7.5926	0.281	
13.75	530.8	273.2	110.27	7.4727	0.282	
14.00	531.3	273.7	110.29	7.3571	0.282	
14.25	531.9	274.3	110.29	7.2456	0.283	

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
14.50	532.3	274.7	110.30	7.1379	0.283
14.75	532.8	275.2	110.31	7.0339	0.284
15.00	533.2	275.6	110.31	6.9333	0.284
15.25	533.8	276.2	110.32	6.8361	0.285
15.50	534.2	276.6	110.33	6.7419	0.285
15.75	534.7	277.1	110.33	6.6508	0.286
16.00	535.0	277.4	110.32	6.5625	0.286
16.25	535.6	277.9	110.34	6.4769	0.287
16.50	535.9	278.3	110.33	6.3939	0.287
16.75	536.2	278.6	110.34	6.3134	0.288
17.00	536.7	279.1	110.35	6.2353	0.288
17.25	537.1	279.4	110.35	6.1594	0.288
17.50	537.5	279.8	110.35	6.0857	0.289
17.75	537.8	280.2	110.36	6.0141	0.289
18.00	538.2	280.5	110.36	5.9444	0.290
18.25	538.5	280.8	110.37	5.8767	0.290
18.50	538.8	281.2	110.37	5.8108	0.290
18.75	539.2	281.6	110.38	5.7467	0.291
19.00	539.5	281.9	110.38	5.6842	0.291
19.25	539.8	282.2	110.38	5.6234	0.291
19.50	540.2	282.5	110.39	5.5641	0.292
19.75	540.5	282.9	110.39	5.5063	0.292
20.00	540.9	283.3	110.39	5.4500	0.293
20.25	541.1	283.5	110.40	5.3951	0.293
20.50	541.4	283.8	110.41	5.3415	0.293
20.75	541.7	284.0	110.41	5.2892	0.293
21.00	542.0	284.4	110.42	5.2381	0.294
21.25	542.3	284.7	110.42	5.1882	0.294
21.50	542.7	285.0	110.43	5.1395	0.294
21.75	542.9	285.3	110.43	5.0920	0.295
22.00	543.2	285.6	110.44	5.0455	0.295
22.25	543.5	285.9	110.43	5.0000	0.295
22.50	543.7	286.1	110.44	4.9556	0.296
22.75	544.0	286.4	110.44	4.9121	0.296
23.00	544.3	286.6	110.45	4.8696	0.296
23.25	544.5	286.9	110.45	4.8280	0.297
23.50	544.8	287.2	110.44	4.7872	0.297
23.75	545.0	287.4	110.45	4.7474	0.297
24.00	545.3	287.7	110.46	4.7083	0.297
24.25	545.6	288.0	110.46	4.6701	0.298
24.50	545.8	288.2	110.46	4.6327	0.298
24.75	546.0	288.4	110.47	4.5960	0.298
25.00	546.3	288.7	110.48	4.5600	0.298
25.25	546.5	288.9	110.48	4.5248	0.299
25.50	546.8	289.2	110.48	4.4902	0.299
25.75	547.0	289.4	110.49	4.4563	0.299
26.00	547.2	289.6	110.49	4.4231	0.299
26.25	547.4	289.8	110.50	4.3905	0.300
26.50	547.6	290.0	110.50	4.3585	0.300
26.75	547.9	290.3	110.51	4.3271	0.300
27.00	548.0	290.4	110.51	4.2963	0.300

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
27.25	548.3	290.7	110.51	4.2661	0.301
27.50	548.6	290.9	110.51	4.2364	0.301
27.75	548.8	291.1	110.51	4.2072	0.301
28.00	548.9	291.3	110.52	4.1786	0.301
28.25	549.1	291.5	110.52	4.1504	0.302
28.50	549.3	291.7	110.53	4.1228	0.302
28.75	549.5	291.9	110.53	4.0957	0.302
29.00	549.7	292.1	110.54	4.0690	0.302
29.25	549.9	292.3	110.53	4.0427	0.302
29.50	550.1	292.5	110.54	4.0169	0.303
29.75	550.4	292.7	110.55	3.9916	0.303
30.00	550.6	293.0	110.54	3.9667	0.303
30.25	550.7	293.1	110.55	3.9421	0.303
30.50	550.9	293.2	110.55	3.9180	0.303
30.75	551.0	293.4	110.56	3.8943	0.304
31.00	551.3	293.6	110.57	3.8710	0.304
31.25	551.5	293.8	110.57	3.8480	0.304
31.50	551.6	294.0	110.57	3.8254	0.304
31.75	551.9	294.3	110.57	3.8031	0.305
32.00	552.1	294.4	110.57	3.7812	0.305
32.25	552.1	294.5	110.58	3.7597	0.305
32.50	552.3	294.7	110.58	3.7385	0.305
32.75	552.4	294.8	110.59	3.7176	0.305
33.00	552.6	294.9	110.59	3.6970	0.305
33.25	552.8	295.2	110.59	3.6767	0.306
33.50	553.0	295.3	110.59	3.6567	0.306
33.75	553.1	295.4	110.61	3.6370	0.306
34.00	553.2	295.6	110.61	3.6176	0.306
34.25	553.4	295.8	110.61	3.5985	0.306
34.50	553.7	296.0	110.61	3.5797	0.307
34.75	553.7	296.1	110.62	3.5612	0.307
35.00	553.9	296.3	110.62	3.5429	0.307
35.25	554.0	296.4	110.63	3.5248	0.307
35.50	554.1	296.5	110.63	3.5070	0.307
35.75	554.3	296.7	110.63	3.4895	0.307
36.00	554.5	296.9	110.63	3.4722	0.307
36.25	554.6	297.0	110.64	3.4552	0.308
36.50	554.8	297.2	110.64	3.4384	0.308
36.75	554.9	297.3	110.64	3.4218	0.308
37.00	555.1	297.5	110.65	3.4054	0.308
37.25	555.2	297.6	110.65	3.3893	0.308
37.50	555.4	297.7	110.65	3.3733	0.308
37.75	555.5	297.9	110.66	3.3576	0.309
38.00	555.6	298.0	110.66	3.3421	0.309
38.25	555.7	298.1	110.67	3.3268	0.309
38.50	555.9	298.3	110.67	3.3117	0.309
38.75	556.1	298.4	110.68	3.2968	0.309
39.00	556.2	298.6	110.68	3.2821	0.309
39.25	556.4	298.7	110.68	3.2675	0.310
39.50	556.5	298.9	110.68	3.2532	0.310
39.75	556.6	299.0	110.69	3.2390	0.310

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
40.00	556.7	299.1	110.68	3.2250	0.310
40.25	556.9	299.3	110.69	3.2112	0.310
40.50	557.0	299.4	110.69	3.1975	0.310
40.75	557.1	299.5	110.70	3.1840	0.310
41.00	557.3	299.6	110.70	3.1707	0.311
41.25	557.4	299.8	110.69	3.1576	0.311
41.50	557.5	299.9	110.70	3.1446	0.311
41.75	557.7	300.1	110.70	3.1317	0.311
42.00	557.8	300.2	110.70	3.1190	0.311
42.25	557.9	300.3	110.71	3.1065	0.311
42.50	558.0	300.4	110.72	3.0941	0.311
42.75	558.2	300.6	110.72	3.0819	0.312
43.00	558.3	300.6	110.72	3.0698	0.312
43.25	558.4	300.7	110.73	3.0578	0.312
43.50	558.5	300.9	110.73	3.0460	0.312
43.75	558.7	301.0	110.74	3.0343	0.312
44.00	558.8	301.1	110.73	3.0227	0.312
44.25	558.8	301.2	110.74	3.0113	0.312
44.50	559.0	301.4	110.74	3.0000	0.312
44.75	559.1	301.5	110.74	2.9888	0.313
45.00	559.3	301.7	110.75	2.9778	0.313
45.25	559.5	301.9	110.76	2.9669	0.313
45.50	559.5	301.9	110.76	2.9560	0.313
45.75	559.6	302.0	110.76	2.9454	0.313
46.00	559.7	302.1	110.76	2.9348	0.313
46.25	559.8	302.2	110.77	2.9243	0.313
46.50	559.9	302.3	110.77	2.9140	0.314
46.75	560.1	302.5	110.78	2.9037	0.314
47.00	560.2	302.6	110.78	2.8936	0.314
47.25	560.3	302.7	110.79	2.8836	0.314
47.50	560.3	302.7	110.79	2.8737	0.314
47.75	560.6	303.0	110.79	2.8639	0.314
48.00	560.6	303.0	110.79	2.8542	0.314
48.25	560.7	303.1	110.78	2.8446	0.314
48.50	560.8	303.2	110.80	2.8351	0.314
48.75	560.9	303.3	110.79	2.8256	0.315
49.00	561.0	303.4	110.79	2.8163	0.315
49.25	561.1	303.5	110.80	2.8071	0.315
49.50	561.2	303.6	110.79	2.7980	0.315
49.75	561.3	303.7	110.80	2.7889	0.315
50.00	561.4	303.8	110.81	2.7800	0.315
50.25	561.5	303.9	110.81	2.7711	0.315
50.50	561.6	304.0	110.81	2.7624	0.315
50.75	561.7	304.1	110.81	2.7537	0.316
51.00	561.8	304.2	110.82	2.7451	0.316
51.25	562.0	304.4	110.82	2.7366	0.316
51.50	562.0	304.4	110.82	2.7282	0.316
51.75	562.1	304.5	110.82	2.7198	0.316
52.00	562.2	304.6	110.83	2.7115	0.316
52.25	562.3	304.7	110.83	2.7033	0.316
52.50	562.4	304.8	110.84	2.6952	0.316

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1
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Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
52.75	562.5	304.9	110.84	2.6872	0.316
53.00	562.5	304.9	110.85	2.6792	0.316
53.25	562.6	305.0	110.83	2.6714	0.317
53.50	562.8	305.2	110.84	2.6636	0.317
53.75	562.8	305.2	110.85	2.6558	0.317
54.00	562.9	305.3	110.85	2.6481	0.317
54.25	563.0	305.4	110.86	2.6406	0.317
54.50	563.2	305.6	110.87	2.6330	0.317
54.75	563.2	305.6	110.87	2.6256	0.317
55.00	563.3	305.7	110.87	2.6182	0.317
55.25	563.4	305.8	110.87	2.6109	0.317
55.50	563.5	305.9	110.88	2.6036	0.317
55.75	563.6	306.0	110.88	2.5964	0.318
56.00	563.7	306.1	110.87	2.5893	0.318
56.25	563.8	306.1	110.88	2.5822	0.318
56.50	563.8	306.2	110.89	2.5752	0.318
56.75	563.9	306.3	110.89	2.5683	0.318
57.00	564.0	306.4	110.89	2.5614	0.318
57.25	564.1	306.5	110.89	2.5546	0.318
57.50	564.2	306.6	110.89	2.5478	0.318
57.75	564.3	306.7	110.90	2.5411	0.318
58.00	564.4	306.8	110.90	2.5345	0.319
58.25	564.4	306.8	110.91	2.5279	0.319
58.50	564.6	307.0	110.90	2.5214	0.319
58.75	564.7	307.1	110.91	2.5149	0.319
59.00	564.7	307.1	110.91	2.5085	0.319
59.25	564.8	307.2	110.91	2.5021	0.319
59.50	565.0	307.4	110.91	2.4958	0.319
59.75	565.0	307.4	110.91	2.4895	0.319
60.00	565.1	307.5	110.91	2.4833	0.319
60.25	565.2	307.6	110.92	2.4772	0.319
60.50	565.3	307.7	110.92	2.4711	0.320
60.75	565.3	307.7	110.92	2.4650	0.320
61.00	565.5	307.9	110.93	2.4590	0.320
61.25	565.5	307.9	110.93	2.4531	0.320
61.50	565.6	308.0	110.93	2.4472	0.320
61.75	565.7	308.1	110.93	2.4413	0.320
62.00	565.7	308.1	110.93	2.4355	0.320
62.25	565.9	308.2	110.94	2.4297	0.320
62.50	565.9	308.3	110.94	2.4240	0.320
62.75	566.0	308.4	110.95	2.4183	0.320
63.00	566.0	308.4	110.95	2.4127	0.320
63.25	566.1	308.5	110.95	2.4071	0.320
63.50	566.3	308.7	110.96	2.4016	0.321
63.75	566.3	308.6	110.96	2.3961	0.321
64.00	566.4	308.8	110.96	2.3906	0.321
64.25	566.5	308.9	110.96	2.3852	0.321
64.50	566.6	308.9	110.96	2.3798	0.321
64.75	566.7	309.0	110.96	2.3745	0.321
65.00	566.7	309.0	110.97	2.3692	0.321
65.25	566.7	309.1	110.97	2.3640	0.321

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

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Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
65.50	566.8	309.2	110.97	2.3588	0.321
65.75	566.9	309.2	110.98	2.3536	0.321
66.00	566.9	309.3	110.98	2.3485	0.321
66.25	567.0	309.4	110.99	2.3434	0.321
66.50	567.1	309.4	110.98	2.3383	0.322
66.75	567.1	309.5	110.99	2.3333	0.322
67.00	567.3	309.6	110.99	2.3284	0.322
67.25	567.3	309.6	110.98	2.3234	0.322
67.50	567.3	309.7	110.99	2.3185	0.322
67.75	567.4	309.8	111.00	2.3137	0.322
68.00	567.5	309.9	111.00	2.3088	0.322
68.25	567.6	309.9	111.00	2.3040	0.322
68.50	567.6	310.0	111.01	2.2993	0.322
68.75	567.7	310.1	111.00	2.2945	0.322
69.00	567.8	310.2	111.01	2.2899	0.322
69.25	567.8	310.2	111.01	2.2852	0.322
69.50	567.9	310.3	111.01	2.2806	0.323
69.75	568.0	310.4	111.01	2.2760	0.323
70.00	568.1	310.5	111.02	2.2714	0.323
70.25	568.1	310.5	111.02	2.2669	0.323
70.50	568.2	310.6	111.02	2.2624	0.323
70.75	568.2	310.6	111.02	2.2580	0.323
71.00	568.4	310.8	111.03	2.2535	0.323
71.25	568.4	310.7	111.03	2.2491	0.323
71.50	568.5	310.9	111.03	2.2448	0.323
71.75	568.5	310.9	111.04	2.2404	0.323
72.00	568.6	311.0	111.03	2.2361	0.323
72.25	568.6	311.0	111.04	2.2318	0.323
72.50	568.8	311.1	111.04	2.2276	0.323
72.75	568.8	311.2	111.04	2.2234	0.324
73.00	568.8	311.2	111.04	2.2192	0.324
73.25	568.9	311.3	111.05	2.2150	0.324
73.50	568.9	311.3	111.04	2.2109	0.324
73.75	569.0	311.4	111.05	2.2068	0.324
74.00	569.3	311.6	111.05	2.2027	0.324
74.25	569.2	311.6	111.06	2.1987	0.324
74.50	569.3	311.7	111.05	2.1946	0.324
74.75	569.4	311.7	111.06	2.1906	0.324
75.00	569.4	311.8	111.07	2.1867	0.324
75.25	569.5	311.8	111.06	2.1827	0.324
75.50	569.5	311.9	111.07	2.1788	0.324
75.75	569.6	312.0	111.07	2.1749	0.324
76.00	569.6	312.0	111.07	2.1711	0.324
76.25	569.7	312.1	111.08	2.1672	0.325
76.50	569.7	312.1	111.08	2.1634	0.325
76.75	569.8	312.2	111.08	2.1596	0.325
77.00	569.8	312.2	111.08	2.1558	0.325
77.25	569.9	312.3	111.08	2.1521	0.325
77.50	570.0	312.4	111.09	2.1484	0.325
77.75	570.1	312.5	111.09	2.1447	0.325
78.00	570.1	312.5	111.09	2.1410	0.325

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97 TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
78.25	570.2	312.6	111.10	2.1374	0.325
78.50	570.2	312.6	111.09	2.1338	0.325
78.75	570.3	312.7	111.10	2.1302	0.325
79.00	570.4	312.8	111.10	2.1266	0.325
79.25	570.4	312.8	111.10	2.1230	0.325
79.50	570.4	312.8	111.10	2.1195	0.325
79.75	570.5	312.9	111.10	2.1160	0.325
80.00	570.7	313.1	111.11	2.1125	0.326
80.25	570.7	313.1	111.11	2.1090	0.326
80.50	570.7	313.1	111.12	2.1056	0.326
80.75	570.8	313.1	111.11	2.1022	0.326
81.00	570.9	313.2	111.11	2.0988	0.326
81.25	570.9	313.3	111.12	2.0954	0.326
81.50	571.0	313.3	111.12	2.0920	0.326
81.75	571.0	313.4	111.12	2.0887	0.326
82.00	571.1	313.5	111.13	2.0854	0.326
82.25	571.2	313.6	111.12	2.0821	0.326
82.50	571.3	313.7	111.13	2.0788	0.326
82.75	571.3	313.7	111.12	2.0755	0.326
83.00	571.3	313.7	111.13	2.0723	0.326
83.25	571.3	313.7	111.14	2.0691	0.326
83.50	571.4	313.8	111.14	2.0659	0.326
83.75	571.5	313.8	111.14	2.0627	0.327
84.00	571.5	313.9	111.14	2.0595	0.327
84.25	571.5	313.9	111.14	2.0564	0.327
84.50	571.6	314.0	111.15	2.0533	0.327
84.75	571.6	314.0	111.14	2.0501	0.327
85.00	571.7	314.1	111.15	2.0471	0.327
85.25	571.8	314.1	111.15	2.0440	0.327
85.50	571.8	314.2	111.15	2.0409	0.327
85.75	571.9	314.2	111.15	2.0379	0.327
86.00	571.9	314.3	111.15	2.0349	0.327
86.25	571.9	314.3	111.16	2.0319	0.327
86.50	572.0	314.4	111.16	2.0289	0.327
86.75	572.0	314.4	111.16	2.0259	0.327
87.00	572.1	314.5	111.16	2.0230	0.327
87.25	572.2	314.5	111.16	2.0201	0.327
87.50	572.2	314.6	111.16	2.0171	0.327
87.75	572.3	314.6	111.17	2.0142	0.327
88.00	572.3	314.7	111.17	2.0114	0.328
88.25	572.3	314.7	111.17	2.0085	0.328
88.50	572.4	314.8	111.18	2.0056	0.328
88.75	572.4	314.8	111.18	2.0028	0.328
89.00	572.5	314.8	111.18	2.0000	0.328
89.25	572.5	314.9	111.18	1.9972	0.328
89.50	572.6	315.0	111.19	1.9944	0.328
89.75	572.6	315.0	111.19	1.9916	0.328
90.00	572.7	315.1	111.19	1.9889	0.328
90.25	572.8	315.2	111.20	1.9861	0.328
90.50	572.9	315.2	111.19	1.9834	0.328
90.75	572.9	315.3	111.21	1.9807	0.328

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
91.00	572.9	315.3	111.20	1.9780	0.328
91.25	573.0	315.3	111.21	1.9753	0.328
91.50	573.0	315.4	111.20	1.9727	0.328
91.75	573.0	315.4	111.20	1.9700	0.328
92.00	573.1	315.5	111.19	1.9674	0.328
92.25	573.1	315.5	111.19	1.9648	0.328
92.50	573.2	315.6	111.20	1.9622	0.329
92.75	573.2	315.6	111.19	1.9596	0.329
93.00	573.3	315.7	111.21	1.9570	0.329
93.25	573.3	315.7	111.20	1.9544	0.329
93.50	573.4	315.8	111.21	1.9519	0.329
93.75	573.4	315.8	111.21	1.9493	0.329
94.00	573.5	315.9	111.22	1.9468	0.329
94.25	573.5	315.9	111.22	1.9443	0.329
94.50	573.6	316.0	111.23	1.9418	0.329
94.75	573.7	316.1	111.22	1.9393	0.329
95.00	573.7	316.1	111.23	1.9368	0.329
95.25	573.7	316.1	111.22	1.9344	0.329
95.50	573.8	316.1	111.23	1.9319	0.329
95.75	573.8	316.2	111.23	1.9295	0.329
96.00	573.8	316.2	111.23	1.9271	0.329
96.25	573.9	316.3	111.23	1.9247	0.329
96.50	573.9	316.3	111.24	1.9223	0.329
96.75	573.9	316.3	111.24	1.9199	0.329
97.00	574.0	316.4	111.24	1.9175	0.329
97.25	574.1	316.5	111.25	1.9152	0.330
97.50	574.1	316.5	111.25	1.9128	0.330
97.75	574.2	316.6	111.25	1.9105	0.330
98.00	574.3	316.7	111.25	1.9082	0.330
98.25	574.3	316.7	111.25	1.9059	0.330
98.50	574.4	316.8	111.26	1.9036	0.330
98.75	574.4	316.8	111.25	1.9013	0.330
99.00	574.4	316.8	111.26	1.8990	0.330
99.25	574.5	316.9	111.26	1.8967	0.330
99.50	574.5	316.9	111.26	1.8945	0.330
99.75	574.5	316.9	111.27	1.8922	0.330
100.00	574.5	316.9	111.26	1.8900	0.330
100.25	574.6	317.0	111.27	1.8878	0.330
100.50	574.6	317.0	111.28	1.8856	0.330
100.75	574.7	317.1	111.27	1.8834	0.330
101.00	574.8	317.2	111.27	1.8812	0.330
101.25	574.9	317.3	111.28	1.8790	0.330
101.50	574.8	317.2	111.28	1.8768	0.330
101.75	574.9	317.3	111.28	1.8747	0.331
102.00	575.0	317.4	111.28	1.8725	0.331
102.25	574.9	317.3	111.28	1.8704	0.331
102.50	574.9	317.3	111.28	1.8683	0.331
102.75	575.1	317.5	111.29	1.8662	0.331
103.00	575.1	317.5	111.29	1.8641	0.331
103.25	575.1	317.5	111.28	1.8620	0.331
103.50	575.1	317.5	111.28	1.8599	0.331

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1
 DATE: 07/14/97

TIME: 09:20:54

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
103.75	575.2	317.6	111.29	1.8578	0.331
104.00	575.3	317.7	111.29	1.8558	0.331
104.25	575.3	317.7	111.30	1.8537	0.331
104.50	575.4	317.8	111.30	1.8517	0.331
104.75	575.4	317.8	111.30	1.8496	0.331
105.00	575.4	317.8	111.30	1.8476	0.331
105.25	575.5	317.9	111.30	1.8456	0.331
105.50	575.5	317.9	111.30	1.8436	0.331
105.75	575.5	317.9	111.30	1.8416	0.331
106.00	575.5	317.9	111.31	1.8396	0.331
106.50	575.7	318.1	111.31	1.8357	0.331
106.75	575.7	318.1	111.31	1.8337	0.331
107.00	575.8	318.2	111.32	1.8318	0.332
107.25	575.8	318.2	111.32	1.8298	0.332
107.50	575.8	318.2	111.32	1.8279	0.332
107.75	575.9	318.3	111.31	1.8260	0.332
108.00	576.0	318.4	111.32	1.8241	0.332
108.25	575.9	318.3	111.32	1.8222	0.332
108.50	576.0	318.4	111.32	1.8203	0.332
108.75	576.0	318.4	111.33	1.8184	0.332
109.00	576.0	318.4	111.33	1.8165	0.332
109.25	576.0	318.4	111.33	1.8146	0.332
109.50	576.1	318.5	111.33	1.8128	0.332
109.75	576.1	318.5	111.34	1.8109	0.332
110.00	576.2	318.6	111.34	1.8091	0.332
110.25	576.2	318.6	111.34	1.8073	0.332
110.50	576.2	318.6	111.34	1.8054	0.332
110.75	576.2	318.6	111.34	1.8036	0.332
111.00	576.4	318.8	111.34	1.8018	0.332
111.25	576.4	318.8	111.34	1.8000	0.332
111.50	576.4	318.8	111.35	1.7982	0.332
111.75	576.4	318.8	111.35	1.7964	0.332
112.00	576.5	318.9	111.36	1.7946	0.332
112.25	576.6	319.0	111.35	1.7929	0.332
112.50	576.6	319.0	111.35	1.7911	0.332
112.75	576.6	319.0	111.36	1.7894	0.332
113.00	576.6	319.0	111.36	1.7876	0.332
113.25	576.6	319.0	111.36	1.7859	0.333
113.50	576.7	319.1	111.37	1.7841	0.333
113.75	576.8	319.2	111.36	1.7824	0.333
114.00	576.8	319.2	111.37	1.7807	0.333
114.25	576.8	319.2	111.37	1.7790	0.333
114.50	576.9	319.3	111.37	1.7773	0.333
114.75	576.8	319.2	111.37	1.7756	0.333
115.00	576.9	319.3	111.38	1.7739	0.333
115.25	576.9	319.3	111.38	1.7722	0.333
115.50	577.0	319.4	111.38	1.7706	0.333
115.75	577.0	319.4	111.38	1.7689	0.333
116.00	577.0	319.4	111.38	1.7672	0.333
116.25	577.0	319.4	111.39	1.7656	0.333
116.50	577.1	319.5	111.38	1.7639	0.333

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10191 Murfin Drlg Co. Rusco C-1 DST #1

DATE: 07/14/97

TIME: 09:20:54

	Time	Pressure PSIg	delta P PSIg	P	Temp. DEG F	(T+dT)/dT	P^2/10^6
	116.75	577.1	319.5		111.38	1.7623	0.333
	117.00	577.3	319.7		111.38	1.7607	0.333
	117.25	577.3	319.7		111.39	1.7591	0.333
	117.50	577.3	319.7		111.39	1.7574	0.333
	117.75	577.4	319.8		111.39	1.7558	0.333
	118.00	577.4	319.8		111.39	1.7542	0.333
	118.25	577.4	319.8		111.40	1.7526	0.333
	118.50	577.5	319.9		111.40	1.7511	0.333
	118.75	577.5	319.9		111.40	1.7495	0.333
	119.00	577.5	319.9		111.40	1.7479	0.334
	119.25	577.5	319.9		111.40	1.7463	0.334
	119.50	577.5	319.9		111.40	1.7448	0.334
***** End Shut-in 2	119.75	577.6	320.0		111.41	1.7432	0.334
***** Final Hydro.	385.25	1623.4	0.0		111.44		

TEST HISTORY

10191 Murfin Drlg Co. Rusco C-1 DST #1

Flag Points

	t (Min.)	P (PSig)
A:	0.00	1653.05
B:	0.00	40.18
C:	30.25	145.42
D:	61.25	579.09
E:	0.00	155.90
F:	58.75	257.61
G:	119.75	577.57
Q:	0.00	1623.37

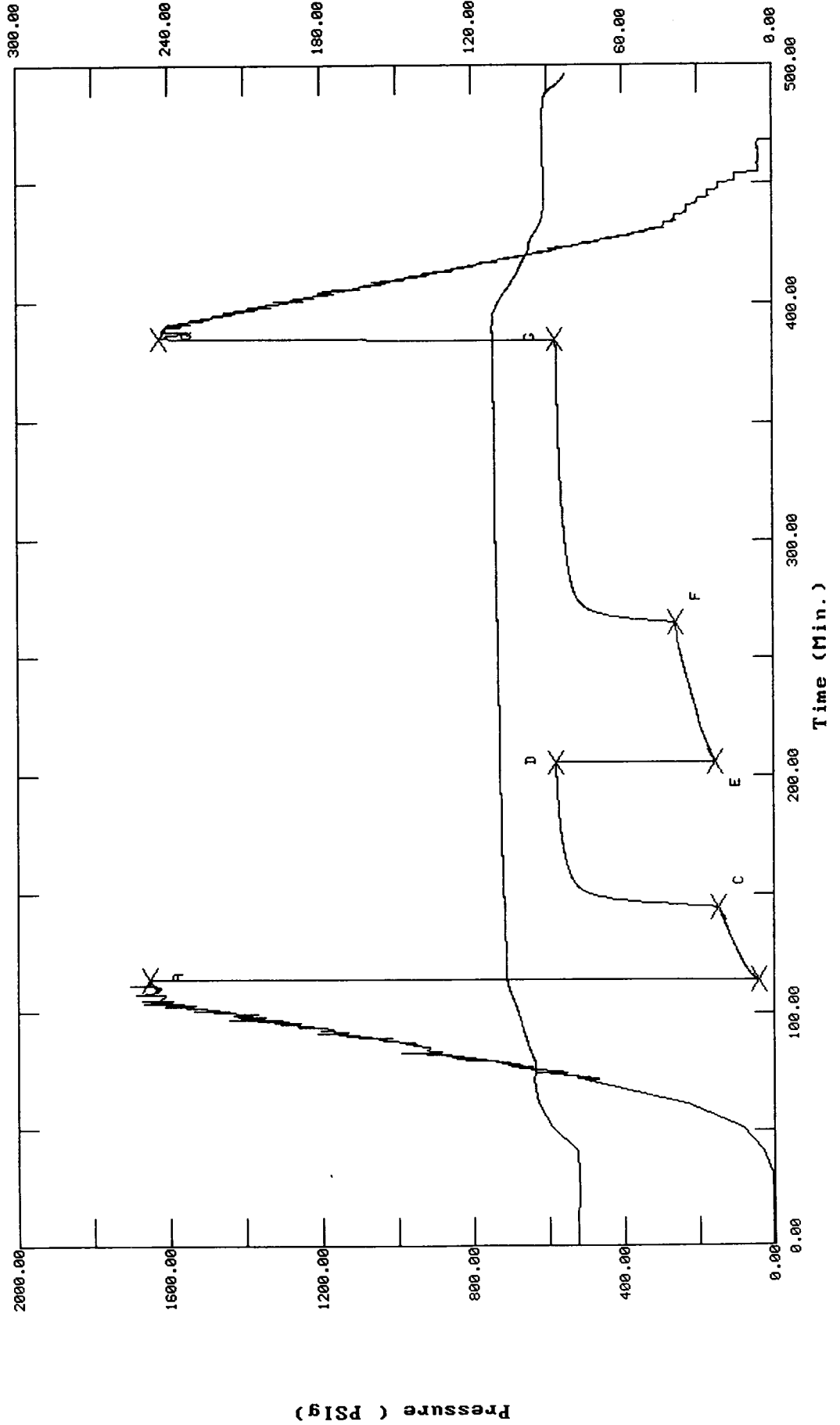
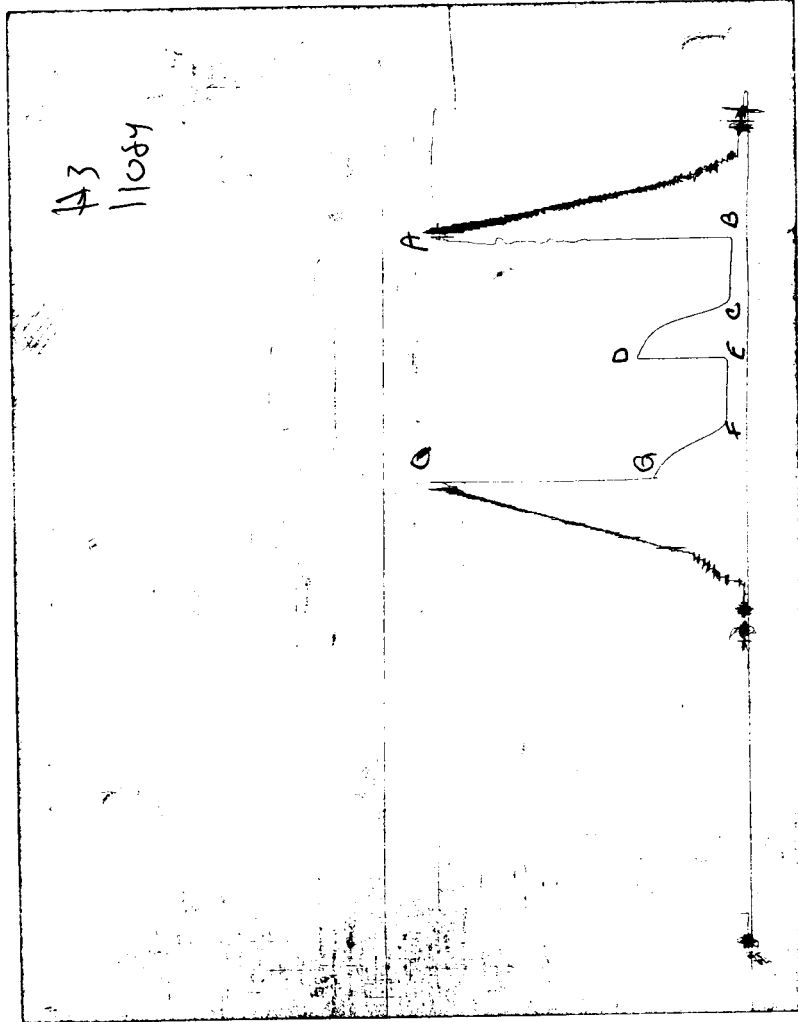


CHART PAGE



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

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co. Inc
 WELL NAME: Rusco C-1
 LOCATION : Sec36 T11s R20w Ellis KS
 INTERVAL : 3578.00 To 3612.00 ft

DATE 07/16/97
 KB 2032.00 ft
 GR 2027.00 ft
 TD 3612.00 ft

TICKET NO: 10194
 FORMATION: Arbuckle
 TEST TYPE: CONV

DST #4

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11084	11084	2346			PF Fr. 1455 to 1525 hr
SI 60	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0	IS Fr. 1525 to 1625 hr
SF 60	Clock(hrs)	12hr.	12hr.	Elec			SF Fr. 1625 to 1725 hr
FS 90	Depth(ft)	3607.0	3607.0	3584.0	0.0	0.0	FS Fr. 1725 to 1855 hr

	Field	1	2	3	4	
A. Init Hydro	0.0	1841.0	1775.0	0.0	0.0	T STARTED 1340 hr
B. First Flow	0.0	477.0	523.0	0.0	0.0	T ON BOTM 1453 hr
Bl. Final Flow	0.0	1072.0	1082.0	0.0	0.0	T OPEN 1455 hr
C. In Shut-in	0.0	1127.0	1136.0	0.0	0.0	T PULLED 1855 hr
D. Init Flow	0.0	1103.0	1091.0	0.0	0.0	T OUT 2125 hr
E. Final Flow	0.0	1127.0	1138.0	0.0	0.0	
F. Fl Shut-in	0.0	1128.0	1141.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	0.0	1832.0	1745.0	0.0	0.0	Tool Wt. 2900.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 130000.00 lbs
						Initial Str Wt 74000.00 lbs
						Unseated Str Wt 89000.00 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 534.00 ft
						D.P. Length 3042.00 ft

RECOVERY

Tot Fluid 2620.00 ft of 534.00 ft in DC and 1086.00 ft in DP
 20.00 ft of Clean Oil
 0.00 ft of
 720.00 ft of Oil & Mud Cut Water
 0.00 ft of 10%mud 15%oil 75%water
 1880.00 ft of Slight Oil Cut Water
 0.00 ft of 10%oil 90%water
 0.00 ft of
 0.00 ft of Rw .28@83
 SALINITY 23000.00 P.P.M. A.P.I. Gravity 28.00

BLOW DESCRIPTION

Initial Flow-
 strong blow--bottom of bucket in
 30 seconds

Initial Shutin-
 surface blow---died in 1 minutes

Final Flow-
 strong blow---bottom of bucket in
 45 seconds---then decreased &
 died in 20 minutes

Final Shutin-
 no blow

SAMPLES:
 SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 9.00 lb/c
 Vis. 45.00 S/L
 W.L. 8.40 in3
 F.C. 0.00 in
 Mud Drop

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
 Tool Chased
 Tester Paul Simpson
 Co. Rep. Roger Welty
 Contr. Murfin
 Rig # 3
 Unit #
 Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Rusco C-1
 LOCATION : Sec36 T11s R20w Ellis KS
 TICKET No. 10194 D.S.T. No. 4 DATE 07/16/97
 TOTAL TOOL TO BOTTOM OF TOP PACKERS 27
 INTERVAL TOOL
 BOTTOM PACKERS AND ANCHOR 34 perf
 TOTAL TOOL 61
 DRILL COLLAR ANCHOR IN INTERVAL
 D.C. ANCHOR STND.Stands Single Total
 D.P. ANCHOR STND.Stands Single Total
 TOTAL ASSEMBLY 61
 D.C. ABOVE TOOLS.Stands9 Single Total 534
 D.P. ABOVE TOOLS.Stands49 Single Total 3042
 TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3637
 TOTAL DEPTH 3612
 TOTAL DRILL PIPE ABOVE K.B. 15
 REMARKS:

P.O. SUB		
C.O. SUB Top of tool @		3558
S.I. TOOL H & T		3564
HMV Sterling		3569
JARS Sterling		n/a
SAFETY JOINT Bowen		n/a
PACKER Top		3573
PACKER Bottom		3578
DEPTH	3578	
STUBB 1'		3579
ANCHOR		
5' perf		3584
Alpine rec. @	3584	
5' perf		3589
T.C.		
DEPTH		
5'perf		3594
5'perf		3599
5'perf		3604
5' perf		3609
Ak-1 rec @	3607	
BULLNOSE 3' bullplug		
T.D.	to	3612

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	101.00	1774.9	0.0	106.28		
***** Start Flow 1	0.00	523.1	0.0	106.38		
	0.25	526.5	3.4	106.45		
	0.50	546.4	23.3	106.55		
	0.75	575.7	52.6	106.70		
	1.00	601.6	78.5	106.90		
	1.25	605.5	82.4	107.15		
	1.50	629.1	106.0	107.44		
	1.75	629.6	106.5	107.78		
	2.00	635.7	112.6	108.15		
	2.25	625.2	102.1	108.56		
	2.50	628.3	105.2	108.97		
	2.75	642.1	119.0	109.39		
	3.00	639.9	116.8	109.82		
	3.25	640.9	117.8	110.26		
	3.50	650.8	127.7	110.69		
	3.75	661.2	138.1	111.13		
	4.00	664.1	141.0	111.55		
	4.25	671.7	148.6	111.95		
	4.50	682.7	159.6	112.35		
	4.75	686.2	163.1	112.73		
	5.00	691.2	168.1	113.10		
	5.25	698.2	175.1	113.46		
	5.50	704.3	181.2	113.80		
	5.75	693.5	170.4	114.13		
	6.00	700.3	177.2	114.43		
	6.25	713.9	190.8	114.74		
	6.50	723.4	200.3	115.02		
	6.75	723.9	200.8	115.29		
	7.00	739.5	216.4	115.53		
	7.25	742.8	219.7	115.78		
	7.50	747.9	224.8	116.03		
	7.75	754.6	231.4	116.24		
	8.00	760.2	237.1	116.45		
	8.25	756.0	232.9	116.64		
	8.50	751.1	228.0	116.83		
	8.75	762.5	239.4	117.00		
	9.00	791.3	268.1	117.17		
	9.25	796.0	272.9	117.32		
	9.50	801.1	277.9	117.48		
	9.75	806.6	283.4	117.61		
	10.00	811.3	288.2	117.75		
	10.25	817.5	294.4	117.87		
	10.50	821.5	298.4	118.03		
	10.75	799.1	276.0	118.10		
	11.00	802.2	279.1	118.21		
	11.25	809.6	286.5	118.31		
	11.50	820.1	296.9	118.41		
	11.75	825.6	302.5	118.43		
	12.00	830.0	306.9	118.55		
	12.25	833.2	310.1	118.63		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
12.50	836.3	313.1	118.71		
12.75	840.8	317.7	118.78		
13.00	846.6	323.5	118.84		
13.25	850.7	327.6	118.90		
13.50	856.8	333.7	118.96		
13.75	873.3	350.2	119.02		
14.00	877.9	354.7	119.07		
14.25	881.6	358.5	119.13		
14.50	899.9	376.8	119.16		
14.75	890.1	367.0	119.21		
15.00	894.3	371.2	119.25		
15.25	899.3	376.2	119.28		
15.50	903.6	380.5	119.32		
15.75	908.8	385.7	119.34		
16.00	912.7	389.6	119.37		
16.25	917.0	393.8	119.40		
16.50	920.7	397.6	119.42		
16.75	924.7	401.6	119.45		
17.00	928.4	405.3	119.47		
17.25	932.9	409.7	119.50		
17.50	938.3	415.2	119.52		
17.75	940.2	417.1	119.53		
18.00	945.3	422.2	119.55		
18.25	948.8	425.7	119.56		
18.50	952.4	429.2	119.57		
18.75	955.7	432.5	119.58		
19.00	959.5	436.4	119.59		
19.25	963.6	440.5	119.60		
19.50	966.9	443.8	119.62		
19.75	970.8	447.7	119.62		
20.00	974.3	451.2	119.63		
20.25	978.5	455.4	119.64		
20.50	981.0	457.9	119.64		
20.75	984.8	461.7	119.65		
21.00	987.5	464.4	119.65		
21.25	991.0	467.9	119.66		
21.50	994.2	471.1	119.67		
21.75	997.5	474.4	119.67		
22.00	1000.8	477.6	119.67		
22.25	1004.0	480.9	119.67		
22.50	1007.1	484.0	119.67		
22.75	1010.3	487.2	119.68		
23.00	1014.9	491.7	119.67		
23.25	1016.4	493.3	119.68		
23.50	1019.2	496.0	119.67		
23.75	1021.9	498.8	119.67		
24.00	1025.0	501.8	119.67		
24.25	1028.2	505.1	119.67		
24.50	1030.9	507.8	119.71		
24.75	1033.7	510.6	119.67		
25.00	1036.4	513.3	119.67		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14 .

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	25.25	1039.1	516.0	119.66		
	25.50	1041.5	518.3	119.67		
	25.75	1044.0	520.8	119.66		
	26.00	1046.4	523.3	119.66		
	26.25	1047.9	524.8	119.66		
	26.50	1050.2	527.0	119.66		
	26.75	1052.3	529.2	119.65		
	27.00	1054.6	531.5	119.66		
	27.25	1056.8	533.6	119.65		
	27.50	1058.9	535.8	119.64		
	27.75	1061.0	537.9	119.64		
	28.00	1063.0	539.9	119.63		
	28.25	1065.3	542.1	119.64		
	28.50	1067.0	543.9	119.63		
	28.75	1068.9	545.8	119.63		
	29.00	1070.5	547.4	119.62		
	29.25	1072.3	549.2	119.62		
	29.50	1074.0	550.9	119.62		
	29.75	1075.7	552.6	119.61		
	30.00	1077.4	554.3	119.60		
	30.25	1079.1	556.0	119.60		
	30.50	1080.7	557.6	119.59		
***** End Flow 1	30.75	1082.5	559.3	119.60		
***** Start Shutin 1	0.00	1082.5	0.0	119.60	0.0000	1.172
	0.25	1083.1	0.6	119.58	124.0000	1.173
	0.50	1083.3	0.8	119.59	62.5000	1.174
	0.75	1116.9	34.4	119.58	42.0000	1.247
	1.00	1118.2	35.8	119.58	31.7500	1.250
	1.25	1118.9	36.5	119.58	25.6000	1.252
	1.50	1119.6	37.1	119.57	21.5000	1.253
	1.75	1120.0	37.6	119.57	18.5714	1.254
	2.00	1120.4	38.0	119.56	16.3750	1.255
	2.25	1120.8	38.4	119.56	14.6667	1.256
	2.50	1121.2	38.7	119.56	13.3000	1.257
	2.75	1121.5	39.1	119.54	12.1818	1.258
	3.00	1121.8	39.3	119.54	11.2500	1.258
	3.25	1122.1	39.6	119.52	10.4615	1.259
	3.50	1122.3	39.9	119.53	9.7857	1.260
	3.75	1122.6	40.1	119.52	9.2000	1.260
	4.00	1122.8	40.3	119.52	8.6875	1.261
	4.25	1122.9	40.5	119.49	8.2353	1.261
	4.50	1123.1	40.7	119.49	7.8333	1.261
	4.75	1123.3	40.8	119.48	7.4737	1.262
	5.00	1123.5	41.0	119.47	7.1500	1.262
	5.25	1123.7	41.2	119.47	6.8571	1.263
	5.50	1123.9	41.4	119.46	6.5909	1.263
	5.75	1124.0	41.6	119.45	6.3478	1.263
	6.00	1124.1	41.7	119.44	6.1250	1.264
	6.25	1124.3	41.9	119.43	5.9200	1.264
	6.50	1124.5	42.0	119.42	5.7308	1.264
	6.75	1124.6	42.1	119.42	5.5556	1.265

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
7.00	1124.7	42.3	119.41	5.3929	1.265
7.25	1124.9	42.5	119.39	5.2414	1.265
7.50	1125.1	42.6	119.38	5.1000	1.266
7.75	1125.3	42.8	119.38	4.9677	1.266
8.00	1125.4	43.0	119.37	4.8438	1.267
8.25	1125.5	43.0	119.36	4.7273	1.267
8.50	1125.7	43.2	119.35	4.6176	1.267
8.75	1125.9	43.4	119.34	4.5143	1.268
9.00	1125.9	43.4	119.33	4.4167	1.268
9.25	1126.0	43.5	119.32	4.3243	1.268
9.50	1126.1	43.6	119.31	4.2368	1.268
9.75	1126.2	43.8	119.31	4.1538	1.268
10.00	1126.3	43.8	119.30	4.0750	1.269
10.25	1126.4	43.9	119.29	4.0000	1.269
10.50	1126.6	44.1	119.28	3.9286	1.269
10.75	1126.7	44.2	119.27	3.8605	1.269
11.00	1126.8	44.3	119.26	3.7955	1.270
11.25	1126.9	44.4	119.26	3.7333	1.270
11.50	1127.0	44.5	119.25	3.6739	1.270
11.75	1127.1	44.6	119.24	3.6170	1.270
12.00	1127.2	44.8	119.23	3.5625	1.271
12.25	1127.3	44.8	119.22	3.5102	1.271
12.50	1127.4	44.9	119.22	3.4600	1.271
12.75	1127.5	45.0	119.21	3.4118	1.271
13.00	1127.6	45.2	119.20	3.3654	1.272
13.25	1127.7	45.2	119.19	3.3208	1.272
13.50	1127.8	45.3	119.19	3.2778	1.272
13.75	1127.9	45.4	119.18	3.2364	1.272
14.00	1128.0	45.6	119.17	3.1964	1.272
14.25	1128.1	45.6	119.16	3.1579	1.273
14.50	1128.2	45.8	119.16	3.1207	1.273
14.75	1128.2	45.8	119.15	3.0847	1.273
15.00	1128.4	45.9	119.15	3.0500	1.273
15.25	1128.5	46.0	119.14	3.0164	1.273
15.50	1128.6	46.1	119.13	2.9839	1.274
15.75	1128.6	46.1	119.12	2.9524	1.274
16.00	1128.7	46.2	119.11	2.9219	1.274
16.25	1128.7	46.3	119.11	2.8923	1.274
16.50	1128.8	46.4	119.09	2.8636	1.274
16.75	1128.9	46.4	119.09	2.8358	1.274
17.00	1129.0	46.6	119.09	2.8088	1.275
17.25	1129.1	46.6	119.08	2.7826	1.275
17.50	1129.2	46.7	119.07	2.7571	1.275
17.75	1129.3	46.8	119.06	2.7324	1.275
18.00	1129.4	46.9	119.05	2.7083	1.275
18.25	1129.4	46.9	119.04	2.6849	1.275
18.50	1129.5	47.0	119.04	2.6622	1.276
18.75	1129.6	47.1	119.02	2.6400	1.276
19.00	1129.7	47.2	119.03	2.6184	1.276
19.25	1129.7	47.3	119.01	2.5974	1.276
19.50	1129.7	47.3	119.00	2.5769	1.276

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4
 DATE: 07/16/97 TIME: 13:19:14

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
19.75	1129.8	47.4	118.99	2.5570	1.277
20.00	1129.9	47.4	118.99	2.5375	1.277
20.25	1130.0	47.6	118.98	2.5185	1.277
20.50	1130.1	47.6	118.97	2.5000	1.277
20.75	1130.1	47.7	118.96	2.4819	1.277
21.00	1130.2	47.7	118.96	2.4643	1.277
21.25	1130.3	47.8	118.95	2.4471	1.278
21.50	1130.3	47.8	118.95	2.4302	1.278
21.75	1130.4	47.9	118.93	2.4138	1.278
22.00	1130.5	48.0	118.93	2.3977	1.278
22.25	1130.5	48.1	118.91	2.3820	1.278
22.50	1130.6	48.2	118.90	2.3667	1.278
22.75	1130.6	48.2	118.90	2.3516	1.278
23.00	1130.7	48.2	118.90	2.3370	1.278
23.25	1130.8	48.4	118.88	2.3226	1.279
23.50	1130.9	48.4	118.88	2.3085	1.279
23.75	1130.9	48.4	118.87	2.2947	1.279
24.00	1131.0	48.5	118.87	2.2812	1.279
24.25	1131.1	48.6	118.86	2.2680	1.279
24.50	1131.1	48.6	118.85	2.2551	1.279
24.75	1131.1	48.7	118.84	2.2424	1.279
25.00	1131.2	48.8	118.83	2.2300	1.280
25.25	1131.3	48.8	118.83	2.2178	1.280
25.50	1131.3	48.9	118.82	2.2059	1.280
25.75	1131.3	48.9	118.81	2.1942	1.280
26.00	1131.4	48.9	118.81	2.1827	1.280
26.25	1131.4	49.0	118.80	2.1714	1.280
26.50	1131.5	49.0	118.79	2.1604	1.280
26.75	1131.5	49.0	118.78	2.1495	1.280
27.00	1131.6	49.1	118.78	2.1389	1.280
27.25	1131.6	49.2	118.77	2.1284	1.281
27.50	1131.7	49.2	118.76	2.1182	1.281
27.75	1131.8	49.3	118.75	2.1081	1.281
28.00	1131.8	49.3	118.75	2.0982	1.281
28.25	1131.9	49.4	118.75	2.0885	1.281
28.50	1131.9	49.4	118.73	2.0789	1.281
28.75	1131.9	49.4	118.73	2.0696	1.281
29.00	1132.0	49.5	118.72	2.0603	1.281
29.25	1132.0	49.6	118.71	2.0513	1.282
29.50	1132.1	49.6	118.71	2.0424	1.282
29.75	1132.1	49.7	118.71	2.0336	1.282
30.00	1132.2	49.7	118.70	2.0250	1.282
30.25	1132.3	49.8	118.69	2.0165	1.282
30.50	1132.2	49.8	118.68	2.0082	1.282
30.75	1132.3	49.8	118.68	2.0000	1.282
31.00	1132.4	50.0	118.67	1.9919	1.282
31.25	1132.4	50.0	118.66	1.9840	1.282
31.50	1132.5	50.0	118.65	1.9762	1.282
31.75	1132.5	50.0	118.65	1.9685	1.282
32.00	1132.6	50.1	118.65	1.9609	1.283
32.25	1132.6	50.1	118.64	1.9535	1.283

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
32.50	1132.7	50.2	118.63	1.9462	1.283
32.75	1132.7	50.2	118.63	1.9389	1.283
33.00	1132.7	50.2	118.63	1.9318	1.283
33.25	1132.8	50.3	118.61	1.9248	1.283
33.50	1132.9	50.4	118.62	1.9179	1.283
33.75	1132.9	50.4	118.61	1.9111	1.283
34.00	1132.9	50.4	118.61	1.9044	1.283
34.25	1132.9	50.4	118.59	1.8978	1.283
34.50	1133.0	50.5	118.59	1.8913	1.284
34.75	1133.1	50.6	118.59	1.8849	1.284
35.00	1133.0	50.6	118.57	1.8786	1.284
35.25	1133.2	50.7	118.57	1.8723	1.284
35.50	1133.2	50.7	118.57	1.8662	1.284
35.75	1133.2	50.7	118.57	1.8601	1.284
36.00	1133.3	50.8	118.55	1.8542	1.284
36.25	1133.3	50.8	118.55	1.8483	1.284
36.50	1133.3	50.9	118.55	1.8425	1.284
36.75	1133.4	50.9	118.54	1.8367	1.285
37.00	1133.4	50.9	118.54	1.8311	1.285
37.25	1133.4	50.9	118.52	1.8255	1.285
37.50	1133.5	51.0	118.51	1.8200	1.285
37.75	1133.5	51.1	118.51	1.8146	1.285
38.00	1133.5	51.1	118.51	1.8092	1.285
38.25	1133.6	51.1	118.50	1.8039	1.285
38.50	1133.7	51.2	118.50	1.7987	1.285
38.75	1133.7	51.2	118.50	1.7935	1.285
39.00	1133.7	51.3	118.47	1.7885	1.285
39.25	1133.8	51.3	118.47	1.7834	1.285
39.50	1133.8	51.3	118.48	1.7785	1.285
39.75	1133.8	51.4	118.46	1.7736	1.286
40.00	1133.9	51.4	118.44	1.7688	1.286
40.25	1133.9	51.5	118.45	1.7640	1.286
40.50	1134.0	51.5	118.44	1.7593	1.286
40.75	1134.0	51.5	118.44	1.7546	1.286
41.00	1134.0	51.5	118.44	1.7500	1.286
41.25	1134.0	51.6	118.43	1.7455	1.286
41.50	1134.1	51.6	118.42	1.7410	1.286
41.75	1134.1	51.7	118.42	1.7365	1.286
42.00	1134.1	51.7	118.42	1.7321	1.286
42.25	1134.2	51.8	118.42	1.7278	1.286
42.50	1134.3	51.8	118.42	1.7235	1.287
42.75	1134.4	51.9	118.42	1.7193	1.287
43.00	1134.4	51.9	118.42	1.7151	1.287
43.25	1134.4	51.9	118.42	1.7110	1.287
43.50	1134.4	51.9	118.42	1.7069	1.287
43.75	1134.5	52.0	118.42	1.7029	1.287
44.00	1134.4	52.0	118.41	1.6989	1.287
44.25	1134.5	52.1	118.41	1.6949	1.287
44.50	1134.5	52.1	118.41	1.6910	1.287
44.75	1134.6	52.1	118.41	1.6872	1.287
45.00	1134.6	52.1	118.40	1.6833	1.287

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
45.25	1134.7	52.2	118.40	1.6796	1.287
45.50	1134.7	52.2	118.41	1.6758	1.288
45.75	1134.7	52.3	118.39	1.6721	1.288
46.00	1134.8	52.3	118.39	1.6685	1.288
46.25	1134.8	52.3	118.38	1.6649	1.288
46.50	1134.8	52.3	118.36	1.6613	1.288
46.75	1135.0	52.5	118.36	1.6578	1.288
47.00	1134.9	52.5	118.35	1.6543	1.288
47.25	1134.9	52.5	118.34	1.6508	1.288
47.50	1134.9	52.5	118.34	1.6474	1.288
47.75	1135.0	52.5	118.33	1.6440	1.288
48.00	1135.0	52.6	118.32	1.6406	1.288
48.25	1135.0	52.6	118.31	1.6373	1.288
48.50	1135.1	52.7	118.31	1.6340	1.289
48.75	1135.0	52.6	118.31	1.6308	1.288
49.00	1135.1	52.6	118.30	1.6276	1.288
49.25	1135.1	52.7	118.29	1.6244	1.288
49.50	1135.1	52.7	118.28	1.6212	1.289
49.75	1135.2	52.8	118.27	1.6181	1.289
50.00	1135.2	52.7	118.27	1.6150	1.289
50.25	1135.3	52.8	118.26	1.6119	1.289
50.50	1135.3	52.8	118.26	1.6089	1.289
50.75	1135.3	52.8	118.25	1.6059	1.289
51.00	1135.3	52.9	118.25	1.6029	1.289
51.25	1135.4	52.9	118.24	1.6000	1.289
51.50	1135.4	53.0	118.24	1.5971	1.289
51.75	1135.4	53.0	118.23	1.5942	1.289
52.00	1135.5	53.1	118.22	1.5913	1.289
52.25	1135.4	53.0	118.22	1.5885	1.289
52.50	1135.5	53.1	118.21	1.5857	1.289
52.75	1135.5	53.1	118.19	1.5829	1.289
53.00	1135.6	53.2	118.19	1.5802	1.290
53.25	1135.6	53.2	118.19	1.5775	1.290
53.50	1135.6	53.2	118.18	1.5748	1.290
53.75	1135.6	53.2	118.18	1.5721	1.290
54.00	1135.7	53.2	118.17	1.5694	1.290
54.25	1135.8	53.3	118.17	1.5668	1.290
54.50	1135.8	53.3	118.16	1.5642	1.290
54.75	1135.7	53.3	118.16	1.5616	1.290
55.00	1135.8	53.4	118.16	1.5591	1.290
55.25	1135.8	53.3	118.15	1.5566	1.290
55.50	1135.9	53.4	118.15	1.5541	1.290
55.75	1135.8	53.4	118.13	1.5516	1.290
56.00	1135.9	53.5	118.14	1.5491	1.290
56.25	1135.9	53.5	118.13	1.5467	1.290
56.50	1135.9	53.5	118.12	1.5442	1.290
56.75	1136.0	53.5	118.11	1.5419	1.290
57.00	1135.9	53.5	118.11	1.5395	1.290
57.25	1136.0	53.6	118.11	1.5371	1.291
57.50	1136.1	53.6	118.11	1.5348	1.291
57.75	1136.1	53.7	118.10	1.5325	1.291

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	58.00	1136.1	53.6	118.10	1.5302	1.291
	58.25	1136.1	53.7	118.09	1.5279	1.291
	58.50	1136.1	53.7	118.09	1.5256	1.291
	58.75	1136.2	53.7	118.08	1.5234	1.291
	59.00	1136.2	53.7	118.08	1.5212	1.291
	59.25	1136.2	53.8	118.08	1.5190	1.291
	59.50	1136.3	53.9	118.08	1.5168	1.291
	59.75	1136.3	53.8	118.07	1.5146	1.291
	60.00	1136.3	53.8	118.06	1.5125	1.291
	60.25	1136.2	53.8	118.05	1.5104	1.291
	60.50	1136.4	53.9	118.05	1.5083	1.291
	60.75	1136.3	53.9	118.05	1.5062	1.291
***** End Shut-in 1	61.00	1136.2	53.7	118.05	1.5041	1.291
***** Start Flow 2	0.00	1091.8	0.0	118.04		
	0.25	1093.6	1.8	118.03		
	0.50	1095.2	3.3	118.03		
	0.75	1096.9	5.1	118.03		
	1.00	1098.6	6.8	118.03		
	1.25	1100.4	8.5	118.02		
	1.50	1101.9	10.1	118.04		
	1.75	1103.4	11.6	118.05		
	2.00	1105.1	13.2	118.07		
	2.25	1106.5	14.7	118.09		
	2.50	1107.9	16.0	118.11		
	2.75	1109.3	17.4	118.14		
	3.00	1110.7	18.9	118.16		
	3.25	1112.0	20.2	118.20		
	3.50	1113.3	21.4	118.22		
	3.75	1114.5	22.7	118.26		
	4.00	1115.7	23.8	118.29		
	4.25	1116.7	24.9	118.34		
	4.50	1117.7	25.9	118.41		
	4.75	1118.7	26.8	118.21		
	5.00	1119.7	27.9	118.41		
	5.25	1120.6	28.7	118.42		
	5.50	1121.5	29.6	118.42		
	5.75	1122.3	30.5	118.48		
	6.00	1123.1	31.3	118.52		
	6.25	1123.9	32.0	118.55		
	6.50	1124.7	32.8	118.57		
	6.75	1125.4	33.6	118.60		
	7.00	1126.0	34.2	118.63		
	7.25	1126.7	34.8	118.66		
	7.50	1127.2	35.3	118.68		
	7.75	1127.7	35.9	118.69		
	8.00	1128.2	36.3	118.71		
	8.25	1128.7	36.8	118.74		
	8.50	1129.2	37.3	118.75		
	8.75	1129.6	37.7	118.77		
	9.00	1130.0	38.2	118.79		
	9.25	1130.4	38.5	118.81		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
9.50	1130.7	38.8	118.82		
9.75	1131.1	39.2	118.83		
10.00	1131.3	39.5	118.85		
10.25	1131.7	39.8	118.86		
10.50	1131.9	40.1	118.87		
10.75	1132.2	40.4	118.89		
11.00	1132.5	40.6	118.90		
11.25	1132.8	40.9	118.92		
11.50	1132.9	41.1	118.92		
11.75	1133.2	41.4	118.93		
12.00	1133.5	41.6	118.94		
12.25	1133.7	41.8	118.95		
12.50	1133.8	42.0	118.96		
12.75	1133.9	42.1	118.97		
13.00	1134.0	42.2	118.98		
13.25	1134.1	42.3	118.99		
13.50	1134.3	42.5	118.99		
13.75	1134.4	42.6	119.00		
14.00	1134.5	42.6	119.00		
14.25	1134.6	42.7	119.02		
14.50	1134.8	42.9	119.03		
14.75	1134.8	43.0	119.04		
15.00	1135.2	43.3	119.03		
15.25	1135.3	43.5	119.03		
15.50	1135.3	43.5	119.03		
15.75	1135.5	43.6	119.05		
16.00	1135.6	43.7	119.05		
16.25	1135.6	43.7	119.06		
16.50	1135.5	43.7	119.06		
16.75	1135.6	43.8	119.07		
17.00	1135.7	43.8	119.07		
17.25	1135.7	43.9	119.07		
17.50	1135.7	43.8	119.07		
17.75	1135.8	43.9	119.07		
18.00	1135.8	43.9	119.07		
18.25	1135.8	44.0	119.07		
18.50	1135.9	44.0	119.07		
18.75	1135.9	44.1	119.06		
19.00	1136.0	44.1	119.06		
19.25	1135.9	44.1	119.07		
19.50	1136.1	44.2	119.06		
19.75	1136.1	44.2	119.05		
20.00	1136.1	44.2	119.05		
20.25	1136.2	44.3	119.05		
20.50	1136.2	44.3	119.03		
20.75	1136.2	44.3	119.04		
21.00	1136.2	44.4	119.04		
21.25	1136.2	44.4	119.04		
21.50	1136.3	44.4	119.03		
21.75	1136.3	44.4	119.02		
22.00	1136.3	44.5	119.03		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
22.25	1136.4	44.5	119.02		
22.50	1136.4	44.5	119.01		
22.75	1136.4	44.6	118.99		
23.00	1136.4	44.5	119.00		
23.25	1136.4	44.6	119.00		
23.50	1136.5	44.6	118.99		
23.75	1136.5	44.7	118.98		
24.00	1136.5	44.7	118.98		
24.25	1136.6	44.8	118.96		
24.50	1136.7	44.8	118.97		
24.75	1136.6	44.7	118.95		
25.00	1136.6	44.8	118.95		
25.25	1136.7	44.9	118.95		
25.50	1136.7	44.9	118.94		
25.75	1136.7	44.9	118.92		
26.00	1136.7	44.9	118.94		
26.25	1136.7	44.9	118.92		
26.50	1136.7	44.9	118.91		
26.75	1136.7	44.9	118.92		
27.00	1136.8	44.9	118.91		
27.25	1136.8	45.0	118.89		
27.50	1136.9	45.1	118.91		
27.75	1136.9	45.0	118.90		
28.00	1136.9	45.0	118.88		
28.25	1137.0	45.1	118.88		
28.50	1137.0	45.2	118.88		
28.75	1137.1	45.2	118.87		
29.00	1137.1	45.2	118.87		
29.25	1137.1	45.2	118.87		
29.50	1137.1	45.2	118.86		
29.75	1137.2	45.4	118.86		
30.00	1137.2	45.4	118.85		
30.25	1137.2	45.3	118.85		
30.50	1137.2	45.4	118.84		
30.75	1137.2	45.3	118.83		
31.00	1137.3	45.4	118.82		
31.25	1137.3	45.4	118.83		
31.50	1137.2	45.4	118.82		
31.75	1137.3	45.4	118.82		
32.00	1137.3	45.4	118.82		
32.25	1137.3	45.5	118.81		
32.50	1137.4	45.5	118.81		
32.75	1137.3	45.5	118.79		
33.00	1137.3	45.5	118.80		
33.25	1137.4	45.5	118.79		
33.50	1137.4	45.5	118.79		
33.75	1137.4	45.6	118.78		
34.00	1137.5	45.6	118.78		
34.25	1137.5	45.6	118.77		
34.50	1137.4	45.5	118.76		
34.75	1137.5	45.6	118.76		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
35.00	1137.4	45.6	118.75		
35.25	1137.5	45.7	118.75		
35.50	1137.5	45.6	118.73		
35.75	1137.5	45.7	118.73		
36.00	1137.5	45.6	118.73		
36.25	1137.5	45.7	118.72		
36.50	1137.5	45.7	118.72		
36.75	1137.5	45.7	118.70		
37.00	1137.5	45.7	118.69		
37.25	1137.7	45.8	118.69		
37.50	1137.6	45.8	118.70		
37.75	1137.7	45.8	118.69		
38.00	1137.7	45.8	118.69		
38.25	1137.7	45.9	118.69		
38.50	1137.7	45.9	118.68		
38.75	1137.7	45.9	118.67		
39.00	1137.8	45.9	118.67		
39.25	1137.8	46.0	118.67		
39.50	1137.8	45.9	118.67		
39.75	1137.8	46.0	118.67		
40.00	1137.9	46.0	118.66		
40.25	1137.8	46.0	118.65		
40.50	1137.9	46.0	118.65		
40.75	1137.9	46.0	118.64		
41.00	1137.9	46.1	118.64		
41.25	1137.9	46.1	118.64		
41.50	1137.8	46.0	118.62		
41.75	1137.9	46.1	118.61		
42.00	1138.0	46.1	118.61		
42.25	1138.0	46.1	118.61		
42.50	1138.0	46.1	118.61		
42.75	1138.0	46.2	118.61		
43.00	1138.0	46.2	118.60		
43.25	1138.0	46.2	118.59		
43.50	1138.1	46.2	118.60		
43.75	1138.1	46.3	118.59		
44.00	1138.1	46.2	118.59		
44.25	1138.1	46.2	118.57		
44.50	1138.1	46.2	118.58		
44.75	1138.1	46.2	118.57		
45.00	1138.1	46.2	118.56		
45.25	1138.2	46.3	118.57		
45.50	1138.2	46.3	118.55		
45.75	1138.2	46.4	118.55		
46.00	1138.2	46.4	118.54		
46.25	1138.2	46.4	118.54		
46.50	1138.2	46.4	118.54		
46.75	1138.2	46.4	118.52		
47.00	1138.2	46.4	118.53		
47.25	1138.2	46.3	118.52		
47.50	1138.2	46.4	118.52		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
47.75	1138.3	46.4	118.52		
48.00	1138.3	46.4	118.52		
48.25	1138.3	46.5	118.50		
48.50	1138.3	46.5	118.50		
48.75	1138.4	46.5	118.50		
49.00	1138.4	46.5	118.50		
49.25	1138.4	46.5	118.48		
49.50	1138.4	46.5	118.50		
49.75	1138.4	46.5	118.47		
50.00	1138.4	46.6	118.47		
50.25	1138.4	46.6	118.48		
50.50	1138.5	46.6	118.49		
50.75	1138.4	46.6	118.47		
51.00	1138.4	46.6	118.46		
51.25	1138.5	46.7	118.44		
51.50	1138.5	46.6	118.45		
51.75	1138.5	46.7	118.44		
52.00	1138.6	46.7	118.45		
52.25	1138.5	46.7	118.44		
52.50	1138.5	46.7	118.45		
52.75	1138.6	46.7	118.43		
53.00	1138.6	46.7	118.44		
53.25	1138.6	46.7	118.43		
53.50	1138.6	46.7	118.42		
53.75	1138.6	46.7	118.43		
54.00	1138.7	46.8	118.42		
54.25	1138.7	46.8	118.42		
54.50	1138.7	46.8	118.42		
54.75	1138.7	46.8	118.42		
55.00	1138.7	46.8	118.42		
55.25	1138.7	46.8	118.42		
55.50	1138.8	46.9	118.42		
55.75	1138.8	46.9	118.42		
56.00	1138.8	46.9	118.42		
56.25	1138.8	46.9	118.41		
56.50	1138.8	46.9	118.42		
56.75	1138.8	47.0	118.41		
57.00	1138.9	47.0	118.41		
57.25	1138.9	47.0	118.41		
57.50	1138.9	47.0	118.41		
57.75	1138.9	47.0	118.41		
58.00	1138.9	47.0	118.41		
58.25	1138.9	47.1	118.41		
58.50	1139.0	47.1	118.41		
58.75	1139.0	47.1	118.41		
59.00	1138.9	47.1	118.40		
59.25	1139.0	47.1	118.39		
59.50	1138.9	47.0	118.39		
***** End Flow 2					
***** Start Shutin 2	0.00	1138.9	0.0	118.39	0.0000 1.297
	0.25	1139.1	0.2	118.41	362.0000 1.297
	0.50	1139.0	0.1	118.39	181.5000 1.297

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
0.75	1139.1	0.2	118.38	121.3333	1.298
1.00	1139.0	0.1	118.38	91.2500	1.297
1.25	1139.1	0.2	118.36	73.2000	1.297
1.50	1139.1	0.2	118.36	61.1667	1.297
1.75	1139.0	0.1	118.36	52.5714	1.297
2.00	1139.2	0.3	118.35	46.1250	1.298
2.25	1139.1	0.2	118.35	41.1111	1.298
2.50	1139.2	0.3	118.35	37.1000	1.298
2.75	1139.1	0.2	118.33	33.8182	1.298
3.00	1139.2	0.3	118.33	31.0833	1.298
3.25	1139.3	0.4	118.33	28.7692	1.298
3.50	1139.2	0.3	118.33	26.7857	1.298
3.75	1139.2	0.3	118.32	25.0667	1.298
4.00	1139.3	0.4	118.31	23.5625	1.298
4.25	1139.3	0.4	118.31	22.2353	1.298
4.50	1139.2	0.3	118.31	21.0556	1.298
4.75	1139.3	0.4	118.31	20.0000	1.298
5.00	1139.3	0.4	118.30	19.0500	1.298
5.25	1139.3	0.4	118.30	18.1905	1.298
5.50	1139.3	0.4	118.28	17.4091	1.298
5.75	1139.3	0.4	118.28	16.6957	1.298
6.00	1139.3	0.4	118.27	16.0417	1.298
6.25	1139.5	0.6	118.27	15.4400	1.298
6.50	1139.4	0.5	118.26	14.8846	1.298
6.75	1139.4	0.5	118.26	14.3704	1.298
7.00	1139.4	0.5	118.25	13.8929	1.298
7.25	1139.4	0.5	118.25	13.4483	1.298
7.50	1139.5	0.6	118.24	13.0333	1.298
7.75	1139.4	0.5	118.25	12.6452	1.298
8.00	1139.4	0.5	118.24	12.2812	1.298
8.25	1139.5	0.6	118.24	11.9394	1.298
8.50	1139.4	0.5	118.22	11.6176	1.298
8.75	1139.4	0.5	118.21	11.3143	1.298
9.00	1139.4	0.5	118.21	11.0278	1.298
9.25	1139.5	0.6	118.20	10.7568	1.298
9.50	1139.5	0.6	118.20	10.5000	1.298
9.75	1139.4	0.5	118.20	10.2564	1.298
10.00	1139.5	0.6	118.19	10.0250	1.298
10.25	1139.5	0.6	118.19	9.8049	1.298
10.50	1139.5	0.6	118.17	9.5952	1.298
10.75	1139.5	0.6	118.18	9.3953	1.298
11.00	1139.5	0.6	118.17	9.2045	1.298
11.25	1139.5	0.6	118.17	9.0222	1.298
11.50	1139.5	0.6	118.17	8.8478	1.298
11.75	1139.5	0.6	118.17	8.6809	1.299
12.00	1139.6	0.7	118.16	8.5208	1.299
12.25	1139.6	0.7	118.15	8.3673	1.299
12.50	1139.6	0.7	118.15	8.2200	1.299
12.75	1139.6	0.7	118.14	8.0784	1.299
13.00	1139.6	0.7	118.14	7.9423	1.299
13.25	1139.6	0.7	118.14	7.8113	1.299

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
13.50	1139.6	0.7	118.12	7.6852	1.299
13.75	1139.7	0.8	118.12	7.5636	1.299
14.00	1139.7	0.8	118.12	7.4464	1.299
14.25	1139.7	0.8	118.12	7.3333	1.299
14.50	1139.6	0.7	118.11	7.2241	1.299
14.75	1139.7	0.8	118.11	7.1186	1.299
15.00	1139.7	0.8	118.11	7.0167	1.299
15.25	1139.7	0.8	118.10	6.9180	1.299
15.50	1139.7	0.8	118.09	6.8226	1.299
15.75	1139.7	0.8	118.09	6.7302	1.299
16.00	1139.7	0.8	118.08	6.6406	1.299
16.25	1139.7	0.8	118.09	6.5538	1.299
16.50	1139.6	0.7	118.08	6.4697	1.299
16.75	1139.7	0.8	118.08	6.3881	1.299
17.00	1139.8	0.9	118.07	6.3088	1.299
17.25	1139.8	0.9	118.07	6.2319	1.299
17.50	1139.8	0.9	118.07	6.1571	1.299
17.75	1139.7	0.8	118.06	6.0845	1.299
18.00	1139.8	0.9	118.05	6.0139	1.299
18.25	1139.8	0.9	118.05	5.9452	1.299
18.50	1139.8	0.9	118.05	5.8784	1.299
18.75	1139.8	0.9	118.03	5.8133	1.299
19.00	1139.8	0.9	118.04	5.7500	1.299
19.25	1139.8	0.9	118.04	5.6883	1.299
19.50	1139.8	0.9	118.03	5.6282	1.299
19.75	1139.9	1	118.04	5.5696	1.299
20.00	1139.9	1.0	118.02	5.5125	1.299
20.25	1140.0	1.1	118.03	5.4568	1.299
20.50	1139.8	0.9	118.02	5.4024	1.299
20.75	1139.9	1.0	118.02	5.3494	1.299
21.00	1139.9	1	118.02	5.2976	1.299
21.25	1139.9	1.0	118.01	5.2471	1.299
21.50	1139.9	1.0	118.01	5.1977	1.299
21.75	1140.0	1.1	118.02	5.1494	1.299
22.00	1140.0	1.1	118.01	5.1023	1.299
22.25	1140.0	1.1	118.00	5.0562	1.300
22.50	1140.0	1.1	118.01	5.0111	1.299
22.75	1139.9	1.0	118.00	4.9670	1.299
23.00	1139.9	1.0	117.99	4.9239	1.299
23.25	1140.0	1.1	118.00	4.8817	1.299
23.50	1140.0	1.1	117.99	4.8404	1.300
23.75	1139.9	1.0	117.99	4.8000	1.299
24.00	1140.0	1.1	117.98	4.7604	1.300
24.25	1140.0	1.1	117.97	4.7216	1.300
24.50	1140.0	1.1	117.97	4.6837	1.300
24.75	1140.0	1.1	117.97	4.6465	1.300
25.00	1140.1	1.2	117.97	4.6100	1.300
25.25	1140.1	1.2	117.97	4.5743	1.300
25.50	1140.0	1.1	117.96	4.5392	1.300
25.75	1140.1	1.2	117.96	4.5049	1.300
26.00	1140.0	1.1	117.98	4.4712	1.300

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4
 DATE: 07/16/97 TIME: 13:19:14

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
26.25	1140.0	1.1	117.96	4.4381	1.300
26.50	1140.0	1.1	117.96	4.4057	1.300
26.75	1140.1	1.2	117.95	4.3738	1.300
27.00	1140.2	1.3	117.95	4.3426	1.300
27.25	1140.2	1.3	117.94	4.3119	1.300
27.50	1140.1	1.2	117.94	4.2818	1.300
27.75	1140.1	1.2	117.94	4.2523	1.300
28.00	1140.2	1.3	117.94	4.2232	1.300
28.25	1140.2	1.3	117.93	4.1947	1.300
28.50	1140.2	1.3	117.91	4.1667	1.300
28.75	1140.2	1.3	117.94	4.1391	1.300
29.00	1140.2	1.3	117.92	4.1121	1.300
29.25	1140.3	1.4	117.92	4.0855	1.300
29.50	1140.2	1.3	117.92	4.0593	1.300
29.75	1140.2	1.3	117.92	4.0336	1.300
30.00	1140.2	1.3	117.90	4.0083	1.300
30.25	1140.3	1.4	117.90	3.9835	1.300
30.50	1140.3	1.4	117.89	3.9590	1.300
30.75	1140.3	1.4	117.89	3.9350	1.300
31.00	1140.3	1.4	117.89	3.9113	1.300
31.25	1140.3	1.4	117.89	3.8880	1.300
31.50	1140.3	1.4	117.89	3.8651	1.300
31.75	1140.2	1.3	117.89	3.8425	1.300
32.00	1140.3	1.4	117.88	3.8203	1.300
32.25	1140.3	1.4	117.87	3.7984	1.300
32.50	1140.4	1.5	117.87	3.7769	1.300
32.75	1140.4	1.5	117.87	3.7557	1.300
33.00	1140.3	1.5	117.86	3.7348	1.300
33.25	1140.3	1.5	117.86	3.7143	1.300
33.50	1140.3	1.4	117.88	3.6940	1.300
33.75	1140.3	1.4	117.86	3.6741	1.300
34.00	1140.3	1.4	117.88	3.6544	1.300
34.25	1140.4	1.5	117.87	3.6350	1.300
34.50	1140.4	1.5	117.86	3.6159	1.300
34.75	1140.3	1.4	117.86	3.5971	1.300
35.00	1140.3	1.4	117.87	3.5786	1.300
35.25	1140.4	1.5	117.84	3.5603	1.301
35.50	1140.4	1.5	117.86	3.5423	1.301
35.75	1140.4	1.5	117.85	3.5245	1.300
36.00	1140.4	1.5	117.84	3.5069	1.301
36.25	1140.4	1.5	117.84	3.4897	1.301
36.50	1140.5	1.6	117.84	3.4726	1.301
36.75	1140.4	1.5	117.83	3.4558	1.301
37.00	1140.5	1.6	117.81	3.4392	1.301
37.25	1140.4	1.5	117.83	3.4228	1.301
37.50	1140.4	1.5	117.81	3.4067	1.301
37.75	1140.5	1.6	117.83	3.3907	1.301
38.00	1140.5	1.6	117.81	3.3750	1.301
38.25	1140.5	1.6	117.81	3.3595	1.301
38.50	1140.5	1.6	117.81	3.3442	1.301
38.75	1140.5	1.6	117.80	3.3290	1.301

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
39.00	1140.5	1.6	117.80	3.3141	1.301
39.25	1140.5	1.6	117.80	3.2994	1.301
39.50	1140.5	1.6	117.80	3.2848	1.301
39.75	1140.5	1.6	117.80	3.2704	1.301
40.00	1140.5	1.6	117.80	3.2563	1.301
40.25	1140.5	1.7	117.79	3.2422	1.301
40.50	1140.5	1.7	117.78	3.2284	1.301
40.75	1140.5	1.7	117.78	3.2147	1.301
41.00	1140.5	1.7	117.77	3.2012	1.301
41.25	1140.5	1.7	117.78	3.1879	1.301
41.50	1140.5	1.7	117.77	3.1747	1.301
41.75	1140.6	1.7	117.77	3.1617	1.301
42.00	1140.5	1.6	117.77	3.1488	1.301
42.25	1140.5	1.6	117.76	3.1361	1.301
42.50	1140.6	1.7	117.76	3.1235	1.301
42.75	1140.6	1.7	117.76	3.1111	1.301
43.00	1140.6	1.7	117.76	3.0988	1.301
43.25	1140.6	1.7	117.77	3.0867	1.301
43.50	1140.6	1.7	117.75	3.0747	1.301
43.75	1140.6	1.7	117.75	3.0629	1.301
44.00	1140.6	1.7	117.75	3.0511	1.301
44.25	1140.6	1.8	117.76	3.0395	1.301
44.50	1140.6	1.8	117.76	3.0281	1.301
44.75	1140.7	1.8	117.75	3.0168	1.301
45.00	1140.7	1.8	117.75	3.0056	1.301
45.25	1140.6	1.7	117.75	2.9945	1.301
45.50	1140.6	1.7	117.75	2.9835	1.301
45.75	1140.6	1.7	117.74	2.9727	1.301
46.00	1140.7	1.8	117.73	2.9620	1.301
46.25	1140.8	1.9	117.74	2.9514	1.301
46.50	1140.8	1.9	117.74	2.9409	1.301
46.75	1140.7	1.8	117.74	2.9305	1.301
47.00	1140.7	1.8	117.72	2.9202	1.301
47.25	1140.7	1.8	117.72	2.9101	1.301
47.50	1140.7	1.8	117.72	2.9000	1.301
47.75	1140.7	1.8	117.72	2.8901	1.301
48.00	1140.7	1.8	117.72	2.8802	1.301
48.25	1140.8	1.9	117.71	2.8705	1.301
48.50	1140.8	1.9	117.70	2.8608	1.301
48.75	1140.8	1.9	117.70	2.8513	1.301
49.00	1140.8	1.9	117.70	2.8418	1.301
49.25	1140.8	1.9	117.70	2.8325	1.301
49.50	1140.8	1.9	117.69	2.8232	1.302
49.75	1140.8	1.9	117.69	2.8141	1.301
50.00	1140.8	1.9	117.69	2.8050	1.301
50.25	1140.9	2.0	117.69	2.7960	1.302
50.50	1140.9	2.0	117.68	2.7871	1.302
50.75	1140.9	2.0	117.67	2.7783	1.302
51.00	1140.9	2.0	117.68	2.7696	1.302
51.25	1140.9	2.0	117.67	2.7610	1.302
51.50	1140.9	2.0	117.67	2.7524	1.302

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
51.75	1140.9	2.0	117.66	2.7440	1.302
52.00	1140.9	2.0	117.65	2.7356	1.302
52.25	1140.9	2.0	117.65	2.7273	1.302
52.50	1140.9	2.0	117.65	2.7190	1.302
52.75	1140.9	2.0	117.65	2.7109	1.302
53.00	1140.9	2.1	117.64	2.7028	1.302
53.25	1140.9	2.1	117.64	2.6948	1.302
53.50	1140.9	2.1	117.64	2.6869	1.302
53.75	1140.9	2.0	117.64	2.6791	1.302
54.00	1140.9	2.0	117.64	2.6713	1.302
54.25	1140.9	2.0	117.64	2.6636	1.302
54.50	1141.0	2.1	117.64	2.6560	1.302
54.75	1140.9	2.0	117.63	2.6484	1.302
55.00	1141.0	2.1	117.63	2.6409	1.302
55.25	1141.0	2.1	117.63	2.6335	1.302
55.50	1141.0	2.1	117.62	2.6261	1.302
55.75	1141.0	2.1	117.63	2.6188	1.302
56.00	1141.0	2.1	117.62	2.6116	1.302
56.25	1141.0	2.1	117.63	2.6044	1.302
56.50	1141.0	2.1	117.61	2.5973	1.302
56.75	1141.0	2.1	117.62	2.5903	1.302
57.00	1141.0	2.1	117.62	2.5833	1.302
57.25	1141.0	2.1	117.61	2.5764	1.302
57.50	1141.0	2.1	117.61	2.5696	1.302
57.75	1141.0	2.1	117.61	2.5628	1.302
58.00	1141.0	2.2	117.61	2.5560	1.302
58.25	1141.0	2.2	117.61	2.5494	1.302
58.50	1141.0	2.1	117.61	2.5427	1.302
58.75	1141.0	2.1	117.61	2.5362	1.302
59.00	1141.0	2.1	117.60	2.5297	1.302
59.25	1141.0	2.2	117.60	2.5232	1.302
59.50	1141.0	2.2	117.60	2.5168	1.302
59.75	1141.0	2.2	117.60	2.5105	1.302
60.00	1141.0	2.2	117.59	2.5042	1.302
60.25	1141.0	2.2	117.59	2.4979	1.302
60.50	1141.0	2.1	117.60	2.4917	1.302
60.75	1141.0	2.1	117.59	2.4856	1.302
61.00	1141.0	2.1	117.58	2.4795	1.302
61.25	1141.0	2.1	117.57	2.4735	1.302
61.50	1141.1	2.2	117.58	2.4675	1.302
61.75	1141.1	2.2	117.58	2.4615	1.302
62.00	1141.0	2.1	117.57	2.4556	1.302
62.25	1141.1	2.2	117.57	2.4498	1.302
62.50	1141.1	2.2	117.57	2.4440	1.302
62.75	1141.1	2.2	117.57	2.4382	1.302
63.00	1141.1	2.2	117.56	2.4325	1.302
63.25	1141.1	2.2	117.57	2.4269	1.302
63.50	1141.1	2.2	117.57	2.4213	1.302
63.75	1141.1	2.2	117.56	2.4157	1.302
64.00	1141.1	2.2	117.57	2.4102	1.302
64.25	1141.1	2.2	117.56	2.4047	1.302

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
64.50	1141.1	2.2	117.56	2.3992	1.302
64.75	1141.1	2.2	117.56	2.3938	1.302
65.00	1141.1	2.3	117.56	2.3885	1.302
65.25	1141.1	2.3	117.56	2.3831	1.302
65.50	1141.1	2.2	117.56	2.3779	1.302
65.75	1141.2	2.3	117.55	2.3726	1.302
66.00	1141.1	2.2	117.55	2.3674	1.302
66.25	1141.1	2.2	117.55	2.3623	1.302
66.50	1141.2	2.3	117.56	2.3571	1.302
66.75	1141.2	2.3	117.55	2.3521	1.302
67.00	1141.2	2.3	117.56	2.3470	1.302
67.25	1141.2	2.3	117.55	2.3420	1.302
67.50	1141.2	2.3	117.54	2.3370	1.302
67.75	1141.2	2.3	117.55	2.3321	1.302
68.00	1141.2	2.3	117.55	2.3272	1.302
68.25	1141.3	2.4	117.55	2.3223	1.303
68.50	1141.3	2.4	117.54	2.3175	1.303
68.75	1141.2	2.3	117.55	2.3127	1.302
69.00	1141.3	2.4	117.54	2.3080	1.303
69.25	1141.3	2.4	117.54	2.3032	1.302
69.50	1141.3	2.4	117.54	2.2986	1.303
69.75	1141.3	2.4	117.53	2.2939	1.302
70.00	1141.2	2.3	117.53	2.2893	1.302
70.25	1141.3	2.4	117.53	2.2847	1.303
70.50	1141.3	2.4	117.53	2.2801	1.302
70.75	1141.4	2.5	117.53	2.2756	1.303
71.00	1141.3	2.4	117.53	2.2711	1.303
71.25	1141.4	2.5	117.52	2.2667	1.303
71.50	1141.3	2.4	117.52	2.2622	1.303
71.75	1141.3	2.4	117.52	2.2578	1.303
72.00	1141.4	2.5	117.52	2.2535	1.303
72.25	1141.4	2.5	117.53	2.2491	1.303
72.50	1141.4	2.5	117.51	2.2448	1.303
72.75	1141.3	2.4	117.51	2.2405	1.303
73.00	1141.4	2.5	117.52	2.2363	1.303
73.25	1141.4	2.5	117.51	2.2321	1.303
73.50	1141.4	2.5	117.51	2.2279	1.303
73.75	1141.3	2.4	117.51	2.2237	1.303
74.00	1141.3	2.4	117.51	2.2196	1.303
74.25	1141.4	2.5	117.51	2.2155	1.303
74.50	1141.4	2.5	117.51	2.2114	1.303
74.75	1141.4	2.5	117.51	2.2074	1.303
75.00	1141.4	2.5	117.51	2.2033	1.303
75.25	1141.4	2.5	117.51	2.1993	1.303
75.50	1141.4	2.5	117.51	2.1954	1.303
75.75	1141.4	2.5	117.50	2.1914	1.303
76.00	1141.4	2.5	117.51	2.1875	1.303
76.25	1141.5	2.6	117.52	2.1836	1.303
76.50	1141.5	2.6	117.51	2.1797	1.303
76.75	1141.5	2.6	117.51	2.1759	1.303
77.00	1141.6	2.7	117.51	2.1721	1.303

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10194 Murfin Drlg Co. Rusco C-1 DST #4

DATE: 07/16/97

TIME: 13:19:14

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
77.25	1141.5	2.6	117.50	2.1683	1.303
77.50	1141.5	2.6	117.50	2.1645	1.303
77.75	1141.5	2.6	117.49	2.1608	1.303
78.00	1141.5	2.6	117.49	2.1571	1.303
78.25	1141.5	2.6	117.48	2.1534	1.303
78.50	1141.5	2.6	117.49	2.1497	1.303
78.75	1141.5	2.6	117.49	2.1460	1.303
79.00	1141.6	2.7	117.49	2.1424	1.303
79.25	1141.5	2.6	117.49	2.1388	1.303
79.50	1141.5	2.6	117.47	2.1352	1.303
79.75	1141.5	2.6	117.47	2.1317	1.303
80.00	1141.5	2.6	117.48	2.1281	1.303
80.25	1141.5	2.6	117.48	2.1246	1.303
80.50	1141.5	2.6	117.48	2.1211	1.303
80.75	1141.5	2.6	117.47	2.1176	1.303
81.00	1141.5	2.6	117.47	2.1142	1.303
81.25	1141.5	2.6	117.48	2.1108	1.303
81.50	1141.6	2.7	117.47	2.1074	1.303
81.75	1141.5	2.6	117.47	2.1040	1.303
82.00	1141.6	2.7	117.47	2.1006	1.303
82.25	1141.5	2.6	117.46	2.0973	1.303
82.50	1141.5	2.6	117.47	2.0939	1.303
82.75	1141.5	2.6	117.47	2.0906	1.303
83.00	1141.6	2.7	117.47	2.0873	1.303
83.25	1141.5	2.6	117.46	2.0841	1.303
83.50	1141.5	2.6	117.46	2.0808	1.303
83.75	1141.5	2.6	117.47	2.0776	1.303
84.00	1141.5	2.6	117.46	2.0744	1.303
84.25	1141.5	2.6	117.46	2.0712	1.303
84.50	1141.6	2.7	117.46	2.0680	1.303
84.75	1141.6	2.7	117.46	2.0649	1.303
85.00	1141.6	2.7	117.48	2.0618	1.303
85.25	1141.6	2.7	117.48	2.0587	1.303
85.50	1141.6	2.7	117.46	2.0556	1.303
85.75	1141.6	2.7	117.46	2.0525	1.303
86.00	1141.7	2.8	117.45	2.0494	1.303
86.25	1141.6	2.7	117.46	2.0464	1.303
86.50	1141.7	2.8	117.46	2.0434	1.303
86.75	1141.7	2.8	117.46	2.0403	1.303
87.00	1141.6	2.8	117.47	2.0374	1.303
87.25	1141.6	2.8	117.47	2.0344	1.303
87.50	1141.6	2.8	117.46	2.0314	1.303
87.75	1141.6	2.8	117.45	2.0285	1.303
88.00	1141.6	2.7	117.46	2.0256	1.303
88.25	1141.7	2.8	117.46	2.0227	1.303
88.50	1141.7	2.8	117.46	2.0198	1.303
***** End Shut-in 2					
***** Final Hydro.	349.75	1745.2	0.0	117.48	

TEST HISTORY

10194 Murfin Drlg Co. Rusco C-1 DST #4

Flag Points

t (Min.)	P (PSig)
A:	0.00 1774.92
B:	0.00 523.12
C:	30.75 1082.46
D:	61.00 1136.17
E:	0.00 1091.85
F:	59.50 1138.89
G:	88.50 1141.68
Q:	0.00 1745.22

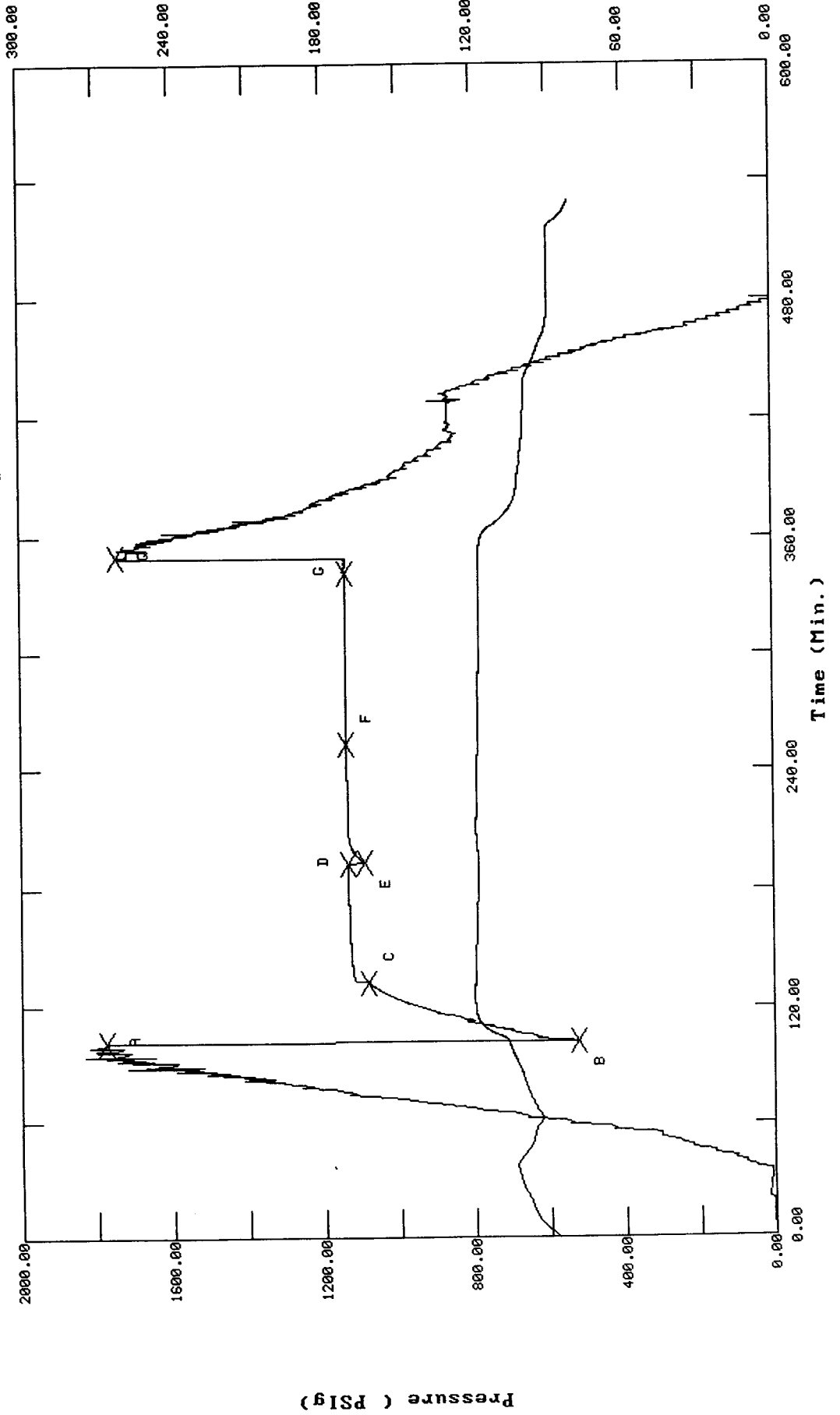
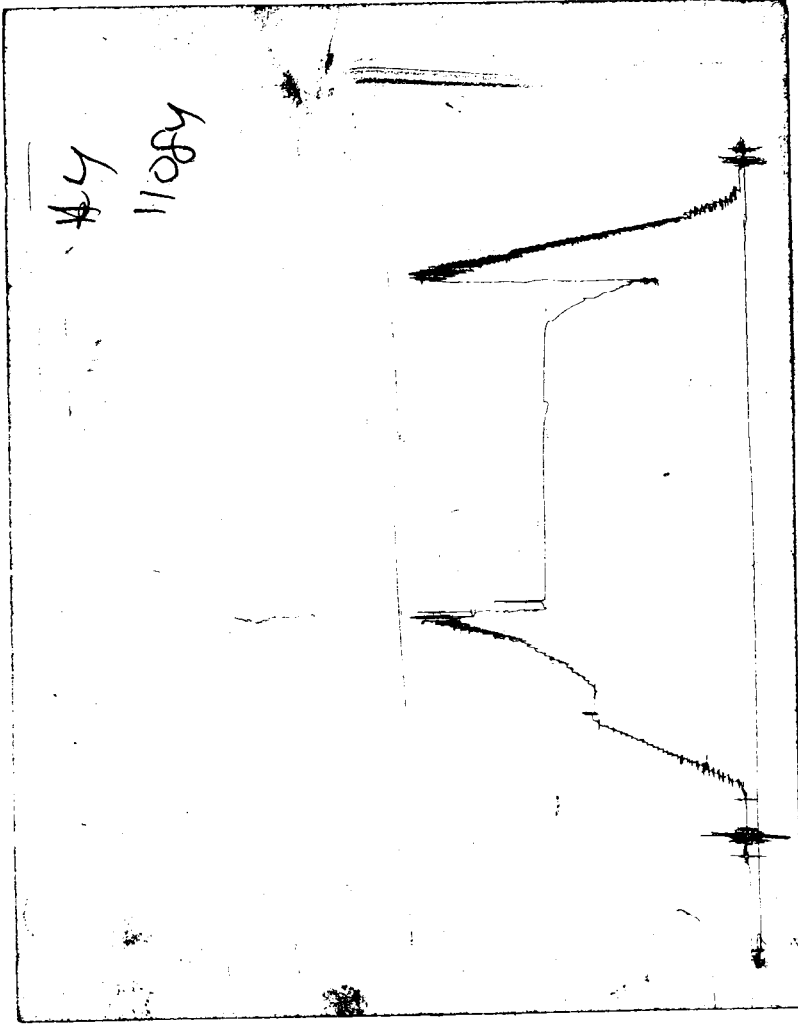


CHART PAGE



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