WELL NAME:	Norris #1
COMPANY:	Redland Resources, Inc.
LOCATION:	12-21s-21w
	Hodgeman County, Kansas
DATE:	11/28/97

B 2672144

TRILOBITE TESTING L.L.C.

'ERATOR : Redland Resources Inc. DATE 11/26/97
:LL NAME: Norris #1 KB 2168.00 ft TICKET NO: 10559 DST #1
)CATION : 12-21s-21w Hodgeman Co KS GR 2159.00 ft FORMATION: Mississippi Osage
/TERVAL : 4290.00 To 4338.00 ft TD 4338.00 ft TEST TYPE: CONV

:CORDER DATA

lins		Field	1	2	3	4
' 30	Rec.	AK-1	AK-1	Alpine		
: 30	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
' 30	Clock(hrs)	12hr	12hr	Elec		
; 30	Depth(ft)	4333.0	4333.0	4294.0	0.0	0.0

TIME DATA----------
PF Fr. 0035 to 0105 hr
IS Fr. 0105 to 0135 hr
SF Fr. 0135 to 0205 hr
FS Fr. 0205 to 0235 hr

	Field	1	2	3	4
Init Hydro	2328.0	2325.0	2310.0	0.0	0.0
First Flow	219.0	218.0	233.0	0.0	0.0
.. Final Flow	439.0	447.0	475.0	0.0	0.0
In Shut-in	1217.0	1208.0	1243.0	0.0	0.0
Init Flow	471.0	481.0	472.0	0.0	0.0
Final Flow	732.0	727.0	754.0	0.0	0.0
Fl Shut-in	1229.0	1215.0	1243.0	0.0	0.0
Final Hydro	2252.0	2233.0	2210.0	0.0	0.0
ıside/Outside	O	O	I	B	

T STARTED 2215 hr
T ON BOTM 0033 hr
T OPEN 0035 hr
T PULLED 0235 hr
T OUT 0450 hr

:COVERY
)t Fluid 1640.00 ft of 0.00 ft in DC and 1640.00 ft in DP
;40.00 ft of gassy slightly muddy water
.00 ft of
.00 ft of reversed into pit
.00 ft of
.00 ft of
.00 ft of
.00 ft of
.00 ft of Rw .3@ 60
\LINITY 27000.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	1900.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	80000.00 lbs
Initial Str Wt	62000.00 lbs
Unseated Str Wt	70000.00 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	0.00 ft
D.P. Length	4283.00 ft
H.W. I.D	2.70 in

:OW DESCRIPTION
ıitial Flow-
strong blow built to bottom of bucket in 3 minutes

ıitial Shutin-
weak surface blow

ınal Flow-
strong blow built to bottom of bucket in 3 minutes

ınal Shutin-
no blow

MUD DATA----------

Mud Type	Chemical
Weight	9.80 lb/c
Vis.	52.00 S/L
W.L.	10.40 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	125.00 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.	Steve Davis
Contr.	Duke
Rig #	4
Unit #	
Pump T.	

\AMPLES:
:NT TO:

Test Successful: Y

GAS RECOVERY

COMPANY: Redland Resources Inc. DATE: 11/26/97
WELL NAME: Norris #1 KB Elev: 2168.00 ft TICKET #10559 DST #1
WELL LOCATION: 12-21s-21w Hodgeman Co KS GR Elev: 2159.00 ft FORMATION: Mississippi Osage
INTERVAL Fr.: 4290.00 To 4338.00 T.D.: 4338.00 ft TEST TYPE: CONV

GAS RECOVERY MEASURED WITH Merla

***** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.50	0	36	418000.0
10	1.50	0	48	482000.0
15	1.50	0	50	493000.0
25	1.50	0	50	493000.0
30	1.50	0	50	493000.0

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.50	0	70	583000.0
10	1.50	0	68	575000.0
20	1.50	0	58	530000.0
30	1.50	0	54	511000.0
40	1.50	0	52	502000.0
50	1.50	0	52	502000.0
60	1.50	0	50	493000.0

*** TOOL DIAGRAM *** CONV

WELL NAME: Norris #1

LOCATION : 12-21s-21w Hodgeman Co KS

TICKET No. 10559 D.S.T. No. 1 DATE 11/26/97

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 27 tool

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 16 perf

TOTAL TOOL 43

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 32

TOTAL ASSEMBLY 75

D.C. ABOVE TOOLS.Stands Single Total

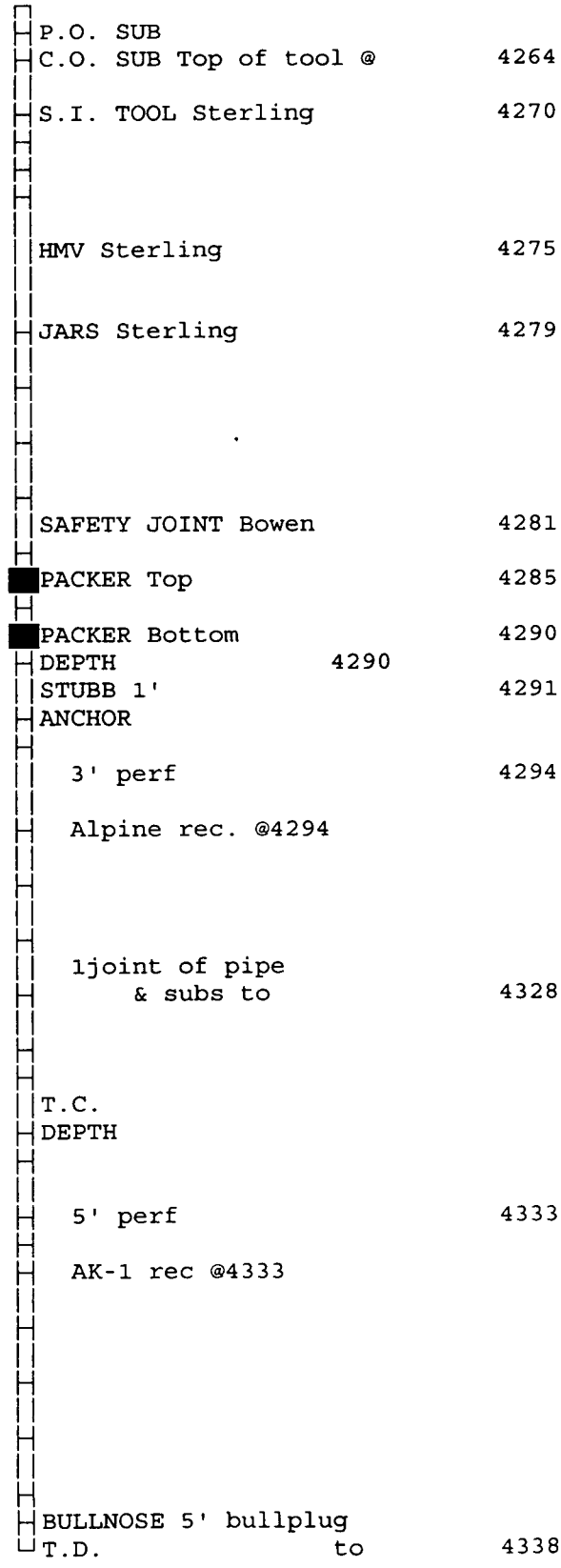
D.P. ABOVE TOOLS.Stands68 Single 1 Total 4283

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4358

TOTAL DEPTH 4338

TOTAL DRILL PIPE ABOVE K.B. 20

REMARKS:
Sampler Data



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10559 Redland Resources Norris #1 DST #1

DATE: 11/26/97 TIME: 21:44:31

	Time	Pressure PSIg.	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	170.00	2309.7	0.0	108.29		
****** Start Flow 1	0.00	232.8	0.0	108.61		
	0.50	230.5	-2.3	109.05		
	1.00	228.4	-4.4	109.71		
	1.50	220.6	-12.2	110.59		
	2.00	222.3	-10.5	111.59		
	2.50	220.1	-12.7	112.62		
	3.00	220.2	-12.6	113.62		
	3.50	216.3	-16.5	114.56		
	4.00	218.9	-13.9	115.43		
	4.50	226.3	-6.5	116.19		
	5.00	233.3	0.5	116.90		
	5.50	236.9	4.1	117.53		
	6.00	238.7	5.9	118.09		
	6.50	238.6	5.8	118.59		
	7.00	255.8	23.0	119.02		
	7.50	263.0	30.2	119.41		
	8.00	268.7	35.9	119.76		
	8.50	243.3	10.5	120.08		
	9.00	260.3	27.5	120.37		
	9.50	266.0	33.2	120.64		
	10.00	269.9	37.1	120.88		
	10.50	274.2	41.4	121.12		
	11.00	285.9	53.1	121.36		
	11.50	301.6	68.8	121.61		
	12.00	310.2	77.4	121.83		
	12.50	309.4	76.6	122.04		
	13.00	314.3	81.5	122.24		
	13.50	318.0	85.2	122.43		
	14.00	322.8	90.0	122.59		
	14.50	334.7	101.9	122.74		
	15.00	331.2	98.4	122.88		
	15.50	335.3	102.5	123.01		
	16.00	313.2	80.4	123.13		
	16.50	365.2	132.4	123.24		
	17.00	347.7	114.9	123.34		
	17.50	335.1	102.3	123.43		
	18.00	347.9	115.1	123.50		
	18.50	351.7	118.9	123.55		
	19.00	368.8	136.0	123.57		
	19.50	373.0	140.2	123.59		
	20.00	376.7	143.9	123.62		
	20.50	382.5	149.7	123.70		
	21.00	387.2	154.4	123.76		
	21.50	392.0	159.2	123.84		
	22.00	396.7	163.9	123.91		
	22.50	401.3	168.5	123.99		
	23.00	407.1	174.3	124.05		
	23.50	411.5	178.7	124.12		
	24.00	416.3	183.5	124.17		
	24.50	420.5	187.7	124.22		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10559 Redland Resources Norris #1 DST #1

DATE: 11/26/97 TIME: 21:44:31

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	424.6	191.8	124.27		
	25.50	428.7	196.0	124.31		
	26.00	433.4	200.6	124.35		
	26.50	437.4	204.6	124.39		
	27.00	441.4	208.6	124.43		
	27.50	445.9	213.1	124.47		
	28.00	450.5	217.7	124.51		
	28.50	454.6	221.8	124.54		
	29.00	458.5	225.7	124.58		
	29.50	462.9	230.1	124.61		
	30.00	466.7	233.9	124.64		
	30.50	470.8	238.0	124.67		
****** End Flow 1	31.00	475.1	242.4	124.70		
****** Start Shutin 1	0.00	475.1	0.0	124.70	0.0000	0.226
	0.50	741.4	266.2	124.73	63.0000	0.550
	1.00	902.6	427.4	124.78	32.0000	0.815
	1.50	930.9	455.8	124.82	21.6667	0.867
	2.00	951.1	476.0	124.86	16.5000	0.905
	2.50	967.9	492.7	124.88	13.4000	0.937
	3.00	982.5	507.4	124.90	11.3333	0.965
	3.50	995.8	520.6	124.91	9.8571	0.992
	4.00	1007.9	532.8	124.91	8.7500	1.016
	4.50	1019.3	544.1	124.89	7.8889	1.039
	5.00	1029.7	554.6	124.86	7.2000	1.060
	5.50	1039.7	564.5	124.83	6.6364	1.081
	6.00	1049.1	573.9	124.79	6.1667	1.101
	6.50	1058.0	582.8	124.74	5.7692	1.119
	7.00	1066.5	591.3	124.69	5.4286	1.137
	7.50	1074.5	599.4	124.66	5.1333	1.155
	8.00	1082.1	607.0	124.61	4.8750	1.171
	8.50	1089.5	614.4	124.55	4.6471	1.187
	9.00	1096.6	621.4	124.51	4.4444	1.202
	9.50	1103.3	628.1	124.46	4.2632	1.217
	10.00	1109.6	634.5	124.40	4.1000	1.231
	10.50	1115.9	640.7	124.34	3.9524	1.245
	11.00	1121.8	646.6	124.30	3.8182	1.258
	11.50	1127.5	652.4	124.23	3.6957	1.271
	12.00	1133.0	657.9	124.18	3.5833	1.284
	12.50	1138.4	663.3	124.13	3.4800	1.296
	13.00	1143.7	668.5	124.07	3.3846	1.308
	13.50	1148.5	673.4	124.02	3.2963	1.319
	14.00	1153.4	678.3	123.96	3.2143	1.330
	14.50	1157.9	682.7	123.92	3.1379	1.341
	15.00	1162.4	687.3	123.86	3.0667	1.351
	15.50	1166.7	691.5	123.80	3.0000	1.361
	16.00	1170.9	695.8	123.75	2.9375	1.371
	16.50	1175.0	699.8	123.70	2.8788	1.381
	17.00	1178.9	703.7	123.65	2.8235	1.390
	17.50	1182.5	707.4	123.60	2.7714	1.398
	18.00	1186.3	711.1	123.57	2.7222	1.407
	18.50	1189.9	714.7	123.51	2.6757	1.416

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10559 Redland Resources Norris #1 DST #1

DATE: 11/26/97 TIME: 21:44:31

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	19.00	1193.4	718.3	123.47	2.6316	1.424
	19.50	1196.7	721.5	123.41	2.5897	1.432
	20.00	1199.8	724.6	123.37	2.5500	1.440
	20.50	1202.9	727.8	123.33	2.5122	1.447
	21.00	1206.0	730.9	123.28	2.4762	1.454
	21.50	1209.1	733.9	123.24	2.4419	1.462
	22.00	1211.9	736.8	123.22	2.4091	1.469
	22.50	1214.7	739.6	123.17	2.3778	1.476
	23.00	1217.3	742.2	123.13	2.3478	1.482
	23.50	1220.0	744.9	123.08	2.3191	1.488
	24.00	1222.7	747.6	123.05	2.2917	1.495
	24.50	1225.1	750.0	123.02	2.2653	1.501
	25.00	1227.6	752.5	122.98	2.2400	1.507
	25.50	1229.9	754.7	122.93	2.2157	1.513
	26.00	1232.3	757.1	122.91	2.1923	1.518
	26.50	1234.5	759.3	122.87	2.1698	1.524
	27.00	1236.6	761.4	122.83	2.1481	1.529
	27.50	1238.8	763.7	122.80	2.1273	1.535
	28.00	1240.9	765.7	122.78	2.1071	1.540
****** End Shut-in 1	28.50	1242.7	767.6	122.75	2.0877	1.544
****** Start Flow 2	0.00	472.1	0.0	122.65		
	0.50	478.4	6.3	122.60		
	1.00	485.6	13.4	122.55		
	1.50	491.7	19.6	122.50		
	2.00	498.1	26.0	122.45		
	2.50	504.1	32.0	122.42		
	3.00	510.1	38.0	122.40		
	3.50	515.8	43.7	122.37		
	4.00	521.8	49.7	122.36		
	4.50	527.6	55.5	122.36		
	5.00	533.1	61.0	122.37		
	5.50	538.7	66.6	122.40		
	6.00	544.0	71.9	122.43		
	6.50	549.5	77.4	122.46		
	7.00	554.6	82.5	122.52		
	7.50	559.7	87.6	122.58		
	8.00	564.9	92.8	122.65		
	8.50	569.8	97.7	122.73		
	9.00	574.9	102.7	122.82		
	9.50	579.8	107.7	122.93		
	10.00	584.6	112.5	123.04		
	10.50	589.6	117.5	123.16		
	11.00	594.3	122.2	123.29		
	11.50	599.1	127.0	123.41		
	12.00	604.0	131.9	123.54		
	12.50	608.3	136.2	123.62		
	13.00	613.0	140.9	123.75		
	13.50	617.6	145.5	123.85		
	14.00	621.8	149.7	123.94		
	14.50	626.2	154.1	124.03		
	15.00	630.5	158.4	124.12		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10559 Redland Resources Norris #1 DST #1

DATE: 11/26/97 TIME: 21:44:31

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	15.50	634.9	162.8	124.20		
	16.00	638.8	166.7	124.27		
	16.50	643.1	170.9	124.35		
	17.00	647.2	175.1	124.40		
	17.50	651.2	179.1	124.46		
	18.00	655.4	183.3	124.50		
	18.50	659.5	187.4	124.56		
	19.00	663.6	191.5	124.61		
	19.50	667.5	195.4	124.65		
	20.00	671.5	199.4	124.69		
	20.50	675.4	203.3	124.72		
	21.00	679.2	207.1	124.76		
	21.50	683.3	211.2	124.80		
	22.00	687.2	215.1	124.83		
	22.50	690.9	218.8	124.86		
	23.00	694.6	222.5	124.90		
	23.50	698.4	226.3	124.92		
	24.00	702.1	230.0	124.94		
	24.50	705.5	233.4	124.97		
	25.00	708.9	236.8	124.99		
	25.50	711.8	239.7	125.01		
	26.00	715.4	243.3	125.03		
	26.50	718.8	246.7	125.06		
	27.00	722.5	250.4	125.07		
	27.50	726.1	254.0	125.08		
	28.00	729.5	257.4	125.09		
	28.50	732.9	260.7	125.11		
	29.00	736.6	264.4	125.11		
	29.50	740.1	268.0	125.14		
	30.00	743.4	271.3	125.14		
	30.50	746.7	274.6	125.16		
	31.00	750.2	278.1	125.17		
****** End Flow 2	31.50	753.6	281.5	125.18		
****** Start Shutin 2	0.00	753.6	0.0	125.18	0.0000	0.568
	0.50	856.6	103.0	125.19	126.0000	0.734
	1.00	979.3	225.6	125.21	63.5000	0.959
	1.50	999.2	245.5	125.22	42.6667	0.998
	2.00	1013.8	260.2	125.27	32.2500	1.028
	2.50	1026.3	272.7	125.27	26.0000	1.053
	3.00	1037.2	283.6	125.30	21.8333	1.076
	3.50	1047.2	293.5	125.32	18.8571	1.097
	4.00	1056.4	302.7	125.36	16.6250	1.116
	4.50	1064.8	311.2	125.38	14.8889	1.134
	5.00	1073.0	319.3	125.40	13.5000	1.151
	5.50	1080.4	326.8	125.42	12.3636	1.167
	6.00	1087.6	333.9	125.44	11.4167	1.183
	6.50	1094.4	340.8	125.46	10.6154	1.198
	7.00	1100.9	347.3	125.47	9.9286	1.212
	7.50	1107.0	353.4	125.49	9.3333	1.226
	8.00	1113.0	359.4	125.50	8.8125	1.239
	8.50	1118.8	365.1	125.51	8.3529	1.252

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10559 Redland Resources Norris #1 DST #1

DATE: 11/26/97 TIME: 21:44:31

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	9.00	1124.2	370.5	125.51	7.9444	1.264
	9.50	1129.4	375.8	125.53	7.5789	1.276
	10.00	1134.4	380.8	125.51	7.2500	1.287
	10.50	1139.3	385.6	125.52	6.9524	1.298
	11.00	1143.8	390.2	125.50	6.6818	1.308
	11.50	1148.3	394.7	125.51	6.4348	1.319
	12.00	1152.8	399.1	125.51	6.2083	1.329
	12.50	1156.9	403.3	125.49	6.0000	1.338
	13.00	1160.9	407.3	125.48	5.8077	1.348
	13.50	1164.8	411.2	125.51	5.6296	1.357
	14.00	1168.6	414.9	125.47	5.4643	1.366
	14.50	1172.2	418.6	125.45	5.3103	1.374
	15.00	1175.7	422.0	125.44	5.1667	1.382
	15.50	1179.2	425.6	125.42	5.0323	1.391
	16.00	1182.4	428.8	125.40	4.9062	1.398
	16.50	1185.8	432.1	125.38	4.7879	1.406
	17.00	1188.8	435.2	125.37	4.6765	1.413
	17.50	1191.8	438.1	125.35	4.5714	1.420
	18.00	1194.7	441.0	125.35	4.4722	1.427
	18.50	1197.6	443.9	125.31	4.3784	1.434
	19.00	1200.4	446.7	125.30	4.2895	1.441
	19.50	1203.1	449.5	125.28	4.2051	1.447
	20.00	1205.6	452.0	125.27	4.1250	1.453
	20.50	1208.2	454.6	125.25	4.0488	1.460
	21.00	1210.7	457.0	125.24	3.9762	1.466
	21.50	1213.1	459.5	125.22	3.9070	1.472
	22.00	1215.4	461.8	125.21	3.8409	1.477
	22.50	1217.8	464.2	125.20	3.7778	1.483
	23.00	1220.0	466.4	125.17	3.7174	1.488
	23.50	1222.1	468.5	125.19	3.6596	1.494
	24.00	1224.2	470.5	125.15	3.6042	1.499
	24.50	1226.2	472.6	125.13	3.5510	1.504
	25.00	1228.2	474.6	125.12	3.5000	1.508
	25.50	1230.2	476.6	125.10	3.4510	1.513
	26.00	1232.1	478.4	125.08	3.4038	1.518
	26.50	1233.8	480.2	125.05	3.3585	1.522
	27.00	1235.7	482.0	125.03	3.3148	1.527
	27.50	1237.5	483.8	125.00	3.2727	1.531
	28.00	1239.2	485.5	124.98	3.2321	1.536
	28.50	1240.9	487.2	124.95	3.1930	1.540
****** End Shut-in 2	29.00	1242.5	488.9	124.94	3.1552	1.544
****** Final Hydro.	294.00	2210.4	0.0	124.90		

TEST HISTORY

10559 Redland Resources Norris #1 DST #1

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	2309.67
B:	0.00	232.80
C:	31.00	475.15
D:	28.50	1242.74
E:	0.00	472.10
F:	31.50	753.64
G:	29.00	1242.54
Q:	0.00	2210.36

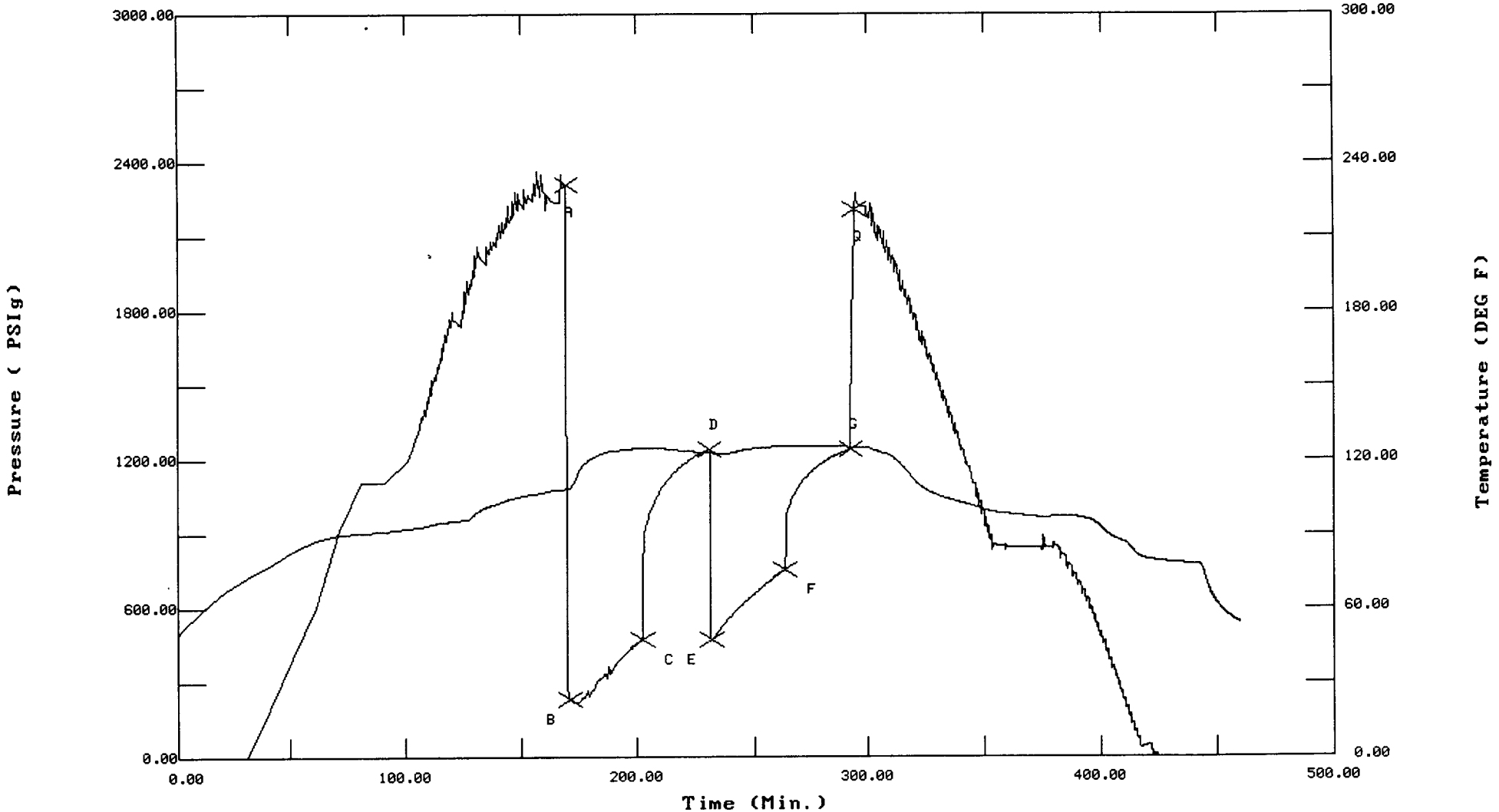
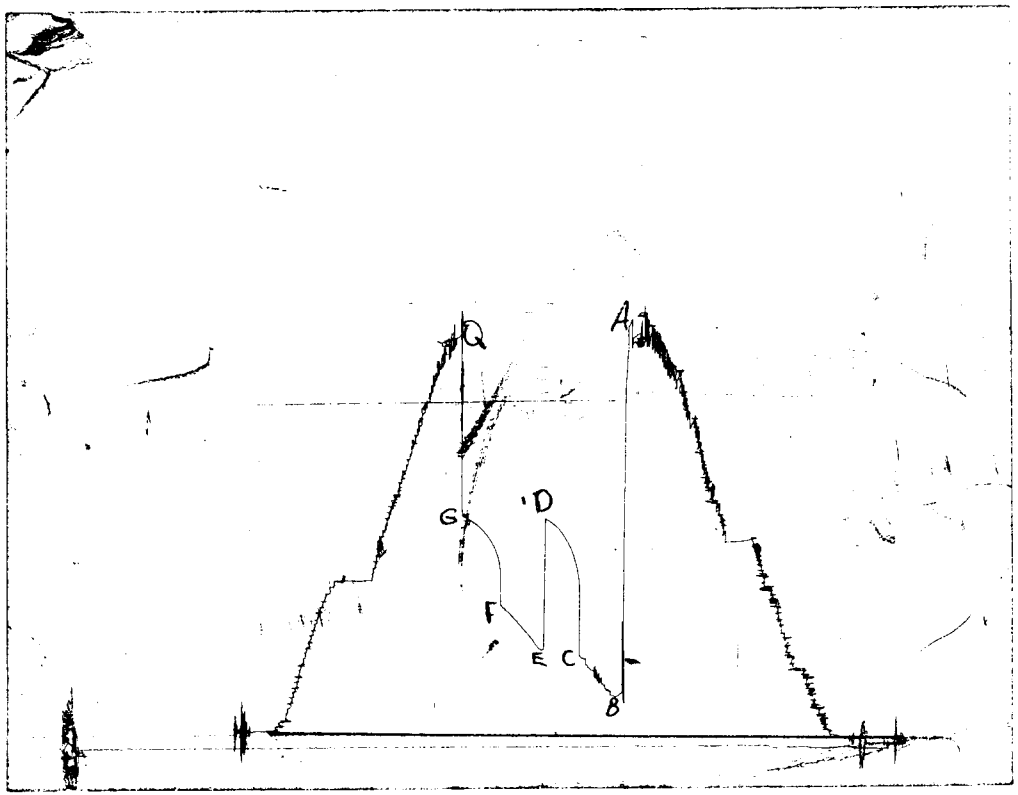


CHART PAGE



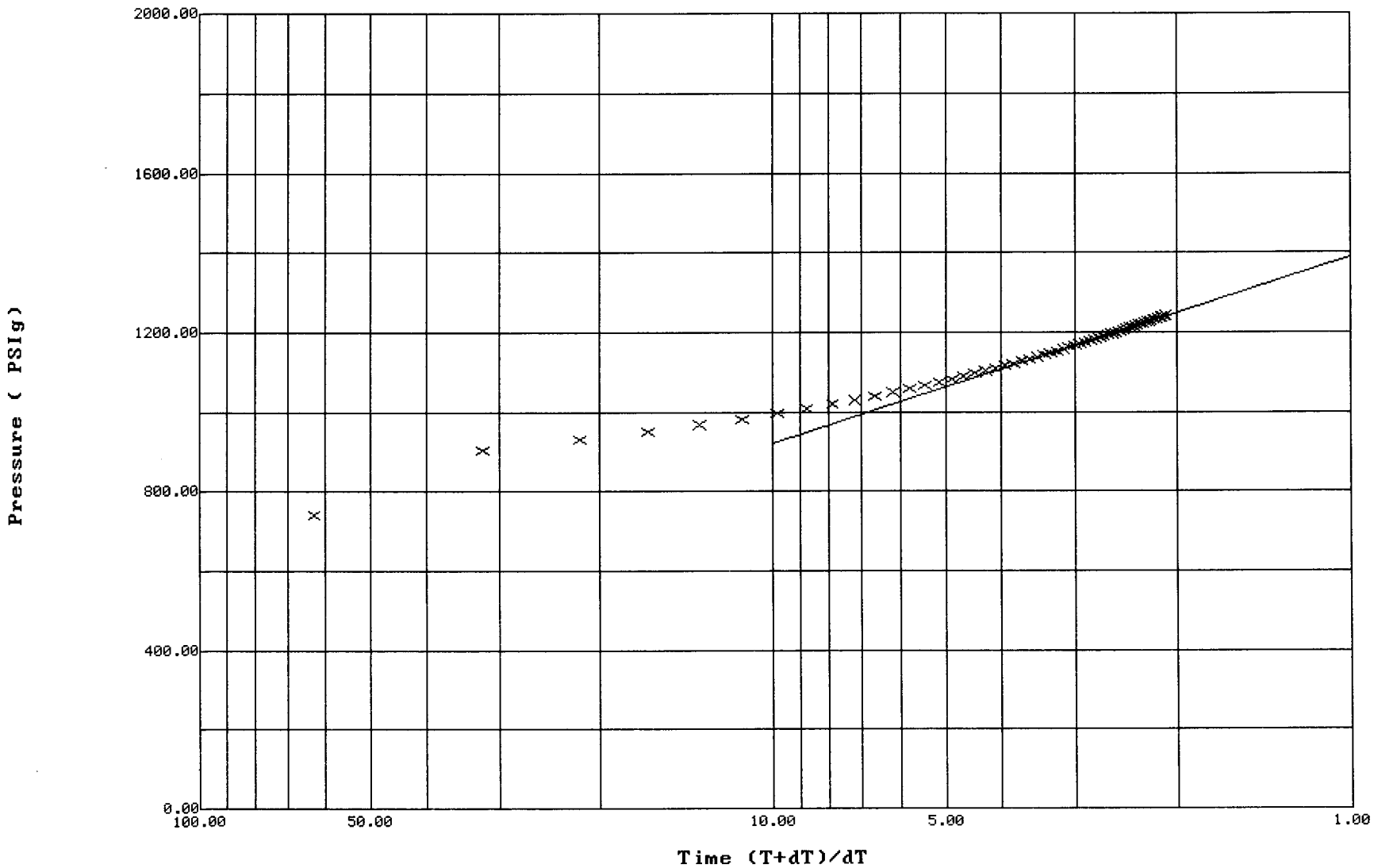
This is a photocopy of the actual AK-1 recorder chart

Horner Plot: shut-in #1

10559 Redland Resources Norris #1 DST #1

Slope: 469.8246 PSIg/cycle

Ext. Pressure: 1391.7092 PSIg



Horner Plot: shut-in #2

10559 Redland Resources Norris #1 DST #1

Slope: 308.0089 PSIg/cycle

Ext. Pressure: 1395.6584 PSIg