

WELL NAME: Ziegler 1-21
COMPANY: Ranken Energy Inc.
LOCATION: 21-11S-32W
Logan County Kansas
DATE: 08/27/97

TRILOBITE TESTING L.L.C.

OPERATOR : Ranken Energy Inc.
WELL NAME: Ziegler 1-21
LOCATION : 21-11S-32W Logan KS
INTERVAL : 4566.00 To 4623.00 ft

DATE 8-21-97
KB 3023.00 ft TICKET NO: 10353 DST #1
GR 3018.00 ft FORMATION: Johnson
TD 4672.00 ft TEST TYPE: CONV. STRADDLE

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11057	11057	2342			PF Fr. 2130 to 2200 hr
SI 30	Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0	IS Fr. 2200 to 2230 hr
SF 30	Clock(hrs)	12 hr	12 hr	Elec			SF Fr. 2230 to 2300 hr
FS 60	Depth(ft)	4571.0	4571.0	4577.0	0.0	0.0	FS Fr. 2300 to 1200 hr

	Field	1	2	3	4	
A. Init Hydro	2321.0	2309.0	2269.0	0.0	0.0	T STARTED 1938 hr
B. First Flow	44.0	66.0	15.0	0.0	0.0	T ON BOTM 2126 hr
B1. Final Flow	56.0	63.0	33.0	0.0	0.0	T OPEN 2130 hr
C. In Shut-in	973.0	971.0	989.0	0.0	0.0	T PULLED 1200 hr
D. Init Flow	67.0	77.0	37.0	0.0	0.0	T OUT 0250 hr
E. Final Flow	67.0	69.0	46.0	0.0	0.0	
F. Fl Shut-in	1017.0	1009.0	1021.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2298.0	2298.0	2252.0	0.0	0.0	Tool Wt. 6000.00 lbs
Inside/Outside	I	I	O			Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 68000.00 lbs
						Initial Str Wt 42000.00 lbs
						Unseated Str Wt 43000.00 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 4044.00 ft
						H.W. I.D 2.70 in
						H.W. Length 589.00 ft

RECOVERY

Tot Fluid 62.00 ft of 0.00 ft in DC and 62.00 ft in DP
62.00 ft of Drilling Mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of

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

BLOW DESCRIPTION

Initial Flow:
Surface blow built to 1 1/4"
Died back to 3/4"

Initial Shut In:
No return

Final Flow:
Bubble to open tool, no blow

Final Shut In:
No return

SAMPLES:
SENT TO:

Test Successful: N

MUD DATA-----
Mud Type Chemical
Weight 9.00 lb/c
Vis. 48.00 S/L
W.L. 8.00 in3
F.C. 0.00 in
Mud Drop Y 15.0 ft

Amt. of fill 0.00 ft
Btm. H. Temp. 128.00 F
Hole Condition good
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 3
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Shane McBride
Co. Rep. Mark Herndon
Contr. Abercrombie
Rig # 8
Unit #
Pump T.

*** TOOL DIAGRAM *** CONV. STRADDLE

WELL NAME: Ziegler 1-21

LOCATION : 21-11-32

TICKET No. 10353 D.S.T. No. 1 DATE 8-21-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 44

TOTAL TOOL 64

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 1 Single Total 62

TOTAL ASSEMBLY 126

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands 74 Single 1 Total 4571

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4697

TOTAL DEPTH 4672

TOTAL DRILL PIPE ABOVE K.B. 25

REMARKS:

P.O. SUB	
C.O. SUB 1'	4546
S.I. TOOL 5'	4552
HMV 5'	4557
JARS	
SAFETY JOINT	
PACKER top	4561
PACKER bottom	4566
DEPTH 4566	
STUBB 1'	4567
ANCHOR 4'perf	4571
Ak-1 Rec. @ 4571	
5' perf	4576
1' c.o.	4577
Alpine Rec. @ 4577	
31' drill pipe	4608
1' c.o.	4609
10'perf	4619
1' blank off	4620
3' top of packer	4623
T.C.	
DEPTH	
PACKER straddle packer	4623
1' stubb	4624
10'perf	4634
1' c.o.	4635
31' drill pipe	4666
1' c.o.	4667
Ak-1 Reco. @ 4667	
BULLNOSE 5' bullplug	4672
T.D.	4672

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 10353 DST #1 Ziegler 1-21 Ranken Energy
 DATE: 08/21/97 TIME: 07:35:03

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	110.00	2268.7	0.0	123.87		
***** Start Flow 1	0.00	15.2	0.0	124.46		
	1.00	18.3	3.1	124.67		
	2.00	19.5	4.3	124.81		
	3.00	20.4	5.2	124.91		
	4.00	21.1	5.9	124.96		
	5.00	21.7	6.5	125.00		
	6.00	22.3	7.1	125.03		
	7.00	23.1	7.9	125.05		
	8.00	23.6	8.4	125.08		
	9.00	25.3	10.2	125.09		
	10.00	24.7	9.5	125.10		
	11.00	25.0	9.8	125.13		
	12.00	25.6	10.4	125.16		
	13.00	25.9	10.7	125.20		
	14.00	26.3	11.1	125.24		
	15.00	26.9	11.7	125.27		
	16.00	27.4	12.3	125.31		
	17.00	27.7	12.5	125.35		
	18.00	28.0	12.8	125.39		
	19.00	28.8	13.6	125.42		
	20.00	29.2	14.0	125.46		
	21.00	29.5	14.3	125.48		
	22.00	29.9	14.7	125.50		
	23.00	31.3	16.1	125.52		
	24.00	30.4	15.2	125.53		
	25.00	31.0	15.9	125.55		
	26.00	33.4	18.2	125.57		
	27.00	32.0	16.8	125.58		
	28.00	32.5	17.3	125.60		
	29.00	32.6	17.5	125.63		
***** End Flow 1	30.00	33.0	17.8	125.65		
***** Start Shutin 1	0.00	33.0	0.0	125.65	0.0000	0.001
	1.00	55.0	22.1	125.67	31.0000	0.003
	2.00	79.0	46.0	125.71	16.0000	0.006
	3.00	112.3	79.3	125.74	11.0000	0.013
	4.00	156.9	123.9	125.77	8.5000	0.025
	5.00	214.9	182.0	125.81	7.0000	0.046
	6.00	285.0	252.0	125.86	6.0000	0.081
	7.00	362.3	329.3	125.91	5.2857	0.131
	8.00	440.4	407.5	125.96	4.7500	0.194
	9.00	513.5	480.5	126.02	4.3333	0.264
	10.00	579.0	546.0	126.07	4.0000	0.335
	11.00	636.5	603.5	126.12	3.7273	0.405
	12.00	686.5	653.5	126.18	3.5000	0.471
	13.00	729.7	696.8	126.22	3.3077	0.533
	14.00	766.9	733.9	126.26	3.1429	0.588
	15.00	798.9	765.9	126.31	3.0000	0.638
	16.00	826.6	793.6	126.36	2.8750	0.683
	17.00	850.4	817.5	126.41	2.7647	0.723
	18.00	871.2	838.2	126.47	2.6667	0.759

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	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	19.00	889.4	856.4	126.51	2.5789	0.791
	20.00	905.2	872.3	126.55	2.5000	0.819
	21.00	919.3	886.3	126.57	2.4286	0.845
	22.00	931.7	898.7	126.61	2.3636	0.868
	23.00	942.5	909.5	126.65	2.3043	0.888
	24.00	952.4	919.4	126.68	2.2500	0.907
	25.00	961.2	928.2	126.72	2.2000	0.924
	26.00	969.1	936.1	126.77	2.1538	0.939
	27.00	976.4	943.4	126.79	2.1111	0.953
	28.00	983.0	950.0	126.84	2.0714	0.966
	29.00	989.0	956.0	126.87	2.0345	0.978
***** End Shut-in 1	30.00	989.0	956.0	126.90	2.0000	0.978
***** Start Flow 2	0.00	37.0	0.0	126.87		
	1.00	37.5	0.5	126.85		
	2.00	37.8	0.8	126.83		
	3.00	38.0	1.0	126.80		
	4.00	38.2	1.2	126.77		
	5.00	38.5	1.5	126.75		
	6.00	39.0	2.0	126.73		
	7.00	39.4	2.3	126.71		
	8.00	40.0	3.0	126.70		
	9.00	40.5	3.5	126.70		
	10.00	40.9	3.9	126.69		
	11.00	40.9	3.9	126.70		
	12.00	41.5	4.5	126.71		
	13.00	42.2	5.2	126.70		
	14.00	43.0	6.0	126.71		
	15.00	43.2	6.2	126.72		
	16.00	43.5	6.5	126.74		
	17.00	43.5	6.5	126.74		
	18.00	44.1	7.1	126.74		
	19.00	45.2	8.2	126.76		
	20.00	45.3	8.3	126.78		
	21.00	45.5	8.5	126.78		
	22.00	46.0	9.0	126.80		
	23.00	45.4	8.4	126.81		
	24.00	45.0	8.0	126.82		
	25.00	45.1	8.1	126.83		
	26.00	45.2	8.2	126.84		
	27.00	45.5	8.5	126.86		
	28.00	45.6	8.6	126.87		
***** End Flow 2	29.00	45.9	8.9	126.88		
***** Start Shutin 2	0.00	45.9	0.0	126.88	0.0000	0.002
	1.00	60.3	14.4	126.91	60.0000	0.004
	2.00	77.4	31.5	126.91	30.5000	0.006
	3.00	99.3	53.4	126.93	20.6667	0.01
	4.00	127.6	81.7	126.95	15.7500	0.016
	5.00	163.5	117.6	126.97	12.8000	0.027
	6.00	207.9	162.0	126.99	10.8333	0.043
	7.00	260.6	214.7	127.01	9.4286	0.068
	8.00	320.2	274.3	127.03	8.3750	0.103

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9.00	382.6	336.7	127.06	7.5556	0.146
10.00	444.6	398.7	127.08	6.9000	0.198
11.00	503.8	457.9	127.12	6.3636	0.254
12.00	557.8	511.9	127.15	5.9167	0.311
13.00	606.5	560.6	127.18	5.5385	0.368
14.00	650.0	604.1	127.21	5.2143	0.423
15.00	688.4	642.5	127.25	4.9333	0.474
16.00	722.0	676.1	127.28	4.6875	0.521
17.00	751.5	705.6	127.31	4.4706	0.565
18.00	777.3	731.4	127.34	4.2778	0.604
19.00	800.0	754.1	127.37	4.1053	0.640
20.00	819.9	774.0	127.39	3.9500	0.672
21.00	837.3	791.4	127.41	3.8095	0.701
22.00	852.9	807.0	127.44	3.6818	0.727
23.00	866.6	820.7	127.47	3.5652	0.751
24.00	878.8	832.9	127.48	3.4583	0.772
25.00	889.8	843.9	127.51	3.3600	0.792
26.00	899.8	853.9	127.53	3.2692	0.810
27.00	908.7	862.8	127.56	3.1852	0.826
28.00	916.7	870.8	127.57	3.1071	0.840
29.00	924.1	878.2	127.60	3.0345	0.854
30.00	930.8	884.9	127.62	2.9667	0.866
31.00	937.1	891.2	127.62	2.9032	0.878
32.00	942.8	896.9	127.64	2.8438	0.889
33.00	948.1	902.2	127.65	2.7879	0.899
34.00	952.9	907.0	127.68	2.7353	0.908
35.00	957.5	911.6	127.69	2.6857	0.917
36.00	961.7	915.8	127.70	2.6389	0.925
37.00	965.7	919.8	127.72	2.5946	0.933
38.00	969.4	923.5	127.74	2.5526	0.940
39.00	973.0	927.1	127.75	2.5128	0.947
40.00	976.2	930.3	127.75	2.4750	0.953
41.00	979.4	933.5	127.77	2.4390	0.959
42.00	982.4	936.5	127.79	2.4048	0.965
43.00	985.2	939.3	127.79	2.3721	0.971
44.00	987.9	942.0	127.81	2.3409	0.976
45.00	990.4	944.5	127.82	2.3111	0.981
46.00	992.8	946.9	127.83	2.2826	0.986
47.00	995.1	949.2	127.84	2.2553	0.990
48.00	997.3	951.4	127.86	2.2292	0.995
49.00	999.5	953.6	127.87	2.2041	0.999
50.00	1001.6	955.7	127.87	2.1800	1.003
51.00	1003.5	957.6	127.89	2.1569	1.007
52.00	1005.4	959.5	127.91	2.1346	1.011
53.00	1007.1	961.2	127.91	2.1132	1.014
54.00	1009.0	963.1	127.92	2.0926	1.018
55.00	1010.6	964.7	127.93	2.0727	1.021
56.00	1012.2	966.3	127.95	2.0536	1.025
57.00	1013.8	967.9	127.95	2.0351	1.028
58.00	1015.4	969.5	127.96	2.0172	1.031
59.00	1016.9	971.0	127.97	2.0000	1.034

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DATE: 08/21/97 TIME: 07:35:03

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	60.00	1018.3	972.4	127.98	1.9833	1.037
	61.00	1019.6	973.7	127.99	1.9672	1.040
***** End Shut-in 2	62.00	1021.0	975.1	128.00	1.9516	1.042
***** Final Hydro.	265.00	2252.2	0.0	128.09		

10353 DST #1 Ziegler 1-21 Ranken Energy TEST HISTORY

Flag Points

t (Min.) P (PSig)

A: 0.00 2268.73
 B: 0.00 15.18
 C: 30.00 32.98
 D: 30.00 989.00
 E: 0.00 37.00
 F: 29.00 45.90
 G: 62.00 1020.97
 Q: 0.00 2252.19

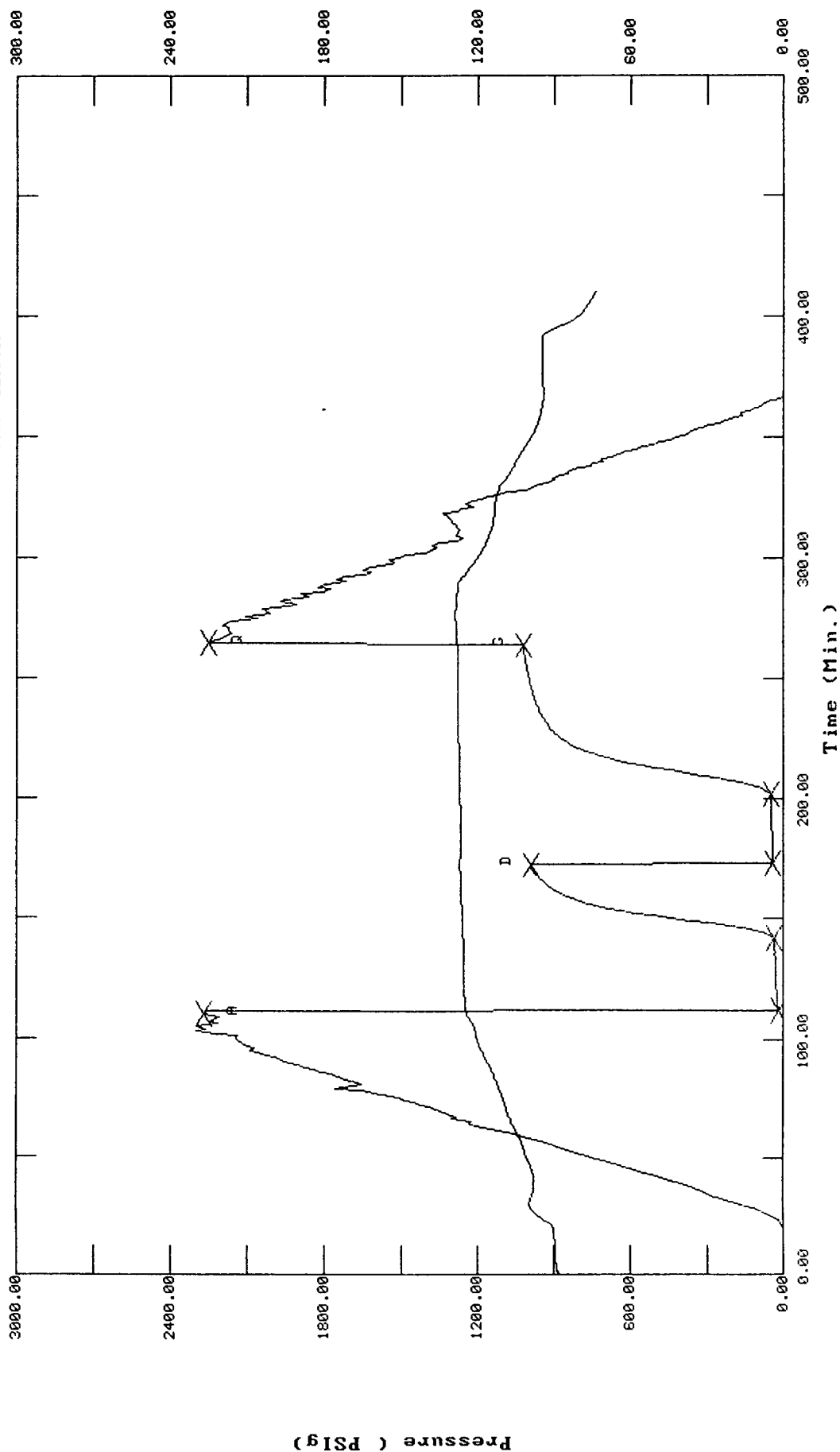
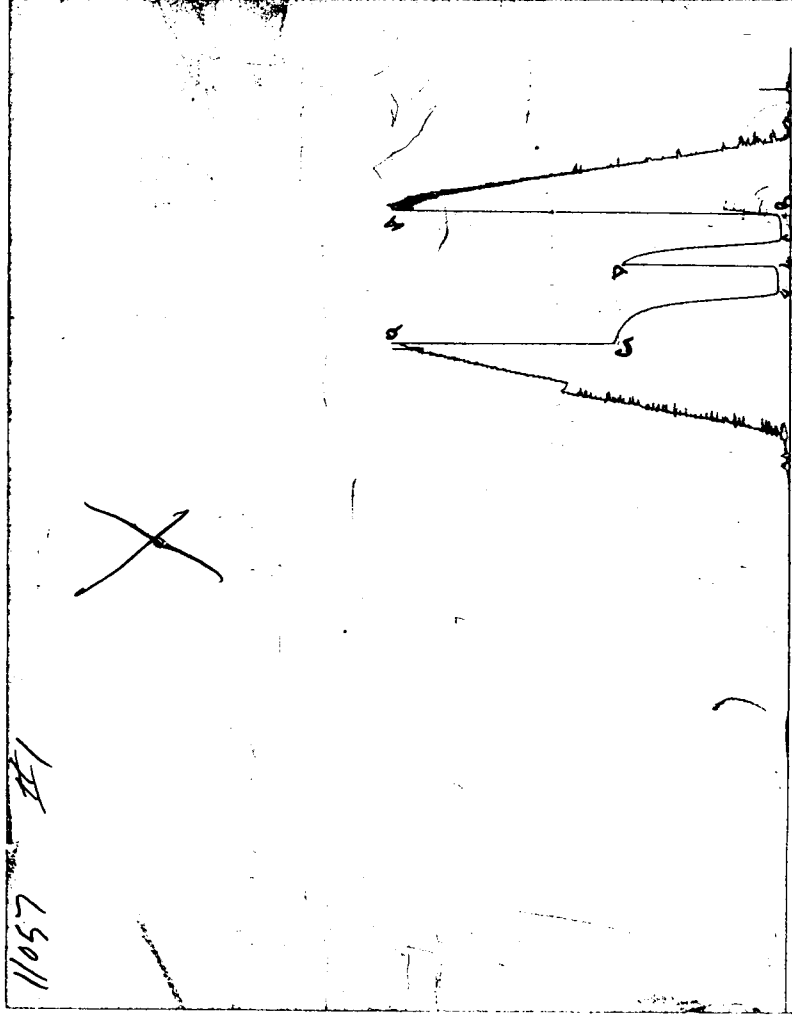
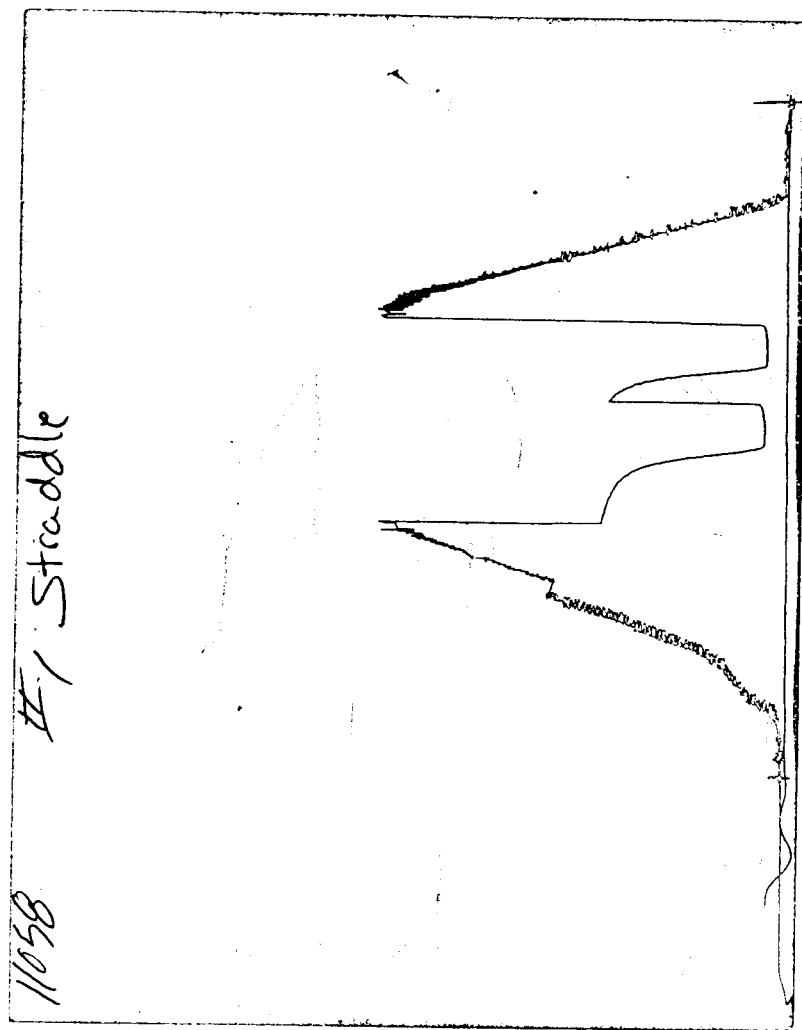


CHART PAGE



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

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