

WELL NAME: Dowell 1-23
COMPANY: Ranken Energy Inc
LOCATION: 23-16S-29W
Lane County Kansas
DATE: 09/12/97

TRILOBITE TESTING L.L.C.

OPERATOR : Ranken Energy Inc.
 WELL NAME: Dowell 1-23
 LOCATION : 23-16S-29W Lane KS
 INTERVAL : 4148.00 To 4176.00 ft

DATE 9-7-97

KB 2791.00 ft TICKET NO: 10362 DST #1
 GR 2786.00 ft FORMATION: Lansing KC "J"
 TD 4176.00 ft TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11057	11057	2342		PF Fr. 2130 to 2200 hr
SI 60	Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0 IS Fr. 2200 to 2300 hr
SF 30	Clock(hrs)	12 hr	12 hr	Elec		SF Fr. 2300 to 2330 hr
FS 45	Depth(ft)	4173.0	4173.0	4166.0	0.0	0.0 FS Fr. 2330 to 1215 hr

	Field	1	2	3	4	
A. Init Hydro	2083.0	2072.0	2110.0	0.0	0.0	T STARTED 1920 hr
B. First Flow	67.0	58.0	16.0	0.0	0.0	T ON BOTM 2127 hr
B1. Final Flow	78.0	63.0	44.0	0.0	0.0	T OPEN 2130 hr
C. In Shut-in	515.0	491.0	502.0	0.0	0.0	T PULLED 1215 hr
D. Init Flow	78.0	87.0	49.0	0.0	0.0	T OUT 0225 hr
E. Final Flow	89.0	74.0	65.0	0.0	0.0	
F. Fl Shut-in	426.0	403.0	425.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2061.0	2021.0	2019.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 46000.00 lbs
						Initial Str Wt 38000.00 lbs
						Unseated Str Wt 38000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.50 in
						D.C. Length 0.00 ft
						D.P. Length 3538.00 ft
						H.W. Length 589.00 ft

RECOVERY

Tot Fluid 101.00 ft of 0.00 ft in DC and 101.00 ft in DP
 1.00 ft of Free Oil
 100.00 ft of Gassy Slight Oil Cut Mud
 0.00 ft of 5%gas 8%oil 87%mud
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 SALINITY 3000.00 P.P.M. A.P.I. Gravity 0.00

Tool Wt.	4000.00 lbs
Wt Set On Packer	26000.00 lbs
Wt Pulled Loose	46000.00 lbs
Initial Str Wt	38000.00 lbs
Unseated Str Wt	38000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	0.00 in
D. Pipe ID	3.50 in
D.C. Length	0.00 ft
D.P. Length	3538.00 ft
H.W. Length	589.00 ft

BLOW DESCRIPTION

Initial Flow:
 Surface blow, built to 3.5"

Initial Shut In:
 No return

Final Flow:
 Weak Surface blow in 17 mins

Final Shut In:
 No return

SAMPLES:
 SENT TO:

MUD DATA-----	
Mud Type	Chemical
Weight	9.10 lb/cf
Vis.	41.00 S/L
W.L.	7.20 in3
F.C.	0.00 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	124.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Shane McBride
Co. Rep.	Mark Herndon
Contr.	Abercrombie
Rig #	8
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONV.

WELL NAME: Dowell 1-23

LOCATION : 23-16-29

TICKET No. 10362 D.S.T. No. 1 DATE 9-7-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 28

TOTAL TOOL 48

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 48

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands66 Single 1 Total 4136

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4184

TOTAL DEPTH 4176

TOTAL DRILL PIPE ABOVE K.B. 8

REMARKS:

P.O. SUB	
C.O. SUB 1'	4128
S.I. TOOL 5'	4134
HMV 5'	4139
JARS	
SAFETY JOINT	
PACKER top	4144
PACKER bottom	4148
DEPTH 4148	
STUBB 1'	4149
ANCHOR 17' perf	4166
Alpine Rec. @ 4166	
5'-perf	4171
T.C.	
DEPTH	
AK-1 Rec. @ 4173	
BULLNOSE 5' bullplug	4176
T.D.	4176

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10362 DST #1 Dowell 1-21 Ranken Energy Inc.

DATE: 09/08/97 TIME: 07:15:08

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	129.00	2109.5	0.0	119.10		
***** Start Flow 1	0.00	16.4	0.0	120.09		
	1.00	19.0	2.6	120.27		
	2.00	21.0	4.6	120.38		
	3.00	22.6	6.2	120.46		
	4.00	24.4	8.1	120.49		
	5.00	25.7	9.3	120.52		
	6.00	26.8	10.5	120.54		
	7.00	28.3	11.9	120.55		
	8.00	28.9	12.6	120.56		
	9.00	30.3	13.9	120.57		
	10.00	31.3	14.9	120.57		
	11.00	33.2	16.9	120.57		
	12.00	34.5	18.1	120.58		
	13.00	35.2	18.9	120.58		
	14.00	34.4	18.0	120.59		
	15.00	35.5	19.1	120.59		
	16.00	36.6	20.2	120.60		
	17.00	37.8	21.5	120.60		
	18.00	37.6	21.2	120.60		
	19.00	37.6	21.2	120.61		
	20.00	37.8	21.4	120.62		
	21.00	38.4	22.1	120.63		
	22.00	38.8	22.4	120.64		
	23.00	39.4	23.0	120.65		
	24.00	39.8	23.4	120.66		
	25.00	40.4	24.1	120.67		
	26.00	42.5	26.1	120.69		
	27.00	44.8	28.5	120.70		
	28.00	43.9	27.5	120.72		
	29.00	44.3	27.9	120.73		
***** End Flow 1	30.00	44.4	28.0	120.75		
***** Start Shutin 1	0.00	44.4	0.0	120.75	0.0000	0.002
	1.00	52.4	8.0	120.76	31.0000	0.003
	2.00	63.9	19.5	120.79	16.0000	0.004
	3.00	78.2	33.8	120.80	11.0000	0.006
	4.00	96.5	52.1	120.83	8.5000	0.009
	5.00	120.5	76.1	120.85	7.0000	0.015
	6.00	151.6	107.2	120.88	6.0000	0.023
	7.00	188.8	144.4	120.90	5.2857	0.036
	8.00	229.3	184.9	120.93	4.7500	0.053
	9.00	266.9	222.5	120.96	4.3333	0.071
	10.00	298.2	253.8	121.00	4.0000	0.089
	11.00	322.7	278.3	121.02	3.7273	0.104
	12.00	342.9	298.5	121.06	3.5000	0.118
	13.00	358.9	314.5	121.09	3.3077	0.129
	14.00	371.9	327.5	121.12	3.1429	0.138
	15.00	382.6	338.2	121.15	3.0000	0.146
	16.00	391.8	347.4	121.19	2.8750	0.153
	17.00	399.7	355.3	121.22	2.7647	0.160
	18.00	406.6	362.2	121.25	2.6667	0.165

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10362 DST #1 Dowell 1-21 Ranken Energy Inc.

DATE: 09/08/97 TIME: 07:15:08

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
19.00	412.7	368.4	121.28	2.5789	0.170
20.00	418.3	373.9	121.31	2.5000	0.175
21.00	423.3	378.9	121.33	2.4286	0.179
22.00	427.9	383.6	121.36	2.3636	0.183
23.00	432.1	387.7	121.40	2.3043	0.187
24.00	436.1	391.7	121.42	2.2500	0.190
25.00	439.7	395.3	121.46	2.2000	0.193
26.00	443.2	398.8	121.48	2.1538	0.196
27.00	446.3	401.9	121.51	2.1111	0.199
28.00	449.3	405.0	121.53	2.0714	0.202
29.00	452.3	407.9	121.57	2.0345	0.205
30.00	455.0	410.6	121.59	2.0000	0.207
31.00	457.6	413.2	121.62	1.9677	0.209
32.00	460.0	415.6	121.65	1.9375	0.212
33.00	462.3	417.9	121.67	1.9091	0.214
34.00	464.5	420.1	121.70	1.8824	0.216
35.00	466.6	422.2	121.73	1.8571	0.218
36.00	468.7	424.3	121.76	1.8333	0.220
37.00	470.7	426.4	121.78	1.8108	0.222
38.00	472.5	428.1	121.82	1.7895	0.223
39.00	474.4	430.0	121.84	1.7692	0.225
40.00	476.1	431.7	121.87	1.7500	0.227
41.00	477.9	433.5	121.90	1.7317	0.228
42.00	479.6	435.2	121.92	1.7143	0.230
43.00	481.1	436.8	121.95	1.6977	0.232
44.00	482.6	438.2	121.98	1.6818	0.233
45.00	484.1	439.7	122.01	1.6667	0.234
46.00	485.6	441.2	122.03	1.6522	0.236
47.00	486.9	442.5	122.06	1.6383	0.237
48.00	488.2	443.8	122.09	1.6250	0.238
49.00	489.5	445.1	122.12	1.6122	0.240
50.00	490.7	446.3	122.13	1.6000	0.241
51.00	492.0	447.6	122.17	1.5882	0.242
52.00	493.0	448.6	122.20	1.5769	0.243
53.00	494.2	449.9	122.22	1.5660	0.244
54.00	495.4	451.0	122.25	1.5556	0.245
55.00	496.5	452.1	122.28	1.5455	0.247
56.00	497.7	453.3	122.30	1.5357	0.248
57.00	498.7	454.3	122.32	1.5263	0.249
58.00	499.8	455.4	122.35	1.5172	0.250
59.00	500.7	456.3	122.38	1.5085	0.251
60.00	501.7	457.3	122.40	1.5000	0.252

***** End Shut-in 1

***** Start Flow 2

0.00	49.1	0.0	122.42
1.00	49.8	0.7	122.42
2.00	50.9	1.8	122.43
3.00	51.8	2.7	122.44
4.00	52.7	3.6	122.45
5.00	53.5	4.4	122.45
6.00	53.7	4.6	122.47
7.00	54.5	5.5	122.50
8.00	55.0	5.9	122.51

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10362 DST #1 Dowell 1-21 Ranken Energy Inc.

DATE: 09/08/97 TIME: 07:15:08

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	9.00	55.6	6.5	122.53		
	10.00	56.1	7.0	122.55		
	11.00	56.6	7.5	122.58		
	12.00	57.2	8.1	122.60		
	13.00	57.6	8.6	122.62		
	14.00	58.4	9.3	122.65		
	15.00	58.6	9.5	122.67		
	16.00	59.2	10.2	122.70		
	17.00	59.9	10.8	122.72		
	18.00	60.3	11.2	122.74		
	19.00	61.1	12.0	122.77		
	20.00	61.6	12.5	122.79		
	21.00	61.8	12.8	122.81		
	22.00	62.7	13.6	122.84		
	23.00	63.0	13.9	122.87		
	24.00	63.4	14.3	122.89		
	25.00	63.7	14.6	122.91		
	26.00	64.0	14.9	122.93		
	27.00	64.4	15.4	122.95		
*****	End Flow 2	28.00	64.9	15.8	122.99	
*****	Start Shutin 2	0.00	64.9	0.0	122.99	0.0000
	1.00	71.7	6.9	123.01	59.0000	0.005
	2.00	80.0	15.1	123.03	30.0000	0.006
	3.00	89.0	24.2	123.05	20.3333	0.008
	4.00	98.9	34.1	123.07	15.5000	0.01
	5.00	109.9	45.1	123.11	12.6000	0.012
	6.00	122.1	57.2	123.12	10.6667	0.015
	7.00	135.2	70.3	123.15	9.2857	0.018
	8.00	149.5	84.6	123.18	8.2500	0.022
	9.00	164.3	99.5	123.20	7.4444	0.027
	10.00	180.2	115.3	123.23	6.8000	0.032
	11.00	196.0	131.2	123.25	6.2727	0.038
	12.00	212.1	147.2	123.28	5.8333	0.045
	13.00	227.7	162.8	123.30	5.4615	0.052
	14.00	242.7	177.8	123.34	5.1429	0.059
	15.00	257.1	192.2	123.36	4.8667	0.066
	16.00	270.7	205.8	123.38	4.6250	0.073
	17.00	283.2	218.4	123.41	4.4118	0.080
	18.00	294.8	230.0	123.44	4.2222	0.087
	19.00	305.5	240.6	123.45	4.0526	0.093
	20.00	315.5	250.6	123.48	3.9000	0.10
	21.00	324.5	259.6	123.51	3.7619	0.105
	22.00	332.8	267.9	123.53	3.6364	0.111
	23.00	340.3	275.5	123.55	3.5217	0.116
	24.00	347.3	282.4	123.57	3.4167	0.121
	25.00	353.7	288.9	123.60	3.3200	0.125
	26.00	359.6	294.8	123.62	3.2308	0.129
	27.00	365.2	300.3	123.65	3.1481	0.133
	28.00	370.4	305.5	123.67	3.0714	0.137
	29.00	375.1	310.2	123.69	3.0000	0.141
	30.00	379.5	314.6	123.71	2.9333	0.144

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10362 DST #1 Dowell 1-21 Ranken Energy Inc.

DATE: 09/08/97 TIME: 07:15:08

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	31.00	383.6	318.8	123.74	2.8710	0.147
	32.00	387.6	322.7	123.75	2.8125	0.150
	33.00	391.2	326.3	123.78	2.7576	0.153
	34.00	394.5	329.7	123.79	2.7059	0.156
	35.00	397.8	332.9	123.81	2.6571	0.158
	36.00	400.9	336.0	123.83	2.6111	0.161
	37.00	403.9	339.0	123.85	2.5676	0.163
	38.00	406.7	341.8	123.88	2.5263	0.165
	39.00	409.3	344.4	123.89	2.4872	0.168
	40.00	411.7	346.9	123.91	2.4500	0.170
	41.00	414.2	349.3	123.93	2.4146	0.172
	42.00	416.5	351.7	123.95	2.3810	0.173
	43.00	418.8	353.9	123.97	2.3488	0.175
	44.00	420.9	356.0	123.98	2.3182	0.177
	45.00	423.1	358.2	124.01	2.2889	0.179
***** End Shut-in 2	46.00	425.1	360.2	124.02	2.2609	0.181
***** Final Hydro.	300.00	2018.6	0.0	124.25		

TEST HISTORY

18362 DST #1 Dowell 1-21 Ranken Energy Inc.

Flag Points

	t (Min.)	P (PSig)
A:	0.00	2109.52
B:	0.00	16.36
C:	30.00	44.39
D:	60.00	501.71
E:	0.00	49.09
F:	28.00	64.87
G:	46.00	425.09
Q:	0.00	2019.62

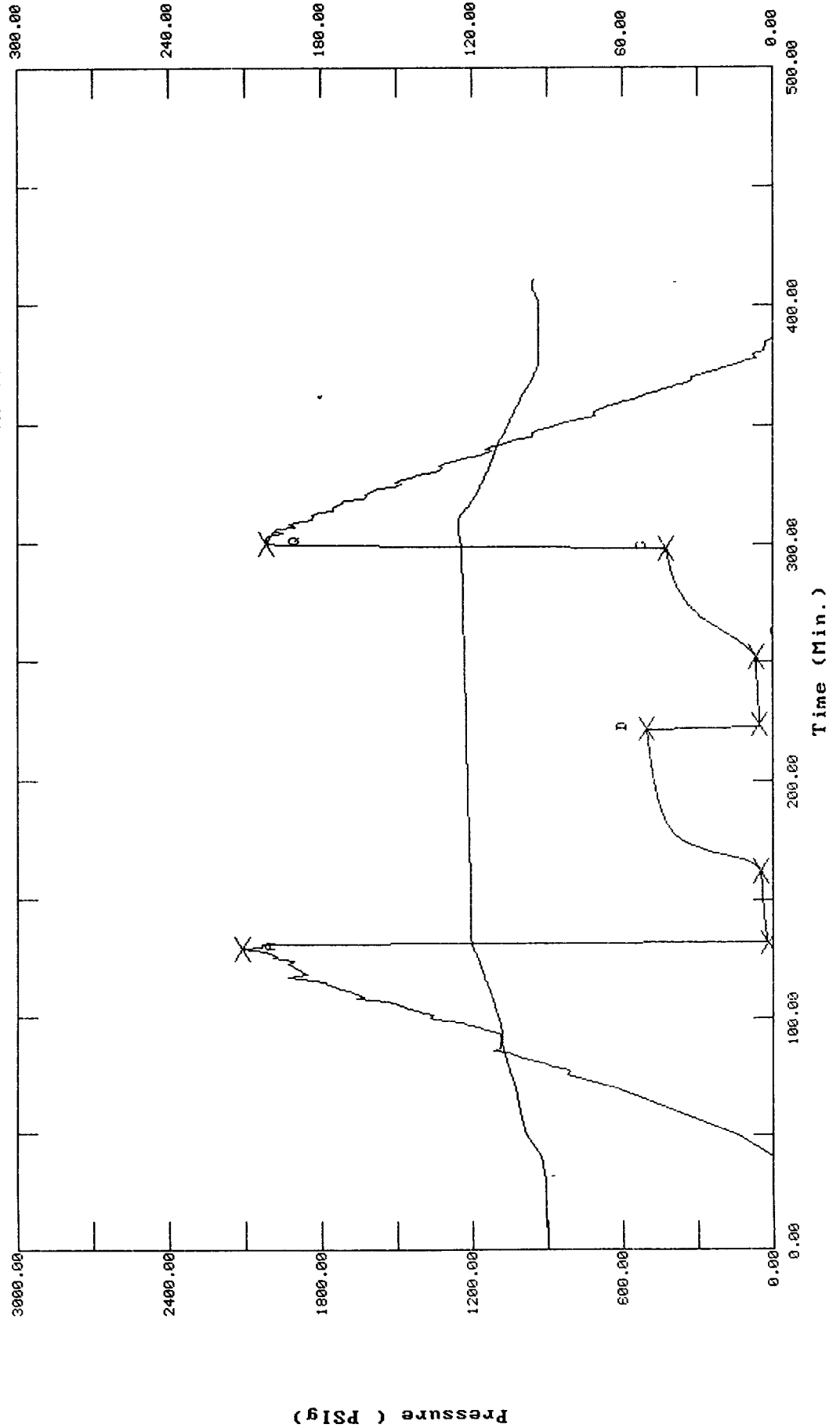
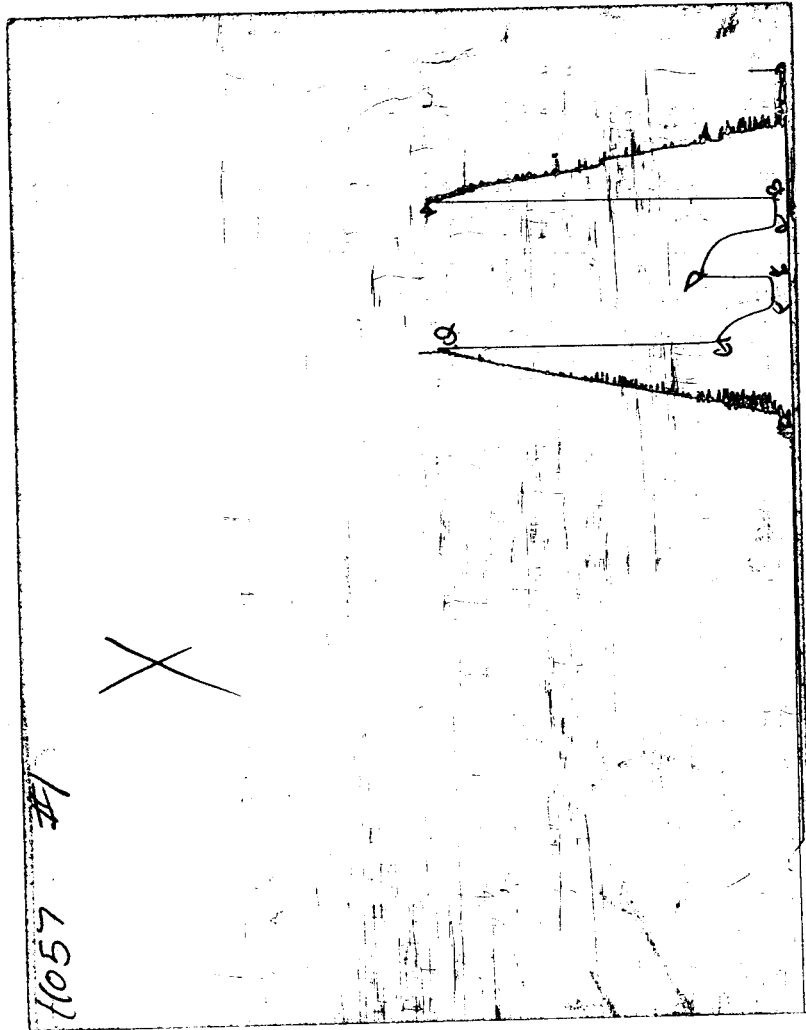


CHART PAGE



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

TRILOBITE TESTING L.L.C.

OPERATOR : Ranken Energy Inc.
 WELL NAME: Dowell 1-23
 LOCATION : 23-16S-29W Lane KS
 INTERVAL : 4206.00 To 4248.00 ft

DATE 9-8-97
 KB 2991.00 ft
 GR 2986.00 ft
 TD 4248.00 ft
 TICKET NO: 10363 DST #2
 FORMATION: Lansing KS "L"
 TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11057	11057	2342		PF Fr. 1620 to 1650 hr
SI 60	Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0 IS Fr. 1650 to 1750 hr
SF 45	Clock(hrs)	12 hr	12 hr	Elec		SF Fr. 1750 to 1835 hr
FS 90	Depth(ft)	4245.0	4245.0	4236.0	0.0	0.0 FS Fr. 1835 to 2005 hr

	Field	1	2	3	4	
A. Init Hydro	2140.0	2112.0	2086.0	0.0	0.0	T STARTED 1420 hr
B. First Flow	89.0	79.0	24.0	0.0	0.0	T ON BOTM 1617 hr
B1. Final Flow	100.0	91.0	62.0	0.0	0.0	T OPEN 1620 hr
C. In Shut-in	280.0	277.0	262.0	0.0	0.0	T PULLED 2005 hr
D. Init Flow	123.0	126.0	66.0	0.0	0.0	T OUT 2230 hr
E. Final Flow	145.0	126.0	93.0	0.0	0.0	
F. Fl Shut-in	269.0	262.0	239.0	0.0	0.0	
G. Final Hydro	2129.0	2096.0	2066.0	0.0	0.0	
Inside/Outside	0	0	I			

RECOVERY

Tot Fluid 170.00 ft of 0.00 ft in DC and 170.00 ft in DP
 5.00 ft of Slightly Gassy Oil
 0.00 ft of 15%gas 85%oil
 105.00 ft of Gassy Heavy Mud Cut Oil
 0.00 ft of 10%gas 30%mud 60%oil
 60.00 ft of Water & Oil Cut Mud
 0.00 ft of 10%water 20%oil 70%mud
 0.00 ft of
 0.00 ft of
 SALINITY 0.00 P.P.M. A.P.I. Gravity 36.50

BLOW DESCRIPTION

Initial Flow:
 Surface blow built to 5.75"

Initial Shut In:
 No reutrnr

Final Flow:
 Surface blow built to 2.75"

Final Shut In:
 No return

SAMPLES:
 SENT TO:

TOOL DATA-----
 Tool Wt. 4000.00 lbs
 Wt Set On Packer 26000.00 lbs
 Wt Pulled Loose 44000.00 lbs
 Initial Str Wt 38000.00 lbs
 Unseated Str Wt 39000.00 lbs
 Bot Choke 0.75 in
 Hole Size 7.88 in
 D Col. ID 5.00 in
 D. Pipe ID 3.50 in
 D.C. Length 0.00 ft
 D.P. Length 3599.00 ft
 H.W. Length 598.00 ft

MUD DATA-----
 Mud Type Chemical
 Weight 9.20 lb/cf
 Vis. 45.00 S/L
 W.L. 7.00 in3
 F.C. 0.00 in
 Mud Drop N

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 N
 Tool Chased N
 Tester Sahne McBride
 Co. Rep. Mark Herndon
 Contr. Abercrombie
 Rig # 8
 Unit #
 Pump T.

Test Successful: Y

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10363 DST #2 Dowell 1-23 Ranken Energy Inc.

DATE: 09/09/97 TIME: 02:18:07

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	118.00	2086.4	0.0	116.60		
***** Start Flow 1	0.00	24.5	0.0	117.72		
	1.00	27.7	3.2	117.94		
	2.00	30.2	5.7	118.08		
	3.00	32.1	7.6	118.19		
	4.00	34.1	9.6	118.26		
	5.00	35.7	11.2	118.32		
	6.00	37.5	13.0	118.37		
	7.00	39.1	14.6	118.41		
	8.00	40.4	15.9	118.45		
	9.00	41.6	17.1	118.50		
	10.00	43.0	18.5	118.53		
	11.00	44.6	20.1	118.56		
	12.00	45.6	21.1	118.60		
	13.00	47.4	22.9	118.63		
	14.00	48.7	24.2	118.67		
	15.00	50.0	25.5	118.70		
	16.00	51.4	26.9	118.74		
	17.00	52.4	27.9	118.77		
	18.00	53.5	29.0	118.81		
	19.00	53.8	29.3	118.85		
	20.00	54.8	30.3	118.88		
	21.00	56.3	31.8	118.91		
	22.00	56.7	32.2	118.96		
	23.00	57.9	33.4	118.99		
	24.00	59.4	34.9	119.03		
	25.00	60.1	35.6	119.08		
	26.00	61.2	36.7	119.11		
	27.00	61.7	37.2	119.16		
***** End Flow 1	28.00	61.8	37.3	119.20		
***** Start Shutin 1	0.00	61.8	0.0	119.20	0.0000	0.004
	1.00	64.4	2.6	119.23	29.0000	0.004
	2.00	77.3	15.4	119.27	15.0000	0.006
	3.00	92.1	30.2	119.32	10.3333	0.008
	4.00	109.8	47.9	119.36	8.0000	0.012
	5.00	130.3	68.5	119.41	6.6000	0.017
	6.00	152.6	90.7	119.46	5.6667	0.023
	7.00	173.6	111.7	119.50	5.0000	0.030
	8.00	189.9	128.1	119.54	4.5000	0.036
	9.00	201.8	139.9	119.59	4.1111	0.041
	10.00	208.8	147.0	119.64	3.8000	0.044
	11.00	213.5	151.7	119.69	3.5455	0.046
	12.00	217.0	155.2	119.74	3.3333	0.047
	13.00	219.9	158.0	119.79	3.1538	0.048
	14.00	222.2	160.4	119.83	3.0000	0.049
	15.00	224.3	162.5	119.88	2.8667	0.050
	16.00	226.2	164.3	119.93	2.7500	0.051
	17.00	228.0	166.2	119.97	2.6471	0.052
	18.00	229.7	167.9	120.01	2.5556	0.053
	19.00	231.2	169.4	120.05	2.4737	0.053
	20.00	232.8	171.0	120.10	2.4000	0.054

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10363 DST #2 Dowell 1-23 Ranken Energy Inc.

DATE: 09/09/97

TIME: 02:18:07

Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶	
21.00	234.1	172.2	120.14	2.3333	0.055	
22.00	235.6	173.7	120.18	2.2727	0.055	
23.00	237.3	175.5	120.23	2.2174	0.056	
24.00	239.1	177.3	120.27	2.1667	0.057	
25.00	240.7	178.9	120.32	2.1200	0.058	
26.00	242.5	180.7	120.35	2.0769	0.059	
27.00	243.7	181.9	120.39	2.0370	0.059	
28.00	245.1	183.2	120.44	2.0000	0.060	
29.00	246.2	184.4	120.47	1.9655	0.061	
30.00	247.2	185.3	120.52	1.9333	0.061	
31.00	248.2	186.3	120.56	1.9032	0.062	
32.00	249.0	187.2	120.61	1.8750	0.062	
33.00	249.8	188.0	120.64	1.8485	0.062	
34.00	250.6	188.8	120.69	1.8235	0.063	
35.00	251.4	189.5	120.73	1.8000	0.063	
36.00	251.9	190.1	120.77	1.7778	0.063	
37.00	252.4	190.6	120.81	1.7568	0.064	
38.00	253.1	191.3	120.85	1.7368	0.064	
39.00	253.7	191.9	120.89	1.7179	0.064	
40.00	254.3	192.4	120.93	1.7000	0.065	
41.00	254.9	193.0	120.97	1.6829	0.065	
42.00	255.5	193.6	121.00	1.6667	0.065	
43.00	255.9	194.0	121.05	1.6512	0.065	
44.00	256.4	194.5	121.09	1.6364	0.066	
45.00	256.8	195.0	121.12	1.6222	0.066	
46.00	257.3	195.5	121.17	1.6087	0.066	
47.00	257.7	195.9	121.21	1.5957	0.066	
48.00	258.2	196.4	121.23	1.5833	0.067	
49.00	258.5	196.6	121.28	1.5714	0.067	
50.00	258.9	197.1	121.31	1.5600	0.067	
51.00	259.2	197.4	121.35	1.5490	0.067	
52.00	259.5	197.7	121.39	1.5385	0.067	
53.00	259.8	198.0	121.43	1.5283	0.068	
54.00	260.1	198.2	121.46	1.5185	0.068	
55.00	260.4	198.6	121.50	1.5091	0.068	
56.00	260.8	198.9	121.54	1.5000	0.068	
57.00	261.0	199.2	121.57	1.4912	0.068	
58.00	261.3	199.4	121.60	1.4828	0.068	
59.00	261.6	199.7	121.64	1.4746	0.068	
***** End Shut-in 1	60.00	261.8	199.9	121.68	1.4667	0.069
***** Start Flow 2	0.00	65.9	0.0	121.70		
	1.00	65.3	-0.6	121.73		
	2.00	66.1	0.3	121.75		
	3.00	67.0	1.2	121.79		
	4.00	68.6	2.8	121.81		
	5.00	69.9	4.0	121.84		
	6.00	70.9	5.0	121.87		
	7.00	71.8	6.0	121.90		
	8.00	73.6	7.7	121.93		
	9.00	74.8	8.9	121.96		
	10.00	75.4	9.6	121.99		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10363 DST #2 Dowell 1-23 Ranken Energy Inc.

DATE: 09/09/97

TIME: 02:18:07

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
11.00	75.9	10.1	122.02		
12.00	76.6	10.7	122.05		
13.00	77.4	11.5	122.09		
14.00	78.1	12.3	122.12		
15.00	78.2	12.3	122.16		
16.00	78.5	12.7	122.18		
17.00	79.5	13.6	122.22		
18.00	79.9	14.0	122.25		
19.00	80.5	14.6	122.28		
20.00	80.7	14.9	122.31		
21.00	81.4	15.5	122.34		
22.00	81.7	15.9	122.38		
23.00	82.2	16.3	122.40		
24.00	82.9	17.0	122.43		
25.00	83.5	17.6	122.47		
26.00	84.1	18.2	122.50		
27.00	84.4	18.5	122.52		
28.00	85.1	19.2	122.56		
29.00	85.6	19.7	122.59		
30.00	86.4	20.5	122.61		
31.00	86.9	21.0	122.64		
32.00	87.4	21.5	122.68		
33.00	88.0	22.2	122.70		
34.00	88.5	22.6	122.73		
35.00	89.0	23.2	122.76		
36.00	89.9	24.0	122.79		
37.00	90.2	24.3	122.81		
38.00	90.5	24.6	122.84		
39.00	90.8	24.9	122.87		
40.00	91.6	25.7	122.90		
41.00	92.0	26.1	122.93		
42.00	92.2	26.4	122.95		
43.00	92.4	26.5	122.98		
44.00	92.6	26.8	123.01		
***** End Flow 2	45.00	93.0	27.1	123.04	
***** Start Shutin 2	0.00	93.0	0.0	123.04	0.0000 0.009
	1.00	100.5	7.5	123.06	74.0000 0.010
	2.00	108.8	15.9	123.08	37.5000 0.012
	3.00	117.8	24.8	123.12	25.3333 0.014
	4.00	126.8	33.8	123.15	19.2500 0.016
	5.00	136.0	43.0	123.18	15.6000 0.018
	6.00	145.2	52.2	123.21	13.1667 0.021
	7.00	154.4	61.4	123.23	11.4286 0.024
	8.00	163.5	70.5	123.25	10.1250 0.027
	9.00	171.9	78.9	123.29	9.1111 0.030
	10.00	179.8	86.9	123.32	8.3000 0.032
	11.00	187.0	94.0	123.35	7.6364 0.035
	12.00	193.4	100.4	123.38	7.0833 0.037
	13.00	198.6	105.7	123.41	6.6154 0.039
	14.00	203.3	110.3	123.43	6.2143 0.041
	15.00	207.0	114.0	123.46	5.8667 0.043

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10363 DST #2 Dowell 1-23 Ranken Energy Inc.

DATE: 09/09/97

TIME: 02:18:07

Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
16.00	210.0	117.0	123.48	5.5625	0.044
17.00	212.3	119.3	123.51	5.2941	0.045
18.00	214.2	121.2	123.53	5.0556	0.046
19.00	215.8	122.8	123.57	4.8421	0.047
20.00	217.0	124.0	123.59	4.6500	0.047
21.00	218.1	125.1	123.61	4.4762	0.048
22.00	219.1	126.1	123.63	4.3182	0.048
23.00	220.0	127.0	123.66	4.1739	0.048
24.00	220.6	127.7	123.68	4.0417	0.049
25.00	221.3	128.3	123.71	3.9200	0.049
26.00	222.0	129.0	123.74	3.8077	0.049
27.00	222.7	129.7	123.75	3.7037	0.050
28.00	223.2	130.2	123.78	3.6071	0.050
29.00	223.7	130.7	123.81	3.5172	0.050
30.00	224.2	131.2	123.83	3.4333	0.050
31.00	224.7	131.7	123.85	3.3548	0.050
32.00	225.1	132.1	123.88	3.2812	0.051
33.00	225.6	132.6	123.90	3.2121	0.051
34.00	225.9	132.9	123.92	3.1471	0.051
35.00	226.4	133.4	123.94	3.0857	0.051
36.00	226.8	133.8	123.97	3.0278	0.051
37.00	227.1	134.1	123.99	2.9730	0.052
38.00	227.4	134.5	124.01	2.9211	0.052
39.00	227.8	134.8	124.03	2.8718	0.052
40.00	228.0	135.0	124.05	2.8250	0.052
41.00	228.4	135.5	124.08	2.7805	0.052
42.00	228.8	135.8	124.10	2.7381	0.052
43.00	229.0	136.0	124.12	2.6977	0.052
44.00	229.3	136.3	124.14	2.6591	0.053
45.00	229.5	136.6	124.17	2.6222	0.053
46.00	229.9	136.9	124.19	2.5870	0.053
47.00	230.2	137.2	124.21	2.5532	0.053
48.00	230.5	137.5	124.22	2.5208	0.053
49.00	230.7	137.7	124.25	2.4898	0.053
50.00	231.1	138.1	124.27	2.4600	0.053
51.00	231.3	138.3	124.30	2.4314	0.053
52.00	231.5	138.6	124.32	2.4038	0.054
53.00	231.7	138.7	124.34	2.3774	0.054
54.00	232.0	139.0	124.35	2.3519	0.054
55.00	232.2	139.2	124.37	2.3273	0.054
56.00	232.5	139.5	124.39	2.3036	0.054
57.00	232.7	139.7	124.42	2.2807	0.054
58.00	233.0	140.0	124.45	2.2586	0.054
59.00	233.1	140.2	124.45	2.2373	0.054
60.00	233.3	140.3	124.48	2.2167	0.054
61.00	233.5	140.5	124.49	2.1967	0.055
62.00	233.7	140.7	124.52	2.1774	0.055
63.00	234.0	141.0	124.54	2.1587	0.055
64.00	234.2	141.3	124.56	2.1406	0.055
65.00	234.5	141.5	124.58	2.1231	0.055
66.00	234.7	141.8	124.59	2.1061	0.055

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10363 DST #2 Dowell 1-23 Ranken Energy Inc.

DATE: 09/09/97

TIME: 02:18:07

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	67.00	235.0	142.0	124.61	2.0896	0.055
	68.00	235.2	142.3	124.64	2.0735	0.055
	69.00	235.5	142.5	124.66	2.0580	0.055
	70.00	235.7	142.7	124.67	2.0429	0.056
	71.00	235.8	142.8	124.69	2.0282	0.056
	72.00	236.0	143.0	124.71	2.0139	0.056
	73.00	236.2	143.3	124.73	2.0000	0.056
	74.00	236.5	143.5	124.75	1.9865	0.056
	75.00	236.7	143.7	124.77	1.9733	0.056
	76.00	236.8	143.9	124.79	1.9605	0.056
	77.00	236.9	143.9	124.81	1.9481	0.056
	78.00	237.3	144.3	124.82	1.9359	0.056
	79.00	237.3	144.4	124.85	1.9241	0.056
	80.00	237.7	144.7	124.86	1.9125	0.056
	81.00	237.8	144.9	124.88	1.9012	0.057
	82.00	237.9	144.9	124.90	1.8902	0.057
	83.00	238.0	145.0	124.92	1.8795	0.057
	84.00	238.3	145.3	124.94	1.8690	0.057
	85.00	238.3	145.4	124.95	1.8588	0.057
	86.00	238.4	145.4	124.97	1.8488	0.057
	87.00	238.6	145.6	124.99	1.8391	0.057
	88.00	238.7	145.7	125.00	1.8295	0.057
	89.00	238.8	145.8	125.03	1.8202	0.057
	90.00	238.9	146.0	125.04	1.8111	0.057
***** End Shut-in 2	91.00	239.1	146.1	125.06	1.8022	0.057
***** Final Hydro.	348.00	2066.0	0.0	125.22		

TEST HISTORY

10363 DST #2 Dowell 1-23 Ranken Energy Inc.

Flag Points

t (Min.) P (PSig)

A:	0.00	2066.44
B:	0.00	24.50
C:	28.00	61.85
D:	60.00	261.76
E:	0.00	65.87
F:	45.00	92.98
G:	91.00	239.10
O:	0.00	2066.04

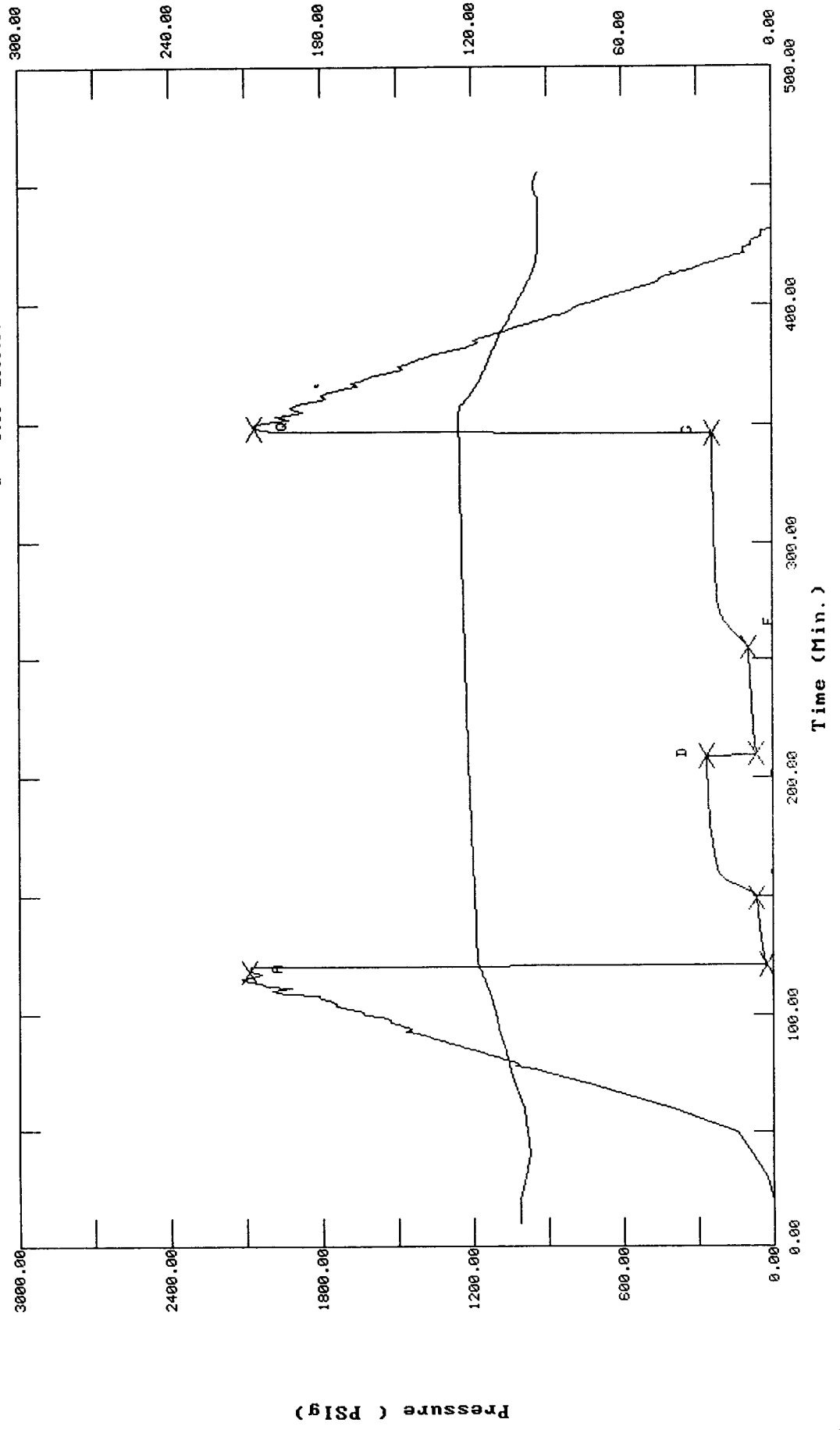
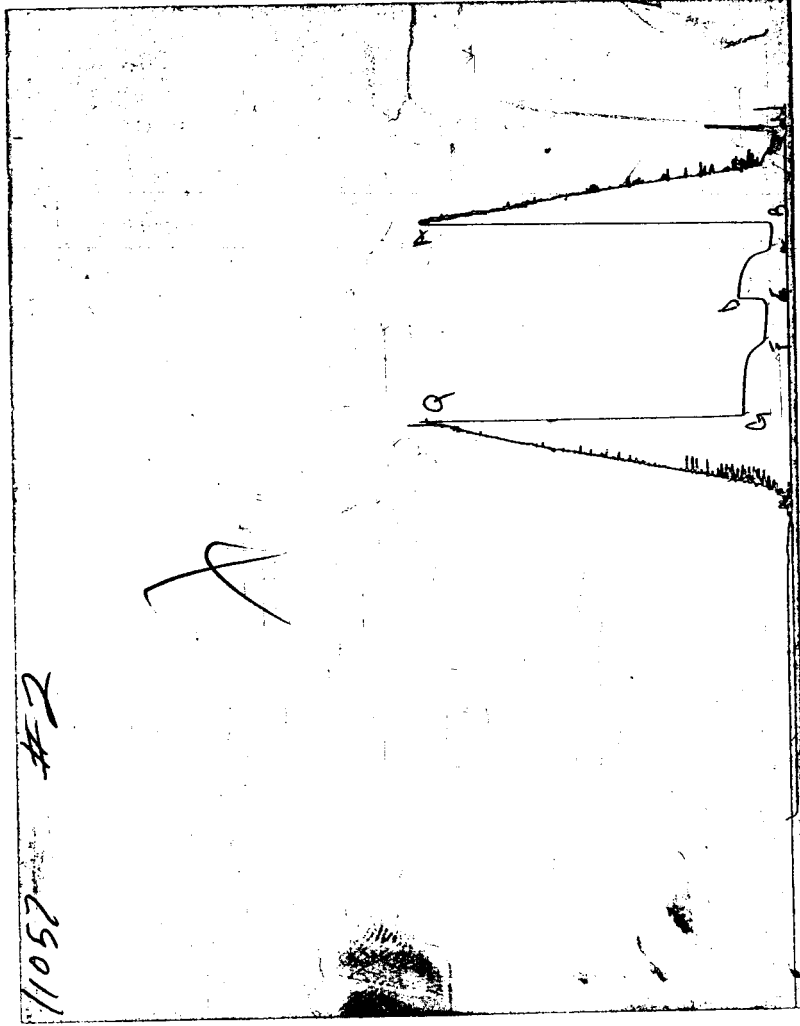


CHART PAGE



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

TRILOBITE TESTING L.L.C.

OPERATOR : Ranken Energy Inc.
 WELL NAME: Dowell 1-23
 LOCATION : 23-16S-29W Lane KS
 INTERVAL : 4318.00 To 4367.00 ft

DATE 9-9-97
 KB 2991.00 ft TICKET NO: 10364 DST #3
 GR 2986.00 ft FORMATION: Marmaton
 TD 4367.00 ft TEST TYPE: CONV.

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15	Rec.	11057	11057	2342		PF Fr. 1244 to 1304 hr
SI 30	Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0 IS Fr. 1304 to 1334 hr
SF 0	Clock(hrs)	12 hr	12 hr	Elec		SF Fr. 1334 to 1339 hr
FS 0	Depth(ft)	4364.0	4364.0	4331.0	0.0	0.0 FS Fr. 1339 to 1339 hr

	Field	1	2	3	4	
A. Init Hydro	2196.0	2183.0	2167.0	0.0	0.0	T STARTED 1100 hr
B. First Flow	33.0	60.0	11.0	0.0	0.0	T ON BOTM 1241 hr
B1. Final Flow	33.0	43.0	15.0	0.0	0.0	T OPEN 1244 hr
C. In Shut-in	44.0	45.0	25.0	0.0	0.0	T PULLED 1339 hr
D. Init Flow	0.0	0.0	0.0	0.0	0.0	T OUT 1540 hr
E. Final Flow	0.0	0.0	0.0	0.0	0.0	
F. Fl Shut-in	0.0	0.0	0.0	0.0	0.0	
G. Final Hydro	2174.0	2133.0	2161.0	0.0	0.0	
Inside/Outside	0	0	I			

TOOL DATA-----
 Tool Wt. 5000.00 lbs
 Wt Set On Packer 26000.00 lbs
 Wt Pulled Loose 48000.00 lbs
 Initial Str Wt 40000.00 lbs
 Unseated Str Wt 40000.00 lbs
 Bot Choke 0.75 in
 Hole Size 7.88 in
 D Col. ID 0.00 in
 D. Pipe ID 3.50 in
 D.C. Length 0.00 ft
 D.P. Length 3724.00 ft
 H.W. I.D 3.40 in
 H.W. Length 598.00 ft

RECOVERY

Tot Fluid 5.00 ft of 0.00 ft in DC and 5.00 ft in DP
 5.00 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 3000.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA-----
 Mud Type Chemical
 Weight 9.40 lb/cf
 Vis. 48.00 S/L
 W.L. 8.00 in3
 F.C. 0.00 in
 Mud Drop Y 20.0 ft

BLOW DESCRIPTION

Initial Flow:
 Weak .5" blow, died in 20 mins

Initial Shut In:
 No return

Final Flow:
 No blow, flushed tool , good surge
 no blow

Final Shut In:
 Pulled tool

SAMPLES:
 SENT TO:

Amt. of fill 0.00 ft
 Btm. H. Temp. 121.00 F
 Hole Condition good
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out N
 Tool Chased N
 Tester Shane McBride
 Co. Rep. Mark Herndon
 Contr. Abercrombie
 Rig # 8
 Unit #
 Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONV.

WELL NAME: Dowell 1-23

LOCATION : 23-16S-29W Lane KS

TICKET No. 10364 D.S.T. No. 3 DATE 9-9-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 19

TOTAL TOOL 39

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

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

TOTAL ASSEMBLY 69

D.C. ABOVE TOOLS.Stands Single Total

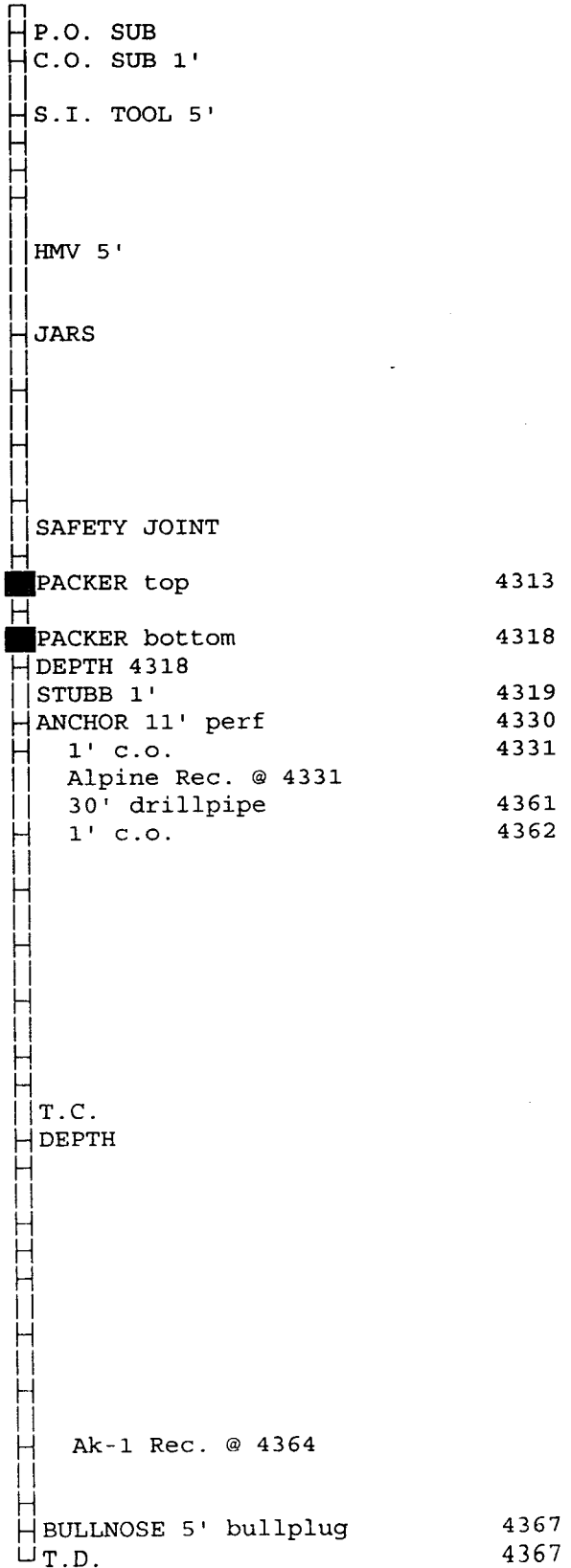
D.P. ABOVE TOOLS.Stands Single 1 Total 4322

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4391

TOTAL DEPTH 4367

TOTAL DRILL PIPE ABOVE K.B. 24

REMARKS:



 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10364 DST#3 Dowell 1-23 Ranken Energy
 DATE: 09/09/97 TIME: 22:54:51

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	105.00	2167.3	0.0	118.48		
***** Start Flow 1	0.00	11.4	0.0	118.63		
	1.00	14.2	2.8	118.75		
	2.00	14.4	3.0	118.81		
	3.00	14.6	3.2	118.83		
	4.00	14.7	3.3	118.83		
	5.00	14.9	3.5	118.82		
	6.00	15.1	3.7	118.81		
	7.00	15.2	3.8	118.80		
	8.00	15.2	3.8	118.80		
	9.00	15.3	3.9	118.78		
	10.00	15.4	3.9	118.78		
	11.00	15.4	4.0	118.78		
	12.00	15.4	4.0	118.79		
	13.00	15.4	3.9	118.79		
	14.00	15.5	4.1	118.80		
***** End Flow 1	15.00	15.5	4.1	118.81		
***** Start Shutin 1	0.00	15.5	0.0	118.81	0.0000	0.000
	1.00	15.5	0.0	118.83	16.0000	0.000
	2.00	15.5	0.0	118.84	8.5000	0.000
	3.00	15.5	0.0	118.86	6.0000	0.000
	4.00	15.6	0.1	118.88	4.7500	0.000
	5.00	15.6	0.1	118.90	4.0000	0.000
	6.00	15.3	-0.3	118.93	3.5000	0.000
	7.00	15.9	0.4	118.95	3.1429	0.000
	8.00	16.4	0.9	118.98	2.8750	0.000
	9.00	16.9	1.3	119.02	2.6667	0.000
	10.00	17.3	1.8	119.05	2.5000	0.000
	11.00	17.7	2.2	119.08	2.3636	0.000
	12.00	18.1	2.6	119.11	2.2500	0.000
	13.00	18.5	2.9	119.15	2.1538	0.000
	14.00	18.8	3.3	119.18	2.0714	0.000
	15.00	18.8	3.3	119.21	2.0000	0.000
	16.00	18.8	3.3	119.25	1.9375	0.000
	17.00	18.9	3.4	119.29	1.8824	0.000
	18.00	19.4	3.9	119.32	1.8333	0.000
	19.00	19.8	4.3	119.36	1.7895	0.000
	20.00	20.2	4.7	119.40	1.7500	0.000
	21.00	20.6	5.1	119.44	1.7143	0.000
	22.00	21.0	5.5	119.47	1.6818	0.000
	23.00	21.3	5.8	119.51	1.6522	0.000
	24.00	21.7	6.2	119.54	1.6250	0.000
	25.00	22.1	6.5	119.58	1.6000	0.000
	26.00	22.5	7.0	119.61	1.5769	0.001
	27.00	22.9	7.4	119.66	1.5556	0.001
	28.00	23.2	7.7	119.70	1.5357	0.001
	29.00	23.6	8.1	119.74	1.5172	0.001
	30.00	24.0	8.5	119.77	1.5000	0.001
	31.00	24.3	8.8	119.81	1.4839	0.001
	32.00	24.8	9.2	119.85	1.4688	0.001
	33.00	25.1	9.6	119.88	1.4545	0.001

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10364 DST#3 Dowell 1-23 Ranken Energy

DATE: 09/09/97 TIME: 22:54:51

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** End Shut-in 1	34.00	25.4	9.9	119.92	1.4412	0.001
***** Final Hydro.	165.00	2160.7	0.0	120.55		

TEST HISTORY

19364 DST#3 Dowell 1-23 Ranken Energy

Flag Points

t (Min.)	P (PSIg)
A: 0.00	2167.34
B: 0.00	11.41
C: 15.00	15.52
D: 34.00	25.42
E: 0.00	2160.71

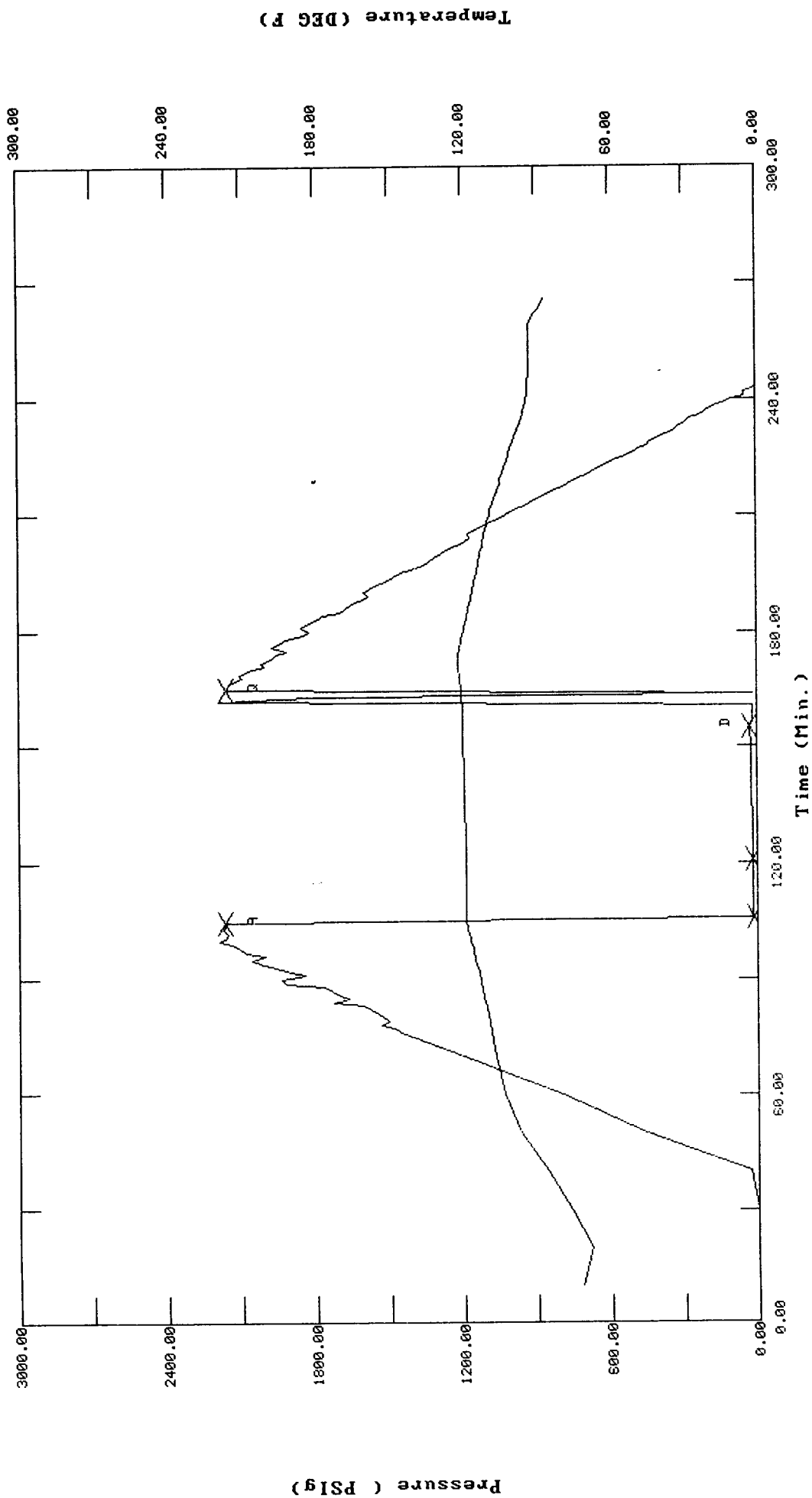
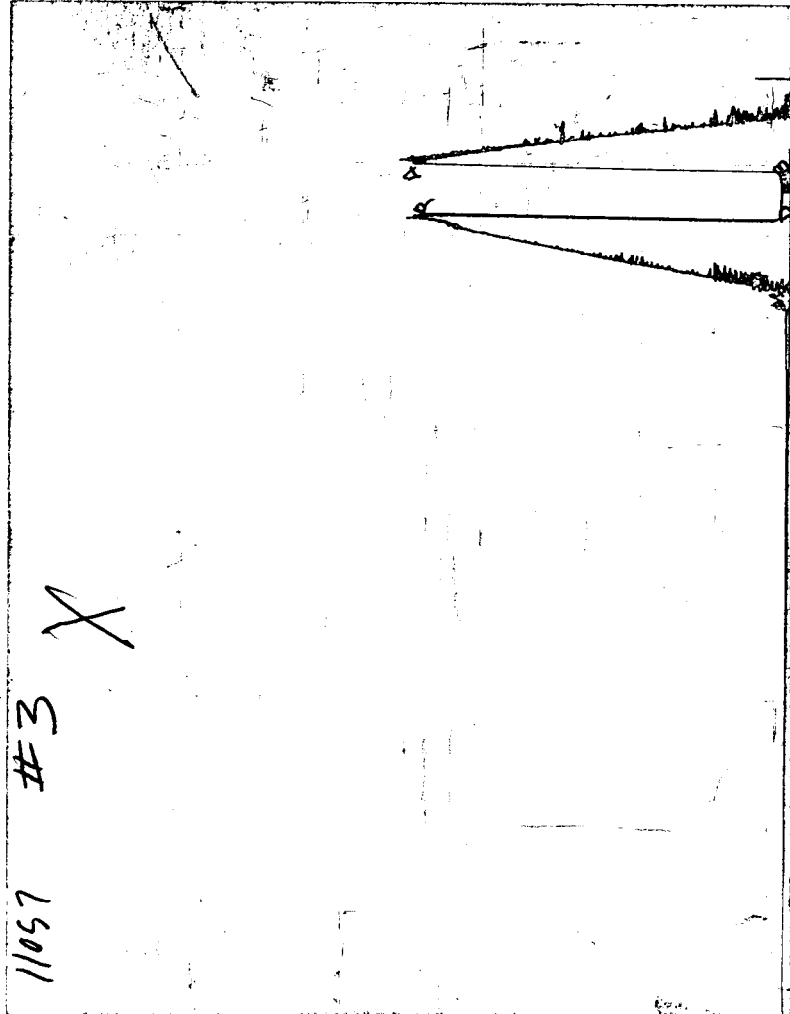


CHART PAGE



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

TRILOBITE TESTING L.L.C.

OPERATOR : Ranken Energy Inc.

DATE 9-9-97

WELL NAME: Dowell 1-23

KB 2991.00 ft

TICKET NO: 10365

DST #4

LOCATION : 23-16S-29W

GR 2986.00 ft

FORMATION: Pawnee

INTERVAL : 4364.00 To 4396.00 ft

TD 4396.00 ft

TEST TYPE: CONV.

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11057	11057	2342		PF Fr. 2345 to 1215 hr
SI 60	Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0 IS Fr. 1215 to 0115 hr
SF 60	Clock(hrs)	12 hr	12 hr	Elec		SF Fr. 0115 to 0215 hr
FS 120	Depth(ft)	4391.0	4391.0	4376.0	0.0	0.0 FS Fr. 0215 to 0415 hr

	Field	1	2	3	4	
A. Init Hydro	2162.0	2133.0	2118.0	0.0	0.0	T STARTED 2145 hr
B. First Flow	56.0	66.0	13.0	0.0	0.0	T ON BOTM 2341 hr
B1. Final Flow	67.0	68.0	35.0	0.0	0.0	T OPEN 2345 hr
C. In Shut-in	1062.0	1039.0	1044.0	0.0	0.0	T PULLED 0415 hr
D. Init Flow	78.0	95.0	36.0	0.0	0.0	T OUT 0645 hr
E. Final Flow	100.0	95.0	66.0	0.0	0.0	
F. Fl Shut-in	1051.0	1027.0	1030.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2140.0	2128.0	2105.0	0.0	0.0	Tool Wt. 4000.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 49000.00 lbs
						Initial Str Wt 40000.00 lbs
						Unseated Str Wt 42000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.50 in
						D.C. Length 0.00 ft
						D.P. Length 3754.00 ft
						H.W. I.D 3.40 in
						H.W. Length 598.00 ft

RECOVERY

Tot Fluid 130.00 ft of 0.00 ft in DC and 130.00 ft in DP
 830.00 ft of Gas In Pipe
 0.00 ft of
 10.00 ft of Gassy Mud Cut Oil
 0.00 ft of 10%gas 20%mud 70%oil
 120.00 ft of Gassy Heavy Oil Cut Mud
 0.00 ft of 40%gas 30%oil 30%mud
 0.00 ft of
 0.00 ft of
 SALINITY 3000.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA-----

Mud Type	Chemical
Weight	9.40 lb/cf
Vis.	52.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop Y	20.0 ft

BLOW DESCRIPTION

Initial Flow:
 Bottom of bucket in 22 mins
 Initial Shut In:
 Weak surface blow in 10 mins, died in 25 mins

Final Flow:
 Bottom of bucket in 2 mins

Final Shut In:
 Weak surface blow in 8 mins, died in 35 mins

SAMPLES:

SENT TO:

Amt. of fill	0.00 ft
Btm. H. Temp.	126.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Shane McBride
Co. Rep.	Mark Herndon
Contr.	Abercrombie
Rig #	8
Unit #	
Pump T.	

Test Successful: Y

CALCULATED RECOVERY ANALYSIS

DST 4

TICKET 10365

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	10	10	1	70	7	0	20	2	
PIPE 2	120	40	48	30	36	0	30	36	
3			0		0	0		0	

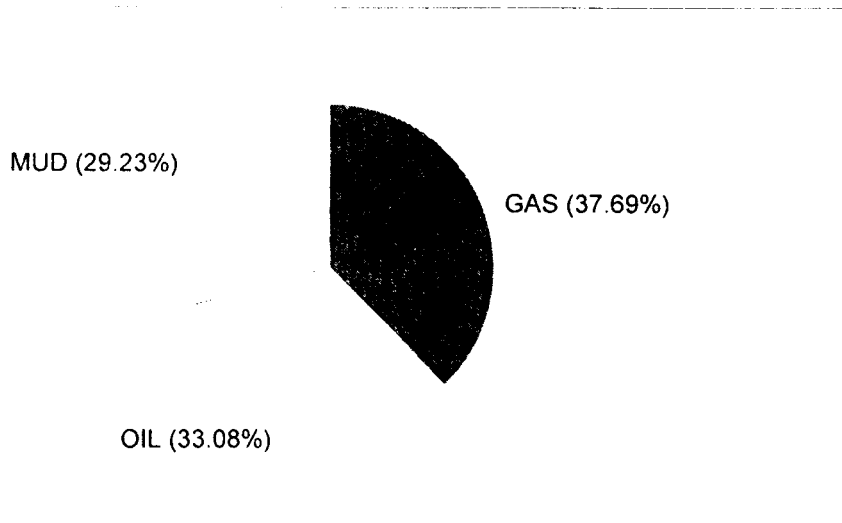
CALCULATED RECOVERY ANALYSIS

DST 4

TICKET 10365

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	10	10	1	70	7	0	20	2	
PIPE 2	120	40	48	30	36	0	30	36	
3			0		0	0		0	
4			0		0	0		0	
5			0		0	0		0	
6			0		0	0		0	
WEIGHT 1			0		0	0		0	
PIPE 2			0		0	0		0	
3			0		0	0		0	
4			0		0	0		0	
DRILL 1			0		0	0		0	
COLLARS 2			0		0	0		0	
3			0		0	0		0	
4			0		0	0		0	
5			0		0	0		0	
TOTAL	130		49		43	0		38	

BBL OIL= 0.61146 * HRS OPEN 90 = BBL/DAY 0.163056
 BBL WATER= 0 * = 0
 BBL MUD= 0.54036
 BBL GAS = 0.69678



Operator.....: Ranken Energy Inc
Well Name.....: Dowell 1-23
DST Number.....: 4

Location.: 23-16S-29W Recorder No...: 2342
Test Type: conv Recorder Depth: 4376
Formation: Pawnee Test Interval.: 4364-4396

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

RESERVOIR PARAMETERS USED:

Net Pay.....	4.00 ft
Porosity.....	22.00 %
Bottom Hole Temp.....	126.00 F
Specific Gravity.....	0.028
API Gravity.....	38.00
Compressibility.....	0.000004 /psi
Viscosity.....	1.8909 cp
Total Recovery.....	130.00 ft
Total Flowing Time.....	90.00 min.
Flow Rate.....	0.16 bbls/d
Final Flowing Pressure.....	66.00 psi
Horner Slope.....	439.4369 psi/cycle
Extrapolated Pressure.....	1132.33 psi
Formation Volume Factor.....	1.12 Reservoir/Surface
Well Bore Radius.....	3.94 in

RESULTS:

Effective Permeability.....	0.032010 md
Flow Capacity.....	0.1280 md.ft
Transmissibility.....	0.0677 md.ft/cp
Skin Factor.....	0.6727
Radius of Investigation.....	5.05412 ft
Damage Ratio.....	1.3173
Productivity Index.....	0.0002 bbls/psi.d
Productivity Index W/O Damage..	0.0002 bbls/psi.d

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10365 DST #4 Dowell 1-23 Ranken Energy Inc.

DATE: 09/10/97 TIME: 09:44:50

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	116.00	2117.8	0.0	116.10		
***** Start Flow 1	0.00	13.3	0.0	116.84		
	1.00	15.9	2.5	117.12		
	2.00	18.4	5.0	117.33		
	3.00	20.5	7.1	117.49		
	4.00	22.3	9.0	117.61		
	5.00	23.7	10.4	117.70		
	6.00	24.1	10.7	117.77		
	7.00	23.2	9.9	117.83		
	8.00	24.2	10.8	117.87		
	9.00	25.0	11.7	117.90		
	10.00	25.7	12.3	117.93		
	11.00	26.3	13.0	117.95		
	12.00	27.0	13.7	117.96		
	13.00	27.6	14.3	117.98		
	14.00	28.3	14.9	117.98		
	15.00	28.9	15.5	117.99		
	16.00	29.5	16.1	117.99		
	17.00	30.0	16.6	118.00		
	18.00	30.5	17.1	118.00		
	19.00	31.0	17.6	118.00		
	20.00	31.5	18.1	118.01		
	21.00	31.9	18.5	118.01		
	22.00	32.5	19.1	118.02		
	23.00	32.9	19.6	118.02		
	24.00	33.2	19.9	118.03		
	25.00	33.8	20.5	118.03		
	26.00	34.2	20.8	118.04		
	27.00	34.5	21.1	118.05		
	28.00	34.8	21.5	118.06		
***** End Flow 1	29.00	35.4	22.1	118.08		
***** Start Shutin 1	0.00	35.4	0.0	118.08	0.0000	0.001
	1.00	38.4	3.0	118.09	30.0000	0.001
	2.00	44.8	9.4	118.11	15.5000	0.002
	3.00	51.2	15.8	118.12	10.6667	0.003
	4.00	57.9	22.5	118.13	8.2500	0.003
	5.00	64.8	29.4	118.16	6.8000	0.004
	6.00	72.1	36.7	118.18	5.8333	0.005
	7.00	79.8	44.4	118.20	5.1429	0.006
	8.00	87.9	52.5	118.22	4.6250	0.008
	9.00	96.0	60.6	118.25	4.2222	0.009
	10.00	105.1	69.7	118.27	3.9000	0.011
	11.00	116.1	80.7	118.31	3.6364	0.013
	12.00	128.0	92.6	118.33	3.4167	0.016
	13.00	141.2	105.7	118.36	3.2308	0.020
	14.00	155.3	119.8	118.39	3.0714	0.024
	15.00	170.4	135.0	118.42	2.9333	0.029
	16.00	187.2	151.7	118.46	2.8125	0.035
	17.00	206.0	170.5	118.49	2.7059	0.042
	18.00	227.0	191.6	118.53	2.6111	0.052
	19.00	251.0	215.6	118.57	2.5263	0.063

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10365 DST #4 Dowell 1-23 Ranken Energy Inc.

DATE: 09/10/97 TIME: 09:44:50

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
20.00	278.8	243.4	118.60	2.4500	0.078
21.00	311.8	276.4	118.64	2.3810	0.097
22.00	350.9	315.5	118.69	2.3182	0.123
23.00	396.3	360.9	118.72	2.2609	0.157
24.00	449.1	413.7	118.77	2.2083	0.202
25.00	509.1	473.7	118.82	2.1600	0.259
26.00	575.2	539.8	118.87	2.1154	0.331
27.00	644.4	609.0	118.92	2.0741	0.415
28.00	711.6	676.2	118.97	2.0357	0.506
29.00	773.0	737.6	119.04	2.0000	0.597
30.00	825.1	789.7	119.09	1.9667	0.681
31.00	866.6	831.2	119.14	1.9355	0.751
32.00	898.5	863.1	119.22	1.9062	0.807
33.00	922.6	887.2	119.26	1.8788	0.851
34.00	940.5	905.1	119.32	1.8529	0.885
35.00	954.2	918.8	119.37	1.8286	0.910
36.00	964.7	929.3	119.43	1.8056	0.931
37.00	973.3	937.9	119.47	1.7838	0.947
38.00	980.4	944.9	119.52	1.7632	0.961
39.00	986.4	951.0	119.57	1.7436	0.973
40.00	991.6	956.2	119.62	1.7250	0.983
41.00	996.2	960.8	119.67	1.7073	0.992
42.00	1000.3	964.9	119.71	1.6905	1.001
43.00	1004.2	968.8	119.76	1.6744	1.008
44.00	1007.6	972.2	119.81	1.6591	1.015
45.00	1010.9	975.5	119.84	1.6444	1.022
46.00	1013.8	978.4	119.88	1.6304	1.028
47.00	1016.7	981.3	119.93	1.6170	1.034
48.00	1019.5	984.1	119.96	1.6042	1.039
49.00	1022.0	986.6	120.02	1.5918	1.044
50.00	1024.4	989.0	120.06	1.5800	1.049
51.00	1026.8	991.4	120.10	1.5686	1.054
52.00	1029.0	993.6	120.14	1.5577	1.059
53.00	1031.2	995.8	120.19	1.5472	1.063
54.00	1033.3	997.9	120.22	1.5370	1.068
55.00	1035.2	999.8	120.26	1.5273	1.072
56.00	1037.2	1001.8	120.30	1.5179	1.076
57.00	1038.9	1003.5	120.34	1.5088	1.079
58.00	1040.6	1005.2	120.38	1.5000	1.083
59.00	1042.4	1007.0	120.42	1.4915	1.087
60.00	1043.9	1008.5	120.46	1.4833	1.090

***** End Shut-in 1

***** Start Flow 2

0.00	36.4	0.0	120.49
1.00	40.6	4.2	120.49
2.00	42.4	6.0	120.49
3.00	44.2	7.8	120.49
4.00	44.9	8.5	120.48
5.00	45.2	8.8	120.49
6.00	45.6	9.2	120.50
7.00	46.2	9.7	120.52
8.00	46.4	10	120.53
9.00	46.9	10.5	120.56

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10365 DST #4 Dowell 1-23 Ranken Energy Inc.

DATE: 09/10/97 TIME: 09:44:50

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	10.00	47.2	10.8	120.59		
	11.00	48.1	11.7	120.62		
	12.00	48.2	11.8	120.65		
	13.00	48.8	12.4	120.68		
	14.00	49.5	13.1	120.72		
	15.00	49.8	13.3	120.76		
	16.00	49.9	13.5	120.78		
	17.00	50.5	14.1	120.82		
	18.00	50.6	14.2	120.86		
	19.00	51.3	14.9	120.90		
	20.00	51.6	15.2	120.93		
	21.00	51.9	15.5	120.97		
	22.00	52.7	16.3	121.01		
	23.00	52.8	16.4	121.04		
	24.00	53.0	16.6	121.09		
	25.00	53.1	16.7	121.12		
	26.00	54.0	17.6	121.16		
	27.00	54.5	18.0	121.21		
	28.00	54.5	18.1	121.24		
	29.00	54.7	18.3	121.28		
	30.00	55.8	19.4	121.32		
	31.00	56.0	19.6	121.35		
	32.00	56.1	19.6	121.39		
	33.00	56.5	20.1	121.43		
	34.00	57.0	20.6	121.46		
	35.00	57.1	20.6	121.51		
	36.00	57.8	21.4	121.54		
	37.00	58.2	21.7	121.58		
	38.00	58.3	21.9	121.61		
	39.00	58.7	22.3	121.65		
	40.00	59.6	23.2	121.69		
	41.00	59.6	23.2	121.72		
	42.00	59.9	23.5	121.76		
	43.00	60.3	23.8	121.80		
	44.00	60.8	24.3	121.84		
	45.00	61.1	24.7	121.87		
	46.00	61.2	24.8	121.91		
	47.00	61.9	25.5	121.95		
	48.00	62.1	25.7	121.98		
	49.00	62.4	26.0	122.02		
	50.00	62.8	26.4	122.06		
	51.00	63.0	26.6	122.10		
	52.00	63.6	27.2	122.13		
	53.00	63.9	27.4	122.16		
	54.00	64.2	27.8	122.20		
	55.00	65.1	28.7	122.23		
	56.00	65.6	29.2	122.27		
	57.00	65.8	29.4	122.30		
***** End Flow 2	58.00	66.0	29.5	122.34		
***** Start Shutin 2	0.00	66.0	0.0	122.34	0.0000	0.004
	1.00	68.0	2.0	122.38	88.0000	0.005

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10365 DST #4 Dowell 1-23 Ranken Energy Inc.

DATE: 09/10/97 TIME: 09:44:50

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
2.00	75.9	9.9	122.41	44.5000	0.006
3.00	84.1	18.1	122.45	30.0000	0.007
4.00	92.6	26.7	122.48	22.7500	0.009
5.00	101.7	35.8	122.52	18.4000	0.010
6.00	111.3	45.3	122.55	15.5000	0.012
7.00	121.4	55.5	122.59	13.4286	0.015
8.00	132.3	66.3	122.62	11.8750	0.017
9.00	144.2	78.2	122.65	10.6667	0.021
10.00	156.9	91.0	122.70	9.7000	0.025
11.00	170.3	104.3	122.72	8.9091	0.029
12.00	185.1	119.1	122.77	8.2500	0.034
13.00	201.1	135.1	122.81	7.6923	0.040
14.00	219.0	153.1	122.84	7.2143	0.048
15.00	239.2	173.2	122.88	6.8000	0.057
16.00	262.4	196.5	122.91	6.4375	0.069
17.00	289.1	223.2	122.95	6.1176	0.084
18.00	320.1	254.1	123.00	5.8333	0.102
19.00	355.3	289.4	123.03	5.5789	0.126
20.00	395.4	329.4	123.08	5.3500	0.156
21.00	440.2	374.2	123.12	5.1429	0.194
22.00	489.5	423.6	123.17	4.9545	0.240
23.00	541.9	476.0	123.21	4.7826	0.294
24.00	595.7	529.8	123.25	4.6250	0.355
25.00	648.2	582.2	123.30	4.4800	0.420
26.00	696.4	630.5	123.34	4.3462	0.485
27.00	738.8	672.8	123.40	4.2222	0.546
28.00	774.3	708.4	123.44	4.1071	0.600
29.00	802.9	737.0	123.49	4.0000	0.645
30.00	825.6	759.6	123.54	3.9000	0.682
31.00	843.2	777.3	123.58	3.8065	0.711
32.00	857.1	791.2	123.63	3.7188	0.735
33.00	868.4	802.4	123.67	3.6364	0.754
34.00	877.5	811.5	123.71	3.5588	0.770
35.00	885.2	819.2	123.76	3.4857	0.784
36.00	891.7	825.8	123.79	3.4167	0.795
37.00	897.5	831.6	123.82	3.3514	0.806
38.00	902.6	836.7	123.86	3.2895	0.815
39.00	907.3	841.3	123.90	3.2308	0.823
40.00	911.5	845.6	123.93	3.1750	0.831
41.00	915.4	849.4	123.95	3.1220	0.838
42.00	919.1	853.1	124.00	3.0714	0.845
43.00	922.4	856.5	124.03	3.0233	0.851
44.00	925.7	859.8	124.07	2.9773	0.857
45.00	928.8	862.9	124.10	2.9333	0.863
46.00	931.8	865.9	124.13	2.8913	0.868
47.00	934.7	868.7	124.16	2.8511	0.874
48.00	937.3	871.3	124.19	2.8125	0.879
49.00	940.0	874.0	124.21	2.7755	0.884
50.00	942.4	876.5	124.25	2.7400	0.888
51.00	944.9	878.9	124.27	2.7059	0.893
52.00	947.1	881.2	124.31	2.6731	0.897

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10365 DST #4 Dowell 1-23 Ranken Energy Inc.

DATE: 09/10/97 TIME: 09:44:50

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
53.00	949.4	883.4	124.33	2.6415	0.901
54.00	951.6	885.6	124.36	2.6111	0.905
55.00	953.6	887.6	124.39	2.5818	0.909
56.00	955.6	889.6	124.42	2.5536	0.913
57.00	957.7	891.7	124.44	2.5263	0.917
58.00	959.7	893.7	124.47	2.5000	0.921
59.00	961.6	895.7	124.50	2.4746	0.925
60.00	963.5	897.5	124.53	2.4500	0.928
61.00	965.2	899.3	124.55	2.4262	0.932
62.00	967.0	901.0	124.58	2.4032	0.935
63.00	968.8	902.8	124.61	2.3810	0.939
64.00	970.4	904.4	124.64	2.3594	0.942
65.00	972.0	906.1	124.66	2.3385	0.945
66.00	973.6	907.6	124.69	2.3182	0.948
67.00	975.1	909.1	124.71	2.2985	0.951
68.00	976.6	910.6	124.74	2.2794	0.954
69.00	978.0	912.0	124.75	2.2609	0.956
70.00	979.3	913.4	124.80	2.2429	0.959
71.00	980.9	914.9	124.82	2.2254	0.962
72.00	982.2	916.2	124.84	2.2083	0.965
73.00	983.5	917.6	124.87	2.1918	0.967
74.00	985.0	919.0	124.90	2.1757	0.970
75.00	986.2	920.3	124.92	2.1600	0.973
76.00	987.5	921.5	124.94	2.1447	0.975
77.00	988.7	922.8	124.97	2.1299	0.978
78.00	990.0	924.0	124.99	2.1154	0.980
79.00	991.3	925.3	125.02	2.1013	0.983
80.00	992.4	926.4	125.04	2.0875	0.985
81.00	993.5	927.6	125.06	2.0741	0.987
82.00	994.7	928.7	125.09	2.0610	0.989
83.00	995.9	929.9	125.12	2.0482	0.992
84.00	997.0	931.0	125.15	2.0357	0.994
85.00	998.1	932.1	125.16	2.0235	0.996
86.00	999.1	933.1	125.19	2.0116	0.998
87.00	1000.2	934.2	125.22	2.0000	1.000
88.00	1001.2	935.2	125.24	1.9886	1.002
89.00	1002.3	936.3	125.26	1.9775	1.005
90.00	1003.3	937.3	125.29	1.9667	1.007
91.00	1004.3	938.3	125.31	1.9560	1.009
92.00	1005.2	939.2	125.34	1.9457	1.010
93.00	1006.2	940.2	125.36	1.9355	1.012
94.00	1007.2	941.3	125.38	1.9255	1.014
95.00	1008.1	942.2	125.40	1.9158	1.016
96.00	1009.1	943.2	125.44	1.9062	1.018
97.00	1010.1	944.2	125.45	1.8969	1.020
98.00	1011.2	945.2	125.47	1.8878	1.022
99.00	1012.0	946.0	125.49	1.8788	1.024
100.00	1012.7	946.8	125.52	1.8700	1.026
101.00	1013.6	947.6	125.54	1.8614	1.027
102.00	1014.5	948.6	125.56	1.8529	1.029
103.00	1015.3	949.3	125.58	1.8447	1.031

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10365 DST #4 Dowell 1-23 Ranken Energy Inc.
 DATE: 09/10/97 TIME: 09:44:50

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	104.00	1016.2	950.2	125.60	1.8365	1.033
	105.00	1017.0	951.1	125.64	1.8286	1.034
	106.00	1017.9	951.9	125.65	1.8208	1.036
	107.00	1018.6	952.7	125.67	1.8131	1.038
	108.00	1019.4	953.4	125.70	1.8056	1.039
	109.00	1020.2	954.3	125.72	1.7982	1.041
	110.00	1021.1	955.1	125.74	1.7909	1.043
	111.00	1021.8	955.9	125.76	1.7838	1.044
	112.00	1022.6	956.6	125.78	1.7768	1.046
	113.00	1023.3	957.4	125.80	1.7699	1.047
	114.00	1024.1	958.1	125.82	1.7632	1.049
	115.00	1024.8	958.9	125.84	1.7565	1.050
	116.00	1025.6	959.6	125.87	1.7500	1.052
	117.00	1026.3	960.3	125.89	1.7436	1.053
	118.00	1026.9	961.0	125.91	1.7373	1.055
	119.00	1027.7	961.7	125.93	1.7311	1.056
	120.00	1028.4	962.4	125.95	1.7250	1.058
	121.00	1029.1	963.2	125.97	1.7190	1.059
	122.00	1029.9	963.9	125.99	1.7131	1.061
***** End Shut-in 2	123.00	1030.5	964.6	126.02	1.7073	1.062
***** Final Hydro.	393.00	2104.8	0.0	126.38		

TEST HISTORY

10365 DST #4 Dowell 1-23 Ranken Energy Inc.

Flag Points

t (Min.) P (PSIg)

A: 0.00 2117.83
 B: 0.00 13.34
 C: 29.00 35.41
 D: 60.00 1043.89
 E: 0.00 36.42
 F: 58.00 65.96
 G: 123.00 1030.54
 H: 0.00 2104.82

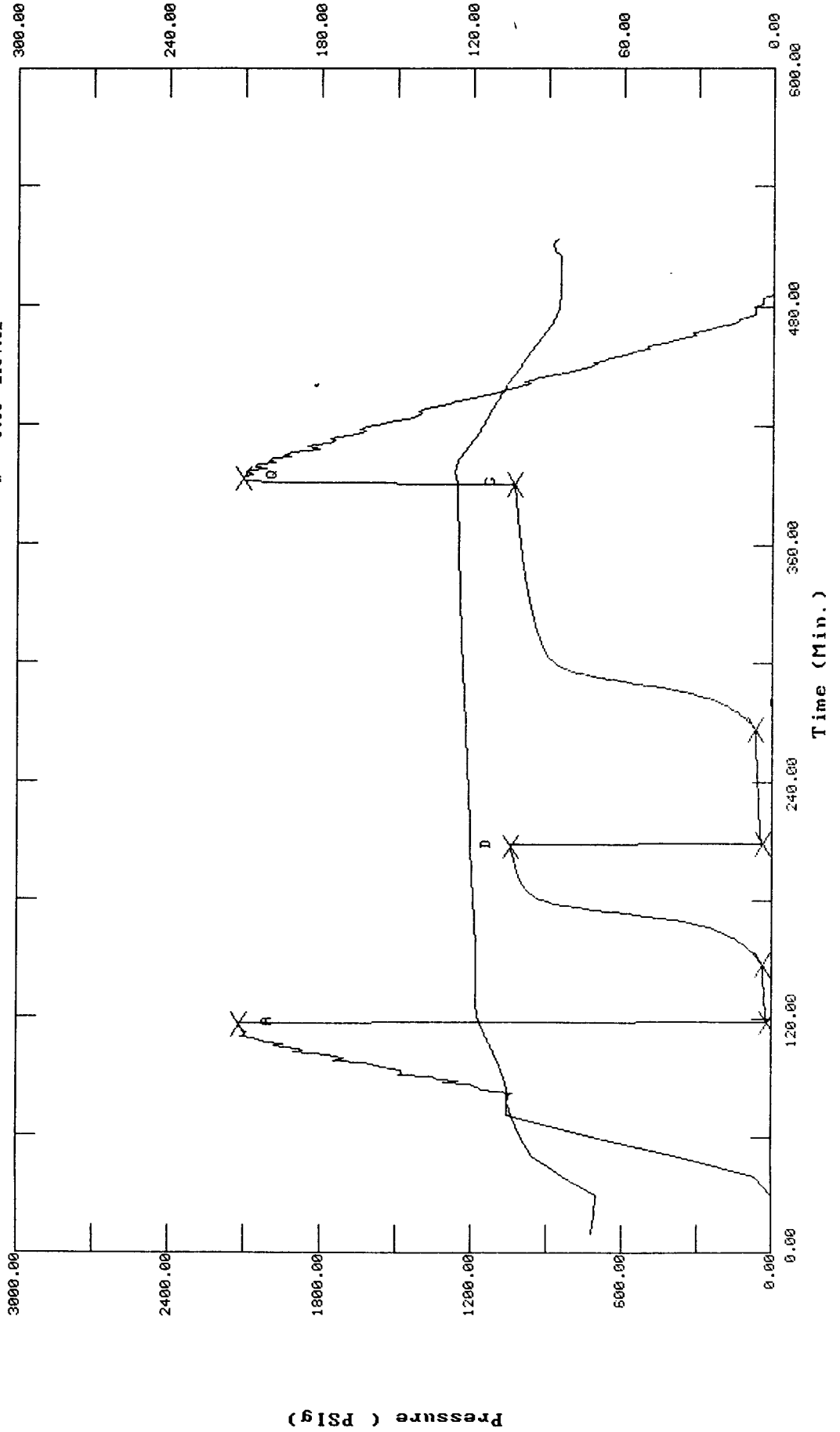
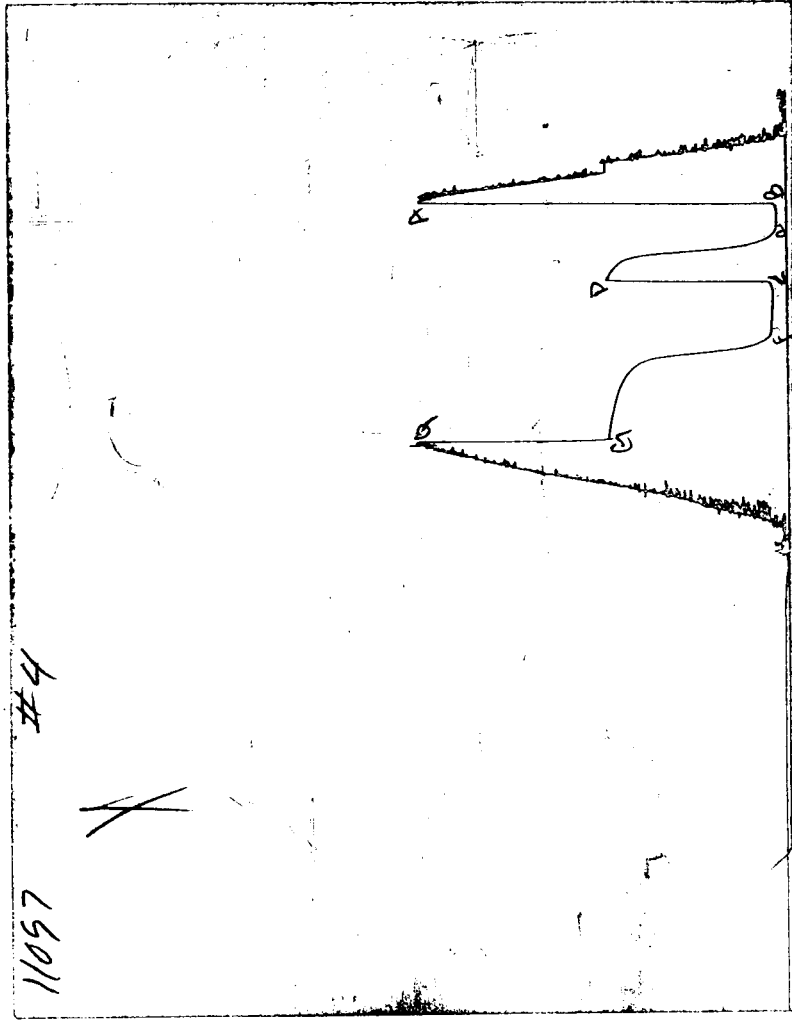


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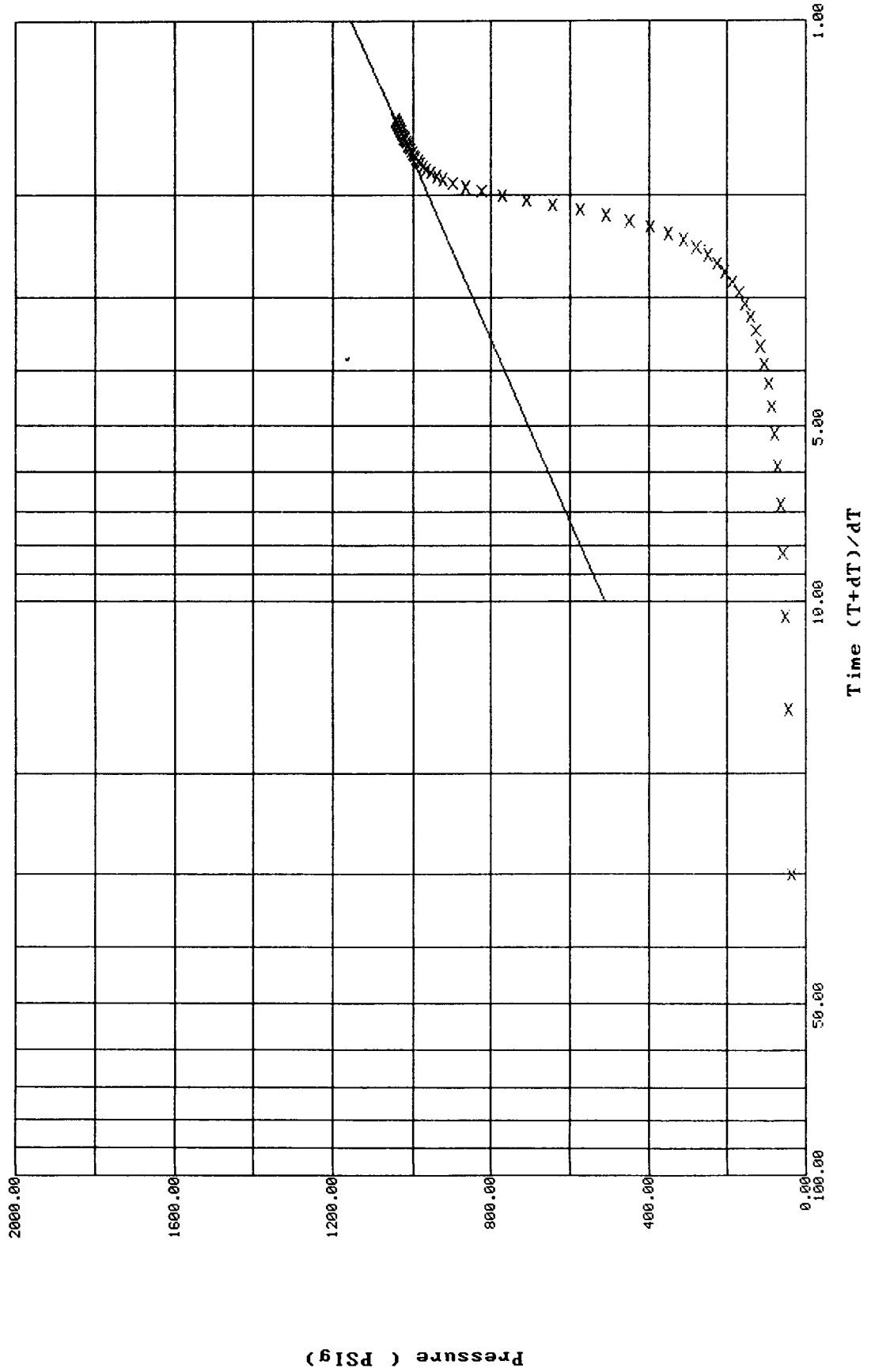
This is a photocopy of the actual AK-1 recorder chart

Horner Plot: shut-in #1

10365 DST #4 Dowell 1-23 Ranken Energy Inc.

Slope: 643.9089 PSig/cycle

Ext. Pressure: 1154.1626 PSig



Horner Plot: shut-in #2

10365 DST #4 Dowell 1-23 Ranken Energy Inc.

Slope: 439.4369 PSig/cycle

Ext. Pressure: 1132.3259 PSig

