

WELL NAME: Long Ranch #2
COMPANY: Dark Horse Oil Company
LOCATION: 04-02S-27W
Decatur County Kansas
DATE: 09/11/97

TRILOBITE TESTING L.L.C.

OPERATOR : Dark Horse Oil Co.

DATE 09/08/97

WELL NAME: Long Ranch #2

KB 2661.00 ft

TICKET NO: 10532 DST #1

LOCATION : 04-02S-27W Decatur KS

GR 2656.00 ft

FORMATION: Toronto/Lansing "A"

INTERVAL : 3494.00 To 3546.00 ft

TD 3546.00 ft

TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11084	11084	2341			PF Fr. 0653 to 0723 hr
SI 45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0	IS Fr. 0723 to 0808 hr
SF 45	Clock(hrs)	12hr.	12hr.	Elec			SF Fr. 0808 to 0853 hr
FS 45	Depth(ft)	3510.0	3510.0	3495.0	0.0	0.0	FS Fr. 0853 to 0938 hr

	Field	1	2	3	4	
A. Init Hydro	1734.0	1742.0	1683.0	0.0	0.0	T STARTED 0540 hr
B. First Flow	55.0	49.0	23.0	0.0	0.0	T ON BOTM 0651 hr
B1. Final Flow	88.0	77.0	73.0	0.0	0.0	T OPEN 0653 hr
C. In Shut-in	1153.0	1143.0	1146.0	0.0	0.0	T PULLED 0938 hr
D. Init Flow	98.0	107.0	76.0	0.0	0.0	T OUT 1111 hr
E. Final Flow	143.0	128.0	129.0	0.0	0.0	
F. Fl Shut-in	1121.0	1108.0	1115.0	0.0	0.0	
G. Final Hydro	1691.0	1601.0	1656.0	0.0	0.0	
Inside/Outside	0	0	I			

TOOL DATA-----

Tool Wt.	2400.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	82000.00 lbs
Initial Str Wt	62000.00 lbs
Unseated Str Wt	64000.00 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	2985.00 ft

RECOVERY

Tot Fluid 240.00 ft of 240.00 ft in DC and 0.00 ft in DP

60.00 ft of Mud

0.00 ft of

180.00 ft of Muddy Water

0.00 ft of 20% mud 80% water

0.00 ft of

0.00 ft of

0.00 ft of

0.00 ft of Rw .145@85

SALINITY 44000.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA-----

Mud Type	Chemical
Weight	8.80 lb/cf
Vis.	44.00 S/L
W.L.	6.80 in3
F.C.	0.00 in
Mud Drop	

BLOW DESCRIPTION

Initial Flow-
Weak 1/4" blow building to 5 1/2"

Initial Shutin-
No blow

Final Flow-
Surface blow building to 3 1/2"

Final Shutin-
No blow

Amt. of fill	0.00 ft
Btm. H. Temp.	108.00 F
Hole Condition	fair
% 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.	

SAMPLES:

SENT TO:

Test Successful: Y

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10532 Dark Horse Oil Long Ranch #2 DST #1

DATE: 09/08/97

TIME: 05:13:30

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	106.50	1683.1	0.0	105.31		
***** Start Flow 1	0.00	22.6	0.0	105.20		
	0.50	24.1	1.5	105.21		
	1.00	25.5	3.0	105.22		
	1.50	26.8	4.2	105.23		
	2.00	28.1	5.5	105.24		
	2.50	29.2	6.6	105.25		
	3.00	30.4	7.9	105.25		
	3.50	31.5	9.0	105.25		
	4.00	32.6	10.1	105.26		
	4.50	33.8	11.2	105.26		
	5.00	34.8	12.2	105.26		
	5.50	35.6	13.1	105.27		
	6.00	36.5	13.9	105.27		
	6.50	37.4	14.8	105.29		
	7.00	38.2	15.7	105.28		
	7.50	39.1	16.5	105.30		
	8.00	40.0	17.4	105.30		
	8.50	40.9	18.3	105.31		
	9.00	41.7	19.2	105.32		
	9.50	42.9	20.3	105.33		
	10.00	43.9	21.3	105.34		
	10.50	45.7	23.1	105.34		
	11.00	50.8	28.2	105.35		
	11.50	65.3	42.7	105.36		
	12.00	50.4	27.8	105.37		
	12.50	50.1	27.5	105.38		
	13.00	49.8	27.3	105.41		
	13.50	50.5	27.9	105.42		
	14.00	50.9	28.3	105.45		
	14.50	51.2	28.6	105.45		
	15.00	51.6	29.1	105.47		
	15.50	52.4	29.8	105.50		
	16.00	53.2	30.6	105.52		
	16.50	54.0	31.4	105.54		
	17.00	55.3	32.7	105.56		
	17.50	56.7	34.1	105.59		
	18.00	57.5	35.0	105.60		
	18.50	58.6	36.1	105.63		
	19.00	60.6	38.0	105.64		
	19.50	64.3	41.7	105.67		
	20.00	58.7	36.1	105.67		
	20.50	58.6	36.1	105.68		
	21.00	59.3	36.8	105.70		
	21.50	59.9	37.4	105.73		
	22.00	60.6	38.1	105.73		
	22.50	61.6	39.0	105.74		
	23.00	62.5	40.0	105.75		
	23.50	63.4	40.8	105.78		
	24.00	63.9	41.3	105.78		
	24.50	64.4	41.9	105.79		

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
	25.00	65.1	42.5	105.81		
	25.50	65.6	43.0	105.81		
	26.00	66.2	43.6	105.81		
	26.50	66.9	44.3	105.81		
	27.00	67.6	45.0	105.82		
	27.50	68.3	45.8	105.82		
	28.00	69.0	46.4	105.82		
	28.50	69.7	47.1	105.82		
	29.00	70.4	47.9	105.83		
	29.50	71.1	48.5	105.84		
	30.00	71.8	49.2	105.85		
	30.50	72.4	49.8	105.87		
***** End Flow 1	31.00	73.0	50.4	105.89		
***** Start Shutin 1	0.00	73.0	0.0	105.89	0.0000	0.005
	0.50	87.8	14.8	105.90	63.0000	0.008
	1.00	170.9	97.9	105.94	32.0000	0.029
	1.50	386.0	313.0	105.97	21.6667	0.149
	2.00	607.9	534.9	106.00	16.5000	0.370
	2.50	747.8	674.8	106.04	13.4000	0.559
	3.00	830.7	757.7	106.06	11.3333	0.690
	3.50	883.3	810.3	106.09	9.8571	0.780
	4.00	920.9	847.9	106.12	8.7500	0.848
	4.50	948.7	875.7	106.14	7.8889	0.900
	5.00	970.7	897.7	106.19	7.2000	0.942
	5.50	988.4	915.4	106.21	6.6364	0.977
	6.00	1003.1	930.0	106.23	6.1667	1.006
	6.50	1015.5	942.5	106.26	5.7692	1.031
	7.00	1025.8	952.8	106.28	5.4286	1.052
	7.50	1034.4	961.4	106.29	5.1333	1.070
	8.00	1042.4	969.4	106.33	4.8750	1.087
	8.50	1049.8	976.8	106.36	4.6471	1.102
	9.00	1056.2	983.2	106.38	4.4444	1.116
	9.50	1061.9	988.9	106.41	4.2632	1.128
	10.00	1067.2	994.1	106.42	4.1000	1.139
	10.50	1071.8	998.8	106.43	3.9524	1.149
	11.00	1076.1	1003.0	106.46	3.8182	1.158
	11.50	1080.0	1007.0	106.48	3.6957	1.166
	12.00	1083.6	1010.6	106.50	3.5833	1.174
	12.50	1086.9	1013.9	106.51	3.4800	1.181
	13.00	1089.9	1016.9	106.52	3.3846	1.188
	13.50	1092.7	1019.7	106.54	3.2963	1.194
	14.00	1095.3	1022.3	106.54	3.2143	1.200
	14.50	1097.8	1024.8	106.57	3.1379	1.205
	15.00	1100.2	1027.2	106.60	3.0667	1.210
	15.50	1102.3	1029.3	106.60	3.0000	1.215
	16.00	1104.3	1031.3	106.61	2.9375	1.220
	16.50	1106.4	1033.4	106.63	2.8788	1.224
	17.00	1108.1	1035.1	106.64	2.8235	1.228
	17.50	1109.8	1036.8	106.66	2.7714	1.232
	18.00	1111.4	1038.4	106.68	2.7222	1.235
	18.50	1112.9	1039.9	106.68	2.6757	1.238

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19.00	1114.3	1041.3	106.69	2.6316	1.242
19.50	1115.8	1042.8	106.71	2.5897	1.245
20.00	1117.1	1044.1	106.71	2.5500	1.248
20.50	1118.4	1045.4	106.72	2.5122	1.251
21.00	1119.6	1046.5	106.74	2.4762	1.253
21.50	1120.7	1047.7	106.75	2.4419	1.256
22.00	1121.9	1048.9	106.75	2.4091	1.259
22.50	1123.0	1049.9	106.77	2.3778	1.261
23.00	1124.0	1051.0	106.78	2.3478	1.263
23.50	1125.0	1052.0	106.78	2.3191	1.266
24.00	1125.9	1052.9	106.79	2.2917	1.268
24.50	1126.8	1053.8	106.81	2.2653	1.270
25.00	1127.1	1054.1	106.82	2.2400	1.270
25.50	1127.7	1054.6	106.82	2.2157	1.272
26.00	1128.4	1055.4	106.83	2.1923	1.273
26.50	1129.2	1056.2	106.84	2.1698	1.275
27.00	1129.9	1056.9	106.84	2.1481	1.277
27.50	1130.7	1057.7	106.84	2.1273	1.278
28.00	1131.4	1058.4	106.84	2.1071	1.280
28.50	1132.1	1059.1	106.85	2.0877	1.282
29.00	1132.9	1059.9	106.86	2.0690	1.283
29.50	1133.5	1060.5	106.86	2.0508	1.285
30.00	1134.1	1061.1	106.88	2.0333	1.286
30.50	1134.8	1061.8	106.89	2.0164	1.288
31.00	1135.5	1062.4	107.00	2.0000	1.289
31.50	1136.1	1063.1	106.92	1.9841	1.291
32.00	1136.7	1063.6	106.86	1.9688	1.292
32.50	1137.3	1064.3	106.78	1.9538	1.294
33.00	1137.8	1064.8	106.85	1.9394	1.295
33.50	1138.3	1065.3	106.92	1.9254	1.296
34.00	1138.8	1065.8	106.94	1.9118	1.297
34.50	1139.4	1066.4	106.93	1.8986	1.298
35.00	1139.8	1066.8	106.96	1.8857	1.299
35.50	1140.3	1067.3	106.96	1.8732	1.300
36.00	1140.8	1067.8	106.98	1.8611	1.301
36.50	1141.2	1068.2	106.99	1.8493	1.302
37.00	1141.7	1068.7	107.00	1.8378	1.303
37.50	1142.0	1069.0	107.01	1.8267	1.304
38.00	1142.5	1069.5	107.03	1.8158	1.305
38.50	1142.9	1069.9	107.05	1.8052	1.306
39.00	1143.3	1070.3	107.05	1.7949	1.307
39.50	1143.7	1070.7	107.08	1.7848	1.308
40.00	1144.0	1071.0	107.07	1.7750	1.309
40.50	1144.5	1071.5	107.09	1.7654	1.310
41.00	1144.8	1071.8	107.10	1.7561	1.311
41.50	1145.2	1072.2	107.10	1.7470	1.312
42.00	1145.6	1072.6	107.11	1.7381	1.312
42.50	1145.9	1072.9	107.12	1.7294	1.313
43.00	1146.3	1073.2	107.14	1.7209	1.314
43.50	1146.5	1073.5	107.14	1.7126	1.315

***** End Shut-in 1

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

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***** Start Flow 2	0.00	76.1	0.0	107.12		
	0.50	77.5	1.4	107.11		
	1.00	78.1	2.0	107.10		
	1.50	79.0	2.9	107.07		
	2.00	79.7	3.6	107.03		
	2.50	80.6	4.5	107.00		
	3.00	81.2	5.1	106.97		
	3.50	82.0	5.9	106.93		
	4.00	82.9	6.8	106.92		
	4.50	83.5	7.4	106.89		
	5.00	84.3	8.2	106.88		
	5.50	85.0	8.9	106.87		
	6.00	85.8	9.7	106.87		
	6.50	86.5	10.4	106.86		
	7.00	87.2	11.1	106.86		
	7.50	87.9	11.8	106.87		
	8.00	88.6	12.5	106.87		
	8.50	89.4	13.3	106.88		
	9.00	89.6	13.5	106.89		
	9.50	90.1	14.0	106.90		
	10.00	90.6	14.5	106.92		
	10.50	91.0	14.9	106.93		
	11.00	91.5	15.4	106.94		
	11.50	92.0	15.9	106.97		
	12.00	92.4	16.3	106.98		
	12.50	92.8	16.7	106.98		
	13.00	93.4	17.2	107.00		
	13.50	93.7	17.6	107.01		
	14.00	94.1	18.0	107.02		
	14.50	94.6	18.5	107.03		
	15.00	95.1	19.0	107.05		
	15.50	95.5	19.4	107.06		
	16.00	95.9	19.8	107.07		
	16.50	96.3	20.2	107.08		
	17.00	96.8	20.7	107.10		
	17.50	97.2	21.1	107.10		
	18.00	97.6	21.5	107.11		
	18.50	98.1	22.0	107.13		
	19.00	98.5	22.4	107.14		
	19.50	98.9	22.8	107.16		
	20.00	99.3	23.2	107.16		
	20.50	99.7	23.6	107.18		
	21.00	100.1	24.0	107.19		
	21.50	100.6	24.4	107.21		
	22.00	101.1	25.0	107.22		
	22.50	101.7	25.6	107.23		
	23.00	102.3	26.2	107.25		
	23.50	102.9	26.8	107.27		
	24.00	103.4	27.3	107.27		
	24.50	104.1	28.0	107.29		
	25.00	104.7	28.6	107.31		
	25.50	105.3	29.2	107.32		

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	26.00	105.9	29.8	107.34		
	26.50	106.6	30.5	107.34		
	27.00	107.3	31.2	107.36		
	27.50	107.9	31.8	107.36		
	28.00	108.5	32.4	107.38		
	28.50	109.2	33.1	107.40		
	29.00	109.8	33.7	107.41		
	29.50	110.5	34.4	107.40		
	30.00	111.1	35.0	107.42		
	30.50	111.9	35.8	107.43		
	31.00	112.4	36.3	107.44		
	31.50	112.9	36.8	107.44		
	32.00	113.7	37.6	107.46		
	32.50	114.1	38.0	107.48		
	33.00	114.7	38.6	107.48		
	33.50	115.3	39.2	107.49		
	34.00	115.9	39.8	107.50		
	34.50	116.3	40.2	107.51		
	35.00	116.9	40.8	107.52		
	35.50	117.5	41.4	107.53		
	36.00	118.2	42.1	107.54		
	36.50	118.8	42.7	107.55		
	37.00	119.4	43.3	107.57		
	37.50	120.1	44.0	107.58		
	38.00	120.7	44.5	107.60		
	38.50	121.3	45.2	107.60		
	39.00	121.9	45.8	107.61		
	39.50	122.5	46.4	107.62		
	40.00	123.1	47.0	107.64		
	40.50	123.7	47.6	107.67		
	41.00	124.4	48.3	107.67		
	41.50	124.9	48.8	107.68		
	42.00	125.6	49.5	107.69		
	42.50	126.2	50.1	107.71		
	43.00	126.7	50.6	107.72		
	43.50	127.4	51.3	107.74		
	44.00	128.0	51.9	107.76		
	44.50	128.5	52.4	107.76		
***** End Flow 2	45.00	129.1	53.0	107.78		
***** Start Shutin 2	0.00	129.1	0.0	107.78	0.0000	0.017
	0.50	195.4	66.3	107.80	153.0000	0.038
	1.00	342.5	213.5	107.82	77.0000	0.117
	1.50	518.3	389.2	107.85	51.6667	0.269
	2.00	660.9	531.8	107.88	39.0000	0.437
	2.50	756.6	627.6	107.91	31.4000	0.572
	3.00	819.8	690.8	107.93	26.3333	0.672
	3.50	863.6	734.5	107.96	22.7143	0.746
	4.00	895.5	766.4	107.97	20.0000	0.802
	4.50	920.2	791.2	108.01	17.8889	0.847
	5.00	939.7	810.6	108.03	16.2000	0.883
	5.50	955.9	826.8	108.05	14.8182	0.914

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6.00	969.5	840.5	108.08	13.6667	0.940
6.50	981.1	852.0	108.08	12.6923	0.963
7.00	991.0	861.9	108.11	11.8571	0.982
7.50	999.8	870.7	108.13	11.1333	1.00
8.00	1007.4	878.4	108.16	10.5000	1.015
8.50	1014.3	885.3	108.17	9.9412	1.029
9.00	1020.5	891.5	108.18	9.4444	1.041
9.50	1026.0	897.0	108.20	9.0000	1.053
10.00	1031.1	902.0	108.21	8.6000	1.063
10.50	1035.6	906.5	108.21	8.2381	1.072
11.00	1039.8	910.8	108.24	7.9091	1.081
11.50	1043.7	914.6	108.26	7.6087	1.089
12.00	1047.3	918.2	108.25	7.3333	1.097
12.50	1050.5	921.5	108.26	7.0800	1.104
13.00	1053.7	924.6	108.27	6.8462	1.110
13.50	1056.5	927.4	108.27	6.6296	1.116
14.00	1059.1	930.1	108.28	6.4286	1.122
14.50	1061.6	932.5	108.29	6.2414	1.127
15.00	1064.0	934.9	108.32	6.0667	1.132
15.50	1066.1	937.1	108.31	5.9032	1.137
16.00	1068.2	939.2	108.31	5.7500	1.141
16.50	1070.2	941.1	108.32	5.6061	1.145
17.00	1072.1	943.1	108.32	5.4706	1.149
17.50	1073.9	944.8	108.33	5.3429	1.153
18.00	1075.6	946.5	108.33	5.2222	1.157
18.50	1077.2	948.1	108.37	5.1081	1.160
19.00	1078.7	949.6	108.34	5.0000	1.164
19.50	1080.2	951.1	108.36	4.8974	1.167
20.00	1081.5	952.5	108.35	4.8000	1.170
20.50	1082.9	953.8	108.35	4.7073	1.173
21.00	1084.2	955.1	108.36	4.6190	1.175
21.50	1085.4	956.3	108.37	4.5349	1.178
22.00	1086.5	957.5	108.37	4.4545	1.181
22.50	1087.7	958.7	108.39	4.3778	1.183
23.00	1088.8	959.7	108.37	4.3043	1.185
23.50	1089.8	960.8	108.39	4.2340	1.188
24.00	1090.8	961.7	108.38	4.1667	1.190
24.50	1091.8	962.7	108.40	4.1020	1.192
25.00	1092.7	963.7	108.40	4.0400	1.194
25.50	1093.7	964.7	108.40	3.9804	1.196
26.00	1094.6	965.5	108.41	3.9231	1.198
26.50	1095.4	966.3	108.40	3.8679	1.200
27.00	1096.3	967.2	108.39	3.8148	1.202
27.50	1097.1	968.0	108.39	3.7636	1.204
28.00	1097.9	968.8	108.42	3.7143	1.205
28.50	1098.6	969.6	108.39	3.6667	1.207
29.00	1099.4	970.3	108.41	3.6207	1.209
29.50	1100.1	971.0	108.41	3.5763	1.210
30.00	1100.8	971.7	108.41	3.5333	1.212
30.50	1101.4	972.4	108.42	3.4918	1.213
31.00	1102.1	973.0	108.43	3.4516	1.215

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10532 Dark Horse Oil Long Ranch #2 DST #1

DATE: 09/08/97

TIME: 05:13:30

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	31.50	1102.7	973.7	108.43	3.4127	1.216
	32.00	1103.3	974.3	108.43	3.3750	1.217
	32.50	1104.0	974.9	108.43	3.3385	1.219
	33.00	1104.6	975.5	108.44	3.3030	1.220
	33.50	1105.1	976.1	108.43	3.2687	1.221
	34.00	1105.7	976.7	108.44	3.2353	1.223
	34.50	1106.3	977.2	108.44	3.2029	1.224
	35.00	1106.9	977.8	108.45	3.1714	1.225
	35.50	1107.4	978.3	108.45	3.1408	1.226
	36.00	1107.9	978.9	108.48	3.1111	1.227
	36.50	1108.4	979.3	108.47	3.0822	1.228
	37.00	1108.9	979.8	108.45	3.0541	1.230
	37.50	1109.4	980.3	108.47	3.0267	1.231
	38.00	1109.9	980.8	108.49	3.0000	1.232
	38.50	1110.4	981.3	108.47	2.9740	1.233
	39.00	1110.8	981.7	108.48	2.9487	1.234
	39.50	1111.3	982.2	108.48	2.9241	1.235
	40.00	1111.7	982.6	108.49	2.9000	1.236
	40.50	1112.2	983.1	108.48	2.8765	1.237
	41.00	1112.5	983.5	108.46	2.8537	1.238
	41.50	1112.9	983.8	108.49	2.8313	1.239
	42.00	1113.4	984.3	108.49	2.8095	1.240
	42.50	1113.7	984.7	108.47	2.7882	1.240
	43.00	1114.1	985.1	108.48	2.7674	1.241
	43.50	1114.5	985.4	108.50	2.7471	1.242
	44.00	1114.9	985.8	108.49	2.7273	1.243
***** End Shut-in 2	44.50	1115.3	986.2	108.49	2.7079	1.244
***** Final Hydro.	273.50	1656.4	0.0	108.47		

TEST HISTORY

10532 Dark Horse Oil Long Ranch #2 DST #1

Flag Points

t (Min.) P (PSig)

A:	0.00	1683.15
B:	0.00	22.57
C:	31.00	73.01
D:	43.50	1146.54
E:	0.00	76.10
F:	45.00	129.06
G:	44.50	1115.28
Q:	0.00	1656.38

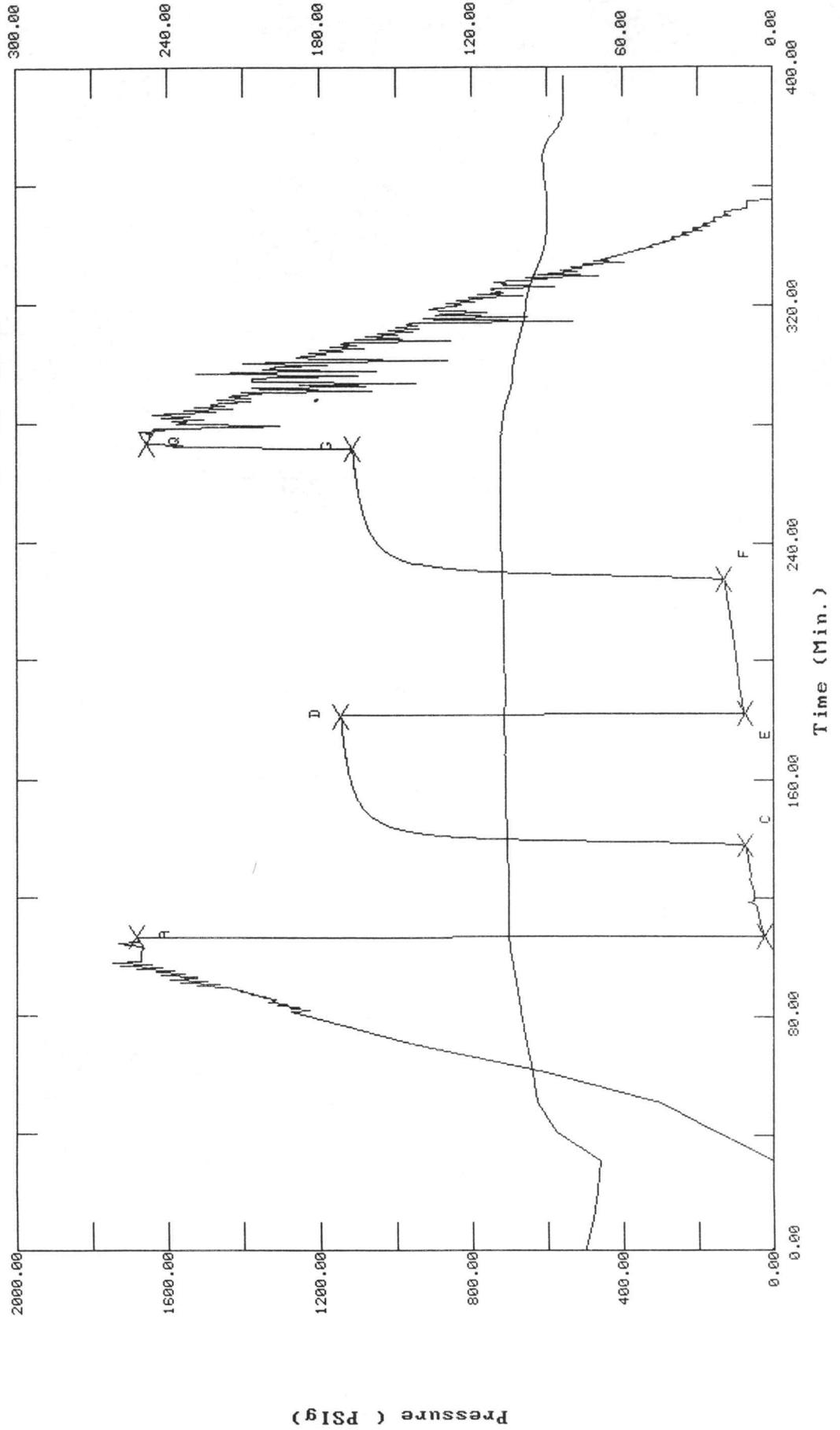
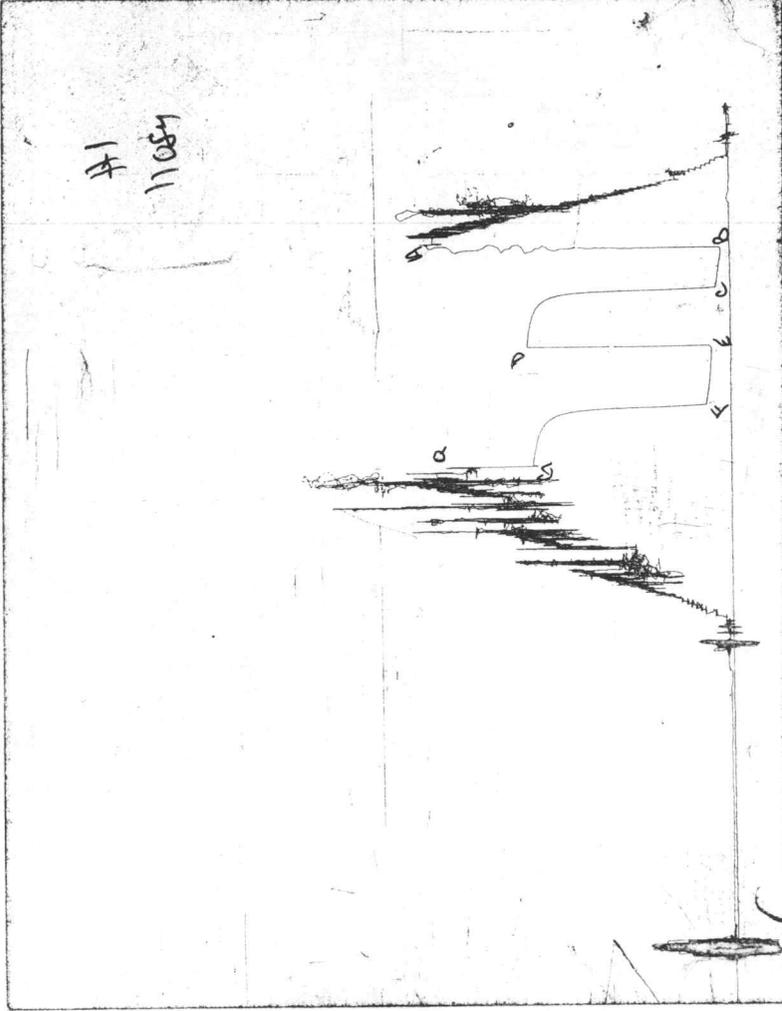


CHART PAGE



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

TRILOBITE TESTING L.L.C.

OPERATOR : Dark Horse Oil Co.
 WELL NAME: Long Ranch #2
 LOCATION : 4-02S-27W Decatur KS
 INTERVAL : 3544.00 To 3570.00 ft

DATE 09/08/97
 KB 2661.00 ft TICKET NO: 10533 DST #2
 GR 2656.00 ft FORMATION: Pollnow
 TD 3570.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF	30	Rec.	11084	11084	2341		PF Fr. 1929 to 1959 hr
SI	30	Range (Psi)	4300.0	4300.0	4995.0	0.0	IS Fr. 1959 to 2029 hr
SF	30	Clock (hrs)	12hr.	12hr.	Elec		SF Fr. 2029 to 2059 hr
FS	30	Depth(ft)	3565.0	3565.0	3547.0	0.0	FS Fr. 2059 to 2129 hr

	Field	1	2	3	4	
A. Init Hydro	1789.0	1742.0	1721.0	0.0	0.0	T STARTED 1828 hr
B. First Flow	66.0	46.0	21.0	0.0	0.0	T ON BOTM 1927 hr
B1. Final Flow	77.0	58.0	25.0	0.0	0.0	T OPEN 1929 hr
C. In Shut-in	991.0	947.0	953.0	0.0	0.0	T PULLED 2129 hr
D. Init Flow	77.0	57.0	27.0	0.0	0.0	T OUT 2317 hr
E. Final Flow	77.0	49.0	30.0	0.0	0.0	
F. Fl Shut-in	959.0	915.0	934.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1778.0	1722.0	1715.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 65000.00 lbs
						Initial Str Wt 64000.00 lbs
						Unseated Str Wt 64000.00 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 3016.00 ft

RECOVERY

Tot Fluid 10.00 ft of 10.00 ft in DC and 0.00 ft in DP
 10.00 ft of Mud
 0.00 ft of
 0.00 ft of

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

BLOW DESCRIPTION

Initial Flow-
 Weak surface blow died in 10 minutes

Initial Shutin-
 No blow

Final Flow-
 No blow

Final Shutin-
 No blow

SAMPLES:
 SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	8.90 lb/cf
Vis.	49.00 S/L
W.L.	6.80 in3
F.C.	0.00 in
Mud Drop	

Amt. of fill	0.00 ft
Btm. H. Temp.	107.00 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

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10533 Dark Horse Oil Long Ranch #2 DST #2

DATE: 09/08/97 TIME: 18:12:53

	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	83.00	1720.7	0.0	104.81		
***** Start Flow 1	0.00	21.4	0.0	104.92		
	0.50	21.7	0.3	104.97		
	1.00	22.0	0.6	105.02		
	1.50	22.1	0.7	105.06		
	2.00	22.3	0.9	105.09		
	2.50	22.4	1.0	105.13		
	3.00	22.6	1.2	105.15		
	3.50	22.7	1.3	105.18		
	4.00	22.7	1.3	105.19		
	4.50	22.9	1.5	105.20		
	5.00	22.9	1.5	105.22		
	5.50	23.1	1.7	105.23		
	6.00	23.1	1.7	105.23		
	6.50	23.3	1.9	105.25		
	7.00	23.3	1.9	105.25		
	7.50	23.3	1.9	105.26		
	8.00	23.6	2.2	105.28		
	8.50	23.3	1.9	105.27		
	9.00	23.6	2.3	105.29		
	9.50	24.0	2.6	105.29		
	10.00	23.4	2.0	105.29		
	10.50	23.8	2.4	105.31		
	11.00	23.6	2.2	105.31		
	11.50	23.9	2.5	105.31		
	12.00	23.9	2.5	105.32		
	12.50	23.8	2.4	105.33		
	13.00	23.9	2.5	105.33		
	13.50	24.2	2.8	105.34		
	14.00	24.3	2.9	105.34		
	14.50	25.4	4.0	105.35		
	15.00	27.1	5.8	105.36		
	15.50	24.7	3.4	105.36		
	16.00	26.6	5.2	105.37		
	16.50	28.0	6.6	105.37		
	17.00	26.6	5.2	105.38		
	17.50	28.7	7.3	105.40		
	18.00	28.3	6.9	105.41		
	18.50	30.1	8.7	105.42		
	19.00	31.6	10.2	105.42		
	19.50	34.0	12.6	105.44		
	20.00	31.3	9.9	105.45		
	20.50	31.9	10.5	105.46		
	21.00	28.2	6.8	105.46		
	21.50	29.9	8.5	105.47		
	22.00	32.5	11.2	105.47		
	22.50	35.1	13.7	105.50		
	23.00	38.3	16.9	105.50		
	23.50	42.0	20.6	105.51		
	24.00	40.9	19.5	105.52		
	24.50	41.5	20.1	105.52		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10533 Dark Horse Oil Long Ranch #2 DST #2

DATE: 09/08/97

TIME: 18:12:53

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	25.00	46.9	25.5	105.53		
	25.50	44.4	23.0	105.55		
	26.00	45.2	23.8	105.56		
	26.50	51.1	29.8	105.57		
	27.00	52.8	31.4	105.58		
	27.50	55.2	33.9	105.59		
	28.00	48.0	26.6	105.60		
	28.50	56.0	34.6	105.61		
	29.00	60.6	39.2	105.62		
	29.50	54.1	32.7	105.63		
	30.00	59.1	37.7	105.64		
***** End Flow 1	30.50	25.3	3.9	105.66		
***** Start Shutin 1	0.00	25.3	0.0	105.66	0.0000	0.001
	0.50	27.5	2.1	105.67	62.0000	0.001
	1.00	31.0	5.7	105.67	31.5000	0.001
	1.50	34.1	8.8	105.69	21.3333	0.001
	2.00	38.2	12.9	105.69	16.2500	0.001
	2.50	42.8	17.5	105.69	13.2000	0.002
	3.00	47.0	21.7	105.71	11.1667	0.002
	3.50	52.1	26.8	105.72	9.7143	0.003
	4.00	57.5	32.2	105.72	8.6250	0.003
	4.50	64.2	38.9	105.74	7.7778	0.004
	5.00	71.6	46.3	105.76	7.1000	0.005
	5.50	80.3	55.0	105.76	6.5455	0.006
	6.00	90.0	64.7	105.77	6.0833	0.008
	6.50	101.0	75.7	105.78	5.6923	0.010
	7.00	113.4	88.1	105.80	5.3571	0.013
	7.50	128.3	103.0	105.81	5.0667	0.016
	8.00	145.1	119.8	105.81	4.8125	0.021
	8.50	163.9	138.6	105.81	4.5882	0.027
	9.00	184.6	159.3	105.82	4.3889	0.034
	9.50	206.9	181.6	105.82	4.2105	0.043
	10.00	230.6	205.3	105.82	4.0500	0.053
	10.50	255.7	230.4	105.82	3.9048	0.065
	11.00	281.7	256.4	105.83	3.7727	0.079
	11.50	308.3	283.0	105.83	3.6522	0.095
	12.00	335.1	309.8	105.84	3.5417	0.112
	12.50	362.0	336.7	105.86	3.4400	0.131
	13.00	388.6	363.3	105.87	3.3462	0.151
	13.50	415.2	389.9	105.95	3.2593	0.172
	14.00	441.4	416.1	105.95	3.1786	0.195
	14.50	467.1	441.8	105.99	3.1034	0.218
	15.00	492.4	467.1	105.99	3.0333	0.242
	15.50	516.9	491.6	106.01	2.9677	0.267
	16.00	541.0	515.7	106.03	2.9062	0.293
	16.50	564.2	538.9	106.04	2.8485	0.318
	17.00	586.9	561.6	106.07	2.7941	0.344
	17.50	608.7	583.4	106.08	2.7429	0.371
	18.00	630.0	604.7	106.09	2.6944	0.397
	18.50	650.6	625.3	106.10	2.6486	0.423
	19.00	670.6	645.3	106.12	2.6053	0.450

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10533 Dark Horse Oil Long Ranch #2 DST #2

DATE: 09/08/97

TIME: 18:12:53

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	19.50	689.9	664.6	106.14	2.5641	0.476
	20.00	708.4	683.1	106.17	2.5250	0.502
	20.50	726.3	701.0	106.17	2.4878	0.528
	21.00	743.7	718.4	106.19	2.4524	0.553
	21.50	760.5	735.2	106.21	2.4186	0.578
	22.00	776.8	751.5	106.23	2.3864	0.603
	22.50	792.5	767.2	106.25	2.3556	0.628
	23.00	807.7	782.4	106.25	2.3261	0.652
	23.50	822.3	797.0	106.27	2.2979	0.676
	24.00	836.5	811.2	106.29	2.2708	0.700
	24.50	850.1	824.8	106.30	2.2449	0.723
	25.00	863.3	838.0	106.31	2.2200	0.745
	25.50	875.9	850.6	106.32	2.1961	0.767
	26.00	888.1	862.8	106.33	2.1731	0.789
	26.50	899.9	874.6	106.36	2.1509	0.810
	27.00	911.3	886.0	106.36	2.1296	0.830
	27.50	922.2	896.9	106.37	2.1091	0.850
	28.00	932.9	907.5	106.38	2.0893	0.870
	28.50	943.0	917.7	106.40	2.0702	0.889
***** End Shut-in 1	29.00	952.9	927.6	106.41	2.0517	0.908
***** Start Flow 2	0.00	26.9	0.0	106.39		
	0.50	29.3	2.4	106.39		
	1.00	28.4	1.5	106.38		
	1.50	28.4	1.5	106.37		
	2.00	29.7	2.8	106.34		
	2.50	27.1	0.2	106.35		
	3.00	27.1	0.2	106.33		
	3.50	29.5	2.6	106.32		
	4.00	32.8	5.9	106.31		
	4.50	33.8	6.9	106.31		
	5.00	37.7	10.8	106.30		
	5.50	30.3	3.5	106.29		
	6.00	31.4	4.5	106.30		
	6.50	31.1	4.2	106.28		
	7.00	32.9	6.0	106.28		
	7.50	34.5	7.6	106.28		
	8.00	36.5	9.6	106.28		
	8.50	37.5	10.6	106.28		
	9.00	39.5	12.6	106.29		
	9.50	40.3	13.4	106.29		
	10.00	30.4	3.5	106.29		
	10.50	28.4	1.5	106.30		
	11.00	28.1	1.2	106.31		
	11.50	28.0	1.1	106.30		
	12.00	29.0	2.1	106.32		
	12.50	31.0	4.1	106.32		
	13.00	33.0	6.1	106.32		
	13.50	33.3	6.4	106.33		
	14.00	34.3	7.4	106.34		
	14.50	35.3	8.4	106.35		
	15.00	35.3	8.4	106.35		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10533 Dark Horse Oil Long Ranch #2 DST #2

DATE: 09/08/97

TIME: 18:12:53

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	15.50	35.6	8.7	106.37		
	16.00	35.8	8.9	106.38		
	16.50	36.4	9.5	106.38		
	17.00	35.4	8.5	106.39		
	17.50	35.6	8.7	106.39		
	18.00	35.9	9.0	106.40		
	18.50	35.9	9.1	106.42		
	19.00	35.9	9.0	106.42		
	19.50	36.2	9.3	106.43		
	20.00	35.7	8.8	106.44		
	20.50	35.4	8.5	106.45		
	21.00	35.3	8.4	106.45		
	21.50	35.2	8.3	106.46		
	22.00	35.2	8.3	106.47		
	22.50	35.3	8.4	106.48		
	23.00	35.4	8.5	106.49		
	23.50	35.4	8.5	106.50		
	24.00	35.4	8.5	106.51		
	24.50	35.3	8.4	106.51		
	25.00	35.4	8.5	106.52		
	25.50	35.4	8.5	106.52		
	26.00	35.4	8.5	106.54		
	26.50	35.4	8.5	106.54		
	27.00	35.4	8.5	106.56		
	27.50	35.2	8.3	106.56		
	28.00	35.3	8.4	106.57		
	28.50	35.3	8.4	106.57		
	29.00	35.4	8.5	106.59		
	29.50	35.5	8.6	106.59		
***** End Flow 2	30.00	30.3	3.4	106.60		
***** Start Shutin 2	0.00	30.3	0.0	106.60	0.0000	0.001
	0.50	33.3	3.0	106.60	122.0000	0.001
	1.00	37.5	7.2	106.61	61.5000	0.001
	1.50	42.1	11.8	106.62	41.3333	0.002
	2.00	46.9	16.5	106.62	31.2500	0.002
	2.50	52.2	21.8	106.64	25.2000	0.003
	3.00	58.1	27.8	106.64	21.1667	0.003
	3.50	64.8	34.4	106.65	18.2857	0.004
	4.00	72.4	42.1	106.66	16.1250	0.005
	4.50	81.0	50.6	106.67	14.4444	0.007
	5.00	90.8	60.5	106.68	13.1000	0.008
	5.50	101.8	71.4	106.68	12.0000	0.010
	6.00	114.1	83.8	106.69	11.0833	0.013
	6.50	128.0	97.7	106.71	10.3077	0.016
	7.00	143.4	113.0	106.70	9.6429	0.021
	7.50	160.5	130.2	106.72	9.0667	0.026
	8.00	179.1	148.7	106.73	8.5625	0.032
	8.50	197.5	167.2	106.75	8.1176	0.039
	9.00	218.8	188.4	106.77	7.7222	0.048
	9.50	241.0	210.6	106.80	7.3684	0.058
	10.00	264.0	233.6	106.79	7.0500	0.070

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10533 Dark Horse Oil Long Ranch #2 DST #2

DATE: 09/08/97

TIME: 18:12:53

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
10.50	287.6	257.2	106.81	6.7619	0.083
11.00	311.6	281.3	106.82	6.5000	0.097
11.50	335.9	305.6	106.83	6.2609	0.113
12.00	360.3	329.9	106.85	6.0417	0.130
12.50	384.6	354.2	106.86	5.8400	0.148
13.00	408.7	378.4	106.87	5.6538	0.167
13.50	432.6	402.3	106.89	5.4815	0.187
14.00	456.2	425.8	106.90	5.3214	0.208
14.50	479.4	449.0	106.92	5.1724	0.230
15.00	502.0	471.7	106.93	5.0333	0.252
15.50	524.2	493.9	106.94	4.9032	0.275
16.00	545.9	515.6	106.96	4.7812	0.298
16.50	567.0	536.7	106.97	4.6667	0.322
17.00	587.6	557.3	106.99	4.5588	0.345
17.50	607.6	577.3	107.00	4.4571	0.369
18.00	627.3	597.0	107.02	4.3611	0.393
18.50	646.2	615.9	107.03	4.2703	0.418
19.00	664.6	634.2	107.04	4.1842	0.442
19.50	682.6	652.2	107.06	4.1026	0.466
20.00	699.8	669.5	107.07	4.0250	0.490
20.50	716.7	686.4	107.09	3.9512	0.514
21.00	733.3	703.0	107.10	3.8810	0.538
21.50	749.2	718.9	107.11	3.8140	0.561
22.00	764.6	734.3	107.11	3.7500	0.585
22.50	779.4	749.0	107.13	3.6889	0.607
23.00	793.7	763.4	107.13	3.6304	0.630
23.50	807.7	777.4	107.15	3.5745	0.652
24.00	821.2	790.9	107.16	3.5208	0.674
24.50	834.2	803.9	107.17	3.4694	0.696
25.00	846.8	816.5	107.18	3.4200	0.717
25.50	859.0	828.7	107.20	3.3725	0.738
26.00	870.7	840.4	107.20	3.3269	0.758
26.50	882.0	851.7	107.23	3.2830	0.778
27.00	893.0	862.7	107.26	3.2407	0.797
27.50	903.7	873.4	107.25	3.2000	0.817
28.00	913.9	883.6	107.26	3.1607	0.835
28.50	923.9	893.6	107.27	3.1228	0.854
29.00	933.6	903.2	107.27	3.0862	0.872
***** End Shut-in 2					
***** Final Hydro.	204.50	1715.1	0.0	107.33	

TEST HISTORY

10533 Dark Horse Oil Long Ranch #2 DST #2

Flag Points

t (Min.)	P (PSIg)
A: 0.00	1720.66
B: 0.00	21.38
C: 30.50	25.30
D: 29.00	952.91
E: 0.00	26.89
F: 30.00	30.32
G: 29.00	933.55
Q: 0.00	1715.07

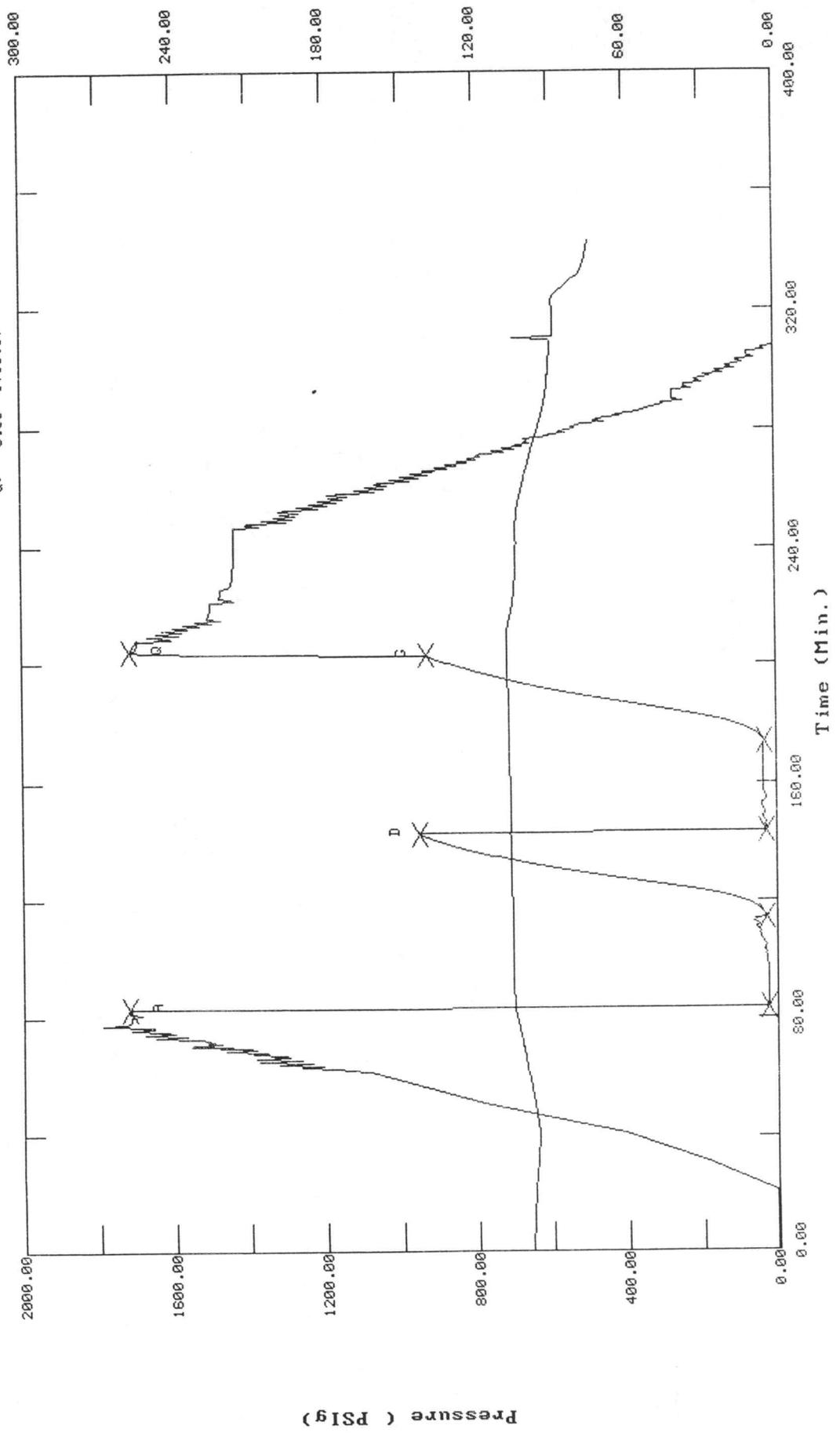
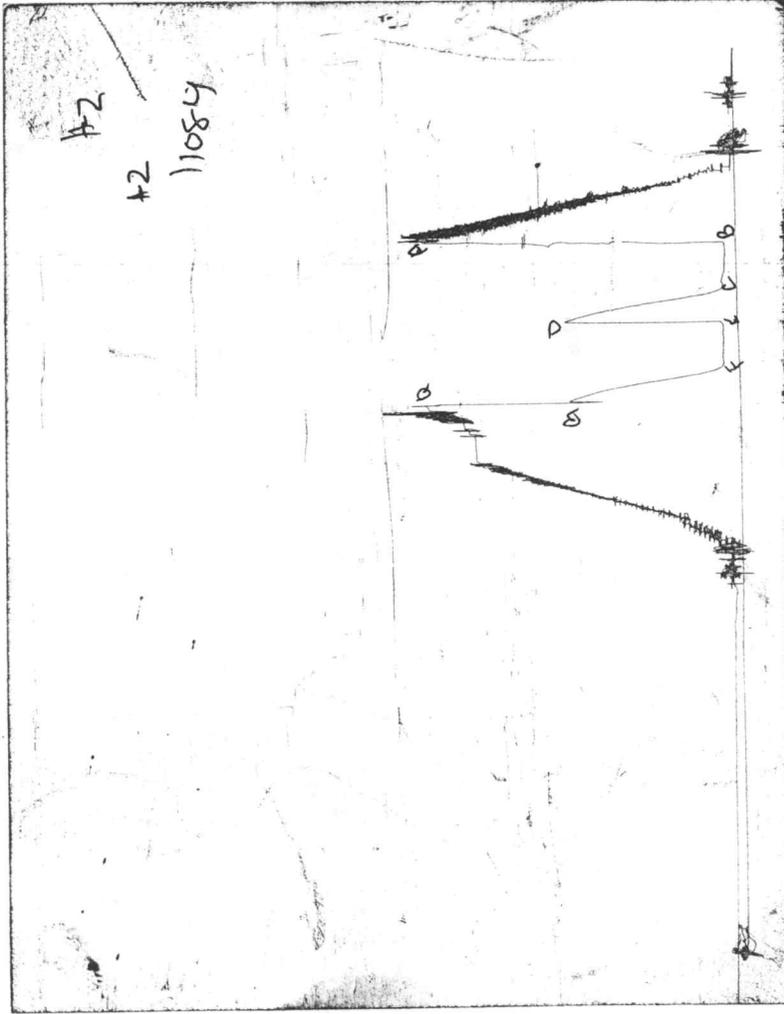


CHART PAGE



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

TRILOBITE TESTING L.L.C.

OPERATOR : Dark Horse Oil Co.
 WELL NAME: Long Ranch #2
 LOCATION : 04-02S-27W Decatur KS
 INTERVAL : 3550.00 To 3590.00 ft

DATE 09/09/97

KB 2661.00 ft TICKET NO: 10534 DST #3
 GR 2656.00 ft FORMATION: Lansing C-D
 TD 3590.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11084	11084	2341			PF Fr. 0810 to 0840 hr
SI 30	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0	IS Fr. 0840 to 0910 hr
SF 30	Clock(hrs)	12 hr	12 hr	Elec			SF Fr. 0910 to 0940 hr
FS 30	Depth(ft)	3585.0	3585.0	3554.0	0.0	0.0	FS Fr. 0940 to 1010 hr

	Field	1	2	3	4	
A. Init Hydro	1832.0	1877.0	1725.0	0.0	0.0	T STARTED 0706 hr
B. First Flow	54.0	60.0	15.0	0.0	0.0	T ON BOTM 0808 hr
B1. Final Flow	54.0	60.0	22.0	0.0	0.0	T OPEN 0810 hr
C. In Shut-in	1056.0	1039.0	1034.0	0.0	0.0	T PULLED 1010 hr
D. Init Flow	54.0	71.0	23.0	0.0	0.0	T OUT 1127 hr
E. Final Flow	54.0	71.0	29.0	0.0	0.0	
F. Fl Shut-in	1002.0	981.0	980.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1778.0	1869.0	1712.0	0.0	0.0	Tool Wt. 2100.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 66000.00 lbs
						Initial Str Wt 64000.00 lbs
						Unseated Str Wt 64000.00 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 3016.00 ft

RECOVERY

Tot Fluid 15.00 ft of 15.00 ft in DC and 0.00 ft in DP
 15.00 ft of Mud
 0.00 ft of
 0.00 ft of

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

BLOW DESCRIPTION

Initial Flow-
 Weak blow building to 1/2"

Initial Shutin-
 No blow

Final Flow-
 No blow

Final Shutin-
 No blow

SAMPLES:
 SENT TO:

MUD DATA-----

Mud Type Chemical
 Weight 8.90 lb/cf
 Vis. 49.00 S/L
 W.L. 6.80 in3
 F.C. 0.00 in
 Mud Drop

Amt. of fill 0.00 ft
 Btm. H. Temp. 103.00 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: Long Ranch #2
 LOCATION : 04-02s-27w Decatur KS
 TICKET No. 10534 D.S.T. No. 3 DATE 09/09/97
 TOTAL TOOL TO BOTTOM OF TOP PACKERS 21
 INTERVAL TOOL
 BOTTOM PACKERS AND ANCHOR 9 perf
 TOTAL TOOL 30
 DRILL COLLAR ANCHOR IN INTERVAL
 D.C. ANCHOR STND.Stands Single Total
 D.P. ANCHOR STND.Stands Single 1 Total 31
 TOTAL ASSEMBLY 61
 D.C. ABOVE TOOLS.Stands9 Single Total 534
 D.P. ABOVE TOOLS.Stands48 Single 1 Total 3016
 TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3611
 TOTAL DEPTH 3590
 TOTAL DRILL PIPE ABOVE K.B. 21
 REMARKS:

P.O. SUB	
C.O. SUB Top of tool @	3526
S.I. TOOL H & T	3532
HMV Sterling	3537
JARS Sterling	3541
SAFETY JOINT Bowen	n/a
PACKER Top	3545
PACKER Bottom	3550
DEPTH 3550	
STUBB 1'	3551
ANCHOR	
3' perf	3554
Alpine rec. @3554	
1 joint of pipe & subs to	3587
T.C. DEPTH	
AK-1 rec @	3585
BULLNOSE 3' bullplug	
T.D. to	3590

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10534 Dark Horse Oil Long Ranch #2 DST #3
 DATE: 09/09/97 TIME: 06:39:37

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	97.50	1725.2	0.0	100.92		
***** Start Flow 1	0.00	15.1	0.0	100.86		
	0.50	15.4	0.2	100.90		
	1.00	15.4	0.3	100.91		
	1.50	15.6	0.4	100.92		
	2.00	15.7	0.5	100.93		
	2.50	15.8	0.6	100.95		
	3.00	16.0	0.8	100.95		
	3.50	16.1	0.9	100.95		
	4.00	16.2	1.0	100.92		
	4.50	16.3	1.2	100.92		
	5.00	16.5	1.3	100.91		
	5.50	16.6	1.4	100.91		
	6.00	16.7	1.5	100.91		
	6.50	16.8	1.6	100.90		
	7.00	16.9	1.7	100.90		
	7.50	17.0	1.8	100.89		
	8.00	17.0	1.9	100.87		
	8.50	17.2	2.1	100.87		
	9.00	17.3	2.1	100.87		
	9.50	17.4	2.2	100.87		
	10.00	17.4	2.3	100.86		
	10.50	17.5	2.4	100.86		
	11.00	17.6	2.5	100.86		
	11.50	17.8	2.6	100.86		
	12.00	17.8	2.7	100.86		
	12.50	18.0	2.8	100.86		
	13.00	18.1	2.9	100.86		
	13.50	18.2	3.1	100.85		
	14.00	18.2	3.1	100.85		
	14.50	18.4	3.3	100.85		
	15.00	18.5	3.4	100.85		
	15.50	18.6	3.4	100.85		
	16.00	18.7	3.5	100.86		
	16.50	18.8	3.6	100.86		
	17.00	18.8	3.7	100.85		
	17.50	18.9	3.8	100.86		
	18.00	19.1	3.9	100.85		
	18.50	19.1	3.9	100.86		
	19.00	19.2	4.0	100.86		
	19.50	19.3	4.2	100.87		
	20.00	19.3	4.2	100.87		
	20.50	19.5	4.4	100.87		
	21.00	19.6	4.5	100.88		
	21.50	19.7	4.5	100.88		
	22.00	19.8	4.7	100.88		
	22.50	19.9	4.7	100.88		
	23.00	20.0	4.8	100.89		
	23.50	20.1	4.9	100.89		
	24.00	20.1	4.9	100.89		
	24.50	20.2	5.1	100.90		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10534 Dark Horse Oil Long Ranch #2 DST #3

DATE: 09/09/97

TIME: 06:39:37

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	20.3	5.2	100.91		
	25.50	20.4	5.3	100.92		
	26.00	20.4	5.3	100.92		
	26.50	20.6	5.4	100.93		
	27.00	20.7	5.6	100.91		
	27.50	20.7	5.6	100.92		
	28.00	20.8	5.7	100.93		
	28.50	20.8	5.7	100.94		
	29.00	21.0	5.8	100.94		
	29.50	21.0	5.9	100.95		
	30.00	21.1	5.9	100.95		
	30.50	21.2	6.0	100.95		
***** End Flow 1	31.00	22.0	6.9	100.96		
***** Start Shutin 1	0.00	22.0	0.0	100.96	0.0000	0.000
	0.50	25.2	3.2	100.96	63.0000	0.001
	1.00	29.5	7.5	100.97	32.0000	0.001
	1.50	34.5	12.5	100.98	21.6667	0.001
	2.00	40.5	18.4	100.98	16.5000	0.002
	2.50	47.6	25.6	100.98	13.4000	0.002
	3.00	56.3	34.2	100.99	11.3333	0.003
	3.50	66.6	44.6	100.99	9.8571	0.004
	4.00	78.6	56.6	101.00	8.7500	0.006
	4.50	93.8	71.8	101.01	7.8889	0.009
	5.00	112.0	90.0	101.02	7.2000	0.013
	5.50	133.4	111.4	101.03	6.6364	0.018
	6.00	158.4	136.4	101.03	6.1667	0.025
	6.50	186.3	164.3	101.04	5.7692	0.035
	7.00	217.0	194.9	101.05	5.4286	0.047
	7.50	249.6	227.6	101.06	5.1333	0.062
	8.00	283.6	261.6	101.07	4.8750	0.080
	8.50	317.8	295.8	101.08	4.6471	0.101
	9.00	352.0	330.0	101.08	4.4444	0.124
	9.50	386.1	364.1	101.11	4.2632	0.149
	10.00	419.8	397.8	101.11	4.1000	0.176
	10.50	452.5	430.5	101.12	3.9524	0.205
	11.00	484.2	462.2	101.14	3.8182	0.234
	11.50	514.8	492.8	101.14	3.6957	0.265
	12.00	544.7	522.7	101.17	3.5833	0.297
	12.50	573.4	551.3	101.18	3.4800	0.329
	13.00	600.9	578.9	101.20	3.3846	0.361
	13.50	627.3	605.3	101.22	3.2963	0.394
	14.00	652.6	630.5	101.23	3.2143	0.426
	14.50	676.6	654.6	101.24	3.1379	0.458
	15.00	699.5	677.5	101.25	3.0667	0.489
	15.50	721.3	699.3	101.27	3.0000	0.520
	16.00	742.1	720.1	101.29	2.9375	0.551
	16.50	762.1	740.0	101.29	2.8788	0.581
	17.00	780.9	758.9	101.31	2.8235	0.610
	17.50	798.8	776.8	101.32	2.7714	0.638
	18.00	815.8	793.8	101.33	2.7222	0.666
	18.50	831.9	809.9	101.35	2.6757	0.692

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10534 Dark Horse Oil Long Ranch #2 DST #3

DATE: 09/09/97

TIME: 06:39:37

	Time	Pressure PSig	delta PSig	P	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	19.00	847.2	825.2	101.36		2.6316	0.718
	19.50	861.8	839.8	101.38		2.5897	0.743
	20.00	875.7	853.7	101.39		2.5500	0.767
	20.50	888.8	866.7	101.39		2.5122	0.790
	21.00	901.3	879.2	101.41		2.4762	0.812
	21.50	913.2	891.2	101.42		2.4419	0.834
	22.00	924.6	902.5	101.43		2.4091	0.855
	22.50	935.3	913.3	101.45		2.3778	0.875
	23.00	945.5	923.5	101.46		2.3478	0.894
	23.50	955.3	933.3	101.47		2.3191	0.913
	24.00	964.5	942.5	101.48		2.2917	0.930
	24.50	973.4	951.4	101.50		2.2653	0.947
	25.00	981.6	959.6	101.51		2.2400	0.964
	25.50	989.6	967.6	101.51		2.2157	0.979
	26.00	997.0	975.0	101.52		2.1923	0.994
	26.50	1004.2	982.1	101.51		2.1698	1.008
	27.00	1010.9	988.9	101.53		2.1481	1.022
	27.50	1017.3	995.3	101.55		2.1273	1.035
	28.00	1023.4	1001.4	101.56		2.1071	1.047
	28.50	1029.2	1007.2	101.57		2.0877	1.059
***** End Shut-in 1	29.00	1034.7	1012.7	101.59		2.0690	1.071
***** Start Flow 2	0.00	23.5	0.0	101.55			
	0.50	23.6	0.2	101.54			
	1.00	23.9	0.4	101.54			
	1.50	24.0	0.5	101.52			
	2.00	24.1	0.6	101.52			
	2.50	24.3	0.8	101.50			
	3.00	24.4	0.9	101.49			
	3.50	24.5	1.0	101.48			
	4.00	24.6	1.1	101.47			
	4.50	24.7	1.2	101.47			
	5.00	24.8	1.3	101.45			
	5.50	24.9	1.4	101.45			
	6.00	25.0	1.5	101.45			
	6.50	25.2	1.7	101.44			
	7.00	25.2	1.7	101.44			
	7.50	25.4	1.9	101.44			
	8.00	25.5	2.0	101.43			
	8.50	25.5	2.0	101.44			
	9.00	25.6	2.1	101.43			
	9.50	25.8	2.3	101.43			
	10.00	25.8	2.4	101.43			
	10.50	25.9	2.4	101.44			
	11.00	25.9	2.5	101.44			
	11.50	26.0	2.6	101.44			
	12.00	26.0	2.5	101.44			
	12.50	26.1	2.6	101.44			
	13.00	26.2	2.7	101.45			
	13.50	26.3	2.8	101.45			
	14.00	26.4	2.9	101.45			
	14.50	26.5	3.0	101.46			

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10534 Dark Horse Oil Long Ranch #2 DST #3
 DATE: 09/09/97 TIME: 06:39:37

	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	15.00	26.6	3.1	101.46		
	15.50	26.6	3.2	101.47		
	16.00	26.6	3.2	101.47		
	16.50	26.7	3.2	101.48		
	17.00	26.8	3.4	101.48		
	17.50	27.0	3.5	101.49		
	18.00	27.0	3.5	101.49		
	18.50	27.1	3.6	101.50		
	19.00	27.2	3.7	101.50		
	19.50	27.2	3.8	101.51		
	20.00	27.3	3.8	101.51		
	20.50	27.4	3.9	101.52		
	21.00	27.4	4.0	101.53		
	21.50	27.5	4.0	101.53		
	22.00	27.7	4.2	101.54		
	22.50	27.7	4.3	101.54		
	23.00	27.8	4.3	101.54		
	23.50	27.9	4.4	101.54		
	24.00	28.0	4.5	101.55		
	24.50	28.1	4.6	101.56		
	25.00	28.2	4.7	101.57		
	25.50	28.3	4.8	101.57		
	26.00	28.3	4.8	101.57		
	26.50	28.4	4.9	101.58		
	27.00	28.5	5.1	101.59		
	27.50	28.6	5.1	101.59		
	28.00	28.7	5.2	101.59		
	28.50	28.7	5.3	101.61		
*****	End Flow 2	29.00	28.8	5.3	101.61	
*****	Start Shutin 2	0.00	28.8	0.0	101.61	0.0000
		0.50	30.5	1.8	101.62	121.0000
		1.00	34.4	5.6	101.62	61.0000
		1.50	38.7	9.9	101.62	41.0000
		2.00	43.5	14.7	101.64	31.0000
		2.50	48.9	20.1	101.63	25.0000
		3.00	54.9	26.2	101.65	21.0000
		3.50	61.9	33.2	101.65	18.1429
		4.00	69.9	41.2	101.67	16.0000
		4.50	79.2	50.4	101.67	14.3333
		5.00	89.8	61.0	101.68	13.0000
		5.50	102.1	73.3	101.68	11.9091
		6.00	116.0	87.2	101.69	11.0000
		6.50	131.9	103.2	101.70	10.2308
		7.00	149.8	121.0	101.71	9.5714
		7.50	169.3	140.5	101.71	9.0000
		8.00	190.7	162.0	101.73	8.5000
		8.50	214.3	185.5	101.72	8.0588
		9.00	239.2	210.5	101.74	7.6667
		9.50	265.5	236.7	101.75	7.3158
		10.00	292.5	263.7	101.75	7.0000
		10.50	319.9	291.1	101.76	6.7143

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10534 Dark Horse Oil Long Ranch #2 DST #3

DATE: 09/09/97

TIME: 06:39:37

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	11.00	347.6	318.8	101.77	6.4545	0.121
	11.50	375.3	346.6	101.82	6.2174	0.141
	12.00	402.8	374.0	101.81	6.0000	0.162
	12.50	429.8	401.0	101.82	5.8000	0.185
	13.00	456.5	427.7	101.84	5.6154	0.208
	13.50	482.4	453.7	101.85	5.4444	0.233
	14.00	507.8	479.1	101.87	5.2857	0.258
	14.50	532.7	503.9	101.89	5.1379	0.284
	15.00	556.7	527.9	101.89	5.0000	0.310
	15.50	579.8	551.0	101.92	4.8710	0.336
	16.00	602.2	573.5	101.92	4.7500	0.363
	16.50	624.0	595.2	101.93	4.6364	0.389
	17.00	644.9	616.1	101.95	4.5294	0.416
	17.50	665.0	636.3	101.96	4.4286	0.442
	18.00	684.4	655.6	101.97	4.3333	0.468
	18.50	703.1	674.3	101.98	4.2432	0.494
	19.00	721.0	692.3	102.00	4.1579	0.520
	19.50	738.4	709.6	102.01	4.0769	0.545
	20.00	755.0	726.2	102.00	4.0000	0.570
	20.50	770.9	742.1	102.04	3.9268	0.594
	21.00	786.2	757.4	102.06	3.8571	0.618
	21.50	800.8	772.1	102.06	3.7907	0.641
	22.00	814.8	786.0	102.07	3.7273	0.664
	22.50	828.3	799.6	102.09	3.6667	0.686
	23.00	841.3	812.5	102.10	3.6087	0.708
	23.50	853.6	824.8	102.11	3.5532	0.729
	24.00	865.4	836.6	102.12	3.5000	0.749
	24.50	876.7	847.9	102.13	3.4490	0.769
	25.00	887.4	858.7	102.14	3.4000	0.788
	25.50	897.8	869.0	102.15	3.3529	0.806
	26.00	907.7	878.9	102.15	3.3077	0.824
	26.50	917.2	888.4	102.16	3.2642	0.841
	27.00	926.2	897.4	102.17	3.2222	0.858
	27.50	934.8	906.0	102.19	3.1818	0.874
	28.00	943.1	914.3	102.19	3.1429	0.889
	28.50	951.1	922.3	102.20	3.1053	0.905
	29.00	958.7	929.9	102.21	3.0690	0.919
	29.50	966.0	937.2	102.22	3.0339	0.933
	30.00	973.1	944.3	102.23	3.0000	0.947
***** End Shut-in 2	30.50	979.8	951.1	102.24	2.9672	0.960
***** Final Hydro.	219.50	1712.8	0.0	102.29		

TEST HISTORY

10534 Dark Horse Oil Long Ranch #2 DST #3

Flag Points

t (Min.) P (PSig)

A:	0.00	1725.16
B:	0.00	15.14
C:	31.00	22.02
D:	29.00	1034.71
E:	0.00	23.48
F:	29.00	28.76
G:	30.50	979.81
Q:	0.00	1712.84

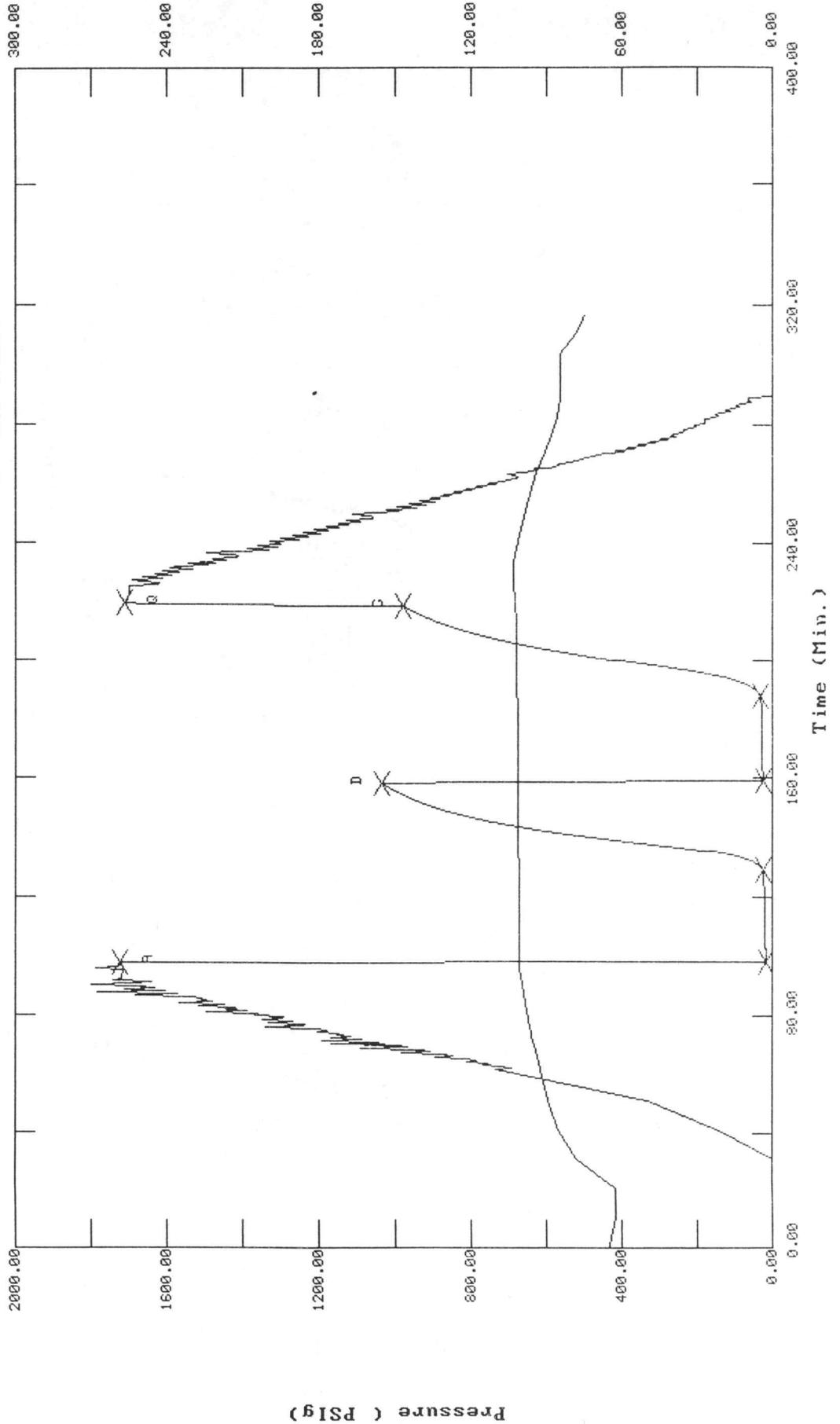
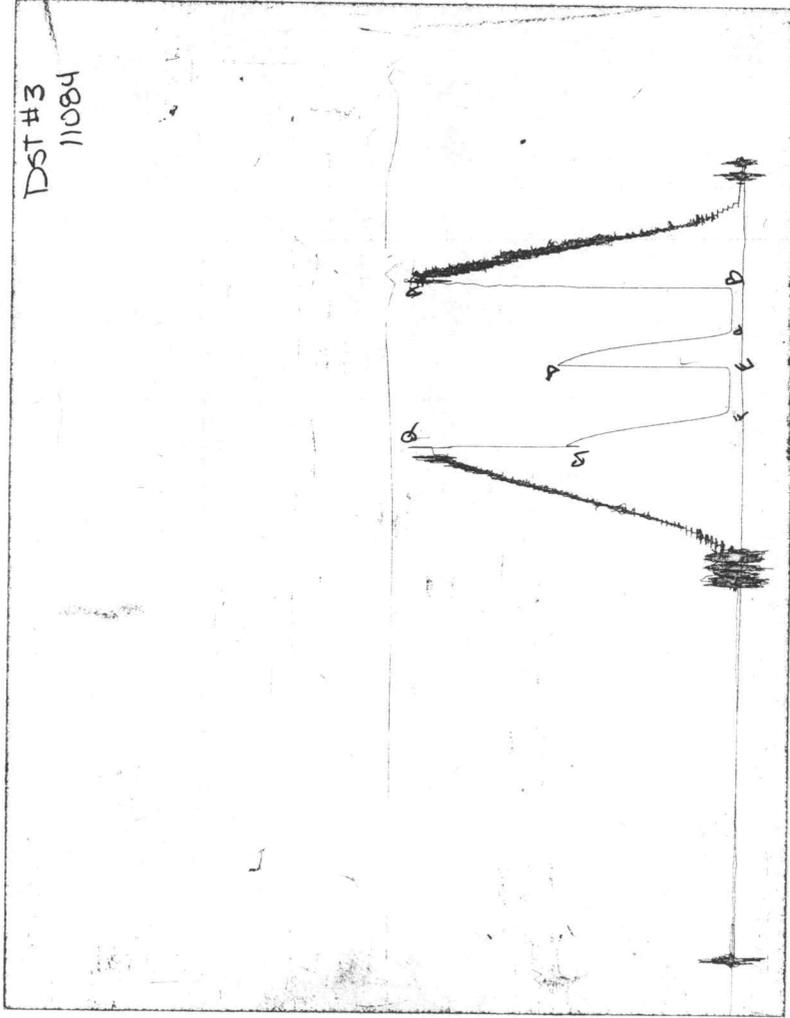


CHART PAGE



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

Computer inventoried

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LONG RANCH #2
1510' FNL & 1680' FEL of Sec. 14 T-2-S R-27-W 12543 North Highway 83 - Suite 228
Decatur County, Kansas
API #: 15-039-20905-0000
Ground Level: 2656 feet Kelly Bushing: 2661 feet

DARK HORSE OIL COMPANY

Parker, CO 80134

800-876-4482

DRILL STEM TEST INFORMATION

DRILL STEM TEST #1

INTERVAL: 3494.00 through 3546.00 ft. (Toronto & Lansing/KC "A" Zones)

BLOW DESCRIPTION: Initial Flow - 1/4 inch blow built to 5 1/2 inches.

Final Flow - Surface blow building to 3 1/2 inches.

OPEN: 30 min. - CLOSE: 45 min. - OPEN: 45 min. - CLOSE: 45 min.

FIRST INITIAL FLOW PRESSURE: 23

FIRST FINAL FLOW PRESSURE: 73

SECOND INITIAL FLOW PRESSURE: 76

SECOND FINAL FLOW PRESSURE: 129

INITIAL HYDROSTATIC MUD: 1683

FINAL HYDROSTATIC MUD: 1656

INITIAL SHUT-IN PRESSURE: 1146

FINAL SHUT-IN PRESSURE: 1115

RECOVERY: 60.00 feet of Mud.

180.00 feet of Muddy Water (80% Water and 20% Mud).

TOTAL FLUID RECOVERY: 240.00 ft. = (240.00 ft. in the drill collars and 0.00 ft. in the drill pipe.)

BOTTOM HOLE TEMPERATURE: 108 degrees fahrenheit.

DRILL STEM TEST #2

INTERVAL: 3544.00 through 3570.00 ft. ("Pollnow" Zone)

BLOW DESCRIPTION: Initial Flow - Weak Surface Blow died in 10 minutes.

Final Flow - No return blow.

OPEN: 30 min. - CLOSE: 30 min. - OPEN: 30 min. - CLOSE: 30 min.

FIRST INITIAL FLOW PRESSURE: 21

FIRST FINAL FLOW PRESSURE: 26

SECOND INITIAL FLOW PRESSURE: 25

SECOND FINAL FLOW PRESSURE: 30

INITIAL HYDROSTATIC MUD: 1720

FINAL HYDROSTATIC MUD: 1715

INITIAL SHUT-IN PRESSURE: 953

FINAL SHUT-IN PRESSURE: 934

RECOVERY: 10.00 feet of Drilling Mud.

TOTAL FLUID RECOVERY: 10.00 ft. = (10.00 ft. in the drill collars & 0.00 ft. in the drill pipe.)

BOTTOM HOLE TEMPERATURE: 107 degrees fahrenheit.

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DRILL STEM TEST #3

INTERVAL: 3550.00 through 3590.00 ft. (Lansing/KC "C/D" Zone)

BLOW DESCRIPTION: Initial Flow - Weak Blow building to 1/2 inch.

Final Flow - No return blow.

OPEN: 30 min. - CLOSE: 30 min. - OPEN: 30 min. - CLOSE: 30 min.

FIRST INITIAL FLOW PRESSURE: 15

FIRST FINAL FLOW PRESSURE: 22

SECOND INITIAL FLOW PRESSURE: 23

SECOND FINAL FLOW PRESSURE: 29

INITIAL HYDROSTATIC MUD: 1725

FINAL HYDROSTATIC MUD: 1712

INITIAL SHUT-IN PRESSURE: 1034

FINAL SHUT-IN PRESSURE: 980

RECOVERY: 15.00 ft. of Mud.

TOTAL FLUID RECOVERY: 15.00 ft. = (15.00 ft. in the drill collars & 0.00 ft. in the drill pipe.)

BOTTOM HOLE TEMPERATURE: 103 degrees farenheit.

ELECTRIC LOG TOPS

<u>FORMATION NAME</u>	<u>TOP</u>	<u>SUB-SEA DATUM</u>
Top Anhydrite	2184'	+477
Base Anhydrite	2215'	+446
Topeka	3325'	-664
Deer Creek	3441'	-780
Oread	3474'	-813
Heebner	3494'	-833
Toronto	3523'	-862
Lansing/Kansas City	3534'	-873
Base Kansas City	3736'	-1075
Marmaton	3750'	-1089
Rotary Total Depth	3775'	-1114
Loggers Total Depth	3774'	-1113

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