

15-055-21483

22-26s-34w

**WELL NAME:** Oliver 1-22  
**OPERATOR:** Helmerich & Payne Inc  
**LOCATION:** Sec 22 Rge 26s Twp 34w  
Finney County Kansas  
**DATE:** 03/22/96

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TRILOBITE TESTING L.L.C.

OPERATOR : Helmerich & Payne

DATE 3-18-96

WELL NAME: Oliver # 1-22

KB 2958.00 ft

TICKET NO: 8824

DST #1

LOCATION : 22-26S-34W, Finney Cty KS

GR 2946.00 ft

FORMATION: KC Marmaton

INTERVAL : 4397.00 To 4481.00 ft

TD 4504.00 ft

TEST TYPE: CONV. STRADDLE

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11058	11058	2346			PF Fr. 2253 to 2323 hr
SI 60	Range(Psi )	4500.0	4500.0	4995.0	0.0	0.0	IS Fr. 2323 to 0023 hr
SF 60	Clock(hrs)	AK-1	AK-1	Alpin			SF Fr. 0023 to 0123 hr
FS 120	Depth(ft )	4406.0	4406.0	4398.0	0.0	0.0	FS Fr. 0123 to 0223 hr

	Field	1	2	3	4
A. Init Hydro	2199.0	2198.0	2172.0	0.0	0.0
B. First Flow	.72.0	57.0	26.0	0.0	0.0
B1. Final Flow	111.0	102.0	115.0	0.0	0.0
C. In Shut-in	1220.0	1207.0	1233.0	0.0	0.0
D. Init Flow	166.0	151.0	124.0	0.0	0.0
E. Final Flow	244.0	240.0	256.0	0.0	0.0
F. Fl Shut-in	1220.0	1204.0	1228.0	0.0	0.0
G. Final Hydro	2177.0	2105.0	2123.0	0.0	0.0
Inside/Outside	0	0	I		

T STARTED 1845 hr  
T ON BOTM 2250 hr  
T OPEN 2253 hr  
T PULLED 0223 hr  
T OUT 0620 hr

TOOL DATA-----  
Tool Wt. 5000.00 lbs  
Wt Set On Packer 35000.00 lbs  
Wt Pulled Loose 105000.00 lbs  
Initial Str Wt 90000.00 lbs  
Unseated Str Wt 90000.00 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 594.00 ft  
D.P. Length 3845.00 ft

RECOVERY

Tot Fluid 480.00 ft of 480.00 ft in DC and 0.00 ft in DP  
120.00 ft of Water cut mud trace oil -  
0.00 ft of 3% oil, 30% water, 67% mud  
60.00 ft of Watery mud - 70% water, 30% mud, scum of oil  
300.00 ft of Water - 100% water, slight scum oil  
0.00 ft of  
0.00 ft of  
0.00 ft of  
0.00 ft of

SALINITY 39500.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -  
Surface blow built to 4.25"  
  
Initial Shutin -  
No return  
  
Final Flow -  
Surface blow built to 1.25"  
  
Final Shutin -  
No return

MUD DATA-----  
Mud Type Chemical  
Weight 9.10 lb/cf  
Vis. 54.00 S/L  
W.L. 8.80 in3  
F.C. 0.00 in  
Mud Drop Y 6.0 ft  
  
Amt. of fill 0.00 ft  
Btm. H. Temp. 116.00 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. Brad Rine  
Contr. Cheyenne  
Rig # 7  
Unit #  
Pump T.

SAMPLES:

SENT TO:

Test Successful: Y

# TEST HISTORY

8824 DST #1 Oliver # 1-22 H & P Inc.

## Flag Points

t (Min.)	P (PSig)
A: 0.00	2171.79
B: 0.00	26.26
C: 30.00	114.80
D: 60.00	1232.72
E: 0.00	124.20
F: 59.00	256.39
G: 120.00	1227.94
Q: 0.00	2123.03

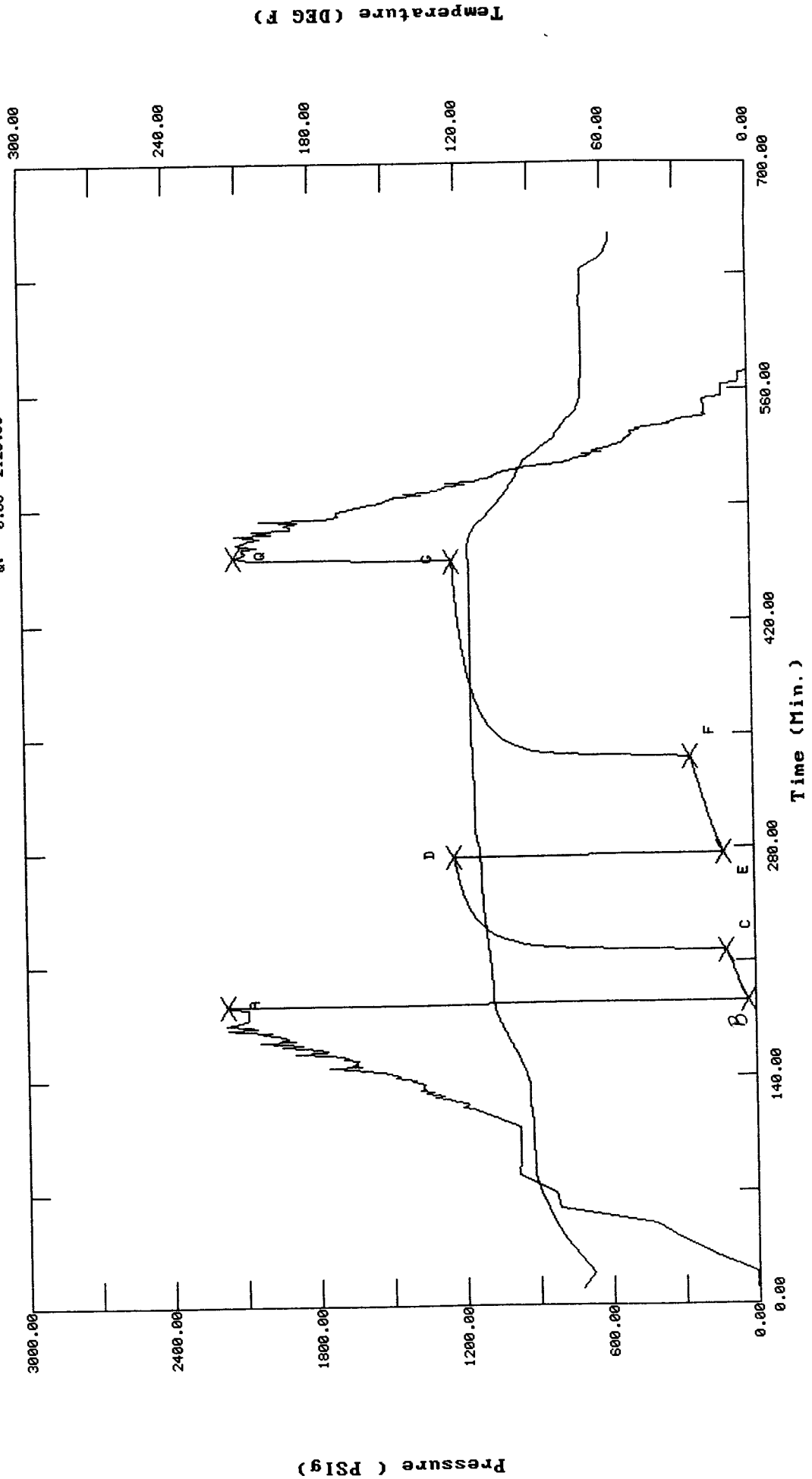
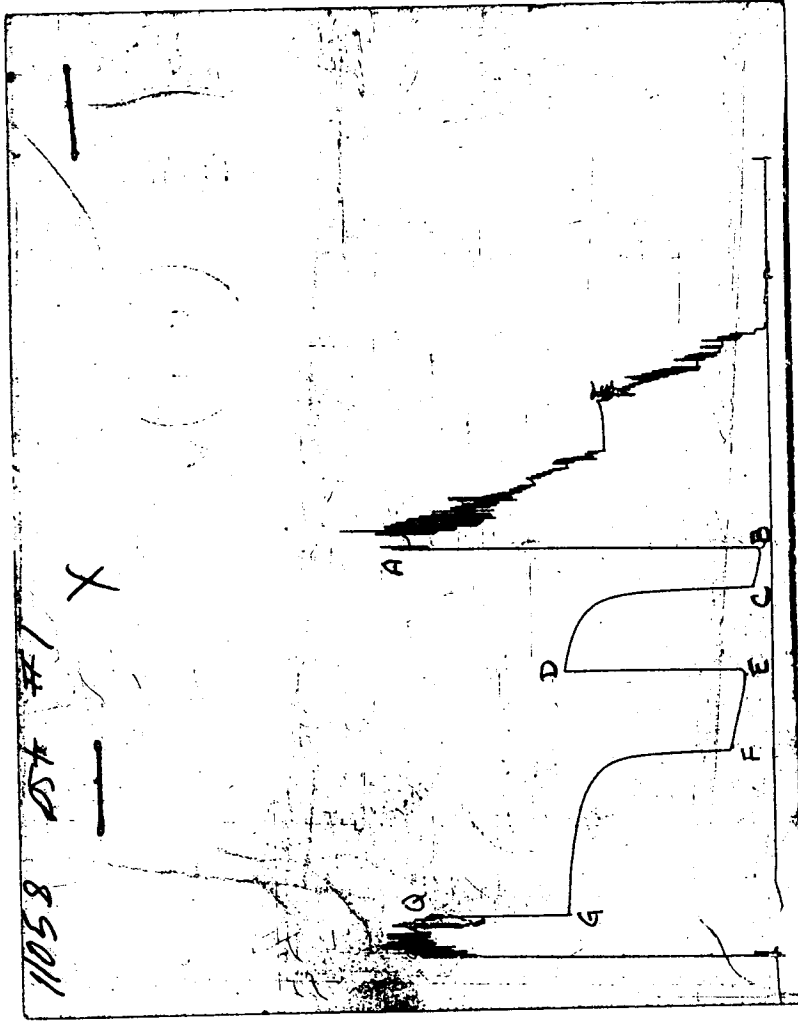
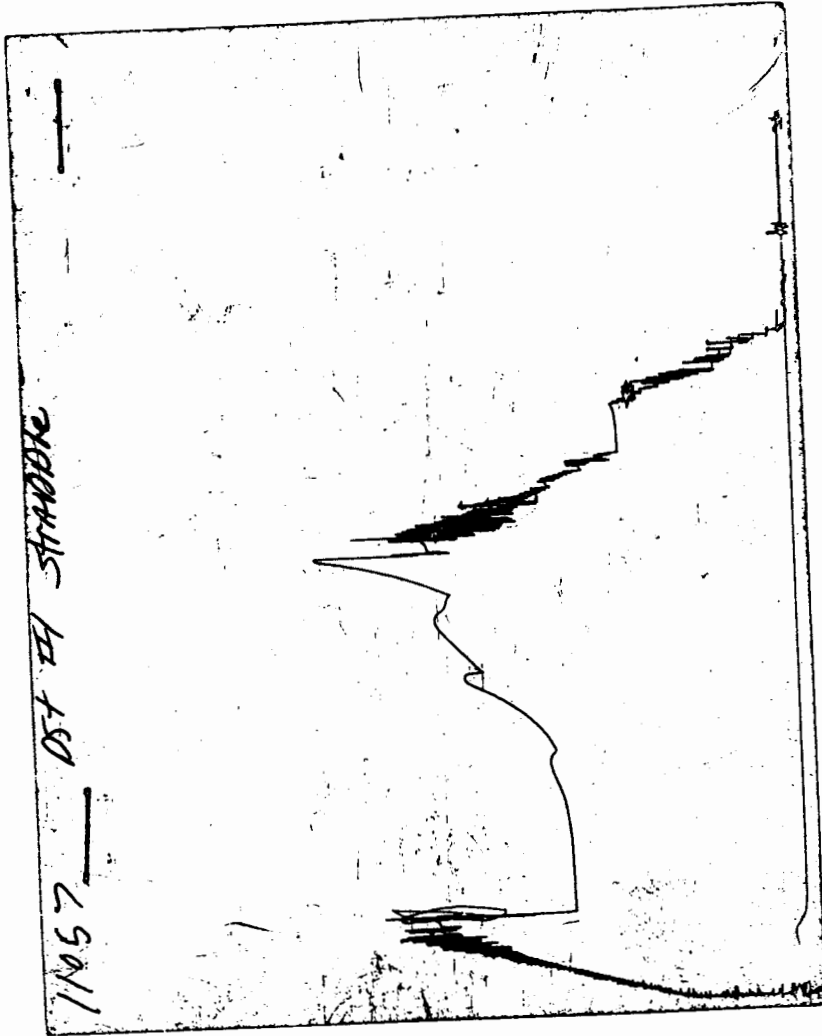


CHART PAGE



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

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

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 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8824 DST #1 Oliver # 1-22 H & P Inc.

DATE: 03/18/96

TIME: 20:00:56  
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	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
***** Initial Hydro.	185.00	2171.8	0.0	107.44		
***** Start Flow 1	0.00	26.3	0.0	107.59		
	1.00	30.6	4.4	107.69		
	2.00	35.1	8.8	107.88		
	3.00	38.5	12.3	107.90		
	4.00	42.1	15.9	107.90		
	5.00	45.6	19.4	107.90		
	6.00	48.9	22.7	107.90		
	7.00	51.9	25.7	107.90		
	8.00	55.2	29.0	107.90		
	9.00	58.6	32.3	107.90		
	10.00	61.9	35.7	107.95		
	11.00	64.4	38.1	108.01		
	12.00	67.0	40.7	108.09		
	13.00	69.7	43.5	108.15		
	14.00	72.3	46.1	108.22		
	15.00	74.6	48.3	108.27		
	16.00	77.2	50.9	108.34		
	17.00	79.7	53.5	108.37		
	18.00	82.3	56.1	108.43		
	19.00	85.0	58.7	108.48		
	20.00	87.3	61.0	108.55		
	21.00	90.3	64.0	108.61		
	22.00	93.2	67.0	108.68		
	23.00	96.1	69.8	108.74		
	24.00	98.9	72.7	108.80		
	25.00	101.4	75.1	108.84		
	26.00	104.0	77.7	108.93		
	27.00	106.8	80.6	109.02		
	28.00	109.6	83.3	109.07		
	29.00	112.4	86.1	109.12		
***** End Flow 1	30.00	114.8	88.5	109.19		
***** Start Shutin 1	0.00	114.8	0.0	109.19	0.0000	0.013
	1.00	143.9	29.1	109.28	31.0000	0.021
	2.00	518.0	403.2	109.36	16.0000	0.268
	3.00	728.8	614.0	109.45	11.0000	0.531
	4.00	840.8	726.0	109.54	8.5000	0.707
	5.00	906.5	791.7	109.64	7.0000	0.822
	6.00	949.8	835.0	109.72	6.0000	0.902
	7.00	981.5	866.7	109.82	5.2857	0.963
	8.00	1006.4	891.6	109.91	4.7500	1.013
	9.00	1026.6	911.8	109.98	4.3333	1.054
	10.00	1043.5	928.7	110.07	4.0000	1.089
	11.00	1058.0	943.2	110.18	3.7273	1.119
	12.00	1070.7	955.9	110.27	3.5000	1.146
	13.00	1081.9	967.1	110.34	3.3077	1.171
	14.00	1091.8	977.0	110.39	3.1429	1.192
	15.00	1100.7	985.9	110.44	3.0000	1.212
	16.00	1108.8	994.0	110.50	2.8750	1.230
	17.00	1116.2	1001.4	110.56	2.7647	1.246
	18.00	1123.0	1008.2	110.62	2.6667	1.261

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
19.00	1129.4	1014.6	110.70	2.5789	1.276
20.00	1135.1	1020.3	110.77	2.5000	1.288
21.00	1140.6	1025.8	110.85	2.4286	1.301
22.00	1145.6	1030.8	110.93	2.3636	1.312
23.00	1150.4	1035.6	111.00	2.3043	1.323
24.00	1154.9	1040.1	111.08	2.2500	1.334
25.00	1159.3	1044.5	111.15	2.2000	1.344
26.00	1163.2	1048.4	111.22	2.1538	1.353
27.00	1166.8	1052.0	111.31	2.1111	1.362
28.00	1170.4	1055.6	111.37	2.0714	1.370
29.00	1173.8	1059.0	111.42	2.0345	1.378
30.00	1177.1	1062.3	111.48	2.0000	1.386
31.00	1180.3	1065.5	111.53	1.9677	1.393
32.00	1183.5	1068.7	111.57	1.9375	1.401
33.00	1186.4	1071.6	111.62	1.9091	1.408
34.00	1189.1	1074.3	111.67	1.8824	1.414
35.00	1191.7	1076.9	111.69	1.8571	1.420
36.00	1194.0	1079.2	111.74	1.8333	1.426
37.00	1196.4	1081.6	111.79	1.8108	1.431
38.00	1198.7	1083.9	111.83	1.7895	1.437
39.00	1201.0	1086.2	111.87	1.7692	1.442
40.00	1203.1	1088.3	111.90	1.7500	1.447
41.00	1205.1	1090.3	111.98	1.7317	1.452
42.00	1206.9	1092.1	111.97	1.7143	1.457
43.00	1208.7	1093.9	112.02	1.6977	1.461
44.00	1210.4	1095.6	112.06	1.6818	1.465
45.00	1212.1	1097.3	112.07	1.6667	1.469
46.00	1213.8	1099.0	112.12	1.6522	1.473
47.00	1215.5	1100.7	112.15	1.6383	1.477
48.00	1217.1	1102.3	112.18	1.6250	1.481
49.00	1218.7	1103.9	112.20	1.6122	1.485
50.00	1220.2	1105.4	112.23	1.6000	1.489
51.00	1221.7	1106.9	112.25	1.5882	1.493
52.00	1223.1	1108.3	112.28	1.5769	1.496
53.00	1224.5	1109.7	112.30	1.5660	1.499
54.00	1225.7	1110.9	112.32	1.5556	1.502
55.00	1227.0	1112.2	112.35	1.5455	1.506
56.00	1228.3	1113.5	112.39	1.5357	1.509
57.00	1229.4	1114.6	112.43	1.5263	1.511
58.00	1230.5	1115.7	112.45	1.5172	1.514
59.00	1231.6	1116.8	112.49	1.5085	1.517
60.00	1232.7	1117.9	112.52	1.5000	1.520
***** End Shut-in 1					
***** Start Flow 2	0.00	124.2	0.0	112.52	
	1.00	127.2	3.0	112.52	
	2.00	129.9	5.7	112.52	
	3.00	132.8	8.6	112.61	
	4.00	135.6	11.4	112.63	
	5.00	138.4	14.2	112.83	
	6.00	141.1	16.9	113.05	
	7.00	143.5	19.3	113.25	
	8.00	146.3	22.1	113.41	

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Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
9.00	149.1	24.9	113.61		
10.00	151.9	27.7	113.76		
11.00	154.3	30.1	113.94		
12.00	156.9	32.7	114.12		
13.00	159.8	35.6	114.29		
14.00	162.1	37.9	114.43		
15.00	164.6	40.4	114.52		
16.00	167.3	43.1	114.58		
17.00	169.4	45.2	114.61		
18.00	172.0	47.8	114.62		
19.00	174.6	50.4	114.60		
20.00	177.1	52.9	114.59		
21.00	179.7	55.5	114.56		
22.00	182.2	58.0	114.55		
23.00	184.0	59.8	114.52		
24.00	185.8	61.6	114.51		
25.00	187.6	63.4	114.50		
26.00	189.4	65.2	114.48		
27.00	191.3	67.1	114.48		
28.00	193.0	68.8	114.47		
29.00	194.9	70.7	114.48		
30.00	196.5	72.3	114.46		
31.00	198.7	74.5	114.48		
32.00	201.1	76.9	114.48		
33.00	203.3	79.1	114.50		
34.00	205.5	81.3	114.49		
35.00	207.7	83.5	114.51		
36.00	209.8	85.6	114.51		
37.00	211.7	87.5	114.55		
38.00	213.8	89.6	114.58		
39.00	215.9	91.7	114.63		
40.00	218.0	93.7	114.66		
41.00	220.1	95.8	114.67		
42.00	222.0	97.8	114.69		
43.00	223.9	99.7	114.72		
44.00	225.8	101.6	114.74		
45.00	228.2	104.0	114.77		
46.00	230.1	105.9	114.80		
47.00	232.3	108.1	114.83		
48.00	234.5	110.3	114.86		
49.00	236.6	112.4	114.89		
50.00	238.3	114.1	114.92		
51.00	240.5	116.3	114.96		
52.00	242.6	118.4	114.99		
53.00	244.7	120.5	115.00		
54.00	246.9	122.7	115.00		
55.00	248.8	124.5	115.00		
56.00	250.8	126.6	115.01		
57.00	252.4	128.2	115.01		
58.00	254.5	130.3	115.02		
59.00	256.4	132.2	115.05		

\*\*\*\*\* End Flow 2

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

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	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
***** Start Shutin 2	0.00	256.4	0.0	115.05	0.0000	0.066
	1.00	359.5	103.1	115.07	90.0000	0.129
	2.00	645.1	388.7	115.15	45.5000	0.416
	3.00	781.9	525.5	115.20	30.6667	0.611
	4.00	853.9	597.5	115.26	23.2500	0.729
	5.00	898.6	642.2	115.30	18.8000	0.807
	6.00	929.7	673.4	115.35	15.8333	0.864
	7.00	953.6	697.2	115.39	13.7143	0.909
	8.00	972.7	716.3	115.44	12.1250	0.946
	9.00	988.5	732.1	115.47	10.8889	0.977
	10.00	1002.2	745.8	115.51	9.9000	1.004
	11.00	1014.0	757.6	115.53	9.0909	1.028
	12.00	1024.3	767.9	115.56	8.4167	1.049
	13.00	1033.7	777.3	115.57	7.8462	1.069
	14.00	1042.1	785.7	115.59	7.3571	1.086
	15.00	1049.9	793.5	115.62	6.9333	1.102
	16.00	1057.0	800.6	115.64	6.5625	1.117
	17.00	1063.5	807.1	115.66	6.2353	1.131
	18.00	1069.7	813.3	115.66	5.9444	1.144
	19.00	1075.3	818.9	115.67	5.6842	1.156
	20.00	1080.6	824.3	115.66	5.4500	1.168
	21.00	1085.7	829.3	115.69	5.2381	1.179
	22.00	1090.4	834.0	115.69	5.0455	1.189
	23.00	1094.8	838.4	115.71	4.8696	1.199
	24.00	1099.2	842.8	115.72	4.7083	1.208
	25.00	1103.2	846.8	115.72	4.5600	1.217
	26.00	1107.1	850.7	115.74	4.4231	1.226
	27.00	1110.9	854.5	115.73	4.2963	1.234
	28.00	1114.4	858.0	115.74	4.1786	1.242
	29.00	1117.7	861.4	115.75	4.0690	1.249
	30.00	1121.0	864.6	115.76	3.9667	1.257
	31.00	1124.1	867.7	115.76	3.8710	1.264
	32.00	1127.1	870.8	115.76	3.7812	1.270
	33.00	1130.0	873.6	115.78	3.6970	1.277
	34.00	1132.8	876.4	115.78	3.6176	1.283
	35.00	1135.5	879.1	115.79	3.5429	1.289
	36.00	1138.1	881.7	115.78	3.4722	1.295
	37.00	1140.6	884.2	115.79	3.4054	1.301
	38.00	1142.9	886.5	115.79	3.3421	1.306
	39.00	1145.2	888.8	115.79	3.2821	1.311
	40.00	1147.5	891.1	115.79	3.2250	1.317
	41.00	1149.6	893.2	115.80	3.1707	1.322
	42.00	1151.7	895.3	115.80	3.1190	1.326
	43.00	1153.9	897.5	115.81	3.0698	1.332
	44.00	1155.8	899.5	115.81	3.0227	1.336
	45.00	1157.9	901.5	115.82	2.9778	1.341
	46.00	1159.7	903.3	115.82	2.9348	1.345
	47.00	1161.6	905.2	115.82	2.8936	1.349
	48.00	1163.3	906.9	115.82	2.8542	1.353
	49.00	1165.1	908.7	115.81	2.8163	1.357
	50.00	1166.8	910.4	115.83	2.7800	1.362

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

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DATE: 03/18/96

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Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
51.00	1168.4	912.0	115.82	2.7451	1.365
52.00	1170.0	913.6	115.82	2.7115	1.369
53.00	1171.6	915.2	115.82	2.6792	1.373
54.00	1173.1	916.7	115.79	2.6481	1.376
55.00	1174.6	918.2	115.80	2.6182	1.380
56.00	1175.9	919.5	115.81	2.5893	1.383
57.00	1177.4	921.0	115.81	2.5614	1.386
58.00	1178.7	922.3	115.75	2.5345	1.389
59.00	1180.1	923.7	115.78	2.5085	1.393
60.00	1181.4	925.1	115.79	2.4833	1.396
61.00	1182.7	926.3	115.83	2.4590	1.399
62.00	1184.0	927.7	115.86	2.4355	1.402
63.00	1185.2	928.8	115.86	2.4127	1.405
64.00	1186.4	930.0	115.88	2.3906	1.408
65.00	1187.6	931.2	115.91	2.3692	1.410
66.00	1188.7	932.3	115.94	2.3485	1.413
67.00	1189.9	933.5	115.91	2.3284	1.416
68.00	1191.0	934.6	115.90	2.3088	1.419
69.00	1192.0	935.6	115.89	2.2899	1.421
70.00	1193.0	936.6	115.91	2.2714	1.423
71.00	1194.0	937.6	115.84	2.2535	1.426
72.00	1195.1	938.7	115.89	2.2361	1.428
73.00	1196.0	939.7	115.89	2.2192	1.431
74.00	1197.0	940.6	115.91	2.2027	1.433
75.00	1197.9	941.5	115.89	2.1867	1.435
76.00	1198.9	942.5	115.90	2.1711	1.437
77.00	1199.8	943.4	115.90	2.1558	1.440
78.00	1200.8	944.4	115.90	2.1410	1.442
79.00	1201.7	945.3	115.90	2.1266	1.444
80.00	1202.5	946.1	115.90	2.1125	1.446
81.00	1203.3	947.0	115.91	2.0988	1.448
82.00	1204.3	947.9	115.91	2.0854	1.450
83.00	1205.1	948.7	115.90	2.0723	1.452
84.00	1205.9	949.5	115.91	2.0595	1.454
85.00	1206.7	950.3	115.91	2.0471	1.456
86.00	1207.5	951.2	115.91	2.0349	1.458
87.00	1208.3	951.9	115.92	2.0230	1.460
88.00	1209.1	952.7	115.91	2.0114	1.462
89.00	1209.8	953.4	115.91	2.0000	1.464
90.00	1210.5	954.1	115.92	1.9889	1.465
91.00	1211.2	954.8	115.92	1.9780	1.467
92.00	1211.9	955.5	115.92	1.9674	1.469
93.00	1212.6	956.2	115.92	1.9570	1.470
94.00	1213.3	956.9	115.91	1.9468	1.472
95.00	1213.9	957.5	115.93	1.9368	1.474
96.00	1214.6	958.2	115.93	1.9271	1.475
97.00	1215.3	958.9	115.93	1.9175	1.477
98.00	1215.9	959.5	115.92	1.9082	1.479
99.00	1216.4	960.1	115.94	1.8990	1.480
100.00	1217.1	960.7	115.94	1.8900	1.481
101.00	1217.7	961.3	115.94	1.8812	1.483

-----  
 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8824 DST #1 Oliver # 1-22 H & P Inc.

DATE: 03/18/96 TIME: 20:00:56  
 -----

	Time	Pressure PSIg	delta P PSIg	P	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
	102.00	1218.3	961.9		115.94	1.8725	1.484
	103.00	1218.9	962.5		115.93	1.8641	1.486
	104.00	1219.6	963.2		115.95	1.8558	1.487
	105.00	1220.2	963.8		115.94	1.8476	1.489
	106.00	1220.6	964.2		115.95	1.8396	1.490
	107.00	1221.2	964.8		115.95	1.8318	1.491
	108.00	1221.8	965.4		115.95	1.8241	1.493
	109.00	1222.3	965.9		115.96	1.8165	1.494
	110.00	1222.9	966.5		115.99	1.8091	1.495
	111.00	1223.3	966.9		115.96	1.8018	1.497
	112.00	1223.9	967.5		115.96	1.7946	1.498
	113.00	1224.4	968.0		115.97	1.7876	1.499
	114.00	1224.9	968.5		115.97	1.7807	1.500
	115.00	1225.5	969.1		115.98	1.7739	1.502
	116.00	1226.0	969.6		115.98	1.7672	1.503
	117.00	1226.5	970.1		115.97	1.7607	1.504
	118.00	1227.1	970.7		115.97	1.7542	1.506
	119.00	1227.4	971.0		115.98	1.7479	1.507
*****	End Shut-in 2	120.00	1227.9	971.5	115.98	1.7417	1.508
*****	Final Hydro.	460.00	2123.0	0.0	116.15		

\*\*\* TOOL DIAGRAM \*\*\* CONV. STRADDLE

WELL NAME: Oliver # 1-22

LOCATION : 22-26S-34W, Finney Cty KS

TICKET No. 8824 D.S.T. No. 1 DATE 3-18-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 30

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 46

TOTAL TOOL ..... 76

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands1 Single Total 61

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY ..... 137

D.C. ABOVE TOOLS.Stands9 Single Total 533

D.P. ABOVE TOOLS.Stands62 Single 1 Total 3845

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4515

TOTAL DEPTH ..... 4504

TOTAL DRILL PIPE ABOVE K.B. .... 11

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -

Water 4,000 ml, Oil scum, Pressure 1150 PSI,  
Total 4000 ml

SAMPLER ANALYSIS -

Resist .18 ohms @ 64 F; Chlorides 39500 ppm

PIT MUD ANALYSIS -

Chlorides 3700 ppm, Resist 1.8 ohms @ 65 F;  
Vis 54, Mud Wt 9.1, Filtrate 8.8, LCM @3

PIPE RECOVERY -

Top -

Resist .39 ohms @ 58 F; Chlorides 21000 ppm

Bottom -

Resist .18 ohms @ 64 F; Chlorides 39500 ppm

P.O. SUB	
C.O. SUB 1'	4367
S.I. TOOL 5'	4373
sampler 3'	4376
HMV 5'	4381
JARS 5'	4386
SAFETY JOINT 2'	4388
PACKER top	4392
PACKER bottom	4397
DEPTH 4397	
STUBB 1'	4398
ANCHOR 11'-perf	4409
1' c.o.	4410
61' drill collar	4471
1' c.o.	4472
5'-perf	4477
1' blank off	4478
3'top of packer	4481
T.C.	
DEPTH	
PACKER straddle packer	4481
1' stubb	4482
17'-perf	4499
BULLNOSE 5'	
T.D.	4504

# TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

## FLUID SAMPLER DATA

Ticket No. 8824 Date 3-18-96  
Company Name H & P INC.  
Lease Oliver #1-22 Test No. 1  
County Finney, KS Sec. 22 Twp. 26 S Rng. 34 W

### SAMPLER RECOVERY

Gas \_\_\_\_\_ ML  
Oil Scum \_\_\_\_\_ ML  
Mud \_\_\_\_\_ ML  
Water 4,000 \_\_\_\_\_ ML  
Other \_\_\_\_\_ ML  
Pressure 1150 lbs \_\_\_\_\_ PSI  
Total 4,000 \_\_\_\_\_ ML

### PIT MUD ANALYSIS

Chlorides 3,700 \_\_\_\_\_ ppm.  
Resistivity 1.8 ohms @ 65 \_\_\_\_\_ F  
Viscosity 54 \_\_\_\_\_  
Mud Weight 9.1 \_\_\_\_\_  
Filtrate 8.8 \_\_\_\_\_  
Other HCM #2 \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity .18 ohms @ 69 \_\_\_\_\_ F  
Chlorides 39,500 \_\_\_\_\_ ppm.  
Gravity \_\_\_\_\_ corrected @ 60 F

### PIPE RECOVERY

TOP  
Resistivity .39 ohms @ 58 \_\_\_\_\_ F  
Chlorides 21,000 \_\_\_\_\_ ppm.

#### MIDDLE

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ F  
Chlorides \_\_\_\_\_ ppm.

#### BOTTOM

Resistivity .18 ohms @ 64 \_\_\_\_\_ F  
Chlorides 39,500 \_\_\_\_\_ ppm.

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

No 8824

## Test Ticket

Well Name & No. Oliver #1-22 Test No. 1 Date 3-18-96  
 Company H & P Inc. Zone Tested KC - mill mt. Tol  
 Address P.O. Box 558 Garden City, KS 67846 Elevation 2958' KB 2946' GL  
 Co. Rep / Geo. Brad Rive Cont. Cheyenne #7 Est. Ft. of Pay      Por.      %  
 Location: Sec. 22 Twp. 26 S Rge. 39 W Co. Finney State KS  
 No. of Copies None Distribution Sheet (Y, N)      Turnkey (Y, N) N Evaluation (Y, N)     

Interval Tested ~~4372~~ 4397' - 4481' Initial Str Wt./Lbs. 90,000 Unseated Str Wt./Lbs. 90,000  
 Anchor Length 84' Wt. Set Lbs. 35,000 Wt. Pulled Loose/Lbs. 105,000  
 Top Packer Depth 4392' - 4397' Hole Size — 7 7/8"  Rubber Size — 6 3/4"   
 Bottom Packer Depth 4481' Wt. Pipe I.D. — 2.7 Ft. Run       
 Total Depth 4504' Drill Collar — 2.25 Ft. Run 594'  
 Mud Wt. 9.1 LCM #2 Vis. 54 WL 8.8 Drill Pipe Size 4 1/2 XH Ft. Run 3845'  
 Blow Description Surface blow built to 4 1/4" in.

T.S.I: No return

F.F: Surface blow built to 1 1/4" in.

F.S.I: No return

Recovery — Total Feet	Ft. in DC	Ft. in WP	Ft. in DP
Rec. <u>120'</u> Feet Of <u>water cut mud to coil</u>	<u>480'</u>	<u>    </u>	<u>    </u>
Rec. <u>60'</u> Feet Of <u>watery mud</u>			
Rec. <u>300'</u> Feet Of <u>water</u>			
Rec. <u>    </u> Feet Of <u>    </u>			
Rec. <u>    </u> Feet Of <u>    </u>			

BHT 116° °F Gravity      °API D@      °F Corrected Gravity      °API  
 RW .19 @ 64 °F Chlorides 39,500 ppm Recovery Chlorides 3,700 ppm System

(A) Initial Hydrostatic Mud <u>2159</u> <u>2171</u> PSI	Recorder No. <u>2346</u>	T-Started <u>6:40 P.M.</u>
(B) First Initial Flow Pressure <u>72</u> <u>26</u> PSI	@ (depth) <u>4398'</u>	T-Open <u>10:53 P.M.</u>
(C) First Final Flow Pressure <u>111</u> <u>114</u> PSI	Recorder No. <u>11057</u>	T-Pulled <u>3:23 A.M.</u>
(D) Initial Shut-in Pressure <u>1220</u> <u>1232</u> PSI	@ (depth) <u>4501'</u>	T-Out <u>6:45 A.M.</u>
(E) Second Initial Flow Pressure <u>166</u> <u>124</u> PSI	Recorder No. <u>11058</u>	
(F) Second Final Flow Pressure <u>244</u> <u>256</u> PSI	@ (depth) <u>4406</u>	
(G) Final Shut-in Pressure <u>1220</u> <u>1227</u> PSI	Initial Opening <u>30</u>	Test <u>X</u> <u>600</u>
(H) Final Hydrostatic Mud <u>2177</u> <u>2123</u> PSI	Initial Shut-in <u>60</u>	Jars <u>X</u> <u>200</u>

Final Flow 60 Safety Joint X 50  
 Final Shut-in 120 Straddle X 250

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Approved By

Allen J. [Signature]

Our Representative

Shane [Signature]

Circ. Sub X N/C  
 Sampler X 200  
 Extra Packer X 150  
 Elect. Rec. X 150  
 Other       
 TOTAL PRICE \$ 1600

Well name Oliver

DST # 1

Recorder # 11058

				1
A		2198		2
B		57		3
C		102		4
D		1207		5
E		151		6
F		240		7
G		1204		8
H		2105		9
				1
				1
				1