

Well Name: KUHN #3-10
Company : HELMERICH & PAYNE
Location - Sec: 10 **Twps:** 27S **Rge:** 34W
County: HASKELL **State:** KS
Date: 12/17/95

TRILOBITE TESTING L.L.C.

OPERATOR : Helmerich & Payne
 WELL NAME: Kuhn #3-10
 LOCATION : 10-27S-34W Haskell Cty KS
 INTERVAL : 4610.00 To 4675.00 ft

DATE 12-16-95
 KB 2968.00 ft
 GR 2960.00 ft
 TD 4675.00 ft

TICKET NO: 8497
 FORMATION: Pawnee
 TEST TYPE: CONVENTIONAL

DST #1

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	11057	11057	2351			PF Fr. 1233 to 1248 hr
SI 60 Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0	IS Fr. 1248 to 1348 hr
SF 30 Clock(hrs)	AK-1	AK-1	Alpin			SF Fr. 1348 to 1418 hr
FS 60 Depth(ft)	4636.0	4636.0	4612.0	0.0	0.0	FS Fr. 1418 to 1518 hr

	Field	1	2	3	4	
A. Init Hydro	2298.0	2285.0	2253.0	0.0	0.0	T STARTED 1000 hr
B. First Flow	44.0	46.0	20.0	0.0	0.0	T ON BOTM 1230 hr
Bl. Final Flow	39.0	40.0	28.0	0.0	0.0	T OPEN 1233 hr
C. In Shut-in	1247.0	1256.0	1280.0	0.0	0.0	T PULLED 1518 hr
D. Init Flow	44.0	47.0	28.0	0.0	0.0	T OUT 1718 hr
E. Final Flow	39.0	46.0	35.0	0.0	0.0	
F. Fl Shut-in	1146.0	1147.0	1171.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2276.0	2226.0	2215.0	0.0	0.0	Tool Wt. 5000.00 lbs
Inside/Outside	O	O	I			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 80000.00 lbs
						Initial Str Wt 68000.00 lbs
						Unseated Str Wt 68000.00 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 670.00 ft
						D.P. Length 3934.00 ft

RECOVERY

Tot Fluid 15.00 ft of 15.00 ft in DC and 0.00 ft in DP
 15.00 ft of Drilling mud w/ scum of oil - 100% mud

SALINITY 1400.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Surface blow, built to a weak 1" blow

Initial Shutin -
 Bled blow, no return

Final Flow -
 Bubble to open tool, no blow

Final Shutin -
 No return

SAMPLES:
 SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.10 lb/
Vis.	54.00 S/I
W.L.	12.80 in
F.C.	0.00 in
Mud Drop Y	10.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	117.00 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 N	
Tester	Shane McBride
Co. Rep.	Austin Garner
Contr.	Cheyenne
Rig #	4
Unit #	
Pump T.	

Test Successful: Y

TEST HISTORY

8497 DST #1 Kuhn 3-10 Helmerich & Payne

Flag Points

(Min.) (K PSIG)

A1	0.00	2253.45
B1	0.00	19.00
C1	16.00	28.19
D1	59.00	1280.31
E1	0.00	28.11
F1	29.00	35.24
G1	62.00	1176.78
Q1	0.00	2214.68

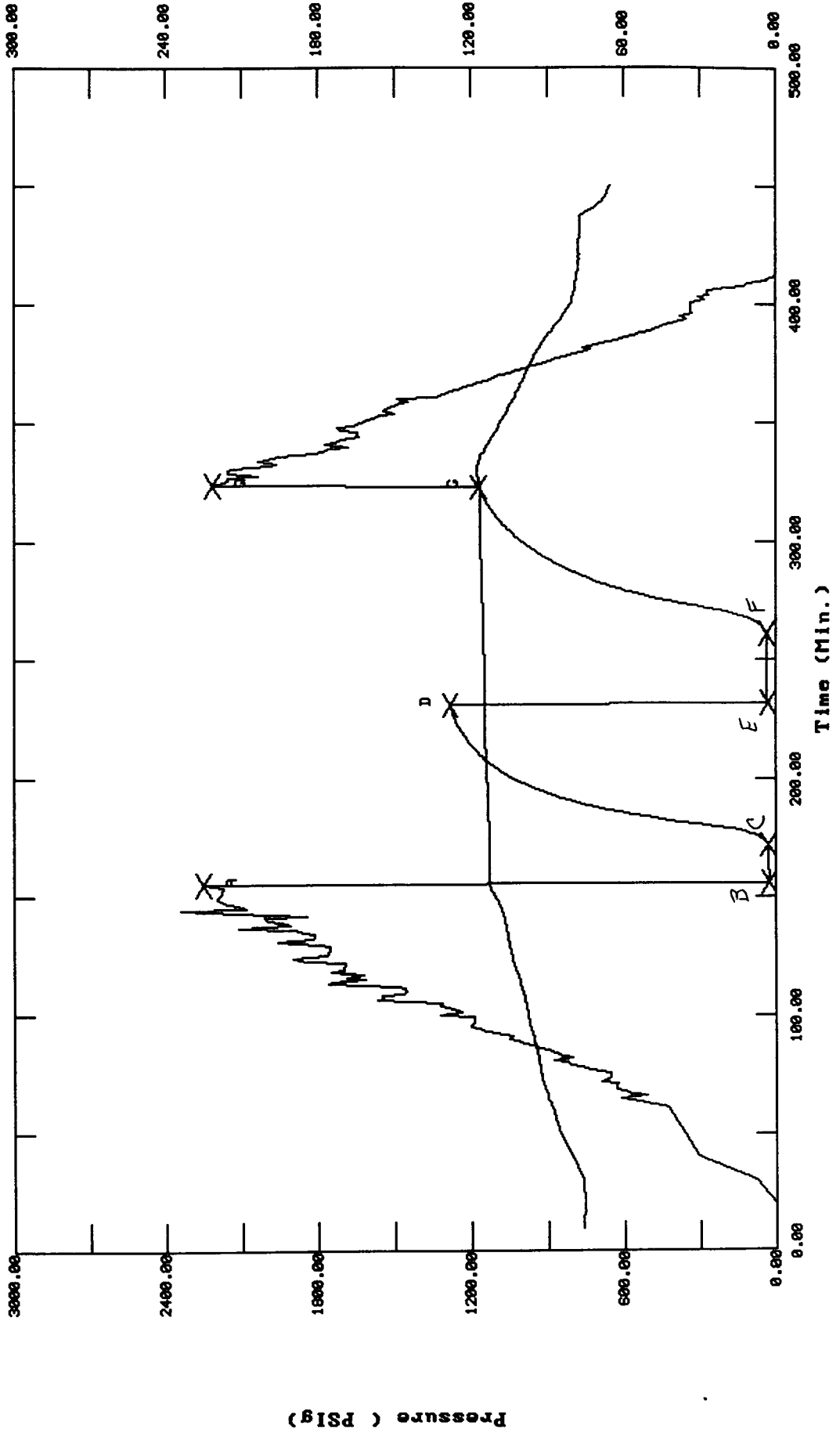
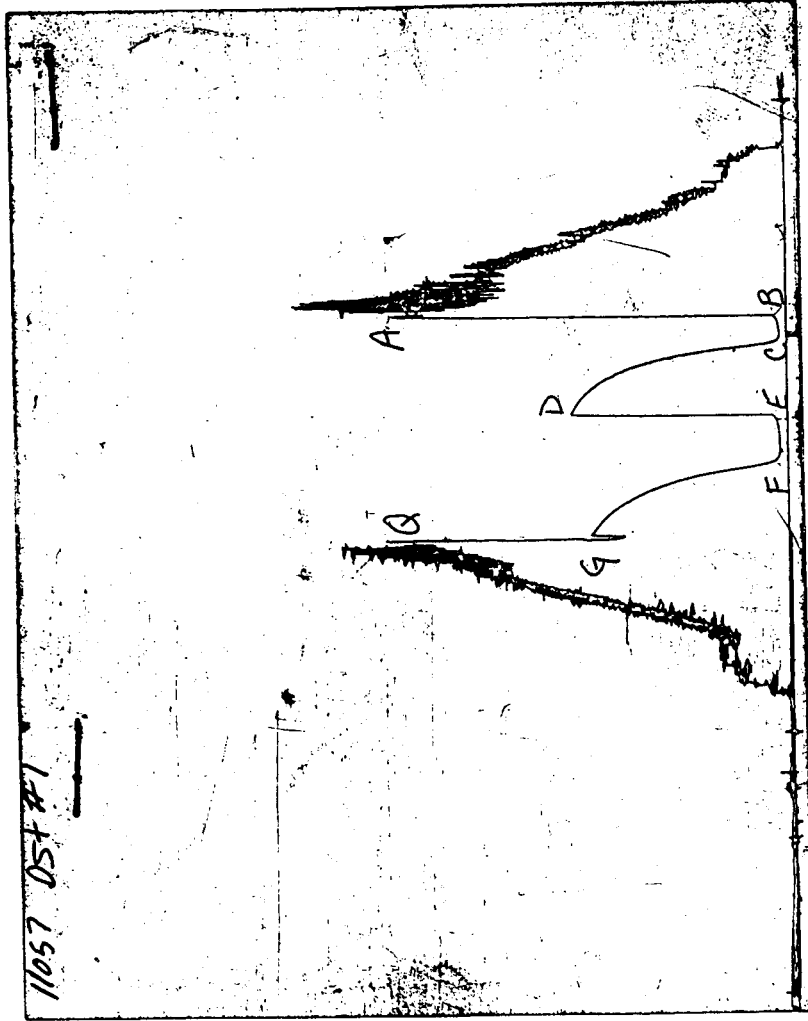


CHART PAGE



This is an actual photograph of recorder chart

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8497 DST #1 Kuhn 3-10 Helmerich & Payne

DATE: 12/16/95 TIME: 09:59:29

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	155.00	2253.5	0.0	112.46		
***** Start Flow 1	0.00	19.8	0.0	112.64		
	1.00	24.6	4.8	112.82		
	2.00	21.9	2.1	112.82		
	3.00	22.6	2.8	112.82		
	4.00	23.8	4.0	112.82		
	5.00	24.6	4.8	112.82		
	6.00	25.0	5.2	112.82		
	7.00	25.7	5.9	112.82		
	8.00	25.3	5.5	112.82		
	9.00	26.3	6.5	112.82		
	10.00	26.3	6.5	112.82		
	11.00	26.8	7.0	112.82		
	12.00	26.8	7.0	112.82		
	13.00	27.0	7.2	112.82		
	14.00	27.2	7.4	112.82		
	15.00	28.3	8.5	112.82		
***** End Flow 1	16.00	28.2	8.4	112.82		
***** Start Shutin 1	0.00	28.2	0.0	112.82	0.0000	0.001
	1.00	36.0	7.8	112.82	17.0000	0.001
	2.00	44.7	16.5	112.82	9.0000	0.002
	3.00	55.9	27.7	112.82	6.3333	0.003
	4.00	71.1	42.9	113.00	5.0000	0.005
	5.00	92.9	64.7	113.00	4.2000	0.009
	6.00	125.5	97.3	113.00	3.6667	0.016
	7.00	173.4	145.2	113.00	3.2857	0.030
	8.00	236.4	208.2	113.00	3.0000	0.056
	9.00	307.8	279.6	113.00	2.7778	0.095
	10.00	380.4	352.2	113.00	2.6000	0.145
	11.00	446.9	418.7	113.18	2.4545	0.200
	12.00	509.2	481.0	113.18	2.3333	0.259
	13.00	565.3	537.1	113.18	2.2308	0.320
	14.00	616.2	588.0	113.18	2.1429	0.380
	15.00	662.4	634.2	113.18	2.0667	0.439
	16.00	704.5	676.3	113.36	2.0000	0.496
	17.00	743.3	715.1	113.36	1.9412	0.552
	18.00	779.2	751.0	113.36	1.8889	0.607
	19.00	812.5	784.3	113.36	1.8421	0.660
	20.00	843.4	815.2	113.36	1.8000	0.711
	21.00	872.3	844.1	113.36	1.7619	0.761
	22.00	899.5	871.3	113.36	1.7273	0.809
	23.00	924.8	896.6	113.54	1.6957	0.855
	24.00	948.6	920.4	113.54	1.6667	0.900
	25.00	971.0	942.8	113.54	1.6400	0.943
	26.00	992.0	963.8	113.54	1.6154	0.984
	27.00	1011.7	983.6	113.72	1.5926	1.024
	28.00	1030.1	1001.9	113.72	1.5714	1.061
	29.00	1047.5	1019.3	113.72	1.5517	1.097
	30.00	1063.7	1035.5	113.72	1.5333	1.131
	31.00	1079.0	1050.8	113.72	1.5161	1.164
	32.00	1093.2	1065.0	113.90	1.5000	1.195

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8497 DST #1 Kuhn 3-10 Helmerich & Payne

DATE: 12/16/95 TIME: 09:59:29

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	33.00	1106.7	1078.5	113.72	1.4848	1.225
	34.00	1119.3	1091.1	113.90	1.4706	1.253
	35.00	1131.3	1103.1	113.90	1.4571	1.280
	36.00	1142.2	1114.1	113.90	1.4444	1.305
	37.00	1152.8	1124.6	114.08	1.4324	1.329
	38.00	1162.8	1134.6	114.08	1.4211	1.352
	39.00	1172.1	1143.9	114.08	1.4103	1.374
	40.00	1180.9	1152.7	114.08	1.4000	1.395
	41.00	1189.3	1161.1	114.26	1.3902	1.415
	42.00	1197.1	1168.9	114.26	1.3810	1.433
	43.00	1204.7	1176.5	114.26	1.3721	1.451
	44.00	1211.8	1183.6	114.26	1.3636	1.469
	45.00	1218.5	1190.3	114.44	1.3556	1.485
	46.00	1224.8	1196.6	114.44	1.3478	1.500
	47.00	1230.9	1202.7	114.44	1.3404	1.515
	48.00	1236.7	1208.5	114.44	1.3333	1.529
	49.00	1242.1	1213.9	114.44	1.3265	1.543
	50.00	1247.4	1219.2	114.62	1.3200	1.556
	51.00	1252.4	1224.3	114.62	1.3137	1.569
	52.00	1257.1	1229.0	114.62	1.3077	1.580
	53.00	1261.6	1233.4	114.62	1.3019	1.592
	54.00	1265.9	1237.7	114.62	1.2963	1.602
	55.00	1270.1	1241.9	114.62	1.2909	1.613
	56.00	1274.1	1245.9	114.62	1.2857	1.623
	57.00	1273.3	1245.1	114.80	1.2807	1.621
	58.00	1281.4	1253.2	114.62	1.2759	1.642
***** End Shut-in 1	59.00	1280.3	1252.1	114.80	1.2712	1.639
***** Start Flow 2	0.00	28.1	0.0	114.80		
	1.00	32.2	4.1	114.62		
	2.00	33.0	4.9	114.62		
	3.00	33.4	5.3	114.62		
	4.00	33.6	5.5	114.62		
	5.00	33.9	5.8	114.62		
	6.00	34.4	6.3	114.62		
	7.00	34.6	6.5	114.62		
	8.00	34.9	6.8	114.62		
	9.00	35.1	7.0	114.62		
	10.00	35.3	7.2	114.62		
	11.00	35.6	7.5	114.62		
	12.00	31.5	3.4	114.80		
	13.00	31.6	3.5	114.80		
	14.00	32.1	3.9	114.80		
	15.00	32.1	4.0	114.80		
	16.00	32.4	4.3	114.80		
	17.00	32.7	4.6	114.80		
	18.00	32.6	4.4	114.80		
	19.00	32.9	4.8	114.80		
	20.00	33.2	5.1	114.80		
	21.00	33.6	5.5	114.98		
	22.00	33.8	5.7	114.98		
	23.00	34.6	6.5	114.98		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8497 DST #1 Kuhn 3-10 Helmerich & Payne

DATE: 12/16/95 TIME: 09:59:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	24.00	34.2	6.0	114.98		
	25.00	35.0	6.9	114.98		
	26.00	34.3	6.2	114.98		
	27.00	34.8	6.7	114.98		
	28.00	35.4	7.3	114.98		
***** End Flow 2	29.00	35.2	7.1	115.16		
***** Start Shutin 2	0.00	35.2	0.0	115.16	0.0000	0.001
	1.00	37.4	2.2	115.16	46.0000	0.001
	2.00	44.8	9.6	115.16	23.5000	0.002
	3.00	53.5	18.2	115.16	16.0000	0.003
	4.00	63.9	28.6	115.16	12.2500	0.004
	5.00	77.0	41.7	115.16	10.0000	0.006
	6.00	93.7	58.5	115.16	8.5000	0.009
	7.00	115.6	80.4	115.16	7.4286	0.013
	8.00	143.8	108.6	115.34	6.6250	0.021
	9.00	179.9	144.7	115.34	6.0000	0.032
	10.00	223.6	188.3	115.34	5.5000	0.050
	11.00	272.2	236.9	115.34	5.0909	0.074
	12.00	323.4	288.1	115.34	4.7500	0.105
	13.00	374.0	338.7	115.34	4.4615	0.140
	14.00	422.2	387.0	115.52	4.2143	0.178
	15.00	467.5	432.2	115.52	4.0000	0.219
	16.00	509.3	474.0	115.52	3.8125	0.259
	17.00	548.0	512.7	115.52	3.6471	0.300
	18.00	583.8	548.6	115.52	3.5000	0.341
	19.00	617.0	581.8	115.70	3.3684	0.381
	20.00	647.9	612.7	115.70	3.2500	0.420
	21.00	676.7	641.5	115.70	3.1429	0.458
	22.00	703.6	668.4	115.70	3.0455	0.495
	23.00	728.9	693.7	115.70	2.9565	0.531
	24.00	752.7	717.4	115.70	2.8750	0.566
	25.00	775.2	740.0	115.88	2.8000	0.601
	26.00	796.6	761.3	115.88	2.7308	0.634
	27.00	816.8	781.5	115.88	2.6667	0.667
	28.00	836.0	800.8	115.88	2.6071	0.699
	29.00	854.4	819.1	115.88	2.5517	0.730
	30.00	871.8	836.6	115.88	2.5000	0.760
	31.00	888.5	853.3	115.88	2.4516	0.789
	32.00	904.6	869.4	116.06	2.4062	0.818
	33.00	920.0	884.8	116.06	2.3636	0.846
	34.00	934.7	899.5	116.06	2.3235	0.874
	35.00	948.9	913.6	116.06	2.2857	0.900
	36.00	962.5	927.2	116.06	2.2500	0.926
	37.00	975.4	940.2	116.06	2.2162	0.951
	38.00	987.9	952.7	116.06	2.1842	0.976
	39.00	999.8	964.6	116.06	2.1538	1.00
	40.00	1011.2	975.9	116.24	2.1250	1.022
	41.00	1022.1	986.9	116.24	2.0976	1.045
	42.00	1032.6	997.3	116.24	2.0714	1.066
	43.00	1042.5	1007.3	116.24	2.0465	1.087
	44.00	1052.2	1017.0	116.24	2.0227	1.107

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8497 DST #1 Kuhn 3-10 Helmerich & Payne

DATE: 12/16/95 TIME: 09:59:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	45.00	1061.3	1026.1	116.24	2.0000	1.126
	46.00	1070.1	1034.8	116.24	1.9783	1.145
	47.00	1078.5	1043.2	116.24	1.9574	1.163
	48.00	1086.4	1051.2	116.42	1.9375	1.180
	49.00	1094.2	1058.9	116.42	1.9184	1.197
	50.00	1101.6	1066.4	116.42	1.9000	1.214
	51.00	1108.8	1073.5	116.42	1.8824	1.229
	52.00	1115.6	1080.3	116.42	1.8654	1.244
	53.00	1122.1	1086.9	116.42	1.8491	1.259
	54.00	1128.3	1093.1	116.42	1.8333	1.273
	55.00	1134.4	1099.1	116.42	1.8182	1.287
	56.00	1140.2	1104.9	116.60	1.8036	1.300
	57.00	1145.8	1110.5	116.60	1.7895	1.313
	58.00	1151.1	1115.8	116.60	1.7759	1.325
	59.00	1156.3	1121.1	116.60	1.7627	1.337
	60.00	1161.3	1126.1	116.60	1.7500	1.349
	61.00	1166.0	1130.8	116.60	1.7377	1.360
***** End Shut-in 2	62.00	1170.7	1135.5	116.60	1.7258	1.371
***** Final Hydro.	324.00	2214.7	0.0	116.78		

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Kuhn #3-10

LOCATION : 10-27S-34W Haskell Cty KS

TICKET No. 8497 D.S.T. No. 1 DATE 12-16-95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 34

TOTAL TOOL 64

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 31

TOTAL ASSEMBLY 95

D.C. ABOVE TOOLS.Stands11 Single Total 670

D.P. ABOVE TOOLS.Stands63 Single Total 3934

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4699

TOTAL DEPTH 4675

TOTAL DRILL PIPE ABOVE K.B. 24

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -

Oil trace, Mud 4000 ml, Pressure 10 PSI,
Total 4000 ml

SAMPLER ANALYSIS -

Resist 4.11 ohms @ 68 F; Chlorides 1400 ppm

PIT MUD ANALYSIS -

Chlorides 1200 ppm; Resist 4.47 ohms @ 70 F
Vis 54, Mud Wt 9.1, Filtrate 12.8, LCM 2#

PIPE RECOVERY -

Top -
Resist 4.11 ohms @ 68 F; Chlorides 1400 ppm

P.O. SUB	
C.O. SUB 1' double pin	4580
S.I. TOOL 5'	4586
sampler	4589
HMV 5'	4594
JARS 5'	4599
SAFETY JOINT 2'	4601
PACKER top	4605
PACKER bottom	4610
DEPTH 4610	
STUBB 1'	4611
ANCHOR Alpine recorder	4612
5'	4616
5'	4621
5'	4626
5'	4631
5'	4636
AK-1 recorder	4636
T.C.	
DEPTH	
2'	4638
1'	4639
31' drill pipe	4670
BULLNOSE 5'	
T.D.	4675

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

No 8497

Test Ticket

Well Name & No. Kuhn #3-10 Test No. 1 Date 12-16-95
 Company Helmerich & Payne Zone Tested Pawnee
 Address P.O. Box 558 Garden City, KS 62846 Elevation 2968' KB 2960' GL
 Co. Rep / Geo. Austin Garner Cont. Cheyenne #4 Est. Ft. of Pay Por. %
 Location: Sec. 10 Twp. 27 Rge. 34 Co. Haskell State KS
 No. of Copies None Distribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N)

Interval Tested 4610' - 4675' Initial Str Wt./Lbs. 68,000 Unseated Str Wt./Lbs. 68,000
 Anchor Length 65' Wt. Set Lbs. 26,000 Wt. Pulled Loose/Lbs. 80,000
 Top Packer Depth 4605' Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 4610' Wt. Pipe I.D. — 2.7 Ft. Run
 Total Depth 4675' Drill Collar — 2.25 Ft. Run 670'
 Mud Wt. 9.1 LCM 2 Vis. 54 WL 12.8 Drill Pipe Size 4 1/2 FH Ft. Run 3934'
 Blow Description Surface Blow Built to 1 in.
F.S.I: Bleed Blow - NO return
F.F: Bubble to open tool - NO blow
F.S.I: NO return

Recovery — Total Feet	Ft. in DC	Ft. in WP	Ft. in DP
<u>15'</u>	<u>15'</u>	<u> </u>	<u> </u>
Rec. <u>15'</u> Feet Of <u>Drill mud Trace oil</u>	%gas <u>5%</u>	%oil <u> </u>	%water <u>100%</u>
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u>	%water <u> </u>
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u>	%water <u> </u>
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u>	%water <u> </u>
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u>	%water <u> </u>

BHT 117° °F Gravity °API D@ °F Corrected Gravity °API
 RW 4.11 @ 68 °F Chlorides 1,400 ppm Recovery Chlorides 1,200 ppm System
 (A) Initial Hydrostatic Mud 2298 PSI Recorder No. 2351 T-Started 10:00 AM
 (B) First Initial Flow Pressure 44 PSI @ (depth) 4612' T-Open 12:33 pm
 (C) First Final Flow Pressure 39 PSI Recorder No. 11057 T-Pulled 15:18 pm
 (D) Initial Shut-in Pressure 1247 PSI @ (depth) T-Out 17:18 pm
 (E) Second Initial Flow Pressure 44 PSI Recorder No.
 (F) Second Final Flow Pressure 39 PSI @ (depth)
 (G) Final Shut-in Pressure 1146 PSI Initial Opening 15 Test X 400
 (H) Final Hydrostatic Mud 2276 PSI Initial Shut-in 60 Jars X 200

Final Flow 30 Safety Joint X 50
 Final Shut-in 60 Straddle
 Circ. Sub X N/C
 Sampler X 200
 Extra Packer
 Elect. Rec. X 150
 Other
 TOTAL PRICE \$ 1200

Approved By Austin Garner
 Our Representative

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 8497 Date 12-16-95
Company Name Helmerich & Payne
Lease Kuhn #3-10 Test No. 1
County Haskell, KS Sec. 10 Twp. 27 Rng. 34

SAMPLER RECOVERY

Gas _____ ML
Oil scum _____ ML
Mud 4,000 _____ ML
Water _____ ML
Other _____ ML
Pressure 10.1bs _____ PSI
Total 4,000 _____ ML

PIT MUD ANALYSIS

Chlorides 1,200 _____ ppm.
Resistivity 4.47 ohms @ 70 F
Viscosity 54 _____
Mud Weight 9.1 _____
Filtrate 12.8 _____
Other LCM #2 _____

SAMPLER ANALYSIS

Resistivity 4.11 ohms @ 68 F
Chlorides 1,400 _____ ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity 4.11 ohms @ 68 F
Chlorides 1,400 _____ ppm.

MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

TRILOBITE TESTING L.L.C.

OPERATOR : Helmerich & Payne
 WELL NAME: Kuhn #3-10
 LOCATION : 10-27S-34W Haskell Cty KS
 INTERVAL : 4930.00 To 5130.00 ft

DATE 12/17/95

KB 2968.00 ft TICKET NO: 8498 DST #2
 GR 2960.00 ft FORMATION: Chester Sand
 TD 5130.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	11057	11057	2351			PF Fr. 0355 to 0410 hr
SI 60 Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0	IS Fr. 0410 to 0510 hr
SF 60 Clock(hrs)	AK-1	AK-1	Alpin			SF Fr. 0510 to 0610 hr
FS 120 Depth(ft)	5127.0	5127.0	4932.0	0.0	0.0	FS Fr. 0610 to 0810 hr

	Field	1	2	3	4	
A. Init Hydro	2536.0	2403.0	2342.0	0.0	0.0	T STARTED 0102 hr
B. First Flow	168.0	159.0	32.0	0.0	0.0	T ON BOTM 0350 hr
B1. Final Flow	151.0	147.0	36.0	0.0	0.0	T OPEN 0355 hr
C. In Shut-in	889.0	875.0	807.0	0.0	0.0	T PULLED 0810 hr
D. Init Flow	179.0	168.0	48.0	0.0	0.0	T OUT hr
E. Final Flow	179.0	170.0	60.0	0.0	0.0	
F. Fl Shut-in	906.0	882.0	809.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2502.0	2386.0	2313.0	0.0	0.0	Tool Wt. 0.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 26000.00 lbs

RECOVERY

Tot Fluid 65.00 ft of 65.00 ft in DC and 0.00 ft in DP
 65.00 ft of Slightly oil cut mud - 5% oil, 95% mud

Initial Str Wt 68000.00 lbs
 Unseated Str Wt 68000.00 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 670.00 ft
 D.P. Length 4428.00 ft

SALINITY 1000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Surface blow built to 2"

Initial Shutin -
 No return

Final Flow -
 Weak surface, built to a .25" blow

Final Shutin -
 No return

SAMPLES:
 SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 9.10 lb,
 Vis. 55.00 S/l
 W.L. 8.00 in
 F.C. 0.00 in
 Mud Drop
 Amt. of fill 0.00 ft
 Btm. H. Temp. 120.00 F
 Hole Condition
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out
 Tool Chased
 Tester Shane McBride
 Co. Rep. Austin Garner
 Contr. Cheyenne
 Rig # 4
 Unit #
 Pump T.

Test Successful: Y

TEST HISTORY

8498 DST# 2 Kuhn 3-10 H & P Inc.

Flag Points

{(Min.)} {X PSig}

A:	0.00	2342.33
B:	0.00	31.55
C:	15.00	36.00
D:	59.00	806.87
E:	0.00	47.75
F:	68.00	59.65
G:	121.00	806.55
Q:	0.00	2313.46

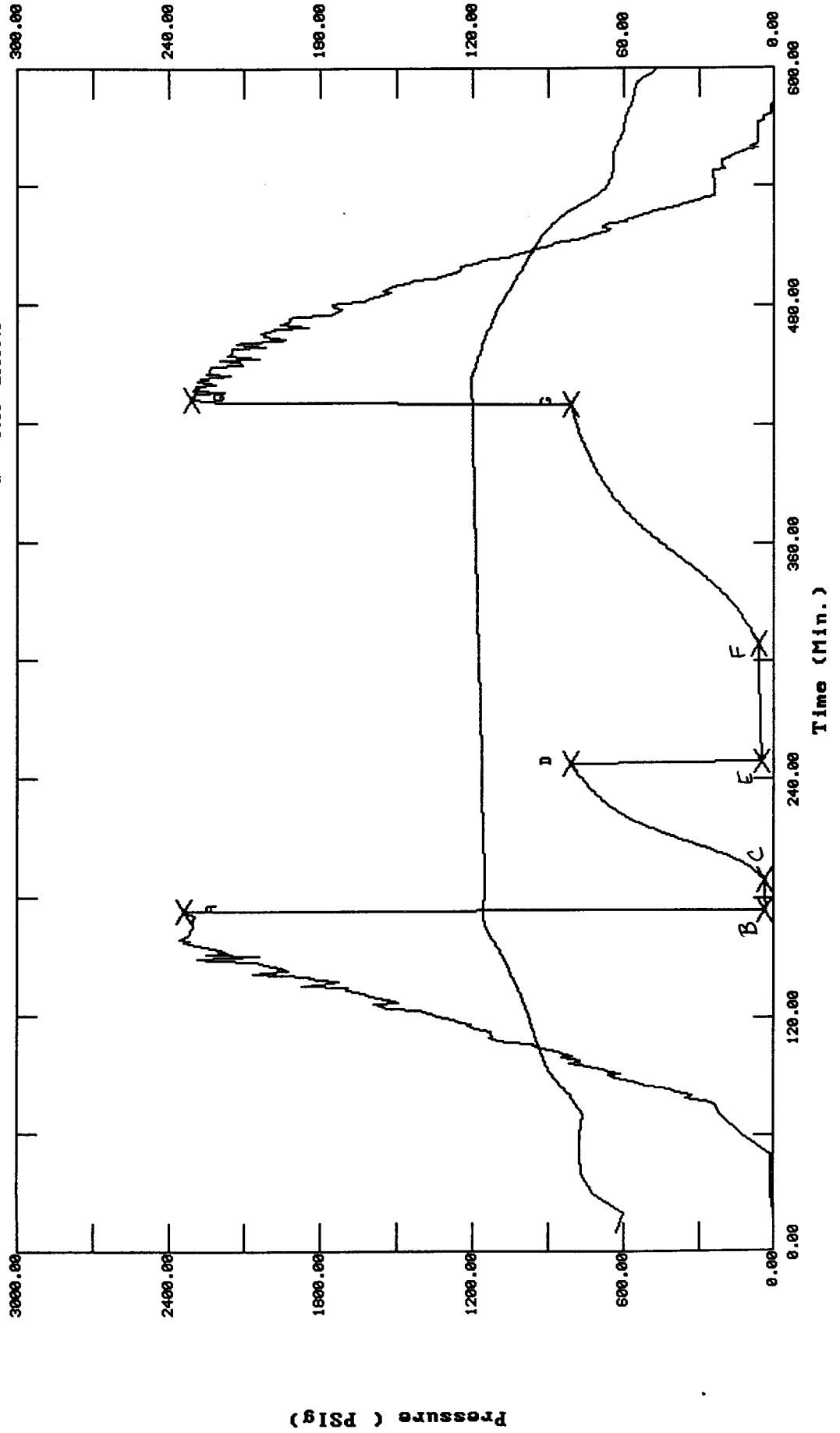
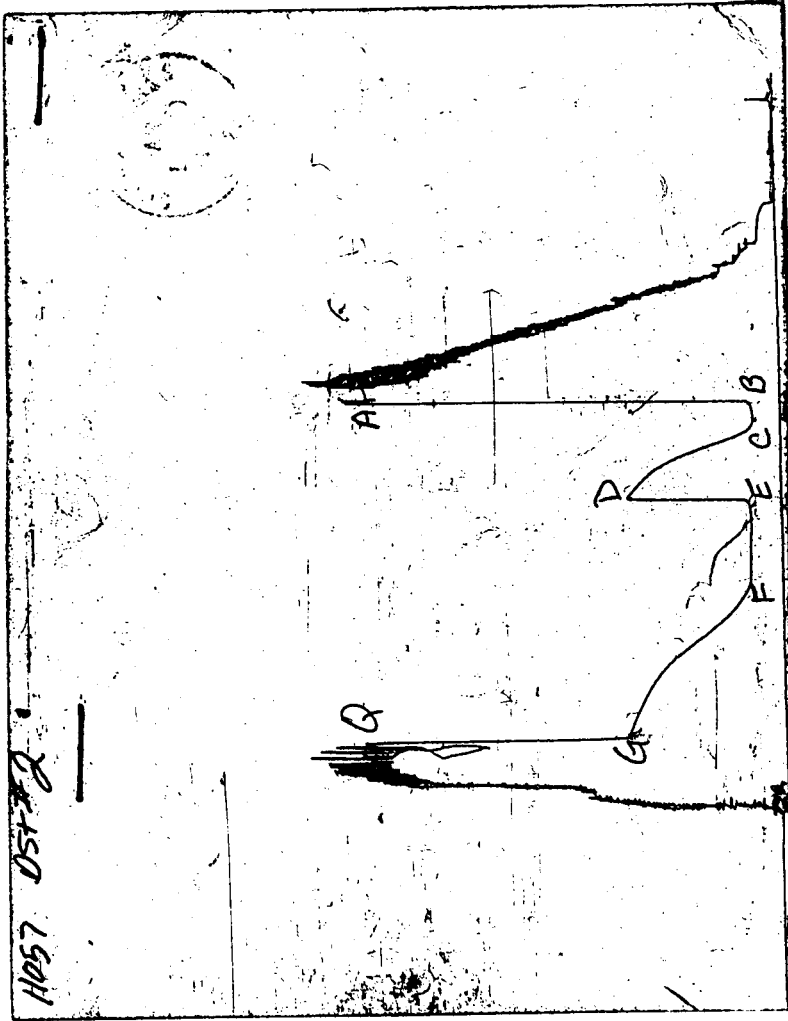


CHART PAGE



This is an actual photograph of recorder chart

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8498 DST# 2 Kuhn 3-10 H & P Inc.

DATE: 12/18/95 TIME: 01:03:19

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	173.00	2342.3	0.0	115.70		
***** Start Flow 1	0.00	31.5	0.0	115.52		
	1.00	26.3	-5.2	115.52		
	2.00	28.1	-3.4	115.52		
	3.00	29.4	-2.2	115.52		
	4.00	30.0	-1.5	115.52		
	5.00	31.1	-0.4	115.34		
	6.00	31.5	-0.1	115.34		
	7.00	32.1	0.5	115.34		
	8.00	32.6	1.0	115.34		
	9.00	33.1	1.5	115.34		
	10.00	33.6	2.0	115.34		
	11.00	34.2	2.6	115.34		
	12.00	34.8	3.3	115.34		
	13.00	35.2	3.6	115.34		
	14.00	35.6	4.0	115.34		
***** End Flow 1	15.00	36.0	4.4	115.34		
***** Start Shutin 1	0.00	36.0	0.0	115.34	0.0000	0.001
	1.00	41.8	5.8	115.16	16.0000	0.002
	2.00	49.9	13.9	115.16	8.5000	0.002
	3.00	58.4	22.4	115.34	6.0000	0.003
	4.00	67.1	31.1	115.34	4.7500	0.005
	5.00	76.9	40.9	115.34	4.0000	0.006
	6.00	87.7	51.7	115.34	3.5000	0.008
	7.00	99.5	63.5	115.34	3.1429	0.01
	8.00	112.4	76.4	115.34	2.8750	0.013
	9.00	126.6	90.6	115.34	2.6667	0.016
	10.00	142.3	106.3	115.34	2.5000	0.020
	11.00	159.4	123.4	115.34	2.3636	0.025
	12.00	177.9	141.9	115.34	2.2500	0.032
	13.00	197.6	161.6	115.34	2.1538	0.039
	14.00	218.6	182.6	115.52	2.0714	0.048
	15.00	240.5	204.5	115.52	2.0000	0.058
	16.00	263.4	227.4	115.52	1.9375	0.069
	17.00	286.8	250.8	115.52	1.8824	0.082
	18.00	310.4	274.4	115.52	1.8333	0.096
	19.00	334.4	298.4	115.52	1.7895	0.112
	20.00	358.0	322.0	115.52	1.7500	0.128
	21.00	381.4	345.4	115.52	1.7143	0.145
	22.00	404.4	368.4	115.70	1.6818	0.164
	23.00	426.7	390.7	115.70	1.6522	0.182
	24.00	448.3	412.3	115.70	1.6250	0.201
	25.00	469.1	433.2	115.70	1.6000	0.220
	26.00	489.0	453.0	115.70	1.5769	0.239
	27.00	508.2	472.2	115.70	1.5556	0.258
	28.00	526.3	490.3	115.88	1.5357	0.277
	29.00	543.7	507.7	115.88	1.5172	0.296
	30.00	560.0	524.0	115.88	1.5000	0.314
	31.00	575.7	539.7	115.88	1.4839	0.331
	32.00	590.5	554.5	115.88	1.4688	0.349
	33.00	604.4	568.4	115.88	1.4545	0.365

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8498 DST# 2 Kuhn 3-10 H & P Inc.

DATE: 12/18/95

TIME: 01:03:19

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	34.00	617.6	581.6	115.88	1.4412	0.381
	35.00	630.0	594.0	116.06	1.4286	0.397
	36.00	641.6	605.6	116.06	1.4167	0.412
	37.00	652.5	616.5	116.06	1.4054	0.426
	38.00	662.9	626.9	116.06	1.3947	0.439
	39.00	672.5	636.5	116.06	1.3846	0.452
	40.00	681.7	645.7	116.06	1.3750	0.465
	41.00	690.5	654.5	116.06	1.3659	0.477
	42.00	699.0	663.0	116.24	1.3571	0.489
	43.00	706.9	670.9	116.24	1.3488	0.500
	44.00	714.8	678.8	116.24	1.3409	0.511
	45.00	722.2	686.2	116.24	1.3333	0.522
	46.00	729.3	693.3	116.24	1.3261	0.532
	47.00	736.3	700.3	116.24	1.3191	0.542
	48.00	743.0	707.0	116.24	1.3125	0.552
	49.00	749.9	713.9	116.24	1.3061	0.562
	50.00	756.6	720.6	116.42	1.3000	0.572
	51.00	763.2	727.2	116.42	1.2941	0.583
	52.00	769.7	733.7	116.42	1.2885	0.592
	53.00	775.9	739.9	116.42	1.2830	0.602
	54.00	781.8	745.8	116.42	1.2778	0.611
	55.00	787.3	751.3	116.42	1.2727	0.620
	56.00	792.8	756.8	116.42	1.2679	0.628
	57.00	797.7	761.7	116.60	1.2632	0.636
	58.00	802.3	766.3	116.60	1.2586	0.644
***** End Shut-in 1	59.00	806.9	770.9	116.60	1.2542	0.651
***** Start Flow 2	0.00	47.7	0.0	116.60		
	1.00	41.9	-5.9	116.60		
	2.00	43.1	-4.6	116.60		
	3.00	44.1	-3.7	116.60		
	4.00	45.2	-2.5	116.60		
	5.00	45.5	-2.3	116.60		
	6.00	46.0	-1.8	116.60		
	7.00	46.7	-1.0	116.60		
	8.00	47.4	-0.3	116.60		
	9.00	47.4	-0.3	116.60		
	10.00	49.0	1.3	116.60		
	11.00	49.1	1.3	116.60		
	12.00	48.8	1.1	116.60		
	13.00	48.9	1.2	116.60		
	14.00	49.3	1.5	116.78		
	15.00	49.8	2.0	116.78		
	16.00	50.0	2.3	116.78		
	17.00	50.4	2.7	116.78		
	18.00	50.8	3.0	116.78		
	19.00	50.9	3.2	116.78		
	20.00	51.3	3.5	116.78		
	21.00	51.6	3.9	116.78		
	22.00	51.6	3.9	116.78		
	23.00	51.9	4.2	116.96		
	24.00	52.4	4.6	116.96		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8498 DST# 2 Kuhn 3-10 H & P Inc.

DATE: 12/18/95 TIME: 01:03:19

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	52.6	4.9	116.96		
	26.00	52.9	5.2	116.96		
	27.00	53.1	5.4	116.96		
	28.00	53.1	5.4	116.96		
	29.00	53.5	5.8	116.96		
	30.00	53.8	6.0	116.96		
	31.00	53.9	6.1	116.96		
	32.00	54.2	6.5	117.14		
	33.00	54.6	6.9	117.14		
	34.00	54.5	6.7	117.14		
	35.00	55.4	7.6	117.14		
	36.00	55.1	7.4	117.14		
	37.00	55.6	7.9	117.14		
	38.00	55.8	8.1	117.14		
	39.00	56.0	8.2	117.14		
	40.00	56.3	8.6	117.14		
	41.00	56.4	8.6	117.32		
	42.00	56.2	8.5	117.32		
	43.00	56.9	9.1	117.32		
	44.00	56.7	9.0	117.32		
	45.00	57.1	9.3	117.32		
	46.00	57.5	9.7	117.32		
	47.00	57.6	9.8	117.32		
	48.00	57.7	10	117.50		
	49.00	58.1	10.3	117.50		
	50.00	58.1	10.4	117.50		
	51.00	58.1	10.4	117.50		
	52.00	58.1	10.4	117.50		
	53.00	58.7	10.9	117.50		
	54.00	59.2	11.4	117.50		
	55.00	59.2	11.5	117.50		
	56.00	59.4	11.7	117.50		
	57.00	59.6	11.8	117.68		
	58.00	59.7	11.9	117.68		
	59.00	59.7	11.9	117.68		
***** End Flow 2	60.00	59.7	11.9	117.68		
***** Start Shutin 2	0.00	59.7	0.0	117.68	0.0000	0.004
	1.00	61.0	1.4	117.68	76.0000	0.004
	2.00	66.5	6.9	117.68	38.5000	0.004
	3.00	71.4	11.8	117.68	26.0000	0.005
	4.00	76.1	16.5	117.68	19.7500	0.006
	5.00	80.6	21.0	117.86	16.0000	0.007
	6.00	85.3	25.6	117.86	13.5000	0.007
	7.00	90.0	30.4	117.86	11.7143	0.008
	8.00	94.8	35.2	117.86	10.3750	0.009
	9.00	99.8	40.1	117.86	9.3333	0.01
	10.00	104.8	45.2	117.86	8.5000	0.011
	11.00	110.0	50.4	117.86	7.8182	0.012
	12.00	115.4	55.7	118.04	7.2500	0.013
	13.00	120.8	61.1	118.04	6.7692	0.015
	14.00	126.1	66.5	118.04	6.3571	0.016

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8498 DST# 2 Kuhn 3-10 H & P Inc.

DATE: 12/18/95

TIME: 01:03:19

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
15.00	131.8	72.1	118.04	6.0000	0.017
16.00	137.4	77.7	118.04	5.6875	0.019
17.00	143.7	84.0	118.04	5.4118	0.021
18.00	150.2	90.6	118.04	5.1667	0.023
19.00	156.4	96.8	118.04	4.9474	0.024
20.00	162.9	103.2	118.22	4.7500	0.027
21.00	169.9	110.2	118.22	4.5714	0.029
22.00	177.2	117.5	118.22	4.4091	0.031
23.00	184.5	124.9	118.22	4.2609	0.034
24.00	191.8	132.1	118.22	4.1250	0.037
25.00	199.4	139.8	118.22	4.0000	0.040
26.00	207.4	147.7	118.22	3.8846	0.043
27.00	215.6	155.9	118.22	3.7778	0.046
28.00	223.9	164.3	118.40	3.6786	0.050
29.00	232.5	172.8	118.40	3.5862	0.054
30.00	241.3	181.6	118.40	3.5000	0.058
31.00	250.4	190.8	118.40	3.4194	0.063
32.00	259.6	199.9	118.40	3.3438	0.067
33.00	269.0	209.3	118.40	3.2727	0.072
34.00	278.6	219.0	118.40	3.2059	0.078
35.00	288.2	228.5	118.40	3.1429	0.083
36.00	298.4	238.7	118.58	3.0833	0.089
37.00	308.3	248.7	118.58	3.0270	0.095
38.00	318.1	258.4	118.58	2.9737	0.101
39.00	328.2	268.6	118.58	2.9231	0.108
40.00	338.8	279.2	118.58	2.8750	0.115
41.00	349.1	289.5	118.58	2.8293	0.122
42.00	359.8	300.1	118.58	2.7857	0.129
43.00	369.9	310.3	118.58	2.7442	0.137
44.00	380.4	320.7	118.76	2.7045	0.145
45.00	390.9	331.3	118.76	2.6667	0.153
46.00	401.8	342.1	118.76	2.6304	0.161
47.00	411.9	352.3	118.76	2.5957	0.170
48.00	422.1	362.4	118.76	2.5625	0.178
49.00	432.7	373.1	118.76	2.5306	0.187
50.00	442.9	383.2	118.76	2.5000	0.196
51.00	453.0	393.4	118.94	2.4706	0.205
52.00	462.9	403.2	118.94	2.4423	0.214
53.00	472.4	412.8	118.94	2.4151	0.223
54.00	482.3	422.7	118.94	2.3889	0.233
55.00	491.6	432.0	118.94	2.3636	0.242
56.00	500.8	441.1	118.94	2.3393	0.251
57.00	509.9	450.2	118.94	2.3158	0.260
58.00	518.7	459.0	118.94	2.2931	0.269
59.00	527.5	467.8	119.12	2.2712	0.278
60.00	536.1	476.5	119.12	2.2500	0.287
61.00	544.4	484.8	119.12	2.2295	0.296
62.00	552.7	493.1	119.12	2.2097	0.306
63.00	561.0	501.4	119.12	2.1905	0.315
64.00	568.9	509.3	119.12	2.1719	0.324
65.00	577.2	517.6	119.12	2.1538	0.333

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8498 DST# 2 Kuhn 3-10 H & P Inc.

DATE: 12/18/95 TIME: 01:03:19

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
66.00	584.9	525.2	119.12	2.1364	0.342
67.00	592.1	532.4	119.12	2.1194	0.351
68.00	599.2	539.5	119.12	2.1029	0.359
69.00	606.1	546.5	119.12	2.0870	0.367
70.00	612.7	553.1	119.30	2.0714	0.375
71.00	619.2	559.6	119.30	2.0563	0.383
72.00	625.5	565.9	119.30	2.0417	0.391
73.00	631.8	572.1	119.30	2.0274	0.399
74.00	637.8	578.2	119.30	2.0135	0.407
75.00	643.5	583.9	119.30	2.0000	0.414
76.00	649.1	589.4	119.30	1.9868	0.421
77.00	654.6	595.0	119.30	1.9740	0.429
78.00	660.8	601.1	119.30	1.9615	0.437
79.00	666.6	607.0	119.30	1.9494	0.444
80.00	671.9	612.3	119.48	1.9375	0.451
81.00	676.9	617.2	119.48	1.9259	0.458
82.00	681.6	621.9	119.48	1.9146	0.465
83.00	686.2	626.5	119.48	1.9036	0.471
84.00	690.5	630.9	119.48	1.8929	0.477
85.00	694.7	635.1	119.48	1.8824	0.483
86.00	699.1	639.5	119.48	1.8721	0.489
87.00	703.6	643.9	119.48	1.8621	0.495
88.00	707.8	648.2	119.48	1.8523	0.501
89.00	712.0	652.4	119.48	1.8427	0.507
90.00	716.2	656.6	119.66	1.8333	0.513
91.00	720.3	660.7	119.66	1.8242	0.519
92.00	724.2	664.6	119.66	1.8152	0.524
93.00	728.1	668.5	119.66	1.8065	0.530
94.00	732.0	672.4	119.66	1.7979	0.536
95.00	735.8	676.1	119.66	1.7895	0.541
96.00	739.5	679.8	119.66	1.7812	0.547
97.00	743.3	683.6	119.66	1.7732	0.552
98.00	746.9	687.2	119.66	1.7653	0.558
99.00	750.4	690.7	119.66	1.7576	0.563
100.00	754.0	694.3	119.66	1.7500	0.569
101.00	757.3	697.6	119.84	1.7426	0.573
102.00	760.7	701.1	119.84	1.7353	0.579
103.00	763.9	704.2	119.84	1.7282	0.584
104.00	766.9	707.3	119.84	1.7212	0.588
105.00	770.0	710.4	119.84	1.7143	0.593
106.00	772.9	713.2	119.84	1.7075	0.597
107.00	775.8	716.2	119.84	1.7009	0.602
108.00	778.6	718.9	119.84	1.6944	0.606
109.00	781.2	721.5	119.84	1.6881	0.610
110.00	784.0	724.3	119.84	1.6818	0.615
111.00	786.6	726.9	119.84	1.6757	0.619
112.00	789.0	729.3	119.84	1.6696	0.623
113.00	791.3	731.6	120.02	1.6637	0.626
114.00	793.7	734.0	120.02	1.6579	0.630
115.00	796.0	736.3	120.02	1.6522	0.634
116.00	798.1	738.5	120.02	1.6466	0.637

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8498 DST# 2 Kuhn 3-10 H & P Inc.

DATE: 12/18/95

TIME: 01:03:19

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	117.00	800.3	740.7	120.02	1.6410	0.641
	118.00	802.5	742.9	120.02	1.6356	0.644
	119.00	804.6	745.0	120.02	1.6303	0.647
	120.00	806.6	747.0	120.02	1.6250	0.651
***** End Shut-in 2	121.00	808.6	748.9	120.02	1.6198	0.654
***** Final Hydro.	432.00	2313.5	0.0	120.20		

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Kuhn #3-10

LOCATION : 10-27S-34W Haskell Cty KS

TICKET No. 8498 D.S.T. No. 2 DATE 12/17/95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 14

TOTAL TOOL 44

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 3 Single Total 186

TOTAL ASSEMBLY 230

D.C. ABOVE TOOLS.Stands Single Total 670

D.P. ABOVE TOOLS.Stands Single Total 4242

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5142

TOTAL DEPTH 5130

TOTAL DRILL PIPE ABOVE K.B. 12

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -

Oil 200 ml, Mud 3800 ml, Pressure 30 PSI,
Total 4000 ml

SAMPLER ANALYSIS -

Resist 6.1 ohms @ 70 F; Chlorides 1000 ppm

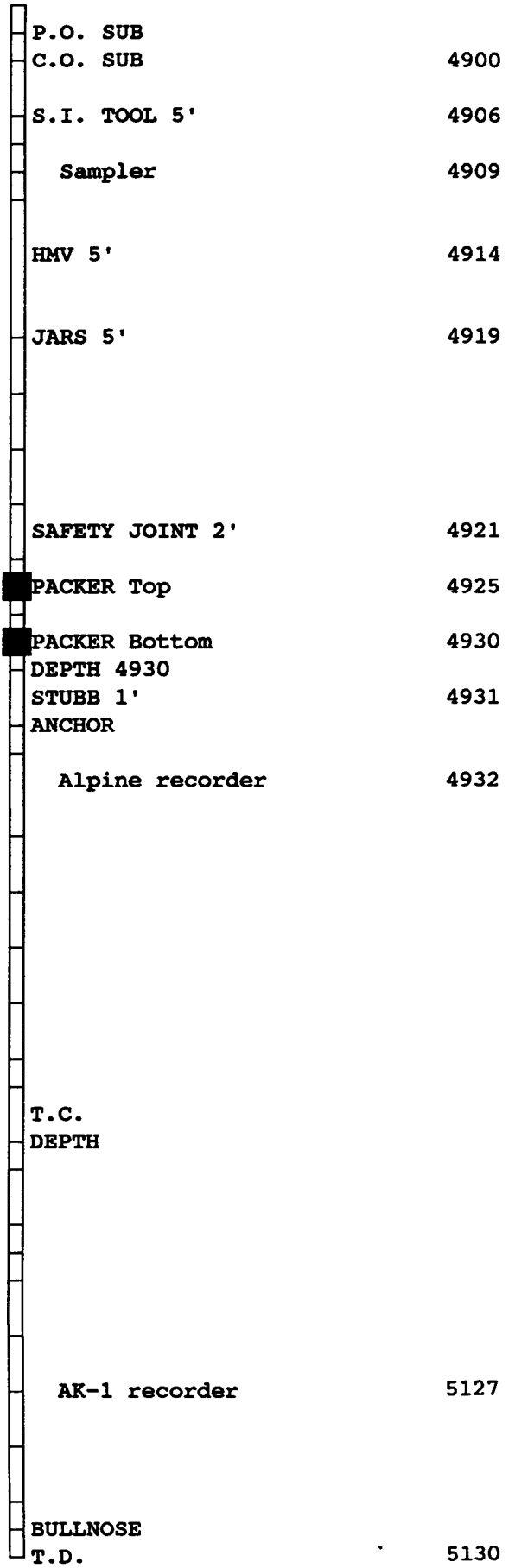
PIT MUD ANALYSIS -

Chlorides 800 ppm; Resist 7.96 ohms @ 65 F;
Vis 55, Mud Wt 9.1, Filtrate 8, LCM 2#

PIPE RECOVERY -

Top & Bottom -

Resist 6.1 ohms @ 70 F; Chlorides 1000 ppm



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

No 8498

Test Ticket

Well Name & No. Kuba 3-10 Test No. 2 Date 12-17-95
 Company H 3 P Zone Tested Chester sand
 Address P.O. Box 558 Garden City, KS 67846 Elevation 2968' KB 2960' GL
 Co. Rep / Geo. Austin Garner Cont. Cheyenne #4 Est. Ft. of Pay Por. %
 Location: Sec. 10 Twp. 27 Rge. 34 Co. Haskell State KS
 No. of Copies None Distribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N)

Interval Tested 4930 - 5130 Initial Str Wt./Lbs. 68,000 Unseated Str Wt./Lbs. 68,000
 Anchor Length 200' Wt. Set Lbs. 26,000 Wt. Pulled Loose/Lbs. 75,000
 Top Packer Depth 4925 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 4930 Wt. Pipe I.D. — 2.7 Ft. Run
 Total Depth 5130 Drill Collar — 2.25 Ft. Run 620'
 Mud Wt. 9.1 LCM 2 Vis. 55 WL 8.0 Drill Pipe Size 4 1/2 FH Ft. Run 4428'
 Blow Description F.O. - Surface blow built to 2" in.

F.S.I. - No return
F.F. - weak surface built to a 1/4" in.
F.S.I - No return

Recovery — Total Feet	Ft. in DC	Ft. in WP	Ft. in DP
<u>65'</u>	<u>65'</u>	<u> </u>	<u> </u>
Rec. <u>65'</u> Feet Of <u>slit/yoil cut mud</u>	%gas <u>5</u> %oil <u> </u> %water <u>95</u> %mud <u> </u>		
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil <u> </u> %water <u> </u> %mud <u> </u>		
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil <u> </u> %water <u> </u> %mud <u> </u>		
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil <u> </u> %water <u> </u> %mud <u> </u>		
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil <u> </u> %water <u> </u> %mud <u> </u>		

BHT 120. °F Gravity °API D@ °F Corrected Gravity °API

RW 6.1 @ 70' AK-PF Chlorides 1,000 ppm Recovery Chlorides 800 ppm System

(A) Initial Hydrostatic Mud	PSI	Recorder No.	T-Started
<u>2536</u> ^{ERL} <u>2342</u>	<u>31</u>	<u>2351</u>	<u>1:02 am</u>
(B) First Initial Flow Pressure	<u>168</u>	@ (depth) <u>4932'</u>	T-Open <u>3:55 am</u>
(C) First Final Flow Pressure	<u>151</u>	Recorder No. <u>11057</u>	T-Pulled <u>8:10 am</u>
(D) Initial Shut-in Pressure	<u>889</u>	@ (depth) <u>5127'</u>	T-Out <u> </u>
(E) Second Initial Flow Pressure	<u>179</u>	Recorder No. <u> </u>	
(F) Second Final Flow Pressure	<u>179</u>	@ (depth) <u> </u>	
(G) Final Shut-in Pressure	<u>906</u>	Initial Opening <u>15</u>	Test <input checked="" type="checkbox"/> <u>600</u>
(H) Final Hydrostatic Mud	<u>2502</u> ^{ERL} <u>2313</u>	Initial Shut-in <u>60</u>	Jars <input checked="" type="checkbox"/> <u>200</u>
		Final Flow <u>60</u>	Safety Joint <input checked="" type="checkbox"/> <u>50</u>
		Final Shut-in <u>120</u>	Straddle <u> </u>
			Circ. Sub <input checked="" type="checkbox"/> <u>N/C</u>
			Sampler <input checked="" type="checkbox"/> <u>200</u>
			Extra Packer <u> </u>
			Elect. Rec. <input checked="" type="checkbox"/> <u>150</u>
			Other <u> </u>
			TOTAL PRICE \$ <u>1200</u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Michy Lane
 Our Representative Steve TMB

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 8498 Date 12-17-95
Company Name H 3/4 P
Lease Kuhw 3-10 Test No. 2
County Haskell, Ks Sec. 10 Twp. 27 Rng. 34

SAMPLER RECOVERY

Gas _____ ML
Oil 200 ML
Mud 3800 ML
Water _____ ML
Other _____ ML
Pressure 30 lbs PSI
Total 4,000 ML

PIT MUD ANALYSIS

Chlorides 800 ppm.
Resistivity 7.96 ohms @ 65 F
Viscosity 55
Mud Weight 9.1
Filtrate 8.0
Other LCM # 2

SAMPLER ANALYSIS

Resistivity 6.1 ohms @ 70 F
Chlorides 1,000 ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity 6.1 ohms @ 70 F
Chlorides 1,000 ppm.

MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM
Resistivity 6.1 ohms @ 70 F
Chlorides 1,000 ppm.