WELL NAME:	Miller #2
COMPANY:	Maxwell Operating Company
LOCATION:	04-16S-12W
	Barton County Kansas
DATE:	04/24/97

TRILOBITE TESTING L.L.C.

OPERATOR : Maxwell Operating Co. DATE 04/21/97
WELL NAME: Miller #2 KB 0.00 ft TICKET NO: 10135 DST #1
LOCATION : Sec 04 Twp.16s Rge.12w GR 0.00 ft FORMATION: Topeka
INTERVAL : 2887.00 To 2920.00 ft TD 2920.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	11084	11084	2346		
SI 30	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF 30	Clock(hrs)	12hr.	12hr.	Elec		
FS 30	Depth(ft)	2915.0	2915.0	2921.0	0.0	0.0

TIME DATA----------
PF Fr. 2141 to 2211 hr
IS Fr. 2211 to 2241 hr
SF Fr. 2241 to 2311 hr
FS Fr. 2311 to 2341 hr

	Field	1	2	3	4
A. Init Hydro	1433.0	1419.0	1390.0	0.0	0.0
B. First Flow	33.0	31.0	17.0	0.0	0.0
B1. Final Flow	44.0	53.0	38.0	0.0	0.0
C. In Shut-in	688.0	688.0	699.0	0.0	0.0
D. Init Flow	55.0	61.0	40.0	0.0	0.0
E. Final Flow	66.0	63.0	51.0	0.0	0.0
F. Fl Shut-in	656.0	648.0	667.0	0.0	0.0
G. Final Hydro	1379.0	1335.0	1370.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 2048 hr
T ON BOTM 2139 hr
T OPEN 2141 hr
T PULLED 2341 hr
T OUT 0035 hr

RECOVERY
Tot Fluid 75.00 ft of 30.00 ft in DC and 45.00 ft in DP
15.00 ft of Slight Oil Cut Mud 5%oil 95%mud
60.00 ft of Muddy Water 60%water 40%mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of Rw .46 @ 55
SALINITY 18500.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	1900.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	36000.00 lbs
Initial Str Wt	32000.00 lbs
Unseated Str Wt	32000.00 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	30.00 ft
D.P. Length	2851.00 ft

BLOW DESCRIPTION
Initial Flow-
Weak surface blow building to 3"

Initial Shutin-
No blow

Final Flow-
Surface blow building to 2"

Final Shutin-
No blow

MUD DATA----------

Mud Type	Chemical
Weight	8.80 lb/
Vis.	44.00 S/L
W.L.	12.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	97.00 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.	Ron Nelson
Contr.	Discovery
Rig #	1
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Miller #2

LOCATION : Sec 04 Twp.16s Rge.12w

TICKET No. 10135 D.S.T. No. 1 DATE 04/21/97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 21

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 33 anch

TOTAL TOOL 54

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 54

D.C. ABOVE TOOLS.Stands Single 1 Total 30

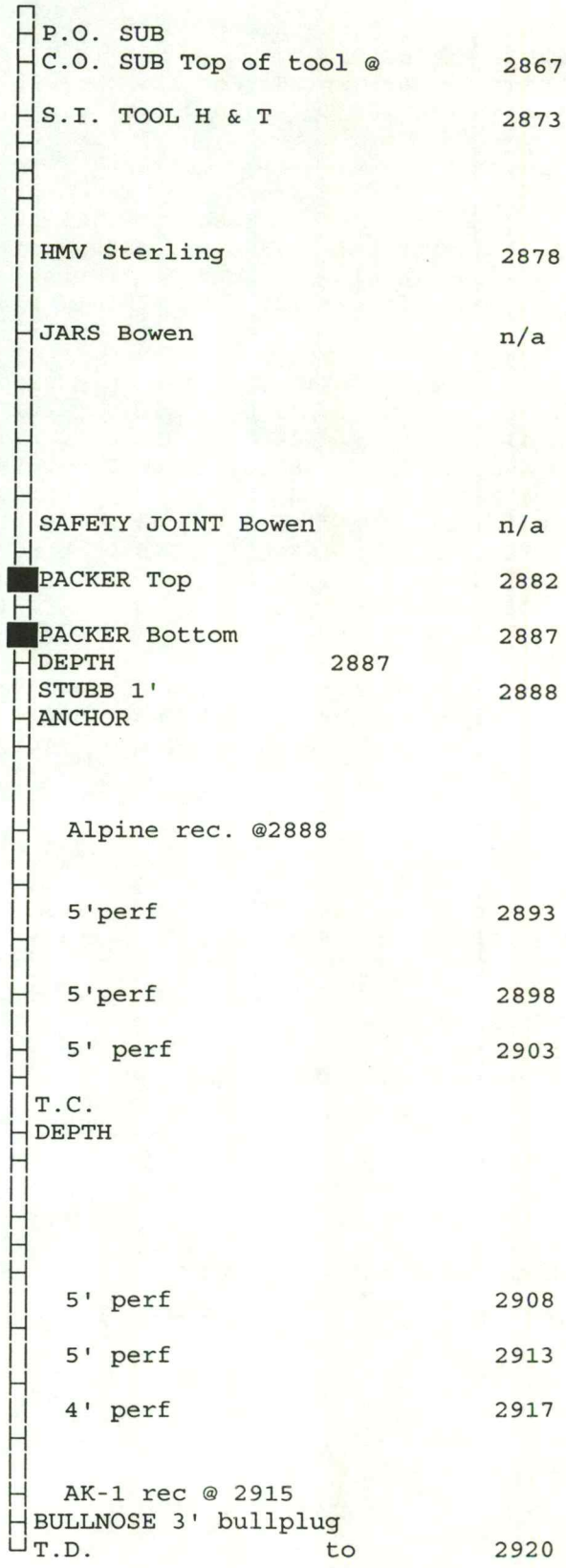
D.P. ABOVE TOOLS.Stands46 Single Total 2851

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 2935

TOTAL DEPTH 2920

TOTAL DRILL PIPE ABOVE K.B. 15

REMARKS:



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10135 Maxwell Operating Miller #2 DST #1

DATE: 04/21/97 TIME: 20:26:57

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	76.00	1390.1	0.0	92.29		
****** Start Flow 1	0.00	17.3	0.0	92.44		
	1.25	18.4	1.1	92.55		
	2.50	20.2	2.9	92.62		
	3.75	21.8	4.5	92.67		
	5.00	23.5	6.1	92.71		
	6.25	25.0	7.7	92.73		
	7.50	26.5	9.2	92.75		
	8.75	27.8	10.5	92.76		
	10.00	29.2	11.9	92.77		
	11.25	30.2	12.9	92.79		
	12.50	31.1	13.8	92.80		
	13.75	31.9	14.6	92.81		
	15.00	32.6	15.3	92.83		
	16.25	33.2	15.9	92.86		
	17.50	33.8	16.5	92.87		
	18.75	34.4	17.1	92.91		
	20.00	34.9	17.6	92.94		
	21.25	35.2	17.9	92.97		
	22.50	35.8	18.5	93.01		
	23.75	36.3	19.0	93.04		
	25.00	36.7	19.4	93.09		
	26.25	37.5	20.2	93.13		
	27.50	37.7	20.3	93.18		
	28.75	37.8	20.5	93.23		
****** End Flow 1	30.00	38.2	20.9	93.29		
****** Start Shutin 1	0.00	38.2	0.0	93.29	0.0000	0.001
	1.25	320.7	282.4	93.35	25.0000	0.103
	2.50	381.8	343.6	93.56	13.0000	0.146
	3.75	441.3	403.1	93.86	9.0000	0.195
	5.00	485.6	447.4	94.17	7.0000	0.236
	6.25	520.0	481.8	94.44	5.8000	0.270
	7.50	547.5	509.3	94.67	5.0000	0.300
	8.75	570.1	531.9	94.88	4.4286	0.325
	10.00	588.7	550.5	95.09	4.0000	0.347
	11.25	604.5	566.3	95.27	3.6667	0.365
	12.50	617.9	579.6	95.41	3.4000	0.382
	13.75	629.4	591.2	95.52	3.1818	0.396
	15.00	639.5	601.2	95.61	3.0000	0.409
	16.25	648.2	610.0	95.68	2.8462	0.420
	17.50	656.0	617.8	95.76	2.7143	0.430
	18.75	662.9	624.7	95.82	2.6000	0.439
	20.00	669.1	630.9	95.89	2.5000	0.448
	21.25	674.6	636.4	95.96	2.4118	0.455
	22.50	679.6	641.4	96.03	2.3333	0.462
	23.75	684.2	646.0	96.09	2.2632	0.468
	25.00	688.4	650.2	96.15	2.2000	0.474
	26.25	692.1	653.9	96.21	2.1429	0.479
	27.50	695.6	657.4	96.28	2.0909	0.484
****** End Shut-in 1	28.75	698.8	660.6	96.34	2.0435	0.488

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10135 Maxwell Operating Miller #2 DST #1

DATE: 04/21/97 TIME: 20:26:57

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Start Flow 2	0.00	39.7	0.0	96.40		
	1.25	40.4	0.7	96.40		
	2.50	41.2	1.4	96.38		
	3.75	41.8	2.1	96.35		
	5.00	42.3	2.5	96.32		
	6.25	42.7	3.0	96.31		
	7.50	43.2	3.5	96.30		
	8.75	43.6	3.8	96.31		
	10.00	44.1	4.4	96.32		
	11.25	44.7	4.9	96.33		
	12.50	45.3	5.5	96.35		
	13.75	45.7	5.9	96.37		
	15.00	46.1	6.4	96.40		
	16.25	46.6	6.9	96.43		
	17.50	47.1	7.4	96.46		
	18.75	47.4	7.7	96.48		
	20.00	47.9	8.2	96.52		
	21.25	48.3	8.6	96.55		
	22.50	48.8	9.1	96.58		
	23.75	49.2	9.5	96.62		
	25.00	49.7	10	96.65		
	26.25	50.1	10.4	96.68		
***** End Flow 2	27.50	50.6	10.8	96.72		
***** Start Shutin 2	0.00	50.6	0.0	96.72	0.0000	0.003
	1.25	58.6	8.0	96.76	47.0000	0.003
	2.50	136.4	85.9	96.81	24.0000	0.019
	3.75	266.9	216.3	96.85	16.3333	0.071
	5.00	356.7	306.1	96.89	12.5000	0.127
	6.25	412.7	362.1	96.95	10.2000	0.170
	7.50	452.8	402.3	97.00	8.6667	0.205
	8.75	483.9	433.4	97.06	7.5714	0.234
	10.00	509.1	458.6	97.11	6.7500	0.259
	11.25	530.1	479.6	97.16	6.1111	0.281
	12.50	547.8	497.2	97.21	5.6000	0.300
	13.75	563.2	512.6	97.26	5.1818	0.317
	15.00	576.2	525.7	97.30	4.8333	0.332
	16.25	587.9	537.3	97.34	4.5385	0.346
	17.50	598.2	547.6	97.39	4.2857	0.358
	18.75	607.2	556.7	97.42	4.0667	0.369
	20.00	615.5	564.9	97.47	3.8750	0.379
	21.25	622.9	572.4	97.51	3.7059	0.388
	22.50	629.6	579.1	97.55	3.5556	0.396
	23.75	635.8	585.2	97.60	3.4211	0.404
	25.00	641.4	590.8	97.63	3.3000	0.411
	26.25	646.5	596.0	97.67	3.1905	0.418
	27.50	651.2	600.6	97.71	3.0909	0.424
	28.75	655.5	605.0	97.74	3.0000	0.430
	30.00	659.6	609.1	97.77	2.9167	0.435
	31.25	663.4	612.9	97.81	2.8400	0.440
****** End Shut-in 2	32.50	666.9	616.3	97.84	2.7692	0.445
****** Final Hydro.	201.00	1370.5	0.0	97.96		

TEST HISTORY

10135 Maxwell Operating Miller #2 DST #1

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1390.05
B:	0.00	17.31
C:	30.00	38.22
D:	28.75	698.79
E:	0.00	39.74
F:	27.50	50.55
G:	32.50	666.89
Q:	0.00	1370.47

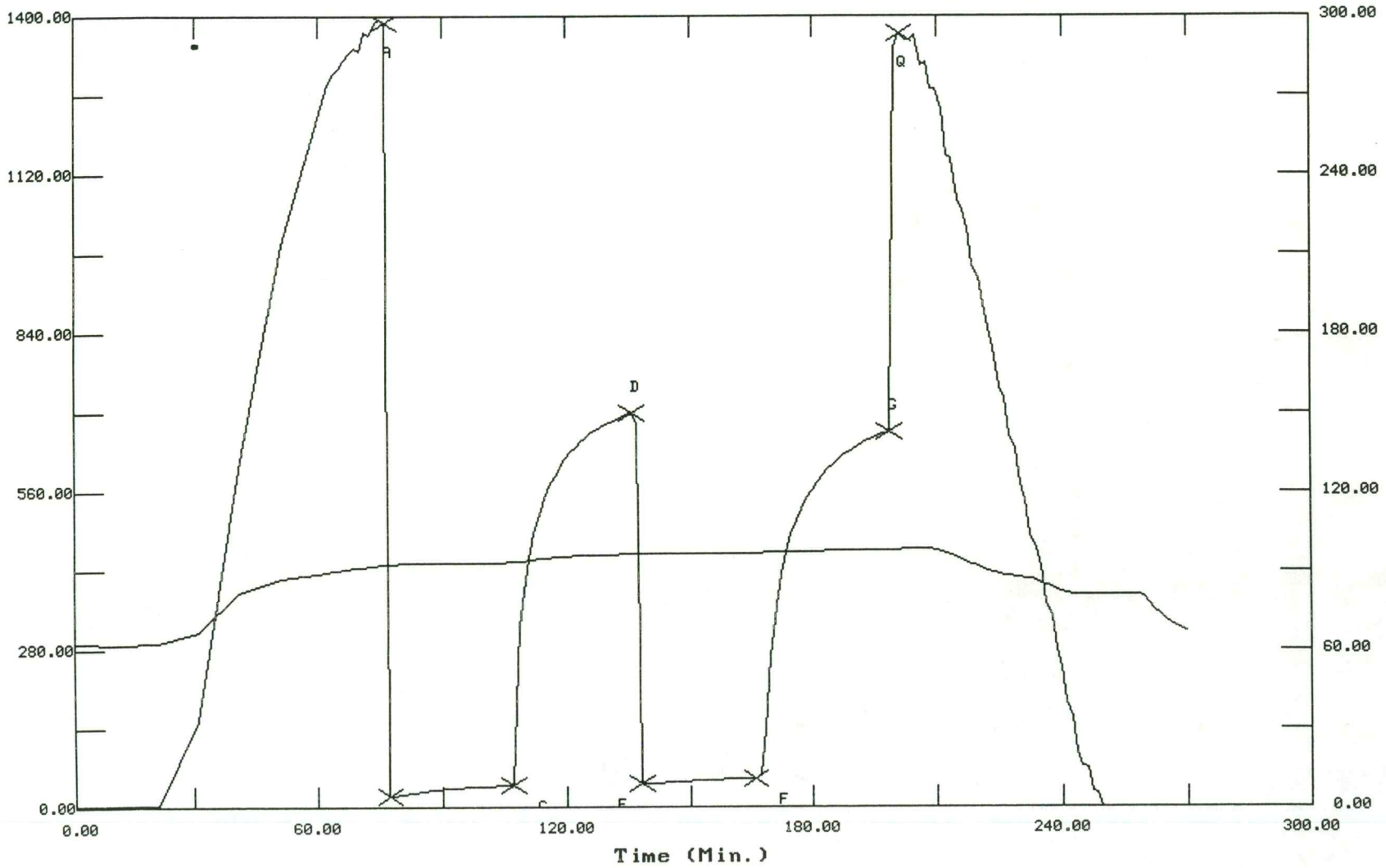
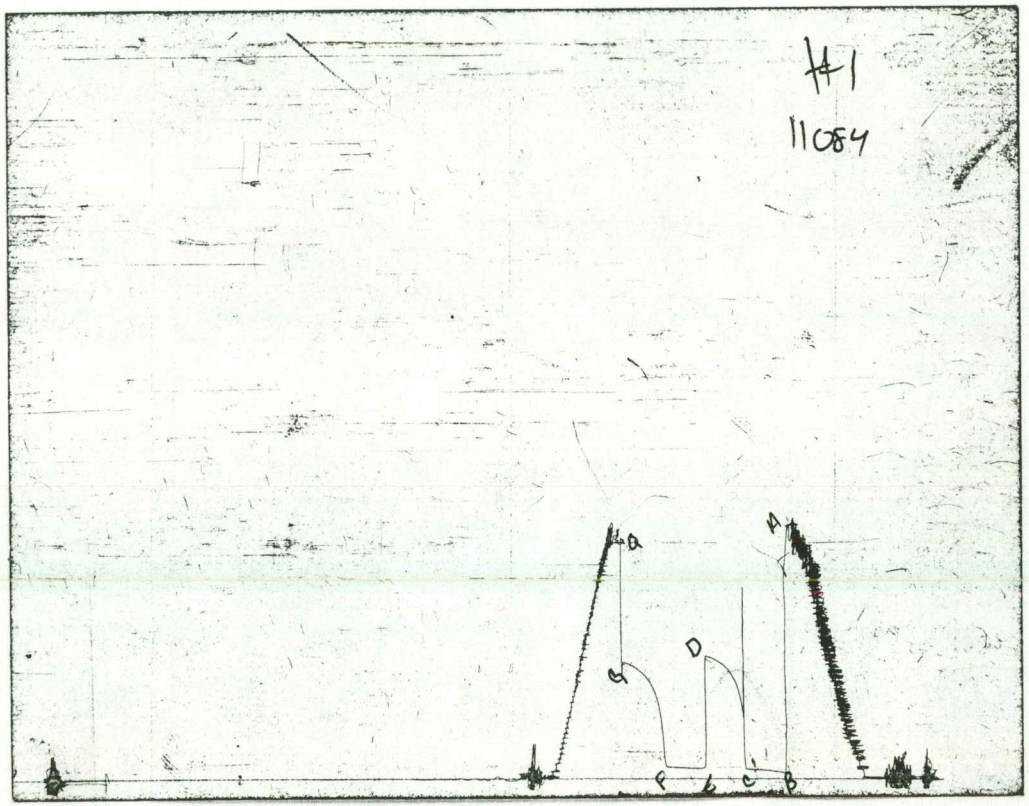


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

Nº 10135

Well Name & No. Miller #2 Test No. 1 Date 4-21-97

Company Maxwell Operating Company Zone Tested Topeka

Address PO Box 1213 Hays Ks 67601 Elevation ____ KB ____ GL

Co. Rep / Geo. Ron Nelson Cont. Discovery #1 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 4 Twp. 16s Rge. 12w Co. Barton State Ks

No. of Copies ____ Distribution Sheet (Y, N) ____ Turnkey (Y, N) ____ Evaluation (Y, N) ____

Interval Tested 2887-2920 Initial Str Wt./Lbs. 32,000 Unseated Str Wt./Lbs. 32,000

Anchor Length 33 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 36,000

Top Packer Depth 2882 Tool Weight 1900

Bottom Packer Depth 2887 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Total Depth 2920 Wt. Pipe Run ____ Drill Collar Run 30

Mud Wt. 8.8 LCM ____ Vis. 44 WL 12 Drill Pipe Size 4½ XH Ft. Run 2851

Blow Description Weak surface blow building to 3"

FF- surface blow building to 2"

Recovery — Total Feet 75 GIP ____ Ft. in DC 30 Ft. in DP 45

Rec. 15 Feet Of SOCM %gas 5 %oil ____ %water 95 %mud

Rec. 60 Feet Of MW %gas 00 %oil ____ %water 40 %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

BHT 97 °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW .46 @ 55 °F Chlorides 18,500 ppm Recovery Chlorides ____ ppm System

(A) Initial Hydrostatic Mud	1433	1390	PSI	Recorder No.	2346	T-Started	2048
(B) First Initial Flow Pressure	33	17	PSI	(depth)	2921	T-Open	2141
(C) First Final Flow Pressure	44	38	PSI	Recorder No.	11084	T-Pulled	2341
(D) Initial Shut-in Pressure	668	699	PSI	(depth)	2915	T-Out	0035
(E) Second Initial Flow Pressure	55	40	PSI	Recorder No.			
(F) Second Final Flow Pressure	46	51	PSI	(depth)			
(G) Final Shut-in Pressure	656	667	PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	1379	1370	PSI	Initial Shut-in	30	Jars	
	AK-1	Alpine		Final Flow	30	Safety Joint	
				Final Shut-in	30	Straddle	
				46 stands		Circ. Sub	
						Sampler	
						Extra Packer	
						Elect. Rec.	150
						Other	
						TOTAL PRICE $	750

Approved By ____

Our Representative Paul Simpson

TRILOBITE TESTING L.L.C.

OPERATOR : Maxwell Operating Co. DATE 04/22/97
WELL NAME: Miller #2 KB 1875.00 ft TICKET NO: 10136 DST #2
LOCATION : Sec 04 Twp.16s Rge.12w GR 1867.00 ft FORMATION: Douglas Sand
INTERVAL : 2974.00 To 3010.00 ft TD 3010.00 ft TEST TYPE: CONV

RECORDER DATA

Mins			Field	1	2	3	4
PF	45	Rec.	11084	11084	2346		
SI	45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF	45	Clock(hrs)	12hr.	12hr.	Elec		
FS	45	Depth(ft)	3005.0	3005.0	2979.0	0.0	0.0

TIME DATA----------
PF Fr. 1010 to 1055 hr
IS Fr. 1055 to 1140 hr
SF Fr. 1140 to 1225 hr
FS Fr. 1225 to 1310 hr

	Field	1	2	3	4
A. Init Hydro	1487.0	1497.0	1462.0	0.0	0.0
B. First Flow	66.0	57.0	23.0	0.0	0.0
B1. Final Flow	88.0	68.0	46.0	0.0	0.0
C. In Shut-in	753.0	723.0	745.0	0.0	0.0
D. Init Flow	88.0	67.0	49.0	0.0	0.0
E. Final Flow	98.0	70.0	63.0	0.0	0.0
F. Fl Shut-in	688.0	658.0	689.0	0.0	0.0
G. Final Hydro	1476.0	1489.0	1432.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 0856 hr
T ON BOTM 1008 hr
T OPEN 1010 hr
T PULLED 1310 hr
T OUT 1402 hr

RECOVERY
Tot Fluid 90.00 ft of 30.00 ft in DC and 60.00 ft in DP
30.00 ft of Gas In Pipe
30.00 ft of Slightly Oil and Water Cut Mud
0.00 ft of 5%oil 10%water 85%mud
60.00 ft of Muddy Water
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of Rw .17 @ 71
SALINITY 44000.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	1950.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	34000.00 lbs
Initial Str Wt	32000.00 lbs
Unseated Str Wt	33000.00 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	30.00 ft
D.P. Length	2943.00 ft

BLOW DESCRIPTION
Initial Flow-
1/4" blow building to to 7"

Initial Shutin-
no blow

Final Flow-
1/4" blow building to 4"

Final Shutin-
no blow

MUD DATA----------

Mud Type	Chemical
Weight	8.80 lb/c
Vis.	44.00 S/L
W.L.	12.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	101.00 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.	Ron Nelson
Contr.	Discovery
Rig #	1
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONV

VELL NAME: Miller #2

LOCATION : Sec 04 Twp.16s Rge.12w

TICKET No. 10136 D.S.T. No. 2 DATE 04/22/97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 21

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 36 anch

TOTAL TOOL 57

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 57

D.C. ABOVE TOOLS.Stands Single 1 Total 30

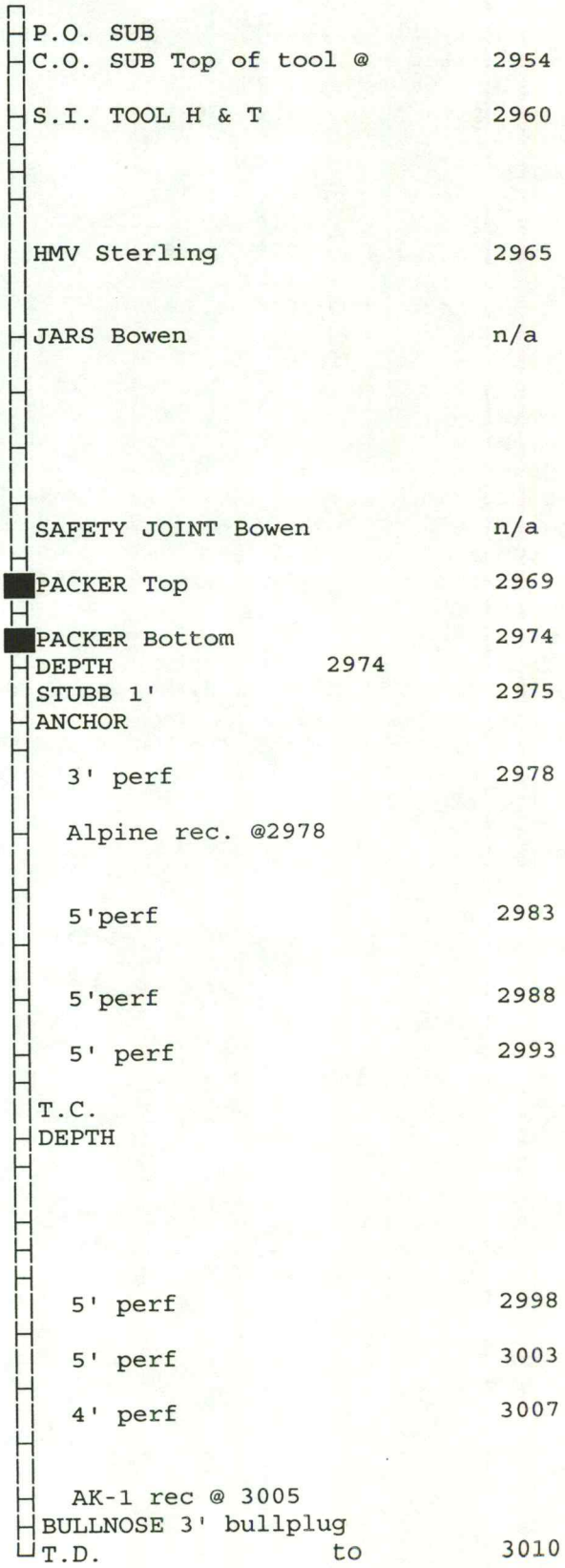
D.P. ABOVE TOOLS.Stands47 Single 1 Total 2943

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3030

TOTAL DEPTH 3010

TOTAL DRILL PIPE ABOVE K.B. 20

REMARKS:



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10136 Maxwell Operating Co. Miller #2 DST #2

DATE: 04/22/97 TIME: 08:40:40

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	91.00	1462.5	0.0	91.83		
****** Start Flow 1	0.00	22.8	0.0	92.16		
	1.25	26.6	3.8	92.45		
	2.50	27.8	4.9	92.80		
	3.75	29.7	6.8	93.20		
	5.00	31.6	8.8	93.54		
	6.25	32.3	9.4	93.81		
	7.50	32.0	9.2	94.11		
	8.75	33.0	10.1	94.45		
	10.00	34.7	11.9	94.76		
	11.25	36.0	13.1	94.94		
	12.50	31.3	8.5	95.05		
	13.75	35.8	12.9	95.10		
	15.00	36.4	13.5	95.13		
	16.25	36.7	13.9	95.11		
	17.50	36.7	13.8	95.08		
	18.75	37.1	14.3	95.03		
	20.00	37.2	14.4	94.98		
	21.25	37.8	15.0	94.95		
	22.50	38.2	15.3	94.97		
	23.75	38.5	15.7	95.00		
	25.00	38.7	15.8	95.05		
	26.25	39.8	17.0	95.11		
	27.50	40.6	17.7	95.16		
	28.75	40.7	17.9	95.22		
	30.00	40.5	17.7	95.29		
	31.25	41.1	18.3	95.37		
	32.50	41.9	19.1	95.44		
	33.75	41.9	19.1	95.52		
	35.00	42.3	19.4	95.60		
	36.25	43.3	20.5	95.68		
	37.50	43.6	20.8	95.75		
	38.75	44.0	21.2	95.82		
	40.00	44.4	21.5	95.88		
	41.25	43.6	20.7	95.94		
	42.50	44.6	21.7	96.00		
	43.75	45.0	22.2	96.09		
****** End Flow 1	45.00	45.9	23.0	96.19		
****** Start Shutin 1	0.00	45.9	0.0	96.19	0.0000	0.002
	1.25	55.6	9.7	96.32	37.0000	0.003
	2.50	67.5	21.6	96.48	19.0000	0.005
	3.75	83.9	38.0	96.65	13.0000	0.007
	5.00	107.1	61.2	96.81	10.0000	0.011
	6.25	142.0	96.1	96.95	8.2000	0.020
	7.50	192.7	146.9	97.07	7.0000	0.037
	8.75	258.2	212.3	97.19	6.1429	0.067
	10.00	326.1	280.3	97.28	5.5000	0.106
	11.25	385.4	339.6	97.39	5.0000	0.149
	12.50	433.7	387.9	97.48	4.6000	0.188
	13.75	472.7	426.9	97.59	4.2727	0.223
	15.00	504.7	458.8	97.68	4.0000	0.255

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10136 Maxwell Operating Co. Miller #2 DST #2

DATE: 04/22/97 TIME: 08:40:40

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	16.25	531.3	485.5	97.78	3.7692	0.282
	17.50	554.1	508.2	97.87	3.5714	0.307
	18.75	573.8	527.9	97.97	3.4000	0.329
	20.00	591.1	545.2	98.06	3.2500	0.349
	21.25	606.6	560.7	98.14	3.1176	0.368
	22.50	620.4	574.5	98.21	3.0000	0.385
	23.75	632.8	587.0	98.28	2.8947	0.400
	25.00	644.2	598.4	98.33	2.8000	0.415
	26.25	654.7	608.8	98.39	2.7143	0.429
	27.50	664.2	618.3	98.44	2.6364	0.441
	28.75	672.9	627.0	98.49	2.5652	0.453
	30.00	681.0	635.1	98.52	2.5000	0.464
	31.25	688.5	642.6	98.57	2.4400	0.474
	32.50	695.4	649.5	98.61	2.3846	0.484
	33.75	701.9	656.0	98.64	2.3333	0.493
	35.00	707.9	662.1	98.68	2.2857	0.501
	36.25	713.6	667.7	98.71	2.2414	0.509
	37.50	718.9	673.0	98.75	2.2000	0.517
	38.75	723.8	677.9	98.78	2.1613	0.524
	40.00	728.4	682.5	98.81	2.1250	0.531
	41.25	732.8	686.9	98.84	2.0909	0.537
	42.50	736.9	691.0	98.87	2.0588	0.543
	43.75	740.8	695.0	98.90	2.0286	0.549
***** End Shut-in 1	45.00	744.5	698.6	98.94	2.0000	0.554
***** Start Flow 2	0.00	48.7	0.0	98.96		
	1.25	48.8	0.1	98.96		
	2.50	48.9	0.2	98.95		
	3.75	49.8	1.1	98.96		
	5.00	50.4	1.7	98.96		
	6.25	50.9	2.2	98.98		
	7.50	51.5	2.8	99.00		
	8.75	51.8	3.1	99.03		
	10.00	52.4	3.7	99.08		
	11.25	52.9	4.2	99.13		
	12.50	53.3	4.6	99.20		
	13.75	53.9	5.2	99.27		
	15.00	54.3	5.6	99.35		
	16.25	54.7	6.0	99.43		
	17.50	55.1	6.4	99.51		
	18.75	55.5	6.8	99.58		
	20.00	55.9	7.2	99.66		
	21.25	56.3	7.7	99.73		
	22.50	56.7	8.0	99.79		
	23.75	57.2	8.5	99.85		
	25.00	57.6	8.9	99.91		
	26.25	58.0	9.3	99.97		
	27.50	58.3	9.7	100.03		
	28.75	58.6	9.9	100.09		
	30.00	58.9	10.2	100.15		
	31.25	59.4	10.7	100.20		
	32.50	59.7	11.1	100.24		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10136 Maxwell Operating Co. Miller #2 DST #2

DATE: 04/22/97 TIME: 08:40:40

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	33.75	60.2	11.5	100.28		
	35.00	60.5	11.8	100.30		
	36.25	60.9	12.2	100.33		
	37.50	61.3	12.6	100.36		
	38.75	61.8	13.1	100.40		
	40.00	62.1	13.4	100.45		
	41.25	62.5	13.8	100.49		
	42.50	62.8	14.1	100.53		
****** End Flow 2	43.75	63.1	14.5	100.58		
****** Start Shutin 2	0.00	63.1	0.0	100.58	0.0000	0.004
	1.25	68.3	5.1	100.63	72.0000	0.005
	2.50	83.1	19.9	100.69	36.5000	0.007
	3.75	102.5	39.4	100.75	24.6667	0.011
	5.00	129.4	66.3	100.83	18.7500	0.017
	6.25	166.4	103.3	100.91	15.2000	0.028
	7.50	214.3	151.1	100.99	12.8333	0.046
	8.75	268.9	205.8	101.08	11.1429	0.072
	10.00	322.7	259.5	101.17	9.8750	0.104
	11.25	369.9	306.8	101.26	8.8889	0.137
	12.50	409.7	346.5	101.34	8.1000	0.168
	13.75	442.8	379.6	101.41	7.4545	0.196
	15.00	470.2	407.1	101.45	6.9167	0.221
	16.25	493.5	430.3	101.50	6.4615	0.244
	17.50	513.6	450.5	101.53	6.0714	0.264
	18.75	531.0	467.9	101.55	5.7333	0.282
	20.00	546.3	483.2	101.56	5.4375	0.298
	21.25	560.0	496.8	101.56	5.1765	0.314
	22.50	572.2	509.1	101.56	4.9444	0.327
	23.75	583.4	520.2	101.57	4.7368	0.340
	25.00	593.5	530.4	101.58	4.5500	0.352
	26.25	602.9	539.7	101.59	4.3810	0.363
	27.50	611.4	548.3	101.60	4.2273	0.374
	28.75	619.5	556.4	101.61	4.0870	0.384
	30.00	626.9	563.8	101.62	3.9583	0.393
	31.25	633.9	570.8	101.62	3.8400	0.402
	32.50	640.5	577.3	101.64	3.7308	0.410
	33.75	646.6	583.5	101.76	3.6296	0.418
	35.00	652.4	589.3	101.67	3.5357	0.426
	36.25	658.0	594.8	101.68	3.4483	0.433
	37.50	663.1	600.0	101.70	3.3667	0.440
	38.75	668.1	605.0	101.72	3.2903	0.446
	40.00	672.8	609.6	101.73	3.2188	0.453
	41.25	677.3	614.1	101.75	3.1515	0.459
	42.50	681.6	618.4	101.77	3.0882	0.465
	43.75	685.7	622.5	101.79	3.0286	0.470
****** End Shut-in 2	45.00	689.6	626.5	101.81	2.9722	0.476
****** Final Hydro.	273.50	1431.7	0.0	101.83		

TEST HISTORY

10136 Maxwell Operating Co. Miller #2 DST #2

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1462.51
B:	0.00	22.84
C:	45.00	45.87
D:	45.00	744.50
E:	0.00	48.69
F:	43.75	63.15
G:	45.00	689.64
Q:	0.00	1431.69

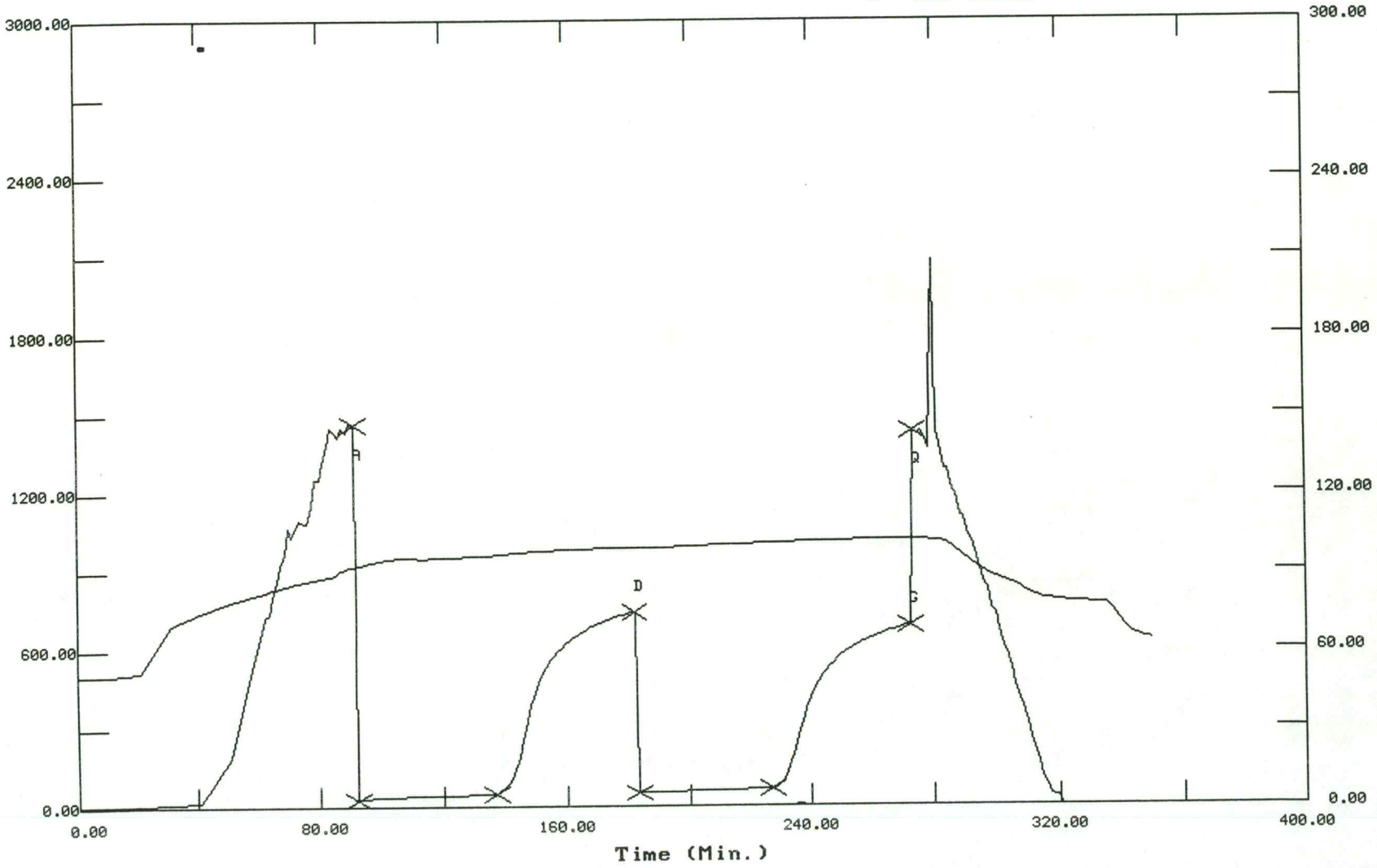
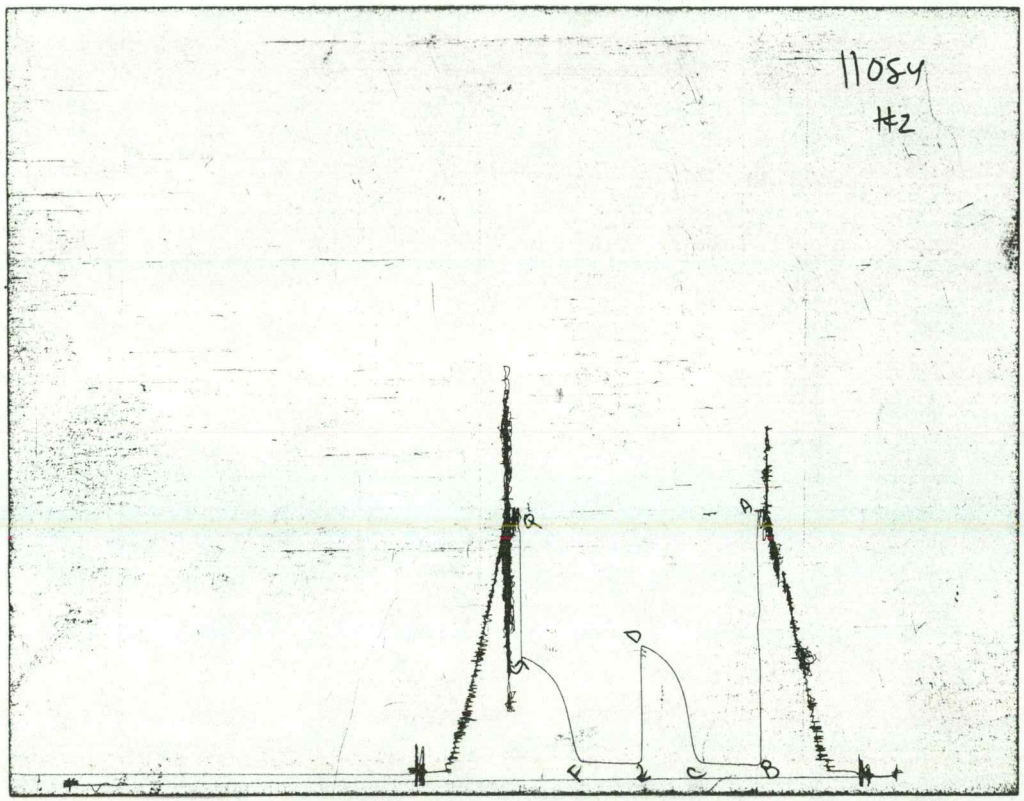


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10136

Well Name & No. Miller #2 Test No. 2 Date 4-22-97

Company Maxwell Operating Company Zone Tested Douglas Sand

Address _____ Elevation 1885 KB 1890 GL

Co. Rep / Geo. Ron Nelson Cont. Discovery #1 Est. Ft. of Pay _____ Por. ____ %

Location: Sec. 4 Twp. 16s Rge. 12w Co. Barton State Ks

No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 2974-3010 Initial Str Wt./Lbs. 32,000 Unseated Str Wt./Lbs. 33,000

Anchor Length 36 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 34,000

Top Packer Depth 2969 Tool Weight 1950

Bottom Packer Depth 2974 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____

Total Depth 3010 Wt. Pipe Run _____ Drill Collar Run 30

Mud Wt. 9.2 LCM _____ Vis. 47 WL 10.4 Drill Pipe Size 4½ XH Ft. Run 2943

Blow Description ¼" blow building to 7"

ff- ¼" blow building to 4"

Recovery — Total Feet 90 GIP _____ Ft. in DC 30 Ft. in DP 60

Rec. 30 Feet Of SOSWCM %gas 5 %oil 10 %water 85 %mud

Rec. 60 Feet Of MW %gas _____ %oil 60 %water 40 %mud

Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud

Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud

Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud

BHT _____ °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API

RW .17 @ 91 °F Chlorides 44,000 ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud	1487	1462	PSI	Recorder No. 2346	T-Started	0856
(B) First Initial Flow Pressure	66	23	PSI	(depth) 2979	T-Open	1010
(C) First Final Flow Pressure	88	46	PSI	Recorder No. 11084	T-Pulled	1310
(D) Initial Shut-in Pressure	753	745	PSI	(depth) 3005	T-Out	1402
(E) Second Initial Flow Pressure	88	49	PSI	Recorder No. _____		
(F) Second Final Flow Pressure	98	63	PSI	(depth) _____		
(G) Final Shut-in Pressure	668	690	PSI	Initial Opening 45	Test	600
(H) Final Hydrostatic Mud	1426	1432	PSI	Initial Shut-in 45	Jars	
	Ak-1	Alpine		Final Flow 45	Safety Joint	
				Final Shut-in 45	Straddle	
				47.5 stands	Circ. Sub	
					Sampler	
					Extra Packer	
					Elect. Rec. X	150
					Other	
					TOTAL PRICE $	750

Approved By _____

Our Representative Paul Simpson

TRILOBITE TESTING L.L.C.

OPERATOR : Maxwell Operating Co. DATE 04/23/97
WELL NAME: Miller #2 KB 1875.00 ft TICKET NO: 10137 DST #3
LOCATION : Sec 04 Twp.16s Rge.12w GR 1867.00 ft FORMATION: Lansing
INTERVAL : 3063.00 To 3143.00 ft TD 3143.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 45	Rec.	11084	11084	2346		
SI 45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF 45	Clock(hrs)	12hr.	12hr.	Elec		
FS 45	Depth(ft)	3130.0	3130.0	3066.0	0.0	0.0

TIME DATA----------
PF Fr. 0313 to 0358 hr
IS Fr. 0358 to 0443 hr
SF Fr. 0443 to 0528 hr
FS Fr. 0528 to 0613 hr

	Field	1	2	3	4
A. Init Hydro	1605.0	1608.0	1540.0	0.0	0.0
B. First Flow	66.0	76.0	25.0	0.0	0.0
B1. Final Flow	66.0	67.0	32.0	0.0	0.0
C. In Shut-in	153.0	152.0	134.0	0.0	0.0
D. Init Flow	66.0	72.0	33.0	0.0	0.0
E. Final Flow	66.0	68.0	38.0	0.0	0.0
F. Fl Shut-in	241.0	251.0	235.0	0.0	0.0
G. Final Hydro	1584.0	1576.0	1524.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 0206 hr
T ON BOTM 0310 hr
T OPEN 0313 hr
T PULLED 0613 hr
T OUT 0722 hr

TOOL DATA----------

Tool Wt.	2400.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	35000.00 lbs
Initial Str Wt	32000.00 lbs
Unseated Str Wt	32000.00 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	30.00 ft
D.P. Length	3034.00 ft

RECOVERY
Tot Fluid 40.00 ft of 30.00 ft in DC and 10.00 ft in DP
30.00 ft of Gas In Pipe
40.00 ft of Oil specked Mud
0.00 ft of 3%oil 97%mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA----------

Mud Type	Chemical
Weight	9.10 lb/cf
Vis.	47.00 S/L
W.L.	12.80 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	100.00 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.	Ron Nelson
Contr.	Discovery
Rig #	1
Unit #	
Pump T.	

BLOW DESCRIPTION
Initial Flow-
1/8" blow building to to 3"

Initial Shutin-
no blow

Final Flow-
surface blow building to 2"

Final Shutin-
no blow

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONV

/ELL NAME: Miller #2

.OCATION : Sec 04 Twp.16s Rge.12w

'ICKET No. 10137 D.S.T. No. 3 DATE 04/23/97

'OTAL TOOL TO BOTTOM OF TOP PACKERS 21

:NTERVAL TOOL .....

3OTTOM PACKERS AND ANCHOR ..... 18 anch

'OTAL TOOL 39

)RILL COLLAR ANCHOR IN INTERVAL .....

).C. ANCHOR STND.Stands Single Total

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

'OTAL ASSEMBLY 101

).C. ABOVE TOOLS.Stands Single 1 Total 30

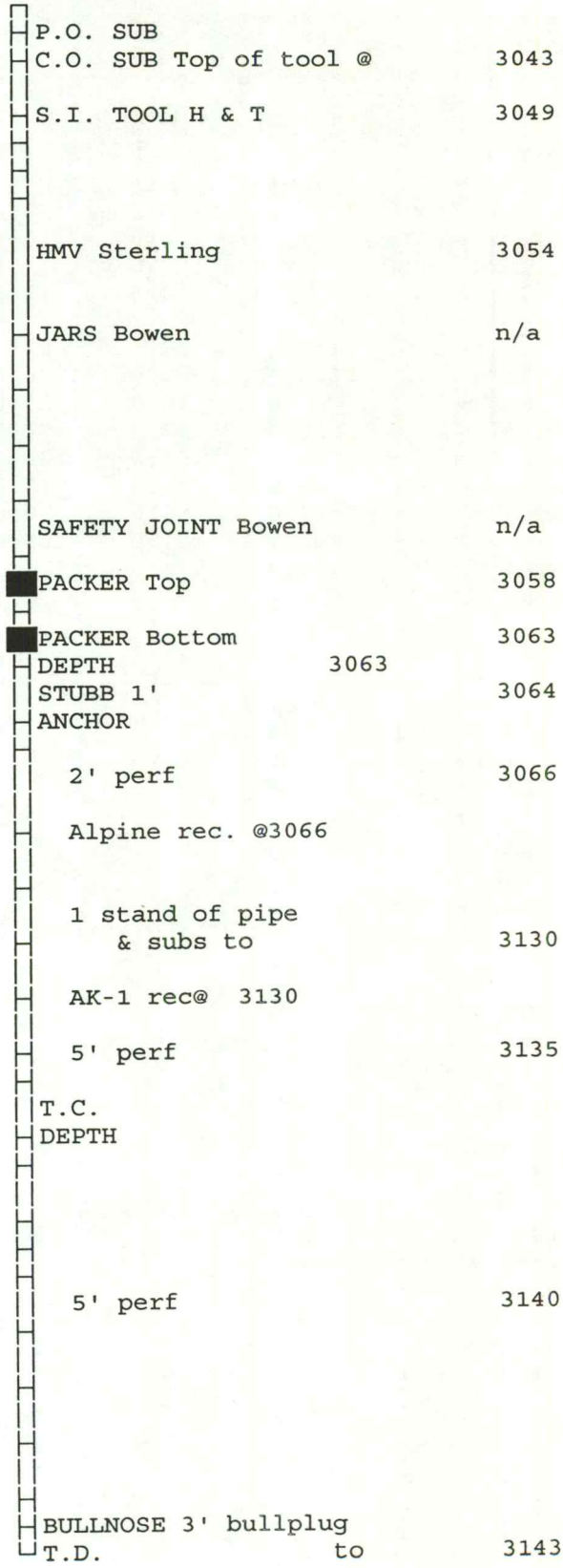
).P. ABOVE TOOLS.Stands49 Single Total 3034

'OTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3165

'OTAL DEPTH 3143

'OTAL DRILL PIPE ABOVE K.B. 22

REMARKS:



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10137 Maxwell Operating Co. Miller #2 DST #3

DATE: 04/23/97 TIME: 01:34:51

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	101.00	1539.9	0.0	93.44		
****** Start Flow 1	0.00	24.9	0.0	93.61		
	1.25	28.6	3.7	93.76		
	2.50	29.1	4.2	93.87		
	3.75	30.2	5.2	93.97		
	5.00	32.8	7.9	94.07		
	6.25	36.8	11.9	94.15		
	7.50	32.5	7.6	94.23		
	8.75	36.3	11.3	94.30		
	10.00	36.0	11.1	94.36		
	11.25	38.7	13.7	94.41		
	12.50	33.1	8.1	94.46		
	13.75	30.8	5.9	94.52		
	15.00	31.8	6.9	94.59		
	16.25	31.0	6.1	94.66		
	17.50	32.3	7.4	94.72		
	18.75	32.1	7.1	94.78		
	20.00	34.1	9.2	94.83		
	21.25	36.5	11.5	94.89		
	22.50	41.1	16.1	94.94		
	23.75	36.4	11.4	95.00		
	25.00	35.9	10.9	95.05		
	26.25	35.9	11.0	95.11		
	27.50	36.1	11.2	95.15		
	28.75	36.2	11.3	95.20		
	30.00	36.4	11.5	95.26		
	31.25	36.5	11.6	95.32		
	32.50	36.5	11.6	95.37		
	33.75	36.6	11.7	95.43		
	35.00	36.7	11.8	95.49		
	36.25	36.8	11.9	95.54		
	37.50	37.0	12.1	95.61		
	38.75	37.2	12.3	95.67		
	40.00	37.3	12.4	95.73		
	41.25	38.0	13.0	95.79		
****** End Flow 1	42.50	31.6	6.7	95.85		
****** Start Shutin 1	0.00	31.6	0.0	95.85	0.0000	0.001
	1.25	33.4	1.8	95.90	35.0000	0.001
	2.50	34.8	3.1	95.97	18.0000	0.001
	3.75	36.2	4.5	96.02	12.3333	0.001
	5.00	37.8	6.1	96.08	9.5000	0.001
	6.25	39.4	7.8	96.14	7.8000	0.002
	7.50	41.1	9.5	96.18	6.6667	0.002
	8.75	42.5	10.9	96.23	5.8571	0.002
	10.00	44.3	12.7	96.29	5.2500	0.002
	11.25	45.9	14.3	96.33	4.7778	0.002
	12.50	47.6	15.9	96.38	4.4000	0.002
	13.75	49.4	17.8	96.42	4.0909	0.002
	15.00	51.2	19.6	96.47	3.8333	0.003
	16.25	53.1	21.5	96.50	3.6154	0.003
	17.50	55.1	23.5	96.55	3.4286	0.003

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10137 Maxwell Operating Co. Miller #2 DST #3

DATE: 04/23/97 TIME: 01:34:51

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	18.75	57.2	25.5	96.58	3.2667	0.003
	20.00	59.5	27.9	96.64	3.1250	0.004
	21.25	61.8	30.2	96.67	3.0000	0.004
	22.50	64.4	32.7	96.71	2.8889	0.004
	23.75	66.6	35.0	96.75	2.7895	0.004
	25.00	69.2	37.6	96.79	2.7000	0.005
	26.25	71.9	40.3	96.83	2.6190	0.005
	27.50	74.6	43.0	96.87	2.5455	0.006
	28.75	77.7	46.1	96.91	2.4783	0.006
	30.00	81.1	49.5	96.95	2.4167	0.007
	31.25	84.4	52.8	96.99	2.3600	0.007
	32.50	85.1	53.5	97.02	2.3077	0.007
	33.75	89.4	57.8	97.06	2.2593	0.008
	35.00	91.1	59.5	97.10	2.2143	0.008
	36.25	95.0	63.3	97.14	2.1724	0.009
	37.50	98.4	66.8	97.18	2.1333	0.01
	38.75	103.1	71.5	97.22	2.0968	0.011
	40.00	107.8	76.2	97.25	2.0625	0.012
	41.25	112.4	80.7	97.29	2.0303	0.013
	42.50	117.3	85.7	97.33	2.0000	0.014
	43.75	122.5	90.8	97.36	1.9714	0.015
	45.00	127.9	96.3	97.40	1.9444	0.016
***** End Shut-in 1	46.25	133.8	102.2	97.44	1.9189	0.018
***** Start Flow 2	0.00	33.3	0.0	97.47		
	1.25	30.7	-2.6	97.50		
	2.50	33.7	0.4	97.52		
	3.75	33.1	-0.2	97.56		
	5.00	33.2	-0.1	97.60		
	6.25	33.1	-0.2	97.64		
	7.50	33.4	0.1	97.67		
	8.75	33.6	0.3	97.72		
	10.00	33.5	0.2	97.75		
	11.25	33.7	0.4	97.79		
	12.50	33.6	0.3	97.83		
	13.75	34.6	1.2	97.86		
	15.00	35.1	1.8	97.90		
	16.25	34.1	0.8	97.94		
	17.50	34.7	1.4	97.98		
	18.75	35.7	2.4	98.01		
	20.00	35.7	2.4	98.05		
	21.25	35.9	2.6	98.08		
	22.50	36.4	3.1	98.12		
	23.75	36.6	3.3	98.15		
	25.00	36.7	3.4	98.19		
	26.25	36.9	3.6	98.22		
	27.50	37.0	3.7	98.24		
	28.75	37.2	3.9	98.28		
	30.00	37.2	3.9	98.32		
	31.25	35.4	2.1	98.36		
	32.50	36.7	3.4	98.40		
	33.75	36.8	3.4	98.42		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

'EST: 10137 Maxwell Operating Co. Miller #2 DST #3

)ATE: 04/23/97 TIME: 01:34:51

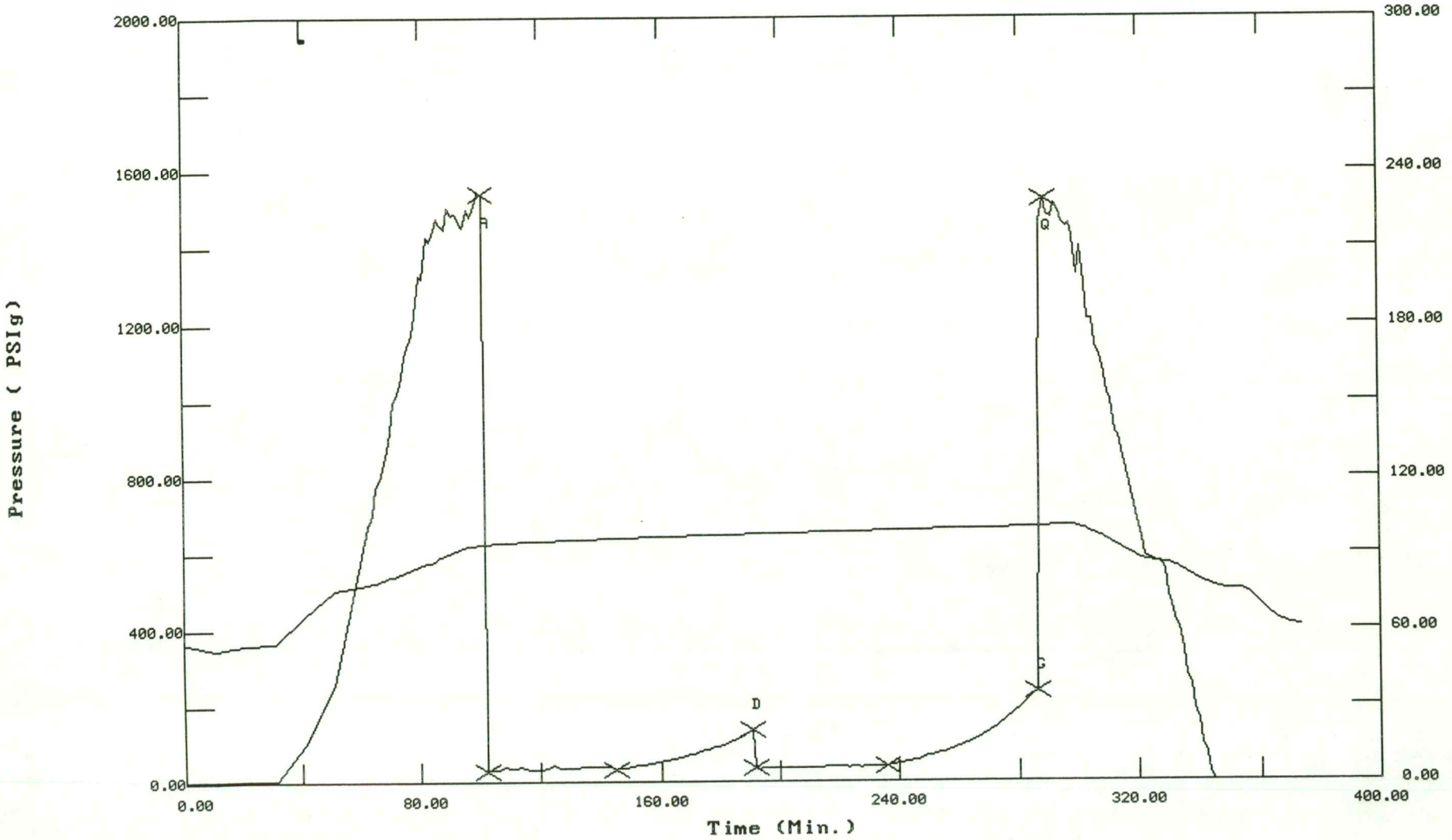
	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	35.00	36.0	2.7	98.46		
	36.25	36.8	3.5	98.49		
	37.50	37.2	3.8	98.52		
	38.75	37.4	4.1	98.56		
	40.00	37.2	3.9	98.59		
	41.25	37.1	3.8	98.63		
	42.50	37.5	4.2	98.68		
**** End Flow 2	43.75	38.0	4.7	98.72		
**** Start Shutin 2	0.00	38.0	0.0	98.72	0.0000	0.001
	1.25	40.9	2.9	98.76	70.0000	0.002
	2.50	42.7	4.7	98.81	35.5000	0.002
	3.75	44.6	6.6	98.84	24.0000	0.002
	5.00	46.8	8.8	98.89	18.2500	0.002
	6.25	49.1	11.0	98.93	14.8000	0.002
	7.50	51.4	13.3	98.96	12.5000	0.003
	8.75	53.9	15.9	99.00	10.8571	0.003
	10.00	56.4	18.4	99.04	9.6250	0.003
	11.25	59.1	21.1	99.08	8.6667	0.003
	12.50	61.8	23.8	99.11	7.9000	0.004
	13.75	64.7	26.6	99.15	7.2727	0.004
	15.00	67.5	29.5	99.18	6.7500	0.005
	16.25	70.1	32.0	99.22	6.3077	0.005
	17.50	73.4	35.3	99.25	5.9286	0.005
	18.75	76.1	38.1	99.28	5.6000	0.006
	20.00	79.6	41.6	99.31	5.3125	0.006
	21.25	82.7	44.7	99.34	5.0588	0.007
	22.50	86.5	48.5	99.37	4.8333	0.007
	23.75	89.8	51.8	99.40	4.6316	0.008
	25.00	93.9	55.8	99.43	4.4500	0.009
	26.25	98.1	60.1	99.46	4.2857	0.01
	27.50	102.5	64.5	99.49	4.1364	0.011
	28.75	107.3	69.2	99.52	4.0000	0.012
	30.00	112.2	74.1	99.55	3.8750	0.013
	31.25	117.6	79.6	99.58	3.7600	0.014
	32.50	123.1	85.0	99.61	3.6538	0.015
	33.75	129.0	90.9	99.63	3.5556	0.017
	35.00	135.4	97.4	99.67	3.4643	0.018
	36.25	142.3	104.3	99.70	3.3793	0.020
	37.50	149.4	111.4	99.72	3.3000	0.022
	38.75	157.0	119.0	99.75	3.2258	0.025
	40.00	164.9	126.9	99.78	3.1562	0.027
	41.25	173.5	135.5	99.81	3.0909	0.030
	42.50	182.3	144.3	99.84	3.0294	0.033
	43.75	191.1	153.0	99.87	2.9714	0.037
	45.00	199.5	161.5	99.90	2.9167	0.040
	46.25	208.3	170.3	99.92	2.8649	0.043
	47.50	217.2	179.1	99.95	2.8158	0.047
	48.75	226.0	187.9	99.98	2.7692	0.051
***** End Shut-in 2	50.00	234.9	196.8	100.01	2.7250	0.055
***** Final Hydro.	288.50	1524.2	0.0	100.12		

TEST HISTORY

10137 Maxwell Operating Co. Miller #2 DST #3

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1539.92
B:	0.00	24.94
C:	42.50	31.63
D:	46.25	133.81
E:	0.00	33.31
F:	43.75	38.04
G:	50.00	234.86
Q:	0.00	1524.16



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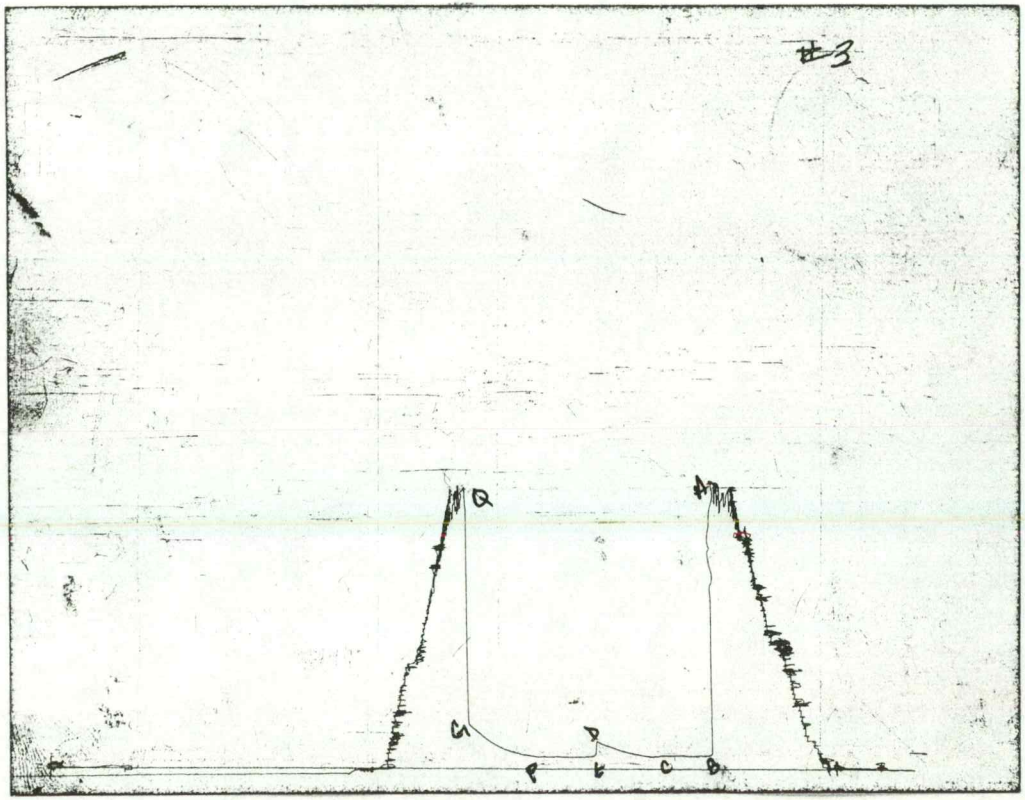


This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10137

Well Name & No. Miller #2 Test No. 3 Date 4-23-97

Company Maxwell Operating Company Zone Tested LKC

Address ______ Elevation 1875 KB 1867 GL

Co. Rep / Geo. Ron Nelson Cont. Discovery #1 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 4 Twp. 16s Rge. 12w Co. Barton State Ks

No. of Copies ____ Distribution Sheet (Y, N) ____ Turnkey (Y, N) ____ Evaluation (Y, N) ____

Interval Tested 3063-3143 | Initial Str Wt./Lbs. 32,000 | Unseated Str Wt./Lbs. 32,000

Anchor Length 80 | Wt. Set Lbs. 20,000 | Wt. Pulled Loose/Lbs. 35,000

Top Packer Depth 3058 | Tool Weight 24000

Bottom Packer Depth 3063 | Hole Size — 7 7/8" ____ | Rubber Size — 6 3/4" ____

Total Depth 3143 | Wt. Pipe Run ____ | Drill Collar Run 30

Mud Wt. 9.1 LCM ____ Vis. 47 WL 12.8 | Drill Pipe Size 4½XH | Ft. Run 3034

Blow Description ½" blow building to 3"

FF- ½" blow building to 2"

Recovery — Total Feet 40 GIP 30 Ft. in DC 30 Ft. in DP 10

Rec.	Feet Of	%gas	%oil	%water	%mud
40	OSM		3		97

BHT 100 °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides ____ ppm System

(A) Initial Hydrostatic Mud	1605	1540	PSI
(B) First Initial Flow Pressure	66	25	PSI
(C) First Final Flow Pressure	66	32	PSI
(D) Initial Shut-in Pressure	153	134	PSI
(E) Second Initial Flow Pressure	66	33	PSI
(F) Second Final Flow Pressure	66	38	PSI
(G) Final Shut-in Pressure	241	235	PSI
(H) Final Hydrostatic Mud	1584	1542	PSI

Recorder No. 2346 (depth) 3066

Recorder No. 11084 (depth) 3130

Recorder No. ____ (depth) ____

Initial Opening 45

Initial Shut-in 45

Final Flow 45

Final Shut-in 45

49 stands

T-Started 0206

T-Open 0313

T-Pulled 0613

T-Out 0722

Test 600

Jars ____

Safety Joint ____

Straddle ____

Circ. Sub ____

Sampler ____

Extra Packer ____

Elect. Rec. 150

Other ____

TOTAL PRICE $ 750

Approved By ____

Our Representative Paul Simpson

TRILOBITE TESTING L.L.C.

OPERATOR : Maxwell Operating Co. DATE 04/24/97
WELL NAME: Miller #2 KB 1875.00 ft TICKET NO: 10138 DST #4
LOCATION : Sec 04 Twp.16s Rge.12w GR 1867.00 ft FORMATION: Arbuckle
INTERVAL : 3288.00 To 3322.00 ft TD 3322.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	11084	11084	2346		
SI 45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF 30	Clock(hrs)	12hr.	12hr.	Elec		
FS 45	Depth(ft)	3317.0	3317.0	3290.0	0.0	0.0

TIME DATA----------
PF Fr. 0124 to 0154 hr
IS Fr. 0154 to 0239 hr
SF Fr. 0239 to 0309 hr
FS Fr. 0309 to 0354 hr

	Field	1	2	3	4
A. Init Hydro	1735.0	1795.0	1667.0	0.0	0.0
B. First Flow	471.0	458.0	420.0	0.0	0.0
B1. Final Flow	829.0	832.0	814.0	0.0	0.0
C. In Shut-in	1045.0	1037.0	1024.0	0.0	0.0
D. Init Flow	881.0	896.0	859.0	0.0	0.0
E. Final Flow	1024.0	1002.0	990.0	0.0	0.0
F. Fl Shut-in	1056.0	1056.0	1043.0	0.0	0.0
G. Final Hydro	1713.0	1696.0	1631.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 0025 hr
T ON BOTM 0122 hr
T OPEN 0124 hr
T PULLED 0354 hr
T OUT 0545 hr

RECOVERY
Tot Fluid 2300.00 ft of 30.00 ft in DC and 2270.00 ft in DP
2300.00 ft of Salt Water with Oil specks at top
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of Rw .26 & 66
SALINITY 29000.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	2100.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	45000.00 lbs
Initial Str Wt	34000.00 lbs
Unseated Str Wt	44000.00 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	30.00 ft
D.P. Length	3251.00 ft

BLOW DESCRIPTION
Initial Flow-
Strong blow bottom of bucket
in 20 seconds

Initial Shutin-
No blow

Final Flow-
Strong blow bottom of bucket in 45
seconds

Final Shutin-
No blow

SAMPLES:
SENT TO:

MUD DATA----------

Mud Type	Chemical
Weight	9.30 lb/c
Vis.	47.00 S/L
W.L.	10.50 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	115.00 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.	Ron Nelson
Contr.	Discovery
Rig #	1
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Miller #2

LOCATION : Sec 04 Twp.16s Rge.12w

TICKET No. 10138 D.S.T. No. 4 DATE 04/24/97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 21

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 34 anch

TOTAL TOOL 55

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 55

D.C. ABOVE TOOLS.Stands Single 1 Total 30

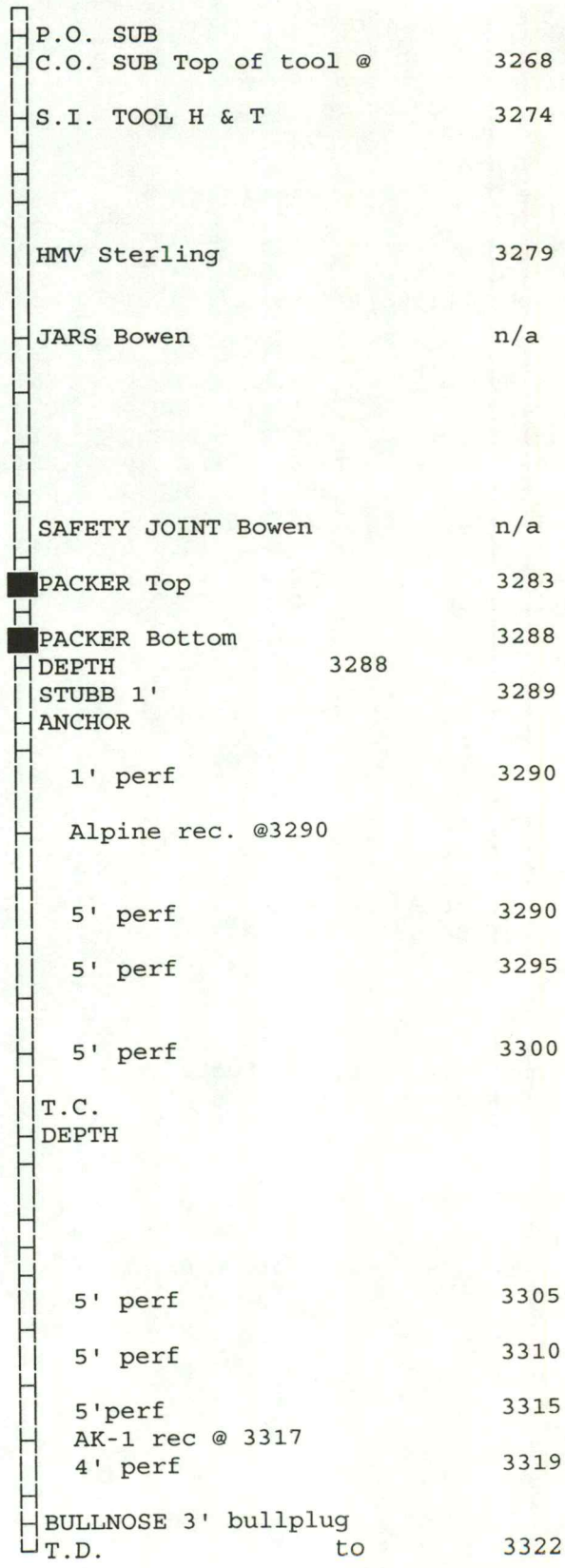
D.P. ABOVE TOOLS.Stands42 Single 1 Total 3251

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3335

TOTAL DEPTH 3322

TOTAL DRILL PIPE ABOVE K.B. 13

REMARKS:



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10138 Maxwell Operating Co. Miller #2 DST #4

DATE: 04/24/97 TIME: 00:13:28

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	73.50	1666.9	0.0	96.69		
****** Start Flow 1	0.00	419.6	0.0	97.04		
	1.25	414.5	-5.1	98.68		
	2.50	438.4	18.8	101.49		
	3.75	462.8	43.2	104.46		
	5.00	488.1	68.6	107.07		
	6.25	512.1	92.5	109.18		
	7.50	542.8	123.2	110.83		
	8.75	566.1	146.5	112.09		
	10.00	591.0	171.5	113.04		
	11.25	611.3	191.7	113.76		
	12.50	634.0	214.4	114.30		
	13.75	655.1	235.5	114.71		
	15.00	675.0	255.4	115.01		
	16.25	692.2	272.6	115.24		
	17.50	710.1	290.6	115.41		
	18.75	725.9	306.4	115.53		
	20.00	741.3	321.8	115.62		
	21.25	756.1	336.5	115.69		
	22.50	769.1	349.5	115.74		
	23.75	781.4	361.9	115.77		
	25.00	793.2	373.7	115.80		
	26.25	804.3	384.7	115.81		
****** End Flow 1	27.50	814.5	394.9	115.83		
****** Start Shutin 1	0.00	814.5	0.0	115.83	0.0000	0.663
	1.25	823.0	8.5	115.84	23.0000	0.677
	2.50	901.4	86.9	115.81	12.0000	0.812
	3.75	914.6	100.1	115.78	8.3333	0.836
	5.00	924.3	109.8	115.76	6.5000	0.854
	6.25	932.4	117.9	115.76	5.4000	0.869
	7.50	939.6	125.1	115.73	4.6667	0.883
	8.75	945.9	131.4	115.72	4.1429	0.895
	10.00	951.6	137.1	115.70	3.7500	0.906
	11.25	956.9	142.5	115.70	3.4444	0.916
	12.50	961.7	147.2	115.65	3.2000	0.925
	13.75	966.3	151.8	115.63	3.0000	0.934
	15.00	970.4	156.0	115.57	2.8333	0.942
	16.25	974.2	159.8	115.53	2.6923	0.949
	17.50	977.8	163.3	115.46	2.5714	0.956
	18.75	981.2	166.7	115.41	2.4667	0.963
	20.00	984.4	169.9	115.33	2.3750	0.969
	21.25	987.3	172.8	115.26	2.2941	0.975
	22.50	990.2	175.7	115.18	2.2222	0.980
	23.75	992.9	178.4	115.10	2.1579	0.986
	25.00	995.4	180.9	115.01	2.1000	0.991
	26.25	997.8	183.3	114.93	2.0476	0.996
	27.50	1000.1	185.6	114.85	2.0000	1.000
	28.75	1002.2	187.7	114.76	1.9565	1.004
	30.00	1004.2	189.7	114.67	1.9167	1.008
	31.25	1006.2	191.7	114.59	1.8800	1.012
	32.50	1008.0	193.5	114.51	1.8462	1.016

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10138 Maxwell Operating Co. Miller #2 DST #4

DATE: 04/24/97 TIME: 00:13:28

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	33.75	1009.8	195.3	114.44	1.8148	1.020
	35.00	1011.5	197.0	114.35	1.7857	1.023
	36.25	1013.2	198.7	114.29	1.7586	1.026
	37.50	1014.6	200.1	114.21	1.7333	1.029
	38.75	1016.2	201.7	114.13	1.7097	1.033
	40.00	1017.6	203.1	114.04	1.6875	1.035
	41.25	1019.0	204.6	113.94	1.6667	1.038
	42.50	1020.4	205.9	113.84	1.6471	1.041
	43.75	1021.7	207.2	113.73	1.6286	1.044
	45.00	1022.9	208.4	113.63	1.6111	1.046
***** End Shut-in 1	46.25	1024.0	209.5	113.54	1.5946	1.049
***** Start Flow 2	0.00	858.8	0.0	113.47		
	1.25	872.5	13.7	113.50		
	2.50	884.9	26.2	113.72		
	3.75	895.6	36.9	114.05		
	5.00	905.8	47.0	114.36		
	6.25	914.8	56.0	114.66		
	7.50	923.0	64.2	114.93		
	8.75	930.3	71.5	115.09		
	10.00	937.0	78.2	115.23		
	11.25	942.7	83.9	115.34		
	12.50	948.3	89.5	115.43		
	13.75	953.0	94.2	115.50		
	15.00	957.4	98.6	115.56		
	16.25	961.7	102.9	115.58		
	17.50	965.3	106.5	115.62		
	18.75	968.8	110.0	115.73		
	20.00	971.9	113.1	115.62		
	21.25	975.2	116.4	115.60		
	22.50	978.0	119.2	115.56		
	23.75	980.5	121.7	115.56		
	25.00	983.0	124.2	115.54		
	26.25	985.4	126.6	115.51		
	27.50	987.3	128.6	115.48		
****** End Flow 2	28.75	989.5	130.7	115.46		
****** Start Shutin 2	0.00	989.5	0.0	115.46	0.0000	0.979
	1.25	1003.5	13.9	115.42	46.0000	1.007
	2.50	1007.6	18.1	115.38	23.5000	1.015
	3.75	1010.3	20.8	115.34	16.0000	1.021
	5.00	1012.6	23.1	115.25	12.2500	1.025
	6.25	1014.6	25.1	115.13	10.0000	1.030
	7.50	1016.3	26.8	115.02	8.5000	1.033
	8.75	1017.9	28.4	114.92	7.4286	1.036
	10.00	1019.5	29.9	114.83	6.6250	1.039
	11.25	1020.9	31.3	114.74	6.0000	1.042
	12.50	1022.3	32.8	114.69	5.5000	1.045
	13.75	1023.5	34.0	114.61	5.0909	1.048
	15.00	1024.7	35.1	114.56	4.7500	1.050
	16.25	1025.8	36.3	114.52	4.4615	1.052
	17.50	1026.9	37.4	114.46	4.2143	1.055
	18.75	1028.0	38.4	114.41	4.0000	1.057

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10138 Maxwell Operating Co. Miller #2 DST #4

DATE: 04/24/97 TIME: 00:13:28

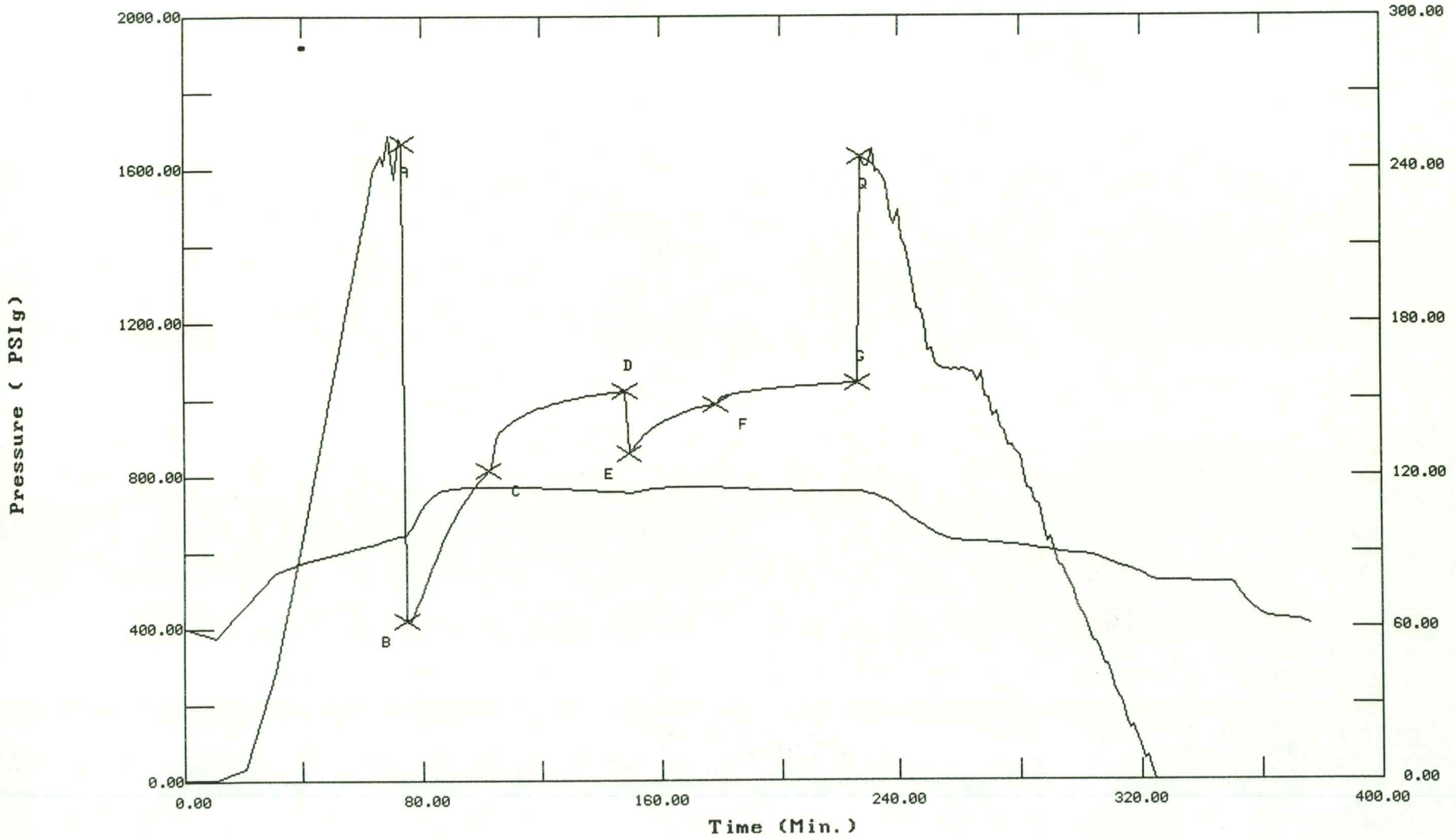
	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	20.00	1028.9	39.4	114.38	3.8125	1.059
	21.25	1029.9	40.4	114.34	3.6471	1.061
	22.50	1030.8	41.3	114.29	3.5000	1.063
	23.75	1031.7	42.2	114.26	3.3684	1.064
	25.00	1032.5	43.0	114.23	3.2500	1.066
	26.25	1033.3	43.8	114.19	3.1429	1.068
	27.50	1034.1	44.5	114.16	3.0455	1.069
	28.75	1034.8	45.3	114.15	2.9565	1.071
	30.00	1035.6	46.1	114.11	2.8750	1.072
	31.25	1036.2	46.7	114.10	2.8000	1.074
	32.50	1036.9	47.3	114.07	2.7308	1.075
	33.75	1037.5	48.0	114.04	2.6667	1.076
	35.00	1038.2	48.6	114.01	2.6071	1.078
	36.25	1038.7	49.2	113.98	2.5517	1.079
	37.50	1039.3	49.8	113.96	2.5000	1.080
	38.75	1039.9	50.3	113.94	2.4516	1.081
	40.00	1040.4	50.9	113.91	2.4062	1.082
	41.25	1040.9	51.4	113.89	2.3636	1.084
	42.50	1041.5	52.0	113.87	2.3235	1.085
	43.75	1042.0	52.5	113.85	2.2857	1.086
	45.00	1042.5	53.0	113.83	2.2500	1.087
	46.25	1043.0	53.4	113.80	2.2162	1.088
****** End Shut-in 2	47.50	1042.9	53.4	113.78	2.1842	1.088
****** Final Hydro.	227.25	1631.1	0.0	113.72		

TEST HISTORY

10138 Maxwell Operating Co. Miller #2 DST #4

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1666.89
B:	0.00	419.55
C:	27.50	814.49
D:	46.25	1023.98
E:	0.00	858.79
F:	28.75	989.53
G:	47.50	1042.88
Q:	0.00	1631.06



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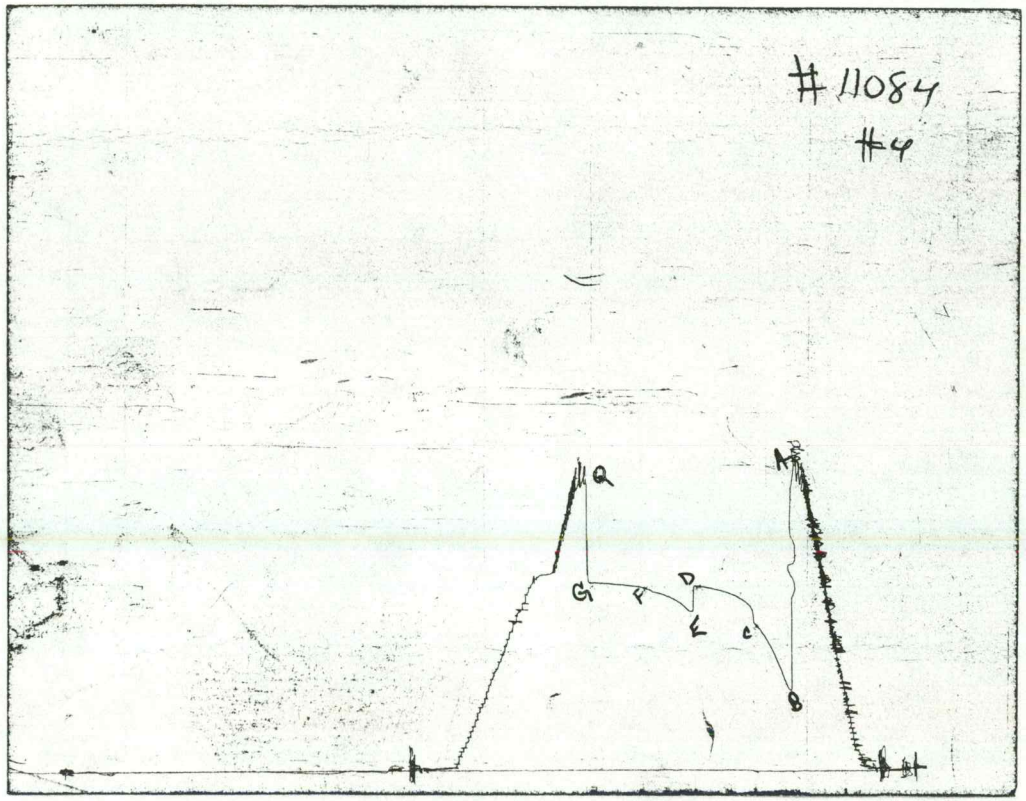

This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10138

Well Name & No. Miller #2 Test No. 4 Date 4-24-97

Company Maxwell Operating Co Zone Tested Arbuckle

Address Elevation 1875 KB 1867 GL

Co. Rep / Geo. Brian Karlin Cont. Discovery #1 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 4 Twp. 16s Rge. 12w Co. Barton State Ks

No. of Copies ____ Distribution Sheet (Y, N) ____ Turnkey (Y, N) ____ Evaluation (Y, N) ____

Interval Tested 3288-3322 Initial Str Wt./Lbs. 34,000 Unseated Str Wt./Lbs. ____

Anchor Length 34 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. ____

Top Packer Depth 3283 Tool Weight 2100

Bottom Packer Depth 3288 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Total Depth 3322 Wt. Pipe Run ____ Drill Collar Run 30

Mud Wt. 9.3 LCM ____ Vis. 47 WL 10.8 Drill Pipe Size 4½ XH Ft. Run 3251

Blow Description strong blow - bottom of bucket in 20 seconds

ISI - no blow

FF - strong blow - bottom of bucket in 45 seconds

Recovery — Total Feet 2300 GIP ____ Ft. in DC 30 Ft. in DP 2270

Rec. 2300	Feet Of	saltwater w/ oil	%gas	%oil	%water	%mud
Rec. ____	Feet Of	specks at top	%gas	%oil	%water	%mud
Rec. ____	Feet Of		%gas	%oil	%water	%mud
Rec. ____	Feet Of		%gas	%oil	%water	%mud
Rec. ____	Feet Of		%gas	%oil	%water	%mud

BHT 126 °F Gravity 66 °API D@ 29,000 °F Corrected Gravity 10,000 °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides ____ ppm System

(A) Initial Hydrostatic Mud	1735	1667	PSI	Recorder No.	2346	T-Started	0025
(B) First Initial Flow Pressure	471	420	PSI	(depth)	3290	T-Open	0124
(C) First Final Flow Pressure	829	814	PSI	Recorder No.	11084	T-Pulled	0354
(D) Initial Shut-in Pressure	1045	1024	PSI	(depth)	3317	T-Out	0545
(E) Second Initial Flow Pressure	881	859	PSI	Recorder No.	____		
(F) Second Final Flow Pressure	1024	990	PSI	(depth)	____		
(G) Final Shut-in Pressure	1056	1043	PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	1713	1631	PSI	Initial Shut-in	45	Jars	____
				Final Flow	30	Safety Joint	____
				Final Shut-in	45	Straddle	____
				52.5 stand		Circ. Sub	____
				____		Sampler	____
						Extra Packer	____
						Elect. Rec.	X 150
						Other	____
						TOTAL PRICE $	750

Approved By ____

Our Representative ____