WELL NAME:	Mitchell #3
COMPANY:	American Warrior
LOCATION:	Sec. 18 Twp. 30s Rge. 33w Haskell County Kansas
DATE:	12-5-96

TRILOBITE TESTING L.L.C.

OPERATOR : American Warrior
WELL NAME: Mitchell #3
LOCATION : 18-30S-33W
INTERVAL : 4119.00 To 4174.00 ft

DATE 11-27-96
KB 2967.00 ft TICKET NO: 9085 DST #1
GR 2957.00 ft FORMATION: Lansing "A"
TD 4174.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins			Field	1	2	3	4
PF	60	Rec.	2836	2836	2346		
SI	60	Range(Psi)	3500.0	3500.0	4995.0	0.0	0.0
SF	30	Clock(hrs)	12HR.	12HR.	elec.		
FS	60	Depth(ft)	4171.0	4171.0	4123.0	0.0	0.0

TIME DATA----------
PF Fr. 0625 to 0725 hr
IS Fr. 0725 to 0825 hr
SF Fr. 0825 to 0855 hr
FS Fr. 0855 to 0955 hr

	Field	1	2	3	4
A. Init Hydro	1975.0	1956.0	2012.0	0.0	0.0
B. First Flow	94.0	81.0	31.0	0.0	0.0
B1. Final Flow	145.0	126.0	163.0	0.0	0.0
C. In Shut-in	291.0	277.0	324.0	0.0	0.0
D. Init Flow	205.0	192.0	166.0	0.0	0.0
E. Final Flow	196.0	182.0	183.0	0.0	0.0
F. Fl Shut-in	291.0	272.0	324.0	0.0	0.0
G. Final Hydro	1948.0	1913.0	1982.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 0315 hr
T ON BOTM 0622 hr
T OPEN 0625 hr
T PULLED 0955 hr
T OUT 1230 hr

RECOVERY
Tot Fluid 330.00 ft of 301.00 ft in DC and 29.00 ft in DP
90.00 ft of Slightly oil cut watery mud 5%o 25%w 70%m
0.00 ft of
120.00 ft of Gassy cut muddy water w/film oil
0.00 ft of 20% gas 70% water 20% mud
0.00 ft of
120.00 ft of Slightly muddy water 95% water 5% mud
0.00 ft of
0.00 ft of RW .857 @ 66.3F
SALINITY 7200.00 P.P.M. A.P.I. Gravity 0.00

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

Tool Wt.	1800.00 lbs
Wt Set On Packer	30000.00 lbs
Wt Pulled Loose	60000.00 lbs
Initial Str Wt	55000.00 lbs
Unseated Str Wt	55000.00 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	301.00 ft
D.P. Length	3851.00 ft
H.W. I.D	2.70 in

BLOW DESCRIPTION

Initial Flow -
Fair blow - built to 6"

Initial Shut-in -
Bled off 2" - no blow back

Final Flow -
Weak surface blow for 5 min. -
then no blow

SAMPLES: NO
SENT TO:

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

Mud Type	Chemical
Weight	9.10 lb/cf
Vis.	49.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop Y	75.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	111.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Mike Colantonio
Co. Rep.	Alen Downing
Contr.	Val Energy
Rig #	2
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Mitchell #3

LOCATION : 18-30S-33W

TICKET No. 9085 D.S.T. No. 1 DATE 11-27-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 22ft.

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 29ft

TOTAL TOOL 51ft

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

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

TOTAL ASSEMBLY 82ft

D.C. ABOVE TOOLS.Stands5 Single Total 301ft

D.P. ABOVE TOOLS.Stands61 Single Total 3821ft

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4204ft.

TOTAL DEPTH 4174ft

TOTAL DRILL PIPE ABOVE K.B. ..... 30ft.

REMARKS:

P.O. SUB	
C.O. SUB Top of tool at	4092
S.I. TOOL 5ft	4098
HMV 5ft	4103
JARS 5ft	4108
SAFETY JOINT 2ft	4110
PACKER Top	4114
PACKER Bottom	4119
DEPTH	
STUBB 1ft	4120
ANCHOR	
2ft perf	4122
Alpine Rec.	4123
T.C.	
DEPTH	
6ft pick up sub	4128
10ft perf	4138
1ft C\O sub	4139
31ft Drlg. Pipe	4170
1ft C\O sub	4171
BULLNOSE AK-1 Rec.	4171
T.D. 3ft Bullplug	4174

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
P. O. Box 2137
Liberal, Kansas 67905
Phone: 316-624-5389
Fax: 316-626-7108

Lab Number:	960714	Analyzed:	12/02/96
Sample From:	Mitchell #3 DST 1	Pressure:	
Producer:	American Warrior	Temperature:	
Date:		Location:	18-30-33
Time:		County:	Haskell
Sampler:		State:	Kansas
Source:		Formation:	Marmaton

		Mole %	GPM
Helium	He:	0.303	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	9.598	0.000
Carbon Dioxide	CO2:	0.362	0.000
Methane	C1:	75.991	0.000
Ethane	C2:	6.663	1.782
Propane	C3:	4.261	1.174
Iso Butane	iC4:	0.629	0.206
Normal Butane	nC4:	1.165	0.367
Iso Pentane	iC5:	0.348	0.127
Normal Pentane	nC5:	0.391	0.142
Hexanes Plus	C6+:	0.289	0.126
	TOTAL:	100.000	3.924
	Z Fact:	0.9972	
	SP.GR.:	0.7194	
	BTU (SAT):	1081.9 @ 14.73 psia	
	BTU (DRY):	1101.1 @ 14.73 psia	
	OCTANE RATING:	112.0	

COMMENTS:

0.129

Caraway Analytical, 02-Dec-96

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9085 DST#1 Mitchell #3 American Warrior

DATE: 11/27/96 TIME: 04:53:13

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	170.00	2012.0	0.0	97.45		
****** Start Flow 1	0.00	31.4	0.0	97.53		
	1.00	40.0	8.6	97.64		
	2.00	48.1	16.7	97.72		
	3.00	55.4	24.0	97.79		
	4.00	62.0	30.6	97.86		
	5.00	68.4	37.0	97.90		
	6.00	73.3	41.9	97.95		
	7.00	77.0	45.6	98.00		
	8.00	79.9	48.4	98.14		
	9.00	82.2	50.8	98.51		
	10.00	84.8	53.4	99.09		
	11.00	87.9	56.5	99.80		
	12.00	90.9	59.5	100.52		
	13.00	93.9	62.4	101.19		
	14.00	96.7	65.2	101.77		
	15.00	98.5	67.1	102.28		
	16.00	101.4	69.9	102.72		
	17.00	103.1	71.7	103.08		
	18.00	105.8	74.4	103.38		
	19.00	107.7	76.3	103.65		
	20.00	110.0	78.6	103.89		
	21.00	111.6	80.2	104.08		
	22.00	113.5	82.1	104.25		
	23.00	115.3	83.9	104.41		
	24.00	117.3	85.9	104.55		
	25.00	118.9	87.5	104.68		
	26.00	121.0	89.6	104.79		
	27.00	123.1	91.7	104.90		
	28.00	124.8	93.4	105.00		
	29.00	126.8	95.3	105.09		
	30.00	128.9	97.5	105.18		
	31.00	130.6	99.2	105.26		
	32.00	132.4	101.0	105.34		
	33.00	134.7	103.2	105.41		
	34.00	136.4	105.0	105.49		
	35.00	138.1	106.7	105.55		
	36.00	140.5	109.0	105.62		
	37.00	140.9	109.5	105.67		
	38.00	142.1	110.6	105.73		
	39.00	143.8	112.4	105.78		
	40.00	144.4	112.9	105.83		
	41.00	144.9	113.4	105.88		
	42.00	146.4	115.0	105.92		
	43.00	146.6	115.2	105.96		
	44.00	148.0	116.6	106.00		
	45.00	148.7	117.3	106.04		
	46.00	149.7	118.3	106.08		
	47.00	150.4	119.0	106.11		
	48.00	151.6	120.1	106.15		
	49.00	153.0	121.6	106.18		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9085 DST#1 Mitchell #3 American Warrior

DATE: 11/27/96 TIME: 04:53:13

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	50.00	154.4	122.9	106.20		
	51.00	155.1	123.6	106.23		
	52.00	155.0	123.5	106.27		
	53.00	156.6	125.1	106.30		
	54.00	158.3	126.9	106.34		
	55.00	158.6	127.2	106.36		
	56.00	160.1	128.7	106.40		
	57.00	161.0	129.6	106.43		
	58.00	161.9	130.4	106.46		
	59.00	162.6	131.2	106.50		
	60.00	163.2	131.8	106.54		
****** End Flow 1	61.00	163.8	132.4	106.58		
****** Start Shutin 1	0.00	163.8	0.0	106.58	0.0000	0.027
	1.00	197.3	33.4	106.63	62.0000	0.039
	2.00	223.9	60.1	106.67	31.5000	0.050
	3.00	250.5	86.7	106.72	21.3333	0.063
	4.00	267.2	103.4	106.77	16.2500	0.071
	5.00	276.0	112.2	106.80	13.2000	0.076
	6.00	281.7	117.8	106.83	11.1667	0.079
	7.00	286.2	122.3	106.85	9.7143	0.082
	8.00	289.7	125.8	106.86	8.6250	0.084
	9.00	292.7	128.9	106.87	7.7778	0.086
	10.00	295.1	131.3	106.88	7.1000	0.087
	11.00	296.7	132.9	106.88	6.5455	0.088
	12.00	298.3	134.4	106.88	6.0833	0.089
	13.00	299.9	136.0	106.88	5.6923	0.090
	14.00	301.3	137.4	106.89	5.3571	0.091
	15.00	302.6	138.8	106.89	5.0667	0.092
	16.00	303.8	140.0	106.90	4.8125	0.092
	17.00	305.5	141.6	106.90	4.5882	0.093
	18.00	306.8	143.0	106.91	4.3889	0.094
	19.00	308.0	144.2	106.91	4.2105	0.095
	20.00	309.2	145.3	106.92	4.0500	0.096
	21.00	310.8	146.9	106.93	3.9048	0.097
	22.00	311.9	148.0	106.93	3.7727	0.097
	23.00	312.6	148.7	106.93	3.6522	0.098
	24.00	313.2	149.3	106.94	3.5417	0.098
	25.00	314.0	150.1	106.95	3.4400	0.099
	26.00	314.4	150.6	106.96	3.3462	0.099
	27.00	314.9	151.1	106.96	3.2593	0.099
	28.00	315.7	151.8	106.98	3.1786	0.10
	29.00	316.4	152.5	106.96	3.1034	0.100
	30.00	317.0	153.1	106.99	3.0333	0.100
	31.00	317.6	153.8	106.99	2.9677	0.101
	32.00	318.2	154.3	107.00	2.9062	0.101
	33.00	318.3	154.5	107.00	2.8485	0.101
	34.00	318.8	155.0	107.01	2.7941	0.102
	35.00	319.2	155.3	107.01	2.7429	0.102
	36.00	319.4	155.6	107.02	2.6944	0.102
	37.00	319.9	156.1	107.02	2.6486	0.102
	38.00	320.4	156.6	107.03	2.6053	0.103

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9085 DST#1 Mitchell #3 American Warrior

DATE: 11/27/96 TIME: 04:53:13

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	39.00	320.7	156.9	107.03	2.5641	0.103
	40.00	321.0	157.1	107.03	2.5250	0.103
	41.00	321.2	157.4	107.03	2.4878	0.103
	42.00	321.5	157.7	107.04	2.4524	0.103
	43.00	321.9	158.0	107.04	2.4186	0.104
	44.00	322.0	158.2	107.04	2.3864	0.104
	45.00	322.2	158.3	107.05	2.3556	0.104
	46.00	322.7	158.8	107.05	2.3261	0.104
	47.00	322.9	159.0	107.06	2.2979	0.104
	48.00	323.0	159.2	107.06	2.2708	0.104
	49.00	323.3	159.5	107.06	2.2449	0.105
	50.00	323.6	159.8	107.08	2.2200	0.105
	51.00	323.9	160.1	107.08	2.1961	0.105
	52.00	324.0	160.1	107.09	2.1731	0.105
	53.00	324.2	160.3	107.09	2.1509	0.105
	54.00	324.3	160.4	107.10	2.1296	0.105
	55.00	324.4	160.6	107.11	2.1091	0.105
	56.00	324.5	160.7	107.11	2.0893	0.105
	57.00	324.7	160.8	107.12	2.0702	0.105
	58.00	324.8	161.0	107.12	2.0517	0.106
****** End Shut-in 1	59.00	324.2	160.3	107.13	2.0339	0.105
****** Start Flow 2	0.00	166.6	0.0	107.13		
	1.00	167.2	0.6	107.13		
	2.00	167.8	1.2	107.14		
	3.00	168.3	1.8	107.15		
	4.00	168.6	2.0	107.16		
	5.00	168.8	2.2	107.19		
	6.00	169.5	3.0	107.22		
	7.00	170.3	3.7	107.26		
	8.00	171.0	4.4	107.30		
	9.00	171.7	5.1	107.34		
	10.00	172.2	5.6	107.38		
	11.00	172.9	6.4	107.42		
	12.00	173.6	7.1	107.46		
	13.00	174.2	7.7	107.51		
	14.00	174.7	8.1	107.54		
	15.00	175.3	8.8	107.60		
	16.00	175.9	9.4	107.66		
	17.00	176.4	9.8	107.71		
	18.00	177.0	10.5	107.76		
	19.00	177.5	10.9	107.82		
	20.00	178.1	11.5	107.87		
	21.00	178.6	12.0	107.94		
	22.00	179.0	12.5	108.00		
	23.00	179.6	13.1	108.05		
	24.00	180.0	13.4	108.11		
	25.00	180.5	13.9	108.16		
	26.00	181.1	14.5	108.21		
	27.00	181.4	14.8	108.27		
	28.00	182.0	15.4	108.32		
	29.00	182.5	15.9	108.38		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9085 DST#1 Mitchell #3 American Warrior

DATE: 11/27/96 TIME: 04:53:13

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	30.00	182.9	16.3	108.44		
***** End Flow 2	31.00	183.4	16.8	108.49		
***** Start Shutin 2	0.00	183.4	0.0	108.49	0.0000	0.034
	1.00	229.2	45.8	108.55	93.0000	0.053
	2.00	272.8	89.4	108.61	47.0000	0.074
	3.00	286.3	102.9	108.66	31.6667	0.082
	4.00	292.7	109.3	108.73	24.0000	0.086
	5.00	296.7	113.4	108.77	19.4000	0.088
	6.00	299.6	116.3	108.80	16.3333	0.090
	7.00	302.0	118.6	108.84	14.1429	0.091
	8.00	303.8	120.4	108.86	12.5000	0.092
	9.00	305.3	121.9	108.88	11.2222	0.093
	10.00	306.7	123.3	108.89	10.2000	0.094
	11.00	307.9	124.5	108.91	9.3636	0.095
	12.00	309.0	125.6	108.90	8.6667	0.095
	13.00	309.9	126.6	108.90	8.0769	0.096
	14.00	310.8	127.4	108.89	7.5714	0.097
	15.00	311.5	128.1	108.87	7.1333	0.097
	16.00	312.2	128.9	108.87	6.7500	0.097
	17.00	312.9	129.6	108.84	6.4118	0.098
	18.00	313.5	130.2	108.84	6.1111	0.098
	19.00	314.2	130.8	108.82	5.8421	0.099
	20.00	314.7	131.3	108.82	5.6000	0.099
	21.00	315.2	131.8	108.82	5.3810	0.099
	22.00	315.7	132.3	108.82	5.1818	0.10
	23.00	316.2	132.8	108.81	5.0000	0.10
	24.00	316.6	133.3	108.81	4.8333	0.100
	25.00	317.1	133.7	108.81	4.6800	0.101
	26.00	317.4	134.0	108.80	4.5385	0.101
	27.00	317.8	134.4	108.80	4.4074	0.101
	28.00	318.1	134.7	108.80	4.2857	0.101
	29.00	318.4	135.0	108.80	4.1724	0.101
	30.00	318.7	135.3	108.80	4.0667	0.102
	31.00	319.0	135.7	108.80	3.9677	0.102
	32.00	319.4	136.0	108.80	3.8750	0.102
	33.00	319.7	136.3	108.79	3.7879	0.102
	34.00	319.9	136.5	108.80	3.7059	0.102
	35.00	320.3	136.9	108.80	3.6286	0.103
	36.00	320.4	137.1	108.80	3.5556	0.103
	37.00	320.8	137.4	108.80	3.4865	0.103
	38.00	321.0	137.6	108.80	3.4211	0.103
	39.00	321.3	137.9	108.80	3.3590	0.103
	40.00	321.5	138.1	108.80	3.3000	0.103
	41.00	321.8	138.4	108.81	3.2439	0.104
	42.00	322.0	138.6	108.81	3.1905	0.104
	43.00	322.1	138.7	108.81	3.1395	0.104
	44.00	322.2	138.9	108.81	3.0909	0.104
	45.00	322.5	139.1	108.81	3.0444	0.104
	46.00	322.6	139.2	108.82	3.0000	0.104
	47.00	322.8	139.5	108.82	2.9574	0.104
	48.00	323.1	139.7	108.82	2.9167	0.104

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9085 DST#1 Mitchell #3 American Warrior

DATE: 11/27/96 TIME: 04:53:13

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	49.00	323.2	139.9	108.82	2.8776	0.104
	50.00	323.4	140.0	108.82	2.8400	0.105
	51.00	323.6	140.2	108.83	2.8039	0.105
	52.00	323.6	140.2	108.82	2.7692	0.105
	53.00	323.7	140.4	108.83	2.7358	0.105
	54.00	323.8	140.5	108.83	2.7037	0.105
	55.00	324.0	140.6	108.83	2.6727	0.105
	56.00	324.1	140.7	108.84	2.6429	0.105
	57.00	324.2	140.8	108.84	2.6140	0.105
	58.00	324.3	140.9	108.84	2.5862	0.105
	59.00	324.5	141.1	108.85	2.5593	0.105
	60.00	324.5	141.1	108.86	2.5333	0.105
	61.00	324.6	141.2	108.86	2.5082	0.105
	62.00	324.8	141.4	108.86	2.4839	0.105
	63.00	324.8	141.5	108.87	2.4603	0.106
****** End Shut-in 2	64.00	325.0	141.6	108.88	2.4375	0.106
****** Final Hydro.	389.00	1982.6	0.0	108.97		

TEST HISTORY

9085 DST#1 Mitchell #3 American Warrior

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	2012.04
B:	0.00	31.43
C:	61.00	163.85
D:	59.00	324.18
E:	0.00	166.57
F:	31.00	183.37
G:	64.00	324.97
Q:	0.00	1982.64

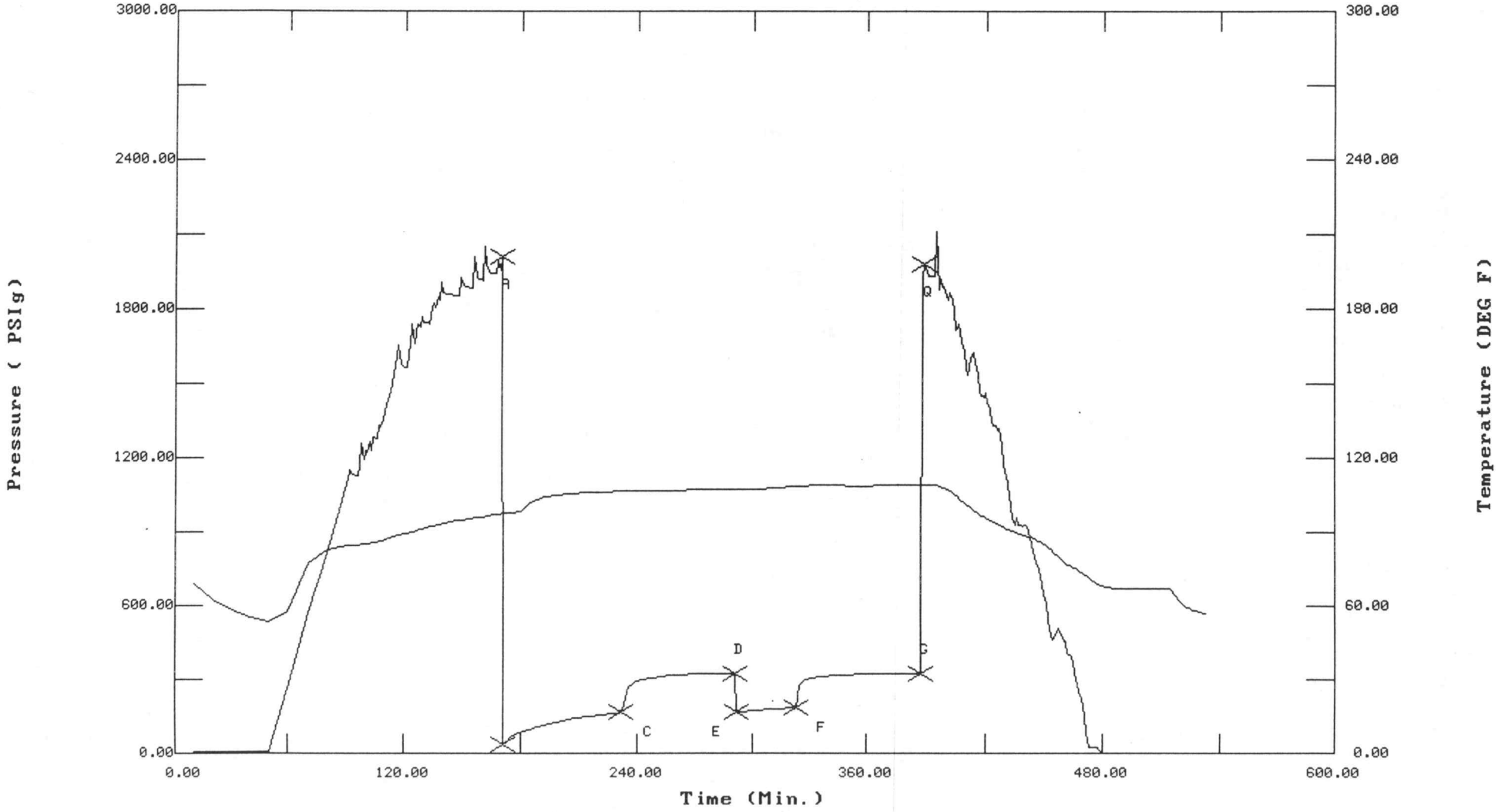
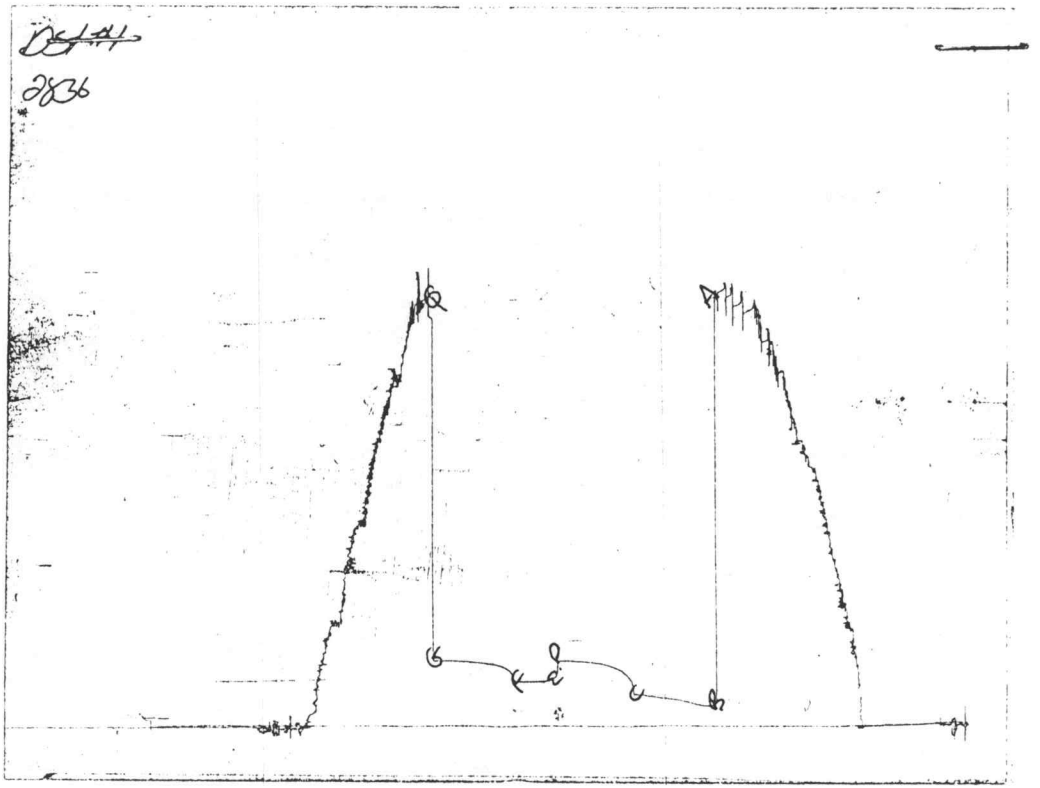


CHART PAGE



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 9085

Well Name & No. Mitchell #3 Test No. 1 Date 11-27-96

Company American Warrior Zone Tested Lansing "A"

Address Garden City, 67846-0399 Elevation 2967 KB 2957 GL

Co. Rep / Geo. Alan Downing Cont. Val Energy Rig #2 Est. Ft. of Pay 5 Por. ___ %

Location: Sec. 18 Twp. 30S Rge. 33W Co. Haskell State KS

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

Interval Tested 4119 - 4174

Anchor Length 55'

Top Packer Depth 4114

Bottom Packer Depth 4119

Total Depth 4174

Mud Wt. 9.1 LCM 1 Vis. 49 WL 8.8

Initial Str Wt./Lbs. 55000 Unseated Str Wt./Lbs. 55000

Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 60000

Hole Size — 7 7/8" X Rubber Size — 6 3/4" X

Wt. Pipe I.D. — 2.7 Ft. Run ___

Drill Collar — 2.25 Ft. Run 301'

Drill Pipe Size 4½ X-H Ft. Run 3851'

Blow Description Fair Blow Built to 6in Blow,
I.S.I. Bled OFF 2in. NO Blow Back
2nd. opening Weak Surface Blow Then NO Blow

Recovery — Total Feet 330 Ft. in DC 301 Ft. in WP ___ Ft. in DP 29'

Rec. 90	Feet Of Sly O-C-W-Mud	‰gas 5	‰oil 25	‰water 70	‰mud
Rec. ___	Feet Of ___	‰gas ___	‰oil ___	‰water ___	‰mud
Rec. 120	Feet Of Cassy C-M-W Film Oil 20	‰gas Film	‰oil 70	‰water 20	‰mud
Rec. ___	Feet Of ___	‰gas ___	‰oil ___	‰water ___	‰mud
Rec. 120	Feet Of Sly M-Water	‰gas ___	‰oil 95	‰water 5	‰mud

BHT 111 °F Gravity ___ °API D@ ___ °F Corrected Gravity ___ °API

RW .957 @ 66.3 °F Chlorides 7,200 ppm Recovery Chlorides 2,200 ppm System

(A) Initial Hydrostatic Mud	2012	1975	PSI	Recorder No. 2346	T-Started 3:15 AM
(B) First Initial Flow Pressure	31	94	PSI	@ (depth) 4123	T-Open 6:25 AM
(C) First Final Flow Pressure	163	145	PSI	Recorder No. 2836	T-Pulled 9:55 AM
(D) Initial Shut-in Pressure	324	291	PSI	@ (depth) 4171	T-Out 12:30 PM
(E) Second Initial Flow Pressure	166	205	PSI	Recorder No. ___	
(F) Second Final Flow Pressure	183	196	PSI	@ (depth) ___	
(G) Final Shut-in Pressure	324	291	PSI	Initial Opening 60min.	Test ✓ Conventional 1600
(H) Final Hydrostatic Mud	1980 Alpine	1948 AK-1	PSI	Initial Shut-in 60min.	Jars ✓ 200
				Final Flow 30min.	Safety Joint ✓ 50 (5)
				Final Shut-in 60min.	Straddle ___
				___	Circ. Sub ✓ N/C
				___	Sampler ___
					Extra Packer ✓ ___
					Elect. Rec. ✓ 150
					Other ___
					TOTAL PRICE $ 1000

Approved By Alan Downing

Our Representative Mike Callaway

TRILOBITE TESTING L.L.C.

OPERATOR : American Warrior
WELL NAME: Mitchell #3
LOCATION : 18-30S-33W
INTERVAL : 4765.00 To 4800.00 ft

DATE 11-28-96
KB 2967.00 ft TICKET NO: 9086 DST #2
GR 2957.00 ft FORMATION: Marmaton
TD 4800.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4
PF 60	Rec.	2836	2836	2346		
SI 60	Range(Psi)	3500.0	3500.0	4995.0	0.0	0.0
SF 60	Clock(hrs)	12HR.	12HR.	elec.		
FS 60	Depth(ft)	4797.0	4797.0	4769.0	0.0	0.0

TIME DATA----------
PF Fr. 2257 to 2357 hr
IS Fr. 2357 to 0057 hr
SF Fr. 0057 to 0157 hr
FS Fr. 0157 to 0257 hr

	Field	1	2	3	4
A. Init Hydro	2306.0	2339.0	2387.0	0.0	0.0
B. First Flow	51.0	62.0	32.0	0.0	0.0
B1. Final Flow	42.0	55.0	39.0	0.0	0.0
C. In Shut-in	1143.0	1156.0	1236.0	0.0	0.0
D. Init Flow	51.0	68.0	23.0	0.0	0.0
E. Final Flow	42.0	58.0	34.0	0.0	0.0
F. Fl Shut-in	1160.0	1161.0	1234.0	0.0	0.0
G. Final Hydro	2216.0	2163.0	2450.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 1915 hr
T ON BOTM 2235 hr
T OPEN 2237 hr
T PULLED 0237 hr
T OUT 0600 hr

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

Tool Wt.	1800.00 lbs
Wt Set On Packer	30000.00 lbs
Wt Pulled Loose	80000.00 lbs
Initial Str Wt	70000.00 lbs
Unseated Str Wt	73000.00 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	544.00 ft
D.P. Length	4225.00 ft
H.W. I.D	2.70 in

RECOVERY
Tot Fluid 15.00 ft of 15.00 ft in DC and 0.00 ft in DP
0.00 ft of
15.00 ft of 100% Drilling Mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

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

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	39.00 S/L
W.L.	11.20 in3
F.C.	0.00 in
Mud Drop Y	60.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	118.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Mike Colantonio
Co. Rep.	Alan Downing
Contr.	Val Energy
Rig #	2
Unit #	
Pump T.	

BLOW DESCRIPTION
Initial Flow -
Strong blow - bottom of bucket in 30 sec. Gas to surface in 15 min. (MCF @ 6.55)

Initial Shut-in -
Bled off 2" - no blow back

Final Flow -
Strong blow - bottom of bucket soon as open tool. (MCF @ 6.72)

Initial Shut-in -
Bled off 2" - no blow back
SAMPLES: yes 1
SENT TO:Caraway Lab Liberal

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Mitchell #3

LOCATION : 18-30S-33W

TICKET No. 9086 D.S.T. No. 2 DATE 11-28-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 22ft

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 40ft

TOTAL TOOL 62ft

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands9 Single Total 544ft

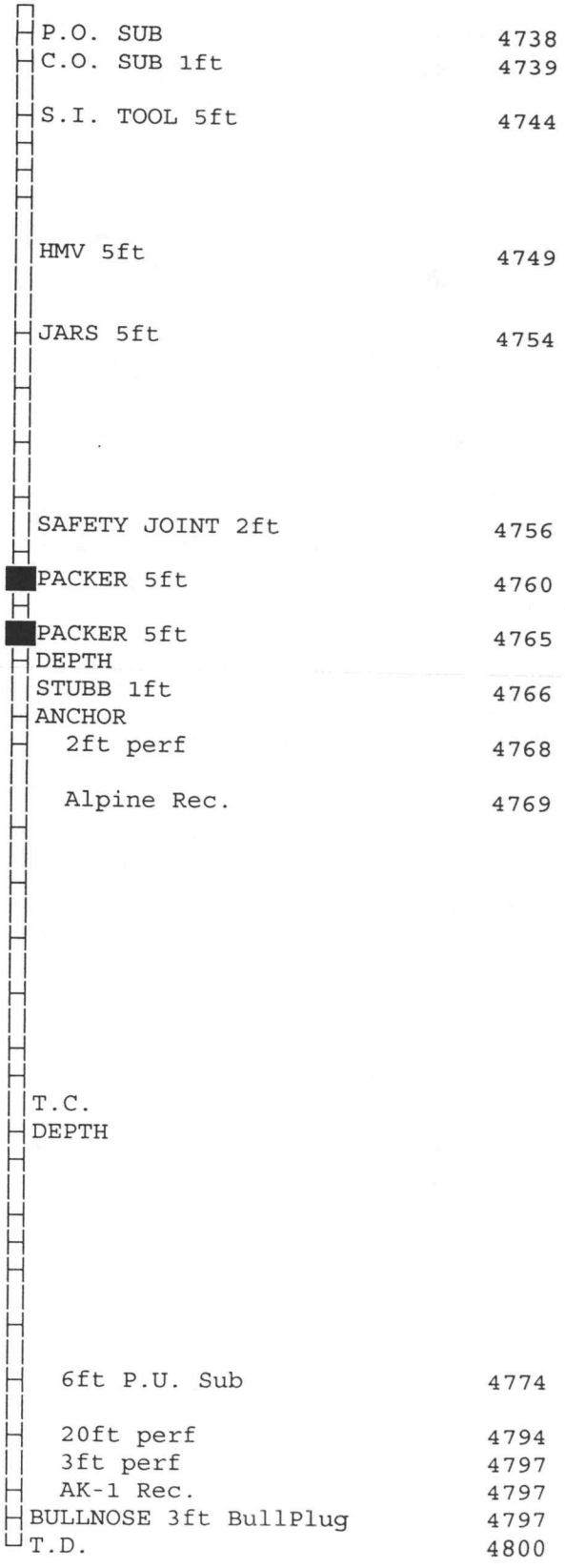
D.P. ABOVE TOOLS.Stands68 Single Total 4225ft

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4831ft

TOTAL DEPTH 4800ft

TOTAL DRILL PIPE ABOVE K.B. 31ft

REMARKS:



GAS RECOVERY

COMPANY: American Warrior DATE: 11-28-96
WELL NAME: Mitchell #3 KB Elev: 2967.00 ft TICKET #9086 DST #2
WELL LOCATION: 18-30S-33W GR Elev: 2957.00 ft FORMATION: Marmaton
INTERVAL Fr.: 4765.00 To 4800.00 T.D.: 4800.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Merla Data

***** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
20	0.25	6	0	4012.0
25	0.25	9	0	5005.0
30	0.25	11	0	5060.0
35	0.25	13	0	6010.0
40	0.25	14	0	6033.0
45	0.25	15	0	6055.0
50	0.25	15	0	6055.0
60	0.25	15	0	6055.0

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	0.25	10	0	5032.0
10	0.25	12	0	5086.0
15	0.25	13	0	6010.0
20	0.25	14	0	6033.0
25	0.25	15	0	6055.0
40	0.25	15	0	6055.0
50	0.25	16	0	6072.0
60	0.25	16	0	6072.0

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9086 DST #2 Mitchell #3 American Warrior

DATE: 11/28/96 TIME: 20:41:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	194.00	2387.7	0.0	112.13		
****** Start Flow 1	0.00	32.8	0.0	112.23		
	1.00	31.3	-1.5	112.28		
	2.00	31.7	-1.1	112.38		
	3.00	31.0	-1.8	112.50		
	4.00	34.9	2.1	112.65		
	5.00	31.9	-0.9	112.78		
	6.00	32.6	-0.3	112.89		
	7.00	28.7	-4.1	112.96		
	8.00	27.0	-5.8	113.01		
	9.00	26.9	-5.9	113.01		
	10.00	28.4	-4.5	112.99		
	11.00	30.7	-2.1	112.95		
	12.00	28.6	-4.2	112.87		
	13.00	28.0	-4.8	112.78		
	14.00	28.6	-4.3	112.69		
	15.00	28.1	-4.7	112.57		
	16.00	30.0	-2.8	112.45		
	17.00	30.4	-2.4	112.33		
	18.00	30.6	-2.2	112.19		
	19.00	31.2	-1.6	112.06		
	20.00	31.9	-0.9	111.93		
	21.00	33.3	0.5	111.79		
	22.00	33.0	0.2	111.66		
	23.00	33.5	0.7	111.52		
	24.00	34.1	1.2	111.40		
	25.00	34.4	1.5	111.27		
	26.00	34.8	2.0	111.14		
	27.00	35.2	2.4	111.02		
	28.00	35.6	2.7	110.92		
	29.00	35.9	3.0	110.80		
	30.00	36.1	3.2	110.70		
	31.00	36.2	3.4	110.59		
	32.00	36.6	3.8	110.49		
	33.00	36.8	4.0	110.40		
	34.00	37.0	4.2	110.31		
	35.00	37.2	4.3	110.22		
	36.00	37.4	4.6	110.13		
	37.00	37.6	4.8	110.04		
	38.00	37.6	4.7	109.95		
	39.00	38.1	5.2	109.87		
	40.00	38.1	5.3	109.78		
	41.00	38.0	5.2	109.71		
	42.00	38.4	5.5	109.62		
	43.00	38.4	5.6	109.55		
	44.00	38.6	5.8	109.47		
	45.00	38.5	5.7	109.40		
	46.00	38.7	5.9	109.33		
	47.00	38.7	5.9	109.26		
	48.00	38.8	6.0	109.19		
	49.00	38.9	6.1	109.13		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9086 DST #2 Mitchell #3 American Warrior

DATE: 11/28/96 TIME: 20:41:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	50.00	39.1	6.3	109.08		
	51.00	39.2	6.3	109.01		
	52.00	38.8	6.0	108.96		
	53.00	39.2	6.4	108.89		
	54.00	39.1	6.2	108.83		
	55.00	39.2	6.4	108.77		
	56.00	39.6	6.7	108.73		
	57.00	39.5	6.6	108.66		
	58.00	39.3	6.5	108.60		
	59.00	40.2	7.3	108.54		
****** End Flow 1	60.00	39.5	6.7	108.49		
****** Start Shutin 1	0.00	39.5	0.0	108.49	0.0000	0.002
	1.00	401.9	362.4	108.44	61.0000	0.161
	2.00	703.0	663.5	108.39	31.0000	0.494
	3.00	876.3	836.8	108.37	21.0000	0.768
	4.00	979.7	940.1	108.35	16.0000	0.960
	5.00	1043.0	1003.4	108.36	13.0000	1.088
	6.00	1084.7	1045.2	108.35	11.0000	1.177
	7.00	1113.4	1073.8	108.38	9.5714	1.240
	8.00	1134.0	1094.5	108.37	8.5000	1.286
	9.00	1149.7	1110.2	108.38	7.6667	1.322
	10.00	1161.8	1122.3	108.40	7.0000	1.350
	11.00	1171.8	1132.3	108.41	6.4545	1.373
	12.00	1179.8	1140.3	108.42	6.0000	1.392
	13.00	1186.6	1147.1	108.41	5.6154	1.408
	14.00	1192.2	1152.6	108.42	5.2857	1.421
	15.00	1197.0	1157.5	108.43	5.0000	1.433
	16.00	1201.2	1161.7	108.43	4.7500	1.443
	17.00	1204.8	1165.3	108.43	4.5294	1.452
	18.00	1208.0	1168.4	108.43	4.3333	1.459
	19.00	1210.7	1171.2	108.43	4.1579	1.466
	20.00	1213.1	1173.6	108.44	4.0000	1.472
	21.00	1215.3	1175.8	108.44	3.8571	1.477
	22.00	1217.2	1177.7	108.44	3.7273	1.482
	23.00	1218.9	1179.4	108.45	3.6087	1.486
	24.00	1220.5	1181.0	108.44	3.5000	1.490
	25.00	1221.9	1182.4	108.46	3.4000	1.493
	26.00	1223.1	1183.6	108.46	3.3077	1.496
	27.00	1224.3	1184.8	108.47	3.2222	1.499
	28.00	1225.3	1185.8	108.46	3.1429	1.501
	29.00	1226.2	1186.7	108.47	3.0690	1.504
	30.00	1227.1	1187.6	108.47	3.0000	1.506
	31.00	1227.9	1188.4	108.48	2.9355	1.508
	32.00	1228.6	1189.1	108.48	2.8750	1.509
	33.00	1229.3	1189.8	108.47	2.8182	1.511
	34.00	1229.9	1190.4	108.49	2.7647	1.513
	35.00	1230.4	1190.9	108.49	2.7143	1.514
	36.00	1231.0	1191.5	108.51	2.6667	1.515
	37.00	1231.5	1192.0	108.52	2.6216	1.517
	38.00	1232.0	1192.5	108.52	2.5789	1.518
	39.00	1232.4	1192.9	108.53	2.5385	1.519

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9086 DST #2 Mitchell #3 American Warrior

DATE: 11/28/96 TIME: 20:41:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	40.00	1232.9	1193.4	108.53	2.5000	1.520
	41.00	1233.1	1193.6	108.54	2.4634	1.521
	42.00	1233.4	1193.9	108.56	2.4286	1.521
	43.00	1233.7	1194.2	108.58	2.3953	1.522
	44.00	1234.0	1194.5	108.58	2.3636	1.523
	45.00	1234.3	1194.8	108.59	2.3333	1.523
	46.00	1234.5	1194.9	108.61	2.3043	1.524
	47.00	1234.7	1195.2	108.63	2.2766	1.525
	48.00	1234.9	1195.4	108.63	2.2500	1.525
	49.00	1235.1	1195.6	108.65	2.2245	1.525
	50.00	1235.2	1195.7	108.67	2.2000	1.526
	51.00	1235.4	1195.9	108.68	2.1765	1.526
	52.00	1235.7	1196.1	108.70	2.1538	1.527
	53.00	1235.8	1196.3	108.71	2.1321	1.527
	54.00	1235.9	1196.4	108.73	2.1111	1.527
	55.00	1236.0	1196.5	108.74	2.0909	1.528
	56.00	1236.2	1196.7	108.77	2.0714	1.528
	57.00	1236.4	1196.8	108.76	2.0526	1.529
	58.00	1236.5	1196.9	108.80	2.0345	1.529
	59.00	1236.6	1197.1	108.81	2.0169	1.529
****** End Shut-in 1	60.00	1236.7	1197.2	108.84	2.0000	1.529
****** Start Flow 2	0.00	23.4	0.0	108.89		
	1.00	22.5	-0.8	109.04		
	2.00	22.6	-0.8	109.23		
	3.00	23.4	0.0	109.40		
	4.00	23.7	0.4	109.53		
	5.00	24.3	0.9	109.60		
	6.00	25.0	1.7	109.62		
	7.00	25.4	2.0	109.59		
	8.00	25.9	2.6	109.52		
	9.00	26.3	2.9	109.43		
	10.00	26.5	3.2	109.33		
	11.00	26.7	3.4	109.19		
	12.00	27.1	3.8	109.06		
	13.00	27.4	4.1	108.91		
	14.00	27.7	4.4	108.76		
	15.00	27.5	4.2	108.61		
	16.00	28.1	4.8	108.46		
	17.00	28.1	4.8	108.30		
	18.00	28.5	5.2	108.14		
	19.00	28.8	5.4	107.99		
	20.00	28.9	5.5	107.83		
	21.00	29.2	5.8	107.68		
	22.00	29.5	6.1	107.54		
	23.00	29.6	6.2	107.43		
	24.00	29.7	6.4	107.32		
	25.00	29.8	6.4	107.23		
	26.00	30.3	6.9	107.15		
	27.00	30.4	7.1	107.07		
	28.00	30.6	7.2	107.00		
	29.00	30.8	7.5	106.93		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9086 DST #2 Mitchell #3 American Warrior

DATE: 11/28/96 TIME: 20:41:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	30.00	30.7	7.4	106.86		
	31.00	31.0	7.7	106.80		
	32.00	31.3	7.9	106.71		
	33.00	31.5	8.2	106.61		
	34.00	31.7	8.4	106.51		
	35.00	32.0	8.7	106.40		
	36.00	32.1	8.8	106.31		
	37.00	32.2	8.8	106.21		
	38.00	32.2	8.9	106.14		
	39.00	32.3	9.0	106.07		
	40.00	32.4	9.0	106.00		
	41.00	32.5	9.2	105.94		
	42.00	32.5	9.2	105.88		
	43.00	32.6	9.2	105.82		
	44.00	32.7	9.3	105.77		
	45.00	32.8	9.5	105.73		
	46.00	32.9	9.6	105.68		
	47.00	33.0	9.6	105.64		
	48.00	33.0	9.7	105.57		
	49.00	33.5	10.1	105.49		
	50.00	33.4	10.1	105.37		
	51.00	33.5	10.1	105.23		
	52.00	33.7	10.3	105.08		
	53.00	33.8	10.4	104.92		
	54.00	33.9	10.5	104.78		
	55.00	34.2	10.8	104.65		
	56.00	34.3	10.9	104.53		
****** End Flow 2	57.00	34.1	10.8	104.43		
****** Start Shutin 2	0.00	34.1	0.0	104.43	0.0000	0.001
	1.00	190.0	155.8	104.33	118.0000	0.036
	2.00	518.8	484.7	104.26	59.5000	0.269
	3.00	733.5	699.4	104.21	40.0000	0.538
	4.00	872.8	838.7	104.18	30.2500	0.762
	5.00	963.9	929.8	104.17	24.4000	0.929
	6.00	1024.9	990.8	104.15	20.5000	1.050
	7.00	1067.0	1032.9	104.15	17.7143	1.139
	8.00	1097.1	1062.9	104.17	15.6250	1.204
	9.00	1119.3	1085.2	104.18	14.0000	1.253
	10.00	1136.7	1102.5	104.19	12.7000	1.292
	11.00	1150.3	1116.1	104.20	11.6364	1.323
	12.00	1161.3	1127.2	104.21	10.7500	1.349
	13.00	1170.3	1136.2	104.23	10.0000	1.370
	14.00	1177.8	1143.7	104.23	9.3571	1.387
	15.00	1184.2	1150.1	104.23	8.8000	1.402
	16.00	1189.5	1155.4	104.24	8.3125	1.415
	17.00	1194.2	1160.0	104.24	7.8824	1.426
	18.00	1198.2	1164.1	104.26	7.5000	1.436
	19.00	1201.8	1167.6	104.26	7.1579	1.444
	20.00	1204.8	1170.7	104.27	6.8500	1.452
	21.00	1207.6	1173.5	104.27	6.5714	1.458
	22.00	1210.0	1175.8	104.29	6.3182	1.464

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9086 DST #2 Mitchell #3 American Warrior

DATE: 11/28/96 TIME: 20:41:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	23.00	1212.2	1178.0	104.30	6.0870	1.469
	24.00	1213.9	1179.8	104.30	5.8750	1.474
	25.00	1215.7	1181.6	104.31	5.6800	1.478
	26.00	1217.2	1183.1	104.31	5.5000	1.482
	27.00	1218.6	1184.5	104.33	5.3333	1.485
	28.00	1219.9	1185.8	104.33	5.1786	1.488
	29.00	1221.0	1186.8	104.34	5.0345	1.491
	30.00	1222.0	1187.9	104.34	4.9000	1.493
	31.00	1222.9	1188.7	104.34	4.7742	1.495
	32.00	1223.8	1189.7	104.37	4.6562	1.498
	33.00	1224.6	1190.4	104.38	4.5455	1.500
	34.00	1225.4	1191.2	104.40	4.4412	1.501
	35.00	1226.1	1192.0	104.40	4.3429	1.503
	36.00	1226.7	1192.6	104.40	4.2500	1.505
	37.00	1227.3	1193.2	104.42	4.1622	1.506
	38.00	1227.8	1193.7	104.44	4.0789	1.508
	39.00	1228.4	1194.2	104.45	4.0000	1.509
	40.00	1228.8	1194.7	104.46	3.9250	1.510
	41.00	1229.2	1195.1	104.47	3.8537	1.511
	42.00	1229.7	1195.5	104.49	3.7857	1.512
	43.00	1230.1	1195.9	104.50	3.7209	1.513
	44.00	1230.4	1196.2	104.52	3.6591	1.514
	45.00	1230.8	1196.6	104.55	3.6000	1.515
	46.00	1231.1	1197.0	104.54	3.5435	1.516
	47.00	1231.4	1197.2	104.56	3.4894	1.516
	48.00	1231.7	1197.5	104.58	3.4375	1.517
	49.00	1232.0	1197.9	104.60	3.3878	1.518
	50.00	1232.2	1198.1	104.62	3.3400	1.518
	51.00	1232.4	1198.2	104.64	3.2941	1.519
	52.00	1232.6	1198.4	104.66	3.2500	1.519
	53.00	1232.9	1198.7	104.69	3.2075	1.520
	54.00	1233.0	1198.9	104.71	3.1667	1.520
	55.00	1233.3	1199.2	104.74	3.1273	1.521
	56.00	1233.4	1199.3	104.76	3.0893	1.521
	57.00	1233.6	1199.5	104.79	3.0526	1.522
	58.00	1233.8	1199.7	104.79	3.0172	1.522
	59.00	1233.9	1199.8	104.81	2.9831	1.522
	60.00	1234.0	1199.9	104.84	2.9500	1.523
****** End Shut-in 2	61.00	1234.2	1200.1	104.87	2.9180	1.523
****** Final Hydro.	438.00	2450.3	0.0	104.96		

TEST HISTORY

9086 DST #2 Mitchell #3 American Warrior

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	2387.71
B:	0.00	32.83
C:	60.00	39.52
D:	60.00	1236.71
E:	0.00	23.36
F:	57.00	34.13
G:	61.00	1234.20
Q:	0.00	2450.34

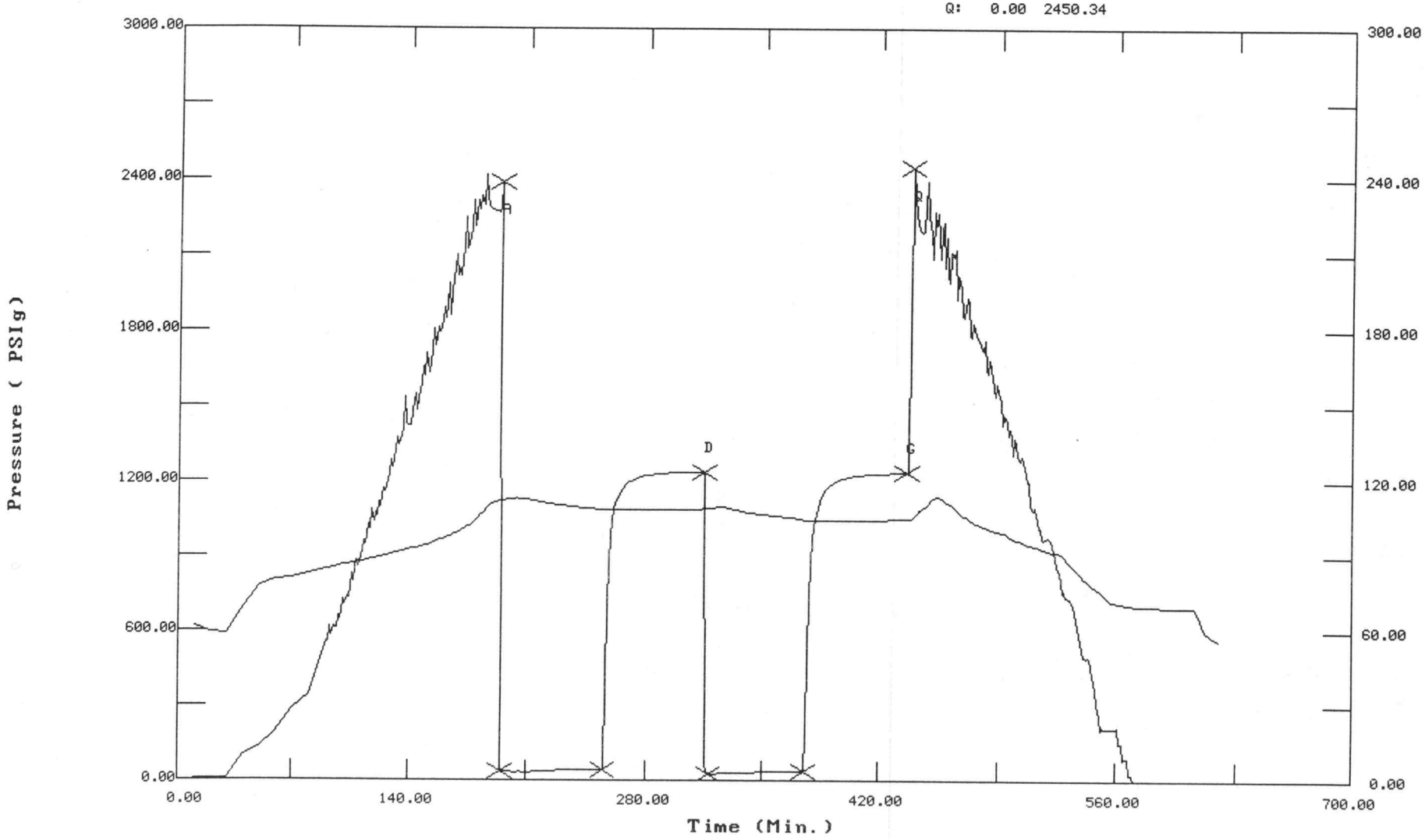
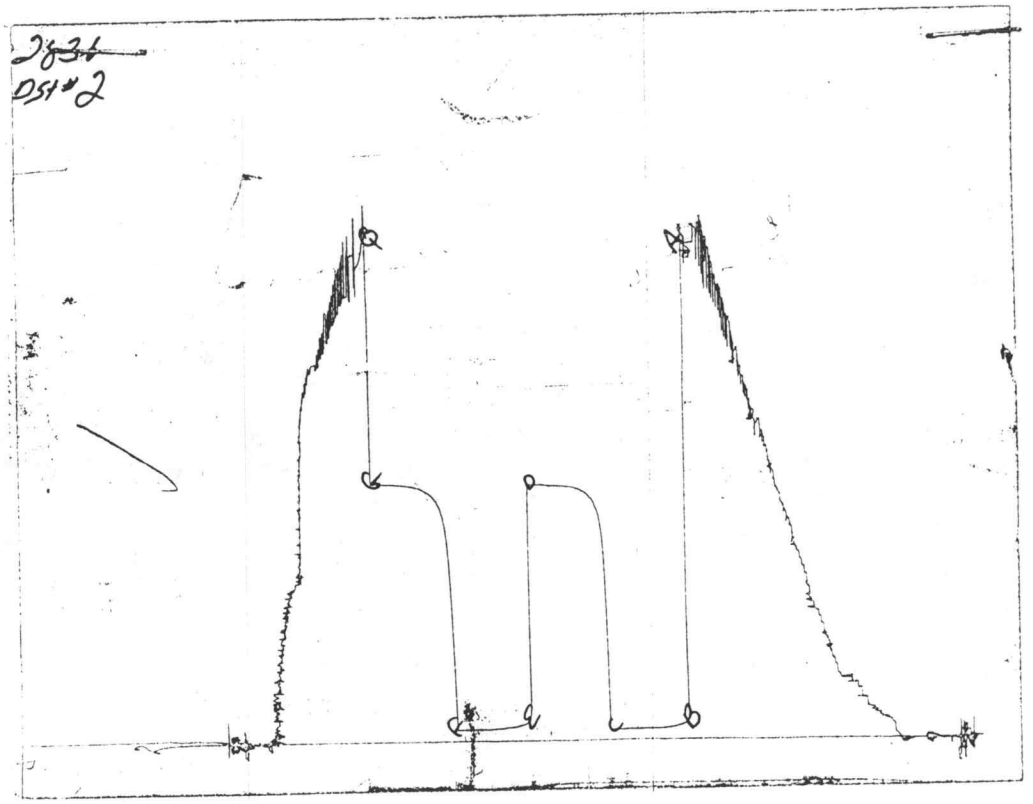


CHART PAGE



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

№ 9086

Well Name & No. Mitchell #3 Test No. #2 Date 11-28-96

Company American Warrior Zone Tested Marmaton

Address Garden City KS. 67846-6399 Elevation 2967 KB 2957 GL

Co. Rep / Geo. Alan Downing Cont. Val Energy Rig #2 Est. Ft. of Pay 4 Por. ___ %

Location: Sec. 18 Twp. 30S Rge. 33W Co. Haskell State KS.

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

Interval Tested 4765 - 4800 Initial Str Wt./Lbs. 70000 Unseated Str Wt./Lbs. 73000

Anchor Length 35' Wt. Set Lbs. 30000 Wt. Pulled Loose/Lbs. 80000

Top Packer Depth 4760 Hole Size — 7 7/8" X Rubber Size — 6 3/4" X

Bottom Packer Depth 4765 Wt. Pipe I.D. — 2.7 Ft. Run ___

Total Depth 4800 Drill Collar — 2.25 Ft. Run 1 1/2 X-0 54'

Mud Wt. 9.2 LCM 1 Vis. 39 WL 11.2 Drill Pipe Size 4 1/2 X-0 Ft. Run 4225

Blow Description Strong Blow B.O.B in 30 sec. G.T.S. in 15 min. (MCF@ 6.55)
I.S.I Bled OFF 2in NO Blow Back
2nd. opening Strong Blow B.O.B soon as open Tool. (MCF@ 6.72)
F.S.I. Bled OFF 2in. NO Blow Back

Recovery — Total Feet 15 Ft. in DC 15 Ft. in WP ___ Ft. in DP ___

Rec. 15	Feet Of Drlg Mud	‰gas	‰oil	‰water 100	‰mud	
Rec. ___	Feet Of ___	‰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 118 °F Gravity ___ °API D@ ___ °F Corrected Gravity ___ °API

RW ___ @ ___ °F Chlorides ___ ppm Recovery Chlorides 2100 ppm System

(A) Initial Hydrostatic Mud	~~2490~~ 2387	2306	PSI	Recorder No.	2346	T-Started	7:15 pm.
(B) First Initial Flow Pressure	32	51	PSI	@ (depth)	4769	T-Open	10:37 AM
(C) First Final Flow Pressure	39	42	PSI	Recorder No.	2836	T-Pulled	2:37 AM
(D) Initial Shut-in Pressure	1236	1143	PSI	@ (depth)	4797	T-Out	6:00 AM
(E) Second Initial Flow Pressure	23	51	PSI	Recorder No.	___		
(F) Second Final Flow Pressure	34	42	PSI	@ (depth)	___		
(G) Final Shut-in Pressure	1234	1160	PSI	Initial Opening	60 min.	Test	✓ Conventional 1600
(H) Final Hydrostatic Mud	~~2337~~ 2450	2216	PSI	Initial Shut-in	60 min.	Jars	✓ 200
	API-	AE-1		Final Flow	60 min.	Safety Joint	✓ 50
				Final Shut-in	60 min.	Straddle	___
						Circ. Sub	✓ N/C
						Sampler	___
						Extra Packer	___
						Elect. Rec.	✓ 150
						Other	___
						TOTAL PRICE $	1000

Approved By Alan Downing

Our Representative Mike Coleman

TRILOBITE TESTING

P.O. Box 362 • Hays, Kansas 67601 • (913) 625-4778

GAS VOLUME REPORT

American Warrior (OPERATOR) | Mitchell #3 (WELL NAME AND NO.) | #2 (DST NO.)

1st opening G.T.S. in 15 min — 2nd. Opening

Min.	Ins. of Water PSIG	Orifice Size	MCF/D	Min.	Ins. of Water PSIG	Orifice Size	MCF/D
20	6	1/4	4.12	5	10	1/4	5.32
25	9	1/4	5.05	10	12	1/4	5.86
30	11	1/4	5.60	~~15~~	13	1/4	6.10
35	13	1/4	6.10	20	14	1/4	6.33
40	14	1/4	6.33	25	15	1/4	6.55
45	15	1/4	6.55	30	15	1/4	6.55
50	15	1/4	6.55	40	15	1/4	6.55
55	15	1/4	6.55	50	16	1/4	6.72
60	15	1/4	6.55	60	16	1/4	6.72

Remarks:

Gas. Will Burn.

101 NCR

TRILOBITE TESTING L.L.C.

OPERATOR : American Warrior — DATE 12-1-96
WELL NAME: Mitchell #3 — KB 2967.00 ft — TICKET NO: 9087 — DST #3
LOCATION : 18-30S-33W — GR 2957.00 ft — FORMATION: Morrow
INTERVAL : 5269.00 To 5323.00 ft — TD 5323.00 ft — TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4
PF 60	Rec.	2836	2836	2346		
SI 60	Range(Psi)	3500.0	3500.0	4995.0	0.0	0.0
SF 60	Clock(hrs)	12HR.	12HR.	Elet.		
FS 60	Depth(ft)	5320.0	5320.0	5273.0	0.0	0.0

TIME DATA----------
PF Fr. 0734 to 0834 hr
IS Fr. 0834 to 0934 hr
SF Fr. 0934 to 1034 hr
FS Fr. 1034 to 1134 hr

	Field	1	2	3	4
A. Init Hydro	2713.0	0.0	2773.0	0.0	0.0
B. First Flow	85.0	0.0	26.0	0.0	0.0
B1. Final Flow	85.0	0.0	41.0	0.0	0.0
C. In Shut-in	453.0	0.0	499.0	0.0	0.0
D. Init Flow	85.0	0.0	41.0	0.0	0.0
E. Final Flow	68.0	0.0	42.0	0.0	0.0
F. Fl Shut-in	445.0	0.0	491.0	0.0	0.0
G. Final Hydro	2531.0	0.0	2654.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 0430 hr
T ON BOTM 0732 hr
T OPEN 0734 hr
T PULLED 1134 hr
T OUT 1415 hr

RECOVERY
Tot Fluid 60.00 ft of 60.00 ft in DC and 0.00 ft in DP
4575.00 ft of Gas in drilling pipe
0.00 ft of
60.00 ft of 100% Drilling 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

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

Tool Wt.	1800.00 lbs
Wt Set On Packer	25000.00 lbs
Wt Pulled Loose	85000.00 lbs
Initial Str Wt	70000.00 lbs
Unseated Str Wt	75000.00 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	544.00 ft
D.P. Length	4752.00 ft
H.W. I.D	2.70 in

BLOW DESCRIPTION
Initial Flow -
Fair blow - built to bottom of bucket in 22 min.

Initial Shut-in -
Bled off 2" - no blow back

Final Flow -
Strong blow - bottom of bucket soon as open tool

Final Shut-in -
No blow back

SAMPLES: NO
SENT TO:

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

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	56.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop Y	45.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	123.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Mike Colantonio
Co. Rep.	Alan Downing
Contr.	Val-Energy
Rig #	#2
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Mitchell #3

LOCATION : 18-30S-33W

TICKET No. 9087 D.S.T. No. 3 DATE 12-1-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 22ft

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 30ft.

TOTAL TOOL 52ft

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 29ft

TOTAL ASSEMBLY 81ft

D.C. ABOVE TOOLS.Stands9 Single Total 544ft

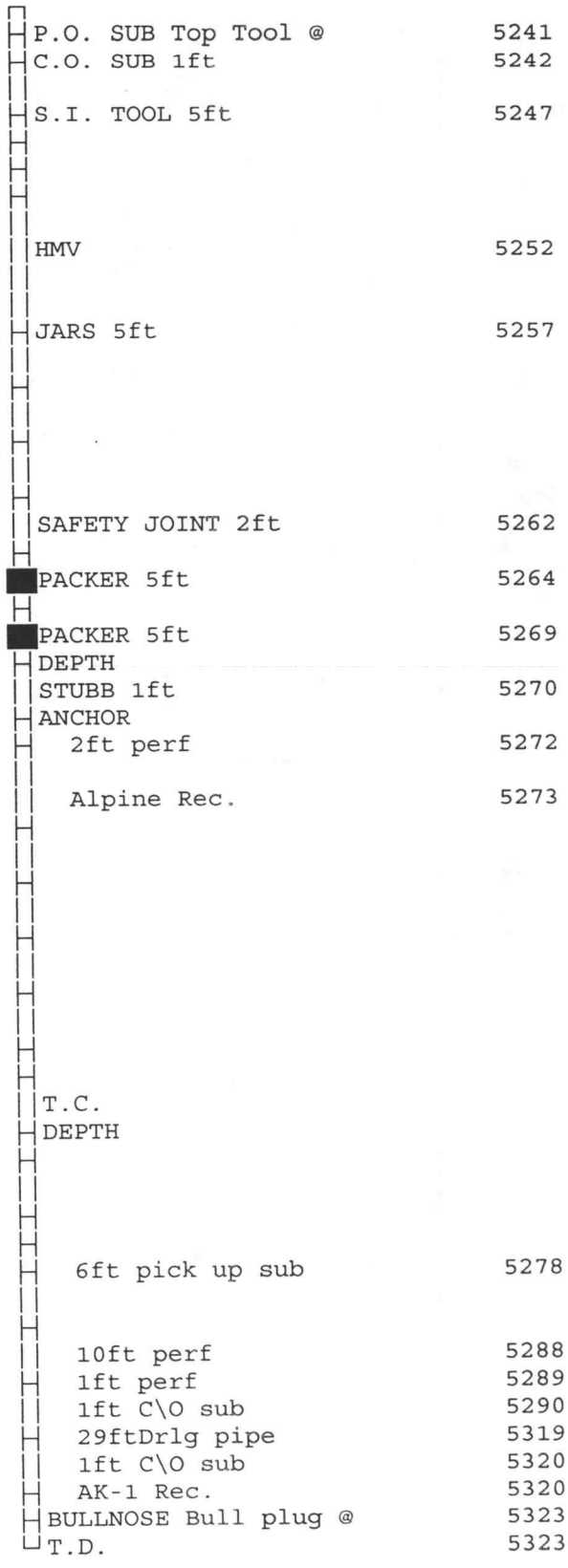
D.P. ABOVE TOOLS.Stands76 Single Total 4723ft

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5348ft

TOTAL DEPTH 5323ft

TOTAL DRILL PIPE ABOVE K.B. ..... 25ft.

REMARKS:



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9087 DST#3 Mitchell #3 American Warrior

DATE: 12/01/96 TIME: 06:06:14

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	50.00	41.5	14.7	119.95		
	51.00	40.4	13.7	120.12		
	52.00	41.1	14.3	120.30		
	53.00	41.3	14.6	120.47		
	54.00	40.9	14.2	120.65		
	55.00	41.0	14.3	120.85		
***** End Flow 1	56.00	41.3	14.5	121.08		
***** Start Shutin 1	0.00	41.3	0.0	121.08	0.0000	0.002
	1.00	40.9	-0.4	121.34	57.0000	0.002
	2.00	41.0	-0.3	121.62	29.0000	0.002
	3.00	42.0	0.7	121.89	19.6667	0.002
	4.00	41.7	0.4	122.16	15.0000	0.002
	5.00	73.7	32.4	122.43	12.2000	0.005
	6.00	129.0	87.7	122.67	10.3333	0.017
	7.00	177.4	136.1	122.89	9.0000	0.031
	8.00	220.5	179.2	123.07	8.0000	0.049
	9.00	258.6	217.3	123.24	7.2222	0.067
	10.00	291.4	250.1	123.38	6.6000	0.085
	11.00	320.2	278.9	123.50	6.0909	0.103
	12.00	344.9	303.6	123.61	5.6667	0.119
	13.00	366.1	324.8	123.70	5.3077	0.134
	14.00	383.9	342.7	123.78	5.0000	0.147
	15.00	399.1	357.9	123.85	4.7333	0.159
	16.00	411.8	370.6	123.91	4.5000	0.170
	17.00	422.5	381.2	123.97	4.2941	0.179
	18.00	431.5	390.3	124.02	4.1111	0.186
	19.00	439.1	397.8	124.08	3.9474	0.193
	20.00	445.5	404.2	124.13	3.8000	0.198
	21.00	450.9	409.6	124.16	3.6667	0.203
	22.00	455.5	414.2	124.21	3.5455	0.207
	23.00	459.2	418.0	124.24	3.4348	0.211
	24.00	462.7	421.4	124.26	3.3333	0.214
	25.00	465.5	424.2	124.31	3.2400	0.217
	26.00	467.8	426.6	124.34	3.1538	0.219
	27.00	469.9	428.6	124.36	3.0741	0.221
	28.00	471.8	430.5	124.38	3.0000	0.223
	29.00	473.3	432.0	124.41	2.9310	0.224
	30.00	474.6	433.3	124.43	2.8667	0.225
	31.00	475.9	434.6	124.46	2.8065	0.226
	32.00	477.0	435.7	124.49	2.7500	0.227
	33.00	477.9	436.7	124.50	2.6970	0.228
	34.00	478.8	437.6	124.53	2.6471	0.229
	35.00	479.7	438.4	124.54	2.6000	0.230
	36.00	480.5	439.2	124.56	2.5556	0.231
	37.00	481.2	439.9	124.58	2.5135	0.232
	38.00	482.0	440.7	124.60	2.4737	0.232
	39.00	482.9	441.6	124.62	2.4359	0.233
	40.00	483.6	442.3	124.63	2.4000	0.234
	41.00	484.4	443.1	124.65	2.3659	0.235
	42.00	485.3	444.0	124.67	2.3333	0.235
	43.00	486.0	444.7	124.68	2.3023	0.236

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9087 DST#3 Mitchell #3 American Warrior

DATE: 12/01/96 TIME: 06:06:14

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	167.00	2723.9	0.0	115.55		
****** Start Flow 1	0.00	26.7	0.0	115.56		
	1.00	28.5	1.8	115.52		
	2.00	30.4	3.6	115.47		
	3.00	31.6	4.9	115.43		
	4.00	32.8	6.0	115.41		
	5.00	32.8	6.0	115.42		
	6.00	32.9	6.2	115.44		
	7.00	33.0	6.3	115.47		
	8.00	35.0	8.2	115.52		
	9.00	35.0	8.2	115.57		
	10.00	34.1	7.4	115.63		
	11.00	35.3	8.6	115.70		
	12.00	35.5	8.8	115.77		
	13.00	35.2	8.5	115.85		
	14.00	34.2	7.4	115.92		
	15.00	34.6	7.8	116.01		
	16.00	35.2	8.5	116.09		
	17.00	35.4	8.7	116.18		
	18.00	35.9	9.2	116.26		
	19.00	35.8	9.0	116.35		
	20.00	36.1	9.4	116.44		
	21.00	36.1	9.4	116.53		
	22.00	36.3	9.6	116.63		
	23.00	37.1	10.4	116.73		
	24.00	37.1	10.4	116.82		
	25.00	37.5	10.8	116.93		
	26.00	37.2	10.5	117.02		
	27.00	37.1	10.3	117.13		
	28.00	37.3	10.5	117.23		
	29.00	37.7	10.9	117.34		
	30.00	37.4	10.7	117.45		
	31.00	38.1	11.3	117.56		
	32.00	38.6	11.9	117.67		
	33.00	37.8	11.0	117.78		
	34.00	38.6	11.9	117.90		
	35.00	38.2	11.5	118.01		
	36.00	38.8	12.0	118.13		
	37.00	39.1	12.4	118.25		
	38.00	39.3	12.6	118.41		
	39.00	40.5	13.8	118.46		
	40.00	39.7	12.9	118.62		
	41.00	39.7	13.0	118.75		
	42.00	39.2	12.5	118.88		
	43.00	39.7	13.0	119.01		
	44.00	39.5	12.7	119.16		
	45.00	40.6	13.9	119.29		
	46.00	40.2	13.4	119.42		
	47.00	41.1	14.3	119.54		
	48.00	39.8	13.0	119.65		
	49.00	39.9	13.1	119.79		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9087 DST#3 Mitchell #3 American Warrior

DATE: 12/01/96 TIME: 06:06:14

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	44.00	486.8	445.5	124.71	2.2727	0.237
	45.00	487.5	446.2	124.72	2.2444	0.238
	46.00	488.3	447.1	124.73	2.2174	0.238
	47.00	489.0	447.7	124.75	2.1915	0.239
	48.00	489.8	448.5	124.77	2.1667	0.240
	49.00	490.5	449.2	124.78	2.1429	0.241
	50.00	491.3	450.0	124.79	2.1200	0.241
	51.00	491.9	450.6	124.81	2.0980	0.242
	52.00	492.6	451.3	124.82	2.0769	0.243
	53.00	493.3	452.0	124.84	2.0566	0.243
	54.00	493.9	452.7	124.85	2.0370	0.244
	55.00	494.7	453.5	124.88	2.0182	0.245
	56.00	495.3	454.1	124.89	2.0000	0.245
	57.00	496.1	454.8	124.90	1.9825	0.246
	58.00	496.7	455.4	124.92	1.9655	0.247
	59.00	497.3	456.1	124.93	1.9492	0.247
	60.00	498.0	456.7	124.95	1.9333	0.248
	61.00	498.5	457.3	124.97	1.9180	0.249
	62.00	499.2	457.9	124.99	1.9032	0.249
****** End Shut-in 1	63.00	499.9	458.6	125.01	1.8889	0.250
****** Start Flow 2	0.00	41.5	0.0	125.03		
	1.00	37.3	-4.2	125.04		
	2.00	39.9	-1.6	125.09		
	3.00	39.8	-1.6	125.15		
	4.00	39.2	-2.3	125.22		
	5.00	40.8	-0.7	125.30		
	6.00	38.4	-3.1	125.36		
	7.00	39.9	-1.6	125.43		
	8.00	38.7	-2.8	125.49		
	9.00	37.5	-4.0	125.56		
	10.00	38.7	-2.8	125.64		
	11.00	38.4	-3.1	125.73		
	12.00	38.9	-2.6	125.84		
	13.00	38.9	-2.6	125.96		
	14.00	39.6	-1.9	126.06		
	15.00	39.2	-2.3	126.16		
	16.00	40.4	-1.1	126.27		
	17.00	39.2	-2.3	126.38		
	18.00	39.3	-2.1	126.49		
	19.00	39.0	-2.4	126.58		
	20.00	40.1	-1.3	126.67		
	21.00	40.4	-1.0	126.76		
	22.00	40.2	-1.3	126.83		
	23.00	38.7	-2.7	126.91		
	24.00	37.2	-4.3	126.98		
	25.00	40.2	-1.3	127.05		
	26.00	39.2	-2.3	127.11		
	27.00	40.2	-1.3	127.17		
	28.00	40.8	-0.7	127.22		
	29.00	40.5	-1.0	127.28		
	30.00	38.5	-3.0	127.32		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9087 DST#3 Mitchell #3 American Warrior

DATE: 12/01/96 TIME: 06:06:14

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	31.00	39.2	-2.3	127.37		
	32.00	38.7	-2.8	127.42		
	33.00	39.3	-2.2	127.47		
	34.00	38.5	-3.0	127.51		
	35.00	39.3	-2.1	127.55		
	36.00	39.5	-1.9	127.59		
	37.00	38.9	-2.6	127.62		
	38.00	41.3	-0.1	127.67		
	39.00	40.1	-1.4	127.70		
	40.00	41.4	-0.1	127.73		
	41.00	38.5	-2.9	127.76		
	42.00	41.0	-0.5	127.80		
	43.00	40.7	-0.8	127.83		
	44.00	39.7	-1.7	127.85		
	45.00	39.4	-2.1	127.88		
	46.00	39.4	-2.1	127.91		
	47.00	40.8	-0.7	127.93		
	48.00	39.8	-1.7	127.97		
	49.00	42.1	0.6	127.99		
	50.00	40.5	-1.0	128.01		
	51.00	40.0	-1.5	128.05		
	52.00	40.3	-1.2	128.07		
	53.00	41.5	0.1	128.09		
	54.00	40.7	-0.8	128.12		
	55.00	40.9	-0.6	128.14		
	56.00	41.8	0.4	128.16		
****** End Flow 2	57.00	42.3	0.8	128.20		
****** Start Shutin 2	0.00	42.3	0.0	128.20	0.0000	0.002
	1.00	40.4	-1.9	128.22	114.0000	0.002
	2.00	107.2	64.9	128.25	57.5000	0.011
	3.00	164.5	122.2	128.28	38.6667	0.027
	4.00	215.0	172.7	128.30	29.2500	0.046
	5.00	258.9	216.6	128.33	23.6000	0.067
	6.00	296.7	254.3	128.36	19.8333	0.088
	7.00	328.7	286.3	128.38	17.1429	0.108
	8.00	355.4	313.1	128.40	15.1250	0.126
	9.00	377.7	335.4	128.42	13.5556	0.143
	10.00	395.9	353.6	128.44	12.3000	0.157
	11.00	410.9	368.6	128.46	11.2727	0.169
	12.00	423.2	380.9	128.48	10.4167	0.179
	13.00	433.1	390.8	128.49	9.6923	0.188
	14.00	441.2	398.9	128.50	9.0714	0.195
	15.00	447.9	405.6	128.52	8.5333	0.201
	16.00	453.3	411.0	128.53	8.0625	0.205
	17.00	457.7	415.4	128.54	7.6471	0.209
	18.00	461.5	419.1	128.55	7.2778	0.213
	19.00	464.5	422.2	128.55	6.9474	0.216
	20.00	466.9	424.6	128.56	6.6500	0.218
	21.00	469.0	426.7	128.57	6.3810	0.220
	22.00	470.7	428.4	128.57	6.1364	0.222
	23.00	472.2	429.9	128.58	5.9130	0.223

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9087 DST#3 Mitchell #3 American Warrior

DATE: 12/01/96 TIME: 06:06:14

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	24.00	473.5	431.2	128.58	5.7083	0.224
	25.00	474.5	432.2	128.58	5.5200	0.225
	26.00	475.5	433.2	128.58	5.3462	0.226
	27.00	476.3	434.0	128.59	5.1852	0.227
	28.00	476.9	434.6	128.59	5.0357	0.227
	29.00	477.6	435.2	128.60	4.8966	0.228
	30.00	478.2	435.8	128.61	4.7667	0.229
	31.00	478.6	436.3	128.61	4.6452	0.229
	32.00	479.1	436.7	128.62	4.5312	0.229
	33.00	479.6	437.3	128.62	4.4242	0.230
	34.00	480.0	437.7	128.62	4.3235	0.230
	35.00	480.5	438.2	128.63	4.2286	0.231
	36.00	480.8	438.4	128.63	4.1389	0.231
	37.00	481.2	438.8	128.64	4.0541	0.232
	38.00	481.8	439.4	128.63	3.9737	0.232
	39.00	482.1	439.8	128.64	3.8974	0.232
	40.00	482.5	440.1	128.65	3.8250	0.233
	41.00	482.8	440.5	128.65	3.7561	0.233
	42.00	483.3	441.0	128.65	3.6905	0.234
	43.00	483.7	441.4	128.66	3.6279	0.234
	44.00	484.1	441.8	128.66	3.5682	0.234
	45.00	484.5	442.2	128.67	3.5111	0.235
	46.00	484.9	442.6	128.67	3.4565	0.235
	47.00	485.3	443.0	128.67	3.4043	0.236
	48.00	485.7	443.4	128.68	3.3542	0.236
	49.00	486.1	443.8	128.68	3.3061	0.236
	50.00	486.7	444.3	128.69	3.2600	0.237
	51.00	487.0	444.7	128.71	3.2157	0.237
	52.00	487.4	445.1	128.70	3.1731	0.238
	53.00	487.8	445.5	128.66	3.1321	0.238
	54.00	488.3	445.9	128.71	3.0926	0.238
	55.00	488.7	446.4	128.72	3.0545	0.239
	56.00	489.2	446.9	128.72	3.0179	0.239
	57.00	489.6	447.3	128.73	2.9825	0.240
	58.00	489.9	447.6	128.73	2.9483	0.240
	59.00	490.3	448.0	128.74	2.9153	0.240
	60.00	490.7	448.4	128.74	2.8833	0.241
****** End Shut-in 2	61.00	491.2	448.9	128.74	2.8525	0.241
****** Final Hydro.	409.00	2654.1	0.0	128.81		

TEST HISTORY

9087 DST#3 Mitchell #3 American Warrior

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	2723.95
B:	0.00	26.74
C:	56.00	41.28
D:	63.00	499.88
E:	0.00	41.48
F:	57.00	42.32
G:	61.00	491.17
Q:	0.00	2654.05

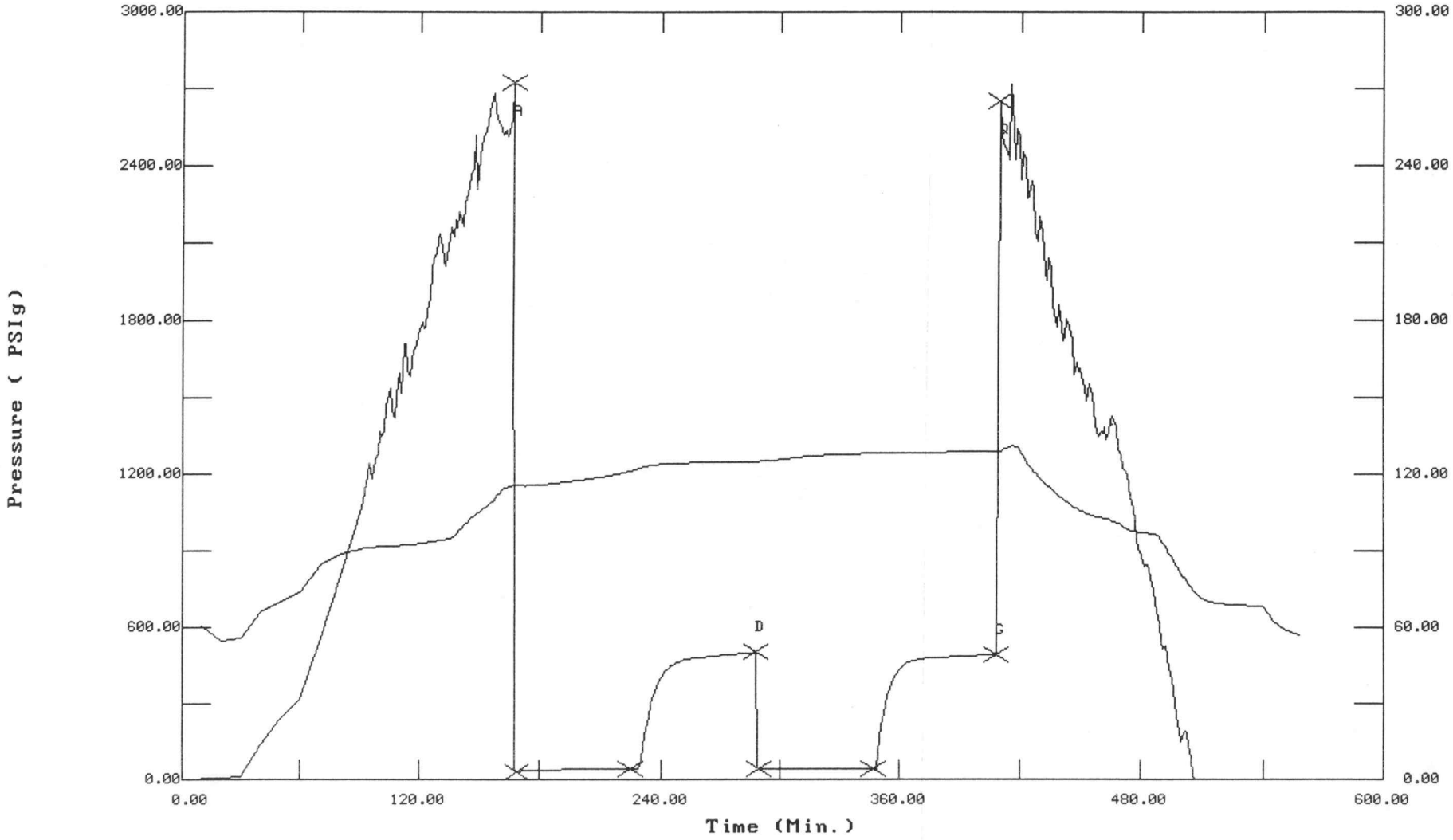
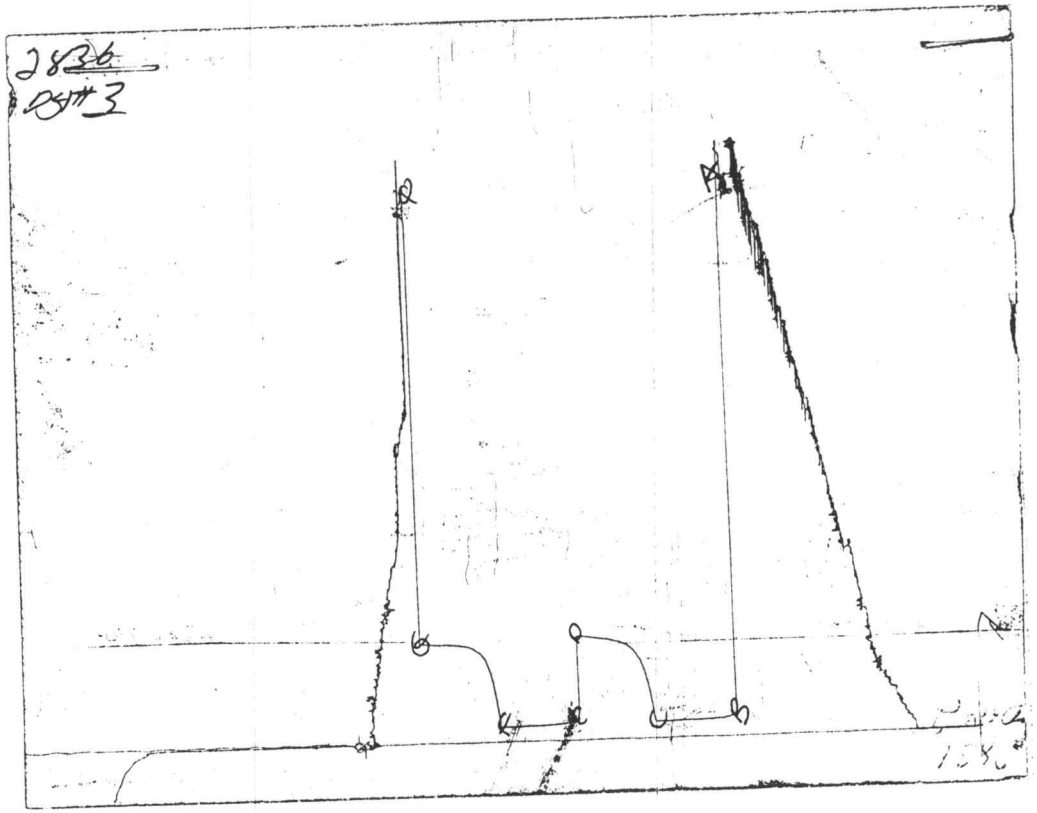


CHART PAGE



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 9087

Well Name & No. Mitchell #3 Test No. #3 Date 12-1-96

Company American Warrior Zone Tested Morrow

Address Garden City KS. 67846-6399 Elevation 2967 KB 2972 GL

Co. Rep / Geo. Alan Downies Cont. Val-Energy Rig #2 Est. Ft. of Pay 3 Por. ___ %

Location: Sec. 18 Twp. 30S Rge. 33W Co. Haskell State KS.

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

Interval Tested 5269-5323 Initial Str Wt./Lbs. 70000 Unseated Str Wt./Lbs. 75000

Anchor Length 54' Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 85000

Top Packer Depth 5264 Hole Size — 7 7/8" X Rubber Size — 6 3/4" X

Bottom Packer Depth 5269 Wt. Pipe I.D. — 2.7 Ft. Run ___

Total Depth 5323 Drill Collar — 2.25 Ft. Run 544'

Mud Wt. 9.2 LCM 3 Vis. 56 WL 8.8 Drill Pipe Size 4½ X.H Ft. Run 4752

Blow Description Fair Blow built to B.O.B in 22min.
I.S.I Bled off 2in NO Blow Back
2nd opening Strong Blow B.O.B soon as open Tool.
F.S.I NO Blow Back

Recovery — Total Feet 60' Ft. in DC 60' Ft. in WP ___ Ft. in DP ___

Rec. 4575	Feet Of Gas in Pipe	‰gas	‰oil	‰water	‰mud
Rec. ___	Feet Of ___	‰gas	‰oil	‰water	‰mud
Rec. 60	Feet Of Dirty mud	‰gas	‰oil	‰water 100	‰mud
Rec. ___	Feet Of ___	‰gas	‰oil	‰water	‰mud
Rec. ___	Feet Of ___	‰gas	‰oil	‰water	‰mud

BHT 123 °F Gravity ___ °API D@ ___ °F Corrected Gravity ___ °API

RW ___ @ ___ °F Chlorides ___ ppm Recovery Chlorides 4800 ppm System

(A) Initial Hydrostatic Mud	2773	2713	PSI	Recorder No. 2346	T-Started 4:30 Am
(B) First Initial Flow Pressure	26	85	PSI	@ (depth) 5273	T-Open 7:34 Am
(C) First Final Flow Pressure	41	85	PSI	Recorder No. 2836	T-Pulled 11:34 Am
(D) Initial Shut-in Pressure	499	453	PSI	@ (depth) 5320	T-Out 2:15 pm
(E) Second Initial Flow Pressure	41	85	PSI	Recorder No. ___	
(F) Second Final Flow Pressure	42	68	PSI	@ (depth) ___	
(G) Final Shut-in Pressure	491	445	PSI	Initial Opening 60min	Test ✓ Conventional 700
(H) Final Hydrostatic Mud	2654	2531	PSI	Initial Shut-in 60 min	Jars ✓ 200
	Alpine	AK-1		Final Flow 60min	Safety Joint ✓ 50
				Final Shut-in 60min.	Straddle ___
					Circ. Sub ✓ N/C
					Sampler ___
					Extra Packer ___
					Elect. Rec. ✓ 150
					Other ___
					TOTAL PRICE $ 1100

Approved By ___

Our Representative Mike Coleman

TRILOBITE TESTING L.L.C.

OPERATOR : American Warrior
WELL NAME: Mitchell #3
LOCATION : 18-30S-33W
INTERVAL : 5331.00 To 5355.00 ft

DATE 12-1-96
KB 2967.00 ft TICKET NO: 9088 DST #4
GR 2957.00 ft FORMATION: Morrow
TD 5355.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	1055	1055	2346		
SI 30	Range(Psi)	4050.0	4050.0	4995.0	0.0	0.0
SF 30	Clock(hrs)	12HR.	12HR.	elec.		
FS 30	Depth(ft)	5355.0	5355.0	5336.0	0.0	0.0

TIME DATA----------
PF Fr. 2420 to 2450 hr
IS Fr. 2450 to 0120 hr
SF Fr. 0120 to 0150 hr
FS Fr. 0150 to 0220 hr

	Field	1	2	3	4
A. Init Hydro	2798.0	2715.0	2723.0	0.0	0.0
B. First Flow	22.0	18.0	20.0	0.0	0.0
B1. Final Flow	22.0	18.0	22.0	0.0	0.0
C. In Shut-in	33.0	33.0	45.0	0.0	0.0
D. Init Flow	22.0	18.0	20.0	0.0	0.0
E. Final Flow	22.0	18.0	22.0	0.0	0.0
F. Fl Shut-in	22.0	18.0	32.0	0.0	0.0
G. Final Hydro	2604.0	2593.0	2548.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 2130 hr
T ON BOTM 2418 hr
T OPEN 2420 hr
T PULLED 0220 hr
T OUT 0510 hr

RECOVERY
Tot Fluid 5.00 ft of 5.00 ft in DC and 0.00 ft in DP
5.00 ft of 100% Drilling Mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

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

Tool Wt.	1800.00 lbs
Wt Set On Packer	25000.00 lbs
Wt Pulled Loose	80000.00 lbs
Initial Str Wt	74000.00 lbs
Unseated Str Wt	74000.00 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	544.00 ft
D.P. Length	4771.00 ft
H.W. I.D	2.70 in

BLOW DESCRIPTION
Initial Flow -
Weak surface blow for 15 min. -
then no blow

Final Flow -
Weak surface blow for 10 min. -
then no blow

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

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	60.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop Y	25.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	123.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Mike Colantonio
Co. Rep.	Alan Downing
Contr.	Val-Energy
Rig #	2
Unit #	
Pump T.	

SAMPLES: NO
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Mitchell #3

LOCATION : 18-30S-33W

TICKET No. 9088 D.S.T. No. 4 DATE 12-1-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 22ft.

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 29ft.

TOTAL TOOL 51ft

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands9 Single Total 544ft

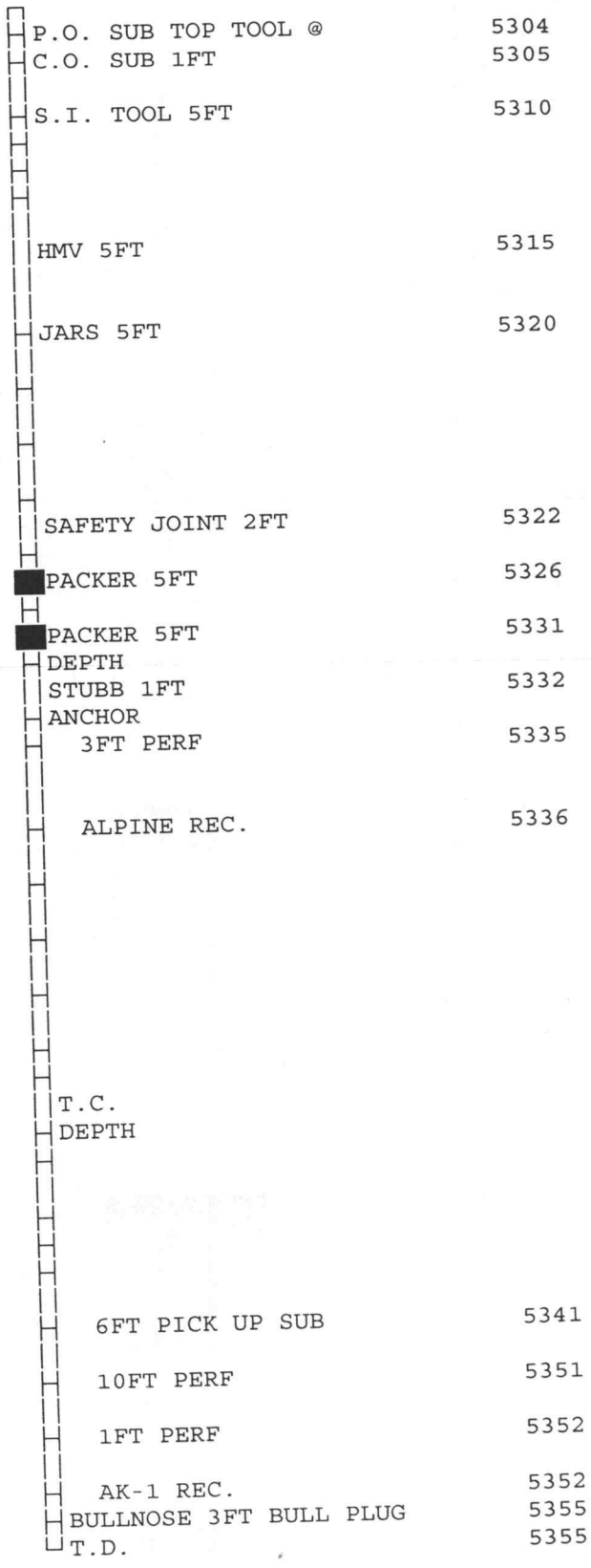
D.P. ABOVE TOOLS.Stands77 Single Total 4771ft

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5366ft

TOTAL DEPTH 5355ft

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

REMARKS:



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9088 DST#4 Mitchell #3 American Warrior.

DATE: 12/01/96 TIME: 23:05:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	152.00	2723.4	0.0	113.79		
****** Start Flow 1	0.00	20.5	0.0	115.02		
	1.00	20.5	0.0	115.14		
	2.00	21.5	1.0	115.22		
	3.00	20.9	0.4	115.27		
	4.00	22.6	2.1	115.31		
	5.00	21.9	1.4	115.35		
	6.00	21.1	0.7	115.39		
	7.00	22.8	2.4	115.42		
	8.00	21.6	1.1	115.46		
	9.00	20.6	0.1	115.50		
	10.00	22.3	1.8	115.54		
	11.00	20.6	0.1	115.58		
	12.00	22.6	2.1	115.62		
	13.00	24.6	4.2	115.67		
	14.00	23.2	2.7	115.72		
	15.00	22.1	1.6	115.76		
	16.00	23.4	2.9	115.81		
	17.00	22.9	2.4	115.87		
	18.00	21.7	1.3	115.92		
	19.00	23.1	2.7	115.97		
	20.00	23.0	2.5	116.03		
	21.00	22.7	2.2	116.09		
	22.00	23.8	3.4	116.14		
	23.00	23.0	2.5	116.20		
	24.00	22.1	1.7	116.26		
	25.00	23.3	2.9	116.32		
****** End Flow 1	26.00	22.7	2.3	116.38		
****** Start Shutin 1	0.00	22.7	0.0	116.38	0.0000	0.001
	1.00	23.8	1.1	116.44	27.0000	0.001
	2.00	23.5	0.8	116.50	14.0000	0.001
	3.00	24.3	1.5	116.57	9.6667	0.001
	4.00	25.3	2.5	116.63	7.5000	0.001
	5.00	26.2	3.4	116.69	6.2000	0.001
	6.00	27.0	4.3	116.75	5.3333	0.001
	7.00	27.9	5.1	116.81	4.7143	0.001
	8.00	28.7	6.0	116.88	4.2500	0.001
	9.00	29.6	6.9	116.94	3.8889	0.001
	10.00	30.4	7.7	117.00	3.6000	0.001
	11.00	31.2	8.5	117.08	3.3636	0.001
	12.00	32.0	9.3	117.14	3.1667	0.001
	13.00	32.9	10.2	117.21	3.0000	0.001
	14.00	33.5	10.8	117.27	2.8571	0.001
	15.00	34.3	11.6	117.34	2.7333	0.001
	16.00	35.0	12.3	117.40	2.6250	0.001
	17.00	35.8	13.1	117.46	2.5294	0.001
	18.00	36.4	13.7	117.53	2.4444	0.001
	19.00	37.3	14.6	117.59	2.3684	0.001
	20.00	37.9	15.2	117.66	2.3000	0.001
	21.00	38.6	15.8	117.73	2.2381	0.001
	22.00	39.3	16.6	117.79	2.1818	0.002

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9088 DST#4 Mitchell #3 American Warrior.

DATE: 12/01/96 TIME: 23:05:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	23.00	39.9	17.1	117.86	2.1304	0.002
	24.00	40.7	17.9	117.92	2.0833	0.002
	25.00	41.3	18.5	117.99	2.0400	0.002
	26.00	42.0	19.2	118.05	2.0000	0.002
	27.00	42.5	19.8	118.11	1.9630	0.002
	28.00	43.3	20.5	118.18	1.9286	0.002
	29.00	43.9	21.1	118.26	1.8966	0.002
	30.00	44.4	21.7	118.31	1.8667	0.002
	31.00	45.1	22.4	118.41	1.8387	0.002
***** End Shut-in 1	32.00	45.6	22.9	118.42	1.8125	0.002
***** Start Flow 2	0.00	20.1	0.0	118.46		
	1.00	20.8	0.7	118.54		
	2.00	21.3	1.3	118.60		
	3.00	21.7	1.6	118.67		
	4.00	22.0	2.0	118.73		
	5.00	21.0	1	118.80		
	6.00	21.4	1.3	118.85		
	7.00	21.8	1.7	118.92		
	8.00	22.0	1.9	118.98		
	9.00	22.3	2.3	119.04		
	10.00	21.4	1.3	119.10		
	11.00	21.8	1.7	119.16		
	12.00	22.2	2.2	119.23		
	13.00	22.5	2.4	119.28		
	14.00	22.8	2.8	119.34		
	15.00	21.9	1.8	119.40		
	16.00	22.3	2.2	119.46		
	17.00	22.6	2.6	119.52		
	18.00	22.9	2.8	119.58		
	19.00	23.1	3.0	119.64		
	20.00	23.2	3.2	119.70		
	21.00	23.3	3.3	119.76		
	22.00	23.4	3.3	119.81		
	23.00	22.3	2.3	119.88		
	24.00	22.6	2.6	119.92		
	25.00	23.0	2.9	119.99		
	26.00	23.2	3.1	120.05		
	27.00	23.6	3.5	120.10		
****** End Flow 2	28.00	22.1	2.0	120.16		
****** Start Shutin 2	0.00	22.1	0.0	120.16	0.0000	0.000
	1.00	22.6	0.5	120.21	55.0000	0.001
	2.00	22.9	0.8	120.27	28.0000	0.001
	3.00	23.1	1.0	120.33	19.0000	0.001
	4.00	23.4	1.3	120.38	14.5000	0.001
	5.00	23.7	1.6	120.43	11.8000	0.001
	6.00	24.0	1.9	120.49	10.0000	0.001
	7.00	24.3	2.3	120.54	8.7143	0.001
	8.00	24.8	2.7	120.61	7.7500	0.001
	9.00	25.1	3.1	120.66	7.0000	0.001
	10.00	25.4	3.4	120.72	6.4000	0.001
	11.00	25.8	3.7	120.77	5.9091	0.001

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9088 DST#4 Mitchell #3 American Warrior.

DATE: 12/01/96 TIME: 23:05:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	12.00	26.2	4.1	120.82	5.5000	0.001
	13.00	26.5	4.5	120.87	5.1538	0.001
	14.00	26.8	4.8	120.93	4.8571	0.001
	15.00	27.2	5.1	120.99	4.6000	0.001
	16.00	27.5	5.4	121.04	4.3750	0.001
	17.00	27.8	5.7	121.09	4.1765	0.001
	18.00	28.2	6.1	121.14	4.0000	0.001
	19.00	28.6	6.5	121.19	3.8421	0.001
	20.00	29.0	6.9	121.25	3.7000	0.001
	21.00	29.3	7.2	121.30	3.5714	0.001
	22.00	29.6	7.6	121.35	3.4545	0.001
	23.00	30.0	7.9	121.40	3.3478	0.001
	24.00	30.2	8.1	121.45	3.2500	0.001
	25.00	30.5	8.4	121.50	3.1600	0.001
	26.00	30.9	8.8	121.55	3.0769	0.001
	27.00	31.2	9.1	121.60	3.0000	0.001
	28.00	31.5	9.4	121.66	2.9286	0.001
	29.00	31.8	9.7	121.70	2.8621	0.001
****** End Shut-in 2	30.00	32.1	10.0	121.75	2.8000	0.001
****** Final Hydro.	275.00	2548.1	0.0	122.06		

TEST HISTORY

9088 DST#4 Mitchell #3 American Warrior.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	2723.37
B:	0.00	20.45
C:	26.00	22.74
D:	32.00	45.65
E:	0.00	20.05
F:	28.00	22.07
G:	30.00	32.09
Q:	0.00	2548.07

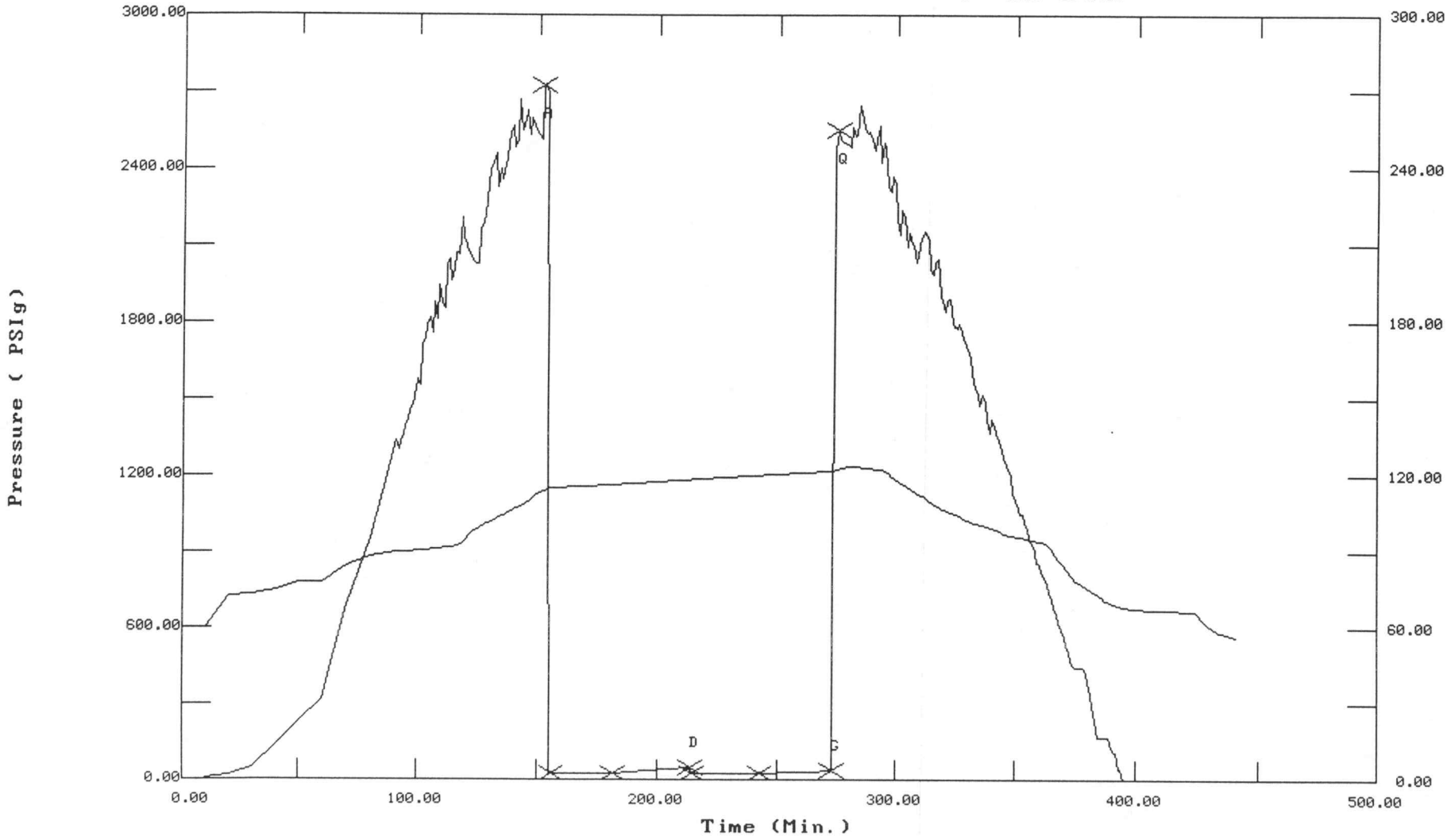
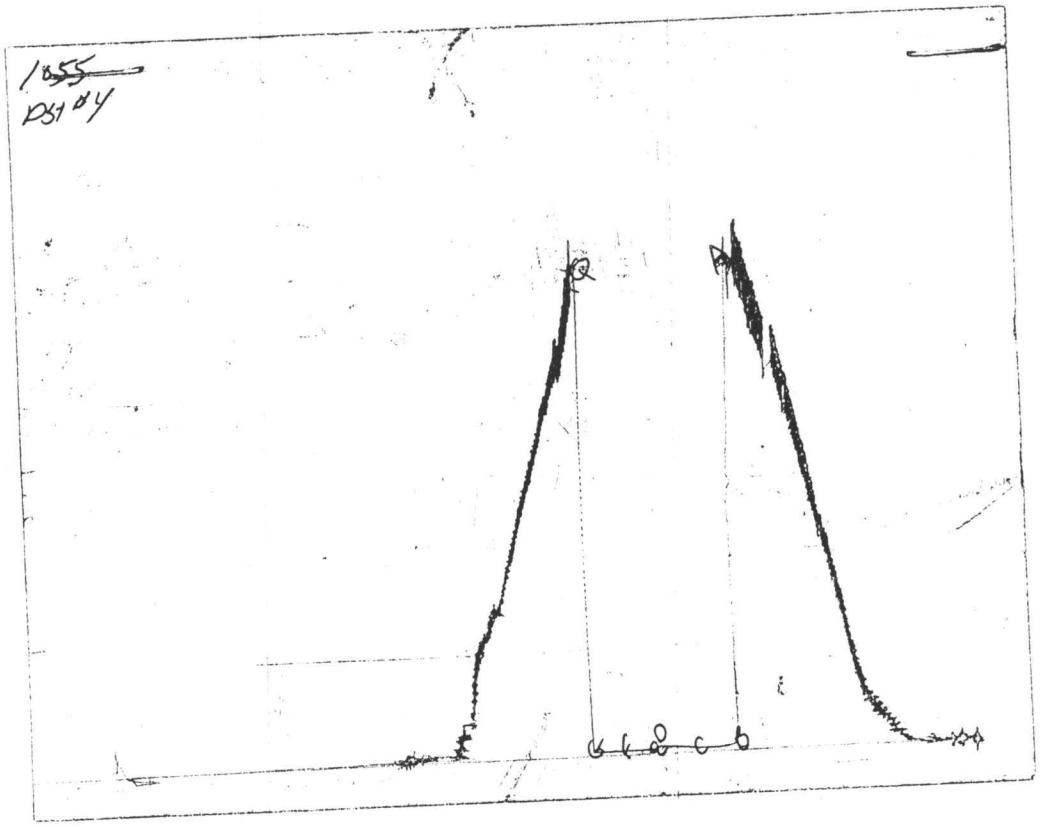


CHART PAGE



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 9088

Well Name & No. Mitchell #3 Test No. #4 Date 12-1-96

Company American Warrior Zone Tested Lower Morrow

Address Garden City KS. 67846-6399 Elevation 2967 KB 2957 GL

Co. Rep / Geo. Alan Downing Cont. Val-Energy Rig #2 Est. Ft. of Pay ___ Por. ___ %

Location: Sec. 18 Twp. 30s Rge. 33w Co. Haskell State KS

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

Interval Tested 5331-5355

Anchor Length 24'

Top Packer Depth 5326

Bottom Packer Depth 5331

Total Depth 5355

Mud Wt. 9.2 LCM 3 Vis. 60 WL 8.0

Initial Str Wt./Lbs. 74,000 Unseated Str Wt./Lbs. 74,000

Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 80,000

Hole Size — 7 7/8" X Rubber Size — 6 3/4" X

Wt. Pipe I.D. — 2.7 Ft. Run ___

Drill Collar — 2.25 Ft. Run 544'

Drill Pipe Size 4 1/2 X-H Ft. Run 4771

Blow Description Weak Surface Blow For 15 min Then No Blow

2nd opening Weak Surface Blow For 10 min then NO Blow

Recovery — Total Feet 5 Ft. in DC 5 Ft. in WP ___ Ft. in DP ___

Rec. 5	Feet Of Drlg Mud	‰gas	‰oil	‰water 100	‰mud	
Rec. ___	Feet Of ___	‰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 123 °F Gravity ___ °API D@ ___ °F Corrected Gravity ___ °API

RW ___ @ ___ °F Chlorides ___ ppm Recovery Chlorides 4500 ppm System

(A) Initial Hydrostatic Mud	2798	2798	PSI	Recorder No. 2346	T-Started 9:30 pm	
(B) First Initial Flow Pressure	20	22	PSI	@ (depth) 5336	T-Open 12:20 AM	
(C) First Final Flow Pressure	22	22	PSI	Recorder No. 1055	T-Pulled 2:20 AM	
(D) Initial Shut-in Pressure	45	33	PSI	@ (depth) 5355	T-Out 5:10 AM	
(E) Second Initial Flow Pressure	20	22	PSI	Recorder No. ___		
(F) Second Final Flow Pressure	22	22	PSI	@ (depth) ___		
(G) Final Shut-in Pressure	32	22	PSI	Initial Opening 30 min	Test ✓ Conventional 1700	
(H) Final Hydrostatic Mud	2548	2604	PSI	Initial Shut-in 30 min	Jars ✓ 200	
	AIR #	AT-1		Final Flow 30 min	Safety Joint ✓ 50	
				Final Shut-in 30 min	Straddle ___	
				___	Circ. Sub ✓ 35	
				___	Sampler ___	
					Extra Packer ___	
					Elect. Rec. ✓ 150	
					Other ___	
					TOTAL PRICE $ 1135	

Approved By ___

Our Representative Mike Colantoni