

8- 30S- 39W

ORIGINAL

WELL NAME: Mandy Jo #1-8
OPERATOR: Amoco Production Company
LOCATION: Sec 08 Twp 30S Rge 39W
Stanton County Kansas

DATE: 04/23/96

15-187-20823

RECEIVED
KANSAS CORPORATION COMMISSION

MAY 16 1996

CONSERVATION DIVISION
WICHITA, KS

TRILOBITE TESTING L.L.C.

ORIGINAL

OPERATOR : Amoco Production Company
 WELL NAME: Mandy Jo #1-8
 LOCATION : 8-30S-39W, Stanton Cty KS
 INTERVAL : 5516.00 To 5555.00 ft

DATE 4-22-96
 KB 0.00 ft TICKET NO: 7844 DST #1
 GR 3218.00 ft FORMATION: Morrow
 TD 5900.00 ft TEST TYPE: CONV STRADDLE

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 0 Rec.	1055	2346	2836			PF Fr. to hr
SI 0 Range(Psi)	4075.0	4995.0	3500.0	0.0	0.0	IS Fr. to hr
SF 0 Clock(hrs)	AK-1	Alpin	AK-1			SF Fr. to hr
FS 0 Depth(ft)	5550.0	5519.0	5897.0	0.0	0.0	FS Fr. to hr

	Field	1	2	3	4	
A. Init Hydro	0.0	0.0	0.0	0.0	0.0	T STARTED 0415 hr
B. First Flow	0.0	0.0	0.0	0.0	0.0	T ON BOTM 0742 hr
B1. Final Flow	0.0	0.0	0.0	0.0	0.0	T OPEN 0745 hr
C. In Shut-in	0.0	0.0	0.0	0.0	0.0	T PULLED 0815 hr
D. Init Flow	0.0	0.0	0.0	0.0	0.0	T OUT 1230 hr
E. Final Flow	0.0	0.0	0.0	0.0	0.0	
F. Fl Shut-in	0.0	0.0	0.0	0.0	0.0	
G. Final Hydro	0.0	0.0	0.0	0.0	0.0	
Inside/Outside	O	I	T			

RECOVERY

Tot Fluid 585.00 ft of 395.00 ft in DC and 188.00 ft in DP
 585.00 ft of Drilling mud

TOOL DATA-----
 Tool Wt. 1800.00 lbs
 Wt Set On Packer 25000.00 lbs
 Wt Pulled Loose 180000.00 lbs
 Initial Str Wt 120000.00 lbs
 Unseated Str Wt 95000.00 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 395.00 ft
 D.P. Length 5120.00 ft

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

BLOW DESCRIPTION

*Bottom packers would not seat.

MUD DATA-----
 Mud Type Chemical
 Weight 9.00 lb/c
 Vis. 62.00 S/L
 W.L. 6.90 in3
 F.C. 0.00 in
 Mud Drop Y 0.0 ft

Amt. of fill 4.00 ft
 Btm. H. Temp. 128.00 F
 Hole Condition Fair
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 4
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out N
 Tool Chased N
 Tester Mike Colantonio
 Co. Rep. Ken LeBlanc
 Contr. Cheyenne
 Rig # 7
 Unit #
 Pump T.

SAMPLES: no
 SENT TO:

Test Successful: N

TEST HISTORY

7844 DST#1 Mandy Jo #1-8 Amoco Prod. Comp.

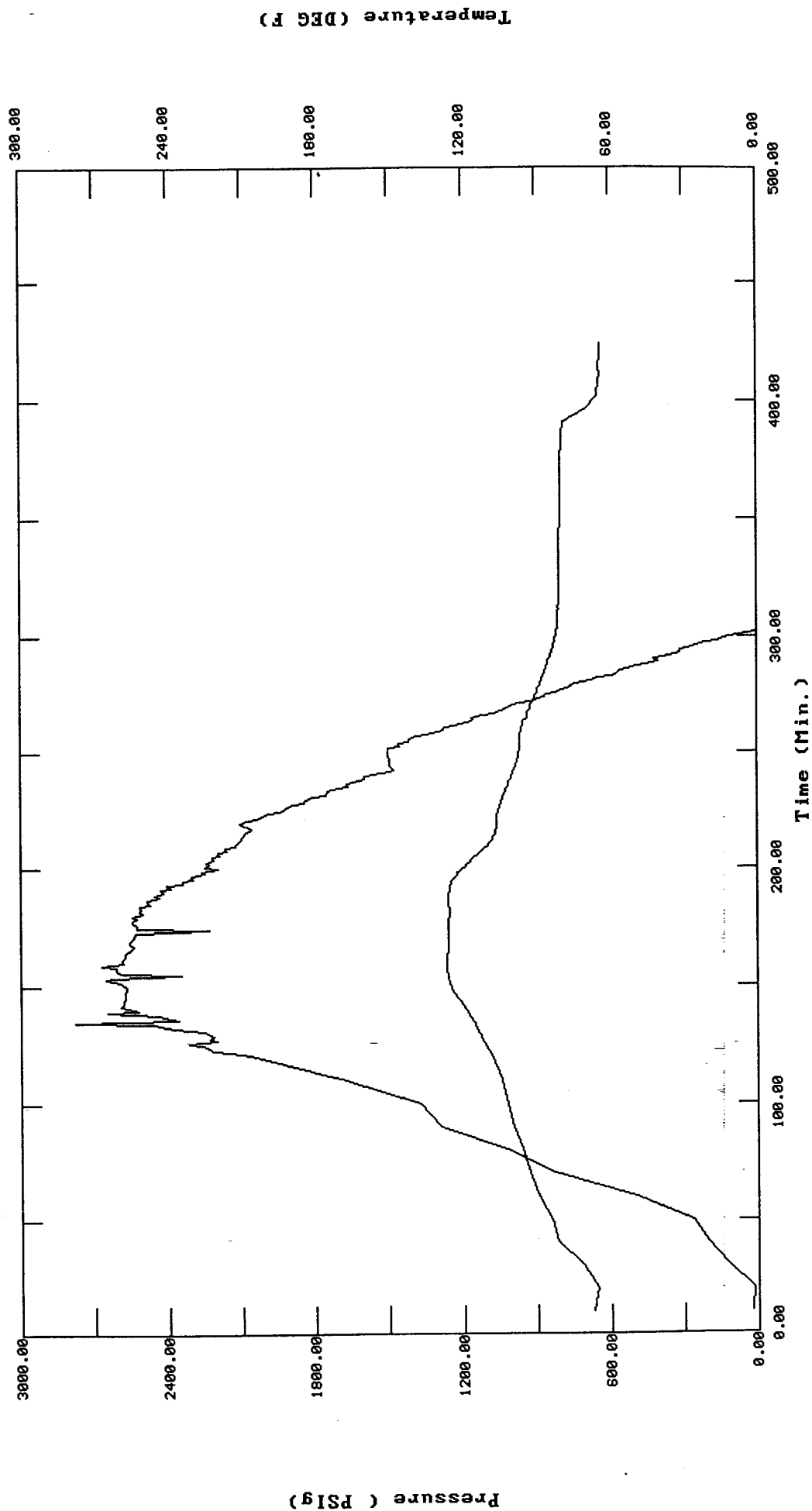
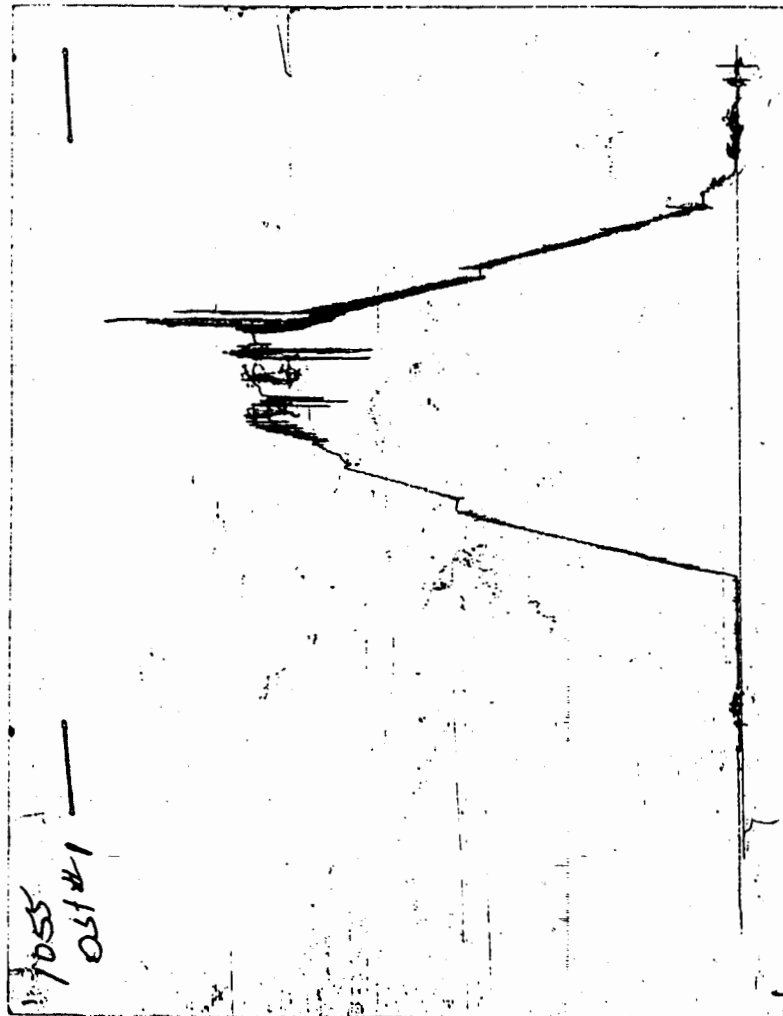
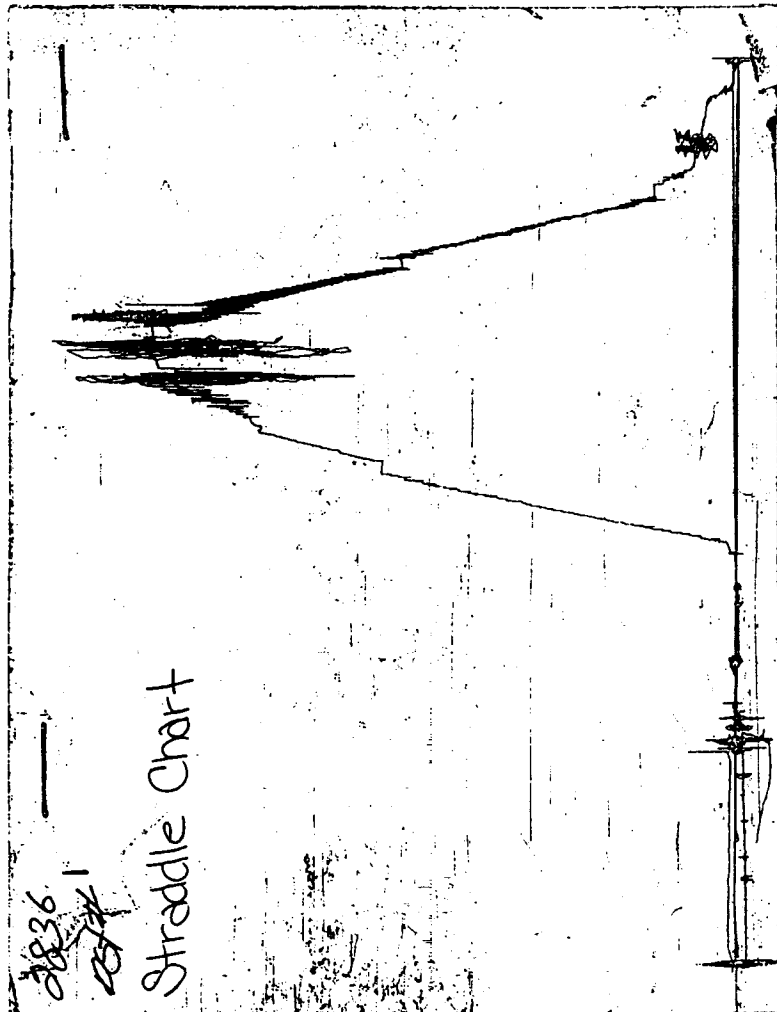


CHART PAGE



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

CHART PAGE



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

*** TOOL DIAGRAM *** CONV STRADDLE

WELL NAME: Mandy Jo #1-8

LOCATION : 8-30S-39W

TICKET No. 7844 D.S.T. No. 1 DATE 4-22-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 25

INTERVAL TOOL 39

BOTTOM PACKERS AND ANCHOR 16

TOTAL TOOL 80

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands6 Single 1 Total 329

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 409

D.C. ABOVE TOOLS.Stands Single Total 395

D.P. ABOVE TOOLS.Stands Single Total 5120

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5924

TOTAL DEPTH 5900

TOTAL DRILL PIPE ABOVE K.B. 24

REMARKS:

P.O. SUB	
C.O. SUB 1ft.	5491
S.I. TOOL 5ft.	5497
3ft. Sampler	5500
HMV	
JARS 5ft	5505
SAFETY JOINT 2ft	5507
PACKER 5ft	5511
PACKER 5ft	5516
DEPTH 5516	5516
STUBB 1'	5517
ANCHOR	
2ft. Perf.	5519
Alpine Rec.	5519
6ft Pick up sub.	5525
25ft. Perf	5550
AK-1 Rec.	5550
1ft. Blank off sub	5551
T.C.	
DEPTH	
PACKER 5ft Straddle Pack	5555
PACKER 5ft.	5560
1' stubb	5561
3ft perf	5564
1ft. C\O sub.	5565
329ft. Drlg Collar	5894
1ft double pin	5895
1ft. hanger sub	5896
1ft perf	5897
AK-1 Rec	5897
BULLNOSE 3ft bullplug	
T.D.	5900

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

8-30s-39w

Test Ticket

No 7844

Well Name & No. Mandy 30# 1-8 Test No. 1 Date 4-22-96
 Company Amoco Prod. Comp. Zone Tested Morrow
 Address P.O. Box 800 San 924 Dent CO. 80201 Elevation 3218 ft.
 Co. Rep./Geo. Ken Heblanc Cont. Chapman Rig #7 Est. Ft. of Pay _____
 Location: Sec. 8 Twp. 30 S Rge. 39 W Co. Stanton State KS.
 No. of Copies _____ Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 5516 - 5555 Drill Pipe Size 4 1/2 X-Hole
 Anchor Length 39' Top Choke — 1" — Bottom Choke — 1/4" —
 Top Packer Depth 5511 Hole Size — 7 7/8" — Rubber Size — 6 3/4" —
 Bottom Packer Depth 5560 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 5900 Drill Collar — 2.25 Ft. Run 395'
 Mud Wt. 9.0 lb/gal. Viscosity 62 Filtrate 6.9
 Tool Open @ _____ Initial Blow Set Tool on Bottom packers would n't
Seat
 Final Blow _____

Recovery — Total Feet _____ Feet of Gas in Pipe _____ Flush Tool? NO

Rec.	Feet Of	%gas	%oil	%water	%mud
<u>585</u>	<u>Alg mud.</u>			<u>100</u>	
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 128 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 4,100 ppm System
 (A) Initial Hydrostatic Mud _____ PSI Ak1 Recorder No. IBM Range 4,995
 (B) First Initial Flow Pressure _____ PSI @ (depth) 5519 w/Clock No. Electronic
 (C) First Final Flow Pressure _____ PSI AK1 Recorder No. 2836 Range 3,500
 (D) Initial Shut-In Pressure _____ PSI @ (depth) 5897 w/Clock No. 23935
 (E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. 1055 Range 4075
 (F) Second Final Flow Pressure _____ PSI @ (depth) 5550 w/Clock No. 30416
 (G) Final Shut-In Pressure _____ PSI Initial Opening _____ Test Shuttle 500 m.
 (H) Final Hydrostatic Mud _____ PSI Initial Shut-In _____ Jars 200

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

Final Flow _____ Safety Joint 50
 Final Shut-In _____ Straddle 250
 Circ. Sub N/C
 Sampler nc
 Extra Packer 150
 Other Electronic Rec 150
 TOTAL PRICE \$ 1300

Approved By Ken Heblanc
 Our Representative Mike Collette

TRILOBITE TESTING L.L.C.

OPERATOR : Amoco Production Company
WELL NAME: Mandy Jo #1-8
LOCATION : 8-30S-39W, Stanton Cty KS
INTERVAL : 5521.00 To 5560.00 ft

DATE 4-23-96
KB 0.00 ft
GR 3218.00 ft
TD 5893.00 ft
TICKET NO: 7845
FORMATION: Morrow
TEST TYPE: CONV. STRADDLE
DST #2

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 10 Rec.	1055	1055	2346	2836		PF Fr. 1102 to 1112 hr
SI 60 Range(Psi)	3500.0	3500.0	4995.0	4075.0	0.0	IS Fr. 1112 to 1212 hr
SF 120 Clock(hrs)	AK-1	AK-1	Alpin	AK-1		SF Fr. 1212 to 1412 hr
FS 120 Depth(ft)	5556.0	5556.0	5525.0	5889.0	0.0	FS Fr. 1412 to 1612 hr

	Field	1	2	3	4	
A. Init Hydro	2696.0	2686.0	2656.0	0.0	0.0	T STARTED 0750 hr
B. First Flow	129.0	112.0	104.0	0.0	0.0	T ON BOTM 1100 hr
B1. Final Flow	140.0	125.0	135.0	0.0	0.0	T OPEN 1102 hr
C. In Shut-in	1529.0	1499.0	1526.0	0.0	0.0	T PULLED 1612 hr
D. Init Flow	245.0	201.0	180.0	0.0	0.0	T OUT 2100 hr
E. Final Flow	441.0	386.0	387.0	0.0	0.0	
F. Fl Shut-in	1367.0	1309.0	1315.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2574.0	2515.0	2479.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	O	O	I	T		Wt Set On Packer 25000.00 lbs
						Wt Pulled Loose 165000.00 lbs
						Initial Str Wt 116000.00 lbs
						Unseated Str Wt 91000.00 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 724.00 ft
						D.P. Length 5119.00 ft

RECOVERY

Tot Fluid 785.00 ft of 724.00 ft in DC and 61.00 ft in DP
275.00 ft of Muddy water - 50% mud, 50% water
449.00 ft of Watery mud - 75% water, 25% mud

SALINITY 24000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
Fair blow built to 5.5"

Initial Shutin -
Bled off 2", no blow back

Final Flow -
Surface blow built to bottom of
bucket in 80 min

Final Shutin -
Bled off 2", no blow back

SAMPLES: NO
SENT TO:

Test Successful: Y

MUD DATA-----

Mud Type	Chemical
Weight	8.60 lb/c
Vis.	74.00 S/L
W.L.	7.00 in3
F.C.	0.00 in
Mud Drop Y	25.0 ft
Amt. of fill	2.00 ft
Btm. H. Temp.	128.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	4
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Mike Colantonio
Co. Rep.	Ken LeBlanc
Contr.	Cheyenne
Rig #	7
Unit #	
Pump T.	

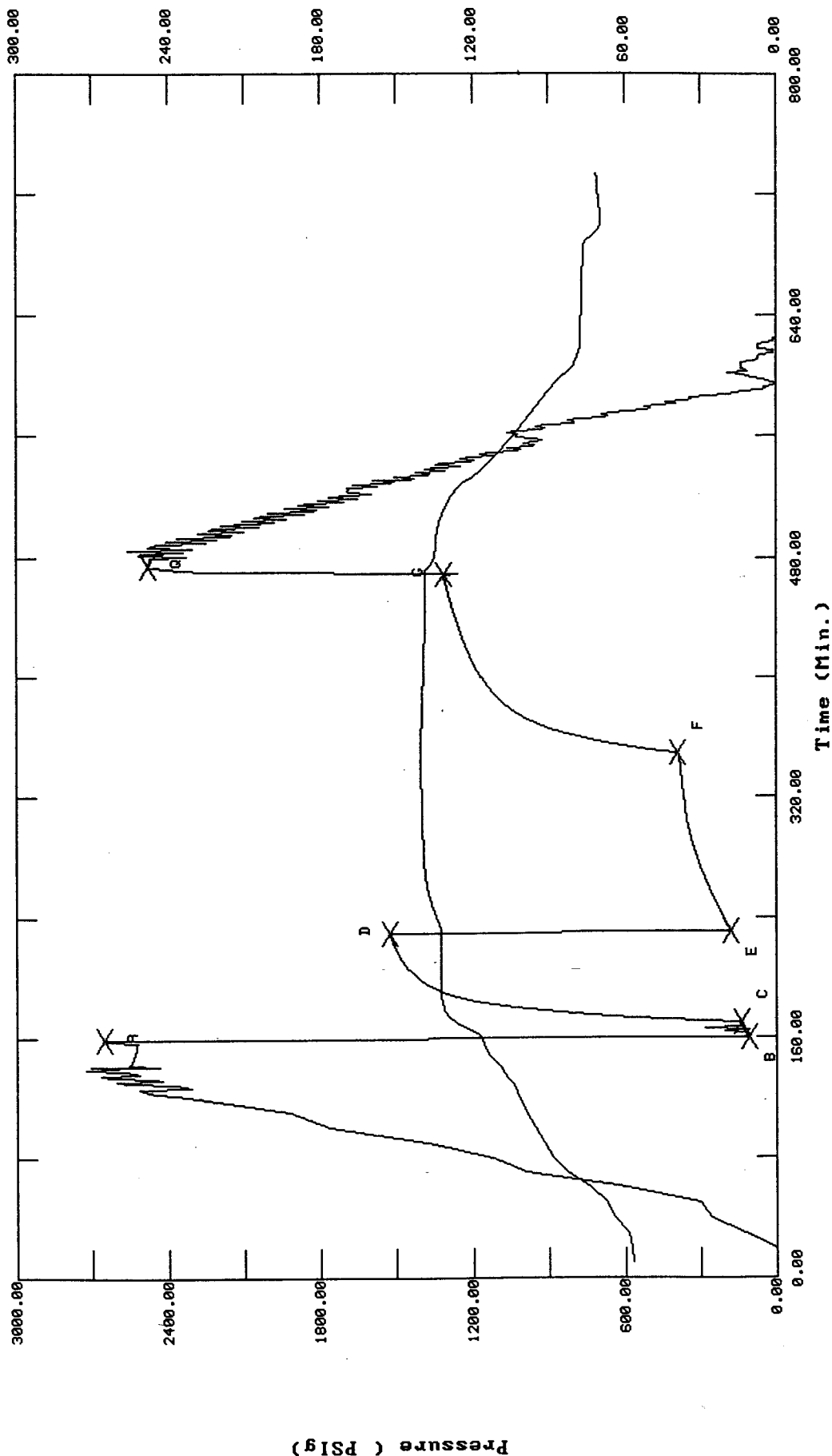
TEST HISTORY

7845 DST#2 Mandy Jo #1-8 Amoco Prod. Comp.

Flag Points

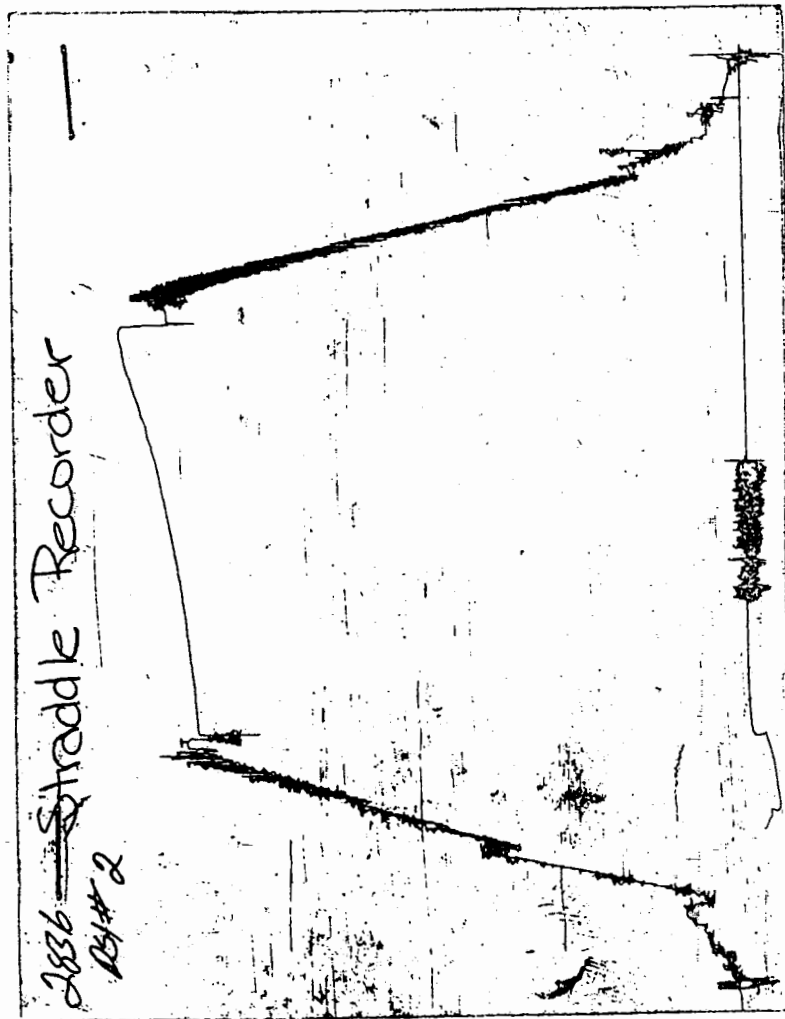
t (Min.) P (PSig)

A: 0.00 2655.64
 B: 0.00 103.56
 C: 10.00 134.70
 D: 60.00 1525.63
 E: 0.00 179.76
 F: 119.00 386.98
 G: 119.00 1315.14
 Q: 0.00 2479.39



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

CHART PAGE



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

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING
 TEST: 7845 DST#2 Mandy Jo #1-8 Amoco Prod. Comp.
 DATE: 04/23/96 TIME: 07:38:34

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	159.00	2655.6	0.0	116.31		
***** Start Flow 1	0.00	103.6	0.0	116.47		
	1.00	116.7	13.2	116.80		
	2.00	115.3	11.7	117.52		
	3.00	119.8	16.3	118.57		
	4.00	202.3	98.8	119.82		
	5.00	107.8	4.3	121.22		
	6.00	279.6	176.1	122.11		
	7.00	129.9	26.4	123.49		
	8.00	131.6	28.0	124.63		
	9.00	132.3	28.7	125.66		
***** End Flow 1	10.00	134.7	31.1	126.58		
***** Start Shutin 1	0.00	134.7	0.0	126.58	0.0000	0.018
	1.00	293.8	159.1	127.41	11.0000	0.086
	2.00	437.5	302.8	128.11	6.0000	0.191
	3.00	564.7	430.0	128.82	4.3333	0.319
	4.00	652.9	518.2	129.35	3.5000	0.426
	5.00	728.8	594.1	129.93	3.0000	0.531
	6.00	795.9	661.2	130.37	2.6667	0.633
	7.00	858.7	724.0	130.75	2.4286	0.737
	8.00	918.8	784.1	131.06	2.2500	0.844
	9.00	975.6	840.9	131.33	2.1111	0.952
	10.00	1028.2	893.5	131.58	2.0000	1.057
	11.00	1075.9	941.2	131.63	1.9091	1.157
	12.00	1118.6	983.9	131.83	1.8333	1.251
	13.00	1156.1	1021.4	131.97	1.7692	1.337
	14.00	1189.1	1054.4	132.09	1.7143	1.414
	15.00	1218.0	1083.3	132.18	1.6667	1.483
	16.00	1243.1	1108.4	132.25	1.6250	1.545
	17.00	1265.4	1130.7	132.37	1.5882	1.601
	18.00	1285.0	1150.3	132.39	1.5556	1.651
	19.00	1302.5	1167.8	132.44	1.5263	1.696
	20.00	1318.0	1183.3	132.48	1.5000	1.737
	21.00	1332.1	1197.4	132.53	1.4762	1.774
	22.00	1345.0	1210.3	132.56	1.4545	1.809
	23.00	1356.6	1221.9	132.59	1.4348	1.840
	24.00	1367.3	1232.6	132.59	1.4167	1.870
	25.00	1377.2	1242.5	132.60	1.4000	1.897
	26.00	1386.3	1251.6	132.61	1.3846	1.922
	27.00	1394.7	1260.0	132.62	1.3704	1.945
	28.00	1402.5	1267.8	132.63	1.3571	1.967
	29.00	1410.0	1275.3	132.64	1.3448	1.988
	30.00	1416.8	1282.1	132.66	1.3333	2.007
	31.00	1423.2	1288.5	132.67	1.3226	2.026
	32.00	1429.4	1294.7	132.68	1.3125	2.043
	33.00	1435.1	1300.4	132.69	1.3030	2.059
	34.00	1440.5	1305.8	132.68	1.2941	2.075
	35.00	1445.9	1311.2	132.69	1.2857	2.091
	36.00	1450.8	1316.1	132.68	1.2778	2.105
	37.00	1455.6	1320.9	132.68	1.2703	2.119
	38.00	1460.1	1325.4	132.70	1.2632	2.132

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 7845 DST#2 Mandy Jo #1-8 Amoco Prod. Comp.

DATE: 04/23/96

TIME: 07:38:34

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	39.00	1464.3	1329.6	132.69	1.2564	2.144
	40.00	1468.5	1333.8	132.71	1.2500	2.156
	41.00	1472.4	1337.7	132.71	1.2439	2.168
	42.00	1476.1	1341.4	132.69	1.2381	2.179
	43.00	1479.7	1345.0	132.70	1.2326	2.190
	44.00	1483.3	1348.6	132.72	1.2273	2.200
	45.00	1486.5	1351.8	132.71	1.2222	2.210
	46.00	1489.9	1355.2	132.72	1.2174	2.220
	47.00	1492.9	1358.2	132.72	1.2128	2.229
	48.00	1496.0	1361.3	132.71	1.2083	2.238
	49.00	1498.9	1364.2	132.73	1.2041	2.247
	50.00	1501.6	1366.9	132.73	1.2000	2.255
	51.00	1504.4	1369.7	132.71	1.1961	2.263
	52.00	1507.1	1372.4	132.72	1.1923	2.271
	53.00	1509.7	1375.0	132.74	1.1887	2.279
	54.00	1512.1	1377.4	132.73	1.1852	2.287
	55.00	1514.6	1379.9	132.73	1.1818	2.294
	56.00	1516.9	1382.2	132.72	1.1786	2.301
	57.00	1519.2	1384.5	132.71	1.1754	2.308
	58.00	1521.4	1386.7	132.70	1.1724	2.315
	59.00	1523.4	1388.8	132.68	1.1695	2.321
***** End Shut-in 1	60.00	1525.6	1390.9	132.67	1.1667	2.328
***** Start Flow 2	0.00	179.8	0.0	132.64		
	1.00	181.3	1.5	132.63		
	2.00	182.6	2.9	132.69		
	3.00	186.2	6.5	132.78		
	4.00	189.8	10	132.95		
	5.00	193.9	14.1	133.13		
	6.00	196.8	17.0	133.35		
	7.00	200.0	20.2	133.57		
	8.00	203.2	23.4	133.80		
	9.00	206.3	26.5	134.06		
	10.00	209.8	30.0	134.30		
	11.00	213.2	33.4	134.57		
	12.00	216.3	36.5	134.80		
	13.00	218.8	39.0	135.03		
	14.00	221.7	42.0	135.24		
	15.00	224.8	45.1	135.43		
	16.00	227.9	48.1	135.64		
	17.00	230.8	51.0	135.86		
	18.00	234.1	54.3	136.11		
	19.00	237.3	57.6	136.33		
	20.00	240.0	60.3	136.33		
	21.00	242.5	62.8	136.54		
	22.00	245.4	65.6	136.78		
	23.00	248.2	68.5	136.97		
	24.00	251.1	71.3	137.14		
	25.00	253.8	74.0	137.29		
	26.00	256.3	76.5	137.43		
	27.00	259.2	79.4	137.56		
	28.00	261.9	82.2	137.69		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 7845 DST#2 Mandy Jo #1-8 Amoco Prod. Comp.

DATE: 04/23/96

TIME: 07:38:34

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
29.00	264.7	84.9	137.82		
30.00	267.3	87.5	137.92		
31.00	269.6	89.8	138.03		
32.00	272.3	92.5	138.13		
33.00	274.9	95.2	138.23		
34.00	277.5	97.7	138.32		
35.00	280.0	100.2	138.40		
36.00	282.5	102.7	138.46		
37.00	284.6	104.8	138.49		
38.00	287.0	107.3	138.58		
39.00	289.5	109.7	138.64		
40.00	292.0	112.2	138.73		
41.00	294.4	114.6	138.78		
42.00	296.8	117.0	138.82		
43.00	298.4	118.7	138.86		
44.00	300.4	120.6	138.91		
45.00	302.5	122.7	138.93		
46.00	304.6	124.9	138.97		
47.00	306.7	126.9	139.00		
48.00	308.6	128.8	139.02		
49.00	310.4	130.7	139.07		
50.00	312.0	132.3	139.10		
51.00	314.0	134.3	139.13		
52.00	316.2	136.5	139.16		
53.00	318.3	138.6	139.18		
54.00	320.5	140.7	139.20		
55.00	322.5	142.8	139.26		
56.00	324.6	144.9	139.29		
57.00	326.4	146.6	139.31		
58.00	328.3	148.6	139.34		
59.00	330.3	150.6	139.38		
60.00	331.9	152.2	139.41		
61.00	333.4	153.7	139.43		
62.00	334.9	155.1	139.46		
63.00	336.2	156.4	139.48		
64.00	337.6	157.9	139.51		
65.00	339.2	159.5	139.53		
66.00	340.8	161.1	139.56		
67.00	342.2	162.4	139.57		
68.00	343.8	164.0	139.62		
69.00	345.4	165.6	139.62		
70.00	347.0	167.3	139.64		
71.00	348.6	168.9	139.67		
72.00	350.1	170.4	139.67		
73.00	351.2	171.5	139.68		
74.00	352.1	172.3	139.71		
75.00	352.8	173.1	139.72		
76.00	353.5	173.7	139.75		
77.00	354.3	174.5	139.76		
78.00	355.1	175.3	139.79		
79.00	355.8	176.0	139.82		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 7845 DST#2 Mandy Jo #1-8 Amoco Prod. Comp.

DATE: 04/23/96

TIME: 07:38:34

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	80.00	356.6	176.8	139.82		
	81.00	357.4	177.6	139.84		
	82.00	358.1	178.3	139.86		
	83.00	358.8	179.0	139.87		
	84.00	359.6	179.9	139.89		
	85.00	360.3	180.5	139.89		
	86.00	361.0	181.3	139.91		
	87.00	361.8	182.0	139.92		
	88.00	362.6	182.8	139.95		
	89.00	363.3	183.6	139.97		
	90.00	364.0	184.2	139.98		
	91.00	364.7	185.0	140.00		
	92.00	365.5	185.7	140.01		
	93.00	366.5	186.7	140.01		
	94.00	367.3	187.5	140.04		
	95.00	367.9	188.2	140.05		
	96.00	368.6	188.8	140.06		
	97.00	369.3	189.5	140.07		
	98.00	369.9	190.2	140.09		
	99.00	370.5	190.8	140.10		
	100.00	371.3	191.5	140.11		
	101.00	371.9	192.1	140.13		
	102.00	372.5	192.8	140.15		
	103.00	373.2	193.5	140.17		
	104.00	374.0	194.2	140.17		
	105.00	374.6	194.8	140.19		
	106.00	375.1	195.4	140.19		
	107.00	375.9	196.1	140.20		
	108.00	376.5	196.7	140.21		
	109.00	377.1	197.3	140.23		
	110.00	377.9	198.2	140.24		
	111.00	378.5	198.7	140.24		
	112.00	379.1	199.3	140.24		
	113.00	379.7	199.9	140.25		
	114.00	380.3	200.5	140.22		
	115.00	381.0	201.3	140.28		
	116.00	381.9	202.1	140.26		
	117.00	382.5	202.8	140.27		
	118.00	383.2	203.4	140.29		
***** End Flow 2	119.00	387.0	207.2	140.30		
***** Start Shutin 2	0.00	387.0	0.0	140.30	0.0000	0.150
	1.00	455.0	68.0	140.32	130.0000	0.207
	2.00	498.6	111.6	140.33	65.5000	0.249
	3.00	539.3	152.3	140.35	44.0000	0.291
	4.00	577.2	190.2	140.36	33.2500	0.333
	5.00	612.6	225.6	140.35	26.8000	0.375
	6.00	646.1	259.1	140.35	22.5000	0.417
	7.00	677.7	290.7	140.33	19.4286	0.459
	8.00	707.4	320.4	140.33	17.1250	0.500
	9.00	735.5	348.5	140.31	15.3333	0.541
	10.00	762.0	375.0	140.27	13.9000	0.581

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 7845 DST#2 Mandy Jo #1-8 Amoco Prod. Comp.

DATE: 04/23/96

TIME: 07:38:34

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
11.00	787.1	400.1	140.25	12.7273	0.619
12.00	810.7	423.7	140.21	11.7500	0.657
13.00	832.9	445.9	140.16	10.9231	0.694
14.00	853.7	466.7	140.15	10.2143	0.729
15.00	873.3	486.3	140.11	9.6000	0.763
16.00	891.8	504.8	140.13	9.0625	0.795
17.00	908.9	521.9	140.04	8.5882	0.826
18.00	925.2	538.2	140.04	8.1667	0.856
19.00	940.2	553.3	140.02	7.7895	0.884
20.00	954.3	567.4	139.98	7.4500	0.911
21.00	967.8	580.8	139.97	7.1429	0.937
22.00	980.2	593.2	139.94	6.8636	0.961
23.00	991.9	605.0	139.91	6.6087	0.984
24.00	1003.0	616.0	139.89	6.3750	1.006
25.00	1013.5	626.5	139.89	6.1600	1.027
26.00	1023.3	636.3	139.87	5.9615	1.047
27.00	1032.6	645.6	139.86	5.7778	1.066
28.00	1041.4	654.4	139.84	5.6071	1.084
29.00	1049.8	662.8	139.81	5.4483	1.102
30.00	1057.6	670.6	139.76	5.3000	1.118
31.00	1065.2	678.2	139.75	5.1613	1.135
32.00	1072.3	685.4	139.71	5.0312	1.150
33.00	1079.1	692.2	139.68	4.9091	1.165
34.00	1085.7	698.7	139.67	4.7941	1.179
35.00	1092.0	705.0	139.65	4.6857	1.192
36.00	1098.0	711.0	139.62	4.5833	1.206
37.00	1103.8	716.8	139.60	4.4865	1.218
38.00	1109.3	722.3	139.58	4.3947	1.230
39.00	1114.7	727.7	139.57	4.3077	1.243
40.00	1119.8	732.9	139.53	4.2250	1.254
41.00	1124.9	737.9	139.53	4.1463	1.265
42.00	1129.7	742.8	139.50	4.0714	1.276
43.00	1134.3	747.3	139.48	4.0000	1.287
44.00	1138.9	751.9	139.47	3.9318	1.297
45.00	1143.3	756.4	139.44	3.8667	1.307
46.00	1147.5	760.5	139.44	3.8043	1.317
47.00	1151.6	764.7	139.42	3.7447	1.326
48.00	1155.6	768.6	139.39	3.6875	1.335
49.00	1159.5	772.6	139.37	3.6327	1.345
50.00	1163.4	776.4	139.38	3.5800	1.353
51.00	1167.1	780.1	139.33	3.5294	1.362
52.00	1170.7	783.7	139.31	3.4808	1.371
53.00	1174.1	787.2	139.30	3.4340	1.379
54.00	1177.7	790.7	139.27	3.3889	1.387
55.00	1181.0	794.0	139.25	3.3455	1.395
56.00	1184.4	797.4	139.21	3.3036	1.403
57.00	1187.6	800.6	139.19	3.2632	1.410
58.00	1190.8	803.8	139.18	3.2241	1.418
59.00	1193.9	806.9	139.17	3.1864	1.425
60.00	1196.9	809.9	139.14	3.1500	1.433
61.00	1199.8	812.8	139.11	3.1148	1.440

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 7845 DST#2 Mandy Jo #1-8 Amoco Prod. Comp.

DATE: 04/23/96

TIME: 07:38:34

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
62.00	1202.8	815.8	139.09	3.0806	1.447
63.00	1205.6	818.6	139.07	3.0476	1.454
64.00	1208.5	821.5	139.04	3.0156	1.460
65.00	1211.2	824.3	139.04	2.9846	1.467
66.00	1213.9	826.9	138.96	2.9545	1.474
67.00	1216.5	829.5	139.00	2.9254	1.480
68.00	1219.2	832.2	138.98	2.8971	1.486
69.00	1221.8	834.8	138.94	2.8696	1.493
70.00	1224.2	837.3	138.92	2.8429	1.499
71.00	1226.8	839.8	138.91	2.8169	1.505
72.00	1229.2	842.2	138.88	2.7917	1.511
73.00	1231.7	844.7	138.87	2.7671	1.517
74.00	1234.0	847.0	138.84	2.7432	1.523
75.00	1236.3	849.3	138.83	2.7200	1.529
76.00	1238.7	851.7	138.81	2.6974	1.534
77.00	1240.9	854.0	138.80	2.6753	1.540
78.00	1243.1	856.1	138.78	2.6538	1.545
79.00	1245.3	858.3	138.77	2.6329	1.551
80.00	1247.6	860.6	138.75	2.6125	1.556
81.00	1249.8	862.8	138.75	2.5926	1.562
82.00	1251.8	864.8	138.73	2.5732	1.567
83.00	1253.9	866.9	138.71	2.5542	1.572
84.00	1255.9	868.9	138.70	2.5357	1.577
85.00	1258.0	871.0	138.69	2.5176	1.583
86.00	1260.0	873.0	138.68	2.5000	1.588
87.00	1261.9	874.9	138.67	2.4828	1.592
88.00	1263.9	877.0	138.66	2.4659	1.598
89.00	1265.9	878.9	138.64	2.4494	1.602
90.00	1267.7	880.7	138.62	2.4333	1.607
91.00	1269.7	882.7	138.62	2.4176	1.612
92.00	1271.4	884.4	138.60	2.4022	1.616
93.00	1273.3	886.4	138.60	2.3871	1.621
94.00	1275.2	888.2	138.57	2.3723	1.626
95.00	1277.0	890.0	138.57	2.3579	1.631
96.00	1278.8	891.8	138.55	2.3438	1.635
97.00	1280.6	893.6	138.53	2.3299	1.640
98.00	1282.3	895.3	138.52	2.3163	1.644
99.00	1284.0	897.0	138.51	2.3030	1.649
100.00	1285.8	898.8	138.49	2.2900	1.653
101.00	1287.4	900.4	138.49	2.2772	1.657
102.00	1289.1	902.1	138.47	2.2647	1.662
103.00	1290.7	903.7	138.44	2.2524	1.666
104.00	1292.4	905.4	138.46	2.2404	1.670
105.00	1294.0	907.0	138.44	2.2286	1.674
106.00	1295.7	908.7	138.42	2.2170	1.679
107.00	1297.3	910.3	138.41	2.2056	1.683
108.00	1298.7	911.7	138.41	2.1944	1.687
109.00	1300.4	913.4	138.41	2.1835	1.691
110.00	1301.9	914.9	138.38	2.1727	1.695
111.00	1303.4	916.4	138.37	2.1622	1.699
112.00	1304.9	917.9	138.36	2.1518	1.703

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 7845 DST#2 Mandy Jo #1-8 Amoco Prod. Comp.

DATE: 04/23/96 TIME: 07:38:34

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	113.00	1306.4	919.4	138.35	2.1416	1.707
	114.00	1307.9	920.9	138.35	2.1316	1.711
	115.00	1309.3	922.4	138.34	2.1217	1.714
	116.00	1310.8	923.8	138.35	2.1121	1.718
	117.00	1312.2	925.2	138.33	2.1026	1.722
	118.00	1313.6	926.6	138.32	2.0932	1.726
***** End Shut-in 2	119.00	1315.1	928.2	138.31	2.0840	1.730
***** Final Hydro.	475.00	2479.4	0.0	136.87		

*** TOOL DIAGRAM *** CONV. STRADDLE

WELL NAME: Mandy Jo #1-8

LOCATION : 8-30S-39W, Stanton Cty KS

TICKET No. 7845 D.S.T. No. 2 DATE 4-23-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL 39

BOTTOM PACKERS AND ANCHOR 24

TOTAL TOOL 93

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 5 Single Total 309

TOTAL ASSEMBLY 402

D.C. ABOVE TOOLS.Stands12 Single Total 724

D.P. ABOVE TOOLS.Stands78 Single Total 4871

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5997

TOTAL DEPTH 5983

TOTAL DRILL PIPE ABOVE K.B. 14

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -

Water 4000 ml, Pressure 225 PSI,

Total 4000 ml

SAMPLER ANALYSIS -

Resist .299 ohms @ 74.9 F, Chlor 22000 ppm

PIT MUD ANALYSIS -

Chlorides 850, LCM 13#

PIPE RECOVERY -

T-Resist .436 ohms @ 84.1 F, Chlor 12000 ppm

M-Resist .284 ohms @ 78.2 F, Chlor 20000 ppm

B-Resist .272 ohms @ 72.5 F, Chlor 24000 ppm

P.O. SUB 1ft	5491
C.O. SUB	
S.I. TOOL 5ft	5497
3ft Sampler	5500
HMV 5ft	5505
JARS 5ft	5510
SAFETY JOINT 2ft	5512
PACKER 5ft	5516
PACKER 5ft	5521
DEPTH 5521	
STUBB 1ft	5522
ANCHOR	
2ft perf	5524
Alpine Recorder	5525
6ft pick up sub	5530
25ft perf	5555
1ft blank off sub	5556
AK-1 recorder	5556
T.C.	
DEPTH	
PACKER 5ft	5560
PACKER 5ft	5565
1ft stubb	5566
11ft perf	5577
1ft c-o sub	5578
309ft drlg pipe	5887
1ft c-o sub	5888
1ft hanger sub	5889
1ft perf	5890
AK-1 Rec.	5890
BULLNOSE 3ft bull plug	
T.D.	5893

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 7845

Well Name & No. <u>Mandy 50 #1-8</u>	Test No. <u>2</u>	Date <u>4-23-96</u>
Company <u>Amoco Prod. Corp.</u>	Zone Tested <u>Morrow</u>	
Address <u>P.O. Box 800 Room 924 Denver, CO 80201</u>	Elevation <u>3218 ft.</u>	
Co. Rep./Geo. <u>Ken LeBlanc</u>	Cont. <u>Cheyenne Rig #7</u>	Est. Ft. of Pay <u>80'</u>
Location: Sec. <u>8</u>	Twp. <u>30.5</u>	Rge. <u>39W</u>
Co. <u>Stanton</u>	State <u>KS</u>	
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____
Yes _____	No _____	Evaluation _____

Interval Tested <u>5521 - 5560</u>	Drill Pipe Size <u>4 1/2" X-Hole</u>
Anchor Length <u>39'</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>5516</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>5565</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5893</u>	Drill Collar — 2.25 Ft. Run <u>724'</u>
Mud Wt. <u>8.6</u> lb/gal.	Viscosity <u>74</u> Filtrate <u>2.0</u>

Tool Open @ 11:02 AM Initial Blow Fair blow Built to 5 1/2 in.
T.S.I. Bkd off 2 in. No blow back.
 Final Blow Surface blow Built to B.O.B. in 80 min.
F.S.I. Bkd off 2 in. No Blow Back

Recovery — Total Feet <u>785</u>	Feet of Gas In Pipe _____	Flush Tool? <u>NO</u>
Rec. <u>275</u> Feet Of <u>Muddy Water</u>	%gas _____ %oil _____ %water <u>50</u> %mud <u>50</u>	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. <u>449</u> Feet Of <u>Watery mud</u>	%gas _____ %oil _____ %water <u>75</u> %mud <u>25</u>	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT <u>128</u> °F Gravity <u>72.5</u> API @ _____ °F Corrected Gravity _____ API
RW <u>.272</u> @ <u>72.5</u> Chlorides <u>24,000</u> ppm Recovery Chlorides <u>850</u> ppm System
(A) Initial Hydrostatic Mud <u>2655</u> <u>2696</u> PSI AK1 Recorder No. <u>1 Bm</u> Range <u>4995</u>
(B) First Initial Flow Pressure <u>116</u> <u>129</u> PSI @ (depth) <u>5525</u> w/Clock No. <u>Electronic</u>
(C) First Final Flow Pressure <u>134</u> <u>140</u> PSI AK1 Recorder No. <u>2836</u> Range <u>1055</u>
(D) Initial Shut-In Pressure <u>1525</u> <u>1529</u> PSI @ (depth) <u>5556</u> w/Clock No. <u>23935</u>
(E) Second Initial Flow Pressure <u>179</u> <u>215</u> PSI AK1 Recorder No. <u>2836</u> Range <u>4075</u>
(F) Second Final Flow Pressure <u>386</u> <u>441</u> PSI @ (depth) <u>5889</u> w/Clock No. <u>30416</u>
(G) Final Shut-In Pressure <u>1315</u> <u>1367</u> PSI Initial Opening <u>10 min</u> Test <u>Straddle 700</u>
(H) Final Hydrostatic Mud <u>2479</u> <u>2574</u> PSI Initial Shut-In <u>60 min</u> Jars <u>2.00</u>

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

Final Flow <u>180 min</u>	Safety Joint <u>50</u>
Final Shut-In <u>120 min</u>	Straddle <u>250</u>
	Circ. Sub <u>N/C</u>
	Sampler <u>2.00</u>
	Extra Packer <u>2300</u>
	Other <u>Electronic Rec 150</u>
	TOTAL PRICE \$ <u>1850</u>

Approved By _____
 Our Representative Mick Coleman

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. #7848 Date 4-23-96
Company Name Amoco Prod. Comp.
Lease ~~W~~ Mandy 50th S-8 Test No. 2st #2
County Stanton Sec. 8 Twp. 30S Rng. 39W

SAMPLER RECOVERY

Gas _____ ML
Oil _____ ML
Mud _____ ML
Water 4,000 ML
Other _____ ML
Pressure 225 PSI
Total 4,000 ML

PIT MUD ANALYSIS

Chlorides 850 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 74
Mud Weight 8.6
Filtrate 7.0
Other LCM 13th

SAMPLER ANALYSIS

Resistivity .299 ohms @ 74.9 F
Chlorides 22,000 ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity .436 ohms @ 84.1 F
Chlorides 12,000 ppm.

MIDDLE
Resistivity .284 ohms @ 78.2 F
Chlorides 20,000 ppm.

BOTTOM
Resistivity .272 ohms @ 72.5 F
Chlorides 24,000 ppm.