WELL NAME:	Graber #2
COMPANY:	Messenger Petroleum Inc.
LOCATION:	1-31S-7W
	Harper County Kansas
DATE:	09/04/97

TRILOBITE TESTING L.L.C.

OPERATOR : Messenger Petroleum Inc DATE 9/1/97
WELL NAME: Graber #2 KB 1598.00 ft TICKET NO: 10042 DST #1
LOCATION : 1-31S-7W Harper KS GR 1589.00 ft FORMATION: Miss.
INTERVAL : 4323.00 To 4342.00 ft TD 4342.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	10332	10332	2353		
SI 30	Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0
SF 60	Clock(hrs)	12hr.	12hr.	Elec		
FS 60	Depth(ft)	4338.0	4338.0	4330.0	0.0	0.0

TIME DATA----------
PF Fr. 0504 to 0534 hr
IS Fr. 0534 to 0604 hr
SF Fr. 0604 to 0704 hr
FS Fr. 0704 to 0804 hr

	Field	1	2	3	4
A. Init Hydro	2218.0	0.0	2151.0	0.0	0.0
B. First Flow	142.0	0.0	112.0	0.0	0.0
B1. Final Flow	101.0	0.0	95.0	0.0	0.0
C. In Shut-in	1206.0	0.0	1226.0	0.0	0.0
D. Init Flow	81.0	0.0	68.0	0.0	0.0
E. Final Flow	91.0	0.0	94.0	0.0	0.0
F. Fl Shut-in	1155.0	0.0	1218.0	0.0	0.0
G. Final Hydro	2058.0	0.0	2082.0	0.0	0.0
Inside/Outside	O		I		

T STARTED 0100 hr
T ON BOTM 0450 hr
T OPEN 0504 hr
T PULLED 0804 hr
T OUT 0930 hr

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

Tool Wt.	2100.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	105000.00 lbs
Initial Str Wt	62000.00 lbs
Unseated Str Wt	63000.00 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	3769.00 ft

RECOVERY
Tot Fluid 200.00 ft of 200.00 ft in DC and 0.00 ft in DP
3569.00 ft of Gas In Pipe
140.00 ft of Gassy Slightly Watery Mud
0.00 ft of 1%gas 4%water 95%mud
60.00 ft of Gassy Heavy Water Cut Mud
0.00 ft of 4%gas 32%water 64%mud
0.00 ft of
0.00 ft of
0.00 ft of RW .6 @ 81F
SALINITY 9000.00 P.P.M. A.P.I. Gravity 0.00

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

Mud Type	Chemical
Weight	9.10 lb/c
Vis.	61.00 S/L
W.L.	10.20 in3
F.C.	2.32 in
Mud Drop	N
Amt. of fill	0.00 ft
Btm. H. Temp.	134.00 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	Darren Amerine
Co. Rep.	Jon F.Messenger
Contr.	Sterling
Rig #	4
Unit #	
Pump T.	

BLOW DESCRIPTION
Initial Flow:
Strong blow bottom of bucket in 4 mins
Gas to Surface in 12 mins

Initial Shut In:
Bled down for 5 mins, no blow back

Final Flow:
Strong blow, gauge gas, sample taken
at 40 mins

Final Shut In:
Bled down for 5 mins, No blow back

SAMPLES: Caraway Analytical
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Graber #2

LOCATION : 1-31S-7W Harper KS

TICKET No. 10042 D.S.T. No. 1 DATE 9/1/97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 26

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 18

TOTAL TOOL 44

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 44

D.C. ABOVE TOOLS.Stands9 Single Total 544

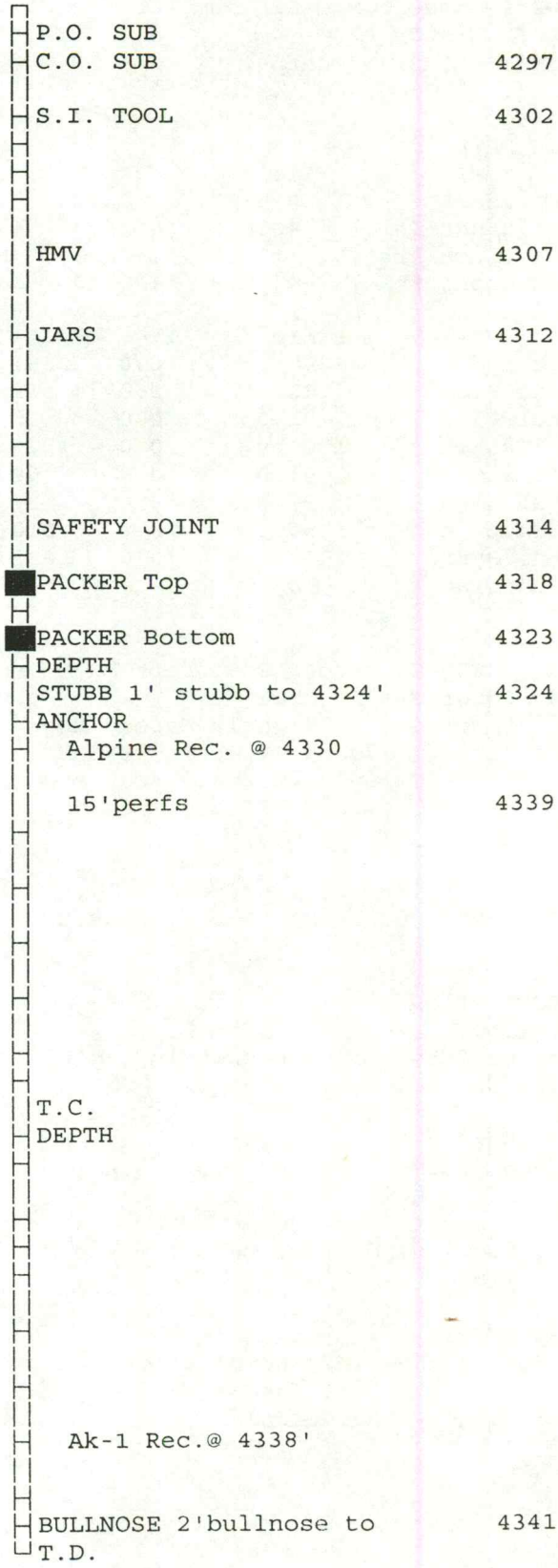
D.P. ABOVE TOOLS.Stands60 Single 1 Total 3769

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4357

TOTAL DEPTH 4341

TOTAL DRILL PIPE ABOVE K.B. ..... 16'

REMARKS:



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, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 316-624-5389
Fax: 316-626-7108

Lab Number:	972572	Analyzed:	09/04/97
Sample From:	Graber #2 DST 1	Pressure:	
Producer:	Messenger Petorleum	Temperature:	
Date:		Location:	1-31-17
Time:		County:	Harper
Sampler:		State:	Kansas
Source:		Formation:	Miss

		Mole %	GPM
Helium	He:	0.370	0.000
Hydrogen	H2:	0.009	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	7.668	0.000
Carbon Dioxide	CO2:	0.201	0.000
Methane	C1:	78.828	0.000
Ethane	C2:	7.007	1.874
Propane	C3:	3.367	0.928
Iso Butane	iC4:	0.422	0.138
Normal Butane	nC4:	1.074	0.339
Iso Pentane	iC5:	0.237	0.087
Normal Pentane	nC5:	0.316	0.114
Hexanes Plus	C6+:	0.501	0.219
	TOTAL:	100.000	3.698
	Z Fact:	0.9973	
	SP.GR.:	0.6983	
	BTU (SAT):	1087.8 @ 14.73 psia	
	BTU (DRY):	1107.0 @ 14.73 psia	
	OCTANE RATING:	114.8	

COMMENTS:

0.000

GAS RECOVERY

COMPANY: Messenger Petroleum Inc DATE: 9/1/97
WELL NAME: Graber #2 KB Elev: 1598.00 ft TICKET #10042 DST #1
WELL LOCATION: 1-31S-7W Harper KS GR Elev: 1589.00 ft FORMATION: Miss.
INTERVAL Fr.: 4323.00 To 4342.00 T.D.: 4342.00 ft TEST TYPE: CONV

GAS RECOVERY MEASURED WITH Adj.Choke

***** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
15	0.75	0	18	60200.0
20	0.75	0	19	61900.0
25	0.75	0	20	63500.0
30	0.75	0	24	69500.0

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	0.75	0	48	98400.0
10	0.75	0	40	89800.0
15	0.75	0	39	88000.0
20	0.75	0	40	89800.0
25	0.75	0	41	90500.0
30	0.75	0	42	92000.0
35	0.75	0	44	94000.0
40	0.75	0	44	94000.0
45	0.75	0	46	96300.0
50	0.75	0	50	100000.0
55	0.75	0	50	100000.0
60	0.75	0	50	100000.0

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	223.00	2151.0	0.0	123.14		
****** Start Flow 1	0.00	112.0	0.0	125.30		
	0.25	118.9	6.9	125.36		
	0.50	118.6	6.5	125.42		
	0.75	119.6	7.6	125.47		
	1.00	119.2	7.1	125.53		
	1.25	126.5	14.4	125.59		
	1.50	127.0	14.9	125.65		
	1.75	133.4	21.3	125.70		
	2.00	137.4	25.3	125.76		
	2.25	140.0	27.9	125.82		
	2.50	139.6	27.6	125.88		
	2.75	139.1	27.0	125.93		
	3.00	137.7	25.7	126.00		
	3.25	136.1	24.1	126.05		
	3.50	133.3	21.2	126.10		
	3.75	131.3	19.3	126.16		
	4.00	130.2	18.1	126.22		
	4.25	127.2	15.2	126.26		
	4.50	127.4	15.4	126.32		
	4.75	142.2	30.2	126.38		
	5.00	170.9	58.8	126.43		
	5.25	171.3	59.3	126.48		
	5.50	175.1	63.1	126.53		
	5.75	181.7	69.7	126.58		
	6.00	184.5	72.5	126.63		
	6.25	185.3	73.3	126.68		
	6.50	165.1	53.0	126.72		
	6.75	135.1	23.1	126.77		
	7.00	110.6	-1.4	126.82		
	7.25	98.3	-13.8	126.87		
	7.50	91.8	-20.2	126.91		
	7.75	83.4	-28.6	126.95		
	8.00	76.2	-35.8	126.98		
	8.25	76.3	-35.8	127.02		
	8.50	77.4	-34.7	127.06		
	8.75	76.4	-35.6	127.10		
	9.00	77.4	-34.7	127.14		
	9.25	79.3	-32.7	127.17		
	9.50	79.9	-32.1	127.20		
	9.75	80.0	-32.1	127.23		
	10.00	83.3	-28.7	127.26		
	10.25	82.7	-29.4	127.28		
	10.50	84.2	-27.9	127.31		
	10.75	82.9	-29.1	127.34		
	11.00	84.1	-27.9	127.36		
	11.25	84.9	-27.1	127.39		
	11.50	83.6	-28.5	127.39		
	11.75	85.2	-26.9	127.42		
	12.00	87.2	-24.8	127.44		
	12.25	86.9	-25.1	127.46		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	12.50	97.5	-14.5	127.47		
	12.75	93.5	-18.5	127.50		
	13.00	92.1	-20.0	127.51		
	13.25	93.4	-18.6	127.52		
	13.50	91.6	-20.5	127.54		
	13.75	94.4	-17.6	127.56		
	14.00	92.3	-19.7	127.56		
	14.25	89.0	-23.1	127.57		
	14.50	87.0	-25.0	127.58		
	14.75	88.5	-23.5	127.59		
	15.00	87.3	-24.8	127.59		
	15.25	91.2	-20.8	127.60		
	15.50	90.6	-21.4	127.61		
	15.75	90.9	-21.1	127.62		
	16.00	87.4	-24.7	127.62		
	16.25	90.7	-21.3	127.62		
	16.50	90.9	-21.1	127.63		
	16.75	91.0	-21.1	127.64		
	17.00	90.6	-21.4	127.63		
	17.25	90.8	-21.2	127.64		
	17.50	89.5	-22.6	127.64		
	17.75	91.3	-20.7	127.64		
	18.00	93.6	-18.5	127.64		
	18.25	89.1	-22.9	127.63		
	18.50	94.6	-17.5	127.63		
	18.75	88.0	-24.0	127.63		
	19.00	88.8	-23.2	127.63		
	19.25	90.1	-21.9	127.63		
	19.50	89.4	-22.7	127.63		
	19.75	89.9	-22.2	127.62		
	20.00	89.8	-22.2	127.61		
	20.25	96.7	-15.4	127.61		
	20.50	94.5	-17.5	127.61		
	20.75	90.8	-21.2	127.60		
	21.00	91.0	-21.1	127.60		
	21.25	93.6	-18.5	127.58		
	21.50	94.7	-17.3	127.58		
	21.75	94.5	-17.5	127.58		
	22.00	93.3	-18.7	127.57		
	22.25	95.2	-16.8	127.56		
	22.50	92.5	-19.6	127.55		
	22.75	90.9	-21.1	127.54		
	23.00	92.1	-20.0	127.53		
****** End Flow 1	23.25	94.7	-17.3	127.53		
****** Start Shutin 1	0.00	94.7	0.0	127.53	0.0000	0.009
	0.25	236.4	141.7	127.51	94.0000	0.056
	0.50	355.8	261.1	127.52	47.5000	0.127
	0.75	457.6	362.9	127.51	32.0000	0.209
	1.00	545.1	450.4	127.51	24.2500	0.297
	1.25	621.1	526.4	127.51	19.6000	0.386
	1.50	687.9	593.1	127.52	16.5000	0.473

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
1.75	746.0	651.3	127.54	14.2857	0.557
2.00	796.8	702.1	127.56	12.6250	0.635
2.25	841.4	746.6	127.58	11.3333	0.708
2.50	880.6	785.8	127.59	10.3000	0.775
2.75	915.1	820.3	127.62	9.4545	0.837
3.00	945.4	850.6	127.65	8.7500	0.894
3.25	972.2	877.5	127.68	8.1538	0.945
3.50	995.9	901.1	127.71	7.6429	0.992
3.75	1016.7	921.9	127.73	7.2000	1.034
4.00	1035.2	940.4	127.76	6.8125	1.072
4.25	1051.6	956.9	127.79	6.4706	1.106
4.50	1066.2	971.5	127.82	6.1667	1.137
4.75	1079.1	984.3	127.84	5.8947	1.164
5.00	1090.5	995.7	127.87	5.6500	1.189
5.25	1100.7	1006.0	127.88	5.4286	1.212
5.50	1109.9	1015.2	127.92	5.2273	1.232
5.75	1118.1	1023.3	127.94	5.0435	1.250
6.00	1125.4	1030.6	127.95	4.8750	1.266
6.25	1132.1	1037.3	127.99	4.7200	1.282
6.50	1138.1	1043.3	128.01	4.5769	1.295
6.75	1143.5	1048.8	128.01	4.4444	1.308
7.00	1148.4	1053.6	128.06	4.3214	1.319
7.25	1152.8	1058.1	128.06	4.2069	1.329
7.50	1156.9	1062.1	128.09	4.1000	1.338
7.75	1160.7	1066.0	128.10	4.0000	1.347
8.00	1164.1	1069.3	128.13	3.9062	1.355
8.25	1167.3	1072.5	128.14	3.8182	1.362
8.50	1170.2	1075.5	128.17	3.7353	1.369
8.75	1172.9	1078.1	128.17	3.6571	1.376
9.00	1175.4	1080.7	128.21	3.5833	1.382
9.25	1177.8	1083.0	128.19	3.5135	1.387
9.50	1179.8	1085.1	128.21	3.4474	1.392
9.75	1181.9	1087.1	128.23	3.3846	1.397
10.00	1183.9	1089.1	128.25	3.3250	1.402
10.25	1185.6	1090.9	128.26	3.2683	1.406
10.50	1187.2	1092.5	128.28	3.2143	1.410
10.75	1188.8	1094.1	128.35	3.1628	1.413
11.00	1190.4	1095.7	128.20	3.1136	1.417
11.25	1191.9	1097.1	128.32	3.0667	1.421
11.50	1193.2	1098.4	128.33	3.0217	1.424
11.75	1194.5	1099.7	128.35	2.9787	1.427
12.00	1195.6	1100.9	128.37	2.9375	1.430
12.25	1196.8	1102.1	128.38	2.8980	1.432
12.50	1198.0	1103.2	128.40	2.8600	1.435
12.75	1198.9	1104.2	128.42	2.8235	1.437
13.00	1200.0	1105.2	128.43	2.7885	1.440
13.25	1200.9	1106.2	128.44	2.7547	1.442
13.50	1201.8	1107.1	128.44	2.7222	1.444
13.75	1202.6	1107.8	128.47	2.6909	1.446
14.00	1203.5	1108.8	128.47	2.6607	1.448
14.25	1204.4	1109.7	128.49	2.6316	1.451

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
14.50	1205.1	1110.4	128.47	2.6034	1.452
14.75	1205.9	1111.1	128.50	2.5763	1.454
15.00	1206.6	1111.9	128.52	2.5500	1.456
15.25	1207.4	1112.6	128.53	2.5246	1.458
15.50	1208.0	1113.3	128.55	2.5000	1.459
15.75	1208.6	1113.9	128.55	2.4762	1.461
16.00	1209.4	1114.6	128.57	2.4531	1.463
16.25	1209.9	1115.1	128.58	2.4308	1.464
16.50	1210.6	1115.8	128.58	2.4091	1.465
16.75	1211.2	1116.4	128.59	2.3881	1.467
17.00	1211.7	1116.9	128.62	2.3676	1.468
17.25	1212.2	1117.4	128.61	2.3478	1.469
17.50	1212.7	1118.0	128.62	2.3286	1.471
17.75	1213.2	1118.4	128.63	2.3099	1.472
18.00	1213.8	1119.0	128.64	2.2917	1.473
18.25	1214.3	1119.5	128.63	2.2740	1.474
18.50	1214.7	1119.9	128.65	2.2568	1.475
18.75	1215.1	1120.4	128.65	2.2400	1.476
19.00	1215.7	1120.9	128.67	2.2237	1.478
19.25	1216.2	1121.4	128.67	2.2078	1.479
19.50	1216.4	1121.7	128.69	2.1923	1.480
19.75	1216.9	1122.1	128.68	2.1772	1.481
20.00	1217.2	1122.5	128.69	2.1625	1.482
20.25	1217.6	1122.9	128.70	2.1481	1.483
20.50	1218.1	1123.4	128.70	2.1341	1.484
20.75	1218.4	1123.6	128.72	2.1205	1.484
21.00	1218.8	1124.0	128.72	2.1071	1.485
21.25	1219.0	1124.3	128.72	2.0941	1.486
21.50	1219.5	1124.7	128.73	2.0814	1.487
21.75	1219.8	1125.1	128.75	2.0690	1.488
22.00	1220.2	1125.5	128.76	2.0568	1.489
22.25	1220.4	1125.6	128.76	2.0449	1.489
22.50	1220.8	1126.1	128.76	2.0333	1.490
22.75	1221.1	1126.4	128.77	2.0220	1.491
23.00	1221.5	1126.7	128.79	2.0109	1.492
23.25	1221.7	1127.0	128.78	2.0000	1.493
23.50	1222.0	1127.2	128.79	1.9894	1.493
23.75	1222.2	1127.5	128.81	1.9789	1.494
24.00	1222.5	1127.7	128.82	1.9688	1.494
24.25	1222.8	1128.1	128.82	1.9588	1.495
24.50	1223.0	1128.2	128.82	1.9490	1.496
24.75	1223.3	1128.6	128.83	1.9394	1.497
25.00	1223.7	1128.9	128.84	1.9300	1.497
25.25	1223.8	1129.1	128.85	1.9208	1.498
25.50	1224.1	1129.3	128.87	1.9118	1.498
25.75	1224.3	1129.6	128.88	1.9029	1.499
26.00	1224.5	1129.8	128.87	1.8942	1.499
26.25	1224.8	1130.0	128.87	1.8857	1.500
26.50	1225.0	1130.3	128.88	1.8774	1.501
26.75	1225.2	1130.4	128.89	1.8692	1.501
27.00	1225.5	1130.8	128.90	1.8611	1.502

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	27.25	1225.7	1130.9	128.91	1.8532	1.502
	27.50	1225.9	1131.2	128.92	1.8455	1.503
	27.75	1225.9	1131.2	128.93	1.8378	1.503
	28.00	1226.3	1131.5	128.92	1.8304	1.504
	28.25	1226.3	1131.6	128.92	1.8230	1.504
	28.50	1226.6	1131.9	128.94	1.8158	1.505
	28.75	1226.8	1132.0	128.95	1.8087	1.505
	29.00	1226.9	1132.2	128.97	1.8017	1.505
	29.25	1227.2	1132.4	128.96	1.7949	1.506
	29.50	1227.4	1132.6	128.97	1.7881	1.506
****** End Shut-in 1	29.75	1227.4	1132.7	128.99	1.7815	1.507
****** Start Flow 2	0.00	67.7	0.0	128.61		
	0.25	69.1	1.3	128.56		
	0.50	68.6	0.9	128.52		
	0.75	67.8	0.1	128.46		
	1.00	68.6	0.8	128.41		
	1.25	68.3	0.6	128.38		
	1.50	71.1	3.4	128.33		
	1.75	68.7	1.0	128.29		
	2.00	70.1	2.3	128.25		
	2.25	70.6	2.9	128.20		
	2.50	71.8	4.1	128.17		
	2.75	71.7	3.9	128.13		
	3.00	72.2	4.4	128.09		
	3.25	73.8	6.0	128.06		
	3.50	73.3	5.6	128.03		
	3.75	74.1	6.4	127.99		
	4.00	75.5	7.8	127.96		
	4.25	75.0	7.3	127.92		
	4.50	74.7	7.0	127.90		
	4.75	78.4	10.7	127.86		
	5.00	76.1	8.4	127.83		
	5.25	76.9	9.1	127.80		
	5.50	78.5	10.8	127.77		
	5.75	77.1	9.4	127.73		
	6.00	78.7	11.0	127.71		
	6.25	77.1	9.4	127.67		
	6.50	79.4	11.7	127.64		
	6.75	79.3	11.6	127.61		
	7.00	80.7	13.0	127.58		
	7.25	79.5	11.7	127.56		
	7.50	80.3	12.6	127.52		
	7.75	80.9	13.2	127.49		
	8.00	81.7	14.0	127.45		
	8.25	80.6	12.9	127.42		
	8.50	81.4	13.7	127.40		
	8.75	81.6	13.8	127.37		
	9.00	82.2	14.5	127.33		
	9.25	82.1	14.4	127.29		
	9.50	82.4	14.7	127.27		
	9.75	82.3	14.6	127.23		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
10.00	81.7	13.9	127.20		
10.25	82.9	15.2	127.16		
10.50	83.2	15.4	127.13		
10.75	82.2	14.5	127.09		
11.00	82.8	15.1	127.07		
11.25	83.9	16.2	127.03		
11.50	82.2	14.5	127.00		
11.75	82.7	14.9	126.97		
12.00	85.2	17.5	126.93		
12.25	81.8	14.1	126.89		
12.50	83.4	15.7	126.86		
12.75	82.7	15.0	126.83		
13.00	83.1	15.4	126.79		
13.25	84.2	16.4	126.75		
13.50	82.1	14.4	126.72		
13.75	83.5	15.8	126.69		
14.00	83.9	16.2	126.66		
14.25	83.8	16.1	126.63		
14.50	82.7	14.9	126.58		
14.75	83.3	15.6	126.55		
15.00	84.0	16.3	126.51		
15.25	82.4	14.7	126.47		
15.50	84.1	16.4	126.44		
15.75	83.6	15.9	126.41		
16.00	83.1	15.4	126.36		
16.25	85.0	17.3	126.32		
16.50	84.0	16.3	126.29		
16.75	84.6	16.9	126.25		
17.00	83.6	15.9	126.21		
17.25	85.8	18.1	126.18		
17.50	84.8	17.0	126.14		
17.75	84.5	16.8	126.11		
18.00	84.4	16.7	126.06		
18.25	84.4	16.7	126.02		
18.50	85.5	17.8	125.99		
18.75	85.0	17.3	125.95		
19.00	85.8	18.0	125.92		
19.25	83.6	15.9	125.87		
19.50	85.7	18.0	125.84		
19.75	85.1	17.4	125.79		
20.00	84.3	16.6	125.76		
20.25	84.9	17.2	125.72		
20.50	84.8	17.1	125.69		
20.75	84.6	16.9	125.64		
21.00	85.3	17.6	125.61		
21.25	86.6	18.9	125.57		
21.50	85.7	18.0	125.53		
21.75	84.3	16.6	125.49		
22.00	85.5	17.8	125.44		
22.25	86.2	18.5	125.41		
22.50	85.6	17.9	125.38		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
22.75	85.5	17.8	125.34		
23.00	86.4	18.7	125.31		
23.25	84.8	17.1	125.25		
23.50	86.4	18.6	125.22		
23.75	86.4	18.7	125.19		
24.00	85.7	18.0	125.15		
24.25	85.6	17.9	125.11		
24.50	85.8	18.0	125.07		
24.75	86.4	18.6	125.03		
25.00	86.1	18.4	124.99		
25.25	85.9	18.2	124.95		
25.50	86.7	19.0	124.93		
25.75	86.5	18.8	124.88		
26.00	86.3	18.5	124.84		
26.25	87.1	19.4	124.81		
26.50	86.8	19.1	124.76		
26.75	87.1	19.4	124.74		
27.00	86.4	18.6	124.70		
27.25	87.3	19.6	124.66		
27.50	86.1	18.4	124.62		
27.75	86.9	19.2	124.58		
28.00	87.8	20.1	124.55		
28.25	86.9	19.1	124.51		
28.50	86.6	18.9	124.48		
28.75	87.2	19.5	124.43		
29.00	87.3	19.6	124.40		
29.25	87.6	19.9	124.36		
29.50	87.9	20.1	124.32		
29.75	87.4	19.6	124.29		
30.00	87.7	20.0	124.25		
30.25	88.4	20.6	124.22		
30.50	87.7	20.0	124.18		
30.75	87.4	19.7	124.14		
31.00	87.6	19.9	124.11		
31.25	87.8	20.1	124.07		
31.50	87.5	19.8	124.03		
31.75	87.9	20.1	124.00		
32.00	87.7	20.0	123.97		
32.25	88.2	20.5	123.93		
32.50	88.3	20.6	123.90		
32.75	88.9	21.1	123.86		
33.00	88.5	20.8	123.83		
33.25	88.4	20.6	123.79		
33.50	88.7	21.0	123.76		
33.75	88.1	20.4	123.72		
34.00	88.9	21.1	123.69		
34.25	89.7	22.0	123.65		
34.50	88.9	21.1	123.61		
34.75	88.6	20.9	123.58		
35.00	90.2	22.5	123.55		
35.25	88.8	21.0	123.52		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
35.50	88.8	21.0	123.49		
35.75	88.8	21.0	123.45		
36.00	88.6	20.9	123.41		
36.25	88.4	20.6	123.39		
36.50	90.0	22.2	123.35		
36.75	88.5	20.7	123.32		
37.00	90.5	22.7	123.29		
37.25	89.1	21.4	123.26		
37.50	89.0	21.2	123.21		
37.75	88.7	21.0	123.19		
38.00	89.2	21.5	123.15		
38.25	90.0	22.2	123.12		
38.50	89.5	21.7	123.09		
38.75	90.4	22.7	123.05		
39.00	91.0	23.2	123.02		
39.25	89.9	22.2	122.99		
39.50	90.2	22.5	122.96		
39.75	90.0	22.3	122.93		
40.00	90.5	22.7	122.90		
40.25	90.5	22.7	122.87		
40.50	91.0	23.2	122.83		
40.75	90.7	23.0	122.80		
41.00	89.8	22.1	122.77		
41.25	91.5	23.8	122.74		
41.50	90.0	22.2	122.71		
41.75	91.1	23.4	122.67		
42.00	90.5	22.8	122.64		
42.25	90.9	23.2	122.61		
42.50	90.9	23.1	122.59		
42.75	90.9	23.1	122.55		
43.00	91.1	23.4	122.52		
43.25	90.8	23.1	122.50		
43.50	91.6	23.8	122.45		
43.75	91.4	23.7	122.43		
44.00	90.6	22.9	122.40		
44.25	91.8	24.1	122.37		
44.50	91.0	23.2	122.35		
44.75	91.6	23.8	122.31		
45.00	91.2	23.5	122.29		
45.25	92.1	24.3	122.25		
45.50	91.3	23.6	122.23		
45.75	91.1	23.4	122.20		
46.00	91.6	23.9	122.18		
46.25	91.9	24.2	122.14		
46.50	91.0	23.2	122.12		
46.75	92.5	24.8	122.09		
47.00	91.6	23.9	122.06		
47.25	92.8	25.1	122.03		
47.50	92.6	24.9	122.00		
47.75	92.1	24.4	121.98		
48.00	92.5	24.8	121.95		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	48.25	92.8	25.1	121.92		
	48.50	93.9	26.2	121.90		
	48.75	92.8	25.1	121.86		
	49.00	94.0	26.3	121.84		
	49.25	92.8	25.1	121.81		
	49.50	92.7	25.0	121.79		
	49.75	93.0	25.3	121.76		
	50.00	92.4	24.7	121.73		
	50.25	93.0	25.3	121.69		
	50.50	94.0	26.3	121.69		
	50.75	93.2	25.5	121.65		
	51.00	92.9	25.2	121.62		
	51.25	93.0	25.3	121.60		
	51.50	93.4	25.7	121.57		
	51.75	94.2	26.5	121.55		
	52.00	93.7	26.0	121.53		
	52.25	93.1	25.3	121.49		
	52.50	93.9	26.2	121.47		
	52.75	92.7	25.0	121.44		
	53.00	94.3	26.6	121.42		
	53.25	93.0	25.3	121.38		
	53.50	93.8	26.1	121.37		
	53.75	93.4	25.7	121.34		
	54.00	93.2	25.5	121.31		
	54.25	94.1	26.4	121.29		
	54.50	93.2	25.5	121.26		
	54.75	93.3	25.6	121.24		
	55.00	94.1	26.4	121.21		
	55.25	93.5	25.8	121.19		
	55.50	94.3	26.6	121.16		
	55.75	93.7	26.0	121.15		
	56.00	93.3	25.6	121.11		
	56.25	93.9	26.2	121.10		
	56.50	93.6	25.8	121.07		
****** End Flow 2	56.75	94.1	26.4	121.04		
****** Start Shutin 2	0.00	94.1	0.0	121.04	0.0000	0.009
	0.25	179.3	85.3	121.02	321.0000	0.032
	0.50	289.8	195.7	121.00	161.0000	0.084
	0.75	384.4	290.3	120.99	107.6667	0.148
	1.00	466.9	372.8	120.99	81.0000	0.218
	1.25	539.5	445.4	121.02	65.0000	0.291
	1.50	603.2	509.1	121.06	54.3333	0.364
	1.75	659.5	565.4	121.11	46.7143	0.435
	2.00	709.3	615.2	121.20	41.0000	0.503
	2.25	753.4	659.3	121.31	36.5556	0.568
	2.50	792.5	698.4	121.44	33.0000	0.628
	2.75	827.1	733.0	121.58	30.0909	0.684
	3.00	857.9	763.8	121.74	27.6667	0.736
	3.25	885.2	791.1	121.93	25.6154	0.784
	3.50	909.3	815.3	122.11	23.8571	0.827
	3.75	931.2	837.1	122.31	22.3333	0.867

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
4.00	950.6	856.6	122.52	21.0000	0.904
4.25	968.0	873.9	122.72	19.8235	0.937
4.50	983.8	889.7	122.93	18.7778	0.968
4.75	997.8	903.7	123.14	17.8421	0.996
5.00	1010.6	916.5	123.35	17.0000	1.021
5.25	1022.1	928.1	123.56	16.2381	1.045
5.50	1032.5	938.4	123.75	15.5455	1.066
5.75	1042.0	947.9	123.96	14.9130	1.086
6.00	1050.7	956.6	124.13	14.3333	1.104
6.25	1058.5	964.4	124.32	13.8000	1.120
6.50	1065.7	971.6	124.48	13.3077	1.136
6.75	1072.3	978.2	124.66	12.8519	1.150
7.00	1078.4	984.3	124.82	12.4286	1.163
7.25	1084.0	989.9	124.98	12.0345	1.175
7.50	1089.3	995.2	125.13	11.6667	1.187
7.75	1094.0	999.9	125.26	11.3226	1.197
8.00	1098.5	1004.4	125.40	11.0000	1.207
8.25	1102.7	1008.6	125.53	10.6970	1.216
8.50	1106.6	1012.5	125.65	10.4118	1.225
8.75	1110.2	1016.1	125.76	10.1429	1.233
9.00	1113.5	1019.5	125.87	9.8889	1.240
9.25	1116.7	1022.7	125.96	9.6486	1.247
9.50	1119.8	1025.7	126.06	9.4211	1.254
9.75	1122.5	1028.5	126.15	9.2051	1.260
10.00	1125.2	1031.1	126.23	9.0000	1.266
10.25	1127.6	1033.6	126.32	8.8049	1.272
10.50	1130.1	1036.0	126.39	8.6190	1.277
10.75	1132.3	1038.3	126.46	8.4419	1.282
11.00	1134.4	1040.4	126.52	8.2727	1.287
11.25	1136.6	1042.6	126.59	8.1111	1.292
11.50	1138.6	1044.5	126.65	7.9565	1.296
11.75	1140.6	1046.5	126.71	7.8085	1.301
12.00	1142.3	1048.3	126.77	7.6667	1.305
12.25	1144.0	1049.9	126.82	7.5306	1.309
12.50	1145.8	1051.7	126.86	7.4000	1.313
12.75	1147.3	1053.2	126.91	7.2745	1.316
13.00	1148.9	1054.8	126.96	7.1538	1.320
13.25	1150.4	1056.3	126.99	7.0377	1.323
13.50	1151.8	1057.7	127.06	6.9259	1.327
13.75	1153.1	1059.0	127.08	6.8182	1.330
14.00	1154.5	1060.4	127.11	6.7143	1.333
14.25	1155.8	1061.8	127.17	6.6140	1.336
14.50	1156.9	1062.9	127.20	6.5172	1.339
14.75	1158.1	1064.0	127.23	6.4237	1.341
15.00	1159.4	1065.3	127.26	6.3333	1.344
15.25	1160.5	1066.4	127.29	6.2459	1.347
15.50	1161.6	1067.6	127.33	6.1613	1.349
15.75	1162.6	1068.5	127.36	6.0794	1.352
16.00	1163.6	1069.5	127.38	6.0000	1.354
16.25	1164.6	1070.5	127.42	5.9231	1.356
16.50	1165.7	1071.6	127.44	5.8485	1.359

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
16.75	1166.7	1072.6	127.46	5.7761	1.361
17.00	1167.5	1073.4	127.48	5.7059	1.363
17.25	1168.4	1074.4	127.50	5.6377	1.365
17.50	1169.3	1075.2	127.54	5.5714	1.367
17.75	1170.1	1076.0	127.55	5.5070	1.369
18.00	1171.0	1076.9	127.59	5.4444	1.371
18.25	1172.0	1077.9	127.60	5.3836	1.373
18.50	1172.6	1078.6	127.60	5.3243	1.375
18.75	1173.5	1079.4	127.64	5.2667	1.377
19.00	1174.1	1080.1	127.65	5.2105	1.379
19.25	1174.9	1080.8	127.66	5.1558	1.380
19.50	1175.7	1081.6	127.68	5.1026	1.382
19.75	1176.4	1082.3	127.70	5.0506	1.384
20.00	1177.0	1082.9	127.71	5.0000	1.385
20.25	1177.8	1083.7	127.71	4.9506	1.387
20.50	1178.4	1084.3	127.73	4.9024	1.389
20.75	1179.1	1085.0	127.75	4.8554	1.390
21.00	1179.7	1085.6	127.76	4.8095	1.392
21.25	1180.3	1086.2	127.77	4.7647	1.393
21.50	1181.0	1086.9	127.78	4.7209	1.395
21.75	1181.6	1087.5	127.79	4.6782	1.396
22.00	1182.1	1088.0	127.80	4.6364	1.397
22.25	1182.6	1088.5	127.82	4.5955	1.399
22.50	1183.2	1089.1	127.83	4.5556	1.400
22.75	1183.8	1089.7	127.84	4.5165	1.401
23.00	1184.4	1090.3	127.85	4.4783	1.403
23.25	1184.8	1090.7	127.86	4.4409	1.404
23.50	1185.4	1091.3	127.86	4.4043	1.405
23.75	1185.9	1091.8	127.88	4.3684	1.406
24.00	1186.3	1092.2	127.89	4.3333	1.407
24.25	1186.9	1092.8	127.90	4.2990	1.409
24.50	1187.4	1093.3	127.91	4.2653	1.410
24.75	1187.7	1093.7	127.92	4.2323	1.411
25.00	1188.4	1094.3	127.94	4.2000	1.412
25.25	1188.9	1094.8	127.95	4.1683	1.414
25.50	1189.2	1095.2	127.96	4.1373	1.414
25.75	1189.8	1095.7	128.01	4.1068	1.416
26.00	1190.2	1096.1	128.09	4.0769	1.417
26.25	1190.6	1096.5	127.98	4.0476	1.418
26.50	1191.1	1097.0	127.88	4.0189	1.419
26.75	1191.4	1097.4	127.82	3.9907	1.420
27.00	1191.9	1097.8	127.96	3.9630	1.421
27.25	1192.3	1098.2	128.02	3.9358	1.422
27.50	1192.7	1098.6	128.03	3.9091	1.423
27.75	1193.0	1099.0	128.04	3.8829	1.423
28.00	1193.4	1099.3	128.05	3.8571	1.424
28.25	1193.9	1099.8	128.06	3.8319	1.425
28.50	1194.3	1100.2	128.07	3.8070	1.426
28.75	1194.6	1100.5	128.08	3.7826	1.427
29.00	1195.0	1100.9	128.09	3.7586	1.428
29.25	1195.3	1101.2	128.09	3.7350	1.429

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
29.50	1195.7	1101.6	128.10	3.7119	1.430
29.75	1196.0	1102.0	128.11	3.6891	1.431
30.00	1196.5	1102.4	128.12	3.6667	1.432
30.25	1196.7	1102.6	128.13	3.6446	1.432
30.50	1197.0	1102.9	128.14	3.6230	1.433
30.75	1197.4	1103.3	128.15	3.6016	1.434
31.00	1197.8	1103.7	128.16	3.5806	1.435
31.25	1198.1	1104.0	128.16	3.5600	1.435
31.50	1198.4	1104.3	128.17	3.5397	1.436
31.75	1198.7	1104.7	128.18	3.5197	1.437
32.00	1199.0	1104.9	128.19	3.5000	1.438
32.25	1199.2	1105.2	128.20	3.4806	1.438
32.50	1199.6	1105.5	128.21	3.4615	1.439
32.75	1200.0	1105.9	128.22	3.4427	1.440
33.00	1200.2	1106.2	128.21	3.4242	1.441
33.25	1200.5	1106.4	128.23	3.4060	1.441
33.50	1200.8	1106.8	128.24	3.3881	1.442
33.75	1201.1	1107.0	128.25	3.3704	1.443
34.00	1201.3	1107.3	128.27	3.3529	1.443
34.25	1201.6	1107.5	128.27	3.3358	1.444
34.50	1201.9	1107.8	128.27	3.3188	1.445
34.75	1202.2	1108.1	128.31	3.3022	1.445
35.00	1202.4	1108.4	128.30	3.2857	1.446
35.25	1202.6	1108.5	128.33	3.2695	1.446
35.50	1202.9	1108.9	128.34	3.2535	1.447
35.75	1203.3	1109.2	128.33	3.2378	1.448
36.00	1203.4	1109.4	128.36	3.2222	1.448
36.25	1203.6	1109.5	128.34	3.2069	1.449
36.50	1204.0	1109.9	128.37	3.1918	1.450
36.75	1204.1	1110.0	128.40	3.1769	1.450
37.00	1204.4	1110.4	128.37	3.1622	1.451
37.25	1204.7	1110.6	128.40	3.1477	1.451
37.50	1204.9	1110.8	128.42	3.1333	1.452
37.75	1205.0	1111.0	128.44	3.1192	1.452
38.00	1205.4	1111.3	128.44	3.1053	1.453
38.25	1205.5	1111.5	128.46	3.0915	1.453
38.50	1205.8	1111.7	128.48	3.0779	1.454
38.75	1206.0	1112.0	128.47	3.0645	1.455
39.00	1206.2	1112.1	128.50	3.0513	1.455
39.25	1206.5	1112.4	128.51	3.0382	1.456
39.50	1206.6	1112.5	128.53	3.0253	1.456
39.75	1206.9	1112.8	128.53	3.0126	1.457
40.00	1207.2	1113.1	128.55	3.0000	1.457
40.25	1207.3	1113.2	128.57	2.9876	1.458
40.50	1207.6	1113.6	128.58	2.9753	1.458
40.75	1207.7	1113.6	128.62	2.9632	1.459
41.00	1207.9	1113.8	128.63	2.9512	1.459
41.25	1208.1	1114.1	128.62	2.9394	1.460
41.50	1208.2	1114.1	128.64	2.9277	1.460
41.75	1208.6	1114.5	128.67	2.9162	1.461
42.00	1208.8	1114.7	128.67	2.9048	1.461

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
42.25	1209.0	1114.9	128.70	2.8935	1.462
42.50	1209.1	1115.1	128.71	2.8824	1.462
42.75	1209.4	1115.3	128.72	2.8713	1.463
43.00	1209.6	1115.5	128.74	2.8605	1.463
43.25	1209.6	1115.5	128.75	2.8497	1.463
43.50	1209.8	1115.7	128.77	2.8391	1.464
43.75	1210.0	1115.9	128.79	2.8286	1.464
44.00	1210.3	1116.2	128.80	2.8182	1.465
44.25	1210.3	1116.2	128.82	2.8079	1.465
44.50	1210.6	1116.5	128.84	2.7978	1.465
44.75	1210.8	1116.7	128.84	2.7877	1.466
45.00	1211.0	1116.9	128.85	2.7778	1.466
45.25	1211.2	1117.1	128.88	2.7680	1.467
45.50	1211.3	1117.2	128.89	2.7582	1.467
45.75	1211.5	1117.4	128.91	2.7486	1.468
46.00	1211.5	1117.4	128.93	2.7391	1.468
46.25	1211.8	1117.8	128.93	2.7297	1.469
46.50	1211.9	1117.8	128.95	2.7204	1.469
46.75	1212.1	1118.0	128.96	2.7112	1.469
47.00	1212.2	1118.2	128.98	2.7021	1.470
47.25	1212.4	1118.3	129.00	2.6931	1.470
47.50	1212.6	1118.5	129.00	2.6842	1.470
47.75	1212.7	1118.7	129.02	2.6754	1.471
48.00	1212.8	1118.8	129.04	2.6667	1.471
48.25	1213.0	1118.9	129.06	2.6580	1.471
48.50	1213.2	1119.1	129.07	2.6495	1.472
48.75	1213.3	1119.2	129.08	2.6410	1.472
49.00	1213.4	1119.3	129.10	2.6327	1.472
49.25	1213.5	1119.4	129.11	2.6244	1.473
49.50	1213.7	1119.6	129.13	2.6162	1.473
49.75	1213.8	1119.8	129.15	2.6080	1.473
50.00	1214.0	1119.9	129.15	2.6000	1.474
50.25	1214.1	1120.0	129.17	2.5920	1.474
50.50	1214.3	1120.2	129.19	2.5842	1.474
50.75	1214.4	1120.4	129.21	2.5764	1.475
51.00	1214.5	1120.4	129.21	2.5686	1.475
51.25	1214.8	1120.7	129.21	2.5610	1.476
51.50	1214.9	1120.9	129.23	2.5534	1.476
51.75	1215.0	1120.9	129.24	2.5459	1.476
52.00	1215.2	1121.1	129.26	2.5385	1.477
52.25	1215.4	1121.3	129.29	2.5311	1.477
52.50	1215.5	1121.4	129.29	2.5238	1.477
52.75	1215.4	1121.4	129.30	2.5166	1.477
53.00	1215.6	1121.5	129.32	2.5094	1.478
53.25	1215.8	1121.7	129.34	2.5023	1.478
53.50	1215.9	1121.9	129.34	2.4953	1.479
53.75	1216.0	1121.9	129.36	2.4884	1.479
54.00	1216.2	1122.1	129.38	2.4815	1.479
54.25	1216.3	1122.2	129.38	2.4747	1.479
54.50	1216.4	1122.3	129.39	2.4679	1.480
54.75	1216.5	1122.5	129.41	2.4612	1.480

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

DATE: 09/02/97 TIME: 01:09:47

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	55.00	1216.7	1122.6	129.42	2.4545	1.480
	55.25	1216.8	1122.7	129.43	2.4480	1.481
	55.50	1216.9	1122.8	129.46	2.4414	1.481
	55.75	1217.0	1123.0	129.47	2.4350	1.481
	56.00	1217.0	1123.0	129.48	2.4286	1.481
	56.25	1217.3	1123.2	129.47	2.4222	1.482
	56.50	1217.4	1123.3	129.49	2.4159	1.482
	56.75	1217.4	1123.3	129.50	2.4097	1.482
	57.00	1217.5	1123.5	129.52	2.4035	1.482
	57.25	1217.7	1123.6	129.54	2.3974	1.483
	57.50	1217.8	1123.7	129.55	2.3913	1.483
	57.75	1218.0	1123.9	129.56	2.3853	1.483
	58.00	1218.0	1124.0	129.57	2.3793	1.484
	58.25	1218.1	1124.0	129.57	2.3734	1.484
****** End Shut-in 2	58.50	1218.1	1124.0	129.58	2.3675	1.484
****** Final Hydro.	403.50	2081.8	0.0	130.68		

TEST HISTORY

Tk#10042 Graber #2 DST#1 Messenger Pet,Inc.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	2150.98
B:	0.00	112.04
C:	23.25	94.75
D:	29.75	1227.44
E:	0.00	67.72
F:	56.75	94.07
G:	58.50	1218.12
Q:	0.00	2081.82

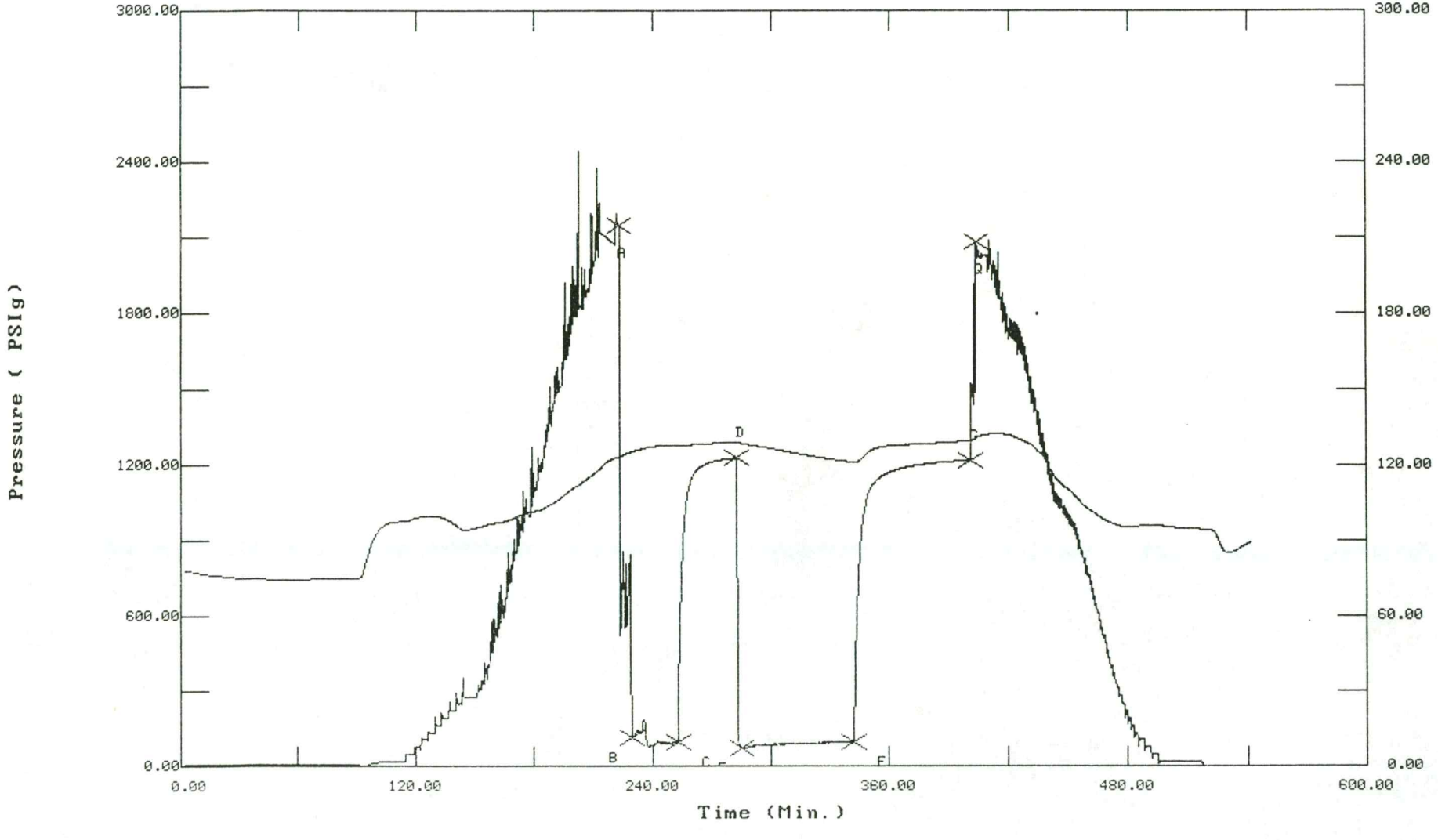
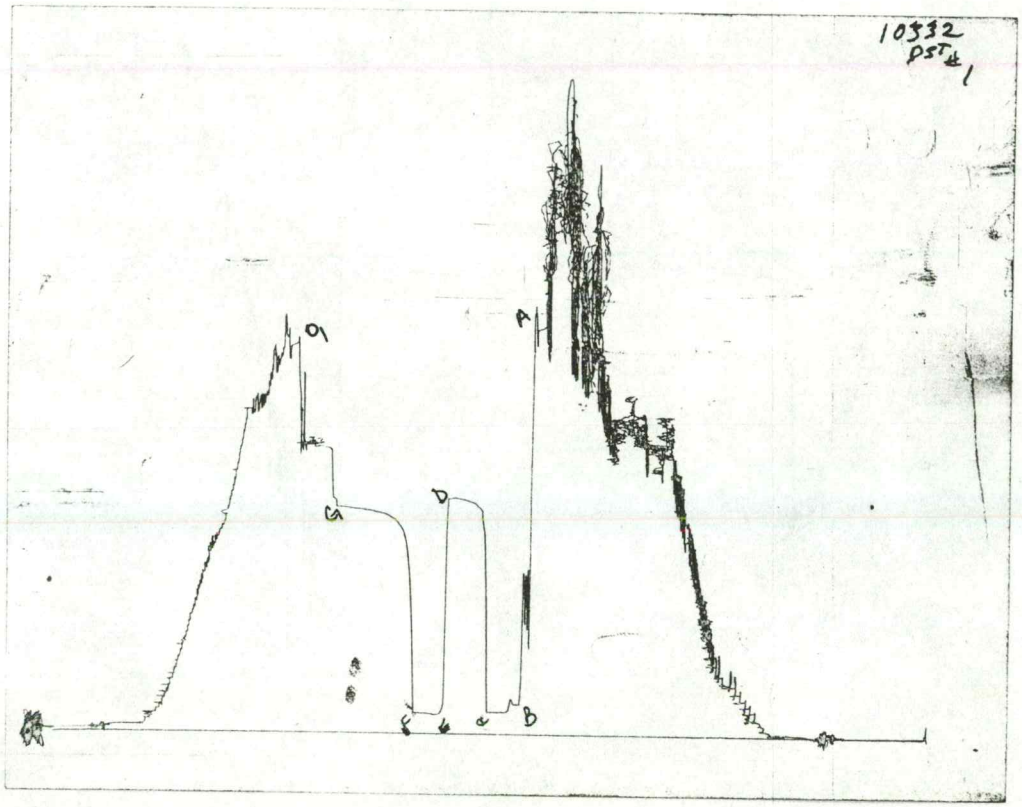


CHART PAGE



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

№ 10042

Well Name & No. Graber #2 Test No. #1 Date 9/1/97

Company Messenger Pet, Inc. Zone Tested Miss

Address 1015 E. Hyw. 54 Kingman, Ks. 67068 Elevation 1586 KB 1589 GL

Co. Rep / Geo. Jon F. Messenger Cont. Sterling #4 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 1 Twp. 31S Rge. 7W Co. Harper State Ks

No. of Copies 5 Distribution Sheet (Y, N) — Turnkey (Y, N) — Evaluation (Y, N) —

Interval Tested 4323' - 4342' Initial Str Wt./Lbs. 62,000 Unseated Str Wt./Lbs. ____

Anchor Length 18' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. ____

Top Packer Depth 4318' Tool Weight 2100

Bottom Packer Depth 4323' Hole Size — 7 7/8" ✓ Rubber Size — 6 3/4" ✓

Total Depth 4342' Wt. Pipe Run ____ Drill Collar Run 544

Mud Wt. 9.1 LCM — Vis. 61 WL 10.2 Drill Pipe Size 4½ XH Ft. Run 3769'

Blow Description IF: Strong blow. B.O.B in 4 mins GTS in 12 mins
1ST: Bled down for 5 mins
FF: Strong blow. Gauge Gas Sample Taken at 40 mins
FSI: Bled down for 5 mins.

Recovery — Total Feet 200 GIP 3569 Ft. in DC 200' Ft. in DP ____

Rec.	120'	Feet Of	SGM	1	%gas	%oil	5	%water 95 %mud
Rec.	60'	Feet Of	SGCWM	4	%gas	%oil	32	%water 64 %mud
Rec.		Feet Of			%gas	%oil		%water %mud
Rec.		Feet Of			%gas	%oil		%water %mud
Rec.		Feet Of			%gas	%oil		%water %mud

BHT 134° °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW .6 @ 81 °F Chlorides 9000 ppm Recovery Chlorides 5000 ppm System

(A) Initial Hydrostatic Mud	2199	2218	PSI	Recorder No. 2350	T-Started	1:00 AM
(B) First Initial Flow Pressure	112	142	PSI	(depth) 4330	T-Open	5:04
(C) First Final Flow Pressure	92	101	PSI	Recorder No. 10332	T-Pulled	8:04
(D) Initial Shut-in Pressure	1226	1206	PSI	(depth) 4338'	T-Out	9:30
(E) Second Initial Flow Pressure	100	81	PSI	Recorder No. ____		
(F) Second Final Flow Pressure	94	91	PSI	(depth) ____		
(G) Final Shut-in Pressure	1218	1155	PSI	Initial Opening 30	Test	✓ 700
(H) Final Hydrostatic Mud	2082	2058	PSI	Initial Shut-in 30	Jars	✓ 200
	Alpine	AK-1		Final Flow 60	Safety Joint	✓ 50
				Final Shut-in 60	Straddle	____
					Circ. Sub	____
					Sampler	____
					Extra Packer	____
					Elect. Rec.	✓ 150
					Other	____
					TOTAL PRICE $	1100

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

Approved By Jon F Messenger

Our Representative Darren Shreve

TRILOBITE TESTING

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

GAS VOLUME REPORT

Messenger Pet, Inc. (OPERATOR) | Graber #2 (WELL NAME AND NO.) | #1 (DST NO.)

Miss

Min.	Ins. of Water PSIG	Orifice Size	MCF/D	Min.	Ins. of Water PSIG	Orifice Size	MCF/D
5	18 in	3/4	60,200				
0	19 in	3/4	61,900				
5	20 in	3/4	63,500				
0	24 in	3/4	69,500				
2nd	Flow Period						
5	48 in	3/4	98,400				
0	40 in	3/4	89,800				
5	39 in	3/4	88,000				
0	40 in	3/4	89,800				
5	41 in	3/4	90,500				
0	42 in	3/4	92,000				
5	44 in	3/4	94,000				
0	44 in	3/4	94,000				
5	46 in	3/4	96,300				
0	50 in	3/4	100,000				
5	50 in	3/4	100,000				
	50 in	3/4	100,000				

Remarks:

NCR

TRILOBITE TESTING L.L.C.

OPERATOR : Messenger Petroleum Inc — DATE 9/2/97
WELL NAME: Graber #2 — KB 1598.00 ft — TICKET NO: 10043 DST #2
LOCATION : 1-31S-7W Harper KS — GR 1589.00 ft — FORMATION: Mississippi
INTERVAL : 4340.00 To 4352.00 ft — TD 4352.00 ft — TEST TYPE: CONV

RECORDER DATA

Mins			Field	1	2	3	4
PF	30	Rec.	10332	10332	2353		
SI	30	Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0
SF	60	Clock(hrs)	12hr.	12hr.	Elec		
FS	60	Depth(ft)	4349.0	4349.0	4347.0	0.0	0.0

TIME DATA----------
PF Fr. 1813 to 1843 hr
IS Fr. 1843 to 1913 hr
SF Fr. 1913 to 2013 hr
FS Fr. 2013 to 2113 hr

	Field	1	2	3	4
A. Init Hydro	2178.0	2175.0	2143.0	0.0	0.0
B. First Flow	91.0	117.0	55.0	0.0	0.0
B1. Final Flow	111.0	117.0	85.0	0.0	0.0
C. In Shut-in	1196.0	1215.0	1201.0	0.0	0.0
D. Init Flow	101.0	146.0	89.0	0.0	0.0
E. Final Flow	132.0	146.0	111.0	0.0	0.0
F. Fl Shut-in	1196.0	1219.0	1203.0	0.0	0.0
G. Final Hydro	2068.0	2069.0	2087.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 1633 hr
T ON BOTM 1810 hr
T OPEN 1813 hr
T PULLED 2113 hr
T OUT 2300 hr

RECOVERY
Tot Fluid 320.00 ft of 320.00 ft in DC and 0.00 ft in DP
120.00 ft of Gassy Slight Oil and Water Cut Mud
0.00 ft of 8%gas 8%oil 20%water 64%mud
80.00 ft of Gassy Slight Oil and Mud Cut Water
0.00 ft of 12%gas 6%oil 34%mud 54%water
60.00 ft of Gassy Oil Mud Cut Water
0.00 ft of 20%gas 10%oil 10%mud 60%water
60.00 ft of Gassy Salt Water
0.00 ft of 4%gas 96%water trace oil
SALINITY 22000.00 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	70000.00 lbs
Initial Str Wt	62000.00 lbs
Unseated Str Wt	63000.00 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	3799.00 ft

BLOW DESCRIPTION
Initial Flow:.
Strong blow, Gas to surface in 7 mins

Initial Shut In:
Bled down for 5 mins, No blow back

Final Flow:
Strong blow, Gauge gas

Final Shut In:
Bled down for 5 mins, Very slight blow back

SAMPLES: Caraway analytical L.L.C.
SENT TO:Liberal,Ks.67901

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

Mud Type	Chemical
Weight	9.10 lb/c
Vis.	80.00 S/L
W.L.	10.40 in3
F.C.	2.32 in
Mud Drop	N
Amt. of fill	0.00 ft
Btm. H. Temp.	130.00 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	Darren Amerine
Co. Rep.	Jon F.Messenger
Contr.	Sterling
Rig #	4
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Graber #2

LOCATION : 1-31S-7W Harper KS

TICKET No. 10043 D.S.T. No. 2 DATE 9/2/97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 12

TOTAL TOOL 39

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 39

D.C. ABOVE TOOLS.Stands9 Single Total 544

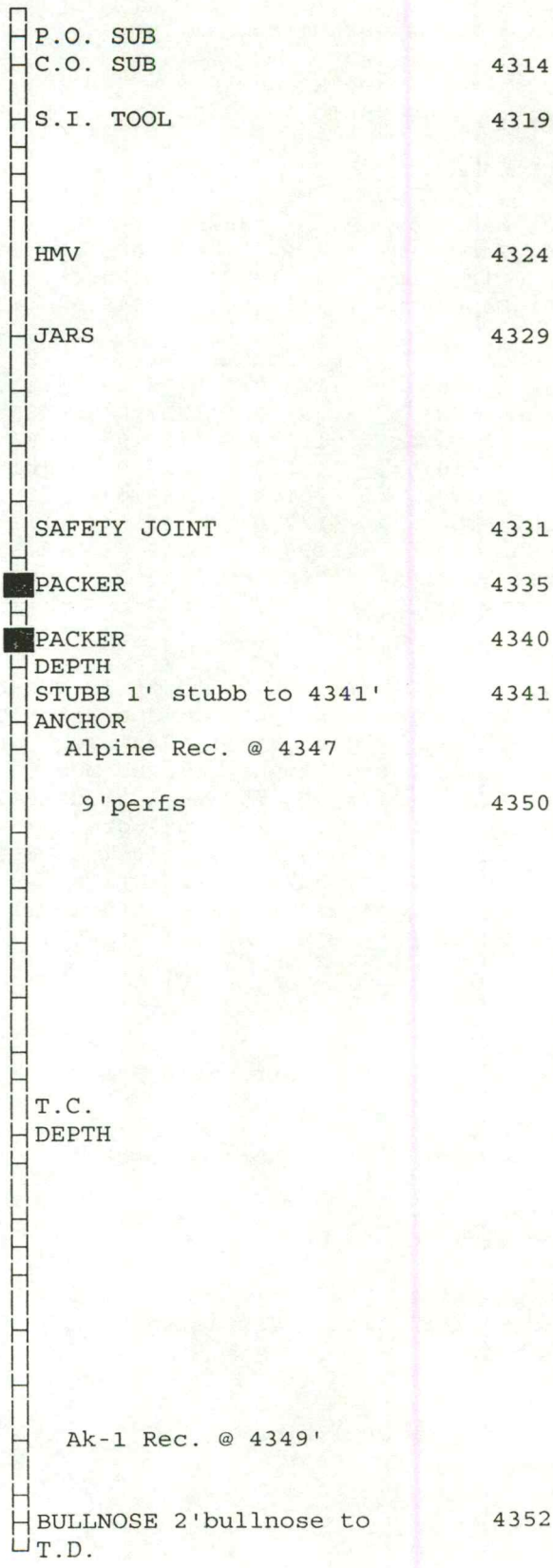
D.P. ABOVE TOOLS.Stands61 Single Total 3799

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4381

TOTAL DEPTH 4352

TOTAL DRILL PIPE ABOVE K.B. ..... 29'

REMARKS:



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, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 316-624-5389
Fax: 316-626-7108

Lab Number:	972573	Analyzed:	09/04/97
Sample From:	Graber #2 DST 2	Pressure:	
Producer:	Messenger Petorleum	Temperature:	
Date:		Location:	1-31-17
Time:		County:	Harper
Sampler:		State:	Kansas
Source:		Formation:	Miss

		Mole %	GPM
Helium	He:	0.354	0.000
Hydrogen	H2:	0.000	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	7.419	0.000
Carbon Dioxide	CO2:	0.130	0.000
Methane	C1:	78.526	0.000
Ethane	C2:	7.165	1.916
Propane	C3:	3.504	0.966
Iso Butane	iC4:	0.446	0.146
Normal Butane	nC4:	1.154	0.364
Iso Pentane	iC5:	0.263	0.096
Normal Pentane	nC5:	0.357	0.129
Hexanes Plus	C6+:	0.682	0.298
	TOTAL:	100.000	3.915
	Z Fact:	0.9972	
	SP.GR.:	0.7064	
	BTU (SAT):	1106.2 @ 14.73 psia	
	BTU (DRY):	1125.8 @ 14.73 psia	
	OCTANE RATING:	114.9	

COMMENTS: 0.000

GAS RECOVERY

COMPANY: Messenger Petroleum Inc DATE: 9/2/97
WELL NAME: Graber #2 KB Elev: 1598.00 ft TICKET #10043 DST #2
WELL LOCATION: 1-31S-7W Harper KS GR Elev: 1589.00 ft FORMATION: Mississippi
INTERVAL Fr.: 4340.00 To 4352.00 T.D.: 4352.00 ft TEST TYPE: CONV

GAS RECOVERY MEASURED WITH Adj.Choke

***** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
10	0.75	0	20	63500.0
15	0.75	0	24	69500.0
20	0.75	0	24	69500.0
25	0.75	0	26	72400.0
30	0.75	0	28	75100.0

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
10	0.75	0	46	96300.0
20	0.75	0	36	85200.0
30	0.75	0	36	85200.0
40	0.75	0	36	85200.0
50	0.75	0	36	85200.0
60	0.75	0	36	85200.0

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TK#10043 Graber #2 DST#2 Messenger Pe, Inc.

DATE: 09/02/97 TIME: 16:20:08

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	97.50	2143.4	0.0	116.38		
****** Start Flow 1	0.00	54.7	0.0	116.46		
	0.75	52.6	-2.1	116.70		
	1.50	54.0	-0.8	117.07		
	2.25	55.0	0.3	117.57		
	3.00	56.2	1.5	118.14		
	3.75	58.2	3.4	118.73		
	4.50	59.8	5.1	119.27		
	5.25	61.3	6.6	119.77		
	6.00	63.0	8.3	120.21		
	6.75	64.9	10.2	120.59		
	7.50	66.1	11.4	120.94		
	8.25	67.7	13.0	121.23		
	9.00	68.9	14.2	121.49		
	9.75	68.5	13.8	121.72		
	10.50	69.2	14.5	121.92		
	11.25	68.6	13.8	122.10		
	12.00	69.6	14.9	122.25		
	12.75	70.2	15.5	122.37		
	13.50	70.6	15.9	122.48		
	14.25	71.2	16.4	122.59		
	15.00	71.6	16.9	122.68		
	15.75	73.5	18.8	122.76		
	16.50	73.4	18.7	122.82		
	17.25	73.8	19.1	122.87		
	18.00	74.4	19.7	122.92		
	18.75	75.3	20.6	122.97		
	19.50	75.3	20.6	122.99		
	20.25	74.9	20.2	123.03		
	21.00	76.4	21.7	123.05		
	21.75	77.0	22.2	123.07		
	22.50	77.5	22.7	123.09		
	23.25	78.2	23.5	123.10		
	24.00	79.1	24.4	123.12		
	24.75	79.1	24.4	123.12		
	25.50	79.9	25.2	123.14		
	26.25	81.1	26.4	123.15		
	27.00	81.8	27.1	123.15		
	27.75	82.9	28.2	123.17		
	28.50	83.3	28.6	123.17		
****** End Flow 1	29.25	85.0	30.3	123.17		
****** Start Shutin 1	0.00	85.0	0.0	123.17	0.0000	0.007
	0.75	261.6	176.6	123.18	40.0000	0.068
	1.50	556.9	471.8	123.23	20.5000	0.310
	2.25	719.8	634.8	123.35	14.0000	0.518
	3.00	822.0	737.0	123.49	10.7500	0.676
	3.75	892.6	807.6	123.66	8.8000	0.797
	4.50	943.2	858.2	123.80	7.5000	0.890
	5.25	981.2	896.2	123.93	6.5714	0.963
	6.00	1010.9	925.9	124.07	5.8750	1.022
	6.75	1034.8	949.8	124.14	5.3333	1.071

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TK#10043 Graber #2 DST#2 Messenger Pe, Inc.

DATE: 09/02/97 TIME: 16:20:08

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	7.50	1054.5	969.5	124.24	4.9000	1.112
	8.25	1070.9	985.9	124.32	4.5455	1.147
	9.00	1084.8	999.8	124.39	4.2500	1.177
	9.75	1096.8	1011.8	124.47	4.0000	1.203
	10.50	1107.3	1022.2	124.55	3.7857	1.226
	11.25	1116.4	1031.4	124.64	3.6000	1.246
	12.00	1124.5	1039.4	124.75	3.4375	1.264
	12.75	1131.7	1046.7	124.88	3.2941	1.281
	13.50	1138.1	1053.1	125.03	3.1667	1.295
	14.25	1144.0	1059.0	125.21	3.0526	1.309
	15.00	1149.3	1064.3	125.40	2.9500	1.321
	15.75	1154.1	1069.1	125.60	2.8571	1.332
	16.50	1158.4	1073.4	125.80	2.7727	1.342
	17.25	1162.6	1077.6	125.99	2.6957	1.352
	18.00	1166.4	1081.4	126.15	2.6250	1.361
	18.75	1169.9	1084.9	126.34	2.5600	1.369
	19.50	1173.2	1088.2	126.47	2.5000	1.376
	20.25	1176.2	1091.1	126.61	2.4444	1.383
	21.00	1178.9	1093.9	126.71	2.3929	1.390
	21.75	1181.5	1096.5	126.80	2.3448	1.396
	22.50	1184.0	1099.0	126.85	2.3000	1.402
	23.25	1186.3	1101.3	126.91	2.2581	1.407
	24.00	1188.4	1103.4	126.94	2.2188	1.412
	24.75	1190.5	1105.5	126.96	2.1818	1.417
	25.50	1192.4	1107.3	126.98	2.1471	1.422
	26.25	1193.9	1108.9	127.05	2.1143	1.426
	27.00	1195.7	1110.7	126.76	2.0833	1.430
	27.75	1197.3	1112.3	126.98	2.0541	1.434
	28.50	1198.7	1113.7	126.99	2.0263	1.437
	29.25	1200.2	1115.1	126.99	2.0000	1.440
****** End Shut-in 1	30.00	1200.7	1115.7	126.98	1.9750	1.442
****** Start Flow 2	0.00	89.0	0.0	126.86		
	0.75	81.0	-8.0	126.61		
	1.50	77.8	-11.2	126.34		
	2.25	76.9	-12.1	126.10		
	3.00	77.4	-11.6	125.88		
	3.75	77.6	-11.3	125.67		
	4.50	79.5	-9.5	125.49		
	5.25	81.2	-7.7	125.32		
	6.00	83.3	-5.6	125.17		
	6.75	84.8	-4.1	125.03		
	7.50	87.5	-1.4	124.89		
	8.25	87.9	-1.0	124.79		
	9.00	87.4	-1.5	124.70		
	9.75	87.4	-1.6	124.61		
	10.50	88.4	-0.6	124.54		
	11.25	87.8	-1.2	124.47		
	12.00	88.3	-0.7	124.42		
	12.75	88.7	-0.3	124.37		
	13.50	89.4	0.4	124.33		
	14.25	89.4	0.4	124.29		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TK#10043 Graber #2 DST#2 Messenger Pe, Inc.

DATE: 09/02/97 TIME: 16:20:08

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
15.00	89.1	0.2	124.26		
15.75	89.9	0.9	124.22		
16.50	90.1	1.2	124.20		
17.25	90.9	1.9	124.17		
18.00	90.2	1.3	124.14		
18.75	91.3	2.3	124.12		
19.50	91.6	2.7	124.10		
20.25	92.1	3.1	124.08		
21.00	92.7	3.8	124.07		
21.75	92.9	3.9	124.06		
22.50	93.2	4.3	124.05		
23.25	93.8	4.9	124.04		
24.00	93.9	5.0	124.03		
24.75	94.4	5.5	124.03		
25.50	94.7	5.8	124.03		
26.25	95.4	6.5	124.02		
27.00	95.8	6.8	124.02		
27.75	96.8	7.8	124.02		
28.50	96.7	7.7	124.02		
29.25	97.0	8.1	124.02		
30.00	97.5	8.6	124.02		
30.75	98.2	9.2	124.02		
31.50	98.5	9.6	124.03		
32.25	98.4	9.4	124.03		
33.00	99.0	10.1	124.04		
33.75	99.2	10.2	124.05		
34.50	100.0	11.1	124.05		
35.25	99.9	11.0	124.06		
36.00	100.3	11.3	124.07		
36.75	100.5	11.5	124.07		
37.50	101.3	12.3	124.08		
38.25	101.0	12.1	124.09		
39.00	101.2	12.3	124.11		
39.75	102.2	13.3	124.12		
40.50	102.6	13.6	124.13		
41.25	102.7	13.8	124.14		
42.00	103.4	14.4	124.16		
42.75	104.0	15.0	124.18		
43.50	104.1	15.2	124.18		
44.25	104.4	15.4	124.21		
45.00	104.2	15.3	124.22		
45.75	104.7	15.8	124.24		
46.50	104.7	15.8	124.25		
47.25	105.4	16.4	124.27		
48.00	105.5	16.5	124.30		
48.75	106.4	17.5	124.31		
49.50	106.4	17.5	124.34		
50.25	106.8	17.9	124.34		
51.00	107.1	18.1	124.36		
51.75	107.3	18.4	124.38		
52.50	108.1	19.1	124.40		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TK#10043 Graber #2 DST#2 Messenger Pe, Inc.

DATE: 09/02/97 TIME: 16:20:08

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	53.25	108.4	19.5	124.42		
	54.00	108.7	19.7	124.44		
	54.75	108.8	19.9	124.46		
	55.50	109.8	20.8	124.48		
	56.25	109.3	20.3	124.50		
	57.00	109.9	21.0	124.52		
	57.75	110.4	21.4	124.53		
	58.50	111.2	22.2	124.56		
****** End Flow 2	59.25	111.0	22.1	124.57		
****** Start Shutin 2	0.00	111.0	0.0	124.57	0.0000	0.012
	0.75	430.3	319.3	124.60	119.0000	0.185
	1.50	628.9	517.9	124.67	60.0000	0.396
	2.25	740.9	629.9	124.79	40.3333	0.549
	3.00	814.1	703.1	124.92	30.5000	0.663
	3.75	866.6	755.6	125.03	24.6000	0.751
	4.50	906.7	795.6	125.13	20.6667	0.822
	5.25	938.5	827.4	125.24	17.8571	0.881
	6.00	964.7	853.6	125.33	15.7500	0.931
	6.75	986.6	875.5	125.41	14.1111	0.973
	7.50	1005.4	894.4	125.50	12.8000	1.011
	8.25	1021.6	910.6	125.52	11.7273	1.044
	9.00	1035.8	924.8	125.57	10.8333	1.073
	9.75	1048.4	937.4	125.62	10.0769	1.099
	10.50	1059.4	948.4	125.66	9.4286	1.122
	11.25	1069.4	958.4	125.70	8.8667	1.144
	12.00	1078.3	967.3	125.72	8.3750	1.163
	12.75	1086.4	975.3	125.75	7.9412	1.180
	13.50	1093.7	982.7	125.79	7.5556	1.196
	14.25	1100.3	989.3	125.83	7.2105	1.211
	15.00	1106.4	995.4	125.88	6.9000	1.224
	15.75	1112.0	1001.0	125.93	6.6190	1.237
	16.50	1117.2	1006.2	125.99	6.3636	1.248
	17.25	1122.1	1011.1	126.07	6.1304	1.259
	18.00	1126.6	1015.5	126.14	5.9167	1.269
	18.75	1130.8	1019.7	126.20	5.7200	1.279
	19.50	1134.5	1023.5	126.28	5.5385	1.287
	20.25	1138.2	1027.2	126.33	5.3704	1.296
	21.00	1141.6	1030.5	126.39	5.2143	1.303
	21.75	1144.7	1033.7	126.44	5.0690	1.310
	22.50	1147.7	1036.7	126.49	4.9333	1.317
	23.25	1150.5	1039.4	126.53	4.8065	1.324
	24.00	1153.2	1042.1	126.58	4.6875	1.330
	24.75	1155.5	1044.5	126.63	4.5758	1.335
	25.50	1157.8	1046.7	126.69	4.4706	1.340
	26.25	1160.0	1049.0	126.70	4.3714	1.346
	27.00	1162.1	1051.1	126.75	4.2778	1.351
	27.75	1164.2	1053.1	126.78	4.1892	1.355
	28.50	1166.0	1055.0	126.83	4.1053	1.360
	29.25	1167.8	1056.8	126.87	4.0256	1.364
	30.00	1169.5	1058.5	126.92	3.9500	1.368
	30.75	1171.1	1060.1	126.94	3.8780	1.372

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TK#10043 Graber #2 DST#2 Messenger Pe, Inc.

DATE: 09/02/97 TIME: 16:20:08

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	31.50	1172.6	1061.6	126.99	3.8095	1.375
	32.25	1174.1	1063.0	127.03	3.7442	1.378
	33.00	1175.6	1064.5	127.07	3.6818	1.382
	33.75	1176.8	1065.8	127.12	3.6222	1.385
	34.50	1178.1	1067.1	127.14	3.5652	1.388
	35.25	1179.4	1068.4	127.19	3.5106	1.391
	36.00	1180.5	1069.5	127.22	3.4583	1.394
	36.75	1181.8	1070.8	127.25	3.4082	1.397
	37.50	1182.8	1071.8	127.29	3.3600	1.399
	38.25	1183.8	1072.8	127.31	3.3137	1.401
	39.00	1184.8	1073.8	127.36	3.2692	1.404
	39.75	1185.7	1074.7	127.37	3.2264	1.406
	40.50	1186.6	1075.6	127.42	3.1852	1.408
	41.25	1187.5	1076.5	127.45	3.1455	1.410
	42.00	1188.3	1077.3	127.50	3.1071	1.412
	42.75	1189.2	1078.1	127.54	3.0702	1.414
	43.50	1189.9	1078.9	127.60	3.0345	1.416
	44.25	1190.6	1079.6	127.65	3.0000	1.418
	45.00	1191.4	1080.4	127.73	2.9667	1.420
	45.75	1192.1	1081.1	127.75	2.9344	1.421
	46.50	1192.9	1081.8	127.77	2.9032	1.423
	47.25	1193.4	1082.4	127.86	2.8730	1.424
	48.00	1194.2	1083.2	127.93	2.8438	1.426
	48.75	1194.8	1083.8	127.99	2.8154	1.428
	49.50	1195.4	1084.3	128.05	2.7879	1.429
	50.25	1196.0	1085.0	128.11	2.7612	1.431
	51.00	1196.6	1085.6	128.16	2.7353	1.432
	51.75	1197.3	1086.3	128.22	2.7101	1.434
	52.50	1197.8	1086.8	128.28	2.6857	1.435
	53.25	1198.4	1087.4	128.31	2.6620	1.436
	54.00	1199.0	1088.0	128.37	2.6389	1.438
	54.75	1199.5	1088.5	128.41	2.6164	1.439
	55.50	1200.1	1089.0	128.46	2.5946	1.440
	56.25	1200.5	1089.5	128.48	2.5733	1.441
	57.00	1201.0	1090.0	128.53	2.5526	1.442
	57.75	1201.5	1090.5	128.56	2.5325	1.444
	58.50	1202.0	1091.0	128.58	2.5128	1.445
	59.25	1202.4	1091.4	128.63	2.4937	1.446
****** End Shut-in 2	60.00	1202.9	1091.9	128.67	2.4750	1.447
****** Final Hydro.	279.00	2086.5	0.0	128.83		

TEST HISTORY

TK#10043 Graber #2 DST#2 Messenger Pe, Inc.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	2143.42
B:	0.00	54.71
C:	29.25	85.01
D:	30.00	1200.66
E:	0.00	88.95
F:	59.25	111.03
G:	60.00	1202.93
Q:	0.00	2086.52

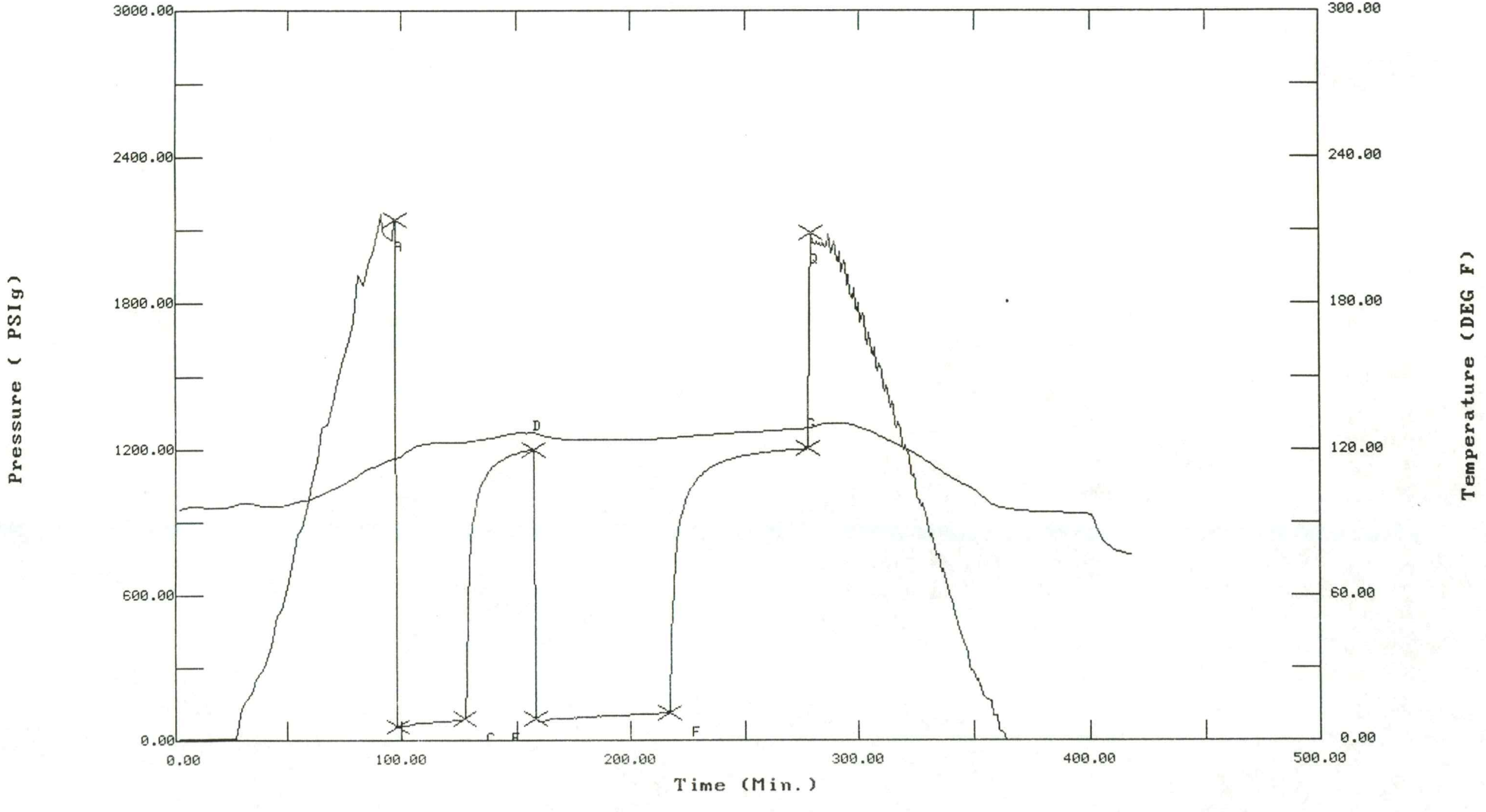
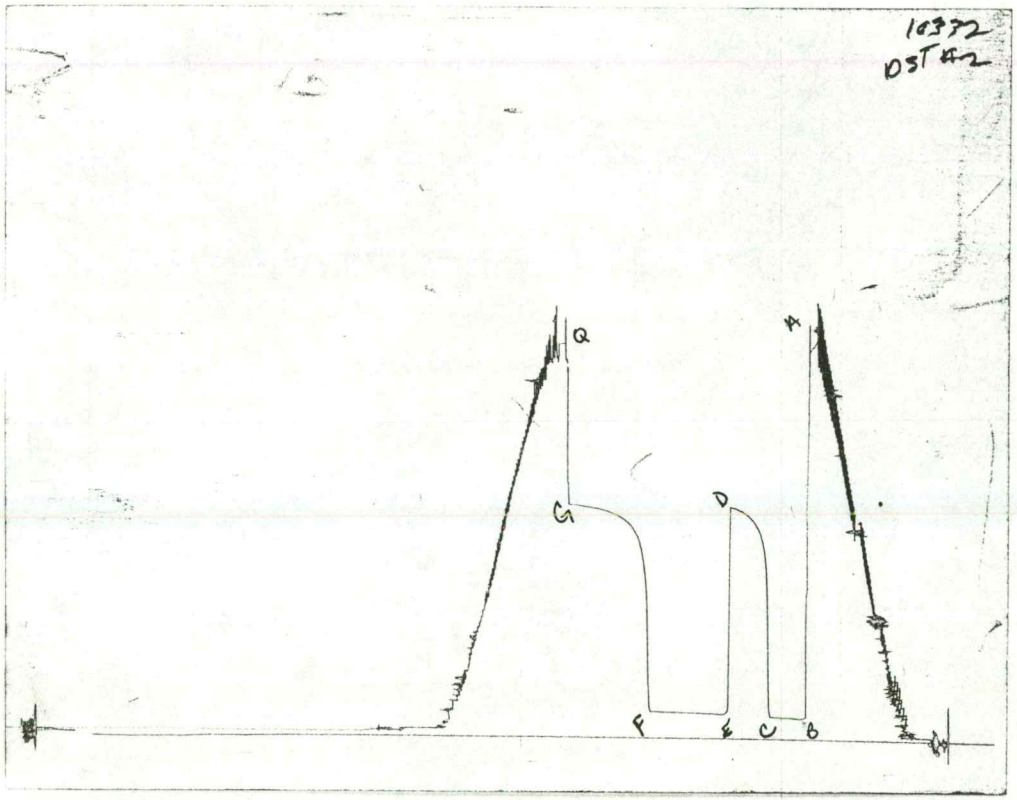


CHART PAGE



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

№ 10043

Well Name & No. Graber #2 Test No. #2 Date 9/2/97

Company Messenger Pet, Inc. Zone Tested Miss

Address 1015 E. Hyw 54 Kingman, Ks. 67068 Elevation 1598 KB 1589 GL

Co. Rep / Geo. Jon F. Messenger Cont. Sterling #4 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 1 Twp. 31S Rge. 7W Co. Harper State Ks

No. of Copies 5 Distribution Sheet (Y, N) — Turnkey (Y, N) — Evaluation (Y, N) —

Interval Tested 4340' - 4352' Initial Str Wt./Lbs. 62000 Unseated Str Wt./Lbs. 63000

Anchor Length 12' Wt. Set Lbs. 50000 Wt. Pulled Loose/Lbs. 70,000

Top Packer Depth 4335' Tool Weight 2100

Bottom Packer Depth 4340' Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Total Depth 4352 Wt. Pipe Run ____ Drill Collar Run 544'

Mud Wt. 9.1 LCM — Vis. 80 WL 10.4 Drill Pipe Size 4½ XH Ft. Run 3799'

Blow Description IF: Strong Blow. BOB in 30 sec. GTS 7 mins.
ISI: Bled down for 5 mins. NO BB.
FF: Strong Blow. Gauge Gas
FSI: Bled down for 5 mins

Recovery — Total Feet 320' GIP 3799 Ft. in DC 320' Ft. in DP ____

Rec. 120'	Feet Of OGCWM	8	%gas	8	%oil	20	%water	64	%mud
Rec. 80'	Feet Of OGCWM	12	%gas	6	%oil	54	%water	34	%mud
Rec. 60'	Feet Of OGCMW	20	%gas	10	%oil	60	%water	10	%mud
Rec. 60	Feet Of Salt Water	4	%gas	Trc	%oil	96	%water		%mud
Rec. ____	Feet Of ____		%gas		%oil		%water		%mud

BHT 130° °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW .3 @ 74 °F Chlorides 22,000 ppm Recovery Chlorides 5,000 ppm System

(A) Initial Hydrostatic Mud	2143	2178	PSI	Recorder No.	2350	T-Started	4:33
(B) First Initial Flow Pressure	55	91	PSI	(depth)	4347	T-Open	6:13
(C) First Final Flow Pressure	85	111	PSI	Recorder No.	10332	T-Pulled	9:13
(D) Initial Shut-in Pressure	1201	1196	PSI	(depth)	4349	T-Out	11:00
(E) Second Initial Flow Pressure	89	101	PSI	Recorder No.			
(F) Second Final Flow Pressure	111	132	PSI	(depth)			
(G) Final Shut-in Pressure	1203	1196	PSI	Initial Opening	30	Test	700
(H) Final Hydrostatic Mud	2087	2068	PSI	Initial Shut-in	30	Jars	200
	Alpine	AK-1		Final Flow	60	Safety Joint	50
				Final Shut-in	60	Straddle	
						Circ. Sub	
						Sampler	
						Extra Packer	
						Elect. Rec.	150
						Other	
						TOTAL PRICE $	1100

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

Approved By Jon F Messenger

Our Representative Darren Emerine

TRILOBITE TESTING

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

GAS VOLUME REPORT

Messenger Pet, Inc. (OPERATOR) | Graber #2 (WELL NAME AND NO.) | Miss Formation #2 (DST NO.)

C.T.S 7 min Initial Flow.

Min.	Ins. of Water PSIG	Orifice Size	MCF/D	Min.	Ins. of Water PSIG	Orifice Size	MCF/D
0	20 in	3/4	63,500				
5	24 in	3/4	69,500				
9	24 in	3/4	69,500				
5	26 in	3/4	72,400				
0	28 in	3/4	~~75~~ 75,100				
2nd	Flow	Period	(Immediately 28 in				
0	46 in	3/4	96,300				
9	36 in	3/4	85,200				
0	36 in	3/4	85,200				
10	36 in	3/4	85,200				
0	36 in	3/4	85,200				
0	36 in	3/4	85,200				

Remarks:

ICR