

WELL NAME: Haag Estate #6
COMPANY: NARCO
LOCATION: 12-23S-31W
Finney County Kansas
DATE: 05/27/97

TRILOBITE TESTING L.L.C.

OPERATOR : NARCO DATE 5-25-97
 WELL NAME: Haag Estate #6 KB 2868.00 ft TICKET NO: 10157 DST #1
 LOCATION : 12-23-31-Finny Co Ks GR 2863.00 ft FORMATION: Morrow Sd
 INTERVAL : 4742.00 To 4755.00 ft TD 4755.00 ft TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	13754	13754	2357			PF Fr. 1308 to 1323 hr
SI 60 Range(Psi)	4000.0	4000.0	4995.0	0.0	0.0	IS Fr. 1323 to 1423 hr
SF 30 Clock(hrs)	12 hr	12	Elec			SF Fr. 1423 to 1453 hr
FS 120 Depth(ft)	4752.0	4752.0	4744.0	0.0	0.0	FS Fr. 1453 to 1653 hr

	Field	1	2	3	4	
A. Init Hydro	2380.0	2363.0	2315.0	0.0	0.0	T STARTED 1147 hr
B. First Flow	9.0	9.0	23.0	0.0	0.0	T ON BOTM 1305 hr
B1. Final Flow	9.0	9.0	24.0	0.0	0.0	T OPEN 1308 hr
C. In Shut-in	98.0	96.0	118.0	0.0	0.0	T PULLED 1653 hr
D. Init Flow	29.0	32.0	21.0	0.0	0.0	T OUT 2000 hr
E. Final Flow	29.0	27.0	27.0	0.0	0.0	
F. Fl Shut-in	157.0	150.0	169.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2289.0	2217.0	2293.0	0.0	0.0	Tool Wt. 1100.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 42000.00 lbs
						Initial Str Wt 40000.00 lbs
						Unseated Str Wt 40000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4736.00 ft

RECOVERY

Tot Fluid 5.00 ft of 0.00 ft in DC and 5.00 ft in DP
 5.00 ft of Gassy Oil Cut Mud
 0.00 ft of 10%gas 10%oil 80%mud
 0.00 ft of
 SALINITY 0.00 P.P.M. A.P.I. Gravity 34.00

BLOW DESCRIPTION

Initial Flow:
 Weak-Died in 1 min

Final Flow:
 3" blow decreasing to no blow
 in 5 minutes

SAMPLES:
 SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 9.30 lb/c
 Vis. 50.00 S/L
 W.L. 11.20 in3
 F.C. 0.00 in
 Mud Drop N
 Amt. of fill 0.00 ft
 Btm. H. Temp. 122.00 F
 Hole Condition Fair
 % 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 Dan Bangle
 Co. Rep. Ron Osterbuhr
 Contr. Aber
 Rig # 8
 Unit #
 Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Haag Estate #6

LOCATION : 12-23-31-Finny Co Ks

TICKET No. 10157 D.S.T. No. 1 DATE 5-25-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 31

INTERVAL TOOL

TOTAL PACKERS AND ANCHOR 13

TOTAL TOOL 44

DRILL COLLAR ANCHOR IN INTERVAL

C. ANCHOR STAND.Stands Single Total

P. ANCHOR STAND.Stands Single Total

TOTAL ASSEMBLY 44

C. ABOVE TOOLS.Stands Single Total

P. ABOVE TOOLS.Stands76 Single 1 Total 4736

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4780

TOTAL DEPTH 4755

TOTAL DRILL PIPE ABOVE K.B. 25

REMARKS:

Run 3 or 4 bridges last 30' to bottom

P.O. SUB	
C.O. SUB	4711
S.I. TOOL Sterling	4717
Sampler	4720
HMV Sterling	4725
JARS Bowen	4730
SAFETY JOINT Bowen	4733
PACKER	4737
PACKER	4742
DEPTH 4742	
STUBB 1'	4743
ANCHOR	
Alpine Recorder	4744
T.C.	
DEPTH	
5' Perfs	4748
2' Perfs	4750
AK-1 Recorder	4752
BULLNOSE 5' Bullplug	4755
T.D.	

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk# 10157 DST# 1 Haag Estate #6 NARCO

DATE: 05/25/97 TIME: 11:47:42

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	139.00	2314.8	0.0	116.06		
***** Start Flow 1	0.00	22.7	0.0	116.29		
	1.00	24.0	1.3	116.50		
	2.00	24.5	1.8	116.64		
	3.00	24.9	2.3	116.72		
	4.00	25.2	2.5	116.78		
	5.00	25.3	2.7	116.81		
	6.00	25.5	2.9	116.83		
	7.00	25.3	2.7	116.84		
	8.00	20.8	-1.8	116.83		
	9.00	24.5	1.8	116.82		
	10.00	22.4	-0.3	116.81		
	11.00	23.2	0.6	116.80		
	12.00	23.6	0.9	116.77		
	13.00	23.7	1.1	116.75		
***** End Flow 1	14.00	23.9	1.3	116.73		
***** Start Shutin 1	0.00	23.9	0.0	116.73	0.0000	0.001
	1.00	22.8	-1.1	116.72	15.0000	0.001
	2.00	25.3	1.3	116.70	8.0000	0.001
	3.00	26.9	3.0	116.69	5.6667	0.001
	4.00	28.9	5.0	116.68	4.5000	0.001
	5.00	30.7	6.8	116.67	3.8000	0.001
	6.00	32.2	8.3	116.66	3.3333	0.001
	7.00	33.7	9.8	116.66	3.0000	0.001
	8.00	35.4	11.5	116.66	2.7500	0.001
	9.00	37.0	13.1	116.65	2.5556	0.001
	10.00	38.7	14.8	116.66	2.4000	0.001
	11.00	40.4	16.4	116.66	2.2727	0.002
	12.00	42.0	18.0	116.67	2.1667	0.002
	13.00	43.7	19.8	116.68	2.0769	0.002
	14.00	45.3	21.4	116.69	2.0000	0.002
	15.00	46.8	22.9	116.70	1.9333	0.002
	16.00	48.4	24.5	116.72	1.8750	0.002
	17.00	49.8	25.9	116.73	1.8235	0.002
	18.00	51.4	27.4	116.75	1.7778	0.003
	19.00	53.1	29.2	116.77	1.7368	0.003
	20.00	54.6	30.7	116.79	1.7000	0.003
	21.00	56.2	32.3	116.81	1.6667	0.003
	22.00	57.7	33.8	116.83	1.6364	0.003
	23.00	59.2	35.2	116.85	1.6087	0.003
	24.00	60.7	36.8	116.88	1.5833	0.004
	25.00	62.4	38.5	116.90	1.5600	0.004
	26.00	63.8	39.9	116.93	1.5385	0.004
	27.00	65.4	41.5	116.96	1.5185	0.004
	28.00	67.0	43.1	116.99	1.5000	0.004
	29.00	68.4	44.5	117.02	1.4828	0.005
	30.00	70.1	46.2	117.04	1.4667	0.005
	31.00	71.5	47.6	117.07	1.4516	0.005
	32.00	73.2	49.3	117.10	1.4375	0.005
	33.00	74.6	50.7	117.13	1.4242	0.006
	34.00	76.1	52.2	117.16	1.4118	0.006

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk# 10157 DST# 1 Haag Estate #6 NARCO

DATE: 05/25/97 TIME: 11:47:42

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	35.00	77.5	53.5	117.20	1.4000	0.006
	36.00	79.2	55.3	117.23	1.3889	0.006
	37.00	80.8	56.9	117.26	1.3784	0.007
	38.00	82.2	58.3	117.29	1.3684	0.007
	39.00	84.0	60.1	117.32	1.3590	0.007
	40.00	85.4	61.5	117.35	1.3500	0.007
	41.00	87.0	63.1	117.39	1.3415	0.008
	42.00	88.5	64.6	117.42	1.3333	0.008
	43.00	90.0	66.1	117.46	1.3256	0.008
	44.00	91.6	67.6	117.49	1.3182	0.008
	45.00	93.1	69.2	117.52	1.3111	0.009
	46.00	94.7	70.8	117.55	1.3043	0.009
	47.00	96.3	72.3	117.59	1.2979	0.009
	48.00	97.7	73.8	117.63	1.2917	0.01
	49.00	99.4	75.5	117.66	1.2857	0.01
	50.00	100.9	77.0	117.69	1.2800	0.010
	51.00	102.4	78.5	117.73	1.2745	0.010
	52.00	104.1	80.2	117.75	1.2692	0.011
	53.00	105.6	81.7	117.79	1.2642	0.011
	54.00	107.2	83.3	117.82	1.2593	0.011
	55.00	108.9	85.0	117.86	1.2545	0.012
	56.00	110.4	86.4	117.88	1.2500	0.012
	57.00	112.0	88.1	117.92	1.2456	0.013
	58.00	113.5	89.6	117.96	1.2414	0.013
	59.00	115.2	91.3	117.99	1.2373	0.013
	60.00	116.8	92.9	118.02	1.2333	0.014
***** End Shut-in 1	61.00	118.3	94.4	118.06	1.2295	0.014
***** Start Flow 2	0.00	21.5	0.0	118.09		
	1.00	21.6	0.1	118.11		
	2.00	21.6	0.2	118.15		
	3.00	21.6	0.1	118.18		
	4.00	20.4	-1.1	118.21		
	5.00	23.5	2.0	118.24		
	6.00	23.2	1.8	118.27		
	7.00	22.0	0.5	118.30		
	8.00	24.6	3.1	118.33		
	9.00	23.0	1.5	118.36		
	10.00	24.2	2.7	118.39		
	11.00	23.9	2.4	118.43		
	12.00	23.2	1.7	118.47		
	13.00	24.6	3.1	118.50		
	14.00	22.7	1.2	118.53		
	15.00	24.6	3.1	118.56		
	16.00	24.3	2.9	118.58		
	17.00	22.7	1.3	118.62		
	18.00	24.8	3.3	118.65		
	19.00	24.1	2.6	118.69		
	20.00	22.5	1.0	118.71		
	21.00	25.0	3.5	118.75		
	22.00	23.4	1.9	118.78		
	23.00	25.3	3.9	118.80		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk# 10157 DST# 1 Haag Estate #6 NARCO

DATE: 05/25/97

TIME: 11:47:42

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	24.00	22.9	1.4	118.83		
	25.00	25.3	3.8	118.86		
	26.00	22.5	1.0	118.89		
	27.00	25.3	3.8	118.92		
	28.00	23.5	2.0	118.95		
	29.00	25.4	3.9	118.98		
***** End Flow 2	30.00	26.5	5.0	119.01		
***** Start Shutin 2	0.00	26.5	0.0	119.01	0.0000	0.001
	1.00	27.8	1.3	119.04	45.0000	0.001
	2.00	28.8	2.3	119.07	23.0000	0.001
	3.00	30.1	3.6	119.10	15.6667	0.001
	4.00	31.4	4.9	119.13	12.0000	0.001
	5.00	32.6	6.0	119.16	9.8000	0.001
	6.00	33.7	7.2	119.18	8.3333	0.001
	7.00	35.0	8.5	119.21	7.2857	0.001
	8.00	36.1	9.6	119.24	6.5000	0.001
	9.00	37.3	10.7	119.27	5.8889	0.001
	10.00	38.5	12.0	119.30	5.4000	0.001
	11.00	39.7	13.2	119.32	5.0000	0.002
	12.00	40.8	14.3	119.35	4.6667	0.002
	13.00	42.0	15.4	119.38	4.3846	0.002
	14.00	43.1	16.6	119.40	4.1429	0.002
	15.00	44.3	17.8	119.44	3.9333	0.002
	16.00	45.5	19.0	119.46	3.7500	0.002
	17.00	46.5	20.0	119.49	3.5882	0.002
	18.00	47.7	21.2	119.52	3.4444	0.002
	19.00	48.9	22.4	119.54	3.3158	0.002
	20.00	49.9	23.4	119.57	3.2000	0.002
	21.00	51.2	24.7	119.59	3.0952	0.003
	22.00	52.3	25.8	119.62	3.0000	0.003
	23.00	53.6	27.1	119.65	2.9130	0.003
	24.00	54.7	28.2	119.68	2.8333	0.003
	25.00	56.0	29.5	119.70	2.7600	0.003
	26.00	57.1	30.5	119.72	2.6923	0.003
	27.00	58.2	31.7	119.76	2.6296	0.003
	28.00	59.3	32.8	119.78	2.5714	0.004
	29.00	60.6	34.1	119.80	2.5172	0.004
	30.00	61.8	35.2	119.83	2.4667	0.004
	31.00	62.9	36.4	119.86	2.4194	0.004
	32.00	64.1	37.6	119.88	2.3750	0.004
	33.00	65.4	38.9	119.91	2.3333	0.004
	34.00	66.5	39.9	119.93	2.2941	0.004
	35.00	67.6	41.1	119.96	2.2571	0.005
	36.00	68.7	42.2	119.98	2.2222	0.005
	37.00	69.9	43.4	120.00	2.1892	0.005
	38.00	71.1	44.6	120.03	2.1579	0.005
	39.00	72.3	45.8	120.05	2.1282	0.005
	40.00	73.3	46.8	120.08	2.1000	0.005
	41.00	74.4	47.9	120.10	2.0732	0.006
	42.00	75.5	49.0	120.13	2.0476	0.006
	43.00	76.9	50.4	120.16	2.0233	0.006

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk# 10157 DST# 1 Haag Estate #6 NARCO

DATE: 05/25/97

TIME: 11:47:42

Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
44.00	77.9	51.4	120.18	2.0000	0.006
45.00	79.0	52.5	120.21	1.9778	0.006
46.00	80.3	53.8	120.23	1.9565	0.006
47.00	81.5	55.0	120.25	1.9362	0.007
48.00	82.5	56.0	120.27	1.9167	0.007
49.00	83.8	57.3	120.30	1.8980	0.007
50.00	84.8	58.2	120.32	1.8800	0.007
51.00	86.1	59.6	120.35	1.8627	0.007
52.00	87.4	60.9	120.37	1.8462	0.008
53.00	88.5	62.0	120.40	1.8302	0.008
54.00	89.7	63.2	120.42	1.8148	0.008
55.00	90.9	64.4	120.44	1.8000	0.008
56.00	92.1	65.6	120.46	1.7857	0.008
57.00	93.3	66.8	120.49	1.7719	0.009
58.00	94.3	67.8	120.51	1.7586	0.009
59.00	95.6	69.1	120.53	1.7458	0.009
60.00	96.6	70.1	120.55	1.7333	0.009
61.00	97.9	71.4	120.57	1.7213	0.01
62.00	99.2	72.7	120.59	1.7097	0.01
63.00	100.4	73.9	120.62	1.6984	0.010
64.00	101.5	74.9	120.64	1.6875	0.010
65.00	102.9	76.4	120.66	1.6769	0.011
66.00	104.1	77.5	120.68	1.6667	0.011
67.00	105.2	78.6	120.70	1.6567	0.011
68.00	106.3	79.8	120.72	1.6471	0.011
69.00	107.5	81.0	120.74	1.6377	0.012
70.00	108.8	82.3	120.77	1.6286	0.012
71.00	110.0	83.5	120.79	1.6197	0.012
72.00	111.0	84.5	120.81	1.6111	0.012
73.00	112.2	85.7	120.83	1.6027	0.013
74.00	113.5	86.9	120.85	1.5946	0.013
75.00	114.6	88.0	120.87	1.5867	0.013
76.00	115.7	89.2	120.90	1.5789	0.013
77.00	117.1	90.6	120.92	1.5714	0.014
78.00	118.2	91.7	120.94	1.5641	0.014
79.00	119.5	93.0	120.96	1.5570	0.014
80.00	120.8	94.3	120.98	1.5500	0.015
81.00	122.0	95.5	121.00	1.5432	0.015
82.00	123.1	96.6	121.02	1.5366	0.015
83.00	124.2	97.7	121.04	1.5301	0.015
84.00	125.5	99.0	121.06	1.5238	0.016
85.00	126.7	100.2	121.08	1.5176	0.016
86.00	127.8	101.3	121.10	1.5116	0.016
87.00	129.2	102.6	121.12	1.5057	0.017
88.00	130.2	103.7	121.14	1.5000	0.017
89.00	131.5	105.0	121.16	1.4944	0.017
90.00	132.8	106.3	121.18	1.4889	0.018
91.00	133.9	107.3	121.20	1.4835	0.018
92.00	135.2	108.7	121.22	1.4783	0.018
93.00	136.4	109.9	121.23	1.4731	0.019
94.00	137.5	111.0	121.26	1.4681	0.019

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

EST: Tk# 10157 DST# 1 Haag Estate #6 NARCO

ATE: 05/25/97 TIME: 11:47:42

	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	95.00	138.9	112.4	121.27	1.4632	0.019
	96.00	140.1	113.6	121.29	1.4583	0.020
	97.00	141.5	115.0	121.32	1.4536	0.020
	98.00	142.8	116.2	121.34	1.4490	0.020
	99.00	143.9	117.4	121.35	1.4444	0.021
	100.00	145.1	118.6	121.37	1.4400	0.021
	101.00	146.4	119.8	121.39	1.4356	0.021
	102.00	147.6	121.1	121.40	1.4314	0.022
	103.00	148.9	122.4	121.42	1.4272	0.022
	104.00	150.2	123.7	121.44	1.4231	0.023
	105.00	151.5	125.0	121.46	1.4190	0.023
	106.00	152.7	126.2	121.48	1.4151	0.023
	107.00	154.1	127.6	121.50	1.4112	0.024
	108.00	155.4	128.9	121.52	1.4074	0.024
	109.00	156.8	130.3	121.54	1.4037	0.025
	110.00	157.9	131.4	121.55	1.4000	0.025
	111.00	159.4	132.9	121.58	1.3964	0.025
	112.00	160.5	134.0	121.59	1.3929	0.026
	113.00	162.0	135.5	121.61	1.3894	0.026
	114.00	163.2	136.7	121.64	1.3860	0.027
	115.00	164.6	138.1	121.64	1.3826	0.027
	116.00	166.0	139.5	121.67	1.3793	0.028
	117.00	167.3	140.7	121.68	1.3761	0.028
**** End Shut-in 2	118.00	168.5	142.0	121.70	1.3729	0.028
**** Final Hydro.	366.00	2293.2	0.0	121.87		

TEST HISTORY

Tk# 10157 DST# 1 Haag Estate #6 NARCO

Flag Points

t (Min.) P (PSig)

A:	0.00	2314.80
B:	0.00	22.65
C:	14.00	23.91
D:	61.00	118.33
E:	0.00	21.48
F:	30.00	26.51
G:	118.00	168.52
H:	0.00	2293.24

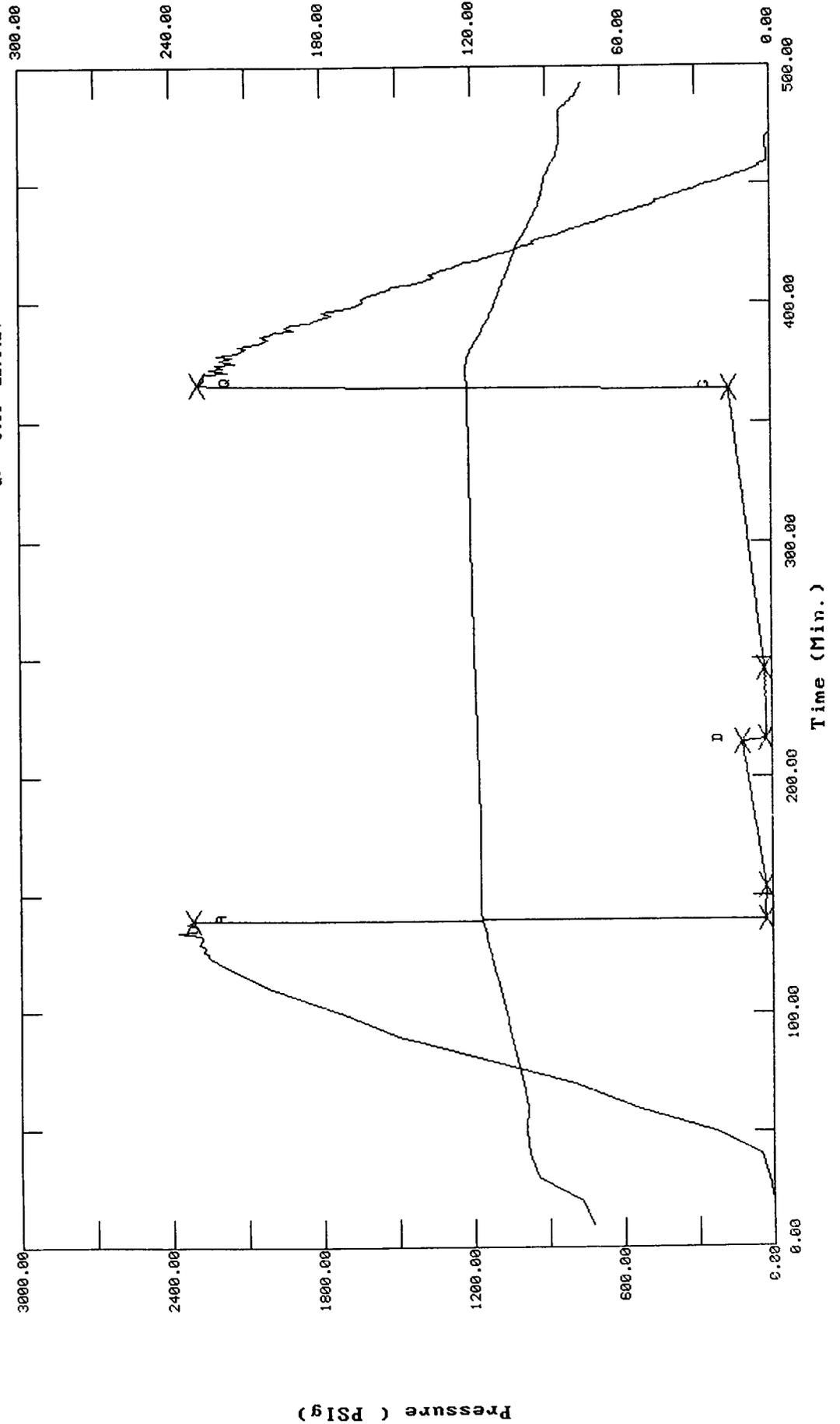
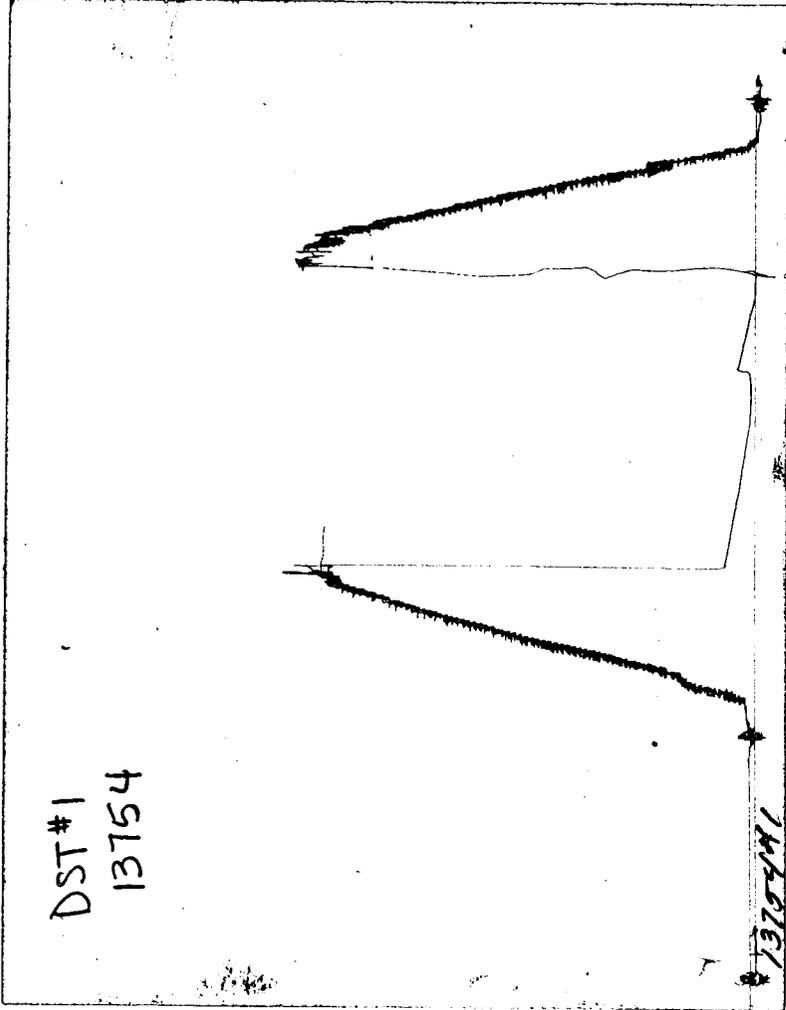


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 10157 Date 5-25-97
Company Name NARCO
Lease Haag Estate #6 Test No. 1
County Finney Sec. 12 Twp. 23 Rng. 31

SAMPLER RECOVERY

Gas 0 ML
Oil 4000 ML
Mud 0 ML
Water 0 ML
Other 0 ML
Pressure 150 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 1700 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 50
Mud Weight 9.3
Filtrate 11.2
Other _____

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity 34 corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.