

DRILL-STEM TEST DATA

Well Name: GREESON #1-27
Company : HARRIS OIL & GAS CO
Location - Sec: 27 **Twp:** 30N **Rge:** 33W
County: HASKELL **State:** KS
Date: 08/29/95

TRILOBITE TESTING L.L.C.

OPERATOR : Harris Oil & Gas Co
 WELL NAME: Greeson #1-27
 LOCATION : 27-30S-33W, Haskell Cty
 INTERVAL : 4610.00 To 4650.00 ft

DATE 08/26/95
 KB 2935.00 ft
 GR 0.00 ft
 TD 4650.00 ft

TICKET NO: 7886
 FORMATION: Kansas City "A"
 DST #1
 TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	AK-1	AK-1	AK-1			PF Fr. 0850 to 0920 hr
SI 60	Range(Psi)	5075.0	5075.0	4575.0	0.0	0.0	IS Fr. 0920 to 1020 hr
SF 60	Clock(hrs)	25813	25813	25113			SF Fr. 1020 to 1120 hr
FS 120	Depth(ft)	4614.0	4614.0	4647.0	0.0	0.0	FS Fr. 1120 to 1320 hr

	Field	1	2	3	4	
A. Init Hydro	2233.0	2230.0	0.0	0.0	0.0	T STARTED hr
B. First Flow	297.0	306.0	0.0	0.0	0.0	T ON BOTM hr
Bl. Final Flow	416.0	421.0	0.0	0.0	0.0	T OPEN 0850 hr
C. In Shut-in	1083.0	1090.0	0.0	0.0	0.0	T PULLED 1320 hr
D. Init Flow	468.0	478.0	0.0	0.0	0.0	T OUT hr
E. Final Flow	611.0	629.0	0.0	0.0	0.0	
F. Fl Shut-in	1058.0	1073.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2195.0	2189.0	0.0	0.0	0.0	Tool Wt. 0.00 lbs
Inside/Outside	I	I	O			Wt Set On Packer 0.00 lbs
						Wt Pulled Loose 0.00 lbs
						Initial Str Wt 0.00 lbs
						Unseated Str Wt 0.00 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 516.00 ft
						D.P. Length 0.00 ft

RECOVERY

Tot Fluid 1240.00 ft of 516.00 ft in DC and 724.00 ft in DP
 2460.00 ft of Gas in Pipe
 254.00 ft of Slightly Oil & Gas Cut Mud - 25% gas, 15% oil
 0.00 ft of 60% mud
 986.00 ft of Gas Cut Salt Water - 5% gas, 95% water
 0.00 ft of
 0.00 ft of
 0.00 ft of

RW .112 @ 90 F

SALINITY 53000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Blow -
 Fair blow, built to bottom of bucket
 3 min

Initial Shutin -
 Bled off blow, weak blow, built to
 bottom of bucket 25 min

Final Blow -
 Weak blow, built to bottom of bucket
 9 min

Final Shutin -
 Bled off blow, weak blow, built to 9"

SAMPLES:

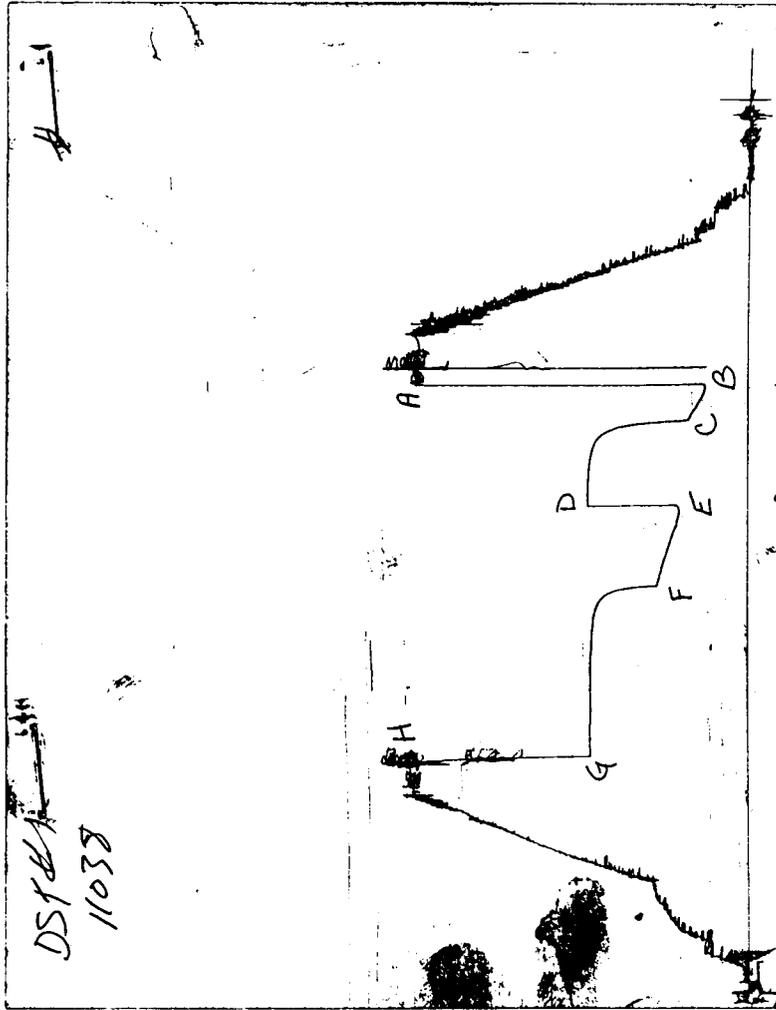
SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.10 lb/c
Vis.	42.00 S/L
W.L.	15.20 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	119.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Tom Horacek
Co. Rep.	Harold Frauli
Contr.	Allen
Rig #	5
Unit #	
Pump T.	

Test Successful: Y

CHART PAGE



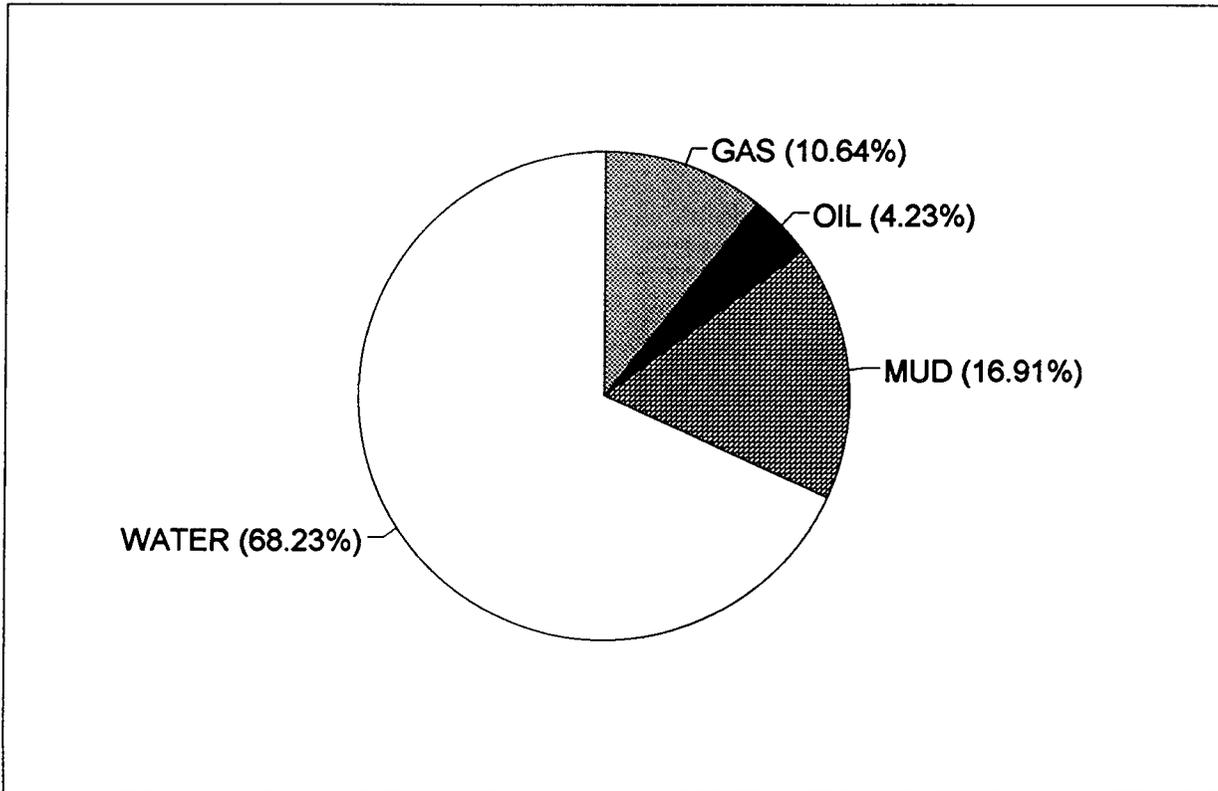
This is an actual photograph of recorder chart

CALCULATED RECOVERY ANALYSIS

DST # 1

TICKET # 7886

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL PIPE 1	254	25	63.5	15	38.1		0	60	152.4
2	470	5	23.5		0	95	446.5		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT PIPE 1			0		0		0		0
2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRL COLLAR 1	516	5	25.8		0	95	490.2		0
2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1240	9.096774	112.8	3.072581	38.1	75.54032	936.7	12.29032	152.4
			HRS OPE BBL/DAY						
BBL OIL=	0.541782	*	1.50	8.668512					
BBL WATER=	8.746308	*		139.9409					
BBL MUD=	2.167128								
BBL GAS =	1.363302								



TRILOBITE TESTING L.L.C.

OPERATOR : Harris Oil & Gas Co
 WELL NAME: Greeson #1-27
 LOCATION : 27-30S-33W, Haskell Cty
 INTERVAL : 5272.00 To 5353.00 ft

DATE 8/28/95
 KB 2935.00 ft
 GR 0.00 ft
 TD 5353.00 ft

TICKET NO: 7887
 FORMATION: MORROW
 TEST TYPE: CONVENTIONAL

DST #2

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF	0 Rec.	AK-1	AK-1	Alpine			PF Fr. 0035 to 0040 hr
SI	0 Range(Psi)	5075.0	5075.0	4995.0	0.0	0.0	IS Fr. to hr
SF	0 Clock(hrs)	12 hr	12 hr				SF Fr. to hr
FS	0 Depth(ft)	5350.0	5350.0	5276.0	0.0	0.0	FS Fr. to hr

	Field	1	2	3	4	
A. Init Hydro	2477.0	2491.0	2476.0	0.0	0.0	T STARTED 2130 hr
B. First Flow	0.0	0.0	0.0	0.0	0.0	T ON BOTM 0033 hr
B1. Final Flow	0.0	0.0	0.0	0.0	0.0	T OPEN 0035 hr
C. In Shut-in	0.0	0.0	0.0	0.0	0.0	T PULLED 0040 hr
D. Init Flow	0.0	0.0	0.0	0.0	0.0	T OUT 0245 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	2452.0	2452.0	2463.0	0.0	0.0	
Inside/Outside	0	0	I			

TOOL DATA-----

Tool Wt. 21000.00 lbs
 Wt Set On Packer 25000.00 lbs
 Wt Pulled Loose 80000.00 lbs
 Initial Str Wt 80000.00 lbs
 Unseated Str Wt 80000.00 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 456.00 ft
 D.P. Length 4800.00 ft

RECOVERY

Tot Fluid 0.00 ft of 0.00 ft in DC and 0.00 ft in DP

0.00 ft of
 0.00 ft of

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

BLOW DESCRIPTION

Initial Blow -
 Packer Failure

MUD DATA-----

Mud Type Chemical
 Weight 9.10 lb/c
 Vis. 40.00 S/L
 W.L. 9.20 in3
 F.C. 0.00 in

Mud Drop

Amt. of fill 0.00 ft
 Btm. H. Temp. 125.00 F
 Hole Condition Good
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00

SAMPLES:
 SENT TO:

Cushion Type
 Reversed Out N
 Tool Chased N
 Tester Tom Horacek
 Co. Rep. Harold Frauli
 Contr. Allen
 Rig # 5
 Unit #
 Pump T.

Test Successful: N

TEST HISTORY

7887 DST #2 GREESON #1-27 HARRIS OIL & GAS

Flag Points

t<Min.> P< PSig>

R: 0.00 2476.11

Q: 0.00 2434.99

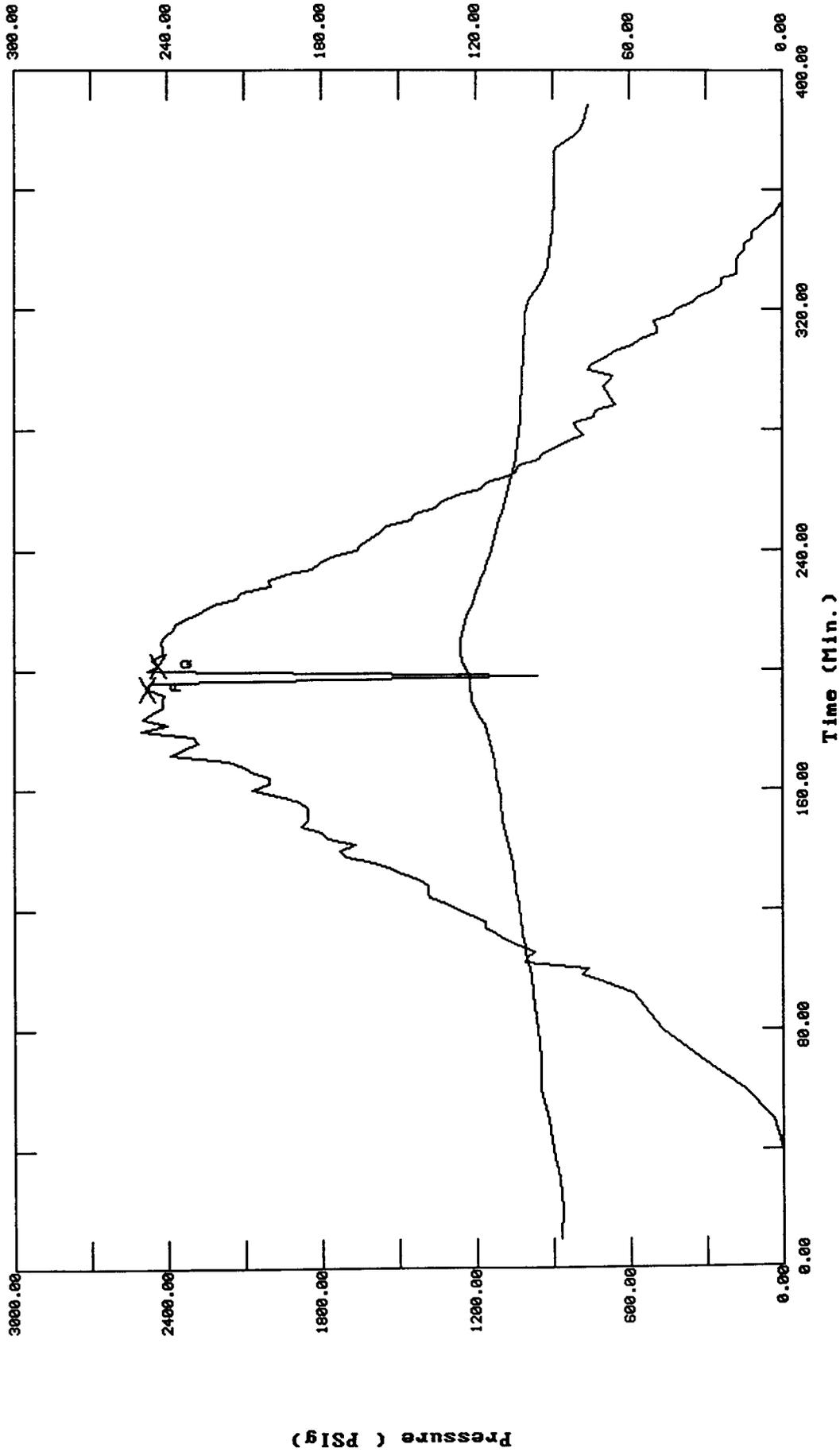
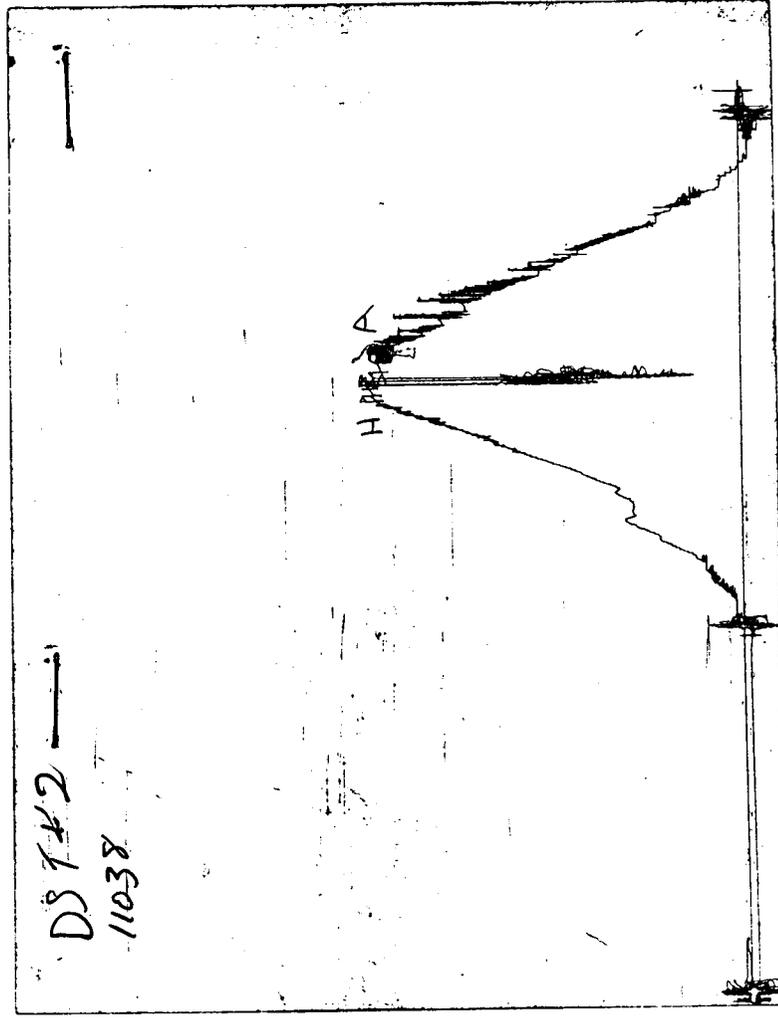


CHART PAGE



This is an actual photograph of recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 7887 DST #2 GREESON #1-27 HARRIS OIL & GAS

DATE: 08/28/95

TIME: 20:13:36

	Time	Pressure	delta P	Temp.	(T+dT)/dT	P ² /10 ⁶
		PSIg	PSIg	DEG F		
***** Initial Hydro.	194.00	2476.1	0.0	122.18		
***** Start Flow 1	0.00	2435.0	0.0	124.52		
***** End Flow 1	2.00	2463.2	28.2	125.24		
***** End Shut-in 1	205.00	2463.2	0.0	125.24	0.0098	6.067
***** Final Hydro.	204.00	2463.2	0.0	125.24		

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Greeson #1-27

LOCATION : 27-30S-33W, Haskell Cty

TICKET No. 7887 D.S.T. No. 2 DATE 8/28/95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27 ft.

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 81 ft.

TOTAL TOOL 108 ft.

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands1 Single Total 61 ft.

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 81 ft.

D.C. ABOVE TOOLS.Stands7 Single 1 Total 456 ft.

D.P. ABOVE TOOLS.Stands76 Single 1 Total 4800 ft.

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5364 ft.

TOTAL DEPTH 5353 ft.

TOTAL DRILL PIPE ABOVE K.B. 11 ft.

REMARKS:

P.O. SUB	
C.O. SUB	5245
S.I. TOOL	5250
HMV Hyd. Tool	5255
JARS	5260
SAFETY JOINT	5262
PACKER	5267
PACKER	5272
DEPTH 5272	
STUBB Perf. 1 ft.	5273
ANCHOR Perf. 2 ft.	5275
Alpine Rec.	5276
Pick up sub 5 ft.	5280
Perf. 5 ft.	5285
T.C. DEPTH	
C. O. sub 1 ft.	5286
D. C. 61 ft.	5347
C. O. sub 1 ft.	5348
BULLNOSE A-K1 Rec.	5350
T.D. Bull Plug 5 ft.	5353

TRILOBITE TESTING L.L.C.

OPERATOR : Harris Oil & Gas Co
 WELL NAME: Greeson #1-27
 LOCATION : 27-30S-33W, Haskell Cty
 INTERVAL : 5228.00 To 5353.00 ft

DATE 8/29/95
 KB 2935.00 ft
 GR 0.00 ft
 TD 5353.00 ft

TICKET NO: 7888
 FORMATION: MORROW
 TEST TYPE: CONVENTIONAL

DST #3

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	AK-1	AK-1	Alpine			PF Fr. 0630 to 0700 hr
SI 60 Range(Psi)	5075.0	5075.0	4995.0	0.0	0.0	IS Fr. 0700 to 0800 hr
SF 60 Clock(hrs)	25813	25813				SF Fr. 0800 to 0900 hr
FS 120 Depth(ft)	5350.0	5350.0	5232.0	0.0	0.0	FS Fr. 0900 to 1100 hr

	Field	1	2	3	4	
A. Init Hydro	2503.0	2511.0	2497.0	0.0	0.0	T STARTED 0255 hr
B. First Flow	109.0	113.0	39.0	0.0	0.0	T ON BOTM 0628 hr
B1. Final Flow	109.0	113.0	40.0	0.0	0.0	T OPEN 0630 hr
C. In Shut-in	176.0	174.0	118.0	0.0	0.0	T PULLED 1100 hr
D. Init Flow	109.0	113.0	45.0	0.0	0.0	T OUT 1415 hr
E. Final Flow	122.0	121.0	61.0	0.0	0.0	
F. Fl Shut-in	203.0	204.0	172.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2477.0	2482.0	2418.0	0.0	0.0	Tool Wt. 21000.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 25000.00 lbs
						Wt Pulled Loose 145000.00 lbs
						Initial Str Wt 80000.00 lbs
						Unseated Str Wt 84000.00 lbs

RECOVERY

Tot Fluid 130.00 ft of 130.00 ft in DC and 0.00 ft in DP
 130.00 ft of Drilling Mud
 0.00 ft of
 0.00 ft of

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

BLOW DESCRIPTION

Initial Blow -
 Strong blow, Built to bottom of
 bucket 3 min.

Initial Shutin -

No blow back

Final Blow -

Weak blow, Built to 4.5 in.

Final Shutin -

No blow back

SAMPLES:

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.10 lb/c
Vis.	40.00 S/L
W.L.	9.20 in3
F.C.	0.00 in
Mud Drop Y	50.0 ft

Amt. of fill	5.00 ft
Btm. H. Temp.	130.00 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 Tom Horacek
 Co. Rep. Harold Frauli
 Contr. Allen
 Rig # 5
 Unit #
 Pump T.

Test Successful: Y

TEST HISTORY

7888 DST #3 GREESEON #1-27 HARRIS OIL & Gas

Flag Points

t(Min.) P(PSig)

A:	0.00	2496.51
B:	0.00	38.51
C:	28.00	39.94
D:	58.00	118.08
E:	0.00	45.31
F:	62.00	68.67
G:	118.00	171.79
Q:	0.00	2417.78

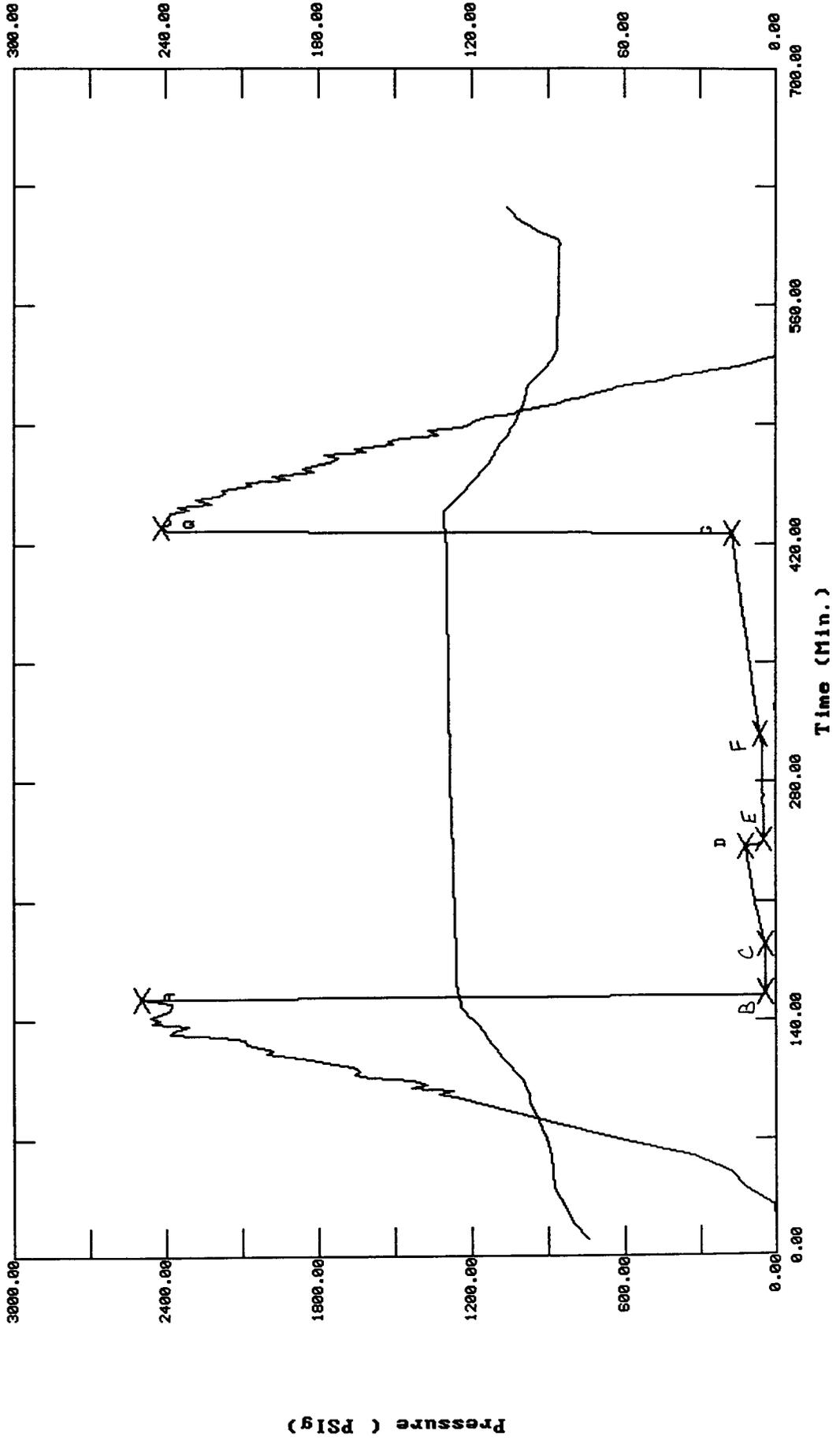
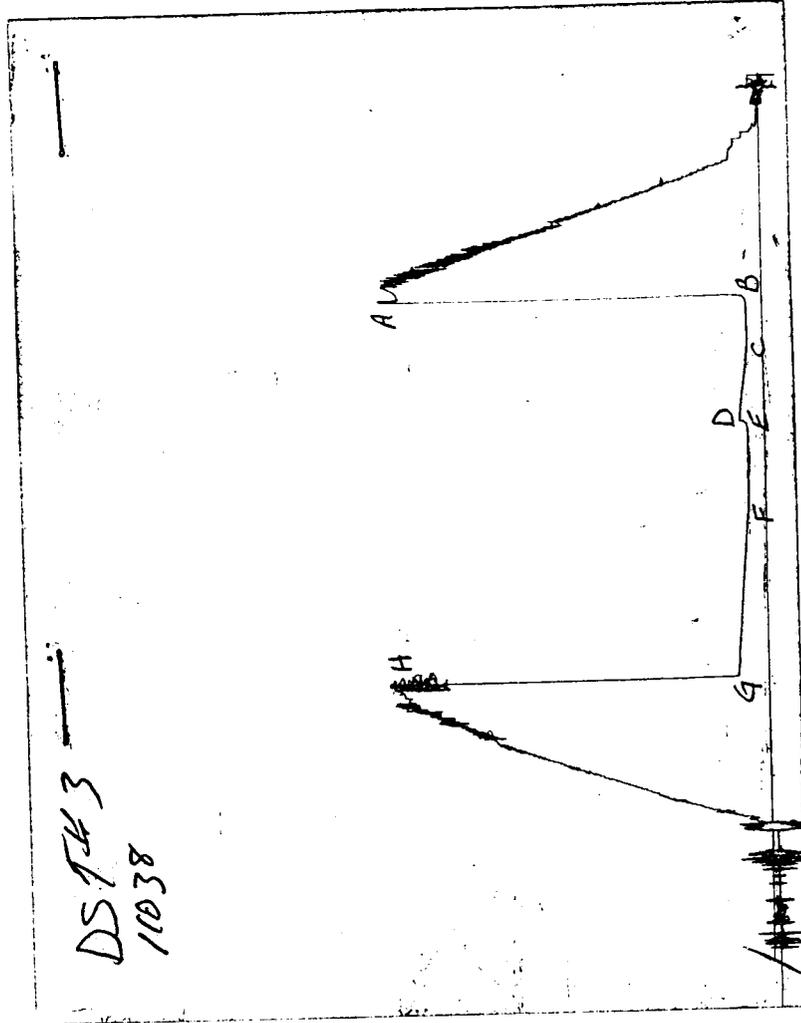


CHART PAGE



This is an actual photograph of recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 7888 DST #3 GREESON #1-27 HARRIS Oil & Gas

DATE: 08/29/95 TIME: 02:47:02

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	152.00	2496.5	0.0	124.70		
***** Start Flow 1	0.00	38.5	0.0	125.42		
	2.00	36.9	-1.6	125.60		
	4.00	38.2	-0.3	125.78		
	6.00	39.1	0.6	125.78		
	8.00	40.0	1.5	125.78		
	10.00	40.4	1.8	125.78		
	12.00	40.5	2.0	125.78		
	14.00	40.9	2.3	125.78		
	16.00	38.8	0.3	125.96		
	18.00	39.9	1.4	125.96		
	20.00	40.8	2.3	125.96		
	22.00	39.4	0.8	125.96		
	24.00	39.1	0.6	125.96		
	26.00	40.4	1.9	126.14		
***** End Flow 1	28.00	39.9	1.4	126.14		
***** Start Shutin 1	0.00	39.9	0.0	126.14	0.0000	0.002
	2.00	43.0	3.0	126.14	15.0000	0.002
	4.00	47.0	7.0	126.14	8.0000	0.002
	6.00	50.8	10.8	126.32	5.6667	0.003
	8.00	54.1	14.2	126.32	4.5000	0.003
	10.00	57.6	17.7	126.32	3.8000	0.003
	12.00	60.6	20.6	126.32	3.3333	0.004
	14.00	63.8	23.8	126.50	3.0000	0.004
	16.00	66.5	26.6	126.50	2.7500	0.004
	18.00	69.2	29.3	126.50	2.5556	0.005
	20.00	71.9	32.0	126.50	2.4000	0.005
	22.00	76.8	36.8	126.68	2.2727	0.006
	24.00	78.7	38.8	126.68	2.1667	0.006
	26.00	81.3	41.4	126.68	2.0769	0.007
	28.00	83.8	43.9	126.68	2.0000	0.007
	30.00	86.1	46.2	126.86	1.9333	0.007
	32.00	88.5	48.5	126.86	1.8750	0.008
	34.00	90.9	50.9	126.86	1.8235	0.008
	36.00	93.2	53.2	126.86	1.7778	0.009
	38.00	95.7	55.7	126.86	1.7368	0.009
	40.00	98.1	58.2	127.04	1.7000	0.01
	42.00	100.2	60.3	127.04	1.6667	0.010
	44.00	102.4	62.4	127.04	1.6364	0.010
	46.00	105.1	65.1	127.04	1.6087	0.011
	48.00	107.0	67.1	127.22	1.5833	0.011
	50.00	109.2	69.2	127.22	1.5600	0.012
	52.00	111.4	71.5	127.22	1.5385	0.012
	54.00	113.5	73.6	127.22	1.5185	0.013
	56.00	116.1	76.1	127.22	1.5000	0.013
***** End Shut-in 1	58.00	118.1	78.1	127.40	1.4828	0.014
***** Start Flow 2	0.00	45.3	0.0	127.40		
	2.00	47.0	1.7	127.58		
	4.00	47.2	1.9	127.58		
	6.00	44.9	-0.4	127.76		
	8.00	46.5	1.2	127.76		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 7888 DST #3 GREESON #1-27 HARRIS Oil & Gas

DATE: 08/29/95

TIME: 02:47:02

	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	10.00	45.3	0.0	127.76		
	12.00	46.2	0.9	127.94		
	14.00	46.5	1.2	127.94		
	16.00	46.9	1.6	127.94		
	18.00	47.3	2.0	127.94		
	20.00	48.6	3.3	127.94		
	22.00	49.2	3.9	127.94		
	24.00	49.0	3.7	127.94		
	26.00	48.4	3.1	128.12		
	28.00	49.8	4.4	128.12		
	30.00	50.5	5.2	128.12		
	32.00	49.7	4.4	128.12		
	34.00	51.2	5.9	128.12		
	36.00	50.7	5.4	128.12		
	38.00	51.9	6.5	128.30		
	40.00	50.8	5.5	128.30		
	42.00	51.7	6.4	128.30		
	44.00	52.3	7.0	128.30		
	46.00	52.7	7.4	128.30		
	48.00	54.0	8.6	128.30		
	50.00	53.5	8.1	128.48		
	52.00	53.9	8.6	128.48		
	54.00	53.4	8.1	128.48		
	56.00	54.4	9.1	128.48		
	58.00	55.4	10.1	128.48		
	60.00	58.2	12.9	128.48		
***** End Flow 2	62.00	60.7	15.4	128.48		
***** Start Shutin 2	0.00	60.7	0.0	128.48	0.0000	0.004
	2.00	63.3	2.6	128.66	46.0000	0.004
	4.00	65.4	4.7	128.66	23.5000	0.004
	6.00	67.5	6.8	128.66	16.0000	0.005
	8.00	69.6	8.9	128.66	12.2500	0.005
	10.00	71.5	10.8	128.66	10.0000	0.005
	12.00	73.7	13.0	128.66	8.5000	0.005
	14.00	75.4	14.8	128.66	7.4286	0.006
	16.00	77.3	16.6	128.84	6.6250	0.006
	18.00	79.3	18.6	128.84	6.0000	0.006
	20.00	81.3	20.6	128.84	5.5000	0.007
	22.00	83.1	22.4	128.84	5.0909	0.007
	24.00	85.2	24.5	128.84	4.7500	0.007
	26.00	87.0	26.4	128.84	4.4615	0.008
	28.00	88.8	28.1	128.84	4.2143	0.008
	30.00	90.8	30.1	129.02	4.0000	0.008
	32.00	92.6	31.9	129.02	3.8125	0.009
	34.00	94.4	33.7	129.02	3.6471	0.009
	36.00	96.3	35.7	129.02	3.5000	0.009
	38.00	98.2	37.5	129.02	3.3684	0.01
	40.00	100.0	39.4	129.02	3.2500	0.010
	42.00	101.8	41.1	129.02	3.1429	0.010
	44.00	103.7	43.1	129.20	3.0455	0.011
	46.00	105.5	44.8	129.20	2.9565	0.011

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

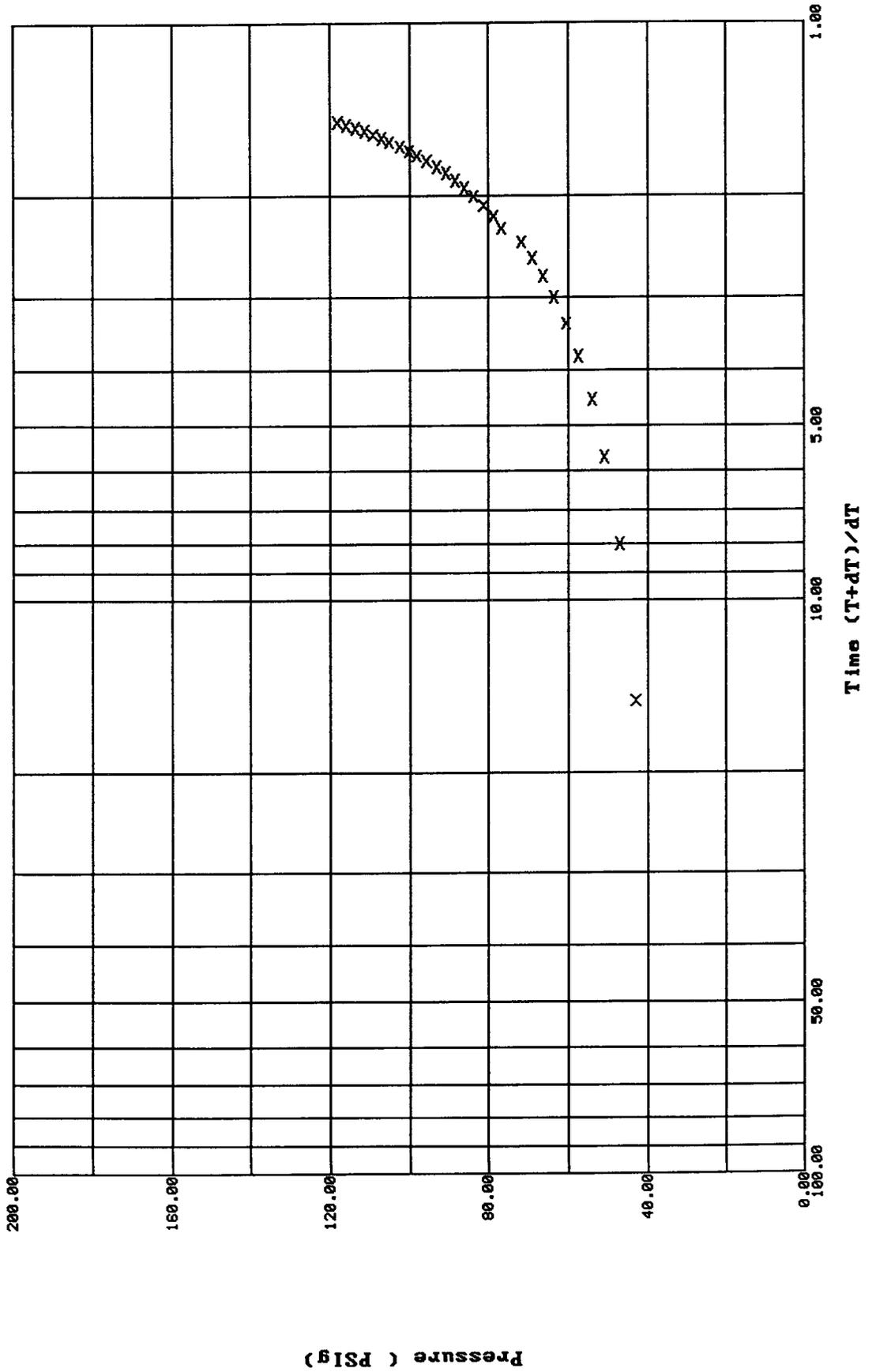
TEST: 7888 DST #3 GREESON #1-27 HARRIS Oil & Gas

DATE: 08/29/95

TIME: 02:47:02

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶	
48.00	107.2	46.5	129.20	2.8750	0.011	
50.00	108.9	48.3	129.20	2.8000	0.012	
52.00	110.7	50.0	129.20	2.7308	0.012	
54.00	112.9	52.2	129.20	2.6667	0.013	
56.00	114.5	53.8	129.20	2.6071	0.013	
58.00	116.4	55.7	129.20	2.5517	0.014	
60.00	118.3	57.7	129.38	2.5000	0.014	
62.00	120.1	59.4	129.38	2.4516	0.014	
64.00	121.9	61.2	129.38	2.4062	0.015	
66.00	123.7	63.0	129.38	2.3636	0.015	
68.00	125.6	65.0	129.38	2.3235	0.016	
70.00	127.4	66.7	129.38	2.2857	0.016	
72.00	129.2	68.6	129.38	2.2500	0.017	
74.00	130.9	70.2	129.38	2.2162	0.017	
76.00	133.0	72.3	129.56	2.1842	0.018	
78.00	134.7	74.0	129.56	2.1538	0.018	
80.00	136.5	75.8	129.56	2.1250	0.019	
82.00	138.2	77.5	129.56	2.0976	0.019	
84.00	140.1	79.4	129.56	2.0714	0.020	
86.00	142.0	81.3	129.56	2.0465	0.020	
88.00	143.8	83.2	129.56	2.0227	0.021	
90.00	145.4	84.8	129.56	2.0000	0.021	
92.00	147.4	86.7	129.56	1.9783	0.022	
94.00	149.4	88.7	129.74	1.9574	0.022	
96.00	151.2	90.6	129.74	1.9375	0.023	
98.00	152.8	92.2	129.74	1.9184	0.023	
100.00	154.9	94.3	129.74	1.9000	0.024	
102.00	156.6	95.9	129.74	1.8824	0.025	
104.00	158.4	97.7	129.74	1.8654	0.025	
106.00	160.5	99.8	129.74	1.8491	0.026	
108.00	162.4	101.7	129.74	1.8333	0.026	
110.00	164.1	103.4	129.74	1.8182	0.027	
112.00	165.9	105.2	129.74	1.8036	0.028	
114.00	167.8	107.1	129.92	1.7895	0.028	
116.00	169.7	109.0	129.92	1.7759	0.029	
***** End Shut-in 2	118.00	171.8	111.1	129.92	1.7627	0.030
***** Final Hydro.	430.00	2417.7	0.0	130.64		

Horner Plot: shut-in #1
 7888 DST #3 GREESON #1-27 HARRIS OIL & Gas



Horner Plot: shut-in #2
 7888 DST #3 GREESON #1-27 HARRIS Oil & Gas

