

DRILL-STEM TEST DATA

Well Name:	BURG #3-20			
Company :	SONAT EXPLORATION CO			
Location - Sec:	20	Twp:	22S	Rge: 34W
County:	FINNEY	State:	KS	
Date:	06/14/95			

TRILOBITE TESTING L.L.C.

OPERATOR : Sonat Exploration Co
WELL NAME: Burg 3-20
LOCATION : 20-22S-34W, Finney County
INTERVAL : 4280.00 To 4300.00 ft

DATE 6-14-95
KB 0.00 ft
GR 2960.00 ft
TD 4300.00 ft
TICKET NO: 8129
FORMATION: Marmaton B
TEST TYPE: CONVENTIONAL
DST #1

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	AK-1	AK-1	Alpine			PF Fr. 30 to hr
SI 60 Range(Psi)	4350.0	4350.0	4995.0	0.0	0.0	IS Fr. to 1 hr
SF 60 Clock(hrs)	25828	25828				SF Fr. to 1 hr
FS 90 Depth(ft)	4295.0	4295.0	4281.0	0.0	0.0	FS Fr. to 1.5 hr

	Field	1	2	3	4	
A. Init Hydro	2120.0	2129.0	2061.0	0.0	0.0	T STARTED 14:1 hr
B. First Flow	13.0	27.0	7.0	0.0	0.0	T ON BOTM 16:3 hr
B1. Final Flow	15.0	27.0	8.0	0.0	0.0	T OPEN 16:3 hr
C. In Shut-in	174.0	150.0	172.0	0.0	0.0	T PULLED 20:3 hr
D. Init Flow	17.0	19.0	6.0	0.0	0.0	T OUT 22:1 hr
E. Final Flow	21.0	24.0	14.0	0.0	0.0	
F. Fl Shut-in	54.0	35.0	51.0	0.0	0.0	
G. Final Hydro	2054.0	2072.0	2056.0	0.0	0.0	
Inside/Outside	0	0	I			

RECOVERY

Tot Fluid 25.00 ft of 0.00 ft in DC and 25.00 ft in DP
5.00 ft of Clean Gassy Oil - 5% gas, 95% oil
20.00 ft of Oil Cut Mud - 30% oil, 70% mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 37.00

TOOL DATA-----
Tool Wt. 2000.00 lbs
Wt Set On Packer 25000.00 lbs
Wt Pulled Loose 65000.00 lbs
Initial Str Wt 55000.00 lbs
Unseated Str Wt 55000.00 lbs
Bot Choke 0.75 in
Hole Size 7.87 in
D Col. ID 0.00 in
D. Pipe ID 3.80 in
D.C. Length 0.00 ft
D.P. Length 4275.00 ft

MUD DATA-----
Mud Type Chemical
Weight 9.10 lb/c
Vis. 43.00 S/L
W.L. 12.80 in3
F.C. 0.00 in
Mud Drop

BLOW DESCRIPTION

Initial Blow -
Weak surface blow, built to 1"

Initial Shutin -
No return blow

Final Blow -
2" blow @ open, built to 10" fair blow

Final Shutin -
1/2" weak return blow

SAMPLES:
SENT TO:

Amt. of fill 1.50 ft
Btm. H. Temp. 109.40 F
Hole Condition good
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 2
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Gary Speer
Co. Rep. Tom Hamilton
Contr. Val Energy
Rig # 1
Unit #
Pump T.

Test Successful: Y

TEST HISTORY

Burg 3-20 Sonat DST 1

Flag Points

t<Min.> P< PSig>

A: 0.00 2061.18
 B: 0.00 7.38
 C: 30.00 8.22
 D: 60.00 172.38
 E: 0.00 6.12
 F: 64.00 13.67
 G: 84.00 51.44
 Q: 0.00 2056.81

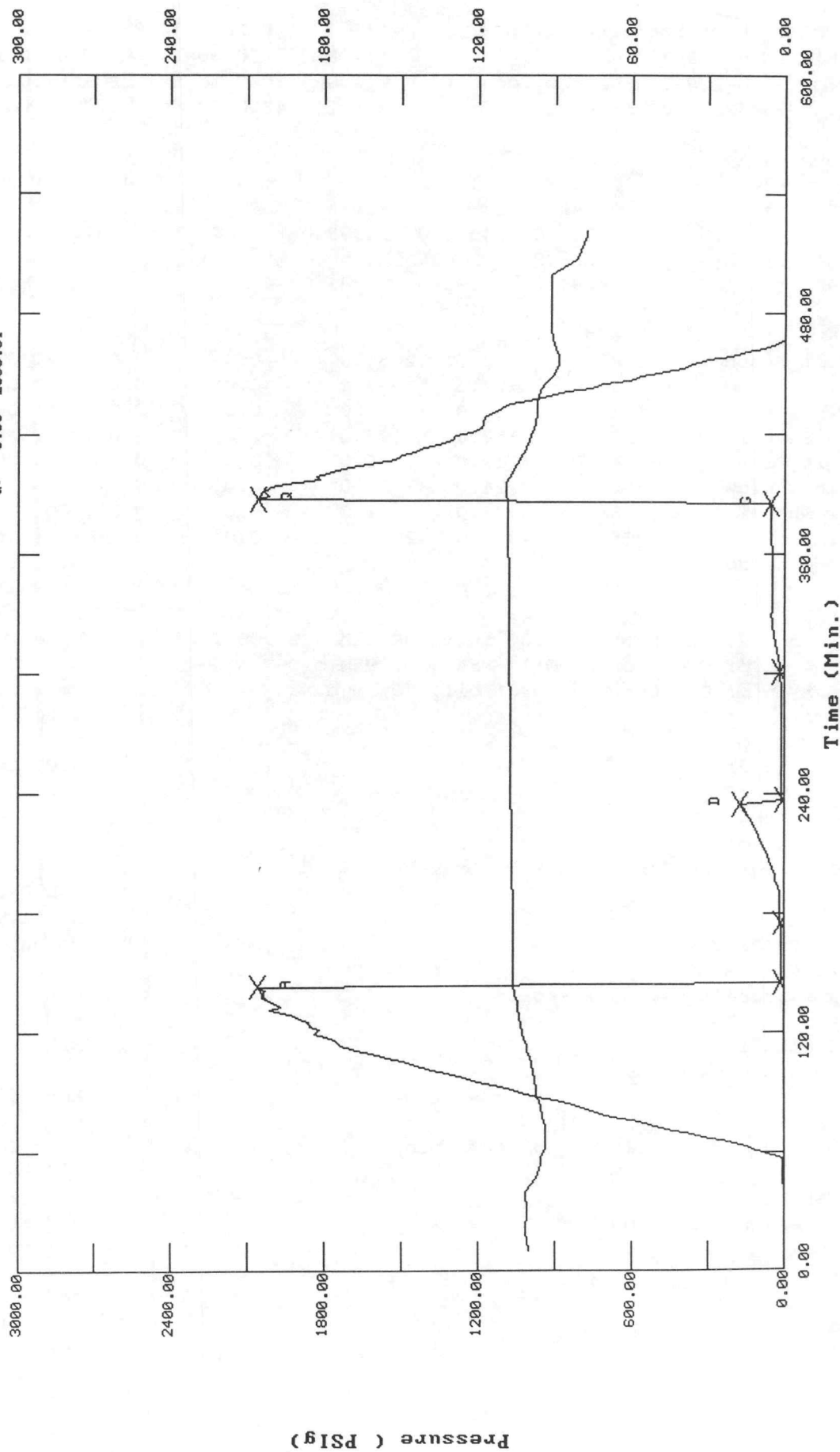
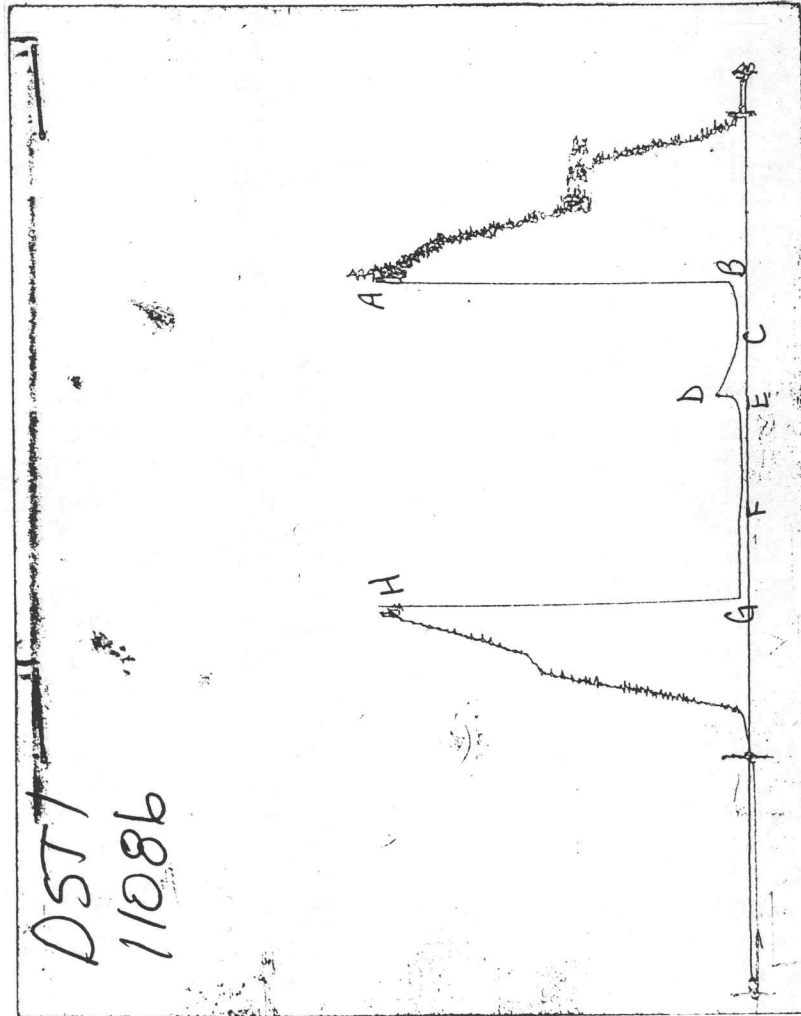


CHART PAGE



This is an actual photograph of an AK1 recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Burg 3-20 Sonat DST 1

DATE: 06/14/95

TIME: 13:11:55

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	143.00	2061.2	0.0	105.98		
***** Start Flow 1	0.00	7.4	0.0	106.16		
	2.00	9.4	2.0	106.16		
	4.00	10.2	2.9	106.16		
	6.00	10.7	3.3	105.98		
	8.00	10.9	3.5	105.98		
	10.00	8.8	1.4	105.98		
	12.00	7.4	0.0	105.98		
	14.00	6.8	-0.6	105.98		
	16.00	7.5	0.1	106.16		
	18.00	8.1	0.8	106.16		
	20.00	7.7	0.3	106.16		
	22.00	7.8	0.4	106.16		
	24.00	9.1	1.7	106.16		
	26.00	9.4	2.0	106.16		
	28.00	8.0	0.7	106.16		
***** End Flow 1	30.00	8.2	0.8	106.16		
***** Start Shutin 1	0.00	8.2	0.0	106.16	0.0000	0.000
	2.00	13.3	5.0	106.16	16.0000	0.000
	4.00	16.9	8.7	106.34	8.5000	0.000
	6.00	16.7	8.5	106.34	6.0000	0.000
	8.00	14.8	6.6	106.34	4.7500	0.000
	10.00	14.0	5.8	106.34	4.0000	0.000
	12.00	13.8	5.5	106.34	3.5000	0.000
	14.00	15.6	7.4	106.34	3.1429	0.000
	16.00	18.3	10.1	106.34	2.8750	0.000
	18.00	22.5	14.3	106.52	2.6667	0.001
	20.00	26.3	18.1	106.52	2.5000	0.001
	22.00	31.3	23.1	106.52	2.3636	0.001
	24.00	36.3	28.1	106.52	2.2500	0.001
	26.00	41.7	33.5	106.52	2.1538	0.002
	28.00	47.2	38.9	106.52	2.0714	0.002
	30.00	53.0	44.8	106.52	2.0000	0.003
	32.00	59.1	50.9	106.70	1.9375	0.003
	34.00	65.4	57.2	106.70	1.8824	0.004
	36.00	71.7	63.5	106.70	1.8333	0.005
	38.00	78.5	70.3	106.70	1.7895	0.006
	40.00	85.4	77.2	106.70	1.7500	0.007
	42.00	92.6	84.4	106.70	1.7143	0.009
	44.00	99.9	91.6	106.70	1.6818	0.01
	46.00	107.1	98.9	106.88	1.6522	0.011
	48.00	114.6	106.4	106.88	1.6250	0.013
	50.00	122.7	114.5	106.88	1.6000	0.015
	52.00	131.2	123.0	106.88	1.5769	0.017
	54.00	140.3	132.1	106.88	1.5556	0.020
	56.00	150.1	141.9	106.88	1.5357	0.023
	58.00	160.9	152.7	107.06	1.5172	0.026
***** End Shut-in 1	60.00	172.4	164.2	107.06	1.5000	0.030
***** Start Flow 2	0.00	6.1	0.0	107.06		
	2.00	7.7	1.6	107.06		
	4.00	8.5	2.3	107.06		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

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DATE: 06/14/95

TIME: 13:11:55

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	6.00	10.1	3.9	107.06		
	8.00	9.3	3.2	107.24		
	10.00	10.7	4.6	107.24		
	12.00	10.5	4.4	107.24		
	14.00	10.9	4.8	107.24		
	16.00	10.6	4.4	107.24		
	18.00	10.7	4.6	107.24		
	20.00	9.5	3.4	107.42		
	22.00	10.5	4.4	107.42		
	24.00	10.4	4.3	107.42		
	26.00	10.7	4.5	107.42		
	28.00	9.6	3.5	107.42		
	30.00	9.5	3.4	107.42		
	32.00	9.9	3.8	107.42		
	34.00	10.4	4.3	107.42		
	36.00	10.7	4.6	107.42		
	38.00	11.7	5.6	107.60		
	40.00	10.7	4.6	107.60		
	42.00	11.3	5.2	107.60		
	44.00	10.9	4.8	107.60		
	46.00	10.8	4.7	107.60		
	48.00	11.1	5.0	107.60		
	50.00	11.7	5.6	107.60		
	52.00	11.4	5.3	107.60		
	54.00	12.5	6.4	107.60		
	56.00	11.7	5.6	107.60		
	58.00	11.5	5.4	107.78		
	60.00	15.3	9.1	107.78		
	62.00	13.8	7.6	107.78		
***** End Flow 2	64.00	13.7	7.6	107.78		
***** Start Shutin 2	0.00	13.7	0.0	107.78	0.0000	0.000
	2.00	15.7	2.0	107.78	48.0000	0.000
	4.00	18.0	4.3	107.78	24.5000	0.000
	6.00	20.0	6.3	107.78	16.6667	0.000
	8.00	22.6	8.9	107.78	12.7500	0.001
	10.00	25.9	12.3	107.78	10.4000	0.001
	12.00	29.5	15.9	107.78	8.8333	0.001
	14.00	33.1	19.4	107.78	7.7143	0.001
	16.00	36.1	22.4	107.96	6.8750	0.001
	18.00	39.0	25.3	107.96	6.2222	0.002
	20.00	41.5	27.8	107.96	5.7000	0.002
	22.00	43.8	30.1	107.96	5.2727	0.002
	24.00	45.9	32.2	107.96	4.9167	0.002
	26.00	47.7	34.1	107.96	4.6154	0.002
	28.00	48.7	35.0	107.96	4.3571	0.002
	30.00	47.0	33.3	107.96	4.1333	0.002
	32.00	46.0	32.3	107.96	3.9375	0.002
	34.00	45.4	31.7	107.96	3.7647	0.002
	36.00	44.9	31.2	107.96	3.6111	0.002
	38.00	44.9	31.2	108.14	3.4737	0.002
	40.00	45.1	31.4	108.14	3.3500	0.002

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Burg 3-20 Sonat DST 1

DATE: 06/14/95

TIME: 13:11:55

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	42.00	45.2	31.6	108.14	3.2381	0.002
	44.00	45.6	32.0	108.14	3.1364	0.002
	46.00	46.1	32.4	108.14	3.0435	0.002
	48.00	46.4	32.7	108.14	2.9583	0.002
	50.00	46.7	33.1	108.14	2.8800	0.002
	52.00	46.6	33.0	108.14	2.8077	0.002
	54.00	46.6	33.0	108.14	2.7407	0.002
	56.00	46.8	33.2	108.14	2.6786	0.002
	58.00	46.9	33.2	108.32	2.6207	0.002
	60.00	47.0	33.3	108.32	2.5667	0.002
	62.00	47.9	34.2	108.32	2.5161	0.002
	64.00	48.7	35.0	108.32	2.4688	0.002
	66.00	49.2	35.5	108.32	2.4242	0.002
	68.00	49.3	35.6	108.32	2.3824	0.002
	70.00	49.7	36.0	108.32	2.3429	0.002
	72.00	50.0	36.3	108.32	2.3056	0.003
	74.00	50.3	36.6	108.32	2.2703	0.003
	76.00	50.1	36.4	108.32	2.2368	0.003
	78.00	50.2	36.5	108.32	2.2051	0.003
	80.00	50.5	36.8	108.50	2.1750	0.003
	82.00	51.0	37.3	108.50	2.1463	0.003
***** End Shut-in 2	84.00	51.4	37.8	108.50	2.1190	0.003
***** Final Hydro.	387.00	2056.8	0.0	108.68		

CALCULATED RECOVERY ANAL DRILL PIPE

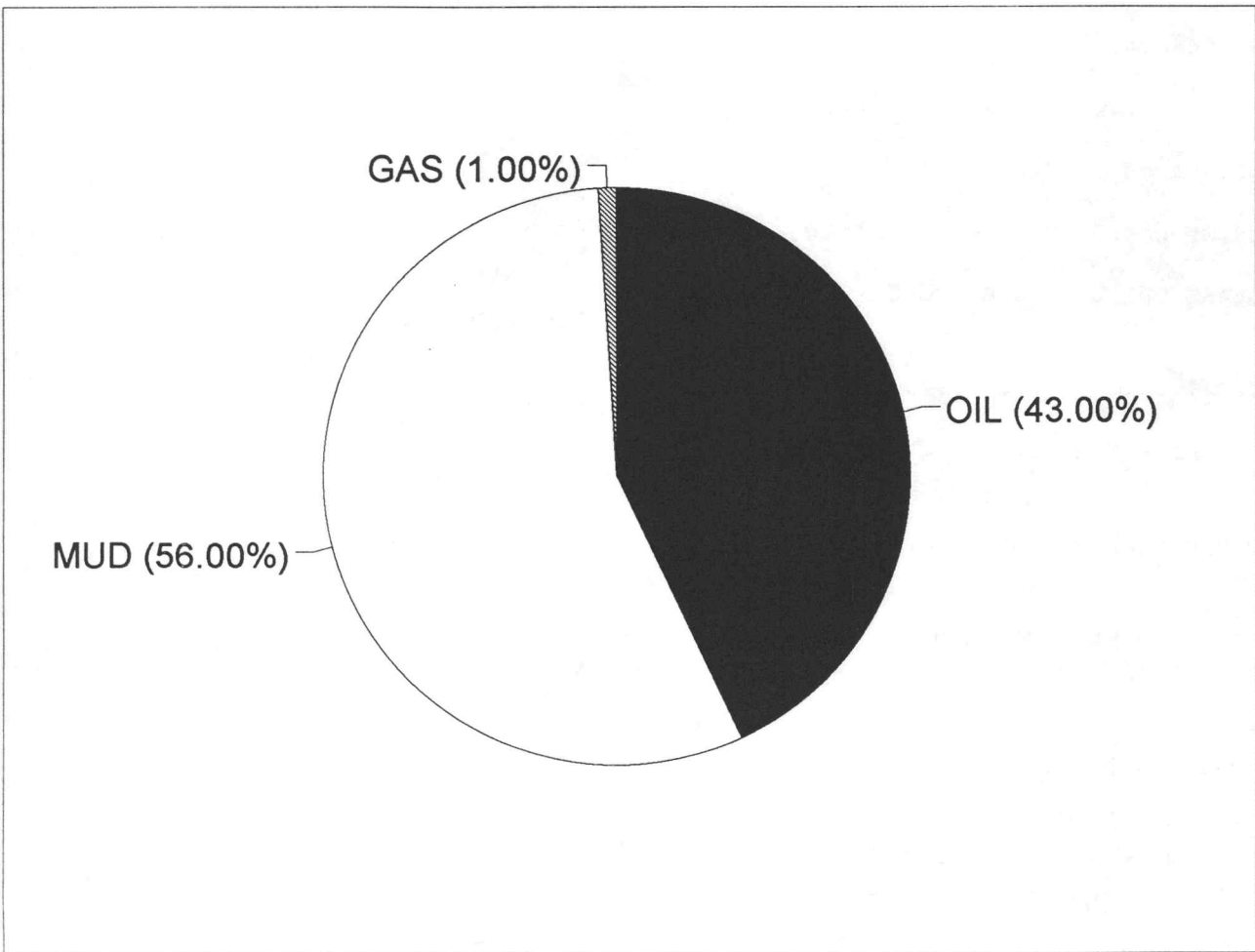
DST # 1

TICKET # 8129

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
1	5	5	0.25	95	4.75		0		0
2	20		0	30	6		0	70	14
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
TOTAL	25	1.00	0.25	43.00	10.75	0	0	56.00	14

HRS OPE BBL/DAY

BBL OIL=	0.152865	*	1.50	2.45
BBL WATER=	0	*		0.00
BBL MUD=	0.19908			
BBL GAS	0.003555			



*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Burg 3-20

LOCATION : 20-22S-34W, Finney County

TICKET No. 8129 D.S.T. No. 1 DATE 6-14-95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 29 ft.

INTERVAL TOOL 20 ft.

BOTTOM PACKERS AND ANCHOR

TOTAL TOOL 49 ft.

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands69 Single Total 4275

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4324

TOTAL DEPTH 4300

TOTAL DRILL PIPE ABOVE K.B. 24

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -

GAS 900 ML, OIL 3050 ML, MUD 50 ML,
PRESSURE 50 PSI, TOTAL 4000 ML

SAMPLER ANALYSIS -

GRAVITY 37 CORRECTED AT 60 F

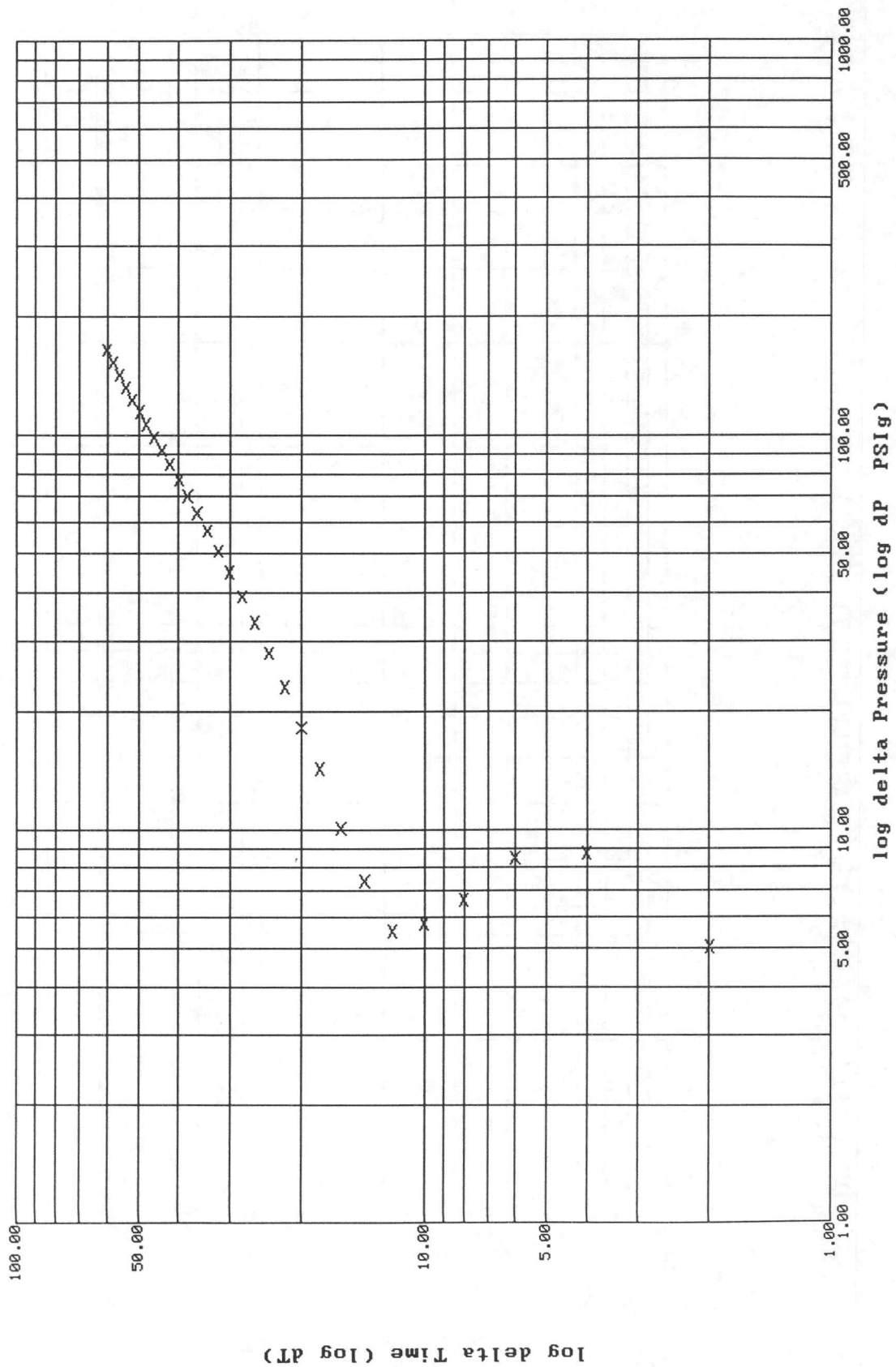
PIT MUD ANALYSIS -

CHLORIDES 4000 PPM; RESIST 1.7 OHMS @ 70 F;
VISCOSITY 43, MUD WT 9.1, FILTRATE 12.8

P.O. SUB	4130
C.O. SUB	4250
S.I. TOOL	4251
Sampler	4256
HMV	4259
JARS	4264
SAFETY JOINT	4269
PACKER	4271
PACKER	4276
DEPTH	
STUBB	4280
ANCHOR	
Elec. Rec. @	4281
T.C.	
DEPTH	
5 ft. pickup sub	4281
5 ft. perf.	4286
4 ft. perf.	4291
AK-1 Rec.	4295
BULLNOSE	
T.D.	4295

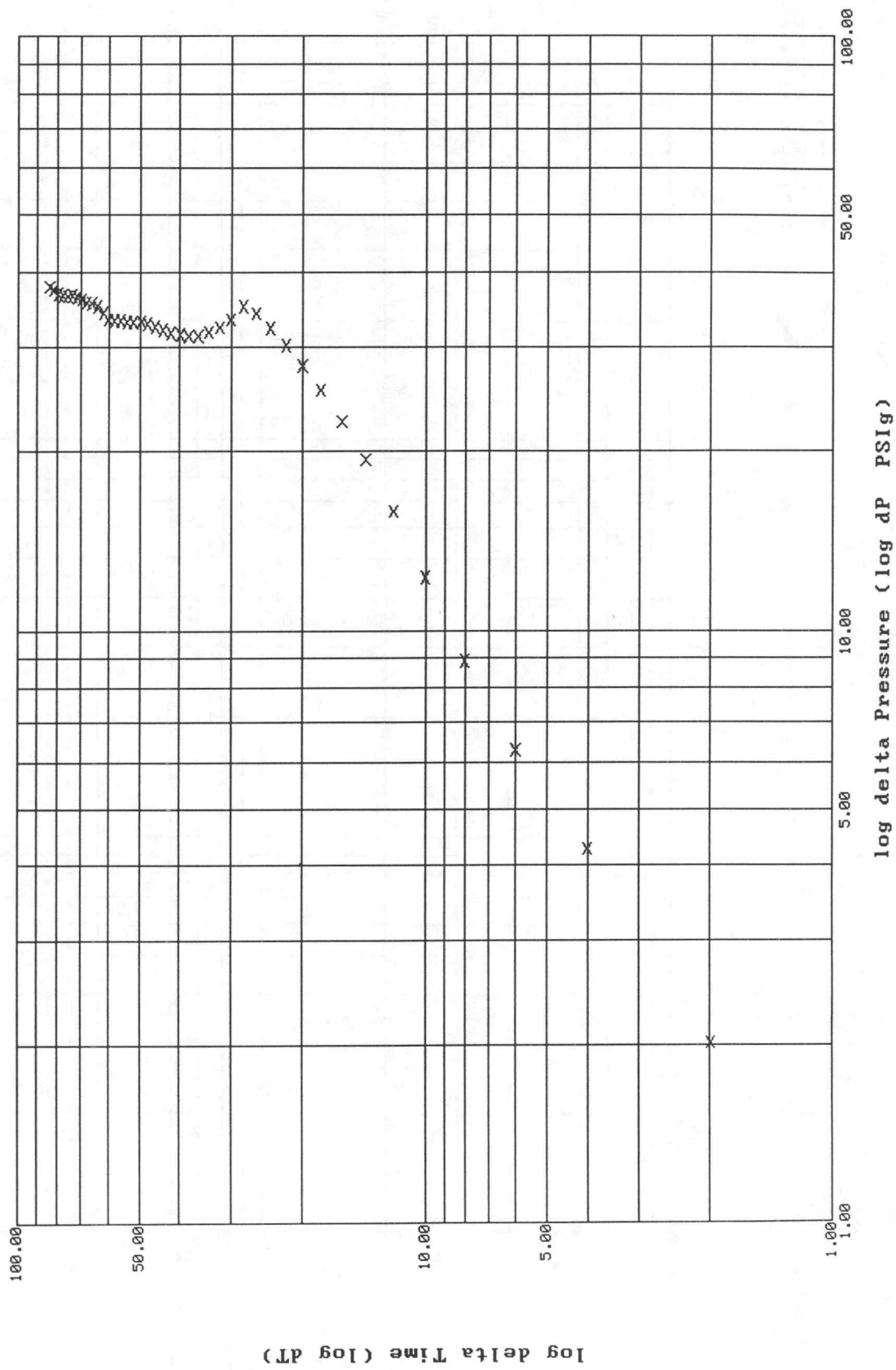
McKinley Plot: shut-in #1

Burg 3-20 Sonat DST 1



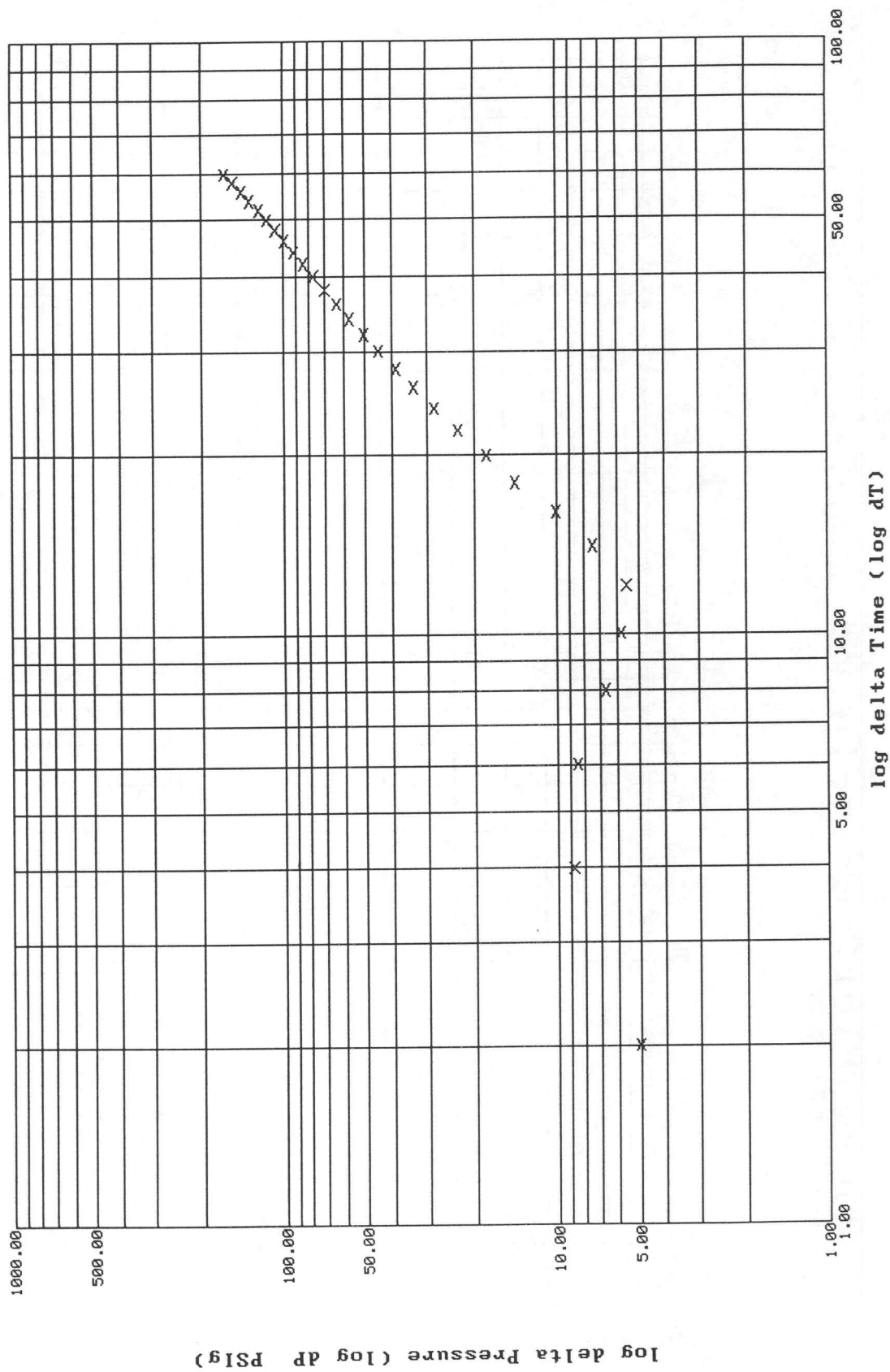
McKinley Plot: shut-in #2

Burg 3-20 Sonat DST 1



Ramey Plot: shut-in #1

Burg 3-20 Sonat DST 1



Ramey Plot: shut-in #2

Burg 3-20 Sonat DST 1

