

WELL NAME: Pauls #9-6
COMPANY: PetroSantander USA Inc.
LOCATION: 9-23s-31w
Finney County, Kansas
DATE: 9/29/98

TRILOBITE TESTING L.L.C.

OPERATOR : PetroSantander USA Inc.
WELL NAME: Pauls #9-6
LOCATION : 9-23S-31W Finney KS.
INTERVAL : 4754.00 To 4780.00 ft

DATE 9-26-98
KB 2792.00 ft TICKET NO: 11018 DST #1
GR 2788.00 ft FORMATION: Morrow
TD 4900.00 ft TEST TYPE: CONV STRADDLE

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339	13339	3024		13309	PF Fr. 1058 to 1128 hr
SI 60 Range (Psi)	4025.0	4025.0	4995.0	0.0	4700.0	IS Fr. 1128 to 1228 hr
SF 30 Clock (hrs)	12 Hr	12	ALP		12 HR	SF Fr. 1228 to 1258 hr
FS 60 Depth (ft)	4775.0	4775.0	4760.0	0.0	4895.0	FS Fr. 1258 to 1358 hr

	Field	1	2	3	4	
A. Init Hydro	2363.0	2345.0	2363.0	0.0	0.0	T STARTED 0908 hr
B. First Flow	52.0	36.0	28.0	0.0	0.0	T ON BOTM 1056 hr
B1. Final Flow	52.0	37.0	72.0	0.0	0.0	T OPEN 1058 hr
C. In Shut-in	1150.0	1146.0	1200.0	0.0	0.0	T PULLED 1358 hr
D. Init Flow	93.0	93.0	79.0	0.0	0.0	T OUT 1600 hr
E. Final Flow	93.0	93.0	109.0	0.0	0.0	
F. Fl Shut-in	1130.0	1132.0	1176.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2353.0	2335.0	2338.0	0.0	0.0	Tool Wt. 2500.00 lbs
Inside/Outside	O	O	I		S	Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 90000.00 lbs
						Initial Str Wt 76000.00 lbs
						Unseated Str Wt 76000.00 lbs
						Bot Choke 0.75 in
						Hole Size 8.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 178.00 ft
						D.P. Length 4572.00 ft

RECOVERY

Tot Fluid 190.00 ft of 187.00 ft in DC and 12.00 ft in DP
190.00 ft of Thin 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
0.00 ft of RW 2.9 @ 70 deg =
SALINITY 2100.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Weak surface blow built to 2"
Final Flow:
No return blow

MUD DATA-----
Mud Type Chemical
Weight 9.40 lb/cf
Vis. 48.00 S/L
W.L. 9.20 in3
F.C. 0.00 in
Mud Drop N

Amt. of fill 0.00 ft
Btm. H. Temp. 119.00 F
Hole Condition Good
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 3
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Rod Steinbrink
Co. Rep. Pete K / Wes H
Contr. Abercrombie
Rig # 4
Unit #
Pump T.

Test Successful: Y

SAMPLES:
SENT TO:

*** TOOL DIAGRAM *** CONV STRADDLE

LL NAME: Pauls #9-6

LOCATION : 9-23S-31W Finney KS.

CKET No. 11018 D.S.T. No. 1 DATE 9-26-98

TAL TOOL TO BOTTOM OF TOP PACKERS 30

TERVAL TOOL 26

TTOM PACKERS AND ANCHOR 27

TAL TOOL 53

ILL COLLAR ANCHOR IN INTERVAL

C. ANCHOR STND.Stands Single Total

P. ANCHOR STND.Stands 1 Single 1 Total 93

TAL ASSEMBLY 146

C. ABOVE TOOLS.Stands3 Single Total 178

P. ABOVE TOOLS.Stands74 Single Total 4603

TAL DRILL COLLARS DRILL PIPE & TOOLS .. 4927

TAL DEPTH 4900

TAL DRILL PIPE ABOVE K.B. 27

MARKS:

ampler Data;

as;

l;

ater;

id; 4000 ml

otal Volume; 4000 ml

essure; 200# psi

P.O. SUB 1' Above 120' DC	4604
C.O. SUB 1'	4724
S.I. TOOL 5'	4730
3' Sampler	4733
HMV 5'	4738
JARS 5'	4743
SAFETY JOINT 2'	4745
PACKER 4'	4749
PACKER 5'	4754
DEPTH STUBB 1'	4755
ANCHOR	
Alp Rec. @	4760
19' Perf	4774
AK-1 Rec. @	4775
1' Blank Off Sub	4775
T.C.	
DEPTH	
PACKER 5'	4780
1' Stubb	4781
19' Perf.	4800
1' c/o sub	4801
93' DP	4894
1' c/o sub	4895
AK-1 rec. @	4895
BULLNOSE 5'	
T.D.	4900

TEST HISTORY

11018 DST #1 Pauls #9-6 PetroSantander Inc.

Flag Points			
	t (Min.)	P (PSig)	
A:	0.00	2363.86	Q: 0.00 2338.66
B:	0.00	28.82	
C:	30.00	72.94	
D:	60.00	1200.50	
E:	0.00	79.31	
F:	31.00	109.79	
G:	61.00	1176.00	
H:	0.00	2338.66	

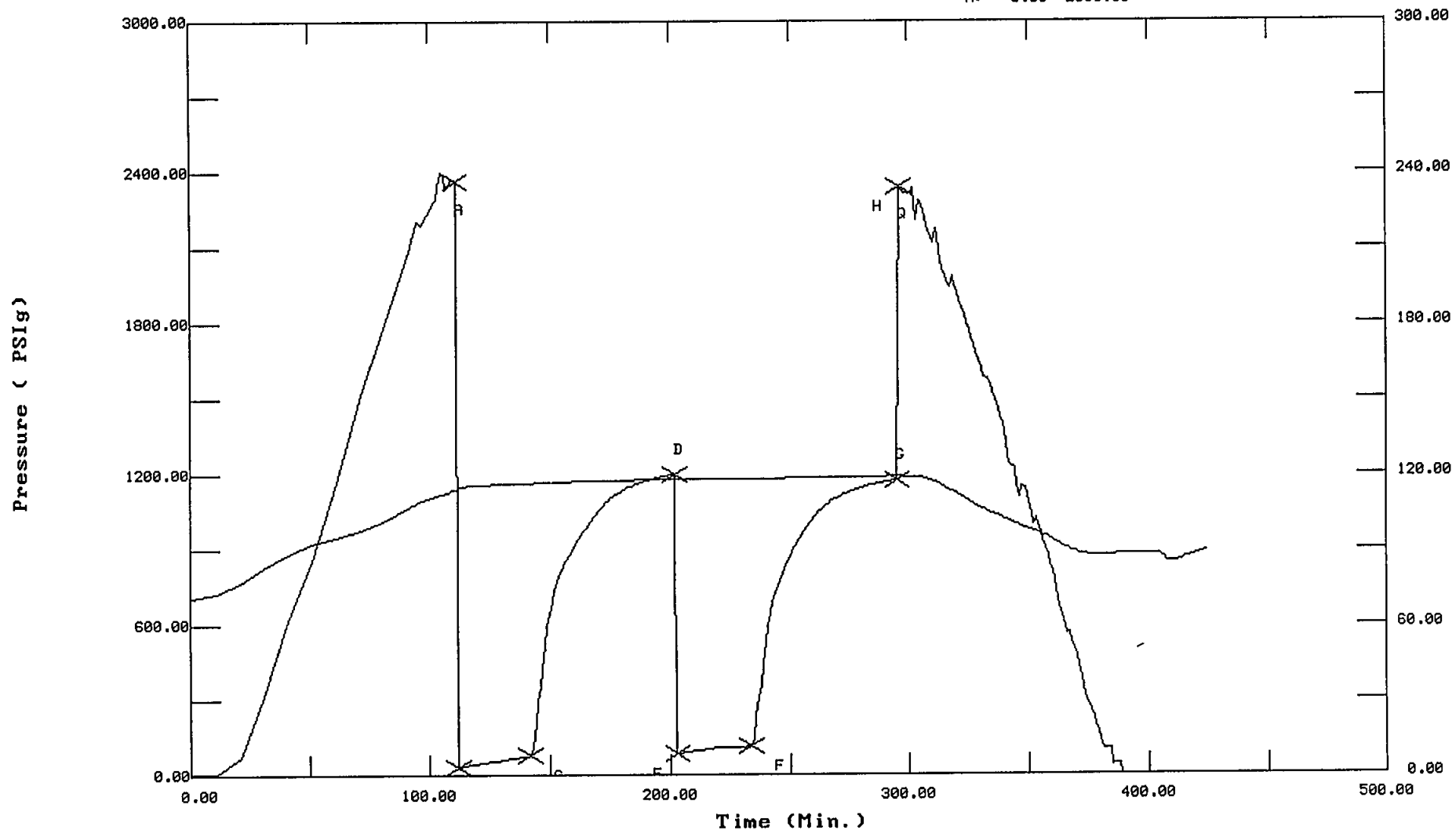
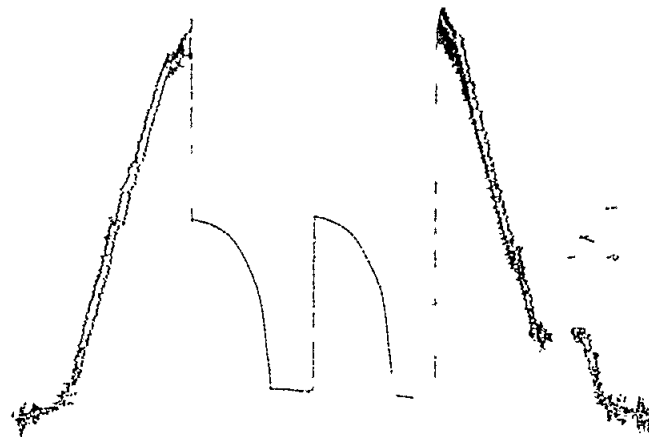


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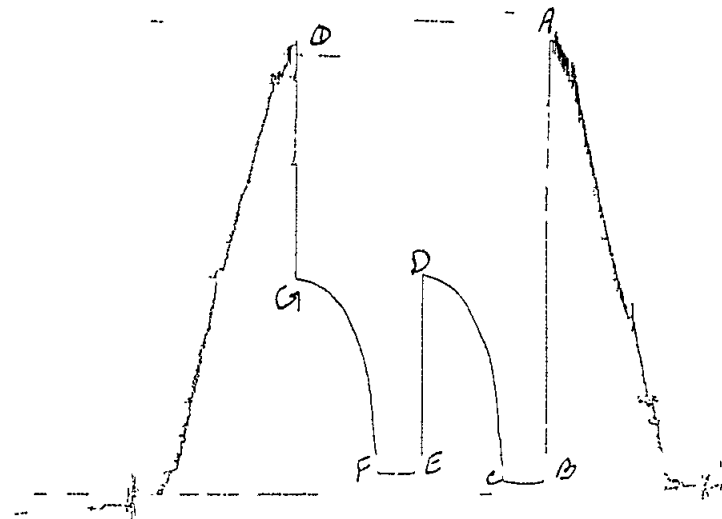
DST #1
13309 S



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CHART PAGE

DST#1
13339 I



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

TRILOBITE TESTING L.L.C.

OPERATOR : PetroSantander USA Inc.
WELL NAME: Pauls #9-6
LOCATION : 9-23S-31W Finney KS.
INTERVAL : 4754.00 To 4805.00 ft

DATE 9-26-98
KB 2892.00 ft TICKET NO: 11019 DST #2
GR 2887.00 ft FORMATION: Morrow
TD 4900.00 ft TEST TYPE: CONV STRADDLE

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339	13339	3024		13309	PF Fr. 2000 to 2030 hr
SI 60 Range(Psi)	4700.0	4700.0	4995.0	0.0	4700.0	IS Fr. 2030 to 2130 hr
SF 30 Clock(hrs)	12 HR	12	ALP		12 HR	SF Fr. 2130 to 2200 hr
FS 60 Depth(ft)	4795.0	4795.0	4760.0	0.0	4895.0	FS Fr. 2200 to 2300 hr

	Field	1	2	3	4	
A. Init Hydro	2353.0	2330.0	2374.0	0.0	2417.0	T STARTED 1822 hr
B. First Flow	31.0	41.0	22.0	0.0	0.0	T ON BOTM 1958 hr
B1. Final Flow	31.0	41.0	36.0	0.0	0.0	T OPEN 2000 hr
C. In Shut-in	405.0	284.0	408.0	0.0	0.0	T PULLED 2300 hr
D. Init Flow	31.0	41.0	38.0	0.0	0.0	T OUT 0130 hr
E. Final Flow	31.0	41.0	48.0	0.0	0.0	
F. Fl Shut-in	384.0	228.0	340.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2333.0	2357.0	2350.0	0.0	2370.0	Tool Wt. 2500.00 lbs
Inside/Outside	O	O	I		S	Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 85000.00 lbs
						Initial Str Wt 76000.00 lbs
						Unseated Str Wt 76000.00 lbs
						Bot Choke 0.75 in
						Hole Size 8.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 178.00 ft
						D.P. Length 4572.00 ft

RECOVERY

Tot Fluid 30.00 ft of 30.00 ft in DC and 0.00 ft in DP
30.00 ft of Thin 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
0.00 ft of
0.00 ft of RW 2.9 @ 70deg =
SALINITY 2100.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Weak 1/4" blow decreased to surface
Final Flow:
No return blow

MUD DATA-----
Mud Type Chemical
Weight 9.40 lb/cf
Vis. 48.00 S/L
W.L. 9.20 in3
F.C. 0.00 in
Mud Drop N

Amt. of fill 0.00 ft
Btm. H. Temp. 119.00 F
Hole Condition Good
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 3
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Rod Steinbrink
Co. Rep. Pete K / Wes H
Contr. Abercrombie
Rig # 4
Unit #
Pump T.

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONV STRADDLE

LL NAME: Pauls #9-6

LOCATION : 9-23S-31W Finney KS.

WELL No. 11019 D.S.T. No. 2 DATE 9-26-98

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL 20

TOTAL PACKERS AND ANCHOR 33

TOTAL TOOL 83

WELL COLLAR ANCHOR IN INTERVAL

C. ANCHOR STAND.Stands Single Total

P. ANCHOR STAND.Stands 1 Single 1 Total 93

TOTAL ASSEMBLY 176

C. ABOVE TOOLS.Stands3 Single Total 178

P. ABOVE TOOLS.Stands73 Single 1 Total 4572

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4926

TOTAL DEPTH 4900

TOTAL DRILL PIPE ABOVE K.B. 26

REMARKS:

Sampler Data;

as;

l;

ater;

id; 4000 ml

otal Volume; 4000 ml

ressure; 200 # psi

P.O. SUB 1' Above 120' DC	4604
C.O. SUB 1'	4724
S.I. TOOL 5'	4730
3' Sampler	4733
HMV 5'	4738
JARS 5'	4743
SAFETY JOINT 2'	4745
PACKER 4'	4749
PACKER 5'	4754
DEPTH STUBB 1'	4755
ANCHOR ALP Rec. @ 5' Pef.	4760
1' c/o sub	4761
31' DP	4792
1' c/o sub	4793
AK-1 Rec. @	4795
6' Perf	4799
1' Blank Off Sub	4800
T.C. DEPTH	
PACKER 5'	4805
1' Stubb	4806
25' Pef	4831
1' c/o sub	4832
62' DP	4894
1' c/o sub	4895
AK-1 Rec. @	4895
BULLNOSE 5'	
T.D.	4900

TEST HISTORY

11019 DST #2 Pauls #9-6 PetroSantander Inc.

Flag Points
t(Min.) P(PSig)

A: 0.00 2374.53
B: 0.00 22.98
C: 31.00 36.79
D: 61.00 400.56
E: 0.00 38.92
F: 29.00 48.31
G: 61.00 340.65
Q: 0.00 2350.68

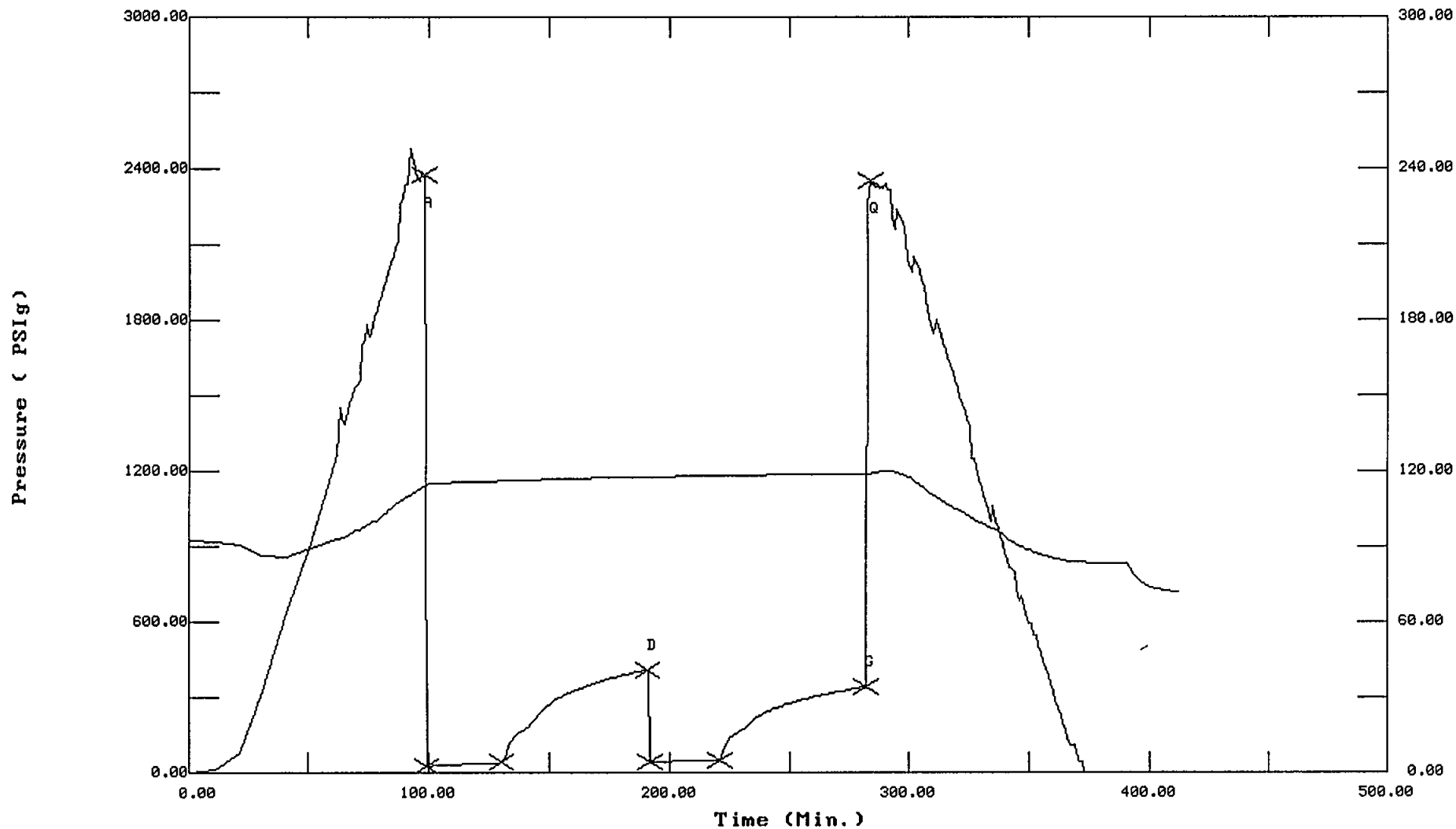
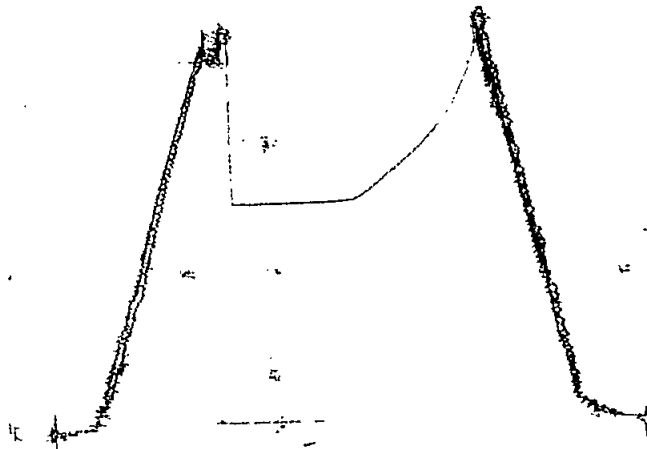


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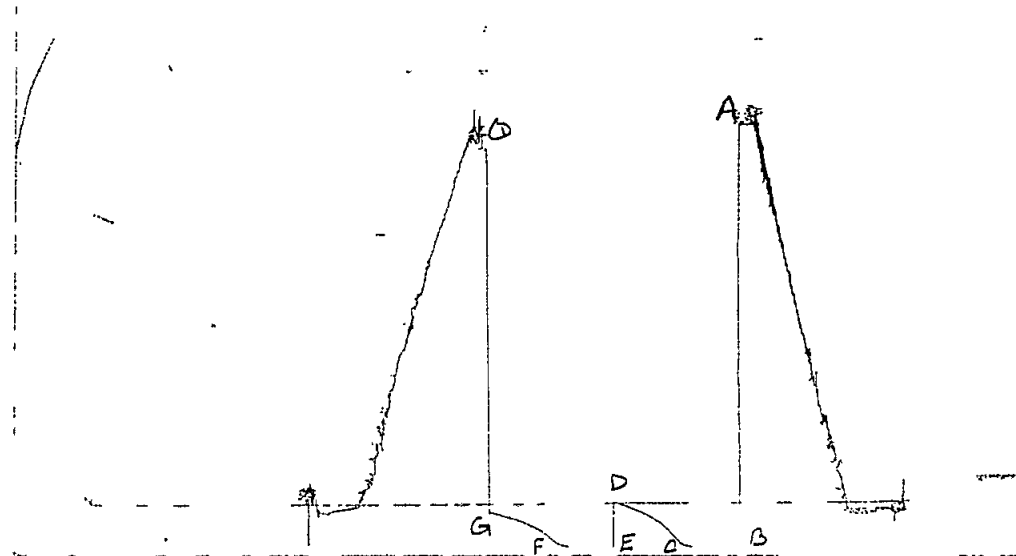
DST#2
13309 Straddle



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CHART PAGE

DST#2 X
13339 outside



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