

LEASE NAME

WELL NO.

TEST NO.

4780.0 - 4840.0
TESTED INTERVAL

MOBIL EXPLORATION & PRODUCING U.S., INC.
LEASE OWNER/COMPANY NAME

LEGAL LOCATION
SEC - TWP - RANG.

13-31S-35W

FIELD
AREA

OUT POST

COUNTY

STEVENS

STATE

KANSAS OR

MOBIL EXPLORATION & PRODUCING U.S., INC.

LEASE : EARL DAVIS

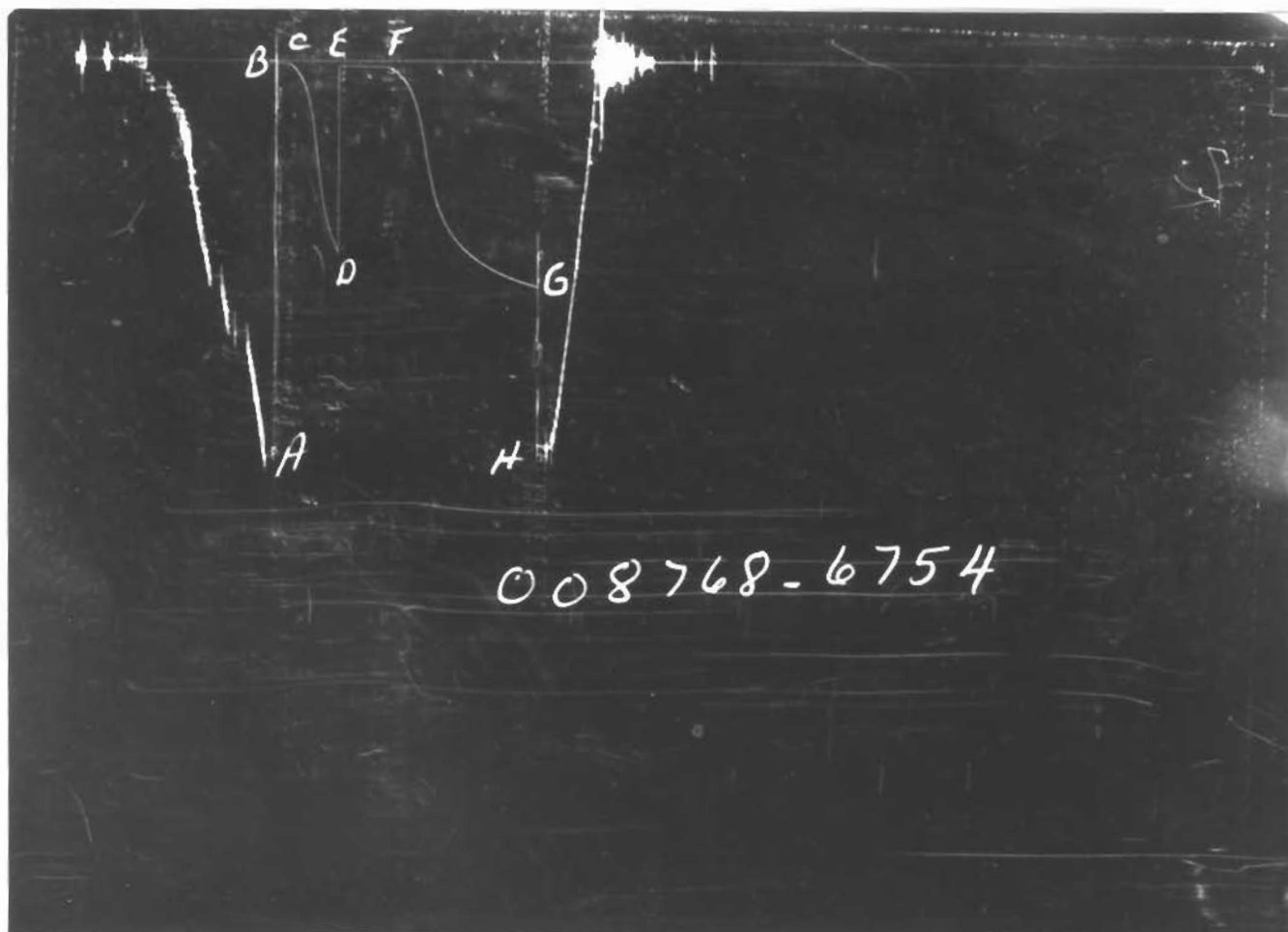
WELL NO.: 1

TEST NO.: 1

TICKET NO. 00876800

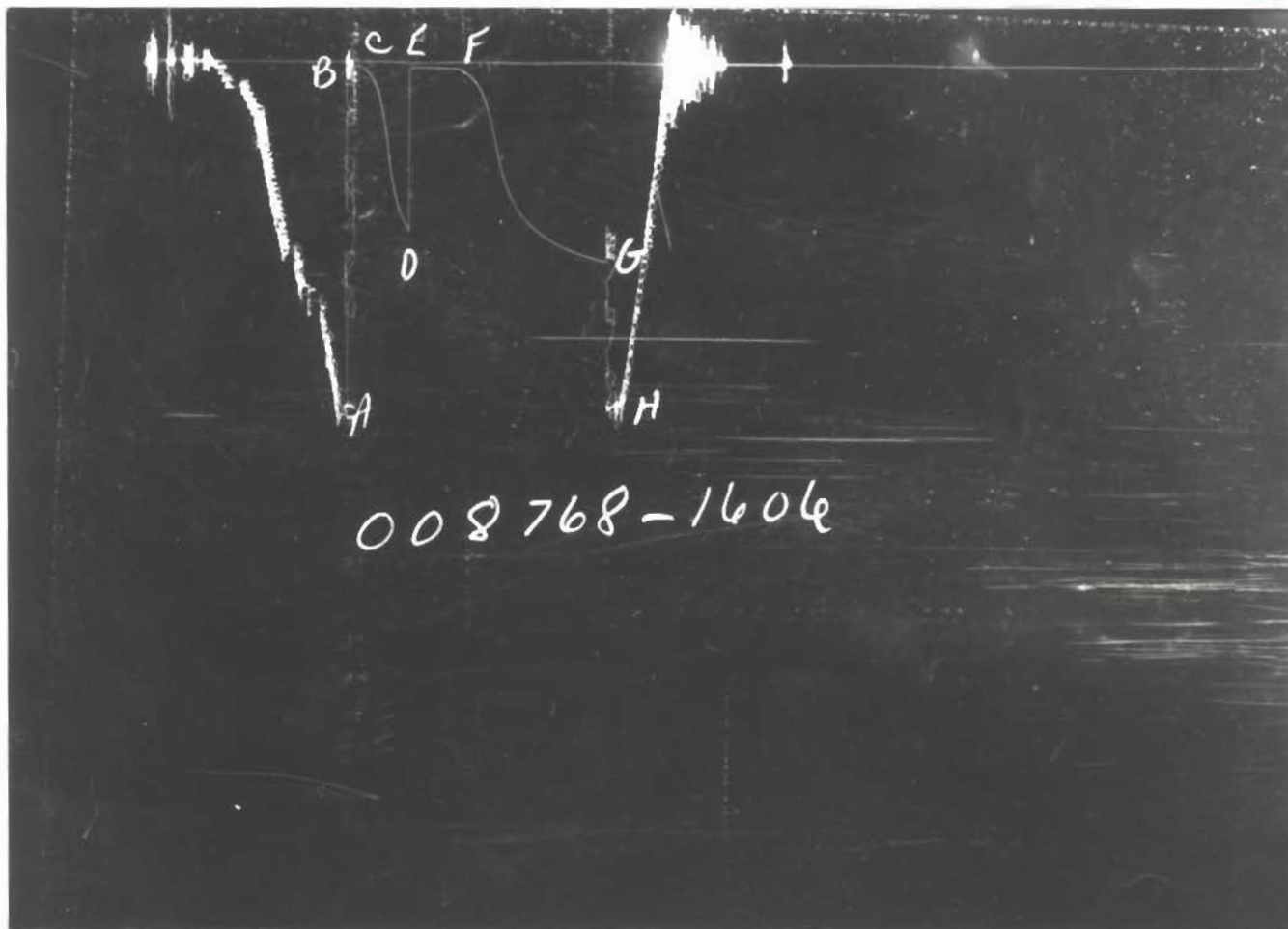
12-JUL-91

LIBERAL



GAUGE NO: 6754 DEPTH: 4755.3 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2217	2232.3			
B	INITIAL FIRST FLOW	3	10.9			
C	FINAL FIRST FLOW	5	20.2	15.0	15.9	F
C	INITIAL FIRST CLOSED-IN	5	20.2			
D	FINAL FIRST CLOSED-IN	1118	1081.1	60.0	59.9	C
E	INITIAL SECOND FLOW	5	32.4			
F	FINAL SECOND FLOW	6	34.8	60.0	58.9	F
F	INITIAL SECOND CLOSED-IN	6	34.8			
G	FINAL SECOND CLOSED-IN	1261	1279.7	180.0	180.4	C
H	FINAL HYDROSTATIC	2217	2243.5			



GAUGE NO: 1606 DEPTH: 4759.4 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2208	2233.6			
B	INITIAL FIRST FLOW	26	17.0	15.0	15.9	F
C	FINAL FIRST FLOW	33	27.1			
C	INITIAL FIRST CLOSED-IN	33	27.1	60.0	59.9	C
D	FINAL FIRST CLOSED-IN	1086	1081.1			
E	INITIAL SECOND FLOW	33	50.7	60.0	58.9	F
F	FINAL SECOND FLOW	59	47.2			
F	INITIAL SECOND CLOSED-IN	59	47.2	180.0	180.4	C
G	FINAL SECOND CLOSED-IN	1283	1283.6			
H	FINAL HYDROSTATIC	2208	2241.2			

008768-1605

GAUGE NO: 1605 DEPTH: 4836.9 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2260	2267.0			
B	INITIAL FIRST FLOW	42	50.1			
C	FINAL FIRST FLOW	63	58.0	15.0	15.9	F
C	INITIAL FIRST CLOSED-IN	63	58.0			
D	FINAL FIRST CLOSED-IN	1130	1129.5	60.0	59.9	C
E	INITIAL SECOND FLOW	63	68.0			
F	FINAL SECOND FLOW	80	77.3	60.0	58.9	F
F	INITIAL SECOND CLOSED-IN	80	77.3			
G	FINAL SECOND CLOSED-IN	1329	1311.1	180.0	180.4	C
H	FINAL HYDROSTATIC	2260	2271.1			

EQUIPMENT & HOLE DATA

FORMATION TESTED: MARMATON

NET PAY (ft): 10.0

GROSS TESTED FOOTAGE: 60.0

ALL DEPTHS MEASURED FROM: KELLY BUSHING

CASING PERFS. (ft): _____

HOLE OR CASING SIZE (in): 7.875

ELEVATION (ft): 2899.6 GROUND LEVEL

TOTAL DEPTH (ft): 4840.0

PACKER DEPTH(S) (ft): 4774, 4780

FINAL SURFACE CHOKE (in): _____

BOTTOM HOLE CHOKE (in): 0.750

MUD WEIGHT (lb/gal): 8.90

MUD VISCOSITY (sec): 46

ESTIMATED HOLE TEMP. (°F): _____

ACTUAL HOLE TEMP. (°F): 123 @ 4835.4 ft

TICKET NUMBER: 00876800

DATE: 7-5-91 TEST NO: 1

TYPE DST: OPEN HOLE

FIELD CAMP:
LIBERAL

TESTER: L.D. GRANT
H.E. REARDON

WITNESS: MELANIE HILL

DRILLING CONTRACTOR:
UNIT DRILLING CO. #19

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
PIT	<u>1.350 @ 81 °F</u>	<u>3675 ppm</u>
TOP RECOVERY	<u>0.980 @ 81 °F</u>	<u>4135 ppm</u>
BOTTOM RECOVERY	<u>0.520 @ 81 °F</u>	<u>6891 ppm</u>
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

SAMPLER DATA

Psig AT SURFACE: 59.3 ???

cu.ft. OF GAS: _____

cc OF OIL: TRACE

cc OF WATER: _____

cc OF MUD: 2000.0

TOTAL LIQUID cc: 2000.0

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ _____ °F

GAS/OIL RATIO (cu.ft. per bbl): _____

GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED :

56' OF MUD WITH VERY SLIGHT TRACE OF OIL

MEASURED FROM
TESTER VALVE

REMARKS :

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 00876800

TICKET NO: 00876800

[illegible]

TICKET NO: 00876800

CLOCK NO: 17524 HOUR: 24

GAUGE NO: 6754

DEPTH: 4755.3

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta p}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	10.9			
2	3.0	12.3	1.4		
3	6.0	15.0	2.7		
4	9.0	16.7	1.7		
5	12.0	18.6	1.9		
C 6	15.9	20.2	1.6		
FIRST CLOSED-IN					
C 1	0.0	20.2			
2	1.0	22.2	2.0	1.0	1.222
3	2.0	22.9	2.7	1.7	0.957
4	3.0	27.1	7.0	2.5	0.797
5	4.0	31.4	11.3	3.2	0.697
6	5.0	35.0	14.8	3.8	0.622
7	6.0	41.1	21.0	4.4	0.560
8	7.0	45.7	25.5	4.9	0.514
9	8.0	51.5	31.4	5.3	0.475
10	9.0	57.1	36.9	5.8	0.440
11	10.0	62.8	42.6	6.1	0.413
12	12.0	75.8	55.6	6.8	0.366
13	14.0	89.9	69.7	7.4	0.329
14	16.0	108.0	87.8	8.0	0.299
15	18.0	126.8	106.7	8.4	0.274
16	20.0	150.4	130.2	8.8	0.253
17	22.0	179.0	158.9	9.2	0.236
18	24.0	218.7	198.5	9.6	0.220
19	26.0	263.0	242.9	9.9	0.207
20	28.0	315.7	295.5	10.1	0.195
21	30.0	384.9	364.7	10.4	0.184
22	35.0	574.6	554.4	10.9	0.162
23	39.9	765.9	745.7	11.3	0.145
24	45.0	898.9	878.7	11.7	0.131
25	50.0	977.1	956.9	12.0	0.120
26	55.0	1038.9	1018.7	12.3	0.110
D 27	59.9	1081.1	1060.9	12.5	0.102
SECOND FLOW					
E 1	0.0	32.4			
2	5.0	30.9	-1.4		
3	10.0	30.9	0.0		
4	15.0	30.1	-0.9		
5	20.0	30.1	0.0		
6	25.0	30.7	0.6		
7	30.0	32.1	1.4		
8	35.0	32.1	0.0		
9	40.0	32.7	0.6		
10	45.0	33.5	0.9		
11	50.0	33.5	0.0		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta p}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
12	55.0	34.2	0.7		
F 13	58.9	34.8	0.6		
SECOND CLOSED-IN					
F 1	0.0	34.8			
2	1.0	38.1	3.3	1.0	1.862
3	2.0	38.6	3.8	2.0	1.579
4	3.0	39.2	4.4	2.9	1.417
5	4.0	42.6	7.8	3.8	1.295
6	5.0	45.3	10.6	4.7	1.203
7	6.0	48.2	13.4	5.5	1.132
8	7.0	50.9	16.1	6.4	1.069
9	8.0	53.9	19.1	7.3	1.013
10	9.0	57.7	23.0	8.1	0.968
11	10.0	61.3	26.5	8.8	0.929
12	12.0	68.4	33.7	10.3	0.859
13	14.0	77.6	42.8	11.8	0.803
14	16.0	87.6	52.8	13.2	0.753
15	18.0	97.0	62.2	14.5	0.713
16	20.0	108.9	74.1	15.8	0.676
17	22.0	120.4	85.6	17.0	0.643
18	24.0	133.6	98.8	18.2	0.615
19	26.0	149.2	114.4	19.3	0.588
20	28.0	168.0	133.2	20.4	0.565
21	30.0	190.4	155.6	21.4	0.543
22	35.0	263.0	228.2	23.8	0.497
23	40.0	364.7	329.9	26.1	0.458
24	45.0	489.8	455.0	28.1	0.425
25	50.0	621.4	586.6	30.0	0.397
26	55.0	727.1	692.3	31.7	0.373
27	60.0	819.0	784.2	33.3	0.351
28	70.0	933.8	899.0	36.2	0.316
29	80.0	1005.3	970.5	38.7	0.287
30	90.0	1060.6	1025.8	40.9	0.263
31	100.0	1105.1	1070.3	42.8	0.242
32	110.0	1139.9	1105.1	44.5	0.225
33	120.0	1168.9	1134.1	46.1	0.210
34	135.0	1207.3	1172.5	48.1	0.191
35	150.0	1238.9	1204.1	49.9	0.176
36	165.0	1261.8	1227.0	51.5	0.162
G 37	180.4	1279.7	1244.9	52.9	0.151

REMARKS:

TICKET NO: 00876800

CLOCK NO: 17529 HOUR: 24

GAUGE NO: 1606

DEPTH: 4759.4

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta P}{t + \Delta P}$	$\log \frac{t + \Delta P}{\Delta P}$
FIRST FLOW					
B 1	0.0	17.0			
2	3.0	19.4	2.4		
3	6.0	23.5	4.1		
4	9.0	25.3	1.8		
5	12.0	26.3	1.0		
C 6	15.9	27.1	0.8		
FIRST CLOSED-IN					
C 1	0.0	27.1			
2	1.0	30.0	2.9	1.0	1.215
3	2.0	32.5	5.4	1.8	0.951
4	3.0	35.5	8.5	2.5	0.799
5	4.0	39.1	12.0	3.2	0.699
6	5.0	43.8	16.7	3.8	0.620
7	6.0	47.9	20.8	4.4	0.560
8	7.0	52.9	25.9	4.9	0.513
9	8.0	57.8	30.7	5.3	0.474
10	9.0	62.7	35.6	5.7	0.441
11	10.0	68.2	41.1	6.1	0.413
12	12.0	79.6	52.7	6.8	0.366
13	14.0	94.7	67.6	7.4	0.330
14	16.0	113.9	86.8	8.0	0.299
15	18.0	132.7	105.7	8.4	0.274
16	20.0	158.6	131.5	8.8	0.254
17	22.0	190.1	163.0	9.2	0.236
18	24.0	221.8	194.7	9.5	0.220
19	26.0	268.0	240.9	9.8	0.207
20	28.0	330.5	303.4	10.1	0.195
21	30.0	390.7	363.6	10.4	0.184
22	35.0	585.4	558.3	10.9	0.162
23	40.0	777.1	750.1	11.4	0.145
24	45.0	899.5	872.4	11.7	0.131
25	50.0	984.7	957.7	12.0	0.120
26	55.0	1040.1	1013.0	12.3	0.110
D 27	59.9	1081.1	1054.0	12.5	0.102
SECOND FLOW					
E 1	0.0	50.7			
2	5.0	41.5	-9.2		
3	10.0	39.8	-1.6		
4	15.0	39.8	0.0		
5	20.0	40.8	1.0		
6	25.0	40.8	0.0		
7	30.0	40.8	0.0		
8	35.0	42.1	1.3		
9	40.0	42.9	0.8		
10	45.0	43.9	1.0		
11	50.0	44.6	0.7		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta P}{t + \Delta P}$	$\log \frac{t + \Delta P}{\Delta P}$
SECOND FLOW - CONTINUED					
12	55.0	44.6	0.0		
F 13	58.9	47.2	2.6		
SECOND CLOSED-IN					
F 1	0.0	47.2			
2	1.1	51.2	4.1	1.0	1.855
3	2.0	52.0	4.9	2.0	1.579
4	3.0	54.5	7.3	2.9	1.415
5	4.0	56.9	9.8	3.8	1.292
6	5.0	59.4	12.2	4.7	1.204
7	6.0	62.9	15.8	5.5	1.130
8	7.0	67.2	20.0	6.4	1.065
9	8.0	72.2	25.0	7.2	1.017
10	9.0	74.6	27.5	8.1	0.967
11	10.0	78.4	31.2	8.9	0.927
12	12.0	87.0	39.8	10.3	0.860
13	14.0	96.3	49.1	11.8	0.803
14	16.0	107.0	59.8	13.2	0.754
15	18.0	117.9	70.7	14.5	0.712
16	20.0	130.2	83.1	15.8	0.676
17	22.0	143.9	96.7	17.0	0.644
18	24.0	160.9	113.8	18.2	0.615
19	26.0	179.1	132.0	19.3	0.589
20	28.0	199.9	152.8	20.4	0.565
21	30.0	222.6	175.5	21.4	0.543
22	35.0	303.3	256.2	23.8	0.497
23	40.0	401.1	354.0	26.0	0.458
24	45.0	523.7	476.5	28.1	0.425
25	50.0	647.2	600.1	30.0	0.397
26	55.0	747.7	700.5	31.7	0.373
27	60.0	830.0	782.8	33.3	0.351
28	70.0	937.3	890.1	36.1	0.316
29	80.0	1013.5	966.3	38.6	0.287
30	90.0	1065.3	1018.1	40.8	0.263
31	100.0	1110.1	1063.0	42.8	0.242
32	110.0	1146.8	1099.6	44.5	0.225
33	120.0	1177.4	1130.2	46.1	0.210
34	135.0	1211.9	1164.7	48.1	0.191
35	150.0	1239.3	1192.1	49.9	0.176
36	165.0	1263.5	1216.3	51.5	0.162
G 37	180.4	1283.6	1236.5	52.9	0.151

REMARKS:

TICKET NO: 00876800

CLOCK NO: 13668 HOUR: 12

GAUGE NO: 1605

DEPTH: 4836.9

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	50.1			
2	2.9	55.7	5.6		
3	5.0	58.8	3.1		
4	9.0	58.8	0.0		
5	12.0	58.8	0.0		
C 6	15.9	58.0	-0.8		
FIRST CLOSED-IN					
C 1	0.0	58.0			
2	1.0	64.6	6.6	0.9	1.237
3	2.0	68.7	10.7	1.8	0.951
4	3.0	72.6	14.6	2.5	0.800
5	4.0	76.1	18.1	3.2	0.696
6	5.0	81.0	23.0	3.8	0.622
7	6.0	85.8	27.8	4.3	0.562
8	7.0	90.0	32.0	4.9	0.514
9	8.0	95.0	37.0	5.3	0.475
10	9.0	100.7	42.7	5.7	0.442
11	10.0	106.6	48.6	6.1	0.412
12	12.0	118.8	60.8	6.8	0.366
13	14.0	134.4	76.4	7.4	0.329
14	16.0	149.5	91.5	8.0	0.299
15	18.0	170.2	112.2	8.4	0.275
16	20.0	194.2	136.2	8.8	0.253
17	22.0	223.1	165.1	9.2	0.236
18	24.0	258.4	200.4	9.6	0.220
19	26.0	304.5	246.5	9.9	0.207
20	28.0	365.9	307.9	10.1	0.195
21	30.0	428.9	370.9	10.4	0.184
22	35.0	625.3	567.4	10.9	0.162
23	40.0	802.0	744.0	11.4	0.145
24	45.0	926.2	868.2	11.7	0.131
25	50.0	1016.6	958.6	12.0	0.120
26	55.0	1078.8	1020.8	12.3	0.110
D 27	59.9	1129.5	1071.5	12.5	0.102
SECOND FLOW					
E 1	0.0	68.0			
2	5.0	69.3	1.3		
3	10.0	70.1	0.8		
4	15.0	69.9	-0.2		
5	20.0	69.9	0.0		
6	25.0	69.9	0.0		
7	30.0	71.9	2.0		
8	35.1	71.9	0.0		
9	40.0	71.9	0.0		
10	45.0	72.6	0.7		
11	50.0	73.5	1.0		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
12	55.0	74.9	1.3		
F 13	58.9	77.3	2.5		
SECOND CLOSED-IN					
F 1	0.0	77.3			
2	1.0	79.1	1.8	1.0	1.877
3	2.0	80.9	3.6	1.9	1.591
4	3.0	84.1	6.7	2.9	1.417
5	4.0	87.0	9.7	3.8	1.298
6	5.1	90.6	13.3	4.8	1.197
7	6.0	93.3	15.9	5.6	1.129
8	7.0	95.4	18.1	6.4	1.068
9	8.0	99.8	22.5	7.2	1.014
10	9.0	102.3	25.0	8.0	0.971
11	10.0	105.7	28.4	8.8	0.929
12	12.0	114.0	36.6	10.4	0.859
13	14.0	123.0	45.7	11.8	0.802
14	16.0	133.3	56.0	13.2	0.753
15	18.0	143.4	66.0	14.5	0.713
16	20.0	155.7	78.4	15.8	0.676
17	22.0	168.2	90.8	17.0	0.644
18	24.0	181.6	104.3	18.2	0.615
19	26.0	198.5	121.2	19.3	0.589
20	28.0	218.3	140.9	20.4	0.564
21	30.0	242.7	165.4	21.4	0.543
22	35.0	316.9	239.6	23.8	0.497
23	40.0	419.0	341.7	26.1	0.458
24	45.0	547.9	470.6	28.1	0.425
25	50.0	674.5	597.2	30.0	0.397
26	55.0	782.3	705.0	31.7	0.373
27	60.0	866.5	789.2	33.3	0.352
28	70.0	973.2	895.8	36.2	0.316
29	80.0	1044.7	967.4	38.6	0.287
30	90.0	1096.1	1018.8	40.8	0.263
31	100.0	1140.0	1062.6	42.8	0.242
32	110.0	1176.8	1099.5	44.5	0.225
33	120.0	1206.6	1129.2	46.1	0.210
34	135.0	1242.4	1165.1	48.1	0.191
35	150.0	1271.2	1193.9	49.9	0.176
36	165.0	1293.9	1216.6	51.5	0.162
G 37	180.4	1311.1	1233.8	52.9	0.151

REMARKS:

TICKET NO. 00876800

		O.D.	I.D.	LENGTH	DEPTH
1		4.500	3.826	3977.5	
3		5.750	2.250	566.6	
50		6.000	2.170	1.3	4645.5
3		5.750	2.250	91.5	
5		6.000	2.370	1.0	
11		4.500	2.430	4.7	
13		5.000	0.750	6.6	
60		5.000	0.750	5.0	4753.3
80		5.000	2.250	4.1	4755.3
80		5.000	2.250	4.1	4759.4
15		5.000	1.750	5.0	
16		5.000	1.000	2.8	
70		6.750	1.530	5.8	4774.1
70		6.750	1.530	5.8	4780.0
20		5.000	2.370	10.0	
5		6.000	2.370	1.0	
3		5.750	2.250	31.5	
5		6.000	2.370	1.0	
5		6.000	2.370	1.0	
20		5.000	2.370	8.0	
83		5.000		1.5	4835.4
81		5.000		4.1	4836.9
TOTAL DEPTH					4840.0

EQUIPMENT DATA