

733



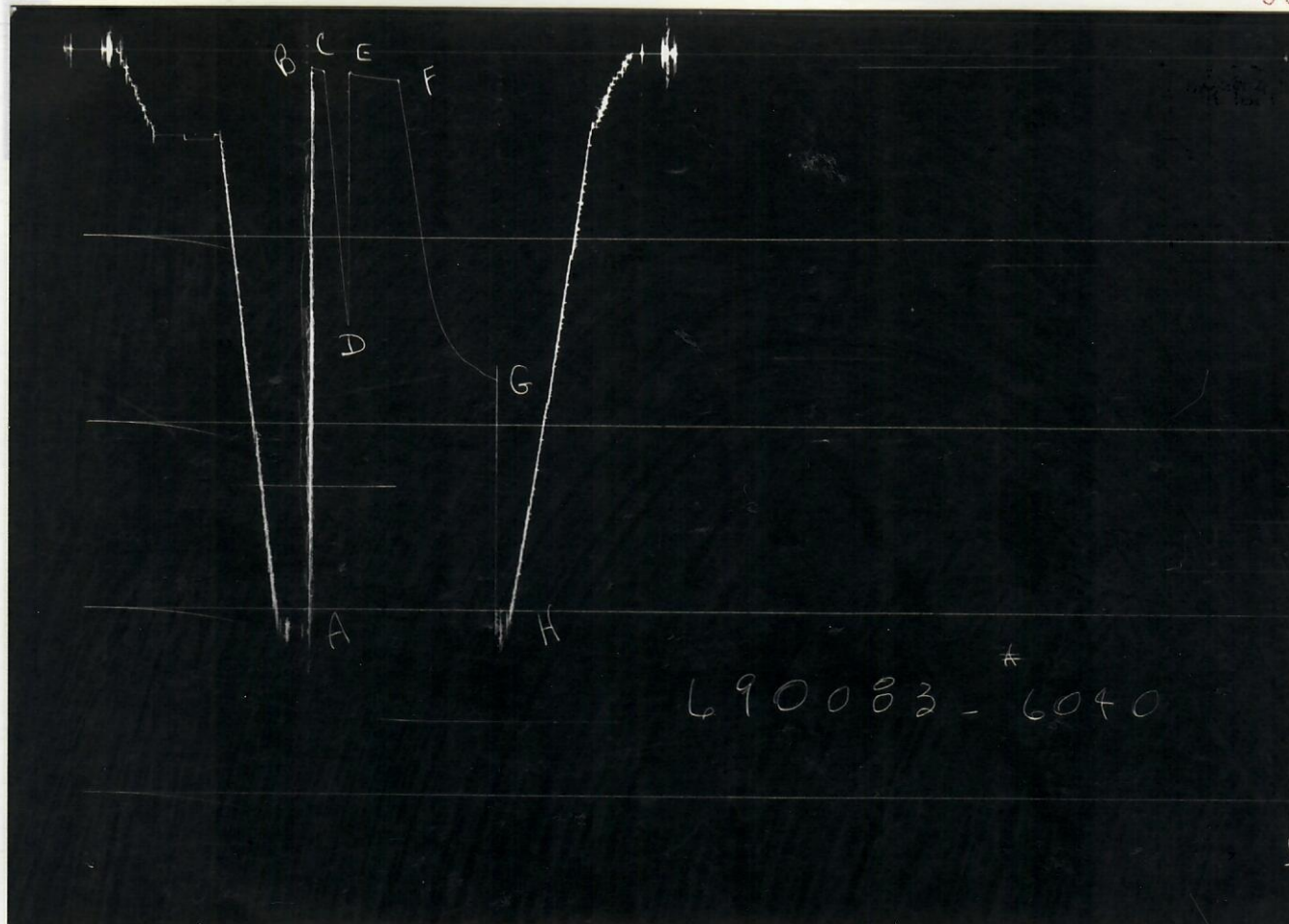
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TICKET NO. 69008300  
12-NOV-84  
FARMINGTON

# FORMATION TESTING SERVICE REPORT

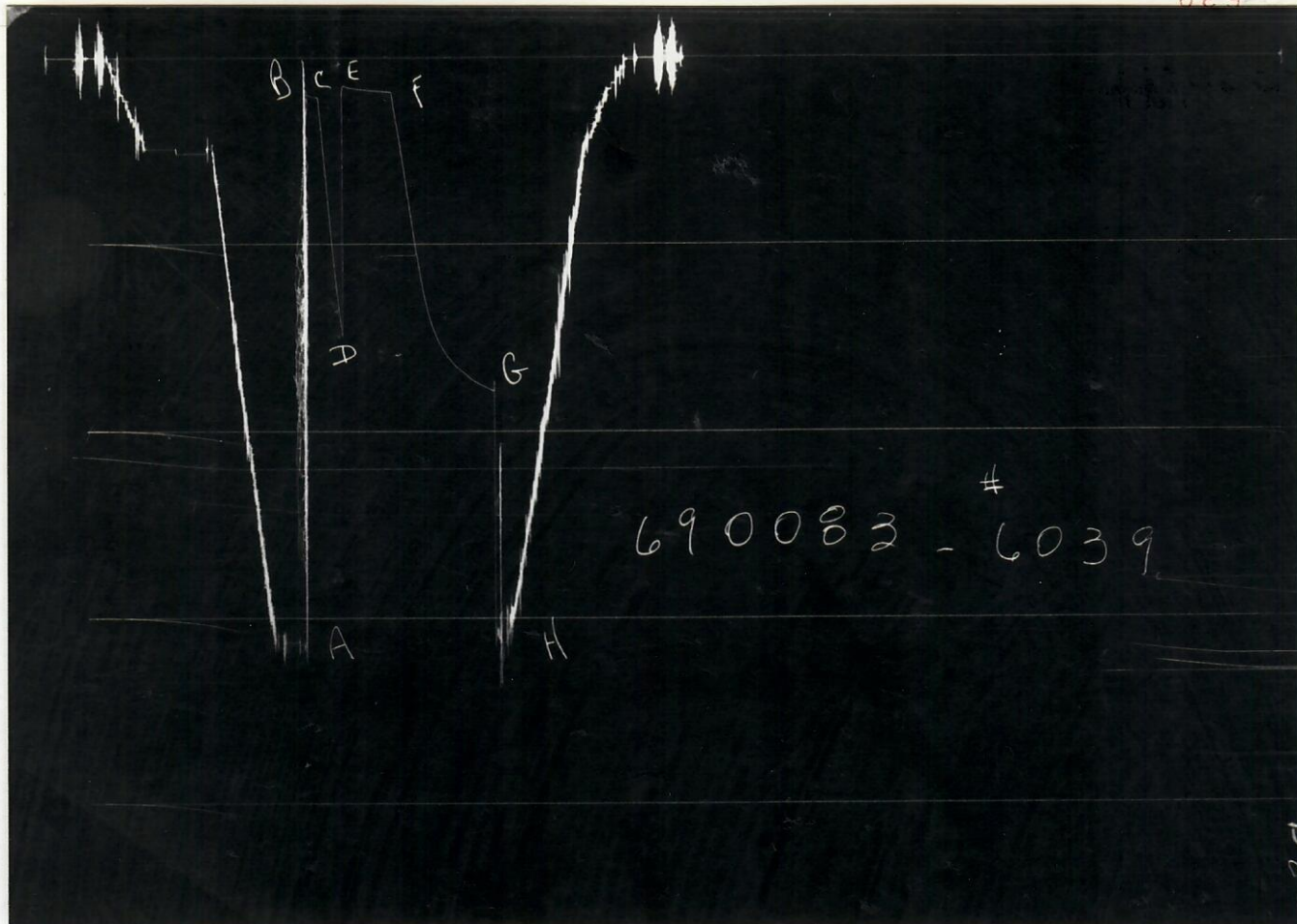
ROD/RUNNER	23-31	2	5840.1' - 5863.1'	WINTERSHALL OIL AND GAS CORPORATION
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
LEGAL LOCATION SEC. - TWP. - RANG.	23-33.5N - 20W	FIELD AREA	COUNTY	STATE
			MONTEZUMA	COLORADO NM



GAUGE NO: 6040 DEPTH: 5819.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3102	3103.7			
B	INITIAL FIRST FLOW	95	84.8			
C	FINAL FIRST FLOW	108	106.3	16.0	16.5	F
C	INITIAL FIRST CLOSED-IN	108	106.3			
D	FINAL FIRST CLOSED-IN	1454	1464.0	30.0	27.9	C
E	INITIAL SECOND FLOW	122	139.5			
F	FINAL SECOND FLOW	149	150.3	60.0	59.5	F
F	INITIAL SECOND CLOSED-IN	149	150.3			
G	FINAL SECOND CLOSED-IN	1764	1752.5	120.0	120.0	C
H	FINAL HYDROSTATIC	3088	3101.0			





GAUGE NO: 6039 DEPTH: 5880.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3139	3139.7			
B	INITIAL FIRST FLOW	174	194.3			
C	FINAL FIRST FLOW	201	208.5	16.0	16.5	F
C	INITIAL FIRST CLOSED-IN	201	208.5			
D	FINAL FIRST CLOSED-IN	1465	1483.1	30.0	27.9	C
E	INITIAL SECOND FLOW	148	180.3			
F	FINAL SECOND FLOW	188	179.4	60.0	59.5	F
F	INITIAL SECOND CLOSED-IN	188	179.4			
G	FINAL SECOND CLOSED-IN	1789	1776.2	120.0	120.0	C
H	FINAL HYDROSTATIC	3112	3126.8			

# EQUIPMENT & HOLE DATA

FORMATION TESTED: LOWER ISMAY  
NET PAY (ft): 11.0  
GROSS TESTED FOOTAGE: 43.0  
ALL DEPTHS MEASURED FROM: KELLY BUSHING  
CASING PERFS. (ft): \_\_\_\_\_  
HOLE OR CASING SIZE (in): 7.875  
ELEVATION (ft): 5078  
TOTAL DEPTH (ft): 5883.0  
PACKER DEPTH(S) (ft): 5834, 5840  
FINAL SURFACE CHOKE (in): \_\_\_\_\_  
BOTTOM HOLE CHOKE (in): 0.750  
MUD WEIGHT (lb/gal): 10.20  
MUD VISCOSITY (sec): 37  
ESTIMATED HOLE TEMP. (°F): \_\_\_\_\_  
ACTUAL HOLE TEMP. (°F): 136 @ 5879.0 ft

TICKET NUMBER: 69008300  
DATE: 11-8-84 TEST NO: 2  
TYPE DST: OPEN HOLE  
HALLIBURTON CAMP: FARMINGTON  
TESTER: D. AULD  
WITNESS: RIC KOPP  
DRILLING CONTRACTOR: COLEMAN # 3

## FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
TOP	0.911 @ 52 °F	ppm
MIDDLE	1.250 @ 52 °F	ppm
BOTTOM	0.930 @ 52 °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

## SAMPLER DATA

Pstg AT SURFACE: 1045  
cu.ft. OF GAS: 3.99  
cc OF OIL: 0  
cc OF WATER: 0  
cc OF MUD: 0  
TOTAL LIQUID cc: 825

## HYDROCARBON PROPERTIES

OIL GRAVITY (°API): \_\_\_\_\_ @ \_\_\_\_\_ °F  
GAS/OIL RATIO (cu.ft. per bbl): \_\_\_\_\_  
GAS GRAVITY: \_\_\_\_\_

## CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

## RECOVERED:

470 FEET OF GAS CUT MUD WITH A SHOW OF OIL

MEASURED FROM  
TESTER VALVE

## REMARKS:

HAD 12 FEET OF FILL  
LOG-LOG PLOTS INDICATE THAT THERE IS INSUFFICIENT BUILDUP OF THE CLOSED IN  
PRESSURE PERIODS TO OBTAIN AN EXTRAPOLATED PRESSURE FOR HORNER ANALYSIS.



TYPE & SIZE MEASURING DEVICE: FLOOR MANIFOLD					TICKET NO: 69008300
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
11-8-84					
0016					ON LOCATION.
0235					PICKED UP THE TOOL.
0327					TOOL ON TRIP IN.
0717	1/8BH	4 OZ			OPENED TOOL.
0718	"	5 OZ			
0719	"	6 OZ			
0720	"	6.5 OZ			
0721	"	6.75 OZ			
0722	"	7.5 OZ			
0723	"	9.5 OZ			
0724	"	9.5 OZ			
0725	"	13 OZ			
0726	"	14.5 OZ			
0727	"	16.5 OZ			
0728	"	18.5 OZ			
0729	"	20 OZ			
0730	"	22 OZ			
0731	1/8BH	24 OZ			
0732	"	25 OZ			
0733	"	27.5 OZ			CLOSED TOOL.
0803	"	16 OZ			OPENED TOOL.
0808	"	3#			
0813	"	3.25#			
0818	"	3.5#			
0823	"	3.75#			
0828	"	4.25#			
0833	"	4.25#			
0838	"	4.5#			
0843	"	4.75#			
0848	"	5#			
0853	"	5#			
0858	"	5#			
0903	"	5.25#			CLOSED TOOL.
1103					OPENED BYPASS - TRIPPED OUT.
1630					JOB COMPLETED.

TICKET NO: 69008300

CLOCK NO: 13741 HOUR: 24


 HALLIBURTON  
SERVICES

GAUGE NO: 6040

DEPTH: 5819.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$	REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$	
FIRST FLOW						SECOND FLOW - CONTINUED						
B	1	0.0	84.8			7	18.0	132.8	1.4			
	2	1.0	83.5	-1.3		8	21.0	134.5	1.6			
	3	2.0	88.9	5.4		9	24.0	136.9	2.4			
	4	3.0	94.5	5.5		10	27.0	138.1	1.2			
	5	4.0	95.1	0.7		11	30.0	139.5	1.4			
	6	5.0	95.7	0.5		12	33.0	141.0	1.5			
	7	6.0	96.5	0.8		13	36.0	142.4	1.5			
	8	7.0	97.6	1.1		14	39.0	143.9	1.5			
	9	8.0	98.2	0.7		15	42.0	145.3	1.4			
	10	9.0	99.6	1.4		16	45.0	146.0	0.7			
	11	10.0	100.5	0.9		17	48.0	146.8	0.8			
	12	11.0	101.9	1.4		18	51.0	147.9	1.1			
	13	12.0	102.6	0.7		19	54.0	149.2	1.4			
	14	13.0	103.4	0.8		F	20	57.0	150.2	0.9		
	15	14.0	104.5	1.1			21	59.5	150.3	0.2		
	16	15.0	105.3	0.8		SECOND CLOSED-IN						
	17	16.0	105.9	0.7		F	1	0.0	150.3			
C	18	16.5	106.3	0.4		2	1.0	195.4	45.1	1.0	1.891	
FIRST CLOSED-IN						3	2.0	221.0	70.7	2.0	1.589	
C	1	0.0	106.3			4	3.0	250.3	100.0	2.9	1.420	
	2	1.0	159.5	53.1	0.9	1.244	5	4.0	277.5	127.2	3.8	1.302
	3	2.0	207.5	101.1	1.8	0.967	6	5.0	303.2	152.9	4.6	1.213
	4	3.0	260.6	154.2	2.5	0.817	7	6.0	331.8	181.5	5.6	1.136
	5	4.0	304.6	198.3	3.2	0.708	8	7.0	355.1	204.8	6.4	1.074
	6	5.0	351.3	244.9	3.9	0.632	9	8.0	381.3	231.0	7.2	1.023
	7	6.0	404.1	297.8	4.4	0.575	10	9.0	406.9	256.6	8.0	0.975
	8	7.0	451.2	344.8	4.9	0.526	11	10.0	435.7	285.4	8.8	0.935
	9	8.0	497.8	391.5	5.4	0.487	12	12.0	492.8	342.5	10.4	0.865
	10	9.0	554.3	447.9	5.8	0.451	13	14.0	551.5	401.2	11.8	0.808
	11	10.0	605.4	499.0	6.2	0.423	14	16.0	614.4	464.1	13.2	0.760
	12	12.0	710.9	604.5	6.9	0.376	15	18.0	676.2	525.9	14.5	0.718
	13	14.0	822.4	716.1	7.6	0.338	16	20.0	734.5	584.2	15.8	0.682
	14	16.0	929.7	823.4	8.1	0.307	17	22.0	800.1	649.8	17.0	0.649
	15	18.0	1029.6	923.3	8.6	0.282	18	24.0	858.3	708.0	18.2	0.620
	16	20.0	1136.9	1030.6	9.0	0.261	19	26.0	922.5	772.2	19.4	0.593
	17	22.0	1229.9	1123.6	9.4	0.243	20	28.0	978.9	828.6	20.5	0.570
	18	24.0	1319.1	1212.7	9.8	0.227	21	30.0	1038.9	888.6	21.5	0.548
	19	26.0	1398.1	1291.7	10.1	0.214	22	35.0	1176.3	1026.0	24.0	0.501
D	20	27.9	1464.0	1357.6	10.4	0.202	23	40.0	1284.7	1134.4	26.2	0.463
SECOND FLOW						24	45.0	1373.8	1223.5	28.3	0.429	
E	1	0.0	139.5			25	50.0	1443.3	1293.0	30.2	0.401	
	2	3.0	113.5	-26.0		26	55.0	1492.8	1342.5	31.9	0.377	
	3	6.0	124.9	11.4		27	60.0	1534.9	1384.6	33.5	0.355	
	4	9.0	127.2	2.3		28	70.0	1598.5	1448.2	36.4	0.319	
	5	12.0	129.1	1.9		29	80.0	1645.0	1494.7	39.0	0.290	
	6	15.0	131.5	2.4		30	90.0	1680.7	1530.4	41.2	0.266	
						31	100.0	1708.4	1558.1	43.2	0.245	
						32	110.0	1732.6	1582.3	44.9	0.228	
						G	33	120.0	1752.5	1602.2	46.5	0.213

REMARKS:



TICKET NO: 69008300

CLOCK NO: 7276 HOUR: 24


 HALLIBURTON  
SERVICES

GAUGE NO: 6039
















DEPTH: 5880.0

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	194.3			
2	1.0	193.7	-0.5		
3	2.0	193.7	0.0		
4	3.0	193.7	0.0		
5	4.0	193.7	0.0		
6	5.0	193.7	0.0		
7	6.0	196.8	3.1		
8	7.0	199.2	2.4		
9	8.0	200.6	1.3		
10	9.0	203.9	3.4		
11	10.0	204.6	0.7		
12	11.0	205.3	0.7		
13	12.0	205.3	0.0		
14	13.0	205.3	0.0		
15	14.0	205.3	0.0		
16	15.0	205.9	0.7		
17	16.0	207.0	1.1		
C 18	16.5	208.5	1.5		
FIRST CLOSED-IN					
C 1	0.0	208.5			
2	1.0	277.3	68.8	1.0	1.237
3	2.0	310.7	102.2	1.8	0.966
4	3.0	361.5	153.1	2.5	0.815
5	4.0	412.1	203.6	3.2	0.712
6	5.0	471.4	262.9	3.8	0.633
7	6.0	518.3	309.9	4.4	0.576
8	7.0	568.9	360.4	4.9	0.524
9	8.0	619.2	410.7	5.4	0.486
10	9.0	669.0	460.5	5.8	0.452
11	10.0	727.5	519.0	6.2	0.423
12	12.0	825.3	616.8	7.0	0.375
13	14.0	923.9	715.4	7.6	0.339
14	16.0	1021.7	813.3	8.1	0.308
15	18.0	1116.4	907.9	8.6	0.282
16	20.0	1197.1	988.6	9.1	0.261
17	22.0	1279.4	1071.0	9.4	0.243
18	24.0	1355.2	1146.7	9.8	0.228
19	26.0	1428.1	1219.6	10.1	0.213
D 20	27.9	1483.1	1274.6	10.4	0.202
SECOND FLOW					
E 1	0.0	180.3			
2	3.0	145.8	-34.5		
3	6.0	153.2	7.4		
4	9.0	156.4	3.2		
5	12.0	159.1	2.7		
6	15.0	161.1	2.0		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
7	18.0	163.1	2.0		
8	21.0	164.9	1.7		
9	24.0	166.4	1.5		
10	27.0	168.1	1.7		
11	30.0	169.2	1.1		
12	33.0	170.9	1.7		
13	36.0	171.7	0.8		
14	39.0	173.1	1.3		
15	42.0	173.6	0.5		
16	45.0	174.1	0.5		
17	48.0	175.5	1.3		
18	51.0	176.7	1.2		
19	54.0	178.3	1.6		
20	57.0	179.0	0.7		
F 21	59.5	179.4	0.4		
SECOND CLOSED-IN					
F 1	0.0	179.4			
2	1.0	207.7	28.3	0.9	1.906
3	2.0	236.8	57.4	1.9	1.597
4	3.0	276.2	96.8	2.9	1.414
5	4.0	301.1	121.7	3.8	1.301
6	5.0	324.6	145.2	4.7	1.213
7	6.0	343.5	164.1	5.5	1.138
8	7.0	361.2	181.8	6.4	1.075
9	8.0	406.4	227.0	7.2	1.021
10	9.0	434.9	255.5	8.1	0.973
11	10.0	457.5	278.1	8.8	0.935
12	12.0	513.8	334.4	10.4	0.864
13	14.0	577.2	397.8	11.8	0.808
14	16.0	638.3	458.9	13.2	0.760
15	18.0	709.7	530.3	14.6	0.718
16	20.0	767.7	588.3	15.9	0.681
17	22.0	828.4	649.0	17.0	0.649
18	24.0	894.2	714.8	18.3	0.619
19	26.0	959.7	780.3	19.4	0.594
20	28.0	1021.0	841.6	20.5	0.570
21	30.0	1067.8	888.4	21.5	0.548
22	35.0	1203.0	1023.6	24.0	0.501
23	40.0	1310.2	1130.8	26.2	0.462
24	45.0	1396.0	1216.6	28.3	0.429
25	50.0	1461.2	1281.8	30.2	0.401
26	55.0	1513.8	1334.4	31.9	0.377
27	60.0	1555.5	1376.1	33.5	0.355
28	70.0	1618.9	1439.5	36.4	0.319
29	80.0	1665.6	1486.2	39.0	0.290
30	90.0	1702.6	1523.2	41.2	0.266
31	100.0	1732.5	1553.1	43.2	0.245
32	110.0	1756.0	1576.6	44.9	0.228
G 33	120.0	1776.2	1596.8	46.5	0.213

REMARKS:

TICKET NO. 69008300

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	4900.0	
4		FLEX WEIGHT.....	5.875	2.500	119.0	
3		DRILL COLLARS.....	6.250	2.250	723.0	
50		IMPACT REVERSING SUB.....	6.000	3.000	1.0	5743.0
3		DRILL COLLARS.....	6.250	2.250	62.0	
5		CROSSOVER.....	6.000	3.000	1.0	
13		DUAL CIP SAMPLER.....	5.000	0.870	7.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	5817.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	5819.0
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	3.0	
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	5834.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	5840.0
20		FLUSH JOINT ANCHOR.....	5.750	2.250	37.0	
81		BLANKED-OFF RUNNING CASE.....	5.750		4.0	5880.0
TOTAL DEPTH						5883.0

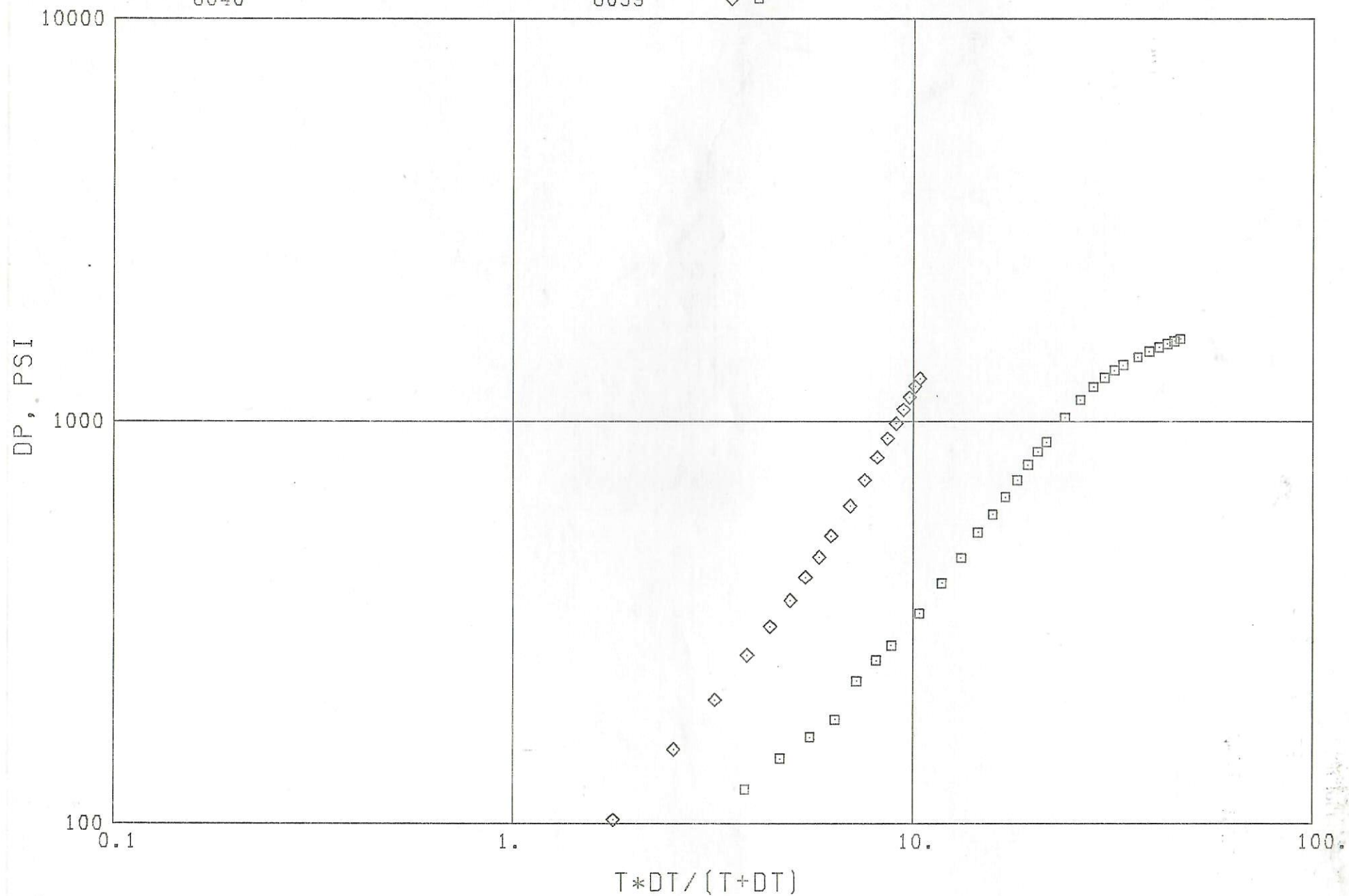
EQUIPMENT DATA



TICKET NO 69008300

GAUGE NO CIP 1 2  
6040

GAUGE NO CIP 1 2  
6039  $\diamond$   $\square$



TICKET NO 69008300

GAUGE NO CIP 1 2  
6040     ◇   □

GAUGE NO CIP 1 2  
6039     ◇   □

