

ORIGINAL

COPY

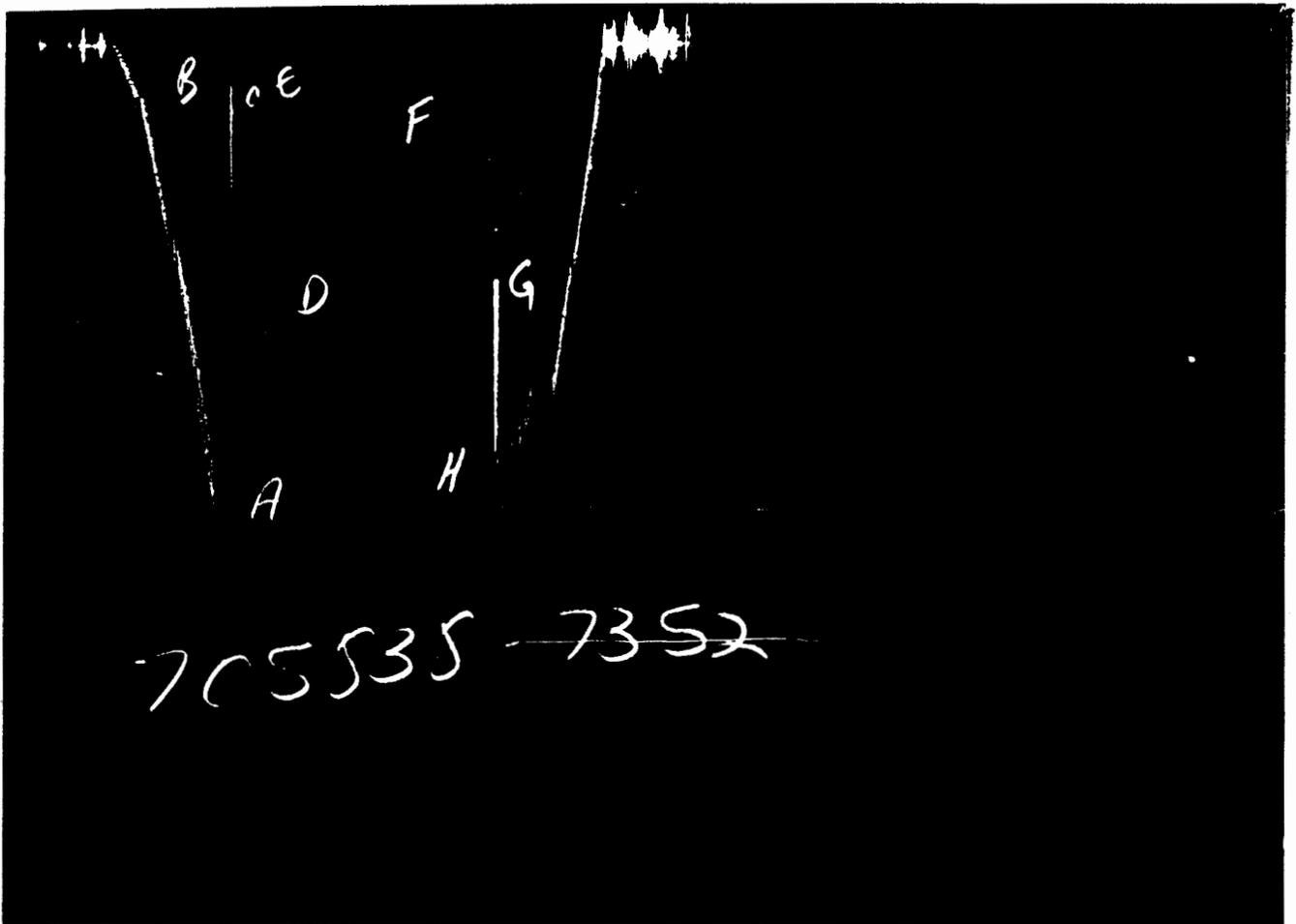
**AMOCO PRODUCTION COMPANY**  
**LEASE : ELLIOT SPENCER**  
**WELL NO. : 1-17**  
**TEST NO. : 1**  
**API # 15-187-20762**

**TICKET NO. 70583800**  
**01-FEB-95**  
**LIBERAL**

LEGAL LOCATION SEC. - TWP. - RANG.	17 - 30 - 39	FIELD AREA	NICHOLAS	COUNTY	STANTON	STATE	KANSAS
LEASE NAME	ELLIOT SPENCER	WELL NO.	1-17	TESTED INTERVAL	5605.2 - 5628.0	LEASE OWNER/COMPANY NAME	AMOCO PRODUCTION COMPANY
		TEST NO.	1				

**RECEIVED**  
 KANSAS CORPORATION COMMISSION

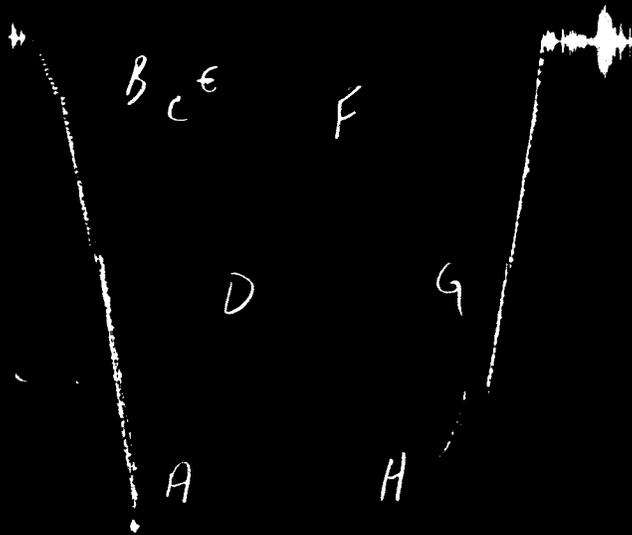
MAY 16 1995



GAUGE NO: 7352 DEPTH: 5584.6 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2500	2609.7			
B	INITIAL FIRST FLOW	311	246.7			
C	FINAL FIRST FLOW	360	373.0	10.0	10.3	F
C	INITIAL FIRST CLOSED-IN	360	373.0			
D	FINAL FIRST CLOSED-IN	1463	1475.8	60.0	59.9	C
E	INITIAL SECOND FLOW	311	326.1			
F	FINAL SECOND FLOW	513	500.8	120.0	119.4	F
F	INITIAL SECOND CLOSED-IN	513	500.8			
G	FINAL SECOND CLOSED-IN	1441	1452.5	120.0	120.4	C
H	FINAL HYDROSTATIC	2500	2589.4			

COPY



705838-7351

GAUGE NO: 7351 DEPTH: 5625.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2492	2637.6			
B	INITIAL FIRST FLOW	310	328.0			
C	FINAL FIRST FLOW	441	453.7	10.0	10.3	F
C	INITIAL FIRST CLOSED-IN	441	453.7			
D	FINAL FIRST CLOSED-IN	1489	1488.6	60.0	59.9	C
E	INITIAL SECOND FLOW	358	361.5			
F	FINAL SECOND FLOW	527	519.7	120.0	119.4	F
F	INITIAL SECOND CLOSED-IN	527	519.7			
G	FINAL SECOND CLOSED-IN	1451	1462.1	120.0	120.4	C
H	FINAL HYDROSTATIC	2492	2603.9			

ORIGINAL

### EQUIPMENT & HOLE DATA

FORMATION TESTED: BASALL MORROW  
 NET PAY (ft): 18.0  
 GROSS TESTED FOOTAGE: 22.8 PACKER TO T.D.  
 ALL DEPTHS MEASURED FROM: K.B.  
 CASING PERFS. (ft): \_\_\_\_\_  
 HOLE OR CASING SIZE (in): 7.875  
 ELEVATION (ft): 3208.0  
 TOTAL DEPTH (ft): 5628.0  
 PACKER DEPTH(S) (ft): 5599, 5605  
 FINAL SURFACE CHOKE (in): 0.62500  
 BOTTOM HOLE CHOKE (in): 0.750  
 MUD WEIGHT (lb/gal): 9.00  
 MUD VISCOSITY (sec): 57  
 ESTIMATED HOLE TEMP. (°F): \_\_\_\_\_  
 ACTUAL HOLE TEMP. (°F): 127 @ 5623.0 ft

TICKET NUMBER: 70583800

DATE: 01-25-95 TEST NO: 1

TYPE DST: OPEN HOLE

FIELD CAMP:  
LIBERAL

TESTER: RICHARD TAYLOR  
JEFF CLARK

WITNESS: SAM CARMACK

DRILLING CONTRACTOR:  
CHEYENNE DRILLING

### FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
<u>PIT</u>	<u>0.970 @ 52 °F</u>	<u>2988 ppm</u>
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

### SAMPLER DATA

Psig AT SURFACE: 525.0  
 cu.ft. OF GAS: 3.140  
 cc OF OIL: \_\_\_\_\_  
 cc OF WATER: \_\_\_\_\_  
 cc OF MUD: \_\_\_\_\_  
 TOTAL LIQUID cc: \_\_\_\_\_

### HYDROCARBON PROPERTIES

OIL GRAVITY (°API): 65.3 @ \_\_\_\_\_ °F  
 GAS/OIL RATIO (cu.ft. per bbl): \_\_\_\_\_  
 GAS GRAVITY: \_\_\_\_\_

### CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

### RECOVERED:

30 FT. OF 65.3 API GRAVITY CONDENSATE  
 5600 FT. OF FAS

MEASURED FROM  
TESTER VALVE

### REMARKS:

COPY

TYPE & SIZE MEASURING DEVICE : 6" POSITIVE CHOKE NIPPLE				TICKET NO : 70583800	
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
01-25-95					
0100					CALLED OUT
0400					DN LOCATION
0421					STARTED CLOCK #13833
0423					STARTED CLOCK #17532
0505					PICKED UP TOOLS
0545					STARTED IN THE HOLE WITH TOOLS
0800					SET WEIGHT ON TOOLS
0801	B.H.				HYDROSPRING OPENED
0802	B.H.				BLOW TO BOTTOM OF BUCKET IN 30 SECS.
0803	B.H.				CLOSED VALVE AND CHANGED GAUGE
0804	B.H.	80			OPENED VALVE TO HOSE
0805	.625	100			OPENED FLOW LINE VALVE
0806	.625	116	1308		GAS TO SURFACE ; FLOWED TO PIT
0808	.625	137	1518		
0809	.625	142	1568		
0810	.625	147	1618		
0811	.625	153	1678		CLOSED TOOL
0911	.625	20	349		OPENED TOOL WITH INSTANT BLOW
0912	.625	55	699		FLOWED TO PIT ; FLARED FLOW LINE
0915	.625	135	1498		
0920	.625	190	2047		
0930	.625	230	2446		
0935	.625	240	2546		
0950	.625	242	2566		
0955	.625	248	2626		
0957	.625	250	2646		
1000	.625	252	2666		TOOK GAS SAMPLE
1005	.625	254	2686		
1015	.625	256	2706		
1030	.625	260	2746		
1045	.625	260	2746		
1100	.625	262	2766		
1110	.625	265	2796		
1111	.625	265	2796		CLOSED TOOL
1311					OPENED BYPASS
1314					UNSEATED PACKERS ; PULLED OUT OF



TICKET NO: 70583800

GAUGE NO: 7352

CLOCK NO: 17532 HOUR: 24

DEPTH: 5584.6

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B	1	0.0	245.7		
	2	2.0	302.1	55.5	
	3	4.0	324.6	22.5	
	4	6.0	342.9	18.3	
	5	8.0	357.0	14.1	
C	6	10.3	373.0	16.0	
FIRST CLOSED-IN					
C	1	0.0	373.0		
	2	1.0	1430.3	1057.4	0.9 1.051
	3	2.0	1447.5	1074.6	1.7 0.792
	4	3.0	1454.5	1081.6	2.3 0.648
	5	4.0	1457.5	1084.5	2.9 0.556
	6	5.0	1460.2	1087.2	3.3 0.488
	7	6.0	1461.7	1088.8	3.8 0.435
	8	7.0	1463.3	1090.3	4.1 0.394
	9	8.0	1464.7	1091.7	4.5 0.359
	10	9.0	1465.5	1092.5	4.8 0.331
	11	10.0	1466.9	1093.9	5.1 0.307
	12	12.0	1467.8	1094.9	5.5 0.268
	13	14.0	1468.8	1095.8	5.9 0.239
	14	16.0	1470.0	1097.0	6.3 0.216
	15	18.0	1470.8	1097.8	6.5 0.196
	16	20.0	1471.6	1098.6	6.8 0.180
	17	22.0	1471.7	1098.8	7.0 0.166
	18	24.0	1472.0	1099.1	7.2 0.155
	19	26.0	1472.5	1099.5	7.4 0.145
	20	28.0	1473.0	1100.0	7.5 0.136
	21	30.0	1473.3	1100.3	7.7 0.128
	22	35.0	1473.6	1100.6	7.9 0.112
	23	40.0	1474.7	1101.7	8.2 0.099
	24	45.0	1474.8	1101.9	8.4 0.089
	25	50.0	1475.5	1102.5	8.5 0.081
	26	55.0	1475.6	1102.7	8.7 0.074
D	27	59.9	1475.8	1102.8	8.8 0.069
SECOND FLOW					
E	1	0.0	326.1		
	2	5.0	367.4	41.2	
	3	10.0	411.4	44.0	
	4	15.0	433.0	21.6	
	5	20.0	445.1	12.1	
	6	25.0	452.5	7.4	
	7	30.0	458.1	5.6	
	8	35.0	462.8	4.7	
	9	40.0	466.3	3.6	
	10	45.0	469.7	3.4	
	11	50.0	472.8	3.1	

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
	12	55.0	475.9	3.1	
	13	60.0	478.3	2.3	
	14	65.0	481.2	2.9	
	15	70.0	484.3	3.1	
	16	75.0	486.0	1.7	
	17	80.0	488.2	2.2	
	18	85.0	489.4	1.2	
	19	90.0	491.3	1.9	
	20	95.0	493.0	1.7	
	21	100.0	494.6	1.6	
	22	105.0	496.1	1.6	
	23	110.0	498.1	2.0	
	24	115.0	499.5	1.4	
F	25	119.4	500.8	1.2	
SECOND CLOSED-IN					
F	1	0.0	500.8		
	2	1.0	1348.2	847.4	1.0 2.132
	3	2.0	1367.2	866.5	2.0 1.815
	4	3.0	1376.4	875.7	2.9 1.644
	5	4.0	1383.3	882.5	3.9 1.527
	6	5.0	1389.1	888.3	4.8 1.428
	7	6.0	1393.0	892.2	5.8 1.351
	8	7.0	1396.6	895.8	6.6 1.292
	9	8.0	1399.9	899.1	7.5 1.237
	10	9.0	1402.5	901.8	8.4 1.189
	11	10.0	1405.0	904.3	9.2 1.147
	12	12.0	1409.6	908.8	11.0 1.072
	13	14.0	1413.3	912.5	12.6 1.011
	14	16.0	1416.9	916.1	14.2 0.960
	15	18.0	1419.4	918.6	15.8 0.915
	16	20.0	1421.7	921.0	17.3 0.875
	17	22.0	1423.1	922.4	18.8 0.838
	18	24.0	1424.9	924.1	20.2 0.807
	19	26.0	1426.9	926.1	21.7 0.777
	20	28.0	1427.8	927.1	23.0 0.751
	21	30.0	1429.5	928.8	24.3 0.726
	22	35.0	1432.4	931.6	27.6 0.672
	23	40.0	1435.0	934.2	30.6 0.627
	24	45.0	1436.9	936.1	33.4 0.589
	25	50.0	1438.8	938.0	36.1 0.556
	26	55.0	1440.3	939.6	38.6 0.526
	27	60.0	1441.4	940.6	41.0 0.500
	28	70.0	1443.9	943.1	45.5 0.455
	29	80.0	1445.9	945.2	49.5 0.418
	30	90.0	1448.1	947.4	53.1 0.387
	31	100.0	1449.9	949.1	56.4 0.361
	32	110.0	1451.4	950.6	59.5 0.338
G	33	120.4	1452.5	951.7	62.4 0.317

REMARKS:

TICKET NO: 70583800

CLOCK NO: 13833 HOUR: 24

GAUGE NO: 7351

DEPTH: 5625.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B	1	0.0	328.0		
	2	2.0	364.4	36.4	
	3	4.0	405.3	40.9	
	4	6.0	424.6	19.3	
	5	8.0	438.9	14.3	
C	6	10.3	453.7	14.8	
FIRST CLOSED-IN					
C	1	0.0	453.7		
	2	1.0	1442.7	989.0	0.9 1.049
	3	2.0	1461.8	1008.1	1.7 0.786
	4	3.0	1468.2	1014.5	2.4 0.640
	5	4.0	1471.1	1017.4	2.9 0.555
	6	5.0	1473.5	1019.8	3.4 0.486
	7	6.0	1475.3	1021.5	3.8 0.433
	8	7.0	1476.6	1022.8	4.2 0.393
	9	8.0	1477.5	1023.8	4.5 0.359
	10	9.0	1479.0	1025.2	4.8 0.331
	11	10.0	1479.8	1026.0	5.1 0.307
	12	12.0	1481.2	1027.5	5.5 0.268
	13	14.0	1482.2	1028.4	5.9 0.239
	14	16.0	1483.5	1029.7	6.3 0.215
	15	18.0	1483.8	1030.0	6.5 0.196
	16	20.0	1484.6	1030.8	6.8 0.180
	17	22.0	1484.8	1031.0	7.0 0.166
	18	24.0	1485.2	1031.5	7.2 0.155
	19	26.0	1485.6	1031.8	7.4 0.145
	20	28.0	1486.2	1032.5	7.5 0.136
	21	30.0	1486.4	1032.6	7.6 0.128
	22	35.0	1487.0	1033.3	7.9 0.112
	23	40.0	1487.3	1033.6	8.2 0.099
	24	45.0	1487.6	1033.9	8.4 0.089
	25	50.0	1488.0	1034.2	8.5 0.081
	26	55.0	1488.4	1034.7	8.7 0.074
D	27	59.9	1488.6	1034.9	8.8 0.069
SECOND FLOW					
E	1	0.0	361.5		
	2	5.0	393.2	31.7	
	3	10.0	436.3	43.2	
	4	15.0	455.9	19.6	
	5	20.0	466.8	10.8	
	6	25.0	473.0	6.2	
	7	30.0	478.4	5.4	
	8	35.0	482.4	4.0	
	9	40.0	485.9	3.5	
	10	45.0	489.5	3.7	
	11	50.0	492.1	2.5	

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
	12	55.0	495.8	3.7	
	13	60.0	498.1	2.4	
	14	65.0	500.2	2.1	
	15	70.0	503.7	3.5	
	16	75.0	505.6	1.9	
	17	80.0	507.1	1.4	
	18	85.0	508.8	1.8	
	19	90.0	510.4	1.6	
	20	95.0	511.8	1.4	
	21	100.0	513.6	1.8	
	22	105.0	515.2	1.6	
	23	110.0	516.8	1.6	
	24	115.0	518.4	1.6	
F	25	119.4	519.7	1.3	
SECOND CLOSED-IN					
F	1	0.0	519.7		
	2	1.0	1350.4	830.8	1.0 2.101
	3	2.0	1372.4	852.8	2.0 1.809
	4	3.0	1383.3	863.7	3.0 1.643
	5	4.0	1390.1	870.4	3.8 1.527
	6	5.0	1396.3	876.7	4.8 1.428
	7	6.0	1400.5	880.8	5.8 1.352
	8	7.0	1404.3	884.7	6.7 1.288
	9	8.0	1407.6	887.9	7.5 1.236
	10	9.0	1410.6	891.0	8.4 1.186
	11	10.0	1413.0	893.4	9.3 1.145
	12	12.0	1417.2	897.5	10.9 1.073
	13	14.0	1421.2	901.5	12.7 1.010
	14	16.0	1424.4	904.8	14.2 0.960
	15	18.0	1427.1	907.5	15.8 0.914
	16	20.0	1429.2	909.6	17.3 0.874
	17	22.0	1431.6	912.0	18.8 0.839
	18	24.0	1433.2	913.6	20.2 0.807
	19	26.0	1435.0	915.3	21.6 0.777
	20	28.0	1436.4	916.8	23.0 0.751
	21	30.0	1438.0	918.4	24.4 0.726
	22	35.0	1441.7	922.1	27.6 0.672
	23	40.0	1443.7	924.0	30.5 0.628
	24	45.0	1446.1	926.4	33.4 0.589
	25	50.0	1448.5	928.8	36.1 0.555
	26	55.0	1450.1	930.4	38.6 0.526
	27	60.0	1451.5	931.9	41.0 0.500
	28	70.0	1454.1	934.4	45.4 0.455
	29	80.0	1456.0	936.4	49.5 0.418
	30	90.0	1457.9	938.3	53.1 0.388
	31	100.0	1458.9	939.3	56.5 0.361
	32	110.0	1460.5	940.9	59.5 0.338
G	33	120.4	1462.1	942.5	62.4 0.317

REMARKS:

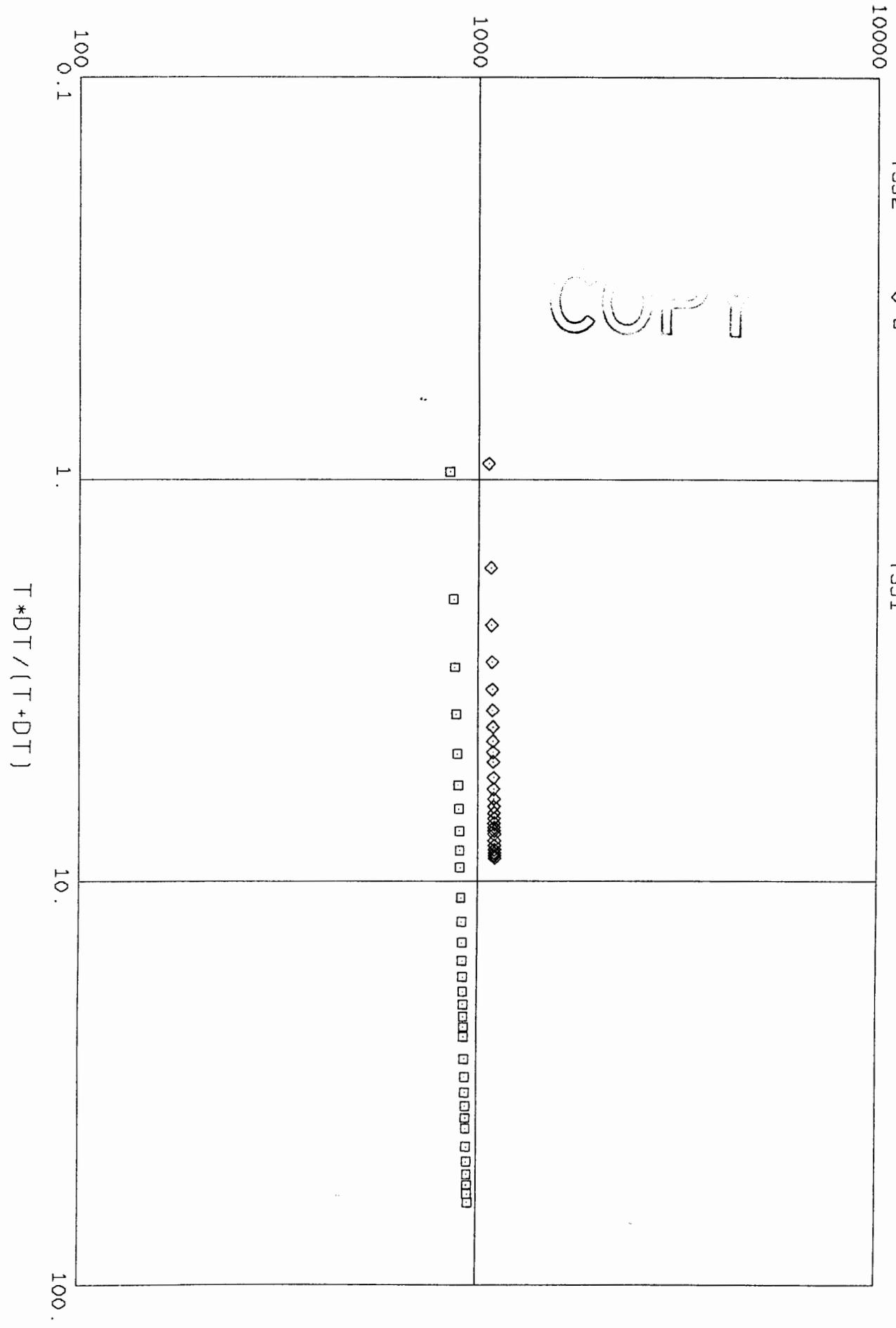
		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	4759.0	
3		DRILL COLLARS.....	6.000	2.500	745.1	
50		IMPACT REVERSING SUB.....	6.000	3.000	1.0	5504.5
3		DRILL COLLARS.....	6.000	2.500	60.7	
5		CROSSOVER.....	6.000	2.500	1.0	
11		HANDLING SUB & CHOKE ASSEMBLY...	4.500	3.500	4.6	
13		DUAL CIP SAMPLER.....	5.000	0.750	6.9	
60		HYDROSPRING TESTER.....	5.000	0.750	5.3	5582.5
80		AP RUNNING CASE.....	5.000	2.250	4.1	5584.6
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	2.8	
70		OPEN HOLE PACKER.....	6.750	1.530	5.8	5599.4
70		OPEN HOLE PACKER.....	6.750	1.530	5.8	5605.2
20		FLUSH JOINT ANCHOR.....	5.000	2.370	16.0	
83		HT-500 TEMPERATURE CASE.....	5.000		1.0	5623.0
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	5625.0
TOTAL DEPTH						5628.0

EQUIPMENT DATA

GAUGE NO 7352 CIP 1 2

GAUGE NO 7351 CIP 1 2

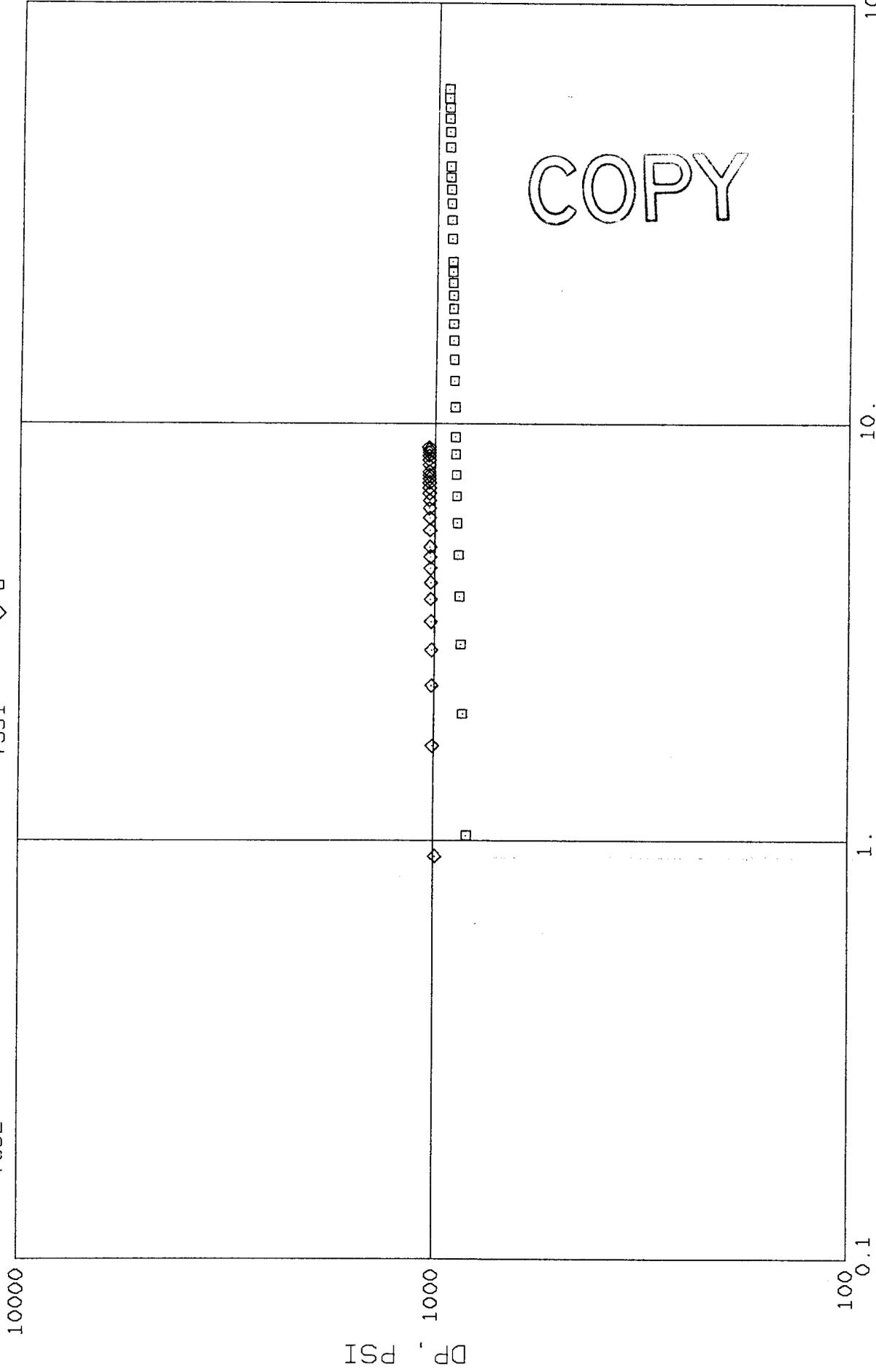
DP, PSI



TICKET NO 70583800

GAUGE NO CIP 1 2  
7351

GAUGE NO CIP 1 2  
7352



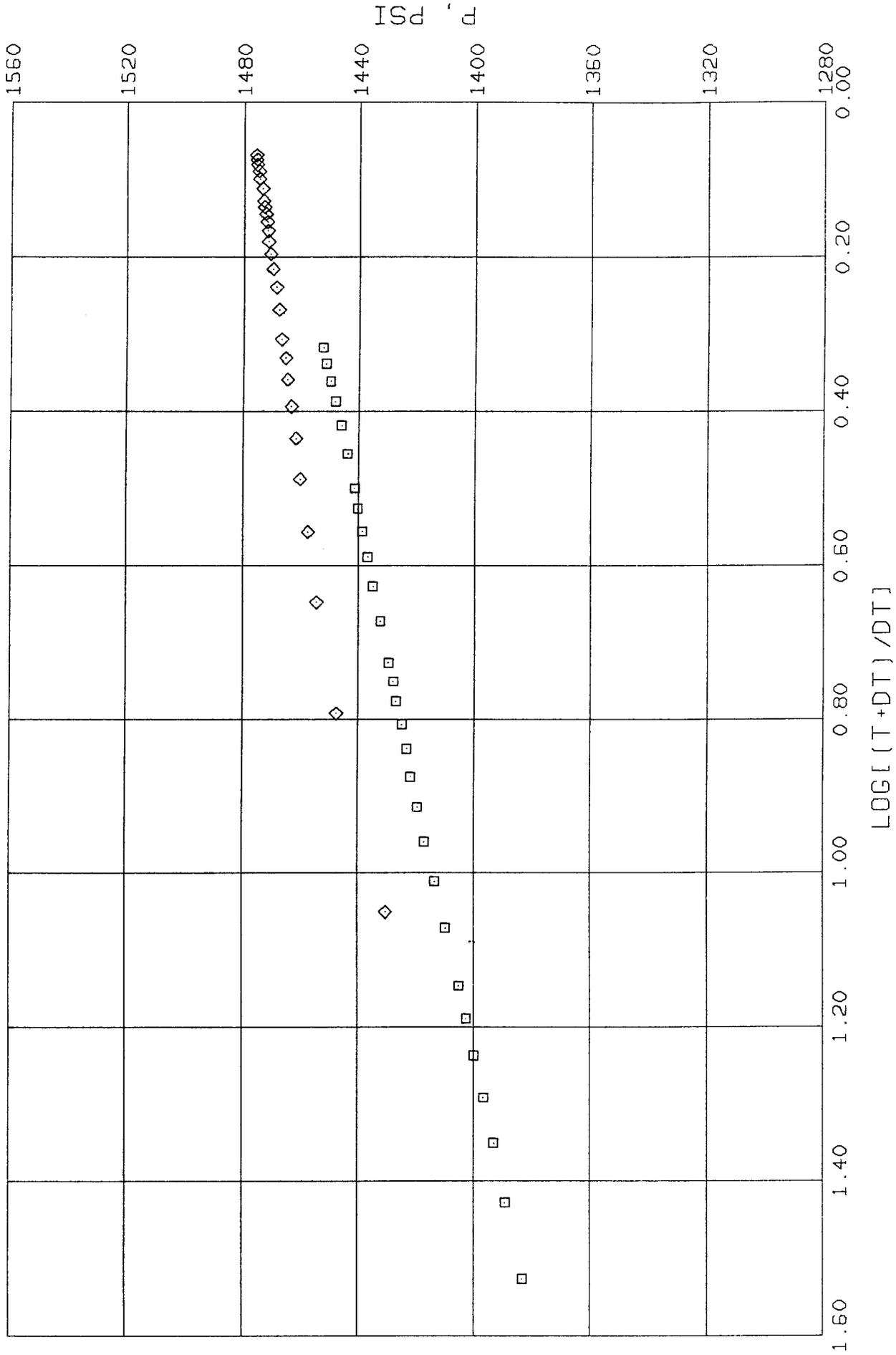
$T*DT/(T+DT)$

DP  
PSI

TICKET NO 70583800

GAUGE NO CIP 1 2  
7351

GAUGE NO CIP 1 2  
7352



TICKET NO 70583800

GAUGE\_NO CIP 1 2  
7351

GAUGE\_NO CIP 1 2  
7352

