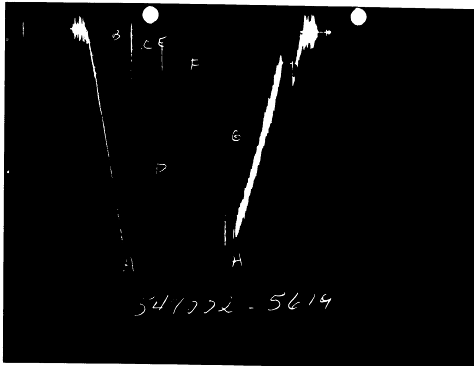
HALLIBURTON SERVICES

TICKET NO. 54700200
12-MAY-87
HOBBS

FORMATION TESTING SERVICE REPORT

MOBIL MESCALERO RIDGE LEASE NAME	1 WELL NO	2 TEST NO	9739.0 - 9900.0 TESTED INTERVAL
WESTERN OIL PRODUCERS INCORPORATED LEASE OWNER/COMPANY NAME			
17-19S-35E LEGAL LOCATION SEC - TWP - RNG	SOUTHEAST SCHARB FIELD AREA	LEA COUNTY	NEW MEXICO IC STATE

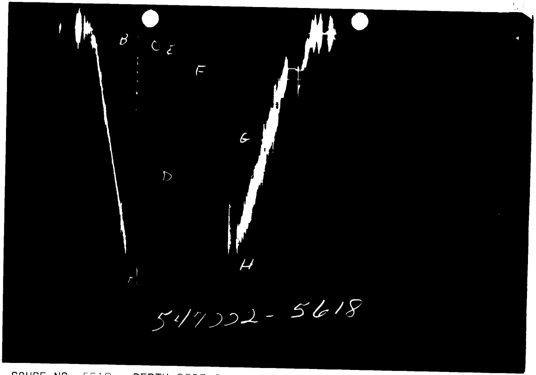


GAUGE NO: 5619 DEPTH: 9721.0 BLANKED OFF: NO HOUR OF CLOCK

ID	DESCRIPTION	PRESSURE		TIME	
		REPORTED	CALCULATED	REPORTED	CALCULATED
A	INITIAL HYDROSTATIC	4565	4529.1		
B	INITIAL FIRST FLOW	86	50.2	30.0	28.9
C	FINAL FIRST FLOW	432	396.8		
C	INITIAL FIRST CLOSED-IN	432	396.8	61.0	58.1
D	FINAL FIRST CLOSED-IN	2750	2747.9		
E	INITIAL SECOND FLOW	432	413.8	60.0	60.5
F	FINAL SECOND FLOW	777	757.3		
F	INITIAL SECOND CLOSED-IN	777	757.3	123.0	123.6
G	FINAL SECOND CLOSED-IN	2322	2304.1		
H	FINAL HYDROSTATIC	4565	4519.5		

: 24

TYPE
F
C
F
C



547222 - 5618

GAUGE NO: 5618 DEPTH: 9897.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	4575	4567.2			
B	INITIAL FIRST FLOW	129	136.8	30.0	28.9	F
C	FINAL FIRST FLOW	497	493.4			
C	INITIAL FIRST CLOSED-IN	497	493.4	61.0	58.1	C
D	FINAL FIRST CLOSED-IN	2917	2862.2			
E	INITIAL SECOND FLOW	540	514.9	60.0	60.5	F
F	FINAL SECOND FLOW	885	866.9			
F	INITIAL SECOND CLOSED-IN	885	866.9	123.0	123.6	C
G	FINAL SECOND CLOSED-IN	2447	2424.0			
H	FINAL HYDROSTATIC	4575	4548.2			

EQUIPMENT & HOLE DATA

FORMATION TESTED: BONE SPRINGS
NET PAY (ft):
GROSS TESTED FOOTAGE: 161.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 3835.0 KELLY BUSHING
TOTAL DEPTH (ft): 9900.0
PACKER DEPTH(S) (ft): 9734, 9739
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 8.90
MUD VISCOSITY (sec): 36
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 140 @ 9896.0 ft

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
MUD PIT	0.740 @ 62 °F	5000 ppm
TOP OF FLUID	0.105 @ 70 °F	44100 ppm
MIDDLE OF RECOVERY	0.062 @ 76 °F	86100 ppm
END OF RECOVERY	0.075 @ 72 °F	73000 ppm
TOOL TOP	0.062 @ 76 °F	86000 ppm
SAMPLER	0.060 @ 76 °F	97800 ppm

HYDROCARBON PROPERTIES

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

RECOVERED:

1540 FEET OF FLUID
APPROXIMATELY 250 FEET OF DR
1290 FEET OF FORMATION WATER

REMARKS:

NOTE: TESTED ACROSS PRODUCING INTERVAL OF AD

TICKET NUMBER: 54700200

DATE: 5-6-87 TEST NO: 2

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: HOBBS

TESTER: STEVE LUSCOMBE

WITNESS: CARROLL BELLAH

DRILLING CONTRACTOR: W.E.K. RIG #2

SAMPLER DATA

Psig AT SURFACE: 210.0
cu.ft. OF GAS: 0.070
cc OF OIL:
cc OF WATER: 2100.0
cc OF MUD: 200.0
TOTAL LIQUID cc: 2300.0

CUSHION DATA

TYPE	AMOUNT	WEIGHT

ILLING FLUID

MEASURED FROM TESTER VALVE

JACENT WELL.

TYPE & SIZE MEASURING DEVICE: 5" POSITIVE CHOKE

TICKET NO: 54700200

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
5-5-87					
2230					ON LOCATION
5-6-87					
0030					PICKED UP TOOL
0100					MADE UP TOOL
0145					RAN IN HOLE
0405					ON BOTTOM
0406	BH				OPENED TOOL WITH A WEAK BLOW -
					1" IN BUCKET
0411		2 OZ.			NOTE: ALL SURFACE PRESSURE WAS
					MEASURED ON OUNCE GAUGE!!!
0416		3.5			
0421		4.5			
0426		5.25			
0431		5.75			
0436		6.25			CLOSED TOOL
0535					STROKE TO OPEN TOOL
0537					OPENED TOOL WITH WEAK BLOW -
					1" IN BUCKET
0542	BH	1.5			
0547		2.25			
0552		2.75			
0557		3			
0602		3.25			
0607		3.5			
0612		3.5			
0617		3.5			
0622		3.5			
0627		3.5			
0632		3.25			
0637		3			STROKE TO CLOSE
0840					OPENED BYPASS
0850					PULLED OUT OF HOLE
1100					TOP OF FLUID - REVERSED OUT
1330					OUT OF HOLE
1400					LOADED OUT

TICKET NO: 54700200

CLOCK NO: 5991 HOUR: 24

REF		MINUTES	PRESSURE	ΔP
			FIRST FLOW	
B	1	0.0	50.2	
	2	2.0	101.2	51.0
	3	4.0	143.1	41.9
	4	6.0	178.8	35.6
	5	8.0	213.4	34.6
	6	10.0	241.7	28.3
	7	12.0	264.8	23.1
	8	14.0	281.6	16.9
	9	16.0	300.2	18.6
	10	18.0	317.5	17.3
	11	20.0	334.6	17.1
	12	22.0	350.1	15.6
	13	24.0	363.1	13.0
	14	26.0	378.0	14.9
C	15	28.9	396.8	18.8
			FIRST CLOSED-IN	
C	1	0.0	396.8	
	2	1.0	896.0	499.3
	3	2.0	1357.9	961.1
	4	3.0	1782.8	1386.0
	5	4.0	2173.0	1776.2
	6	5.0	2308.8	1912.0
	7	6.0	2377.1	1980.3
	8	7.0	2421.2	2024.4
	9	8.0	2457.7	2060.9
	10	9.0	2482.2	2085.4
	11	10.0	2502.7	2105.9
	12	12.0	2534.0	2137.3
	13	14.0	2556.6	2159.9
	14	16.0	2575.4	2178.6
	15	18.0	2591.4	2194.6
	16	20.0	2606.5	2209.8
	17	22.0	2621.5	2224.7
	18	24.0	2635.1	2238.3
	19	26.0	2645.8	2249.0
	20	28.0	2655.6	2258.8
	21	30.0	2665.6	2268.8
	22	35.0	2684.2	2287.4
	23	40.0	2701.2	2304.5
	24	45.0	2716.6	2319.8
	25	50.0	2730.0	2333.3
	26	55.0	2740.9	2344.1
D	27	58.1	2747.9	2351.2
			SECOND FLOW	
E	1	0.0	413.8	
	2	5.0	452.6	38.7

REMARKS:

Δt	log $\frac{t+\Delta t}{\Delta t}$
1.0	1.463
1.9	1.183
2.7	1.023
3.5	0.915
4.3	0.831
5.0	0.766
5.6	0.710
6.3	0.664
6.9	0.625
7.4	0.591
8.5	0.532
9.4	0.486
10.3	0.448
11.1	0.417
11.8	0.388
12.5	0.364
13.1	0.344
13.7	0.325
14.2	0.308
14.7	0.293
15.8	0.262
16.8	0.236
17.6	0.216
18.3	0.198
18.9	0.184
19.3	0.175

GAUGE NO: 5619

DEPTH: 9721.0

SECOND FLOW - CONTINUED

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	log $\frac{t+\Delta t}{\Delta t}$
3	10.0	488.7	36.1		
4	15.0	520.5	31.8		
5	20.0	550.8	30.3		
6	25.0	578.3	27.5		
7	30.0	607.8	29.4		
8	35.0	634.8	27.1		
9	40.0	661.4	26.6		
10	45.0	689.4	27.9		
11	50.0	711.4	22.1		
12	55.0	735.7	24.2		
F 13	60.5	757.3	21.6		

SECOND CLOSED-IN

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	log $\frac{t+\Delta t}{\Delta t}$
F 1	0.0	757.3			
2	1.0	1286.8	529.5	1.0	1.950
3	2.0	1563.4	806.1	2.0	1.653
4	3.0	1769.6	1012.3	2.9	1.495
5	4.0	1897.5	1140.2	3.9	1.365
6	5.0	1965.1	1207.8	4.7	1.277
7	6.0	1998.8	1241.5	5.6	1.203
8	7.0	2025.9	1268.6	6.5	1.141
9	8.0	2048.8	1291.5	7.3	1.085
10	9.0	2065.9	1308.6	8.2	1.037
11	10.0	2080.0	1322.7	9.0	0.997
12	12.0	2102.2	1344.9	10.6	0.926
13	14.0	2118.0	1360.7	12.1	0.867
14	16.0	2133.9	1376.5	13.6	0.819
15	18.0	2146.7	1389.3	15.0	0.776
16	20.0	2155.0	1397.7	16.3	0.738
17	22.0	2165.3	1407.9	17.7	0.704
18	24.0	2174.0	1416.7	18.9	0.675
19	26.0	2179.8	1422.5	20.1	0.647
20	28.0	2186.8	1429.5	21.3	0.623
21	30.0	2194.5	1437.2	22.5	0.600
22	35.0	2205.0	1447.7	25.2	0.550
23	40.0	2215.7	1458.4	27.6	0.510
24	45.0	2224.4	1467.1	29.9	0.475
25	50.0	2232.4	1475.0	32.1	0.445
26	55.0	2239.2	1481.9	34.0	0.419
27	60.0	2246.0	1488.7	35.9	0.396
28	70.0	2257.4	1500.0	39.3	0.357
29	80.0	2268.7	1511.3	42.2	0.326
30	90.0	2277.2	1519.9	44.9	0.300
31	100.0	2286.6	1529.3	47.2	0.277
32	110.0	2295.0	1537.6	49.3	0.258
33	120.0	2303.7	1546.4	51.2	0.242
G 34	123.6	2304.1	1546.8	51.9	0.236

TICKET NO: 54700200

CLOCK NO: 12871 HOUR: 24

FIRST FLOW

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	log $\frac{t+\Delta t}{\Delta t}$
B 1	0.0	136.8			
2	2.1	180.2	43.4		
3	4.0	222.4	42.1		
4	6.0	262.1	39.8		
5	8.0	299.1	37.0		
6	10.0	333.5	34.4		
7	12.0	356.8	23.3		
8	14.0	374.5	17.7		
9	16.0	391.8	17.3		
10	18.0	408.9	17.1		
11	20.0	427.0	18.2		
12	22.0	441.3	14.3		
13	24.0	458.6	17.3		
14	26.0	475.5	16.9		
C 15	28.9	493.4	17.9		

FIRST CLOSED-IN

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	log $\frac{t+\Delta t}{\Delta t}$
C 1	0.0	493.4			
2	1.0	1856.9	1363.5	0.9	1.493
3	2.0	2230.8	1737.4	1.9	1.187
4	3.0	2382.0	1888.6	2.7	1.027
5	4.0	2471.6	1978.2	3.5	0.916
6	5.0	2522.0	2028.6	4.3	0.828
7	6.0	2553.0	2059.6	5.0	0.765
8	7.0	2577.8	2084.4	5.6	0.712
9	8.0	2603.5	2110.1	6.3	0.662
10	9.0	2621.9	2128.5	6.9	0.624
11	10.0	2637.7	2144.3	7.4	0.589
12	12.0	2661.2	2167.8	8.5	0.532
13	14.0	2681.3	2187.9	9.4	0.487
14	16.0	2699.7	2206.3	10.3	0.448
15	18.0	2715.3	2221.9	11.1	0.416
16	20.0	2729.9	2236.5	11.8	0.388
17	22.0	2741.4	2248.0	12.5	0.365
18	24.0	2752.9	2259.6	13.1	0.343
19	26.0	2762.8	2269.4	13.7	0.325
20	28.0	2772.0	2278.6	14.2	0.308
21	30.0	2781.0	2287.6	14.7	0.293
22	35.0	2799.3	2306.0	15.8	0.262
23	40.0	2817.3	2323.9	16.8	0.236
24	45.0	2831.0	2337.6	17.6	0.216
25	50.0	2845.7	2352.3	18.3	0.198
26	55.0	2856.6	2363.3	19.0	0.183
D 27	58.1	2862.2	2368.8	19.3	0.175

SECOND FLOW

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	log $\frac{t+\Delta t}{\Delta t}$
E 1	0.0	514.9			
2	5.0	545.3	30.3		

REMARKS:

GAUGE NO: 5618

DEPTH: 9897.0

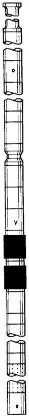
SECOND FLOW - CONTINUED

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	log $\frac{t+\Delta t}{\Delta t}$
3	10.0	583.4	38.1		
4	15.0	617.3	34.0		
5	20.0	647.4	30.1		
6	25.0	678.6	31.2		
7	30.0	707.4	28.8		
8	35.0	735.3	27.9		
9	40.0	763.2	27.9		
10	45.0	789.4	26.2		
11	50.0	815.4	26.0		
12	55.0	841.0	25.5		
F 13	60.5	866.9	26.0		

SECOND CLOSED-IN

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	log $\frac{t+\Delta t}{\Delta t}$
F 1	0.0	866.9			
2	1.0	1545.3	678.3	1.0	1.973
3	2.0	1837.2	970.2	1.9	1.664
4	3.0	1986.2	1119.3	2.9	1.492
5	4.0	2067.9	1200.9	3.8	1.369
6	5.0	2108.1	1241.2	4.7	1.275
7	6.0	2137.0	1270.1	5.7	1.199
8	7.0	2157.6	1290.6	6.5	1.139
9	8.0	2173.2	1306.3	7.3	1.088
10	9.0	2190.6	1323.6	8.2	1.037
11	10.0	2203.0	1336.1	9.0	0.996
12	12.0	2223.8	1356.8	10.6	0.926
13	14.0	2241.1	1374.2	12.1	0.869
14	16.0	2255.0	1388.1	13.6	0.819
15	18.0	2266.8	1399.9	15.0	0.776
16	20.0	2276.5	1409.5	16.3	0.738
17	22.0	2284.4	1417.4	17.6	0.705
18	24.0	2292.1	1425.1	18.9	0.675
19	26.0	2300.7	1433.7	20.1	0.647
20	28.0	2307.3	1440.4	21.3	0.623
21	30.0	2312.6	1445.7	22.5	0.600
22	35.0	2324.9	1457.9	25.2	0.551
23	40.0	2334.1	1467.1	27.6	0.510
24	45.0	2342.2	1475.3	30.0	0.475
25	50.0	2351.2	1484.3	32.1	0.445
26	55.0	2358.0	1491.1	34.1	0.419
27	60.0	2364.5	1497.5	35.9	0.396
28	70.0	2376.0	1509.1	39.2	0.357
29	80.0	2387.6	1520.7	42.2	0.326
30	90.0	2397.2	1530.3	44.8	0.300
31	100.0	2405.2	1538.2	47.2	0.277
32	110.0	2413.5	1546.6	49.3	0.258
33	120.0	2420.4	1553.4	51.2	0.242
G 34	123.6	2424.0	1557.1	51.9	0.236

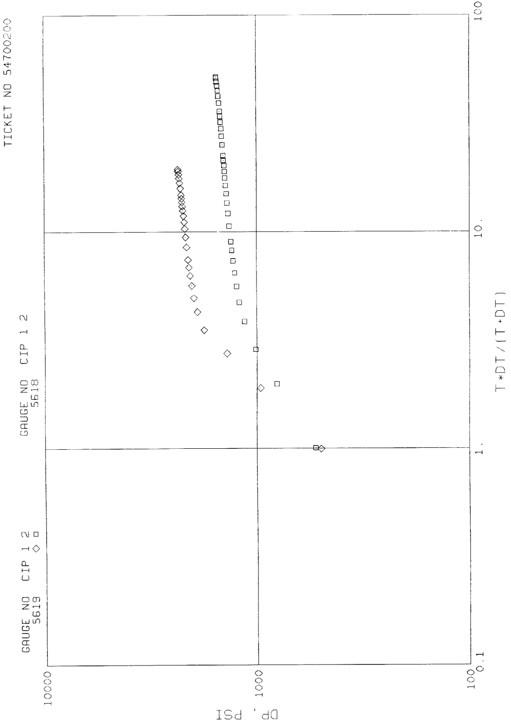
TICKET NO. 54700200

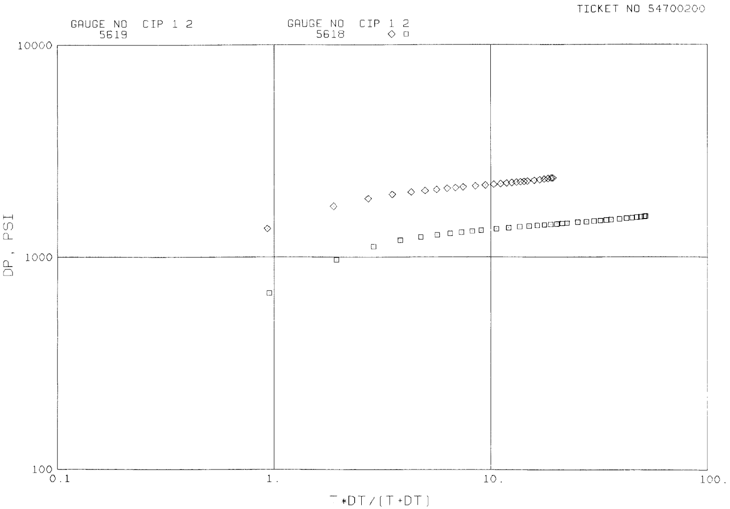


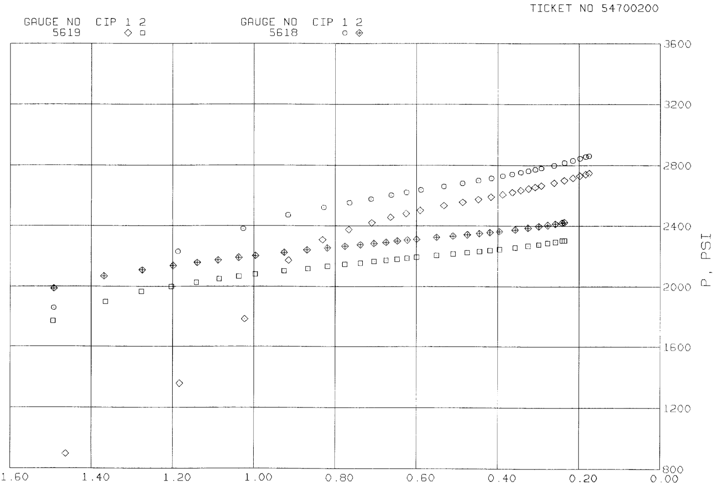
		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE	4.000	3.340	9126.0	
3	DRILL COLLARS	6.500	2.250	450.0	
50	IMPACT REVERSING SUB	6.000	2.813	1.0	9576.0
3	DRILL COLLARS	6.500	2.250	123.0	
5	CROSSOVER	5.750	2.313	1.0	
62	MULTIPLE CIP SAMPLER	5.000	0.750	9.0	9709.0
14	EXTENSION JOINT	5.000	0.870	10.0	
80	AP RUNNING CASE	5.000	2.250	4.0	9721.0
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	5.0	9734.0
70	OPEN HOLE PACKER	6.750	1.530	5.0	9739.0
19	ANCHOR PIPE SAFETY JOINT	5.750	1.500	4.0	
5	CROSSOVER	5.750	2.500	1.0	
3	DRILL COLLARS	6.500	2.250	121.0	
5	CROSSOVER	6.125	3.000	1.0	
20	FLUSH JOINT ANCHOR	5.750	3.000	27.0	
81	BLANKED-OFF RUNNING CASE	5.750		4.0	9897.0
	TOTAL DEPTH				9900.0

EQUIPMENT DATA

TICKET NO 54700200







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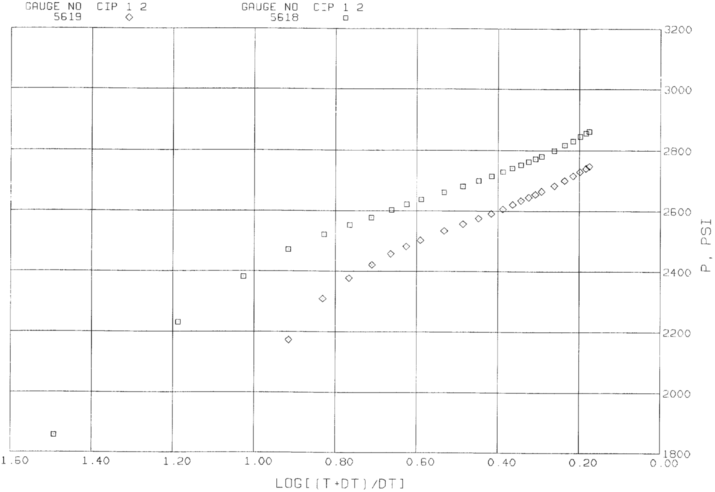

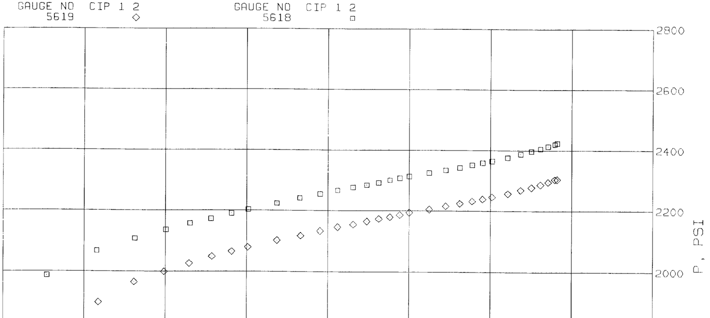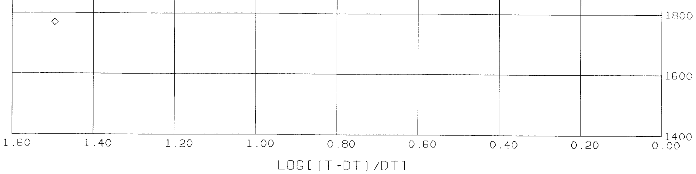TICKET NO 54700200