HALLIBURTON

SERVICES

TICKET NO. 65057500

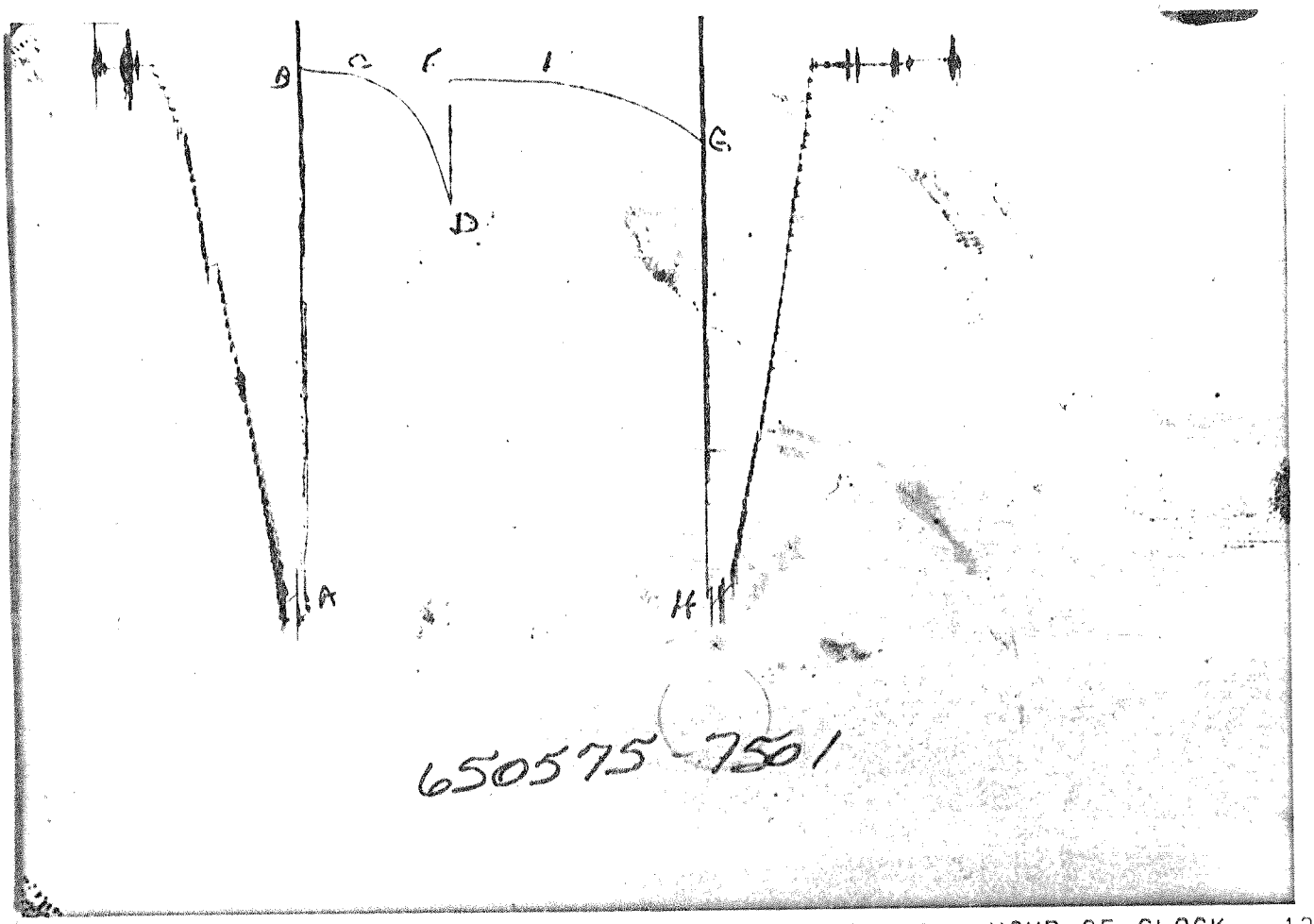
31-MAY-83

PRATT

FORMATION TESTING SERVICE REPORT

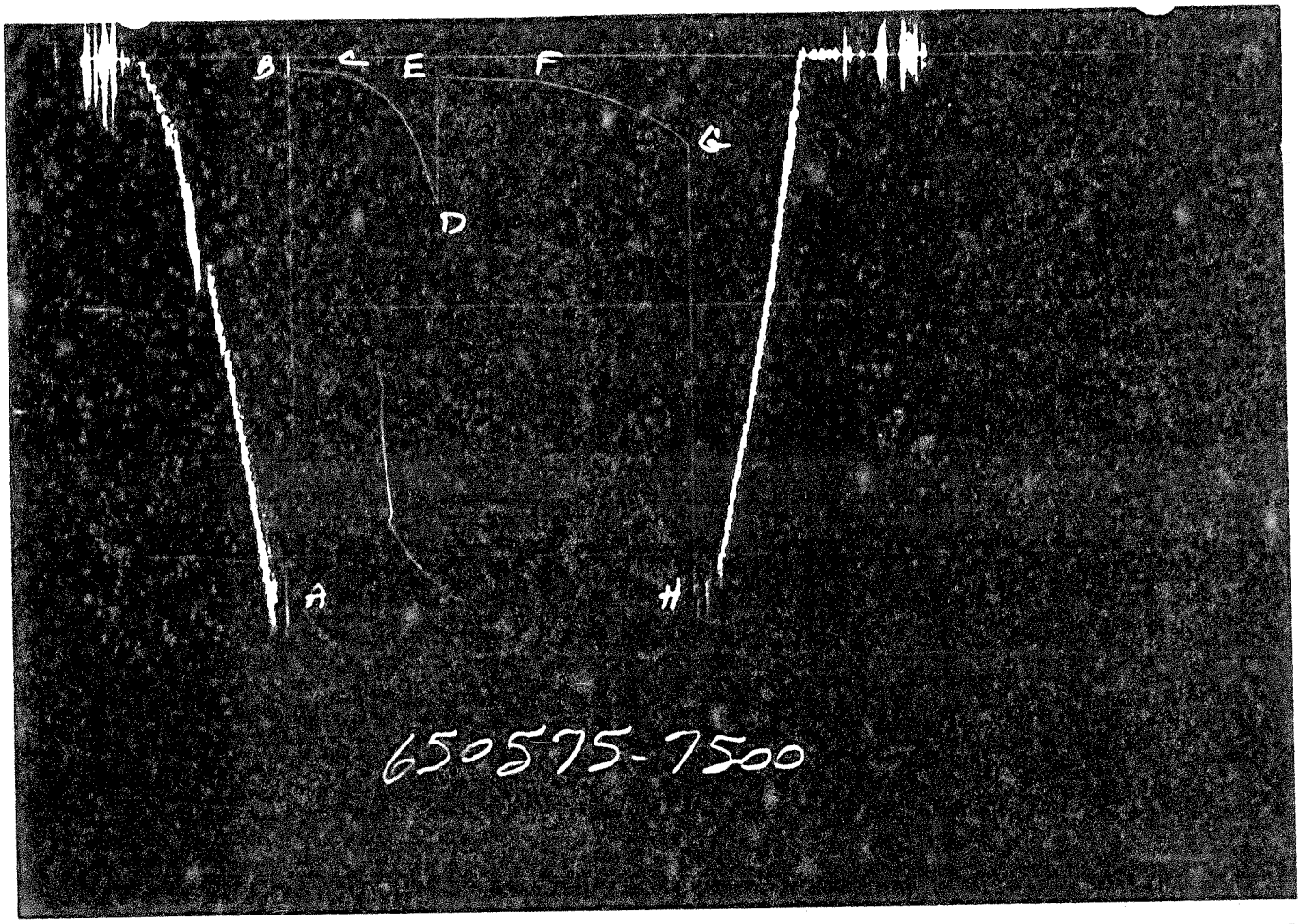
LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
26 - 34S - 21W	SNAKE CREEK	CLARK	KANSAS IC/NM

LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
BARBY	1-26	1	4295. ' - 4348. '	



GAUGE NO: 7501 DEPTH: 4274.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2124.2				
B	INITIAL FIRST FLOW	12.2		30.0	30.0	F
C	FINAL FIRST FLOW	34.9				
C	INITIAL FIRST CLOSED-IN	34.9		60.0	60.0	C
D	FINAL FIRST CLOSED-IN	556.5				
E	INITIAL SECOND FLOW	63.8		60.0	60.0	F
F	FINAL SECOND FLOW	65.2				
F	INITIAL SECOND CLOSED-IN	65.2		90.0	90.0	C
G	FINAL SECOND CLOSED-IN	310.9				
H	FINAL HYDROSTATIC	2098.3				



GAUGE NO: 7500 DEPTH: 4345.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2199	2155.8			
B	INITIAL FIRST FLOW	59	42.5	30.0	30.0	F
C	FINAL FIRST FLOW	79	64.1			
C	INITIAL FIRST CLOSED-IN	79	64.1	60.0	60.0	C
D	FINAL FIRST CLOSED-IN	607	596.5			
E	INITIAL SECOND FLOW	79	83.6	60.0	60.0	F
F	FINAL SECOND FLOW	98	99.8			
F	INITIAL SECOND CLOSED-IN	98	99.8	90.0	90.0	C
G	FINAL SECOND CLOSED-IN	373	360.7			
H	FINAL HYDROSTATIC	2179	2134.5			

EQUIPMENT & HOLE DATA

FORMATION TESTED: TORONTO
NET PAY (ft): 17.0
GROSS TESTED FOOTAGE: 53.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 1809
TOTAL DEPTH (ft): 4348.0
PACKER DEPTH(S) (ft): 4289, 4295
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.00
MUD VISCOSITY (sec): 48
ESTIMATED HOLE TEMP. (°F): 113
ACTUAL HOLE TEMP. (°F): 105 @ 4343.0 ft

TICKET NUMBER: 65057500
DATE: 5-26-83 TEST NO: 1
TYPE DST: OPEN HOLE
HALLIBURTON CAMP: PRATT
TESTER: ROBERT E. MARTIN
WITNESS: BILL SLADEK, GEOL.
DRILLING CONTRACTOR: RINE DRILLING COMPANY RIG # 1

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
PIT	0.140 @ 83 °F		30000 ppm
	@ °F		ppm
	@ °F		ppm
	@ °F		ppm
	@ °F		ppm
	@ °F		ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

120 FEET OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

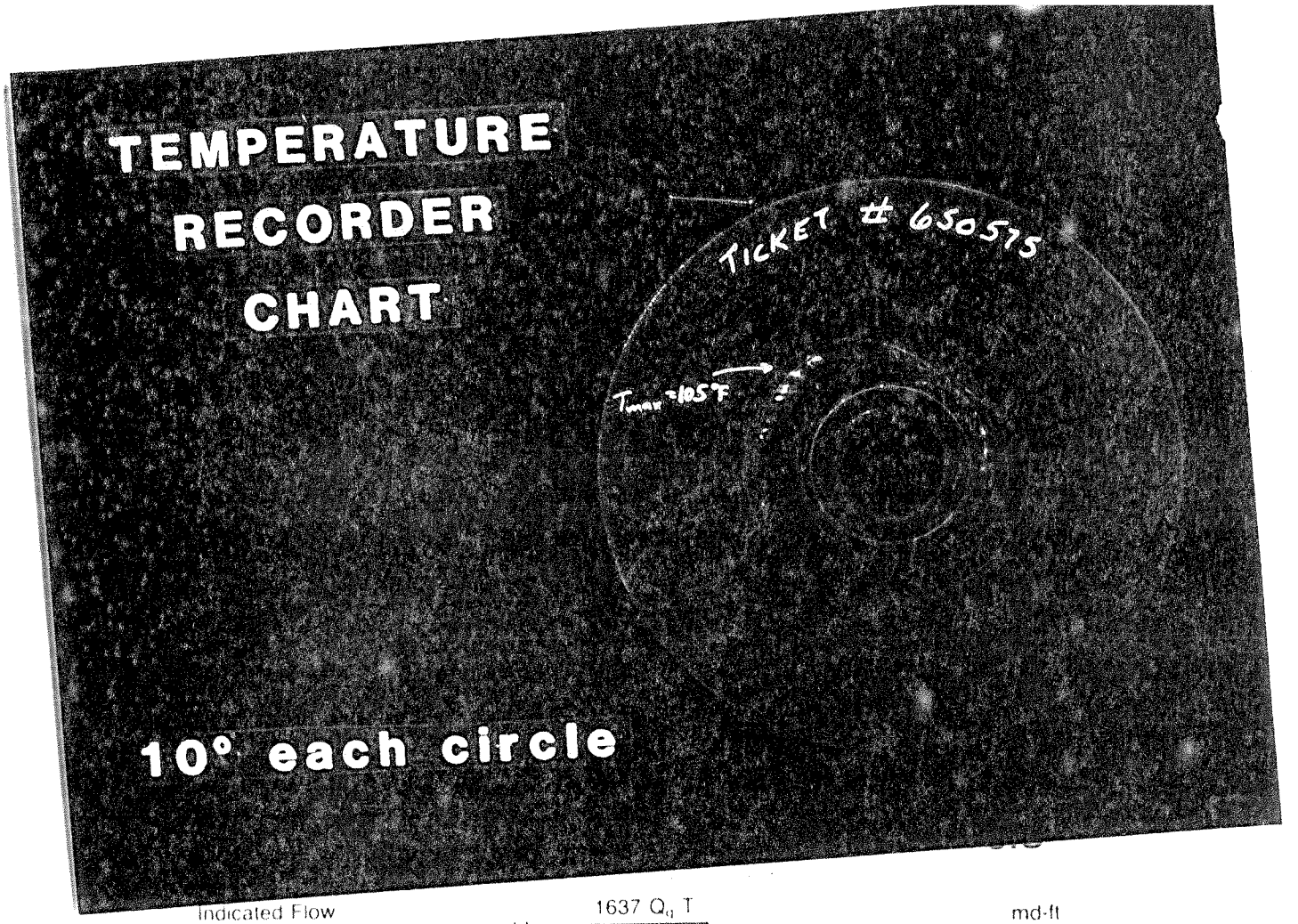
TYPE & SIZE MEASURING DEVICE: MERLA 2" TESTER | TICKET NO: 65057500

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
5-26-83					
0522					CALLED OUT.
0550					LEFT CAMP.
0730					ON LOCATION - RIG MAKING A SHORT
					TRIP.
1620					STARTED CLOCKS.
1630					PICKED UP THE TOOL.
1645					TOOL AT THE TABLE.
1655					TOOL THROUGH THE TABLE.
1822					TOOL ON BOTTOM-TOOL DID NOT
					SLIDE.
1825					ON THE INITIAL OPENING - HAD A
					WEAK BLOW - 1/2" INTO THE BUCKET
					BUILDING TO 1 1/2" INTO THE
					BUCKET.
1855					CLOSED FOR THE FIRST CIP.
1955					TOOL REOPENED WITH NO BLOW.
2055					CLOSED FOR THE FINAL CIP.
2225					TOOL OFF BOTTOM - BYPASS OPEN.
5-27-83					
0015					TOOL AT THE TABLE.
0045					TOOL LAID DOWN.

TICKET NO. 65057500

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	3720.0	
3	DRILL COLLARS.....	6.250	2.250	450.0	
50	IMPACT REVERSING SUB.....	5.750	2.750	1.0	4170.0
3	DRILL COLLARS.....	6.250	2.250	90.0	
5	CROSSOVER.....	6.250	2.250	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	6.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	4272.0
80	AP RUNNING CASE.....	5.000	3.060	4.0	4274.0
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	4289.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	4295.0
5	CROSSOVER.....	5.750	2.750	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	2.370	4.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	41.0	
83	HT-500 TEMPERATURE CASE.....	5.000		1.0	4343.0
81	BLANKED-OFF RUNNING CASE.....	5.000		4.0	4345.0
	TOTAL DEPTH				4348.0

EQUIPMENT DATA



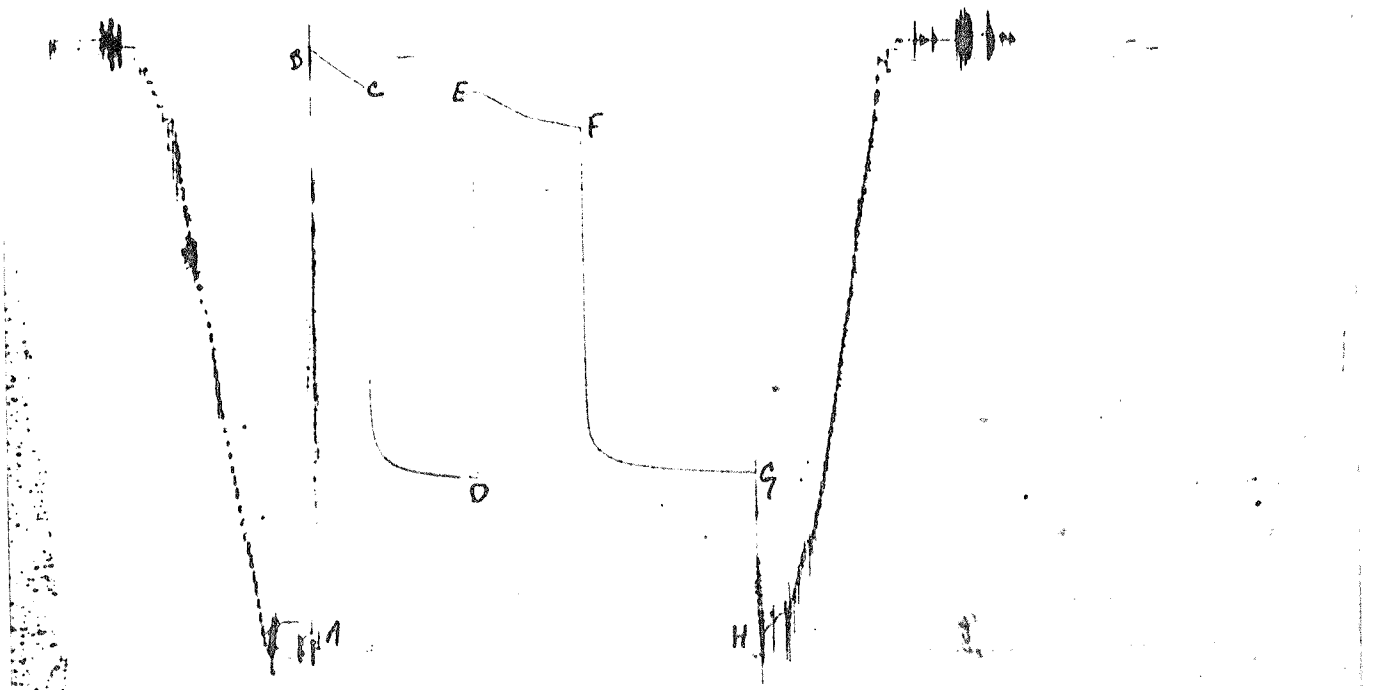
Indicated Flow Capacity	kh	$\frac{1637\ Q_g\ T}{m}$	md-ft
Average Effective Permeability	k	$\frac{kh}{h}$	md
Skin Factor	$S = 1.151\left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG}\frac{kt}{\phi\ \mu\ c_t r_w^2} + 3.23\right]$		—
Damage Ratio	$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\ mS}$		—
Indicated Flow Rate (Maximum)	$AOF_1 = \frac{Q_g\ m(P^*)}{m(P^*) - m(P_f)}$		MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g\sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$		MCFD
Approx. Radius of Investigation	$r_i = 0.032\sqrt{\frac{kt}{\phi\mu c_t}}$		ft

HALLIBURTON
SERVICES

TICKET NO. 65752600
31-MAY-83
PRATT

FORMATION TESTING SERVICE REPORT

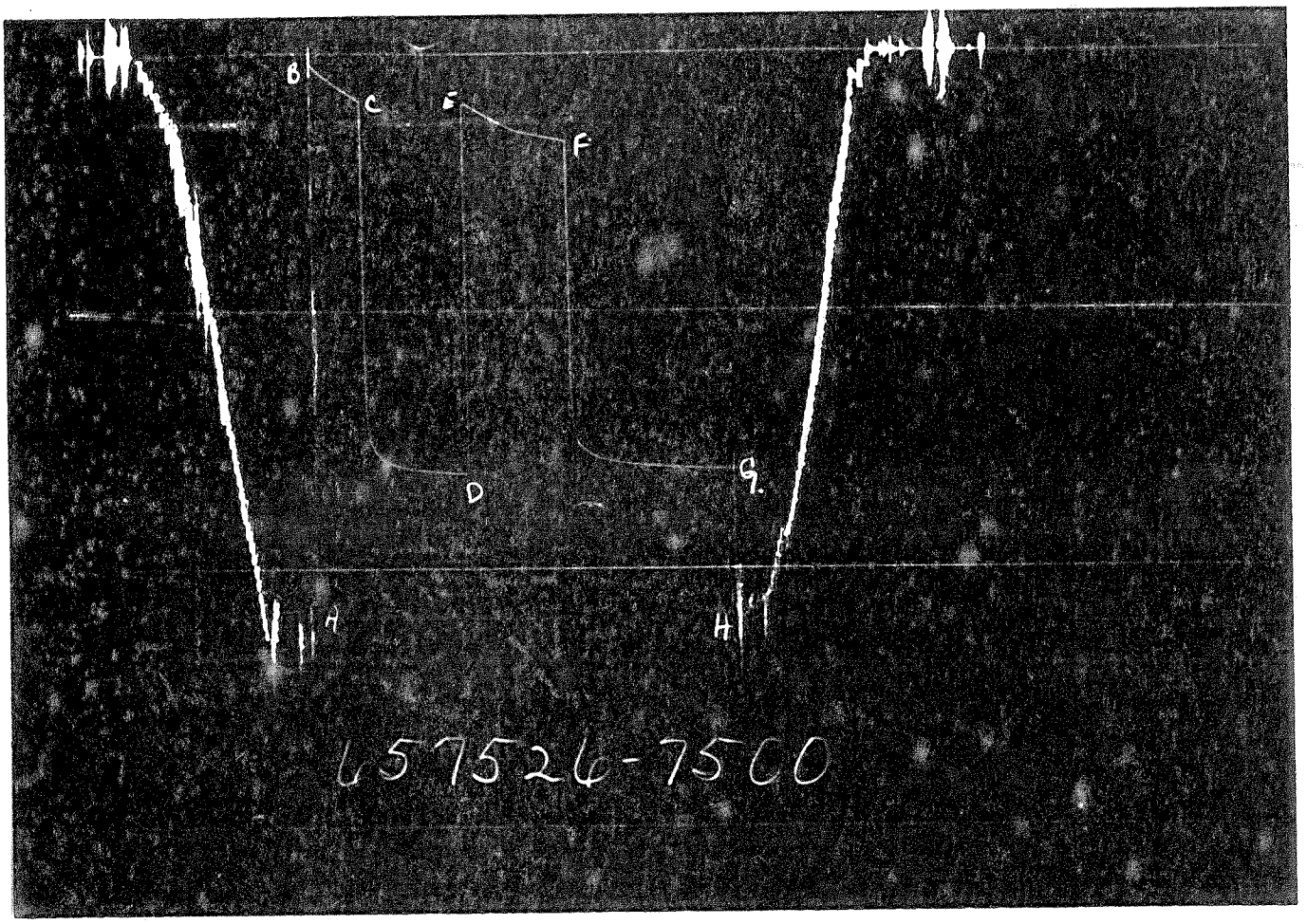
LEASE NAME: BARBY	WELL NO.: 1-26	TEST NO.: 2	TESTED INTERVAL: 4348.' - 4380.'	LEASE OWNER/COMPANY NAME: RINE DRILLING COMPANY	
LEGAL LOCATION SEC. - TWP. - RNG.: 26 - 34S - 21W	FIELD AREA: SNAKE CREEK	COUNTY: CLARK	STATE: KANSAS BC/NM		



657526-7501

GAUGE NO: 7501 DEPTH: 4327.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2173.0			
B	INITIAL FIRST FLOW		19.4	30.0	29.4	F
C	FINAL FIRST FLOW		156.2			
C	INITIAL FIRST CLOSED-IN		156.2	60.0	61.1	C
D	FINAL FIRST CLOSED-IN		1609.2			
E	INITIAL SECOND FLOW		179.6	60.0	59.5	F
F	FINAL SECOND FLOW		317.9			
F	INITIAL SECOND CLOSED-IN		317.9	90.0	95.1	C
G	FINAL SECOND CLOSED-IN		1598.1			
H	FINAL HYDROSTATIC		2159.6			



GAUGE NO: 7500 DEPTH: 4377.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2238	2196.0			
B	INITIAL FIRST FLOW	59	43.8	30.0	29.4	F
C	FINAL FIRST FLOW	196	186.7			
C	INITIAL FIRST CLOSED-IN	196	186.7	60.0	61.1	C
D	FINAL FIRST CLOSED-IN	1637	1634.1			
E	INITIAL SECOND FLOW	196	199.1	60.0	59.5	F
F	FINAL SECOND FLOW	333	344.2			
F	INITIAL SECOND CLOSED-IN	333	344.2	90.0	95.1	C
G	FINAL SECOND CLOSED-IN	1617	1621.5			
H	FINAL HYDROSTATIC	2179	2176.6			

EQUIPMENT & HOLE DATA

FORMATION TESTED: TORONTO
NET PAY (ft): 7.0
GROSS TESTED FOOTAGE: 32.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 1809
TOTAL DEPTH (ft): 4380.0
PACKER DEPTH(S) (ft): 4342, 4348
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 8.10
MUD VISCOSITY (sec): 42
ESTIMATED HOLE TEMP. (°F): 114
ACTUAL HOLE TEMP. (°F): 106 @ 4375.0 ft

TICKET NUMBER: 65752600

DATE: 5-27-83 TEST NO: 2

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: PRATT

TESTER: ROBERT E. MARTIN

WITNESS: BILL SLADEK, GEOL.

DRILLING CONTRACTOR: RINE DRILLING COMPANY RIG # 1

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
PIT	0.140 @ 79 °F	32000 ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

570 FEET OF MUDDY WATER

MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: MERLA 2" TESTER | TICKET NO: 65752600

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
5-27-83					
1205					STARTED CLOCKS.
1235					PICKED UP THE TOOL.
1245					TOOL AT THE TABLE.
1257					TOOL THROUGH THE TABLE.
1427					TOOL ON BOTTOM - TOOL DID NOT
					SLIDE.
1430					TOOL OPENED WITH A WEAK BLOW -
					BUILDING TO 8" INTO THE
					BUCKET.
1500					CLOSED TOOL FOR THE FIRST CIP.
1600					TOOL OPENED WITH A WEAK BLOW-
					BUILDING TO 8" INTO THE BUCKET.
1700					CLOSED TOOL FOR THE FINAL CIP.
1830					TOOL OFF BOTTOM - BYPASS OPEN.
2015					TOOL AT THE TABLE.
2050					TOOL LAID DOWN.

TICKET NO: 65752600

CLOCK NO: 3228 HOUR: 12

HALLIBURTON SERVICES

GAUGE NO: 7501

DEPTH: 4327.0

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	19.4			
	2	5.0	41.4	21.9		
	3	10.0	66.0	24.6		
	4	15.0	91.1	25.1		
	5	20.0	116.1	25.0		
	6	25.0	137.9	21.8		
C	7	29.4	156.2	18.4		
			FIRST CLOSED-IN			
C	1	0.0	156.2			
	2	4.0	1477.8	1321.5	3.5	0.923
	3	8.0	1527.3	1371.0	6.3	0.671
	4	12.0	1550.2	1393.9	8.5	0.538
	5	16.0	1565.3	1409.1	10.4	0.453
	6	20.0	1576.0	1419.8	11.9	0.393
	7	24.0	1583.1	1426.9	13.2	0.347
	8	28.0	1588.4	1432.2	14.3	0.312
	9	32.0	1592.5	1436.2	15.3	0.283
	10	36.0	1595.7	1439.5	16.2	0.259
	11	40.0	1599.6	1443.4	16.9	0.239
	12	44.0	1601.9	1445.7	17.6	0.222
	13	48.0	1604.7	1448.4	18.2	0.207
	14	52.0	1606.7	1450.5	18.8	0.194
	15	56.0	1607.6	1451.4	19.3	0.183
	16	60.0	1609.1	1452.8	19.7	0.173
D	17	61.1	1609.2	1452.9	19.9	0.170
			SECOND FLOW			
E	1	0.0	179.6			
	2	10.0	204.5	24.9		
	3	20.0	240.3	35.8		
	4	30.0	273.8	33.5		
	5	40.0	290.5	16.7		
	6	50.0	304.3	13.8		
F	7	59.5	317.9	13.6		
			SECOND CLOSED-IN			
F	1	0.0	317.9			
	2	4.0	1469.1	1151.2	3.9	1.362
	3	8.0	1509.5	1191.6	7.4	1.082
	4	12.0	1529.9	1212.1	10.6	0.923
	5	16.0	1544.2	1226.4	13.6	0.816
	6	20.0	1554.0	1236.1	16.3	0.736
	7	24.0	1560.4	1242.6	18.9	0.673
	8	28.0	1566.0	1248.1	21.3	0.621
	9	32.0	1570.1	1252.2	23.5	0.577

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	10	36.0	1573.5	1255.6	25.6	0.540
	11	40.0	1576.6	1258.8	27.6	0.508
	12	44.0	1579.3	1261.5	29.4	0.480
	13	48.0	1581.8	1263.9	31.2	0.455
	14	52.0	1583.9	1266.1	32.8	0.433
	15	56.0	1585.8	1267.9	34.4	0.413
	16	60.0	1587.8	1270.0	35.8	0.394
	17	65.0	1589.3	1271.4	37.6	0.374
	18	70.0	1590.6	1272.8	39.2	0.356
	19	75.0	1592.5	1274.6	40.7	0.339
	20	80.0	1594.2	1276.4	42.1	0.324
	21	85.0	1595.5	1277.7	43.4	0.311
	22	90.0	1597.0	1279.1	44.7	0.298
G	23	95.1	1598.1	1280.2	45.9	0.287

REMARKS:

TICKET NO: 65752600	
CLOCK NO: 3004	HOUR: 12

HALLIBURTON SERVICES

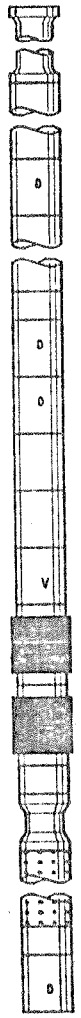
GAUGE NO: 7500	
DEPTH: 4377.0	

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	43.8			
	2	5.0	72.7	28.9		
	3	10.0	98.6	25.9		
	4	15.0	123.2	24.6		
	5	20.0	145.5	22.3		
	6	25.0	168.6	23.1		
C	7	29.4	186.7	18.0		
		FIRST CLOSED-IN				
C	1	0.0	186.7			
	2	4.0	1497.4	1310.7	3.5	0.919
	3	8.0	1553.5	1366.8	6.3	0.672
	4	12.0	1579.2	1392.5	8.5	0.539
	5	16.0	1593.6	1406.9	10.3	0.453
	6	20.0	1602.6	1415.9	11.9	0.393
	7	24.0	1609.2	1422.5	13.2	0.348
	8	28.0	1614.2	1427.6	14.3	0.312
	9	32.0	1618.1	1431.5	15.3	0.283
	10	36.0	1621.3	1434.7	16.2	0.259
	11	40.0	1624.1	1437.5	16.9	0.239
	12	44.0	1626.9	1440.3	17.6	0.222
	13	48.0	1628.9	1442.2	18.2	0.208
	14	52.0	1630.7	1444.1	18.8	0.194
	15	56.0	1632.2	1445.5	19.3	0.183
	16	60.0	1633.6	1447.0	19.7	0.173
D	17	61.1	1634.1	1447.4	19.9	0.170
		SECOND FLOW				
E	1	0.0	199.1			
	2	10.0	236.4	37.3		
	3	20.0	273.0	36.7		
	4	30.0	304.7	31.7		
	5	40.0	319.7	15.0		
	6	50.0	332.5	12.8		
F	7	59.5	344.2	11.7		
		SECOND CLOSED-IN				
F	1	0.0	344.2			
	2	4.0	1487.9	1143.6	3.8	1.366
	3	8.0	1534.5	1190.3	7.3	1.085
	4	12.0	1556.1	1211.9	10.6	0.923
	5	16.0	1569.6	1225.4	13.6	0.815
	6	20.0	1579.2	1235.0	16.3	0.736
	7	24.0	1585.8	1241.5	18.9	0.672
	8	28.0	1591.0	1246.8	21.3	0.620
	9	32.0	1595.5	1251.3	23.6	0.577

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
		SECOND CLOSED-IN - CONTINUED				
	10	36.0	1598.5	1254.3	25.6	0.540
	11	40.0	1601.6	1257.3	27.6	0.508
	12	44.0	1603.7	1259.5	29.4	0.480
	13	48.0	1605.8	1261.6	31.1	0.455
	14	52.0	1608.2	1264.0	32.8	0.433
	15	56.0	1610.3	1266.1	34.4	0.413
	16	60.0	1611.6	1267.4	35.8	0.395
	17	65.0	1613.0	1268.8	37.5	0.374
	18	70.0	1615.4	1271.2	39.2	0.356
	19	75.0	1616.6	1272.4	40.7	0.339
	20	80.0	1618.2	1274.0	42.1	0.324
	21	85.0	1619.2	1275.0	43.4	0.311
	22	90.0	1620.4	1276.2	44.7	0.298
G	23	95.1	1621.5	1277.3	45.9	0.287

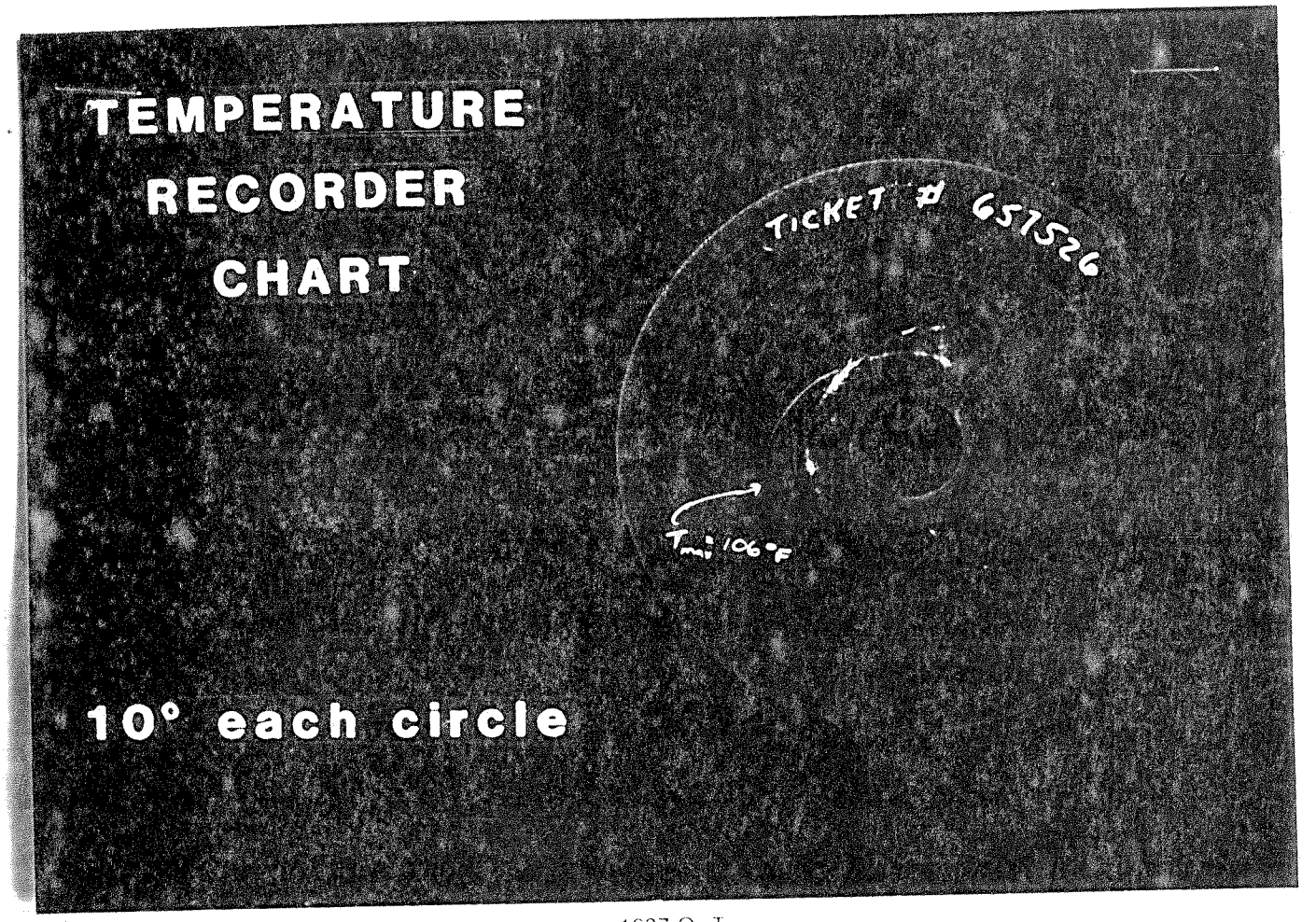
REMARKS:

TICKET NO. 65752600



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	3773.0	
3	DRILL COLLARS.....	6.250	2.250	450.0	
50	IMPACT REVERSING SUB.....	5.750	2.750	1.0	4223.0
3	DRILL COLLARS.....	6.250	2.250	90.0	
5	CROSSOVER.....	6.250	2.250	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	6.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	4325.0
80	AP RUNNING CASE.....	5.000	3.060	4.0	4327.0
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	4342.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	4348.0
5	CROSSOVER.....	5.750	2.750	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	2.370	4.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	20.0	
83	HT-500 TEMPERATURE CASE.....	5.000		1.0	4375.0
81	BLANKED-OFF RUNNING CASE.....	5.000		4.0	4377.0
	TOTAL DEPTH				4380.0

EQUIPMENT DATA



Indicated Flow Capacity	kh	$\frac{1637\ Q_o\ T}{m}$	md-ft
Average Effective Permeability	k	$\frac{kh}{h}$	md
Skin Factor	S	$1.151\left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG}\frac{kt}{\phi\ \mu\ c_t r_w^2} + 3.23\right]$	—
Damage Ratio	DR	$\frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\ mS}$	—
Indicated Flow Rate (Maximum)	AOF_1	$\frac{Q_o\ m(P^*)}{m(P^*) - m(P_f)}$	MCFD
Indicated Flow Rate (Minimum)	AOF_2	$Q_o\sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$	MCFD
Approx. Radius of Investigation	r_i	$0.032\sqrt{\frac{kt}{\phi\mu c_t}}$	ft

HALLIBURTON

SERVICES

TICKET NO. 65748300

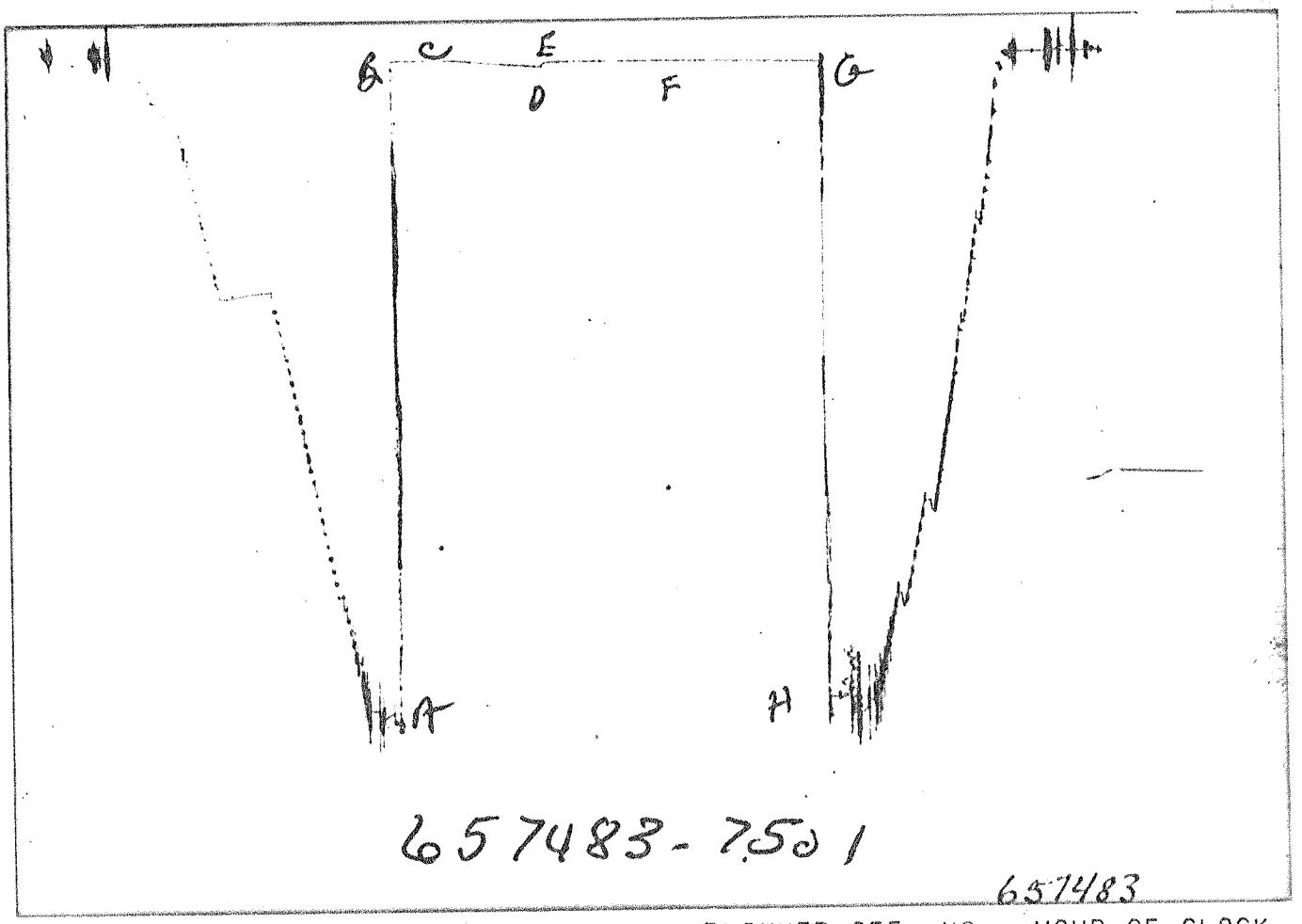
03-JUN-83

PRATT

FORMATION TESTING SERVICE REPORT

BARBY	1-26	3	5088.' - 5140.'	RINE DRILLING COMPANY	
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME	
LEGAL LOCATION SEC. - TWP. - RNG.	26-31-21	FIELD AREA	COUNTY CLARK	STATE KANSAS	DR

29-34-21

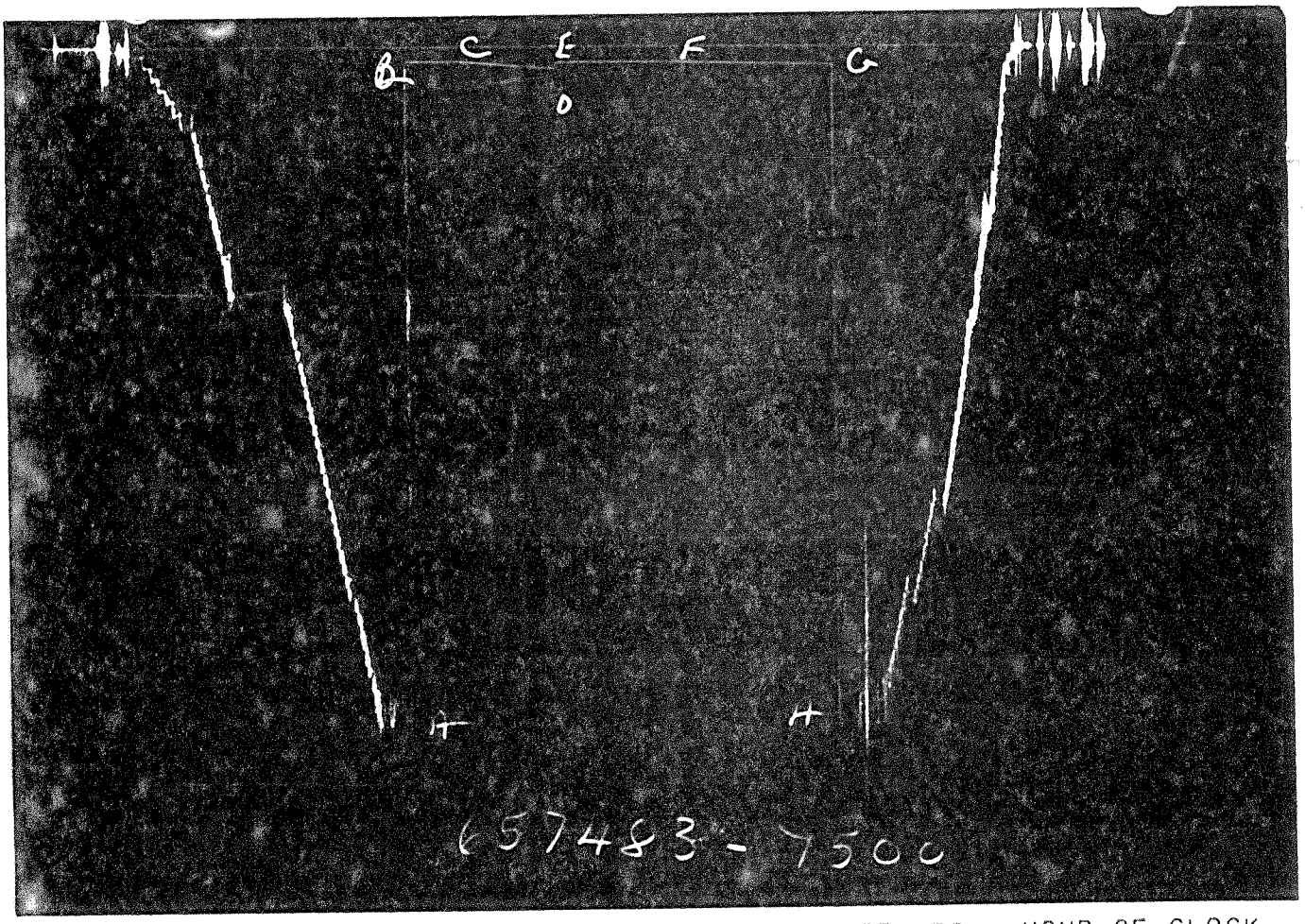


657483-7501

657483

GAUGE NO: 7501 DEPTH: 5067.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2666.5				
B	INITIAL FIRST FLOW	20.0		30.0	30.0	F
C	FINAL FIRST FLOW	20.0				
C	INITIAL FIRST CLOSED-IN	20.0		60.0	60.0	C
D	FINAL FIRST CLOSED-IN	43.7				
E	INITIAL SECOND FLOW	33.3		60.0	60.0	F
F	FINAL SECOND FLOW	22.3				
F	INITIAL SECOND CLOSED-IN	22.3		110.0	110.0	C
G	FINAL SECOND CLOSED-IN	29.9				
H	FINAL HYDROSTATIC	2606.4				



GAUGE NO: 7500 DEPTH: 5137.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2731	2698.5			
B	INITIAL FIRST FLOW	39	57.4	30.0	30.0	F
C	FINAL FIRST FLOW	49	59.6			
C	INITIAL FIRST CLOSED-IN	49	59.6	60.0	60.0	C
D	FINAL FIRST CLOSED-IN	88	83.9			
E	INITIAL SECOND FLOW	49	69.0	60.0	60.0	F
F	FINAL SECOND FLOW	49	58.1			
F	INITIAL SECOND CLOSED-IN	49	58.1	110.0	110.0	C
G	FINAL SECOND CLOSED-IN	49	69.4			
H	FINAL HYDROSTATIC	2683	2633.8			

EQUIPMENT & HOLE DATA

FORMATION TESTED: MARMATON
NET PAY (ft): 4.0
GROSS TESTED FOOTAGE: 52.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 0
TOTAL DEPTH (ft): 5140.0
PACKER DEPTH(S) (ft): 5082, 5088
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.20
MUD VISCOSITY (sec): 47
ESTIMATED HOLE TEMP. (°F): 121
ACTUAL HOLE TEMP. (°F): 120 @ 5135.0 ft

TICKET NUMBER: 65748300

DATE: 5-31-83 TEST NO: 3

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: PRATT

TESTER: J. AREND

WITNESS: G. SHARP

DRILLING CONTRACTOR: RINE DRILLING #1

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
PIT	@	°F	26000 ppm
RECOVERY	0.160 @	70 °F	26499 ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

17' OF MUD

MEASURED FROM TESTER VALVE

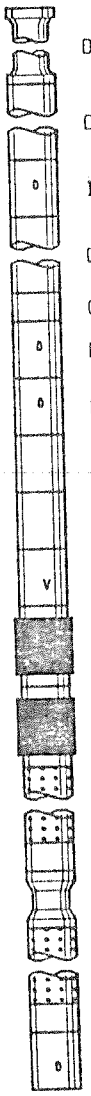
REMARKS:

RECOVERY	SP. GR.	IRON	PH	CALCIUM	SULFATES
	1.029	NEG.	6.86	960 MPL	HEAVY

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 65748300

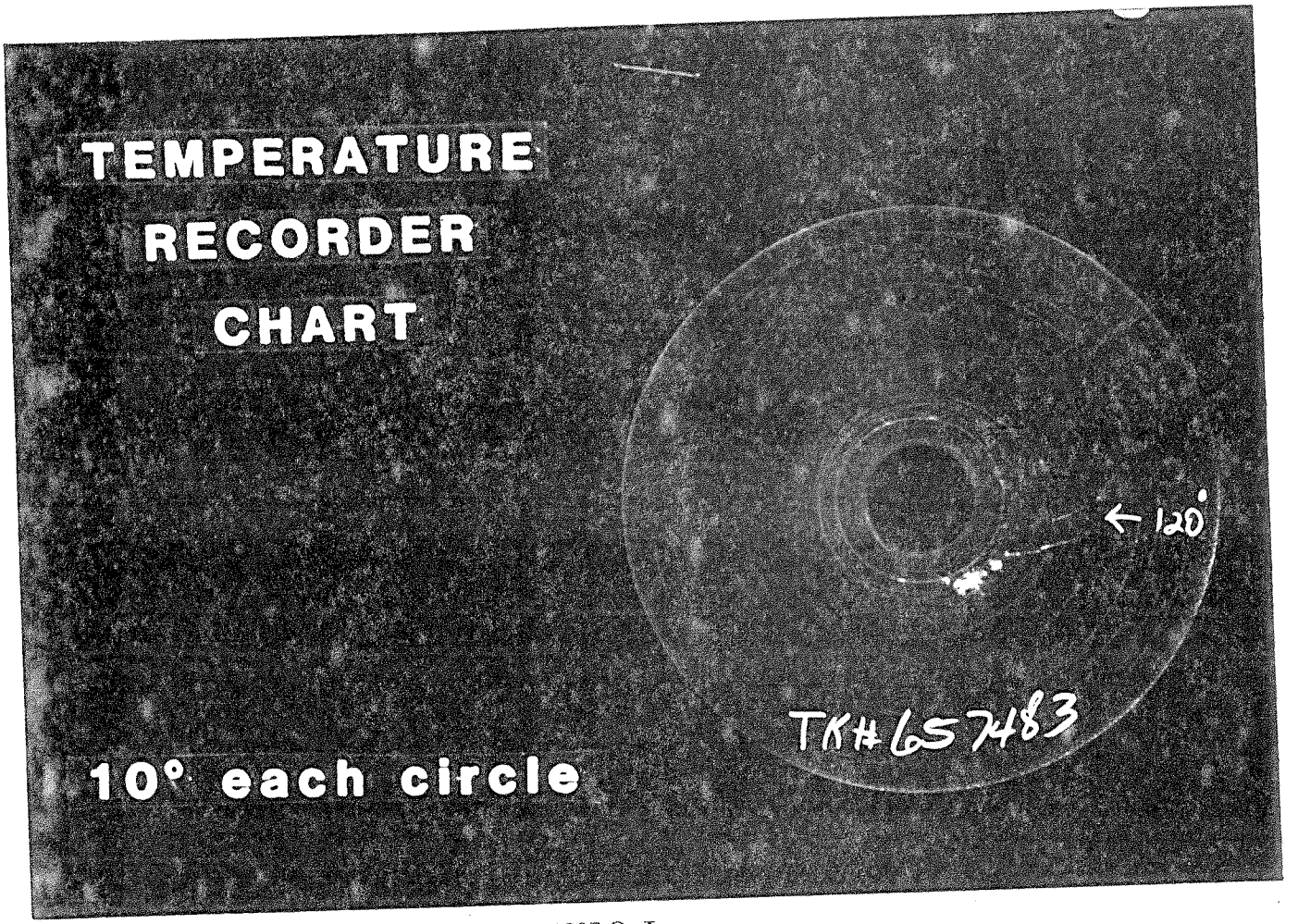
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
5-30-83					
2000					CALLED FOR TEST-READY @
					1100
2300					ON LOCATION. RIG STARTED
					OUT OF HOLE WITH DRILL
					PIPE. HAVING DIFFICULTIES
					WITH 1 ENGINE AND 1 ENGINE
					DOWN.
5-31-83					
0215					STARTED CLOCKS
0230					PICKED UP TOOL
0300					TOOL THROUGH TABLE
0547					TOOL ON BOTTOM
0550					OPENED TOOL WITH A WEAK
					BLOW 1/8" IN BUCKET
0620					CLOSED TOOL. BLOW VERY WEAK
0720					OPENED TOOL. BUBBLE AND DIED
0820					CLOSED TOOL
0950					UNABLE TO UNSET TOOL-RIG
					CREW WORKING ON ENGINE.
1010					OPENED BYPASS. HAD TO
					JAR 3 TIMES TO GET TOOL
					LOOSE
1212					TOOL AT TABLE
1300					TOOL LAID DOWN
1400					LEFT LOCATION

TICKET NO. 65748300



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.827	4537.0	
3	DRILL COLLARS.....	6.125	2.765	455.0	
50	IMPACT REVERSING SUB.....	5.750	2.750	1.0	4962.0
3	DRILL COLLARS.....	6.125	2.765	91.0	
5	CROSSOVER.....	5.875	2.750	1.0	
12	DUAL CIP VALVE.....	5.875	0.870	6.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	5065.0
80	AP RUNNING CASE.....	5.000	3.060	4.0	5067.0
15	JAR.....	5.000	1.500	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5082.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5088.0
20	FLUSH JOINT ANCHOR.....	5.000	2.440	3.0	
5	CROSSOVER.....	5.815	2.750	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.815	2.750	4.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.360	37.0	
83	HT-500 TEMPERATURE CASE.....	5.000	3.350	1.0	5135.0
81	BLANKED-OFF RUNNING CASE.....	5.000	2.440	4.0	5137.0
	TOTAL DEPTH				5140.0

EQUIPMENT DATA



Indicated Flow Capacity	$kh = \frac{1637\ Q_g\ T}{m}$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Skin Factor	$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi\ \mu\ c_t r_w^2} + 3.23 \right]$	—
Damage Ratio	$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\ mS}$	—
Indicated Flow Rate (Maximum)	$AOF_1 = \frac{Q_g\ m(P^*)}{m(P^*) - m(P_f)}$	MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$	MCFD
Approx. Radius of Investigation	$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_t}}$	ft

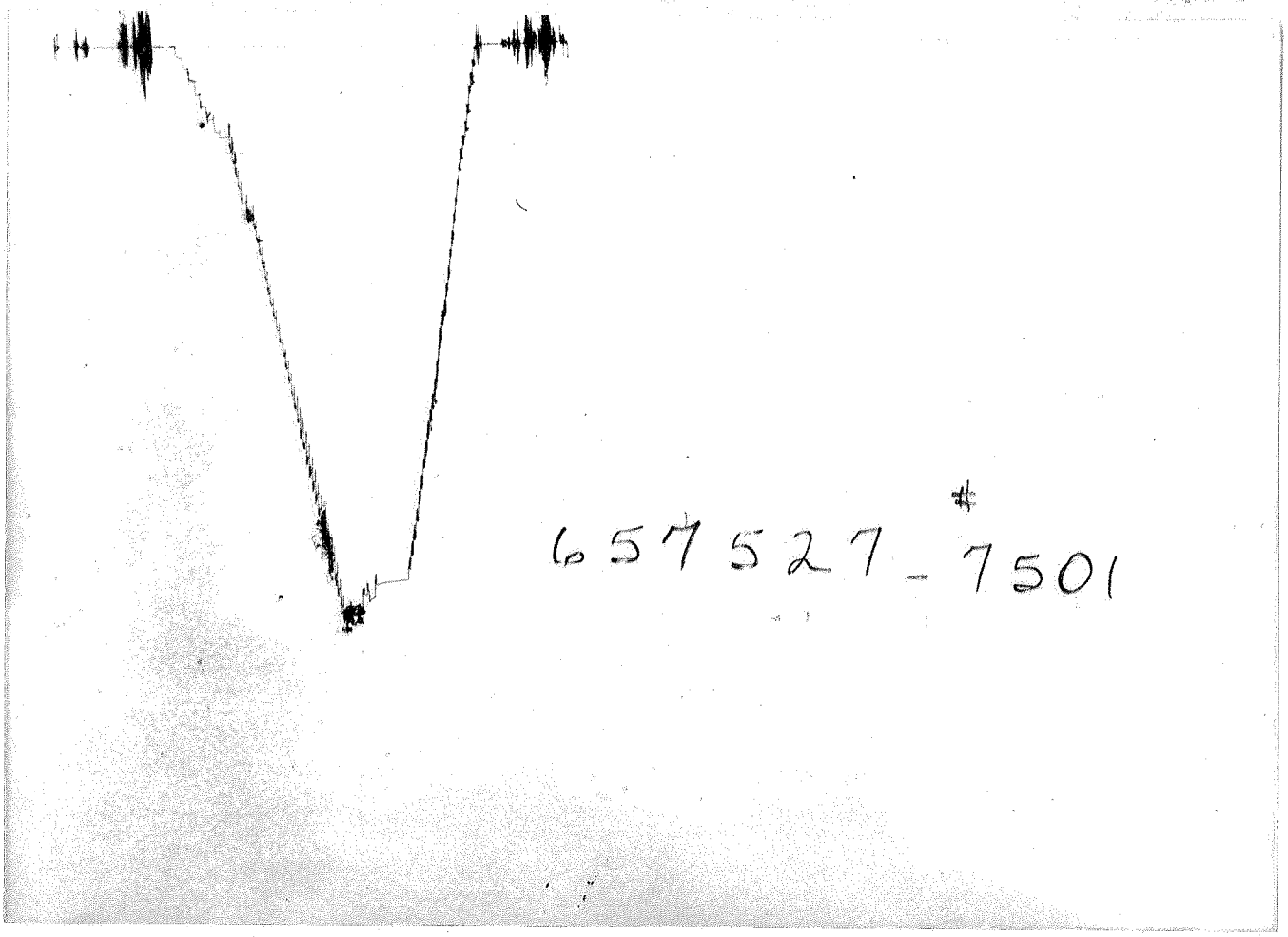
HALLIBURTON
SERVICES

TICKET NO. 65752700
08-JUN-83
PRATT

FORMATION TESTING SERVICE REPORT

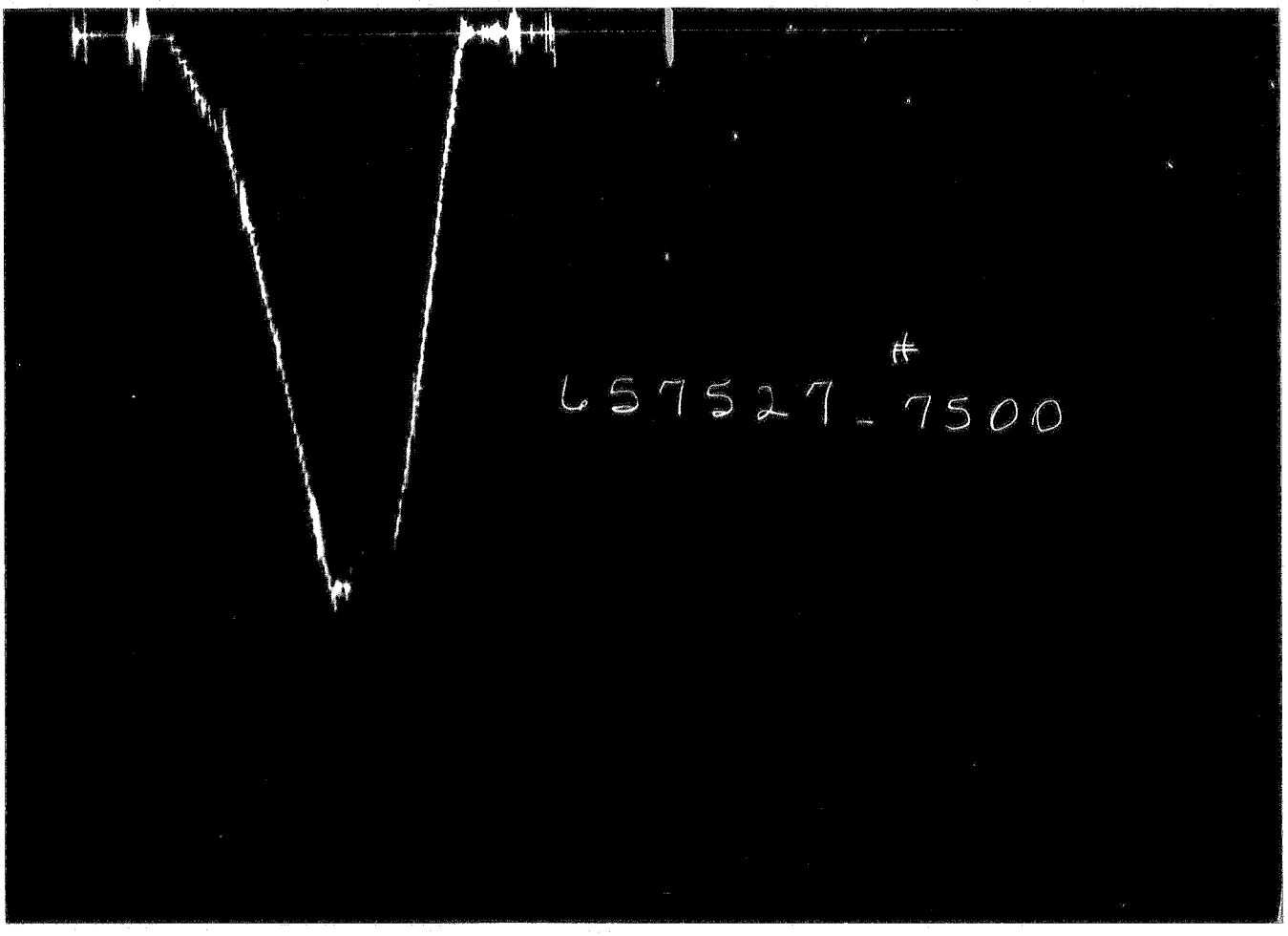
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
BARBY	1-26	4		RINE DRILLING COMPANY

LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
26-34S-21W	SNAKE CREEK	CLARK	KANSAS NM SM



GAUGE NO: 7501 DEPTH: _____ BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	FAILED TO REACH BOTTOM					



GAUGE NO: 7500 DEPTH: _____ BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	FAILED TO REACH BOTTOM					

EQUIPMENT & HOLE DATA

FORMATION TESTED: MORROW
NET PAY (ft): 12.0
GROSS TESTED FOOTAGE:
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 0
TOTAL DEPTH (ft): 5540.0
PACKER DEPTH(S) (ft):
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.10
MUD VISCOSITY (sec): 50
ESTIMATED HOLE TEMP. (°F): 125
ACTUAL HOLE TEMP. (°F): 103 @ ft

TICKET NUMBER: 65752700

DATE: 6-2-83 TEST NO: 4

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: PRATT

TESTER: ROBERT E. MARTIN

WITNESS: BILL SLADEK (GEO.)

DRILLING CONTRACTOR: RINE DRILLING COMPANY RIG #1

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
PIT	0.170 @	71 °F	24000 ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

MEASURED FROM TESTER VALVE

REMARKS:

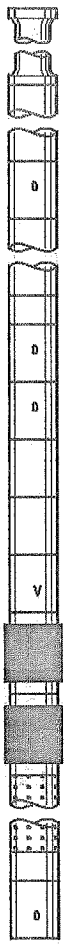
FAILED TO REACH DESIRED DEPTH.....ATTEMPTED TO TEST 5528' TO 5540'.

TYPE & SIZE MEASURING DEVICE: MERLA 2" | TICKET NO: 65752700

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
6-2-83					
2336					CALLED OUT
2350					LEFT CAMP
6-3-83					
0137					ON LOCATION, RIG PULLED PIPE.
0335					STARTED CLOCKS
0405					PICKED UP TOOL
0420					TOOL AT TABLE
0430					TOOL THRU TABLE
0615					HIT BRIDGE 14 STANDS OFF
					BOTTOM (ABOUT 4280').
0620					STARTED OUT OF HOLE WITH TOOL.
0730					TOOL AT TABLE
0815					TOOL LAID DOWN.

246789

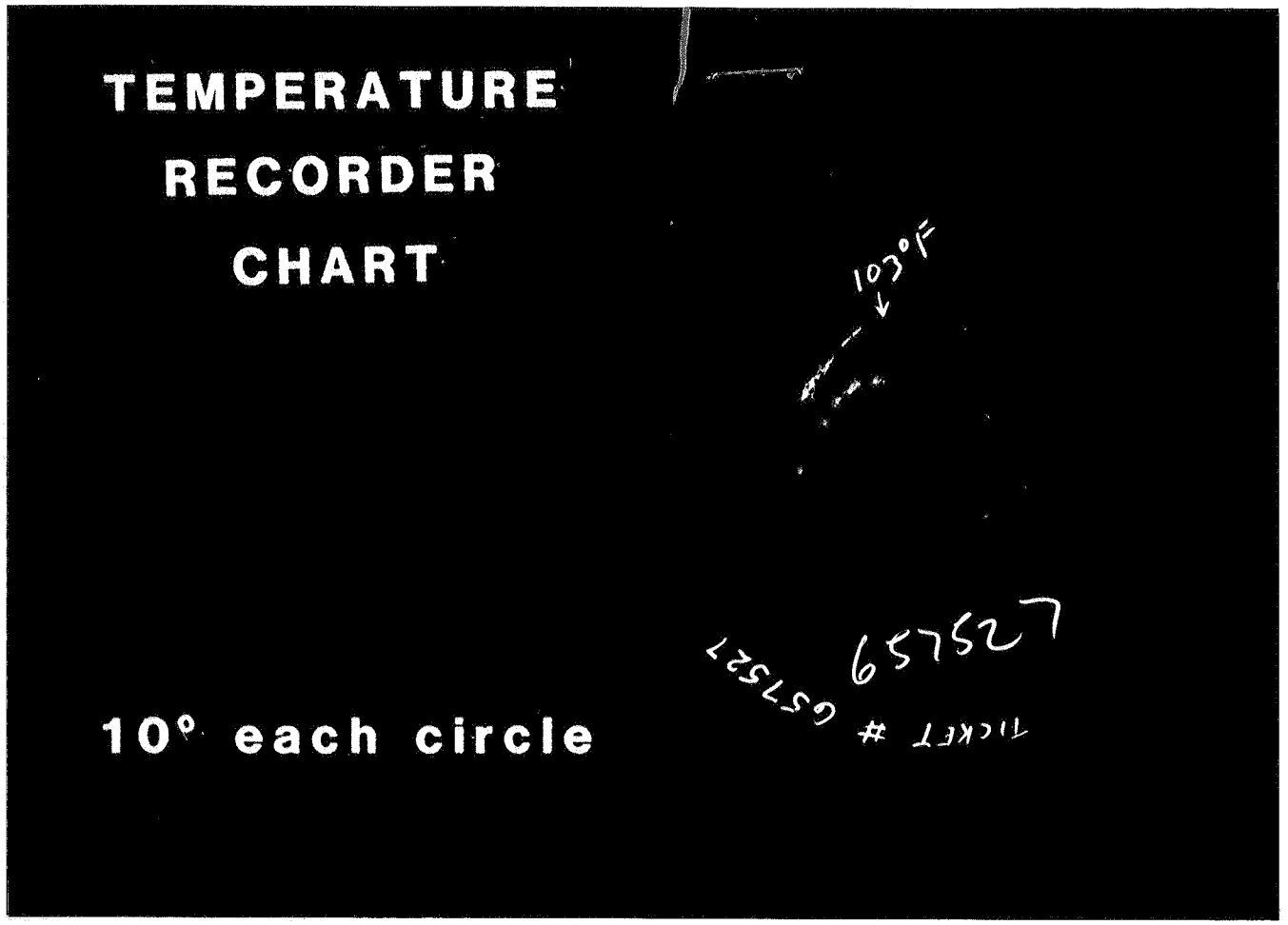
TICKET NO. 65752700



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826		
3	DRILL COLLARS.....	6.250	2.250	450.0	
50	IMPACT REVERSING SUB.....	5.750	2.750	1.0	
3	DRILL COLLARS.....	6.250	2.250	93.0	
5	CROSSOVER.....	6.250	2.250	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	6.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	
80	AP RUNNING CASE.....	5.000	3.060	4.0	
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	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	5.0	
83	HT-500 TEMPERATURE CASE.....	5.000		1.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.0	

TOTAL DEPTH 5540.0

EQUIPMENT DATA



Indicated Flow Capacity	$kh = \frac{1637\ Q_g\ T}{m}$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Skin Factor	$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi\ \mu\ c_t r_w^2} + 3.23 \right]$	—
Damage Ratio	$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87\ mS}$	—
Indicated Flow Rate (Maximum)	$AOF_1 = \frac{Q_g\ m(P^*)}{m(P^*) - m(P_f)}$	MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}}$	MCFD
Approx. Radius of Investigation	$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_t}}$	ft

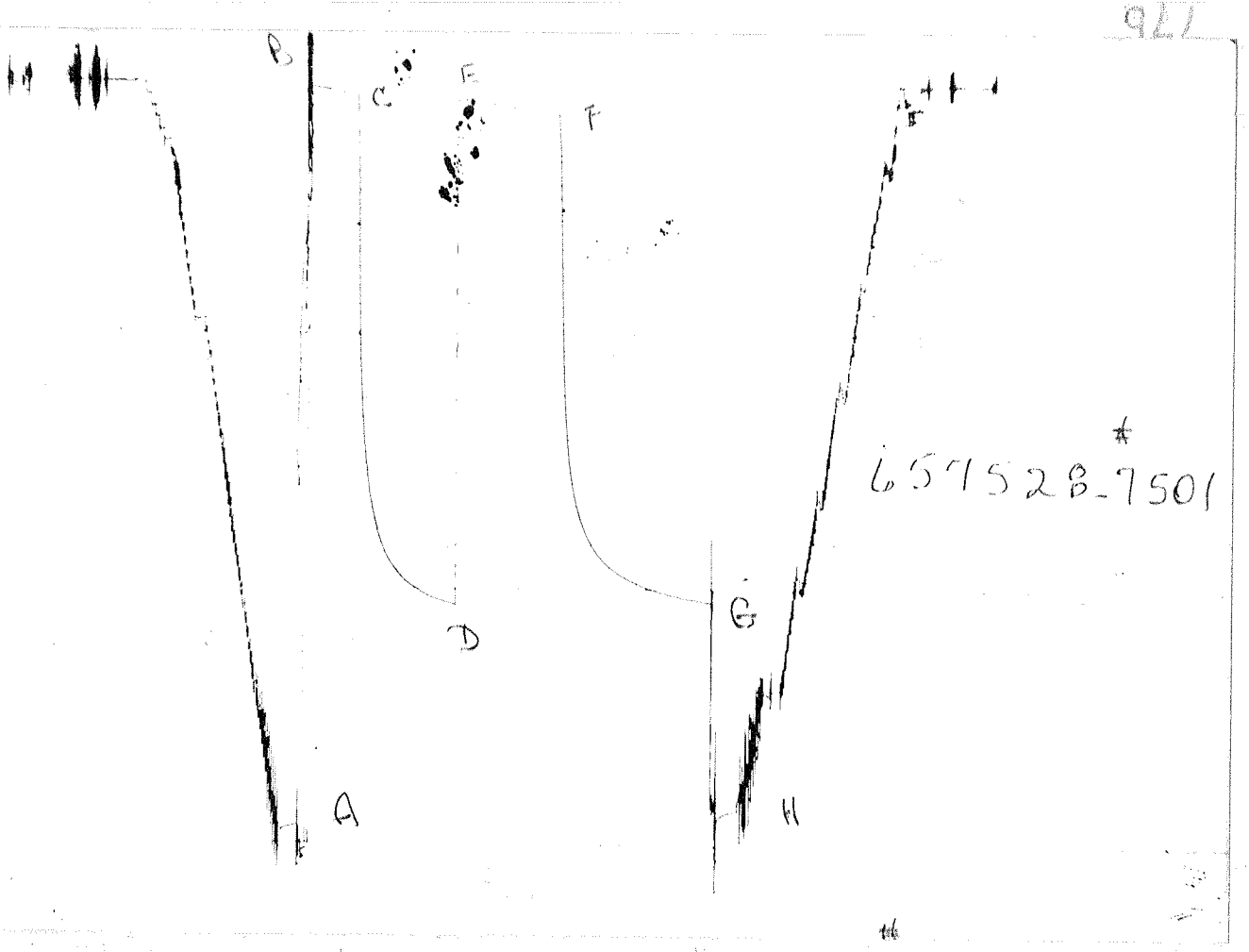
774

HALLIBURTON
SERVICES

TICKET NO. 65752800
14-JUN-83
PRATT

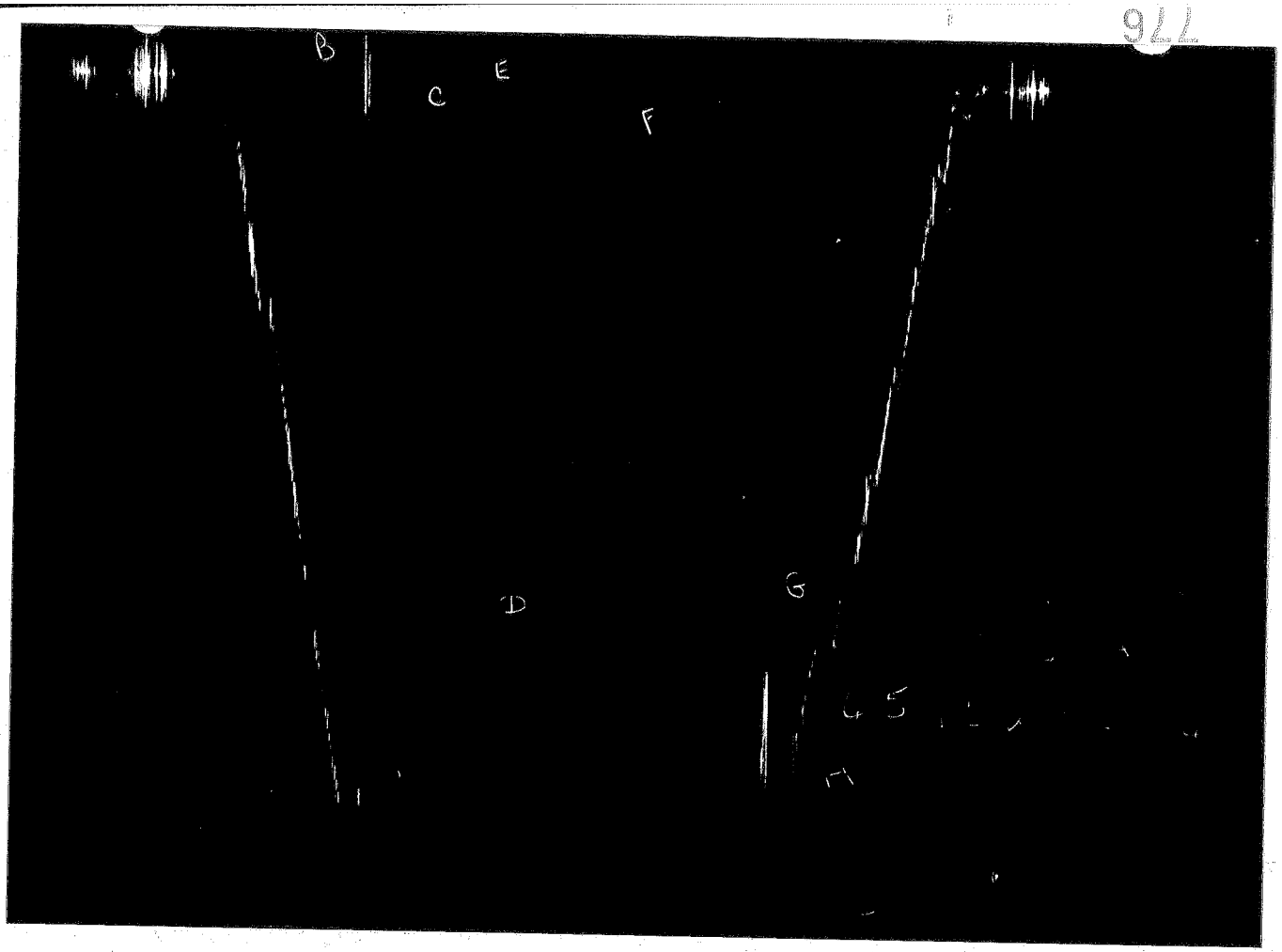
FORMATION TESTING SERVICE REPORT

LEASE NAME: BARBY	WELL NO.: 1-26	TEST NO.: 5	TESTED INTERVAL: 5562.' - 5578.'		LEASE OWNER/COMPANY NAME: RINE DRILLING COMPANY
LEGAL LOCATION SEC. - TWP. - RNG.: 26 - 34 SOUTH - 21 WEST		FIELD AREA: SNAKE CREEK	COUNTY: CLARK	STATE: KANSAS	NM/PM



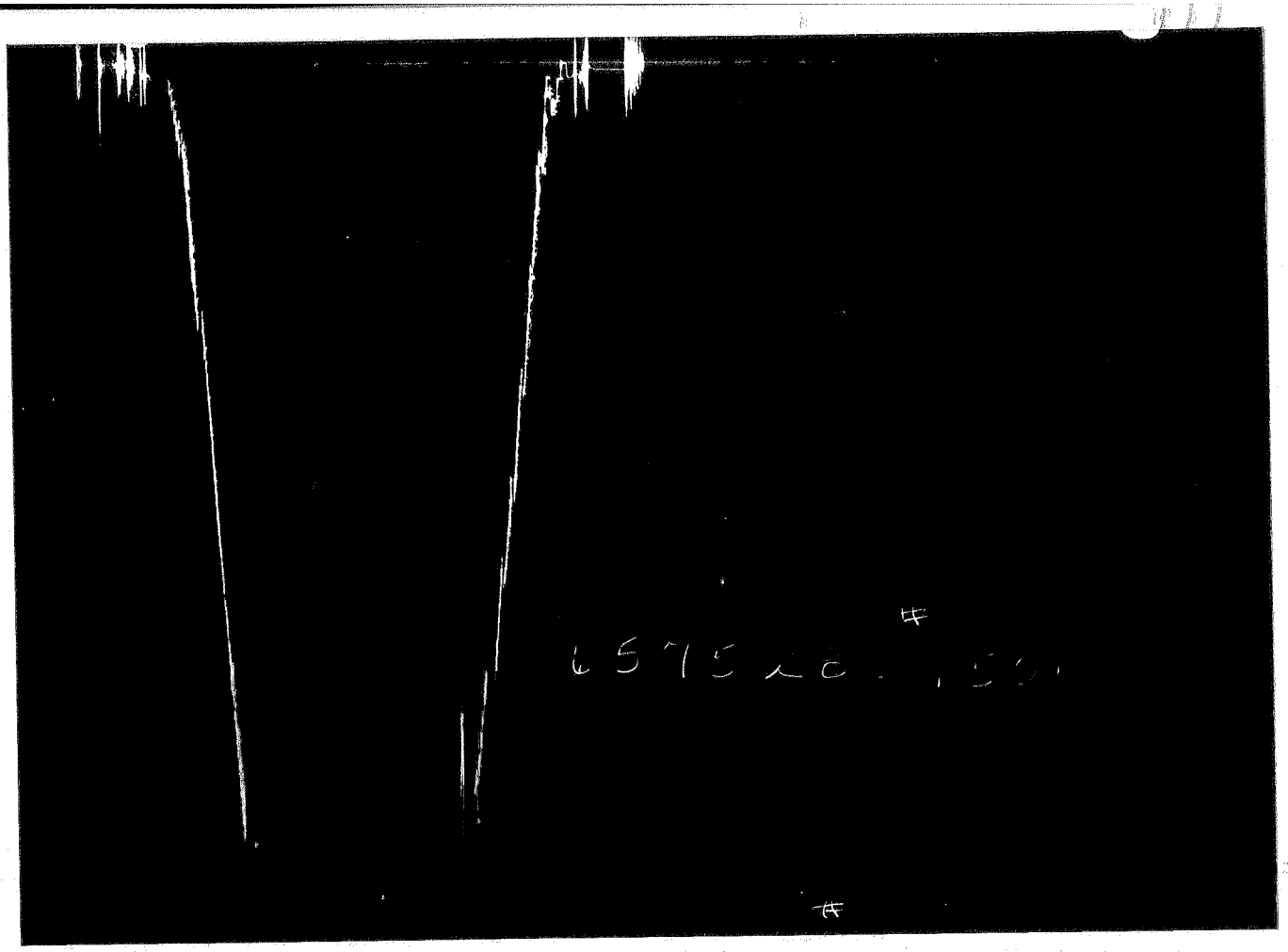
GAUGE NO: 7501 DEPTH: 5540.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2926.5			
B	INITIAL FIRST FLOW		15.4	30.0	29.4	F
C	FINAL FIRST FLOW		56.1			
C	INITIAL FIRST CLOSED-IN		56.1	60.0	60.8	C
D	FINAL FIRST CLOSED-IN		2059.9			
E	INITIAL SECOND FLOW		81.2	60.0	59.9	F
F	FINAL SECOND FLOW		126.0			
F	INITIAL SECOND CLOSED-IN		126.0	90.0	93.7	C
G	FINAL SECOND CLOSED-IN		2046.7			
H	FINAL HYDROSTATIC		2865.0			
I	HYDROSTATIC RELEASE					



GAUGE NO: 5604 DEPTH: 5573.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2884	2923.8			
B	INITIAL FIRST FLOW	62	32.2	30.0	29.4	F
C	FINAL FIRST FLOW	82	67.9			
C	INITIAL FIRST CLOSED-IN	82	67.9	60.0	60.8	C
D	FINAL FIRST CLOSED-IN	2055	2067.2			
E	INITIAL SECOND FLOW	82	81.8	60.0	59.9	F
F	FINAL SECOND FLOW	123	137.9			
F	INITIAL SECOND CLOSED-IN	123	137.9	90.0	93.7	C
G	FINAL SECOND CLOSED-IN	2034	2056.6			
H	FINAL HYDROSTATIC	2842	2865.9			
I	HYDROSTATIC RELEASE					



GAUGE NO: 7500 DEPTH: 5656.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2974.0				
B	INITIAL FIRST FLOW			30.0		F
C	FINAL FIRST FLOW					
C	INITIAL FIRST CLOSED-IN			60.0		C
D	FINAL FIRST CLOSED-IN					
E	INITIAL SECOND FLOW			60.0		F
F	FINAL SECOND FLOW					
F	INITIAL SECOND CLOSED-IN			90.0		C
G	FINAL SECOND CLOSED-IN					
H	FINAL HYDROSTATIC	2915.5				
I	HYDROSTATIC RELEASE	2913.5				

EQUIPMENT & HOLE DATA

FORMATION TESTED: MORROW
NET PAY (ft):
GROSS TESTED FOOTAGE: 16.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 1809
TOTAL DEPTH (ft): 5659.0
PACKER DEPTH(S) (ft): 5556, 5562, 5578, 5584
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.80
MUD VISCOSITY (sec): 61
ESTIMATED HOLE TEMP. (°F): 126
ACTUAL HOLE TEMP. (°F): ___ @ ___ ft

TICKET NUMBER: 65752800
DATE: 6-4-83 TEST NO: 5
TYPE DST: ON BTM. STRADDLE
HALLIBURTON CAMP: PRATT
TESTER: ROBERT E. MARTIN
WITNESS: BILL SLADEK (GEOL.)
DRILLING CONTRACTOR: RINE DRILLING COMPANY (RIG #1)

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
PIT	0.170 @	84 °F	25000 ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

200 FEET OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 65752800

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
6-4-83					
1910					CALLED OUT
2000					LEFT CAMP
2155					ON LOCATION - RIG PULLED PIPE
2350					STARTED CLOCKS
6-5-83					
0000					PICKED-UP TOOL
0033					TOOL AT TABLE
0100					TOOL THROUGH TABLE
0237					TOOL ON BOTTOM - TOOL DID NOT
					SLIDE.
0240					OPENED TOOL - WEAK BLOW 1"
					INTO BUCKET.
0310					CLOSED TOOL
0410					REOPENED TOOL - WEAK BLOW 1"
					INTO BUCKET.
0510					CLOSED TOOL
0640					TOOL OFF BOTTOM - BYPASS OPENED
0915					TOOL AT TABLE
1015					TOOL LAID DOWN

TICKET NO: 65752800

CLOCK NO: 3228 HOUR: 12

HALLIBURTON SERVICES

GAUGE NO: 7501

DEPTH: 5540.0

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	15.4			
	2	5.0	20.6	5.3		
	3	10.0	26.9	6.2		
	4	15.0	34.6	7.7		
	5	20.0	42.1	7.4		
	6	25.0	49.0	6.9		
C	7	29.4	56.1	7.0		
			FIRST CLOSED-IN			
C	1	0.0	56.1			
	2	4.0	1270.3	1214.2	3.5	0.921
	3	8.0	1580.4	1524.4	6.3	0.672
	4	12.0	1726.1	1670.1	8.5	0.537
	5	16.0	1819.2	1763.1	10.3	0.453
	6	20.0	1878.7	1822.6	11.9	0.393
	7	24.0	1916.8	1860.7	13.2	0.347
	8	28.0	1950.6	1894.5	14.3	0.312
	9	32.0	1976.1	1920.1	15.3	0.283
	10	36.0	1993.6	1937.5	16.2	0.259
	11	40.0	2010.2	1954.2	16.9	0.239
	12	44.0	2024.7	1968.6	17.6	0.222
	13	48.0	2035.0	1978.9	18.2	0.207
	14	52.0	2043.8	1987.7	18.8	0.195
	15	56.0	2051.6	1995.5	19.3	0.183
D	16	60.8	2059.9	2003.9	19.8	0.171
			SECOND FLOW			
E	1	0.0	81.2			
	2	10.0	73.5	-7.7		
	3	20.0	85.6	12.1		
	4	30.0	96.1	10.5		
	5	40.0	106.2	10.0		
	6	50.0	115.5	9.3		
F	7	59.9	126.0	10.5		
			SECOND CLOSED-IN			
F	1	0.0	126.0			
	2	6.0	1353.2	1227.2	5.6	1.200
	3	12.0	1660.0	1534.0	10.6	0.926
	4	18.0	1781.2	1655.2	15.0	0.774
	5	24.0	1850.4	1724.4	18.9	0.673
	6	30.0	1896.0	1770.0	22.4	0.599
	7	36.0	1928.1	1802.1	25.7	0.541
	8	42.0	1952.7	1826.7	28.6	0.495
	9	48.0	1972.6	1846.6	31.2	0.456
	10	54.0	1988.4	1862.4	33.6	0.424

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	11	60.0	2001.7	1875.7	35.9	0.396
	12	66.0	2012.4	1886.4	37.9	0.371
	13	72.0	2021.9	1895.9	39.8	0.350
	14	78.0	2030.3	1904.3	41.6	0.331
	15	84.0	2037.1	1911.1	43.3	0.314
	16	90.0	2043.4	1917.4	44.8	0.299
G	17	93.7	2046.7	1920.7	45.7	0.291

REMARKS:

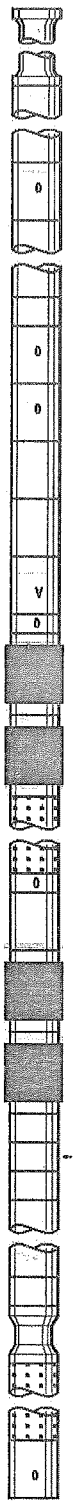
TICKET NO: 65752800		GAUGE NO: 5604
CLOCK NO: 3004 HOUR: 12	HALLIBURTON SERVICES	DEPTH: 5573.0

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	32.2			
	2	5.0	34.7	2.5		
	3	10.0	41.6	6.9		
	4	15.0	48.6	7.0		
	5	20.0	55.4	6.9		
	6	25.0	61.8	6.4		
C	7	29.4	67.9	6.1		
			FIRST CLOSED-IN			
C	1	0.0	67.9			
	2	4.0	1213.3	1145.5	3.5	0.924
	3	8.0	1566.8	1499.0	6.3	0.671
	4	12.0	1732.3	1664.5	8.5	0.539
	5	16.0	1826.1	1758.3	10.3	0.453
	6	20.0	1885.8	1818.0	11.9	0.392
	7	24.0	1928.7	1860.9	13.2	0.347
	8	28.0	1960.4	1892.6	14.3	0.312
	9	32.0	1985.4	1917.6	15.3	0.283
	10	36.0	2004.2	1936.4	16.2	0.259
	11	40.0	2020.2	1952.3	16.9	0.239
	12	44.0	2032.9	1965.1	17.6	0.222
	13	48.0	2043.9	1976.0	18.2	0.207
	14	52.0	2052.6	1984.7	18.8	0.195
	15	56.0	2060.7	1992.8	19.3	0.183
D	16	60.8	2067.2	1999.3	19.8	0.171
			SECOND FLOW			
E	1	0.0	81.8			
	2	10.0	86.8	4.9		
	3	20.0	97.8	11.1		
	4	30.0	108.7	10.9		
	5	40.0	118.7	10.0		
	6	50.0	129.3	10.6		
F	7	59.9	137.9	8.6		
			SECOND CLOSED-IN			
F	1	0.0	137.9			
	2	6.0	1315.6	1177.7	5.6	1.198
	3	12.0	1656.2	1518.3	10.6	0.926
	4	18.0	1784.3	1646.4	15.0	0.776
	5	24.0	1856.6	1718.7	18.9	0.674
	6	30.0	1904.0	1766.1	22.5	0.599
	7	36.0	1937.7	1799.8	25.6	0.542
	8	42.0	1962.5	1824.6	28.5	0.495
	9	48.0	1982.2	1844.3	31.2	0.456
	10	54.0	1997.6	1859.7	33.6	0.424

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	11	60.0	2011.2	1873.3	35.9	0.396
	12	66.0	2022.8	1884.9	37.9	0.372
	13	72.0	2032.3	1894.4	39.8	0.350
	14	78.0	2040.1	1902.2	41.6	0.331
	15	84.0	2047.4	1909.5	43.3	0.314
	16	90.0	2053.6	1915.7	44.8	0.299
G	17	93.7	2056.6	1918.7	45.7	0.291

REMARKS:

TICKET NO. 65752800



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	5019.0	
3	DRILL COLLARS.....	6.250	2.250	417.0	
50	IMPACT REVERSING SUB.....	5.750	2.750	1.0	5436.0
3	DRILL COLLARS.....	6.250	2.250	90.0	
5	CROSSOVER.....	5.000	2.750	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	6.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	5538.0
80	AP RUNNING CASE.....	5.000	3.060	4.0	5540.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	2.620	1.0	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5556.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5562.0
20	FLUSH JOINT ANCHOR.....	5.000	2.370	7.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	2.620	1.0	
80	AP RUNNING CASE.....	5.000	3.060	4.0	5573.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5578.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5584.0
5	CROSSOVER.....	5.000	2.750	1.0	
5	CROSSOVER.....	5.000	2.750	1.0	
5	CROSSOVER.....	5.000	2.750	1.0	
3	DRILL COLLARS.....	6.250	2.250	33.0	
5	CROSSOVER.....	6.250	2.250	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.000	2.370	4.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	26.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.0	5656.0
	TOTAL DEPTH				5659.0

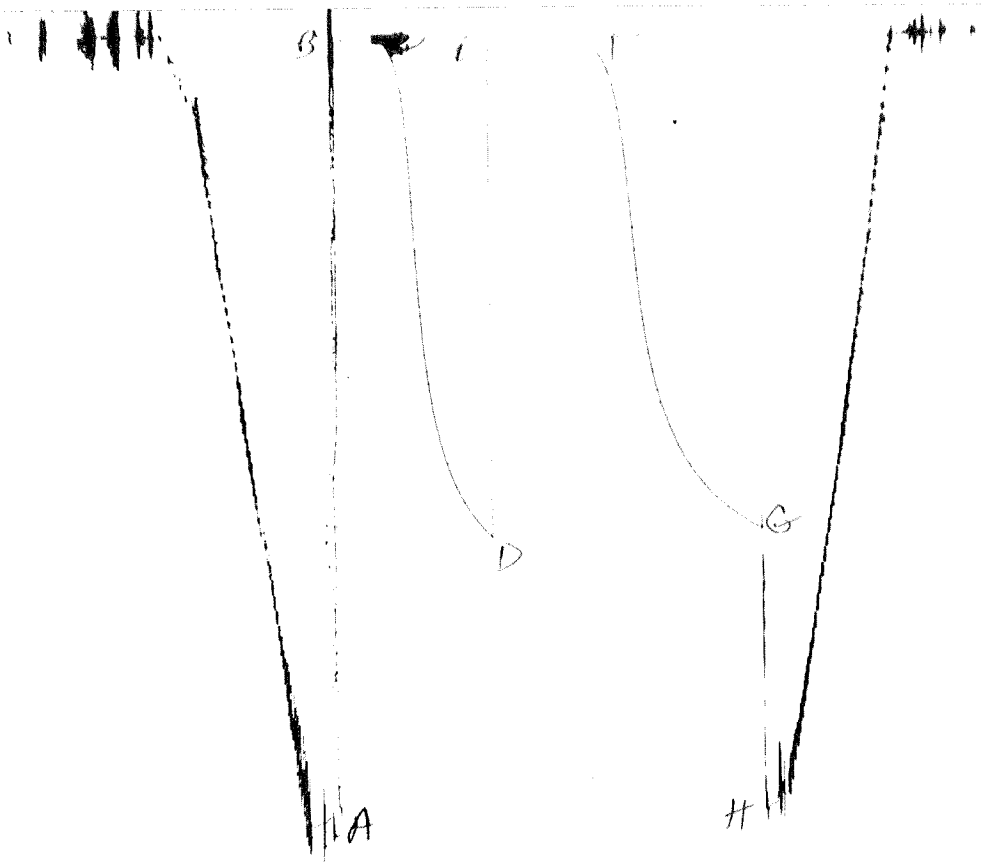
EQUIPMENT DATA

HALLIBURTON
SERVICES

TICKET NO. 65752900
13-JUN-83
PRATT

FORMATION TESTING SERVICE REPORT

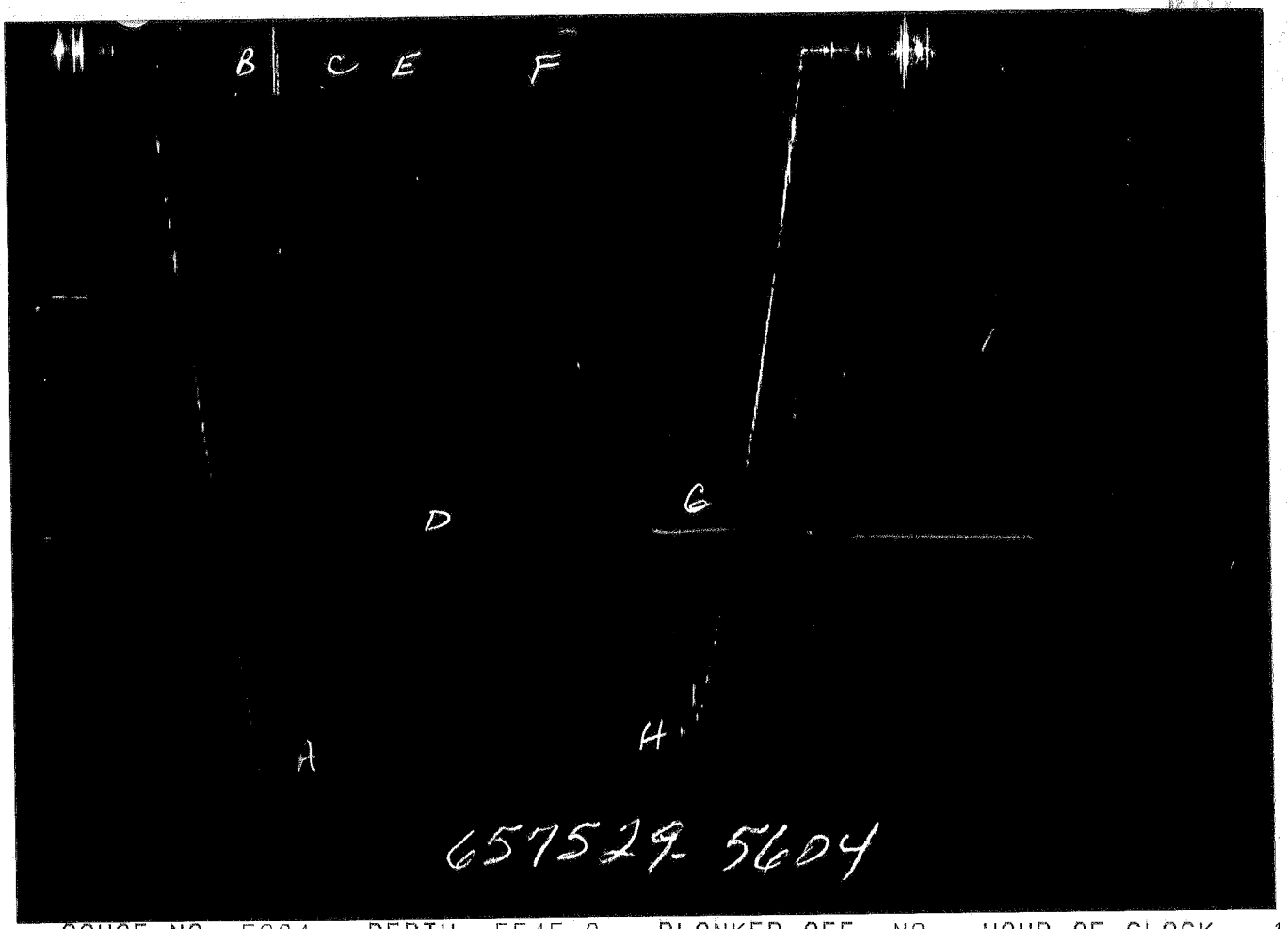
LEASE NAME: BARBY	WELL NO.: 1-26	TEST NO.: 6	TESTED INTERVAL: 5530.' - 5550.'		LEASE OWNER/COMPANY NAME: RINE DRILLING COMPANY
LEGAL LOCATION SEC. - TWP. - RNG.: 26 - 34 SOUTH - 21 WEST	FIELD AREA: SNAKE CREEK	COUNTY: CLARK	STATE: KANSAS	IC/PW	



657529-7501

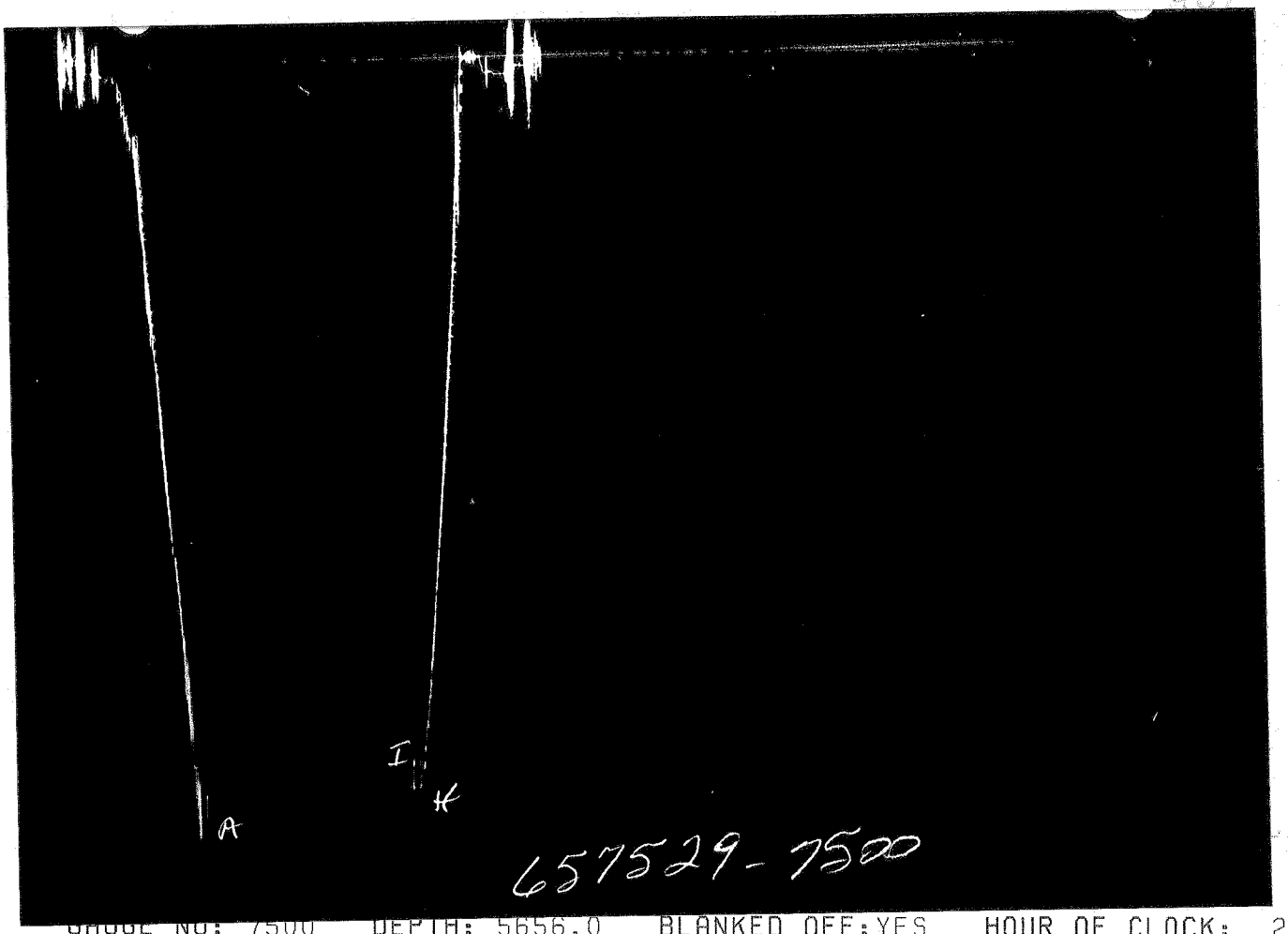
GAUGE NO: 7501 DEPTH: 5508.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2864.4				
B	INITIAL FIRST FLOW	11.7		30.0	29.0	F
C	FINAL FIRST FLOW	33.8				
C	INITIAL FIRST CLOSED-IN	33.8		60.0	60.0	C
D	FINAL FIRST CLOSED-IN	1851.9				
E	INITIAL SECOND FLOW	59.5		60.0	60.2	F
F	FINAL SECOND FLOW	68.3				
F	INITIAL SECOND CLOSED-IN	68.3		90.0	90.8	C
G	FINAL SECOND CLOSED-IN	1821.6				
H	FINAL HYDROSTATIC	2823.5				
I	HYDROSTATIC RELEASE					



GAUGE NO: 5604 DEPTH: 5545.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2967	2892.1			
B	INITIAL FIRST FLOW	41	32.5	30.0	29.0	F
C	FINAL FIRST FLOW	62	51.1			
C	INITIAL FIRST CLOSED-IN	62	51.1	60.0	60.0	C
D	FINAL FIRST CLOSED-IN	1890	1870.4			
E	INITIAL SECOND FLOW	62	63.7	60.0	60.2	F
F	FINAL SECOND FLOW	93	87.1			
F	INITIAL SECOND CLOSED-IN	93	87.1	90.0	90.8	C
G	FINAL SECOND CLOSED-IN	1828	1840.1			
H	FINAL HYDROSTATIC	2801	2835.1			
I	HYDROSTATIC RELEASE					



GAUGE NO: 7500 DEPTH: 5656.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2931.8			
B	INITIAL FIRST FLOW			30.0		F
C	FINAL FIRST FLOW					
C	INITIAL FIRST CLOSED-IN			60.0		C
D	FINAL FIRST CLOSED-IN					
E	INITIAL SECOND FLOW			60.0		F
F	FINAL SECOND FLOW					
F	INITIAL SECOND CLOSED-IN			90.0		C
G	FINAL SECOND CLOSED-IN					
H	FINAL HYDROSTATIC		2896.7			
I	HYDROSTATIC RELEASE		2856.0			

EQUIPMENT & HOLE DATA

FORMATION TESTED: MORROW
NET PAY (ft):
GROSS TESTED FOOTAGE: 20.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 1809
TOTAL DEPTH (ft): 5659.0
PACKER DEPTH(S) (ft): 5524, 5530, 5550, 5556
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.90
MUD VISCOSITY (sec): 70
ESTIMATED HOLE TEMP. (°F): 125
ACTUAL HOLE TEMP. (°F): ____ @ ____ ft

TICKET NUMBER: 65752900

DATE: 6-5-83 TEST NO: 6

TYPE DST: ON BTM. STRADDLE

HALLIBURTON CAMP: PRATT

TESTER: ROBERT E. MARTIN

WITNESS: BILL SLADEK (GEOL.)

DRILLING CONTRACTOR: RINE DRILLING COMPANY (RIG #1)

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
PIT	0.170 @	73 °F	24000 ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

110 FEET OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 65752900

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
6-5-83					
1820					STARTED CLOCKS
1850					PICKED-UP TOOL
1920					TOOL AT TABLE
1930					TOOL THROUGH TABLE
2107					TOOL ON BOTTOM - TOOL DID NOT
					SLIDE.
2110					OPENED TOOL WITH A WEAK BLOW -
					1" INTO BUCKET.
2140					CLOSED TOOL
2240					REOPENED TOOL WITH A WEAK BLOW -
					1" INTO BUCKET.
2340					CLOSED TOOL
6-6-83					
0110					TOOL OFF BOTTOM - BYPASS OPENED
0250					TOOL AT TABLE
0340					TOOL LAID DOWN

TICKET NO: 65752900

CLOCK NO: 3228 HOUR: 12

HALLIBURTON SERVICES

GAUGE NO: 7501

DEPTH: 5508.0

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	11.7			
2	5.0	18.7	7.0		
3	10.0	23.1	4.4		
4	15.0	26.0	2.9		
5	20.0	28.8	2.8		
6	25.0	31.9	3.2		
C 7	29.0	33.8	1.9		
		FIRST CLOSED-IN			
C 1	0.0	33.8			
2	4.0	65.8	31.9	3.5	0.919
3	8.0	138.4	104.6	6.2	0.667
4	12.0	302.5	268.7	8.5	0.534
5	16.0	646.2	612.4	10.3	0.449
6	20.0	1018.5	984.7	11.8	0.390
7	24.0	1264.2	1230.4	13.1	0.344
8	28.0	1420.5	1386.7	14.3	0.308
9	32.0	1526.9	1493.1	15.2	0.280
10	36.0	1607.2	1573.4	16.1	0.256
11	40.0	1667.5	1633.7	16.8	0.237
12	44.0	1718.5	1684.7	17.5	0.220
13	48.0	1760.1	1726.3	18.1	0.205
14	52.0	1794.8	1761.0	18.6	0.192
15	56.0	1825.0	1791.1	19.1	0.181
D 16	60.0	1851.9	1818.1	19.6	0.171
		SECOND FLOW			
E 1	0.0	59.5			
2	10.0	51.1	-8.4		
3	20.0	53.2	2.1		
4	30.0	57.1	4.0		
5	40.0	61.3	4.2		
6	50.0	64.8	3.5		
F 7	60.2	68.3	3.5		
		SECOND CLOSED-IN			
F 1	0.0	68.3			
2	6.0	131.4	63.2	5.6	1.200
3	12.0	285.3	217.1	10.6	0.926
4	18.0	623.9	555.6	15.0	0.774
5	24.0	1009.8	941.5	18.9	0.673
6	30.0	1240.4	1172.2	22.4	0.600
7	36.0	1386.1	1317.9	25.6	0.542
8	42.0	1485.3	1417.1	28.6	0.495
9	48.0	1559.8	1491.6	31.2	0.456
10	54.0	1620.1	1551.8	33.6	0.423

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
	SECOND CLOSED-IN - CONTINUED				
11	60.0	1668.7	1600.5	35.9	0.396
12	66.0	1709.6	1641.3	37.9	0.371
13	72.0	1743.0	1674.7	39.8	0.350
14	78.0	1772.0	1703.8	41.6	0.331
15	84.0	1797.4	1729.1	43.3	0.314
G 16	90.8	1821.6	1753.4	45.0	0.297

REMARKS:

TICKET NO: 65752900

CLOCK NO: 3004 HOUR: 12

HALLIBURTON SERVICES

GAUGE NO: 5604

DEPTH: 5545.0

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	32.5			
	2 5.0	38.4	5.9		
	3 10.0	40.5	2.1		
	4 15.0	43.5	3.1		
	5 20.0	46.3	2.8		
	6 25.0	49.5	3.2		
C	7 29.0	51.1	1.6		
		FIRST CLOSED-IN			
C	1 0.0	51.1			
	2 4.0	91.9	40.8	3.5	0.919
	3 8.0	168.6	117.5	6.3	0.665
	4 12.0	330.3	279.2	8.5	0.535
	5 16.0	695.2	644.1	10.3	0.449
	6 20.0	1050.6	999.5	11.8	0.390
	7 24.0	1291.3	1240.1	13.1	0.344
	8 28.0	1440.5	1389.3	14.3	0.308
	9 32.0	1544.2	1493.1	15.2	0.280
	10 36.0	1624.7	1573.6	16.1	0.256
	11 40.0	1687.5	1636.4	16.8	0.237
	12 44.0	1738.0	1686.9	17.5	0.220
	13 48.0	1778.5	1727.4	18.1	0.205
	14 52.0	1814.0	1762.9	18.6	0.192
	15 56.0	1842.6	1791.4	19.1	0.181
D	16 60.0	1870.4	1819.2	19.6	0.171
		SECOND FLOW			
E	1 0.0	63.7			
	2 10.0	67.8	4.1		
	3 20.0	72.3	4.5		
	4 30.0	75.8	3.5		
	5 40.0	79.2	3.4		
	6 50.0	81.9	2.8		
F	7 60.2	87.1	5.1		
		SECOND CLOSED-IN			
F	1 0.0	87.1			
	2 6.0	157.5	70.4	5.7	1.197
	3 12.0	310.7	223.6	10.6	0.926
	4 18.0	641.4	554.3	15.0	0.774
	5 24.0	1016.0	929.0	18.9	0.674
	6 30.0	1259.7	1172.6	22.5	0.599
	7 36.0	1401.0	1314.0	25.7	0.541
	8 42.0	1499.2	1412.1	28.6	0.494
	9 48.0	1579.5	1492.5	31.2	0.456
	10 54.0	1640.0	1552.9	33.7	0.423

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
	SECOND CLOSED-IN - CONTINUED				
	11 60.0	1689.0	1602.0	35.9	0.396
	12 66.0	1728.3	1641.2	37.9	0.371
	13 72.0	1762.9	1675.8	39.8	0.350
	14 78.0	1791.1	1704.1	41.6	0.331
	15 84.0	1815.4	1728.3	43.2	0.314
G	16 90.8	1840.1	1753.0	45.0	0.297

REMARKS:

TICKET NO. 65752900

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	5016.0	
3	DRILL COLLARS.....	6.250	2.250	388.0	
50	IMPACT REVERSING SUB.....	5.750	2.750	1.0	5404.0
3	DRILL COLLARS.....	6.250	2.250	90.0	
5	CROSSOVER.....	5.000	2.750	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	6.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	5506.0
80	AP RUNNING CASE.....	5.000	3.060	4.0	5508.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	2.620	1.0	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5524.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5530.0
20	FLUSH JOINT ANCHOR.....	5.000	2.370	11.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	2.620	1.0	
80	AP RUNNING CASE.....	5.000	3.060	4.0	5545.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5550.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5556.0
5	CROSSOVER.....	5.000	2.750	1.0	
5	CROSSOVER.....	5.000	2.750	1.0	
5	CROSSOVER.....	5.000	2.750	1.0	
3	DRILL COLLARS.....	6.250	2.250	62.0	
5	CROSSOVER.....	6.250	2.250	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.000	2.370	4.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	25.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.0	5656.0
	TOTAL DEPTH				5659.0

EQUIPMENT DATA

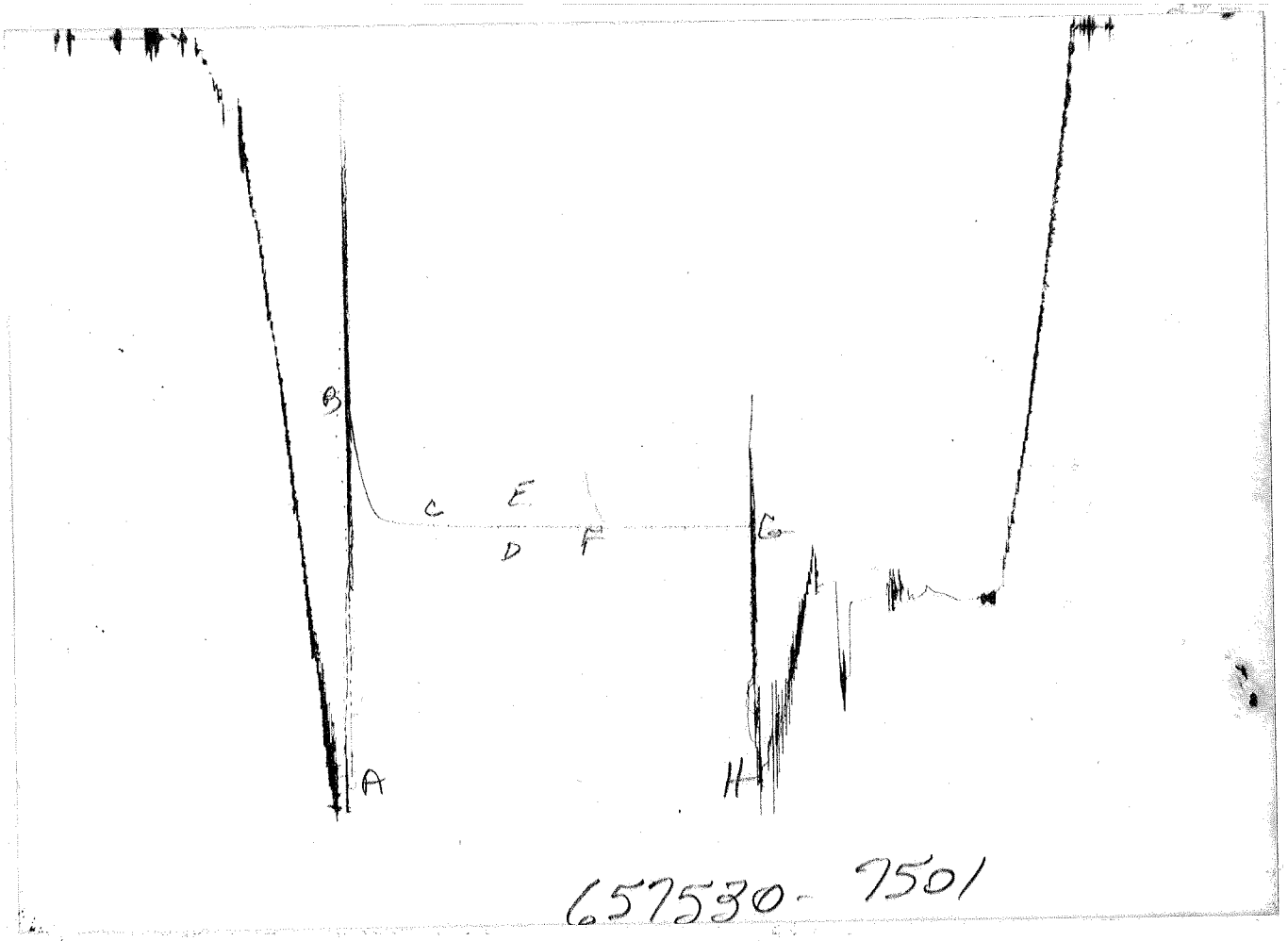
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
BARBY	1-26	7	5496.' - 5533.'	RINE DRILLING COMPANY

LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE	IC/PW
26 - 34 SOUTH - 21 WEST	SNAKE CREEK	CLARK	KANSAS	IC/PW

HALLIBURTON
SERVICES

TICKET NO. 65753000
13-JUN-83
PRATT

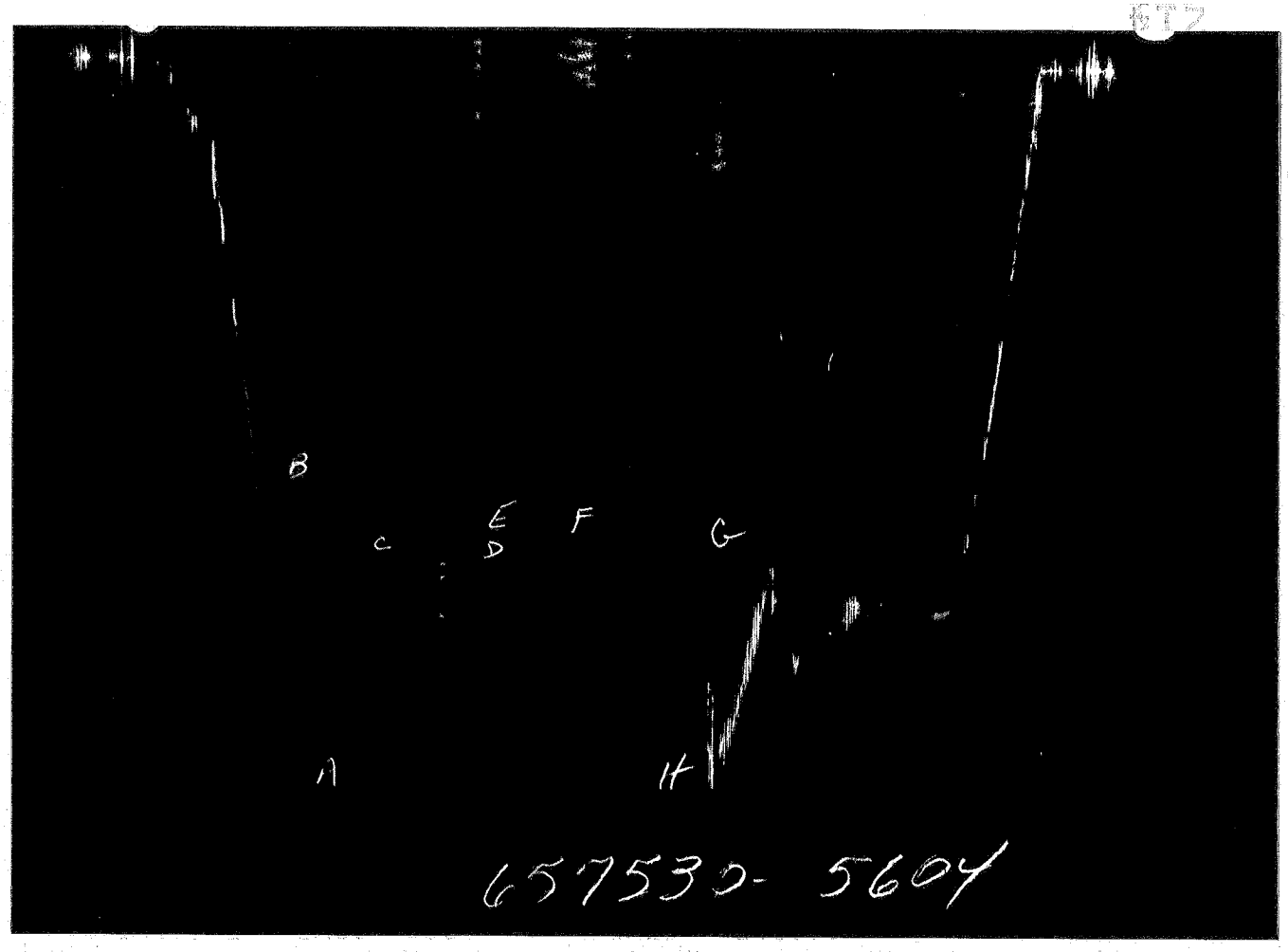
FORMATION TESTING SERVICE REPORT



657530 - 7501

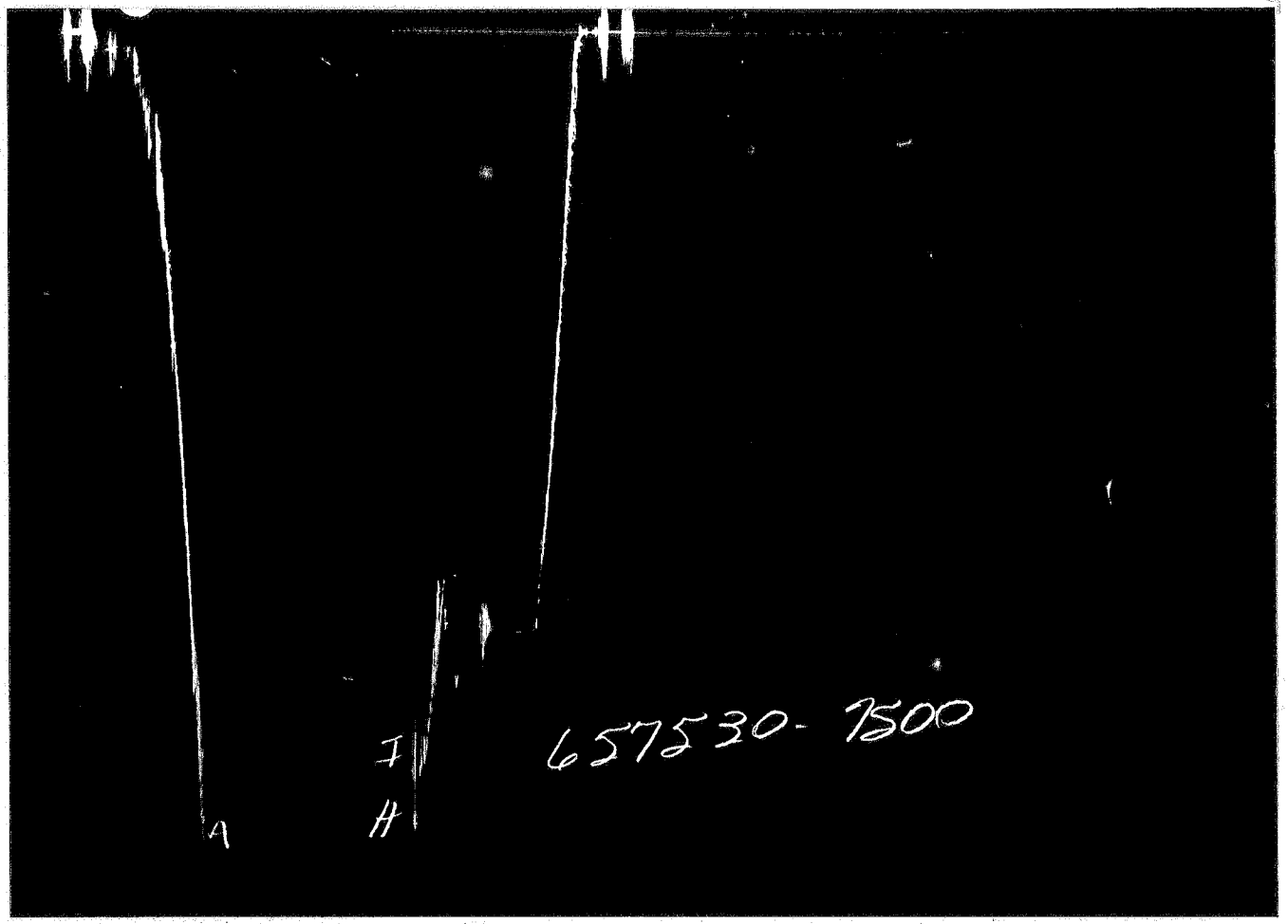
GAUGE NO: 7501 DEPTH: 5480.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2877.1			
B	INITIAL FIRST FLOW		1373.0	30.0	30.0	F
C	FINAL FIRST FLOW		1902.8			
C	INITIAL FIRST CLOSED-IN		1902.8	60.0	60.0	C
D	FINAL FIRST CLOSED-IN		1925.3			
E	INITIAL SECOND FLOW		1922.6	60.0	60.0	F
F	FINAL SECOND FLOW		1929.8			
F	INITIAL SECOND CLOSED-IN		1929.8	90.0	90.0	C
G	FINAL SECOND CLOSED-IN		1935.1			
H	FINAL HYDROSTATIC		2848.9			
I	HYDROSTATIC RELEASE					



GAUGE NO: 5604 DEPTH: 5528.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2925	2895.1			
B	INITIAL FIRST FLOW	1786	1789.9	30.0	30.0	F
C	FINAL FIRST FLOW	1910	1926.0			
C	INITIAL FIRST CLOSED-IN	1910	1926.0	60.0	60.0	C
D	FINAL FIRST CLOSED-IN	1941	1946.9			
E	INITIAL SECOND FLOW	1941	1944.0	60.0	60.0	F
F	FINAL SECOND FLOW	1952	1952.3			
F	INITIAL SECOND CLOSED-IN	1952	1952.3	90.0	90.0	C
G	FINAL SECOND CLOSED-IN	1952	1956.8			
H	FINAL HYDROSTATIC	2884	2866.4			
I	HYDROSTATIC RELEASE					



GAUGE NO: 7500 DEPTH: 5656.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2935.3				
B	INITIAL FIRST FLOW			30.0		F
C	FINAL FIRST FLOW					
C	INITIAL FIRST CLOSED-IN			60.0		C
D	FINAL FIRST CLOSED-IN					
E	INITIAL SECOND FLOW			60.0		F
F	FINAL SECOND FLOW					
F	INITIAL SECOND CLOSED-IN			90.0		C
G	FINAL SECOND CLOSED-IN					
H	FINAL HYDROSTATIC	2880.5				
I	HYDROSTATIC RELEASE	2809.3				

EQUIPMENT & HOLE DATA

FORMATION TESTED: MORROW
NET PAY (ft):
GROSS TESTED FOOTAGE: 37.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 1809
TOTAL DEPTH (ft): 5659.0
PACKER DEPTH(S) (ft): 5490, 5496, 5533, 5539
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.60
MUD VISCOSITY (sec): 46
ESTIMATED HOLE TEMP. (°F): 125
ACTUAL HOLE TEMP. (°F): ___ @ ___ ft

TICKET NUMBER: 65753000

DATE: 6-6-83 TEST NO: 7

TYPE DST: ON BTM. STRADDLE

HALLIBURTON CAMP: PRATT

TESTER: ROBERT E. MARTIN

WITNESS: BILL SLADEK (GEOL.)

DRILLING CONTRACTOR: RINE DRILLING COMPANY (RIG #1)

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
PIT	0.170 @	81 °F	27000 ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

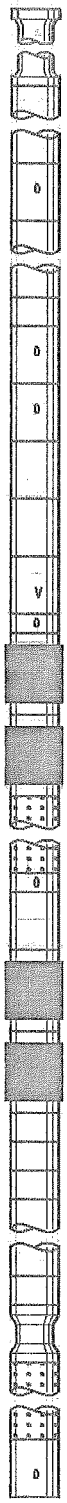
4200 FEET OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 65753000

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
6-6-83					
1135					STARTED CLOCKS
1140					PICKED-UP TOOLS
1215					TOOL AT TABLE
1240					TOOL THROUGH TABLE
1407					TOOL ON BOTTOM - TOOL DID NOT
					SLIDE.
1410					OPENED TOOL - STRONG BLOW OFF
					BOTTOM OF BUCKET IMMEDIATELY -
					NO GAS TO THE SURFACE.
1440					CLOSED TOOL
1540					REOPENED TOOL WITH A STRONG BLOW
					OFF BOTTOM OF BUCKET
					IMMEDIATELY - NO GAS TO THE
					SURFACE.
1640					CLOSED TOOL
1810					TOOL OFF BOTTOM - BYPASS OPENED
1850					DROPPED BAR
1915					PUMPED THROUGH KELLY
2040					STARTED OUT OF HOLE WITH TOOLS
2100					TOOL AT TABLE
2200					TOOL LAID DOWN



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	5018.0	
3	DRILL COLLARS.....	6.250	2.250	358.0	
50	IMPACT REVERSING SUB.....	5.750	2.750	1.0	5376.0
3	DRILL COLLARS.....	6.250	2.250	90.0	
5	CROSSOVER.....	5.000	2.750	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	6.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	5478.0
80	AP RUNNING CASE.....	5.000	3.060	4.0	5480.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	2.620	1.0	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5490.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5496.0
20	FLUSH JOINT ANCHOR.....	5.000	2.370	28.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	2.620	1.0	
80	AP RUNNING CASE.....	5.000	3.060	4.0	5528.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5533.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5539.0
5	CROSSOVER.....	5.000	2.000	1.0	
5	CROSSOVER.....	5.000	2.750	1.0	
5	CROSSOVER.....	5.000	2.750	1.0	
3	DRILL COLLARS.....	6.250	2.250	92.0	
5	CROSSOVER.....	6.250	2.250	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.000	2.370	4.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	12.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.0	5656.0
	TOTAL DEPTH				5659.0

EQUIPMENT DATA

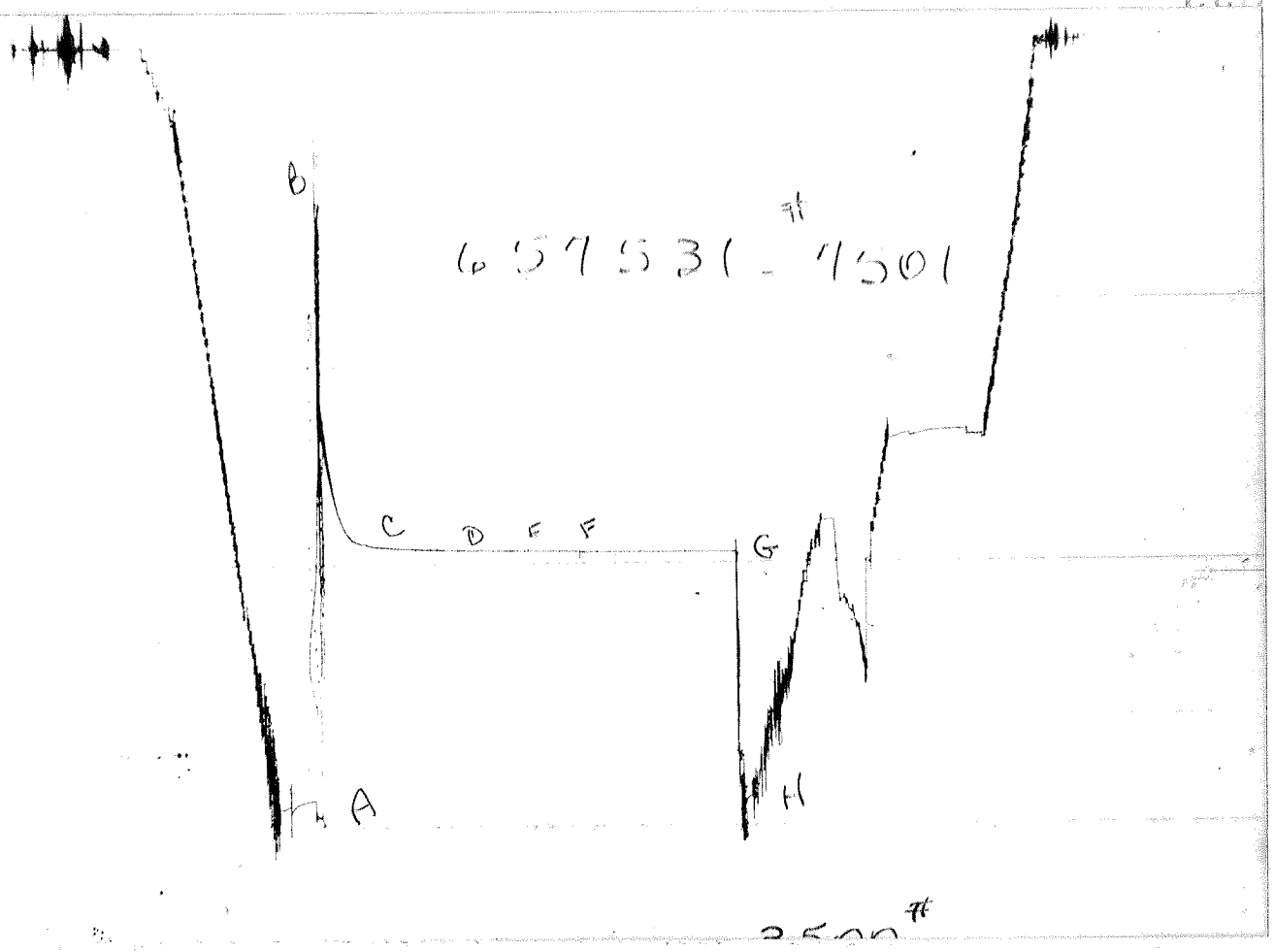
LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
26 34S 21W	SNAKE CREEK	CLARK	KANSAS

LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
BARBY	1-26	8	5496.' - 5533.'	RINE DRILLING COMPANY

HALLIBURTON
SERVICES

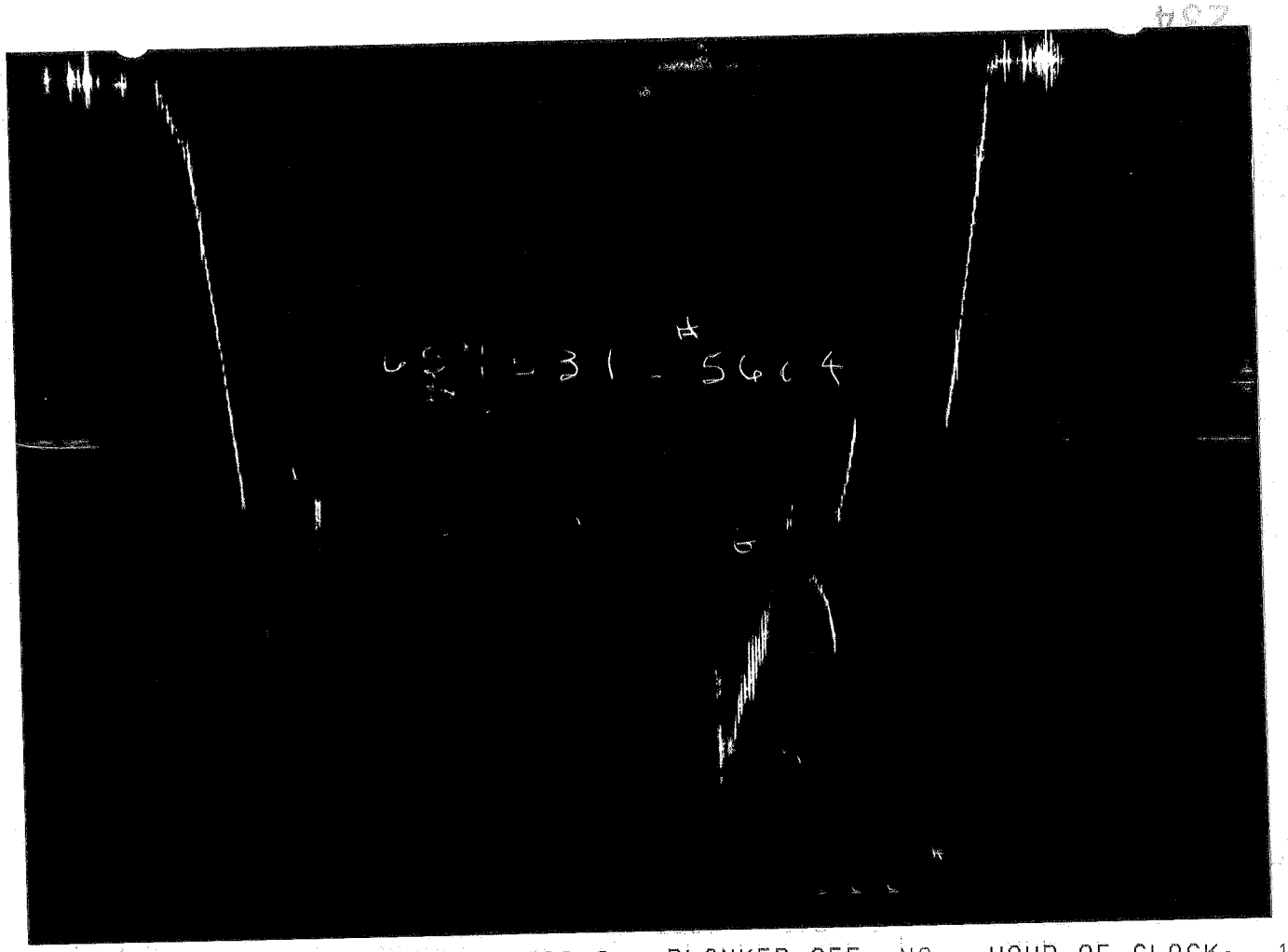
TICKET NO. 65753100
13-JUN-83
PRATT

FORMATION TESTING SERVICE REPORT



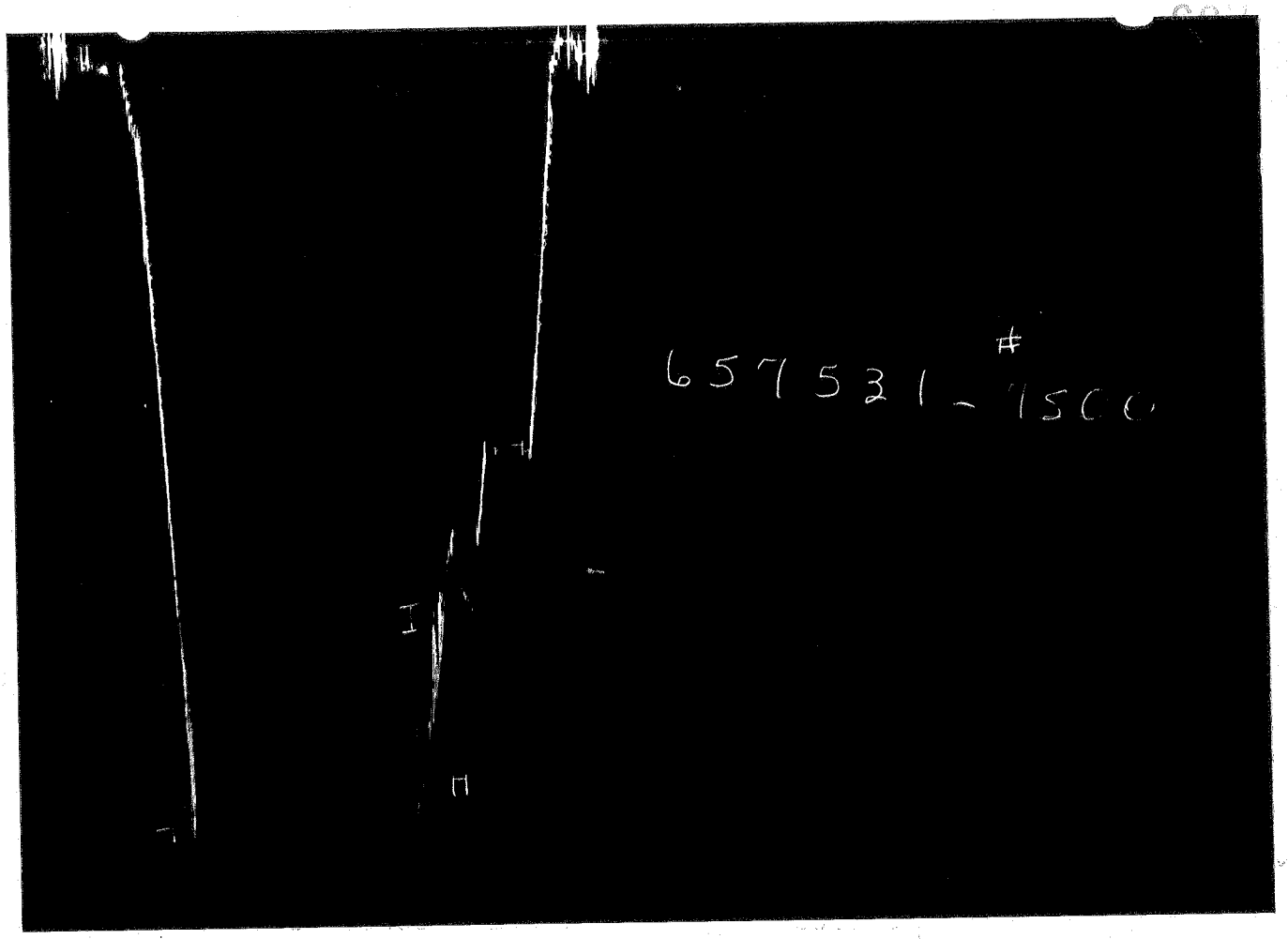
GAUGE NO: 7501 DEPTH: 5480.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2916	2951.1			
B	INITIAL FIRST FLOW	1289	1393.6	30.0	30.0	F
C	FINAL FIRST FLOW	1923	1919.6			
C	INITIAL FIRST CLOSED-IN	1923	1919.6	60.0	60.0	C
D	FINAL FIRST CLOSED-IN	1923	1947.5			
E	INITIAL SECOND FLOW	1923	1946.8	60.0	60.0	F
F	FINAL SECOND FLOW	1933	1953.5			
F	INITIAL SECOND CLOSED-IN	1933	1953.5	90.0	90.0	C
G	FINAL SECOND CLOSED-IN	1943	1958.3			
H	FINAL HYDROSTATIC	2838	2887.1			
I	HYDROSTATIC RELEASE					



GAUGE NO: 5604 DEPTH: 5528.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2905	2968.6			
B	INITIAL FIRST FLOW	1745	1788.7	30.0	30.0	F
C	FINAL FIRST FLOW	1952	1954.5			
C	INITIAL FIRST CLOSED-IN	1952	1954.5	60.0	60.0	C
D	FINAL FIRST CLOSED-IN		1973.6			
E	INITIAL SECOND FLOW		1971.7	60.0	60.0	F
F	FINAL SECOND FLOW		1978.8			
F	INITIAL SECOND CLOSED-IN		1978.8	90.0	90.0	C
G	FINAL SECOND CLOSED-IN		1983.7			
H	FINAL HYDROSTATIC	2884	2910.3			
I	HYDROSTATIC RELEASE					



GAUGE NO: 7500 DEPTH: 5656.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		3045.6			
B C	INITIAL FIRST FLOW FINAL FIRST FLOW			30.0		F
C D	INITIAL FIRST CLOSED-IN FINAL FIRST CLOSED-IN			60.0		C
E F	INITIAL SECOND FLOW FINAL SECOND FLOW			60.0		F
F G	INITIAL SECOND CLOSED-IN FINAL SECOND CLOSED-IN			90.0		C
H	FINAL HYDROSTATIC		2994.6			
I	HYDROSTATIC RELEASE		2466.1			

EQUIPMENT & HOLE DATA

FORMATION TESTED: MORROW
NET PAY (ft):
GROSS TESTED FOOTAGE: 37.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 1809
TOTAL DEPTH (ft): 5659.0
PACKER DEPTH(S) (ft): 5490, 5496, 5533, 5539
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.40
MUD VISCOSITY (sec): 46
ESTIMATED HOLE TEMP. (°F): 125
ACTUAL HOLE TEMP. (°F): ___ @ ___ ft

TICKET NUMBER: 65753100

DATE: 6-7-83 TEST NO: 8

TYPE DST: ON BTM. STRADDLE

HALLIBURTON CAMP: PRATT

TESTER: ROBERT E. MARTIN

WITNESS: BILL SLADEK-GEOL.

DRILLING CONTRACTOR: RINE DRILLING COMPANY RIG #1

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
PIT	___ @	___ °F	36000 ppm
	___ @	___ °F	___ ppm
	___ @	___ °F	___ ppm
	___ @	___ °F	___ ppm
	___ @	___ °F	___ ppm
	___ @	___ °F	___ ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

3900 FEET OF SALTWATER.
300 FEET OF LIGHTLY GAS CUT MUDDY WATER.
4200 FEET OF TOTAL RECOVERY.

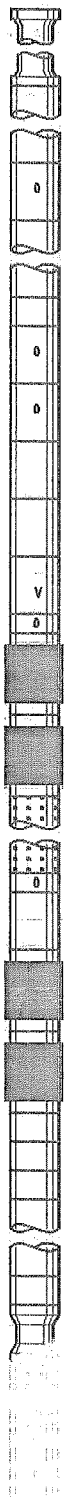
MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: _____ | TICKET NO: 65753100

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
6-7-83					
1110					STARTED CLOCKS.
1115					PICKED UP TOOL.
1150					TOOL AT TABLE.
1220					TOOL THRU TABLE.
1407					TOOL ON BOTTOM. TOOL DID NOT
					SLIDE.
1410					OPENED TOOL WITH A STRONG BLOW
					OFF BOTTOM OF BUCKET IMMEDIATE-
					LY.
1440					CLOSED TOOL.
1540					REOPENED TOOL WITH A STRONG
					BLOW OFF BOTTOM OF BUCKET.
1640					CLOSED TOOL.
1810					TOOL OFF BOTTOM. BYPASS OPENED.
1905					DROPPED BAR AND REVERSED
					CIRCULATION.
1930					STARTED OUT OF HOLE WITH TOOL.
2200					TOOL AT TABLE.
2300					TOOL LAID DOWN.

TICKET NO. 65753100



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	5019.0	
3	DRILL COLLARS.....	6.250	2.250	358.0	
50	IMPACT REVERSING SUB.....	5.750	2.750	1.0	5377.0
3	DRILL COLLARS.....	6.250	2.250	90.0	
5	CROSSOVER.....	5.000	2.750	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	6.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	5478.0
80	AP RUNNING CASE.....	5.000	3.060	4.0	5480.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	2.620	1.0	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5490.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5496.0
20	FLUSH JOINT ANCHOR.....	5.000	2.370	28.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	2.620	1.0	
80	AP RUNNING CASE.....	5.000	3.060	4.0	5528.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5533.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	5539.0
5	CROSSOVER.....	5.000	2.750	1.0	
5	CROSSOVER.....	5.000	2.750	1.0	
5	CROSSOVER.....	5.000	2.750	1.0	
3	DRILL COLLARS.....	6.250	2.250	92.0	
5	CROSSOVER.....	6.250	2.250	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.000	2.370	4.0	
	[illegible]XT ANCHOR.....	5.000	2.370	12.0	
	[illegible]UNNING CASE.....	5.000		4.0	5656.0
					5659.0

EQUIPMENT DATA