HALLIBURTON
SERVICES

TICKET NO. 84477200
11-SEP-84
PRATT

FORMATION TESTING SERVICE REPORT

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

LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
SHUPE	3-21A	1	4239.' - 4293.'	RINE DRILLING COMPANY

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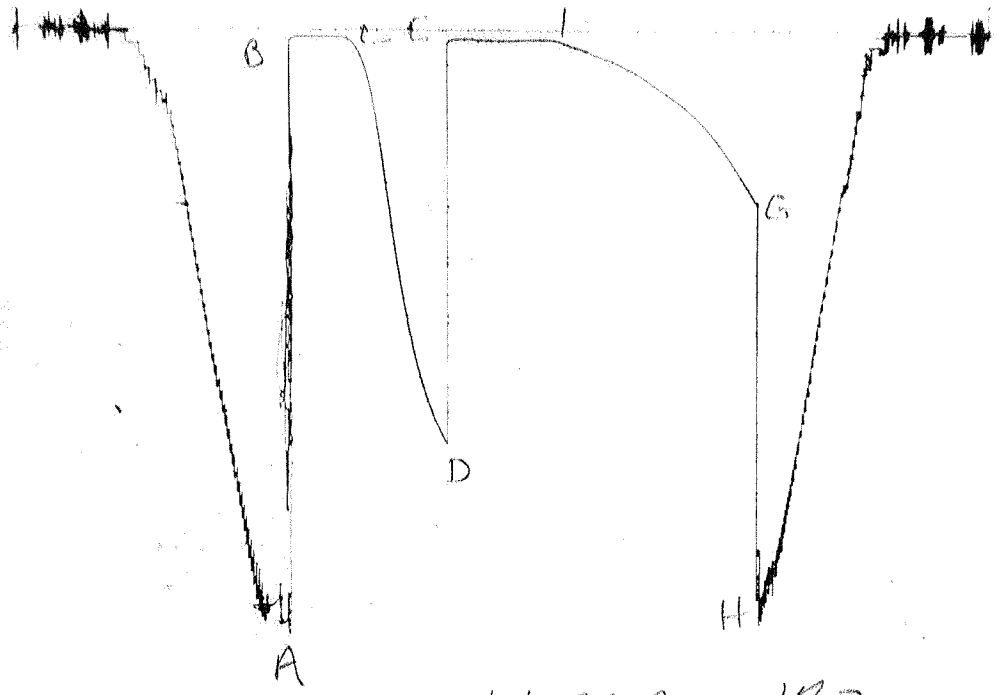
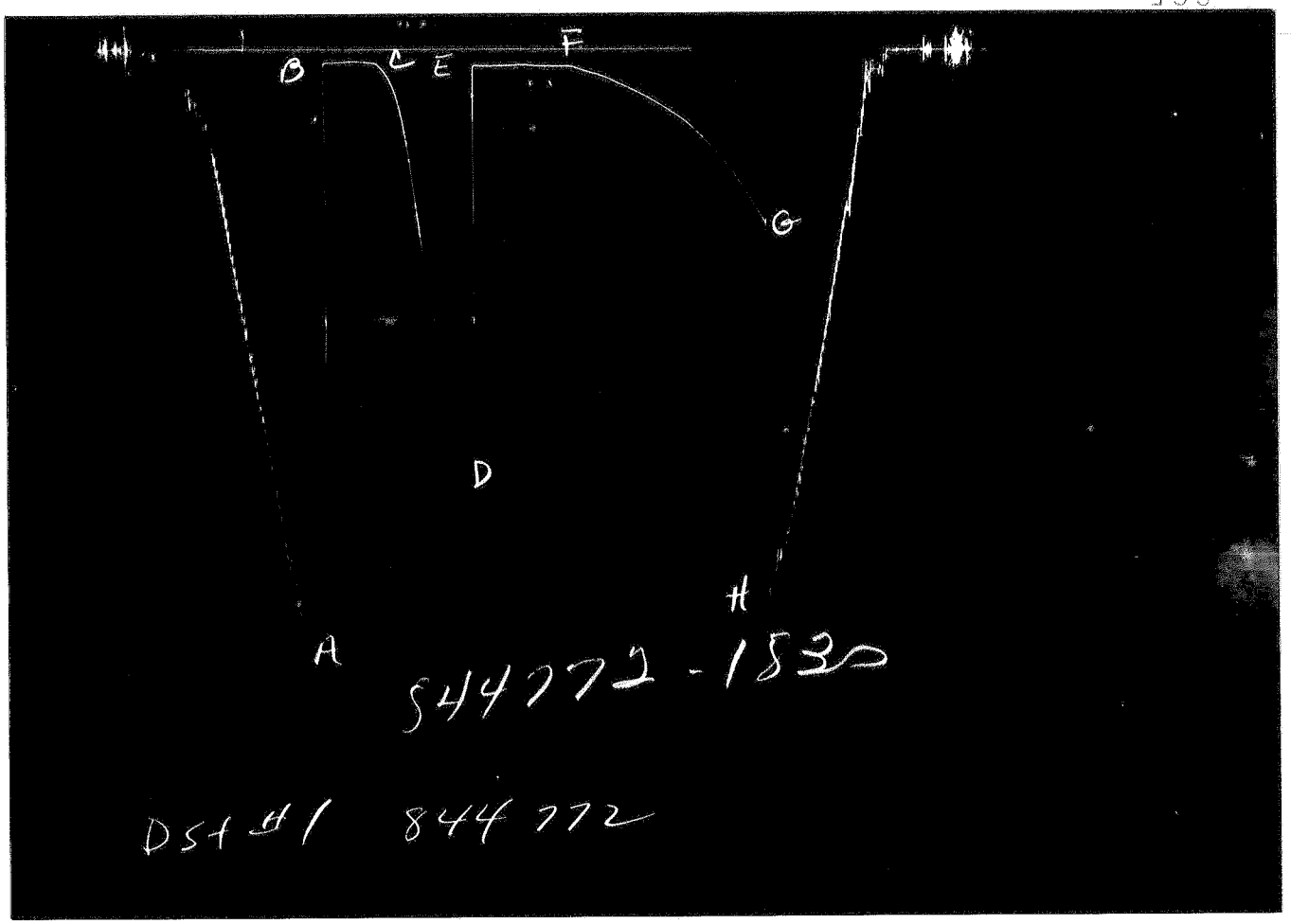


844772 - 1831

DST #1 844772

GAUGE NO: 1831 DEPTH: 4218.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2016.2			
B	INITIAL FIRST FLOW		38.5	30.0	31.0	F
C	FINAL FIRST FLOW		25.6			
C	INITIAL FIRST CLOSED-IN		25.6	60.0	59.2	C
D	FINAL FIRST CLOSED-IN		1461.3			
E	INITIAL SECOND FLOW		46.3	60.0	59.8	F
F	FINAL SECOND FLOW		36.7			
F	INITIAL SECOND CLOSED-IN		36.7	120.0	117.3	C
G	FINAL SECOND CLOSED-IN		612.2			
H	FINAL HYDROSTATIC		2005.0			



GAUGE NO: 1830 DEPTH: 4290.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2076	2049.5			
B	INITIAL FIRST FLOW	56	51.4	30.0	31.0	F
C	FINAL FIRST FLOW	56	51.1			
C	INITIAL FIRST CLOSED-IN	56	51.1	60.0	59.2	C
D	FINAL FIRST CLOSED-IN	1511	1502.9			
E	INITIAL SECOND FLOW	65	59.4	60.0	59.8	F
F	FINAL SECOND FLOW	65	62.0			
F	INITIAL SECOND CLOSED-IN	65	62.0	120.0	117.3	C
G	FINAL SECOND CLOSED-IN	646	644.9			
H	FINAL HYDROSTATIC	2076	2030.6			

EQUIPMENT & HOLE DATA

FORMATION TESTED: TORONTO
NET PAY (ft):
GROSS TESTED FOOTAGE: 54.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 1775
TOTAL DEPTH (ft): 4293.0
PACKER DEPTH(S) (ft): 4233, 4239
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.40
MUD VISCOSITY (sec): 42
ESTIMATED HOLE TEMP. (°F): 112
ACTUAL HOLE TEMP. (°F): ____ @ _____ ft

TICKET NUMBER: 84477200

DATE: 9-5-84 TEST NO: 1

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: PRATT

TESTER: ROLF

WITNESS: JERRY YOUNG

DRILLING CONTRACTOR: RINE DRILLING #8

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
MUD SYSTEM	____ @	____ °F	9000 ppm
BOTTOM	0.320 @	75 °F	11100 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:

30 FEET OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

ELEVATION IS REPORTED AT GROUND LEVEL.

TYPE & SIZE MEASURING DEVICE: ______________________ TICKET NO: 84477200

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
9-5-84					
1845					CALLED OUT-READY AT 2200
2145					ON LOCATION-RIG TRIPPING OUT
2230					STARTED CLOCKS
2245					STARTED PICKING UP TOOLS
2315					TOOL MADE UP AND IN TABLE
9-6-84					
0055					OPENED TOOL WITH A WEAK BLOW
					1/4" IN BUCKET THROUGHOUT FLOW
0125					CLOSED TOOL
0225					OPENED TOOL WITH NO BLOW
					THROUGHOUT FLOW
0325					CLOSED TOOL
0525					OFF BOTTOM-BYPASS OPENED

TICKET NO: 84477200

CLOCK NO: 26864 HOUR: 12

HALLIBURTON SERVICES

GAUGE NO: 1831

DEPTH: 4218.0

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	38.5			
	2	5.0	24.6	-13.9		
	3	10.0	24.4	-0.2		
	4	15.0	24.4	0.0		
	5	20.0	24.7	0.3		
	6	25.0	24.7	0.0		
	7	30.0	25.5	0.7		
C	8	31.0	25.6	0.1		
			FIRST CLOSED-IN			
C	1	0.0	25.6			
	2	4.0	36.1	10.6	3.6	0.940
	3	8.0	67.0	41.5	6.4	0.688
	4	12.0	123.5	98.0	8.6	0.556
	5	16.0	219.6	194.1	10.6	0.468
	6	20.0	359.9	334.4	12.2	0.407
	7	24.0	530.0	504.5	13.6	0.360
	8	28.0	705.0	679.4	14.7	0.324
	9	32.0	866.5	840.9	15.8	0.294
	10	36.0	1000.3	974.7	16.7	0.270
	11	40.0	1125.4	1099.8	17.5	0.249
	12	44.0	1225.6	1200.1	18.2	0.232
	13	48.0	1304.0	1278.4	18.9	0.217
	14	52.0	1374.8	1349.3	19.4	0.203
	15	56.0	1425.3	1399.7	20.0	0.192
D	16	59.2	1461.3	1435.7	20.4	0.183
			SECOND FLOW			
E	1	0.0	46.3			
	2	10.0	33.4	-12.9		
	3	20.0	37.2	3.8		
	4	30.0	39.3	2.0		
	5	40.0	37.6	-1.7		
	6	50.0	35.6	-2.0		
F	7	59.8	36.7	1.1		
			SECOND CLOSED-IN			
F	1	0.0	36.7			
	2	8.0	51.8	15.1	7.3	1.093
	3	16.0	67.4	30.7	13.6	0.825
	4	24.0	87.8	51.1	19.0	0.680
	5	32.0	105.0	68.3	23.6	0.585
	6	40.0	127.7	91.0	27.8	0.515
	7	48.0	153.3	116.7	31.4	0.461
	8	56.0	186.4	149.7	34.6	0.419
	9	64.0	219.8	183.1	37.5	0.384

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log\frac{t+\Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	10	72.0	255.5	218.8	40.2	0.354
	11	80.0	297.0	260.4	42.5	0.329
	12	88.0	347.2	310.6	44.7	0.308
	13	96.0	407.3	370.6	46.7	0.289
	14	104.0	482.7	446.0	48.5	0.273
	15	112.0	560.4	523.7	50.1	0.258
G	16	117.3	612.2	575.5	51.2	0.249

REMARKS:

NO: 84477200

CLOCK NO: 7046 HOUR: 12

HALLIBURTON SERVICES

GAUGE NO: 1830

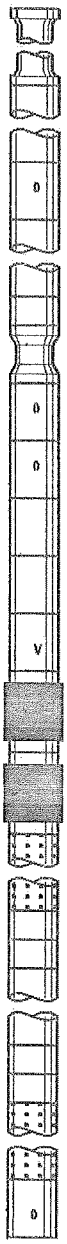
DEPTH: 4290.0

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	51.4			
	2	5.0	48.4	-3.0		
	3	10.0	48.1	-0.4		
	4	15.0	45.5	-2.6		
	5	20.0	44.9	-0.6		
	6	25.0	47.2	2.3		
	7	30.0	50.6	3.3		
C	8	31.0	51.1	0.6		
			FIRST CLOSED-IN			
C	1	0.0	51.1			
	2	4.0	71.9	20.8	3.5	0.943
	3	8.0	106.7	55.5	6.4	0.689
	4	12.0	164.9	113.8	8.7	0.554
	5	16.0	257.3	206.2	10.6	0.469
	6	20.0	395.4	344.3	12.2	0.407
	7	24.0	571.9	520.8	13.5	0.360
	8	28.0	743.5	692.4	14.7	0.324
	9	32.0	903.5	852.4	15.8	0.295
	10	36.0	1037.8	986.6	16.7	0.270
	11	40.0	1161.9	1110.8	17.5	0.250
	12	44.0	1269.2	1218.1	18.2	0.232
	13	48.0	1345.1	1294.0	18.8	0.217
	14	52.0	1415.4	1364.3	19.4	0.203
	15	56.0	1468.9	1417.8	20.0	0.192
D	16	59.2	1502.9	1451.8	20.4	0.183
			SECOND FLOW			
E	1	0.0	59.4			
	2	10.0	61.6	2.1		
	3	20.0	59.4	-2.1		
	4	30.0	57.0	-2.4		
	5	40.0	60.6	3.6		
	6	50.0	61.7	1.1		
F	7	59.8	62.0	0.3		
			SECOND CLOSED-IN			
F	1	0.0	62.0			
	2	8.0	78.2	16.2	7.3	1.093
	3	16.0	91.9	29.9	13.6	0.824
	4	24.0	111.0	49.0	19.0	0.679
	5	32.0	133.3	71.3	23.7	0.584
	6	40.0	156.7	94.6	27.8	0.515
	7	48.0	182.2	120.1	31.4	0.461
	8	56.0	212.3	150.3	34.6	0.419
	9	64.0	243.3	181.2	37.5	0.384

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
		SECOND CLOSED-IN - CONTINUED				
	10	72.0	281.5	219.5	40.2	0.354
	11	80.0	328.5	266.5	42.5	0.329
	12	88.0	380.0	318.0	44.7	0.308
	13	96.0	440.0	378.0	46.7	0.289
	14	104.0	511.4	449.4	48.5	0.273
	15	112.0	591.5	529.5	50.2	0.258
G	16	117.3	644.9	582.9	51.2	0.249

REMARKS:

TICKET NO. 84477200



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	3688.0	
3	DRILL COLLARS.....	6.250	2.250	422.0	
50	IMPACT REVERSING SUB.....	5.750	2.750	1.0	4110.0
3	DRILL COLLARS.....	6.250	2.250	90.0	
5	CROSSOVER.....	5.750	2.750	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.870	3.000	5.0	
12	DUAL CIP VALVE.....	5.030	0.870	5.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	4216.0
80	AP RUNNING CASE.....	5.000	3.060	4.0	4218.0
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	4233.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	4239.0
20	FLUSH JOINT ANCHOR.....	5.000	3.840	1.0	
5	CROSSOVER.....	5.750	2.750	1.0	
5	CROSSOVER.....	5.750	2.750	1.0	
3	DRILL COLLARS.....	6.250	2.250	33.0	
5	CROSSOVER.....	5.750	2.750	1.0	
5	CROSSOVER.....	5.750	2.750	1.0	
20	FLUSH JOINT ANCHOR.....	5.000	3.840	10.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.0	4290.0
	TOTAL DEPTH				4293.0

EQUIPMENT DATA

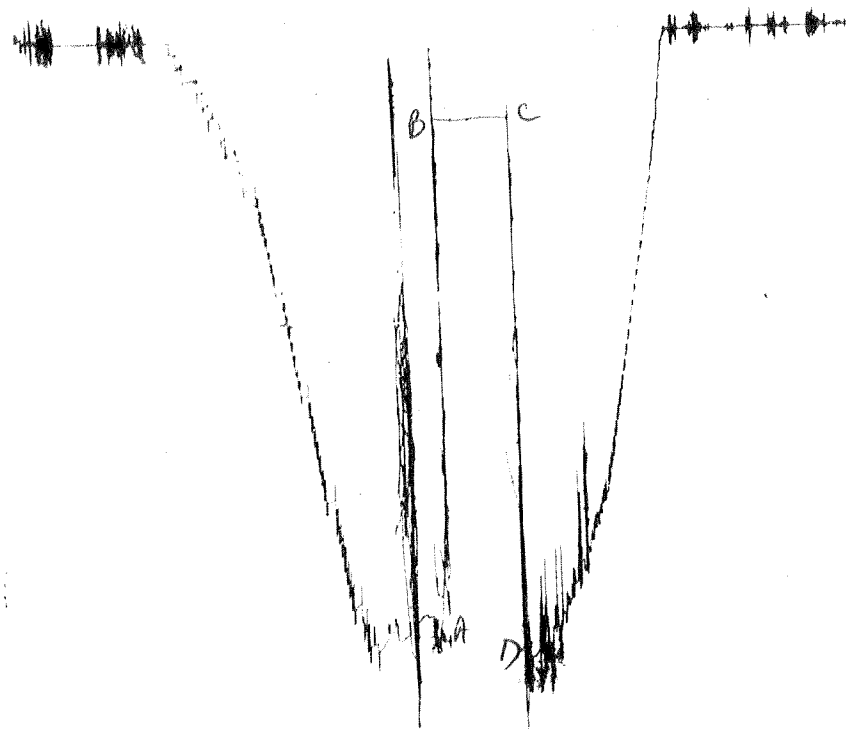
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
SHUPE	3-21A	6	4275.' - 4320.'	RINE DRILLING COMPANY

LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
21-34-21		CLARK	KANSAS DR

HALLIBURTON
SERVICES

TICKET NO. 84477700
24-SEP-84
PRATT

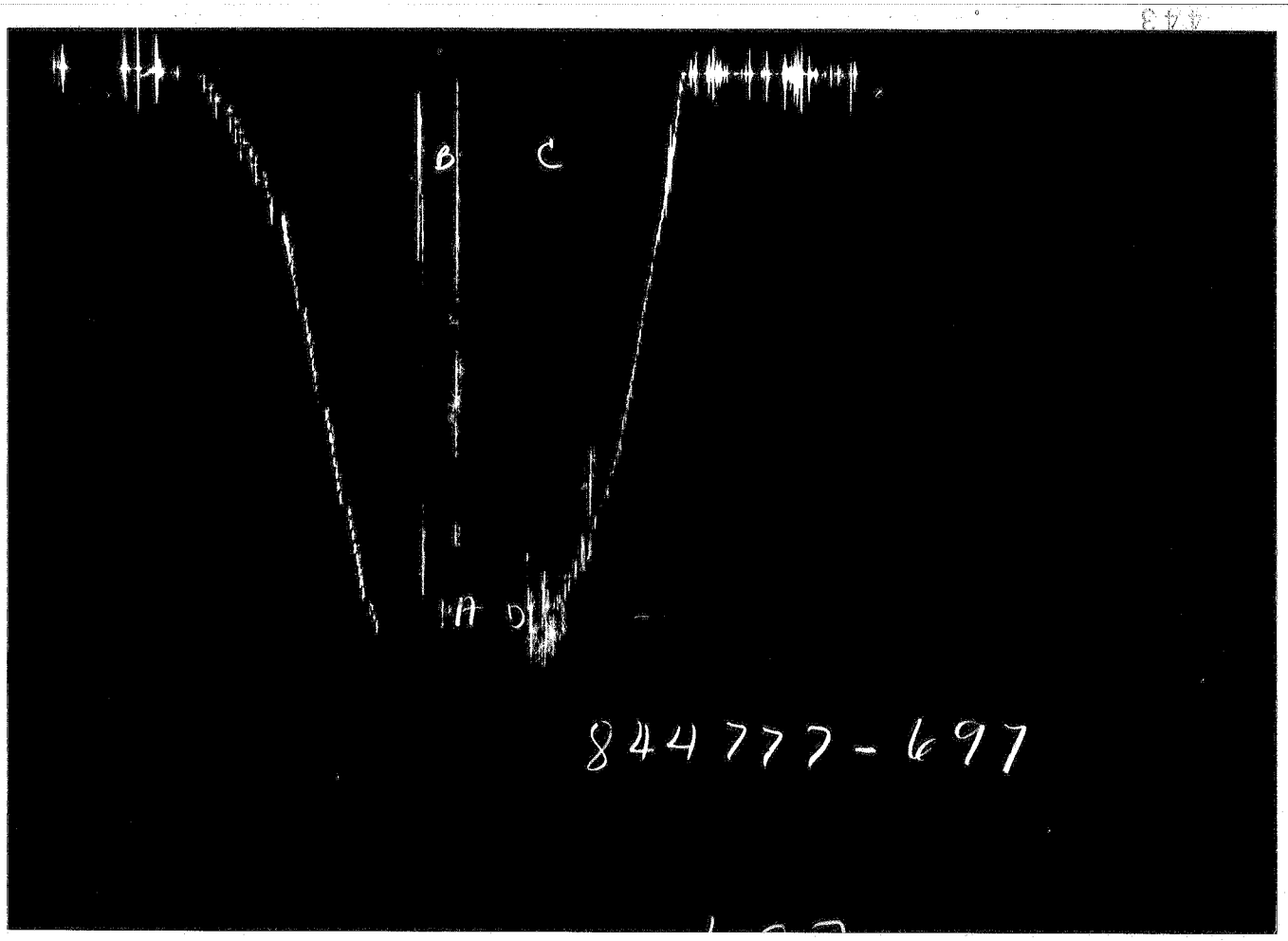
FORMATION TESTING SERVICE REPORT



844777-1831

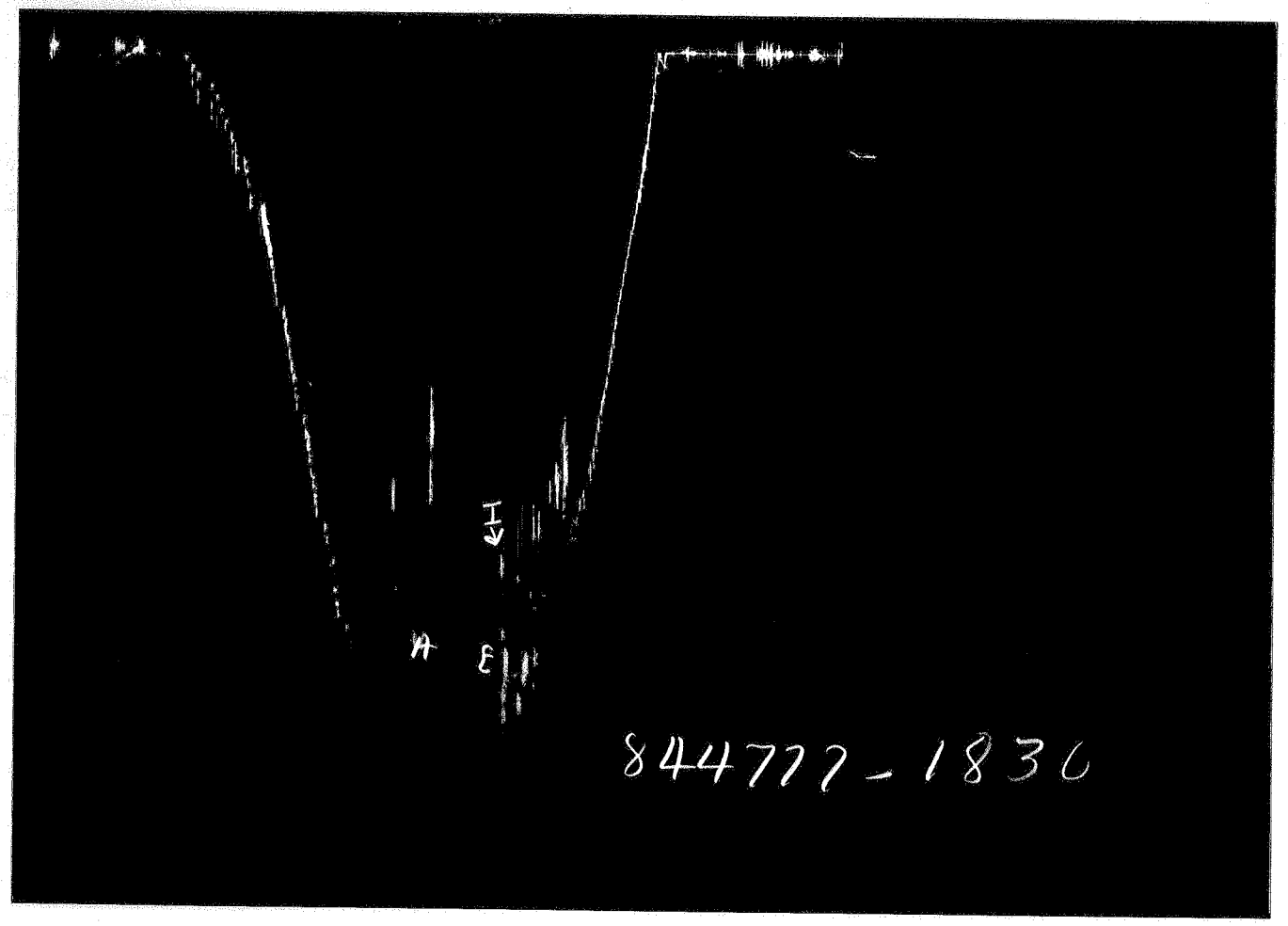
GAUGE NO: 1831 DEPTH: 4259.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2117.9				
B	INITIAL FIRST FLOW	299.4		40.0	40.0	F
C	FINAL FIRST FLOW	297.9				
D	FINAL HYDROSTATIC	2158.2				
E	HYDROSTATIC RELEASE					



GAUGE NO: 697 DEPTH: 4315.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2140.6				
B	INITIAL FIRST FLOW	330.5		40.0	40.0	F
C	FINAL FIRST FLOW	331.1				
D	FINAL HYDROSTATIC	2181.3				
E	HYDROSTATIC RELEASE					



GAUGE NO: 1830 DEPTH: 4333.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2141.6			
B	INITIAL FIRST FLOW			40.0		F
C	FINAL FIRST FLOW					
D	FINAL HYDROSTATIC		2184.9			
E	HYDROSTATIC RELEASE		1912.4			

EQUIPMENT & HOLE DATA

FORMATION TESTED: TORONTO
NET PAY (ft):
GROSS TESTED FOOTAGE: 45.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 1787
TOTAL DEPTH (ft): 5578.0
PACKER DEPTH(S) (ft): 4275, 4320
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.30
MUD VISCOSITY (sec): 45
ESTIMATED HOLE TEMP. (°F): 110
ACTUAL HOLE TEMP. (°F): ____ @ _____ ft

TICKET NUMBER: 84477700

DATE: 9-13-84 TEST NO: 6

TYPE DST: OFF BT. STRADDLE

HALLIBURTON CAMP: PRATT

TESTER: L.R. PARKER

WITNESS: B. SLADEK

DRILLING CONTRACTOR: COMPANY TOOL

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
	@ °F	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

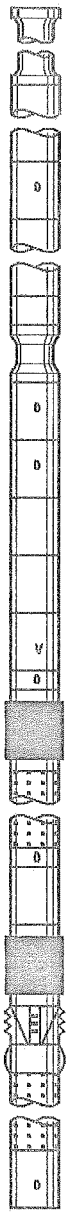
REMARKS:

MISRUN-UNSUCESSFUL TEST

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 84477700

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
9-13-84					
1125					CALLED OUT
1445					ON LOCATION
1530					PICKED UP TOOL
1630					TOOL IN TABLE
1645					TOOL THROUGH TABLE
					ON BOTTOM
1845					SET HOOK
1850					OPENED TOOL WITH NO PACKER SEAT
					CAME UP 4'
1912					SET HOOK
1915					OPENED TOOL, HAD SLOW LOSS OF
					FLUID THEN STOPPED-HAD LITTLE
					WEAK BLOW THEN DEAD.
1955					PULLED LOOSE, CAME OUT OF HOLE
					PULLED VERY TIGHT 5 STANDS
2155					TOOL IN TABLE

TICKET NO. 84477700



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	3639.0	
3	DRILL COLLARS.....	6.250	2.250	515.0	
50	IMPACT REVERSING SUB.....	6.000	2.750	1.0	4154.0
3	DRILL COLLARS.....	6.250	2.250	87.0	
5	CROSSOVER.....	6.000	2.250	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	3.750	5.0	
12	DUAL CIP VALVE.....	5.000	0.870	5.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	4257.0
80	AP RUNNING CASE.....	5.000	2.250	4.0	4259.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000		1.0	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	4275.0
20	FLUSH JOINT ANCHOR.....	5.000	2.370	36.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000		1.0	
80	AP RUNNING CASE.....	5.000	2.250	4.0	4315.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	4320.0
90	SIDE WALL ANCHOR.....	6.750	1.630	5.0	4326.0
20	FLUSH JOINT ANCHOR.....	5.000	2.370	3.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.0	4333.0
	TOTAL DEPTH				5578.0

EQUIPMENT DATA

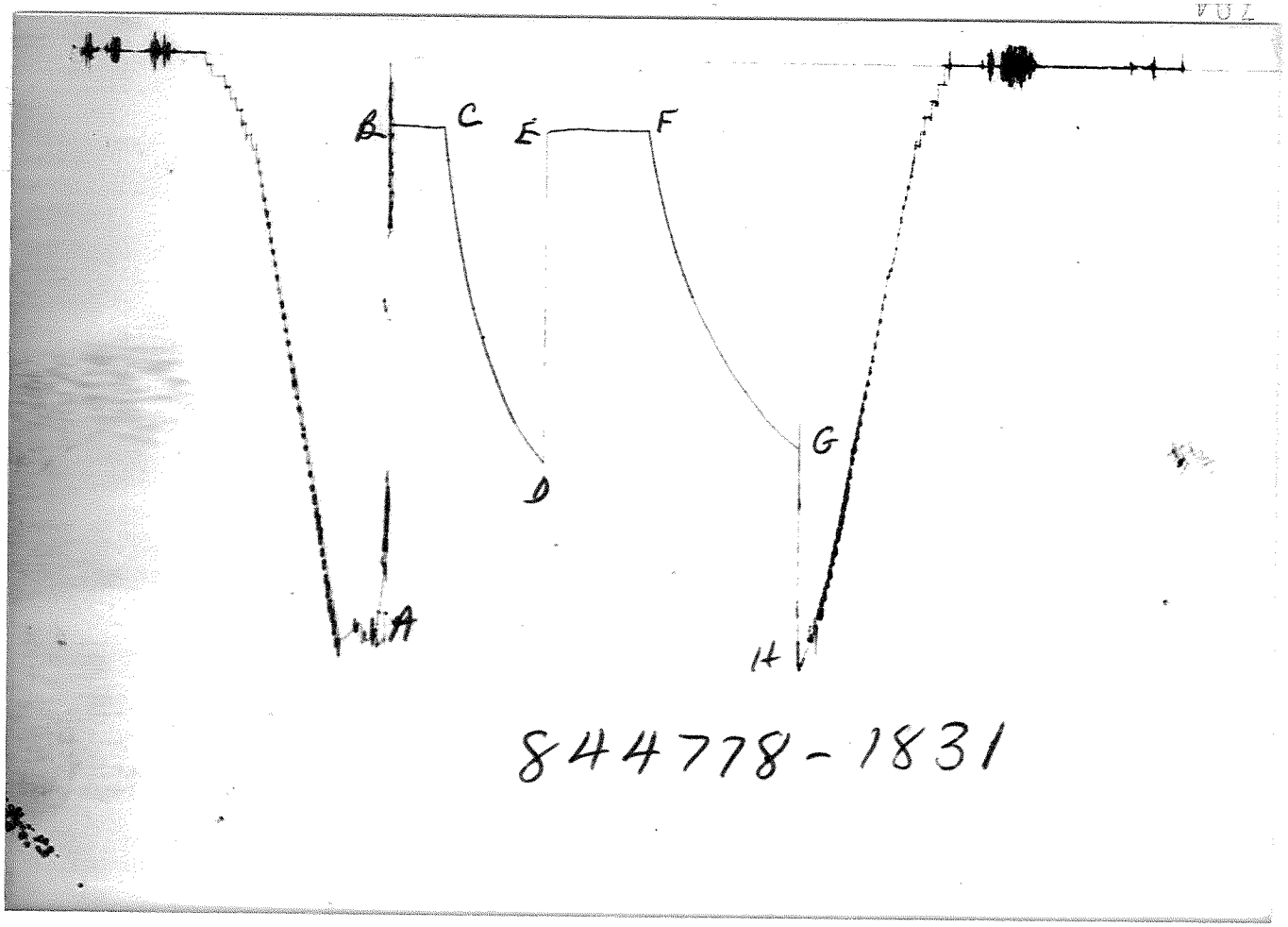
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
SHUPE	3-21A	7	4271.' - 4316.'	RINE DRILLING COMPANY

LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
21-34-21		CLARK	KANSAS OR

HALLIBURTON
SERVICES

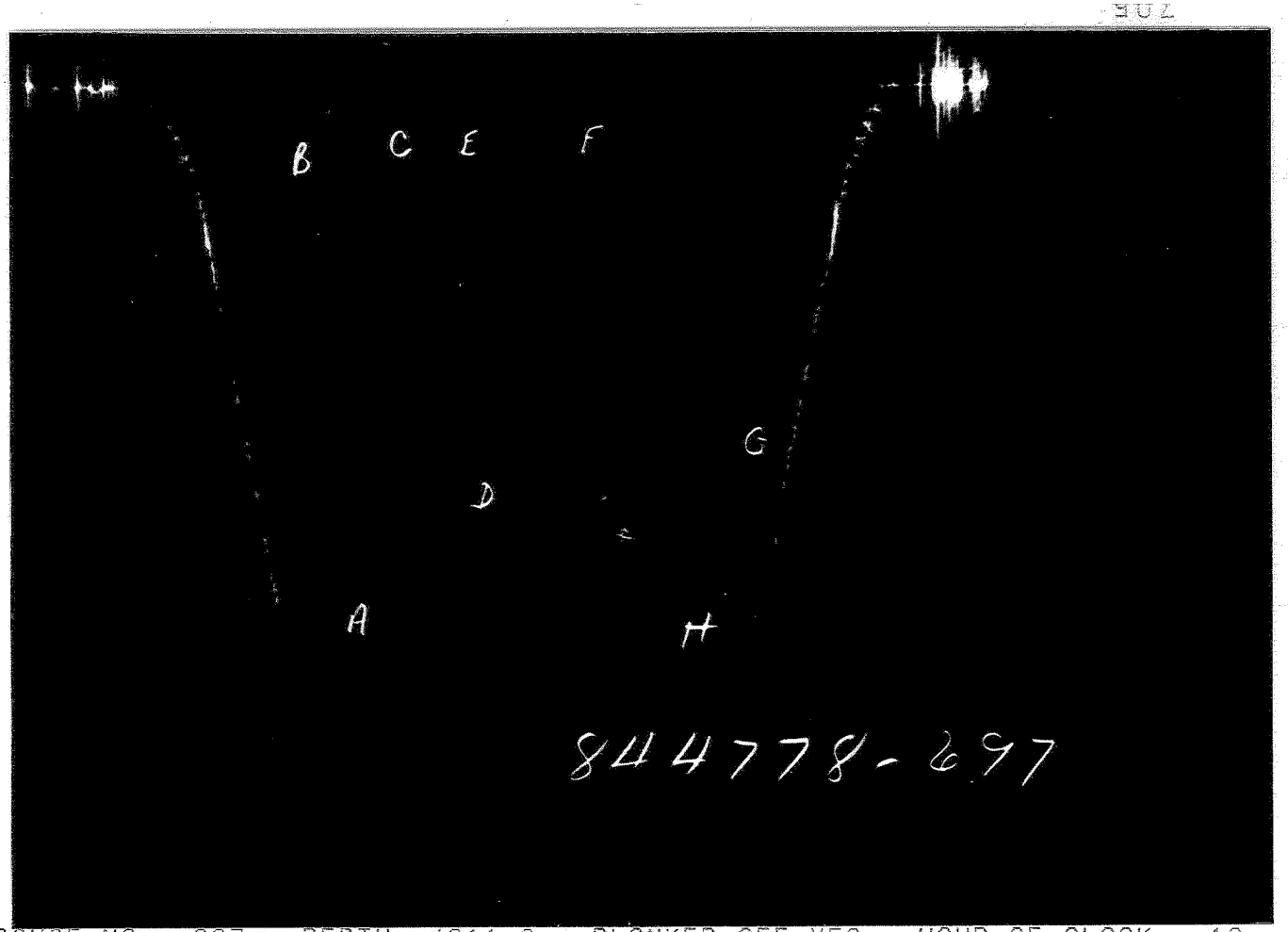
TICKET NO. 84477800
24-SEP-84
PRATT

FORMATION TESTING SERVICE REPORT



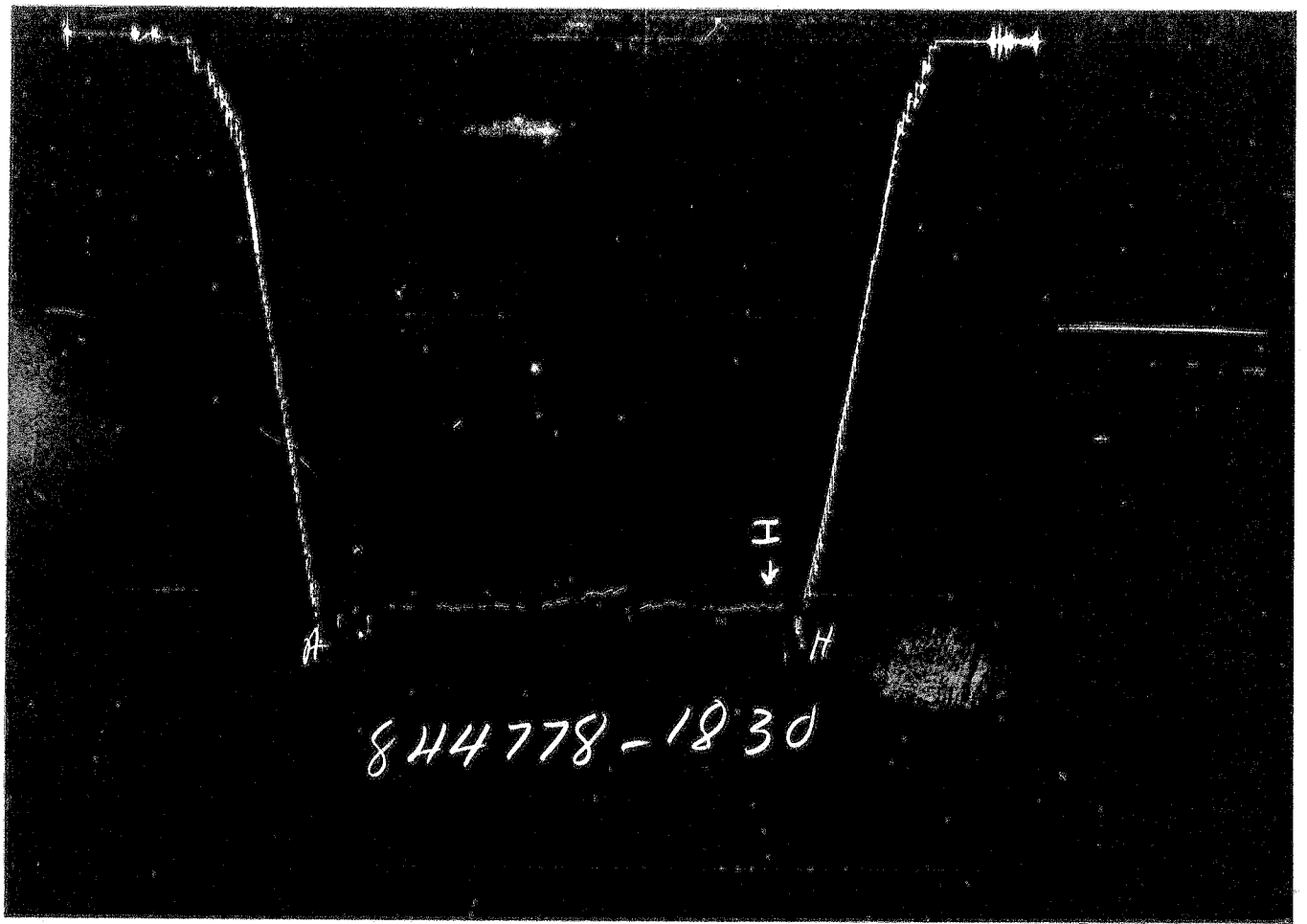
GAUGE NO: 1831 DEPTH: 4255.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2099.6				
B	INITIAL FIRST FLOW	244.3		30.0	30.6	F
C	FINAL FIRST FLOW	251.0				
C	INITIAL FIRST CLOSED-IN	251.0		60.0	58.9	C
D	FINAL FIRST CLOSED-IN	1451.2				
E	INITIAL SECOND FLOW	267.1		60.0	61.2	F
F	FINAL SECOND FLOW	252.2				
F	INITIAL SECOND CLOSED-IN	252.2		90.0	89.3	C
G	FINAL SECOND CLOSED-IN	1384.6				
H	FINAL HYDROSTATIC	2102.9				
I	HYDROSTATIC RELEASE					



GAUGE NO: 697 DEPTH: 4311.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2149	2131.8			
B	INITIAL FIRST FLOW	280	281.3	30.0	30.6	F
C	FINAL FIRST FLOW	280	285.0			
C	INITIAL FIRST CLOSED-IN	280	285.0	60.0	58.9	C
D	FINAL FIRST CLOSED-IN	1471	1493.2			
E	INITIAL SECOND FLOW	280	288.2	60.0	61.2	F
F	FINAL SECOND FLOW	280	288.2			
F	INITIAL SECOND CLOSED-IN	280	288.2	90.0	89.3	C
G	FINAL SECOND CLOSED-IN	1431	1431.3			
H	FINAL HYDROSTATIC	2149	2142.9			
I	HYDROSTATIC RELEASE					



GAUGE NO: 1830 DEPTH: 4329.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2135.9				
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	2150.1				
I	HYDROSTATIC RELEASE	2032.8				

EQUIPMENT & HOLE DATA

FORMATION TESTED: TORONTO
NET PAY (ft):
GROSS TESTED FOOTAGE: 45.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 1787
TOTAL DEPTH (ft): 5578.0
PACKER DEPTH(S) (ft): 4271, 4316
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.30
MUD VISCOSITY (sec): 45
ESTIMATED HOLE TEMP. (°F): 110
ACTUAL HOLE TEMP. (°F): ___ @ ___ ft

TICKET NUMBER: 84477800

DATE: 9-14-84 TEST NO: 7

TYPE DST: OFF BT. STRADDLE

HALLIBURTON CAMP: PRATT

TESTER: L.R. PARKER

WITNESS: B.SLADEK

DRILLING CONTRACTOR: COMPANY TOOL

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
	@ °F		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:

450' OF DRILLING MUD

MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 84477800

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
9-14-84					
0225					STARTED OUT OF HOLE
0400					PICKED UP TOOL
0440					TOOL IN TABLE
0445					TOOL THROUGH TABLE
0631					SET HOOK ON BOTTOM
0635					OPENED TOOL WITH A VERY WEAK
					BLOW
0653					BLOW DEAD
0705					CLOSED TOOL
0805					REOPENED TOOL WITH NO BLOW
					THROUGHOUT SECOND OPENING
0905					CLOSED TOOL
1035					OFF BOTTOM
1205					TOOL IN TABLE

TICKET NO: 84477800		GAUGE NO: 1831
CLOCK NO: 26864 HOUR: 12	HALLIBURTON SERVICES	DEPTH: 4255.0

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	244.3			
	2	5.0	245.9	1.7		
	3	10.0	246.8	0.8		
	4	15.0	248.3	1.6		
	5	20.0	251.0	2.7		
	6	25.0	252.2	1.2		
C	7	30.6	251.0	-1.2		
			FIRST CLOSED-IN			
C	1	0.0	251.0			
	2	4.0	449.6	198.6	3.5	0.940
	3	8.0	613.2	362.1	6.3	0.685
	4	12.0	748.0	497.0	8.6	0.551
	5	16.0	863.8	612.8	10.5	0.464
	6	20.0	950.2	699.2	12.1	0.403
	7	24.0	1028.6	777.6	13.5	0.357
	8	28.0	1100.5	849.4	14.6	0.321
	9	32.0	1164.4	913.4	15.7	0.291
	10	36.0	1224.9	973.9	16.5	0.268
	11	40.0	1280.2	1029.2	17.3	0.247
	12	44.0	1326.8	1075.7	18.1	0.230
	13	48.0	1361.0	1110.0	18.7	0.215
	14	52.0	1394.8	1143.8	19.3	0.201
	15	56.0	1427.0	1176.0	19.8	0.190
D	16	58.9	1451.2	1200.2	20.1	0.182
			SECOND FLOW			
E	1	0.0	267.1			
F	2	61.2	252.2	-14.9		
			SECOND CLOSED-IN			
F	1	0.0	252.2			
	2	6.0	454.2	201.9	5.6	1.212
	3	12.0	599.0	346.8	10.6	0.936
	4	18.0	716.5	464.3	15.0	0.786
	5	24.0	813.1	560.9	19.0	0.684
	6	30.0	896.8	644.6	22.6	0.609
	7	36.0	967.7	715.5	25.9	0.551
	8	42.0	1037.6	785.4	28.8	0.503
	9	48.0	1101.8	849.5	31.5	0.464
	10	54.0	1153.5	901.3	34.0	0.432
	11	60.0	1203.4	951.2	36.3	0.403
	12	66.0	1250.9	998.7	38.4	0.379
	13	72.0	1297.1	1044.9	40.4	0.357
	14	78.0	1333.4	1081.2	42.2	0.338
	15	84.0	1362.9	1110.6	43.9	0.321

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
G	16	89.3	1384.6	1132.4	45.3	0.307

REMARKS:

TICKET NO: 84477800

CLOCK NO: 17482 HOUR: 12

HALLIBURTON SERVICES

GAUGE NO: 697

DEPTH: 4311.0

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	281.3			
	2	5.0	285.7	4.4		
	3	10.0	285.7	0.0		
	4	15.0	285.7	0.0		
	5	20.0	285.7	0.0		
	6	25.0	285.7	0.0		
C	7	30.6	285.0	-0.7		
			FIRST CLOSED-IN			
C	1	0.0	285.0			
	2	4.0	530.3	245.3	3.5	0.938
	3	8.0	690.2	405.2	6.3	0.685
	4	12.0	816.8	531.8	8.6	0.551
	5	16.0	928.3	643.3	10.5	0.465
	6	20.0	1017.9	732.9	12.1	0.404
	7	24.0	1096.1	811.1	13.4	0.357
	8	28.0	1165.6	880.6	14.6	0.321
	9	32.0	1225.8	940.8	15.7	0.291
	10	36.0	1281.0	996.0	16.5	0.268
	11	40.0	1328.4	1043.4	17.3	0.247
	12	44.0	1370.6	1085.6	18.1	0.230
	13	48.0	1405.8	1120.8	18.7	0.215
	14	52.0	1443.0	1158.0	19.3	0.201
	15	56.0	1473.4	1188.4	19.8	0.190
D	16	58.9	1493.2	1208.2	20.1	0.182
			SECOND FLOW			
E	1	0.0	288.2			
F	2	61.2	288.2	0.0		
			SECOND CLOSED-IN			
F	1	0.0	288.2			
	2	6.0	504.2	216.0	5.6	1.213
	3	12.0	647.8	359.6	10.6	0.938
	4	18.0	761.4	473.2	15.0	0.786
	5	24.0	858.8	570.6	19.1	0.683
	6	30.0	944.4	656.2	22.6	0.609
	7	36.0	1018.9	730.7	25.9	0.550
	8	42.0	1089.6	801.4	28.8	0.504
	9	48.0	1152.3	864.1	31.5	0.464
	10	54.0	1206.5	918.3	34.0	0.432
	11	60.0	1256.0	967.8	36.3	0.403
	12	66.0	1299.9	1011.7	38.4	0.379
	13	72.0	1339.7	1051.5	40.1	0.357
	14	78.0	1375.5	1087.3	42.2	0.338
	15	84.0	1405.9	1117.7	43.9	0.321

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
G	16	89.3	1431.3	1143.1	45.3	0.307

REMARKS:

TICKET NO. 84477800

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	3635.0	
3	DRILL COLLARS.....	6.250	2.250	515.0	
50	IMPACT REVERSING SUB.....	6.000	2.750	1.0	4150.0
3	DRILL COLLARS.....	6.250	2.250	87.0	
5	CROSSOVER.....	6.000	2.250	1.0	
11	HANDLING SUB & CHOKE ASSEMBLY...	5.750	3.750	5.0	
12	DUAL CIP VALVE.....	5.000	0.870	5.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	4253.0
80	AP RUNNING CASE.....	5.000	2.250	4.0	4255.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	0.870	1.0	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	4271.0
20	FLUSH JOINT ANCHOR.....	5.000	2.370	36.0	
17	PRESSURE EQUALIZING CROSSOVER...	5.000	0.870	1.0	
81	BLANKED-OFF RUNNING CASE.....	5.000	2.250	4.0	4311.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	4316.0
90	SIDE WALL ANCHOR.....	6.750	1.630	5.0	4322.0
20	FLUSH JOINT ANCHOR.....	5.000	2.370	3.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.0	4329.0

TOTAL DEPTH 5578.0

EQUIPMENT DATA