LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
ALTON UNRUH	3	1	4849.' - 4904.'	THE MAURICE L. BROWN COMPANY

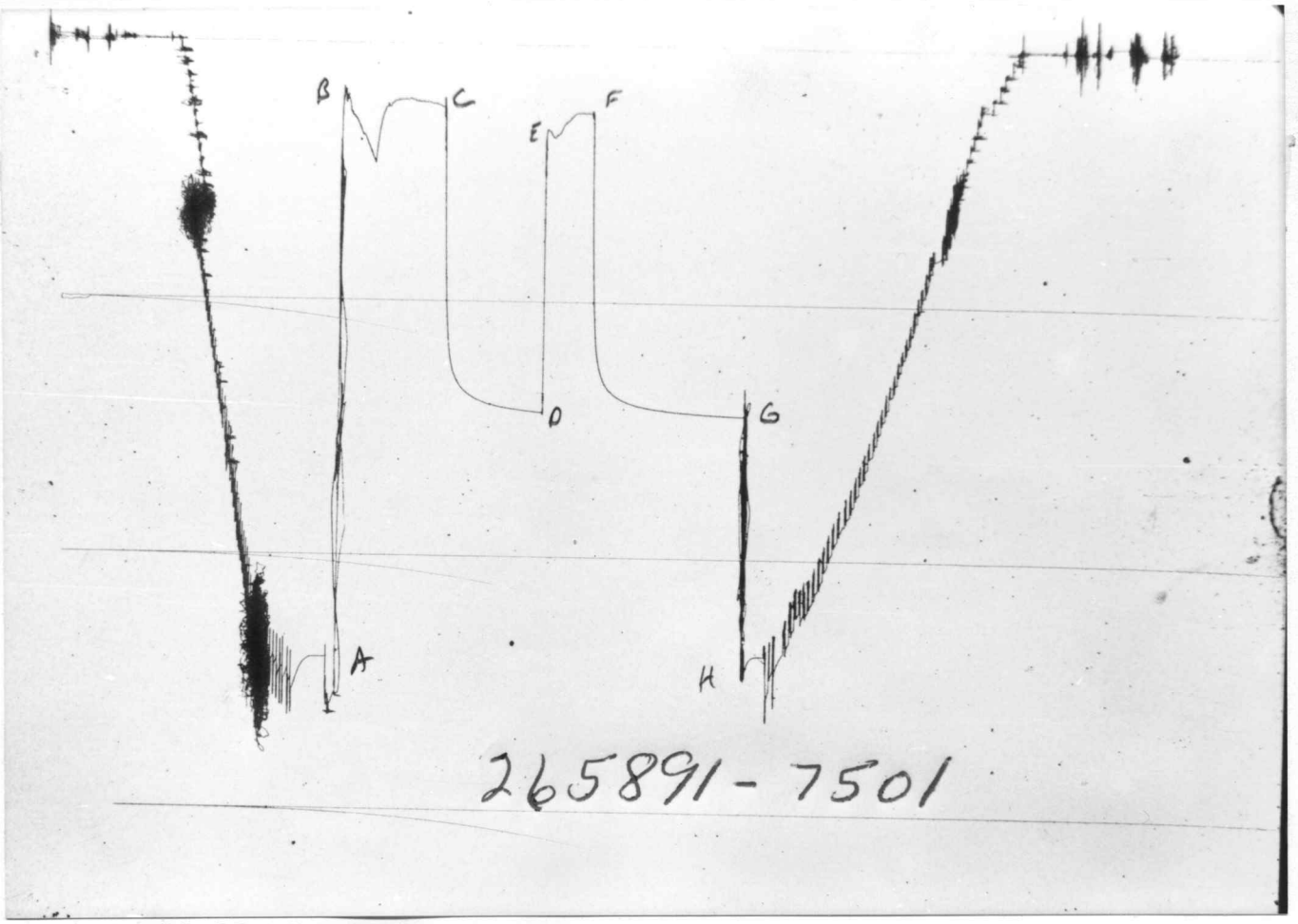
LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
26-30S-15W	WILMORE	KIOWA	KANSAS

DRBC

HALLIBURTON
SERVICES

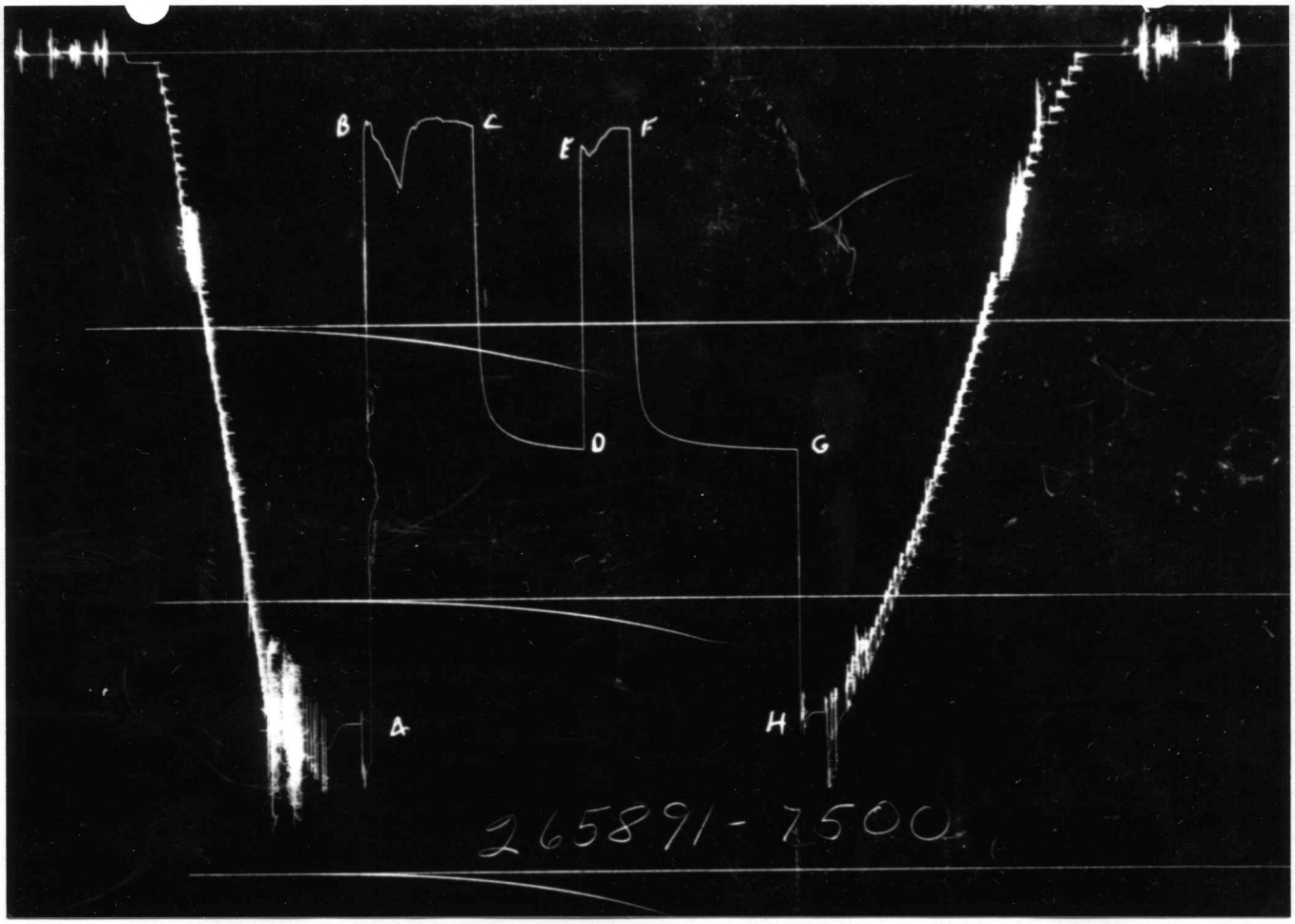
TICKET NO. 26589100
05-APR-82

FORMATION TESTING SERVICE REPORT



GAUGE NO: 7501 DEPTH: 4830.0 BLANKED OFF: NO

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2423.8				
B	INITIAL FIRST FLOW	216.5		60.0	61.4	F
C	FINAL FIRST FLOW	253.1				
C	INITIAL FIRST CLOSED-IN	253.1		60.0	59.8	C
D	FINAL FIRST CLOSED-IN	1449.4				
E	INITIAL SECOND FLOW	371.6		30.0	27.3	F
F	FINAL SECOND FLOW	273.1				
F	INITIAL SECOND CLOSED-IN	273.1		90.0	91.5	C
G	FINAL SECOND CLOSED-IN	1456.2				
H	FINAL HYDROSTATIC	2396.8				



GAUGE NO: 7500 DEPTH: 4901.0 BLANKED OFF: YES

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2469.4				
B	INITIAL FIRST FLOW	296.1		60.0	61.4	F
C	FINAL FIRST FLOW	284.8				
C	INITIAL FIRST CLOSED-IN	284.8		60.0	59.8	C
D	FINAL FIRST CLOSED-IN	1474.4				
E	INITIAL SECOND FLOW	386.4		30.0	27.3	F
F	FINAL SECOND FLOW	300.5				
F	INITIAL SECOND CLOSED-IN	300.5		90.0	91.5	C
G	FINAL SECOND CLOSED-IN	1480.7				
H	FINAL HYDROSTATIC	2441.2				

EQUIPMENT & HOLE DATA

FORMATION TESTED: MARMATON
NET PAY (ft): 17.0
GROSS TESTED FOOTAGE: 55.0
ALL DEPTHS MEASURED FROM: KB
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 2172
TOTAL DEPTH (ft): 4904.0
PACKER DEPTH(S) (ft): 4843, 4849
FINAL SURFACE CHOKE (in): 0.250
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.70
MUD VISCOSITY (sec): 50
ESTIMATED HOLE TEMP. (°F): 119
ACTUAL HOLE TEMP. (°F): 85 @ 4899.0 ft

TICKET NUMBER: 26589100

DATE: 3-25-82 TEST NO: 1

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: PRATT

TESTER: MARTIN

WITNESS: PALMER, GEOLOGIST

DRILLING CONTRACTOR: ABERCROMBIE RIG #6

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
PIT	@ °F	19000 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): 43.0 @ 60°F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

550 FREE GASSY OIL

MEASURED FROM TESTER VALVE

REMARKS:

SEE PRODUCTION TEST DATA SHEET

TYPE & SIZE MEASURING DEVICE: MERLA 2" & PITOT TUBE					TICKET NO: 26589100
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
0250	2				OPENED TOOL
0255	"				GAS TO SURFACE
0310	"	23	3500		
0315	"	19	3120		
0320	"	7	1930		
0325	"	2	1020		
0330	"	1	734		
0335	"	"	"		
0340	"	"	"		
0345	"	"	"		
0350	"	"	"		CLOSED TOOL
0450	"	"			OPENED TOOL WITH GAS TO
					SURFACE IMMEDIATELY
0455	"	"	"		
0457					SPRAY OF OIL, PULSATING
0520					CLOSED TOOL
0650					BY-PASS OPEN

TICKET NO: 26589100	GAUGE NO: 7501
CLOCK NO: 25710 HOUR: 12	DEPTH: 4830.0

HALLIBURTON SERVICES

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	216.5			
	2	10.0	332.7	116.1		
	3	20.0	476.7	144.1		
[1]	4	21.0	476.7	0.0		
	5	30.0	240.7	-236.0		
	6	40.0	223.2	-17.5		
	7	50.0	234.2	11.0		
C	8	61.4	253.1	18.9		
			FIRST CLOSED-IN			
C	1	0.0	253.1			
	2	4.0	1238.1	985.0	3.8	1.209
	3	8.0	1328.1	1075.1	7.1	0.939
	4	12.0	1365.1	1112.1	10.1	0.785
	5	16.0	1385.1	1132.0	12.7	0.685
	6	20.0	1400.4	1147.3	15.1	0.610
	7	24.0	1411.5	1158.5	17.3	0.551
	8	28.0	1418.8	1165.8	19.2	0.505
	9	32.0	1426.0	1172.9	21.0	0.466
	10	36.0	1431.2	1178.1	22.7	0.432
	11	40.0	1435.7	1182.7	24.2	0.404
	12	44.0	1438.7	1185.6	25.6	0.380
	13	48.0	1442.5	1189.4	27.0	0.358
	14	52.0	1445.7	1192.6	28.2	0.339
	15	56.0	1447.8	1194.7	29.3	0.322
D	16	59.8	1449.4	1196.3	30.3	0.307
			SECOND FLOW			
E	1	0.0	371.6			
	2	5.0	368.4	-3.2		
	3	10.0	329.5	-38.9		
	4	15.0	289.9	-39.6		
	5	20.0	271.9	-18.0		
	6	25.0	271.7	-0.2		
F	7	27.3	273.1	1.4		
			SECOND CLOSED-IN			
F	1	0.0	273.1			
	2	6.0	1310.8	1037.8	5.6	1.199
	3	12.0	1370.4	1097.3	10.6	0.923
	4	18.0	1397.0	1123.9	15.0	0.773
	5	24.0	1413.2	1140.1	18.9	0.671
	6	30.0	1423.1	1150.1	22.4	0.598
	7	36.0	1430.8	1157.7	25.6	0.540
	8	42.0	1435.7	1162.7	28.5	0.493

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
	9	48.0	1440.1	1167.1	31.2	0.454
	10	54.0	1443.9	1170.9	33.6	0.422
	11	60.0	1446.6	1173.5	35.8	0.394
	12	66.0	1448.8	1175.8	37.8	0.370
	13	72.0	1451.2	1178.1	39.7	0.349
	14	78.0	1452.9	1179.9	41.5	0.330
	15	84.0	1454.0	1180.9	43.1	0.313
G	16	91.5	1456.2	1183.1	45.0	0.295

LEGEND:
[1] MAXIMUM FLOW PRESSURE

REMARKS:

TICKET NO: 26589100	GAUGE NO: 7500
CLOCK NO: 2476 HOUR: 12	DEPTH: 4901.0

HALLIBURTON SERVICES

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	296.1			
	2	10.0	357.7	61.6		
	3	20.0	499.6	141.9		
[1]	4	21.0	513.7	14.1		
	5	30.0	287.7	-226.0		
	6	40.0	256.9	-30.8		
	7	50.0	267.9	11.0		
C	8	61.4	284.8	16.8		
		FIRST CLOSED-IN				
C	1	0.0	284.8			
	2	4.0	1244.8	960.1	3.8	1.214
	3	8.0	1347.3	1062.5	7.1	0.937
	4	12.0	1386.9	1102.2	10.1	0.786
	5	16.0	1410.4	1125.6	12.7	0.685
	6	20.0	1424.9	1140.1	15.1	0.610
	7	24.0	1436.4	1151.7	17.3	0.552
	8	28.0	1445.1	1160.4	19.2	0.504
	9	32.0	1451.0	1166.2	21.1	0.465
	10	36.0	1456.1	1171.3	22.7	0.433
	11	40.0	1460.1	1175.3	24.2	0.404
	12	44.0	1464.0	1179.2	25.7	0.379
	13	48.0	1467.4	1182.6	27.0	0.358
	14	52.0	1470.0	1185.3	28.2	0.339
	15	56.0	1472.6	1187.8	29.3	0.322
D	16	59.8	1474.4	1189.7	30.3	0.307
		SECOND FLOW				
E	1	0.0	386.4			
	2	5.0	398.8	12.4		
	3	10.0	354.3	-44.6		
	4	15.0	313.2	-41.1		
	5	20.0	296.2	-16.9		
	6	25.0	296.2	0.0		
F	7	27.3	300.5	4.3		
		SECOND CLOSED-IN				
F	1	0.0	300.5			
	2	6.0	1330.8	1030.3	5.6	1.201
	3	12.0	1395.3	1094.8	10.6	0.923
	4	18.0	1420.6	1120.1	14.9	0.774
	5	24.0	1436.7	1136.2	18.9	0.671
	6	30.0	1447.0	1146.5	22.4	0.597
	7	36.0	1454.9	1154.4	25.6	0.540
	8	42.0	1460.3	1159.8	28.5	0.493

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
		SECOND CLOSED-IN - CONTINUED				
	9	48.0	1464.0	1163.5	31.2	0.455
	10	54.0	1468.6	1168.1	33.6	0.422
	11	60.0	1471.1	1170.6	35.8	0.394
	12	66.0	1473.5	1173.0	37.9	0.370
	13	72.0	1475.3	1174.8	39.8	0.349
	14	78.0	1477.0	1176.5	41.5	0.330
	15	84.0	1478.5	1178.0	43.2	0.313
G	16	91.5	1480.7	1180.2	45.0	0.295

LEGEND:
[1] MAXIMUM FLOW PRESSURE

REMARKS:

TICKET NO. 26589100

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	4455.0	
4	FLEX WEIGHT.....	4.500	2.760	180.0	
50	IMPACT REVERSING SUB.....	5.625	2.000	1.0	4635.0
4	FLEX WEIGHT.....	4.500	2.760	180.0	
5	CROSSOVER.....	5.000	2.000	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	5.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	4822.0
80	AP RUNNING CASE.....	5.000	3.060	4.0	4830.0
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	4843.0
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	4849.0
20	FLUSH JOINT ANCHOR.....	5.000	2.370	4.0	
5	CROSSOVER.....	5.000	2.000	1.0	
4	FLEX WEIGHT.....	4.500	2.760	32.0	
5	CROSSOVER.....	5.000	2.000	1.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	10.0	
83	HT-500 TEMPERATURE CASE.....	5.000	2.250	1.0	4899.0
81	BLANKED-OFF RUNNING CASE.....	5.000	3.060	4.0	4901.0
	TOTAL DEPTH				4904.0

EQUIPMENT DATA