

LEGAL LOCATION SEC. - TWP. - RNG.	WELL NO.	TEST NO.	TESTED INTERVAL	COUNTY	ELK	STATE	LEASE OWNER/COMPANY NAME
2-31S-10E	1	2	1652.0 - 1695.0				JAMES F. RALSTIN

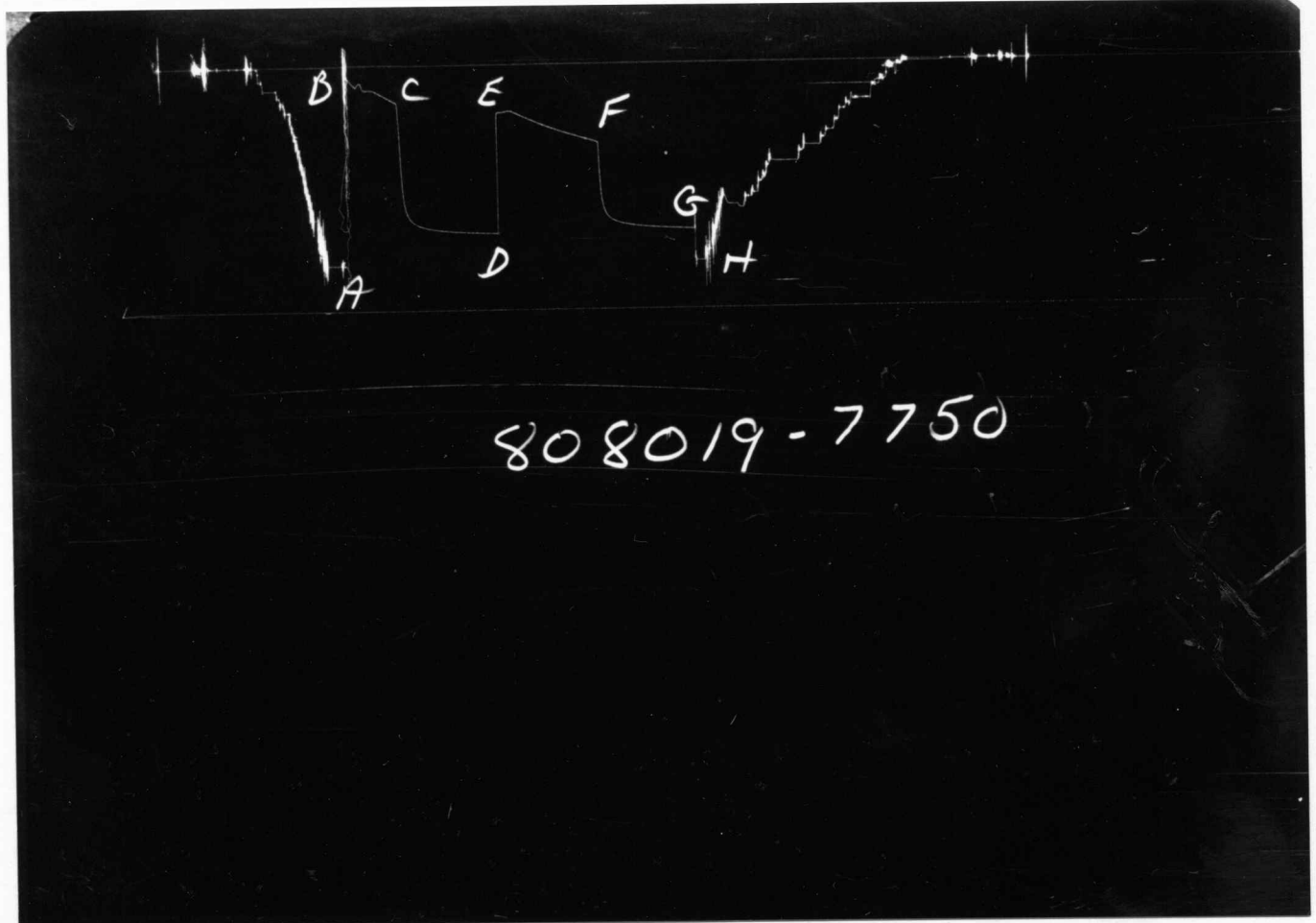
JAMES F. RALSTIN

LEASE : WILLIAMS

WELL NO. : 1

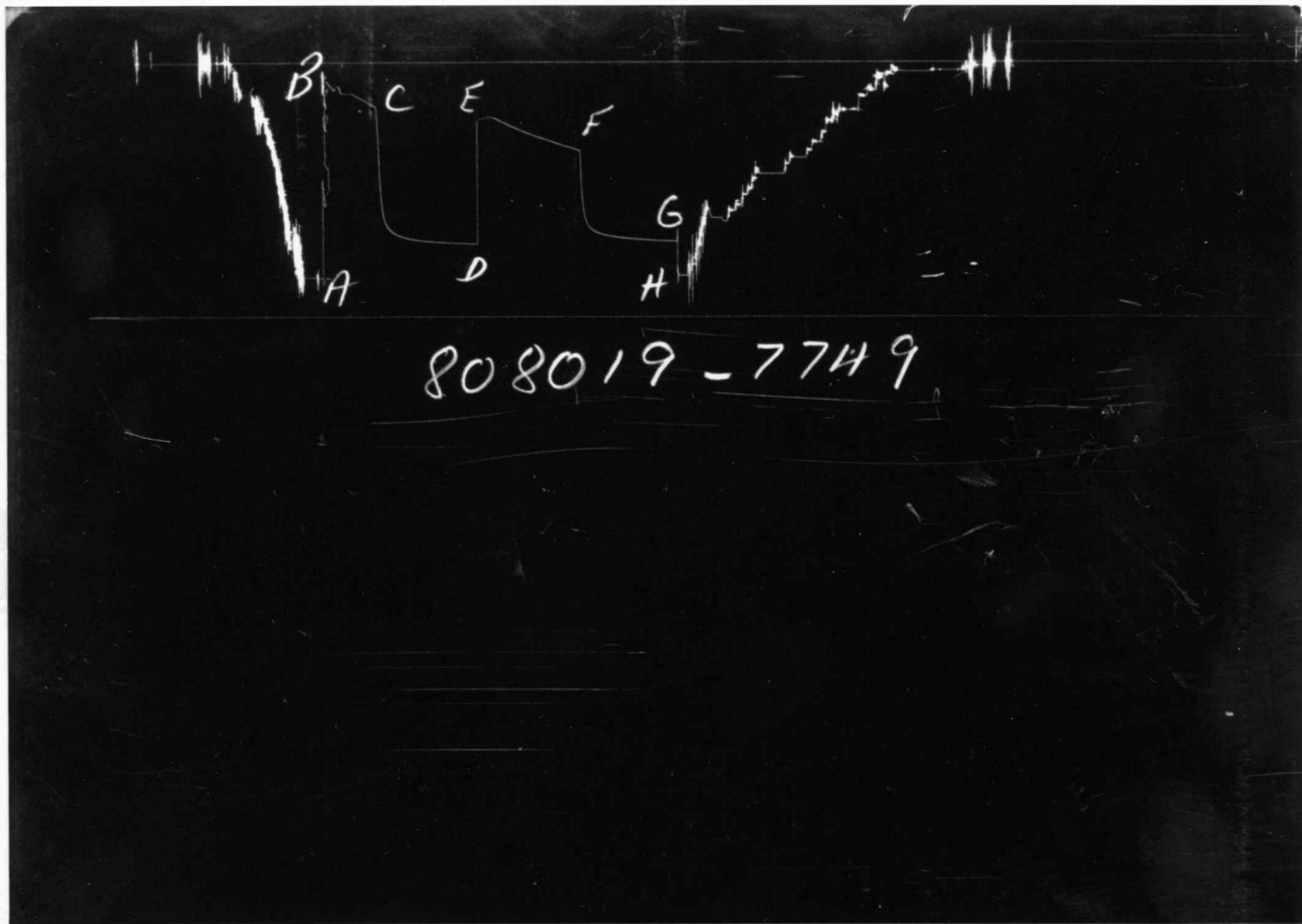
TEST NO. : 2

TICKET NO. 80801900
10-OCT-89
WINFIELD



GAUGE NO: 7750 DEPTH: 1639.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		809.3			
B	INITIAL FIRST FLOW		35.1			
C	FINAL FIRST FLOW		150.9	30.0	31.6	F
C	INITIAL FIRST CLOSED-IN		150.9			
D	FINAL FIRST CLOSED-IN		684.3	60.0	59.6	C
E	INITIAL SECOND FLOW		196.2			
F	FINAL SECOND FLOW		317.8	60.0	61.5	F
F	INITIAL SECOND CLOSED-IN		317.8			
G	FINAL SECOND CLOSED-IN		675.1	60.0	57.4	C
H	FINAL HYDROSTATIC		803.1			



GAUGE NO: 7749 DEPTH: 1692.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	847	843.4			
B	INITIAL FIRST FLOW	60	70.8			
C	FINAL FIRST FLOW	178	173.6	30.0	31.6	F
C	INITIAL FIRST CLOSED-IN	178	173.6			
D	FINAL FIRST CLOSED-IN	691	712.5	60.0	59.6	C
E	INITIAL SECOND FLOW	218	228.5			
F	FINAL SECOND FLOW	357	344.9	60.0	61.5	F
F	INITIAL SECOND CLOSED-IN	357	344.9			
G	FINAL SECOND CLOSED-IN	691	703.1	60.0	57.4	C
H	FINAL HYDROSTATIC	827	836.1			

EQUIPMENT & HOLE DATA

FORMATION TESTED: FORT SCOTT

NET PAY (ft):

GROSS TESTED FOOTAGE: 43.0

ALL DEPTHS MEASURED FROM: RKB

CASING PERFS. (ft):

HOLE OR CASING SIZE (in): 7.875

ELEVATION (ft):

TOTAL DEPTH (ft): 1695.0

PACKER DEPTH(S) (ft): 1646, 1652

FINAL SURFACE CHOKE (in):

BOTTOM HOLE CHOKE (in): 0.750

MUD WEIGHT (lb/gal): 9.30

MUD VISCOSITY (sec): 43

ESTIMATED HOLE TEMP. (°F): 87

ACTUAL HOLE TEMP. (°F): @ ft

TICKET NUMBER: 80801900

DATE: 10-2-89 TEST NO: 2

TYPE DST: OPEN HOLE

FIELD CAMP:

WINFIELD

TESTER: CHARLES D. CAPEHART

WITNESS: KENNETH JOHNSON

DRILLING CONTRACTOR:

EDCO DRILLING COMPANY

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:

365' OF GAS IN DRILL PIPE

970' OF HEAVY GAS CUT FREE OIL

310' OF MUD, HEAVY GAS CUT OIL

MEASURED FROM
TESTER VALVE

REMARKS:

TICKET NO: 80801900

CLOCK NO: 20681 HOUR: 12

GAUGE NO: 7750

DEPTH: 1639.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	35.1			
2	2.0	49.5	14.4		
3	4.0	65.8	16.3		
4	6.0	79.2	13.4		
5	8.0	74.6	-4.6		
6	10.0	72.5	-2.0		
7	12.0	97.9	25.4		
8	14.0	97.9	0.0		
9	16.0	97.9	0.0		
10	18.0	101.1	3.2		
11	20.0	108.8	7.8		
12	22.0	115.5	6.6		
13	24.0	122.7	7.2		
14	26.0	130.2	7.6		
15	28.0	138.4	8.2		
16	30.0	145.6	7.2		
C 17	31.6	150.9	5.3		
FIRST CLOSED-IN					
C 1	0.0	150.9			
2	1.0	277.6	126.7	1.0	1.510
3	2.0	452.4	301.6	1.9	1.220
4	3.0	539.7	388.9	2.8	1.057
5	4.0	579.8	428.9	3.6	0.948
6	5.0	602.8	452.0	4.3	0.865
7	6.0	616.1	465.2	5.1	0.795
8	7.0	625.4	474.6	5.7	0.741
9	8.0	632.5	481.7	6.4	0.695
10	9.0	638.9	488.1	7.0	0.655
11	10.0	644.4	493.5	7.6	0.619
12	12.0	651.1	500.2	8.7	0.559
13	14.0	656.5	505.6	9.7	0.512
14	16.0	660.5	509.7	10.6	0.473
15	18.0	663.7	512.8	11.4	0.440
16	20.0	666.4	515.5	12.2	0.412
17	22.0	669.0	518.1	13.0	0.386
18	24.0	670.9	520.0	13.6	0.364
19	26.0	672.1	521.2	14.3	0.345
20	28.0	673.6	522.7	14.9	0.327
21	30.0	675.4	524.6	15.4	0.312
22	35.0	678.0	527.1	16.6	0.279
23	40.0	680.0	529.1	17.6	0.253
24	45.0	682.0	531.2	18.5	0.231
25	50.0	683.2	532.3	19.3	0.212
26	55.0	684.5	533.6	20.1	0.197
D 27	59.6	684.3	533.4	20.6	0.185

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW					
E 1	0.0	196.2			
2	5.0	190.4	-5.8		
3	10.0	190.4	0.0		
4	15.0	206.9	16.5		
5	20.0	222.1	15.2		
6	25.0	236.6	14.5		
7	30.0	249.9	13.3		
8	35.0	262.3	12.4		
9	40.0	274.4	12.1		
10	45.0	283.7	9.3		
11	50.0	294.2	10.5		
12	55.0	304.2	10.0		
13	60.0	314.3	10.0		
F 14	61.5	317.8	3.6		
SECOND CLOSED-IN					
F 1	0.0	317.8			
2	1.0	510.5	192.6	1.0	1.971
3	2.0	563.2	245.4	2.0	1.675
4	3.0	590.4	272.6	2.9	1.507
5	4.0	606.2	288.4	3.8	1.384
6	5.0	615.6	297.7	4.7	1.294
7	6.0	623.7	305.9	5.6	1.221
8	7.0	629.2	311.3	6.5	1.157
9	8.0	633.8	316.0	7.4	1.102
10	9.0	637.9	320.1	8.2	1.053
11	10.0	641.8	323.9	9.0	1.014
12	12.0	646.4	328.6	10.6	0.944
13	14.0	650.1	332.2	12.2	0.883
14	16.0	652.7	334.9	13.6	0.834
15	18.0	655.3	337.4	15.1	0.790
16	20.0	657.7	339.8	16.4	0.753
17	22.0	660.2	342.4	17.8	0.719
18	24.0	661.3	343.5	19.1	0.689
19	26.0	663.1	345.2	20.3	0.661
20	28.0	664.3	346.4	21.5	0.636
21	30.0	665.3	347.5	22.7	0.613
22	35.0	668.3	350.5	25.4	0.563
23	40.0	669.9	352.0	28.0	0.522
24	45.0	671.9	354.0	30.3	0.487
25	50.0	673.5	355.7	32.5	0.457
26	55.0	675.1	357.3	34.6	0.430
G 27	57.4	675.1	357.3	35.5	0.419

REMARKS:

TICKET NO: 80801900

CLOCK NO: 17418 HOUR: 12

GAUGE NO: 7749

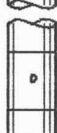
DEPTH: 1692.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	70.8			
2	2.0	72.3	1.6		
3	4.0	87.1	14.8		
4	6.0	101.7	14.6		
5	8.0	95.8	-5.8		
6	10.0	100.4	4.6		
7	12.0	121.3	20.9		
8	14.0	120.9	-0.4		
9	16.0	120.9	0.0		
10	18.0	124.9	4.1		
11	20.0	131.3	6.3		
12	22.0	139.0	7.7		
13	24.0	146.1	7.1		
14	26.0	153.5	7.4		
15	28.0	161.7	8.1		
16	30.0	169.1	7.4		
C 17	31.6	173.6	4.6		
FIRST CLOSED-IN					
C 1	0.0	173.6			
2	1.0	319.9	146.3	0.9	1.527
3	2.0	509.5	335.9	1.9	1.217
4	3.0	580.5	406.9	2.8	1.059
5	4.0	611.8	438.1	3.6	0.947
6	5.0	633.0	459.3	4.3	0.864
7	6.0	646.1	472.4	5.0	0.796
8	7.0	655.9	482.3	5.7	0.741
9	8.0	661.2	487.6	6.4	0.693
10	9.0	668.4	494.8	7.0	0.654
11	10.0	671.1	497.4	7.6	0.620
12	12.0	677.9	504.3	8.7	0.560
13	14.0	683.7	510.0	9.7	0.512
14	16.0	687.6	513.9	10.6	0.473
15	18.0	690.5	516.9	11.5	0.440
16	20.0	694.3	520.7	12.2	0.411
17	22.0	696.2	522.5	13.0	0.386
18	24.0	697.9	524.3	13.6	0.364
19	26.0	700.2	526.5	14.3	0.345
20	28.0	701.7	528.1	14.8	0.328
21	30.0	702.6	529.0	15.4	0.312
22	35.0	705.9	532.3	16.6	0.279
23	40.0	707.6	533.9	17.6	0.253
24	45.0	709.5	535.8	18.6	0.231
25	50.0	710.5	536.9	19.3	0.212
26	55.0	711.9	538.2	20.1	0.197
D 27	59.6	712.5	538.8	20.6	0.185

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW					
E 1	0.0	228.5			
2	5.0	217.6	-10.9		
3	10.0	215.2	-2.5		
4	15.0	231.6	16.4		
5	20.0	248.2	16.5		
6	25.0	262.5	14.4		
7	30.0	275.6	13.1		
8	35.0	287.7	12.1		
9	40.0	299.4	11.7		
10	45.0	309.8	10.4		
11	50.0	321.7	11.9		
12	55.0	332.0	10.3		
13	60.0	342.9	10.9		
F 14	61.5	344.9	2.1		
SECOND CLOSED-IN					
F 1	0.0	344.9			
2	1.0	530.3	185.3	1.0	1.968
3	2.0	588.0	243.1	2.0	1.672
4	3.0	619.0	274.0	2.9	1.500
5	4.0	634.9	290.0	3.9	1.383
6	5.0	646.5	301.6	4.7	1.294
7	6.0	654.3	309.4	5.7	1.216
8	7.0	659.4	314.5	6.5	1.155
9	8.0	662.9	318.0	7.3	1.103
10	9.0	666.6	321.6	8.2	1.054
11	10.0	670.0	325.0	9.1	1.012
12	12.0	674.5	329.5	10.6	0.942
13	14.0	677.8	332.9	12.2	0.884
14	16.0	681.1	336.2	13.7	0.833
15	18.0	683.4	338.4	15.1	0.790
16	20.0	685.1	340.2	16.5	0.752
17	22.0	687.1	342.1	17.8	0.718
18	24.0	689.1	344.2	19.1	0.688
19	26.0	690.5	345.6	20.3	0.661
20	28.0	691.8	346.8	21.5	0.636
21	30.0	692.8	347.9	22.7	0.613
22	35.0	695.7	350.7	25.4	0.563
23	40.0	697.8	352.9	28.0	0.522
24	45.0	699.4	354.4	30.3	0.487
25	50.0	701.3	356.4	32.5	0.457
26	55.0	702.6	357.7	34.6	0.430
G 27	57.4	703.1	358.2	35.5	0.419

REMARKS:

TICKET NO. 80801900

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	1255.0	
3		DRILL COLLARS.....	6.250	2.250	233.0	
50		IMPACT REVERSING SUB.....	5.750	2.750	1.0	1488.0
3		DRILL COLLARS.....	6.250	2.250	133.0	
5		CROSSOVER.....	5.000	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	1637.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	1639.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	1646.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	1652.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	1.0	
5		CROSSOVER.....	5.000	2.750	2.0	
3		DRILL COLLARS.....	6.250	2.250	29.0	
5		CROSSOVER.....	5.000	2.750	2.0	
20		FLUSH JOINT ANCHOR.....	5.000	2.370	3.0	
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	1692.0
TOTAL DEPTH					1695.0	

EQUIPMENT DATA