

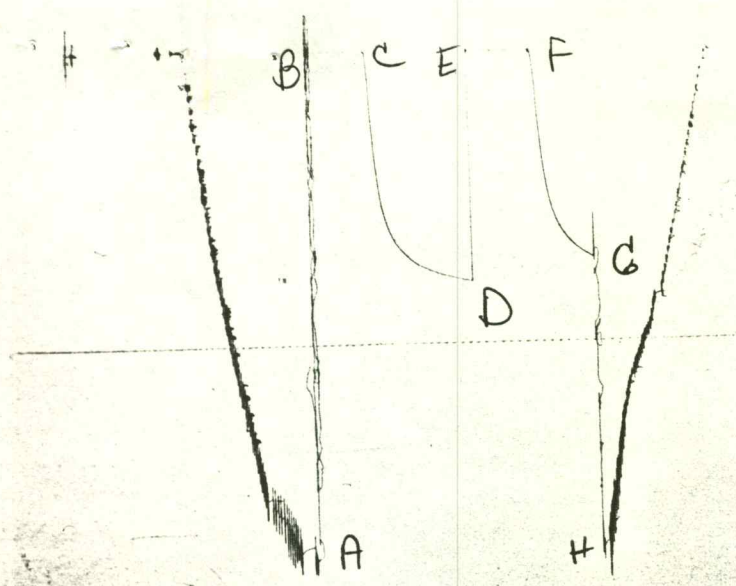
LYND "B" 1 WELL NO. 1 TEST NO. 1
 LEASE NAME
 LEGAL LOCATION 33-11-21 FIELD AREA N.W. ELLIS
 SEC. - TYP. - RMG. NW-SE-NW
 3563.1 - 3620.1 TESTED INTERVAL
 DONALD C. SLAWSON LEASE OWNER/COMPANY NAME
 TREGO COUNTY STATE KANSAS PW/IC



TICKET NO. 53925900
 13-DEC-82
 HAYS

RECEIVED
 JAN 17 '83
 GREAT BEND
 Division Office

FORMATION TESTING SERVICE REPORT

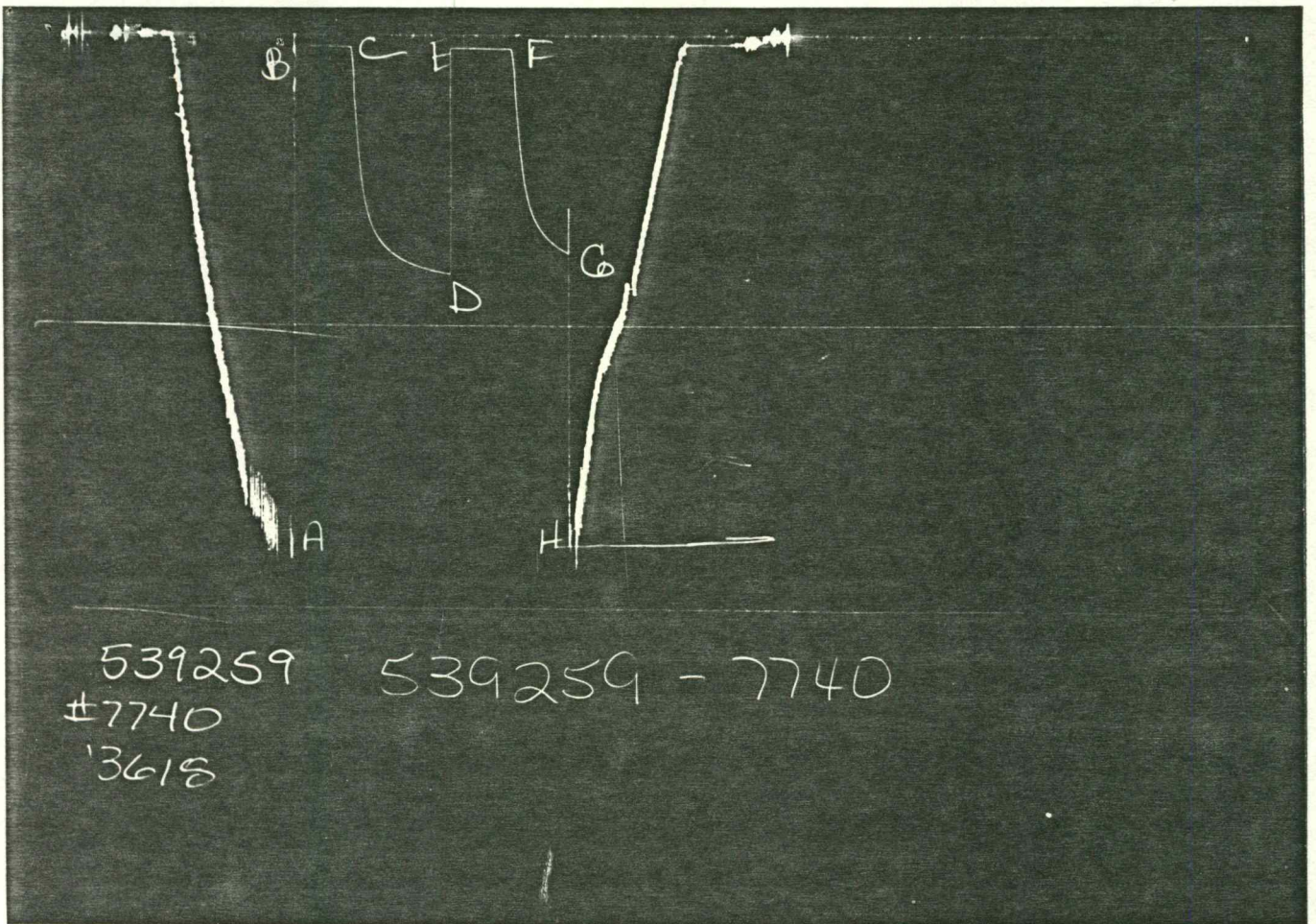


539259
 # 7733
 1 3557

539259-7733

GAUGE NO: 7733 DEPTH: 3557.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1696.4			
B	INITIAL FIRST FLOW		8.2			
C	FINAL FIRST FLOW		11.3	30.0	32.1	F
C	INITIAL FIRST CLOSED-IN		11.3			
D	FINAL FIRST CLOSED-IN		801.7	60.0	57.9	C
E	INITIAL SECOND FLOW		15.0			
F	FINAL SECOND FLOW		17.0	30.0	34.6	F
F	INITIAL SECOND CLOSED-IN		17.0			
G	FINAL SECOND CLOSED-IN		730.0	30.0	33.2	C
H	FINAL HYDROSTATIC		1690.9			



GAUGE NO: 7740 DEPTH: 3616.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	1732	1723.8			
B	INITIAL FIRST FLOW	35	39.0			
C	FINAL FIRST FLOW	35	42.3	30.0	32.1	F
C	INITIAL FIRST CLOSED-IN	35	42.3			
D	FINAL FIRST CLOSED-IN	838	821.7	60.0	57.9	C
E	INITIAL SECOND FLOW	35	50.4			
F	FINAL SECOND FLOW	35	47.6	30.0	34.6	F
F	INITIAL SECOND CLOSED-IN	35	47.6			
G	FINAL SECOND CLOSED-IN	758	749.6	30.0	33.2	C
H	FINAL HYDROSTATIC	1697	1714.5			

EQUIPMENT & HOLE DATA

FORMATION TESTED: LANSING

NET PAY (ft): 2.0

GROSS TESTED FOOTAGE: 57.0

ALL DEPTHS MEASURED FROM: KELLY BUSHING

CASING PERFS. (ft): _____

HOLE OR CASING SIZE (in): 7.875

ELEVATION (ft): 2292

TOTAL DEPTH (ft): 3620.0

PACKER DEPTH(S) (ft): 3563

FINAL SURFACE CHOKE (in): 0.250

BOTTOM HOLE CHOKE (in): 0.750

MUD WEIGHT (lb/gal): 9.30

MUD VISCOSITY (sec): 39

ESTIMATED HOLE TEMP. (°F): _____

ACTUAL HOLE TEMP. (°F): 100 @ 3615.0 ft

TICKET NUMBER: 53925900

DATE: 12-8-82 TEST NO: 1

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: HAYS

TESTER: D. MORGAN

WITNESS: R. ROBBA

DRILLING CONTRACTOR: SLAWSON #1

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm
_____	@ _____ °F	_____ ppm

SAMPLER DATA

Pstg 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 DRILLING MUD

MEASURED FROM TESTER VALVE

REMARKS:

TICKET NO: 53925900

CLOCK NO: 28254 HOUR: 12



GAUGE NO: 7733

DEPTH: 3557.0

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	8.2			
2	5.0	9.3	1.1		
3	10.0	9.3	0.0		
4	15.0	9.3	0.0		
5	20.0	10.4	1.0		
6	25.0	11.2	0.8		
7	30.0	12.0	0.8		
C 8	32.1	11.3	-0.7		
FIRST CLOSED-IN					
C 1	0.0	11.3			
2	4.0	309.0	297.7	3.5	0.957
3	8.0	541.2	529.9	6.4	0.698
4	12.0	628.1	616.8	8.7	0.564
5	16.0	674.7	663.4	10.7	0.478
6	20.0	704.5	693.2	12.3	0.415
7	24.0	728.3	717.0	13.7	0.368
8	28.0	746.0	734.7	14.9	0.331
9	32.0	757.3	746.0	16.0	0.302
10	36.0	767.9	756.6	17.0	0.276
11	40.0	777.0	765.8	17.8	0.256
12	44.0	784.0	772.7	18.6	0.238
13	48.0	790.1	778.8	19.2	0.222
14	52.0	795.7	784.4	19.8	0.209
15	56.0	800.3	789.0	20.4	0.197
D 16	57.9	801.7	790.4	20.6	0.191
SECOND FLOW					
E 1	0.0	15.0			
2	5.0	16.1	1.1		
3	10.0	16.1	0.0		
4	15.0	16.1	0.0		
5	20.0	16.7	0.6		
6	25.0	16.7	0.0		
7	30.0	17.3	0.6		
F 8	34.6	17.0	-0.3		
SECOND CLOSED-IN					
F 1	0.0	17.0			
2	2.0	97.0	80.0	2.0	1.528
3	4.0	254.4	237.4	3.8	1.249
4	6.0	394.1	377.1	5.5	1.084
5	8.0	485.1	468.1	7.1	0.970
6	10.0	546.0	529.0	8.7	0.883
7	12.0	585.3	568.3	10.2	0.816
8	14.0	616.6	599.6	11.6	0.760

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
9	16.0	637.7	620.8	12.9	0.713
10	18.0	655.2	638.2	14.2	0.672
11	20.0	670.8	653.8	15.4	0.636
12	22.0	682.7	665.7	16.5	0.605
13	24.0	693.8	676.8	17.6	0.577
14	26.0	703.4	686.4	18.7	0.552
15	28.0	711.5	694.5	19.7	0.529
16	30.0	719.0	702.1	20.7	0.508
17	32.0	726.4	709.5	21.6	0.489
G 18	33.2	730.0	713.0	22.2	0.478

REMARKS:

TICKET NO: 53925900

CLOCK NO: 28268 HOUR: 12
















GAUGE NO: 7740

DEPTH: 3616.0

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	39.0		
	2	5.0	38.9	-0.1	
	3	10.0	39.4	0.5	
	4	15.0	40.5	1.1	
	5	20.0	40.8	0.4	
	6	25.0	41.6	0.8	
	7	30.0	42.2	0.6	
C	8	32.1	42.3	0.1	
FIRST CLOSED-IN					
C	1	0.0	42.3		
	2	4.0	375.2	332.9	3.5 0.960
	3	8.0	572.1	529.8	6.4 0.701
	4	12.0	654.7	612.3	8.7 0.565
	5	16.0	701.0	658.6	10.7 0.477
	6	20.0	729.2	686.9	12.3 0.415
	7	24.0	750.1	707.8	13.7 0.368
	8	28.0	766.4	724.0	14.9 0.331
	9	32.0	778.7	736.4	16.0 0.301
	10	36.0	788.8	746.5	17.0 0.277
	11	40.0	796.9	754.6	17.8 0.256
	12	44.0	804.2	761.9	18.5 0.238
	13	48.0	810.2	767.9	19.2 0.222
	14	52.0	815.9	773.6	19.8 0.209
	15	56.0	820.5	778.2	20.4 0.196
D	16	57.9	821.7	779.3	20.6 0.191
SECOND FLOW					
E	1	0.0	50.4		
	2	5.0	46.4	-4.1	
	3	10.0	46.5	0.1	
	4	15.0	47.2	0.7	
	5	20.0	47.2	0.0	
	6	25.0	47.8	0.6	
	7	30.0	48.2	0.4	
F	8	34.6	47.6	-0.6	
SECOND CLOSED-IN					
F	1	0.0	47.6		
	2	2.0	141.9	94.3	2.0 1.533
	3	4.0	301.6	254.0	3.8 1.245
	4	6.0	426.7	379.1	5.5 1.085
	5	8.0	514.0	466.4	7.1 0.970
	6	10.0	571.1	523.5	8.7 0.884
	7	12.0	610.4	562.8	10.2 0.817
	8	14.0	638.2	590.6	11.6 0.760

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
	9	16.0	660.2	612.6	12.9 0.712
	10	18.0	677.5	629.8	14.2 0.673
	11	20.0	691.9	644.3	15.4 0.637
	12	22.0	704.6	657.0	16.5 0.605
	13	24.0	715.0	667.3	17.6 0.577
	14	26.0	723.9	676.3	18.7 0.552
	15	28.0	732.0	684.3	19.7 0.529
	16	30.0	739.4	691.8	20.7 0.508
	17	32.0	746.0	698.4	21.6 0.489
G	18	33.2	749.6	702.0	22.2 0.478

REMARKS:

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	3420.0	
50		IMPACT REVERSING SUB.....	5.750	2.750	1.0	3420.0
1		DRILL PIPE.....	4.500	3.826	124.0	
12		DUAL CIP VALVE.....	5.000	0.870	6.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	3555.0
80		AP RUNNING CASE.....	5.000	3.060	4.0	3557.0
70		OPEN HOLE PACKER.....	6.750	1.520	6.0	3563.0
5		CROSSOVER.....	5.000	3.840	1.0	
1		DRILL PIPE.....	4.500	3.826	31.0	
5		CROSSOVER.....	5.000	3.840	1.0	
20		FLUSH JOINT ANCHOR.....	5.000	3.840	15.0	
83		HT-500 TEMPERATURE CASE.....	5.000		1.5	3615.0
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	3616.0

TOTAL DEPTH

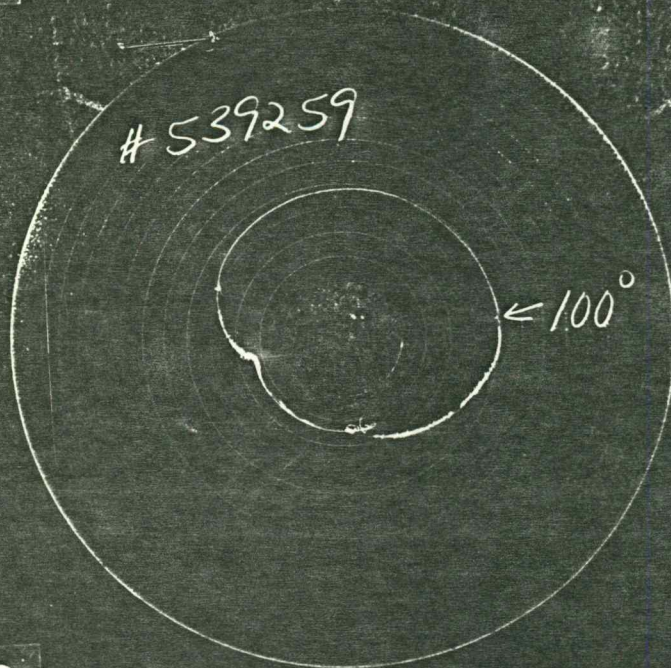
3620.0

EQUIPMENT DATA

TEMPERATURE

RECORDER

CHART



10° each circle

Indicated Flow Capacity

$$kh = \frac{1637 Q_g T}{m}$$

md-ft

Average Effective Permeability

$$k = \frac{kh}{h}$$

md

Skin Factor

$$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi \mu c_f r_w^2} + 3.23 \right] \text{ ---}$$

Damage Ratio

$$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87 mS} \text{ ---}$$

Indicated Flow Rate (Maximum)

$$AOF_1 = \frac{Q_g m(P^*)}{m(P^*) - m(P_f)} \text{ MCFD}$$

Indicated Flow Rate (Minimum)

$$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}} \text{ MCFD}$$

Approx. Radius of Investigation

$$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_f}} \text{ ft}$$



TICKET NO. 53926000
 13-DEC-82
 HAYS

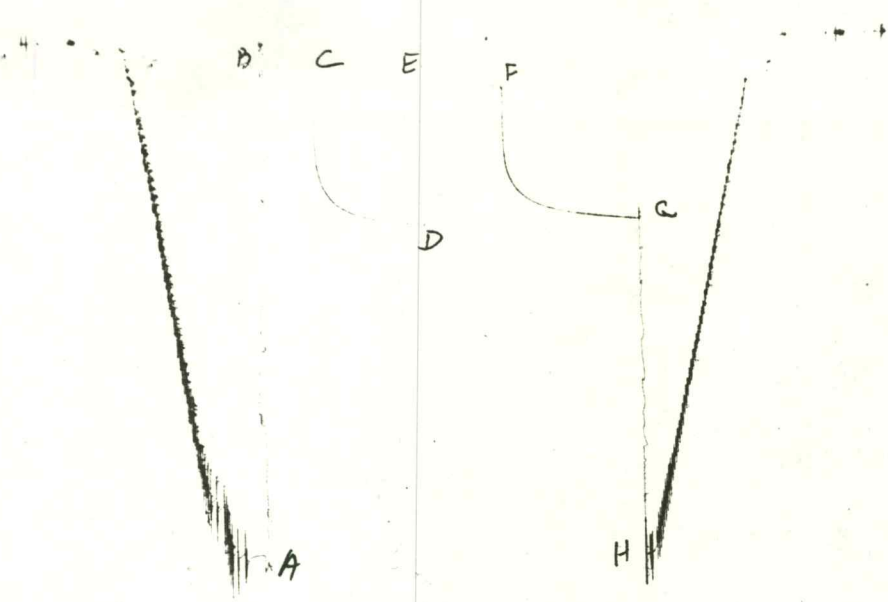
RECEIVED

JAN 17 '83

General Manager
 Division Office

FORMATION TESTING SERVICE REPORT

LYND "B" LEASE NAME	1 WELL NO.	2 TEST NO.	3656.1 - 3687.1 TESTED INTERVAL	DONALD C. SLAYSON LEASE OWNER/COMPANY NAME
33-11-21 SEC. - TWP. - RNC.			N.W. - S.E. - N.W.	
		FIELD AREA	N.E. ELLIS	
			COUNTY	
			TREGO	
			STATE	KANSAS SN-DR

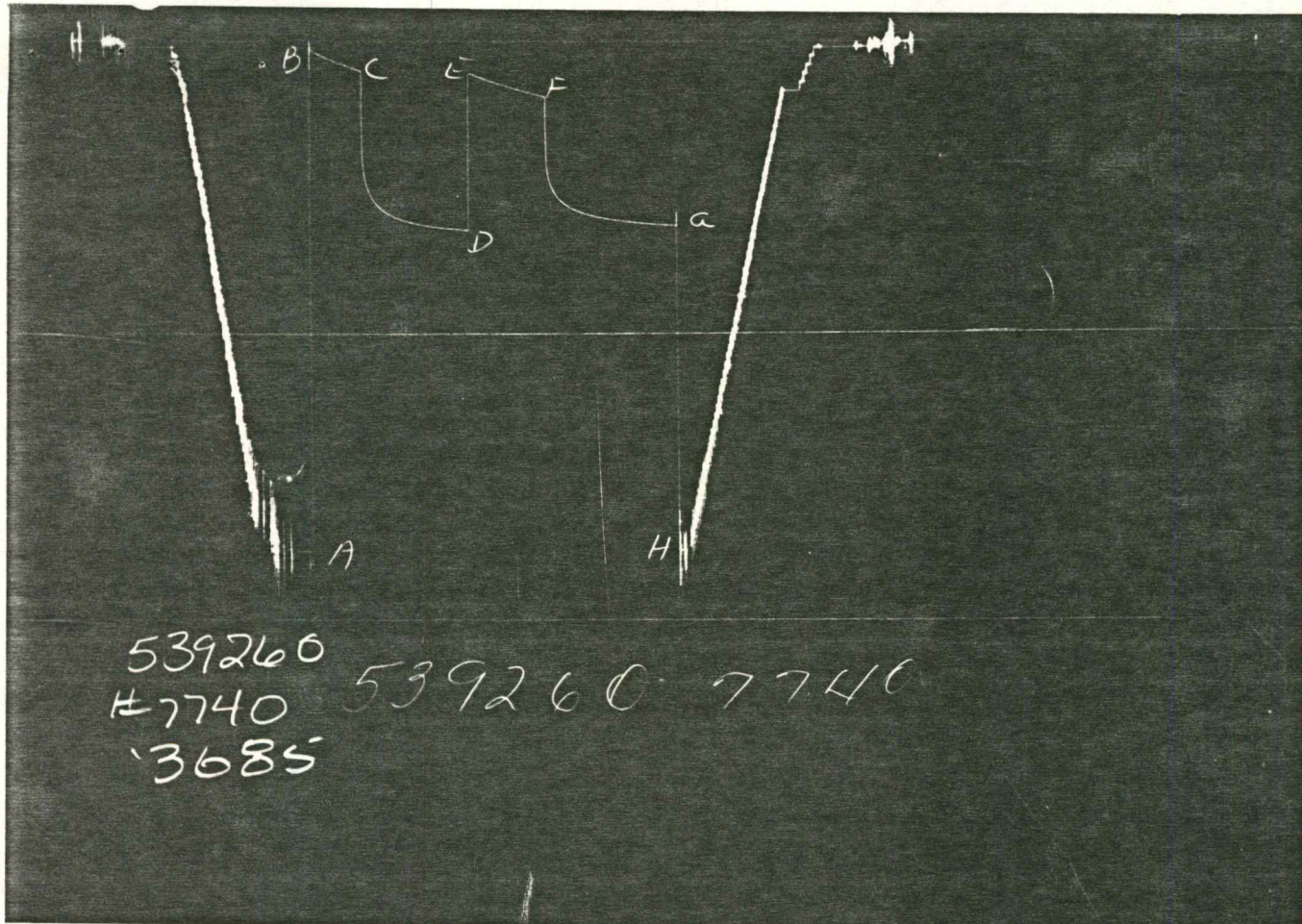


539260
7733
3650

53 9260- 7733

GAUGE NO: 7733 DEPTH: 3650.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1754.2			
B	INITIAL FIRST FLOW		14.0			
C	FINAL FIRST FLOW		86.7	30.0	29.6	F
C	INITIAL FIRST CLOSED-IN		86.7			
D	FINAL FIRST CLOSED-IN		646.2	60.0	61.0	C
E	INITIAL SECOND FLOW		97.4			
F	FINAL SECOND FLOW		177.5	45.0	44.3	F
F	INITIAL SECOND CLOSED-IN		177.5			
G	FINAL SECOND CLOSED-IN		633.7	75.0	75.2	C
H	FINAL HYDROSTATIC		1759.1			



GAUGE NO: 7740 DEPTH: 3685.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	1811	1768.2			
B	INITIAL FIRST FLOW	18	30.3			
C	FINAL FIRST FLOW	90	102.8	30.0	29.6	F
C	INITIAL FIRST CLOSED-IN	90	102.8			
D	FINAL FIRST CLOSED-IN	666	648.2	60.0	61.0	C
E	INITIAL SECOND FLOW	108	113.5			
F	FINAL SECOND FLOW	198	188.9	45.0	44.3	F
F	INITIAL SECOND CLOSED-IN	198	188.9			
G	FINAL SECOND CLOSED-IN	648	632.7	75.0	75.2	C
H	FINAL HYDROSTATIC	1802	1763.0			

EQUIPMENT & HOLE DATA

FORMATION TESTED: LANSING 70'-90'
 NET PAY (ft): 7.0
 GROSS TESTED FOOTAGE: 31.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 2264
 TOTAL DEPTH (ft): 3687.0
 PACKER DEPTH(S) (ft): 3656
 FINAL SURFACE CHOKE (in): 0.250
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 9.00
 MUD VISCOSITY (sec): 41
 ESTIMATED HOLE TEMP. (°F): _____
 ACTUAL HOLE TEMP. (°F): 100 @ 3682.0 ft

TICKET NUMBER: 53926000
 DATE: 12-8-82 TEST NO: 2
 TYPE DST: OPEN HOLE
 HALLIBURTON CAMP: HAYS
 TESTER: D. MORGAN
 WITNESS: R. ROBBA
 DRILLING CONTRACTOR: SLAWSON #1

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
<u>RECOVERY WATER</u>	<u> </u> @ <u> </u> °F	<u>85000</u> ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

SAMPLER DATA

Pstg 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:

465' OF MUDDY SALT WATER (20% MUD-80% WATER)

MEASURED FROM TESTER VALVE

REMARKS:

TICKET NO: 53926000
 CLOCK NO: 28254 HOUR: 12



GAUGE NO: 7733
 DEPTH: 3650.0

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	14.0			
2	5.0	25.2	11.2		
3	10.0	40.0	14.8		
4	15.0	53.3	13.2		
5	20.0	64.6	11.4		
6	25.0	76.6	11.9		
C 7	29.6	86.7	10.1		
FIRST CLOSED-IN					
C 1	0.0	86.7			
2	4.0	500.3	413.6	3.5	0.927
3	8.0	546.6	459.9	6.3	0.671
4	12.0	573.0	486.4	8.5	0.540
5	16.0	589.7	503.0	10.4	0.455
6	20.0	601.6	514.9	11.9	0.394
7	24.0	611.3	524.6	13.3	0.349
8	28.0	618.7	532.0	14.4	0.313
9	32.0	624.2	537.5	15.4	0.284
10	36.0	628.8	542.1	16.2	0.261
11	40.0	633.3	546.6	17.0	0.241
12	44.0	636.5	549.9	17.7	0.223
13	48.0	639.6	552.9	18.3	0.209
14	52.0	641.7	555.0	18.9	0.196
15	56.0	643.9	557.3	19.4	0.184
D 16	61.0	646.2	559.5	19.9	0.172
SECOND FLOW					
E 1	0.0	97.4			
2	6.0	106.3	8.9		
3	12.0	120.3	14.1		
4	18.0	132.8	12.5		
5	24.0	144.1	11.3		
6	30.0	154.9	10.8		
7	36.0	164.9	10.0		
8	42.0	174.3	9.3		
F 9	44.3	177.5	3.3		
SECOND CLOSED-IN					
F 1	0.0	177.5			
2	5.0	508.6	331.1	4.7	1.201
3	10.0	547.4	369.9	8.8	0.923
4	15.0	569.7	392.1	12.5	0.772
5	20.0	583.6	406.0	15.7	0.671
6	25.0	593.8	416.3	18.7	0.597
7	30.0	601.7	424.2	21.3	0.540
8	35.0	608.1	430.6	23.8	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	40.0	612.6	435.1	26.0	0.454
10	45.0	617.0	439.5	28.0	0.422
11	50.0	620.7	443.2	29.8	0.394
12	55.0	624.0	446.5	31.5	0.370
13	60.0	626.0	448.5	33.1	0.348
14	65.0	629.1	451.6	34.6	0.330
15	70.0	631.3	453.8	35.9	0.313
G 16	75.2	633.7	456.1	37.3	0.297

REMARKS:

TICKET NO: 53926000

GAUGE NO: 7740











CLOCK NO: 28268 HOUR: 12



DEPTH: 3685.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$	REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$	
FIRST FLOW						SECOND CLOSED-IN - CONTINUED						
B	1	0.0	30.3			9	40.0	613.0	424.1	25.9	0.455	
	2	5.0	45.3	15.0		10	45.0	617.0	428.1	28.0	0.422	
	3	10.0	58.9	13.6		11	50.0	621.0	432.1	29.8	0.394	
	4	15.0	71.4	12.5		12	55.0	623.6	434.7	31.5	0.370	
	5	20.0	82.0	10.6		13	60.0	626.1	437.2	33.1	0.349	
	6	25.0	92.9	10.9		14	65.0	628.8	439.9	34.6	0.330	
C	7	29.6	102.8	9.9		G	15	70.0	630.7	441.8	35.9	0.313
							16	75.2	632.7	443.8	37.3	0.297
FIRST CLOSED-IN												
C	1	0.0	102.8									
	2	4.0	509.5	406.7	3.5	0.925						
	3	8.0	554.8	451.9	6.3	0.672						
	4	12.0	578.4	475.6	8.5	0.540						
	5	16.0	594.5	491.7	10.4	0.455						
	6	20.0	606.6	503.8	11.9	0.394						
	7	24.0	615.5	512.7	13.3	0.349						
	8	28.0	621.9	519.1	14.4	0.314						
	9	32.0	627.6	524.8	15.4	0.285						
	10	36.0	632.1	529.3	16.2	0.261						
	11	40.0	635.7	532.8	17.0	0.241						
	12	44.0	639.1	536.3	17.7	0.223						
	13	48.0	641.7	538.9	18.3	0.209						
	14	52.0	644.2	541.4	18.9	0.196						
	15	56.0	646.4	543.6	19.4	0.184						
D	16	61.0	648.2	545.3	19.9	0.172						
SECOND FLOW												
E	1	0.0	113.5									
	2	6.0	121.6	8.1								
	3	12.0	134.8	13.2								
	4	18.0	146.6	11.7								
	5	24.0	157.0	10.4								
	6	30.0	167.2	10.2								
	7	36.0	176.5	9.3								
	8	42.0	185.2	8.6								
F	9	44.3	188.9	3.7								
SECOND CLOSED-IN												
F	1	0.0	188.9									
	2	5.0	515.3	326.4	4.7	1.198						
	3	10.0	551.8	363.0	8.8	0.923						
	4	15.0	572.0	383.1	12.5	0.772						
	5	20.0	585.2	396.3	15.7	0.671						
	6	25.0	595.2	406.4	18.7	0.597						
	7	30.0	602.3	413.4	21.3	0.539						
	8	35.0	608.2	419.3	23.8	0.493						

REMARKS:

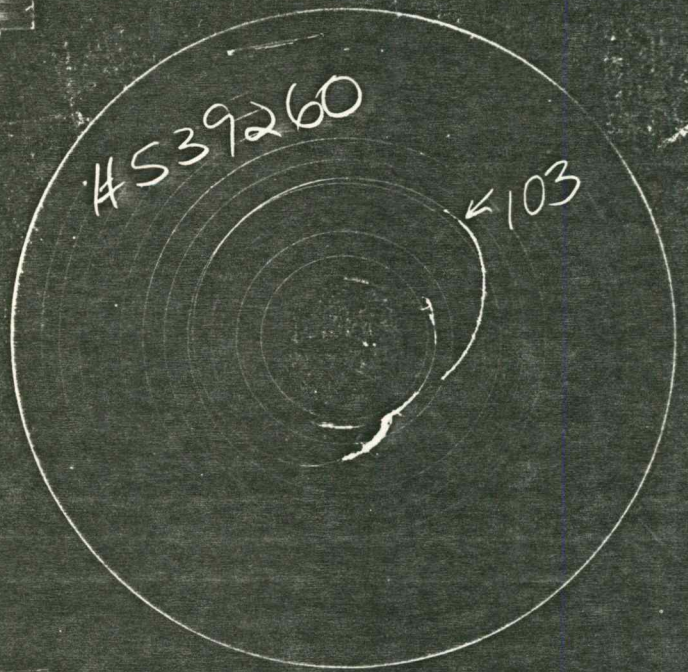
		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	3513.0	
50		IMPACT REVERSING SUB.....	5.750	2.750	1.0	3513.0
1		DRILL PIPE.....	4.500	3.826	124.0	
12		DUAL CIP VALVE.....	5.000	0.870	6.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	3648.0
80		AP RUNNING CASE.....	5.000	3.060	4.0	3650.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	3656.0
20		FLUSH JOINT ANCHOR.....	5.000	3.840	25.0	
83		HT-500 TEMPERATURE CASE.....	5.000		1.5	3682.0
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	3685.0
TOTAL DEPTH						3687.0

EQUIPMENT DATA

TEMPERATURE

RECORDER

CHART



10° each circle

Indicated Flow Capacity

$$kh = \frac{1637 Q_g T}{m}$$

md-ft

Average Effective Permeability

$$k = \frac{kh}{h}$$

md

Skin Factor

$$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi \mu c_t r_w^2} + 3.23 \right] \text{ ---}$$

Damage Ratio

$$DR = \frac{m(P^*) - m(P_f)}{m(P^*) - m(P_f) - 0.87 mS} \text{ ---}$$

Indicated Flow Rate (Maximum)

$$AOF_1 = \frac{Q_g m(P^*)}{m(P^*) - m(P_f)} \text{ MCFD}$$

Indicated Flow Rate (Minimum)

$$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_f)}} \text{ MCFD}$$

Approx. Radius of Investigation

$$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_t}} \text{ ft}$$

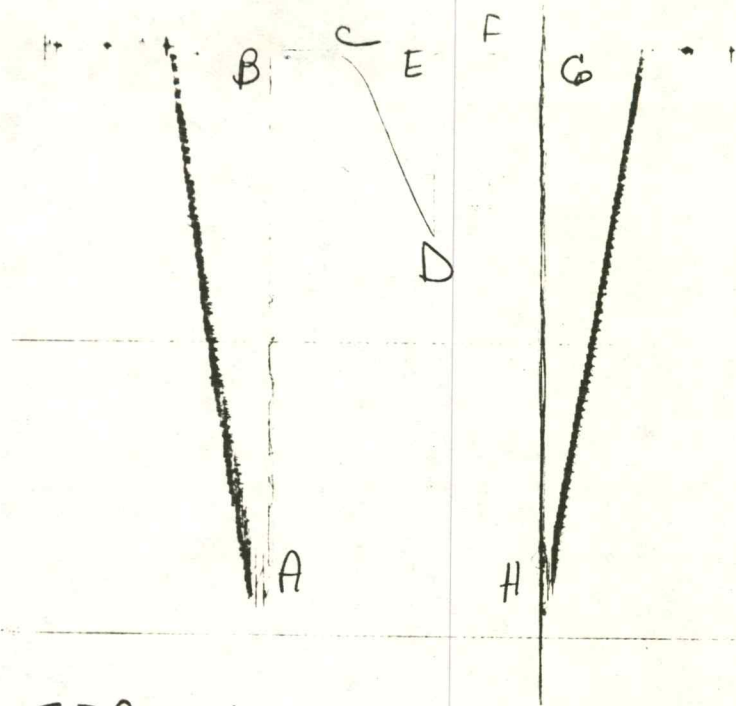


TICKET NO. 53926100
13-DEC-82
HAYS

RECEIVED
JAN 17 '83
GREAT BEND
Division Office

FORMATION TESTING SERVICE REPORT

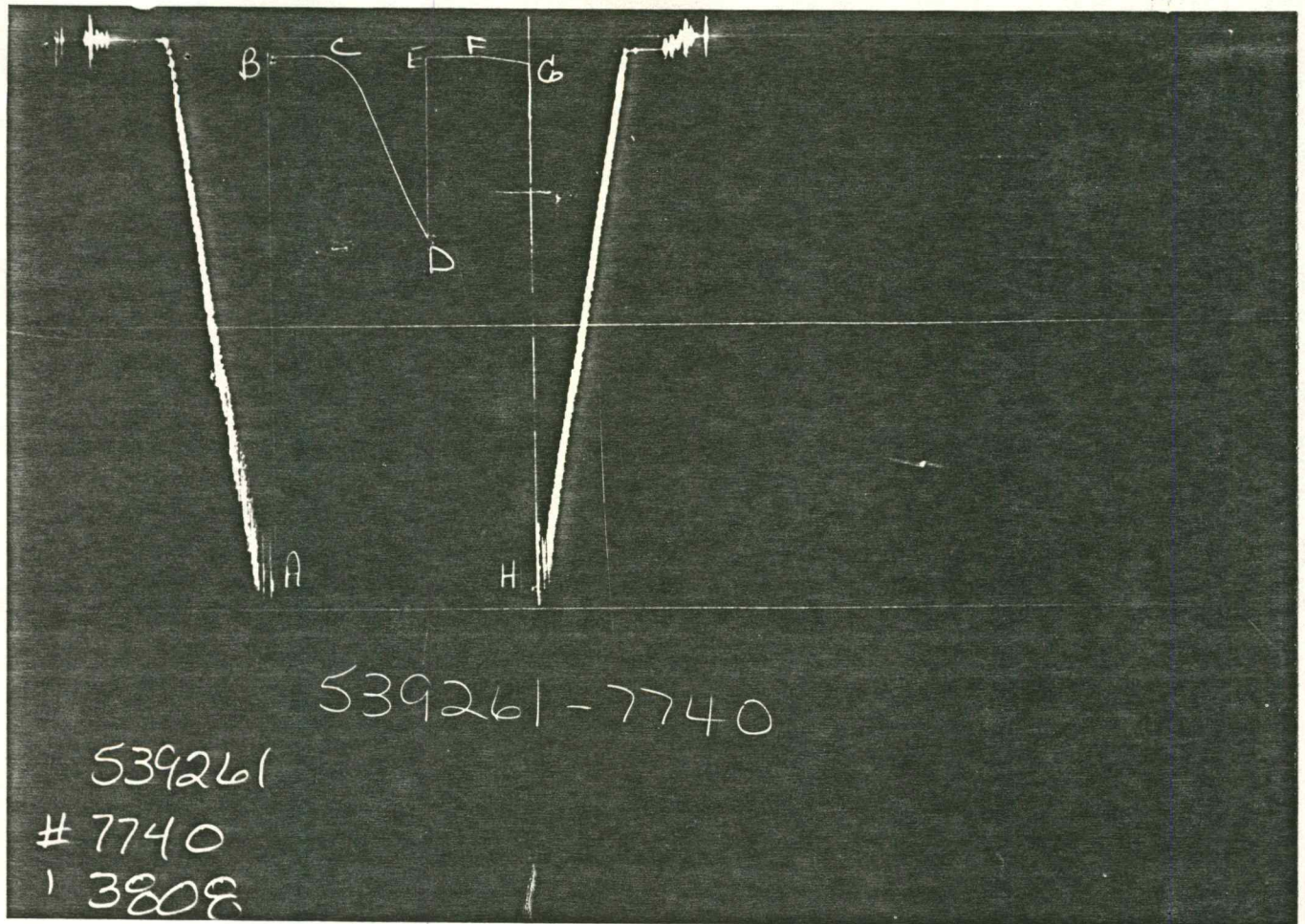
LYND "B" 1 3 3715.1 - 3810.1
LEASE NAME WELL NO. TEST NO. TESTED INTERVAL
LEGAL LOCATION 33-11-21 FIELD AREA N.W. ELLIS
SEC. - TYP. - RMC. NW-SE-NW
COUNTY TREGO STATE KANSAS PW/IC
DONALD C. SLAWSON
LEASE OWNER/COMPANY NAME



539261 539261 - 7733
 #7733
 '3709

GAUGE NO: 7733 DEPTH: 3709.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1778.4			
B	INITIAL FIRST FLOW		8.0			
C	FINAL FIRST FLOW		11.9	30.0	30.0	F
C	INITIAL FIRST CLOSED-IN		11.9			
D	FINAL FIRST CLOSED-IN		650.4	60.0	60.0	C
E	INITIAL SECOND FLOW		21.6			
F	FINAL SECOND FLOW		19.4	30.0	30.0	F
F	INITIAL SECOND CLOSED-IN		19.4			
G	FINAL SECOND CLOSED-IN		43.9	30.0	30.0	C
H	FINAL HYDROSTATIC		1793.6			



GAUGE NO: 7740 DEPTH: 3806.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	1949	1818.7			
B	INITIAL FIRST FLOW	54	61.2			
C	FINAL FIRST FLOW	54	61.2	30.0	30.0	F
C	INITIAL FIRST CLOSED-IN	54	61.2			
D	FINAL FIRST CLOSED-IN	702	689.8	60.0	60.0	C
E	INITIAL SECOND FLOW	54	70.7			
F	FINAL SECOND FLOW	54	66.9	30.0	30.0	F
F	INITIAL SECOND CLOSED-IN	54	66.9			
G	FINAL SECOND CLOSED-IN	90	92.0	30.0	30.0	C
H	FINAL HYDROSTATIC	1856	1829.4			

EQUIPMENT & HOLE DATA

FORMATION TESTED: SEE REMARKS

NET PAY (ft): 9.0

GROSS TESTED FOOTAGE: 95.0

ALL DEPTHS MEASURED FROM: KELLY BUSHING

CASING PERFS. (ft): _____

HOLE OR CASING SIZE (in): 7.875

ELEVATION (ft): 2292

TOTAL DEPTH (ft): 3810.0

PACKER DEPTH(S) (ft): 3715

FINAL SURFACE CHOKE (in): 0.250

BOTTOM HOLE CHOKE (in): 0.750

MUD WEIGHT (lb/gal): 9.20

MUD VISCOSITY (sec): 50

ESTIMATED HOLE TEMP. (°F): _____

ACTUAL HOLE TEMP. (°F): 103 @ 3805.0 ft

TICKET NUMBER: 53926100

DATE: 12-8-82 TEST NO: 3

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: HAYS

TESTER: D. MORGAN

WITNESS: R. ROBBA

DRILLING CONTRACTOR: SLAWSON #1

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES	
_____	@ _____ °F	_____ ppm	
_____	@ _____ °F	_____ ppm	
_____	@ _____ °F	_____ ppm	
_____	@ _____ °F	_____ ppm	
_____	@ _____ °F	_____ ppm	
_____	@ _____ °F	_____ ppm	

SAMPLER DATA

Pstg 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:

10 FEET OF VERY LIGHT OIL CUT MUD

MEASURED FROM TESTER VALVE

REMARKS:

FORMATION TESTED: LANSING-140, 160, 180, 200

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	3572.0	
50		IMPACT REVERSING SUB.....	5.750	2.750	1.0	3572.0
1		DRILL PIPE.....	4.500	3.826	124.0	
12		DUAL CIP VALVE.....	5.000	0.870	6.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	3707.0
80		AP RUNNING CASE.....	5.000	3.060	4.0	3709.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	3715.0
5		CROSSOVER.....	5.000	3.840	1.0	
1		DRILL PIPE.....	4.500	3.826	62.0	
5		CROSSOVER.....	5.000	3.840	1.0	
20		FLUSH JOINT ANCHOR.....	5.000	3.840		
83		HT-500 TEMPERATURE CASE.....	5.000		1.5	3805.0
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	3806.0

TOTAL DEPTH

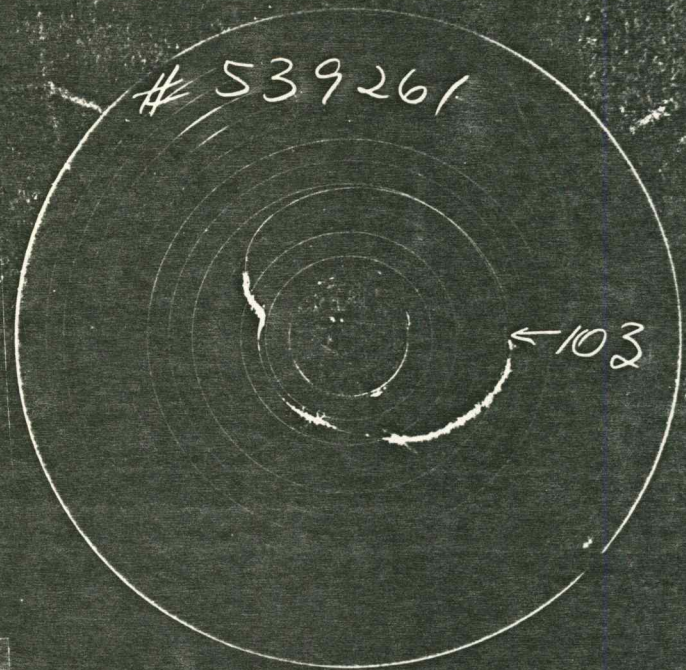
3810.0

EQUIPMENT DATA

TEMPERATURE

RECORDER

CHART



10° each circle

Indicated Flow Capacity

$$kh = \frac{1637 Q_g T}{m}$$

md-ft

Average Effective Permeability

$$k = \frac{kh}{h}$$

md

Skin Factor

$$S = 1.151 \left[\frac{m(P^*) - m(P_f)}{m} - \text{LOG} \frac{kt}{\phi \mu c_f r_w^2} + 3.23 \right]$$

—

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

$$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_f}}$$

ft