

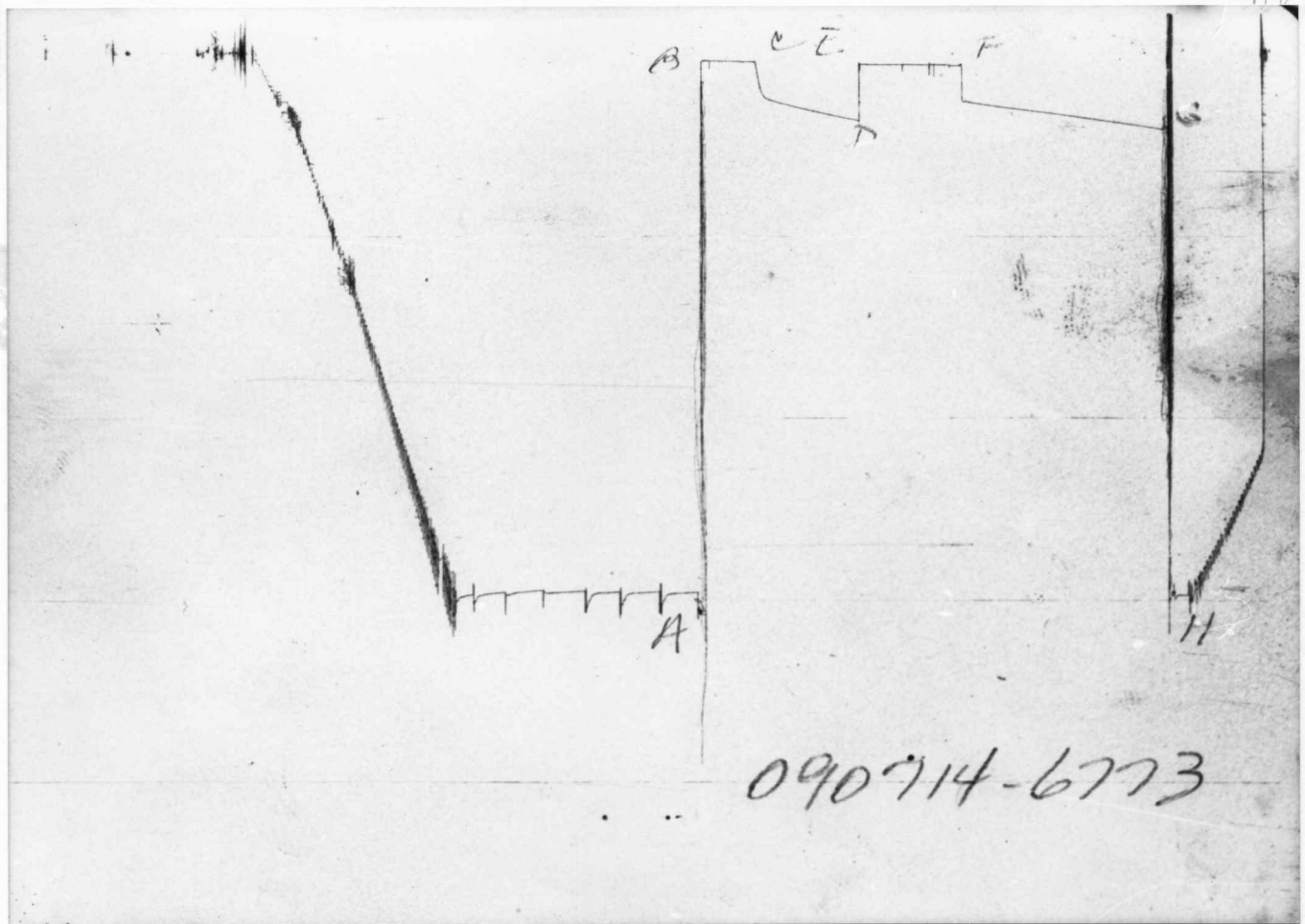
TICKET NO. 09071400
07-JAN-86
LIBERAL

THOMPSON
LEASE NAME
WELL NO. 1-9
TEST NO. 1
FIELD AREA
COUNTY SEWARD
STATE KANSAS
IC
LEGAL LOCATION
SEC. - TWP. - RNG. 9-35S-32W
TESTED INTERVAL 6062.0 - 6150.0
DONALD C. SLAWSON
LEASE OWNER/COMPANY NAME

C NW-SE

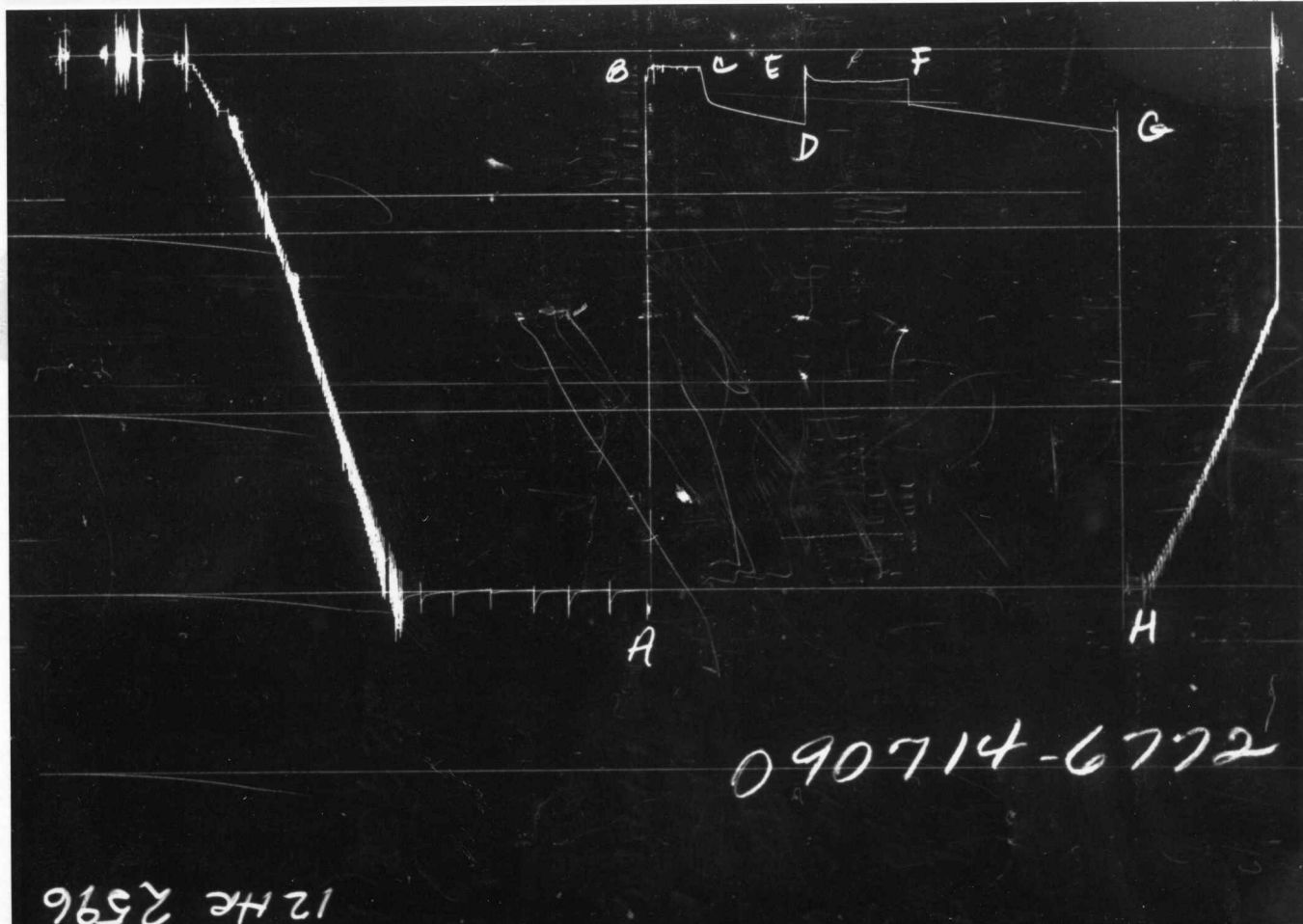
RECEIVED
JAN 20 '86
GREAT BEND
Division Office

FORMATION TESTING SERVICE REPORT



GAUGE NO: 6773 DEPTH: 6046.9 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3031	2975.4			
B	INITIAL FIRST FLOW	49	43.3			
C	FINAL FIRST FLOW	58	50.1	30.0	31.2	F
C	INITIAL FIRST CLOSED-IN	58	50.1			
D	FINAL FIRST CLOSED-IN	384	378.1	60.0	59.8	C
E	INITIAL SECOND FLOW	67	63.6			
F	FINAL SECOND FLOW	76	69.9	60.0	59.1	F
F	INITIAL SECOND CLOSED-IN	76	69.9			
G	FINAL SECOND CLOSED-IN	434	429.2	120.0	119.9	C
H	FINAL HYDROSTATIC	3031	2987.2			



GAUGE NO: 6772 DEPTH: 6147.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2938	3014.8			
B	INITIAL FIRST FLOW	89	135.7			
C	FINAL FIRST FLOW	92	91.7	30.0	31.2	F
C	INITIAL FIRST CLOSED-IN	92	91.7			
D	FINAL FIRST CLOSED-IN	400	423.4	60.0	59.8	C
E	INITIAL SECOND FLOW	92	103.3			
F	FINAL SECOND FLOW	155	168.3	60.0	59.1	F
F	INITIAL SECOND CLOSED-IN	155	168.3			
G	FINAL SECOND CLOSED-IN	449	472.2	120.0	119.9	C
H	FINAL HYDROSTATIC	2938	3024.0			

EQUIPMENT & HOLE DATA

FORMATION TESTED: L. MORROW & CHESTER
 NET PAY (ft): 24.0
 GROSS TESTED FOOTAGE: 88.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 2757.0 KELLY BUSHING
 TOTAL DEPTH (ft): 6150.0
 PACKER DEPTH(S) (ft): 6062
 FINAL SURFACE CHOKE (in): 0.25000
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 9.05
 MUD VISCOSITY (sec): 43
 ESTIMATED HOLE TEMP. (°F): _____
 ACTUAL HOLE TEMP. (°F): 121 @ 6144.7 ft

TICKET NUMBER: 09071400
 DATE: 1-1-86 TEST NO: 1
 TYPE DST: OPEN HOLE
 HALLIBURTON CAMP: LIBERAL
 TESTER: JEFF CLARK
 WITNESS: WAYNE FREDRICKS
 DRILLING CONTRACTOR: SLAWSON DRILLING COMPANY RIG #4

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
PIT	<u>0.824 @ 59 °F</u>	<u>4517 ppm</u>
SAMPLER	<u>0.402 @ 59 °F</u>	<u>8975 ppm</u>
TOP	<u>0.811 @ 59 °F</u>	<u>5013 ppm</u>
BOTTOM	<u>0.400 @ 59 °F</u>	<u>9023 ppm</u>
	_____ @ _____ °F	_____ ppm
	_____ @ _____ °F	_____ ppm

SAMPLER DATA

P_{sig} AT SURFACE: 74.5
 cu.ft. OF GAS: 0.119
 cc OF OIL: _____
 cc OF WATER: _____
 cc OF MUD: 2180.0
 TOTAL LIQUID cc: 2180.0

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

80 FEET OF GAS CUT DRILLING MUD

MEASURED FROM
TESTER VALVE

REMARKS:

CHEMICAL MUD WEIGHT = 9.05#/GALLON; VISCOSITY = 43 SEC./QT.;
 W.L. = 14.0 CM3/30 MINUTES; PH = 9.0; CHLORIDES = 4500 PPM;
 AND LCM = 4#/BBL.

TYPE & SIZE MEASURING DEVICE: _____					TICKET NO: 09071400
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
12-31-85					
1500					CALLED OUT
1-1-86					
0200					JOB READY TIME
0030					ON LOCATION - CHANGED ELEVATORS
					AND PICKED UP BOTTOM HALF OF TOOLS
0230					TOOLS TONGED UP - CHANGED
					ELEVATORS AND RAN 1 STAND OF
					COLLARS
0240					CHANGED ELEVATORS AND PICKED UP
					TOP HALF OF TOOL
0305					TOOL MADE UP AT KELLY BUSHING -
					CHANGED ELEVATORS AND TRIPPED IN
					HOLE WITH TOOLS
0505					RIGGED UP SURFACE EQUIPMENT
0515					WAITING FOR DAYBREAK
0728					ON BOTTOM - STRING WEIGHT
					100000# - 40000# ON TOOL
0730					OPENED TOOL WITH AN IMMEDIATE
					SURFACE BLOW (1/4") INCREASING
					TO 2" - STABILIZED AT 2"
0800					CLOSED TOOL - BLOW 2" INTO
					BUCKET (WEAK)
0900					OPENED TOOL WITH 1.5" INTO BUCKET
1000					CLOSED TOOL WITH 1/2" INTO
					BUCKET (WEAK)
1200					OPENED BYPASS - RIGGED OFF SURFACE
					EQUIPMENT - LAID DOWN 1 SINGLE
1210					TRIPPED OUT OF HOLE
1455					TOOL AT KELLY BUSHING - MADE
					BREAK
1550					TOOL BROKE DOWN
1645					TRUCK LOADED OUT

TICKET NO: 09071400
 CLOCK NO: 17058 HOUR: 12



GAUGE NO: 6773
 DEPTH: 6046.9

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	43.3			
2	5.0	44.9	1.6		
3	10.0	45.6	0.7		
4	15.0	46.3	0.7		
5	20.0	47.8	1.4		
6	25.0	49.1	1.3		
7	30.0	49.5	0.4		
C 8	31.2	50.1	0.6		
FIRST CLOSED-IN					
C 1	0.0	50.1			
2	4.0	223.6	173.5	3.6	0.942
3	8.0	260.5	210.4	6.4	0.690
4	12.0	272.6	222.5	8.7	0.555
5	16.0	284.3	234.2	10.6	0.470
6	20.0	293.3	243.3	12.2	0.408
7	24.0	302.7	252.6	13.5	0.362
8	28.0	312.2	262.1	14.7	0.325
9	32.0	321.6	271.5	15.8	0.295
10	36.0	330.1	280.0	16.7	0.271
11	40.0	339.2	289.1	17.5	0.250
12	44.0	348.2	298.2	18.2	0.232
13	48.0	355.6	305.5	18.9	0.217
14	52.0	363.2	313.2	19.5	0.204
15	56.0	371.2	321.1	20.0	0.192
D 16	59.8	378.1	328.0	20.5	0.182
SECOND FLOW					
E 1	0.0	63.6			
2	10.0	64.3	0.7		
3	20.0	64.4	0.1		
4	30.0	64.9	0.4		
5	40.0	65.5	0.6		
6	50.0	66.2	0.7		
F 7	59.1	69.9	3.7		
SECOND CLOSED-IN					
F 1	0.0	69.9			
2	8.0	279.8	209.9	7.4	1.089
3	16.0	289.9	219.9	13.6	0.822
4	24.0	301.7	231.8	19.0	0.677
5	32.0	310.8	240.8	23.6	0.582
6	40.0	321.4	251.5	27.7	0.513
7	48.0	330.7	260.7	31.3	0.460
8	56.0	340.5	270.5	34.6	0.417
9	64.0	350.8	280.9	37.4	0.382

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	362.4	292.4	40.1	0.353
11	80.0	373.3	303.4	42.4	0.328
12	88.0	384.1	314.2	44.6	0.307
13	96.0	394.5	324.6	46.5	0.288
14	104.0	405.0	335.1	48.3	0.271
15	112.0	417.3	347.3	50.0	0.257
G 16	119.9	429.2	359.3	51.5	0.244

REMARKS:

TICKET NO: 09071400

CLOCK NO: 2596 HOUR: 12























GAUGE NO: 6772

DEPTH: 6147.0

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	135.7		
	2	5.0	86.1	-49.5	
	3	10.0	87.9	1.8	
	4	15.0	92.3	4.4	
	5	20.0	90.0	-2.3	
	6	25.0	93.8	3.8	
	7	30.0	93.8	0.0	
C	8	31.2	91.7	-2.1	
FIRST CLOSED-IN					
C	1	0.0	91.7		
	2	4.0	269.3	177.6	3.5 0.949
	3	8.0	307.6	215.9	6.4 0.689
	4	12.0	321.1	229.4	8.7 0.556
	5	16.0	332.0	240.3	10.6 0.470
	6	20.0	342.1	250.4	12.2 0.408
	7	24.0	351.9	260.2	13.6 0.361
	8	28.0	360.4	268.7	14.7 0.325
	9	32.0	369.5	277.8	15.8 0.296
	10	36.0	377.6	285.9	16.7 0.271
	11	40.0	385.8	294.1	17.5 0.250
	12	44.0	394.5	302.8	18.2 0.233
	13	48.0	402.0	310.2	18.9 0.217
	14	52.0	409.1	317.4	19.5 0.204
	15	56.0	417.2	325.5	20.0 0.192
D	16	59.8	423.4	331.6	20.5 0.182
SECOND FLOW					
E	1	0.0	103.3		
	2	10.0	175.6	72.3	
	3	20.0	181.9	6.3	
	4	30.0	177.8	-4.1	
	5	40.0	182.8	5.0	
	6	50.0	177.9	-4.8	
F	7	59.1	168.3	-9.7	
SECOND CLOSED-IN					
F	1	0.0	168.3		
	2	8.0	323.2	154.9	7.4 1.088
	3	16.0	336.4	168.1	13.6 0.823
	4	24.0	346.6	178.4	19.0 0.678
	5	32.0	357.1	188.8	23.6 0.582
	6	40.0	366.6	198.3	27.7 0.513
	7	48.0	377.5	209.2	31.3 0.459
	8	56.0	387.1	218.9	34.6 0.417
	9	64.0	397.7	229.4	37.4 0.382

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	408.0	239.7	40.1 0.353
	11	80.0	419.0	250.7	42.4 0.328
	12	88.0	430.4	262.1	44.6 0.307
	13	96.0	441.8	273.6	46.5 0.288
	14	104.0	453.7	285.5	48.3 0.271
	15	112.0	465.5	297.2	50.0 0.257
G	16	119.9	472.2	303.9	51.5 0.244

REMARKS:
 READINGS FOR FIRST FLOW PERIOD MAY BE QUESTIONABLE.

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	5457.3	
3		DRILL COLLARS.....	6.250	2.250	448.0	
50		IMPACT REVERSING SUB.....	6.000	2.250	1.0	5897.3
3		DRILL COLLARS.....	6.250	2.250	122.1	
5		CROSSOVER.....	6.000	2.250	1.0	
11		HANDLING SUB & CHOKE ASSEMBLY...	4.500	3.826	4.8	
97		BUMPER SUB.....	6.250	2.250	8.0	
13		DUAL CIP SAMPLER.....	5.000	0.750	6.8	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	6044.9
80		AP RUNNING CASE.....	5.000	2.250	4.1	6046.9
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	2.7	
70		OPEN HOLE PACKER.....	6.750	1.530	5.9	6061.6
5		CROSSOVER.....	6.000	2.250	1.0	
3		DRILL COLLARS.....	6.250	2.250	62.1	
5		CROSSOVER.....	6.000	2.250	1.0	
5		CROSSOVER.....	6.000	2.250	1.0	
20		FLUSH JOINT ANCHOR.....	5.000	2.370	16.0	
83		HT-500 TEMPERATURE CASE.....	5.000		1.0	6145.7
81		BLANKED-OFF RUNNING CASE.....	5.000		4.3	6147.0

TOTAL DEPTH 6150.0

EQUIPMENT DATA

TEMPERATURE

RECORDER

CHART



10° each circle



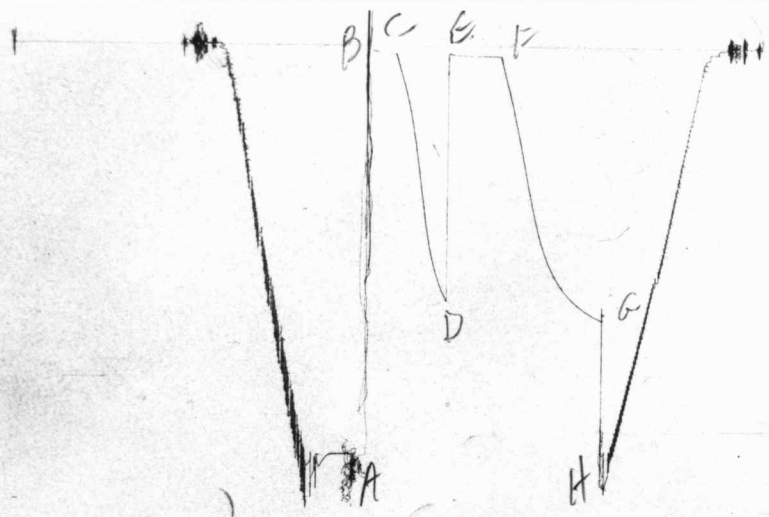
TICKET NO. 35530600
10-JAN-86
LIBERAL

C NW - 5 E

THOMPSON
LEASE NAME
WELL NO. 1-9
TEST NO. 2
TESTED INTERVAL 5230.0 - 5258.0
DONALD C. SLAWSON
LEASE OWNER/COMPANY NAME
LEGAL LOCATION
SEC. - TWP. - RANG. 9 35S 32W
FIELD AREA
LIBERAL LIGHT
COUNTY
SEWARD
STATE
KANSAS SM

RECEIVED
JAN 22 '86
GREAT BEND
Division Office

FORMATION TESTING SERVICE REPORT

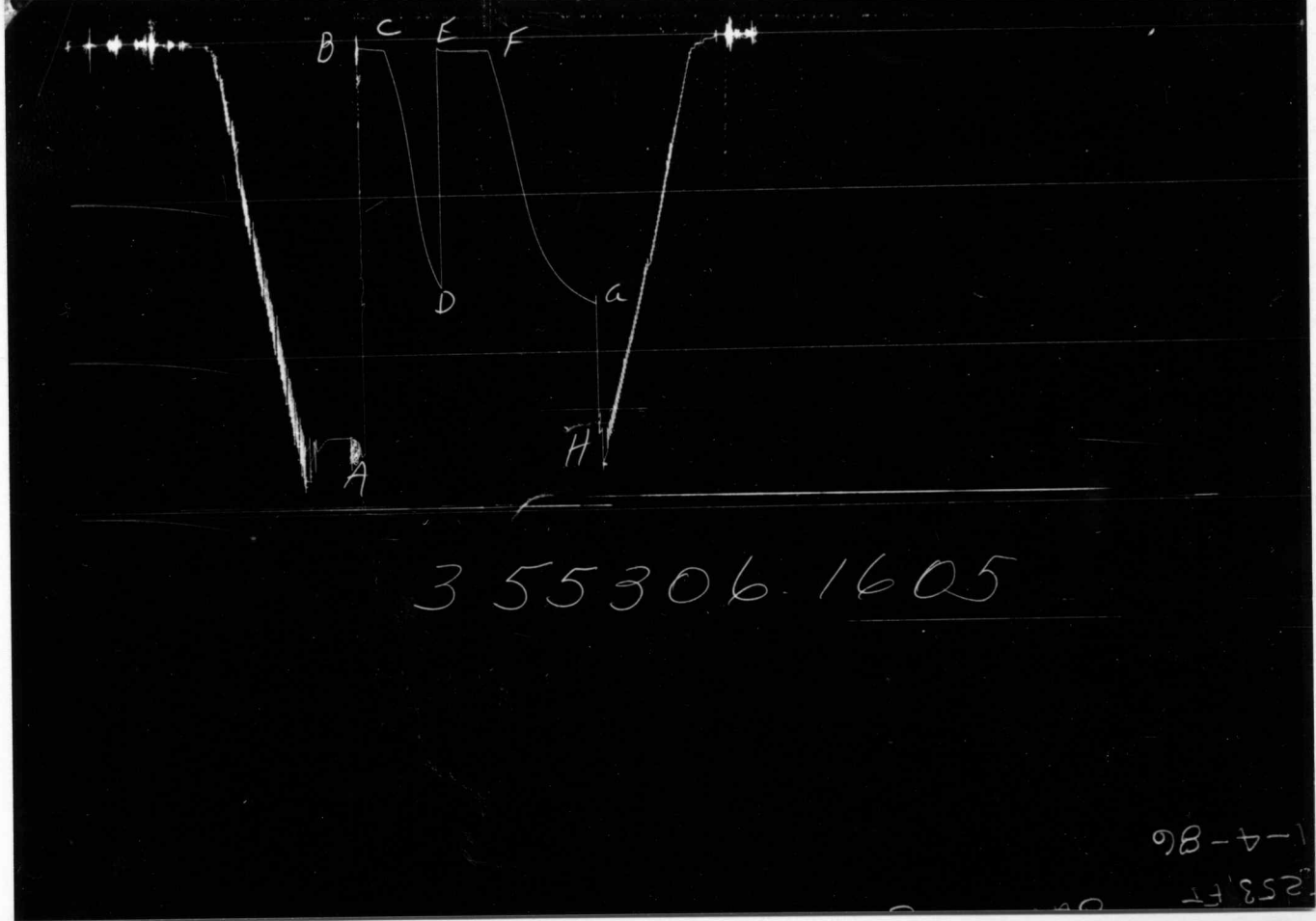


355306 - 1606

98-7-1
5214 FT

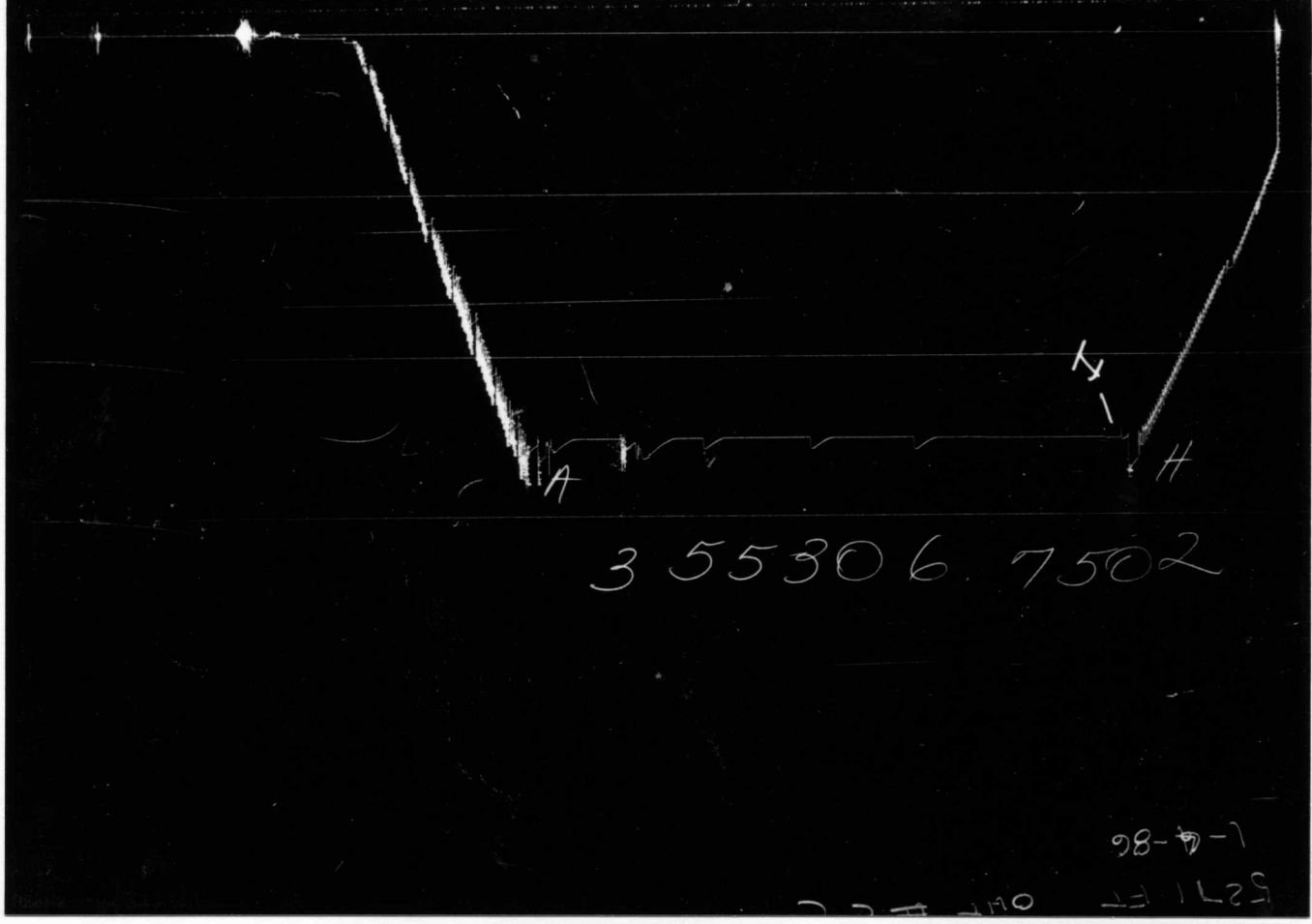
GAUGE NO: 1606 DEPTH: 5214.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2518	2510.6			
B	INITIAL FIRST FLOW	33	24.6			
C	FINAL FIRST FLOW	66	49.1	30.0	30.8	F
C	INITIAL FIRST CLOSED-IN	66	49.1			
D	FINAL FIRST CLOSED-IN	1539	1566.9	61.0	61.7	C
E	INITIAL SECOND FLOW	50	47.8			
F	FINAL SECOND FLOW	66	63.7	59.0	58.9	F
F	INITIAL SECOND CLOSED-IN	66	63.7			
G	FINAL SECOND CLOSED-IN	1669	1679.9	120.0	118.6	C
H	FINAL HYDROSTATIC	2551	2504.2			
I	HYDROSTATIC RELEASE					



GAUGE NO: 1605 DEPTH: 5253.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2626	2540.7			
B	INITIAL FIRST FLOW	67	55.8			
C	FINAL FIRST FLOW	84	71.5	30.0	30.8	F
C	INITIAL FIRST CLOSED-IN	84	71.5			
D	FINAL FIRST CLOSED-IN	1614	1600.9	61.0	61.7	C
E	INITIAL SECOND FLOW	67	65.5			
F	FINAL SECOND FLOW	84	86.0	59.0	58.9	F
F	INITIAL SECOND CLOSED-IN	84	86.0			
G	FINAL SECOND CLOSED-IN	1679	1713.0	120.0	118.6	C
H	FINAL HYDROSTATIC	2561	2520.8			
I	HYDROSTATIC RELEASE					



GAUGE NO: 7502 DEPTH: 5271.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2619.9			
B	INITIAL FIRST FLOW					
C	FINAL FIRST FLOW			30.0		F
C	INITIAL FIRST CLOSED-IN					
D	FINAL FIRST CLOSED-IN			61.0		C
E	INITIAL SECOND FLOW					
F	FINAL SECOND FLOW			59.0		F
F	INITIAL SECOND CLOSED-IN					
G	FINAL SECOND CLOSED-IN			120.0		C
H	FINAL HYDROSTATIC		2580.0			
I	HYDROSTATIC RELEASE		2534.9			

EQUIPMENT & HOLE DATA

FORMATION TESTED: MARMATON
 NET PAY (ft): _____
 GROSS TESTED FOOTAGE: 28.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 2757.0
 TOTAL DEPTH (ft): 6300.0
 PACKER DEPTH(S) (ft): 5230, 5258
 FINAL SURFACE CHOKE (in): _____
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 9.00
 MUD VISCOSITY (sec): 49
 ESTIMATED HOLE TEMP. (°F): 115
 ACTUAL HOLE TEMP. (°F): _____ @ _____ ft

TICKET NUMBER: 35530600
 DATE: 1-4-86 TEST NO: 2
 TYPE DST: OFF BTM STRADDLE
 HALLIBURTON CAMP: _____
LIBERAL
 TESTER: _____
MYRON HESTON
 WITNESS: _____
LEO BECK
W. FREDERICK
 DRILLING CONTRACTOR: _____
SLAWSON DRILLING #4

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
TOP	<u>0.245</u> @ <u>62</u> °F	<u>9525</u> ppm
BOTTOM	<u>0.187</u> @ <u>62</u> °F	<u>24062</u> ppm
SAMPLER	<u>0.187</u> @ <u>62</u> °F	<u>24062</u> ppm
PIT	<u>0.590</u> @ <u>59</u> °F	<u>6500</u> ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

SAMPLER DATA

Pstg AT SURFACE: 60.0
 cu.ft. OF GAS: 0.062
 cc OF OIL: _____
 cc OF WATER: _____
 cc OF MUD: 1890.0
 TOTAL LIQUID cc: 1890.0

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

110 FEET OF DRILLING MUD

MEASURED FROM
TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 35530600

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
1-3-86					
2200					CALLED OUT, REQUESTED AT 0100
2345					ON LOCATION, BIT ON BOTTOM AND
					HOLE BEING CIRCULATED
1-4-86					
0030					RIG CREW STARTED OUT OF HOLE
					WITH BIT
0305					BIT IN TABLE
0320					STARTED PICKING UP TOOL
0420					TOOL MADE UP
0445					STARTED TOOL IN HOLE
0640					TOOL AT 5230', WAITED FOR
					DAYLIGHT
0730					STARTED SETTING HOOK
0736					HOOK SET, SET DOWN ON TOOL
0740					OPENED TOOL, BLOWING 1 1/2"
					DEEP IN 5 GALLON BUCKET OF
					WATER THRU 1/4" BUBBLE HOSE
0745					BLOW INCREASED TO 10" DEEP
0750					BLOWING OFF BOTTOM OF BUCKET
0810					STILL BLOWING OFF BOTTOM OF
					BUCKET
0911					OPENED TOOL, BLOWING 10" DEEP
0921					BLOWING OFF BOTTOM OF BUCKET,
					NO GAS TO THE SURFACE
0941					BLOWING OFF BOTTOM OF BUCKET,
					BLOW DECREASING
0951					BLOW INCREASED, NO GAS TO THE
					SURFACE
1001					BLOW STABILIZED
1010					BLOW STILL STABILIZED, NO GAS
					TO SURFACE, CLOSED TOOL FOR
					CLOSED IN PERIOD.
1210					PICKED UP AND OPENED BYPASS
1215					UNSET HOOK AND RIGGED DOWN
					SURFACE EQUIPMENT
1220					STARTED OUT OF HOLE

TICKET NO: 35530600

CLOCK NO: 17532 HOUR: 24



GAUGE NO: 1606

DEPTH: 5214.0

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											
B	1	0.0	24.6								
	2	5.0	32.1	7.5							
	3	10.0	37.0	5.0							
	4	15.0	41.0	4.0							
	5	20.0	43.3	2.3							
	6	25.0	46.3	3.0							
C	7	30.8	49.1	2.8							
FIRST CLOSED-IN											
C	1	0.0	49.1								
	2	5.0	128.3	79.1	4.3	0.855					
	3	10.0	220.5	171.4	7.5	0.612					
	4	15.0	327.6	278.5	10.1	0.484					
	5	20.0	451.5	402.4	12.1	0.405					
	6	25.0	617.0	567.9	13.8	0.349					
	7	30.0	817.0	767.9	15.2	0.307					
	8	35.0	1025.4	976.2	16.4	0.274					
	9	40.0	1197.9	1148.8	17.4	0.248					
	10	45.0	1325.2	1276.1	18.3	0.227					
	11	50.0	1420.5	1371.4	19.1	0.209					
	12	55.0	1494.2	1445.1	19.8	0.193					
D	13	61.7	1566.9	1517.7	20.6	0.176					
SECOND FLOW											
E	1	0.0	47.8								
	2	10.0	58.6	10.8							
	3	20.0	61.4	2.8							
	4	30.0	62.9	1.5							
	5	40.0	63.1	0.2							
	6	50.0	63.1	0.0							
F	7	58.9	63.7	0.7							
SECOND CLOSED-IN											
F	1	0.0	63.7								
	2	10.0	269.1	205.3	9.0	0.998					
	3	20.0	506.6	442.9	16.3	0.739					
	4	30.0	776.8	713.0	22.5	0.601					
	5	40.0	1041.4	977.6	27.7	0.511					
	6	50.0	1245.3	1181.6	32.1	0.446					
	7	60.0	1378.8	1315.0	36.0	0.397					
	8	70.0	1472.1	1408.4	39.3	0.358					
	9	80.0	1538.4	1474.6	42.3	0.327					
	10	90.0	1588.0	1524.3	44.9	0.300					
	11	100.0	1627.6	1563.9	47.3	0.278					
	12	110.0	1658.2	1594.5	49.4	0.259					
G	13	118.6	1679.9	1616.2	51.1	0.245					

REMARKS:

TICKET NO: 35530600

CLOCK NO: 17529 HOUR: 24





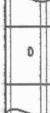


















GAUGE NO: 1605

DEPTH: 5253.0

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	55.8		
	2	5.0	55.8	0.0	
	3	10.0	59.8	4.0	
	4	15.0	62.9	3.0	
	5	20.0	65.7	2.8	
	6	25.0	67.9	2.2	
C	7	30.8	71.5	3.7	
FIRST CLOSED-IN					
C	1	0.0	71.5		
	2	5.0	146.0	74.4	4.3 0.856
	3	10.0	240.8	169.3	7.5 0.611
	4	15.0	349.0	277.5	10.1 0.486
	5	20.0	481.3	409.8	12.1 0.405
	6	25.0	646.3	574.8	13.8 0.349
	7	30.0	846.0	774.5	15.2 0.307
	8	35.0	1053.4	981.9	16.4 0.275
	9	40.0	1233.9	1162.3	17.4 0.248
	10	45.0	1365.6	1294.1	18.3 0.226
	11	50.0	1459.7	1388.2	19.1 0.209
	12	55.0	1529.8	1458.2	19.8 0.193
D	13	61.7	1600.9	1529.4	20.6 0.176
SECOND FLOW					
E	1	0.0	65.5		
	2	10.0	82.5	17.1	
	3	20.0	84.5	2.0	
	4	30.0	84.9	0.3	
	5	40.0	83.0	-1.8	
	6	50.0	84.5	1.5	
F	7	58.9	86.0	1.5	
SECOND CLOSED-IN					
F	1	0.0	86.0		
	2	10.0	285.3	199.2	9.0 0.998
	3	20.0	524.6	438.6	16.4 0.738
	4	30.0	790.6	704.5	22.5 0.601
	5	40.0	1057.2	971.1	27.7 0.511
	6	50.0	1261.6	1175.6	32.1 0.446
	7	60.0	1400.2	1314.2	35.9 0.397
	8	70.0	1497.7	1411.6	39.3 0.358
	9	80.0	1568.0	1482.0	42.3 0.326
	10	90.0	1621.1	1535.1	44.9 0.300
	11	100.0	1660.6	1574.5	47.3 0.278
	12	110.0	1692.3	1606.3	49.4 0.259
G	13	118.6	1713.0	1627.0	51.1 0.245

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
(Empty table area)					

REMARKS:

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	5102.0	
3		DRILL COLLARS.....	6.250	2.250	31.0	
50		IMPACT REVERSING SUB.....	6.000	3.000	1.0	5134.0
3		DRILL COLLARS.....	6.250	2.250	61.0	
5		CROSSOVER.....	6.000	2.250	1.0	
11		HANDLING SUB & CHOKE ASSEMBLY...	4.500	3.160	5.0	
13		DUAL CIP SAMPLER.....	5.030	0.750	7.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	5212.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	5214.0
15		JAR.....	5.030	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	5230.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	13.0	
17		PRESSURE EQUALIZING CROSSOVER...	5.000		1.0	
22		BLANK ANCHOR.....	5.000	2.370	5.0	
80		AP RUNNING CASE.....	5.000	2.250	5.0	5253.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	5258.0
90		SIDE WALL ANCHOR.....	6.750	1.620	5.0	5264.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	3.0	
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	5271.0
		TOTAL DEPTH				6300.0

EQUIPMENT DATA



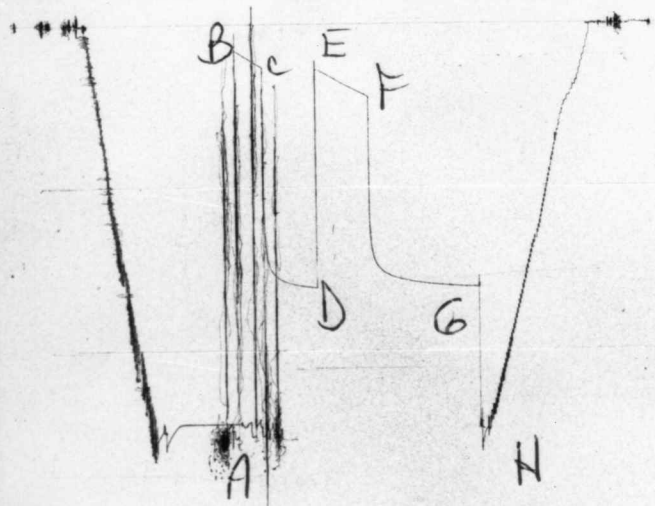
TICKET NO. 35530700
13-JAN-86
LIBERAL

THOMPSON
LEASE NAME
1-9
WELL NO.
3
TEST NO.
5040.0 - 5066.0
TESTED INTERVAL
DONALD C. SLAWSON
LEASE OWNER/COMPANY NAME
LEGAL LOCATION
SEC. - TWP. - RNG.
SEC. 9 - 35 S - 32 W
FIELD AREA
WILD CAT
COUNTY
SEWARD
STATE
KANSAS
PW

C NW - SE

RECEIVED
JAN 22 '86
GREAT BEND
Division Office

FORMATION TESTING SERVICE REPORT



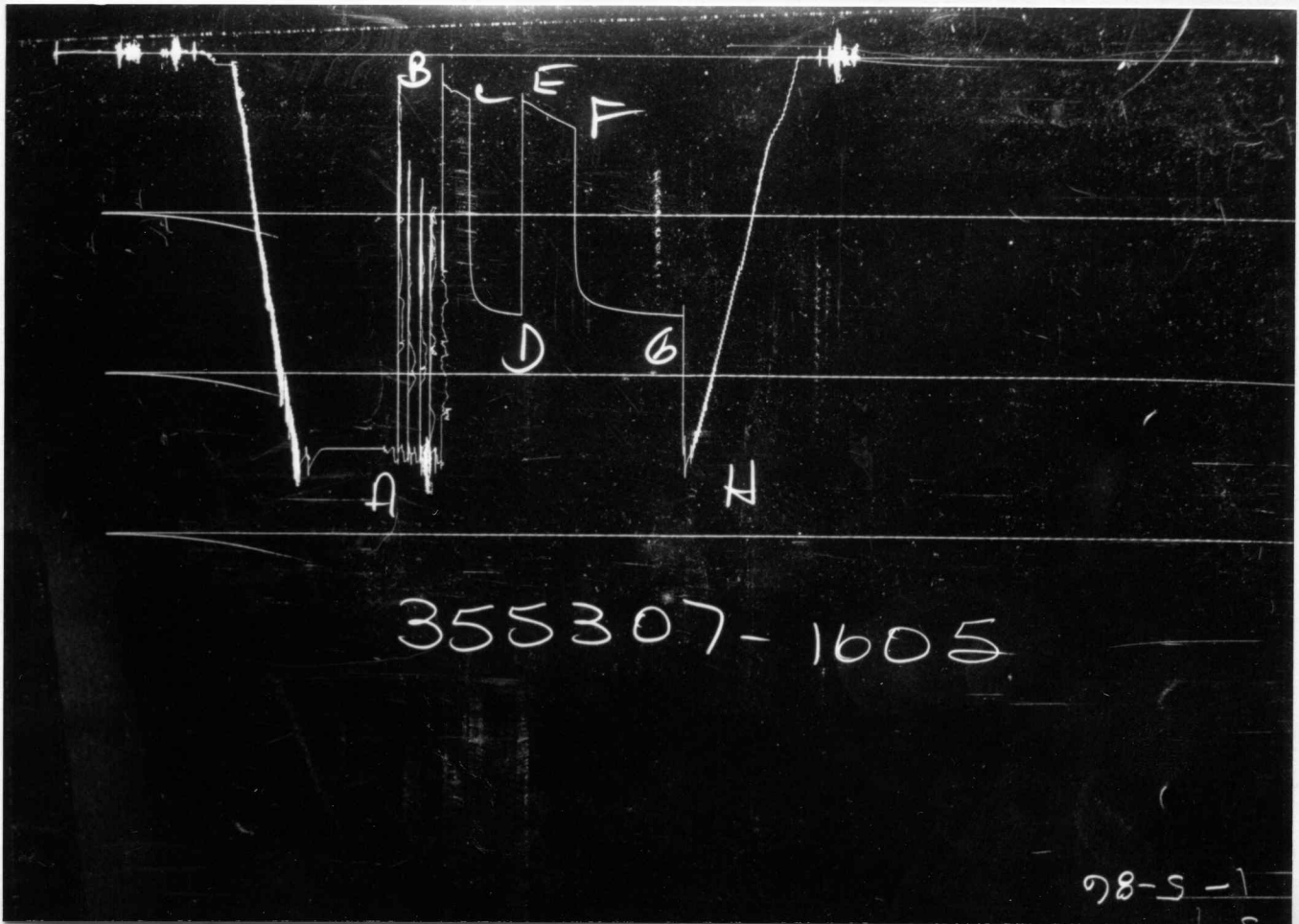
355307-1604

98-5-1

5024 FT GHT #3 (HOOK STANDARD)

GAUGE NO: 1606 DEPTH: 5024.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2450.0			
B	INITIAL FIRST FLOW		160.8			
C	FINAL FIRST FLOW		267.4	30.0	30.7	F
C	INITIAL FIRST CLOSED-IN		267.4			
D	FINAL FIRST CLOSED-IN		1617.5	61.0	60.7	C
E	INITIAL SECOND FLOW		284.7			
F	FINAL SECOND FLOW		450.6	60.0	59.5	F
F	INITIAL SECOND CLOSED-IN		450.6			
G	FINAL SECOND CLOSED-IN		1614.2	124.0	124.1	C
H	FINAL HYDROSTATIC		2475.7			
I	HYDROSTATIC RELEASE					



355307-1605

98-5-1

GAUGE NO: 1605 DEPTH: 5061.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2463	2465.7			
B	INITIAL FIRST FLOW	167	175.9	30.0	30.7	F
C	FINAL FIRST FLOW	268	278.3			
C	INITIAL FIRST CLOSED-IN	268	278.3	61.0	60.7	C
D	FINAL FIRST CLOSED-IN	1614	1627.5			
E	INITIAL SECOND FLOW	234	294.2	60.0	59.5	F
F	FINAL SECOND FLOW	435	460.9			
F	INITIAL SECOND CLOSED-IN	435	460.9	124.0	124.1	C
G	FINAL SECOND CLOSED-IN	1614	1626.7			
H	FINAL HYDROSTATIC	2463	2486.6			
I	HYDROSTATIC RELEASE					



GAUGE NO: 7502 DEPTH: 5079.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2474.5			
B	INITIAL FIRST FLOW					
C	FINAL FIRST FLOW			30.0		F
C	INITIAL FIRST CLOSED-IN					
D	FINAL FIRST CLOSED-IN			61.0		C
E	INITIAL SECOND FLOW					
F	FINAL SECOND FLOW			60.0		F
F	INITIAL SECOND CLOSED-IN					
G	FINAL SECOND CLOSED-IN			124.0		C
H	FINAL HYDROSTATIC		2496.6			
I	HYDROSTATIC RELEASE		2243.3			

EQUIPMENT & HOLE DATA

FORMATION TESTED: HODGES
 NET PAY (ft): _____
 GROSS TESTED FOOTAGE: 26.0
 ALL DEPTHS MEASURED FROM: KB
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 2757.0
 TOTAL DEPTH (ft): 6300.0
 PACKER DEPTH(S) (ft): 5040, 5066
 FINAL SURFACE CHOKE (in): _____
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 9.00
 MUD VISCOSITY (sec): 60
 ESTIMATED HOLE TEMP. (°F): 115
 ACTUAL HOLE TEMP. (°F): _____ @ _____ ft

TICKET NUMBER: 35530700

DATE: 1-5-86 TEST NO: 3

TYPE DST: OFF BTM STRADDLE

HALLIBURTON CAMP:
LIBERAL

TESTER: MYRON E. HESTON

WITNESS: LEO BECK
WAYNE FREDERICK

DRILLING CONTRACTOR:
SLAWSON DRILLING #4

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
<u>TOP</u>	<u>0.512 @ 62 °F</u>	<u>6016 ppm</u>
<u>MIDDLE</u>	<u>0.230 @ 64 °F</u>	<u>18548 ppm</u>
<u>BOTTOM</u>	<u>0.090 @ 59 °F</u>	<u>56146 ppm</u>
<u>SAMPLER</u>	<u>0.089 @ 61 °F</u>	<u>61660 ppm</u>
<u>PIT</u>	<u>0.510 @ 62 °F</u>	<u>6010 ppm</u>
_____	_____ @ _____ °F	_____ ppm

SAMPLER DATA

Pstg AT SURFACE: 390.0
 cu.ft. OF GAS: _____
 cc OF OIL: _____
 cc OF WATER: 2240.0
 cc OF MUD: _____
 TOTAL LIQUID cc: 2240.0

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

440 FEET OF DRILLING MUD
 505 FEET OF SALTWATER

MEASURED FROM
TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: _____

TICKET NO: 35530700

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
1-5-86					
2300					CALLED OUT - TEST READY 0100
1-6-86					
0010					ON LOCATION - HOLE BEING CIRCULATED.
0030					STARTED OUT OF HOLE WITH BIT
0245					BIT IN TABLE
0305					STARTED PICKING UP TOOL
0400					TOOL MADE UP
0430					STARTED TOOL IN HOLE
0600					TOOL AT 5056' - HOOKED UP
					SURFACE EQUIPMENT AND WAITED FOR DAYLIGHT.
0742					SET HOOK AND SET DOWN ON TOOL
0746					OPENED TOOL - ANNULUS FLUID DROPPED - PICKED UP TOOL.
0753					MOVED TOOL TO 5034' - 5060' AND SET HOOK.
0757					OPENED TOOL - ANNULUS FLUID DROPPED - PICKED UP ON TOOL.
0807					MOVED TOOL TO 5032' - 5058' AND SET HOOK.
0811					OPENED TOOL - ANNULUS FLUID DROPPED - PICKED UP ON TOOL.
0818					MOVED TOOL TO 5038' - 5064' AND SET HOOK.
0822					OPENED TOOL - ANNULUS FLUID DROPPED - PICKED UP ON TOOL.
0831					MOVED TOOL TO 5040' - 5066' AND SET HOOK.
0835					OPENED TOOL - ANNULUS REMAINED FULL - BLOWING 3" DEEP IN A 5 GALLON BUCKET OF WATER THROUGH A 1/4" BUBBLE HOSE.
0840					BLOW INCREASED TO 4" DEEP
0845					BLOW INCREASED TO 6" DEEP
0850					BLOW INCREASED TO 8" DEEP

TICKET NO: 35530700

CLOCK NO: 17532 HOUR: 24



GAUGE NO: 1606

DEPTH: 5024.0

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	160.8			
2	5.0	176.6	15.7		
3	10.0	195.0	18.4		
4	15.0	211.5	16.6		
5	20.0	230.8	19.2		
6	25.0	247.6	16.9		
C 7	30.7	267.4	19.7		
FIRST CLOSED-IN					
C 1	0.0	267.4			
2	4.0	1425.1	1157.7	3.6	0.935
3	8.0	1502.1	1234.7	6.4	0.684
4	12.0	1534.2	1266.8	8.6	0.553
5	16.0	1554.4	1287.0	10.5	0.466
6	20.0	1567.6	1300.2	12.1	0.404
7	24.0	1578.4	1311.0	13.5	0.358
8	28.0	1586.7	1319.3	14.6	0.322
9	32.0	1594.0	1326.6	15.7	0.292
10	36.0	1598.6	1331.2	16.6	0.268
11	40.0	1602.8	1335.4	17.4	0.247
12	44.0	1606.5	1339.2	18.1	0.230
13	48.0	1610.1	1342.8	18.7	0.215
14	52.0	1612.7	1345.4	19.3	0.201
15	56.0	1615.3	1348.0	19.8	0.190
D 16	60.7	1617.5	1350.1	20.4	0.178
SECOND FLOW					
E 1	0.0	284.7			
2	10.0	306.2	21.5		
3	20.0	337.7	31.5		
4	30.0	368.2	30.5		
5	40.0	396.6	28.3		
6	50.0	424.1	27.5		
F 7	59.5	450.6	26.5		
SECOND CLOSED-IN					
F 1	0.0	450.6			
2	8.0	1469.4	1018.8	7.4	1.089
3	16.0	1519.0	1068.4	13.6	0.822
4	24.0	1543.1	1092.5	19.0	0.678
5	32.0	1559.8	1109.2	23.6	0.582
6	40.0	1569.5	1118.9	27.7	0.512
7	48.0	1578.7	1128.1	31.3	0.459
8	56.0	1585.8	1135.3	34.5	0.417
9	64.0	1592.4	1141.8	37.4	0.382
10	72.0	1597.3	1146.7	40.0	0.353

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
11	80.0	1601.5	1150.9	42.4	0.328
12	88.0	1605.4	1154.8	44.5	0.307
13	96.0	1607.8	1157.3	46.5	0.288
14	104.0	1611.1	1160.5	48.3	0.271
15	112.0	1613.4	1162.8	50.0	0.257
16	120.0	1614.4	1163.8	51.5	0.244
G 17	124.1	1614.2	1163.6	52.2	0.237

REMARKS:

TICKET NO: 35530700

CLOCK NO: 17529 HOUR: 24
























GAUGE NO: 1605

DEPTH: 5061.0

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	175.9		
	2	5.0	207.2	31.3	
	3	10.0	233.7	26.4	
	4	15.0	228.6	-5.0	
	5	20.0	243.7	15.1	
	6	25.0	261.1	17.4	
C	7	30.7	278.3	17.2	
FIRST CLOSED-IN					
C	1	0.0	278.3		
	2	4.0	1434.8	1156.4	3.6 0.934
	3	8.0	1512.2	1233.9	6.3 0.685
	4	12.0	1544.8	1266.5	8.7 0.550
	5	16.0	1564.7	1286.4	10.5 0.465
	6	20.0	1580.0	1301.7	12.1 0.404
	7	24.0	1592.4	1314.1	13.5 0.358
	8	28.0	1601.1	1322.7	14.6 0.322
	9	32.0	1606.4	1328.1	15.7 0.292
	10	36.0	1611.2	1332.8	16.6 0.268
	11	40.0	1614.8	1336.4	17.4 0.247
	12	44.0	1618.7	1340.3	18.1 0.230
	13	48.0	1620.9	1342.6	18.7 0.215
	14	52.0	1624.4	1346.0	19.3 0.202
	15	56.0	1625.8	1347.5	19.8 0.190
D	16	60.7	1627.5	1349.1	20.4 0.178
SECOND FLOW					
E	1	0.0	294.2		
	2	10.0	314.3	20.1	
	3	20.0	347.7	33.5	
	4	30.0	378.9	31.1	
	5	40.0	408.3	29.5	
	6	50.0	435.0	26.6	
F	7	59.5	460.9	25.9	
SECOND CLOSED-IN					
F	1	0.0	460.9		
	2	8.0	1480.0	1019.1	7.3 1.089
	3	16.0	1531.1	1070.2	13.6 0.822
	4	24.0	1556.2	1095.3	19.0 0.677
	5	32.0	1571.2	1110.3	23.6 0.582
	6	40.0	1582.5	1121.6	27.7 0.513
	7	48.0	1590.8	1129.9	31.3 0.459
	8	56.0	1598.3	1137.4	34.6 0.417
	9	64.0	1604.8	1143.9	37.4 0.382
	10	72.0	1609.0	1148.1	40.0 0.353

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
	11	80.0	1612.8	1151.9	42.4 0.328
	12	88.0	1616.1	1155.2	44.6 0.306
	13	96.0	1618.5	1157.6	46.5 0.288
	14	104.0	1621.6	1160.7	48.3 0.271
	15	112.0	1624.4	1163.5	50.0 0.257
	16	120.0	1626.3	1165.4	51.5 0.243
G	17	124.1	1626.7	1165.8	52.2 0.237

REMARKS:

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	4911.0	
3		DRILL COLLARS.....	6.250	2.250	31.0	
50		IMPACT REVERSING SUB.....	6.000	3.000	1.0	4943.0
3		DRILL COLLARS.....	6.250	2.250	62.0	
5		CROSSOVER.....	6.000	2.250	1.0	
11		HANDLING SUB & CHOKE ASSEMBLY...	4.500	3.160	5.0	
13		DUAL CIP SAMPLER.....	5.030	0.750	7.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	5022.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	5024.0
15		JAR.....	5.030	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	5040.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	11.0	
17		PRESSURE EQUALIZING CROSSOVER...	5.000		1.0	
22		BLANK ANCHOR.....	5.000	2.370	5.0	
80		AP RUNNING CASE.....	5.000	2.250	5.0	5061.0
70		OPEN HOLE PACKER.....	6.750	1.530	6.0	5066.0
90		SIDE WALL ANCHOR.....	6.750	1.620	5.0	5072.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	3.0	
81		BLANKED-OFF RUNNING CASE.....	5.000		4.0	5079.0
		TOTAL DEPTH				6300.0

EQUIPMENT DATA