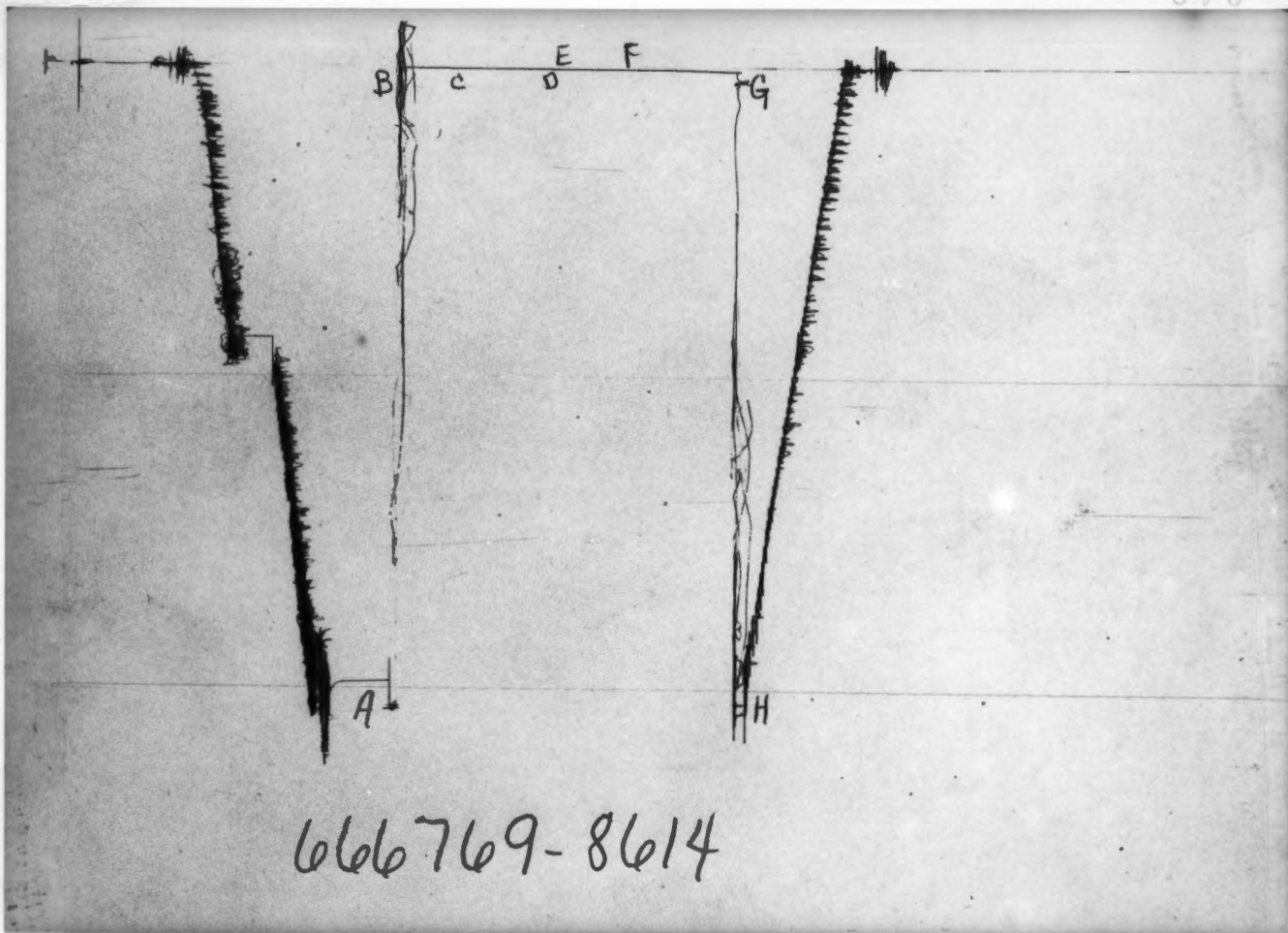




TICKET NO. 66676900
 29-NOV-83
 OBERLIN

FORMATION TESTING SERVICE REPORT

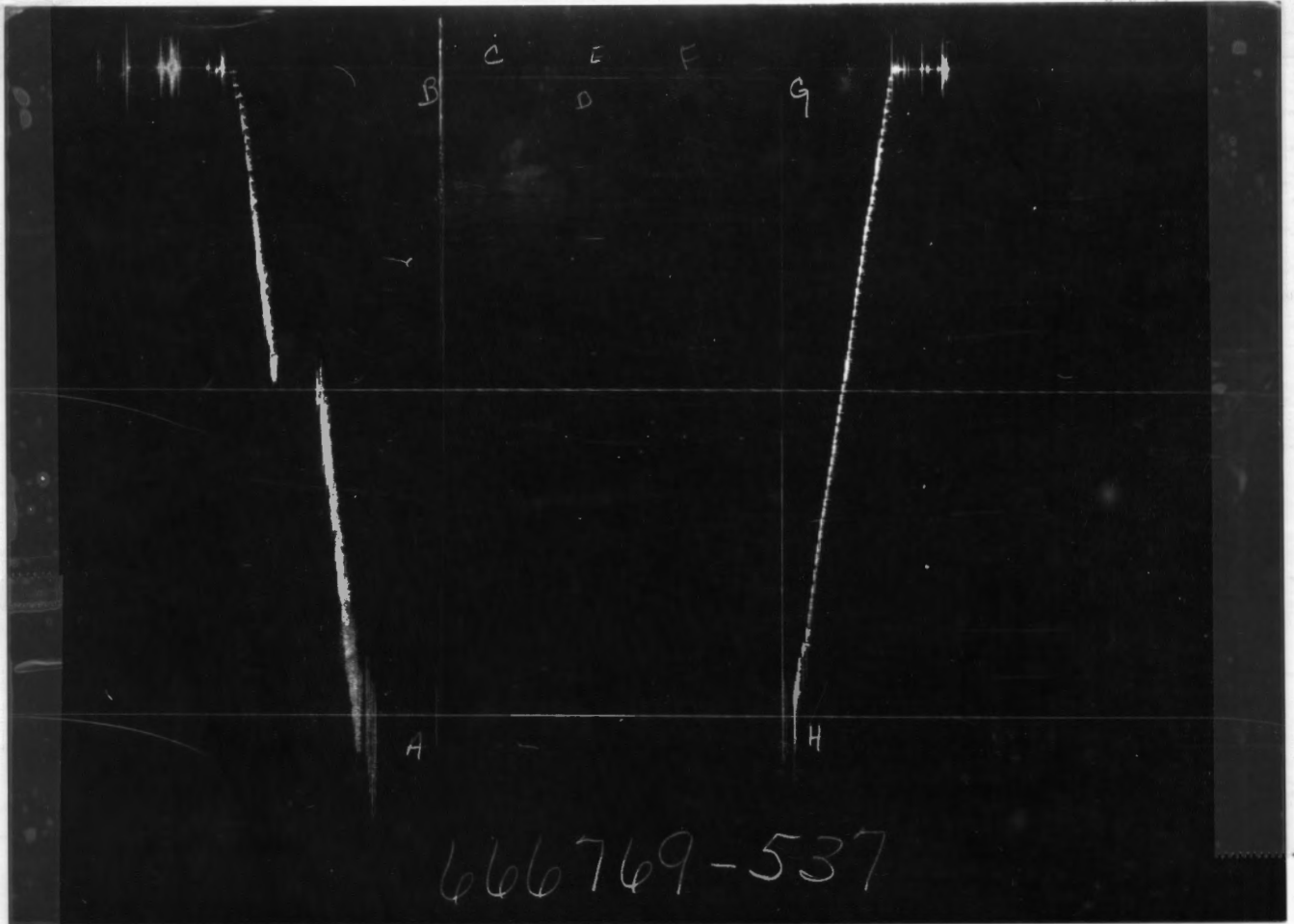
LEASE NAME	ARMBRISTER	WELL NO.	1	TEST NO.	1	TESTED INTERVAL	3806.1 - 3826.1	LEASE OWNER/COMPANY NAME	PETROVENTURES, INCORPORATED
LEGAL LOCATION	5-11S-21W	FIELD AREA	NORTHEAST OF WAKEENEY	COUNTY	TREGO	STATE	KANSAS		BC



666769-8614

GAUGE NO: 8614 DEPTH: 3784.7 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1971.0			
B	INITIAL FIRST FLOW		6.6			
C	FINAL FIRST FLOW		7.5	30.0	30.0	F
C	INITIAL FIRST CLOSED-IN		7.5			
D	FINAL FIRST CLOSED-IN		9.1	60.0	60.0	C
E	INITIAL SECOND FLOW		9.1			
F	FINAL SECOND FLOW		9.1	45.0	45.0	F
F	INITIAL SECOND CLOSED-IN		9.1			
G	FINAL SECOND CLOSED-IN		13.7	60.0	60.0	C
H	FINAL HYDROSTATIC		1967.9			



GAUGE NO: 537 DEPTH: 3823.5 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	1979	1989.9			
B	INITIAL FIRST FLOW	24	28.5	30.0	30.0	F
C	FINAL FIRST FLOW	32	28.5			
C	INITIAL FIRST CLOSED-IN	32	28.5	60.0	60.0	C
D	FINAL FIRST CLOSED-IN	32	29.9			
E	INITIAL SECOND FLOW	32	29.9	45.0	45.0	F
F	FINAL SECOND FLOW	32	29.4			
F	INITIAL SECOND CLOSED-IN	32	29.4	60.0	60.0	C
G	FINAL SECOND CLOSED-IN	32	33.5			
H	FINAL HYDROSTATIC	1979	1985.2			

EQUIPMENT & HOLE DATA
 FORMATION TESTED: MARMATON
 NET PAY (ft): _____
 GROSS TESTED FOOTAGE: 20.0
 ALL DEPTHS MEASURED FROM: KB
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 2201
 TOTAL DEPTH (ft): 3826.0
 PACKER DEPTH(S) (ft): 3800, 3806
 FINAL SURFACE CHOKE (in): 0.250
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 9.80
 MUD VISCOSITY (sec): 44
 ESTIMATED HOLE TEMP. (°F): _____
 ACTUAL HOLE TEMP. (°F): 110 @ 3822.0 ft

TICKET NUMBER: 66676900
 DATE: 11-20-83 TEST NO: 1
 TYPE DST: OPEN HOLE
 HALLIBURTON CAMP: OBERLIN
 TESTER: DEIBERT
 WITNESS: ELDER
 DRILLING CONTRACTOR: DUNNE AND GARDNER

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
MUD REPORT	_____ @ _____ °F	<u>31000</u> ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

SAMPLER DATA
 Pstg AT SURFACE: 30
 cu.ft. OF GAS: 0.00
 cc OF OIL: 0
 cc OF WATER: 0
 cc OF MUD: 2250
 TOTAL LIQUID cc: 2250

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


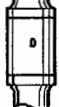











CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:
 2250 CC'S OF MUD IN THE SAMPLER
 THERE WAS NO MUD IN THE TOOL OR DRILL PIPE

MEASURED FROM
TESTER VALVE

REMARKS:

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	3645.2	
50		IMPACT REVERSING SUB.....	6.000	3.000	1.0	3645.2
1		DRILL PIPE.....	4.500	3.870	125.8	
13		DUAL CIP SAMPLER.....	5.030	0.870	8.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	3782.1
80		AP RUNNING CASE.....	5.000	2.250	4.1	3784.7
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	2.8	
70		OPEN HOLE PACKER.....	6.750	1.530	5.8	3799.9
70		OPEN HOLE PACKER.....	6.750	1.530	5.8	3806.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	13.0	
83		HT-500 TEMPERATURE CASE.....	5.000		1.5	3822.0
81		BLANKED-OFF RUNNING CASE.....	5.000		4.1	3823.5
TOTAL DEPTH					3826.0	

EQUIPMENT DATA

TEMPERATURE

RECORDER

CHART



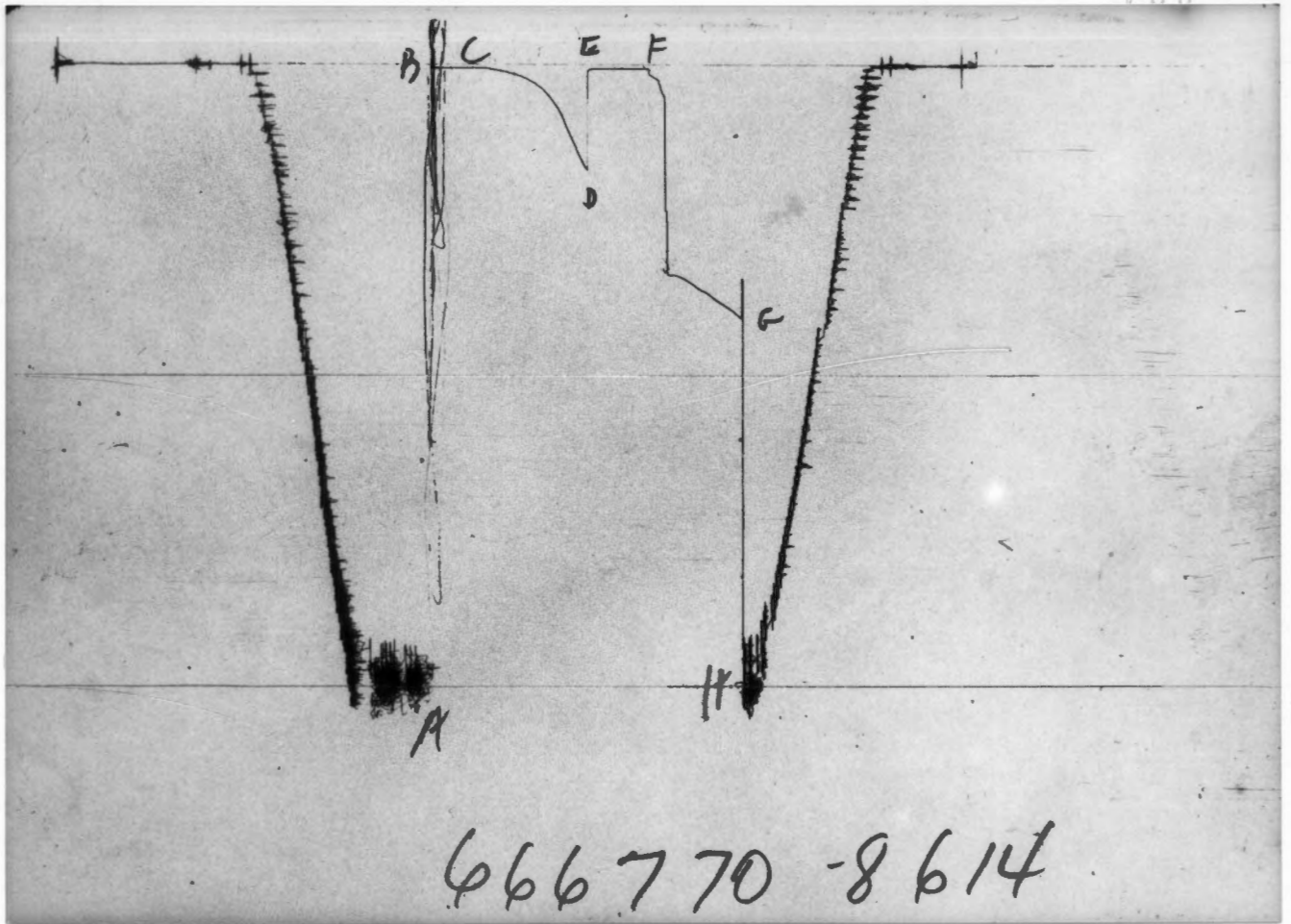
10° each circle



TICKET NO. 66677000
 28-NOV-83
 OBERLIN

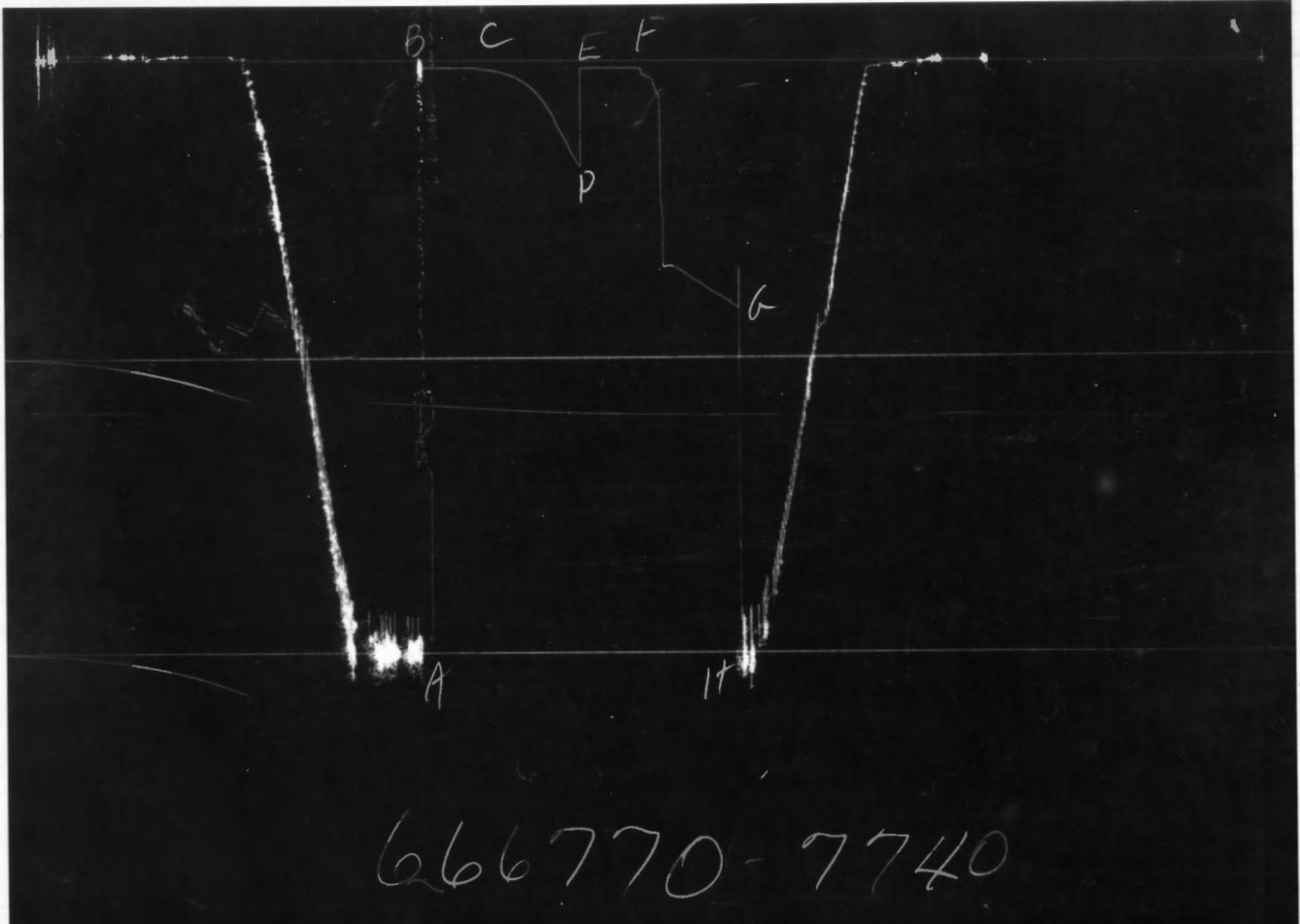
FORMATION TESTING SERVICE REPORT

ARMBRISTER	1	2	3683.1	3707.1	PETROVENTURES, INCORPORATED
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL		LEASE OWNER/COMPANY NAME
LEGAL LOCATION SEC. - TWP. - RNG.	5-11S-21W				
	FIELD AREA	NORTH EAST OF WAKEENEY	COUNTY	TREGO	STATE KANSAS SM



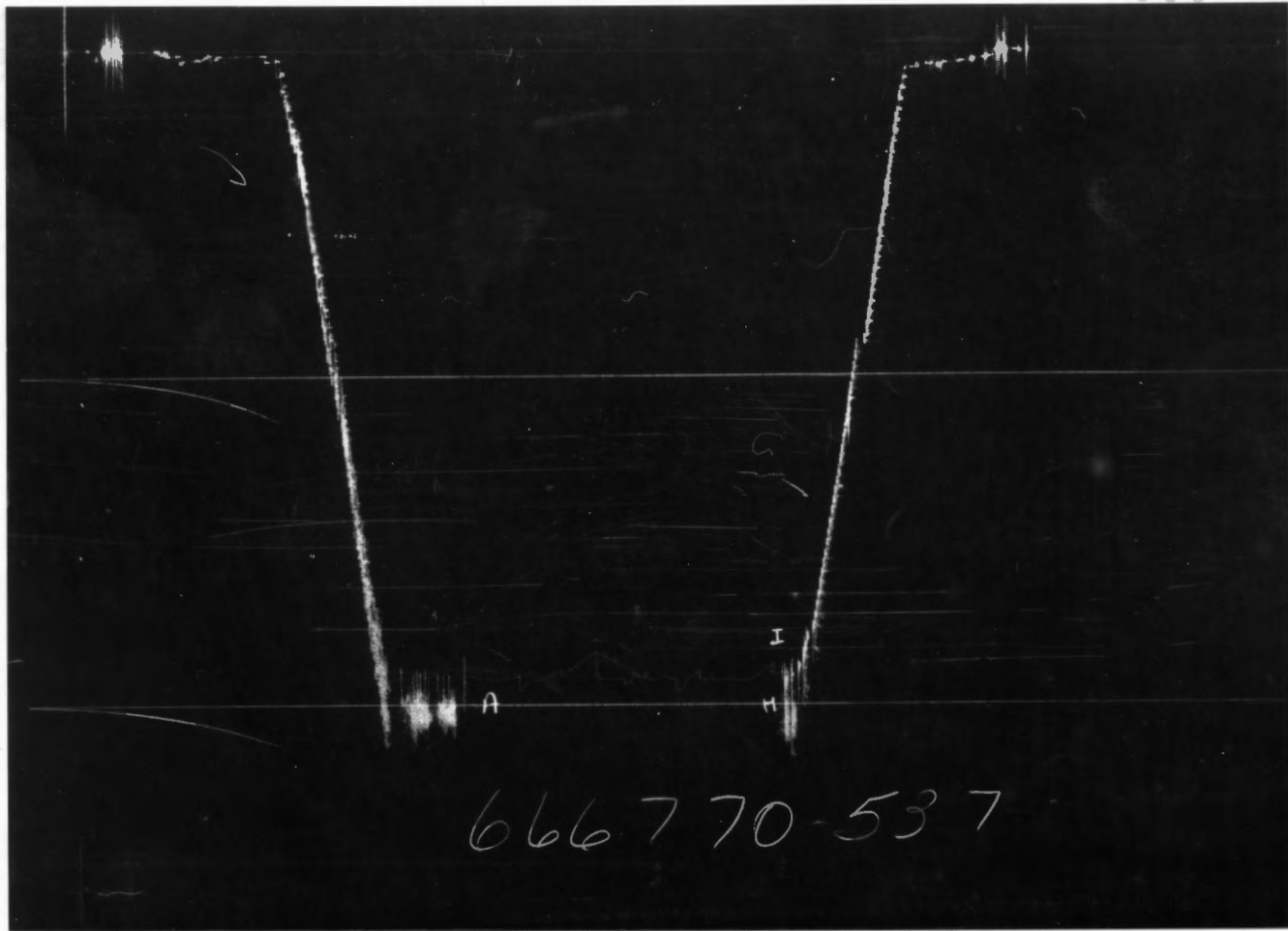
GAUGE NO: 8614 DEPTH: 3661.4 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		1983.3			
B	INITIAL FIRST FLOW		11.3			
C	FINAL FIRST FLOW		11.3	30.0	30.0	F
C	INITIAL FIRST CLOSED-IN		11.3			
D	FINAL FIRST CLOSED-IN		339.6	60.0	60.0	C
E	INITIAL SECOND FLOW		19.2			
F	FINAL SECOND FLOW		13.8	30.0	30.0	F
F	INITIAL SECOND CLOSED-IN		13.8			
G	FINAL SECOND CLOSED-IN		816.5	60.0	60.0	C
H	FINAL HYDROSTATIC		1909.3			
I	HYDROSTATIC RELEASE					



GAUGE NO: 7740 DEPTH: 3704.6 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	1978	2010.0			
B	INITIAL FIRST FLOW	26	24.6			
C	FINAL FIRST FLOW	35	26.0	30.0	30.0	F
C	INITIAL FIRST CLOSED-IN	35	26.0			
D	FINAL FIRST CLOSED-IN	352	357.6	60.0	60.0	C
E	INITIAL SECOND FLOW	17	28.3			
F	FINAL SECOND FLOW	26	25.9	30.0	30.0	F
F	INITIAL SECOND CLOSED-IN	26	25.9			
G	FINAL SECOND CLOSED-IN	827	833.6	60.0	60.0	C
H	FINAL HYDROSTATIC	1978	1922.2			
I	HYDROSTATIC RELEASE					



666770-537

GAUGE NO: 537 DEPTH: 3749.5 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2038.3			
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			30.0		F
F	FINAL SECOND FLOW					
F	INITIAL SECOND CLOSED-IN			60.0		C
G	FINAL SECOND CLOSED-IN					
H	FINAL HYDROSTATIC		1972.4			
I	HYDROSTATIC RELEASE		1881.9			

EQUIPMENT & HOLE DATA

FORMATION TESTED: KANSAS CITY
 NET PAY (ft): _____
 GROSS TESTED FOOTAGE: 24.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 2201
 TOTAL DEPTH (ft): 3925.0
 PACKER DEPTH(S) (ft): 3678, 3683, 3707
 FINAL SURFACE CHOKE (in): 0.250
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 10.00
 MUD VISCOSITY (sec): 49
 ESTIMATED HOLE TEMP. (°F): _____
 ACTUAL HOLE TEMP. (°F): 99 @ 3747.5 ft

TICKET NUMBER: 66677000
 DATE: 11-22-83 TEST NO: 2
 TYPE DST: OFF BTM STRADDLE
 HALLIBURTON CAMP:
 OBERLIN
 TESTER: RICK DEIBERT
 WITNESS: BOB ELDER
 DRILLING CONTRACTOR:
 DUNNE-GARDNER #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
<u>MUD REPORT</u>	<u> @ °F</u>	<u>34000 ppm</u>
_____	<u> @ °F</u>	<u> ppm</u>
_____	<u> @ °F</u>	<u> ppm</u>
_____	<u> @ °F</u>	<u> ppm</u>
_____	<u> @ °F</u>	<u> ppm</u>
_____	<u> @ °F</u>	<u> ppm</u>

SAMPLER DATA

P_{sig} AT SURFACE: 24
 cu.ft. OF GAS: 0.00
 cc OF OIL: 0
 cc OF WATER: 0
 cc OF MUD: 2250
 TOTAL LIQUID cc: 2250

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____
























RECOVERED:

5 FEET OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

CHARTS INDICATE FINAL CIP MAY BE QUESTIONABLE DUE TO POSSIBLE LEAKAGE.

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	3520.9	
50		IMPACT REVERSING SUB.....	6.000	3.000	1.0	3521.9
1		DRILL PIPE.....	4.500	3.826	125.8	
13		DUAL CIP SAMPLER.....	5.030	0.870	8.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	3658.9
80		AP RUNNING CASE.....	5.000	2.250	4.1	3661.4
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	2.8	
17		PRESSURE EQUALIZING CROSSOVER...	5.000	0.750	1.0	
70		OPEN HOLE PACKER.....	6.750	1.530	5.8	3677.7
70		OPEN HOLE PACKER.....	6.750	1.530	5.8	3683.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	15.0	
17		PRESSURE EQUALIZING CROSSOVER...	5.000	0.750	1.0	
80		AP RUNNING CASE.....	5.000	2.250	4.1	3704.6
70		OPEN HOLE PACKER.....	6.750	1.530	4.0	3707.0
5		CROSSOVER.....	6.000	3.000	1.0	
5		CROSSOVER.....	6.000	3.000	1.7	
1		DRILL PIPE.....	4.500	3.826	31.7	
5		CROSSOVER.....	6.000	3.000	1.2	
20		FLUSH JOINT ANCHOR.....	5.000	2.370	1.0	
90		SIDE WALL ANCHOR.....	6.750	2.250	5.0	3746.0
83		HT-500 TEMPERATURE CASE.....	5.000		1.5	3747.5
81		BLANKED-OFF RUNNING CASE.....	5.000		4.1	3749.1
		TOTAL DEPTH			3925.0	

EQUIPMENT DATA

TEMPERATURE

RECORDER

CHART



10° each circle

TK# 666770