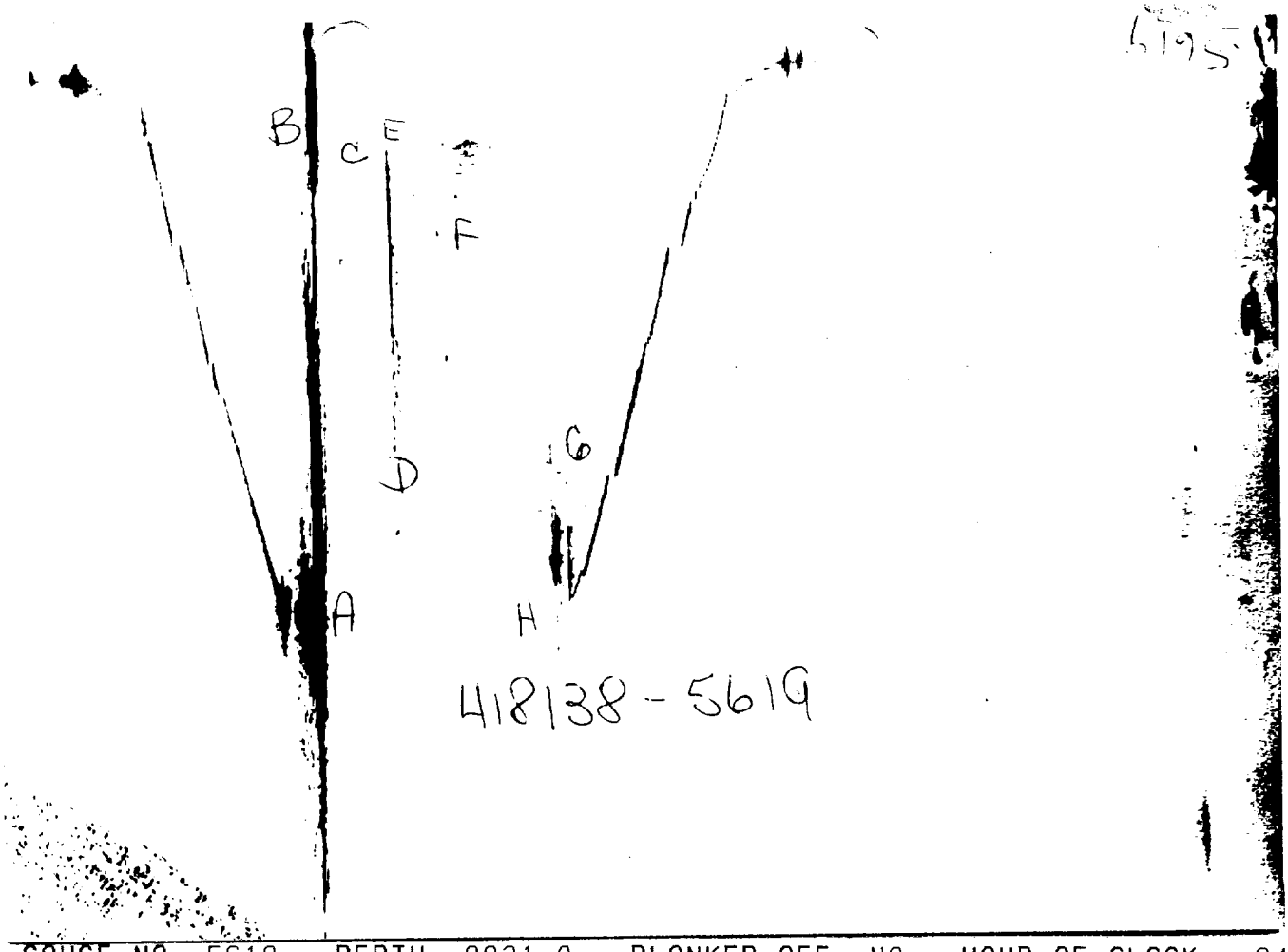
HALLIBURTON
SERVICES

TICKET NO. 41813800
29-JUL-83
HOBBS

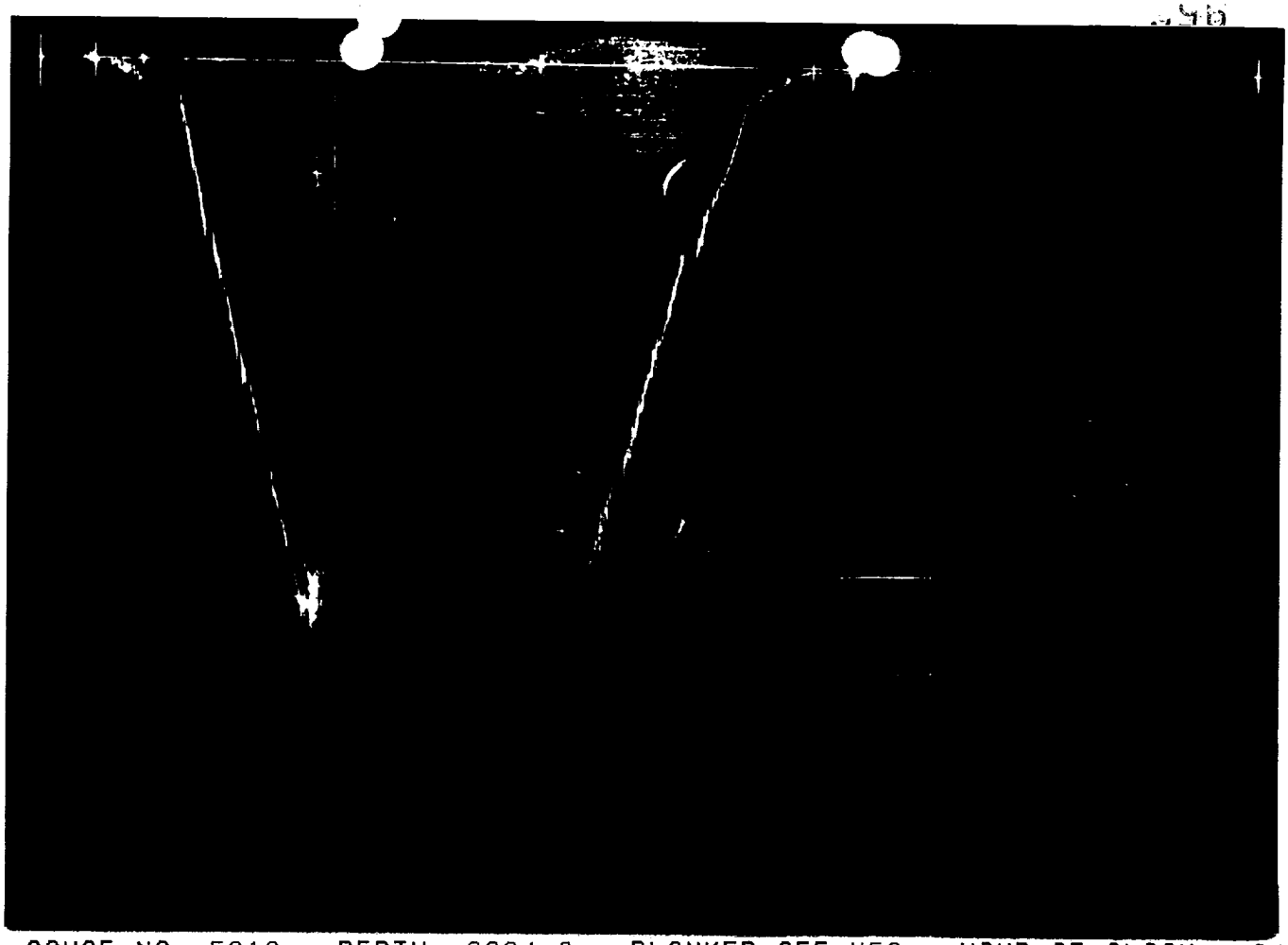
FORMATION TESTING SERVICE REPORT

STATE WES	1	4	9847.' - 9937.'	POGO PRODUCING COMPANY	
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME	
LEGAL LOCATION SEC. - TWP. - RNG. 14 - 20 SOUTH - 33 EAST	FIELD AREA SAUNDERS	COUNTY LEA	STATE NEW MEXICO PW		



GAUGE NO: 5619 DEPTH: 9831.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	4579	4612.7			
B	INITIAL FIRST FLOW	371	254.6	31.0	27.4	F
C	FINAL FIRST FLOW	590	614.6			
C	INITIAL FIRST CLOSED-IN	590	614.6	60.0	59.8	C
D	FINAL FIRST CLOSED-IN	3183	3196.1			
E	INITIAL SECOND FLOW	742	715.7	63.0	64.9	F
F	FINAL SECOND FLOW	1307	1330.2			
F	INITIAL SECOND CLOSED-IN	1307	1330.2	122.0	120.3	C
G	FINAL SECOND CLOSED-IN	3161	3173.1			
H	FINAL HYDROSTATIC	4579	4586.7			



GAUGE NO: 5618 DEPTH: 9934.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	4620	4643.4			
B	INITIAL FIRST FLOW	803	1132.8	31.0	27.4	F
C	FINAL FIRST FLOW	868	883.1			
C	INITIAL FIRST CLOSED-IN	868	883.1	60.0	59.8	C
D	FINAL FIRST CLOSED-IN	3229	3242.8			
E	INITIAL SECOND FLOW	1191	1201.7	63.0	64.9	F
F	FINAL SECOND FLOW	1769	1768.5			
F	INITIAL SECOND CLOSED-IN	1769	1768.5	122.0	120.3	C
G	FINAL SECOND CLOSED-IN	3208	3215.8			
H	FINAL HYDROSTATIC	4620	4614.5			

EQUIPMENT & HOLE DATA

FORMATION TESTED: BOE B
NET PAY (ft): 18.0
GROSS TESTED FOOTAGE: 90.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 0
TOTAL DEPTH (ft): 9937.0
PACKER DEPTH(S) (ft): 9842, 9847
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 8.80
MUD VISCOSITY (sec): 45
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 156 @ 9933.0 ft

TICKET NUMBER: 41813800

DATE: 7-25-83 TEST NO: 4

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: HOBBS

TESTER: LOU URSO

WITNESS: BILL BARNES

DRILLING CONTRACTOR: STERLING RIG #21

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
SAMPLER	0.094 @	74 °F	63000 ppm
TOOL TOP	0.095 @	74 °F	64000 ppm
FLUID CHANGE	0.100 @	74 °F	62000 ppm
TOP OF RECOVERY	0.185 @	74 °F	24000 ppm
PIT SAMPLE	0.474 @	74 °F	6000 ppm
	@	°F	ppm

SAMPLER DATA

Psig AT SURFACE: 400
cu.ft. OF GAS: 0.00
cc OF OIL: 0
cc OF WATER: 2400
cc OF MUD: 0
TOTAL LIQUID cc: 2400

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

400 FEET OF GAS CUT DRILLING MUD
1300 FEET OF GAS CUT FORMATION WATER
1700 FEET OF FORMATION WATER

MEASURED FROM TESTER VALVE

REMARKS:

CHARTS INDICATE PARTIAL PLUGGING OF ANCHOR PERFORATIONS DURING FLOW PERIODS.

TYPE & SIZE MEASURING DEVICE: POSITIVE CHOKE | TICKET NO: 41813800

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
7-25-83					
1200					STARTED TEST TOOLS IN HOLE
1540					SET PACKER
1542	BH				OPENED TOOL - SLID 6'
1546	BH				STROKED TOOL
1548	BH				OPENED TOOL WITH A VERY WEAK
					BLOW.
1553	BH				INCREASED TO A GOOD BLOW
1558	BH	1			
1603	BH	1			
1608	BH	1			
1613	BH	2			
1619	BH	2			CLOSED TOOL
1719	BH				REOPENED TOOL WITH A VERY WEAK
					BLOW.
1730	BH	1			BLOW INCREASED TO A GOOD BLOW
1740	BH	1			
1750	BH	1			
1800	BH	1			
1810	BH	1			
1822	BH	1			CLOSED TOOL
2024					OPENED BYPASS AND PULLED OUT
					OF HOLE.
7-26-83					
0100					BREAK DOWN TEST TOOLS
0400					JOB COMPLETED
					BH: BUBBLE HOSE

TICKET NO: 41813800	GAUGE NO: 5619
CLOCK NO: 28339 HOUR: 24	DEPTH: 9831.0

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	254.6			
	2	5.0	208.1	-46.5		
	3	10.0	383.6	175.5		
	4	15.0	421.6	38.0		
	5	20.0	492.4	70.7		
	6	25.0	574.5	82.1		
C	7	27.4	614.6	40.2		
			FIRST CLOSED-IN			
C	1	0.0	614.6			
	2	4.0	2972.4	2357.8	3.5	0.892
	3	8.0	3048.6	2434.0	6.2	0.647
	4	12.0	3092.3	2477.6	8.3	0.515
	5	16.0	3122.6	2508.0	10.1	0.434
	6	20.0	3142.4	2527.7	11.6	0.374
	7	24.0	3157.4	2542.8	12.8	0.330
	8	28.0	3168.2	2553.5	13.8	0.296
	9	32.0	3175.5	2560.9	14.8	0.268
	10	36.0	3180.2	2565.6	15.5	0.245
	11	40.0	3185.2	2570.5	16.2	0.226
	12	44.0	3188.8	2574.2	16.9	0.210
	13	48.0	3190.5	2575.9	17.4	0.196
	14	52.0	3192.9	2578.3	17.9	0.184
	15	56.0	3194.4	2579.8	18.4	0.173
D	16	59.8	3196.1	2581.5	18.8	0.164
			SECOND FLOW			
E	1	0.0	715.7			
	2	10.0	784.9	69.2		
	3	20.0	891.3	106.3		
	4	30.0	1007.1	115.9		
	5	40.0	1105.8	98.7		
	6	50.0	1198.7	92.9		
	7	60.0	1293.7	95.0		
F	8	64.9	1330.2	36.5		
			SECOND CLOSED-IN			
F	1	0.0	1330.2			
	2	8.0	3056.6	1726.3	7.4	1.096
	3	16.0	3108.4	1778.1	13.6	0.830
	4	24.0	3130.5	1800.3	19.1	0.685
	5	32.0	3141.5	1811.3	23.7	0.590
	6	40.0	3149.9	1819.7	27.9	0.519
	7	48.0	3154.8	1824.6	31.6	0.466
	8	56.0	3159.6	1829.3	34.8	0.423
	9	64.0	3162.8	1832.6	37.8	0.388

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	3165.4	1835.1	40.4	0.358
	11	80.0	3167.3	1837.1	42.8	0.333
	12	88.0	3168.6	1838.4	45.0	0.312
	13	96.0	3170.8	1840.5	47.1	0.293
	14	104.0	3172.7	1842.5	48.9	0.276
	15	112.0	3172.9	1842.7	50.6	0.261
G	16	120.3	3173.1	1842.9	52.2	0.247

REMARKS:

TICKET NO: 41813800

CLOCK NO: 16511 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 5618

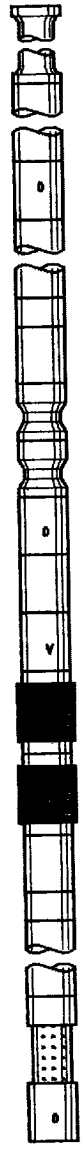
DEPTH: 9934.0

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	1132.8			
	2	5.0	790.7	-342.1		
	3	10.0	759.2	-31.5		
	4	15.0	791.3	32.1		
	5	20.0	817.4	26.0		
	6	25.0	858.1	40.8		
C	7	27.4	883.1	24.9		
			FIRST CLOSED-IN			
C	1	0.0	883.1			
	2	4.0	2960.6	2077.6	3.5	0.897
	3	8.0	3069.4	2186.3	6.2	0.646
	4	12.0	3122.5	2239.4	8.4	0.515
	5	16.0	3158.0	2274.9	10.1	0.433
	6	20.0	3181.2	2298.1	11.6	0.374
	7	24.0	3199.1	2316.1	12.8	0.331
	8	28.0	3212.0	2328.9	13.8	0.296
	9	32.0	3220.6	2337.5	14.8	0.268
	10	36.0	3227.0	2343.9	15.5	0.246
	11	40.0	3230.2	2347.1	16.2	0.226
	12	44.0	3234.3	2351.2	16.9	0.210
	13	48.0	3236.4	2353.3	17.4	0.196
	14	52.0	3238.5	2355.5	17.9	0.184
	15	56.0	3240.9	2357.8	18.4	0.173
D	16	59.8	3242.8	2359.7	18.8	0.164
			SECOND FLOW			
E	1	0.0	1201.7			
F	2	64.9	1768.5	566.8		
			SECOND CLOSED-IN			
F	1	0.0	1768.5			
	2	8.0	3110.5	1342.0	7.4	1.096
	3	16.0	3154.2	1385.7	13.6	0.830
	4	24.0	3175.2	1406.6	19.1	0.685
	5	32.0	3186.7	1418.2	23.8	0.589
	6	40.0	3193.1	1424.6	27.9	0.519
	7	48.0	3197.9	1429.3	31.6	0.466
	8	56.0	3202.1	1433.6	34.9	0.423
	9	64.0	3203.4	1434.9	37.8	0.388
	10	72.0	3206.0	1437.5	40.4	0.358
	11	80.0	3207.9	1439.4	42.9	0.333
	12	88.0	3209.9	1441.3	45.0	0.312
	13	96.0	3211.8	1443.3	47.1	0.292
	14	104.0	3213.3	1444.8	48.9	0.276
	15	112.0	3214.1	1445.6	50.6	0.261

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			SECOND CLOSED-IN - CONTINUED			
G	16	120.3	3215.8	1447.3	52.2	0.247

REMARKS:

TICKET NO. 41813800



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	9310.0	
3	DRILL COLLARS.....	6.250	2.250	311.0	
50	IMPACT REVERSING SUB.....	6.000	2.750	1.0	9621.0
3	DRILL COLLARS.....	6.250	2.250	186.0	
5	CROSSOVER.....	5.750	2.250	1.0	
62	MULTIPLE CIP SAMPLER.....	5.000	0.750	9.0	9813.0
14	EXTENSION JOINT.....	5.000	0.870	10.0	
14	EXTENSION JOINT.....	5.000	0.870	10.0	
81	BLANKED-OFF RUNNING CASE.....	5.000	3.500	4.0	9831.0
15	JAR.....	5.000	1.000	5.0	
16	VR SAFETY JOINT.....	5.000	1.750	3.0	
70	OPEN HOLE PACKER.....	7.000	1.530	5.0	9842.0
70	OPEN HOLE PACKER.....	7.000	1.530	5.0	9847.0
19	ANCHOR PIPE SAFETY JOINT.....	5.750	1.500	4.0	
5	CROSSOVER.....	6.000	2.500	1.0	
3	DRILL COLLARS.....	6.250	2.250	62.0	
5	CROSSOVER.....	6.000	2.250	1.0	
21	PERFORATED TAIL PIPE.....	5.750	3.500	15.0	
81	BLANKED-OFF RUNNING CASE.....	5.750		4.0	9934.0
	TOTAL DEPTH				9937.0

EQUIPMENT DATA