HALLIBURTON
SERVICES

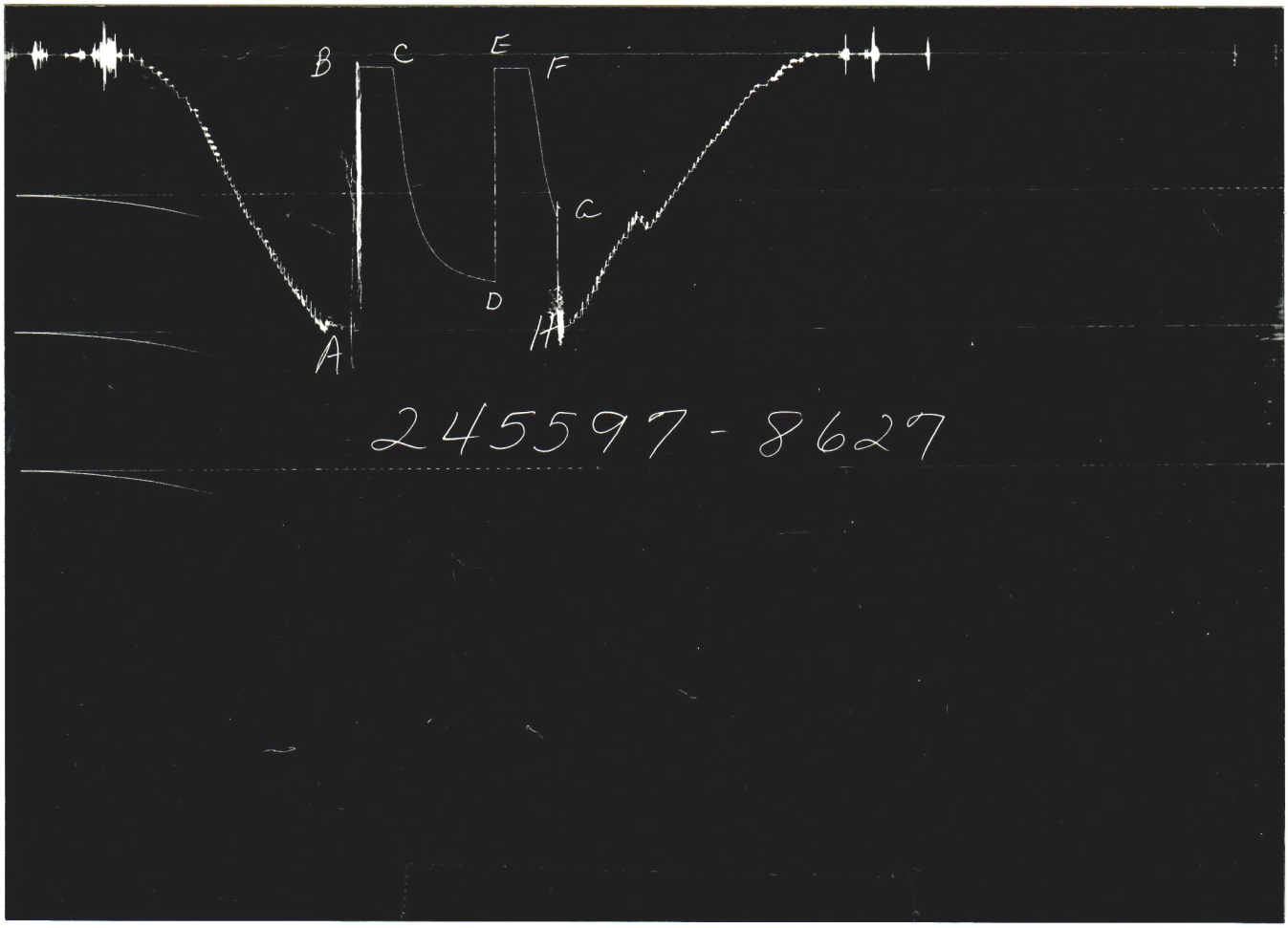
TICKET NO. 24559700
05-NOV-85
VERNAL

00221931

FORMATION TESTING SERVICE REPORT

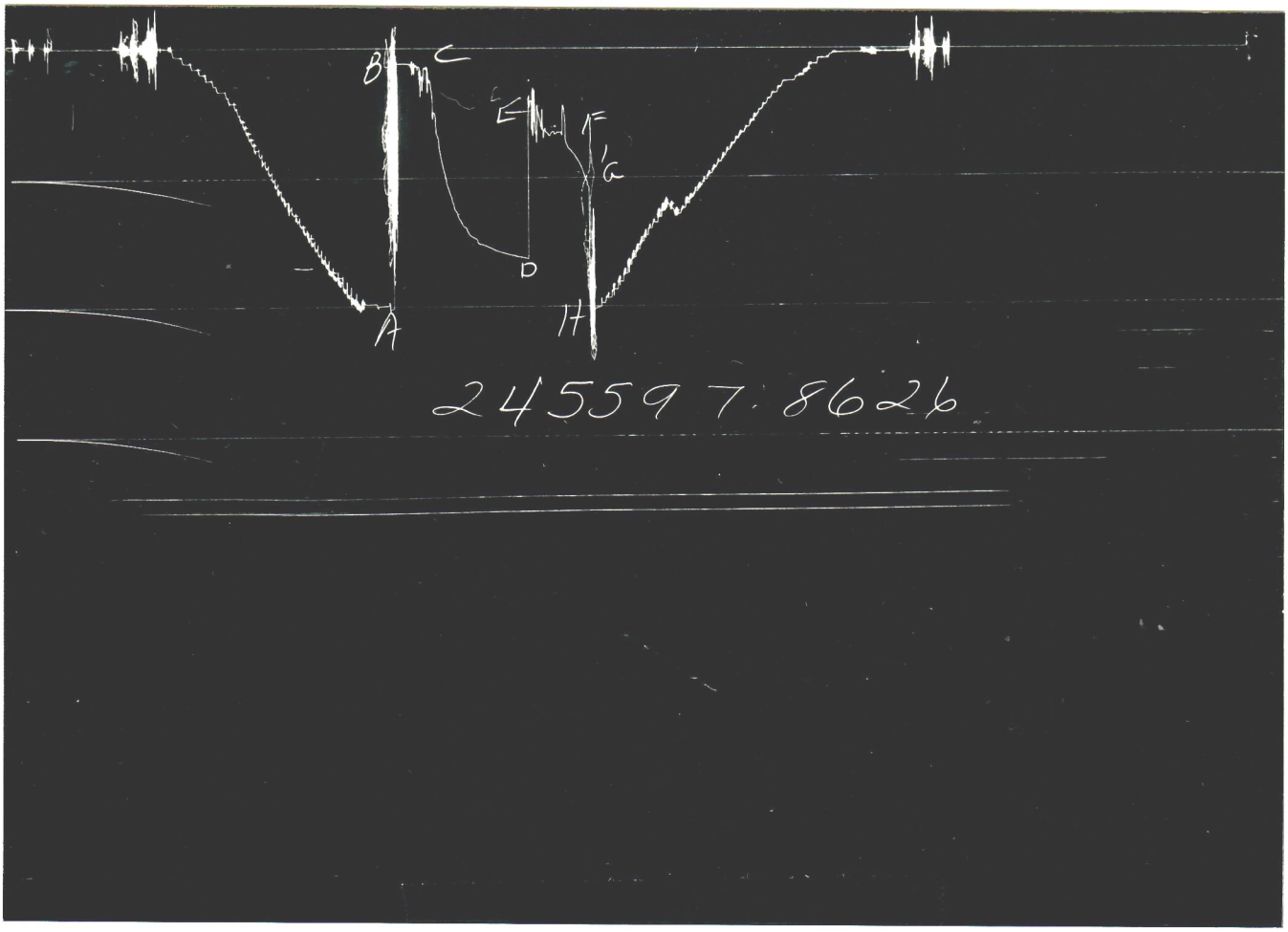
LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
14 7N 9W	PINE RIDGE	MOFFAT	COLORADO SM

LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
STEHLE	14-32	2	4130.0 - 4166.0	BWAB INCORPORATED



GAUGE NO: 8627 DEPTH: 4105.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2017	1986.4			
B	INITIAL FIRST FLOW	56	63.5	22.0	21.0	F
C	FINAL FIRST FLOW	75	96.3			
C	INITIAL FIRST CLOSED-IN	75	96.3	60.0	60.6	C
D	FINAL FIRST CLOSED-IN	1682	1662.9			
E	INITIAL SECOND FLOW	56	108.3	17.0	20.4	F
F	FINAL SECOND FLOW	56	105.0			
F	INITIAL SECOND CLOSED-IN	56	105.0	16.0	16.4	C
G	FINAL SECOND CLOSED-IN	1123	1187.8			
H	FINAL HYDROSTATIC	2017	1983.2			



GAUGE NO: 8626 DEPTH: 4163.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2038	2008.8			
B	INITIAL FIRST FLOW	80	127.7	22.0	21.0	F
C	FINAL FIRST FLOW	120	251.8			
C	INITIAL FIRST CLOSED-IN	120	251.8	60.0	60.6	C
D	FINAL FIRST CLOSED-IN	1659	1643.6			
E	INITIAL SECOND FLOW	361	383.6	17.0	20.4	F
F	FINAL SECOND FLOW	561	548.6			
F	INITIAL SECOND CLOSED-IN	561	548.6	16.0	16.4	C
G	FINAL SECOND CLOSED-IN	1161	1088.1			
H	FINAL HYDROSTATIC	2038	2015.5			

EQUIPMENT & HOLE DATA

FORMATION TESTED: LOWER LANCE
NET PAY (ft):
GROSS TESTED FOOTAGE: 36.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 6691.0
TOTAL DEPTH (ft): 4166.0
PACKER DEPTH(S) (ft): 4122, 4130
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.00
MUD VISCOSITY (sec): 48
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 122 @ 4162.0 ft

TICKET NUMBER: 24559700

DATE: 10-30-85 TEST NO: 2

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: VERNAL

TESTER: DOC MC MILLAN

WITNESS: BILL STECKMAN

DRILLING CONTRACTOR: SHELBY #11

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
MUD PIT	1.040 @	68 °F	4700 ppm
SAMPLER	1.040 @	68 °F	4700 ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm

SAMPLER DATA

Psig AT SURFACE: 10.0
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD: 2100.0
TOTAL LIQUID cc: 2100.0

HYDROCARBON PROPERTIES

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

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

160 TO 180 FEET OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

TOOLS SLID 12 TO 15 FEET TO BOTTOM.

THE CHARTS INDICATE PARTIAL PLUGGING OF THE ANCHOR PERFORATIONS DURING THE LAST HALF OF THE INITIAL FLOW PERIOD AND MORE INTENSELY THROUGHOUT THE FINAL FLOW PERIOD.

TYPE & SIZE MEASURING DEVICE: LT-20 MANIFOLD | TICKET NO: 24559700

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
10-29-85					
2300					ON LOCATION
2330					WOUND CLOCKS
					PICKED UP TOOLS
10-30-85					
0105					STARTED IN HOLE
0257					ON BOTTOM
0300		2 OZ.			TOOL OPENED, SLID APPROXIMATELY
					12 TO 15' TO BOTTOM
0305		2 OZ.			
0310		1 OZ.			
0315		1 OZ.			
0320		1/2 OZ			
0322		1/2 OZ			TOOL CLOSED
0422		1/2 OZ			TOOL OPENED
0425					TOO SMALL TO MEASURE
0430					TOO SMALL TO MEASURE
0439					TOOL CLOSED
0455					BYPASS OPENED
0500					PULLED OUT OF THE HOLE

TICKET NO: 24559700

CLOCK NO: 2797 HOUR: 12

HALLIBURTON SERVICES

GAUGE NO: 8627

DEPTH: 4105.0

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	63.5			
2	5.0	90.1	26.6		
3	10.0	91.6	1.5		
4	15.0	94.4	2.8		
C 5	21.0	96.3	1.9		
FIRST CLOSED-IN					
C 1	0.0	96.3			
2	4.0	473.6	377.4	3.4	0.795
3	8.0	878.2	781.9	5.8	0.559
4	12.0	1106.8	1010.5	7.6	0.438
5	16.0	1266.4	1170.2	9.1	0.363
6	20.0	1372.9	1276.7	10.2	0.311
7	24.0	1446.9	1350.6	11.2	0.273
8	28.0	1501.8	1405.6	12.0	0.242
9	32.0	1543.5	1447.3	12.7	0.219
10	36.0	1575.0	1478.7	13.2	0.199
11	40.0	1598.5	1502.2	13.8	0.183
12	44.0	1616.2	1519.9	14.2	0.169
13	48.0	1630.5	1534.2	14.6	0.157
14	52.0	1643.4	1547.1	14.9	0.147
15	56.0	1653.6	1557.3	15.3	0.138
D 16	60.6	1662.9	1566.7	15.6	0.129
SECOND FLOW					
E 1	0.0	108.3			
2	3.0	103.3	-5.0		
3	6.0	104.0	0.7		
4	9.0	103.7	-0.4		
5	12.0	104.0	0.4		
6	15.0	104.0	0.0		
7	18.0	104.6	0.6		
F 8	20.4	105.0	0.4		
SECOND CLOSED-IN					
F 1	0.0	105.0			
2	1.0	174.1	69.1	1.0	1.607
3	2.0	236.3	131.3	1.9	1.345
4	3.0	314.4	209.4	2.8	1.175
5	4.0	405.6	300.6	3.7	1.052
6	5.0	495.9	390.9	4.5	0.967
7	6.0	574.3	469.4	5.2	0.897
8	7.0	670.0	565.1	6.0	0.840
9	8.0	773.8	668.8	6.7	0.790
10	9.0	844.6	739.6	7.4	0.748
11	10.0	902.8	797.9	8.1	0.710

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
12	11.0	956.8	851.8	8.7	0.677
13	12.0	1012.7	907.7	9.3	0.648
14	13.0	1058.7	953.8	9.9	0.620
15	14.0	1102.3	997.3	10.5	0.596
16	15.0	1142.7	1037.7	11.0	0.574
G 17	16.4	1187.8	1082.8	11.7	0.546

REMARKS:

TICKET NO: 24559700

CLOCK NO: 2418 HOUR: 12

HALLIBURTON SERVICES

GAUGE NO: 8626

DEPTH: 4163.0

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	127.7		
C	2	21.0	251.8	124.1	
FIRST CLOSED-IN					
C	1	0.0	251.8		
	2	4.0	671.9	420.1	3.4 0.795
	3	8.0	938.1	686.3	5.8 0.560
	4	12.0	1129.1	877.3	7.6 0.439
	5	16.0	1275.2	1023.4	9.1 0.363
	6	20.0	1382.8	1131.0	10.2 0.312
	7	24.0	1450.7	1198.9	11.2 0.272
	8	28.0	1489.5	1237.8	12.0 0.243
	9	32.0	1534.2	1282.4	12.7 0.219
	10	36.0	1554.9	1303.1	13.3 0.199
	11	40.0	1576.8	1325.0	13.7 0.183
	12	44.0	1595.7	1344.0	14.2 0.169
	13	48.0	1609.9	1358.1	14.6 0.157
	14	52.0	1620.8	1369.1	14.9 0.147
	15	56.0	1631.0	1379.2	15.2 0.138
D	16	60.6	1643.6	1391.8	15.6 0.129
SECOND FLOW					
E	1	0.0	383.6		
F	2	20.4	548.6	165.0	
SECOND CLOSED-IN					
F	1	0.0	548.6		
G	2	16.4	1088.1	539.4	11.7 0.546

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:
FLOW PERIODS AND SECOND CIP PERIOD NOT SEGMENTED DUE TO PLUGGING....ALSO,
INITIAL CIP READINGS SHOULD BE CONSIDERED QUESTIONABLE DUE TO PLUGGING.

TICKET NO. 24559700

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	3629.9	
3	DRILL COLLARS.....	6.250	2.375	367.9	
50	IMPACT REVERSING SUB.....	5.000	3.000	1.0	3999.0
3	DRILL COLLARS.....	6.250	2.375	92.7	
5	CROSSOVER.....	5.375	3.000	0.6	
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	4103.0
80	AP RUNNING CASE.....	5.000	2.250	4.1	4105.0
15	JAR.....	4.625	1.750	7.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	7.000	1.530	5.8	4122.0
18	DISTRIBUTOR VALVE.....	5.000	1.680	2.0	
70	OPEN HOLE PACKER.....	7.000	1.530	5.8	4130.0
20	FLUSH JOINT ANCHOR.....	5.750	3.500	30.0	
81	BLANKED-OFF RUNNING CASE.....	5.750		4.5	4163.0

TOTAL DEPTH 4166.0

EQUIPMENT DATA