

COLUMBIA GAS DEVELOPMENT CORPORATION

McMILLAN 1-34

24-10-31

DRILL STEM TEST SUMMARY

Drill Stem Test 1 San Andres (6025'-6223') 198'

Opened tool for 10 minute preflow period with weak blow at the surface increasing to 4 inches into bucket at 10 minutes.

Shut tool in for 60 minute initial shut in period

Opened tool for 60 minute final flow period, had 2 inches blow in bucket at 5 minutes increasing steadily to 9 1/2 inches in bucket at 60 minutes. Surface pressure guage indicated 5 1/2 ounces at the end of the flow period.

Shut tool in for 120 minute final shut-in period.

Drill Pipe Recovery: 1080' sulfur water

Sample Chamber Recovery: 2600 cc at 30 psi

(125,000 ppm cl Rw = .052 at 60 degrees)

Bottom Hole Temperature: 114 degrees

PRESSURE DATA - ELECTRONIC GUAGE (6065')

(PSI)

IH	2792
FH	2802
IF-1	72
EF-1	177
IF-2	205
FF-2	577
SIP-1	2827
SIP-2	2822

Drill Stem Test 2 Upper Wolfcamp (9332'-9383') 61'

Opened tool for 10 minute preflow period with weak blow increasing to the bottom of the bucket in 3 minutes with 8 oz on the surface pressure guage. Increasing pressure continued throughout the period ending with 52 oz pressure indicated on the surface pressure guage.

Shut tool in for 60 minute initial shut in period.

Opened tool for 90 minute final flow period with weak blow. At 3 minutes hose was to the bottom of the bucket and the surface

pressure was 8 oz. At 12 minutes, flowline was opened on 1/4" choke. At 15 minutes, surface pressure was 6 pounds. At 30 minutes, surface pressure was 8 1/4 pounds. At 36 minutes, we had GTS with a 4-5' flare. At 45 minutes maximum surface pressure was recorded at 8 1/4 pounds with a 6-8' flare. Pressure at surface began decreasing and at 90 minutes tool was shut in with 5 pounds surface pressure.

Shut tool in for 180 minute final shut in period. Gas continued to bleed off for 45 minutes.

Drill Pipe Recovery: 1335' Oil + 385' Rat Hole Mud
(44 deg. gravity at 54 deg.)

Sample Chamber Recovery: 1950 cc. oil + 250 cc. gas cut mud
+.8 cubic feet gas at 375 psi

Bottom Hole Temperature: 137 degrees

PRESSURE DATA:

	UPPER (9310')	DIGITAL (9353')	LOWER (9393')
IH	4392	4420	4498
FH	4386	4417	4478
IF-1	167	162	264
FF-1	243	252	394
IF-2	243	210	359
FF-2	601	627	687
SIP-1	3705	3722	3739
SIP-2	3688	3695	3695