

4-4-78

DST #1 - 11,326' to 11,544'

30 min. preflow - good strong blow, GTS in 8 min., 450 psi on 3/8" ck. at end of 30 min.; estimated 1.5 MMCFG. Shut in 3 hrs. Reversed out gas cut mud. Sample chamber recovered 200 cc GCM, 11,597 CFG @ 3800 psi.

|                 | <u>TOP CHART</u> | <u>BOTTOM CHART</u> |
|-----------------|------------------|---------------------|
| IH              | 5534             | 5618                |
| 30 min. preflow | 443-863          | 544-978             |
| 90 min. ISIP    | 4602             | 4717                |
| 60 min. FFP     | 797-1283         | 870-1413            |
| 180 min. FSIP   | 4113             | 4211                |
| FH              | 5534             | 5618                |

4-5-78

DST #2 -

Packer failed; 4 hrs. Pick up and lay down test tool; 5-1/2 hrs. Wash to bottom and drill up packer rubbers; 2 hrs. Circulate and condition mud.

4-7-78

DST #3 - 11,260' to 11,544'

Opened tool @ 2:43 A.M., GTS in 7 min., Max pressure 145 psi on 5/8" ck., 1.46 MMCFPD. Reached max. pressure 35 min. after opening tool.

| <u>TOOL OPEN</u> | <u>SUR. PRESS.</u> | <u>RATE (MMCFPD)</u> |
|------------------|--------------------|----------------------|
| 60 min.          | 145 psi            | 1.46                 |
| 90 min.          | 140 psi            | 1.40                 |
| 120 min.         | 135 psi            | 1.34                 |
| 150 min.         | 120 psi            | 1.20                 |
| 180 min.         | 110 psi            | 1.10                 |

Shut in for 4 hrs. Re-opened tool - reached max. pressure of 100 psi in 15 min.

| <u>TOOL OPEN</u> | <u>SUR. PRESS.</u> | <u>RATE (MMCFPD)</u> |
|------------------|--------------------|----------------------|
| 15 min.          | 100 psi            | 1.00                 |
| 30 min.          | 100 psi            | 1.00                 |
| 60 min.          | 100 psi            | 1.00                 |
| 90 min.          | 95 psi             | .95                  |
| 120 min.         | 90 psi             | .90                  |

Shut in 4 hrs.

|      | <u>TOP BOMB</u> | <u>BOTTOM BOMB</u> |
|------|-----------------|--------------------|
| IH   | 5934            | 4079               |
| IFP: |                 |                    |
| IF   | 376             | 515                |
| FF   | 531             | 652                |
| ISI  | 3404            | 3269               |
| FFP: |                 |                    |
| IF   | 426             | 370                |
| FF   | 432             | 391                |
| FSI  | 2960            | 2832               |
| FH   | 5934            | 6079               |

4-18-78

DST #4 - 11,584' to 11,782'

Open tool @ 3:00 A.M., good blow; 30 min. IF, good blow throughout IF period - no gas; 2-1/2 hr. ISI; 1-1/2 hr. FF period - good blow; opened on 3/8" ck. after 30 min., put back on hose, took 50 min. to be able to blow from bottom of bucket; final flow period for DST #4; 5 hrs. FSI on DST 5-1/2 hrs. Test tool 1-1/4 hrs. IH 5950; 30 min. IFP 115-115; 2-1/2 hrs. ISIP 460; 90 min. FFP 184-207; 5 hrs. FSIP 736; FH 5836. Recovered 110' drlg. fluid. Sample chamber: 400 cc. drlg. fluid; BHT-168 degrees.