

Phillips Petroleum Company  
Southwestern District Lab.  
Odessa, Texas

No. 452  
Sec. 11-18-74  
Run. 11-21-74  
Chromo Analysis

Sample of: GAS WELL - MOUNTAIN STATES PET. CORP.

Field: BUFFALO VALLEY

Form: ATOKA

Sec. From: WELL #1 STATE COM. LSE

County: CHAVES

State: NEW MEX

Location: 990'S & 990'W 36-14-27

Purpose: SURVEY

Sec. By: COOPER

| Comp.            | Mol % | Data                                 | GPM Factors | BTU Factors | Sp. Gvty Factors |
|------------------|-------|--------------------------------------|-------------|-------------|------------------|
| Helium           | .     | C <sub>3</sub> GPM .749              | ✓           |             | .1381            |
| CO <sub>2</sub>  | .50   | I-C <sub>4</sub> GPM .121            | ✓           |             | 1.5276           |
| Oxygen           | .     | N-C <sub>4</sub> GPM .229            | ✓           |             | 1.1052           |
| Nitrogen         | .65   | C <sub>5</sub> + GPM .229            | ✓           |             | .9671            |
| H <sub>2</sub> S | .     | C <sub>3</sub> + GPM .               |             | 643.        | 1.1875           |
| Methane          | 87.65 |                                      |             | 1012.       | .5547            |
| Ethane           | 6.78  | BTU CF SB 1123.                      | ✓           | 1784.       | 1.0466           |
| Propane          | 2.73  | Calc. SpGvty .653                    | .27450      | 2564.       | 1.5498           |
| I-Butane         | .37   | H <sub>2</sub> S CO <sub>2</sub> .50 | .32626      | 3355.       | 2.0689           |
| N-Butane         | .73   | H <sub>2</sub> S GR/100cf Sweet      | .31437      | 3375.       | 2.0751           |
| I-Pentane        | .20   | RHS .                                | .36510      | 4191.       | 2.6091           |
| N-Pentane        | .18   |                                      | .36140      | 4199.       | 2.6077           |
| Hexanes          | .12   |                                      | .41135      | 5170.       | 3.2327           |
| Heptanes         | .09   | .9825                                | .45956      | 5981.       | 3.7589           |

Atmos. Temp. 57°  
Trap Press. wet Sample  
Gas Temp. 55°  
Heat ☐ m.  
H<sub>2</sub>S + CO 0.57%  
Choke 16/64"  
Flo. Tub. Press. 560"  
Type Gas. Gas well!  
State. New Mexico  
County. Chaves  
Field. Buffalo Valley  
Formation. Atoka  
Company. Mountain States Petroleum  
Wells. #1  
Leases. State Com. 990'S  
4990'W 36-14-27  
Sampler. E. G. Cooper

Data: 9909 Atmos. Temp: 57° Gas Temp: 55° Field Gas Press: 9909  
Line Press: Flo. Tub. Press: 560" (770 Trap Press: Wet Sample  
Bomb Press: 560" Choke: 16/64" Rx Gvty: Oil Production 5 BOPD (est)  
Test Car GPM: Gas Volume 250 mcf

Run By: RIM-OLC Checked: Courtright  
Sp. Gvty. & BTU Factors from NGPA Pub. 2172-72 @ 14.696 psi., abs., 60°F.  
GPM Factors from NGPSA Engineering Data Book, 1972  
@ 14.696 psi., abs., 60°F.