**DISCOVERY DETAILS**

**Method**
Core Drill.

**Well**
Name: Continental No. 1 McClave State, SE-SE-SE, sec. 11, T. 20 S., R. 49 W.
Completed: December 15, 1952—open flow through 2” tubing from open hole 4858’ to 4911’.
Treatment: Interval 4870’ to 4890’ shot with 50 quarts of Nitro.
Initial Potential: Flow 374 MCFGPD.
In March, 1956, the well was sand fraced at which time it tested 2705 MCFGPD thru 2” tubing.

**GEOLOGY**

**Producing Zone**
"McClave" Sand, which is a lenticular middle Morrow sand, Lower Pennsylvanian in age.

**Other Shows**
Numerous limestone zones in the Lansing-Kansas City, Marmaton and Cherokee have had oil shows in various field wells and on occasion have tested small amounts of oil cut fluid. The Keyes sand zone has also had small insignificant gas shows.
The Harrington No. 1-A Lynn SE NW sec. 13-20 S., 49 W. was completed as an oil well from a Marmaton limestone at 4232-54. After acid treatment the well pumped 75 BOPD. It was depleted in a few months after a total production of 6,815 barrels of 38 gravity oil.

**Trap Type**
Stratigraphic trap—a shale encased sand body pinched out in four directions.

**Lithology**
Sandstone—light grey, coarse-medium grain, angular to sub-angular quartz with interstitial, slightly calcareous-kaolinitic cement.

**Maximum Reservoir Thickness**
28 feet gross.

**Regional Setting**
Located on the southwest flank of the subsurface Las Animas Arch approximately 14 miles northwest of the city of Lamar, Colorado.

**Deepest Formation Penetrated**
444 feet of Arbuckle Formation of Ordovician age was penetrated in the discovery well.

**DEVELOPMENT DATA**

**Total Wells**
Completed Oil: None.
Completed Gas: 21.
Dry and Abandoned: 9.

**Well Spacing**
640 acres.

**Logging Practice**
Induction-Electric log from T.D. to surface casing. Sonic log or microlog from T.D. through the base of the Permian (about 2500’). Gamma Ray-Neutron after production casing is set, from T.D. through the base of the Permian.

**Completion Practice**
Set 250-400’ of 8-5/8” surface casing. Drilled with mud, set 4½” or 5½” production casing to T.D. Perforate gas pay zone. Acid treatment and sand frac, sometimes followed by diesel oil flush, and swabbed in. Open flow potentials through 2” tubing ranging from 168 MFGPD to 9,166 MCFGPD were obtained from Frankfort Oil Company, field operator.

**RESERVOIR DATA**

**Type of Drive**
Gas cap.

**Estimated Gas in Place**
55 + billion cubic feet.

**Estimated Recoverable Gas**
38.5 + billion cubic feet.

**Gas Zone Thickness**
Maximum 28’.
Average 14’.

**Porosity**
11.1% average.

**Permeability**
0.3 md average.

**Area**
13,800 acres (October 1961).

**Gas Characteristics**
1114 B.T.U.
Specific Gravity .726.

**Oil Characteristics**
Some of the gas wells tested a spray of distillate but the characteristics are unknown.

**Associated Water Characteristics**
No water is produced to the writer’s knowledge.

**Pressure Maintenance or Secondary Recovery**
None.

**PRODUCTION**
To date all wells have been shut in after completion and as yet they are not connected to any outlet.