# United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U
Artesia, New Mexico 88210

June 22, 1973

NOTICE

DRILLING WELL CONTROL REQUIREMENTS FOR DEEP WELLS
DRILLED ON FEDERAL OIL AND GAS LEASES
IN THE ARTESIA DISTRICT

The following requirements are established in accordance with 30 CFR 221.24, 221.36, and 221.37. Blowout preventer equipment, choke equipment, drilling fluid characteristics, drilling fluid monitors, and the conduct of drilling procedures shall be such as are necessary to prevent the blowout of any well. In addition to all other applicable rules, regulations, and accepted good operating practices, drilling shall be in accordance with the following safety requirements:

1. After setting the 8 5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report. In addition, the pipe rams and bag-type preventer shall be actuated at least once each 24 hours and the blind rams each time the drill pipe is out of the hole.

2. Accumulators shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers.

3. A drill string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.

4. Blowout prevention drills shall be conducted as necessary to insure that each drilling crew is properly trained to carry out emergency duties.

5. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before

drilling into the Wolfcamp Formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:

(1) A recording pit level indicator to determine pit volume gains and losses.

(2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.

(3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.

6. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.

7. A copy of these requirements shall be posted on the rig floor or in the dog house during the drilling of the well.

James A. Knauf
District Engineer

Lease No. NM 0452402
Well Hilliard Gulf Gas - Red Deer Canyon Unit
Drillsite 21 T. 20 S., R. 21 E., 660' FNL & 660' FWL
Depth 8500' Morrow
Approved 2-5-73