

GENERAL REQUIREMENTS FOR DRILLING OPERATIONS
ON FEDERAL OIL AND GAS LEASES
HOBBS DISTRICT

1. GENERAL:

- A. Full-compliance with applicable laws and regulations, with the approved Permit to Drill, and with the approved Surface Use and Operations Plan is required. Lessee's and/or operators are fully accountable for the actions of their contractors and subcontractors.
- B. Each drilling well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease name or unit name, well number, location of the well, and the lease serial number.
- C. A complete copy of the approved Application for Permit to Drill and the accompanying Surface Use and Operations Plan along with any conditions of approval shall be available to authorized personnel at the drillsite whenever active construction or drilling-operations are underway.
- D. No construction activities, such as roads, well sites, tank battery sites, pits, or other work involving significant surface disturbance will be commenced without prior approval.
- E. If, during operations, any archeological or historical sites, or any object of antiquity subject to the Antiquities Act of June 8, 1906, are discovered, all operations which would affect such sites are to be suspended and the discovery reported promptly to this office and the appropriate office of the Bureau of Land Management.
- F. Well area and lease premises will be maintained in a workmanlike manner with due regard to safety, conservation, and appearance. All waste associated with the drilling operations will be contained and will be buried in place (in a separate trash pit) or removed and deposited in an approved sanitary landfill. All garbage (metal containers will be crushed) and debris left on site will be buried at least two feet deep. All trash and debris will be buried or removed from the site within one month after removal of the drilling rig and/or completion rig, and the wellsite will be kept clean and in an aesthetically satisfactory condition for the life of the well.

2. CONSTRUCTION ACTIVITIES:

- A. Caliche, gravel, or other related minerals, for use in construction of roads, well sites, etc., shall be obtained from existing, authorized pits unless approval is obtained to open a new pit.
- B. Materials removed during construction must be disposed of in such manner that it does not detract from the aesthetics of the area and does not accelerate erosion. Vegetation removed during clearing operations should

be placed in drainages, washes, gullies, etc., and "walked down" by crawler type tractor. If there are no drainages in the immediate area, the vegetation should be "walked down" in place. All trash resulting from construction activities will be disposed of. Any large rocks resulting from construction activities will not be piled or left in rows but will be left so they do not detract from the scenic attributes of the area. Any available topsoil encountered during construction should be stockpiled for use in restoring the pit area after the pits are covered.

- C. All access roads should be limited to 12 feet in width. If the well is a producer, roads should be adequately drained and maintained to control erosion. Drainage facilities may include ditches, water bars, culverts and/or any other measure deemed necessary.

Note: Sec. 2-B and 2-C above apply primarily to Federal lands. If the land is privately owned, these requirements may be varied to comply with the operator-landowner agreement.

3. REPORTS:

- A. The following reports shall be filed with the District Engineer within 15 days after the work is completed:
- (1) Five copies of Sundry Report, Form 9-331, giving complete information concerning:
 - (a) Setting of each string of casing. Show size, grade and weight of casing set, size hole, depth set, amount and type of cement used, whether cement circulated, top of cement behind casing if determined, depth of cementing tools if used, casing test method and results, and date work was done. Show spud date on first report submitted.
 - (b) Intervals tested, perforated, acidized, or fractured and results obtained.
 - (2) Four copies of Well Completion Report, Form 9-330. Show formation tops, drill stem test information, completion data, and production tests. Show all oil and gas zones and important water sands under item 37. Data on water sands should include rate of water inflow and elevation to which water rose in hole.
 - (3) Two copies of all electrical and radioactivity logs run.

4. DRILLER'S LOG: The following shall be entered in the daily driller's log:

- A. Blowout preventer pressure tests including test pressures and results.
- B. Blowout preventer tests for proper functioning.
- C. Blowout prevention drills conducted.
- D. Casing run, including size, grade, weight and depth set.

- E. How pipe was cemented, including amount of cement, type, whether cement circulated, location of cementing tools, etc.
- F. Waiting on cement time for each casing string.
- G. Casing pressure tests after cementing including test pressure and results.

5. BLOWOUT PREVENTION:

- A. Blowout preventers and related well-control equipment shall be installed, tested, and used in such manner necessary to prevent blowouts.
- B. Ram-type blowout preventers and related control equipment shall be pressure tested with water to the rated working pressure of the stack assembly, with the exception of the annular-type preventer, which may be tested: (a) when installed, (b) before drilling possible abnormally pressured zones, and (c) following repairs that require disconnecting a pressure seal in the assembly.
- C. While drill pipe is in use, ram-type blowout preventers shall be actuated to test proper functioning once each trip, but in no event less than once each day. The annular-type blowout preventer shall be actuated on the drill pipe at least once each week.
- D. Blowout preventers are to have proper rams for the operations being performed. Casing rams are required when running casing.
- E. Blowout preventers are to have handwheels installed.
- F. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- G. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- H. Drill string safety valve(s) to fit all pipe in the drill string are to be maintained on the rig floor while drilling operations are in progress.
- I. Blowout prevention drills are to be conducted as necessary to assure that equipment is operational and that each crew is properly trained to carry out emergency duties. All BOP tests and drills are to be recorded in the driller's log.
- J. The maximum pressure to be allowed on blowout preventers during well control operations is to be posted for each casing string.
- K. The characteristics, use, and testing of drilling mud and the conduct of related drilling procedures shall be such as are necessary for well control. Quantities of mud materials sufficient to insure well control shall be maintained, readily accessible for use at all times.

- L. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 100 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 pipe to bottom.
- M. From the time drilling operations are initiated and until the well is completed or abandoned, a member of the drilling crew or the toolpusher shall maintain rig floor surveillance at all times, unless the well is secured with blowout preventers or cement plugs.

6. MUD PITS:

- A. Mud pits will be constructed so as not to leak, break or allow discharge of liquids. Pits are not to be located in natural drainage. Any plastic material used to line pits must be removed to below ground level before pits are covered.
- B. All unguarded pits containing liquids will be fenced.
- C. Liquids in pits will be allowed to evaporate, or be properly disposed of otherwise, before pits are broken.

7. CASING:

- A. Notify the District Office in sufficient time for a representative to inspect any used casing planned for use in a casing string.
- B. Prior to drilling the plug after cementing, all casing strings shall be pressure tested. Test pressure shall not be less than 600 psi for surface casing, and a minimum of 1,500 psi or 0.2 psi/ft., whichever is greater, for other casing strings. If the pressure declines more than 10 percent in 30 minutes, or if there is other indication of a leak, the casing shall be recemented, repaired, or an additional casing string run, and the casing shall be tested again in the same manner.

8. WAITING ON CEMENT TIME:

- A. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until the cement has reached a compressive strength of at least 500 psi at the shoe, except that in no case shall tests be initiated until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log.

9. DRILLSTEM TESTS:

- A. Estimated amounts of oil and gas recovered and/or produced during drillstem tests are to be shown in the driller's log and reported in accordance with NTL-4.

10. SAFETY:

- A. All rig heating stoves are to be of the explosion-proof type.
- B. Drilling rig engines should have water cooled exhausts.
- C. Rig safety lines are to be installed.
- D. Hard hats must be utilized.

11. ABANDONMENT:

- A. If the well is dry and is to be plugged, approval of the proposed plugging program can be obtained orally. However, oral approval must be confirmed in writing by immediately filing a Notice of Intention to Abandon on form 9-331 in quintuplicate with the District Engineer. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed.
- B. Within 15 days after plugging the well, a Subsequent Report of Abandonment is to be filed on form 9-331 in quintuplicate showing the manner in which the well was plugged, including depths where casing was cut and pulled from, intervals, by depths, where cement plugs were placed, and the date plugging was completed. When all surface restoration work is completed, advise the District Office so that a field inspection of the wellsite can be made.