IN REPLY REFER TO:
3100 (016)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Caller Service 4104
Farmington, New Mexico 87499

Peyton Yates
#2 La Mesa Unit
NM 25070
NW¼SE¼ sec. 24, T. 17 N., R. 8 E.
Santa Fe County, New Mexico

Above Data Required on Well Sign

GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

I. Operations:

These requirements apply generally to all oil and gas operations on Federal and Indian leases. They apply specifically to the above-described well. Special requirements that apply and are effective for this well, if any, are check-marked in Section 13 of these General Requirements. The failure of the operator to comply with these requirements and the filing of required reports may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.3 or 3163.4.

1. GENERAL

A. Full compliance with all applicable laws and regulations, with the approved Permit to Drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors.

B. Each 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, and whether lease is Tribal or allotted.

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 drill site whenever active construction or drilling operations are under way.

D. For Wildcat wells only, a drilling operations progress report is to be submitted weekly from spud date until the well is completed and the Well Completion Report (Form 3160-4, formerly 9-330) is filed. The report should be on paper not less than 5 x 8 inches in size, and each page should identify the well by operator's name and number, and by well location.

E. Immediate notice is required of all blowouts, fires, spills and accidents involving life-threatening injuries or loss of life. (See NTL-3A).

F. No construction activities, such as roads, well sites, tank battery sites, pits, or other work involving surface disturbance of previously non-disturbed land will be commenced until a Surface Use and Operations Plan is submitted and approval obtained.

G. Prior approval of the Area Manager is required for variance from the approved drilling program and before commencing plugging operations, plugback work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval does not waive the written report requirements.

H. Blowout prevention equipment is to be installed, tested and in working order before drilling below the surface casing, and shall be maintained ready for use until drilling operations are completed.

I. All shows of fresh water and minerals will be reported and protected.

J. This APD is approved subject to the requirement that, should the well be successfully completed for production, this Office must be notified when it is placed in a producing status. Such notification will be in writing and must be received in this Office by not later than the fifth business day following the date on which the well is placed on production. For oil wells first production is when first saleable oil is produced. (Includes oil re- covered from completion operations). Gas well is when a pipeline connection is made. The notification shall provide, as a minimum, the following informational items:

1. Operator name.

2. Well name and number.

3. Well location (1/4 1/4, sec., T., R., P.M., County and State).

4. Date well was placed on production.

5. The nature of the well's production, i.e., crude oil, or crude oil and casinghead gas, or natural gas and entrained liquid hydrocarbons.

6. The Federal or Indian lease prefix and number on which the well is located. Otherwise the non-Federal or non-Indian land category, i.e., State or private.

7. As appropriate, the unit agreement name, number and participating area name.

8. As appropriate, the communitization agreement number.

K. Note Site Security Requirements of 43 CFR 3162.7-4.

L. Unless drilling operations are commenced within one year, approval of Application for Permit to Drill will expire. A written request for extension may be granted if timely submitted.

M. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan, the conditions of approval, and a copy of Environmental Stipulations Section of these General Requirements.

2. CASING AND CEMENTING REQUIREMENTS

A. Surface casing is to be set at sufficient depth to protect fresh water zones and provide well control; and cement circulated to the surface.

B. Intermediate and production casing strings are to be set and cemented as necessary to effectively isolate and seal off all water, oil, gas, or coalbearing strata encountered, and all potable water zones are to be covered with cement. When cement is not circulated to surface, a temperature or cement bond log is required to determine the cement top.

C. 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.

D. After cementing but before commencing any tests, the casing string shall stand cemented 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.

E. The Area Office shall be notified in sufficient time for a representative to witness cementing of all casing strings.

3. BLOWOUT PREVENTION

A. Blowout preventers and related well control equipment shall be installed, tested, and used in such a manner necessary to prevent blowouts. All wells must be equipped with at least one blowout preventer while drilling below surface casing.

B. 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.

C. Blowout preventers are to have proper rams for the operations being performed. Casing rams are required when running casing.

D. Blowout preventers are to have handwheels installed.

E. 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.

F. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.

G. 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.

H. 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.

I. The maximum pressure to be allowed on blowout preventers during well control operations is to be posted for each casing string.

J. 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.

K. From the time drilling operations are initiated and until drilling operations are completed, 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.

4. REPORTS

A. The following reports shall be filed with the Resource Area Manager within 30 days after the work is completed:

1. Five copies of Sundry Report (Form 3160-5, formerly 9-331) giving complete information concerning:

a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of any and all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.

b. Intervals tested, perforated (include; size, number and location of perforations), acidized, or fractured, and results obtained. Show date work was done (a Sundry Report is not required if a Completion Report is submitted within 30 days of the operation).

2. Well Completion Report (Form 3160-4, formerly 9-330) shall be filled out in compliance with instructions of April 1, 1982.

3. Two copies of all electrical and radioactivity logs run.

5. DRILLER'S LOG

A. The following shall be entered in the daily driller's log:

1. Blowout preventer pressure tests, including test pressures and results.

2. Blowout preventer tests for proper functioning.

3. Blowout prevention drill conducted.

4. Casing run, including size, grade, weight, and depth set.

5. How pipe was cemented, including amount of cement, type, whether cement circulated, location of cementing tools, etc.

6. Waiting on cement time for each casing string.

7. Casing pressure tests after cementing, including test pressure and results.

6. 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-4A.

7. GAS FLARING

A. Approval is granted to flare gas while drilling and completion testing.

B. When gas is used for drilling, the blooey line will be located where no damage to vegetation will occur. If this is not possible, an earthen baffle will be constructed to keep the heat and residue within the operating area.

C. Approval is granted to flare gas during completion and initial testing operations not to exceed a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. The 30 calendar day period commences the first day gas is produced. Any gas vented

other than that provided for above, and without approval, will result in compensation due the U. S. for the full value of gas so wasted. (See NTL-4A). All venting of gas after the initial 30 day period must be approved by the Area Manager prior to venting.

8. WATER DISPOSAL

A. An application for approval of the disposal method for water production from all new wells must be filed with the Area Manager within 30 days following first production, pursuant to Section VII of NTL-2B. Failure to timely file such application will be considered an incident of noncompliance and will be grounds for issuing a shut-in order until the application is submitted and/or assessments pursuant to 43 CFR 3163.3(h).

9. 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.

10. SUBSEQUENT OR CHANGE OF PLANS

A. Any change of plans required in order to mitigate unanticipated conditions encountered during drilling operations, will require verbal approval of the Bureau of Land Management (Fluid Minerals Section) and submission of a Sundry Notice (Form 3160-5, formerly 9-331), five copies.

11. REMOVAL OF DRILLING RIG

A. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill-site without prior approval from the Bureau of Land Management (Fluids Section).

12. ABANDONMENT

A. If the well is dry it is to be plugged in accord with 43 CFR 3162.3-4, approval of the proposed plugging program may be obtained orally; however, oral approval must be confirmed in writing by immediately filing a Notice of Intention to Abandon on Form 3160-5 (formerly 9-331), in quintuplicate with the Area Manager. 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, type of plugging mud, etc.

B. Upon completion of approved plugging, erect a regulation well marker which should not be less than 4 inches in diameter and extend at least 4 feet above general ground level. Heap up the dirt around the base of the marker about 12 inches to take care of any settling of

the cellar. The top of the marker must be closed or capped. The following minimum information shall be permanently placed on the marker with a plate, cap, or welded bead:

1. Operator

2. Well number and name

3. Section, Township and Range

4. Footage location

If approval is obtained to omit the dry hole marker, casings should be cut off three feet below ground level.

C. Within 30 days after plugging the well, a Subsequent Report of Abandonment is to be filed on (Form 3160-5, formerly 9-331), in quintuplicate, showing the manner in which the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were placed, and the date plugging was completed. When all surface restoration work is completed, advise the Farmington Resource Area Office by Sundry Notice so that a field inspection of the wellsite can be made.

13. SPECIAL STIPULATIONS

The following special requirements apply and are effective when checked:

___A. A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the Bureau of Land Management Branch of Fluids, P. O. Box 6770, Albuquerque, New Mexico 87102. The effective date of the agreement must be prior to any sales.

___B. In addition to the well-control equipment stipulated in Section 5, either an annular blowout preventer or a rotating head must be used while drilling below surface casing to _____

___C. Note attachments.

II. Environmental Stipulations:

The following stipulations will apply to all wells unless a particular Surface Managing Agency has supplied to the BLM and the operator a contradictory environmental stipulation. The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.3 or 3163.4.

An agreement between the operator and Fee landowner will take precedence over BLM surface stipulations unless 1) the BLM determines that the operator's actions will affect adjacent Federal or Indian surface (43 CFR Part 3160), or 2) the operator does not maintain the well area and lease premises in a workmanlike manner with due regard for safety, conservation and appearance (43 CFR Part 3162.7-4), or 3) no such agreement exists (43 CFR Part 3160), or 4) in the event of well abandonment, minimal Federal restoration requirements will be required (43 CFR Part 3162.7-2).

1. Location and Access Road

A. Well area and lease premises will be maintained in a workmanlike manner with due regard to safety, conservation and appearance. All waste associated with oil and gas operations will be contained and then buried in place, or removed and deposited in an approved sanitary landfill. If burial on site is used, waste must be buried at least 2' deep and metal containers will be crushed prior to burial. Trash pit should be fenced during drilling activities, so as to keep the trash from spreading outside of the pit. Trash pits for drilling operations will be covered once the drilling rig leaves the location.

B. Pinon and juniper trees will be uprooted from road rights-of-way and well pad locations and distributed beside rights-of-way and well pads for fuelwood salvage. Care will be taken to keep the trees as undamaged as practically possible. Large vegetation such as sagebrush, juniper and pinon will not be incorporated into pit walls. Sagebrush removed during clearing operations will be placed in drainages and "walked down" by a crawler - type tractor. If no drainages are nearby, sagebrush will be buried in the reserve pit when it is filled in. All uprooted vegetation not subsequently buried will be scattered so it does not detract from the natural appearance of the area and does not accelerate erosion.

C. Surface disturbance and vehicular traffic will be limited to the approved location and approved access road.

D. The cut slope shall not exceed a 2:1 ratio.

E. Mud pits will be constructed so as not to leak, break, or allow discharge of liquids. The bottom of the reserve pit shall not be in fill material. Pits are not to be located in natural drainages. Any plastic material used to line pits must be removed to below-ground level before pits are covered. Pit walls are to be "walked down" by a crawler-type tractor following construction and prior to usage.

F. All unguarded pits containing liquids will be fenced. Drilling pits will be fenced on three sides and once the rig leaves the location, the fourth side will be fenced. Fencing should be sufficient to keep livestock and wildlife from entering. Liquids in pits will be allowed to evaporate, or be properly disposed of, before pits are filled and recontoured. (This office will be notified 24 hours prior to fluid hauling). Under no circumstances will pits be cut and drained.

G. Unless otherwise approved, all access roads should be limited to 20 feet in width, excluding turnouts.

H. No gravel or other related minerals from new or existing pits on Federal land will be used in construction of roads, well sites, etc., without prior approval from the Surface Managing Agency.

I. Water bars will be constructed on the access road to the well location and conform to surface management specifications. The maximum slope distance between water bars will be:

% Slope	Slope Distance
Less than 1%	400 feet
1% - 5%	300 feet
5% - 15%	200 feet
15% - 25%	100 feet
Greater than 25%	50 feet

When the access road is graded, water bars will be left in the road or replaced immediately upon completion of grading.

J. Each existing fence to be crossed by the permittee will be braced and tied off before cutting so as to prevent slacking of the wire. The opening will be protected as necessary during construction to prevent the escape of livestock and upon completion of construction, the fence will be repaired back to the original standard of the existing fence. A cattleguard will be installed in any fence where a road is to be regularly traveled. A twelve-foot gate will be installed adjacent to the cattleguard when necessary.

K. Berms or firewalls will be constructed around all storage facilities.

L. No well and/or production equipment within the irrigable fields of the Navajo Indian Irrigation Project will exceed two feet above the natural ground surface elevation, and will be adequately barricaded for safety.

2. Cultural Resources (Archaeology)

A. The lessee will not commence construction on the lease until the cultural resource inventory has been approved by BLM (per 36 CFR 800).

B. Surface disturbance activities shall be kept 100' away from any archaeological site(s) located off the well pad, unless approved otherwise by the Area Manager.

C. If, during operations, any archaeological 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.

3. Reseeding and Abandonment

A. All surface areas disturbed during drilling activities and not in use for production activities, will be reseeded once the reserve pit has been filled in and/or location abandoned.

B. Compacted areas of the well pad will be plowed or ripped to a depth of 12" before reseeding. All seeding will be done between July 1 and September 15. Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. The seed will be planted between one-half inch deep and three quarter inch deep. The seeder will be followed with a drag, packer or roller to insure uniform coverage of the seed, and adequate compaction. Drilling of the seed will be done on the contour where possible. Where slopes are too steep for contour drilling a "cyclone" hand-seeder or similar broadcast seeder will be used, using twice the recommended seed per acre. Seed will then be covered to a depth described above by whatever means is practical.

C. If, in the opinion of the surface management agency, the seeding is unsuccessful, the lessee/operator may be required to make subsequent seedings.

D. If, upon abandonment of wells, the retention of access road is not considered necessary for the management and multiple use of the natural resources, it will be ripped a minimum of 12" in depth. After ripping, water bars will be installed as stated in 1.I. All ripped surfaces are to be protected from vehicular travel by construction of a dead-end ditch and earthen barricade at the entrance to these ripped areas. (Reseeding of the affected areas may be required).

E. Recommended Seed Mixtures. *Species to be planted in pounds pure-live-seed per acre: Pure Live Seed = Germination x Purity

X Seed Mix No. 1--BLM

CRESTED WHEATGRASS	1
SMOOTH BROME	1/2
FOURWING SALTBUSH (dewinged)	1/2
NOMAD ALFALFA	1
INDIAN RICEGRASS	1/2
WESTERN WHEATGRASS	1

___ Seed Mix No. 2--BLM

CRESTED WHEATGRASS	1 1/2
FOURWING SALTBUSH (dewinged)	1
SAND DROPSEED	1/4
INDIAN RICEGRASS	1
WESTERN WHEATGRASS	1

___ Seed Mix No. 3--BLM

FOURWING SALTBUSH (dewinged)	1
SAND DROPSEED	1/4
ALKALI SACATON	1/4
INDIAN RICEGRASS	1

___ Seed Mix No. 4-NIIP

INDIAN RICEGRASS	1
SAND DROPSEED	1
GALLETA	2

___ Seed Mix No. 5--NIIP

ALKALI SACATON	1
SAND DROPSEED	1
GALLETA	2

___ Seed Mix No. 6--BIA (Shiprock)

CRESTED WHEATGRASS	2
SLENDER WHEATGRASS	1
SMOOTH BROME	2
ORCHARDGRASS	1
YELLOW SWEETCLOVER	1

___ Seed Mix No. 7--BIA (Shiprock)

CRESTED WHEATGRASS	2
WESTERN WHEATGRASS	2
SAND DROPSEED	1
YELLOW SWEETCLOVER	1

___ Seed Mix No. 8--BIA (Shiprock)

ALKALI SACATON	1
SAND DROPSEED	1
INDIAN RICEGRASS	2
FOURWING SALTBUSH (dewinged)	1

___ Seed Mix No. 9--BIA (Shiprock)

INDIAN RICEGRASS	2
GALLETA	1

NEEDLE -N- THREAD. 1
FOURWING SALTBUSH (dewinged) 1
CLIFFROSE. 1

___ Seed Mix No. 10--BIA (Crownpoint)

CRESTED WHEATGRASS 3
ALKALI SACATON 1/2
SAND DROPSEED. 1/2
PUBESCENT WHEATGRASS 2
INDIAN RICEGRASS 2

___ Seed Mix No. 11--Forest Serivce #3

CRESTED WHEATGRASS 4
PUBESCENT WHEATGRASS 6
BURNET 1
LADAK ALFALFA. 1
PERENNIAL RYE. 2

___ Seed Mix No. 12--Forest Serivce #4

PUBESCENT WHEATGRASS 6
LADAK ALFALFA. 1
PERENNIAL RYE. 2
SAND DROPSEED. 1
INDIAN RICEGRASS 1/2

___ Seed Mix No. 13--Forest Service (Cuba)

PUBESCENT WHEATGRASS 6
BURNET 1
LADAK ALFALFA. 1/2
PERENNIAL RYE. 2
WESTERN WHEATGRASS (Arriba Variety). 4

___ Seed Mix No. 14--Forest Service (Cuba)

PUBESCENT WHEATGRASS . . . . . ___
BURNET . . . . . ___
LADAK ALFALFA. . . . . ___
PERENNIAL RYE. . . . . ___
SAND DROPSEED. . . . . ___
INDIAN RICEGRASS . . . . . ___
WESTERN WHEATGRASS (Arriba Variety). . . . . ___
_____ . . . . . ___

___
___ Seed Mix No. 15--Jicarilla Reservation

CRESTED WHEATGRASS	1
SMOOTH BROME	1/2
FOURWING SALTBUSH (dewinged)	1/2
NOMAD ALFALFA.	1
INDIAN RICEGRASS	1/2
WESTERN WHEATGRASS	1

F. Note Attachments.

A PROPOSED USE OF PESTICIDE, HERBICIDE OR OTHER POSSIBLE HAZARDOUS CHEMICAL ON BUREAU OF LAND MANAGEMENT LAND SHALL BE CLEARED FOR USE PRIOR TO APPLICATION

Operator: Peyton Yates Well Name: La Mesa Unit #2

Legal Location: 2310 FSL, 2310 FEL sec. 24 T. 17N R. 8E

Lease Number: NM-25070 Field Inspection Date:

___1. The operator or his contractor will contact the BLM Farmington Resource Area Office, Fluids Surface Management Staff, at (505) 325-4572, approximately 48 hours prior to construction activities.

___2. No construction or drilling activities shall be conducted between November 1 and March 31 because of elk/[illegible] winter habitat areas. Contact BLM wildlife biologist (Dave Renwa[illegible]) at [illegible] any questions.

___3. The Fluids Surface [illegible] Staff shall be notified upon site completion, prior to moving on drilling rig. (505) 325-4572.

___4. A _____ (ft.) tree screen will be left on the _____ sides of the location.

___5. Pits and/or pad will be constr[illegible] and narrow, or to conform to natural contour of terrain, so as to avoid the [illegible] by an amount that prevents pit failure.

___6. Pits will be lined.

___7. Earthen berm(s) will be placed on the _____ side(s) of the location between the reserve pit and the wash.

___8. The _____ corner of the well pad will be rounded off to avoid __________

___9. The wash shall be diverted around the _____ side of the well pad.

___10. Diversion ditch(es) will be constructed on the _____ side of the location above/below (circle one) the cut slope, draining to the __________

___11. A culvert of sufficient size will be placed where the drainage crosses access road.

___12. The proposed access road shall utilize the upgraded 2-track trail approximately _____ (ft. or mi.) as agreed upon during on-site inspection. Remainder of planned access road will follow flagged route.

___13. The access road shall be rerouted around the _____ edge of the well pad during construction and drilling activities for safety reasons. Upon completion of drilling and cleanup, the road will be returned to its original alignment.

✓ 14. Recommended paint color green seed mix I.

___15. Net wire shall be required on all reserve pits located on Sheep ranges.

___16. __________

Operator's Representative __________

Bureau of Land Management Representative Alan D. Hiner Date _____

Note: If the land is privately owned, [illegible] requirements may be varied to comply with the operator - landowner agreement.