

# Pecos District

## Documentation of Land Use Plan Compliance and NEPA Adequacy (DNA) DNA-510-2007-45

A. Roswell Field Office;

**Applicant:** Yates Petroleum Corporation

**Lease No.:** NM-17208

**Proposed Action:** APD Resubmittal for the Dorothy "VO" Federal #3 gas well.

**Location of Proposed Action:** Section 14, T. 8 S., R. 26 E., 660' FNL & 660' FEL, Unit Letter A, Chaves County, New Mexico, NMPM.

**Description of Proposed Action:** The proposed APD was previously approved and no new changes would occur to the approved plan of development for this well. An access road and well pad would be constructed and the gas well would be drilled.

B. Conformance with the Land Use Plan (LUP) and Consistency with Related Subordinate Implementation Plans:

1. Roswell Approved Resource Management Plan and Record of Decision, October 1997.
2. The proposed action does not conflict with any known State or local planning, ordinance or zoning.

C. Identify the applicable NEPA document(s) and other related documents that cover the proposed action.

1. RFO SERIAL EA NO: NM-060-04-29 Date Approved: 1-2-04

D. NEPA Adequacy Criteria:

1. Is the current proposed action substantially the same action as previously analyzed? Yes.
2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the current proposed action, given current environmental concerns, interests, resource values and circumstances? Yes.
3. Is the existing analysis adequate and are the conclusions adequate in light of any new information or circumstances? Can you reasonably conclude that all new information and all new circumstances are insignificant with regard to analysis on the proposed action? Yes.
4. Do the methodology and analytical approach used in the existing NEPA document(s) continue to be appropriate for the current proposed action? Yes.
5. Are the direct and indirect impacts of the current proposed action substantially unchanged for those identified in the existing NEPA document(s)? Does the existing NEPA document sufficiently analyze site-specific impacts related to the current proposed action? Yes.
6. Can you conclude without additional analysis or information that the cumulative impacts that would result from the implementation of the current proposed action are substantially unchanged from those analyzed in the existing NEPA document(s)? Yes.

7. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action? Yes.

E. Interdisciplinary Analysis: Identify those team members conducting or participating in the preparation of this worksheet. See attached DNA Checklist.

F. Mitigation Measure:

The provisions for the approval of the DNA include the Roswell Field Office requirements as defined in the following exhibits; **Exhibit A** - Location Map, **Exhibit B** - Well Drilling Requirements, **Exhibit C** - Conditions of Approval, **Exhibit D** - Permanent Resource Road Requirements, (**Exhibit E**) - Surface Restoration/Reclamation Requirements, of the approved APD.

Conclusion:

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the existing NEPA documentation fully covers the proposed action. This constitutes BLM's compliance with the requirement of NEPA.

/s/Larry D. Bray

1/17/07

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Larry D. Bray, Assistant Field Manager,  
Lands and Minerals

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Date

# EXHIBIT B

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## WELL DRILLING REQUIREMENTS

OPERATORS NAME: Yates Petroleum Corporation LEASE NO.: NM-17208  
WELL NAME & NO: Dorothy "VO" Federal #3  
QUARTER/QUARTER & FOOTAGE: NE¼NE¼ & 660' FNL & 660' FEL  
LOCATION: Section 14, T. 8 S., R. 26 E., NMPM  
COUNTY: Chaves County, New Mexico

### I. GENERAL PROVISIONS:

- A. The operator has the right of administrative review of these requirements pursuant to 43 CFR 3165.1(a).
- B. The operator shall hereafter be identified as the holder in these requirements. The Authorized Officer is the person who approves the Well Drilling Requirements.

### II. WELL PAD CONSTRUCTION REQUIREMENTS:

- A. The BLM shall administer compliance and monitor construction of the access road and well pad. Notify Richard G. Hill at least 3 working days (72 Hours) prior to commencing construction of the access road and/or well pad. Roswell Field Office number **(505) 627-0247**.
- B. Prior to commencing construction of the access road, well pad, or other associated developments, the holder shall provide the dirt contractor with **a copy of the approved APD signature page, a copy of the location map (EXHIBIT A), a copy of pages 1 & 2 from the Well Drilling Requirements (EXHIBIT B), and a copy of the Permanent Resource Road Requirements (EXHIBIT D).**
- C. The holder shall stockpile the topsoil from the surface of the well pad for reclamation purposes. The topsoil on the Dorothy "VO" Federal #3 well pad is approximate 6 inches in depth. Approximately 600 cubic yards of topsoil shall be stockpiled on the Southwest corner of the well pad, opposite the reserve pit. Upon reclamation of the well pad, the topsoil stockpile shall be redistributed over the disturbed areas. See Well Drilling Requirements - VI. Seeding Requirements - for reclamation of the well pad.
- D. **Reserve Pit Requirements:**
1. The reserve pit shall be constructed 175' X 150' on the **North** side of the well pad.
  2. The reserve pit shall be constructed to a minimum depth of four (4) feet below ground level. The reserve pit shall be constructed, so that the cuttings in the reserve pit can be buried a minimum depth of three (3) feet below ground level. **See Exhibit E – Surface Reclamation/Restoration Requirements.**
  3. A synthetic or fabricated liner 12 mil in thickness shall be used to line the reserve pit. The liner shall meet ASTM standards that are designed to be resistant to the reserve pit contents.

## WELL DRILLING REQUIREMENTS

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4. The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

5. The reserve pit shall be constructed so as not to leak, break, or allow discharge of drilling muds. Under no circumstances will the reserve pit be cut to drain drilling muds on the terrain.
6. The reserve pit shall not be located in any natural drainage.
7. The reserve pit shall be equipped to deter entry by birds, bats, other wildlife, and livestock, if the reserve pit contains any oil and/or toxic fluids.
8. Drilling muds shall be properly disposed of before the reserve pit is reclaimed. Drilling muds can be allowed to evaporate in the reserve pit or be removed and transported to an authorized disposal site. The reserve pit shall be backfilled when dry.
9. Dumping of junk or trash into the reserve pit is not allowed. Junk or trash shall be removed from within the reserve pit before the reserve pit is reclaimed. **Junk or trash shall not be buried in the reserve pit.**

**E. Federal Mineral Materials Pit Requirements:**

1. Caliche, gravel, or other related materials from new or existing pits on Federal mineral estate shall not be taken without prior approval from the authorized officer. Contact Jerry Dutchover at (505) 627 -0236.
2. Payment for any Federal mineral materials that will be used to surface the access road and the well pad is required prior to removal of the mineral materials.
3. Mineral Materials extracted from the reserve pit may used for the construction of the well pad and access road and used for the development of the **Dorothy "VO" Federal #3** gas well only. Removal of any additional material from location must be purchased from BLM prior to removal of any material .
4. An optional mineral material pit may be constructed within the archaeologically cleared area. The mineral material removed in the process can be used for pad and access road construction. However, a mineral material sales contract must be purchased from the BLM prior to removal of any material.

**F. Well Pad Surfacing Requirement:**

The well pad shall be surfaced with 6 inches of compacted caliche, gravel, or other approved surfacing material. The well pad shall be surfaced prior to drilling operations. **See Permanent Resource Road Requirements - EXHIBIT D - requirement #4, for road surfacing.**

**G. Cave Requirements:**

1. If, during any construction activities any sinkholes or cave openings are discovered, all construction activities shall immediately cease, and the Roswell Field Office shall be notified at (505) 627-0272.
2. The BLM Authorized Officer will, within 24 hours of notification in "A" above, conduct an on-the-ground field inspection for karst. At the field inspection the authorized field inspector will authorize or suggest mitigating measures to lessen the damage to the karst environment. A verbal order to proceed or stop the operation will be issued at that time.

**A. DRILLING REQUIREMENTS:**

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties in sufficient time for a representative to witness:

A. Spudding                      B. Cementing casing: 8<sup>5</sup>/<sub>8</sub> inch 5<sup>1</sup>/<sub>2</sub> inch                      C. BOP tests

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing ( size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

**B. CASING:**

1. The 8<sup>5</sup>/<sub>8</sub> inch surface casing shall be set at **900 feet and cement circulated to the surface**. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the 5<sup>1</sup>/<sub>2</sub> inch intermediate casing is **cement shall extend upward a minimum of 500 feet above the uppermost perforation.**

**C. PRESSURE CONTROL:**

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8<sup>5</sup>/<sub>8</sub> inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- **The results of the test shall be reported to the appropriate BLM office.**
- **Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.**
- **Testing must be done in a safe workman-like manner. Hard line connections shall be required.**
- **BOPE shall be tested before drilling into the Wolfcamp formation.**

**D. DRILLING MUD:**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- § Recording pit level indicator to indicate volume gains and losses.
- § Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- § Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

**WELL DRILLING REQUIREMENTS**

**IV. ON LEASE - WELL REQUIREMENTS:**

A. The holder shall post signs identifying the location permitted herein with the requirements contained in

Onshore Oil and Gas Order #1 and 43 CFR 3162.6.

B. The following data is required on the well sign that shall be posted in a conspicuous place on the well pad. The sign shall be kept up with current identification and shall be legible for as long as the well is in existence:

Operator Name: Yates Petroleum Corporation  
Well Name & No.: Dorothy "VO" Federal #3  
Lease No.: NM-17208  
Footage: 660' FNL & 660' FEL  
Location: Section 14, T. 8 S., R. 26 E.

C. UPON ABANDONMENT OF THE WELL, THE SAME INFORMATION SHALL BE INSCRIBED ON THE DRY HOLE MARKER WITH A BEADED WELD.

D. The approval of the APD does not in any way imply or grant approval of any on-lease, off-lease, or off-unit action(s). It is the responsibility of the holder to obtain other approval(s) such as rights-of-way from the Roswell Field Office or other agencies, including private surface landowner(s).

E. All vehicles, including caterpillar track-type tractors, motor graders, off-highway trucks and any other type of motorized equipment that is used in the construction of the access road and well pad shall be confined to the area(s) herein approved. The drilling rig that is used to drill the well shall also be confined to the approved area(s).

**F. Containment Structure Requirement:**

1. A containment structure or earthen dike shall be constructed and maintained around all storage facilities/batteries. The containment structure or earthen dike shall surround the storage facilities/batteries.
2. The containment structure or earthen dike shall be constructed two (2) feet high around the facilities/batteries (the containment structure or earthen dike can be constructed higher than the two (2) feet high minimum).
3. The perimeter of the containment structure or earthen dike can be constructed substantial larger for greater holding capacity of the contents of the largest tank.
4. The containment structure or earthen dike shall be constructed so that in case of a spill the structure can contain the entire contents of the largest tank, plus 24 hour production, within the containment structure or earthen dike, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

**WELL DRILLING REQUIREMENTS**

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**G. Painting Requirement:**

All above-ground structures (e.g.: meter houses, tanks, above ground pipelines, and related appurtenance,

etc.) not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The color selected for painting all the well facilities is **"Olive Drab 18-0622 TPX" (Colors derived from "PANTONE" FOR Architecture and Interiors Color Guide.)**

#### **H. Fence Requirement:**

The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair impacted improvements to at least their former state. On private surface the holder shall contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates shall be allowed unless approved by the Authorized Officer.

#### **I. Open-vent Exhaust Stack Requirements:**

1. All open-vent exhaust stacks associated with heater-treater, separators and dehydrator units shall be modified to prevent birds and bats from entering them and to the extent practical to discourage perching and nesting.
2. New production equipment installed on federal leases after November 1, 1993, shall have the open-vent exhaust stacks constructed to prevent the entry of birds and bats and to the extent practical, to discourage perching, and nesting.

#### **V. Invasive and Noxious Weeds Requirement:**

A. The holder shall be held responsible if noxious weeds become established within the area. Evaluation of the growth of noxious weeds shall be made upon discovery. Weed control will be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipelines, and adjacent land affected by the establishment of weeds due to this action. The holder is responsible for consultation with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policy.

B. The holder shall insure that the equipment and or vehicles that will be used to construct, maintain and administer the access roads, well pad and resulting well are not polluted with invasive and noxious weed seed. Transporting of invasive and noxious weed seed could occur if the equipment and vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds, the Authorized Officer shall require that the equipment and vehicles be cleaned with either high pressure water or air prior to construction, maintenance and administration of the access roads, well pad, and resulting well.

#### **VI. SPECIAL REQUIREMENT(S):**

A. Low-profile facilities no greater than eight-feet-high shall be used. If necessary, multiple tanks shall be used.

# EXHIBIT C

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## CONDITIONS OF APPROVAL

OPERATOR: Yates Petroleum Corporation

LEASE NO: NM-17208

WELL NAME & NO.: Dorothy "VO" Federal #3

LOCATION: Section 14 T. 8 S., R. 26 E., N.M.P.M.

QUARTER/QUARTER & FOOTAGE: NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> - 660' FNL & 660' FEL

COUNTY: Chaves County, New Mexico

### GENERAL CONDITIONS OF APPROVAL:

1. The **operator** shall hereafter be identified as the **holder** in these requirements. The Authorized Officer is the person who approves the Conditions Of Approval.
2. The holder shall indemnify the United States against any liability for damage to life or property arising from occupancy or use of public lands under this authorization.
3. The holder shall have surface use approval prior to any construction work on change(s) or modification(s) to the access road and/or well pad. The holder shall submit (Form 3160-5), Sundry Notice and Report On Wells, an original plus one (1) copy to the Roswell Field Office, stating the basis for any changes to previously approved plans. Prior to any revised construction the holder shall have an approved Sundry Notice and Report On Wells or written authorization to proceed with the change in plans ratified by the Authorized Officer.
4. **Invasive and Noxious Weeds Requirement:**
  - A. The holder shall be responsible for weed control on disturbed areas within the limits of the site. The holder is responsible for consultation with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policy.
  - B. The holder shall be held responsible should the establishment of noxious weeds begin to grow on the access road and well pad. Evaluation of growth of the noxious weeds shall be made upon discovery. The Authorized Officer reserves the right to require the holder to eradicate the noxious weed species that have invaded the access road and/or well pad. Waiver of this requirement would be considered if diligent attempts to eradicate the noxious weed species has failed and the Authorized Officer determines that further attempts to eradicate the noxious weed species from the access road and well pad is futile.

C. The holder shall insure that the equipment and/or vehicles that will be used to construct the access road and/or well pad are not polluted with invasive and noxious weed seed. Transporting of invasive and noxious weed seed could occur if the equipment and/or vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds and the probability that the equipment and/or vehicles are carriers of noxious weed seed from the conduct of previous projects in noxious weed infested areas, the Authorized Officer shall require that the equipment and vehicles be washed clean prior to construction of the access road and/or well pad.

#### **5. Hazardous Substances:**

a. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act Of 1976, as amended (15 U.S.C. 2601, et. seg.) with regard to any toxic substances that are used, generated by or stored on the project/pipeline route or on facilities authorized. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

b. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substances or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seg. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seg.) on this project/pipeline (unless the release or threatened release is wholly unrelated to the operator's activity on the pipeline). This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.

#### **6. Undesirable Events:**

If, during any phase of the construction, operation, maintenance, or termination of the authorization, any oil or other pollutants, should be discharged, and impacting Federal land, the control and total removal, disposal, and cleaning up of such oil or other pollutants, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal land, or to repair all damages to Federal land resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge

and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any

liability or responsibility.

## **7. Archaeological, Paleontology, and Historical Sites:**

a. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder shall be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

b. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of the project work, the holder shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The holder or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes. Any unauthorized collection or disturbance of cultural resources may result in a shutdown order by the Authorized Officer.

## **8. Sanitation:**

The holder shall be responsible for maintaining the site in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

9. **Open-top Tanks:** Any open-top tank containing oil and/or toxic fluids shall be covered with netting or equipped to prevent birds, bats, and other wildlife from entering the open-top tank.

10. **Other:** None

# EXHIBIT D

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## PERMANENT RESOURCE ROAD REQUIREMENTS

**Operator:** Yates Petroleum Corporation  
**BLM Serial Number:** NM-17208  
**Well Name & NO.:** Dorothy "VO" Federal #3  
**Location:** Section 14, T. 8 S., R. 26 E.  
660' FNL & 660' FEL, Chaves County, N.M.

The holder agrees to comply with the following requirements:

### 1. GENERAL REQUIREMENTS:

- A. The **operator** shall hereafter be identified as the **holder** in these requirements. The Authorized Officer is the person who approves the Permanent Resource Road Requirements.
- B. The holder shall minimize any disturbance to structures on public domain surface. Damages caused to any structure during road construction operations shall be promptly repaired by the holder. Functional use of any structure shall be maintained at all times. The holder shall make a documented good-faith effort to contact the owner prior to disturbing any structure.
- C. When necessary to pass through an existing fence line, the fence shall be braced on both sides of the passageway prior to cutting and the fence shall be promptly repaired to at least it's former state or to a higher standard than it was previously constructed.
- D. A professional engineer shall design the access road if the road grade exceeds 10 percent slope.

### 2. INGRESS AND EGRESS:

The access road shall be constructed to access the well pad on the **Southeast** side of the well pad to comply with the planned access road route.

### 3. ROAD TRAVELWAY WIDTH:

The travelway of the road shall be constructed 14 feet wide. The maximum width of surface disturbance shall not exceed 30 feet of road construction. The specified travelway width is 14 feet for all road travelway surfaces unless the Authorized Officer approves a different width.

## PERMANENT RESOURCE ROAD REQUIREMENTS

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### 4. ON LEASE SURFACING:

A. Beginning from the dedicated road (county road and/or state highway) all access roads on federal surface and the entire length of the new access road travelway shall be surfaced prior to drilling operations.

B. **The access road travelway shall be surfaced** with caliche or gravel material. If other surfacing material is used, the new type of material shall be approved by the Authorized Officer. The travelway of the road shall be surfaced with **caliche** material. The caliche material shall be compacted to a minimum thickness of **6** inches for the entire length of the travelway surface on the access road. The width of surfacing shall not be less than 14 feet of travelway surface. Prior to using any mineral materials from an existing federal pit, authorization must first be obtained from the Authorized Officer.

**5. CROWNING AND DITCHING:**

Crowning with materials on site and ditching on one side of the road, on the uphill side, shall be required. The road cross section shall conform to the cross section diagrams in Figure 1 (attached page 6). Where conditions dictate, ditching is required on both sides of the road. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road).

**6. DRAINAGE:**

A. Drainage control shall be ensured over the entire road through the construction of ditches, sidehill outsliping and insliping, lead-off ditches, culvert installation, and low water crossings.

B. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %)

**PERCENT SLOPE AND SPACING INTERVALS FOR LEAD-OFF DITCHES:**

Percent slope	Spacing interval
0 - 4%	150' - 350'
4 - 6%	125' - 250'
6 - 8%	100' - 200'
8 - 10%	75' - 150'

CROSS SECTION OF TYPICAL LEAD-OFF DITCH

1' MINIMUM DEPTH

BERM

NATURAL GROUND SURFACE

**PERMANENT RESOURCE ROAD REQUIREMENTS**

C. A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

D. On road slopes exceeding 2%, water flow shall drain water into an adjacent lead-off ditch. Water flow drainage location and spacing shall be determined by the following formula:

**FORMULA FOR SPACING INTERVAL OF LEAD-OFF DITCHES:**

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Ex. 4% slope: spacing interval =  $\frac{400}{4} + 100 = 200$  feet

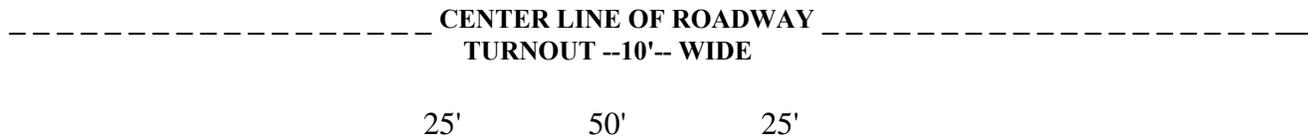
**7. CULVERT INSTALLATION: None Required**

Culvert pipes shall be used in drainage ravines and/or at water flow crossings that require a culvert to cross over the water drainages. The culvert shall be 24 inches in diameter (minimum 18 inch culvert). The location for the culvert installation is designated on the attached map - **EXHIBIT A**. (A culvert pipe installation diagram shall be attached to this requirement when a culvert is required to be installed, see **EXHIBIT - E**).

**8. TURNOUTS:**

Vehicle turnouts shall be constructed on all single lane roads (unless the Authorized Officer determines that the turnouts are not required). Turnouts shall be intervisible and shall be constructed on all blind curves with additional turnouts as needed to keep spacing below 1000 feet. Turnouts shall conform to the following diagram:

*STANDARD TURNOUT - PLAN VIEW*



**9. CATTLEGUARDS: None required.**

ONE (1) CATTLEGUARD WAS INSTALLED AT THE FENCE CROSSING IN THE SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> OF SECTION 3 - T. 8 S. - R. 26 E., WHEN THE JERVIS "AYB" FEDERAL #1 WAS DRILLED.

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads, (exceeding H-20 loading,) are anticipated. (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

(A cattleguard installation diagram shall be attached to this stipulation when a cattleguard is required to be installed - see EXHIBIT X - DIAGRAM A & B).

The existing cattleguard(s) on the access road shall be replaced if they are damaged from heavy vehicular traffic use and the Authorized Officer determines that a new cattleguard shall be installed where the existing in place cattleguard(s) have deteriorated beyond practical use. The holder shall be held responsible for the condition of the existing in place cattleguard(s) that are utilized for vehicular traffic use on lease operations by the holder.

#### **10. MAINTENANCE:**

A. The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, cattleguard maintenance, and surfacing.

B. The holder shall cooperate with other authorized users in maintenance of the road(s). Failure of the holder to share maintenance costs in dollars, equipment, materials, and manpower proportionate to the holders use with other authorized users may be adequate grounds to terminate the road use. The determination as to whether maintenance expenditures have been withheld by the holder and the decision to terminate the road use shall be at the discretion of the Authorized Officer. Upon request, the Authorized Officer shall be provided with copies of any maintenance agreements entered into by the holder.

#### **11. PUBLIC ACCESS:**

A. Public access on this road shall not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public land shall not be locked or closed to public use unless closure is absolutely necessary and is authorized in writing by the Authorized Officer.

#### **12. ROAD REHABILITATION REQUIREMENTS:**

**A. SEE -SURFACE RECLAMATION/RESTORATION REQUIREMENTS - Exhibit E.**

**B. On private estate land the restoration procedures on the reclamation of the access road shall be accomplished in accordance with the Private Surface Land Owner concurrence. If the surface land owner does not retain the access road for his ranch operations, upon abandonment of this well, the surface material (caliche/gravel) shall be removed from the access road. The removal of the surface material on the road could be re-used for maintenance of other federal roads within close proximity of the reclaimed area or properly disposed of in a federal mineral material pit.**

#### **13. Invasive and Noxious Weeds Requirement:**

A. The holder shall be responsible for weed control on disturbed areas within the limits of the site. The holder is responsible for consultation with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policy.

#### **PERMANENT RESOURCE ROAD REQUIREMENTS**

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B. The holder shall be held responsible should the establishment of noxious weeds begin to grow on the access road and well pad. Evaluation of growth of the noxious weeds shall be made upon discovery.

The Authorized Officer reserves the right to require the holder to eradicate the noxious weed species that have invaded the access road and/or well pad. Waiver of this requirement would be considered if diligent attempts to eradicate the noxious weed species has failed and the Authorized Officer determines that further attempts to eradicate the noxious weed species from the access road and well pad is futile.

- C. The holder shall insure that the equipment and/or vehicles that will be used to construct the access road and/or well pad are not polluted with invasive and noxious weed seed. Transporting of invasive and noxious weed seed could occur if the equipment and/or vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds and the probability that the equipment and/or vehicles are carriers of noxious weed seed from the conduct of previous projects in noxious weed infested areas, the Authorized Officer shall require that the equipment and vehicles be washed clean prior to construction of the access road and/or well pad.

### **13. SPECIAL REQUIREMENTS:**

**A. The new access road shall parallel the existing pipeline route for 973 feet and shall be constructed on the north side of the pipeline that is in place (SEE EXHIBIT A). On this segment of new access road construction, the centerline of the access road shall be constructed 25 feet distance from the centerline of the pipeline.**

# EXHIBIT E

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## SURFACE RECLAMATION/RESTORATION REQUIREMENTS

OPERATORS NAME: Yates Petroleum Corporation LEASE NO.: NM-17208

WELL NAME & NO: Dorothy "VO" Federal #3

QUARTER/QUARTER & FOOTAGE: NE¼NE¼ - 660' FNL & 660' FEL

LOCATION: Section 14, T. 8 S., R. 26 E., NMPM

COUNTY: Chaves County, New Mexico

### I. GENERAL PROVISIONS:

- A. The operator has the right of administrative review of these requirements pursuant to 43 CFR 3165.1(a).
- B. The operator shall hereafter be identified as the holder in these requirements. The Authorized Officer is the person who administers the reclamation requirements.
- C. The holder shall comply with all the surface reclamation/restoration required by the Authorized Officer pertaining to the reclamation/restoration of the access road and well pad.

### II. FORM 3160-5, SUNDRY NOTICES AND REPORTS ON WELLS:

A. The holder shall adhere to the following:

1. If the well is not drilled, please notify the BLM so that an official release can be approved.

2. **Downhole requirement:** If the well is a dry hole and will be plugged, approval of the proposed plugging program may be obtained orally. However, oral approval must be confirmed in writing by immediately filing a Sundry Notice And Report On Wells (Form 3160-5) "**Notice of Intention to Abandon**", an original and five (5) copies shall be submitted to the Roswell Field Office. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where plugs are to be placed, type of plug, type of plugging mud, etc..

3. The same notification shall be required of the Holder for the reclamation/restoration of the access road and well pad. The Holder shall initially report surface reclamation/restoration of the access road and well pad concurrently with the Downhole requirement. A Sundry Notice And Report On Wells (Form 3160-5) "**Notice of Intention to Abandon**", an original and five (5) copies shall be submitted to the Roswell Field Office. Upon receipt of the "**NOI**" the Authorized Officer shall provide the holder with the specific requirements for the reclamation/restoration of the access road and well pad.

## SURFACE RECLAMATION/RESTORATION REQUIREMENTS

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4. **Subsequent Report Of Abandonment:** The holder shall submit a second report on Form 3160-5, Sundry Notices and Reports On Wells, an original and five (5) copies shall be submitted to the Roswell Field Office, pertaining to the reclamation/restoration of the access road and well pad. The holder shall demonstrate that the surface reclamation/restoration requirements have been complied with. The holder

shall specify that the reclamation work accomplished the restoration of the disturbed areas to as near the original surface condition the land was in prior to construction of the access road and well pad.

5. **Final Abandonment Notice:** The holder shall submit a third report on Form 3160-5, Sundry Notices and Reports On Wells, an original and five (5) copies shall be submitted to the Roswell Field Office, that shall ascertain that all surface reclamation/restoration requirements have finally been completed and that the access road and well pad are ready for final inspection. The holder shall specify that the surface has been reclaimed in accordance with federal regulations and request for the final approval of the access road and well pad.

### **III. BOND LIABILITY:**

A. Liability under bond shall be retained until all surface reclamation/restoration of the access road and well pad has been completely reclaimed to the satisfaction of the Authorized Officer.

### **IV. ACCESS ROAD AND WELL PAD RECLAMATION REQUIREMENTS:**

1. If the well is completed, all areas of the well pad not necessary for operations shall be reclaimed to resemble the original contours of the surrounding terrain.
2. Upon abandonment of the well, cut-and-fill slopes shall be re-contoured and reduced to a slope of 3:1 or less. The road shall be recontoured to as near the original topography, as possible.
3. Upon abandonment of the well, all production equipment shall be removed from the well pad and properly disposed of.
4. **On private estate land the restoration procedures on the reclamation of the access road and well pad shall be accomplished in accordance with the Private Surface Land Owner concurrence. If the surface land owner does not retain the access road and/or well pad for his ranch operations, upon abandonment of this well, the surface material (caliche/gravel) shall be removed from the access road and well pad.**
5. The surfacing material that is removed can be used on existing surfaced roads in need of maintenance, or hauled to a federal material pit for disposal. If the material is to be used on a road or hauled to a material pit, contact the BLM Authorized Officer at (505) 627-0272 for possible additional requirements.
6. Upon removal of the surfacing material, the access road and well pad shall be ripped a maximum of **16** inches deep (Ripping depth will be determined by depth of soil shown in the Soil Conservation Service Survey Handbook).
7. All culverts and other road structures (e.g.: cattleguard, H-Braces, signs, etc.) shall be removed and properly disposed of.

8. All over-burden material shall be replaced in the cut areas, ditches, lead-off ditches, and any other excavated earthwork shall be back filled.

9. An earthen berm shall be constructed at the entrance of the road to prevent vehicular traffic on the reclaimed road.

**V. Reserve Pit Reclamation Requirements:**

A. Upon reclamation of the reserve pit, the impervious, reinforced, synthetic or fabricated 12 mil in thickness liner shall be used to encapsulate the reserve pit cuttings.

B. The dried cuttings in the reserve pit shall be buried a minimum depth of three (3) feet below ground level.

C. The reserve pit area shall be covered with a three (3) feet minimum cap of clean soil or like material that is capable of supporting native plant growth. Once the reserve pit contents have been capped, the cap shall not be disturbed without NMOCD approval.

D. Should the cuttings in the reserve pit not meet the three (3) feet below ground level depth, the excess contents shall be removed from the reserve pit until the required minimum depth of three (3) feet below ground level requirement has been met. The excess cuttings shall be removed from the well location and shall be properly disposed of at an authorized disposal site.

E. Contact Richard G. Hill at (505) 627-0247, three days before commencing the reserve pit reclamation.

**VI. SEEDING REQUIREMENTS:**

A. The stockpile of topsoil shall be spread over the well pad to cultivate a seedbed. The holder shall not contaminate the topsoil stockpile with the reserve pit muds and/or cuttings.

B. The reclaimed area(s) shall be seeded with the seed mixture that was determined by the Roswell Field Office for the Desired Plant Community on this well site.

C. The same seed mixture shall be used for the reclamation of the access road and well pad.

D. The planting of the seed shall be done in accordance with the following seeding requirements:

1. The topsoil soil shall be plowed under with soil turning equipment and the plowed surface shall be disked before seeding. Seed shall be planted using a drill equipped planter with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area. Smaller/heavier seed has a tendency to drop to the bottom of the drill and is planted first; the holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled.

**SURFACE RECLAMATION/RESTORATION REQUIREMENTS**

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2. The holder shall seed all the disturbed areas with the DPC seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed per acre, (Pounds of pure live seed per acre: pounds of seed X percent purity X percent germination = pounds pure live seed).

There shall be no primary or secondary noxious weeds in the seed mixture.

In accordance with State law(s) the seed should be tested for purity and viability within nine (9) months prior to sell. Commercial seed shall be either certified or registered seed. The seed mixture container shall be tagged in accordance with State law(s) and the certified seed tag shall be made available for inspection by the Authorized Officer.

3. Desired Plant Community seed mixture to be planted in pounds of pure live seed per acre:

SD-3 Gravelly Ecological Site (Well Pad) Slopes 0-15%, Elevation 3,200 to 4,500 feet

<u>Common Name and Preferred Variety</u>	<u>Scientific Name</u>	<u>Pounds of Pure Live Seed Per Acre</u>
Blue grama, var. Lovington	<i>(Bouteloua gracilis)</i>	1.50 Lbs.
Sideoats grama, var. Vaughn or El Reno	<i>(Bouteloua curtipendula)</i>	1.50 Lbs.
Sand dropseed	<i>(Sporobolus cryptandrus)</i>	0.50 Lb.
Plains bristlegrass	<i>(Setaria macrostachya)</i>	2.50 Lbs.
Vine mesquite	<i>(Panicum obtusum)</i>	1.50 Lbs.
Desert or Scarlet	<i>(Sphaeralcea ambigua)</i>	1.00 Lb.
Globemallow	or <i>S. coccinea</i>	
Desert zinnia	<i>(Zinnia grandiflora)</i>	0.50 Lb.
<b>TOTAL POUNDS PURE LIVE SEED PER ACRE</b>		<b>9.00 Lbs.</b>

SD-3 Sandy Ecological Site (Access Road)

<u>Common Name and Preferred Variety</u>	<u>Scientific Name</u>	<u>Pounds Pure Live Seed Per Acre</u>
Black grama or Blue grama, var. Lovington	<i>(Bouteloua eriopoda)</i> <i>(Bouteloua gracilis)</i>	5.00 Lbs.
Sideoats grama var. Vaughn or El Reno	<i>(Bouteloua curtipendula)</i>	1.00 Lb.
Sand dropseed or Mesa dropseed or Spike dropseed	<i>(Sporobolus cryptandrus)</i> <i>(S. flexuosus)</i> <i>(S. contractus)</i>	0.50 Lb.
Desert or Scarlet	<i>(Sphaeralcea ambigua)</i>	1.00 Lb.
Globemallow	or <i>(S. coccinea)</i>	
Croton	<i>(Croton spp.)</i>	1.00 Lb.
<b>TOTAL POUNDS PURE LIVE SEED PER ACRE</b>		<b>8.50 Lbs.</b>

4. If one species is not available, increase ALL others proportionately. The seed mixture shall be certified weed free seed. A minimum of 4 species is required, including 1 forb species.

**SURFACE RECLAMATION/RESTORATION REQUIREMENTS**

E. The recommended time to seed is from June 15<sup>th</sup> through September 15<sup>th</sup>. The optimum seeding time is in mid-July. Successive seeding should be done either late in the fall (Sept. 15<sup>th</sup> - Nov. 15<sup>th</sup>, before freeze up) or early as possible the following spring to take advantage of available ground

moisture. However, the holder may seed immediately after completing surface abandonment requirements.

F. The seeding of the disturbed areas shall be repeated until a vegetative thicket is established on the access road and well pad. The Authorized Officer shall make the determination when the regrowth on the disturbed areas is satisfactory.

G. The holder shall be responsible for the establishment of vegetation on the access road and well pad. Evaluation of vegetative growth will not be made before the completion of the first growing season after seeding. The Authorized Officer reserves the right to require reseeding at a specific time if seed does not germinate after one growing season. Waiver of this requirement would be considered if diligent attempts to revegetate the disturbed areas have failed and the Authorized Officer determines that further attempts to replant the access road and well pad are futile.

H. Contact Mr. Randy Legler at (505) 627-0215 to witness the seeding operations, two (2) days prior to seeding the disturbed areas.

I. Invasive and Noxious Weeds Requirement:

1. The holder shall be held responsible if noxious weeds become established within the reclaimed areas. Evaluation of the growth of noxious weeds shall be made upon discovery. Weed control will be required on the disturbed land where noxious weeds exist, which includes the road, pad, associated pipeline corridor/routes, and adjacent land affected by the establishment of weeds due to this action. The holder is responsible for consultation with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policy.

2. The holder shall insure that the equipment and or vehicles that will be used to reclaim the access roads and well pad are not polluted with invasive and noxious weed seed. Transporting of invasive and noxious weed seed could occur if the equipment and vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds, the Authorized Officer shall require that the equipment and vehicles be cleaned with either high pressure water or air prior to reclamation of the access roads and well pad.