

10-0024

OCD-ARTESIA

7008

ATS-09-643

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JUL 7 2010
NMOCD ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT


APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No.	
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8. Lease Name and Well No. <38237> NINETY-NINE SWD #1	
2. Name of Operator TRITEX RESOURCES LLC		9. API Well No. 30-015-27677 ✓	
3a. Address P.O. BOX 1466, ARTESIA, NM 88211		10. Field and Pool, or Exploratory SWD; WOLFCAMP <261945> <96135>	
3b. Phone No. (include area code) 575.308.0722		11. Sec., T. R. M. or Blk. and Survey or Area SEC. 1, T18S, R30E	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1980' FNL & 990' FWL Unit E At proposed prod. zone SAME		12. County or Parish EDDY	
14. Distance in miles and direction from nearest town or post office* 5 MILES SE of LOCO HILLS NM 88255		13. State NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of acres in lease 160	17. Spacing Unit dedicated to this well 0	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 330'	19. Proposed Depth 9400'	20. BLM/BIA Bond No. on file QCB-0840 Nm 60005528 640	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3568' GL	22. Approximate date work will start* 11/01/2009	23. Estimated duration 14 DAYS	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature 	Name (Printed/Typed) RANDALL HARRIS	Date 09/23/2009
Title GEOLOGIST		

Approved by (Signature)	Name (Printed/Typed) CARLSBAD FIELD OFFICE	Date JUN 29 2010
Title FIELD MANAGER		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

SWD # 1191

Roswell Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1560, Hobbs, NM 88240

DISTRICT II

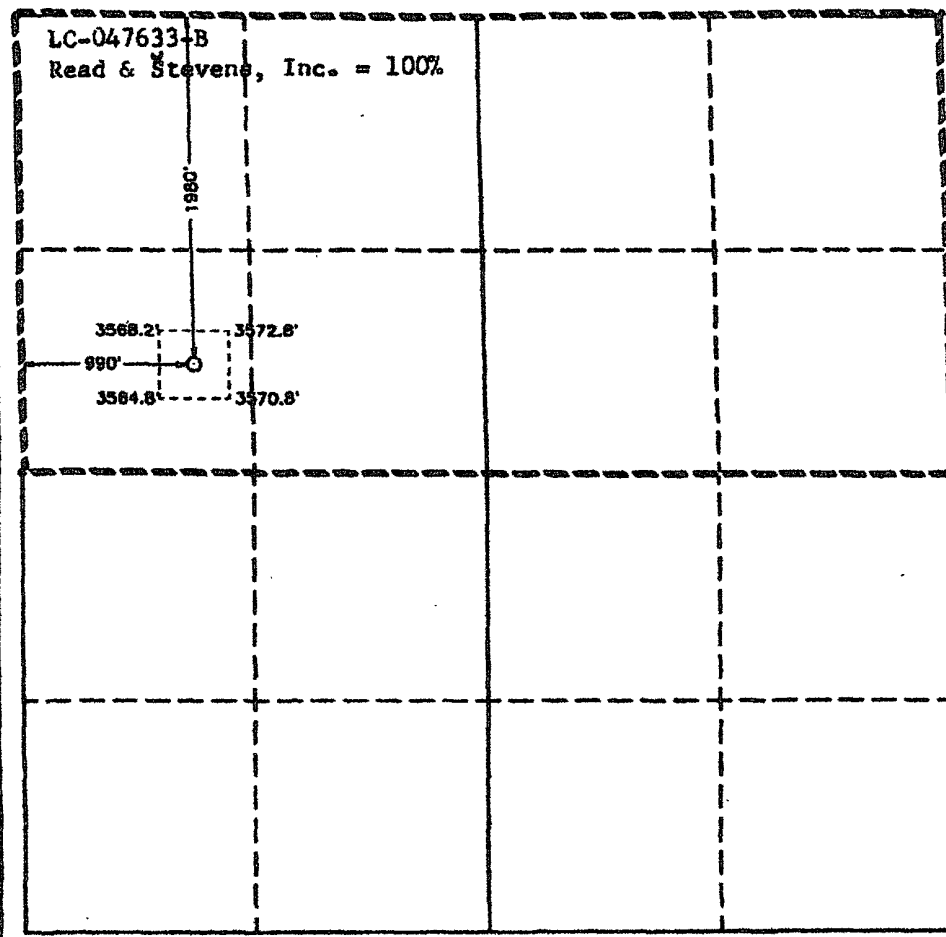

P.O. Drawer 88, Artesia, NM 88210

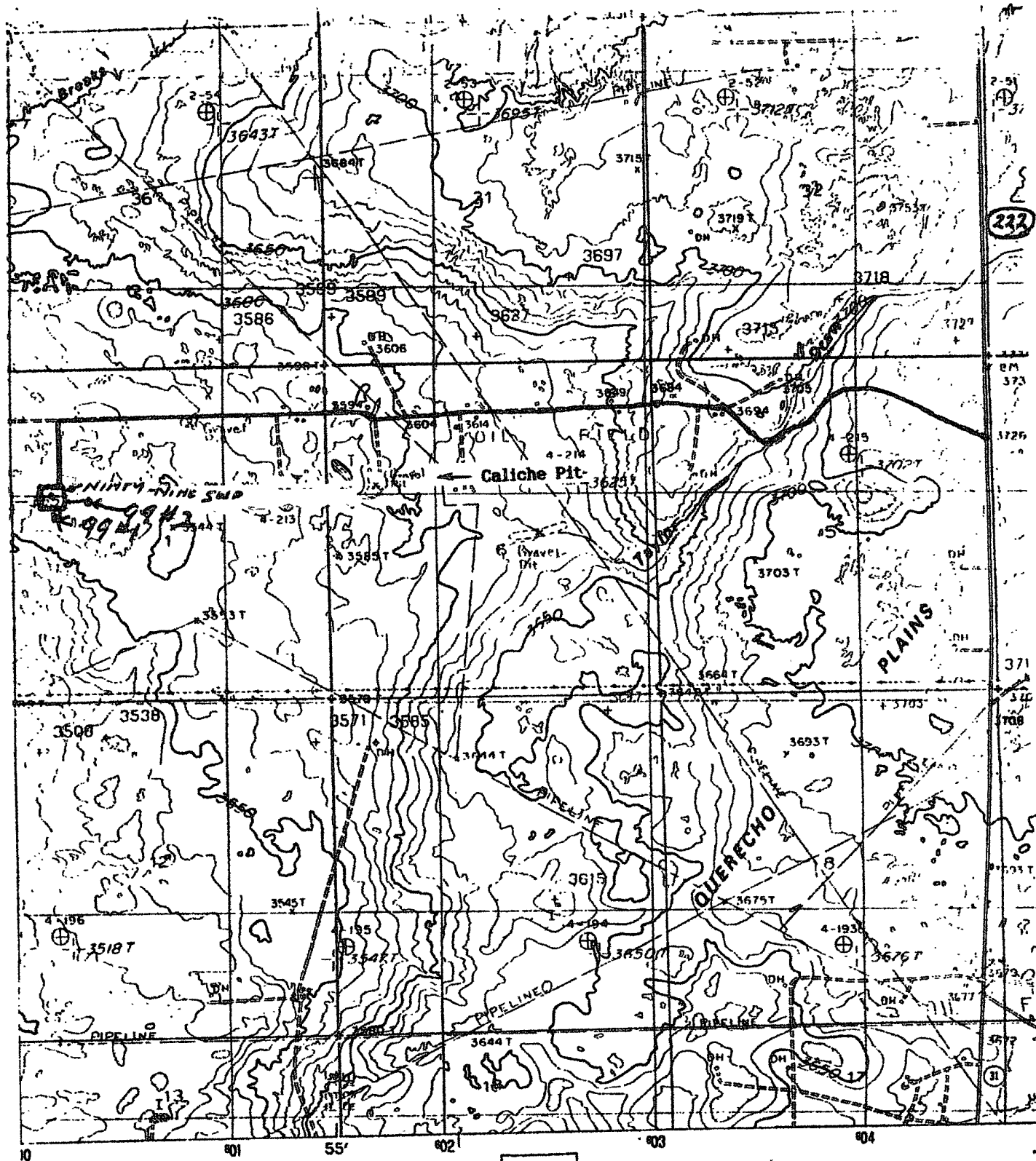
DISTRICT III

1000 Elc Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator TRITEX RESOURCES LLC				Well No. 1	
Unit Letter E	Section 1	Township 18 SOUTH	Range 30 EAST	County EDDY	
Actual Footage Location of Well: 990' feet from the WEST line and 1980' feet from the NORTH line					
Ground Level Elev. 3568.0'	Producing Formation		Pool SWDI WOLFCAMP	Estimated Acreage: 8 Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)</p> <p>No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>					
<p>LC-047633-B Read & Stevens, Inc. = 100%</p> 				<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein to true and complete to the best of my knowledge and belief.</p> <p>Signature <i>George R. Smith</i></p> <p>Printed Name George R. Smith</p> <p>Position Agent for:</p> <p>Company Read & Stevens, Inc.</p> <p>Date August 13, 1993</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.</p> <p>Date Surveyed JULY 27, 1993</p> <p>Signature & Seal of Professional Surveyor </p> <p>676 3239 7817</p> <p>93-11-1422</p>	



00 7000 8000 9000 10 000

1 2
1000 2000
FT



QUADRANGLE LOCATI

1980' FNL & 1980' FNL, Sec. 1-T18S-R30E
Existing Access Roads:


1	2	3	4
1	2	3	4
1	2	3	4
1	2	3	4

1 Bush Wall
2 Hushon 1
3 Malmier
4 Dred Lake

Attached to form 3160-3
Tritex Resources
Ninety Nine SWD #1

The purpose of this re-entry is for an on lease disposal for the Tritex Resources 99 Fed. Nos. 1 & 2.

This plan has been approved by the NMOCD, Administrative Order SWD-1191. Copy of application has previously been filed with the BLM office in Carlsbad, NM. A copy of the approval is attached.



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



Administrative Order SWD-1191

September 15, 2009

Mr. Randall Harris
Tritex Resources LLC
PO Box 1466
Artesia, NM 88211-1466

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Rule 26.8B., Tritex Resources LLC seeks an administrative order to utilize its 99 SWD Well No. 1 (formerly called the Susie Fed Well No. 1) (API 30-015-27677) located 1980 feet from the North line and 990 feet from the West line, Unit E of Section 1, Township 18 South, Range 30 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 26.8B. Satisfactory information has been provided that affected parties as defined in Rule 26.8B.(2) have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 26.8 will be met and the operator is in compliance with Division Rule 5.9.

IT IS THEREFORE ORDERED THAT:

The applicant, Tritex Resources LLC, is hereby authorized to utilize its 99 SWD Well No. 1 (formerly called the Susie Fed Well No. 1) (API 30-015-27677) located 1980 feet from the North line and 990 feet from the West line, Unit E of Section 1, Township 18 South, Range 30 East, NMPM, Eddy County, New Mexico, for disposal of produced water into the Wolfcamp formation from 8760 feet to 9270 feet through 2-7/8 inch or smaller diameter, plastic-lined tubing set within 100 feet of the disposal interval.

Special Requirements: Install a cast iron bridge plug within 200 feet of the lowermost disposal interval.

IT IS FURTHER ORDERED THAT:



The operator shall take all steps necessary to ensure that the disposed water enters only the proposed disposal interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The wellhead injection pressure on the well shall be limited to **no more than 1752 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by an acceptable Step-Rate-Test.

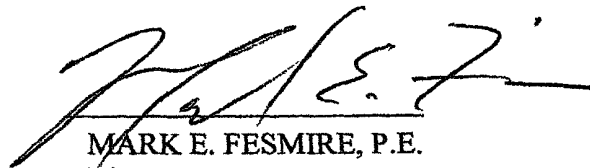
The operator shall notify the supervisor of the Division's district II office in Artesia of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district II office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 26.13 and 7.24.

Without limitation on the duties of the operator as provided in Division Rules 30 and 29, or otherwise, the operator shall immediately notify the Division's district office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

In accordance with Division Rule No 26.12.C., the disposal authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request, mailed by the operator prior to the termination date, may grant an extension thereof for good cause. One year after disposal into the well has ceased, the authority to dispose will terminate *ipso facto*.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



MARK E. FESMIRE, P.E.
Director

MEF/wvjj

cc: Oil Conservation Division – Artesia
Bureau of Land Management – Carlsbad

INJECTION WELL DATA SHEET

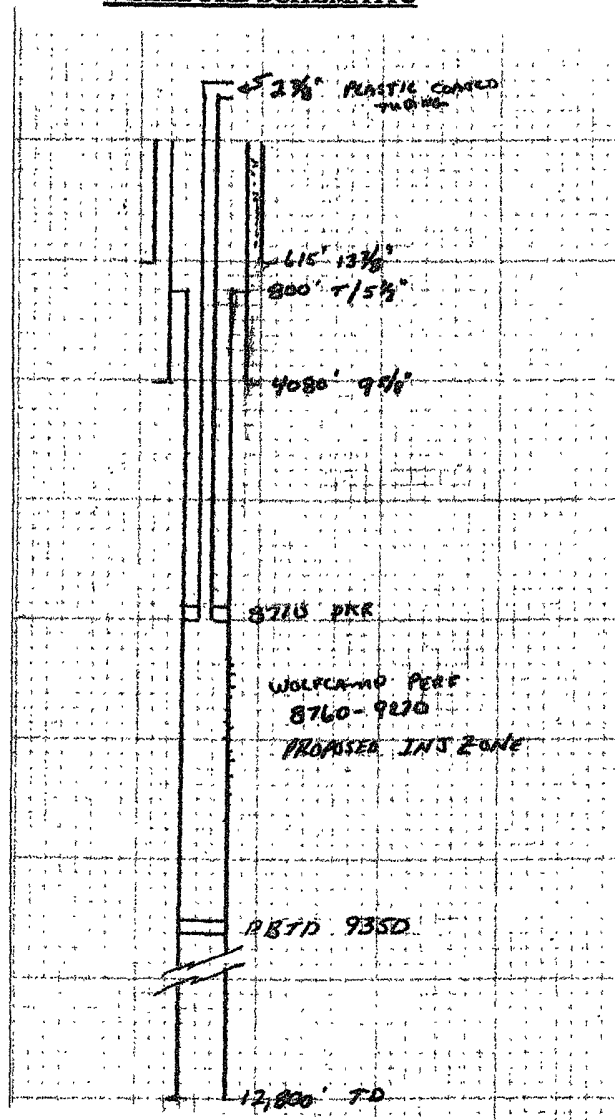
Tubing Size: 2 7/8" Lining Material: PLASTIC
 Type of Packer: LOC - SET
 Packer Setting Depth: 8710
 Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____ Yes X No
 If no, for what purpose was the well originally drilled? OIL & GAS PRODUCTION

2. Name of the Injection Formation: _____ WOLF CAMP
3. Name of Field or Pool (if applicable): _____
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. SEE CURRENT SCHEMATIC
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: MORROW - 11,100 GRAY BURG - 4,500'

INJECTION WELL DATA SHEET

OPERATOR: TRITEX RESOURCES LLCWELL NAME & NUMBER: 99 SWP #1 APT 30-015-27677WELL LOCATION: 1980' FNL E 990' FUL E 1 18S 30E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: 17 1/2" Casing Size: 13 3/8"
 Cemented with: 650 SX. or _____ ft³
 Top of Cement: SURFACE Method Determined: CIRC

Intermediate Casing

Hole Size: 11" Casing Size: 9 5/8"
 Cemented with: 1850 SX. or _____ ft³
 Top of Cement: SURFACE Method Determined: CIRC

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"
 Cemented with: 2190 SX. or _____ ft³
 Top of Cement: 800 Method Determined: FREE POINT
 Total Depth: 12,800'

Injection Interval

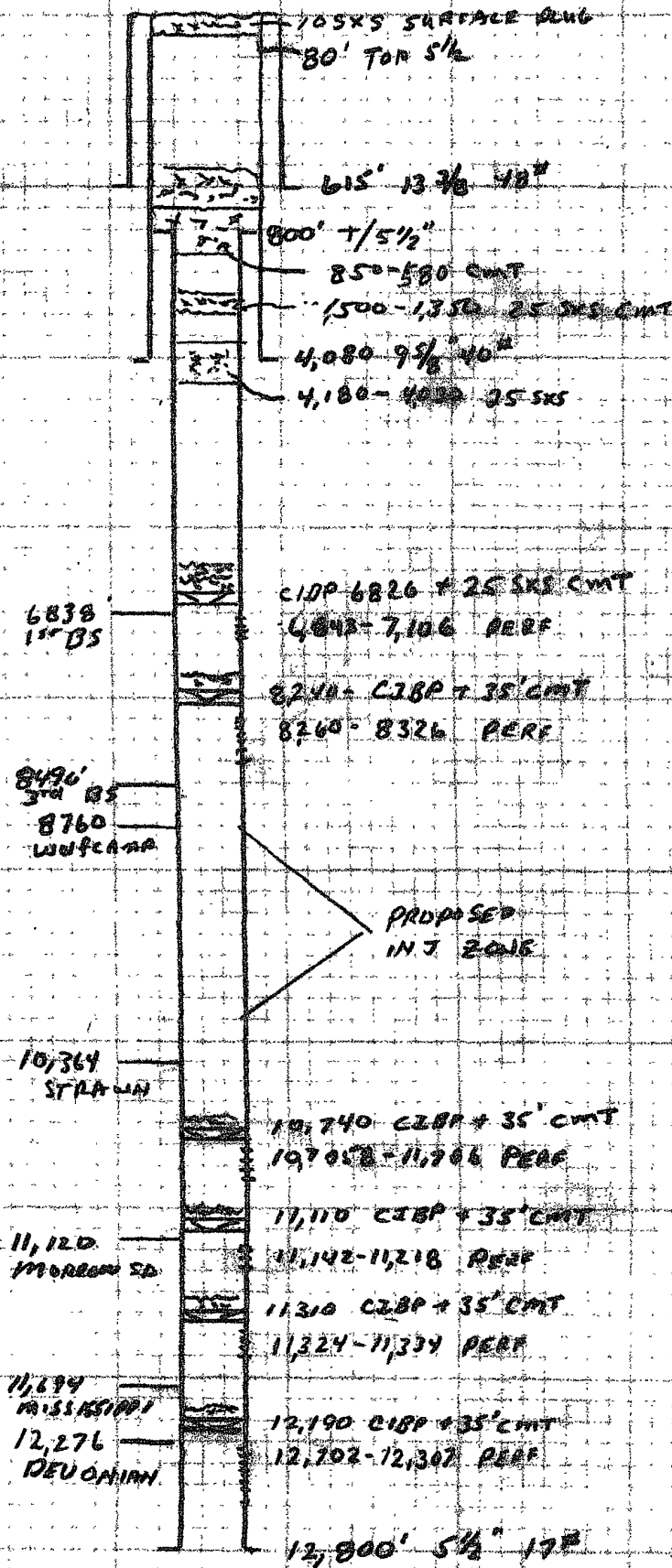
8760 feet to 9270 PERFORATED

(Perforated or Open Hole; indicate which)

TRITEX RESOURCES

995WD

CURRENT CONDITIONS



DRILLING PROGRAM

Attached to Form 3160-3
Tritex Resources LLC
Ninety Nine SWD #1
1980' FSL & 990' FWL
Section 1-18S-30E
Eddy County, New Mexico

1. Geologic Name of Surface Formation: Quaternary
2. The geological markers: Have already been filed.
3. Estimated Depth of Anticipated Fresh Water, Oil or Gas:

All water zones have been cased and cemented. Oil and Gas zones are cased and cemented.

4. Casing Program: Casing currently exists in hole. No additional casing to be run.
See schematic

Cement Program: All casing is cemented. Will cement squeeze Bone Springs perms 6843-7106, 8260-8326 with approximately 600 sxs class "H", in two stages.

5. Minimum Specifications for Pressure Control:

Nipple up on the 9 5/8" with 2m system and test to ~~1000# with reverse unit pumps~~.
Function test daily. Function test on trips. See COA

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and a 2" choke line will be included in the drilling spool located below the ram-type BOP

6. Types and Characteristics of the Proposed Mud System:

Fresh water
7. Auxiliary Equipment: None

8. Logging, Testing, and Coring Program:

Gamma Ray/Collar locator

9. Abnormal Conditions, Pressures, Temperatures, and Potential Hazards:

No abnormal pressures or temperatures are anticipated.

10. Anticipated Starting Date and Duration of Operations:

Location and road work will ^{not} begin until approval has been received from the BLM. Once commenced, the drilling operation should be finished in approximately 14 days.



11382 Lovington Hwy. ⋈ P.O. Box 1466 ⋈ Artesia, NM 88211-1466 ⋈ Tel: 575-308-0722

Bureau of Land Management
620 E. Greene St
Carlsbad, NM 88220-6292

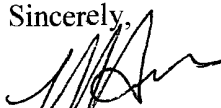
RE: 3162.4
LC047633
1-NINTY NINE SWD, LEASE LC047633

Gentlemen;

1. Drilling rig plat attached.
2. Estimated depth of water: if any exists it would occur surface to 300' and it is already cased. From the Logs top of salt 620' and base 1365'. Oil and Gas is present in the Grayburg formation 3000'-3400' and is cased.
3. A 2M BOP was chosen for the ease of installation for a reentry. The Wolfcamp is cased and is under pressured this is why it is a good candidate for a disposal zone as evidenced by COG SWD-1146 API 30-015-31635 located in P-Sec 36-T17S-R30E approximately 1.25 miles to the North East.
4. The 5 1/2" casing that is cut off at 800' we have no plan to tie back in. We will dress off and test for any bleed off before proceeding.
5. The known H2S in this area is in the Grayburg formation 3000-3400' and is cased by two strings and cemented. All personnel that are connected with the re-entry will have been trained from a qualified instructor prior to commencing operations. One portable monitor will be positioned on location for best coverage and response. In addition all personnel will be carrying a personal H2S monitor. There will be Mark 11 Surviveare 30 minute units located in the dog house and at briefing area.

Any additional questions, please contact Randall Harris at (575) 308-0722.

Sincerely,



Randall Harris

- B. Garbage and trash produced during re-entry or completion operations will be hauled off. All waste material will be contained to prevent scattering by the wind. No toxic waste or hazardous chemicals will be produced by this operation.
 - C. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. No adverse materials will be left on location.
7. Ancillary Facilities: None required
8. Plans for Restoration of the Surface:
- A. Upon finishing drilling and or completion operations, all equipment and other material not needed for operations will be removed.
 - B. All trash, garbage will be hauled away in order to leave the location in an aesthetically pleasing condition.
9. Surface Ownership:
- The wellsite and lease is located on Federal Surface.
- A. The area around the well site is grassland and the top soil is sandy. The vegetation is native scrub grasses with oakbursh, sagebrush, yucca, and prickly pear.
 - B. There is no permanent or live water in the immediate area.
10. Lessee's and Operator's Representative:

The Tritex Resources LLC representative responsible for assuring compliance with the surface use plan is as follows:

Randall Harris
P.O. 1466
Artesia, New Mexico 88211
Phone: 575.308-0722 (office)


Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Tritex Resources LLC and its contractors and subcontractors in conformity with this plan and the provision of 18 U.S.C. 1001 for the filing of a false statement.

Date:

9/22/09

Signed:


Randall L. Harris

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Date: December 28, 2007

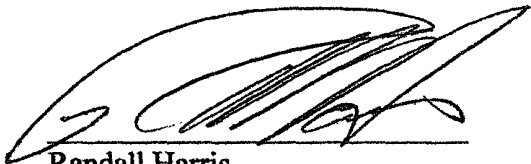
Lease # NM 100556
Ninety Nine SWD #1

Legal Description: SWNW Sec 1, T18S-R30E
EDDY County, New Mexico

Formations(s): Wolfcamp

Bond Coverage: Statewide

BLM Bond File #: OGB 0840

A handwritten signature in black ink, appearing to read 'Randall Harris', is written over a horizontal line.

Randall Harris
Geologist

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Tritex Resources LLC
LEASE NO.:	LC049633B
WELL NAME & NO.:	1 Ninety-Nine SWD
SURFACE HOLE FOOTAGE:	1980' FNL & 990' FWL
BOTTOM HOLE FOOTAGE:	' FL & ' FL
LOCATION:	Section 1, T. 18 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Reclamation of old reserve pit area
 - Lesser Prairie Chicken
 - Ground Level Abandoned Well Marker
- ☐ **Construction**
 - Notification
 - Topsoil
 - Reserve Pit
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - H2S Requirements
 - CIT Test
 - Pressure Monitor Equipment
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator 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 shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

The old salt leached reserve pit area (150 ft. x 200 ft.) will require to be capped. Haul in caliche and topsoil and cover this old pit area and reseed with seed mixture #2 for LPC.

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 8 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future

field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

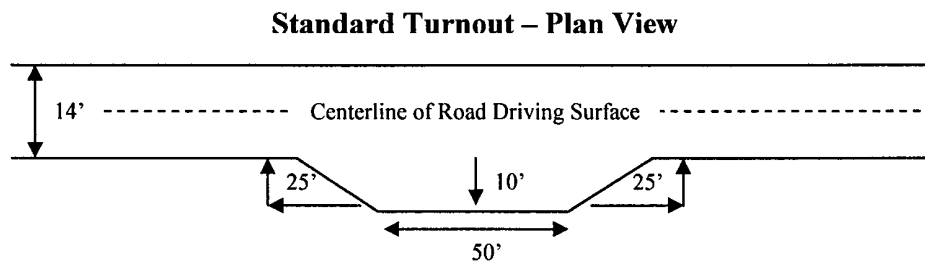
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

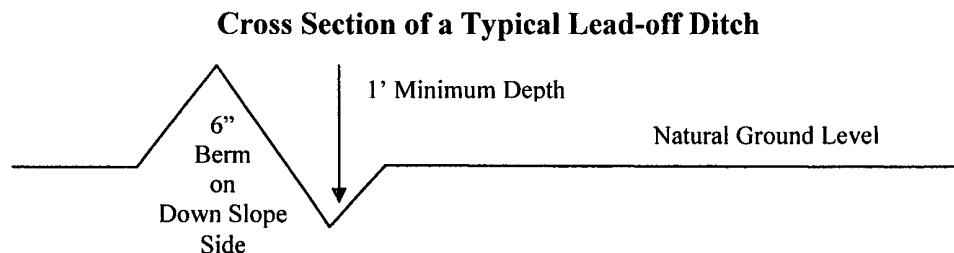
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outloping and insloping, lead-off ditches, culvert installation, and low water crossings).

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.



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

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

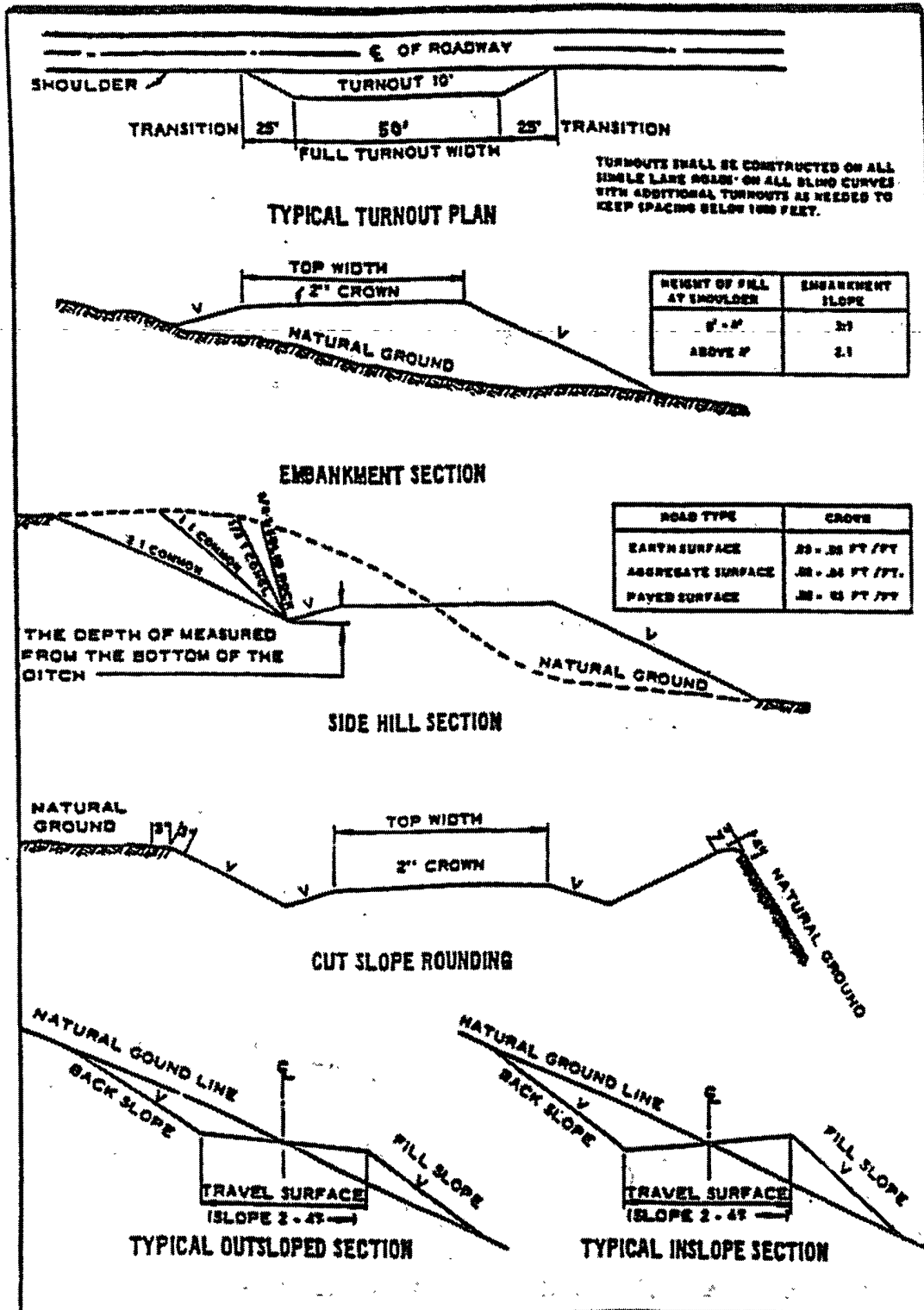
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. BOPE tests
- b. CIT test
- c. CIBP

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. **Hydrogen Sulfide has been reported as a hazard from wells in the vicinity. It is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide.**
2. Unless the re-entry procedure has been completed or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

B. CASING – Re-entry

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

1. The 13-3/8" surface casing is set at 615 feet with cement circulated to surface.
2. The 9-5/8" intermediate casing is set at 4,080' feet with cement circulated to surface.
3. The 5-1/2" production casing is set at 12,800' feet with cement to 800'.

A CIT is to be performed on the production casing after the Bone Springs perms are squeezed, per Onshore Oil and Gas Order 2.III.B.1.h. Test pressure to be 1800 psi.

An electronic pressure monitor device with continuous readout and alarm that notifies operator personnel of pressure increase is to be installed on the casing-tubing annulus and must be checked daily. If an increase in pressure is detected then the well must be shut in and the operator must contact the appropriate NMOC and BLM offices within 24 hours. A Rupture disc or equivalent is to be installed on injection line to shut-in the well if NMOC approved pressure is exceeded.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8" intermediate casing shoe shall be **2000 (2M) psi. A 2M BOP is approved based on reservoir data submitted by operator.**
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - e. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

CRW 062310

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

**Four-winged Saltbush 5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed
(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.