S OCD-ARTESIA 1232 ATS-07-697

Form 3160-3
(February 2005)

DEC 26 2007
OCD-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

5. Lease Serial No. **LC 028755 (A)**

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No.

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. **Russell "C" 6 X**

2 Name of Operator **Joe L. Tarver**

9. API Well No. 30-015-36073

3a. Address **2807 74th St. Suite #1**

3b. Phone No. *(include area code)* **806 795 2042**

10. Field and Pool, or Exploratory **Empire Yates 7 Rivers**

4 Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface **Lot#N, Sec 35, T-17-S, R-27-E, 999' FSL & 2247' FWL, EDDY Co. NM**

Roswell Controlled Water Basin

At proposed prod. zone **Same as Surface**

11. Sec., T. R. M. or Blk. and Survey or Area **Section 35, T-17-S, R-27-E**

14. Distance in miles and direction from nearest town or post office* **9 Miles East of Artesia, NM**

12. County or Parish **Eddy**

13. State **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) **330'**

16. No. of acres in lease **80**

17. Spacing Unit dedicated to this well **10 acres**

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **660'**

19. Proposed Depth **550'**

20. BLM/BIA Bond No. on file **NMB000328**

21 Elevations (Show whether DF, KDB, RT, GL, etc.) **3616GL**

22. Approximate date work will start* **09/06/2007**

23. Estimated duration **1 Month**

24. Attachments

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

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

25. Signature — Name *(Printed/Typed)* **Joe L. Tarver** — Date **09/05/2007**

Title **Operator**

Approved by *(Signature)* /s/ Don Peterson — Name *(Printed/Typed)* /s/ Don Peterson — Date DEC 19 2007

Title **FIELD MANAGER** — Office **CARLSBAD FIELD OFFICE**

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)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102
Revised March 17, 1999
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	22230	

Property Code	Property Name	Well Number
35166	RUSSELL "C"	6X

OGRID No.	Operator Name	Elevation
37594	JOE TARVER	3615

Surface Location

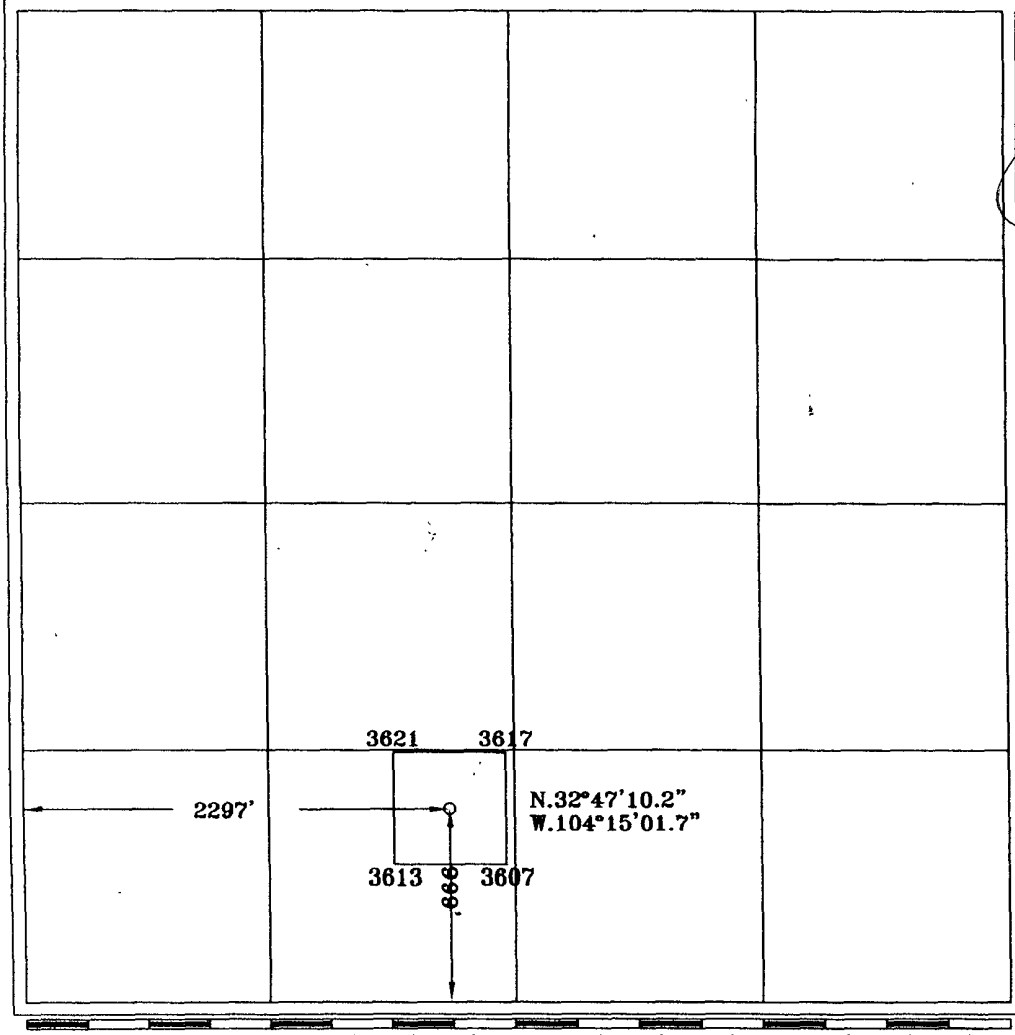
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	35	17S	27E		999	SOUTH	2297	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



0 330' 660' 990' 1650' 1980' 2310' 2310' 1980' 1650' 990' 660' 330' 0'

OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

JOE L. TARVER

Printed Name

OPERATOR

Title

10-6-2007

Date

SURVEYOR CERTIFICATION

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 supervison, and that the same is true and correct to the best of my belief.

9/10/2006

Date Surveyed

Signature & Seal of Professional Surveyor

HERSCHEL L. JONES
NEW MEXICO
3640
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate No. Herschel L. Jones RLS 3640

RUSSELL C #6

GENERAL SURVEYING COMPANY

United States Department of the Interior

Bureau of Land Management

Roswell Field Office 2909 West Second Street
Roswell, New Mexico 88201

Statement Accepting Responsibility for Operations

Operator Name:	**Joe L. Tarver**
Street or Box:	**2807 74th St. Suite #1**
City, State	**Lubbock, TX**
Zip Code:	**79423**

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

Lease No: **LC 028755 (A)**

Legal Description of Land: **SE1/4 SW1/4, SW1/4 SE1/4 Section 35 T17S, R27E – Eddy, Co New Mexico**

Formation(s) (if applicable) **Empire Yates-7 Rivers**

Bond Coverage: State, Nationwide or Individual) **Individual**

BLM Bond File No: **NMB000328**

Authorized Signature:

Title: Operator

Date: 09-05- 2007

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State of New Mexico
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OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	RUSSELL "C"	6Y
OGRID No.	**Operator Name**	**Elevation**
	JOE TARVER	3615

Surface Location

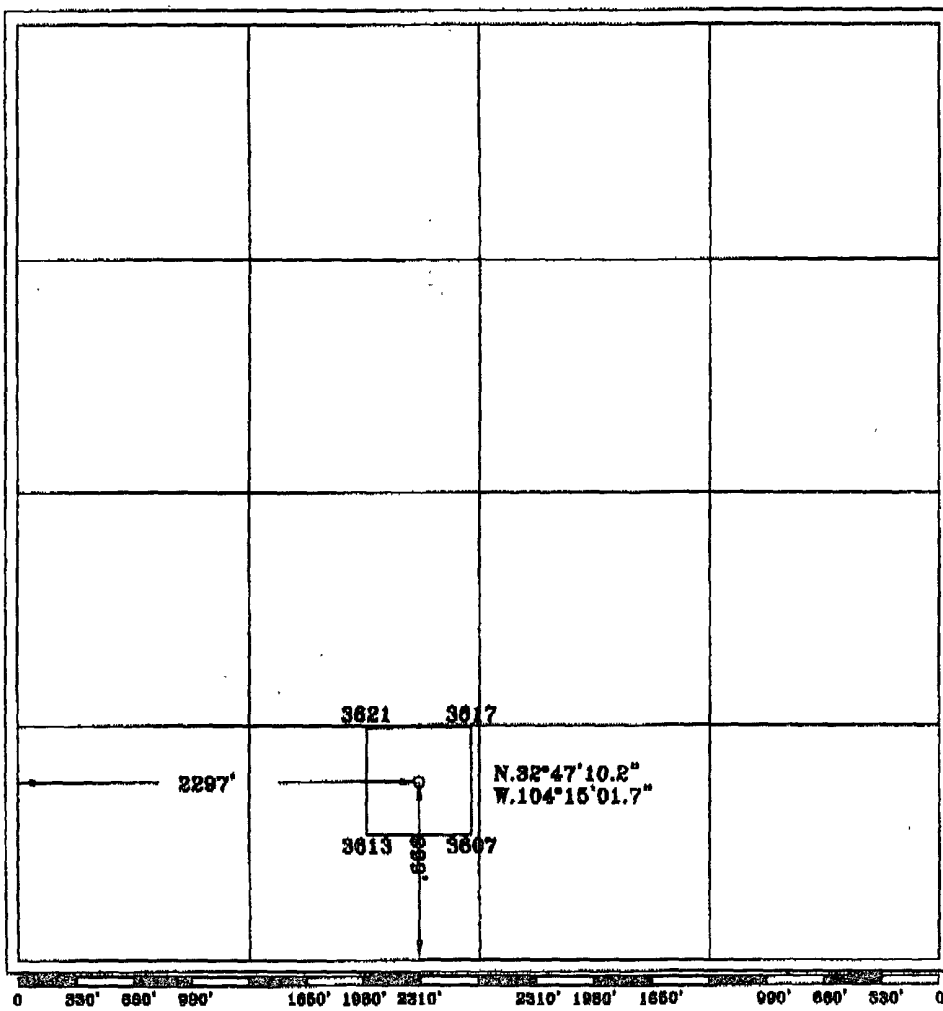
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	35	17S	27E		999	SOUTH	2297	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name

Title

Date

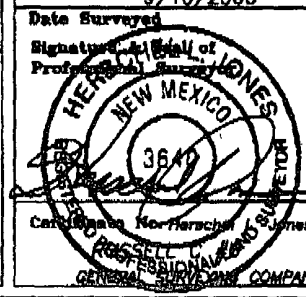
SURVEYOR CERTIFICATION

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 belief.

9/10/2006

Date Surveyed

Signature & Seal of Professional Surveyor



Certificate No. Herschel L. Jones RLS 3640

GENERAL SURVEYING COMPANY

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Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	22230	EMPIRE; YATES-7-RIVERS

Property Code	Property Name	Well Number
	RUSSELL "C"	6 X

OGRID No.	Operator Name	Elevation
37594	JOE TARVER	3616

Surface Location

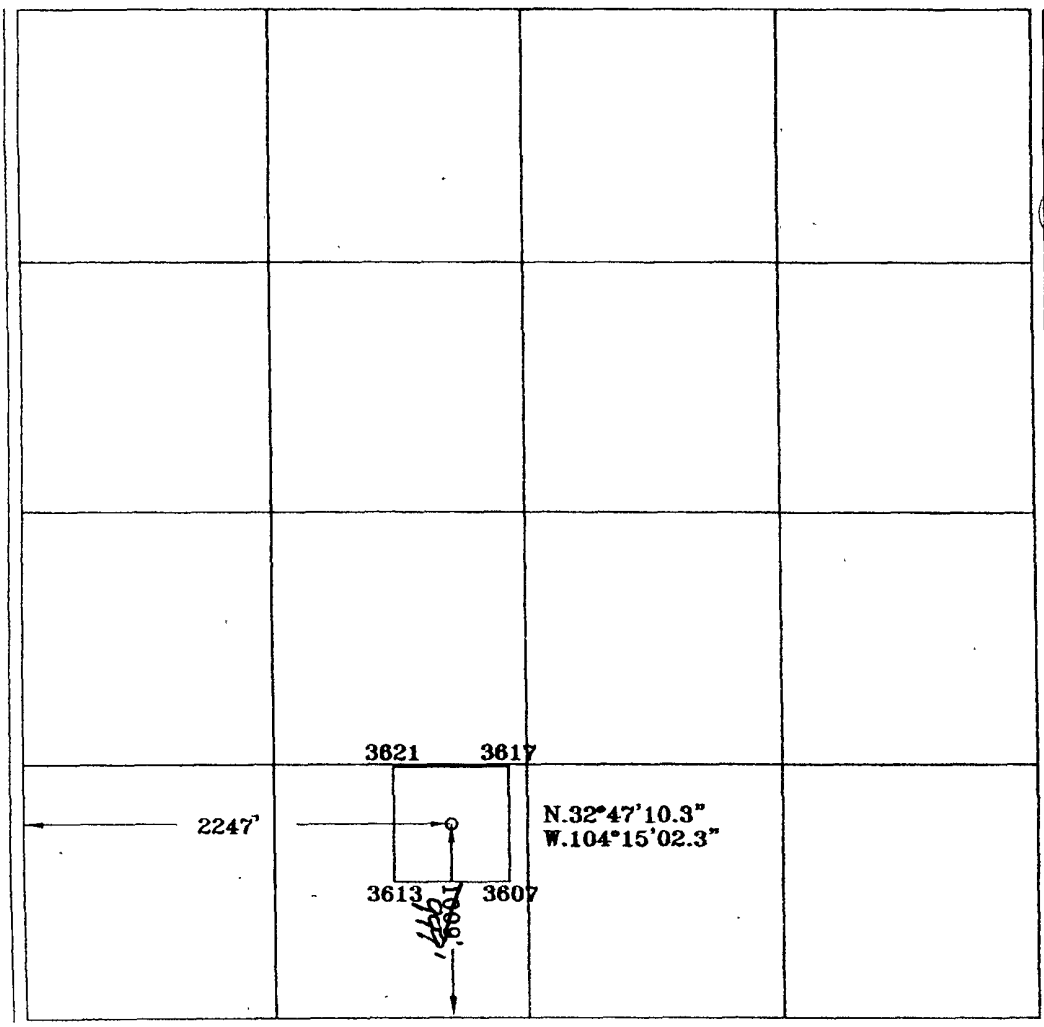
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	35	17S	27E		~~1009~~ 999'	SOUTH	2247	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

JOE L. TARVER

Printed Name

OWNER/OPERATOR

Title

~~2-22-06~~ 09/05/07

Date

SURVEYOR CERTIFICATION

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 supervison, and that the same is true and correct to the best of my belief.

2/14/2006

Date Surveyed

Signature & Seal of Professional Surveyor

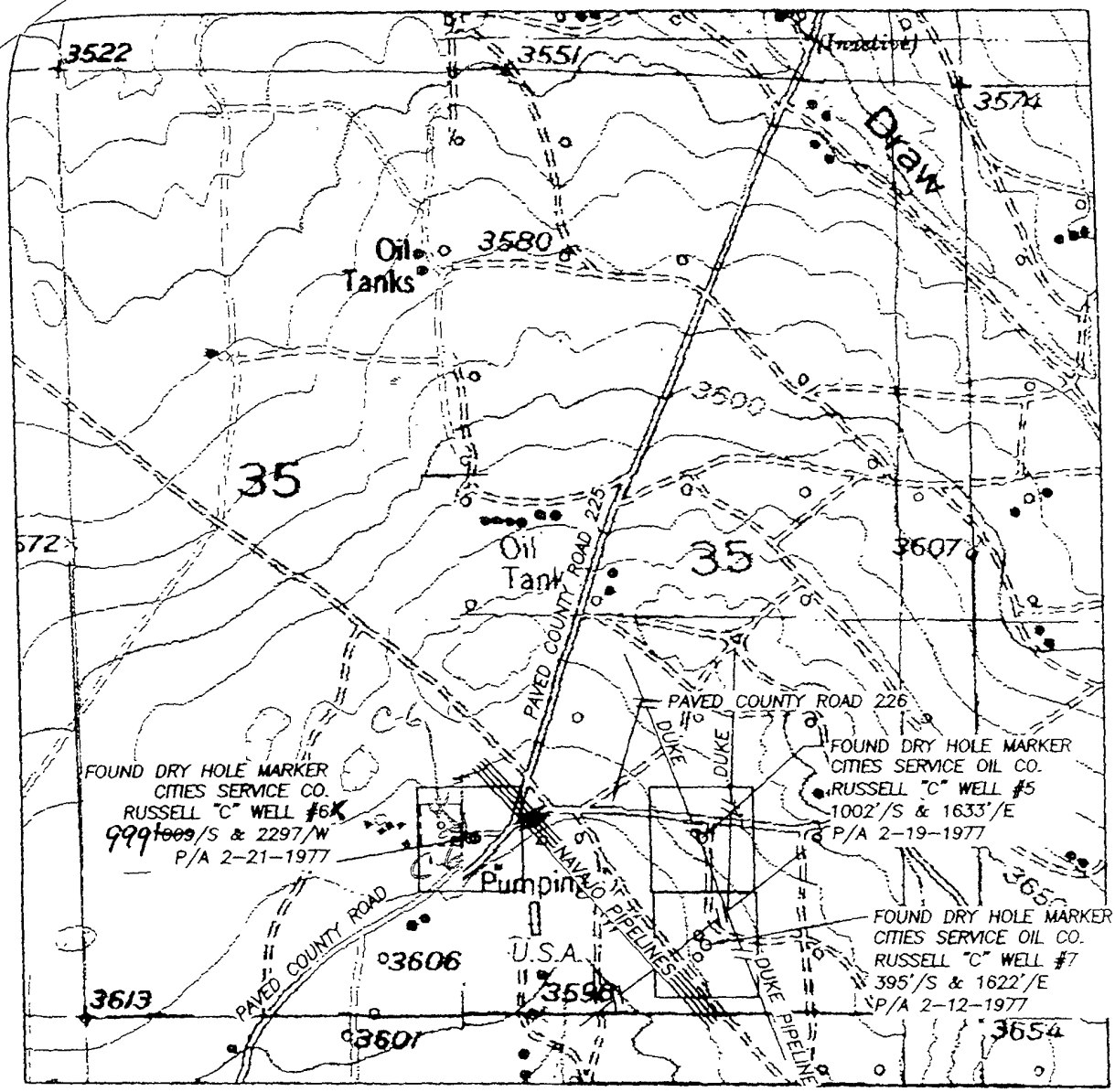
GARY L. JONES
NEW MEXICO
3640
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate No. Gary L. Jones RLS 3640

RUSSELL C #6

GENERAL SURVEYING COMPANY

TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



EXISTING LEASE ROADS

JOE TARVER

Russell-C-6X

LC 028755

1000' 0 1000' 2000'

Scale 1" = 1000'

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEET THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

REGISTERED PROFESSIONAL LAND SURVEYOR 3640

HERSCHEL L. JONES R.L.S. No.3640

GENERAL SURVEYING COMPANY P.O. BOX 1928
LOVINGTON, NEW MEXICO 88260

JOE TARVER RE-ENTERIES

RE-ENTERY WELLS, RUSSELL "C" WELL #5, RUSSELL "C" WELL #6 AND RUSSELL "C" WELL #7 LOCATED IN SECTION 35, TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 8/29/2005		Sheet 1 of 1 Sheets
Drawn By: Ed Blevins		W.O. Number
Date: 8/29/05		Scale 1" = 1000' RUSSELL

EXIBIT-A

Tot 4. TARVED
LC 028755
RUSSELL C-10-X

EXHIBIT B

Joe Tarver
2807 74th St. Suite #1 Lubbock, TX 79423
Phone (806) 795-2042 Fax (806) 748-0676
Email: jtarver@WirelessTowLights.com

Fred Wright
B.L.M.
Carlsbad NM

RE: Russell C-6-X
Section 35 ---T17S, R27E Eddy Co, NM

Casing and Cement program:

Well Bore ---	7 7/8"
Planned TD	530'
Casing 4 ½ " 10.5	J-55 WITNESS

Circulate to surface

21.5 Barrels Cement = 92 sacks

Yield ---- 1.32

Mix With Water --- 6.32

Density 14.8 Slurry

Joe Tarver
09-07-07

LC 028755(A)
Joe L. Tarver - Owner/Operator

Drilling Plan
Russell C - 6 X

Install diverter (air and gas drilling pressure diverter). (Note) The known history of pressure at this shallow depth (550' or less) is minimal. Even the virgin pressure of 220 lbs. has long since dissipated.

Move in rig and set up for drilling.

Drill through all parts of the Empire Yates - 7 Rivers formation (TD is expected at less that 550' below the surface).

Acidize with 1,500 gals. 15% Hydrochloric acid with appropriate additives, i.e., A-179 Iron Control Aid, A-264 Corrosion Inhibitor, F-103 Surfactant, L-63 Iron Control Agent, W-53 Non-Emulsifer.

Clean out residue to pits.

Install tubing, bottom hole pump, and rods.

Connect pump jack for production.

LC 028755(A)
Joe Tarver

Location Platt

Rig Layout
Russell C - 6

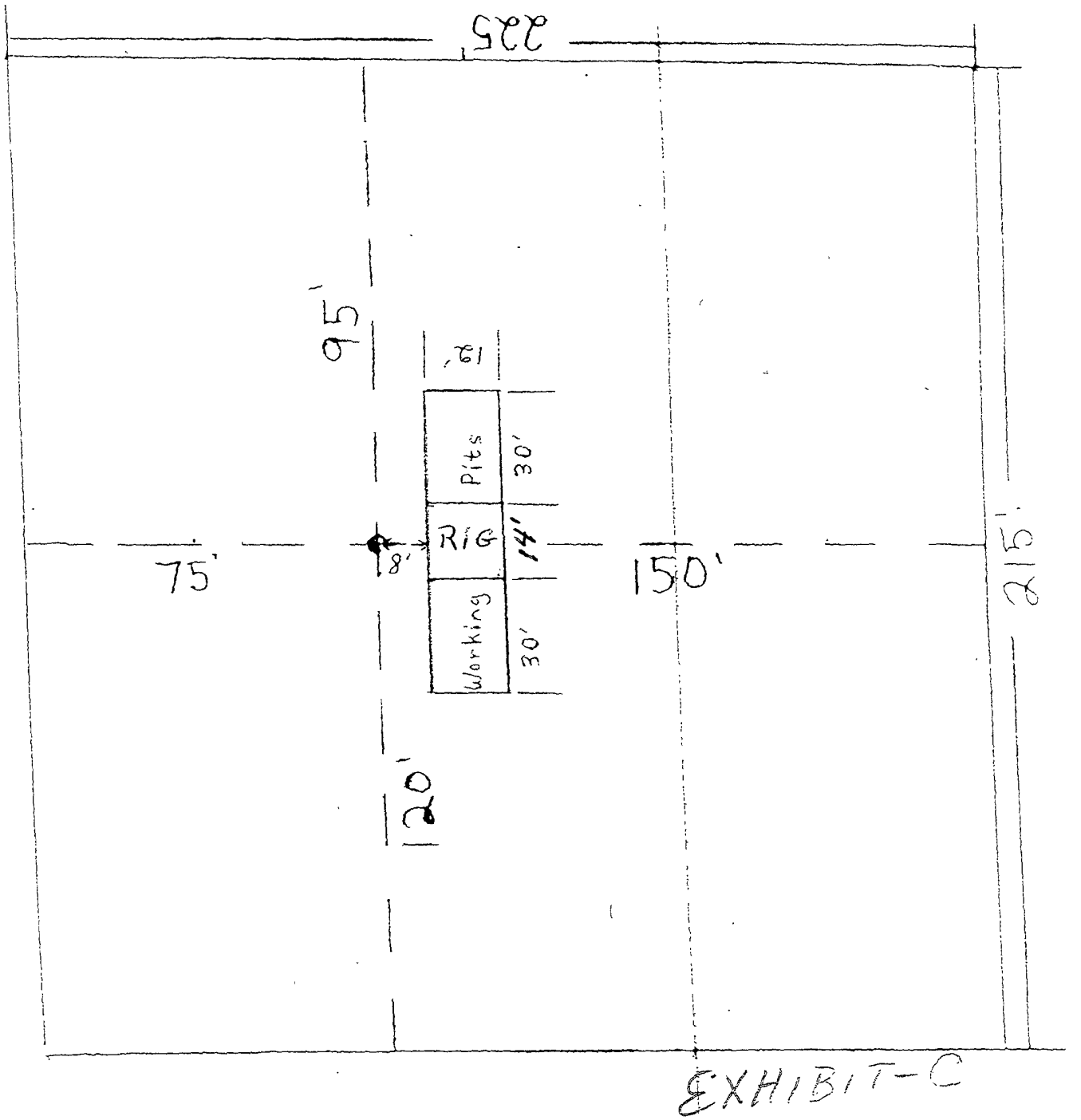
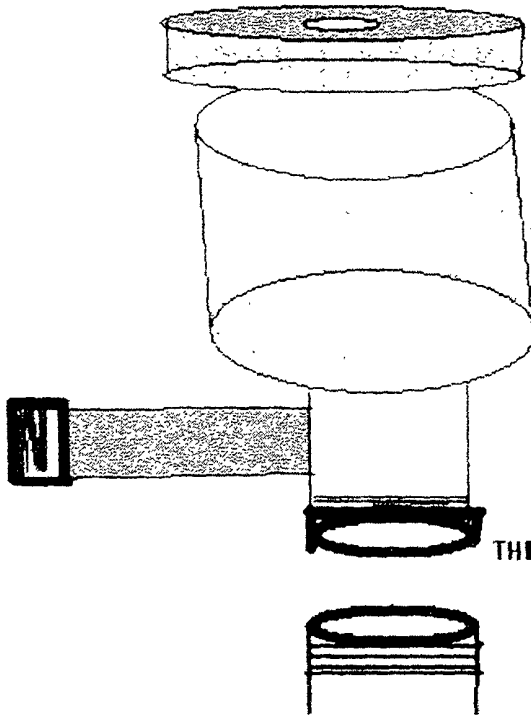


EXHIBIT-C

B.O.P.

DIVERTER FOR AIR DRILLING

DIVERTER FOR AIR OR GAS DRILLING



MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Joe L. Tarver
999' Russell C-6-X
~~1009~~ FSL – 2247' FWL, T17S – R27E

LC 028755(A)

Drill

This plan is submitted with the Application for Permit to ~~Re-Enter~~ the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS:
   A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The well is approximately 8 miles east of Artesia, New Mexico.

   B. Directions: From Artesia go east on Highway 82, 9 miles turn right on County Road 204. Go ½ mile turn right to County Road 225. Go 1 mile to 1st black top road to left. Immediately to the right is a caliche lease road – go 900 feet to Russell C – 6 X on the left.

2. PLANNED ACCESS ROAD:
   A. There is an existing road from the east to the well site.

   B. No additional cutting or construction is necessary.

   C. Culverts: none necessary

   D. Cuts and Fills: none necessary

   E. Gates, Cattleguards: none

   F. Right-of-Way: Existing Right-of-Way. Federal Right of Way will be utilized.

3. LOCATION OF EXISTING WELLS:
   A. Existing wells are indicated on EXHIBIT B.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:
   A. If the well is productive, production, storage and measurement facilities will be constructed on the well pad.

5. LOCATION AND TYPE OF WATER SUPPLY:
   A. Water for drilling operations will be purchased from a commercial water hauler.

6. SOURCE OF CONSTRUCTION MATERIALS:
   A. None necessary

7. METHODS OF HANDLING WASTE DISPOSAL:
   A. Drill cuttings will be disposed of in the drilling pits.

   B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

   C. Water produced during test will be disposed of in the drilling pits. Oil produced during test will be stored in test tanks until sold.

   D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

   E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of soil. All waste material will be contained to prevent scattering by the wind. The trash pit will be located adjacent to the mud pit.

   F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion of operations.

8. ANCILLARY FACILITIES:
   A. None necessary

9. WELL SITE LAYOUT:
   A. The wellsite and 400' x 400' area have been surveyed and flagged.

   B. Dimensions and relative location of the drill pad, pit and equipment are shown on EXHIBIT C.

10. PLANS FOR RESTORATION OF THE SURFACE:
   A. After completion of drilling and/or completion operations, all equipment and other materials not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.

   B. Any unguarded pits containing fluids will be fenced until they are filled.

   C. If the well is non-productive, the disturbed area will be rehabilitated to Federal Agency Requirements and will be accomplished as expeditiously as possible.

11. OTHER INFORMATION:
   A. Topography: The regional terrain is a rolling alluvial plain sloping to the south. The access road is essentially level. The drillsite is essentially level. Slopes 3 degress to the South.

B. Soil: The soil at the wellsite is sandy gravel.

C. Flora and Fauna: Flora consists of sparse range grasses. No wildlife was observed. Fauna Probably includes reptiles, rodents and various birds.

D. Ponds or Streams: There are no ponds near the wellsite. The Pecos river is 6 miles to the west.

E. Residences and Other Structures: There are no occupied dwellings within 6 miles.

F. Archaeological, Historical and Other Cultural Sites: Southern New Mexico Archaeological Services of Bent, New Mexico has made a survey of the proposed new wellsite. They have recommended that construction work be approved.

G. Land Use: The vicinity surrounding the wellsite is semi-arid rangeland, used primarily for grazing.

H. Surface Ownership: The access road and wellsite are on Public Surface (BLM) within the lease boundary.

12. OPERATOR'S REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface Use Plan:

Joe L. Tarver
2807 74th Street, Ste. 1
Lubbock, TX 79423
Ph: 806-795-2042

13. 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 presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; that the work associated with the operations proposed herein will be performed by JOE L. TARVER and it's sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date 09-05-2007

Joe L. Tarver

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Joe L. Tarver
LEASE NO.:	LC-028755A
WELL NAME & NO.:	Russell C #6X
SURFACE HOLE FOOTAGE:	999' FSL & 2247' FWL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 35, T. 17 S., R 27 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.

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)

Cave and Karst

Cave/Karst Surface Mitigation
The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:
Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Cave/Karst Subsurface Mitigation
The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:
Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

Casing:
All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

Lost Circulation:
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (bit drops) of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Abandonment Cementing:
Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Record Keeping:
The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

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 (505) 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

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

C. RESERVE PITS

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed on the South side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

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

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 (505) 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.

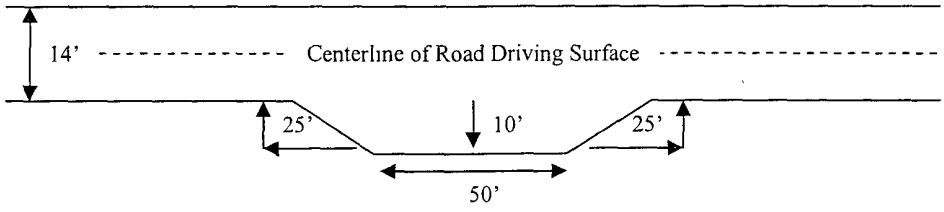
Ditching

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:

Standard Turnout – Plan View

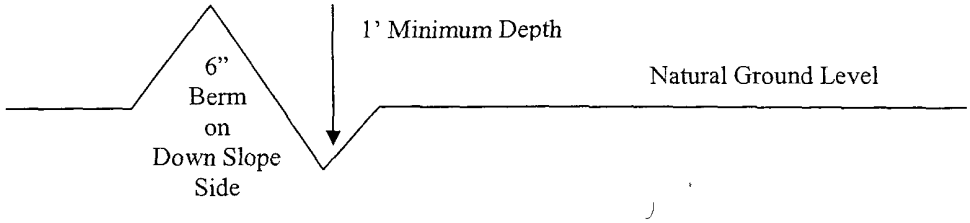


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping 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.

Cross Section of a Typical 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:

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

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.

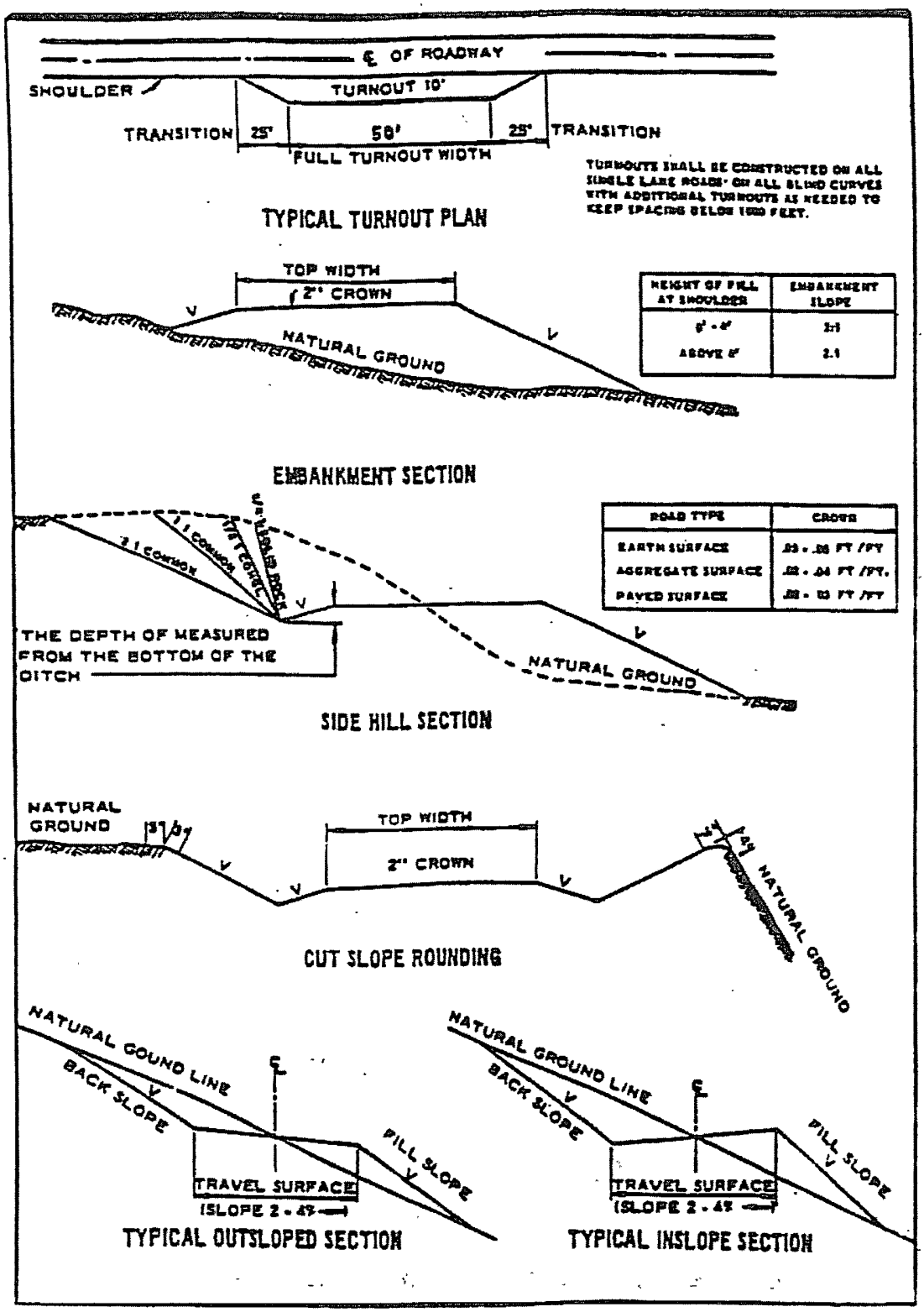
A gate shall be constructed and fastened securely to H-braces.

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. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822

1. A Hydrogen Sulfide (H2S) Drilling Plan is N/A.

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.

B. CASING

1. The 4.5 inch surface / production casing shall be set at 550 feet and cemented to the surface.
   a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

   b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

   c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

   d. If cement falls back, remedial action will be done prior to drilling out that string.

2. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

a. 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.

Air / Gas Special Drilling Operations

In addition to the equipment already specified elsewhere the following equipment shall be in place and operational during air/gas drilling:

- Properly lubricated and maintained rotating head.
- Spark arresters on engines (baffled exhaust extension) or water cooled exhaust. Device is attached directly to exhaust.
- **Blooie line discharge granted a variance due to equipment used.**
- Straight run on blooie line unless otherwise approved
- Deduster equipment - operator will use water misting.
- All cuttings and circulating medium shall be directed into a reserve or blooie pit - pit should be 12' x 12' and lined per NMOCD requirements.
- **Float valve above Bit (similar to lower Kelly valve).**
- Automatic igniter or continuous pilot light on the blooie line.
- Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the well bore **Variance granted on compressor being in opposite direction and 100 feet from wellbore due to size of rig.**
- Mud circulating equipment, water, and mud materials (does not have to be premixed) sufficient to maintain the capacity of the hole and circulating tanks or pits.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

Engineering can be reached @ 505-706-2779 for variances.

FWright: 9/10/07 (date)

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.

At the time reserve pits are to be reclaimed, 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.

B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

Seed Mixture 4, for Gypsum 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:

Species	lb/acre
Alkali Sacaton (Sporobolus airoides)	1.0
DWS⊆ Four-wing saltbush (Atriplex canescens)	5.0

⊆DWS: DeWinged Seed

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

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.