

1276

30-015-00613



OCD-ARTESIA

Form 3160-3
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FEB 06 2008

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

APPLICATION FOR PERMIT TO DRILL OR REENTER
LOCATION

1a. Type of work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		5. Lease Serial No. NMNM0557370	
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Joe L. Tarver		7. If Unit or CA Agreement, Name and No.	
3a. Address 2807 74th St. Suite #1		8. Lease Name and Well No. Harbold #12	
3b. Phone No. (include area code) 806 795 2042		9. API Well No. 3001500613	
4. Location of Well (Report location clearly and in accordance with any State requirements*) At surface Unit E 1650 FNL & 990 FWL Sec, 35 T17S R27E Eddy Co. NM At proposed prod. zone Same as Surface		10. Field and Pool, or Exploratory Red Lake Grayburg	
14. Distance in miles and direction from nearest town or post office* 9 Miles East of Artesia, NM		11. Sec., T. R. M. or Blk. and Survey or Area Sec 35 T17S R27E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 330'		12. County or Parish Eddy	
16. No. of acres in lease 720		13. State NM	
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'		20. BLM/BIA Bond No. on file NMB000328	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3552GL		22. Approximate date work will start* 09/17/2007	
		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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPD must be filed with the appropriate Forest Service Office). | 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/ James Stovall	Name (Printed/Typed) /s/ James Stovall	Date FEB - 2 2008
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)

Well has been re-surveyed for corrected footage-

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

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:

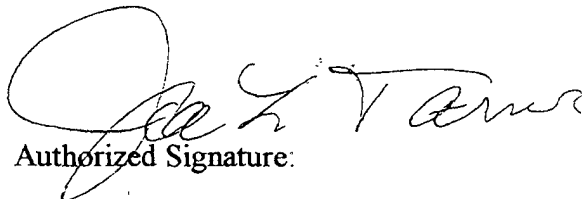
Lease No: **NMNM0557370**

Legal Description of Land: **Unit E 1638' FNL & 995' FWL Sec. 35 T17S R27E Eddy Co. NM**

Formation(s) (if applicable) **Red Lake Grayburg**

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

BLM Bond File No: **NMB000328**


Authorized Signature:

Title: Operator

Date: 09-05- 2007

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

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

36-015-36102 WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 300 1500613	Pool Code 51300	Pool Name
Property Code	Property Name HARBOLD	Well Number 12
OGRID No.	Operator Name JOE TARVER	Elevation 3572'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	35	17 S	27 E		1638	NORTH	995	WEST	EDDY

Bottom Hole Location If Different From Surface

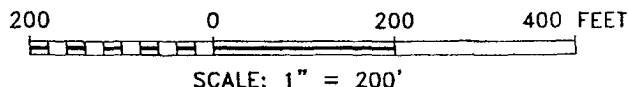
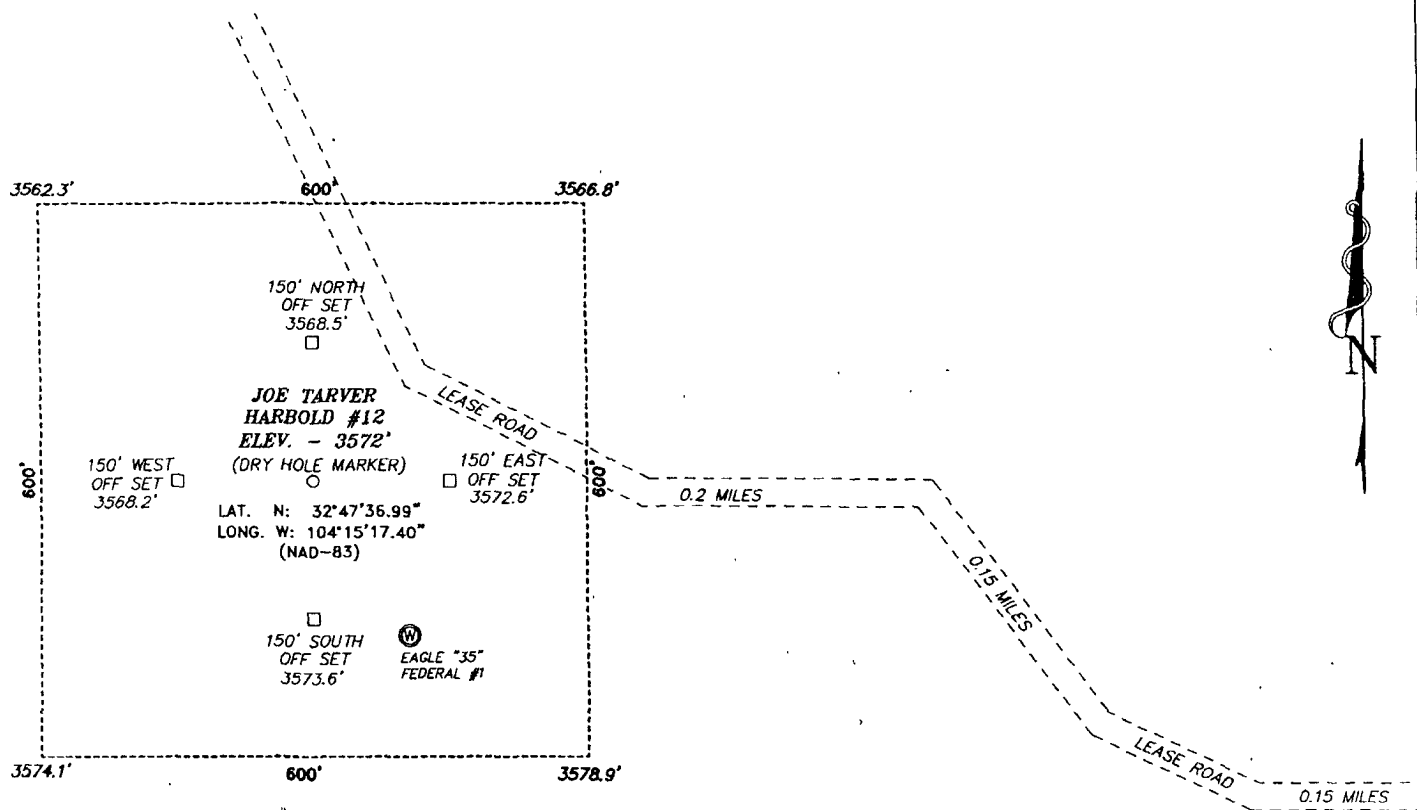
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 10	Joint or Infill	Consolidation Code	Order No.
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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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>Joe L. Tarver</i> Date: 10-6-2007</p> <p>Printed Name: JOE L. TARVER</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 belief.</p>
	<p>SEPTEMBER 28, 2007</p> <p>Date Surveyed: L. JONES</p> <p>Signature & Seal: Professional Surveyor</p>
	<p>7977</p> <p>U.O. No. 18552</p> <p>Certificate No. 6666 L. Jones 7977</p> <p>BASIN SURVEYS</p>

SECTION 35, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF US HWY 82 AND CO. RD. 204 (HILLTOP), GO SOUTHEAST APPROX 0.2 MILES TO CO. RD. 225 (EMPIRE), ON CO. RD. 225 GO 1.2 MILES TO LEASE ROAD, ON LEASE ROAD TURN RIGHT AND GO 0.15 MILES THENCE NORTH 0.15 MILES TO LEASE ROAD, TURN LEFT ON LEASE ROAD (WEST) AND GO 0.2 MILES TO PROPOSED LOCATION.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 18619

Drawn By: J. M. SMALL

Date: 10-04-2007

Disk: JMS

18552W

Survey Date: 09-28-2007

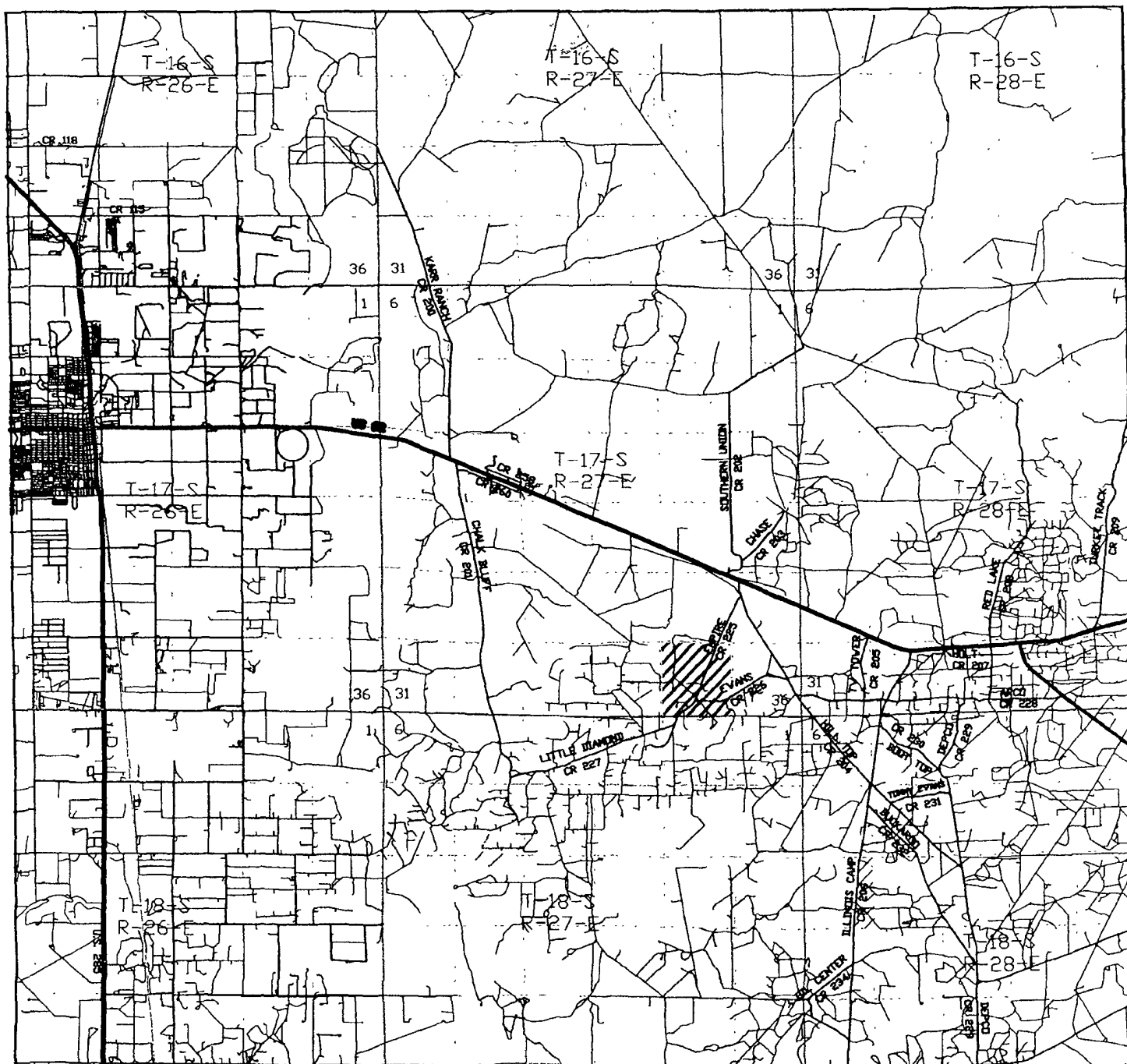
Sheet 1 of 1 Sheets

JOE TARVER

REF: HARBOLD #12 / Well Pad Topo

HARBOLD #12 LOCATED 1638' FROM

THE NORTH LINE AND 995' FROM THE WEST LINE OF
SECTION 35, TOWNSHIP 17 SOUTH, RANGE 27 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.



HARBOLD #12

Located at 1638' FNL & 995' FWL
 Section 35, Township 17 South, Range 27 East,
 N.M.P.M., Eddy County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

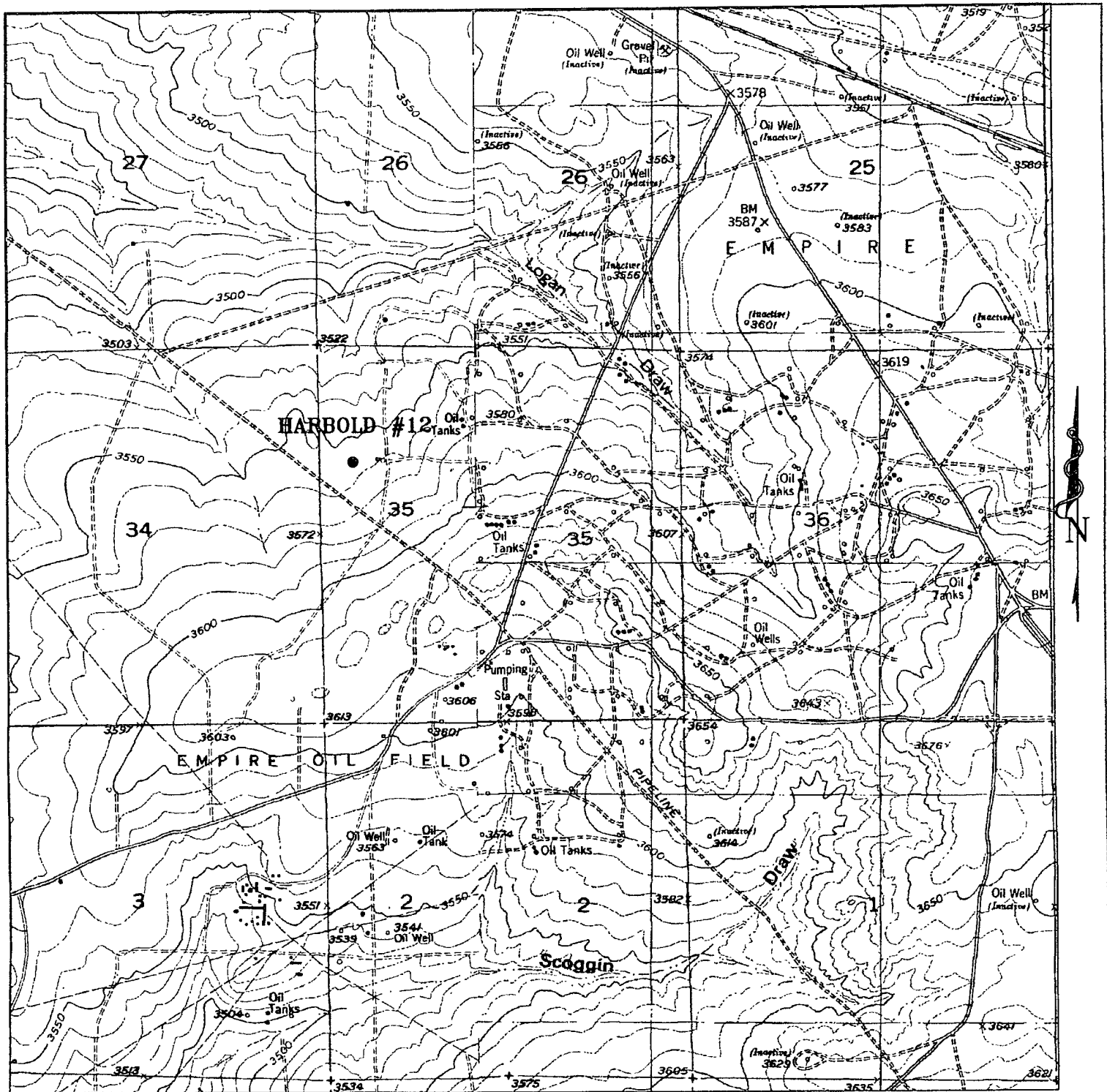
W.O. Number: JMS 18552T

Survey Date: 09-28-2007

Scale: 1" = 2 MILES

Date: 10-04-2007

JOE TARVER



HARBOLD #12

Located at 1638' FNL & 995' FWL
 Section 35, Township 17 South, Range 27 East,
 N.M.P.M., Eddy County, New Mexico.

Basin
Surveys

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax

W.O. Number: 18552T

Survey Date: 09-28-2007

Scale: 1" = 2000'

JOE TARVER

NMNM0557370

Joe L. Tarver

2807 - 74th St., Suite 1

Lubbock, TX 79423

Drilling Plan
Harbold #12

Install diverter (air and gas drilling pressure diverter).

Move in rig and set up for drilling.

Drill through all cement plugs. (TD is expected at 1600' 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 and packer.

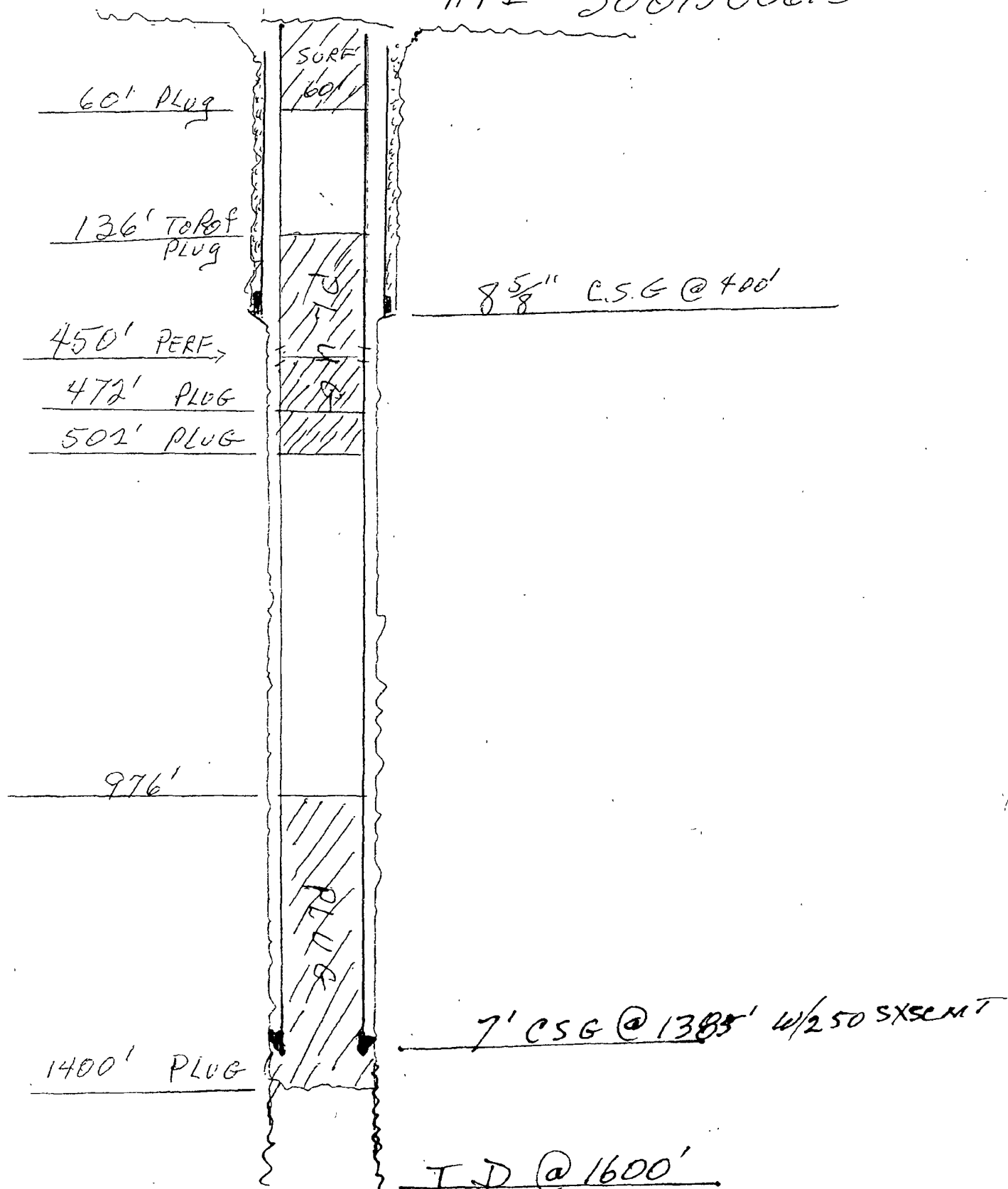
Test for pressure integrity.

11-14-07

CURRENT REPORTED CONDITION
(see ATTACHED REPORT)

HARBOLD #12

API-3001500613



MAYO MARRS CASING PULLING INC.
BOX 863
KERMIT, TEXAS 79745

SMITH & MARRS INC.

Lease: HARBOLD # 12

Project: P & A - CEMENTING REPORT

06-21-06 - SPOT 75 SXS @ 1400'-976' & TAG
06-22-06 - PERFORATE @ 450' - SPOT 70 SXS @ 472'-502' & TAG
06-22-06 - SPOT 50 SXS @ 472'-456' & TAG
06-23-06 - SPOT 60 SXS @ 456'-136' & TAG
06-23-06 - SPOT 60 SXS @ 60' TO SURFACE

INSTALL DRY HOLE MARKER
CIRCULATE 10# MUD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

RECEIVED

FORM APPROVED
OMB No. 1004-0135
Expires January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

JUL 14 2006

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Smith and Marrs, INC.

3a. Address
811 Bullock Ave. Artesia NM

3b. Phone No. (include area code)
505-748-2134

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Unit E 1650 N & 990 W Sec. 35 T17S R27E NMPM

5. Lease Serial No.

NMNM 0557370

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Harbold # 12

9. API Well No.

30-015-00613

10. Field and Pool, or Exploratory Area

Red Lake Q-G-SA

11. County or Parish, State

Eddy Co. NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

SEE ATTACHMENT

Approved as to plugging of the well bore.
Liability under bond is retained until
surface restoration is completed.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Dalton Bell

Signature

Dalton Bell

Title

Agent

Date

6-30-06

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by **DAVID J. CLARK**

DAVID J. CLARK ENGINEER

Date **JUL 12 2006**

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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.

EXHIBIT C

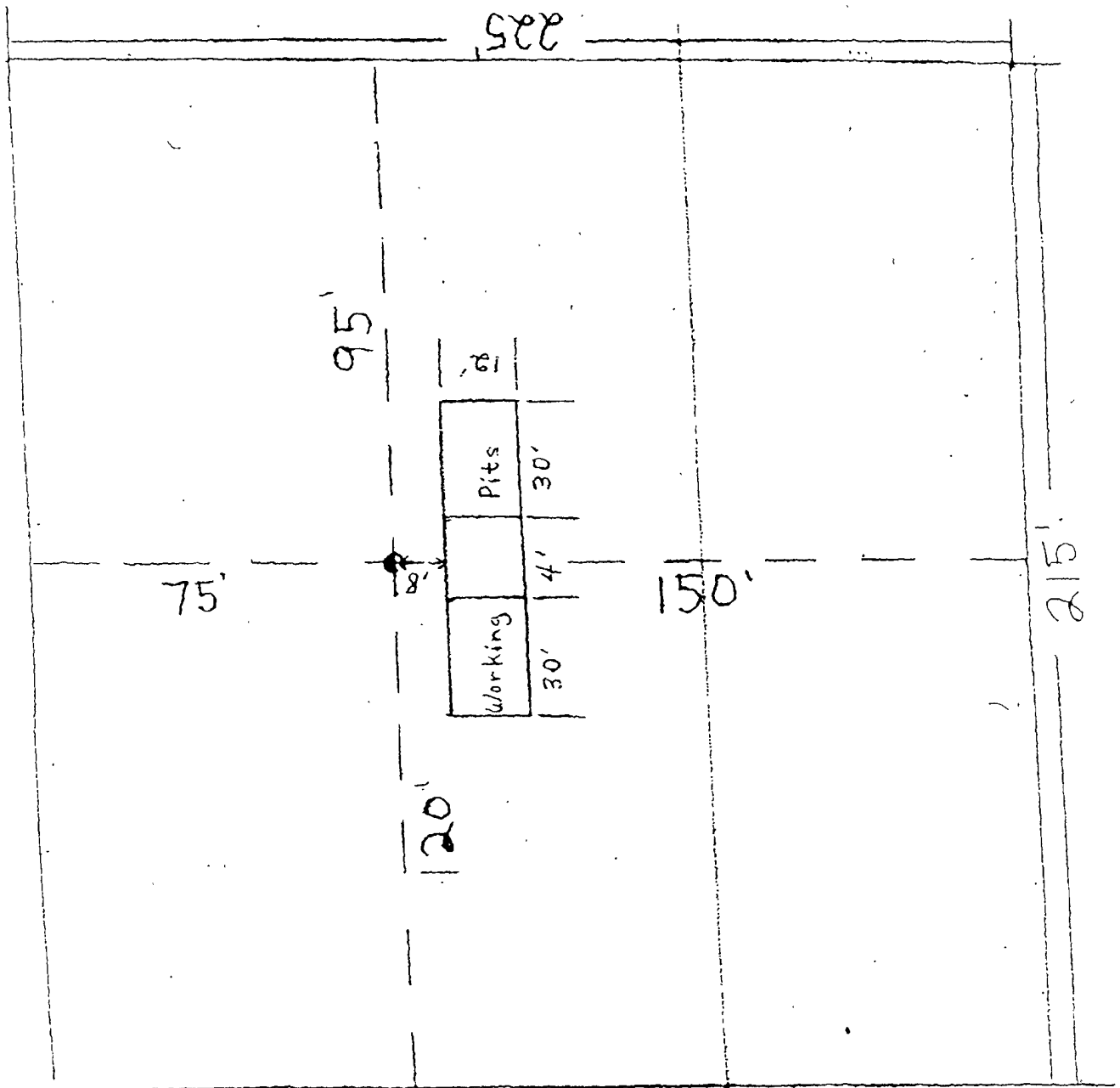
NM NM 0557770

Joe Tarver

Location Platt

HAROLD #12

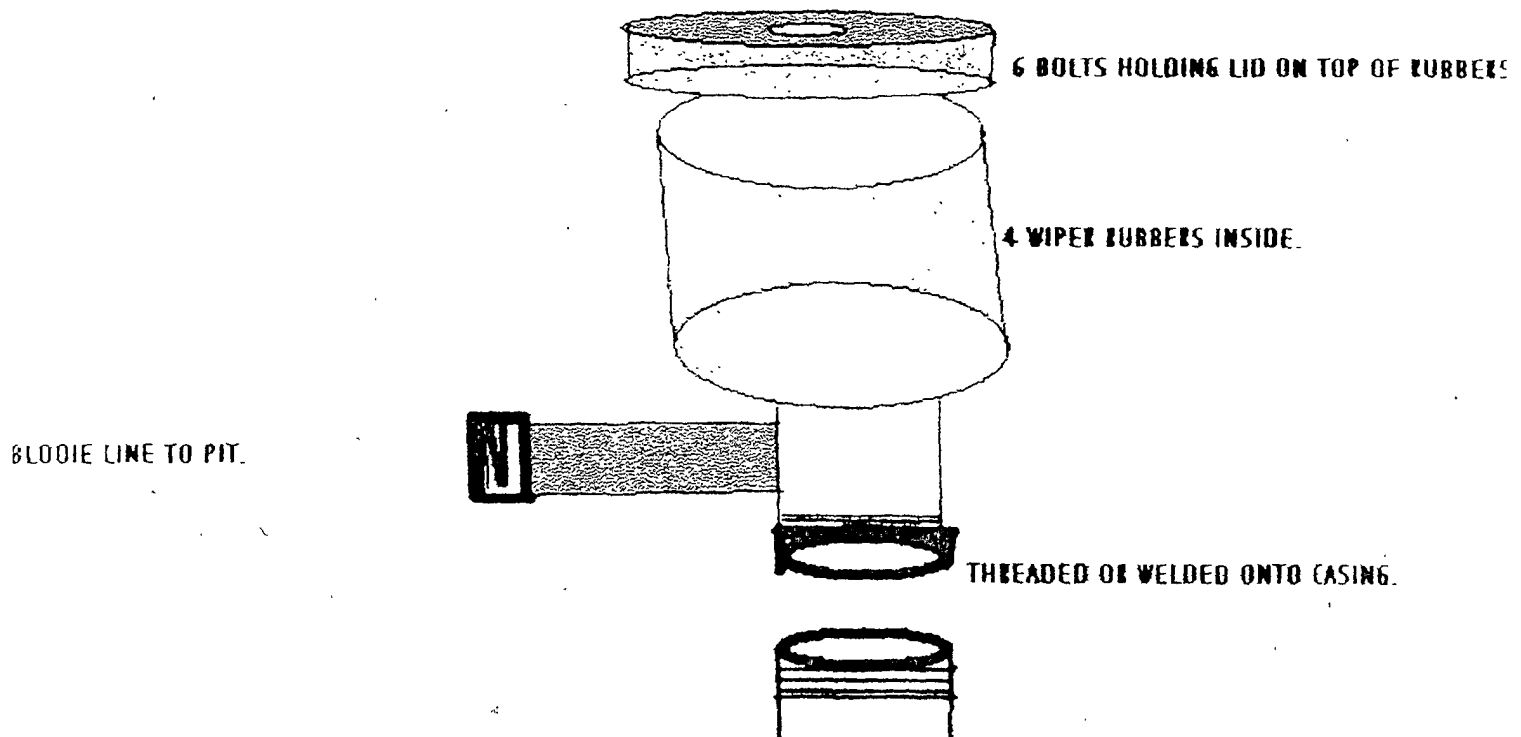
SEE ATTACHED FOR
CONDITIONS OF APPROVAL



B.O.P.

DIVERTER FOR AIR DRILLING

DIVERTER FOR AIR OR GAS DRILLING



MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Joe L. Tarver

Harbold #12

1650 FNL - 990 FWL - T17S - R27E, Eddy Co. NM
1638' 995'

se NMNM0557370

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 1/2 mile to CITGO oil tanks. Go right on road south of tanks Follow caliche road to location.

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. SWD - Storage Tanks and Pump will be installed on Pad. Flow line from Russell-C Lease in the SW ¼ SE ¼, SE ¼ SW ¼ Section 35, T17S, R27E to Harbold #12. (See Exhibit "D")

5. LOCATION AND TYPE OF WATER SUPPLY:

A. Cement Plugs will be drilled with Air. No Water to be used.

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.

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 is marked with P/A Marker and has been discussed with BLM Engineers in Carlsbad, NM.

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 completion is unsuccessful, 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 degrees to the North.

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: The Archaeological Department of BLM, Carlsbad, New Mexico has reviewed this 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:

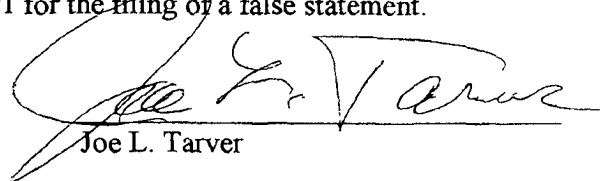
Representative responsible for assuring compliance with the approved Surface Use Plan:

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

SECTION 35, TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

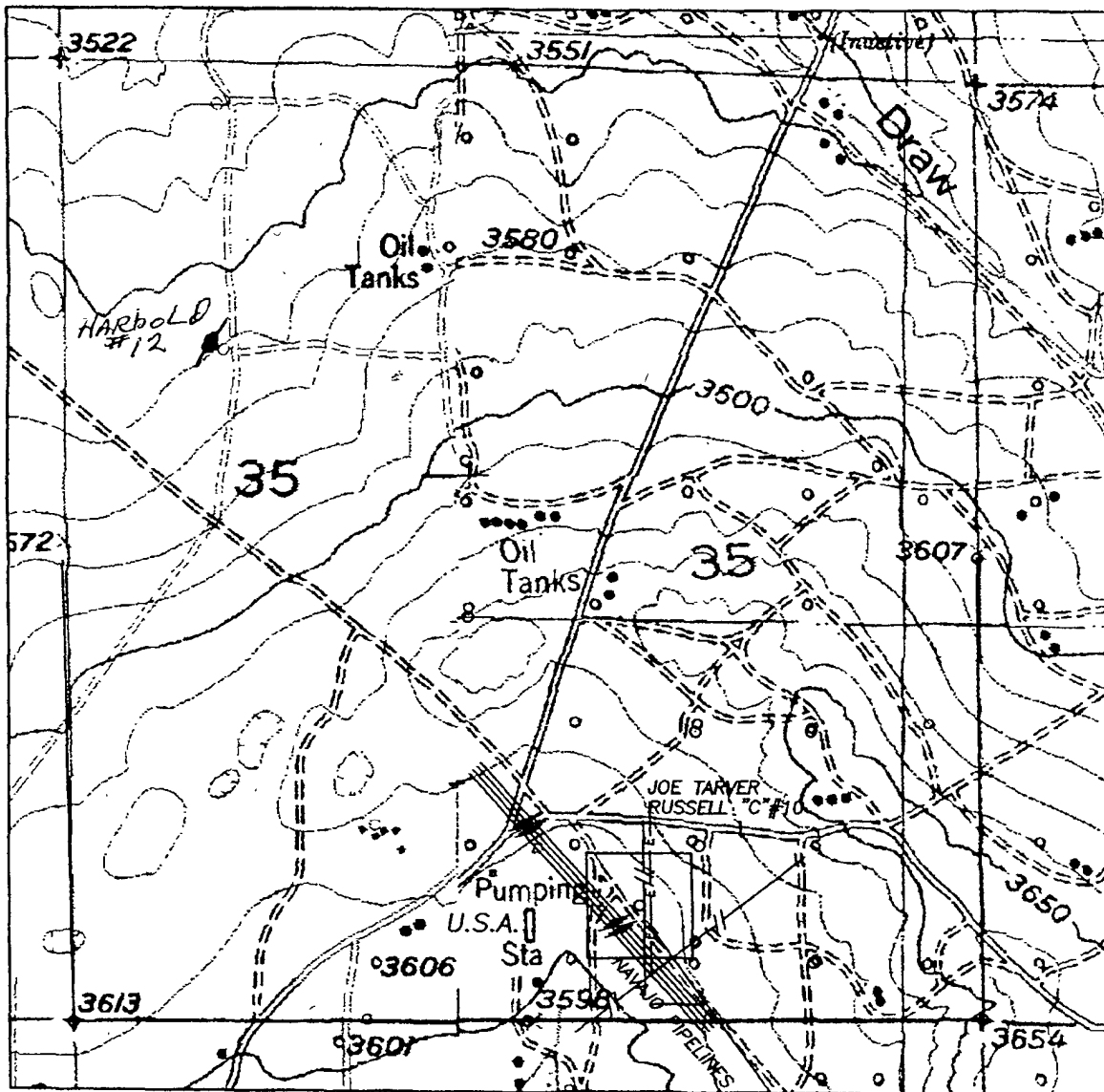


Exhibit "A"
Lease Roads

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 S.L.S. No. 3640

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

JOE TARVER

PROPOSED INJECTION WELL RUSSELL "C" WELL #10
LOCATED IN SECTION 35, TOWNSHIP 17 SOUTH, RANGE 27
EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 5/22/2006	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 5/23/06	Scale 1" = 1000' RUSSELL-10

SECTION 35, TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

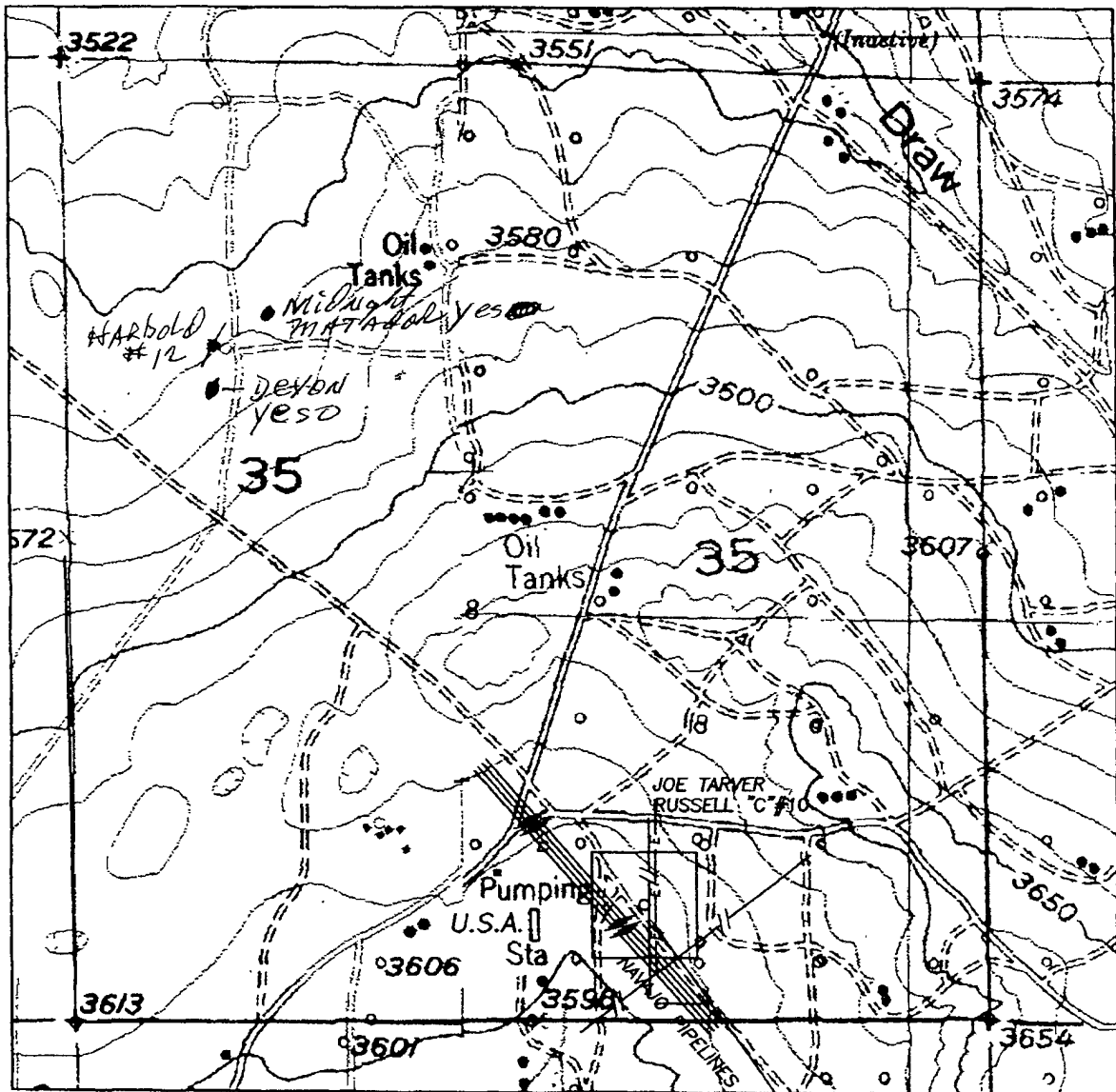
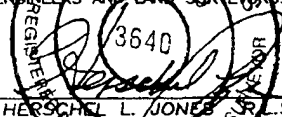


Exhibit "B"
Existing well location

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.



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

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

JOE TARVER

PROPOSED INJECTION WELL RUSSELL "C" WELL #10
LOCATED IN SECTION 35, TOWNSHIP 17 SOUTH, RANGE 27
EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 5/22/2006	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 5/23/06	Scale 1" = 1000' RUSSELL-10

SECTION 35, TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

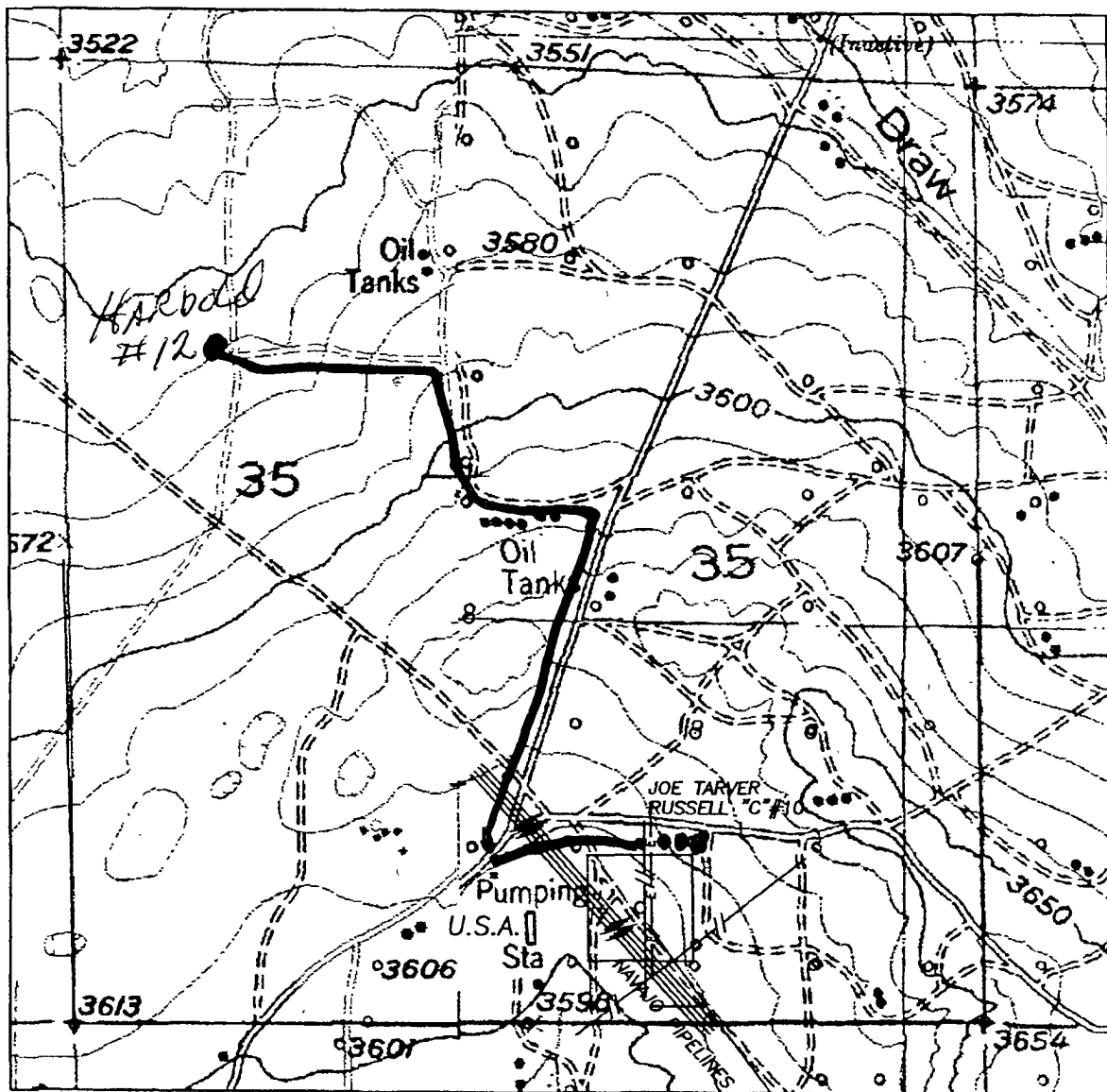
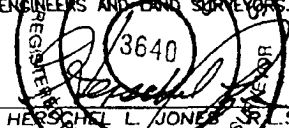


EXHIBIT "D" PROPOSED 2" Poly Flow Line from Russell Tank Battery to Harbold #12

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.



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

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

JOE TARVER

PROPOSED INJECTION WELL RUSSELL "C" WELL #10
LOCATED IN SECTION 35, TOWNSHIP 17 SOUTH, RANGE 27
EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 5/22/2006	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 5/23/06	Scale 1" = 1000' RUSSELL-10

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Joe L Tarver
LEASE NO.:	NMNM0557370
WELL NAME & NO.:	12-Harbold
SURFACE HOLE FOOTAGE:	1638' FNL & 995' 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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Flowline
 - Cave/Karst
- ☐ **Construction**
 - Notification
 - Topsoil
 - Reserve Pit
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Reserve Pit Closure/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)

Flowline that was applied for in the APD is not authorized under this permit due to crossing lease boundaries that will require a Right-of-Way permit. Please submit a SF-299 form for an off-lease surface flowline.

Cave & 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 than 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 working pit shall be constructed 64' X 12' 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.

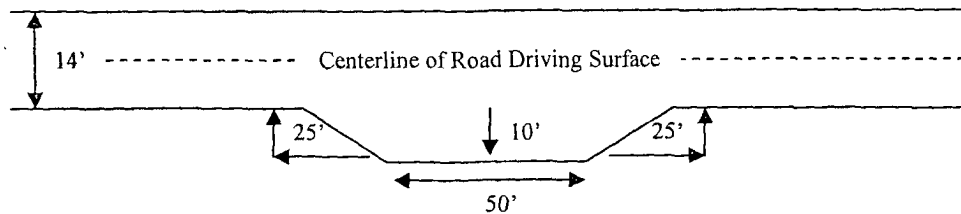
Ditching

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

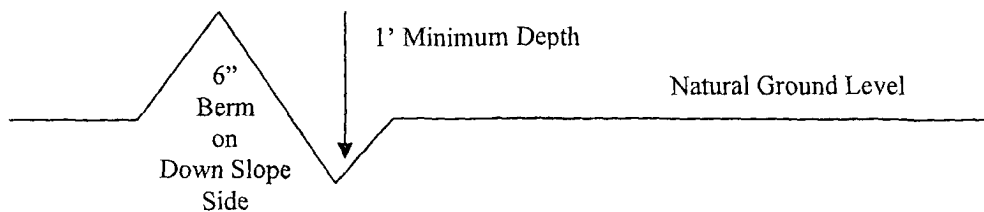


Drainage

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:

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

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

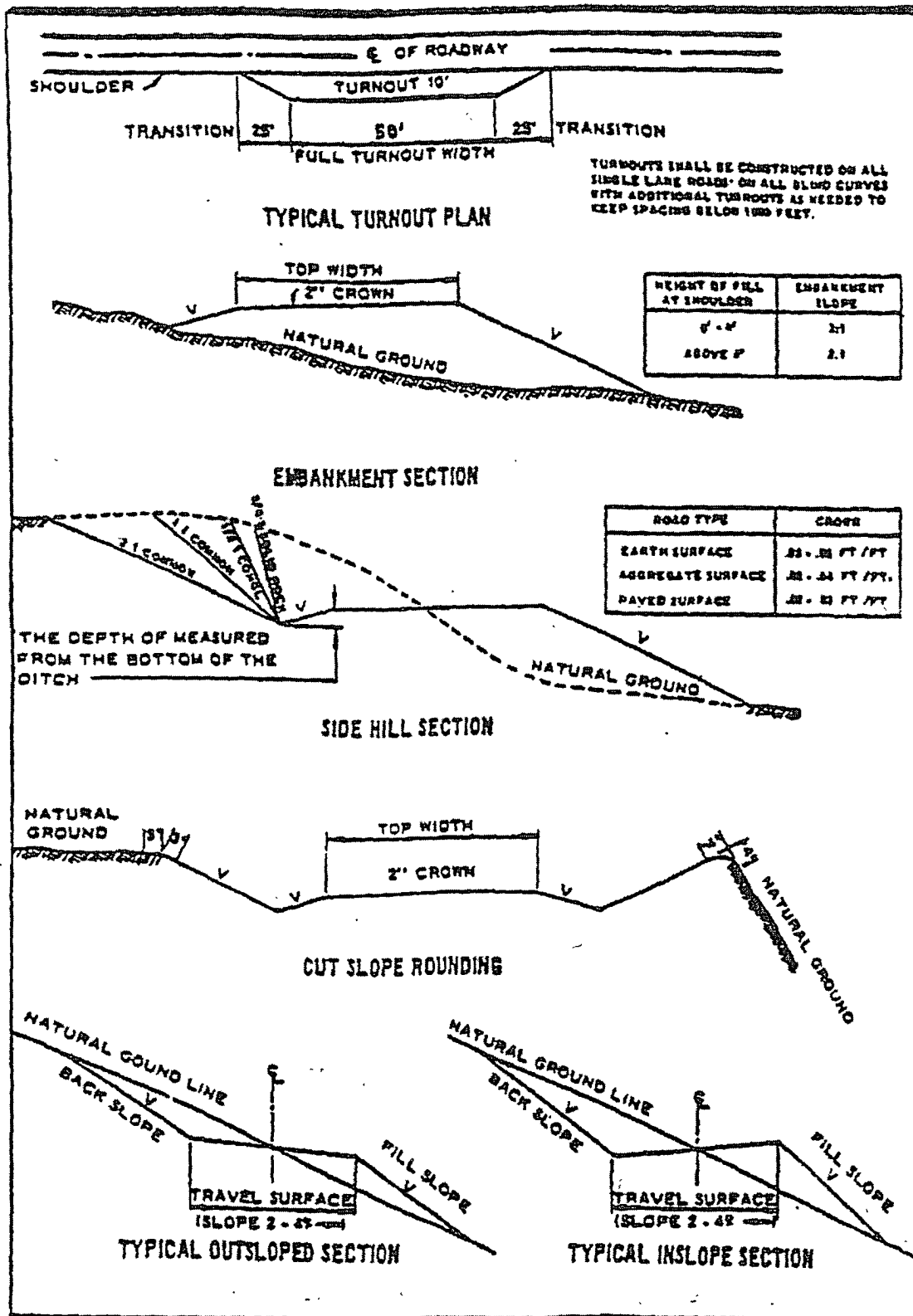
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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. 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,
(575) 361-2822

1. **Hydrogen Sulfide has been reported in minor amounts in STVs measuring 20 ppm. It is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide. If Hydrogen Sulfide is encountered, please report measurements to the BLM.**
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 – RE-ENTRY

1. **The 8-5/8 inch surface casing exists and is set at 400' and cemented to surface.**

Prior to drilling cement plug at 976', a CIT is to be done on the 6-5/8" production casing.

2. **The 6-5/8 inch production casing exists and is set at 1385' and cemented with 250 sacks of cement. No confirmation available for whether cement circulated.**
3. 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

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.

D. AIR/GAS SPECIAL DRILLING OPERATIONS

1. In addition to the equipment already specified elsewhere the following equipment shall be in place and operational during air/gas drilling:
 - a. Properly lubricated and maintained rotating head.
 - b. Spark arresters on engines (baffled exhaust extension) or water cooled exhaust. Device is attached directly to exhaust.
 - c. **Blooie line discharge granted a variance due to equipment used.**
 - d. Straight run on blooie line unless otherwise approved
 - e. Deduster equipment – operator will use water misting.
 - f. 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.
 - g. **Float valve above Bit (similar to lower Kelly valve).**
 - h. Automatic igniter or continuous pilot light on the blooie line.
 - i. 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.**
 - j. 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.

Engineer on call phone (after hours): Carlsbad: (575) 706-2779

WWI 012408

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:

<u>Species</u>	<u>lb/acre</u>
Alkali Sacaton (<i>Sporobolus airoides</i>)	1.0
DWS <u>Four-wing saltbush</u> (<i>Atriplex canescens</i>)	5.0

 DWS: DeWinged Seed

*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.