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MAY 21 2008
HOBBSOCD

New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

Form 3160-3
(August 2007)

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM-~~0444628~~ 0177517

6. If Indian, Allotee or Tribe Name
N/A

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
CATO SAN ANDRES UNIT <303560>

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

8. Lease Name and Well No.
CSAU 593

2. Name of Operator CANO PETRO OF NEW MEXICO, INC. <248802>

9. API Well No.
~~NEW WELL~~ 30-005-29123

3a. Address 801 CHERRY STREET UNIT #25, SUITE 3200, FORT WORTH, TEXAS 76102

3b. Phone No. *(include area code)* 817-698-0900

10. Field and Pool, or Exploratory
CATO SAN ANDRES FIELD

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 1464' FSL & 164' FWL Unit L
At proposed prod. zone SAN ANDRES

11. Sec., T. R. M. or Blk. and Survey or Area
L-14-08S-30E

14. Distance in miles and direction from nearest town or post office*
40 MILES SW OF ROWSWELL NEW MEXICO

12. County or Parish
Chaves

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
164'	15,332	40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
480'	4,500'	NMB000465
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
4121'	08/01/2008	30 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:

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)*	Date
Title: REGULATORY COORDINATOR	CINDY CHAVEZ	06/30/2008

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/S/ Angel Mayes	Angel Mayes	MAY 18 2009
Title: Assistant Field Manager, Lands And Minerals	Office: ROSWELL 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.

APPROVED FOR 2 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.

(Continued on page 2)

*(Instructions on page 2)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED

CEMENT BEHIND THE 8⅝" CASING MUST BE CIRCULATED

RECEIVED
MAY 21 2009
HOBBSOCD

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

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 copies
Fee Lease - 3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-005-29123	10540	Cato San Andres

4 Property Code	5 Property Name	6 Well Number
303560	C.S.A.U. FED.	593

7 OGRID No.	8 Operator Name	9 Elevation
248802	CANO PETROLEUM, INC.	4121

10 Surface Location

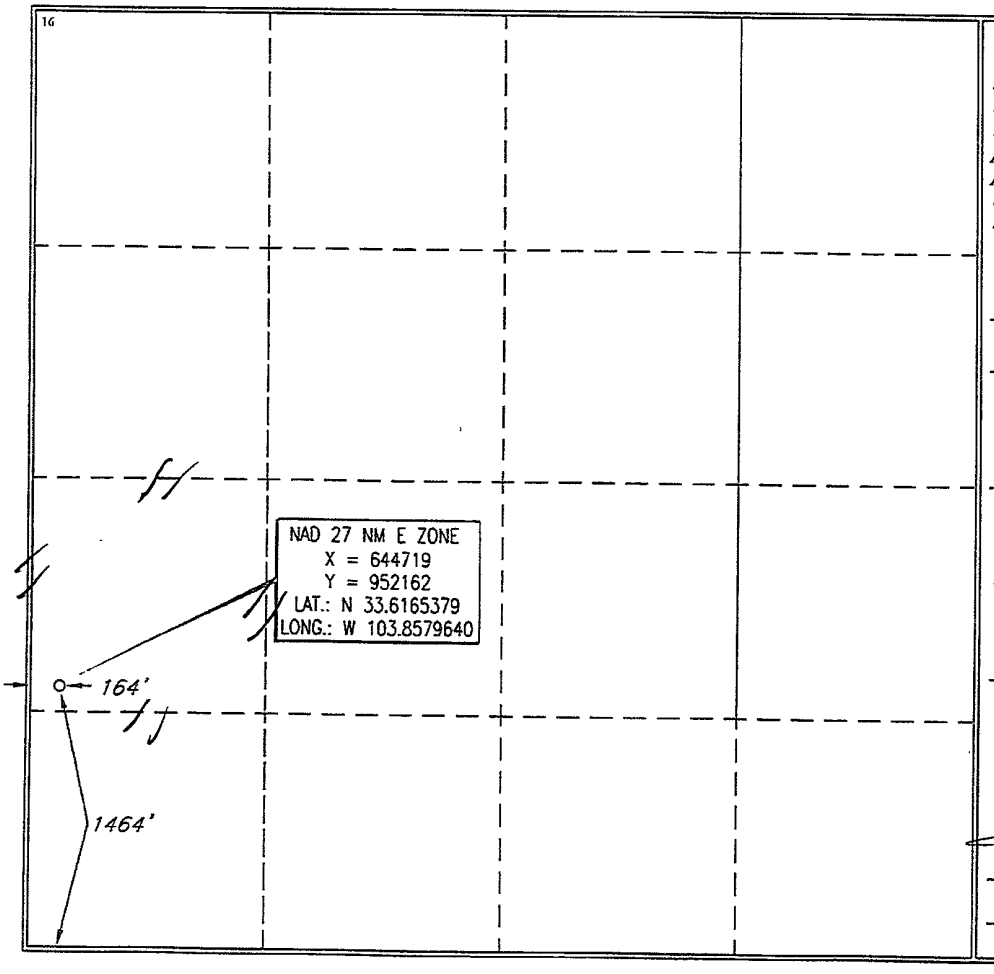
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	14	8 SOUTH	30 EAST, N.M.P.M.		1464'	SOUTH	164'	WEST	CHAVES

11 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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
40			

NO ALLOWABLE WELL 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 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 or has a right to drill this well at this 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.

5/20/08
Signature Date

CINDY CHAVEZ
Printed Name

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.

18329
JANUARY 15, 2008
Date of Survey
Signature and Seal of Professional Surveyor

MICHAEL BLAKE BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Michael Blake Brown P.S. #18329
JOB # 131140 / 173 NE / L.A.S.

APPLICATION TO PERMIT TO DRILL

CANO PETRO OF NEW MEXICO, INC.
Fort Worth, Texas

LOCATION:	**Cato San Andres Unit 593** **1464' South & 164' West** **Sec. 14-T08S-R30E** **Chaves County, New Mexico**
DRILLING CONTRACTOR:	**Sprandling Drilling**
FEDERAL LEASE NUMBER:	**NM-0177517**
LEASE ISSUED:	**September 1, 1957**
ACRES IN LEASE:	**15,322**
BOND COVERAGE:	**$25,000.00** **S/W BLM Bond No. NMB000465**
AUTHORITY TO OPERATE:	**Cano Petro of New Mexico, Inc.** **801 Cherry Street, Unit #25 Suite 3200** **Fort Worth, Texas 76102**
SURFACE OWNERSHIP:	**Preston Berry** **Dallas Texas**
MINERAL OWNERSHIP:	**Bureau of Land Management** **Roswell, New Mexico**

APPLICATION TO PERMIT TO DRILL
DRILLING PLAN

Cato San Andres Unit 593
1464' South & 164' West
Sec. 14-T08S-R30E
Chaves County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, Cano Petro of New Mexico, Inc. submits the following items of pertinent information in accordance with Onshore Oil & Gas Order No 1, and with all other applicable federal, state and fee regulations.

1. **Estimated tops of geologic markers are as follows:**

Rustler	1,047 ft
Yates	1,409 ft
Seven Rivers	1,580 ft
Queen	2,073 ft
San Andres	2,543 ft

2. **Depths and thickness of:**

Fresh water- 500'
Oil or Gas - San Andres

3. **BOPE diagram showing**:

Press Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 2000# BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report . **SEE EXHIBIT A**

4. **Casing program:**

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Setting Depth	Length
12 ¼"	8 5/8"	24#	J55	ST&C	0-500'	500	500'
7 7/8	5 ½	15.5#	J55	ST&C	0-4500'	4500	4500"

5. **Cement (amount and type):**

Circulate cement on surface casing
Min 450sx 50 / 50 pos

APPLICATION TO PERMIT TO DRILL
DRILLING PLAN

6: Drilling Mud (amount, type weight material, and monitoring equipment)

Monitor with Drilling Mud Consultant.
Fresh water to 1000'
Convert to brine mud
Weight 9.5-10.0 ppg with water loss
Set @ 10.
Convert to gel
When chlorides reach 20,000 ppm
Finish well with salt gel/ starch system

7. Testing, Logging, and Coring:

Testing:	Baker Altas
Logging:	Baker Altas
Coring:	Not determined

8. Expected bottom hole pressure and temperatures.

Bottom hole pressure: 300 psi
Temperatures: 100°

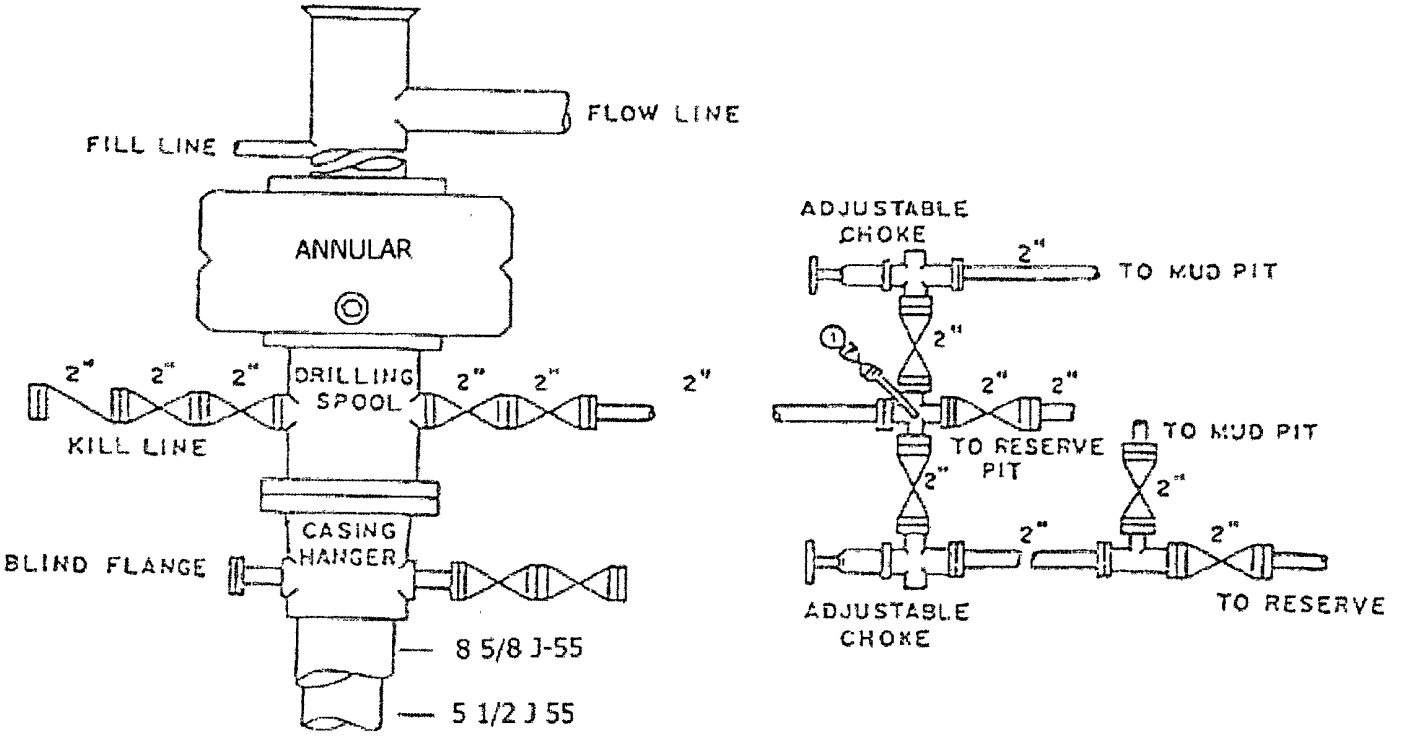
9. Additional information:

None

CANO PETRO OF NEW MEXICO INC.
Fort Worth, Texas

Cato San Andres Unit 593
1464 South & 164 West
Sec. 14-T08S-R30E
Chaves County, New Mexico

Exhibit A



BOP DIAGRAM
2000# Working Pressure
Rams Operation Daily

APPLICATION TO PERMIT TO DRILL
12 Point Surface Use Program

Cato San Andres Unit 593
1464' South & 164' West
Sec. 14-T08S-R30E
Chaves County, New Mexico

This plan is submitted with Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operation plan, to be followed in rehabilitating the surface environmental effects associated with the operations:

The 12 point surface use program consists of the following:

(1) Existing road to the well:

Exhibit B is a map of a portion of the Cato San Andres Unit. The map is showing the well and roads in the vicinity of the proposed location. The proposed well site is located approximated 40 miles east-southwest of Roswell, New Mexico and the access route to the location is indicated in yellow on **Exhibit B**

Directions to location:

From CR 38/Railroad Mountain Road, turn S-SE onto CR 39. Travel 2.45 miles, cross CR 73 and continue southeast. 1.0 mile turn right (south). 1.1 mile turn left (east). 0.26 miles turn right (south). 0.35 miles turn right (west). Travel about 650 feet. The well will be on the south (left) side of the road.

(2) Planned access road to be constructed:

There will be construction for an access road on the northwest corner of the drilling pad. **See Exhibit C**

(3) Location of existing wells: (with in 1 mile)

There is drilling activity within a one-radius of the proposed wellsite.
Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

(4) Location of facilities if well is productive:

There are 6 production facilities on this lease at the present time.
In the event that the well is productive, the necessary production facilities will be in place.

(5) Location and type of water supply:

It is planned to drill the proposed will with fresh water that will be obtained from private or commercial sources and will be transported over the existing access roads.

(6) Construction material:

Caliche for repairing the existing access road and well site pad will be obtained from a private pit owned by a private rancher, Vetena Spring Ranch Sec 23-T08S-R30E. No surface materials will be disturbed except necessary for actual grading and leveling of the drill site and access road.

(7) Methods for handling waste:

A. Drilling cuttings will be allowed to evaporate in the reserve pits.
B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry and any excess fluids will be handled off.
C. Water produced during operations will be collected in tanks until hauled to an approved disposal system or a separate disposal application will be submitted to the BLM for approval.
D. All pits will be fenced with normal fencing materials to prevent livestock form entering the area.
E. Oil produced during operations will be stored in tanks until sold.
F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
G. Trash, waste paper, garbage and junk will be contained tin trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary land fill within 30 days after finishing drilling and/or completion operations.

(8) Ancillary facilities:

None required.

(9) Well site layout:

A. **Exhibit E** shows the relative location and dimensions of the well pad, the reserve pits, and the location of the drilling equipment, rig orientation and access road approach.
B. A 600' x 600' area has been staked and flagged.
C. The reserve pits will be plastic lined.
D. The pits will be put to the northwest.

(10) Plans for surface reclamation:

A. After completion of drilling and/or completion operations, all equipment other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing condition as possible.

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

C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and levels as soon as they are sufficiently dried.

(11) Surface and mineral ownership:

Surface Ownership: Preston Berry, Dallas Texas
Mineral Ownership: Bureau of Land Management, Roswell, New Mexico.

(12) Other information:

An archeological survey was conducted and there is no evidence of any archaeological, historical or cultural sites in the area

Plans are to drill this well August 1, 2008. It should take approximately 7 days to drill the well with completion taking approximately another 20 days.

The field representative responsible for assuring compliance with the approved surface use and operation plan is as follow:

Cano Petro of New Mexico
801 Cherry Street, Unit #25, Suite 3200
Fort Worth, Texas 76102

Field Supervisor:
Gene Brookshire: 505-513-0286

Regulatory Coordinator:
Cindy Chavez: 817-698-0900

Senior Director of Operations:
Jayme Wollison: 817-698-0900

APPLICATION TO PERMIT TO DRILL
12 Point Surface Use Program

(13) Certification:

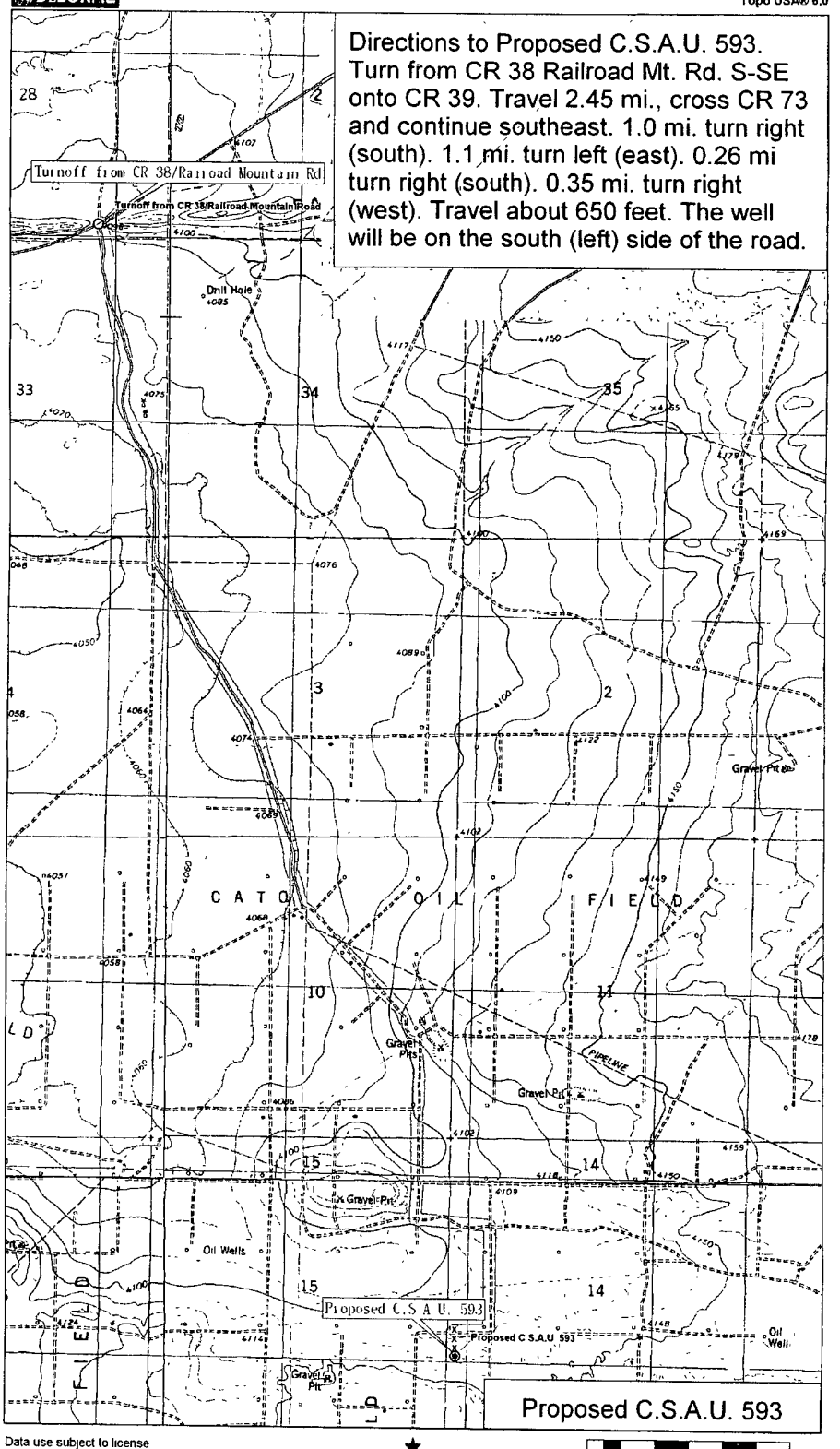
I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the condition which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed therein will be performed by Cano Petro of New Mexico and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of 18 U.S.A.C. 1001 for the filing of a false statement.

Regulatory Coordinator

EXHIBIT B

DeLORME

Topo USA® 6.0



Data use subject to license

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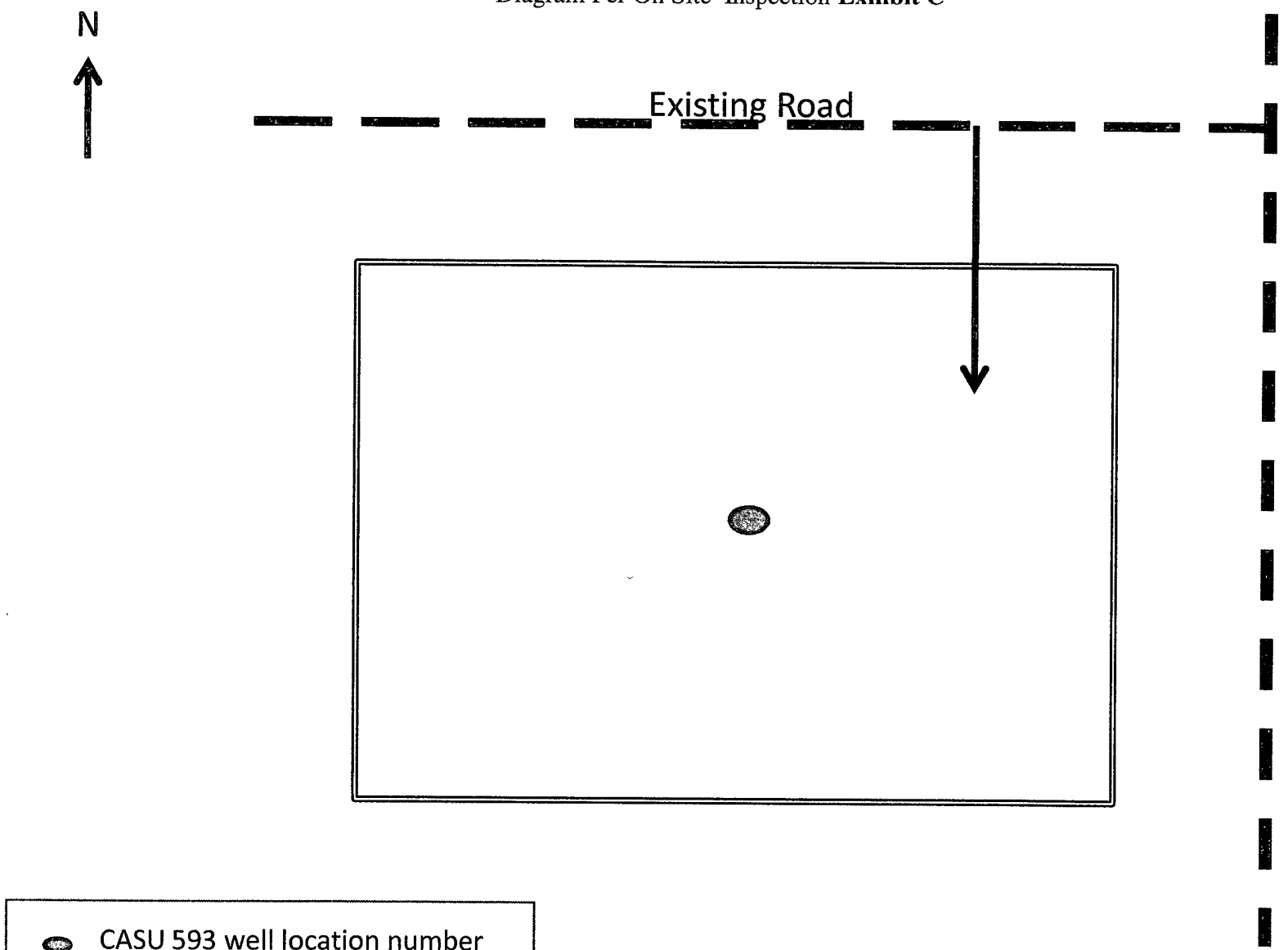
www.delorme.com

MN (8.2° E)

0 600 1200 1800 2400 3000 3600 ft

Data Zoom 13-1

Diagram Per On Site Inspection **Exhibit C**



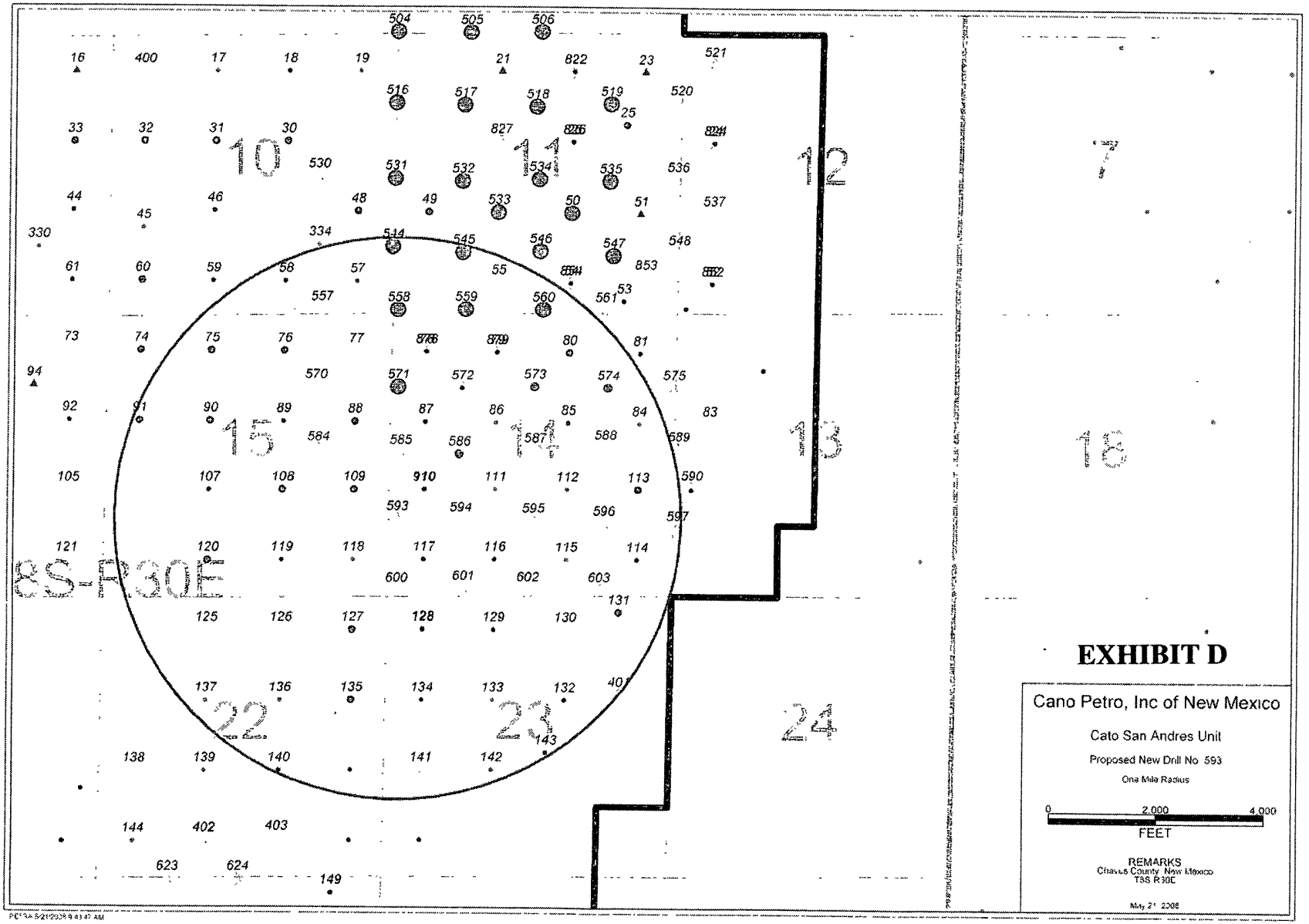
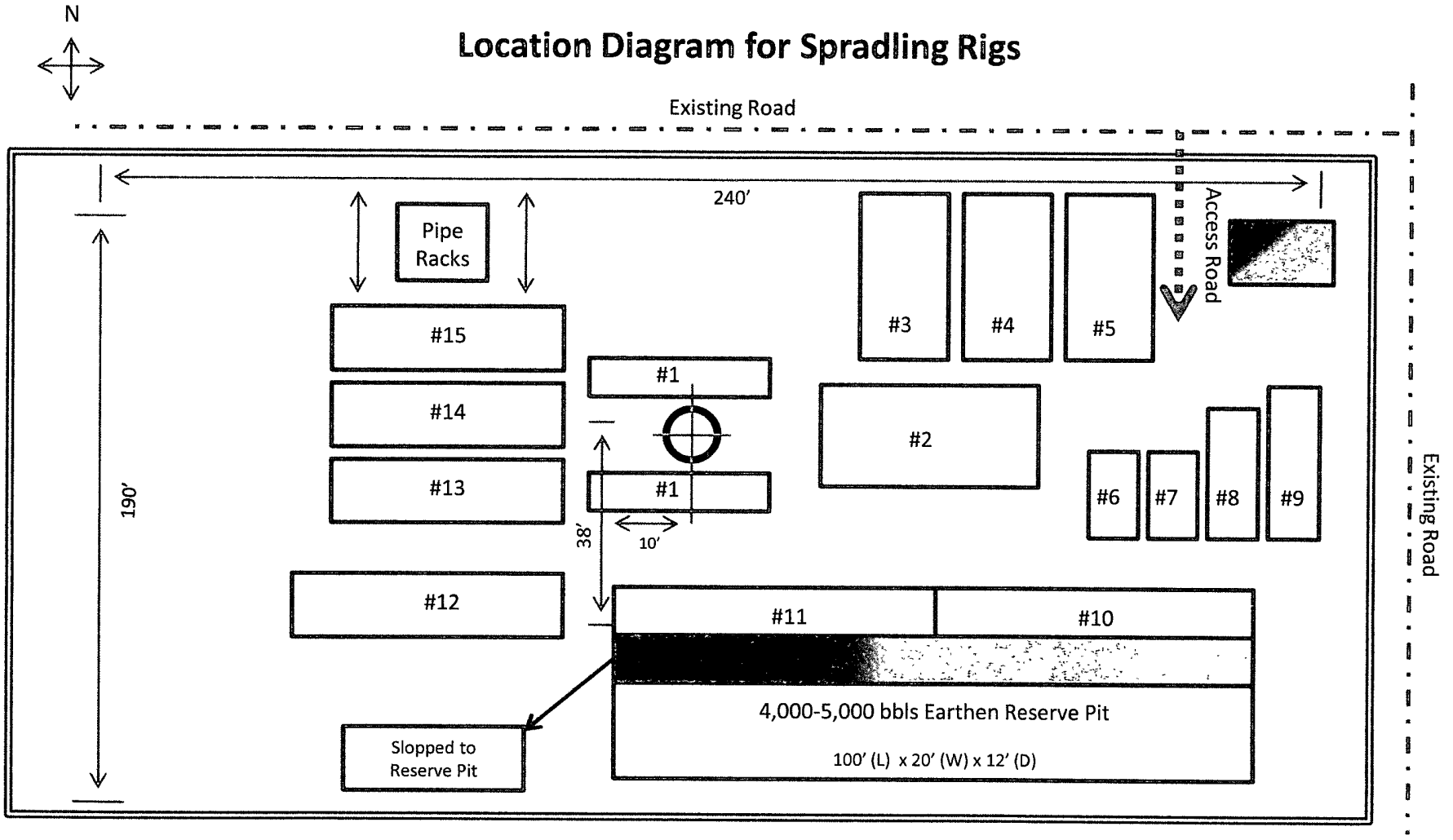


EXHIBIT D
Cano Petro, Inc of New Mexico
Cato San Andres Unit
Proposed New Drill No 593
One Mile Radius
0
2,000
4,000
FEET
REMARKS
Chaves County New Mexico
T8S R30E
May 21 2008
8S-R30E

EXHIBIT E

Location Diagram for Spradling Rigs



CSAU 593 Well Location Number

600' x 600' Survey Area

Stock Pile

Pits

275' Access Road

#1 Sub-base	#9 Water Tank—300 bbls
#2 Mud Bolt	#10 Steel Pit #1
#3 Doghouse	#11 Steel Pit #2
#4 Wash Down Tank	#12 Hull Trailer
#5 Light Plant House	#13 Pipe Basket
#6 Mud Pump #2	#14 Collar Basket
#7 Mud Pump #1	#15 Pipe Basket
#8 Mud Pre-mix	

Location Dimensions
(from stake)

V-Door Side = 120'
Doghouse Side = 120'
Pump Side = 120'
To Working Pit = 20'
To Front of Reserve = 38'

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Pecos District

Carlsbad Field Office
620 E. Greene
Carlsbad, NM 88220

Roswell Field Office
2909 W. Second St.
Roswell, NM 88021

www.nm.blm.gov

TAKE PRIDE IN AMERICA

In reply refer to
1310 (500)

NOV 13 2006

Dear Operator:

Both the Bureau of Land Management (BLM) and the oil and gas industry recognize that mineral development is one of many uses on the public lands in New Mexico. Since oil and gas development is only meant to be a temporary use of the surface, interim reclamation of disturbed areas not needed for active support of production operations is a very important 'best management practice'. In an effort to insure continued access and availability of public minerals, it is in the best interests of the oil and gas industry and BLM to work together towards reclaiming lands not actively used for safe and economical production.

Recognizing that a "one size fits all" approach is not practical, I am asking our lessees and operators to work with BLM staff to find solutions on reclaiming disturbed areas. In keeping with best management practices, locations and roads should have the smallest surface impact possible while balancing the need for safety, terrain, depth of the well and good engineering practices. As I have indicated at our working group meetings, where terrain permits, roads and locations may be built with minimal or no caliche for surfacing. The BLM acknowledges that there will be areas, such as in sandy soils, where surfacing materials may be necessary for a well pad, or portions of the road. These details can be worked out at the time of the onsite inspection.

At the time reserve pits are to be reclaimed, operators should work with a BLM surface management specialist to devise the best strategies to reduce the size of the location. BLM is aware that safety requirements do not allow vehicles within the area of guy anchors. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas. We also recognize that pad sizes will vary depending upon whether a tank battery is present, onsite terrain and soils at each location. Our goal is to minimize the footprint required for safe operations, while achieving our commitment to multiple land use.

During reclamation, the removal of caliche from a road and location when that material is no longer necessary is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, or for building other roads and locations. We also recognize that in sandy dunal areas significant interim reclamation may not be feasible. In addition, 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, since they will usually do little or no damage to the surface. If there is significant disturbance and loss of vegetation, the area will

need to be revegetated within a reasonable period after use. The BLM also acknowledges that there will be exceptions, and I urge operators to communicate with the appropriate BLM office if an exemption to interim reclamation is needed.

While change does not come easy for any of us, our combined efforts to reduce the footprint of mineral activities will go a long way in demonstrating our ability to harmonize oil and gas development with other uses on the public lands. I really appreciate your efforts in this area and look forward to our continued work together.

Sincerely,

Douglas J. Burger
Pecos District Manager

EXHIBIT A

PECOS DISTRICT - RFO
CONDITIONS OF APPROVAL

OPERATORS NAME: **CANO Petroleum of New Mexico, Inc.**
LEASE NO.: **NM-0177517**
WELL NAME & NO: **CSAU Federal #593**
SURFACE HOLE FOOTAGE: **1464' FSL & 164' FWL**
LOCATION: **Section 14, T. 8 S., R. 30 E., NMPM**
COUNTY: **Chaves County, New Mexico**

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.

I. 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).

II. 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.

III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). Weed control shall be required on the disturbed land where noxious weeds exist, which includes the road, pad, 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.

IV. CONSTRUCTION

A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 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 Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL:

The operator shall stockpile the topsoil on the northeast corner of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall be stockpiled adjacent to the constructed well pad within the area surveyed for cultural resources. The topsoil shall be used for interim and final reclamation of the constructed pad and shall not to be used as materials for earthen berms.

C. CLOSED LOOP SYSTEM: No reserve pit shall be used.

The operator shall use a **Closed Loop System** instead of a reserve pit. 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 Roswell Field Office at (505) 627-0236.

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 need.

F. ON LEASE ACCESS ROAD:

Road Egress and Ingress

The access road shall be constructed to access the northeast corner of the well pad.

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.

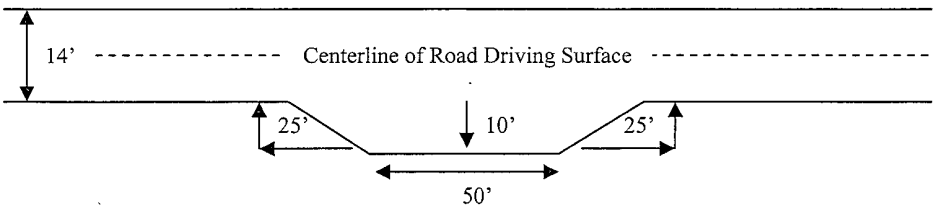
Crowning

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.

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

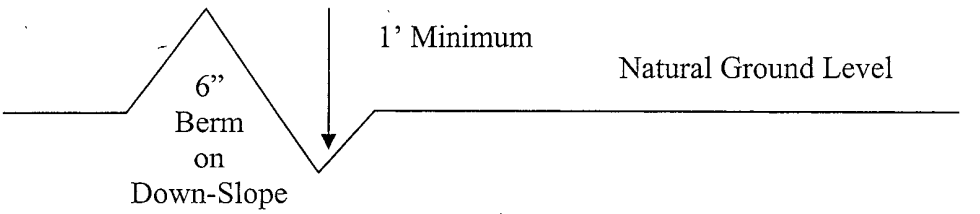


Drainage

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 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

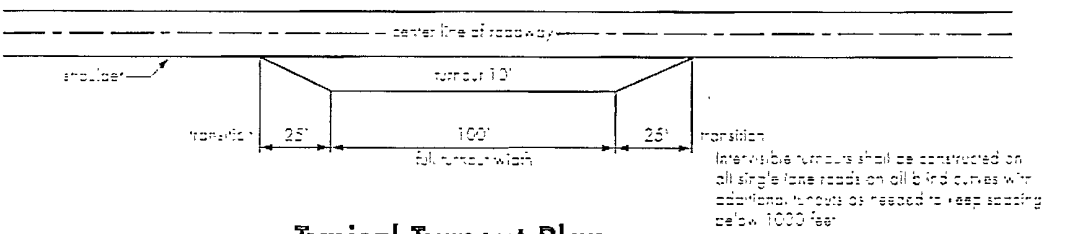
Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

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

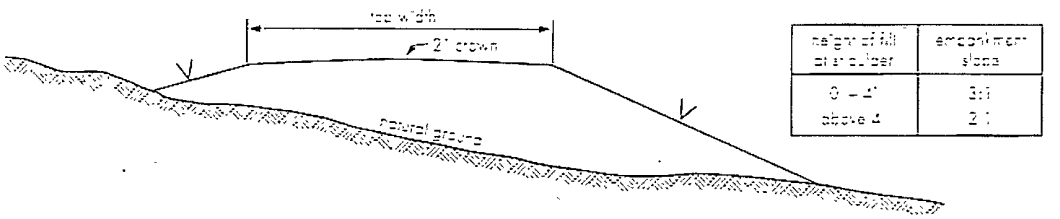
Public Access

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

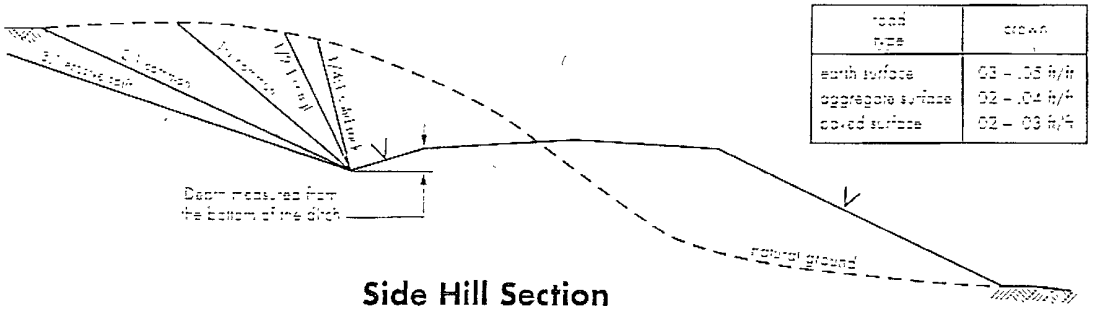


Typical Turnout Plan



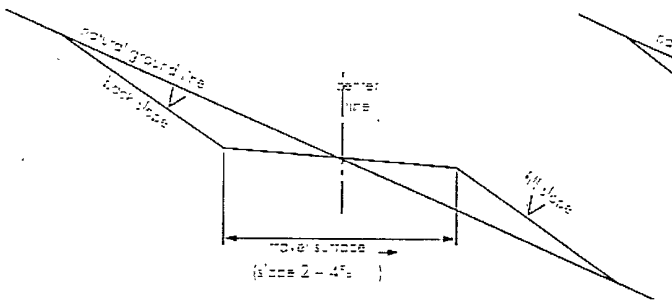
height of fill at shoulder	embankment slope
0 – 4'	3:1
above 4	2:1

Embankment Section

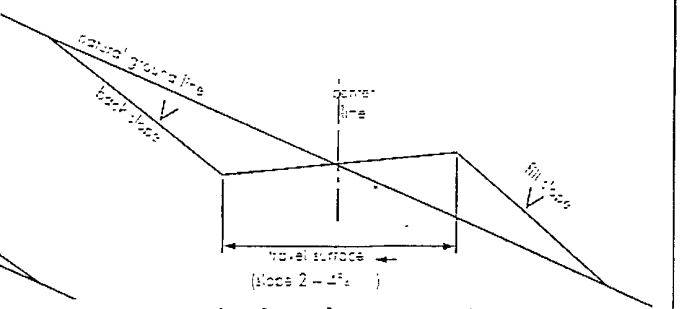


road type	crown
earth surface	.03 – .05 ft/ft
aggregate surface	.02 – .04 ft/ft
paved surface	.02 – .03 ft/ft

Side Hill Section



Typical Outsloped Section



Typical Inslope Section

V. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

1. Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. During office hours call (575) 627-0205 or after hours call (575) 910-6024. Engineer on call during office hours call (575) 627-0272 or after hours call (575) 626-5749.

2. The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:

   a. Spudding well
   b. Setting and/or Cementing of all casing strings

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

BOPE Tests

3. 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.

4. Include the API Number assigned to well by NMOCD on the subsequent report of setting the first casing string.

5. The operator will accurately measure the drilling rate in ft/min to set the base of the usable water protection casing string(s) opposite competent rock. The record of the drilling rate along with the caliper-gamma ray-neutron well log run to surface will be submitted to this office as well as all other logs run on the borehole 30 days from completion

6. Drilling with fresh water and non toxic drilling mud shall be used to drill to the base of the usable water protection casing string(s) at an approximate depth of 1000 ft. Any polymers used will be water based and non-toxic.

7. The operator intends to use a closed loop system and this will reduce the risk of contamination to the ground water. In the event of a leak or the tanks are breached a containment structure around the tanks should minimize contamination.

B. CASING

1. The 8 5/8 inch usable water protection casing string(s) shall be set at approximate depth range of 500 ft to 1000 ft. opposite competent bedrock.

If bedrock is not competent in the interval, the operator may set usable water protection casing opposite any competent bedrock between 400 ft and 500 ft or continue to drill to the next thick competent bedding (i.e. 15 to 25 ft or greater) encountered 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 or 500 pounds compression 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 compression strength, whichever is greater.

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

2. The minimum required fill of cement behind the **5-1/2** inch production casing is **sufficient tie back at least 200 feet into the 8-5/8 inch surface casing set at approximately 500 feet.** If cement does not circulate, 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.

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.

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **8-5/8** inch surface casing shoe shall be **2000 (2M)** psi.

a. The results of the test shall be reported to the BLM Roswell Field Office, 2909 West Second Street, Roswell, NM 88201.

b. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

c. Testing must be done in a safe workman like manner. Hard line connections shall be required.

d. 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 BLM Roswell Field Office.

e. 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.

VI. PRODUCTION

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. The soil stockpile shall not be used for this purpose.

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, Juniper Green, from the Standard Environmental Color Chart.

VII. 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.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, 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 – Closed Loop System

The operator should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions in the well pad should allow for remedial well operations, as well as, to provide a safe working area.

The disturbed areas shall be seeded as follows:

PECOS DISTRICT, BLM, SEED MIX FOR

Sandy Plains CP-2 Ecological Site, Sand Hills CP-2 Ecological Site, Deep Sand SD-3 Ecological Site

Common Name and Preferred Variety	Scientific Name	Pounds of Pure Live Seed Per Acre
Sand bluestem,	(*Andropogon hallii)*	0.50 lb.
Little bluestem	(*Schizachyrium scoparium*)	0.50 lb.
Sideoats grama,	(*Bouteloua curtipendula)*	1.50 lbs.
Sand dropseed	(*Sporobolus cryptandrus)*	0.50 lb.
Spike dropseed	(*S. contractus*)	0.50 lb.
Mesa dropseed	(*S. flexuosus*)	0.50 lb.
Plains bristlegrass	(*Setaria macrostachya)*	2.00 lbs.
Desert or Scarlet Globemallow or Buckwheat	(*Sphaeralcea ambigua*) (*S. coccinea)* (*Eriogonum* spp.)	1.50 lbs.
TOTAL POUNDS PURE LIVE SEED (pls) PER ACRE		8.00 lbs.

CERTIFIED WEED FREE SEED. IF ONE SPECIES IS NOT AVAILABLE, INCREASE ALL OTHER PROPORTIONATELY. NO LESS THAN SIX (6) SPECIES WITH A MINIMUM OF ONE (1) FORB. NO LESS THAN 8.0 POUNDS PLS PER ACRE SHALL BE APPLIED.

VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

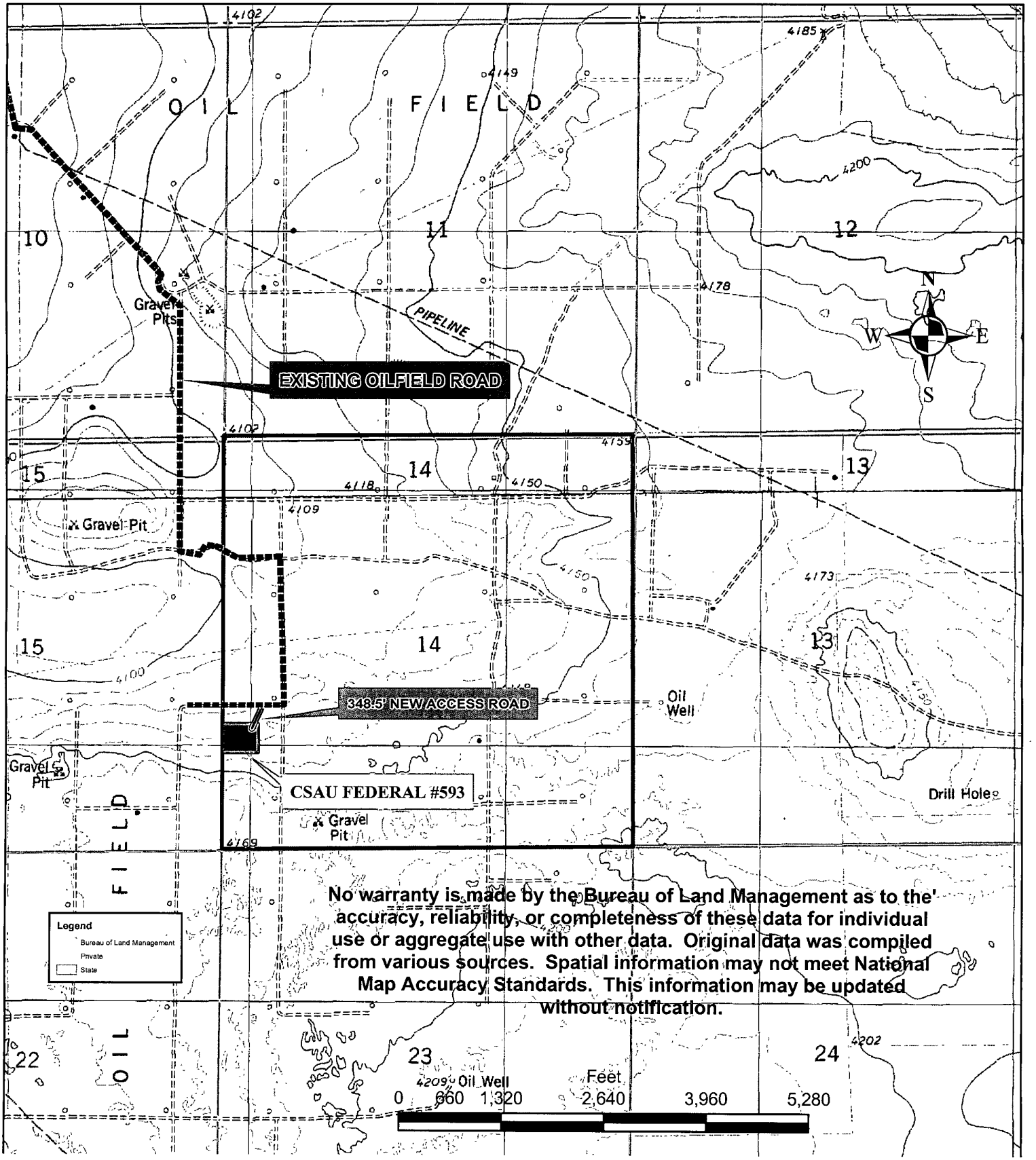
1. Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

2. 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 agreements.

3. LPC AREAS - All casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). The well bore shall then be covered with a metal plate at least ¼ inch thick and welded in place the well location and identity shall be permanently inscribed. A weep hole shall be left in the metal plate that is welded in place.

EXHIBIT B
CSAU #593
NM-0177517
1464' FSL & 164' FWL
SECTION 14, T. 8 S., R. 30 E.
CHAVES COUNTY, NEW MEXICO

NATIONAL SYSTEM OF PUBLIC LANDS



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