

30-015-26539  
BLM Roswell District  
Modified Form No.  
NM060-3160-2

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Chevron U.S.A. Inc.

3a. Area Code & Phone No.

915-687-7812

3. ADDRESS OF OPERATOR

P. O. Box 1150, Midland, Texas 79702

Attn. Ed Doherty

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

1980' FNL & 2310' FEL

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

8 1/2 miles East of Loco Hills NM

O. C. D.

ARTESIA, OFFICE

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

(Also to nearest drilg. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

320 480

17. NO. OF ACRES ASSIGNED TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

990'

19. PROPOSED DEPTH

12,000

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

36190'

22. APPROX. DATE WORK WILL START\*

23.

PROPOSED CASING AND CEMENTING PROGRAM

| HOLE SIZE | CASING SIZE | WEIGHT/FOOT | GRADE | THREAD TYPE | SETTING DEPTH     | QUANTITY OF CEMENT |
|-----------|-------------|-------------|-------|-------------|-------------------|--------------------|
| 14 3/4    | 11 3/4      | 42          | H-40  | STC         | 650               | CIRCULATE 450      |
| 11 1/2    | 8 5/8       | 32          | K-55  | STC         | 4650              | CIRCULATE 1600     |
| 7 7/8     | 5 1/2       | 15.5 & 17   | K-55  | LTC         | 12000 (see slips) | 2100               |

changes as per telecon w/ E.O. Doherty, 11/7/90

Mud Program:

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS

0 - 650' FW Spud 9.0

650 - 4650' BW #10

4650 - 12000 FW KCL ST 8.5 - 9.5 PPG WL 10-3000

BOP Equipment: 3000 psi working psi w/annular preventer\*

Chevron Class III Drawing Attached

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

E.O. Doherty

TITLE

T. A. Drlg.

DATE

10/16/90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Only signed by Tom Hare

APPROVED BY

TITLE

DATE

1-14-90

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any

# OIL CONSERVATION DIVISION

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

RECEIVED

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Nov 13 11 44 AM '90  
C.A.D. AREA

|  |  |   |   |  |
|--|--|---|---|--|
| Operator<br><b>CHEVRON USA INC.</b>  |  | Lease<br><b>Cerro Azul Federal Com. §35</b> |   | Well No.<br><b>1</b>                   |
| Unit Letter<br><b>G</b>  | Section<br><b>28</b>                         | Township<br><b>18 South</b>                 | Range<br><b>31 East</b>   | County<br><b>Eddy</b>                  |
| Actual Footage Location of Well:<br><b>1980</b> feet from the <b>North</b> line and <b>2310</b> feet from the <b>East</b> line   |  |   |   |  |
| Ground level Elev.<br><b>3619.0</b>  | Producing Formation<br><b>Atoka + Morrow</b> |   | Pool<br><b>Shugart North Morrow</b>   | Dedicated Acreage:<br><b>320</b> Acres |
| <p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?<br/><input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation <b>Communitization §35</b></p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)</p> <p>No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p> |  |   |   |  |
|  |  |   | <b>OPERATOR CERTIFICATION</b><br>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.<br>Signature <b>E.O. Doherty</b><br>Printed Name <b>E.O. DOHERTY</b><br>Position <b>T.A. Delg.</b><br>Company <b>Chevron USA Inc.</b><br>Date <b>11/2/90</b>   |  |
|  |  |   | <b>SURVEYOR CERTIFICATION</b><br>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.<br>Date Surveyed <b>October 8, 1990</b><br>Signature & Seal of Professional Surveyor<br><b>John W. West</b><br>Certificate No. <b>JOHN W. WEST, 676</b><br><b>RONALD J. EIDSON, 3239</b> |  |



**Chevron** U.S.A. Inc.  
P.O. Box 1150, Midland, TX 79702

Permian Basin Production Business Unit

October 25, 1990

Application for Permit to Drill  
Proposed Cerro Azul #1  
Eddy County, New Mexico

Bureau of Land Management  
P. O. Box 1778  
Carlsbad, NM 88220

Gentlemen:

We are submitting the information requested in NTL-6 which should accompany application for permit to drill.

Well: Cerro Azul #1

1. Location: 1980' FNL & 2310 FEL Section 28, T-18-S, R-31-E  
Eddy County, New Mexico

2. Elevation of unprepared ground: 3619.0

3. Geologic Name of Surface Formation: Quaternary-Alluvium

4. Type Drilling Tools: Rotary

5. Proposed Drilling Depth: 12,000'

6. Estimated Top of Geologic Markers:

|                |       |                    |         |
|----------------|-------|--------------------|---------|
| Base Salt      | 1990' | Top 2nd Sand       | 8375'   |
| Top Yates      | 2145' | Top WolfCamp       | 9825'   |
| Top Queen      | 3315' | Top Strawn         | 10,600' |
| Top Delaware   | 4925' | Top Atoka          | 10,890' |
| Top Bonespring | 6175' | Top Morrow Clastic | 11,450' |

7. Estimated Depths at which anticipated Gas or Oil-Bearing Formations Expected:

Atoka 11,090' - 11,140'

8. Casing Program and Setting Depths:

|              | <u>Size</u> | <u>Weight</u> | <u>Grade</u> | <u>Setting Depth</u> |
|--------------|-------------|---------------|--------------|----------------------|
| Surface      | 11 3/4"     | 42#           | H-40         | 650'                 |
| Intermediate | 8 5/8"      | 24#           | K-55         | 4,650'               |

Production            5 1/2"            15.50# & 17#            K-55            12,000'

9. Casing Setting Depths and Cementing Program:

- A. Surface casing will be cemented to surface using Class "C" cement. Exact volumes and additives will be based on severity of lost returns historically experienced in this area. Top jobs will be performed as necessary to bring cement to surface.
- B. Production casing will be cemented to surface with Class "C" cement. If cement is not circulated a temperature survey will be run to determine cement top.

10. Prior to drilling below surface and intermediate casing, a BOP hook-up for 3,000 psi will be installed.

11. Circulating Media:

|                |                         |
|----------------|-------------------------|
| 0 - 650'       | FW Spud Mud             |
| 650 - 4650'    | Brine Water             |
| 4650 - 12,000' | PW-KCL Starch 8.5 - 9.5 |
|                | WL 10-30                |

12. Testing, Logging, and Coring Program

- A. Three drill stem test are planned.
- B. Open hole logs will be run at total depth.
- C. No cores are planned.

13. Abnormal Pressure or Temperature and Hydrogen Sulfide Gas:

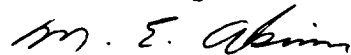
- A. No abnormal pressure or temperature is anticipated; however, BOP's, as specified in item 10 above will be installed.

14. Anticipated Starting Date:

Drilling operations should begin approximately November 28, 1990.

15. Other Facets of the Proposed Operation: None.

Yours very truly,



M. E. Akins  
Drilling Superintendent

MEA:lmk  
MDD/01016.25  
Attachments



**Chevron U.S.A. Inc.**  
P.O. Box 1150, Midland, TX 79702

Permian Basin Production Business Unit

October 25, 1990

Bureau of Land Management  
P. O. Box 1778  
Carlsbad, NM 88220

Gentlemen:

The following is Chevron U.S.A. Inc.'s plan for surface use restoration associated with the drilling of our Cerro Azul #1 to be located 1980 feet from the North line and 2310 feet from the East line of Section 8, T-18-S, R-31-E, Eddy County, New Mexico.

After completion of drilling and/or completion operations, all equipment and 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 as aesthetically pleasing condition as possible. Any unguarded pits containing fluids will be fenced until they are levelled and back filled.

After abandonment of the well, surface restoration will be in accordance with the agreement with the surface owner. Pits will be filled and the location will be cleaned. The pit area, well pad, and all unneeded access road will be ripped to promote revegetation. Rehabilitation should be accomplished within ninety (90) days after abandonment.

Yours very truly,

A handwritten signature in cursive script that reads "M. E. Akins".

M. E. Akins  
Drilling Superintendent

MEA:lmk  
MDD01016.25

## **MULTI-POINT SURFACE USE PLAN #1 CERRO AZUL #1**

### **1. Existing Road**

To reach the proposed location begin at the junction of Hwy (62/180) and Hwy (529) head toward Loco Hills on Hwy (529). Go 32 miles to Hwy (82) turn left go 1/4 mile turn left on Shugurt Road head South 6.4 miles. Turn left on caliche road travel .6 miles on road to new location. Exhibit A.

### **2. Planned Access Roads**

Approximately 175' on new road is planned. This road will run from the North side of existing caliche road.

### **3. Location of Existing Wells**

Exhibit B shows existing wells within a one mile radius of proposed well.

### **4. Location of Production Facilities**

A 2 3/8" steel flowline will be laid to new tank battery to be constructed on location.

To protect livestock and wildlife, the reserve pit will be fenced.

Upon completion of drilling, the location and surrounding area will be cleared of all debris. All trash will be disposed of in the trash pit.

### **5. Water Supply**

Water for drilling and completion operations will be purchased from a supplier and transported to the well site by truck.

### **6. Source of Construction Materials**

Caliche will be purchased and hauled from a federal pit at Section 29 T18S and R36E of the NE SE 1/4.

**7. Methods of Handling Waste Disposal**

- A. The drill cuttings, fluids, and completion fluids will be placed in the reserve pit. The reserve pit will be fenced on three sides away from the pad during drilling and the fourth side as soon as the rig moves out. The reserve pit will be allowed to dry.
- B. All garbage and trash will be placed in a trash container to be hauled off location.
- C. Chemical toilets will be provided and maintained during drilling operations. See Exhibit C for location.

**8. Ancillary Facilities**

No ancillary facilities are planned.

**9. Well Site Layout**

Location of drilling equipment, rig orientation, and access road is shown on Exhibit C.

The reserve pit will be lined with plastic to prevent liquids from soaking into the surrounding soil.

**10. Plans for Restoration of Surface**

When well is abandoned, the location and access road will be cleaned and restored to the original topographical contours as much as possible. The area will be reseeded with the appropriate seed mixture.

If the well is productive, areas not used in production will be contoured and seeded with stipulated seed mixture. Production equipment will be painted the color designated by the BLM.

**11. Surface Ownership**

Surface ownership is Federal.

**12. Other Information**

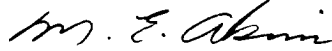
Refer to archaeological report, NMAS-1990-06-0 for a description of the topography, flora, fauna, soil characteristics, dwellings, historical, and cultural sites.

**13. Lessee's or Operators Representative**

M. E. Akins  
P. O. Box 1150  
Midland, TX 79702

**14. Certification**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Chevron U.S.A. Inc., and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.



M. E. AKINS  
DRILLING SUPERINTENDENT

MEA:lmk  
MDD/01016.25

Attachments



# Cerro Azul

Exhibit "A"

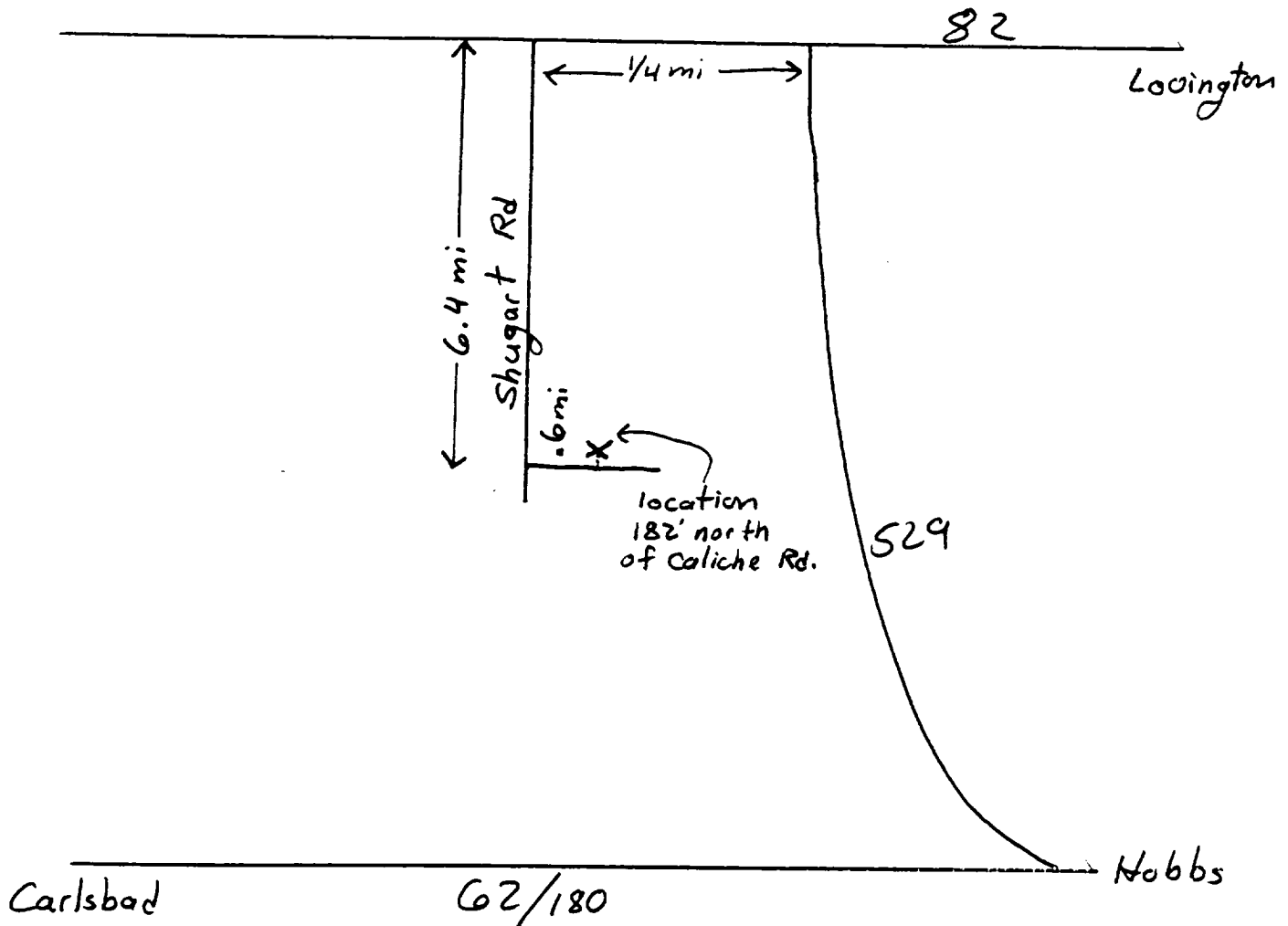
Cerro Azul #1

SEC 28 T18S R31E

EDDY County NEW MEXICO



Artesia



V-door East  
50' new Rd

Mad. St. 1  
tate  
Hughes Prod.  
Canadian Kenwood  
2 059569  
12212  
"C"

Location Plat Exhibit "B"  
Cerro Azul Fed #1  
Sec. 28 T18S R31E  
1980' FNL 2310' FEL  
300' Radius

"Kenwood"  
4  
5  
7  
6  
2 CO. (OPER)  
W. SHUGART  
(ON) UNIT  
Gulf \* Dual  
Keohane, Mark & E  
etal - Fed Garner  
10  
0175770 Suppes  
Little  
Mark Pro  
11  
Keohane, et al  
(J.M. Welch)  
Gulf  
P37

4  
(P/B)  
22  
7  
3  
6  
S.I.  
Fed Littlefield  
2  
P75  
U.S.

Suppes (Gulf)  
Little  
2-B  
P20  
(3)  
12212  
So. Roy.  
Gulf  
Sirgo Oper. "Keohane"  
(P/B) 1-B  
(WO) 3-B  
TD 3650  
Gulf  
28  
Gulf 029390  
Mask  
Little-Fed  
TD 3952

10-F  
4  
11-F  
Amoco  
(18-31' inc.)  
Sie  
029392  
So. Roy.  
Hinkle  
5-F  
3-F  
So. Roy.  
Hinkle  
1-F  
(8)  
(5)  
Pan Amer.  
Hinkle Unit  
TD 5120  
27  
GR  
A.M.

2  
So. Roy.  
TD 3650  
055648  
"A"  
31  
T18S R31E  
"Keohane" U.S. EDDY COUNTY  
So. Roy.  
Phillips

10-F  
8-F  
6-F  
WO  
Dual  
Westall  
(Welch)  
Hinkle-Fed  
TD 3965  
27 Mil + P24  
10-B  
3-B  
2-B  
U.S.

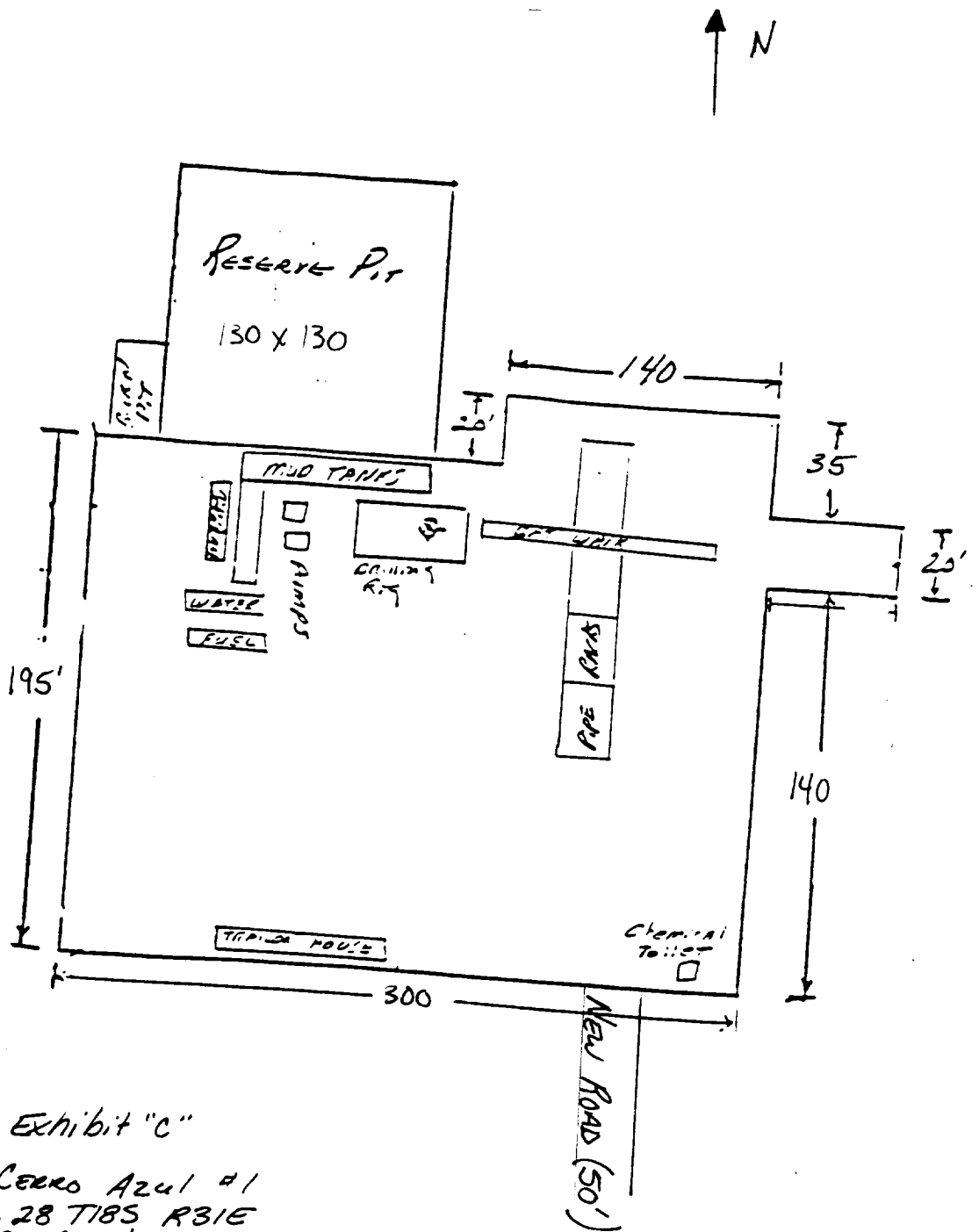


Exhibit "C"  
 CERRO AZUL #1  
 SEC 28 T1B5 R31E  
 EDDY County, NEW MEXICO

RECEIVED

CHEVRON DRILLING REFERENCE SERIES  
VOLUME ELEVEN  
WELL CONTROL AND BLOWOUT PREVENTION

OCT 30 11 57 AM '99

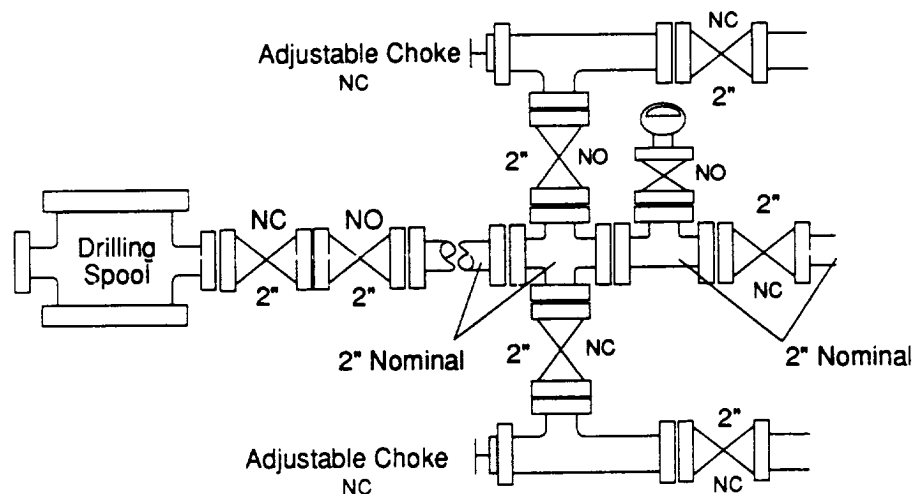
#### D. CLASS III CHOKE MANIFOLD

The Class III choke manifold is suitable for Class III workovers and drilling operations. The Standard Class III choke manifold is shown in Figure 11J.8 below. Specific design features of the Class III manifold include:

1. The manifold is attached to a drilling spool or the top ram preventer side outlet.
2. The minimum internal diameter is 2" (nominal) for outlets, flanges, valves and lines.
3. Includes two steel gate valves in the choke line at the drilling spool outlet. The inside choke line valve may be remotely controlled (HCR).
4. Includes two manually adjustable chokes which are installed on both side of the manifold cross. Steel isolation gate valves are installed between both chokes and the cross, and also downstream of both chokes.
5. Includes a bleed line which runs straight through the cross and is isolated by a steel gate valve.
6. Includes a valve isolated pressure gauge suitable for drilling service which can display the casing pressure within view of the choke operator.
7. Returns through the choke manifold must be divertible through a mud-gas separator and then be routed to either the shale shaker or the reserve pit through a buffer tank or manifold arrangement.
8. If the choke manifold is remote from the wellhead, a third master valve should be installed immediately upstream of the manifold cross.

**Figure 11J.8 - Class III Choke Manifold**

NC = Normally Closed  
NO = Normally Open



**E. CLASS III BLOWOUT PREVENTER STACK:**

The Class III preventer stack is designed for drilling or workover operations. It is composed of a single hydraulically operated annular preventer on top, then a blind ram preventer, a drilling spool, and a single pipe ram preventer on bottom. The choke and kill lines are installed onto the drilling spool and must have a minimum internal diameter of 2". All side outlets on the preventers or drilling spool must be flanged, studded, or clamped. An emergency kill line may be installed on the wellhead. A double ram preventer should only be used when space limitations make it necessary to remove the drilling spool. In these instances, the choke manifold should be connected to a flanged outlet between the preventer rams only. In this hookup, the pipe rams are considered master rams only, and cannot be used to routinely circulate out a kick. The Class III blowout preventer stack is shown to the right in Figure 11J.4.

