

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

New Mexico Oil Conservation Division, District 1  
1625 N. French Drive  
Hobbs, NM 88240  
FORM APPROVED  
Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

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

2. Name of Operator  
Chevron U.S.A. Inc.

3. Address and Telephone No.  
P.O. Box 1150, Midland, TX 79702 (915)687-7148

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
330' FSL & 2005' FWL UNIT N  
SEC. 29, T18S, R32E

5. Lease Designation and Serial No.

NM 96855

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA, Agreement Designation

N/A

8. Well Name and No.

N. LUSK "29"

FEDERAL #1

9. API Well No.

30-025-34673

10. Field and Pool, or exploratory Area

NORTH LUSK; STRAWN

11. County or Parish, State

LEA, NM

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

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

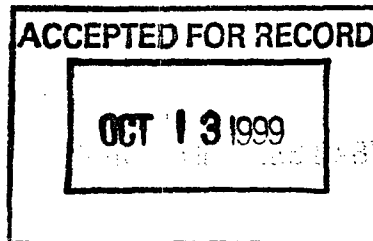
TYPE OF ACTION

- |  |  |
|--|--|
| <input type="checkbox"/> Abandonment                               | <input type="checkbox"/> Change of Plans         |
| <input type="checkbox"/> Recompletion                              | <input type="checkbox"/> New Construction        |
| <input type="checkbox"/> Plugging Back                             | <input type="checkbox"/> Non-Routine Fracturing  |
| <input type="checkbox"/> Casing Repair                             | <input type="checkbox"/> Water Shut-Off          |
| <input type="checkbox"/> Altering Casing                           | <input type="checkbox"/> Conversion to Injection |
| <input checked="" type="checkbox"/> Other <u>COMMENCE DRILLING</u> | <input type="checkbox"/> Dispose Water           |

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

SPUDDED 17-1/2" HOLE 8/17/99. DRILLED TO 517'. SET 13-3/8" CSG. CMTD W/550 SX CL "C". CIRC TO SURF. DRILLED TO 4270'. SET 9-5/8" CSG. CMTD W/1700 SX CL "C". CIRC TO SURF. DRILLED TO 11,860'. SET 5-1/2" CSG @ 11,851'. CMTD W/1230 SX CL "H". WOC 207-1/2 HRS. TSTD 3000 PSI - OK. TOC @ 4070'.



14. I hereby certify that the foregoing is true and correct

Signed G.K. Riple Title REGULATORY O.A.

Date 10/6/99

(This space for Federal or State office use)

Approved by Chris Williams Title DISTRICT 1 SUPERVISOR

Date OCT 20 1999

Conditions of approval, if any:

*Amended*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Conservation Division, District 1  
1625 N. French Drive  
Hobbs, NM 88240  
(Other instructions on reverse side)

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Chevron U.S.A. Inc.

3. ADDRESS AND TELEPHONE NO.

P.O. Box 1150, Midland, TX 79702

(915) 687-7148

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

At surface

330' FSL & 2005' FWL

UNIT N

At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.

NM 96855

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME, WELL NO.

N. LUSK "29" FEDERAL

#1

9. API WELL NO.

30-025-34673

10. FIELD AND POOL, OR WILDCAT

NORTH LUSK STRAWN

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

SEC. 29, T18S, R32E

12. COUNTY OR PARISH

LEA

13. STATE

NM

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

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

330'

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

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

19. PROPOSED DEPTH

12,000'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3705'

22. APPROX. DATE WORK WILL START\*

8/20/99

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54.5#	500'	CIRCULATED
12-1/4"	9-5/8"	36#	4,000'	CIRCULATED
8-3/4"	5-1/2"	17#	12,000'	CIRCULATED

MUD PROGRAM:

0' - 500'

FRESH WATER 8.8 PPG

500' - 4,000'

BRINE WATER 10.0 PPG

4,000' - 12,000'

CUT BRINE WATER 8.8-10.2 PPG

BOPE EQUIPMENT:

SEE ATTACHED

\*\*\*\*\*PLEASE EXPEDITE\*\*\*\*\*

OPER. OGRID NO. 4323  
PROPERTY NO. 24728  
POOL CODE 96678  
EFF. DATE 8-10-99  
API NO. 30-025-34673

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

*J.K. Ripley*

TITLE REGULATORY OA

DATE 8/3/99

(This space for Federal or State office use)

PERMIT NO.

*Chris Williams*

APPROVAL DATE

DISTRICT 1 SUPERVISOR

APPROVED

PETER W. CHESTER

AUG 05 1999

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:

APPROVED BY

TITLE

\*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 department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I  
P.O. Box 1000, Hobbs, NM 88241-1000

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-34673</b>	Pool Code 96678	Pool Name NORTH LUSK; STRAWN
Property Code <b>24728</b>	Property Name N. LUSK "29" FEDERAL	Well Number 1
OGRID No. 4323	Operator Name CHEVRON U.S.A. PRODUCTION COMPANY	Elevation 3705

Surface Location

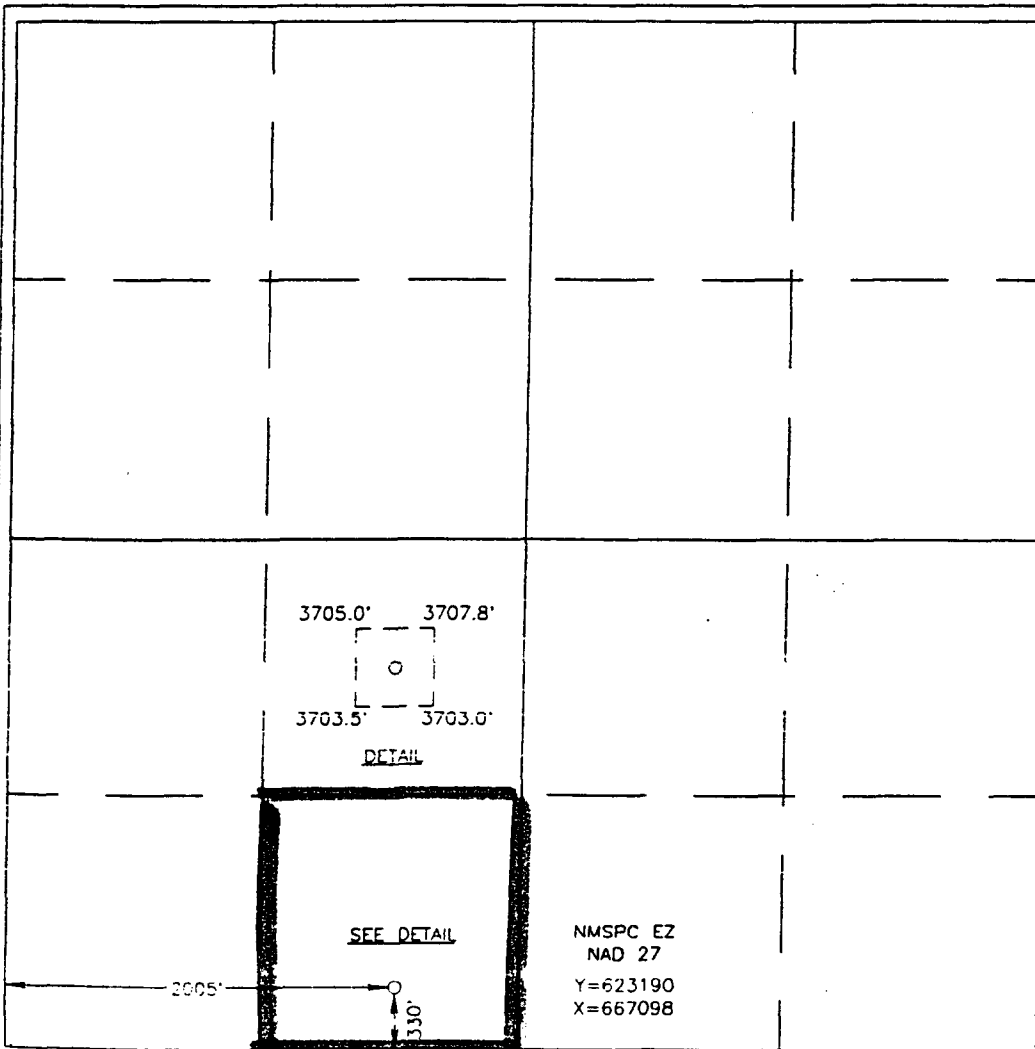
LL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	29	18 S	32 E		330	SOUTH	2005	WEST	LEA

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

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

*J. K. Ripley*  
Signature  
J. K. RIPLEY  
Printed Name  
REGULATORY O.A.  
Title  
8/3/99  
Date

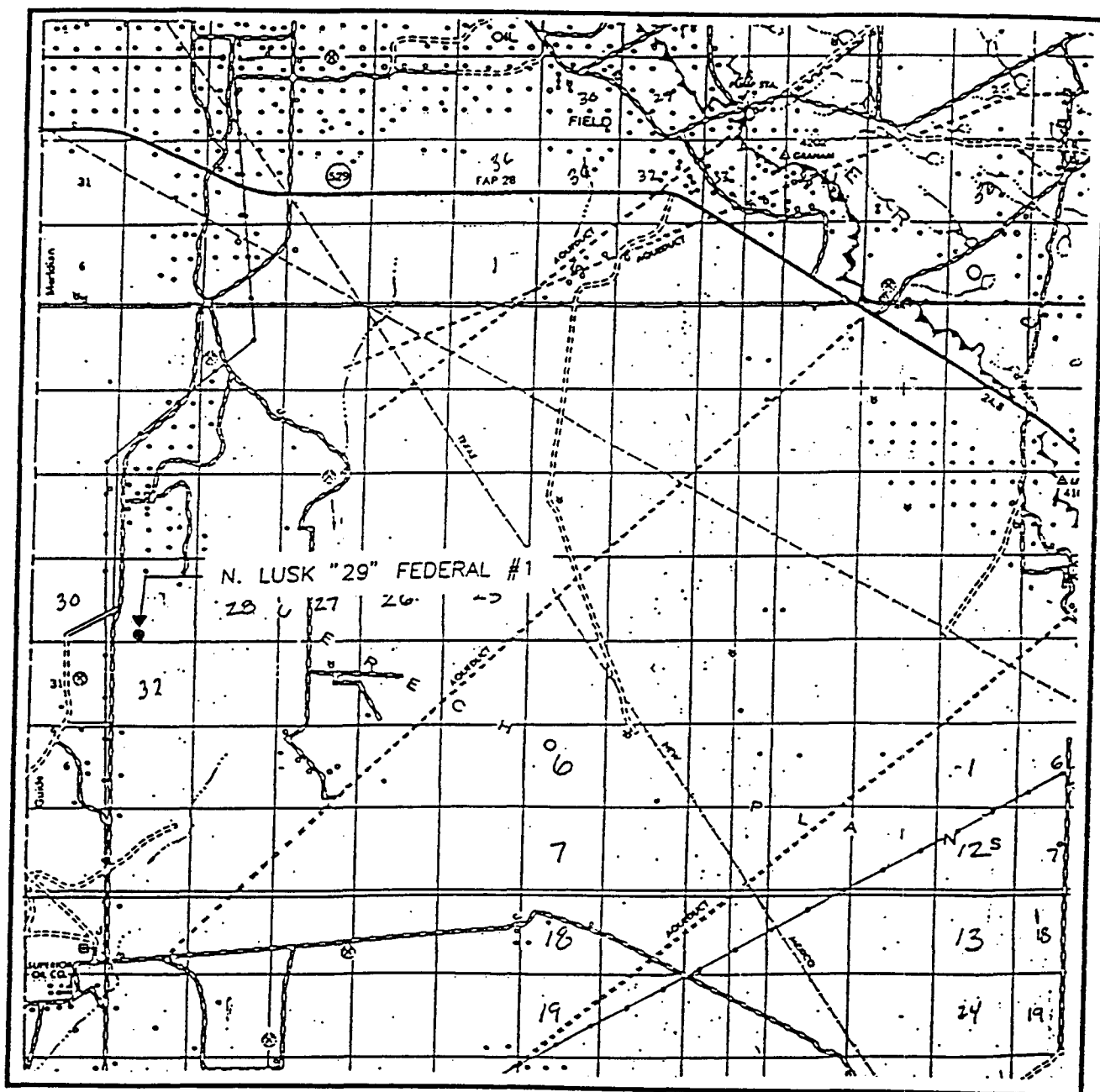
SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

APRIL 27, 1999

Date Surveyed  
Signature *D. L. Edson* DMCC  
Professional Surveyor  
NEW MEXICO  
3239  
4-29-99  
4-11-03  
Certificate No. R. M. L. D. E. IDSON 3239  
C. R. IDSON 12641  
M. C. DONALD 12185

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 29 TWP. 18-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FSL & 2005' FWL

ELEVATION 3705

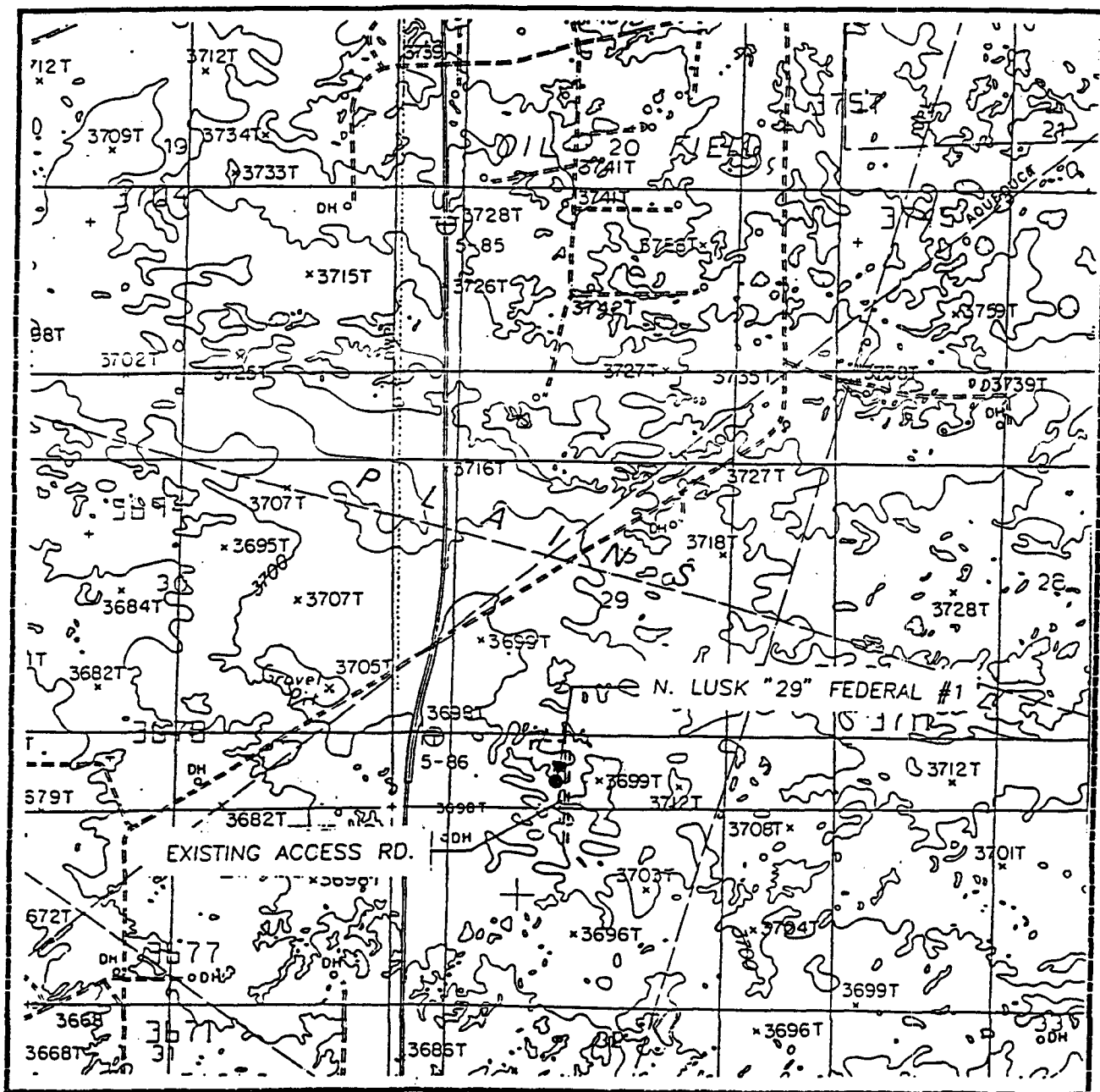
OPERATOR CHEVRON U.S.A. PRODUCTION COMPANY

LEASE N. LUSK "29" FEDERAL

**JOHN WEST ENGINEERING  
HOBBS, NEW MEXICO**

**(505) 393-3117**

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
GREENWOOD LAKE - 10'

SEC. 29 TWP. 18-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FSL & 2005' FWL

ELEVATION 3705

OPERATOR CHEVRON U.S.A. PRODUCTION COMPANY

LEASE N. LUSK "29" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

GREENWOOD LAKE. N.M.

**JOHN WEST ENGINEERING**  
**HOBBS, NEW MEXICO**

**(505) 393-3117**

## DRILLING PROGRAM

Attached to Form 3160-3  
Chevron U.S.A. Inc.  
N. Lusk "29" Federal #1  
330' FSL & 2005' FWL  
Section 29, T18S, R32E  
Lea County, New Mexico

1. Geological Name of Surface Formation:

Aeolian

2. Estimated Tops Of Important Geological Markers:

Rustler	1,081'	San Andres	4,610'
Top Salt	1,206'	Delaware	4,845'
Base Salt	2,470'	Bone Spring	6,810'
Yates	2,735'	Wolfcamp	10,180'
Seven Rivers	3,210'	Cisco/Canyon	10,714'
Queen	3,720'	Strawn	11,269'
Penrose	4,008'	TD	12,000'
Grayburg	4,196'		

3. Protection of Zones:

The fresh water sands will be protected by setting 13-3/8" casing at 500' and circulating cement to surface. The salt section will be protected by setting 9-5/8" casing at 4000' and circulating cement to surface. The oil and gas zones will be isolated from other formations by setting 5-1/2" casing at TD and circulating cement to 200' above intermediate 9-5/8" casing shoe.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>Csg OD</u>	<u>Weight, Grade, Type</u>
17-1/2 "	0- 500'	13-3/8"	54.5#, J-55, ST&C
12-1/4"	0- 4,000'	9-5/8"	36#, K-55, LT&C
8-3/4"	0-12,000'	5-1/2"	17#, N-80, LT&C

Cement Program:

13-3/8" Surface Casing: (17-1/2" hole)	Cemented to surface using Class "C" + 4% Gel + 3% salt, followed by Class "C" + 2% CaCl <sub>2</sub> .
9-5/8" Intermediate Casing (12-1/4" hole)	Cemented to surface using Class "C" + 4% Gel + additives, followed by Class "C" neat.
5 1/2" Production Casing (8-3/4" hole)	Cemented to intermediate casing shoe using Class "C" + 16% Gel + additives, followed by Class "H" + additives.

The above cement slurries will be designed using caliper logs to circulate cement to surface.

5. Minimum Specifications for Pressure Control:

The blowout preventor equipment (BOP) shown in attachment will consist of a (2M system) double ram type (2000 psi WP) preventor. The unit will be hydraulically operated and equipped with blind and pipe type rams. BOP's will be installed on the 13-3/8" surface casing and will be utilized continuously until total depth is reached and production casing is in place and cemented. All BOP's and associated equipment will be tested before drilling out 13-3/8" casing shoe, with rig pumps and before drilling out 9-5/8" casing shoe to rated WP's.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These function tests will be documented on the daily drillers log. A 2" kill line and 2" choke line will be incorporated in the drilling spool below the ram-type BOP. Other BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having 2000 psi WP rating.

6. Types and Characteristics of Proposed Mud System:

The well will be drilled to a total depth using fresh water and brine water mud systems.

<u>DEPTH</u>	<u>TYPE</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>WATER LOSS</u>
0'-500'	Fresh Water	8.8	34-36	No Control
500'-4000'	Brine Water	10.0	28	No Control
4000'-TD	Cut Brine Water	8.8-10.2	30	<10CC

7. A. A kelly cock will be in the drill string at all times.

- B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- C. No H<sub>2</sub>S will be encountered in this well.

8. Logging, Testing and Coring Program:

- A. DST's will be run 7100'-10,180', 10,180'-10,714', 11,269'-11,750'.
- B. The open hole logging program will be:  
LithoDensity/Comp. Neutron, Dual Laterolog/MSFL, Borehole Comp.  
Sonic FMI
- C. No cores are planned.

9. Abnormal Pressures, Temperature and Potential Hazards:

No abnormal pressures or temperatures are foreseen. No hydrogen sulfide gas has been reported or is known to exist at these depths in this area. No major loss circulation intervals have been encountered in adjacent wells.

10. Anticipated Starting Date and Duration of Operations:

Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date is approximately June 24, 1999. The drilling operations should require approximately 12 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether permanent production facilities will be constructed.



## **SURFACE USE AND OPERATING PLAN**

Attachment to Form 3160-3  
Chevron U.S.A. Inc.  
N. Lusk "29" Federal #1  
330' FSL & 2005' FWL  
Section 29, T18S, R32E  
Lea County, New Mexico

1. **Existing Roads:**

- A. The well site and elevation plat for the proposed N. Lusk "29" Federal #1 is attached. The well site was staked by Ronald J. Eidson on April 27, 1999.
- B. Directions to location: Travel from Hobbs, New Mexico west on Hwy 62-180 to SH 243; turn right and travel to CR 126; turn right and travel on CR 126 until reaching Section 29, where N. Lusk "29" Federal #1 will be located.

2. **Proposed access Road:**

- A. No new road will be required.
- B. No cattle guards, grates or fence cuts will be necessary.
- C. No turnouts are planned.

3. **Location of Existing and/or Proposed facilities:**

New production facilities will be built if the well is productive. A sundry notice will be sent to the BLM upon results of the completion.

If the well is productive, rehabilitation plans are as follows:

- 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
- 2. Caliche from unused portions of the drill pad will be removed. The original topsoil from the well site will be returned to the location. The drill site will then be contoured to the original natural state.

4. Location and Type of Water Supply:

N. Lusk "29" Federal #1 will be drilled using a combination of Brine and Fresh water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to the location by transport truck. Additionally, produced salt water from the lease gathering tanks may be used. No water well will be drilled on the location.

5. Source of Construction Materials:

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche.

6. Methods of Handling Water Disposal:

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling Fluids will be contained in steel mud tanks. The reserve pit will contain excess drilling fluids or fluid from the well during drilling, cementing, and completion operations. The reserve pit will be earthen pit roughly 125' x 125' x 6', or smaller, in size.
- C. The reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using 6 mil plastic to minimize loss of drilling fluids and saturation of the ground with brine water used to drill from 1200' - 4200'.
- D. Water produced from the well during completion operations will be disposed into steel tanks or the reserve pit, if volumes prove excessive. After placing production through the production facilities, all water will be collected in tanks. Produced oil will be separated into steel stock tanks until sold.
- E. A portable chemical toilet will be available on location for human waste during drilling operations.
- F. Garbage, trash and waste paper produced during drilling operations will be collected in a container trailer and disposed at an approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed in the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.
- G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed as outlined by the BLM specifications. Only the portion of the drilling pad used by production equipment (pumping unit and tank battery) will remain in use. If the well is deemed non-commercial, only a dry hole marker will remain.

7. Ancillary Facilities:

No campsite or other facilities will be constructed as a result of this well.

8. Well Site Layout:

- A. The drill pad is shown on Attachment. Approximate dimensions of the pad, the pits and the general location of the rig equipment are displayed. Top soil will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad, which will be covered with 6" of compacted caliche.
- B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.
- C. The reserve pit will be lined using plastic sheeting of 6 mil thickness.

9. Plans for Restoration of Surface:

- A. If after concluding the drilling and/or completion operations, the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.
- B. The pit lining will be buried or hauled away in order to return the location and road to the pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- C. The location and road will be rehabilitated as recommended by the BLM.
- D. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.
- E. If the well is deemed commercially productive, the reserve pit will be restored as described on 10 (A) within 120 days subsequent to the completion date. Caliche from the area of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

10. Surface Ownership:

The well site is owned by the Bureau of Land Management.

Road routes have been approved and the surface location will be restored as directed by the BLM.

11. Refer to archaeological report performed by Desert West Archaeological for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

12. Lessee's or Operator's Representative:

George W. Tullos

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

Phone: (915)687-7463

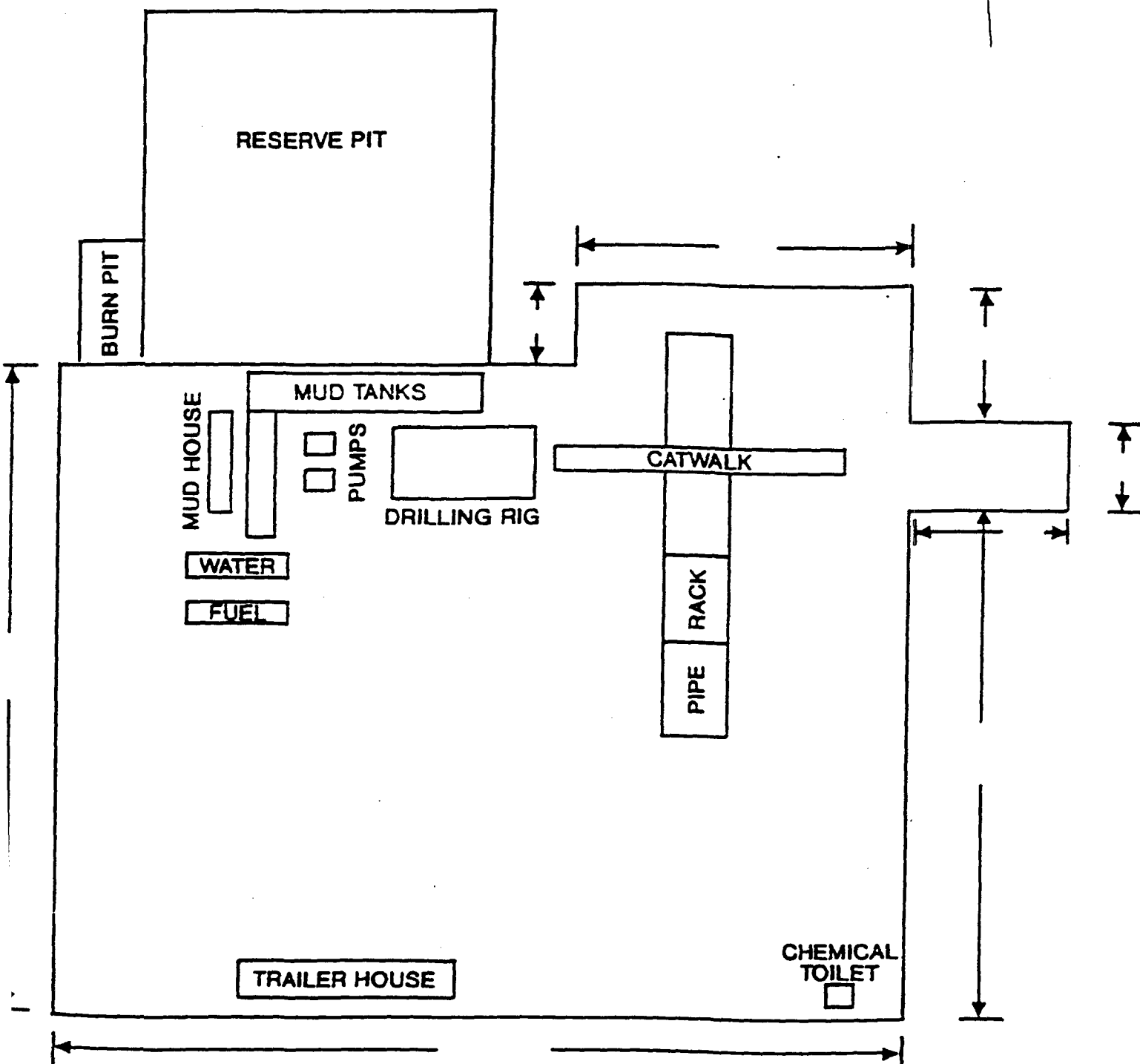
Certification:

I hereby certify that I, or a Chevron representative, have inspected the proposed drill site and access road; 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.

Date: 8/3/99

Signed: J. K. Ripley  
J. K. Ripley

Attachments



**CHEVRON USA INC.**  
**EXHIBIT "C"**

Well Name & Number: N. LUSK "29" FEDERAL #1

Location: 330' F S L & 2005' F W L

Section: 29 Unit: N

Township: 18S Range: 32E

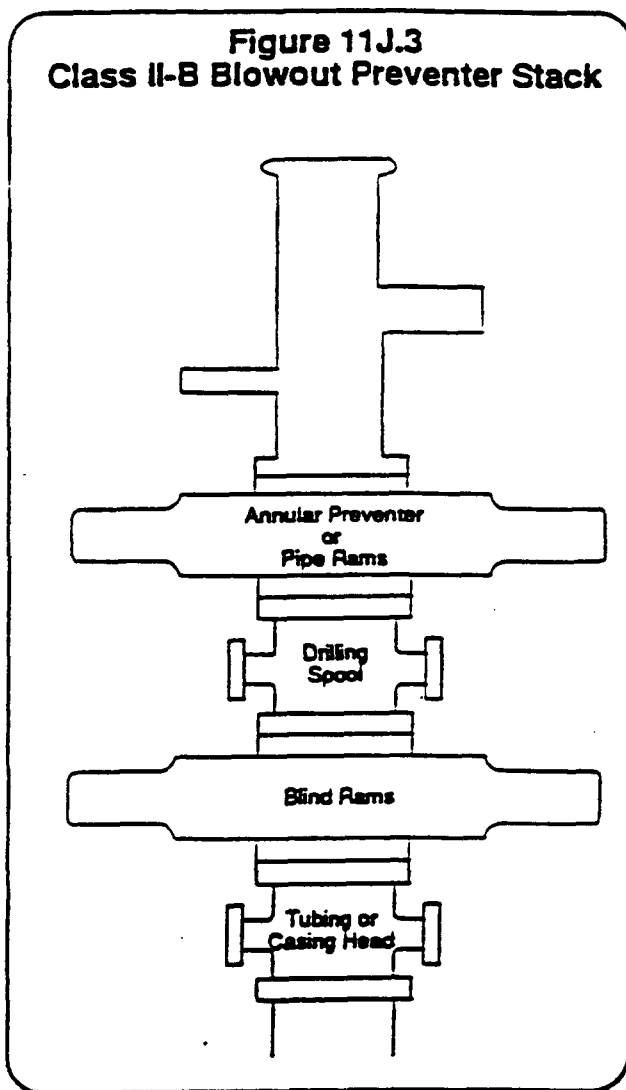
County, New Mexico

PREPARED BY:

CHEVRON DRILLING REFERENCE SERIES  
VOLUME ELEVEN  
WELL CONTROL AND BLOWOUT PREVENTION

D. CLASS II-B BLOWOUT PREVENTER STACK:

**Figure 11J.3**  
**Class II-B Blowout Preventer Stack**



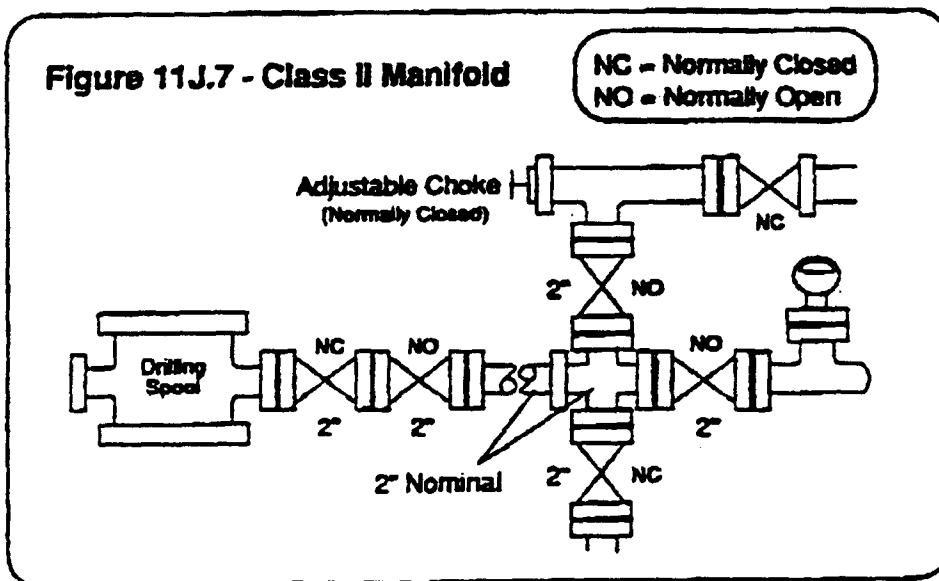
The Class II-B preventer stack is designed for drilling or workover operations. It is composed of a single hydraulically operated annular preventer on top, then a drilling spool, and a single blind ram preventer on bottom. In an alternate configuration, a single pipe ram preventer may be substituted for the annular preventer. The choke and kill lines are installed onto the drilling spool and must have a minimum internal diameter of 2". An emergency kill line may be installed on the wellhead. As the maximum anticipated surface pressure of this stack is less than 2000 psi, screwed connections may be used. All components must be of steel construction. The Class II-B blowout preventer stack is shown to the left in Figure 11J.3.

# **CHEVRON DRILLING REFERENCE SERIES** **VOLUME ELEVEN** **WELL CONTROL AND BLOWOUT PREVENTION**

## **C. CLASS II CHOKE MANIFOLD**

The Class II choke manifold is suitable for all Class II workovers and drilling operations. The Class II choke manifold is shown below in Figure 11J.7. Specific design features of the Class II choke manifold include:

1. The manifold is attached to the tubing/casing head when a Class II-A preventer stack is used. This hook-up is only recommended for Class II workover operations.
2. The manifold is attached to a drilling spool or top ram preventer side outlets when a Class II-B preventer stack is in use.
3. The minimum internal diameter is 2" (nominal) for outlets, flanges, valves and lines.
4. Includes two steel gate valves in the choke line at the wellhead/drilling spool outlet. The inside choke line valve may be remotely controlled (HCR).
5. Includes one manually adjustable choke which is installed on the side of the manifold cross. Steel isolation gate valves are installed between the choke and the cross, and downstream of the choke.
6. Includes one bleed line installed on the side of the manifold cross which is isolated by a steel gate valve.
7. Includes a pressure gauge suitable for drilling service which can display the casing pressure within view of the choke operator.
8. Screwed connections may be used in lieu of flanges or clamps.





## H2S DRILLING OPERATIONS PLAN

### I HYDROGEN SULFIDE TRAINING

All contractors and subcontractors employed by Chevron U.S.A. Inc. will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H2S)
2. Safety precautions
3. Operations of safety equipment and life support systems

In addition, Chevron supervisory personnel will be trained or prepared in the following areas:

1. The effect of H2S on metal components in the system. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-down procedures when drilling or working a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

### II H2S EQUIPMENT AND SYSTEMS

#### 1. Safety Equipment

The following safety equipment will be on location.

- A. Wind direction indicators as seen in attached diagram.
- B. Automatic H2S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at the briefing areas as seen in the attached diagram.

## 2 Well Control Systems

### A. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. pipe rams to accommodate all pipe sizes
- b. blind rams
- c. choke manifold
- d. closing unit

Auxiliary equipment added as appropriate includes:

- |                                     |           |
|-------------------------------------|-----------|
| a. annular preventor                | <u>NA</u> |
| b. rotating head                    | <u>NA</u> |
| c. mud-gas separator                | <u>NA</u> |
| d. flare line and means of ignition | <u>NA</u> |
| e. remote operated choke            | <u>NA</u> |

### B. Communication

The rig contractor will be required to have a two-way communication capability. Chevron U.S.A. Inc. will have either land-line or mobile telephone capabilities.

### C. Mud Program

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S bearing formations.

### D. No Drill Stem Tests are planned.

## III. WELL SITE DIAGRAM

A complete well site diagram including the following information is attached.

- 1. Rig orientation
- 2. Briefing areas
- 3. Ingress and egress
- 4. Pits and flare lines
- 5. Caution and danger signs
- 6. Wind indicators and prevailing wind direction

U. S. BOX 1986  
MEXICO 88240  
N. M. DIT CONS. COMMISSION  
SUBMIT IN PRIVATE  
Other instructions on reverse side  
**UNITED STATES DEPARTMENT OF THE INTERIOR**  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☒

OTHER ☐

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Chevron U.S.A. Inc.

3. ADDRESS AND TELEPHONE NO.

P.O. Box 1150, Midland, TX 79702

(915) 687-7148

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

At surface

330' FSL & 2005' FWL

UNIT N

At proposed prod. zone

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

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 330'

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

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

19. PROPOSED DEPTH

13,000'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3705'

22. APPROX. DATE WORK WILL START\*

6/24/99

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8" REG	54.5#	580' - 450'	CIRCULATED
12-1/4"	9-5/8"	36#	4,000'	CIRCULATED
8-3/4"	5-1/8"	17#	13,000'	CIRCULATED

MUD PROGRAM:

0' BLOW 450'  
450' - 4,000'  
4,000' - 13,000'

FRESH WATER 8.33-8.6 PPG

BRINE WATER 10.0 PPG

BRINE WATER 8.7-10.0 PPG

BOPE EQUIPMENT: SEE ATTACHED

\*\*\*\*\*PLEASE EXPEDITE\*\*\*\*\*

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

G. K. Ripley

TITLE

REGULATORY OA

DATE

5/25/99

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to the rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

Acting

/S/ LARRY D. BRAY

Assistant Field Office Manager,  
Lands and Minerals

JUN 25 1999

APPROVED BY

TITLE

\*See Instructions On Reverse Side

DATE

Title 18 U.S.C. Section 1001, makes 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.

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-10:  
Revised February 10, 1999  
Submit to Appropriate District Office:  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

## OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		NORTH LUSK; MORROW
Property Code	Property Name	Well Number
	N. LUSK "29" FEDERAL	1
OGRID No.	Operator Name	Elevation
4323	CHEVRON U.S.A. PRODUCTION COMPANY	3705

#### Surface Location

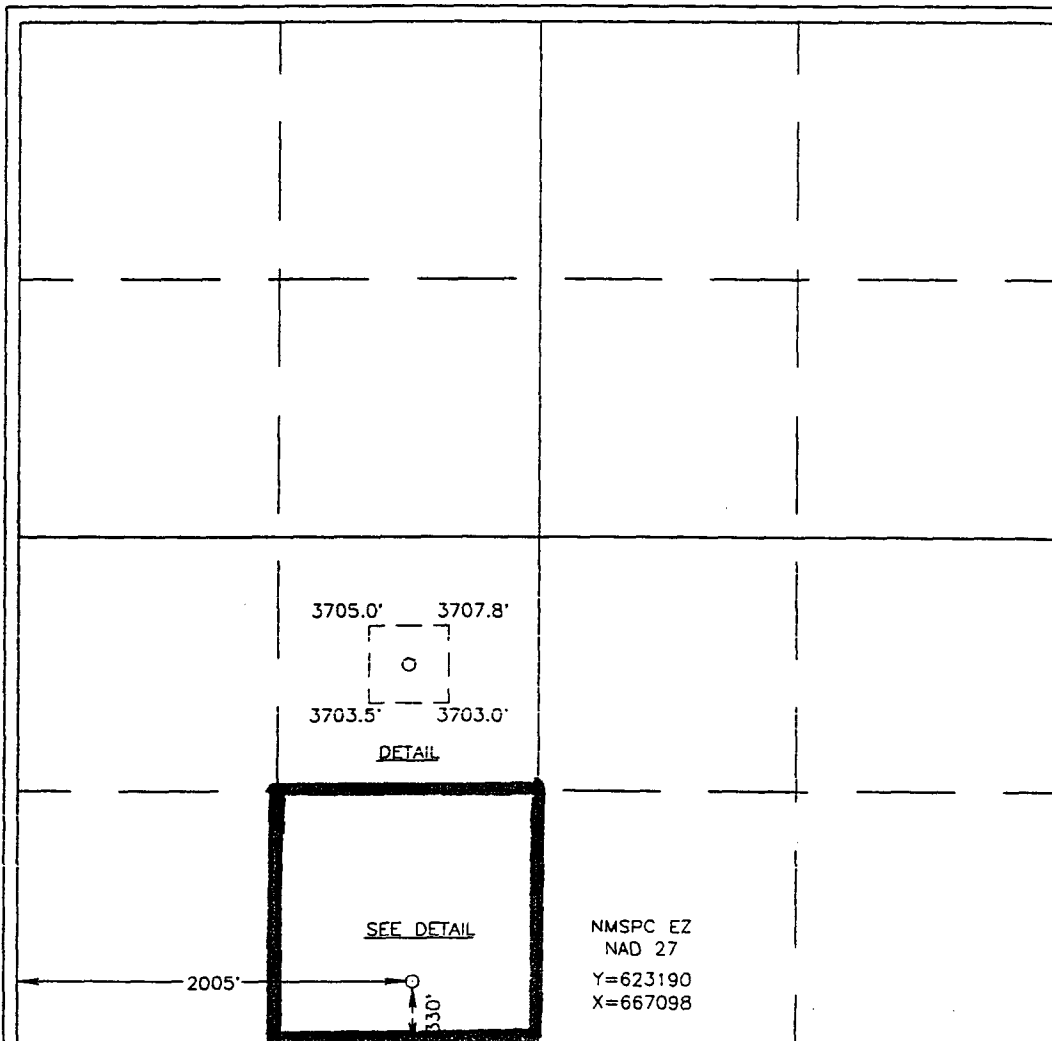
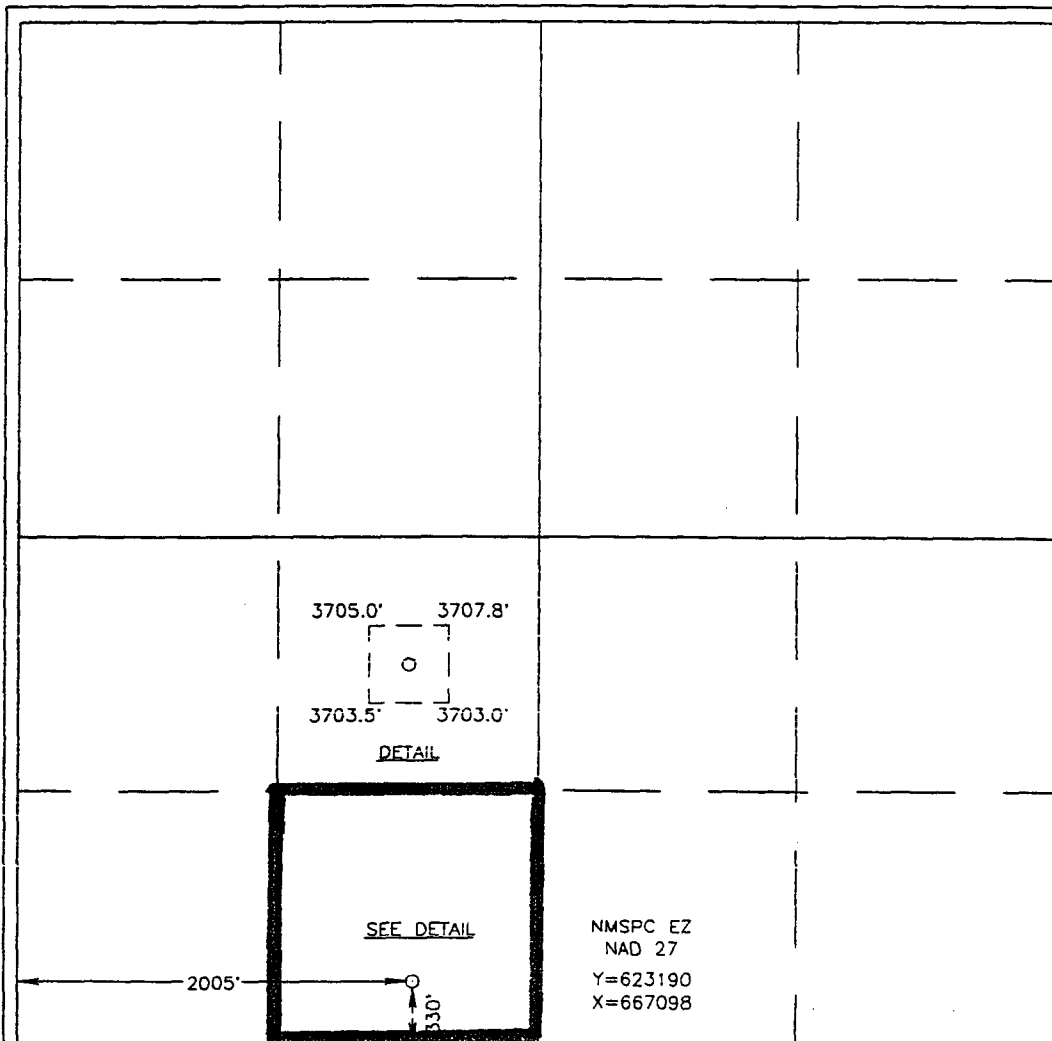
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	29	18 S	32 E		330	SOUTH	2005	WEST	LEA

#### Bottom Hole Location If Different From Surface

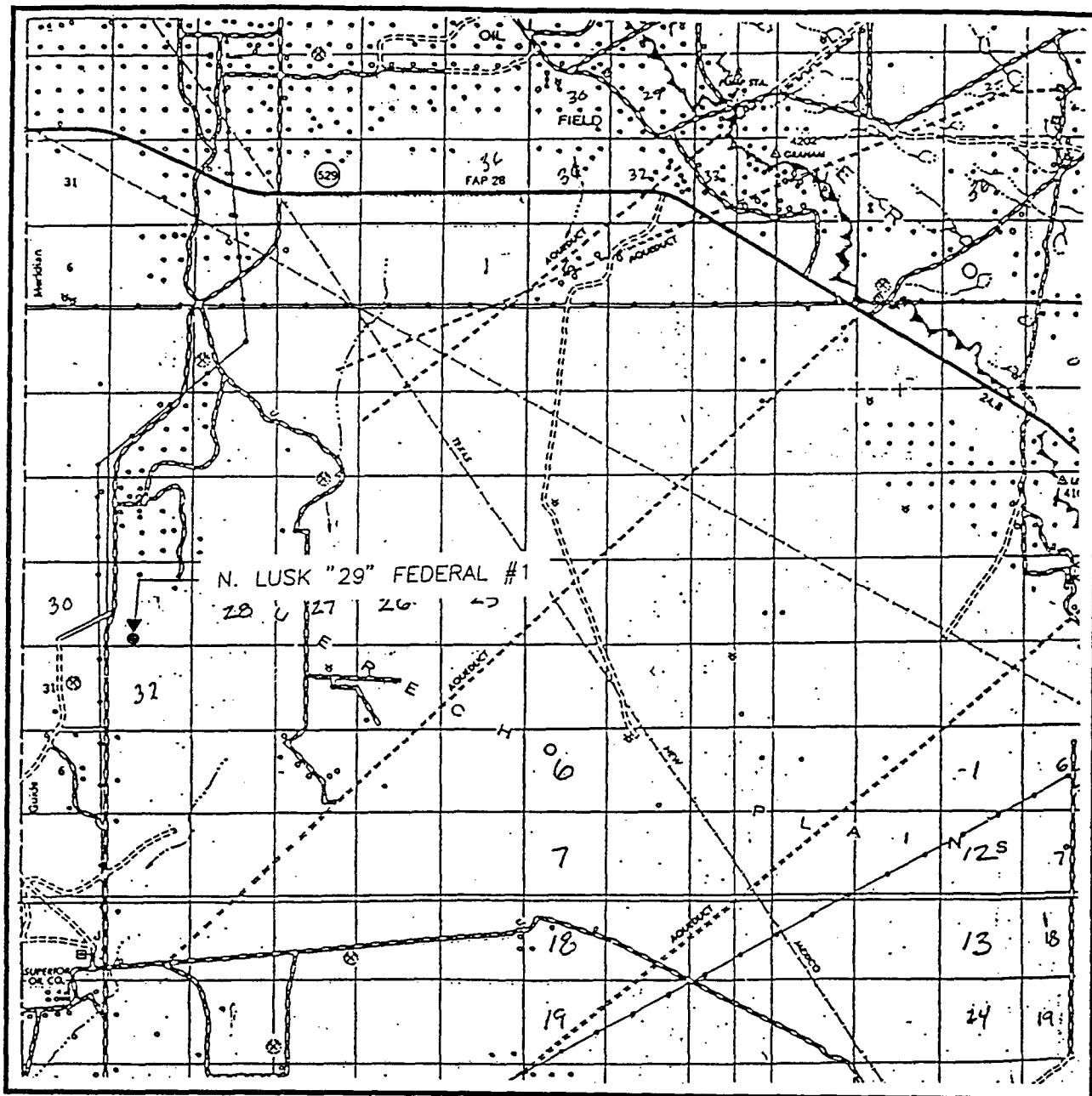
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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

		<b>OPERATOR CERTIFICATION</b>	
		<p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>J. K. Ripley</i> Signature J. K. RIPLEY Printed Name REG OA Title 5/25/99 Date</p>	
		<b>SURVEYOR CERTIFICATION</b>	
		<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>APRIL 27, 1999</p> <p>Date Surveyed Signature Professional Seal DMCC</p> <p>RONALD S. EDSON NEW MEXICO 4-29-99 44-11-0338</p> <p>Cert. No. RONALD S. EDSON 3239 DONALD S. EDSON 12641 DONALD S. EDSON 12185</p>	

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 29 TWP. 18-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FSL & 2005' FWL

ELEVATION 3705

OPERATOR CHEVRON U.S.A. PRODUCTION COMPANY

LEASE N. LUSK "29" FEDERAL

**JOHN WEST ENGINEERING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**

**North**



CONTOUR INTERVAL:  
GREENWOOD LAKE - 10'

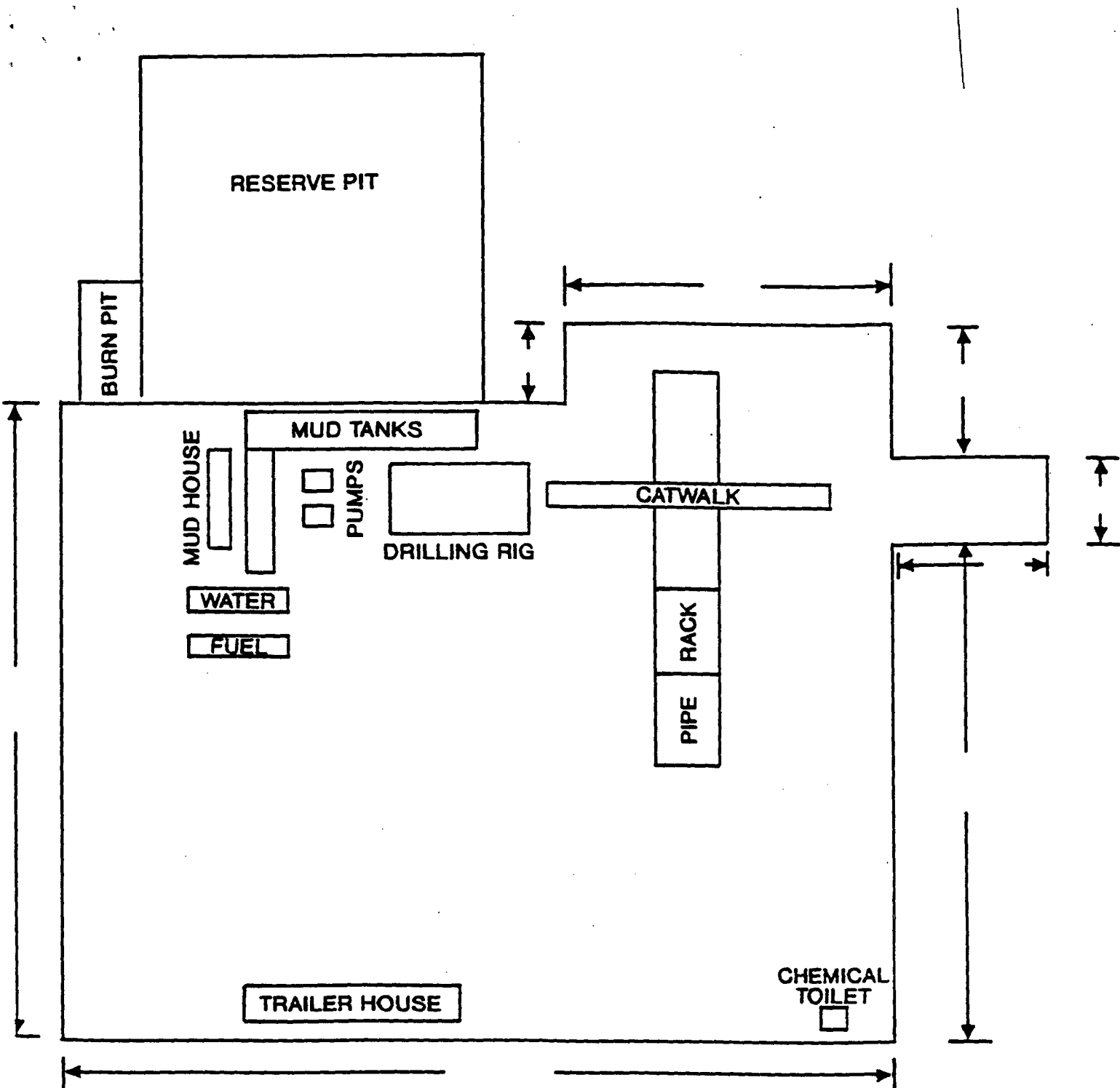
**JOHN WEST ENGINEERING  
HOBBS, NEW MEXICO  
(505) 393-3117**

COUNTY \_\_\_\_\_ LEA \_\_\_\_\_

ELEVATION 3705

LEASE N. LUSK "29" FEDERAL

GREENWOOD LAKE, N.M.



**CHEVRON USA INC.**  
**EXHIBIT "C"**

**Well Name & Number:** N. LUSK "29" FEDERAL #1

**Location:** 330' F.S.L. & 2005' F.W.L.

**Section:** 29 **Unit:** N

**Township:** 18S **Range:** 32E

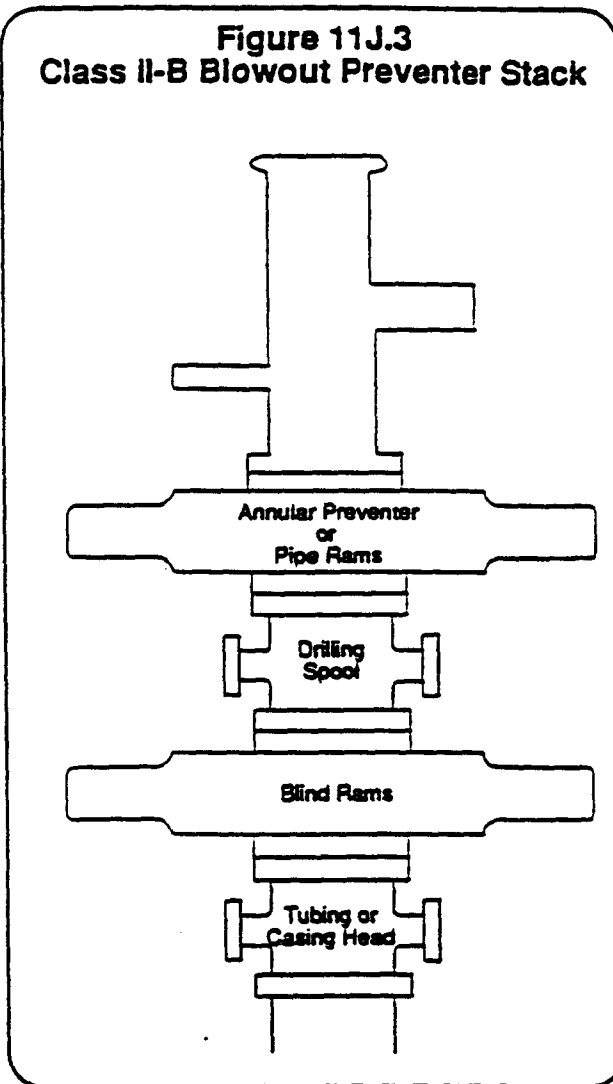
County, New Mexico

**PREPARED BY:**

CHEVRON DRILLING REFERENCE SERIES  
VOLUME ELEVEN  
WELL CONTROL AND BLOWOUT PREVENTION

D. CLASS II-B BLOWOUT PREVENTER STACK:

**Figure 11J.3**  
**Class II-B Blowout Preventer Stack**



The Class II-B preventer stack is designed for drilling or workover operations. It is composed of a single hydraulically operated annular preventer on top, then a drilling spool, and a single blind ram preventer on bottom. In an alternate configuration, a single pipe ram preventer may be substituted for the annular preventer. The choke and kill lines are installed onto the drilling spool and must have a minimum internal diameter of 2". An emergency kill line may be installed on the wellhead. As the maximum anticipated surface pressure of this stack is less than 2000 psi, screwed connections may be used. All components must be of steel construction. The Class II-B blowout preventer stack is shown to the left in Figure 11J.3.



## **H2S DRILLING OPERATIONS PLAN**

### **I HYDROGEN SULFIDE TRAINING**

All contractors and subcontractors employed by Chevron U.S.A. Inc. will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H2S)
2. Safety precautions
3. Operations of safety equipment and life support systems

In addition, Chevron supervisory personnel will be trained or prepared in the following areas:

1. The effect of H2S on metal components in the system. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-down procedures when drilling or working a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

### **II H2S EQUIPMENT AND SYSTEMS**

#### **1. Safety Equipment**

The following safety equipment will be on location.

- A. Wind direction indicators as seen in attached diagram.
- B. Automatic H2S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at the briefing areas as seen in the attached diagram.

## 2 Well Control Systems

### A. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. pipe rams to accommodate all pipe sizes
- b. blind rams
- c. choke manifold
- d. closing unit

Auxiliary equipment added as appropriate includes:

- a. annular preventor
- b. rotating head
- c. mud-gas separator
- d. flare line and means of ignition
- e. remote operated choke

NA  
NA  
NA  
NA  
NA

### B. Communication

The ng contractor will be required to have a two-way communication capability. Chevron U.S.A. Inc. will have either land-line or mobile telephone capabilities.

### C. Mud Program

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S bearing formations.

### D. No Drill Stem Tests are planned.

## III. WELL SITE DIAGRAM

A complete well site diagram including the following information is attached.

- 1. Rig orientation
- 2. Briefing areas
- 3. Ingress and egress
- 4. Pits and flare lines
- 5. Caution and danger signs
- 6. Wind indicators and prevailing wind direction

## DRILLING PROGRAM

Attached to Form 3160-3  
Chevron U.S.A. Inc.  
N. Lusk "29" Federal #1  
330' FSL & 2005' FWL  
Section 29, T18S, R32E  
Lea County, New Mexico

1. Geological Name of Surface Formation:

Aeolian

2. Estimated Tops Of Important Geological Markers:

Queen	3,718'
Penrose	3,939'
Grayburg	4,383
San Andres	4,736'
Delaware	4,976'
Bone Spring	6,942'
Bone Spring "A" Sand	7,217'
Bone Spring 2 <sup>nd</sup> Carb	8,650'
Wolfcamp	10,288'
Strawn	11,600'
Morrow	12,300'

3. Protection of Zones:

The fresh water sands will be protected by setting 13-3/8" casing at 450' and circulating cement to surface. The salt section will be protected by setting 9-5/8" casing at 4000' and circulating cement to surface. The oil and gas zones will be isolated from other formations by setting 5-1/2" casing at TD and circulating cement to 200' above intermediate 9-5/8" casing shoe.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>Csg OD</u>	<u>Weight, Grade, Type</u>
17-1/2 "	0- 450'	13-3/8"	54.5#, J-55, ST&C

12-1/4"	0- 4,000'	9-5/8"	36#, K-55, LT&C
8-3/4"	0-13,000'	5-1/2"	17#, K-55, LT&C

12-1/4"

#### Cement Program:

13-3/8" Surface Casing: (17-1/2" hole)	Cemented to surface using Class "C" + 4% Gel + 3% salt, followed by Class "C" + 2% CaCl <sub>2</sub> .
9-5/8" Intermediate Casing (12-1/4" hole)	Cemented to surface using Class "C" + 4% Gel + additives, followed by Class "C" neat.
5 1/2" Production Casing (8-3/4" hole)	Cemented to intermediate casing shoe using Class "C" + 16% Gel + additives, followed by Class "H" + additives.

The above cement slurries will be designed using caliper logs to circulate cement to surface.

#### 5. Minimum Specifications for Pressure Control:

The blowout preventor equipment (BOP) shown in attachment will consist of a (2M system) double ram type (2000 psi WP) preventor. The unit will be hydraulically operated and equipped with blind and pipe type rams. BOP's will be installed on the 13-3/8" surface casing and will be utilized continuously until total depth is reached and production casing is in place and cemented. All BOP's and associated equipment will be tested before drilling out 13-3/8" casing shoe, with rig pumps and before drilling out 9-5/8" casing shoe to rated WP's.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These function tests will be documented on the daily drillers log. A 2" kill line and 2" choke line will be incorporated in the drilling spool below the ram-type BOP. Other BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having 2000 psi WP rating.

#### 6. Types and Characteristics of Proposed Mud System:

The well will be drilled to a total depth using fresh water and brine water mud systems.

<u>DEPTH</u>	<u>TYPE</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>WATER LOSS</u>
0'-450'	Fresh Water	8.3-8.6	34-36	No Control
450'-4000'	Brine Water	10.0	28	No Control
4000'-TD	Brine Water	8.7-10.0	30	<10CC

7.
    - A. A kelly cock will be in the drill string at all times.
    - B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
    - C. No H<sub>2</sub>S will be encountered in this well.
  8. Logging, Testing and Coring Program:
    - A. DST's will be run 8650'-9000', 10,288'-11,600', 11,600'-12,000' & 12,300'-13,000'.
    - B. The open hole logging program will be:  
LithoDensity/Comp. Neutron, Dual Laterolog/MSFL, Borehole Comp.  
Sonic FMI
    - C. No cores are planned.
  9. Abnormal Pressures, Temperature and Potential Hazards:

No abnormal pressures or temperatures are foreseen. No hydrogen sulfide gas has been reported or is known to exist at these depths in this area. No major loss circulation intervals have been encountered in adjacent wells.
  10. Anticipated Starting Date and Duration of Operations:

Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date is approximately June 24, 1999. The drilling operations should require approximately 12 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether permanent production facilities will be constructed.

## **SURFACE USE AND OPERATING PLAN**

Attachment to Form 3160-3  
Chevron U.S.A. Inc.  
N. Lusk "29" Federal #1  
330' FSL & 2005' FWL  
Section 29, T18S, R32E  
Lea County, New Mexico

1. **Existing Roads:**

- A. The well site and elevation plat for the proposed N. Lusk "29" Federal #1 is attached. The well site was staked by Ronald J. Eidson on April 27, 1999.
- B. Directions to location: Travel from Hobbs, New Mexico west on Hwy 62-180 to SH 243; turn right and travel to CR 126; turn right and travel on CR 126 until reaching Section 29, where N. Lusk "29" Federal #1 will be located.

2. **Proposed access Road:**

- A. No new road will be required.
- B. No cattle guards, grates or fence cuts will be necessary.
- C. No turnouts are planned.

3. **Location of Existing and/or Proposed facilities:**

New production facilities will be built if the well is productive. A sundry notice will be sent to the BLM upon results of the completion.

If the well is productive, rehabilitation plans are as follows:

- 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
- 2. Caliche from unused portions of the drill pad will be removed. The original topsoil from the well site will be returned to the location. The drill site will then be contoured to the original natural state.

4. Location and Type of Water Supply:

N. Lusk "29" Federal #1 will be drilled using a combination of Brine and Fresh water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to the location by transport truck. Additionally, produced salt water from the lease gathering tanks may be used. No water well will be drilled on the location.

5. Source of Construction Materials:

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche.

6. Methods of Handling Water Disposal:

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling Fluids will be contained in steel mud tanks. The reserve pit will contain excess drilling fluids or fluid from the well during drilling, cementing, and completion operations. The reserve pit will be earthen pit roughly 125' x 125' x 6', or smaller, in size.
- C. The reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using 6 mil plastic to minimize loss of drilling fluids and saturation of the ground with brine water used to drill from 1200' - 4200'.
- D. Water produced from the well during completion operations will be disposed into steel tanks or the reserve pit, if volumes prove excessive. After placing production through the production facilities, all water will be collected in tanks. Produced oil will be separated into steel stock tanks until sold.
- E. A portable chemical toilet will be available on location for human waste during drilling operations.
- F. Garbage, trash and waste paper produced during drilling operations will be collected in a container trailer and disposed at an approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed in the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.
- G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed as outlined by the BLM specifications. Only the portion of the drilling pad used by production equipment (pumping unit and tank battery) will remain in use. If the well is deemed non-commercial, only a dry hole marker will remain.

7. Ancillary Facilities:

No campsite or other facilities will be constructed as a result of this well.

8. Well Site Layout:

- A. The drill pad is shown on Attachment. Approximate dimensions of the pad, the pits and the general location of the rig equipment are displayed. Top soil will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad, which will be covered with 6" of compacted caliche.
- B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.
- C. The reserve pit will be lined using plastic sheeting of 6 mil thickness.

9. Plans for Restoration of Surface:

- A. If after concluding the drilling and/or completion operations, the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.
- B. The pit lining will be buried or hauled away in order to return the location and road to the pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- C. The location and road will be rehabilitated as recommended by the BLM.
- D. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.
- E. If the well is deemed commercially productive, the reserve pit will be restored as described on 10 (A) within 120 days subsequent to the completion date. Caliche from the area of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.



10. Surface Ownership:

The well site is owned by the Bureau of Land Management.

Road routes have been approved and the surface location will be restored as directed by the BLM.

11. Refer to archaeological report performed by Desert West Archaeological for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

12. Lessee's or Operator's Representative:

Richard Gemmill

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

Phone: (915)687-7896

Certification:

I hereby certify that I, or a Chevron representative, have inspected the proposed drill site and access road; 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.

Date: 5/25/99

Signed: J. K. Ripley  
J. K. Ripley

Attachments

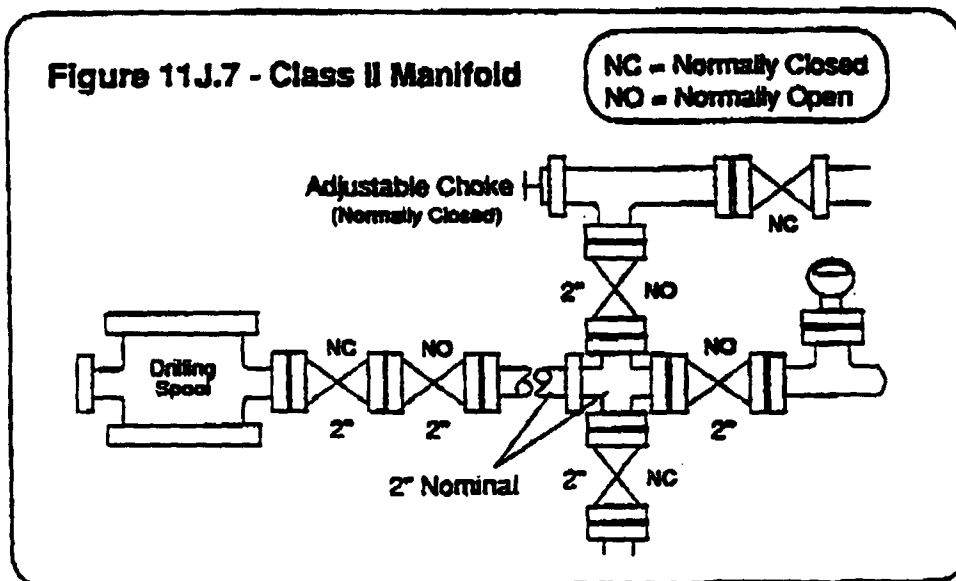
P. 2

CHEVRON DRILLING REFERENCE SERIES  
VOLUME ELEVEN  
WELL CONTROL AND BLOWOUT PREVENTION

### C. CLASS II CHOKE MANIFOLD

The Class II choke manifold is suitable for all Class II workovers and drilling operations. The Class II choke manifold is shown below in Figure 11J.7. Specific design features of the Class II choke manifold include:

1. The manifold is attached to the tubing/casing head when a Class II-A preventer stack is used. This hook-up is only recommended for Class II workover operations.
2. The manifold is attached to a drilling spool or top ram preventer side outlets when a Class II-B preventer stack is in use.
3. The minimum internal diameter is 2" (nominal) for outlets, flanges, valves and lines.
4. Includes two steel gate valves in the choke line at the wellhead/drilling spool outlet. The inside choke line valve may be remotely controlled (HCR).
5. Includes one manually adjustable choke which is installed on the side of the manifold cross. Steel isolation gate valves are installed between the choke and the cross, and downstream of the choke.
6. Includes one bleed line installed on the side of the manifold cross which is isolated by a steel gate valve.
7. Includes a pressure gauge suitable for drilling service which can display the casing pressure within view of the choke operator.
8. Screwed connections may be used in lieu of flanges or clamps.



CMD :  
OG5SECTONGARD  
INQUIRE LAND BY SECTION03/07/00 08:55:34  
OGOMES -TP8C  
PAGE NO: 1

Sec : 32 Twp : 18S Rng : 32E Section Type : NORMAL

D 40.00 CS LG7655 0004 SANTA FE SNYDER C 02/01/90	C 40.00 CS LG7655 0004 SANTA FE SNYDER C 02/01/90	B 40.00 CS LG7655 0004 SANTA FE SNYDER C 02/01/90	A 40.00 CS LG7655 0004 SANTA FE SNYDER C 02/01/90
E 40.00 CS LG7655 0004 SANTA FE SNYDER C 02/01/90	F 40.00 CS LG7655 0004 SANTA FE SNYDER C 02/01/90 A	G 40.00 CS LG7655 0004 SANTA FE SNYDER C 02/01/90 A	H 40.00 CS LG7655 0004 SANTA FE SNYDER C 02/01/90

PF01 HELP  
PF07 BKWDPF02  
PF08 FWDPF03 EXIT  
PF09 PRINTPF04 GoTo  
PF10 SDIVPF05  
PF11PF06  
PF12

CMD :  
OG5SECTONGARD  
INQUIRE LAND BY SECTION03/07/00 08:55:40  
OGOMES -TP8C  
PAGE NO: 2

Sec : 32 Twp : 18S Rng : 32E Section Type : NORMAL

L 40.00 CS LG1044 0002 ALTURA ENERGY LTD 02/01/83	K 40.00 CS LG1044 0002 ALTURA ENERGY LTD 02/01/83	J 40.00 CS LG1044 0002 ALTURA ENERGY LTD 02/01/83 A	I 40.00 CS LG1044 0002 ALTURA ENERGY LTD 02/01/83
M 40.00 CS LG1044 0002 ALTURA ENERGY LTD 02/01/83	N 40.00 CS LG1044 0002 ALTURA ENERGY LTD 02/01/83	O 40.00 CS LG1044 0002 ALTURA ENERGY LTD 02/01/83	P 40.00 CS LG1044 0002 ALTURA ENERGY LTD 02/01/83

PF01 HELP  
PF07 BKWDPF02  
PF08 FWDPF03 EXIT  
PF09 PRINTPF04 GoTo  
PF10 SDIVPF05  
PF11PF06  
PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

03/07/00 08:38:26  
OGOMES -TP8C  
PAGE NO: 1

Sec : 29 Twp : 18S Rng : 32E Section Type : NORMAL

D 40.00	C 40.00	B 40.00	A 40.00
Federal owned	Federal owned	Federal owned	Federal owned
	A		A
E 40.00	F 40.00	G 40.00	H 40.00
Federal owned	Federal owned	Federal owned	Federal owned

PF01 HELP  
PF07 BKWD

PF02  
PF08 FWD

PF03 EXIT  
PF09 PRINT

PF04 GoTo  
PF10 SDIV

PF05  
PF11

PF06  
PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

03/07/00 08:38:31  
OGOMES -TP8C  
PAGE NO: 2

Sec : 29 Twp : 18S Rng : 32E Section Type : NORMAL

L 40.00	K 40.00	J 40.00	I 40.00
Federal owned	Federal owned	Federal owned	Federal owned
M 40.00	N 40.00	O 40.00	P 40.00
Federal owned	Federal owned P A	Federal owned	Federal owned

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

CMD : ONGARD 03/07/00 08:39:19  
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TP8C

OGRID Idn : 4323 API Well No: 30 25 34673 APD Status(A/C/P): A  
Opr Name, Addr: CHEVRON U S A INC Aprvl/Cncl Date : 08-05-1999  
PO BOX J SECTION 975R  
CONCORD,CA 94524

Prop Idn: 24728 NORTH LUSK 29 FEDERAL Well No: 1

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----	-----
Surface Locn :	N	29	18S	32E			FTG 330 F S	FTG 2005 F W
OCD U/L :	N		API County :	25				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : F  
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3705

State Lease No: Multiple Comp (Y/N) : S  
Prpsd Depth : 12000 Prpsd Frmtn : STRAWN

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12



**(FLORA VISTA-MESAVERDE GAS POOL—Cont'd.)**

and where the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Survey, or where the following facts exist and the following provisions are complied with:

- (1) The non-standard unit consists of contiguous quarter-quarter sections or lots.
- (2) The non-standard unit lies wholly within a single governmental section.
- (3) The entire non-standard unit may reasonably be presumed to be productive of gas from the Flora Vista-Mesaverde Gas Pool.
- (4) The length or width of the non-standard unit does not exceed 5280 feet.
- (5) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which any part of the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (6) In lieu of Paragraph 5 of this Rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered mail of his intent to form such non-standard unit. The Secretary-Director of the Commission may approve the application if, after a period of 30 days following the mailing of said notice, no such operator has made objection to the formation of such non-standard unit.

**RULE 3. (a)** Each well completed or recompleted in the Flora Vista-Mesaverde Gas Pool shall be located no nearer than 790 feet to the outer boundary of the unit and shall be located no nearer than 130 feet to a governmental quarter-quarter section line or subdivision inner boundary line. Further tolerance shall be allowed by the Commission only in cases of extremely rough terrain where compliance would necessarily cause an undue increase in drilling costs.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

**DONE** at Santa Fe, New Mexico, on the day and year hereinabove designated.

**LUSK-STRAWN POOL  
Lea County, New Mexico**

**Order No. R-2175-B, Adopting Operating Rules for the Lusk-Strawn Pool, Lea County, New Mexico, April 4, 1962.**

**Order No. R-2175-B supersedes Order No. R-2175, January 30, 1962.**

*Application of El Paso Natural Gas Company  
for the establishment of Special Rules and  
Regulations for the Lusk-Strawn Pool, Lea  
County, New Mexico.*

**CASE NO. 2469  
Order No. R-2175-B**

**ORDER OF THE COMMISSION**

**BY THE COMMISSION:** This cause came on for hearing at 9 o'clock a.m. on March 14, 1962, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

**NOW**, on this 4th day of April, 1962, the Commission, a

quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

**FINDS:**

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, El Paso Natural Gas Company, or rehearing, seeks a modification of the Special Rules and Regulations for the Lusk-Strawn Pool as contained in Order No. R-2175 entered in Case No. 2469 on January 30, 1962, to provide for the development of said pool on 160-acre proration units.
- (3) That the present testimony of the applicant indicates that one well can efficiently drain 160-acres.
- (4) That the present testimony of the applicant relative to the economics of drilling in the subject pool indicates that development on less than 160-acre oil proration units would be uneconomical.
- (5) That the Special Rules and Regulations for the Lusk Strawn Pool as contained in Order No. R-2175 should be modified to provide for 160-acre oil proration units.

**IT IS THEREFORE ORDERED:**

- (1) That Special Rules and Regulations for the Lusk Strawn Pool, Lea County, New Mexico, are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS  
FOR THE LUSK-STRAWN POOL**

**RULE 1.** Each well completed or recompleted in the Lusk Strawn Pool or in the Strawn formation within one mile of the Lusk-Strawn Pool, and not nearer to nor within the limits of another designated Strawn pool, shall be spaced, drilled, operated, and prorated in accordance with the Special Rules and Regulations hereinafter set forth.

**RULE 2.** Each well completed or recompleted in the Lusk-Strawn Pool shall be located on a unit containing 160 acres more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Lands Survey.

**RULE 3.** Each well completed or recompleted in said pool shall not be drilled closer than 660 feet to any quarter section line nor closer than 330 feet to any quarter-quarter section line. Any well which was drilling to or recompleted in the Lusk-Strawn Pool prior to January 4, 1962, is granted an exception to the well location requirements of this Rule.

**RULE 4.** For good cause shown, the Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising less than 160 acres. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director of the Commission may approve the application if, after a period of 30 days, no offset operator has entered an objection to the formation of such non-standard unit.

The allowable assigned to any such non-standard unit shall bear the same ratio to a standard allowable in the Lusk-Strawn Pool as the acreage in such non-standard unit bears to 160 acres.

**RULE 5.** A 160-acre proration unit (158 through 162 acres) in the Lusk-Strawn Pool shall be assigned a 160-acre proportional factor of 8.67 for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit in any proportion.

**RULE 6.** The limiting gas-oil ratio in the Lusk-Strawn Pool shall be 4000:1.

**PROVIDED HOWEVER,** That the provisions of Rules 5 and 6 shall not become effective until such time as all wells

## (LUSK-STRAWN POOL—Cont'd.)

presently completed in the subject pool are connected to a casinghead gas gathering system.

(2) That Order No. R-2175 entered in Case No. 2469 on January 30, 1962, is hereby superseded.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

**HENSHAW-WOLFCAMP POOL**  
Eddy County, New Mexico

Order No. R-2182, Creating and Adopting Temporary Operating Rules for the Henshaw-Wolfcamp Pool, Eddy County, New Mexico, March 1, 1962.

Order No. R-2182-A, February 27, 1963, extends existing rules for one year and requires reconsideration at an examiner hearing in February, 1964.

Order No. R-2182-B, April 13, 1964, makes permanent the temporary rules adopted in Order No. R-2182.

CASE NO. 2480  
Order No. R-2182

**ORDER OF THE COMMISSION**

BY THE COMMISSION: This cause came on for hearing at 9 o'clock a.m. on January 24, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 12th day of February, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

**FINDS:**

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Shell Oil Company, seeks the promulgation of temporary special rules and regulations for the Henshaw-Wolfcamp Pool in Eddy County, New Mexico, to provide for 80-acre proration units.

(3) That the evidence presented concerning the reservoir characteristics of the Henshaw-Wolfcamp Pool justifies the establishment of 80-acre proration units in said pool for a temporary one-year period.

(4) That the information presently available and presented as evidence indicates that the Henshaw-Wolfcamp Pool can be efficiently and economically drained on 80-acre proration units.

(5) That during the one-year period in which this order will be in effect, the applicant should gather all available information relative to drainage and recoverable reserves in the subject pool, including core data and interference tests.

(6) That this case should be heard again by a duly appointed examiner of the Commission at an examiner hearing in February, 1963, at which time the applicant should be prepared to prove by a preponderance of the evidence the proration unit size on which the subject pool can be most efficiently drained and developed.

(7) That the Henshaw-Wolfcamp Pool should be created for the production of oil from the Wolfcamp formation. Said Henshaw-Wolfcamp Pool was discovered by the applicant's Henshaw Deep Unit Well No. 1, located in the NE/4 NW/4 of Section 24, Township 16 South, Range 30 East, NMPM, Eddy County, New Mexico. The top of the perforations is 8822 feet.

**IT IS THEREFORE ORDERED:**

(1) That a new pool in Eddy County, New Mexico, classified as an oil pool for Wolfcamp production is hereby created and designated as the Henshaw-Wolfcamp Pool, consisting of the following-described area:

**TOWNSHIP 16 SOUTH, RANGE 30 EAST, NMPM**  
Section 24: NW/4 and S/2

(2) That special rules and regulations for the Henshaw-Wolfcamp Pool are hereby promulgated as follows, effective March 1, 1962.

**SPECIAL RULES AND REGULATIONS FOR THE  
HENSHAW-WOLFCAMP POOL**

**RULE 1.** Each well completed or recompleted in the Henshaw-Wolfcamp Pool or in the Wolfcamp formation within one mile of the Henshaw-Wolfcamp Pool, and not nearer to nor within the limits of another designated Wolfcamp Pool shall be spaced, drilled, operated and prorated in accordance with the Special Rules and Regulations hereinafter set forth.

**RULE 2.** Each well completed or recompleted in the Henshaw-Wolfcamp Pool shall be located on a unit containing 80 acres, more or less, which consists of the N/2, S/2, E/2 or W/2 of a single governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

**RULE 3.** For good cause shown, the Secretary-Director may grant exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising a single quarter-quarter section or lot. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application if, after a period of 30 days, no offset operator has entered an objection to the formation of such non-standard unit.

The allowable assigned to any such non-standard unit shall bear the same ratio to a standard allowable in the Henshaw-Wolfcamp Pool as the acreage in such non-standard unit bears to 80 acres.

**RULE 4.** The initial well on any 80-acre unit in said pool shall be located within 150 feet of the center of either the SW/4 or NE/4 of the quarter section on which the well is located. Any well which was drilling to or completed in the Henshaw-Wolfcamp Pool prior to January 24, 1962, is granted an exception to the well location requirements of this rule.

**RULE 5.** An 80-acre proration unit (79 through 81 acres) in the Henshaw-Wolfcamp Pool shall be assigned an 80-acre



County Lea

Pool Young - Strawn

TOWNSHIP 18 South

Range 32 East

NMPM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description: NE/4 Sec 20 (R-5102, 10-1-75)

County Lea

Pool North Lusk-Strawn

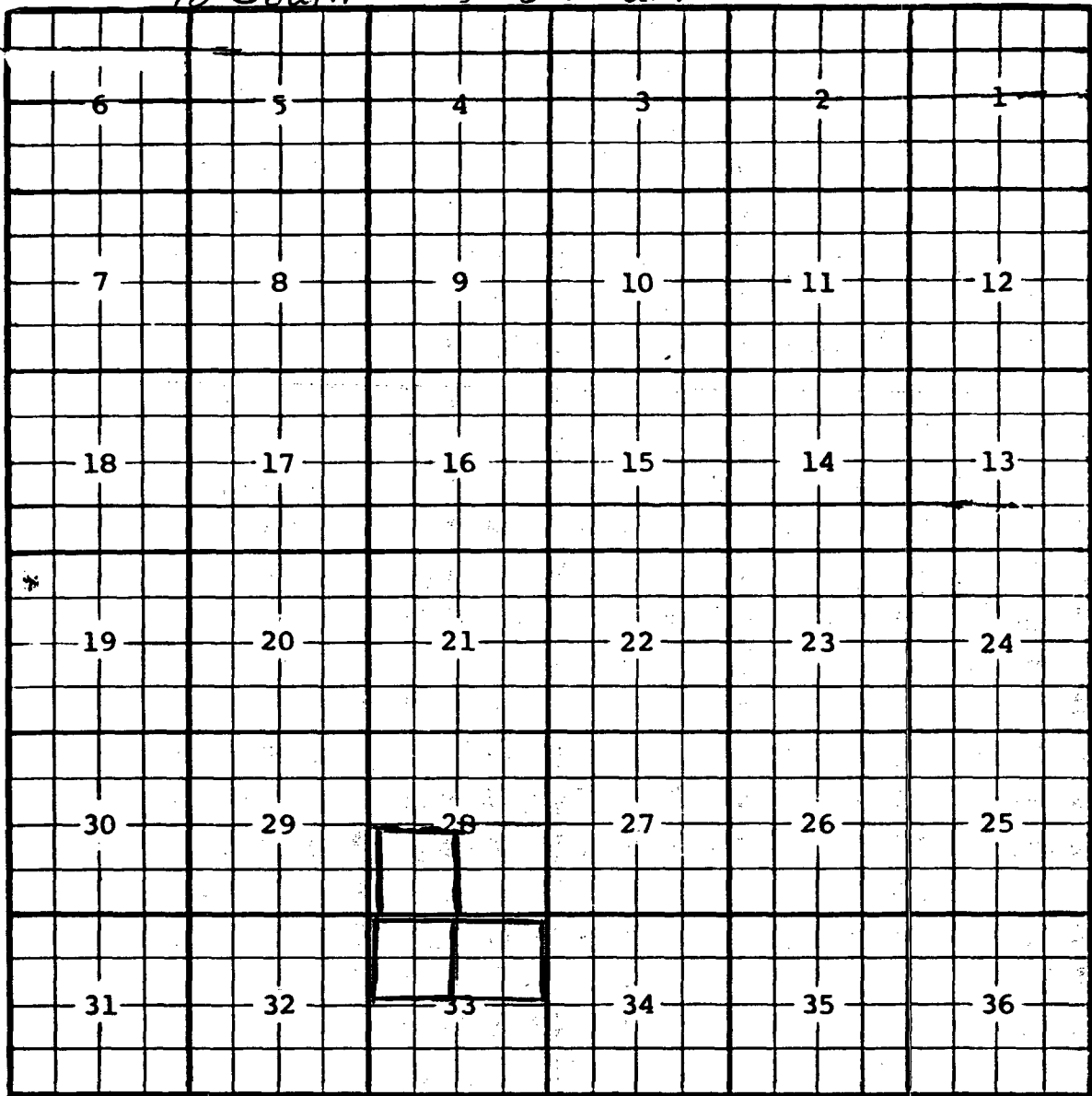
TOWNSHIP

18 South

RANGE

32 East

NMPM



Description: NW 1/4 Sec. 33 (R-10795, 4-28-97)

Ext: NE 1/4 Sec. 33 (R-10972, 4-13-98) Ext: SW 1/4 Sec. 28 (R-11183, 5-19-99)