

N.M. Oil Cons. Div. Dist. 2  
 UNITED STATES 1301 W. Grand Avenue  
 DEPARTMENT OF THE INTERIOR  
 Artesia, NM 88210  
 BUREAU OF LAND MANAGEMENT

Form approved.

Budget Bureau No. 1004-0136

Expires: December 31, 1991

|                                                                                                                                                                                                              |  |                                         |                                                                             |                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------|
| <b>APPLICATION FOR PERMIT TO DRILL OR DEEPEN</b>                                                                                                                                                             |  |                                         | 5. LEASE DESIGNATION AND SERIAL NO.<br><b>LC-029419A</b>                    |                                                     |
| 1a. TYPE OF WORK<br><b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>                                                                                                  |  |                                         | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                                        |                                                     |
| b. TYPE OF WELL<br>OIL WELL <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> |  |                                         | 7. UNIT AGREEMENT NAME                                                      |                                                     |
| 2. NAME OF OPERATOR<br><b>Chevron USA Inc. (Mack Energy Agent)</b>                                                                                                                                           |  |                                         | 8. FARM OR LEASE NAME, WELL NO.<br><b>Skelly Unit #946</b>                  |                                                     |
| 3. ADDRESS AND TELEPHONE NO.<br><b>P.O. Box 960, Artesia, NM 88211-0960 (505) 748-1288</b>                                                                                                                   |  |                                         | 9. API WELL NO.<br><b>30-015-32965</b>                                      |                                                     |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirement.)<br>At surface <b>330 FNL &amp; 1650 FFL</b><br>At proposed prod. zone                                            |  |                                         | 10. FIELD AND POOL, OR WILDCAT<br><b>Fren Paddock</b>                       |                                                     |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE<br><b>9 miles east of Loco Hills, NM</b>                                                                                                |  |                                         | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br><b>Sec 22 T17S R31E</b> |                                                     |
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)<br><b>330</b>                                                                          |  | 16. NO. OF ACRES IN LEASE<br><b>640</b> |                                                                             | 17. NO. OF ACRES IN LEASE TO THIS WELL<br><b>40</b> |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED OR APPLIED FOR, ON THIS LEASE, FT.<br><b>660</b>                                                                                   |  | 19. PROPOSED DEPTH<br><b>5500</b>       |                                                                             | 20. ROTARY OR CABLE TOOLS<br><b>Rotary</b>          |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.)<br><b>3863' GR ROSWELL CONTROLLED WATER BASIN</b>                                                                                                             |  |                                         | 22. APPROX. DATE WORK WILL START*<br><b>7/24/2003</b>                       |                                                     |

| 23. PROPOSED CASING AND CEMENTING PROGRAM |                       |                 |               |                    |
|-------------------------------------------|-----------------------|-----------------|---------------|--------------------|
| SIZE OF HOLE                              | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
| 17 1/2                                    | J-55, 13 3/8          | 48              | 450           | WITNESS Circ       |
| 12 1/4                                    | J-55, 8 5/8           | 24              | 1620          | Suff to Circ       |
| 7 7/8                                     | J-55, 5 1/2           | 17              | 5500          | Suff to Circ       |

Chevron USA Inc. proposes to drill to a depth sufficient to test the Paddock and San Andres formation for oil. If productive, 5 1/2" casing will be cemented. If non-productive, the well will be plugged and abandoned in a manner consistent with federal regulation. Specific programs as per Onshore Oil and Gas Order #1 are outlined in the following attachments:

- |                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. <u>Surveys</u><br>Exhibit #1- Well Location Plat<br>Exhibit #2- Vicinity Map<br>Exhibit #3- Location Verification Map<br><br>2. <u>Drilling Program</u><br><br>3. <u>Surface Use &amp; Operating Plan</u><br>Exhibit #4- One Mile Radius Map<br>Exhibit #5- Production Facilities Layout<br>Exhibit #6- Location Layout | 4. <u>Certification</u><br><br>5. <u>Hydrogen Sulfide Drilling Operation Plan</u><br>Exhibit #7- H2S Warning Sign<br>Exhibit #8- H2S Safety Equipment<br><br>6. <u>Blowout Preventers</u><br>Exhibit #9- BOPE Schematic<br>Exhibit #10- Blowout Preventer Requirements<br>Exhibit #11- Choke Manifold | 7. <u>Responsibility Statement</u><br><br><div style="text-align: center; border: 1px solid black; padding: 5px; transform: rotate(-5deg);"> <b>APPROVAL SUBJECT TO<br/>           GENERAL REQUIREMENTS<br/>           AND SPECIAL STIPULATIONS<br/>           ATTACHED</b> </div> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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 Jerry W. Sherrill TITLE Production Clerk DATE 7/18/2003  
 Mack Energy Corporation (Agent for Chevron USA Inc.)

(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 those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /s/ Mary J. Rugwell TITLE FOR FIELD MANAGER DATE 31 AUG 2003

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

**APPROVAL FOR 1 YEAR**

DISTRICT I  
P.O. Box 1290, Hobbs, NM 88241-1980

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  
New Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

|               |                  |           |              |
|---------------|------------------|-----------|--------------|
| API Number    |                  | Pool Code | Pool Name    |
|               |                  | 26770     | Fren Paddock |
| Property Code | Property Name    |           | Well Number  |
| 11091         | SKELLY UNIT      |           | 946          |
| OGRID No.     | Operator Name    |           | Elevation    |
| 4323          | CHEVRON USA INC. |           | 3863'        |

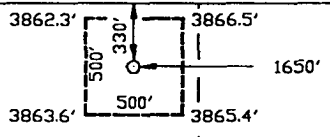
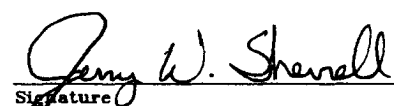
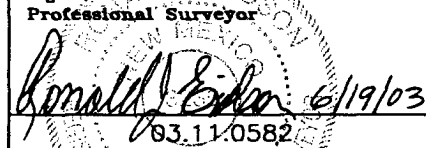
Surface Location

|               |         |          |       |         |               |                  |               |                |        |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| B             | 22      | 17-S     | 31-E  |         | 330'          | NORTH            | 1650'         | EAST           | EDDY   |

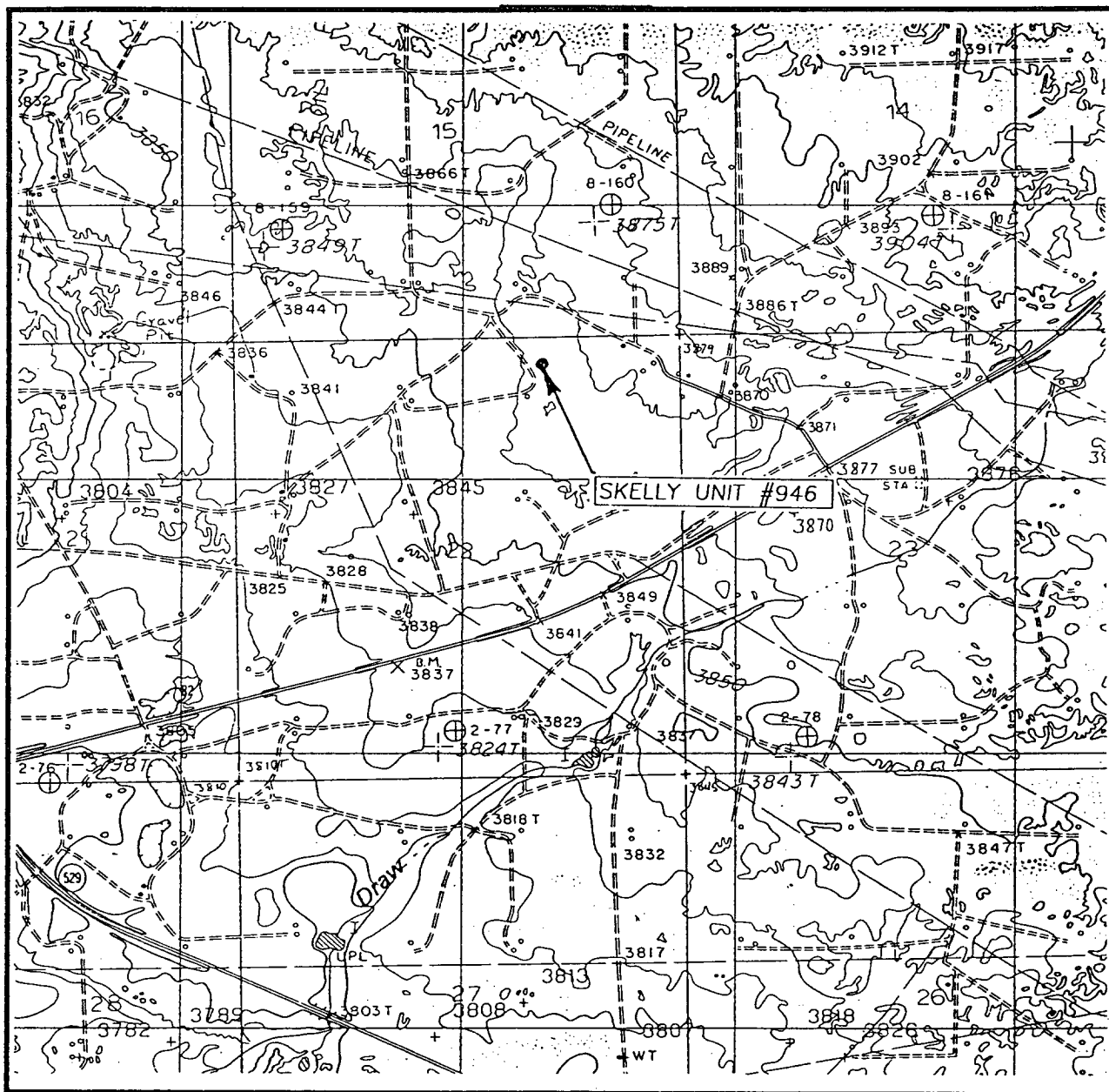
Bottom Hole Location If Different From Surface

|                 |         |                 |       |                    |               |                  |               |                |        |
|-----------------|---------|-----------------|-------|--------------------|---------------|------------------|---------------|----------------|--------|
| UL or lot No.   | Section | Township        | Range | Lot Idn            | Feet from the | North/South line | Feet from the | East/West line | County |
|                 |         |                 |       |                    |               |                  |               |                |        |
| Dedicated Acres |         | Joint or Infill |       | Consolidation Code |               | Order No.        |               |                |        |
| 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>                                                                                                                                                                                 |  |
|                                                                                                                           | I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.                                                                                            |  |
|                                                                                                                           | <br>Signature                                                                                                            |  |
|                                                                                                                           | Jerry W. Sherrell<br>Printed Name<br>Production Clerk<br>Title<br>7/18/2003<br>Date                                                                                                                           |  |
| <b>GEODETIC COORDINATES</b><br>NAD 27 NME<br>Y= 664664.7 N<br>X= 647323.8 E<br>LAT. 32°49'34.79"N<br>LONG. 103°51'13.46"W | <b>SURVEYOR CERTIFICATION</b>                                                                                                                                                                                 |  |
|                                                                                                                           | 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. |  |
|                                                                                                                           | June 16, 2003                                                                                                                                                                                                 |  |
|                                                                                                                           | Date Surveyed<br>Signature & Seal of Professional Surveyor<br><br>93.11.0582                                             |  |
| Certificate No. RONALD J. EDSON 3239<br>GARY EDSON 12641                                                                  |                                                                                                                                                                                                               |  |

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

MALJAMAR, N.M.

SEC. 22 TWP. 17-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 330' FNL & 1650' FEL

ELEVATION 3863'

OPERATOR ChevronTexaco Corporation

LEASE SKELLY UNIT

U.S.G.S. TOPOGRAPHIC MAP

MALJAMAR, N.M.

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

Attached to Form 3160-3  
Chevron USA Inc. (Mack Energy Agent)  
Skelly Unit #946  
330 FNL & 1650 FEL  
NW/4 NE/4, Sec 22 T17S R31E  
Eddy County, NM

## DRILLING PROGRAM

### 1. Geologic Name of Surface Formation

Quaternary

### 2. Estimated Tops of Important Geologic Markers:

|              |         |
|--------------|---------|
| Quaternary   | Surface |
| Top of Salt  | 505'    |
| Base of Salt | 1025'   |
| Yates        | 1600'   |
| Queen        | 2450'   |
| San Andres   | 3200'   |
| Glorieta     | 4700'   |

### 3. Estimated Depths of Anticipated Fresh Water, Oil and Gas:

|            |       |             |
|------------|-------|-------------|
| Water Sand | 150'  | Fresh Water |
| Grayburg   | 2580' | Oil/Gas     |
| San Andres | 3200' | Oil/Gas     |
| Paddock    | 4800' | Oil/Gas     |

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 450' and circulating cement back to surface will protect the surface fresh water sand. Salt Section will be protected by setting 8 5/8" casing to 1620' and circulating cement back to surface. Any shallower zones above TD, which contain commercial quantities of oil and/or gas, will have cement circulated across them by cementing 5 1/2" production casing, which will be run at TD.

### 4. Casing Program:

| Hole Size | Interval | OD Casing | Weight, Grade, Jt, Cond., Type |
|-----------|----------|-----------|--------------------------------|
| 17 1/2"   | 0-450'   | 13 3/8"   | 48#, J-55, ST&C, New, R-3      |
| 12 1/4"   | 0-1620'  | 8 5/8"    | 24#, J-55, ST&C, New, R-3      |
| 7 7/8"    | 0-TD     | 5 1/2"    | 17#, J-55, LT&C, New, R-3      |

Attached to Form 3160-3  
Chevron USA Inc. (Mack Energy Agent)  
Skelly Unit #946  
330 FNL & 1650 FEL  
NW/4 NE/4, Sec 22 T17S R31E  
Eddy County, NM

**5. Cement Program:**

13 3/8" Surface Casing: Circulate to Surface with Class C w/2% CaCl<sub>2</sub>.

8 5/8 Intermediate Casing: Circulate to Surface with Class C W/2% CaCl<sub>2</sub>.

5 1/2" Production Casing: Cement Casing with Class C w/6# Salt & 2/10 of 1% CFR-3 per sack. We will run a hole caliper and run sufficient cement to circulate to surface.

**6. Minimum Specifications for Pressure Control:**

The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ram-type (2000 psi WP) preventer. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 4 1/2" drill pipe rams on bottom. The BOP will be nipped up on the 13 3/8" surface casing and tested to 70% of the internal yield of the 13 3/8" casing. This will be tested with the Drilling Rig Pumps (which can test to 1500 psi). The BOP will then be nipped up on the 8 5/8" intermediate casing and tested by a 3<sup>rd</sup> party to 2000 psi and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 2000 psi before drilling out of intermediate casing. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment (Exhibit #10) will include a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) with 2000 psi WP rating.

**7. Types and Characteristics of the Proposed Mud System:**

The well will be drilled to TD with a combination of brine, cut brine and polymer mud system. The applicable depths and properties of this system are as follows:

| DEPTH     | TYPE        | WEIGHT | VISCOSITY | WATERLOSS |
|-----------|-------------|--------|-----------|-----------|
| 0-450'    | Fresh Water | 8.5    | 28        | N.C.      |
| 450-1620' | Brine       | 10     | 30        | N.C.      |
| 1620'-TD  | Cut Brine   | 9.1    | 29        | N.C.      |

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

**8. Auxiliary Well Control and Monitoring Equipment:**

- A. Kelly cock will be kept in the drill string at all times.
- B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

Attached to Form 3160-3  
Chevron USA Inc. (Mack Energy Agent)  
Skelly Unit #946  
330 FNL & 1650 FEL  
NW/4 NE/4, Sec 22 T17S R31E  
Eddy County, NM

**9. Logging, Testing and Coring Program:**

- A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be ran from T.D. to 8 5/8 casing shoe.
- B. Drill Stem test is not anticipated.
- C. No conventional coring is anticipated.
- D. Further testing procedures will be determined after the 5 1/2" production casing has been cemented at TD based on drill shows and log evaluation.

**10. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:**

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 110 degrees and estimated maximum bottom hole pressure is 2300 psig. Low levels of Hydrogen sulfide have been monitors in producing wells in the area, so H2S may be present while drilling of the well a plan is attached to the Drilling program. No major loss of circulation zones has been reported in offsetting wells.

**11. Anticipated Starting Date and Duration of Operations:**

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is July 24, 2003. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

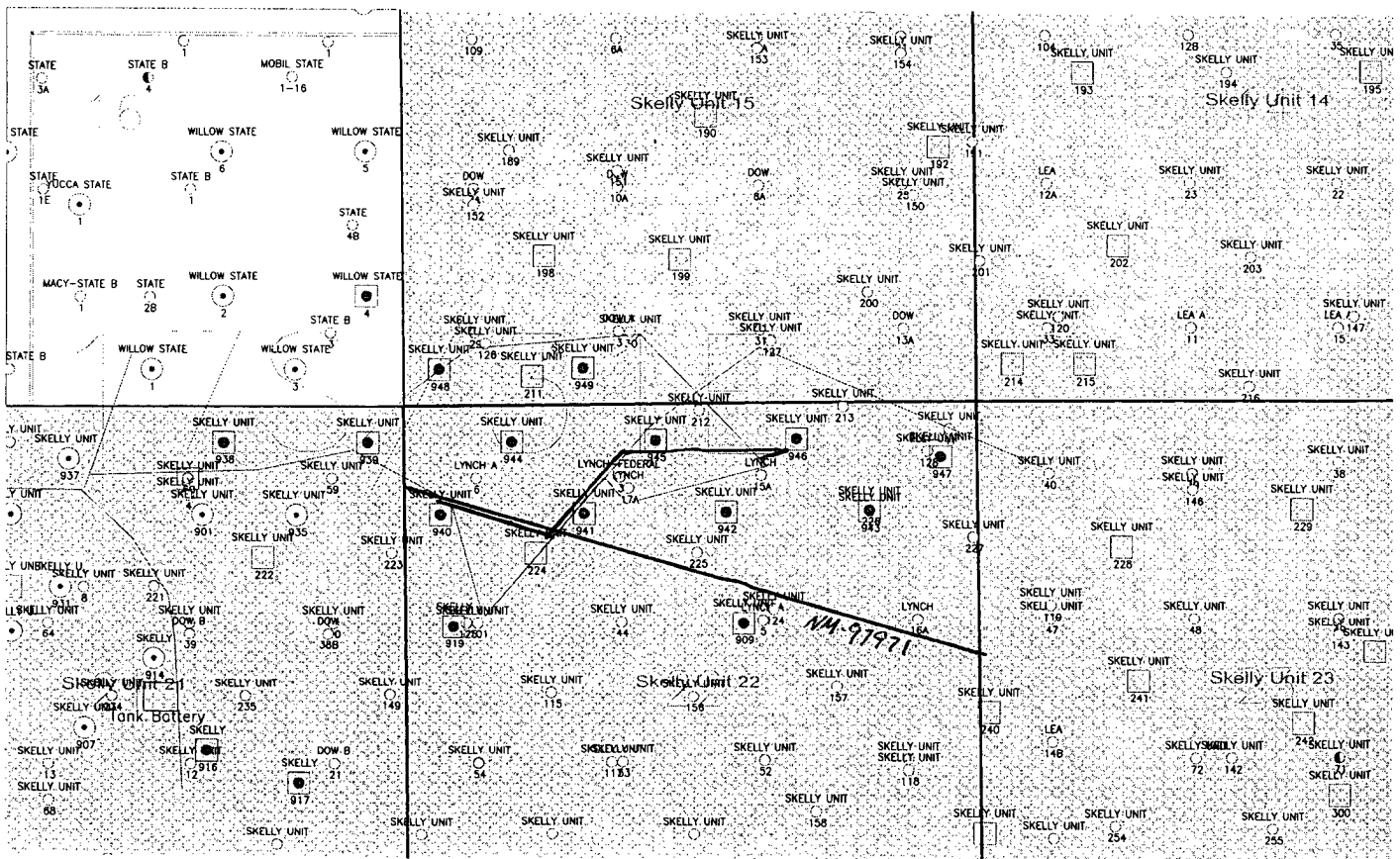
Attached to Form 3160-3  
Chevron USA Inc. (Mack Energy Agent)  
Skelly Unit #946  
330 FNL & 1650 FEL  
NW/4 NE/4, Sec 22 T17S R31E  
Eddy County, NM

## SURFACE USE AND OPERATING PLAN

### 1. Existing & Proposed Access Roads

- A. The well site and elevation plat for the proposed well is shown in Exhibit #1. It was staked by John West Engineering, Hobbs NM.
- B. All roads to the location are shown in Exhibit below. The existing roads are illustrated in Blue and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling well will be done where necessary.
- C. Directions to Location: Go 1 mile east of 529 on Hwy 82, turn north on CR 223, go 3/4 mile, turn east go 3/4 mile, south 1/10 mile, then northeast to location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

Exhibit #4



## **Chevron USA Inc.**

### **Hydrogen Sulfide Drilling Operation Plan**

#### **I. HYDROGEN SULFIDE TRAINING**

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

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

1. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well, and blowout prevention and well control procedures.
3. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

## **II. H2S SAFETY EQUIPMENT AND SYSTEMS**

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

### **1. Well Control Equipment:**

- A. Flare line.
- B. Choke manifold.
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

### **2. Protective equipment for essential personnel:**

- A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

### **3. H2S detection and monitoring equipment:**

- A. 1 portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

### **4. Visual warning systems:**

- A. Wind direction indicators as shown on well site diagram (Exhibit #8).
- B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

### **5. Mud program:**

- A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

**6. Metallurgy:**

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.
- B. All elastomers used for packing and seals shall be H<sub>2</sub>S trim.

**7. Communication:**

- A. Radio communications in company vehicles including cellular telephone and 2-way radio.
- B. Land line (telephone) communication at Office.

**8. Well testing:**

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H<sub>2</sub>S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

**EXHIBIT #7**

**WARNING**  
**YOU ARE ENTERING AN H<sub>2</sub>S**  
**AUTHORIZED PERSONNEL ONLY**

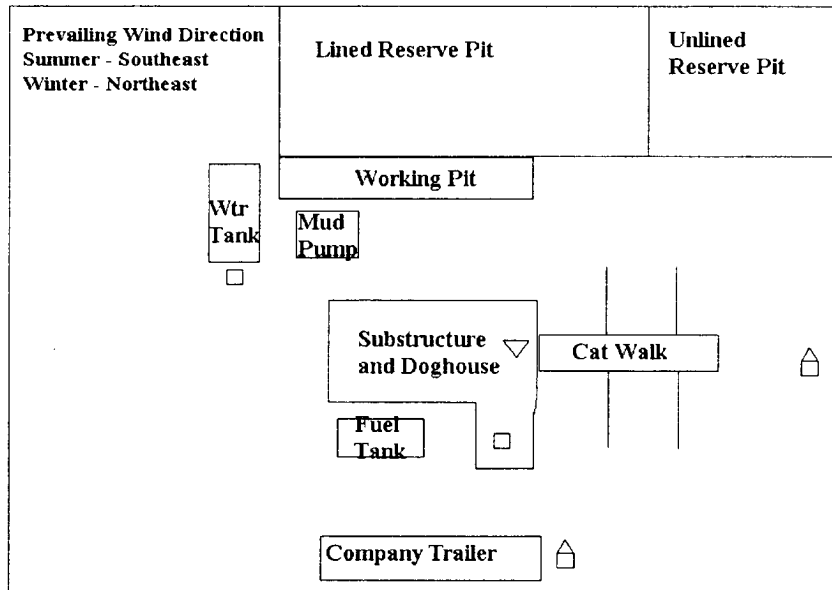
- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
- 2. HARD HATS REQUIRED**
- 3. SMOKING IN DESIGNATED AREAS ONLY**
- 4. BE WIND CONSCIOUS AT ALL TIMES**
- 5. CHECK WITH MACK ENERGY FOREMAN AT OFFICE**

**MACK ENERGY CORPORATION**

**1-505-748-1288**

# DRILLING LOCATION H2S SAFTY EQUIPMENT

## Exhibit # 8



▽ H2S Monitors with alarms at the bell nipple

□ Wind Direction Indicators

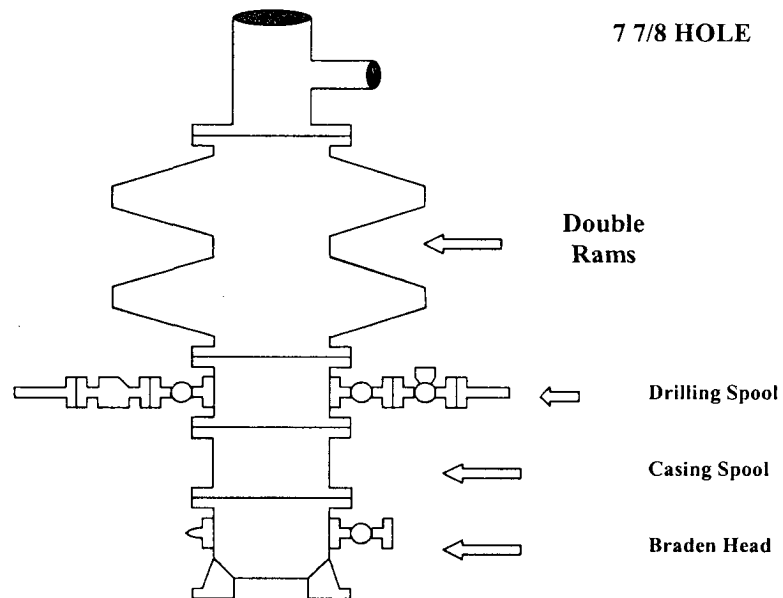
⌂ Safe Briefing areas with caution signs and breathing equipment min 150 feet from

**Attachment to Exhibit #9**  
**NOTES REGARDING THE BLOWOUT PREVENTERS**  
**Skelly Unit #946**  
**Eddy County, New Mexico**

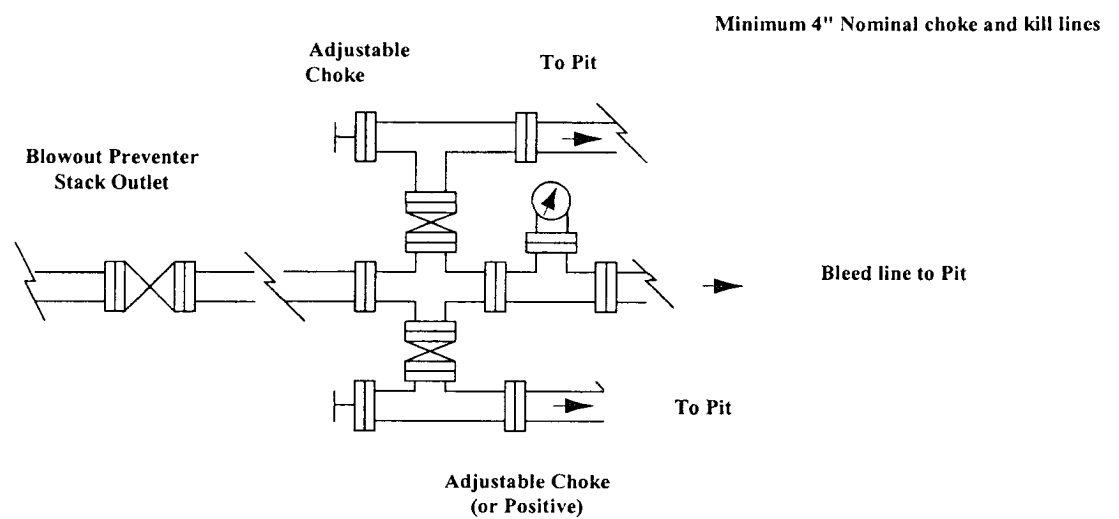
1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 2000 psi WP minimum.
4. All fittings to be flanged.
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 2000 psi WP minimum.
6. All choke and fill lines to be securely anchored especially ends of choke lines.
7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
8. Kelly cock on Kelly.
9. Extension wrenches and hands wheels to be properly installed.
10. Blow out preventer control to be located as close to driller's position as feasible.
11. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation all API specifications.

# Chevron USA Inc.

## Exhibit #9 BOPE Schematic



### Choke Manifold Requirement (2000 psi WP) No Annular Required



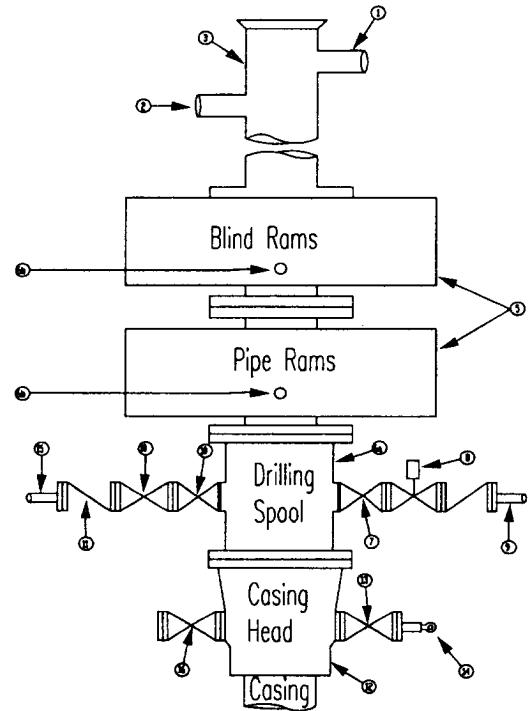
**Chevron USA Inc.**  
**Minimum Blowout Preventer Requirements**  
**2000 psi Working Pressure**  
**2 MWP**  
**EXHIBIT #10**

**Stack Requirements**

| NO. | Items                                                                            | Min.<br>I.D. | Min.<br>Nominal |
|-----|----------------------------------------------------------------------------------|--------------|-----------------|
| 1   | Flowline                                                                         |              | 2"              |
| 2   | Fill up line                                                                     |              | 2"              |
| 3   | Drilling nipple                                                                  |              |                 |
| 4   | Annular preventer                                                                |              |                 |
| 5   | Two single or one dual hydraulically operated rams                               |              |                 |
| 6a  | Drilling spool with 2" min. kill line and 3" min choke line outlets              |              | 2" Choke        |
| 6b  | 2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above) |              |                 |
| 7   | Valve Gate Plug                                                                  | 3 1/8        |                 |
| 8   | Gate valve-power operated                                                        | 3 1/8        |                 |
| 9   | Line to choke manifold                                                           |              | 3"              |
| 10  | Valve Gate Plug                                                                  | 2 1/16       |                 |
| 11  | Check valve                                                                      | 2 1/16       |                 |
| 12  | Casing head                                                                      |              |                 |
| 13  | Valve Gate Plug                                                                  | 1 13/16      |                 |
| 14  | Pressure gauge with needle valve                                                 |              |                 |
| 15  | Kill line to rig mud pump manifold                                               |              | 2"              |

**OPTIONAL**

|    |               |         |  |
|----|---------------|---------|--|
| 16 | Flanged Valve | 1 13/16 |  |
|----|---------------|---------|--|



**CONTRACTOR'S OPTION TO FURNISH:**

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 2000 psi minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers' position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

**MEC TO FURNISH:**

1. Bradenhead or casing head and side valves.
2. Wear bushing. If required.

**GENERAL NOTES:**

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, or bean

5. sizes, retainers, and choke wrenches to be conveniently located for immediate use.
6. All valves to be equipped with hand-wheels or handles ready for immediate use.
7. Choke lines must be suitably anchored.
8. Handwheels and extensions to be connected and ready for use.
9. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
10. All seamless steel control piping (2000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
11. Casinghead connections shall not be used except in case of emergency.
12. Do not use kill line for routine fill up operations.

**Chevron USA Inc.**

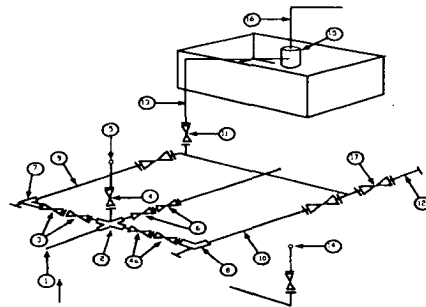
Exhibit #11

**MINIMUM CHOKE MANIFOLD**

3,000, 5,000, and 10,000 PSI Working Pressure

2 M will be used or greater

3 MWP - 5 MWP - 10 MWP

**Mud Pit****Reserve Pit**

\* Location of separator optional

**Below Substructure****Minimum requirements**

| No. |                                                  | 3,000 MWP |         |        | 5,000 MWP |         |        | 10,000 MWP |         |        |
|-----|--------------------------------------------------|-----------|---------|--------|-----------|---------|--------|------------|---------|--------|
|     |                                                  | I.D.      | NOMINAL | Rating | I.D.      | Nominal | Rating | I.D.       | Nominal | Rating |
| 1   | Line from drilling Spool                         |           | 3"      | 3,000  |           | 3"      | 5,000  |            | 3"      | 10,000 |
| 2   | Cross 3" x 3" x 3" x 2"                          |           |         | 3,000  |           |         | 5,000  |            |         |        |
| 2   | Cross 3" x 3" x 3" x 2"                          |           |         |        |           |         |        |            |         | 10,000 |
| 3   | Valve Gate Plug                                  | 3 1/8     |         | 3,000  | 3 1/8     |         | 5,000  | 3 1/8      |         | 10,000 |
| 4   | Valve Gate Plug                                  | 1 13/16   |         | 3,000  | 1 13/16   |         | 5,000  | 1 13/16    |         | 10,000 |
| 4a  | Valves (1)                                       | 2 1/16    |         | 3,000  | 2 1/16    |         | 5,000  | 2 1/16     |         | 10,000 |
| 5   | Pressure Gauge                                   |           |         | 3,000  |           |         | 5,000  |            |         | 10,000 |
| 6   | Valve Gate Plug                                  | 3 1/8     |         | 3,000  | 3 1/8     |         | 5,000  | 3 1/8      |         | 10,000 |
| 7   | Adjustable Choke (3)                             | 2"        |         | 3,000  | 2"        |         | 5,000  | 2"         |         | 10,000 |
| 8   | Adjustable Choke                                 | 1"        |         | 3,000  | 1"        |         | 5,000  | 2"         |         | 10,000 |
| 9   | Line                                             |           | 3"      | 3,000  |           | 3"      | 5,000  |            | 3"      | 10,000 |
| 10  | Line                                             |           | 2"      | 3,000  |           | 2"      | 5,000  |            | 2"      | 10,000 |
| 11  | Valve Gate Plug                                  | 3 1/8     |         | 3,000  | 3 1/8     |         | 5,000  | 3 1/8      |         | 10,000 |
| 12  | Line                                             |           | 3"      | 1,000  |           | 3"      | 1,000  |            | 3"      | 2,000  |
| 13  | Line                                             |           | 3"      | 1,000  |           | 3"      | 1,000  |            | 3"      | 2,000  |
| 14  | Remote reading compound Standpipe pressure quage |           |         | 3,000  |           |         | 5,000  |            |         | 10,000 |
| 15  | Gas Separator                                    |           | 2' x 5' |        |           | 2' x 5' |        |            | 2' x 5' |        |
| 16  | Line                                             |           | 4"      | 1,000  |           | 4"      | 1,000  |            | 4"      | 2,000  |
| 17  | Valve Gate Plug                                  | 3 1/8     |         | 3,000  | 3 1/8     |         | 5,000  | 3 1/8      |         | 10,000 |

- (1) Only one required in Class 3M  
 (2) Gate valves only shall be used for Class 10 M  
 (3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

**EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTION**

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees.



P.O. Box 960  
Artesia, NM 88211-0960  
Office (505) 748-1288  
Fax (505) 746-9539

August 25, 2003

Oil Conservation Division  
Attn: Bryan Arrant  
1301 W. Grand Avenue  
Artesia, NM 88210



Re: ROE for Skelly Unit Wells  
Sec. 22 & 15 T17S R31E

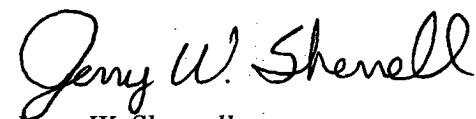
Dear Mr. Arrant:

Per our conversation, I am requesting that you to please approve the Drilling of the Skelly Unit Wells. The H<sub>2</sub>S concentration from Paddock wells in these sections is low enough that no contingency plan needs to be submitted for these wells or facilities.

If we can be of any further assistance, please feel free to call.

Sincerely,

MACK ENERGY CORPORATION

  
Jerry W. Sherrell  
Production Clerk

JWS/