

# OCD-ARTESIA

Form 3160-5  
(August 2007)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

### SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Serial No.  
NMLC029420A

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE -- Other instructions on page 2.**

1. Type of Well

☒ Oil Well    ☐ Gas Well    ☐ Other

2. Name of Operator  
CHEVRON USA INCORPORATED

3a. Address  
(Agent)  
15 Smith Road Midland, TX 79705

3b. Phone No. (include area code)  
432-687-7375

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

Sec 15 T17S R31E 1175 FSL 2310 FWL, Unit N

7. If Unit of CA/Agreement, Name and/or No.  
NMNM71030C

8. Well Name and No.  
Skelly Unit 964

9. API Well No.  
30-015-34686

10. Field and Pool or Exploratory Area  
FREN; GLORIETA-YESO 26770

11. Country or Parish, State  
EDDY COUNTY, NM

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

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

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

Please review the attached AMENDED program for deepening the existing Paddock producing well to the Blinbery reservoir. The existing sundry will remain as is. Please note modifications to Section 4 Casing/Cement Program as we have clarified that our ultimate objective is to have the deepened Skelly well to be producing from the Blinbery and Paddock which is recognized by the OCD as the Yeso interval.

Also, please note modifications to the Deepening Procedure Step 2 as we have included a pressure test on the cement squeezed Paddock perforations to 500 psi for 20 mins.

Upon BLM approval of the AMENDED deepening program, please remove items E and F from the Conditions of Approval.

All modifications were aided by the technical expertise of Mr. Ed Fernandez, BLM representative.

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**RECEIVED**

JAN 13 2012

NMOC ARTESIA



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

Denise Pinkerton

Title Regulatory Specialist

Signature

*Denise Pinkerton*

Date

*01/03/2012*

Accepted for record

NMOC

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**Skelly Unit 964  
Chevron USA Inc.  
30-015-34686  
January 10, 2012  
Conditions of Approval**

**Original COA still applies with the following changes:**

1. Item e) and f) and h) omitted
2. New item e,f) as follows: 4: liner minimum tie back to production casing will be 100 feet, this will avoid covering the existing perforations from 5047'-5225.5'. Note 5-1/2" csg set at 5401'.

**EGF 011012**

# OCD-ARTESIA

Form 3160-5  
(August 2007)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

### SUNDRY NOTICES AND REPORTS ON WELLS *Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

SUBMIT IN TRIPLICATE - Other instructions on page 2		5. Lease Serial No LC-029420A
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator CHEVRON U.S.A. INC (4323)		7. If Unit of CA/Agreement, Name and/or No
3a. Address 15 SMITH ROAD MIDLAND, TEXAS 79705		8. Well Name and No SKELLY UNIT #964 (29742)
3b. Phone No (include area code) 432-687-7375		9. API Well No 30-015-34686
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1175' FSL & 2310' FWL, SECTION 15, UL N, T-17S, R-31E		10. Field and Pool or Exploratory Area FREN; GLORIETA-YESO (26770)
		11. Country or Parish, State EDDY COUNTY, NEW MEXICO

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

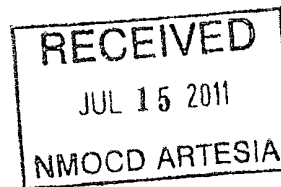
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input checked="" type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	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

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

CHEVRON U.S.A. INC INTENDS TO DEEPEN THE SUBJECT WELL. CHEVRON RESPECTFULLY REQUESTS A 1 YEAR APPROVAL.

PLEASE FIND ATTACHED, THE DEEPENING PROCEDURE, DEEPENING PROGRAM, COMPLETION PROCEDURE, AND CLOSED LOOP INFORMATION FOR THE NMOCD.

Deepening operations will be conducted by COG Opr LLC, agent for Chevron



SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) DENISE PINKERTON		Title REGULATORY SPECIALIST
Signature: <i>Denise Pinkerton</i>		Date: 05/23/2011
THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by: <i>Ted M. Morgan</i>	<div style="border: 2px solid black; padding: 5px; text-align: center;"> <b>APPROVED</b>  JUN 22 2011  Petroleum Engineer  BUREAU OF LAND MANAGEMENT  CARLSBAD FIELD OFFICE </div>	
<p>Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.</p>		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

## SKELLY UNIT #964 DEEPENING PROGRAM

### 1. Estimated Tops of Important Geologic Markers

Yeso Group +/- 5000'

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

Yeso Group +/- 5000'

This deepening originates in the Yeso and will finish at the base of the Yeso. The entire Yeso group is an oil and gas bearing interval.

### 3. Casing Program

Hole Size	Interval	OD Casing	Weight	Grade**	Jt./Condition	Burst/collapse/tension
4-3/4"	5251' - 6750'	4"	11.3#	L-80 or P-110	ULT-FJ/New	3.98/4.09/3.21 (L80) 5.47/5.23/4.25 (P110)

\*\* Due to casing shortages, either L-80 or P-110 will be run. The exact grade is unknown at time of requesting permit.

**NOTE: CHEVRON USA INC REQUESTS A VARIANCE TO THE 0.422" STAND OFF RULE BETWEEN CASING AND WELLBORE.**

### 4. Casing/Cement Program

4" Liner: Class C, 120 sxs, yield 1.37. 50' minimum tie back to production casing which avoids covering existing Paddock perforations.

**PRIOR TO DRILLING FRESH HOLE THROUGH BLINEBRY RESERVOIR, CHEVRON WILL CEMENT SQUEEZE EXISTING PADDOCK PERFORATIONS TO PREVENT LOST CIRCULATION WHILE DRILLING. CHEVRON'S INTENT IS TO PRODUCE THE BLINEBRY RESERVOIR UNTIL RESERVOIR PRESSURE EQUALIZES (TYPICALLY 6 TO 12 MONTHS UPON THE DECLINE CURVE ANALYSIS). AFTER THE DECLINE CURVE ANALYSIS, CHEVRON WILL RECOMPLETE THE PADDOCK RESERVOIR AND PRODUCE FROM BOTH THE BLINEBRY AND PADDOCK WHICH IS RECOGNIZED BY THE OCD AS ONE INTERVAL (YESO). CHEVRON USA INC REQUESTS A VARIANCE TO THE LINER TOP FLUID ENTRY OR PRESSURE TEST. AS PER ONSHORE ORDER NO. 2 SECT III: REQUIREMENTS, PART B. CASING AND CEMENTING REQUIREMENTS, SUBPART b. "NO TEST SHALL BE REQUIRED FOR LINERS THAT DO NOT INCORPORATE OR NEED A SEAL MECHANISM." CHEVRON USA INC BELIEVES WE MEET THE CRITERIA TO NOT BE REQUIRED TESTING THE LINER TOP BECAUSE THERE IS NO NEED FOR A SEAL MECHANISM.**

### 5. Minimum Specifications for Pressure Control

The BOP equipment will be a 3000 psi double ram type manually operated preventer. This equipment will be nipple up to a 7-1/16" 3K flange. The pipe rams are located above blind rams. There is no choke or kill manifold. The BOP is tested to 500 psi prior to drilling new formation. Access to the annulus will be through the valves on the 5-1/2" casing head.

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

This well will drilled from end of the existing 5-1/2" casing to TD with 2% KCl.

### 7. Auxillary Well Control and Monitoring Equipment

- A. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

#### **8. Logging, Testing, and Coring Program**

- A. The electric logging program will consist of GR, Spectral Gr, Dual Spaced Neutron, CSNG Log and will be run from TD to 5-1/2" production casing shoe.
- B. No drill stem tests.
- C. No conventional coring anticipated.
- D. Further testing procedures will be determined after the 4" liner has been cemented at TD, based on drill shows and log evaluation.

#### **9. Abnormal Conditions, Pressure, Temperatures, and Potential Hazards**

No abnormal pressures or temperatures are anticipated. The estimated bottomhole temperature at TD is 110 degrees and the estimated maximum bottomhole pressure is 2800 psig. The drilling starts in the Yeso and ends in the Yeso. The section of Yeso being drilled has very low permeability (less than 1 md).

#### **10. Anticipated Starting Date and Duration of Operations**

There will be no road or location work required as this is an existing well location. Once commenced, drilling operations should be finished in approximately 14 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made.

#### **11. Centralizer Program**

Fixed blade stabilizer subs will be utilized in the casing string to insure adequate isolation and seal throughout the wellbore. These stabilizer subs are positive fixed blade type. These subs will actually be screwed into the casing string. A diagram of the fixed blade stabilizer sub is located at the end of this program.

The standard location of the stabilizers will be the following:

##### *Shoe Location*

Guide shoe, 1 jt casing, stabilizer sub, float collar, 1 jt casing, stabilizer sub

##### *Perf Interval Location – between perf intervals*

Stabilizer sub, 1 jt casing, stabilizer sub

##### *Top of Liner Location*

DV tool, 1 jt casing, stabilizer sub, 1 jt casing, stabilizer sub

#### **12. Summary Drilling and Completion Program**

##### **Deepening Procedure**

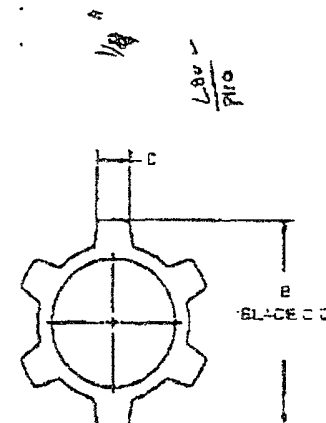
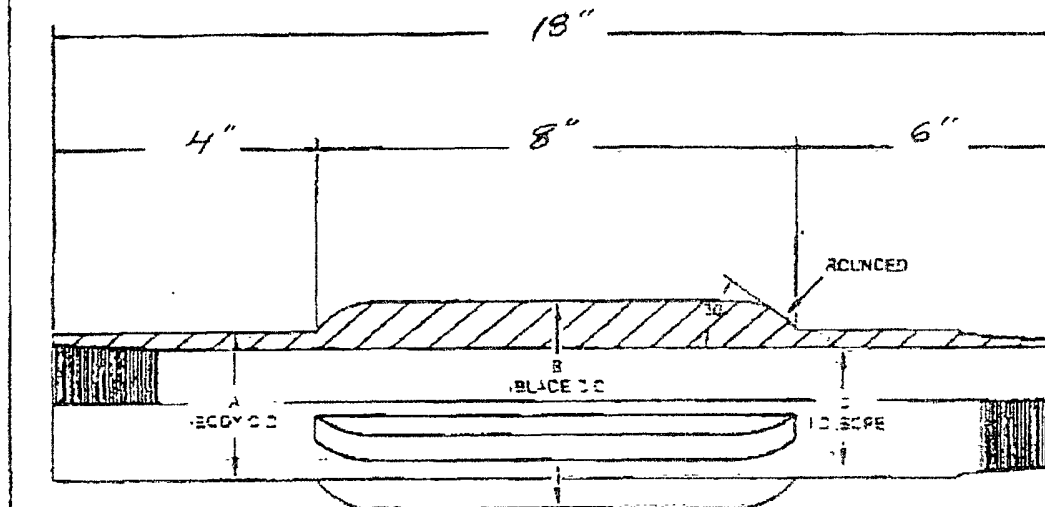
1. MIRU rig.
2. Sqz upper Yeso w/ +/- 400 sx of Class C neat. Drill out squeeze. Test squeeze to 500 psi for 20 minutes using chart recorder.
3. PU 4-3/4" bit and drill 4-3/4" hole from 5416' to 6750'.
4. POOH w/ bit and drillstring.
5. RIH w/ logs and log from TD to 5100'.

6. RIH w/ 4", 11.3# casing. See section 11 for general centralizer program.
7. Cement casing from TD to 5251' w/ 120 sxs Class C cmt. Drop plug and open DV tool. Circ cmt off DV tool. Drop plug to close DV tool.
8. PU workstring and RIH and drill out DV tool. POOH and LD workstring.
9. RDMO rig.


#### Completion Procedure

1. MIRU rig.
2. RIH/ w/ perforating guns and perforate Yeso from 6350 – 6550 w/ 2 spf, 30 holes.
3. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 6300'.
4. RIH w/ perforating guns and perforate Yeso from 6050' – 6250'.
5. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 6000'.
6. RIH w/ perforating guns and perforate Yeso from 5750' – 5950'.
7. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand.
8. RIH and drill out plug at 6000' and 6300'.
9. RIH and cut or back off 4" casing at 5251'. POOH w/ 4" casing. Leave 4" liner from 5251' to 6750' (TD).
10. RIH w/ tbg and locate end of tbg at 5200'.
11. RIH w/ rods and pump.
12. RDMO rig.

Centralizer Diagram



SIZE	A	B	C	D	E	F	G	DRIFT
4" x 3/4" 11.6"	4.050	4.750	3.347"	3/4"				3-303"

 <b>RAY OIL TOOL CO.</b>	
CENTRALIZED INTERCASING	
CLIENT	CINCO Res
WELL NAME & NO	
CASING	4" P145 11.6"
MATERIAL	4 3/4" x 3/4" x 18" Q135