

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

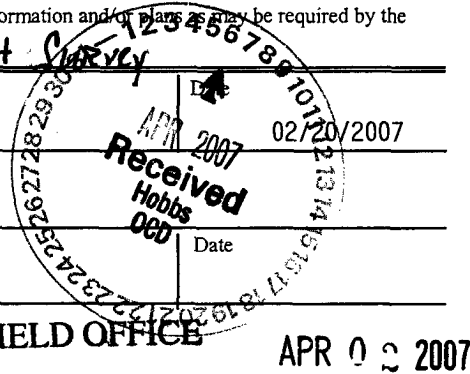
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. LC-033706-A
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Chevron U.S.A. Inc.		7. Unit or CA Agreement Name and No.
3a. Address 15 Smith Road, Midland Texas 79705	3b. Phone No. (include area code) 432-687-7375	8. Lease Name and Well No. <i><4323></i> C.P. FALBY FEDERAL A #6
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface UL-D, 1310' FNL, 1100' FWL At proposed prod. zone SAME		9. API Well No. 10-025-38372
14. Distance in miles and direction from nearest town or post office* 2 MILES SOUTHWEST OF EUNICE, NM		10. Field and Pool, or Exploratory PENROSE SKELLY GRAYBURG
15. Distance from proposed* location to nearest property or lease line, ft. 1100' FROM WEST LEASE LINE (Also to nearest drg. unit line, if any)		11. Sec., T., R., M., or Blk. and Survey or Area SEC 8, T-22-S, R-37-E
16. No. of Acres in lease 320 ACRES		12. County or Parish LEA
17. Spacing Unit dedicated to this well 40		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		20. BLM/BIA Bond No. on file 2A0329 22
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3429'		22. Approximate date work will start*
23. Estimated duration		

Surface owner - Chevron 24. Attachments *NSL #5533*, *Pit info for NMDC*
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form: *H2S PLAN*

- Well plat certified by a registered surveyor.
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Denise Pinkerton</i>	Name (Printed/Typed) DENISE PINKERTON
Title REGULATORY SPECIALIST	
Approved by (Signature) <i>ACTING /s/ James Stovall</i>	Name (Printed/Typed) CARLSBAD FIELD OFFICE
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE



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

APPROVAL FOR 1 YEAR

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 Reverse)

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED**

DISTRICT I

1625 N. FRANCE DR., HOBBBS, NM 88240

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-38372	Pool Code 50350	Pool Name Penrose Kelly Drayburg
Property Code 29921	Property Name C.P. FALBY FEDERAL A	Well Number 6
OGRID No. 4323	Operator Name CHEVRON U.S.A. INC.	Elevation 3429'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	22-S	37-E		1310	NORTH	1100	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			1/SL-5533

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

<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=514716.1 N X=852964.8 E</p> <p>LAT.=32.409877° N LONG.=103.189633° W</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Denise Pinkerton</i> 22807 Signature Date Denise Pinkerton Printed Name</p>
	<p>SURVEYOR CERTIFICATION</p> <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><i>Hobbs</i> Signature OCT 30 2006 Date</p>
	<p>Signature & Seal of Professional Surveyor</p> <p><i>Gary E. Edson</i> 4/20/06 Signature 06.11.1691 Seal</p>
	<p>Certificate No. GARY EDSON 12641</p>

PROPOSED DRILLING PROGRAM

C. P. Falby B Federal #6

Section 8

Township 22 South

Range 37 East

Lea County, New Mexico

**Surface Location: ~~1320'~~ FNL, ~~1320'~~ FWL
1310' 1100'**

**Prepared By: Rick Parrish
February 13, 2007**

WBS Number: TBD

API Number: TBD

Chevno: TBD

DIRECTIONS

TBD.

PROPOSED WORK

SURFACE HOLE:

1. Call the 1-800 dig number and notify BLM (505-234-5972) 3 working days prior to building location. Build location and cellar prior to moving in rotary tools. Have reserve pits lined and filled with water. A fresh water well should be located and utilized for fresh water as opposed to trucking. Set a 20" cemented conductor at $\pm 40'$.
2. Move in and rig up rotary tools. Conduct safety meeting with rig personnel. Post drilling permit and emergency response plan in the dog house. Notify the BLM and OCD of intent to spud.
3. Pick up a 12-1/4" bit, bit sub, and 6-1/2" collars. Deviation is not expected to be a problem. Inclinations less than one degree are common.
4. Spud well utilizing fresh water spud mud as the drilling fluid. Circulate the reserve pit for solids control. It is imperative that brine, oil, or other contaminants not be introduced into the surface hole. The main purpose of this hole is to protect fresh water sands.
5. Drill a 12-1/4" hole to ~440'. Run 8-5/8" casing as follows:
 - a) Guide shoe
 - b) 1 joint 8-5/8", 24 ppf, J-55, STC casing
 - c) Insert float
 - d) 8-5/8", 24 ppf, J-55, STC casing to surface

Centralize the bottom three joints and every fourth joint thereafter.

Threadlock the field and mill ends of the bottom three joints and all float equipment.

Inspection: None

6. Circulate casing capacity or annular volume, whichever is greater. Cement in accordance with attached cementing summary. Displace cement with fresh water utilizing wiper plug. Check float. If float fails, shut in for a minimum of four hours. If cement does not circulate, will need to run temperature survey, notify BLM and 1" back to surface.
7. Cut off casing. Install casing (starting) head. Test starting head to +750 psi (55% of collapse rating).
8. Nipple up BOP stack. Test BOPE to 250 psi low and 1000 psi high. Test casing to 1000 psi.

↑
CCT

9. Install H₂S detection equipment prior to drilling out. This equipment will remain on location until the rig is released. Equipment to include warning signs, windsocks, and detectors at the cellar, at the rotating head, at the flow line and on the floor.

PRODUCTION HOLE:

1. Trip in hole with a 7-7/8" bit, bit sub, and 6-1/2" drill collars. Tag cement.
2. Drill a 7-7/8" hole to ~4300'. DRILL OUT WITH FRESH WATER. DRILL WITH FRESH WATER TO 1,100' THEN SWAP TO Brine water to TD (this is to satisfy BLM requirements for protection of surface waters to the Rustler (1075'). Mud up prior to TD with a starch mud.
3. Condition hole and trip out and run open hole logs (if applicable).
4. Trip in hole and condition for casing; trip out of hole laying down.
5. Run 5-1/2" production casing as follows:
 - a) Float shoe
 - b) 2 joints 5-1/2", 15.5 ppf, J-55, LTC
 - c) Float collar
 - d) 5-1/2", 15.5 ppf, J-55, LTC to surface

Centralize the bottom 2 joints, 1 per joint to 3350', and 1 on last joint. Threadlock the shoe track.

Inspection: BCI and drift

15. Cement in accordance with attached cementing summary.
16. Set slips with weight as cemented. Cut off casing. Install permanent 11" 3000 psi X 7-1/16" 3000 psi tubing head. Test seal to 50% of collapse rating.
17. Release rig. Rig down and move out rotary tools.

POTENTIAL PROBLEMS

Surface Hole:

Tight hole due to redbeds.

Production Hole:

Lost circulation in the Grayburg and San Andres formations.

Stuck pipe in the San Andres.

MUD PROGRAM

<u>Interval</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Vis. (sec/qt)</u>	<u>Fluid Loss (cc)</u>	<u>Remarks</u>
Surface	FW Spud	8.6	32	No control	Circulate reserve
Production	Brine	10	29	No control	Circulate reserve
TD	Brine	10	29	8-10	

When circulating the reserve, it is a good practice to switch to the steel pits for one hour each tour to monitor gains/losses. Mud up to a starch/PAC system at TD.

EVALUATION PROGRAM

Mud Logging:

None.

Open Hole Logs:

None.

SURFACE CEMENTING PROGRAM

Cement with 475 sacks Class "C" with 2% CaCl₂ + 0.1 pps Polyester flake.

Minimum waiting on cement time: 12 hours

Cement properties:

Slurry weight:14.8 ppg

Slurry yield: 1.34 ft³ per sack

Cement must circulate to surface. If cement does not circulate, run a temperature survey six to eight hours after cementing. Contact the BLM and OCD and the Midland office for proper procedure to bring cement to surface. Normal procedure is to run one inch tubing down the annulus to top of cement, therefore one inch tubing should be on location or readily available.

Cement volume is based on gauge hole volume plus 235% excess.

PRODUCTION CEMENTING PROGRAM

Cement with 550 sacks 35:65 Poz:Class "C" w/ 5% D44 (NaCl) + 6% D20 (gel) + 0.4% D112 (FLA) + 0.1 pps D130 (Polyester flake) + 0.2% D46 (Antifoam followed by 525 sacks 50:50 Poz:"C" w/ 5% D44 (NaCl) + 2% D20 (gel) + 0.1 pps D130 (Polyester flake .

Minimum waiting on cement time: 12 hours

Cement properties:

Slurry weight: (lead).....12.4 ppg
(tail)..... 14.2 ppg

Slurry yield: (lead).....2.15 ft³ per sack
(tail)..... 1.35 ft³ per sack

Cement volume is based on gauge hole volume plus 148% excess for the lead and 195% excess for the tail. Cement is designed to circulate to surface.

CASING SUMMARY

SURFACE:

445', 8-5/8", 24 ppf, J-55, STC

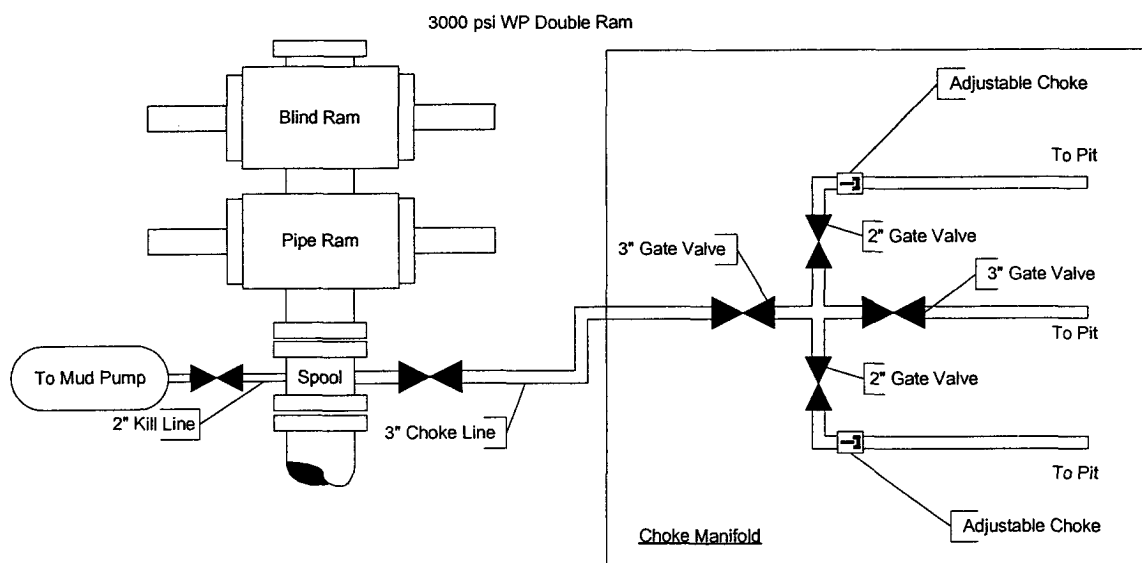
PRODUCTION:

5-1/2", 15.5 ppf, J-55, LTC

CASING PROPERTIES

	BURST		COLLAPSE		Test Pressure
	<u>Rated</u>	<u>(80%)</u>	<u>Rated</u>	<u>(80%)</u>	
8-5", 24 ppf, J-55, STC	2950	2360	1370	1100	1000
5-1/2", 15.5 ppf, J-55, LTC	4810	3850	4040	3230	2000

Capstar 24 -
BOPE



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.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-144
June 1, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Chevron USA Inc Telephone: 432-687-7375 e-mail address: leakejd@chevron.com
Address: 15 Smith Road, Midland, TX 79705
Facility or well name: C.P. Falby Fed B 6 API #: New U/L or Qtr/Qtr 30-025-38372 Sec 8 T 22S R 37E
County: Lea, New Mexico Latitude 32.409817 N Longitude 102.189133 W NAD: 1927 ☒ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐
Workover ☐ Emergency ☐
Lined ☒ Unlined ☐
Liner type: Synthetic ☒ Thickness 20 mil Clay ☐
Pit Volume ~3500 bbl

Below-grade tank

Volume: _____ bbl Type of fluid: _____
Construction material: _____
Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet	(20 points)
<u>50 feet or more, but less than 100 feet</u>	<u>(10 points)</u>
100 feet or more	(0 points)

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes	(20 points)
<u>No</u>	<u>(0 points)</u>

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet	(20 points)
<u>200 feet or more, but less than 1000 feet</u>	<u>(10 points)</u>
<u>1000 feet or more</u>	<u>(0 points)</u>

Ranking Score (Total Points) **10**

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☒ offsite ☐ If offsite, name of facility _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒, or an (attached) alternative OCD-approved plan ☐.

Date: 02/13/07

Printed Name/Title Rick Parrish, Drilling Engineer

Signature Rick Parrish / GAP

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title CHRIS WILLIAMS / DIST. SURV

Signature Chris Williams

Date: 4/9/07

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Chevron USA, Inc.
Well Name & No. 6-C.P. Falby A Federal
Location: 1310FNL, 1100FWL, Section 8, T-22-S, R-37-E
Lease: LC-033706-A

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I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
1. Spudding well
 2. Setting and/or Cementing of all casing strings
 3. BOPE tests
- Lea County call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612
- B. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the Tansill formation. **H₂S reported in section 17 measuring 300 ppm in the gas stream of the Eunice and Eumont Fields (Tansill, Yates, Seven Rivers, and Queen) and at 300 ppm from the Blinbry and Drinkard formations. Plan attached to APD.**
- C. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

II. CASING:

- A. The 8-5/8 inch surface casing shall be set at approximately 440 feet and cemented to the surface.
1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, **18 hours for a water basin**, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
 3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
 4. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the Delaware.

- B. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement to circulate to surface.**

- C. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

Diagram attached to APD meets the requirements for a 2M BOP system.

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53.
- B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) PSI**.
- C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
1. The tests shall be done by an independent service company.
 2. The results of the test shall be reported to the appropriate BLM office.
 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

IV. DRILLING MUD:

Fresh water mud to be used to the Rustler Anhydrite.

Engineer on call phone: 505-706-2779

WWI 032107