

DISTRICT I

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

DISTRICT II

P.O. Box Drawer DD, Artesia, NM 88211-0719

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-101

Revised February 10, 1999

Instructions on back
 Submit to Appropriate District Office

State Lease - 6 Copie

Fee Lease - 5 Copie

☐ AMENDED REPORT**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

¹ Operator Name and Address CHEVRON USA INC 15 SMITH RD, MIDLAND, TX 79705		² OGRID Number 4323
		³ API Number 30-025-06902
⁴ Property Code 2682	⁵ Property Name H.T. MATTERN (NCT-B)	⁶ Well No. 5

7 Surface Location

UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
O	30	21-S	37-E		810'	SOUTH	1980'	EAST	LEA

8 Proposed Bottom Hole Location If Different From Surface

UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
⁹ Proposed Pool 1 PENROSE SKELLY GRAYBURG					¹⁰ Proposed Pool 2				

¹¹ Work Type Code D <i>Deepen</i>	¹² WellType Code O	¹³ Rotary or C.T. ROTARY	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3487'
¹⁶ Multiple No	¹⁷ Proposed Depth 3950'	¹⁸ Formation GRAYBURG	¹⁹ Contractor	²⁰ Spud Date 5/20/2006

21 Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
NO CHANGE					

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone.
 Describe the blowout prevention program, if any. Use additional sheets if necessary.

CHEVRON U.S.A. INC. INTENDS TO DEEPEN AND FRAC STIMULATE TO INCREASE PRODUCTION FROM THE GRAYBURG RESERVOIR.

A PIT WILL NOT BE USED FOR THIS DEEPENING. A STEEL FRAC TANK WILL BE UTILIZED.

THE INTENDED PROCEDURE AND CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway
Deepen

²³ I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature

Denise Pinkerton

Printed Name

Denise Pinkerton

Title

Regulatory Specialist

Date

5/10/2006

Telephone

432-687-7375

OIL CONSERVATION DIVISION

Approved By:

[Signature]

Title:

PETROLEUM ENGINEER

Approval

MAY 17 2006

Expiration Date:

Conditions of Approval:

Attached ☐

H. T. Mattern (NCT-B) # 5

Penrose Skelly Field

T21S, R37E, Section 30

Job: Drill Well Deeper To Lower Grayburg Formation And Frac Stimulate

Procedure:

1. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. Buried fiberglass lines will be tested with 300 psi. All poly pipe (SDR7 and SDR11) will be tested w/100 psi. All steel lines will be tested w/500 psi. If a leak is found, contact Donnie Ives for repair/replacement. If test is good, bleed off pressure and **open valve** at header. Document this process in the morning report.
2. MI & RU workover unit. Bleed pressure from well, if any. Pump down csg with 8.6 PPG cut brine water, if necessary to kill well. POH with rods and pump. Remove WH. Install BOP's and test to 1000 psi. POH LD 2 3/8" production tbg string. **Note: Do not exceed 350 psi casing pressure due to cmt squeezed perfs from 3158-3618'.**
3. PU 4 3/4" MT bit and GIH on 2 7/8" work string to approximately 3790'. MI & RU foam unit(s). LD and cleanout 4 3/4" open hole to original TD at 3800'. Drill well deeper to a new TD of 3950'. Circulate well clean from 3950'. POH with 4 3/4" MT bit and drill string. LD MT bit.
4. PU and GIH w/ 5 1/2" Lok-Set pkr & On-Off tool w/ 2.25" "F" profile, 18 jts of 3 1/2" EUE 8R L-80 tbg, 5 1/2" hydraulic-set pkr, and 100 jts. of 3 1/2" EUE 8R L-80 work string, testing to 8500 psi. Set Lok-Set pkr at 3650' and hydraulic-set pkr at 3100'. Pressure annulus to 500 psi to test csg and pkr. Install frac head. Leave pressure on csg during frac job to observe for communication.
5. MI & RU DS Services. Frac well down 3 1/2" tubing at **40 BPM** with 88,000 gals of YF125, 176,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs **resin-coated** 16/30 mesh CR1630 proppant. Observe a maximum surface treating pressure of **8000 psi**. Pump job as follows:

Pump 2,000 gals 2% KCL water containing 55 gals Baker RE 4777-SCW Scale Inhibitor

Pump 1,000 gals 2% KCL water spacer

Pump 14,000 gals YF125 pad containing 5 GPT J451 Fluid Loss Additive

Pump 14,000 gals YF125 containing 0.5 PPG 16/30 mesh Jordan Sand & 5 GPT J451 FL Additive

Pump 12,000 gals YF125 containing 1.5 PPG 16/30 mesh Jordan Sand

Pump 12,000 gals YF125 containing 2.5 PPG 16/30 mesh Jordan Sand

Pump 14,000 gals YF125 containing 3.5 PPG 16/30 mesh Jordan Sand

Pump 16,000 gals YF125 containing 4.5 PPG 16/30 mesh Jordan Sand

Pump 6,000 gals YF125 containing 5 PPG **resin-coated** 16/30 mesh CR1630 proppant.

Flush to 3650' with 1,336 gals WF125. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services. **Leave well SI overnight.**

6. Open well. GIH and swab well until there is no sand inflow. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. Release pkr and POH with 3 1/2" work string. Lay down work string and pkrs.
7. PU and GIH with 4 3/4" MT bit on 2 7/8" work string to 3950'. If fill is tagged, clean out to 3950' using 8.6 PPG cut brine water and air unit (if necessary). POH with 2 7/8" work string and bit. LD 2 7/8" work string and bit.
8. PU and GIH w/ Centrilift sub pump assembly, drain sub, 2 7/8" x 6' tbg sub, SN, and 116 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Suspend tbg with bottom of sub pump assembly at approximately 3650'.
9. Remove BOP's and install WH. RD & release pulling unit.
10. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH
5/8/2006

Well: **H. T. Mattern (NCT-B) # 5**Field: **Penrose Skelly**Reservoir: **Grayburg****Location:**

810' FSL & 1980' FEL
 Section: 30
 Township: 21S
 Range: 37E
 County: Lea State: NM

Elevations:

GL: 3487'
 KB: 3505'
 DF: 3504'

Current
Wellbore Diagram

Well ID Info:

Refno: FA7999
 API No: 30-025-06902
 L5/L6: U490300
 Spud Date: 10/27/44
 Compl. Date: 12/3/44

Surf. Csg: 9 5/8", 25.7#, SW
Set: @ 294' w/ 175 sks
Hole Size: 12 1/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tbg Detail:

EOT @ 3766'
 2 3/8" OD EUE 8R J-55 mud jt.
 2 3/8" x 4' perf tbg sub
 SN @ 3728'
 1 jt. 2 3/8" EUE 8R J-55 IPC tbg
 118 jts. 2 3/8" EUE 8R J-55 tbg

Perfs**Status**

3158-60'	Eumont - Cmt Sqzd
3184-86'	Eumont - Cmt Sqzd
3211-13'	Eumont - Cmt Sqzd
3250-52'	Eumont - Cmt Sqzd
3272-74'	Eumont - Cmt Sqzd
3304-06'	Eumont - Cmt Sqzd
3321-23'	Eumont - Cmt Sqzd
3360-62'	Eumont - Cmt Sqzd
3408-40'	Eumont - Cmt Sqzd
3530-64'	Eumont - Cmt Sqzd
3568-74'	Eumont - Cmt Sqzd
3578-86'	Eumont - Cmt Sqzd
3594-3618'	Eumont - Cmt Sqzd

Prod. Csg: 5 1/2", 14#, SS & H-40**Set:** @ 3673' w/ 200 sks**Hole Size:** 6 3/4"**Circ:** No **TOC:** 2415'**TOC By:** Temperature Survey**4 3/4" Open-Hole****Production Interval**

3673-3800' (Grayburg)

COTD: 3800'**PBTD:** 3800'**TD:** 3800'**Updated:** 5/8/06**By:** A. M. Howell

Well: **H. T. Mattern (NCT-B) # 5**Field: **Penrose Skelly**Reservoir: **Grayburg****Location:**

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Proposed
Wellbore Diagram

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 API No: 30-025-06902
 L5/L6: U490300
 Spud Date: 10/27/44
 Compl. Date: 12/3/44

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Set: @ 294' w/ 175 sks
Hole Size: 12 1/4"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	7.00
116	Jts. 2 7/8" J-55 Tbg	3588.00
	2 7/8" API S.N.	1.10
	2 7/8" x 10' J-55 Tbg Sub	10.00
	Centriflgt Sub Pump	44.00
116	Bottom Of Mtr >>	3650.10

Perfs**Status**

3158-60'	Eumont - Cmt Sqzd
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Form C-102

Revised February 10, 1999

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☐ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

¹ API Number 30-025-06902	² Pool Code 50350	³ Pool Name PENROSE SKELLY; GRAYBURG
⁴ Property Code 2682	⁵ Property Name H.T. MATTERN (NCT-B)	⁶ Well No. 5
⁷ OGRID Number 4323	⁸ Operator Name CHEVRON USA INC	⁹ Elevation 3487'

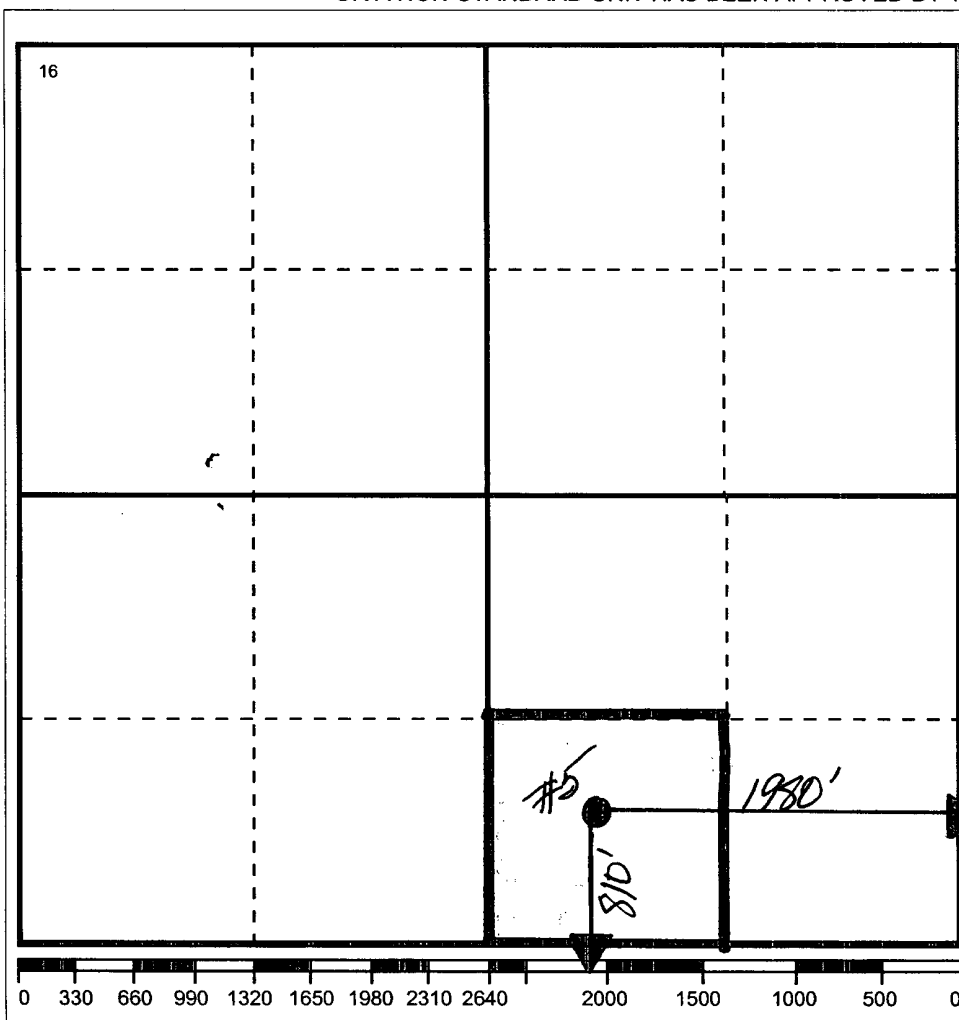
¹⁰ Surface Location

Ul or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
O	30	21-S	37-E		810'	SOUTH	1980'	EAST	LEA

¹¹ 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
¹² Dedicated Acre 40	¹³ Joint or Infill No	¹⁴ Consolidation Code	¹⁵ Order No.						

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

¹⁷ OPERATOR CERTIFICATION

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

Signature

Printed Name

Denise Pinkerton

Positio

Regulatory Specialist

Date

5/10/2006


¹⁸ 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 knowledge and
belief.

Date Surveyed

Signature & Seal of
Professional Surveyor

Certificate No.

 The sender of this message has requested a read receipt. [Click here to send a receipt.](#)

Mull, Donna, EMNRD

From: Phillips, Dorothy, EMNRD
To: Mull, Donna, EMNRD
Cc:
Subject: RE: Financial Assurance Requirement
Attachments:

Sent: Tue 5/16/2006 11:05 AM

All have blanket bonds and none of these appear on Jane's list.

From: Mull, Donna, EMNRD
Sent: Tuesday, May 16, 2006 8:41 AM
To: Phillips, Dorothy, EMNRD
Cc: Macquesten, Gail, EMNRD; Sanchez, Daniel J., EMNRD
Subject: Financial Assurance Requirement

Dorothy,

Is the Financial Assurance Requirement for these Operators OK?

Yates Petroleum Corp (25575)
Pogo Producing Co (17891)
Chevron USA Inc (4323)
Devon Energy Production Co LP (6137)
Cimarex Ennergy Co (215099)
BP America Production Co (778)
Mewbourne Oil Co (14744)
Occidental Permian Ltd (157984)

I have checked the Inactive well list and these Operators are OK there.

Please let me know. Thanks and have a nice day. Donna.