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 10,199
Instructions on bac
Submit to Appropriate District Offic
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	2 OGRID Number
CHEVRON USA INC 15 SMITH ROAD, MIDLAND, TX 79705	4323
	3 API Number 30-025-27530

4 Property Code	5 Property Name	6 Well No.
2683	H.T. MATTERN NCT-C	16

7 Surface Location

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
G	18	21S	37E		2080'	NORTH	1980'	EAST	LEA

8 Proposed 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

9 Proposed Pool 1	10 Proposed Pool 2
PENROSE SKELLY GRAYBURG	

11 Work Type Code	12 WellType Code	13 Rotary or C.T.	14 Lease Type Code	15 Ground Level Elevation
P	O	ROTARY	P	
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	6874'	GRAYBURG		11/10/2004

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 zoneand proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

CHEVRON U.S.A. INC. INTENDS TO RECOMPLETE THE SUBJECT WELL FROM THE BLINEBRY POOL TO THE GRAYBURG RESERVOIR. THE INTENDED PROCEDURE, CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.

Permit Expires 1 Year From Approval Date Unless ~~Drilling~~ Underway
Plugback

OCT 2004
RECEIVED
Hobbs
OCD

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 Leake
Printed Name: Denise Leake
Title: Regulatory Specialist
Date: 10/28/2004 Telephone: 915-687-7375

OIL CONSERVATION DIVISION

Approved By: Paul F. Kautz
Title: PETROLEUM ENGINEER
Approval Date: NOV 16 2004 Expiration Date:
Conditions of Approval Attached ☐

DeSoto/Nichols 3-94 ver 1.10

H T Mattern C #16
API #30-025-27530
2080' FNL & 1980' FEL
S18, T21S, R37E
Penrose Skelly
Lea County, New Mexico

PROCEDURE

Use 8.6 ppg brine water.

1. Displace flowline w/ fresh water. Have Field Specialist close valve at header. Pressure test line according to type. All polypipe (SDR7 and SDR11) will be tested to 100 psi. All steel lines will be tested to 500 psi. If a leak is found, contact Larry Williams for repair/replacement. If tests good, bleed off pressure and open valve at header. Document this process in the morning report.

2. MIRU Key PU & Smith RU. Bleed any pressure off well. Use 8.6 ppg brine water to kill well. POOH w/ rods & pump. NDWH NUBOP & EPA equipment. Test BOP. POOH w/ 2-3/8" Tbg.

3. RIH w/ 4-3/4" bit on 2-7/8" WS to 5510'. POOH & LD bit.

4. RU WL & RIH w/ 5-1/2" CIBP. Set CIBP @ 5460' & dump 30' cmt on top. POOH. RD WL.

5. RIH w/ 5-1/2" Pkr. Set Pkr @ 5410'. Test CIBP to 1000 psi. Release Pkr & POOH.

6. MIRU Baker Atlas WL. Tag cmt & 5430'. Run CBL/CCL log from 2500'-4500'. Correlate to Dresser Atlas Densilog dated 2/01/1982. Check proposed completion interval for good cement. If cement bond does not look adequate discuss squeezing options with engineer.

7. Perforate with 3-1/8" slick guns loaded w/ 4 JSPF, 120 degree phasing and 23 gram charges as follows:

Top Depth	Bottom Depth	Total Footage	Total Holes
3718	3720	2	8
3726	3729	3	12
3750	3760	10	40
3786	3798	12	48
3823	3835	12	48
3843	3846	3	12
3857	3860	3	12

3872	3877	5	20
3884	3890	6	24
3904	3908	4	16
3915	3920	5	20
3922	3931	9	36
3939	3942	3	12
3950	3960	10	40
3974	3978	4	16

8. RIH w/ 5-1/2" PPI packer w/ 12' element spacing and SCV. Test 2-7/8" WS to 4500 psi while RIH. Test PPI packer in blank pipe. Mark settings.

9. MIRU DS. Acidize perfs 3718'-3978' w/ 3,000 gals 15% NEFE HCl acid at a max rate of ½ BPM & 4000 psi surface pressure as follows:

Perfs	Acid Vol	Max Rate	PPI Setting
3718-3720	200 gals	1/2 bpm	3712-3724
3726-3729	200 gals	1/2 bpm	3723-3735
3750-3760	200 gals	1/2 bpm	3749-3761
3786-3798	200 gals	1/2 bpm	3786-3798
3823-3835	200 gals	1/2 bpm	3823-3835
3843-3846	200 gals	1/2 bpm	3838-3950
3857-3860	200 gals	1/2 bpm	3852-3864
3872-3877	200 gals	1/2 bpm	3868-3880
3884-3890	200 gals	1/2 bpm	3880-3892
3904-3908	200 gals	1/2 bpm	3902-3914
3915-3920	200 gals	1/2 bpm	3909-3921
3922-3931	200 gals	1/2 bpm	3921-3933
3939-3942	200 gals	1/2 bpm	3934-3946
3950-3960	200 gals	1/2 bpm	3949-3961
3974-3978	200 gals	1/2 bpm	3970-3982

Displace acid w/ 8.6# brine to top perf. Record ISIP, 5, and 10 SIP. RD DS. **If communication occurs during treatment, attempt to put away stage without exceeding 1,000 psi csg pressure. If stage can not be completed move to next and combine stage volumes.**

10. SI well for 2 hrs for acid to spend. Release PPI & PU above top perf. RU swab and swab back load before SION if possible. Record volumes, pressures, & fluid levels. Discuss results with Engineering. If excessive water is produced, selectively swab perf intervals as discussed w/ engineer.

11. POOH w/ PPI and LD. RIH w/ 5-1/2" pkr, on/off tool and profile on 3-1/2" WS testing to 7500 psi while RIH. Set packer @ +/- 3600'. Install frac head. Pressure test BS to 700 psi. Hold 500 psi on BS during frac job and observe for communication.

12. MIRU DS. Frac well down 3-1/2" tubing at **40 BPM** w/ 66,000 gals of YF135, 138,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs **resin-coated** 16/30 mesh CR4000 proppant. Max treating pressure 7000 psi. Pump job as follows:

    Pump 2,000 gals 2% KCl water containing 110 gals Baker SCW-358 Scale Inhibitor
    Pump 1,000 gal 2% KCl water spacer
    Pump 25,000 gals YF135 pad containing 5 GPT J451 Fluid Loss Additive
    Pump 5,000 gals YF135 containing 1.5 PPG 16/30 mesh Jordan Sand
    Pump 6,000 gals YF135 containing 2.5 PPG 16/30 mesh Jordan Sand
    Pump 7,000 gals YF135 containing 3.5 PPG 16/30 mesh Jordan Sand
    Pump 8,000 gals YF135 containing 4.5 PPG 16/30 mesh Jordan Sand
    Pump 10,000 gals YF135 containing 5.5 PPG 16/30 mesh Jordan Sand
    Pump 5,000 gals YF135 containing 6 PPG resin-coated 16/30 mesh CR4000 proppant

    Flush to 3718'. **Do not overflush.** SI well and record ISIP, 5, 10, and 15 minute SIP. RD DS. SION. RD DS.

13. Open well and bleed off any pressure. RU swab and swab well checking for sand inflow. Discuss results w/ engineer. Release packer and POOH. RIH w/ 4-3/4" bit to 4100'. POOH & LD bit.

14. RIH w/ 2-3/8" production tbg & hang off as per ALS recommendation. NDBOP NUWH. RIH w/ rods & pump as per ALS recommendation.

15. RD Key PU & Smith RR. Turn well over to production. Contact Lease Operator and inform them that the well is ready for operation.

Engineer - Keith Lopez
432-687-7120 Office
505-390-2227 Cell
303-949-3021 Home

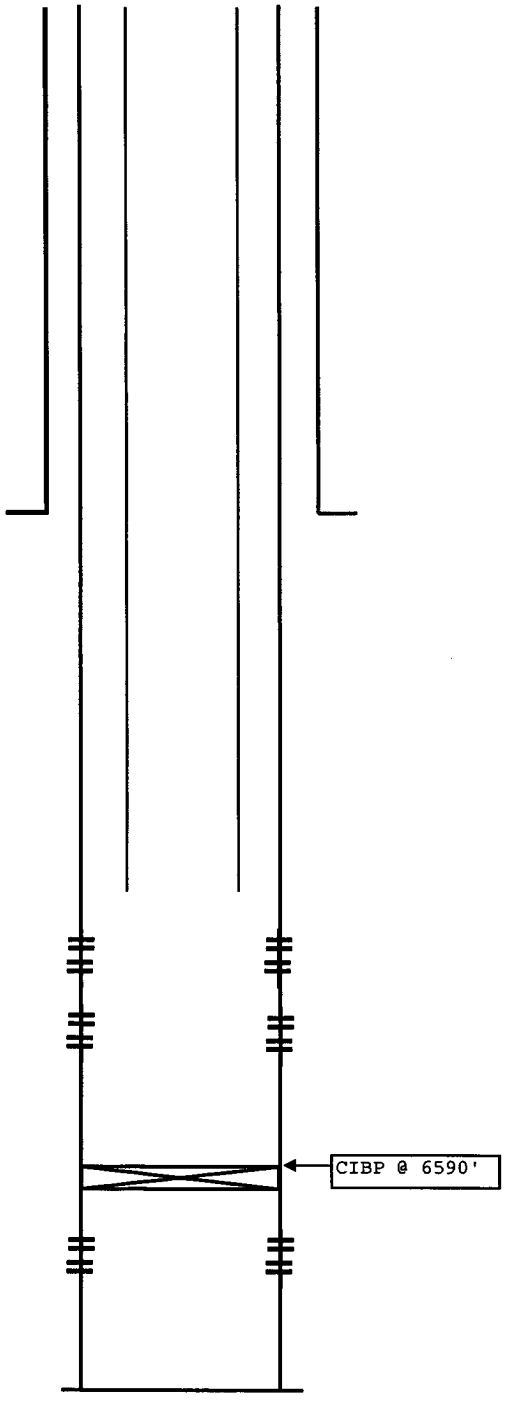
Well: **H T Mattern C #16**

Reservoir: **Blinebry**

Location:
2080'-FNL & 1980'-FEL
Section: 18
Township: 21S
Range: 37E
County: LEA, NM.

Elevations:
GL:
DF:
KB: 13'

Current
Wellbore Diagram



Well ID Info:
Refno: EQ6901
API No: 3002527530
L5/L6: UCU466500
Spud Date:
Compl. Date:

Surf. Csg:
Size 8 5/8
Weight 24#
Set: @ 1250'
With: 650 sxs
Hole Size:
Circ: Yes
TOC @ Surface

2-3/8" Tbg EOT 5891'
SN 5860'

Blinebry
Perfs: **Status**
5512'-5856' Open

Prod. Csg:
Size 5 1/2
Weight 15.5#
Set @ 6874'
With: 1200xs
Hole Size:
Circ: o DV tool (2693')
TOC @ Surf

Drinkard
Perfs: **Status**
6677'-6782' Below CIBP

Updated: 14-Sep-04
By: LOPK

PBTD: 6844'
TD: 6874'

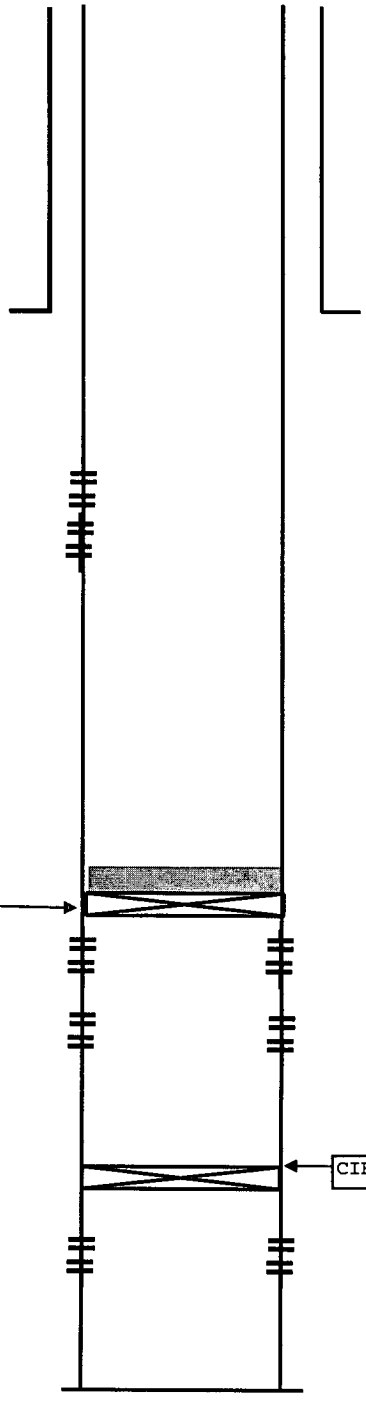
Well: **H T Mattern C #16**

Reservoir: **Grayburg**

Location:
2080'-FNL & 1980'-FEL
Section: 18
Township: 21S
Range: 37E
County: LEA, NM.

Elevations:
GL:
DF:
KB: 13'

Proposed
Wellbore Diagram



Well ID Info:
Refno: EQ6901
API No: 3002527530
L5/L6: UCU466500
Spud Date:
Compl. Date:

Surf. Csg:
Size 8 5/8
Weight 24#
Set: @ 1197'
With: 650 sxs
Hole Size:
Circ: Yes
TOC @ Surface

Grayburg
Perfs: **Status**
3718'-3978' Open

CIBP @ 5460' w/ 30' cmt

Blinebry
Perfs: **Status**
5512'-5856' Open

Prod. Csg:
Size 5 1/2
Weight 15.5#
Set @ 6874'
With: 1200xs
Hole Size:
Circ: o DV tool (2693')
TOC @ Surf

Drinkard
Perfs: **Status**
6677'-6782' Below CIBP

PBTD: 5430'
TD: 6874'

Updated: 24-Sep-04
By: LOPK

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-102
Revised February 10,199
Instructions on bac
Submit to Appropriate District Offic
State Lease - 4 Copie
Fee Lease - 3 Copie
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-27530	50350	PENROSE SKELLY GRAYBURG

4 Property Code	5 Property Name	6 Well No.
2683	H.T. MATTERN NCT-C	16

7 OGRID Number	8 Operator Name	9 Elevation
4323	CHEVRON USA INC	

10 Surface Location

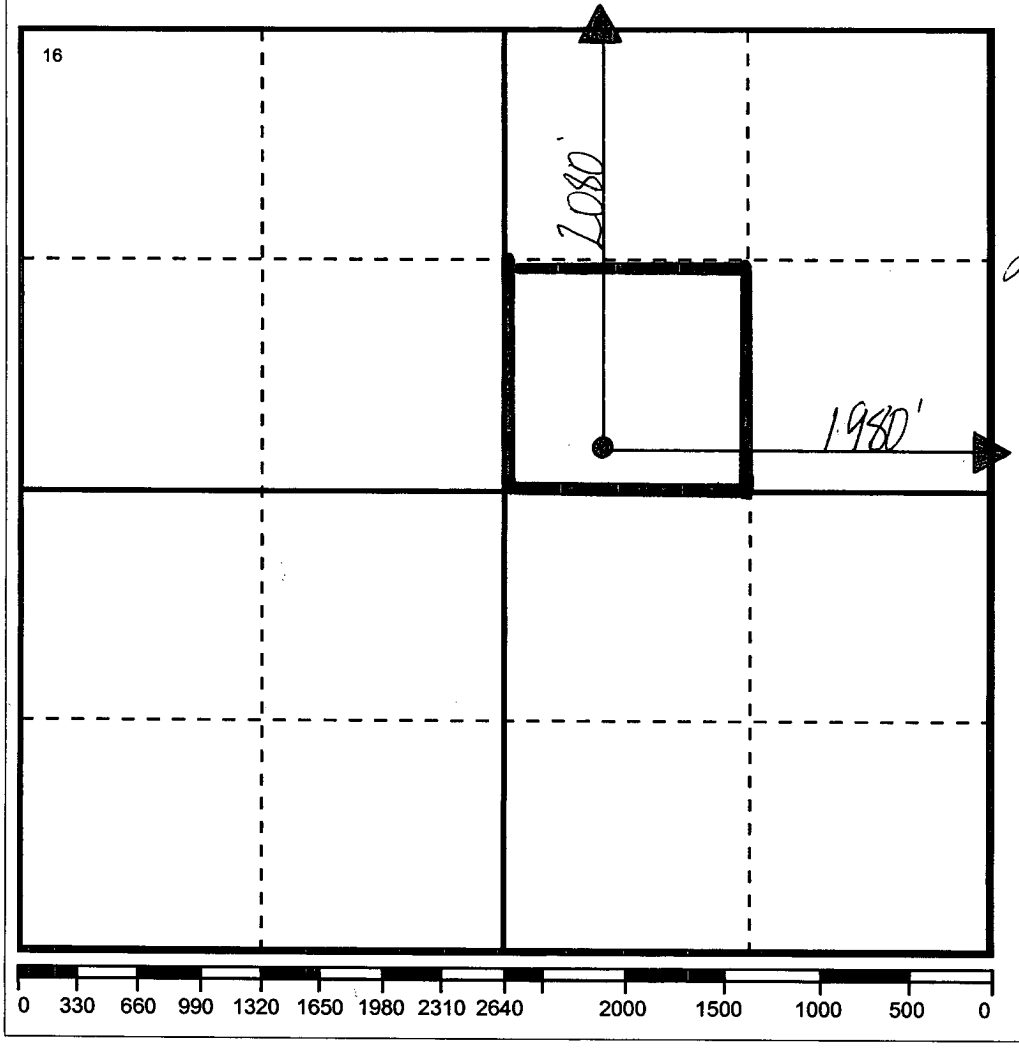
Ul or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
G	18	21S	37E		2080'	NORTH	1980'	EAST	LEA

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	13 Joint or Infill	14 Consolidation Code	15 Order No.
40	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: Denise Leake

Printed Name: Denise Leake

Positio: Regulatory Specialist

Date: 10/28/2004

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.

DeSoto/Nichols 3/94 ver 1.10

Submit 3 copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Box Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

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

WELL API NO. 30-025-27530
5. Indicate Type of Lease STATE ☐ FEE ☐
6. State Oil / Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMI (FORM C-101) FOR SUCH PROPOSALS.

7. Lease Name or Unit Agreement Name: H.T. MATTERN NCT-C

1. Type of Well: OIL WELL ☐ GAS WELL ☐ OTHER

2. Name of Operator: CHEVRON USA INC

8. Well No. 16

3. Address of Operator: 15 SMITH ROAD, MIDLAND, TX 79705

9. Pool Name or Wildcat: PENROSE SKELLY GRAYBURG

4. Well Location

Unit Letter G : 2080' Feet From The NORTH Line and 1980' Feet From The EAST Line

Section 18 Township 21S Range 37E NMPM LEA COUNTY

10. Elevation (Show whether DF, RKB, RT,GR, etc.)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPERATION	☐	PLUG AND ABANDONMENT	☐
PULL OR ALTER CASING	☐			CASING TEST AND CEMENT JOB	☐		
OTHER: PIT INFORMATION	☑			OTHER:			☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

THE SUBJECT WELL WILL BE RECOMPLETED TO THE GRAYBURG RESERVOIR UPON APPROVAL.

NO PIT WILL BE USED FOR THIS RECOMPLETION, BUT WILL USE A STEEL FRAC TANK.

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

SIGNATURE Denise Leake TITLE Regulatory Specialist DATE 11/8/2004

TYPE OR PRINT NAME Denise Leake Telephone No. 915-687-7375

(This space for State Use)

APPROVED

CONDITIONS OF APPROVAL, IF ANY: TITLE ORIGINAL SIGNED BY PAUL F. KAUTZ PETROLEUM ENGINEER DATE NOV 16 2004