Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 15 2018

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

## 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.
NMNM119754

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
RB NE 5 32 FED 11H

2. Name of Operator
CHEVRON USA INCORPORATED
Contact: LAURA BECERRA
E-Mail: LBECERRA@CHEVRON.COM

9. API Well No.
30-015-44637-00-X1

3a. Address
6301 DEAUVILLE BLVD
MIDLAND, TX 79706

3b. Phone No. (include area code)
Ph: 432-687-7665

10. Field and Pool or Exploratory Area
PURPLE SAGE-WOLFCAMP (GAS)

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 5 T24S R29E SESE 379FSL 1300FEL
32.240524 N Lat, 104.002266 W Lon

11. County 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 | | | |
|---|---|---|---|---|
| ☒ Notice of Intent | ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| ☐ Subsequent Report | ☐ Alter Casing | ☐ Hydraulic Fracturing | ☐ Reclamation | ☐ Well Integrity |
| ☐ Final Abandonment Notice | ☐ Casing Repair | ☐ New Construction | ☐ Recomplete | ☒ Other Change to Original APD |
| | ☐ Change Plans | ☐ Plug and Abandon | ☐ Temporarily Abandon | |
| | ☐ Convert to Injection | ☐ Plug Back | ☐ 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 recomplete 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.

We are requesting the name of the well to be changed as referenced in the certified well plat as well the TVD and MD to reflect the depths on the 9 Pt Plan. Supporting documents attached.

From: RB NE 5 32 FED 11H – property 320646
To: CB SE 5 32 FED COM 11H – property 320809
effective 2-1-2018

TVD: 10,174'
MD: 20,376'

Carlsbad Field Office
OCD Artesia

SC 2-15-18
Accepted for record - NMOCD

14. I hereby certify that the foregoing is true and correct.
**Electronic Submission #402943 verified by the BLM Well Information System**
**For CHEVRON USA INCORPORATED, sent to the Carlsbad**
**Committed to AFMSS for processing by PRISCILLA PEREZ on 02/01/2018 (18PP1000SE)**

Name *(Printed/Typed)* LAURA BECERRA — Title PERMITTING SPECIALIST

Signature (Electronic Submission) — Date 02/01/2018

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ZOTA STEVENS — Title PETROLEUM ENGINEER — Date 02/07/2018

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 Carlsbad

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)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

NM OIL CONSERVATION
ARTESIA DISTRICT

FEB 15 2018

RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| [1] API Number | [2] Pool Code | [3] Pool Name |
|---|---|---|
| 30-015-44637 | 98220 | PURPLE SAGE; WOLFCAMP (GAS) |

| [4] Property Code | [5] Property Name | [6] Well Number |
|---|---|---|
| 320646 | CB SE 5 32 FED COM | 11H |

| [7] OGRID No. | [8] Operator Name | [9] Elevation |
|---|---|---|
| 4323 | CHEVRON U.S.A. INC. | 3028' |

## [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 |
|---|---|---|---|---|---|---|---|---|---|
| P | 5 | 24 SOUTH | 29 EAST, N.M.P.M. | | 379' | SOUTH | 1300' | EAST | EDDY |

## [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 |
|---|---|---|---|---|---|---|---|---|---|
| B | 32 | 23 SOUTH | 29 EAST, N.M.P.M. | | 280' | NORTH | 2180' | EAST | EDDY |

| [12] Dedicated Acres | [13] Joint or Infill | [14] Consolidation Code | [15] Order No. |
|---|---|---|---|
| 640 | | | |

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.

[16]

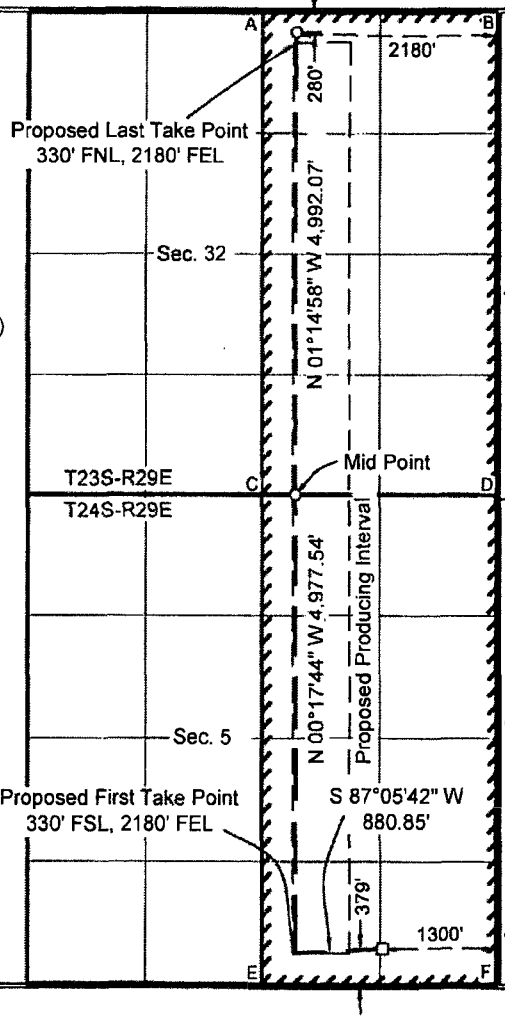
| PROPOSED BOTTOM HOLE LOCATION | | |
|---|---|---|
| X= | 601,498 | NAD 27 |
| Y= | 461,258 | |
| LAT. | 32.267688 | |
| LONG. | 104.004958 | |
| X= | 642,681 | NAD83 |
| Y= | 461,317 | |
| LAT. | 32.267810 | |
| LONG. | 104.005449 | |

CORNER COORDINATES TABLE (NAD 27)

A - Y=461537.13, X=601028.36
B - Y=461542.17, X=603672.21
C - Y=456270.49, X=601137.17
D - Y=456251.69, X=603786.69
E - Y=450962.21, X=601166.20
F - Y=450947.72, X=603814.23

Mid Point
Y=456267.14, X=601606.75
First Take Point
Y=451289.67, X=601632.43
Last Take Point
Y=461208.02, X=601498.98

| CB SE 5 32 FED COM 11H WELL | | |
|---|---|---|
| X= | 602,512 | NAD 27 |
| Y= | 451,334 | |
| LAT. | 32.240400 | |
| LONG. | 104.001776 | |
| X= | 643,696 | NAD83 |
| Y= | 451,393 | |
| LAT. | 32.240523 | |
| LONG. | 104.002266 | |
| ELEVATION +3028' NAVD 88 | | |




## [17] OPERATOR CERTIFICATION

*I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.*

Dorian K. Fuentes
Signature Date

Dorian K. Fuentes
Printed Name

djvo@chevron.com
E-mail Address

## [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 belief.*

1-10-2016
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT L. LASTRAPES
NEW MEXICO
23006
1-30-2018
PROFESSIONAL SURVEYOR

23006
Certificate Number

## 1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

| FORMATION | SUB-SEA TVD | KBTVD | MD |
|---|---|---|---|
| Castille | | 758 | |
| Lamar | | 2868 | |
| Bell | | 2906 | |
| Cherry | | 3810 | |
| Brushy | | 5024 | |
| Bone Spring Lime | | 6644 | |
| Avalon | | 6716 | |
| First Bone Spring Sand | | 7672 | |
| SBSG Sand | | 8438 | |
| Third Bone Spring Carbonate | | 8826 | |
| Third Bone Spring Sand | | 9558 | |
| Wolfcamp A | | 9911 | |
| Wolfcamp B | | 10511 | |
| | | | |
| Lateral TVD Wolfcamp A | | 10174 | 20376 |

BOP Scher


Wellhead S


Choke Hos


## 2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

| Substance | Formation | Depth |
|---|---|---|
| Deepest Expected Base of Fresh Water | | 450 |
| Water | Castille | 758 |
| Water | Cherry Canyon | 3810 |
| Oil/Gas | Brushy Canyon | 5024 |
| Oil/Gas | First Bone Spring Sand | 7672 |
| Oil/Gas | SBSG Sand | 8438 |
| Oil/Gas | Third Bone Spring Carbonate | 8826 |
| Oil/Gas | Third Bone Spring Sand | 9558 |
| Oil/Gas | Wolfcamp A | 9911 |

All shows of fresh water and minerals will be reported and protected.

## 3. BOP EQUIPMENT

Will have a minimum of a 5000 psi rig stack (see proposed schematic). Stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed unless approval from BLM is received otherwise. Flex choke hose will be used for all wells on the pad (see attached specs) BOP test will be conducted by a third party.

Chevron requests a variance to use a FMC UHS Multibowl wellhead, which will be run through the rig foor on surface casing. BOPE will be nippled up and tested after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC and BOP test information will be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal.

4. **CASING PROGRAM**

| Purpose | From | To | Hole Size | Csg Size | Weight | Grade | Thread | Condition |
|---|---|---|---|---|---|---|---|---|
| Surface | 0' | 450' | 17-1/2" | 13-3/8" | 54.5 # | J-55 | STC | New |
| Intermediate | 0' | 9,000' | 12-1/4" | 9-5/8" | 43.5# | L-80 | LTC | New |
| Production | 0' | 20,376' | 8-1/2" | 5-1/2" | 20.0 # | P-110 | TXP | New |

**SF Calculations based on the following "Worst Case" casing design:**

**Surface Casing:** 450'
**Intermediate Casing:** 9,000' MD
**Production Casing:** 20,376' MD/10,174' TVD (10,174' VS @ 90 deg inc)

| Casing String | Min SF Burst | Min SF Collapse | Min SF Tension | Min SF Tri-Axial |
|---|---|---|---|---|
| Surface | 1.43 | 5.73 | 3.42 | 1.58 |
| Intermediate | 1.29 | 2.43 | 1.9 | 1.4 |
| Production | 1.33 | 1.48 | 2.4 | 1.4 |

Min SF is the smallest of a group of safety factors that include the following considerations:

| | Surf | Int | Prod |
|---|---|---|---|
| **Burst Design** | | | |
| Pressure Test- Surface, Int, Prod Csg<br>P external: Water<br>P internal: Test psi + next section heaviest mud in csg | X | X | X |
| Displace to Gas- Surf Csg<br>P external: Water<br>P internal: Dry Gas from Next Csg Point | X | | |
| Frac at Shoe, Gas to Surf- Int Csg<br>P external: Water<br>P internal: Dry Gas, 15 ppg Frac Gradient | | X | |
| Stimulation (Frac) Pressures- Prod Csg<br>P external: Water<br>P internal: Max inj pressure w/ heaviest injected fluid | | | X |
| Tubing leak- Prod Csg (packer at KOP)<br>P external: Water<br>P internal: Leak just below surf, 8.7 ppg packer fluid | | | X |
| **Collapse Design** | | | |
| Full Evacuation<br>P external: Water gradient in cement, mud above TOC<br>P internal: none | X | X | X |
| Cementing- Surf, Int, Prod Csg<br>P external: Wet cement<br>P internal: water | X | X | X |
| **Tension Design** | | | |

| | | | |
|---|---|---|---|
| 100k lb overpull | X | X | X |

## 5. CEMENTING PROGRAM

| Slurry | Type | Cemnent Top | Cement Bottom | Weight | Yield | %Excess | Sacks | Water |
|---|---|---|---|---|---|---|---|---|
| Surface | | | | (ppg) | (sx/cu ft) | Open Hole | | gal/sk |
| Tail | Class C | 0' | 450' | 14.8 | 1.33 | 10 | 311 | 6.37 |
| Intermediate | | | | | | | | |
| Stage 2 Lead | Class C | 0' | 1,600' | 11.9 | 2.41 | 10 | 230 | 2.43 |
| Stage 2 Tail | Class C | 1,600' | 2,500' | 14.8 | 1.33 | 10 | 233 | 1.33 |
| DV Tool | | 2,500' | | | | | | |
| Stage 1 Lead | Class C | 2,500' | 8,000' | 11.9 | 2.43 | 10 | 764 | 13.66 |
| Stage 1 Tail | Class C | 8,000' | 9,000' | 15.6 | 1.21 | 10 | 310 | 5.34 |
| Production | | | | | | | | |
| Tail | Class C | 8,000' | 20,375' | 15.6 | 1.2 | 10 | 2608 | 7.62 |

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.

3. Production casing will have one horizontal type centralizer on every joint for the first 1000' from TD, then every other joint to EOB, and then every third joint to KOP. Bowspring type centralizers will be run from KOP to intermediate



## 6. MUD PROGRAM

| From | To | Type | Weight | F. Vis | Filtrate |
|---|---|---|---|---|---|
| 0' | 450' | Spud Mud | 8.3 - 10 | 32 - 34 | NC - NC |
| 450' | 9,000' | OBM | 8.8 - 9.8 | 50 -70 | 5.0 - 10 |
| 9,000' | 20,376' | OBM | 9.5 - 13 | 50 -70 | 5.0 - 10 |

A closed system will by utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole

## 7. TESTING, LOGGING, AND CORING

The anticipated type and amount of testing, logging, and coring are as follows:

a. Drill stem tests are not planned.
b. The logging program will be as follows:

| TYPE | Logs | Interval | Timing | Vendor |
|---|---|---|---|---|
| Mudlogs | 2 man mudlog | Int Csg to TD | Drillout of Int Csg | TBD |
| LWD | MWD Gamma | Int CSG & Prod | While Drilling | TBD |

c. Conventional whole core samples are not planned.
d. A Directional Survey will be run.

## 8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

No abnormal Pressures anticipated Reference Attached H2S Contingency Plan