

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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.*

**Carlsbad Field Office**  
**Oil & Gas Division**  
**Artesia**

Lease Serial No.  
NMNM118108

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.  
HH SO 8 P2 22H

9. API Well No.  
30-015-43928-00-X1

10. Field and Pool or Exploratory Area  
WILDCAT

11. County or Parish, State  
EDDY COUNTY, NM

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

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

CHEVRON USA INCORPORATED

Contact: DORIAN K. FUENTES

E-Mail: djvo@chevron.com

3a. Address

15 SMITH ROAD  
MIDLAND, TX 79705

3b. Phone No. (include area code)

Ph: 432-687-7631

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

Sec 17 T26S R27E NWNW 230FNL 960FWL

**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 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"/> Hydraulic Fracturing	<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 checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<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 recompleat 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 recompleat 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., respectfully request to make changes to the original drill permit approved 10/11/2016.

Chevron request to change the BOTTOM HOLE location and the drilling plan:  
BHL FROM - 180 FNL & 1254 FWL TO 280 FNL & 1254 FWL

TVD FROM 9068 to 9102  
MD FROM 19510 to 19479

Change the class of well from Oil to Gas Well.

Please refer to the attached C-102 and the drilling plan.

- All previous COAP still apply. Additional COA is not required

**NM OIL CONSERVATION**  
ARTEZIA DISTRICT

FEB 9 2017

RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #362658 verified by the BLM Well Information System  
For CHEVRON USA INCORPORATED, sent to the Carlsbad  
Committed to AFMSS for processing by DEBORAH MCKINNEY on 01/24/2017 (17DLM0627SE)

Name (Printed/Typed) DORIAN K. FUENTES

Title REGULATORY SPECIALIST

Signature (Electronic Submission)

Date 01/04/2017

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

**APPROVED**

FEB 9 2017

Approved By MUSTAFA HAQUE

Title PETROLEUM ENGINEER

Date 02/09/2017

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.

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD 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)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

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**Additional data for EC transaction #362658 that would not fit on the form**

**32. Additional remarks, continued**

Should questions arise, contact [djvo@chevron.com](mailto:djvo@chevron.com) or 432-687-7631.

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone (505) 393-6161 Fax (505) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone (505) 748-1283 Fax (505) 748-9736  
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

<sup>1</sup> API Number 30-115-4342E	<sup>2</sup> Pool Code 4669C	<sup>3</sup> Post Name SAGE DRAW WELLCAMP, EAST (GAS)
<sup>4</sup> Property Code 317043	<sup>5</sup> Property Name HH SO 8 P2	<sup>6</sup> Well Number 22H
<sup>7</sup> OGRID No. 4323	<sup>8</sup> Operator Name CHEVRON U.S.A. INC.	<sup>9</sup> Elevation 3245'

<sup>10</sup> 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	17	26 SOUTH	27 EAST, N.M.P.M.		230'	NORTH	960'	WEST	EDDY

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
D	5	26 SOUTH	27 EAST, N.M.P.M.		280'	NORTH	1254'	WEST	EDDY

<sup>12</sup> Dedicated Acres 6.46	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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><b>LAST TAKE POINT</b></p> <p>X= 536,208 NAD 27 Y= 392,114 LAT. 32.077983 LONG. 104.216433</p> <p>X= 577,391 NAD83 Y= 392,171 LAT. 32.078105 LONG. 104.216928</p> <p><b>MID POINT</b></p> <p>X= 536,189 NAD 27 Y= 387,138 LAT. 32.064304 LONG. 104.216510</p> <p>X= 577,373 NAD83 Y= 387,195 LAT. 32.064426 LONG. 104.217004</p> <p><b>FIRST TAKE POINT</b></p> <p>X= 536,239 NAD 27 Y= 382,138 LAT. 32.050559 LONG. 104.216367</p> <p>X= 577,423 NAD83 Y= 382,195 LAT. 32.050681 LONG. 104.216861</p>	<p><b>PROPOSED BOTTOM HOLE LOCATION</b></p> <p>X= 536,208 NAD 27 Y= 392,164 LAT. 32.078121 LONG. 104.216433</p> <p>X= 577,391 NAD83 Y= 392,221 LAT. 32.078242 LONG. 104.216927</p> <p><b>CORNER COORDINATES TABLE (NAD 27)</b></p> <p>A - Y=392442.33, X=534954.83 B - Y=392446.14, X=537606.87 C - Y=387143.09, X=534935.36 D - Y=387132.57, X=537574.14 E - Y=381810.94, X=534988.20 F - Y=381805.09, X=537646.07 G - Y=376480.27, X=535066.16</p> <p><b>HH SO 8 P2 22H WELL</b></p> <p>X= 535,952 NAD 27 Y= 381,579 LAT. 32.049022 LONG. 104.217296</p> <p>X= 577,135 NAD83 Y= 381,636 LAT. 32.049144 LONG. 104.217790</p> <p>ELEVATION +3245' NAVD 83</p>	<p>1254'</p> <p>280'</p> <p>Proposed Last Take Point 330' FNL, 1254' FWL</p> <p>Sec 5</p> <p>Mid Point</p> <p>Sec 8</p> <p>Proposed First Take Point 330' FSL, 1254' FWL</p> <p>N 27° 11' 22" E 628.86'</p> <p>Sec. 17</p> <p>960'</p> <p>230'</p>	<p><b>17 OPERATOR CERTIFICATION</b></p> <p>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 unfocused 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 as before entered by the division.</p> <p><i>[Signature]</i> 01-04-2012 Signature Date</p> <p><i>[Signature]</i> Printed Name</p> <p><i>[Signature]</i> E-mail Address</p> <p><b>SURVEYOR CERTIFICATION</b></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>01-05-2016 Date of Survey</p> <p><i>[Signature]</i> Signature and Seal of Professional Surveyor</p> <p>23006 Certificate Number</p>
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**1. FORMATION TOPS**

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA TVD	KBTVD	MD
Castille		505	
Lamar		2028	
Bell		2073	
Cherry		2922	
Brushy		4042	
Bone Spring/Avalon		5649	
First Bone Spring Sand		6564	
First Bone Spring Shale		6914	
Second Bone Spring Sand		7249	
Harkey Sand		8123	
Third Bone Spring Sand		8405	
Wolfcamp A		8745	
Lateral TVD Wolfcamp A		9102	19478.90'

**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	505
Water	Cherry Canyon	2922
Oil/Gas	Brushy Canyon	4042
Oil/Gas	Bone Spring Limestone	6564
Oil/Gas	First Bone Spring Shale	6914
Oil/Gas	Second Bone Spring Sand	7249
Oil/Gas	Harkey Sand	8123
Oil/Gas	Wolfcamp A	8745

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

**3. BOP EQUIPMENT**

PLEASE REFERENCE MDP

#### 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'	9050'	12-1/4"	9-5/8"	43.5 #	L-80	TXP	New
Production	0'	19,479'	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: 9015'

Production Casing: 195478.9' MD/9,102' TVD (10,000' VS @ 90.1 deg inc)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.82	5.11	3.97	2.31
Intermediate	2.9	1.34	1.79	2.22
Production	1.26	1.66	2.54	1.31

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

	Surf	Int	Prod
<b>Burst Design</b>			
Pressure Test- Surface, Int, Prod Csg P external: Water P internal: Test psi + next section heaviest mud in csg	X	X	X
Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 15 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
<b>Collapse Design</b>			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
<b>Tension Design</b>			
100k lb overpull	X	X	X

5. CEMENTING PROGRAM

Slurry	Type	Cement Top	Cement Bottom	Weight (ppg)	Yield (sx/cu ft)	%Excess Open Hole	Sacks	Water gal/sk
<u>Surface</u>								
Tail	Class C	0'	450'	14.8	1.33	50	356	6.37
<u>Intermediate</u>								
Stage 2 Lead	50:50 Poz: Class C + Antifoam, Extender, Salt, Retarder	0'	1,100'	11.9	2.43	50	213	14.21
Stage 2 Tail	Class C + Antifoam, Retarder, Viscosifier	1,100'	2,100'	14.8	1.33	0	235	6.37
DV Tool		2,100'						
Stage 1 Lead	50:50 Poz: Class H + Extender, Antifoam, Retarder, Salt, Viscosifier	2,100'	8,015'	11.9	2.43	100	1524	13.76
Stage 1 Tail	Class H + Retarder, Extender, Dispersant	8,015'	9,050'	15.6	1.21	50	389	5.54
<u>Production</u>								
Lead	50:50 Poz: Class H + Extender, Antifoam, Dispersant, , Retarder	7,015'	8,015'	14.5	1.21	100	430	5.54
Tail	Class H + Viscosifier, Antifoam, Dispersant, Fluid Loss, Retarder, Expanding Agent	8,015'	19,479'	15.6	1.2	50	3290	5.30

ONSHORE ORDER NO. 1  
Chevron  
HayHurst SO 8 P2 #22H  
Eddy County, NM

CONFIDENTIAL -- TIGHT HOLE  
DRILLING PLAN  
PAGE: 4

6. **MUD PROGRAM**

From	To	Type	Weight	F. Vis	Filtrate
0'	450'	Spud Mud	8.3 - 8.7	32 - 34	NC - NC
450'	9,050'	OBM	9.0 - 9.5	50 - 70	5.0 - 10
9,050'	19,479'	OBM	10.0 - 13.5	50 - 70	5.0 - 10

7. **TESTING, LOGGING, AND CORING**

TYPE	Logs	Interval	Timing	Vendor
Mudlogs	2 man mudlog	Int Csg to TD	Drillout of Int Csg	TBD
LWD	MWD Gamma	Int. and Prod. Hole	While Drilling	TBD

8. **ABNORMAL PRESSURES AND HYDROGEN SULFIDE**

PLEASE REFERENCE MDP