

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS**  
*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**  
**Artesia**

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	8. Well Name and No. HH SO 8 P2 21H
2. Name of Operator CHEVRON USA INCORPORATED Contact: DORIAN K. FUENTES E-Mail: djvo@chevron.com	9. API Well No. 30-015-43927-00-X1
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 205FNL 960FWL	10. Field and Pool or Exploratory Area WILDCAT <b>98220 Purple Sage WFP</b>
	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			
<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 recomplate 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.

Chevron U.S.A. INC., respectfully request to make changes to the original drill permit approved 10/11/2016.

Chevron request to change the wellbore location and the drilling plan:  
BHL FROM - 180 FNL & 330 FWL TO 280 FNL & 330 FWL

TVD FROM 8918 to 9072  
MD FROM 19401 to 19378

Change the class of well from Oil to Gas Well.

- All previous COA or fill apply. Additional COA is not required.

**NM OIL CONSERVATION**  
ARTESIA DISTRICT  
FEB 13 2017

RECEIVED

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

Electronic Submission #362657 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 (17DLM0626SE)

Name (Printed/Typed) DORIAN K. FUENTES	Title REGULATOR SPECIALIST
Signature (Electronic Submission)	Date 01/04/2017

**APPROVED**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE** FEB 9 2017

Approved By MUSTAFA HAQUE	Title PETROLEUM ENGINEER MANAGEMENT	Date 02/09/2017
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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 \*\*

*Ruf*  
H-13-17

**Additional data for EC transaction #362657 that would not fit on the form**

**32. Additional remarks, continued**

Please refer to the attached C-102 and the drilling plan.  
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 (575) 393-6151 Fax (575) 393-0720  
District II  
811 S First St. Artesia, NM 88211  
Phone (575) 748-1283 Fax (575) 748-9720  
District III  
10 N Rio Brazos Road, Aztec, NM 874 0  
Phone (505) 334-6178 Fax (505) 334 6176  
District IV  
1220 S St Francis Dr. Santa Fe, NM 87505  
Phone (505) 476-3461 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 30-015-43421	<sup>2</sup> Pool Code 90890	<sup>3</sup> Pool Name Purple SAGE HAWK W. CAMP, (Gas)
<sup>4</sup> Property Code 317043	<sup>5</sup> Property Name HH SO 8 P2	
<sup>7</sup> OGRID No 4323	<sup>8</sup> Operator Name CHI:VRON U.S.A. INC.	<sup>6</sup> Well Number 2111
		<sup>9</sup> Elevation 3245'

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.		205'	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	330'	WEST	EDDY

<sup>12</sup> Dedicated Acres 640	<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.

LAST TAKE POINT		
X=	535,284	NAD 27
Y=	392,113	
LAT.	32.077983	
LONG.	104.219417	
X=	576,467	NAD83
Y=	392,170	
LAT.	32.078104	
LONG.	104.219912	
MID POINT		
X=	535,265	NAD 27
Y=	387,142	
LAT.	32.064317	
LONG.	104.219493	
X=	576,449	NAD83
Y=	387,199	
LAT.	32.064438	
LONG.	104.219967	
FIRST TAKE POINT		
X=	535,315	NAD 27
Y=	382,140	
LAT.	32.050567	
LONG.	104.219350	
X=	576,499	NAD83
Y=	382,197	
LAT.	32.050689	
LONG.	104.219844	

PROPOSED BOTTOMHOLE LOCATION		
X=	535,284	NAD 27
Y=	392,163	
LAT.	32.078120	
LONG.	104.219416	
X=	576,467	NAD83
Y=	392,220	
LAT.	32.078241	
LONG.	104.219911	

HH SO 8 P2 21H WELL		
X=	535,951	NAD 27
Y=	381,604	
LAT.	32.049091	
LONG.	104.217297	
X=	577,135	NAD83
Y=	381,601	
LAT.	32.049212	
LONG.	104.217791	
ELEVATION	+3245	NAVD 88

330'

**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 in, having the proposed bottom hole location or has a right to drill this well or 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

Signature: *[Signature]* Date: 01-14-2017  
Printed Name: Lerman K. Fuentes  
E-mail Address: *[Email]*

**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.

Date of Survey: 01-05-2016  
Signature and Seal of Professional Surveyor: *[Signature]*  
Certificate Number: 23006

**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		9072	19378.32

**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 MPD

**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'	9,150'	12-1/4"	9-5/8"	43.5 #	L-80	TXP	New
Production	0'	19,378'	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: 19378.3 MD/9,072' TVD (10,000' VS @ 89.16 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	Yield	%Excess	Sacks	Water
Surface				(ppg)	(sx/cu ft)	Open Hole		gal/sk
Tail	Class C	0'	450'	14.8	1.33	50	356	6.37
<b>Intermediate</b>								
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'	8,150'	11.9	2.43	100	1524	13.76
Stage 1 Tail	Class H + Retarder, Extender, Dispersant	8,150'	9,150'	15.6	1.21	50	389	5.54
<b>Production</b>								
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'	19,402'	15.6	1.2	50	3258	5.30

6. **MUD PROGRAM**

From	To	Type	Weight	F. Vis	Filtrate
0'	450'	Spud Mud	8.3 - 8.7	32 - 34	NC - NC
450'	9150'	OBM	9.0 - 9.5	50 - 70	5.0 - 10
9150'	19,378'	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