

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010

**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.*

5. Lease Serial No.  
NMNM117126

6. If Indian, Allottee or Tribe Name

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

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

8. Well Name and No.  
TALCO 9 26 35 FEDERAL 2H

9. API Well No.  
30-025-42547-00-X1

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
CHEVRON USA INCORPORATED

Contact: CINDY H MURILLO  
E-Mail: CHERRERAMURILLO@CHEVRON.COM

3a. Address  
15 SMITH ROAD  
MIDLAND, TX 79705

3b. Phone No. (include area code)  
Ph: 575-263-0431  
Fx: 575-263-0445

10. Field and Pool, or Exploratory  
WC-025 G09 S253509D

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 9 T26S R35E SWSE 235FSL 1980FEL  
32.051061 N Lat, 103.369819 W Lon

11. County or Parish, and State  
LEA COUNTY, NM

NOV 06 2015  
RECEIVED

**12. CHECK 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"/> Fracture Treat	<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	
	<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 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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall 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 USA INC REQUESTS TO MAKE A CHANGE FROM THE ORIGINAL APD FROM BRINE BASE MUD TO OIL BASED MUD. PLEASE SEE ATTACHED DRILLING PLAN CHANGE.

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

**Electronic Submission #293093 verified by the BLM Well Information System  
For CHEVRON USA INCORPORATED, sent to the Hobbs  
Committed to AFMSS for processing by LINDA JIMENEZ on 08/19/2015 (15LJ1535SE)**

Name (Printed/Typed) CINDY H MURILLO Title PERMITTING SPECIALIST

Signature (Electronic Submission) Date 02/26/2015

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

Approved By \_\_\_\_\_ Title \_\_\_\_\_

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 \_\_\_\_\_

**APPROVED**  
 NOV 4 2015  
 /s/ Chris Walls  
 BUREAU OF LAND MANAGEMENT

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.

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

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**1. FORMATION TOPS**

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA	KBTVD	MD
Rustler	2166	1037	
Magenta Dolomite	2119	1084	
Salado	1884	1319	
Castile	-432	3635	
Lamar	-2094	5297	
Bell Canyon	-2140	5343	
Cherry Canyon	-3123	6326	
Brushy Canyon	-4615	7818	
Bone Spring Limestone	-5995	9198	
1st Bone Spring	-7192	10395	
2nd Bone Spring	-7990	11193	
3rd Bone Spring	-8998	12201	
Pilot TD	-9626	12786	12786
Lateral TD (3rd Bone Spring)	(9,388)	12,591	17157

**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		1,084
Water	Rustler	1037
Water	Bell Canyon	5343
Water	Cherry Canyon	6326
Oil/Gas	Brushy Canyon	7818
Oil/Gas	Bone Spring Limestone	9198
Oil/Gas	1st Bone Spring	10395
Oil/Gas	2nd Bone Spring	11193
Oil/Gas	3rd Bone Spring	12201
Oil/Gas	Wolfcamp A	12666

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) for drill out below surface casing. Stack will be tested as specified in the attached testing requirements. Chevron requests a variance to use A coffex hose with a metal protective covering that will be utilized between the BOP and Choke manifold. Please see the attached testing and certification information.

Chevron requests a variance to use a GE/Vetco SH-2 Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nipped up and test after cementing surface casing. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from GE/Vetco 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**

a. The proposed casing program will be as follows:

*See Original COA*

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0' <i>1140</i>	1,100'	17-1/2"	13-3/8"	54.5 #	J-55	STC	New
Intermediate	0'	9,200'	12-1/4"	9-5/8"	43.5 #	HCP-110	LTC	New
Production	0'	17,157'	8-1/2"	5-1/2"	17.0 #	HCP-110	CDC	New

b. Casing design subject to revision based on geologic conditions encountered.

c. \*\*\*A "Worst Case" casing design for wells in a particular area is used below to calculate the Casing Safety Factors. If for any reason the casing design for a particular well requires setting casing deeper than the following "worst case" design, then the Casing Safety Factors will be recalculated & sent to the BLM prior to drilling.

d. Chevron will fill casing at a minimum of every 20 jts (840') while running for intermediate and production casing in order to maintain collapse SF.

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

Surface Casing: 1500'  
 Intermediate Casing: 9300'  
 Production Casing: 17500' MD/13000' TVD (5000' VS @ 90 deg inc)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension
Surface	1.2	1.2	1.6
Deep Intermediate	1.2	1.2	1.6
Production	1.2	1.2	1.6

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	Top	Bottom	Weight	Yield	%Excess	Sacks	Water
				(ppg)	(sx/cu ft)	Open Hole		gal/sk
Surface								
Lead	C + 4% Gel+2%CaCl	0'	800'	13.5	1.75	150	746	9.18
Tail	Class C+2%CaCl	800'	1,100'	14.8	1.36	150	441	6.39
Intermediate								
1st Stage Lead	50% Class H+ 50% Silicalite +2% Gel	5,200'	8,600'	11.3	2.54	30	545	15.51
1st Stage Tail	Class C	8,600'	9,200'	14.8	1.33	30	213	6.57
2nd Stage Lead	65C/35Poz +6%Gel +5%Salt	0'	4,900'	12.9	1.87	100	1494	9.87
2nd Stage Tail	Class C	4,900'	5,200'	14.8	1.33	100	141	6.57
Production								
1st Lead	50% Class H+ 50% Silicalite +2% Gel	4,700'	11,614'	11.3	2.54	75	843	15.07
2nd Lead	Versacem (Halliburton)	11,614'	12,864'	13.2	1.61	75	315	8.10
Tail	Acid Soluble Cement	12,864'	17,157'	15	2.6	35	511	11.2

1. Final cement volumes will be determined by fluid 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 casing.
4. Intermediate cement job will be performed in 2 stages with a DV tool with at ~5200'. An ECP will placed below the DV tool and inflated before pumping the 2nd stage

**Pilot Hole Plugging Plan:**

The 8-1/2" pilot hole will TD in the Wolfcamp Shale at ~12,786' (exact depth of Pilot TD will depend on geologic tops encountered while drilling). An open hole cemented whipstock will be utilized with 2-7/8" tail pipe. The tail 2-7/8" tail pipe will be cemented in place from the Pilot hole TD of 12,786' MD/TVD to the whipstock/KOP at 12114' MD/TVD ( KOP subject to change after evaluating Pilot Hole logs).

Plug	Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks	Mix Water
					(ppg)	(sx/cu ft)	Open Hole		Gal/Sk
Pilot Hole Plug	Plug Cement	Class H	12,114'	12,786'	17.2	0.97	35	391	3.61

**6. MUD PROGRAM**

From	To	Type	Weight	F. Vis	Filtrate
0'	1,100'	1140 Spud Mud	8.3 - 8.7	32 - 34	NC - NC
1,100'	3,635'	Brine	9.5 - 10.1	28 - 29	NC - NC
3,635'	9,200'	Sprayberry Mud	8.9 - 9.3	3 - 9	5 - 7
9,200'	12,114'	FW/Cut Brine	8.3 - 9.5	28 - 29	NC - NC
12,114'	12,864'	Weighted Polymer	9.5 - 11.0	28 - 30	15 - 25
12,864'	17,157'	Weighted Polymer	9.5 - 11.0	28 - 29	15 - 25

After drilling through the salt section in the 12.25" hole with a saturated Brine, the mud system will be changed to a Sprayberry type mud to allow for decreased mud weights without excessive salt washout.

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 be used to detect volume changes indicating loss or gain of circulating fluid volume.

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

**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	5000' to TD	Drillout of Surf Csg	TBD
LWD	MWD Gamma	Curve and Lateral	While Drilling	TBD
Wireline	Quad Combo	Pilot TD to 9200	After Pilot TD	TBD
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

- c. No coring is planned
- d. A Directional Survey will be run.

**8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE**

- a. Increased pressure is expected in the base of the 3rd Bone Spring sand and Wolfcamp. No abnormal temperatures are expected. Estimated BHP is: 6875 psi
- b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered