Rec'd 05/12/2020 - NMOCD

Form 3160-5
(June 2015)

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.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMNM96244

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.
Multiple--See Attached

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

9. API Well No.
Multiple--See Attached

3a. Address
6301 DEAUVILLE BLVD
MIDLAND, TX 79706

3b. Phone No. (include area code)
Ph: 432-687-7655

10. Field and Pool or Exploratory Area
WILDCAT

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Multiple--See Attached

11. County or Parish, State
LEA 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 have been getting ~250 bbls of cement back on wells DL 4 33 LOCH NESS FED COM P1 6H (30-025-46646) and DL 9 16 LOCH NESS FED COM P1 16H (30-025-46647). The current APD requirements are a minimum of 3500'.

The excess has been reduced from 50% on the lead to 20% and the excess on the tail has been reduced from 35% to 15%. The reduced volumes will still return an estimated 130 bbls of cement back to surface, but is also a buffer to ensure we will get cement to surface.

This request applies to the rest of the wells on this pad:

DL 4 33 LOCH NESS FED COM P1 4H - 30-025-46644
DL 4 33 LOCH NESS FED COM P1 5H - 30-025-46645

Accepted 05/14/2020 - KMS NMOCD

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

Electronic Submission #512201 verified by the BLM Well Information System
For CHEVRON USA INCORPORATED, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 04/23/2020 (20PP2186SE)

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

Signature (Electronic Submission) — Date 04/22/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By NDUNGU KAMAU — Title PETROLEUM ENGINEER — Date 04/24/2020

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 Hobbs

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 ****

Additional data for EC transaction #512201 that would not fit on the form

Wells/Facilities, continued

Agreement	Lease	Well/Fac Name, Number	API Number	Location
NMNM96244	NMNM96244	DL 4 33 LOCH NESS FED COM P1 16H	30-025-46644-00-X1	Sec 4 T22S R33E SWSE 264FSL 1347FEL 32.414284 N Lat, 103.573242 W Lon
NMNM96244	NMNM96244	DL 4 33 LOCH NESS FED COM P1 15H	30-025-46645-00-X1	Sec 4 T22S R33E SESE 264FSL 1297FEL 32.414284 N Lat, 103.573082 W Lon
NMNM96244	NMNM96244	DL 9 16 LOCH NESS FED COM P1 17H	30-025-46648-00-X1	Sec 4 T22S R33E SWSE 264FSL 1322FEL 32.414284 N Lat, 103.573158 W Lon
NMNM96244	NMNM96244	DL 9 16 LOCH NESS FED COM P1 18H	30-025-46649-00-X1	Sec 4 T22S R33E SESE 264FSL 1272FEL 32.414284 N Lat, 103.572998 W Lon

32. Additional remarks, continued

DL 9 16 LOCH NESS FED COM P1 17H - 30-025-46648
DL 9 16 LOCH NESS FED COM P1 18H - 30-025-46649

Revisions to Operator-Submitted EC Data for Sundry Notice #512201

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM96244	NMNM96244
Agreement:		
Operator:	CHEVRON USA INC 6301 DEAUVILLE BLVD MIDLAND, TX 79706 Ph: 432-687-7665	CHEVRON USA INCORPORATED 6301 DEAUVILLE BLVD MIDLAND, TX 79706 Ph: 432.687.7100 Fx: 432-687-7221
Admin Contact:	LAURA BECERRA REGULATORY SPECIALIST E-Mail: LBECERRA@CHEVRON.COM Ph: 432-687-7665	LAURA BECERRA REGULATORY SPECIALIST E-Mail: LBECERRA@CHEVRON.COM Ph: 432-687-7655
Tech Contact:	LAURA BECERRA REGULATORY SPECIALIST E-Mail: LBECERRA@CHEVRON.COM Ph: 432-687-7665	LAURA BECERRA REGULATORY SPECIALIST E-Mail: LBECERRA@CHEVRON.COM Ph: 432-687-7655
Location: State: County:	 NM LEA	 NM LEA
Field/Pool:	WILDCAT;UPR AVALON	WILDCAT
Well/Facility:	DL 4 33 LOCH NESS FED COM P1 4H Sec 4 T22S R33E Mer NMP SWSE 264FSL 1347FEL	DL 4 33 LOCH NESS FED COM P1 4H Sec 4 T22S R33E SWSE 264FSL 1347FEL 32.414284 N Lat, 103.573242 W Lon DL 4 33 LOCH NESS FED COM P1 5H Sec 4 T22S R33E SESE 264FSL 1297FEL 32.414284 N Lat, 103.573082 W Lon DL 9 16 LOCH NESS FED COM P1 17H Sec 4 T22S R33E SWSE 264FSL 1322FEL 32.414284 N Lat, 103.573158 W Lon DL 9 16 LOCH NESS FED COM P1 18H Sec 4 T22S R33E SESE 264FSL 1272FEL 32.414284 N Lat, 103.572998 W Lon

Pad Summary

The table below lists all the wells for the given pad and their respective name and TVD's (ft) for their production target intervals:

Well Name(s)	Target TVD	Formation Desc.
DL 4 33 Loch Ness Fed Com P1 4H	9,520	Avalon
DL 4 33 Loch Ness Fed Com P1 5H	9,665	Avalon
DL 4 33 Loch Ness Fed Com P1 6H	9,520	Avalon
DL 4 33 Loch Ness Fed Com P1 16H	9,520	Avalon
DL 4 33 Loch Ness Fed Com P1 17H	9,665	Avalon
DL 4 33 Loch Ness Fed Com P1 18H	9,520	Avalon

1. **FORMATION TOPS**

The estimated tops of important geologic markers are as follows:
Elevation: 3634 ft

FORMATION	SUB-SEA TVD	TVD	MD	LITHOLOGIES	MIN. RESOURCES	PROD. FORMATION
Rustler	2374	1,260	1,260	ANHYD	N/A	
Castile	94	3,540	3,562	SALT	N/A	
Lamar	-1231	4,865	4,902	LIMESTONE	N/A	
Bell Canyon	-1356	4,990	5,028	SAND STONE	N/A	
Cherry Canyon	-2156	5,790	5,837	SAND STONE	N/A	
Brushy Canyon	-3391	7,025	7,079	SAND STONE	N/A	
Bone Spring	-5186	8,820	8,874	SHALE/LIMESTONE	N/A	
Upper Avalon	-5331	8,965	9,019	SHALE	Oil	
Upper Avalon Target 1	-5861	9,495	20,334	SHALE	Oil	

WELLBORE LOCATIONS	SUB-SEA TVD	RKB TVD	MD
SHL	3634	-	
KOP	-6213	9,847	9,001
FTP	-5886	9,520	9,901
LTP	-5886	9,520	20,260

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		900
Water	Cherry Canyon	5,790
Oil/Gas	Brushy Canyon	7,025
Oil/Gas	Avalon	8,965

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

3. **BOP EQUIPMENT**

Chevron will have a minimum of a 5,000 psi rig stack (see proposed schematic) for drill out below surface casing. The 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 per hole section, unless approval from BLM is received otherwise. Flex choke hose will be used for all wells on the pad (see attached specs and variance). BOP test will be conducted by a third party.

Chevron requests a variance to use a FMC Technologies UH-S Multibowl wellhead, which will be run through the rig floor 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 Technologies 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. All tests performed by third party.

4. **CASING PROGRAM**

a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	1,300'	16"	13-3/8"	54.5 #	J-55	BTC	New
Intermediate	0'	4,865'	12-1/4"	9-5/8"	40.0 #	HCK-55	LTC	New
Production	0'	20,334'	8-1/2"	5-1/2"	20.0 #	P-110	TXP BTC	New

Proposed	Hole Size	Casing Size	Top (MD)	Btm (MD)	Top (TVD)	Btm (TVD)	*Top (SSTVD)*	*Btm (SSTVD)*	Grade	Weight	Joint type
Surface	16"	13-3/8"	0'	1,300'	0'	1,300'	3,634'	2,334'	J-55	54.5 #	BTC
Intermediate	12-1/4"	9-5/8"	0'	4,865'	0'	4,865'	3,634'	-1,231'	HCK-55	40.0 #	LTC
Production	8-1/2"	5-1/2"	0'	20,334'	0'	9,520'	3,634'	-5,886'	P110	20.0 #	TXP-BTC

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:	1,300'	ftTVD
Intermediate Casing:	5,000'	ftTVD
Production Casing:	22,000'	ftMD

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.80	2.94	3.70	2.24
Intermediate	1.33	3.02	2.15	1.48
Production	1.11	2.51	2.47	1.33

The following worst case load cases were considered for calculation of the above Min. Safety Factors:

Burst Design	Surf	Int	Prod
Pressure Test- Surface, Int, Prod Csg P external: Mud weight above TOC, PP below P internal: Test psi + next section heaviest mud in csg	X	X	X
Displace to Gas- Surf Csg P external: Mud weight above TOC, PP below P internal: Dry Gas from Next Csg Point	X		
Gas over mud (60/40) - Int Csg P external: Mud weight above TOC, PP below P internal: 60% gas over 40% mud from hole TD PP		X	
Stimulation (Frac) Pressures- Prod Csg P external: Mud weight above TOC, PP below P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Mud weight above TOC, PP below P internal: Leak just below surf, 8.45 ppg packer fluid			X
Collapse Design	Surf	Int	Prod
Full Evacuation P external: Mud weight gradient P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: displacement fluid - water	X	X	X
Tension Design	Surf	Int	Prod
100k lb overpull	X	X	X

5. **CEMENTING PROGRAM**

Slurry	Type	Top	Bottom	*Sacks*	Yield	Density	%Excess	Water	*Volume*	Additives
Surface					(cu ft/sk)	(ppg)	Open Hole	gal/sk	cuft	
Lead	Class C	0'	800'	662	1.69	12.8	125	8.92	1119	Extender, Antifoam, Retarder
Tail	Class C	800'	1,300'	1321	1.34	14.8	125	6.40	1770	Extender, Antifoam, Retarder
Intermediate Csg										
Lead	Class C	0'	3,865'	946	2.56	11.9	100	14.66	2421	Extender, Antifoam, Retarder, Viscosifier
Tail	Class C	3,865'	4,865'	382	1.33	14.8	50	6.38	507	Extender, Antifoam, Retarder, Viscosifier
Production										
Lead 1	Class C	800'	8,500'	890	2.46	11.5	15	14.05	2189	Extender, Antifoam, Retarder, Viscosifier
Lead 2	Class C	8,500'	20,334'	1758	1.85	13.2	20	9.87	3253	Extender, Antifoam, Retarder, Viscosifier
Tail	Acid Sol Class H									Extender, Antifoam, Retarder, Viscosifier
Intermediate Csg	Foam Cement Contingency									
Cap	Class C	0'	562'	146	1.33	13.2	10	6.55	194	Extender, Antifoam, Retarder, Viscosifier
Foam Lead	Class C	562'	4,459'	1835	1.33	9.5	100	14.66	2441	Nitrogen, Surfactant, Extender, Antifoam, Retarder, Viscosifier
Tail	Class C	4,459'	4,865'	133	1.33	13.2	10	6.38	178	Extender, Antifoam, Retarder, Viscosifier
Top Out Contingency	Class C	0'	400'	19	1.3	14.8	10	6.38	25	Extender, Antifoam, Retarder, Viscosifier
Intermediate Csg	2 Stage Contingency									
1st Stage Lead (Contingent)	Class C	0'	3,865'	946	2.56	11.9	100	14.66	2421	Extender, Antifoam, Retarder, Viscosifier
1st Stage Tail	Class C	3,865'	4,865'	382	1.33	14.8	50	6.38	507	Extender, Antifoam, Retarder, Viscosifier
2nd Stage Lead	Class C	0'	2,865'	701	2.56	11.9	100	14.66	1795	Extender, Antifoam, Retarder, Viscosifier
2nd Stage Tail	Class C	2,865'	3,865'	382	1.33	14.8	50	6.38	507	Extender, Antifoam, Retarder, Viscosifier

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 solid body type centralizer on every joint in the lateral, then every other joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing and surface.

6. **MUD PROGRAM**

From	To	Type	Weight	Viscosity	Filtrate	Notes
0'	1,300'	Fresh water mud	8.3 - 9.0	28-30	N/C	
1,300'	4,865'	Brine/OBM	8.3 - 10	28-31	15-25	
4,865'	0'	OBM	8.3 - 10	10-15	15-25	Due to wellbore stability, the mud program may exceed the MW window needed to maintain overbalance to pore pressure

A closed system will be used 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. And transportating of E&P waste will follow EPA regulations and accompanying manifests.

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
Mudlogs	2 man mudlog	Surface casing shoe through prod hole TD	While drilling or circulating
LWD	MWD Gamma	Int. and Prod. Hole	While Drilling

c. Conventional whole core samples are not planned.
d. A directional survey will be run.

8. **ABNORMAL PRESSURES AND HYDROGEN SULFIDE**

a. No abnormal pressure or temperatures are expected. Estimated BHP is: 4,429 psi
b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered