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

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 04 2019
RECEIVED

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
30-015-45711	98220	PURPLE SAGE; WOLFCAMP (GAS)

[4] Property Code	[5] Property Name	[6] Well Number
324971	CB CAL 15 22 002	3H

[7] OGRID No.	[8] Operator Name	[9] Elevation
4323	CHEVRON U.S.A. INC.	2992'

[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
A	15	23 SOUTH	28 EAST, N.M.P.M.		520'	NORTH	1305'	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
P	22	23 SOUTH	28 EAST, N.M.P.M.		100'	SOUTH	330'	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]

CB CAL 15 22 002 NO. 3H WELL		
X=	581,239	NAD 27
Y=	477,044	
LAT.	32.311237	
LONG.	104.070376	
X=	622,422	NAD83
Y=	477,104	
LAT.	32.311358	
LONG.	104.070871	
ELEVATION +2992' NAVD 88		

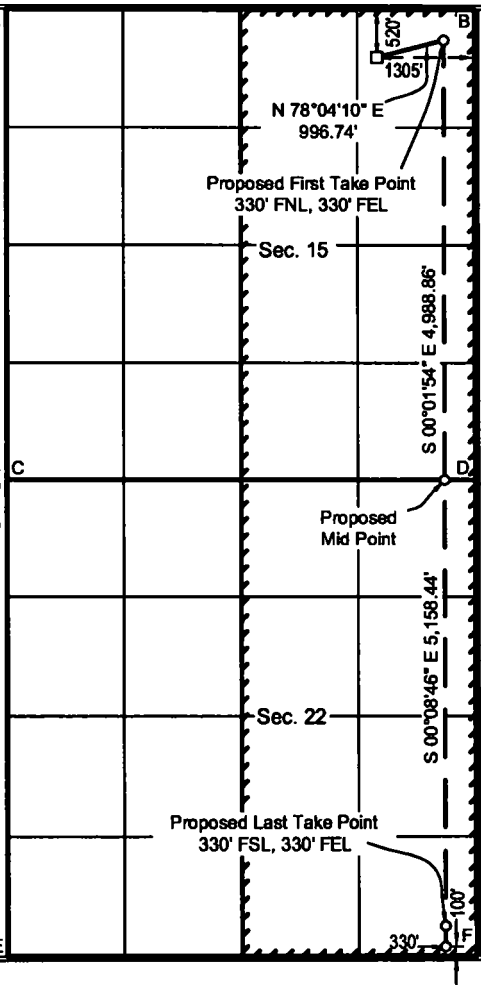
PROPOSED FIRST TAKE POINT		
X=	582,214	NAD 27
Y=	477,250	
LAT.	32.311797	
LONG.	104.067218	
X=	623,397	NAD83
Y=	477,310	
LAT.	32.311918	
LONG.	104.067713	

PROPOSED MID POINT		
X=	582,217	NAD 27
Y=	472,261	
LAT.	32.298083	
LONG.	104.067249	
X=	623,400	NAD83
Y=	472,321	
LAT.	32.298204	
LONG.	104.067744	

PROPOSED LAST TAKE POINT		
X=	582,229	NAD 27
Y=	467,333	
LAT.	32.284535	
LONG.	104.067248	
X=	623,412	NAD83
Y=	467,392	
LAT.	32.284656	
LONG.	104.067742	

CORNER COORDINATES TABLE (NAD 27)
A - Y=477496.90, X=577205.98
B - Y=477585.85, X=582543.98
C - Y=472181.86, X=577232.84
D - Y=472266.72, X=582546.90
E - Y=466858.95, X=577288.92
F - Y=467012.61, X=582560.30

PROPOSED BOTTOM HOLE LOCATION		
X=	582,230	NAD 27
Y=	467,103	
LAT.	32.283903	
LONG.	104.067248	
X=	623,413	NAD83
Y=	467,162	
LAT.	32.284024	
LONG.	104.067742	



[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.

Kayla McConnell 1/29/19
Signature Date

Kayla McConnell
Printed Name

gncv@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.

10/13/2017
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT L. LASTRAPES
NEW MEXICO
23006
06/05/2018
PROFESSIONAL SURVEYOR

23006
Certificate Number

RVP 2-13-19

BOP Scher


Wellhead S


Choke Hos


1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA TVD	KBTVD	MD
Castille	1917	1103	
Lamar	435	2595	
Bell	398	2622	
Cherry	-414	3434	
Brushy	-1638	4658	
Bone Spring Lime	-3140	6160	
Avalon	-3547	6567	
First Bone Spring Sand	-4272	7292	
SBSG Sand	-5004	8024	
Third Bone Spring Carbonate	-6108	9128	
Third Bone Spring Sand	-6443	9403	
Wolfcamp A		9463	
Lateral TVD Wolfcamp A	-6545	9565	19871

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	1103
Water	Cherry Canyon	3434
Oil/Gas	Brushy Canyon	4658
Oil/Gas	First Bone Spring Sand	7292
Oil/Gas	SBSG Sand	8024
Oil/Gas	Third Bone Spring Carbonate	9128
Oil/Gas	Third Bone Spring Sand	9403
Oil/Gas	Wolfcamp A	9463

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.

ONSHORE ORDER NO. 1
Chevron
CB CAL 15 22 002 3H
Eddy County, NM

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-80IC	LTC	New
Production	0'	19,871'	8-1/2"	5-1/2"	20#	P-110	TXP	New

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

Surface Casing: 450'
Intermediate Casing: 9,000' MD
Production Casing: 19,871' MD/9,565' TVD (9,943.39' VS @ 90 deg inc)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.42	5.22	2.76	1.76
Intermediate	1.38	2.19	1.7	1.67
Production	1.1	1.64	2.19	1.32

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 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
Collapse Design			
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
Tension Design			

5. **CEMENTING PROGRAM**

Slurry	Type	Cemnent Top	Cement Bottom	Weight (ppg)	Yield (sx/cu ft)	OH %Excess Open Hole	Sacks	Water gal/sk
Surface								
Tail	Class C	0'	450'	14.8	1.336	10	257	6.423
Intermediate								
Stage 2 Lead	Class C	0'	1,595'	11.9	2.57	10	217	14.73
Stage 2 Tail	Class C	1,595'	2595'	14.8	1.337	10	258	6.42
DV Tool		2,595'						
Stage 1 Lead	Class C	2,595'	8,000'	11.9	2.57	10	724	14.73
Stage 1 Tail	Class C	8,000'	9,000'	14.8	1.337	10	258	6.42
Production								
Tail	Class C	6,000'	18,871'	13.2	1.84	10	1763	9.85
Acid Soluable Tail	Class H	18,871'	19,871'	15	2.18	10	116	9.55

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.

6. **MUD PROGRAM**

From	To	Type	Weight	F. Vis	Filtrate
0'	450'	Spud Mud	8.3 - 8.4	32 - 34	NC - NC
450'	9,000'	Brine/OBM	8.8 - 10	50 -70	5.0 - 10
9,000'	19,871'	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 be used to detect

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	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.