

Well Name: VONI FED COM	Well Location: T26S / R31E / SEC 21 / NWNW / 32.0345749 / -103.7902491	County or Parish/State: EDDY / NM
Well Number: 221H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM138866	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001547018	Well Status: Approved Application for Permit to Drill	Operator: MATADOR PRODUCTION COMPANY

Notice of Intent

Type of Submission: Notice of Intent	Type of Action Other
Date Sundry Submitted: 03/10/2021	Time Sundry Submitted: 04:37
Date proposed operation will begin: 05/01/2021	

Procedure Description: BLM Bond No.: NMB001079 Surety Bond No.: RLB0015172 Matador requests the option to amend the casing and cement design to the attached plan. Omit 9-5/8" casing string and utilize a diesel brine emulsion mud system. Please see the supporting documentation attached and contact Blake Hermes at 972-371-5485 or bhermes@matadorresources.com for any questions.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- Voni_Fed_Com_221H_BLM_Drill_Plan_20210310163429.pdf
- Voni_Fed_Com_221H_BLM_Tapered_String_Spec_20210310163429.pdf

County or Parish/State: EDDY / NM

Allottee or Tribe Name:

Unit or CA Number:

Operator: MATADOR
PRODUCTION COMPANY

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MATADOR PRODUCTION COMPANY
LEASE NO.:	NMNM138866
WELL NAME & NO.:	VONI FED COM 221H SUNDRY
SURFACE HOLE FOOTAGE:	320'/N & 484'/W
BOTTOM HOLE FOOTAGE:	240'/S & 338'/ W
LOCATION:	Section 21, T.26 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input type="radio"/> Medium	<input checked="" type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

ALL Previous COAs Still Apply.

A. CASING

- The **7-5/8** inch intermediate casing shall be set at approximately **11805 feet**. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

- b. Second stage above DV tool:
- Cement to surface. If cement does not circulate, contact the appropriate BLM office.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
 - ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ **Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.**

Operator has proposed to pump down 13-3/8" X 7-5/8" annulus. Operator must run a CBL from TD of the Choose an item." casing to surface. Submit results to BLM.

RI03162021

212631 D ATS-19-2240 VONI FED COM 221H Eddy NMNM138866 Matador 13-22 03162021 RI SUNDRY

VONI FED COM 221H SUNDRY

13 3/8	surface csg in a	17 1/2	inch hole.	Design Factors					Surface		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50	J 55	BTC	14.90	2.35	0.48	1,051	6	0.87	4.53	57,280
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,452			Tail Cmt	does not	circ to sfc.	Totals:	1,051	57,280			
Comparison of Proposed to Minimum Required Cement Volumes											
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist		
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg		
17 1/2	0.6946	700	1131	730	55	8.80	3155	5M	1.56		
Class 'C' tail cmt yield above 1.35.											
Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.											
Site plat (pipe racks S or E) as per O.O.I.III.D.4.L not found.											

7 5/8	casing inside the	13 3/8	Design Factors						Int 1		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@S	a-B	a-C	Weight
"A"	29.70	P 110	BTC	2.69	0.93	1.11	11,805	2	1.62	1.70	350,609
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	11,805	350,609		
The cement volume(s) are intended to achieve a top of				0	ft from surface or a			1051	overlap.		
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist		
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg		
9 7/8	0.2148	1070	3467	2888	20	9.40	5842	10M	0.69		
Class 'H' tail cmt yld > 1.20							MASP is within 10% of 5000psig, need exrta equip?				
More cement may be needed , Casing must be 1//3 fluid filled during drilling.											

Tail cmt		casing inside the		7 5/8		Design Factors				Prod 1		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	20.00	P 110	TLW	2.91	1.53	1.69	24,459	2	2.46	2.23	489,180	
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,670							Totals:	24,459	489,180			
The cement volume(s) are intended to achieve a top of				11611	ft from surface or a			194	overlap.			
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist			
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg			
6 3/4	0.0835	1000	1193	1075	11	13.50			U.44			
Class 'C' tail cmt yld > 1.35												
More cement may be needed.												
#N/A												

Drill Plan

Voni Fed Com 221H
SHL: 320' FNL & 484' FWL Section 21
BHL: 240' FSL & 338' FWL Section 33
Township/Range: 26S 31E
Elevation Above Sea Level: 3194

Drilling Operation Plan

Proposed Drilling Depth: 24459' MD / 12137' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0353186972 N / -103.7909563304 W

TD Lat/Long (NAD83): 32.0008349213 N / -103.7906431123 W

1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	742	742	765	Anhydrite	Barren
Salado (Top of Salt)	1,507	1,507	1,884	Salt	Barren
Lamar (Base of Salt)	3,977	3,977	32	Salt	Barren
Bell Canyon	4,009	4,009	1,115	Sandstone	Oil/Natural Gas
Cherry Canyon	5,124	5,124	1,138	Sandstone	Oil/Natural Gas
Brushy Canyon	6,262	6,262	1,638	Sandstone	Oil/Natural Gas
Bone Spring Lime	7,900	7,900	961	Limestone	Oil/Natural Gas
1st Bone Spring Sand	8,861	8,861	495	Sandstone	Oil/Natural Gas
2nd Bone Spring Carbonate	9,356	9,356	174	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	9,530	9,530	630	Sandstone	Oil/Natural Gas
3rd Bone Spring Carbonate	10,160	10,160	595	Carbonate	Oil/Natural Gas
3rd Bone Spring Sand	10,755	10,755	436	Sandstone	Oil/Natural Gas
Wolfcamp	11,191	11,191	-	Shale	Oil/Natural Gas
KOP	11,955	11,908	-	Shale	Oil/Natural Gas
TD	24,459	12,137	-	Shale	Oil/Natural Gas

2. Notable Zones

Wolfcamp is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 230'

3. Pressure Control**Equipment**

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Onshore Order #2 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

Testing Procedure

Drill Plan

BOP will be inspected and operated as required in Onshore Order #2. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

Variance Request

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

4. Casing & Cement

All casing will be API and new. See attached casing assumption worksheet.

String	Hole Size (in)	Set MD (ft)	Set TVD (ft)	Casing Size (in)	Wt. (lb/ft)	Grade	Joint	Collapse	Burst	Tension
Surface	17.5	0 - 1051	0 - 1051	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	9.875	0 - 11805	0 - 11758	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	6.75	0 - 24459	0 - 12137	5.5	20	P-110	Hunting TLW-SC	1.125	1.125	1.8

- All casing strings will be tested in accordance with Onshore Order #2 - III.B.1.h
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality and as run specification sheets will be on location for review

Variance Request

Drill Plan

Matador request a variance to wave the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Matador request option to perform a bradenhead cement squeeze on Intermediate 1 string.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole.

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement	Class	Blend
Surface	Lead	450	1.747	780	13.5	50%	0	C	5% NaCl + LCM
	Tail	250	1.379	348	14.8	50%	751	C	5% NaCl + LCM
Intermediate 1	Lead	870	3.66	3195	10.3	25%	0	A/C	Fluid Loss + Dispersant + Retarder + LCM
	Tail	200	1.413	286	13.2	25%	10805	A/C	Fluid Loss + Dispersant + Retarder + LCM
Production	Tail	1000	1.193	1190	14.2	10%	11605	H	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

An electronic Pason mud monitoring system complying with Onshore Order 2 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

Hole Section	Hole Size (in)	Mud Type	Interval MD (ft)	Density (lb/gal)	Viscosity	Fluid Loss
Surface	17.5	Spud Mud	0 - 1051	8.4 - 8.8	28-30	NC
Intermediate 1	9.875	Brine Diesel Emulsion	1051 - 11805	8.4 - 9.4	28-30	NC
Production	6.75	OBM	11805 - 24459	12 - 13.5	50-65	<20

6. Cores, Test, & Logs

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve.

7. Down Hole Conditions

Drill Plan

No abnormal pressure or temperature is expected. Bottom hole pressure is 8520 psi. Maximum anticipated surface pressure is 5850 psi. Expected bottom hole temperature is 201° F.

In accordance with Onshore Order 6, Matador does not anticipate that there will be enough H₂S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of a "H₂S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have a H₂S safety package on all wells, attached is a "H₂S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of the equipment being used.

Tapered String Specification Sheet

Voni Fed Com 221H

SHL: 320' FNL & 484' FWL Section 21

BHL: 240' FSL & 338' FWL Section 33

Township/Range: 26S 31E

Elevation Above Sea Level: 3194'

String	Hole Size (in)	Set MD (ft)	Set TVD (ft)	Casing Size (in)	Wt. (lb/ft)	Grade	Joint	Collapse	Burst	Tension
Surface	17.5	0 - 1051	0 - 1051	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	9.875	0 - 11805	0 - 11758	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	6.75	0 - 24459	0 - 12137	5.5	20	P-110	Hunting TLW-SC	1.125	1.125	1.8

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 26831

CONDITIONS OF APPROVAL

Operator: MATADOR PRODUCTION COMPANY 5400 LBJ Freeway, Ste 1500	One Lincoln Centre Dallas, TX75240	OGRID: 228937	Action Number: 26831	Action Type: C-103A
OCD Reviewer jagarcia	Condition None			