

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Sundry Print Reports
10/15/2024

Well Name: BLUE MARLIN FED COM Well Location: T25S / R36E / SEC 19 / County or Parish/State: LEA /

LOT 4 / 32.109317 / -103.31048

Well Number: 111H Type of Well: CONVENTIONAL GAS Allottee or Tribe Name:

WELL

Lease Number: NMNM127448 Unit or CA Name: Unit or CA Number:

OPERATING LLC

Notice of Intent

Sundry ID: 2809836

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 09/03/2024 Time Sundry Submitted: 10:15

Date proposed operation will begin: 11/22/2024

Procedure Description: Civitas Permian Operating is requesting permission to change the current hole diameter and casing size on the intermediate and production holes of the subject well. Corresponding changes have also been made to the cementing program. Intermediate: 11" hole / 8-5/8" casing Production: 7-7/8" hole / 5-1/2" casing. An updated Drilling Operations Plan is attached to this sundry.

NOI Attachments

Procedure Description

 $APD_Blue_Marlin__111H_Rev3_07.09.2024_20240903101418.pdf$

Page 1 of 2

eived by OCD: 10/24/2024 4:17:01 PM Well Name: BLUE MARLIN FED COM

Well Location: T25S / R36E / SEC 19 /

LOT 4 / 32.109317 / -103.31048

County or Parish/State: LEA/ 2 of

NM

Well Number: 111H

Lease Number: NMNM127448

Type of Well: CONVENTIONAL GAS

Unit or CA Name:

Unit or CA Number:

Allottee or Tribe Name:

US Well Number: 3002549115

Operator: CIVITAS PERMIAN OPERATING LLC

Conditions of Approval

Additional

Sec 19 25S 36E NMP Sundry 2809839 Blue Marlin Fed Com 111H COAs 20240916082428.pdf

Sec_19_25S_36E_NMP_Sundry_2809839_Blue_Marlin_Fed_Com_111H_Eng_Worksheet_20240916082343.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: NATHAN BENNETT Signed on: SEP 03, 2024 10:15 AM

Name: CIVITAS PERMIAN OPERATING LLC

Title: Director Permitting & Compliance

Street Address: 555 17TH STREET SUITE 3500

City: DENVER State: CO

Phone: (303) 312-8166

Email address: NBENNETT@CIVIRESOURCES.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 10/07/2024

Signature: Chris Walls

Page 2 of 2

Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

BURE	EAU OF LAND MANAGEMEN	Т	5. Lease Serial No.				
Do not use this f	OTICES AND REPORTS ON orm for proposals to drill or Jse Form 3160-3 (APD) for s	to re-enter an	6. If Indian, Allottee or Tribe	Name			
SUBMIT IN 1	FRIPLICATE - Other instructions on pa	age 2	7. If Unit of CA/Agreement, N	Name and/or No.			
1. Type of Well Oil Well Gas W	/ell Other		8. Well Name and No.				
2. Name of Operator			9. API Well No.				
3a. Address	3b. Phone N	o. (include area code)	10. Field and Pool or Exploratory Area				
4. Location of Well (Footage, Sec., T.,R	.,M., or Survey Description)		11. Country or Parish, State				
12. CHE	CK THE APPROPRIATE BOX(ES) TO I	NDICATE NATURE	OF NOTICE, REPORT OR OTI	HER DATA			
TYPE OF SUBMISSION		TYP	E OF ACTION				
Notice of Intent		epen draulic Fracturing	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity			
Subsequent Report	Casing Repair Ne	w Construction	Recomplete	Other			
Final Abandonment Notice	= ' =	ig and Abandon ig Back	Temporarily Abandon Water Disposal				
14. I hereby certify that the foregoing is	true and correct. Name (Printed/Typed)						
		Title					
Signature		Date					
	THE SPACE FOR FE	DERAL OR STA	ATE OFICE USE				
Approved by		Title		Date			
	ned. Approval of this notice does not warr quitable title to those rights in the subject duct operations thereon.	ant or	ľ				
	3 U.S.C Section 1212, make it a crime for ents or representations as to any matter wi		y and willfully to make to any do	epartment or agency of the United States			

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

Additional Information

Location of Well

 $0. \ SHL: LOT \ 4 \ / \ 257 \ FSL \ / \ 696 \ FWL \ / \ TWSP: \ 25S \ / \ RANGE: \ 36E \ / \ SECTION: \ 19 \ / \ LAT: \ 32.109317 \ / \ LONG: \ -103.31048 \ (\ TVD: \ 0 \ feet, \ MD: \ 0 \ feet \)$ $PPP: \ LOT \ 4 \ / \ 13 \ FSL \ / \ 662 \ FWL \ / \ TWSP: \ 25S \ / \ RANGE: \ 36E \ / \ SECTION: \ 19 \ / \ LAT: \ 32.1086489 \ / \ LONG: \ -103.3105989 \ (\ TVD: \ 8435 \ feet, \ MD: \ 8441 \ feet \)$ $BHL: \ LOT \ 1 \ / \ 5 \ FNL \ / \ 660 \ FWL \ / \ TWSP: \ 25S \ / \ RANGE: \ 36E \ / \ SECTION: \ 18 \ / \ LAT: \ 32.1376705 \ / \ LONG: \ -103.3105997 \ (\ TVD: \ 9683 \ feet, \ MD: \ 20039 \ feet \)$

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Civitas Permian Operating LLC
WELL NAME & NO.: Blue Marlin Fed 111H
LOCATION: Sec 19-25S-36E-NMP
COUNTY: Lea County, New Mexico

Changes approved through engineering via **Sundry 2809839** on 09/16/2024. Any previous COAs not addressed within the updated COAs still apply.

COA

H ₂ S	•	No	C	Yes
Potash /	None	Secretary	C R-111-Q	□ Open Annulus
WIPP				\square WIPP
Cave / Karst	• Low	Medium	High	Critical
Wellhead	Conventional	Multibowl	Both	Diverter
Cementing	☐ Primary Squeeze	□ Cont. Squeeze	☐ EchoMeter	□ DV Tool
Special Req	Capitan Reef	Water Disposal	▼ COM	Unit
Waste Prev.	C Self-Certification	C Waste Min. Plan	APD Submitted p	prior to 06/10/2024
Additional	▼ Flex Hose	☐ Casing Clearance	Pilot Hole	☐ Break Testing
Language	☐ Four-String	☐ Offline Cementing	☐ Fluid-Filled	

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 1285 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is:
 - 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, Capitan Reef, or potash.
 - ❖ In <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
 - Switch to freshwater mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - O Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **50 feet** on top of Capitan Reef top or **200 feet** into the previous casing, whichever is greater. 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, Capitan Reef, or potash.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000** (**5M**) psi.

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Contact Lea County Petroleum Engineering Inspection Staff:

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following

- conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Blue Marlin Fed Com 111H

13 3/8	surface o	sg in a	17 1/2	inch hole.		<u>Design I</u>	Factors -			Surfa	ce	
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50	J	55	BTC	12.18	2.04	1.01	1,285	5	1.75	4.16	70,033
"B"				BTC				0				0
w/8.4#/	g mud, 30min Sfc	Csg Test psig:	1,350	Tail Cmt	does not	circ to sfc.	Totals:	1,285				70,033
Comparison of	of Proposed to	Minimum R	equired Ceme	nt 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	1322	1785	893	100	8.30	1557	2M				1.56

8 5/8	casing ins	side the	13 3/8			Design I	Factors -			Int 1		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	32.00	L	80	BTC	4.40	1.41	1.26	5,205	2	2.38	2.45	166,560
"B"								0				0
w/8.4#	g mud, 30min Sfc	Csg Test psig:					Totals:	5,205				166,560
	The cement vo	olume(s) are	intended to ac	chieve a top of	0	ft from su	rface or a	1285				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
11	0.2542	1129	2182	1590	37	10.00	2397	3M				0.69
Class 'H' tail o	emt yld > 1.20											

5 1/2	casing ins	side the	8 5/8			Design Fa	<u>ctors</u>		4	Prod 1		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	23.00	Р	110	Blue	3.27	3.21	3.21	20,039	3	6.06	6.07	460,897
"B"								0				0
w/8.4#/g	g mud, 30min Sfc	Csg Test psig:	2,130				Totals:	20,039				460,897
1	The cement vo	olume(s) are	intended to ac	chieve a top of	5000	ft from su	ırface or a	205				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
7 7/8	0.1733	3539	6052	2606	132	9.00						0.85
Class 'C' tail cr	nt yld > 1.35											

#N/A			5 1/2									
Segment	#/ft	Grade		Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"				0.00				0				0
"B"				0.00				0				0
w/8.4#/	g mud, 30min Sfc	Csg Test psig:					Totals:	0				0
	Cmt vol cal	c below incl	udes this csg,	TOC intended	#N/A	ft from su	ırface or a	#N/A				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
0		#N/A	#N/A	0	#N/A							
#N/A			Capitan Reef e	est top XXXX.								

Carlsbad Field Office 9/16/2024



Elevation above Sea Level: 3075'

DRILLING PROGRAM

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Quaternary Deposits	0	0	Surface	None
Rustler Anhydrite	1215	1215		Salt
Salado	1740	1740	Salt	Salt
Base Salt	3395	3397		Salt
Lamar	5180	5185	Limestone	None
Bell Canyon	5195	5200	Sandstone	Hydrocarbons
Cherry Canyon	6125	6131	Sandstone	Hydrocarbons
Brushy Canyon	7180	7186	Sandstone	Hydrocarbons
Bone Spring	8435	8441	Limestone	Hydrocarbons
КОР	9147	9153	Sandstone	Hydrocarbons
1st Bone Spring	9685	9852	Sandstone	Hydrocarbons
TD	9683	20039	Shale	Hydrocarbons

2. Notable Zones

1st Bone Spring Sand is the target formation.

3. Pressure Control

Pressure Control Equipment (See Schematics):

A 5,000 psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attachments for BOP and choke manifold diagrams. Also present will be an accumulator that meets the requirements of Onshore Order #2 for the pressure rating of the BOP stack. A rotating head will also be installed as needed. BOP will be inspected and operated as recommended in Onshore Order #2. A top drive check valve 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. The wellhead will be a multi-bowl speed head.

BOP Test procedure will be as follows:

After surface casing is set and the BOP is nippled up, the BOP pressure tests will be made with a third party tester to 250 psi low, 5000 psi high, and the annular preventer will be tested to 2,500 psi. The BOP will be tested in this manner after nipple-up if any break of the stack occurs.



Variance Requests:

Civitas requests a variance to run a multi-bowl speed head for setting the Intermediate 1, and Production Strings. Civitas 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. In the event the specific hose is not available, one of equal or higher rating will be used.

Civitas requests approval to possibly utilize a spudder rig to drill and set casing for the surface interval on this well. The spudder rig will be possibly utilized in order to reduce cost and save time. The wellhead will be installed and tested as soon as the surface casing is cut off per the existing COAs. A blind flange with the same pressure rating as the wellhead will be installed on the well. Once the spudder rig is removed, Civitas will secure the wellhead area by placing a guard rail around the cellar. Pressure will be monitored and a means for intervention will be maintained while the drilling rig is not over the well. Spudder rig operations are expected to take 2-3 days per well. Three wells on the pad will have surface casing set by the spudder rig as a part of this operation. The BLM will be notified 24 hours prior to commencing spudder rig operations. Within 90 days of the departure of the spudder rig, drilling operations will recommence on these wells. This rig will have a BOP stack equal or greater to the pressure rating required in the COAs. The BLM will be notified 24 hours before the larger rig moves on the pre-set wells. Civitas will have supervision on the spudder rig to ensure compliance with all BLM and NMOCD regulations.

4. Casing & Cement

All Casing will be new.

Name	Hole Size	Casing Size	Standard	Tapered	Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	17 1/2	13 3/8	API	No	0	1285	0	1285	J-55	54.5	BUTT	1.13	1.15	1.6
1st Intermediate	11	8 5/8	API	No	0	5205	0	5200	L-80	32	BUTT	1.13	1.15	1.6
Production	7 7/8	5 1/2	NON API	No	0	20039	0	9683	VS-SS-95-XP	20	VAAC	1.13	1.15	1.6

Name	Туре	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Tail	0	1322	1.35	1785	14.8	100%	С	5% NCI + LCM
1st Intermediate	Lead	0	801	2.18	1746	12.7	65%	С	Bentonite + 1% CaCL2 + 8% NaCl + LCM
1st intermediate	Tail	4205	328	1.33	437	14.8	65%	С	5% NaCl + LCM
Production	Tail	4205	2070	1.71	3539	14.2	25%	Н	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

Electronic Pason mud monitor system complying with Onshore Order 1 will be used. All necessary mud products (e. g., barite, cedar bark) for weight addition and fluid loss control will always be on site. Mud program is subject to change due to hole conditions. A closed loop system will be used.



Name	Тор	Bottom	Туре	Mud Weight	Visc	Fluid Loss
Surface	0	1285	FW Spud Mud	8.30	28	NC
Intermediate	1285	5205	Brine Water	10.00	30-32	NC
Production	5205	20039	Oil Based Mud	9.00	15-20	<10

6. Cores, Tests, & Logs

- Electric Logging Program: No open-hole logs are planned at this time for the pilot hole.
- GR will be collected while drilling through the MWD tools from 8.625" casing shoe to TD.
- A 2-person mud logging program will be used from 8.625" casing shoe to TD.
- No DSTs or cores are planned at this time.
- CBL w/ CCL from as far as gravity will let it fall to TOC.

7. <u>Down Hole Conditions</u>

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is $^{\sim}4,549$ psi. Expected bottom hole temperature is $^{\sim}160^{\circ}$ F.

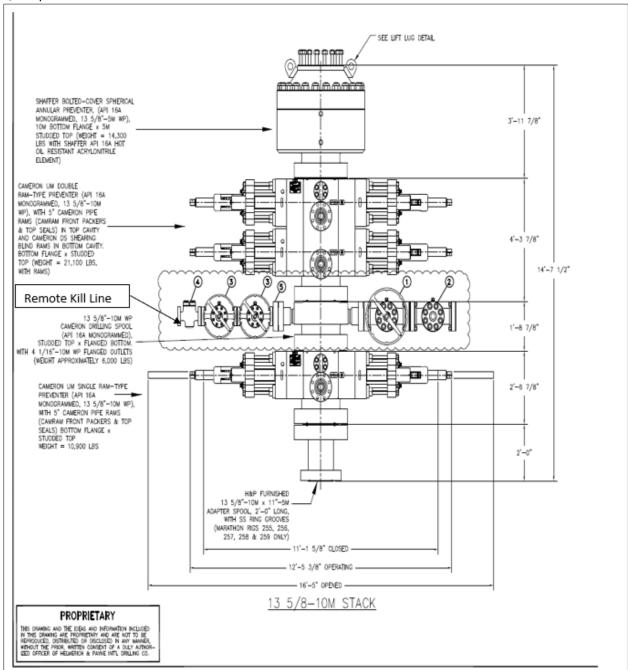
Civitas does not anticipate that there will be enough H_2S from the surface to the Wolfcamp formations to meet the BLM's Onshore Order 6 requirements for the submission of an " H_2S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Civitas has an H_2S safety package on all wells and an " H_2S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be safely flared. All personnel will be familiar with all aspects of safe operation of equipment being used.

8. Other Conditions

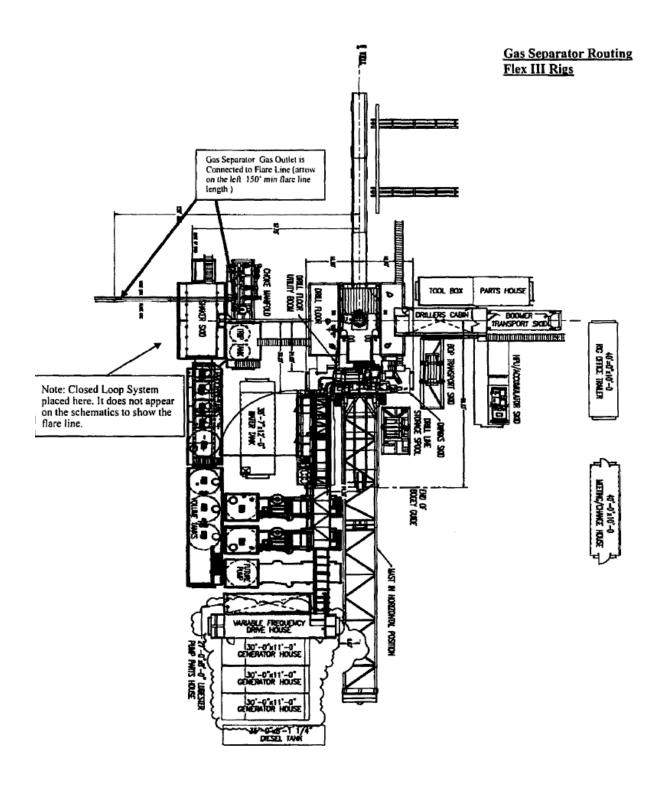
Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 30 days. If production casing is run an additional 60 days will be required to complete and construct surface facilities.



5,000 psi BOP Stack

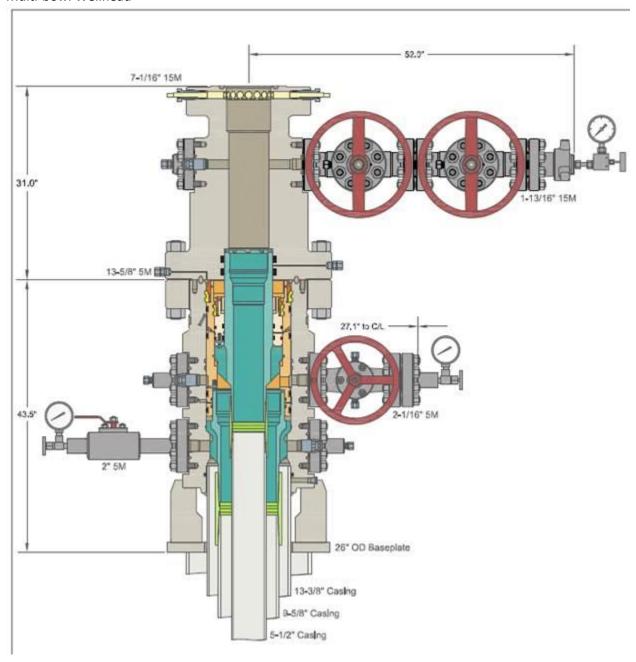






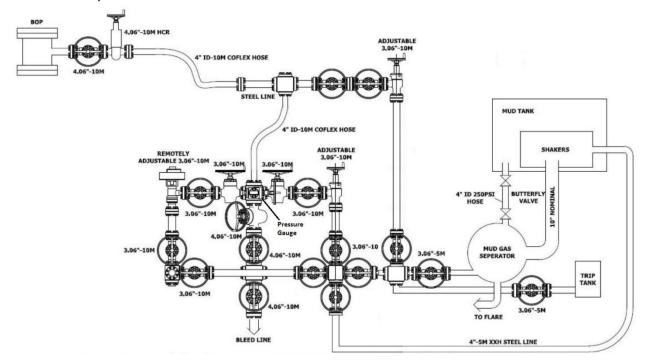


Multi-bowl Wellhead





10M Choke Layout



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

CONDITIONS

Action 395725

CONDITIONS

Operator:	OGRID:
Civitas Permian Operating, LLC	332195
555 17th Street	Action Number:
Denver, CO 80202	395725
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	1/24/2025
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing.	1/24/2025