Form 3160-3 FORM APPROVED OMB No. 1004-0137 (October 2024) Expires: October 31, 2027 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. DRILL REENTER 1a. Type of work: 1b. Type of Well: Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone Multiple Zone 2. Name of Operator 9. API Well No. 3**0-**01**5-5**7323 10. Field and Pool, or Exploratory 3a. Address 3b. Phone No. (include area code) 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area At surface At proposed prod. zone 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the 25. Signature Name (Printed/Typed) Date Title Approved by (Signature) Name (Printed/Typed) Date Title Office Application approval 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. Conditions of approval, if any, are attached. 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

APPROVED WITH CONDITIONS

*(Instructions on page 2)

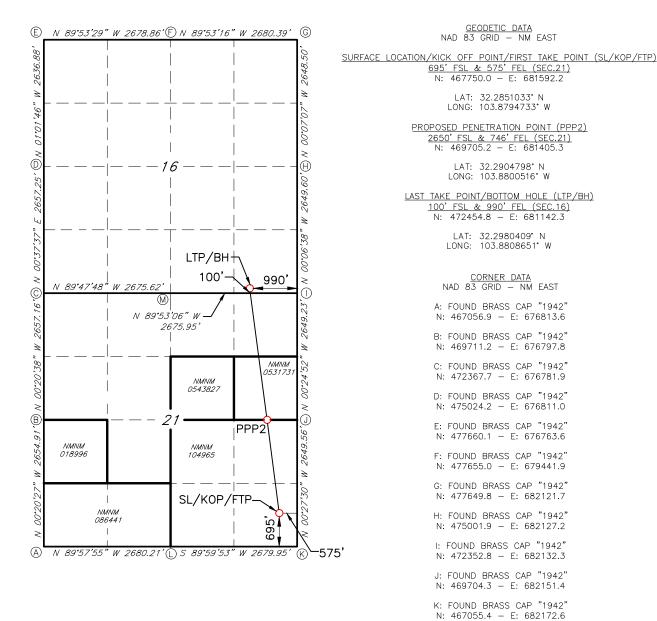
<u>C-102</u>	<u>,</u>		Ene	rgy, Min	State of New erals & Natura	w Mexico al Resources Dep	Revised J	uly 9, 2024						
	Electronica					TION DIVISION					tal			
Via OC	D Permittir	ıg						Subm		☐ Amended Rep				
								Type:		☐ As Drilled				
					WELL LOCAT	TION INFORMATIC)N							
API Nu	mber		Pool Code			Pool Name								
		5-57323		247	50	FO	RTY NINE	ER RII	OGE	DELAWAR	E			
Property	28510		Property Na		FORTY	NINER RIDO		2Н						
OGRID	No. 21	1712	Operator Na	ame	STRATA I	PRODUCTION	COMPANY	ľ	Grou	nd Level Elevation	3258'			
Surface	Owner:	State □ Fee □	Tribal ∏ Fo	ederal		Mineral Owner:	☐ State 🛚 Fee	□Tribal	∑ Fee	leral				
					Surfa	ace Location								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Long	itude	County			
P	21	23S	30E		695 FSL	575 FEL	32.28510	33°N	103	.8794733°W	EDDY			
					1	Hole Location								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Long		County			
P	16	23S	30E		100 FSL	990 FEL	32.29804	.09°N	103	.8808651°W	EDDY			
	ed Acres	Infill or Defin	ning Well	Defining	g Well API	Overlapping Spacing Unit (Y/N) Consolidation Code								
Order N						Well setbacks are	e under Commoi	ı Ownersl	nip: 🗆	Yes X No				
						mp : (Yep)								
TIT	G ti	T1.		T	1	ff Point (KOP)	T . 414 1.		T	· 1.	Country			
UL P	Section 21	Township 23S	Range 30E	Lot	Ft. from N/S 695 FSL	Ft. from E/W 575 FEL	Latitude 32 28510	33°N	Long	.8794733°W	County EDDY			
1	21	200	JOE			ake Point (FTP)			100	.0794733 11	EDDI			
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W Latitude			Long	itude	County			
P	21	23S	30E		695 FSL	Ft. from E/W Latitude 32.2851033°]			_		EDDY			
			<u> </u>	<u> </u>		ke Point (LTP)								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Long	itude	County			
P	21	23S	30E		100 FSL	990 FEL	32.29804	09°N	103	.8808651°W	EDDY			
				1			1							
Unitized	l Area or Aı	rea of Uniform	Interest	Spacing	Unit Type X Hor	izontal ☐ Vertical	Grou	nd Floor l	Elevati	on: 3258'				
				1										
OPER.	ATOR CER	TIFICATIONS	;			SURVEYOR CER	TIFICATIONS							
					plete to the best of					s plotted from field no				
organiza	tion either own	ef, and , if the well ns a working inter	est or unleased i	mineral inter	rest in the land	surveys made by me u my belief.	nder my supervisio	n, and that	the san	ne is true and correct t	to the best of			
		bottom hole locat contract with an o			s well at this r unleased mineral					WEE. BE				
	or to a volunta y the division.		nent or a compu	lsory pooling	g order heretofore				/ <	MEX	< \			
If this we	ll is a horizoni	tal well, I further o	certify that this (organization	has received the			1	/ /	W MEXICO				
in each tr	act (in the tar	get pool or format	tion) in which ar	ny part of the	sed mineral interest e well's completed			(PF ((14400)) g)			
interval v Oer	vill be located ru Egis	l or obtained a con V	npulsory pooling 05/20/20	-	the division.	PR (14400) PR (05/19/2025 A)								
Signature	J J		Date			Signature and Scal-of Professional Surveyor								
		of Operation	ons			1/1/1/1/1								
Printed Na	_					Certificate Number	Date of Surv	rey						
jelgin	@stratan	m.com				14400		0	1/2	1/2025				

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is a directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

FORTY NINER RIDGE UNIT #52H





L: FOUND BRASS CAP "1942"

N: 467055.3 - E: 679493.2

M: FOUND BRASS CAP "1942"

N: 472358.2 - E: 679456.9

I. Operator:

Strata Production Company

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Date: 04/24/25

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description Effective May 25, 2021

OGRID: __21712

II. Type: ☒ Original ☐	Amendment	t due to □ 19.15.27.9	.D(6)(a) NMA	C □ 19.15.27.9.D((6)(b) NN	MAC Oth	er.
If Other, please describe	:						
III. Well(s): Provide the be recompleted from a si					wells pro	posed to be	drilled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D		ipated ICF/D	Anticipated Produced Water BBL/D
Forty Niner Ridge Unit		Sec 21-T23S-R30E	695' FSL &	1,200	2,6	600	3,300
#52H			575' FEL				
IV. Central Delivery Pov. Anticipated Schedu or proposed to be recom	le: Provide th		ion for each ne		well or s		7.9(D)(1) NMAC] roposed to be drilled
Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date		Initial Flow Back Date	
Forty Niner Ridge Unit		2/2/2026	2/16/2026	3/4/2026		3/18/2026	3/21/2026
#52H							
VI. Separation Equipm VII. Operational Pract Subsection A through F VIII. Best Management during active and planne	tices: \(\times\) Attaction 19.15.27.8	ch a complete descrip NMAC.	ption of the ac	tions Operator wil	l take to	comply wit	h the requirements of

Section 2 - Enhanced Plan

			E APRIL 1, 2022									
	2022, an operator tha complete this section.	t is not in compliance	with its statewide natural ga	as capture requirement for the applicable								
_	s that it is not require for the applicable rep	_	tion because Operator is in o	compliance with its statewide natural gas								
IX. Anticipated Na	tural Gas Production	1:										
W	ell	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF								
Forty Niner Ridge Unit #52H 1,900 832,000												
	thering System (NGC	<u> </u>										
Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in								
Strata Production Co.	Forty Niner Ridge	Sec 30-T23S-R30E	3/21/2026	36,000,000								
production operation the segment or portion the segment or portion. XII. Line Capacity production volume for the XIII. Line Pressure natural gas gathering. Attach Operator's XIV. Confidentiality.	as to the existing or place on of the natural gas gath. The natural gas gath from the well prior to be a comparator ⊠ does □ g system(s) described as plan to manage producty: □ Operator assert	anned interconnect of trathering system(s) to varieting system \(\sqrt{N} \) will \(\sqrt{N} \) the date of first production does not anticipate the above will continue to function in response to the transfer of the confidentiality pursuits and the confidentiality	the natural gas gathering systewhich the well(s) will be considered which the well(s) will be considered will not have capacity to getion. at its existing well(s) connect meet anticipated increases in the increased line pressure.	atticipated pipeline route(s) connecting the em(s), and the maximum daily capacity of nected. ather 100% of the anticipated natural gas ed to the same segment, or portion, of the line pressure caused by the new well(s). SA 1978 for the information provided in full description of the specific information								
		ne basis for such assert										

Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

🛮 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system: or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one

hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan.

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- **(b)** power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- reinjection for underground storage; (e)
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- fuel cell production; and (h)
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Printed Name: Jelm Elgin	
Title: Vice President Operations	
E-mail Address: jelgin@stratanm.com	
Date: 04/24/2025	
Phone: 575-622-1127, ext 18	
OIL CONSERVATION I	
(Only applicable when submitted as	a standalone form)
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	
OIL CONSERVATION I (Only applicable when submitted as Approved By: Title: Approval Date:	

Strata Production Company Natural Gas Management Plan

Forty Niner Ridge Unit #52H Section 21-T23S-R30E Eddy County, New Mexico

Attachment to NMOCD Form NGMP

VI. Separation Equipment

Well site separation equipment consists of a 4' X 15' X 500 psi WP 2 phase separator at the well site in Section 30-T23S-R31E to separate the gas from the oil and water and a 6' X 20' X 250 psi 3 phase separator that separates any residual gas, water, and oil. The gas is routed to a gas gathering line that connects to Strata's corridor through the field to Common Tank Battery 2 in the SWNW of Section 23-T23S-R30E where the gas goes through a 2 phase separator to remove any residual liquids, then through a compressor and into an interconnect with Enterprise GD LLC located in the NENE of Section 22-T23S-R30E (all in Eddy County, NM).

The oil and water are routed to FNRU #2 Common Tank Battery in the SWNE of Section 21-T23S-R30E where the oil goes through a separator to remove any residual gas then through a heater treater to remove any residual water. The oil is then stored in 500 bbl steel tanks at the battery. The facility separator, heater treater, and tanks are tied into a vapor recover system so any liberated gas is routed into the gas gathering line.

VII. Strata Production Company will take the following actions to comply with regulations outlined in 19.15.27.8.

A. Venting and Flaring of Natural Gas

Strata will maximize recovery of natural gas by minimizing the waste, as defined in 19.15.2 NMAC, of natural gas through venting and flaring. Strata will be connected to natural gas gathering systems with sufficient capacity to transport its produced natural gas. If there is inadequate capacity to transport the gas, the well(s) will be shut in until there is adequate capacity or other arrangements can be made to avoid waste.

B. Venting and Flaring During Drilling Operations

Drilling rigs shall be equipped with a rig flare located at least 100 ft from the well. The flare will be utilized to combust any natural gas produced through drilling operations. Should gas be flared, an estimated volume will be reported as required by statutes. Gas will not be flared during normal drilling operations.

C. Venting and Flaring During Completion Operations

Natural gas produced during completion operations will be flared. All gas produced will be directed to permanent separation equipment and into sales as soon as practical. If natural gas does not meet pipeline specifications, Strata may flare the gas for up to 60 days or until the gas meets pipeline specifications, whichever is sooner. Strata will properly size the flare which will be equipped with automatic ignition source. The gas will be sampled no less than twice per week and the gas will be routed through Strata's gathering system as soon as it meets pipeline specifications.

D. Venting and Flaring During Production Operations

Natural gas will not be flared during normal production operations except as is allowed under 19.15.27.8 D (1)-(4). If capacity is inadequate, well(s) will be shut in until there is adequate capacity or other arrangements can be made to avoid waste except during emergency or malfunction situations. Flared volumes will be reported as required by statutes.

E. Performance Standards

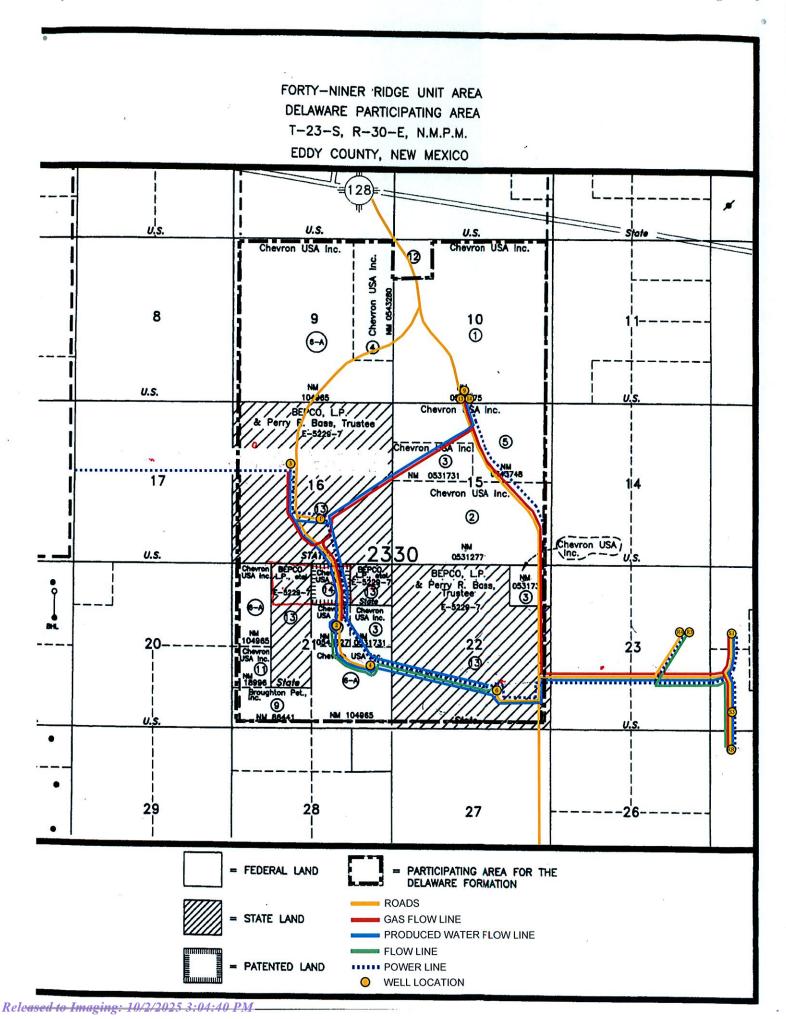
Strata will comply with the performance standards per 19.15.27.8 E (1)-(8). All equipment will be designed to accommodate anticipated volumes and pressures. Storage tanks will be equipped with automatic gauging equipment connected to Strata's SCADA system. Flares will be located at least 100 ft from wells and storage tanks and will be equipped with automatic ignition sources. Strata will conduct AVO inspections to comply with 19.15.27.8 E (5) (a) and 19.15.27.8 E (5) (b)-(c). Any emergency situations resulting in flaring will be resolved to minimize waste.

F. Measurement of Vented and Flared Natural Gas

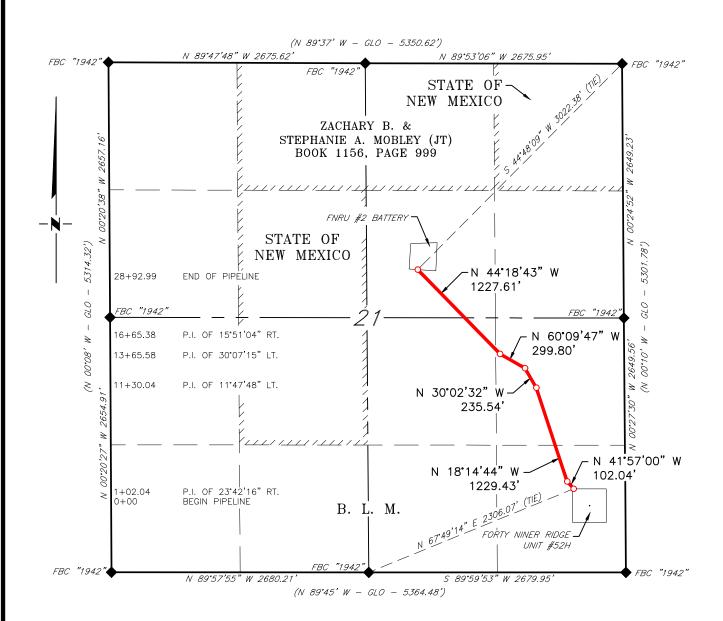
Gas flared as the result of emergency of malfunction will be metered. Gas used beneficially during production operations will be metered or estimated. Should metering be impractical due to equipment malfunction or low flow, Strata will estimate the volume of gas vented or flared. All metering equipment will conform to industry standards and will not be equipped with a bypass around metering equipment except for the sole purpose of inspecting or servicing the metering equipment.

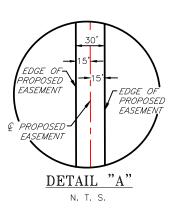
VIII. Maintenance Activities

For maintenance activities involving production equipment and compression, venting will be limited to depressurization of the equipment to provide safe working conditions. In the event maintenance is required on pressurized equipment, associated producing wells will be shut in to minimize waste. Gas normally routed through a vapor recovery unit may be routed to flares to avoid venting for the maintenance of VRU's and associated equipment.



STRATA PRODUCTION COMPANY FLOWLINE FOR THE FORTY NINER RIDGE UNIT #52H WELL LOCATION SECTION 21, T23S, R30E N. M. P. M., EDDY COUNTY, NEW MEXICO





SCALE: 1" = 1000' 0 500' 1000'

BEARINGS ARE GRID NAD 83 NM EAST DISTANCES ARE HORIZ. GROUND.

<u>LEGEND</u>

) RECORD DATA — GLO
FOUND MONUMENT
AS NOTED
PROPOSED PIPELINE

I, Dale E. Bell, New Mexico Professional Surveyor No. 14400, do hereby certify that this Plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey, said survey and plat meets the Minimum Standards for Land Surveying in the State of New Mexico and that it is true and correct to the best of my knowledge and belief.

Dale E. Bell NM PS 14400

701 S. CECIL ST., HOBBS, NM 88240

00, PLE E. BELL 14400 03/18/2025 03/18/2025

1 REWORK 1/21/25
NO. REVISION DATE

JOB NO.: LS24040333R1
DWG. NO.: 24040333R1-7

RRC ELECTRIC SERVICES, LLC.

(575) 964-8200

SCALE: 1" = 1000'

DATE: 12/24/2024

SURVEYED BY: RG/HA

DRAWN BY: CG

APPROVED BY: DEB

SHEET: 1 OF 2

STRATA PRODUCTION COMPANY FLOWLINE FOR THE FORTY NINER RIDGE UNIT #52H WELL LOCATION SECTION 21, T23S, R30E N. M. P. M., EDDY COUNTY, NEW MEXICO

DESCRIPTION

A strip of land 30 feet wide, being 2,892.99 feet or 175.333 rods in length, lying in Section 21, Township 23 South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Southeast quarter of Section 21, which bears, N 67*49'14" E, 2,306.07 feet from a brass cap, stamped "1942", found for the South Quarter corner of Section 21;

Thence N 41°57'00" W, 102.04 feet, to Engr. Sta. 1+02.04, a P. I. of 23°42'16" right;

Thence N 18*14'44" W, 1,028 feet, to Engr. Sta. 11+30.04, a P. I. of 11*47'48" left;

Thence N 30°02'32" W, 235.54 feet, to Engr. Sta. 13+65.58, a P. I. of 30°07'15" left;

Thence N 60°09'47" W, 299.80 feet, to Engr. Sta. 16+65.38, a P. I. of 15°01'04" right;

Thence N 44°18'43" W, 1,227.61 feet, to Engr. Sta. 28+92.99, the End of Survey, a point in the Northeast quarter of Section 21, which bears, S 44°48'09" W, 3,022.38 feet from a brass cap, stamped "1942", found for the Northeast corner of Section 21.

Said strip of land contains 2.061 acres, more or less, and is allocated by forties as follows:

SE	1/4 SE	1/4	30.360	Rods	0.345	Acres
NE	1/4 SE	1/4	74.447	Rods	0.846	Acres
NW	1/4 SE	1/4	27.964	Rods	0.317	Acres
SW	1/4 NE	1/4	42.562	Rods	0.484	Acres



1	REWORK	1/21/25
NO.	REVISION	DATE
JOB	NO.: 1S2404	-0.3.3.3R1

DWG. NO.: 24040333R1-8

RRC SERVICES LIC

ELECTRIC SERVICES, LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'

DATE: 12/24/2024

SURVEYED BY: RG/HA

DRAWN BY: CG

APPROVED BY: DEB

SHEET: 2 OF 2

Well Name: FORTY NINER RIDGE UNIT



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

Drilling Plan Data Report

09/23/2025

APD ID: 10400103742

Submission Date: 06/25/2025

Highlighted data reflects the most recent changes

Operator Name: STRATA PRODUCTION COMPANY

Well Number: 52H

Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
16444586	RUSTLER	3258	45	45	SALT	NONE	N
16444587	SALADO	2623	635	635	SALT	NONE	N
16444588	BASE OF SALT	-391	3649	3649	SALT	NONE	N
16444589	LAMAR	-461	3719	3719	LIMESTONE, SHALE	NATURAL GAS, OIL, USEABLE WATER	Y
16444590	BELL CANYON	-535	3793	3793	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, USEABLE WATER	Y
16444591	CHERRY CANYON	-1303	4561	4561	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, USEABLE WATER	Y
16444592	BRUSHY CANYON	-2523	5781	5781	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, USEABLE WATER	Y
16444593	BONE SPRING	-4183	7441	7441	LIMESTONE, SANDSTONE, SILTSTONE	NONE	N

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M Rating Depth: 7700

Equipment: Annular, Blind Rams, Double Rams, Mud Gas Separator, Remote kill line and other equipment as listed on 3M attachment.

Requesting Variance? NO

Variance request:

Testing Procedure: BOPE will be tested by an independent service company to 250# psi low pressure and 3000# psi high pressure per Onshore Oil and Gas Order 2 requirements.

Choke Diagram Attachment:

Forty_Niner_Ridge_Unit_52H_Choke_Diagram_20250625104503.pdf

BOP Diagram Attachment:

Forty_Niner_Ridge_Unit_52H_BOPE_Description_20250625104533.pdf

Forty_Niner_Ridge_Unit_52H_BOPE_20250625104534.pdf

Well Name: FORTY NINER RIDGE UNIT Well Number: 52H

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	450	0	450	3258	2808	450	H-40	48	ST&C	3.95	7.39	DRY	14.9 1	DRY	25.0 5
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	3800	0	3800	3258	-542	3800	N-80	43.5	LT&C	2.32	3.2	DRY	6.08	DRY	4.99
3	PRODUCTI ON	8.5	7.0	NEW	API	Υ	0	6800	0	6800	3258	-3542	6800	P- 110	29	LT&C	2.89	3.17	DRY	3.15	DRY	2.7
4	PRODUCTI ON	8.5	5.5	NEW	API	Y	6800	11701	6800	7262	-3542	-4004	4901	P- 110	20	LT&C	3.52	4.96	DRY	6.54	DRY	5.59

Casing Attachments

Casing ID: 1 String SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $Forty_Niner_Ridge_Unit_52H_Casing_Worksheet_20250625110219.pdf$

Well Name: FORTY NINER RIDGE UNIT Well Number: 52H

Casing Attachments

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Forty_Niner_Ridge_Unit_52H_Casing_Worksheet_20250625110250.pdf

Casing ID: 3

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Forty_Niner_Ridge_Unit_52H_Casing_Worksheet_20250625110554.pdf

Casing Design Assumptions and Worksheet(s):

Forty_Niner_Ridge_Unit_52H_Casing_Worksheet_20250625110537.pdf

Casing ID: 4

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Forty_Niner_Ridge_Unit_52H_Tapered_String_20250625110653.pdf

Casing Design Assumptions and Worksheet(s):

Forty_Niner_Ridge_Unit_52H_Casing_Worksheet_20250625110641.pdf

Section 4 - Cement

Well Name: FORTY NINER RIDGE UNIT Well Number: 52H

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	450	469	1.33	14.8	623		Class C	CaCl, LCM

INTERMEDIATE	Lead	0	3300	749	2.07	12.9	1544	50	Class C	Salt, gel, extender, LCM
INTERMEDIATE	Tail	3300	3800	182	1.42	14.8	258	65	Class C	Salt, LCM
PRODUCTION	Lead	3300	5200	208	1.34	14.2	281	10	Class C	None

PRODUCTION	Lead	5200	5200	1170	1308	1.52	13.2	1988	50	Class C	None
				1							

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

Describe what will be on location to control well or mitigate other conditions: Kelly cock in the drill string, a full opening drill pipe stabbing valve on a rig floor, remote kill line, and mud gas separator.

Describe the mud monitoring system utilized: Pason pit level monitors, hourly weight check, viscosity, gel strength and pH, and solids control.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	450	WATER-BASED MUD	8.5	8.9			10				Spud with fresh water and build mud while drilling.

Well Name: FORTY NINER RIDGE UNIT Well Number: 52H

Top Depth	Bottom Depth	Mud Type	, Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	HA	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
450	3800	SALT SATURATED	10	10.5			10				Drill with brine water with LCM and gel sweeps.
3800	1170 1	WATER-BASED MUD	9.5	10.2			10				Drill with water based mud using sliders and gel sweeps in the lateral.

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

None

List of open and cased hole logs run in the well:

CALIPER, COMPENSATED DENSILOG, CEMENT BOND LOG, GAMMA RAY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG, DUAL LATERAL LOG/MICRO-SPHERICALLY FOCUSED,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3360 Anticipated Surface Pressure: 1762

Anticipated Bottom Hole Temperature(F): 125

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Forty_Niner_Ridge_Unit_52H_H2S_Plan_20250520145519.pdf

Well Name: FORTY NINER RIDGE UNIT Well Number: 52H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

 $FNRU_52H__I_Well__Preliminary_Deviation_Plan_20250624133223.pdf$

FNRU_21_16_PPI__52H_Permitting_WBD_Rev1_20250625111501.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

FNRU_52H_NGMP_20250625101722.pdf

Other Variance request(s)?: N

Other Variance attachment:

Forty Niner Ridge Unit 21 16 PPI #52H

Sec: 21-T23S-R30E

SHL: 695' FSL & 575' FEL of Section 21 BHL: 100' FSL & 990' FEL of Section 16

Eddy County, New Mexico

Strata Production Company

 MD (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	DX (ft)	DY (ft)	X (ft)	Y (ft)	Subsea (ft)	Segment Length	Segment Inclination	Offset	Original Azimuth (deg)	Original DX (ft)	Origin DY (ft)
0	() 0	0		0 0	681793.1	467750.5	3265	C	0	0			
112.1			112.1		0.03				112.1	0.01382	0.03			
202.22	0.05069	0	202.22		0.09	681793.1	l 467750.59	3062.78	90.12	0.03916	0.09			
289.4					0 0.18						0.18			
390.23					0 0.33						0.33			
487.01					0 0.53						0.53			
579.84					0 0.75						0.75			
668.82					0 1						1			
767.89					0 1.33						1.33			
862					0 1.67						1.67			
963.7					0 2.09						2.09			
1047.72					0 2.47						2.47			
1149.2					0 2.96						2.96			
1243.63					0 3.43						3.43			
1340.69					0 3.91						3.91			
1429.89					0 4.34						4.34			
1527.21					0 4.74						4.74			
1621.54					0 5						5			
1717.28					0 5.01						5.01			
1810.69					0 4.55						4.55			
1907.11					0 3.15						3.15			
2000.08					0 0						0 5.74			
2100.44					0 -5.74						5.74			
2202.42					0 -12.27						12.27			
2299.39					0 -18.69						18.69			
2402.27					0 -25.63						25.63			
2500.78					0 -32.34						32.34			
2602.81					0 -39.35						39.35			
2699.5					0 -46.02						46.02			
2803.15					0 -53.2						53.2			
2897.52					0 -59.75						59.75			
2997.02					0 -66.68						66.68			
3101.65					0 -73.97 0 -80.98						73.97			
3202.08											80.98			
3297.13 3395.76					0 -87.62 0 -94.52						87.62			
3497.98											94.52			
3593.05					0 -101.67 0 -108.32						101.67 108.32			
3702.1					0 -106.32 0 -115.95						115.95			
3702.1					0 -113.93						122.23			
3895.76					0 -122.23						122.23			
3990.5					0 -129.3						136.13			
4099.85					0 -130.13						143.78			
4199.52					0 -143.76						150.75			
4301.5					0 -150.75						157.88			
4301.3					0 -164.26						164.26			
4392.04					0 -164.26						171.69			
4593.94					0 -171.68 0 -178.32						171.69			
4593.94					0 -176.32 0 -185.08						185.08			
4789.22					0 -191.96						191.96			
4889.53					0 -191.96						191.96			
4991.64					0 -196.96						206.08			
5095.54					0 -200.00						213.33			
5186.02					0 -219.63						219.63			
5293.25						681793.1					227.1			
5386.6						681793.1					233.6			
5497.17						681793.1					241.3			
5593.37					0 -247.99						247.99			
5690.9					0 -254.77						254.77			
5789.76					0 -261.64						261.64			
5889.94					0 -201.04						268.6			
5991.45					0 -275.64						275.64			
6094.29					0 -273.04						282.78			
6181					0 -288.79						288.79			
6286.28					0 -200.78						296.08			
6392.89					0 -296.06						303.47			
0002.00	4.25808				0 -303.47						309.69			

6591.8	3.67593	180	6580.72	0	-317.23	681793.1	467433.27	-3315.72	109.05	3.96701	317.23
6683.7	4.25362	180	6672.4	0	-323.59	681793.1	467426.91	-3407.4	91.9	3.96476	323.59
6776.52	3.67183	180	6765	0	-330	681793.1	467420.5	-3500	92.83	3.96273	330
6808.7	0.80656	0	6797.16	0	-330.8	681793.1	467419.7	-3532.16	32.17	1.43263	330.8
6840.7	5.16831	0	6829.11	0	-329.14	681793.1	467421.36	-3564.11	32.01	2.98743	329.14
6873.56	9.5674	0	6861.68	0	-324.92	681793.1	467425.58	-3596.68	32.85	7.36794	324.92
6905.44	13.71371	0	6892.9	0	-318.49	681793.1	467432.01	-3627.9	31.88	11.64052	318.49
6937.33	17.78032	0	6923.59	0	-309.84 -299.05	681793.1 681793.1	467440.66	-3658.59	31.89	15.74695	309.84 299.05
6969.26 7001.27	21.73251	0	6953.64 6982.94	0	-299.05	681793.1	467451.45	-3688.64	31.94 32	19.75645	299.05
7001.27	25.62406 29.42534	0	7011.39	0	-271.37	681793.1	467464.3 467479.13	-3717.94 -3746.39	32.09	23.67827 27.52483	271.37
7065.53	33.19381	0	7011.39	0	-271.57	681793.1	467495.85	-3773.88	32.09	31.30919	254.65
7097.8	36.90229	0	7065.29	0	-236.13	681793.1	467514.37	-3800.29	32.27	35.04826	236.13
7130.16	40.60957	0	7090.53	0	-215.87	681793.1	467534.63	-3825.53	32.36	38.75604	215.87
7161.66	44.18027	0	7113.78	0	-194.64	681793.1	467555.86	-3848.78	31.5	42.39491	194.64
7194.21	47.8899	0	7136.37	0	-171.22	681793.1	467579.28	-3871.37	32.54	46.03482	171.22
7225.88	51.4917	0	7156.86	0	-147.07	681793.1	467603.43	-3891.86	31.67	49.69101	147.07
7258.61	55.26087	0	7176.38	0	-120.8	681793.1	467629.7	-3911.38	32.73	53.37618	120.8
7290.48	58.94617	0	7193.69	0	-94.05	681793.1	467656.45	-3928.69	31.87	57.1035	94.05
7322.46	62.70786	0	7209.28	0	-66.13	681793.1	467684.37	-3944.28	31.98	60.82675	66.13
7354.59	66.51276	0	7223.05	0	-37.11	681793.1	467713.39	-3958.05	32.12	64.61099	37.11
7386.88	70.40604	0	7234.9	0	-7.08	681793.1	467743.42	-3969.9	32.3	68.4591	7.08
7418.4	74.22833	0	7244.47	0	22.95	681793.1	467773.45	-3979.47	31.52	72.31707	22.95
7451.17	78.25619	0	7252.26	0	54.77	681793.1	467805.27	-3987.26	32.77	76.24225	54.77
7483.25	82.20323	0	7257.71	0	86.38	681793.1	467836.88	-3992.71	32.09	80.22951	86.38
7514.69	86.09229	0	7260.91	0	117.65	681793.1	467868.15	-3995.91	31.44	84.14834	117.65
7546.57	89.9988	0	7262	0	149.5	681793.1	467900	-3997	31.87	88.04529	149.5
7645.49	89.99892	0	7262	0	248.42	681793.1	467998.92	-3997	98.92	89.99887	248.42
7744.41	89.99902	0	7262	0	347.35	681793.1	468097.85	-3997	98.92	89.99887	347.35
7843.34	89.99912	0	7262.01	0	446.27	681793.1	468196.77	-3997.01	98.92	89.99915	446.27
7942.26	89.99922	0	7262.01	0	545.2	681793.1	468295.7	-3997.01	98.92	89.99915	545.2
8041.19	89.99932	0	7262.01	0	644.12	681793.1	468394.62	-3997.01	98.92	89.99943	644.12
8140.11	89.99941	0	7262.01	0	743.04	681793.1	468493.54	-3997.01	98.92	89.99915	743.04
8239.03	89.9995	0	7262.01	0	841.97	681793.1	468592.47	-3997.01	98.92	89.99943	841.97
8337.96	89.99958	0	7262.01	0	940.89	681793.1	468691.39	-3997.01	98.92	89.99972	940.89
8436.88	89.99966	0	7262.01	0	1039.81	681793.1	468790.31	-3997.01	98.92	89.99943	1039.81
8535.8	89.99974	0	7262.01	0	1138.74	681793.1	468889.24	-3997.01	98.92	89.99972	1138.74
8634.73	89.99981	0	7262.01	0	1237.66 1336.59	681793.1 681793.1	468988.16 469087.09	-3997.01	98.92	90 89.99972	1237.66
8733.65 8832.58	89.99988	0	7262.01 7262.01	0	1435.51	681793.1		-3997.01	98.92 98.92	90	1336.59 1435.51
8931.5	89.99994 90	0	7262.01	0	1534.43	681793.1	469186.01 469284.93	-3997.01 -3997.01	98.92	90	1534.43
9030.42	90.00005	0	7262.01	0	1633.36	681793.1	469383.86	-3997.01	98.92	90	1633.36
9129.35	90.00003	0	7262.01	0	1732.28	681793.1	469482.78	-3997.01	98.92	90	1732.28
9228.27	90.00011	0	7262.01	0	1831.2	681793.1	469581.7	-3997.01	98.92	90	1831.2
9327.19	90.00019	0	7262.01	0	1930.13	681793.1	469680.63	-3997.01	98.92	90.00028	1930.13
9426.12	90.00024	0	7262.01	0	2029.05	681793.1	469779.55	-3997.01	98.92	90.00028	2029.05
9525.04	90.00027	0	7262.01	0	2127.98	681793.1	469878.48	-3997.01	98.92	90.00028	2127.98
9623.97	90.0003	0	7262.01	0	2226.9	681793.1	469977.4	-3997.01	98.92	90.00028	2226.9
9722.89	90.00033	0	7262.01	0	2325.82	681793.1	470076.32	-3997.01	98.92	90.00028	2325.82
9821.81	90.00035	0	7262.01	0	2424.75	681793.1	470175.25	-3997.01	98.92	90.00028	2424.75
9920.74	90.00037	0	7262.01	0	2523.67	681793.1	470274.17	-3997.01	98.92	90.00028	2523.67
10019.66	90.00038	0	7262.01	0	2622.6	681793.1	470373.1	-3997.01	98.92	90.00057	2622.6
10118.58	90.00039	0	7262.01	0	2721.52	681793.1	470472.02	-3997.01	98.92	90.00028	2721.52
10217.51	90.0004	0	7262.01	0	2820.44	681793.1	470570.94	-3997.01	98.92	90.00028	2820.44
10316.43	90.0004	0	7262.01	0	2919.37	681793.1	470669.87	-3997.01	98.92	90.00057	2919.37
10415.36	90.0004	0	7262.01	0	3018.29	681793.1	470768.79	-3997.01	98.92	90.00028	3018.29
10514.28	90.00039	0	7262.01	0	3117.21	681793.1	470867.71	-3997.01	98.92	90.00028	3117.21
10613.2	90.00038	0	7262	0	3216.14	681793.1	470966.64	-3997	98.92	90.00057	3216.14
10712.13	90.00037	0	7262	0	3315.06	681793.1	471065.56	-3997	98.92	90.00028	3315.06
10811.05	90.00035	0	7262	0	3413.99	681793.1	471164.49	-3997	98.92	90.00028	3413.99
10909.97	90.00033	0	7262	0	3512.91		471263.41	-3997	98.92	90.00057	3512.91
11008.9	90.0003	0	7262	0	3611.83	681793.1	471362.33	-3997	98.92	90.00028	3611.83
11107.82	90.00027	0	7262	0	3710.76	681793.1	471461.26	-3997	98.92	90.00028	3710.76
11206.75	90.00024	0	7262	0	3809.68	681793.1	471560.18	-3997	98.92	90.00028	3809.68
11305.67	90.00019	0	7262	0	3908.6	681793.1	471659.1	-3997	98.92	90	3908.6
11404.59	90.00015	0	7262	0	4007.53	681793.1	471758.03	-3997	98.92	90.00028	4007.53
11503.52	90.00011	0	7262	0	4106.45	681793.1	471856.95	-3997	98.92	90	4106.45
11602.44	90.00005	0	7262	0	4205.38	681793.1	471955.88	-3997	98.92	90.00028	4205.38
11701.37	90	0	7262	0	4304.3	681793.1	472054.8	-3997	98.92	90	4304.3

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Strata Production Company WELL NAME & NO.: Forty Niner Ridge Unit 52H

LOCATION: Sec 21-23S-30E-NMP

COUNTY: Eddy County, New Mexico

Create COAs

- H ₂ S	Cave / Karst	\ \W	aste Prevention Rule
Not Reported	High	V	Vaste Minimization Plan
Potash	F	R-111-Q Design	
R-111-Q	3-String: Intern	nediate Designed for	r Frac Loads
Wellhead Conventional	☐ Liner ☐ Fluid	Casing 3-String Well Filled	Casing Clearance
☐ Flex Hose ☐ Break Testing	☐ DV Tool ☐ Offline Cement ☐	Cementing Bradenhead Open Annulus	☐ Echometer ☐ Pilot Hole
☐ Capitan Reef	Special Requirer Water Disposal	nents □ COM	▼ Unit
•	1		

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.

APD is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the updated order.

B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 450 feet (a minimum of 70' 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 (including 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 9-5/8 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 the presence of cave/karst, Capitan Reef, or potash features.
- 3. The minimum required fill of cement behind the 7 inch x 5-1/2 inch production casing is 500 feet into the previous casing but not higher than USGS Marker Bed No. 126 (base of the McNutt Potash ore zone.)
 - Operator must verify top of cement per R-111-Q requirements. Submit results to the BLM. 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 the presence of cave/karst, Capitan Reef, or potash features.

C. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.

D. SPECIAL REQUIREMENT(S)

Unit Wells:

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination:

A commercial well determination shall be submitted after production has been established for at least six months.

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 Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; BLM NM CFO DrillingNotifications@BLM.GOV; (575) 361-2822

- 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. Wait on cement (WOC) for Potash Areas: 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).

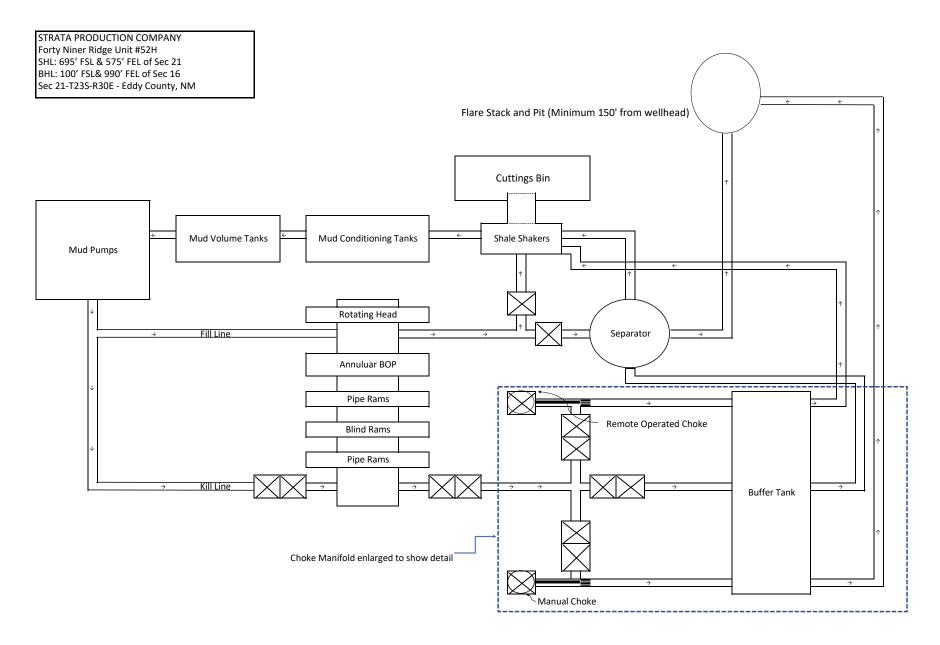
- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart 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.



STRATA PRODUCTION COMPANY

Forty Niner Ridge Unit #52H

SHL: 695' FSL & 575' FEL of Sec 21 BHL: 100' FSL & 990' FEL of Sec 16

Sec 21-T23S-R30E Eddy County, NM

BLOWOUT PREVENTER EQUIPMENT DESCRIPTION

All equipment should be at least 3,000 psi WP or higher unless otherwise specified.

- 1. Bell Nipple.
- 2. Hydril bag type preventer.
- 3. Ram type pressure operated blowout preventer with blind rams.
- 4. Flanged spool with one 3" and one 2" (minimum) outlet.
- 5. 2" (minimum) flanged plug or gate valve.
- 6. 2"x 2"x 2" (minimum) flanged.
- 7. 3" gate valve.
- 8. Ram type pressure operated blowout preventer with pipe rams.
- 9. Flanged type casing head with one side outlet.
- 10. 2" threaded (or flanged) plug or gate valve. Flanged on 5000# WP, threaded on 3000# WP or less.
- 11. 3" flanged spacer spool.
- 12. 3"x 2" x 2"x 2" flanged cross.
- 13. 2" flanged plug or gate valve.
- 14. 2" flanged adjustable choke.
- 15. 2" threaded flange.
- 16. 2" XXH Nipple.
- 17. 2" forged steel 90 Ell.
- 18. Cameron (or equal) threaded pressure gauge.
- 19. Threaded flange.
- 20. 2" flanged tee.
- 21. 2" flanged plug or gate valve.
- 22. 2 ½" pipe, 300' to pit, anchored.
- 23. 2 ½" SE valve.
- 24. 2 ½" line to steel pit or separator.

NOTES:

- 1). Items 3, 4, and 8 may be replaced with double ram type preventer with side outlets <u>between</u> the rams.
- 2). The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled.
- 3). Kill line is for emergency use only. This connection shall not be used for filling.
- 4). Replacement pipe rams and blind rams shall always be on location.
- 5). Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
- 6). Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

ACKNOWLEDGMENTS

Action 508958

ACKNOWLEDGMENTS

Operator:	OGRID:			
STRATA PRODUCTION CO	21712			
P.O. Box 1030	Action Number:			
Roswell, NM 882021030	508958			
	Action Type:			
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)			

ACKNOWLEDGMENTS

I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.

Sante Fe Main Office Phone: (505) 476-3441 General Information

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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 508958

CONDITIONS

Operator:	OGRID:
STRATA PRODUCTION CO	21712
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	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
rfresquez	Cement is required to circulate on both surface and intermediate1 strings of casing.	9/24/2025
rfresquez	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	9/24/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	10/2/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	10/2/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	10/2/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	10/2/2025
ward.rikala	Operator must comply with all of the R-111-Q requirements.	10/2/2025