

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. 9. API Well No. <div style="color: red; font-weight: bold;">30-015-56837</div>
2. Name of Operator 3a. Address 3b. Phone No. (include area code)		10. Field and Pool, or Exploratory 11. Sec., T. R. M. or Blk. and Survey or Area 12. County or Parish 13. State
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		14. Distance in miles and direction from nearest town or post office* 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 16. No of acres in lease 17. Spacing Unit dedicated to this well 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth 20. BLM/BIA Bond No. in file 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.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

25. Signature Title	Name (Printed/Typed) Office	Date Date
Approved by (Signature) Title	Name (Printed/Typed) Office	Date Date

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.

(Continued on page 2)

*(Instructions on page 2)



C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
			<input type="checkbox"/> As Drilled

WELL LOCATION INFORMATION

API Number 30-015-56837	Pool Code 24750	Pool Name FORTY NINER RIDGE DELAWARE
Property Code 337355	Property Name FORTY NINER RIDGE UNIT 16 / 9 NDI	Well Number 59H
OGRID No. 21712	Operator Name STRATA PRODUCTION COMPANY	Ground Level Elevation 3177'
Surface Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input checked="" type="checkbox"/> State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL N	Section 16	Township 23S	Range 30E	Lot	Ft. from N/S 350 FSL	Ft. from E/W 1780 FWL	Latitude 32.2987755°N	Longitude 103.8892016°W	County EDDY
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Bottom Hole Location

UL D	Section 9	Township 23S	Range 30E	Lot	Ft. from N/S 100 FNL	Ft. from E/W 990 FWL	Latitude 32.3266244°N	Longitude 103.8917585°W	County EDDY
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Dedicated Acres 320	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.			Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Kick Off Point (KOP)

UL N	Section 16	Township 23S	Range 30E	Lot	Ft. from N/S 350 FSL	Ft. from E/W 1780 FWL	Latitude 32.2987755°N	Longitude 103.8892016°W	County EDDY
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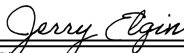


First Take Point (FTP)

UL N	Section 16	Township 23S	Range 30E	Lot	Ft. from N/S 601 FSL	Ft. from E/W 1911 FWL	Latitude 32.2994625°N	Longitude 103.8887655°W	County EDDY
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Last Take Point (LTP)

UL D	Section 9	Township 23S	Range 30E	Lot	Ft. from N/S 100 FNL	Ft. from E/W 990 FWL	Latitude 32.3266244°N	Longitude 103.8917585°W	County EDDY
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Unitized Area or Area of Uniform Interest 3800	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3177'
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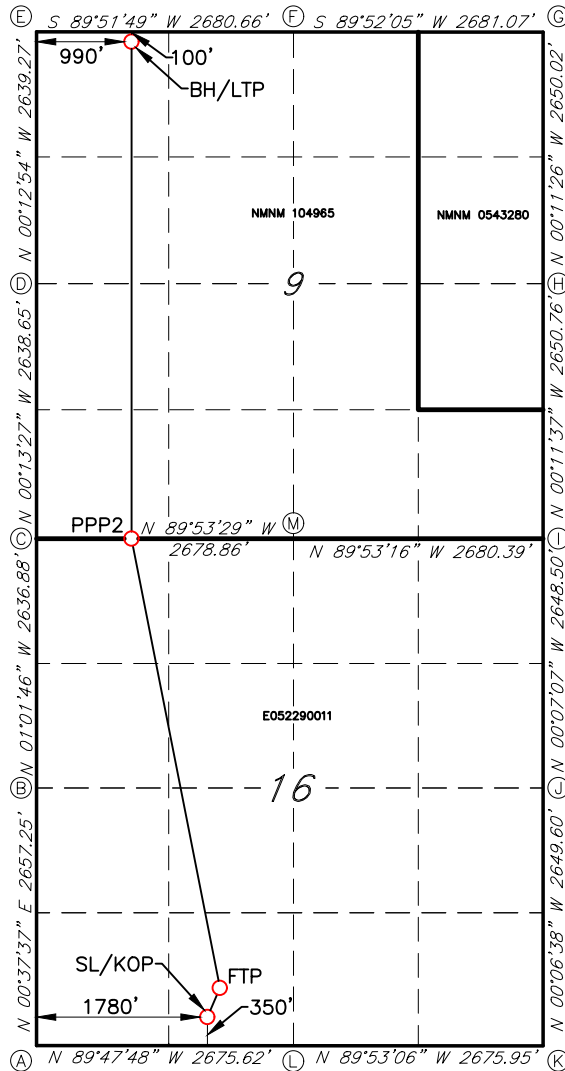
OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and , if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i>  10/07/2024 Signature Date Jerry Elgin, VP of Operations Printed Name jelgin@stratanm.com Email Address		SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me under my supervision, and that the same is true and correct to the best of my belief.</i>   Signature and Seal of Professional Surveyor Certificate Number 14400 Date of Survey 08/22/2024	
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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 16 / 9 NDI #59H



GEODETIC DATA
NAD 83 GRID - NM EAST
SURFACE LOCATION/KICK OFF POINT (SL/KOP)
N: 472711.3 - E: 678565.3

LAT: 32.2987755° N
LONG: 103.8892016° W

FIRST TAKE POINT (FTP)
601' FSL & 1911' FWL (SEC.16)
N: 472961.8 - E: 678699.0

LAT: 32.2994625° N
LON: 103.8887655° W

PROPOSED PENETRATION POINT 2 (PPP2)
0' FSL & 1065' FWL (SEC.9)
N: 477658.1 - E: 677828.4

LAT: 32.3123816° N
LON: 103.8915207° W

LAST TAKE POINT/BOTTOM HOLE (LTP/BH)
N: 482839.2 - E: 677733.5

LAT: 32.3266244° N
LONG: 103.8917585° W

CORNER DATA
NAD 83 GRID - NM EAST
A: FOUND BRASS CAP "1942"
N: 472367.7 - E: 676781.9

B: FOUND BRASS CAP "1942"
N: 475024.2 - E: 676811.0

C: FOUND BRASS CAP "1942"
N: 477660.1 - E: 676763.6

D: FOUND BRASS CAP "1942"
N: 480298.2 - E: 676753.3

E: FOUND BRASS CAP "1942"
N: 482936.8 - E: 676743.4

F: FOUND BRASS CAP "1942"
N: 482943.2 - E: 679423.4

G: FOUND BRASS CAP "1942"
N: 482949.4 - E: 682103.9

H: FOUND BRASS CAP "1942"
N: 480299.9 - E: 682112.7

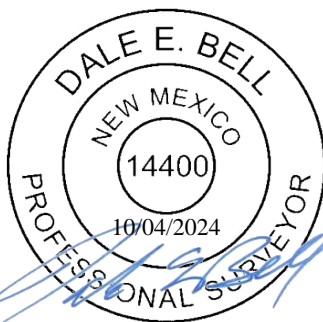
I: FOUND BRASS CAP "1942"
N: 477649.8 - E: 682121.7

J: FOUND BRASS CAP "1942"
N: 475001.9 - E: 682127.2

K: FOUND BRASS CAP "1942"
N: 472352.8 - E: 682132.3

L: FOUND BRASS CAP "1942"
N: 472358.2 - E: 679456.9

M: FOUND BRASS CAP "1942"
N: 477655.0 - E: 679441.9



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

Submit Electronically
Via E-permitting

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

I. Operator: Strata Production Company **OGRID:** 21721 **Date:** 09 / 04 / 24

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Forty Niner Ridge Unit		Sec 16-T23S-R30E	350' FSL &	1,200	2,600	3,300
16 9 NDI #59H			1780' FWL			

IV. Central Delivery Point Name: CTB #3 [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Forty Niner Ridge Unit		7/24/2025	8/16/2025	8/30/2025	9/05/2025	9/08/2025
16 9 NDI #59H						

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF
Forty Niner Ridge Unit 16 21 NDI #59H		1,900	832,000

X. Natural Gas Gathering System (NGGS):

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	8/17/2025	36,000,000

XI. Map. ☒ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☒ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☒ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

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;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

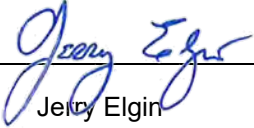
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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

(b) 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.

Signature:	
Printed Name:	Jerry Elgin
Title:	Vice President Operations
E-mail Address:	jelgin@stratanm.com
Date:	09/04/2024
Phone:	575-622-1127, ext 18
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

**Strata Production Company Natural
Gas Management Plan**

**Forty Niner Ridge Unit 16 21 NDI #59H
Section 16-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 16-T23S-R30E 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 Common Tank Battery 3 in the NENE of Section 22-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.

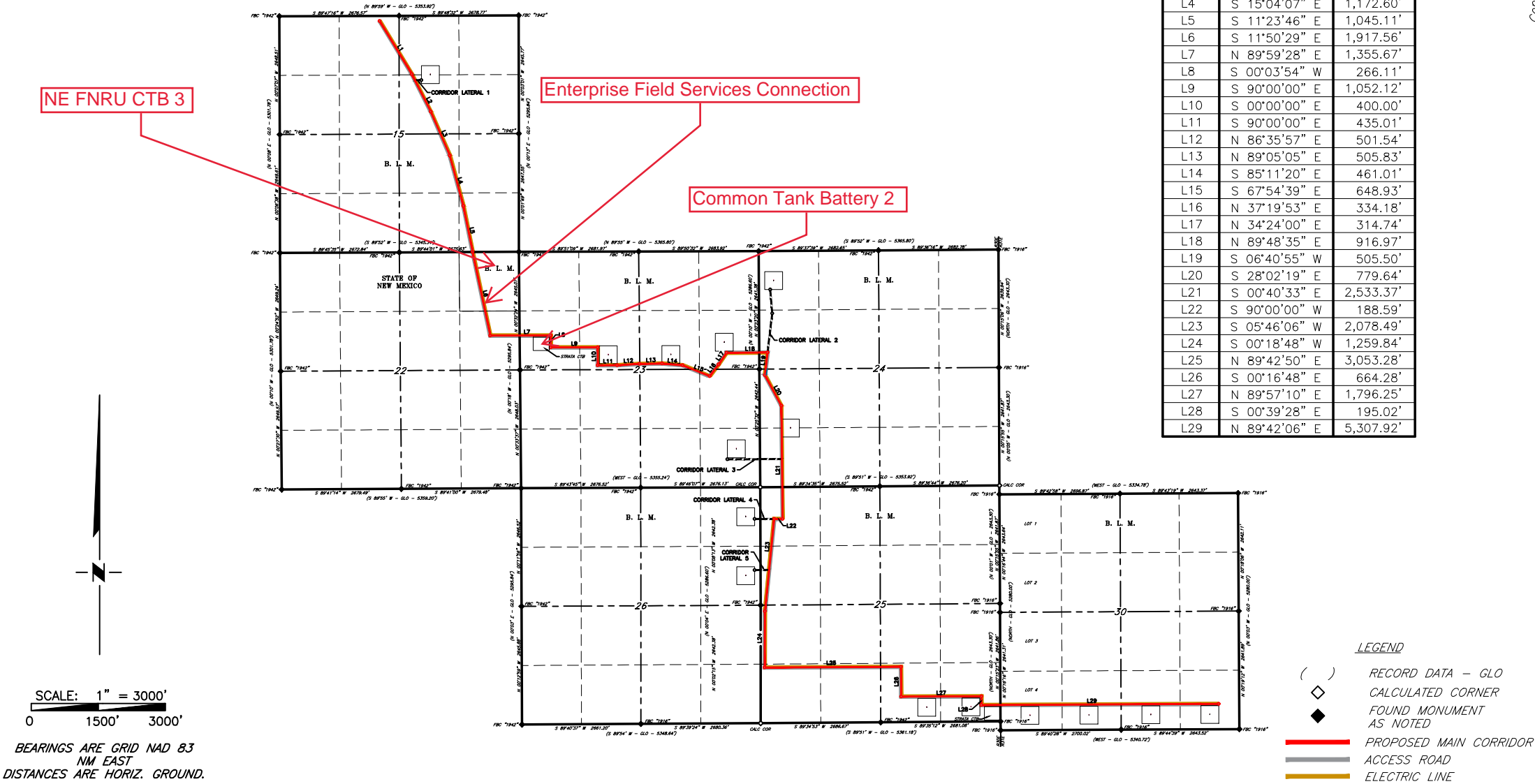
F. Measurement of Vented and Flared Natural Gas

Gas flared as the result of emergency or 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
PROPOSED MAIN CORRIDOR FOR THE STRATA WELL LOCATIONS
SECTIONS 15, 22, 23, 24, 26 & 25, T23S, R30E, &
SECTION 30, T23S, R31E
N. M. P. M., EDDY CO., NEW MEXICO



LINE TABLE		
LINE	BEARING	LENGTH
L1	S 31°10'54" E	1,393.05'
L2	S 26°50'18" E	940.07'
L3	S 23°25'43" E	1,068.15'
L4	S 15°04'07" E	1,172.60'
L5	S 11°23'46" E	1,045.11'
L6	S 11°50'29" E	1,917.56'
L7	N 89°59'28" E	1,355.67'
L8	S 00°03'54" W	266.11'
L9	S 90°00'00" E	1,052.12'
L10	S 00°00'00" E	400.00'
L11	S 90°00'00" E	435.01'
L12	N 86°35'57" E	501.54'
L13	N 89°05'05" E	505.83'
L14	S 85°11'20" E	461.01'
L15	S 67°54'39" E	648.93'
L16	N 37°19'53" E	334.18'
L17	N 34°24'00" E	314.74'
L18	N 89°48'35" E	916.97'
L19	S 06°40'55" W	505.50'
L20	S 28°02'19" E	779.64'
L21	S 00°40'33" E	2,533.37'
L22	S 90°00'00" W	188.59'
L23	S 05°46'06" W	2,078.49'
L24	S 00°18'48" W	1,259.84'
L25	N 89°42'50" E	3,053.28'
L26	S 00°16'48" E	664.28'
L27	N 89°57'10" E	1,796.25'
L28	S 00°39'28" E	195.02'
L29	N 89°42'06" E	5,307.92'

LEGEND

() RECORD DATA - GLO

◇ CALCULATED CORNER

◆ FOUND MONUMENT AS NOTED

PROPOSED MAIN CORRIDOR

ACCESS ROAD

ELECTRIC LINE

Copyright 2016 - All Rights Reserved

SCALE: 1" = 3000'

DATE: 5/22/2019

SURVEYED BY: BK/AS

DRAWN BY: GA

APPROVED BY: RMH

SHEET: 1 OF 12

RRC

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

NO.	REVISION	DATE

JOB NO.: LS19050633

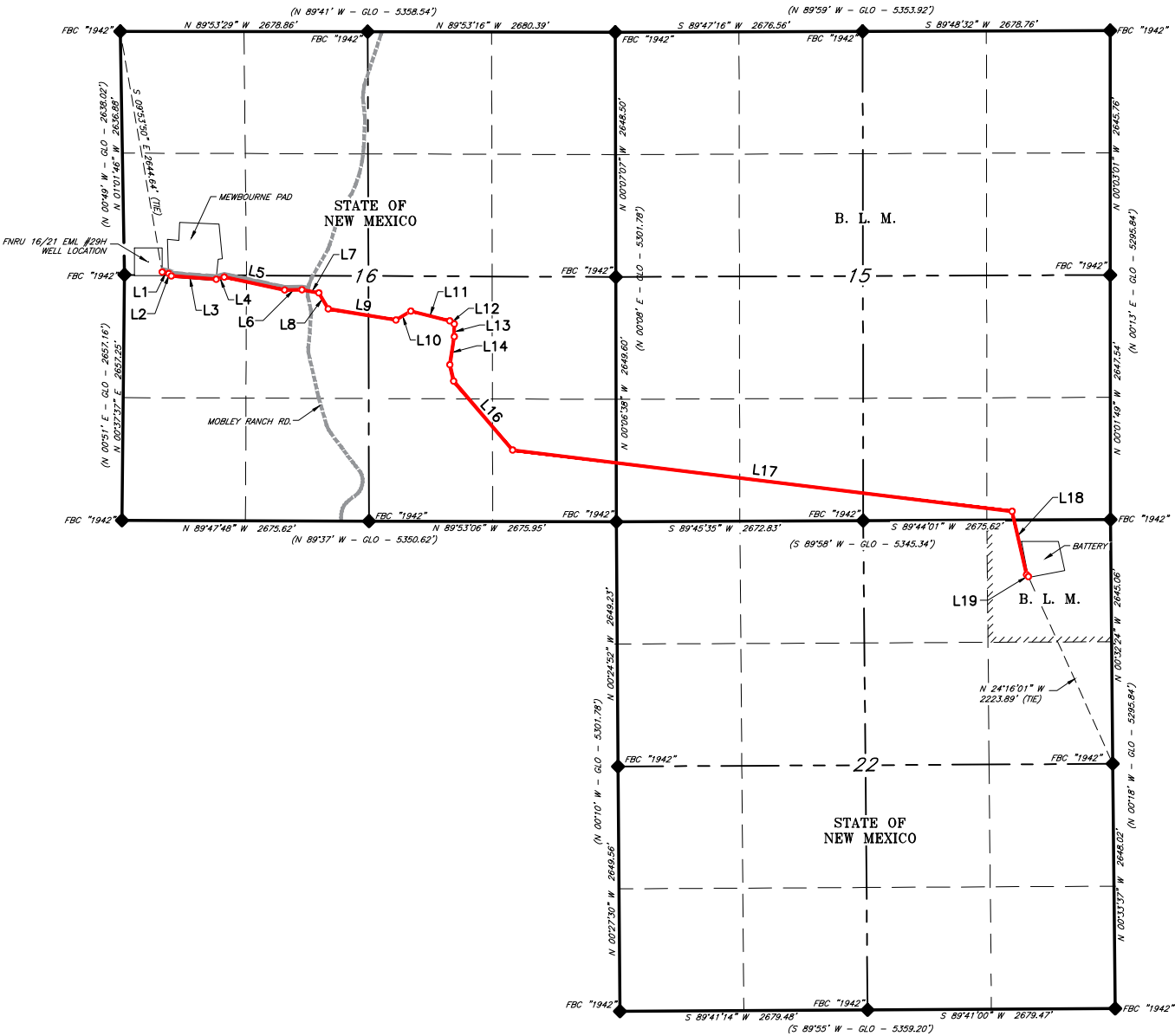
DWG. NO.: 19050633-1

STRATA PRODUCTION COMPANY

FNRU 16-21 EML #29H PIPELINE & ELECTRIC LINE


SECTIONS 15, 16 & 22, T23S, R30E

N. M. P. M., EDDY CO., NEW MEXICO



LINE TABLE		
LINE	BEARING	LENGTH
L1	S 76°53'01" E	71.90'
L2	S 48°02'23" E	38.69'
L3	S 85°40'26" E	487.02'
L4	N 74°43'52" E	90.73'
L5	S 77°58'08" E	667.50'
L6	N 89°09'42" E	187.18'
L7	S 79°18'09" E	186.64'
L8	S 30°23'57" E	200.40'
L9	S 80°39'54" E	743.03'
L10	N 59°03'16" E	187.49'
L11	S 75°56'28" E	434.59'
L12	S 55°28'08" E	59.57'
L13	S 00°01'28" E	136.55'
L14	S 08°58'43" W	308.42'
L15	S 12°58'10" E	182.16'
L16	S 40°32'54" E	982.04'
L17	S 83°00'39" E	5,446.36'
L18	S 12°50'37" E	704.53'
L19	S 44°05'06" E	28.02'




SCALE: 1" = 1800'
0 900' 1800'
BEARINGS ARE GRID NAD 83
NM EAST
DISTANCES ARE HORIZ. GROUND.

- LEGEND
- ()

RECORD DATA - GLO
- ◆

FOUND MONUMENT
AS NOTED
- PROPOSED UTILITY EASEMENT
- EXISTING ACCESS ROAD
- MOBLEY RANCH RD.

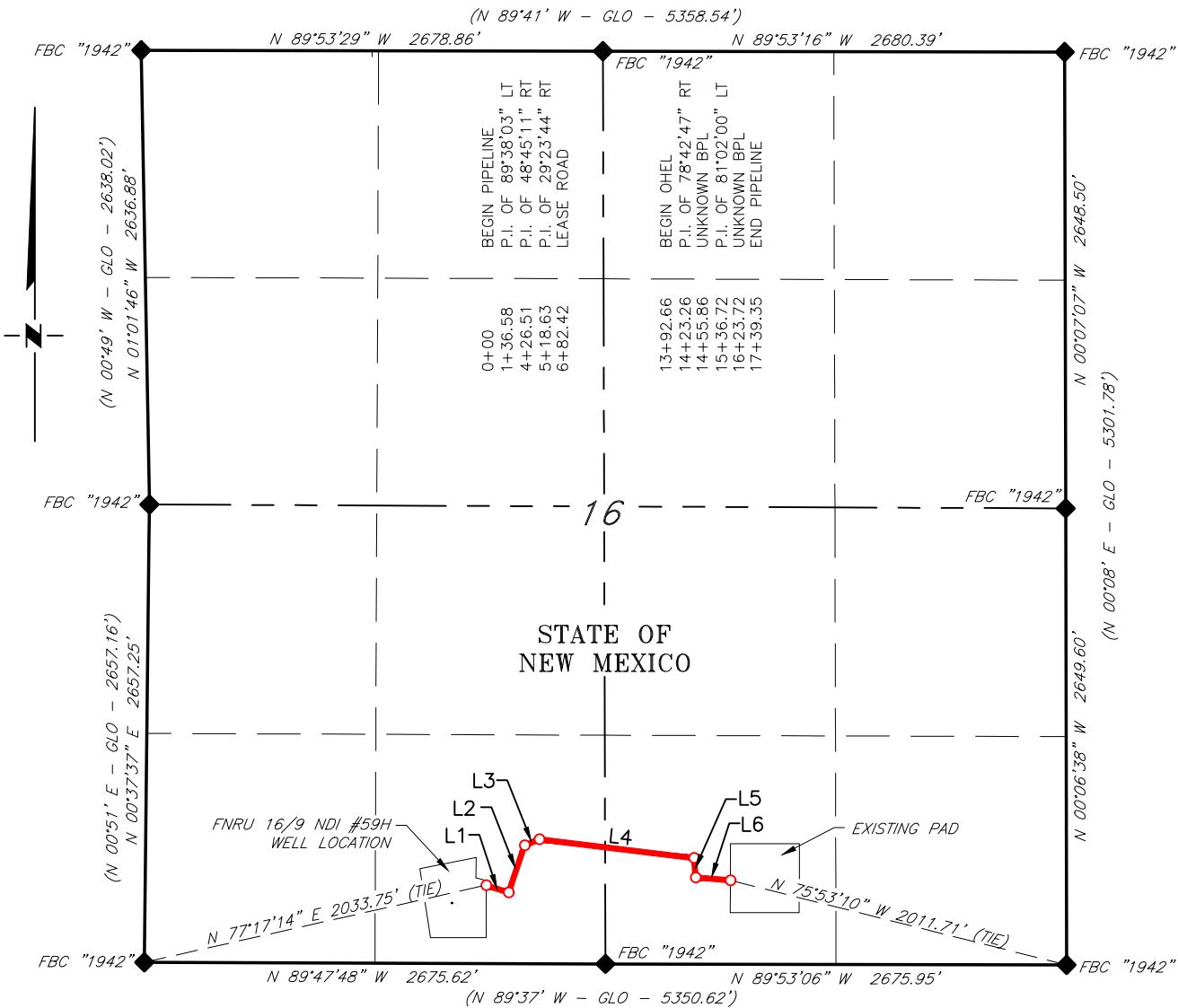
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NO.	REVISION	DATE
JOB NO.: LS23030268R		
DWG. NO.: 23030268R-1		



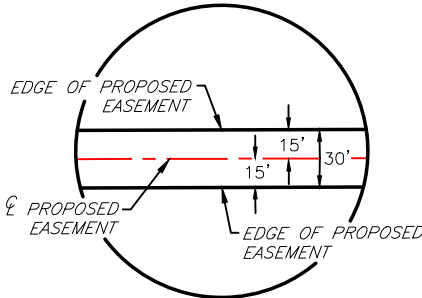
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1800'
DATE: 03/08/2023
SURVEYED BY: JF/GA
DRAWN BY: LM
APPROVED BY: DEB
SHEET: 1 OF 5

STRATA PRODUCTION COMPANY
FNRU 16/9 #59H FLOW PATH
SECTION 16, T23S, R30E
N. M. P. M., EDDY COUNTY, NEW MEXICO



LINE TABLE		
LINE	BEARING	LENGTH
L1	S 71°35'24" E	136.58'
L2	N 18°46'32" E	289.93'
L3	N 67°31'43" E	92.12'
L4	S 83°04'33" E	904.63'
L5	S 04°21'46" E	113.46'
L6	S 85°23'46" E	202.63'



SCALE: 1" = 1000'
0 500' 1000'
BEARINGS ARE GRID NAD 83
NM EAST
DISTANCES ARE HORIZ. GROUND.
LEGEND
() 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



NO.	REVISION	DATE
JOB NO.:	LS24080711	
DWG. NO.:	24080711-1	



SCALE: 1" = 1000'
DATE: 08/22/2024
SURVEYED BY: JM/IW
DRAWN BY: RQ
APPROVED BY: DEB
SHEET: 1 OF 2

STRATA PRODUCTION COMPANY
FNRU 16/9 #59H FLOW PATH
SECTION 16, T23S, R30E
N. M. P. M., EDDY COUNTY, NEW MEXICO

DESCRIPTION

A strip of land 30 feet wide, being 1,739.35 feet or 105.415 rods in length, lying in Section 16, 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 State of New Mexico land:

BEGINNING at Engr. Sta. 0+00, a point on the Southwest quarter of Section 16, which bears, N 77°17'14" E, 2,033.75 feet from a brass cap, stamped "1942", found for the Southwest corner of Section 16.

Thence S 71°35'24" E, 136.58 feet, to Engr. Sta. 1+36.58, a P. I. of 89°38'03" left;

Thence N 18°46'32" E, 289.93 feet, to Engr. Sta. 4+26.51, a P. I. of 48°45'11" right;

Thence N 67°31'43" E, 92.12 feet, to Engr. Sta. 5+18.63, a P. I. of 29°23'44" right;

Thence S 83°04'33" E, 904.63 feet, to Engr. Sta. 14+23.26, a P. I. of 78°42'47" right;

Thence S 04°21'46" E, 113.46 feet, to Engr. Sta. 15+36.72, a P. I. of 81°02'00" left;

Thence S 85°23'46" E, 202.63 feet, to Engr. Sta. 17+39.35, the End of Survey, a point in the Southeast quarter of Section 16, which bears, N 75°53'10" W, 2,011.71 feet from a brass cap, stamped "1942", found for the Southeast corner of Section 16.

Said strip of land contains 1.198 acres, more or less, and is allocated by forties as follows:

SE 1/4 SW 1/4	54.739 Rods	0.622 Acres
SW 1/4 SE 1/4	50.676 Rods	0.576 Acres



NO.	REVISION	DATE
JOB NO.: LS24080711		
DWG. NO.: 24080711-2		



SCALE: 1" = 1000'
DATE: 08/22/2024
SURVEYED BY: JM/IW
DRAWN BY: RQ
APPROVED BY: DEB
SHEET: 2 OF 2



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

Drilling Plan Data Report

05/09/2025

APD ID: 10400100940

Submission Date: 11/12/2024

Operator Name: STRATA PRODUCTION COMPANY

Well Name: FORTY NINER RIDGE UNIT 16 9 NDI

Well Number: 59H

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
15602600	SALADO	3177	436	436	SALT	NONE	N
15602601	BASE OF SALT	-262	3439	3439	SALT	NONE	N
15602603	BELL CANYON	-411	3588	3588	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
15602604	CHERRY CANYON	-1440	4617	4617	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	N
15602605	BRUSHY CANYON	-4278	7455	7455	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
15602606	Bone Springs	-4413	7590	7590	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 attachment.

Requesting Variance? NO

Variance request:

Testing Procedure: BOPE will be tested by an independent service company to 250 psi low pressure and 3,000 psi high pressure per Onshore Oil and Gas Order 2 requirements.

Choke Diagram Attachment:

FNRU_59H_Choke_Diagram_20240911093958.pdf

BOP Diagram Attachment:

FNRU_59H_BOPE_Description_20240911094005.pdf

FNRU_59H_BOPE_20241112133354.pdf

Operator Name: STRATA PRODUCTION COMPANY

Well Name: FORTY NINER RIDGE UNIT 16 9 NDIWell Number: 59H

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	3177	2727	450	H-40	48	ST&C	3.95	7.39	DRY	14.91	DRY	25.05
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3800	0	3800	3177	-623	3800	N-80	43.5	LT&C	2.32	3.2	DRY	4.92	DRY	6.08
3	PRODUCTION	8.5	7.0	NEW	API	Y	0	6800	0	6800	3177	-3623	6800	N-80	29	OTHER - BTC	2.38	2.31	DRY	1.67	DRY	1.78
4	PRODUCTION	8.5	5.5	NEW	API	Y	6800	17159	6800	7246	-3623	-4069	10359	N-80	20	OTHER - BTC	2.81	1.71	DRY	2.25	DRY	2.43

Casing Attachments

Casing ID: 1StringSURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

FNRU_59H_Casing_Worksheet_20241108150229.pdf

Operator Name: STRATA PRODUCTION COMPANY

Well Name: FORTY NINER RIDGE UNIT 16 9 NDI

Well Number: 59H

Casing Attachments

Casing ID: 2	String	INTERMEDIATE
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assumptions and Worksheet(s):		
FNRU_59H_Casing_Worksheet_20241108150255.pdf		
Casing ID: 3	String	PRODUCTION
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Tapered_String_20241008151753.pdf		
Casing Design Assumptions and Worksheet(s):		
FNRU_59H_Casing_Worksheet_20241108150357.pdf		
Casing ID: 4	String	PRODUCTION
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Tapered_String_20241008151803.pdf		
Casing Design Assumptions and Worksheet(s):		
FNRU_59H_Casing_Worksheet_20241108150409.pdf		

Section 4 - Cement

Operator Name: STRATA PRODUCTION COMPANY**Well Name:** FORTY NINER RIDGE UNIT 16 9 NDI**Well Number:** 59H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	450	469	1.33	14.8	241	100	Class C	CaCl, LCM

INTERMEDIATE	Lead		0	3300	813	1.91	12.9	1550	50	Class C	Salt, gel, extender, LCM
INTERMEDIATE	Tail		3300	3800	194	1.33	14.8	258	65	Class C	Salt, LCM
PRODUCTION	Lead		0	5200	200	2.51	11	500	100	Class C	N/A - Circulate out
PRODUCTION	Tail		5200	1715 9	2553	1.43	13.2	3650	25	Class C	Salt, gel, extender, LCM
PRODUCTION	Lead	5200	3300	5200	321	1.34	14.8	427	50	Class C	None

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.

Operator Name: STRATA PRODUCTION COMPANY**Well Name:** FORTY NINER RIDGE UNIT 16 9 NDI**Well Number:** 59H

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
450	3800	SALT SATURATED	10	10.5			10				Drill with brine water with LCM and gel sweeps.
3800	1715 9	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 DENSLOG, DUAL LATERAL LOG/MICRO-SPHERICALLY FOCUSED, GAMMA RAY LOG, CEMENT BOND LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 2860

Anticipated Surface Pressure: 1268

Anticipated Bottom Hole Temperature(F): 130

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

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

FNRU_59H_H2S_Plan_20240911110450.pdf

Operator Name: STRATA PRODUCTION COMPANY

Well Name: FORTY NINER RIDGE UNIT 16 9 NDI

Well Number: 59H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

FNRU_59H_Preliminary_Deviation_Plan_v2_20241007144554.pdf

FNRU_59H_WBD_20241112134138.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

FNRU_59H_NGMP_Rev_1_20250207114429.pdf

Other Variance request(s)?: N

Other Variance attachment:

FORTY NINER RIDGE UNIT 16 9 NDI 59H
 SHL: 350' FSL AND 1780' FWL 16-23S-30E
 BHL: 100 FNL AND 990 FWL 9-23S-30E
 EDDY COUNTY, NEW MEXICO

#	MD (ft)	Inclination	Azimuth (d ϵ TVD (ft)	DX (ft)	DY (ft)	X (ft)	Y (ft)	Subsea (ft)	Segment L ϵ	Segment In	Offset
	0	0	0	0	0	0	678565.3	472711.3	3336	0	0
	113.74	0.0504	91.14485	113.74	0.05	0	678565.4	472711.3	3222.26	113.74	0.0252
	204.9	0.09265	91.14485	204.9	0.16	0	678565.5	472711.3	3131.1	91.15	0.07153
	292.83	0.1336	91.14485	292.83	0.34	-0.01	678565.7	472711.3	3043.17	87.93	0.11313
	394.19	0.18264	91.14485	394.19	0.62	-0.01	678565.9	472711.3	2941.81	101.36	0.15812
	491.13	0.2297	91.14485	491.13	0.97	-0.02	678566.3	472711.3	2844.87	96.95	0.20617
	583.79	0.27572	91.14485	583.79	1.37	-0.03	678566.7	472711.3	2752.21	92.66	0.25271
	686.63	0.32598	91.14485	686.63	1.91	-0.04	678567.2	472711.2	2649.37	102.84	0.30085
	784	0.37314	91.14485	784	2.51	-0.05	678567.8	472711.2	2552	97.37	0.34956
	876.1	0.41492	91.14485	876.09	3.14	-0.06	678568.5	472711.2	2459.91	92.1	0.39403
	975.16	0.45629	91.14485	975.15	3.89	-0.08	678569.2	472711.2	2360.85	99.06	0.43561
	1067.88	0.48687	91.14485	1067.87	4.66	-0.09	678570	472711.2	2268.13	92.73	0.47158
	1165	0.5081	91.14485	1164.98	5.5	-0.11	678570.8	472711.2	2171.02	97.12	0.49748
	1264.46	0.50705	91.14485	1264.44	6.38	-0.13	678571.7	472711.2	2071.56	99.46	0.50757
	1355.6	0.47478	91.14485	1355.57	7.16	-0.14	678572.5	472711.1	1980.43	91.13	0.49092
	1454.77	0.38497	91.14485	1454.75	7.91	-0.16	678573.2	472711.1	1881.25	99.18	0.42988
	1550.78	0.1965	91.14485	1550.75	8.39	-0.17	678573.7	472711.1	1785.25	96	0.29073
	1648.39	0.16181	88.85515	1648.36	8.42	-0.17	678573.7	472711.1	1687.64	97.61	0.01734
	1744.34	1.15496	270.8241	1744.3	7.59	-0.15	678572.9	472711.1	1591.7	95.95	0.49663
	1840.98	1.7278	271.3593	1840.91	5.16	-0.1	678570.5	472711.2	1495.09	96.64	1.44137
	1936.22	4.48681	271.0622	1936	0	0	678565.3	472711.3	1400	95.24	3.1073
	2037.47	5.82673	271.1394	2036.85	-9.1	0.18	678556.2	472711.5	1299.16	101.26	5.15677
	2136.08	5.40431	271.1192	2134.98	-18.75	0.37	678546.6	472711.7	1201.02	98.61	5.61552
	2235.31	6.13319	271.1523	2233.7	-28.72	0.56	678536.6	472711.9	1102.3	99.23	5.76876
	2332.19	5.56366	271.1272	2330.08	-38.59	0.76	678526.7	472712	1005.92	96.88	5.84843
	2430.66	6.23032	271.1562	2428.03	-48.7	0.96	678516.6	472712.2	907.97	98.47	5.89699
	2527.33	5.62831	271.1303	2524.19	-58.69	1.16	678506.6	472712.4	811.81	96.67	5.92932
	2625.92	6.27549	271.1579	2622.24	-68.91	1.37	678496.4	472712.7	713.76	98.58	5.95189
	2724.97	5.66122	271.1318	2720.76	-79.21	1.57	678486.1	472712.9	615.24	99.06	5.96835
	2823.13	6.29955	271.1588	2818.38	-89.43	1.78	678475.9	472713.1	517.62	98.16	5.98039
	2927.32	5.6794	271.1327	2922	-100.3	1.99	678465	472713.3	414	104.19	5.98947
	3020.25	6.3127	271.1593	3014.42	-110.01	2.19	678455.3	472713.5	321.58	92.93	5.99605
	3126.67	5.68914	271.1332	3120.26	-121.13	2.41	678444.2	472713.7	215.74	106.42	6.00091
	3219.41	6.3198	271.1596	3212.49	-130.83	2.6	678434.5	472713.9	123.51	92.74	6.00447
	3315.88	5.69389	271.1334	3308.43	-140.92	2.81	678424.4	472714.1	27.57	96.47	6.00684
	3416.12	6.32313	271.1597	3408.12	-151.41	3.02	678413.9	472714.3	-72.11	100.24	6.00852
	3520.16	5.69595	271.1335	3511.58	-162.3	3.23	678403	472714.5	-175.58	104.04	6.00954
	3617.07	6.32403	271.1598	3607.96	-172.45	3.44	678392.9	472714.7	-271.96	96.91	6.00999
	3717.11	5.69595	271.1335	3707.45	-182.92	3.65	678382.4	472714.9	-371.45	100.04	6.00999
	3808.68	6.32334	271.1597	3798.52	-192.5	3.84	678372.8	472715.1	-462.52	91.58	6.00965
	3914.71	5.69462	271.1334	3903.97	-203.6	4.06	678361.7	472715.3	-567.97	106.03	6.00898
	4011.65	6.32146	271.1597	4000.37	-213.75	4.27	678351.6	472715.6	-664.37	96.94	6.00804
	4111.14	5.69238	271.1333	4099.31	-224.15	4.47	678341.2	472715.8	-763.31	99.49	6.00691
	4213.2	6.31879	271.1596	4200.81	-234.83	4.69	678330.5	472716	-864.81	102.06	6.00559
	4304.62	5.68952	271.1332	4291.73	-244.39	4.88	678320.9	472716.2	-955.73	91.42	6.00418
	4411.54	6.31561	271.1595	4398.07	-255.57	5.1	678309.7	472716.4	-1062.07	106.92	6.00255
	4507.25	5.68606	271.133	4493.25	-265.57	5.3	678299.7	472716.6	-1157.25	95.71	6.00084
	4604.97	6.31212	271.1593	4590.44	-275.78	5.51	678289.5	472716.8	-1254.44	97.73	5.9991
	4704.73	5.68234	271.1328	4689.65	-286.21	5.72	678279.1	472717	-1353.65	99.76	5.99723
	4806.53	6.3082	271.1592	4790.89	-296.84	5.93	678268.5	472717.2	-1454.89	101.8	5.99528
	4895.42	5.67853	271.1327	4879.3	-306.12	6.11	678259.2	472717.4	-1543.3	88.89	5.99335
	5001.05	6.30422	271.159	4984.34	-317.14	6.34	678248.2	472717.6	-1648.34	105.62	5.99136

5093.23	5.6744	271.1325	5076.03	-326.76	6.53	678238.6	472717.8	-1740.03	92.19	5.98931	326.82
5186.96	6.30028	271.1589	5169.24	-336.53	6.72	678228.8	472718	-1833.24	93.72	5.98736	336.6
5298.25	5.67001	271.1323	5279.92	-348.13	6.96	678217.2	472718.2	-1943.92	111.29	5.98515	348.2
5395.32	6.29578	271.1587	5376.46	-358.25	7.16	678207.1	472718.4	-2040.46	97.07	5.98288	358.32
5493.95	5.66575	271.1321	5474.55	-368.52	7.36	678196.8	472718.6	-2138.55	98.63	5.98076	368.59
5594.14	6.29142	271.1585	5574.2	-378.96	7.57	678186.4	472718.9	-2238.2	100.19	5.97859	379.03
5695.91	5.6613	271.1319	5675.42	-389.55	7.78	678175.8	472719.1	-2339.42	101.77	5.97635	389.63
5781.92	6.28727	271.1584	5760.96	-398.5	7.96	678166.8	472719.2	-2424.96	86.01	5.9743	398.58
5886.59	5.65708	271.1317	5865.06	-409.39	8.18	678155.9	472719.5	-2529.06	104.67	5.97215	409.47
5975.03	6.28299	271.1582	5953.03	-418.58	8.36	678146.7	472719.7	-2617.03	88.44	5.97006	418.67
6082.63	5.65273	271.1314	6060.04	-429.77	8.59	678135.6	472719.9	-2724.04	107.6	5.96785	429.85
6173.53	6.2786	271.1581	6150.44	-439.21	8.78	678126.1	472720.1	-2814.44	90.89	5.96568	439.3
6284.08	5.64828	271.1313	6260.4	-450.7	9.01	678114.6	472720.3	-2924.4	110.55	5.96342	450.79
6377.45	6.2741	271.1579	6353.26	-460.39	9.2	678104.9	472720.5	-3017.26	93.37	5.9612	460.48
6471.95	5.64415	271.131	6447.25	-470.2	9.4	678095.1	472720.7	-3111.25	94.5	5.95912	470.29
6567.58	6.26993	271.1577	6542.36	-480.12	9.59	678085.2	472720.9	-3206.36	95.63	5.95704	480.22
6664.35	5.63995	271.1309	6638.61	-490.16	9.8	678075.2	472721.1	-3302.61	96.77	5.95495	490.26
6762.27	6.26569	271.1575	6736	-500.31	10	678065	472721.3	-3400	97.92	5.95281	500.41
6794.16	8.23604	302.8491	6767.65	-503.98	11.27	678061.3	472722.6	-3431.65	31.89	6.9832	504.1
6826.48	11.70507	319.8369	6799.48	-508.04	15.04	678057.3	472726.3	-3463.48	32.31	9.8665	508.26
6857.34	15.47122	328.3901	6829.47	-512.21	20.94	678053.1	472732.2	-3493.47	30.86	13.55237	512.64
6889.85	19.60956	333.8332	6860.47	-516.9	29.53	678048.4	472740.8	-3524.47	32.51	17.52217	517.74
6921.17	23.54382	337.2413	6889.59	-521.63	40.02	678043.7	472751.3	-3553.59	31.31	21.56794	523.17
6952.37	27.4049	339.6937	6917.75	-526.54	52.5	678038.8	472763.8	-3581.75	31.2	25.46931	529.15
6984.5	31.20163	341.574	6945.76	-531.74	67.34	678033.6	472778.6	-3609.76	32.13	29.29991	535.99
7015.67	34.75423	343.0283	6971.91	-536.89	83.51	678028.4	472794.8	-3635.91	31.17	32.97599	543.34
7047.87	38.21964	344.2444	6997.8	-542.27	101.88	678023	472813.2	-3661.8	32.2	36.48521	551.76
7079.17	41.44296	345.2553	7021.83	-547.54	121.22	678017.8	472832.5	-3685.83	31.3	39.83018	560.8
7110.54	44.49333	346.1279	7044.78	-552.82	141.94	678012.5	472853.2	-3708.78	31.37	42.9676	570.75
7142.96	47.51854	346.942	7067.3	-558.24	164.61	678007.1	472875.9	-3731.3	32.42	46.00509	582.01
7174.44	50.29869	347.6545	7087.98	-563.46	187.75	678001.9	472899	-3751.98	31.48	48.90788	593.91
7205.92	52.99875	348.3283	7107.52	-568.59	211.9	677996.7	472923.2	-3771.52	31.48	51.6489	606.79
7237.37	55.57722	348.9609	7125.87	-573.61	236.93	677991.7	472948.2	-3789.87	31.45	54.28728	620.62
7269.7	58.1873	349.5988	7143.54	-578.65	263.54	677986.7	472974.8	-3807.54	32.34	56.88191	635.84
7300.92	60.62918	350.1996	7159.42	-583.36	289.99	677982	473001.3	-3823.42	31.21	59.40775	651.46
7332.89	63.1386	350.8228	7174.49	-588.01	317.81	677977.3	473029.1	-3838.49	31.98	61.88328	668.4
7364.58	65.59467	351.4475	7188.2	-592.41	346.03	677972.9	473057.3	-3852.2	31.69	64.36682	686.07
7395.91	68.08356	352.0922	7200.52	-596.53	374.54	677968.8	473085.8	-3864.52	31.33	66.83894	704.36
7427.73	70.6396	352.7763	7211.73	-600.45	404.05	677964.9	473115.3	-3875.73	31.82	69.36071	723.74
7459.01	73.28182	353.5013	7221.42	-604	433.58	677961.3	473144.9	-3885.42	31.28	71.96089	743.51
7490.55	76.05344	354.2904	7229.76	-607.23	463.82	677958.1	473175.1	-3893.76	31.54	74.66692	764.11
7522.21	79.06966	355.1742	7236.57	-610.07	494.6	677955.3	473205.9	-3900.57	31.66	77.56138	785.37
7553.83	82.32008	356.166	7241.69	-612.42	525.71	677952.9	473237	-3905.69	31.62	80.69402	807.12
7586.06	86.04395	357.3398	7244.95	-614.24	557.73	677951.1	473269	-3908.95	32.24	84.18201	829.67
7617.1	90.09299	358.6773	7246	-615.31	588.72	677950	473300	-3910	31.04	88.06832	851.59
7726.43	90.09559	358.6783	7245.82	-617.84	698.02	677947.5	473409.3	-3909.82	109.33	90.09417	932.18
7825.82	90.0979	358.6793	7245.65	-620.13	797.39	677945.2	473508.7	-3909.65	99.39	90.09683	1010.14
7925.22	90.1002	358.6802	7245.48	-622.42	896.75	677942.9	473608	-3909.48	99.39	90.09908	1091.59
8024.61	90.10243	358.6811	7245.31	-624.71	996.12	677940.6	473707.4	-3909.31	99.39	90.10133	1175.8
8124	90.10465	358.682	7245.13	-626.99	1095.48	677938.3	473806.8	-3909.13	99.39	90.10358	1262.22
8223.39	90.10681	358.6828	7244.94	-629.28	1194.85	677936	473906.1	-3908.94	99.39	90.10555	1350.43
8322.79	90.10896	358.6837	7244.75	-631.56	1294.22	677933.8	474005.5	-3908.75	99.39	90.10809	1440.09
8422.18	90.11105	358.6845	7244.56	-633.85	1393.58	677931.5	474104.9	-3908.56	99.39	90.11006	1530.96
8521.57	90.11311	358.6853	7244.37	-636.13	1492.95	677929.2	474204.2	-3908.37	99.39	90.11203	1622.82
8620.96	90.11513	358.6861	7244.17	-638.41	1592.31	677926.9	474303.6	-3908.17	99.39	90.114	1715.53
8720.36	90.11713	358.6869	7243.97	-640.69	1691.68	677924.6	474403	-3907.97	99.39	90.11625	1808.94
8819.75	90.11906	358.6877	7243.77	-642.96	1791.05	677922.4	474502.3	-3907.77	99.39	90.11794	1902.96
8919.14	90.12099	358.6885	7243.56	-645.24	1890.41	677920.1	474601.7	-3907.56	99.39	90.12019	1997.5

9018.53	90.12286	358.6892	7243.35	-647.51	1989.78	677917.8	474701.1	-3907.35	99.39	90.12188	2092.49
9117.93	90.1247	358.6899	7243.13	-649.79	2089.15	677915.5	474800.4	-3907.13	99.39	90.12385	2187.86
9217.32	90.12649	358.6906	7242.91	-652.06	2188.51	677913.3	474899.8	-3906.91	99.39	90.12554	2283.59
9316.71	90.12827	358.6914	7242.69	-654.33	2287.88	677911	474999.2	-3906.69	99.39	90.12723	2379.61
9416.1	90.12998	358.692	7242.47	-656.6	2387.24	677908.7	475098.5	-3906.47	99.39	90.1292	2475.9
9515.5	90.13168	358.6927	7242.24	-658.87	2486.61	677906.5	475197.9	-3906.24	99.39	90.13089	2572.42
9614.89	90.13332	358.6934	7242.01	-661.13	2585.98	677904.2	475297.3	-3906.01	99.39	90.13257	2669.15
9714.28	90.13494	358.694	7241.78	-663.4	2685.34	677901.9	475396.6	-3905.78	99.39	90.13398	2766.07
9813.67	90.13651	358.6946	7241.54	-665.66	2784.71	677899.7	475496	-3905.54	99.39	90.13567	2863.17
9913.07	90.13806	358.6952	7241.31	-667.93	2884.08	677897.4	475595.4	-3905.31	99.39	90.13736	2960.41
10012.46	90.13956	358.6958	7241.06	-670.19	2983.44	677895.1	475694.7	-3905.06	99.39	90.13877	3057.79
10111.85	90.14103	358.6964	7240.82	-672.45	3082.81	677892.9	475794.1	-3904.82	99.39	90.14046	3155.3
10211.24	90.14245	358.697	7240.58	-674.71	3182.18	677890.6	475893.5	-3904.58	99.39	90.14158	3252.92
10310.64	90.14384	358.6975	7240.33	-676.97	3281.54	677888.3	475992.8	-3904.33	99.39	90.14327	3350.64
10410.03	90.1452	358.6981	7240.08	-679.23	3380.91	677886.1	476092.2	-3904.08	99.39	90.1444	3448.46
10509.42	90.14652	358.6986	7239.82	-681.49	3480.28	677883.8	476191.6	-3903.82	99.39	90.1458	3546.37
10608.81	90.14779	358.6991	7239.57	-683.75	3579.64	677881.6	476290.9	-3903.57	99.39	90.14721	3644.36
10708.21	90.14904	358.6996	7239.31	-686	3679.01	677879.3	476390.3	-3903.31	99.39	90.14862	3742.42
10807.6	90.15024	358.7001	7239.05	-688.26	3778.38	677877.1	476489.7	-3903.05	99.39	90.14946	3840.55
10906.99	90.15141	358.7005	7238.79	-690.51	3877.74	677874.8	476589	-3902.79	99.39	90.15087	3938.74
11006.38	90.15253	358.701	7238.53	-692.76	3977.11	677872.6	476688.4	-3902.53	99.39	90.152	4036.99
11105.78	90.15364	358.7014	7238.26	-695.02	4076.47	677870.3	476787.8	-3902.26	99.39	90.15312	4135.3
11205.17	90.15469	358.7018	7237.99	-697.27	4175.84	677868	476887.1	-3901.99	99.39	90.15397	4233.66
11304.56	90.15572	358.7022	7237.72	-699.52	4275.21	677865.8	476986.5	-3901.72	99.39	90.15537	4332.06
11403.95	90.15668	358.7026	7237.45	-701.77	4374.57	677863.5	477085.9	-3901.45	99.39	90.15622	4430.51
11503.35	90.15764	358.703	7237.18	-704.02	4473.94	677861.3	477185.2	-3901.18	99.39	90.15706	4529
11602.74	90.15854	358.7034	7236.91	-706.27	4573.31	677859	477284.6	-3900.91	99.39	90.15819	4627.52
11702.13	90.15942	358.7037	7236.63	-708.52	4672.67	677856.8	477384	-3900.63	99.39	90.15903	4726.09
11801.52	90.16024	358.704	7236.35	-710.77	4772.04	677854.6	477483.3	-3900.35	99.39	90.1596	4824.68
11900.92	90.16105	358.7044	7236.07	-713.02	4871.41	677852.3	477582.7	-3900.07	99.39	90.16072	4923.31
12000.31	90.1618	358.7047	7235.79	-715.26	4970.77	677850.1	477682.1	-3899.79	99.39	90.16157	5021.97
12099.7	90.16253	358.705	7235.51	-717.51	5070.14	677847.8	477781.4	-3899.51	99.39	90.16213	5120.66
12199.09	90.16321	358.7052	7235.23	-719.76	5169.51	677845.6	477880.8	-3899.23	99.39	90.16269	5219.37
12298.49	90.16386	358.7055	7234.95	-722	5268.87	677843.3	477980.2	-3898.95	99.39	90.16354	5318.11
12397.88	90.16446	358.7057	7234.66	-724.25	5368.24	677841.1	478079.5	-3898.66	99.39	90.16438	5416.88
12497.27	90.16505	358.706	7234.38	-726.49	5467.61	677838.8	478178.9	-3898.38	99.39	90.16466	5515.66
12596.66	90.16557	358.7062	7234.09	-728.74	5566.98	677836.6	478278.3	-3898.09	99.39	90.16523	5614.47
12696.06	90.16608	358.7064	7233.8	-730.98	5666.34	677834.3	478377.6	-3897.8	99.39	90.16579	5713.3
12795.45	90.16653	358.7065	7233.51	-733.22	5765.71	677832.1	478477	-3897.51	99.39	90.16635	5812.14
12894.84	90.16696	358.7067	7233.22	-735.47	5865.08	677829.9	478576.4	-3897.22	99.39	90.16691	5911.01
12994.23	90.16734	358.7069	7232.93	-737.71	5964.44	677827.6	478675.7	-3896.93	99.39	90.16691	6009.89
13093.63	90.1677	358.707	7232.64	-739.95	6063.81	677825.4	478775.1	-3896.64	99.39	90.16776	6108.79
13193.02	90.168	358.7071	7232.35	-742.2	6163.18	677823.1	478874.5	-3896.35	99.39	90.16776	6207.7
13292.41	90.16829	358.7072	7232.06	-744.44	6262.54	677820.9	478973.8	-3896.06	99.39	90.16804	6306.63
13391.8	90.16852	358.7073	7231.77	-746.68	6361.91	677818.6	479073.2	-3895.77	99.39	90.1686	6405.58
13491.2	90.16872	358.7074	7231.48	-748.92	6461.28	677816.4	479172.6	-3895.48	99.39	90.1686	6504.53
13590.59	90.16888	358.7075	7231.18	-751.16	6560.64	677814.2	479271.9	-3895.18	99.39	90.1686	6603.51
13689.98	90.16901	358.7076	7230.89	-753.41	6660.01	677811.9	479371.3	-3894.89	99.39	90.16917	6702.49
13789.37	90.1691	358.7076	7230.6	-755.65	6759.38	677809.7	479470.7	-3894.6	99.39	90.16888	6801.48
13888.77	90.16916	358.7076	7230.3	-757.89	6858.74	677807.4	479570	-3894.3	99.39	90.16917	6900.49
13988.16	90.16917	358.7076	7230.01	-760.13	6958.11	677805.2	479669.4	-3894.01	99.39	90.16917	6999.51
14087.55	90.16915	358.7076	7229.72	-762.37	7057.48	677802.9	479768.8	-3893.72	99.39	90.16917	7098.53
14186.94	90.16908	358.7076	7229.42	-764.62	7156.84	677800.7	479868.1	-3893.42	99.39	90.16917	7197.57
14286.34	90.16899	358.7075	7229.13	-766.86	7256.21	677798.5	479967.5	-3893.13	99.39	90.16888	7296.62
14385.73	90.16885	358.7075	7228.84	-769.1	7355.58	677796.2	480066.9	-3892.84	99.39	90.16888	7395.68
14485.12	90.16869	358.7074	7228.54	-771.34	7454.94	677794	480166.2	-3892.54	99.39	90.16888	7494.74
14584.51	90.16847	358.7073	7228.25	-773.58	7554.31	677791.7	480265.6	-3892.25	99.39	90.1686	7593.82
14683.91	90.16824	358.7072	7227.96	-775.83	7653.68	677789.5	480365	-3891.96	99.39	90.16832	7692.9

14783.3	90.16795	358.7071	7227.67	-778.07	7753.04	677787.3	480464.3	-3891.67	99.39	90.16804	7791.99
14882.69	90.16763	358.707	7227.38	-780.31	7852.41	677785	480563.7	-3891.38	99.39	90.16776	7891.09
14982.08	90.16727	358.7069	7227.09	-782.55	7951.78	677782.8	480663.1	-3891.09	99.39	90.16748	7990.19
15081.48	90.16688	358.7067	7226.8	-784.8	8051.14	677780.5	480762.4	-3890.8	99.39	90.1672	8089.3
15180.87	90.16644	358.7065	7226.51	-787.04	8150.51	677778.3	480861.8	-3890.51	99.39	90.16663	8188.42
15280.26	90.16598	358.7063	7226.22	-789.28	8249.88	677776	480961.2	-3890.22	99.39	90.16607	8287.55
15379.65	90.16547	358.7061	7225.93	-791.53	8349.24	677773.8	481060.5	-3889.93	99.39	90.16579	8386.68
15479.05	90.16493	358.7059	7225.64	-793.77	8448.61	677771.5	481159.9	-3889.64	99.39	90.16523	8485.82
15578.44	90.16434	358.7057	7225.36	-796.02	8547.98	677769.3	481259.3	-3889.36	99.39	90.16466	8584.96
15677.83	90.16373	358.7054	7225.07	-798.26	8647.35	677767.1	481358.6	-3889.07	99.39	90.1641	8684.11
15777.22	90.16307	358.7052	7224.79	-800.51	8746.71	677764.8	481458	-3888.79	99.39	90.16326	8783.27
15866.68	90.16246	358.7049	7224.54	-802.53	8836.14	677762.8	481547.4	-3888.54	89.45	90.16294	8872.51
15966.07	90.16173	358.7047	7224.26	-804.78	8935.51	677760.5	481646.8	-3888.26	99.39	90.16213	8971.68
16065.46	90.16097	358.7044	7223.98	-807.02	9034.88	677758.3	481746.2	-3887.98	99.39	90.16129	9070.85
16164.85	90.16016	358.704	7223.7	-809.27	9134.24	677756	481845.5	-3887.7	99.39	90.16044	9170.02
16264.25	90.15933	358.7037	7223.42	-811.52	9233.61	677753.8	481944.9	-3887.42	99.39	90.15988	9269.2
16363.64	90.15845	358.7033	7223.14	-813.77	9332.98	677751.6	482044.3	-3887.14	99.39	90.15875	9368.39
16463.03	90.15755	358.703	7222.87	-816.02	9432.34	677749.3	482143.6	-3886.87	99.39	90.15819	9467.57
16562.42	90.15659	358.7026	7222.6	-818.27	9531.71	677747.1	482243	-3886.6	99.39	90.15706	9566.77
16661.82	90.15561	358.7022	7222.33	-820.52	9631.08	677744.8	482342.4	-3886.33	99.39	90.15594	9665.96
16761.21	90.15459	358.7018	7222.06	-822.77	9730.44	677742.5	482441.7	-3886.06	99.39	90.15509	9765.17
16860.6	90.15353	358.7014	7221.79	-825.02	9829.81	677740.3	482541.1	-3885.79	99.39	90.15425	9864.37
16959.99	90.15243	358.701	7221.53	-827.28	9929.18	677738	482640.5	-3885.53	99.39	90.15284	9963.58
17059.39	90.1513	358.7005	7221.26	-829.53	10028.54	677735.8	482739.8	-3885.26	99.39	90.152	10062.79
17158.78	90.15012	358.7	7221	-831.78	10127.91	677733.5	482839.2	-3885	99.39	90.15059	10162.01

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Strata Production Company
WELL NAME & NO.:	Forty Niner Ridge Unit 16-9 NDI 59H
LOCATION:	Sec 16-23S-30E-NMP
COUNTY:	Eddy County, New Mexico ▼

COA

H₂S	<input checked="" type="radio"/> No <input type="radio"/> Yes			
Potash / WIPP	<input type="radio"/> None <input type="radio"/> Secretary <input checked="" type="radio"/> R-111-Q <input type="radio"/> Open Annulus <i>Operator must submit design that complies with R-111-Q requirements via sundry before spud.</i> <input type="checkbox"/> WIPP			
Cave / Karst	<input type="radio"/> Low <input type="radio"/> Medium <input checked="" type="radio"/> High <input type="radio"/> Critical			
Wellhead	<input checked="" type="radio"/> Conventional <input type="radio"/> Multibowl <input type="radio"/> Both <input type="radio"/> Diverter			
Cementing	<input type="checkbox"/> Primary Squeeze <input type="checkbox"/> Cont. Squeeze <input type="checkbox"/> EchoMeter <input checked="" type="checkbox"/> DV Tool			
Special Req	<input type="checkbox"/> Capitan Reef <input type="checkbox"/> Water Disposal <input checked="" type="checkbox"/> COM <input type="checkbox"/> Unit			
Waste Prev.	<input type="radio"/> Self-Certification <input checked="" type="radio"/> Waste Min. Plan <input type="radio"/> APD Submitted prior to 06/10/2024			
Additional Language	<input type="checkbox"/> Flex Hose <input type="checkbox"/> Casing Clearance <input type="checkbox"/> Pilot Hole <input type="checkbox"/> Break Testing <input type="checkbox"/> Four-String <input type="checkbox"/> Offline Cementing <input type="checkbox"/> Fluid-Filled			

Operator must submit design that complies with R-111-Q requirements via sundry before spud.

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 **420** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. *Set depth adjusted per BLM geologist.*
 - 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 **9-5/8** inch intermediate casing (*set at 3563' per BLM geologist*) 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.**
3. The minimum required fill of cement behind the **7** inch production casing with **5 1/2** inch taper is:

The operator has proposed utilize a DV tool. The selected depth is below the Salado and is an acceptable set point. Operator may adjust depth of DV tool if it remains below the Salado and cement volumes are adjusted accordingly. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. **Second stage above DV tool:** Cement should tie-back 500 feet into the previous casing but not higher than USGS Marker Bed No. 126. **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 cave/karst, Capitan Reef, or potash.**

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)

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 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 16 9 NDI #59H

Sec 16-T23S-R30E

SHL: 350' FSL & 1780' FWL of Sec 16

BHL: 100' FNL & 990' FWL of Sec 9

Eddy County, NM

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- A. The hazards and characteristics of hydrogen sulfide (H₂S).
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- A. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- C. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

- A. Well Control Equipment:
 - All BOP and BOP equipment is shown in the attachments.
 - Flare line.
 - Choke manifold with a remotely operated choke as shown in Attachment #5.
 - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - Auxiliary equipment to include annular preventer, mud-gas separator, rotating head.
- B. Protective equipment for essential personnel:
 - Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- C. H₂S detection and monitoring equipment:
 - 2 - portable H₂S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.
- D. Visual warning systems:
 - Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate.
 - Wind Direction indicators as seen in the H₂S Well Site Diagram.

- E. Mud Program: The mud program has been designed to minimize the volume of H₂S circulated to the surface.
- F. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- G. Communication:
Company vehicles equipped with cellular telephone.

W A R N I N G

**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED*
- 2. HARD HATS REQUIRED*
- 3. SMOKING IN DESIGNATED AREAS ONLY*
- 4. BE WIND CONSCIOUS AT ALL TIMES*
- 5. CK WITH STRATA FOREMAN AT MAIN OFFICE*

STRATA PRODUCTION COMPANY

**575-622-1127 EXT 18
575-626-7909**

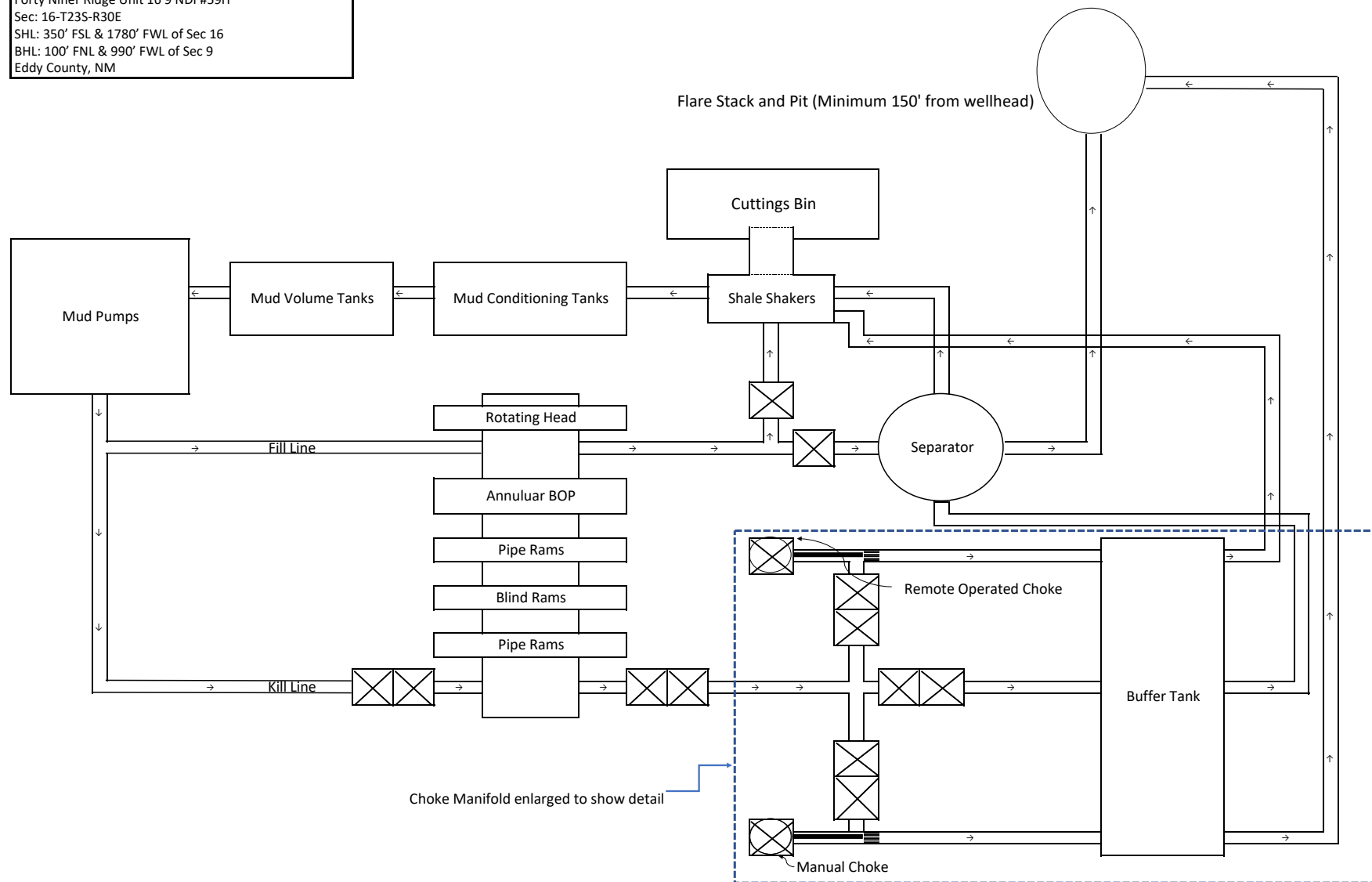
EMERGENCY NUMBERS**911 Must have Correct County & State & Directions to your location**

Eddy County Sheriff's Office	575-887-7551
Lea County Sherrif's Office (Lovington)	575-396-3611
New Mexico State Police (Roswell)	575-622-7200
Eastern NM Medical Center (Roswell)	575-622-8170
Lea Regional Hospital (Hobbs)	575-492-5000
Carlsbad Hospital	575-887-4100
Carlsbad Fire Department	575-885-3125
Ambulance Service	575-885-2111

BLM Carlsbad	575-234-5972
BLM Hobbs	575-393-3612
NMOCD Hobbs	575-393-6161
Mosaic Potash Carlsbad	575-887-2871

Strata Office	575-622-1127
Jerry Elgin	575-622-1127 x18
Cheyenne Scharf	307-360-3062
Rygel Russell	575-626-1479
Pilar Mendoza	575-626-8161
Mitch Krakauskas	575-622-1127 x23

STRATA PRODUCTION COMPANY
Forty Niner Ridge Unit 16 9 NDI #59H
Sec: 16-T23S-R30E
SHL: 350' FSL & 1780' FWL of Sec 16
BHL: 100' FNL & 990' FWL of Sec 9
Eddy County, NM



STRATA PRODUCTION COMPANY

Forty Niner Ridge Unit 16 9 NDI #59H

Sec 16-T23S-R30E

SHL: 350' FSL & 1780' FWL of Sec 16

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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 between 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

CONDITIONS

Action 461002

CONDITIONS

Operator: STRATA PRODUCTION CO P.O. Box 1030 Roswell, NM 882021030	OGRID: 21712
	Action Number: 461002
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
strata	Cement is required to circulate on both surface and intermediate1 strings of casing.	5/12/2025
strata	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	5/12/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	6/20/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	6/20/2025
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.	6/20/2025
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.	6/20/2025
ward.rikala	Operator must comply with all of the R-111-Q requirements.	6/20/2025