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

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

2. Name of Operator

9. API Well No. 30-015-54334

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

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	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

(Continued on page 2)

*(Instructions on page 2)

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-54334	24750	FORTY NINER RIDGE DELAWARE

4 Property Code	5 Property Name	6 Well Number
334818	ROADRUNNER 23/11 HAI FED COM	13H

7 OGRID NO.	8 Operator Name	9 Elevation
21712	STRATA PRODUCTION COMPANY	3248'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
H	23	23S	30E		1980	NORTH	750	EAST	EDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	11	23S	30E		100	NORTH	330	EAST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
400			

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

16

GEODETIC DATA
NAD 83 GRID – NM EAST

SURFACE LOCATION (SL)/
KICK OFF POINT (KOP) PROPOSED
PENETRATION POINT 1 (PPP1)
N: 470409.2 – E: 692107.8
LAT: 32.2922858° N
LONG: 103.8454072° W

PROPOSED
PENETRATION POINT 2 (PPP2)
0' FSL – 683' FEL SEC.14
N: 472388.9 – E: 692161.3
LAT:32.2977269° N
LONG:103.8452047° W

PROPOSED
PENETRATION POINT 3 (PPP3)
0' FSL – 505' FEL SEC.11
N: 477673.5 – E: 692324.3
LAT: 32.3122510° N
LONG:103.8445993° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BRASS CAP "1942"
N: 467084.8 – E: 687530.3

B: FOUND BRASS CAP "1942"
N: 469732.1 – E: 687504.4

C: FOUND BRASS CAP "1942"
N: 472376.5 – E: 687479.5

D: FOUND BRASS CAP "1942"
N: 475023.4 – E: 687478.1

E: FOUND BRASS CAP "1942"
N: 477668.6 – E: 687475.8

F: FOUND BRASS CAP "1942"
N: 480316.7 – E: 687466.4

G: FOUND BRASS CAP "1942"
N: 482961.4 – E: 687452.8

H: FOUND BRASS CAP "1942"
N: 482959.5 – E: 690132.2

I: FOUND BRASS CAP "1942"
N: 482957.2 – E: 692811.0

PROPOSED
PENETRATION POINT 4 (PPP4)
1321' FSL – 461' FEL SEC.11
N: 478994.3– E: 692363.8
LAT: 32.3158809° N
LONG: 103.8444520° W

PROPOSED
PENETRATION POINT 5 (PPP5)
2642' FSL – 416' FEL SEC.11
N: 480315.0 – E: 692404.3
LAT: 32.3195109° N
LONG: 103.8443016° W

PROPOSED
PENETRATION POINT 6 (PPP6)
1323' FNL – 371' FEL SEC.11
N: 481634.8 – E: 692444.7
LAT: 32.3231382° N
LONG: 103.8441512° W

BOTTOM HOLE (BH)
N: 482857.5 – E: 692481.4
LAT: 32.3264986° N
LONG: 103.8440142° W

J: FOUND BRASS CAP "1942"
N: 480315.3 – E: 692820.2

K: FOUND BRASS CAP "1942"
N: 477674.0 – E: 692829.2

L: FOUND BRASS CAP "1942"
N: 475033.1 – E: 692835.7

M: FOUND BRASS CAP "1942"
N: 472390.8 – E: 692844.2

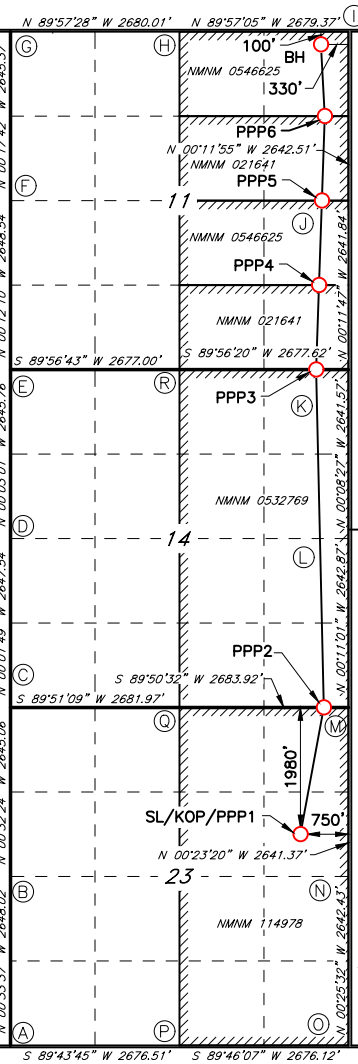
N: FOUND BRASS CAP "1942"
N: 469750.0 – E: 692862.1

O: CALCULATED CORNER
N: 467108.3 – E: 692881.7

P: FOUND BRASS CAP "1942"
N: 467097.4 – E: 690206.2

Q: FOUND BRASS CAP "1942"
N: 472383.4 – E: 690160.9

R: FOUND BRASS CAP "1942"
N: 477671.2 – E: 690152.2



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Jerry Elgin 05/16/2023
Signature Date

Jerry Elgin, VP of Operations
Printed Name

jelgin@stratanm.com
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

03/29/2023
Date of Survey

Signature and Seal of Professional Surveyor:

DALE E. BELL
NEW MEXICO
14400
PROFESSIONAL SURVEYOR
05/16/2023

14400
Certificate Number

REV: WELL CALLS & LEASE AREAS 5/16/23

Job No.: LS23020156R

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

I. Operator: Strata Production Company **OGRID:** 21712 **Date:** 10/26/23

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
Roadrunner 23 11 HAI Fed Com 13H		Sec 23-T23S-R30E	1980' FNL & 750' FEL	800	1,200	2,200

IV. Central Delivery Point Name: Common Tank Battery #2 [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
Roadrunner 23 11 HAI Fed Com 13H		1/3/2024	2/3/2024	2/8/2024	2/13/2024	2/18/2024

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
Roadrunner 23 11 HAI Fed Com 13H		1,200	400,000

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	2/8/2024	15,000,000

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:	10/26/2023
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

Roadrunner 23 11 HAI Fed Com #13H
Section 23-T23S-R30E
Eddy County, New Mexico

Attachment to NMOCD Form NGMP

VI. Separation Equipment

Separation equipment consists of a 6' X 20' X 250 psi 3 phase separator at the well site in Section 23-T23S-R30E that separates the gas, water, and oil. The gas is routed to a gas gathering line that follows 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 2 in the SWNW of Section 23-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 unit 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.

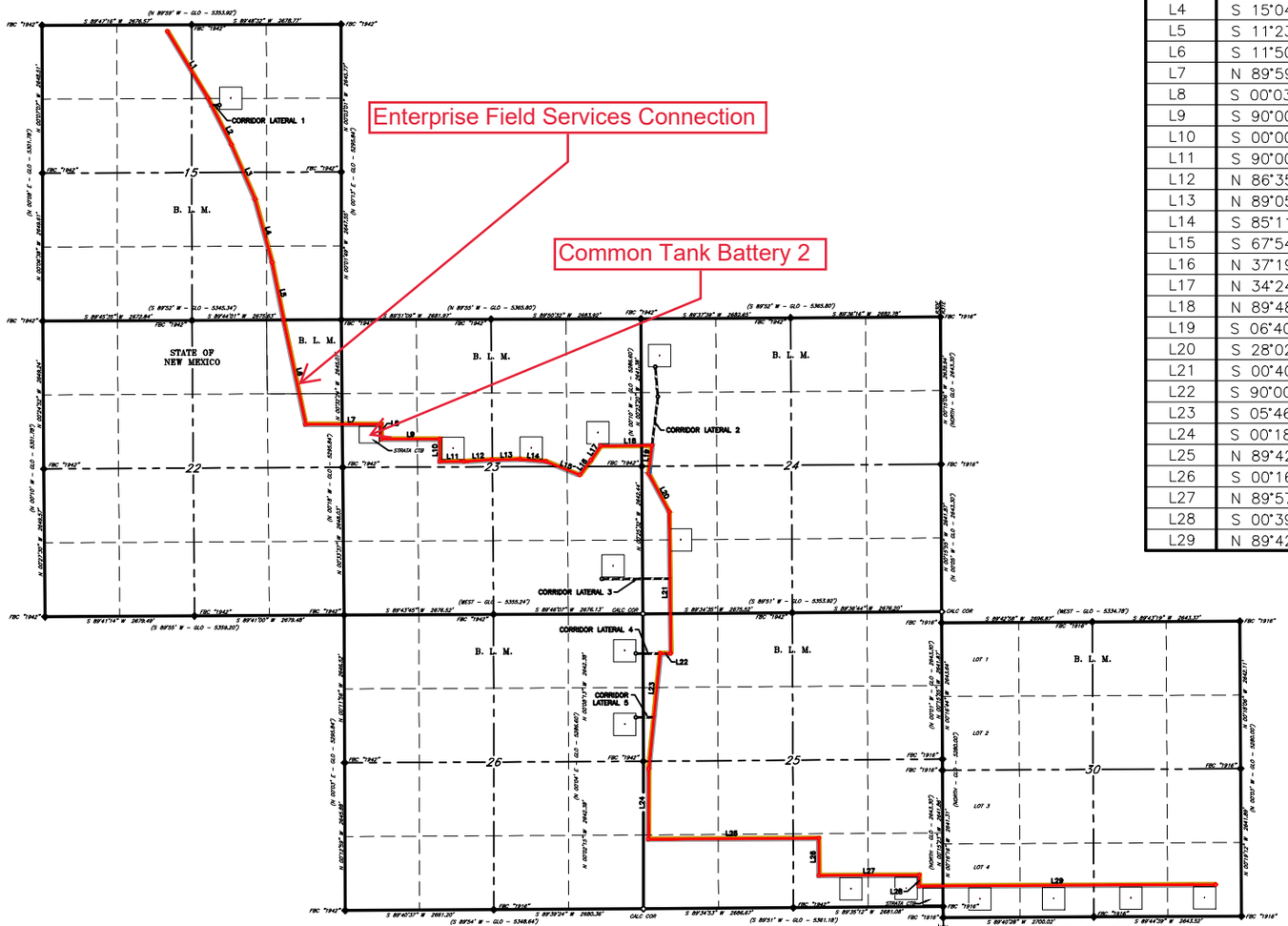
VIII. Maintenance Activities

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

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'

SCALE: 1" = 3000'
0 1500' 3000'

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

LEGEND
( ) RECORD DATA – GLO
◇ CALCULATED CORNER
◆ FOUND MONUMENT AS NOTED
PROPOSED MAIN CORRIDOR
ACCESS ROAD
ELECTRIC LINE

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

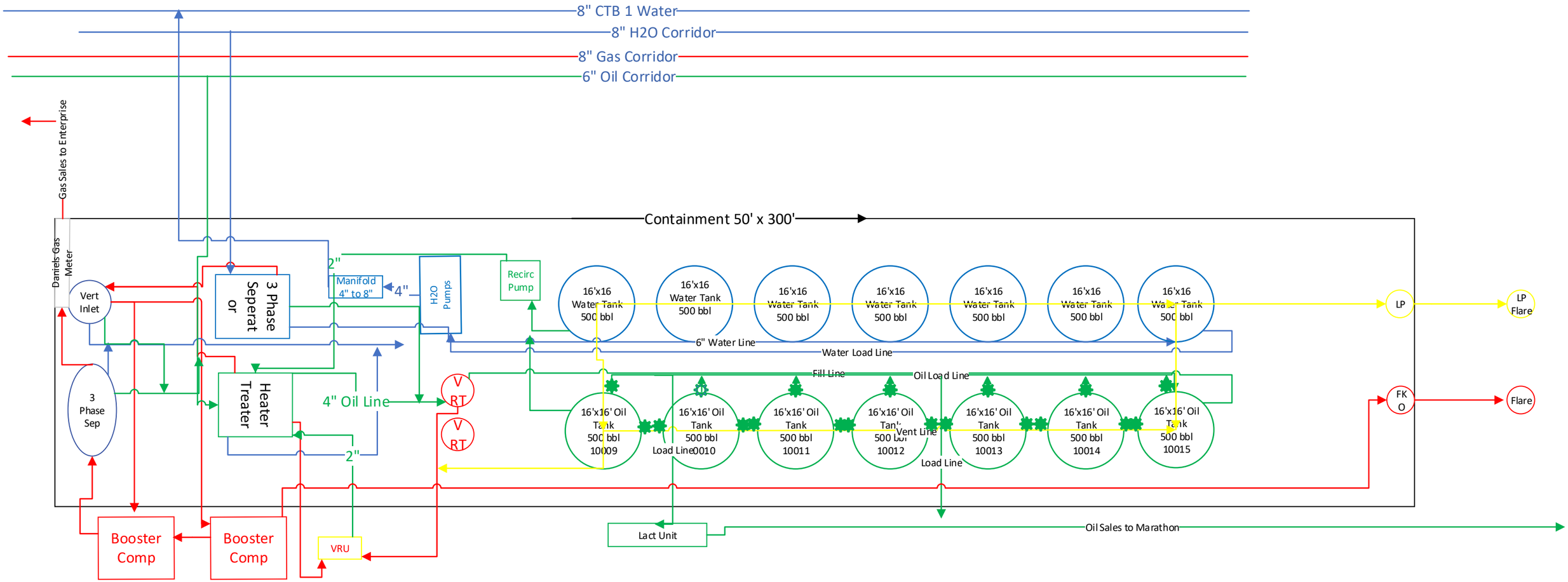
NO.	REVISION	DATE

JOB NO.: LS19050633
DWG. NO.:19050633-1

NORTH

Strata Production Company
Roadrunner NE CTB
SWNW of Sec 23, T23S, R30E NMP
Eddy Co., NM
API 30-015-49594
Lease NMNM114978
Forty Niner Ridge Unit/Delaware Field

- Sealed Valves



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

Drilling Plan Data Report
10/26/2023

APD ID: 10400091956 **Submission Date:** 06/01/2023

Operator Name: STRATA PRODUCTION COMPANY

Well Name: ROADRUNNER 23 11 HAI FED COM **Well Number:** 13H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
12368962	RUSTLER	3248	150	150	OTHER, SANDSTONE : Redbeds	USEABLE WATER	N
12368963	TOP SALT	2778	470	470	ANHYDRITE, SALT	NONE	N
12368964	BASE OF SALT	-411	3659	3659	ANHYDRITE, SALT	NONE	N
12368965	LAMAR	-620	3868	3868	ANHYDRITE, LIMESTONE	NONE	N
12368966	BONE SPRING	-4490	7738	7738	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
12368967		0					

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:

Roadrunner_23_11_HAI_Fed_Com__13H_Choke_Diagram_20230428114152.pdf

BOP Diagram Attachment:

Roadrunner_23_11_HAI_Fed_Com__13H_BOPE_Description_20230428114205.pdf

Roadrunner_23_11_HAI_Fed_Com__13H_BOPE_20230428114212.pdf

Operator Name: STRATA PRODUCTION COMPANY

Well Name: ROADRUNNER 23 11 HAI FED COM **Well Number:** 13H

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	3248	2798	450	H-40	48	ST&C	3.95	7.39	DRY	14.9	DRY	25
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	4000	0	4000	3248	-752	4000	J-55	40	LT&C	1.48	1.9	DRY	2.83	DRY	4.81
3	PRODUCTION	8.75	7.0	NEW	API	N	0	6900	0	6900	3248	-3652	6900	P-110	29	BUTT	2.85	3.13	DRY	4.77	DRY	4.64
4	PRODUCTION	8.75	5.5	NEW	API	N	6900	19767	6900	7309	-3652	-4061	12867	P-110	20	BUTT	3.5	1.85	DRY	2.49	DRY	2.59

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Roadrunner_23_11_HAI_Fed_Com__13H_Casing_Attachment_20230428115026.pdf

Operator Name: STRATA PRODUCTION COMPANY

Well Name: ROADRUNNER 23 11 HAI FED COM **Well Number:** 13H

Casing Attachments

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Roadrunner_23_11_HAI_Fed_Com__13H_Casing_Attachment_20230428115035.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Roadrunner_23_11_HAI_Fed_Com__13H_Casing_Attachment_20230428115044.pdf

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Roadrunner_23_11_HAI_Fed_Com__13H_Casing_Attachment_20230428115054.pdf

Section 4 - Cement

Operator Name: STRATA PRODUCTION COMPANY

Well Name: ROADRUNNER 23 11 HAI FED COM **Well Number:** 13H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	200	2.64	11	528	100	Class H	None
PRODUCTION	Tail		5200	19767	3225	1.42	13.2	4582	25	Class H	Salt, gel, extender, LCM
SURFACE	Lead		0	450	550	1.33	14.8	730	100	Class C	CaCl, LCM
INTERMEDIATE	Lead		0	3500	900	1.91	12.9	1718	100	Class C	Salt, gel, extender, LCM
INTERMEDIATE	Tail		3500	4000	200	1.33	14.8	264	65	Class C	Salt, LCM
PRODUCTION	Lead	5200	0	3700	260	2.5	11	651	50	Class C	Salt, gel, extender, LCM
PRODUCTION	Tail		3700	5200	250	1.34	14.8	337	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 Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

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 rig floor, remote kill line, mud gas separator.

Describe the mud monitoring system utilized: Pason pit level monitors, hourly weight check and viscosity, gel strength, and pH, 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: ROADRUNNER 23 11 HAI FED COM **Well Number:** 13H

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	4000	SALT SATURATED	10	10.5			10				Drill with brine water with LCM and gel sweeps.
4000	19767	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,CEMENT BOND LOG,COMPENSATED DENSILOG,DUAL LATERAL LOG/MICRO-SPHERICALLY FOCUSED,GAMMA RAY LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3360 **Anticipated Surface Pressure:** 1723

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

Roadrunner_23_11_HAI_Fed_Com__13H_H2S_Plan_20230428115114.pdf

Operator Name: STRATA PRODUCTION COMPANY

Well Name: ROADRUNNER 23 11 HAI FED COM **Well Number:** 13H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Roadrunner_23_11_HAI_Fed_Com__13H_WBD_20230510094033.pdf

Roadrunner_23_11_HAI_13H_Preliminary_Well_Plan_20230522110443.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Roadrunner_23_11_HAI_Fed_Com__13H_NGMP_20230428115148.pdf

Other Variance attachment:

#	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)	Original DY (ft)
	0	0.00	0	0	0	0	692,518	470,334	3,335	0	0.00	0			
	108	0.01	270	108	-0.01	0	692,518	470,334	3,227	108.38	0.00	0.01			
	207	0.01	270	207	-0.02	0	692,518	470,334	3,128	98.52	0.01	0.02			
	296	0.01	270	296	-0.04	0	692,518	470,334	3,039	88.67	0.01	0.04			
	394	0.02	270	394	-0.06	0	692,518	470,334	2,941	98.52	0.02	0.06			
	493	0.02	270	493	-0.1	0	692,518	470,334	2,842	98.52	0.02	0.1			
	591	0.02	270	591	-0.13	0	692,518	470,334	2,744	98.52	0.02	0.13			
	690	0.03	270	690	-0.18	0	692,518	470,334	2,645	98.52	0.03	0.18			
	788	0.03	270	788	-0.23	0	692,518	470,334	2,547	98.52	0.03	0.23			
	887	0.03	270	887	-0.28	0	692,518	470,334	2,448	98.52	0.03	0.28			
	985	0.03	270	985	-0.33	0	692,517	470,334	2,350	98.52	0.03	0.33			
	1,084	0.03	270	1,084	-0.39	0	692,517	470,334	2,251	98.52	0.03	0.39			
	1,182	0.04	270	1,182	-0.45	0	692,517	470,334	2,153	98.52	0.04	0.45			
	1,281	0.04	270	1,281	-0.51	0	692,517	470,334	2,054	98.52	0.04	0.51			
	1,379	0.04	270	1,379	-0.58	0	692,517	470,334	1,956	98.52	0.04	0.58			
	1,478	0.04	270	1,478	-0.64	0	692,517	470,334	1,857	98.52	0.04	0.64			
	1,576	0.04	270	1,576	-0.7	0	692,517	470,334	1,759	98.52	0.04	0.7			
	1,675	0.04	270	1,675	-0.76	0	692,517	470,334	1,660	98.52	0.04	0.76			
	1,773	0.03	270	1,773	-0.83	0	692,517	470,334	1,562	98.52	0.04	0.83			
	1,872	0.03	270	1,872	-0.88	0	692,517	470,334	1,463	98.52	0.03	0.88			
	1,970	0.03	270	1,970	-0.94	0	692,517	470,334	1,365	98.52	0.03	0.94			
	2,069	0.03	270	2,069	-0.99	0	692,517	470,334	1,266	98.52	0.03	0.99			
	2,168	0.03	270	2,168	-1.04	0	692,517	470,334	1,168	98.52	0.03	1.04			
	2,266	0.02	270	2,266	-1.09	0	692,517	470,334	1,069	98.52	0.03	1.09			
	2,365	0.02	270	2,365	-1.13	0	692,517	470,334	970	98.52	0.02	1.13			
	2,463	0.02	270	2,463	-1.16	0	692,517	470,334	872	98.52	0.02	1.16			
	2,562	0.01	270	2,562	-1.19	0	692,517	470,334	773	98.52	0.02	1.19			
	2,660	0.01	270	2,660	-1.22	0	692,517	470,334	675	98.52	0.01	1.22			
	2,759	0.01	269	2,759	-1.23	0	692,517	470,334	576	98.52	0.01	1.23			
	2,857	0.00	268	2,857	-1.24	0	692,517	470,334	478	98.52	0.00	1.24			
	2,956	0.00	91	2,956	-1.24	0	692,517	470,334	379	98.52	0.00	1.24			
	3,054	0.01	90	3,054	-1.23	0	692,517	470,334	281	98.52	0.01	1.23			
	3,153	0.01	90	3,153	-1.21	0	692,517	470,334	182	98.52	0.01	1.21			
	3,251	0.02	90	3,251	-1.18	0	692,517	470,334	84	98.52	0.02	1.18			
	3,350	0.03	90	3,350	-1.13	0	692,517	470,334	-15	98.52	0.02	1.13			
	3,448	0.03	90	3,448	-1.08	0	692,517	470,334	-113	98.52	0.03	1.08			
	3,547	0.04	90	3,547	-1.02	0	692,517	470,334	-212	98.52	0.04	1.02			
	3,645	0.05	90	3,645	-0.94	0	692,517	470,334	-310	98.52	0.04	0.94			
	3,744	0.06	90	3,744	-0.85	0	692,517	470,334	-409	98.52	0.05	0.85			
	3,842	0.06	90	3,842	-0.75	0	692,517	470,334	-507	98.52	0.06	0.75			
	3,941	0.07	90	3,941	-0.63	0	692,517	470,334	-606	98.52	0.07	0.63			
	4,039	0.08	90	4,039	-0.5	0	692,517	470,334	-704	98.52	0.08	0.5			
	4,138	0.09	90	4,138	-0.35	0	692,517	470,334	-803	98.52	0.09	0.35			
	4,236	0.10	90	4,236	-0.18	0	692,518	470,334	-901	98.52	0.10	0.18			
	4,335	0.11	90	4,335	0	0	692,518	470,334	-1,000	98.52	0.11	0			
	4,442	0.14	90	4,442	0.23	0	692,518	470,334	-1,107	106.83	0.13	0.23			
	4,539	0.17	90	4,539	0.49	0	692,518	470,334	-1,204	97.12	0.15	0.49			
	4,636	0.19	90	4,636	0.8	0	692,519	470,334	-1,301	97.12	0.18	0.8			
	4,733	0.22	90	4,733	1.15	0	692,519	470,334	-1,398	97.12	0.20	1.15			
	4,830	0.24	90	4,830	1.53	0	692,519	470,334	-1,495	97.12	0.23	1.53			
	4,927	0.26	90	4,927	1.95	0	692,520	470,334	-1,592	97.12	0.25	1.95			
	5,025	0.27	90	5,025	2.4	0	692,520	470,334	-1,690	97.12	0.27	2.4			
	5,122	0.29	90	5,122	2.88	0	692,521	470,334	-1,787	97.12	0.28	2.88			
	5,219	0.31	90	5,219	3.38	0	692,521	470,334	-1,884	97.12	0.30	3.38			
	5,316	0.32	90	5,316	3.91	0	692,522	470,334	-1,981	97.12	0.31	3.91			
	5,413	0.33	90	5,413	4.46	0	692,522	470,334	-2,078	97.12	0.32	4.46			
	5,510	0.34	90	5,510	5.03	0	692,523	470,334	-2,175	97.12	0.33	5.03			
	5,607	0.35	90	5,607	5.61	0	692,523	470,334	-2,272	97.12	0.34	5.61			
	5,704	0.35	90	5,704	6.21	0	692,524	470,334	-2,369	97.12	0.35	6.21			
	5,801	0.36	90	5,801	6.81	0	692,525	470,334	-2,466	97.12	0.36	6.81			
	5,899	0.36	90	5,899	7.42	0	692,525	470,334	-2,564	97.12	0.36	7.42			
	5,996	0.36	90	5,996	8.04	0	692,526	470,334	-2,661	97.12	0.36	8.04			
	6,093	0.36	90	6,093	8.65	0	692,526	470,334	-2,758	97.12	0.36	8.65			
	6,190	0.36	90	6,190	9.26	0	692,527	470,334	-2,855	97.12	0.36	9.26			
	6,287	0.36	90	6,287	9.87	0	692,528	470,334	-2,952	97.12	0.36	9.87			
	6,384	0.35	90	6,384	10.47	0	692,528	470,334	-3,049	97.12	0.35	10.47			
	6,481	0.34	90	6,481	11.06	0	692,529	470,334	-3,146	97.12	0.35	11.06			
	6,569	0.34	90	6,569	11.58	0	692,529	470,334	-3,234	87.41	0.34	11.58			
	6,666	0.33	90	6,666	12.14	0	692,530	470,334	-3,331	97.12	0.33	12.14			
	6,763	0.31	90	6,763	12.68	0	692,530	470,334	-3,428	97.12	0.32	12.68			
	6,860	0.30	90	6,860	13.2	0	692,531	470,334	-3,525	97.12	0.31	13.2			
	6,892	2.14	7	6,892	13.36	0.59	692,531	470,334	-3,557	31.79	1.10	13.37			
	6,923	4.31	3	6,923	13.49	2.34	692,531	470,336	-3,588	31.22	3.22	13.69			
	6,955	6.56	2	6,955	13.62	5.34	692,531	470,339	-3,620	31.78	5.43	14.63			
	6,986	8.87	1	6,986	13.72	9.53	692,532	470,343	-3,651	31.2	7.72	16.71			
	7,018	11.27	1	7,017	13.81	15.08	692,532	470,349	-3,682	31.73	10.07	20.45			
	7,050	13.81	0	7,048	13.89	22.07	692,532	470,356	-3,713	32.22	12.54	26.08			
	7,081	16.28	0	7,078	13.95	30.01	692,532	470,364	-3,743	30.58	15.04	33.09			
	7,113	18.97	0	7,108	13.99	39.73	692,532	470,373	-3,773	32.1	17.62	42.12			
	7,144	21.69	0	7,138	14.01	50.68	692,532	470,384	-3,803	31.52	20.33	52.58			
	7,175	24.47	0	7,166	14.03	62.81	692,532	470,397	-3,831	30.96	23.08	64.36			
	7,207	27.37	0	7,195	14.02	76.54	692,532	470,410	-3,860	31.4	25.92	77.81			
	7,238	30.44	360	7,222	14.01	91.91	692,532	470,426	-3,887	31.81	28.90	92.97			
	7,270	33.54	360	7,249	13.98	108.46	692,532	470,442	-3,914	31.25	31.99	109.36			

#	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)	Original DY (ft)
	7,301	36.83	360	7,275	13.94	126.7	692,532	470,460	-3,940	31.65	35.18	127.47			
	7,332	40.17	360	7,299	13.89	146.08	692,532	470,480	-3,964	31.13	38.50	146.73			
	7,364	43.70	360	7,323	13.83	167.15	692,532	470,501	-3,988	31.54	41.93	167.72			
	7,396	47.40	360	7,345	13.76	189.94	692,532	470,524	-4,010	31.94	45.55	190.44			
	7,427	51.22	360	7,366	13.69	213.8	692,532	470,548	-4,031	31.48	49.31	214.24			
	7,458	55.11	360	7,384	13.61	238.66	692,531	470,572	-4,049	31.07	53.16	239.05			
	7,490	59.22	360	7,401	13.54	265.18	692,531	470,599	-4,066	31.56	57.17	265.52			
	7,522	63.54	360	7,417	13.46	293.34	692,531	470,627	-4,082	32.09	61.38	293.65			
	7,553	67.86	360	7,429	13.39	321.6	692,531	470,655	-4,094	31.01	65.70	321.87			
	7,585	72.36	360	7,440	13.33	351.39	692,531	470,685	-4,105	31.69	70.11	351.64			
	7,616	76.97	360	7,449	13.27	381.88	692,531	470,716	-4,114	31.62	74.66	382.11			
	7,648	81.62	0	7,454	13.23	412.98	692,531	470,747	-4,119	31.66	79.29	413.19			
	7,679	86.21	360	7,458	13.21	443.78	692,531	470,778	-4,123	30.98	83.91	443.97			
	7,710	90.80	0	7,458	13.2	475	692,531	470,809	-4,123	31.24	88.50	475.18			
	7,819	90.80	0	7,457	13.2	583.22	692,531	470,917	-4,122	108.23	90.80	583.37			
	7,917	90.80	0	7,456	13.2	681.6	692,531	471,015	-4,121	98.39	90.80	681.73			
	8,015	90.80	0	7,454	13.2	779.99	692,531	471,114	-4,119	98.39	90.80	780.1			
	8,114	90.81	0	7,453	13.2	878.37	692,531	471,212	-4,118	98.39	90.81	878.47			
	8,202	90.81	0	7,452	13.2	966.92	692,531	471,301	-4,117	88.55	90.81	967.01			
	8,301	90.81	0	7,450	13.2	1065.3	692,531	471,399	-4,115	98.39	90.81	1065.38			
	8,399	90.81	0	7,449	13.2	1163.69	692,531	471,497	-4,114	98.39	90.81	1163.76			
	8,497	90.82	0	7,447	13.2	1262.07	692,531	471,596	-4,112	98.39	90.81	1262.14			
	8,596	90.82	0	7,446	13.2	1360.45	692,531	471,694	-4,111	98.39	90.82	1360.52			
	8,694	90.82	0	7,445	13.2	1458.84	692,531	471,793	-4,110	98.39	90.82	1458.9			
	8,793	90.82	0	7,443	13.2	1557.22	692,531	471,891	-4,108	98.39	90.82	1557.28			
	8,891	90.82	0	7,442	13.2	1655.6	692,531	471,989	-4,107	98.39	90.82	1655.66			
	8,989	90.82	0	7,440	13.2	1753.99	692,531	472,088	-4,105	98.39	90.82	1754.04			
	9,088	90.82	0	7,439	13.2	1852.37	692,531	472,186	-4,104	98.39	90.82	1852.42			
	9,186	90.82	0	7,438	13.2	1950.76	692,531	472,285	-4,103	98.39	90.82	1950.8			
	9,285	90.82	0	7,436	13.2	2049.14	692,531	472,383	-4,101	98.39	90.82	2049.18			
	9,383	90.82	0	7,435	13.2	2147.52	692,531	472,481	-4,100	98.39	90.82	2147.56			
	9,481	90.82	0	7,433	13.2	2245.91	692,531	472,580	-4,098	98.39	90.82	2245.95			
	9,580	90.82	0	7,432	13.2	2344.29	692,531	472,678	-4,097	98.39	90.82	2344.33			
	9,678	90.82	0	7,430	13.2	2442.67	692,531	472,776	-4,095	98.39	90.82	2442.71			
	9,777	90.82	0	7,429	13.2	2541.06	692,531	472,875	-4,094	98.39	90.82	2541.09			
	9,875	90.82	0	7,428	13.2	2639.44	692,531	472,973	-4,093	98.39	90.82	2639.47			
	9,973	90.82	0	7,426	13.2	2737.83	692,531	473,072	-4,091	98.39	90.82	2737.86			
	10,072	90.82	0	7,425	13.2	2836.21	692,531	473,170	-4,090	98.39	90.82	2836.24			
	10,170	90.81	0	7,423	13.2	2934.59	692,531	473,268	-4,088	98.39	90.82	2934.62			
	10,269	90.81	0	7,422	13.2	3032.98	692,531	473,367	-4,087	98.39	90.81	3033.01			
	10,367	90.81	0	7,421	13.2	3131.36	692,531	473,465	-4,086	98.39	90.81	3131.39			
	10,465	90.81	0	7,419	13.2	3229.75	692,531	473,564	-4,084	98.39	90.81	3229.77			
	10,564	90.81	0	7,418	13.2	3328.13	692,531	473,662	-4,083	98.39	90.81	3328.16			
	10,662	90.80	0	7,417	13.2	3426.51	692,531	473,760	-4,082	98.39	90.80	3426.54			
	10,760	90.80	0	7,415	13.2	3524.9	692,531	473,859	-4,080	98.39	90.80	3524.92			
	10,859	90.80	0	7,414	13.2	3623.28	692,531	473,957	-4,079	98.39	90.80	3623.31			
	10,957	90.79	0	7,412	13.2	3721.67	692,531	474,055	-4,077	98.39	90.80	3721.69			
	11,056	90.79	0	7,411	13.2	3820.05	692,531	474,154	-4,076	98.39	90.79	3820.07			
	11,154	90.79	0	7,410	13.2	3918.43	692,531	474,252	-4,075	98.39	90.79	3918.46			
	11,252	90.78	0	7,408	13.2	4016.82	692,531	474,351	-4,073	98.39	90.78	4016.84			
	11,351	90.78	0	7,407	13.2	4115.2	692,531	474,449	-4,072	98.39	90.78	4115.23			
	11,449	90.77	0	7,406	13.2	4213.59	692,531	474,547	-4,071	98.39	90.78	4213.61			
	11,548	90.77	0	7,404	13.2	4311.97	692,531	474,646	-4,069	98.39	90.77	4311.99			
	11,646	90.76	0	7,403	13.2	4410.36	692,531	474,744	-4,068	98.39	90.77	4410.38			
	11,744	90.76	0	7,402	13.2	4508.74	692,531	474,842	-4,067	98.39	90.76	4508.76			
	11,843	90.75	0	7,400	13.2	4607.13	692,531	474,941	-4,065	98.39	90.76	4607.15			
	11,941	90.75	0	7,399	13.2	4705.51	692,531	475,039	-4,064	98.39	90.75	4705.53			
	12,040	90.74	0	7,398	13.2	4803.9	692,531	475,138	-4,063	98.39	90.75	4803.92			
	12,138	90.74	0	7,397	13.2	4902.28	692,531	475,236	-4,062	98.39	90.74	4902.3			
	12,236	90.73	0	7,395	13.2	5000.67	692,531	475,334	-4,060	98.39	90.73	5000.69			
	12,335	90.73	0	7,394	13.2	5099.06	692,531	475,433	-4,059	98.39	90.73	5099.07			
	12,433	90.72	0	7,393	13.2	5197.44	692,531	475,531	-4,058	98.39	90.72	5197.46			
	12,532	90.71	0	7,392	13.2	5295.83	692,531	475,630	-4,057	98.39	90.72	5295.84			
	12,641	90.71	0	7,390	13.2	5404.84	692,531	475,739	-4,055	109.02	90.71	5404.86			
	12,740	90.71	0	7,389	13.2	5503.95	692,531	475,838	-4,054	99.11	90.71	5503.97			
	12,839	90.70	0	7,388	13.2	5603.05	692,531	475,937	-4,053	99.11	90.70	5603.07			
	12,938	90.70	0	7,387	13.2	5702.16	692,531	476,036	-4,052	99.11	90.70	5702.18			
	13,037	90.70	0	7,385	13.2	5801.27	692,531	476,135	-4,050	99.11	90.70	5801.28			
	13,136	90.70	0	7,384	13.2	5900.37	692,531	476,234	-4,049	99.11	90.70	5900.39			
	13,235	90.69	0	7,383	13.2	5999.48	692,531	476,333	-4,048	99.11	90.69	5999.49			
	13,334	90.69	0	7,382	13.2	6098.58	692,531	476,432	-4,047	99.11	90.69	6098.6			
	13,433	90.69	0	7,381	13.2	6197.69	692,531	476,531	-4,046	99.11	90.69	6197.7			
	13,533	90.69	0	7,379	13.2	6296.79	692,531	476,631	-4,044	99.11	90.69	6296.81			
	13,632	90.68	0	7,378	13.2	6395.9	692,531	476,730	-4,043	99.11	90.68	6395.91			
	13,731	90.68	0	7,377	13.2	6495.01	692,531	476,829	-4,042	99.11	90.68	6495.02			
	13,830	90.68	0	7,376	13.2	6594.11	692,531	476,928	-4,041	99.11	90.68	6594.13			
	13,929	90.68	0	7,375	13.2	6693.22	692,531	477,027	-4,040	99.11	90.68	6693.23			
	14,028	90.67	0	7,374	13.2	6792.32	692,531	477,126	-4,039	99.11	90.68	6792.34			
	14,127	90.67	0	7,372	13.2	6891.43	692,531	477,225	-4,037	99.11	90.67	6891.44			
	14,226	90.67	0	7,371	13.2	6990.54	692,531	477,324	-4,036	99.11	90.67	6990.55			
	14,326	90.67	0	7,370	13.2	7089.64	692,531	477,423	-4,035	99.11	90.67	7089.65			
	14,425	90.67	0	7,369	13.2	7188.75	692,531	477,523	-4,034	99.11	90.67	7188.76			
	14,524	90.66	0	7,368	13.2	7287.86	692,531	477,622	-4,033	99.11	90.67	7287.87			
	14,623	90.66	0	7,367	13.2	7386.96	692,531	477,721	-4,032	99.11	90.66	7386.97			

#	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)	Original DY (ft)
	14,722	90.66	0	7,365	13.2	7486.07	692,531	477,820	-4,030	99.11	90.66	7486.08			
	14,821	90.66	0	7,364	13.2	7585.17	692,531	477,919	-4,029	99.11	90.66	7585.19			
	14,920	90.66	0	7,363	13.2	7684.28	692,531	478,018	-4,028	99.11	90.66	7684.29			
	15,019	90.66	0	7,362	13.2	7783.39	692,531	478,117	-4,027	99.11	90.66	7783.4			
	15,118	90.65	0	7,361	13.2	7882.49	692,531	478,216	-4,026	99.11	90.66	7882.5			
	15,218	90.65	0	7,360	13.2	7981.6	692,531	478,315	-4,025	99.11	90.65	7981.61			
	15,317	90.65	0	7,359	13.2	8080.71	692,531	478,414	-4,024	99.11	90.65	8080.72			
	15,416	90.65	0	7,357	13.2	8179.81	692,531	478,514	-4,022	99.11	90.65	8179.82			
	15,515	90.65	0	7,356	13.2	8278.92	692,531	478,613	-4,021	99.11	90.65	8278.93			
	15,614	90.65	0	7,355	13.2	8378.03	692,531	478,712	-4,020	99.11	90.65	8378.04			
	15,713	90.65	0	7,354	13.2	8477.13	692,531	478,811	-4,019	99.11	90.65	8477.14			
	15,812	90.65	0	7,353	13.2	8576.24	692,531	478,910	-4,018	99.11	90.65	8576.25			
	15,911	90.65	0	7,352	13.2	8675.35	692,531	479,009	-4,017	99.11	90.65	8675.36			
	16,010	90.64	0	7,351	13.2	8774.45	692,531	479,108	-4,016	99.11	90.65	8774.46			
	16,110	90.64	0	7,350	13.2	8873.56	692,531	479,207	-4,015	99.11	90.64	8873.57			
	16,209	90.64	0	7,349	13.2	8972.67	692,531	479,306	-4,014	99.11	90.64	8972.68			
	16,308	90.64	0	7,347	13.2	9071.77	692,531	479,406	-4,012	99.11	90.64	9071.78			
	16,407	90.64	0	7,346	13.2	9170.88	692,531	479,505	-4,011	99.11	90.64	9170.89			
	16,506	90.64	0	7,345	13.2	9269.99	692,531	479,604	-4,010	99.11	90.64	9270			
	16,605	90.64	0	7,344	13.2	9369.09	692,531	479,703	-4,009	99.11	90.64	9369.1		5	
	16,704	90.64	0	7,343	13.2	9468.2	692,531	479,802	-4,008	99.11	90.64	9468.21			
	16,803	90.64	0	7,342	13.2	9567.31	692,531	479,901	-4,007	99.11	90.64	9567.32			
	16,902	90.64	0	7,341	13.2	9666.41	692,531	480,000	-4,006	99.11	90.64	9666.42			
	17,002	90.64	0	7,340	13.2	9765.52	692,531	480,099	-4,005	99.11	90.64	9765.53			
	17,101	90.64	0	7,339	13.2	9864.63	692,531	480,198	-4,004	99.11	90.64	9864.64			
	17,200	90.64	0	7,337	13.2	9963.73	692,531	480,297	-4,002	99.11	90.64	9963.74			
	17,299	90.64	0	7,336	13.2	10062.84	692,531	480,397	-4,001	99.11	90.64	10062.85			
	17,398	90.64	0	7,335	13.2	10161.95	692,531	480,496	-4,000	99.11	90.64	10161.96			
	17,497	90.64	0	7,334	13.2	10261.05	692,531	480,595	-3,999	99.11	90.64	10261.06			
	17,596	90.64	0	7,333	13.2	10360.16	692,531	480,694	-3,998	99.11	90.64	10360.17			
	17,695	90.64	0	7,332	13.2	10459.27	692,531	480,793	-3,997	99.11	90.64	10459.28			
	17,794	90.64	0	7,331	13.2	10558.37	692,531	480,892	-3,996	99.11	90.64	10558.38			
	17,894	90.64	0	7,330	13.2	10657.48	692,531	480,991	-3,995	99.11	90.64	10657.49			
	17,993	90.64	0	7,329	13.2	10756.59	692,531	481,090	-3,994	99.11	90.64	10756.6			
	18,092	90.64	0	7,327	13.2	10855.69	692,531	481,189	-3,992	99.11	90.64	10855.7			
	18,191	90.64	0	7,326	13.2	10954.8	692,531	481,289	-3,991	99.11	90.64	10954.81			
	18,290	90.64	0	7,325	13.2	11053.91	692,531	481,388	-3,990	99.11	90.64	11053.92			
	18,389	90.64	0	7,324	13.2	11153.02	692,531	481,487	-3,989	99.11	90.64	11153.02			
	18,488	90.64	0	7,323	13.2	11252.12	692,531	481,586	-3,988	99.11	90.64	11252.13			
	18,587	90.64	0	7,322	13.2	11351.23	692,531	481,685	-3,987	99.11	90.64	11351.24			
	18,686	90.64	0	7,321	13.2	11450.34	692,531	481,784	-3,986	99.11	90.64	11450.34			
	18,776	90.65	0	7,320	13.2	11539.53	692,531	481,873	-3,985	89.2	90.65	11539.54			
	18,875	90.65	0	7,319	13.2	11638.64	692,531	481,972	-3,984	99.11	90.65	11638.65			
	18,974	90.65	0	7,318	13.2	11737.74	692,531	482,071	-3,983	99.11	90.65	11737.75			
	19,073	90.65	0	7,316	13.2	11836.85	692,531	482,171	-3,981	99.11	90.65	11836.86			
	19,172	90.65	0	7,315	13.2	11935.96	692,531	482,270	-3,980	99.11	90.65	11935.97			
	19,271	90.65	0	7,314	13.2	12035.06	692,531	482,369	-3,979	99.11	90.65	12035.07			
	19,370	90.65	0	7,313	13.2	12134.17	692,531	482,468	-3,978	99.11	90.65	12134.18			
	19,469	90.65	0	7,312	13.2	12233.28	692,531	482,567	-3,977	99.11	90.65	12233.28			
	19,569	90.65	0	7,311	13.2	12332.38	692,531	482,666	-3,976	99.11	90.65	12332.39			
	19,668	90.66	0	7,310	13.2	12431.49	692,531	482,765	-3,975	99.11	90.66	12431.5			
	19,767	90.66	0	7,309	13.2	12530.6	692,531	482,864	-3,974	99.11	90.66	12530.6			

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Strata Production Company
WELL NAME & NO.:	Roadrunner 23 11 HAI Fed Com 13H
LOCATION:	Sec 23-23S-30E-NMP
COUNTY:	Eddy County, New Mexico

COA

H_2S	○ No	○ Yes		
Potash / WIPP	○ None	○ Secretary	◉ R-111-P	☐ WIPP
Cave / Karst	◉ Low	○ Medium	○ High	○ Critical
Wellhead	◉ Conventional	○ Multibowl	○ Both	○ Diverter
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	☐ DV Tool
Special Req	☐ Break Testing	☐ Water Disposal	☑ COM	☐ Unit
Variance	☐ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	☐ Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
☐ **Batch APD / Sundry**				

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 Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 445 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 altered 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 **24 hours in the Potash Area** 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 Choose an item. inch intermediate casing is:

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

❖ In R111 Potash Areas if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing salt string must come to surface.

3. The minimum required fill of cement behind the **7** inch production casing is:

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

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 to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

C. PRESSURE EQUIPMENT

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)

☒ Eddy County
Email **or** call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, **BLM_NM_CFO_DrillingNotifications@BLM.GOV**
(575) 361-2822

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - 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.

- BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 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. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

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, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity 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-P 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 part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

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:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.

c. Manufacturer representative shall install the test plug for the initial BOP test.
d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
e. 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.

a. 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).

b. 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.)

c. 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 part 3170 Subpart 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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. 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.

e. The results of the test shall be reported to the appropriate BLM office.

f. 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.

g. 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.

h. 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 part 3170 Subpart 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
Roadrunner 23 11 HAI Fed Com #13H
Section 23 T23S, R30E
SHL: 1980' FNL & 750' FEL of Sec 23
BHL: 100' FNL & 330' FEL of Sec 11
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 (H_2S).

B. The proper use and maintenance of personal protective equipment and life support systems.

C. The proper use of H_2S 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 H_2S 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 H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S 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. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S 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 H_2S.

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. H_2S detection and monitoring equipment:

2 - portable H_2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H_2S 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 H_2S 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 H_2S service.

G. Communication:
Company vehicles equipped with cellular telephone.

W A R N I N G

YOU ARE ENTERING AN H_2S 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

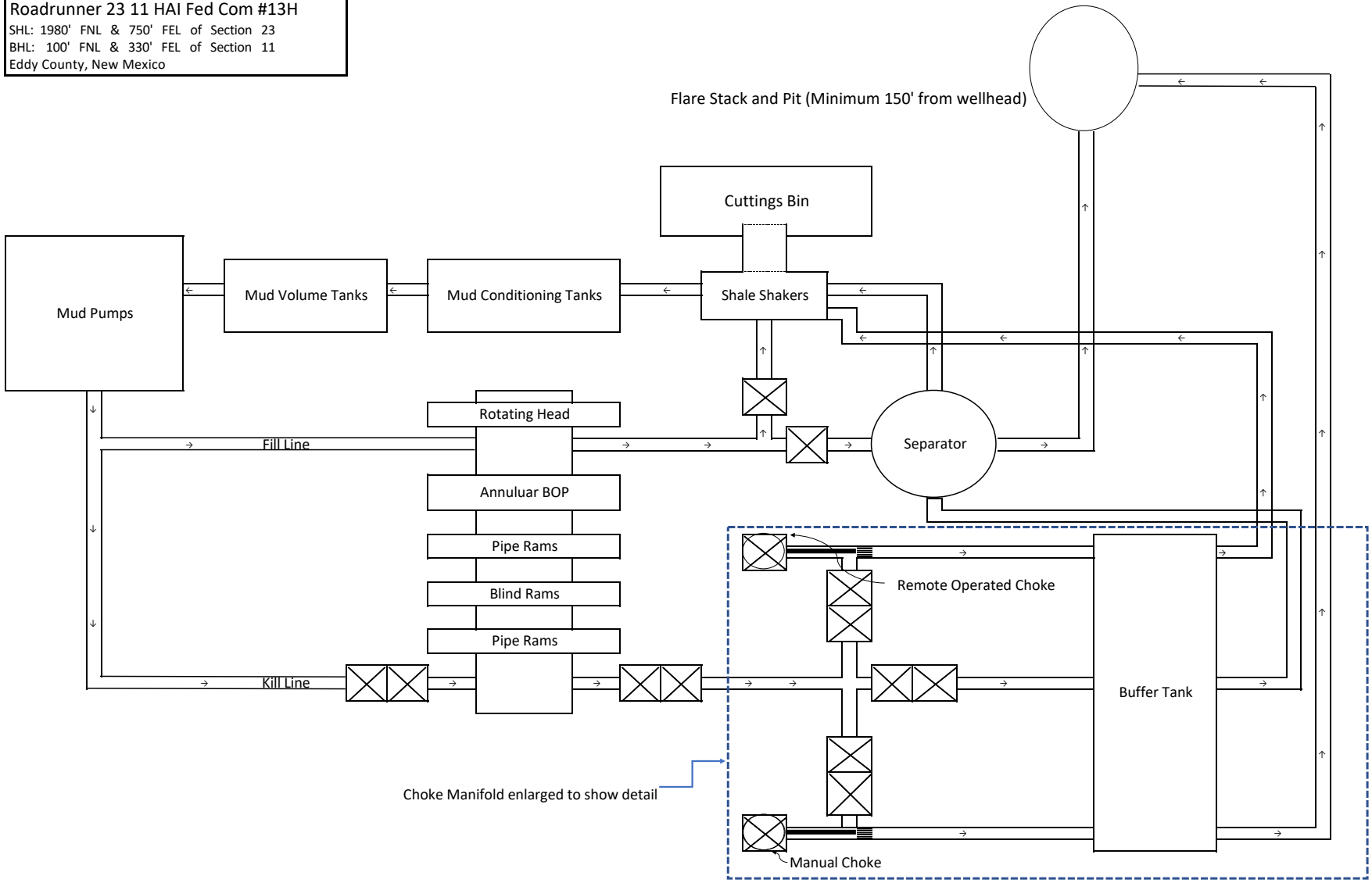
911 Must have Correct County & State & Directions to your location

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
Roadrunner 23 11 HAI Fed Com #13H
SHL: 1980' FNL & 750' FEL of Section 23
BHL: 100' FNL & 330' FEL of Section 11
Eddy County, New Mexico



STRATA PRODUCTION COMPANY

Roadrunner 23 11 HAI Fed Com #13H
SHL: 1980' FNL & 750' FEL of Sec 23
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Sec 23-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 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.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 279965

CONDITIONS

Operator: STRATA PRODUCTION CO P.O. Box 1030 Roswell, NM 882021030	OGRID: 21712
	Action Number: 279965
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	10/30/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/30/2023
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	10/30/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	10/30/2023
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	10/30/2023
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	10/30/2023
ward.rikala	Strata is currently out of compliance with Rule 5.9. This well can not be produced until the operator is in compliance.	10/30/2023