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. 30-015-53943

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)

Approval Date: 06/16/2023

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
30-015-53943	24750	Forty Niner Ridge Delaware

4 Property Code	5 Property Name	6 Well Number
24750	PAJARITO FED COM 31 19 AAL	4H

7 OGRID NO.	8 Operator Name	9 Elevation
21712	STRATA PRODUCTION COMPANY	3352'

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
A	31	23S	31E		1070	NORTH	910	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	19	23S	31E		1420	NORTH	400	EAST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320			

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
N: 460618.6 – E: 702696.2

LAT: 32.2652366° N
LONG: 103.8112961° W

GEODETIC DATA
NAD 83 GRID – NM EAST

BOTTOM HOLE
N: 470829.1 – E: 703147.2

LAT: 32.2932969° N
LONG: 103.8096759° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BRASS CAP "1916"
N: 456382.5 – E: 698281.8

B: FOUND BRASS CAP "1916"
N: 459024.4 – E: 698269.1

C: FOUND BRASS CAP "1916"
N: 461665.3 – E: 698257.4

D: FOUND BRASS CAP "1916"
N: 464306.0 – E: 698244.9

E: FOUND BRASS CAP "1916"
N: 466949.0 – E: 698232.0

F: FOUND BRASS CAP "1942"
N: 469590.6 – E: 698220.6

G: FOUND BRASS CAP "1916"
N: 472231.9 – E: 698209.1

H: FOUND BRASS CAP "1916"
N: 472244.2 – E: 700897.8

I: FOUND BRASS CAP "1916"
N: 472249.6 – E: 703536.9

J: FOUND BRASS CAP "1916"
N: 469616.5 – E: 703555.8

K: FOUND BRASS CAP "1916"
N: 466975.2 – E: 703571.0

L: FOUND BRASS CAP "1916"
N: 464333.7 – E: 703584.9

M: FOUND BRASS CAP "1916"
N: 461692.4 – E: 703599.6

N: FOUND BRASS CAP "1916"
N: 4599051.9 – E: 703615.3

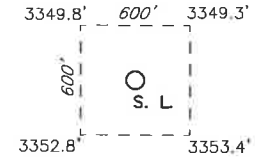
O: FOUND BRASS CAP "1916"
N: 456410.9 – E: 703629.3

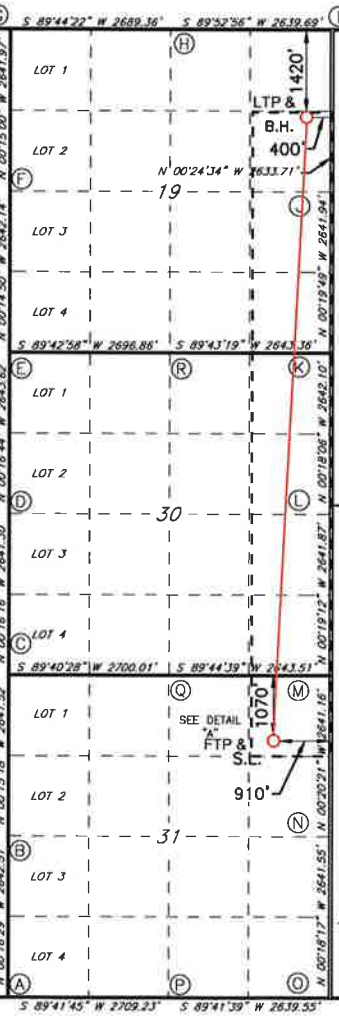
P: FOUND BRASS CAP "1916"
N: 456396.8 – E: 700990.4

Q: FOUND BRASS CAP "1916"
N: 461680.6 – E: 700956.7

R: FOUND BRASS CAP "1916"
N: 466962.4 – E: 700928.2

DETAIL "A"





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.

Signature 7.1.2022 Date

Mitch Krakauskas
Printed Name

mitch@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.

02-04-2020
Date of Survey

Signature and Seal of Professional Surveyor

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

19680
Certificate Number

REV: B.H. MOVE – 7/20/22

Job No: LS20010085R1

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:** 06 / 22 / 2023

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
Pajarito 31 19 AAL Fed Com		Sec 31-T23S-R31E	1070' FNL & 910' FEL	800	1,200	2,200

IV. Central Delivery Point Name: Common Tank Battery #1 [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
Pajarito 31 19 AAL Fed Com		08/20/2023	09/20/2023	09/25/2023	09/30/2023	10/05/2023

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
Pajarito 31 19 AAL Fed Com #4		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	10/05/2023	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:	06/23/2023
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

Pajarito 31 19 AAL Fed Com #4
Section 31-T23S-R31E
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 30-T23S-R31E 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 1 in the SESE of Section 25-T23S-R30E (Eddy County) 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

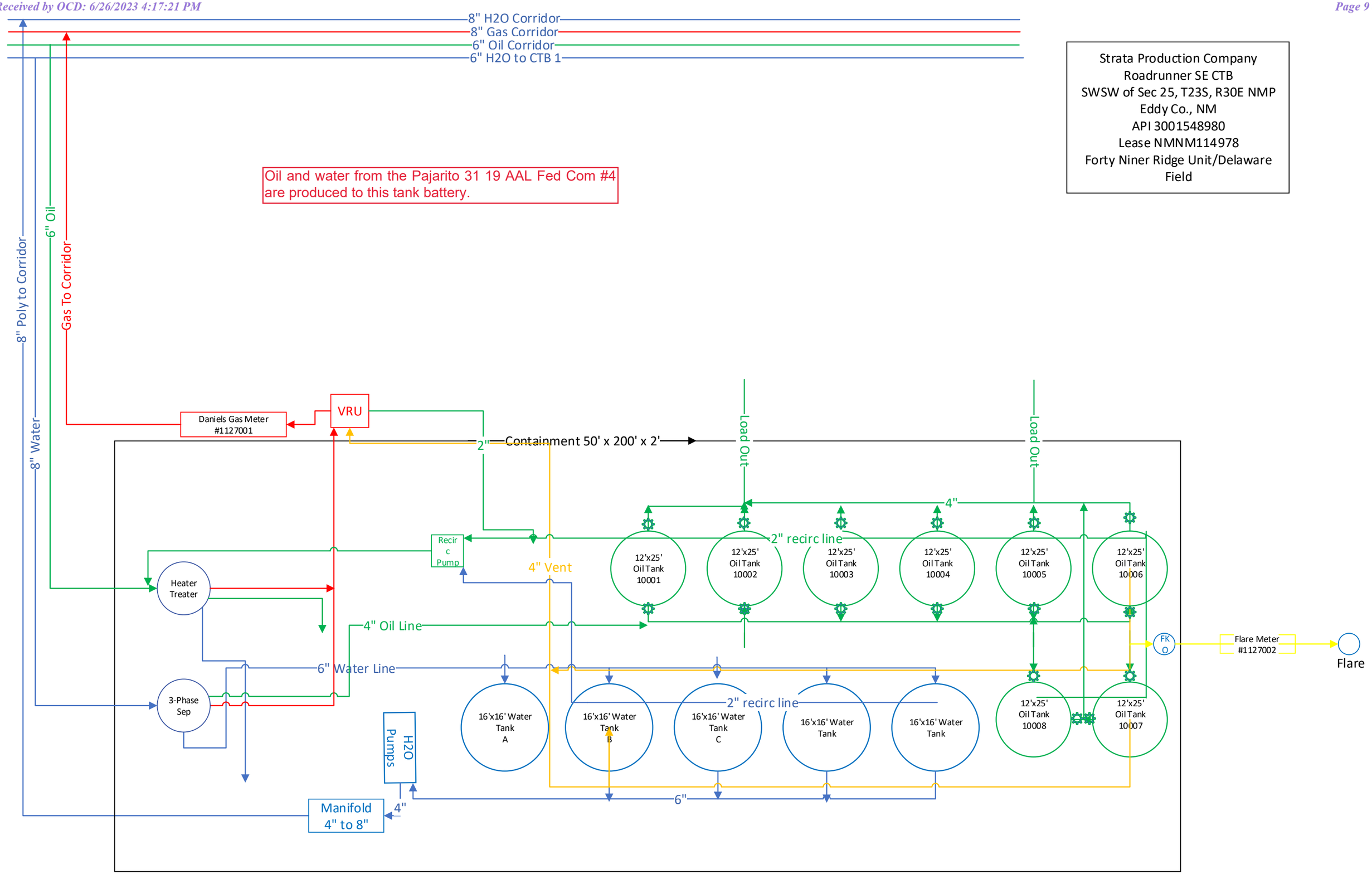
Gas flared as the result of emergency of malfunction will be metered. Gas used beneficially during production operations will be metered or estimated. Should metering be impractical due to equipment malfunction or low flow, Strata will estimate the volume of gas vented or flared. All metering equipment 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

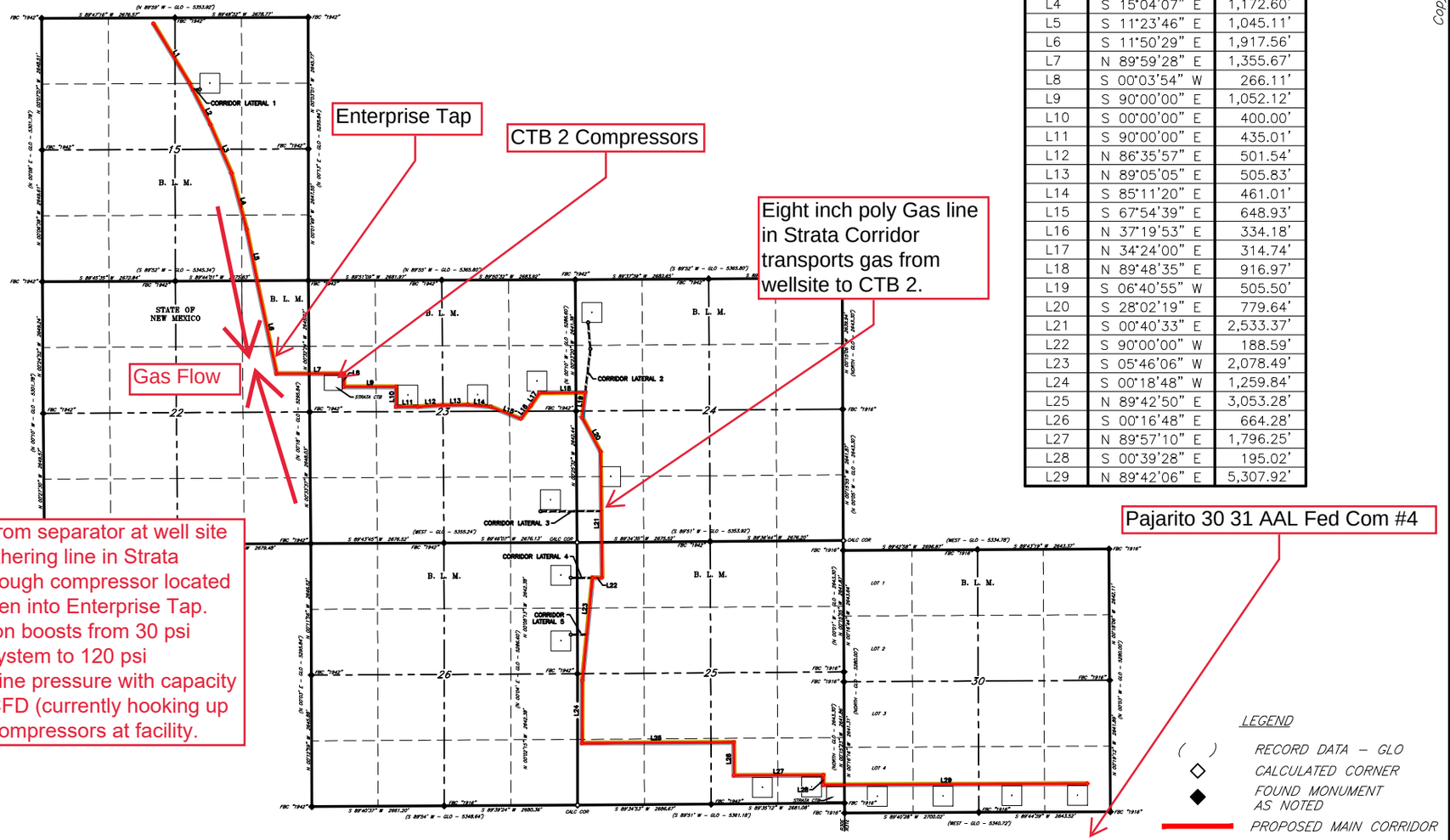
For maintenance activities involving production equipment and compression, venting will be limited to depressurization of the equipment to provide safe working conditions. In the event maintenance is required on pressurized equipment, associated producing wells will be shut in to minimize waste. Gas 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
Roadrunner SE CTB
SWSW of Sec 25, T23S, R30E NMP
Eddy Co., NM
API 3001548980
Lease NMNM114978
Forty Niner Ridge Unit/Delaware Field

Oil and water from the Pajarito 31 19 AAL Fed Com #4 are produced to this tank battery.



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



Gas flows from separator at well site into gas gathering line in Strata Corridor through compressor located at CTB 2 then into Enterprise Tap. Compression boosts from 30 psi gathering system to 120 psi Enterprise line pressure with capacity for 15 MMCFD (currently hooking up additional compressors at facility.

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

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

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'

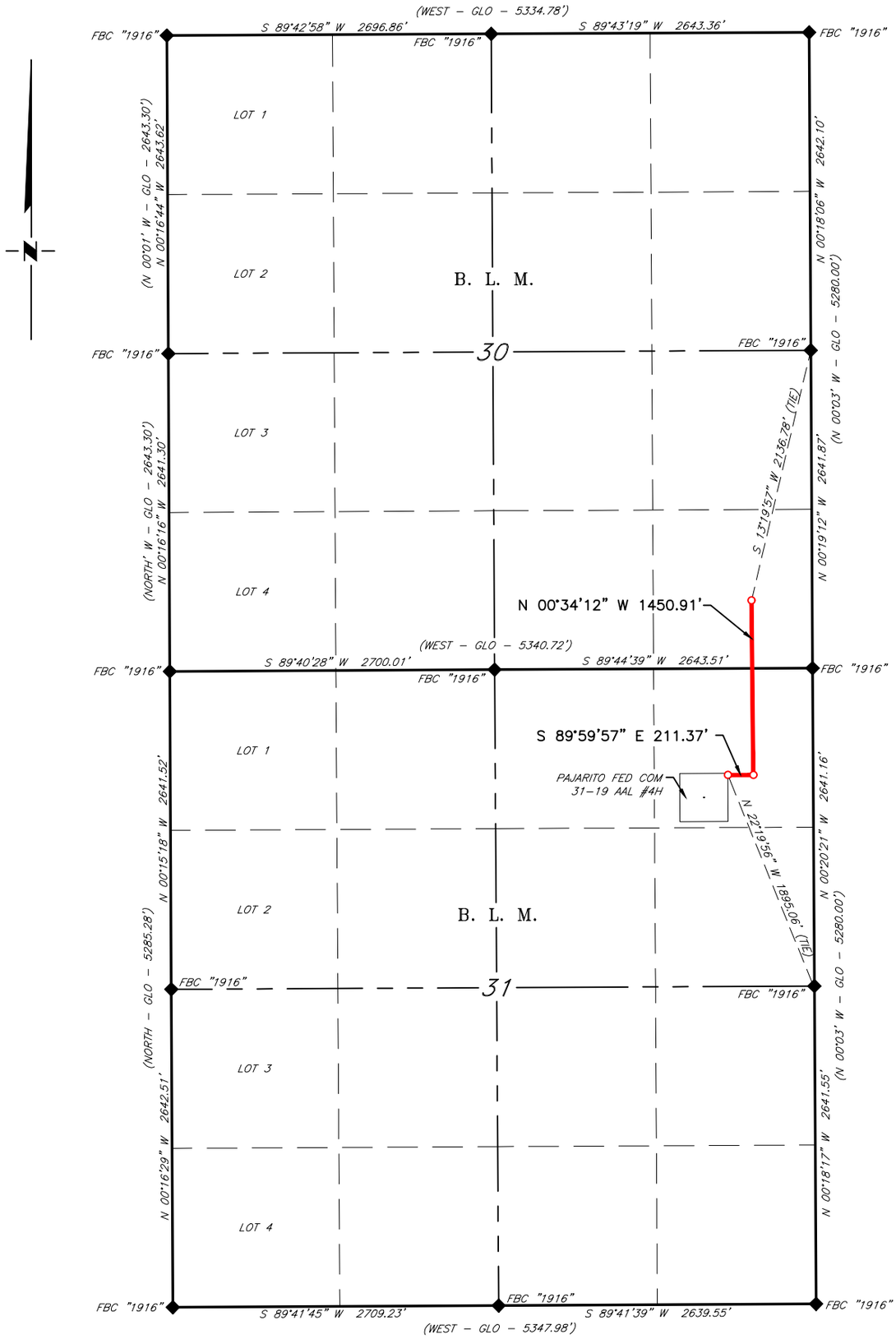
SCALE: 1" = 3000'
DATE: 5/22/2019
SURVEYED BY: BK/AS
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 12

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

NO.	REVISION	DATE

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

STRATA PRODUCTION COMPANY
PROPOSED PIPELINE FOR THE PAJARITO FED COM 31-19 AAL #4H
SECTIONS 30 & 31, T23S, R31E,
N. M. P. M., EDDY CO., NEW MEXICO



SCALE: 1" = 1200'
0 600' 1200'

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

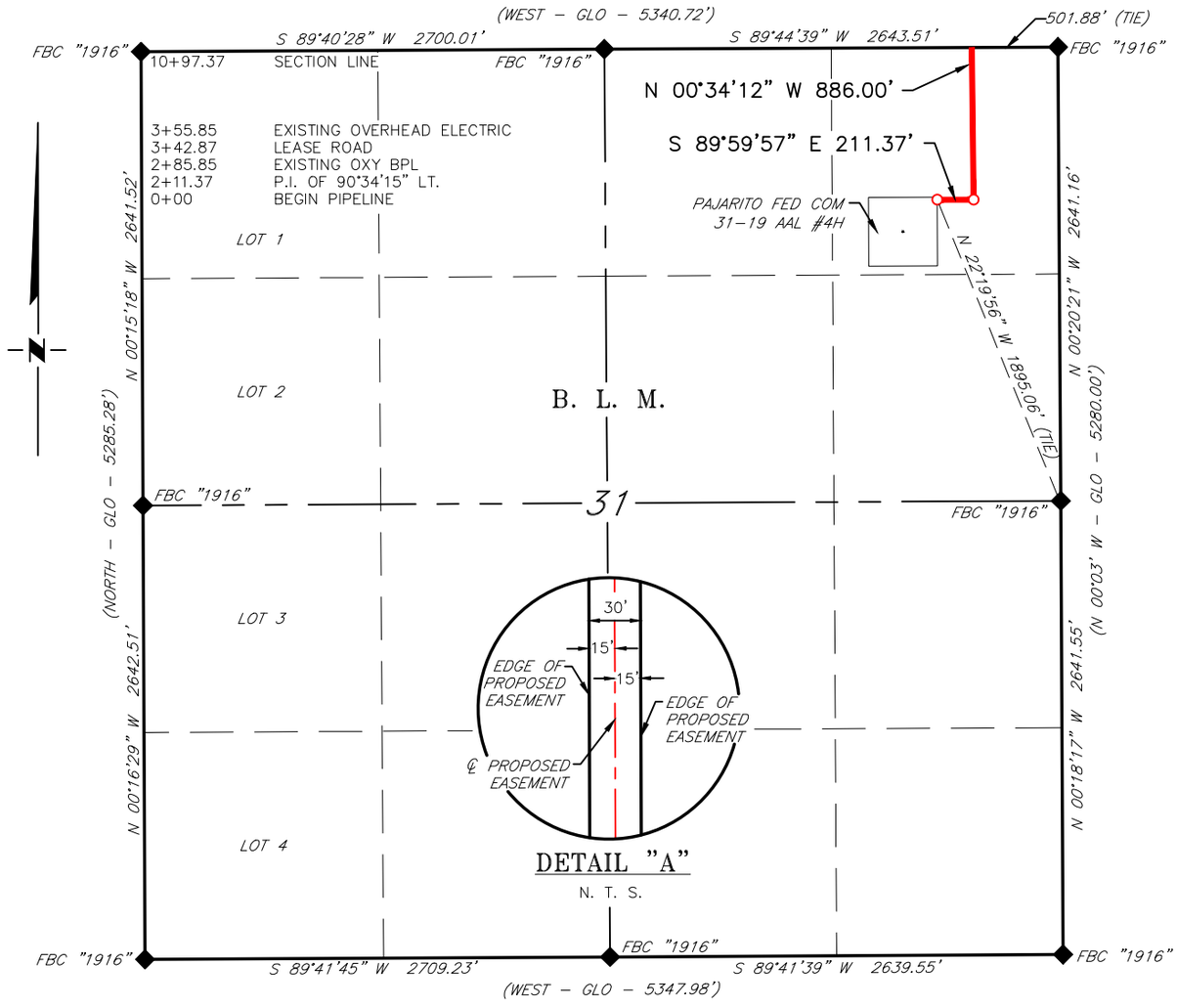
LEGEND
( ) RECORD DATA - GLO
FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

1	REROUTE	11/03/22
NO.	REVISION	DATE
JOB NO.: LS22040484R		
DWG. NO.: 22040484R-1		

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

SCALE: 1" = 1200'
DATE: 04/26/2022
SURVEYED BY: JF/AB
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 3

STRATA PRODUCTION COMPANY
PROPOSED PIPELINE FOR THE PAJARITO FED COM 31-19 AAL #4H
SECTION 31, T23S, R31E,
N. M. P. M., EDDY CO., NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 1,097.37 feet or 66.507 rods in length, lying in Section 31, Township 23 South, Range 31 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Northeast quarter of Section 31, which bears, N 22°19'56" W, 1,895.06 feet from a brass cap, stamped "1916", found for the East quarter corner of Section 31;

Thence S 89°59'57" E, 211.37 feet, to Engr. Sta. 2+11.37, a P. I. of 90°34'15" left;

Thence N 00°34'12" W, 886.00 feet, to Engr. Sta. 10+97.37, a point on the North line of Section 31, which bears S 89°44'39" W, 501.88 feet from a brass cap, stamped "1916", found for the Northeast corner of Section 31;

Said strip of land contains 0.756 acres, more or less and is allocated by forties as follows:

NE 1/4 NE 1/4	66.507 Rods	0.756 Acres

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, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

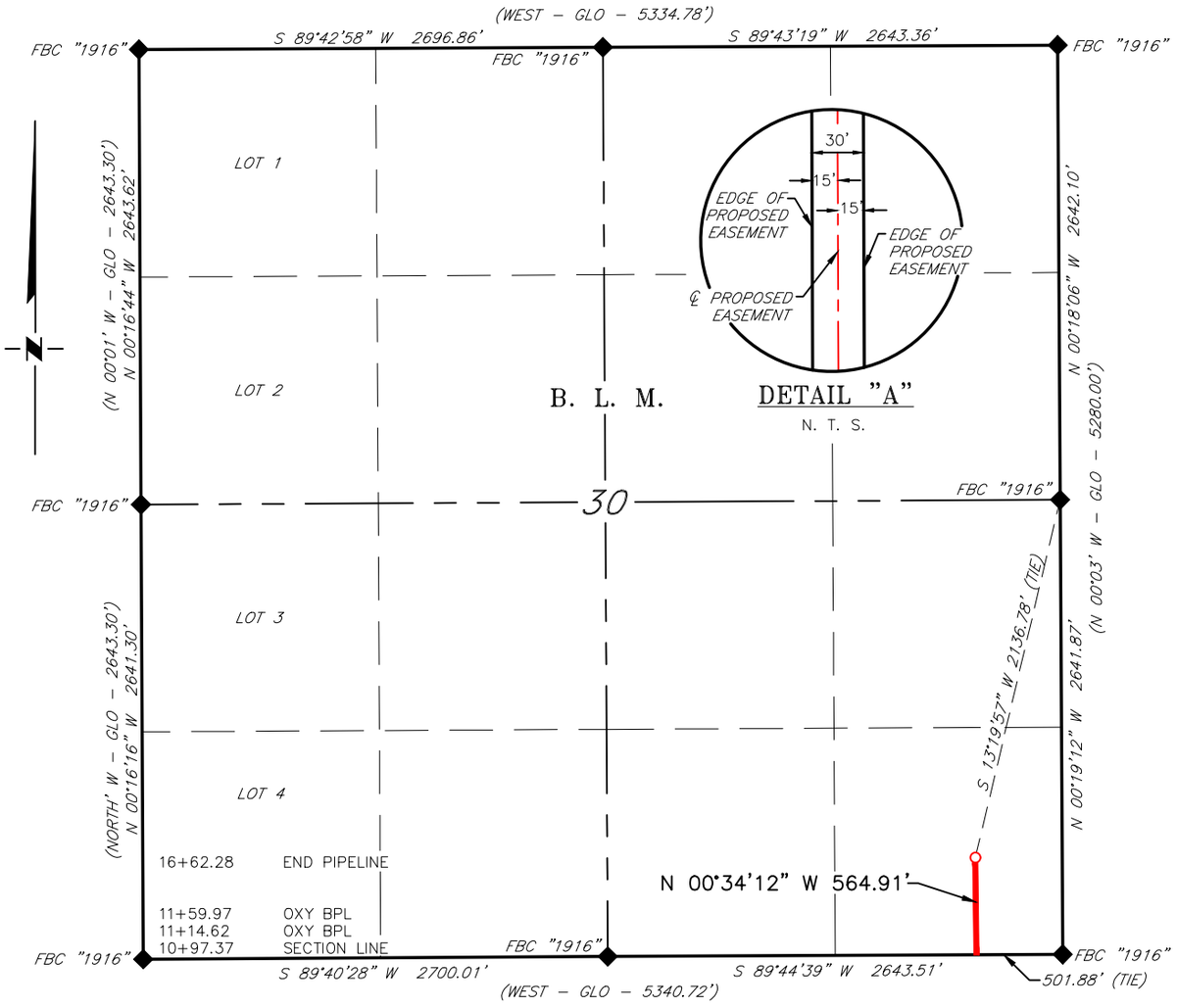
ROBERT M. HOWETT NEW MEXICO 19680 04/28/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE
1	REROUTE	11/03/22
JOB NO.: LS22040484R		
DWG. NO.: 22040484R-2		

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

SCALE: 1" = 1000'
DATE: 04/26/2022
SURVEYED BY: JF/AB
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 2 OF 3

STRATA PRODUCTION COMPANY
PROPOSED PIPELINE FOR THE PAJARITO FED COM 31-19 AAL #4H
SECTION 30, T23S, R31E,
N. M. P. M., EDDY CO., NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 564.91 feet or 34.237 rods in length, lying in Section 30, Township 23 South, Range 31 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 10+97.37, a point on the South line of Section 30, which bears, S 89°44'39" W, 501.88 feet from a brass cap, stamped "1916", found for the Southeast corner of Section 30;

Thence N 00°34'12" W, 564.91 feet, to Engr. Sta. 16+62.28, the End of Survey, a point in the Southeast quarter of Section 30, which bears S 13°19'57" W, 2,136.78 feet from a brass cap, stamped "1916", found for the East quarter corner of Section 30;

Said strip of land contains 0.389 acres, more or less and is allocated by forties as follows:

SE 1/4 SE 1/4	34.237 Rods	0.389 Acres

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, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 04/28/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE
1	REROUTE	11/03/22

JOB NO.: LS22040484R
DWG. NO.: 22040484R-3

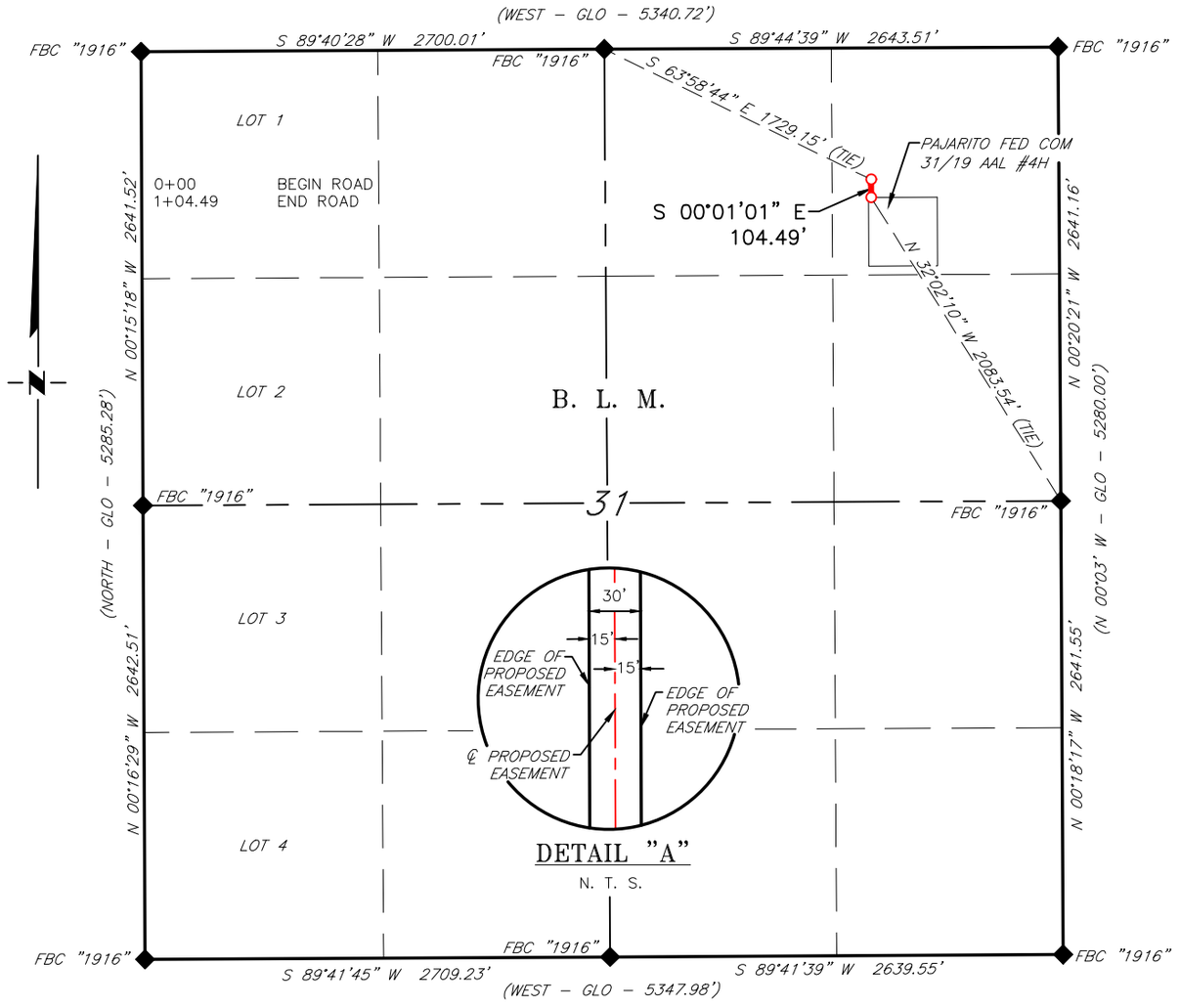
RRC ENERGY SERVICES, LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 04/26/2022
SURVEYED BY: JF/AB
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 3 OF 3

STRATA PRODUCTION COMPANY

PROPOSED ACCESS ROAD FOR THE PAJARITO FED COM 31/19 AAL #4H

SECTION 31, T23S, R31E,
N. M. P. M., EDDY CO., NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 104.49 feet or 6.333 rods in length, lying in Section 31, Township 23 South, Range 31 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00 a point in the Northeast quarter of Section 31, which bears, S 63°58'44" E, 1,729.15 feet from a brass cap, stamped "1916", found for the North quarter corner of Section 31;

Thence S 00°01'01" E, 104.49 feet, to Engr. Sta. 1+04.49, the End of Survey, a point in the Northeast quarter of Section 31, which bears N 32°02'10" W, 2,083.54 feet from a brass cap, stamped "1916", found for the East quarter corner of Section 31;

Said strip of land contains 0.072 acres, more or less and is allocated by forties as follows:

NE 1/4 NE 1/4	6.333 Rods	0.072 Acres

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 ACCESS ROAD

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 04/04/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS20010085R
DWG. NO.: 20010085R–5

RRC ENERGY SERVICES, LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 02/04/2020
SURVEYED BY: JF/BM/AB
DRAWN BY: GA
APPROVED BY: RMH
SHEET: 1 OF 1

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

Drilling Plan Data Report
06/19/2023

APD ID: 10400084108 **Submission Date:** 05/18/2022

Operator Name: STRATA PRODUCTION COMPANY

Well Name: PAJARITO FED COM 31 19 AAL **Well Number:** 4H

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
8394968	RUSTLER	3352	375	375	SALT	NONE	N
9499533	SALADO	2668	684	684	SALT	NONE	N
8394964	BASE OF SALT	-683	4035	4035	SALT	NONE	N
9499540	LAMAR	-713	4065	4065	SANDSTONE	NATURAL GAS, OIL	Y
9499541	BELL CANYON	-736	4088	4088	SANDSTONE	NATURAL GAS, OIL	Y
8394965	CHERRY CANYON	-1676	5028	5028	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
8394966	BRUSHY CANYON	-3065	6417	6417	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
8394967	BONE SPRING	-4610	7962	7962	LIMESTONE, SHALE	NATURAL GAS, OIL	N

Section 2 - Blowout Prevention

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

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

Requesting Variance? NO

Variance request:

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

Choke Diagram Attachment:

Pajarito_Fed_Com_30_31_OOL_5H_Choke_Diagram_20221216163000.pdf

BOP Diagram Attachment:

Pajarito_Fed_31_19_AAL_4H_BOP_20221216163014.pdf

Pajarito_Fed_31_19_AAL_4H_BOPE_Description_20221216163021.pdf

Operator Name: STRATA PRODUCTION COMPANY

Well Name: PAJARITO FED COM 31 19 AAL **Well Number:** 4H

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	3352	2902	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	4200	0	4200	3352	-848	4200	J-55	40	LT&C	1.41	1.81	DRY	3.8	DRY	2.7
3	PRODUCTION	8.75	5.5	NEW	API	N	0	17562	0	7609	3340	-4257	17562	HCP-110	20	BUTT	1.45	1.38	DRY	1.85	DRY	1.89

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Pajarito_Fed_Com_31_19_AAL_4H_Casing_Worksheet_20221220083152.pdf

Operator Name: STRATA PRODUCTION COMPANY

Well Name: PAJARITO FED COM 31 19 AAL **Well Number:** 4H

Casing Attachments

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Pajarito_Fed_Com_31_19_AAL_4H_Casing_Worksheet_20221220083218.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Pajarito_Fed_Com_31_19_AAL_4H_Casing_Worksheet_20221220083234.pdf

Section 4 - Cement

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	100	2.64	11	263	100	Class H	None
PRODUCTION	Tail		5200	17637	2165	1.42	13.2	3076	25	Class H	Salt, gel, extender, LCM
SURFACE	Lead		0	450	580	1.33	14.8	769	100	Class C	CaCl, LCM
INTERMEDIATE	Lead		0	3900	1265	1.88	12.9	2380	100	Class C Poz	Salt, gel, extender, LCM

Operator Name: STRATA PRODUCTION COMPANY

Well Name: PAJARITO FED COM 31 19 AAL **Well Number:** 4H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		3900	4200	120	1.34	14.8	162	65	Class C	LCM
PRODUCTION	Lead	5200	0	4700	495	2.64	11	1308	50	Class C	Salt, gel , extender, LCM
PRODUCTION	Tail		4700	5200	255	1.08	14.8	275	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.
450	4200	SALT SATURATED	10	10.5			10				Drill with brine water with LCM and gel sweeps.
4200	17637	WATER-BASED MUD	9.5	10.2			10				Drill with water based and mud using sliders and gel sweeps in the lateral.

Operator Name: STRATA PRODUCTION COMPANY

Well Name: PAJARITO FED COM 31 19 AAL **Well Number:** 4H

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:** 1686

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

Pajarito_Fed_31_19_AAL_4H_H2S_Plan_20221216163243.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Pajarito_Fed_Com_31_19_AAL__4H___Lateral_1r0_20221220083821.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

NGMP_20221216081907.pdf

Pajarito_Fed_Com_31_19_AAL_4H_Wellbore_Diagram_20221220084134.pdf

Other Variance attachment:

Strata Production Company

Pajarito Fed Com 31-19 AAL #4H
Eddy Co., NM (NAD 83 NME)
Job No. WT-22-*
Lateral 1r0

Aim Directional Services

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.000	0.00	0.00	Build: 1°/100'
3	2230.28	2.30	359.26	2230.22	4.63	-0.06	1.000	359.26	4.62	Hold: 2.30° Inc, 359.26° Azm
4	3971.25	2.30	359.26	3969.78	74.57	-0.96	0.000	0.00	74.46	Drop: 1°/100'
5	4201.53	0.00	0.00	4200.00	79.20	-1.02	1.000	180.00	79.08	Hold
6	7037.57	0.00	0.00	7036.04	79.20	-1.02	0.000	0.00	79.08	KOP: 10°/100' @ 7037.57' MD
7	7937.57	90.00	2.55	7609.00	651.59	24.52	10.000	2.55	652.03	Hold: 90.00° Inc, 2.55° Azm
8	17505.99	90.00	2.55	7609.00	10210.50	451.00	0.000	0.00	10220.45	PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - Pajarito Fed Com 31-19 AAL #4H	7609.00	10210.50	451.00	470829.10	703147.20	32.293	-103.810

PROJECT DETAILS: Eddy Co., NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

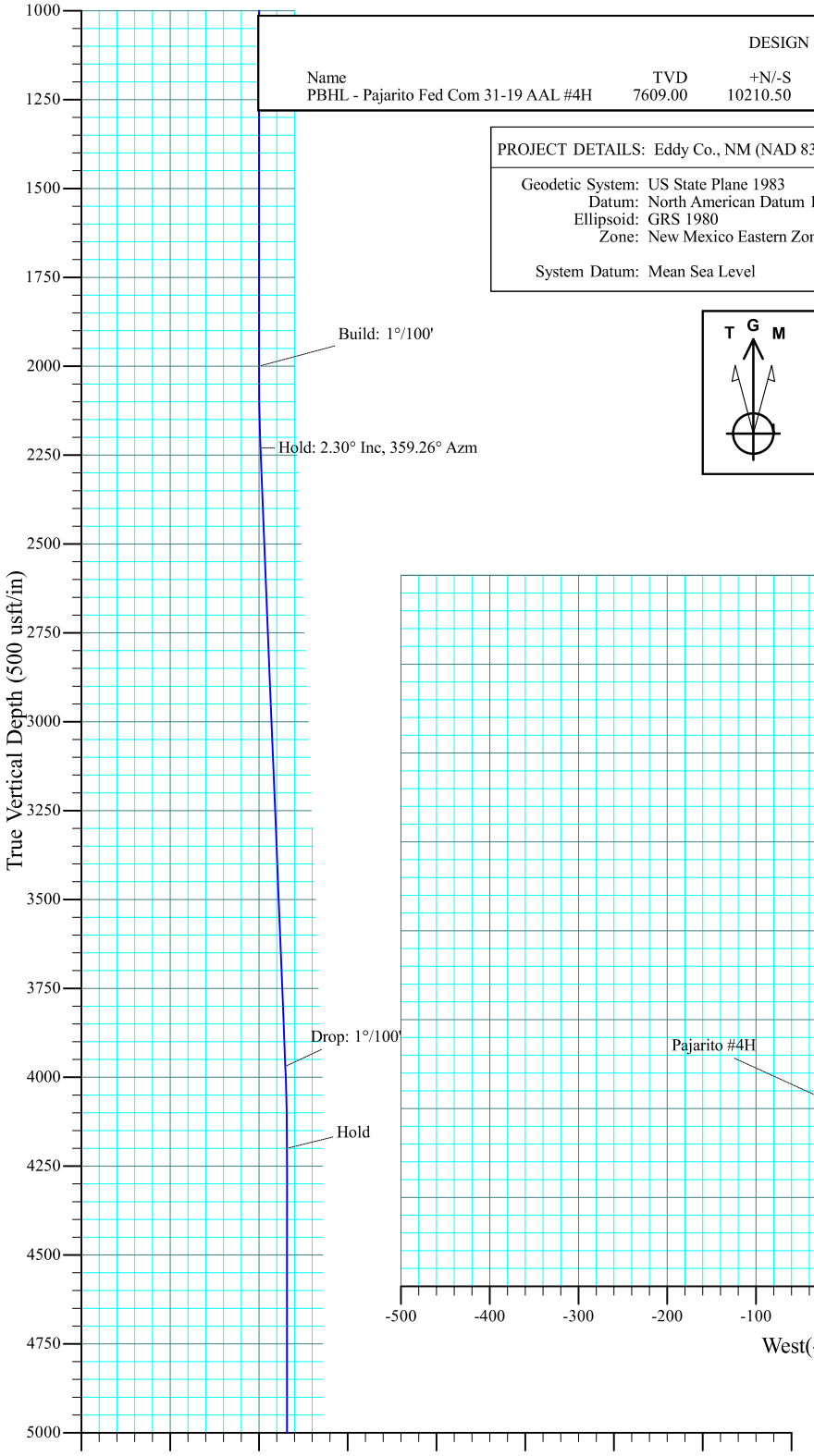
SITE DETAILS: Pajarito Fed Com 31-19 AAL #4H

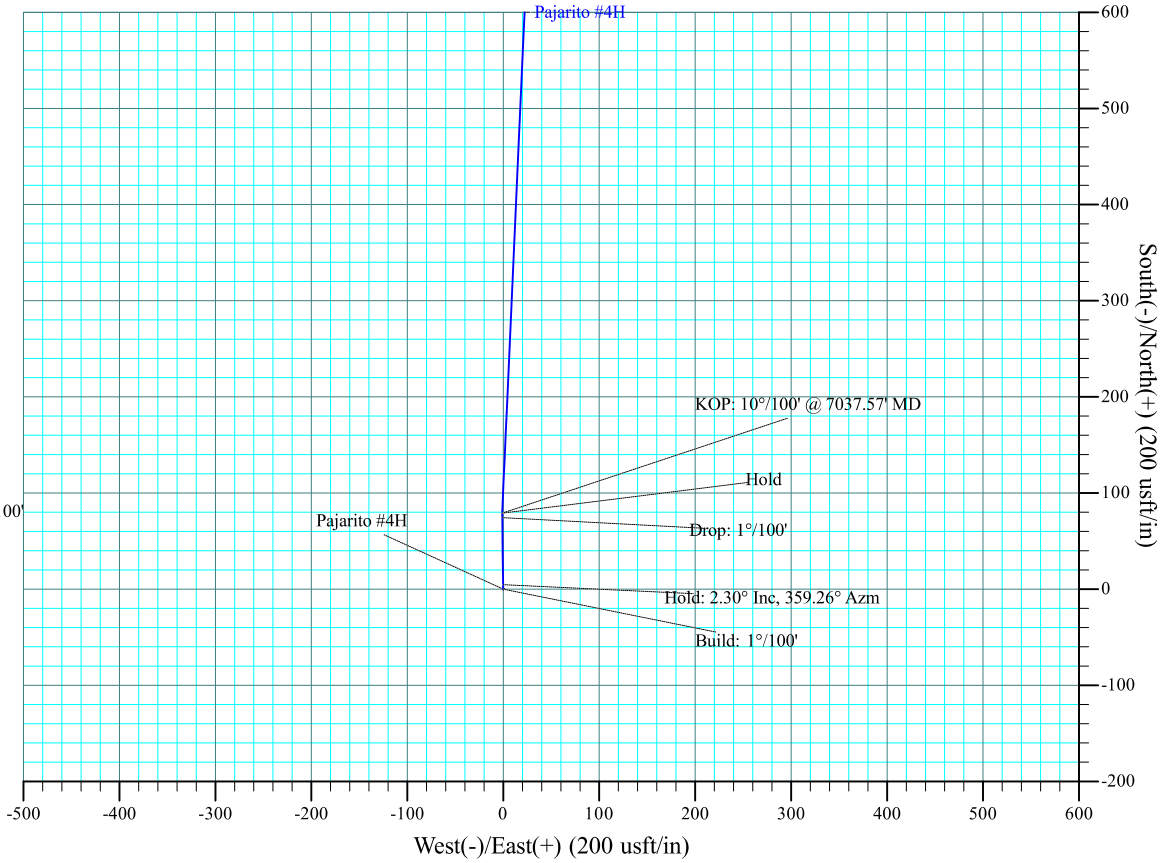
Site Centre Northing: 460618.60
Easting: 702696.20

Positional Uncertainty: 0.00
Convergence: 0.28
Local North: Grid

Azimuths to Grid North
True North: -0.28°
Magnetic North: 6.15°

Magnetic Field
Strength: 47558.8nT
Dip Angle: 59.85°
Date: 5/1/2023
Model: MVHD





Drawn By: PBR
Date Created: 12/19/2022
Date Revised: 12/20/2022
File: Strata Production - Pajarito Fed Com 31-19 AAL #4H - Lateral 1r0 Int.wpc

Strata Production Company

Pajarito Fed Com 31-19 AAL #4H
Eddy Co., NM (NAD 83 NME)
Job No. WT-22-*
Lateral 1r0

Aim Directional Services

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00		
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.000	0.00	0.00		Build: 1°/100'
3	2230.28	2.30	359.26	2230.22	4.63	-0.06	1.000	359.26	4.62		Hold: 2.30° Inc, 359.26° Azm
4	3971.25	2.30	359.26	3969.78	74.57	-0.96	0.000	0.00	74.46		Drop: 1°/100'
5	4201.53	0.00	0.00	4200.00	79.20	-1.02	1.000	180.00	79.08		Hold
6	7037.57	0.00	0.00	7036.04	79.20	-1.02	0.000	0.00	79.08		KOP: 10°/100' @ 7037.57' MD
7	7937.57	90.00	2.55	7609.00	651.59	24.52	10.000	2.55	652.03		Hold: 90.00° Inc, 2.55° Azm
8	17505.99	90.00	2.55	7609.00	10210.50	451.00	0.000	0.00	10220.45	PBHL - Pajarito Fed Com 31-19 AAL #4H	PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - Pajarito Fed Com 31-19 AAL #4H	7609.00	10210.50	451.00	470829.10	703147.20	32.293	-103.810

PROJECT DETAILS: Eddy Co., NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

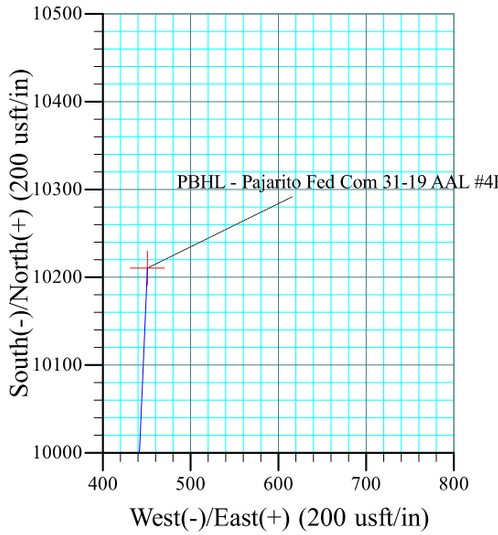
System Datum: Mean Sea Level

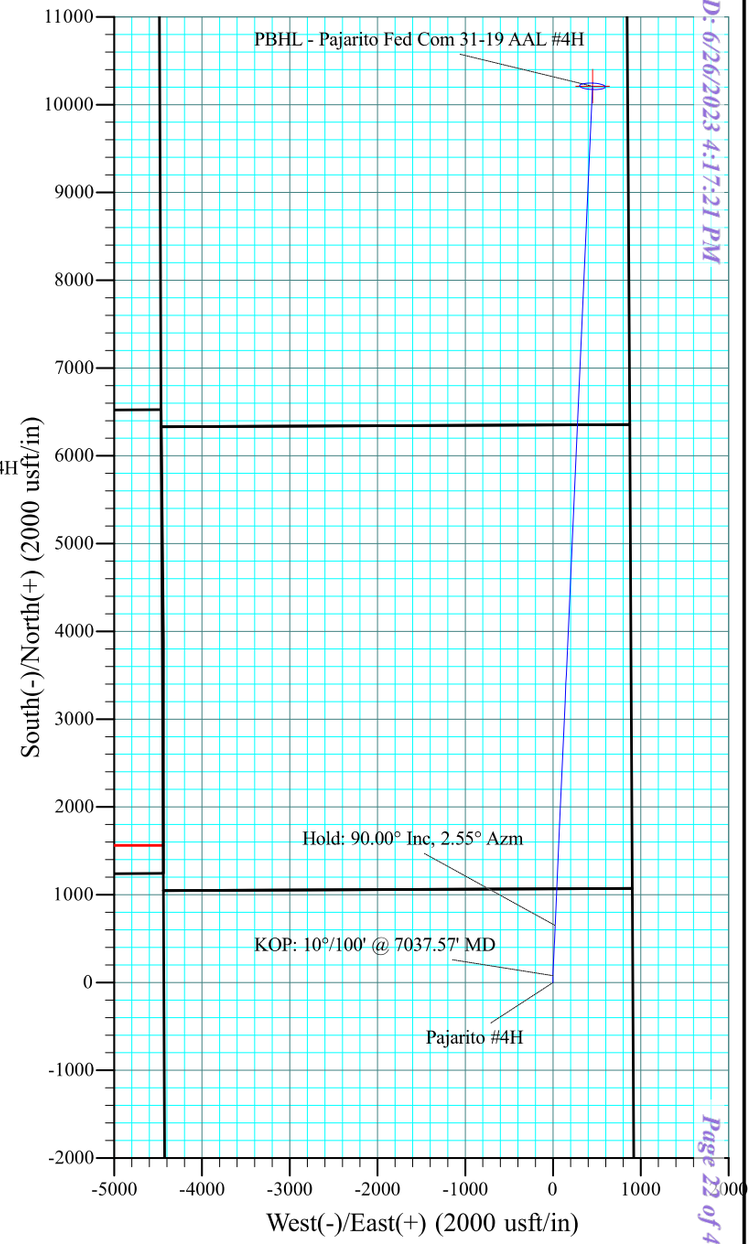
SITE DETAILS: Pajarito Fed Com 31-19 AAL #4H

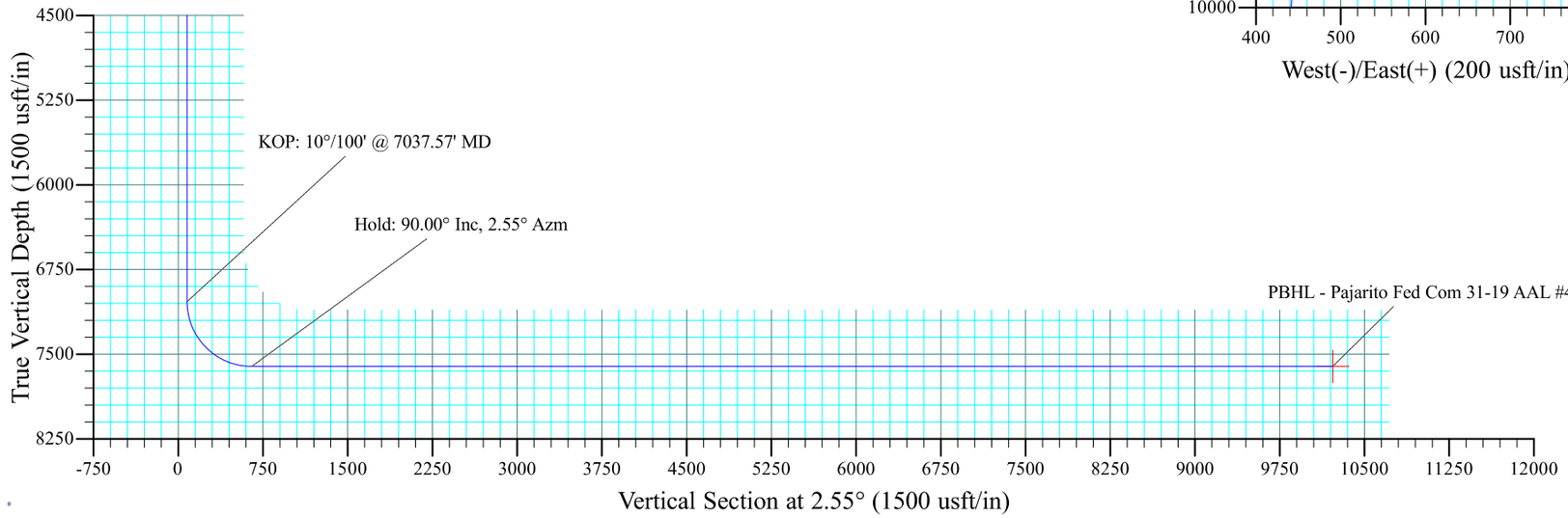
Site Centre Northing: 460618.60
Easting: 702696.20

Positional Uncertainity: 0.00
Convergence: 0.28
Local North: Grid

Drawn By: PBR
Date Created: 12/19/2022
Date Revised: 12/20/2022
File: Strata Production - Pajarito Fed Com 31-19 AAL #4H - Lateral 1r0.wpc







Strata Production Company

Eddy Co., NM (NAD 83 NME)
Pajarito Fed Com 31-19 AAL #4H
Pajarito #4H

OH

Plan: Lateral 1r0

Standard Planning Report

20 December, 2022

STRATA PRODUCTION COMPANY

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	**Local Co-ordinate Reference:**	Well Pajarito #4H
Company:	Strata Production Company	**TVD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Project:	Eddy Co., NM (NAD 83 NME)	**MD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Site:	Pajarito Fed Com 31-19 AAL #4H	**North Reference:**	Grid
Well:	Pajarito #4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r0		

Project Eddy Co., NM (NAD 83 NME)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Pajarito Fed Com 31-19 AAL #4H

Site Position:		**Northing:**	460,618.60 usft	**Latitude:**	32.265
From:	Map	**Easting:**	702,696.20 usft	**Longitude:**	-103.811
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well Pajarito #4H

Well Position	**+N/-S**	0.00 usft	**Northing:**	460,618.60 usft	**Latitude:**	32.265
	+E/-W	0.00 usft	**Easting:**	702,696.20 usft	**Longitude:**	-103.811
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,352.00 usft
Grid Convergence:		0.28 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	5/1/2023	6.43	59.85	47,558.84377018

Design Lateral 1r0

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	2.55

Plan Survey Tool Program **Date** 12/20/2022

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,505.33	Lateral 1r0 (OH)	B001Mb_MWD+HRGM OWSG MWD + HRGM	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.000	0.000	0.000	0.00	
2,230.28	2.30	359.26	2,230.22	4.63	-0.06	1.000	1.000	0.000	359.26	
3,971.25	2.30	359.26	3,969.78	74.57	-0.96	0.000	0.000	0.000	0.00	
4,201.53	0.00	0.00	4,200.00	79.20	-1.02	1.000	-1.000	0.000	180.00	
7,037.57	0.00	0.00	7,036.04	79.20	-1.02	0.000	0.000	0.000	0.00	
7,937.57	90.00	2.55	7,609.00	651.59	24.52	10.000	10.000	0.284	2.55	
17,505.99	90.00	2.55	7,609.00	10,210.50	451.00	0.000	0.000	0.000	0.00	PBHL - Pajarito Fec

STRATA PRODUCTION COMPANY

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	**Local Co-ordinate Reference:**	Well Pajarito #4H
Company:	Strata Production Company	**TVD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Project:	Eddy Co., NM (NAD 83 NME)	**MD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Site:	Pajarito Fed Com 31-19 AAL #4H	**North Reference:**	Grid
Well:	Pajarito #4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.000	0.000	0.000
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.000	0.000	0.000
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.000	0.000	0.000
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.000	0.000	0.000
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.000	0.000	0.000
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.000	0.000	0.000
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.000	0.000	0.000
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.000	0.000	0.000
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.000	0.000	0.000
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.000	0.000	0.000
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.000	0.000	0.000
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.000	0.000	0.000
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.000	0.000	0.000
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.000	0.000	0.000
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.000	0.000	0.000
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.000	0.000	0.000
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.000	0.000	0.000
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.000	0.000	0.000
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.000	0.000	0.000
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.000	0.000	0.000
Build: 1°/100'									
2,100.00	1.00	359.26	2,099.99	0.87	-0.01	0.87	1.000	1.000	0.000
2,200.00	2.00	359.26	2,199.96	3.49	-0.04	3.48	1.000	1.000	0.000
2,230.28	2.30	359.26	2,230.22	4.63	-0.06	4.62	1.000	1.000	0.000
Hold: 2.30° Inc, 359.26° Azm									
2,300.00	2.30	359.26	2,299.88	7.43	-0.10	7.42	0.000	0.000	0.000
2,400.00	2.30	359.26	2,399.80	11.45	-0.15	11.43	0.000	0.000	0.000
2,500.00	2.30	359.26	2,499.72	15.46	-0.20	15.44	0.000	0.000	0.000
2,600.00	2.30	359.26	2,599.64	19.48	-0.25	19.45	0.000	0.000	0.000
2,700.00	2.30	359.26	2,699.56	23.50	-0.30	23.46	0.000	0.000	0.000
2,800.00	2.30	359.26	2,799.48	27.52	-0.35	27.47	0.000	0.000	0.000
2,900.00	2.30	359.26	2,899.40	31.53	-0.41	31.48	0.000	0.000	0.000
3,000.00	2.30	359.26	2,999.32	35.55	-0.46	35.50	0.000	0.000	0.000
3,100.00	2.30	359.26	3,099.24	39.57	-0.51	39.51	0.000	0.000	0.000
3,200.00	2.30	359.26	3,199.15	43.59	-0.56	43.52	0.000	0.000	0.000
3,300.00	2.30	359.26	3,299.07	47.60	-0.61	47.53	0.000	0.000	0.000
3,400.00	2.30	359.26	3,398.99	51.62	-0.66	51.54	0.000	0.000	0.000
3,500.00	2.30	359.26	3,498.91	55.64	-0.72	55.55	0.000	0.000	0.000
3,600.00	2.30	359.26	3,598.83	59.66	-0.77	59.56	0.000	0.000	0.000
3,700.00	2.30	359.26	3,698.75	63.68	-0.82	63.58	0.000	0.000	0.000
3,800.00	2.30	359.26	3,798.67	67.69	-0.87	67.59	0.000	0.000	0.000
3,900.00	2.30	359.26	3,898.59	71.71	-0.92	71.60	0.000	0.000	0.000
3,971.25	2.30	359.26	3,969.78	74.57	-0.96	74.46	0.000	0.000	0.000
Drop: 1°/100'									
4,000.00	2.02	359.26	3,998.51	75.66	-0.97	75.54	1.000	-1.000	0.000
4,100.00	1.02	359.26	4,098.48	78.30	-1.01	78.18	1.000	-1.000	0.000
4,201.53	0.00	0.00	4,200.00	79.20	-1.02	79.08	1.000	-1.000	0.000
Hold									
4,300.00	0.00	0.00	4,298.47	79.20	-1.02	79.08	0.000	0.000	0.000
4,400.00	0.00	0.00	4,398.47	79.20	-1.02	79.08	0.000	0.000	0.000
4,500.00	0.00	0.00	4,498.47	79.20	-1.02	79.08	0.000	0.000	0.000
4,600.00	0.00	0.00	4,598.47	79.20	-1.02	79.08	0.000	0.000	0.000

STRATA PRODUCTION COMPANY

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	**Local Co-ordinate Reference:**	Well Pajarito #4H
Company:	Strata Production Company	**TVD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Project:	Eddy Co., NM (NAD 83 NME)	**MD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Site:	Pajarito Fed Com 31-19 AAL #4H	**North Reference:**	Grid
Well:	Pajarito #4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.00	0.00	0.00	4,698.47	79.20	-1.02	79.08	0.000	0.000	0.000
4,800.00	0.00	0.00	4,798.47	79.20	-1.02	79.08	0.000	0.000	0.000
4,900.00	0.00	0.00	4,898.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,000.00	0.00	0.00	4,998.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,100.00	0.00	0.00	5,098.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,200.00	0.00	0.00	5,198.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,300.00	0.00	0.00	5,298.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,400.00	0.00	0.00	5,398.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,500.00	0.00	0.00	5,498.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,600.00	0.00	0.00	5,598.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,700.00	0.00	0.00	5,698.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,800.00	0.00	0.00	5,798.47	79.20	-1.02	79.08	0.000	0.000	0.000
5,900.00	0.00	0.00	5,898.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,000.00	0.00	0.00	5,998.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,100.00	0.00	0.00	6,098.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,200.00	0.00	0.00	6,198.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,300.00	0.00	0.00	6,298.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,400.00	0.00	0.00	6,398.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,500.00	0.00	0.00	6,498.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,600.00	0.00	0.00	6,598.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,700.00	0.00	0.00	6,698.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,800.00	0.00	0.00	6,798.47	79.20	-1.02	79.08	0.000	0.000	0.000
6,900.00	0.00	0.00	6,898.47	79.20	-1.02	79.08	0.000	0.000	0.000
7,000.00	0.00	0.00	6,998.47	79.20	-1.02	79.08	0.000	0.000	0.000
7,037.57	0.00	0.00	7,036.04	79.20	-1.02	79.08	0.000	0.000	0.000
KOP: 10°/100' @ 7037.57' MD									
7,050.00	1.24	2.55	7,048.47	79.33	-1.01	79.21	10.000	10.000	0.000
7,100.00	6.24	2.55	7,098.35	82.59	-0.87	82.47	10.000	10.000	0.000
7,150.00	11.24	2.55	7,147.75	90.18	-0.53	90.07	10.000	10.000	0.000
7,200.00	16.24	2.55	7,196.30	102.05	0.00	101.95	10.000	10.000	0.000
7,250.00	21.24	2.55	7,243.64	118.09	0.72	118.01	10.000	10.000	0.000
7,300.00	26.24	2.55	7,289.39	138.20	1.61	138.13	10.000	10.000	0.000
7,350.00	31.24	2.55	7,333.22	162.21	2.68	162.17	10.000	10.000	0.000
7,400.00	36.24	2.55	7,374.78	189.95	3.92	189.93	10.000	10.000	0.000
7,450.00	41.24	2.55	7,413.76	221.20	5.32	221.22	10.000	10.000	0.000
7,500.00	46.24	2.55	7,449.88	255.72	6.86	255.78	10.000	10.000	0.000
7,550.00	51.24	2.55	7,482.84	293.26	8.53	293.35	10.000	10.000	0.000
7,600.00	56.24	2.55	7,512.40	333.53	10.33	333.66	10.000	10.000	0.000
7,650.00	61.24	2.55	7,538.33	376.21	12.23	376.39	10.000	10.000	0.000
7,700.00	66.24	2.55	7,560.45	421.00	14.23	421.21	10.000	10.000	0.000
7,750.00	71.24	2.55	7,578.57	467.53	16.31	467.80	10.000	10.000	0.000
7,800.00	76.24	2.55	7,592.56	515.47	18.44	515.78	10.000	10.000	0.000
7,850.00	81.24	2.55	7,602.32	564.45	20.63	564.80	10.000	10.000	0.000
7,900.00	86.24	2.55	7,607.77	614.08	22.84	614.49	10.000	10.000	0.000
7,937.57	90.00	2.55	7,609.00	651.59	24.52	652.03	10.000	10.000	0.000
Hold: 90.00° Inc, 2.55° Azm									
8,000.00	90.00	2.55	7,609.00	713.96	27.30	714.46	0.000	0.000	0.000
8,100.00	90.00	2.55	7,609.00	813.86	31.76	814.46	0.000	0.000	0.000
8,200.00	90.00	2.55	7,609.00	913.76	36.21	914.46	0.000	0.000	0.000
8,300.00	90.00	2.55	7,609.00	1,013.66	40.67	1,014.46	0.000	0.000	0.000
8,400.00	90.00	2.55	7,609.00	1,113.56	45.13	1,114.46	0.000	0.000	0.000
8,500.00	90.00	2.55	7,609.00	1,213.46	49.59	1,214.46	0.000	0.000	0.000
8,600.00	90.00	2.55	7,609.00	1,313.36	54.04	1,314.46	0.000	0.000	0.000

STRATA PRODUCTION COMPANY

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	**Local Co-ordinate Reference:**	Well Pajarito #4H
Company:	Strata Production Company	**TVD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Project:	Eddy Co., NM (NAD 83 NME)	**MD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Site:	Pajarito Fed Com 31-19 AAL #4H	**North Reference:**	Grid
Well:	Pajarito #4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,700.00	90.00	2.55	7,609.00	1,413.26	58.50	1,414.46	0.000	0.000	0.000
8,800.00	90.00	2.55	7,609.00	1,513.16	62.96	1,514.46	0.000	0.000	0.000
8,900.00	90.00	2.55	7,609.00	1,613.06	67.42	1,614.46	0.000	0.000	0.000
9,000.00	90.00	2.55	7,609.00	1,712.96	71.87	1,714.46	0.000	0.000	0.000
9,100.00	90.00	2.55	7,609.00	1,812.86	76.33	1,814.46	0.000	0.000	0.000
9,200.00	90.00	2.55	7,609.00	1,912.76	80.79	1,914.46	0.000	0.000	0.000
9,300.00	90.00	2.55	7,609.00	2,012.66	85.24	2,014.46	0.000	0.000	0.000
9,400.00	90.00	2.55	7,609.00	2,112.57	89.70	2,114.46	0.000	0.000	0.000
9,500.00	90.00	2.55	7,609.00	2,212.47	94.16	2,214.46	0.000	0.000	0.000
9,600.00	90.00	2.55	7,609.00	2,312.37	98.62	2,314.46	0.000	0.000	0.000
9,700.00	90.00	2.55	7,609.00	2,412.27	103.07	2,414.46	0.000	0.000	0.000
9,800.00	90.00	2.55	7,609.00	2,512.17	107.53	2,514.46	0.000	0.000	0.000
9,900.00	90.00	2.55	7,609.00	2,612.07	111.99	2,614.46	0.000	0.000	0.000
10,000.00	90.00	2.55	7,609.00	2,711.97	116.44	2,714.46	0.000	0.000	0.000
10,100.00	90.00	2.55	7,609.00	2,811.87	120.90	2,814.46	0.000	0.000	0.000
10,200.00	90.00	2.55	7,609.00	2,911.77	125.36	2,914.46	0.000	0.000	0.000
10,300.00	90.00	2.55	7,609.00	3,011.67	129.82	3,014.46	0.000	0.000	0.000
10,400.00	90.00	2.55	7,609.00	3,111.57	134.27	3,114.46	0.000	0.000	0.000
10,500.00	90.00	2.55	7,609.00	3,211.47	138.73	3,214.46	0.000	0.000	0.000
10,600.00	90.00	2.55	7,609.00	3,311.37	143.19	3,314.46	0.000	0.000	0.000
10,700.00	90.00	2.55	7,609.00	3,411.27	147.64	3,414.46	0.000	0.000	0.000
10,800.00	90.00	2.55	7,609.00	3,511.17	152.10	3,514.46	0.000	0.000	0.000
10,900.00	90.00	2.55	7,609.00	3,611.07	156.56	3,614.46	0.000	0.000	0.000
11,000.00	90.00	2.55	7,609.00	3,710.98	161.02	3,714.46	0.000	0.000	0.000
11,100.00	90.00	2.55	7,609.00	3,810.88	165.47	3,814.46	0.000	0.000	0.000
11,200.00	90.00	2.55	7,609.00	3,910.78	169.93	3,914.46	0.000	0.000	0.000
11,300.00	90.00	2.55	7,609.00	4,010.68	174.39	4,014.46	0.000	0.000	0.000
11,400.00	90.00	2.55	7,609.00	4,110.58	178.84	4,114.46	0.000	0.000	0.000
11,500.00	90.00	2.55	7,609.00	4,210.48	183.30	4,214.46	0.000	0.000	0.000
11,600.00	90.00	2.55	7,609.00	4,310.38	187.76	4,314.46	0.000	0.000	0.000
11,700.00	90.00	2.55	7,609.00	4,410.28	192.22	4,414.46	0.000	0.000	0.000
11,800.00	90.00	2.55	7,609.00	4,510.18	196.67	4,514.46	0.000	0.000	0.000
11,900.00	90.00	2.55	7,609.00	4,610.08	201.13	4,614.46	0.000	0.000	0.000
12,000.00	90.00	2.55	7,609.00	4,709.98	205.59	4,714.46	0.000	0.000	0.000
12,100.00	90.00	2.55	7,609.00	4,809.88	210.04	4,814.46	0.000	0.000	0.000
12,200.00	90.00	2.55	7,609.00	4,909.78	214.50	4,914.46	0.000	0.000	0.000
12,300.00	90.00	2.55	7,609.00	5,009.68	218.96	5,014.46	0.000	0.000	0.000
12,400.00	90.00	2.55	7,609.00	5,109.58	223.42	5,114.46	0.000	0.000	0.000
12,500.00	90.00	2.55	7,609.00	5,209.48	227.87	5,214.46	0.000	0.000	0.000
12,600.00	90.00	2.55	7,609.00	5,309.38	232.33	5,314.46	0.000	0.000	0.000
12,700.00	90.00	2.55	7,609.00	5,409.29	236.79	5,414.46	0.000	0.000	0.000
12,800.00	90.00	2.55	7,609.00	5,509.19	241.25	5,514.46	0.000	0.000	0.000
12,900.00	90.00	2.55	7,609.00	5,609.09	245.70	5,614.46	0.000	0.000	0.000
13,000.00	90.00	2.55	7,609.00	5,708.99	250.16	5,714.46	0.000	0.000	0.000
13,100.00	90.00	2.55	7,609.00	5,808.89	254.62	5,814.46	0.000	0.000	0.000
13,200.00	90.00	2.55	7,609.00	5,908.79	259.07	5,914.46	0.000	0.000	0.000
13,300.00	90.00	2.55	7,609.00	6,008.69	263.53	6,014.46	0.000	0.000	0.000
13,400.00	90.00	2.55	7,609.00	6,108.59	267.99	6,114.46	0.000	0.000	0.000
13,500.00	90.00	2.55	7,609.00	6,208.49	272.45	6,214.46	0.000	0.000	0.000
13,600.00	90.00	2.55	7,609.00	6,308.39	276.90	6,314.46	0.000	0.000	0.000
13,700.00	90.00	2.55	7,609.00	6,408.29	281.36	6,414.46	0.000	0.000	0.000
13,800.00	90.00	2.55	7,609.00	6,508.19	285.82	6,514.46	0.000	0.000	0.000
13,900.00	90.00	2.55	7,609.00	6,608.09	290.27	6,614.46	0.000	0.000	0.000
14,000.00	90.00	2.55	7,609.00	6,707.99	294.73	6,714.46	0.000	0.000	0.000

STRATA PRODUCTION COMPANY

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	**Local Co-ordinate Reference:**	Well Pajarito #4H
Company:	Strata Production Company	**TVD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Project:	Eddy Co., NM (NAD 83 NME)	**MD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Site:	Pajarito Fed Com 31-19 AAL #4H	**North Reference:**	Grid
Well:	Pajarito #4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,100.00	90.00	2.55	7,609.00	6,807.89	299.19	6,814.46	0.000	0.000	0.000
14,200.00	90.00	2.55	7,609.00	6,907.79	303.65	6,914.46	0.000	0.000	0.000
14,300.00	90.00	2.55	7,609.00	7,007.70	308.10	7,014.46	0.000	0.000	0.000
14,400.00	90.00	2.55	7,609.00	7,107.60	312.56	7,114.46	0.000	0.000	0.000
14,500.00	90.00	2.55	7,609.00	7,207.50	317.02	7,214.46	0.000	0.000	0.000
14,600.00	90.00	2.55	7,609.00	7,307.40	321.47	7,314.46	0.000	0.000	0.000
14,700.00	90.00	2.55	7,609.00	7,407.30	325.93	7,414.46	0.000	0.000	0.000
14,800.00	90.00	2.55	7,609.00	7,507.20	330.39	7,514.46	0.000	0.000	0.000
14,900.00	90.00	2.55	7,609.00	7,607.10	334.85	7,614.46	0.000	0.000	0.000
15,000.00	90.00	2.55	7,609.00	7,707.00	339.30	7,714.46	0.000	0.000	0.000
15,100.00	90.00	2.55	7,609.00	7,806.90	343.76	7,814.46	0.000	0.000	0.000
15,200.00	90.00	2.55	7,609.00	7,906.80	348.22	7,914.46	0.000	0.000	0.000
15,300.00	90.00	2.55	7,609.00	8,006.70	352.67	8,014.46	0.000	0.000	0.000
15,400.00	90.00	2.55	7,609.00	8,106.60	357.13	8,114.46	0.000	0.000	0.000
15,500.00	90.00	2.55	7,609.00	8,206.50	361.59	8,214.46	0.000	0.000	0.000
15,600.00	90.00	2.55	7,609.00	8,306.40	366.05	8,314.46	0.000	0.000	0.000
15,700.00	90.00	2.55	7,609.00	8,406.30	370.50	8,414.46	0.000	0.000	0.000
15,800.00	90.00	2.55	7,609.00	8,506.20	374.96	8,514.46	0.000	0.000	0.000
15,900.00	90.00	2.55	7,609.00	8,606.11	379.42	8,614.46	0.000	0.000	0.000
16,000.00	90.00	2.55	7,609.00	8,706.01	383.88	8,714.46	0.000	0.000	0.000
16,100.00	90.00	2.55	7,609.00	8,805.91	388.33	8,814.46	0.000	0.000	0.000
16,200.00	90.00	2.55	7,609.00	8,905.81	392.79	8,914.46	0.000	0.000	0.000
16,300.00	90.00	2.55	7,609.00	9,005.71	397.25	9,014.46	0.000	0.000	0.000
16,400.00	90.00	2.55	7,609.00	9,105.61	401.70	9,114.46	0.000	0.000	0.000
16,500.00	90.00	2.55	7,609.00	9,205.51	406.16	9,214.46	0.000	0.000	0.000
16,600.00	90.00	2.55	7,609.00	9,305.41	410.62	9,314.46	0.000	0.000	0.000
16,700.00	90.00	2.55	7,609.00	9,405.31	415.08	9,414.46	0.000	0.000	0.000
16,800.00	90.00	2.55	7,609.00	9,505.21	419.53	9,514.46	0.000	0.000	0.000
16,900.00	90.00	2.55	7,609.00	9,605.11	423.99	9,614.46	0.000	0.000	0.000
17,000.00	90.00	2.55	7,609.00	9,705.01	428.45	9,714.46	0.000	0.000	0.000
17,100.00	90.00	2.55	7,609.00	9,804.91	432.90	9,814.46	0.000	0.000	0.000
17,200.00	90.00	2.55	7,609.00	9,904.81	437.36	9,914.46	0.000	0.000	0.000
17,300.00	90.00	2.55	7,609.00	10,004.71	441.82	10,014.46	0.000	0.000	0.000
17,400.00	90.00	2.55	7,609.00	10,104.61	446.28	10,114.46	0.000	0.000	0.000
17,505.99	90.00	2.55	7,609.00	10,210.50	451.00	10,220.45	0.000	0.000	0.000
PBHL									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL - Pajarito Fed C - plan hits target center - Point	0.00	0.00	7,609.00	10,210.50	451.00	470,829.10	703,147.20	32.293	-103.810

STRATA PRODUCTION COMPANY

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	**Local Co-ordinate Reference:**	Well Pajarito #4H
Company:	Strata Production Company	**TVD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Project:	Eddy Co., NM (NAD 83 NME)	**MD Reference:**	Well @ 3377.00usft (Assumed 25'KB)
Site:	Pajarito Fed Com 31-19 AAL #4H	**North Reference:**	Grid
Well:	Pajarito #4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r0		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,000.00	2,000.00	0.00	0.00	Build: 1°/100'
2,230.28	2,230.22	4.63	-0.06	Hold: 2.30° Inc, 359.26° Azm
3,971.25	3,969.78	74.57	-0.96	Drop: 1°/100'
4,201.53	4,200.00	79.20	-1.02	Hold
7,037.57	7,036.04	79.20	-1.02	KOP: 10°/100' @ 7037.57' MD
7,937.57	7,609.00	651.59	24.52	Hold: 90.00° Inc, 2.55° Azm
17,505.99	7,609.00	10,210.50	451.00	PBHL

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Strata Production Company
WELL NAME & NO.:	Pajarito Fed Com 31 19 AAL 4H
LOCATION:	Sec 31-23S-31E-NMP
COUNTY:	Eddy County, New Mexico

COA

H2S	○ Yes	◉ No	
Potash	○ None	○ Secretary	◉ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	◉ None	○ Flex Hose	○ Other
Wellhead	◉ Conventional	○ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

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 460 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **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.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing set at approximately 4180 ft is:
Note: *Intermediate set depth adjusted per BLM geologist.*

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

❖ 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 string must come to surface.

3. The minimum required fill of cement behind the **5-1/2** 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.

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 **2000 (2M)** psi.

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate 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.
- 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
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (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 Onshore Oil and Gas Order No. 2 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 intergrity 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 Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

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 OOGO2.III.A.2.i 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 when specified), 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 plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 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 Onshore Order No. 2.

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
Pajarito Fed 31 19 AAL 4H
Section 31 T23S, R31E
SHL: 1070' FNL & 910' FEL of Sec 31
BHL: 1420' FNL & 400' FEL of Sec 19
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

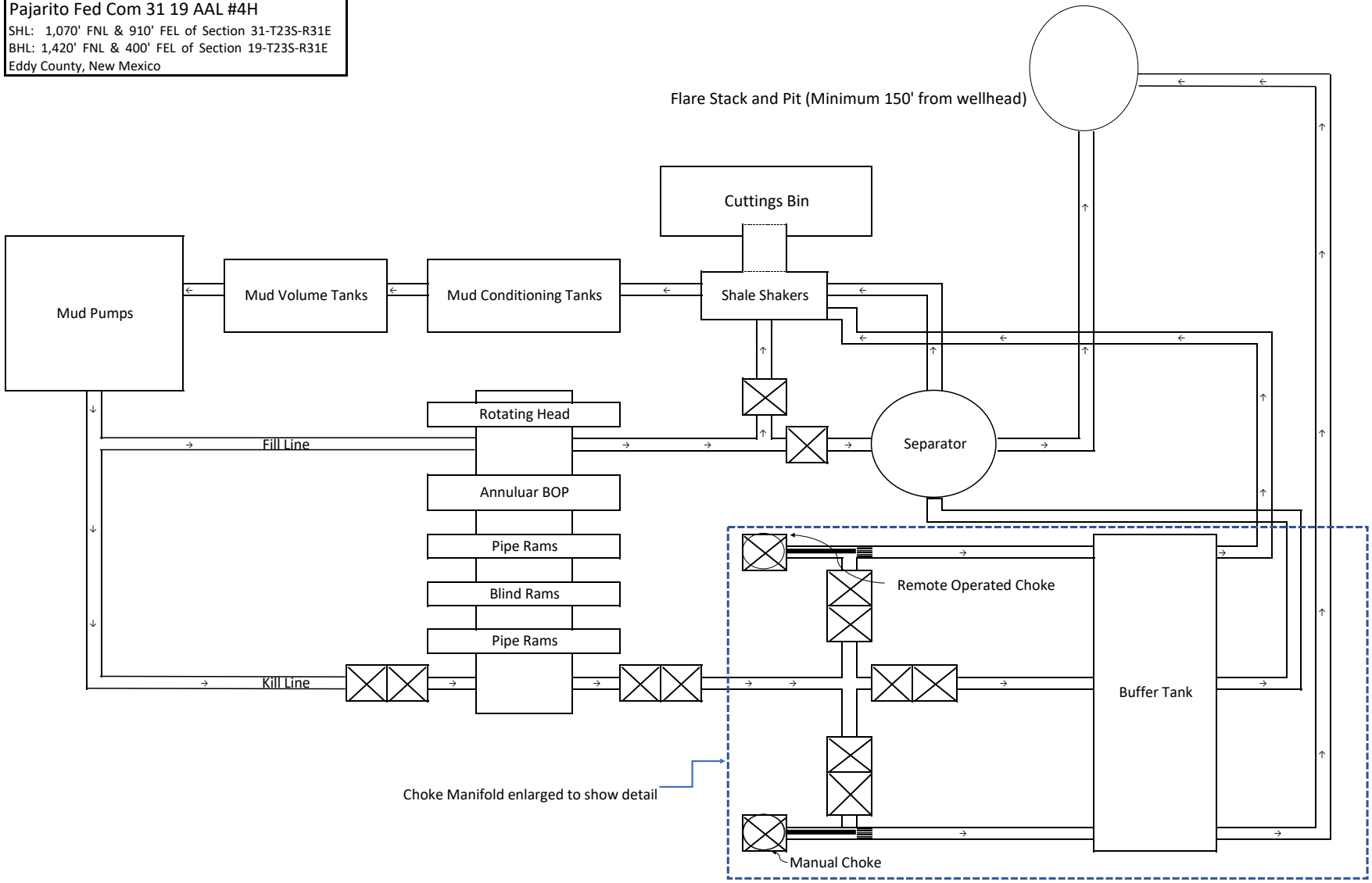
911 Must have Correct County & State & Directions to your location

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
Pajarito Fed Com 31 19 AAL #4H
SHL: 1,070' FNL & 910' FEL of Section 31-T23S-R31E
BHL: 1,420' FNL & 400' FEL of Section 19-T23S-R31E
Eddy County, New Mexico



STRATA PRODUCTION COMPANY
Pajarito Fed 31 19 AAL 4H
Section 31 T23S, R31E
SHL: 1070' FNL & 910' FEL of Sec 31
BHL: 1420' FNL & 400' FEL of Sec 19
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 230260

CONDITIONS

Operator: STRATA PRODUCTION CO P.O. Box 1030 Roswell, NM 882021030	OGRID: 21712
	Action Number: 230260
	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	6/29/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	6/29/2023
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	6/29/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	6/29/2023
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	6/29/2023
ward.rikala	Strata Production Company will not be allowed to produce this well until they are in compliance with NMOCD Rule 5.9.	6/29/2023