

Form 3160-3
(June 2015)

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

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

| | | |
|---|--|---|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone | | 5. Lease Serial No. NMNM070951X 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. FNRU FEDERAL COM 22 23 PPI 16H 9. API Well No. 30-015-50196 10. Field and Pool, or Exploratory FORTY NINER RIDGE UNIT/DELAWARE 11. Sec., T. R. M. or Blk. and Survey or Area SEC 22/T23S/R30E/NMP |
| 2. Name of Operator STRATA PRODUCTION COMPANY 3a. Address P O BOX 1030, ROSWELL, NM 88202-1030 3b. Phone No. (include area code) (575) 622-1127 | | 12. County or Parish EDDY 13. State NM |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SESE / 475 FSL / 823 FEL / LAT 32.2845078 / LONG -103.8629372 At proposed prod. zone SESE / 330 FSL / 100 FEL / LAT 32.28411 / LONG -103.843278 | | 14. Distance in miles and direction from nearest town or post office* 20 miles 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 475 feet 16. No of acres in lease 17. Spacing Unit dedicated to this well 400.0 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 306 feet 19. Proposed Depth 7465 feet / 13172 feet 20. BLM/BIA Bond No. in file FED: NM 1538 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3264 feet 22. Approximate date work will start* 05/04/2022 23. Estimated duration 60 days |

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 (Electronic Submission) | Name (Printed/Typed) LUPE RINCON-GARCIA / Ph: (575) 622-1127 | Date 02/25/2022 |
| Title | | |

| | | |
|--|--|--------------------|
| Approved by (Signature) (Electronic Submission) | Name (Printed/Typed) CODY LAYTON / Ph: (575) 234-5959 | Date 11/17/2022 |
| Title Assistant Field Manager Lands & Minerals | | |
| Office Carlsbad Field 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

Approval Date: 11/17/2022

(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 30-015-50196 | | ² Pool Code 24750 | | ³ Pool Name FORTY NINER RIDGE DELAWARE | | | | | |
| ⁴ Property Code 333580 | | ⁵ Property Name FNRU FEDERAL COM 22 23 PPI | | | | | | ⁶ Well Number 16H | |
| ⁷ OGRID NO. 21712 | | ⁸ Operator Name STRATA PRODUCTION COMPANY | | | | | | ⁹ Elevation 3264' | |
| ¹⁰ Surface Location | | | | | | | | | |
| UL or lot no. P | Section 22 | Township 23S | Range 30E | Lot Idn | Feet from the 475 | North/South line SOUTH | Feet From the 823 | East/West line EAST | County EDDY |
| ¹¹ Bottom Hole Location If Different From Surface | | | | | | | | | |
| UL or lot no. P | Section 23 | Township 23S | Range 30E | Lot Idn | Feet from the 330 | North/South line SOUTH | Feet from the 100 | East/West line EAST | County EDDY |
| ¹² Dedicated Acres 200 | | ¹³ Joint or Infill | | ¹⁴ Consolidation Code | | ¹⁵ Order No. | | | |

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.

| | | |
|---|--|---|
| <p>¹⁶</p> <p>CORNER DATA NAD 83 GRID - NM EAST</p> <p>A: FOUND BRASS CAP "1942" N: 467055.4 - E: 682172.6 H: FOUND BRASS CAP "1942" N: 469750.0 - E: 692862.1</p> <p>B: FOUND BRASS CAP "1942" N: 469704.3 - E: 682151.4 I: CALCULATED CORNER N: 467108.3 - E: 692881.7</p> <p>C: FOUND BRASS CAP "1942" N: 472352.8 - E: 682132.3 J: FOUND BRASS CAP "1942" N: 467097.4 - E: 690206.2</p> <p>D: FOUND BRASS CAP "1942" N: 472364.0 - E: 684804.5 K: FOUND BRASS CAP "1942" N: 467084.8 - E: 687530.3</p> <p>E: FOUND BRASS CAP "1942" N: 472376.5 - E: 687479.5 L: FOUND BRASS CAP "1942" N: 467070.0 - E: 684851.5</p> <p>F: FOUND BRASS CAP "1942" N: 472383.4 - E: 690160.9 M: FOUND BRASS CAP "1942" N: 469732.1 - E: 687504.4</p> <p>G: FOUND BRASS CAP "1942" N: 472390.8 - E: 692844.2</p> | | <p>¹⁷ OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>Jerry Elgin</i> June 6, 2022 Signature Date Jerry Elgin, VP Operations Printed Name jelgin@stratanm.com E-mail Address</p> |
| <p>GEODETIC DATA NAD 83 GRID - NM EAST</p> <p>SURFACE LOCATION N: 467555.4 - E: 686703.3 LAT: 32.2845078° N LONG: 103.8629372° W</p> <p>GEODETIC DATA NAD 83 GRID - NM EAST</p> <p>BOTTOM HOLE N: 467437.8 - E: 692779.3 LAT: 32.2841096° N LONG: 103.8432780° W</p> | | <p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>05/20/2022 Date of Survey Signature and Seal of Professional Surveyor 19680 Certificate Number</p> |

Job No: LS21060668R

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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:** 09 / 14 / 2021

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 Federal PAD 7H | | SEC 25 / T23S / R30E | 830 FSL/660 FEL | 550 | 300 | 950 |
| | | | | | | |

IV. Central Delivery Point Name: Roadrunner Federal PAD 7H [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 Federal PAD 7H | | 01/05/2022 | 01/23/2022 | 02/02/2022 | 02/08/2022 | 02/11/2022 |
| | | | | | | |

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.

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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 |
|------|-----|--|--|
| | | | |
| | | | |

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 |
|----------|--------|-----------------|----------------------------------|---|
| | | | | |
| | | | | |

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.

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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: <i>Jerry Elgin</i> |
| Printed Name: Jerry Elgin |
| Title: Vice President Operations |
| E-mail Address: jelgin@stratanm.com |
| Date: 09/14/2021 |
| Phone: 575-622-127 |
| 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

Description for Sections:

- VI. Separation Equipment
- VII. Operational Practices
- VIII. Best Management Practices

VI. Separation equipment will be sized by stated manufacture daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs and VRU's will be sized to ensure adequate capacity for anticipated production volumes and conditions.

VII. Strata Production Company (SPC) will take following actions to comply with the regulations listed in 19.15.27.8

A. Venting and flaring of natural gas

SPC will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. SPC will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is not adequate takeaway for the gas, well(s) will be shut in until the natural gas gathering system is available.

B. Venting and flaring during drilling operations

All drilling operations will be equipped with a rig flare located at least 100 ft from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.

C. Venting and flaring during completion or recompletion operations

During completion operations any natural gas brought to surface will be flared. Immediately following completions operations, all well flow will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, SPC will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. SPC will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas

sample will be analyzed twice per week and the gas will be routed into a gathering system as soon as it is confirmed to be within pipeline specifications.

D. Venting and flaring during production operations

Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D. (1) through (4). If there is not adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.

E. Performance standards

SPC will comply with the performance standards requirements and provisions listed in 19.15.27.8 E. (1) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. SPC will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.

F. Measurement or estimation of vented and flared natural gas

The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured or estimated. SPC will install equipment to measure the volume of natural gas flared from existing process piping or a flowline piped from equipment such as high-pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued after May 25, 2021, that has an average daily production greater than 60 mcf per day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, SPC will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

VIII. For maintenance activities involving production equipment and compression, venting will be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production and compression equipment the associated producing wells will be shut in to eliminate venting. For maintenance of VRU's all gas normally routed to the VRU will be routed to flare to eliminate venting.

STRATA PRODUCTION COMPANY

FNRU Federal Com 22 23 PPI 16H

Section 22-T23S-R30E

SHL: 475' FSL & 823' FEL of Section 22

BHL: 330' FSL & 100' FEL of Section 23

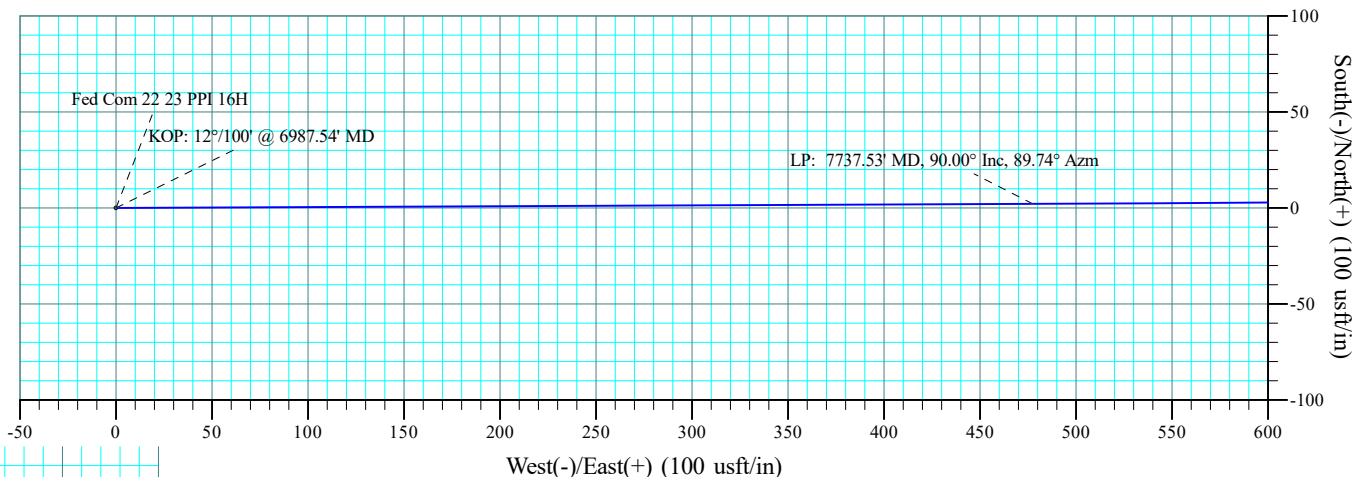
CASING DESIGN ASSUMPTIONS & WORKSHEET

| <u>Hole Size</u> | <u>Casing Interval</u> | | <u>Csg Size</u> | <u>Weight</u> | <u>Grade</u> | <u>Connection</u> | <u>SF Collapse</u> | <u>SF Burst</u> | <u>SF Joint Tension</u> | <u>SF Body Tension</u> |
|-----------------------|------------------------|-----------|-----------------|---------------|--------------|-------------------|--------------------|-----------------|-------------------------|------------------------|
| | <u>From</u> | <u>To</u> | | | | | | | | |
| 17.5 | 0 | 450 | 13.375 | 48 | API | STC | 3.95 | 7.39 | 14.9 | 25.0 |
| 12.25 | 0 | 3,800 | 9.625 | 40 | API | LTC | 1.56 | 2.00 | 4.20 | 2.98 |
| 8.75 | 0 | 13,172 | 5.5 | 20 | API | Buttress | 1.94 | 1.85 | 2.48 | 2.53 |
| BLM Minimum SF | | | | | | | 1.125 | 1.00 | 1.60 | 1.60 |

| | Y or N |
|--|--------|
| Is casing new? If used, attach certificate as required in Onshore Order #1. | Y |
| Is casing API approved? If no, attach casing specification sheet. | Y |
| Is premium or uncommon casing planned? If yes, attach casing specification sheet. | N |
| Does the above casing design meet or exceed BLM's minimum standards? If not, provide justifications (loading assumptions, casing design criteria). | Y |
| Will the pipe be kept at a minimum of 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing? | Y |
| | |
| Is well located within Capitan Reef? | N |
| If yes, does production casing cement tie back a minimum of 50' above the Reef? | NA |
| Is well within the designated 4 string boundary? | NA |
| | |
| Is well located in SOPA but not in R-111-P? | N |
| If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing? | NA |
| | |
| Is well located in R-111-P and SOPA? | Y |
| If yes, are the first 3 strings cemented to the surface? | Y |
| Is 2nd string set 100' to 600' below the base of salt? | Y |
| | |
| Is well located in high Cave/Karst? | Y |
| If yes, are there two strings cemented to the surface? | Y |
| If yes, is there a contingency casing if lost circulation occurs? | |
| | |
| Is well located in critical Cave/Karst? | N |
| If yes, are there three strings cemented to surface? | NA |



FNRU Federal Com 22 23 PPI 16H
Eddy Co., NM (NAD 83 NME)
Job No. WT-22-***
Lateral 1r0



| 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 | 6987.54 | 0.00 | 0.00 | 6987.54 | 0.00 | 0.00 | 0.000 | 0.00 | 0.00 | KOP: 12°/100' @ 6987.54' MD |
| 3 | 7737.53 | 90.00 | 89.74 | 7465.00 | 2.16 | 477.46 | 12.000 | 89.74 | 477.46 | LP: 7737.53' MD, 90.00° Inc, 89.74° Azm |
| 4 | 13172.23 | 90.00 | 89.74 | 7465.00 | 26.80 | 5912.10 | 0.000 | 0.00 | 5912.16 | PBHL @ 13172.23' MD/7465.00' TVD |

| DESIGN TARGET DETAILS | | | | | | | |
|-------------------------------------|---------|-------|---------|-----------|-----------|-----------------|-------------------|
| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
| FNRU Federal Com 22 23 PPI 16H PBHL | 7465.00 | 26.80 | 5912.10 | 467437.80 | 692779.30 | 32° 17' 2.795 N | 103° 50' 35.801 W |

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

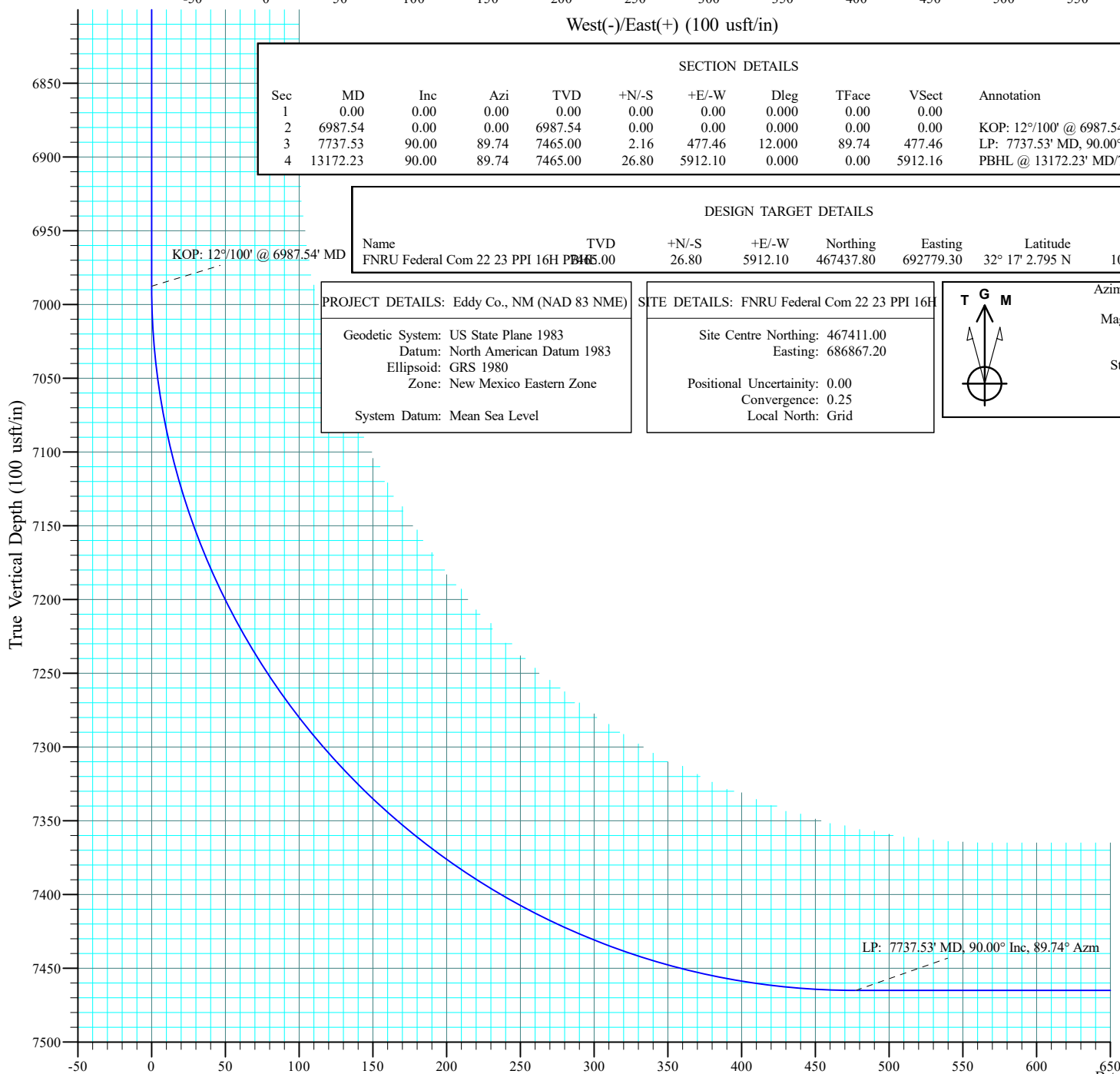
SITE DETAILS: FNRU Federal Com 22 23 PPI 16H

Site Centre Northing: 467411.00
Easting: 686867.20
Positional Uncertainty: 0.00
Convergence: 0.25
Local North: Grid



Azimuths to Grid North
True North: -0.25°
Magnetic North: 6.36°

Magnetic Field
Strength: 47690.7nT
Dip Angle: 59.92°
Date: 1/3/2022
Model: MVHD



Released to Imaging: 12/27/2022 10:31:14 AM

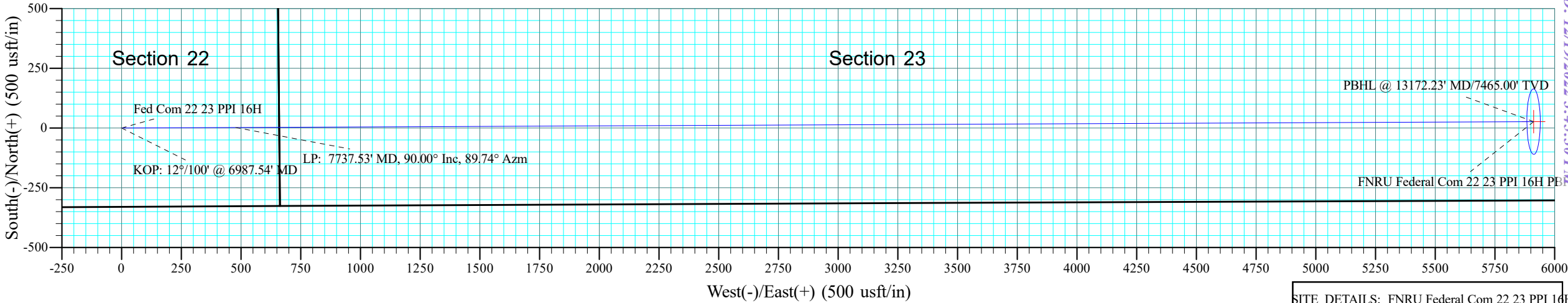


Strata Production Company

FNRU Federal Com 22 23 PPI 16H
Eddy Co., NM (NAD 83 NME)
WT-22-***
Lateral 1r0



Received by: OCD: 12/19/2022 3:45:30 PM

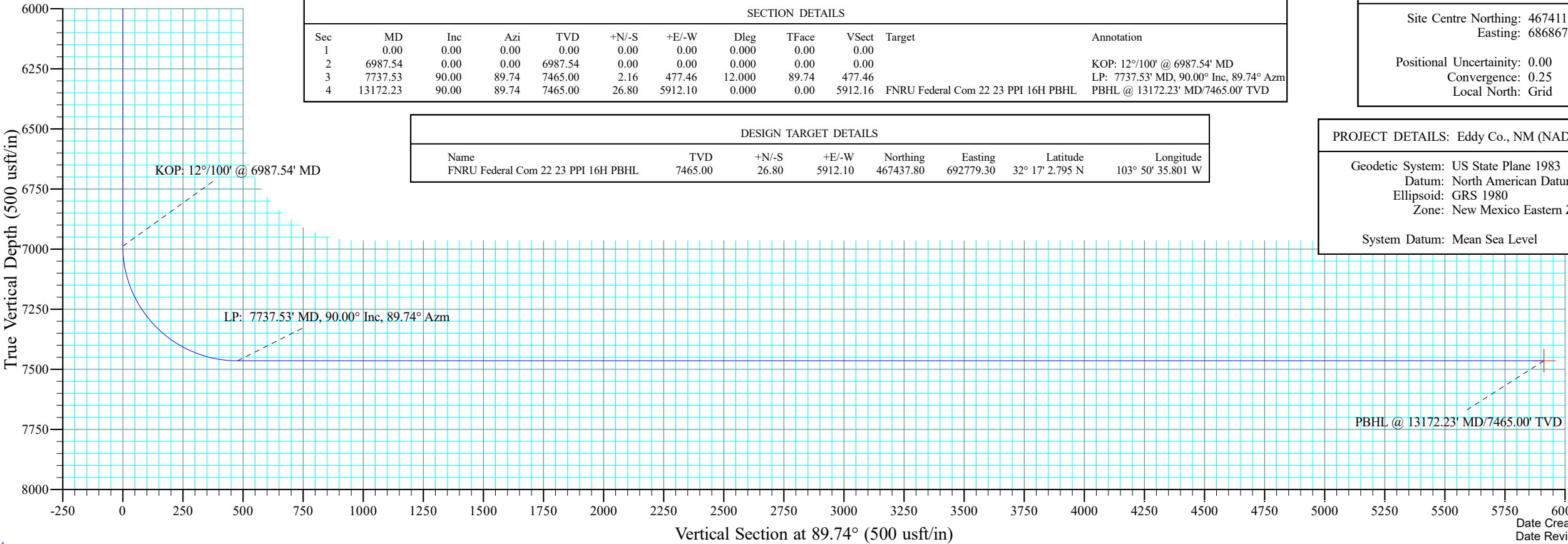


| SECTION DETAILS | | | | | | | | | | |
|-----------------|----------|-------|-------|---------|-------|---------|--------|-------|---------|---|
| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect | Target |
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.00 | 0.00 | |
| 2 | 6987.54 | 0.00 | 0.00 | 6987.54 | 0.00 | 0.00 | 0.000 | 0.00 | 0.00 | KOP: 12°/100' @ 6987.54' MD |
| 3 | 7737.53 | 90.00 | 89.74 | 7465.00 | 2.16 | 477.46 | 12.000 | 89.74 | 477.46 | LP: 7737.53' MD, 90.00° Inc, 89.74° Azm |
| 4 | 13172.23 | 90.00 | 89.74 | 7465.00 | 26.80 | 5912.10 | 0.000 | 0.00 | 5912.16 | FNRU Federal Com 22 23 PPI 16H PBHL PBHL @ 13172.23' MD/7465.00' TVD |

| SITE DETAILS: FNRU Federal Com 22 23 PPI 16H | |
|--|-----------|
| Site Centre Northing: | 467411.00 |
| Easting: | 686867.20 |
| Positional Uncertainty: | 0.00 |
| Convergence: | 0.25 |
| Local North: | Grid |

| DESIGN TARGET DETAILS | | | | | | | |
|-------------------------------------|---------|-------|---------|-----------|-----------|-----------------|-------------------|
| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
| FNRU Federal Com 22 23 PPI 16H PBHL | 7465.00 | 26.80 | 5912.10 | 467437.80 | 692779.30 | 32° 17' 2.795 N | 103° 50' 35.801 W |

| 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 |





Aim Directional Services, LLC

Survey Report



| | | | |
|------------------|--------------------------------|-------------------------------------|--------------------------------------|
| Company: | Strata Production Company | Local Co-ordinate Reference: | Site FNRU Federal Com 22 23 PPI 16H |
| Project: | Eddy Co., NM (NAD 83 NME) | TVD Reference: | Well @ 3285.00usft (Assumed 25' RKB) |
| Site: | FNRU Federal Com 22 23 PPI 16H | MD Reference: | Well @ 3285.00usft (Assumed 25' RKB) |
| Well: | Fed Com 22 23 PPI 16H | North Reference: | Grid |
| Wellbore: | Planning | Survey Calculation Method: | Minimum Curvature |
| Design: | Lateral 1r0 | Database: | RTOC- EDM 5000.1 Single User Db |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| 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 | FNRU Federal Com 22 23 PPI 16H | | |
| Site Position: | | Northing: | 467,411.00 usft |
| From: | Map | Easting: | 686,867.20 usft |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13-3/16 " |
| | | Latitude: | 32° 17' 2.792 N |
| | | Longitude: | 103° 51' 44.672 W |
| | | Grid Convergence: | 0.25 ° |

| | | | |
|-----------------------------|-----------------------|----------------------------|----------------------------------|
| Well | Fed Com 22 23 PPI 16H | | |
| Well Position | +N/-S | 0.00 usft | Northing: 467,411.00 usft |
| | +E/-W | 0.00 usft | Easting: 686,867.20 usft |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | usft |
| | | Latitude: | 32° 17' 2.792 N |
| | | Longitude: | 103° 51' 44.672 W |
| | | Ground Level: | 3,260.00 usft |

| | | | |
|------------------|-------------------|--------------------|---------------------------------------|
| Wellbore | Planning | | |
| Magnetics | Model Name | Sample Date | Declination (°) |
| | MVHD | 1/3/2022 | 6.61 |
| | | | Dip Angle (°) 59.92 |
| | | | Field Strength (nT) 47,690.749 |

| | | | |
|--------------------------|--------------------------------|---------------------|----------------------------|
| 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) |
| | 0.00 | 0.00 | 0.00 |
| | | | Direction (°) 89.74 |

| | | | | |
|----------------------------|------------------|--------------------------|------------------|--------------------|
| Survey Tool Program | Date | 10/25/2021 | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
| 0.00 | 13,172.23 | Lateral 1r0 (Planning) | B001Mb_MWD+HRGM | OWSG MWD + HRGM |

| | | | | | | | | | |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|------------------------------|-----------------------------|----------------------------|
| Planned Survey | | | | | | | | | |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 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 |



Aim Directional Services, LLC

Survey Report



| | | | |
|------------------|--------------------------------|-------------------------------------|--------------------------------------|
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| Site: | FNRU Federal Com 22 23 PPI 16H | MD Reference: | Well @ 3285.00usft (Assumed 25' RKB) |
| Well: | Fed Com 22 23 PPI 16H | North Reference: | Grid |
| Wellbore: | Planning | Survey Calculation Method: | Minimum Curvature |
| Design: | Lateral 1r0 | Database: | RTOC- EDM 5000.1 Single User Db |

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| 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 |
| 2,100.00 | 0.00 | 0.00 | 2,100.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 2,200.00 | 0.00 | 0.00 | 2,200.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 2,300.00 | 0.00 | 0.00 | 2,300.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 2,400.00 | 0.00 | 0.00 | 2,400.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 2,500.00 | 0.00 | 0.00 | 2,500.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 2,600.00 | 0.00 | 0.00 | 2,600.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 2,700.00 | 0.00 | 0.00 | 2,700.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 2,800.00 | 0.00 | 0.00 | 2,800.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 2,900.00 | 0.00 | 0.00 | 2,900.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,000.00 | 0.00 | 0.00 | 3,000.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,100.00 | 0.00 | 0.00 | 3,100.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,200.00 | 0.00 | 0.00 | 3,200.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,300.00 | 0.00 | 0.00 | 3,300.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,400.00 | 0.00 | 0.00 | 3,400.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,500.00 | 0.00 | 0.00 | 3,500.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,600.00 | 0.00 | 0.00 | 3,600.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,700.00 | 0.00 | 0.00 | 3,700.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,800.00 | 0.00 | 0.00 | 3,800.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 3,900.00 | 0.00 | 0.00 | 3,900.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,000.00 | 0.00 | 0.00 | 4,000.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,100.00 | 0.00 | 0.00 | 4,100.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,200.00 | 0.00 | 0.00 | 4,200.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,300.00 | 0.00 | 0.00 | 4,300.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,400.00 | 0.00 | 0.00 | 4,400.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,500.00 | 0.00 | 0.00 | 4,500.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,600.00 | 0.00 | 0.00 | 4,600.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,700.00 | 0.00 | 0.00 | 4,700.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,800.00 | 0.00 | 0.00 | 4,800.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 4,900.00 | 0.00 | 0.00 | 4,900.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 5,000.00 | 0.00 | 0.00 | 5,000.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 5,100.00 | 0.00 | 0.00 | 5,100.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 5,200.00 | 0.00 | 0.00 | 5,200.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 5,300.00 | 0.00 | 0.00 | 5,300.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |



Aim Directional Services, LLC

Survey Report



| | | | |
|------------------|--------------------------------|-------------------------------------|--------------------------------------|
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| Wellbore: | Planning | Survey Calculation Method: | Minimum Curvature |
| Design: | Lateral 1r0 | Database: | RTOC- EDM 5000.1 Single User Db |

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| 5,400.00 | 0.00 | 0.00 | 5,400.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 5,500.00 | 0.00 | 0.00 | 5,500.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 5,600.00 | 0.00 | 0.00 | 5,600.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 5,700.00 | 0.00 | 0.00 | 5,700.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 5,800.00 | 0.00 | 0.00 | 5,800.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 5,900.00 | 0.00 | 0.00 | 5,900.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,000.00 | 0.00 | 0.00 | 6,000.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,100.00 | 0.00 | 0.00 | 6,100.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,200.00 | 0.00 | 0.00 | 6,200.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,300.00 | 0.00 | 0.00 | 6,300.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,400.00 | 0.00 | 0.00 | 6,400.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,500.00 | 0.00 | 0.00 | 6,500.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,600.00 | 0.00 | 0.00 | 6,600.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,700.00 | 0.00 | 0.00 | 6,700.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,800.00 | 0.00 | 0.00 | 6,800.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,900.00 | 0.00 | 0.00 | 6,900.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| 6,987.54 | 0.00 | 0.00 | 6,987.54 | 0.00 | 0.00 | 0.00 | 0.000 | 0.000 | 0.000 |
| KOP: 12°/100' @ 6987.54' MD | | | | | | | | | |
| 7,000.00 | 1.50 | 89.74 | 7,000.00 | 0.00 | 0.16 | 0.16 | 12.000 | 12.000 | 0.000 |
| 7,025.00 | 4.50 | 89.74 | 7,024.96 | 0.01 | 1.47 | 1.47 | 12.000 | 12.000 | 0.000 |
| 7,050.00 | 7.50 | 89.74 | 7,049.82 | 0.02 | 4.08 | 4.08 | 12.000 | 12.000 | 0.000 |
| 7,075.00 | 10.50 | 89.74 | 7,074.51 | 0.04 | 7.99 | 7.99 | 12.000 | 12.000 | 0.000 |
| 7,100.00 | 13.50 | 89.74 | 7,098.96 | 0.06 | 13.18 | 13.18 | 12.000 | 12.000 | 0.000 |
| 7,125.00 | 16.50 | 89.74 | 7,123.11 | 0.09 | 19.65 | 19.65 | 12.000 | 12.000 | 0.000 |
| 7,150.00 | 19.50 | 89.74 | 7,146.88 | 0.12 | 27.37 | 27.37 | 12.000 | 12.000 | 0.000 |
| 7,175.00 | 22.50 | 89.74 | 7,170.22 | 0.16 | 36.33 | 36.33 | 12.000 | 12.000 | 0.000 |
| 7,200.00 | 25.50 | 89.74 | 7,193.06 | 0.21 | 46.50 | 46.50 | 12.000 | 12.000 | 0.000 |
| 7,225.00 | 28.50 | 89.74 | 7,215.33 | 0.26 | 57.84 | 57.84 | 12.000 | 12.000 | 0.000 |
| 7,250.00 | 31.50 | 89.74 | 7,236.98 | 0.32 | 70.34 | 70.34 | 12.000 | 12.000 | 0.000 |
| 7,275.00 | 34.50 | 89.74 | 7,257.95 | 0.38 | 83.95 | 83.95 | 12.000 | 12.000 | 0.000 |
| 7,300.00 | 37.50 | 89.74 | 7,278.17 | 0.45 | 98.64 | 98.64 | 12.000 | 12.000 | 0.000 |
| 7,325.00 | 40.50 | 89.74 | 7,297.60 | 0.52 | 114.37 | 114.37 | 12.000 | 12.000 | 0.000 |
| 7,350.00 | 43.50 | 89.74 | 7,316.18 | 0.59 | 131.10 | 131.10 | 12.000 | 12.000 | 0.000 |
| 7,375.00 | 46.50 | 89.74 | 7,333.85 | 0.67 | 148.77 | 148.77 | 12.000 | 12.000 | 0.000 |
| 7,400.00 | 49.50 | 89.74 | 7,350.58 | 0.76 | 167.35 | 167.35 | 12.000 | 12.000 | 0.000 |
| 7,425.00 | 52.50 | 89.74 | 7,366.31 | 0.85 | 186.77 | 186.77 | 12.000 | 12.000 | 0.000 |
| 7,450.00 | 55.50 | 89.74 | 7,381.01 | 0.94 | 206.99 | 207.00 | 12.000 | 12.000 | 0.000 |
| 7,475.00 | 58.50 | 89.74 | 7,394.62 | 1.03 | 227.96 | 227.96 | 12.000 | 12.000 | 0.000 |
| 7,500.00 | 61.50 | 89.74 | 7,407.12 | 1.13 | 249.60 | 249.61 | 12.000 | 12.000 | 0.000 |
| 7,525.00 | 64.50 | 89.74 | 7,418.47 | 1.23 | 271.88 | 271.88 | 12.000 | 12.000 | 0.000 |
| 7,550.00 | 67.50 | 89.74 | 7,428.64 | 1.34 | 294.71 | 294.71 | 12.000 | 12.000 | 0.000 |
| 7,575.00 | 70.50 | 89.74 | 7,437.60 | 1.44 | 318.05 | 318.05 | 12.000 | 12.000 | 0.000 |
| 7,600.00 | 73.50 | 89.74 | 7,445.33 | 1.55 | 341.82 | 341.82 | 12.000 | 12.000 | 0.000 |



Aim Directional Services, LLC

Survey Report



| | | | |
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| Site: | FNRU Federal Com 22 23 PPI 16H | MD Reference: | Well @ 3285.00usft (Assumed 25' RKB) |
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| Wellbore: | Planning | Survey Calculation Method: | Minimum Curvature |
| Design: | Lateral 1r0 | Database: | ROTOC- EDM 5000.1 Single User Db |

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|--|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| 7,625.00 | 76.50 | 89.74 | 7,451.80 | 1.66 | 365.96 | 365.97 | 12.000 | 12.000 | 0.000 |
| 7,650.00 | 79.50 | 89.74 | 7,457.00 | 1.77 | 390.41 | 390.42 | 12.000 | 12.000 | 0.000 |
| 7,675.00 | 82.50 | 89.74 | 7,460.91 | 1.88 | 415.10 | 415.11 | 12.000 | 12.000 | 0.000 |
| 7,700.00 | 85.50 | 89.74 | 7,463.53 | 1.99 | 439.96 | 439.97 | 12.000 | 12.000 | 0.000 |
| 7,725.00 | 88.50 | 89.74 | 7,464.84 | 2.11 | 464.93 | 464.93 | 12.000 | 12.000 | 0.000 |
| 7,737.53 | 90.00 | 89.74 | 7,465.00 | 2.16 | 477.46 | 477.46 | 12.000 | 12.000 | 0.000 |
| LP: 7737.53' MD, 90.00° Inc, 89.74° Azm | | | | | | | | | |
| 7,800.00 | 90.00 | 89.74 | 7,465.00 | 2.45 | 539.92 | 539.93 | 0.000 | 0.000 | 0.000 |
| 7,900.00 | 90.00 | 89.74 | 7,465.00 | 2.90 | 639.92 | 639.93 | 0.000 | 0.000 | 0.000 |
| 8,000.00 | 90.00 | 89.74 | 7,465.00 | 3.35 | 739.92 | 739.93 | 0.000 | 0.000 | 0.000 |
| 8,100.00 | 90.00 | 89.74 | 7,465.00 | 3.81 | 839.92 | 839.93 | 0.000 | 0.000 | 0.000 |
| 8,200.00 | 90.00 | 89.74 | 7,465.00 | 4.26 | 939.92 | 939.93 | 0.000 | 0.000 | 0.000 |
| 8,300.00 | 90.00 | 89.74 | 7,465.00 | 4.71 | 1,039.92 | 1,039.93 | 0.000 | 0.000 | 0.000 |
| 8,400.00 | 90.00 | 89.74 | 7,465.00 | 5.17 | 1,139.92 | 1,139.93 | 0.000 | 0.000 | 0.000 |
| 8,500.00 | 90.00 | 89.74 | 7,465.00 | 5.62 | 1,239.92 | 1,239.93 | 0.000 | 0.000 | 0.000 |
| 8,600.00 | 90.00 | 89.74 | 7,465.00 | 6.07 | 1,339.92 | 1,339.93 | 0.000 | 0.000 | 0.000 |
| 8,700.00 | 90.00 | 89.74 | 7,465.00 | 6.53 | 1,439.91 | 1,439.93 | 0.000 | 0.000 | 0.000 |
| 8,800.00 | 90.00 | 89.74 | 7,465.00 | 6.98 | 1,539.91 | 1,539.93 | 0.000 | 0.000 | 0.000 |
| 8,900.00 | 90.00 | 89.74 | 7,465.00 | 7.43 | 1,639.91 | 1,639.93 | 0.000 | 0.000 | 0.000 |
| 9,000.00 | 90.00 | 89.74 | 7,465.00 | 7.89 | 1,739.91 | 1,739.93 | 0.000 | 0.000 | 0.000 |
| 9,100.00 | 90.00 | 89.74 | 7,465.00 | 8.34 | 1,839.91 | 1,839.93 | 0.000 | 0.000 | 0.000 |
| 9,200.00 | 90.00 | 89.74 | 7,465.00 | 8.79 | 1,939.91 | 1,939.93 | 0.000 | 0.000 | 0.000 |
| 9,300.00 | 90.00 | 89.74 | 7,465.00 | 9.25 | 2,039.91 | 2,039.93 | 0.000 | 0.000 | 0.000 |
| 9,400.00 | 90.00 | 89.74 | 7,465.00 | 9.70 | 2,139.91 | 2,139.93 | 0.000 | 0.000 | 0.000 |
| 9,500.00 | 90.00 | 89.74 | 7,465.00 | 10.15 | 2,239.91 | 2,239.93 | 0.000 | 0.000 | 0.000 |
| 9,600.00 | 90.00 | 89.74 | 7,465.00 | 10.61 | 2,339.91 | 2,339.93 | 0.000 | 0.000 | 0.000 |
| 9,700.00 | 90.00 | 89.74 | 7,465.00 | 11.06 | 2,439.90 | 2,439.93 | 0.000 | 0.000 | 0.000 |
| 9,800.00 | 90.00 | 89.74 | 7,465.00 | 11.51 | 2,539.90 | 2,539.93 | 0.000 | 0.000 | 0.000 |
| 9,900.00 | 90.00 | 89.74 | 7,465.00 | 11.97 | 2,639.90 | 2,639.93 | 0.000 | 0.000 | 0.000 |
| 10,000.00 | 90.00 | 89.74 | 7,465.00 | 12.42 | 2,739.90 | 2,739.93 | 0.000 | 0.000 | 0.000 |
| 10,100.00 | 90.00 | 89.74 | 7,465.00 | 12.87 | 2,839.90 | 2,839.93 | 0.000 | 0.000 | 0.000 |
| 10,200.00 | 90.00 | 89.74 | 7,465.00 | 13.33 | 2,939.90 | 2,939.93 | 0.000 | 0.000 | 0.000 |
| 10,300.00 | 90.00 | 89.74 | 7,465.00 | 13.78 | 3,039.90 | 3,039.93 | 0.000 | 0.000 | 0.000 |
| 10,400.00 | 90.00 | 89.74 | 7,465.00 | 14.23 | 3,139.90 | 3,139.93 | 0.000 | 0.000 | 0.000 |
| 10,500.00 | 90.00 | 89.74 | 7,465.00 | 14.69 | 3,239.90 | 3,239.93 | 0.000 | 0.000 | 0.000 |
| 10,600.00 | 90.00 | 89.74 | 7,465.00 | 15.14 | 3,339.90 | 3,339.93 | 0.000 | 0.000 | 0.000 |
| 10,700.00 | 90.00 | 89.74 | 7,465.00 | 15.59 | 3,439.89 | 3,439.93 | 0.000 | 0.000 | 0.000 |
| 10,800.00 | 90.00 | 89.74 | 7,465.00 | 16.05 | 3,539.89 | 3,539.93 | 0.000 | 0.000 | 0.000 |
| 10,900.00 | 90.00 | 89.74 | 7,465.00 | 16.50 | 3,639.89 | 3,639.93 | 0.000 | 0.000 | 0.000 |
| 11,000.00 | 90.00 | 89.74 | 7,465.00 | 16.95 | 3,739.89 | 3,739.93 | 0.000 | 0.000 | 0.000 |
| 11,100.00 | 90.00 | 89.74 | 7,465.00 | 17.41 | 3,839.89 | 3,839.93 | 0.000 | 0.000 | 0.000 |
| 11,200.00 | 90.00 | 89.74 | 7,465.00 | 17.86 | 3,939.89 | 3,939.93 | 0.000 | 0.000 | 0.000 |
| 11,300.00 | 90.00 | 89.74 | 7,465.00 | 18.31 | 4,039.89 | 4,039.93 | 0.000 | 0.000 | 0.000 |
| 11,400.00 | 90.00 | 89.74 | 7,465.00 | 18.77 | 4,139.89 | 4,139.93 | 0.000 | 0.000 | 0.000 |



Aim Directional Services, LLC

Survey Report



| | | | |
|------------------|--------------------------------|-------------------------------------|--------------------------------------|
| Company: | Strata Production Company | Local Co-ordinate Reference: | Site FNRU Federal Com 22 23 PPI 16H |
| Project: | Eddy Co., NM (NAD 83 NME) | TVD Reference: | Well @ 3285.00usft (Assumed 25' RKB) |
| Site: | FNRU Federal Com 22 23 PPI 16H | MD Reference: | Well @ 3285.00usft (Assumed 25' RKB) |
| Well: | Fed Com 22 23 PPI 16H | North Reference: | Grid |
| Wellbore: | Planning | Survey Calculation Method: | Minimum Curvature |
| Design: | Lateral 1r0 | Database: | RTOC- EDM 5000.1 Single User Db |

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| 11,500.00 | 90.00 | 89.74 | 7,465.00 | 19.22 | 4,239.89 | 4,239.93 | 0.000 | 0.000 | 0.000 |
| 11,600.00 | 90.00 | 89.74 | 7,465.00 | 19.67 | 4,339.88 | 4,339.93 | 0.000 | 0.000 | 0.000 |
| 11,700.00 | 90.00 | 89.74 | 7,465.00 | 20.13 | 4,439.88 | 4,439.93 | 0.000 | 0.000 | 0.000 |
| 11,800.00 | 90.00 | 89.74 | 7,465.00 | 20.58 | 4,539.88 | 4,539.93 | 0.000 | 0.000 | 0.000 |
| 11,900.00 | 90.00 | 89.74 | 7,465.00 | 21.03 | 4,639.88 | 4,639.93 | 0.000 | 0.000 | 0.000 |
| 12,000.00 | 90.00 | 89.74 | 7,465.00 | 21.49 | 4,739.88 | 4,739.93 | 0.000 | 0.000 | 0.000 |
| 12,100.00 | 90.00 | 89.74 | 7,465.00 | 21.94 | 4,839.88 | 4,839.93 | 0.000 | 0.000 | 0.000 |
| 12,200.00 | 90.00 | 89.74 | 7,465.00 | 22.39 | 4,939.88 | 4,939.93 | 0.000 | 0.000 | 0.000 |
| 12,300.00 | 90.00 | 89.74 | 7,465.00 | 22.85 | 5,039.88 | 5,039.93 | 0.000 | 0.000 | 0.000 |
| 12,400.00 | 90.00 | 89.74 | 7,465.00 | 23.30 | 5,139.88 | 5,139.93 | 0.000 | 0.000 | 0.000 |
| 12,500.00 | 90.00 | 89.74 | 7,465.00 | 23.75 | 5,239.88 | 5,239.93 | 0.000 | 0.000 | 0.000 |
| 12,600.00 | 90.00 | 89.74 | 7,465.00 | 24.21 | 5,339.87 | 5,339.93 | 0.000 | 0.000 | 0.000 |
| 12,700.00 | 90.00 | 89.74 | 7,465.00 | 24.66 | 5,439.87 | 5,439.93 | 0.000 | 0.000 | 0.000 |
| 12,800.00 | 90.00 | 89.74 | 7,465.00 | 25.11 | 5,539.87 | 5,539.93 | 0.000 | 0.000 | 0.000 |
| 12,900.00 | 90.00 | 89.74 | 7,465.00 | 25.57 | 5,639.87 | 5,639.93 | 0.000 | 0.000 | 0.000 |
| 13,000.00 | 90.00 | 89.74 | 7,465.00 | 26.02 | 5,739.87 | 5,739.93 | 0.000 | 0.000 | 0.000 |
| 13,100.00 | 90.00 | 89.74 | 7,465.00 | 26.47 | 5,839.87 | 5,839.93 | 0.000 | 0.000 | 0.000 |
| 13,172.23 | 90.00 | 89.74 | 7,465.00 | 26.80 | 5,912.10 | 5,912.16 | 0.000 | 0.000 | 0.000 |
| PBHL @ 13172.23' MD/7465.00' TVD | | | | | | | | | |

Design Targets

| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
|---------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------------|-------------------|
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| FNRU Federal Com 2 | 0.00 | 0.00 | 7,465.00 | 26.80 | 5,912.10 | 467,437.80 | 692,779.30 | 32° 17' 2.795 N | 103° 50' 35.801 W |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |

Casing Points

| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") |
|-----------------------|-----------------------|------------|---------------------|-------------------|
| 13,172.23 | 7,465.00 | 20" Casing | 20 | 24 |

Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | Comment |
|---|-----------------------|-------------------|--------------|
| | | +N/-S (usft) | +E/-W (usft) |
| 6988 | 6988 | 0 | 0 |
| 7738 | 7465 | 2 | 477 |
| 13,172 | 7465 | 27 | 5912 |
| KOP: 12°/100' @ 6987.54' MD | | | |
| LP: 7737.53' MD, 90.00° Inc, 89.74° Azm | | | |
| PBHL @ 13172.23' MD/7465.00' TVD | | | |

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

| | |
|-----------------------------|--------------------------------|
| OPERATOR'S NAME: | Strata Production Company |
| WELL NAME & NO.: | FNRU Federal Com 22 23 PPI 16H |
| LOCATION: | Sec 22-23S-30E-NMP |
| COUNTY: | Eddy County, New Mexico |

COA

| | | | |
|----------------------|---|---|--|
| H2S | <input type="radio"/> Yes | <input checked="" type="radio"/> No | |
| Potash | <input type="radio"/> None | <input type="radio"/> Secretary | <input checked="" type="radio"/> R-111-P |
| Cave/Karst Potential | <input type="radio"/> Low | <input type="radio"/> Medium | <input checked="" type="radio"/> High |
| Cave/Karst Potential | <input type="radio"/> Critical | | |
| Variance | <input checked="" type="radio"/> None | <input type="radio"/> Flex Hose | <input type="radio"/> Other |
| Wellhead | <input checked="" type="radio"/> Conventional | <input type="radio"/> Multibowl | <input type="radio"/> Both |
| Other | <input type="checkbox"/> 4 String Area | <input type="checkbox"/> Capitan Reef | <input type="checkbox"/> WIPP |
| Other | <input type="checkbox"/> Fluid Filled | <input type="checkbox"/> Cement Squeeze | <input type="checkbox"/> Pilot Hole |
| Special Requirements | <input type="checkbox"/> Water Disposal | <input checked="" type="checkbox"/> COM | <input type="checkbox"/> 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 367 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. *Depth adjusted per BLM geologist requirements to protect usable water*
 - 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 **9-5/8** inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
 - ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ 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 integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-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

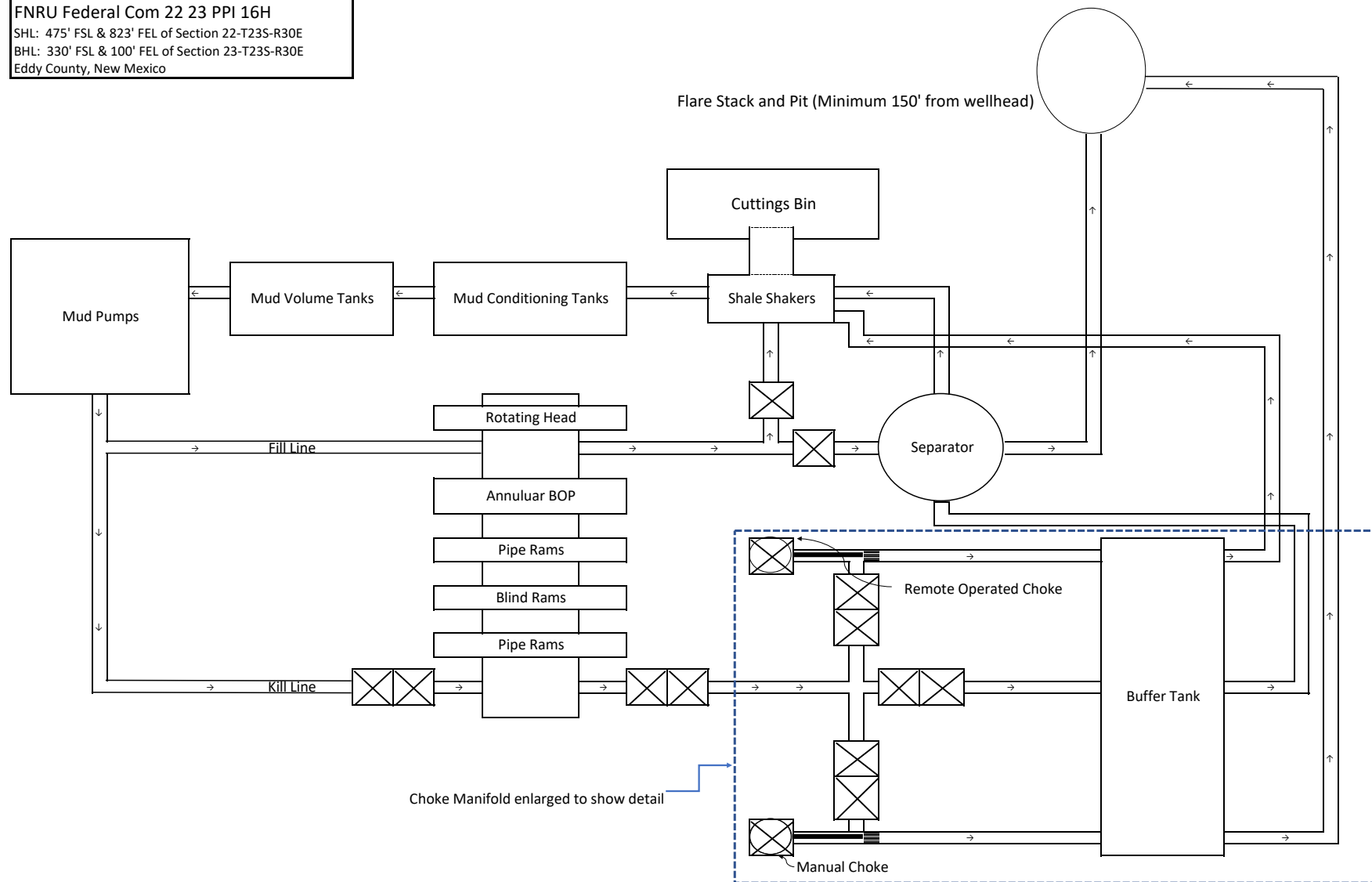
Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

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
FNRU Federal Com 22 23 PPI 16H
SHL: 475' FSL & 823' FEL of Section 22-T23S-R30E
BHL: 330' FSL & 100' FEL of Section 23-T23S-R30E
Eddy County, New Mexico



Strata Production Company
 FNRU Federal Com 22 23 PPI 16H
 SHL: 475' FSL & 823' FEL of Section 22-T235-R30E
 BHL: 330' FSL & 100' FEL of Section 23-T235-R30E
 Eddy County, New Mexico

| Formation ID | Formation Name | Elevation | True Vertical | Measured Depth | Lithologies | Mineral Resources | Producing Formatio |
|--------------|----------------|-----------|---------------|----------------|---------------------------------|-------------------|--------------------|
| 8755402 | RUSTLER | 2894 | 370 | 370 | ANHYDRITE | NONE | N |
| 7873400 | TOP SALT | 2245 | 649 | 649 | SALT | NONE | N |
| 7873401 | BASE OF SALT | -727 | 3621 | 3621 | SALT | NONE | N |
| 8755403 | LAMAR | -952 | 3846 | 3846 | LIMESTONE | NATURAL GAS, OIL | N |
| 8755404 | BELL CANYON | -980 | 3874 | 3874 | SANDSTONE | NATURAL GAS, OIL | Y |
| 7873402 | CHERRY CANYON | -1867 | 4761 | 4761 | LIMESTONE, SANDSTONE, SILTSTONE | NATURAL GAS, OIL | Y |
| 7873403 | BRUSHY CANYON | -3183 | 6077 | 6077 | LIMESTONE, SANDSTONE, SILTSTONE | NATURAL GAS, OIL | Y |
| 7873404 | BONE SPRING | -4824 | 7718 | 7718 | LIMESTONE, SHALE | NATURAL GAS, OIL | N |

STRATA PRODUCTION COMPANY

FNRU Federal Com 22 23 PPI 16H
SHL: 475' FSL & 823' FEL of Sec 22
BHL: 330' FSL & 100' FEL of Sec 23
Section 22-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 168490

CONDITIONS

| | |
|---|---|
| Operator: STRATA PRODUCTION CO P.O. Box 1030 Roswell, NM 882021030 | OGRID: |
| | 21712 |
| | Action Number: 168490 |
| | Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|--|----------------|
| kpickford | Will require a name change C-103A Change of Plans Sundry prior to putting the well into production. See naming convention document sent via e-mail. | 12/27/2022 |
| kpickford | Notify OCD 24 hours prior to casing & cement | 12/27/2022 |
| kpickford | Will require a File As Drilled C-102 and a Directional Survey with the C-104 | 12/27/2022 |
| kpickford | 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 | 12/27/2022 |
| kpickford | Cement is required to circulate on both surface and intermediate1 strings of casing | 12/27/2022 |
| kpickford | 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 | 12/27/2022 |