

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

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

1a. Type of work: ☐ DRILL ☐ REENTER 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.
2. Name of Operator		9. API Well No. 30-015-49594
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.

(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 30-015-49594	² Pool Code 24750	³ Pool Name FORTY NINER RIDGE DELAWARE
⁴ Property Code 332907	⁵ Property Name ROADRUNNER FEDERAL COM 23 ILL	⁶ Well Number 5H
⁷ OGRID NO. 21712	⁸ Operator Name STRATA PRODUCTION COMPANY	⁹ Elevation 3268'

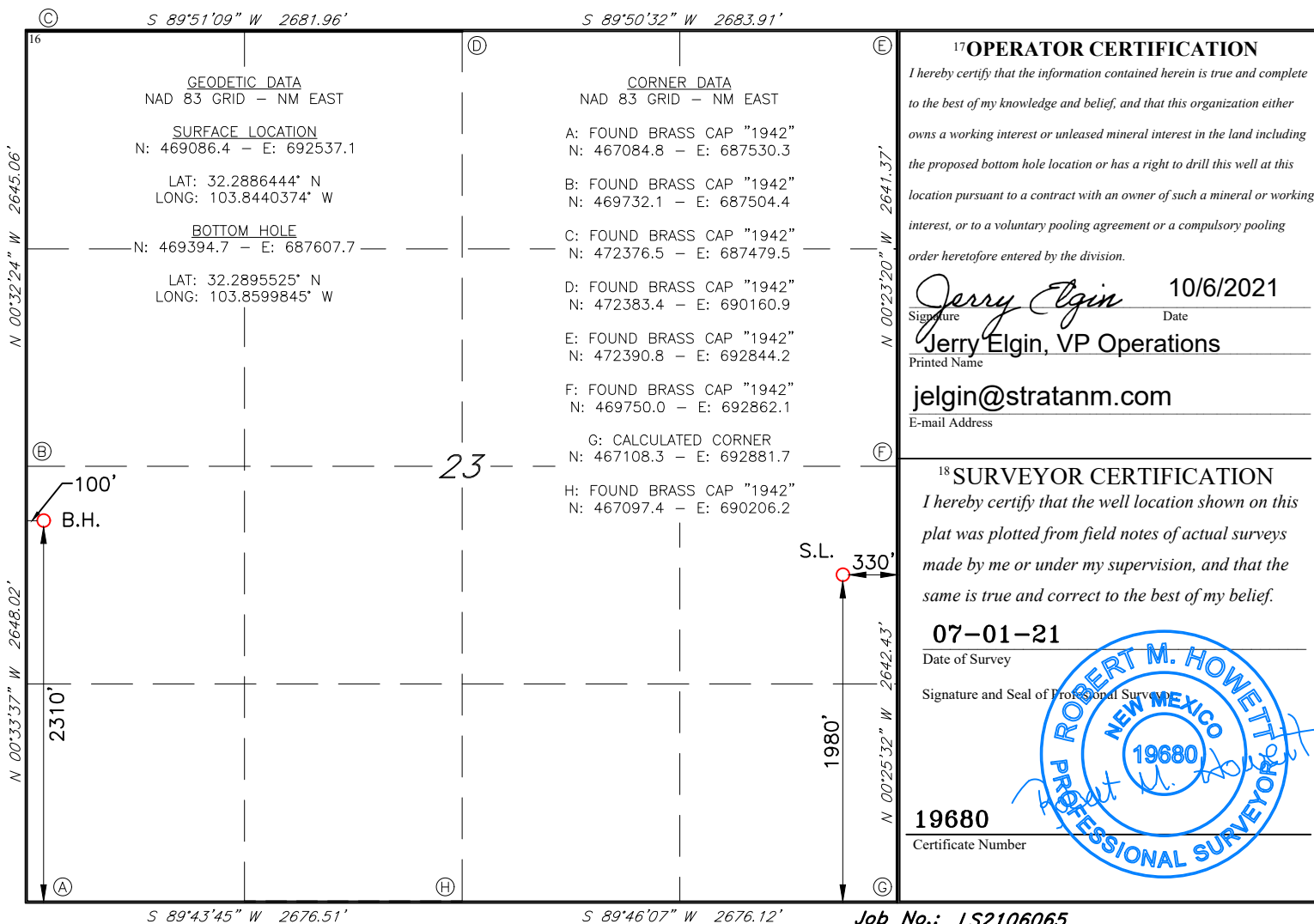
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
I	23	23S	30E		1980	SOUTH	330	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
L	23	23S	30E		2310	SOUTH	100	WEST	EDDY
¹² Dedicated Acres	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.



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 / 06 / 2022

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 COM 23 ILL 5H		I, Section 23 T23S, R30E	1980' FSL, 330' FEL	600	1200	2000

IV. Central Delivery Point Name: Roadrunner Federal COM 23 ILL 5H [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 COM 23 ILL 5H		07/14/2022	08/04/2022	08/18/2022	08/25/2022	08/28/2022

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.

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:

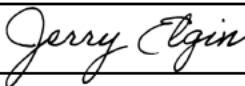
(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit 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.

Page 8

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

Signature: 
Printed Name: Jerry Elgin
Title: Vice President Operations
E-mail Address: jelgin@stratanm.com
Date: 09/14/2021
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.

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

QUESTIONS

Action 48529

QUESTIONS

Operator: STRATA PRODUCTION CO P.O. Box 1030 Roswell, NM 882021030	OGRID:	21712
	Action Number:	48529
	Action Type:	[UF-NGMP] NG Management Plan (NGMP)

QUESTIONS

II. Type:	
Original	True
Amendment due to 19.15.27.9.D(6)(a) NMAC	Not answered.
Amendment due to 19.15.27.9.D(6)(b) NMAC	Not answered.
Other	Not answered.
If other, please describe	Not answered.

III. Well(s)	
Number of wells identified above	10

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

COMMENTS

Action 48529

COMMENTS

Operator: STRATA PRODUCTION CO P.O. Box 1030 Roswell, NM 882021030	OGRID: 21712
	Action Number: 48529
	Action Type: [UF-NGMP] NG Management Plan (NGMP)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 10/21/2021	10/21/2021

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 48529

CONDITIONS

Operator: STRATA PRODUCTION CO P.O. Box 1030 Roswell, NM 882021030	OGRID: 21712
	Action Number: 48529
	Action Type: [UF-NGMP] NG Management Plan (NGMP)

CONDITIONS

Created By	Condition	Condition Date
kpickford	None	10/21/2021



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

Drilling Plan Data Report

06/02/2022

APD ID: 10400080504

Submission Date: 10/12/2021

Highlighted data
reflects the most
recent changes

Operator Name: STRATA PRODUCTION COMPANY

Well Name: ROADRUNNER FEDERAL COM 23 ILL

Well Number: 5H

Well Type: OIL WELL

Well Work Type: Drill

[Show Final Text](#)

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
7008465	TOP SALT	3268	575	575	SALT	NONE	Y
7008466	BASE OF SALT	-614	3882	3882	SALT	NONE	N
7008467	CHERRY CANYON	-1518	4786	4786	SANDSTONE	NATURAL GAS, OIL	N
7008468	BRUSHY CANYON	-2870	6138	6138	SANDSTONE	NATURAL GAS, OIL	N
7008469	BONE SPRING	-4474	7742	7742	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:

RR_Fed_COM_23_ILL_5H_Choke_Diagram_20210924091447.pdf

BOP Diagram Attachment:

RR_Fed_COM__23_ILL_5H_BOP_20210924091456.pdf

RR_Fed_COM_23_ILL_5H_BOP_Description_20210924091503.pdf

Operator Name: STRATA PRODUCTION COMPANY**Well Name:** ROADRUNNER FEDERAL COM 23 ILL**Well Number:** 5H**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	3268	2818	450	H-40	48	ST&C	3.95	7.39	DRY	14.91	DRY	25.05
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	4000	0	4000	3335	-732	4000	J-55	40	LT&C	1.48	1.9	DRY	3.99	DRY	2.83
3	PRODUCTION	8.75	5.5	NEW	API	N	0	12401	0	7667	3268	-4399	12401	HCP-110	20	BUTT	2.06	1.96	DRY	2.64	DRY	2.69

Casing Attachments**Casing ID:** 1 **String** SURFACE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

RR_Fed_COM_23_ILL_5H_Casing_Worksheet_20211006101652.pdf

Operator Name: STRATA PRODUCTION COMPANY**Well Name:** ROADRUNNER FEDERAL COM 23 ILL**Well Number:** 5H**Casing Attachments****Casing ID:** 2 **String** INTERMEDIATE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

RR_Fed_COM_23_ILL_5H_Casing_Worksheet_20211006101713.pdf

Casing ID: 3 **String** PRODUCTION**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

RR_Fed_COM_23_ILL_5H_Casing_Worksheet_20211006101738.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
SURFACE	Lead		0	450	575	1.33	14.8	135	100	Class C	CaCl, LCM

INTERMEDIATE	Lead		0	3050	1047	1.98	12.6	369	100	Class C Poz	Salt, gel, extender, LCM
INTERMEDIATE	Tail		3050	4000	150	1.34	14.8	36	100	Class C	LCM
PRODUCTION	Lead	5200	0	4700	467	2.64	11.5	220	50	Class C Poz	Salt, gel, extender, LCM

Operator Name: STRATA PRODUCTION COMPANY**Well Name:** ROADRUNNER FEDERAL COM 23 ILL**Well Number:** 5H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		4700	5200	128	1.34	14.8	31	50	Class C Poz	none
PRODUCTION	Lead		5200	7000	289	2.38	11.8	122	50	Class H Poz	Salt, gel, extender, LCM
PRODUCTION	Tail		7000	12401	1539	1.22	14.4	335	50	Class H Poz	Salt, gel, extender, LCM

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	12401	WATER-BASED MUD	9.5	10.2			10				Drill with water based mud using sliders and gel sweeps in the lateral.

Operator Name: STRATA PRODUCTION COMPANY**Well Name:** ROADRUNNER FEDERAL COM 23 ILL**Well Number:** 5H

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 DENSITOMETER LOG, 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:** 1673**Anticipated Bottom Hole Temperature(F):** 125**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO**Describe:****Contingency Plans geohazards description:****Contingency Plans geohazards****Hydrogen Sulfide drilling operations plan required?** YES**Hydrogen sulfide drilling operations**

RR_Fed_COM_23_ILL_5H_H2S_Plan_20210924121218.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

RR_Fed_COM_23_ILL_5H_Lateral_20210930093914.pdf

RR_Fed_COM_23_ILL_5H_Wellbore_Diagram_20210930154449.pdf

Other proposed operations facets description:**Other proposed operations facets attachment:**

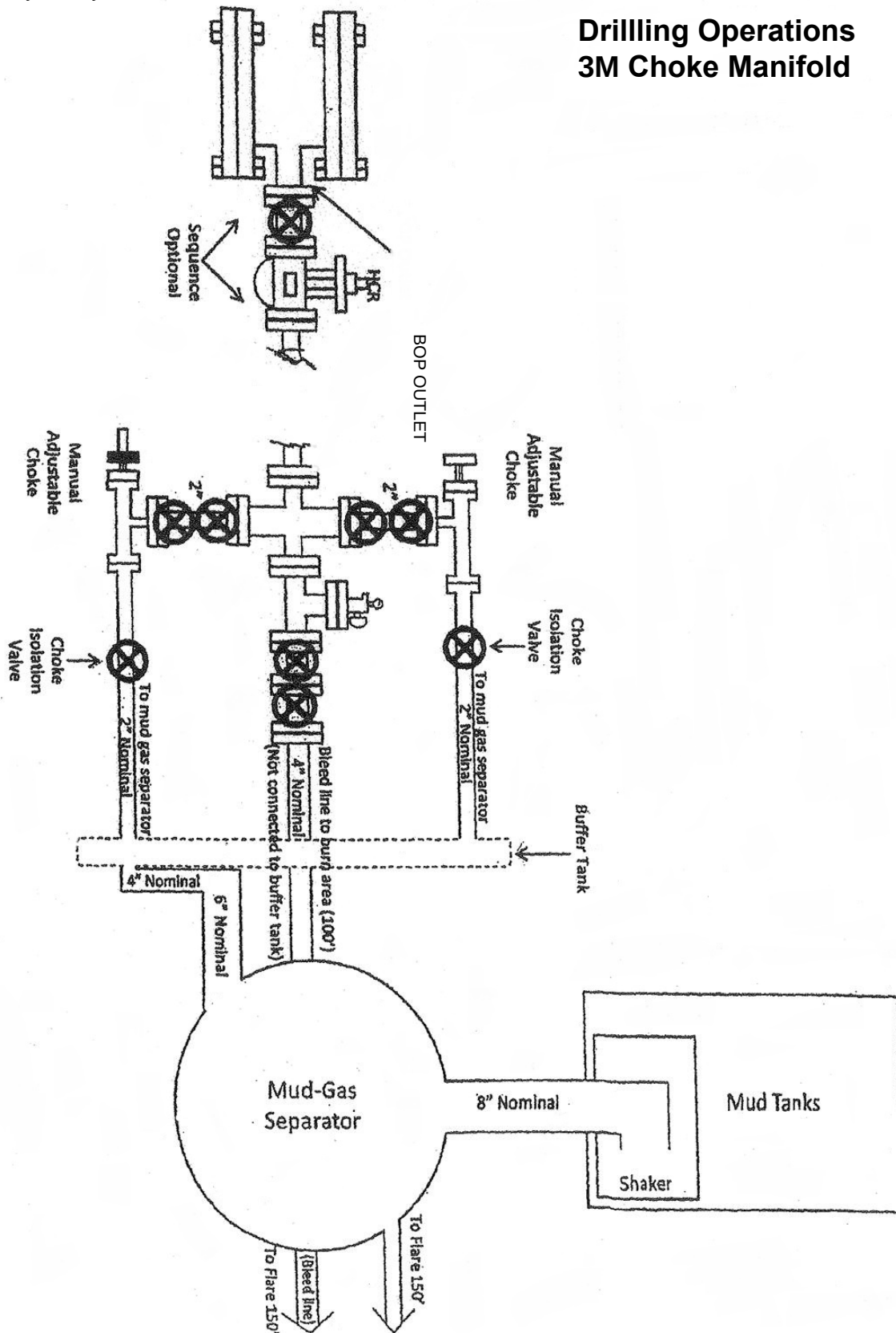
RR_Fed_COM_23_ILL_5H_Gas_Capture_Plan_20210930154555.pdf

Other Variance attachment:

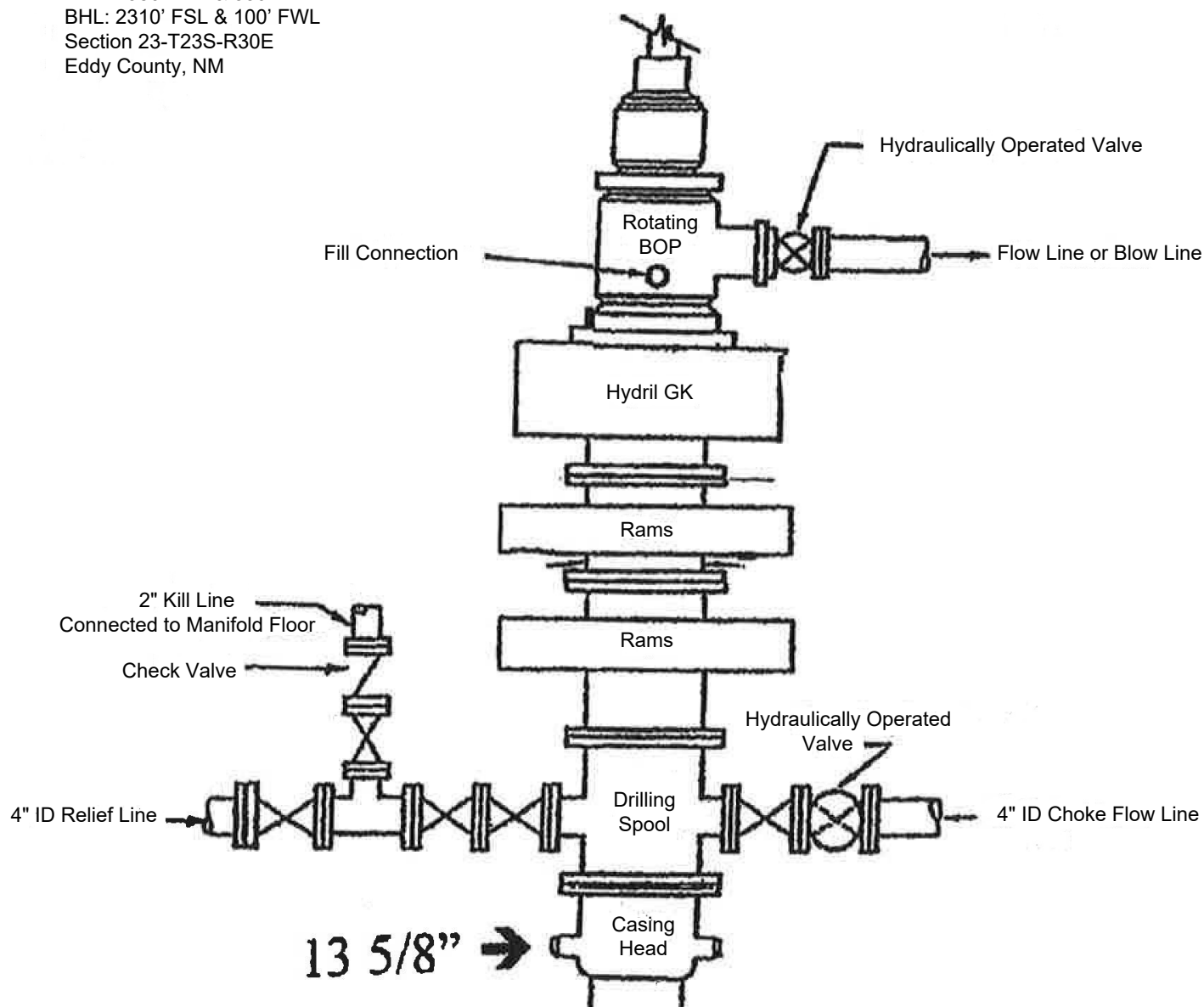
CONFIDENTIAL

Strata Production Company
Roadrunner Federal COM 23 ILL 5H
SHL: 1980' FSL & 330' FEL
BHL: 2310' FSL & 100' FWL
Section 23-T23S-R30E
Eddy County, NM

Drilling Operations 3M Choke Manifold



Strata Production Company
Roadrunner Federal COM 23 ILL 5H
 SHL: 1980' FSL & 330' FEL
 BHL: 2310' FSL & 100' FWL
 Section 23-T23S-R30E
 Eddy County, NM



**3000# PSI WORKING PRESSURE
 BLOWOUT PREVENTER HOOK-UP**

The blowout preventer assembly shall consist of one single type blind ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GK" preventer; a rotating blowout preventer; valves; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and 4-inch I.D. relief line, except when air or gas drilling. All preventer connections are to be open-face flanged.

Minimum operating equipment for the preventers and hydraulically operated valves shall be as follows: (1) Multiple pumps, driven by a continuous source of power, capable of fluid charging the total accumulator volume from the nitrogen precharge pressure to its rated pressure within _____ minutes. Also, the pumps are to be connected to the nitrogen precharge pressure of not less than 750 PSI and connected so as to receive the aforementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within _____ seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures to ram preventers. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairways shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

* To include derrick floor mounted controls.

Strata Production Company
Roadrunner Federal COM 23 ILL 5H
SHL: 1980' FSL & 330' FEL
BHL: 2310' FSL & 100' FWL
Section 23-T23S-R30E
Eddy County, NM

BLOWOUT PREVENTER EQUIPMENT DESCRIPTION

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

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

NOTES:

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

Strata Production Company
Roadrunner Federal COM 23 ILL #5H
Section 23, T23S, R30E
SL: 1,980' FSL & 330' FEL of Section 23
BHL: 2,310' FSL & 100' FWL of Section 23

Hole Size	Casing Interval		Csg Size	Weight	Grade	Connection	SF Collapse	SF Burst	SF Joint Tension	SF Body Tension
	From	To								
17.5	0	450	13.375	48	API	STC	3.95	7.39	14.9	25.0
12.25	0	4,000	9.625	40	API	LTC	1.48	1.90	3.99	2.83
8.75	0	12,401	5.5	20	API	Buttress	2.06	1.96	2.64	2.69
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

Strata Production Company
Roadrunner Federal 23 ILL 5H
SHL: 1980' FSL & 330' FEL
BHL: 2310' FSL & 100' FWL
Section 23-T23S-R30E
Eddy County, NM

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

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

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

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

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

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

II. H₂S SAFETY EQUIPMENT AND SYSTEMS

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

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

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

W A R N I N G

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

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

STRATA PRODUCTION COMPANY

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

EMERGENCY NUMBERS

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

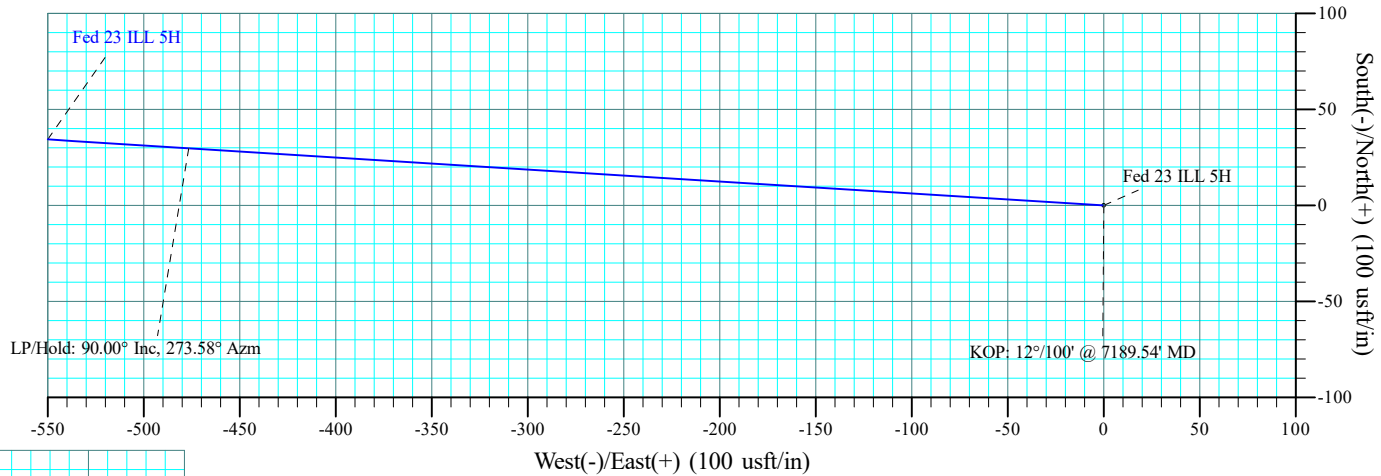
Eddy County Sheriff's Office	575-887-7551
Lea County Sherrif's Office (Lovington)	575-396-3611
New Mexico State Police (Roswell)	575-622-7200
Eastern NM Medical Center (Roswell)	575-622-8170
Lea Regional Hospital (Hobbs)	575-492-5000
Carlsbad Hospital	575-887-4100
Carlsbad Fire Department	575-885-3125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

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

Strata Office	575-622-1127
Matt Murphy	575-622-1127 x33
Jerry Elgin	575-622-1127 x18
Richard Marr	575-626-1479
Pilar Mendoza	575-626-8161
Mitch Krakauskas	575-622-1127 x23



Roadrunner Fed 23 ILL 5H
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	7189.54	0.00	0.00	7189.54	0.00	0.00	0.000	0.00	0.00	KOP: 12°/100' @ 7189.54' MD
3	7939.54	90.00	273.58	7667.00	29.80	-476.53	12.000	273.58	477.46	LP/Hold: 90.00° Inc, 273.58° Azm
4	12401.11	90.00	273.58	7667.00	308.30	-4929.40	0.000	0.00	4939.03	PBHL

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL - Roadrunner Fed 23 ILL 5H	7667.00	308.30	-4929.40	469394.70	687607.70	32° 17' 22.389 N	103° 51' 35.944 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

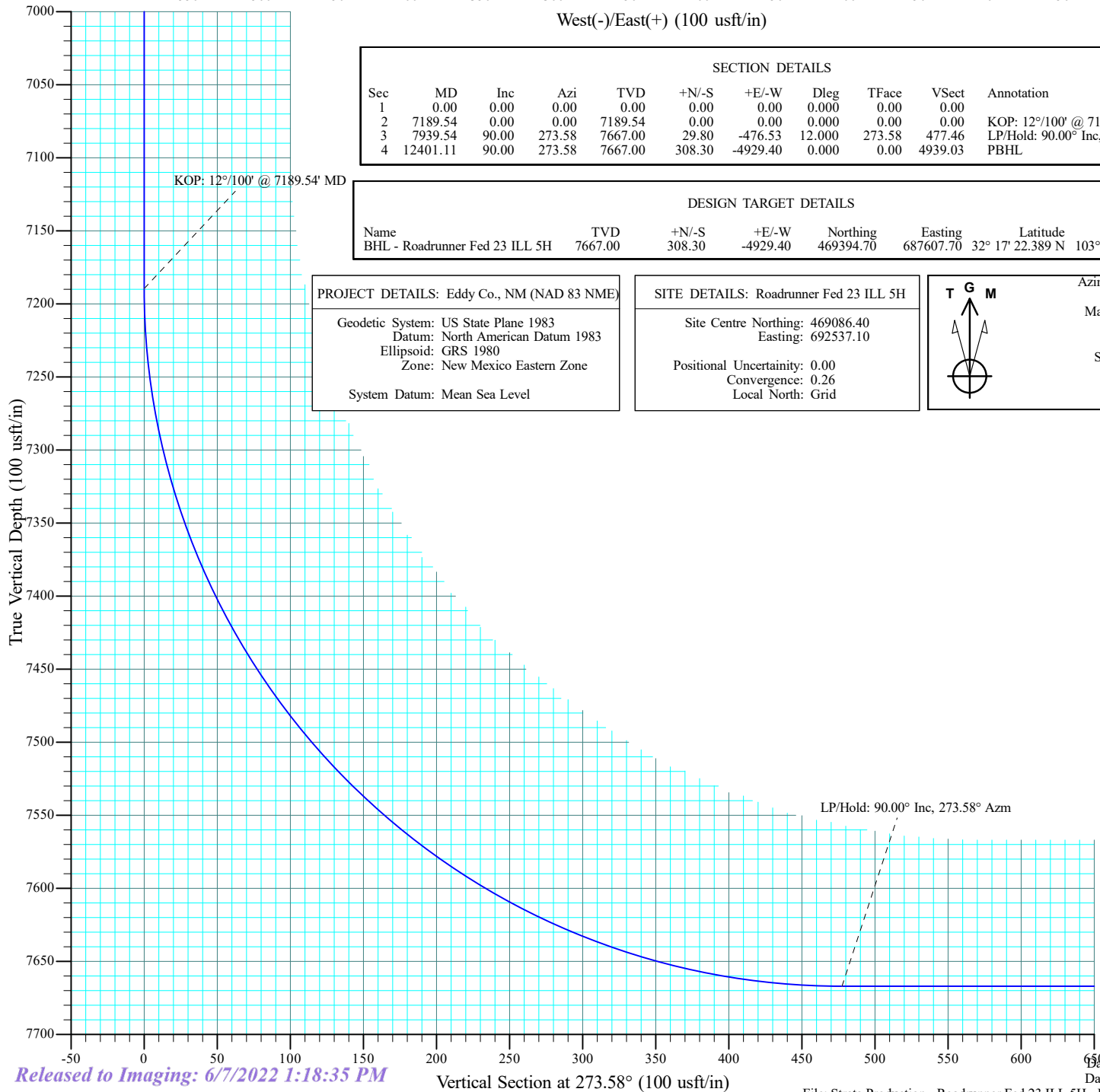
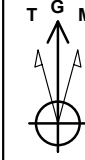
SITE DETAILS: Roadrunner Fed 23 ILL 5H

Site Centre Northing: 469086.40
Easting: 692537.10

Positional Uncertainty: 0.00
Convergence: 0.26
Local North: Grid

Azimuths to Grid North
True North: -0.26°
Magnetic North: 6.34°

Magnetic Field
Strength: 47698.2nT
Dip Angle: 59.92°
Date: 1/1/2022
Model: MVHD



Released to Imaging: 6/7/2022 1:18:35 PM



Strata Production Company

Roadrunner Fed 23 ILL 5H
Eddy Co., NM (NAD 83 NME)
WT-22-***
Lateral 1r0



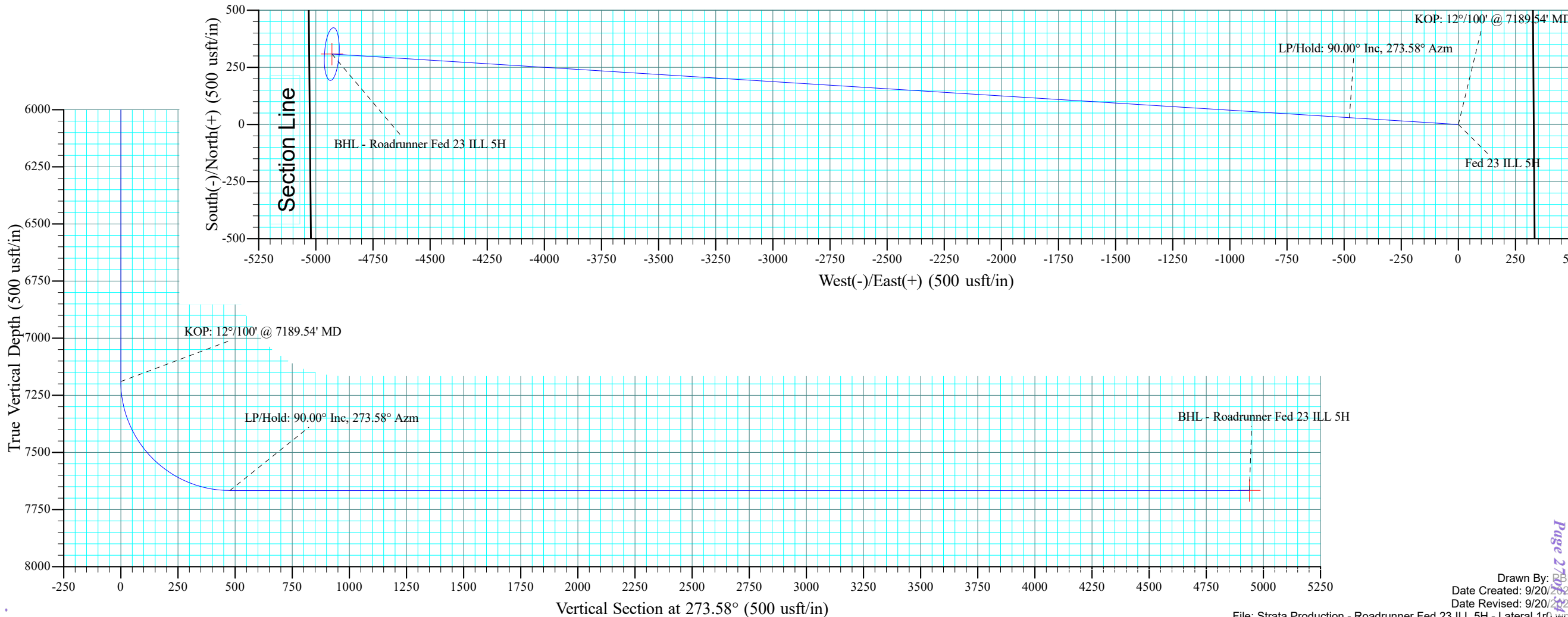
Received by OGD: 6/6/2022 3:56:40 PM

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

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	7189.54	0.00	0.00	7189.54	0.00	0.00	0.000	0.00	0.00		KOP: 12°/100' @ 7189.54' MD
3	7939.54	90.00	273.58	7667.00	29.80	-476.53	12.000	273.58	477.46		LP/Hold: 90.00° Inc, 273.58° Azm
4	12401.11	90.00	273.58	7667.00	308.30	-4929.40	0.000	0.00	4939.03	BHL - Roadrunner Fed 23 ILL 5H	PBHL

SITE DETAILS: Roadrunner Fed 23 ILL 5H	
Site Centre Northing:	469086.40
Easting:	692537.10
Positional Uncertainty:	0.00
Convergence:	0.26
Local North:	Grid

DESIGN TARGET DETAILS									
Name		TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
BHL - Roadrunner Fed 23 ILL 5H		7667.00	308.30	-4929.40	469394.70	687607.70	32° 17' 22.389 N	103° 51' 35.944 W	



Page 27 of 34



Aim Directional Services, LLC

Survey Report

Company:	Strata Production Company	Local Co-ordinate Reference:	Site Roadrunner Fed 23 ILL 5H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Site:	Roadrunner Fed 23 ILL 5H	MD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Well:	Fed 23 ILL 5H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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	Roadrunner Fed 23 ILL 5H		
Site Position:		Northing:	469,086.40 usft
From:	Map	Easting:	692,537.10 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 17' 19.120 N
		Longitude:	103° 50' 38.535 W
		Grid Convergence:	0.26 °

Well	Fed 23 ILL 5H		
Well Position	+N/-S	0.00 usft	Northing: 469,086.40 usft
	+E/-W	0.00 usft	Easting: 692,537.10 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 17' 19.120 N
		Longitude:	103° 50' 38.535 W
		Ground Level:	3,268.00 usft

Wellbore	Planning				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	1/1/2022	6.60	59.92	47,698.200

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	273.58

Survey Tool Program	Date	9/20/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	12,401.11	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

Company:	Strata Production Company	Local Co-ordinate Reference:	Site Roadrunner Fed 23 ILL 5H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Site:	Roadrunner Fed 23 ILL 5H	MD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Well:	Fed 23 ILL 5H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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

Company:	Strata Production Company	Local Co-ordinate Reference:	Site Roadrunner Fed 23 ILL 5H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Site:	Roadrunner Fed 23 ILL 5H	MD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Well:	Fed 23 ILL 5H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.000	0.000	0.000
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.000	0.000	0.000
7,189.54	0.00	0.00	7,189.54	0.00	0.00	0.00	0.000	0.000	0.000
KOP: 12°/100' @ 7189.54' MD									
7,200.00	1.26	273.58	7,200.00	0.01	-0.11	0.11	12.000	12.000	0.000
7,225.00	4.26	273.58	7,224.97	0.08	-1.31	1.32	12.000	12.000	0.000
7,250.00	7.26	273.58	7,249.84	0.24	-3.82	3.82	12.000	12.000	0.000
7,275.00	10.26	273.58	7,274.54	0.48	-7.61	7.63	12.000	12.000	0.000
7,300.00	13.26	273.58	7,299.02	0.79	-12.70	12.72	12.000	12.000	0.000
7,325.00	16.26	273.58	7,323.19	1.19	-19.05	19.09	12.000	12.000	0.000
7,350.00	19.26	273.58	7,347.00	1.67	-26.66	26.71	12.000	12.000	0.000
7,375.00	22.26	273.58	7,370.37	2.22	-35.50	35.57	12.000	12.000	0.000
7,400.00	25.26	273.58	7,393.25	2.85	-45.55	45.64	12.000	12.000	0.000
7,425.00	28.26	273.58	7,415.57	3.55	-56.78	56.89	12.000	12.000	0.000
7,450.00	31.26	273.58	7,437.27	4.33	-69.16	69.30	12.000	12.000	0.000
7,475.00	34.26	273.58	7,458.30	5.17	-82.66	82.82	12.000	12.000	0.000
7,500.00	37.26	273.58	7,478.58	6.08	-97.24	97.43	12.000	12.000	0.000
7,525.00	40.26	273.58	7,498.07	7.06	-112.86	113.08	12.000	12.000	0.000
7,550.00	43.26	273.58	7,516.72	8.10	-129.47	129.72	12.000	12.000	0.000
7,575.00	46.26	273.58	7,534.47	9.20	-147.04	147.32	12.000	12.000	0.000
7,600.00	49.26	273.58	7,551.28	10.35	-165.50	165.83	12.000	12.000	0.000
7,625.00	52.26	273.58	7,567.09	11.56	-184.83	185.19	12.000	12.000	0.000
7,650.00	55.26	273.58	7,581.87	12.82	-204.95	205.35	12.000	12.000	0.000
7,675.00	58.26	273.58	7,595.58	14.12	-225.81	226.25	12.000	12.000	0.000
7,700.00	61.26	273.58	7,608.17	15.47	-247.36	247.85	12.000	12.000	0.000
7,725.00	64.26	273.58	7,619.61	16.86	-269.55	270.07	12.000	12.000	0.000
7,750.00	67.26	273.58	7,629.88	18.28	-292.29	292.86	12.000	12.000	0.000



Aim Directional Services, LLC

Survey Report

Company:	Strata Production Company	Local Co-ordinate Reference:	Site Roadrunner Fed 23 ILL 5H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Site:	Roadrunner Fed 23 ILL 5H	MD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Well:	Fed 23 ILL 5H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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)
7,775.00	70.26	273.58	7,638.93	19.74	-315.55	316.16	12.000	12.000	0.000
7,800.00	73.26	273.58	7,646.76	21.22	-339.24	339.90	12.000	12.000	0.000
7,825.00	76.26	273.58	7,653.33	22.72	-363.31	364.02	12.000	12.000	0.000
7,850.00	79.26	273.58	7,658.63	24.25	-387.69	388.45	12.000	12.000	0.000
7,875.00	82.26	273.58	7,662.65	25.79	-412.32	413.12	12.000	12.000	0.000
7,900.00	85.26	273.58	7,665.37	27.34	-437.12	437.97	12.000	12.000	0.000
7,925.00	88.26	273.58	7,666.78	28.90	-462.02	462.93	12.000	12.000	0.000
7,939.54	90.00	273.58	7,667.00	29.80	-476.53	477.47	11.999	11.999	0.000
LP/Hold: 90.00° Inc, 273.58° Azm									
8,000.00	90.00	273.58	7,667.00	33.58	-536.88	537.93	0.000	0.000	0.000
8,100.00	90.00	273.58	7,667.00	39.82	-636.68	637.93	0.000	0.000	0.000
8,200.00	90.00	273.58	7,667.00	46.06	-736.49	737.93	0.000	0.000	0.000
8,300.00	90.00	273.58	7,667.00	52.30	-836.29	837.93	0.000	0.000	0.000
8,400.00	90.00	273.58	7,667.00	58.55	-936.10	937.93	0.000	0.000	0.000
8,500.00	90.00	273.58	7,667.00	64.79	-1,035.90	1,037.93	0.000	0.000	0.000
8,600.00	90.00	273.58	7,667.00	71.03	-1,135.71	1,137.93	0.000	0.000	0.000
8,700.00	90.00	273.58	7,667.00	77.27	-1,235.51	1,237.93	0.000	0.000	0.000
8,800.00	90.00	273.58	7,667.00	83.51	-1,335.32	1,337.93	0.000	0.000	0.000
8,900.00	90.00	273.58	7,667.00	89.76	-1,435.12	1,437.93	0.000	0.000	0.000
9,000.00	90.00	273.58	7,667.00	96.00	-1,534.93	1,537.93	0.000	0.000	0.000
9,100.00	90.00	273.58	7,667.00	102.24	-1,634.73	1,637.93	0.000	0.000	0.000
9,200.00	90.00	273.58	7,667.00	108.48	-1,734.54	1,737.93	0.000	0.000	0.000
9,300.00	90.00	273.58	7,667.00	114.73	-1,834.34	1,837.93	0.000	0.000	0.000
9,400.00	90.00	273.58	7,667.00	120.97	-1,934.15	1,937.93	0.000	0.000	0.000
9,500.00	90.00	273.58	7,667.00	127.21	-2,033.95	2,037.93	0.000	0.000	0.000
9,600.00	90.00	273.58	7,667.00	133.45	-2,133.76	2,137.93	0.000	0.000	0.000
9,700.00	90.00	273.58	7,667.00	139.69	-2,233.56	2,237.93	0.000	0.000	0.000
9,800.00	90.00	273.58	7,667.00	145.94	-2,333.37	2,337.93	0.000	0.000	0.000
9,900.00	90.00	273.58	7,667.00	152.18	-2,433.17	2,437.93	0.000	0.000	0.000
10,000.00	90.00	273.58	7,667.00	158.42	-2,532.98	2,537.93	0.000	0.000	0.000
10,100.00	90.00	273.58	7,667.00	164.66	-2,632.78	2,637.93	0.000	0.000	0.000
10,200.00	90.00	273.58	7,667.00	170.90	-2,732.59	2,737.93	0.000	0.000	0.000
10,300.00	90.00	273.58	7,667.00	177.15	-2,832.39	2,837.93	0.000	0.000	0.000
10,400.00	90.00	273.58	7,667.00	183.39	-2,932.20	2,937.93	0.000	0.000	0.000
10,500.00	90.00	273.58	7,667.00	189.63	-3,032.00	3,037.93	0.000	0.000	0.000
10,600.00	90.00	273.58	7,667.00	195.87	-3,131.81	3,137.93	0.000	0.000	0.000
10,700.00	90.00	273.58	7,667.00	202.12	-3,231.61	3,237.93	0.000	0.000	0.000
10,800.00	90.00	273.58	7,667.00	208.36	-3,331.42	3,337.93	0.000	0.000	0.000
10,900.00	90.00	273.58	7,667.00	214.60	-3,431.22	3,437.93	0.000	0.000	0.000
11,000.00	90.00	273.58	7,667.00	220.84	-3,531.03	3,537.93	0.000	0.000	0.000
11,100.00	90.00	273.58	7,667.00	227.08	-3,630.83	3,637.93	0.000	0.000	0.000
11,200.00	90.00	273.58	7,667.00	233.33	-3,730.64	3,737.93	0.000	0.000	0.000
11,300.00	90.00	273.58	7,667.00	239.57	-3,830.44	3,837.93	0.000	0.000	0.000
11,400.00	90.00	273.58	7,667.00	245.81	-3,930.25	3,937.93	0.000	0.000	0.000



Aim Directional Services, LLC

Survey Report

Company:	Strata Production Company	Local Co-ordinate Reference:	Site Roadrunner Fed 23 ILL 5H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Site:	Roadrunner Fed 23 ILL 5H	MD Reference:	Well @ 3293.00usft (Assumed 25'KB)
Well:	Fed 23 ILL 5H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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	273.58	7,667.00	252.05	-4,030.05	4,037.93	0.000	0.000	0.000
11,600.00	90.00	273.58	7,667.00	258.29	-4,129.86	4,137.93	0.000	0.000	0.000
11,700.00	90.00	273.58	7,667.00	264.54	-4,229.66	4,237.93	0.000	0.000	0.000
11,800.00	90.00	273.58	7,667.00	270.78	-4,329.47	4,337.93	0.000	0.000	0.000
11,900.00	90.00	273.58	7,667.00	277.02	-4,429.27	4,437.93	0.000	0.000	0.000
12,000.00	90.00	273.58	7,667.00	283.26	-4,529.08	4,537.93	0.000	0.000	0.000
12,100.00	90.00	273.58	7,667.00	289.50	-4,628.88	4,637.93	0.000	0.000	0.000
12,200.00	90.00	273.58	7,667.00	295.75	-4,728.69	4,737.93	0.000	0.000	0.000
12,300.00	90.00	273.58	7,667.00	301.99	-4,828.49	4,837.93	0.000	0.000	0.000
12,401.11	90.00	273.58	7,667.00	308.30	-4,929.40	4,939.03	0.000	0.000	0.000
PBHL - BHL - Roadrunner Fed 23 ILL 5H									

Design Targets

Target Name

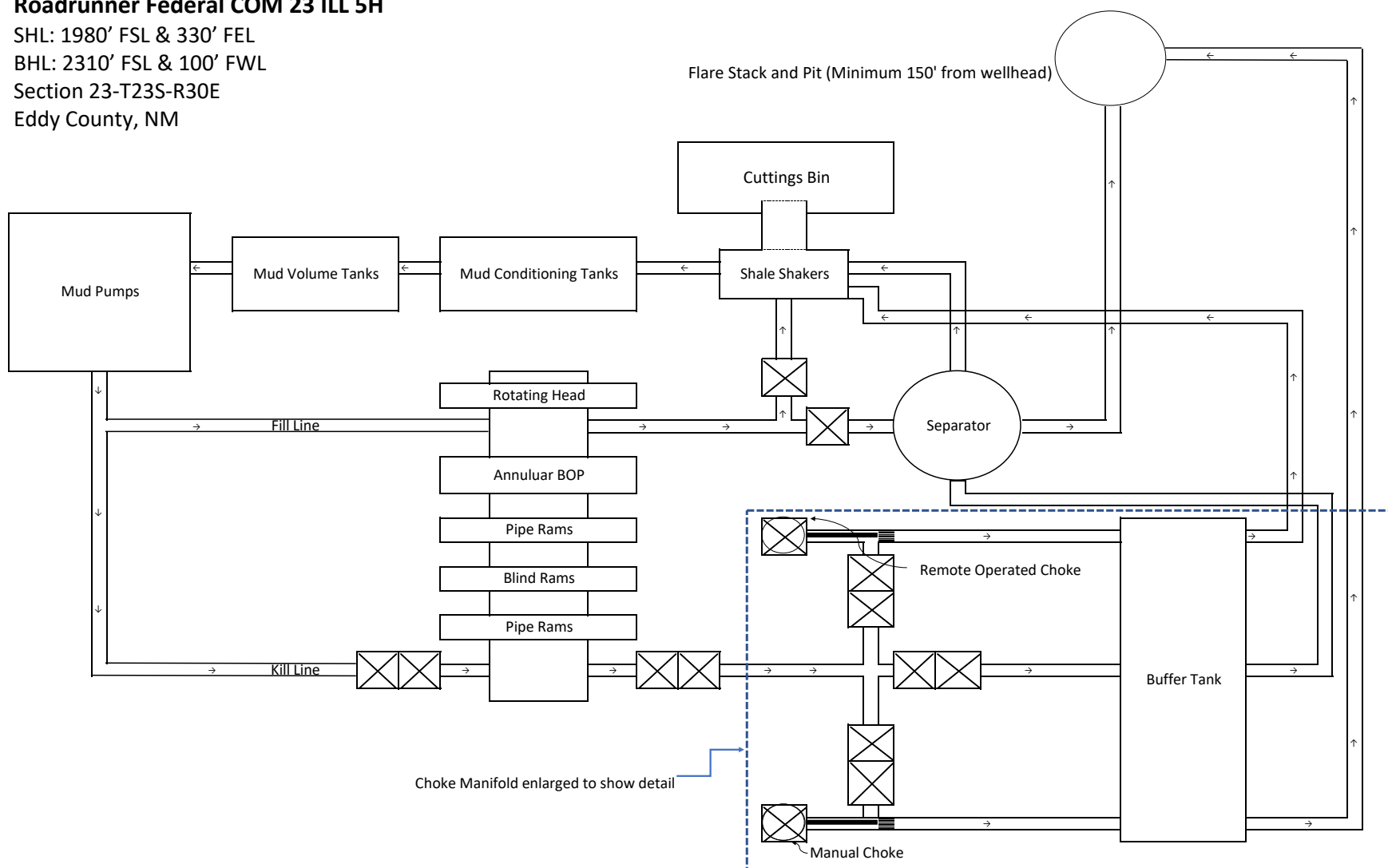
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
BHL - Roadrunner Fed	0.00	0.00	7,667.00	308.30	-4,929.40	469,394.70	687,607.70	32° 17' 22.389 N	103° 51' 35.944 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7190	7190	0	0	KOP: 12°/100' @ 7189.54' MD
7940	7667	30	-477	LP/Hold: 90.00° Inc, 273.58° Azm
12,401	7667	308	-4929	PBHL

Checked By: _____ Approved By: _____ Date: _____

SHL: 1980' FSL & 330' FEL
BHL: 2310' FSL & 100' FWL
Section 23-T23S-R30E
Eddy County, NM



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 114148

CONDITIONS

Operator: STRATA PRODUCTION CO P.O. Box 1030 Roswell, NM 882021030	OGRID:
	21712
	Action Number: 114148
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	6/7/2022
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	6/7/2022
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	6/7/2022
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	6/7/2022
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	6/7/2022