Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. DRILL REENTER 1a. Type of work: 1b. Type of Well: Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone Multiple Zone 2. Name of Operator 9. API Well No. 30-015-55364 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.*) 11. Sec., T. R. M. or Blk. and Survey or Area At surface At proposed prod. zone 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, applied for, on this lease, ft. 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. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the 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



*(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

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

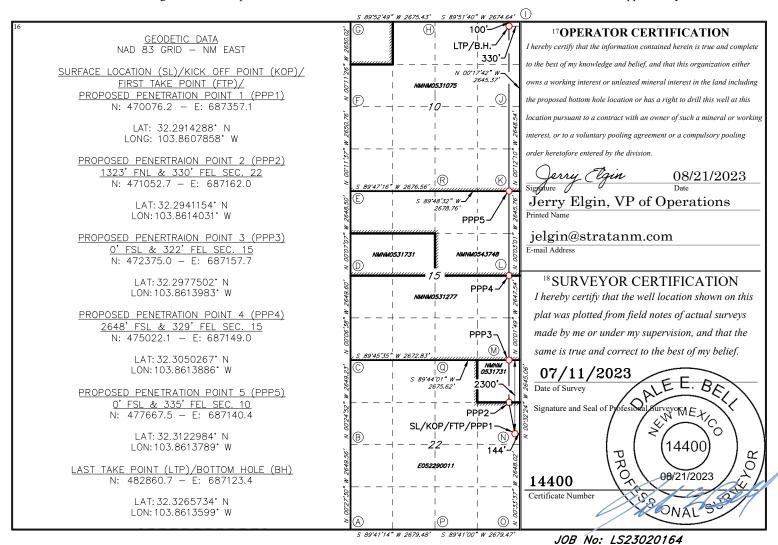
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

■ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Number	r		² Pool Code	:		³ Pool Na	me						
30-015-55	364			24750	FORTY NINER RIDGE DELAWARE									
⁴ Property Co	de		•		erty Name 6 Well Number									
FORTY NINER RIDGE UNIT										57H				
7 OGRID 1	NO.				9	Elevation								
21712 STRATA PRODUCTION COMPANY										3218'				
UL or lot no.	Section	Township	Range	est line	County									
H	22	23S	30E		2300	NORTH	144	EAS	ST	EDDY				
			11]	Bottom F	Iole Location	on If Different Fro	om Surface							
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County				
A	10	23S	S 30E 100 NORTH 330 EAST											
12 Dedicated Acres	s 13 Joint	or Infill 14	Consolidation	Code 15 (Order No.									
400														

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



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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Number	r		² Pool Code			³ Pool Na	me						
				24750		FORTY NINER RIDGE DELAWARE								
⁴ Property Co	de		•	FORTY	ame IDGE UNIT									
7 OGRID NO. 21712 STRATA PRODUCTION COMPANY 9Elevation 3218'														
¹⁰ Surface Location														
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/We	est line	County				
H	22	23S	30E		2300	NORTH	144	EAS	ST	EDDY				
			11]	Bottom H	ole Location	If Different Fr	om Surface							
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County				
A	10 23S 30E 100 NORTH 330 EAST													
12 Dedicated Acres	s 13 Joint	or Infill 14 (Consolidation	Code 15 O	rder No.	•								
400														

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

17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working CORNER DATA NAD 83 GRID interest, or to a voluntary pooling agreement or a compulsory pooling A: FOUND BRASS CAP "1942" J: FOUND BRASS CAP "1916" order heretofore entered by the division. N: 467055.4 - E: 682172.6 N: 480316.7 - E: 687466.4 08/21/2023 B: FOUND BRASS CAP "1942" K: FOUND BRASS CAP "1942" N: 469704.3 - E: 682151.4 N: 477668.6 - E: 687475.8 Jerry Elgin, VP of Operations C: FOUND BRASS CAP "1942" L: FOUND BRASS CAP "1942" N: 472352.8 - E: 682132.3 N: 475023.4 - E: 687478.1 jelgin@stratanm.com E-mail Address D: FOUND BRASS CAP "1942" M: FOUND BRASS CAP "1942" N: 475001.9 - E: 682127.2 N: 472376.5 - E: 687479.5 18 SURVEYOR CERTIFICATION E: FOUND BRASS CAP "1942" N: FOUND BRASS CAP "1942" I hereby certify that the well location shown on this N: 477649.8 - E: 682121.7 N: 469732.1 - E: 687504.4 plat was plotted from field notes of actual surveys F: FOUND BRASS CAP "1942" O: FOUND BRASS CAP "1942" N: 480299.9 - E: 682112.7 N: 467084.8 - E: 687530.3 made by me or under my supervision, and that the same is true and correct to the best of my belief. G: FOUND BRASS CAP "1940" P: FOUND BRASS CAP "1942" N: 482949.4 - E: 682103.9 N: 467070.0 - E: 684851.5 07/11/2023 BEL H: FOUND BRASS CAP "1940" Q: FOUND BRASS CAP "1942" E. N: 482955.0 - E: 684778.7 N: 472364.0 - E: 684804.5 Signature and Seal of Profesional MEX/C ZE'N I: FOUND BRASS CAP "1940" R: FOUND BRASS CAP "1942" N: 482961.4 - E: 687452.8 N: 477659.7 - E: 684797.6 Ō 14400 Certificate Number

JOB No: LS23020164

Strata Production Company

I. Operator:

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Date: 08 / 25 / 23

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

OGRID: _

21712

Amendmen	t due to □ 19.15.27.9.	D(6)(a) NMA	C □ 19.15.27.9.D((6)(b) NN	MAC Othe	:.
				wells pro	oposed to be o	rilled or proposed to
API	ULSTR	Footages	Anticipated Oil BBL/D			Anticipated Produced Water BBL/D
	Sec 22-T23S-R30E	2300' FNL &	800	1,2	200	2,200
		144' FEL				
- e: Provide th	single well pad or co	nnected to a ce	entral delivery poin Completion	nt.	et of wells pro	posed to be drilled First Production
	0/24/2024					Date 11/10/2024
	9/21/2024	10/21/2024	10/31/2022	+	11/5/2024	11/10/2024
ices: 🛛 Atta of 19.15.27.8 t Practices:	ch a complete descript NMAC.	otion of the act	ions Operator wil	l take to	comply with	the requirements of
	int Name: _ le: Provide the bleted from a API API API API API API API API	following information for each neingle well pad or connected to a ceral API ULSTR Sec 22-T23S-R30E int Name: Common Tank Base: Provide the following information of the pad or considered from a single well pad or considered from a single well pad or considered from a complete description of 19.15.27.8 NMAC.	following information for each new or recomple ngle well pad or connected to a central delivery page API ULSTR Footages Sec 22-T23S-R30E 2300' FNL & 144' FEL	following information for each new or recompleted well or set of ringle well pad or connected to a central delivery point. API ULSTR Footages Anticipated Oil BBL/D Sec 22-T23S-R30E 2300' FNL & 800 144' FEL int Name: Common Tank Battery 3 ie: Provide the following information for each new or recompleted oleted from a single well pad or connected to a central delivery point API Spud Date TD Reached Completion Commencement API Spud Date TD Reached Completion Commencement 9/21/2024 10/21/2024 10/31/2024 ent: Attach a complete description of how Operator will size septices: Attach a complete description of the actions Operator will fig. 19.15.27.8 NMAC.	following information for each new or recompleted well or set of wells prongle well pad or connected to a central delivery point. API ULSTR Footages Anticipated Oil BBL/D Gas Mark Sec 22-T23S-R30E 2300' FNL & 800 1,2 144' FEL 144' FEL 151 144' FEL 151' FEL 151' FEL 151' FEL 15	following information for each new or recompleted well or set of wells proposed to be dead regle well pad or connected to a central delivery point. API ULSTR Footages Anticipated Gas MCF/D Sec 22-T23S-R30E 2300' FNL & 800 1,200 144' FEL int Name: Common Tank Battery 3 [See 19.15.2] See Provide the following information for each new or recompleted well or set of wells probleted from a single well pad or connected to a central delivery point. API Spud Date TD Reached Completion Commencement Date Back Date 9/21/2024 10/21/2024 10/31/2024 11/5/2024 ent: Attach a complete description of how Operator will size separation equipment to concern Attach a complete description of the actions Operator will take to comply with for 19.15.27.8 NMAC.

Section 2 - Enhanced Plan

			<u>/E APRIL 1, 2022</u>									
	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 Anticipated Volume of Natural Natural Gas Rate MCF/D Gas for the First Year MCF												
Forty Niner Ridge	Forty Niner Ridge Unit #57H 1,200 400,000											
X. Natural Gas Gathering System (NGGS):												
Operator	Operator System ULSTR of Tie-in Anticipated Gathering Available Maximum Daily Capacity Start Date of System Segment Tie-in											
Strata Production Co.	Forty Niner Ridge	Sec 30-T23S-R30E	11/10/2024	15,000,000								
production operation the segment or porticular the segment or porticular the segment or porticular the segment or porticular the segment or volume of the segment of the se	ns to the existing or plon of the natural gas gath. The natural gas gath from the well prior to e. Operator ⊠ does □g system(s) described s plan to manage proof ty: □ Operator assed in Paragraph (2) of	anned interconnect of gathering system(s) to nering system \(\mathbb{Z}\) will the date of first product does not anticipate the above will continue to duction in response to the trest confidentiality pure	the natural gas gathering syste which the well(s) will be common will not have capacity to gotion. That its existing well(s) connect to meet anticipated increases in the increased line pressure. Suant to Section 71-2-8 NMS .27.9 NMAC, and attaches a f	atticipated pipeline route(s) connecting the em(s), and the maximum daily capacity of nected. Eather 100% of the anticipated natural gas are to the same segment, or portion, of the a line pressure caused by the new well(s). EA 1978 for the information provided in full description of the specific information								

Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal: 🛮 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system: or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan.

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: (a) power generation on lease; **(b)** power generation for grid; (c) compression on lease; (d) liquids removal on lease; (e) reinjection for underground storage;

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

Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

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

Signature: Ocean Elic
Printed Name: Jelry Elgin
Title: Vice President Operations
E-mail Address: jelgin@stratanm.com
Date: 08/25/2023
Phone: 575-622-1127, ext 18
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Strata Production Company Natural Gas Management Plan

Forty Niner Ridge Unit #57H Section 22-T23S-R30E Eddy County, New Mexico

Attachment to NMOCD Form NGMP

VI. Separation Equipment

Well site separation equipment consists of a 4' X 15' X 500 psi WP 2 phase separator at the well site in Section 30-T23S-R31E to separate the gas from the oil and water and a 6' X 20' X 250 psi 3 phase separator that separates any residual gas, water, and oil. The gas is routed to a gas gathering line that connects to Strata's corridor through the field to Common Tank Battery 2 in the SWNW of Section 23-T23S-R30E where the gas goes through a 2 phase separator to remove any residual liquids, then through a compressor and into an interconnect with Enterprise GD LLC located in the NENE of Section 22-T23S-R30E (all in Eddy County, NM).

The oil and water are routed to Common Tank Battery 3 in the NENE of Section 22-T23S-R30E where the oil goes through a separator to remove any residual gas then through a heater treater to remove any residual water. The oil is then stored in 500 bbl steel tanks at the battery. The facility separator, heater treater, and tanks are tied into a vapor recover system so any liberated gas is routed into the gas gathering line.

VII. Strata Production Company will take the following actions to comply with regulations outlined in 19.15.27.8.

A. Venting and Flaring of Natural Gas

Strata will maximize recovery of natural gas by minimizing the waste, as defined in 19.15.2 NMAC, of natural gas through venting and flaring. Strata will be connected to natural gas gathering systems with sufficient capacity to transport its produced natural gas. If there is inadequate capacity to transport the gas, the well(s) will be shut in until there is adequate capacity or other arrangements can be made to avoid waste.

B. Venting and Flaring During Drilling Operations

Drilling rigs shall be equipped with a rig flare located at least 100 ft from the well. The flare will be utilized to combust any natural gas produced through drilling operations. Should gas be flared, an estimated volume will be reported as required by statutes. Gas will not be flared during normal drilling operations.

C. Venting and Flaring During Completion Operations

Natural gas produced during completion operations will be flared. All gas produced will be directed to permanent separation equipment and into sales as soon as practical. If natural gas does not meet pipeline specifications, Strata may flare the gas for up to 60 days or until the gas meets pipeline specifications, whichever is sooner. Strata will properly size the flare which will be equipped with automatic ignition source. The gas will be sampled no less than twice per week and the gas will be routed through Strata's gathering system as soon as it meets pipeline specifications.

D. Venting and Flaring During Production Operations

Natural gas will not be flared during normal production operations except as is allowed under 19.15.27.8 D (1)-(4). If capacity is inadequate, well(s) will be shut in until there is adequate capacity or other arrangements can be made to avoid waste except during emergency or malfunction situations. Flared volumes will be reported as required by statutes.

E. Performance Standards

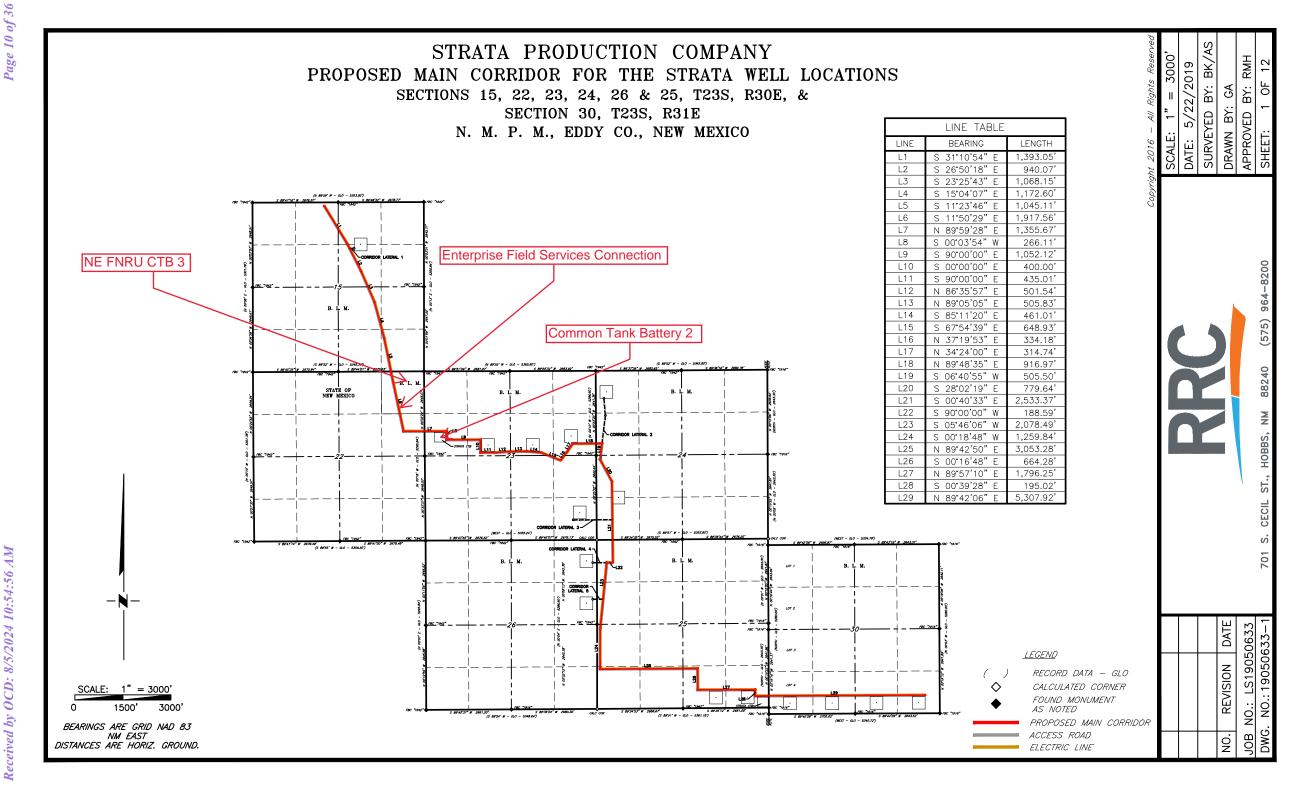
Strata will comply with the performance standards per 19.15.27.8 E (1)-(8). All equipment will be designed to accommodate anticipated volumes and pressures. Storage tanks will be equipped with automatic gauging equipment connected to Strata's SCADA system. Flares will be located at least 100 ft from wells and storage tanks and will be equipped with automatic ignition sources. Strata will conduct AVO inspections to comply with 19.15.27.8 E (5) (a) and 19.15.27.8 E (5) (b)-(c). Any emergency situations resulting in flaring will be resolved to minimize waste.

F. Measurement of Vented and Flared Natural Gas

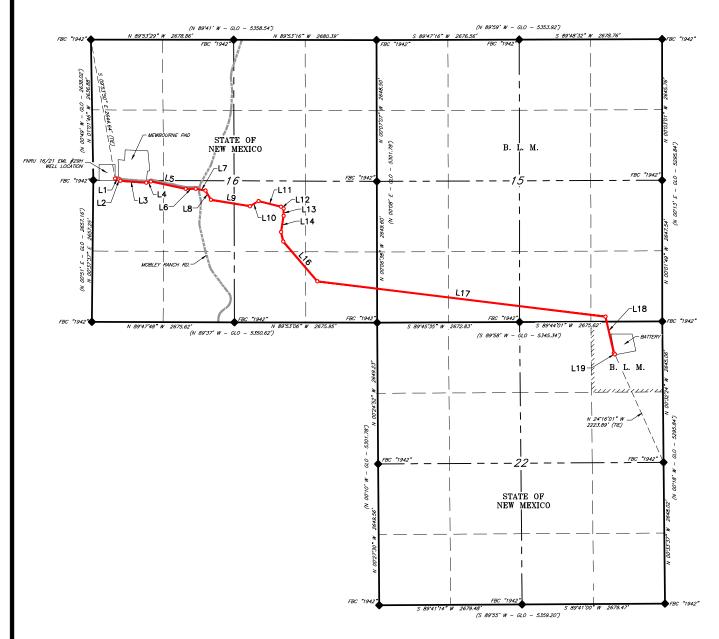
Gas flared as the result of emergency of malfunction will be metered. Gas used beneficially during production operations will be metered or estimated. Should metering be impractical due to equipment malfunction or low flow, Strata will estimate the volume of gas vented or flared. All metering equipment will conform to industry standards and will not be equipped with a bypass around metering equipment except for the sole purpose of inspecting or servicing the metering equipment.

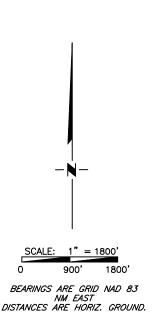
VIII. Maintenance Activities

For maintenance activities involving production equipment and compression, venting will be limited to depressurization of the equipment to provide safe working conditions. In the event maintenance is required on pressurized equipment, associated producing wells will be shut in to minimize waste. Gas normally routed through a vapor recovery unit may be routed to flares to avoid venting for the maintenance of VRU's and associated equipment.



STRATA PRODUCTION COMPANY FNRU 16-21 EML #29H PIPELINE & ELECTRIC LINE SECTIONS 15, 16 & 22, T23S, R30E N. M. P. M., EDDY CO., NEW MEXICO





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



LEGEND

() RECORD DATA − GLO

FOUND MONUMENT
AS NOTED

PROPOSED UTILITY EASEMENT

EXISTING ACCESS ROAD

MOBLEY RANCH RD.

1 REROUTE 3/23/23
NO. REVISION DATE
JOB NO.: LS23030268R

DWG. NO.: 23030268R-1

RRC ENERGY SERVICES, LLC.

(575) 964-8200

701 S. CECIL ST., HOBBS, NM 88240

SCALE: 1" = 1800'

DATE: 03/08/2023

SURVEYED BY: JF/GA

DRAWN BY: LM

APPROVED BY: DEB

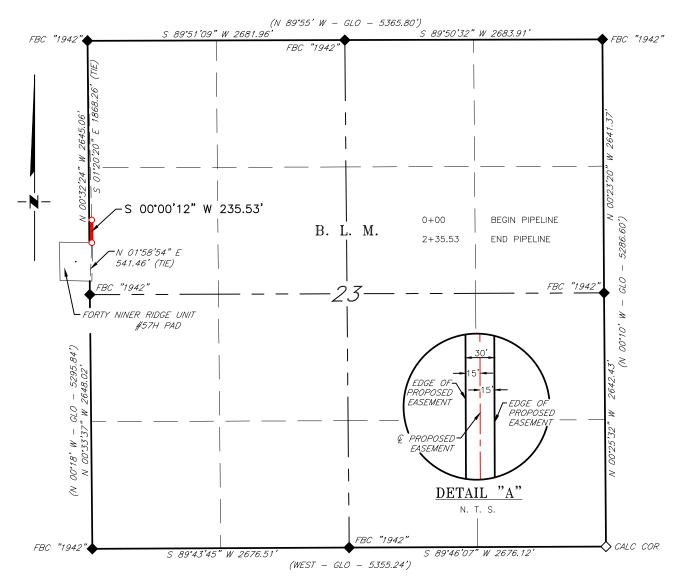
SHEET: 1 OF 5

STRATA PRODUCTION COMPANY

FLOWLINE FOR THE FORTY NINER RIDGE UNIT

#57H WELL LOCATION SECTION 23, T23S, R30E

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



DESCRIPTION

A strip of land 30 feet wide, being 235.53 feet or 14.274 rods in length, lying in Section 23, Township 23 South, Range 30 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Northwest quarter of Section 23, which bears, S 01°20'20" E, 1,868.26 feet from a brass cap, stamped "1942", found for the Northwest corner of Section 23;

Thence S 00°00'12" W, 235.53 feet, to Engr. Sta. 2+35.53, the End of Survey, a point in the Northwest quarter of Section 23, which bears, N 01°58'54" E, 541.46 feet from a brass cap, stamped "1942", found for the West quarter corner of Section 23.

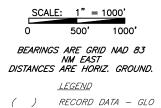
Said strip of land contains 0.162 acres, more or less, and is allocated by forties as follows:

SW 1/4 NW 1/4

14.274 Rods

I, Dale E. Bell, New Mexico Professional Surveyor No. 14400,

0.162 Acres



FOUND MONUMENT AS NOTED

CALCULATED CORNER

PROPOSED PIPELINE

do hereby certify that this Plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey, said survey and plat meets the Minimum Standards for Land Surveying in the State of New Mexico and that it is true and correct to the best of my knowledge and belief.

ORLE E. BEL EN MEXICO PROPERTY OB/2. 08/21/2023

Dale E. Bell

NM PS 14400

Copyright 2016

NO. **REVISION** DATE JOB NO.: LS23070599 NO.: 23070599-1

 \Diamond

ENERGY SERVICES, LLC.

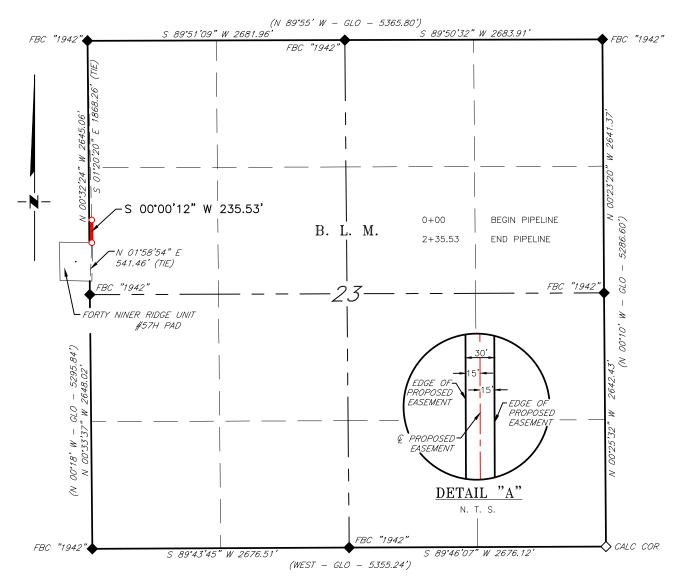
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200 SCALE: 1" = 1000DATE: 07/13/2023 SURVEYED BY: JF/MP/HA DRAWN BY: AR APPROVED BY: DEB SHEET: 1 OF 1

STRATA PRODUCTION COMPANY

FLOWLINE FOR THE FORTY NINER RIDGE UNIT

#57H WELL LOCATION SECTION 23, T23S, R30E

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



DESCRIPTION

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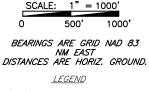
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Said strip of land contains 0.162 acres, more or less, and is allocated by forties as follows:

SW 1/4 NW 1/4

14.274 Rods

0.162 Acres



RECORD DATA — GLO
FOUND MONUMENT
AS NOTED
CALCULATED CORNER
PROPOSED PIPELINE

I, Dale E. Bell, New Mexico Professional Surveyor No. 14400, do hereby certify that this Plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey, said survey and plat meets the Minimum Standards for Land Surveying in the State of New Mexico and that it is true and correct to the best of my knowledge and belief.

DRIE E. BEING METICO (14400)

ORIZINA METICO (14400)

Dale E. Bell NM PS

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NO. REVISION DATE

JOB NO.: LS23070599

DWG. NO.: 23070599-1

 \Diamond

RRC
ENERGY SERVICES, LLC.

14400

ENERGY SERVICES, LLC.

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

SCALE: 1" = 1000'

DATE: 07/13/2023

SURVEYED BY: JF/MP/HA

DRAWN BY: AR

APPROVED BY: DEB

SHEET: 1 OF 1



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

Drilling Plan Data Report

APD ID: 10400093924 **Submission Date:** 10/19/2023

Operator Name: STRATA PRODUCTION COMPANY

Well Name: FORTY NINER RIDGE UNIT Well Number: 57H

Well Type: OIL WELL Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
12234904	RUSTLER	3218	139	139	SALT	NONE	N
12234905	SALADO	2641	577	577	SALT	NONE	N
12234906	BASE OF SALT	-474	3692	3692	SALT	NONE	N
12234907	LAMAR	-514	3732	3732	LIMESTONE, SHALE	NATURAL GAS, OIL	Y
12234908	BELL CANYON	-542	3760	3760	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
12234909	CHERRY CANYON	-1434	4652	4652	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
12234910	BRUSHY CANYON	-2711	5929	5929	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
12234911	BONE SPRING	-4375	7593	7593	LIMESTONE, SANDSTONE, SILTSTONE	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.

attachinent.

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:

Forty_Niner_Ridge_Unit__57H_Choke_Diagram_20231002142816.pdf

BOP Diagram Attachment:

Forty_Niner_Ridge_Unit_57H_BOPE_Description_20230817141149.pdf

Forty_Niner_Ridge_Unit_57H_BOPE_20230817141150.pdf

Well Name: FORTY NINER RIDGE UNIT Well Number: 57H

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	3218	2768	450	H-40	48	ST&C	3.95	7.39	DRY	14.9	DRY	25
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	3800	0	3800	3218	-582	3800	N-80	43.5	LT&C	1.56	2	DRY	2.73	DRY	4.66
1	PRODUCTI ON	8.5	7.0	NEW	API	Y	0	6540	0	6540	3218	-3322		HCP -110	29	LT&C	3.01	3.3	DRY	1.75	DRY	2.04
4	PRODUCTI ON	8.5	5.5	NEW	API	Y	6540	19773	6900	7160	-3682	-3942	13233	HCP -110		OTHER - DWC-IC	3.57	1.84	DRY	2.42	DRY	2.52

Casing Attachments

Casing ID: 1 String SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

 $Forty_Niner_Ridge_Unit__57H_Casing_Worksheet_20231019144230.pdf$

Well Name: FORTY NINER RIDGE UNIT Well Number: 57H

Casing Attachments

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Forty_Niner_Ridge_Unit__57H_Casing_Worksheet_20231019144304.pdf

Casing ID: 3

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Forty_Niner_Ridge_Unit__57H_Tapered_String_20231019144422.pdf

Casing Design Assumptions and Worksheet(s):

Forty_Niner_Ridge_Unit__57H_Casing_Worksheet_20231019144439.pdf

Casing ID: 4

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Forty_Niner_Ridge_Unit__57H_Tapered_String_20231019144208.pdf

Casing Design Assumptions and Worksheet(s):

Forty_Niner_Ridge_Unit__57H_Casing_Worksheet_20231019144213.pdf

Section 4 - Cement

Well Name: FORTY NINER RIDGE UNIT Well Number: 57H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	200	2.51	11	505	100	Class H	None
PRODUCTION	Tail		5200	1977 3	2791	1.43	13.2	4002	25	Class H	Salt, gel, extender, LCM
SURFACE	Lead		0	450	469	1.33	14.8	625	100	Class C	CaCl, LCM

INTERMEDIATE	Lead	0	3300	813	1.91	12.9	1550	50	Class C	Salt, gel, extender, LCM
INTERMEDIATE	Tail	3300	3800	194	1.33	14.8	258	65	Class C	Salt, LCM
PRODUCTION	Lead	2800	5200	238	1.34	14.8	328	50	Class C	None

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: Kelly cock in the drill string, a full opening drill pipe stabbing valve on rig floor, remote kill line, mud gas separator.

Describe the mud monitoring system utilized: Pason pit level monitors, hourly weight check and viscosity, gel strength and pH, solids control.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	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.

Well Name: FORTY NINER RIDGE UNIT Well Number: 57H

Top Depth	3880 Bottom Depth	Mud Type	O Min Weight (lbs/gal)	O.D Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	표 10	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics Note: The second state of the second s
		SATURATED									LCM and gel sweeps.
3800	1977 3	WATER-BASED MUD	8.5	9.5			10				Drill with water based mud using sliders and gel sweeps in the lateral.

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

None

List of open and cased hole logs run in the well:

CEMENT BOND LOG, COMPENSATED DENSILOG, DUAL LATERAL LOG/MICRO-SPHERICALLY FOCUSED, GAMMA RAY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG, CALIPER,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3360 Anticipated Surface Pressure: 1784

Anticipated Bottom Hole Temperature(F): 125

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Forty_Niner_Ridge_Unit_57H_H2S_Plan_20230817141331.pdf

Well Name: FORTY NINER RIDGE UNIT Well Number: 57H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

FNRU_57H_Preliminary_Directional_Plan_20231019145251.pdf

FNRU__57H_WBD_Permitting_20231019145258.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

NGMP_Form_Forty_Niner_Ridge_Unit_20231019150432.pdf

Other Variance attachment:

Strata Production Company Received by OCD: 8/3/2024 10:54:36 AM Forty Niner Ridge Unit #57 H

Section 22-T23S-R30E

SHL: 2,300' FNL and 144' FEL of Section 22

BHL: 100' FNL and 330' FEL of Section 10

Eddy County, NM

#	MD (ft)	Inclination	Azimuth (d	TVD (ft)	DX (ft)	DY (ft))	K (ft)	Y (ft)	Subsea (ft)	Segment Le	Segment In Offset	
	0	0	0	0	0		0	687357.1	470076.2	3218	0	0	0
	98.79	0	0	98.79	0		0	687357.1	470076.2	3119.21	98.79	0	0
	197.59	0	0	197.59	0		0	687357.1	470076.2	3020.41	98.79	0	0
	296.38	0	0	296.38	0		0	687357.1	470076.2	2921.62	98.79	0	0
	395.18	0	0	395.18	0		0	687357.1	470076.2	2822.82	98.79	0	0
	493.97	0	0	493.97	0		0	687357.1	470076.2	2724.03	98.79	0	0
	592.76	0	0	592.76	0		0	687357.1	470076.2	2625.24	98.79	0	0
	691.56	0	0	691.56	0		0	687357.1	470076.2	2526.44	98.79	0	0
	790.35	0	0	790.35	0		0	687357.1	470076.2	2427.65	98.79	0	0
	889.15	0	0	889.15			0	687357.1		2328.85	98.79	0	0
	987.94	0	0	987.94			0		470076.2	2230.06		0	0
	1086.74	0		1086.74			0	687357.1		2131.27		0	0
	1185.53	0		1185.53			0	687357.1		2032.47		0	0
	1284.32	0		1284.32			0			1933.68		0	0
	1383.12	0		1383.12			0	687357.1		1834.88		0	0
	1481.91	0		1481.91			0	687357.1		1736.09	98.79	0	0
	1580.71	0		1580.71			0		470076.2	1637.29	98.79	0	0
	1679.5	0		1679.5			0	687357.1		1538.5	98.79	0	0
	1778.29	0		1778.29			0		470076.2	1439.71		0	0
	1877.09	0		1877.09			0	687357.1		1340.91		0	0
	1975.88	0		1975.88			0	687357.1		1242.12		0	0
	2074.68	0		2074.68			0	687357.1		1143.32		0	0
	2173.47	0		2173.47			0	687357.1		1044.53	98.79	0	0
	2272.27	0		2272.27			0		470076.2	945.74	98.79	0	0
	2371.06	0		2371.06			0		470076.2	846.94		0	0
	2469.85	0		2469.85			0		470076.2	748.15		0	0
	2568.65	0		2568.65			0		470076.2	649.35		0	0
	2667.44	0		2667.44 2766.24			0		470076.2 470076.2	550.56 451.76		0 0	0
	2766.24 2865.03	0		2865.03			0		470076.2	352.97		0	0
	2963.82	0		2963.82			0	687357.1		254.18		0	0
	3062.62	0		3062.62			0		470076.2	155.38		0	0
	3161.41	0		3161.41			0	687357.1		56.59		0	0
	3260.21	0		3260.21			0	687357.1	470076.2	-42.21	98.79	0	0
	3359	0		3359			0	687357.1		-141	98.79	0	0
	3457.79	0		3457.79			0	687357.1		-239.79	98.79	0	0
	3556.59	0		3556.59			0	687357.1		-338.59	98.79	0	0
	3655.38	0		3655.38			0	687357.1	470076.2	-437.38		0	0
	3754.18	0	0	3754.18	0		0		470076.2	-536.18		0	0
	3852.97	0	0	3852.97	0		0	687357.1	470076.2	-634.97	98.79	0	0
	3951.77	0	0	3951.77	0		0		470076.2	-733.76	98.79	0	0
	4050.56	0	0	4050.56	0		0	687357.1	470076.2	-832.56	98.79	0	0
	4149.35	0	0	4149.35	0		0	687357.1	470076.2	-931.35	98.79	0	0
	4248.15	0	0	4248.15	0		0	687357.1	470076.2	-1030.15	98.79	0	0
	4346.94	0	0	4346.94	0		0	687357.1	470076.2	-1128.94	98.79	0	0
	4445.74	0	0	4445.74	0		0	687357.1	470076.2	-1227.74	98.79	0	0
	4544.53	0	0	4544.53	0		0	687357.1	470076.2	-1326.53	98.79	0	0
	4643.32	0	0	4643.32	0		0	687357.1	470076.2	-1425.32	98.79	0	0
	4742.12	0		4742.12			0		470076.2	-1524.12		0	0
	4840.91	0		4840.91	0		0		470076.2	-1622.91		0	0
	4939.71	0		4939.71			0		470076.2	-1721.71		0	0
	5038.5	0		5038.5			0		470076.2	-1820.5		0	0
	5137.29	0		5137.29			0	687357.1		-1919.29	98.79	0	0
	5236.09	0	0	5236.09	0		0	687357.1	470076.2	-2018.09	98.79	0	0

5334.88	0	0	5334.88	0	0	687357.1	470076.2	-2116.88	98.79	0	0
5433.68	0	0	5433.68	0	0	687357.1	470076.2	-2215.68	98.79	0	0
5532.47	0	0	5532.47	0	0	687357.1	470076.2	-2314.47	98.79	0	0
5631.27	0	0	5631.27	0	0	687357.1	470076.2	-2413.27	98.79	0	0
5730.06	0	0	5730.06	0	0	687357.1	470076.2	-2512.06	98.79	0	0
5828.85	0	0	5828.85	0	0	687357.1	470076.2	-2610.85	98.79	0	0
5927.65	0	0	5927.65	0	0	687357.1	470076.2	-2709.65	98.79	0	0
6026.44	0	0	6026.44	0	0	687357.1	470076.2	-2808.44	98.79	0	0
6125.24	0	0	6125.24	0	0	687357.1	470076.2	-2907.24	98.79	0	0
6224.03	0	0	6224.03	0	0	687357.1	470076.2	-3006.03	98.79	0	0
6322.82	0	0	6322.82	0	0	687357.1	470076.2	-3104.82	98.79	0	0
6421.62	0	0	6421.62	0	0	687357.1		-3104.82	98.79	0	0
6520.41	0	0	6520.41	0	0	687357.1	470076.2	-3302.41	98.79	0	0
6619.21	0	0	6619.21	0	0	687357.1	470076.2	-3401.21	98.79	0	0
6718	0	0	6718	0	0	687357.1	470076.2	-3500	98.79	0	0
6749.4	4.4614	1.14014	6749.37	0.02	1.22	687357.1	470077.4	-3531.37	31.4	2.23069	1.22
6779.82	8.60998	1.06831	6779.58	0.09	4.68	687357.2	470080.9	-3561.58	30.42	6.53573	4.68
6811.17	12.7828	1.01831	6810.38	0.2	10.5	687357.3	470086.7	-3592.38	31.35	10.69642	10.5
6841.64	16.6488	0.95291	6839.85	0.33	18.24	687357.4	470094.4	-3621.85	30.47	14.7157	18.24
6873.11	20.55036	0.89587	6869.67	0.49	28.27	687357.6	470104.5	-3651.67	31.47	18.59959	28.28
6903.75	24.16957	0.82748	6898	0.66	39.92	687357.8	470116.1	-3680	30.63	22.36014	39.93
6934.47	27.74384	0.76588	6925.61	0.85	53.37	687358	470129.6	-3707.61	30.72	25.95669	53.37
6966.2	31.2867	0.69098	6953.23	1.05	69	687358.2	470145.2	-3735.23	31.74	29.51504	69
6997.08	34.71119	0.62215	6979.12	1.24	85.81	687358.3	470162	-3761.12	30.87	32.99894	85.82
7028	38.04012	0.54351	7004.01	1.43	104.14	687358.5	470180.3	-3786.01	30.92	36.3759	104.15
7058	41.2931	0.46961	7027.1	1.6	123.29	687358.7	470199.5	-3809.1	30.01	39.66617	123.3
7088.95	44.59036	0.3842	7049.75	1.75	144.37	687358.9	470220.6	-3831.75	30.95	42.94166	144.38
7119.87	47.9503	0.29952	7043.73	1.89	166.71	687359	470242.9	-3853.12	30.92	46.27047	166.72
7150.74	51.29267	0.20562	7091.12	1.99	190.22	687359.1	470266.4	-3873.12	30.87	49.62162	190.23
7182.47	54.84043	0.10853	7110.18	2.06	215.58	687359.2		-3892.18	31.73	53.06686	215.59
7213.17	58.3087	0	7127.09	2.08	241.2	687359.2		-3909.09	30.7	56.57446	241.21
7243.77	61.9129	359.903	7142.34	2.06	267.73	687359.2		-3924.34	30.6	60.11069	267.74
7275.19	65.68796	359.7755	7156.21	1.98	295.91	687359.1	470372.1	-3938.21	31.42	63.8006	295.92
7305.58	69.52457	359.6643	7167.78	1.84	324	687358.9	470400.2	-3949.78	30.39	67.60596	324.01
7336.79	73.56189	359.5226	7177.66	1.63	353.61	687358.7	470429.8	-3959.66	31.22	71.54346	353.61
7367.96	77.80407	359.3908	7185.37	1.35	383.79	687358.5	470460	-3967.37	31.16	75.68259	383.79
7398.19	82.01515	359.2357	7190.66	0.99	413.55	687358.1	470489.8	-3972.66	30.23	79.90987	413.55
7429.4	86.55305	359.0841	7193.77	0.53	444.59	687357.6	470520.8	-3975.77	31.21	84.28404	444.59
7459.83	91.04285	358.9076	7194.41	0	475	687357.1	470551.2	-3976.41	30.43	88.79786	475
7577.22	91.04457	358.9077	7192.27	-2.24	592.35	687354.9	470668.6	-3974.27	117.4	91.04362	592.36
7673.99	91.046	358.9078	7190.5	-4.08	689.09	687353	470765.3	-3972.5	96.77	91.04549	689.1
	91.04742		7188.75	-5.91	784.86		470861.1	-3970.75	95.8	91.04666	784.88
7864.63		358.908	7187.02	-7.71		687349.4		-3969.02		91.04811	879.7
	91.05023		7185.3	-9.5	973.52		471049.7	-3967.3	93.89		973.57
	91.05164		7183.6	-11.27		687345.8		-3965.6		91.05101	1066.48
	91.05331		7181.57	-13.37	1176.64		471142.8	-3963.57		91.05228	1176.72
	91.05469	358.9084	7179.9	-15.11	1267.45		471343.7	-3961.9		91.05395	1267.54
	91.05469									91.05567	
			7177.91	-17.16		687339.9		-3959.91			1375.28
	91.05771		7176.28	-18.85		687338.3		-3958.28		91.05686	1464.02
	91.05933		7174.33	-20.85	1569.14		471645.3			91.05852	1569.28
8641.05			7172.73	-22.5		687334.6	471732			91.06007	1655.96
	91.06227	358.9089	7170.82	-24.46	1758.58		471834.8	-3952.82	102.81	91.06162	1758.75
	91.06387	358.9091	7168.94	-26.39	1860.01		471936.2	-3950.94		91.06295	1860.2
8945.46	91.06543	358.9092	7167.08	-28.3	1960.11	687328.8	472036.3	-3949.08	100.13	91.06454	1960.32
9044.26	91.06699	358.9093	7165.24	-30.18	2058.88	687326.9	472135.1	-3947.24	98.8	91.06641	2059.1
9141.74	91.06852	358.9094	7163.43	-32.03	2156.32	687325.1	472232.5	-3945.43	97.48	91.06771	2156.56
9237.9	91.07005	358.9096	7161.63	-33.86	2252.45	687323.2	472328.7	-3943.63	96.16	91.06927	2252.7
9332.74	91.07153	358.9097	7159.86	-35.67	2347.26	687321.4	472423.5	-3941.86	94.84	91.07083	2347.53
	91.07327		7157.82	-37.74	2456.21		472532.4	-3939.82	108.99		2456.5
	91.07471	358.9099	7156.09	-39.49	2548.19		472624.4	-3938.09	92.01	91.074	2548.5
	91.07639		7154.11	-41.5			472730.1			91.07543	2654.18
JUJJJ	31.07003	333.3101	, 154.11	71.5	2000.00	55,515.0	., 2, 30.1	5550.11	105.7	31.073-3	2057.10

9728.65	91.07777	358.9102	7152.43	-43.2	2743.02	687313.9	472819.2	-3934.43	89.2	91.07711	2743.36
9831.08	91.07938	358.9103	7150.51	-45.15	2845.42	687312	472921.6	-3932.51	102.44	91.07859	2845.78
9931.77	91.08094	358.9105	7148.61	-47.06	2946.07	687310	473022.3	-3930.61	100.69	91.08008	2946.45
10030.72	91.08247	358.9106	7146.74	-48.94	3044.98		473121.2	-3928.74	98.95	91.08183	3045.38
10127.93	91.08395	358.9107	7144.9	-50.79	3142.16	687306.3	473218.4	-3926.9	97.22	91.08326	3142.58
10223.42	91.08539	358.9109	7143.09	-52.61	3237.62	687304.5	473313.8	-3925.09	95.49	91.08466	3238.05
10317.2	91.08678	358.911	7141.32	-54.39	3331.36	687302.7		-3923.32	93.77	91.08603	3331.8
10422.27	91.08831	358.9112	7139.32	-56.38	3436.4	687300.7	473512.6	-3921.32	105.08	91.08742	3436.86
10512.39	91.08958	358.9114	7137.61	-58.1	3526.49	687299	473602.7	-3919.61	90.12	91.08908	3526.97
10613.31	91.09997	358.9115	7135.69	-60.01	3627.37		473703.6	-3917.69	100.92	91.09034	3627.87
						687295.2			98.72	91.09034	3726.57
10712.04 10808.57	91.09227	358.9117	7133.81	-61.89	3726.06			-3915.81			3823.09
	91.0935	358.9118	7131.97	-63.72	3822.56	687293.4	473898.8	-3913.97	96.53	91.09295	
10914.57	91.09475	358.912	7129.94	-65.73	3928.51	687291.4	474004.7	-3911.94	106	91.09407	3929.06
11006.49	91.09576	358.9122	7128.19	-67.48	4020.4	687289.6	474096.6	-3910.19	91.92	91.09544	4020.97
11107.33	91.09676	358.9124	7126.26	-69.39	4121.2	687287.7	474197.4	-3908.26	100.84	91.09623	4121.79
11205.45	91.09762	358.9125	7124.38	-71.25	4219.3	687285.9	474295.5	-3906.38	98.13	91.09712	4219.9
11300.89	91.0983	358.9127	7122.55	-73.06	4314.7	687284	474390.9	-3904.55	95.44	91.09788	4315.32
11403.79	91.09886	358.9129	7120.58	-75.02	4417.56	687282.1	474493.8	-3902.58	102.9	91.09869	4418.2
11503.42	91.09916	358.9132	7118.67	-76.91	4517.15	687280.2		-3900.67	99.62	91.09893	4517.81
11599.78	91.09921	358.9134	7116.82	-78.73	4613.48	687278.4	474689.7	-3898.82	96.36	91.09922	4614.15
11692.91	91.09894	358.9135	7115.03	-80.5	4706.57	687276.6	474782.8	-3897.03	93.13	91.09897	4707.26
11791.64	91.09828	358.9138	7113.14	-82.37	4805.27	687274.7	474881.5	-3895.14	98.73	91.09869	4805.97
11894.94	91.09703	358.914	7111.16	-84.33	4908.53	687272.8	474984.7	-3893.16	103.3	91.0977	4909.26
11993.69	91.09518	358.9143	7109.27	-86.2	5007.24	687270.9	475083.4	-3891.27	98.75	91.0962	5007.99
12087.92	91.09261	358.9145	7107.47	-87.98	5101.44	687269.1	475177.6	-3889.47	94.23	91.0938	5102.2
12184.95	91.08896	358.9147	7105.62	-89.82	5198.44	687267.3	475274.6	-3887.62	97.03	91.09077	5199.22
12283.63	91.08376	358.915	7103.75	-91.69	5297.08	687265.4	475373.3	-3885.75	98.68	91.08621	5297.87
12382.73	91.07655	358.9153	7101.88	-93.57	5396.14	687263.5	475472.3	-3883.88	99.1	91.08022	5396.95
12480.95	91.06647	358.9156	7100.05	-95.43	5494.33	687261.7	475570.5	-3882.05	98.22	91.07156	5495.16
12582.34	91.05163	358.9159	7098.17	-97.34	5595.68	687259.8	475671.9	-3880.17	101.39	91.05909	5596.53
12679.03	91.03032	358.9161	7096.42	-99.17	5692.34	687257.9	475768.5	-3878.42	96.69	91.04081	5693.21
12777.93	90.99671	358.9164	7094.67	-101.04	5791.21	687256.1	475867.4	-3876.67	98.9	91.01359	5792.09
12873.6	90.93964	358.9165	7093.05	-102.85	5886.84	687254.3	475963	-3875.05	95.67	90.96831	5887.74
12973.21	90.8174	358.9163	7091.52	-104.74	5986.43	687252.4	476062.6	-3873.52	99.61	90.87854	5987.34
13069.21	90.37483	358.9139	7090.53	-106.55	6082.4	687250.6	476158.6	-3872.53	96	90.59598	6083.33
13168.53	89.39431	358.9132	7090.73	-108.44	6181.71	687248.7	476257.9	-3872.73	99.33	89.88452	6182.66
13268.1	89.82237	358.9135	7091.41	-110.32	6281.26	687246.8	476357.5	-3873.41	99.57	89.60832	6282.23
13365.61	89.22713	358.913	7092.21	-112.17	6378.75	687244.9	476455	-3874.21	97.51	89.52487	6379.73
13467.59	89.73431	358.9134	7093.14	-114.11	6480.7	687243	476556.9	-3875.14	101.97	89.48065	6481.7
13563.66	89.17262	358.913	7094.06	-115.93	6576.75	687241.2	476653	-3876.06	96.08	89.45342	6577.77
	89.69747		7095.05	-117.84		687239.3				89.43512	6678.46
	89.14573		7096.04	-119.7		687237.4		-3878.04		89.42173	6776.37
13861.23			7097.05	-121.57	6874.25		476950.5	-3879.05		89.41141	6875.33
13960.03		358.9129	7098.08	-123.45	6973.03		477049.2	-3880.08	98.8	89.40393	6974.12
14057.54		358.9134	7099.11	-125.3			477146.7	-3881.11	97.5	89.398	7071.62
	89.12056	358.9129	7100.19	-127.24		687229.9		-3882.19	102.63	89.39293	7174.25
14252.24		358.9134	7101.17	-128.99	7265.17		477341.4	-3883.17	92.08		7266.32
	89.11438	358.9129	7102.29	-130.96	7369.19		477445.4	-3884.29	104.04	89.3861	7370.35
	89.65266	358.9134	7102.23	-132.86	7469.19		477545.4	-3885.37		89.38352	7470.37
		358.9129	7103.37	-134.66		687222.4		-3886.39		89.38165	7565.42
	89.64943	358.9134									7663.71
		358.9134	7105.46 7106.56	-136.53	7662.5		477738.7 477840.2	-3887.46	98.3		
	89.10767			-138.45	7764.02			-3888.56		89.37847	7765.26
	89.64733	358.9134	7107.59	-140.26		687216.8		-3889.59		89.37753	7860.4
14944.22		358.9129	7108.65	-142.11	7956.98		478033.2	-3890.65	97.86		7958.25
15044.79	89.64606	358.9134	7109.75	-144.02	8057.53		478133.7	-3891.75	100.57		8058.82
15148.09	89.10511		7110.88	-145.98	8160.8	687211.1	478237	-3892.88		89.37544	8162.11
15243.4		358.9134	7111.92	-147.79	8256.08		478332.3	-3893.92		89.37533	8257.41
15340.93		358.9129	7112.98	-149.64	8353.59	687207.5	478429.8	-3894.98	97.53		8354.93
	89.64529	358.9134	7114.07	-151.53			478529.5	-3896.07		89.37487	8454.68
	89.10479	358.9129	7115.18	-153.47			478631.5	-3897.18		89.37514	8556.67
15635.22	89.64548	358.9134	7116.19	-155.22	8647.81	687201.9	478724	-3898.19	92.54	89.37512	8649.2

15741.45	89.10515	358.9129	7117.35	-157.24	8754.02	687199.9	478830.2	-3899.35	106.24	89.37533	8755.43
15837.78	89.64598	358.9134	7118.4	-159.06	8850.32	687198	478926.5	-3900.4	96.32	89.37554	8851.75
15935.89	89.10574	358.9129	7119.47	-160.92	8948.41	687196.2	479024.6	-3901.47	98.11	89.37579	8949.86
16035.79	89.64668	358.9134	7120.55	-162.82	9048.29	687194.3	479124.5	-3902.55	99.9	89.37635	9049.75
16137.49	89.10654	358.9129	7121.66	-164.75	9149.96	687192.4	479226.2	-3903.66	101.7	89.37664	9151.45
16227.96	89.64754	358.9134	7122.64	-166.46	9240.41	687190.6	479316.6	-3904.64	90.47	89.37685	9241.91
16333.04	89.10748	358.9129	7123.78	-168.46	9345.46	687188.6	479421.7	-3905.78	105.08	89.37753	9346.98
16426.47	89.64855	358.9134	7124.8	-170.23	9438.87	687186.9	479515.1	-3906.8	93.43	89.37807	9440.41
16521.29	89.1085	358.9129	7125.83	-172.03	9533.67	687185.1	479609.9	-3907.83	94.82	89.37862	9535.22
16631.37	89.64971	358.9134	7127.02	-174.11	9643.72	687183	479719.9	-3909.02	110.07	89.37906	9645.29
16729.18	89.10973	358.9129	7128.08	-175.97	9741.5	687181.1	479817.7	-3910.08	97.81	89.37959	9743.09
16828.39	89.65092	358.9134	7129.15	-177.85	9840.69	687179.3	479916.9	-3911.15	99.21	89.38044	9842.3
16914.54	89.11089	358.9129	7130.08	-179.49	9926.82	687177.6	480003	-3912.08	86.15	89.38105	9928.44
17016.36	89.65214	358.9134	7131.18	-181.42	10028.61	687175.7	480104.8	-3913.18	101.82	89.38147	10030.25
17119.58	89.11225	358.9129	7132.29	-183.37	10131.81	687173.7	480208	-3914.29	103.23	89.38205	10133.47
17224.22	89.65354	358.9134	7133.42	-185.36	10236.43	687171.7	480312.6	-3915.42	104.64	89.38291	10238.1
17315.04	89.1136	358.9129	7134.4	-187.08	10327.22	687170	480403.4	-3916.4	90.82	89.38356	10328.91
17422.3	89.65493	358.9134	7135.55	-189.12	10434.46	687168	480510.7	-3917.55	107.27	89.38448	10436.18
17515.38	89.11503	358.9129	7136.55	-190.88	10527.51	687166.2	480603.7	-3918.55	93.08	89.3847	10529.24
17609.5	89.65627	358.9134	7137.56	-192.67	10621.61	687164.4	480697.8	-3919.56	94.12	89.38589	10623.36
17704.67	89.1164	358.9129	7138.58	-194.47	10716.76	687162.6	480793	-3920.58	95.17	89.38619	10718.52
17817.03	89.6578	358.9134	7139.78	-196.6	10829.09	687160.5	480905.3	-3921.78	112.36	89.38722	10830.88
17914.48	89.11795	358.9129	7140.82	-198.45	10926.52	687158.7	481002.7	-3922.82	97.45	89.38791	10928.32
18012.98	89.65926	358.9134	7141.87	-200.32	11025	687156.8	481101.2	-3923.87	98.5	89.3885	11026.82
18112.54	89.11944	358.9129	7142.93	-202.21	11124.53	687154.9	481200.7	-3924.93	99.56	89.38937	11126.37
18196.31	89.66064	358.9134	7143.83	-203.8	11208.29	687153.3	481284.5	-3925.83	83.78	89.38986	11210.14
18297.81	89.12084	358.9129	7144.91	-205.72	11309.76	687151.4	481386	-3926.91	101.5	89.39085	11311.63
18400.38	89.66219	358.9134	7145.99	-207.67	11412.3	687149.4	481488.5	-3927.99	102.56	89.39144	11414.19
18504.01	89.12241	358.9129	7147.09	-209.63	11515.91	687147.5	481592.1	-3929.09	103.63	89.39229	11517.81
18591.18	89.66366	358.9134	7148.02	-211.29	11603.06	687145.8	481679.3	-3930.02	87.17	89.3931	11604.98
18696.77	89.12389	358.9129	7149.13	-213.29	11708.62	687143.8	481784.8	-3931.13	105.59	89.39375	11710.56
18803.42	89.66529	358.9134	7150.26	-215.31	11815.25	687141.8	481891.5	-3932.26	106.66	89.39458	11817.21
18893.12	89.12541	358.9129	7151.21	-217.01	11904.93	687140.1	481981.1	-3933.21	89.7	89.39554	11906.9
19001.74	89.66682	358.9134	7152.35	-219.07	12013.52	687138	482089.7	-3934.35	108.62	89.39602	12015.52
19093.08	89.12695	358.9129	7153.31	-220.81	12104.84	687136.3	482181	-3935.31	91.34	89.39691	12106.86
19185.17	89.66824	358.9134	7154.28	-222.55	12196.91	687134.6	482273.1	-3936.28	92.09	89.39756	12198.94
19296.67	89.12852	358.9129	7155.45	-224.67	12308.38	687132.4	482384.6	-3937.45	111.5	89.39829	12310.43
19390.41	89.66982	358.9134	7156.44	-226.45	12402.1	687130.7	482478.3	-3938.44	93.74	89.39921	12404.16
19484.9	89.12997	358.9129	7157.43	-228.24	12496.57	687128.9	482572.8	-3939.43	94.49	89.39985	12498.65
19580.15	89.67128	358.9134	7158.42	-230.04	12591.79	687127.1	482668	-3940.42	95.24	89.40078	12593.89
19676.15	89.13145	358.9129	7159.42	-231.86	12687.77	687125.2	482764	-3941.42	96	89.40141	12689.89
19772.9	89.67277	358.9134	7160.43	-233.7	12784.5	687123.4	482860.7	-3942.43	96.76	89.40203	12786.64

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Strata Production Company
WELL NAME & NO.: Forty Niner Ridge Unit 57H
LOCATION: Sec 22-23S-30E-NMP
COUNTY: Eddy County, New Mexico

COA

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

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

- 1. The **13-3/8** inch surface casing shall be set at approximately 450 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - 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 <u>24</u> 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, Capitan Reef, or potash.
 - ❖ In <u>R111 Potash Areas</u> if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing salt string must come to surface.
- 3. The minimum required fill of cement behind the 7 inch production casing (with 5 inch taper) is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.

C. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000** (**3M**) psi.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

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 (API No. / US Well No. contains 30-015-#####)

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

BLM_NM_CFO_DrillingNotifications@blm.gov; (575) 361-2822

Lea County (API No. / US Well No. contains 30-025-#####)

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

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will

- be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR part 3170 Subpart 3172 must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR part 3170 Subpart 3172.
- C. **DRILLING MUD:** Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.
- D. WASTE MATERIAL AND FLUIDS: All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Strata Production Company

Forty Niner Ridge Unit #57H Section 22-T23S-R30E SHL: 2,300' FNL & 144' FEL of Sec 22 BHL: 100' FNL & 330' FEL of Sec 10

Eddy County, NM

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. <u>HYDROGEN SULFIDE TRAINING</u>

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. <u>H2S SAFETY EQUIPMENT AND SYSTEMS</u>

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, mudgas 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.

WARNING

YOU ARE ENTERING AN H₂S AREA AUTHORIZED PERSONNEL ONLY

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

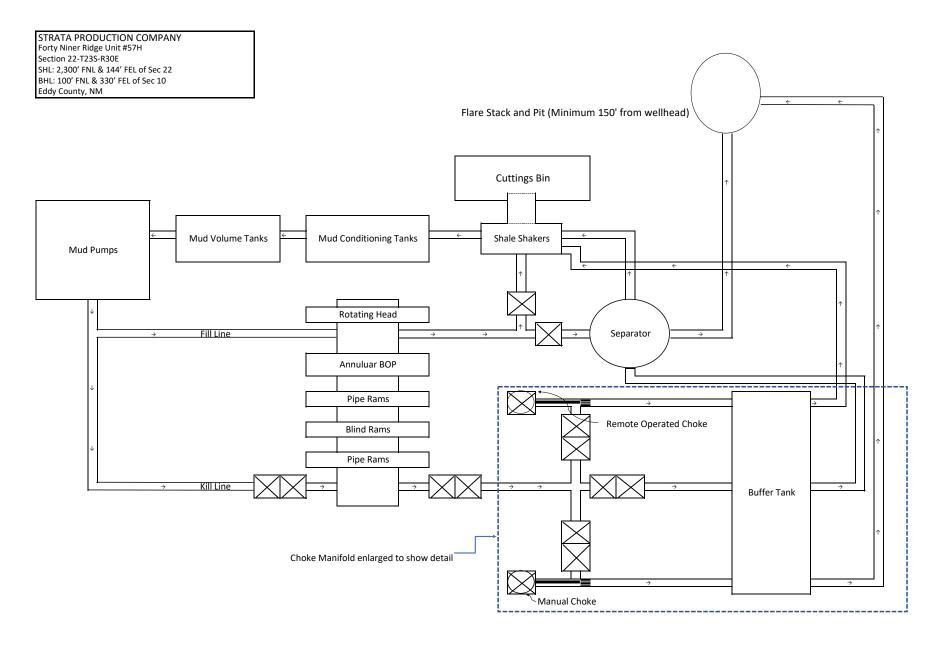
STRATA PRODUCTION COMPANY

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

EMERGENCY NUMBERS

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

Eddy County Sheriff's Office		575-887-7551
Lea County Sherrif's Office	(Lovington)	575-396-3611
New Mexico State Police	(Roswell)	575-622-7200
Eastern NM Medical Center	(Roswell)	575-622-8170
Lea Regional Hospital	(Hobbs)	575-492-5000
Carlsbad Hospital		575-887-4100
Carlsbad Fire Department		575-885-3125
Ambulance Service		575-885-2111
BLM Carlsbad		575-234-5972
BLM Hobbs		575-393-3612
NMOCD Hobbs		575-393-6161
Mosaic Potash Carlsbad		575-887-2871
Strata Office		575-622-1127
Jerry Elgin		575-622-1127 x18
Cheyenne Scharf		307-360-3062
Rygel Russell		575-626-1479
Pilar Mendoza		575-626-8161
Mitch Krakauskas		575-622-1127 x23



STRATA PRODUCTION COMPANY

Forty Niner Ridge Unit #57H

Sec 22-T23S-R30E

SHL: 2,300' FNL & 144' FEL of Sec 22 BHL: 100' FNL & 330' FEL of Sec 10

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 <u>between</u> 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

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 370416

CONDITIONS

Operator:	OGRID:
STRATA PRODUCTION CO	21712
P.O. Box 1030	Action Number:
Roswell, NM 882021030	370416
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	8/27/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	8/27/2024
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	8/27/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	8/27/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	8/27/2024
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	8/27/2024
ward.rikala	This well can not be produced until the operator is in compliance with Rule 5.9.	8/27/2024
ward.rikala	The operator must comply with all of the requirements of R-111-Q.	8/27/2024