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 and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

☒ AMENDED REPORT

PLUGBACK, RECOMPL

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
MORNINGSTAR OPERATING LLC, 400 W 7TH ST, FORT WORTH, TX 76102	330132
	3. API Number: 30-025-30206

4. Property Code	5. Property Name	6. Well No.
30021	VACUUM GLORIETA WEST UNIT	088H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
J	36	17S	34E		1653	S	2309	E	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
VACUUM; GRAYBURG-SAN ANDRES	62180

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
P, A	O		S	3994 GL
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N				

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☒, if applicable.
Signature: Connie Blaylock

Printed name: CONNIE BLAYLOCK
Title: REGULATORY ANALYST
E-mail Address: cblaylock@txoenergy.com
Date: 04/25/2023 Phone: 817-334-7882

OIL CONSERVATION DIVISION

Approved By: P Kautz
Title:
Approved Date: **04/08/2023** Expiration Date: **04/08/2025**
Conditions of Approval Attached

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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

PLUGBACK GLORIETA
RECOMPL GB-SAN ANDRES

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-30206	62180	VACUUM; GRAYBURG-SAN ANDRES

[4] Property Code	[5] Property Name	[6] Well Number
333201	VACUUM GLORIETA WEST UNIT	088H

[7] OGRID No.	[8] Operator Name	[9] Elevation
330132	MORNINGSTAR OPERATING LLC	3994 GL

[10] Surface Location

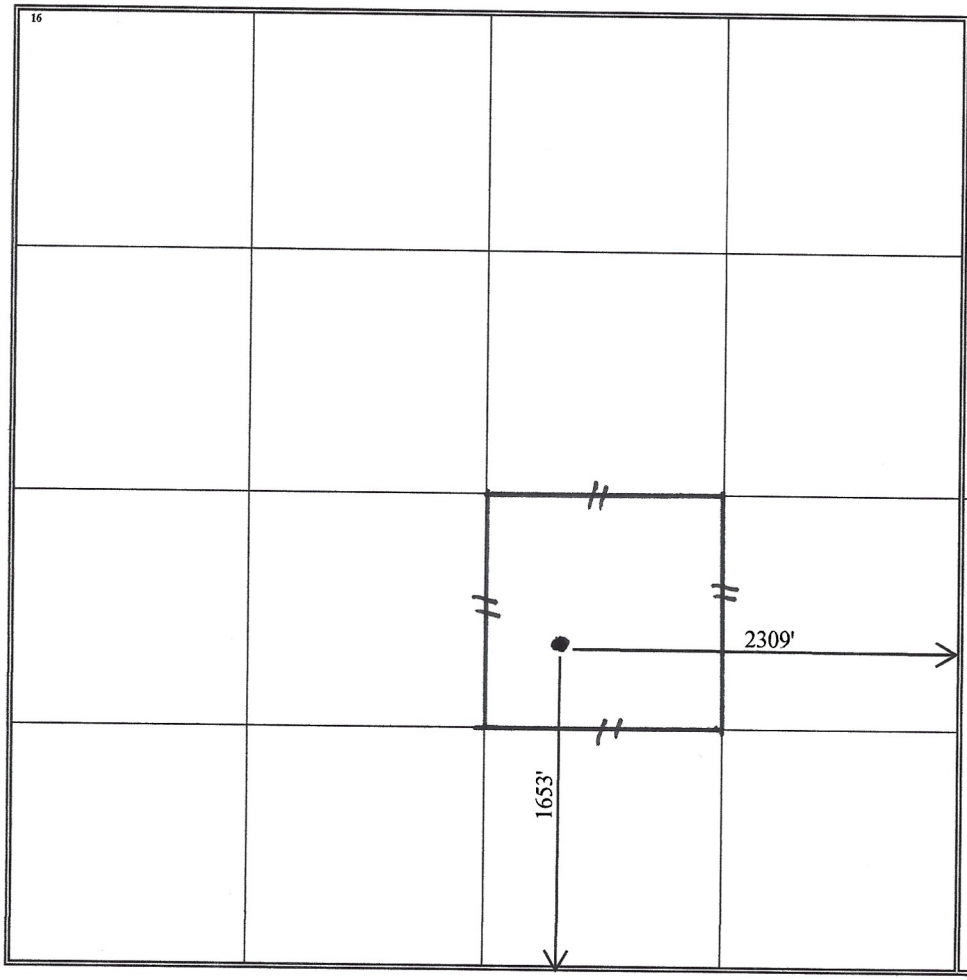
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	36	17S	34E		1653	S	2309	E	LEA

[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

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

No allowable will be assigned to this completion until all interests 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 interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Connie Blaylock 04/24/2023
Signature Date

CONNIE BLAYLOCK
Printed Name

cblaylock@txoenergy.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

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: MORNINGSTAR OPERATING LLC **OGRID:** 330132 **Date:** 04/25/2023

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
VAC GLORIETA WEST UNIT	30-025-30206	J/ 36/ 17S/ 34E	1653 FSL 2309 FEL	50	300	350

IV. Central Delivery Point Name: CENTRAL VACUUM UNIT BATTERY [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
CENTRAL VACUUM UNIT 278	30-025-30206			05/08/23	05/12/23	05/14/23

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.

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:	Connie Blaylock
Printed Name:	CONNIE BLAYLOCK
Title:	REGULATORY ANALYST
E-mail Address:	cblaylock@txoenergy.com
Date:	04/25/2023
Phone:	817-334-7882

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

VI. **Separation Equipment**: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

Each well will full stream produce to a satellite location. At each satellite, bulk and test measurements for unit allocation are performed. Liquids are then sent on to the battery for lact sales. All vessels are sized based on historical well performance, and historical volumes were generally higher than what we now process and produce.

Satellite (gas venting is minimal to none in this satellite bulk and test transport to central battery). Test – 2 phase test vessel and Coriolis measurement on liquid and gas phases. Bulk – 2 phase vessel for gas separation from liquids. All gas from the satellite is sent to the plant for processing and reinjection into the unit. All liquids from the satellite are sent to the Central Vacuum Unit Battery.

Central Vacuum Unit Battery (all gas and vapors are collected and compressed to the plant to minimize any venting). Gas scrubber and FWKO are utilized to remove any excess gas. This gas is gathered by our GRU compression to be sent to the gas plant for processing and reinjection into the unit. Water is moved from holding tanks to suction tanks to be reinjected into the unit. In the event of an emergency, gas can be routed to a flare on location.

VII. **Operational Practices**: Attach a complete description of the action Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

- Drilling Operations: Any natural gas produced during drilling operations will be combusted with a flare line. A properly sized flare stack will be located a minimum of 100 feet from the nearest surface hole location. If flaring isn't possible or poses a risk, Operator will vent natural gas to avoid any safety or environmental risks and report natural gas.

- Completion Operations: Hydrocarbon production will be minimized during completion and flowback operations. No flowback will occur until the well is connected to a properly sized system. When feasible, natural gas will be flared rather than vented. When sustained producible volumes are obtained, operations will turn to separation facilities and gathering pipeline.

- Production Operations: Efforts will be made to minimize waste. Process equipment (separator and tanks) is designed for efficient separation and routing produced gas to the sales pipeline. Flaring rather than venting will be the preferred method to handle emergencies and malfunctions. Equipment will be properly maintained with routine inspections and preventative maintenance. Weekly AVOs will be performed at facilities.

VIII. **Best Management Practices**: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- Best management practices are used to minimize venting and flaring during downhole operations.

- Flaring will be used in lieu of venting when feasible.
- Adequate well control during completion operations will be employed to minimize oil and gas production.
- Tanks and vessels are isolated from their respective facilities prior to inspection, maintenance, and repairs.
- The preventive maintenance program includes weekly AVO inspections, identification of failures or malfunctions, and repairs as needed.
- Coordinate with third-party gathering and sales operators to minimize downtime and the need for venting/flaring during downstream pipeline and gas plant events.

CURRENT WELLBORE DIAGRAM

Created:	8/19/2003	**By:**					
Updated:	3/27/2023	**By:**	JFR				
Lease:	Vacuum Glorieta West Unit		**Well No.:**	88H	**Field:**	Vacuum Glorieta	
Surface Location:	1653' FSL & 2309' FEL		**Unit Ltr:**	J	**Sec:**	36	**TSHP/Range:** 17S-34E
Bottomhole Location:	577' FSL & 1763' FEL		**Unit Ltr:**	O	**Sec:**	36	**TSHP/Range:** 17S-34E
County:	Lea	**St:** NM	**St Lease:**	B-155	**API:**	30-025-30206	
Current Status:	Active Oil Well		**Elevation:**	4006'			
Directions to Wellsite:	Buckeye, New Mexico						

Surface Csg.

Size:	16"
Wt.:	75#, J-55
Set @:	400'
Sxs cmt:	650 + 175
Circ:	Yes
TOC:	Surface
Hole Size:	20"

Intermediate Csg.

Size:	11-3/4"
Wt.:	42#, H-40
Set @:	1540'
Sxs Cmt:	1300
Circ:	Yes
TOC:	Surface
Hole Size:	14 3/4"

Intermediate Csg.

Size:	8-5/8"
Wt.:	32#, S-80 & K-55
Set @:	4840'
Sxs Cmt:	1400 (stg 1-950, stg 2-450)
Circ:	Yes
DV tool:	1572'
Hole Size:	11"

Production Csg.

Size:	5-1/2"
Wt.:	15.5#, J-55
Set @:	6275'
Sxs Cmt:	1100 (stg 1-500, stg 2-600)
Circ:	Yes
DV tool	4975'
Hole Size:	7 7/8"

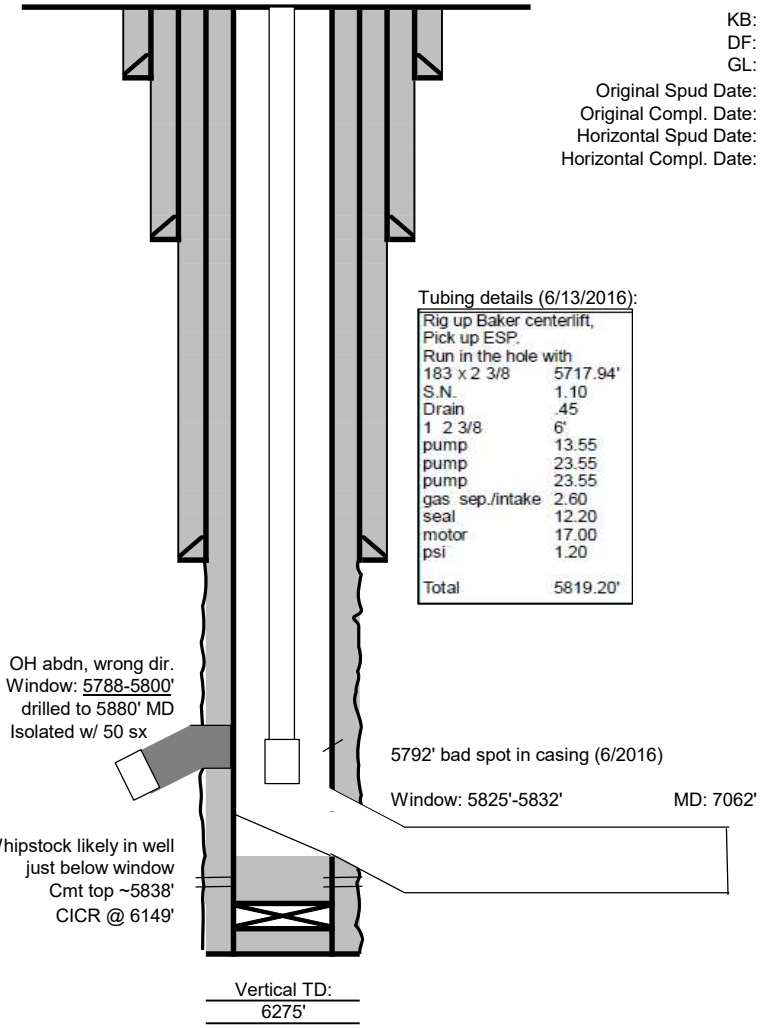
Original Vertical TD: 6275'

Perforations:

6094'-6120'-sqzd
CR @ 6149', 6180-84'-sqzd

HORIZONTAL INFORMATION

Top of Horizontal Window:	5825'
Bot of Horizontal Window:	5832'
Horizontal Drilling Interval:	5826'-7062', Open Hole
Horizontal TD:	7062'
TVD:	5930'



PROPOSED
WELLBORE DIAGRAM

Created:	8/19/2003	**By:**						
Updated:	3/27/2023	**By:**	JFR					
Lease:	CVU #278 (formerly VGWU #88)			**Well No.:**		**Field:**	Vacuum Glorieta	
Surface Location:	1653' FSL & 2309' FEL			**Unit Ltr:**	J	**Sec:**	36	**TSHP/Range:** 17S-34E
Bottomhole Location:	577' FSL & 1763' FEL			**Unit Ltr:**	O	**Sec:**	36	**TSHP/Range:** 17S-34E
County:	Lea	**St:**	NM	**St Lease:**	B-155	**API:**	30-025-30206	
Current Status:	Active Oil Well			**Elevation:**	4006'			
Directions to Wellsite:	Buckeye, New Mexico							

Surface Csg.

Size:	16"
Wt.:	75#, J-55
Set @:	400'
Sxs cmt:	650 + 175
Circ:	Yes
TOC:	Surface
Hole Size:	20"

Intermediate Csg.

Size:	11-3/4"
Wt.:	42#, H-40
Set @:	1540'
Sxs Cmt:	1300
Circ:	Yes
TOC:	Surface
Hole Size:	14 3/4"

Intermediate Csg.

Size:	8-5/8"
Wt.:	32#, S-80 & K-55
Set @:	4840'
Sxs Cmt:	1400 (stg 1-950, stg 2-450)
Circ:	Yes
DV tool:	1572'
Hole Size:	11"

Production Csg.

Size:	5-1/2"
Wt.:	15.5#, J-55
Set @:	6275'
Sxs Cmt:	1100 (stg 1-500, stg 2-600)
Circ:	Yes
DV tool	4975'
Hole Size:	7 7/8"

Original Vertical TD: 6275'

Perforations:

6094'-6120'-sqzd
CR @ 6149', 6180-84'-sqzd

HORIZONTAL INFORMATION

Top of Horizontal Window:	5825'
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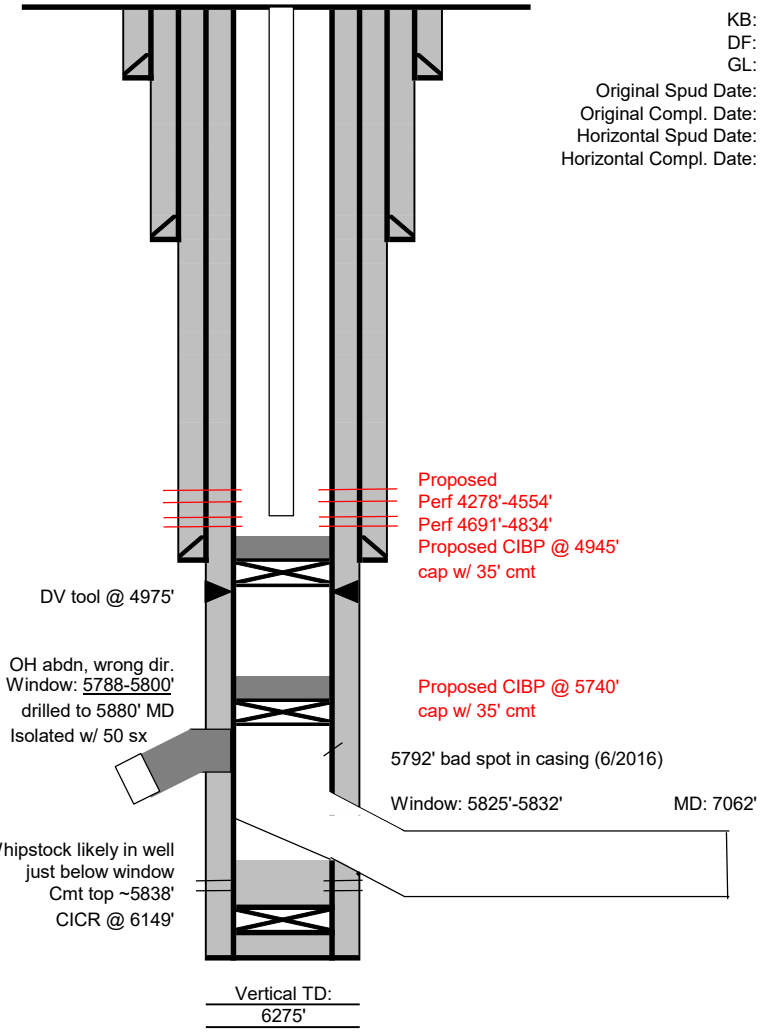
Horizontal Drilling Interval:	5826'-7062', Open Hole
Horizontal TD:	7062'
TVD:	5930'



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

CONDITIONS

Action 211043

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 211043
	Action Type: [C-101] Drilling Non-Federal/Indian (APD)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	4/27/2023