<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III 1000 Rio Brazos Rd., Aztec, NM 87410

Phone:(505) 334-6178 Fax:(505) 334-6170 **District IV** 

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form C-101 August 1, 2011

Permit 334648

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

			AFFLICATI	ION FOR PERIVITI	O DRILL, RE-	ENTER, DEEPEN	, PLUGBACK	, OR ADD A ZOI	VE.			
1. Operate	Operator Name and Address  3R Operating, LLC  331569											
	4000 N BIG SPRING ST  Midland, TX 79705  3. API Number 30-025-51126											
4. Propert	4. Property Code 5. Property Name MORPHEUS 25 36 STATE COM								No. 001H			
					7. Surf	ace Location						
UL - Lot		Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County		
	L 25 20S 35E L					2540	S	1105	W		Lea	
					8. Proposed B	ottom Hole Location						
UL - Lot												
	M	36	20S	35E	M	100	S	330	W		Lea	

#### 9. Pool Information

Additional Well Information											
	Additional Well Information										
FEATHERSTONE;BONE SPRING 24250											

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3675
16. Multiple	17. Proposed Depth	18. Formation	19. Contractor	20. Spud Date
N	17918	Bone Spring		4/1/2023
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

Туре	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	2000	940	0
Surf	17.5	13.375	54.5	2000	390	1300
Int1	12.25	9.625	40	5800	400	4800
Int1	12.25	9.625	40	5800	1500	0
Prod	8.75	5.5	20	17918	1530	9700
Prod	8.75	5.5	20	17918	537	4800

#### Casing/Cement Program: Additional Comments

	22. Proposed Blowout Prevention Program									
Type Working Pressure Test Pressure Manufacturer										
Annular	2500	2500	CAMERON							
Double Ram	5000	5000	CAMERON							
Pipe	5000	5000	CAMERON							

knowledge and b	elief.	true and complete to the best of my  NMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVATI	ON DIVISION	
Printed Name:	Electronically filed by Lauren Fra	nco	Approved By:	Paul F Kautz		
Title:			Title:	Geologist		
Email Address:	Ifranco@3roperating.com		Approved Date:	2/27/2023 Expiration Date: 2/27/2025		
Date:	2/18/2023	Phone: 432-413-4148	Conditions of Appr	roval Attached		

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

# State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

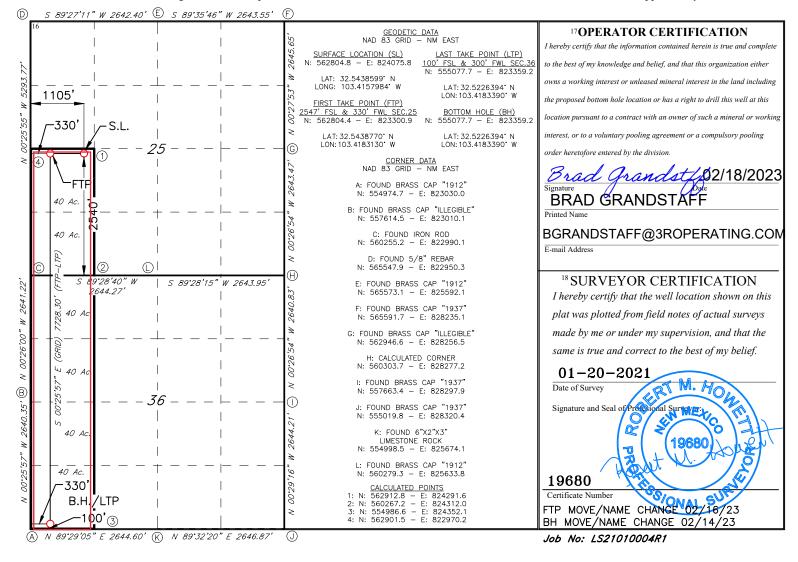
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number				<sup>2</sup> Pool Code	:	<sup>3</sup> Pool Name					
				24250	FEATHERSTONE; BONE SPRING						
4Property Co	de		-		5 Property				6 Well Number		
			M	ORPHE	US 25 36	S STATE COM			1H		
7OGRID					8 Operato					levation	
33156	9			3]	R OPERAT	TING, LLC.			;	3675'	
					10 Surfac	e Location					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/We	st line	County	
L	25	20S	35E		2540	SOUTH	1105	WES	ST	LEA	
			11	Bottom F	Iole Location	on 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	st line	County	
M	36	20S	35E		100	SOUTH	330	WES	ST	LEA	
12 Dedicated Acre	s 13 Joint	or Infill 14	Consolidation	Code 15 (	Order No.						
240											

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.



Inten	t	As Dril	led											
API#	ŀ													
Ope	rator Nai	me:				Prop	oerty N	ame:						Well Number
Kick (	Off Point	(KOP)												
UL	Section	Township	Range	Lot	Feet		From N	I/S	Feet		From	n E/W	County	
Latit	ude				Longitu	ıde							NAD	
First <sup>-</sup>	Take Poir	it (FTP)												
UL	Section	Township	Range	Lot	Feet		From N	I/S	Feet		Fron	n E/W	County	
Latit	ude				Longitu	ıde							NAD	
Last 1	「ake Poin	t (LTP)			·									
UL	Section	Township	Range	Lot	Feet	Fro	m N/S	Feet		From E	/W	Count	Э	
Latit	ude				Longitu	ıde						NAD		
Is this	s well the	defining v	vell for th	ie Hori	zontal S <sub>l</sub>	pacinį	g Unit?			]				
Is this	s well an	infill well?												
Spaci	ng Unit.	lease provi	ide API if	availal	ole, Ope	rator	Name	and w	vell n	umber	for [	Definir	ng well fo	or Horizontal
API#	!													
Ope	rator Nai	ne:				Pro	oerty N	ame:						Well Number

KZ 06/29/2018

<u>District I</u> 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** 

Form APD Comments

Permit 334648

#### PERMIT COMMENTS

Operator Name and Address:	API Number:
3R Operating, LLC [331569]	30-025-51126
4000 N BIG SPRING ST	Well:
Midland, TX 79705	MORPHEUS 25 36 STATE COM #001H

Created By	Comment	Comment Date
pkautz	HOLD DDP IS INCOMPLETE	2/27/2023

Form APD Conditions

Permit 334648

<u>District I</u> 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** 

#### PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
3R Operating, LLC [331569]	30-025-51126
4000 N BIG SPRING ST	Well:
Midland, TX 79705	MORPHEUS 25 36 STATE COM #001H

OCD	Condition
Reviewer	
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
pkautz	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
pkautz	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
pkautz	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
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

#### **3R OPERATING, LLC**

1004 N . Big Spring Street,

Suite 325

Midland, TX 79701

# H2S Contingency Plan Lea County, NM

#### **Escape**

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road. Crew should then block entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are NO homes or buildings in or near the ROE.

#### Assumed 100 ppm ROE = 3000' 100 ppm H2S concentration shall trigger activation of this plan

#### **Emergency Procedures**

In the event of a release of gas containing H2S, the first responder(s) must:

- « Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- « Evacuate any public places encompassed by the 100 ppm ROE.
- « Be equipped with H2S monitors and air packs in order to control the release.
- « Use the "buddy system" to ensure no injuries occur during the response.
- « Take precautions to avoid personal injury during this operation.
- « Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- « Have received training

in the: Detection of

H2S, and

Measures for protection against the gas,

Equipment used for protection and emergency response.

#### **Ignition of Gas Source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (S02). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

#### Characteristics of H2S and SO,

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H2S	1.189 Air=1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO2	2.21 Air=1	2 ppm	N/A	1000 ppm

#### **Contacting Authorities**

3 Bear Field Services personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to sit e. The following call list of essential and potential responders has been prepared for use during a release. 3 Bear Field Services, LLC response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMERP).

#### **Hydrogen Sulfide Drilling Operations Plan**

- 1. <u>All Company and Contract personnel admitted on location must be trained by a qualified H2S</u> safety instructor to the following:
  - A. Characteristics of H2S
  - B. Physical effects and hazards
  - C. Principal and operation of H2S detectors, warning system and briefing areas.
  - D. Evacuation procedure, routes and first aid.
  - E. Proper use of safety equipment & life support systems
  - F. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30-minute pressure demand air packs.

#### 2. H2S Detection and Alarm Systems:

- a. H2S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may play placed as deemed necessary.
- b. An audio alarm system will be installed on the derrick floor and in the top doghouse.

#### 3. Windsock and/or wind streamers:

- a. Windsock at mudpit area should be high enough to be visible.
- b. Windsock on the rig floor and/ or top doghouse should be high enough to be visible.

#### 4. Condition Flags and Signs

- a. Warning sign on access road to location.
- Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H2S present in dangerous concentration). Only H2S trained and certified personnel

admitted to location.

#### 5. Well control equipment:

a. See exhibit BOP and Choke Diagrams

#### 6. Communication:

- a. While working under masks chalkboards will be used for communication.
- b. Hand signals will be used where chalk board is inappropriate.
- c. Two-way radio will be used to communicate off location in case of emergency help is required. In most cases, cellular telephones will be available at most drilling foreman's trailer or living quarters.

#### 7. <u>Drill stem Testing</u>:

No DSTs are planned at this time.

- 8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.
- 9. If H25 is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

#### **Emergency Assistance Telephone List**

#### Ridge Runner Resources. LLC

Ridge Runner Resources, LLC	Office:	(432)686-2973
CEO-Brian Cassens	Office:	(817)953-0480
Drilling Superintendent-Russell Simons Production Superintendent-Paul Martinez	Cell: Cell:	(830)285-7501 (325)206-1722

Public Safety:			911 or_
Lea County Sheriff's Department	Number:	(575)396-3611	
Lea County Emergency Managemer	Number:	(575)391-2983	
Lea County Fire Marshal			
Lorenzo Velasquez, Director	•	Number:	(575)391-2983
Jeff Broom, Deputy Fire Mai	rshal	Number:	(575)391-2988
Fire Department:			
Knowles Fire Department		Number:	(505)392-2810
City of Hobbs Fire Department		Number:	(505)397-9308
Jal Volunteer Fire Department		Number:	(505)395-2221
Lovington Fire Department		Number:	(575)396-2359
Maljamar Fire Department		Number:	(505)676-4100
Tatum Volunteer Fire Departm	Number:	(505)398-3473	
<b>Eunice Fire Department</b>	Number:	(575)394-3258	
Hospital: Lea Regional Medical Center		Number:	(575)492-5000
AirMed: Medevac	Number:	(888)303-9112	
Dept. of Public Safety	Number:	(505)827-9000	
New Mexico OCD-Dist. 1-Hobbs-	Office	Number:	(575)393-6161
	Emergency	Number:	(575)370-3186
Lea County Road Department		Number:	(575)391-2940
NMDOT		Number:	(505)827-5100
Bureau Of Land Management Pecos			
District Office		Number:	(575)627-0272
Carlsbad Field Office	Number:	(575)234 5972	

WELL DETAILS: Morpheus 25-36 State 2BS Com #1H

Northing

Longitude

**Easting** Latittude -103.41579848 562804.80 32.54385984 824075.80

3R Operating, LLC Site: Morpheus 25-36 State Well: Morpheus 25-36 State 2BS Com #1H

Wellbore: Permit Plan: APD-Rev01

Formation

Seven Rivers

Rustler

Salado

Yates

Queen

Delaware

Bone Spring

1st Bone Spring Sand

2nd Bone Spring Sand

FORMATION TOP DETAILS

1900.73

2855.33

4247.04

5794.50

8100.62

9472.94

10118.54

4840.00

5775.00

10070.00

# **Section Details**

Sec	MD	lno	Azi	TVD	+N/-S	+E/-W	Dlog	TE	VSect	
Sec		Inc	AZI	IVD	TIN/-0	<b>+⊏/-</b> VV	Dleg	TFace	VSeci	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	
3	1875.23	5.63	274.25	1874.62	1.36	-18.36	1.50	274.25	-1.50	
4	8457.71	5.63	274.25	8425.38	49.22	-662.18	0.00	0.00	-54.18	
5	8832.94	0.00	0.00	00.0088	50.58	-680.54	1.50	180.00	-55.69	
6	9803.73	0.00	0.00	9770.79	50.58	-680.54	0.00	0.00	-55.69	
7	10403.73	60.00	192.20	10266.99	-229.43	-741.08	10.00	192.20	223.86	
8	10726.93	90.00	179.57	10350.00	-535.98	-770.23	10.00	-24.13	530.19	
9	17918.25	90.00	179.57	10350.00	-7727.10	-716.60	0.00	0.00	7721.50	

**Azimuths to Grid North** True North: -0.49° Magnetic North: 5.81°

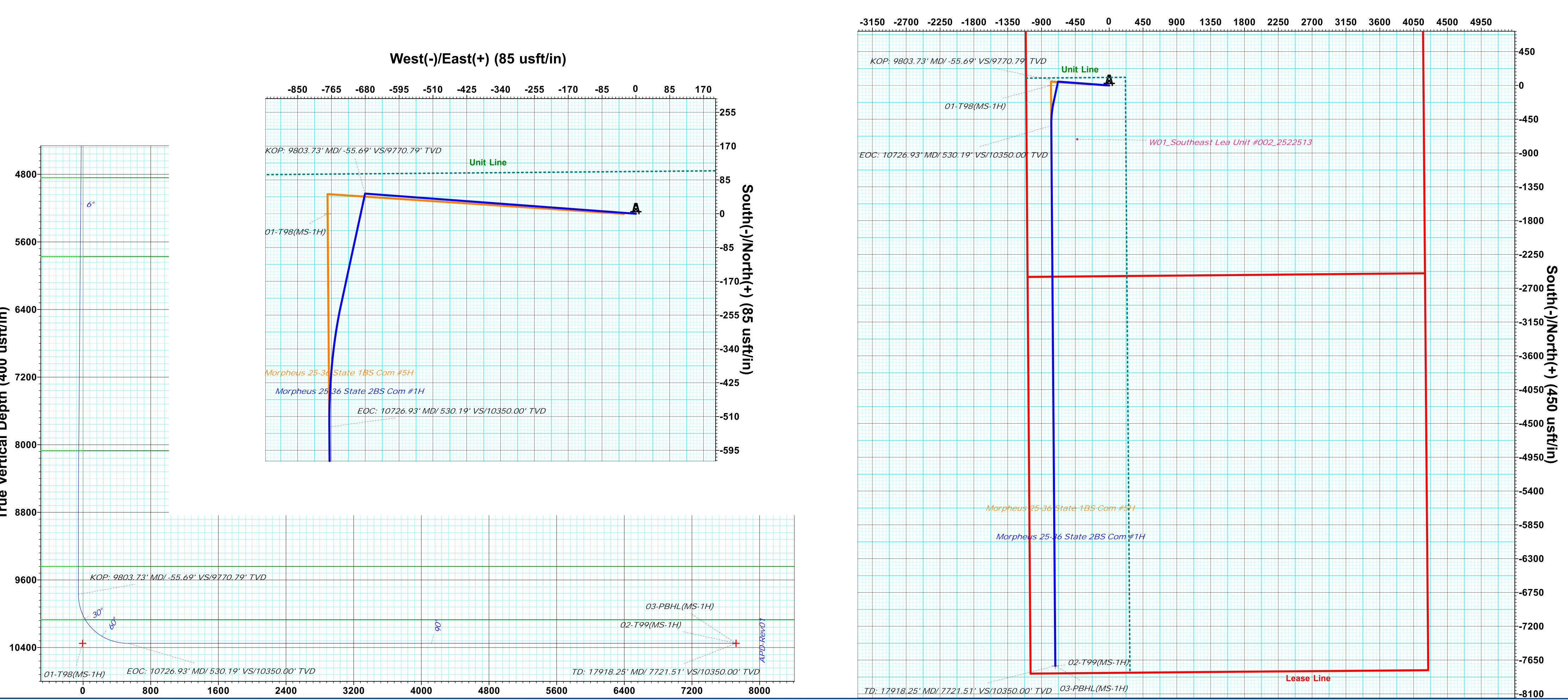
> Magnetic Field Strength: 47521.8nT Dip Angle: 60.16° Date: 2/17/2023 Model: IGRF2020

PROJECT DETAILS: Lea County, NM (N83-NME) Well Name: Morpheus 25-36 State 2BS Com #1H Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980

**Zone: New Mexico Eastern Zone** System Datum: Mean Sea Level Local North: Grid

KB Elevation: 3675+25 @ 3700.00usft Elevation: 3700.00

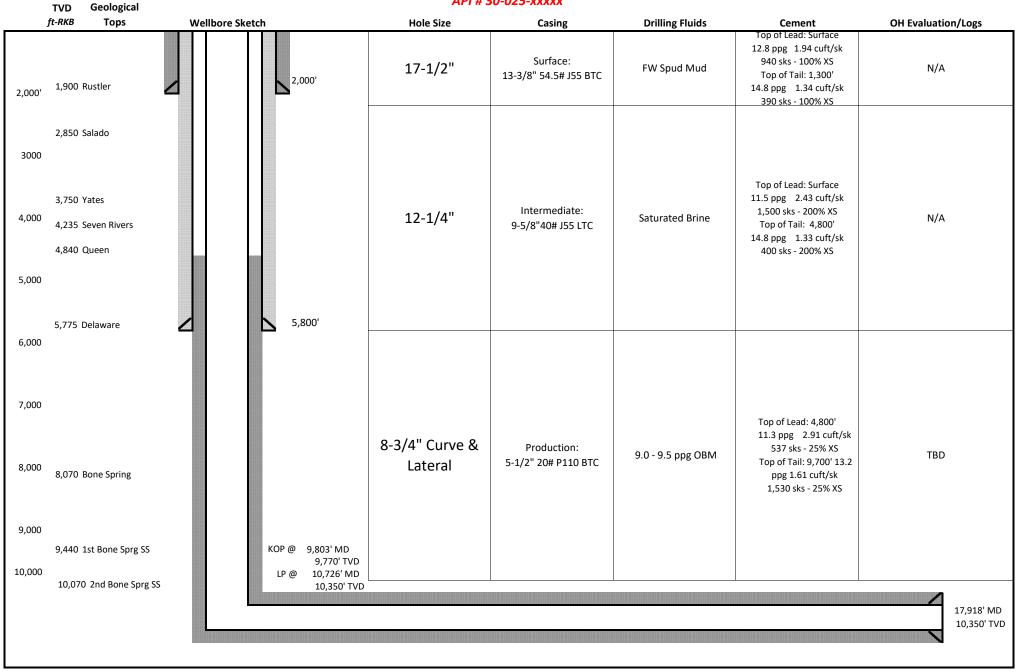
# West(-)/East(+) (450 usft/in)



Vertical Section at 179.57° (400 usft/in)



#### API # 30-025-xxxxx



#### 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: _3R OPE	RATING, LLC	C_OGRID: _331569_		Date: _02_	/_18_/_2023	
II. Type: ☐ Original ☐	☐ Amendment	due to □ 19.15.27.9.D	(6)(a) NMAC	□ 19.15.27.9.D(	6)(b) NMAC □ 0	Other.
If Other, please describe	<b>:</b>					
III. Well(s): Provide the be recompleted from a s					vells proposed to	be drilled or proposed to
TTT 11 3 T	4 D.I	TH CED	ъ.			

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
MORPHEUS 25 36 STATE C	OM 1H	L-25-20S-35E			1500	5000
MORPEHUS 25 36 STATE C	ОМ 5Н	L-25-20S-35E		1200	1500	5000

- IV. Central Delivery Point Name: MORPHEUS STATE COM WEST PAD [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
			Date	Commencement Date	Dack Date	Date
MORPHEUS 25 36 STATE C	OM 1H	04/01/2023	04/28/2023	06/15/2023	07/15/2023	07/20/2023
MOREHUS 25 36 STATE CO	M 5H	05/01/2023	05/28/2023	06/15/2023	07/15/2023	07/20/2023

- VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.
- VII. Operational Practices: 
  ☐ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.
- VIII. Best Management Practices: 

  Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Page 6

Section 2 - Enhanced Plan
<b>EFFECTIVE APRIL 1, 2022</b>

			E APRIL 1, 2022			
Beginning April 1, 2 reporting area must c			with its statewide natural g	as cap	ture requirement for the applicable	
Operator certifies capture requirement			tion because Operator is in	compl	iance with its statewide natural gas	
IX. Anticipated Nat	ural Gas Productio	on:				
We	11	API	Anticipated Average Natural Gas Rate MCF/D		Anticipated Volume of Natural Gas for the First Year MCF	
X. Natural Gas Gat	hering System (NC	GGS):				
Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	ing Available Maximum Daily Capacity of System Segment Tie-in		
production operations the segment or portion the segment or portion XII. Line Capacity. production volume from XIII. Line Pressure. natural gas gathering Attach Operator's XIV. Confidentiality. Section 2 as provided	s to the existing or point of the natural gas.  The natural gas gas come the well prior to a comparator does described plan to manage property:  Operator association of the paragraph (2) of the natural gas	planned interconnect of to gathering system(s) to we thering system will will to the date of first product does not anticipate that above will continue to eduction in response to the terts confidentiality purs	he natural gas gathering systemhich the well(s) will be considered will not have capacity to go tion.  at its existing well(s) connect meet anticipated increases in the increased line pressure.  uant to Section 71-2-8 NMS 27.9 NMAC, and attaches a fixed which we have the content of the cont	em(s), nected gather ted to p h line p	ted pipeline route(s) connecting the and the maximum daily capacity of l.  100% of the anticipated natural gas the same segment, or portion, of the pressure caused by the new well(s).	

# Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

Departor will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☑ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☑ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- **(b)** power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

#### **Section 4 - Notices**

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

Page 8

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

Signature:
Printed Name: BRAD GRANDSTAFF
Title: VP OPERATIONS
E-mail Address: BRGRANDSTAFF@3ROPERATING.COM
Date: 02/18/2023
Phone: 972-977-9221
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

### **3RO Natural Gas Management Plan** Items VI-VIII

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

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Adequate separation relates to retention time for Liquid Liquid separation and velocity for Gas-Liquid separation.
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering are selected to be serviced without flow interruptions or the need to release gas from the well.

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

#### **Drilling Operations**

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100' from the nearest surface hole location on the pad.
- All-natural gas produced during drilling operations will be flared, unless there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety and the environment, at which point the gas will be vented.

#### Completions/Recompletions Operations

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste
- For flowback operations, multiple stages of separation will be used as well as excess VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

#### **Production Operations**

- Weekly AVOs will be performed on all facilities.
- All flares will be equipped with auto-ignition systems and continuous pilot operations.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All tanks will have sight glasses installed, but no electronic gauging equipment.
- Leaking thief hatches found during AVOs will be cleaned and properly re-sealed.
- There will be no gas re-injection for underground storage, temporary storage, or for enhanced oil recovery; however, gas injection will be used for gas lift applications in which the gas would be circulated through a closed loop system.
- If H2S is encountered, gas will be treated to pipeline spec to avoid shut-in's and/or flaring.

#### Performance Standards

• Production equipment will be designed to handle maximum anticipated rates and pressure.

- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Weekly AVOs will be performed on all wells and facilities that produce more than 50MCFPD.

#### Measurement & Estimation

- All volume that is flared or vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- No meter bypasses with be installed.
- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

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

- During downhole well maintenance, 3RO will use best management practices to vent as minimally as possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.