#### 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**

Form C-101 Revised July 18, 2013

# **Energy Minerals and Natural Resources**

**Oil Conservation Division** 

☐ AMENDED REPORT

1220 South St. Francis Dr.

**Santa Fe, NM 87505** 

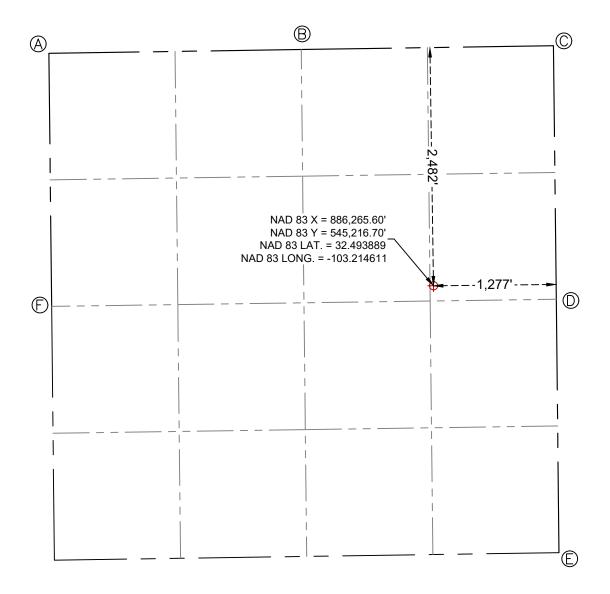
		ım Permian	Operator Name a , LLC iite 850, Dalla					<sup>2.</sup> OGRID Nur 372311 <sup>3.</sup> API Numb	per	
4. Prope	4 Property Code Troperty 333305 Verlande					30-025-50632 Name "Well				
33	3305			Verlande <sup>7.</sup> <b>Surface L</b>					1	
UL - Lot	Section	Township	Range	Lot Idn Feet		I/S Line	Feet From	E/W Line	County	
Н	12	21-S	36-E		82 NC	ORTH	1277	EAST	LEÁ	
				8 Proposed Botto	1				T -	
UL - Lot	Section	Township	Range	Lot Idn Feet t	from N	//S Line	Feet From	E/W Line	County	
				9. Pool Infor	mation					
				SWD; San And	nes - Glori	eta			Pool Code 96127	
				Additional Well		R-22	030 / SWD	- 2261		
<sup>11.</sup> Wor	k Type J		12. Well Type	13. Cable/.	-	Private	<sup>14.</sup> Lease Type Private Surface & Minerals		round Level Elevation 3503.33'	
16. Mi	ıltiple J		7. Proposed Depth	San Andres	ation		9. Contractor TBD	Contractor <sup>20.</sup> Spu		
Depth to Grou			Dista	nce from nearest fresh water			Distance to nearest surface water 10,426' (South)			
,		osed-loop sy	stem in lieu of	`	,	ogram				
Туре	Hole	Size	Casing Size	Casing Weight/ft	Settin	g Depth	Sacks of 0	Cement	Estimated TOC	
Surface	17-1/	2"	13-3/8"	54.5 lb/ft	128	80'	1025		Surface	
roduction	12-1/	4"	9-5/8"	40 lb/ft	56	50'	1,715	5	Surface	
ubing	N/A		5-1/2"	11.6 lb/ft	420	00'	N/A		N/A	
			Casin	g/Cement Program:	Additional (	Comments	<u> </u>			
				Proposed Blowout P	revention Pr			T		
4 1 D'	Туре	VGI D		Working Pressure	Test Pressure			Manufacturer		
Annular, Pi	pe & Blind	/Shear Rams	5	5,000 psi		3,000 ps	<u>S1</u>	Hyarii, Ca	ameron, or Equivalen	
<sup>23.</sup> I hereby ce best of my kn			given above is tr	ue and complete to the		OIL	CONSERVA	ΓΙΟΝ DIVI	SION	
		], if applicab		(A) NMAC and/or	Approved B	y:				
Printed name: Nate Alleman				Title:		<u>,                                      </u>				
Title: Goods	night Regula	tory Consulta	nt		Approved D	ate:	Е	xpiration Date:		
E-mail Addre	ss: nate.all	eman@aceadv	isors.com							
E-mail Address: nate.alleman@aceadvisors.com  Date: 11/27/2024 Phone: 918-237-0559					Conditions of Approval Attached					

C-102 Submit Electronically Via OCD Permitting		Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION    Submittal					Revised July 9, 2024 Jbmittal				
•								Type:	☐ Amended Report		
					WELLLOCAT	TION INFORMATION			☐ As Drille	ed	
API Number Pool Code				Pool Name SWD; SAN ANDRES - GLORIETTA							
Proper	ty Code	025-50632	Property N	961	277	5VVD; 5/	AN ANDRE	5 - GLURI	Well Numb	nor.	
	333305 VERLANDER SWD 1h			1H							
OGRI	OGRID No. <b>331165</b>			Name <b>GO</b>	ODNIGHT MID	STREAM PERMIAN	, LLC			vel Elevation <b>3,503.33'</b>	
;	Surface Ow	ner:   State	Fee 🗆 1	ribal □ F	ederal	Mineral Ov	vner:   State	e 🗹 Fee 🗆	∃ Tribal □ Fe	ederal	
					Surf	ace Location					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Lo	ongitude	County	
Н	12	21 S	36 E		2,482' FNI	_ 1,277' FEL	32.4938	389 -1	03.214611	LEA	
	1	T	D	Τ		n Hole Location	1			L Communication of the Communi	
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	LC	ongitude	County	
Dedica	ated Acres	Infill or Defin	ing Well	Definin	g Well API	Overlapping Spacir	ng Unit (Y/N)	Consolidat	ion Code		
Order	Numbers.	l				Well setbacks are under Common Ownership: □Yes □No					
					Kick (	Off Point (KOP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Lo	ongitude	County	
					First T	ake Point (FTP)					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Lo	ongitude	County	
					Last T	ake Point (LTP)	-				
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Lo	ongitude	County	
Unitize	d Area or A	rea of Uniform	Interest	Spacin	g Unit Type □ H	orizontal □ Vertical	Grou	nd Floor Ele	evation:		
OPER	ATOR CER	TIFICATIONS				SURVEYOR CERTIF	FICATIONS				
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.  11/08/2024					I hereby certify that the actual surveys made by correct to the best of my	me or under my belief.	y superMsign	and that the s	ame is true and		
Signatu Natha	re an Alleman		С	ate		Signature and Seal of P	rofessional Sur	veyor			
Printed nate.a Email A	lleman@ace	eadvisors.com				Certificate Number	Date of Surv	•	/20/2024		

#### ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



CORNER COORDINATES NEW MEXICO EAST - NAD 83						
Α	N: 547,638.20', E: 882,260.30'					
В	N: 547,678.30', E: 884,888.30'					
С	N: 547,717.40', E: 887,515.20'					
D	N: 545,076.90', E: 887,544.60'					
Е	N: 542,437.10', E: 887,572.80'					
F	N: 545,002.50', E: 882,288.70'					

Date: 11/27/2024

Lea County, New Mexico

Goodnight Midstream Permian, LLC Verlander SWD #1 2,482' FNL & 1,277' FEL Section 12, Twp 21S, Rng 36E Lea County, New Mexico

## Proposed Drilling Plan for New SWD

## 1. **Geologic Information:** Permian geologic formations

The Permian San Andres Formation and Glorieta Formation consist of interbedded carbonates rocks including dolomites, siltstones, and sands. Several thick sections of porous and permeable intervals are present within these formations in the area. Geologic information and depths of formation tops were obtained from surrounding wells within the area of interest. Total depth is 100 feet below the base of the Glorieta Formation. The base of the Rustler Formation and top of the Salado Formation is at approximately 1,255 feet plus 25 feet equals 1,280 feet to set bottom of the surface casing to protect the deepest underground sources of drinking water (USDWs).

# **Estimated Formation Top Depths:**

Rustler - Base	1,255'
Salado	1,280'
Grayburg	3,705'
San Andres	4,015'
Glorieta	5,220'
Total Depth	5,650'

## 2. **Proposed Drilling Plan:**

- a. Move in equipment, excavate cellar and install tinhorn, and then drill conductor hole and set and cement in conductor casing.
- b. Mobilize drilling rig and rig up drilling rig and associated equipment onsite. Set up H2S wind direction indicators and monitors; brief all personnel on Emergency Evacuation Routes and Site Health and Safety Plan.
- c. Everyone onsite will have stop work authority.
- d. Perform Job Safety Analysis (JSA) meetings before each drilling shift change and prior to any subcontractor performing any task on the location. All equipment should be inspected daily and repaired or replaced as required.
- e. Drilling operations commence.
- f. Have mud logger monitoring returns. All drill cuttings and waste hauled to specified waste facility.
- g. After drilling the surface hole and setting and cementing the casing; if hydrogen sulfide (H2S) levels are detected greater than 10ppm, implement H2S Plan by ceasing operations, shut in well, employ H2S safety trailer and personnel safety devices, install flare line, etc. – refer to plan.
- h. Proper secondary containment needs to be in place. Spills need to be cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify Oil Conservation Division (OCD) within 24 hours. Remediation started as soon as possible if required. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
- i. Sundry forms need to be completed and filed as required by OCD.

3. **Proposed Casing Program:** Casing designed as follows:

STRING	HOLE SZ	DEPTH	CSG SZ	COND	WT/GRD	CLLPS/BRS	TNSN
STRING	HOLL 32	DEFIII	C3G 3Z	סויוט	שאוטאי	(Minimum Safety	Factors)
Conductor	24"	0-120'	20"	n/a	n/a	n/a	n/a
Surface	17-1/2"	0-1,280'	13-3/8"	New	54.5# J-55	1.125/1.1	1.8
Production	12-1/4"	0-5,650'	9-5/8"	New	40# J-55	1.125/1.1	1.8
Tubing	n/a	0-4,200'	5-1/2"	New	11.6# L-80	1.125/1.1	1.8

#### Notes:

- ✓ A deviation survey will be conducted and submitted with the Well Completion Report (Form C-105)
- ✓ While running all casing strings, the pipe will be kept a minimum of 1/3 full at all times to avoid approaching the collapse pressure of casing.
- ✓ Based on well completions and geophysical logs on adjacent wells, 9-5/8" casing shoe is expected to be set at 5,650'. Similarly, total depth will be approximately 5,650' as determined by open hole geophysical logging and after suitable porosity and low resistivity values have been identified. Maximum perforated interval is anticipated to be from 4,251' to 5,550', but may change based upon actual wellbore determinations. A sundry notice will document such events as a C-105 well completion report filed within 60 days.

# 4. **Proposed Cementing Plans:**

**Surface Casing:** Cemented with approximately 1,025 sacks of Class A cement with 25% excess and circulated to the surface.

**Production Casing:** Cement with approximately 1,715 sacks of Class C cement with 25% excess and cement back to surface inside the 13-3/8" surface casing string. Cement top to be confirmed by cement bond logging after cement has cured to appropriate compressive strength.

- 5. **Pressure Control:** All Blowout Preventers (BOP) and related equipment will comply with well control requirements as described OCD Rules and Regulations and API RP 53, Section 17. The BOP will be either a Hydril, Cameron or equivalent. Minimum working pressure of the BOP and related equipment required for the drilling shall be 500 psig. The maximum working pressure is anticipated at 3,000 psig and the test pressure will be 3,000 psig. The OCD Hobbs district office shall be notified a minimum of 4 hours in advance for a representative to witness all BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup of J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD district office. BOP testing shall be conducted at:
  - a. Installation;
  - b. After equipment or configuration changes;
  - c. At 30 days from any previous test, and;
  - d. Any time operations warrant, such as well conditions.

The BOP specifications to be used during the various phases of the drilling and casing installation are included in the table below:

Casing Size	Annular Preventer	Rams
24"	26-3/4" – 3M, with diverter	None
13-3/8"	11" – 5M	Pipe & Blind/Shear – 5M
9-5/8"	11" – 5M	Pipe & Blind/Shear – 5M

A diagram showing the representative BOP setup is included as Attachment 1.

- 6. **Auxiliary Well Control and Monitoring:** Hydraulic remote BOP operation and mudlogging to monitor returns.
- 7. **Mud Program and Monitoring:** Mud will be balanced for all operations with adjustment as needed based on actual wellbore conditions and is proposed as follows:

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	рН
0-1,300'	FW Spud Mud	8.5-9.2	70-40	20	12	NC	10.0
1,300'-5,650'	Brine Mud	9.2-10.0	28-32	NC	NC	NC	10.0

Mud and all cuttings monitored with all drill cuttings recovered for disposal. Returns shall be visually and electronically monitored. In the event of H<sub>2</sub>S, mud shall be adjusted appropriately by weight and H<sub>2</sub>S scavengers.

8. **H2S Safety:** This well and related facilities are not expected to have H2S releases. However, there may be H2S in the area. There are no private residences or public facilities in the area but a contingency plan has been developed. Goodnight Midstream Permian, LLC will have a company representative available to personnel throughout all operations. If H2S levels greater than 10ppm are detected or suspected, the H2S Contingency Plan will be implemented at the appropriate level.

H2S Safety – There is a low risk of H2S in this area. The operator will comply with the provisions of New Mexico Administrative Code (NMAC) 19.15.11 and Bureau of Land Management (BLM) Onshore Oil and Gas Order #6.

- a. Monitoring all personnel will wear monitoring devices.
- b. Warning Sign a highly visible H2S warning sign will be placed for obvious viewing at the vehicular entrance point onto location.
- c. Wind Detection two (2) wind direction socks will be placed on location.
- d. Communications will be via cellular phones and/or radios located within reach of the driller, the rig floor and safety trailer when applicable.
- e. Alarms will be located at the rig floor, circulating pump/reverse unit area and the flare line and will be set for visual (red flashing light) at 15 ppm and visual and audible (115 decibel siren) at 20 ppm.
- f. Mud program If H2S levels require, proper mud weight, safe drilling practices and H2S scavengers will minimize potential hazards.
- g. Metallurgy all tubulars, pressure control equipment, flowlines, valves, manifolds and related equipment will be rated for H2S service if required.

The Goodnight Midstream Permian, LLC H2S Contingency Plan will be implemented if levels greater than 10ppm H2S are detected.

- 9. **Geophysical Logging and Testing:** Goodnight Midstream Permian, LLC expects to run:
  - a. Geophysical logging through the proposed injection interval will ensure the target interval remains within the San Andres and Glorieta formations.
  - b. An open hole gamma ray, SP, compensated density- neutron and dual resistivity log suite will be run from total depth to approximately 525'.
  - c. A cement bond log with gamma ray and collar locator will be run (Radial, CET or equivalent) on the production casing.
  - d. No cores or drill stem tests will be conducted. (The well may potentially be step rate tested in the future if additional injection pressures are required.)
- 10. **Potential Hazards:** H2S is a potential hazard. No abnormal pressure or temperatures are anticipated, but drilling operations will be prepared in the event that those conditions occur.

No loss of circulation is expected to occur with the exception of drilling into the target disposal zone. All onsite personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom-hole pressure is 2500 psig and the maximum anticipated bottom-hole temperature is 210°F.

- 11. **Waste Disposal Management:** All drill cuttings, fluids, and other solid wastes associated with drilling and completion operations will be transported to a solid waste facility and commercial Class IID injection operation that has been approved and permitted by the Environmental Bureau of the OCD.
- 12. **Anticipated Drilling Commencement Date:** Upon approval of the permit for saltwater disposal (SWD), operations would begin within 30 days based on rig availability. Drilling and completion of the well will take approximately two to three weeks. Installation of the surface facility such as the secondary containment and tank battery, plumbing, injection pump(s), and other treatment and filtering associated equipment would be occurring after the well is completed. In any event, it is not expected for the construction of the surface facility of the project to last more than 90 days, pending on availability of subcontractors and equipment lead times.
- 13. **Completion for Salt Water Disposal:** Subsequent to SWD permit issuance from OCD and prior to commencing any work, a Notice of Intent (NOI) sundry will be submitted to complete the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure testing per BLM and OCD test procedures (including appropriate OCD notification). The tubing and packer will be set at a depth of approximately 4,200 feet and the casing/tubing annulus will be filled with freshwater and corrosion inhibitor and pressure tested to the required test pressure using the standard annulus pressure test. Anticipated daily maximum volume is 15,000 barrels of water per day (bpd) and average of 12,500 bpd at a maximum surface injection pressure of 850 psig (0.2 psi/ft to the top of the injection interval).

If satisfactory disposals rates cannot be achieved at default pressure of 0.2 psi/ft, Goodnight Midstream Permian, LLC will conduct a step-rate test and apply for an injection pressure increase 50 psig below actual parting pressure achieved during the step-rate testing.

**Rotating Head** مقدم معرضم Annular Preventer ràm m m mh Blind/Shear Rams Pipe Rams 0 تشمه همش Kill Line Choke Line مخده مده معضم

Attachment 1 - Representative BOP Setup

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF GOODNIGHT MIDSTREAM PERMIAN, LLC FOR APPROVAL OF A SALT WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO.

**CASE NO. 20825 ORDER NO. R-22030** 

# **ORDER OF THE DIVISION**

This case came in for hearing before the Oil Conservation Division ("OCD") at 8:15 a.m. on September 19, 2019, in Santa Fe, New Mexico.

The OCD Director, having considered the testimony, the record, the recommendations of Hearing Examiners Kathleen Murphy and Phillip R. Goetze, these findings of fact, and conclusions of law issues this Order.

# FINDINGS OF FACT

- 1. Due public notice has been given, and the Oil Conservation Division ("OCD") has jurisdiction of this case and the subject matter.
- 2. Goodnight Midstream Permian, LLC ("Applicant") seeks authority to utilize its Verlander SWD Well No. 1 (API No. 30-025-Pending; "Well"), located 2482 feet from the North line and 1277 feet from the East line (Unit H) of Section 12, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, as an Underground Injection Control ("UIC") Class II well for disposal of produced water into the San Andres and Glorieta formations through a perforated interval from 4251 feet to 5550 feet below surface.
- 3. Applicant submitted a Form C-108 application (Administrative Application No. pDHR1924054414) on August 28, 2019, for authority to inject into the Well which was protested by the New Mexico State Land Office ("NMSLO").
- 4. On September 10, 2019, Applicant submitted an application for hearing for approval of the Well for commercial disposal of produced water. Subsequently, the NMSLO filed an entry of appearance for this application on October 22, 2019.

Case No. 20825 Order No. R-22030 Page 2 of 3

- 5. Applicant provided affidavits at hearing through counsel that presented geologic and engineering evidence in support of the approval of injection authority for the Well.
- 6. Applicant identified four wells that penetrated the proposed injection interval within the one-half mile Area of Review of the surface location of the Well. The completion information indicates the wells are properly cased and cemented to prevent vertical migration of injection fluids.
- 7. Three shallow freshwater wells were located within one mile of the Well and were sampled with the results included in the application.
- 8. The NMSLO appeared through counsel at hearing and did not oppose the presentation of the case by affidavit nor oppose the granting of this application. The NMSLO provided a statement into record expressing their concern for the spacing of disposal wells and the potential impacts to adjacent state mineral interests.
- 9. No other party appeared at the hearing, or otherwise opposed the granting of this application.

# The OCD concludes as follows:

- 10. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject produced water into a Class II UIC well.
- 11. Applicant complied with the notice requirements of 19.15.4 NMAC.
- 12. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.
- 13. Applicant is in compliance with 19.15.5.9 NMAC.
- 14. Approval of disposal in the Well will enable Applicant to support existing production and future exploration in this area, thereby preventing waste while not impairing correlative rights and protecting fresh water or underground sources of drinking water.

# **IT IS THEREFORE ORDERED THAT:**

- 1. Goodnight Midstream Permian, LLC is hereby authorized by <u>UIC Permit SWD-2261</u> to utilize its Verlander SWD Well No. 1, located in Unit N of Section 17, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, for the commercial disposal of UIC Class II fluids into the San Andres and Glorieta formations.
- 2. Jurisdiction is retained by the OCD for the entry of such further orders as may be necessary

Case No. 20825 Order No. R-22030 Page 3 of 3

for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order; whereupon the OCD may, after notice and hearing or prior to notice and hearing in event of an emergency, terminate the disposal authority granted herein.

DONE at Santa Fe, New Mexico, on this 16 day of February, 2022.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

ADRIENNE SANDOVAL DIRECTOR

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

# **UIC CLASS II PERMIT SWD-2261**

## APPENDIX A – AUTHORIZED INJECTION

Permittee: Goodnight Midstream Permian, LLC

OGRID No.: 372311

Well name: Verlander SWD Well No. 1

Surface location: Lat: N 32.493889; Long: W 103.214511; NAD83

2482 feet from the North line and 1277 feet from the East line (Unit H) of Section 12, Township 21 South, Range 36 East, NMPM, Lea County, New

Mexico.

Bottom hole location (if different): NA

Type of completion: Perforations

Type of injection: Commercial

Injection fluid: produced water from Yates, Seven River, Queen, Grayburg, San Andres,

Blinebry, Tubb, Bone Spring, Wolfcamp, Strawn, and Morrow formations and

Delaware Mountain Group.

Injection interval: San Andres and Glorieta Formations

Injection interval thickness (feet): 4251 feet to 5550 feet (1,299 feet)

Confining layer(s): Upper confining: base of Grayburg Formation and upper San Andres

Formation

Lower confining: upper contact of Paddock Formation

Prohibited injection interval(s): Paddock or deeper formations.

Liner, tubing, and packer set: No liner; 4.5-inch lined tubing with packer set within 100 feet of

uppermost perforation.

Maximum daily injection rate: 15000 barrels of water.

Maximum surface injection pressure: 850 PSI

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

#### UIC CLASS II PERMIT SWD- 2261

Pursuant to the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, ("Act") and its implementing regulations, 19.15.1 *et seq.* NMAC, ("Rules") and the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, the Oil Conservation Division ("OCD") issues this Permit to Goodnight Midstream Permian, LLC ("Permittee") to authorize the construction and operation of a well to inject produced water at the location and under the terms and conditions specified in this Permit and Appendix A.

#### I. GENERAL CONDITIONS

## A. AUTHORIZATION

- 1. Scope of Permit. This Permit authorizes the injection of produced water into the well described on Appendix A ("Well"). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the "operator" of the Well as defined in 19.15.2.7(O)(5) NMAC.
  - a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water ("USDW") if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]
  - b. The wellhead injection pressure for the Well shall not exceed the value identified in Appendix A.
  - c. Permittee shall not commence to drill, convert, or recomplete the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill ("APD") pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]
  - d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.
  - e. This Permit authorizes injection of any UIC Class II fluid or oil field waste defined in 19.15.2.7(E)(6) NMAC.

- f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.
- **2. Notice of Commencement**. Permittee shall provide written notice on Form C-103 to OCD E-Permitting and notify OCD Engineering Bureau by email of the submittal no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]
- 3. **Termination.** Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.
  - a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.
  - b. One (1) year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

# B. DUTIES AND REQUIREMENTS

- 1. Duty to Comply with Permit. Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]
- 2. Duty to Halt or Reduce Activity to Avoid Permit Violations. Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]
- 3. Duty to Mitigate Adverse Effects. Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the

environment resulting from noncompliance with the terms and conditions of this Permit. [40 CFR 144.51(d)]

- 4. Duty to Operate and Maintain Well and Facilities. Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]
- **5. Duty to Provide Information.** In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]
- **6. Private Property.** This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]
- 7. Inspection and Entry. Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:
  - a. Inspect the Well and associated facilities;
  - b. Have access to and copy any record required by this Permit;
  - c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and
  - d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]
- **8.** Certification Requirement. Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]
- **9. Financial Assurance.** Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

## C. PRIOR TO COMMENCING INJECTION

- 1. Construction Requirements.
  - a. Permittee shall construct the Well as described in the Application,

Appendix A and as required by the Special Conditions.

- b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.
- 2. Tests and Reports. Permittee shall complete the following actions prior to commencing injection in the Well.
  - a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well, or other OCD approval, as applicable, prior to converting or recompleting the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.
  - b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the OCD Engineering Bureau and the appropriate OCD Inspection Supervisor and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of two hundred (200) feet above the next higher casing shoe.
  - c. If a liner is approved for the construction of the Well, Permittee shall run and submit to OCD E-Permitting and notify the OCD Engineering Bureau by email, a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.
  - d. Permittee shall submit to the appropriate OCD Engineering Bureau the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval within the stratigraphic interval requested in the application. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau by email and obtain written approval prior to commencing injection into the Well.
  - e. Permittee shall obtain and submit to the OCD E-permitting on a Form C-103 a calculated or measured static bottom-hole pressure measurement representative of the completion in the approved injection interval.
  - f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the

initial MIT have been approved by the appropriate OCD Inspection Supervisor. [19.15.26.11(A) NMAC]

g. OCD retains authority to require a wireline verification of the completion and packer setting depths in this Well. [19.15.26.11(A) NMAC]

## D. OPERATION

# 1. Operation and Maintenance.

- a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]
- b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]
- c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.
- d. If OCD has reason to believe that operation of the Well may have caused or determined to be contributing to seismic activity, Permittee shall, upon OCD's written request:
  - i. Take immediate corrective action, which could include testing and evaluating of the injection interval and confining layers; suspending or reducing of the rate of injection or maximum surface injection pressure, or both; and providing increased monitoring of the Well's operation; and
  - ii. Submit a remedial work plan or an application to modify the Permit to implement the corrective action, plug back the injection interval, or incorporate another modification required by OCD.

OCD may approve the remedial work plan, modify the Permit or issue an emergency order or temporary cessation order as it deems necessary.

# 2. Pressure Limiting Device.

- a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site, that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.
- b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.
- 3. Mechanical Integrity. Permittee shall conduct a MIT prior to commencing injection, at least every five (5) years after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.
  - a. MITs shall be conducted in accordance with 19.15.26 NMAC.
  - b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.
  - c. Permittee shall report the result of a MIT no later than two (2) business days after the test.
  - d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:
    - i. The Well fails a MIT; or
    - ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.
  - e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.
  - f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.
- **4.** Additional Tests. Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

#### 5. Records.

- a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]
- b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:
  - i. Date, location, and time of sample, measurement or calibration;
  - ii. Person who conducted the sample event, -measurement or calibration;
  - iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;
    - iv. Description of method and procedures;
    - v. Description of handling and custody procedures; and
    - vi. Result of the analysis.

## E. PLUGGING AND ABANDONMENT

- 1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.
- **2.** If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.
- 3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.
- **4**. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

## F. REPORTING

1. Monthly Reports. Permittee shall submit a report using Form C-115 using the OCD's web-based online application on or before the 15th day of the second month following the month of injection, or if such day falls on a weekend or holiday, the first workday following the 15<sup>th</sup>, with the number of days of operation, injection volume, and injection pressure. [19.15.26.13 NMAC; 19.15.7.24 NMAC]

**2.** Corrections. Permittee shall promptly disclose to OCD any incorrect information in the Application or any record required by this Permit and submit corrected information. [40 CFR 144.51(h)(8)]

## G. CORRECTIVE ACTION

- 1. Releases. Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.
- **2. Failures and Noncompliance.** Permittee shall report the following incidents to appropriate OCD Inspection Supervisor and OCD Engineering Bureau verbally and by e-mail no later than 24 hours after such incident:
  - a. Any mechanical integrity failures identified in Section I. D. 3. d;
  - b. The migration of injection fluid from the injection interval [19.15.26.10 NMAC]; or
  - c. A malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(1)(6)]
- **3.** Corrective Action. Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.
- **4. Restriction or Shut-In.** OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

#### H. PERMIT CHANGES

1. Transfer. This Permit shall not be transferred without the prior written approval of OCD. Permittee shall file Form C-145 for a proposed transfer of the Well. OCD may require, as a condition of approving the transfer, that this Permit be amended to ensure compliance and consistency with applicable law. If the Well has not been spud prior to the transfer, the OCD may require that the new operator reapply and submit to the OCD a new Form C-108 prior to constructing and injecting into the well. [19.15.26.15 NMAC; 19.15.9.9 NMAC]

2. Insolvency. Permittee shall notify OCD Engineering Bureau of the commencement of a voluntary or involuntary proceeding in bankruptcy which names Permittee or an entity which operates the Well on behalf of Permittee as a debtor no later than ten (10) business days after the commencement of the proceeding.

# 3. OCD Authority to Modify Permit and Issue Orders

- a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:
  - i. The Permit contains a material mistake;
  - ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;
  - iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;
  - iv. The Well's operation may affect the water quality of fresh water;
  - v. Injected fluid is escaping from the approved injection interval;
  - vi. Injection may be caused or contributed to seismic activity: or
  - vii. Injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.
- b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.
- c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated. [40 CFR 144.36(a)]
- **4. Permittee Request to Modify Permit.** Permittee may apply to modify the terms of this Permit.
  - a. **Minor Modifications**. OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:

- i. Non-substantive changes such as correction of typographical errors;
- ii. Requirements for more frequent monitoring or reporting;
- iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit;
- iv. Amendments to the plugging and abandonment plan;
- v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well;
- vi. Corrections of the actual injection interval if within the approved formation; or
- vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]
- b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

## II. SPECIAL CONDITIONS

Permittee shall comply with the following special conditions:

1. The Permittee shall obtain a water sample for analysis of hydrocarbon content as well as general water chemistry (including major cations, major anions, and Total Dissolved Solids (TDS)). Prior to commencing injection, the Permittee shall supply the results of the water sample in an e-mail submittal to the OCD Engineering Bureau. If the analysis of the sample is found to contain a TDS concentration of 10000 mg/L or less, the injection authority under this Permit shall be suspended <u>ipso facto</u>.

## III. ATTACHMENT

Well Completion Diagram as Provided in the C-108 Application for Case No. 20825.

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 407036

#### **CONDITIONS**

Operator:	OGRID:
GOODNIGHT MIDSTREAM PERMIAN, LLC	372311
5910 North Central Expressway	Action Number:
Dallas, TX 75206	407036
	Action Type:
	[C-101] Drilling Non-Federal/Indian (APD)

#### CONDITIONS

Created By	Condition	Condition Date
pkautz	WILL REQUIRE A DEVIATION SURVEY WITH COMPLETION REPORT	11/27/2024
pkautz	Notify the OCD 24 hours prior to casing & cement.	11/27/2024
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.	11/27/2024
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.	11/27/2024
pkautz	Cement is required to circulate on both surface and production strings of casing.	11/27/2024
pkautz	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	11/27/2024
pkautz	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.	11/27/2024
pkautz	MUST COMPLY WITH ALL REQUIREMENTS OF R-22030 / SWD-2261	11/27/2024
pkautz	APD EXPIRES 02/16/2025	11/27/2024