

State of New Mexico
Energy, Minerals and Natural Resources Department

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Via E-permitting

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

Seismicity Response Protocol Information Form

This form must be completed as part of OCD's Seismicity Response Protocol and updated after any qualifying event thereafter.

Applicability: This form must be completed for each well classified as an Underground Injection Control (UIC) Class II disposal wells or Class II enhanced recovery injection well with active injection authority (wells). "Active injection authority" means a well that is authorized to inject pursuant to an administrative permit or hearing order. This includes wells that have an approved Application for Permit to Drill and have an approved injection permit but have not yet been drilled or commenced injection.

Well Information

I. Operator: Solaris Water Midstream, LL **OGRID:** 371643 **OCD notification date** 1-7-2022

Well Name Zeus SWD #1 **API#** 30-025-44273

II. Type of Notification: ☒ Original ☒ Amendment ☐ Other

If Other, please describe: _____

III. Seismic event information: **Magnitude** 3.2 **Location** 32.413 lat, -103.592 long. , **Date of occurrence** 11-12-20
Source of information (i.e. USGS, NMTSO, TexNet, other) USGS **Depth of occurrence** 5.0 km

IV. Well(s): Provide the following information for each well permitted within a 10-mile proximity of the epicenter.

Injection Order	Distance from epicenter	Perforated and/or open-hole interval (Vertical Depth)	Formation/s completed
SWD-1708	2.9 miles	16,320' - 17,400'	Devonian, Silurian and Fusselman

V. ☐ An updated well bore diagram is required to be attached, which identifies the current injection intervals (perforations and/or open hole), formation tops, measured depth, vertical depths and Sub-Sea True vertical depths.

VI. Well Information Prior to Injection Volume Reduction: Provide the following information for each well identified in Section IV. Daily rates and pressures are based on the active injection days during the prior 6-month period.

Avg daily injection rate (prior to reduction)	Avg injection daily pressure (prior to reduction)	Well Type (Commercial, lease only, single operator)
15,857	2,392	Commercial

VII. Well Information After Injection Volume Reduction: Provide the following information for each well identified in Section IV.

Avg daily injection rate limit (post reduction)	Avg injection daily pressure limit (post reduction)	Reduction %	Reduction start date	Reduction achieved date
7,928	2,392	50%	12/3/21	1/12/22

Acknowledgments

Operator acknowledges that it must take the following actions as part of its seismic response protocol:

- ☒ Operator shall report the daily injection volumes and pressures for each well on a weekly basis on the form prescribed by the OCD. The report is due on the Wednesday the week following the weekly monitoring interval.
- ☒ Operator shall start or continue to digitally measure injection volumes and pressures for each well at a minimum of an hourly basis, and shall archive the data and make it available to OCD upon receipt of a written request.
- ☒ Operator shall monitor seismicity events with magnitudes equal to or greater than M2.5 within a radius of 10 miles around each well using USGS / NMTSO data, and shall archive the data and make it available to OCD upon receipt of a written request.
- ☒ Operator shall notify OCD and provide updated pertinent well information within 24 hours of an event greater than M 2.5 within a radius of 10 miles around each well using this OCD form.
- ☒ After each event greater than M 2.5 within a radius of 10 miles around each well, Operator shall inspect well head and well equipment of each well to ensure proper working order. As part of this inspection, Operator should evaluate whether a Bradenhead test or MIT is warranted to ensure wellbore integrity.

I certify that, after reasonable inquiry and based on the available information at the time of submittal, this Seismic Information Form is true and correct to the best of my knowledge, and I acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	<i>Teena Robbins</i>
Printed Name:	Teena Robbins
Title:	Office Manager
E-mail Address:	teena.robbins@ariswater.com
Date:	1/31/2022
Phone:	432.203.9024

SOLARIS MIDSTREAM LLC									
Zeus SWD #1									
WELLBORE DATA SHEET AS OF 12/10/2018									
FIELD:		SWD		TOTAL DEPTH:		0			
WELL:		Zeus #1 SWD		SURF. LOC'N:		199' FSL & 335' FEL, Sec. 35, T21S, R32E			
LOCATION:		199' FSL & 335' FEL, Sec. 35, T21S, R32E		BTM. HOLE LOC'N:		199' FSL & 335' FEL, Sec. 35, T21S, R32E			
		Lea Co, NM		SURFACE ELEV.:		3659'			
OBJECTIVE:		Devonian Dolomite		Updated:		Patrick Schrim 6.18.2019			
MUD LOGGING E LOGGING/ DIRECTIONAL	CASING SIZE (IN.)	RKB DRILL DEPTH MD TVD	BOPE	FORMATION	HOLE SIZE (IN.)	MUD WT.	FRAC GRAD		
Grnd Level	RKB	32'							
	GL ELEV.	3659'							
	30"	100' / 100'	None						
	20" 133# NT80 BTC	1,133' / 1,133'	21-1/4" 3M Diverte	Rustler Anhydrite base		8.4			
						26"			
Cement:	Lead 1565 sks Class C 13.5 ppg, 1.67 ft3/sk								
	Tail 565 sks Class C 14.8 ppg, 1.33 ft3/sk								
						17.5"			
	9 5/8" DV/ ECP at +/- 4,651'								
	13 3/8" BTC	4,742' / 4,742'	13-5/8"-5M Annular	Base of Capitan Reef		9.5			
	6 jls, 61#, J-55		13-5/8"-10M BOP's			9.0			
	69 jls, 72#, N-80	5,900'		Massive Delaware Sands					
	40 jls, 72#, P-110								
Cement	Lead 2300 sks, 12.7#, 2.2 ft3/sk	7,015'		Brushy Canyon					
	Tail 420 sks, 14.8#, 1.33 ft3/sk								
		8,675'		Bone Spring LS		12 1/4"			
	7.625" Versa Flex TieBack Hanger 11,458'								
	7.625" Versa Flex TOL 11,727'	11,665'		Wolfcamp					
		11,760'		Wolfcamp Limestone					
				Suspected 9-5/8" part @ 11,699'					
	9 5/8" 53.5# HCQ125 BTC	12,071' / 12,071'	13-5/8"-5M Annular			9.6			
			13-5/8"-10M BOP's			10.0	14.5 ppgs FIT		
Stage 1 Cement	Lead 110 sks, 11.2#, 2.51 ft3/sk	13,375'		Strawn LS					
	Lead 460 sks, 11.2#, 2.45 ft3/sk	13,500'		Atoka Sand					
	Tail 330 sks, 14.6#, 1.24 ft3/sk	13,820'		Bend LS					
Stage 2 Cement	None pumped, Cmt to surface on 1st stage	13,985'		Morrow Lm					
		14,115'		Middle Morrow Sand		11.0			
		14,405'		Morrow Marker					
		14,815'		Lower Morrow		8 1/2"			
		15,475'							
		16,000'		Lower Mississippi Lime					
		16,000'		Woodford Shale					
	7 5/8" 39# HCQ125 EZGO FJ3	16,320' / 16,320'	13-5/8"-5M Annular			11.3			
			13-5/8"-10M BOP's	Devonian					
Cement	Tail 390 sks, 15.6#, 1.35ft3/sk								
Run #1	GR/NEUTRON 0 - 0	17385'		Montoya (per Dale L.)		6-1/2"	FW		
	USIT/CBL 16,320 - 0								
		17,400' / 17,400'	13-5/8"-5M Annular						
			13-5/8"-10M BOP's	Final TD at Base of Fusselman					

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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oecd/contact-us>

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DEFINITIONS

Action 177613

DEFINITIONS

Operator: SOLARIS WATER MIDSTREAM, LLC 9651 Katy Fwy Houston, TX 77024	OGRID: 371643
	Action Number: 177613
	Action Type: [UF-SA] Seismicity Response Protocol Information (UF-SA-SRPI)

DEFINITIONS

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application: <ul style="list-style-type: none">this application's operator, hereinafter "this operator".
This form must be completed as part of OCD's Seismicity Response Protocol and updated after any qualifying event thereafter.
Applicability: This form must be completed for each well classified as an Underground Injection Control (UIC) Class II disposal well or Class II enhanced recovery injection well with active injection authority (wells). "Active injection authority" means a well that is authorized to inject pursuant to an administrative permit or hearing order. This includes wells that have an approved Application for Permit to Drill and have an approved injection permit but have not yet been drilled or commenced injection.

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QUESTIONS

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QUESTIONS

Prerequisites	
Well	[30-025-44273] ZEUS SWD #001

Seismic Event Information

The source and reference ID is required, if you would like to submit information of a new seismic event.

Source of information (i.e., USGS, NMTSO, TexNet, other)	USGS
Reference ID from source of information	US7000FTRH
Magnitude	3.2
Latitude	32.41300
Longitude	-103.59200
Date of occurrence	11/12/2021
Depth of occurrence (kilometers)	5.00

Injection Order

Please indicate the latest (current) injection order permitting injection for this well.

Admin Order (SWD-#)	SWD-1708-0 [pMAM1731050949]
Hearing Order (R-#)	Not answered.

Well Information

The following information is required for each well permitted within a 10-mile proximity of the epicenter.

Distance from epicenter (miles)	3
Top perforated and/or open-hole interval (vertical depth in feet)	16,320
Bottom perforated and/or open-hole interval (vertical depth in feet)	17,400
Formation(s) completed	Devonian, Silurian, Fusselman

Well Information Prior to Injection Volume Reduction

Daily rates and pressures are based on the active injection days during the prior 6-month period.

Average daily injection rate (BBLS per day), prior to reduction	15,857
Average injection daily pressure (PSI), prior to reduction	2,392
Well Type (i.e., Commercial, Lease Only, Single Operator)	Commercial

Well Information After Injection Volume Reduction

The following information is required for each well permitted within a 10-mile proximity of the epicenter.

Required injection rate reduction percentage (0%, 25%, 50%, Shut-in)	50%
Average daily injection rate (BBLS per day) limit, post reduction	7,928
Average injection daily pressure (PSI) limit, post reduction	2,392
Reduction start date	12/03/2021
Reduction achieved date	01/12/2022

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<input checked="" type="checkbox"/>	This operator acknowledges that it must take the appropriate following action(s) as part of its seismic response protocol:
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CONDITIONS

Created By	Condition	Condition Date
pgoetze	None	12/20/2024