AE Order Number Banner

Application Number: pEG2519755380

Initial

Application

Part I

SWD-2660

SOLARIS WATER MIDSTREAM, LLC [371643]

Received: 7/01/25

RECEIVED:	REVIEWER:	TYPE:	APP NO:	
		ABOVE THIS TABLE FOR OCD D	VISION USE ONLY	
	- Geologi	CO OIL CONSERV, ical & Engineering rancis Drive, Santo	g Bureau –	Participante and
		RATIVE APPLICATI		
THIS	CHECKLIST IS MANDATORY FOR A REGULATIONS WHICH R	ALL ADMINISTRATIVE APPLICA EQUIRE PROCESSING AT THE		
Applicant: <u>Solar</u>	is Water Midstream, LLC) Number: <u>371643</u>
Vell Name: <u>Gene</u>			API:	30-015-TBD
'ool: <u>SWD</u>	; Bell Canyon-Cherry Canyo	n	Pool C	ode: <u>96802</u>
A. Location	ICATION: Check those n – Spacing Unit – Simu NSL INSP #		n	D
[I] Con [[II] Inje	one only for [1] or [1] nmingling – Storage – N DHC CTB F ction – Disposal – Press WFX PMX S	PLC PC C ure Increase – Enhc	nced Oil Recover	FOR OCD ONLY
A. Offse B. Royc C. Appl D. Notifi E. Notifi F. Surfa G. For a	N REQUIRED TO: Check t operators or lease ho lity, overriding royalty c ication requires publish ication and/or concurr ication and/or concurr ce owner Il of the above, proof c otice required	olders owners, revenue ow ned notice rent approval by SL rent approval by BL	ners O M	Notice Complete Application Content Complete
	N: I hereby certify that approval is accurate			

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

understand that **no action** will be taken on this application until the required information and

Ben Stone

Print or Type Name

7/01/2025 Date

903-967-5950

Phone Number

ben@sosconsulting.us e-mail Address

Signature

Released to Imaging: 7/16/2025 3:40:48 PM

notifications are submitted to the Division.

SOS Consulting, LLC

Oil & Gas Accounting - Regulatory Processing Assistance - Oil Field Technical Assistance

2age 3 of 73

July 1, 2025

New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Attn: Mr. Gerry Razatos, Acting Director

Re: Application of Solaris Water Midstream, LLC to permit for salt water disposal its Gene SWD #1, (API 30-025-TBD) located in Section 13, Township 24 South, Range 26 East, NMPM, Eddy County, New Mexico.

Dear Mr. Razatos,

Please find enclosed form C-108 Application for Authority to Inject, supporting the above-referenced request to permit for disposal the subject well. This SWD prospect is proposed as a DMG disposal into the Bell and Cherry Canyon formations. We have carefully considered new guidelines for DMG injection which resulted from Chevron pursing the DMG target for some of its SWDs recently. We believe the data and exhibits appropriately represent the intent for prudent operations into the Delaware Mountain Group as described.

Solaris Water Midstream, LLC seeks to optimize efficiency, both economically and operationally, of all its operations in southeast New Mexico. Approval of this application is consistent with that goal as well as the NMOCD's mission of preventing waste and protection of correlative rights.

Published legal notice ran in the April 24, 2025, edition of the Artesia Daily Press and offset operators and other affected parties have been notified individually. The well is located on fee land and minerals.

I respectfully request that the approval of this salt water disposal well proceed swiftly and if you or your staff requires additional information or has any questions, please do not hesitate to call or email me.

Best regards,

Ben Stone, Partner SOS Consulting, LLC Agent for Solaris Water Midstream, LLC

Cc: Application attachment and file

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

Page 4 of 73

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Salt Water Disposal and the application QUALIFIES for administrative approval.
- II. OPERATOR: Solaris Water Midstream, LLC ADDRESS: 9651 Katy Freeway, Suite 400, Houston, Texas, 77024

CONTACT PARTY: Agent: SOS Consulting, LLC - Ben Stone (936) 967-5950

- III. WELL DATA: All Well Data and Applicable Wellbore Diagrams and Packer Info are ATTACHED.
- IV. This is not an expansion of an existing project.
- V. A map is attached that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- *VI. A Tabulation is ATTACHED of data on all wells of public record within the area of review which penetrate the proposed injection zone. There are 2 wells in the subject AOR which Penetrate the proposed DMG interval. The data includes a description of each well's type, construction, date drilled, location, depth, and a schematic of any plugged well illustrating all plugging detail. NO P&A (of 2 total) wells penetrate.
- VII. The following data is ATTACHED on the proposed operation, including:
 - 1. Proposed average and maximum daily rate and volume of fluids to be injected;
 - 2. Whether the system is open or closed;
 - 3. Proposed average and maximum injection pressure;
 - 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 - 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Appropriate geologic data on the injection zone is ATTACHED including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Stimulation program a conventional acid job of up to 30,000 gals. may be performed to clean and open the formation.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). *NEW Well Logs will be run when drilled for completion and further zone analysis.*
- *XI. There is 1 P&A'd water well within one mile of the proposed salt water disposal well per OSE data.
- XII. An affirmative statement is ATTACHED that available geologic and engineering data has been examined and no evidence was found of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. "Proof of Notice" section on the next page of this form has been completed and ATTACHED. There are 7 offset lessees and/or operators within ONE mile Including Federal minerals all have been noticed. Location is FEE (Split Estate).
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME:	Ben Stone	TITLE: SOS Consulting, LLC agent for Solaris Water	[.] Midstream,	LLC
SIGNATURE:	- Sur	free	DATE:	7/01/2025
E-MAIL ADDF	RESS: ben@sos	consulting.us		

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Page 2

FORM C-108 - APPLICATION FOR AUTHORIZATION TO INJECT (cont.)

III. WELL DATA – The following information and data is included (See ATTACHED Wellbore Schematic):

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No., Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and details on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE pursuant to the following criteria is ATTACHED.

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Ceived by OCD: 7/1/2025 3:00:24 PM Santa Fe Main Office Phone: (505) 476-3441 Fax: (55) 476-3462 General Information Phone: (505) 629-6116 Online Phone Directory Visit: https://www.emnrd.nm.gov/ocd/contact-us/		State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION			Pag C Revised July 9, 20 Submit Electronic via OCD Permittir			
					Submittal	□ Initial Submittal		
					Type:	□ Amended Report		
						□ As Drilled		
		WELL LOCA	ATION INFO	RMATION				
API Number 30-015-TBD	Pool Code 968	02	Pool Name	SWD; BELL CA	CANYON-CHERRY CANYON			
Property Code TBD	Property Name	GENE	SWD			Well Number #1		
OGRID No. 371643	Operator Name	SOLARIS W	ATER M	IIDSTREAM, LL	.C.	Ground Level Elevation 3220'		
Surface Owner: State Fee	Tribal 🗆 Federal		Minera	al Owner: 🗆 State 🗆 Fee	🗆 Tribal 🗆 F	ederal		

Surface Location											
UL	Section 13	Township 24-S	Range 26-E	Lot	Ft. from N/S 1,603 FSL	Ft. from E/W 534 FEL	Latitude 32.21433888°N	Longitude 104.23971829°W	County EDDY		
					Bottom H	ole Location					
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County		

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code	
Order Numbers.			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	Longitude	County			
	First Take Point (FTP)											
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County			
	Last Take Point (LTP)											
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County			
L	1	1	I	1	1	L	1	1	1			

Unitized Area or Area of Uniform Interest

Spacing Unit Type 🗆 Horizontal 🗆 Vertical

Ground Floor Elevation:

73

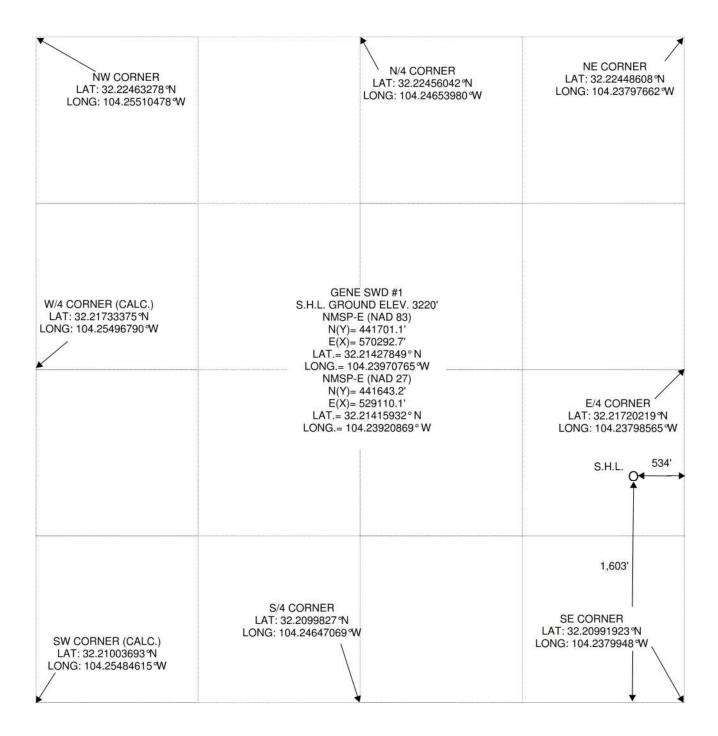
OPERATOR CERTIFICATIONS	SURVEYOR CERTIFICATIONS	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in 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.	I hereby certify that the well location shown on this plat was plotted from field notes of ac surveys made by me or under my supervision, and that the same is true and correct to the bes my belief.	
Signature Date	Signature and Seal of Professional Surveyor	
Printed Name	Certificate Number Date of Survey	1
	29786 3-17-2025 6-24-2	
Email Address		-

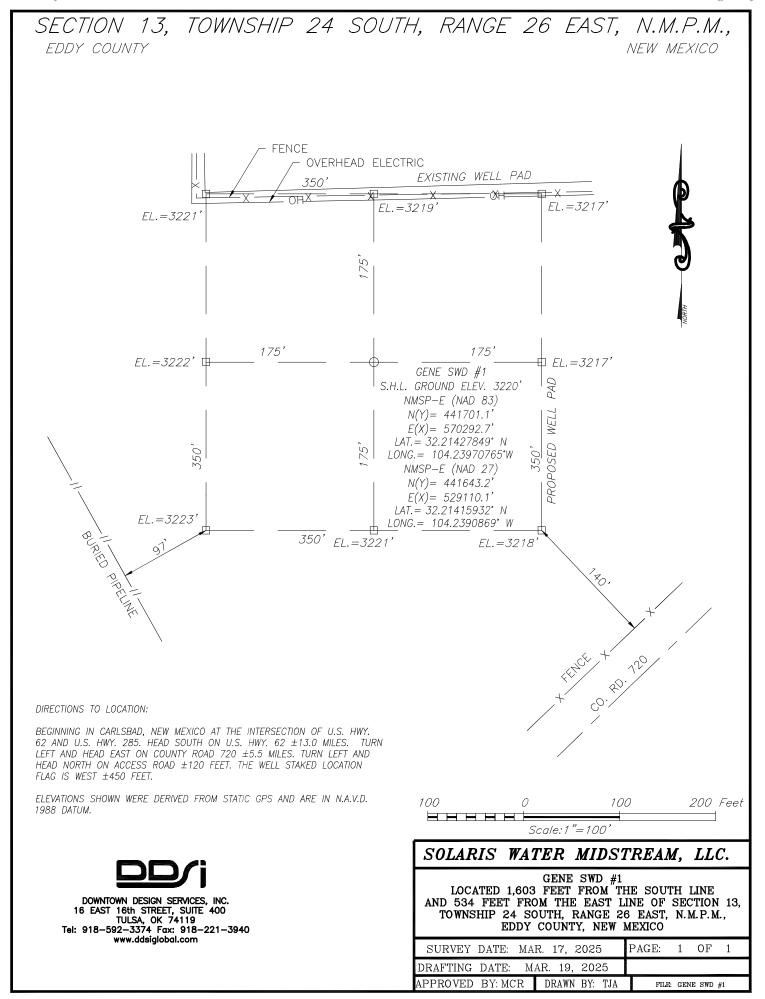
Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division. **Released to Imaging:** 7/16/2025 3:40:48 PM

Received by OCD: 7/1/2025 3:00:24 PM ACREAGE DEDICATION PLATS

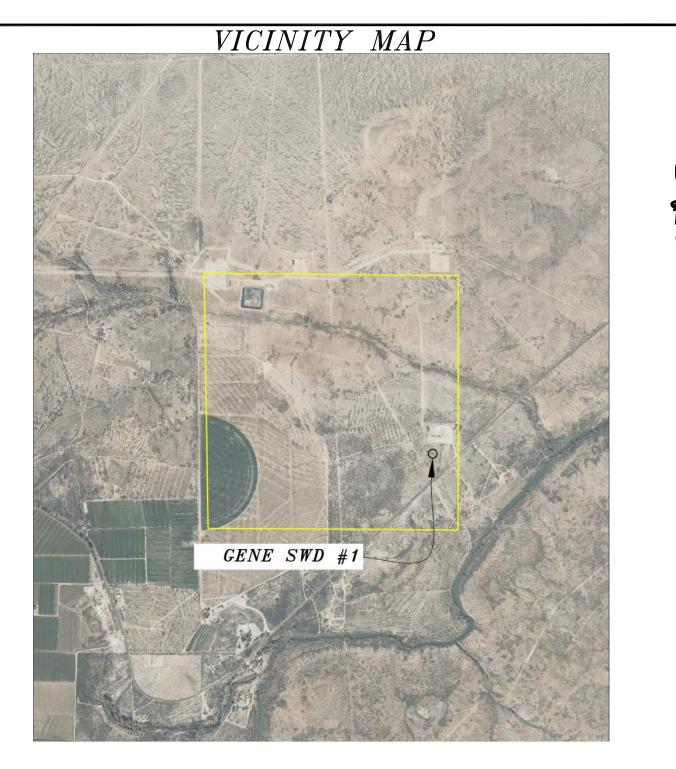
This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the 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.





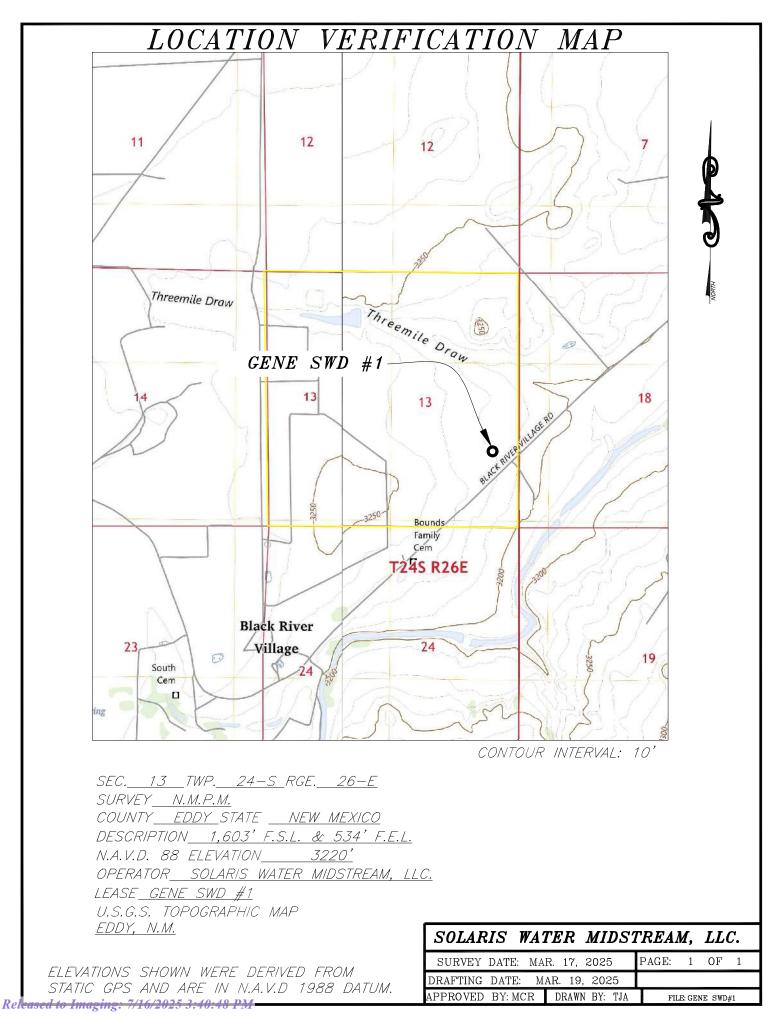
Released to Imaging: 7/16/2025 3:40:48 PM



SEC. <u>13</u> TWP. <u>24–S</u> RGE. <u>26–E</u>
SURVEYN.M.P.M.
COUNTY <u>EDDY</u> STATE <u>NEW MEXICO</u>
DESCRIPTION <u>1,603'F.S.L. & 534'F.E.L.</u>
N.A.V.D. 88 ELEVATION <u> </u>
OPERATOR <u>SOLARIS WATER MIDSTREAM, LLC.</u>
LEASE <u>GENE_SWD #1</u>
U.S.G.S. TOPOGRAPHIC MAP
EDDY, N.M. SOL

ELEVATIONS SHOWN WERE DERIVED FROM STATIC GPS AND ARE IN N.A.V.D 1988 DATUM. Released to Imaging: 7/16/2025 3:40:48 PM SCALE: 1" = 2000'

SOLARIS WATER MIDST	TREAM, LLC.
SURVEY DATE: MAR. 17, 2025	PAGE: 1 OF 1
DRAFTING DATE: MAR. 19, 2025	
APPROVED BY: MCR DRAWN BY: TJA	FILE: GENE SWD#1



C-108 - Items III, IV, V

Item III - Subject Well Data

(New Drill) Wellbore Diagram – PROPOSED

Item IV – Tabulation of AOR Wells

2 Wells Penetrate the Proposed Injection Interval, No (1) P&A

Well	Status	Completion
Solaris Water Midstream	Active	Devonian SWD; 13.375" @ 515 w/ 450 sx, 9.625" @ 9038' w/ 1980 sx; Circ.
Hood SWD #1 - 30-015-44851		
Pre-Ongard Operator	P&A-R	DA in October 1951; Dry hole to 2100'. Filled w/ cement & mud.
C.A. Martin #1		P&A Diagram follows section

Item V – Area of Review Maps

1. Two Mile AOR Map with One-Mile Fresh Water Well Radius

2. One-Half Mile AOR Map

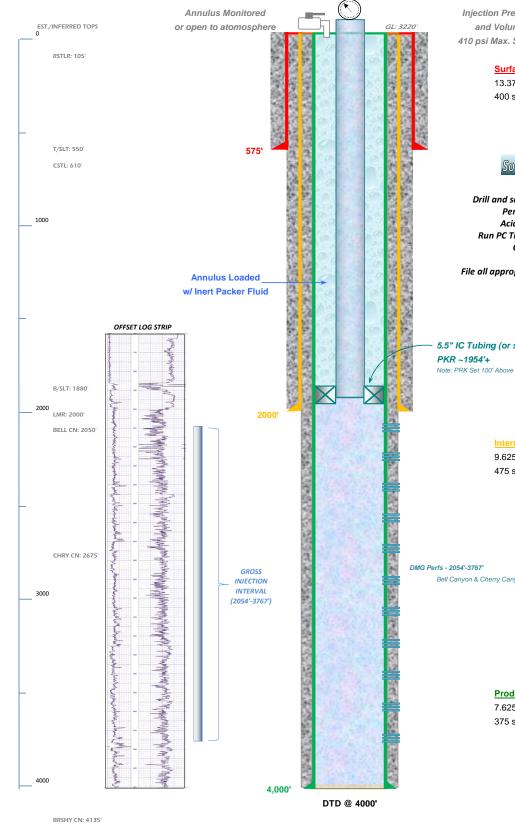
P&A Schematic 30-015-00404

All Above Exhibits follow this page...



WELL SCHEMATIC - PROPOSED Gene SWD #1

API 30-015-xxxxx 1603' FSL & 534' FEL, SEC. 13-24S-R26E EDDY COUNTY, NEW MEXICO



Page 12 of 73

SWD; Bell Canyon-Cherry Canyon (96802)

Spud Date: ~9/15/2025 Config SWD Dt: ~10/01/2025

Injection Pressure Regulated and Volumes Reported 410 psi Max. Surface (0.2 psi/ft)

Surface Casing

13.375" Csg. (17.5" Hole) @ 575' 400 sx - Circulated to Surface

Solaris Water Midstream, LLC

Drill and Complete New SWD: Drill and set casing as shown (25%-50% excess Cmt). Perforate select intervals w/ 4-8 jspf. Acidize w/ up to ~30,000 gals 15% HCl Run PC Tubing and PKR - Conduct Witnessed MIT. Commence Disposal Operations.

File all appropriate sundry and C-105 Completion Reports.

5.5" IC Tubing (or smaller) Note: PRK Set 100' Above Final Uppermost Perf Interval.

> Intermediate Casing 9.625", 36.0# J-55 Csg. (12.25" Hole) @ 2000' 475 sx - Circulated to Surface

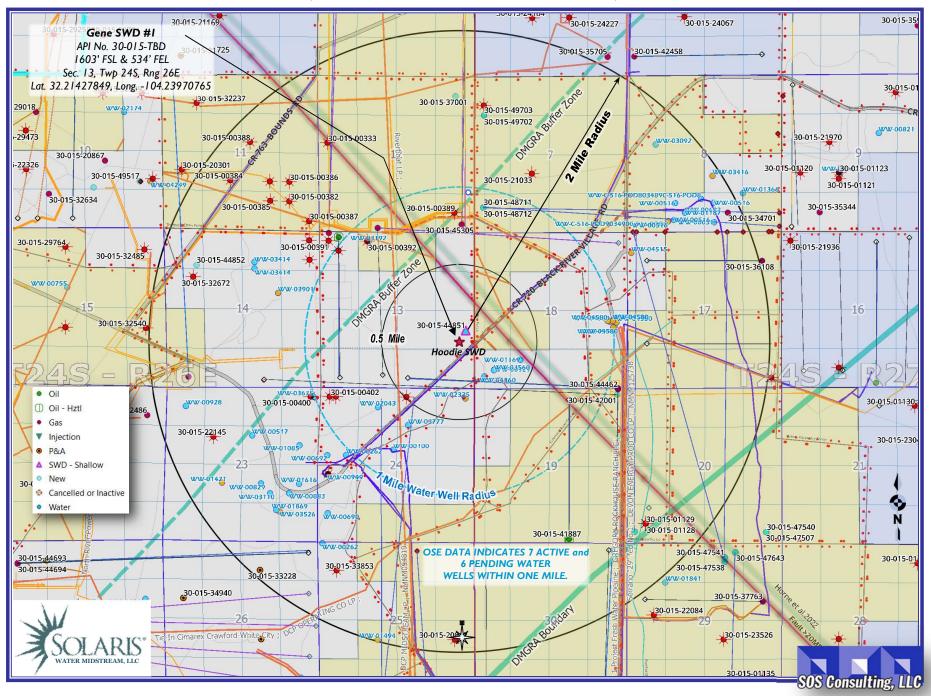
Bell Canyon & Cherry Canyon Selectively Perforated

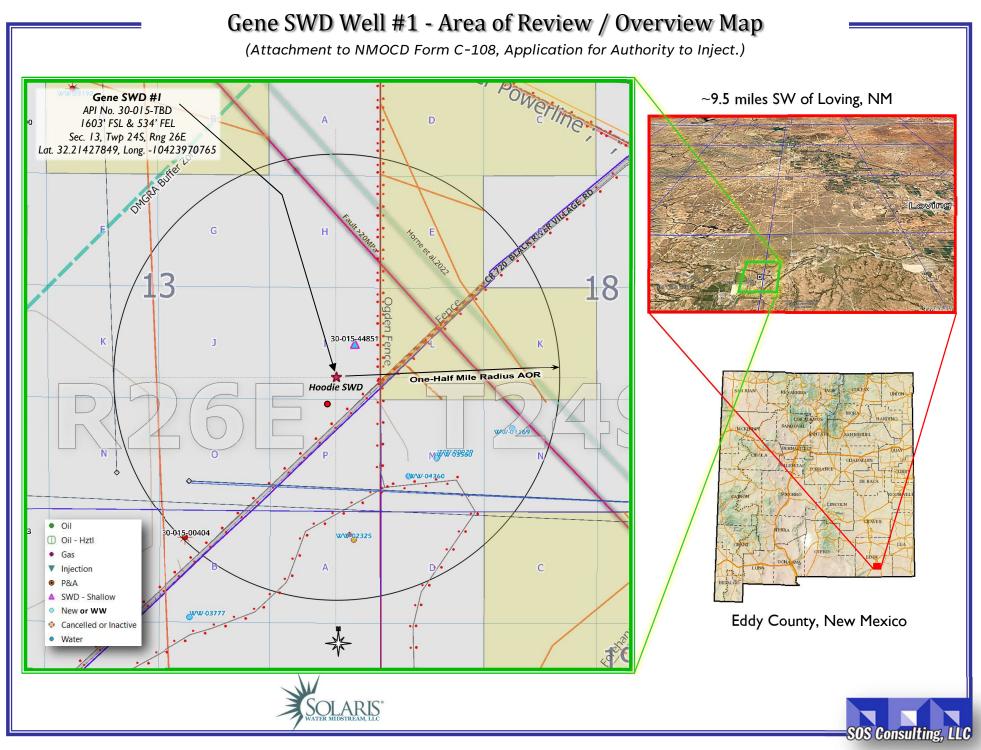
Production Casing 7.625", 29.7# P-110 Csg. (8.75" Hole) @ 4,000'; 375 sx 'C' - Calc'd to Circ.



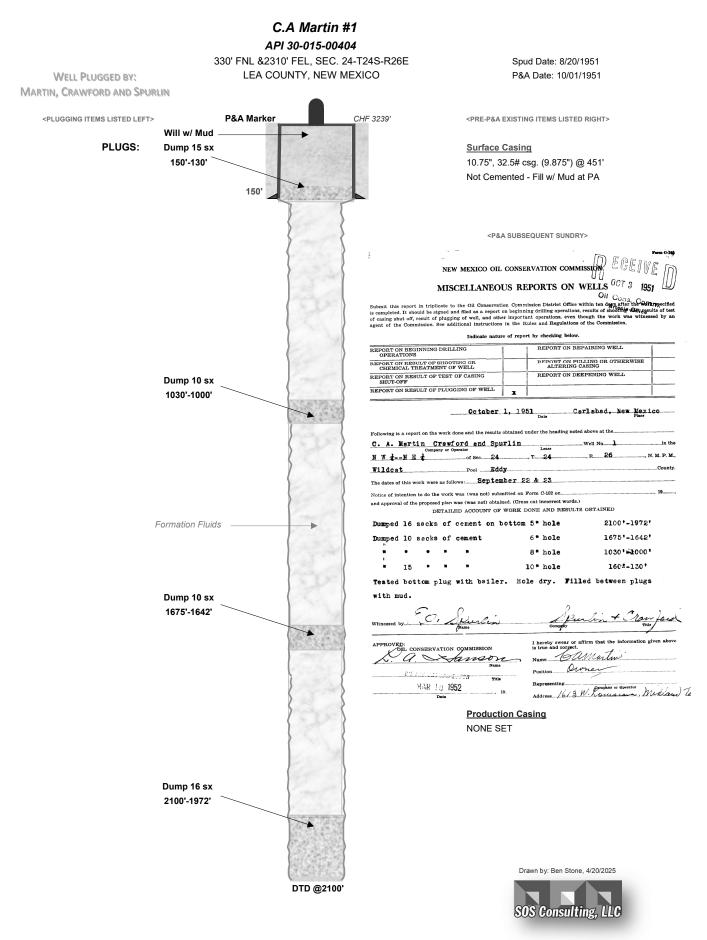
Gene SWD #1 - Area of Review / 2 Miles

(Attachment to NMOCD Form C-108 - Item V)





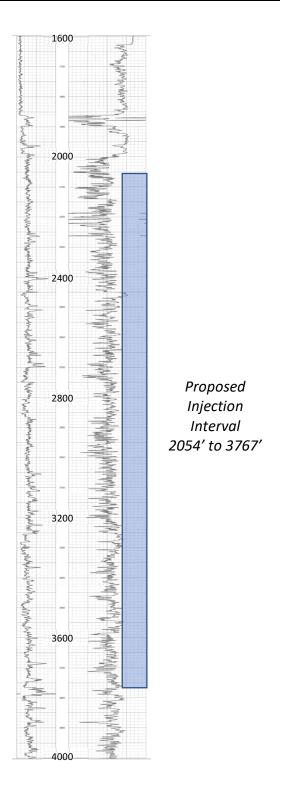
PLUGGED WELL SCHEMATIC

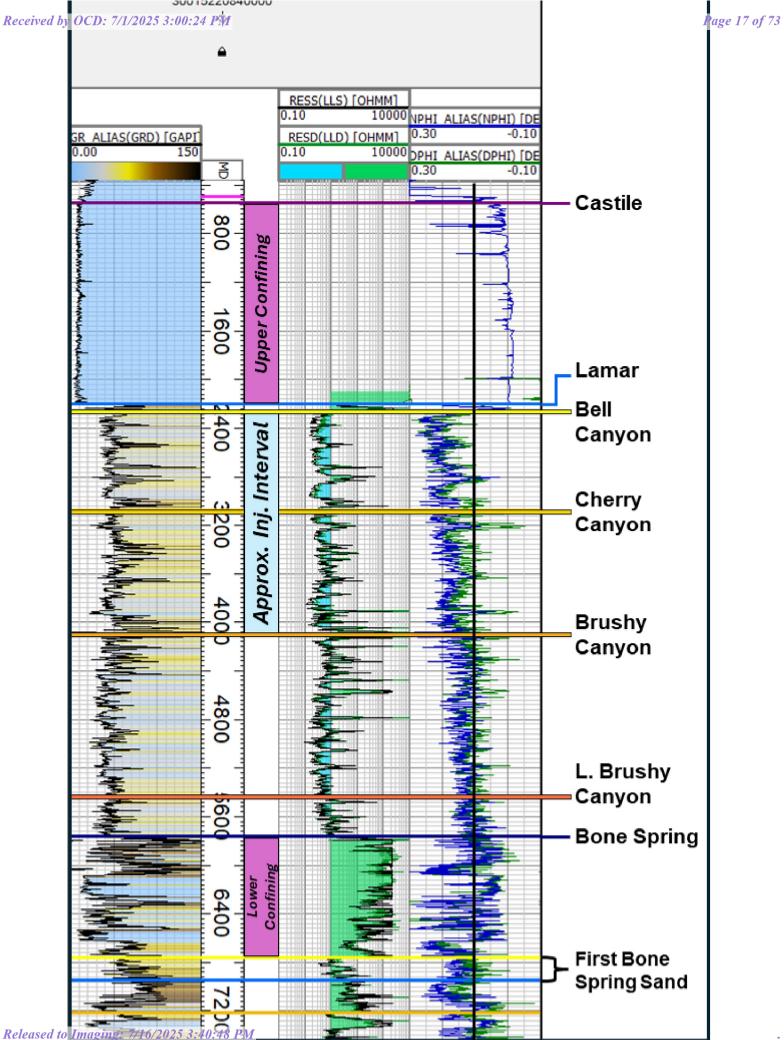


C-108 ITEM X – LOGS and AVAILABLE TEST DATA

Log Strip from offset well with zone identified. (API 30-015-42765, ~4775' NW of Subject)

<u>New logs will be run to upon drilling and completion to positively identify</u> the target intervals within the described maximum top and bottom depths.





Released to Imaging: 7/16/20

C-108 ITEM VII – PROPOSED OPERATION

Solaris Water Midstream <u>Gene SWD No.1</u>

Note: The prospect was developed pursuant to the '<u>Revised OCD Recommendations for</u> <u>Administrative Approval of UIC Disposal Wells in the DMG'</u>

- 1. Location the prospect is outside the DMGRA, location is new, waterflows are nonexistent and, there are no other DMG SWDs in the area.
- 2. The proposed interval into the Bell Canyon and Cherry Canyon formations do not include the Lamar Limestone or the lower Brushy Canyon. Additional information is included in the following pages to address formation specs, testing and 20-year performance modeling for the proposed operation.
- 3. Well will be constructed to comply with this and all regulations. All casing will be cemented to surface; location is beyond potash areas and the well will not be fracture stimulated.
- 4. CBL will be run on each casing string, appropriate suite of logs will be run (quadcombo), a step-rate test will be conducted and pressure gradient verified prior to approval to commence injection. Further, Solaris will provide static BHP every 2 years and include in a detailed performance summary of the SWD. Every 4 years, Solaris will conduct additional testing to include a tracer survey, falloff test, formation sampling and any additional testing or reports deemed necessary by OCD engineering and UIC staff. If requested and warranted, Solaris is amenable to installing a public seismic monitoring station.

Commercial SWD Facility (Split Estate, Fee Surface, BLM Minerals)

Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take approximately 6-8 weeks. Facility construction including installation of the tank battery, berms, plumbing and other and associated equipment would occur as soon as possible and immediately after the rig is moved out. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment. The operator will have obtained all necessary easements, rights-of-way or other instruments as required to begin operations.

Configure for Salt Water Disposal

Prior to commencing any work, C-103 NOI sundry(ies) will be submitted to configure 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 test per BLM and OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity. The operator

will have the voluntary option to install a seismic monitoring device which may or may not be coordinated with resources in the state.

Operational Summary

The SWD facility will primarily be tied into existing Solaris infrastructure currently utilized by the Hood SWD #1 (SWD-1732) located nearby, to the northeast of this site. (Solaris may opt to have an onsite truck facility for limited access if needed.)

The Gene SWD well and injection equipment will be a closed system and equipped with pressure limiting devices and volume meters. The annulus, loaded with an inert, anti-corrosion packer fluid, will be monitored for pressure.

Any tanks will be equipped with telemetry devices and visual alarms to alert the operator and customers of full tanks or an overflow situation.

Anticipated daily maximum volume is 18,500 bpd and an average of 12,500 bpd at a maximum surface injection pressure of 410 psi (.2 psi/ft gradient).

Potential releases will be contained and cleaned up immediately. The operator shall repair or otherwise correct the situation within 48 hours before resuming operations. OCD will be notified within 24 hours of any release greater than 5 bbls. If required, remediation will start as soon as practicable. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as necessary and appropriate.

C-108 ITEM VII – PRODUCED WATER ANAYLSES

Source and Disposal Waters are Reasonably Compatible.

Item VII.4 – Water Analysis of Source Zone Water

Delaware, Bone Spring, Wolfcamp

Item VII.5 – Water Analysis of Disposal Zone Water

DMG

Water analysis summaries follow this page...

C-108 Item VII.5 - Produced Water Data Solaris Water Midstream - Gene SWD #1

SOURCE ZONE

Lab ID

DELAWARE

										LabiD			
API No.	3001502	494								Sample	e ID		5254
Well Name							001			Sample	No		
Location	ULSTR	13	24	S	28	Е		Lat / Long	32.22448	-104	1.03667		
		330	N		650	Е		5		County	Eddy		
Operator	(when sa	mnlod	n										
Operator	(when sa	Fiel		MA	LAG	4				Unit B			
Sam	nple Date							Analysis Date					
			nple S		e UN	KNC	WN		Depth (if known)			
		Wat	ter Typ	pe									
ph								alkalinit	y_as_caco3_	mgL			
ph_ten	np_F							hardness_as_caco3_mgL					
specifi	ficgravity					hardness_mgL							
specifi	ificgravity_temp_F							resistivity_ohm_cm					
tds_m	ngL 148288				288	resistivity_ohm_cm_temp_l							
tds_m	gL_180C							conduc	tivity				
chlorid	le_mgL					91	050	conduc	tivity_temp_F				
sodium	n_mgL							carbona	ate_mgL				
calcium	n_mgL							bicarbo	nate_mgL			182	
iron_m	ngL							sulfate_	_mgL			400	
barium	_mgL							hydroxi	de_mgL				
magne	sium_mgl	-						h2s_m	gL				
potass	ium_mgL							co2_m	gL				
strontiu	um_mgL							o2_mgl	-				
manga	anese_mgl	-						anionre	marks				
Remarks													

(Produced water data courtesy of NMT Octane NM WAIDS database.)



Lab ID

C-108 Item VII.5 - Produced Water Data Solaris Water Midstream - Gene SWD #1 SOURCE ZONE

BONE SPRING

										Lab ID			
API No.	3001510	060								Sample	e ID		5500
Well Name	ROOKIE		ΓE			(001			Sample	No		
Location	ULSTR	07	22	S	26	Е		Lat / Long	32.41351	-104	1.32957		
		150	Ν	2	056	Е		_		County	Eddy		
Operator	(when sa	ampled	ł)										
•	•	Fiel		HA	PPY	VALLI	EY SOUTH			Unit B			
Sample Date							Analy	sis Date					
		•											
			nple S iter Tyj		e UN	KNOV	VN		Depth (i	f known)			
		wa		pe									
ph									y_as_caco3_i	-			
ph_ten	ph_temp_F							hardnes	hardness_as_caco3_mgL				
specifi	specificgravity							hardness_mgL					
specificgravity_temp_F							resistivity_ohm_cm						
tds_m	gL					679	85	resistivi	ty_ohm_cm_t	emp_l			
tds_m	gL_180C							conduc	tivity				
chlorid	le_mgL					391	50	conduc	tivity_temp_F				
sodium	n_mgL							carbona	ate_mgL				
calciur	n_mgL							bicarbo	nate_mgL			61	
iron_m	ngL							sulfate_	mgL			1148	
barium	n_mgL							hydroxid	de_mgL				
magne	esium_mg	L						h2s_m	μL				
potass	ium_mgL							co2_mg	βL				
stronti	um_mgL							o2_mgL	-				
manga	anese_mg	L						anionre	marks				
Remarks													

(Produced water data courtesy of NMT Octane NM WAIDS database.)



C-108 Item VII.5 - Produced Water Data Solaris Water Midstream - Gene SWD #1

SOURCE ZONE

Lab ID

WOLFCAMP

										Lab ID			
API No.	3001520	0138								Sample	e ID		5688
Well Name	MAHUN		E			001				Sample	No		
Location	ULSTR	16	22	s	22	E	Lat	/ Long	32.39340	-104	1.70979		
		1800	Ν	1	980	W		_		County	Eddy		
Operator	(when sa	ampled)										
-		Fiel		RC	СКҮ	ARROYO				Unit F			
San	nple Date			5/17	7/1968	}	Analysis D	ate					
						_			5				
			nple S ter Ty		e DS	I			Depth (i	f known)			
		vva	teriy	pe									
ph						8.6			y_as_caco3_i	-			
ph_ten	np_F							hardnes	s_as_caco3_	_mgL			
specifi	specificgravity					hardness_mgL							
specificgravity_temp_F					resistivity_ohm_cm								
tds_m	gL					35495		resistivi	ty_ohm_cm_t	emp_l			
tds_m	gL_180C							conduct	tivity				
chlorid	e_mgL					19000		conduct	tivity_temp_F				
sodium	n_mgL							carbona	ate_mgL				
calciun	n_mgL							bicarbo	nate_mgL			830	
iron_m	IgL							sulfate_	mgL		2	2500	
barium	_mgL							hydroxid	de_mgL				
magne	sium_mg	L						h2s_mg	ιL				
potass	ium_mgL							co2_mg	ιL				
strontiu	um_mgL							o2_mgL	-				
manga	nese_mg	L						anionre	marks				
Remarks													

(Produced water data courtesy of NMT Octane NM WAIDS database.)



C-108 Item VII.5 - Produced Water Data Solaris Water Midstream - Gene SWD #1

DISPOSAL ZONE

DMG

3								Lab ID		
API No.	30015	22595						Sample		2721
Well Name	GOME	Z			001			Sample	No	
Locat	ion ULSTI	R 05	23	S 28	Е	Lat / Long	32.33373	-104	1.11209	
		2310	S	1650	W			County	Eddy	
Opera	tor (when s	sampleo	d)							
		Fie	ld	HERRA	DURA BEI	ND		Unit K		
:	Sample Dat	е		8/11/197	8	Analysis Date				
		Sar	mple S	ource WE	ELLHEAD		Depth (if	f known)		
		Wa	ater Ty	ре						
ph					6.4	alkalini	y_as_caco3_r	ngL		
ph_	_temp_F					hardne	ss_as_caco3_	mgL		
spe	ecificgravity					hardne	ss_mgL			
spe	ecificgravity	_temp_F	-			resistiv	ity_ohm_cm			
tds	_mgL				133440	resistiv	ity_ohm_cm_te	emp_l		
tds	_mgL_1800	C				conduc	tivity			
chl	oride_mgL				80500	conduc	tivity_temp_F			
SO	dium_mgL					carbon	ate_mgL			
cal	cium_mgL					bicarbo	nate_mgL		303	
iror	n_mgL					sulfate	_mgL		2100	
bar	rium_mgL					hydroxi	de_mgL			
ma	gnesium_m	ngL				h2s_m	gL			
pot	tassium_mg	۱L				co2_m	gL			
str	ontium_mgL	-				o2_mg	L			
ma	nganese_m	ngL				anionre	emarks			
Remarks										

(Produced water data courtesy of NMT Octane NM WAIDS database.)



.

C-108 – Item VIII

Geologic Information

Geologic Exhibits for the Gene SWD Prospect Include:

- Geologic Narrative Description
- Formation [Prog] Tops
- Index Map
- Local Cross Section
- Structure maps:
 - o Lamar
 - o Bell Canyon
 - o Cherry Canyon
 - o Brushy Canyon
 - o Bone Spring
 - Isopach maps:

٠

- o Lamar
- o Bell Canyon
- o Cherry Canyon
- o Brushy Canyon
- o Injection interval (Bell + Cherry)

VIII. Geologic Description

The proposed injection interval, between depths of 2,054 and 3,720* feet below ground level, will straddle the Bell and Cherry Canyon Formations, subdivisions of the Delaware Mountain Group. These formations consist of interbedded sequences composed predominantly of sandstone, siltstone, and shale, with minor limestone beds.

Most of the 1,685-foot-thick injection interval exhibits porosity greater than 10% (Figure 2) and is laterally continuous within the project area (Figure 9), making it a suitable target for high-rate injection (18,500 barrels of water per day).

Upper confinement, separating the injection interval from overlying groundwater, is provided by the low-porosity carbonate and low-permeability shale of the Lamar Formation, as well as the impervious salts and anhydrites of the Castile Formation.

Lower confinement is provided by the low-permeability shales and siltstones at the top of the Brushy Canyon Formation. In nearby wells, porosity generally decreases with depth through the Brushy Canyon, reaching a minimum in the lower interval (Figure 2).

Deeper formations, such as the Bonespring sands and the Wolfcamp, which have been exploited by horizontal drilling, are isolated from the injection interval by the 1,003-footthick Bonespring Lime and Avalon Shales underlying the Brushy Canyon Formation. The well is located outside both the DMGRA and DMGHRP areas (Figure 1).

All depths and thicknesses cited are estimates based on mapping and offset logs that have penetrated the Delaware Mountain Group. A full set of open-hole wireline logs will be collected on the subject well, if conditions allow, including but not limited to: gamma ray, resistivity, neutron-density, sonic, and borehole image logs.

There are no fresh water zones underlying the proposed injection zone. Usable water depth is from surface to 300', the water source is the Rustler formation and older alluvium (Quaternary). All of the fresh water wells in the area (sections 13, 14, 18 & 19) have an average depth to water of 27 feet. A representative water analysis for one of the freshwater wells is included herein.

* After further analysis of logs and available data, the bottom of the interval was brought up 46 feet. Legal notice had already been made but, considering the new depth was above the advertised depth, the decision was made to leave other info unchanged. Meaning, if the original full interval was approved, the new adjustment would have been within the original top and bottom interval calls. The intended target formations remain the Bell Canyon and Cherry Canyon as advertised.

C-108 ITEM VIII

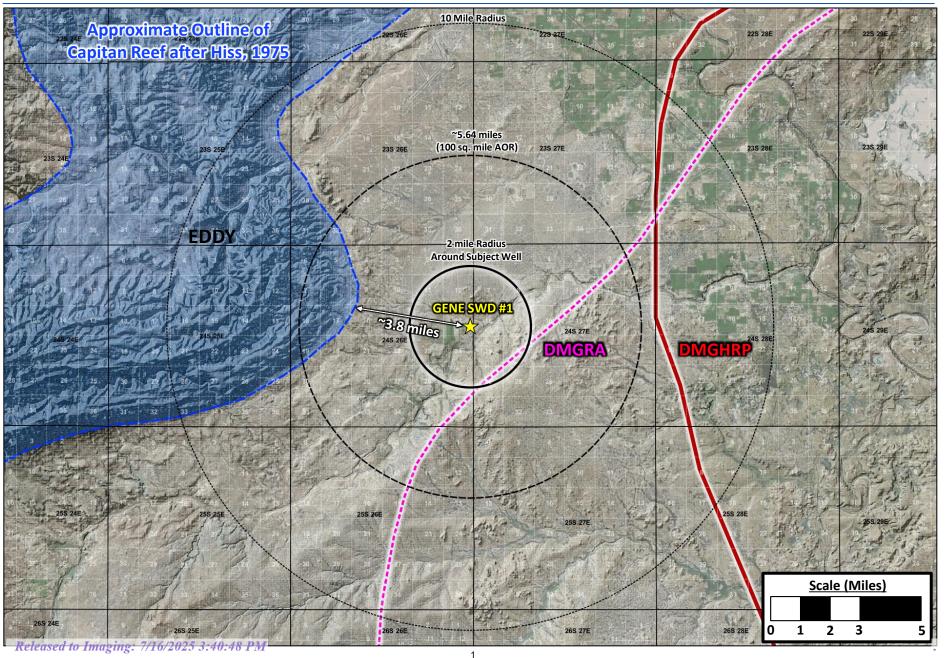
Geologic Information

Formation Tops

Well Name & #	GENE SWD #1					
GL (plat)	3220.0					
Formation	SSTVD (ft)	TVD (ft)				
Alluvium	3220.0	25.0				
Castile	2775.3	444.7				
Lamar	1344.3	1875.7				
Bell Canyon	1234.7	1985.3				
Cherry Canyon	470.8	2749.2				
Brushy Canyon	-548.6	3768.6				
Lower Brushy	-1825.6	5045.6				
Bonespring Lime	-2171.7	5391.7				
First Bonespring	-3174.2	6394.2				
TD	3819					
TOP/BASE INJ	2054	3720				
Req. Max Pressure (PSI)	410					
Req. MDIV (BBL)	18,500					
Tubing	5.5" OD					

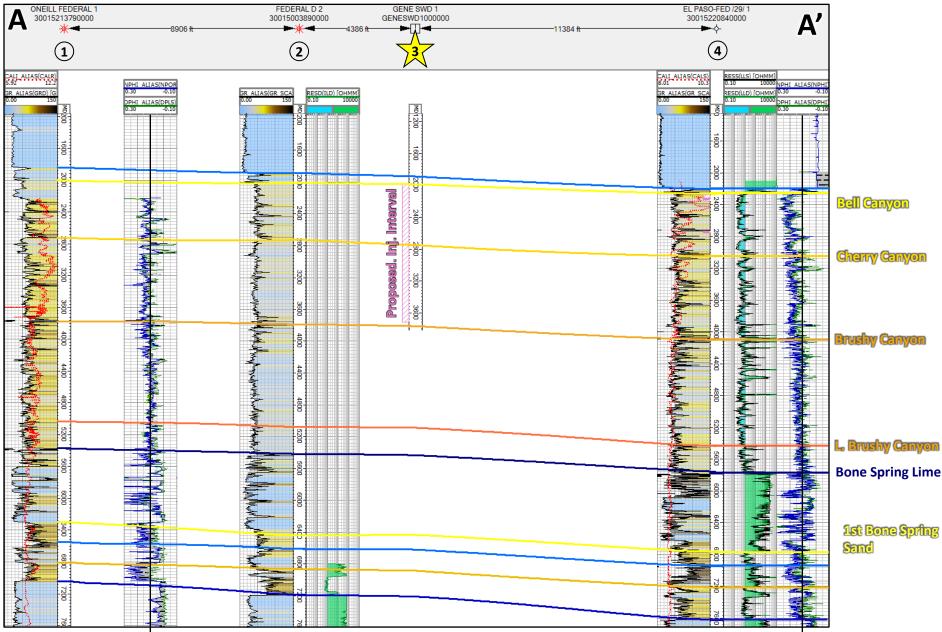
Received by OCD: 7/1/2025 3:00:24 PM Figure 1: index wap





Received by OCD: 7/1/2025 3:00:24 PM Figure 2: Cross Section A-A'



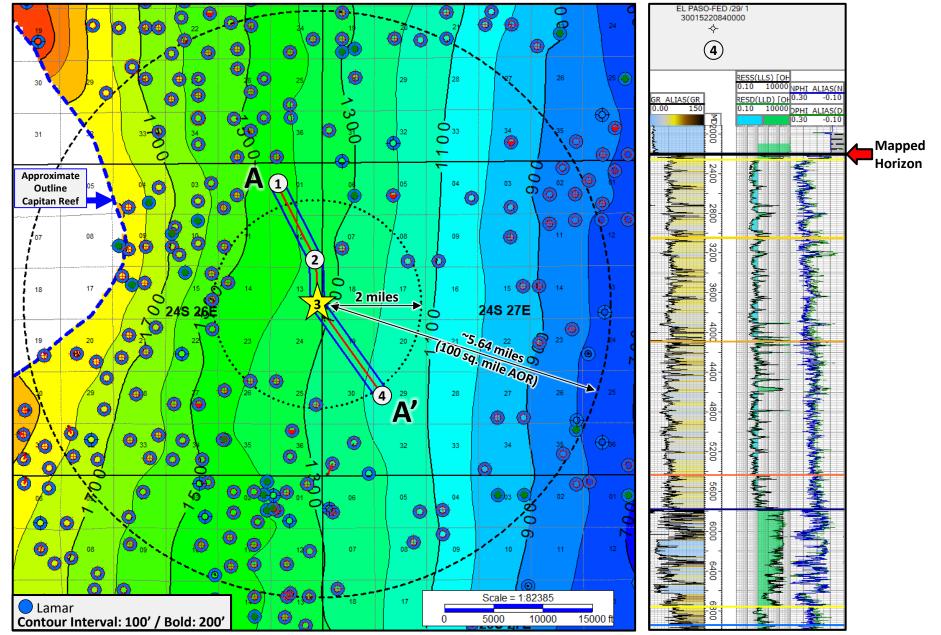


Released to Imagins =7106/2025 3:40:48 PM

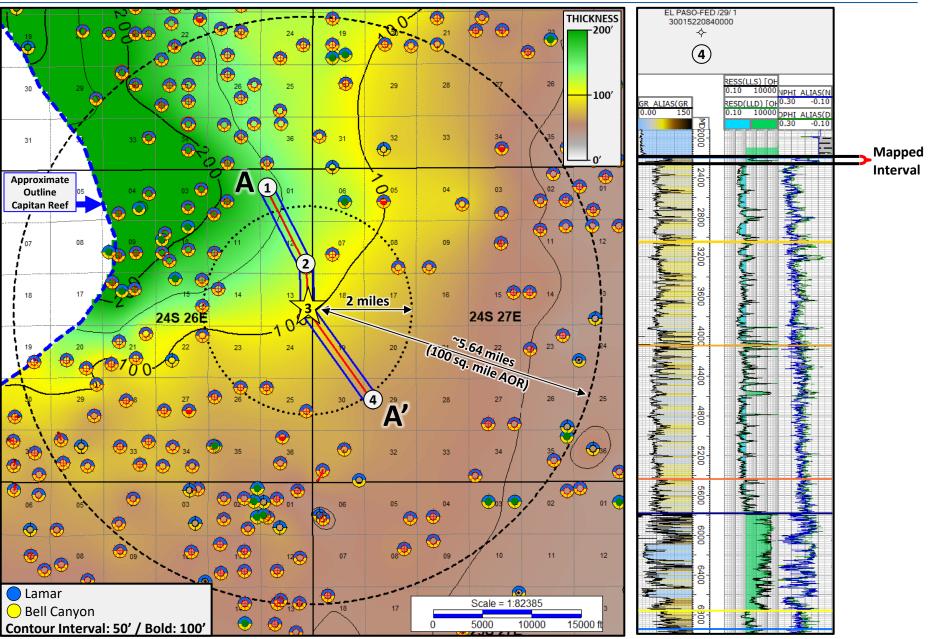
φ=10%

Received by OCD: 7/1/2025 3:00:24 PM Figure 3: Top Lamar Structure Map (Subsea TVD - Feet)





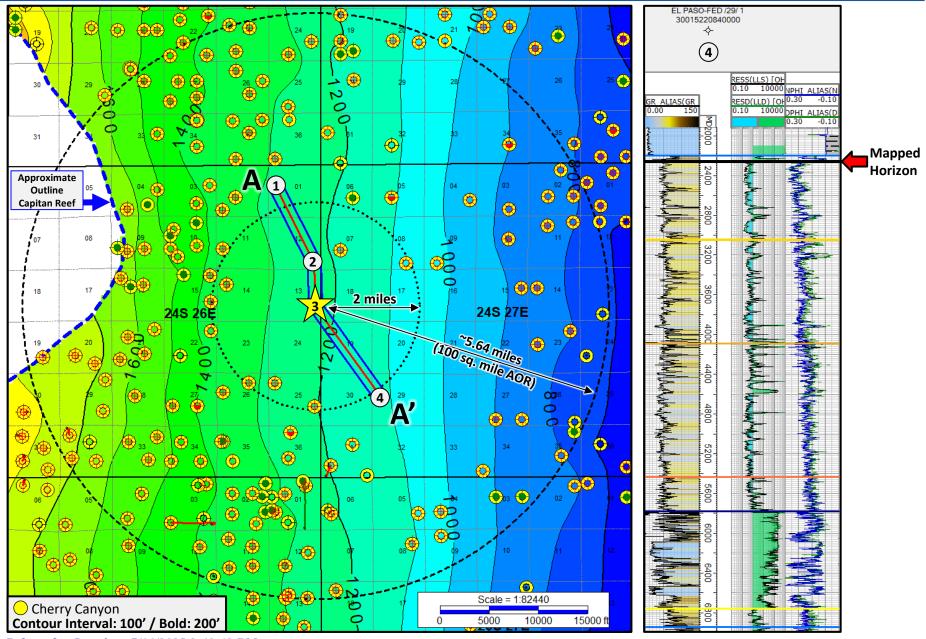
Received by OCD: 7/1/2025 3:00:24 PM Figure 4: Lamar isopach (Gross Thickness - Feet)



Page 31 of 73

Received by OCD: 7/1/2025 3:00:24 PM Figure 5: Top Bell Canyon Structure Map (Subsea TVD - Feet)

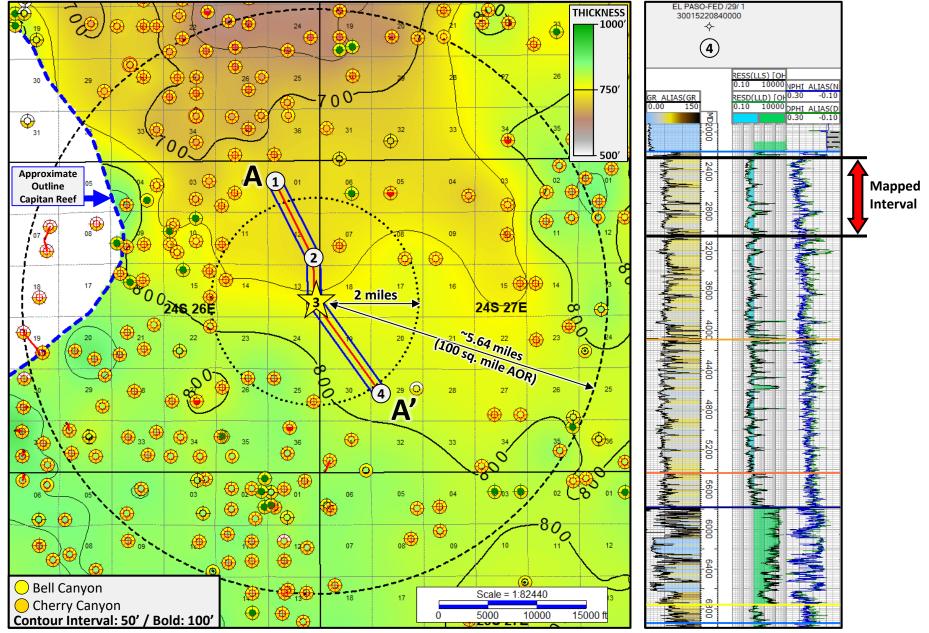
Page 32 of 73



Retoped (ky Jeleging) K/16(2022 R:40448 PM

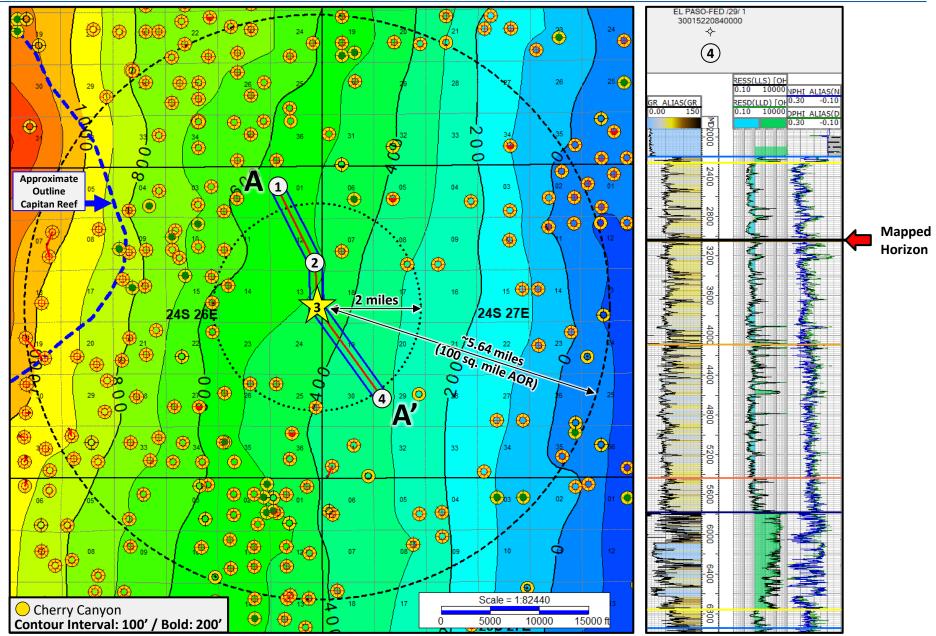
Received by OCD: 7/1/2025 3:00:24 PM Figure 6: Bell Canyon Isopach (Gross Thickness - Feet)





Received by OCD: 7/1/2025 3:00:24 PM Figure 7: Top Cherry Canyon Structure Map (Subsea TVD - Feet)

Page 34 of 73



Received by OCD: 7/1/2025 3:00:24 PM Figure 8: Cherry Canyon Isopach (Gross Thickness - Feet)



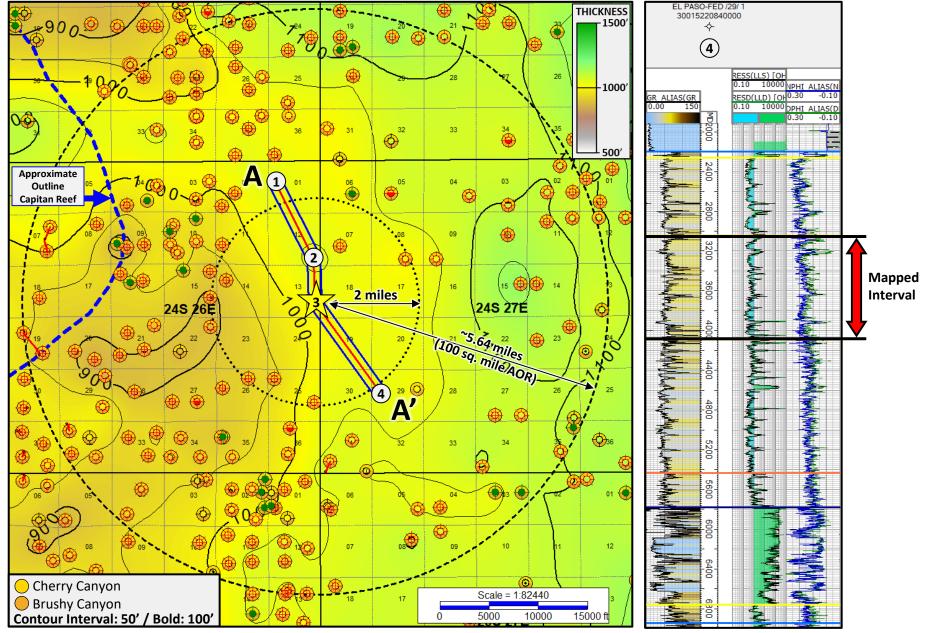
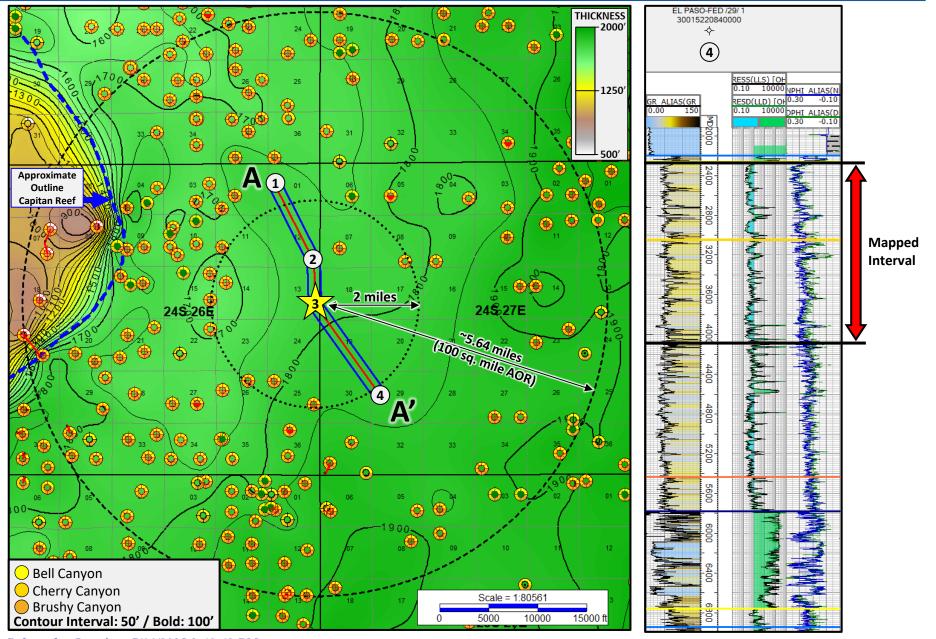


Figure 9: Injection Interval Isopach [Bell + Cherry] (Gross Thickness - Feet)

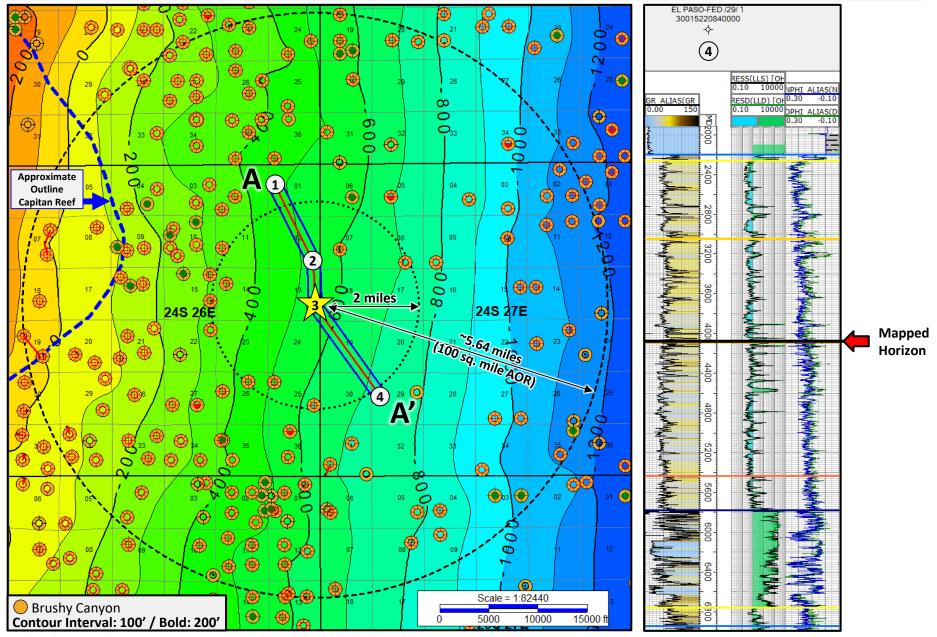
Page 36 of 73



Refered to book inst fer WA137 flat RMJESS

Received by OCD: 7/1/2025 3:00:24 PM Figure 10: Top Brushy Canyon Structure Map (Subsea TVD - Feet)

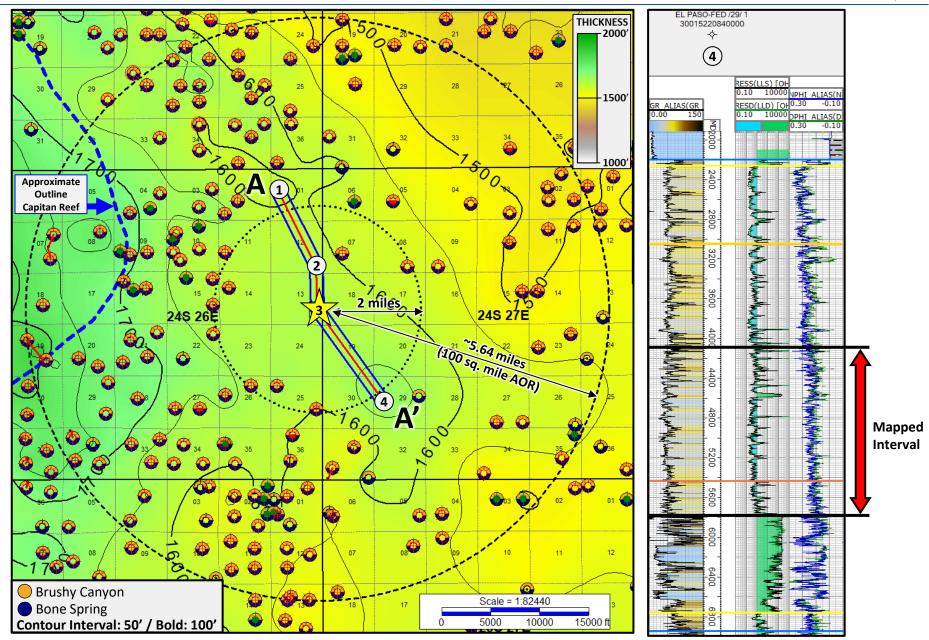




BASE INTERTION APPERVALPM

Received by OCD: 7/1/2025 3:00:24 PM Figure 11: Brushy Canyon Isopach (Gross Thickness - Feet)

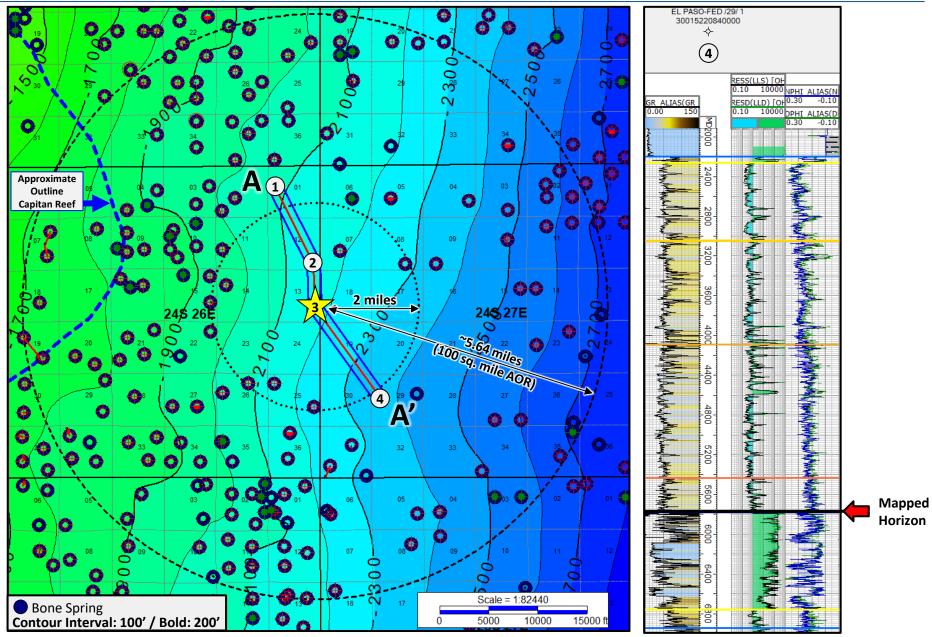
Page 38 of 73



Released to Imaging: 7/16/2025 3:40:48 PM

Received by OCD: 7/1/2025 3:00:24 PM Figure 12: Top Bone Spring Structure Map (Subsea TVD - Feet)

Page 39 of 73



Released to Imaging: 7/16/2025 3:40:48 PM

C-108 Item XI

Water Wells Within One Mile

Gene SWD #1 - Water Well Locator Map

As displayed in OCD's GIS Map, NM State Engineer's and USGS records indicate 10 Active and 5 Pending Water Wells within one mile of the proposed SWD.

One water well was previously sampled and analyzed for the offsetting Hood SWD; analysis follows this page.





(R=POD has

New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been

the POD has been replaced & no longer serves a water right file.)	been replaced, O=orphaned, C=the file is closed)			(quart smalle larges										(In feet)	I
POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	x	Y	Мар	Well Depth	Depth Water	Water Column
<u>C 00100 A</u>		CUB	ED	NW	NW	SW	24	24S	26E	570284.0	3563053.0	۲	51	26	25
<u>C 00262</u>	R	С	ED	SE	SW	NW	24	24S	26E	570481.0	3563253.0 *	۲	50		
<u>C 00262 POD2</u>		С	ED	SE	SW	NW	24	24S	26E	570233.8	3562337.7	۲	45	18	27
<u>C 00690</u>		С	ED	NW	SW	SW	24	24S	26E	570288.0	3562653.0 *	٩	30	10	20
<u>C 00692</u>		С	ED	SW	SW	NW	24	24S	26E	570281.0	3563253.0 *	۲	50	42	8
<u>C 00949</u>		С	ED	NW	NW	SW	24	24S	26E	570284.0	3563053.0 *	۲	62	35	27
<u>C 02043</u>		С	ED		NE	NW	24	24S	26E	570805.0	3563758.0 *	٩	42	28	14
<u>C 03192</u>		С	ED	NW	NE	NW	13	24S	26E	570697.0	3565474.0 *	٩	200		
<u>C 03777 POD1</u>		С	ED	SW	NW	NE	24	24S	26E	571120.4	3563571.6		55	28	27

Average Depth to Water: 26 feet

Minimum Depth: 10 feet

Maximum Depth: 42 feet

Record Count: 9

PLSS Search: Range: 26E Township: 24S Section: 13,24

* UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Page 42 of 73 New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix (R=POD has indicates

the POD has been replaced & no longer serves a water right file.)	been replaced, O=orphaned, C=the file is closed)			(quart smalle larges										(In feet))
POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	x	Y	Мар	Well Depth	Depth Water	Water Column
<u>C 00929</u>		С	ED		SW	SW	18	24S	27E	572013.0	3564159.0 *		54	33	21
<u>C 01169</u>		С	ED	NW	SE	SW	18	24S	27E	572282.0	3564261.0 *	٠	55	35	20
<u>C 03560 POD1</u>		С	ED	NE	SW	SW	18	24S	27E	572009.0	3564150.6	٠	68	28	40
<u>C 04360 POD1</u>		С	ED	SW	SW	SW	18	24S	27E	571910.0	3564085.3	٠	72	40	32

Average Depth to Water: 34 feet

Minimum Depth: 28 feet

Maximum Depth: 40 feet

Record Count: 4

PLSS Search:

Range: 27E Township: 24S **Section:** 18,19

* UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



P.O. Box 3394, Midland, Texas 79702 Phone (432) 684-4233 Fax (432) 684-4277

202250					SAMPLE ANAI	LYSIS FORM
Company	Delaware Energ	ЭУ			Date	01/08/2018
State	Cou	inty Eddy			Date in Lab	01/08/2018
Lease	Hood Fresh Wa	ter	Well Type		Well	
Sample Date	01/08/2018	Sample Pt	Well Head		Sales Rep	Derrick Boutwell
Number of Yrs Old			Top Perf	-		
	<u> </u>	Produc	tion			
Fluids:	Oil(bpd)	Gravity API		Color of Oil		
	Water(bpd)	Estimated Chlorides		Water Produced		······
	Gas(mcf)	Working Pressure(ps	i)	Shut in Pressure(psi)	
Well Class and Typ	e Lift:				lron Count(mg/l)	<u></u>
Equipment:					 Temperature(F)
		Chemicals	s in Use	2	-	
Produc	t	Amount		Unit	Treat	ment
	Problem:				Location:	
	Water Quality					
Recommendations	: Yes					
Details:						

Fresh water well using for frac. Any was possible they need it Wednesday morning. ASAP.

1

.

.



P.O. Box 3394, Midland, Texas 79702 Phone (432) 684-4233 Fax (432) 684-4277

Water Analysis

Code	202250						
Client Information		Sample Information					
Delaware Energy		Lease/Well:	Hood Fresh Water/				
County:	Eddy						
		Sample Point:	Well Head				
		Date Sampled:	01/08/2018				
Rep:	Derrick Boutwell	Date Reported:	01/08/2018				

Results

Cations	
lon	Concentration(mg/L)
Barium (as Ba)	0
Calcium (as Ca)	710
Iron (as Fe)	0
Sodium (as Na)	2
Magnesium (as Mg)	0
Anions	
lon	Concentration(mg/L)
Chlorides (as Cl)	56
Sulfate (as SO4)	1408
Carbonate (as CO3)	0
Bicarbonates (as HCO3)	390
Sulfide (as S2-)	0

Other Measurements

Measurement	Value
рН	6.97
SG	1.0024
Turbidity	19
CO2	
Total Dissolved Solids	2566.000

Scaling Indices

Temp(F)	CaCO ₃	CaSO ₄ *2H ₂ O	CaSO ₄	BaSO ₄
80	0.8356	0.0000	0.0000	-28.0671
120	1.1790	0.0000	0.0000	-28.2801
160	1.5792	0.0000	0.0000	-28.4082
200	1.9427	0.0000	0.0000	-28.4640
250	2.2736	0.0000	0.0000	-28.4245

Low = < 0.200, Moderate = 0.200-0.999, High = > 1.00

Comments

Fresh Water

e-Permitting

C-108 Submittal

Attachment Category

Seismicity Analysis

For High Volume Devonian Wells

(NOT APPLICABLE TO THIS APPLICATION)



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

> Re: Geology Statement Solaris Water Midstream, LLC Gene SWD #1 Section 13, T. 24S, R. 26E Eddy County, New Mexico

To whom it may concern:

Publicly available geologic and engineering data related to the proposed well have been thoroughly reviewed, and no evidence for open faults or any other hydrologic connection between the proposed Delaware Mountain Group injection zone and any underground sources of drinking water have been found.

Sincerely,

Patrick Ryp

Patrick Ryan Sr. Geologist

C-108 ITEM XII – GEOLOGIC AFFIRMATION

We have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and any underground sources of drinking water.

Ano

Ben Stone, Partner SOS Consulting, LLC

Project: Solaris Water Midstream, LLC Gene SWD #1

Reviewed for DMG 4/20/2025

C-108 ITEM XIII – PROOF OF NOTIFICATION

IDENTIFICATION AND NOTIFICATION OF AFFECTED PARTIES

Exhibits for Section

Affected Parties Map

List of Affected Parties

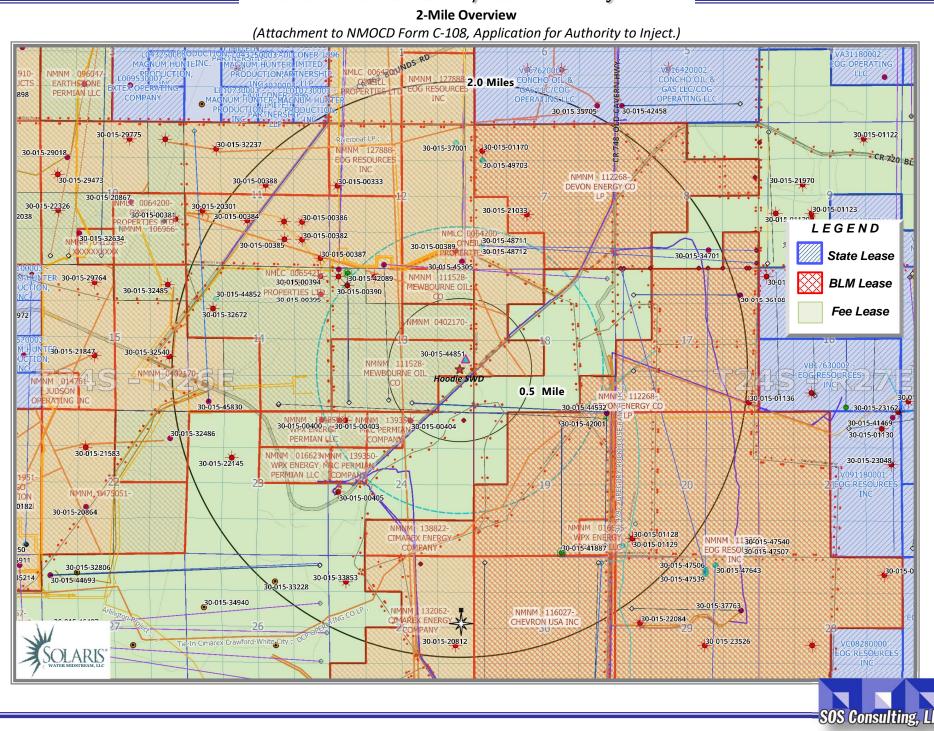
Notification Letter to Affected Parties

Instructions for PDF Document Access

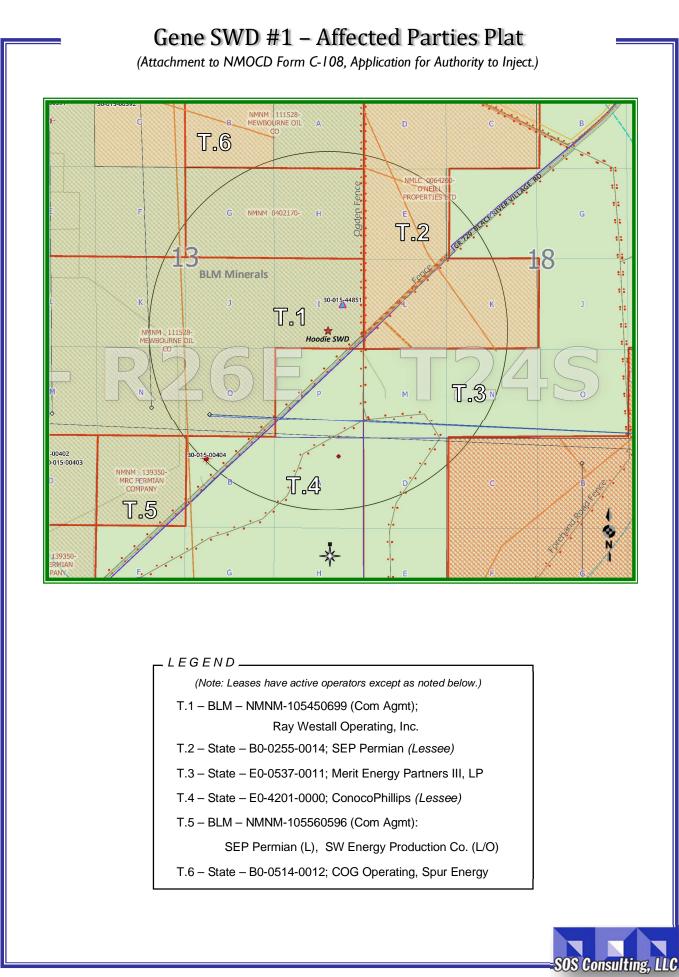
Proof of Certified Mailing

Affidavit Published Legal Notice

Gene SWD #1 – Lease/ Affected Party Plat



Released to Imaging: 7/16/2025 3:40:48 PM



F

C-108 ITEM XIII – PROOF OF NOTIFICATION AFFECTED PARTIES LIST

ALL AFFECTED PARTIES ARE PROVIDED A NOTICE LETTER VIA US CERTIFIED MAIL CONTAINING UNIQUE 6 CHARACTER DOCUMENT ACCESS CODES FOR SECURE DOWNLOAD OF A PDF COPY OF THE SUBJECT C-108 APPLICATION. AFFECTED PARTIES MAY ALSO REQUEST A PDF COPY VIA SENT EMAIL.

"AFFECTED PERSON" MEANS THE DIVISION DESIGNATED OPERATOR; IN THE ABSENCE OF AN OPERATOR, A LESSEE WHOSE INTEREST IS EVIDENCE BY A WRITTEN CONVEYANCE DOCUMENT EITHER OF RECORD OR KNOWN TO THE APPLICANT AS OF THE DATE THE APPLICANT FILES THE APPLICATION; OR IN THE ABSENCE OF AN OPERATOR OR LESSEE, A MINERAL INTEREST OWNER WHOSE INTEREST IS EVIDENCED BY A WRITTEN CONVEYANCE DOCUMENT EITHER OF RECORD OR KNOWN TO THE APPLICANT AS OF THE DATE THE APPLICANT FILED THE APPLICATION FOR PERMIT TO INJECT.; PER OCD RULES NMAC 19.15.26.7, A. AND 19.15.26.8, B.2.

SURFACE OWNER

SOM AGE OWNER			
NOTICE #	ENTITY	US CERTIFIED TRACKING	SOS DOC ACCESS CODE
1	EUGENE C & ALICE K HOOD 1142 Black River Village Road Carlsbad, NM 88220	7018 2290 0001 2038 9231	
OFFSET MINERALS L	ESSEES and/ or OPERATORS		
2	MEWBOURNE OIL COMPANY P.O. Box 5270 Hobbs, NM 88241	7018 2290 0001 2038 9248	
3	DEVON ENERGY OPER. CO. 20 North Broadway, Ste.1500 Oklahoma City, OK 73102	7018 2290 0001 2038 9255	
4	MRC PERMIAN, LLC 5400 LBJ Freeway, Suite 1500 Dallas, Texas 75240	7018 2290 0001 2038 9262	
5	EOG RESOURCES, INC. 5509 Champions Drive Midland, TX 79706	7018 2290 0001 2038 9279	\boxtimes
6	O'NEILL PROPERTIES LTD. P O Box 2840	7018 2290 0001 2038 9286	\boxtimes
	Midland, TX 79702		

REGULATORY	OIL CONSERVATION DIVISION Engineering Bureau – UIC Group 1220 S. St. Francis Drive Santa Fe, NM 87505	Filed via OCD Online	
7	U.S. DEPARTMENT OF INTERIOR Bureau of Land Management Oil & Gas Division 620 E. Greene St. Carlsbad, NM 88220	7018 2290 0001 2038 9293	J

SOS Consulting, LLC

Oil & Gas Accounting - Regulatory Processing Assistance - Oil Field Technical Assistance

May 9, 2025

NOTIFICATION TO INTERESTED PARTIES via U.S. Certified Mail – Return Receipt Requested

To Whom It May Concern:

Solaris Water Midstream, Houston, Texas, has made application to the New Mexico Oil Conservation Division to permit for salt water disposal the Hoodie #1. The SWD operation will be for commercial water disposal from area operators. As indicated in the notice below, the well is located in Section 13, Township 24 South, Range 26 East in Eddy County, New Mexico.

The published notice states that the interval will be from 2,054 feet to 3,767 feet into the Bell Canyon and Cherry Canyon formations. Following is the notice published in the Artesia Daily Press, Artesia, New Mexico on or about April 24, 2025.

LEGAL NOTICE

Solaris Water Midstream, LLC, 9651 Katy Freeway, Suite 400, Houston, Texas, 77024, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well is the Hoodie SWD No.1, (API 30-015-TBD) is located 1603' FSL and 534' FEL, Section 13, Township 24 South, Range 26 East, Eddy County, New Mexico. Produced water from area production will be commercially disposed into the Bell Canyon and Cherry Canyon formations at a depth of 2,054' to 3,767' at a maximum surface pressure of 410 psi with a maximum daily rate of 18,500 bwpd and an average daily rate of 12,500 bwpd. The proposed SWD well is located approximately 9.5 miles southwest of Loving, NM.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505)476-3460 within 15 days of the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (936)367-5950 or, email info@sosconsulting.us.

You have been identified as a party who may be interested as an offset lessee or operator.

<u>You are entitled to a full copy of the application</u>. SOS Consulting has deployed a new app for the explicit secure delivery of a full PDF copy of the application. Any user employed with **Affected Party** may log into the system and when prompted for a *Document Access Code*, enter **0000XX** to View or Download the document as desired. Using the *SOS Client and Affected Party Document Access* app takes about one minute, start to finish – instructions are included, and only name, email and company name are needed to access the system.

Thank you for your attention in this matter.

Best regards,

Ben Stone, SOS Consulting, LLC Agent for Solaris Water Midstream, LLC Cc: Application File

User Information for the SOS Client & Affected Party Portal

Thank you for using the new SOS Document Portal. This system allows for the **secure delivery of all types of applications and any resulting permits**. The system is built in and stored in the cloud using the best available platforms and code for a secure and robust app. We hope you appreciate our efforts to reduce printed paper copies and deliver pertinent documents in a much more efficient way. <u>If you're a client, you may use the portal</u> to view all the applications that SOS Consulting, LLC has generated on behalf of you or your organization.



<u>Become a user of the site</u> by entering your email address and basic info for your profile – minimal information is required although we ask that you provide your company name so we may view who and which companies have reviewed a particular document.

(Please note that nothing is done with your information - it is only for access to this portal.)

Each time you log into the SOS Portal, you will be sent a pin code for **2-Step Verification** to your email within 15 seconds. Enter the code for access to the portal.



OBILE ACCESS

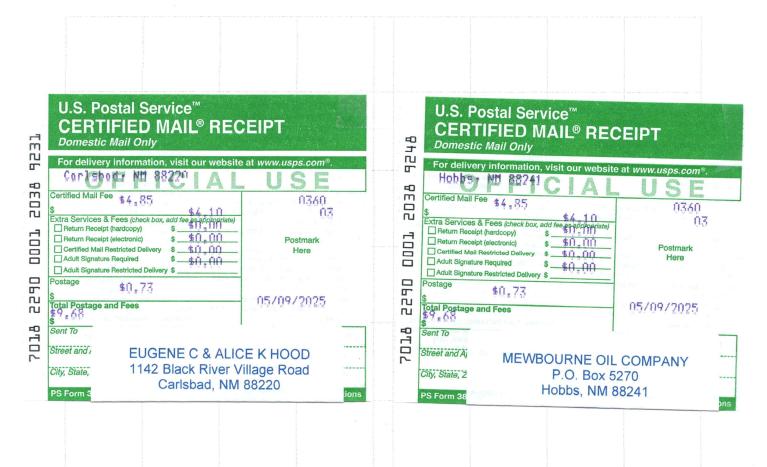
The SOS portal will open to your user page or the portal home. If you don't see this screen, simply click on the SOS Client & Affected Party title and the home page will open. This page allows you to enter a **'Document Access Code'** or if a client, **'Enter your OGRID'**. **(When entering an OGRID, you will also be prompted for a Client ID for security – SOS Consulting will have already provided this to its clients.)** <u>Note: The unique **Document Access Code** is provided in your **'Notice Letter to Affected Parties'**.</u>



Released to Imaging: 7/16/2025 3:40:48 PM

C-108 - Item XIV

Proof of Notice (Certified Mail Receipts)

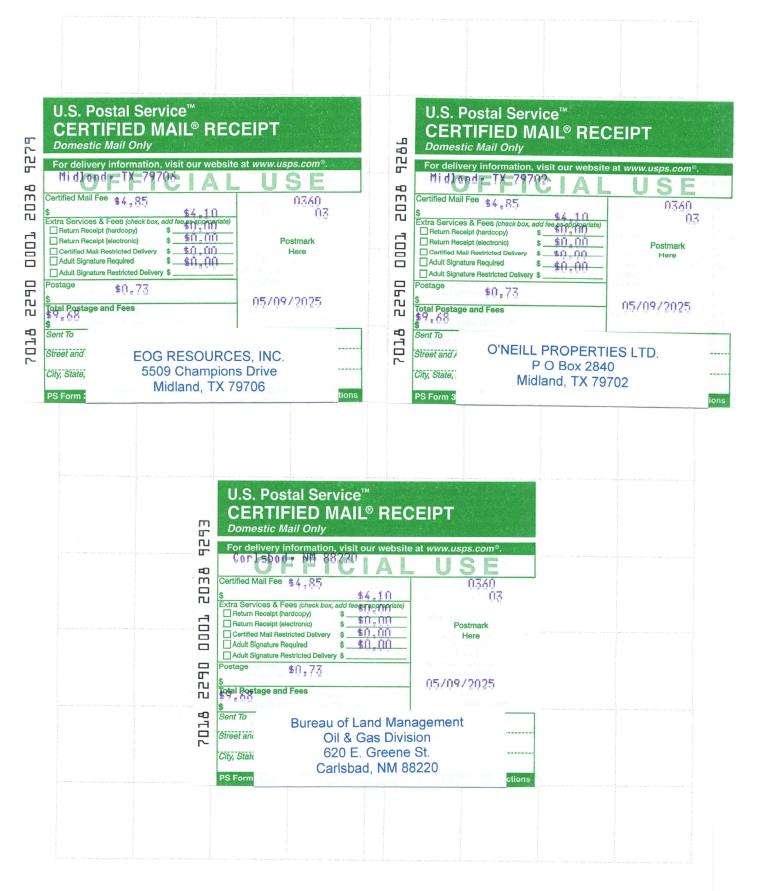




Released to Imaging: 7/16/2025 3:40:48 PM

C-108 - Item XIV

Proof of Notice (Certified Mail Receipts - cont.)



ben sosconsulting.us

From:	Tim Harrington <tharrington@mewbourne.com></tharrington@mewbourne.com>
Sent:	Sunday, May 11, 2025 2:12 PM
То:	ben sosconsulting.us
Subject:	RE: [EXT] Solaris shallow SWD proposal

Ben:

I received confirmation from our Midland Exploration Team that we <u>do not</u> plan to protest this application. Thanks.

Tim Harrington

Reservoir Engineer Mewbourne Oil Company 3620 Old Bullard Road PO Box 7698 Tyler, TX 75701

W -903-534-7647 (Direct) C - 832-217-6852 tharrington@mewbourne.com

From: ben sosconsulting.us <ben@sosconsulting.us>
Sent: Thursday, May 8, 2025 1:46 PM
To: Tim Harrington <tharrington@mewbourne.com>
Subject: [EXT] Solaris shallow SWD proposal...

Hello Tim,

Hope all is well.

Hey, I'm working on a new SWD for Solaris – it's proposed into the Bell and Cherry Canyons and is adjacent to its existing Hood SWD (Devonian) in 13-24S-26E.

Mewbourne had a couple laterals running through the south portion of the ½ mile AOR. Can you check with your guys to see if there are any issues? I've attached basic info here... Working on notice so Mewbourne will be getting that, but I wanted to bounce it off you before I got too far down the road.

Thanks very much, Ben

Sen Jon

.



Ben Stone, Partner 127 Teena Lane Livingston, TX 77351

C: 903-335-3368 O: 936-376-5950

Visit us on the web at <u>www.sosconsulting.us</u> CONFIDENTIALITY NOTICE: This message is confidential and may be privileged. If you believe that this email has been sent to you in error, please reply to the sender that you received the message in error; then please delete this e-mail. Thank you.

Received by OCD: 7/1/2025 3:00:24 PM

Affidavit	of	Publication
		4

		No.	44940
State of	New Mexico		Publisher
County	of Eddy:		
-	Shabaz		
being d	uly sworn, saye	s that he is the	Publisher
of the A	rtesia Daily Pro	ess, a weekly newsp	paper of General
circulat	ion, published i	n English at Artesia	a,
said co	unty and state, a	and that the hereto	attached
	Le	gal Ad	
was puł	olished in a reg	ular and entire issu	e of the said
Artesia	Daily Press, a v	weekly newspaper c	luly qualified
for that	purpose within	the meaning of Ch	apter 167 of
the 193	7 Session Laws	s of the state of New	w Mexico for
1	Consecuti	ve weeks/day on th	e same
day as f	ollows:		
First Pu	blication	Apri	1 24, 2025
Second	Publication		
Third P	ublication		
Fourth I	Publication		
Fifth Pu	blication		
Sixth Pu	ublication		
Seventh	Publication		
Eighth F	Publication		
Subscrit	oed ans sworn b	efore me this	
24th	day of	April	2025
	Notary Public, Commissi My Comm	A ROMINE State of New Mexico on No. 1076338 nission Expires -12-2027	
\mathcal{A}	atishe	j Ren	Unl
<u> </u>	Latisha R	omine	
	Notary Pi	ublic, Eddy Count	tv. New Mexico

Copy of Publication:

LEGAL NOTICE

Solaris Water Midstream, LLC, 9651 Katy Freeway, Suite 400, Houston, Texas, 77024, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well is the Hoodie SWD No.1, (API 30-015-TBD) is located 1603' FSL and 534 FEL. Section 13, Township 24 South, Range 26 East, Eddy County, New Mexico. Produced water from area production will be commercially disposed into the Bell Canyon and Cherry Canyon formations at a depth of 2,054' to 3,767' at a maximum surface pressure of 410 psi with a maximum daily rate of 18,500 bwpd and an average daily rate of 12,500 bwpd. The proposed SWD well is located approximately 9.5 miles southwest of Loving, NM.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505)476-3460 within 15 days of the filing of the application which is expected 10 days from the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (936)367-5950 or, email info@sosconsulting.us.

44940-Published in Artesia Daily Press, April 24, 2025

<i>ceived by OCD: 7/1/2025 3:00:24 PM</i> Santa Fe Main Office Phone: (505) 476-3441 Fax: (55) 476-3462 General Information Phone: (505) 629-6116		Energy, Mi	nerals Depa	New Mexico & Natural Resources artment ATION DIVISION		Page 59 of 7 <u>C-102</u> Revised July 9, 2024 Submit Electronically via OCD Permitting
Online Phone Directory Visit: https://www.emnrd.nm.gov/ocd/conta	ict-us/				C-1	Initial Submittal
					Submittal Type:	□ Amended Report
						□ As Drilled
		WELL LOCA	ATION I	NFORMATION		
API Number 30-015-TBD	Pool Code 968	02	Pool N	swd; BELL CA	NYON-C	HERRY CANYON
Property Code TBD	Property Name	GENE	SWD			Well Number #1
OGRID No. 371643	Operator Name	SOLARIS W	/ATE	R MIDSTREAM, LL	.C.	Ground Level Elevation 3220'
Surface Owner: \Box State \Box Fee \Box	Tribal 🗆 Federal		N	Mineral Owner: 🗆 State 🗆 Fee	🗆 Tribal 🗆 F	ederal

	Surface Location								
UL	Section 13	Township 24-S	Range 26-E	Lot	Ft. from N/S 1,603 FSL	Ft. from E/W 534 FEL	Latitude 32.21433888°N	Longitude 104.23971829°W	County EDDY
	Bottom Hole Location								
					Bottom H	ole Location			

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.			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	Longitude	County
		-	Ũ					e	, i i i i i i i i i i i i i i i i i i i
					First Take	e Point (FTP)	·		•
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
		_						-	-
					Last Take	e Point (LTP)			
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
		_	_						

Spacing Unit Type 🗆 Horizontal 🗆 Vertical

Ground Floor Elevation:

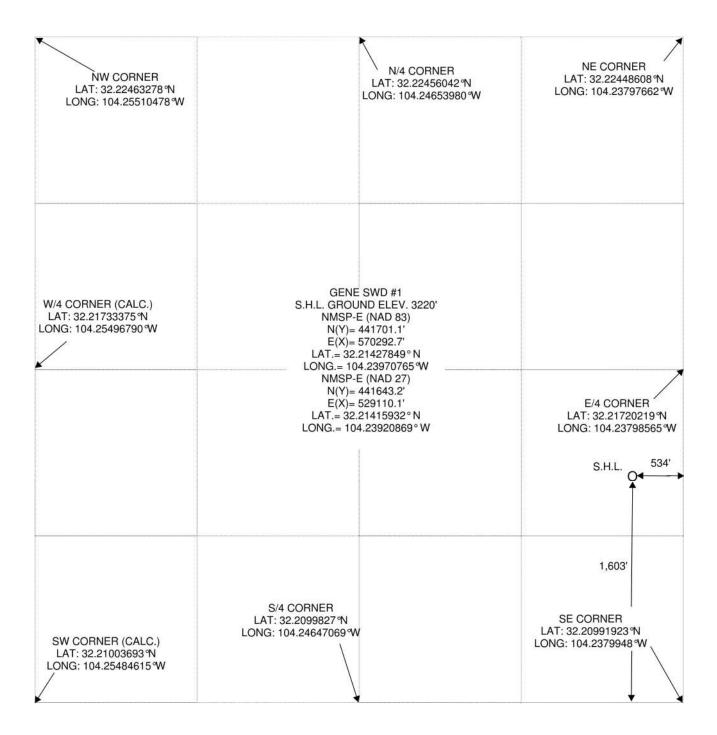
OPERATOR CERTIFICATIONS	SURVEYOR CERTIFIC	CATIONS	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest 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.	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.		
	Signature and sear of Professi	SSIONAL SUF	
Printed Name	Certificate Number	Date of Survey REV. 1	
	29786	3-17-2025 6-24-25	
Email Address		02120	

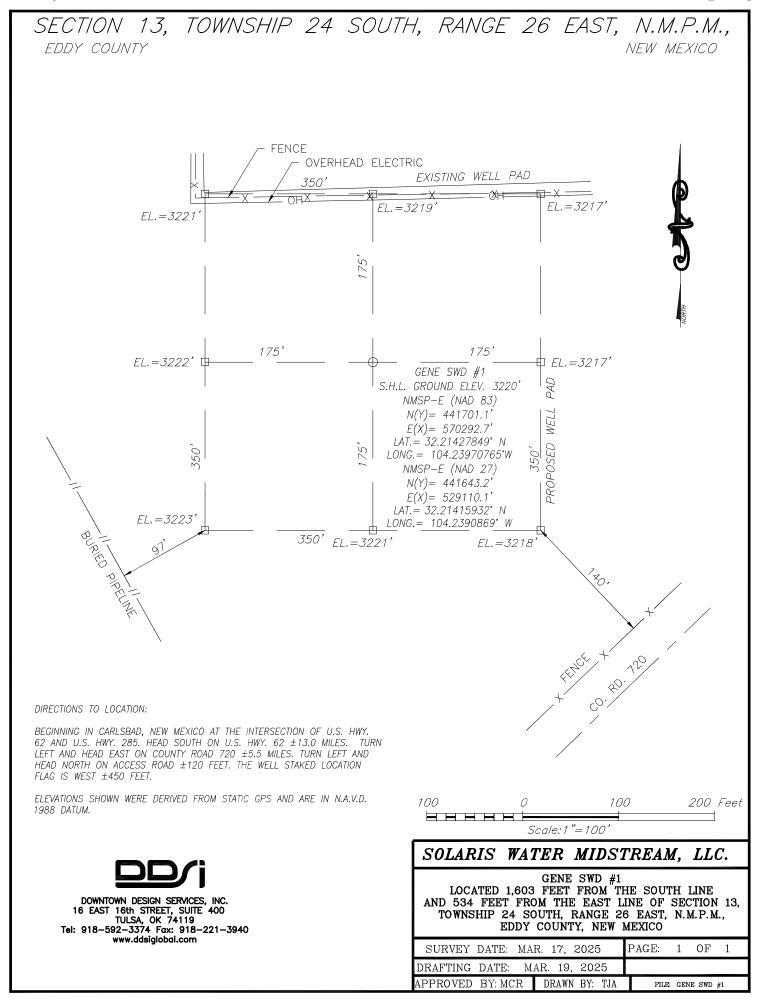
Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division. **Released to Imaging:** 7/16/2025 3:40:48 PM

Received by OCD: 7/1/2025 3:00:24 PM 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.





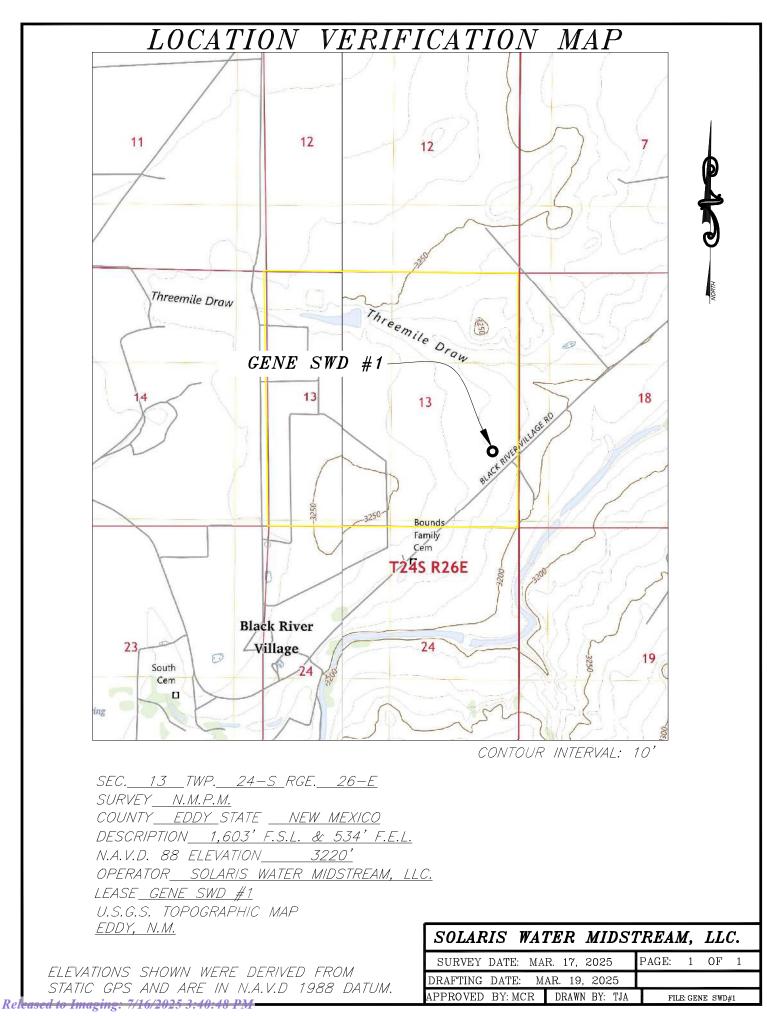
Released to Imaging: 7/16/2025 3:40:48 PM



SEC. <u>13</u> TWP. <u>24–S</u> RGE. <u>26–E</u>
SURVEYN.M.P.M.
COUNTY <u>EDDY</u> STATE <u>NEW_MEXICO</u>
DESCRIPTION <u>1,603'F.S.L. & 534'F.E.L.</u>
N.A.V.D. 88 ELEVATION <u>3220'</u>
OPERATOR <u>SOLARIS WATER MIDSTREAM, LLC.</u>
LEASE <u>GENE SWD #1</u>
U.S.G.S. TOPOGRAPHIC MAP
EDDY, N.M.

ELEVATIONS SHOWN WERE DERIVED FROM STATIC GPS AND ARE IN N.A.V.D 1988 DATUM. Released to Imaging: 7/16/2025 3:40:48 PM SCALE: 1" = 2000'

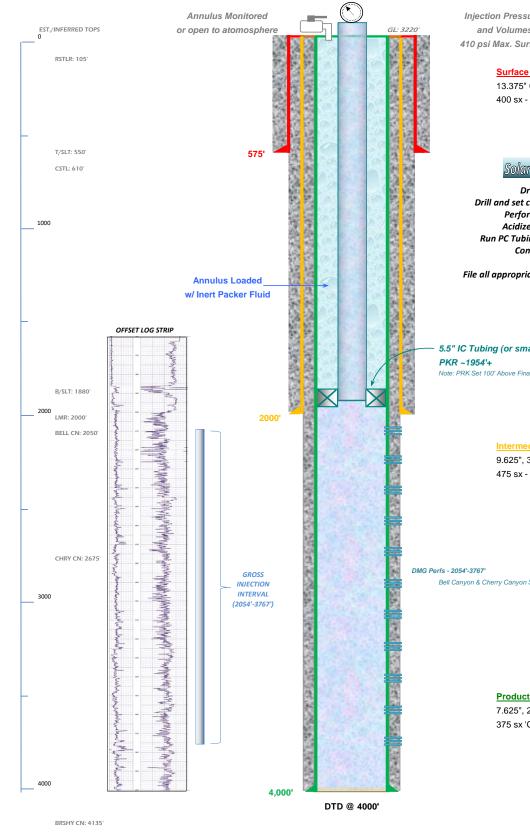
SOLARIS WATER MIDST	TREAM, LLC.				
SURVEY DATE: MAR. 17, 2025	PAGE: 1 OF 1				
DRAFTING DATE: MAR. 19, 2025					
APPROVED BY: MCR DRAWN BY: TJA	FILE: GENE SWD#1				





WELL SCHEMATIC - PROPOSED Gene SWD #1

API 30-015-xxxxx 1603' FSL & 534' FEL, SEC. 13-24S-R26E EDDY COUNTY, NEW MEXICO



SWD; Bell Canyon-Cherry Canyon (96802)

Spud Date: ~9/15/2025 Config SWD Dt: ~10/01/2025

Injection Pressure Regulated and Volumes Reported 410 psi Max. Surface (0.2 psi/ft)

Surface Casing

13.375" Csg. (17.5" Hole) @ 575' 400 sx - Circulated to Surface

Solaris Water Midstream, LLC

Drill and Complete New SWD: Drill and set casing as shown (25%-50% excess Cmt). Perforate select intervals w/ 4-8 jspf. Acidize w/ up to ~30,000 gals 15% HCl Run PC Tubing and PKR - Conduct Witnessed MIT. Commence Disposal Operations.

File all appropriate sundry and C-105 Completion Reports.

5.5" IC Tubing (or smaller) Note: PRK Set 100' Above Final Uppermost Perf Interval.

> Intermediate Casing 9.625", 36.0# J-55 Csg. (12.25" Hole) @ 2000' 475 sx - Circulated to Surface

Bell Canyon & Cherry Canyon Selectively Perforated

Production Casing 7.625", 29.7# P-110 Csg. (8.75" Hole) @ 4,000'; 375 sx 'C' - Calc'd to Circ.



C-108 ITEM XIII – PROOF OF NOTIFICATION

IDENTIFICATION AND NOTIFICATION OF AFFECTED PARTIES

Exhibits for Section

Affected Parties Map

List of Affected Parties

Notification Letter to Affected Parties

Instructions for PDF Document Access

Proof of Certified Mailing

Affidavit Published Legal Notice

C-108 - Items III, IV, V

Item III - Subject Well Data

(New Drill) Wellbore Diagram – PROPOSED

Item IV – Tabulation of AOR Wells

2 Wells Penetrate the Proposed Injection Interval, No (1) P&A

Well	Status	Completion
Solaris Water Midstream	Active	Devonian SWD; 13.375" @ 515 w/ 450 sx, 9.625" @ 9038' w/ 1980 sx; Circ.
Hood SWD #1 - 30-015-44851		
Pre-Ongard Operator	P&A-R	DA in October 1951; Dry hole to 2100'. Filled w/ cement & mud.
C.A. Martin #1		P&A Diagram follows section

Item V – Area of Review Maps

1. Two Mile AOR Map with One-Mile Fresh Water Well Radius

2. One-Half Mile AOR Map

P&A Schematic 30-015-00404

All Above Exhibits follow this page...

C-108 - Items III, IV, V

Item III - Subject Well Data

(New Drill) Wellbore Diagram – PROPOSED

Item IV – Tabulation of AOR Wells

2 Wells Penetrate the Proposed Injection Interval, No (1) P&A

Well	Status	Completion
Solaris Water Midstream	Active	Devonian SWD; 13.375" @ 515 w/ 450 sx, 9.625" @ 9038' w/ 1980 sx; Circ.
Hood SWD #1 - 30-015-44851		
Pre-Ongard Operator	P&A-R	DA in October 1951; Dry hole to 2100'. Filled w/ cement & mud.
C.A. Martin #1		P&A Diagram follows section

Item V – Area of Review Maps

1. Two Mile AOR Map with One-Mile Fresh Water Well Radius

2. One-Half Mile AOR Map

P&A Schematic 30-015-00404

All Above Exhibits follow this page...

C-108 ITEM VII – PRODUCED WATER ANAYLSES

Source and Disposal Waters are Reasonably Compatible.

Item VII.4 – Water Analysis of Source Zone Water

Delaware, Bone Spring, Wolfcamp

Item VII.5 – Water Analysis of Disposal Zone Water

DMG

Water analysis summaries follow this page...

e-Permitting

C-108 Submittal

Attachment Category

Seismicity Analysis

For High Volume Devonian Wells

(NOT APPLICABLE TO THIS APPLICATION)

C-108 ITEM VII – PROPOSED OPERATION

Solaris Water Midstream <u>Gene SWD No.1</u>

Note: The prospect was developed pursuant to the '<u>Revised OCD Recommendations for</u> <u>Administrative Approval of UIC Disposal Wells in the DMG'</u>

- 1. Location the prospect is outside the DMGRA, location is new, waterflows are nonexistent and, there are no other DMG SWDs in the area.
- 2. The proposed interval into the Bell Canyon and Cherry Canyon formations do not include the Lamar Limestone or the lower Brushy Canyon. Additional information is included in the following pages to address formation specs, testing and 20-year performance modeling for the proposed operation.
- 3. Well will be constructed to comply with this and all regulations. All casing will be cemented to surface; location is beyond potash areas and the well will not be fracture stimulated.
- 4. CBL will be run on each casing string, appropriate suite of logs will be run (quadcombo), a step-rate test will be conducted and pressure gradient verified prior to approval to commence injection. Further, Solaris will provide static BHP every 2 years and include in a detailed performance summary of the SWD. Every 4 years, Solaris will conduct additional testing to include a tracer survey, falloff test, formation sampling and any additional testing or reports deemed necessary by OCD engineering and UIC staff. If requested and warranted, Solaris is amenable to installing a public seismic monitoring station.

Commercial SWD Facility (Split Estate, Fee Surface, BLM Minerals)

Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take approximately 6-8 weeks. Facility construction including installation of the tank battery, berms, plumbing and other and associated equipment would occur as soon as possible and immediately after the rig is moved out. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment. The operator will have obtained all necessary easements, rights-of-way or other instruments as required to begin operations.

Configure for Salt Water Disposal

Prior to commencing any work, C-103 NOI sundry(ies) will be submitted to configure 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 test per BLM and OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity. The operator

will have the voluntary option to install a seismic monitoring device which may or may not be coordinated with resources in the state.

Operational Summary

The SWD facility will primarily be tied into existing Solaris infrastructure currently utilized by the Hood SWD #1 (SWD-1732) located nearby, to the northeast of this site. (Solaris may opt to have an onsite truck facility for limited access if needed.)

The Gene SWD well and injection equipment will be a closed system and equipped with pressure limiting devices and volume meters. The annulus, loaded with an inert, anti-corrosion packer fluid, will be monitored for pressure.

Any tanks will be equipped with telemetry devices and visual alarms to alert the operator and customers of full tanks or an overflow situation.

Anticipated daily maximum volume is 18,500 bpd and an average of 12,500 bpd at a maximum surface injection pressure of 410 psi (.2 psi/ft gradient).

Potential releases will be contained and cleaned up immediately. The operator shall repair or otherwise correct the situation within 48 hours before resuming operations. OCD will be notified within 24 hours of any release greater than 5 bbls. If required, remediation will start as soon as practicable. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as necessary and appropriate.

C-108 – Item VIII

Geologic Information

Geologic Exhibits for the Gene SWD Prospect Include:

- Geologic Narrative Description
- Formation [Prog] Tops
- Index Map
- Local Cross Section
- Structure maps:
 - o Lamar
 - o Bell Canyon
 - o Cherry Canyon
 - o Brushy Canyon
 - o Bone Spring
 - Isopach maps:

٠

- o Lamar
- o Bell Canyon
- o Cherry Canyon
- o Brushy Canyon
- o Injection interval (Bell + Cherry)

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

Operator:	OGRID:
SOLARIS WATER MIDSTREAM, LLC	371643
9651 Katy Fwy	Action Number:
Houston, TX 77024	480820
	Action Type:
	[C-108] Fluid Injection Well (C-108)

CONDITIONS

Created By	Condition	Condition Date
erica.gordan	None	7/16/2025

CONDITIONS

Page 73 of 73

Action 480820