

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

Form C-147
Revised October 11, 2022

<https://www.emnrd.nm.gov/ocd/ocd-e-permitting/>

Recycling Facility and/or Recycling Containment

Type of Facility: ☒ Recycling Facility ☒ Recycling Containment*

Type of action: ☐ Permit
 ☒ Modification
 ☐ Closure

☒ Registration
☐ Extension
☒ Other (explain) containment design from SLO for buffer

*** At the time C-147 is submitted to the division for a Recycling Containment, a copy shall be provided to the surface owner.**

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.

Operator: Solaris Water Midstream LLC (For multiple operators attach page with information) OGRID #: 371643
Address: 9611 Katy Freeway, Suite 900, Houston, TX 77024
Facility or well name (include API# if associated with a well): Wild Cobra Recycle Facility
OCD Permit Number: 1RF-533 (For new facilities the permit number will be assigned by the district office)
U/L or Qtr/Qtr O and P Section 36 Township 18 S Range 34 E County: Lea
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.

☒ **Recycling Facility:**

Location of recycling facility (if applicable): Latitude 32.697546 Longitude -103.511095 (approx) NAD83

Proposed Use: ☒ Drilling* ☒ Completion* ☒ Production* ☒ Plugging *

**The re-use of produced water may NOT be used until fresh water zones are cased and cemented*

☐ Other, *requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.*

☒ Fluid Storage

☒ Above ground tanks ☒ Recycling containment ☐ Activity permitted under 19.15.17 NMAC explain type _____

☐ Activity permitted under 19.15.36 NMAC explain type: _____ ☐ Other explain _____

☐ For multiple or additional recycling containments, attach design and location information of each containment

☐ **Closure Report (required within 60 days of closure completion):** ☐ Recycling Facility Closure Completion Date: _____

3.

☒ **Recycling Containment:**

☐ Annual Extension after initial 5 years (attach summary of monthly leak detection inspections for previous year)

Center of Recycling Containment (if applicable): Latitude 32.697734 Longitude -103.511031 (approx.) NAD83

☐ For multiple or additional recycling containments, attach design and location information of each containment

☐ Lined ☐ Liner type: Thickness 60 mil pri & 40 mil sec mil ☐ LLDPE ☒ HDPE ☐ PVC ☐ Other _____

☐ String-Reinforced

Wild Cobra E ~~1,142~~ K 1,030 K
Wild Cobra W 1,094 K

Liner Seams: ☒ Welded ☐ Factory ☐ Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D 20 ft

☐ Recycling Containment Closure Completion Date: _____ See Attachment Drawings and Plans, Shapes are irregular.

4.

Bonding:

- ☐ Covered under bonding pursuant to 19.15.8 NMAC per 19.15.34.15(A)(2) NMAC (These containments are limited to only the wells owned or operated by the owners of the containment.)
- ☒ Bonding in accordance with 19.15.34.15(A)(1). Amount of bond \$ _____ (work on these facilities cannot commence until bonding amounts are approved)
- ☒ Attach closure cost estimate and documentation on how the closure cost was calculated. See Transmittal Letter, Vol. 1

5.

Fencing:

- ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☒ Alternate. Please specify _____ Fixed knot woven wire, 8- foot height. See Sheets 6 and 12 of Containment Plans

6.

Signs:

- ☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.16.8 NMAC

7.

Variances:

Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.

Check the below box only if a variance is requested:

- ☒ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.

If a Variance is requested, it must be approved prior to implementation.

See Transmittal Letter for Variances

8.

Siting Criteria for Recycling Containment

Instructions: The applicant must provide attachments that demonstrate compliance for each siting criteria below as part of the application. Potential examples of the siting attachment source material are provided below under each criteria.

General siting**Ground water is less than 50 feet below the bottom of the Recycling Containment.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

Plates 1 and 2

☐ Yes ☒ No
☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; written approval obtained from the municipality

Plate 3

☐ Yes ☒ No
☐ NA

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division

Plate 4

☐ Yes ☒ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map

Plate 5

☐ Yes ☒ No

Within a 100-year floodplain. FEMA map

Plate 6

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; visual inspection (certification) of the proposed site

Plate 7

☐ Yes ☒ No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; aerial photo; satellite image

Plate 8

☐ Yes ☒ No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site

Plates 1 and 7

☐ Yes ☒ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site

Plate 9

☐ Yes ☒ No

9.

Recycling Facility and/or Containment Checklist:**Instructions:** Each of the following items must be attached to the application. Indicate, by a check mark in the box, that the documents are attached.

- ☒ Design Plan - based upon the appropriate requirements.
☒ Operating and Maintenance Plan - based upon the appropriate requirements.
☒ Closure Plan - based upon the appropriate requirements.
☒ Site Specific Groundwater Data -
☒ Siting Criteria Compliance Demonstrations –
☒ Certify that notice of the C-147 (only) has been sent to the surface owner(s)

10.

Operator Application Certification:

I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.

Name (Print): Drew Dixon Title: SVP- Land and Regulatory
 Signature: *Drew Dixon* Date: 03/26/2025
 e-mail address drew.dixon@ariswater.com Telephone: 832-304-9028

11.

OCD Representative Signature: *Victoria Venegas* Approval Date: 04/02/2025
 Title: Environmental Specialist OCD Permit Number: 1RF-533
☒ OCD Conditions _____
☒ Additional OCD Conditions on Attachment _____

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996

March 27, 2025

Ms. Leigh Barr
EMNRD - Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505
Via E-Mail

Ms. Victoria Venegas
NMOCD - District 2
811 S. First St.
Artesia, NM 88210
Via E-Mail

RE: Solaris Water Midstream, LLC, Wild Cobra Recycling Facility and Containments
Minor Change to Design Drawings

Dear Ms. Barr and Ms. Venegas:

On behalf of Solaris Water Midstream, LLC, R.T. Hicks Consultants prepared this short comparison of the revised design plan dated 3/21/25 to those dated 9/23/24. The State Land Office requested a larger buffer that resulted in a minor modification to the East Containment. Attached are the revised drawings that Solaris will use for construction as these were approved by the SLO. Examination of Page 3 from both plan sets demonstrate the change of design is difficult to discern and both designs lie within area cleared in Volume 1 of the 2024 submission and approved by OCD. .

The revised design moved the northern levee/anchor trench of the East Containment to the south resulting in a decrease of volume shown on the attached page. There is no design change to the West Containment. As this submission is a minor modification of an approved registration, Solaris will begin the construction process as soon as possible.

Thank you for your attention.

Sincerely,
R.T. Hicks Consultants



Randall T. Hicks PG
Principal

Copy: Solaris Water Midstream, LLC,

March 27, 2025

Page 2

9-23-24 – Maximum Volume 1,438,493 bbls

Owner	Solaris Water Midstream		
Site Name	Wild Cobra Recycle Facility East Pit		
	Top	Bottom	Max
Lagoon Features			Liq. Level
Side slope Ratio	3		3
Maximum Depth (ft)	20.0		17.0
Lagoon Top Width (ft)	785	695	767
Lagoon Top Length (ft)	843	758	825
Maximum Total Vol (ft ³)	8,076,018		6,411,616
Maximum Total Vol (bbls)	1,438,493		1,142,031

Freeboard
Maximum Capacity
Storage Volume
Floor
Sump

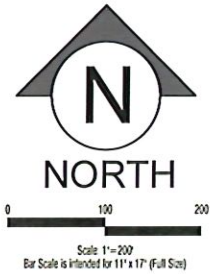
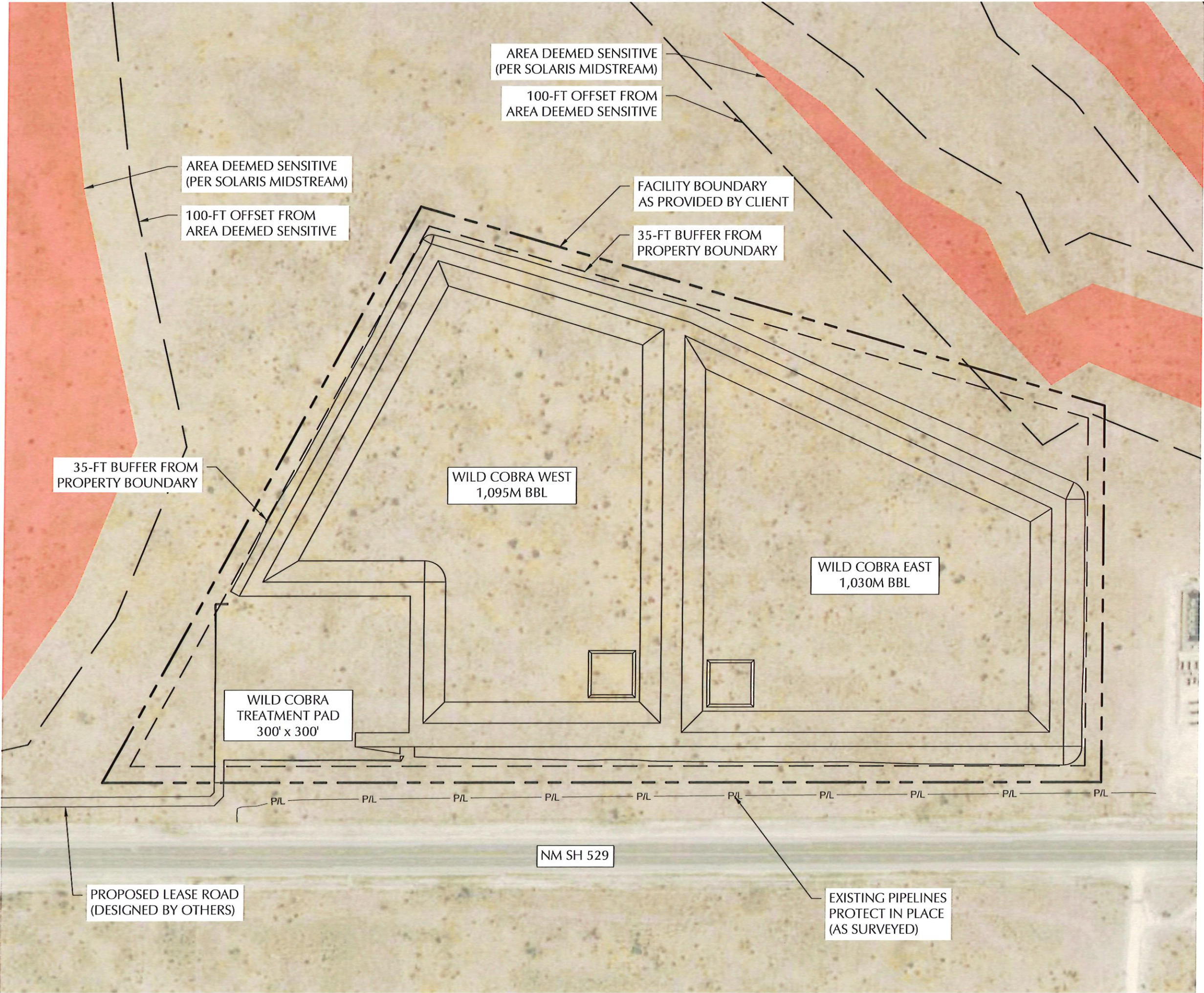
Elevation	Lagoon Liq	Storage	Remaining	Gallons	BBLS	Percent of	Vol	Gallons	Vol	Vol	Percent
ft	Depth	ft	Stor Vol	Storage	Storage	Total Volume	in lagoon	Storage	in Lagoon	in Lagoon	Total Vol
	ft		ft ³	gal	bbls	%	ft ³	gal	bbls	ac-ft	%
3965.50	20.0	0.0	-	-	-	0.0%	8,076,018	60,416,689	1,438,493	185.40	100%
3964.50	19.0	1.0	503,862	4,218,252	100,435	7.0%	7,512,156	56,198,438	1,338,058	173.46	93%
3963.50	18.0	2.0	1,118,638	8,368,530	199,251	13.9%	6,957,380	52,048,160	1,239,242	159.72	86%
3962.50	17.0	3.0	1,664,401	12,451,387	296,462	20.6%	6,411,616	47,965,302	1,142,031	147.19	79%
3961.50	16.0	4.0	2,204,337	16,453,376	392,680	27.3%	5,671,701	43,040,313	1,046,413	134.67	73%

3-21-25 Maximum Volume 1,298,942 bbls

Owner	Solaris Water Midstream		
Site Name	Wild Cobra Recycle Facility East Pit		
	Top	Bottom	Max
Lagoon Features			Liq. Level
Side slope Ratio	3		3
Maximum Depth (ft)	20.0		17.0
Lagoon Top Width (ft)	785	695	767
Lagoon Top Length (ft)	843	758	825
Maximum Total Vol (ft ³)	7,292,551		5,780,069
Maximum Total Vol (bbls)	1,298,942		1,029,540

Freeboard
Maximum Capacity
Storage Volume
Floor
Sump

Elevation	Lagoon Liq	Storage	Remaining	Gallons	BBLS	Percent of	Vol	Gallons	Vol	Vol	Percent
ft	Depth	ft	Stor Vol	Storage	Storage	Total Volume	in lagoon	Storage	in Lagoon	in Lagoon	Total Vol
	ft		ft ³	gal	bbls	%	ft ³	gal	bbls	ac-ft	%
3965.50	20.0	0.0	-	-	-	0.0%	7,292,551	54,555,572	1,298,942	167.41	100%
3964.50	19.0	1.0	512,969	3,837,521	91,370	7.0%	6,779,582	50,718,051	1,207,571	155.64	93%
3963.50	18.0	2.0	1,017,104	7,608,958	181,166	13.9%	6,275,446	46,946,614	1,117,777	144.06	86%
3962.50	17.0	3.0	1,512,482	11,314,878	269,402	20.7%	5,780,069	43,240,694	1,029,540	132.69	79%
3961.50	16.0	4.0	1,999,127	14,955,845	356,002	27.4%	5,262,323	39,500,727	943,951	121.53	73%



ENVIROTECH ENGINEERING
2500 North Elmwood Street
Ft. Lauderdale, FL 33309
561.234.8780
envirotechconsulting.com
FL #29736 - Expiration Date: 12-31-2026

COPYRIGHT
This document and the information contained may NOT be reproduced or excerpted from without the express written permission of Envirotech Engineering and Consulting, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

NO.	DATE	DESCRIPTION



EXISTING SITE FEATURES
WILD COBRA RECYCLE FACILITY
SOLARIS WATER MIDSTREAM
SECTION 36, TOWNSHIP 18 SOUTH, RANGE 34 EAST
LEA COUNTY, NEW MEXICO

DATE:	MARCH 2025
SCALE:	1" = 200'
DESIGNED BY:	R. MOHAN
DRAWN BY:	R. MOHAN
CHECKED BY:	M. RATKE
PROJECT NO.	025064-00
SHEET NO.	3 OF 12



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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/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 446283

CONDITIONS

Operator: SOLARIS WATER MIDSTREAM, LLC 9651 Katy Fwy Houston, TX 77024	OGRID: 371643
	Action Number: 446283
	Action Type: [C-147] Water Recycle Long (C-147L)

CONDITIONS

Created By	Condition	Condition Date
vvenegas	None	4/2/2025