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

APPLICATION OF OXY USA INC. TO AMEND ORDER NO. R-22101 TO EXPAND THE APPROVED CLOSED LOOP GAS CAPTURE INJECTION PILOT PROJECT AREA, ADD ADDITIONAL INJECTION WELLS, INCREASE THE MAXIMUM ALLOWABLE SURFACE INJECTION PRESSURE, EXTEND THE PILOT PROJECT FOR TWO YEARS, AND DISMISS ORDER NO. R-22102, LEA COUNTY, NEW MEXICO.

CASE NO. 23427 ORDER NO. R-22101-A

ORDER

The Director of the New Mexico Oil Conservation Division ("OCD"), having heard this matter through a Hearing Examiner on April 6, 2023, and after considering the testimony, evidence, and recommendation of the OCD Engineering Bureau staff, issues the following Order.

FINDINGS OF FACT

- 1. Due public notice has been given, and the OCD has jurisdiction of this case and its subject matter.
- 2. Oxy USA, Inc. ("Applicant") with this application ("Application") seeks to operate a closed loop gas capture ("CLGC") pilot project ("Project") which shall involve the intermittent injection of produced gas into selected production well(s) for the purpose of temporary storage and recovery during temporary interruptions of gas pipeline services ("CLGC event"). The Project is intended to prevent waste, reduce impacts associated with temporary interruptions of gas pipeline services, and to develop standard practices for similar projects.
- 3. Applicant was approved to operate a Project on April 6, 2022, though Order R-22101. That Project included injection into three (3) wells with a project area consisting of the following lands:

Township 22 South, Range 33 East, N.M.P.M.

Section 30: All Section 31: All

4. Applicant was approved to operator a Project on April 6, 2022, though Order R-22102. That Project included injection into the Taco Cat 27 34 Federal Com No. 11H (API No. 30-025-44933). The project area for Order R-22101 was incorrectly referenced in Order R-22102. The intended project area for R-22102 consisted of the following lands:

Township 22 South, Range 32 East, N.M.P.M.

Section 27: W/2 W/2

Section 34: W/2 W/2

- 5. In Order R-21777, the OCD approved a horizontal spacing unit ("HSU") for the Taco Cat 27 34 Federal Com No. 11H (API No. 30-025-44933) on July 16, 2021, that consists of all of Sections 27 and 34 in Township 22 South, Range 32 East, N.M.P.M..
- 6. In this case, Applicant seeks to consolidate the Projects approved though Orders R-22101 and R-22102 and expand them to include additional wells.
- 7. Concurrently, Applicant submitted written requests for approval of extensions of time for continued operations of the CLGC Projects approved in Orders R-22101 and R-22102.
- 8. At hearing, Applicant presented through affidavits and expert witness testimony the following evidence in support of the Application.
 - a. Applicant selected one or more producing oil and gas wells ("Proposed CLGC Well(s)") in which to intermittently inject gas delivered by a common gas gathering system.
 - b. Applicant proposed an area in which the Project shall be confined ("Proposed Project Area"). The Proposed Project Area is comprised of the lease(s) containing each Proposed CLGC Well and may include the adjacent lease(s) that are owned or operated by Applicant.
 - c. Applicant provided a general description and timeline of the Project.
 - d. Applicant provided a lease map which depicts the Proposed Project Area, lateral(s) of each Proposed CLGC Well, and the area which the gathering system incorporates including affected compressor stations.
 - e. Applicant proposed a maximum allowable surface pressure ("MASP") of 1,300 pounds per square inch ("psi") for each Proposed CLGC Well which will not endanger the mechanical integrity of the well or fracture the formation.
 - f. Applicant provided geologic and reservoir information to demonstrate that the injected fluids will enter only the pool(s) from which the Proposed CLGC Well(s) produce and will not affect correlative rights or migrate into other formations or protectable waters.
 - g. Applicant provided construction details for each Proposed CLGC Well and every well with a segment within one-half (½) mile of any segment of a Proposed CLGC Well.
 - h. The casing and cementing of each Proposed CLGC Well is or will be sufficient prior to injection to prevent leakage and prevent movement of formation or injected fluid from the injection zone into another zone or to the surface around the outside of a casing string in accordance with 19.15.26.9 NMAC.

- i. Applicant conducted or intends to conduct a mechanical integrity test ("MIT") upon each Proposed CLGC Well prior to injection which consisted of holding a pressure of at least one hundred ten percent (110%) of the proposed MASP or 500 psi, whichever is greater, within the annulus of the production casing.
- j. Applicant provided or intends to provide a cement bond log ("CBL") which demonstrates the placement of cement and cement bond of the production casing and the tie-in of the production casing with the next prior casing for each Proposed CLGC Well.
- k. Applicant provided a summary of its operational plan to ensure safe operation and efficient response in the event of an emergency, including a supervisory control and data acquisition ("SCADA") system to monitor and collect relevant data.
- 1. Applicant proposed a method ("CLGC Allocation Plan") to allocate gas production during the period in which injected gas is being recovered.
- m. Applicant provided an affirmative statement that it has examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the injection zone and any underground source of drinking water.
- n. Applicant provided an affirmative statement that it has examined the available geologic and engineering data and determined that the total recoverable volume of hydrocarbons from the reservoir will not be adversely affected by the Project.
- o. Applicant identified the source(s) of the gas to be injected during the Project, conducted an analysis of it, and either proposed a corrosion prevention plan to assure the integrity of the Proposed CLGC Well(s) ("Corrosion Prevention Plan") or certified that a Corrosion Prevention Plan is unnecessary to assure the integrity of the Proposed CLGC Well(s).
- 9. Applicant provided a copy of the Application by certified or registered mail to the surface owner for each Proposed CLGC Well surface location and to each leasehold operator and other affected person(s), as defined in 19.15.2.7(A) NMAC, within any tract wholly or partially contained within one-half (½) mile of the well, in accordance with 19.15.26.8(B)(2) NMAC.
- 10. Applicant published public notice of the Application in a newspaper of general circulation in the county in which the Project is located, in accordance with 19.15.26.8(C)(1) NMAC.
- 11. No other parties appeared at hearing.
- 12. The Proposed Project Area described in the Application does not include the entirety of the HSU for several of the Proposed CLGC Wells. The Proposed Project Area includes the west half, but not the east half, of Sections 27 and 34 in Township 22 South, Range 32 East N.M.P.M.. The HSU for the Taco Cat 27 34 Federal Com No. 11H (API No. 30-025-44933)

- and Taco Cat 27 34 Federal Com No. 21H (API No. 30-025-44934) includes all of Sections 27 and 34 in Township 22 South, Range 32 East N.M.P.M.
- 13. Several plugged wells in proximity to the Proposed Project Area have the Brushy Canyon formation of the Delaware Mountain Group and Avalon formation commingled within their well bores. These include the Mule Deer 36 State No. 5 (API No. 30-025-33239), Coriander AOC State No. 2 (API No. 30-025-33574), and Coriander AOC State No. 1 (API No. 30-025-33531) ("Plugged Wells"). The Proposed CLGC Wells that are placed within the Avalon and the west half of Sections 30 and 31 in Township 22 South, Range 33 East N.M.P.M. are the Avogato 30 31 State Com No. 11H (API No. 30-025-45956), Avogato 30 31 State Com No. 13H (API No. 30-025-45958), and Avogato 30 31 State Com No. 12H (API No. 30-025-45957) ("West Half Avalon CLGC Wells"). The Mule Deer 36 State No. 4 (API No. 30-025-33107) is located in the northeast quarter of the northeast quarter of Section 36 in Township 22 South, Range 32 East N.M.P.M., is placed within the Brushy Canyon and Avalon formations, and may serve as a monitor well to gather data during injection events into the West Half Avalon CLGC Wells.

CONCLUSIONS OF LAW

- 14. OCD does not have in place a process to administratively approve this Application. Accordingly, applications of this type are considered on a case-by-case basis and authorized by means of a hearing order.
- 15. Applicant is in compliance with 19.15.5.9(A) NMAC.
- 16. Applicant provided notice of the hearing in accordance with 19.15.4.9 NMAC.
- 17. Applicant has proposed a method of allocation, that is reasonable and shall provide adequate protection of correlative rights.
- 18. Operation of the Project shall be in compliance with 19.15.26.10 NMAC.
- 19. Due to the Proposed Project Area not including the entirety of the HSU for the Taco Cat 27 34 Federal Com No. 11H (API No. 30-025-44933) and Taco Cat 27 34 Federal Com No. 21H (API No. 30-025-44934), the inclusion of the two wells in the Project should be denied. Without the inclusion of a well in the Project within the west half of Sections 27 and 34 in Township 22 South, Range 32 East N.M.P.M., that area of the Proposed Project Area should be excluded from the approved Project Area.
- 20. Due to the proximity of the Plugged Wells to the Proposed Project Area and the Brushy Canyon and Avalon formations being commingled within their well bores, a safeguard should be in place to ensure that the injectant in this Project is confined to the pool(s) from which the Proposed CLGC Wells produce and will not affect correlative rights or migrate into other formations or protectable waters. Applicant should monitor the Mule Deer 36 State No. 4 (API No. 30-025-33107) during and following injection events into the West Half Avalon CLGC Wells.

21. Having considered the evidence, approval of the Project with specific conditions shall enable the Applicant to prevent waste while protecting correlative rights, public health, and the environment.

ORDER

- 1. Applicant is authorized to operate a closed loop gas capture pilot project which shall involve the intermittent injection of gas into the production well(s) identified in Exhibit A and which have been approved by the OCD Engineering Bureau to be placed in service for the purpose of temporary storage and recovery to prevent waste, reduce impacts associated with temporary interruptions of gas pipeline services, and to develop standard practices for similar projects.
- 2. Applicant (OGRID No. 16696) is designated as the operator of the Project.
- 3. The west half of Sections 27 and 34 in Township 22 South, Range 32 East N.M.P.M. is excluded from the approved Project Area ("Project Area"). The Project Area shall comprise the lands described in Exhibit A.
- 4. Applicant's request to include the Taco Cat 27 34 Federal Com No. 11H (API No. 30-025-44933) and Taco Cat 27 34 Federal Com No. 21H (API No. 30-025-44934) in the Project is denied. The remaining Proposed CLGC Wells may be included in the Project ("CLGC Well(s)").
- 5. Applicant shall not place a West Half Avalon CLGC Well into service for injection unless it is able to monitor the Avalon formation within the Mule Deer 36 State No. 4 (API No. 30-025-33107), and if Applicant loses the ability to conduct that monitoring, then it shall immediately take all West Half Avalon CLGC Wells out of service and make them unavailable for injection.
- 6. The authority granted by this Order shall terminate two (2) years after the date of approval, provided however OCD, upon receipt of a written request submitted before the termination date and for good cause shown, may extend the authority granted by this Order. Required to be included with this request is a summary report.
- 7. This Order supersedes Order No. R-22101. Order No. R-22101 shall be void with the approval of this Order. Additionally, approval of an extension of time for Order R-22102 is not necessary and authority of Order R-22102 shall be allowed to lapse with approval of this Order.
- 8. The MASP for each CLGC Well shall be 1,300 psi. Applicant shall install equipment to limit the production casing pressure to less than or equal to the MASP and incorporate procedures into its operational plan to allow the safe reduction or cessation of injection to prevent the production casing pressure from exceeding the MASP.
- 9. Applicant shall allocate gas production during the period in which injected gas is being recovered as detailed in the CLGC Allocation Plan approved by OCD, provided however

- OCD, upon receipt of a written request from Applicant or upon its own determination that correlative rights may be harmed, may modify the CLGC Allocation Plan.
- 10. OCD has made the following modifications to the allocation method proposed by Applicant:
 - a. If a CLGC Well has had less than twenty-four (24) hours of injection over a seven (7) day period, then Applicant shall dedicate a test separator to the CLGC Well for a period not less than forty-eight (48) hours following the CLGC event.
 - b. If a CLGC Well has had more than twenty-four (24) hours of injection over a seven (7) day period, then Applicant shall dedicate a test separator to the CLGC Well for a period not less than seven (7) days following the CLGC event.
 - c. If one hundred percent (100%) of the injected gas is recovered from a CLGC Well during the above specified time period, then Applicant is no longer required to dedicate a test separator to it.
 - d. Following the above specified time period during which Applicant dedicates a test separator to a CLGC Well and if one hundred percent (100%) of the injected gas has not been recovered, then Applicant shall increase the frequency of well tests conducted on the CLGC Well as much as is feasible until the injected gas is no longer being recovered.
- 11. Applicant shall conduct MITs pursuant to 19.15.26.11 NMAC on each CLGC Well in accordance with the following requirements:
 - a. A MIT shall consist of isolating the production casing from the reservoir by setting a retrievable bridge plug or packer not less than one hundred (100) feet below the top of the upper confining layer identified in Exhibit B, loading the production casing with an inert fluid, and conducting a pressure test with a pressure drop of not more than ten percent (10%) over a thirty (30) minute period.
 - b. The appropriate inspection supervisor shall be notified no less than three (3) business days prior to conducting the MIT.
 - c. A chart recorder with a maximum two (2) hour clock and an appropriate maximum pound spring and which has been calibrated within the six (6) months prior to conducting the test shall be used during each MIT. Copies of the chart shall be submitted to OCD with a Form C-103 within thirty (30) days following the test date.
 - d. No more than one (1) year prior to submission of the Application, a MIT shall be conducted to a pressure of at least one hundred ten percent (110%) of the MASP or 500 psi, whichever is greater.
 - e. No later than six (6) months after the Project has terminated, a MIT shall be conducted to a pressure of at least 500 psi.
 - f. Additional MITs shall be conducted as directed by OCD.

- 12. For any CLGC Well that the Applicant intends to inject via the tubing, Applicant shall submit a Form C-103 for review and approval by OCD with a detailed summary of their downhole configuration prior to commencement of injection.
- 13. Applicant shall install and maintain a SCADA system approved by OCD. The information collected during the active Project shall be maintained and made available to OCD upon request for no less than five (5) years after the cessation of the project, including:
 - a. for each CLGC Well, the oil and gas production and injection flow rates, tubing pressure, and annulus pressure for all casing strings; and
 - b. for each well required by OCD as described in Exhibit B, the oil and gas production and injection flow rates and production casing pressure.
- 14. Prior to initially placing each CLGC Well into service and available for injection, Applicant shall submit a notice of intent on Form C-103, notify the OCD Engineering Bureau at ocd.engineer@emnrd.nm.gov, and await approval from the OCD Engineering Bureau to place the CLGC Well into service. The notice of intent shall include the following content:
 - a. The results of the most recent MIT conducted upon the CLGC Well.
 - b. Confirmation that OCD has on record a CBL that demonstrates the placement of cement and cement bond of the production casing and the tie-in of the production casing with the next prior casing.
 - c. Confirmation that equipment is installed to limit the injection pressure to less than or equal to the MASP.
 - d. Confirmation that equipment to monitor the casing annulus pressure(s) and injection rate is installed.
- 15. For each CLGC Well, Applicant shall submit a Form C-115 in accordance with 19.15.7.24 NMAC and 19.15.26.13 NMAC or as otherwise directed by OCD.
- 16. Applicant shall monitor the production casing pressure and injection rate while injecting into a CLGC Well during each CLGC event. If any indication that a leak in the production casing occurs, then Applicant shall:
 - a. immediately cease injection into the CLGC Well;
 - b. within twenty-four (24) hours notify the OCD Engineering Bureau at ocd.engineer@emnrd.nm.gov;
 - c. within thirty (30) days perform a MIT or other test approved by OCD demonstrating the well integrity of the CLGC Well and submit the results on Form C-103 to the OCD Engineering Bureau; and
 - d. not recommence injection into the CLGC Well until OCD grants approval.

- 17. Applicant shall monitor the casing annulus pressure(s) while injecting into a CLGC Well during each CLGC event. For casings other than the production casing whenever the pressure increases over normal operational conditions:
 - a. more than 50 psi within the surface casing annulus or 100 psi within any intermediate casing annulus, Applicant shall notify the OCD Engineering Bureau at ocd.engineer@emnrd.nm.gov within twenty-four (24) hours; and
 - b. more than 200 psi within the surface casing anulus or 500 psi within any intermediate casing annulus, Applicant shall:
 - i. immediately cease injection into the CLGC Well;
 - ii. within thirty (30) days, submit a Form C-103 to the OCD Engineering Bureau containing a summary of the event that includes the cause for the pressure increase, description of any remedial actions and a revised operational plan to reduce and maintain the pressure below the thresholds described in Subparagraph b of this Ordering Paragraph; and
 - iii. not recommence injection into the CLGC Well until OCD has approved the revised operational plan.
- 18. For each CLGC Well, production shall occur via the tubing.
- 19. Applicant shall follow the approved Corrosion Prevention Plan if applicable. If the composition of the injectant being injected into a CLGC Well becomes inherently more corrosive than the composition approved by OCD, Applicant shall:
 - a. immediately cease injection into the CLGC Well;
 - b. within twenty-four (24) hours, notify the OCD Engineering Bureau at ocd.engineer@emnrd.nm.gov;
 - c. within thirty (30) days, submit a Form C-103 to the OCD Engineering Bureau describing the alteration to the injectant's composition and a revised Corrosion Prevention Plan which addresses the effect of the alteration or a certification from a qualified person that no revision to the Corrosion Prevention Plan is required; and
 - d. not recommence injection into the CLGC Well until OCD has approved the revised Corrosion Prevention Plan or certification that no revision to the Corrosion Prevention Plan is required.
- 20. If the casing of a CLGC Well fails or fluids leak from or around the CLGC Well or any well with a segment within one-half (½) mile of any segment of a CLGC Well, Applicant shall:
 - a. immediately cease injection into every well with a segment within one-half (½) mile of any segment of the well from which fluids are leaking from or around;
 - b. immediately notify the OCD Engineering Bureau Chief at the emergency contact number;

- c. within twenty-four (24) hours, notify the OCD Engineering Bureau at ocd.engineer@emnrd.nm.gov; and
- d. take all necessary steps and actions required and approved by OCD to correct the failure or leakage.
- 21. Applicant shall provide to the OCD Engineering Bureau at ocd.engineer@emnrd.nm.gov, project status updates every three (3) months after the approval of this Order and a summary report no later than three (3) months after the cessation of the Project or upon request from OCD. Status updates shall include a summary of actions taken that are related to the Project and a summary of any identified problems and the corresponding mitigations or remedial actions. Status updates may but are not required to include summaries of individual CLGC events that are not related to an identified problem. The summary report(s) shall include:
 - a. a summary of all project-related activity;
 - b. a review and supporting data regarding any identified problems and the solutions implemented to solve or mitigate them;
 - c. for each CLGC event, a summary of the results, including for each CLGC Well in which injection occurred ("involved CLGC Well"):
 - i. average and maximum injection flow rates;
 - ii. injection duration; and
 - iii. total injected volume.
 - d. for each CLGC event, the following data graphed and tabulated with a resolution of at least: one (1) data point per hour beginning twenty-four (24) hours before the injection, four (4) data points per hour during the injection, and one (1) data point per hour ending twenty-four (24) hours after the injection:
 - i. for each involved CLGC Well, the oil and gas production and injection flow rates and annulus pressure of all casing strings; and
 - ii. for each offset well to each involved CLGC Well as described in Exhibit B, the oil and gas production and injection flow rates and production casing pressure.
 - e. for each CLGC event, a recovery profile for each involved CLGC Well and for each offset well of a CLGC Well described in Exhibit B which experienced a change in production casing pressure or production during or immediately following the CLGC event. The volume of recovered gas shall be determined by taking the difference between the gas production following the injection and baseline production. The baseline production shall be determined by using production history to plot a production curve that estimates what the production would have been had injection not occurred. The recovery profile shall include:

- i. a summary of the results, including the volume and percent of total production recovered and the duration of time required to achieve that recovery; and
- ii. a tabulation of daily oil and gas production and baseline production totals; beginning a week before the CLGC event and ending when either the gas production is near equal to its baseline production or another CLGC event occurs for an involved CLGC Well.
- 22. Based on Applicant's allocation of production to leases and pools related to the Project, the following modifications shall be part of this Order provided that Applicant has demonstrated an effort to comply with the original requirements:
 - a. Applicant is exempt from providing data points for oil and gas production from CLGC Wells for time prior to a CLGC event which it is unable to measure but shall provide its best estimate for production and an explanation for why the production was unable to be measured.
 - b. Applicant is exempt from providing data points for oil and gas production from offset wells, except for the Mule Deer 36 State No. 4 (API No. 30-025-33107), it is unable to measure but shall provide its best estimate for production and an explanation for why the production was unable to be measured.
- 23. This Order does not grant an exception to 19.15.12.9 NMAC. Applicant shall not commingle oil or gas production from different pools or leases or transport oil or gas production from a lease until approval to do so has been granted by OCD in accordance with 19.15.12.10 NMAC or 19.15.23.9 NMAC, as applicable.
- 24. Applicant shall comply with all applicable OCD rules and any other state, federal, or local law or regulation and if the Project causes any harm or damage or threat of harm or damage to protectable fresh water, public health, or the environment.
- 25. OCD retains jurisdiction of this case for the entry of such further orders as may be deemed necessary.

DATE: 11/1/2024

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

GERASIMOS RAZATOS DIRECTOR (ACTING)

State of New Mexico Energy, Minerals and Natural Resources Department

Exhibit A

Case Number: 23427 Order Number: R-22101-A

Operator: Oxy USA, Inc. (16696)

Project Pools

Pool Name Pool Code RED TANK; BONE SPRING, EAST 51687

Project Area (NMPM)

UL or Q/Q S-T-R All 30-22S-33E

All 31-22S-33E

CLGC Wells Well Name Well API UL or Q/Q S-T-R Pool W/230-22S-33E 30-025-45956 Avogato 30 31 State Com #11H 51687 W/231-22S-33E W/230-22S-33E 30-025-45958 Avogato 30 31 State Com #13H 51687 W/231-22S-33E 30-22S-33E E/230-025-45959 Avogato 30 31 State Com #14H 51687 E/231-22S-33E E/2 E/230-22S-33E 30-025-44161 Red Tank 30 31 State Com #24Y 51687 E/2 E/231-22S-33E 30-22S-33E E/2 E/230-025-44193 Red Tank 30 31 State Com #14H 51687 E/2 E/231-22S-33E E/230-22S-33E 30-025-45923 Avogato 30 31 State Com #4H 51687 E/231-22S-33E W/230-22S-33E 30-025-45957 Avogato 30 31 State Com #12H 51687 31-22S-33E W/2W/230-22S-33E 30-025-45924 Avogato 30 31 State Com #21H 51687 31-22S-33E W/2W/230-22S-33E 30-025-45925 Avogato 30 31 State Com #22H 51687 W/231-22S-33E W/230-22S-33E 30-025-45926 Avogato 30 31 State Com #23H 51687 31-22S-33E W/2E/230-22S-33E 30-025-45960 Avogato 30 31 State Com #24H 51687 E/231-22S-33E E/230-22S-33E 30-025-45961 Avogato 30 31 State Com #25H 51687 E/231-22S-33E E/230-22S-33E 30-025-45964 Avogato 30 31 State Com #74H 51687 E/231-22S-33E

State of New Mexico

Energy, Minerals and Natural Resources Department

Exhibit B

Case Number: 23427 Order Number: R-22101-A

Operator: Oxy USA, Inc. (16696)

CLGC Wells and Offset Wells

Well API Well Name MASP: 1,300 psi

30-025-45956 Avogato 30 31 State Com #11H

Upper Confining Layer: Low porosity and permeability limestone found at

approximately 9,000 ft to 9,300 ft MD in the Red Tank 30

State #3 (30-025-27596)

Offset Well API Offset Well Name 30-025-33107 Mule Deer 36 State #4

30-025-45957 Avogato 30 31 State Com #12H

Well API Well Name MASP: 1,300 psi

30-025-45958 Avogato 30 31 State Com #13H

Upper Confining Layer: Low porosity and permeability limestone found at

approximately 9,000 ft to 9,300 ft MD in the Red Tank 30

State #3 (30-025-27596)

Offset Well API Offset Well Name
30-025-33107 Mule Deer 36 State #4

30-025-45957 Avogato 30 31 State Com #12H 30-025-44193 Red Tank 30 31 State Com #14H

Well API Well Name MASP: 1,300 psi

30-025-45959 Avogato 30 31 State Com #14H

Upper Confining Layer: Low porosity and permeability limestone found at

approximately 9,000 ft to 9,300 ft MD in the Red Tank 30

State #3 (30-025-27596)

Offset Well API Offset Well Name

30-025-44193 Red Tank 30 31 State Com #14H 30-025-45958 Avogato 30 31 State Com #13H

Well API Well Name MASP: 1,300 psi

30-025-44161 Red Tank 30 31 State Com #24Y

Upper Confining Layer: Low permeability limestone found at approximately 10,150 ft

to 10,600 ft MD in the Red Tank 30 State #3 (30-025-27596)

Offset Well API Offset Well Name

30-025-41885 Red Tank 31 State #5H

30-025-45961 Avogato 30 31 State Com #25H

Well API	Well Name	MASP: 1,300 psi
30-025-44193	Red Tank 30 31 State Con	m #14H
	Upper Confining Layer: Low porosity and permeability limestone found at	
		approximately 9,000 ft to 9,300 ft MD in the Red Tank 30
		State #3 (30-025-27596)
	Offset Well API	Offset Well Name
	30-025-45959	Avogato 30 31 State Com #14H
Well API	Well Name	MASP: 1,300 psi
30-025-45923	Avogato 30 31 State Com	#4H
	Upper Confining Layer:	Interbedded low permeability limestone and shale found at
		approximately 9,650 ft to 9,900 ft MD in the Red Tank 30
		State #3 (30-025-27596)
	Offset Well API	Offset Well Name
Well API	Well Name	MASP: 1,300 psi
30-025-45957	Avogato 30 31 State Com	#12H
	Upper Confining Layer: Low porosity and permeability limestone found at	
		approximately 9,000 ft to 9,300 ft MD in the Red Tank 30
		State #3 (30-025-27596)
	Offset Well API	Offset Well Name
	30-025-33107	Mule Deer 36 State #4
	30-025-45958	Avogato 30 31 State Com #13H
	30-025-45956	Avogato 30 31 State Com #11H
Well API	Well Name	MASP: 1,300 psi
30-025-45924	Avogato 30 31 State Com	#21H
	Upper Confining Layer: Low permeability limestone found at approximately 10,150 fe	
		to 10,600 ft MD in the Red Tank 30 State #3 (30-025-27596)
	Offset Well API	Offset Well Name
	30-025-41885	Red Tank 31 State #5H
	30-025-45925	Avogato 30 31 State Com #22H
Well API	Well Name	MASP: 1,300 psi
30-025-45925	Avogato 30 31 State Com	
	Upper Confining Layer: Low permeability limestone found at approximately 10,150 ft	
	to 10,600 ft MD in the Red Tank 30 State #3 (30-025-27596)	
	Offset Well API	Offset Well Name
	30-025-41885	Red Tank 31 State #5H

Well API **Well Name** MASP: 1,300 psi 30-025-45926 Avogato 30 31 State Com #23H Upper Confining Layer: Low permeability limestone found at approximately 10,150 ft to 10,600 ft MD in the Red Tank 30 State #3 (30-025-27596) **Offset Well API Offset Well Name** 30-025-41885 Red Tank 31 State #5H 30-025-45925 Avogato 30 31 State Com #22H 30-025-45960 Avogato 30 31 State Com #24H Well API Well Name 1,300 psi MASP: 30-025-45960 Avogato 30 31 State Com #24H Upper Confining Layer: Low permeability limestone found at approximately 10,150 ft to 10,600 ft MD in the Red Tank 30 State #3 (30-025-27596) Offset Well API **Offset Well Name** 30-025-41885 Red Tank 31 State #5H 30-025-45961 Avogato 30 31 State Com #25H 30-025-45926 Avogato 30 31 State Com #23H Well API Well Name MASP: 1,300 psi 30-025-45961 Avogato 30 31 State Com #25H Upper Confining Layer: Low permeability limestone found at approximately 10,150 ft to 10,600 ft MD in the Red Tank 30 State #3 (30-025-27596) Offset Well API **Offset Well Name** 30-025-41885 Red Tank 31 State #5H

Well API Well Name MASP: 1,300 psi

30-025-45964 Avogato 30 31 State Com #74H

30-025-45960

30-025-44161

Upper Confining Layer: Interbedded low porosity and permeability silts, shales, and limestones found at approximately 11,050 ft to 11,200 ft MD

Avogato 30 31 State Com #24H

Red Tank 30 31 State Com #24Y

in the Red Tank 30 State #3 (30-025-27596)

Offset Well API Offset Well Name