

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

ORDER

GRANTING UIC PERMIT SWD-2464

Pinon Midstream, LLC (“Applicant”) filed an Application for Authorization to Inject (Form C-108) (“Application”) with the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division (“OCD”) to inject treated acid gas (“TAG”) at the Applicant’s Independence AGI Well No. 2 (“Well”), as more fully described in Appendix A.

THE OCD FINDS THAT:

1. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject TAG into a Class II Underground Injection Control (“UIC”) well.
2. Applicant submitted the Application for administrative approval as outlined in Ordering Paragraph 18 of Commission Order No. R-21455-A.
3. Applicant complied with the notice requirements of 19.15.26.8 NMAC.
4. One affected party, NGL Water Solutions Permian, LLC, filed a protest on the Application but subsequently withdrew the protest of the Well.
5. The Well will inject TAG into the Devonian and Silurian formations.
6. The TAG injected into the Well will be confined by layers above and below the approved injection interval.
7. One UIC well is permitted and a second UIC well is subject of a hearing to inject produced water into the same approved injection interval within 1.75 miles of the Well.
8. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.
9. Applicant affirmed in a sworn statement by a qualified person that the injection of TAG over the predicted service life of the Well will not increase the potential for an induced seismic event.
10. Applicant is in compliance with 19.15.5.9 NMAC.

11. Applicant agrees to the Terms and Conditions in the attached Permit.

THE DIVISION CONCLUDES THAT:

1. OCD has authority under the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, and its implementing regulations, 19.15.1 *et seq.* NMAC, and under the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, to issue this permit for an UIC Class II injection well. *See* 40 CFR 147.1600.
2. Based on the information and representations provided in the Application, the proposed injection, if conducted in accordance with the Application and the terms and conditions of the attached Permit, (a) will not result in waste of oil and gas; (b) will not adversely affect correlative rights; (c) will protect underground sources of drinking water; and (d) will protect the public health and environment.
3. Applicant is authorized to inject subject to the terms and conditions of the Permit.

IT IS THEREFORE ORDERED THAT:

The Applicant be granted UIC Permit SWD-2464 for the Independence AGI Well No. 2.



ADRIENNE E. SANDOVAL
DIVISION DIRECTOR

Date: 3/31/2022

AES/prg

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

UIC CLASS II PERMIT SWD-2464

APPENDIX A – AUTHORIZED INJECTION

Permittee: Pinon Midstream, LLC

OGRID No.: 330718

Well name: Independence AGI Well No. 2

Surface location: 1,180 feet FNL and 1,578 feet FWL, Sec. 20, T25S, R36E, NMPM
Latitude and Longitude (NAD83): 32.120020 and -103.291015

Bottom hole location: 1,033 feet FSL and 2,132 feet FWL, Sec. 20, T25S, R36E, NMPM
Latitude and Longitude (NAD83): 32.111581 and -103.289273

Type of completion: Deviated open hole

Type of injection: Gas processing waste from the Dark Horse Gas Treatment Facility

Injection fluid: Treated acid gas

Injection interval: 16,080 to 17,683 feet TVD; Devonian and Silurian formations.

Injection interval thickness (feet): approximately 1,603

Confining layer(s): Woodford Shale (upper) and Montoya formation (lower)

Prohibited injection interval(s): Woodford Shale and shallower formations including the Capitan Reef aquifer; Montoya formation and deeper Ordovician formations.

Liner, tubing, and packer set: 3.5-inch tubing (both L80 and CRA) with permanent packer (CR) set within 100 feet of the top of open hole.

Maximum daily injection rate: Under Order No. R-21455-A, a combined total of 12 MMSCFD for both Independence AGI wells injecting concurrently. If the Independence AGI No. 1 is not injecting, the Independence AGI No. 2 can receive total of 12 MMSCFD.

Maximum surface injection pressure: 5,005 PSIG

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UIC CLASS II PERMIT SWD-2464

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

I. GENERAL CONDITIONS

A. AUTHORIZATION

1. Scope of Permit. This Permit authorizes the injection of treated acid gas into the well described on Appendix A (“Well”). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the “operator” of the Well as defined in 19.15.2.7(O)(5) NMAC.

a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water (“USDW”) if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]

b. The wellhead injection pressure for the Well shall not exceed the value identified in Appendix A.

c. Permittee shall not commence to drill, convert, or recompleat the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill (“APD”) pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]

d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.

e. This Permit authorizes injection of a single UIC Class II fluid, TAG, as defined in 19.15.2.7(E)(6) NMAC.

f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.

2. Notice of Commencement. Permittee shall provide written notice on Form C-103 to OCD E-Permitting and notify OCD Engineering Bureau by email of the submittal no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]

3. Termination. Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.

a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.

b. One (1) year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

B. DUTIES AND REQUIREMENTS

1. Duty to Comply with Permit. Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]

2. Duty to Halt or Reduce Activity to Avoid Permit Violations. Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]

3. Duty to Mitigate Adverse Effects. Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the

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

4. Duty to Operate and Maintain Well and Facilities. Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]

5. Duty to Provide Information. In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]

6. Private Property. This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]

7. Inspection and Entry. Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:

- a. Inspect the Well and associated facilities;
- b. Have access to and copy any record required by this Permit;
- c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and
- d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]

8. Certification Requirement. Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]

9. Financial Assurance. Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

C. PRIOR TO COMMENCING INJECTION

1. Construction Requirements.

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

Appendix A and as required by the Special Conditions.

b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

2. Tests and Reports. Permittee shall complete the following actions prior to commencing injection in the Well.

a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well, or other OCD approval, as applicable, prior to converting or recompleting the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.

b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the OCD Engineering Bureau and the appropriate OCD Inspection Supervisor and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of two hundred (200) feet above the next higher casing shoe.

c. If a liner is approved for the construction of the Well, Permittee shall run and submit to OCD E-Permitting and notify the OCD Engineering Bureau by email, a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.

d. Permittee shall submit to the appropriate OCD district office the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval within the stratigraphic interval requested in the application. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau by email and obtain written approval prior to commencing injection into the Well.

e. Permittee shall obtain and submit to the appropriate OCD district office on a Form C-103 a calculated or measured static bottom-hole pressure measurement representative of the completion in the approved injection interval.

f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the

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

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

D. OPERATION

1. Operation and Maintenance.

a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]

b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]

c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.

d. If OCD has reason to believe that operation of the Well may have caused or determined to be contributing to seismic activity, Permittee shall, upon OCD's written request:

i. Take immediate corrective action, which could include testing and evaluating of the injection interval and confining layers; suspending or reducing of the rate of injection or maximum surface injection pressure, or both; and providing increased monitoring of the Well's operation; and

ii. Submit a remedial work plan or an application to modify the Permit to implement the corrective action, plug back the injection interval, or incorporate another modification required by OCD.

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

2. Pressure Limiting Device.

a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site, that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.

b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.

3. Mechanical Integrity. Permittee shall conduct a MIT prior to commencing injection, annually after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.

a. MITs shall be conducted in accordance with 19.15.26 NMAC.

b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.

c. Permittee shall report the result of a MIT no later than two (2) business days after the test.

d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:

i. The Well fails a MIT; or

ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.

e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.

f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.

4. Additional Tests. Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

5. Records.

a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]

b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:

i. Date, location, and time of sample, measurement or calibration;

ii. Person who conducted the sample event, -measurement or calibration;

iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;

iv. Description of method and procedures;

v. Description of handling and custody procedures; and

vi. Result of the analysis.

E. PLUGGING AND ABANDONMENT

1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

2. If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.

3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

4. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

F. REPORTING

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

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

G. CORRECTIVE ACTION

1. Releases. Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.

2. Failures and Noncompliance. Permittee shall report the following incidents to appropriate OCD Inspection Supervisor and OCD Engineering Bureau verbally and by e-mail no later than 24 hours after such incident:

a. Any mechanical integrity failures identified in Section I. D. 3. d;

b. The migration of injection fluid from the injection interval [19.15.26.10 NMAC]; or

c. A malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(l)(6)]

3. Corrective Action. Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.

4. Restriction or Shut-In. OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

H. PERMIT CHANGES

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

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

3. OCD Authority to Modify Permit and Issue Orders

a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:

i. The Permit contains a material mistake;

ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;

iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;

iv. The Well's operation may affect the water quality of fresh water;

v. Injected fluid is escaping from the approved injection interval;

vi. Injection may be caused or contributed to seismic activity:
or

vii. Injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.

b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.

c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated. [40 CFR 144.36(a)]

4. Permittee Request to Modify Permit. Permittee may apply to modify the terms of this Permit.

a. **Minor Modifications.** OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:

- i. Non-substantive changes such as correction of typographical errors;
- ii. Requirements for more frequent monitoring or reporting;
- iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit;
- iv. Amendments to the plugging and abandonment plan;
- v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well;
- vi. Corrections of the actual injection interval if within the approved formation; or
- vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]

b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

II. SPECIAL CONDITIONS

Permittee shall comply, as is applicable to the redundant Well, with the conditions listed in Ordering Paragraph 2 through Ordering Paragraph 21 of Order No. R-21455-A. If any conditions contained in this Permit conflicts with the conditions of Order No. R-21455-A, the requirements of the Order shall supersede the condition found in this Permit.

III. ATTACHMENTS

- A. Well Completion Diagram as Provided in the Form C-108 Application dated November 1, 2021
- B. Commission Order No. R-21455-A

WELL SCHEMATIC

INDEPENDENCE AGI #2

S20 - T25S - R36E

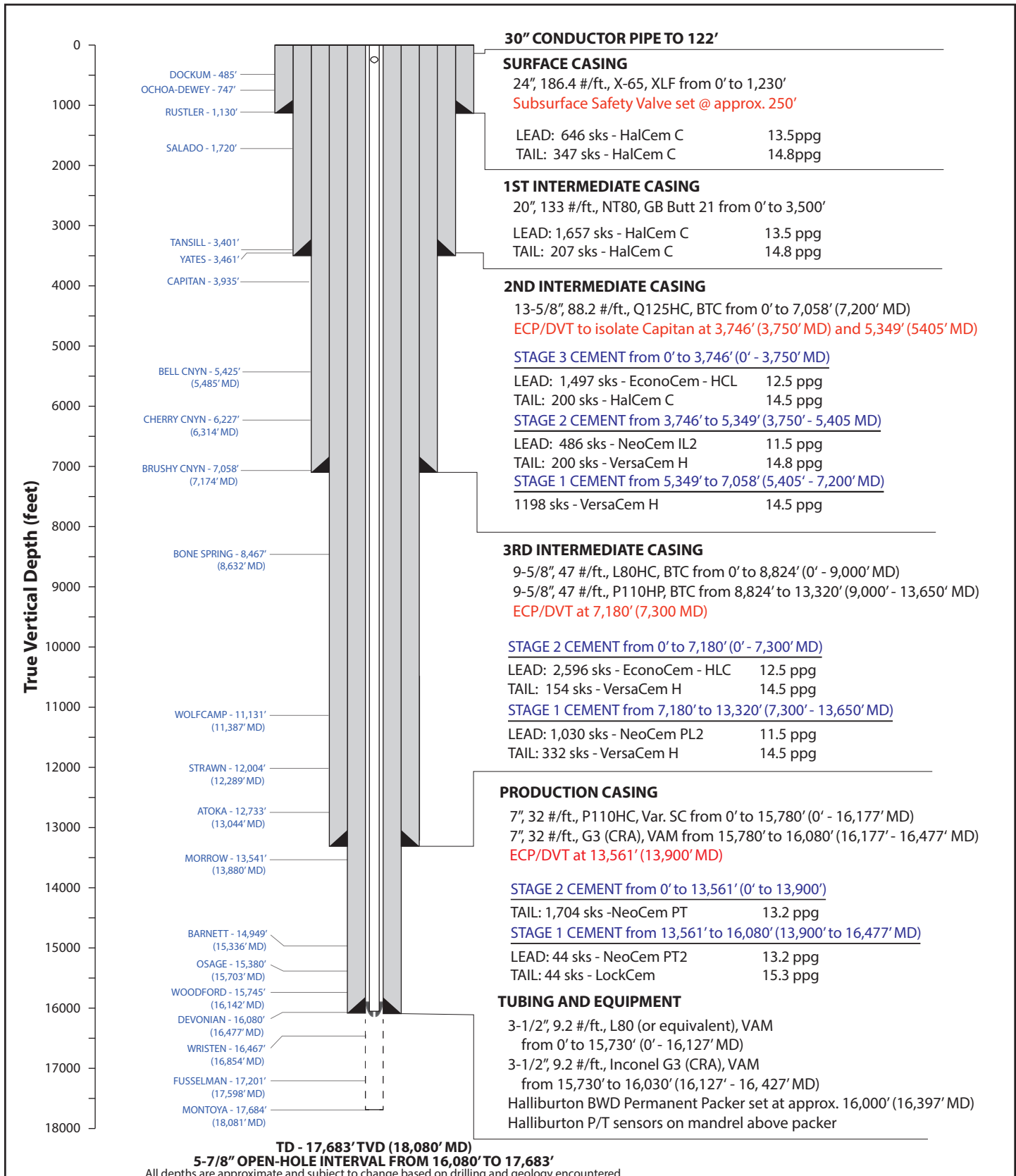


Figure 4. Well design consisting of a surface string of casing, three intermediate strings, and a production string with associating tubing/equipment and cement types

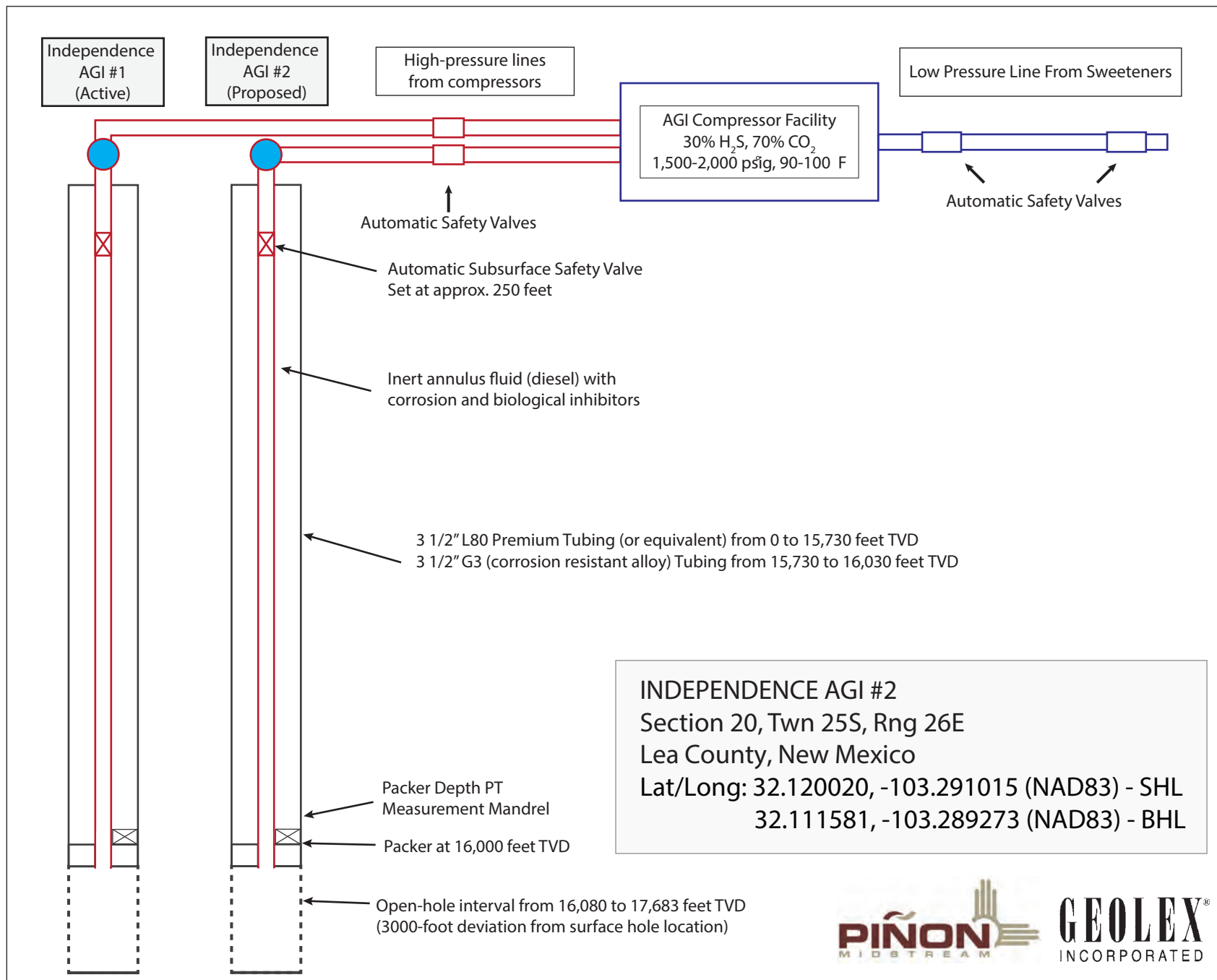


Figure 3. Schematic of surface facilities, proposed Independence AGI #2 and existing Independence AGI # 1

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

**APPLICATION OF AMEREDEV
OPERATING, LLC FOR
AUTHORIZATION TO INJECT, LEA
COUNTY, NEW MEXICO.**

**CASE No. 21381
ORDER No. R-21455-A**

ORDER OF THE COMMISSION

THIS MATTER comes before the New Mexico Oil Conservation Commission (“Commission”) on Ameredev Operating, LLC’s (“Ameredev”) *Application for Authorization to Inject, Lea County, New Mexico* (“Application”). The Commission, having conducted a hearing on October 8, 2020, and having considered the testimony and the record in this case, enters the following findings of fact, conclusions of law, and order.

FINDINGS OF FACT

1. On July 10, 2020, Ameredev filed its Application seeking authorization to inject treated acid gas (“TAG”) into the proposed Independence AGI No. 1 well (“Well”).
2. The Well is an Underground Injection Control (“UIC”) Class II well subject to the requirements of 19.15.26 NMAC.
3. The Well is vertical with an approximate surface and bottom hole location approximately 829 feet from the north line and 1,443 feet from the west line (Unit C) of Section 20, Township 25 South, Range 36 East in Lea County.
4. The target injection zone will be from approximately 16,230 to 17,900 feet deep in the Devonian Thirty-One and Upper Silurian Wristen and Fusselman formations.
5. The Well’s maximum daily injection rate is twelve million standard cubic feet per day (“MMSCFD”).
6. The Well’s maximum surface injection pressure is approximately 4,779 pounds per square inch gauge (“psig”).
7. Ameredev gave personal notice of the Application and the Commission’s hearing via certified mail, return receipt requested to the State Land Office and all operators, surface owners, and lessees within a one-mile radius of the location for the Well, but did not give notice to the Oil Conservation Division or the City of Jal, which is located approximately six miles from the Well.

8. The Commission gave public notice of the Application and the Commission's hearing by publication in a newspaper of general circulation in Lea County.

9. Tap Rock Operating, LLC ("Tap Rock") filed an Entry of Appearance on September 10, 2020.

10. The OCD filed an Entry of Appearance and Notice of Intervention on September 22, 2020.

11. The Commissioner of Public Lands of the State of New Mexico, Stephanie Garcia Richard, and the New Mexico State Land Office ("SLO") filed an Entry of Appearance on October 1, 2020.

12. OCD filed a Pre-Hearing Statement on October 1, 2020, stating that OCD's witness would testify that OCD does not oppose Ameredev's Application provided that the Order includes the specific and general conditions stated in OCD Exhibits 2 and 3 (collectively, "Conditions"), and contingent on OCD's review of Ameredev's revised plume dispersion modeling which was not completed at the time of filing the Pre-Hearing Statement.

13. SLO filed a Pre-Hearing Statement on October 1, 2020, stating that SLO's witnesses would testify that SLO concurred with the OCD's Conditions, and also would testify regarding the potential effect of injection into the proposed well on state trust resources.

14. No other person filed an objection to the Application or an entry of appearance.

15. The Commission held a hearing on the Application on October 8, 2020.

16. In support of the Application, Ameredev presented the testimony of three witnesses: Mr. Floyd Hammond, Chief Operating Officer, Ameredev; Mr. Alberto Gutierrez, President, Geolex, Inc.; and Mr. David White, Geologist, Geolex, Inc.

17. Mr. Hammond provided background regarding Ameredev, including its future H₂S treating investment plans and proposal for TAG disposal. Mr. Hammond also testified regarding the benefits of disposing of TAG through an acid gas injection ("AGI") well. Specifically, Mr. Hammond testified that authorization for the Well will allow Ameredev to design and construct a gas treating facility and will provide necessary capacity for needed TAG disposal in the area of the proposed injection. Mr. Hammond testified that the proposed treating facility and Well are needed to resume production in at least nine horizontal wells operated by Ameredev that have been shut-in or curtailed due to a lack of TAG disposal capacity in the area and will allow Ameredev to complete six additional horizontal wells and to drill and develop 89 additional horizontal wells, and to provide services to other operators. Mr. Hammond testified that, in his opinion, Ameredev's proposal to dispose of TAG through the Well will increase reliability of production operations in the area, help prevent shut-ins, and prevent waste and protect correlative rights.

18. Mr. Hammond testified that Ameredev agrees to the Conditions. With respect to the redundant well, Mr. Hammond testified that Ameredev would shut in wells to deal with operational or maintenance issues that might arise after the Well begins to operate and before the redundant well begins to operate; that Ameredev factored the cost of the redundant well into its economic analysis for the Well and the proposed natural gas processing plant; and that if Ameredev does not build the redundant well or tries to back out of the agreement to build the redundant well, it must shut down the Well. Mr. Hammond also testified that Ameredev understands that the Conditions give OCD the discretion to decide whether the final design for the Well is acceptable, and that the redundant well must be built in essentially the same manner as approved for the Well.

19. Mr. Gutierrez testified regarding the information contained in the Application and regarding the site geology and hydrogeology and stated that, in his opinion, the proposed injection zone provides a sufficient capacity and geologic seal to contain the injected TAG and prevent its migration into other zones; the injection zone is sufficiently isolated from any protectable groundwater sources; and there is no evidence that injection will impair existing or potential hydrocarbon production in the area.

20. Mr. Gutierrez testified regarding the design and operation of the Well, and observed that Ameredev had made significant changes to the well design as a result of concerns raised by OCD and SLO after the agencies learned about the Application.

21. Mr. Gutierrez testified that Ameredev will submit its H₂S Contingency Plan for OCD approval prior to commencement of injection, and that Ameredev will certify that it coordinated the plan with the State Emergency Response Commission and the local emergency planning committee, including representatives of the City of Jal, and will provide them with regular updates during operation of the Well.

22. Mr. Gutierrez testified that, in his opinion, the Well will not pose health and safety risks, and the Well will not cause waste or damage correlative rights in any formations in the area.

23. Mr. White testified regarding Geolex's evaluation of the potential for induced seismicity, including seismic review of the area and the preparation of fault-slip modeling. Based on this evaluation, Mr. White testified that the Well can be operated under the proposed operating conditions without contributing significantly to the total risk of injection-induced fault slip.

24. Mr. White further testified the injected TAG is not anticipated to present any risk for vertical migration out of the injection zone based on Geolex's evaluation of local subsurface pressure conditions to assess reservoir containment, including the over-pressure conditions overlying the injection interval, drilling-fluid characteristics, and drilling-fluid programs for the Well. Mr. White confirmed that the injected TAG is not expected to migrate vertically out of the injection zone due to the presence of a dense caprock and because the target injection zone is expected to be under-pressured relative to the overlying strata.

25. Mr. White also testified on plume dispersion modeling over a 30-year period of injection, which included the influence of offsetting injection from saltwater disposal wells. Mr.

White testified that the maximum lateral dispersion of TAG from the Well is predicted to be from approximately 1.6 miles to 1.8 miles, with TAG dispersion at 20% saturation extending to approximately one mile to 1.3 miles from the Well. He testified that, based on the data analyzed, the proposed injection zone is a good candidate for the injection of TAG; the TAG plume and pressure front will not reach producing intervals; the TAG plume will be contained within the injection interval; and TAG can safely be injected into the Well. Mr. White concluded that, in his opinion, the Well will not result in waste, impair correlative rights, or have a negative impact on public health or the environment.

26. OCD presented the testimony of one witness, Baylen Lamkin, along with six exhibits in support of his testimony. Mr. Lamkin testified that OCD worked closely with SLO to develop the Conditions, and that Ameredev had told OCD and SLO that it would accept and comply with the Conditions.

27. Mr. Lamkin testified that the condition requiring a redundant well is important to prevent waste associated with flaring as a result of mechanical issues or maintenance on the Well, and that the condition concerning well construction is important to protect hydrologic flows in the Salado formation and the protectable water source in the Capitan Reef given historic problems with cement returns for long intermediate casing strings. Mr. Lamkin also testified that the remaining conditions were the same conditions adopted in orders granting applications for AGI wells in two prior cases, except for the addition of the certification requirement for the H₂S Contingency Plan.

28. Mr. Lamkin testified that OCD does not oppose the Application, provided that the Commission adopt the Conditions, because they would ensure that the Well prevents waste and does not harm correlative rights, public health, or the environment. Mr. Lamkin testified that OCD has residual concerns about certain assumptions used in Ameredev's fault-slip and plume dispersion modeling, such as porosity, permeability, water saturation, zone definitions, and fault sealing, but that these concerns would be somewhat ameliorated by the condition requiring Ameredev to recalculate its models using observed data five years after commencing injection into the Well.

29. The Commission accepted Ameredev's late-filed Exhibit 3—Updated 2. The Commission also adopted the Conditions with certain modifications reflected below.

CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the Parties and the subject matter of this case.
2. Proper public notices of the Application and the Commission's hearing were given, including personal notices to all operators, surface owners, and lessees within a one-mile radius of the Well.
3. The Application is complete.

4. OCD records show that Ameredev Operating, LLC (OGRID No. 372224) is in compliance with Subsection A of 19.15.5.9 NMAC.

5. The Well, if constructed and operated in accordance with the Conditions, as modified by the Commission, will comply with the requirements of 19.15.26 NMAC.

6. Ameredev's injection of TAG, if conducted in accordance with the Conditions, as modified by the Commission, will not cause waste, impair correlative rights, or harm public health or the environment.

ORDER

1. The Application is approved, and Ameredev is authorized to drill and operate the Well with an approximate surface and bottom hole location at approximately 829 feet from the north line and 1,443 feet from the west line (Unit C) of Section 20, Township 25 South, Range 36 East, N.M.P.M., Lea County, New Mexico, to dispose of TAG at a maximum daily injection rate of 12 MMSCFD into the Devonian Thirty-One and Wristen Fusselman formations at depths of approximately 16,230 to 17,900 feet deep and a maximum surface injection pressure not to exceed 4,779 psig, subject to these Conditions.

2. Ameredev shall construct the Independence AGI Well No. 1 in accordance with the design and plan of construction approved by OCD, including the use of corrosion-resistant casing, cement, tubing, and packer, and shall isolate and protect the Salado and Capitan intervals, by (1) installing and cementing an intermediate casing string through the Salado interval before drilling into the Capitan interval; and (2) cementing the subsequent intermediate casing to protect the Capitan interval from the Delaware Mountain Group.

3. Ameredev shall circulate cement for all casing to the surface.

4. Ameredev shall use a corrosion-inhibiting diesel with a biocide component as the annular fluid of the well.

5. Ameredev shall equip the Well with a pressure-limiting device and a one-way safety valve (with the appropriate interior drift diameter) on the tubing approximately 250 feet below the surface.

6. No later than forty-five (45) days after drilling the Well, Ameredev shall submit to OCD's district office the well drilling logs including mudlogs, electric logs, daily reports, static bottom-hole pressure measured at completion of drilling the well, and a written evaluation of the hydrocarbon resource potential for the approved injection interval. If a significant hydrocarbon show occurs during drilling the Well, Ameredev shall submit a Form C-103 and obtain OCD's written approval prior to commencing injection.

7. No later than forty-five (45) days after completing the Well, Ameredev shall submit to OCD the final reservoir evaluation and confirm that the open-hole portion of the Well does not intersect the fault plane of any identified fault that occurs within the approved injection interval.

8. No later than thirty (30) days prior to commencing injection into the Well, Ameredev shall:

a. Obtain OCD's approval of a hydrogen-sulfide contingency plan that complies with Rule 19.15.11.9 NMAC, and that (i) includes a contingency plan for and a GIS mapping layer showing the gathering lines associated with the natural gas processing plant(s) served by the Well; and (ii) certifies that Ameredev has contacted and coordinated with appropriate representatives of the city of Jal, Lea County, the State Emergency Response Commission, and the local emergency preparedness committee and will provide regular updates to the same at least annually;

b. Determine the salinity of the formation fluid from the approved injection interval and submit to OCD either a calculation of the estimated salinity based on open-hole logs or the actual salinity based on a laboratory analysis. If OCD determines that the salinity of the formation fluid from the approved injection interval contains a total dissolved solids (TDS) concentration of 10,000 milligrams or less, the injection authority under this Order shall be suspended and Ameredev shall not commence injection until Ameredev complies with 19.15.26.8(E) NMAC;

c. Conduct step-rate and fall-off tests. Ameredev may adjust the maximum surface injection pressure for the Well after these tests with OCD's written approval; and

d. Obtain OCD's approval of immediate notification parameters for annulus pressure and tubing and casing differential pressure at a set injection temperature.

9. No later than ninety (90) days after commencing injection into the Well, and no less frequently than annually thereafter, Ameredev shall consult with OCD regarding the immediate notification parameters. If OCD determines that the immediate notification parameters should be modified, Ameredev shall provide modified parameters within thirty (30) days of notification for review by OCD.

10. Ameredev shall conduct an annual mechanical integrity test (MIT) on the Well.

11. Ameredev shall conduct continuous monitoring of surface TAG injection pressure, temperature, rate, surface annular pressure, and bottom-hole (or "end of tubing") temperatures and pressures in the tubing and annulus.

12. Ameredev shall maintain a maintenance log, including the volume of annular fluid (diesel) replaced in the annulus of the Well.

13. Ameredev shall establish and submit for OCD approval the temperature parameters for injected fluid, install and maintain temperature-activated controls to govern the temperature of injected fluid, and install and maintain an alarm system for the controls to indicate exceedance of the parameters.

14. Ameredev shall report to OCD on a quarterly basis (unless changed to a biannual basis upon approval of the OCD Director) the summary data for injection parameters monitored pursuant to this Order, and upon request by OCD, shall submit annual reports after each year of operation, which shall include composition and volume of acid gas injected into the Well.

15. No later than thirty (30) days after the fifth (5th) year of injection into the Well, Ameredev shall submit to OCD a report summarizing the Well's performance, including injected volumes by fluid type, change in reservoir pressures, the model originally used in the Application recalibrated using that information, and seismic modeling. Ameredev shall provide an in-person presentation of the report to the Commission at its request.

16. Ameredev shall install, operate, and monitor for the life of this Order a seismic monitoring station or stations. OCD shall be responsible for coordinating with the Manager of the New Mexico Tech Seismological Observatory at the New Mexico Bureau of Geology and Mineral Resources for appropriate specifications for the equipment and the required reporting procedure for the monitoring data.

17. In the event Ameredev transfers ownership of the Well, Ameredev shall seek approval of such change in ownership from OCD pursuant to 19.15.9.9 NMAC.

18. No later than twelve (12) months after issuance of this Order, Ameredev shall file a C-108 with OCD for approval to construct a redundant AGI well ("Redundant Well") in Devonian-Silurian formations that is capable of receiving volumes of TAG that is equal to or greater than the volumes approved for injection into the Independence AGI Well No. 1. No later than twenty (24) months after issuance of this Order, Ameredev will complete the Redundant Well subject to the Conditions this Order. OCD is authorized to review and approve the Redundant Well.

19. If Ameredev fails to timely submit or to diligently prosecute the application for the Redundant Well, fails to construct the Redundant Well by the specified deadline after receiving OCD's approval, or requests an exemption or rescission of the above condition, this Order shall terminate automatically and Ameredev shall plug and abandon the Independence AGI Well No. 1 pursuant to an OCD-approved plan; provided, however, that OCD in its sole discretion may grant an extension of time not to exceed six (6) months to the completion deadline in Paragraph 18 for good cause shown.

20. The injection authority herein granted shall terminate two years after the effective date of this Order if Ameredev has not commenced injection operation. The OCD Director, upon written request of Ameredev submitted prior to the expiration of this Order may extend this time for good cause shown.

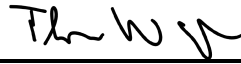
21. After 30 years from the date of the Commission's Order in this case, the authority granted by this Order shall terminate unless Ameredev or its successor-in-interest shall make application before the Commission for an extension to inject.

DONE at Santa Fe, New Mexico on the 4th day of November, 2020.

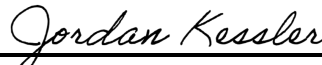
**STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION**



Adrienne Sandoval, M.E., Chair



Dr. Thomas Engler, P.E., Member



Jordan Kessler, Esq., Member