

This order will not be final and effective until 25 days after the date the order is signed. If a timely motion for rehearing is filed by any party at interest, this order shall not become final and effective until such motion is overruled, or if such motion is granted, this order shall be subject to further action by the Commission. Pursuant to Tex. Gov't Code § 2001.146(e), the time allotted for Commission action on a motion for rehearing in this

Oil & Gas Docket No. 08-0320009 and 08-0320288
Final Order
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case prior to its being overruled by operation of law, is hereby extended until 100 days from the date the order is served on the parties.

Signed on April 21, 2020.

RAILROAD COMMISSION OF TEXAS

DocuSigned by:

Wayne Christian

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CHAIRMAN WAYNE CHRISTIAN

DocuSigned by:

Christi Craddick

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COMMISSIONER CHRISTI CRADDICK

DocuSigned by:

Ryan Sitton

7D198C38A37443C

COMMISSIONER RYAN SITTON

ATTEST:

DocuSigned by:

Callie Farnas

3581C80DFDE0476

SECRETARY

SPECIAL CONDITIONS:

Well No.	API No.	Special Conditions
2	38937483	<p>1. For wells with long string casing set more than 100 feet below the permitted injection interval, the plug back depth shall be within 100 feet of the bottom of the permitted injection interval. For wells with open hole completions, the plug back depth shall be no deeper than the bottom of the permitted injection interval.</p> <p>2. One or more seismic events have been recorded within 9.08 km of this well. In addition to the standard H-10 Annual Disposal/Injection Well Monitoring Report, the operator shall collect and maintain daily records of injected volumes and maximum injection pressure. The operator shall make this data available to the Commission upon request.</p> <p>3. Step-Rate Test (SRT):</p> <p>(A) The operator shall conduct a SRT to determine the reservoir fracture initiation pressure prior to initial injection into the permitted formations, using the RRC SRT guidelines. https://www.rrc.state.tx.us/oil-gas/publications-and-notice/manuals/injectiondisposal-well-manual/summary-of-standards-and-procedures/technical-review/step-rate-test-guidelines/</p> <p>(B) The operator shall notify the appropriate District Office at least 48 hours in advance of the test to provide opportunity for the Commission to witness the SRT.</p> <p>(C) The operator shall provide raw data from the test to the Injection-Storage Permits Unit in Austin within 48 hours of completing the SRT.</p> <p>(D) An analysis of the step-rate test shall be filed with the Injection-Storage Permits Unit in Austin within 30 days of completion of the SRT. The SRT analysis shall be prepared, signed and sealed by a professional engineer registered in Texas and filed with the Mechanical Integrity Test, Form H-5.</p> <p>4. Initial Static Bottomhole Pressure (BHP) Test:</p> <p>(A) The operator shall perform an initial static BHP test to quantify reservoir pressure prior to initial injection into the permitted formations.</p> <p>(B) The operator shall notify the appropriate District Office at least 48 hours in advance of the test to provide opportunity for the Commission to witness the BHP test.</p> <p>(C) The operator shall provide raw data from the test to the Injection-Storage Permits Unit in Austin within 48 hours of completing the BHP test.</p> <p>(D) An analysis of the BHP test shall be filed with the Injection-Storage Permits Unit in Austin within 30 days of completion of the BHP test. The BHP analysis shall be prepared, signed and sealed by a professional engineer registered in Texas and filed with the Mechanical Integrity Test, Form H-5.</p> <p>(E) Measurement for the BHP test shall be performed via wireline tool, or other Commission-approved bottomhole pressure measurement technique.</p> <p>(F) If multiple formations are open to injection, steps must be taken to isolate the formations for discrete shut-in BHP measurements for each separate formation. The Delaware Mountain Group shall be treated as a single formation and it shall not be necessary to measure the pressure in the discrete members of the Delaware Mountain Group.</p>

STANDARD CONDITIONS:

WAYNE CHRISTIAN, CHAIRMAN
 CHRISTI CRADDICK, COMMISSIONER
 RYAN SITTON, COMMISSIONER



DANNY SORRELLS
 ASSISTANT EXECUTIVE DIRECTOR
 DIRECTOR, OIL AND GAS DIVISION
 PAUL DUBOIS
 ASSISTANT DIRECTOR, TECHNICAL PERMITTING

RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

PERMIT TO DISPOSE OF NON-HAZARDOUS OIL AND GAS WASTE BY INJECTION INTO A POROUS FORMATION NOT PRODUCTIVE OF OIL AND GAS

PERMIT NO. 16646

BOYKIN ENERGY LLC
 1100 MACON STREET
 FORT WORTH TX 76102

Authority is granted to inject Non-Hazardous Oil and Gas waste into the well identified herein in accordance with Statewide Rule 9 of the Railroad Commission of Texas and based on information contained in the application (Form W-14) dated August 14, 2018 for the permitted interval of the BELL CANYON, CHERRY CANYON, and BRUSHY CANYON formations and subject to the following terms and special conditions:

BATEMAN SWD (000000) LEASE
 WOLFBONE (TREND AREA) FIELD
 REEVES COUNTY
 DISTRICT 08

WELL IDENTIFICATION AND PERMIT PARAMETERS:

Well No.	API No.	UIC Number	Permitted Fluids	Top Interval (feet)	Bottom Interval (feet)	Maximum Liquid Daily Injection Volume (BBL/day)	Maximum Gas Daily Injection Volume (MCF/day)	Maximum Surface Injection Pressure for Liquid (PSIG)	Maximum Surface Injection Pressure for Gas (PSIG)
1	38937482	16646	Salt Water, and Other Non-Hazardous O/G Waste	4,600	6,400	20,000		1,100	

SPECIAL CONDITIONS:

Well No.	API No.	Special Conditions
1	38937482	<p>1. For wells with long string casing set more than 100 feet below the permitted injection interval, the plug back depth shall be within 100 feet of the bottom of the permitted injection interval. For wells with open hole completions, the plug back depth shall be no deeper than the bottom of the permitted injection interval.</p> <p>2. One or more seismic events have been recorded within 9.08 km of this well. In addition to the standard H-10 Annual Disposal/Injection Well Monitoring Report, the operator shall collect and maintain daily records of injected volumes and maximum injection pressure. The operator shall make this data available to the Commission upon request.</p> <p>3. Step-Rate Test (SRT):</p> <p>(A) The operator shall conduct a SRT to determine the reservoir fracture initiation pressure prior to initial injection into the permitted formations, using the RRC SRT guidelines. https://www.rrc.state.tx.us/oil-gas/publications-and-notice/manuals/injectiondisposal-well-manual/summary-of-standards-and-procedures/technical-review/step-rate-test-guidelines/</p> <p>(B) The operator shall notify the appropriate District Office at least 48 hours in advance of the test to provide opportunity for the Commission to witness the SRT.</p> <p>(C) The operator shall provide raw data from the test to the Injection-Storage Permits Unit in Austin within 48 hours of completing the SRT.</p> <p>(D) An analysis of the step-rate test shall be filed with the Injection-Storage Permits Unit in Austin within 30 days of completion of the SRT. The SRT analysis shall be prepared, signed and sealed by a professional engineer registered in Texas and filed with the Mechanical Integrity Test, Form H-5.</p> <p>4. Initial Static Bottomhole Pressure (BHP) Test:</p> <p>(A) The operator shall perform an initial static BHP test to quantify reservoir pressure prior to initial injection into the permitted formations.</p> <p>(B) The operator shall notify the appropriate District Office at least 48 hours in advance of the test to provide opportunity for the Commission to witness the BHP test.</p> <p>(C) The operator shall provide raw data from the test to the Injection-Storage Permits Unit in Austin within 48 hours of completing the BHP test.</p> <p>(D) An analysis of the BHP test shall be filed with the Injection-Storage Permits Unit in Austin within 30 days of completion of the BHP test. The BHP analysis shall be prepared, signed and sealed by a professional engineer registered in Texas and filed with the Mechanical Integrity Test, Form H-5.</p> <p>(E) Measurement for the BHP test shall be performed via wireline tool, or other Commission-approved bottomhole pressure measurement technique.</p> <p>(F) If multiple formations are open to injection, steps must be taken to isolate the formations for discrete shut-in BHP measurements for each separate formation. The Delaware Mountain Group shall be treated as a single formation and it shall not be necessary to measure the pressure in the discrete members of the Delaware Mountain Group.</p>

STANDARD CONDITIONS:

1. Injection must be through tubing set on a packer. The packer must be set no higher than 100 feet above the top of the permitted interval.
2. The District Office must be notified 48 hours prior to:
 - a. running tubing and setting packer;
 - b. beginning any work over or remedial operation;
 - c. conducting any required pressure tests or surveys.
3. The wellhead must be equipped with a pressure observation valve on the tubing and for each annulus.
4. Prior to beginning injection and subsequently after any work over, an annulus pressure test must be performed. The test pressure must equal the maximum authorized injection pressure or 500 psig, whichever is less, but must be at least 200 psig. The test must be performed and the results submitted in accordance with the instructions of Form H-5.
5. The injection pressure and injection volume must be monitored at least monthly and reported annually on Form H-10 to the Commission's Austin office.
6. Within 30 days after completion, conversion to disposal, or any work over which results in a change in well completion, a new Form W-2 or G-1 must be filed to show the current completion status of the well. The date of the disposal well permit and the permit number must be included on the new Form W-2 or G-1.
7. Written notice of intent to transfer the permit to another operator by filing Form P-4 must be submitted to the Commission at least 15 days prior to the date of the transfer.
8. This permit will expire when the Form W-3, Plugging Record, is filed with the Commission. Furthermore, permits issued for wells to be drilled will expire three (3) years from the date of the permit unless drilling operations have commenced.

Provided further that, should it be determined that such injection fluid is not confined to the approved interval, then the permission given herein is suspended and the disposal operation must be stopped until the fluid migration from such interval is eliminated. Failure to comply with all of the conditions of this permit may result in the operator being referred to enforcement to consider assessment of administrative penalties and/or the cancellation of the permit.

April 21, 2020.

Sean Avitt, Manager
Injection-Storage Permits Unit

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Note: This document will only be distributed electronically.