

State of Colorado Oil and Gas Conservation Commission

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FOR OGCC USE ONLY Document Number: 402045353 Date Received: 06/03/2019

UNDERGROUND INJECTION FORMATION PERMIT APPLICATION

Per Rule 325, this form shall be submitted with all required attachments. A Form 31 - Intent shall be submitted and approved prior to completing an injection zone. A Form 31 - Subsequent shall be submitted following collection of water samples and injectivity test (if performed) and must be approved prior to injection in any new injection facility. NOTE: Per Rule 324B, an aquifer exemption is required for any injection formation with water quality less than 10,000 mg/L total dissolved solids (TDS). Contact the Commission for further requirements if the TDS as determined by water analysis for the injection zone is less than 10,000 mg/L.

Form 31 Type [X] Intent [] Subsequent UIC Facility ID 160027 UIC Facility ID Required for Subsequent Form 31

UIC FACILITY INFORMATION

Facility Name and Number: Pintail 16 County: JACKSON Facility Location: NESW / 16 / 7N / 80W / 6 Field Name and Number: WILDCAT 99999 Facility Type: [] Enhanced Recovery [X] Disposal [] Simultaneous Disposal Single or Multiple Well Facility? [] Single [X] Multiple

Proposed Injection Program (Required):

SandRidge intends to change the objective disposal formation from the Entrada to the Dakota-Lakota formation of the existing directional disposal Pintail SWD 0780 2-16D well.

OPERATOR INFORMATION

OGCC Operator Number: 10598 Name of Operator: SANDRIDGE EXPLORATION & PRODUCTION LLC Address: 123 ROBERT S KERR AVE City: OKLAHOMA CITY State: OK Zip: 73102 Contact Name and Telephone: Name: Diane Overbey Phone: (405) 429 5828 Fax: () Email: doverbey@sandridgeenergy.com

INJECTED FLUID TYPE

All injected fluids must be Exempt E&P waste per RCRA Subpart C.

(Check all that apply.)

- [X] Produced Water [] Natural Gas [] CO2 [] Drilling Fluids [] Exempt Gas Plant Waste [X] Used Workover Fluids [X] Flowback Fluids

[] Other Fluids (describe):

Empty text box for describing other fluids.

Commercial Disposal Facility [] Yes [X] No Commercial UIC Bond Surety ID:

Commercial Facility Description: Describe the physical region of the facility, the details of the operations, and the type of fluids to be injected.

PROPOSED INJECTION FORMATIONS

FORMATION (Name): DAKOTA-LAKOTA Porosity: 13 %
Formation TDS: 3900 mg/L Frac Gradient: 0.69 psi/ft Permeability: 4 mD
Proposed Stimulation Program: Acid Frac Treatment None

ANTICIPATED FACILITY OPERATIONS CONDITIONS

Under normal operating conditions, estimated TOTAL fluid injection rates and pressures for this facility:

FOR WATER: Daily Injection Rate Range From 100 to 8500 bbls/day
Surface Injection Pressure Range From 1500 to 1750 psi
FOR GAS: Daily Injection Rate Range From _____ to _____ mcf/day
Surface Injection Pressure Range From _____ to _____ psi

Estimated Initial Injection Date: 10/1/2019

AREA OF REVIEW OIL and GAS WELL EVALUATION SUMMARY

Review all existing wells within 1/2 mile for injection formation isolation.

Area Review Date: 5/16/2019

Total number of Oil & Gas Wells within Area of Review:

ABANDONED WELLS (All wells that have been plugged: PA and DA status))

Total within Area of Review
Number To Be Re-Plugged

ACTIVE WELLS (All wells that have not been plugged: AC, DG, DM, IJ, PR, SU, SI, TA, WO, XX, UN status)

Total within Area of Review
Number Requiring Casing Repair
Number To Be Plugged

Operator's Area of Review Contact Email: doverbey@sandridgeenergy.com

No Wells within 2,640'

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Justin Garrett Signed: _____

Title: Regulatory Analyst Date: 6/3/2019 12:44:22 PM

COGCC Approved:  Date: 04/03/2020

Form 31 - Intent Expiration Date: 10/03/2020

Per Rule 325.o, a 90 day extension of the Expiration Date may be requested via a Sundry Notice, Form 4 submitted prior to Form 31- Intent expiration

Order Number: _____ UIC FACILITY ID: 160027

CONDITIONS OF APPROVAL, IF ANY:

COA Type	Description
Underground Injection Control	Operator is required to contact COGCC to discuss Step Rate Test or Injectivity Test criteria for Maximum Surface Injection Pressure determination.
Underground Injection Control	Operator must provide results of Dakota-Lakota injectivity test for Maximum Surface Injection Pressure determination.
Underground Injection Control	Injection is not authorized until approval of Subsequent Forms 31 and 33.

Attachment Check List

Att Doc Num	Name
1352423	SURFACE AGREEMENT-AMENDMENT
1352424	CORRESPONDENCE-DWR HYDROLOGIC EVALUATION
1352425	INJECTION ZONE WATER ANALYSES
1352426	CORRESPONDENCE-SANDRIDGE TO COGCC SEISMIC
1352427	CORRESPONDENCE-COGCC TO CDPHE AQEX
1352428	CORRESPONDENCE-COGCC TO EPA AQEX
402045353	FORM 31-INTENT-SUBMITTED
402058322	AQUIFER EXEMPTION-COGCC
402058324	OIL & GAS WELL PLAT
402058330	STEP RATE/INJECTIVITY TEST DOCUMENTATION
402058334	WELLBORE DIAGRAM-CURRENT
402058336	SURFACE USE AGREEMENT FOR SALT WATER DISPOSAL
402058346	LIST OF MINERAL OWNERS ¼-MILE
402058347	MAP OF MINERAL OWNERS ¼-MILE
402058351	MAP OF O&G WELLS IN AREA OF REVIEW
402058352	LIST OF SURFACE OWNERS ¼-MILE
402058353	MAP OF SURFACE OWNERS ¼-MILE
402058356	MAP OF WATER WELLS ¼-MILE
402058359	UNIT AREA PLAT
402058360	CERTIFIED MAIL RECEIPT(S)
402062339	SURFACE FACILITY DIAGRAM

Total Attach: 21 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)