

State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



FOR OGCC USE ONLY

Document Number:

401447290

Date Received:

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

Intent

Subsequent

UIC Facility ID 0

UIC Facility ID Required for Subsequent Form 31

UIC FACILITY INFORMATION

Facility Name and Number: Bighorn 0780

1-17

County: JACKSON

Facility Location: NENW / 17 / 7N / 80W / 6

Field Name and Number:

WILDCAT

99999

Facility Type:  Enhanced Recovery

Disposal

Simultaneous Disposal

Single or Multiple Well Facility?  Single

Multiple

Proposed Injection Program (Required):

Produced water from the Niobrara formation from nearby SandRidge wells along with flowback water which could contain drilling mud (water based and oil based), propan, acids and any stray hydrocarbons or other items produced from drilling, completing and producing an oil well may be disposed of in the proposed well. These fluids will mostly be transported to this well via pipeline but they could also be trucked there if pipeline is down or a new well is drilled and a connecting pipeline has yet to be installed.

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: Spence Laird

Phone: (405) 420-8415 Fax: ( )

Email: slaird@sandridgeenergy.com

INJECTED FLUID TYPE

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

(Check all that apply.)

Produced Water

Natural Gas

CO2

Drilling Fluids

Exempt Gas Plant Waste

Used Workover Fluids

Flowback Fluids

Other Fluids (describe):

Commercial Disposal Facility

Yes

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): ENTRADA Porosity: 15 %  
Formation TDS: 7500 mg/L Frac Gradient: 0.63 psi/ft Permeability: -35 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 0 to 8000 bbls/day  
Surface Injection Pressure Range From 1500 to 4000 psi  
FOR GAS: Daily Injection Rate Range From \_\_\_\_\_ to \_\_\_\_\_ mcf/day  
Surface Injection Pressue Range From \_\_\_\_\_ to \_\_\_\_\_ psi

Estimated Initial Injection Date: 12/15/2017

**AREA OF REVIEW OIL and GAS WELL EVALUATION SUMMARY**

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

Area Review Date: 9/28/2017

Total number of Oil & Gas Wells within Area of Review: 9

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

Total within Area of Review 0  
Number To Be Re-Plugged 0

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 9  
Number Requiring Casing Repair 0  
Number To Be Plugged 0

Operator's Area of Review Contact Email: Spence Laird slaird@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: Kim Rodell Signed: \_\_\_\_\_

Title: Permit Agent Date: \_\_\_\_\_

COGCC Approved: \_\_\_\_\_ Date: \_\_\_\_\_

Form 31 - Intent Expiration Date: \_\_\_\_\_

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: 0

CONDITIONS OF APPROVAL, IF ANY:

<u>COA Type</u>	<u>Description</u>	
<b><u>Attachment Check List</u></b>		
<u>Att Doc Num</u>	<u>Name</u>	
401458043	SURFACE USE AGREEMENT FOR SALT WATER DISPOSAL	
401458049	MAP OF O&G WELLS IN AREA OF REVIEW	
401458053	MAP OF WATER WELLS ¼-MILE	
401458061	LIST OF SURFACE OWNERS ¼-MILE	
401458063	LIST OF MINERAL OWNERS ¼-MILE	
401458068	MAP OF MINERAL OWNERS ¼-MILE	
401458071	SURFACE FACILITY DIAGRAM	
401458073	WELLBORE DIAGRAM-CURRENT	
401458242	OFFSET WELL EVALUATION	
401462566	AQUIFER EXEMPTION-COGCC	
401462862	CERTIFIED MAIL RECEIPT(S)	
Total Attach: 11 Files		
<b><u>General Comments</u></b>		
<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval
Total: 0 comment(s)		