

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: 401610723 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 [X] Subsequent UIC Facility ID 160009 UIC Facility ID Required for Subsequent Form 31

UIC FACILITY INFORMATION

Facility Name and Number: Greasewood North County: WELD Facility Location: SWNE / 23 / 6N / 61W / 6 Field Name and Number: GREASEWOOD SOUTH 32700 Facility Type: [X] Enhanced Recovery [ ] Disposal [ ] Simultaneous Disposal Single or Multiple Well Facility? [X] Single [ ] Multiple

Proposed Injection Program (Required):

The injection plan is to inject into the Behring 23-7 "D" Sand formation to provide pressure support to the wells located to the north west (Babb 14-14, Kettl 23-3). We will inject natural gas or a combination of natural gas and water into the Behring 23-7 since it is the highest well structurally.

OPERATOR INFORMATION

OGCC Operator Number: 10112 Name of Operator: FOUNDATION ENERGY MANAGEMENT LLC Address: 5057 KELLER SPRINGS RD STE 650 City: ADDISON State: TX Zip: 75001 Contact Name and Telephone: Name: Adam Johnson Phone: (918) 5265525 Fax: ( ) Email: regulatory@foundationenergy.com

INJECTED FLUID TYPE

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

(Check all that apply.)

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

[ ] Other Fluids (describe):

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): D SAND Porosity: 15 %  
Formation TDS: 8943 mg/L Frac Gradient: 0.7168 psi/ft Permeability: 50 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 1000 bbls/day  
Surface Injection Pressure Range From 0 to 1684 psi  
FOR GAS: Daily Injection Rate Range From 0 to 1500 mcf/day  
Surface Injection Pressue Range From 0 to 3801 psi

Estimated Initial Injection Date: 5/23/2018

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

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

Area Review Date: 3/31/2017

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: ajohnson@foundationenergy.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: Alyssa Beard Signed: \_\_\_\_\_

Title: EHS Manager 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: 4-5

UIC FACILITY ID: 160009

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>	
401610737	WELLBORE DIAGRAM-SUBSEQUENT	
401610739	ANALYSIS OF INJECTION ZONE WATER	
401612875	ANALYSIS OF INJECTION WATER	
401612876	OTHER	
401612878	MAXIMUM SURFACE INJECTION PRESSURE DETERMINATION	
401612906	MAP OF O&G WELLS IN AREA OF REVIEW	
401612956	MAP OF WATER WELLS ¼-MILE	
401612961	UNIT AREA PLAT	
401612962	SURFACE FACILITY DIAGRAM	
401612979	OIL & GAS WELL PLAT	
Total Attach: 10 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)		