

State of Colorado
Oil and Gas Conservation Commission

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FOR OGCC USE ONLY

Document Number:

401846785

Date Received:

11/20/2018

INJECTION WELL PERMIT APPLICATION

Submit a completed Form 33 with or after approval obtained on Form 31 (Underground Injection Formation Permit Application) or you must have a previously approved injection Well Permit.

1. Operator may not commence injection into this well until this form is approved.
2. Each individual injection well must be approved by this form.

Per Rule 325, this form shall be submitted with all required attachments.

A Form 33 – Intent shall be submitted and approved prior to completing an injection zone.

A Form 33 – Subsequent shall be submitted following completion of the well and must be approved prior to injection.

NOTE: Injection for Enhanced Recovery requires the field to be unitized according to the 400 Series Rules. Injection for Disposal into a producing field requires unitization of the formation in the field.

Form 33 Type Intent Subsequent

OPERATOR INFORMATION

OGCC Operator Number: <u>10112</u> Name of Operator: <u>FOUNDATION ENERGY MANAGEMENT LLC</u> Address: <u>5057 KELLER SPRINGS RD STE 650</u> City: <u>ADDISON</u> State: <u>TX</u> Zip: <u>75001</u>	Contact Name and Telephone: Name: <u>Adam Johnson</u> Phone: <u>(918) 526-5505</u> Fax: <u>()</u> Email: <u>regulatory@foundationenergy.com</u>
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WELL INFORMATION

Well Name and Number: STATE 36-16 API No: 05-123-20908-00
 Field Name and Number: CROW 13600 County: WELD
 QtrQtr: SESE Sec: 36 Twp: 8N Range: 60W Meridian: 6

UIC FACILITY INFORMATION

UIC Facility ID: 159994 (as assigned on an approved Form 31)
 Facility Name: Mule Waterflood Unit Facility Number: _____

WELLBORE INFORMATION

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top	Status
SURF	12+1/4	8+5/8	24	0	436	350	436	0	VISU
1ST	7+7/8	4+1/2	11.6	0	6969	200	6969	5930	CBL

Plug Back Total Depth: 6874 Tubing Depth: 6786 Packer Depth: 6754

List below all Plugs, Bridge Plugs, Stage Cementing or Squeeze Work performed on this wellbore:

Describe below any changes to the wellbore which will be made upon conversion (includes but not limited to changes of tubing and packer setting depths, any additional squeeze work for aquifer protection or casing leaks, setting of bridge plugs to isolate non-injection formations).

Foundation will set a packer at 6,754' to isolate the annulus from the injection fluids and pressure.

WELLBORE COMPLETIONS

Formation Name	Gross Completed Interval from Top	Gross Completed Interval from Bottom	Completion Type
D SAND	6820	6840	Perforated

Operator Comments:

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

Print Name: Adam Johnson

Signed: _____ Title: Operations Engineer Date: 11/20/2018 12:59:27 PM

OGCC Approved:  Title: _____ Date: 4/30/2019 3:06:39 PM

MAX. SURFACE INJECTION PRESSURE: 2250 If Disposal Well, MAX. INJECTION VOL. LIMIT: _____

CONDITIONS OF APPROVAL, IF ANY:

COA Type

Description

	Maximum Water Injection Pressure will be 2250 psi. Similar to Green #1-1 (API: 123-26575) and Wickstrom #6-12 (API: 123-32065) wells. Maximum Gas Injection Pressure will be 4350 psi as at Green #1-1 (API: 123-26575). Maximum injection volume not applicable to enhanced recovery projects.
	1. Injection is not authorized until approval of Subsequent Forms 33. 2. PRIOR TO PERFORMING OPERATIONS: Operator is required to contact COGCC to discuss acid and fracturing jobs. Approval of Form 4 may be required for acid and fracturing jobs. (As of 4/13/2016) 3. Maximum Surface Injection Pressures for Gas and Water determined previously in Green #1-1 and Wickstrom #6-12 well. Operator is not planning Step Rate Test or Injectivity Test. 4. Operator must provide all tops of formations encountered from surface to TD on the Form 5 when submitted. 5. Well must pass MIT witnessed by COGCC before Subsequent Forms 33 will be approved. Well in must be in injection configuration for MIT.

Attachment Check List

Att Doc Num

Name

401846785	FORM 33-INTENT-SUBMITTED
401846843	WELLBORE DIAGRAM-PROPOSED
401846844	WELLBORE DIAGRAM-CURRENT

Total Attach: 3 Files

General Comments

User Group

Comment

Comment Date

UIC	State 36-16 lies within 1/4-mile of Green 1-1 (API: 123-26575) injection well.	04/30/2019
UIC	Surface casing set at 436 ft. Water well 1.31 miles north had TD of 450 ft. It was permitted as source water for waterflood (enhanced recovery) in 1984. Well does not appear on air photo at plotted location. Nearest water well is 0.56 miles northeast, 1982, permitted for stock, TD 250 ft. Well does not appear on air photo at plotted location.	04/30/2019
UIC	Submit wellbore diagrams with distinct labels for Current, Proposed, and ultimately Final. Include list of Formation Tops on wellbore diagrams from surface to TD. Show TD on wellbore diagrams. Show details of PBSD from 6970 to 6874 on wellbore diagrams.	01/09/2019

Total: 3 comment(s)