

State of Colorado
Oil and Gas Conservation Commission

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FOR OGCC USE ONLY

Document Number:

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Date Received:

11/20/2017

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

UIC Facility ID Required for Subsequent Form 31

UIC FACILITY INFORMATION

Facility Name and Number: EMERALD 79X

County: RIO BLANCO

Facility Location: SESE / 26 / 2N / 103W / 6

Field Name and Number: RANGELY 72370

Facility Type: Enhanced Recovery

Disposal

Simultaneous Disposal

Single or Multiple Well Facility? Single

Multiple

Proposed Injection Program (Required):

Relief well for Rangely Weber Sand Unit. Will inject produced water into the Navajo Formation

OPERATOR INFORMATION

OGCC Operator Number: 16700

Contact Name and Telephone:

Name of Operator: CHEVRON USA INC

Name: Jordan Etten

Address: 6301 DEAUVILLE BLVD

Phone: (432) 687-7688 Fax: (970) 675-3800

City: MIDLAND State: TX Zip: 79706

Email: Jordan.Etten@chevron.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): NAVAJO Porosity: 25 %
Formation TDS: 15600 mg/L Frac Gradient: 0.95 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 15000 bbls/day
Surface Injection Pressure Range From 1600 to 1900 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: 11/1/2017

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: _____

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: Diane Peterson Signed: _____

Title: Permit Specialist Date: 11/20/2017 10:58:50 AM

COGCC Approved:  Date: 04/02/2018

Form 31 - Intent Expiration Date: 10/02/2018

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: 160012

CONDITIONS OF APPROVAL, IF ANY:

COA Type	Description
	Slightly expand Proposed Injection Program description on Facility Location tab. Define what a "Relief well" is and does.
	Based on precedents from existing Navajo disposal wells operator required to notify Surface Owner and Mineral Owner of intension to convert Emerald 79X into disposal well for injection of salt water, produced water, and/or approved E&P fluids into Navajo Formation. Existing 1957 Surface Use Agreement (Doc # 1801184) is for Unitized Enhanced Recovery in Weber Sandstone.
	<ol style="list-style-type: none"> 1. Injection is not authorized until approval of Subsequent Forms 31 and 33. 2. If retrieving water sample(s) from injection zone(s) for analysis do so before stimulating formation. Samples must be analyzed for Total Dissolved Solids at a minimum. 3. PRIOR TO PERFORMING OPERATIONS: Operator is required to contact COGCC to discuss Step Rate Test or Injectivity Test criteria for Maximum Surface Injection Pressure determination. Prior approval of Form 4 is required for step rate and injectivity tests. 4. PRIOR TO PERFORMING OPERATIONS: Approval of Form 4 is required for acid and fracturing jobs. (New as of 4/13/2016). 5. Operator must provide all tops of formations encountered from surface to TD on the Sundry Notice Form 4.
	Operator required to update Area of Review or Offset Well Evaluation. Original Evaluation did not contain plugged and abandoned or drilled and abandoned wells within 1/4-mile of Emerald 79X. This will include submitting updated Map of all Oil and Gas Wells Within 1/4-Mile of the Emerald 79X and a list of those wells.

Attachment Check List

Att Doc Num	Name
645596	survey map
1801135	INJECTION WATER - LAB REPORT
1801184	SURFACE USE AGREEMENT
1801186	SURFACE FACILITY DIAGRAM
1801189	CERTIFIED MAIL RECEIPTS
2618757	CORRESPONDENCE-EMAIL
401448492	FORM 31-INTENT-SUBMITTED
401464022	WELLBORE DIAGRAM-CURRENT
401464023	OTHER-WORKOVER PROCEDURE
401464024	WELLBORE DIAGRAM-PROPOSED
401464215	MAP OF O&G WELLS IN AREA OF REVIEW
401464217	MAP OF SURFACE OWNERS ¼-MILE
401464221	NOTICE TO SURFACE & MINERAL OWNERS
401464237	OFFSET WELL EVALUATION

Total Attach: 14 Files

General Comments

User Group	Comment	Comment Date
UIC	Area is a designated CDPHE Regulation 42 Area (Figure) 41 Narrative age 64, Figure page # 65 for Weber and Navajo injection.	04/02/2018

Total: 1 comment(s)