

State of Colorado Oil and Gas Conservation Commission

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FOR OGCC USE ONLY Document Number: 401839581 Date Received: 11/30/2018

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 160030 UIC Facility ID Required for Subsequent Form 31

UIC FACILITY INFORMATION

Facility Name and Number: UNION PACIFIC 113X22 County: RIO BLANCO Facility Location: SWNW / 22 / 2N / 102W / 6 Field Name and Number: RANGELY 72370 Facility Type: [ ] Enhanced Recovery [X] Disposal [ ] Simultaneous Disposal Single or Multiple Well Facility? [X] Single [ ] Multiple

Proposed Injection Program (Required):

RELIEF WELL FOR THE RANGELY WEBER SAND UNIT. THIS WELL WILL INJECT PRODUCED WATER INTO THE NAVAJO FORMATION.

OPERATOR INFORMATION

OGCC Operator Number: 16700 Contact Name and Telephone: Name: EMILY PUGH Address: 6301 DEAUVILLE BLVD Phone: (432) 687-7635 Fax: (970) 675-3800 City: MIDLAND State: TX Zip: 79706 Email: Emily.Pugh@chevron.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 [ ] Used Workover Fluids [ ] 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): 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: 3/1/2019

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

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

Area Review Date: \_\_\_\_\_

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

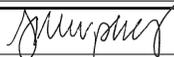
Operator's Area of Review Contact Email: KSchilling@chevron.com

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: DIANE PETERSON Signed: \_\_\_\_\_

Title: PERMIT SPECIALIST Date: 11/30/2018 9:59:57 AM

COGCC Approved:  Date: 11/23/2020

Form 31 - Intent Expiration Date: 05/23/2021

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: 160030

CONDITIONS OF APPROVAL, IF ANY:

<b>COA Type</b>	<b>Description</b>
Underground Injection Control	Prior to approval of the Form 31 Subsequent operator is required to submit Induced Seismicity Evaluation, passing MIT documentation, revised surface and mineral owner maps, documentation of Step Rate Test results (if performed).
Underground Injection Control	If the daily injection rate exceeds 10,000 barrels per day and if the area is not already monitored Chevron will be required to monitor for seismic activity in the Union Pacific 113x22 area. Chevron may be required to install a seismometer at a location to be determined by Chevron and COGCC. Chevron will be responsible for maintenance and operation of the seismometer. Data gathered by the seismometer will be made available to one or more third parties (such as the USGS, CU-Boulder, CSM, or CSU) for analysis.
Underground Injection Control	<ol style="list-style-type: none"> <li>1. Injection is not authorized until Subsequent Forms 31 and 33 are approved.</li> <li>2. Retrieve water sample(s) from injection zone(s) before stimulating formation. Samples must be analyzed for Total Dissolved Solids at a minimum.</li> <li>3. 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)</li> <li>4. 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 may be required for step rate and injectivity tests.</li> <li>5. If not already in COGCC records operator required to provide all tops of formations encountered from surface to TD on a Form 5 if one is needed or on a Sundry.</li> <li>6. Well must pass MIT witnessed by COGCC before Subsequent Forms 31 and 33 will be approved. Well in must be in injection configuration.</li> <li>7. Operator must have approved eForm version(s) of Form 26(s) on file before Form 31-Subsequent and Form 33-Subsequent will be approved. Operator is required to file Form 26 updates on a quarterly basis if they have wells that need to be added or deleted.</li> </ol>
Underground Injection Control	Perform radioactive tracer survey of Navajo injection zone 1 year after initial injection. Object is to detect any movement of injected fluid up along casing and out of injection zone. A spinner survey may also be requested.
Underground Injection Control	If in future initial maximum injection volume of Navajo in Union Pacific 113x22 (API: 103-08606) is reached and operator requests additional injection volume then review and determine whether remedial cement squeeze is needed at the base of the Navajo in the U P R R 117x22 (API: 103-08667) well. An initial remedial cement job on Navajo in U P R R 117x22 was performed 7/18/2019.

### **Attachment List**

<b>Att Doc Num</b>	<b>Name</b>
2618925	LIST OIL & GAS AND WATER WELLS 1/4-MILE
2618933	Surface Use Agreement-Saltwater Disposal
2618934	CERTIFIED MAIL RECEIPT-MERIT
2618935	PLAT = DOC # 659281
2619060	HYDROLOGIC EVALUATION
2619065	PROOF OF PUBLICATION-GENERAL ANNOUNCEMENT
2619248	AOR TABLE-COGCC
2619249	ANALYSIS OF INJECTION ZONE WATER
2619250	ANALYSIS OF INJECTION ZONE WATER-II
2619251	SURFACE & MINERAL OWNERS-UPDATE
2619252	OTHER-NOTE TO FILE-CMT
401839581	FORM 31-INTENT-SUBMITTED
401839613	WELLBORE DIAGRAM-CURRENT
401839614	WELLBORE DIAGRAM-PROPOSED
401839615	OTHER-CONVERSION PROCEDURE
401856307	MAP OF O&G WELLS IN AREA OF REVIEW
401856315	MAP OF MINERAL OWNERS ¼-MILE

401856333	NOTICE TO SURFACE & MINERAL OWNERS
401856336	UNIT AGREEMENT-RANGELY WEBER SAND UNIT
401856343	CERTIFIED MAIL RECEIPT(S)
401856394	OFFSET WELL EVALUATION
401856437	RANGELY WEBER SAND UNIT AREA MAP
401856447	MAP OF SURFACE OWNERS ¼-MILE
401856458	SURFACE FACILITY DIAGRAM

Total Attach: 24 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
UIC	With operator approval changed from Multiple well to Single well facility.	10/01/2019
UIC	Maximum Surface Injection Pressure and Maximum Injection Volume to be determined.	10/01/2019

Total: 2 comment(s)