

State of Colorado
Oil and Gas Conservation Commission

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



DE	ET	OE	ES
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SUNDRY NOTICE

Submit a signed original. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full in Comments or provide as an attachment. Identify Well by API Number; identify Oil and Gas Location by Location ID Number; identify other Facility by Facility ID Number.

OGCC Operator Number: 96850 Contact Name Vicki Schoeber
 Name of Operator: TEP ROCKY MOUNTAIN LLC Phone: (970) 263-2721
 Address: 1058 COUNTY ROAD 215 Fax: ()
 City: PARACHUTE State: CO Zip: 81635 Email: vschoeber@terraep.com

FORM 4 SUBMITTED FOR:

Facility Type: WELL
 API Number : 05- 103 12476 00 ID Number: 478941
 Name: FEDERAL Number: RG 412-7-297
 Location QtrQtr: LOT 15 Section: 7 Township: 2S Range: 97W Meridian: 6
 County: RIO BLANCO Field Name: LOVE RANCH

Oil & Gas Location(s) and Oil & Gas Development Plan (OGDP) Information

Location(s)

Location ID	Location Name and Number
316408	FEDERAL RGU 23-7-297

OGDP(s)

No OGDP

WELL LOCATION CHANGE OR AS-BUILT GPS REPORT

- Change of Location for Well * As-Built GPS Location Report As-Built GPS Location Report with Survey

* Well Location Change requires a new Plat.

SURFACE LOCATION GPS DATA Data must be provided for Change of Surface Location and As Built Reports.

Latitude _____ Longitude _____
 GPS Quality Value: _____ Type of GPS Quality Value: _____ Measurement Date: _____
 Well Ground Elevation: _____ feet (Required for change of Surface Location.)

WELL LOCATION CHANGE

Well plan is: _____ (Vertical, Directional, Horizontal)

				FNL/FSL		FEL/FWL				
Change of Surface Footage From :				1808	FSL	1351	FWL			
Change of Surface Footage To :										
Current Surface Location From	QtrQtr	LOT 15	Sec	7	Twp	2S	Range	97W	Meridian	6
New Surface Location To	QtrQtr		Sec		Twp		Range		Meridian	
Change of Top of Productive Zone Footage From :				2185	FNL	966	FWL			
Change of Top of Productive Zone Footage To :										**
Current Top of Productive Zone Location	Sec	7	Twp	2S	Range	97W				
New Top of Productive Zone Location	Sec		Twp		Range					

Change of **Base of Productive Zone** Footage **From:**

 FNL FWL

Change of **Base of Productive Zone** Footage **To:**

**

Current **Base of Productive Zone** Location

Sec Twp Range

New **Base of Productive Zone** Location

Sec Twp Range

Change of **Bottomhole** Footage **From:**

 2185 FNL 966 FWL

Change of **Bottomhole** Footage **To:**

**

Current **Bottomhole** Location

Sec Twp Range

** attach deviated drilling plan

New **Bottomhole** Location

Sec Twp Range

SAFETY SETBACK INFORMATION

Required for change of Surface Location.

Distance from Well to nearest:

Building: _____ Feet
 Building Unit: _____ Feet
 Public Road: _____ Feet
 Above Ground Utility: _____ Feet
 Railroad: _____ Feet
 Property Line: _____ Feet

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit – as defined in 100 Series Rules.

SUBSURFACE MINERAL SETBACKS

Required for change of Top and/or Base of Productive Zone. Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? _____

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: _____ Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

Exception Location

If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

LOCATION CHANGE COMMENTS

CHANGE OR ADD OBJECTIVE FORMATION AND/OR SPACING UNIT

<u>Objective Formation</u>	<u>Formation Code</u>	<u>Spacing Order Number</u>	<u>Unit Acreage</u>	<u>Unit Configuration</u>	<u>Add</u>	<u>Modify</u>	<u>No Change</u>	<u>Delete</u>
ILES	ILES	1-229					X	
WILLIAMS FORK	WMFK	1-229					X	

Comments:

ENGINEERING AND ENVIRONMENTAL WORK

NOTICE OF CONTINUED TEMPORARILY ABANDONED STATUS

Indicate why the well is temporarily abandoned and describe future plans for utilization in the COMMENTS box below, as required by Rule 434.b.(3).

Date well temporarily abandoned _____

Has Production Equipment been removed from site? _____

Mechanical Integrity Test (MIT) required. Date of last MIT _____

TECHNICAL ENGINEERING AND ENVIRONMENTAL WORK

Details of work must be described in full in the COMMENTS below or provided as an attachment.

NOTICE OF INTENT/REQUEST FOR APPROVAL Approximate Start Date 06/01/2022

SUBSEQUENT REPORT Date of Activity _____

- | | | |
|---|--|--|
| <input type="checkbox"/> Bradenhead Plan | <input type="checkbox"/> Venting or Flaring (Rule 903) | <input type="checkbox"/> E&P Waste Mangement |
| <input checked="" type="checkbox"/> Change Drilling Plan | <input type="checkbox"/> Repair Well | <input type="checkbox"/> Beneficial Reuse of E&P Waste |
| <input type="checkbox"/> Gross Interval Change | | |
| <input type="checkbox"/> Underground Injection Control | | |
| <input type="checkbox"/> Request approval of Reuse and Recycling Plan per Rule 905.a.(3). (Reuse and Recycling Plan must be attached.) | | |
| <input type="checkbox"/> Request approval of Alternative Sampling Plan per Rule 909.j.(6). for this Pit. (Alternative Sampling Program must be attached.) | | |
| <input type="checkbox"/> Other | | |

Request that an existing produced water sample from the same formation be used per Rule 909.j.(6) to meet the requirements of Rule 909.j.(1)-(5) for this Well.

Pit ID _____ Pit Name _____

(No Sample Provided)

Subsequent well operations with heavy equipment (Rule 312)

(No Well Provided)

COMMENTS:

TEP Rocky Mountain LLC (TEP) requests a design change to the Federal RG 412-7-297 wellbore. TEP's proposal with respect to well design, encompasses drilling a 17-1/2" surface section to approximately 1449' MD and running 13-3/8" surface casing to ~200 ft TVD above the dissolution loss zone. This would enable TEP to set this surface casing and establish effective cement returns to surface remedial operations. That would provide a competent surface shoe in place as well as the option to nipple up the BOP for a secure air drilled intermediate section through the highly fractured dissolution zone. The 12-1/4" intermediate section would be drilled to approximately 3379' MD (500' TVD into Wasatch) followed by running 9-5/8" 36# J-55 intermediate casing - functioning as a fracture gradient isolation string. The purpose of cement for the 9-5/8" intermediate string is to provide sufficient drilling mud weight at TD for the following production section and TOC is planned to be 500' MD above the Wasatch formation and utilizing 50% excess with a single stage slurry.

Hole design:

Surface hole size - 17.5" to 200' TVD above Dissolution Surface
 Surface casing - 13.375", J-55, BTC, 54.5#
 Intermediate hole size - 12.25" to TD 500' TVD into the Wasatch
 Intermediate casing - 9.625", J-55, LTC, 36#

Cement design:

Surface Casing - 12.3# Single stage slurry with 40% excess (cement to surface)
 Intermediate - Single stage slurry
 12.3# Lead with TOC 500' MD above the Wasatch with 50% excess
 12.8# Tail from TD to 500' MD above float shoe with 50% excess

Proposed total measured depth - 11879', TVD at proposed measured depth - 11763'
 Conductor information is actual as drilled data.

GAS CAPTURE

VENTING AND FLARING:

Operation type: _____ Operational phase requiring venting/flaring: _____

Reason for venting/flaring: _____

Describe Other reason for venting/flaring:

Describe why venting or flaring is necessary. If reporting per Rule 903.b.(2), 903.c.(3).C, or 903.d.(2), include the explanation, rationale, and cause of the event:

Describe how the operation will protect and minimize adverse impacts to public health, safety, welfare, the environment, and wildlife resources. If reporting per Rule 903.d.(2), include BMPs used to minimize venting on the BMP Tab:

Total volume of gas vented or flared: _____ mcf estimated measured

Total duration of emission event: _____ hours consecutive cumulative

Submit a single representative gas analysis via Form 43 to create a Sample Site Facility ID# for this Location. Reference the Form 43 document number on the Related Forms tab.

Sample Site Facility ID#: _____

GAS CAPTURE PLAN

Describe the plan to connect to a gathering line or beneficially use the gas; include anticipated timeline:

A Gas Capture Plan that meets the requirements of Rule 903.e is attached.

CASING PROGRAM

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Grade</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	30	20	X-52	52.78	0	84	199	84	0
SURF	17+1/2	13+3/8	J-55	54.5	0	1449	473	1449	0
1ST	12+1/4	9+5/8	J-55	36	0	3379	155	3379	2371

2ND	8+3/4	4+1/2	P-110	11.6	0	11879	922	11879	6746
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POTENTIAL FLOW AND CONFINING FORMATIONS

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Groundwater	UINTA	30	30	951	943	501-1000	Produced Water Sample	
Groundwater	GRRV	951	943	1108	1098	501-1000	Produced Water Sample	
Subsurface Hazard	GRRV A GROOVE	1108	1098	1301	1288			
Subsurface Hazard	GRRV B GROOVE	1301	1288	1652	1633			
Subsurface Hazard	GRRV DISSOLUTION SURF	1652	1633	2637	2603			
Confining Layer	GRRV ORANGE	2637	2603	2871	2833			
Confining Layer	U WASATCH	2871	2833	5218	5143			
Hydrocarbon	G SAND	5218	5143	5584	5503			
Hydrocarbon	FRUN	5584	5503	6946	6843			
Hydrocarbon	OCRK	6946	6843	8219	8103			
Hydrocarbon	APPROX TOP GAS	8219	8103	10369	10253			
Hydrocarbon	CAMEO	10369	10253	10889	10773			
Hydrocarbon	RLNS	10889	10773	11039	10923			
Hydrocarbon	CZZT	11039	10923	11259	11143			
Hydrocarbon	CRCN	11259	11143	11609	11493			
Hydrocarbon	SEGO	11609	11493	11779	11663			
Hydrocarbon	LOWER SEGO	11779	11663	11879	11763			

H2S REPORTING

- Intentional release of H2S gas due to Upset Condition or malfunction.
- Intent to temporarily abandon well with potential H2S concentration >100 ppm.

Data Fields in this section are intended to document Sample and Location Data associated with the collection of a Gas Sample that is submitted for Laboratory Analysis.

Gas Analysis Report must be attached.

H2S Concentration: _____ in ppm (parts per million) Date of Measurement or Sample Collection _____

Description of Sample Point:

Absolute Open Flow Potential _____ in CFPD (cubic feet per day)

Description of Release Potential and Duration (If flow is not open to the atmosphere, identify the duration in which the container or pipeline would likely be opened for servicing operations.):

Distance to nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent: _____

Distance to nearest Federal, State, County, or municipal road or highway owned and principally maintained for public

use: _____

COMMENTS:

OIL & GAS LOCATION UPDATES

OGDP ID _____ OGD Name _____

SITE EQUIPMENT LIST UPDATES

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

Wells _____	Oil Tanks _____	Condensate Tanks _____	Water Tanks _____	Buried Produced Water Vaults _____
Drilling Pits _____	Production Pits _____	Special Purpose Pits _____	Multi-Well Pits _____	Modular Large Volume Tank _____
Pump Jacks _____	Separators _____	Injection Pumps _____	Heater-Treaters _____	Gas Compressors _____
Gas or Diesel Motors _____	Electric Motors _____	Electric Generators _____	Fuel Tanks _____	LACT Unit _____
Dehydrator Units _____	Vapor Recovery Unit _____	VOC Combustor _____	Flare _____	Enclosed Combustion Devices _____
Meter/Sales Building _____	Pigging Station _____		Vapor Recovery Towers _____	

OTHER PERMANENT EQUIPMENT UPDATES

OTHER TEMPORARY EQUIPMENT UPDATES

CULTURAL AND SAFETY SETBACK UPDATES

OTHER LOCATION CHANGES AND UPDATES

Provide a description of other changes or updates to technical information for this Location:

POTENTIAL OGD UPDATES

PROPOSED CHANGES TO AN APPROVED OGD

This Sundry Form 4 is being submitted pursuant to Rule 301.c to propose changes to an approved Oil and Gas Development Plan.

Check all boxes that pertain to the type(s) of changes being proposed for this OGD:

- | | |
|--|--|
| <input type="checkbox"/> Add Oil and Gas Location(s) | <input type="checkbox"/> Add Drilling and Spacing Unit(s) |
| <input type="checkbox"/> Amend Oil and Gas Location(s) | <input type="checkbox"/> Amend Drilling and Spacing Unit(s) |
| <input type="checkbox"/> Remove Oil and Gas Location(s) | <input type="checkbox"/> Remove Drilling and Spacing Unit(s) |
| <input type="checkbox"/> Oil and Gas Location attachment or plan updates | <input type="checkbox"/> Amend the lands subject to the OGD |
| <input type="checkbox"/> Other | |

Provide a detailed description of the changes being proposed for this OGD. Attach supporting documentation such as maps if necessary.

Best Management Practices

No	BMP/COA Type	Description

Operator Comments:

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

Signed: _____ Print Name: Vicki Schoeber
 Title: Regulatory Specialist Email: vschoeber@terraep.com Date: 4/11/2022

Based on the information provided herein, this Sundry Notice (Form 4) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Katz, Aaron Date: 4/21/2022

CONDITIONS OF APPROVAL, IF ANY:

Condition of Approval

COA Type	Description
1 COA	1) Operator shall comply with the most current revision of the Northwest Colorado Notification Policy. See attached notice. 2) Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above all Mesa Verde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify production casing cement coverage with a cement bond log.

General Comments

User Group	Comment	Comment Date
Engineer	Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. All permitted water wells within the search radius show zero for reported depths. Depths to formation tops in offset oil and gas wells, locally-available geophysical logs, and hydrogeologic information was used to evaluate the adequacy of the operator's proposed surface casing setting depth. The permit 68235-F is identified as a water well, but is only a permit associated with XTO's producing well 103-10051 Piceance Creek 4609. Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. API 103-10454 is a producing well on the existing pad with a TOC of 6300'. Operator is adding an Intermediate string as described in the Operator's comments changing the well from a two to three string design	04/21/2022

Total: 1 comment(s)

Attachment List

Att Doc Num	Name
403003332	SUNDRY NOTICE APPROVED-OBJ-DRLG-CSG
403008352	DIRECTIONAL DATA
403008354	DEVIATED DRILLING PLAN
403023242	FORM 4 SUBMITTED

Total Attach: 4 Files