

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 |
| Document Number: 401951810 | | | |
| Date Received: | | | |

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 Jeff Kirtland
 Name of Operator: TEP ROCKY MOUNTAIN LLC Phone: (970) 263-2736
 Address: PO BOX 370 Fax: ()
 City: PARACHUTE State: CO Zip: 81635 Email: jkirtland@terraep.com

Complete the Attachment
Checklist

OP OGCC

API Number : 05- 045 22641 00 OGCC Facility ID Number: 439913
 Well/Facility Name: Federal GM Well/Facility Number: 424-11
 Location QtrQtr: NESW Section: 11 Township: 7S Range: 96W Meridian: 6
 County: GARFIELD Field Name: GRAND VALLEY
 Federal, Indian or State Lease Number: COC27874

| | | |
|---------------------|--|--|
| Survey Plat | | |
| Directional Survey | | |
| Srfc Eqpmt Diagram | | |
| Technical Info Page | | |
| Other | | |

CHANGE OF LOCATION OR AS BUILT GPS REPORT

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

* Well location change requires new plat. A substantive surface location change may require new Form 2A.

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

Latitude _____ PDOP Reading _____ Date of Measurement _____
 Longitude _____ GPS Instrument Operator's Name _____

LOCATION CHANGE (all measurements in Feet)

Well will be: _____ (Vertical, Directional, Horizontal)

Change of **Surface** Footage **From** Exterior Section Lines:

Change of **Surface** Footage **To** Exterior Section Lines:

Current **Surface** Location **From** QtrQtr NESW Sec 11

New **Surface** Location **To** QtrQtr _____ Sec _____

Change of **Top of Productive Zone** Footage **From** Exterior Section Lines:

Change of **Top of Productive Zone** Footage **To** Exterior Section Lines:

Current **Top of Productive Zone** Location **From** Sec 11

New **Top of Productive Zone** Location **To** Sec _____

Change of **Bottomhole** Footage **From** Exterior Section Lines:

Change of **Bottomhole** Footage **To** Exterior Section Lines:

Current **Bottomhole** Location Sec 11 Twp 7S

New **Bottomhole** Location Sec _____ Twp _____

Is location in High Density Area? _____

Distance, in feet, to nearest building _____, public road: _____, above ground utility: _____, railroad: _____,

property line: _____, lease line: _____, well in same formation: _____

Ground Elevation _____ feet Surface owner consultation date _____

| FNL/FSL | | FEL/FWL | |
|---------------|------------------|-------------------|------------|
| <u>2004</u> | <u>FSL</u> | <u>2266</u> | <u>FWL</u> |
| _____ | _____ | _____ | _____ |
| Twp <u>7S</u> | Range <u>96W</u> | Meridian <u>6</u> | |
| Twp _____ | Range _____ | Meridian _____ | |
| <u>515</u> | <u>FSL</u> | <u>954</u> | <u>FWL</u> |
| _____ | _____ | _____ | _____ |
| Twp <u>7S</u> | Range <u>96W</u> | | |
| Twp _____ | Range _____ | | |
| <u>515</u> | <u>FSL</u> | <u>954</u> | <u>FWL</u> |
| _____ | _____ | _____ | _____ |
| Twp <u>7S</u> | Range <u>96W</u> | | |
| Twp _____ | Range _____ | | |

**

**

** attach deviated drilling plan

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 or provide as an attachment, as required by Rule 319.b.(3).

Date well temporarily abandoned _____ Has Production Equipment been removed from site? _____

Mechanical Integrity Test (MIT) required if shut in longer than 2 years. Date of last MIT _____

SPUD DATE: _____

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 Approximate Start Date 03/01/2019

REPORT OF WORK DONE Date Work Completed _____

| | | |
|--|---|--|
| <input type="checkbox"/> Intent to Recomplete (Form 2 also required) | <input type="checkbox"/> Request to Vent or Flare | <input type="checkbox"/> E&P Waste Mangement Plan |
| <input 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"/> Rule 502 variance requested. Must provide detailed info regarding request. | |
| <input checked="" type="checkbox"/> Other <u>Low TOC COA</u> | <input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases | |

COMMENTS:

TEP Rocky Mountain LLC (Terra) requests a waiver of the top of cement COA applied to the GM 424-11 that requires the "operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200 ft above all Mesa Verde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstones and coalbed formations." COGCC was notified of Low TOC prior to completions operations on 7/13/2018. Based on the attached Mesaverde Water Evaluation, TEP believes that the intent of the COA has been met as there is de minimis potential for fluid migration between any gas or water bearing formations and/or coalbeds in the uncemented interval of the well. There is a constant fluid level present in the production casing annulus, which is an indication of no fluid cross-zone flow. The first echometer was taken on February 18, 2019 and showed a fluid level of approximately 448 ft above the surface casing shoe. The second reading was taken on February 25, 2019 and showed a fluid level of 448 ft above the surface casing shoe. The result of echometer readings demonstrate fluid levels are static and not changing. The bradenhead pressure on the well during the echometer tests was 31 and 35 psi. The presence of bradenhead pressure that is neither increasing nor decreasing by a large amount suggests the gas and fluid column is static. TEP believes the system permeability is around 10^-3 md in the Ohio Creek Formation, if present. There is core cut from the Ohio Creek Formation in the Cascade Creek 629-1(OXY) well. However, TEP does not have access to the cores nor any core analyses and the data has not been published on the COGCC website. It is recommended that you follow up with the respective operators for this data. TEP does not produce hydrocarbons from the Ohio Creek or stratigraphically equivalent intervals within Section 11, T7S, R96W. There are no producing wells out of the Ohio Creek or stratigraphically equivalent within a 5-mile radius of this well. As a nonproducing interval, no water samples have been collected nor are any TDS analyses available. There are no active injections into the Ohio Creek or stratigraphically equivalent in the Terra operated Grand Valley field.

Comment on Mechanical Integrity: TEP believes that when a well has low static bradenhead pressure and adequate cement coverage above the shallowest perforation, introducing squeeze perforations above the cement top introduces risk for cross flow. Squeeze perms are more likely to lose mechanical integrity than new casing over the life of the well due to normal operations. Unless there are sources of bradenhead pressure behind the casing to attempt to eliminate, TEP does not encourage compromising the mechanical integrity of new casing by creating cement perforations. Top of Cement is 4,650 ft, and top of last perforation is 5,102 ft. TEP has 452 ft of cement over the top perforation, which we believe to be adequate cement over the top perforation. Our recommendation would be to not remediate low TOC for this well. If we experience an increase in bradenhead pressure, we will address the issue accordingly, which may include remediation.

CASING AND CEMENTING CHANGES

| Casing Type | Size | Of | / | Hole | Size | Of | / | Casing | Wt/Ft | Csg/LinTop | Setting Depth | Sacks of Cement | Cement Bottom | Cement Top |
|-------------|------|----|---|------|------|----|---|--------|-------|------------|---------------|-----------------|---------------|------------|
| | | | | | | | | | | | | | | |

H2S REPORTING

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:

| <u>Best Management Practices</u> | |
|---|---------------------------|
| <u>No BMP/COA Type</u> | <u>Description</u> |
| | |

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: Jeff Kirtland

Title: Regulatory Lead Email: jkirtland@terraep.com Date: _____

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

COGCC Approved: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:

| <u>COA Type</u> | <u>Description</u> |
|-----------------|--------------------|
| | |

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-------------|
| 401951842 | OTHER |

Total Attach: 1 Files