

FORM
2A

Rev
06/19

State of Colorado
Oil and Gas Conservation Commission

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



Document Number:

402063034

(SUBMITTED)

Date Received:

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 324362

This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

324362

Expiration Date:

☒ This location assessment is included as part of a permit application.

CONSULTATION

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # _____
- ☒ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 96850
Name: TEP ROCKY MOUNTAIN LLC
Address: PO BOX 370
City: PARACHUTE State: CO Zip: 81635

Contact Information

Name: Vicki Schoeber
Phone: (970) 263-2721
Fax: ()
email: vschoeber@terraep.com

FINANCIAL ASSURANCE

- ☐ Plugging and Abandonment Bond Surety ID (Rule 706): _____ ☐ Gas Facility Surety ID (Rule 711): _____
- ☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: FEDERAL Number: RWF 12-12
County: GARFIELD
Quarter: LOT 5 Section: 12 Township: 6S Range: 94W Meridian: 6 Ground Elevation: 5467

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 1974 feet FNL from North or South section line
1281 feet FWL from East or West section line

Latitude: 39.542138 Longitude: -107.841550

PDOP Reading: 2.4 Date of Measurement: 04/18/2019

Instrument Operator's Name: J. KIRKPATRICK

LOCAL GOVERNMENT INFORMATION

County: GARFIELD Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" below.

☐ Yes ☒ No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location. ☐

The local government siting permit type is: _____

The local government siting permit was filed on: _____

The disposition of the application filed with the local government is: Waived

Additional explanation of local process:

TEP Rocky Mountain LLC has contacted Garfield County, the local government with jurisdiction over the siting of this proposed oil and gas location and determined that per the Garfield County Land Use and Development Code, Table 3-403, "Oil and Gas Drilling and Production" and "Hydraulic Fracturing, Remote Surface Location" are a use by right or Exempt from Land Use Regulation at this site. Garfield County's disposition is not required for the purposes of this submittal.

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is: LOCATION ID # FORM 2A DOC #
Well Site is served by Production Facilities 324259

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

| | | | | | | | | | |
|-----------------------|-----------|----------------------|-----------|----------------------|----------|------------------|-------|-------------------------------|-------|
| Wells | <u>19</u> | Oil Tanks* | _____ | Condensate Tanks* | <u>5</u> | Water Tanks* | _____ | Buried Produced Water Vaults* | _____ |
| Drilling Pits | <u>1</u> | Production Pits* | _____ | Special Purpose Pits | _____ | Multi-Well Pits* | _____ | Modular Large Volume Tanks | _____ |
| Pump Jacks | _____ | Separators* | <u>24</u> | Injection Pumps* | _____ | Cavity Pumps* | _____ | Gas Compressors* | _____ |
| Gas or Diesel Motors* | _____ | Electric Motors | _____ | Electric Generators* | _____ | Fuel Tanks* | _____ | LACT Unit* | _____ |
| Dehydrator Units* | _____ | Vapor Recovery Unit* | _____ | VOC Combustor* | <u>1</u> | Flare* | _____ | Pigging Station* | _____ |

OTHER FACILITIES*

| <u>Other Facility Type</u> | <u>Number</u> |
|----------------------------|---------------|
| 500 bbl blowdown tank | <u>1</u> |

Those facilities indicated by an asterisk () shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Temporary surface frac lines (5-4.5" steel; approx. 2,404') will be installed from the Federal Rulison 8 (Loc ID #311534), cross country to the north east where they will follow the existing access road and pipeline corridor to the Federal RWF 12-12 pad.

A new 8" steel gas pipeline (approx. 6,220') will be installed following the existing pipeline corridor to the existing 8-inch gas pipeline in Section 13. 1-10" dia. valve can will be installed at the tie-in point for the 8" gas pipeline. 19-2" steel flowlines will be installed between the wellheads and the separators. 5-2" flexpipe condensate dumlins will be installed between the separators and the tanks on location. 1-2" flexpipe water pipeline will be installed between the separators and the blowdown tank. 1-4" flexpipe water pipeline (approx. 3,765') will be installed from the RWF 12-12 to the tank battery on the RWF 34-12 pad (Loc ID #324259).

CONSTRUCTION

Date planned to commence construction: 09/01/2019 Size of disturbed area during construction in acres: 5.90
Estimated date that interim reclamation will begin: 07/01/2020 Size of location after interim reclamation in acres: 1.19
Estimated post-construction ground elevation: 5467

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H₂S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: ONSITE Cuttings Disposal Method: Drilling pit

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: _____

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Bureau of Land Mgmt-CRVO

Phone: 970-876-9000

Address: 2300 River Frontage Rd

Fax: _____

Address: _____

Email: _____

City: Silt State: CO Zip: 81652

Surface Owner: ☐ Fee ☐ State ☒ Federal ☐ Indian

Check all that apply. The Surface Owner: ☒ is the mineral owner

☒ is committed to an oil and Gas Lease

☒ has signed the Oil and Gas Lease

☐ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☐ Fee ☐ State ☒ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation _____

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Future Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP
 Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____
 Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

| | From WELL | From PRODUCTION FACILITY |
|-----------------------------------|-----------|--------------------------|
| Building: | 3820 Feet | 3438 Feet |
| Building Unit: | 3820 Feet | 3438 Feet |
| High Occupancy Building Unit: | 5280 Feet | 5280 Feet |
| Designated Outside Activity Area: | 5280 Feet | 5280 Feet |
| Public Road: | 5280 Feet | 5280 Feet |
| Above Ground Utility: | 3805 Feet | 4054 Feet |
| Railroad: | 5280 Feet | 5280 Feet |
| Property Line: | 597 Feet | 843 Feet |
| School Facility:: | 5280 Feet | 5280 Feet |
| School Property Line: | 5280 Feet | 5280 Feet |
| Child Care Center: | 5280 Feet | 5280 Feet |

INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
 - 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, High Occupancy Building Unit, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.
 - For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

SCHOOL SETBACK INFORMATION

Was Notice required under Rule 305.a.(4)? ☐ Yes ☒ No

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:

- ☐ Buffer Zone
☐ Exception Zone
☐ Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
 - Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
 - Urban Mitigation Area - as defined in 100-Series Rules.
 - Large UMA Facility – as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- ☐ Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (onll or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- ☐ By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 3—Arvada loam, 1 to 6 percent slopes

NRCS Map Unit Name: 21—Cushman-Lazear stony loams, 15 to 65 percent slopes

NRCS Map Unit Name: 67—Torriorthents-Rock outcrop complex, steep

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☐ NRCS or, ☒ field observation Date of observation: 06/03/2019

List individual species:

Check all plant communities that exist in the disturbed area.

- ☒ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- ☒ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- ☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- ☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- ☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- ☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- ☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- ☐ Alpine (above timberline)
- ☐ Other (describe):

WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 0 Feet

water well: 6722 Feet

Estimated depth to ground water at Oil and Gas Location 50 Feet

Basis for depth to groundwater and sensitive area determination:

Attached Sensitive Area Determination.

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: _____

Is the Location within a Floodplain? ☒ No ☐ Yes Floodplain Data Sources Reviewed (check all that apply)

☒ Federal (FEMA)

☒ State

☐ County

☐ Local

☐ Other _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

WILDLIFE

☐ This location is included in a Wildlife Mitigation Plan

☒ This location was subject to a pre-consultation meeting with CPW held on 11/27/2018

Operator Proposed Wildlife BMPs

| No | Target Species | BMP Type | Description |
|----|----------------|-------------------------|---|
| 1 | Black Bear | Wildlife - Avoidance | The operator agrees to report bear conflicts immediately to CPW staff. |
| 2 | Black Bear | Wildlife - Minimization | The operator will implement Rule 1204.a.1 (also see General Operating Recommendations). |
| 3 | Deer and Elk | Wildlife - Minimization | The operator agrees to preclude the use of aggressive CPW-identified non-native grasses and shrubs in mule deer and elk habitat restoration. |
| 4 | Deer and Elk | Wildlife - Minimization | The operator agrees to reclaim mule deer and elk habitats with CPW-identified native shrubs, grasses, and forbs appropriate to the ecological site disturbed. |

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

☐ Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area

☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)

- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments This is an existing location with 1 producing well and 18 proposed wells. Condensate production will be stored on location, and water will be stored at the tank battery on the RWF 34-12 pad (Loc ID #32459). Completion operations will be done remotely from the Federal Rulison 8 pad (Loc ID #311534).

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

Signed: _____ Date: _____ Email: vschoeber@terraep.com

Print Name: Vicki Schoeber Title: Regulatory Specialist

Based on the information provided herein, this Oil and Gas Location Assessment complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____ Director of COGCC Date: _____

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type

Description

| | |
|--|--|
| | |
|--|--|

Best Management Practices

| No | BMP/COA Type | Description |
|----|--------------|--|
| 1 | Planning | <p>Prior to submittal of the COGCC Form 2A, TEP conducted an onsite and meetings with the Bureau of Land Management (BLM), Colorado Parks and Wildlife, and the associated private landowners. This onsite and meetings were held to discuss TEP's proposed development plan for the RWF 12-12 pad and associated support facilities. Changes were made to the proposed development plan based on feedback received from all stakeholders and included in the COGCC Form 2A, Oil and Gas Location Assessment.</p> <p>The development plan for the Federal RWF 12-12 pad was prepared to minimize surface impacts to the greatest extent possible through the development of multiple wells from one location, through the use of directional drilling, collocating the access road and utilities corridors within the same area, and through the transportation of fluids to a centralized storage facility on the RWF 34-12 pad thus minimizing the surface area needed to conduct operations on the RWF 12-12 pad.</p> |

| | | |
|---|--------------------------------|--|
| 2 | Pre-Construction | Prior to commencement of construction activities, TEP will hold a pre-construction meeting with contractors to review proposed site construction and installation of stormwater control measures. The site will be staked for construction prior to pre-construction meeting. Staking will identify the boundaries of the proposed site to protect existing vegetation in areas that should not be disturbed. |
| 3 | General Housekeeping | Storage of material and fluids on location during drilling, completion, and production operations will be conducted in a neat and orderly manner and with regards to potential fire hazards on site. All garbage and trash will be stored in enclosed bear proof trash containers and transported to an approved disposal facility. No garbage or trash will be disposed of on location. The well site and access road will be kept free of trash and debris at all time. Disposal of garbage and trash will occur approximately once per week during drilling and completions operations. |
| 4 | Wildlife | <p>The RWF 12-12 pad location is located within Mule Deer Critical Winter Range. TEP has consulted with CPW and BLM and will be providing compensatory mitigation to offset impacts to wildlife (including Mule Deer) for operations which may occur within the Big Game Winter Range Timing Limitation, beginning December 1st and ending April 30th annually. Please see CPW Correspondence attached to the Form 2A for additional details.</p> <p>TEP agrees to report any bear conflicts immediately to CPW. TEP will implement Rule 1204.a.1 by utilizing bear proof dumpsters and trash receptacles for all food related trash. TEP will preclude from the use of aggressive CPW-identified non-native grasses and shrubs in mule deer and elk habitat and will reclaim the site using CPW-identified native shrubs, grasses and forbs appropriate to the ecological site disturbed.</p> |
| 5 | Storm Water/Erosion Control | Stormwater BMP's will be in place during all phases of development to control stormwater runoff in a manner that minimizes erosion, transportation of sediment offsite, and site degradation. Stormwater BMP's will include perimeter controls such as sediment traps, diversion ditches, check dams, waddles, and others control measures necessary to control stormwater run-on and run-off and minimized offsite movement of sediment. Stormwater BMP's will also include site degradation control measures such as grading, slope stabilization methods (i.e. seeding, mulching, surface roughening), perimeter berms, surfacing materials (i.e. gravel), and others necessary to minimize site degradation. Stormwater controls will be installed with consideration given to worker safety, wildlife, and site access. A post-construction stormwater program will be developed for the facility as required per Rule 1002.f.(3). Stormwater is also addressed under a field-wide Stormwater Management Plan (CDPHE Certification COR404624). See the construction layout or stormwater BMP exhibits for the planned stormwater BMP's proposed for installation at the site for further details. |
| 6 | Dust control | Fugitive dust control measures will be employed during all phase of development to minimize dust pollution. Dust control measures include but are not limited to the application of fresh water via water truck along access road during construction, drilling, and completion operations, speed restrictions, periodic road maintenance, road surfacing (i.e. gravel), and automation of wells to reduce truck traffic. Dust control measures will be employed on an as needed based during all phases of development. |
| 7 | Construction | All construction equipment and materials will be contained within the proposed limits of the oil and gas location, access roads, or pipeline corridors. Topsoil will be stripped from the site and segregated from subsoil for reuse during pad reclamation. Fugitive dust control measures implemented as described in the dust control section of this document. |
| 8 | Emissions mitigation | Dual fuel generators will be utilized during drilling operations to minimize air emission associated with the use of diesel fuel. Green completion practices will be employed to reduce emissions of gas and condensate vapor utilizing separators, tanks, sand traps, and other facilities to minimize emissions. |
| 9 | Drilling/Completion Operations | A closed loop drilling system will be utilized during drilling of all wells at this location. TEP will utilize remote centralized hydraulic fracturing operations during well completion operations minimizing un-necessary traffic and activities at the pad location. TEP will ensure 110 percent secondary containment for any volume of fluids contained at the well site during drilling and completions operations. |

| | | |
|----|---------------------|---|
| 10 | Interim Reclamation | <p>Onsite production facilities will be minimized on this oil and gas location through installation of water and condensate pipeline to transport fluids to a centralized fluid storage facility on the RWF 34-12 pad. This method will be employed to minimize long-term operational activities on the oil and gas location, reduce truck traffic to the location, and minimize the overall disturbance at the Federal RWF 12-12 Pad. Facilities will be painted a Shadow Gray color to blend in with the surrounding environment. Remote telemetry equipment will be installed on location to minimize site visits and truck traffic. Exclusionary devices will be installed to prevent bird and other wildlife from accessing equipment stacks, vents, and openings.</p> <p>Certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife will be used. TEP will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas. Soil amendments may be added to topsoil during reclamation actives to promote vegetation growth.</p> |
|----|---------------------|---|

Total: 10 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-------------------------|
| 402092968 | ACCESS ROAD MAP |
| 402092969 | CONST. LAYOUT DRAWINGS |
| 402092970 | FACILITY LAYOUT DRAWING |
| 402092972 | HYDROLOGY MAP |
| 402092973 | LOCATION DRAWING |
| 402092974 | MULTI-WELL PLAN |
| 402092975 | OTHER |
| 402092977 | REFERENCE AREA MAP |
| 402092985 | SENSITIVE AREA DATA |
| 402092988 | CORRESPONDENCE |
| 402092990 | LOCATION PICTURES |
| 402092992 | NRCS MAP UNIT DESC |
| 402092995 | NRCS MAP UNIT DESC |
| 402092999 | NRCS MAP UNIT DESC |
| 402093003 | REFERENCE AREA PICTURES |
| 402093024 | OTHER |

Total Attach: 16 Files

General Comments

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

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

