

FORM
2A

Rev
04/18

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:

401619384

Date Received:

08/15/2018

Oil and Gas Location Assessment

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

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:

457490

Expiration Date:

09/19/2021

☐ 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): 20160057 ☐ Gas Facility Surety ID (Rule 711): _____

☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: Clough RWF Number: 12-20 Tank Pad

County: GARFIELD

QuarterQuarter: SWNW Section: 20 Township: 6S Range: 94W Meridian: 6 Ground Elevation: 5575

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: 1456 feet FNL from North or South section line

136 feet FWL from East or West section line

Latitude: 39.513678 Longitude: -107.920768

PDOP Reading: 2.6 Date of Measurement: 08/22/2017

Instrument Operator's Name: J. KIRKPATRICK

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

Production Facilities Location serves Well(s)

335744

401655680

401598785

401522763

FACILITIES

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

Wells	Oil Tanks*	Condensate Tanks*	2	Water Tanks*	6	Buried Produced Water Vaults*
Drilling Pits	Production Pits*	Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks
Pump Jacks	Separators*	Injection Pumps*	1	Cavity Pumps*		Gas Compressors*
Gas or Diesel Motors*	Electric Motors	Electric Generators*		Fuel Tanks*		LACT Unit*
Dehydrator Units*	Vapor Recovery Unit*	VOC Combustor*	1	Flare*		Pigging Station*

OTHER FACILITIES*

Other Facility Type

Number

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:

One 10" steel gas pipeline, one 2" flexpipe condensate pipeline, and one 4" flexpipe produced water pipeline (approx. 17,692') will be installed from separators on the proposed Federal PA 32-13 pad (Form 2A Doc #401598785) to the separators on the proposed Federal PA 44-13 (Form 2A Doc #401522763), then along existing roads and pipeline rights-of-way to the proposed RWF 12-20 Tank Pad.

One 8" steel gas pipeline and one 4" flexpipe produced water pipeline (approx. 8,492') will be installed from the DOE 1-M-18 pad (Loc ID #335744, Amended Form 2 A Doc #401655680) to the proposed Clough RWF 12-20 Tank Pad following existing roads and pipeline rights-of-way. One 4" steel surface pipeline will be installed from the tank battery to the ECD. One 2" flexpipe dump line will be installed from the vertical separator to the tank battery.

CONSTRUCTION

Date planned to commence construction: 09/26/2018 Size of disturbed area during construction in acres: 1.18

Estimated date that interim reclamation will begin: 09/26/2019 Size of location after interim reclamation in acres: 0.48

Estimated post-construction ground elevation: 5573

DRILLING PROGRAM

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

Is H₂S anticipated? _____

Will salt sections be encountered during drilling: _____

Will salt based mud (>15,000 ppm Cl) be used? _____

Will oil based drilling fluids be used? _____

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: _____ Drilling Fluids Disposal Method: _____

Cutting Disposal: _____ Cuttings Disposal Method: _____

Other Disposal Description:

This application is for a tank pad.

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Clough Sheep Co. LLC

Phone: 970-618-7749

Address: P.O. Box 686

Fax: _____

Address: _____

Email: _____

City: Rifle State: CO Zip: 81650

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: No

The right to construct this Oil and Gas Location is granted by: Surface Use Agreement

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:	Feet 703	Feet 703
Building Unit:	Feet 5280	Feet 5280
High Occupancy Building Unit:	Feet 128	Feet 143
Designated Outside Activity Area:	Feet 5280	Feet 136
Public Road:	Feet 128	Feet 143
Above Ground Utility:	Feet 5280	Feet 136
Railroad:	Feet 128	Feet 143
Property Line:	Feet 5280	Feet 136

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, and Designated Outside Activity Area - as defined in 100-Series Rules.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

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: 07/16/2018

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 (on 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.

TEP Rocky Mountain LLC ("TEP") evaluated several alternative locations for the proposed Clough RWF 12-20 Tank Pad including existing well pads, other new locations, and installing tanks on associated well pads. During this evaluation, the Clough RWF 12-20 Tank Pad location was ultimately chosen and planned for construction. The Clough RWF 12-20 Tank Pad is located at a point of intersection where produced water from three separate well pads, condensate from two separate well pad, and gas gathering from four separate well pad (RWF 13-19, DOE 1-M-18, PA 44-13, and PA 32-13) would converge in order to consolidate production facilities associated with these locations.

(Comments continued under Operator Comments and Submittal Section.)

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: 47—Nihill channery loam, 6 to 25 percent slopes

NRCS Map Unit Name:

NRCS Map Unit Name:

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: 03/19/2018

List individual species: n/a

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: 173 Feet

water well: 1767 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 map

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 N/A

WILDLIFE

- ☐ This location is included in a Wildlife Mitigation Plan
- ☒ This location was subject to a pre-consultation meeting with CPW held on 02/26/2018

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 The Clough RWF 12-20 Tank Pad will be used to store oil and water produced from wells on the proposed Federal PA 32 -13 pad (Form 2A Doc #401598785), the Federal PA 44-13 pad (Form 2A Doc #401522763), as well as produced water from future wells on the DOE 1-M-18 Pad (Loc ID 335744, Amended Form 2A Doc #401655680).

The building unit that is located within 1,000 ft of the proposed Clough RWF 12-20 tank pad is an active office building.

Siting Rationale Comment Continued:

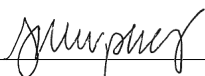
Alternative locations would have resulted in additional surface disturbance and potentially further impacts to the landscape. In addition, this location was chosen due to proximity to other existing oil and gas facilities (i.e. Williams Anvil Points Compressor Station and TEP's Rulison Water Management Facility). TEP strives to reduce overall surface disturbance, and consolidate or cluster facilities whenever possible. TEP also took into consideration proximity to existing surface and subsurface water sources in an effort to minimize the potential impacts to water resources in the event of a spill if one were to occur. TEP has negotiated and entered into an agreement with surface owner(s) to construct the proposed Clough RWF 12-20 Tank Pad as currently proposed. Please see the executed Surface Use Agreement for details. TEP has also notified Building Unit owner(s) within 1000' of the proposed facility. TEP believes construction of the proposed Clough RWF 12-20 Tank Pad as planned maximizes the distance from the nearest building unit, while also reducing the overall impact to the landscape and consolidating operational facilities into one centralized location. TEP has prepared mitigation measures per Rule 604.c, and based on discussions with the surface owner will eliminate, minimize, or mitigate potential adverse impacts to public health, safety, welfare, the environment, and wildlife. Please see the attached Mitigation Measures for specific details.

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

Signed: _____ Date: 08/15/2018 Email: vschoeber@terraep.com

Print Name: Vicki Schoeber Title: Regulatory Specialist

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved:  _____ Date: 9/20/2018

Director of COGCC

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	<ul style="list-style-type: none"> - Maximize use of the long-term centralized tank batteries to minimize traffic. - Maximize use of remote telemetry monitoring to minimize traffic. - Maintain undeveloped areas within development boundaries sufficient to allow wildlife to persist within development boundaries during all phases of construction, drilling, and production.
2 Planning	<p>Rule 604.c. Mitigation Measures. (2) Location Specific Requirements – Designated Setback Locations. The following mitigation measures shall apply to the Clough RWF 12-20 Tank Pad Production Facility.</p> <ul style="list-style-type: none"> • 604.c.(2)A; Noise; Noise generated from operations associated with the tank pad are not expected to exceed the maximum permissible noise levels as stated under Rule 802.b. • 604.c.(2)B; Closed Loop Drilling System; Not Applicable • 604.c.(2)C; Green Completions; Not Applicable • 604.c.(2)D; Traffic Plan; Vehicular traffic to the facility will utilize Garfield County Road 246 to access the facility. TEP has received an approved access permit from Garfield County for this location. TEP will coordinate with Garfield County if any modification are required. • 604.c.(2)E; Multi-well Pad; Production facilities will be consolidated onto one central pad location adjacent to existing Oil and Gas operations to eliminate, minimize or mitigate potential adverse impacts to public health, safety, welfare, the environment, and wildlife. • 604.c.(2)F; Leak detection plan; Onsite inspections by pumpers will occur 2-3 times per week. In addition, routine quarterly checklists are filled out and kept on file regarding dump line/flow line pressures. A checklist is also completed for everything regarding compliance at the production equipment. • 604.c.(2)G; Berms; A steel containment device will be installed around the proposed production tanks and lined with an engineered synthetic liner. Containment device shall provide containment for 150% of the largest single tank. • 604.c.(2)H; Blowout Preventer Equipment (BOPE); Not Applicable • 604.c.(2)I; BOPE Testing for Drilling; Not Applicable • 604.c.(2)J; BOPE for Well Servicing; Not Applicable • 604.c.(2)K; Pit Level Indicators; Not Applicable • 604.c.(2)L; Drill Stem Tests; Not Applicable • 604.c.(2)M; Fencing; Fencing shall be installed around production equipment immediately following completions of installation. Fencing, other than what is described, has not been needed in this area. • 604.c.(2)N; Fire Hazards; All materials that may constitute a fire hazard shall not be placed within 25' of the proposed production equipment. No electrical installations are planned within the bermed area. • 604.c.(2)O; Loadlines; TEP will comply with Loadline requirements per Rule 604.c.(2) O. • 604.c.(2)P; Trash/Garbage Removal; All trash will be promptly removed from the facility and discarded at an permitted and approved disposal facility. • 604.c.(2)Q; Guy Line Anchors; Not Applicable • 604.c.(2)R; Tank Specifications; TEP will comply with tank specifications per Rule 604.c.(2)R. • 604.c.(2)S; Access Roads; Access road will be constructed and maintained in a manner that will accommodate local emergency vehicles. • 604.c.(2)T; Well Site Clearing; Not Applicable • 604.c.(2)U; Identification of P&A Wells; Not Applicable • 604.c.(2)V; Development from Existing Well Pads; Not Applicable • 604.c.(2)W; Other Site-Specific Measures/BMPs; Planning: Maximize use of the long-term centralized tank batteries to minimize traffic; Maximize use of remote telemetry monitoring to minimize traffic; Maintain undeveloped areas within development boundaries sufficient to allow wildlife to persist within development boundaries during all phases of construction; drilling; and production.
3 General Housekeeping	<ul style="list-style-type: none"> - Direct any lighting downward toward center of pad, away from building.

4	Dust control	- Fugitive dust control will be implemented during all phases of operations on an as-needed basis.
5	Odor mitigation	- API tanks with thief hatches and enardo valves will be installed to control emissions. An emissions control device (ECD), or combustor, will be installed adjacent to the proposed tank battery.
6	Interim Reclamation	- Use only certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas. - Use only certified weed free native seed in seed mixes, except for non-native plants that benefit wildlife. - Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings.

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2108558	SENSITIVE AREA DETERMINATION
2108559	TANK PAD - WELL PADS and PIPELINE LOCATION MAP
401619384	FORM 2A SUBMITTED
401620526	NRCS MAP UNIT DESC
401620531	LOCATION PICTURES
401677597	REFERENCE AREA PICTURES
401701087	ACCESS ROAD MAP
401701089	CONST. LAYOUT DRAWINGS
401701093	REFERENCE AREA MAP
401701096	FACILITY LAYOUT DRAWING
401701231	SURFACE AGRMT/SURETY
401703370	OTHER
401727192	RULE 305.a.(3) EVIDENCE OF COMPLIANCE
401727197	WASTE MANAGEMENT PLAN
401732529	MITIGATION PLAN
401732800	PRE-APPLICATION NOTIFICATION CERTIFICATION
401734900	HYDROLOGY MAP
401734901	LOCATION DRAWING

Total Attach: 18 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	09/19/2018
OGLA	<p>03/19/2018 - onsite by COGCC, TEP, BLM, and CPW;</p> <p>08/27/2018 - passed by CPW with no BMPs being recommended since the the COAs that BLM will be implementing are sufficient; CPW is involved in ongoing negotiations with BLM and the operator regarding wildlife mitigation projects to offset impacts to mule deer winter range;</p> <p>09/18/2018 - initiated / completed OGLA review by Dave Kubeczko; made the following corrections / revisions to the Form 2A per operator request on 09-18-18:</p> <ul style="list-style-type: none"> •Under "Future Land Use" uncheck "Other" and delete "Tank Pad"; •Under "Plant Community" check "Field observation" and include the field observation date of 3/19/18; •Change construction date to 9/26/18 and interim reclamation date to 9/26/2019; •Change distance to downgradient surface water feature to from 270' to 173', water well distance from 1907' to 1767'; •Attach updated Sensitive Area Determination document; attached Tank Pad - Well Pads and Pipeline Location Map; <p>09/18/2018 - changed to 'sensitive area' due to proximity to surface water, added Federal (FEMA) to floodplain sources, removed Rule 609 water well sampling requirement (rule is for wells, not production facilities), placed Rule 604.c.(2) mitigation measures on the operator BMP/COA section (all changes concurred verbally by operator on 09-18-18);</p> <ul style="list-style-type: none"> •Attach updated Sensitive Area Determination document; attached Tank Pad - Well and Pipeline Location Map; <p>09/18/2018 - passed OGLA Form 2A review by Dave Kubeczko with no COAs, operator's attachments, proposed BMPs, and waste management plan being sufficient.</p>	09/18/2018
DOW	<p>This permit is to create a tank pad on an already disturbed site within a highly developed area. Wildlife impacts from the proposed activity are expected to be minimal. Therefore, CPW does not recommend any additional BMPs to what the operator has volunteered to implement on the submitted Form2A application.</p> <p>Taylor Elm, August 27, 2018, 11:25 a.m.</p>	08/27/2018
Permit	Passed Completeness.	08/22/2018
OGLA	Passed Buffer Zone completeness review.	08/22/2018
Permit	Referred to OGLA supervisor for buffer zone review.	08/16/2018

Total: 6 comment(s)