

FORM
2A

Rev
08/13

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:

401338955

(SUBMITTED)

Date Received:

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 335434

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:

335434

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

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: _____
- Gas Facility Surety ID: _____
- Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: FEDERAL Number: RWF 13-19
 County: GARFIELD
 Quarter: NWSW Section: 19 Township: 6S Range: 94W Meridian: 6 Ground Elevation: 5732

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: 1415 feet FSL from North or South section line
378 feet FWL from East or West section line

Latitude: 39.507051 Longitude: -107.936898

PDOP Reading: 2.1 Date of Measurement: 06/09/2017

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 # 335433 **FORM 2A DOC #** _____

Well Site is served by Production Facilities

FACILITIES

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

Wells	<u>20</u>	Oil Tanks*	_____	Condensate Tanks*	_____	Water Tanks*	_____	Buried Produced Water Vaults*	_____
Drilling Pits	_____	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	_____
Pump Jacks	_____	Separators*	<u>20</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*	_____	Flare*	_____	Pigging Station*	_____

OTHER FACILITIES*

Other Facility Type

Number

80 bbl blowdown tank

1

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:

Completions will frac from the RWF 23-19 pad. 3-4.5" temporary surface steel frac lines (approx. 950') will be installed from the RWF 23-19 pad to the RWF 13-19 pad following the access road.

Line Installations:

19-2" flowlines on pad (14 proposed wells, 5 existing wells), and 2-2" dump lines from separators to proposed blowdown tank. Install 2-2" oil lines (approx. 1396') from the RWF 13-19 pad to the existing tank battery on the RWF 23-19 pad following the existing road. Will also install an 8" gas line (approx. 6,163') from the RWF 13-19 pad to an existing 8" pipeline adjacent to Anvil Points Road. 8" gas line will be installed with the oil lines to the RWF 23-19 pad, then follow existing pipelines to the proposed pipeline tie-in. Existing 6" gas line (approx. 349') and existing 4" water line (approx. 368') will be re-routed on location. Existing 6" gas line will be looped with the 8" gas line.

CONSTRUCTION

Date planned to commence construction: 11/01/2017

Size of disturbed area during construction in acres: 4.46

Estimated date that interim reclamation will begin: 11/01/2018

Size of location after interim reclamation in acres: 1.00

Estimated post-construction ground elevation: 5733

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: Cuttings trench

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): Existing well pad

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): Well pad

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:	2817 Feet	2715 Feet
Building Unit:	2817 Feet	2715 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	2150 Feet	2110 Feet
Above Ground Utility:	1914 Feet	1895 Feet
Railroad:	2986 Feet	2953 Feet
Property Line:	378 Feet	321 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, 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

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: _____

- 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.

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.

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: 59-Potts-Ildfonso complex, 25 to 45 percent slopes

NRCS Map Unit Name: 66-Torriorhents-Camborthids-Rock outcrop complex, steep

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: 09/09/2016

List individual species: Halogeton, Bull Thistle, Russian Thistle

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: 1892 Feet

water well: 2632 Feet

Estimated depth to ground water at Oil and Gas Location 60 Feet

Basis for depth to groundwater and sensitive area determination:

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 zone: No

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 06/20/2017

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 - Mitigation	Operator agrees to treating cheatgrass and reseeding area with CPW approved, wildlife benefiting seed mix.

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 5 producing wells, 1 P&A well, and 14 proposed new wells.

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 Application for Permit-to-Drill complies with COGCC Rules and applicable orders 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

COA Type	Description

Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p>Maximize the utility of surface facilities by developing multiple wells from a single pad (directional drilling), and by collocating multipurpose facilities (for example, well pads and compressors) to avoid unnecessary habitat fragmentation and disturbance of additional geographic areas.</p> <p>Combine and share roads to minimize habitat loss/fragmentation</p> <p>Use existing roads where possible</p> <p>Combine utility infrastructure (gas, electric, and water) planning with roadway planning to avoid separate utility corridors</p> <p>Where possible, consolidate pipeline and existing roadways, or roadways that are planned for development</p> <p>Maximize the use of directional drilling to minimize habitat loss/fragmentation</p> <p>Maximize use of long-term centralized tank batteries to minimize traffic</p> <p>Maximize use of remote telemetry for well monitoring to minimize traffic</p> <p>Phase and concentrate development activities, so that large areas of undisturbed habitat for wildlife remain.</p> <p>Maintain undeveloped areas within development boundaries sufficient to allow wildlife to persist within development boundaries during all phases of construction, drilling, and production.</p> <p>Minimize the duration of development and avoid repeated or chronic disturbance of developed areas. Complete all anticipated drilling within a phased, concentrated, development area during a single, uninterrupted time period.</p>
2	Drilling/Completion Operations	<p>Use centralized hydraulic fracturing operations.</p> <p>Conduct well completions with drilling operations to limit the number of rig moves and traffic.</p> <p>TEP will ensure 110 percent secondary containment for any volume of fluids contained at the well site during drilling and completions operations.</p> <p>TEP will implement best management practices to contain any unintentional release of fluids.</p>
3	Interim Reclamation	<p>Remove well pad and road surface materials that are incompatible with post-production land use and re-vegetation requirements</p> <p>Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife</p> <p>TEP will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeded and reclamation of disturbed areas.</p> <p>Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings.</p> <p>Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors.</p> <p>Bore pipelines that cross perennial streams</p>

Total: 3 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401395187	ACCESS ROAD MAP
401395188	CONST. LAYOUT DRAWINGS
401395189	HYDROLOGY MAP
401395191	LOCATION DRAWING
401395192	MULTI-WELL PLAN
401395199	REFERENCE AREA MAP
401395214	FACILITY LAYOUT DRAWING
401395216	LOCATION PICTURES
401395218	SENSITIVE AREA DATA
401395222	NRCS MAP UNIT DESC
401395224	NRCS MAP UNIT DESC
401395542	OTHER
401395543	REFERENCE AREA PICTURES

Total Attach: 13 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.

