

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:

401685655

(SUBMITTED)

Date Received:

Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: 323823

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:

**323823**

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): 20160057     Gas Facility Surety ID (Rule 711): \_\_\_\_\_
- Waste Management Surety ID (Rule 704): \_\_\_\_\_

LOCATION IDENTIFICATION

Name: PUCKETT    Number: GV 1-8  
 County: GARFIELD  
 Quarter: NESW    Section: 8    Township: 7S    Range: 96W    Meridian: 6    Ground Elevation: 6278

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: 2286 feet FSL from North or South section line  
 2247 feet FWL from East or West section line

Latitude: 39.450841    Longitude: -108.132637

PDOP Reading: 1.8    Date of Measurement: 02/28/2018

Instrument Operator's Name: BART HUNTING

## RELATED REMOTE LOCATIONS

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

<b>This proposed Oil and Gas Location is:</b>	<b>LOCATION ID #</b>	<b>FORM 2A DOC #</b>
Well Site is served by Production Facilities	334794	_____
	436797	_____
	333109	_____
	334950	_____

## 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>22</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\*

<u>Other Facility Type</u>	<u>Number</u>
300 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:

Temporary surface frac lines (3-4.5" steel; approx. 10,645') will be installed between the GM 41-4 pad and the MV 60-8D pad. Temporary surface frac lines (7-4.5" steel; approx. 1,707') will be installed between the MV 60-8D pad and the GV 1-8 pad. Temporary surface water lines (2-10" poly; approx. 1938') will be installed from the GM 41-4 Pad to the existing 10" water pipelines.

A new 8" steel gas pipeline (approx. 1472') will be installed following the existing access road to the MV 60-8D pad, where it will tie into a proposed gas pipeline. 1-4" flexpipe water pipeline (1870' approx.) will be installed from the GV 1-8 pad to the MV 60-8D pad where it will tie into a proposed water pipe line. 2-2" flexpipe condensate pipelines (1870' approx.) will be installed from the GV 1-8 pad to the tank battery on the MV 60-8D pad. 20-2" steel flowlines will be installed from the wells to the separators. 1-2" flexpipe water dump line will be installed between the separators and the blowdown tank.

## CONSTRUCTION

Date planned to commence construction: 09/01/2018      Size of disturbed area during construction in acres: 3.90  
 Estimated date that interim reclamation will begin: 09/01/2019      Size of location after interim reclamation in acres: 1.15  
 Estimated post-construction ground elevation: 6281

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes  
 Is H<sub>2</sub>S 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

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

Cuttings will be hauled off location and managed at the MV 60-8D well pad (Loc ID #334950), with any excess hauled to either the GM 41-8 cuttings trench (Loc ID #334794) or the Hayes Gulch Cuttings Trench (Loc ID #436797).

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: Puckett Land Company Phone: 303-763-1000

Address: 5460 S. Quebec Street, Ste. 250 Fax: \_\_\_\_\_

Address: \_\_\_\_\_ Email: \_\_\_\_\_

City: Denver State: CO Zip: 80111

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:	5280 Feet	5280 Feet
Building Unit:	5280 Feet	5280 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:	5280 Feet	5280 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	313 Feet	224 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: 52—Parachute loam, 25 to 65 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: 07/06/2017

List individual species: Bull 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: 479 Feet

water well: 13338 Feet

Estimated depth to ground water at Oil and Gas Location 30 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 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 05/21/2018

## 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.

## 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 existing well and 19 proposed wells. (Fee surface and split minerals)

Completions will remotely frac the proposed wells on the GV 1-8 pad from the GM 41-4 pad (Loc ID #333109).

Condensate production will be piped to the MV 60-8D pad (Loc ID #334950). Produced water will be transported through a proposed water pipeline to the MV 60-8D pad, and also through proposed/existing pipeline infrastructure to the Riley Gulch Tank Battery.

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

## Best Management Practices

No	BMP/COA Type	Description
1	Planning	<ul style="list-style-type: none"> <li>- Combine and share roads to minimize habitat loss/fragmentation</li> <li>- Use existing roads where possible</li> <li>- Combine utility infrastructure (gas, electric, and water) planning with roadway planning to avoid separate utility corridors</li> <li>- Where possible, consolidate pipeline and existing roadways, or roadways that are planned for development</li> <li>- Maximize the use of directional drilling to minimize habitat loss/fragmentation</li> <li>- Maximize use of long-term centralized tank batteries to minimize traffic</li> <li>- Maximize use of remote completion/frac operations to minimize traffic</li> <li>- Maximize use of remote telemetry for well monitoring to minimize traffic</li> </ul>
2	Drilling/Completion Operations	<ul style="list-style-type: none"> <li>- Use centralized hydraulic fracturing operations.</li> <li>- TEP will ensure 110 percent secondary containment for any volume of fluids contained at the well site during drilling and completions operations.</li> <li>- TEP will implement best management practices to contain any unintentional release of fluids.</li> <li>- Either a lined drilling pit or closed loop system will be implemented.</li> </ul>
3	Interim Reclamation	<ul style="list-style-type: none"> <li>- Utilize staked soil retention blankets for erosion control and reclamation of large surface areas with 1.5:1 or steeper slopes. Avoid use of plastic blanket materials.</li> <li>- Remove well pad and road surface materials that are incompatible with post-production land use and re-vegetation requirements.</li> <li>- Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife</li> <li>- TEP will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas.</li> <li>- Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings.</li> <li>- Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors.</li> </ul>

Total: 3 comment(s)

### Attachment Check List

Att Doc Num	Name
401697822	REFERENCE AREA PICTURES
401697825	ACCESS ROAD MAP
401697830	CONST. LAYOUT DRAWINGS
401697831	FACILITY LAYOUT DRAWING
401697833	HYDROLOGY MAP
401697835	LOCATION DRAWING
401697837	MULTI-WELL PLAN
401697838	REFERENCE AREA MAP
401697839	OTHER
401697842	LOCATION PICTURES
401697845	SENSITIVE AREA DATA
401697851	NRCS MAP UNIT DESC
401700273	SURFACE AGRMT/SURETY

Total Attach: 13 Files

## General Comments

User Group

Comment

Comment Date

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Stamp Upon Approval
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Total: 0 comment(s)



**Public Comments**

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

