

**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:

401670117

Date Received:

06/20/2018

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:

456107

Expiration Date:

07/21/2021☐ 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): _____
- ☐ Gas Facility Surety ID (Rule 711): _____
- ☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: DOE 1-M-18 Number: Production Pad

County: GARFIELD

QuarterQuarter: SENE Section: 18 Township: 6S Range: 94W Meridian: 6 Ground Elevation: 5851

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: 2243 feet FNL from North or South section line

10 feet FEL from East or West section line

Latitude: 39.525986 Longitude: -107.921346

PDOP Reading: 2.2 Date of Measurement: 01/18/2018

Instrument Operator's Name: CODY RICH

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

FACILITIES

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

Wells	Oil Tanks*	Condensate Tanks*	4	Water Tanks*	1	Buried Produced Water Vaults*
Drilling Pits	Production Pits*	Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks
Pump Jacks	Separators*	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*	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:

Seven (7) temporary surface steel frac lines (3-4.5" Frac Lines /4-4.5" Flow back Lines - approx. 2688') will be installed between the DOE 1-M-18 Well Pad and the DOE 1-M-18 Production Pad.

Two 2-inch flexpipe condensate lines (approx. 2631') will be installed between the DOE 1-M-18 Well Pad and the DOE 1-M-18 Production Pad.

CONSTRUCTION

Date planned to commence construction: 08/01/2018 Size of disturbed area during construction in acres: 0.56

Estimated date that interim reclamation will begin: 09/01/2019 Size of location after interim reclamation in acres: 0.29

Estimated post-construction ground elevation: 5853

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 production pad with condensate storage.

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 RiverFrontage 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:	_____ Feet	3591 Feet
Building Unit:	_____ Feet	3591 Feet
High Occupancy Building Unit:	_____ Feet	5280 Feet
Designated Outside Activity Area:	_____ Feet	5280 Feet
Public Road:	_____ Feet	4023 Feet
Above Ground Utility:	_____ Feet	4036 Feet
Railroad:	_____ Feet	5280 Feet
Property Line:	_____ Feet	1337 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: 35—Ildefonso-Lazear complex, 6 to 65 percent slopes

NRCS Map Unit Name: 9—Badland

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: _____

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: _____ 126 Feet

water well: _____ 4635 Feet

Estimated depth to ground water at Oil and Gas Location _____ 100 Feet

Basis for depth to groundwater and sensitive area determination:

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 _____ 609

WILDLIFE

☐ This location is included in a Wildlife Mitigation Plan

☒ This location was subject to a pre-consultation meeting with CPW held on 03/19/2018

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 DOE 1-M-18 Production Pad will be constructed to support condensate storage for the fifteen (15) proposed wells on the DOE 1-M-18 Well Pad (Loc ID #335744, Amended Form 2A Doc #401655680), and also be utilized during completions operations as a remote flowback location.

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

Signed: _____ Date: 06/20/2018 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: _____ Director of COGCC Date: 7/22/2018

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
	<p>Planning: The following COA will apply: COA 91 - In addition to the notifications required by COGCC listed in the Northwest Notification Policy (Notice of Intent to Construct a New Location) and Rule 316C. COGCC Form 42. FIELD OPERATIONS NOTICE (c. Notice of Construction or Major Change); operator shall notify the COGCC 48 hours prior to onsite flowline/pipeline testing (flowlines from wellheads to separators to onsite tanks) using the Form 42 (as described in Rule 316C.m. Notice of Completion of Form 2/2A Permit Conditions). The appropriate COGCC individuals will automatically be email notified.</p>
	<p>Construction: The following COAs will apply: COA 23 - Operator must ensure secondary containment for any volume of fluids contained at the production tankl site during operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices [BMPs] associated with fluid containment/control as well as stormwater management for the control of run-on and run-off) sufficiently protective of nearby surface water. COA 44 - The access road will be constructed and maintained as to not allow sediment to migrate from the access road to nearby surface water or any drainages leading to surface water. COA 76 - Strategically apply fugitive dust control measures to reduce fugitive dust and coating of vegetation and deposition in water sources. Operator shall employ practices for control of fugitive dust caused by other operations, including, but not limited to the use of speed restrictions, regular road maintenance, and restriction of construction activity during high wind days. Additional management practices such as road surfacing, wind breaks and barriers may be used. COA 24 - The location is in an area of moderate to high run-on/run-off potential; therefore standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater run-off. COA 58 - Berms or other containment devices shall be constructed to be sufficiently impervious (preferably corrugated steel with poly liner) to contain any spilled or released material around the condensate and produced water tanks. COA 48 - Operator shall submit a scaled as-built drawing (plan view with distances) of this oil and gas location (showing onsite flowlines, offsite pipelines, combustors, etc.) and the nearby well site location from which the condensate and produced water will be sent to via underground pipelines (showing onsite wellheads, separators, flowlines, offsite pipelines, tanks, etc.) within 60 calendar days of construction of the production equipment on either or both locations.</p>
	<p>Emissions Mitigation: The following COA will apply: COA 26 - Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.</p>
	<p>Material Handling and Spill Prevention: The following COA will apply to this oil and gas location: COA 45 - Operator shall pressure test pipelines (flowlines from wellheads to separators to storage tanks; pipelines from onsite separators to offsite storage tanks) in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network, and tested annually, unless agreed to by both parties that the flowlines can be managed under an approved COGCC variance.</p>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	<ul style="list-style-type: none"> - 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. - Combine and share roads to minimize habitat loss/fragmentation - Use existing roads where possible - Maximize the use of directional drilling to minimize habitat loss/fragmentation - Maximize use of long-term centralized tank batteries to minimize traffic - Maximize use of remote completion/frac operations to minimize traffic - Maximize use of remote telemetry for well monitoring to minimize traffic
2	Interim Reclamation	<ul style="list-style-type: none"> - 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. - Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife - TEP will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas. - Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings. - Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors.
3	CPW-Wildlife - Minimization-Deer and Elk	The operator agrees to preclude the use of aggressive CPW-identified non-native grasses and shrubs in mule deer and elk habitat restoration.
4	CPW-Wildlife - Minimization-Black Bear	The operator will implement Rule 1204.a.1 (also see General Operating Recommendations).
5	CPW-Wildlife - Avoidance-Black Bear	The operator agrees to report bear conflicts immediately to CPW staff.

Total: 5 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401670117	FORM 2A SUBMITTED
401675588	ACCESS ROAD MAP
401675589	CONST. LAYOUT DRAWINGS
401675590	FACILITY LAYOUT DRAWING
401675591	HYDROLOGY MAP
401675592	LOCATION DRAWING
401675593	REFERENCE AREA MAP
401675595	SENSITIVE AREA DATA
401675596	NRCS MAP UNIT DESC
401675597	NRCS MAP UNIT DESC
401675600	LOCATION PICTURES
401677528	REFERENCE AREA PICTURES
401677529	OTHER

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	07/20/2018
Permit	Preliminary review complete.	07/09/2018
LGD	Pass KHW	07/02/2018
OGLA	<p>03/19/2018 - location does fall within 'sensitive wildlife habitat' (SWH) areas, therefore a CPW Wildlife Consult is required; the location was onsite by CPW, BLM, COGCC, and operator; although there are no BMPs being recommended by CPW in addition to the COAs that BLM will be implementing, 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>06/29/2018 - initiated / completed OGLA Form 2A review by Dave Kubeczko, placed notification, fluid containment, spill/release BMPs, construction stormwater / erosion control BMPs, sediment and dust control on access road and pad, odor control, tank berming, as-built drawing, and pipeline COAs on Form 2A;</p> <p>07/18/2018 - passed OGLA Form 2A review by Dave Kubeczko with notification, fluid containment, spill/release BMPs, construction stormwater / erosion control BMPs, sediment and dust control on access road and pad, odor control, tank berming, as-built drawing, and pipeline COAs.</p>	06/29/2018
DOW	<p>This production pad will be located directly adjacent to an existing location. CPW attended an onsite visit of this location on March 19, 2018 with the operator and the Bureau of Land Management. This location will serve as a tank battery for condensate and produced water from the DOE 1-M-18 pad, therefore reducing truck traffic and disturbance into more remote habitat. There are no BMPs being recommended in addition to the COAs that BLM will be implementing. 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>Taylor Elm, June 28, 2018, 11:46 a.m.</p>	06/28/2018
Permit	Passed Completeness.	06/27/2018

Total: 6 comment(s)