

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:

401263994

Date Received:

05/15/2017

Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: 324411

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:

**324411**

Expiration Date:

**06/22/2020**

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: 20160057

Gas Facility Surety ID: \_\_\_\_\_

Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: CHEVRON

Number: TR 43-32-597

County: GARFIELD

Quarter: NESE    Section: 32    Township: 5S    Range: 97W    Meridian: 6    Ground Elevation: 8139

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: 2064 feet FSL from North or South section line

495 feet FEL from East or West section line

Latitude: 39.568588    Longitude: -108.293991

PDOP Reading: 2.5    Date of Measurement: 04/28/2017

Instrument Operator's Name: J. Kirkpatrick



## 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: Chevron USA, Inc.

Phone: 713-372-0821

Address: 1400 Smith Street, Room 47170

Fax: \_\_\_\_\_

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

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

City: Houston State: TX Zip: 77002

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 04/11/2017

## 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:	3215 Feet	3124 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: 56 - Parachute-Irigul-Rhone association, 25 to 50 percent slopes MLRA 48A

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: 07/06/2016

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: 712 Feet

water well: 9811 Feet

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

Basis for depth to groundwater and 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:

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 04/28/2017

## 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 pad with one producing well. Twenty additional wells are being proposed for this location.

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

Signed: \_\_\_\_\_ Date: 05/15/2017 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: Matthew Lee Director of COGCC Date: 6/23/2017

## 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

In addition to the notifications required by COGCC listed in the Northwest Notification Policy (Notice of Intent to Construct a New Location, Notice of Intent to Spud Surface Casing, and Notice of Intent to Commence Hydraulic Fracturing Operations) and Rule 316C. COGCC Form 42. FIELD OPERATIONS NOTICE (a. Notice of Intent to Conduct Hydraulic Fracturing Treatment and 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 tanks; and/or any temporary surface lines used for hydraulic stimulation and/or flowback operations) 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. In addition, operator will adhere to the Roan Rim notification requirements.

Operator shall comply with all provisions of the NOTICE TO OPERATORS (NTO) DRILLING WELLS WITHIN ¼ MILE OF THE RIM OF THE ROAN PLATEAU IN GARFIELD COUNTY - PIT DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS, dated June 12, 2008.

Operator must ensure secondary containment for any volume of fluids contained at the well site during drilling and completion 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. Any berm re-constructed at the well pad location will be stabilized, inspected at regular intervals as required by CDPHE (at least every 14 days and after precipitation events), and maintained in good condition.

The design/build of any perimeter berm or fluid management structures shall be sized, re-constructed, and compacted sufficiently to contain and/or manage potential fluid releases during operations in a manner that prevents or controls potential sedimentation and scouring on adjacent lands and drainages. Such design/build of perimeter berms or fluid management structures may include, but are not limited to the following: on location berms; diversion ditches; enhanced vegetation; or other design features necessary to achieve the goal of protecting adjacent lands and drainages from potential sedimentation and scouring.

The location is in an area of moderate to high run-on/run-off potential; therefore standard stormwater BMPs must be implemented; prior to, during, and after well pad location re-construction, as well as during drilling, completion, and production operations; at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater run-off.

The access road will be maintained as to not allow sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.

Strategically apply fugitive dust control measures, including encouraging established speed limits on private or BLM roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.

Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel [or equivalent] with an impervious liner) to contain any spilled or released material around temporary or permanent condensate and produced water storage tanks.

The nearby hillside must be monitored for any day-lighting of drilling fluids throughout the drilling of the surface casing interval.

The moisture content of water/bentonite based mud (WBM) generated drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. After drilling and completion operations have been completed, the WBM drill cuttings that will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), must meet the applicable standards of Table 910-1. No liners are allowed to be disposed of with the drill cuttings. After the drill cuttings have been amended (if necessary) and placed on the well pad, sampling frequency of the drill cuttings (to be determined by the operator) shall be representative of the material left on location. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of a Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method. Commercial disposal of drill cuttings will only require notification to COGCC via a Form 4 Sundry Notice.

Flowback and stimulation fluids must be sent to enclosed tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline storage vessel, or other open top containment located on the well pad; or into tanker trucks for offsite disposal. No open top tanks can be used for initial flowback fluids containment. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material. No additional downgradient berming is required if operator constructs a sufficiently sized perimeter berm.

Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.

Operator shall pressure test pipelines (flowlines from wellheads to separators to tanks; pipelines from onsite separators to offsite storage tanks, and any temporary surface lines used for hydraulic stimulation and/or flowback operations) 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.

Operator must routinely inspect the entire length of the surface pipeline to ensure integrity. Operator shall conduct daily inspections of surface poly pipeline routes for leaks during active transfer of fluids and implement best management practices to contain any unintentional release of fluids along all portions of the surface pipeline route where temporary pumps and other necessary equipment are located. Inspections shall be conducted by viewing the length of the pipeline; operator will endeavor to minimize surface disturbance during pipeline monitoring. In addition, pump stations along the surface poly or steel pipeline route will be continuously monitored when operating in order to swiftly respond to such a failure.

Operator will implement BMPs necessary to mitigate a potential for a release of fluids to impact streams, intermittent streams, ditches, and drainage crossings. For these crossings: if poly pipe is used on the surface, operator will ensure appropriate containment by either installing over-sized pipe "sleeves" which extend the length of the crossing and beyond to a distance deemed adequate to capture (catchment basins) and/or divert any possible release of fluids and prevent fluids from reaching the stream or drainage; installing over-sized pipe "sleeves" which extend the length of the crossing and installing shut off valves on either side of crossing instead of catchment basins; or develop an alternative means for containment. For all other pipeline materials, operator will implement BMPs necessary to mitigate a potential for E&P fluids not to reach groundwater or flowing surface water.

Operator will utilize, to the extent practical, all existing access and other public roads, and/or existing pipeline right-of-ways, when placing/routing the temporary surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.

No	BMP/COA Type	Description
1	Planning	<ul style="list-style-type: none"> <li>• To the extent practicable, share and consolidate new corridors for pipeline rights-of-way and roads to minimize surface disturbance.</li> <li>• Engineer new pipelines to reduce field fitting and reduce excessive right-of-way widths and therefore subsequent reclamation requirements.</li> <li>• Plan new transportation networks and new oil and gas facilities to minimize surface disturbance and the number and length of oil and gas roads through the utilization of common roads, rights of way, and access points to the extent practicable.</li> </ul>
2	General Housekeeping	<ul style="list-style-type: none"> <li>• Post speed limits and caution signs to the extent allowed by surface owners, Federal and state regulations, local government, and land use policies, as appropriate.</li> <li>• Use remote monitoring of well production to the extent practicable.</li> <li>• Maintain pre and post development site inspection records and monitor operations for compliance.</li> <li>• Ensure that staging, refueling, and chemical storage areas are established outside of riparian zones and floodplains, as appropriate.</li> <li>• Store and stage emergency spill response equipment at strategic locations so that it is available to expedite effective spill response.</li> </ul>
3	Wildlife	<ul style="list-style-type: none"> <li>• Install and maintain adequate measures to exclude birds and big game from all fluid pits to the greatest extent possible (e.g. fencing, netting, and other appropriate exclusionary measures).</li> <li>• Construct fluid pit fences and nets that are capable of withstanding animal pressure and environmental conditions and that are appropriately sized for the wildlife encountered.</li> <li>• Skim and eliminate oil from produced water ponds and fluid pits at a rate sufficient to prevent oiling of birds or other wildlife that could gain access to the pit and as consistent with COGCC skimming requirements.</li> <li>• Treat fresh water pits and any associated pit containing water that provides a medium for breeding mosquitoes with Bti (<i>Bacillus thuringiensis v. israelensis</i>) or other similar products, or take other effective action to control mosquito larvae that may spread West Nile Virus to wildlife, especially grouse.</li> <li>• Reclaim reserve pits as quickly as practical after drilling and completions to ensure that pit contents do not offer the possibility of unnecessary environmental liability to the environment or local biota.</li> </ul>
4	Construction	<ul style="list-style-type: none"> <li>• Use minimum practical construction widths for new rights-of-way where pipelines cross riparian areas, streams, and critical habitats, where possible.</li> <li>• Perform routine inspections of netting and pit liner systems to ensure proper function and condition for preventative maintenance and incident deterrence.</li> <li>• Strip and segregate topsoil prior to construction. Appropriately configure topsoil piles and seed as immediate as practicable to control erosion, prevent weed establishment and maintain soil microbial activity.</li> <li>• Where allowed by the surface owner, mow or brushhog vegetation for temporary staging areas where appropriate, leaving root structure intact, instead of scraping the surface.</li> </ul>
5	Drilling/Completion Operations	<ul style="list-style-type: none"> <li>• Minimize rig mobilization and demobilization where practicable by completing or recompleting all wells from a given well pad before moving rigs to a new location.</li> <li>• Maximize the use of directional drilling to minimize habitat loss/fragmentation.</li> </ul>

6	Interim Reclamation	<ul style="list-style-type: none"> <li>• Commensurate with the language set forth in the surface agreement, interim and final reclamation shall be performed as early as practical and to the greatest extent possible.</li> <li>• Apply a weed management plan. Utilize an adaptive management strategy that permits effective response(s) to monitored findings and reflects local site geography and conditions.</li> <li>• Perform interim reclamation on all disturbed areas not needed for active support of production operations consistent with applicable timing restrictions and requirements.</li> <li>• Control listed noxious weeds in areas surrounding reclamation areas, as reasonable, in order to reduce weed competition.</li> <li>• Educate employees and contractors about weed issues.</li> <li>• Utilize GIS technologies to assess the initial and final extent of disturbance and document reclamation progression.</li> </ul>
7	CPW-Wildlife - Avoidance-Black Bear	The operator agrees to report bear conflicts immediately to CPW staff.
8	CPW-Wildlife - Minimization-Black Bear	The operator will implement Rule 1204.a.1 (also see General Operating Recommendations).

Total: 8 comment(s)

### Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
2108179	CORRESPONDENCE
401263994	FORM 2A SUBMITTED
401276409	NRCS MAP UNIT DESC
401276410	REFERENCE AREA PICTURES
401276411	LOCATION PICTURES
401276412	SENSITIVE AREA DATA
401283482	ACCESS ROAD MAP
401283484	CONST. LAYOUT DRAWINGS
401283485	HYDROLOGY MAP
401283486	LOCATION DRAWING
401283488	MULTI-WELL PLAN
401283489	REFERENCE AREA MAP
401283525	FACILITY LAYOUT DRAWING
401283526	OTHER

Total Attach: 14 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	06/23/2017
OGLA	Initiated/Completed OGLA Form 2A review on 06-22-17 by Dave Kubeczko; requested acknowledgement of notification, fluid containment, spill/release BMPs, stormwater construction BMPs, sediment and dust control access road, hillside monitoring, flowback to tanks, tank berming, odor control, cuttings low moisture/management, and pipeline inspection and testing COAs from operator on 06-22-17; received acknowledgement/concurrence of COAs from operator on 06-22-17; passed by CPW on 06-01-17 with information provided by operator during the 04-28-17 pre-consultation and the operator's submitted wildlife BMPs to minimize impacts to wildlife acceptable; passed OGLA Form 2A review on 06-22-17 by Dave Kubeczko; notification, reference area pictures, fluid containment, spill/release BMPs, stormwater construction BMPs, sediment and dust control access road, hillside monitoring, flowback to tanks, tank berming, odor control, cuttings low moisture/management, and pipeline inspection and testing COAs.	06/22/2017
Permit	Preliminary review complete.	06/08/2017
DOW	CPW and the operator held a pre-consultation meeting on April 28, 2017 to discuss timing and BMPs for this location and several others in the Trail Ridge area. CPW is satisfied with the proposed timing of operations and measures being taken to minimize impacts on wildlife. There are no additional recommendations at this time.  By: Taylor Elm, 06-01-2017, 9:10 a.m.	06/01/2017
Permit	Added check mark to Field Observation box on Soil & Plant Community Tab per operator.  Passed Completeness.	05/24/2017

Total: 5 comment(s)