

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:

401359259

Date Received:

08/02/2017

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 319094

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:

**319094**

Expiration Date:

**11/19/2020**

☒ 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: 10459  
Name: EXTRACTION OIL & GAS INC  
Address: 370 17TH STREET SUITE 5300  
City: DENVER State: CO Zip: 80202

Contact Information

Name: Alyssa Andrews  
Phone: (720) 481-2379  
Fax: ( )  
email: aandrews@extractionog.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20130028 ☐ Gas Facility Surety ID: \_\_\_\_\_  
☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Coyote Trails Number: \_\_\_\_\_  
County: WELD  
QuarterQuarter: SWSE Section: 28 Township: 1N Range: 68W Meridian: 6 Ground Elevation: 5272  
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: 1198 feet FSL from North or South section line  
2229 feet FEL from East or West section line  
Latitude: 40.018113 Longitude: -105.007023  
PDOP Reading: 1.2 Date of Measurement: 06/30/2017  
Instrument Operator's Name: T. Winnicki

## 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 #

## FACILITIES

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

Wells	<u>45</u>	Oil Tanks*	<u>10</u>	Condensate Tanks*	<u>      </u>	Water Tanks*	<u>4</u>	Buried Produced Water Vaults*	<u>      </u>
Drilling Pits	<u>      </u>	Production Pits*	<u>      </u>	Special Purpose Pits	<u>      </u>	Multi-Well Pits*	<u>      </u>	Modular Large Volume Tanks	<u>2</u>
Pump Jacks	<u>      </u>	Separators*	<u>54</u>	Injection Pumps*	<u>      </u>	Cavity Pumps*	<u>      </u>	Gas Compressors*	<u>8</u>
Gas or Diesel Motors*	<u>      </u>	Electric Motors	<u>      </u>	Electric Generators*	<u>      </u>	Fuel Tanks*	<u>      </u>	LACT Unit*	<u>3</u>
Dehydrator Units*	<u>      </u>	Vapor Recovery Unit*	<u>      </u>	VOC Combustor*	<u>      </u>	Flare*	<u>      </u>	Pigging Station*	<u>      </u>

## OTHER FACILITIES\*

### Other Facility Type

### Number

Emmsion Control Devices	8
Vapor Recovery Towers	4
O2 Buildings	4
Maintenance 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:

Extraction will trench flowlines in one piping corridor that runs between the drill pad and the separator pad and be placed at 12" centers. These lines will most likely be 2" or 3" fusion bonded SCH160 steel pipe and have proper cathodic protection throughout the run. Extraction will then sweep up with a long radius that will tie off each line to the appropriate separator. All welds on these are 100% x-ray and hydro tested to the API and Manufactures specs for a class 1500 series flange. Also meets ASME code B31.4.

## CONSTRUCTION

Date planned to commence construction: 11/21/2017 Size of disturbed area during construction in acres: 31.28

Estimated date that interim reclamation will begin: 02/21/2018 Size of location after interim reclamation in acres: 16.46

Estimated post-construction ground elevation: 5272

## 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? Yes

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

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: Front Range Landfill Inc

Phone:                                     

Address: 1235 North Loop W

Fax:                                     

Address: Suite 205

Email:   

City: Houston State: TX Zip: 77008

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): Undeveloped Landfill Acreage

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): Undeveloped Landfill Acreage

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:	1386 Feet	1158 Feet
Building Unit:	1386 Feet	1159 Feet
High Occupancy Building Unit:	4628 Feet	4403 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	1187 Feet	960 Feet
Above Ground Utility:	1636 Feet	1262 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	234 Feet	177 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

- 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: \_\_\_\_\_

## 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: 36 - Midway-Shingle complex, 5 to 20 percent slopes

NRCS Map Unit Name: 67—Ulm clay loam, 3 to 5 percent slopes

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: \_\_\_\_\_ 0 Feet

water well: \_\_\_\_\_ 585 Feet

Estimated depth to ground water at Oil and Gas Location \_\_\_\_\_ 30 Feet

Basis for depth to groundwater and sensitive area determination:

Downgradient surface water feature: Ditch 0'  
Water well: 585' N, Permit #67512-F, no depth provided  
Water well depth: 172' deep, 1300' N, Permit #67512-F

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: \_\_\_\_\_ No

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 \_\_\_\_\_ 318A

## WILDLIFE



This location is included in a Wildlife Mitigation Plan

☐ This location was subject to a pre-consultation meeting with CPW held on \_\_\_\_\_

## 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	<p>This pad will be constructed to allow for the drilling to occur in phases consisting of an appraisal phase of up to 7 wells and the full development phase consisting of the remaining wells.</p> <p>Facility equipment count is a total of both proposed and existing equipment. There are two existing wells on this location and existing facilities (2 oil tanks, 1 water tank, 2 separators, &amp; 1 ECD). All other equipment is proposed. Existing facilities will be removed and the two existing wells (MEIKLE 28-1, 05-123-10665 &amp; MEIKLE 2, 05-123-12185) will be plugged and abandoned prior to construction.</p> <p>This location is not in a buffer zone or LUMA. Please see the attached Notification Zone Exhibit and UMA Check Exhibit attached as "OTHER".</p> <p>MLVT:Manufacturer: Hydrologistics, Time: 3 months, Size/volume - 157' diameter/42,000 bbl</p> <p>Extraction Oil &amp; Gas hosted a community open house at the Erie Community Center on August 24, 2017. The specifics of the proposed Coyote Trails pad were discussed including location, access road, truck haul route, phasing of the pad, and schedule. Additionally numerous subject matter experts from Extraction were in attendance to discuss all phases of operations including drilling, completions, pad and facility construction, production, and environment and regulatory regulations. Its estimated that approximately 30 community members attended the open house. Many community member had questions but some attendees also came to voice their objection to oil and gas development. Questions and comments were centered around traffic and haul routes, the number of wells and amount of equipment proposed, plugging and abandonment of existing wells in the area, air and odor emissions, noise and light mitigation, and casing design. Extraction's best management practices were discussed in response to all questions. BMPs such as the use of a high-line powered drilling rig, reduced noise completion fleet, sound walls, emission control devices, FLIR camera technology, use of temporary above ground waterlines to transport completion water, reduced aromatics drilling mud, use of coolers and enclosures for cuttings, and commitment to oil pipeline for full development.</p> <p>The disturbed area shown on the Location Drawing is only the surface use agreement disturbance area. The drilling disturbance area is only 18.9 acres and the reclaimed area will be 2.44 acres. Please see the Facility Layout Drawing for reference.</p>
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: \_\_\_\_\_ Date: 08/02/2017 Email: aandrews@extractionog.com

Print Name: Alyssa Andrews Title: Regulatory Analyst

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: 11/20/2017

### **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**

	Operator shall collect surface water samples from the surface water body that is downgradient of the Oil and Gas Location at approximately 40.015608, -105.007805, or from an alternative downgradient location in the same drainage in the parcel. The operator shall collect a baseline sample prior to commencing construction of the location and quarterly beginning three months after the first well is spud at the location. The operator shall collect the samples for 12 quarters with a minimum 60 days between sampling events. Analytical parameters shall follow COGCC Rules 318A.f.(6) for the baseline sample and 3018A.f.(7) for subsequent samples. The operator shall report quarterly sampling to COGCC via a Form 4 Sundry within 3 months of a sampling event. The Sundry attachments shall include analytical results, the latitude and longitude of the sample location, and an aerial photograph that shows the location. If the operator cannot collect a sample in the quarter due to an absence of water in the drainage, the operator shall provide a Form 4 Sundry with that information.
	The Approved Form 2A permit will be posted at the location during construction, drilling, and completions operations.

### **Best Management Practices**

#### **No BMP/COA Type**

#### **Description**

1	Planning	Fencing: A meeting with the surface owner will determine a fencing plan. The location will be adequately fenced to restrict access by unauthorized persons.
2	Planning	This location is subject to a WOGLA permit approval from Weld County. Operator is currently working through the WOGLA application with Weld County staff. Operator will host a neighborhood meeting prior to commencement of any operations.
3	Planning	Blowout Prevention Equipment ("BOPE"): A double ram and annular preventer will be used during drilling. Stabbing valves shall be installed in the event of reverse circulation and shall be prior tested with low and high pressure fluid.
4	Planning	Backup stabbing valves will be required on well servicing operations during reverse circulation. Valves shall be pressure tested before each well servicing operation using both low-pressure air and high-pressure fluid.
5	Planning	Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25' from the wellhead tanks or separators. Electrical equipment shall comply with API IRP 500 and will comply with the current national electrical code.
6	Community Outreach and Notification	Extraction has established a live, 24-hour telephone hotline, as well as an email address, to receive feedback on our drilling and completion activities with the goal of having a tool for us to immediately investigate and address any complaints that arise
7	Traffic control	Access Roads: The access road will be constructed to accommodate local emergency vehicles. This road will be maintained for access at all times. Traffic will be routed to minimize local interruption. During construction and through the life of this location, Operator will utilize watering, via water trucks, to control fugitive dust. Additionally, the access road will be constructed with aggregate road base material and vehicle speeds will be limited to ten miles per hour to reduce dust.

8	General Housekeeping	804. Visual Impacts: All long term facility structures will be painted a color that enables the facilities to blend in with the natural background color of the landscape, as seen from a viewing distance and location typically used by the public
9	General Housekeeping	Maintain appearance with garbage clean-up; a trash bin will be located on site to accumulate waste by the personnel drilling the wells. Site will have unused equipment, trash and junk removed immediately.
10	General Housekeeping	Trash Removal: All trash, debris and material not intrinsic to the operation of the oil and gas facility shall be removed and legally disposed of as applicable.
11	Storm Water/Erosion Control	Implement and maintain BMPs to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation. Location will be covered under Extraction Oil & Gas's field wide permit, permit number COR03M013. Typical stormwater BMPs installed include a diversion ditch and berm with sediment traps. If necessary additional BMPs such as silt fence and/or wattles may be installed.
12	Material Handling and Spill Prevention	Leak Detention Plan: Extraction will monitor production facilities weekly at a minimum to a maximum of daily to identify fluid leaks, including, but not limited to, visually inspecting all wellheads, tanks and fittings. Additionally annual SPCC inspections will be conducted and documented. Annual flowline testing will also occur according to COGCC rules 1101 and 1102. Inspection and record retention of flowline testing will be in accordance per COGCC regulation. All records will be made available to the COGCC upon request.
13	Material Handling and Spill Prevention	Tank Specifications: Tanks will be designed, constructed and maintained in accordance with NFPA Code 30 (2008 version). All tanks are visually inspected by the operator weekly at a minimum to a maximum of daily and annual SPCC inspections will be conducted and documented. Inspection and record retention of tank inspections will be in accordance per SPCC regulation. All records will be made available to the COGCC upon request.
14	Dust control	805.c. Operator shall employ practices for control of fugitive dust caused by their operations. Such practices shall include but are not limited to the use of speed restrictions, regular road maintenance, restriction of construction activity during high-wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. Additional management practices such as road surfacing, wind breaks and barriers may be used.
15	Construction	803. Permanent lighting will be installed around the facility to allow both the operator and haulers to conduct safe operations at night. All lights will be directed down toward the location or shielded so no light pollution leaves the facility.
16	Construction	Base beams will be used and not guy line anchors.
17	Construction	This will be a multi-well pad, located in a manner which allows for the greatest distances possible from building units.
18	Construction	Berm construction. Tank berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. All berms will be visually checked weekly at a minimum to a maximum of daily to ensure proper working condition. Secondary containment devices shall be sufficiently impervious to contain any spilled or released material. No potential ignition sources shall be installed inside the secondary containment area unless the containment area encloses a fired vessel.
19	Construction	When the drilled & completed well count on the Coyote Trails pad exceeds ten, Extraction or third party will provide oil pipeline for produced oil.
20	Noise mitigation	Sound walls will be used during drilling and completion operations. Sound walls will be installed on the edges impacting nearest neighbors to the south-west, south, and south-east edges of the pad. Highline power will be used for the rig.
21	Noise mitigation	Baseline noise monitoring will be conducted prior to commencement of pad construction. Additional sound mitigation measures will be considered and implemented pursuant to third party recommendations. All noise survey data will be made available to the COGCC inspector upon request.



22	Noise mitigation	For the development wells, to provide long term noise mitigation at this location all production equipment will powered by electricity. If needed, sound mitigation panels will be installed around the vapor recovery units and/or compressors during production operations to shield sensitive areas.
23	Noise mitigation	This pad will be developed in phases consisting of an appraisal phase of up to 7 wells and the full development phase consisting of the remaining wells. During the appraisal phase, a rig powered off of high line power. During the full development phase the drilling rig will be powered off of high line power, however sounds walls will remain in place to provide additional mitigation.
24	Emissions mitigation	Operator will bring a new or expand existing gas sales lines, in a timely manner, to send salable quality gas immediately down the sales line. LACT Units will be used for truck loading to minimize emissions from tanks. to minimize emissions from tanks.
25	Emissions mitigation	Green Completions - Emission Control System. Test separators and associated flow lines and sand traps shall be installed on-site to accommodate green completions techniques pursuant to COGCC Rules.
26	Emissions mitigation	Leak Detention Plan: Operator will monitor production facilities weekly at a minimum to a maximum of daily to identify fluid leaks, including, but not limited to, visually inspecting all wellheads, tanks and fittings. As part of Extraction's Leak Detection and Repair (LDAR) program, all facilities including above ground flowlines and piping will be inspected monthly with an infra-red camera. This frequency may be reduced as production declines in accordance to Colorado Department of Health and Environment - Regulation 7 Section XVII.
27	Odor mitigation	805. Oil & gas facilities and equipment shall be operated in such a manner that odors do not constitute a nuisance or hazard to public welfare. Operator will utilize advanced oil based mud systems which target the reduction of aromatics. Extraction will use a cooler/mud chiller for OBM.
28	Drilling/Completion Operations	BOPE testing for drilling operations. Upon initial rig-up and at least once every thirty (30) days during drilling operations thereafter, pressure testing of the casing string and each component of the blowout prevention equipment including flange connections shall be performed to seventy percent (70%) of working pressure or seventy percent (70%) of the internal yield of casing, whichever is less. Pressure testing shall be conducted and the documented results shall be retained by the operator for inspection by the Director for a period of one (1) year. Activation of the pipe rams for function testing shall be conducted on a daily basis when practicable.
29	Drilling/Completion Operations	Closed chamber drill stem tests shall be allowed. All other drill stem tests shall require approval by the Director. None planned for this well.
30	Drilling/Completion Operations	Tank level Indicators shall be used for tanks on location.
31	Drilling/Completion Operations	All loadlines shall be bull plugged or capped.
32	Drilling/Completion Operations	Operator will be utilizing a closed loop system.
33	Drilling/Completion Operations	Operator has an MLVT Design Package, certified and sealed by a licensed professional engineer, which is on file in their office and available upon request. The site shall be prepared in accordance with the specifications of the design package prior to tank installation; including ensuring that proper compaction requirements have been met.
34	Drilling/Completion Operations	The MLVT will be at least 75 feet from a wellhead, fired vessel, heater-treater, or a compressor with a rating of 200 horsepower or more. It will be placed at least 50 feet from a separator, well test unit, or other non-fired equipment.
35	Drilling/Completion Operations	All liner seams will be welded and tested in accordance with applicable ASTM International standards.
36	Drilling/Completion Operations	Operator will be present during initial filling of the MLVT and the contractor will supervise and inspect the MLVT for leaks during filling.
37	Drilling/Completion Operations	Operator will comply with the testing and re-inspection requirements and associated written standard operating procedures (SOP) listed on the design package.

38	Drilling/Completion Operations	Signs will be posted on the MLVT indicating that the contents are freshwater.
39	Drilling/Completion Operations	The MLVT will be operated with a minimum of 1 foot of freeboard at all times.
40	Drilling/Completion Operations	Access to the MLVT will be limited to operational personnel and authorized regulatory agency personnel.
41	Drilling/Completion Operations	Operator or contractor will conduct daily visual inspections of the exterior wall and surrounding area for integrity deficiencies.
42	Drilling/Completion Operations	Operator has developed a contingency plan/emergency response plan associated with the MLVT and it is on file at their office.
43	Drilling/Completion Operations	Tanks will be filled using a local water source through temporary waterlines. No water will be trucked to location.
44	Drilling/Completion Operations	A fabric reinforced liner will be utilized. In the event that a tank breach were to occur, the fabric reinforced liner will prevent a "zippering" failure from occurring. The liner will meet the specifications per the design package.
45	Drilling/Completion Operations	Operator acknowledges and will comply with the Colorado Oil & Gas Conservation Commission Policy on the Use of Modular Large Volume Tanks in Colorado dated June 13, 2014.
46	Interim Reclamation	Operator shall be responsible for segregating the topsoil, backfilling, re-compacting, reseeding, and re-contouring the surface of any disturbed area so as not to interfere with Owner's operations and shall reclaim such area to be returned to pre-existing conditions as best as possible with control of all noxious weeds.
47	Final Reclamation	Within 90 days subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site. Identification of plugged and abandoned wells will be identified pursuant to 319.a.(5)
48	Final Reclamation	The operator shall identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). The operator shall also inscribe or imbed the well number and date of plugging upon the permanent monument

Total: 48 comment(s)

### **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
2316165	NRCS MAP UNIT DESC
2316185	OTHER
2316227	FACILITY LAYOUT DRAWING
2316228	OTHER
401359259	FORM 2A SUBMITTED
401361438	NRCS MAP UNIT DESC
401361494	ACCESS ROAD MAP
401361510	HYDROLOGY MAP
401361515	LOCATION DRAWING
401361522	LOCATION PICTURES
401361525	MULTI-WELL PLAN
401361530	OTHER
401361532	REFERENCE AREA MAP
401361534	REFERENCE AREA PICTURES
401361538	SURFACE AGRMT/SURETY
401361540	OTHER
401361546	WASTE MANAGEMENT PLAN
401368657	CONST. LAYOUT DRAWINGS

Total Attach: 18 Files

### **General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	With operators concurrent changed construction date to 11/21/17 and 2/21/17 as interim rec. Final Review Completed.	11/20/2017
OGLA	Operator sent revised facility layout and hydrology report (attached as other). Borings to 30 feet did not encounter groundwater. Added a BMP for pipeline and comment regarding size of disturbed area and changed interim reclamation from 27 acres to 16.46 acres. Operator concurs with COGCC surface water sampling COA. Public comments are regarding concerns for noise and LGD comment for Weld County oil and gas requirements. Based on Supervisor and Manager review: Based on the information provided by the Operator, COGCC has determined that this proposed Oil and Gas Location meets the requirements for conditional approval based on compliance with COGCC Rules, including, but not limited to; Rule 604 Series Setback and Mitigation Measures. The Operator has presented a siting rationale for the Production Facilities in the Buffer Zone and Best Management Practices that adequately address site specific environmental, health, safety and welfare concerns. OGLA review complete and task passed.	11/17/2017
OGLA	Manager review: would like surface and groundwater sampled for water quality and additional information on why area to the north is not part of interim reclamation. Would like COA for pipeline or amended 2A if pipeline is not available with all wells, remove haybales, add highline power only for the rig to noise BMPs, and remove references to 604.c.(2) rules as not a designated setback location. Spoke to Operator on the phone regarding removing 604.c.(2) references from the BMPs, removing haybales, and highline power. Sent email regarding water sampling, interim reclamation explanation and COA for additional equipment.	11/08/2017
OGLA	Changed the construction date to 10/20/2017	10/18/2017
OGLA	Operator responded to questions regarding, quiet frac fleet, mud chiller, FLIR Camera, pipeline, and cut/fill . Agreed to mud chiller – added to odor BMP, added info on leak detection for infra-red camera, and response on the following: “1. No, Extraction will not be using the quiet fleet for Coyote Trails due to the use of other noise mitigation measures including sound walls and/or hay bales. The sound walls and/or hay bales will effectively mitigate noise in full compliance will all applicable law. 2. Extraction’s intent is to utilize an oil pipeline for the second phase of development, if approved, and if technologically practicable and economically reasonable, not withstanding any pipeline shut downs or other reasons that would make us truck it. 3. Due to the topography and large cut and fill of the location (please see the attached grading plan to the 2A), full pad build out for the initial and subsequent development is necessary to balance earth work as well as provide sufficient area for the movement and placement of drilling, completions and production equipment.”	10/16/2017
OGLA	Spoke with Operator via phone regarding county process, stated went through the paper work WOGLA process. Attached environmental report (doc no 2316185) as other regarding concerns for burrowing owls and other potential sensitive environments. OGLA review complete and task passed.	10/09/2017
OGLA	OGCC conducted a site drive-by to evaluate the location and distance to the landfill and neighboring building units to the southwest of the location. OGCC observed from the corner of Weld County Road and Sheridan Pkwy a high volume of traffic, especially large trucks, as well as trucks on the landfill property.	10/06/2017
Permit	Changed date of construction is 10/2/17 and interim reclamation 1/2/2018 with operator's concurrence.	09/27/2017
OGLA	Operator provided statement for public meetings and outreach - in the Operator comments section. Operator confirmed existing wells will be P&A prior to construction and all cultural distances are from new wells and production- changed well count to 45 from 47. Production equipment does not include existing equipment as it will be removed prior to construction. Totals are reflected on the facility list of the 2A. Public comment is from the Weld County LGD regarding county requirements for O&G locations. send for supervisor review	09/26/2017

Permit	Permitting Review Complete.	09/26/2017
OGLA	Operator responded via email stating plans to P&A existing wells and remove existing equipment prior to construction of new production and drilling new wells. Added MLVT information to the comments section, informed that base beams not guy line anchors will be used – changed BMP, explained that sound walls would be in place during all drilling and completions activities, attached NRCS map description 36 and removed NRCS 40, and concurred to remove extra location drawing. Changed depth to water from 172 feet (drinking water) to 30 feet from monitoring wells to the southwest in the area. Changed to sensitive area	09/14/2017
LGD	This proposed oil and gas facility is located in the Agricultural Zoned District of unincorporated Weld County. A Weld Oil and Gas Location Assessment (WOGLA) is required prior to constructing any improvements related to oil and gas exploration and production and prior to issuance of any building permits. The operator has noticed their intent to apply for the WOGLA. A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access points from County roads require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The use of County right-of-way requires a permit from the Department of Public Works. Troy Swain, Weld Oil/Gas Liaison and LGD (970) 400-3579.	09/06/2017
OGLA	Location is not in a designated setback area and is an amended location. Multi-well plan does not have existing vertical wells on it, check with permitting, as Operator has included all existing wells and production equipment, but plans to P&A wells and remove equipment. Do not have size, time, or vendor/manufacture for the MLVT. Need clarification on noise BMP, Location drawing is attached twice.	09/05/2017
OGLA	Operator met with COGCC on 7/19 regarding this location as an amended location, that it is outside all designated setback location areas, but they would have public meetings for the surrounding neighborhoods in the area. Received email correspondence on 8/22/2017 from the Operator regarding the information mailed to residences' on 8/14/2017 for the public meeting to be held 8/24/2017. COGCC has started the review of this location - near Erie, but in unincorporated Weld County.	09/01/2017
Permit	Passed Completeness.	08/17/2017
Permit	Returned to draft: --attach Construction Layout Drawing	08/03/2017

Total: 16 comment(s)