

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:

400700334

0

Date Received:

10/20/2014

Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: \_\_\_\_\_

Submit signed original form. 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:

**443716**

Expiration Date:

**10/25/2018**

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: 69175

Name: PDC ENERGY INC

Address: 1775 SHERMAN STREET - STE 3000

City: DENVER    State: CO    Zip: 80203

Contact Information

Name: Shaye Marshall

Phone: (303) 318-6131

Fax: ( )

email: shayelyn.marshall@pdce.com

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20090078     Gas Facility Surety ID: \_\_\_\_\_
- Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Bolton    Number: 3N68W7TY

County: WELD

Quarter: SESE    Section: 7    Township: 3N    Range: 68W    Meridian: 6    Ground Elevation: 5148

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: 310 feet FSL from North or South section line

511 feet FEL from East or West section line

Latitude: 40.233810    Longitude: -105.038270

PDOP Reading: 1.6    Date of Measurement: 01/20/2015

Instrument Operator's Name: Brian Brinkman

## 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>8</u>	Oil Tanks*	<u>24</u>	Condensate Tanks*	<u>      </u>	Water Tanks*	<u>8</u>	Buried Produced Water Vaults*	<u>4</u>
Drilling Pits	<u>      </u>	Production Pits*	<u>      </u>	Special Purpose Pits	<u>      </u>	Multi-Well Pits*	<u>      </u>	Modular Large Volume Tanks	<u>4</u>
Pump Jacks	<u>      </u>	Separators*	<u>8</u>	Injection Pumps*	<u>      </u>	Cavity Pumps*	<u>      </u>	Gas Compressors*	<u>      </u>
Gas or Diesel Motors*	<u>      </u>	Electric Motors	<u>      </u>	Electric Generators*	<u>      </u>	Fuel Tanks*	<u>      </u>	LACT Unit*	<u>      </u>
Dehydrator Units*	<u>      </u>	Vapor Recovery Unit*	<u>2</u>	VOC Combustor*	<u>7</u>	Flare*	<u>      </u>	Pigging Station*	<u>      </u>

## OTHER FACILITIES\*

Other Facility Type

Number

Meters

2

\*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:

Each well will have a flow line, oil production line, water production line and a backpressure line, each battery will have a gas sales line. Oil production line and flow lines are 3 inch steel SCH 80FB PE DRL. Water production line and low pressure gas vent lines are 2 inch SDR7 poly. Gas sales lines installed and maintained by Gas Purchaser, normally 6 inch steel .256 FBE

## CONSTRUCTION

Date planned to commence construction: 01/01/2016 Size of disturbed area during construction in acres: 8.20

Estimated date that interim reclamation will begin: 06/01/2016 Size of location after interim reclamation in acres: 2.30

Estimated post-construction ground elevation: 5148

## 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: Land application

Cutting Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Drill cuttings will be land applied at PDC spread fields with COGCC Facility ID 429629, 430649, 431183, 434889, or 436033.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 429629 or Document Number:       

Centralized E&P Waste Management Facility ID, if applicable:       

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: David & Sherry Bolton Phone: \_\_\_\_\_  
 Address: 16245 CR 3 Fax: \_\_\_\_\_  
 Address: \_\_\_\_\_ Email: \_\_\_\_\_  
 City: Berthoud State: CO Zip: 80513  
 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: Surface Use Agreement  
 Surface damage assurance if no agreement is in place: \_\_\_\_\_ Surface Surety ID: \_\_\_\_\_  
 Date of Rule 306 surface owner consultation 05/16/2014

**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.

	<b>From WELL</b>	<b>From PRODUCTION FACILITY</b>
Building:	520 Feet	439 Feet
Building Unit:	544 Feet	439 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	200 Feet	168 Feet
Above Ground Utility:	235 Feet	683 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	310 Feet	180 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.

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: 09/12/2014

**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.

This 2A application is for a 4-well pad. No suitable existing locations are in the area. The property to the North would not allow us to use their surface for our location. The property to the west is a housing subdivision. Drilling from the west was not acceptable per geology. Using the legal window would cause drilling constraints as the kicks would be too long. Pushing the production facility farther to the west would cause the surface owners more permanent disturbance than necessary. All options surrounding the drill unit were reviewed prior to choosing this location. (Additional rationale from 2/5/15 email to COGCC) See additional rationale in comment section and attached siting rationale

**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: 42-Nunn clay loam, 1 to 3 percent slopes  
 NRCS Map Unit Name: 83—Wiley-Colby complex, 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: 289 Feet

water well: 2245 Feet

Estimated depth to ground water at Oil and Gas Location 20 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive area determination: ground water is at 20'. Depth to ground water determination: Land Owner experience. Closest water well is 2245' S of the pad location.

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 318A

**DESIGNATED SETBACK LOCATION EXCEPTIONS**

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- 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 MLVT will be onsite for 120 days and contains 53,000 bbls per tank. MLVT manufacturers currently used by PDC are Industrial Systems Inc. (ISI) and PCI Manufacturing.

The proposed Bolton 7X-404 (well-document number: 400703221) location was used as the reference point for footages and lat/long location.

Notification Zone Drawing, Pre-Application Notice Certification and Leak Detection Plan attached as "Other".

The SUA attached includes the original and the amended SUA. Please see both for reference to the Bolton TY wells.

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

Signed: \_\_\_\_\_ Date: 10/20/2014 Email: shayelyn.marshall@pdce.com

Print Name: Shaye Marshall 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: 10/26/2015

**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.

<u>COA Type</u>	<u>Description</u>

**Best Management Practices**

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	PDC determines MLVT locations based on size of location, nearby surface waters, site visibility, surrounding land use, property lines, onsite traffic, site security, tear-away tank fill connections, topography (high, low, slope, direction), nearby building units, roads, access points, and surface owner requests.
2	Planning	Signs shall be posted on each MLVT to indicate that the contents are fresh water and that no E&P waste fluids are allowed. Location and additional signage shall conform to Rule 210.
3	Planning	MLVTs will be operated with a minimum of 1 foot freeboard at all times.
4	Planning	Access to the tanks shall be limited to operational personnel.

5	Planning	Construction and installation of the tank structure, liner and sub-grade shall meet or exceed the manufacturer specifications. PDC follows manufacturer's Standard Operating Procedures (SOPs) and will provide these SOPs upon request to the COGCC.
6	Planning	PDC will conduct daily, visual inspections of the exterior wall and general area for any integrity deficiencies before, during, and after filling the MLVTs. PDC uses Construction Sign-Off, Site Preparation Sign-Off, Completion Sign-Off, Pre-Fill, and Site Visit checklists to maintain a written record of inspections. However, when the fluid level in the MLVTs is less than two (2) feet and there is no activity going on (i.e. during holidays or a small break between completions), only intermittent inspections will be conducted. Two feet is the safe volume of fluid level that is needed to hold the liner down and keep the MLVT stable.
7	Planning	Each location where MLVT's are used will have its own set of unique site-specific characteristics and associated risks (e.g., rural vs. urban setting, grade of the location, etc.) to be considered in a worst case scenario. These characteristics must be identified and addressed prior to the MLVT construction phase and should be documented in the MLVT construction checklist. Ensuring the safety of our employees, contractors, and the public are a top priority. This can be addressed with the implementation of MLVT pre-construction risk assessment measures to address safety concerns, and minimize environmental impacts and property damage in the unlikely event of a MLVT release.
8	Planning	In the event of a catastrophic MLVT failure, the Operator shall notify the COGCC as soon as practicable but not more than 24 hours after discovery, submit a Form 22-Accident Report within 10 days after discovery, conduct a "root cause analysis", and provide same to COGCC on a Form 4-Sundry Notice within 30 days of the failure.
9	Planning	The MLVT shall be constructed and operated in accordance with a design package certified and sealed by a Licensed Professional Engineer either in Colorado or the state where the MLVT was designed or manufactured.
10	Planning	COGCC Rules 605.a.(3,5,6,7, and 8), as applicable to tank setbacks at the time of installation shall apply to the siting of this MLVT.
11	Planning	All MLVT liner seams shall be welded and tested in accordance with applicable ASTM international standards. Any repairs to liners shall be made using acceptable practices and applicable standards.
12	Planning	PDC Energy Inc. hereby certifies to the Director that the Modular Large Volume Tanks, utilized for the afore mentioned location, will be designed and implemented consistent with the Colorado Oil and Gas Conservation Commission policy dated June 13, 2014.
13	Planning	604c.(2).E. Multiwell Pads: This 2A application is for a 4-well pad. No suitable existing locations are in the area. PDC has worked with the landowners to select the proposed site. Location was chosen based on surface owner preference.
14	Planning	604.c.(2).W. Site Specific Measures: Lights should be turned downward and away from building units within the 1,000 foot buffer area. Dust mitigation will be provided as necessary on lease access roads.
15	Planning	804. Visual Impact: Production facilities, regardless of construction date, which are observable from any public highway will be painted with uniform, non-contrasting, non-reflective color tones (similar to the Munsell Soil Color Coding System), and with colors matched to but slightly darker than the surrounding landscape.
16	Planning	604c.(2).I. BOPE Testing for Drilling Operations: PDC's contractors will supply a double ram BOPE (Blinds and pipes). BOPE is always function tested and all seals and ram block rubbers are inspected. After installation of the BOPE, PDCE conducts a pressure test on the BOPE at a low pressure of (200-400 psi) and a high pressure test with a third party tester, all tests are digitally recorded and any failed equipment or seals are replaced and re-tested.

17	Planning	604c.(2).J. BOPE for Well Servicing Operations: All valves will also be tested to maximum rating by a third party prior to being delivered to location. Whenever snubbing operations are being used the snubbing stack will be pressure tested at the same time the BOPE is being tested which consist of a single pipe ram and a annular bag.
18	Planning	604c.(2).L. Drill Stem Tests: PDC does not conduct drill stem tests, but will seek prior approval from the director if a drill stem test will be preformed.
19	Planning	604c.(2).U. Identification of Plugged and Abandoned Wells: Pursuant to rule 319.a. (5)., once the well has been plugged and abandoned, PDC will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging.
20	Community Outreach and Notification	604c.(2).V. Development From Existing Well Pads: An existing pad was not available to utilize to develop these wells.
21	Traffic control	604c.(2).D. Traffic Plan: If required by the local government, a traffic plan will be coordinated with the local jurisdiction prior to commencement of operations.
22	General Housekeeping	604c.(2).N. Control of Fire Hazards: PDC will ensure that any material that might be deemed a fire hazard will be will remain no less than twenty-five (25) feet from the wellhead(s), tanks and separator(s). PDC installs automation equipment for tank level and pressure monitoring inside the bermed area that complies with API RP 500 classifications and with the current national electrical code as adopted by the State of Colorado.
23	General Housekeeping	604c.(2).P. Removal of Surface Trash: A commercial size trash bin for removing debris will be located on site. This bin will be for use by all parties affiliated with the operation.
24	General Housekeeping	604c.(2).T. Well Site Cleared: The wellsite will be cleared of all non-essential equipment within ninety (90) days after all wells associated with the pad have been plugged and abandoned.
25	Storm Water/Erosion Control	Stormwater Management Plan contains required elements associated with PDC's construction activities for Areas 1, 2, 3, and 5, as defined in the CDPS General Permit for Stormwater Discharges Associated with Construction Activity, Authorization to Discharge Under the Colorado Discharge Permit System (Permit No. COR-030000, re-issued and effective July 1, 2007).BMPs for sediment and erosion control will be accomplished through a combination of construction techniques, vegetation and re-vegetation, administrative controls, and structural features.
26	Material Handling and Spill Prevention	To prevent adverse impacts to shallow groundwater, buried produced water vault shall be installed above an impermeable synthetic or geosynthetic liner system which shall be tied back into the surface liner.
27	Material Handling and Spill Prevention	604c.(2).K. Pit Level Indicators: PDC uses an Electronic Drilling Recorder (EDR) with pit level monitor(s) and alarm(s) for production rigs. Basic level gages are used on steel pits utilized for the surface rig.

28	Dust control	805.b(1)-(c) Odors and Dust: Oil and gas facilities and equipment will operate in a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Odors: Oil and gas operations will be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII. Dust; PDC will employ practices for control of fugitive dust caused by operations include but 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. When necessary, PDC coordinates dust mitigation with the county on gravel roads, places road base where allowed by surface owner around tanks and wellheads to minimize dust, and will water the roads and locations when dry. In addition, automation is used on all new wells to minimize truck traffic.
29	Construction	604c.(2).G. Berm Construction: Containment berms shall be constructed of steel rings with a geosynthetic liner, designed and installed to prevent leakage and resist degradation from erosion or routine operation. All berms will be visually checked periodically to ensure proper working condition. Secondary containment devices shall be sufficiently impervious to contain any spilled or released material. Due to a downgradient surface water body within 500', tertiary containment (such as an earthen berm or the like), will be installed around Production Facilities. -PDC's berm construction does provide secondary containment for 150% of the largest single tank.
30	Construction	"604c.(2).S. Access Roads: PDC will utilize the lease access road off of CR 3 (gravel) for drilling operations and maintenance equipment. The lease access road will be properly constructed and maintained to accommodate for local emergency vehicle access. Dust will be mitigated as necessary on lease access road and CR 3."
31	Construction	604c.(2).M. Fencing Requirements: The completed wellsites will be surrounded with a fence and gate. PDC personnel will monitor the wellsites regularly upon completion of the wells. Authorized representatives and/or PDC personnel shall be on-site during drilling and completion operations.
32	Construction	604c.(2).Q. Guy Line Anchors: Rig guy wires are anchored to the rig's base beam that the rig stands on, temporary and permanent anchors will not be set on this location.
33	Construction	604c.(2).R. Tank Specifications: Condensate storage tanks will be designed, constructed and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). PDC will maintain written records to verify proper design, construction and maintenance. All records will be available for inspection by the Director.
34	Noise mitigation	604c.(2).A. Noise: WELL PAD: PDC has conducted baseline noise surveys for all drilling rigs that are being contracted and has also conducted a baseline noise survey for hydraulic fracture stimulation operations on a representative horizontal well. These baseline surveys are utilized for site specific noise modeling to determine if any mitigation measures are warranted. A review was conducted to identify potential receptors within 1000 feet of the proposed pad site. There are 2 building units of concern located north-east 511 feet and north 632 feet of the proposed pad. Noise and light mitigation will be installed to the north of the pad. Methods of noise mitigation shall include but not be limited to hay bales, noise walls, or customized semi-trailers. PRODUCTION FACILITIES: It is not anticipated that noise mitigation will be necessary at the proposed tank battery location. After construction is completed, equipment installed and production begins, noise levels will be assessed to determine if mitigation measures will be required to be compliant with Rule 802.

35	Emissions mitigation	604c.(2).C. Green Completions: Flowlines, 48" HLPs, sand traps all capable of supporting green completions as described in rule 805 shall be installed at any Oil and Gas location at which commercial quantities of gas and or oil are reasonable expected to be produced based on existing wells. All green flow back equipment will be able to handle more than 1.5 times the amount of any know volumes in the surrounding field. First sign of salable gas will be put into production equipment and turned down line.
36	Drilling/Completion Operations	604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped.

Total: 36 comment(s)

### **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
19826	SITING RATIONALE
901152	SURFACE AGRMT/SURETY
1009823	CORRESPONDENCE
1009824	CORRESPONDENCE
1009825	COGCC SETBACK MAP
1345269	MULTI-WELL PLAN
1345271	LOCATION PICTURES
1668830	ACCESS ROAD MAP
1668831	HYDROLOGY MAP
1668832	LOCATION DRAWING
1668833	OTHER
1668834	FACILITY DRAWING
1668835	CULTURAL ITEMS
1668845	CORRESPONDENCE
1668846	RULE 306.E. CERTIFICATION
400700334	FORM 2A SUBMITTED
400703720	NRCS MAP UNIT DESC
400703726	WASTE MANAGEMENT PLAN
400703727	OTHER
400711568	OTHER
400721385	NRCS MAP UNIT DESC

Total Attach: 21 Files

### **General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Final Review Complete. Added four related APD's since this is now an 8 well pad.	10/20/2015 7:08:01 AM
OGLA	Operator sent 306e certification and COGCC attached	10/13/2015 3:46:35 PM
OGLA	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. No public comments. OGLA review complete and task passed.	10/12/2015 4:20:40 PM
OGLA	Emailed operator regarding access road location. Operator did not want the turn on/off from a busy road. Also concurred with unchecking the NRCS as it is cropland. Correspondence attached.	10/12/2015 4:19:42 PM
OGLA	Originally there were two locations, one with wells and production and one that was wells only. Operator combined two locations to be one location per COGCC request, by withdrawing the well only location and moving production west of the wells. COGCC attached new drawings and updated cultural distances. Correspondence is related to moving production, siting rationale, and combining locations.	10/6/2015 2:43:37 PM
Permit	Replaced multi well plan, Location pictures Corrected Surface Location per the operator.	9/29/2015 7:41:17 AM
OGLA	Additional siting rationale provided by Operator in 2/5/15 email: PDC considered many options surrounding the drill unit and could not find a better option than its current location. The property owners to the North would not allow us to put any wellheads or equipment on their property, so we had to put all 8 well heads and the production facility on the Bolton property. Drilling from the west side of the unit is not feasible per geology and there is a housing subdivision on the west side that prevents us from putting the production facility there. Using the legal window is not feasible due to drilling constraints because the kicks would be too long. Pushing the production facility any further West would bring it closer to building units and cause more permanent surface disturbance than necessary for the surface owner.	5/27/2015 1:14:33 PM
OGLA	COGCC identified the following issues on the Operator Siting Rationale that require correction - Surface Owner's Building Unit incorrectly identified, indication of Building Unit on the map where none is present, the Contacted Operator on 3/5/15 for corrections and for additional information about interactions with non-Surface Owner BU.	5/27/2015 1:09:02 PM
OGLA	Phone conversation with Operator on 2/3/15 regarding Production Facility siting. Email sent by Operator on 2/5/15, attached as correspondence. Siting rationale narrative from email placed on Form. COGCC email to Operator on 2/6/15 requesting additional explanation for siting rationale (attached as correspondence) COGCC setback map attached as correspondence. Operator responded with email on 2/12/15 (attached as Siting Rationale).	5/27/2015 8:54:15 AM
OGLA	Corresponded with operator regarding potential drainage for location of MLVTs, operator said not in a drainage area. In BMP section number 31 has information for both 604c(2)G and 604c(3)B.i, ii, and iii.	12/2/2014 2:57:19 PM
Permit	Passed completeness. NRCS Map Unit #83 added. Correct SUA attached.	11/4/2014 3:18:29 PM
Agency	Return to draft. Missing NRCS Map Unit #83 in Soil tab and attachments. SUA does not state location of surface.  Need to correct SUA on related form 2s as well.	10/30/2014 4:25:18 PM
OGLA	passed Buffer Zone completeness check. Noted that BMP #31 refers to 604.c(2)G. 604.c.(3)B applies to berms and containment areas in Exception Zone Setback Locations.	10/30/2014 2:55:42 PM
Permit	Within buffer zone, sent to OGLA for further review.	10/22/2014 7:47:26 AM

Total: 14 comment(s)