

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:

400493311

Date Received:

10/10/2013

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 427470

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:

427470

Expiration Date:

11/14/2016

☐ 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: 10071
Name: BARRETT CORPORATION* BILL
Address: 1099 18TH ST STE 2300
City: DENVER State: CO Zip: 80202

Contact Information

Name: Venessa Langmacher
Phone: (303) 312-8172
Fax: (303) 291-0420
email: vlangmacher@billbarrettcorp.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20040060 ☐ Gas Facility Surety ID: _____
☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Dutch Lake Number: 8-10H
County: WELD
QuarterQuarter: NWNW Section: 10 Township: 6N Range: 62W Meridian: 6 Ground Elevation: 4772
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: 519 feet FNL from North or South section line
230 feet FWL from East or West section line
Latitude: 40.507503 Longitude: -104.317131
PDOP Reading: 1.7 Date of Measurement: 12/16/2010
Instrument Operator's Name: Robert Kay

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>1</u>	Oil Tanks <u>3</u>	Condensate Tanks <u> </u>	Water Tanks <u> </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>	Temporary Large Volume Above Ground Tanks <u> </u>
Pump Jacks <u>1</u>	Separators <u>2</u>	Injection Pumps <u> </u>	Cavity Pumps <u> </u>	
Gas or Diesel Motors <u> </u>	Electric Motors <u>1</u>	Electric Generators <u> </u>	Fuel Tanks <u> </u>	Gas Compressors <u> </u>
Dehydrator Units <u> </u>	Vapor Recovery Unit <u> </u>	VOC Combustor <u>1</u>	Flare <u>1</u>	LACT Unit <u> </u>
				Pigging Station <u> </u>

OTHER FACILITIES

Other Facility Type

Number

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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

One gas pipeline up to 8 inch in diameter, one water line up to 4 inch in diameter and one residue line up to 4 inch in diameter would be installed. Pipelines would be constructed of steel, polyethylene or fiberglass.

CONSTRUCTION

Date planned to commence construction: 10/14/2013 Size of disturbed area during construction in acres: 4.86
Estimated date that interim reclamation will begin: 04/14/2014 Size of location after interim reclamation in acres: 1.64
Estimated post-construction ground elevation: 4772

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H₂S 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?

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Land application

Cutting Disposal: Cuttings Disposal Method:

Other Disposal Description:

Mud and Cuttings will be hauled to Krier Spreadfield.

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: Phone:

Address: _____

Fax: _____

Address: _____

Email: _____

City: _____ State: _____ Zip: _____

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: _____

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): _____

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

Distance to nearest:

Building: 932 Feet
Building Unit: 932 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 977 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 1633 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.

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: _____

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: 72; Vona Loamy Sand, 0-3% slopes

NRCS Map Unit Name: 74; Vona Loamy Sand, 5-9% 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: 12/16/2010

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: 210 Feet

water well: 1088 Feet

Estimated depth to ground water at Oil and Gas Location 85 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 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: _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule _____

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

This Form 2A is only being submitted to amend the facilities and add the surface owner agreement. The facilities listed on this form should completely replace what was previously approved. The Temporary Large Volume Storage Tank (TLVST) will remain on location for approximately one month.

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

Signed: _____ Date: 10/10/2013 Email: vlangmacher@billbarrettcorp.com

Print Name: Venessa Langmacher Title: Sr Permit 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: 11/15/2013

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>
	LVSTs may only be utilized for the storage of freshwater obtained legally from an adjudicated consumable water supply. E&P wastes, including treated E&P wastes and flowback during hydraulic fracturing operations, are not allowed.
	Signs shall be posted on each TLVST to indicate contents are freshwater and that no E&P waste fluids are allowed. Location and additional signage shall conform to Rule 210.
	Access to the tanks shall be limited to operational personnel.
	TLVSTs will be brought into service incrementally, by loading to 25%, 50%, 75%, and 100% capacity (subject to freeboard) and held at each level without leaks for 24-hours prior to increasing load.
	TLVSTs will be operated with a minimum of 1 foot freeboard.
	COGCC Rules 604.a. and 605.a.(2,3,5,6,7, and 8), as applicable to tank setbacks at the time of installation shall apply to the siting of TLVSTs.
	Operators or their designated representatives shall conduct regular visual inspections of the exterior wall and general area for any integrity deficiencies. These inspections will be recorded and maintained for a period of at least 5 years per Rule 205. Inspection records shall be provided to the COGCC upon request.
	TLVSTs shall not be located on non-engineered fill material. If areas are to be graded and disturbed, the operator shall conduct such activity in accordance with COGCC Rules 1002.b. and 1002.c.
	Should a failure of TLVST integrity occur, operator shall notify COGCC upon discovery, report the incident to COGCC on a Form 22-Accident Report within 10 days and shall conduct a "root cause analysis" and provide it to COGCC on a Form 4-Sundry Notice within 30 days of the failure.
	Site preparation and installation oversight will be provided by a Professional Engineer or their designated representative.
	All liner seams shall be welded at the liner manufacturers facility; field welded liners shall not be used. If liners are re-used, liner installation shall be noticed on a Form 42 to COGCC 48-hours prior to installation. If liners are re-used, liner installation shall be noticed on a Form 42 to the COGCC 48-hours prior to installation.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	<p>Large Volume Above Ground Storage Tanks: BBC will be utilizing one 40,000 bbls tanks provided by Well Water Solutions. The tank is approximately 156 feet in diameter and 12 feet tall. Well Water Solution's tanks are manufactured in accordance with designs and specifications that have been reviewed and certified by a Professional Engineer. The tanks will be erected by Well Water Solutions or a contractor authorized by Well Water Solutions to set up their tanks. The tanks will be filled with fresh water obtained from local fresh water sources. The tanks will be placed within the perimeter berm that will be constructed around the entire pad.</p> <p>We make our best efforts to put the LVST on the cut portion of location, so it is not on fill if at all possible. We also bring in dirt and create a solid, flat, and level area for the tank to sit on before the vender starts work on the tank. Then the vender digs a small trench and lays down a geo pad before starting to assemble the tank.</p> <p>During initial pad construction, compactors are utilized along with wetting of soil while compacting. This is standard BBC procedure when equipment is placed on fill. Also all fittings and flow lines are schedule 80 (2400 psi WP) along with all connections being welded. Tanks will be placed on a bed of sand with a 36 mil synthetic liner that is attached to 3' corrugated containment.</p> <p>Please see diagrams and contingency plan attached.</p>

Total: 1 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1667913	FACILITY LAYOUT DRAWING
1667914	CORRESPONDENCE
400493311	FORM 2A SUBMITTED
400493326	SURFACE AGRMT/SURETY
400493327	OTHER
400493328	OTHER

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Oper. submitted 2A to add Large Volume Storage Tank (LVST) to existing location with currently drilling well. All COA's attached to the previously approved 2A still apply. No LGD or public comments. Final Review--passed.	11/11/2013 10:31:37 AM
OGLA	Revised operator BMP to indicate only one Temporary Large Volume Storage Tank (TLVST) will be used. While site is within the Buffer Zone due to nearby house, the nearest Building Unit owner is the surface owner and a SUA is in place which addresses the pre-app notification issue. Operator is claiming the Rule 604.b.(1) A Exception Location as the well and location have already been permitted and drilled. OGLA review complete and task passed.	11/8/2013 8:57:32 AM
Permit	Passed completeness. See operator's comments in Submit tab.	10/17/2013 6:13:00 AM
Permit	Returned to draft. Fewer number of facilities on this form than already approved. Asked opr to clarify whether they are adding or subtracting facilities.	10/11/2013 2:06:17 PM

Total: 4 comment(s)