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

Oil and Gas Location Assessment

Document Number: 400567017

Date Received:

Location ID:

Expiration Date:

☒ 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.

☒ 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: Pappenheim C-W2 Number: 6-62-27_26

County: WELD

QuarterQuarter: SWNW Section: 27 Township: 6N Range: 62W Meridian: 6 Ground Elevation: 4733

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: 2300 feet FNL from North or South section line

205 feet FWL from East or West section line

Latitude: 40.458070 Longitude: -104.317490

PDOP Reading: 2.0 Date of Measurement: 02/03/2014

Instrument Operator's Name: Wyatt Hall

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:	LOCATION ID #	FORM 2A DOC #
Production Facilities Location serves Well(s)	435044	
	432657	

FACILITIES

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

Wells	2	Oil Tanks	10	Condensate Tanks		Water Tanks	2	Buried Produced Water Vaults	
Drilling Pits		Production Pits		Special Purpose Pits		Multi-Well Pits		Temporary Large Volume Above Ground Tanks	2
Pump Jacks	2	Separators	10	Injection Pumps	2	Cavity Pumps			
Gas or Diesel Motors		Electric Motors	8	Electric Generators	2	Fuel Tanks		Gas Compressors	1
Dehydrator Units		Vapor Recovery Unit	1	VOC Combustor	3	Flare	1	LACT Unit	
								Pigging Station	1

OTHER FACILITIES

Other Facility Type	Number
Vapor Recovery Tower	3

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: 05/01/2014 Size of disturbed area during construction in acres: 7.40

Estimated date that interim reclamation will begin: 12/01/2014 Size of location after interim reclamation in acres: 3.50

Estimated post-construction ground elevation: 4732

DRILLING PROGRAM

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

Is H_2S 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: Other

Cutting Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

Cuttings from the vertical portion of the well(s) will be hauled to Krier Spread field. Cuttings from the lateral portion of the wellbore(s) will be hauled to a commercial disposal facility OR treated to meet table 910 standards then hauled to Krier.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: or Document Number: 430225

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Betty & Ronald Pappenheim Phone:
Address: 20112 WCR 76 Fax:
Address: Email:
City: Eaton State: CO Zip: 80615
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

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:	3235	Feet
Building Unit:	3467	Feet
High Occupancy Building Unit:	5280	Feet
Designated Outside Activity Area:	5280	Feet
Public Road:	4291	Feet
Above Ground Utility:	5280	Feet
Railroad:	5280	Feet
Property Line:	250	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 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: _____

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: 02/03/2014

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: 1586 Feet

Estimated depth to ground water at Oil and Gas Location 95 Feet

Basis for depth to groundwater and sensitive area determination:

Static Water Level of nearby water well.

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: No

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 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: Please see storm water best management practices in regards to the distance to the nearest surface water being 0' due to a stream running thru the pad on the NE corner.

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

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

Best Management Practices

No	BMP/COA Type	Description
1	Drilling/Completion Operations	Large Volume Above Ground Storage Tanks: BBC will be utilizing 2 40,000 bbls tanks provided by Well Water Solutions. The tanks are 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. The tanks will be placed on cut only. 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. During initial pad construction, compactors are utilized along with wetting of soil while compacting. This is standard BBC procedure. 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. The tank(s) will be on location for approximately 1 month. Freshwater will be obtained from Bluewater Resources Depot in Windsor, CO; an industrial water depot. Please see diagrams and contingency plan attached.

2	Storm Water/Erosion Control	GENERAL • Utilize diking and other forms of containment and diversions around tanks, drums, chemicals, liquids, pits, impoundments, or well pads • Use drip pans, sumps, or liners where appropriate • Limit the amount of land disturbed during construction of pad, access road, and facilities • Employ spill response plan (SPCC) for all facilities • Dispose properly offsite any wastes fluids and other materials MATERIAL HANDLING, ACTIVITIES, PRACTICES AND STORM WATER DIVERSION • Secondary containment of tanks, drums, and storage areas is mandatory to prohibit discharges to surface waters. A minimum of 110% capacity required of largest storage tank within a containment area • Material handling and spill prevention procedures and practices will be followed to help prohibit discharges to surface waters • Proper loading, and transportation procedures to be followed for all materials to and from locations EROSION CONTROL • Pad and access road to be designed to minimize erosion • Pad and access road to implement appropriate erosion control devices where necessary to minimize erosion • Routine inspections of sites and controls to be implemented with additions, repairs, and optimization to occur as necessary to minimize erosion SELF INSPECTION, MAINTENANCE, AND HOUSEKEEPING • All employees are trained in spill response, good housekeeping, material management practices, and procedures for equipment and container washing annually • Conduct internal storm water inspections per applicable stormwater regulations • Conduct routine informal inspections of all tanks and storage facilities at least weekly • All containment areas are to be inspected weekly or following a heavy rain event. • Any excessive precipitation accumulation within containment should be removed as appropriate and disposed of properly • All structural berms, dikes, and containment will be inspected periodically to ensure they are operating correctly SPILL RESPONSE Spill response procedures as per the BBC field SPCC Plan VEHICLE & LOCATION PROCEDURES • Vehicles entering location are to be free of chemical, oil, mud, weeds, trash, and debris • Location to be treated to kill weeds and bladed when necessary

3	Drilling/Completion Operations	Large Volume Above Ground Storage Tanks: BBC will be utilizing 2 40,000 bbls tanks provided by Well Water Solutions. The tanks are 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. The tanks will be placed on cut only. 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. During initial pad construction, compactors are utilized along with wetting of soil while compacting. This is standard BBC procedure. 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. The tank(s) will be on location for approximately 1 month. Freshwater will be obtained from Bluewater Resources Depot in Windsor, CO; an industrial water depot. Please see diagrams and contingency plan attached.

Total: 3 comment(s)

Attachment Check List

Att Doc Num	Name
400567118	LOCATION DRAWING
400567122	ACCESS ROAD MAP
400567127	HYDROLOGY MAP
400567128	LOCATION PICTURES
400567129	REFERENCE AREA MAP
400567130	REFERENCE AREA PICTURES
400567131	MULTI-WELL PLAN
400567132	FACILITY LAYOUT DRAWING
400567133	SURFACE AGRMT/SURETY
400567134	OTHER
400567135	OTHER
400567136	WASTE MANAGEMENT PLAN
400567140	NRCS MAP UNIT DESC

Total Attach: 13 Files

General Comments

User Group	Comment	Comment Date

Total: 0 comment(s)