

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:

400866170

(SUBMITTED)

Date Received:

07/10/2015

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 440569

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:

440569

Expiration Date:

☐ 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: 10261
Name: BAYSWATER EXPLORATION AND PRODUCTION LLC
Address: 730 17TH ST STE 610
City: DENVER State: CO Zip: 80202

Contact Information

Name: Jeff Annable
Phone: (303) 928-7128
Fax: (303) 218-5678
email: regulatory@petro-fs.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20080034 ☐ Gas Facility Surety ID: _____
☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Sherley Number: 4-9H Facility
County: WELD
Quarter: NWNW Section: 4 Township: 5N Range: 65W Meridian: 6 Ground Elevation: 4642
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: 818 feet FNL from North or South section line
1023 feet FWL from East or West section line
Latitude: 40.433393 Longitude: -104.674080
PDOP Reading: 1.9 Date of Measurement: 10/03/2014
Instrument Operator's Name: Bart Pfeifer

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)

440536

FACILITIES

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

Wells	Oil Tanks*	21	Condensate Tanks*	Water Tanks*	3	Buried Produced Water Vaults*	
Drilling Pits	Production Pits*		Special Purpose Pits	Multi-Well Pits*		Modular Large Volume Tanks	1
Pump Jacks	Separators*	10	Injection Pumps*	Cavity Pumps*		Gas Compressors*	3
Gas or Diesel Motors*	Electric Motors		Electric Generators*	Fuel Tanks*		LACT Unit*	
Dehydrator Units*	Vapor Recovery Unit*		VOC Combustor*	Flare*		Pigging Station*	

OTHER FACILITIES*

Other Facility Type

Number

Emmission Control Device	5
Meter House	1
Vapor Recovery Tower	4

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:

2" steel flowlines from wellheads to separators carrying oil, gas and water.
2" steel gas supply line from Gas Compressors to wellheads.

Facility Layout attached.

CONSTRUCTION

Date planned to commence construction: 08/06/2015

Size of disturbed area during construction in acres: 1.29

Estimated date that interim reclamation will begin: 02/06/2016

Size of location after interim reclamation in acres: 0.68

Estimated post-construction ground elevation: 4642

DRILLING PROGRAM

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

Is H₂S anticipated? _____

Will salt sections be encountered during drilling: _____

Will salt based mud (>15,000 ppm Cl) be used? _____

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: _____

Drilling Fluids Disposal Method: _____

Cutting Disposal: _____

Cuttings Disposal Method: _____

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Brian K. Harrell

Phone: _____

Address: 288 1st Avenue

Fax: _____

Address: _____

Email: _____

City: Greeley State: CO Zip: 80631

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☒ is the mineral owner

☒ is committed to an oil and Gas Lease

☒ has signed the Oil and Gas Lease

☐ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation _____

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.

	From WELL	From PRODUCTION FACILITY
Building:	Feet	510 Feet
Building Unit:	Feet	618 Feet
High Occupancy Building Unit:	Feet	5280 Feet
Designated Outside Activity Area:	Feet	5280 Feet
Public Road:	Feet	638 Feet
Above Ground Utility:	Feet	629 Feet
Railroad:	Feet	4016 Feet
Property Line:	Feet	52 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: 10/06/2014

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 (onll 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.

Bayswater Exploration & Production LLC (Bayswater) designed the Sherley 4-9H Facility to be a safe distance from neighboring houses and buildings, clear of the 100 year flood plain and located efficiently for regular maintenance and access. Bayswater agree upon an oil and gas operations area per the landowner/ operator Surface Use Agreement pertaining to the horizontal wells. And where possible, consolidation of existing facilities has been attempted to keep the disturbed area to a minimum. Bayswater feels this Facility's location is the best option given the property boundaries, utility easements and current COGCC setbacks.

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: 3-Aquolls and Aquepts - gravelly substratum

NRCS Map Unit Name: 68-Ustic Torriorthents - Moderately steep

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: 10/03/2014

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: 470 Feet

Estimated depth to ground water at Oil and Gas Location 5 Feet

Basis for depth to groundwater and sensitive area determination:

Distance to nearest downgradient water feature is a Ditch.

The landowner is going to reroute the ditch that runs through the location. There is a dry pond bed that will be grated flat in order to build the site.

This location falls within the 500yr floodplain.

Nearest water well is CDWR Permit #74793.

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 N/A

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 amended 2A is being submitted in order to add an MLVT. Nothing else has changed since the original 2A was approved.

Engineering plans for the MLVT have been attached as OTHER.

The Proposed MLVT will be less than 500' from a BU. Operator has scheduled a meeting to discuss siting rationale for placing the MLVT within the exception zone. The MLVT is planned to be on-site as soon as this Form 2A is approved.

Letter to Director for COGCC Rule 303b.(3)J.iii. Building Unit Owner Pre-Application Notification receipts, attached as Correspondence.

There were four (4) Building Unit Owners (BUOs) in which letters were returned. A second attempt to contact the BUOs was made through different means of mailing. The letters were returned a second time. The Operator then sent someone out to the area to go door-to-door in an attempt to reach the BUOs. They were again unsuccessful in reaching anyone. The operator has put forth a good faith effort into reaching the BUOs in the area.

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

Signed: _____

Date: 07/10/2015

Email: regulatory@petro-fs.com

Print Name: Jeff Annable

Title: Regulatory Technician

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.

Best Management Practices

No	BMP/COA Type	Description
1	Planning	A meeting with the surface owner will determine the fencing plan. Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks are visually inspected once a day for issues, and recorded inspections are conducted once a month.
2	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.
3	General Housekeeping	Visual Impacts: Equipment, regardless of construction date, which are observable from any public highway shall 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. 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. Operator shall keep the Surface Use Area as well as any roads or other areas used by Operator safe and in good order, including control of noxious weeds litter and debris.
4	Storm Water/Erosion Control	Use water bars, and other measures to prevent erosion and non-source pollution. Implement and maintain BMPs to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation. Co-locate gas and water gathering lines whenever feasible, and mitigate any erosion problems that arise due to the construction of any pipeline(s).

5	Material Handling and Spill Prevention	<p>Leak Detention Plan: Pumper will visit the location daily and visually inspect all tanks and fittings for leaks. Additionally, monthly documented SPCCP inspections are conducted pursuant to 40 CFR 112.</p> <p>Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25' from the tanks or separators. Electrical equipment shall comply with API IRP 500 and will comply with the current national electrical code.</p> <p>Operator shall comply with state and federal laws, rules and regulations governing the presence of any petroleum products, toxic or hazardous chemicals or wastes on the Subject lands.</p>
6	Dust control	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, or automation of wells to reduce truck traffic may also be required if technologically feasible and economically reasonable to minimize fugitive dust emissions.
7	Construction	<p>Berm Construction- Tanks 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 periodically to ensure proper working condition.</p> <p>Containment berms shall be constructed and designed to prevent leakage and resist degradation from erosion or routine operation. Tertiary containment, such as an earthen berm, will be installed as required for Production Facilities within 500 feet of a downgradient surface water feature. All berms will be visually checked periodically to ensure proper working condition.</p> <p>All equipment will be anchored to the extent necessary to resist flotation, collapse, lateral movement, or subsidence.</p> <p>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.</p>
8	Noise mitigation	The Operator will stay under the maximum permissible noise levels stated in COGCC Rule 604.c.(2)A. If necessary the operator will use appropriately sized sound walls that will be installed around compressors to dampen noise.
9	Emissions mitigation	Green Completions - Measures will be undertaken to reduce emissions of salable gas and condensate vapors during cleanout and flowback operations prior to the well being placed on production. Test separators, associated flow lines and sand traps shall be installed on-site to accommodate Green completions techniques. Bayswater is working with a midstream operators and will tie into their system for gas transportation and sales as soon as there are salable quantities of gas.
10	Odor mitigation	<p>Equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare.</p> <p>Oil and gas operations shall 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.</p>
11	Interim Reclamation	Operator shall be responsible for segregating the topsoil, backfilling, repacking, reseeding, and recontouring 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.
12	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. The Operator shall restore the surface of the Land affected by such terminated operations as near as possible to the previous state that existed prior to operations.

Total: 12 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400866170	FORM 2A SUBMITTED
400866275	ACCESS ROAD MAP
400866277	HYDROLOGY MAP
400866278	FACILITY LAYOUT DRAWING
400866279	LOCATION DRAWING
400866280	LOCATION PICTURES
400866282	REFERENCE AREA MAP
400866337	REFERENCE AREA PICTURES
400866343	CORRESPONDENCE
400866359	OTHER
400866367	NRCS MAP UNIT DESC
400866368	NRCS MAP UNIT DESC

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Returned to draft. Waste Management Plan attachment is missing.	7/14/2015 3:23:54 PM
OGLA	Buffer Zone completeness review - No BMP for compliance with COGCC MLVT policy, missing certain applicable Rule 604.c.(2) mitigation measures including but not limited to; 604.c.(2)A - Noise. Confirm whether MLVT will be >500 feet from a Building Unit, Emissions Mitigation BMP - anticipated absence of sales line requires further explanation and distance to viable line. Return to DRAFT	7/14/2015 2:50:54 PM
OGLA	Buffer Zone completeness review - No BMP for compliance with COGCC MLVT policy, missing certain applicable Rule 604.c.(2) mitigation measures including but not limited to; 604.c.(2)A - Noise. Confirm whether MLVT will be >500 feet from a Building Unit, Emissions Mitigation BMP - anticipated absence of sales line requires further explanation and distance to viable line. Return to DRAFT	7/13/2015 5:23:13 PM
Permit	Referred to OGLA Supervisor for buffer zone review.	7/13/2015 12:18:13 PM

Total: 4 comment(s)