

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:

400517696

Date Received:

02/24/2014

Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: 433341

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:

**433341**

Expiration Date:

**05/21/2017**

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: Sonia Stephens  
 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: MSH Farms    Number: 15-P Pad  
 County: WELD  
 Quarter: SWSW    Section: 15    Township: 7N    Range: 67W    Meridian: 6    Ground Elevation: 5054

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: 205 feet FSL from North or South section line  
 1041 feet FWL from East or West section line  
 Latitude: 40.567522    Longitude: -104.885123  
 PDOP Reading: 2.2    Date of Measurement: 03/29/2013  
 Instrument Operator's Name: Alan Hnizdo

## 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>4</u>	Oil Tanks	<u>4</u>	Condensate Tanks	<u>      </u>	Water Tanks	<u>2</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>      </u>	Separators	<u>2</u>	Injection Pumps	<u>      </u>	Cavity Pumps	<u>      </u>		
Gas or Diesel Motors	<u>      </u>	Electric Motors	<u>      </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>2</u>	Flare	<u>      </u>	LACT Unit	<u>      </u>
								Pigging Station	<u>      </u>

## OTHER FACILITIES

Other Facility Type

Number

<input type="text"/>	<input type="text"/>
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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Flowline from the wellhead to the separator is a 2" steel line and it carries all products...oil, gas & water.

## CONSTRUCTION

Date planned to commence construction: 07/01/2014 Size of disturbed area during construction in acres: 2.38

Estimated date that interim reclamation will begin: 10/15/2014 Size of location after interim reclamation in acres: 1.19

Estimated post-construction ground elevation: 5054

## 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: Other

Cutting Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

Reeves Mud Field COGCC Facility 435839 will be used for offsite disposal.

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: MSH Farms, LLC

Phone: N/A

Address: 39943 CR 19

Fax: N/A

Address: \_\_\_\_\_

Email: N/A

City: Fort Collins State: CO Zip: 80202

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

Distance to nearest:

Building: 618 Feet  
Building Unit: 618 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 204 Feet  
Above Ground Utility: 176 Feet  
Railroad: 5280 Feet  
Property Line: 206 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: 01/07/2014

## 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: 32-Kim Loam 1-3%  
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: 03/29/2013  
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: 183 Feet

water well: 2907 Feet

Estimated depth to ground water at Oil and Gas Location 19 Feet

Basis for depth to groundwater and sensitive area determination:

State of Colorado Division of Water Resources Division

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 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 603.a.(1)

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

Operator is amending previously approved Form 2A to add two new wells to the existing pad. Exception to COGCC Rule 604.b.(1)A. applies. Rule 303.b.(3)J.iii receipt certifications for Rule 305.a.(2) pre-application notifications to Building Unit Owners attached, labeled as "Other". Operator seeking 502.b. Variance for proximity to above ground utility being less than 200'.

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

Signed: \_\_\_\_\_ Date: 02/24/2014 Email: regulatory@petro-fs.com

Print Name: Sonia Stephens 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: 5/22/2014

### 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	Closed Loop Drilling: A closed loop drilling system will be used within the required Buffer Zone Setback to preclude the use of earthen pits.
2	Planning	Pits are not planned for this location.
3	Planning	When feasible, develop multi well sites by using directional drilling to reduce cumulative and adverse impacts on human and wildlife populations.
4	Planning	The pumper will visit the location daily to visually monitor the production facilities for leaks.
5	Planning	BOPE: Blowout prevention equipment will include a double ram and an annular preventer. The drilling company will have a valid blowout prevention certification. Adequate BOPE will be used for well servicing operations.
6	Planning	All materials deemed as fire hazards, will be kept at a distance of 25 feet from the wellhead and equipment. Electrical equipment shall comply with API RP 500 and will comply with the current national electrical code.
7	Planning	Pursuant to COGCC 207.a. ("Policy"), Bayswater Exploration & Production, LLC, acknowledges and will comply with said policy for Bradenhead Monitoring during hydraulic fracturing treatments in the Greater Wattenberg Area (GWA), dated May 29, 2012.
8	Planning	Anti-collision: Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed well path with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottom hole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, an as-constructed gyro survey will be submitted to COGCC with the Form 5.
9	Planning	Drill stem tests: NA, no Drill Stem tests are planned.
10	Community Outreach and Notification	During the Rule 306 consultation, a mitigation plan to address local concerns may be developed for specific considerations not already addressed by the BMPs.
11	Traffic control	A traffic and access plan has been coordinated with the Weld County prior to commencement of construction and drilling operations.
12	General Housekeeping	The well site will be fenced after drilling to restrict public and wildlife access.
13	General Housekeeping	Well site location, road and the pipeline easement will be kept free of noxious weeds, litter and debris. All materials connected with operations shall be removed from the property.

14	General Housekeeping	During construction, all leasehold roads are to be constructed to accommodate local emergency vehicle access requirements and maintained in good condition. Spray for noxious weeds and implement dust control as needed.
15	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).
16	Material Handling and Spill Prevention	Rule 604.c.(2)F. 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.
17	Construction	Remove only the minimum amount of vegetation necessary for the construction of roads and facilities. Conserve topsoil during excavation and reuse as cover on disturbed areas to facilitate regrowth of vegetation. No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment.
18	Noise mitigation	Rule 604.c.(2)A. Noise: All operations will be subject to the maximum permissible noise levels of 55 db, as measured at the nearest Building Unit, and shall be mitigated by either the use of a hay bale or commercial wall sound barrier. Baseline rig noise levels will be obtained prior to moving to location in order to properly plan the mitigation measures necessary for this sight. Light sources will be directed downwards and away from occupied Building Units when possible. There will be no permanently installed lighting on site.
19	Emissions mitigation	Rule 604.c.(2)C. 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. In the anticipated absence of a viable gas sales line, the flowback gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for least the first 90-days of production pursuant to CDPHE rules. This ECD shall have an adequate capacity for 1.5 times the largest flowback within a 10 mile radius, will be flanged to route gas to other or permanent oxidizing equipment and shall be provided with the equipment needed to maintain combustions where non-combustible gases are present. 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.
20	Interim Reclamation	Interim Reclamation Utilize only such area around each producing well as is reasonably necessary. Restore the remainder of the well site location to its original condition within a reasonable time after the completion of operations. All reseeded shall be done with grasses consistent with the Rocky Mountain native mix or other grasses reasonably requested by surface owner and during planting period suggested by Owner.
21	Final Reclamation	All surface restoration shall be accomplished to the satisfaction of Owner. All reseeded shall be done with grasses consistent with the Rocky Mountain native mix or other grasses reasonably requested by surface owner and during planting period suggested by Owner. Final reclamation shall be completed to the reasonable satisfaction of the Owner as soon as practical after installation (weather permitting) and in accordance with regulatory agency standards (BLM/COGCC).

Total: 21 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1668267	30 DAY NOTICE LETTER
1668268	RULE 306.E. CERTIFICATION
1668269	CORRESPONDENCE
1668312	VARIANCE REQUEST
1668313	CORRESPONDENCE
1668316	CORRESPONDENCE
2167764	LEGAL/LEASE DESCRIPTION
400517696	FORM 2A SUBMITTED
400552676	LOCATION DRAWING
400552678	LOCATION PICTURES
400552679	ACCESS ROAD MAP
400552682	HYDROLOGY MAP
400553151	NRCS MAP UNIT DESC
400553153	WASTE MANAGEMENT PLAN
400558011	MULTI-WELL PLAN

Total Attach: 15 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Attached Lease as per opr. Lease map and SUA attached to previously permitted form 2's (API 123-37590 & 123- 37591) Final review complete.	5/22/2014 12:39:03 PM
OGLA	IN PROCESS - Operator provided an updated date they plan to commence construction, more detailed noise and emissions BMP, and a Leak Detection BMP. No Public Comments. OGLA review complete and task passed.	5/22/2014 9:35:05 AM
OGLA	Director Lepore has granted the Variance Request. Operator to provide an updated date they plan to commence construction, a more site specific noise mitigation BMP, a more specific emissions BMP, and a leak detection plan BMP.	5/19/2014 8:58:25 AM
Permit	OGLA is working with Opr for variance to utility.	5/2/2014 10:01:48 AM
OGLA	Site visit conducted on 3/6/14. Small berm present on east side of pad providing some visual mitigation to nearby Building Unit owners.	3/11/2014 10:03:07 AM
Permit	Putting form on hold for opr to submit variance request letter and waivers.	3/10/2014 8:59:52 AM
Permit	Previous 2A did not require same setbacks. Will need variance request letter and waiver for 502.b.; Right to construct is SUA not lease, as minerals produced are not beneath this location New form 2 not listed in related doc's.	3/6/2014 10:20:09 AM
Permit	Passed completeness.	2/25/2014 7:19:28 AM

Total: 8 comment(s)