

FORM  
2A

Rev  
04/01

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:

400433345

Date Received:

06/14/2013

Oil and Gas Location Assessment

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

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a standalone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this 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. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

**433746**

Expiration Date:

**07/25/2016**

This location assessment is included as part of a permit application.

1. 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.

2. Operator

Operator Number: 10261

Name: BAYSWATER EXPLORATION AND PRODUCTION LLC

Address: 730 17TH ST STE 610

City: DENVER State: CO Zip: 80202

3. Contact Information

Name: Ann L. Stephens

Phone: (303) 928.7128

Fax: (303) 962.6237

email: astephens@petro-fs.com

4. Location Identification:

Name: Badger Creek Number: 22-32B

County: ADAMS

Quarter: SWNE Section: 22 Township: 2S Range: 57W Meridian: 6 Ground Elevation: 4651

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 2227 feet FNL, from North or South section line, and 1461 feet FEL, from East or West section line.

Latitude: 39.864818 Longitude: -103.747518 PDOP Reading: 4.4 Date of Measurement: 04/25/2013

Instrument Operator's Name: David MacDonald

5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

Special Purpose Pits: <input type="checkbox"/>	Drilling Pits: <input type="checkbox"/> <u>1</u>	Wells: <input type="checkbox"/> <u>1</u>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="checkbox"/>	Separators: <input type="checkbox"/> <u>1</u>	Electric Motors: <input type="checkbox"/> <u>1</u>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="checkbox"/>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="checkbox"/> <u>1</u>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="checkbox"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="checkbox"/> <u>1</u>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="checkbox"/>	Oil Tanks: <input type="checkbox"/> <u>1</u>	Fuel Tanks: <input type="checkbox"/>	

Other: 1 heater/treater; flare to capture vapor emissions from oil tank

6. Construction:

Date planned to commence construction: 07/19/2013 Size of disturbed area during construction in acres: 1.57  
Estimated date that interim reclamation will begin: 01/20/2014 Size of location after interim reclamation in acres: 0.79  
Estimated post-construction ground elevation: 4651 Will a closed loop system be used for drilling fluids: Yes  No   
Will salt sections be encountered during drilling: Yes  No  Is H2S anticipated? Yes  No   
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes  No   
Mud disposal: Offsite  Onsite  Method: Land Farming  Land Spreading  Disposal Facility   
Other: drilling/reserve pit

### 7. Surface Owner:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_ Fax: \_\_\_\_\_  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Date of Rule 306 surface owner consultation: \_\_\_\_\_  
Surface Owner:  Fee  State  Federal  Indian  
Mineral Owner:  Fee  State  Federal  Indian  
The surface owner is:  the mineral owner  committed to an oil and gas lease  
 is the executer of the oil and gas lease  the applicant  
The right to construct the location is granted by:  oil and gas lease  Surface Use Agreement  Right of Way  
 applicant is owner  
Surface damage assurance if no agreement is in place:  \$2000  \$5000  Blanket Surety ID \_\_\_\_\_

### 8. Reclamation Financial Assurance:

Well Surety ID: 20100112  Gas Facility Surety ID: \_\_\_\_\_  Waste Mgmt. Surety ID: \_\_\_\_\_

### 9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes  No   
Distance, in feet, to nearest building: 2787, public road: 1252, above ground utility: 602,  
railroad: 5280, property line: 1205

### 10. 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

### 11. 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

### 12. Soils:

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.gov/> 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: Lu Loamy alluvial land

NRCS Map Unit Name: \_\_\_\_\_  
NRCS Map Unit Name: \_\_\_\_\_

### 13. 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): \_\_\_\_\_

### 14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area:  No  Yes Was a Rule 901.e. Sensitive Areas Determination performed:  No  Yes  
Distance (in feet) to nearest surface water: 120, water well: 1929, depth to ground water: 11  
Is the location in a riparian area:  No  Yes Was an Army Corps of Engineers Section 404 permit filed  No  Yes  
Is the location within a Rule 317B Surface Water Suppl Area buffer zone:  
 No  0-300 ft. zone  301-500 ft. zone  501-2640 ft. 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:  No  Yes

### 15. Comments:

rig height is 97'; related document includes Form 2 Doc #400433324; operator plans to dispose of all mud material onsite in the drilling/reserve pit as defined in Rule 903.c.; the use of a flare onsite is to capture vapor emissions from oil tank for air quality standards

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

Signed: \_\_\_\_\_ Date: 06/14/2013 Email: astephens@petro-fs.com

Print Name: Ann L. Stephens Title: Regulatory Manager

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: 7/26/2013

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_

**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.**

Shallow groundwater potentially underlies the proposed location (at 15 bgs or less). Therefore if drilling pits intercept saturated soil or groundwater, the pit must be lined or a closed loop system must be used.

### Attachment Check List

Att Doc Num	Name
1534262	REVISED WASTE MGMT PLAN
400433345	FORM 2A SUBMITTED
400433397	ACCESS ROAD MAP
400433398	HYDROLOGY MAP A, TOPO
400433400	LOCATION DRAWING
400433401	LOCATION PICTURES
400433405	REFERENCE AREA MAP
400433406	REFERENCE AREA PICTURES
400433408	NRCS MAP UNIT DESC
400433409	WASTE MANAGEMENT PLAN

Total Attach: 10 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed. Note LGD comments.	7/24/2013 7:22:29 AM
OGLA	email to operator requesting plans for protection of adjacent Badger Creek. BMP from operator entered into form (BMP #9), operator agreed to COA	6/26/2013 4:09:32 PM
LGD	It appears as though existing access roads will be used. If the access points will change, a new access map will have to be submitted. An Oil and Gas Drilling Rig Move permit will be required when the rig is moved into and out of this location. If it is decided to place the well into production, an On-Site Facilities Permit will also be required. Please contact Mr. Mark Russel at 720-523-6821 for information regarding these permits.	6/19/2013 4:43:53 PM
Permit	Removed surface bond as per opr. Form passes completeness.	6/17/2013 9:55:47 AM

Total: 4 comment(s)

### BMP

Type	Comment
Site Specific	<ul style="list-style-type: none"> <li>- The facilities, separation and oil storage equipment plus evaporation ponds will be fenced to restrict public and wildlife access.</li> <li>- The well site locations, facilities and the roads will be kept free of noxious weeds, litter and debris.</li> <li>- Spraying for noxious weeds will be applied as needed.</li> <li>- Operator will manage all facilities such that secondary containment berms and evaporation ponds are within the specifications set forth in the COGCC rules.</li> <li>- Gates and fences will be constructed and maintained where necessary.</li> <li>- All lease roads used by operator, its employees, or contractors will be graded and maintained such that water can drain properly.</li> <li>- Mist systems are proposed for the evaporation ponds to aide in the rates of water handling and control of levels in the ponds during summer/peak evaporation months.</li> <li>- Daily visits from field pumpers will record pond levels and make adjustments to production if necessary.</li> </ul>
Site Specific	<p>Pit Monitoring/Inspection</p> <ul style="list-style-type: none"> <li>- Drilling personnel/site supervisor will monitor the earthen drilling pit fluid level to ensure the minimum required two (2) feet of freeboard is maintained at the drill site.</li> <li>- Once drilling operations are completed, Operator personnel &amp; pumper will inspect the evaporation ponds on a daily basis. Adjustments can be made daily if needed to well cycles, shutting in of a well and diverting water to pits that have more freeboard available. Pumpers will also monitor the condition of the fencing, pipeline routes, wells, pumps and facilities in general for observations of abnormal activity and operations. Records will be kept documenting pit monitoring levels and inspection.</li> <li>- When applicable, fluids will be delivered to and/or removed from the pit from a single, designated access point. The access point shall be clearly identified and shall be constructed and utilized to prevent damage to the liner system from operators and contractors placing or removing hoses into or from the pit during fluid transfer.</li> </ul>
Planning	<ul style="list-style-type: none"> <li>- When feasible, develop one unified separation/treatment and oil tank storage facility for multiple wells to reduce cumulative impacts, multiple facility footprints and adverse impacts on wildlife resources.</li> <li>- Plan for growth upfront in the design process such that tanks or water handling facilities can be added with minimal ground disturbance later in development or drilling progress.</li> <li>- In terms of production, wells will be brought on-line in a phased approach to utilize existing evaporation ponds and minimize the footprint of new ponds.</li> <li>- Existing wells will be shut-in (SI) while new wells are brought on line to control produced water volumes and over building facilities.</li> </ul>
Planning	<p>Bayswater will incorporate into the drilling rig pad design a perimeter earthen berm consisting of native Samsil clays and sandy loams from the approved well locations. In addition, a silt fence can be erected where necessary to prevent any disturbed areas on the location from eroding into the Badger Creek drainage. In preparation for the drilling activity, Bayswater has improved the lease roads at the Badger Creek facility specifically with a road grader and added gravel where necessary. This has improved the access and proper drainage for the lease roads. Secondary spill prevention measures will also be provided for any rig work tanks in the form of standard ditching. Flow back tanks and any frac style tanks used for well testing will have secondary spill prevention in the form of spill guards.</p>
Storm Water/Erosion Control	<ul style="list-style-type: none"> <li>- Operator will make use of water bars, straw hay bales, gravel and other measures will be used to prevent erosion, storm water run-off and site degradation.</li> <li>- Co-locate gas and water gathering lines whenever feasible, and mitigate any erosion problems that arise due to the construction of any pipeline(s).</li> </ul>

Construction	<ul style="list-style-type: none"> <li>- Remove only the minimum amount of vegetation necessary for the construction of roads, drilling pads, facilities and evaporation ponds.</li> <li>- Conserve topsoil during excavation and reuse as cover on disturbed areas to facilitate regrowth of vegetation.</li> <li>- No construction or routine maintenance activities will be performed during periods when the soil and or roads are too wet to adequately support construction equipment.</li> </ul>
Drilling/Completion Operations	<ul style="list-style-type: none"> <li>- Light sources will be directed downwards and away from occupied structures during drilling operations.</li> <li>- Completion operations will be minimal as fracture stimulation is not necessary for our target formations in the Adams and Washington Co. wells.</li> <li>- Noise and the numbers of days with equipment on site will be minimized due to completion techniques.</li> <li>- Once the drilling and completions rigs leave the site, there will be no permanently installed lighting on site.</li> </ul>
Interim Reclamation	<ul style="list-style-type: none"> <li>- Utilize existing pad areas and for temporary storage of equipment when possible such that any new well pads will have a reduced footprint.</li> <li>- Restore well site locations to their original condition within a reasonable time frame after the completion of operations.</li> <li>- All reseeding 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 surface owner.</li> </ul>
Final Reclamation	<ul style="list-style-type: none"> <li>- All surface restoration shall be accomplished to the satisfaction of surface owner.</li> <li>- All final seeding 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 surface owner.</li> <li>- Drilling pad size will be reclaimed to a simple vehicle turn-around area for daily maintenance of wells and pump jacks.</li> <li>- Final reclamation shall be completed to the reasonable satisfaction of the surface owner as soon as practical after installation (weather permitting) and in accordance with regulatory agency standards (BLM/COGCC).</li> </ul>

Total: 9 comment(s)