

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:

400147973

Date Received:

04/05/2011

## 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:

**430107**

Expiration Date:

**08/30/2015**

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: 10124

Name: VESSELS COAL GAS INC

Address: 730 17TH ST - SUITE 340

City: DENVER State: CO Zip: 80202

### 3. Contact Information

Name: Paul Jordan

Phone: (303) 809-1273

Fax: (303) 575-9697

email: paul@np3llc.com

### 4. Location Identification:

Name: Oxbow Mining LLC Number: 1

County: GUNNISON

Quarter: NESW Section: 11 Township: 13S Range: 90W Meridian: 6 Ground Elevation: 6185

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: 2603 feet FSL, from North or South section line, and 2286 feet FWL, from East or West section line.

Latitude: 38.932080 Longitude: -107.416450 PDOP Reading: 2.4 Date of Measurement: 02/15/2011

Instrument Operator's Name: Randy H. Wilmore

### 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>0</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"/>	Electric Motors: <input type="checkbox"/>	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"/>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="checkbox"/> <u>1</u>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="checkbox"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="checkbox"/>	Oil Tanks: <input type="checkbox"/>	Fuel Tanks: <input type="checkbox"/>	

Other: Aboveground container to be used as drilling pit and cuttings collection

### 6. Construction:

Date planned to commence construction: 10/01/2011 Size of disturbed area during construction in acres: 2.20  
Estimated date that interim reclamation will begin: 04/01/2012 Size of location after interim reclamation in acres: 0.30  
Estimated post-construction ground elevation: 6185 Will a closed loop system be used for drilling fluids: Yes   
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: Evaporation

### 7. Surface Owner:

Name: Jim Kiger Phone: (970) 929-5122  
Address: 3737 Highway 133 - POB 535 Fax: (970) 929-5177  
Address: \_\_\_\_\_ Email: jim.kiger@oxbow.com  
City: Somerset State: CO Zip: 81434 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: 20050098  Gas Facility Surety ID: \_\_\_\_\_  Waste Mgnt. Surety ID: \_\_\_\_\_

### 9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes  No   
Distance, in feet, to nearest building: 2800, public road: 91, above ground utilit: 175  
, railroad: 7200, property line: 61

### 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 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: 74. Torriorthents-Haplargids complex, very stony  
NRCS Map Unit Name: 41. Curecant-Fughes, stony loams  
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: Gambel Oak, Elk Sedge, Mountain Brome, Saskatoon Serviceberry, Wheatgrass, Mountain Snowberry, Needle Grass, Western Wheatgrass, Arizona Fescue, Bluebunch Wheatgrass, Bottlebrush Squirreltail, Common Snowberry, Muttongrass, Sagebrush, Slender Wheatgrass

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): Additional Plant Species: True Mountain Mahogany

**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: 300, water well: 948, depth to ground water: 30  
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:**

The well will be drilled on an existing pad that was previously constructed by the surface owner; therefore, minimal to no pad construction required prior to the drilling of the Oxbow Mining LLC #1. The reference area is located immediately adjacent to the well pad to the east on undisturbed land.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 04/05/2011 Email: paul@np3llc.com  
Print Name: Paul Jordan Title: Managing Principal, NP3

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: 8/31/2012

**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.**

**WATER RESOURCE (SURFACE WATER AND GROUNDWATER) PROTECTION COAs:**

Operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals, and maintained in good condition.

Due to the very steep slopes to the north, this location is in an area of high run off/run on potential; therefore the pad shall be constructed as quickly as possible and appropriate BMPs need to be in place both during, after well pad construction completion, as well as during all drilling and well completion operations. Standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater runoff.

Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or buried permanent pipelines.

Location is in a sensitive area due to shallow groundwater; therefore, no pits are allowed.

**317B INTERMEDIATE BUFFER ZONE COAs:**

A closed loop drilling system must be implemented.

Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The flowback and stimulation fluid tanks must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material (per Rule 604.a.(4)).

The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if drill cuttings are to remain/disposed of onsite, they must also meet the applicable standards of table 910-1.

Berms or other containment devices shall be constructed in compliance with Rule 604.a.(4) around crude oil, condensate, and produced water storage tanks.

When sufficient water exists in the Classified Water Supply Segment, collection of baseline surface water data consisting of a pre-drilling surface water sample collected immediately downgradient of the oil and gas location and follow-up surface water data consisting of a sample collected at the same location three (3) months after the conclusion of any drilling activities and operations or completion. The sample parameters shall include: pH; alkalinity; specific conductance; major cations/anions (chloride, fluoride, sulfate, sodium); total dissolved solids (TDS); benzene, toluene, ethylbenzene, total xylenes (BTEX); gasoline range organics (GRO); diesel range organics (DRO); total petroleum hydrocarbons (TPH); polyaromatic hydrocarbons (PAH's [including benzo(a)pyrene]); and metals (arsenic, barium, calcium, chromium, iron, magnesium, selenium). Current applicable EPA-approved analytical methods for drinking water must be used and analyses must be performed by laboratories that maintain state or nationally accredited programs. Copies of all test results described above shall be provided to the Commission and the potentially impacted Public Water System(s) within three (3) months of collecting the samples. In addition, the analytical results and surveyed sample locations shall be submitted to the Commission in an electronic data deliverable format.

An emergency spill response program that includes employee training, safety, and maintenance provisions and current contact information for downstream Public Water System(s) located within fifteen (15) stream miles of the DCPS Operation, as well as the ability to notify any such downstream Public Water System(s) with intake(s) within fifteen (15) stream miles downstream of the DCPS operations. In the event of a spill or release, the operator shall immediately implement the emergency response procedures in the above-described emergency response program. If a spill or release impacts or threatens to impact a Public Water System, the operator shall notify the affected or potentially affected Public Water System(s) immediately following discovery of the release, and the spill or release shall be reported to the Commission in accordance with Rule 906.b.(3), and to the Environmental Release/Incident Report Hotline (1-877-518-5608) in accordance with Rule 906.b.(4).

Operator shall provide notification to potentially impacted Public Water Systems within fifteen (15) stream miles downstream of the DCPS Operation within 30 days prior to commencement of new surface disturbing activities at the site, including spud.

### Attachment Check List

Att Doc Num	Name
2033701	NRCS MAP UNIT DESC
2033995	317B NOTIFICATION
2033996	CORRESPONDENCE
2034506	VARIANCE REQUEST
2034507	WAIVERS
400147973	FORM 2A SUBMITTED
400148478	LOCATION DRAWING
400148482	CONST. LAYOUT DRAWINGS
400148486	CONST. LAYOUT DRAWINGS
400148487	HYDROLOGY MAP A, TOPO
400148490	TOPO MAP
400148491	ACCESS ROAD MAP
400148495	NRCS MAP UNIT DESC
400148506	OTHER
400148507	LOCATION PICTURES

Total Attach: 15 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	This application is a 502.b variance request from Rules 603.a.(1) (distance to public road), 603.a.(2), (distance to surface property line), and 318.b (distance to subsurface mineral boundaries). All necessary waivers from encroached upon parties are attached and staff recommends granting these variance requests with the approval of this location assessment.	8/30/2012 6:42:54 AM
Permit	Final review completed.	8/23/2012 6:31:19 AM
Permit	I am in agreement with you. I see buildings at 2800' east, I see power lines 175' to the south. If you could make the changes that would be great. Sorry for the confusion. Thanks Mark	3/7/2012 7:30:04 AM
Permit	Have questioned the distance to the nearest building and utility, stated as 20000' but to the east are two buildings and possible utilities at the same location some 2780' away.	3/1/2012 9:11:33 AM
OGLA	Initiated/Completed OGLA Form 2A review on 04-14-11 by Dave Kubeczko; requested clarifications and acknowledgement of fluid containment, spill/release BMPs, closed loop, flowback to tanks, tank berming, pad sediment control, 317B intermediate, and cuttings low moisture COAs from operator on 04-14-11; received acknowledgement of COAs from operator on 08-31-11; no CDOW; passed OGLA Form 2A review on 09-09-11 by Dave Kubeczko; fluid containment, spill/release BMPs, closed loop, flowback to tanks, tank berming, pad sediment control, 317B intermediate, and cuttings low moisture COAs.	4/14/2011 3:38:07 PM
LGD	Gunnison County has no comments and will not be requesting consultation on Regulatory Form 400147973.	4/14/2011 3:34:51 PM

Total: 6 comment(s)

### BMP

<u>Type</u>	<u>Comment</u>

Total: 0 comment(s)