

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:

401417487

Date Received:

10/26/2017

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 430927

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:

430927

Expiration Date:

12/08/2020

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: 10591

Name: AUGUSTUS ENERGY PARTNERS II LLC

Address: 2016 GRAND AVENUE SUITE A

City: BILLINGS State: MT Zip: 59102

Contact Information

Name: Duane Zimmerman

Phone: (406) 294-5990

Fax: (406) 294-5992

email: dzimmerman@augustusenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20150098 Gas Facility Surety ID: _____

Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: BHR

Number: J22-397

County: RIO BLANCO

Quarter: NWSE Section: 22 Township: 3N Range: 97W Meridian: 6 Ground Elevation: 5938

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: 1762 feet FSL from North or South section line

1333 feet FEL from East or West section line

Latitude: 40.212032 Longitude: -108.259757

PDOP Reading: 1.4 Date of Measurement: 10/10/2017

Instrument Operator's Name: K.G. Stewart

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

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: Buffalo Horn Properties

Phone: _____

Address: 13825 County Road 7

Fax: _____

Address: _____

Email: buffalohornranch@wreawildblue.org

City: Meeker State: CO Zip: 81641

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): Existing Well Pad

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:	4575 Feet	4390 Feet
Building Unit:	5280 Feet	5280 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	5280 Feet	5280 Feet
Above Ground Utility:	5280 Feet	5280 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	877 Feet	709 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

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: _____

- 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.
- Large UMA Facility - as defined in 100-Series Rules.

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 (on 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.

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 be 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: 41. Havre loam, 0 to 4 percent slopes _____

NRCS Map Unit Name: 61. Patrent loam, 3 to 8 percent slopes _____

NRCS Map Unit Name: 53. Moyerson stony clay loam, 15 to 65 percent slopes _____

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: 08/27/2012

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): Sagebrush & Native Grasses

WATER RESOURCES

Is this a sensitive area: No Yes

Distance to nearest

downgradient surface water feature: 108 Feet

water well: 1533 Feet

Estimated depth to ground water at Oil and Gas Location 110 Feet

Basis for depth to groundwater and sensitive area determination:

The closest permitted water well is an inactive stock well with permit #16877-F located approximately 1,533 feet southeast of the proposed location. Closest active water well permit is #295300 located approximately 3,807 feet east of the proposed location. Water Well (Permit #16877-F) was reportedly constructed on March 2, 1973. During drilling, water was observed at 110 feet bgs. Water Well (Permit #295300) was constructed on September 12, 2014, and static water level was reported as 140 ft bgs.

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: _____

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 609

WILDLIFE

This location is included in a Wildlife Mitigation Plan

This location was subject to a pre-consultation meeting with CPW held on 01/15/2015

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area
- 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

Form 2A is being amended to include an additional well proposed to be drilled as the BHR Fed J22-15-397-4RH including changes to the original well pad which will need to be enlarged to accommodate the associated production equipment. The well pad will be enlarged from an existing 300 feet x 400 feet to a 375 feet x 600 feet. The same BMPs/COAs previously approved will continue to be applied to this amendment.

All the attachments as requested in your e-mail dated October 2, 2017, have been attached including the e-mail as correspondence.

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

Signed: _____ Date: 10/26/2017 Email: plaborda@augustusenergy.com

Print Name: Pascual Laborda Title: Permitting & Regulatory

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: 12/9/2017

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

	In addition to the notifications required by COGCC listed in the Northwest Notification Policy (Notice of Intent to construct a new location, Notice of Intent to spud surface casing, and Notice of Intent to commence hydraulic fracturing operations) and Rule 316C. COGCC Form 42. FIELD OPERATIONS NOTICE (a. Notice of Intent to Conduct Hydraulic Fracturing Treatment; b. Notice of Spud; and c. Notice of Construction or Major Change); operator shall notify the COGCC 48 hours prior to pipeline testing (flowlines from wellheads to separators to tanks; and/or any temporary surface lines used for hydraulic stimulation and/or flowback operations) using the Form 42 (as described in Rule 316C.m. Notice of Completion of Form 2/2A Permit Conditions). The appropriate COGCC individuals will automatically be email notified.
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Operator must ensure secondary containment for any volume of fluids contained at the water storage facility site during operations (as shown on the Construction Layout Drawings attachment); 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 fluid containment/control as well as stormwater management for the control of run-on and run-off) sufficiently protective of nearby surface water. Any berm constructed at the water storage facility site will be stabilized, inspected at regular intervals as required by CDPHE (at least every 14 days and after precipitation events), and maintained in good condition.

The design/build of any perimeter berm or fluid management structures shall be sized, constructed, and compacted sufficiently to contain and/or manage potential fluid releases during operations in a manner that prevents or controls potential sedimentation and scouring on adjacent lands and drainages. Such design/build of perimeter berms or fluid management structures may include, but are not limited to the following: on location berms; diversion ditches; down gradient baffles intended to slow and control water flow and sediment; enhanced vegetation; or other design features necessary to achieve the goal of protecting adjacent lands and drainages from potential sedimentation and scouring.

The location is in an area of moderate run-on/run-off potential; therefore standard stormwater BMPs must be implemented; prior to, during, and after any re-construction activities, as well as during all drilling and completion operations; at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater run-off.

The access road will be constructed and maintained as to not allow sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.

Strategically apply fugitive dust control measures, including encouraging established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.

Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner) to contain any spilled or released material around permanent produced water storage tanks.

	<p>Location is in a sensitive area due to close proximity to nearby downgradient surface water (108'); therefore, a closed loop system must be used (which operator has indicated on the Form 2A).</p> <p>The moisture content of water/bentonite-based mud (WBM) drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. After drilling and completion operations have been completed, the drill cuttings that will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), must meet the applicable standards of Table 910-1. After the drill cuttings have been amended (if necessary) and placed on the well pad, sampling frequency of the drill cuttings (to be determined by the operator) shall be representative of the material left on location. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of a Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method. No offsite reuse of cuttings to another oil and gas location shall occur without prior approval of a Beneficial Reuse or Land Application Plan (submitted via a Form 4 Sundry Notice) specifying reuse or application, location, and waste characterization method. Commercial disposal of drill cuttings and drilling fluids will only require the operator to maintain documentation (manifests, bills of lading, etc) of drill cuttings and drilling fluids disposal.</p> <p>A closed loop system must be implemented during drilling (as indicated on the Form 2s and Form 2A). Since operator has indicated that oil-based mud (OBM) will be used during drilling of the horizontal production interval of the well borehole, then the drill cuttings must be managed separately from the water/bentonite-based mud (WBM) generated cuttings. All cuttings generated during drilling with OBM must be segregated from WBM-generated drill cuttings and placed separately on the well pad. All OBM-generated drill cuttings must be kept in tanks/containers, or placed on a lined/bermed portion of the well pad; prior to disposition. The moisture content of any OBM-generated drill cuttings in a tank, cuttings containment area, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. The operator had indicated that 'Cuttings Disposal' will be "ONSITE" and that the 'Cuttings Disposal Method' will be "Cuttings Trench" (as shown in the 'DRILLING WASTE MANAGEMENT PROGRAM SECTION' of the this Form 2A #401417487; however the originally approved [11-29-12] Form 2A#400332378, indicated that 'Cuttings Disposal' will be "ONSITE" and that the 'Cuttings Disposal Method' will be "Land Farming", as shown in the 'CONSTRUCTION SECTION']). If operator needs to land farm the cuttings, a Form 4 Sundry Notice shall be submitted (consisting of a Waste Management Plan detailing the cuttings land farming operations as well as estimated time-frame to amend the cutting to Table 910-1 levels) and approved by COGCC prior to implementation. All liners associated with OBM-generated drill cuttings must be disposed of offsite per CDPHE rules and regulations. Any changes to drill cuttings management and disposal at this location will require submittal (via a Form 4 Sundry Notice) and approval of a Waste Management Plan detailing the changes (specifying change in drilling fluids, cuttings characterization methods, cuttings management, cuttings amendment, and onsite disposal location[s]).</p> <p>Flowback and stimulation fluids must be sent to enclosed tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline storage vessel, or other open top containment located on the well pad; or into tanker trucks for offsite disposal. No open top tanks can be used for initial flowback fluids containment. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area with additional downgradient perimeter berming, unless the operator has constructed a sufficiently sized perimeter berm.</p> <p>Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.</p>
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Operator shall pressure test pipelines (flowlines from wellheads to separators to tanks; pipelines from onsite separators to offsite storage tanks, and any temporary surface lines used for hydraulic stimulation and/or flowback operations) in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network, and tested annually, unless agreed to by both parties that the flowlines can be managed under an approved COGCC variance.

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

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401417487	FORM 2A SUBMITTED
401442058	ACCESS ROAD MAP
401442061	ACCESS ROAD MAP
401442068	MULTI-WELL PLAN
401442088	OTHER
401442091	PROPOSED BMPS
401442099	OTHER
401442104	HYDROLOGY MAP
401442109	LOCATION DRAWING
401442283	OTHER
401442339	WELL LOCATION PLAT
401442352	CORRESPONDENCE
401449015	CONST. LAYOUT DRAWINGS

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Form 2A Refile was approved in April 2017 along with the first well (BHR Fed #J22-15-397-2RH) which is being drilled. This APD is to add another well to the pad. Final review complete.	12/06/2017
OGLA	11/28/17 - Initiated/Completed OGLA Form 2A review by Dave Kubeczko; versions of COAs that were placed on the original Form 2A# 400332378 (approved on 11-29-12) for OGCC ID#430927, and the amended Form 2A # 401169458 (approved on 04-28-17) have been placed on this Form 2A, including - notification, fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, WBM and OBM cuttings containment and management, tank berming, sediment and dust control, odor control, and pipeline testing; 11/13/17 - passed by CPW with operator and the Surface Owner declining all recommended wildlfie BMPs, with the surface owner providing a waiver of BMPs on the previously submitted Form 2As; 11/28/17 - passed OGLA Form 2A review by Dave Kubeczko; notification, fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, tank berming, sediment and dust control, odor control, and pipeline testing COAs.	11/28/2017

DOW	<p>Operator: AUGUSTUS ENERGY PARTNERS II LLC Well Name: BHR Well No:J22-397 COGCC Doc. No:401417487 Mineral owner:FEE Surface Owner:FEE Status of well pad:CONSTRUCTED.APPLICANT WILL ENLARGE THE EXISTING WELL PAD. The operator has requested authorization to enlarge the existing well pad (Wiley 22-3-97 J2H) and drill 2 additional wells (referenced as BHR J22-397 wells). The existing well pad location, access and pipeline corridor are classified by CPW as Mule Deer Critical Winter Range, Elk Winter Concentration Area habitat and Greater sage-grouse Priority Habitat Management Area (PHMA). The surface and mineral owner at the proposed well pad location is Buffalo Horn Properties, LLC.</p> <p>The following recommended BMPs were submitted to the operator for the existing location on February 21, 2017. These BMPs also apply to the proposed wells and the proposed expansion of the existing well pad.</p> <ol style="list-style-type: none"> 1. Where oil and gas activities must occur in mule deer critical winter range, conduct these activities outside the time period from December 1 through April 15. Where oil and gas activities must occur within Greater sage-grouse winter habitat, conduct these activities outside the period between December 1 and March 15. 2. Use hospital-grade mufflers for compressors, pump jacks, or other motors necessary to run operations at the site. Point mufflers upward to dissipate potential vibration. 3. Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads. 4. Include a weed management plan and implement the plan as part of reclamation. 5. Install and utilize bear-proof dumpsters and trash receptacles for all food-related trash on location, following COGCC Rule 1204 a-1. <p>BRETT SMITHERS, 11:47 11/13/2017</p>	11/13/2017
Permit	Preliminary review complete.	11/07/2017
Permit	Passed Completeness. Per communication with the Operator, the following corrections were made: - relabeled attachments	11/03/2017
Permit	Returned to draft for: - "Related Forms" tab is blank - " Facilities" tab: description of "all oil, gas, and/or water pipelines" is blank - a "CONST. LAYOUT DRAWING" requires a location layout drawing page and a cross section page as one document; please consolidate and relabel other non-CONST. LAYOUT DRAWINGS attachments as OTHER	11/02/2017

Total: 6 comment(s)