

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:

400527552

Date Received:

12/16/2013

Oil and Gas Location Assessment

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

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:

436835

Expiration Date:

04/19/2017

☒ 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: 10150
Name: BLACK HILLS PLATEAU PRODUCTION LLC
Address: 1515 WYNKOOP ST STE 500
City: DENVER State: CO Zip: 80202

Contact Information

Name: Jessica Donahue
Phone: (720) 210-1333
Fax: (303) 566-3344
email: Jessica.Donahue@blackhillscorp.com

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: Homer Deep Unit Number: 7-23
County: GARFIELD
QuarterQuarter: NESW Section: 7 Township: 8S Range: 98W Meridian: 6 Ground Elevation: 5676
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: 1835 feet FSL from North or South section line
2399 feet FWL from East or West section line
Latitude: 39.371980 Longitude: -108.369820
PDOP Reading: 2.6 Date of Measurement: 10/13/2012
Instrument Operator's Name: Paul Reid

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>3</u>	Oil Tanks	<u>3</u>	Condensate Tanks	<u> </u>	Water Tanks	<u>6</u>	Buried Produced Water Vaults	<u> </u>
Drilling Pits	<u> </u>	Production Pits	<u> </u>	Special Purpose Pits	<u> </u>	Multi-Well Pits	<u>1</u>	Temporary Large Volume Above Ground Tanks	<u> </u>
Pump Jacks	<u> </u>	Separators	<u>3</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> </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:

CONSTRUCTION

Date planned to commence construction: 02/03/2014 Size of disturbed area during construction in acres: 6.24
Estimated date that interim reclamation will begin: 09/15/2017 Size of location after interim reclamation in acres: 2.67
Estimated post-construction ground elevation: 5673

DRILLING PROGRAM

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

Is H₂S 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: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Bureau of Land Management Phone: 970-244-3000

Address: 2815 H Road

Fax: _____

Address: _____

Email: _____

City: Grand Junction State: CO Zip: 81506

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: 2744 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 703 Feet
Above Ground Utility: 2744 Feet
Railroad: 5280 Feet
Property Line: 1965 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: _____

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: 70. Uffens Loam, 1 to 8 percent slopes.

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: _____

List individual species: cheatgrass

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: 100 Feet

water well: 630 Feet

Estimated depth to ground water at Oil and Gas Location 80 Feet

Basis for depth to groundwater and sensitive area determination:

Water Well located in NENE Sect. 7, Permit # 277891, Receipt #9503012A: Depth is 20 feet; Elevation is approximately 5613 feet. This well is not located near a public water source nor consistent surface water.

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 609

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

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 12/16/2013 Email: Jessica.Donahue@blackhillscorp.com
Print Name: Jessica Donahue 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: Matthew Lee Director of COGCC Date: 4/20/2014

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.

COA Type

Description

	<p>The moisture content of any drill cuttings in a cuttings 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.</p> <p>Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline, storage vessel, or the lined multi-well pit located on the well pad; or into tanker trucks for offsite disposal. 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. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.</p>
	<p>Operator shall pressure test pipelines 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. Operator shall notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to testing surface poly or buried steel pipelines.</p> <p>Operator will utilize, to the extent practical, all existing access and other public roads, and/or existing pipeline right-of-ways, when placing/routing the surface pipelines. This will reduce surface disturbance.</p>
	<p>Notify the COGCC 48 hours prior to start of pad construction, pit construction (if different than pad construction), pit liner installation, multi-well pit hydrostatic testing, rig mobilization, spud, and start of hydraulic stimulation operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).</p> <p>As required for Groundwater Baseline Sampling; Operator shall comply with Rule 609. STATEWIDE GROUNDWATER BASELINE SAMPLING AND MONITORING.</p>

FORM 15 PIT PERMIT COAs (FOR THE MULTI-WELL PIT):

The multi-well pit must be double-lined. The pit will also require a leak detection system (Rule 904.e).

Operator must submit as-built drawings (plan view and cross-sections) of the multi-well pit within 30 calendar days of construction.

No portion of any pit that will be used to hold liquids shall be constructed on fill material, unless the pit and fill slope are designed and certified by a professional engineer, subject to review and approval by the director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut.

For pits containing fluids other than freshwater only; the pit must be fenced. If the pit is not drained, or closure has not begun within 30 days after last use for well completion, the pit must be netted. The operator must maintain the fencing and netting until the pit is closed.

After installation of the uppermost liner and prior to operating the pit, the synthetic liner (s) shall be tested by filling the pit with at least 70 percent of operating capacity of water, measured from the base of the pit (not to exceed the 2-foot freeboard requirement). The operator shall monitor the pit for leaks for a period of 72 hours prior to either draining the pit or commencing operations. Operator shall notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) 48 hours prior to start of the hydrotest. Hydrotest monitoring results must be maintained by the operator for the life of the pit and provided to COGCC prior to using the pit.

Surface water samples (one upgradient and one downgradient from the pit/well pad location) from South Dry Fork (if water is present) shall be collected prior to pit use and every 12 months (until pit closure) to evaluate potential impacts from pit operations. At a minimum, the surface water samples will be analyzed for the following parameters: major cations/anions (chloride, fluoride, sulfate, sodium); total dissolved solids (TDS); and BTEX/DRO.

The operator shall submit, and receive approval of, a reuse and recycling plan per Rule 907.a.(3), prior to any offsite reuse/recycling of pit fluids.

Pits used exclusively for drilling shall be closed in accordance with the 1000-Series Rules. Any pit(s) used for purposes other than drilling shall be closed in accordance with Rule 905. Closure of Pits, and Buried or Partially Buried Produced Water Vessels; with an approved Site Investigation and Remediation Workplan, Form 27.

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.

Operator must ensure 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 (at least every 14 days), and maintained in good condition.

The access road will be constructed and maintained as to not allow any 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 enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.

Best Management Practices

No BMP/COA Type

Description

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Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2106917	CORRESPONDENCE
400527552	FORM 2A SUBMITTED
400527660	LOCATION DRAWING
400527661	LOCATION PICTURES
400527662	NRCS MAP UNIT DESC
400527663	LOCATION DRAWING
400527667	FED. DRILLING PERMIT
400527668	CONST. LAYOUT DRAWINGS
400527669	CONST. LAYOUT DRAWINGS
400527671	SURFACE PLAN
400529126	MULTI-WELL PLAN
400529131	ACCESS ROAD MAP
400529134	HYDROLOGY MAP

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed. No LGD comments.	4/14/2014 6:36:31 AM
OGLA	Initiated/Completed OGLA Form 2A and Form 15 review on 01-27-14 by Dave Kubeczko; requested acknowledgement of notification, GW monitoring, SW sampling, fluid containment, spill/release BMPs, moisture content cuttings, lined pit/closed loop, no pit in fill, sediment control, Form 15, pit fencing/netting, flowback to tanks, and pipeline COAs from operator on 01-27-14; received acknowledgement of COAs from operator on 02-06-14; corrected to sensitive area due to close SW (100') and close water well (630'); no visible improvements between 400' and 500', revised Location Drawing to be submitted via Form 4; no CPW; passed OGLA Form 2A review on 03-04-14 and Form 15 review on 03-07-14 by Dave Kubeczko; notification, GW monitoring, SW sampling, fluid containment, spill/release BMPs, moisture content cuttings, lined pit/closed loop, no pit in fill, sediment control, Form 15, pit fencing/netting, flowback to tanks, and pipeline COAs.	1/27/2014 3:17:45 PM
LGD	pass, gdb	12/30/2013 8:56:09 AM
Permit	Passed completeness.	12/18/2013 12:31:43 PM
Permit	Returned to draft for the following: 1. Appropriate boxes need to be checked in Surface & Minerals tab for oil and gas lease as the right to construct. 2. Insufficient information for depth to ground water and sensitive area determination. 3. Missing Access Road Map, Hydrology Map, and Multiwell Plan in Attachments tab.	12/17/2013 9:37:11 AM

Total: 5 comment(s)