

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:

400505289

Date Received:

11/08/2013

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 334460

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:

334460

Expiration Date:

12/27/2016

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: 10244
 Name: BLACK DIAMOND MINERALS LLC
 Address: 1600 STOUT ST STE 1710
 City: DENVER State: CO Zip: 80202

Contact Information

Name: Mary Griggs
 Phone: (303) 973-3228
 Fax: (303) 346-4893
 email: mgriggs@bdminerals.com

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20090102 Gas Facility Surety ID: _____
- Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: TPR Well Pad Number: 36A
 County: GARFIELD
 QuarterQuarter: SWNE Section: 36 Township: 7S Range: 94W Meridian: 6 Ground Elevation: 9354

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: 2831 feet FNL from North or South section line
 1693 feet FEL from East or West section line
 Latitude: 39.395017 Longitude: -107.831908
 PDOP Reading: 2.0 Date of Measurement: 10/31/2013
 Instrument Operator's Name: Brian Baker

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>2</u>	Oil Tanks	<u> </u>	Condensate Tanks	<u> </u>	Water Tanks	<u>1</u>	Buried Produced Water Vaults	<u> </u>
Drilling Pits	<u> </u>	Production Pits	<u>1</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> </u>	Injection Pumps	<u> </u>	Cavity Pumps	<u> </u>		
Gas or Diesel Motors	<u>2</u>	Electric Motors	<u>2</u>	Electric Generators	<u>1</u>	Fuel Tanks	<u>2</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

Temporary Frac Tanks	80
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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

A water line will circulate between the tanks and the production pit.

CONSTRUCTION

Date planned to commence construction: 01/01/2013 Size of disturbed area during construction in acres: 5.10

Estimated date that interim reclamation will begin: 09/01/2016 Size of location after interim reclamation in acres: 2.00

Estimated post-construction ground elevation: 9354

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: Drilling Fluids Disposal Method:

Cutting Disposal: Cuttings Disposal Method:

Other Disposal Description:

No drilling fluids or cuttings will be generated at the present time. This form will be amended at such time drilling is planned.

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: Black Diamond Minerals LL

Phone: 303-973-3228

Address: 1600 Stout St.

Fax: _____

Address: Suite 1710

Email: wgiltner@bdminerals.com

City: Denver 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: applicant is owner

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: 438 Feet
Building Unit: 5280 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 2047 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 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: No NRCS data available for this section.
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: 05/10/2010
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: 350 Feet

water well: 8400 Feet

Estimated depth to ground water at Oil and Gas Location 40 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive area - Location is close to Beaver Creek. Depth to groundwater was estimated at the elevation difference between Beaver Creek and the Pad location.

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

At the present time the location will be used to facilitate completion of Pad 25A wells. Only freshwater will be placed into the frac tanks on this location. The proposed multi-well production pit is not planned at this time. If the pit is needed in the future, and flowback fluids and/or produced water are sent to this pit; then the tertiary containment structures will be lined.

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

Signed: _____ Date: 11/08/2013 Email: mgriggs@badminerals.com

Print Name: Mary Griggs Title: Reg/Environ Compliance

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: 12/28/2013

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

The access road will be maintained to prevent sediment migration from the access road to nearby surface water or any drainages leading to other nearby surface waters.

Operator must ensure secondary containment for any volume (total manifolded volume) of fluids contained at frac pad site during operations; including, but not limited to, construction of a berm or diversion dike, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of Divide Creek and all other nearby surface water. Any berm constructed at the pit/frac pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.

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.

Operator shall stabilize exposed soils and slopes as an interim measure during frac pad operations at this site.

Because of proximity of the frac pad to Beaver Creek, operator shall, to the extent practical, grade the well pad surface to slope towards the southeast, away from the edges of the fill slope side. In addition, tertiary containment will be required at the well pad location consisting of two lined lateral collection trenches/ditches (requiring lining if flowback fluids or produced water are sent to the frac tanks) along the west and north sides of the pad (outside of the well pad berm/ditches). The trenches will be graded to flow into an oversized catchment basin (requiring lining if flowback fluids or produced water are sent to the frac tanks) located near the northwest corner of the well pad. This basin will be surrounded by additional stormwater controls (i.e., straw waddle and/or silt fencing, or equivalent).

Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried (steel/poly) 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 or buried steel/poly pipelines.

Operator must implement best management practices to contain any unintentional release of fluids along all portions of the surface pipeline route where temporary pumps and other necessary equipment are located.

Operator must routinely inspect the entire length of the surface pipeline to ensure integrity. Operator shall conduct daily inspections of surface poly pipeline routes for leaks during active transfer of fluids. Inspections shall be conducted by viewing the length of the pipeline; operator will endeavor to minimize surface disturbance during pipeline monitoring. The operator shall maintain records of inspections, findings and repairs, if necessary, for the life of the pipelines.

Operator must ensure appropriate secondary containment for volume of fluids that may be released before pump shut down from the surface pipeline at all stream, intermittent stream, ditch, and drainage crossings. Catchment basins, if needed, should be sized to contain the volume between pump stations or between the nearest pump station and the frac pad being used for this well pad location. Pump stations along the surface poly or steel pipeline route will be continuously monitored when operating in order to swiftly respond to such a failure.

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.

Notify the COGCC 48 hours prior to start of temporary frac pad reconstruction/regrading and pipeline testing, using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

Notify the COGCC 48 hours prior to start of hydraulic stimulation operations supported by this frac pad, using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

Surface Water Testing. When sufficient water exists in Beaver Creek, collection of baseline surface water data consisting of a pre-completion activities surface water sample collected immediately downgradient of the oil and gas location (frac pad) and follow-up surface water data consisting of a sample collected at the same location three (3) months after the conclusion of any completion activities. 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). Copies of all test results described above shall be provided to the Commission. The sample location shall be surveyed in accordance with Rule 215. In addition, the analytical results and surveyed sample locations shall be submitted to the COGCC in an electronic data deliverable format to the COGCC.

Operator shall prepare an emergency spill response program that includes employee training, safety, and maintenance provisions. 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 an PWS, the operator shall notify the COGCC & CDPHE 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).

If flowback fluids or produced water are to be sent back to the tanks on this temporary frac pad location, then a spill response trailer will be on location 24 hours a day, 7 days a week during completion operations to facilitate a timely response to any spills that may occur.

Appropriate heavy equipment (e.g., a backhoe) will be staged at the location during all drilling and completion operations so that any emergency diversions or pits to contain spills can be built immediately upon discovery.

All personnel working at the location during all drilling and completion operations will receive training on spill response and reporting. Documentation of this training will be maintained in the operator's office/onsite trailer.

At a minimum, weekly spill prevention meetings will be held identifying staff responsibilities in order to provide a quick and effective response to a spill. Appropriate documentation will be maintained in the operator's office/onsite trailer.

Operator will conduct daily inspections of equipment for leaks and equipment problems with appropriate documentation retained in the operator's office/onsite trailer. All equipment deficiencies shall be corrected. Daily monitoring should end approximately 14 days after well completion and/or after production has been stabilized; however, timely inspections should continue during the production phase.

Operator shall have trained personnel present at the frac tanks during water transfer into or out of tanks; personnel shall be able to shut off transfer pumps or close valves as necessary in response to upset conditions.

Additional containment shall be required where temporary or permanent pumps and other necessary equipment or chemicals are located on the frac pad site.

Operator will use adequately sized containment devices for all hazardous chemicals and/or materials stored or used on location.

Operator will implement measures to ensure that adequate separation of hydrocarbons from the influent occurs to minimize accumulation of oil on the surface of stored fluids. Operator shall also employ a method for monitoring buildup of phase-separated hydrocarbons on the surface of stored fluids.

FORM 15 PIT PERMIT COAs:

Notify 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 start of reconstruction/regrading (if necessary) of the well/frac pad, start of construction of the pit (if different), pit liner installation, and start of fracing operations at nearby well pads (via Form 42).

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

Delivery and vacuum truck hoses will not be allowed to be placed directly onto the pit liner. Operator will construct a loading/unloading station (or equivalent delivery/retrieval system) located next to the pit, to deliver fluids to or remove fluids from the pit by truck. The loading/unloading station shall be designed and utilized to prevent hoses from being dropped into the pits and dragged over the liner, which could lead to liner damage. The loading/unloading station will be the only permitted access for manual fluids transfers to or from the pit. Vehicles will not be allowed to approach the pit any closer than the loading/unloading station. Each station will have a catch basin in case a leak occurs while operations personnel are connecting or disconnecting hoses. Signs clearly marking the truck loading/unloading station shall be provided and maintained by the operator.

Operator must submit as-built drawings (plan view and cross-sections) of the completion pit within 14 calendar days of construction.

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 75 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 draining the pit and commencing operations. The leak detection system must also be monitored during the entire test. 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.

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.

Submit additional disposal facilities (wells, pits, etc.), if necessary (i.e., if original disposal option changes), for pit liquid contents to COGCC via a Form 4 Sundry prior to disposal.

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.

At the time of pit closure, operator must submit disposal information for solids, if necessary, via a Form 4 Sundry Notice to the COGCC Location Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us). The disposal method will need to be approved prior to operator starting pit closure.

Best Management Practices

No BMP/COA Type

Description

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Attachment Check List

Att Doc Num	Name
1792903	MULTI-WELL PLAN
2106809	PROPOSED BMPs
2106810	CONST. LAYOUT DRAWINGS
2106811	CONST. LAYOUT DRAWINGS
2106812	CONST. LAYOUT DRAWINGS
2106813	CONST. LAYOUT DRAWINGS
2106814	CONST. LAYOUT DRAWINGS
2106815	SENSITIVE AREA DETERMINATION
2106824	CORRESPONDENCE
2106827	TOPO MAP
400505289	FORM 2A SUBMITTED
400509451	OTHER
400509452	OTHER
400509463	LOCATION PICTURES
400509476	ACCESS ROAD MAP
400509478	HYDROLOGY MAP A, TOPO
400509480	LOCATION DRAWING
400509482	SURFACE PLAN
400509484	TOPO MAP
400509486	CONST. LAYOUT DRAWINGS

Total Attach: 20 Files

General Comments

User Group	Comment	Comment Date
Permit	Final review completed. No LGD comments.	12/26/2013 1:37:18 PM
OGLA	Initiated/Completed OGLA Form 2A and Form 15 review on 12-05-13 by Dave Kubeczko; requested acknowledgement of notification, SW sampling, fluid containment, spill/release BMPs, spill response, moisture content cuttings, lined pit/closed loop, no pit in fill, sediment control, stormwater BMPs, Form 15, pit fencing/netting, and flowback to tanks COAs from operator on 12-05-13; received acknowledgement of COAs from operator on 12-12-13; no CPW; passed OGLA Form 2A review on 12-26-13 by Dave Kubeczko; notification, SW sampling, fluid containment, spill/release BMPs, spill response, moisture content cuttings, lined pit/closed loop, no pit in fill, sediment control, stormwater BMPs, Form 15, pit fencing/netting, and flowback to tanks COAs.	12/26/2013 11:35:45 AM
Permit	This comment is from a sundry 400513085; "Surface casing is set. Building unit is an unoccupied hunting cabin, and is not a "Building Unit." Sundry main purpose is the change the NWSE to SWNE. The SWNE is more close to valid, actually this is a mining claim M 20590.	11/29/2013 11:50:23 AM
OGLA	Corrected location lat/long from 39.394942/-107.831953 to 39.395017/-107.831908 per operator email dated 11-13-13 (Correspondence attachment).	11/13/2013 12:41:42 PM
Permit	Corrected location ID from 324460 to 33460 and notified opr. Form passes completeness.	11/12/2013 10:37:53 AM

Total: 5 comment(s)