

**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:

400515726

Date Received:

12/04/2013

**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:

**435903**

Expiration Date:

**01/19/2017**☒ 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: 10110Name: GREAT WESTERN OPERATING COMPANY LLCAddress: 1801 BROADWAY #500City: DENVER State: CO Zip: 80202**Contact Information**Name: Shannon HartnettPhone: (303) 398-3051Fax: ( )email: regulatorypermitting@gwogco.com**RECLAMATION FINANCIAL ASSURANCE**☒ Plugging and Abandonment Bond Surety ID: 20090080☐ Gas Facility Surety ID: \_\_\_\_\_☐ Waste Management Surety ID: \_\_\_\_\_**LOCATION IDENTIFICATION**Name: Bruegman South EG PadNumber: 34-021HNCounty: WELDQuarter: SWSW Section: 34 Township: 7N Range: 64W Meridian: 6 Ground Elevation: 4848

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: 440 feet FSL from North or South section line343 feet FWL from East or West section lineLatitude: 40.523675 Longitude: -104.544478PDOP Reading: 1.9 Date of Measurement: 09/06/2013Instrument Operator's Name: Darren Shanks

## 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>9</u>	Oil Tanks	<u>16</u>	Condensate Tanks	<u>      </u>	Water Tanks	<u>2</u>	Buried Produced Water Vaults	<u>      </u>
Drilling Pits	<u>      </u>	Production Pits	<u>      </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>9</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>2</u>	VOC Combustor	<u>2</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:

9 – 3" steel line  
9 - 3" steel oil line  
9 – 3" steel vent line  
2 – 3" steel return gas line  
2 – 3" poly pipe

## CONSTRUCTION

Date planned to commence construction: 02/01/2014 Size of disturbed area during construction in acres: 6.80  
Estimated date that interim reclamation will begin: 07/01/2014 Size of location after interim reclamation in acres: 3.00  
Estimated post-construction ground elevation: 4844

## DRILLING PROGRAM

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

Is H<sub>2</sub>S 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: Land application  
Cutting Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

Land Application

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: Brandon and Tami Bruegman

Phone: \_\_\_\_\_

Address: 27367 CR 74

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: Galeton State: CO Zip: 80615

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: Surface Use Agreement

Surface damage assurance if no agreement is in place: \_\_\_\_\_ Surface Surety ID: \_\_\_\_\_

Date of Rule 306 surface owner consultation 11/25/2013

## 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: 627 Feet  
Building Unit: 615 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 282 Feet  
Above Ground Utility: 264 Feet  
Railroad: 5280 Feet  
Property Line: 282 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: 10/24/2013

## 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: 56 - Renohill clay loam, 0 to 3 percent slopes

NRCS Map Unit Name: 38 - Nelson fine sandy loam, 3 to 9 percent slopes

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: \_\_\_\_\_

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: 269 Feet

water well: 598 Feet

Estimated depth to ground water at Oil and Gas Location 62 Feet

Basis for depth to groundwater and sensitive area determination:

Water well receipt # 0482663 permit # 237715 is at a depth of 62'

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 318A

## 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

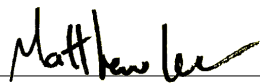
I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: \_\_\_\_\_ Date: 12/04/2013 Email: regulatorypermitting@gwogco.com

Print Name: Shannon Hartnett Title: Reg. Compl. Spec.

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: 1/20/2014

### **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**

	Operator will comply with all applicable mitigation measures as listed in COGCC Rule 604.c.
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## **Best Management Practices**

No	<b><u>BMP/COA Type</u></b>	<b><u>Description</u></b>
1	General Housekeeping	General housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur prompt cleanup is required to minimize any commingling of waste materials with storm water runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup will consist of patrolling the roadways, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly and promptly.
2	Storm Water/Erosion Control	Storm Water Management Plans (SWMP) are in place to address construction, drilling and operations associated with Oil and Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE). BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location, and will remain in place until the pad reaches final reclamation.
3	Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spills associated with Oil and Gas operations throughout the state of Colorado in accordance with CFR 112. In accordance with COGCC Rule 1002.f.(2)A. & B., shall provide a designated storage area for dry bulk chemicals and miscellaneous fluids. The storage area shall be covered to prevent contact of precipitation with chemicals, shall be elevated above storm- or standing water, and shall provide sufficient containment to prevent release of spilled fluids or chemicals from impacting soil, surface water or groundwater and will prevent the co-mingling of spilled fluids or chemicals with other E & P Waste.
4	Construction	Light sources will be directed downwards, and away from occupied structures where possible. Once the drilling and completion rigs leave the site, there will be no permanently installed lighting on site.
5	Noise mitigation	604.c.(2).A. Noise: Sound mitigation barriers (hay bales or sound walls) will be placed along the edge of the pad to the west, north, and east sides of the pad to damper noise during drilling and completions. Where possible, drilling rig engine exhaust will be vented away from occupied buildings.
6	Traffic control	604.c.(2).D. Traffic Plan: If required by the local government, a traffic plan will be coordinated with the local jurisdiction prior to commencement of operations. Weld County Road 74 is paved as well as the adjacent road to the north to access the location, the paved road is maintained by Weld County and therefore will not require dust mitigation. The access road to the location is already established with existing production facilities from another operator.

Total: 6 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1668028	RULE 306.E. CERTIFICATION
1668029	CORRESPONDENCE
400515726	FORM 2A SUBMITTED
400517200	NRCS MAP UNIT DESC
400517203	NRCS MAP UNIT DESC
400517204	ACCESS ROAD MAP
400517207	CONST. LAYOUT DRAWINGS
400517209	TOPO MAP
400517213	LOCATION DRAWING
400517214	LOCATION PICTURES
400517215	FACILITY LAYOUT DRAWING
400517225	MULTI-WELL PLAN
400517229	WASTE MANAGEMENT PLAN
400517231	HYDROLOGY MAP
400520860	SURFACE AGRMT/SURETY
400523233	CORRESPONDENCE

Total Attach: 16 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Agency	IN PROCESS - Operator provided pipeline description, noise, light, and traffic mitigation BMPs.	1/14/2014 2:28:20 PM
Final Review	Placed Form 2A ON HOLD - Need description of pipelines. Need specific details regarding 604.c. mitigation measures; BMPs provided by operator do not meet the Rule requirement.	1/11/2014 11:35:28 AM
Permit	Final review complete.	1/6/2014 10:22:37 AM
OGLA	No Public Comments and operator provided letter certifying compliance with COGCC RULE 306.e. OGLA task passed.	12/27/2013 11:44:19 AM
OGLA	IN PROCESS - Operator agreed to changes. Waiting on Public Comment period to end.	12/24/2013 1:25:53 PM
OGLA	ON HOLD - Revise distance to nearest building, public road, above ground utility, property line, water well, & estimated depth to groundwater. Change Sensitive Area determination to YES due to proximity of domestic water well. Add COA on complying with Rule 604.c. Mitigation Measures. Requested certification letter on complying with Rule 306.e. after the public comment period ends. Due by 1/18/14.	12/18/2013 9:46:28 AM
Permit	Ready to pass pending public comment 12/27/13.	12/16/2013 1:01:00 PM
Permit	Passed Completeness.	12/6/2013 1:36:01 PM
Permit	Returned to draft: Request a letter certifying that the building unit owner received notification. Land use is irrigated and therefore reference area photos and map are not required. Cultural distances to overhead power line, property line and public road as filled out in the form appear to measured from the edge of pad and not the closest well or facility location which should be one of the wells.	12/5/2013 10:45:50 AM

Total: 9 comment(s)