

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:

400518456

Date Received:

12/24/2013

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:

**436824**

Expiration Date:

**04/17/2017**

☐ 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: 57667

Name: MINERAL RESOURCES INC

Address: PO BOX 328

City: GREELEY    State: CO    Zip: 80632

Contact Information

Name: Collin Richardson

Phone: (970) 352-9446

Fax: (970) 339-8321

email: collin@mineralresourcesinc.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20090133    ☐ Gas Facility Surety ID: \_\_\_\_\_

☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Triple Creek    Number: \_\_\_\_\_

County: WELD

QuarterQuarter: SENE    Section: 8    Township: 5N    Range: 66W    Meridian: 6    Ground Elevation: 4790

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: 2622 feet FNL from North or South section line

1191 feet FEL from East or West section line

Latitude: 40.414200    Longitude: -104.798670

PDOP Reading: 0.7    Date of Measurement: 11/22/2013

Instrument Operator's Name: Corey Westholmes

## 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>22</u>	Oil Tanks	<u>22</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>22</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>4</u>	VOC Combustor	<u>      </u>	Flare	<u>      </u>	LACT Unit	<u>      </u>
								Pigging Station	<u>      </u>

## OTHER FACILITIES

Other Facility Type

Number

ECD

16

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

There will be buried pipelines between the wellheads and separators and buried pipelines between the separators and oil/water tanks.

## CONSTRUCTION

Date planned to commence construction: 07/01/2014 Size of disturbed area during construction in acres: 9.50  
Estimated date that interim reclamation will begin: 01/01/2015 Size of location after interim reclamation in acres: 4.50  
Estimated post-construction ground elevation: 4790

## 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: Beneficial reuse

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 430649 or Document Number:       

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: ZC Real Estate Holdings

Phone:

Address: 14183 West Exposition Drive

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

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

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

City: Lakewood State: CO Zip: 80228

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: No

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 \_\_\_\_\_

### 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: 885 Feet  
Building Unit: 1177 Feet  
High Occupancy Building Unit: 2348 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 1177 Feet  
Above Ground Utility: 1218 Feet  
Railroad: 5280 Feet  
Property Line: 521 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: 51 Otero Sandy Loam, 1 to 3 percent

NRCS Map Unit Name: 52 Otero Sandy Loam, 3 to 5 percent

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: 819 Feet

water well: 1150 Feet

Estimated depth to ground water at Oil and Gas Location 17 Feet

Basis for depth to groundwater and sensitive area determination:

Depth to groundwater determined from static water level of nearby water well, receipt number 9065245.

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

1. Mineral Resources requests an exception to Rule 318A.a. Request is attached.

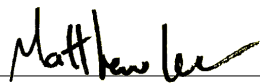
I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: \_\_\_\_\_ Date: 12/24/2013 Email: emathews@olssonassociates.com

Print Name: Erin Mathews Title: Project Engineer

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: 4/18/2014

### **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 must implement site-specific best management practices in accordance with good engineering practices, including, but not limited to, construction of a berm or diversion dike, site grading, or other comparable measures, sufficient to protect Sheep Draw located approximately 800 feet northwest of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products.
	Operator will provide visual, noise and light mitigation measures to reduce these possible impacts to the nearby homeowners south and southeast of the location.
	Operator will use low profile tanks.

## **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Planning	Multi-well pad will be used for resource extraction while maintaining the highest distances possible from the offsetting residential areas.
2	Planning	Mineral Resources will make best effort to reduce truck traffic associated with water hauling by using a nearby water source, if available in sufficient supply from the City of Greeley, to supply drilling and completion water.
3	Planning	Mineral Resources will obtain a Use by Special Review permit for the location through the City of Greeley. The USR will address site specific conditions.
4	Community Outreach and Notification	A sign with Mineral Resources' contact information and a 24-hour contact number will be placed at or near the access road entrance.
5	Community Outreach and Notification	Public Notice will be a part of the City of Greeley Use by Special Review process. City staff will conduct all notices. A neighborhood meeting will be conducted prior to planning commission if requested by the city staff.
6	Storm Water/Erosion Control	Mineral Resources maintains a field wide stormwater management permit, certification number COR03H509. Stormwater BMPs will be completed per the site specific erosion and sediment control plan.
7	Material Handling and Spill Prevention	A secondary containment system, consisting of a steel ring with either a spray on liner or geomembrane liner, will be utilized around the tank battery.
8	Material Handling and Spill Prevention	Land farming of E&P Waste will not be conducted on the location. This shall not preclude on-site disposal of E&P waste in accordance with COGCC Rules and permit conditions.
9	Drilling/Completion Operations	A closed loop system will be utilized during drilling.
10	Drilling/Completion Operations	Reduced emissions completions: Mineral Resources will employ completion practices that will ensure compliance with COGCC Rule 805.b.(3).
11	Drilling/Completion Operations	Emissions from condensate, crude oil, and produced water tanks and from glycol dehydrators shall be controlled with devices capable of achieving 95% efficiency destruction of VOCs. Mineral Resources will comply with applicable Colorado Department of Public Health and Environment, Air Pollution Control Division permitting requirements.

Total: 11 comment(s)

## **Attachment Check List**

<b>Att Doc Num</b>	<b>Name</b>
1668048	LOCATION DRAWING
1668277	CORRESPONDENCE
400518456	FORM 2A SUBMITTED
400531805	HYDROLOGY MAP
400531806	ACCESS ROAD MAP
400531807	MULTI-WELL PLAN
400531808	LOCATION PICTURES
400531811	EXCEPTION LOC REQUEST
400533494	SURFACE AGRMT/SURETY
400533518	NRCS MAP UNIT DESC
400533519	WASTE MANAGEMENT PLAN

Total Attach: 11 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	4/14/2014 8:03:00 AM
OGLA	Meeting with Operator and City of Greeley on 4/10/14. City of Greeley USR process should provide for BMPs around the production facilities to allow for subsequent land development in close proximity. OGLA task passed.	4/11/2014 9:15:59 AM
OGLA	Telephone call with Greeley LGD. Message left for operator. Meeting requested.	3/31/2014 3:55:19 PM
OGLA	Telephone call with Tom Kimmel, attorney for Mineral Resources. He indicated that at this time Mineral Resources is still evaluating how to handle the freshwater storage at this location but do not currently plan to use MLVTs that would require additional notifications due to being within 1,000 feet of Building Units. I asked him if Mineral Resources was going to work with City of Greeley concerning their numerous significant concerns from the Scoping Review. He indicated that Mineral Resources would be working with Greeley to resolve them and asked that we pass this Form 2A.	3/31/2014 9:39:01 AM
OGLA	Received a copy of Greeley's comments to the Scoping for this location from Brad Mueller with the City of Greeley. He requests that the Form 2A be withheld until Greeley concludes their dealings with Operator on this location.	3/26/2014 9:04:14 AM
OGLA	1/10/14 - Phoned Operator asking about distance from ECDs to nearby house. Is it within 1,000 feet. 1/13/14 - Operator sent revised Location Drawing indicating tank battery and ECDs are not closer than 1000 feet to nearby homes. 1/16/14 - Email to Operator asking if City of Greeley required any noise or visual mitigation as part of their USR process. Also has Operator contacted homeowner where Access Road comes off of 71st Ave about the upcoming increase in oilfield traffic going by his house for this proposed location. Proposed a COA to protect the nearby Sheep Draw from impact of fluids coming from the proposed location. 1/20/14 - Operator responded saying they had not started the USR process yet. 2/18/14 - Follow-up email asking about the noise and visual mitigation as part of the USR process, the proposed COA, and if the homeowner has been informed about the pending increase in oilfield traffic. 2/19/14 - Informed that operator had begun the USR process with City of Greeley starting with a Scoping Review, they accept the COA, and they have not met with the homeowner about the oilfield traffic. Consultant for operator also inquired about adding Modular Large Volume Tanks (MLVTS) to this location. 2/20/14 - In a phone conversation with consultant, I indicated that adding MLVTs to this location would likely place them within 1,000 feet on Building Units and that this 2A would have to be re-submitted to comply with all Buffer Zone requirements. 3/14/14 - Operator's consultant asked if we had heard from operator about adding MLVTs to this location. I responded that we had not heard anything from them about this.	3/19/2014 4:54:22 PM
Permit	Preliminary review complete.	1/6/2014 2:23:56 PM
Permit	Operator checked 'yes' for beneficial reuse plan submitted. This form has passed completeness.	1/3/2014 10:43:15 AM
Permit	Operator made corrections. Beneficial reuse plan submitted should be 'yes.' A facility ID number has been entered.	1/3/2014 10:15:04 AM
Permit	Returned to draft: Attached Surface Use Agreement is not signed. NRCS Map Unit Description not attached. Waste Management Plan not attached.	12/26/2013 8:31:27 AM

Total: 10 comment(s)