

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:

401142282

Date Received:

11/07/2016

Oil and Gas Location Assessment

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

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:

449340

Expiration Date:

02/26/2020

☐ 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: 86610

Name: CAERUS WASHCO LLC

Address: 1001 17TH STREET - STE #1600

City: DENVER State: CO Zip: 80202

Contact Information

Name: Reed Haddock

Phone: (720) 880-6369

Fax: (303) 565-4606

email: rhaddock@caerusoilandgas.com

RECLAMATION FINANCIAL ASSURANCE

☐ Plugging and Abandonment Bond Surety ID: 20070099

☐ Gas Facility Surety ID: _____

☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: K&H Ranches MN 1-661

Number: Production Pad

County: WELD

QuarterQuarter: SESW Section: 1 Township: 6N Range: 61W Meridian: 6 Ground Elevation: 4752

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: 292 feet FSL from North or South section line

2334 feet FWL from East or West section line

Latitude: 40.510834 Longitude: -104.158263

PDOP Reading: 6.0 Date of Measurement: 02/08/2016

Instrument Operator's Name: James Kalmon

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 #

Production Facilities Location serves Well(s)

400891513

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	Oil Tanks*	2	Condensate Tanks*	Water Tanks*	3	Buried Produced Water Vaults*	
Drilling Pits	Production Pits*		Special Purpose Pits	Multi-Well Pits*		Modular Large Volume Tanks	2
Pump Jacks	Separators*	28	Injection Pumps*	Cavity Pumps*		Gas Compressors*	
Gas or Diesel Motors*	Electric Motors	28	Electric Generators*	Fuel Tanks*		LACT Unit*	7
Dehydrator Units*	Vapor Recovery Unit*	14	VOC Combustor*	28	Flare*	Pigging Station*	1

OTHER FACILITIES*

Other Facility Type

Number

Meter Skid

4

Those facilities indicated by an asterisk () shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

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

A steel pipeline from each wellhead over to the individual separator for each well. From the Separator we will have steel lines to the gas sales point for the gas, steel lines to the oil storage tanks for the oil, and steel lines for the water to the water storage tanks.

CONSTRUCTION

Date planned to commence construction: 08/01/2017 Size of disturbed area during construction in acres: 5.81

Estimated date that interim reclamation will begin: 01/31/2018 Size of location after interim reclamation in acres: 5.51

Estimated post-construction ground elevation: 4750

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:

This is a Production Pad. There will be no drilling waste.

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: K&H Ranches

Phone: _____

Address: 404 Stagecoach Lane

Fax: _____

Address: _____

Email: _____

City: Carbondale State: CO Zip: 81623

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 _____

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

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	_____ Feet	5280 Feet
Building Unit:	_____ Feet	5280 Feet
High Occupancy Building Unit:	_____ Feet	5280 Feet
Designated Outside Activity Area:	_____ Feet	5280 Feet
Public Road:	_____ Feet	2688 Feet
Above Ground Utility:	_____ Feet	4833 Feet
Railroad:	_____ Feet	5280 Feet
Property Line:	_____ Feet	292 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

- 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.

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: _____

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: Map Unit Description # 5 - Ascalon sandy loam, 0 to 3 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: _____

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: 4558 Feet

water well: 4069 Feet

Estimated depth to ground water at Oil and Gas Location 50 Feet

Basis for depth to groundwater and sensitive area determination:

Water Well Permit # 13755 - TD 200' - Depth to GW: 80'

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: _____

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 318A _____

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	<p>A Form 2A (Doc. No. 400891513) will be submitted for the drill pad which is located west of the production pad.</p> <p>MLVT manufacturer: MWS Tanks MLVT size: 40,605 barrels (153 ft x 12 ft) Caerus Washco LLC anticipate the MLVTs to be on ground no more than 70 days.</p> <p>The MLVT design and installation will follow COGCC's "Policy on the Use of Modular Large Volume Tanks in Colorado".</p>
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 11/07/2016 Email: rhaddock@caerusoilandgas.com

Print Name: Reed Haddock Title: Sr. Regulatory Specialist

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: 2/27/2017

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

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Best Management Practices

No	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	Minimize the number, length, and footprint of oil and gas development roads; use existing roads where possible.
2	Storm Water/Erosion Control	Structural practices primarily include physical attributes of the pads and access roads designed to reduce erosion and control stormwater or sediment movement. Erosion and runoff control procedures that will be used to mitigate and reduce the erosive transport forces of stormwater during and after construction may include but will not be limited to the following. 1) Diversion and control of run-on water; 2) Diversion and control of runoff water; 3) Vegetation establishment and maintenance; and 4) Application and maintenance of mulches, tackifiers, tracking and contouring.
3	Material Handling and Spill Prevention	All waste from materials imported to the construction site are placed in appropriate containment and then removed for disposal/recycling to an appropriate licensed disposal/recycling facility. No waste materials will be buried, dumped, or discharged to waters of the state. In the event of any spills or leaks the EHS Manager for Caerus Oil and Gas will be contacted immediately for further direction.
4	Dust control	Dust and/or particulates generated from vehicle traffic on graveled access roads may produce fugitive emissions. Dust and particulate generation are highest during dry and hot times of the year. If dust from vehicle traffic on graveled access roads becomes significant, dust suppression procedures will be implemented that include road watering.
5	Drilling/Completion Operations	The MLVT design and installation will follow COGCC's "Policy on the Use of Modular Large Volume Tanks in Colorado".
6	Interim Reclamation	Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife. Use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeded and reclamation of disturbed areas. Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings. Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors when feasible.
7	Final Reclamation	Pad reclamation is accomplished by contouring disturbed soils to conform to the surrounding terrain, replacing the stockpiled top soil, and seeding of disturbed soil areas in order to re-establish coverage vegetation. Disturbed areas will be seeded using seed mixes appropriate to the location. Local soil conservation authorities with the U.S. Natural Resources Conservation Service, surface owners, and/or reclamation contractors familiar with the area may be consulted regarding the correct seed mix to be utilized. Seeding will be done when seasonal or weather conditions are most favorable according to schedules identified by the jurisdictional authority or reclamation contractor. Whenever possible, seeding will be timed to take advantage of moisture, such as early spring or late fall, which will benefit from winter precipitation.

Total: 7 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2478088	CORRESPONDENCE
2478099	LOCATION PICTURES
401142282	FORM 2A SUBMITTED
401142317	SURFACE AGRMT/SURETY
401142320	ACCESS ROAD MAP
401142321	CONST. LAYOUT DRAWINGS
401142322	LOCATION DRAWING
401142323	HYDROLOGY MAP
401142324	REFERENCE AREA MAP
401142326	FACILITY LAYOUT DRAWING
401143872	REFERENCE AREA PICTURES
401146561	NRCS MAP UNIT DESC
401146563	OTHER

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Complete. Corrected "minerals beneath location will be developed" to YES.	02/27/2017
OGLA	IN PROCESS - Operator concurred with including the Related Remote Location of the wells that will produce to this production facility pad, confirmed the number of meter skids shown on the Facility Layout Drawing and add them to the Facilities section, provided the missing Location Pictures attachment, provided the anticipated timeframe the MLVTs will be onsite, and provided MLVT Policy Certification BMP. OGLA review complete and task passed.	12/15/2016
OGLA	ON HOLD - Operator to concur with including the Related Remote Location of the wells that will produce to this production facility pad, confirm the number of meter skids shown on the Facility Layout Drawing and add them to the Facilities section, provide missing Location Pictures attachment, provide the anticipated timeframe the MLVTs will be onsite, and provide MLVT Policy Certification BMP. Due by 1/8/17	12/08/2016
LGD	Oil and Gas Exploration and Production activities are currently considered a Use by Right in the Agricultural Zoned District and no land use permitting is required by the County. A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access points from a County road require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The use of a right-of-way requires a Right-Of-Way Permit from the Department of Public Works. Troy Swain, Weld Oil/Gas Liaison and LGD (970) 400-3579.	11/28/2016
Permit	Passes completeness. OGLA will need to add the well pad to the Related Remote Locations Tab.	11/11/2016
Permit	Returned to Draft: * Need NRCS Attachment. * Need Form 2A Drilling Pad DocNum added to Related Forms.	11/09/2016

Total: 6 comment(s)