

FORM
2A

Rev
02/20

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:

402505441

(SUBMITTED)

Date Received:

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 <https://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

Expiration Date:

☐ 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: 10456

Name: CAERUS PICEANCE LLC

Address: 1001 17TH STREET #1600

City: DENVER State: CO Zip: 80202

Contact Information

Name: Jason Eckman

Phone: (970) 285-2656

Fax: ()

email: jeckman@caerusoilandgas.com

FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID (Rule 706): 20130021 ☐ Gas Facility Surety ID (Rule 711): _____
- ☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: G13 496 CDP

Number: _____

County: RIO BLANCO

Quarter: SWNE Section: 13 Township: 4S Range: 96W Meridian: 6 Ground Elevation: 8078

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: 1457 feet FNL from North or South section line

2433 feet FEL from East or West section line

Latitude: 39.705684 Longitude: -108.116315

GPS Quality Value: 2.4 Type of GPS Quality Value: PDOP

Date of Measurement: 06/02/2020

Instrument Operator's Name: Jay Taggart

LOCAL GOVERNMENT INFORMATION

County: RIO BLANCO

Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County _____

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition below. ☐ Yes ☒ No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location. ☐

The local government siting permit type is: _____

The local government siting permit was filed on: _____

The disposition of the application filed with the local government is: Other _____

Additional explanation of local process:

Caerus will be submitting a Land Use application with Rio Blanco County approximately 6 months prior to constructing the CDP location.

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 _____ | Oil Tanks* _____ | Condensate Tanks* 5 | Water Tanks* 2 | Buried Produced Water Vaults* _____ |
| Drilling Pits _____ | Production Pits* _____ | Special Purpose Pits _____ | Multi-Well Pits* _____ | Modular Large Volume Tanks _____ |
| Pump Jacks _____ | Separators* 2 | Injection Pumps* _____ | Cavity Pumps* 2 | Gas Compressors* _____ |
| Gas or Diesel Motors* _____ | Electric Motors _____ | Electric Generators* _____ | Fuel Tanks* _____ | LACT Unit* 1 |
| Dehydrator Units* _____ | Vapor Recovery Unit* _____ | VOC Combustor* 1 | Flare* _____ | Pigging Station* _____ |

OTHER FACILITIES*

| Other Facility Type | Number |
|----------------------------------|--------|
| Electrical Skid | 1 |
| Fuel Gas Skid | 1 |
| Gas Meter Skid | 1 |
| Generator Skids | 2 |
| Inlet Slug Catcher | 2 |
| Instrument Air Skid | 1 |
| Master Control Center (MCC) Skid | 1 |
| Water Coolers | 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:

Buried up to 12" 3-Phase gathering pipeline
Buried up to 12" Water pipeline
Buried 6" Gas Lift pipeline
Buried up to 8" steel frac pipeline
Surface up to 12" 3-Phase flowback pipeline. This will be removed once completions and flowback have been completed.

CONSTRUCTION

Date planned to commence construction: 10/01/2021 Size of disturbed area during construction in acres: 10.20
Estimated date that interim reclamation will begin: 11/15/2021 Size of location after interim reclamation in acres: 7.95
Estimated post-construction ground elevation: _____

DRILLING PROGRAM

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

Is H₂S anticipated? _____

Will salt sections be encountered during drilling: _____

Will salt based mud (>15,000 ppm Cl) be used? _____

Will oil based drilling fluids be used? _____

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: _____ Drilling Fluids Disposal Method: _____

Cutting Disposal: _____ Cuttings Disposal Method: _____

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: The Oil Shale Corporation

Phone: 281-206-5485

Address: 925 North Eldridge Parkway

Fax: _____

Address: _____

Email: _____

City: Houston State: TX Zip: 77079

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: _____

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 _____

If this Form 2A is associated with Drilling and Spacing Unit applications, list docket number(s): _____

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

SUBMITTED

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 | 2100 Feet |
| Building Unit: | Feet | 5280 Feet |
| High Occupancy Building Unit: | Feet | 5280 Feet |
| Designated Outside Activity Area: | Feet | 5280 Feet |
| Public Road: | Feet | 277 Feet |
| Above Ground Utility: | Feet | 5280 Feet |
| Railroad: | Feet | 5280 Feet |
| Property Line: | Feet | 3800 Feet |
| School Facility:: | Feet | 5280 Feet |
| School Property Line: | Feet | 5280 Feet |
| Child Care Center: | Feet | 5280 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, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

SCHOOL SETBACK INFORMATION

Was Notice required under Rule 305.a.(4)? ☐ Yes ☒ No

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: 58- Parachute Loam 25 to 75 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: 06/02/2020

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: 340 Feet

water well: 3900 Feet

Estimated depth to ground water at Oil and Gas Location 503 Feet

Basis for depth to groundwater and sensitive area determination:

Water well permit receipt No. 3667700B. Depth to ground water is unknown. The estimated depth to groundwater above is based on other water wells in the area.

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 609

WILDLIFE

☒ This location is included in a Wildlife Mitigation Plan

☒ This location was subject to a pre-consultation meeting with CPW held on 06/02/2020

Operator Proposed Wildlife BMPs

| No | Target Species | BMP Type | Description |
|----|---------------------|-------------------------|---|
| 1 | GREATER SAGE-GROUSE | Wildlife - Avoidance | Caerus has agreed to avoid development along the top of Barnes Ridge. CPW Indicated that this ridge is an important resource for the greater sage grouse population and will continue to adhere to avoiding the ridgetop. |
| 2 | GREATER SAGE-GROUSE | Wildlife - Mitigation | Caerus will continue to provide access to CPW research personnel for ongoing greater sage grouse population research on the North Parachute Ranch (NPR)(NPR) and other operator-owned property. |
| 3 | GREATER SAGE-GROUSE | Wildlife - Minimization | Only essential traffic will be permitted to access sites throughout the North Parachute Ranch where no active operations are occurring. Essential site visits to the well pad and production pad will occur between 10:00 a.m. and 4:00 p.m. during the lekking, nesting and early brood rearing seasons (March 1 to June 30) within 1.0 mile of an active lek. |
| 4 | GREATER SAGE-GROUSE | Wildlife - Minimization | Caerus will implement three-phase gathering on existing locations to reduce the need for onsite production facilities and increase the acreage put into interim reclamation. It will also reduce truck traffic. |

| | | | |
|----|----------------------|-------------------------|---|
| 5 | GUNNISON SAGE-GROUSE | Wildlife - Minimization | Caerus will restrict commercial and residential development on the North Parachute Ranch. |
| 6 | GREATER SAGE-GROUSE | Wildlife - Minimization | Caerus will implement weed management programs for offsite weed treatment (annual budget of \$100,000) and onsite weed treatment (annual budget of \$200,000) for well pads, support pads, production and central delivery point pads, pipeline corridors, access roads, and adjacent areas. |
| 7 | GREATER SAGE-GROUSE | Wildlife - Avoidance | Caerus will complete pad construction and interim/final reclamation activities between July 15 and December 15; avoiding the greater sage grouse wintering, breeding, and nesting periods of December 15 to July 15. |
| 8 | Deer and Elk | Wildlife - Mitigation | Caerus will place multiple gathering lines into a single trench to minimize disturbance and construction; and will install trench plugs (sloped to allow wildlife or livestock to exit the trench should they enter) at known wildlife or livestock trails to allow safe crossing on long spans of open trench, when trenches are left open longer than 48 hours. |
| 9 | Deer and Elk | Wildlife - Mitigation | Caerus will continue to provide access to CPW research personnel for ongoing mule deer research and predator research on the North Parachute Ranch (NPR) and other operator-owned property. |
| 10 | Deer and Elk | Wildlife - Minimization | |
| 11 | Deer and Elk | Wildlife - Minimization | Caerus will implement a three-phase gathering system on this existing location to reduce the need for onsite separation and fluid storage facilities and increase the amount of acreage placed into interim reclamation. This will also reduce truck traffic. |
| 12 | Deer and Elk | Wildlife - Mitigation | Caerus will manage all grazing lease agreements for the North Parachute Ranch under a consistent monitoring program to ensure that livestock utilization does not negatively impact other natural wildlife resources. Monitoring will include fence inspections, repairs, and improvements; periodic range checks for trespassing cattle or unexpected issues; the use of grazing baskets to determine the percentage of grazing usage so that livestock may be timely removed from an area; continuing the development and maintenance of water sources as a result of Caerus operations; and adopting grazing management guidelines, including grazing lease deferrals, to protect existing wildlife habitat resources. Existing and new lease agreements include provisions to: 1) limit animal grazing unit months; 2) prevent overgrazing; 3) manage the use of salt blocks to protect vegetation; 4) conduct any weed treatment operations consistent with the North Parachute Ranch Integrated Vegetation Management Guidance Document; and 5) utilize sound animal management practices |
| 13 | Deer and Elk | Wildlife - Mitigation | Caerus elected to add additional Grazing Monitoring cages to several of the pastures and near water sources. A total of \$50,000 will be spent on grazing monitoring annually. |
| 14 | Deer and Elk | Wildlife - Minimization | Pets will be prohibited on Caerus property. |
| 15 | Deer and Elk | Wildlife - Mitigation | Caerus will maintain open space (no permanent surface structures) on 20 acres of the Parachute Creek Property that is within a migration corridor. |
| 16 | GREATER SAGE-GROUSE | Wildlife - Mitigation | Caerus will utilize the BLM/CPW suggested seed mix containing native species recommended for greater sage grouse habitat |
| 17 | GUNNISON SAGE-GROUSE | Wildlife - Minimization | Caerus will utilize solar panels to reduce the need for additional powerlines; and use remote telemetry to reduce the need for daily well site visitation. |
| 18 | GREATER SAGE-GROUSE | Wildlife - Minimization | To reduce truck traffic, Caerus will utilize a three-phase gathering system to transfer product fluids from the multiple well pads to the G13 496 CDP; where produced water will then be transferred through the existing pipeline system to the Divide Road Water Treatment Facility for treatment and recycling. |

| | | | |
|----|------------|-------------------------|--|
| 19 | Black Bear | Wildlife - Minimization | The operator agrees to report bear conflicts immediately to CPW staff. |
| 20 | Black Bear | Wildlife - Minimization | The operator will implement Rule 1204.a.1 (also see General Operating Recommendations) by storing all garbage, trash, and debris in enclosed bear proof trash containers and transported to an approved disposal facility once per week during drilling and completions operations. No garbage, trash, and debris will be disposed of on location. The well site and access road will be kept free of trash and debris at all times. |

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

The proposed ELU G13 496 Central Delivery Point (CDP) will be handling the 3 -Phase Production from the proposed ELU M12 496 pad (37 Wells), the proposed ELU A18 495 pad (35 wells) and the proposed ELU O13 496 (26 wells). The handling of production at the CDP allows for an increase in area to be interim reclaimed at the two proposed well pads.

Three phase separation will occur at the CDP facility, with oil being separated, and measured through a LACT Meter, dumped to, and sold from the oil tank battery. Water will be separated, cooled, and pumped back to Divide Road Water Treatment where the water will be reused for completion activities or disposed of in existing salt-water disposal well. Gas will be separated, measured, and will flow into a gas gathering line, carrying the gas to the Story Gulch Compressor Station or Middle Fork Compressor Station, where compression and dehydration activities will occur. Measurement of the gas, on the gathering facility pad, will be the custody transfer and allocation point.

Stormwater is addressed under a field-wide Stormwater Management Plan (CDPHE Certification #COR400000). Run-on protection and run-off controls will be installed prior to the beginning of construction activities, with consideration given to worker safety, wildlife, and site access.

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

Signed: _____ Date: _____ Email: jeckman@caerusoilandgas.com

Print Name: Jason Eckman Title: Surface Regulatory Lead

Based on the information provided herein, this Oil and Gas Location Assessment complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____ Director of COGCC Date: _____

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.

| <u>COA Type</u> | <u>Description</u> |
|-----------------|--------------------|
| | |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|---------------------|--------------------|
| | | |

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-------------------------|
| 402507014 | ACCESS ROAD MAP |
| 402507017 | OTHER |
| 402507020 | CONST. LAYOUT DRAWINGS |
| 402507022 | HYDROLOGY MAP |
| 402507023 | LOCATION DRAWING |
| 402507024 | OTHER |
| 402507025 | REFERENCE AREA PICTURES |
| 402507026 | REFERENCE AREA MAP |
| 402507027 | OTHER |
| 402507028 | ACCESS ROAD MAP |

Total Attach: 10 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

