

FORM
2A

Rev
04/18

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:

401905856

Date Received:

02/08/2019

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:

463756

Expiration Date:

04/02/2022

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: 10311
 Name: SRC ENERGY INC
 Address: 1675 BROADWAY SUITE 2600
 City: DENVER State: CO Zip: 80202

Contact Information

Name: Erin Ekblad
 Phone: (720) 616.4319
 Fax: (720) 616.4301
 email: eekblad@srcenergy.com

FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20090043 Gas Facility Surety ID (Rule 711): _____
- Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: Golden Eagle Number: 1-6 Pad
 County: WELD
 Quarter: NENE Section: 6 Township: 6N Range: 66W Meridian: 6 Ground Elevation: 4871

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: 979 feet FNL from North or South section line
498 feet FEL from East or West section line

Latitude: 40.520940 Longitude: -104.814644

PDOP Reading: 1.7 Date of Measurement: 04/24/2018

Instrument Operator's Name: Aaron Rivera

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

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: Golden Eagle Acres, Inc Phone: _____

Address: 1035 37th Court Fax: _____

Address: _____ Email: _____

City: Greeley State: CO Zip: 80634

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: oil and gas lease

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

Date of Rule 306 surface owner consultation 06/08/2016

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:	613 Feet	386 Feet
Building Unit:	953 Feet	558 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	491 Feet	89 Feet
Above Ground Utility:	390 Feet	160 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	176 Feet	26 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: 01/08/2019

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.

The location of the Production Facility depicted in the Location Drawing has been placed at the request of the Surface Owner/Developer of Golden Eagle Acres. In addition, the location for siting the multi-well Production Facility as described provides easy access, consolidated surface impact and the least disturbance to current and future agricultural operations. The facility is also situated in a centralized area to accommodate existing pipeline infrastructure in the area. The location of the proposed production facility is adjacent to the existing Noble Energy production facility to reduce overall surface impacts and combine disturbance areas.

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: 32: Kim loam, 1 to 3 percent slopes

NRCS Map Unit Name: 4: Aquolls and Aquepts, flooded

NRCS Map Unit Name: 47: Olney fine sandy loam, 1 to 3 percent slopes

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: 10/29/2018

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: 10 Feet

water well: 502 Feet

Estimated depth to ground water at Oil and Gas Location 14 Feet

Basis for depth to groundwater and sensitive area determination:

Water Well Permit 251499 is 502 feet away, but nearest water permit with static water level of 14 feet is 383-WCB.
Canal is 38 Feet and Ditch is 0 feet away (Dry at time)
Wetlands are 646 feet away.
Stormwater detention basin is 10 feet away.
Woods Lake is 805 feet away and Angel Lake is 726 feet away.

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

WILDLIFE

This location is included in a Wildlife Mitigation Plan

This location was subject to a pre-consultation meeting with CPW held on _____

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 Reference well for this proposed pad is Golden Eagle 28N-1B-M.

Lot 2 in the NE 1/4 is greater than 40 acres, so the SHL is listed as if the Qtr were divided into QtrQtr. Page 4 of SUA SRC and the Developer agreed to waive Exception and Twinning 318A.a. and 318A.c

SRC will comply with all MLVT policies and requirements for this pad. For the MLVT, we will plan on 90 days on location.
 42,000 bbl capacity
 12' high x 160' diameter
 Manufacturer is unknown at this time. Potential: PCI Manufacturing, Pinnacle, Southern Frac, or Big Holdings.
 SRC will comply with all MLVT policies and requirements for this pad.

The Body of Water to the East side of the pad is a privately owned lake. It is not related to drinking water.

The Canal going thru the pad is privately owned as well. SRC is working with the owner to get an easement for the boring underneath the canal for the SRC's flowlines. And SRC is working with the owner to get an easement for building an access bridge to go over the canal. No Corp of engineers involvement needed.

Noble still plans on keeping the tank battery and existing wells per our discussion today. SRC and Noble worked jointly on these plats for the proposed location to relocate Noble's flowlines around SRC's new disturbance.

There is no Wildlife concerns in this proposed location. We named the location Golden Eagle after the name of the neighborhood which is Golden Eagle Acres.

SRC, the Surface Owner, the Developer, and Town of Severance have all been working closely together on this project for almost two years. A Surface Use/Development Agreement between SRC, the Surface Owner, and Developer was executed in August 2017. Pursuant to the Conditional Use Permit Application SRC has been in the works with the Town of Severance, a neighborhood meeting with surrounding Surface Owners in the Town of Severance occurred December 10, 2018. Town of Severance Planning Commission has approved SRC's Conditional Use Permit for the Golden Eagle 1-6 project on December 19, 2018. As discussed during the Planning Commission hearing, SRC will install landscaping and security fencing, following SRC's operations. Final approval of the Golden Eagle 1-6 Conditional Use Permit was granted by the Town of Severance Board of Trustees on February 5, 2019. This approval from the Town of Severance comes with no additional BMPs to the Form 2A. SRC is planning to commence operations prior to the second phase of development in Golden Eagle Acres, the neighboring (planned) subdivision to the West of SRC's project area.

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

Signed: _____ Date: 02/08/2019 Email: eekblad@srcenergy.com

Print Name: Erin Ekblad Title: Manager Regulatory Affair

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: 4/3/2019

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 location is in a sensitive area due to shallow groundwater, therefore, the operator shall line the secondary containment areas for the tanks and separators with an impervious material.
	Operator shall post a copy of the approved Form 2A on the location during all construction, drilling, and well completion activities.

Best Management Practices

No	BMP/COA Type	Description
1	Planning	604.c(2)M. Fencing: A meeting with the surface owner will determine a fencing plan. And after this discussion with surface owner, Fencing around wellheads and fencing around facility. SRC will install landscaping and security fencing.
2	Planning	804. Visual Impacts: All long term facility structures will be painted a color that enables the facilities to blend in with the natural background color of the landscape, as seen from a viewing distance and location typically used by the public. Maintain appearance with garbage clean-up; a trash bin will be located on site to accumulate waste by the personnel drilling the wells. Site will have unused equipment, trash and junk removed immediately. SRC and the Town of Severance have agreed that SRC will install a five (5) foot berm with trees and shrubbery on the North, West, and South sides of the Well Pad with six (6) foot chain link fencing around the wellheads. The Facility pad will also include a five (5) foot berm with trees and shrubbery on the North and West sides with six (6) foot chain link fencing on the North, South, East, and West sides of the facility.
3	Planning	604.c.(2)N. Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25' from the wellhead tanks or separators. Electrical equipment shall comply with API IRP 500 and will comply with the current national electrical code. 606A.d. Flammable liquids shall not be stored within fifty (50) feet of the wellbore, except for the fuel in the tanks of operating equipment or supply for injection pumps. Where terrain and location configuration do not permit maintaining this distance, equivalent safety measures should be taken.
4	Traffic control	604.c.(2)S. Access Roads: The access road will be constructed to accommodate local emergency vehicles. This road will be maintained for access at all times. Traffic will be routed to minimize local interruption. Dust control measures will also be utilized., which we will use Magnesium Chloride to control dust.
5	Traffic control	RULE 604.c.(2)D: If required by the local government, a traffic plan shall be coordinated with the local jurisdiction prior to commencement of move in and rig up. Any subsequent modification to the traffic plan must be coordinated with the local jurisdiction. Our access permit to location is our notification to Weld County, the city of Greeley, or additional municipality if necessary for approved traffic routes, and traffic control. All Traffic Plans are approved per our access permit, part of the access permitting process.
6	General Housekeeping	604.c.(2)P. Trash Removal: All trash, debris and material not intrinsic to the operation of the oil and gas facility shall be removed and legally disposed of as applicable.
7	Material Handling and Spill Prevention	604.c.(2)F. Leak Detention Plan: Pumper will visit the location daily and visually inspect all tanks and fittings for leaks. Additionally, monthly documented SPCCP inspections are conducted pursuant to 40 CFR 112.
8	Material Handling and Spill Prevention	604.c.(2)R Tank Specifications: Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks are visually inspected once a day for issues, and recorded inspections are conducted once a month.
9	Construction	604.c.(3)B. Berm Construction. Tank berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. All berms will be visually checked periodically to ensure proper working condition. Secondary containment devices shall be sufficiently impervious to contain any spilled or released material. Tertiary containment, such as an earthen berm, will be installed around production facilities.
10	Construction	803 Light sources during all phases of operations will be directed downwards and away from occupied structures where possible. Once the drilling and completion rigs leave the site, lighting usually exists on the entrance/exit doors to the LACT units and Instrument Air skids, all for safety. The light fixtures need to be specified as "shine down" with appropriate shields.

11	Construction	604.c.(2).Q. All guy line anchors left buried for future use shall be identified by a marker of bright color not less than four (4) feet in height and not greater than one (1) foot east of the guy line anchor.
12	Construction	604.c.(2).E. This will be a multi-well pad.
13	Noise mitigation	604.c.(2)A. Sound walls will be used to surround the well site during drilling operations.
14	Emissions mitigation	604.c.(2)C.i. Green Completions - Emission Control System: Test separators and associated flow lines and sand traps shall be installed on-site to accommodate green completions techniques pursuant to COGCC Rules. The flowback gas shall be sold or shall be captured and combusted with an Emissions Control Device (ECD), which will be installed and kept in operable condition for least the first 90-days of production pursuant to CDPHE rules. This ECD shall have an adequate capacity for 1.5 times the largest flowback within a 10 mile radius, and will be piped to other or permanent equipment and shall be provided with the equipment needed to maintain combustions where non-combustible gases are present. There is a sales line available, at the first sign of salable quality gas SRC Energy will turn the gas to a sales line.
15	Odor mitigation	Rule 805: Oil & gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare.
16	Odor mitigation	For the OBM system, the base fluid is D822. The fluid is a refined product that has low VOC and BTEX counts. The BTEX counts are trace levels so this provides a much safer work environment as compared to diesel. The product has a reduction in aromatic compounds when compared to diesel so the odor emitted by the fluid is minimal. The flash point is 85°F higher than diesel which increases the overall safety of the product. During our drilling operations we average 5-6 loads of cuttings hauled off per day to a disposal facility. During the plating process of every location, special consideration is payed to the orientation of the rig with respect to surrounding residential units. When possible, the generators will be placed on the far side of location away from surrounding occupied units. Prevailing wind direction is taken into consideration when planning a location in order to mitigate odor, and noise from being a nuisance to the surrounding stakeholders. When possible, the rig is oriented in a way in which residential units are upwind from the location. Hydrocarbon odors from production facilities are minimize and eliminated by keeping all product inside pipe, separators, tanks, and combustors. Uncommon leaks are discovered by frequent FLIR camera inspections and immediately repaired. All tanks are sealed with best available industry thief hatches and gaskets. Tank vapors are captured with properly sized piping and combustors.
17	Drilling/Completion Operations	604.c.(2).K. 604.c.(2).K. Pit level Indicators - For the rig pits (steel tanks) we utilize the Pason PVT (Pit Volume Totalizer) system in conjunction with the EDR (Electronic Depth Recorder) systems on both rigs which incorporate digital recording of pit volumes, settable alarms for gain and loss so we are able to track the pit volumes. These items are standard on a 5K system which is what we are permitting for.
18	Drilling/Completion Operations	604.c.(2).O. Drilling and Completion-All loadlines shall be bullplugged or capped.
19	Drilling/Completion Operations	SRC will comply with all MLVT policies and requirements for this pad.
20	Drilling/Completion Operations	604.c.(2)B.i Operator will be utilizing a closed loop system.
21	Drilling/Completion Operations	SRC will put steel berms around all of our separators at this location.
22	Final Reclamation	604.c.(2)T. Within 90 days subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site. Identification of plugged and abandoned wells will be identified pursuant to 319.a.(5)
23	Final Reclamation	604.c.(2).U. Final Reclamation-The operator shall identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). The operator shall also inscribe or imbed the well number and date of plugging upon the permanent monument.

Total: 23 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2479025	OTHER
2479026	RULE 306.E. CERTIFICATION
2479027	CORRESPONDENCE
401905856	FORM 2A SUBMITTED
401905859	WASTE MANAGEMENT PLAN
401912905	ACCESS ROAD MAP
401912910	OTHER
401912913	FACILITY LAYOUT DRAWING
401912914	LOCATION PICTURES
401912915	HYDROLOGY MAP
401912916	LOCATION DRAWING
401912917	LOCATION PICTURES
401912918	MULTI-WELL PLAN
401912919	OTHER
401912920	OTHER
401912988	SURFACE AGRMT/SURETY
401914281	NRCS MAP UNIT DESC
401914282	NRCS MAP UNIT DESC
401914285	NRCS MAP UNIT DESC
401933248	PRE-APPLICATION NOTIFICATION CERTIFICATION

Total Attach: 20 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Permitting review complete, passed Final Review.	04/02/2019
OGLA	Siting Rationale review by OGLA Supervisor completed. OGLA task passed.	04/02/2019
OGLA	The three LACT Units are comprised of 2 Oil LACTs and 1 Produced Water LACT. The 306.e. Certification letter indicates that SRC held a neighborhood meeting to discuss this location on 12/10/18 in which no one attended except for SRC staff.	03/21/2019
OGLA	Operator revised the Future Land Use, provided more detail in the Visual Impacts BMP about the planned landscaping, and provide the Rule 306.e. Certification letter. No Public Comments. OGLA review completed. Waiting on Siting Rationale review by OGLA Supervisor.	03/20/2019
OGLA	Requested operator revise the Future Land Use, and provide more detail in the Visual Impacts BMP about the planned landscaping. Due by 4/7/19.	03/07/2019
LGD	This proposed oil and gas location is within the municipal boundaries of the Town of Severance. No Weld Oil and Gas Location Assessment (WOGLA) required. The operator will need to work with the Town to address any requirements for this location. Jason Maxey, Weld Oil/Gas Specialist and LGD 970-400-3579	02/27/2019
Permit	Passed completeness.	02/21/2019
OGLA	Passed Buffer Zone completeness review	02/20/2019
Permit	Changed date planned to commence construction per operator.	02/11/2019
Permit	Referred to OGLA supervisor for buffer zone review.	02/11/2019

Total: 10 comment(s)