FORM 2A Rev 06/19

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Oil and Gas Location Assessment

Document Number: 401762724

Date Received: 11/28/2018

☒ 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: **466367**

Expiration Date: **07/30/2022**

☒ 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: Bernhardt Number: 4-18 Pad
County: WELD

QuarterQuarter: NWNW Section: 18 Township: 4N Range: 66W Meridian: 6 Ground Elevation: 4738

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: 518 feet FNL from North or South section line
357 feet FWL from East or West section line

Latitude: 40.317783 Longitude: -104.828427

PDOP Reading: 1.3 Date of Measurement: 11/10/2016

Instrument Operator's Name: Aaron Rivera

LOCAL GOVERNMENT INFORMATION

County: WELD Municipality: MILLIKEN

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: Municipality

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" 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: USR

The local government siting permit was filed on: 04/24/2017

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

SRC collabarated on many fronts to locate the Bernhardt 4-18 Pad to not only align with Milliken's Use by Special Review application but accomadations set forth by the owner as well. Milliken approved this USR (Resolution No. PC17-02) on October 4, 2017.

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	11	Oil Tanks*	8	Condensate Tanks*		Water Tanks*	2	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	1
Pump Jacks		Separators*	13	Injection Pumps*		Cavity Pumps*		Gas Compressors*	1
Gas or Diesel Motors*		Electric Motors		Electric Generators*	1	Fuel Tanks*		LACT Unit*	2
Dehydrator Units*		Vapor Recovery Unit*	4	VOC Combustor*	4	Flare*		Pigging Station*	

OTHER FACILITIES*

Other Facility Type	Number
Two-Phase Separator	6
Instrument Air Building	1
Gas Lift Skid	1
Gas Buster	1

*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:

1 inch, 2 inch, 3 inch, schedule 40/80/160 bare and fusion bonded epoxy, threaded and welded. water, oil, gas.
4, 6, 8 inch schedule 40/80 bare and fusion bonded epoxy, welded, water, oil, gas.
2 inch stainless steel, schedule 40, water
3 inch polyflow composite pipe, 500 psig rated, water
6 inch, 8 inch, 10 inch schedule 40 welded, oil and combustion vapors.
Flowlines 3, 4, 6, 8" fusion bonded epoxy and welded scheduled 10/40/80/160 steel.

CONSTRUCTION

Date planned to commence construction: 09/28/2019 Size of disturbed area during construction in acres: 13.31

Estimated date that interim reclamation will begin: 03/31/2020 Size of location after interim reclamation in acres: 3.99

Estimated post-construction ground elevation: 4735

DRILLING PROGRAM

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

Is H_2S 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? Yes

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: Bernhardt Farms, LLC Phone:

Address: 12281 State Highway 60 Fax:

Address: Email:

City: Milliken State: CO Zip: 80543

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 12/01/2016

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.

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.

	From WELL	From PRODUCTION FACILITY
Building:	504 Feet	832 Feet
Building Unit:	1062 Feet	890 Feet
High Occupancy Building Unit:	2565 Feet	3247 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	338 Feet	62 Feet
Above Ground Utility:	316 Feet	37 Feet
Railroad:	440 Feet	502 Feet
Property Line:	355 Feet	40 Feet
School Facility::	2884 Feet	3443 Feet
School Property Line:	2688 Feet	3237 Feet
Child Care Center:	2565 Feet	3247 Feet

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: 10/22/2018

FOR MULTI-WELL PADS AND PRODUCTION FACILTIES 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. 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 outside of the floodplain and situated near existing pipeline infrastructure.

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 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: 11: Bresser sandy loam, 0 to 3 percent slopes

NRCS Map Unit Name: 2: Altvan loam, 1 to 3 percent slopes

NRCS Map Unit Name: 1: Altvan loam, 0 to 1 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: _____

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: 1 Feet

water well: 42 Feet

Estimated depth to ground water at Oil and Gas Location 4 Feet

Basis for depth to groundwater and sensitive area determination:

Ponds are 1' SW.

WATER WELL (PERMIT #83-R) IS ±42' E with an estimated depth 36 feet.

WATER WELL (PERMIT #15499-F) IS ±318' NE
WATER WELL (PERMIT #4486-R) IS ±903' N
WATER WELL (PERMIT #4933) IS ±786' W
WATER WELL (PERMIT #43-GX) IS ±864' SE
WATER WELL (PERMIT #268245) IS ±766' SE
WATER WELL (PERMIT #155687--A) IS ±759' SE
WATER WELL (PERMIT #84-R) IS ±467' SE

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 zone: No

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: No

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 the Bernhardt 30C-14-L.

Lot 2 in the NW 1/4 is greater than 40 acres, so the SHL is listed as if the Qtr were divided into QtrQtr.

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.

All Traffic Plans are approved per our access permit, part of the access permitting process.

SRC obtained a Use by Special Review permit on August 2, 2017 from the Town of Milliken.

For this proposed pad location, all wells on this pad will be GWA and all 11 wellbores on this pad will include the Bernhardt lease under the surface.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 11/28/2018 Email: eekblad@srcenergy.com

Print Name: Erin Ekblad Title: Manager Regulatory Affair

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: 7/31/2019

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
	This Form 2A has been approved prior to the approval of the Wellbore Spacing Units for the wells proposed on this location. If the final agency action is denial of the APD then the operator shall abandon this Oil and Gas Location by submitting a Form 4 Sundry within 45 days of the agency denial; however, if location construction has commenced, then the location will be immediately subject to final reclamation.
	The Approved Form 2A permit will be posted at the location during construction, drilling, and completions operations.

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. After discussions with Surface Owner, permanent fencing will be added around the facility and wellheads.

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.
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 will 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 We also will use Water on access roads when on non-leased roads (public roads).
5	Traffic control	RULE 604.c.(2)D: Traffic control is always worked out with Weld county for routes and all municipalities that are notified for their approval as well. We have addressed traffic issues with Miliken.
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	Storm Water/Erosion Control	An impermeable liner https://www.carboceramics.com/Environmental/Oil-and-gas-applications-overview/Proprietary-liner-technology and tank bases https://www.carboceramics.com/Environmental/Oil-and-gas-applications-overview/Tank-bases (by Falcon Technologies) will be installed under all oil/water tanks, and up and along the inner wall of the steel tank berm. A steel berm will be installed around the separators. Above ground piping will be installed on the entire facility, except the flowlines from the wellhead to separator inlets, and gas lift injection. These buried lines will follow the latest leak testing per COGCC rules. See leak detection BMPs. Construction: Ditch and berm with sediment traps and the Drainage ponds will be install as the first phase of construction to restrict erosion issues. Sediment Traps will have an overflow structure that is lined with erosion blankets and rip rap. Check dams will be used in ditch and berm to slow water where needed. Drilling: Common practice, we will install a ditch and berm around the drill/completions pad with sediment traps installed at the lowest lying areas to help with sediment control. We also have a Detention pond that is part of our BMP for this project that is located at the south end of the drill/completions pad and MLVT area. The grading plan is designed for storm water to flow to the detention pond. Sediment Traps will have an overflow structure that is lined with erosion blankets and rip rap. We will install a cement treatment liner for the rig to sit on that is impermeable to protect ground water. In addition to this we will install a berm around the flat perimeter of the location and will install storm water outlet pipes that have valves that can be open and closed, so we can control our storm water releasing from the pad, and ensure that it is clean upon releasing from location into the ditch & berm, sediment traps, and detention pond. Completions: All the same as stated above but we install a containment liner around the wells for the completions fleet to sit on. Production: The facility's grading plan is designed to drain to the detention pond that is at the east end of the facility. All storm water will drain to the pond. All tanks and separators have secondary containment. The productions facility is designed to drain to the retention pond, catching storm water and sediment associated with storm water to flow into the retention pond. So it acts as a sediment trap as well. Storm water will collect into the pond and slowly evaporate and or be absorbed into the ground. We will install an emergency overflow structure in the pond so if we have an event that water needs to escape the pond it will have a designated place to overflow so it does not wash out the banks of the pond. The ditch and berm around the pad will help divert run-on for the pad and we can direct it into the retention pond so it slows the water down helping with erosion.
8	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. Any leaks found by the pumper are immediately notified to SRC through a digital alert system to the FLIR thermographers. The pumper notifies SRC through the digital alert system when they are doing their daily entries. This Identification process is for any fluid or gas that is produced on site and has a potential to emit hydro carbons. Detection and repair confirmation is done with a GF-320 FLIR infrared camera.
9	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.
10	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. SRC will put steel berms around all of our separators at this location.

11	Construction	Lights: To minimize impacts from lighting used during the drilling phase, all lights will be pointed in a downward position to limit impacts of neighboring houses. If lights are installed on sound walls, they are placed a minimum of 3' below the top of the wall. Lighting will be assessed once installed to ensure all neighboring houses/business are free from impacts of light. Lights are placed strategically to ensure there is no direct lighting to the surrounding neighbors. Rig Mast Light only provides enough lighting to ensure the safety of the working environment for personnel on the night shift. Mast lighting will not cause a direct lighting effect on neighboring housing. The mast lights are attached with fixed mounts and cannot be re-aimed and cannot be dimmed for safety reasons. Drilling does not use the sound wall lights as SRC has the portable light towers and try to keep them below the sound walls and pointed specifically at the operation that requires more light at night. When not needed SRC does not operate them to keep the light pollution to a minimum. 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 will be specified as "shine down" with appropriate shields.
12	Construction	604.c.(2).Q. No Guy Lines Anchors Will be used, all our rigs use Base Beams.
13	Construction	604.c.(2).E. This will be a multi-well pad.
14	Noise mitigation	604.c.(2)A. After discussions with Surface Owner, sound walls will be located all around well pad and permanent fencing around the facility and wellheads. Sound walls will be utilized on the north, east, south and west sides of the well pad. SRC will conduct sound surveys pre and post operations with the intent to comply with state a local noise regulations.
15	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.
16	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. Dust for sandboxes: Silica dust suppression practices are controlled using Halliburton's sand transportation boxes that are placed on a specialty frame that allows sand to gravity feed directly into mixing tanks thus mitigating airborne silica dust.

17	Odor mitigation	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 platting process of every location, special consideration is payed to the orientation of the rig with respect to surrounding residential units. SRC will orient its equipment within the disturbance area(s) to limit and comply with all COGCC regulations for any fugitive noise, odor or lighting pollution to any nearby sensitive cultural items. 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. 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.
18	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.
19	Drilling/Completion Operations	604.c.(2).O. Drilling and Completion-All loadlines shall be bullplugged or capped.
20	Drilling/Completion Operations	SRC will comply with all MLVT policies and requirements for this pad.
21	Drilling/Completion Operations	604.c.(2)B.i Operator will be utilizing a closed loop system.
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

Att Doc Num	Name
2316428	DIRECTOR OBJECTIVE CRITERIA MEMO
2316540	RULE 306.E. CERTIFICATION
2316541	LOCATION DRAWING
2316542	FACILITY LAYOUT DRAWING
2316555	OTHER
2473338	MINERAL LEASE MAP
401762724	FORM 2A SUBMITTED
401801399	WASTE MANAGEMENT PLAN
401801451	SURFACE AGRMT/SURETY
401852557	ACCESS ROAD MAP
401852562	OTHER
401852567	HYDROLOGY MAP
401852575	LOCATION PICTURES
401852580	MULTI-WELL PLAN
401852584	OTHER
401852592	OTHER
401852691	NRCS MAP UNIT DESC
401852694	NRCS MAP UNIT DESC
401852695	NRCS MAP UNIT DESC
401852912	PRE-APPLICATION NOTIFICATION CERTIFICATION

Total Attach: 20 Files

General Comments

User Group	Comment	Comment Date
Permit	Permitting review complete, passed Final Review.	07/31/2019
Permit	Requested Mineral Lease Map from operator to confirm Right to Construct. Requested additional information from operator about the Proposed Wellbore Spacing Units. Attached Mineral Lease Map to form. Corrected the Right to Construct to Surface Use Agreement. With operator concurrence, a comment was added to the submit tab ensuring that all 11 APDs will be GWA wells, and that all 11 Wellbore Spacing Units will include the lease under the surface.	07/25/2019
OGLA	Operator provided clarification for leak detection notification, traffic control for correct area (Milliken), access road maintenance and dust control, and stormwater and erosion BMP - updated BMP regarding detention pond.	07/23/2019
OGLA	request additional clarification on stormwater, leak detection, fire control, and traffic control on 6/27/2019. have not heard back - move to "On Hold"	07/03/2019
OGLA	Operator provided updated location drawing with Childcare as HOBU per previous comment. Request clarification on BMPS for access road/traffic management, stormwater and Leak detection.	06/27/2019
OGLA	Operator provided the school and childcare distances and revised location drawing with the HOBU listed as the distance to the nearby school. The in-home childcare facility has a capacity of up to 6 children and is considered a HOBU and is closer than the school as indicated on the 2A. The Facility layout drawing lists the k-8 school as the HOBU.	06/26/2019
OGLA	The Director Objective Criteria Review Summary (Doc#2316428) is attached to this Form 2A. Following additional analysis of the Director Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.	06/14/2019

OGLA	Director reviewed the location for SB19-181 - Objective review memo is attached as doc no 2316428. OGLA task passed.	06/13/2019
OGLA	Operator provided updated distances to Child Care facility - updated in cultural distance section, provided revised location drawing with distances - attached.	06/07/2019
OGLA	Operator provided Local government information. Operator had provided distance to nearest school and school property. Childcare facility may be closer than indicated, but still greater than 2000 feet from the location - contact Operator for more information. Operator responded they will provide revised distances to child care facility. Operator provided revised BMPs for noise, light, and dust - added to BMP section.	06/05/2019
Permit	With operator concurrence, the Local Government disposition was updated.	05/30/2019
OGLA	This Form 2A was reviewed under SB-181 and was flagged for additional Director Review based on Objective Criteria #1: being within 1500 feet of a building unit; #2: within a municipality; and #5 for Sensitive Area for water resources. The Operator provided information regarding the agreement with the local government/municipality. The Operator provided BMPs under Rule 604.c.(2) for nuisance mitigation and provided information regarding secondary and tertiary containment for shallow groundwater and nearby surface water. Location is within the proposed boundaries of the SRC CDP, add COA for CDP compliance.	05/17/2019
Permit	Permitting review complete, passed Final Review.	04/12/2019
OGLA	OGLA review and supervisor review complete, OGLA task passed.	04/08/2019
OGLA	Operator provided revised location and facility drawings (replaced) and 306.e. certification - attached. Operator provided additional BMP for ground and surface water protection and concurrence to update depth to water at 4 feet. Operator provided clarification on BMPs and comment of SUA with Milliken. Water well within disturbed area is abandoned, next nearest water well is approx. 443 feet northeast. Send to OGLA supervisor for final review.	04/01/2019
OGLA	OGLA review: 2A and multi-well plan have 11 wells, other drawings have 13 wells - request well count confirmation. Request additional information for siting rationale and interactions with local and proximate governments. Depth to groundwater appears to be shallower based on water well logs, request concurrence to update from 36 feet to 4 feet. Request BMP for protection of groundwater and surface water. Request clarification on leak detection plan and noise mitigation. Request 306.e. certification.	03/07/2019
Permit	Passed completeness.	12/10/2018
OGLA	Passed Buffer Zone completeness review.	12/07/2018
Permit	Refererred to OGLA supervisor for buffer zone review. Due Dec 12.	11/29/2018

Total: 19 comment(s)