

FORM
2A

Rev
08/19

State of Colorado
Oil and Gas Conservation Commission

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



Document Number:

402201622

(SUBMITTED)

Date Received:

10/14/2019

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:

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: 10598
Name: SANDRIDGE EXPLORATION & PRODUCTION LLC
Address: 123 ROBERT S KERR AVE
City: OKLAHOMA CITY State: OK Zip: 73102

Contact Information

Name: Diane Overbey
Phone: (405) 429 5828
Fax: ()
email: doverbey@sandridgeenergy.com

FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID (Rule 706): 20170015 ☐ Gas Facility Surety ID (Rule 711): _____
- ☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: High Point 0880 Number: S28 Pad
County: JACKSON
Quarter: NENW Section: 28 Township: 8N Range: 80W Meridian: 6 Ground Elevation: 8196

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: 892 feet FNL from North or South section line
1826 feet FWL from East or West section line

Latitude: 40.641530 Longitude: -106.381300

PDOP Reading: 1.2 Date of Measurement: 05/24/2019

Instrument Operator's Name: Levi Kurtzer

LOCAL GOVERNMENT INFORMATION

County: JACKSON 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 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: _____

The local government siting permit was filed on: _____

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

Additional explanation of local process:

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

OTHER FACILITIES*

Other Facility Type

Number

Allocation Vessels	4
Gas Meter	1
Power Fluid Vessels	4
Triplex Pumps	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:

All offsite take away pipelines will be 8" or smaller and be at least schedule 40 steel lines and will meet API standards. All location flowlines connected to the takeaway lines will be 4" or smaller and be at least schedule 40 steel lines and will meet APD standards. All pipelines will be buried to a minimum of 4' below grade.

CONSTRUCTION

Date planned to commence construction: 07/01/2020 Size of disturbed area during construction in acres: 5.41
Estimated date that interim reclamation will begin: 12/01/2020 Size of location after interim reclamation in acres: 4.42
Estimated post-construction ground elevation: 8196

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? 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?

Reuse Facility ID: or Document Number:

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: BLM

Phone:

Address: 2103 E Park Avenue

Fax:

Address: c/o Kremmling Field Office

Email:

City: Kremmling State: CO Zip: 80549

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

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:	3508 Feet	3216 Feet
Building Unit:	3578 Feet	3284 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	3870 Feet	3597 Feet
Above Ground Utility:	4119 Feet	3840 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	658 Feet	382 Feet
School Facility::	5280 Feet	5280 Feet
School Property Line:	5280 Feet	5280 Feet
Child Care Center:	5280 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: Te - Tealson-Rock land association

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: 05/24/2019

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: 2697 Feet

water well: 160 Feet

Estimated depth to ground water at Oil and Gas Location 44 Feet

Basis for depth to groundwater and sensitive area determination:

No Hydrological features within 1000'.
Depth to groundwater taken from water well permit #40552

The dry wash shown on the location drawing is not a creek (or intermittent creek) and not present on the USGS 24k topo map that we use to establish water routes on the Hydrology Map. The dry wash is low area where surface precipitation flows since it is on the side of a hill and is not a water source from a spring or creek.

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 10/23/2019

Operator Proposed Wildlife BMPs

No	Target Species	BMP Type	Description
1	Deer and Elk	Wildlife - Minimization	
2	GREATER SAGE-GROUSE	Wildlife - Minimization	If oil and gas operations must occur (with documented justification) within 4.0 miles of greater sage grouse leks, the operator agrees to conduct oil and gas operations outside the period between March 1 and June 30

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

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 10/14/2019 Email: regulatory@ascentgeomatics.com

Print Name: Justin Garrett Title: Regulatory Analyst

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.

COA Type

Description

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Best Management Practices

No	BMP/COA Type	Description
1	Wildlife	<ul style="list-style-type: none"> • Greater Sage-Grouse- The operator agrees to use hospital-grade mufflers on production equipment (or house such equipment in enclosed structure(s)) including: compressors, pump jacks, or other motors necessary to run operations at the site. Mufflers will be pointed upward to dissipate potential vibration. (Mufflers not applicable for any equipment that will be enclosed to mitigate noise). • Greater Sage-Grouse- The operator agrees to establish company guideline to minimize wildlife mortality from vehicle collisions on roads. Slow speed and increased awareness among employees and contractors should lessen impacts to wildlife. • Greater Sage-Grouse- The operator agrees to preclude the use of aggressive non-native grasses in greater sage-grouse habitat reclamation. • Greater Sage-Grouse- The operator agrees to utilize combustion chambers or enclosed flaring devices to eliminate open flares at this location. • Black Bear- The operator will implement Rule 1204.a.1 (also see General Operating Recommendations). • Black Bear- The operator will implement Rule 1204.a.1 stating that within black bear habitat west of Interstate 25, operators shall install and utilize bear-proof dumpsters and trash receptacles for food-related trash at all facilities that generate such trash.

2	Storm Water/Erosion Control	Operator will implement a storm water and erosion control plan to prevent sedimentation and erosion. The use of earthen berms, seeding of slopes on the outside of the perimeter earthen berms, and placement of waddles and silt fencing outside of the perimeter berm will be used to prevent erosion and non-source pollution. These items also control water runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation. At the PRU High Point 0880 S28 Pad, the compacted earthen perimeter berm will be at least 18 inches in height and has been seeded on the outside slopes and surrounded with silt fence.
3	Material Handling and Spill Prevention	<ul style="list-style-type: none"> • For onsite fluid/product storage - all produced fluids will be routed to new separation equipment. To protect shallow groundwater, operator uses separators with built-in containment. Following separation, some of the produced fluids will then be routed via flowlines to the one onsite condensate storage tank, which has secondary containment consisting of a synthetic liner inside a compacted earthen berm. • For offsite fluid/product storage - all produced fluids will be routed to new separation equipment. To protect shallow groundwater, operator uses separators with built-in containment. Following separation, the produced fluids will then be routed via a pipeline to an offsite central tank battery production facility with existing secondary containment system features (synthetic liners tied into steel containment rings). • Pollution control containers (spill boxes) are used on truck loading lines and are placed within the limits of the secondary containment system. • To protect groundwater resources, operator shall use cathodic protection on buried steel lines to mitigate corrosion. • To protect surface water and groundwater resources, the wells located on this pad will be equipped with remote shut-in capabilities prior to commencing production. Remote shut-in capabilities include the ability to shut-in the well remotely via automation controls. Operator will also have remote monitoring and shut down capabilities including automatic shutdown pressure devices installed on process vessels with remote monitoring capabilities.
4	Construction	During construction only the minimum amount of vegetation necessary for the construction of roads and facilities will be removed. Topsoil will be conserved during excavation and will not be reused as cover on disturbed areas to facilitate regrowth of vegetation. No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment.
5	Construction	Light sources will be directed downwards and away from public roads and occupied structures.
6	Emissions mitigation	• SandRidge will follow all requirements of COGCC's current policy- NOTICE TO OPERATORS, Rule 912. VENTING OR FLARING PRODUCED NATURAL GAS- STATEWIDE, dated January 12, 2016; and to Rule 912. VENTING OR FLARING NATURAL GAS. a. thru e. in regards to venting and flaring; potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated in adherence to COGCC's current policy and rules.

7	Drilling/Completion Operations	<ul style="list-style-type: none"> • Operator utilizes a portable containment liner under the substructure of the drilling rig during drilling activities. This protects shallow groundwater from any potential spills surrounding the rig during drilling. A liquid release would simply be vacuumed up from the liner. When drilling activity is completed, the liner is removed and transferred to the next drilling location. • A closed loop system must be implemented during drilling (as indicated on the Form 2 and Form 2A). • The moisture content of all drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than the minimum amounts. • All cuttings generated during drilling must be kept in tanks or containers, or placed in a bermed portion of the well pad prior to disposition. The surface where the cuttings will be placed shall be constructed to be sufficiently impervious (or lined) to keep any material from migrating into the subsurface. • Flowback and stimulation fluids must be sent to enclosed tanks, separators, or other containment or filtering equipment before the fluids can be placed into any pipeline, storage vessel, or into tanker trucks for offsite disposal. No open top tanks can be used for initial flowback fluids containment. Secondary containment for flowback storage tanks shall meet the requirements of Rule 906.d.(1). • The trucks used for offsite disposal will have a liner and the operator will implement measures (covers, misting, etc.) to reduce dust and PM emissions during transport of solid materials from the well pad location. • No open top tanks will be used for initial flowback storage tanks will meet the requirements of Rule 906.d.(1) • Secondary containment for flowback storage tanks will meet the requirements of Rule 906.d.(1)
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Total: 7 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
402204983	ACCESS ROAD MAP
402204984	CONST. LAYOUT DRAWINGS
402204987	LOCATION DRAWING
402204988	REFERENCE AREA MAP
402204993	REFERENCE AREA PICTURES
402204994	LOCATION PICTURES
402204997	HYDROLOGY MAP
402205001	MULTI-WELL PLAN
402205004	NRCS MAP UNIT DESC

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Form returned to draft for empty datafield in wildlife tab and for verification of pre-consultation CPW meeting date. Email sent to both submitter and operator contact, from this form.	10/18/2019

Total: 1 comment(s)

Public Comments

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

