

FORM
2A

Rev
08/13

State of Colorado
Oil and Gas Conservation Commission

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



Document Number:

400958753

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Date Received:

12/29/2015

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 324757

Submit signed original form. 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:

324757

Expiration Date:

02/04/2019

☒ 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: Kimberley Rodell
Phone: (303) 942-0506
Fax: ()
email: krodell@upstreampm.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20150119 ☐ Gas Facility Surety ID: _____
☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Mutual Number: 01-17H
County: JACKSON
QuarterQuarter: NWNW Section: 17 Township: 7N Range: 80W Meridian: 6 Ground Elevation: 8152
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: 267 feet FNL from North or South section line
501 feet FWL from East or West section line
Latitude: 40.584031 Longitude: -106.405317
PDOP Reading: 1.8 Date of Measurement: 02/03/2014
Instrument Operator's Name: Loren K. Shanks

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*	56	Condensate Tanks*		Water Tanks*	12	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks	11	Separators*	11	Injection Pumps*		Cavity Pumps*		Gas Compressors*	
Gas or Diesel Motors*		Electric Motors	11	Electric Generators*		Fuel Tanks*	1	LACT Unit*	
Dehydrator Units*		Vapor Recovery Unit*	1	VOC Combustor*	1	Flare*	3	Pigging Station*	

OTHER FACILITIES*

Other Facility Type

Number

Burner	1
Meter House	1
Electric Panel	1
Powerline	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:

No offsite pipelines are planned for this location. Buried pipelines between wellhead and separators, and from separators to the tanks. The pipes will be 3", Schedule 40 steel.

CONSTRUCTION

Date planned to commence construction: 02/08/2016 Size of disturbed area during construction in acres: 9.38
Estimated date that interim reclamation will begin: 08/08/2016 Size of location after interim reclamation in acres: 6.74
Estimated post-construction ground elevation: 8150

DRILLING PROGRAM

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

Is H₂S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: 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: Kohlman's OK LP

Phone: _____

Address: 21536 State Highway 14

Fax: _____

Address: _____

Email: _____

City: Walden State: CO Zip: 80480

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 08/15/2013

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:	2560 Feet	2425 Feet
Building Unit:	2600 Feet	2412 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	504 Feet	175 Feet
Above Ground Utility:	234 Feet	9 Feet
Railroad:	4270 Feet	5280 Feet
Property Line:	501 Feet	165 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.

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 (onll 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: CA-Cabin Sandy Loam

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☒ NRCS or, ☐ field observation Date of observation: _____

List individual species: Big sagebrush, Muttongrass, Streambank wheatgrass, Pine needlegrass, Sheep fescue, Yellow rabbitbrush, Prairie junegrass, Buckwheat, Bluebunch wheatgrass, Spiny phlox, Bottlebrush squirreltail

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: 145 Feet

water well: 2785 Feet

Estimated depth to ground water at Oil and Gas Location 40 Feet

Basis for depth to groundwater and sensitive area determination:

The location was checked as sensitive due to potential shallow depth of groundwater. Depth to groundwater was determined from Water Well Permit No. 211370. Depth to first water bearing zone is 40' bgs, which, is more indicative of the depth at which groundwater could be encountered if any water could infiltrate/percolate through and past the cuttings and through the minimum thickness of 20' of clay/shale.

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

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ 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


This location is being amended. SandRidge Exploration & Production LLC is adding 10 additional wells to the pad which will necessitate the size of the pad be increased. There will also be a change to the facilities to accommodate these additional wells.

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

Signed: _____ Date: 12/29/2015 Email: krodell@upstreampm.com

Print Name: Kimberly Rodell Title: Permit Agent

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved:  Director of COGCC Date: 2/5/2016

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
	Operator shall 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.
	<p>In addition to the notifications required by COGCC listed in the Northwest Notification Policy (Notice of Intent to construct a new location, Notice of Intent to install a pit liner, Notice of Intent to spud surface casing, and Notice of Intent to commence hydraulic fracturing operations) and Rule 316C. COGCC Form 42. FIELD OPERATIONS NOTICE (a. Notice of Intent to Conduct Hydraulic Fracturing Treatment; b. Notice of Spud; and c. Notice of Construction or Major Change); operator shall notify the COGCC 48 hours prior to pipeline testing (flowlines from wellheads to separators to tanks; and/or any temporary surface lines used for hydraulic stimulation and/or flowback operations) using the Form 42 (as described in Rule 316C.m. Notice of Completion of Form 2/2A Permit Conditions). The appropriate COGCC individuals will automatically be email notified.</p> <p>Operator must adhere to all COAs that were previously agreed to by EE3 for this location - OGCC ID#324757 (previously submitted and approved [09-12-14] Form 2A#400593227). These include notification, fluid containment, spill/release BMPs, flowback to tanks, tank berming, cuttings management, cuttings low moisture content, and reference area pictures within 12 months.</p>

Best Management Practices

No	BMP/COA Type	Description
1	Storm Water/Erosion Control	SandRidge Exploration & Production LLC will implement a storm water and erosion plan to prevent sedimentation and erosion.

Total: 1 comment(s)

Attachment Check List

Att Doc Num	Name
2107760	CORRESPONDENCE
400958753	FORM 2A SUBMITTED
400960042	SURFACE AGRMT/SURETY
400960043	CONST. LAYOUT DRAWINGS
400960044	FACILITY LAYOUT DRAWING
400960045	LOCATION DRAWING
400960046	MULTI-WELL PLAN

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Requested operator's adherence to 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, as well as acknowledgement of COAs that were previously agreed to by EE3 for this location - OGCC ID#324757 (previously submitted and approved [09-12-14] Form 2A#400593227). These include notification, fluid containment, spill/release BMPs, flowback to tanks, tank berming, cuttings management, cuttings low moisture content, and reference area pictures within 12 months, from operator on 02-04-16; received venting and flaring policy concurrence and acknowledgement of COAs from operator on 02-05-16; adjusted number of oil tanks from 50 to 56 and number of water tanks from 10 to 12 per conversation with SandRidge on 02-04-16. These corrections correspond to details shown on the Facility Layout Drawing attachment (existing tank location with 8 tanks and a second proposed tank location with 60 tanks). Operator intends to consolidate the facilities into one location at the well pad once the new wells are drilled and completed.	2/4/2016 2:56:49 PM
Permit	Final review complete.	1/29/2016 7:49:15 AM
Permit	Permit task passed.	1/29/2016 7:46:48 AM
OGLA	Initiated/Completed OGLA Form 2A review on 01-19-16 by Dave Kubeczko; previously submitted and approved (09-12-14) Form 2A#400593227, OGCC ID#324757; same COAs apply - notification, fluid containment, spill/release BMPs, flowback to tanks, tank berming, cuttings management, cuttings low moisture content, and reference area pictures within 12 months; passed by CPW on 01-05-16 with no sage grouse recommended wildlife BMPs due to existing disturbance and the close proximity to Highway 14, but recommendation to use a wildlife friendly seed mix for interim and final reclamation acceptable; passed OGLA Form 2A review on 01-27-16 by Dave Kubeczko; notification, fluid containment, spill/release BMPs, flowback to tanks, tank berming, cuttings management, cuttings low moisture content, and reference area pictures within 12 months COAs.	1/19/2016 12:20:16 PM

OGLA	<p>PREVIOUS FORM 2A#400593227, OGCC ID#324757 COAs:</p> <p>Notify the COGCC 48 hours prior to start of pad reconstruction/regrading, rig mobilization, spud, pipeline testing, start of hydraulic stimulation operations, and start of flowback operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).</p> <p>Reference Area Pictures during the growing season must be submitted within 12 months of this Form 2A approval.</p> <p>Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.</p> <p>Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.</p> <p>A closed loop system must be implemented during drilling; or, if a drilling pit or cuttings trench are constructed, an amended Form 2A must be submitted and a Form 15 submitted. All cuttings generated during drilling of the horizontal portion of the wellbore through the oil-producing zone must be kept in the lined drilling pit or cuttings trench (if permitted and constructed), or placed either in containers, or on a lined/bermed portion of the well pad; prior to amending and final disposition. The moisture content of any drill cuttings in a drilling pit, cuttings trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. All liners associated with drilling mud and cuttings must be disposed of offsite per CDPHE rules and regulations.</p> <p>Operator will dispose of drilling mud and cuttings offsite at a commercial disposal facility. Any change to this disposal method must be approved by COGCC through submittal of a Form 4 Sundry Notice detailing changes to drilling mud and cuttings handling and disposal. At the time of closure, if any of the drill cuttings are to be left onsite, they must also meet the applicable standards of table 910-1. Since this location has been determined to be a "sensitive area", the operator will be required to notify COGCC (using Form 42) prior to covering the cuttings (in case of drilling pit or cuttings trench) or placing the cuttings on the surface to be mixed with topsoil and seeded to allow inspection and potential confirmation sampling.</p> <p>If the wells are to be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material.</p>	<p>1/19/2016 12:20:14 PM</p>
DOW	<p>This permit is to expand and drill 10 additional wells from the existing Mutual 01-17H pad location. The location falls within greater sage-grouse production sensitive wildlife habitat (SWH). However, due to the existing disturbance and the close proximity to Highway 14, impacts to grouse and other wildlife species are expected to be minimal. CPW does not recommend any seasonal timing restrictions for the proposed activity, but does support using a wildlife friendly seed mix for interim and final reclamation at this site.</p> <p>By: Taylor Elm, January 5, 2016, 11:30 a.m.</p>	<p>1/5/2016 11:29:14 AM</p>

Permit	Passed completeness.	12/30/2015 11:58:51 AM
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Total: 7 comment(s)