

FORM
2A

Rev
02/20

State of Colorado
Oil and Gas Conservation Commission

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



Document Number:

402405790

Date Received:

06/04/2020

Oil and Gas Location Assessment

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

This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <https://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

479199

Expiration Date:

01/12/2024

☐ 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: 47120

Name: KERR MCGEE OIL & GAS ONSHORE LP

Address: P O BOX 173779

City: DENVER State: CO Zip: 80217-3779

Contact Information

Name: TRACY COLLING

Phone: (720) 9296160

Fax: ()

email: tracy_colling@oxy.com

FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID (Rule 706): 20010124 ☐ Gas Facility Surety ID (Rule 711): _____

☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: POINT THREE Number: 11-16HZ

County: WELD

QuarterQuarter: NESW Section: 16 Township: 4N Range: 67W Meridian: 6 Ground Elevation: 4889

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: 2025 feet FSL from North or South section line

1876 feet FWL from East or West section line

Latitude: 40.311112 Longitude: -104.899056

GPS Quality Value: 2.0 Type of GPS Quality Value: PDOP Date of Measurement: 01/14/2020

Instrument Operator's Name: RYAN GROVES

LOCAL GOVERNMENT INFORMATION

County: WELD Municipality: Johnstown

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

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

The local government siting permit type is: Operator Agreement & Use by Special Review (USR)

The local government siting permit was filed on: 02/20/2019

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

Additional explanation of local process:

Point Three 11-16HZ is located in the Town of Johnstown.
An Operator Agreement for Point Three 11-16HZ was approved by the Johnstown Town Council on 12/16/2019.
The Point Three 11-16HZ Use by Special Review application was re-submitted on 5/29/2020 to Kim Meyer, Johnstown Planning and Development Director and Local Government Designee for review and approval. USR approved 12/16/2020 USR19-0002.
An Emergency Action Plan (EAP) & Tactical Response Plan (TRP) has been submitted to Front Range Fire Rescue for their review.
As part of the local permitting USR process, Johnstown sends a referral package to Weld County to solicit feedback.

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	<u>12</u>	Oil Tanks*	<u>0</u>	Condensate Tanks*	<u>1</u>	Water Tanks*	<u>4</u>	Buried Produced Water Vaults*	<u>0</u>
Drilling Pits	<u>0</u>	Production Pits*	<u>0</u>	Special Purpose Pits	<u>0</u>	Multi-Well Pits*	<u>0</u>	Modular Large Volume Tanks	<u>0</u>
Pump Jacks	<u>12</u>	Separators*	<u>12</u>	Injection Pumps*	<u>0</u>	Cavity Pumps*		Gas Compressors*	<u>0</u>
Gas or Diesel Motors*	<u>0</u>	Electric Motors	<u>0</u>	Electric Generators*	<u>0</u>	Fuel Tanks*	<u>0</u>	LACT Unit*	<u>2</u>
Dehydrator Units*	<u>0</u>	Vapor Recovery Unit*		VOC Combustor*	<u>1</u>	Flare*	<u>0</u>	Pigging Station*	<u>0</u>

OTHER FACILITIES*

Other Facility Type **Number**

TEMPORARY ECDS	9
TEMPORARY PROPANE TANK	1
TEMPORARY PURGE FLARES	3
AIR COMPRESSOR	2
TEMPORARY GENERATOR	1
METER BUILDING	2
TEMPORARY 500 BARREL TANKS	22

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:

Please see Operator Comments section for pipeline descriptions.

CONSTRUCTION

Date planned to commence construction: 06/17/2021 Size of disturbed area during construction in acres: 15.19
Estimated date that interim reclamation will begin: 12/17/2021 Size of location after interim reclamation in acres: 4.22
Estimated post-construction ground elevation: 4889

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:

Please see attached Waste Management Plan.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: 149021

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Anadarko E&P Onshore LLC

Phone: _____

Address: 1099 18th Street Suite 1800

Fax: _____

Address: _____

Email: _____

City: Denver State: CO Zip: 80202

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: applicant is owner

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

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:	1201 Feet	872 Feet
Building Unit:	1885 Feet	1794 Feet
High Occupancy Building Unit:	4639 Feet	4761 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	1857 Feet	1669 Feet
Above Ground Utility:	2006 Feet	2184 Feet
Railroad:	2642 Feet	2148 Feet
Property Line:	588 Feet	20 Feet
School Facility::	4639 Feet	4761 Feet
School Property Line:	4441 Feet	4567 Feet
Child Care Center:	5202 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: 82 - WILEY-COLBY COMPLEX, 1 TO 3 PERCENT SLOPES

NRCS Map Unit Name: 34 - KIM LOAM, 5 TO 9 PERCENT SLOPES

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:

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: 170 Feet

water well: 2324 Feet

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

Basis for depth to groundwater and sensitive area determination:

Nearest water wells:

2324' NW, Permit 177928-, depth 200', Static Water Level 60', Elev 4792'

2557' NW, Permit 74429-, depth 39', Static Water Level 9', Elev 4786'

Sensitive Area Determination: SENSITIVE AREA, downgradient surface water feature (irrigation ditch) ~170' east of location

Location is NOT in floodplain according to Weld County and FEMA

(SWL calc: $(4889 - 4786) + 9 = 112$)

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

PLEASE ENSURE ALL CORRESPONDENCE ASSOCIATED WITH THIS PERMIT GOES TO ANALYST AND THE DJREGULATORY EMAIL ADDRESSES, AS LISTED ON THIS PERMIT - THANK YOU!

COMMENT 1: Facility Comments: Two 500-barrel skid-mounted frac tanks will be temporarily placed onsite for use of the pre-spud rig only. One tank will store water and the other will store water-based mud. A temporary ECD may be utilized during drilling.

20 temporary 500-barrel skid-mounted frac tanks will be utilized during flowback and initially for produced water. It is estimated the 8 temporary ECDs and the temporary tanks will be on location for 9 - 12 months and will be removed as water production declines.

A temporary generator may be placed on location if needed and would be in place until electric power is available.

A temporary purge flares may be placed on location for up to 60 days.

A temporary 250-gallon propane tank will be used on location to provide fuel gas during facility equipment startup.

COMMENT 2: Buried pipelines will be utilized to gather the gas and oil product from the location (3 gas pipelines, 1 oil pipeline). Both gas and oil pipelines will be constructed from steel of suitable wall thickness and material grade to meet the respective gathering systems design pressure. Gas pipelines will range in diameter from 4" to 20"; oil pipelines from 4" to 12". Capacity of pipelines will vary based on diameter. Pipelines will begin at the location and terminate at larger trunk lines in the area.

COMMENT 3: Temporary above ground polyethylene water pipelines (diameter 10" - 12" with a 60 BPM capacity) will deliver water to location operations from larger trunk lines.

COMMENT 4: Twelve flow lines will flow to the production facility location. During production, flow direction in the flow lines is from the wellhead to the production facility. The size of flow lines is typically 2". Flow lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the production facility, approximately 215'.

COMMENT 5: Twelve compressed air supply lines will also be installed from the well head to the production facility. During operation flow direction in the supply lines will be from the production facility to the well head. The size of the supply lines is typically 1 ". Supply lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the production facility, approximately 215'.

COMMENT 6: Gas lift lines are also occasionally installed (one per well) from the well head to the production facility. During operation flow direction in the gas lift lines will be from the production facility to the well head. The size of the gas lift lines is typically 2". Gas lift lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the tank battery, approximately 215'.

COMMENT 7: Gas custody transfer occurs at the custody transfer meter located on the proposed production facility location. Oil custody transfer occurs at the LACT Unit on the proposed production facility location into a pipeline owned by a third party.

DISTANCES TO EDGES OF PERMANENT EQUIPMENT:

BUILDING: 932'

BUILDING UNIT: 1866'

HIGH OCCUPANCY BUILDING UNIT: 4764'

DESIGNATED OUTSIDE ACTIVITY AREA: 5280'

PUBLIC ROAD: 1741'

ABOVE GROUND UTILITY: 2263'

RAILROAD: 2318'

PROPERTY LINE: 208'

SCHOOL FACILITY: 4784'

SCHOOL PROPERTY LINE: 4594'

CHILD CARE CENTER: 5280'

DISTANCES TO EDGES OF TEMPORARY EQUIPMENT:

BUILDING: 872'

BUILDING UNIT: 1794'

HIGH OCCUPANCY BUILDING UNIT: 4761'

DESIGNATED OUTSIDE ACTIVITY AREA: 5280'

PUBLIC ROAD: 1669'

ABOVE GROUND UTILITY: 2184'

RAILROAD: 2148'

PROPERTY LINE: 20'

SCHOOL FACILITY: 4761'

SCHOOL PROPERTY LINE: 4567'

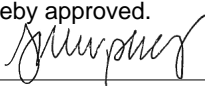
CHILD CARE CENTER: 5280'

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

Signed: _____ Date: 06/04/2020 Email: DJRegulatory@anadarko.com

Print Name: TRACY COLLING Title: SR. 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: 1/13/2021

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

Construction	The Approved Form 2A permit will be posted at the location during construction, drilling, and completions operations.
Emissions mitigation	Air Monitoring: Operator will not begin well drilling operations on the location until an Air Monitoring Plan has been submitted to the COGCC via Form 4, Sundry notice and approved by the Director. The plan will address background air monitoring, air monitoring during drilling, completion, and 1 full year of production operations. The plan will include provisions for meteorological monitoring, notification, and reporting. The plan will describe monitoring methods, monitoring locations, and quality assurance/quality control.
Noise mitigation	Noise: Prior to commencement of construction operations, Operator will submit via Form 4, Sundry Notice for Director approval of a noise mitigation plan. The plan will describe how the Operator will achieve compliance with Rule 423, as adopted by the Commission on November 23, 2020.
General Housekeeping	Lighting: Prior to commencement of construction operations, Operator will submit via Form 4, Sundry Notice for Director approval of a lighting mitigation plan. The plan will describe how the Operator will achieve compliance with Rule 424, as adopted by the Commission on November 23, 2020.
Odor mitigation	Odor: Prior to commencement of construction operations, Operator will submit via Form 4, Sundry Notice for Director approval of an odor mitigation plan. The plan will describe how the Operator will achieve compliance with Rule 426, as adopted by the Commission on November 23, 2020.
Dust control	Dust: Prior to commencement of construction operations, Operator will submit via Form 4, Sundry Notice for Director approval of a dust mitigation plan. The plan will describe how the Operator will achieve compliance with Rule 427, as adopted by the Commission on November 23, 2020.
Construction	This Form 2A has been approved prior to approval of the Wellbore Spacing Units (WSU). If the final agency action is denial of the WSU 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.

Best Management Practices

No BMP/COA Type

Description

1	Planning	Access Road: KMG will utilize a lease access road from WCR 44 for drilling, completions, and production operations, including maintenance equipment.
2	Planning	As a part of planning this proposed location, Kerr-McGee has held multi-disciplinary Surface Impact Planning Meetings regarding the impacts and mitigations associated with this proposed location. The toll-free number and email for the Occidental Colorado Response Line will be posted at the entrance to the lease access road for stakeholders during drilling and completion operations at this proposed location.

3	Community Outreach and Notification	<p>Courtesy Notifications will be sent to stakeholders within one mile of the proposed location prior to drilling operations and again prior to completions operations, providing contact information for the Occidental Colorado Response Line and online resources. Community Meeting: Per the Town of Johnstown USR Requirement, a community meeting was held on 10/2/19 at the Johnstown Community Center. Invitation were sent to 319 surrounding property owners.</p> <p>KMG continues to work with the Town of Johnstown and address their feedback and considerations for their support of planned operations. A COGCC Health study fact sheet was mailed 6/10/2020 to the 174 of residential building unit within 2000' of the location, including all the residence in the Pioneer Ridge subdivision north of CR 44/Cinnamon Teal Ave.</p>
4	Traffic control	Prior to the commencement of operations, the operator will obtain access and ROW permits from the Town of Johnstown and implement traffic control plans.
5	Traffic control	KMG currently plans to use the water-on-demand system on this location which is a network of over 180 miles of underground pipeline that stretches the length of the 20-mile by 30-mile field to source and transport water to completions crews. This system eliminates more than 2,000 truck trips per day field-wide, also reducing associated concerns of traffic, noise, emissions and dust.
6	Traffic control	The operator will share with Town of Johnstown the primary truck haul routes to be used during operations. Additionally, the operator will discuss with the Johnstown if Town owned and maintained roads are to be utilized and determine appropriate mitigation measures.
7	General Housekeeping	All loadlines shall be bullplugged or capped.
8	General Housekeeping	A commercial size trash bin for removing debris will be located on site. This bin will be for use by all parties affiliated with the operation. Upon completion of operations, the commercial trash bin will be removed from the location and disposed of in an appropriate manner.
9	General Housekeeping	KMG will ensure that any material that might be deemed a fire hazard will remain no less than twenty-five (25) feet from the wellhead(s), tanks and separator(s).
10	General Housekeeping	KMG and its contractors will employ best management practices during the drilling and production of its wells and will comply with appropriate COGCC rules concerning fire prevention. Flammable liquids will not be stored within (fifty) 50' of the proposed wellheads. If storage of flammable liquid is to be conducted within (fifty) 50' of the wellhead, sufficient safety measures will be implemented.
11	General Housekeeping	Site lighting shall be shielded and directed downward and inward toward operations to avoid glare on public roads and nearby Building Units. Additionally, 32 ft. tall walls along the south and west sides will help to shield lights.
12	Storm Water/Erosion Control	<p>Site-Specific Measures: During active construction, drilling, and completions, with personnel on location, daily inspections will occur. During non-active, but while under construction, site inspections will occur every 14 days or after major rain events. When construction is completed and the location is on production, site inspections will occur every 28 days with additional inspections after major rain events.</p> <p>When construction is completed and the location is on production, site inspections will occur every 28 days with additional inspections after major rain events.</p> <p>During construction, stormwater features will be checked more frequently (up to daily, depending on the intensity of construction activity). These construction checks will not be formally documented, since they occur as part of construction oversight, and minor issues will be corrected with no further documentation. If and when larger issues are noted in these construction checks, the associated corrective actions would be documented.</p>
13	Material Handling and Spill Prevention	<p>Berm Construction: A geosynthetic liner will be laid under the long-term tanks on this location and a metal containment will be constructed. Secondary containment devices will be constructed around crude oil, condensate, and produced water storage tanks and shall enclose an area sufficient to contain and provide secondary containment for 150% of the largest single tank. Secondary containment devices shall be inspected at the same time as stormwater inspections, with personnel on location, daily inspections will occur. During non-active, but while under construction, site inspections will occur every 14 days. When construction is completed and the Location is on production, site inspections will occur every 28 days.</p>

14	Material Handling and Spill Prevention	Berm Construction: The temporary produced water storage tanks will be staged on a geosynthetic liner and surrounded by an earthen berm. The berms shall enclose an area sufficient to provide secondary containment for 150% of the volume of the largest single tank and shall be sufficiently impervious to contain spilled or released material. Berms and the liner shall be inspected at the same time as stormwater inspections, with personnel on location, daily inspections will occur. During non-active, but while under construction, site inspections will occur every 14 days. When construction is completed and the location is on production, site inspections will occur every 28 days.
15	Material Handling and Spill Prevention	Automation technology will be utilized at this facility. This technology includes the use of fluid level monitoring for the tanks and produced water sumps, high-level shut offs, and electronic sensors to monitor the interstitial space of double-walled produced water sumps. All automation is monitored by Kerr-McGee's Integrated Operations Center (IOC), which is manned 24 hours per day, 7 days per week.
16	Material Handling and Spill Prevention	Berm Construction - Separators: Around all separators, secondary containment in the form of a 22" steel berm will be constructed and buried 13" with the remaining 9" exposed above grade. The seams and penetrations of the berm are sealed. This shall be inspected at the same time as stormwater inspections, with personnel on location, daily inspections will occur. During non-active, but while under construction, site inspections will occur every 14 days. When construction is completed and the Location is on production, site inspections will occur every 28 days.
17	Dust control	Water will be placed on unpaved roads to mitigate dust.
18	Construction	Fencing Requirements: The completed wellsites will be surrounded with a fence and gate with adequate lock to restrict access to authorized personnel only. KMG personnel will monitor the wellsites regularly upon completion of the wells. Authorized representatives and/or KMG personnel shall be on-site during drilling and completion operations.
19	Noise mitigation	Sound mitigation barriers in the form of sound walls will be placed along the South and West sides of the pad location to dampen noise and minimize impact to the nearby residences and to WCR 44 and WCR 17 (aka Parish Aveneu) during drilling and completions. Operator agrees to use a quiet rig with modifications such as noise dampening baffels, luvers, muffler enclosures and portable walls as needed. Quiet completions fleet will be used for completions operations.
20	Emissions mitigation	Eight temporary ECD(s) will be utilized to mitigate releases of emissions from temporary produced water storage tanks for the duration which the tanks are on location and being used.
21	Emissions mitigation	Operator will provide air emissions monitoring to detect fugitive emissions at the production facility based upon a plan approved by the Director which will contain, at a minimum, the following conditions. A two-week baseline test will be conducted prior to the start of drilling. The monitors will be placed in proximity of the production facility and will remain in place from the beginning of drilling through production. One month following the initial thirty-day period after drilling commenced, a data summary report will be provided to the COGCC, which will include the first 30 days from the start of drilling, as well as the two-weeks of baseline data. Thereafter, monthly reports will be provided and submitted to the COGCC on a monthly basis for a duration of no less than one year, at which point, Operator may suspend further monitoring, upon approval of the Director and a finding by the Director that such monitoring is no longer necessary to protect public health, safety, welfare, the environment and wildlife resources. The air emissions monitoring will be performed by a third party.
22	Odor mitigation	Odor Mitigation. Additional BMPs for this location are: 1) the storage of excess drilling fluid (e.g., fluid not being used in the active mud system) in closed, upright tanks. 2) Drill cutting will be run through a centrifugal dryer to minimize odor during temporary time on location and during transport to disposal. 3) Odor neutralizer will be used in the active mud system for management of odors within 24 hours of receipt of a stakeholder grievance. 4) Drill cuttings will not remain in storage at the oil and gas location for more than a 24 hours period. Disposal will occur before the end of the 24 hours period.

23	Drilling/Completion Operations	Test separators and associated surface equipment shall be installed on-site to accommodate green completions techniques. When commercial quantities of salable quality gas are achieved at each well, the gas shall be immediately directed to a sales line or shut in and conserved. If a sales line is unavailable or other conditions prevent placing the gas into a sales line, the operator shall not produce the wells without an approved variance per Rule 805.b. (3)C.
24	Drilling/Completion Operations	KMG's Integrated Operations Center is staffed 24-hours per day, seven days per week, 365 days per year providing real-time remote monitoring capabilities for all of KMG's wells. Employees in the Integrated Operations Center are able to shut in wells remotely and dispatch personnel to a location within 5-15 minutes.
25	Final Reclamation	The wellsite will be cleared of all non-essential equipment within ninety (90) days after all wells associated with the pad have been plugged and abandoned.
26	Final Reclamation	Identification of Plugged and Abandoned Wells: Pursuant to rule 319.a.(5)., once the well has been plugged and abandoned, KMG will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging.

Total: 26 comment(s)

Attachment List

Att Doc Num	Name
2316644	CORRESPONDENCE
2316678	CORRESPONDENCE
2316682	OBJECTIVE CRITERIA REVIEW MEMO
402405790	FORM 2A SUBMITTED
402409292	LOCATION DRAWING
402409294	WELL LOCATION PLAT
402409299	MULTI-WELL PLAN
402409300	HYDROLOGY MAP
402409301	ACCESS ROAD MAP
402409302	NRCS MAP UNIT DESC
402409303	WASTE MANAGEMENT PLAN
402409304	FACILITY LAYOUT DRAWING
402409309	LOCATION PICTURES

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	Final review completed	01/10/2021
OGLA	COGCC staff reviewed and considered all public comments received for this Form 2A.	01/04/2021
OGLA	The Objective Criteria Review Memo (Doc# 2316682) is attached to this Form 2A. Following additional analysis arising out of the 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.	12/30/2020
OGLA	Added Air Monitoring BMP as provided by the Operator and added COAs for nuisance mitigation plans.	12/30/2020
OGLA	Operator provided USR by Johnstown was approved 12/16/2020. Added info to local government section. Attached correspondence doc 2316678	12/17/2020
OGLA	Confirm with Operator regarding Criteria #3 and proximate government's comment regarding right-of-way permit requirements.	10/13/2020
OGLA	OGLA review: The depth to water is probably closer to 40 feet below ground surface based on water well permit 93108 at an elevation of 4880 and 4,283 feet to the southeast of the Location. The nearest Building Unit is approximately 1,550 feet to the south of the Location and 1,885 feet from the nearest well. The Aerial photos show work to the north, which is pipeline construction and is not related to an oil and gas Location. Operator confirmed all temporary and permanent tanks are greater than the required distance for Rule 605.c.(2) for tanks setbacks to a property line. Operator sent COGCC health study fact sheet based off of CDPHE 2015 Health Study. Response are attached as Correspondence (doc 2316644).	08/04/2020
OGLA	COGCC staff conducted its technical review of this Form 2A Oil and Gas Location Assessment within the context of SB 19-181 and the required Objective Criteria. This Form 2A met Objective Criteria #2 - within a municipality; #3 within 1,500 feet of a proximate government - Weld County; and #5.c. within a sensitive environment for proximate surface water. There is a comment from the public on the Form 2A.	08/04/2020
Permit	The planned well spacing for all 12 wells is WSUs. There are no pending or existing spacing orders for these wells.	08/03/2020
LGD	This proposed oil and gas location is within the municipal boundaries of Johnstown. No 1041 Weld Oil and Gas Location Assessment (WOGLA) is required. The operator will need to work with the Johnstown Planning and Development Director and LGD to address any requirements for this location. Access points from County roads require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The use of County right-of-way requires a permit from the Department of Public Works. Jason Maxey Director, Oil Gas Energy Department and LGD 970-400-3580	06/16/2020
OGLA	Passed Completeness	06/08/2020

Total: 11 comment(s)