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: 401788638 **(RESUBMITTED)**

Date Received:

☒ 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.

RE-SUBMITTED

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: ERIN HAMPE
Phone: (720) 929-3242
Fax: ( )
email: ERIN.HAMPE@ANADARKO.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: NILES MILLER Number: 37-20HZ PAD
County: WELD

QuarterQuarter: SESE Section: 20 Township: 3N Range: 66W Meridian: 6 Ground Elevation: 4957

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: 379 feet FSL from North or South section line
828 feet FEL from East or West section line

Latitude: 40.204157 Longitude: -104.794569

PDOP Reading: 1.2 Date of Measurement: 11/30/2018

Instrument Operator's Name: TRAVIS HOLLAND

LOCAL GOVERNMENT INFORMATION

County: WELD 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: WOGLA

The local government siting permit was filed on: 04/04/2019

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

Additional explanation of local process:

Pad is located in unincorporated Weld County. Nearest town (Platteville) is >1500' from this location. Access permits have been submitted as well as an Emergency Action Plan. Haul routes do not impact the Town of Platteville (access is from the east).

Weld County has waived it's ability to have the local permit precede the COGCC permits. However a WOGLA was submitted to Weld County on 4/4/2019.

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 #**
Production Facilities Location serves Well(s)		401782179

RESUBMITTED

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	8	Oil Tanks*		Condensate Tanks*	1	Water Tanks*	3	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks	8	Separators*	17	Injection Pumps*		Cavity Pumps*		Gas Compressors*	
Gas or Diesel Motors*		Electric Motors		Electric Generators*		Fuel Tanks*		LACT Unit*	2
Dehydrator Units*		Vapor Recovery Unit*		VOC Combustor*	1	Flare*		Pigging Station*	

OTHER FACILITIES*

Other Facility Type	Number
AIR COMPRESSOR	2
COMPRESSED AIR SUPPLY LINES	15
ELECTRICAL BOX	1
FLOW LINES	15
GAS LIFT LINES	15
GAS PIPELINES	3
METER BUILDING	2
OIL PIPELINES	1
TEMPORARY 500 BBL TANKS	25
TEMPORARY ECD's	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:

Two 500 barrel skid-mounted frac tanks will be temporarily placed onsite for use while drilling the surface hole. One tank will store water and the other will store water-based mud. A temporary ECD may be utilized during drilling.

23 temporary 500 barrel tanks and 3 temporary ECD will be utilized during flowback and initially for produced water. It is estimated the temporary tanks will be on location for 9 - 12 months, and will be removed incrementally as water production declines. The ECD will be on location for the duration the temporary tanks are utilized

Please see Comments section for flow line and pipeline description. Sarchet wells produce to Niles Miller Facility, and production equipment and flowlines are counted in this facility. Flowlines for Sarchet wells are also described in the approved 2A for the Sarchet Pad (Doc #401782179)

CONSTRUCTION

Date planned to commence construction: 09/01/2019 Size of disturbed area during construction in acres: 11.44

Estimated date that interim reclamation will begin: 03/01/2020 Size of location after interim reclamation in acres: 2.99

Estimated post-construction ground elevation: 4957

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:

Please see Comments section. Disposal description will not fit in space provided

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: NILES MILLER FAMILY FARMS Phone: _____

Address: 615 LIPPITT AVE Fax: _____

Address: _____ Email: _____

City: JOHNSTOWN State: CO Zip: 80534

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 03/17/2019

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		

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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:	561 Feet	1081 Feet
Building Unit:	588 Feet	1081 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	262 Feet	611 Feet
Above Ground Utility:	244 Feet	594 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	274 Feet	248 Feet
School Facility::	5280 Feet	5280 Feet
School Property Line:	5280 Feet	5280 Feet
Child Care Center:	5280 Feet	5280 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: 01/18/2019

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.

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.

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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: 47—Olney fine sandy loam, 1 to 3 percent slopes

NRCS Map Unit Name: 57—Renohill clay loam, 3 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):

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WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 1550 Feet

water well: 290 Feet

Estimated depth to ground water at Oil and Gas Location 97 Feet

Basis for depth to groundwater and sensitive area determination:

Pond (dry): 1550' SW Elev: 4893'
Loc Elev: 4957'

Nearest water wells:
290' W, Permit 252360-, depth unknown, Static Water Level unknown, Elev 4942'
6650' NW, Permit 11396-R, depth 58', Static Water Level 20', Elev 4880'
Sensitive Area Determination: NOT A SENSITIVE AREA
Location is NOT in floodplain according to Weld County and FEMA

(SWL calc: (4957 - 4880) + 20 = 97)

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:

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

Operator Proposed Wildlife BMPs

No BMP

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.)
- ☐

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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

RE-SUBMITTED

Please ensure any email correspondence is directed to both the permitting Analyst and DJREGULATORY@ANADARKO.COM.

Drilling fluids disposal: KMG will reuse water-based drilling fluids to the maximum extent possible, at which point they will either be land applied or taken to a licensed, commercial disposal site; the decision will be based upon laboratory analysis of fluids. KMG will reuse oil-based drilling fluids to the maximum extent possible, at which point they will be returned to the fluids manufacturer for reconditioning or disposal at a licensed, commercial disposal site.

Cuttings disposal: Water-based cuttings will be disposed of at a Centralized E&P Waste Management facility or a private spread field, depending on feasibility at the time of drilling. Oil-based cuttings will be disposed of offsite at a licensed, commercial disposal site.

Pipelines: 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.

Temporary above ground polyethylene water pipelines (diameter 10” – 12” with a 60 BPM capacity) will deliver water to location operations from larger trunk lines.

15 flow lines will flow to the production facility location. 8 of the flowlines will connect with the wells located on this pad; the remaining 7 are for the Sarchet wells (see Related Forms & Related Locations). During production, flow direction in the flow lines is from the well head 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 513' to 592'

15 compressed air supply lines will also be installed from the well head to the production facility. 8 of the air supply lines will connect with the wells located on this pad; the remaining 7 are for the Sarchet wells (see Related Forms & Related Locations). 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 513' to 592'.

Gas lift lines are also occasionally installed (one per well) from the well head to the production facility. 8 of the flowlines will connect with the wells located on this pad; the remaining 7 are for the Sarchet wells (see Related Forms & Related Locations). 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 513' to 592'.

CUSTODY TRANSFER: Gas custody transfer occurs at the custody transfer meter located on the proposed production facility location. Oil custody transfer occurs at the LACT Unit located on the proposed production facility location. Oil is transferred from the LACT Unit into a pipeline owned by Anadarko Wattenberg Oil Complex LLC.

FLOWLINES FROM THE SARCHET 35-21HZ WELL PAD (2A DOC ID: 401782179) TO THE NILES MILLER 37-20HZ PRODUCTION FACILITY ARE DESCRIBED IN THIS 2A.

Distances from temporary, 500bbl produced water tanks:
BUILDING: 1218'
BUILDING UNIT: 1252'
HIGH OCCUPANCY BUILDING UNIT: 5280'
DESIGNATED OUTSIDE ACTIVITY AREA: 5280'
PUBLIC ROAD: 1002'
ABOVE GROUND UTILITY: 985'
RAILROAD: 5280'
SCHOOL FACILITY: 5280'
SCHOOL PROPERTY LINE: 5280'
CHILD CARE FACILITY: 5280'

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: _____ Email: DJREGULATORY@ANADARKO.COM

Print Name: ERIN HAMPE 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
Rejected	COGCC Spoke with Operator on the phone 7/17/2019 regarding the Location as an amended or new location. The current well and production in the disturbed area are operated by a different Oil and Gas company. In order to separate proposed location and the existing location, Operator will submit revised drawings excluding existing wells and production from this proposed location. Multiple attachments and changes to the data field on the 2A have made this Form 2A, COGCC is rejecting this Form 2A in order for the Operator to provide revised drawings and data fields.

Best Management Practices

No	BMP/COA Type	Description
1	Planning	604c.(2).E. Multi-Well Pads: In order to reduce surface impact, this application is for an 8-well pad / oil and gas location. Pad will also include production equipment for the Sarchet 35-21HZ pad (see Related Forms for more detail). Pad has been located adjacent to existing wells PDC (API #05-123-14075) and Crestone Peak Resources (API #05-123-19948) wells, and this pad will use a portion of the existing access road to consolidate disturbance. Wellheads and production equipment associated with the PDC and Crestone wells will be The existing PDC & CPR wells are both located outside of the Niles Miller 37-20HZ pad disturbance area. These wells will be protected during construction as follows: KMG will set up concrete jersey barriers to protect the existing wellheads and utilize high visibility flags on the wellheads. If there is not a wellhead guard, these will also be will used. Finally, KMG will protect wells with a ditch and berm, which will deter people from driving across it. PDC EXISTING WELL: MILLER 44-20 (API: 05-123-14075) Location ID: 336534, Status: PR – Outside disturbed area, operated by PDC CPR EXISTING WELL: MILLER 44-20 (API: 05-123-19948) Location ID: 333215, Status: PR – Not a part of this location
2	Planning	604c.(2).Q. Guy Line Anchors: Guy line anchors will not be used. Base Beams will be used to stabilize the rig and removed after drilling.
3	Planning	604c.(2).R. Tank Specifications: Two 500 barrel skid-mounted frac tanks will be temporarily placed on-site for use of the pre-spud rig only. One tank will store water and the other will store water based mud.
4	Planning	604c.(2).S. Access Roads: KMG will utilize a lease access road from Weld CR 30 for drilling, completions, and production operations, including maintenance equipment. The road will be properly constructed and maintained to accommodate for local emergency vehicle access.
5	Planning	604c.(2).V. Development From Existing Well Pads: Drilling from an existing well pad was not feasible for the development of the wells on this proposed oil and gas location however this location will be considered for future well locations, if practical.

6	Community Outreach and Notification	305.a.(2) A Notice of Intent to Conduct Operations was sent to each building unit owner within the Exception Zone or Buffer Zone Setback. Recipients did not contact KMG. As a part of planning this proposed location, Kerr-McGee held multi-disciplinary Surface Impact Planning Meetings regarding the impacts and mitigations associated with this proposed location. The toll-free hotline number and email for the Anadarko 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. Courtesy Notifications will be sent to impacted stakeholders prior to drilling operations and again prior to completions operations, providing contact information for the Anadarko Colorado Response Line and online resources.
7	Traffic control	KMG currently plans to use the water-on-demand system on this location which is a network of over 140 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, also reducing associated concerns of traffic, noise, emissions and dust.
8	Traffic control	604c.(2).D. Traffic Plan: Prior to the commencement of operations, the operator will obtain access and ROW permits per Weld County Code and implement COAs or traffic control plans as required.
9	Traffic control	604c.(2).D. Traffic Plan: The operator will share with Weld County the primary truck haul routes to be used during operations. Additionally, the operator will discuss with Weld County if county-owned and maintained roads are to be utilized and determine appropriate mitigation measures.
10	General Housekeeping	604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped.
11	General Housekeeping	604c.(2).P. Removal of Surface Trash: 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.
12	General Housekeeping	803. Lighting: To the extent practicable, site lighting shall be shielded and directed downward and inward toward operations to avoid glare on public roads and nearby Building Units.
13	Storm Water/Erosion Control	604c.(2).W. Site-Specific Measures: KMG maintains a Storm Water Management Plan that assesses erosion control for every KMG operated location. This location will be added to this plan once construction begins. This site will be inspected every fourteen (14) days during construction activities, every twenty-eight (28) days after construction is completed, and after any major weather event.
14	Material Handling and Spill Prevention	604c.(2).G. 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 regular intervals and maintained in good condition.
15	Material Handling and Spill Prevention	604c.(2).N. Control of Fire Hazards: KMG and its contractors will employ best management practices during the drilling and production of its wells and facilities and will comply with appropriate COGCC rules concerning safety and fire. KMG will ensure that any material that might be deemed a fire hazard will remain no less than twentyfive (25) feet from the wellhead(s), tanks and separator(s).
16	Material Handling and Spill Prevention	606.A.d. for flammable liquids near the wellhead – Flammable liquids will not be stored within 50’ of the proposed wellheads. If storage of flammable liquid is to be conducted within 50’ of the wellhead, sufficient safety measure will be implemented.
17	Material Handling and Spill Prevention	604c.(2).F. Leak Detection Plan: 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.

18	Material Handling and Spill Prevention	604c.(2).G. Berm Construction: A geosynthetic liner will be laid under the tanks on this location and a metal containment will be constructed. Berms or other 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. Berms and other secondary containment devices shall be inspected at scheduled intervals and maintained in good condition.
19	Material Handling and Spill Prevention	604.c.(2)R BMP: crude oil and condensate storage tanks shall be designed, constructed, and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). written records verifying proper design, construction, and maintenance will be maintained and made available to the COGCC upon request.
20	Material Handling and Spill Prevention	604c.(2).R Tank Specifications: A geosynthetic liner will be laid under the tanks on this location and a steel containment will be constructed. Storage tanks will be designed, constructed and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). KMG will maintain written records to verify proper design, construction and maintenance. All records will be available for inspection by the Director.
21	Material Handling and Spill Prevention	604c.(2).R Tank Specifications: temporary water tanks shall be designed, constructed, and maintained in accordance with the following portions of the National Fire Protection Association (NFPA) Code 30 (2008 version): 1) Tanks are built to engineering standards using noncombustible materials, with relief devise sizing based on API 2000 standards. 2) Tanks are inspected and maintained while in use. 3) The only pipes within the containment are related to the temporary tanks (i.e. no external piping is co-located within the containment), and firefighting equipment is likewise not stored within the containment area.
22	Material Handling and Spill Prevention	604c.(2).G. 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 regular intervals and maintained in good condition.
23	Dust control	805.c. Dust: Water will be placed on dirt access roads to mitigate dust as needed. If feasible, magnesium chloride will also be used as needed on access roads to further abate dust.
24	Construction	604c.(2).M. 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.
25	Noise mitigation	604c.(2).A. Noise: Sound surveys have been conducted on each rig type and are utilized to anticipate any additional effective noise mitigation once a drilling rig is determined. At a minimum, and pending a safety review after construction of the location, a 32' sound mitigation wall will be installed around the East, South and West sides of the drilling pad to dampen noise and minimize impact to the nearby residences located west of the pad during drilling and completions.
26	Emissions mitigation	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.
27	Odor mitigation	805b. Odors: KMG will comply with the provisions of 805b as deemed applicable. Additional BMPs for the Niles Miller 37-20HZ location are: 1) the storage of excess drilling fluid (e.g., fluid not being used in the active mud system) in closed, upright tanks; and 2) the use of an odor neutralizer in the active mud system, if needed.
28	Drilling/Completion Operations	604c.(2).B. Closed Loop Drilling System: KMG will use a closed loop or “pitless” system for drilling and fluid management and will not construct a reserve pit.

29	Drilling/Completion Operations	Green Completions -Test separators and associated flow lines, sand traps and emission control systems 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.
30	Drilling/Completion Operations	604c.(2).K. Pit Level Indicators: All storage tanks used for active drilling operations (used in lieu of pits) contain pit level monitors with Electronic Drilling Recorders (EDR). KMG uses EDRs with pit level monitor(s) and alarm(s) for production rigs. Basic level gauges are used on tanks utilized for the surface rig.
31	Final Reclamation	604c.(2).T. Well Site Cleared: 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.
32	Final Reclamation	604c.(2).U. 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: 32 comment(s)

Attachment Check List

Att Doc Num	Name
401788638	FORM 2A SUBMITTED
402114857	FORM 2A REJECTED
402115028	HYDROLOGY MAP
402115029	LOCATION PICTURES
402115033	MULTI-WELL PLAN
402115035	ACCESS ROAD MAP
402115036	LOCATION DRAWING
402115041	NRCS MAP UNIT DESC
402115043	WELL LOCATION PLAT
402115045	SURFACE AGRMT/SURETY
402115050	FACILITY LAYOUT DRAWING
402115055	WASTE MANAGEMENT PLAN
402115058	PRE-APPLICATION NOTIFICATION CERTIFICATION

Total Attach: 13 Files

RE-SUBMITTED

General Comments

User Group	Comment	Comment Date
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 #1 for being 1500 feet from a building unit	07/12/2019
OGLA	Operator provided updated BMPs for lighting, odor, dust and temporary tanks on 7/11/19. OGLA Review: Operator has as new location but there is an original 2A from 2009 and an amended 2A from 2016 in the file for location 336534. The facility list has 9 wells and the multiwell plan has 8 wells. There are two existing vertical wells on the edge of the disturbed area - request confirmation on well count and operator/production of two existing wells, BMP for temporary tanks only address 2 not all 25 temporary tanks. Email Operator for clarification.	07/12/2019
Permit	Passed completeness.	06/14/2019
Permit	Returned to draft: Operator to complete Local Government Information. This form has not been reviewed for completeness.	05/30/2019
Permit	Referred to OGLA supervisor for buffer zone review.	04/12/2019

Total: 5 comment(s)

SUBMITTED

Public Comments

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

RE-SUBMITTED