

FORM
2A

Rev
04/18

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:

401782179

Date Received:

12/19/2018

Oil and Gas Location Assessment

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

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

Location ID:

463773

Expiration Date:

04/03/2022

☒ This location assessment is included as part of a permit application.

CONSULTATION

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # _____
- ☐ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 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.CO
M

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: SARCHET Number: 35-21HZ PAD

County: WELD

QuarterQuarter: SWSW Section: 21 Township: 3N Range: 66W Meridian: 6 Ground Elevation: 4984

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: 640 feet FSL from North or South section line

341 feet FWL from East or West section line

Latitude: 40.204909 Longitude: -104.790392

PDOP Reading: 1.8 Date of Measurement: 09/03/2018

Instrument Operator's Name: ROB WILSON

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 #

Well Site is served by Production Facilities

401788638

FACILITIES

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

| | | | | | | | | | |
|-----------------------|---|----------------------|--|----------------------|--|------------------|--|-------------------------------|--|
| Wells | 7 | Oil Tanks* | | Condensate Tanks* | | Water Tanks* | | Buried Produced Water Vaults* | |
| Drilling Pits | | Production Pits* | | Special Purpose Pits | | Multi-Well Pits* | | Modular Large Volume Tanks | |
| Pump Jacks | 7 | Separators* | | Injection Pumps* | | Cavity Pumps* | | Gas Compressors* | |
| Gas or Diesel Motors* | | Electric Motors | | Electric Generators* | | Fuel Tanks* | | LACT Unit* | |
| Dehydrator Units* | | Vapor Recovery Unit* | | VOC Combustor* | | Flare* | | Pigging Station* | |

OTHER FACILITIES*

Other Facility Type

Number

| | |
|-----------------------------|---|
| COMPRESSED AIR SUPPLY LINES | 7 |
| GAS LIFT LINES | 7 |
| TEMPORARY ECD'S | 1 |
| TEMPORARY 500 BBL TANKS | 2 |
| FLOW LINES | 7 |

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 COMMENTS SECTION. DESCRIPTION OF FLOWLINES DOES NOT FIT IN SPACE PROVIDED.

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.

PAD WILL PRODUCE TO THE NILES MILLER 16-20HZ PAD [DOC: 401788638] PERMITS TO FOLLOW.
COMPRESSED AIR SUPPLY LINES, FLOW LINES, & GAS LIFT LINES WILL ALSO BE COUNTED ON THE NILES MILLER 16-20HZ PAD.

CONSTRUCTION

Date planned to commence construction: 12/24/2019

Size of disturbed area during construction in acres: 7.53

Estimated date that interim reclamation will begin: 06/24/2020

Size of location after interim reclamation in acres: 0.70

Estimated post-construction ground elevation: 4983

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 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: 149021

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: SARCHET SCOTT D REVOCABLE

Phone: 970-785-6143

Address: 14851 COUNTY ROAD 28

Fax: _____

Address: _____

Email: _____

City: PLATTEVILLE State: CO Zip: 80651

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☒ is the mineral owner

☒ is committed to an oil and Gas Lease

☒ has signed the Oil and Gas Lease

☐ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation 02/16/2018

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: | 779 Feet | Feet |
| Building Unit: | 816 Feet | Feet |
| High Occupancy Building Unit: | 5280 Feet | Feet |
| Designated Outside Activity Area: | 5280 Feet | Feet |
| Public Road: | 535 Feet | Feet |
| Above Ground Utility: | 518 Feet | Feet |
| Railroad: | 5280 Feet | Feet |
| Property Line: | 339 Feet | 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.
- Large UMA Facility - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 10/04/2018

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

NRCS Map Unit Name: 56—Renohill clay loam, 0 to 3 percent slopes

NRCS Map Unit Name: 57—Renohill clay loam, 3 to 9 percent slopes

PLANT COMMUNITY:

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

Are noxious weeds present: Yes ☐ No ☐

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

List individual species:

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- ☐ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- ☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- ☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- ☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- ☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- ☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- ☐ Alpine (above timberline)
- ☐ Other (describe): _____

WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 985 Feet

water well: 714 Feet

Estimated depth to ground water at Oil and Gas Location 53 Feet

Basis for depth to groundwater and sensitive area determination:

Spear Canal: 985' E Elev 4978'
Loc Elev: 4984'

Nearest water wells:

714' S, Permit 51775-, depth 407', Static Water Level 150', Elev 4962'

2654' NE, Permit 711-WBC, depth 50', Static Water Level 14', Elev 4945'

(SWL calc: $(4984 - 4945) + 14 = 53$)

Sensitive Area Determination: SENSITIVE AREA, downgradient surface water feature within 1,000'

Location is NOT in floodplain according to Weld County and FEMA

(SWL calc: $(4984 - 4893) + 20 = 111$)

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 This location will produce to the NILES MILLER 37-20HZ PAD (Doc ID: 401788638), which is planned to be submitted in mid-March. Construction of the facility will begin shortly after permit approval. The SARCHET wells will be shut in until the production facility is operational.

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: If the surface owner authorizes, and if it is feasible for this location at the time of drilling, water-based cuttings will be disposed of onsite using bioremediation/solidification product. If the surface owner does not authorize onsite disposal and/or it is not feasible for this location at the time of drilling, water-based cuttings will be disposed of using a Centralized E&P Waste Management facility or a private spread field. Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.

Flow Lines: 7 flow lines will flow to the production facility location. 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 567'.

7 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 567'.

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 production facility, approximately 567'.

PIPELINES ASSOCIATED WITH THE PRODUCTION FACILITY WILL BE DESCRIBED IN THE 2A FOR THE NILES MILLER 16-20HZ PAD.

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

Signed: _____ Date: 12/19/2018 Email: DJREGULATORY@ANADARKO.COM

Print Name: ERIN HAMPE Title: REGULATORY ANALYST

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: 4/4/2019

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type

Description

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 a 7-well pad. |
| 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 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 well pad will be considered for future well locations |
| 6 | Community Outreach and Notification | <p>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.</p> <p>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.</p> |
| 7 | 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. |
| 8 | 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. |
| 9 | General Housekeeping | 604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped. |
| 10 | 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. |
| 11 | Storm Water/Erosion Control | 604c.(2).G. Berm Construction: Kerr-McGee will create tertiary containment by construction of a berm or diversion dike, site grading, or other comparable measures sufficient to further protect the Spear Canal located 985' east of this proposed oil and gas location. |
| 12 | 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. |
| 13 | 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. |

| | | |
|----|--|--|
| 14 | 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 twenty-five (25) feet from the wellhead(s), tanks and separator(s). |
| 15 | Material Handling and Spill Prevention | 606.A.d. Fire Prevention and Protection: 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. |
| 16 | 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. |
| 17 | Construction | 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 |
| 18 | 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 |
| 19 | 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, sound mitigation barriers (straw bales) will be placed along the south side of the pad location to dampen noise and minimize impact to the nearby residences on Weld County Road 30 during drilling and completions. Should technological advancements allow for better noise mitigation at the time of drilling and completion operations on this location, Kerr-McGee will re-evaluate the most effective method at that time. |
| 20 | Odor mitigation | 805b. Odors: KMG will comply with the provisions of 805b as deemed applicable. Additional BMPs for the SARCHET 35-21HZ PAD 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. |
| 21 | 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. |
| 22 | Drilling/Completion Operations | 604c.(2).C. Green Completions: Temporary above ground polyethylene water pipelines will deliver water to location operations from larger trunk lines to reduce truck traffic and minimize air pollution. Pipeline infrastructure is in place prior to completions operations to ensure saleable gas, once hydrocarbons are cut, is sent directly to sales without flaring during flowback. Environmental Control Devices or Volatile Organic Compound (VOC) Combustors will be used to control working and breathing vapor losses for oil and water tanks. |
| 23 | 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. |

| | | |
|----|--------------------------------|---|
| 24 | Drilling/Completion Operations | 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. |
| 25 | Drilling/Completion Operations | 605.c.(1) Special Equipment: Wells will be equipped with automatic control valves and will continuously be monitored by the Integrated Operations Center (IOC) such that if a sudden change in pressure is detected the well will be shut in and fail safe. |
| 26 | 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. |
| 27 | 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: 27 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|--|
| 401782179 | FORM 2A SUBMITTED |
| 401838991 | WASTE MANAGEMENT PLAN |
| 401858015 | HYDROLOGY MAP |
| 401858021 | ACCESS ROAD MAP |
| 401858022 | MULTI-WELL PLAN |
| 401858023 | LOCATION DRAWING |
| 401858025 | LOCATION PICTURES |
| 401858623 | NRCS MAP UNIT DESC |
| 401860990 | SURFACE AGRMT/SURETY |
| 401871123 | PRE-APPLICATION NOTIFICATION CERTIFICATION |
| 401871124 | WELL LOCATION PLAT |
| 401872851 | FACILITY LAYOUT DRAWING |

Total Attach: 12 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|--|----------------------------|
| Final Review | <ul style="list-style-type: none"> •With concurrence from the operator, added acknowledgement of the "Surface owner is committed to an oil and gas lease" and "has signed the oil and gas lease". •Final permitting review complete. Sent to Final Approval. | 04/02/2019 |
| Permit | •Initial permitting review complete. Waiting on operator concurrence for Surface owner is mineral owner questions. | 03/29/2019 |
| OGLA | OGLA supervisor review complete. The BMPs adequately address the health, safety and welfare concerns. OGLA task passed. | 03/14/2019 |
| OGLA | Operator provided updated water information - changed depth to water from 111 feet to 53 feet. Added information regarding remote related location. Send for buffer zone review. | 02/26/2019 |
| OGLA | Operator responded with concurrence to remove duplicate BMP and will provide other information soon. | 02/25/2019 |
| OGLA | OGLA review: Related remote location for production is in Draft at this time, depth to water is listed at 111 feet on the 2A. Based on the comments, request further information on depth to groundwater from Operator. BMP 15 and 16 are duplicates - request to remove one BMP, | 02/21/2019 |
| Permit | Passed completeness. | 01/07/2019 |
| OGLA | Passed Buffer Zone completeness review. | 01/04/2019 |
| Permit | Referred to OGLA supervisor for buffer zone review. Due 1/8 | 12/20/2018 |

Total: 9 comment(s)