

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:

402410265

(SUBMITTED)

Date Received:

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 416717

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:

416717

Expiration Date:

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

CONSULTATION

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

Operator

Operator Number: 47120
 Name: KERR MCGEE OIL & GAS ONSHORE LP
 Address: P O BOX 173779
 City: DENVER State: CO Zip: 80217-3779

Contact Information

Name: Shayelyn Coppinger
 Phone: (720) 9296907
 Fax: ()
 email: shayelyn_coppinger@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: SCHLAGEL Number: 10-5HZ PAD
 County: WELD
 Quarter: NW Section: 5 Township: 3N Range: 67W Meridian: 6 Ground Elevation: 4872

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: 2280 feet FSL from North or South section line
2199 feet FEL from East or West section line

Latitude: 40.253930 Longitude: -104.912758

GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 05/05/2020

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 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: WOGLA _____

The local government siting permit was filed on: _____

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

Additional explanation of local process:

The WOGLA notices were sent on 6/11/2020 and deemed complete on 7/1/2020. The WOGLA application will be submitted after the notice period expires on 8/1/2020.

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 | 17 | Oil Tanks* | _____ | Condensate Tanks* | 1 | Water Tanks* | 4 | Buried Produced Water Vaults* | _____ |
| Drilling Pits | _____ | Production Pits* | _____ | Special Purpose Pits | _____ | Multi-Well Pits* | _____ | Modular Large Volume Tanks | _____ |
| Pump Jacks | 11 | Separators* | 11 | Injection Pumps* | _____ | Cavity Pumps* | _____ | Gas Compressors* | _____ |
| Gas or Diesel Motors* | _____ | Electric Motors | _____ | Electric Generators* | _____ | Fuel Tanks* | _____ | LACT Unit* | 2 |
| Dehydrator Units* | _____ | Vapor Recovery Unit* | _____ | VOC Combustor* | 1 | Flare* | _____ | Pigging Station* | _____ |

OTHER FACILITIES*

Other Facility Type **Number**

| Other Facility Type | Number |
|----------------------------|--------|
| Air Compressors | 2 |
| E-House | 1 |
| Meter Buildings | 2 |
| Temporary 500 Barrel Tanks | 2 |
| Temporary ECDs | 8 |
| Temporary Generator | 1 |
| Temporary Propane Tank | 1 |
| Temporary Purge Flares | 3 |

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: 12/01/2021 Size of disturbed area during construction in acres: 11.49
Estimated date that interim reclamation will begin: 05/01/2021 Size of location after interim reclamation in acres: 3.18
Estimated post-construction ground elevation: 4872

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: Thomas & Jilann Schlagel Phone: _____

Address: 17138 WCR 17 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: Surface Use Agreement

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

Date of Rule 306 surface owner consultation 02/19/2020

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): _____

Ex. wells in DA will
be P&Ad & facility
removed

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: | 905 Feet | 773 Feet |
| Building Unit: | 1926 Feet | 1543 Feet |
| High Occupancy Building Unit: | 5280 Feet | 5280 Feet |
| Designated Outside Activity Area: | 5280 Feet | 5280 Feet |
| Public Road: | 2163 Feet | 1789 Feet |
| Above Ground Utility: | 2151 Feet | 1771 Feet |
| Railroad: | 5280 Feet | 5280 Feet |
| Property Line: | 158 Feet | 32 Feet |
| School Facility:: | 5280 Feet | 5280 Feet |
| School Property Line: | 5280 Feet | 5280 Feet |
| Child Care Center: | 5280 Feet | 5280 Feet |

INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

SCHOOL SETBACK INFORMATION

Was Notice required under Rule 305.a.(4)? Yes No

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:

- Buffer Zone
- Exception Zone
- Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.
- Large UMA Facility – as defined in 100-Series Rules.

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

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

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (on□ or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 82- Wiley-Colby Complex 1-3% slopes

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

PLANT COMMUNITY:

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

Are noxious weeds present: Yes No

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

List individual species:

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: 0 Feet

water well: 1043 Feet

Estimated depth to ground water at Oil and Gas Location 8 Feet

Basis for depth to groundwater and sensitive area determination:

Ditch: 0' W Elev: 4870'
Ditch: 5' N Elev: 4878'
Pond: 39' W Elev: 4880'
Pond: 108' NW Elev: 4878'
Ditch: 488' NNW Elev: 4883'
Ditch: 649' W Elev: 4878'
Ditch: 780' WNW Elev: 4878'
Pond: 866' W Elev: 4886'
Loc Elev: 4872'
Nearest water wells:
1043' NW, Permit 288349--A, depth 101', Static Water Level 42', Elev 4889'
5775' ESE, Permit 297055-, depth 500', Static Water Level 1', Elev 4766'
Sensitive Area Determination: SENSITIVE AREA, downgradient surface water feature within 1,000' AND depth to groundwater less than 20'.
Location is NOT in floodplain according to Weld County and FEMA

SWL = 8'
Groundwater monitoring wells were drilled at this location. One monitoring well encountered groundwater at approximately 7.9'

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 _____

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.)
- 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)

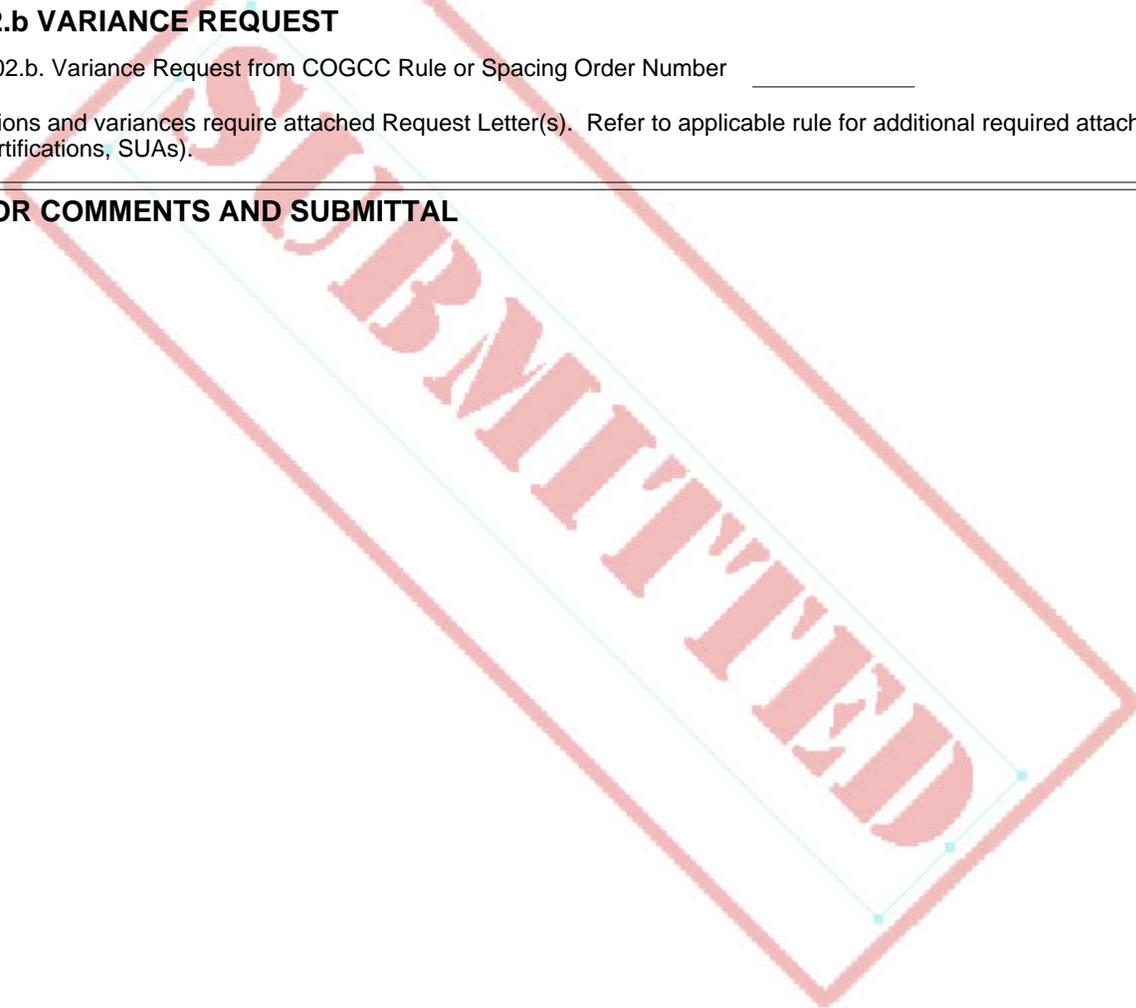
RULE 502.b VARIANCE REQUEST

- 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



Location name is being changed from UPV P #05-21D to Schlagel 10-5HZ. All of the existing wells within the DA will be plugged and the associated facility equipment will be removed prior to construction of the new pad. Per my conversation with COGCC staff on 6/30, the existing wells are included on the facilities tab, but the existing equipment is not.

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.

Flowlines: 11 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.

Air Supply Lines: 11 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.

Gas Lift Lines: 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.

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.

Two 500 barrel skid-mounted 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.

19 temporary 500 barrel skid-mounted frac tanks will be utilized during flowback and initially for produced water. It is estimated the 7 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. 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.

The small ditch (west side of DA) may be filled in during construction but no Army Corps of Engineer Section 404 permit is required because it is not jurisdictional.

Construction and interim rec start dates listed are preliminary and subject to change based off future operational schedules.

***MEASURED FROM TEMPORARY EQUIPMENT EDGE**
 BUILDING ±773'
 BUILDING UNIT ±1759'
 HIGH OCCUPANCY BUILDING UNIT +5280'
 DESIGNATED OUTSIDE ACTIVITY AREA +5280'
 PUBLIC ROAD ±1981'
 ABOVE GROUND UTILITY ±1964'
 RAILROAD +5280'
 PROPERTY LINE ±32'
 SCHOOL FACILITY +5280'
 SCHOOL PROPERTY LINE +5280'
 CHILD CARE CENTER +5280'

***MEASURED FROM NEAREST FACILITY EQUIPMENT**
 BUILDING ±937'
 BUILDING UNIT ±1543'
 HIGH OCCUPANCY BUILDING UNIT +5280'
 DESIGNATED OUTSIDE ACTIVITY AREA +5280'
 PUBLIC ROAD ±1789'
 ABOVE GROUND UTILITY ±1771'
 RAILROAD +5280'
 PROPERTY LINE ±115'
 SCHOOL FACILITY +5280'
 SCHOOL PROPERTY LINE +5280'
 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: _____ Email: shayelyn_coppinger@oxy.com

Print Name: Shayelyn Coppinger 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.

| <u>COA Type</u> | <u>Description</u> |
|-----------------|--------------------|
| | |

Best Management Practices

| No | BMP/COA Type | Description |
|-----------|-------------------------------------|--|
| 1 | Planning | <p>Access Roads: KMG will utilize one existing access road off of CR 17 for temporary operations, up until the temporary tanks are removed. After the temporary tanks are removed, KMG will then use the proposed existing permanent access. KMG chose to use the temporary access in order to be further away from the surrounding building unit owners.</p> <p>Both roads will be properly constructed and maintained to accommodate for local emergency vehicle access.</p> |
| 2 | Planning | <p>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.</p> |
| 3 | Community Outreach and Notification | <p>Courtesy Notifications will be sent to all property owners 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.</p> |
| 4 | Traffic control | <p>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, also reducing associated concerns of traffic, noise, emissions and dust.</p> |
| 5 | Traffic control | <p>Prior to the commencement of operations, the operator will obtain access and ROW permits from Weld County and implement traffic control plans.</p> |
| 6 | General Housekeeping | <p>Loadlines: All loadlines shall be bullplugged or capped.</p> |
| 7 | General Housekeeping | <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.</p> |
| 8 | General Housekeeping | <p>Site lighting shall be shielded and directed downward and inward toward operations to avoid glare on public roads and nearby Building Units.</p> |
| 9 | General Housekeeping | <p>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.</p> |
| 10 | Storm Water/Erosion Control | <p>Kerr-McGee will create tertiary containment around the facility by constructing a berm or diversion dike, site grading, sediment traps or other comparable measures sufficient to further protect adjacent water features, including the ditches and ponds near this proposed oil and gas location. During active construction, with personnel on location, daily inspections will occur. During nonactive, 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. During construction, stormwater features will be checked more frequently (up to daily, depending on the intensity of construction activity).</p> |

| | | |
|----|--|--|
| 11 | Storm Water/Erosion Control | 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. When construction is completed and the location is on production, site inspections will occur every 28 days with additional inspections after major rain events. 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. |
| 12 | Storm Water/Erosion Control | KMG maintains a Stormwater 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 | 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. |
| 14 | Material Handling and Spill Prevention | Temporary produced water storage 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 device 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 colocated within the containment), and firefighting equipment is likewise not stored within the containment area. |
| 15 | Material Handling and Spill Prevention | 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. |
| 16 | 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. |
| 17 | Material Handling and Spill Prevention | 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. |
| 18 | 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. |
| 19 | Dust control | Dust: Water will be placed on unpaved roads to mitigate dust. |

| | | |
|----|--------------------------------|--|
| 20 | 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. |
| 21 | Noise mitigation | KMG will meet all applicable noise requirements set forth by COGCC regulations during operations. At a minimum, straw bales will be placed along certain sides of the pad location to dampen noise and minimize impact to the nearby residences during drilling and completions. |
| 22 | Emissions mitigation | 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. |
| 23 | Odor mitigation | 805b 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. |
| 24 | Drilling/Completion Operations | 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, KMG shall not produce the wells without an approved variance per Rule 805.b. (3)C. |
| 25 | 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, KMG shall not produce the wells without an approved variance per Rule 805.b.(3)C. |
| 26 | Final Reclamation | 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 | 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. |

Total: 27 comment(s)

Attachment Check List

| Att Doc Num | Name |
|--------------------|-----------------------|
| 402437765 | LOCATION DRAWING |
| 402437769 | MULTI-WELL PLAN |
| 402437773 | ACCESS ROAD MAP |
| 402437775 | SURFACE AGRMT/SURETY |
| 402437776 | WASTE MANAGEMENT PLAN |
| 402437781 | WELL LOCATION PLAT |
| 402437914 | LOCATION PICTURES |
| 402437918 | HYDROLOGY MAP |
| 402441073 | NRCS MAP UNIT DESC |

Total Attach: 9 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)



Public Comments

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

