

DIRECTOR'S RECOMMENDATION

Docket Number 220500111

***Kerr McGee Oil & Gas Onshore LP, Inc, a subsidiary of Occidental Petroleum Corporation
(KMOG), Operator Number 47120***

NORTH CORE OGDG (OGDP ID #482683)

Pursuant to Rule 306, the Director submits to the Commission this recommendation for APPROVAL of this KMOG Oil and Gas Development Plan located in Weld County.

The underlying permit documents in support of this Recommendation may be found through the Colorado Oil and Gas Conservation Commission (COGCC) website under "[Permits](#)".

North Core OGDG ("North Core")

Form 2C #403051158

Form 2A #403038033 ("Blue Chip 6-22HZ")

Form 2A #403038035 ("Rainbow 24-9HZ")

Form 2B #403045190

All supporting hearing documents, including KMOG's North Core OGDG hearing application, may be found in COGCC's eFilings System under Docket No. 220500111.

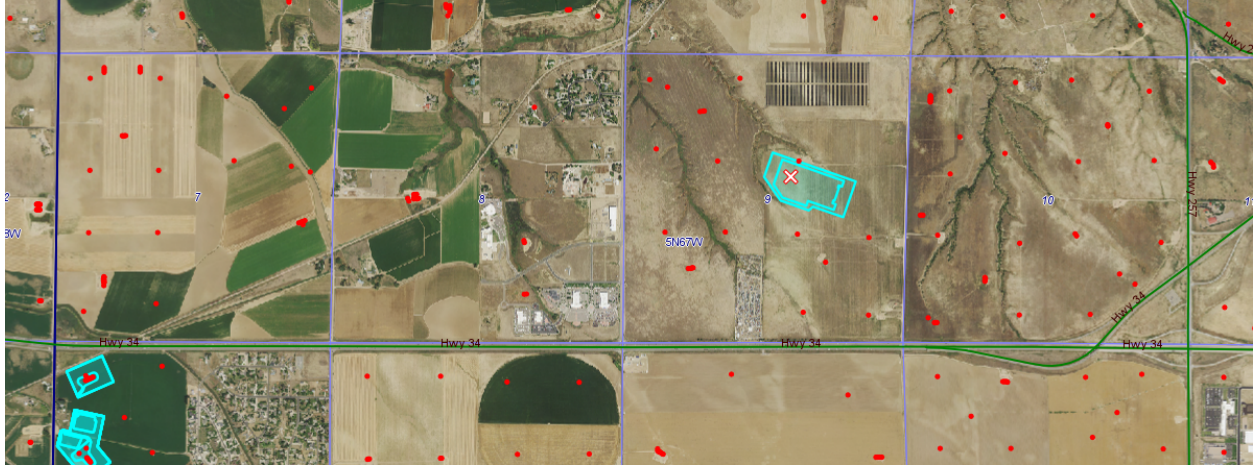
BACKGROUND

The North Core OGDG was originally submitted on 5/26/2022. The Hearing Application was returned to the Applicant on 6/14/2022 for corrections/revisions. The OGDG Form 2C was approved and the Form 2A was placed In Process on 8/8/2022. This Recommendation is based on information finalized in the Form 2As, Form 2B, and hearing application as of November 8, 2022. No additional revisions will be made to the application prior to the Commission Hearing scheduled for November 16, 2022.

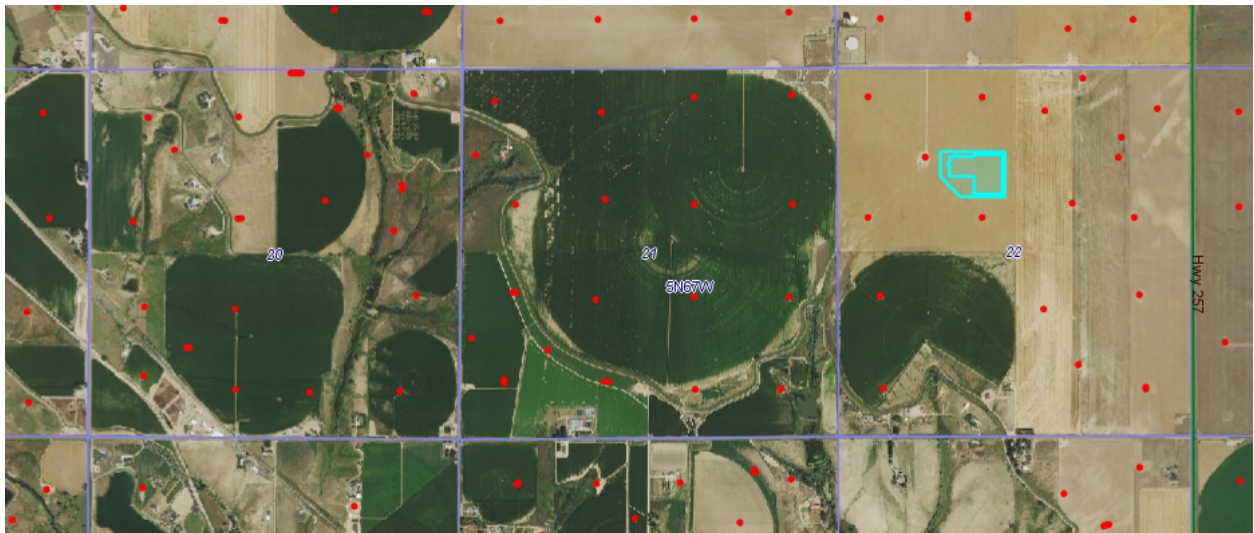
PROPOSED DEVELOPMENT

The proposed North Core OGDG includes application lands in the City of Greeley, with Weld County as a proximate local government.

The proposed Rainbow 24-9HZ application lands consist of approximately 2,560 acres in Township 5 North, Range 67 West, all of Sections 7, 8, 9, and 10. The setting is a mixture of agricultural, commercial, and residential in a moderately populated area. The proposed surface location is within a dryland agricultural field.



The proposed Blue Chip 6-22HZ application lands consist of approximately 1,600 acres in Township 5 North, Range 67 West, covering the south ½ of Section 20, and all of Sections 21 and 22. The area is predominantly agricultural with some residences. The proposed surface location is within a dryland agricultural field.



The Rainbow 24-9HZ location is being permitted for 28 wells, 10 separators, 2 condensate tanks, 8 water tanks, 2 combustors, and assorted equipment. It is planned to have a 26.3 acre disturbance, to be reduced to 8.2 acres after interim reclamation. The access road will disturb approximately 3.6 acres. The existing surface use for this location is dryland crop agriculture. KMOG is the surface owner. Freshwater will be piped to the location for completions operations via an on-demand system. The oil and gas produced from this location will be transported by pipeline. Produced water will be transported by truck.

The Blue Chip 6-22HZ is planned to have 12 wells, 4 separators, 1 condensate tank, 4 water tanks, 1 combustor, and associated equipment. It is planned to have a 12.6 acre disturbance size, to be reduced to 3.0 acres after interim reclamation. The access road will disturb approximately 2.3 acres. The existing surface use for this location is dryland crop agriculture and there is a Surface Use Agreement in place. Freshwater will be piped to the location for completions operations via an on-demand system. The oil and gas produced from this location will be transported by pipeline. Produced water will be transported by truck.

DRILLING AND SPACING CONSIDERATIONS

KMOG is requesting the development of FEE minerals covering approximately 4,160 total acres from the Niobrara, Fort Hays, Codell, Carlile and Sharon Springs Formations as follows:

- Establish a new Drilling and Spacing Unit (DSU), (Rainbow 24-9HZ pad DSU)
 - The proposed DSU would establish 2,560 acres for oil and gas development and approve up to twenty-eight (28) horizontal wells from the proposed Rainbow 24-9HZ Pad.
 - KMOG requests the following unit setbacks for the DSU:
 - Niobrara and Sharon Springs formations wells: 175 feet from the northern and southern unit boundaries and 60 feet from the eastern and western unit boundaries;
 - Codell, Fort Hays and Carlile formations wells: 375 feet from the northern and southern unit boundaries and 120 feet from the eastern and western unit boundaries;
 - All wells: an interwell distance of 150 feet.
- Establish a new Drilling and Spacing Unit (DSU), (Blue Chip 6-22HZ pad DSU)
 - The proposed DSU would establish 1,600 acres for oil and gas development and approve up to twelve (12) horizontal wells from the proposed Blue Chip 6-22HZ Pad.
 - KMOG requests the following unit setbacks for the DSU:
 - Niobrara and Sharon Springs formations wells: 165 feet from the northern and southern unit boundaries and 55 feet from the eastern and western unit boundaries;
 - Codell, Fort Hays and Carlile formations wells: 412 feet from the northern and southern unit boundaries and 135 feet from the eastern and western unit boundaries;
 - All wells: an interwell distance of 150 feet.

There are multiple vertical and directional wells producing or permitted to produce the Niobrara, Fort Hays, Codell, Carlile and Sharon Springs Formations, or portions thereof, within the application lands and within the proposed DSU boundaries; those wells will remain subject to their originally permitted spacing, and will not be included in this OGD. P.

This spacing, as outlined in KMOG's Hearing Application, complies with applicable COGCC rules and Staff appreciates the utilization of two large DSU for these application lands, eliminating the need for multiple individual wellbore spacing units.

FINANCIAL ASSURANCE

Staff confirmed that KMOG has a valid blanket plugging bond on record consistent with Rule 702.

PUBLIC COMMENT

The Public Comment window opened when the OGDG passed completeness review on August 8, 2022. It remained open until September 8, 2022. The Rainbow 24-9HZ location received one public comment and two comments from the City of Greeley (Relevant Local Government). The public comment was from a mineral owner for the proposed location who was in favor of the location. The comments from Greeley were notes about the Use by Special Review (USR) process and KMOG's progress in working through that process. The Blue Chip 6-22HZ received the two comments from Greeley and no other comments. As of November 8, 2022, there are no public comments in the eFiling system for this OGDG.

LOCAL GOVERNMENT PERMITTING AND PRE-APPLICATION CONSULTATIONS

Consultation meetings to discuss the proposed Rainbow 24-9HZ and Blue Chip 6-22HZ locations took place on September 17, 2021 between KMOG, the City of Greeley, and the COGCC. The major subjects covered for the Rainbow 24-9HZ location during this consultation were: Greeley's USR needs, concerns Greeley had about the crossing of easements and water lines, Greeley's landscaping requirements, and the Fire Department's planning requirements. The major subjects covered for the Blue Chip 6-22HZ location during this consultation were: Greeley's USR needs, potential development in the future north of the location, and haul routes.

The City of Greeley approved the USRs for both locations at a public hearing on October 25, 2022.

COGCC STAFF'S TECHNICAL REVIEW HIGHLIGHTS

This section addresses issues related to siting, public health, safety, welfare, the environment, and wildlife resources, within the context of § 34-60-106(2.5)(a).

Alternative Location Analysis (ALA)

No ALA was performed for either of these locations as no ALA criteria were met.

Public Health, Safety, and Welfare Considerations

No Residential Building Units (RBUs) were identified within 2,000 feet of the proposed Rainbow 24-9HZ location. The closest identified RBU is 2,887 feet from the working pad surface. In

addition, there are no High Occupancy Building Units, School Facilities, Child Care Centers, or Disproportionately Impacted Communities within one mile of the location.

No RBUs were identified within 2,000 feet of the proposed Blue Chip 6-22HZ location. The closest identified RBU is 2,660 feet from the working pad surface. In addition, there are no High Occupancy Building Units, School Facilities, Child Care Centers, or Disproportionately Impacted Communities within one mile of the location.

Staff has determined that the proposed site-specific BMPs will adequately minimize and/or mitigate potential adverse impacts to public health, safety, and welfare. This includes the use of a quiet completions fleet during hydraulic fracturing, lighting that is oriented down, inwards, and on timers, and the use of an odor neutralizer in the drilling fluids.

Staff does not anticipate any significant potential direct adverse impacts to public health, safety, and welfare.

Environmental Resource Considerations

Potential impacts to surface water at the proposed Rainbow 24-9HZ location was the primary environmental resource consideration within this OGD. There is an intermittent drainage that traverses through the eastern corner of the proposed location with a mapped associated riverine wetland on the National Wetlands Inventory. This portion of the drainage/wetland has been tilled over since at least the late 1990s and is not a discernible feature due to the agricultural production. The drainage does not become a distinct feature until it is approximately 280 feet north and downgradient of the proposed location. Due to the agricultural disturbance removing the mapped portion of the drainage/wetland, this review was for the drainage beginning where the historic agricultural activity stopped.

KMOG provided stormwater plans for both the Rainbow 24-9HZ and Blue Chip 6-22HZ locations that include diversion of stormwater run-on around the location, onsite stormwater being diverted to sediment traps prior to leaving the location, stabilization of loose soils, and inspections.

Wildlife Resource Considerations

KMOG identified multiple potential Burrowing Owl habitats near the proposed Rainbow 24-9HZ location. The closest potential habitat is approximately 330 feet from the working pad surface and another potential habitat is north of and adjacent to the existing access road. Although the habitats are not mapped as Rule 309.e consultation habitats, Colorado Parks and Wildlife (CPW) was consulted with and recommended avoiding ground disturbing activities during the Burrowing Owl nesting period to reduce the potential for disruption to the population. KMOG provided a BMP that if an active Burrowing Owl habitat is located near the location, pad construction will occur outside of the Burrowing Owl nesting period of March 15 - August 31. Construction is currently scheduled to begin on November 30, 2022.

KMOG identified several active raptor nests in the area of the proposed Rainbow 24-9HZ location, with the closest being approximately 2,150 feet to the southeast. These nests are not formally mapped as Rule 1202.c, 1202.d or 309.e High Priority Habitats.

KMOG placed a BMP to conduct an assessment of the nests which will be completed prior to the start of pre-production operations, with consultation with CPW for any active nests.

DIRECTOR'S RECOMMENDATION:

The Director has obtained and fully reviewed all required and supplemental information necessary to evaluate the OGD's proposed operations and its potential impacts to public health, safety, welfare, the environment and wildlife resources. Through this review, the Director has determined that this OGD complies with all applicable requirements of the Commission's Rules and recommends approval by the Commission.

FORM
2A

Rev
01/21

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:

403038033

Date Received:

05/26/2022

Oil and Gas Location Assessment

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:

OGDP ID:

Expiration Date:

☒ New Location ☐ Refile ☐ Amend Existing Location # _____

If this Location assessment is a component of an Oil and Gas Development Plan (OGDP) application, enter the OGDP docket number(s).

Docket Number	OGDP ID	OGDP Name
220500111		

If this Location assessment is part of an approved Oil and Gas Development Plan, enter the OGDP ID number(s).

<No existing OGDP number provided>

CONSULTATION

- ☐ This location is included in a Comprehensive Area Plan (CAP). CAP ID # _____
- ☐ This Location or its associated new access road, utility, or Pipeline corridor meets Rule 309.e.(2).A, B, or C.
- ☐ This Location is within 2,640 feet of a GUDI or Type III Well per Rule 411.b.(4).
- ☐ This Location includes a Rule 309.e.(2).E variance request.
- ☐ This location includes a Rule 309.f.(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: SAM SAMET

Phone: (720) 9293317

Fax: ()

email: sam_samet@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: BLUE CHIP Number: 6-22HZ

Provide the location description and the latitude and longitude of a single point near the center of the Working Pad Surface as a reference for this Location.

Quarter: SE Section: 22 Township: 5N Range: 67W Meridian: 6 Ground Elevation: 5036

Latitude: 40.388364 Longitude: -104.880304

GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP Date of Measurement: 08/18/2021

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 #



RELEVANT LOCAL GOVERNMENT SITING INFORMATION

County: WELD Municipality: Greeley

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "Relevant Local Government approval of the siting of the proposed oil and gas location."

This proposed Oil and Gas Location is in an area designated as one of State interest and subject to the requirements of § 24-65.1-108, C.R.S. No

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this location? Yes

A siting permit application has been submitted to the Relevant Local Government for this proposed Oil and Gas Location: Yes

Date Relevant Local Government permit application submitted: 05/25/2022

Current status or disposition of the Relevant Local Government permit application for this proposed Oil and Gas Location: Approved

Status/disposition date: 10/25/2022

If Relevant Local Government permit has been approved or denied, attach final decision document(s).

Provide the contact information for the Relevant Local Government point of contact for the local permit associated with this proposed Oil and Gas Location:

Contact Name: BECKY SAFARIK Contact Phone: 970-350-9770

Contact Email: BECKY.SAFARIK@GREELEYGOV.CO
M

PROXIMATE LOCAL GOVERNMENT INFORMATION

For every Proximate Local Government (PLG) associated with this proposed Oil and Gas Location, provide the PLG's point of contact and their contact information.

Type of Proximate Govt	County	Municipality	Contact Name	Contact Phone	Contact Email
County	WELD	N/A	Jason Maxey	970-400-3580	jmaxey@weldgov.com

FEDERAL PERMIT INFORMATION

A Federal drilling permit (or related siting application) has been submitted for this proposed Oil and Gas Location: No

Date submitted: _____

Current status or disposition of the Federal drilling permit (or related siting application) for this proposed Oil and Gas Location: _____

Status/disposition Date: _____

If Federal agency permit has been approved or denied, attach the final decision document(s).

Provide the contact information of the Federal point of contact for the Federal permit associated with this proposed Oil and Gas Location.

Contact Name: _____

Contact Phone: _____

Contact Email: _____

Field Office: _____

Additional explanation of local and/or federal process: _____

A USR has been submitted to the town of Greeley on 5/25/2022. OGD and Use By Special Review Local Permit will be processed concurrently.

RELEVANT LOCAL GOVERNMENT OR FEDERAL PRE-APPLICATION CONSULTATION

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Did a pre-application Formal Consultation Process occur with the Relevant Local Government per Rule 301.f.(3)? Yes

Date of local government consultation: 09/17/2021

Did a pre-application Formal Consultation Process occur with the Federal land manager per Rule 301.f.(3)? No

Date of federal consultation: _____

Was an ALA that satisfies Rule 304.b.(2).C (or substantially equivalent information per Rule 304.e) developed during a federal or local government permit application process? If yes, attach the ALA to the Form 2A. No

ALA APPLICABILITY AND CRITERIA

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Does the proposed Oil and Gas Location meet any of the criteria listed in Rule 304.b.(2)B? No

If YES, indicate by checking the box for every Rule 304.b.(2).B criterion met by this proposed Location, and attach an ALA. See Rule 304.b.(2).B.i-x for full text of criteria.

☐ i. WPS < 2,000 feet from RBU/HOBU

☐ vi.aa. WPS within a surface water supply area

☐ ii. WPS < 2,000 feet from School/Child Care Center

☐ vi.bb. WPS < 2,640 feet from Type III or GUDI well

☐ iii. WPS < 1,500 feet from DOAA

☐ vii. WPS within/immediately upgradient of wetland/riparian corridor

☐

☐ viii. WPS within HPH and CPW did not waive

iv. WPS < 2,000 feet from jurisdictional boundary and
PLG objects/requests ALA

☐ v. WPS within a Floodplain

☐ ix. Operator using Surface bond

☐ x. WPS < 2,000 feet from RBU/HOBUS/School within a DIC

Is the proposed Oil and Gas Location within the exterior boundaries of the Southern Ute Indian Reservation, and the Tribe objects to the Location or requests an ALA? If YES, attach an ALA to the Form 2A.

No

Operator requests the Director waive the ALA requirement per Rule 304.b.(2).A.i: ☐

Provide an explanation for the waiver request, and attach supporting information (if necessary).

ALTERNATIVE LOCATIONS DASHBOARD

List every alternative location reviewed and included in the ALA. Provide a latitude and longitude for the approximate center of the alternative location, all Rule 304.b.(2).B Criteria met, if a variance would be required to permit the location, and a brief comment on the key points of the alternative location.

304.b.(2).B.i-x Criteria Met:

< No row provided >

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: TIM HAGAR

Phone: 9702134365

Address: 155 BOARDWALK DR

Fax:

Address: STE 400

Email: BLUECHIPOL@MSN.COM

City: FORT COLLINS State: CO Zip: 80525

Surface Owner at this Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check only one:

☐ The Operator/Applicant is the surface owner.

☒ The Operator has a signed Surface Use Agreement for this Location – attach SUA.

☐ All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the surface owner owns the minerals beneath this Location and is committed to an oil and gas lease – attach lease map or provide lease description.

☐ All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the Operator intends to use a surface bond per Rule 703 to secure access to this Location – attach lease map or provide lease description.

Surface Owner protection Financial Assurance type: N/A Surety ID Number: _____

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

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

Lease description if necessary: _____

SITE EQUIPMENT LIST

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

Wells	<u>12</u>	Oil Tanks	<u>0</u>	Condensate Tanks	<u>1</u>	Water Tanks	<u>4</u>	Buried Produced Water Vaults	<u>0</u>
Drilling Pits	<u>0</u>	Production Pits	<u>0</u>	Special Purpose Pits	<u>0</u>	Multi-Well Pits	<u>0</u>	Modular Large Volume Tank	<u>0</u>
Pump Jacks	<u>12</u>	Separators	<u>4</u>	Injection Pumps	<u>0</u>	Heater-Treaters	<u>0</u>	Gas Compressors	<u>0</u>
Gas or Diesel Motors	<u>0</u>	Electric Motors	<u>0</u>	Electric Generators	<u>0</u>	Fuel Tanks	<u>0</u>	LACT Unit	<u>2</u>
Dehydrator Units	<u>0</u>	Vapor Recovery Unit	<u>0</u>	VOC Combustor	<u>1</u>	Flare	<u>0</u>	Enclosed Combustion Devices	<u>0</u>
Meter/Sales Building	<u>2</u>	Pigging Station	<u>0</u>	Vapor Recovery Towers	<u>0</u>				

OTHER PERMANENT EQUIPMENT

Permanent Equipment Type	Number
Electric Compressors	<u>2</u>
Communication Tower	<u>1</u>
E House	<u>1</u>
Chemical Totes	<u>3</u>
Electrical Box	<u>1</u>
Air Compressors	<u>1</u>

OTHER TEMPORARY EQUIPMENT

Temporary Equipment Type	Number
Generator	<u>2</u>
ECD	<u>6</u>
Water Tanks	<u>21</u>
Propane Tank	<u>1</u>
Water Tank (rig)	<u>2</u>
ECD (rig)	<u>1</u>
Purge Flare	<u>3</u>

GAS GATHERING COMMITMENT

Operator commits to connecting to a gathering system by the Commencement of Production Operations? Yes

If the answer is NO, a Gas Capture Plan consistent with the requirements of Rule 903.e MUST be attached on the Plans tab.

FLOWLINE DESCRIPTION

Per Rule 304.b.(6), provide a description of all onsite and off-location oil, gas, and/or water flowlines.

Flowlines - 2"-3" size (outside diameter), constructed of carbon steel.

Oil, gas and water pipelines will be used at this location. Water for completions operations will be brought to the location through temporary water lines using KMOG's Water on Demand system. The oil and gas pipelines will be constructed by a 3rd party midstream company.

See comments for further description.

CULTURAL DISTANCE AND DIRECTION

Provide the distance and direction to the nearest cultural feature as measured from the edge of the Working Pad Surface.

	Distance		Direction	Rule 604.b Conditions Satisfied (check all that apply):				
				604.b. (1)	604.b. (2)	604.b. (3)	Details of Condition(s)	604.b. (4)
Building:	2066	Feet	NW					
Residential Building Unit (RBU):	2660	Feet	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
High Occupancy Building Unit(HOBU)	5280	Feet	NE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Designated Outside Activity Area:	5280	Feet	S					
Public Road:	1290	Feet	N					
Above Ground Utility:	109	Feet	E					
Railroad:	5280	Feet	SW					
Property Line:	169	Feet	E					
School Facility:	5280	Feet	SW					
Child Care Center:	5280	Feet	NE					
Disproportionately Impacted (DI) Community:	5280	Feet	W					
RBU, HOBU, or School Facility within a DI Community.	5280	Feet	W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

RULE 604.a.(2). EXCEPTION LOCATION REQUEST

☐ Operator requests an Exception Location Request from Rule 604.a.(2) [well is less than 150 feet from a property line]. Exception Location Request Letter and Waiver signed by offset Surface Owner(s) must be attached.

CULTURAL FEATURE INFORMATION REQUIRED BY RULE 304.b.(3).B.

Provide the number of each Cultural feature identified within the following distances, as measured from the Working Pad Surface:

	0-500 feet	501-1,000 feet	1,001-2,000 feet
Building Units	0	0	0
Residential Building Units	0	0	0

High Occupancy Building Units	<u>0</u>	<u>0</u>	<u>0</u>
School Properties	<u>0</u>	<u>0</u>	<u>0</u>
School Facilities	<u>0</u>	<u>0</u>	<u>0</u>
Designated Outside Activity Areas	<u>0</u>	<u>0</u>	<u>0</u>

CONSTRUCTION

Size of disturbed area during construction in acres: 12.62

Size of location after interim reclamation in acres: 3.03

Estimated post-construction ground elevation: 5036

DRILLING PROGRAM

Will a closed-loop drilling system be used? Yes

Is H2S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If YES, attach H2S Drilling Operations Plan.

Will salt sections be encountered during drilling: No

Will salt based (>15,000 ppm Cl) drilling fluids 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:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: _____

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

CURRENT LAND USE

Current Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☒ Non-Irrigated ☐ Conservation Reserve Program (CRP)

Non-Crop Land: ☐ Rangeland ☐ Forestry ☐ Recreation ☐ Other

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Describe the current land use:

DRYLAND CROP

Describe the Relevant Local Government's land use or zoning designation:

AG

Describe any applicable Federal land use designation:

N/A

FINAL LAND USE

Final Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☒ Non-Irrigated ☐ Conservation Reserve Program (CRP)

Non-Crop Land: ☐ Rangeland ☐ Forestry ☐ Recreation ☐ Other

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

REFERENCE AREA INFORMATION

If Final Land Use includes Non-Crop Land (as checked above), the following information is required:

Describe landowner's designated final land use(s):

Reference Area Latitude: _____ Reference Area Latitude: _____

Provide a list of plant communities and dominant vegetation found in the Reference Area.

< No row provided >

Noxious weeds present: _____

SOILS

List all soil map units that occur within the maximum extent of the proposed Oil and Gas Location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" listing the typical vertical soil profile(s). This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS website at <https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/> or from the COGCC website GIS Online map page. Instructions are provided within the COGCC website help section.

NRCS Map Unit Name: 79 - WELD LOAM, 1 TO 3% SLOPES

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

GROUNDWATER AND WATER WELL INFORMATION

Provide the distance and direction, as measured from the Working Pad Surface, to the nearest:

water well: 2032 Feet N

Spring or Seep: 5280 Feet NE

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 110 Feet

Basis for estimated depth to and description of shallowest groundwater occurrence:

Loc Elev: 5036'
3744' S, Permit 152424-, depth 57', Static Water Level 12', Elev 4938'
(SWL calc: (5036 - 4938) + 12 = 110)

SURFACE WATER AND WETLANDS

Provide the distance and direction to the nearest downgradient surface Waters of the State, as defined 1305 Feet W

in the 100-Series Rules, measured from the Working Pad Surface:

If less than 2,640 feet, is the Waters of the State identified above within 15 stream miles upstream of a Public Water System intake? No

Provide the distance and direction to the nearest downgradient wetland, measured from the Working

Pad Surface: 2480 Feet SW

Provide a description of the nearest downgradient surface Waters of the State:

Riverine

If the proposed Oil and Gas Location is within a Rule 411.a Surface Water Supply Area buffer zone, select the buffer zone type: _____

Public Water System Administrator - Contact Name _____ Email _____

If the proposed Oil and Gas Location is within a Rule 411.b GUDI/Type III buffer zone, select the buffer zone type: _____

Public Water System Administrator - Contact Name _____ Email _____

Is a U.S. Army Corps of Engineers Section 404 permit required for the proposed Oil and Gas Location, access road, or associated pipeline corridor? No

If a U.S. Army Corps of Engineers Section 404 permit is required, provide the permit status, and permit number if available:

Is the Location within a Floodplain? No Floodplain Data Sources Reviewed (check all that apply):

☒ Federal (FEMA) ☐ State ☒ County ☐ Local

☐ Other

Does this proposed Oil and Gas Location lie within a Sensitive Area for water resources, as defined in the 100-Series Rules? No

CONSULTATION, WAIVERS, AND EXCEPTIONS

When Rule 309.e.(2) Consultation must occur, check all that apply:

- ☐ This location is included in a Wildlife Mitigation Plan
- ☐ This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within federally designated critical habitat or an area with a known occurrence for a federal or Colorado threatened or endangered species. Provide description in Comments section of Submit tab.
- ☐ This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within an existing conservation easement established wholly or partly for wildlife habitat. Provide description in Comments section of Submit tab.

When Rule 309.e.(3) Consultation is not required, check all that apply:

- ☐ This Oil and Gas Location has been included in a previously approved, applicable Wildlife Protection Plan.
- ☐ This Oil and Gas Location has been included in a previously approved, applicable Wildlife Mitigation Plan.
- ☐ This Oil and Gas Location has been included in a previously approved, applicable conservation plan.

Pre-application Consultation:

- ☐ A pre-application consultation with CPW, regarding this Oil and Gas Location, occurred _____ on:

CPW Waivers and Exceptions (check all that apply and attach all CPW waivers to this Form 2A):

- ☐ The applicant has obtained a Rule 304.b.(2).B.viii CPW waiver for the requirement to complete an ALA.
- ☐ The applicant has obtained a Rule 309.e.(2).G CPW waiver and consultation is not required.
- ☐ The applicant has obtained a Rule 309.e.(5).D.i CPW waiver and is requesting an exception from Rule 1202.c.(1).R.
- ☐ The applicant has obtained a Rule 309.e.(5).D.ii CPW waiver and is requesting an exception from Rule 1202.c.(1).S.
- ☐ The applicant has obtained a Rule 309.e.(5).D.iii CPW waiver of Rule 1202.c.(1).T.
- ☐ The applicant has obtained a Rule 309.e.(5).D.iv CPW waiver and is requesting an exception from Rule 1202.c.(1) in accordance with an approved CAP.
- ☐ The applicant has obtained a Rule 1202.a CPW waiver.
- ☐ The applicant has obtained a Rule 1202.b CPW waiver.
- ☐ In accordance with Rule 1203.a.(3), the applicant requests an exception from compensatory mitigation Rule(s): _____

HIGH PRIORITY HABITAT AND COMPENSATORY MITIGATION

This Oil and Gas Location, associated access roads, utility, or Pipeline corridor falls wholly or partially within the following High Priority Habitats (Note: dropdown options are abbreviated - see Rule 1202 for full rule text):

< No row provided >

The following questions are for Oil and Gas Locations that cause the density to exceed one Oil and Gas Location per square mile in Rule 1202.d High Priority Habitat:

Direct Impacts:

Is Compensatory Mitigation required per Rule 1203.a for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address direct impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

N/A

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Direct impact habitat mitigation fee amount: \$ 0

Indirect Impacts:

Is Compensatory Mitigation required per Rule 1203.d for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address indirect impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

N/A

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Indirect impact habitat mitigation fee amount: \$ 0

Operator Proposed Wildlife BMPs

No BMP

CPW Proposed Wildlife BMPs

No BMP

AIR QUALITY MONITORING PROGRAM

Will the Operator install and administer an air quality monitoring program at this Location? Yes

Operator Proposed BMPs

No BMP

CDPHE Proposed COAs OR BMPs

No BMP

PLANS

Total Plans Uploaded: 15

- ☐ (1) Emergency Spill Response Program consistent with the requirements of Rules 411.a.(4).B, 411.b.(5).B, & 602.j
- ☒ (2) Noise Mitigation Plan consistent with the requirements of Rule 423.a
- ☒ (3) Light Mitigation Plan consistent with the requirements of Rule 424.a
- ☒ (4) Odor Mitigation Plan consistent with the requirements of Rule 426.a
- ☒ (5) Dust Mitigation Plan consistent with the requirements of Rule 427.a
- ☒ (6) Transportation Plan
- ☒ (7) Operations Safety Management Program consistent with the requirements of Rule 602.d
- ☒ (8) Emergency Response Plan consistent with the requirements of Rule 602.j
- ☐ (9) Flood Shut-In Plan consistent with the requirements of Rule 421.b.(1)
- ☐ (10) Hydrogen Sulfide Drilling Operations Plan consistent with the requirements of Rule 612.d
- ☒ (11) Waste Management Plan consistent with the requirements of Rule 905.a.(4)
- ☐ (12) Gas Capture Plan consistent with the requirements of Rule 903.e
- ☒ (13) Fluid Leak Detection Plan
- ☒ (14) Topsoil Protection Plan consistent with the requirements of Rule 1002.c
- ☒ (15) Stormwater Management Plan consistent with the requirements of Rule 1002.f
- ☒ (16) Interim Reclamation Plan consistent with the requirements of Rule 1003
- ☒ (17) Wildlife Plan consistent with the requirements of Rule 1201
- ☒ (18) Water Plan
- ☒ (19) Cumulative Impacts Plan

☐ (20) Community Outreach Plan

☐ (21) Geologic Hazard Plan

VARIANCE REQUESTS

Check all that apply:

☐ This proposed Oil and Gas Location requires the approval of a Rule 502.a variance from COGCC Rule or Commission

Order number: _____

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

RULE 304.d LESSER IMPACT AREA EXEMPTION REQUESTS

Check the boxes below for all Exemptions being requested. Lesser Impact Area Exemption Request must be attached, and will include all requested exemptions.

- | | |
|--|--|
| <input type="checkbox"/> 304.b.(1). Local Government Siting Information | <input type="checkbox"/> 304.c.(1). Emergency Spill Response Program |
| <input type="checkbox"/> 304.b.(2). Alternative Location Analysis | <input type="checkbox"/> 304.c.(2). Noise Mitigation Plan |
| <input type="checkbox"/> 304.b.(3). Cultural Distances | <input type="checkbox"/> 304.c.(3). Light Mitigation Plan |
| <input type="checkbox"/> 304.b.(4). Location Pictures | <input type="checkbox"/> 304.c.(4). Odor Mitigation Plan |
| <input type="checkbox"/> 304.b.(5). Site Equipment List | <input type="checkbox"/> 304.c.(5). Dust Mitigation Plan |
| <input type="checkbox"/> 304.b.(6). Flowline Descriptions | <input type="checkbox"/> 304.c.(6). Transportation Plan |
| <input type="checkbox"/> 304.b.(7). Drawings | <input type="checkbox"/> 304.c.(7). Operations Safety Management Program |
| <input type="checkbox"/> 304.b.(8). Geographic Information System (GIS) Data | <input type="checkbox"/> 304.c.(8). Emergency Response Plan |
| <input type="checkbox"/> 304.b.(9). Land Use Description | <input type="checkbox"/> 304.c.(9). Flood Shut-In Plan |
| <input type="checkbox"/> 304.b.(10). NRCS Map Unit Description | <input type="checkbox"/> 304.c.(10). Hydrogen Sulfide Drilling Operations Plan |
| <input type="checkbox"/> 304.b.(11). Best Management Practices | <input type="checkbox"/> 304.c.(11). Waste Management Plan |
| <input type="checkbox"/> 304.b.(12). Surface Owner Information | <input type="checkbox"/> 304.c.(12). Gas Capture Plan |
| <input type="checkbox"/> 304.b.(13). Proximate Local Government | <input type="checkbox"/> 304.c.(13). Fluid Leak Detection Plan |
| <input type="checkbox"/> 304.b.(14). Wetlands | <input type="checkbox"/> 304.c.(14). Topsoil Protection Plan |
| <input type="checkbox"/> 304.b.(15). Schools and Child Care Centers | <input type="checkbox"/> 304.c.(15). Stormwater Management Plan |
| | <input type="checkbox"/> 304.c.(16). Interim Reclamation Plan |
| | <input type="checkbox"/> 304.c.(17). Wildlife Plan |
| | <input type="checkbox"/> 304.c.(18). Water Plan |
| | <input type="checkbox"/> 304.c.(19). Cumulative Impacts Plan |
| | <input type="checkbox"/> 304.c.(20). Community Outreach Plan |
| | <input type="checkbox"/> 304.c.(21). Geologic Hazard Plan |

OPERATOR COMMENTS AND SUBMITTAL

Comments

Please send questions and comments to both sam_samet@oxy.com and djregulatory@oxy.com
 Although not required by Rule, a Community Consultation Plan has been attached as "OTHER"
 A six foot tall fence will be placed along the north side of the facility for visual mitigation.
 Temporary above ground polyethylene water pipelines (diameter 10" - 12" with a 60 BPM capacity) will deliver water to location operations from larger trunk lines for completions operations.
 Flowlines 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 flowlines 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.
 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.
 Gas lift compressors may be used at this location.
 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.
 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.
 Temporary 500 BBL skid-mounted frac tanks will be utilized during flowback and initially for produced water. Temporary ECDs and 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 500-gallon propane tank will be used on location to provide fuel gas during facility equipment startup.

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

Signed: _____ Date: 05/26/2022 Email: djregulatory@oxy.com

Print Name: Sam Samet Title: Sr Regulatory Analyst

Based on the information provided herein, this Oil and Gas Location Assessment complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____ Director of COGCC Date: _____

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
Noise mitigation		If operator elects to increase the allowable noise level at the location, the operator will submit a Form 4 Sundry with an updated Noise Mitigation Plan that includes the ambient noise monitoring that will need to be approved prior to the commencement of new construction.
No BMP/COA Type		Description
1	Planning	Access Road: KMOG will construct an existing access road from CR 56 for drilling, completions, and production operations, including maintenance equipment. The road will be properly constructed and maintained to accommodate for emergency vehicle access
1	COA	
2	Planning	The wells are commingled into a bulk and test facility design. This reduces the total number of separators on location on a per well basis which in turn allows KMOG to have a smaller facility footprint. Reducing the total number of separators per well also reduces the total noise and emissions from the separator burners.
3	Planning	KMOG commits to plugging and abandoning the wells listed in the beneficial impacts section of the North Core Cumulative Impacts Plan within one year of all wells associated with this OGD (Rainbow 24-9HZ and Blue Chip 6-22HZ) being fully turned over to production through permanent facility equipment. If unanticipated delays are encountered associated with safety concerns, wildlife stipulations, landowner considerations, offset operations or rig availability KMOG will provide staff with an updated schedule for plugging and abandonment via a Form 4.
4	General Housekeeping	Loadlines: All loadlines shall be bullplugged or capped.
5	General Housekeeping	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.

6	General Housekeeping	<p>Lighting BMPs</p> <p>Construction Phase:</p> <ul style="list-style-type: none"> • KMOG will only conduct day light operation and there will be no nighttime operations that require lighting. <p>Drilling Phase:</p> <ul style="list-style-type: none"> • KMOG will utilize LED fixtures to reduce skyglow. • KMOG will position all lights to point in a downward direction where vertical lighting is not required. Where it is required, lights are angled in a vertical direction to provide task lighting for safety and operations involving personnel. • Derrick mast in Section 5.4 is facing horizontally to provide adequate lighting for safe operation. • Lighting is angled away from surrounding off site buildings. • Lighting within the Drilling area has been reduced to provide a minimum acceptable value for safe operation. • Light masts are automatically switched off/on based on lighting sensors. • Lights are switched off when not required. • Low power (63 W) LED lights are used for the drill rig. • In the event of a lightning complaint, KMOG will address the complaint and work with all parties involved to ensure the complaint is resolved. <p>Completions and Flowback Phases:</p> <ul style="list-style-type: none"> • KMOG will utilize LED fixtures to reduce skyglow. • KMOG will position all lights to point in a downward direction where vertical lighting is not required. Where it is required, lights are angled in a vertical direction to provide task lighting for safety and operations involving personnel. • Lighting is angled away from surrounding off site buildings. • Lighting within the Completion and Flowback areas have been reduced to provide a minimum acceptable value for safe operation. • Light masts are automatically switched off/on based on lighting sensors. • Lights are switched off when not required. • Lights are directed to task areas only. • In the event of a lightning complaint, KMOG will address the complaint and work with all parties involved to ensure the complaint is resolved. <p>Production Phase:</p> <ul style="list-style-type: none"> • KMOG will utilize LED fixtures to reduce skyglow. • KMOG will position all lights to point in a downward direction. • Lighting within the Production areas have been reduced to provide a minimum acceptable value for safe operation. • In the event of a lighting complaint, KMOG will address the complaint and work with all parties involved to ensure the complaint is resolved. 	
7	Wildlife	<p>An environmental assessment will be conducted immediately prior to pad construction, drilling, and completion operations.</p>	

8	Wildlife	<p>The following site-specific wildlife BMPs will be implemented at the Location:</p> <ol style="list-style-type: none"> 1. Inform and educate employees and contractors on wildlife conservation practices, including no hunting, harassment or feeding of wildlife. 2. Consolidate and centralize fluid collection and distribution facilities to minimize impact to wildlife. 3. Adequately size infrastructure and facilities to accommodate both current and future gas production. 4. Protect culvert inlets from erosion and sedimentation and install energy dissipation structures at outfalls. 5. Implement fugitive dust control measures. 6. Install screening or other devices on the stacks and on other openings of heater treaters or fired vessels to prevent entry by migratory birds. 7. Minimize rig mobilization and demobilization by completing or re-completing all wells from a given well pad before moving rigs to a new location. 8. To the extent practicable, share and consolidate new corridors for pipeline rights-of-way and roads to minimize surface disturbance. 9. Engineer new pipelines to reduce field fitting and reduce excessive right-of-way widths and reclamation. 10. Mow or brush hog vegetation where appropriate, leaving root structure intact, instead of scraping the surface, where allowed by the surface owner. 11. Limit access to oil and gas access roads where approved by surface owners, surface managing agencies, or local government. 12. Post speed limits and caution signs to the extent allowed by surface owners, Federal and state regulations, local government, and land use policies. 13. Use wildlife-appropriate fencing where acceptable to the surface owner. 14. Use topographic features and vegetative screening to create seclusion areas, where acceptable to the surface owner. 15. Use remote monitoring of well production to the extent practicable. 16. Reduce traffic associated with transporting drilling water and produced liquids through the use of pipelines, large tanks, or other measures. 17. Install automated emergency response systems (e.g., high tank alarms, emergency shutdown systems). 	
9	Storm Water/Erosion Control	<p>Stormwater will be managed during construction by a combination of site-specific erosion and sediment control measures including: delineation of limits of construction to establish a work space; a vehicle tracking control placed along the northern portion of the access road and well pad to mitigate off-site sediment migration from vehicle traffic onto WCR 56, which is approximately 0.25 miles north of the location; a temporary diversion ditch & berm around the entire location to manage run-on and run-off; temporary spillways and outlet structure placed in the northeastern corner and southeastern portion of the well pad ditch and berm which will allow for settling of sediment from stormwater prior to discharge; ~2 culverts with inlet and outlet protection will be installed in the primary location access point to direct stormwater to designated discharge points; seed & mulch to stabilize areas no longer needed for construction, as well as for topsoil stockpiles which will remain in place until interim and final reclamation. During active construction, daily inspections will be completed by on-site personnel. A contractor will conduct stormwater compliance inspections every 14-days and/or following a rain event which produces 0.25" of precipitation or equivalent snow melt which causes surface erosion. Inspections will review all control measures / BMPs implemented, their status, and whether repair or replacement is needed. Maintenance and repair will be completed as soon as practicable, immediately in most cases.</p>	

10	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.
11	Material Handling and Spill Prevention	Operator will not use PFAS on location.
12	Material Handling and Spill Prevention	Operator will utilize its tankless design for its facilities at the location; the term tankless has been used for the design to designate that we have no oil storage on site.

13	Material Handling and Spill Prevention	<p>A. Material Handling and Spill Prevention The following site-specific best management practices will be used on location: The temporary produced water storage tanks will be staged on a geosynthetic liner and surrounded by an earthen berm. The berms will enclose an area sufficient to provide secondary containment for 150% of the volume of the largest single tank and will be sufficiently impervious to contain spilled or released material. Berms and the liner and all secondary containment devices will 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. During the production phase, a geosynthetic liner will be laid under the permanent 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 will enclose an area sufficient to contain and provide secondary containment for 150% of the largest single tank. Secondary containment devices will be inspected at the same time as stormwater inspections, with personnel on location, daily inspections will occur. During non-active, but while under construction, site inspections will occur every 14 days. When construction is completed and the Location is on production, site inspections will occur every 28 days.</p> <p>B. Drilling Operations During drilling operations, the following site-specific best management practices will be used: Appropriate secondary containment will be utilized when equipment maintenance is conducted on location. KMOG will shut down transfer pump and close supply valve when transfer or circulation is completed. KMOG will ensure fluids cannot enter holding tank through gravity feedback. Pre-job inspection will be conducted prior to start up which include the visual inspection of hoses, lines, and valves to ensure proper connection and alignment. During operations, all fluid containing equipment is inspected daily.</p> <p>C. Completions Operations During completions operations, the following site-specific best management practices will be used: KMOG will monitor pressure responses and containment to identify potential leaks. Lines will also be walked continuously throughout operations (between stages) to identify potential leaks. In addition, there is a slam valve and control valve with Emergency Shut Down system in line to the external temp tanks to prevent overflowing tanks during the green flowback duration.</p> <p>D. Production Operations During production operations, the following site-specific best management practices will be used: 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. All personnel on location on behalf of KMOG are trained in AVO techniques. All personnel are empowered with 'Stop Work Authority' and to report any leaks immediately.</p>	

14	Material Handling and Spill Prevention	<p>? Wastes will be stored in containers or on lined containment that are chosen for compatibility and checked periodically for leaks or integrity problems. Examples of containment include but are not limited to 3-sided steel tanks, steel tanks, lined containment, plastic totes, drums, etc.</p> <p>? All specific wastes in the attached site-specific Table will have a detailed Safety Data Sheet available which includes information such as the properties of the wastes; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical.</p> <p>? The proper personal protective equipment will always be worn when handling waste. Employees will refer to the Safety Data Sheet for additional information.</p> <p>? Good housekeeping measures will be implemented in the operating area and to ensure safety and environmental well-being.</p> <p>? Wastes will be segregated and stored according to its waste type.</p> <p>? When feasible, wastes will be recycled, re-used, or treated onsite. As a BMP fluid are generally re-used from location to location if possible. No onsite treatment or recycling is planned onsite for this location. In the event, that onsite treatment or recycling is feasible, a written management plan will be submitted to the COGCC Director for approval on a Form 4.</p>
15	Dust control	<p>? KMOG will proactively deploy fresh water to suppress dust along access road to well pad/ facility during all phases of pre-production operations</p> <p>? Speed limits will be reduced to 10 mph on access road and 5 mph once vehicles reach well pad/facility</p> <p>? Access roads and Vehicle Tracking Control will receive maintenance as needed throughout operations</p> <p>? In the event of high winds that generate dust that cannot be mitigated with an application of water, KMOG will shut down construction operations</p> <p>? During the Completions phase, KMOG will utilize a fully enclosed Sand Containerized Proppant Delivery System that eliminates the use of pneumatic transfer on location. This methodology utilizes a gravity choke feed system that reduces dust significantly. The dust levels from this system are minimal and below Occupational Safety and Health Administration (OSHA) permissible exposure limit which eliminates the need for additional Personal Protective Equipment (PPE)</p>
16	Construction	<p>Fencing Requirements: The completed wellsites will be surrounded with a fence and gate with adequate lock to restrict access to authorized personnel only. KMOG personnel will monitor the wellsites upon completion of the wells. Authorized representatives and/or KMOG personnel shall be on-site during drilling and completion operations.</p>
17	Construction	<p>Construction: Operator will only conduct during day light and there will be no nighttime operations that require lighting.</p>

18	Noise mitigation	<ul style="list-style-type: none"> • KMOG will utilize a Quiet Fleet for completions operations. • KMOG has implemented the following: The drilling rig will be modified to reduce noise levels below compliance levels. This will include low noise level shale shakers and modifications to the generator house to reduce noise levels from the exhaust vents and radiator fans. Additional noise reduction modifications may also be implemented depending on the rig contractor utilized following a noise survey study. • If the drilling rig or completions fleet is changed prior to commencement of operations, the mitigation measures will be equally or more protective. A Form 4 will be submitted per Rule 404.d to outline any changes. • KMOG will post contact information to receive and address noise complaints arising from pre-production operations around the clock, 24-hours, 7 days per week. Upon receipt of a complaint, either directly to KMOG or from the COGCC, KMOG will contact relative stakeholder within 48 hours of receipt.
19	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.
20	Emissions mitigation	Test separators and associated flow lines, sand traps and emission control systems shall be installed on-site to accommodate 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, KMOG shall not produce the wells.
21	Emissions mitigation	Operator uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading.
22	Emissions mitigation	Operator will implement ambient air quality monitoring on site.
23	Emissions mitigation	Operator will use non-emitting pneumatic controllers.
24	Emissions mitigation	<p>Ozone Action Days KMOG will comply with the follow mitigation measures, as feasible, on forecasted Ozone Action Days:</p> <ol style="list-style-type: none"> a. Operator will minimize vehicle and engine idling b. Operator will reduce truck traffic and worker traffic c. Operator will postpone the refueling of vehicles d. Operator will postpone construction activities e. Operator will reschedule non-essential operational activities such as pigging, well unloading and tank cleaning f. Operator will postpone flowback if emissions cannot be adequately captured with an ECD
25	Odor mitigation	<p>A description of the Best Management Practices used to manage odor from the location during the drilling phase: Odor neutralizer will be added to oil-based drilling fluid system for all production drilling operations.</p> <ol style="list-style-type: none"> a. Odor neutralizer with essential oils are added to closed loop drilling fluid system continuously to neutralize odor at the shakers, transfer tank, active/reserve tanks, and cuttings in collection tanks and during transport. b. All drill cuttings are processed through centrifugal dryers to remove residual oilbased drilling fluid not removed by shale shakers. c. All tubulars pulled out of the hole will be wiped prior to being racked in the derrick or laid down. d. Cuttings storage time on location will be minimized prior to transport to local landfills.

		<p>e. New drilling fluid will be built using transfer line outlets located below tank fluid level to minimize splashing/agitation. New fluid will immediately be treated with odor neutralizer.</p> <p>f. Hydrocarbon base oil used in drilling fluid will include a mixture of the proprietary DrO product to reduce aromatics.</p> <p>g. If first attempts at correction fail, KMOG will increase the injection rate of the odor neutralizer after evaluation of the current injection rate and operational records.</p> <p>Completions Phase:</p> <ol style="list-style-type: none"> 1. Before hydraulic fracturing, there are no potential odor sources. This consists of logging, pressure testing and setting surface equipment. 2. A description of the Best Management Practices used to manage odor from the location during the hydraulic fracturing phase: <ol style="list-style-type: none"> a. Pump slick water fluid system reduces the amount of overall chemicals used. Friction reducer is the primary chemical pumped within this fluid system. b. All chemicals adhere to the CDPHE chemical exclusion list. c. KMOG utilizes a hydraulic fracturing fleet has Tier IV diesel engines which reduces emission relative to Tier II or Tier II Dual Fuel. KMOG also utilizes Diesel Exhaust Fluid additives with engines. d. Water-on-demand system significantly reduces truck traffic and water hauling. This reduces potential odor sources. 3. After the hydraulic fracturing phase: <ol style="list-style-type: none"> a. Produced oil, gas, and water are sent directly to the permanent facility during flowback phase. This eliminates on pad storage and associated water hauling. Therefore, eliminating odor sources. <p>Production Phase:</p> <p>A description of the Best Management Practices used to manage odor from the location during production:</p> <ol style="list-style-type: none"> 1. KMOG uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading. 2. Production facilities are inspected regularly by KMOG to make sure the equipment is working properly and necessary maintenance is performed, to reduce potential odors. KMOG incorporates Audio, Visual, Olfactory (AVO) observations at production facility inspections. 3. KMOG will use Best Management Practices to reduce unloading events and to reduce potential odor causing emissions when liquids unloading is necessary (i.e., maintenance activities to remove liquids from existing wells that are inhibiting production). 4. KMOG remotely monitors production facilities, this reduces traffic onto production facilities which may create odors from truck traffic. 	
26	Drilling/Completion Operations	Guy line anchors will not be used. Base Beams will be used to stabilize the rig and removed after drilling.	

27	Interim Reclamation	Stormwater will be managed during the interim reclamation and production phase by a combination of site-specific erosion and sediment control measures including: a diversion ditch and berm around the western and southern perimeters to manage run-on and run-off; stabilization of slopes and associated topsoil stockpile(s) by seed and crimped mulch application; culverts with inlet & outlet protection may be installed at access roads and crossing, as determined in the field during construction; a temporary spillway and outlet pipe along the eastern perimeter of the well pad which will remain in place until final reclamation. Post construction, daily inspections will be completed by on-site operations personnel. A third party consultant will conduct stormwater compliance inspections every 30-days until final stabilization is achieved. Inspections will review all control measures / BMPs implemented, their status, and whether repair or replacement is needed, including weed maintenance when necessary. Maintenance and repair will be completed as soon as practicable, immediately in most cases.
28	Interim Reclamation	Topsoil will be managed during construction by a combination of site-specific erosion and sediment control measures including: a temporary diversion ditch & berm around the entire location to manage run-on and run-off; short term management of topsoil will include track packing to prevent wind and water erosion, long term management includes seeding with a native seed mix and crimping straw mulch for erosion control and water retention; vegetation establishment on stockpiles and weed control will reduce erosion as well as maintain microbial activity; during the construction phase the stockpile at the well pad and facility will be ~9 feet tall and at a 3:1 slope. Topsoil managed during interim and production phases will be maintained by BMPs including: seeding with a native seed mix and crimped straw mulch; weed monitoring; topsoil stockpile height during the production phase will be approximately 2.5 feet tall at a 5:1 slope to maintain microbial activity for an extended time. Inspections will review all control measures / BMPs implemented, their status, and whether repair or replacement is needed, including weed maintenance when necessary. Maintenance and repair will be completed as soon as practicable, immediately in most cases.
29	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.
30	Final Reclamation	Identification of Plugged and Abandoned Wells: Once the well has been plugged and abandoned, KMOG will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging.

Total: 30 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
2369448	LAYOUT DRAWING
2369449	WILDLIFE HABITAT DRAWING
2369450	OTHER
403038033	FORM 2A SUBMITTED
403060519	OIL AND GAS LOCATION GIS SHP
403060521	SURFACE AGRMT/SURETY
403060523	ACCESS ROAD MAP
403060524	OTHER
403060525	DIRECTIONAL WELL PLAT
403060526	HYDROLOGY MAP
403060527	LOCATION DRAWING
403060529	RELATED LOCATION AND FLOWLINE MAP
403060530	LOCATION PICTURES
403060531	NRCS MAP UNIT DESC
403060532	PRELIMINARY PROCESS FLOW DIAGRAMS
403060535	CULTURAL FEATURES MAP
403060536	LGD CONSULTATION
403060537	GEOLOGIC HAZARD MAP

Total Attach: 18 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	The Director has determined that the OGD application that this Form is a component of conditionally meets all requirements of Rule 306.a. The Director's Recommendation has been attached to the Form 2A.	11/08/2022
OGLA	Updated Cumulative Impacts Plan.	11/08/2022
OGLA	Updated local government approval. Note, Greeley is a USR process and approves drawings, not a formal permit.	11/03/2022
OGLA	Updated Dust Plan, Noise Plan, Odor Plan, Waste Plan, Interim Plan, Stormwater Plan, Topsoil Plan, Cumulative Impacts Plan, Layout Drawing, Wildlife Map.	11/02/2022
OGLA	The Director has determined this OGD application is complete. Form pushed to IN PROCESS.	08/08/2022

Total: 5 comment(s)

Public Comments

The following comments were provided by members of the public and were considered during the technical review of this application.

<u>No.</u>	<u>Comment</u>	<u>Comment Date</u>
1	The applicant has submitted the appropriate local Use by Special Review (USR) land use process required for Oil and Gas development. The applicant is successfully working with city staff through the local permit process.	08/30/2022
2	On behalf of the City of Greeley Planner working with Kerr-McGee on the Blue Chip 6-22HZ project, the applicant has fully cooperated with the permitting requirements for Oil and Gas development. The applicant has submitted the appropriate USR (Use by Special Review) project and is successfully working with City Staff through the Planning and Zoning process. The applicant has been responsive to all comment provided by staff reviewing the project and has followed all required steps in the development process. - City of Greeley Planning and Zoning Department	08/31/2022

Total: 2 comment(s)

FORM
2A

Rev
01/21

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:

403038035

Date Received:

05/26/2022

Oil and Gas Location Assessment

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:

OGDP ID:

Expiration Date:

☒ New Location ☐ Refile ☐ Amend Existing Location # _____

If this Location assessment is a component of an Oil and Gas Development Plan (OGDP) application, enter the OGDP docket number(s).

Docket Number	OGDP ID	OGDP Name
220500111		

If this Location assessment is part of an approved Oil and Gas Development Plan, enter the OGDP ID number(s).

<No existing OGDP number provided>

CONSULTATION

- ☐ This location is included in a Comprehensive Area Plan (CAP). CAP ID # _____
- ☐ This Location or its associated new access road, utility, or Pipeline corridor meets Rule 309.e.(2).A, B, or C.
- ☐ This Location is within 2,640 feet of a GUDI or Type III Well per Rule 411.b.(4).
- ☐ This Location includes a Rule 309.e.(2).E variance request.
- ☐ This location includes a Rule 309.f.(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: SAM SAMET

Phone: (720) 9293317

Fax: ()

email: sam_samet@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: RAINBOW

Number: 24-9HZ

Provide the location description and the latitude and longitude of a single point near the center of the Working Pad Surface as a reference for this Location.

Quarter: SWNE Section: 9 Township: 5N Range: 67W Meridian: 6 Ground Elevation: 4949

Latitude: 40.415144 Longitude: -104.895999

GPS Quality Value: 1.7 Type of GPS Quality Value: PDOP Date of Measurement: 02/21/2022

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 #



RELEVANT LOCAL GOVERNMENT SITING INFORMATION

County: WELD Municipality: Greeley

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "Relevant Local Government approval of the siting of the proposed oil and gas location."

This proposed Oil and Gas Location is in an area designated as one of State interest and subject to the requirements of § 24-65.1-108, C.R.S. No

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this location? Yes

A siting permit application has been submitted to the Relevant Local Government for this proposed Oil and Gas Location: Yes

Date Relevant Local Government permit application submitted: 05/25/2022

Current status or disposition of the Relevant Local Government permit application for this proposed Oil and Gas Location: Approved

Status/disposition date: 10/25/2022

If Relevant Local Government permit has been approved or denied, attach final decision document(s).

Provide the contact information for the Relevant Local Government point of contact for the local permit associated with this proposed Oil and Gas Location:

Contact Name: BECKY SAFARIK Contact Phone: 970-350-9770

Contact Email: BECKY.SAFARIK@GREELEYGOV.CO
M

PROXIMATE LOCAL GOVERNMENT INFORMATION

For every Proximate Local Government (PLG) associated with this proposed Oil and Gas Location, provide the PLG's point of contact and their contact information.

Type of Proximate Govt	County	Municipality	Contact Name	Contact Phone	Contact Email
County	WELD		JASON MAXEY	970-400-3580	jmaxey@weldgov.com

FEDERAL PERMIT INFORMATION

A Federal drilling permit (or related siting application) has been submitted for this proposed Oil and Gas Location: No

Date submitted: _____

Current status or disposition of the Federal drilling permit (or related siting application) for this proposed Oil and Gas Location: _____

Status/disposition Date: _____

If Federal agency permit has been approved or denied, attach the final decision document(s).

Provide the contact information of the Federal point of contact for the Federal permit associated with this proposed Oil and Gas Location.

Contact Name: _____

Contact Phone: _____

Contact Email: _____

Field Office: _____

Additional explanation of local and/or federal process: _____

A USR has been submitted to the town of Greeley on 5/25/2022. OGD and Use By Special Review Local Permit will be processed concurrently.

RELEVANT LOCAL GOVERNMENT OR FEDERAL PRE-APPLICATION CONSULTATION

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Did a pre-application Formal Consultation Process occur with the Relevant Local Government per Rule 301.f.(3)? Yes

Date of local government consultation: 09/17/2021

Did a pre-application Formal Consultation Process occur with the Federal land manager per Rule 301.f.(3)? No

Date of federal consultation: _____

Was an ALA that satisfies Rule 304.b.(2).C (or substantially equivalent information per Rule 304.e) developed during a federal or local government permit application process? If yes, attach the ALA to the Form 2A. No

ALA APPLICABILITY AND CRITERIA

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Does the proposed Oil and Gas Location meet any of the criteria listed in Rule 304.b.(2)B? No

If YES, indicate by checking the box for every Rule 304.b.(2).B criterion met by this proposed Location, and attach an ALA. See Rule 304.b.(2).B.i-x for full text of criteria.

☐ i. WPS < 2,000 feet from RBU/HOBU

☐ vi.aa. WPS within a surface water supply area

☐ ii. WPS < 2,000 feet from School/Child Care Center

☐ vi.bb. WPS < 2,640 feet from Type III or GUDI well

☐ iii. WPS < 1,500 feet from DOAA

☐ vii. WPS within/immediately upgradient of wetland/riparian corridor

☐

☐ viii. WPS within HPH and CPW did not waive

iv. WPS < 2,000 feet from jurisdictional boundary and
PLG objects/requests ALA

☐ v. WPS within a Floodplain

☐ ix. Operator using Surface bond

☐ x. WPS < 2,000 feet from RBU/HOBUS/School within a DIC

Is the proposed Oil and Gas Location within the exterior boundaries of the Southern Ute Indian Reservation, and the Tribe objects to the Location or requests an ALA? If YES, attach an ALA to the Form 2A.

No

Operator requests the Director waive the ALA requirement per Rule 304.b.(2).A.i: ☐

Provide an explanation for the waiver request, and attach supporting information (if necessary).

ALTERNATIVE LOCATIONS DASHBOARD

List every alternative location reviewed and included in the ALA. Provide a latitude and longitude for the approximate center of the alternative location, all Rule 304.b.(2).B Criteria met, if a variance would be required to permit the location, and a brief comment on the key points of the alternative location.

304.b.(2).B.i-x Criteria Met:

< No row provided >

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: KERR MCGEE OIL & GAS ONSH

Phone: _____

Address: PO BOX 173779

Fax: _____

Address: _____

Email: anthony_rader@oxy.com

City: DENVER State: CO Zip: 80217

Surface Owner at this Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check only one:

☒ The Operator/Applicant is the surface owner.

☐ The Operator has a signed Surface Use Agreement for this Location – attach SUA.

☐ All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the surface owner owns the minerals beneath this Location and is committed to an oil and gas lease – attach lease map or provide lease description.

☐ All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the Operator intends to use a surface bond per Rule 703 to secure access to this Location – attach lease map or provide lease description.

Surface Owner protection Financial Assurance type: N/A Surety ID Number: _____

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

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

Lease description if necessary: _____

SITE EQUIPMENT LIST

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

Wells	<u>28</u>	Oil Tanks	<u>0</u>	Condensate Tanks	<u>2</u>	Water Tanks	<u>8</u>	Buried Produced Water Vaults	<u>0</u>
Drilling Pits	<u>0</u>	Production Pits	<u>0</u>	Special Purpose Pits	<u>0</u>	Multi-Well Pits	<u>0</u>	Modular Large Volume Tank	<u>0</u>
Pump Jacks	<u>28</u>	Separators	<u>10</u>	Injection Pumps	<u>0</u>	Heater-Treaters	<u>0</u>	Gas Compressors	<u>0</u>
Gas or Diesel Motors	<u>0</u>	Electric Motors	<u>0</u>	Electric Generators	<u>0</u>	Fuel Tanks	<u>0</u>	LACT Unit	<u>4</u>
Dehydrator Units	<u>0</u>	Vapor Recovery Unit	<u>0</u>	VOC Combustor	<u>2</u>	Flare	<u>0</u>	Enclosed Combustion Devices	<u>0</u>
Meter/Sales Building	<u>2</u>	Pigging Station	<u>0</u>			Vapor Recovery Towers	<u>0</u>		

OTHER PERMANENT EQUIPMENT

Permanent Equipment Type	Number
E House	<u>2</u>
Electric Compressor	<u>4</u>
Electrical box	<u>2</u>
Air compressor	<u>2</u>
Chemical Totes	<u>6</u>
Communication Tower	<u>1</u>

OTHER TEMPORARY EQUIPMENT

Temporary Equipment Type	Number
Propane Tank	<u>2</u>
Purge Flare	<u>3</u>
ECD	<u>12</u>
Water Tank (rig)	<u>2</u>
Generator	<u>2</u>
Water Tank	<u>60</u>
ECD (rig)	<u>1</u>

GAS GATHERING COMMITMENT

Operator commits to connecting to a gathering system by the Commencement of Production Operations? Yes

If the answer is NO, a Gas Capture Plan consistent with the requirements of Rule 903.e MUST be attached on the Plans tab.

FLOWLINE DESCRIPTION

Per Rule 304.b.(6), provide a description of all onsite and off-location oil, gas, and/or water flowlines.

Flowlines - 2"-3" size (outside diameter), constructed of carbon steel.

Oil, gas and water pipelines will be used at this location. Water for completions operations will be brought to the location through temporary water lines using KMOG's Water on Demand system. The oil and gas pipelines will be constructed by a 3rd party midstream company.

See comments for further description

CULTURAL DISTANCE AND DIRECTION

Provide the distance and direction to the nearest cultural feature as measured from the edge of the Working Pad Surface.

	Distance		Direction	Rule 604.b Conditions Satisfied (check all that apply):				604.b. (4)
				604.b. (1)	604.b. (2)	604.b. (3)	Details of Condition(s)	
Building:	2003	Feet	SE					
Residential Building Unit (RBU):	2887	Feet	W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
High Occupancy Building Unit(HOBU)	5280	Feet	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Designated Outside Activity Area:	5280	Feet	S					
Public Road:	1103	Feet	E					
Above Ground Utility:	618	Feet	N					
Railroad:	3569	Feet	NW					
Property Line:	196	Feet	W					
School Facility:	5280	Feet	N					
Child Care Center:	5280	Feet	N					
Disproportionately Impacted (DI) Community:	5280	Feet	W					
RBU, HOBU, or School Facility within a DI Community.	5280	Feet	W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

RULE 604.a.(2). EXCEPTION LOCATION REQUEST

- ☐ Operator requests an Exception Location Request from Rule 604.a.(2) [well is less than 150 feet from a property line]. Exception Location Request Letter and Waiver signed by offset Surface Owner(s) must be attached.

CULTURAL FEATURE INFORMATION REQUIRED BY RULE 304.b.(3).B.

Provide the number of each Cultural feature identified within the following distances, as measured from the Working Pad Surface:

	0-500 feet	501-1,000 feet	1,001-2,000 feet
Building Units	0	0	0
Residential Building Units	0	0	0

High Occupancy Building Units	<u>0</u>	<u>0</u>	<u>0</u>
School Properties	<u>0</u>	<u>0</u>	<u>0</u>
School Facilities	<u>0</u>	<u>0</u>	<u>0</u>
Designated Outside Activity Areas	<u>0</u>	<u>0</u>	<u>0</u>

CONSTRUCTION

Size of disturbed area during construction in acres: 26.26

Size of location after interim reclamation in acres: 8.24

Estimated post-construction ground elevation: 4949

DRILLING PROGRAM

Will a closed-loop drilling system be used? Yes

Is H2S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If YES, attach H2S Drilling Operations Plan.

Will salt sections be encountered during drilling: No

Will salt based (>15,000 ppm Cl) drilling fluids 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:

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

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

CURRENT LAND USE

Current Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☒ Non-Irrigated ☐ Conservation Reserve Program (CRP)

Non-Crop Land: ☐ Rangeland ☐ Forestry ☐ Recreation ☐ Other

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Describe the current land use:

Describe the Relevant Local Government's land use or zoning designation:

AG

Describe any applicable Federal land use designation:

N/A

FINAL LAND USE

Final Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☒ Non-Irrigated ☐ Conservation Reserve Program (CRP)

Non-Crop Land: ☐ Rangeland ☐ Forestry ☐ Recreation ☐ Other

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

REFERENCE AREA INFORMATION

If Final Land Use includes Non-Crop Land (as checked above), the following information is required:

Describe landowner's designated final land use(s):

Reference Area Latitude: _____ Reference Area Latitude: _____

Provide a list of plant communities and dominant vegetation found in the Reference Area.

< No row provided >

Noxious weeds present: _____

SOILS

List all soil map units that occur within the maximum extent of the proposed Oil and Gas Location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" listing the typical vertical soil profile(s). This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS website at <https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/> or from the COGCC website GIS Online map page. Instructions are provided within the COGCC website help section.

NRCS Map Unit Name: 18—Colby-Adena loams, 3 to 9 percent slopes

NRCS Map Unit Name: 34—Kim loam, 5 to 9 percent slopes

NRCS Map Unit Name: 79—Weld loam, 1 to 3 percent slopes

GROUNDWATER AND WATER WELL INFORMATION

Provide the distance and direction, as measured from the Working Pad Surface, to the nearest:

water well: 817 Feet SE

Spring or Seep: 5280 Feet NE

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 158 Feet

Basis for estimated depth to and description of shallowest groundwater occurrence:

Loc Elev: 4951'
4002' NW, Permit 83648-, depth 50', Static Water Level 15', Elev 4808'
(SWL calc: (4951 - 4808) + 15 = 158)

SURFACE WATER AND WETLANDS

Provide the distance and direction to the nearest downgradient surface Waters of the State, as defined 0 Feet NE

in the 100-Series Rules, measured from the Working Pad Surface:

If less than 2,640 feet, is the Waters of the State identified above within 15 stream miles upstream of a Public Water System intake? No

Provide the distance and direction to the nearest downgradient wetland, measured from the Working

Pad Surface: 2640 Feet NW

Provide a description of the nearest downgradient surface Waters of the State:

Intermittent Stream

If the proposed Oil and Gas Location is within a Rule 411.a Surface Water Supply Area buffer zone, select the buffer zone type: _____

Public Water System Administrator - Contact Name _____ Email _____

If the proposed Oil and Gas Location is within a Rule 411.b GUDI/Type III buffer zone, select the buffer zone type: _____

Public Water System Administrator - Contact Name _____ Email _____

Is a U.S. Army Corps of Engineers Section 404 permit required for the proposed Oil and Gas Location, access road, or associated pipeline corridor? No

If a U.S. Army Corps of Engineers Section 404 permit is required, provide the permit status, and permit number if available:

Is the Location within a Floodplain? No Floodplain Data Sources Reviewed (check all that apply):

☒ Federal (FEMA) ☐ State ☒ County ☐ Local

☐ Other

Does this proposed Oil and Gas Location lie within a Sensitive Area for water resources, as defined in the 100-Series Rules? No

CONSULTATION, WAIVERS, AND EXCEPTIONS

When Rule 309.e.(2) Consultation must occur, check all that apply:

- ☐ This location is included in a Wildlife Mitigation Plan
- ☐ This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within federally designated critical habitat or an area with a known occurrence for a federal or Colorado threatened or endangered species. Provide description in Comments section of Submit tab.
- ☐ This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within an existing conservation easement established wholly or partly for wildlife habitat. Provide description in Comments section of Submit tab.

When Rule 309.e.(3) Consultation is not required, check all that apply:

- ☐ This Oil and Gas Location has been included in a previously approved, applicable Wildlife Protection Plan.
- ☐ This Oil and Gas Location has been included in a previously approved, applicable Wildlife Mitigation Plan.
- ☐ This Oil and Gas Location has been included in a previously approved, applicable conservation plan.

Pre-application Consultation:

- ☐ A pre-application consultation with CPW, regarding this Oil and Gas Location, occurred _____ on:

CPW Waivers and Exceptions (check all that apply and attach all CPW waivers to this Form 2A):

- ☐ The applicant has obtained a Rule 304.b.(2).B.viii CPW waiver for the requirement to complete an ALA.
- ☐ The applicant has obtained a Rule 309.e.(2).G CPW waiver and consultation is not required.
- ☐ The applicant has obtained a Rule 309.e.(5).D.i CPW waiver and is requesting an exception from Rule 1202.c.(1).R.
- ☐ The applicant has obtained a Rule 309.e.(5).D.ii CPW waiver and is requesting an exception from Rule 1202.c.(1).S.
- ☐ The applicant has obtained a Rule 309.e.(5).D.iii CPW waiver of Rule 1202.c.(1).T.
- ☐ The applicant has obtained a Rule 309.e.(5).D.iv CPW waiver and is requesting an exception from Rule 1202.c.(1) in accordance with an approved CAP.
- ☐ The applicant has obtained a Rule 1202.a CPW waiver.
- ☐ The applicant has obtained a Rule 1202.b CPW waiver.
- ☐ In accordance with Rule 1203.a.(3), the applicant requests an exception from compensatory mitigation Rule(s): _____

HIGH PRIORITY HABITAT AND COMPENSATORY MITIGATION

This Oil and Gas Location, associated access roads, utility, or Pipeline corridor falls wholly or partially within the following High Priority Habitats (Note: dropdown options are abbreviated - see Rule 1202 for full rule text):

< No row provided >

The following questions are for Oil and Gas Locations that cause the density to exceed one Oil and Gas Location per square mile in Rule 1202.d High Priority Habitat:

Direct Impacts:

Is Compensatory Mitigation required per Rule 1203.a for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address direct impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

N/A

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Direct impact habitat mitigation fee amount: \$ 0

Indirect Impacts:

Is Compensatory Mitigation required per Rule 1203.d for this Oil and Gas Location? No

Is a Compensatory Mitigation Plan proposed to address indirect impacts for this Oil and Gas Location? No

Have all Compensatory Mitigation Plans been approved for this Location? No

If not, what is the current status of each Plan?

N/A

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? No

Indirect impact habitat mitigation fee amount: \$ 0

Operator Proposed Wildlife BMPs

No BMP

CPW Proposed Wildlife BMPs

No BMP

AIR QUALITY MONITORING PROGRAM

Will the Operator install and administer an air quality monitoring program at this Location? Yes

Operator Proposed BMPs

No BMP

CDPHE Proposed COAs OR BMPs

No BMP

PLANS

Total Plans Uploaded: 15

- ☐ (1) Emergency Spill Response Program consistent with the requirements of Rules 411.a.(4).B, 411.b.(5).B, & 602.j
- ☒ (2) Noise Mitigation Plan consistent with the requirements of Rule 423.a
- ☒ (3) Light Mitigation Plan consistent with the requirements of Rule 424.a
- ☒ (4) Odor Mitigation Plan consistent with the requirements of Rule 426.a
- ☒ (5) Dust Mitigation Plan consistent with the requirements of Rule 427.a
- ☒ (6) Transportation Plan
- ☒ (7) Operations Safety Management Program consistent with the requirements of Rule 602.d
- ☒ (8) Emergency Response Plan consistent with the requirements of Rule 602.j
- ☐ (9) Flood Shut-In Plan consistent with the requirements of Rule 421.b.(1)
- ☐ (10) Hydrogen Sulfide Drilling Operations Plan consistent with the requirements of Rule 612.d
- ☒ (11) Waste Management Plan consistent with the requirements of Rule 905.a.(4)
- ☐ (12) Gas Capture Plan consistent with the requirements of Rule 903.e
- ☒ (13) Fluid Leak Detection Plan
- ☒ (14) Topsoil Protection Plan consistent with the requirements of Rule 1002.c
- ☒ (15) Stormwater Management Plan consistent with the requirements of Rule 1002.f
- ☒ (16) Interim Reclamation Plan consistent with the requirements of Rule 1003
- ☒ (17) Wildlife Plan consistent with the requirements of Rule 1201
- ☒ (18) Water Plan
- ☒ (19) Cumulative Impacts Plan

☐ (20) Community Outreach Plan

☐ (21) Geologic Hazard Plan

VARIANCE REQUESTS

Check all that apply:

☐ This proposed Oil and Gas Location requires the approval of a Rule 502.a variance from COGCC Rule or Commission

Order number: _____

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

RULE 304.d LESSER IMPACT AREA EXEMPTION REQUESTS

Check the boxes below for all Exemptions being requested. Lesser Impact Area Exemption Request must be attached, and will include all requested exemptions.

- | | |
|--|--|
| <input type="checkbox"/> 304.b.(1). Local Government Siting Information | <input type="checkbox"/> 304.c.(1). Emergency Spill Response Program |
| <input type="checkbox"/> 304.b.(2). Alternative Location Analysis | <input type="checkbox"/> 304.c.(2). Noise Mitigation Plan |
| <input type="checkbox"/> 304.b.(3). Cultural Distances | <input type="checkbox"/> 304.c.(3). Light Mitigation Plan |
| <input type="checkbox"/> 304.b.(4). Location Pictures | <input type="checkbox"/> 304.c.(4). Odor Mitigation Plan |
| <input type="checkbox"/> 304.b.(5). Site Equipment List | <input type="checkbox"/> 304.c.(5). Dust Mitigation Plan |
| <input type="checkbox"/> 304.b.(6). Flowline Descriptions | <input type="checkbox"/> 304.c.(6). Transportation Plan |
| <input type="checkbox"/> 304.b.(7). Drawings | <input type="checkbox"/> 304.c.(7). Operations Safety Management Program |
| <input type="checkbox"/> 304.b.(8). Geographic Information System (GIS) Data | <input type="checkbox"/> 304.c.(8). Emergency Response Plan |
| <input type="checkbox"/> 304.b.(9). Land Use Description | <input type="checkbox"/> 304.c.(9). Flood Shut-In Plan |
| <input type="checkbox"/> 304.b.(10). NRCS Map Unit Description | <input type="checkbox"/> 304.c.(10). Hydrogen Sulfide Drilling Operations Plan |
| <input type="checkbox"/> 304.b.(11). Best Management Practices | <input type="checkbox"/> 304.c.(11). Waste Management Plan |
| <input type="checkbox"/> 304.b.(12). Surface Owner Information | <input type="checkbox"/> 304.c.(12). Gas Capture Plan |
| <input type="checkbox"/> 304.b.(13). Proximate Local Government | <input type="checkbox"/> 304.c.(13). Fluid Leak Detection Plan |
| <input type="checkbox"/> 304.b.(14). Wetlands | <input type="checkbox"/> 304.c.(14). Topsoil Protection Plan |
| <input type="checkbox"/> 304.b.(15). Schools and Child Care Centers | <input type="checkbox"/> 304.c.(15). Stormwater Management Plan |
| | <input type="checkbox"/> 304.c.(16). Interim Reclamation Plan |
| | <input type="checkbox"/> 304.c.(17). Wildlife Plan |
| | <input type="checkbox"/> 304.c.(18). Water Plan |
| | <input type="checkbox"/> 304.c.(19). Cumulative Impacts Plan |
| | <input type="checkbox"/> 304.c.(20). Community Outreach Plan |
| | <input type="checkbox"/> 304.c.(21). Geologic Hazard Plan |

OPERATOR COMMENTS AND SUBMITTAL

Comments

Please send questions and comments to both sam_samet@oxy.com and djregulatory@oxy.com
 Although not required by Rule, a Community Consultation Plan has been attached as "OTHER"
 This proposed location is on a swale with no discernable OHWM and no wetlands are present. No USACE 404 permit will be required to construct this location. Please refer to the Wildlife Protection Plan for further details.
 Temporary above ground polyethylene water pipelines (diameter 10" - 12" with a 60 BPM capacity) will deliver water to location operations from larger trunk lines for completions operations.
 Flowlines 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 flowlines 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.
 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.
 Gas lift compressors may be used at this location.
 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.
 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.
 Temporary 500 BBL skid-mounted frac tanks will be utilized during flowback and initially for produced water. Temporary ECDs and 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 500-gallon propane tank will be used on location to provide fuel gas during facility equipment startup.

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

Signed: _____ Date: 05/26/2022 Email: DJREGULATORY@OXY.COM

Print Name: SAM SAMET Title: SR REGULATORY ANALYST

Based on the information provided herein, this Oil and Gas Location Assessment complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____ Director of COGCC Date: _____

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
Noise mitigation		Best Management Practices
No BMP/COA Type		Description
1	Planning	Access Road: KMOG will construct an access road from HWY 34 for drilling, completions, and production operations, including maintenance equipment. The road will be properly constructed and maintained to accommodate for emergency vehicle access.
1 COA		
2	Planning	The wells are commingled into a bulk and test facility design. This reduces the total number of separators on location on a per well basis which in turn allows KMOG to have a smaller facility footprint. Reducing the total number of separators per well also reduces the total noise and emissions from the separator burners.
3	Planning	KMOG commits to plugging and abandoning the wells listed in the beneficial impacts section of the North Core Cumulative Impacts Plan within one year of all wells associated with this OGD (Rainbow 24-9HZ and Blue Chip 6-22HZ) being fully turned over to production through permanent facility equipment. If unanticipated delays are encountered associated with safety concerns, wildlife stipulations, landowner considerations, offset operations or rig availability KMOG will provide staff with an updated schedule for plugging and abandonment via a Form 4.
4	General Housekeeping	Loadlines: All loadlines shall be bullplugged or capped.
5	General Housekeeping	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.

6	General Housekeeping	<p>Lighting BMPs</p> <p>Construction Phase:</p> <ul style="list-style-type: none"> • KMOG will only conduct day light operation and there will be no nighttime operations that require lighting. <p>Drilling Phase:</p> <ul style="list-style-type: none"> • KMOG will utilize LED fixtures to reduce skyglow. • KMOG will position all lights to point in a downward direction where vertical lighting is not required. Where it is required, lights are angled in a vertical direction to provide task lighting for safety and operations involving personnel. • Derrick mast in Section 5.4 is facing horizontally to provide adequate lighting for safe operation. • Lighting is angled away from surrounding off site buildings. • Lighting within the Drilling area has been reduced to provide a minimum acceptable value for safe operation. • Light masts are automatically switched off/on based on lighting sensors. • Lights are switched off when not required. • Low power (63 W) LED lights are used for the drill rig. • In the event of a lightning complaint, KMOG will address the complaint and work with all parties involved to ensure the complaint is resolved. <p>Completions and Flowback Phases:</p> <ul style="list-style-type: none"> • KMOG will utilize LED fixtures to reduce skyglow. • KMOG will position all lights to point in a downward direction where vertical lighting is not required. Where it is required, lights are angled in a vertical direction to provide task lighting for safety and operations involving personnel. • Lighting is angled away from surrounding off site buildings. • Lighting within the Completion and Flowback areas have been reduced to provide a minimum acceptable value for safe operation. • Light masts are automatically switched off/on based on lighting sensors. • Lights are switched off when not required. • Lights are directed to task areas only. • In the event of a lightning complaint, KMOG will address the complaint and work with all parties involved to ensure the complaint is resolved. <p>Production Phase:</p> <ul style="list-style-type: none"> • KMOG will utilize LED fixtures to reduce skyglow. • KMOG will position all lights to point in a downward direction. • Lighting within the Production areas have been reduced to provide a minimum acceptable value for safe operation. • In the event of a lighting complaint, KMOG will address the complaint and work with all parties involved to ensure the complaint is resolved. 	
7	Wildlife	<p>An environmental assessment, including a survey for raptor & burrowing owl nests, will be completed no more than 7 days prior to the start of pre-production operations. If during the environmental assessment an active nest is identified within the buffer recommend by CPW, KMOG will consult with CPW prior to beginning pre-production operations. If active burrowing owl habitat is found within ¼ mile buffer of the WPS, pad construction will occur outside the STIP window of 3/15 – 8/31.</p>	

8	Wildlife	<p>The following site-specific wildlife BMPs will be implemented at the Location:</p> <ol style="list-style-type: none"> 1. Inform and educate employees and contractors on wildlife conservation practices, including no hunting, harassment or feeding of wildlife. 2. Consolidate and centralize fluid collection and distribution facilities to minimize impact to wildlife. 3. Adequately size infrastructure and facilities to accommodate both current and future gas production. 4. Protect culvert inlets from erosion and sedimentation and install energy dissipation structures at outfalls. 5. Implement fugitive dust control measures. 6. Install screening or other devices on the stacks and on other openings of heater treaters or fired vessels to prevent entry by migratory birds. 7. Minimize rig mobilization and demobilization by completing or re-completing all wells from a given well pad before moving rigs to a new location. 8. To the extent practicable, share and consolidate new corridors for pipeline rights-of-way and roads to minimize surface disturbance. 9. Engineer new pipelines to reduce field fitting and reduce excessive right-of-way widths and reclamation. 10. Mow or brush hog vegetation where appropriate, leaving root structure intact, instead of scraping the surface, where allowed by the surface owner. 11. Limit access to oil and gas access roads where approved by surface owners, surface managing agencies, or local government. 12. Post speed limits and caution signs to the extent allowed by surface owners, Federal and state regulations, local government, and land use policies. 13. Use wildlife-appropriate fencing where acceptable to the surface owner. 14. Use topographic features and vegetative screening to create seclusion areas, where acceptable to the surface owner. 15. Use remote monitoring of well production to the extent practicable. 16. Reduce traffic associated with transporting drilling water and produced liquids through the use of pipelines, large tanks, or other measures. 17. Install automated emergency response systems (e.g., high tank alarms, emergency shutdown systems). 	
9	Storm Water/Erosion Control	<p>Stormwater will be managed during construction by a combination of site-specific erosion and sediment control measures including: delineation of limits of construction to establish a work space; a vehicle tracking control placed along the southeast portion of the access road to the well pad and the facility pad to mitigate off-site sediment migration from vehicle traffic onto Weld County Road 19, approximately 0.31 miles north of the location; a temporary diversion ditch & berm around the entire location to manage runoff and runoff; temporary spillways and outlet structure placed in the northeastern portion of the well pad ditch and berm which will allow for settling of sediment from stormwater prior to discharge; ~2 culverts with inlet and outlet protection will be installed in the primary location access point to direct stormwater to designated discharge points; seed & mulch to stabilize areas no longer needed for construction, as well as for topsoil stockpiles which will remain in place until interim and final reclamation. During active construction, daily inspections will be completed by on-site personnel. A contractor will conduct stormwater compliance inspections every 14-days and/or following a rain event which produces 0.25" of precipitation or equivalent snow melt which causes surface erosion. Inspections will review all control measures / BMPs implemented, their status, and whether repair or replacement is needed. Maintenance and repair will be completed as soon as practicable, immediately in most cases.</p>	

10	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.
11	Material Handling and Spill Prevention	Operator will not use PFAS on location.
12	Material Handling and Spill Prevention	Operator will utilize its tankless design for its facilities at the location; the term tankless has been used for the design to designate that we have no oil storage on site.

13	Material Handling and Spill Prevention	<p>A. Material Handling and Spill Prevention The following site-specific best management practices will be used on location: The temporary produced water storage tanks will be staged on a geosynthetic liner and surrounded by an earthen berm. The berms will enclose an area sufficient to provide secondary containment for 150% of the volume of the largest single tank and will be sufficiently impervious to contain spilled or released material. Berms and the liner and all secondary containment devices will 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. During the production phase, a geosynthetic liner will be laid under the permanent 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 will enclose an area sufficient to contain and provide secondary containment for 150% of the largest single tank. Secondary containment devices will be inspected at the same time as stormwater inspections, with personnel on location, daily inspections will occur. During non-active, but while under construction, site inspections will occur every 14 days. When construction is completed and the Location is on production, site inspections will occur every 28 days.</p> <p>B. Drilling Operations During drilling operations, the following site-specific best management practices will be used: Appropriate secondary containment will be utilized when equipment maintenance is conducted on location. KMOG will shut down transfer pump and close supply valve when transfer or circulation is completed. KMOG will ensure fluids cannot enter holding tank through gravity feedback. Pre-job inspection will be conducted prior to start up which include the visual inspection of hoses, lines, and valves to ensure proper connection and alignment. During operations, all fluid containing equipment is inspected daily.</p> <p>C. Completions Operations During completions operations, the following site-specific best management practices will be used: KMOG will monitor pressure responses and containment to identify potential leaks. Lines will also be walked continuously throughout operations (between stages) to identify potential leaks. In addition, there is a slam valve and control valve with Emergency Shut Down system in line to the external temp tanks to prevent overflowing tanks during the green flowback duration.</p> <p>D. Production Operations During production operations, the following site-specific best management practices will be used: 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. All personnel on location on behalf of KMOG are trained in AVO techniques. All personnel are empowered with 'Stop Work Authority' and to report any leaks immediately.</p>	

14	Material Handling and Spill Prevention	<ul style="list-style-type: none"> - Wastes will be stored in containers or on lined containment that are chosen for compatibility and checked periodically for leaks or integrity problems. Examples of containment include but are not limited to 3-sided steel tanks, steel tanks, lined containment, plastic totes, drums, etc. - All specific wastes in the attached site-specific Table will have a detailed Safety Data Sheet available which includes information such as the properties of the wastes; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical. - The proper personal protective equipment will always be worn when handling waste. Employees will refer to the Safety Data Sheet for additional information. - Good housekeeping measures will be implemented in the operating area and to ensure safety and environmental well-being. - Wastes will be segregated and stored according to its waste type. - Wastes will be recycled, re-used, or treated onsite. As a BMP fluid are generally re-used from location to location. No onsite treatment or recycling is planned onsite for this location. In the event, that onsite treatment or recycling is feasible, a written management plan will be submitted to the COGCC Director for approval on a Form 4.
15	Dust control	<ul style="list-style-type: none"> - KMOG will proactively deploy fresh water or magnesium chloride to suppress dust along 131 st street and access road to well pad/ facility during all phases of pre-production operations - Speed limits will be reduced to 10 mph on access road and 5 mph once vehicles reach well pad/ facility - Access roads and Vehicle Tracking Control will receive maintenance throughout operations - In the event of high winds that generate dust that cannot be mitigated with an application of water, KMOG will shut down construction operations - During the Completions phase, KMOG will utilize a fully enclosed Sand Containerized Proppant Delivery System that eliminates the use of pneumatic transfer on location. This methodology utilizes a gravity choke feed system that reduces dust significantly. The dust levels from this system are minimal and below Occupational Safety and Health Administration (OSHA) permissible exposure limit which eliminates the need for additional Personal Protective Equipment (PPE)
16	Construction	Fencing Requirements: The completed wellsites will be surrounded with a fence and gate with adequate lock to restrict access to authorized personnel only. KMOG personnel will monitor the wellsites upon completion of the wells. Authorized representatives and/or KMOG personnel shall be on-site during drilling and completion operations.
17	Construction	Construction: Operator will only conduct during day light and there will be no nighttime operations that require lighting.
18	Noise mitigation	<ul style="list-style-type: none"> • KMOG will utilize a Quiet Fleet for completions operations. • KMOG has implemented the following: The drilling rig will be a modified rig designed to reduce noise levels below compliance levels. This will include low noise level shale shakers and modifications to the generator house to reduce noise levels from the exhaust vents and radiator fans. • If the drilling rig or completions fleet is changed prior to commencement of operations, the mitigation measures will be equally or more protective. A Form 4 will be submitted per Rule 404.d to outline any changes. • KMOG will post contact information to receive and address noise complaints arising from pre-production operations around the clock, 24-hours, 7 days per week. Upon receipt of a complaint, either directly to KMOG or from the COGCC, KMOG will contact relative stakeholder within 48 hours of receipt.

19	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.
20	Emissions mitigation	Test separators and associated flow lines, sand traps and emission control systems shall be installed on-site to accommodate 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, KMOG shall not produce the wells.
21	Emissions mitigation	Operator uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading.
22	Emissions mitigation	Operator will implement ambient air quality monitoring on site.
23	Emissions mitigation	Operator will use non-emitting pneumatic controllers.
24	Emissions mitigation	Ozone Action Days KMOG will comply with the follow mitigation measures, as feasible, on forecasted Ozone Action Days: a. Operator will minimize vehicle and engine idling b. Operator will reduce truck traffic and worker traffic c. Operator will postpone the refueling of vehicles d. Operator will postpone construction activities e. Operator will reschedule non-essential operational activities such as pigging, well unloading and tank cleaning f. Operator will postpone flowback if emissions cannot be adequately captured with an ECD

25	Odor mitigation	<p>Best Management Practices used during drilling:</p> <ul style="list-style-type: none"> - All oil-based drilling fluids will be built using a Group III base oil with negligible aromatic content and PAH less than 0.001% so that it does not emit odor during all production drilling operations. - The Group III base oil will be utilized in a closed loop drilling fluid system and eliminate odor at the shakers, transfer tank, active/reserve tanks, and cuttings in collection tanks and during transport. - All drill cuttings are processed through centrifugal dryers to remove residual oil-based drilling fluid not removed by shale shakers. - All tubulars pulled out of the hole will be wiped prior to being racked in the derrick or laid down. - Cuttings storage time on location will be minimized prior to transport to local landfills. - New drilling fluid will be built using transfer line outlets located below tank fluid level to minimize splashing/agitation. New fluid will only be built using Group III base oils. <p>Best Management Practices used during production:</p> <ul style="list-style-type: none"> - KMOG uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading. - Production facilities are inspected regularly by KMOG to make sure the equipment is working properly and necessary maintenance is performed, to reduce potential odors. KMOG incorporates Audio, Visual, Olfactory (AVO) observations at production facility inspections. - KMOG will use Best Management Practices to reduce unloading events and to reduce potential odor causing emissions when liquids unloading is necessary (i.e., maintenance activities to remove liquids from existing wells that are inhibiting production). - KMOG remotely monitors production facilities, this reduces traffic onto production facilities which may create odors from truck traffic. 	
26	Drilling/Completion Operations	Guy line anchors will not be used. Base Beams will be used to stabilize the rig and removed after drilling.	
27	Interim Reclamation	<p>Stormwater will be managed during the interim reclamation and production phase by a combination of site-specific erosion and sediment control measures including: a diversion ditch & berm around the northern perimeter to manage run-on and run-off; stabilization of slopes and associated topsoil stockpile(s) by seed and crimped mulch application; culverts with inlet & outlet protection may be installed at access roads and crossing, as determined in the field during construction; a temporary spillway in the western perimeter and outlet along the northern perimeter of the well pad which will remain in place until final reclamation. Post construction, daily inspections will be completed by on-site operations personnel. A third party consultant will conduct stormwater compliance inspections every 30-days until final stabilization is achieved. Inspections will review all control measures / BMPs implemented, their status, and whether repair or replacement is needed, including weed maintenance when necessary. Maintenance and repair will be completed as soon as practicable, immediately in most cases.</p>	

28	Interim Reclamation	Topsoil will be managed during construction by a combination of site-specific erosion and sediment control measures including: a temporary diversion ditch & berm around the entire location to manage run-on and run-off; short term management of topsoil will include track packing to prevent wind and water erosion, long term management includes seeding with a native seed mix and crimping straw mulch for erosion control and water retention; vegetation establishment on stockpiles and weed control will reduce erosion as well as maintain microbial activity; during the construction phase topsoil will be stockpiled ~8 feet tall and with 3:1 slope to minimize erosion potential. Topsoil managed during interim and production phases will be maintained with BMPs including seeding with a native seed mix and crimped straw mulch; weed monitoring; the long-term topsoil stockpile will be ~3 feet tall at a 5:1 slope to maintain microbial activity for an extended time. Inspections will review all control measures / BMPs implemented, their status, and whether repair or replacement is needed, including weed maintenance when necessary. Maintenance and repair will be completed as soon as practicable, immediately in most cases.
29	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.
30	Final Reclamation	Identification of Plugged and Abandoned Wells: Once the well has been plugged and abandoned, KMOG will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging.

Total: 30 comment(s)

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
2369450	OTHER
403038035	FORM 2A SUBMITTED
403042676	NRCS MAP UNIT DESC
403059876	OIL AND GAS LOCATION GIS SHP
403059879	LAYOUT DRAWING
403059881	ACCESS ROAD MAP
403059884	OTHER
403059889	DIRECTIONAL WELL PLAT
403059895	HYDROLOGY MAP
403059896	LOCATION DRAWING
403059900	RELATED LOCATION AND FLOWLINE MAP
403059902	LOCATION PICTURES
403059905	NRCS MAP UNIT DESC
403059928	PRELIMINARY PROCESS FLOW DIAGRAMS
403059929	WILDLIFE HABITAT DRAWING
403059931	CULTURAL FEATURES MAP
403059933	LGD CONSULTATION
403059934	GEOLOGIC HAZARD MAP

Total Attach: 18 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	The Director has determined that the OGD application that this Form is a component of conditionally meets all requirements of Rule 306.a. The Director's Recommendation has been attached to the Form 2A.	11/08/2022
OGLA	Updated Cumulative Impacts Plan. Updated wildlife BMP with Burrowing Owl language.	11/08/2022
OGLA	Updated local government approval. Note, Greeley is a USR process and approves drawings, not a formal permit.	11/03/2022
OGLA	Updated Noise, Odor, Dust, and Waste Management Plans.	10/28/2022
OGLA	The Director has determined this OGD application is complete. Form pushed to IN PROCESS.	08/08/2022

Total: 5 comment(s)

Public Comments

The following comments were provided by members of the public and were considered during the technical review of this application.

<u>No.</u>	<u>Comment</u>	<u>Comment Date</u>
1	<p>Our company is a mineral owner under this proposed pad. We employ more than 10 people and the development of this pad will allow us to continue to meet payroll and grow our business. We also believe the continued development of responsible oil and gas in Colorado will lower energy costs for Coloradans as well as reduce our reliance on energy produced in Russia and the Middle East.</p> <p>We urge the commission to promptly approve this proposed pad. Thank you for your consideration.</p> <p>-Nick Reiland</p> <p>T</p>	08/08/2022
2	<p>The applicant has submitted the appropriate local Use by Special Review (USR) land use process required for Oil and Gas development. The applicant is successfully working with city staff through the local permit process.</p>	08/30/2022
3	<p>On behalf of the City of Greeley Planner working with Kerr-McGee on the Rainbow 24-9HZ project, the applicant has fully cooperated with the permitting requirements for Oil and Gas development. The applicant has submitted the appropriate USR (Use by Special Review) project and is successfully working with City Staff through the Planning and Zoning process. The applicant has been responsive to all comment provided by staff reviewing the project and has followed all required steps in the development process.</p> <p>- City of Greeley Planning and Zoning Department</p>	08/31/2022

Total: 3 comment(s)