

DIRECTOR'S RECOMMENDATION

Docket #220400073

Kerr McGee Oil & Gas Onshore LP (KMOG, Operator ID #47120)

Democrat OGDG (OGDP ID #482251)

***Form 2As #4029958547, #402958552, #402958562, #402958629,
Form 2B #402958567, Form 2C #402986102***

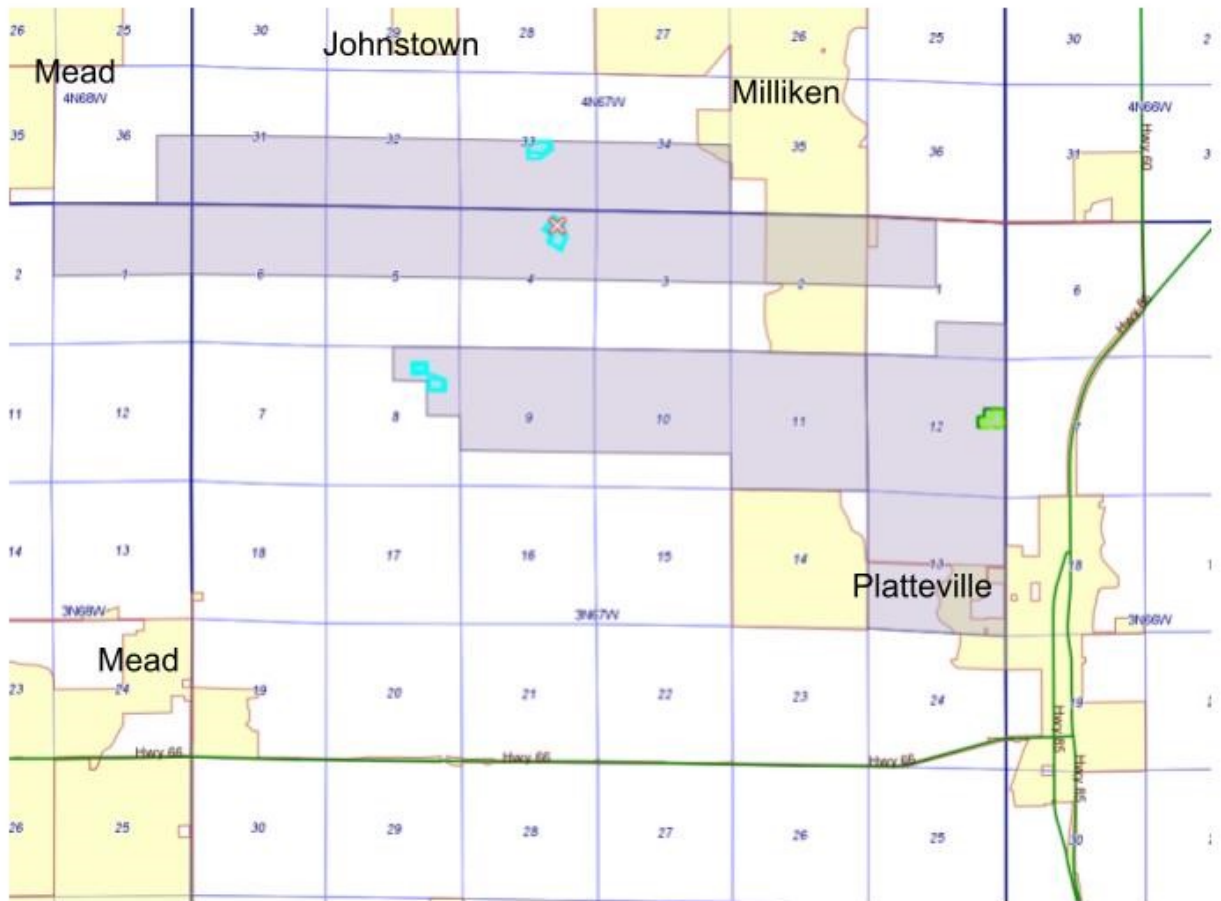
Pursuant to Rule 306, the Director submits to the Commission this recommendation for the KMOG Democrat Oil and Gas Development Plan (Democrat OGDG) located in Weld County. As detailed below, the Director recommends Commission approval of the Democrat OGDG.

BACKGROUND

On April 15, 2022, KMOG submitted a Form 2C, Oil and Gas Development Plan Certification, and all required components for an Oil and Gas Development Plan (OGDP) application with the Colorado Oil and Gas Conservation Commission (COGCC). The Hearing Application was returned to the applicant once for revisions. The Director determined the application was complete on May 31, 2022. This Recommendation is based on information finalized in the Form 2As, Form 2B, and hearing application as of September 2, 2022. No additional revisions will be made to the application prior to the Commission Hearing scheduled for September 7, 2022.

KMOG Democrat Proposed Development:

The proposed OGDG includes Application Lands in Weld County of approximately 5,054 acres in Township 3 North, Range 67 West: portions of Sections 1, 2, 3, 4, 5, 6, 8, 9, 10, and 11; Township 3 North, Range 68 West: northern half of Section 1; Township 4 North, Range 67 West: southern halves of Sections 31, 32, 33, and 34; and Township 4 North, Range 68 West, portions of Section 36.. The setting is a suburban-to-rural area with mixed residential, recreational, and agricultural land uses. The four proposed surface locations are in unincorporated Weld County, and the OGDG's mineral lands include a portion of the town of Miliken. The Application Lands and mineral development area are located near to the towns of Johnstown, Berthoud, Mead, Milliken, and Platteville, just east of I-25.



KMOG proposes three Oil and Gas Locations with wells (one new [Swartz 2-4HZ] and two existing [Camenisch 10-33HZ, Location ID #329899; and Berry Farms Well Pad 8-8HZ, Location ID #318973]) and one Oil and Gas Location with production facilities (existing Berry Farms Facility 8-8HZ, Location ID #436576). The existing Camenisch 10-33HZ well pad has one (1) producing vertical well, while the existing Berry Farms 8-8HZ well pad has one shut-in vertical well.

The three well pad Locations will have a combined total of 32 new horizontal oil wells: 16 at the Swartz, 8 at the Berry Farms, and 8 at the Camenisch. KMOG intends to send all produced fluids (three phase: oil, gas, and water) from the Berry Farms well pad to the Berry Farms Facility for separation and production; there will be no separation, production equipment, or liquids storage on the Berry well pad. The Swartz and Camenisch well pads will have separation and production equipment on location, as well as produced water storage. For the Swartz, Camenisch, and Berry Production Facility, the separated oil and gas will be transferred to a third party gathering system, and produced water will be stored in tanks on location and transported off location via trucks. Gas custody transfer will occur at the gas meter and oil custody transfer will occur at the LACT unit on each Location. KMOG has committed to connecting to a gas gathering system at these proposed locations.

Proposed Swartz 2-4HZ Well/Facility Pad:

The proposed Swartz 2-4HZ Location will be new construction for wells and production equipment. It will include a total of sixteen (16) new horizontal oil wells, with sixteen (16) pump jacks, ten (10) separators, one (1) condensate maintenance tank, four (4) produced water storage tanks, three (3) chemical totes, two (2) air compressors, two (2) meter/sales buildings, one (1) communication tower, one (1) VOC combustor, two (2) LACT units, and various other production equipment. Temporary equipment planned for completion operations includes thirty-two (32) 500-barrel water tanks, seven (7) Enclosed Combustion Devices (ECDs), three (3) purge flares (KMOG: temporary purge flares are utilized for safe commissioning of facilities and they will comply with Rules 903.c.(3).B and 903.c.(3).C. regarding venting and flaring during completions operations), and two (2) generators. KMOG plans to begin construction of this Location in the 2nd Quarter of 2023, drilling in the 2nd Quarter of 2023 through the 3rd Quarter of 2023, completions in the 3rd and 4th Quarters of 2024; placing the wells into production in the 4th Quarter of 2024, and conducting interim reclamation in the 1st Quarter of 2025.

Existing Camenisch 10-33HZ Well/Facility Pad:

The proposed development will reoccupy, re-disturb the original footprint, and expand the existing Camenisch 10-33HZ well pad (Location ID #329899) and production facility. The existing Camenisch 10-33HZ well pad has one (1) producing vertical oil well. The Camenisch Location will include a total of eight (8) new horizontal oil wells, with eight (8) pump jacks, six (6) separators, one (1) condensate maintenance tank, two (2) produced water storage tanks, three (3) chemical totes, one (1) air compressor, one (1) meter/sales building, one (1) communication tower, one (1) VOC combustor, one (1) LACT unit, and various other production equipment. Temporary equipment planned for completion operations includes fourteen (14) 500-barrel water tanks, four (4) ECDs, three (3) purge flares, and two (2) generators. KMOG plans to begin construction of this Location in the 2nd Quarter of 2023, drilling in the 2nd Quarter of 2023 into the 3rd Quarter of 2023, completions in the 3rd and 4th Quarters of 2024; placing the wells into production in the 4th Quarter of 2024, and conducting interim reclamation in the 4th Quarter of 2024.

Existing Berry Farms 8-8HZ Well Pad:

The proposed development will reoccupy, re-disturb the original footprint, and expand the existing Berry Farms 8-8HZ well pad (Location ID #329899). The existing Berry Farms well pad has one (1) shut-in vertical oil well (SI in October 2014), which will be plugged and abandoned prior to new construction; KMOG provided a BMP for this on the Form 2A. The proposed Berry Farms well pad Location will include a total of eight (8) new horizontal oil wells with eight (8) pump jacks. Temporary equipment planned for completion operations at the Berry Farms 8-8HZ well pad includes twenty-five (25) 500-barrel water tanks and one (1) ECD. All (three phase) fluids from the Berry Farms well pad will be sent to the nearby Berry Farms Production Facility for separation, storage of produced water, and transfer to oil/gas gathering. KMOG plans to begin re-construction of this Location in the 4th Quarter of 2022, drilling in the 1st Quarter of 2023, completions in the 2nd Quarter of 2023; placing the wells into production in the 3rd Quarter of 2023, and conducting interim reclamation in the 4th Quarter of 2023.

Existing Berry Farms 8-8HZ Facility Pad:

The proposed development will reoccupy and expand the existing Berry Farms 8-8HZ facility pad (Location ID #436576). KMOG plans to expand the current 1.85-acre facility by 4.25 acres, for a total Oil and Gas Location disturbance of 6.10 acres. The proposed Berry Farms Production Location will include a total of seven (7) separators, one (1) condensate maintenance tank, three (3) produced water storage tanks, two (2) chemical totes, one (1) air compressor, one (1) meter/sales building, one (1) VOC combustor, two (2) LACT units, and various other production equipment. Temporary equipment planned for production operations at the Berry Farms 8-8HZ well pad includes sixteen (16) 500-barrel water tanks, six (6) ECDs, three (3) purge flares, and two (2) generators. All (three phase) fluids from the Berry Farms well pad will be received and processed at the Berry Farms production pad. An additional 5 wells on the nearby Berry Farms 31N-8HZ well pad (Location #436028) are also being supported by production equipment at the Berry Farms Facility, but are not included in this OGDG because they are producing outside the mineral development area. KMOG plans to begin re-construction of this Location in the 4th Quarter of 2022, completions in the 2nd Quarters of 2023; and conducting interim reclamation in the 4th Quarter of 2023.

Surface Lands:

The proposed Oil and Gas Locations are on FEE surface and all are within the mineral development area. The Operator's right to construct are granted through Surface Use Agreements (SUAs). The OGDG locations require approximately 49.32 acres of surface disturbance for locations, 19.90 acres of surface disturbance for oil and gas pipelines, and 0.80 acres of surface disturbance for utilities as outlined below:

Proposed Swartz 2-4HZ Well/Facility Pad:

The Location will be built to accommodate sixteen (16) new horizontal oil wells and production equipment.

- Oil and Gas Location disturbance - 15.79 total acres of new disturbance, of which 10.5 acres will be for the Working Pad Surface (WPS); reclaimed to 4.27 acres after interim reclamation;
- Access Road disturbance - 1.99 acres of new disturbance;
- The total Democrat OGDG disturbance for this location is approximately 17.78 acres.

Existing Camenisch 10-33HZ Well/Facility Pad:

The Location will be expanded from its current interim reclaimed state to accommodate one (1) existing vertical oil well, eight (8) new horizontal oil wells and production equipment.

- Oil and Gas Location disturbance - 12.74 total acres of disturbance (0.01 acres of existing disturbance and 12.73 acres of new disturbance), of which 10.5 acres will be for the WPS; reclaimed to 3.32 acres after interim reclamation (well pad of 1.64 acres and facility pad of 1.68 acres);
- Access Road disturbance - 2.88 acres of new disturbance;
- The total Democrat OGDG disturbance for this location is approximately 15.62 acres.

Existing Berry Farms 8-8HZ Well Pad:

The Location will be expanded from its current interim reclaimed state to accommodate one (1) existing vertical oil well, eight (8) new horizontal oil wells and production equipment.

- Oil and Gas Location disturbance - 8.55 total acres of disturbance (0.01 acres of existing disturbance and 8.54 acres of new disturbance), of which 4.58 acres will be for the WPS; reclaimed to 1.02 acres after interim reclamation;
- Access Road disturbance - 0.69 acres of new disturbance;
- The total Democrat OGDG disturbance for this location is approximately 9.24 acres.

Existing Berry Farms 8-8HZ Facility Pad:

The Location will be expanded from its current interim reclaimed state to accommodate completion and production equipment for the nearby Berry Farms 8-8HZ well pad.

- Oil and Gas Location disturbance - 6.10 total acres of disturbance (1.85 acres of existing disturbance and 4.25 acres of new disturbance), of which 2.36 acres will be for the WPS; reclaimed to 2.06 acres after interim reclamation;
- Access Road disturbance - 0.58 acres of new disturbance;
- The total Democrat OGDG disturbance for this location is approximately 6.68 acres.

Mineral Development:

KMOG is requesting the development of FEE and STATE minerals covering approximately 5,054 total acres from the Sharon Springs, Niobrara, Fort Hays, Codell and Carlile formations as follows:

- Establish a new Drilling and Spacing Unit (DSU#1)
 - The proposed DSU would establish 3,440 acres for oil and gas development and approve up to twenty-four (24) horizontal wells from the amended Camenisch 10-33HZ Pad (Loc ID 329899) and the proposed Swartz 2-4HZ Pad.
 - KMOG requests the following unit setbacks in DSU#1:
 - Niobrara and Sharon Springs formations wells: 195 feet from the unit boundaries;
 - Codell, Fort Hays and Carlile formations wells: 405 feet from the unit boundaries;
 - All wells: an interwell distance of 150 feet.
- Establish a new Drilling and Spacing Unit (DSU#2)
 - The proposed DSU would establish 1,600 acres for oil and gas development and approve up to eight (8) horizontal wells from the amended Berry Farms 8-8HZ Pad (Loc ID 318973).
 - KMOG requests the following unit setbacks in DSU#2:
 - Niobrara and Sharon Springs formations wells: 180 feet from the unit boundaries;
 - Codell, Fort Hays and Carlile formations wells: 285 feet from the 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 and Carlile 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. Finally, the STATE minerals within the Application Lands comprise the E/2SE/4 of section 36, Township 4 North, Range 68 West.

This spacing, as outlined in KMOG's amended Hearing Application, complies with applicable COGCC rules and Staff appreciates the utilization of two large DSUs 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.

LOCAL GOVERNMENT PERMITTING AND PRE-APPLICATION CONSULTATIONS

Relevant Local and Proximate Governments:

Weld County is the Relevant Local Government (RLG) for all four Locations. There are no other local governments within 2,000 feet of these locations.

Pre-Application Consultation and Permitting with Weld County:

On October 27, 2021, KMOG and Weld County held pre-application consultations regarding Kerr McGee's intent to submit applications for Weld County Oil and Gas Location Assessment (WOGLA) permits; COGCC Staff attended (See the "Consultation Summary" attachment on the Form 2As for details of the meeting). KMOG submitted their four WOGLA applications to Weld County in February and March 2021. Weld County subsequently approved WOGLA #1041WOGLA21-0024 permit (Berry Farms 8-8HZ well pad) and WOGLA #1041WOGLA21-0024 permit (Berry Farms 8-8HZ facility pad) on June 21, 2022; WOGLA #1041WOGLA21-0026 permit (Camenisch 10-33HZ well/facility pad) and WOGLA #1041WOGLA21-0027 permit (Swartz 2-4HZ well/facility pad) on July 6, 2022 (see "Weld County Permit" attachments).

Pre-Application Consultations with CPW:

KMOG requested to meet with representatives from Colorado Parks and Wildlife (CPW) to conduct site visits to the proposed Camenisch 10-33HZ and Swartz 2-4HZ Locations. The Camenisch is located within mule deer migration corridor High Priority Habitat (HPH), while the Swartz is in mule deer migration corridor HPH, mule deer severe winter range HPH, and bald eagle roost site habitat (not a formal HPH but a 309.e.(1) CPW consultation habitat). Both locations propose chemical storage sited within 500 feet of natural surface water features and wetlands. One formal onsite was conducted on December 8, 2021 prior to application submittal. The CPW consultation process resulted in the following actions (please see the Wildlife Resource Considerations section and Administrative Considerations section below for additional details):

- CPW provided a waiver for Rule 1202.a.(3) to allow KMOG to site chemical totes within 500' of surface water features and wetlands at the three well pad Locations (the Facility

Location will not require the waiver, as no staging, refueling, or chemical storage will be sited at that Location less than 500 feet from an OHWM);

- For both the Camenisch 10-33HZ and Swartz 2-4HZ Locations, KMOG agreed to preclude oil and gas operations within 0.5 mile of bald eagle winter night roost or communal roost site between November 15 and March 15, if there is direct line of sight to the proposed operations;
- For the Camenisch 10-33HZ well/facility pad, KMOG agreed to conduct new oil and gas operations outside the CPW-suggested time period from December 1 through April 30 to protect mule deer;
- KMOG agreed to pay direct impact habitat mitigation fees to CPW of \$35,299.85 for the Camenisch 10-33HZ well/facility pad to offset direct impacts to HPH, as required by Rule 1203.a;
- CPW determined that the Camenisch 10-33HZ pad is in an area exceeding five active locations per square mile (pursuant to Rule 1203.d.(1), and recommends that the Director grant an exception from indirect compensatory mitigation fees per Rule 1203.a.(3);
- For the Swartz Location, CPW recommends that the Director grant an exception from direct and indirect compensatory mitigation fees per Rule 1203.a.(3).

See the Wildlife Resource Considerations section of this document for additional information.

CDPHE Consultation:

CDPHE initiated consultation with the Director on June 28, 2022; the consultation period was 35 days to accommodate CDPHE's review of ongoing revisions to the application. COGCC, CDPHE, and KMOG attended onsite on July 25, 2022 to the four locations to discuss issues. On July 27, 2022, COGCC, CDPHE, and KMOG held a meeting to discuss the agreed upon BMPs requested by CDPHE. CDPHE provided their Consultation letter to COGCC on August 2, 2022. For all locations, CDPHE and KMOG agreed to ten (10) BMPs to minimize impacts to water resources, two (2) BMPs to minimize impacts from wastes, and four (4) BMPs to minimize impacts from Per- and Polyfluoroalkyl Substances (PFAS). To minimize potential impacts to air resources, CDPHE and KMOG agreed to twenty-four (24) BMPs for the Swartz 2-4HZ and Camenisch 10-33HZ well pads, twenty-one (21) BMPs for the Berry Farms 8-8HZ well pad, and twenty-one (21) BMPs for the Berry Farms 8-8HZ facility pad. All BMPs have been placed on their respective Form 2As. See the "CDPHE Consultation" attachment on the Form 2As (which is also included in the Director's Recommendation) for details of CDPHE's recommendations and KMOG's responses.

ADMINISTRATIVE CONSIDERATIONS

CPW Waiver of Rule 1202.a.(3):

COGCC Rule 1202.a.(3) prohibits new staging, refueling, or chemical storage areas within 500 feet of the Ordinary High Water Mark ("OHWM") of any river, perennial or intermittent stream, lake, pond, or wetland. KMOG requested that CPW waive Rule 1202.a.(3) as the Berry Farms well pad, Camenisch 10-33HZ, and Swartz 2-4HZ locations will include the siting of chemical

storage within 500 feet of downgradient surface water features and wetlands. The chemicals will be used for the production phase of the location. The chemical totes that are used on KMOG locations in the DJ contain built in secondary containment and are made of steel. CPW staff provided the written waiver (see the “CPW Waiver” attachment). COGCC Staff supports this waiver, which will be granted through Commission approval of the OGDG.

Exception to Compensatory Mitigation for the Swartz Location per Rule 1203.a.(3):

CPW determined that the property on which the proposed Swartz Location will be constructed is entirely inaccessible to mule deer due to the existence of an approximate eight foot tall wildlife fence around the perimeter of the property. This effectively eliminates direct impacts, since no mule deer will be able to encroach upon the Location. CPW also determined that the proposed Location is in an area exceeding five active Oil and Gas Locations per square mile, which effectively lessens the quality of the habitat for mule deer. CPW recommends that the Director waive the compensatory mitigation fees. The Director reviewed CPW's recommendation, and pursuant to Rule 1203.a.(3), grants the exception. No additional decisions are required from the Commission to enact this granting other than approval of the OGDG.

PUBLIC COMMENTS

Pursuant to Rule 303.d.(1).A.ii, the public comment period was open for 30 days from May 31, 2022 to June 30, 2022. No public comments were received during the public comment period. No public comments were received in this docket in the eFiling system as of September 2, 2022.

COGCC STAFF'S TECHNICAL REVIEW HIGHLIGHTS

This section addresses issues related to public health, safety, welfare, the environment, and wildlife resources, as required by the Oil and Gas Conservation Act, 34-60-106(2.5)(a), for the KMOG Democrat OGDG.

Alternative Location Analysis (ALA)

Proposed Swartz 2-4HZ Well/Facility Pad:

The proposed Swartz 2-4HZ Well/Facility Pad meets the following Rule 304.b.(2).B criteria:

- 304.b.(2).B.i. The proposed Working Pad Surface is within 2,000 feet of 1 or more Residential Building Units or High Occupancy Building Units;
- 304.b.(2).B.vii. The proposed Oil and Gas Location is within the boundaries of, or is immediately upgradient from, a mapped, visible, or field-verified wetland or riparian corridor;
- 304.b.(2).B.viii. The proposed Oil and Gas Location is within High Priority Habitat and CPW did not waive the ALA.

KMOG formally evaluated six (6) technically feasible locations, including the proposed Swartz 2-4HZ location. Five of the six locations (including the proposed Swartz location) are within 2,000 feet of RBUs. Neither the proposed location nor the five alternative locations avoid all potential receptors.

The proposed Swartz 2-4HZ Well/Facility Pad Location is within 2,000 feet of nine (9) RBUs (3 RBUs between 501 to 1,000 feet; 6 RBUs between 1,001 to 2,000 feet). The nearest RBU is 626 feet to the northwest of the proposed WPS. The Location is within HPH for Mule Deer Migration Corridor, Mule Deer Severe Winter Range, and Bald Eagle Roost or Communal Roost. There are freshwater ponds and freshwater forested/shrub wetlands to the south and southwest of the location.

Alternative Location "Section 5" is within 2,000 feet of eight (8) RBUs. The nearest RBU is 966 feet to the south. Any WPS location on the property of this alternative would disturb significant crop acreage. There are freshwater forested/shrub wetlands to the northeast of the location.

Alternative Location "Section 6" is within 1,000 to 2,000 feet of six (6) RBUs. The nearest RBU is 966 feet to the south. KMOG was not successful at reaching an agreement with this surface owner to locate an oil and gas location on their property. This alternative is positioned at the western end of the DSU, requiring a second well pad to develop all the minerals, thereby, increasing the overall surface disturbance. Any WPS location on the property of this alternative would disturb significant crop acreage. There are freshwater emergent wetlands to the northeast of the location.

Alternative Location "Section 1" is within 2,000 feet of five (5) RBUs. The nearest RBU is 609 feet to the north. A Residential Building Unit within a Disproportionately Impacted Community is 1,480 feet away from the WPS of this location. The boundary of the town of Platteville is 700 feet away from the WPS of this location. This alternative is positioned at the eastern end of the DSU, requiring a second well pad to develop all the minerals, thereby, increasing the overall surface disturbance. Any WPS location on the property of this alternative would disturb significant crop acreage, which KMOG attempts to avoid.

Alternative Location "West Section 2" is not within 2,000 of any RBUs, which makes it initially attractive to Staff. (The nearest RBU is 2,260 feet to the west.) However, the Location would be within a Floodplain, and immediately upgradient of both the St. Vrain and South Platte Rivers. The Location would also be within HPH associated with Mule Deer Severe Winter Range and a Bald Eagle Winter Night Roost buffer area. This alternative is positioned at the eastern end of the DSU, requiring a second well pad to develop all the minerals, thereby, increasing the overall required surface disturbance.

Alternative Location "East Section 2" is within 2,000 feet of four (4) RBUs. The nearest RBU is 1,131 feet to the east. KMOG was not successful at reaching an agreement with this surface owner to locate an oil and gas location on their property. The Access Road would cut through irrigated fields. There would be drilling anti-collision risks with the existing Wilson Pad. To develop the mineral acreage from this alternative location, more than one pad would be required. This alternative is positioned at the eastern end of the DSU, requiring a second well pad to develop all the minerals, thereby, increasing the overall surface disturbance.

KMOG conducted a limited analysis of the four additional alternative locations.

- Alternative Location N/2 SE/4 Section 5: This is the location of the existing Schlagel 5-10HZ pad location. Addition of wells to this pad would have significantly decreased the acreage available to the surface landowner to farm on the property.
- Alternative Location S/2 Section 1: An agreement was not reached with the surface owner. Locating wells on this property would significantly decrease the acreage available to the surface landowner to farm on the property.
- Alternative Location E/2 SW/4 Section 5: An agreement was not reached with the surface owner.
- Alternative Location Section 5: An agreement was not reached with the surface owner.

Existing Camenisch 10-33HZ Well/Facility Pad:

The proposed Camenisch 10-33HZ Well/Facility Pad meets the following Rule 304.b.(2).B criteria:

- 304.b.(2).B.i. The proposed Working Pad Surface is within 2,000 feet of 1 or more Residential Building Units or High Occupancy Building Units;
- 304.b.(2).B.viii. The proposed Oil and Gas Location is within High Priority Habitat and CPW did not waive the ALA.

KMOG formally evaluated seven (7) technically feasible locations, including the proposed Camenisch 10-33HZ location. Six of the seven locations (including the proposed Camenisch location) are within 2,000 feet of RBUs. Neither the proposed location nor the six alternative locations avoid all potential receptors.

The proposed Camenisch 10-33HZ Well/Facility Pad Location is within 2,000 feet of one (1) RBU between 1,001 to 2,000 feet). The nearest RBU is 1,686 feet to the east of the proposed WPS. Location is within HPH for Mule Deer Migration Corridor.

Alternative Location "Section 5" is within 2,000 feet of eight (8) RBUs. The nearest RBU is 966 feet to the south. Any WPS location on the property of this alternative would disturb significant crop acreage. KMOG attempts to avoid or minimize the impact to agriculture which is important to both the landowners and the relevant local government, Weld County. There are freshwater forested/scrub wetlands 299 feet to the northeast of the location.

Alternative Location "Section 31" is within 2,000 feet of six (6) RBUs. The nearest RBU is 1,751 feet to the south. This alternative is positioned at the western end of the DSU, requiring a second well pad to develop all the minerals, thereby, increasing the overall surface disturbance. Any WPS location on the property of this alternative would disturb significant crop acreage. This location would require operational traffic to pass by six RBUs to reach the closest collector road, CR 38. (The preferred location does not pass any RBU's to reach CR 38.) There is a freshwater pond 400 feet to the north of the location. The location is placed on a ditch/canal drainage.

Alternative Location "SW/4 Section 32" is within 2,000 feet of four (4) RBUs. The nearest RBU is 1,758 feet to the south. Any WPS location on the property of this alternative would disturb

significant crop acreage. There are mapped freshwater emergent wetlands 68 feet to the north of the location.

Alternative Location “SE/4 Section 32” is within 2,000 feet of six (6) RBUs. The nearest RBU is 1,307 feet to the west. The surface owner, RTP Land Co LLC, who also owns the preferred location, requested that the preferred location be used instead of this location for oil and gas development due to the superior farmland better suited to farming operations. There are mapped freshwater emergent wetlands approximately 19 feet northeast of the location.

Alternative Location “NE/4 Section 33” is within 2,000 feet of one (1) RBU. This RBU is 1,928 feet to the southeast. Access and truck haul routes to this location are challenging and pose a safety risk due to poor visibility for vehicles to access with limited sight lines, making it difficult to obtain an access permit from Weld County due to traffic safety. Traffic would then need to drive south on CR 19 through HPH areas and past seven RBUs to reach the closest Collector Road, CR 38. Any WPS location on the property of this alternative would disturb significant crop acreage.

Alternative Location “Section 34” is not within 2,000 of RBUs. The nearest RBU is 2,185 feet to the west. The Milliken municipal boundary is within 2,000 feet (1,033 feet to the north). The Town of Milliken will not comment on a potential location without a formal submittal of an application or referral from an adjacent government. The operator did not engage the Town of Milliken and cannot speculate on their objection or acceptance. Location is within HPH for Mule Deer Migration Corridor, Mule Deer Severe Winter Range, and Bald Eagle Roost or Communal Roost. The surface owner, Public Service Company of Colorado (PSCo) was unresponsive to KMOG’s attempts to negotiate a surface use agreement (SUA). KMOG believes that securing a SUA at this location is not reasonably achievable. Any WPS location on the property of this alternative would disturb significant crop acreage. The location is within the floodplain of St. Vrain Creek and the South Platte River. There are mapped freshwater emergent wetlands 381 feet to the east of the location.

Existing Berry Farms 8-8HZ Well Pad and Berry Farms 8-8HZ Facility Pad:

The proposed Berry Farms 8-8HZ Well Pad and Berry Farms 8-8HZ Facility Pad meet the following Rule 304.b.(2).B criteria:

- 304.b.(2).B.i. The proposed Working Pad Surface is within 2,000 feet of 1 or more Residential Building Units or High Occupancy Building Units;
- 304.b.(2).B.vii. The proposed Oil and Gas Location is within the boundaries of, or is immediately upgradient from, a mapped, visible, or field-verified wetland or riparian corridor.

KMOG formally evaluated seven (7) technically feasible locations, including the proposed Berry Farms 8-8HZ well pad and facility pad locations. Five of the seven locations (including the two proposed Berry Farms 8-8HZ Locations) are within 2,000 feet of RBUs. Neither the proposed locations nor the six alternative locations avoid all potential receptors.

The existing Berry Farms 8-8HZ well pad location is within 2,000 feet of three (3) RBUs between 1,001 to 2,000 feet. The nearest RBU is 1,225 feet to the south of the proposed WPS. The existing Berry Farms 8-8HZ facility pad location is within 2,000 feet of two (2) RBUs between 1,001 to 2,000 feet. The nearest RBU is 854 feet to the northwest of the proposed WPS. Any WPS location on the property of this alternative would disturb significant crop acreage. There are NWI mapped freshwater emergent wetlands 180 feet to the west.

Alternative Location "Section 9" is within 2,000 feet of three (3) RBUs. The nearest RBU is 513 feet to the north. The surface owner, PSCo was not responsive to KMOG attempts to negotiate a surface use agreement (SUA) and in January of 2022, they notified KMOG of plans for a large scale solar development in this area. Because this solar project is moving forward, KMOG believes that securing a SUA at this location is not reasonably achievable. Any WPS location on the property of this alternative would disturb significant crop acreage, which KMOG attempts to avoid. There are NWI mapped freshwater emergent wetlands approximately 902 feet to the northeast of the location.

Alternative Location "Section 10" is not within 2,000 of RBUs. The nearest RBU is 2,050 feet to the south. The surface owner, PSCo was not responsive to KMOG attempts to negotiate a surface use agreement (SUA) and in January of 2022, they notified KMOG of plans for a large scale solar development in this area. Because this solar project is moving forward, KMOG believes that securing a SUA at this location is not reasonably achievable. This alternative increases the overall disturbance. Because this location is positioned in the middle of the mineral development area, twice as many wells will be required to develop the minerals because wells will be drilled both to the east and west resulting in increased disturbance. Any WPS location on the property of this alternative would disturb significant crop acreage, which KMOG attempts to avoid. The WPS is within HPH associated with Mule Deer Severe Winter Range.

Alternative Location "NW/4 Section 11" is not within 2,000 of RBUs. The nearest RBU is 2,645 feet to the south. The Milliken municipal boundary is within 2,000 feet (956 feet to the east). The Town of Milliken will not comment on a potential location without a formal submittal of an application or referral from an adjacent government. The operator did not engage the Town of Milliken and can't speculate on their objection or acceptance. The surface owner, PSCo was not responsive to KMOG attempts to negotiate a surface use agreement (SUA) and in January of 2022, they notified KMOG of plans for a large scale solar development in this area. Because this solar project is moving forward, KMOG believes that securing a SUA at this location is not reasonably achievable. Any WPS location on the property of this alternative would disturb significant crop acreage, which KMOG attempts to avoid. The WPS is within HPH associated with Mule Deer Severe Winter Range and is within a half mile buffer of an active Bald Eagle nest site. There are NWI mapped freshwater emergent wetlands 95 feet to the east of the location.

Alternative Location "NE/4 Section 11" is within 2,000 feet of five (5) RBUs. The nearest RBU is 787 feet to the northeast. The Milliken municipal boundary is within 2,000 feet (465 feet to the

north). The Town of Milliken will not comment on a potential location without a formal submittal of an application or referral from an adjacent government. The operator did not engage the Town of Milliken and can't speculate on their objection or acceptance. The surface owner identified the best and most valuable field for crops, the northern part of the field. To protect this more valuable agricultural area, this alternative is in the south half of the field. The WPS is within a quarter mile buffer of an active Bald Eagle nest site. The location is within the floodplain of the South Platte River. There are NWI mapped freshwater emergent wetlands 458 feet to the west of the location.

Alternative Location "SE/4 Section 11" is within 2,000 feet of six (6) RBUs. The nearest RBU is 608 feet to the east. The Platteville municipal boundary is within 2,000 feet (1,235 feet to the southwest). The operator did not engage the town relative to this alternative location. The surface owner, PSCO was unresponsive to conversation with KMOG attempts to negotiate a surface use agreement (SUA). KMOG believes that securing a SUA at this location is not reasonably achievable. The location is within the floodplain of the South Platte River. There are NWI mapped freshwater emergent wetlands 1,002 feet to the east of the location.

Alternative Location "Section 12" is within 2,000 of eight (8) RBUs. The nearest RBU is 523 feet to the south. The Milliken municipal boundary is within 2,000 feet (1,033 feet to the north). The Town of Milliken will not comment on a potential location without a formal submittal of an application or referral from an adjacent government. The operator did not engage the Town of Milliken and cannot speculate on their objection or acceptance. There are both a freshwater pond and NWI mapped freshwater emergent wetlands on the location.

Based on the ALA Datasheets and Narrative Summaries (attached to the Form 2As), a desktop review of the setting and an onsite visit to the three existing locations (Berry Farms 8-8HZ well pad, Berry Farms 8-8HZ facility pad, and the Camenisch 10-33HZ well/facility pad) and one proposed location (Swartz 2-4HZ well/facility pad) and some of the alternatives on July 25, 2022, Staff has determined that the ALAs demonstrate that the four proposed locations would present fewer potential adverse impacts than the alternatives analyzed.

There are no preferable, technically feasible alternative locations or combination of locations within or adjacent to the mineral development area that would more successfully avoid potential impacts to human, environmental, and wildlife receptors while minimizing surface disturbance.

Since receptors cannot be avoided, BMPs are necessary to minimize and/or mitigate the potential adverse impacts to public health, safety, welfare, the environment, and wildlife resources from the existing and proposed Locations and the Oil and Gas operations associated with them.

Public Health, Safety, and Welfare Considerations

Staff identified two interrelated concerns regarding public health, safety, and welfare in this proposed OGDG due to proximity to RBUs:

The proposed WPSs are within 2,000 feet of existing RBUs:

Staff's technical review identified RBUs within 2,000 feet of all four proposed Locations:

- Swartz - nine [9] RBUs within 2,000 feet; the closest RBU is 626 feet to the northwest;
- Camenisch - one [1] RBU 1,686 feet to the east;
- Berry Farms Well Pad - three [3] RBUs within 2,000 feet; the closest RBU is 1,225 feet to the south;
- Berry Farms Facility Pad - two [2] RBUs within 2,000 feet; the closest RBU is 872 feet to the north.
- There are no High Occupancy Building Units (HOBUs), School Facilities, or Child Care Centers within one mile of the proposed WPSs.

The Locations are not within 2,000 feet of RBUs within a Disproportionately Impacted (DI) Community, and the Locations are not within DI Communities, therefore Community Outreach Plans are not required per Rule 304.c.(20). KMOG conducted outreach through mailings, phone calls, and door-to-door visits. KMOG voluntarily included information about their community outreach program as an attachment (see "Community Engagement Report") on the Form 2As. This document primarily restates that KMOG will comply with rule requirements for notification and will practice continued engagement with the RBU owners/tenants within 2,000 feet of the two locations, as well as stakeholders outside 2,000 feet if and when necessary. KMOG has also established a "stakeholder relations" email address and phone number, as well as the "Colorado Response Line" to receive questions, concerns, or complaints.

In addition to the required WOGLA notices that were sent to RBU owners within 1000 feet of the proposed Oil and Gas Locations (OGLs), KMOG sent postcards to all RBU owners within 2,000 feet of the four locations in May 2022 indicating they were interested in developing these areas and requested a conversation. In addition, KMOG has pursued informed consent letters to fulfill Rule 604 requirements, and have executed five (5) of nine (9) for the Swartz 2-4HZ well/facility pad location; three (3) of three (3) for the Berry Farms 8-8HZ well pad location; and two (2) of two (2) for the Berry Farms 8-8HZ facility pad location.

Operator-proposed site-specific measures to address proximity to RBUs:

KMOG provided BMPs that address public health, safety and welfare considerations; Staff has reviewed those BMPs and included them on the Form 2A. A summary of KMOG's relevant minimization and mitigation measures includes:

- 1) Safety: KMOG consulted with the Front Range Fire Rescue District. Site-specific Emergency Action Plans were approved by Weld County Office of Emergency Management and the Front Range Fire Rescue District on January 19, 2022 for all four locations. The Locations will have remote shut in capability.
- 2) Emissions: KMOG has committed to a crude oil and gas gathering system; will minimize truck traffic by using temporary pipeline to deliver water for completions; will conduct

LDAR/AVO inspections; and has a “tankless” location¹ with all hydrocarbon liquids and natural gas piped off location, which will also reduce truck traffic.

- 3) Noise: KMOG will install 32-foot-high sound walls with minimum STC-25 rating on the sides of each location where RBUs are located during drilling and completions.
- 4) Lights: Lights will be pointed downward and angled away from off-site buildings. Sound walls will reduce off-site lighting trespass during pre-production phase. Minimal lighting during production phase will be used for acceptable safe operations.
- 5) Odor: KMOG will use Group III oil-based drilling fluids (zero VOC, low/negligible odor) and a mud chiller with the intent to lower the drilling fluid temperature as fluids are redeployed downhole during production drilling operations at both locations.
- 6) Dust: KMOG will use speed restrictions, restriction of construction activity during high-wind days, silica dust controls, regular road maintenance, and the use of fresh water or magnesium chloride for dust suppressant.
- 7) Air Monitoring: Air monitoring will be conducted according to CDPHE Regulation 7 during production drilling, completions and six months of production facility operations. Air monitoring reports will be submitted at the end of each month during monitoring activity to CDPHE, COGCC, and local governments within 2,000 feet.

The applicant is requesting approval of the Location pursuant to Rule 604.b.(4):

Rule 604.b requires that no WPS will be located between 501 and 2,000 feet from a RBU unless one of four conditions are satisfied. KMOG is asking the Commission to find that the four Locations, as sited within 2,000 feet of a combined total of 13 RBUs, and its submitted BMPs, will provide substantially equivalent protections per Rule 604.b.(4).

COGCC Staff conducted a technical/desktop review of the application materials related to the proposed Location’s siting and proximity to RBUs, and conducted an onsite visit to all four locations on July 25, 2022. Staff concludes that although these four locations are within 2,000 feet of 13 RBUs, the proposed site-specific BMPs will reduce, minimize and/or mitigate many potential adverse impacts to public health, safety and welfare. The applicant’s BMPs, which include administrative processes (coordination and permitting with relevant local and proximate governments), address nuisance conditions (noise, lighting, odors and dust), provide for general safety (emergency response and vapor controls), address acute and cumulative impacts to public health (emission controls, connecting to a pipeline), and promote welfare (communication with nearby building unit owners and tenants), if successfully implemented and maintained, will reduce, but not eliminate, adverse impacts to local residents.

Staff has determined that the dialogue established between KMOG and the RBU owners/tenants shows substantial engagement and agreement with the proposed location and operations. KMOG’s Community Engagement Report states that all COGCC rules have and will continue to be adhered to regarding required outreach and notification. Based on these

¹Staff notes that “tankless” as described by KMOG means there will be no oil stored in tanks on site. This is different from CDPHE’s definition of “tankless”, which means there will be no oil or produced water stored on site. The Swartz 2-4HZ, Camenisch 10-33HZ, and the Berry Farms 8-8HZ Facility locations will have produced water storage.

findings, Staff has determined that KMOG has provided sufficient opportunity for RBU owners to engage in this permitting process.

KMOG also voluntarily provided a “Democrat OGDG Synopsis” (attached to each Form 2A as “Other”) that describes its approach to Rule 604.b.(4) and substantial equivalence. The synopsis details information that the Commission may wish to consider in their decision. Staff appreciates the additional narrative and summary, and finds that the synopsis is a thoughtful addition to the application materials.

Regarding the applicant’s request for Commission finding pursuant to Rule 604.b.(4), Staff finds that this OGDG application meets all COGCC Rule requirements and is appropriate for Commission consideration.

Environmental Resource Considerations

Water Resources

Proposed Swartz 2-4HZ Well/Facility Pad:

The proposed WPS at this Oil and Gas Location lies within a Sensitive Area for water resources due to the potential for shallow groundwater (estimated to be approximately 5 feet below ground surface [bgs]), proximity to downgradient surface water features (Milton Reservoir is approximately 75 feet to the southwest), proximity to downgradient NWI-mapped wetlands (approximately 75 feet to the southwest).

Existing Camenisch 10-33HZ Well/Facility Pad:

The proposed WPS at this Oil and Gas Location lies within a Sensitive Area for water resources due to the potential for shallow groundwater (estimated to be approximately 9 feet bgs), proximity to downgradient surface water features (intermittent drainage ditch is approximately 153 feet to the east-southeast), proximity to downgradient NWI-mapped wetlands (approximately 193 feet to the east-southeast).

Existing Berry Farms 8-8HZ Well Pad:

The proposed WPS at this Oil and Gas Location lies within a Sensitive Area for water resources due to the potential for shallow groundwater (estimated to be approximately 19 feet bgs), proximity to downgradient surface water features (irrigation ditch is approximately 488 feet to the south), proximity to downgradient NWI-mapped wetlands (approximately 180 feet to the west).

Existing Berry Farms 8-8HZ Facility Pad:

The proposed WPS at this Oil and Gas Location lies within a Sensitive Area for water resources due to the proximity to downgradient NWI-mapped wetlands (approximately 450 feet to the south).

Site Specific Measures to Address Water Resources

COGCC staff conducted a detailed technical review of the Hydrology Map, Layout Drawings, Dust Mitigation Plan, Stormwater Management Plan, Interim Reclamation Plan, Fluid Leak

Detection Plan, and Topsoil Protection Plan to evaluate the potential for impacts to shallow groundwater, the nearest surface water features, and wetlands. These plans include site-specific BMPs for initial site construction and interim reclamation; fluid containment during drilling, completion, and production operations; equipment protection from flood waters; and administrative controls detailing inspections, maintenance, and testing. KMOG's construction plans for protection of surface water and groundwater resources at these Oil and Gas Locations include:

- 1) The perimeter controls for all four locations will consist of a 1.5- to 2-foot compacted earthen perimeter berm and diversion ditch system around the entire WPSs; these diversion ditches will drain into one to three sediment catchment basins with a 6-inch outlet pipe; and site degradation control measures that include grading, slope stabilization (seeding, mulching, surface roughening of the topsoil stockpile), and the use of gravel and roadbase materials for surfacing of the WPS and access roads.
- 2) These locations will be constructed with secondary containment with a geosynthetic lining to protect soil and water resources from leaks and spills during the drilling, completion and production phases.
- 3) Automation technology is used at both locations, including fluid level monitoring and high-level shut-offs, and electronic sensors to monitor sumps. All automation is monitored by 24-hours a days, 7 days a week.
- 4) Tank berms shall be constructed of steel rings with an engineered synthetic liner and designed to contain 150% of the capacity of the largest tank. Separator berms shall be constructed of steel rings. All berms will be visually checked regularly (14 days during construction, 28 days during production) to ensure proper working condition.
- 5) 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.
- 6) Site personnel will be trained in detecting, addressing, and containing spills that may occur on site.
- 7) Equipment and transfer lines will be monitored daily during well drilling and completion for signs of drips, leaks, or spills, which will be corrected promptly.

COGCC Staff conducted a technical review to evaluate the potential for impact to groundwater, the nearest surface water features, and wetlands. KMOG provided BMPs that reduce, minimize, or mitigate impacts to groundwater and surface water resources and the environment. The BMPs include engineering controls (construction and containment) and administrative controls (inspections and a leak detection plan).

Based on this information, Staff concludes that risk of contamination from this Oil and Gas Location to groundwater and downgradient surface waters will be minimized by the successful implementation of the proposed BMPs.

Wildlife Resource Considerations

Two of the locations, the Swartz 2-4HZ Well/Facility Pad and Camenisch 10-33HZ Well/Facility Pad, lie within Rule 1202.d.(3) Mule Deer Migration Corridor HPH. The Camenisch 10-33HZ

Well/Facility Pad also lies within Rule 1202.d.(3) Mule Deer Severe Winter Range HPH, and within Rule Rule 309.e.1 Bald Eagle Roost or Communal Roost sites. The other two locations, the Berry Farms 8-8HZ Well Pad and Berry Farms 8-8HZ Facility Pad, do not fall within any HPH areas. The three proposed Well/Facility Locations will also have chemical storage within 500 feet of surface water features and/or wetlands [prohibited without a CPW waiver and Commission approval per Rule 1202.a.(3)]. During KMOG's consultation with CPW, alternative locations within or near the DSUs were discussed, but it was determined that potential adverse impacts to wildlife could largely be addressed with BMPs and other measures, making the original proposed well/facility pads KMOG's preferred locations.

Mule Deer HPH Resources

An approximately eight-foot tall fence surrounds the entire property where the Swartz Location is proposed. The fence was installed by the surface owner in order to keep deer and other wildlife out of the irrigated cropland. Since this portion of the mule deer HPH is essentially inaccessible to mule deer, CPW concluded that no direct impacts will occur. CPW recommended that the Director grant an exception to all direct compensatory mitigation fees as allowed by Rule 1203.a.(3). The Director defers to CPW's expertise in this matter, and grants the exception. CPW also confirmed that the Swartz 2-4HZ pad is in an area exceeding five active Oil and Gas Locations per square mile; this high density of existing Oil and Gas Locations greatly diminishes the quality of the HPH and reduces the likelihood that mule deer will frequent the area.

For the Camenisch 10-33HZ well/facility pad, KMOG agreed to conduct new oil and gas operations outside the time period from December 1 through April 30 per CPW's suggested timing limitations. KMOG agreed to pay direct impact habitat mitigation fees to CPW of \$35,299.85 for the Camenisch 10-33HZ pad to offset direct impacts to HPH, as required by Rule 1203.a. This fee amount was calculated and determined based on the total acreage of proposed temporary and permanent disturbance within HPH. CPW confirmed that the Camenisch 10-33HZ pad is in an area exceeding five active locations per square mile, and did not assess any indirect fees.

Bald Eagle HPH Resources

For the Camenisch 10-33HZ and Swartz 2-4HZ well/facility pads, KMOG agreed to preclude oil and gas operations between November 15 and March 15 due to the Swartz 2-4HZ being planned within 0.5 miles of a bald eagle winter night roost or communal roost site and the Camendish 10-33HZ access road being planned with 0.5 miles of the roost site. KMOG reported that there is a direct line of sight between the planned operations into the roost. If this results in multiple occupations by KMOG, the sound walls may be removed and then reinstalled for each subsequent occupation, depending on the timing of operations related to CPW's preferred limitations.

Rule 1202.a.(3) Requirements

CPW provided a waiver for Rule 1202.a.(3) to allow KMOG to site chemical totes within 500' of surface water features and wetlands at three of the four locations; these waivers are not formally granted unless the Commission approves the Form 2As documenting this relief.

COGCC and CPW believe that the potential impacts to wildlife resources and wildlife habitat have been sufficiently addressed by the proposed BMPs in the Wildlife Protection Plans and Wildlife Mitigation Plans.

DIRECTOR'S RECOMMENDATION:

The Director has obtained and fully reviewed all required and supplemental information necessary to evaluate the OGD's proposed operation and its potential impacts on 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 should be considered for approval by the Commission.



COLORADO
Department of Public
Health & Environment

August 2, 2022

Julie Murphy, Director
Colorado Oil and Gas Conservation Commission
1120 Lincoln St, Suite 801
Denver, CO 80203

**Re: Colorado Department of Public Health and Environment's Rule 309.f Consultation
Comments for the Kerr-McGee Oil & Gas Onshore LP Democrat Oil and Gas Development
Plan (Docket Number 220400073)**

The Colorado Department of Public Health and Environment (CDPHE) appreciates the opportunity to consult on the Kerr-McGee Oil & Gas Onshore LP (KMOG), (a subsidiary of Oxy USA Inc.) Democrat Oil and Gas Development Plan (OGDP), as well as the ongoing collaboration with the Colorado Oil and Gas Conservation Commission (COGCC) to fulfill our shared mission to protect public health and the environment. The Democrat OGDP consists of Berry Farms Well Pad 8-8HZ, Swartz 2-4HZ, Berry Farms Facility 8-8HZ, and Camenisch 10-33HZ. CDPHE's consultation timeline for this CAP is as follows: CDPHE provided the Best Management Practices (BMPs) spreadsheet for CDPHE-COGCC Consultations to KMOG on June 29, 2022. KMOG provided to CDPHE its completed BMP spreadsheet for the Democrat OGDP on July 21.¹ A consultation meeting including CDPHE, COGCC, and KMOG was held on July 27, 2022.

CDPHE notes that the proposed Democrat OGDP is located within 2,000 feet of fourteen residential building units: Berry Farms Well Pad 8-8HZ, has three Residential Building Units (RBUs) within 2000 feet of the Working Pad Surface; Swartz 2-4HZ, has nine RBUs within 2000 feet of the Working Pad Surface; Berry Farms Facility 8-8HZ, has one RBU within 2000 feet of the Working Pad Surface, and; Camenisch 10-33HZ, has one RBU within 2000 feet of the Working Pad Surface. The OGDP is located within the Denver Metro/North Front Range Ozone Nonattainment Area. CDPHE appreciates KMOG's efforts in the proposed OGDP to minimize ozone on forecasted high ozone days. CDPHE also appreciates KMOG's employee commute trip reduction efforts to reduce emissions from employee commuting to and from the office worksite, as noted during the July 27 consultation. To protect public health and air and water

¹ KMOG Democrat OGDP - BMPs for CDPHE-COGCC Consultations,
https://docs.google.com/spreadsheets/d/1laeySE026_3GqBQiu-r6JQntZ56wkYwD/edit?usp=sharing&ouid=116011492119467778154&rtpof=true&sd=true



resources, CDPHE supports incorporation of each of the BMPs that KMOG has committed to in the Democrat OGD, as noted in the linked BMP spreadsheet and listed below:

Camenisch 10-33HZ Pad and Swarts 2-4HZ Pad:

Air BMPs

- Operator will implement ambient air quality monitoring on site.
- Operator will properly maintain vehicles and equipment.
- Operator will use non-emitting pneumatic controllers.
- Electrification: Operator will use electric equipment and devices (e.g. vapor recovery units or VRUs, fans, etc.) to minimize combustion sources on site (if yes, operator will provide a list outlining which equipment and devices will be electrified).
- Operator will implement a "hybrid production flowback method" or "modern production flowback method"; Oil, water and gas will be routed through permanent equipment with the exception of one temporary separator that is necessary to prevent damage to permanent equipment.
- Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations.
- Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a destruction efficiency of 98% or better.
- Venting/Flaring: Operator will control bradenhead/casinghead venting.
- Pipelines: Operator will have adequate and committed pipeline take away capacity for all produced gas and oil.
- Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable.
- Engines: Operator will use tier IV or better engines for hydraulic fracturing.
- Operator will use lease automated custody transfer (LACT) system to remove/reduce the need for truck loadout.
- Odor mitigation: operator will use group III drilling mud.
- Odor mitigation: operator will use a chiller to cool drilling fluid as it is piped through the recirculation system before routing to the suction tanks.
- Odor mitigation: operator will cover trucks transporting drill cuttings.
- Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore.
- Odor mitigation: Operator will ensure that all drilling fluid is removed from pipes before storage.
- Ozone mitigation on forecasted high ozone days: operator will eliminate use of VOC paints and solvents.
- Ozone mitigation on forecasted high ozone days: operator will minimize vehicle and engine idling.



- Ozone mitigation on forecasted high ozone days: operator will reduce truck traffic and worker traffic.
- Ozone mitigation on forecasted high ozone days: operator will postpone the refueling of vehicles as feasible.
- Ozone mitigation on forecasted high ozone days: operator will suspend or delay the use of fossil fuel powered ancillary equipment as feasible.
- Ozone mitigation on forecasted high ozone days: operator will postpone construction activities as feasible.
- Ozone mitigation on forecasted high ozone days: operator will reschedule non-essential operational activities such as pigging, well unloading and tank cleaning as feasible.

Berry Farms 8-8HZ Well Pad

Air BMPs

- Operator will implement ambient air quality monitoring on site.
- Operator will properly maintain vehicles and equipment.
- Operator will use non-emitting pneumatic controllers.
- Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations.
- Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a destruction efficiency of 98% or better.
- Venting/Flaring: Operator will control bradenhead/casinghead venting.
- Pipelines: Operator will have adequate and committed pipeline take away capacity for all produced gas and oil.
- Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable.
- Engines: Operator will use tier IV or better engines for hydraulic fracturing.
- Odor mitigation: operator will use group III drilling mud.
- Odor mitigation: operator will use a chiller to cool drilling fluid as it is piped through the recirculation system before routing to the suction tanks.
- Odor mitigation: operator will cover trucks transporting drill cuttings.
- Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore.
- Odor mitigation: Operator will ensure that all drilling fluid is removed from pipes before storage.
- Ozone mitigation on forecasted high ozone days: operator will eliminate use of VOC paints and solvents.
- Ozone mitigation on forecasted high ozone days: operator will minimize vehicle and engine idling.



- Ozone mitigation on forecasted high ozone days: operator will reduce truck traffic and worker traffic.
- Ozone mitigation on forecasted high ozone days: operator will postpone the refueling of vehicles as feasible.
- Ozone mitigation on forecasted high ozone days: operator will suspend or delay the use of fossil fuel powered ancillary equipment as feasible.
- Ozone mitigation on forecasted high ozone days: operator will postpone construction activities as feasible.
- Ozone mitigation on forecasted high ozone days: operator will reschedule non-essential operational activities such as pigging, well unloading and tank cleaning as feasible.

Berry Farms 8-8HZ Facility Pad

Air BMPs

- Operator will implement ambient air quality monitoring on site.
- Operator will properly maintain vehicles and equipment.
- Operator will use non-emitting pneumatic controllers.
- Electrification: Operator will use electric equipment and devices (e.g. vapor recovery units or VRUs, fans, etc.) to minimize combustion sources on site (if yes, operator will provide a list outlining which equipment and devices will be electrified).
- Operator will implement a "hybrid production flowback method" or "modern production flowback method"; oil, water and gas will be routed through permanent equipment with the exception of one temporary separator that is necessary to prevent damage to permanent equipment.
- Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations.
- Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a destruction efficiency of 98% or better.
- Venting/Flaring: Operator will control bradenhead/casinghead venting.
- Pipelines: Operator will have adequate and committed pipeline take away capacity for all produced gas and oil.
- Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable.
- Operator will use lease automated custody transfer (LACT) system to remove/reduce the need for truck loadout.
- Odor mitigation: operator will cover trucks transporting drill cuttings.
- Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore.



- Odor mitigation: Operator will ensure that all drilling fluid is removed from pipes before storage.
- Ozone mitigation on forecasted high ozone days: operator will eliminate use of VOC paints and solvents.
- Ozone mitigation on forecasted high ozone days: operator will minimize vehicle and engine idling.
- Ozone mitigation on forecasted high ozone days: operator will reduce truck traffic and worker traffic.
- Ozone mitigation on forecasted high ozone days: operator will postpone the refueling of vehicles as feasible.
- Ozone mitigation on forecasted high ozone days: operator will suspend or delay the use of fossil fuel powered ancillary equipment as feasible.
- Ozone mitigation on forecasted high ozone days: operator will postpone construction activities as feasible.
- Ozone mitigation on forecasted high ozone days: operator will reschedule non-essential operational activities such as pigging, well unloading and tank cleaning as feasible.

All Democrat OGD Pads

Water BMPs

- Secondary containment: Operator will install perimeter controls to control potential sediment-laden runoff in the event of spill or release from Modular Large Volume Storage Tank.
- Operator will recycle or beneficially reuse flowback and produced water for use downhole.
- Vehicle fueling: Operator will refuel vehicles only on impervious surfaces and never during storm events.
- Vehicle fueling: Operator will ensure that a fueling contractor is present during the entire fueling process to prevent overfilling, leaks and drips from improper connections.
- Dust suppression: Operator will not use produced water or other process fluids for dust suppression.
- COGCC permit will incorporate other agency water quality protection plans by reference as applicable (e.g. stormwater management plan)
- Down gradient controls: Operator will install adequate down gradient controls if they can not have a control at the source.
- Outfall locations: Outlet protection should be used when a conveyance discharges onto a disturbed area where there is potential for accelerated erosion due to concentrated flow. Outlet protection should be provided where the velocity at the culvert outlet exceeds the maximum permissible velocity of the material in the receiving channel.



- Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices.
- Documentation / stormwater management plan: If it is infeasible to install or repair a control measure immediately after discovering a deficiency, operator will document and keep on record in the stormwater management plan: (a) a description of
- why it is infeasible to initiate the installation or repair immediately; and (b) a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible.
- Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices.
- Documentation / stormwater management plan: If it is infeasible to install or repair a control measure immediately after discovering a deficiency, operator will document and keep on record in the stormwater management plan: (a) a description of why it is infeasible to initiate the installation or repair immediately; and (b) a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible.

All Democrat OGD Pads

Waste BMPs

- Operator will properly characterize and dispose of all waste (i.e. the specific landfill/waste disposal location allows for acceptance of the waste stream).
- Operator will properly test for and dispose of TENORM if CDPHE's 6 CCR 1007-1 Part 20 (TENORM) regulations apply to operations at this location.

All Democrat OGD Pads

PFAs BMPs

- Operator will not use fracturing fluids which contain PFAS compounds.
- Operator will coordinate with nearby fire district(s) to evaluate whether PFAS-free foam can provide the required performance for the specific hazard.
- If PFAS-containing foam is used at a location: operator will properly characterize the site to determine the level, nature and extent of contamination
- If PFAS-containing foam is used at a location: operator will perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions
- If PFAS-containing foam is used at a location: operator will properly capture and dispose of PFAS-contaminated soil and fire and flush water.



CDPHE appreciates this opportunity to consult and looks forward to continued collaboration with COGCC. CDPHE also appreciates KMOG's engagement during this process and we have no additional recommendations at this time. Please do not hesitate to contact me if you have any questions.

Sincerely,



Rick Coffin
Energy Liaison
Colorado Department of Public Health & Environment



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:

402958547

Date Received:

04/18/2022

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: **318973**

OGDP ID:

Expiration Date:

☐ New Location ☐ Refile ☒ Amend Existing Location # 318973

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 |
|---------------|---------|-----------|
| 220400073 | | |

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: TRACY COLLING

Phone: (720) 929-6160

Fax: ()

email: TRACY_COLLING@OXY.COM

FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID (Rule 706): 20010124 ☐ Gas Facility Surety ID (Rule 711): _____
- ☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: BERRY FARMS WELL PAD Number: 8-8HZ

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.

QuarterQuarter: SENE Section: 8 Township: 3N Range: 67W Meridian: 6 Ground Elevation: 4818

Latitude: 40.243722 Longitude: -104.908344

GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP Date of Measurement: 12/14/2020

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

| This proposed Oil and Gas Location is: | LOCATION ID # | FORM 2A DOC # |
|--|---------------|---------------|
| Well Site is served by Production Facilities | 436576 | 402958562 |

RELEVANT LOCAL GOVERNMENT SITING INFORMATION

County: WELD Municipality: N/A

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. Yes

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: 03/07/2022

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

Status/disposition date: 06/21/2022

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: Jason Maxey Contact Phone: 970-400-3580
Contact Email: jmaxey@weldgov.com

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.

< No row provided >

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:

1041 WOGLA21-0024

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

10/27/2021

Date of local government consultation:

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. Yes

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? Yes

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.

- | | |
|---|---|
| <input checked="" type="checkbox"/> i. WPS < 2,000 feet from RBU/HOBU | <input type="checkbox"/> vi.aa. WPS within a surface water supply area |
| <input type="checkbox"/> ii. WPS < 2,000 feet from School/Child Care Center | <input type="checkbox"/> vi.bb. WPS < 2,640 feet from Type III or GUDI well |
| <input type="checkbox"/> iii. WPS < 1,500 feet from DOAA | <input checked="" type="checkbox"/> vii. WPS within/immediately upgradient of wetland/riparian corridor |
| <input type="checkbox"/> iv. WPS < 2,000 feet from jurisdictional boundary and PLG objects/requests ALA | <input type="checkbox"/> viii. WPS within HPH and CPW did not waive |
| <input type="checkbox"/> v. WPS within a Floodplain | <input type="checkbox"/> ix. Operator using Surface bond |
| | <input type="checkbox"/> x. WPS < 2,000 feet from RBU/HOBU/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:

| # | latitude | longitude | i | ii | iii | iv | v | vi | vii | viii | ix | x | Variance Required? | Comments |
|---|-----------|-------------|---|----|-----|----|---|----|-----|------|----|---|--------------------|--|
| | 40.244370 | -104.852570 | x | | | | | | x | x | | | | ALT 5 = SECTION 11 NE4 5 RBUs within 2,000 ft. Pad location at surface owners request to protect more valuable crop land |
| | 40.236320 | -104.850090 | x | | | | x | | x | | | | | ALT 3 = SECTION 11 SE4 6 RBUs within 2,000 ft. Surface Owner unresponsive |
| | 40.239110 | -104.876030 | | | | | | | | x | | | | ALT 2 = SECTION 10 Surface Owner unresponsive |
| | 40.246280 | -104.845090 | x | | | | | | x | | | | | ALT 6 = SECTION 12 8 RBUs within 2,000 ft. |
| | 40.243470 | -104.866910 | | | | | | | x | x | | | | ALT 4 = SECTION 11 NW4 Surface Owner unresponsive |
| | 40.245910 | -104.903130 | x | | | | | | x | | | | | ALT 1 = SECTION 9 3 RBUs within 2,000 ft. Surface Owner unresponsive |

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: Berry Farms LLC

Phone: _____

Address: 2195 Chantala Ln

Fax: _____

Address: _____

Email: garrettchar@comcast.com

City: Pueblo State: CO Zip: 81066

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: No

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

OTHER PERMANENT EQUIPMENT

< No Row Provided >

OTHER TEMPORARY EQUIPMENT

| Temporary Equipment Type | Number |
|--------------------------|--------|
| ECD (rig) | 1 |
| Water Tanks (rig) | 2 |

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.

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): | | | Details of Condition(s) | 604.b. (4) |
|---|----------|------|-----------|--|--------------------------|--------------------------|-------------------------|-------------------------------------|
| | | | | 604.b. (1) | 604.b. (2) | 604.b. (3) | | |
| Building: | 1051 | Feet | S | | | | | |
| Residential Building Unit (RBU): | 1225 | Feet | S | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | <input checked="" type="checkbox"/> |
| High Occupancy Building Unit(HOBU) | 5280 | Feet | SE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> |
| Designated Outside Activity Area: | 5280 | Feet | SW | | | | | |
| Public Road: | 665 | Feet | E | | | | | |
| Above Ground Utility: | 705 | Feet | E | | | | | |
| Railroad: | 5280 | Feet | NW | | | | | |
| Property Line: | 102 | Feet | W | | | | | |
| School Facility: | 5280 | Feet | SE | | | | | |
| Child Care Center: | 5280 | Feet | SE | | | | | |
| Disproportionately Impacted (DI) Community: | 5280 | Feet | NE | | | | | |
| RBU, HOBU, or School Facility within a DI Community. | 5280 | Feet | NE | <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 | <u>0</u> | <u>0</u> | <u>3</u> |
| Residential Building Units | <u>0</u> | <u>0</u> | <u>3</u> |
| 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: 8.55

Size of location after interim reclamation in acres: 1.02

Estimated post-construction ground elevation: 4817

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:

agriculture

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: 33 - Kim loam 3 - 5% slopes

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

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: 1727 Feet SW

Spring or Seep: 5280 Feet NW

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 19 Feet

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

Location Elev 4818'

Monitoring well 247' S (see construction layout drawing), Elev 4803', SWL 4.5' (will assume 4' for SWL calculation), depth 8'

SWL Calc: $(4818 - 4803) + 4 = 19$

SURFACE WATER AND WETLANDS

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

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: _____ 180 Feet _____ W _____

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

IRRIGATION DITCH

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? _____ Yes _____

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 No Location?

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: \$ _____

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 No Location?

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: \$ _____

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 Target | COA/BMP Type | COGCC Action |
|----|-------------|--|--------------|
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will reduce truck traffic and worker traffic | |
| | Water | BMP | Adopt as BMP |
| | Description | COGCC permit will incorporate other agency water quality protection plans by reference as applicable (e.g. stormwater management plan) | |
| | Water | BMP | Adopt as BMP |
| | Description | Dust suppression: Operator will not use produced water or other process fluids for dust suppression | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: Operator will ensure that all drilling fluid is removed from pipes before storage | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will control bradenhead/casinghead venting | |
| | Water | BMP | Adopt as BMP |
| | Description | Vehicle fueling: Operator will refuel vehicles only on impervious surfaces and never during storm events | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions | |
| | Waste | BMP | Adopt as BMP |
| | Description | Operator will properly characterize and dispose of all waste (i.e. the specific landfill/waste disposal location allows for acceptance of the waste stream) | |
| | Air | BMP | Adopt as BMP |
| | Description | Pipelines: Operator will have adequate and committed pipeline take away capacity for all produced gas and oil | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore | |
| | Water | BMP | Adopt as BMP |

| | | | |
|--|-------------|--|--------------|
| | Description | Secondary containment: Operator will install perimeter controls to control potential sediment-laden runoff in the event of spill or release from Modular Large Volume Storage Tank | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use a chiller to cool drilling fluid as it is piped through the recirculation system before routing to the suction tanks | |
| | Water | BMP | Adopt as BMP |
| | Description | Documentation / stormwater management plan: If it is infeasible to install or repair a control measure immediately after discovering a deficiency, operator will document and keep on record in the stormwater management plan: (a) a description of why it is infeasible to initiate the installation or repair immediately; and (b) a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible. | |
| | Water | BMP | Adopt as BMP |
| | Description | Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a destruction efficiency of 98% or better | |
| | Water | BMP | Adopt as BMP |
| | Description | Operator will recycle or beneficially reuse flowback and produced water for use downhole | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will properly characterize the site to determine the level, nature and extent of contamination | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use zero VOC (group III, low/negligible odor) drilling mud | |
| | Air | BMP | Adopt as BMP |
| | Description | Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable | |
| | PFAS | BMP | Adopt as BMP |
| | Description | Operator will coordinate with nearby fire district(s) to evaluate whether PFAS-free foam can provide the required performance for the specific hazard | |
| | Air | BMP | Adopt as BMP |
| | Description | Engines: Operator will use tier IV or better engines for hydraulic fracturing | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will cover trucks transporting drill cuttings | |
| | Water | BMP | Adopt as BMP |
| | Description | Vehicle fueling: Operator will ensure that a fueling contractor is present during the entire fueling process to prevent overfilling, leaks and drips from improper connections | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will implement ambient air quality monitoring on site | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will use non-emitting pneumatic controllers | |
| | Water | BMP | Adopt as BMP |

| | | | |
|--|-------------|--|--------------|
| | Description | Outfall locations: Outlet protection should be used when a conveyance discharges onto a disturbed area where there is potential for accelerated erosion due to concentrated flow. Outlet protection should be provided where the velocity at the culvert outlet exceeds the maximum permissible velocity of the material in the receiving channel. | |
| | Water | BMP | Adopt as BMP |
| | Description | Down gradient controls: Operator will install adequate down gradient controls if they can not have a control at the source | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will minimize vehicle and engine idling | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will eliminate use of VOC paints and solvents | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will properly maintain vehicles and equipment | |
| | Waste | BMP | Adopt as BMP |
| | Description | Operator will properly test for and dispose of TENORM | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will properly capture and dispose of PFAS-contaminated soil and fire and flush water | |

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

Send comments and questions to both submitter's email and djregulatory@oxy.com.

This location will be renamed from BERRY-63N67W 8SENE to Berry Farms Well Pad 8-8HZ.

The existing well, Berry 1 (05-123-10411), within the proposed Oil and Gas Location will be P&A prior to construction.

An agricultural ditch is located within the proposed Oil and Gas Location. In coordination with the surface owner and tenant farmer this ditch will be rerouted by the surface owner. USACE determined this ditch is not jurisdictional therefore not necessitating a permit under the Clean Water Act to reroute.

Although not required by Rule, a Community Consultation Plan has been attached as "OTHER".

KMOG has obtained a Rule 1202.a(3) CPW waiver for "At new and existing Oil and Gas Locations, Operators will not situate new staging, refueling, or Chemical storage areas within 500 feet of the Ordinary High Water Mark (OHWM) of any river, perennial or intermittent stream, lake, pond, or wetland."

Weld County Pre-Application meeting summary attached as "Other".

Pre-application meeting summary attached as "Other".

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.

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 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 facility.

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.

The Preliminary Process Flow Diagram attached to this Form 2A describes the process at the Berry Farms Facility at the end of the consolidation of the existing facility with the new facility. The total number of wells this facility will serve will be thirteen (13). Of that total, five (5) wells are existing and eight (8) new wells are proposed in this form 2A.

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

Signed: _____ Date: 04/18/2022 Email: DJREGULATORY@OXY.COM

Print Name: TRACY COLLING Title: REGULATORY ADVISOR

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.

Condition of Approval

COA Type

Description

0 COA

Best Management Practices

| No BMP/COA Type | Description |
|------------------------|---|
| 1 Planning | <ul style="list-style-type: none"> • Ozone mitigation on forecasted high ozone days: operator will postpone the refueling of vehicles, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will suspend or delay the use of fossil fuel powered ancillary equipment, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will postpone construction activities, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will reschedule non-essential operational activities such as pigging, well unloading and tank cleaning, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. |
| 2 Pre-Construction | The existing well, Berry 1 (05-123-10411), within the proposed Oil and Gas Location will be P&A prior to construction. |
| 3 Traffic control | <ul style="list-style-type: none"> • Access Road: KMOG will utilize an existing access road from CR 17 for drilling, completions, and production operations, including maintenance equipment. The road will be properly constructed and maintained to accommodate for emergency vehicle access. |
| 4 General Housekeeping | <ul style="list-style-type: none"> • 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. • Good housekeeping measures will be implemented to prevent sediment, trash and toxic or hazardous substances from entering surface waters or impacting soils. Housekeeping practices include routine inspections, regular cleaning, site and equipment organization and maintenance, and appropriate chemical storage. • Materials stored on Berry Farms 8-8HZ Well Pad will be kept away from direct traffic to prevent accidents. • Dumpsters and trash receptacles will be enclosed and/or covered to prevent dissemination of rubbish when not in use. • Storage areas will be swept for trash / rubbish, and cleanup coordinated by construction personnel. • Drums and chemical storage containers will be clearly labeled, and an appropriate SDS kept on file to be made available for on-site personnel as needed. • Loadlines: All loadlines shall be bullplugged or capped. |
| 5 General Housekeeping | <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. • When feasible, wastes will be recycled, re-used, or treated onsite. Fluids 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. |
| 6 Wildlife | <ul style="list-style-type: none"> • An environmental assessment will be conducted immediately prior to pad construction, drilling, and completion operations. • Openings greater than 2" on equipment not running 24 hours a day will have avian protection installed. • Approximately two weeks prior to construction start, the approved location will be surveyed by 3rd party biological contractor for nests. • A site-specific spill prevention, control, and countermeasure plan compliant with EPA |

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| | <p>rule 40 CFR 112 Subpart A, B, C will be created for this location.</p> <ul style="list-style-type: none">• Automated emergency response systems and emergency shutdown systems will be installed.• Remote monitoring systems will be utilized at this location.• Vegetation will be controlled on the active location throughout the life of the project.• Water On Demand system and pipelines will be utilized to minimize truck traffic on location.• Periodic inspections for nests and of avian protection will occur throughout the life of the project.• Training is provided to employees and contractors on wildlife conservation practices, including no harassment, feeding of wildlife, or illegal hunting.• Fluids will be consolidated and centralized for collection and distribution to minimize impact to wildlife.• Infrastructure and facility are adequately sized to accommodate planned production.• Employees and contractors visiting location will follow Kerr-McGee Oil & Gas Onshore LP rules for accessing location, including speed limits and access timing. | |
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| 7 | Storm Water/Erosion Control | <p>Construction Phase</p> <ul style="list-style-type: none"> • Construction phasing and sequencing will be implemented at Berry Farms 8-8HZ Well Pad to minimize the amount of surface disturbance and exposed soils to the greatest extent practicable. • Ditch and berm shall be installed around the perimeter of the location, and subsequently around all topsoil stockpiles, to intercept and divert stormwater run-on/run-off and sediment from precipitation and melt events. • Track packing all topsoil stockpiles will occur to prevent erosion from stormwater and wind, as well as provide temporary stabilization. • Seeding and crimped straw mulch will be applied to prevent erosion and soil loss from stormwater and wind. • Vegetation establishment through seeding efforts will promote soil health and maintain carbon exchange. • Weed control will occur seasonally and as needed to hinder the spread of weeds throughout the topsoil stockpile(s) and help native grass establishment. • All waste from materials imported to Berry Farms 8-8HZ Well Pad will be placed in containment bins, and removed for disposal/recycling at an approved, licensed facility. • Self-contained port-o-lets will be placed on both the facility and well pad at Berry Farms 8-8HZ Well Pad and maintained by a licensed contractor at a frequency appropriate based on daily use. • No waste materials will be buried or dumped on Berry Farms 8-8HZ Well Pad. • Pre-existing vegetation cover will only be removed where necessary for the operation of construction and development at Berry Farms 8-8HZ Well Pad. Trees will only be cut or trimmed to facilitate clearing, grading and safe installation of the location. • Vegetative buffers will be preserved to the greatest extent practicable for construction and development. <p>Drilling Phase</p> <ul style="list-style-type: none"> • Ditch and berm shall be installed around the perimeter of the location, and subsequently around all topsoil stockpiles, to intercept and divert stormwater run-on/run-off and sediment from precipitation and melt events. • Track packing all topsoil stockpiles will occur to prevent erosion from stormwater and wind, as well as provide temporary stabilization. • Seeding and crimped straw mulch will be applied to prevent erosion and soil loss from stormwater and wind. • Vegetation establishment through seeding efforts will promote soil health and maintain carbon exchange. • Weed control will occur seasonally and as needed to hinder the spread of weeds throughout the topsoil stockpile(s) and help native grass establishment. <p>Production Phase</p> <ul style="list-style-type: none"> • Vegetation establishment through seeding efforts will promote soil health and maintain carbon exchange. • Weed control will occur seasonally and as needed to hinder the spread of weeds throughout the topsoil stockpile(s) and help native grass establishment. <p>Training and Certification</p> <ul style="list-style-type: none"> • All personnel involved with construction and stormwater activities will be adequately trained and familiarized with the applicable CDPS stormwater permit, local/State regulations, requirements for the stormwater permit, and identification of potential pollutant sources. • Training(s) will cover information and procedures identified in this SWMP, and will be conducted prior to the start of construction, and as needed. • Training is considered initial and ongoing for all personnel involved with construction and development at Berry Farms 8-8HZ Well Pad. | |
| 8 | Material Handling and Spill Prevention | <p>Drilling</p> <ul style="list-style-type: none"> • 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. • 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 | |

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| | <p>will be sufficiently impervious to contain spilled or released material. Berms and the liner and all Kerr-McGee Oil & Gas Onshore LP (KMOG) 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> <ul style="list-style-type: none">• 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.• Operator will not use PFAS on location. | |
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| 9 | Material Handling and Spill Prevention | <p>Completions</p> <ul style="list-style-type: none"> • 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. • Two completions crew members required and dedicated for all fluid transfers (no exceptions) from start to finish of the operation. Their sole focus is on the transfer. No fluid transfer will occur during crew change. Crew members conducting the fluid transfer will not leave the area until transfer operations completed. • Tanks (along with auxiliary equipment installed in tanks) will be inspected prior to use and replaced/repaired if damaged. • Appropriate secondary containment will be utilized when equipment maintenance is conducted on location. • Contractors will maintain an updated copy of their SPCC plan on location and its personnel will be trained accordingly. • Tanks will be labeled (signs, magnets, etc.) indicating the contents of the tank. • Verify tank capacity is capable of handling estimated volumes prior to operations start. • Tanks will have hatches, valves and bull plugs secured prior to transfers. • Shut down transfer pump and close supply valve when transfer or circulation is completed. 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. • Walk all lines and confirm valve alignment before starting the transfer. • Walk the lines as soon as the transfer starts to confirm no leaks. • Temporary produced water storage tanks will be designed, constructed, and maintained in accordance with the following portions of the National Fire Protection Association (NFPA) Code 30 (2008 version): 1) Tanks are built to engineering standards using noncombustible materials, with relief device sizing based on API 2000 standards. 2) Tanks are inspected and maintained while in use. 3) The only pipes within the containment are related to the temporary tanks (i.e. no external piping is co-located within the containment), and firefighting equipment is, likewise, not stored within the containment area. • 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. When construction is completed and the location is on production, site inspections will occur every 28 days at a minimum. • Monitor pressure responses and containment to identify potential leaks. Lines will be walked continuously throughout operations (between stages) to identify potential leaks. <ul style="list-style-type: none"> • 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. • Hourly walk-throughs and pressure measurements recorded during flowback operations for leak detection. • During operations, all fluid containing equipment is inspected daily. • 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. | |
| 10 | Material Handling and Spill Prevention | <p>Production</p> <ul style="list-style-type: none"> • 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. • 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- | |

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| | | <p>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> <ul style="list-style-type: none"> • Field Inspections include the following: Onsite and Offsite Pipelines (flowlines, production piping, gathering lines), Field Drainage Systems (oil traps, sumps, or skimmers); and additional equipment used during transferring of produced fluids. • 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. | |
| 11 | Material Handling and Spill Prevention | <p>Recording Keeping</p> <ul style="list-style-type: none"> • Inspections resulting in findings are reported to the IOC. These are entered into an internal management system. Corrective actions are automatically assigned when necessary. SPCC required inspection records are kept in accordance with US EPA requirements. • Maintenance or repair records are managed through an internal management system. These are tracked from assignment through completion of the tasks. • Leak records: All leaks are reported immediately to the IOC and logged in internal management systems. Leak reports are reviewed daily. Any additional investigation is conducted by trained personnel and records in the system. All leaks are tracked until final resolution. Records are retained per federal, state, and local guidelines. • Training Records: KMOG retains AVO training records for all personnel with access to the location in an internal management system. Records are retained per federal, state, and local guidelines. | |
| 12 | Dust control | <ul style="list-style-type: none"> • KMOG will proactively deploy fresh water to suppress dust along 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 as needed 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 • KMOG will proactively deploy fresh water on CR 36 from access road entrance east to CR 17 as needed. • 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). | |
| 13 | Construction | <ul style="list-style-type: none"> • 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. • Construction: Operator will only conduct during day light and there will be no nighttime operations that require lighting. | |
| 14 | Noise mitigation | <ul style="list-style-type: none"> • KMOG has conducted a Noise Impact Assessment for each phase of operations (drilling, completions, and production) to assess operational noise levels against the maximum allowable dBA and dBC noise levels stated in the Regulation. • The operator will comply with maximum permissible noise levels adjusted based on the results of the ambient noise survey. The adjusted noise levels are outlined in the Noise Mitigation Plan at respective compliance points: <ul style="list-style-type: none"> - Drilling and Completions: Compliance Points 1 and 3 – 65 db(A) Day / 60 db(A) Night – 65 db(C) Day / 65 db(C) Night - Drilling and Completions: Compliance Point 2 – 65 db(A) Day / 60 db(A) Night – 76 db(C) Day / 65 db(C) Night - Production: Compliance Points 1 and 3 – 60 db(A) Day / 55 db(A) Night – 60 db(C) Day / 60 db(C) Night - Production: Compliance Point 2 – 70 db(A) Day / 62 db(A) Night – 75 db(C) Day / 67 db(C) Night • Prior to commencement of any drilling and completion activities, KMOG will install approximately 1,560 linear feet of 32-foot-tall, engineered sound wall rated at STC-32, | |

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| | | <p>as proposed in the NIA below on page 18. This will include approximately 500 linear feet on the north side of the location, 320 linear feet on the East Side of the location, 500 linear feet on the South side of the location, and 240 linear feet on the West side of location.</p> <ul style="list-style-type: none"> • KMOG will utilize a Quiet Completions 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. Additional noise reduction modifications may also be implemented depending on the rig contractor utilized following a noise survey study. • At the Directors request, KMOG agrees to acquire an additional ambient at all three noise points of compliance 30 to 90 days prior to the commencement of operations. If the new ambient noise levels change any components of this Noise Mitigation Plan, a Form 4 sundry will be submitted to update the plan accordingly. • KMOG will deploy Continuous monitoring for all drilling and completions and any operations that lasts longer than 24 continuous hours. Monitor locations will coincide with the three noise points of compliance outlined in Figure 2 in Section 5 of this document. • 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. | |
| 15 | Emissions mitigation | <ul style="list-style-type: none"> • 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. • Operator uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading. • Operator will implement ambient air quality monitoring on site. • Operator will use non-emitting pneumatic controllers. • 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. • Ozone Action Days ±KMOG will comply with the follow mitigation measures, as feasible, on forecasted Ozone Action Days: <ul 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. | |

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|----|--------------------------------|---|--|
| 16 | Odor mitigation | <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. • KMOG will use a mud chiller with the intent to lower the drilling fluid temperature as fluids are redeployed downhole. Mud chillers will be installed downstream of the shale shakers. • KMOG uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading. | |
| 17 | Drilling/Completion Operations | <ul style="list-style-type: none"> • Guy line anchors will not be used. Base Beams will be used to stabilize the rig and removed after drilling. <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 sky glow. • 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 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. • Sound barriers be partially placed on the southeast and southwest sides of the location and will significantly reduce lighting trespass to surrounding off-site buildings. • 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 sky glow. • 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. • Sound barriers be partially placed on the northeast and southeast sides of the location and will significantly reduce lighting trespass to surrounding off-site buildings. • 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"> • KMOW will utilize LED fixtures to reduce sky glow. • KMOG will position all lights 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 lightning complaint, KMOG will address the complaint and work with all parties involved to ensure the complaint is resolved. | |
| 18 | Interim Reclamation | <ul style="list-style-type: none"> • Interim reclamation will commence within twelve months from first date of production for all disturbed areas affected by construction operations which are no longer in use or needed for production. Interim reclaimed areas will be returned to their original | |

| | | | |
|----|-------------------|---|--|
| | | <p>condition as practicable, or their final land use as designated by the surface owner.</p> <ul style="list-style-type: none"> • Seed and mulch are utilized in disturbed areas to establish stabilization through vegetative cover. • Seeding will take place once surface disturbing activities are complete. Topsoil stockpiles will be stabilized with seed and mulch no longer than 14-days after completion of stockpiling efforts unless weather or ground conditions are not suitable to properly create a seedbed and promote successful germination. • Seed & mulch will be installed on all disturbed areas no longer utilized for construction, and on all topsoil stockpiles which will remain on Berry Farms 8-8HZ Well Pad for use during final reclamation. Anticipated topsoil stockpiles will be situated along the northwestern perimeter for the well pad. • Seeding will remain in place until re-disturbed during final reclamation efforts. • In areas to be returned to crop, the seed bed will be prepared and left for surface owner to plant during next agricultural season. • Cropland Per rule 1003.b., "All segregated soil horizons removed from crop lands shall be replaced to their original relative positions and contour and shall be tilled adequately to re-establish a proper seedbed. Any perennial forage crops that were present before disturbance shall be re-established". All cropland locations will be reclaimed within three months from completion final ground disturbing activities. | |
| 19 | Final Reclamation | <ul style="list-style-type: none"> • 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. • 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: 19 comment(s)

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|--|
| 2201002 | COMMUNITY CONSULTATION PLAN |
| 4232312 | CDPHE CONSULTATION |
| 4232313 | RELATED LOCATION AND FLOWLINE MAP |
| 4232314 | WELD COUNTY PERMIT |
| 4232325 | DEMOCRAT OGDG COMMUNITY CONSULTATION PLAN, AUGUST 16, 2022 |
| 4232327 | INFORMED CONSENT LETTER |
| 4232328 | INFORMED CONSENT LETTER |
| 4232329 | INFORMED CONSENT LETTER |
| 24799506 | OTHER |
| 402958547 | FORM 2A SUBMITTED |
| 403014939 | LOCATION DRAWING |
| 403014982 | HYDROLOGY MAP |
| 403014983 | ACCESS ROAD MAP |
| 403014987 | DIRECTIONAL WELL PLAT |
| 403014995 | LOCATION AND WORKING PAD GIS SHP |
| 403015021 | SURFACE AGRMT/SURETY |
| 403015023 | CULTURAL FEATURES MAP |
| 403015024 | LOCATION PICTURES |
| 403015029 | ALA DATASHEET |
| 403016397 | CPW WAIVER |
| 403016411 | CONSULTATION SUMMARY |
| 403017074 | WILDLIFE HABITAT DRAWING |
| 403017096 | PRELIMINARY PROCESS FLOW DIAGRAMS |
| 403018904 | ALA NARRATIVE SUMMARY |
| 403062393 | GEOLOGIC HAZARD MAP |
| 403062394 | LAYOUT DRAWING |
| 403062395 | NRCS MAP UNIT DESC |

Total Attach: 27 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|---------------------|
| OGLA | The Director has determined that the OGDG application that this Form is a component of meets all requirements of Rule 306.a. The Director's Recommendation has been attached to the Form 2A. | 09/02/2022 |
| OGLA | The operator provided a synopsis of the Democrat OGDG. It has been attached and named OTHER. | 09/02/2022 |
| Final Review | With operator concurrence, changed the total well count from 9 to 8 on the Equipment tab and added a BMP that the existing vertical well will be plugged and abandoned prior to commencement of new construction. | 08/30/2022 |
| OGLA | Some attachments and plans have been replaced and a few data fields revised due to revisions requested by Weld County. | 08/23/2022 |

| | | |
|------|---|------------|
| LGD | <p>The Weld County Oil and Gas Energy Department (OGED) submits the following comments:</p> <ol style="list-style-type: none"> 1.The Kerr-McGee (KMG) Berry Farms 8-8HZ Well Pad location was reviewed and processed under Weld County Code, ORD2021-17. 2.Case number 1041WOGLA21-0024 has been assigned to this location. All files associated with the processing and review of this permit are accessible through the Weld County E-Permit center. If there are questions relating to the ability to access these files, please call the OGED office at 970-400-3580. 3.On October 11, 2021 a pre-application meeting with KMG, OGED, COGCC, CPW, and Weld County Planning Department was held. 4.KMG submitted their 1041 WOGLA Application to OGED on April 8, 2022. 5.The application was found to be complete and compliant with Weld County Code, ORD2021-17. 6.OGED did not receive any public comments or any Applications for Intervention. 7.A 1041 WOGLA hearing was held on June 9, 2022. 8.The OGED Hearing Officer considered testimony at the 1041 WOGLA hearing, and subsequently approved 1041WOGLA21-0024. 9.The final order was recorded with the Weld County Clerk and Recorder (reception no. 4836949) on June 22, 2022. 10.The final order was noticed in the Greeley Tribune on June 25, 2022. Approval and publication of KMG's application creates a vested property right pursuant of Article 68 of Title 24, C.R.S. 11.Multiple requirements of KMG were stipulated in the final order, which can be found on Weld County's E-Permit Center at www.weldgov.com. 12.The approved Weld County 1041 WOGLA Permit, and KMG's commitment to best management practices outlined in the application, will protect the health, safety, security and general welfare of the present and future residents of Weld County, while also protecting both the environment and wildlife. 13.1041WOGLA21-0024 Permit is valid for 3 years or can be extended upon request and review. 14.Due to the fact that KMG has completed the 1041 WOGLA Application process, and that a final order has been issued, recorded and legally published, Weld County has no additional concerns with the pending COGCC permit, and would recommend approval. | 06/28/2022 |
| OGLA | The Director has determined this OGD application is complete. Form pushed to IN PROCESS. | 05/31/2022 |

Total: 6 comment(s)

Public Comments

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

| 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: <div style="text-align: center; margin-top: 10px;">402958552</div> Date Received: <div style="text-align: center; margin-top: 10px;">04/15/2022</div> | | | | | | |
|---|---|--|---|---------------|---------|-----------|-----------|--|--|
| 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: OGDG ID: Expiration Date: | | | | | | |
| <input checked="" type="checkbox"/> New Location <input type="checkbox"/> Refile <input type="checkbox"/> 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). | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">Docket Number</th> <th style="width: 25%;">OGDP ID</th> <th style="width: 50%;">OGDP Name</th> </tr> <tr> <td>220400073</td> <td></td> <td></td> </tr> </table> | | | | Docket Number | OGDP ID | OGDP Name | 220400073 | | |
| Docket Number | OGDP ID | OGDP Name | | | | | | | |
| 220400073 | | | | | | | | | |
| 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 <input type="checkbox"/> This location is included in a Comprehensive Area Plan (CAP). CAP ID # _____ <input checked="" type="checkbox"/> This Location or its associated new access road, utility, or Pipeline corridor meets Rule 309.e.(2).A, B, or C. <input type="checkbox"/> This Location is within 2,640 feet of a GUDI or Type III Well per Rule 411.b.(4). <input type="checkbox"/> This Location includes a Rule 309.e.(2).E variance request. <input type="checkbox"/> This location includes a Rule 309.f.(1).A.ii. variance request. | | | | | | | | | |
| Operator Operator Number: <u>47120</u> Name: <u>KERR MCGEE OIL & GAS ONSHORE LP</u> Address: <u>P O BOX 173779</u> City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80217-3779</u> | | Contact Information Name: <u>Sam Samet</u> Phone: <u>(720) 929-3317</u> Fax: <u>()</u> email: <u>sam_samet@oxy.com</u> | | | | | | | |
| FINANCIAL ASSURANCE <input checked="" type="checkbox"/> Plugging and Abandonment Bond Surety ID (Rule 706): <u>20010124</u> <input type="checkbox"/> Gas Facility Surety ID (Rule 711): _____ <input type="checkbox"/> Waste Management Surety ID (Rule 704): _____ | | | | | | | | | |
| LOCATION IDENTIFICATION | | | | | | | | | |
| Name: <u>SWARTZ</u> Number: <u>2-4HZ</u> | | | | | | | | | |
| 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. | | | | | | | | | |
| QuarterQuarter: <u>NWNE</u> Section: <u>4</u> Township: <u>3N</u> Range: <u>67W</u> Meridian: <u>6</u> Ground Elevation: <u>4826</u> Latitude: <u>40.260465</u> Longitude: <u>-104.891432</u> GPS Quality Value: <u>1.9</u> Type of GPS Quality Value: <u>PDOP</u> Date of Measurement: <u>12/14/2021</u> | | | | | | | | | |

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: N/A

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. Yes

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: 03/23/2022

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

Status/disposition date: 07/06/2022

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: Jason Maxey Contact Phone: 970-400-3580

Contact Email: jmaxey@weldgov.com

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.

< No row provided >

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 1041 WOGLA permit was submitted to Weld County Oil & Gas Energy Department and received on 3/23/2022. This local permit was approved on 7/6/2022.

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: 10/27/2021

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. Yes

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? Yes

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.

- | | |
|---|---|
| <input checked="" type="checkbox"/> i. WPS < 2,000 feet from RBU/HOBU | <input type="checkbox"/> vi.aa. WPS within a surface water supply area |
| <input type="checkbox"/> ii. WPS < 2,000 feet from School/Child Care Center | <input type="checkbox"/> vi.bb. WPS < 2,640 feet from Type III or GUDI well |
| <input type="checkbox"/> iii. WPS < 1,500 feet from DOAA | <input checked="" type="checkbox"/> vii. WPS within/immediately upgradient of wetland/riparian corridor |
| <input type="checkbox"/> iv. WPS < 2,000 feet from jurisdictional boundary and PLG objects/requests ALA | <input checked="" type="checkbox"/> viii. WPS within HPH and CPW did not waive |
| <input type="checkbox"/> v. WPS within a Floodplain | <input type="checkbox"/> ix. Operator using Surface bond |
| | <input type="checkbox"/> x. WPS < 2,000 feet from RBU/HOBU/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:

| # | latitude | longitude | i | ii | iii | iv | v | vi | vii | viii | ix | x | Variance Required? | Comments |
|---|-----------|-------------|---|----|-----|----|---|----|-----|------|----|---|--------------------|--|
| | 40.256800 | -104.928978 | x | | | | | | | | | | | ALT Section 6 6 RBUs within 2000 ft.; unable to reach agreement with this surface owner. |
| | 40.253943 | -104.866721 | | | | x | x | | x | x | | | | ALT West Section 2 Town of Milliken is 642 feet away from the WPS; WPS is within a Floodplain; Location is immediately upgradient of both the St. Vrain and South Platte Rivers; WPS is within Mule Deer and Bald Eagle Roost HPH; Additional pad required to develop minerals. |
| | 40.256262 | -104.966244 | x | | | x | | | | | | | | ALT East Section 2 4 RBUs within 2000 ft.; Town of f Mead is 1,380 feet away from the WPS; Additional pad required to develop minerals. |
| | 40.257499 | -104.839698 | x | | | x | | | | | | x | | ALT Section 1 5 RBUs within 2000 ft.; One RBU is within a DIC at 1,480 ft; Town of Platteville is 700 feet away from the WPS; Additional pad required to develop minerals. |
| | 40.256262 | -104.966244 | x | | | | | | x | | | | | ALT Section 5 8 RBUs within 2000 ft. |

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: Heather Colleen Swartz

Phone: _____

Address: 8751 CR 36.5

Fax: _____

Address: _____

Email: RSwartz@myrgroup.com

City: Platteville State: CO Zip: 80651

Name: Richard Stanley Swartz Jr

Phone: _____

Address: 8751 CR 36.5

Fax: _____

Address: _____

Email: RSwartz@myrgroup.com

City: Platteville State: CO Zip: 80651

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>16</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>16</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>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 |
|--------------------------|----------|
| Electrical Boxes | <u>2</u> |
| Air Compressors | <u>2</u> |
| E-House | <u>1</u> |
| Communication Tower | <u>1</u> |
| Chemical Totes | <u>3</u> |

OTHER TEMPORARY EQUIPMENT

| Temporary Equipment Type | Number |
|--------------------------------|-----------|
| Fuel Tanks - Temporary Propane | <u>1</u> |
| Water Tanks (rig) | <u>2</u> |
| ECD (rig) | <u>1</u> |
| Generator | <u>2</u> |
| ECDs | <u>7</u> |
| Water Tanks | <u>32</u> |
| Purge Flares | <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. (4) |
|---|-----------|--|-----------|--|--------------------------|--------------------------|-------------------------|-------------------------------------|
| | | | | 604.b. (1) | 604.b. (2) | 604.b. (3) | Details of Condition(s) | |
| Building: | 73 Feet | | SW | | | | | |
| Residential Building Unit (RBU): | 626 Feet | | NW | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | <input checked="" 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 | | SW | | | | | |
| Public Road: | 307 Feet | | N | | | | | |
| Above Ground Utility: | 70 Feet | | SW | | | | | |
| Railroad: | 5280 Feet | | NW | | | | | |
| Property Line: | 177 Feet | | SW | | | | | |
| School Facility: | 5280 Feet | | N | | | | | |
| Child Care Center: | 5280 Feet | | N | | | | | |
| Disproportionately Impacted (DI) Community: | 5280 Feet | | NE | | | | | |
| RBU, HOBU, or School Facility within a DI Community. | 5280 Feet | | NE | <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 | 3 | 6 |
| Residential Building Units | 0 | 3 | 6 |
| High Occupancy Building Units | 0 | 0 | 0 |
| School Properties | 0 | 0 | 0 |
| School Facilities | 0 | 0 | 0 |
| Designated Outside Activity Areas | 0 | 0 | 0 |

CONSTRUCTION

Size of disturbed area during construction in acres: 15.79

Size of location after interim reclamation in acres: 4.27

Estimated post-construction ground elevation: 4825

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:

See waste management plan

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: _____

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

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:

agriculture

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: 38 - Nelson fine sandy loam, 3 - 9 % slopes

NRCS Map Unit Name: 61 - Tassel fine sandy loam, 5 - 20% slopes

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

GROUNDWATER AND WATER WELL INFORMATION

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

water well: 1431 Feet NE

Spring or Seep: 5280 Feet W

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 5 Feet

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

SWL determination: Three monitoring wells were drilled to a depth of 8' within the proposed oil and gas location. Groundwater was encountered at 6.3', 5.0' and not present in one well. KMOG conservatively estimates depth to groundwater at 5'.

SURFACE WATER AND WETLANDS

Provide the distance and direction to the nearest downgradient surface Waters of the State, as defined 75 Feet SW 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: 75 Feet SW

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

FRESHWATER POND / MOELLER RESERVOIR

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? Yes

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 12/08/2021 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):

| High Priority Habitat (list all that apply) | Oil and Gas Location | Access Road | Utility or Pipeline Corridor |
|---|----------------------|-------------|------------------------------|
| 1202.d.(3) - Mule deer migration & winter | x | x | |

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: \$ _____

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: \$ _____

Operator Proposed Wildlife BMPs

| No | Target Species | BMP Type | Description |
|----|----------------|----------------------|--|
| 1 | BALD EAGLE | Wildlife - Avoidance | The operator will preclude oil and gas operations within 0.5 miles of winter night roost or communal roost site between November 15 and March 15, if there is direct line of sight to the proposed operations. |

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 Target | COA/BMP Type | COGCC Action |
|----|-------------|---|--------------|
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will control bradenhead/casinghead venting | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will use lease automated custody transfer (LACT) system to remove/reduce the need for truck loadout | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use zero VOC (group III, low/negligible odor) drilling mud | |
| | Air | BMP | Adopt as BMP |
| | Description | Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use a chiller to cool drilling fluid as it is piped through the recirculation system before routing to the suction tanks | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will cover trucks transporting drill cuttings | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: Operator will ensure that all drilling fluid is removed from pipes before storage | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will eliminate use of VOC paints and solvents | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will minimize vehicle and engine idling | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will reduce truck traffic and worker traffic | |
| | Water | BMP | Adopt as BMP |
| | Description | Secondary containment: Operator will install perimeter controls to control potential sediment-laden runoff in the event of spill or release from Modular Large Volume Storage Tank | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will implement a "hybrid production flowback method" or "modern production flowback method"; Oil, water and gas will be routed through permanent equipment with the exception of one temporary separator that is necessary to prevent damage to permanent equipment. | |
| | Air | BMP | Adopt as BMP |

| | | | |
|--|-------------|--|--------------|
| | Description | Operator will implement ambient air quality monitoring on site | |
| | Water | BMP | Adopt as BMP |
| | Description | Operator will recycle or beneficially reuse flowback and produced water for use downhole | |
| | Water | BMP | Adopt as BMP |
| | Description | Vehicle fueling: Operator will ensure that a fueling contractor is present during the entire fueling process to prevent overfilling, leaks and drips from improper connections | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will properly maintain vehicles and equipment | |
| | Water | BMP | Adopt as BMP |
| | Description | Vehicle fueling: Operator will refuel vehicles only on impervious surfaces and never during storm events | |
| | Water | BMP | Adopt as BMP |
| | Description | Dust suppression: Operator will not use produced water or other process fluids for dust suppression | |
| | Water | BMP | Adopt as BMP |
| | Description | COGCC permit will incorporate other agency water quality protection plans by reference as applicable (e.g. stormwater management plan) | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will use non-emitting pneumatic controllers | |
| | Water | BMP | Adopt as BMP |
| | Description | Down gradient controls: Operator will install adequate down gradient controls if they can not have a control at the source | |
| | Air | BMP | Adopt as BMP |
| | Description | Engines: Operator will use tier IV or better engines for hydraulic fracturing | |
| | Water | BMP | Adopt as BMP |
| | Description | Outfall locations: Outlet protection should be used when a conveyance discharges onto a disturbed area where there is potential for accelerated erosion due to concentrated flow. Outlet protection should be provided where the velocity at the culvert outlet exceeds the maximum permissible velocity of the material in the receiving channel. | |
| | Water | BMP | Adopt as BMP |
| | Description | Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices | |
| | Air | BMP | Adopt as BMP |
| | Description | Pipelines: Operator will have adequate and committed pipeline take away capacity for all produced gas and oil | |
| | Air | BMP | Adopt as BMP |
| | Description | Electrification: Operator will use electric equipment and devices (e.g. vapor recovery units or VRUs, fans, etc.) to minimize combustion sources on site (if yes, operator will provide a list outlining which equipment and devices will be electrified) | |
| | Water | BMP | Adopt as BMP |
| | Description | Documentation / stormwater management plan: If it is infeasible to install or repair a control measure immediately after discovering a deficiency, operator will document and keep on record in the stormwater management plan: (a) a description of why it is infeasible to initiate the installation or repair immediately; and (b) a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible. | |
| | Waste | BMP | Adopt as BMP |
| | Description | Operator will properly characterize and dispose of all waste (i.e. the specific landfill/waste disposal location allows for acceptance of the waste stream) | |
| | Waste | BMP | Adopt as BMP |

| | | | |
|--|-------------|--|--------------|
| | Description | Operator will properly test for and dispose of TENORM | |
| | PFAS | BMP | Adopt as BMP |
| | Description | Operator will coordinate with nearby fire district(s) to evaluate whether PFAS-free foam can provide the required performance for the specific hazard | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will properly characterize the site to determine the level, nature and extent of contamination | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a destruction efficiency of 98% or better | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will properly capture and dispose of PFAS-contaminated soil and fire and flush water | |

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

The HPH for mule deer migration corridor and severe winter range was identified during the planning process. However after field consultation with CPW it was determined that the HPH is not applicable at this location due fencing that precludes mule deer access.

Bald eagle winter night roost was identified. In consultation with CPW KMOG agrees to observe to the timing limitation of November 15 - March 15 to restrict pre-production activities.

KMOG has obtained a Rule 1202.a(3) CPW waiver for "At new and existing Oil and Gas Locations, Operators will not situate new staging, refueling, or Chemical storage areas within 500 feet of the Ordinary High Water Mark ("OHWM") of any river, perennial or intermittent stream, lake, pond, or wetland."

A 1041 WOGLA was submitted in association with this location to Weld County. The permit number is 1041WOGLA21-0027.

Weld County Pre-Application meeting summary attached as "Other".

Although not required by Rule, a Community Consultation Plan has been attached as "OTHER".

Pre-application meeting summary attached as "OTHER".

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 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.

32 temporary 500 BBL skid-mounted frac tanks will be utilized during flowback and initially for produced water. Seven 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: 04/15/2022 Email: sam_samet@oxy.com

Print Name: Sam Samet Title: Senior 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.

Condition of Approval

COA Type

Description

| | |
|-------|--|
| | |
| 0 COA | |

Best Management Practices

| No BMP/COA Type | Description |
|------------------------|---|
| 1 Planning | <ul style="list-style-type: none"> • 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. • Ozone mitigation on forecasted high ozone days: operator will postpone the refueling of vehicles, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will suspend or delay the use of fossil fuel powered ancillary equipment, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will postpone construction activities, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will reschedule non-essential operational activities such as pigging, well unloading and tank cleaning, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. |
| 2 Traffic control | Access Road: KMOG will utilize the existing Weld County Road (WCR) 17 to WCR 38 to the lease access road to the pad for drilling, completions, and production operations, including maintenance equipment. The road will be properly constructed and maintained to accommodate for emergency vehicle access. |
| 3 General Housekeeping | <ul style="list-style-type: none"> • 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. • Good housekeeping measures will be implemented to prevent sediment, trash and toxic or hazardous substances from entering surface waters or impacting soils. Housekeeping practices include routine inspections, regular cleaning, site and equipment organization and maintenance, and appropriate chemical storage. • Materials stored on Swartz 2-4HZ well pad will be kept away from direct traffic to prevent accidents. • Dumpsters and trash receptacles will be enclosed and/or covered to prevent dissemination of rubbish when not in use. • Storage areas will be swept for trash / rubbish, and cleanup coordinated by construction personnel. • Drums and chemical storage containers will be clearly labeled, and an appropriate SDS kept on file to be made available for on-site personnel as needed. • Loadlines: All loadlines shall be bullplugged or capped. |
| 4 General Housekeeping | <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. • When feasible, wastes will be recycled, re-used, or treated onsite. Fluids 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. |
| 5 Wildlife | <p>AVOIDANCE MEASURES</p> <ul style="list-style-type: none"> • Pad construction and drilling will be scheduled to avoid the timing stipulations of bald eagle winter night roost (November 15th - March 15th). <p>MINIMIZATION MEASURES</p> <ul style="list-style-type: none"> • The gates surrounding the operations area will remain closed and locked at all times to prevent wildlife from entering the property. |

| | | |
|--|--|--|
| | <ul style="list-style-type: none"> • A sound barrier will be installed during pad construction for drilling and completion operations to reduce noise pollution. • Light pollution will be minimized by directing rig lighting downward and away from the Saint Vrain Creek river corridor; this practice will minimize impacts to BEWNR. • KMOG will use CPW-recommended seed mix based on present soil conditions for interim and final reclamation conducted pursuant to Rules 1003 and 1004 and when consistent with the Surface Owner's approval and any local soil conservation district requirements. Location specific plan can be found in the reclamation plan. Seed mix information will be made available upon request. • Openings greater than 2" on equipment not running 24 hours a day will have avian protection installed. • Approximately two weeks prior to construction start, the approved location will be surveyed by 3rd party biological contractor for nests. • A site-specific spill prevention, control, and countermeasure plan compliant with EPA rule 40 CFR 112 Subpart A, B, C will be created for this location. • Automated emergency response systems and emergency shutdown systems will be installed. • Remote monitoring systems will be utilized at this location. • Vegetation will be controlled on the active location throughout the life of the project. • A Water On Demand system and pipelines will be utilized to minimize truck traffic on location. • Periodic inspections for nests and of avian protection will occur throughout the life of the project. • Training is provided to employees and contractors on wildlife conservation practices, including no harassment, feeding of wildlife, or illegal hunting. • Fluids will be consolidated and centralized for collection and distribution to minimize impact to wildlife. • Infrastructure and facility are adequately sized to accommodate planned production. • Employees and contractors visiting location will follow Kerr-McGee Oil & Gas Onshore LP rules for accessing location, including speed limits and access timing. | |
|--|--|--|

| | | | |
|---|--|--|--|
| 6 | Storm Water/Erosion Control | <p>Construction Phase</p> <ul style="list-style-type: none"> • Construction phasing and sequencing will be implemented at Swartz 2-4HZ Well Pad to minimize the amount of surface disturbance and exposed soils to the greatest extent practicable. • Ditch and berm shall be installed around the perimeter of the location, and subsequently around all topsoil stockpiles, to intercept and divert stormwater run-on/run-off and sediment from precipitation and melt events. • Track packing all topsoil stockpiles will occur to prevent erosion from stormwater and wind, as well as provide temporary stabilization. • Seeding and crimped straw mulch will be applied to prevent erosion and soil loss from stormwater and wind. • Vegetation establishment through seeding efforts will promote soil health and maintain carbon exchange. • Weed control will occur seasonally and as needed to hinder the spread of weeds throughout the topsoil stockpile(s) and help native grass establishment. • All waste from materials imported to Swartz 2-4HZ Well Pad will be placed in containment bins, and removed for disposal/recycling at an approved, licensed facility. • Self-contained port-o-lets will be placed on both the facility and well pad at Swartz 2-4HZ Well Pad and maintained by a licensed contractor at a frequency appropriate based on daily use. • No waste materials will be buried or dumped on Swartz 2-4HZ Well Pad. • Pre-existing vegetation cover will only be removed where necessary for the operation of construction and development at Swartz 2-4HZ Well Pad. Trees will only be cut or trimmed to facilitate clearing, grading and safe installation of the location. • Vegetative buffers will be preserved to the greatest extent practicable for construction and development. <p>Drilling Phase</p> <ul style="list-style-type: none"> • Ditch and berm shall be installed around the perimeter of the location, and subsequently around all topsoil stockpiles, to intercept and divert stormwater run-on/run-off and sediment from precipitation and melt events. • Track packing all topsoil stockpiles will occur to prevent erosion from stormwater and wind, as well as provide temporary stabilization. • Seeding and crimped straw mulch will be applied to prevent erosion and soil loss from stormwater and wind. • Vegetation establishment through seeding efforts will promote soil health and maintain carbon exchange. • Weed control will occur seasonally and as needed to hinder the spread of weeds throughout the topsoil stockpile(s) and help native grass establishment. <p>Production Phase</p> <ul style="list-style-type: none"> • Vegetation establishment through seeding efforts will promote soil health and maintain carbon exchange. • Weed control will occur seasonally and as needed to hinder the spread of weeds throughout the topsoil stockpile(s) and help native grass establishment. <p>Training and Certification</p> <ul style="list-style-type: none"> • All personnel involved with construction and stormwater activities will be adequately trained and familiarized with the applicable CDPS stormwater permit, local/State regulations, requirements for the stormwater permit, and identification of potential pollutant sources. • Training(s) will cover information and procedures identified in this SWMP, and will be conducted prior to the start of construction, and as needed. • Training is considered initial and ongoing for all personnel involved with construction and development at Swartz 2-4HZ Well Pad. <p>Swartz 2-4HZ Well Pad</p> | |
| 7 | Material Handling and Spill Prevention | <p>Drilling</p> <ul style="list-style-type: none"> • 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. • 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 | |

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| | | <p>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 Kerr-McGee Oil & Gas Onshore LP (KMOG) 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> <ul style="list-style-type: none"> • 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. • Operator will not use PFAS on location. | |
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| 8 | Material Handling and Spill Prevention | <p>Completions</p> <ul style="list-style-type: none"> • 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. • Two completions crew members required and dedicated for all fluid transfers (no exceptions) from start to finish of the operation. Their sole focus is on the transfer. No fluid transfer will occur during crew change. Crew members conducting the fluid transfer will not leave the area until transfer operations completed. • Tanks (along with auxiliary equipment installed in tanks) will be inspected prior to use and replaced/repaired if damaged. Kerr-McGee Oil & Gas Onshore LP (KMOG) Fluid Leak Detection Plan – Berry Farms Wells 8-8HZ 3 • Appropriate secondary containment will be utilized when equipment maintenance is conducted on location. • Contractors will maintain an updated copy of their SPCC plan on location and its personnel will be trained accordingly. • Tanks will be labeled (signs, magnets, etc.) indicating the contents of the tank. • Verify tank capacity is capable of handling estimated volumes prior to operations start. • Tanks will have hatches, valves and bull plugs secured prior to transfers. • Shut down transfer pump and close supply valve when transfer or circulation is completed. 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. • Walk all lines and confirm valve alignment before starting the transfer. • Walk the lines as soon as the transfer starts to confirm no leaks. • Temporary produced water storage tanks will be designed, constructed, and maintained in accordance with the following portions of the National Fire Protection Association (NFPA) Code 30 (2008 version): 1) Tanks are built to engineering standards using noncombustible materials, with relief device sizing based on API 2000 standards. 2) Tanks are inspected and maintained while in use. 3) The only pipes within the containment are related to the temporary tanks (i.e. no external piping is co-located within the containment), and firefighting equipment is, likewise, not stored within the containment area. • 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. When construction is completed and the location is on production, site inspections will occur every 28 days at a minimum. • Monitor pressure responses and containment to identify potential leaks. Lines will be walked continuously throughout operations (between stages) to identify potential leaks. <p>• 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> <ul style="list-style-type: none"> • Hourly walk-throughs and pressure measurements recorded during flowback operations for leak detection. • During operations, all fluid containing equipment is inspected daily. • 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. | |
| 9 | Material Handling and Spill Prevention | <p>Production</p> <ul style="list-style-type: none"> • 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. • 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, | |

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| | | <p>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> <ul style="list-style-type: none"> • Field Inspections include the following: Onsite and Offsite Pipelines (flowlines, production piping, gathering lines), Field Drainage Systems (oil traps, sumps, or skimmers); and additional equipment used during transferring of produced fluids. • 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. |
| 10 | Material Handling and Spill Prevention | <p>Recording Keeping</p> <ul style="list-style-type: none"> • Inspections resulting in findings are reported to the IOC. These are entered into an internal management system. Corrective actions are automatically assigned when necessary. SPCC required inspection records are kept in accordance with US EPA requirements. • Maintenance or repair records are managed through an internal management system. These are tracked from assignment through completion of the tasks. • Leak records: All leaks are reported immediately to the IOC and logged in internal management systems. Leak reports are reviewed daily. Any additional investigation is conducted by trained personnel and records in the system. All leaks are tracked until final resolution. Records are retained per federal, state, and local guidelines. • Training Records: KMOG retains AVO training records for all personnel with access to the location in an internal management system. Records are retained per federal, state, and local guidelines. |
| 11 | Dust control | <ul style="list-style-type: none"> • KMOG will proactively deploy fresh water to suppress dust along 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 as needed 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 • KMOG will proactively deploy fresh water on CR 36 from access road entrance east to CR 17 as needed. • 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). |
| 12 | Construction | <ul style="list-style-type: none"> • 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. • Construction: Operator will only conduct during day light and there will be no nighttime operations that require lighting. |
| 13 | Noise mitigation | <ul style="list-style-type: none"> • KMOG has conducted a Noise Impact Assessment for each phase of operations (drilling, completions, and production) to assess operational noise levels against the maximum allowable dBA and dBC noise levels stated in the Regulation. • The operator will comply with maximum permissible noise levels adjusted based on the results of the ambient noise survey. The adjusted noise levels are outlined in the Noise Mitigation Plan at respective compliance points: <ul style="list-style-type: none"> - Drilling and Completions: Compliance Points 1, 3, and 4 – 65 db(A) Day / 60 db(A) Night – 65 db(C) Day / 65 db(C) Night - Drilling and Completions: Compliance Point 2 – 65 db(A) Day / 60 db(A) Night – 79 db(C) Day / 71 db(C) Night - Production: Compliance Points 1, 3, and 4 – 60 db(A) Day / 55 db(A) Night – 60 db(C) Day / 60 db(C) Night - Production: : Compliance Point 2 – 70 db(A) Day / 64 db(A) Night – 75 db(C) Day / 70 db(C) Night • Prior to commencement of any drilling and completion activities, approximately 2,040 |

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| | | <p>linear feet of 32 foot tall, engineered sound wall rated at STC 32 will be installed as proposed in the NIA in the Noise Mitigation Plan. This will include approximately 640 linear feet on the north side of the location, 360 linear feet on the East Side of the location, 640 linear feet on the South side of the location, and 400 linear feet on the West side of location.</p> <ul style="list-style-type: none"> • A Quiet Completions Fleet will be utilized for completions operations. • At the Directors request, OXY agrees to acquire an additional ambient at all four noise points of compliance 30 to 90 days prior to the commencement of operations. If the new ambient noise levels change any components of this Noise Mitigation Plan, a Form 4 sundry will be submitted to update the plan accordingly. • Continuous monitoring will be employed for all drilling and completions and any operations that lasts longer than 24 continuous hours. Monitor locations will coincide with the four noise points of compliance outlined in Figure 2 in Section 5 of this document. • 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. • OXY will post contact information to receive and address noise complaints arising from preproduction operations around the clock, 24-hours, 7 days per week. Upon receipt of a complaint, either directly to OXY or from the COGCC, OXY will contact relative stakeholder within 24 hours of receipt. | |
| 14 | Emissions mitigation | <ul style="list-style-type: none"> • 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. • Operator uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading. • Operator will implement ambient air quality monitoring on site. • Operator will use non-emitting pneumatic controllers. • 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. • Ozone Action Days ±KMOG will comply with the follow mitigation measures, as feasible, on forecasted Ozone Action Days: <ul 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. | |
| 15 | Odor mitigation | <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. • KMOG will use a mud chiller with the intent to lower the drilling fluid temperature as fluids are redeployed downhole. Mud chillers will be installed downstream of the shale shakers. • KMOG uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading. | |
| 16 | Drilling/Completion Operations | <ul style="list-style-type: none"> • Guy line anchors will not be used. Base Beams will be used to stabilize the rig and removed after drilling. <p>Construction Phase:</p> | |

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| | | <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 sky glow. • 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 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. • Sound barriers be partially placed on the northeast and southeast sides of the location and will significantly reduce lighting trespass to surrounding off-site buildings. • 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 sky glow. • 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. • Sound barriers be partially placed on the northeast and southeast sides of the location and will significantly reduce lighting trespass to surrounding off-site buildings. • 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"> • KMOW will utilize LED fixtures to reduce sky glow. • KMOG will position all lights 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 lightning complaint, KMOG will address the complaint and work with all parties involved to ensure the complaint is resolved. | |
| 17 | Interim Reclamation | <ul style="list-style-type: none"> • Interim reclamation will commence within twelve months from first date of production for all disturbed areas affected by construction and drilling operations which are no longer in use or needed for production. Interim reclaimed areas will be returned to their original condition as practicable, or their final land use as designated by the surface owner. • Seed and mulch are utilized in disturbed areas to establish stabilization through vegetative cover. • Seeding will take place once surface disturbing activities are complete. Topsoil stockpiles will be stabilized with seed and mulch no longer than 14-days after completion of stockpiling efforts unless weather or ground conditions are not suitable to properly create a seedbed and promote successful germination. • Seed & mulch will be installed on all disturbed areas no longer utilized for construction, and on all topsoil stockpiles which will remain on Swartz 2-4HZ for use during final reclamation. Anticipated topsoil stockpiles will be situated along the southern perimeter of the well pad. • Seeding will remain in place until re-disturbed during final reclamation efforts. • In areas to be returned to crop, the seed bed will be prepared and left for surface owner to plant during next agricultural season. • Cropland Per rule 1003.b., "All segregated soil horizons removed from crop lands shall be replaced to their original relative positions and contour and shall be tilled adequately to re-establish a proper seedbed. Any perennial forage crops that were present before disturbance shall be re-established". All cropland locations will be reclaimed within three months from completion final ground disturbing activities. | |

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| 18 | Final Reclamation | <ul style="list-style-type: none"> 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. 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. |
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Total: 18 comment(s)

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|--|
| 2201002 | COMMUNITY CONSULTATION PLAN |
| 4232303 | WELD COUNTY PERMIT |
| 4232312 | CDPHE CONSULTATION |
| 4232313 | RELATED LOCATION AND FLOWLINE MAP |
| 4232325 | DEMOCRAT OGDG COMMUNITY CONSULTATION PLAN, AUGUST 16, 2022 |
| 4232330 | INFORMED CONSENT LETTER |
| 4232331 | INFORMED CONSENT LETTER |
| 4232332 | INFORMED CONSENT LETTER |
| 4232333 | INFORMED CONSENT LETTER |
| 4232334 | INFORMED CONSENT |
| 24799506 | OTHER |
| 402958552 | FORM 2A SUBMITTED |
| 403014677 | SURFACE AGRMT/SURETY |
| 403014680 | NRCS MAP UNIT DESC |
| 403014681 | ACCESS ROAD MAP |
| 403014684 | CULTURAL FEATURES MAP |
| 403014687 | DIRECTIONAL WELL PLAT |
| 403014698 | LOCATION DRAWING |
| 403014702 | LOCATION PICTURES |
| 403014703 | PRELIMINARY PROCESS FLOW DIAGRAMS |
| 403014848 | OIL AND GAS LOCATION GIS SHP |
| 403014876 | ALA DATASHEET |
| 403014882 | CPW WAIVER |
| 403015383 | CONSULTATION SUMMARY |
| 403016026 | WILDLIFE HABITAT DRAWING |
| 403025128 | HYDROLOGY MAP |
| 403062411 | ALA NARRATIVE SUMMARY |
| 403062412 | CPW CONSULTATION |
| 403062413 | GEOLOGIC HAZARD MAP |
| 403062414 | LAYOUT DRAWING |

Total Attach: 30 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|--|----------------------------|
| OGLA | The Director has determined that the OGDG application that this Form is a component of meets all requirements of Rule 306.a. The Director's Recommendation has been attached to the Form 2A. | 09/02/2022 |
| OGLA | The operator provided a synopsis of the Democrat OGDG. It has been attached and named OTHER. | 09/02/2022 |

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| OGLA | Staff met with the Director to discuss granting relief from compensatory mitigation. The Director defers to CPW's recommendation, and pursuant to Rule 1203.a.(3), grants an exception to direct compensatory mitigation. | 09/02/2022 |
| OGLA | The attached CPW Consultation Summary and Wildlife Mitigation Plan erroneously discuss CPW granting a waiver to Rule 1202.d. In consultation with CPW, staff confirmed and clarified that CPW determined there is an existing 8 foot tall animal exclusion fence around the entire property; the Location, proposed to be constructed inside this enclosure, is not accessible to mule deer. CPW identifies that since no mule deer can access the Location, no direct impacts to mule deer will occur. CPW also identified that this Location is in an area of 5 or more Oil and Gas Locations, so indirect impact mitigation fees should not apply. CPW recommends the Director grant an exception to direct compensatory mitigation fees per Rule 1203.a.(3). | 09/02/2022 |
| OGLA | OGLA staff confirmed with CPW Energy Liaison Brandon Marrette that there is a 8-foot tall fence around the entire property such that Mule Deer cannot get past it and that no compensatory mitigation fees should be assessed because this HPH is essentially inaccessible to Mule Deer. | 09/02/2022 |
| OGLA | Informed Consents have been attached. | 09/01/2022 |
| OGLA | Some attachments and plans have been replaced and a few data fields revised due to revisions requested by Weld County. | 08/23/2022 |
| LGD | <p>The Weld County Oil and Gas Energy Department (OGED) submits the following comments:</p> <ol style="list-style-type: none"> 1.The Kerr-McGee (KMG) Swartz 2-4HZ location was reviewed and processed under Weld County Code, ORD2021-17. 2.Case number 1041WOGLA21-0027 has been assigned to this location. All files associated with the processing and review of this permit are accessible through the Weld County E-Permit center. If there are questions relating to the ability to access these files, please call the OGED office at 970-400-3580. 3.On October 11, 2021 a pre-application meeting with KMG, OGED, COGCC, CPW, and Weld County Planning Department was held. 4.KMG submitted their 1041 WOGLA Application to OGED on March 23, 2022. 5.The application was found to be complete and compliant with Weld County Code, ORD2021-17. 6.OGED did not receive any public comments or any Applications for Intervention. 7.A 1041 WOGLA hearing is scheduled to be held on June 30, 2022. 8.If the OGED Hearing Officer subsequently approves 1041WOGLA21-0027, the final order will be recorded with the Weld County Clerk and Recorder and will be noticed in the Greeley Tribune creating a vested property right pursuant of Article 68 of Title 24, C.R.S. 9.OGED Staff have recommended approval to the OGED Hearing Officer for 1041WOGLA21-0027. 10.KMG has committed to best management practices outlined in the application, that protect the health, safety, security and general welfare of the present and future residents of Weld County, while also protecting both the environment and wildlife. | 06/28/2022 |
| OGLA | The Director has determined this OGD application is complete. Form pushed to IN PROCESS. | 05/31/2022 |

Total: 9 comment(s)

Public Comments

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

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:

402958562

Date Received:

04/18/2022

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: **436576**

OGDP ID:

Expiration Date:

☐ New Location ☐ Refile ☒ Amend Existing Location # 436576

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 |
|---------------|---------|-----------|
| 220400073 | | |

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: TRACY COLLING

Phone: (720) 9296160

Fax: ()

email: TRACY_COLLING@OXY.COM

FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID (Rule 706): 20010124 ☐ Gas Facility Surety ID (Rule 711): _____
- ☐ Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: BERRY FARMS FACILITY Number: 8-8HZ

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.

QuarterQuarter: NWNE Section: 8 Township: 3N Range: 67W Meridian: 6 Ground Elevation: 4825

Latitude: 40.245463 Longitude: -104.910202

GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 12/04/2020

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

| This proposed Oil and Gas Location is: | LOCATION ID # | FORM 2A DOC # |
|---|---------------|---------------|
| Production Facilities Location serves Well(s) | 318973 | 402958547 |
| Production Facilities Location serves Well(s) | 436028 | |

RELEVANT LOCAL GOVERNMENT SITING INFORMATION

County: WELD Municipality: N/A

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. Yes

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: 03/07/2022

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

Status/disposition date: 06/21/2022

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: Jason Maxey Contact Phone: 970-400-3580

Contact Email: jmaxey@weldgov.com

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.

< No row provided >

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:

1041WOGLA21-0025

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: 09/27/2021

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? Yes

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.

- | | |
|---|---|
| <input checked="" type="checkbox"/> i. WPS < 2,000 feet from RBU/HOBU | <input type="checkbox"/> vi.aa. WPS within a surface water supply area |
| <input type="checkbox"/> ii. WPS < 2,000 feet from School/Child Care Center | <input type="checkbox"/> vi.bb. WPS < 2,640 feet from Type III or GUDI well |
| <input type="checkbox"/> iii. WPS < 1,500 feet from DOAA | <input checked="" type="checkbox"/> vii. WPS within/immediately upgradient of wetland/riparian corridor |
| <input type="checkbox"/> iv. WPS < 2,000 feet from jurisdictional boundary and PLG objects/requests ALA | <input type="checkbox"/> viii. WPS within HPH and CPW did not waive |
| <input type="checkbox"/> v. WPS within a Floodplain | <input type="checkbox"/> ix. Operator using Surface bond |
| | <input type="checkbox"/> x. WPS < 2,000 feet from RBU/HOBU/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:

| # | latitude | longitude | i | ii | iii | iv | v | vi | vii | viii | ix | x | Variance Required? | Comments |
|---|-----------|-------------|---|----|-----|----|---|----|-----|------|----|---|--------------------|--|
| | 40.243470 | -104.866910 | | | | | | | x | x | | | | ALT 4 = SECTION 11 NW4 Surface Owner unresponsive |
| | 40.245910 | -104.903130 | x | | | | | | x | | | | | ALT 1 = SECTION 9 3 RBUs within 2,000 ft. Surface Owner unresponsive |
| | 40.246280 | -104.845090 | x | | | | | | x | | | | | ALT 6 = SECTION 12 8 RBUs within 2,000 ft |
| | 40.236320 | -104.850090 | x | | | | x | | x | | | | | ALT 3 = SECTION 11 SE4 6 RBUs within 2,000 ft. Surface Owner unresponsive |
| | 40.239110 | -104.876030 | | | | | | | | x | | | | ALT 2 = SECTION 10 Surface Owner unresponsive |
| | 40.244370 | -104.852570 | x | | | | | | x | x | | | | ALT 5 = SECTION 11 NE4 5 RBUs within 2,000 ft. Pad location at surface owners request to protect more valuable crop land |

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: Berry Farms LLC

Phone: _____

Address: 2195 Chantala Ln

Fax: _____

Address: _____

Email: garrettchar@comcast.net

City: Pueblo State: CO Zip: 81066

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: No

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 | 0 | Oil Tanks | 0 | Condensate Tanks | 1 | Water Tanks | 3 | Buried Produced Water Vaults | 0 |
| Drilling Pits | 0 | Production Pits | 0 | Special Purpose Pits | 0 | Multi-Well Pits | 0 | Modular Large Volume Tank | 0 |
| Pump Jacks | 0 | Separators | 7 | Injection Pumps | 0 | Heater-Treaters | 0 | Gas Compressors | 0 |
| Gas or Diesel Motors | 0 | Electric Motors | 0 | Electric Generators | 0 | Fuel Tanks | 0 | LACT Unit | 2 |
| Dehydrator Units | 0 | Vapor Recovery Unit | 0 | VOC Combustor | 1 | Flare | 0 | Enclosed Combustion Devices | 0 |
| Meter/Sales Building | 1 | Pigging Station | 0 | Vapor Recovery Towers | 0 | | | | |

OTHER PERMANENT EQUIPMENT

| Permanent Equipment Type | Number |
|--------------------------|--------|
| E House | 1 |
| Air Compressor | 1 |
| Electrical Box | 2 |
| Chemical Tote | 2 |

OTHER TEMPORARY EQUIPMENT

| Temporary Equipment Type | Number |
|--------------------------|--------|
| ECD | 6 |
| Purge Flare | 3 |
| Water Tanks | 16 |
| Propane Tank | 1 |
| Generator | 2 |

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 and gas pipelines will be used at this location.

The oil and gas pipelines will be constructed by a 3rd party midstream company.

CULTURAL DISTANCE AND DIRECTION

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

| | | | | Rule 604.b Conditions Satisfied (check all that apply): | | | Details of Condition(s) | 604.b. (4) |
|------------------------------------|-----------|--|-----------|--|--------------------------|--------------------------|-------------------------|-------------------------------------|
| | Distance | | Direction | 604.b. (1) | 604.b. (2) | 604.b. (3) | | |
| Building: | 854 Feet | | N | | | | | |
| Residential Building Unit (RBU): | 854 Feet | | N | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | <input checked="" type="checkbox"/> |
| High Occupancy Building Unit(HOBU) | 5280 Feet | | SE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> |
| Designated Outside Activity Area: | 5280 Feet | | SW | | | | | |
| Public Road: | 608 Feet | | N | | | | | |
| Above Ground Utility: | 596 Feet | | N | | | | | |
| Railroad: | 5280 Feet | | NW | | | | | |
| Property Line: | 31 Feet | | E | | | | | |

School Facility: 5280 Feet SE
 Child Care Center: 5280 Feet SE
 Disproportionately Impacted (DI) Community: 5280 Feet NE
 RBU, HOBUs, or School Facility within a DI Community: 5280 Feet NE ☐ ☐ ☐

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 | 1 | 1 |
| Residential Building Units | 0 | 1 | 1 |
| High Occupancy Building Units | 0 | 0 | 0 |
| School Properties | 0 | 0 | 0 |
| School Facilities | 0 | 0 | 0 |
| Designated Outside Activity Areas | 0 | 0 | 0 |

CONSTRUCTION

Size of disturbed area during construction in acres: 6.10

Size of location after interim reclamation in acres: 2.06

Estimated post-construction ground elevation: 4826

DRILLING PROGRAM

Will a closed-loop drilling system be used? _____

Is H2S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? _____ If YES, attach H2S Drilling Operations Plan.

Will salt sections be encountered during drilling: _____

Will salt based (>15,000 ppm Cl) drilling fluids be used? _____

Will oil based drilling fluids be used? _____

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: _____ Drilling Fluids Disposal Method: _____

Cutting Disposal: _____ Cuttings Disposal Method: _____

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: _____

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:

Agriculture

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: 33 - Kim loam, 3 - 5% slopes

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

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: 765 Feet W

Spring or Seep: 5280 Feet W

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 27 Feet

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

Location Elev: 4826'

Monitoring well 1050' SE (see construction layout drawing for Berry Farms 8-8HZ Well Pad), Elev 4803', SWL 4.5' (will assume 4' for SWL calculation), depth 8'

SWL Calc: $(4826 - 4803) + 4 = 27$

SURFACE WATER AND WETLANDS

Provide the distance and direction to the nearest downgradient surface Waters of the State, as defined 417 Feet SW

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: 417 Feet SW

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

FRESHWATER EMERGENT WETLAND

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? Yes

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: \$ _____

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: \$ _____

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 Target | COA/BMP Type | COGCC Action |
|----|-------------|--|--------------|
| | Air | BMP | Adopt as BMP |
| | Description | Operator will properly maintain vehicles and equipment | |
| | Water | BMP | Adopt as BMP |

| | | | |
|--|-------------|--|--------------|
| | Description | Documentation / stormwater management plan: If it is infeasible to install or repair a control measure immediately after discovering a deficiency, operator will document and keep on record in the stormwater management plan: (a) a description of why it is infeasible to initiate the installation or repair immediately; and (b) a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible. | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will control bradenhead/casinghead venting | |
| | Water | BMP | Adopt as BMP |
| | Description | Vehicle fueling: Operator will refuel vehicles only on impervious surfaces and never during storm events | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will properly capture and dispose of PFAS-contaminated soil and fire and flush water | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will implement a "hybrid production flowback method" or "modern production flowback method"; oil, water and gas will be routed through permanent equipment with the exception of one temporary separator that is necessary to prevent damage to permanent equipment. | |
| | Water | BMP | Adopt as BMP |
| | Description | Secondary containment: Operator will install perimeter controls to control potential sediment-laden runoff in the event of spill or release from Modular Large Volume Storage Tank | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations | |
| | Water | BMP | Adopt as COA |
| | Description | Vehicle fueling: Operator will ensure that a fueling contractor is present during the entire fueling process to prevent overfilling, leaks and drips from improper connections | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will implement ambient air quality monitoring on site | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will use non-emitting pneumatic controllers | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will cover trucks transporting drill cuttings | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore | |
| | Water | BMP | Adopt as BMP |
| | Description | Outfall locations: Outlet protection should be used when a conveyance discharges onto a disturbed area where there is potential for accelerated erosion due to concentrated flow. Outlet protection should be provided where the velocity at the culvert outlet exceeds the maximum permissible velocity of the material in the receiving channel. | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a destruction efficiency of 98% or better | |
| | PFAS | BMP | Adopt as BMP |

| | | | |
|--|-------------|---|--------------|
| | Description | If PFAS-containing foam is used at a location: operator will properly characterize the site to determine the level, nature and extent of contamination | |
| | PFAS | BMP | Adopt as BMP |
| | Description | Operator will coordinate with nearby fire district(s) to evaluate whether PFAS-free foam can provide the required performance for the specific hazard | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will minimize vehicle and engine idling | |
| | Water | BMP | Adopt as BMP |
| | Description | Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices | |
| | Waste | BMP | Adopt as BMP |
| | Description | Operator will properly test for and dispose of TENORM | |
| | Water | BMP | Adopt as BMP |
| | Description | Operator will recycle or beneficially reuse flowback and produced water for use downhole | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will eliminate use of VOC paints and solvents | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will use lease automated custody transfer (LACT) system to remove/reduce the need for truck loadout | |
| | Waste | BMP | Adopt as BMP |
| | Description | Operator will properly characterize and dispose of all waste (i.e. the specific landfill/waste disposal location allows for acceptance of the waste stream) | |
| | Water | BMP | Adopt as BMP |
| | Description | COGCC permit will incorporate other agency water quality protection plans by reference as applicable (e.g. stormwater management plan) | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will reduce truck traffic and worker traffic | |
| | Water | BMP | Adopt as BMP |
| | Description | Dust suppression: Operator will not use produced water or other process fluids for dust suppression | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: Operator will ensure that all drilling fluid is removed from pipes before storage | |
| | Water | BMP | Adopt as BMP |
| | Description | Down gradient controls: Operator will install adequate down gradient controls if they can not have a control at the source | |
| | Air | BMP | Adopt as BMP |
| | Description | Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable | |
| | Air | BMP | Adopt as BMP |
| | Description | Pipelines: Operator will have adequate and committed pipeline take away capacity for all produced gas and oil | |
| | Air | BMP | Adopt as BMP |
| | Description | Electrification: Operator will use electric equipment and devices (e.g. vapor recovery units or VRUs, fans, etc.) to minimize combustion sources on site (if yes, operator will provide a list outlining which equipment and devices will be electrified) | |

PLANS

Total Plans Uploaded 14

- ☐ (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

Send comments and questions to both submitter's email and djregulatory@oxy.com.

This location was named BERRY FARMS TANK BATTERY31N-8HZ and now renamed to BERRY FARMS FACILITY 8-8HZ.

The existing facility at this location will be decommissioned and replaced with KMOG's latest bulk and test facility design. The new facility will continue process hydrocarbons from the wells at Location ID 436028, the new production from the proposed Berry Farms Well Pad (Doc # 402958547), but not the Berry 1 (05-123-10411) which will be P&A.

For the purposes of ALA, the alternatives for the Berry Farms Well Pad (Doc # 402958547) should be considered as alternatives for this proposed facility because the facility would be co-located with the alternative well pads.

Although not required by Rule, a Community Consultation Plan has been attached as "OTHER".

KMOG has obtained a Rule 1202.a(3) CPW waiver for "At new and existing Oil and Gas Locations, Operators will not situate new staging, refueling, or Chemical storage areas within 500 feet of the Ordinary High Water Mark (OHWM) of any river, perennial or intermittent stream, lake, pond, or wetland."

Weld County Pre-Application meeting summary attached as "Other".

Pre-application meeting summary attached as "Other".

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.

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 facility.

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.

No Water Plan was submitted since there will be no drilling or completion operations at this location.

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

Signed: _____ Date: 04/18/2022 Email: DJREGULATORY@OXY.COM

Print Name: TRACY COLLING Title: REGULATORY ADVISOR

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.

Condition of Approval

| COA Type | Description |
|------------------------|---|
| | Best Management Practices |
| COA No BMP/COA Type | Description |
| 1 Planning | <ul style="list-style-type: none"> • Ozone mitigation on forecasted high ozone days: operator will postpone the refueling of vehicles, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will suspend or delay the use of fossil fuel powered ancillary equipment, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will postpone construction activities, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will reschedule non-essential operational activities such as pigging, well unloading and tank cleaning, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. |
| 2 Traffic control | <ul style="list-style-type: none"> • Access Road: Access Road: KMOG will utilize an existing access road from CR 36 for production operations, including maintenance equipment. The road will be properly constructed and maintained to accommodate for emergency vehicle access. |
| 3 General Housekeeping | <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. • 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. |
| 4 General Housekeeping | <ul style="list-style-type: none"> • 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. • Good housekeeping measures will be implemented to prevent sediment, trash and toxic or hazardous substances from entering surface waters or impacting soils. Housekeeping practices include routine inspections, regular cleaning, site and equipment organization and maintenance, and appropriate chemical storage. • Materials stored on Berry Farms 8-8HZ Facility will be kept away from direct traffic to prevent accidents. • Dumpsters and trash receptacles will be enclosed and/or covered to prevent dissemination of rubbish when not in use. • Storage areas will be swept for trash / rubbish, and cleanup coordinated by construction personnel. • Drums and chemical storage containers will be clearly labeled, and an appropriate SDS kept on file to be made available for on-site personnel as needed. • Loadlines: All loadlines shall be bullplugged or capped. |
| 5 Wildlife | <ul style="list-style-type: none"> • An environmental assessment will be conducted immediately prior to pad construction, drilling, and completion operations. • Openings greater than 2" on equipment not running 24 hours a day will have avian protection installed. • Approximately two weeks prior to construction start, the approved location will be surveyed by 3rd party biological contractor for nests. |

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| | | <ul style="list-style-type: none"> • A site-specific spill prevention, control, and countermeasure plan compliant with EPA rule 40 CFR 112 Subpart A, B, C will be created for this location. • Automated emergency response systems and emergency shutdown systems will be installed. • Remote monitoring systems will be utilized at this location. • Vegetation will be controlled on the active location throughout the life of the project. • Water On Demand system and pipelines will be utilized to minimize truck traffic on location. • Periodic inspections for nests and of avian protection will occur throughout the life of the project. • Training is provided to employees and contractors on wildlife conservation practices, including no harassment, feeding of wildlife, or illegal hunting. • Fluids will be consolidated and centralized for collection and distribution to minimize impact to wildlife. • Infrastructure and facility are adequately sized to accommodate planned production. • Employees and contractors visiting location will follow Kerr-McGee Oil & Gas Onshore LP rules for accessing location, including speed limits and access timing. | |
| 6 | Storm Water/Erosion Control | <p>Structural Control Measures</p> <p>Limits of Construction (LOC)</p> <ul style="list-style-type: none"> • Limits of construction will be used to designate the area of intended development and areas intended for surface disturbing activities. • The LOC will be identified prior to commencement of surface disturbing activities, on the location grading plan, and in-field with wooden survey lathe / staking to delineate the boundary. • The LOC surrounds the entirety of Berry Farms 8-8HZ Facility. • LOC will remain in-place until interim reclamation activities are complete. <p>Vehicle Tracking Control (VTC)</p> <ul style="list-style-type: none"> • Vehicle tracking controls will serve as a stabilized site access point which removes sediment from vehicle tires and mitigates off-site tracking onto paved surfaces. • VTC will be installed prior to commencement of surface disturbing activities. • VTC will be installed at the primary access for Berry Farms 8-8HZ Facility, which is along the northeastern portion of the access road. The access road adjoins / intersects Weld County Road 36. • VTC will remain in place until interim reclamation activities are complete. <p>Temporary Diversion Ditch and Berm (DD)</p> <ul style="list-style-type: none"> • A diversion ditch and berm will be implemented to divert stormwater run-on & run-off throughout Berry Farms 8-8HZ Facility to a designated outlet structure(s). • This BMP will be installed prior surface disturbing activities and will surround the entirety of the location to create continuous perimeter control. • A diversion ditch and berm will serve as a continuous perimeter control for the location. • Diversion ditch and berm will remain in-place until interim reclamation activities are complete. <p>Temporary Spillway and Outlet (SW/O)</p> <ul style="list-style-type: none"> • A temporary spillway and/or outlet are designed to capture sediment transported in surface runoff and slowly release flows to allow time for settling of sediment prior to discharge from the location. • Spillway and/or outlet will be installed concurrently with the facility diversion ditch and berm, and prior to commencement of surface disturbing activities. • A temporary spillway/outlet will be installed in the southcentral & southwestern segments of the facility ditch and berm for Berry Farms 8-8HZ Facility. • All spillways and outlets will remain in-place until interim reclamation activities are complete. <p>Culvert (C)</p> <ul style="list-style-type: none"> • Culverts are used to move water under a road or crossing, or to direct flow to a designated endpoint, and are sized to manage anticipated watershed and flow rates. • Culverts will be installed at the Weld County Road 36 access road crossing for Berry Farms 8-8HZ Facility. Culverts will be evaluated at the time of construction and installed as needed. • Culverts will be reinforced with inlet and outlet protection to mitigate sediment transport and surface erosion • These BMPs will remain in place throughout the life of production for Berry Farms 8-8HZ Facility and removed during final reclamation. <p>5.1.6 Inlet / Outlet Protection (IP/OP)</p> <ul style="list-style-type: none"> • Inlet / outlet protection is a permeable barrier installed around a drain or culvert to | |

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| | | <p>filter runoff and remove sediment.</p> <ul style="list-style-type: none"> • This BMP will be installed prior to commencement of surface disturbing activities. • Inlet and outlet protection will be installed for all culverts, temporary spillways, and temporary outlets at Berry Farms 8-8HZ Facility. • Inlet and outlet protection will remain in place throughout the life of production for Berry Farms 8-8HZ Facility and removed with culverts and outlets during final reclamation. <p>Seed & Mulch (SM)</p> <ul style="list-style-type: none"> • Seed and mulch are utilized in disturbed areas to establish stabilization through vegetative cover. • Seeding will take place once surface disturbing activities are complete. Topsoil stockpiles will be stabilized with seed and mulch no longer than 14-days after completion of stockpiling efforts unless weather or ground conditions are not suitable to properly create a seedbed and promote successful germination. • Seed and mulch will be installed on all disturbed areas no longer utilized for construction, and on all topsoil stockpiles which will remain on Berry Farms 8-8HZ Facility for use during interim and final reclamation. Anticipated topsoil stockpiles will be situated along the southern and eastern perimeters of the well pad. • Seed and mulch will be disturbed and re-applied during topsoil application and final reclamation practices. <p>Non-Structural Control Measures</p> <p>Construction Phasing & Sequencing</p> <ul style="list-style-type: none"> • Construction phasing and sequencing will be implemented at Berry Farms 8-8HZ Facility to minimize the amount of surface disturbance and exposed soils to the greatest extent practicable. <p>Construction Site Waste Management</p> <ul style="list-style-type: none"> • All waste from materials imported to Berry Farms 8-8HZ Facility will be placed in containment bins, and removed for disposal/recycling at an approved, licensed facility. • Self-contained port-o-lets will be placed on both the facility and well pad at Berry Farms 8-8HZ Facility and maintained by a licensed contractor at a frequency appropriate based on daily use. • No waste materials will be buried or dumped on Berry Farms 8-8HZ Facility. <p>Protection and Preservation of Existing Vegetation</p> <ul style="list-style-type: none"> • Pre-existing vegetation cover will only be removed where necessary for the operation of construction and development at Berry Farms 8-8HZ Facility. Trees will only be cut or trimmed to facilitate clearing, grading and safe installation of the location. • Vegetative buffers will be preserved to the greatest extent practicable for construction and development. <p>Training and Certification</p> <ul style="list-style-type: none"> • All personnel involved with construction and stormwater activities will be adequately trained and familiarized with the applicable CDPS stormwater permit, local/State regulations, requirements for the stormwater permit, and identification of potential pollutant sources. • Training(s) will cover information and procedures identified in this SWMP, and will be conducted prior to the start of construction, and as needed. • Training is considered initial and ongoing for all personnel involved with construction and development at Berry Farms 8-8HZ Facility. | |
| 7 | Material Handling and Spill Prevention | <p>Production</p> <ul style="list-style-type: none"> • 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 Kerr-McGee Oil & Gas Onshore LP (KMOG) Fluid Leak Detection Plan – Berry Farms Facility 8-8HZ 5 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 | |

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| | | <p>completed and the Location is on production, site inspections will occur every 28 days.</p> <p>Production</p> <ul style="list-style-type: none"> • Berm Construction: 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. • 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. • Field Inspections include the following: Field-Constructed Above Ground Containers; Secondary Containment Structures; Shop-Built Containers; Generators / Fuel Tanks and associated secondary containment; Pressure Vessels (separators, heater treaters, pigging stations); Portable Containers and all Manifolded Piping; Onsite and Offsite Pipelines (flowlines, production piping, gathering lines) Field Drainage Systems (oil traps, sumps, or skimmers); and Additional equipment used during separation, storage, containment, or transferring of produced fluids. • 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>Recording Keeping</p> <ul style="list-style-type: none"> • Inspections resulting in findings are reported to the IOC. These are entered into an internal management system. Corrective actions are automatically assigned when necessary. SPCC required inspection records are kept in accordance with US EPA requirements. • Maintenance or repair records are managed through an internal management system. These are tracked from assignment through completion of the tasks. • Leak records: All leaks are reported immediately to the IOC and logged in internal management systems. Leak reports are reviewed daily. Any additional investigation is conducted by trained personnel and records in the system. All leaks are tracked until final resolution. Records are retained per federal, state, and local guidelines. • Training Records: KMOG retains AVO training records for all personnel with access to the location in an internal management system. Records are retained per federal, state, and local guidelines. • 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. | |
| 8 | Material Handling and Spill Prevention | <p>Recording Keeping</p> <ul style="list-style-type: none"> • Inspections resulting in findings are reported to the IOC. These are entered into an internal management system. Corrective actions are automatically assigned when necessary. SPCC required inspection records are kept in accordance with US EPA requirements. • Maintenance or repair records are managed through an internal management system. These are tracked from assignment through completion of the tasks. • Leak records: All leaks are reported immediately to the IOC and logged in internal management systems. Leak reports are reviewed daily. Any additional investigation is conducted by trained personnel and records in the system. All leaks are tracked until final resolution. Records are retained per federal, state, and local guidelines. • Training Records: KMOG retains AVO training records for all personnel with access to the location in an internal management system. Records are retained per federal, state, and local guidelines. • 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, | |

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| | | 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. |
| 9 | Dust control | <ul style="list-style-type: none"> • KMOG will proactively deploy fresh water to suppress dust along access road to facility pad during all phases of pre-production operations • Speed limits will be reduced to 10 mph on access road and 5 mph once vehicles reach the facility • Access roads and Vehicle Tracking Control will receive maintenance as needed 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 • KMOG will proactively deploy fresh water on CR W36 from access road entrance east to WCR 17 as needed. |
| 10 | Construction | <ul style="list-style-type: none"> • Construction: Operator will only conduct operations during day light and there will be no nighttime operations that require lighting. • Construction: Operator will only conduct during day light and there will be no nighttime operations that require lighting. The wells from the Berry Farms 8-8HZ Facility 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. • Fencing Requirements: The completed location will be surrounded with a fence and gate with adequate lock to restrict access to authorized personnel only. KMOG personnel will monitor the location upon completion of the wells. Authorized representatives and/or KMOG personnel shall be on-site during construction.. |
| 11 | Noise mitigation | <ul style="list-style-type: none"> • KMOG has conducted a Noise Impact Assessment for production operations to assess operational noise levels against the maximum allowable dBA and dBC noise levels stated in the Regulation. • The operator will comply with maximum permissible noise levels adjusted based on the results of the ambient noise survey. The adjusted noise levels are outlined in the Noise Mitigation Plan at respective compliance points: <ul style="list-style-type: none"> - Completion Compliance Points 1 and 3 – 65 db(A) Day / 60 db(A) Night – 65 db(C) Day / 65 db(C) Night - Completion: Compliance Point 2 – 65 db(A) Day / 60 db(A) Night – 76 db(C) Day / 65 db(C) Night - Production: Compliance Points 1 and 3 – 60 db(A) Day / 55 db(A) Night – 60 db(C) Day / 60 db(C) Night - Production: Compliance Point 2 – 70 db(A) Day / 62 db(A) Night – 75 db(C) Day / 67 db(C) Night • KMOG will utilize a Quiet Completions Fleet for completions operations on the facility pad for the Berry farms 8-8HZ Well Pad. • At the Directors request, KMOG agrees to acquire an additional ambient at all three noise points of compliance 30 to 90 days prior to the commencement of operations. If the new ambient noise levels change any components of this Noise Mitigation Plan, a Form 4 sundry will be submitted to update the plan accordingly. • KMOG will deploy continuous monitoring for all completions and any operations that lasts longer than 24 continuous hours. Monitor locations will coincide with the three noise points of compliance outlined in Figure 2 in Section 5 of this document. • If the 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. |
| 12 | Emissions mitigation | <ul style="list-style-type: none"> • 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. • Operator uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading. • Operator will implement ambient air quality monitoring on site. |

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| | | <ul style="list-style-type: none"> • Operator will use non-emitting pneumatic controllers. • 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. • Ozone Action Days ±KMOG will comply with the follow mitigation measures, as feasible, on forecasted Ozone Action Days: <ul 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. |
| 13 | Odor mitigation | <ul style="list-style-type: none"> • KMOG uses pipelines to transport hydrocarbons (oil & gas) from the nearby Berry Farms 8-8HZ Well Pad to the Berry Farms 8-8HZ Facility Pad and then off location via pipelines, eliminating odors that could occur during truck loading. |
| 14 | Interim Reclamation | <ul style="list-style-type: none"> • Interim reclamation will commence within twelve months from first date of production for all disturbed areas affected by construction and drilling operations which are no longer in use or needed for production. Interim reclaimed areas will be returned to their original condition as practicable, or their final land use as designated by the surface owner. • Seed and mulch are utilized in disturbed areas to establish stabilization through vegetative cover. • Seeding will take place once surface disturbing activities are complete. Topsoil stockpiles will be stabilized with seed and mulch no longer than 14-days after completion of stockpiling efforts unless weather or ground conditions are not suitable to properly create a seedbed and promote successful germination. • Seed & mulch will be installed on all disturbed areas no longer utilized for construction, and on all topsoil stockpiles which will remain on Berry Farms 8-8HZ Facility for use during final reclamation. Anticipated topsoil stockpiles will be situated along the southern and eastern perimeters of the facility pad. • Seeding will remain in place until re-disturbed during final reclamation efforts. • In areas to be returned to crop, the seed bed will be prepared and left for surface owner to plant during next agricultural season. • Cropland Per rule 1003.b., "All segregated soil horizons removed from crop lands shall be replaced to their original relative positions and contour and shall be tilled adequately to re-establish a proper seedbed. Any perennial forage crops that were present before disturbance shall be re-established". All cropland locations will be reclaimed within three months from completion final ground disturbing activities. |
| 15 | Final Reclamation | <ul style="list-style-type: none"> • 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. • 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: 15 comment(s)

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|--|
| 2201002 | COMMUNITY CONSULTATION PLAN |
| 4232312 | CDPHE CONSULTATION |
| 4232313 | RELATED LOCATION AND FLOWLINE MAP |
| 4232315 | WELD COUNTY PERMIT |
| 4232324 | ALA NARRATIVE SUMMARY |
| 4232325 | DEMOCRAT OGDG COMMUNITY CONSULTATION PLAN, AUGUST 16, 2022 |
| 4232327 | INFORMED CONSENT LETTER |
| 4232328 | INFORMED CONSENT LETTER |
| 4232329 | INFORMED CONSENT LETTER |
| 24799506 | OTHER |
| 402958562 | FORM 2A SUBMITTED |
| 403015044 | LOCATION PICTURES |
| 403015045 | LOCATION DRAWING |
| 403015048 | HYDROLOGY MAP |
| 403015049 | ACCESS ROAD MAP |
| 403015052 | LOCATION AND WORKING PAD GIS SHP |
| 403015053 | NRCS MAP UNIT DESC |
| 403015054 | CULTURAL FEATURES MAP |
| 403015055 | ALA DATASHEET |
| 403015056 | SURFACE AGRMT/SURETY |
| 403016412 | CONSULTATION SUMMARY |
| 403017076 | WILDLIFE HABITAT DRAWING |
| 403017099 | PRELIMINARY PROCESS FLOW DIAGRAMS |
| 403062399 | GEOLOGIC HAZARD MAP |
| 403062400 | LAYOUT DRAWING |

Total Attach: 25 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
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| OGLA | The Director has determined that the OGDG application that this Form is a component of meets all requirements of Rule 306.a. The Director's Recommendation has been attached to the Form 2A. | 09/02/2022 |
| OGLA | The operator provided a synopsis of the Democrat OGDG. It has been attached and named OTHER. | 09/02/2022 |
| OGLA | The attached Wildlife Mitigation Plan indicates that the Location is within 500 feet of an OHWM and the operator has received a waiver from CPW for Rule 1202.a.(3). Staff confirmed with the applicant that although CPW provided the waiver, no staging, refueling, or chemical storage will be sited within 500 feet of the OHWM. The CPW Waiver attachment has been removed and the 1202.a checkbox has been unchecked with operator concurrence. | 09/02/2022 |
| OGLA | Some attachments and plans have been replaced and a few data fields revised due to revisions requested by Weld County. | 08/23/2022 |

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| LGD | <p>The Weld County Oil and Gas Energy Department (OGED) submits the following comments:</p> <ol style="list-style-type: none"> 1.The Kerr-McGee (KMG) Berry Farms 8-8HZ Production Facility location was reviewed and processed under Weld County Code, ORD2021-17. 2.Case number 1041WOGLA21-0025 has been assigned to this location. All files associated with the processing and review of this permit are accessible through the Weld County E-Permit center. If there are questions relating to the ability to access these files, please call the OGED office at 970-400-3580. 3.On October 11, 2021 a pre-application meeting with KMG, OGED, COGCC, CPW, and Weld County Planning Department was held. 4.KMG submitted their 1041 WOGLA Application to OGED on April 25, 2022. 5.The application was found to be complete and compliant with Weld County Code, ORD2021-17. 6.OGED did not receive any public comments or any Applications for Intervention. 7.A 1041 WOGLA hearing was held on June 9, 2022. 8.The OGED Hearing Officer considered testimony at the 1041 WOGLA hearing, and subsequently approved 1041WOGLA21-0025. 9.The final order was recorded with the Weld County Clerk and Recorder (reception no. 4836948) on June 22, 2022. 10.The final order was noticed in the Greeley Tribune on June 25, 2022. Approval and publication of KMG's application creates a vested property right pursuant of Article 68 of Title 24, C.R.S. 11.Multiple requirements of KMG were stipulated in the final order, which can be found on Weld County's E-Permit Center at www.weldgov.com. 12.The approved Weld County 1041 WOGLA Permit, and KMG's commitment to best management practices outlined in the application, will protect the health, safety, security and general welfare of the present and future residents of Weld County, while also protecting both the environment and wildlife. 13.1041WOGLA21-0025 Permit is valid for 3 years or can be extended upon request and review. 14.Due to the fact that KMG has completed the 1041 WOGLA Application process, and that a final order has been issued, recorded and legally published, Weld County has no additional concerns with the pending COGCC permit, and would recommend approval. | 06/28/2022 |
| OGLA | The Director has determined this OGD application is complete. Form pushed to IN PROCESS. | 05/31/2022 |

Total: 6 comment(s)

Public Comments

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

| 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: 402958629 Date Received: 04/18/2022 | | | | | | |
|--|---|-----------|---|---------------|---------|-----------|-----------|--|--|
| 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: 329899 OGDP ID: Expiration Date: | | | | | | |
| <input type="checkbox"/> New Location <input type="checkbox"/> Refile <input checked="" type="checkbox"/> Amend Existing Location # <u>329899</u> | | | | | | | | | |
| If this Location assessment is a component of an Oil and Gas Development Plan (OGDP) application, enter the OGDP docket number(s). | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><tr><th style="width: 25%;">Docket Number</th><th style="width: 25%;">OGDP ID</th><th style="width: 50%;">OGDP Name</th></tr><tr><td>220400073</td><td></td><td></td></tr></table> | | | | Docket Number | OGDP ID | OGDP Name | 220400073 | | |
| Docket Number | OGDP ID | OGDP Name | | | | | | | |
| 220400073 | | | | | | | | | |
| 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 | | | | | | | | | |
| <input type="checkbox"/> This location is included in a Comprehensive Area Plan (CAP). CAP ID # _____ | | | | | | | | | |
| <input checked="" type="checkbox"/> This Location or its associated new access road, utility, or Pipeline corridor meets Rule 309.e.(2).A, B, or C. | | | | | | | | | |
| <input type="checkbox"/> This Location is within 2,640 feet of a GUDI or Type III Well per Rule 411.b.(4). | | | | | | | | | |
| <input type="checkbox"/> This Location includes a Rule 309.e.(2).E variance request. | | | | | | | | | |
| <input type="checkbox"/> This location includes a Rule 309.f.(1).A.ii. variance request. | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"><div>Operator Operator Number: <u>47120</u> Name: <u>KERR MCGEE OIL & GAS ONSHORE LP</u> Address: <u>P O BOX 173779</u> City: <u>DENVER</u> State: <u>CO</u> Zip: <u>80217-3779</u></div><div>Contact Information Name: <u>TRACY COLLING</u> Phone: <u>(720) 929-6160</u> Fax: <u>()</u> email: <u>TRACY_COLLING@OXY.COM</u></div></div> | | | | | | | | | |
| FINANCIAL ASSURANCE | | | | | | | | | |
| <input checked="" type="checkbox"/> Plugging and Abandonment Bond Surety ID (Rule 706): <u>20010124</u> <input type="checkbox"/> Gas Facility Surety ID (Rule 711): _____ | | | | | | | | | |
| <input type="checkbox"/> Waste Management Surety ID (Rule 704): _____ | | | | | | | | | |
| LOCATION IDENTIFICATION | | | | | | | | | |
| Name: <u>CAMENISCH</u> Number: <u>10-33HZ</u> | | | | | | | | | |
| 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. | | | | | | | | | |
| QuarterQuarter: <u>NWSE</u> Section: <u>33</u> Township: <u>4N</u> Range: <u>67W</u> Meridian: <u>6</u> Ground Elevation: <u>4869</u> | | | | | | | | | |
| Latitude: <u>40.268698</u> Longitude: <u>-104.893734</u> | | | | | | | | | |
| GPS Quality Value: <u>1.2</u> Type of GPS Quality Value: <u>PDOP</u> Date of Measurement: <u>12/08/2021</u> | | | | | | | | | |

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: N/A

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. Yes

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: 02/01/2022

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

Status/disposition date: 07/06/2022

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: Jason Maxey Contact Phone: 970-400-3635

Contact Email: jmaxey@weldgov.com

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.

< No row provided >

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:

1041 WOGLA 21-0026 still in process by the Weld County Oil & Gas Energy Department. This local permit was approved on 7/6/2022.

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

10/27/2021

Date of local government consultation:

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. Yes

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? Yes

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.

- | | |
|---|---|
| <input checked="" type="checkbox"/> i. WPS < 2,000 feet from RBU/HOBU | <input type="checkbox"/> vi.aa. WPS within a surface water supply area |
| <input type="checkbox"/> ii. WPS < 2,000 feet from School/Child Care Center | <input type="checkbox"/> vi.bb. WPS < 2,640 feet from Type III or GUDI well |
| <input type="checkbox"/> iii. WPS < 1,500 feet from DOAA | <input checked="" type="checkbox"/> vii. WPS within/immediately upgradient of wetland/riparian corridor |
| <input type="checkbox"/> iv. WPS < 2,000 feet from jurisdictional boundary and PLG objects/requests ALA | <input checked="" type="checkbox"/> viii. WPS within HPH and CPW did not waive |
| <input type="checkbox"/> v. WPS within a Floodplain | <input type="checkbox"/> ix. Operator using Surface bond |
| | <input type="checkbox"/> x. WPS < 2,000 feet from RBU/HOBU/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:

| # | latitude | longitude | i | ii | iii | iv | v | vi | vii | viii | ix | x | Variance Required? | Comments |
|---|-----------|-------------|---|----|-----|----|---|----|-----|------|----|---|--------------------|---|
| | 40.264187 | -104.872113 | | | | | x | | x | x | | | | ALT SECTION 34 Additional pad required to develop minerals |
| | 40.269390 | -104.914270 | x | | | | | | x | | | | | ALT SECTION 32 SW4 4 RBUs within 2,000 ft. |
| | 40.263001 | -104.906719 | x | | | | | | x | | | | | ALT SECTION 32 SE4 6 RBU'S within 2,000 ft. Surface owner same as preferred Alt. and does not support this location |
| | 40.261746 | -104.891499 | x | | | | | | x | | | | | ALT SECTION 5 8 RBUs within 2,000 ft. Additional pad required develop minerals |
| | 40.269244 | -104.932411 | x | | | | | | | | | | | ALT SECTION 31 6 RBUs within 2,000 ft. Haul route passes 6 RBUs. Second pad necessary to develop minerals |
| | 40.270290 | -104.894690 | x | | | | | | | | | | | ALT SECTION 33 NE4 1 RBU within 2,000 ft. Safety concerns with access & haul route Haul route passes 7 RBUs and enters HPH |

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: RTP Land Co. LLC

Phone: _____

Address: PO Box 335

Fax: _____

Address: _____

Email: aapllandman@gmail.com

City: Fort Lupton State: CO Zip: 80621

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>9</u> | Oil Tanks | <u>0</u> | Condensate Tanks | <u>1</u> | Water Tanks | <u>2</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>8</u> | Separators | <u>6</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>1</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>1</u> | Pigging Station | <u>0</u> | | | Vapor Recovery Towers | <u>0</u> | | |

OTHER PERMANENT EQUIPMENT

| Permanent Equipment Type | Number |
|--------------------------|----------|
| Electrical Box | <u>1</u> |
| Air Compressor | <u>1</u> |
| Communication Tower | <u>1</u> |
| E House | <u>1</u> |
| Chemical Tote | <u>3</u> |

OTHER TEMPORARY EQUIPMENT

| Temporary Equipment Type | Number |
|--------------------------|-----------|
| Generator | <u>2</u> |
| Purge Flare | <u>3</u> |
| Water Tank (Rig) | <u>2</u> |
| Water Tanks | <u>14</u> |
| ECD | <u>4</u> |
| Propane Tank | <u>1</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.

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) |
|---|-----------|-----------|--|--------------------------|--------------------------|-------------------------------------|
| | | | (1) | (2) | (3) | |
| Building: | 1686 Feet | E | | | | Details of Condition(s) |
| Residential Building Unit (RBU): | 1686 Feet | E | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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 | N | | | | |
| Public Road: | 1767 Feet | E | | | | |
| Above Ground Utility: | 1769 Feet | E | | | | |
| Railroad: | 5280 Feet | NW | | | | |
| Property Line: | 30 Feet | W | | | | |
| School Facility: | 5280 Feet | N | | | | |
| Child Care Center: | 5280 Feet | N | | | | |
| Disproportionately Impacted (DI) Community: | 5280 Feet | E | | | | |
| RBU, HOBU, or School Facility within a DI Community. | 5280 Feet | E | <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 | 1 |
| Residential Building Units | 0 | 0 | 1 |
| High Occupancy Building Units | 0 | 0 | 0 |
| School Properties | 0 | 0 | 0 |
| School Facilities | 0 | 0 | 0 |
| Designated Outside Activity Areas | 0 | 0 | 0 |

CONSTRUCTION

Size of disturbed area during construction in acres: 12.74

Size of location after interim reclamation in acres: 3.32

Estimated post-construction ground elevation: 4870

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:

See Waste Management Plan

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: _____

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

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:

agriculture

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: 38 - Nelson fine sandy loam, 3 - 9% slopes

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

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: 2488 Feet SE

Spring or Seep: 5280 Feet W

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 9 Feet

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

Permit 62753-MH, 3221' SW, SWL 7', Depth 25', Elev 4867'
Location Elev 4860'

Permit 62753-MH is owned by KMOG / Oxy. Static Water Level fluctuates between 7.5' and 11'. For the purpose of estimating groundwater depth at the proposed location KMOG is using the a conservative SWL of 7' at the Permit 62753-MH.

At the proposed location monitoring wells were drilled to a depth of 8' and groundwater was not encountered.

SWL Calc: $(4869' - 4867') + 7' = 9'$

SURFACE WATER AND WETLANDS

Provide the distance and direction to the nearest downgradient surface Waters of the State, as defined 153 Feet E

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: 193 Feet E

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

INTERMITTENT DRAINAGE DITCH

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? Yes

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 12/08/2021 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):

| High Priority Habitat (list all that apply) | Oil and Gas Location | Access Road | Utility or Pipeline Corridor |
|---|----------------------|-------------|------------------------------|
| 1202.d.(3) - Mule deer migration & winter | x | x | |

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? Yes

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? Yes

Direct impact habitat mitigation fee amount: \$ 35299.85

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: \$ _____

Operator Proposed Wildlife BMPs

| No | Target Species | BMP Type | Description |
|----|-----------------|-------------------------|--|
| 1 | BALD EAGLE | Wildlife - Avoidance | The operator will preclude oil and gas operations within 0.5 miles of winter night roost or communal roost site between November 15 and March 15, if there is direct line of sight to the proposed operations. |
| 2 | MULE DEER & ELK | Wildlife - Minimization | If new oil and gas operations must occur within the CPW-mapped mule deer migratory corridor areas, operator agrees to conduct new oil and gas operations outside the time period from Dec 1 through March 31. |

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 Target | COA/BMP Type | COGCC Action |
|----|-------------|---|--------------|
| | Water | BMP | Adopt as BMP |
| | Description | Operator will recycle or beneficially reuse flowback and produced water for use downhole | |
| | Air | BMP | Adopt as BMP |
| | Description | Electrification: Operator will use electric equipment and devices (e.g. vapor recovery units or VRUs, fans, etc.) to minimize combustion sources on site (if yes, operator will provide a list outlining which equipment and devices will be electrified) | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will properly characterize the site to determine the level, nature and extent of contamination | |
| | Water | BMP | Adopt as BMP |
| | Description | Secondary containment: Operator will install perimeter controls to control potential sediment-laden runoff in the event of spill or release from Modular Large Volume Storage Tank | |
| | Water | BMP | Adopt as BMP |
| | Description | Vehicle fueling: Operator will refuel vehicles only on impervious surfaces and never during storm events | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will cover trucks transporting drill cuttings | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will implement a "hybrid production flowback method" or "modern production flowback method"; Oil, water and gas will be routed through permanent equipment with the exception of one temporary separator that is necessary to prevent damage to permanent equipment. | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: Operator will ensure that all drilling fluid is removed from pipes before storage | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will implement ambient air quality monitoring on site | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will minimize vehicle and engine idling | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will reduce truck traffic and worker traffic | |
| | Water | BMP | Adopt as BMP |
| | Description | Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will use non-emitting pneumatic controllers | |
| | PFAS | BMP | Adopt as BMP |

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|--|-------------|--|--------------|
| | Description | Operator will coordinate with nearby fire district(s) to evaluate whether PFAS-free foam can provide the required performance for the specific hazard | |
| | Water | BMP | Adopt as BMP |
| | Description | Documentation / stormwater management plan: If it is infeasible to install or repair a control measure immediately after discovering a deficiency, operator will document and keep on record in the stormwater management plan: (a) a description of why it is infeasible to initiate the installation or repair immediately; and (b) a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible. | |
| | Air | BMP | Adopt as BMP |
| | Description | Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a destruction efficiency of 98% or better | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use zero VOC (group III, low/negligible odor) drilling mud | |
| | Water | BMP | Adopt as BMP |
| | Description | Dust suppression: Operator will not use produced water or other process fluids for dust suppression | |
| | Air | BMP | Adopt as BMP |
| | Description | Engines: Operator will use tier IV or better engines for drilling | |
| | Air | BMP | Adopt as BMP |
| | Description | Engines: Operator will use tier IV or better engines for hydraulic fracturing | |
| | Air | BMP | Adopt as BMP |
| | Description | Ozone mitigation on forecasted high ozone days: operator will eliminate use of VOC paints and solvents | |
| | Water | BMP | Adopt as BMP |
| | Description | Outfall locations: Outlet protection should be used when a conveyance discharges onto a disturbed area where there is potential for accelerated erosion due to concentrated flow. Outlet protection should be provided where the velocity at the culvert outlet exceeds the maximum permissible velocity of the material in the receiving channel. | |
| | Air | BMP | Adopt as BMP |
| | Description | Operator will properly maintain vehicles and equipment | |
| | Air | BMP | Adopt as BMP |
| | Description | Pipelines: Operator will have adequate and committed pipeline take away capacity for all produced gas and oil | |
| | Water | BMP | Adopt as BMP |
| | Description | Vehicle fueling: Operator will ensure that a fueling contractor is present during the entire fueling process to prevent overfilling, leaks and drips from improper connections | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will properly capture and dispose of PFAS-contaminated soil and fire and flush water | |
| | Water | BMP | Adopt as BMP |
| | Description | COGCC permit will incorporate other agency water quality protection plans by reference as applicable (e.g. stormwater management plan) | |
| | Air | BMP | Adopt as BMP |
| | Description | Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable | |
| | PFAS | BMP | Adopt as BMP |
| | Description | If PFAS-containing foam is used at a location: operator will perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions | |
| | Water | BMP | Adopt as BMP |

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|--|-------------|--|--------------|
| | Description | Down gradient controls: Operator will install adequate down gradient controls if they can not have a control at the source | |
| | Air | BMP | Adopt as BMP |
| | Description | Odor mitigation: operator will use a chiller to cool drilling fluid as it is piped through the recirculation system before routing to the suction tanks | |
| | Waste | BMP | Adopt as BMP |
| | Description | Operator will properly test for and dispose of TENORM | |
| | Water | BMP | Adopt as BMP |
| | Description | Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices | |

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

Send comments and questions to both submitter's email and djregulatory@oxy.com.

This location will change names from CAMENISCH-64N67W33NWSE to Camenisch 10-33HZ.

The existing well, Camenisch 33-33 (05-123-18013), within the proposed Oil and Gas Location will be P&A once production has been established by a well(s) within the drilling and spacing unit. The flowline for this well will be relocated outside of the Oil and Gas Location prior to construction. Sufficient safety measures will be taken to protect the existing well during pre-production activities such as barricading portion of access to the well and surrounding the wellhead with highly visible cage. Access to this well will be available during all pre-production phases in the event maintenance is necessary.

KMOG has obtained a Rule 1202.a(3) CPW waiver for "At new and existing Oil and Gas Locations, Operators will not situate new staging, refueling, or Chemical storage areas within 500 feet of the Ordinary High Water Mark ("OHWM") of any river, perennial or intermittent stream, lake, pond, or wetland."

The HPH for mule deer migration corridor and severe winter range was identified during the planning process. Bald eagle winter night roost was identified. In consultation with CPW KMOG agrees to observe to the timing limitation of November 15 - March 15 to restrict pre-production activities.

Weld County Pre-Application meeting summary attached as "Other"

Although not required by Rule, a Community Consultation Plan has been attached as "OTHER".

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.

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.

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.

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

Signed: _____ Date: 04/18/2022 Email: TRACY_COLLING@OXY.COM

Print Name: TRACY COLLING Title: REGULATORY ADVISOR

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.

Condition of Approval

COA Type

Description

| | |
|-------|---|
| | <u>Best Management Practices</u> |
| 0 COA | |

No BMP/COA Type

Description

| | | |
|---|----------------------|--|
| 1 | Planning | <ul style="list-style-type: none"> • 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. • Ozone mitigation on forecasted high ozone days: operator will postpone the refueling of vehicles, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will suspend or delay the use of fossil fuel powered ancillary equipment, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will postpone construction activities, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. • Ozone mitigation on forecasted high ozone days: operator will reschedule non-essential operational activities such as pigging, well unloading and tank cleaning, as feasible, given the number of ozone action days, the operations ongoing at the time, and safety considerations. |
| 2 | Traffic control | Access Road: KMOG will utilize an existing access road from CR 38 for drilling, completions, and production operations, including maintenance equipment. The road will be properly constructed and maintained to accommodate for emergency vehicle access. |
| 3 | General Housekeeping | <ul style="list-style-type: none"> • 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. • Good housekeeping measures will be implemented to prevent sediment, trash and toxic or hazardous substances from entering surface waters or impacting soils. Housekeeping practices include routine inspections, regular cleaning, site and equipment organization and maintenance, and appropriate chemical storage. • Materials stored on Swartz 2-4HZ well pad will be kept away from direct traffic to prevent accidents. • Dumpsters and trash receptacles will be enclosed and/or covered to prevent dissemination of rubbish when not in use. • Storage areas will be swept for trash / rubbish, and cleanup coordinated by construction personnel. • Drums and chemical storage containers will be clearly labeled, and an appropriate SDS kept on file to be made available for on-site personnel as needed. • Loadlines: All loadlines shall be bullplugged or capped. |

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| 4 | General Housekeeping | <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. • When feasible, wastes will be recycled, re-used, or treated onsite. Fluids 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. | |
| 5 | Wildlife | <p>AVOIDANCE MEASURES</p> <ul style="list-style-type: none"> - A sound barrier will be installed during pad construction for drilling and completion operations to reduce noise pollution. - Light pollution will be minimized by directing rig lighting downward and away from the Saint Vrain Creek river corridor; this practice will minimize impacts to BEWNR and mule deer habitat. - KMOG will use CPW-recommended seed mix based on present soil conditions for interim and final Reclamation conducted pursuant to Rules 1003 and 1004 and when consistent with the Surface Owner's approval and any local soil conservation district requirements. Site specific plan can be found in the reclamation plan. Seed mix information will be made available upon request. - Openings greater than two inches on equipment not running 24 hours a day will have avian protection installed. - Approximately two weeks prior to construction start, the approved Site will be surveyed by 3rd party biological contractor for nests. - A Site-specific spill prevention, control, and countermeasure plan compliant with EPA rule 40 CFR 112 Subpart A, B, C will be created for this Site. - Automated emergency response systems and emergency shutdown systems will be installed. - Remote monitoring systems will be utilized at this Site. - Vegetation will be controlled on the active Site throughout the life of the project. - A Water On Demand system and pipelines will be utilized to bring water to location during completions to minimize truck traffic on Site. - Periodic inspections for nests and of avian protection will occur throughout the life of the project. - Training is provided to employees and contractors on wildlife conservation practices, including no harassment, feeding of wildlife, or illegal hunting. - Fluids will be consolidated and centralized for collection and distribution to minimize impact to wildlife. - Infrastructure and facility are adequately sized to accommodate planned production - Employees and contractors visiting Site will follow KMOG rules for accessing Site, including speed limits and access timing | |
| 6 | Storm Water/Erosion Control | <p>Construction Phase</p> <ul style="list-style-type: none"> • Construction phasing and sequencing will be implemented at Camenisch 10-33HZ Well Pad to minimize the amount of surface disturbance and exposed soils to the greatest extent practicable. • Ditch and berm shall be installed around the perimeter of the location, and subsequently around all topsoil stockpiles, to intercept and divert stormwater run-on/run-off and sediment from precipitation and melt events. • Track packing all topsoil stockpiles will occur to prevent erosion from stormwater and wind, as well as provide temporary stabilization. • Seeding and crimped straw mulch will be applied to prevent erosion and soil loss from stormwater and wind. • Vegetation establishment through seeding efforts will promote soil health and maintain carbon exchange. • Weed control will occur seasonally and as needed to hinder the spread of weeds | |

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| | | <p>throughout the topsoil stockpile(s) and help native grass establishment.</p> <ul style="list-style-type: none"> • All waste from materials imported to Camenisch 10-33HZ Well Pad will be placed in containment bins, and removed for disposal/recycling at an approved, licensed facility. • Self-contained port-o-lets will be placed on both the facility and well pad at Camenisch 10-33HZ Well Pad and maintained by a licensed contractor at a frequency appropriate based on daily use. • No waste materials will be buried or dumped on Camenisch 10-33HZ Well Pad. • Pre-existing vegetation cover will only be removed where necessary for the operation of construction and development at Camenisch 10-33HZ Well Pad. Trees will only be cut or trimmed to facilitate clearing, grading and safe installation of the location. • Vegetative buffers will be preserved to the greatest extent practicable for construction and development. <p>Drilling Phase</p> <ul style="list-style-type: none"> • Ditch and berm shall be installed around the perimeter of the location, and subsequently around all topsoil stockpiles, to intercept and divert stormwater run-on/run-off and sediment from precipitation and melt events. • Track packing all topsoil stockpiles will occur to prevent erosion from stormwater and wind, as well as provide temporary stabilization. • Seeding and crimped straw mulch will be applied to prevent erosion and soil loss from stormwater and wind. • Vegetation establishment through seeding efforts will promote soil health and maintain carbon exchange. • Weed control will occur seasonally and as needed to hinder the spread of weeds throughout the topsoil stockpile(s) and help native grass establishment. <p>Production Phase</p> <ul style="list-style-type: none"> • Vegetation establishment through seeding efforts will promote soil health and maintain carbon exchange. • Weed control will occur seasonally and as needed to hinder the spread of weeds throughout the topsoil stockpile(s) and help native grass establishment. <p>Training and Certification</p> <ul style="list-style-type: none"> • All personnel involved with construction and stormwater activities will be adequately trained and familiarized with the applicable CDPS stormwater permit, local/State regulations, requirements for the stormwater permit, and identification of potential pollutant sources. • Training(s) will cover information and procedures identified in this SWMP, and will be conducted prior to the start of construction, and as needed. • Training is considered initial and ongoing for all personnel involved with construction and development at Camenisch 10-33HZ Well Pad. | |
| 7 | Material Handling and Spill Prevention | <p>Drilling</p> <ul style="list-style-type: none"> • 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. • 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 Kerr-McGee Oil & Gas Onshore LP (KMOG) 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. • 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. • Operator will not use PFAS on location. | |
| 8 | Material Handling and Spill Prevention | <p>Completions</p> <ul style="list-style-type: none"> • 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.

- Two completions crew members required and dedicated for all fluid transfers (no exceptions) from start to finish of the operation. Their sole focus is on the transfer. No fluid transfer will occur during crew change. Crew members conducting the fluid transfer will not leave the area until transfer operations completed.
- Tanks (along with auxiliary equipment installed in tanks) will be inspected prior to use and replaced/repaired if damaged.
- Appropriate secondary containment will be utilized when equipment maintenance is conducted on location.
- Contractors will maintain an updated copy of their SPCC plan on location and its personnel will be trained accordingly.
- Tanks will be labeled (signs, magnets, etc.) indicating the contents of the tank.
- Verify tank capacity is capable of handling estimated volumes prior to operations start.
- Tanks will have hatches, valves and bull plugs secured prior to transfers.
- Shut down transfer pump and close supply valve when transfer or circulation is completed. 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.
- Walk all lines and confirm valve alignment before starting the transfer.
- Walk the lines as soon as the transfer starts to confirm no leaks.
- Temporary produced water storage tanks will be designed, constructed, and maintained in accordance with the following portions of the National Fire Protection Association (NFPA) Code 30 (2008 version): 1) Tanks are built to engineering standards using noncombustible materials, with relief device sizing based on API 2000 standards. 2) Tanks are inspected and maintained while in use. 3) The only pipes within the containment are related to the temporary tanks (i.e. no external piping is co-located within the containment), and firefighting equipment is, likewise, not stored within the containment area.
- 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. When construction is completed and the location is on production, site inspections will occur every 28 days at a minimum.
- Monitor pressure responses and containment to identify potential leaks. Lines will be walked continuously throughout operations (between stages) to identify potential leaks.

• 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.

- Hourly walk-throughs and pressure measurements recorded during flowback operations for leak detection.
- During operations, all fluid containing equipment is inspected daily.
- 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.

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| 9 | Material Handling and Spill Prevention | <p>Production</p> <ul style="list-style-type: none"> • 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. • 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. • Field Inspections include the following: Onsite and Offsite Pipelines (flowlines, production piping, gathering lines), Field Drainage Systems (oil traps, sumps, or skimmers); and additional equipment used during transferring of produced fluids. • 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. |
| 10 | Material Handling and Spill Prevention | <p>Recording Keeping</p> <ul style="list-style-type: none"> • Inspections resulting in findings are reported to the IOC. These are entered into an internal management system. Corrective actions are automatically assigned when necessary. SPCC required inspection records are kept in accordance with US EPA requirements. • Maintenance or repair records are managed through an internal management system. These are tracked from assignment through completion of the tasks. • Leak records: All leaks are reported immediately to the IOC and logged in internal management systems. Leak reports are reviewed daily. Any additional investigation is conducted by trained personnel and records in the system. All leaks are tracked until final resolution. Records are retained per federal, state, and local guidelines. • Training Records: KMOG retains AVO training records for all personnel with access to the location in an internal management system. Records are retained per federal, state, and local guidelines. |
| 11 | Dust control | <ul style="list-style-type: none"> • KMOG will proactively deploy fresh water to suppress dust along 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 as needed 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 • KMOG will proactively deploy fresh water on CR 36 from access road entrance east to CR 17 as needed. • 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). |
| 12 | Construction | <ul style="list-style-type: none"> • 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. • Construction: Operator will only conduct during day light and there will be no nighttime operations that require lighting. |
| 13 | Noise mitigation | <ul style="list-style-type: none"> • KMOG has conducted a Noise Impact Assessment for each phase of operations (drilling, completions, and production) to assess operational noise levels against the maximum allowable dBA and dBC noise levels stated in the Regulation. • The operator will comply with maximum permissible noise levels adjusted based on the results of the ambient noise survey. The adjusted noise levels are outlined in the Noise Mitigation Plan at respective compliance points: <ul style="list-style-type: none"> - Drilling and Completions: Monitoring Point 1 – 65 db(A) Day / 60 db(A) Night – 65 db (C) Day / 65 db(C) Night - Production: Monitoring Point 1– 60 db(A) Day / 55 db(A) Night – 72 db(C) Day / 66 db |

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| | | <p>(C) Night</p> <ul style="list-style-type: none"> • Prior to commencement of any drilling and completion activities, KMOG will install approximately 1,560 linear feet of 32-foot-tall, engineered sound wall rated at STC-32, as proposed in the NIA below on page 18. This will include approximately 500 linear feet on the north side of the location, 320 linear feet on the East Side of the location, 500 linear feet on the South side of the location, and 240 linear feet on the West side of location. • KMOG will utilize a Quiet Completions 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. Additional noise reduction modifications may also be implemented depending on the rig contractor utilized following a noise survey study. • At the Directors request, KMOG agrees to acquire an additional ambient at all three noise points of compliance 30 to 90 days prior to the commencement of operations. If the new ambient noise levels change any components of this Noise Mitigation Plan, a Form 4 sundry will be submitted to update the plan accordingly. • KMOG will deploy Continuous monitoring for all drilling and completions and any operations that lasts longer than 24 continuous hours. Monitor locations will coincide with the three noise points of compliance outlined in Figure 2 in Section 5 of this document. • 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. | |
| 14 | Emissions mitigation | <ul style="list-style-type: none"> • 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. • Operator uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading. • Operator will implement ambient air quality monitoring on site. • Operator will use non-emitting pneumatic controllers. • 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. • Ozone Action Days ±KMOG will comply with the follow mitigation measures, as feasible, on forecasted Ozone Action Days: <ul 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. | |

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| 15 | Odor mitigation | <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. • KMOG will use a mud chiller with the intent to lower the drilling fluid temperature as fluids are redeployed downhole. Mud chillers will be installed downstream of the shale shakers. • KMOG uses pipelines to transport hydrocarbons (oil & gas) from the production facility eliminating odors that could occur during truck loading. | |
| 16 | Drilling/Completion Operations | <ul style="list-style-type: none"> • Guy line anchors will not be used. Base Beams will be used to stabilize the rig and removed after drilling. <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 sky glow. • 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 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. • Sound barriers be partially placed on the northeast and southeast sides of the location and will significantly reduce lighting trespass to surrounding off-site buildings. • 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 sky glow. • 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. • Sound barriers be partially placed on the northeast and southeast sides of the location and will significantly reduce lighting trespass to surrounding off-site buildings. • 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"> • KMOW will utilize LED fixtures to reduce sky glow. • KMOG will position all lights 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 lightning complaint, KMOG will address the complaint and work with all parties involved to ensure the complaint is resolved. | |
| 17 | Interim Reclamation | <ul style="list-style-type: none"> • Interim reclamation will commence within twelve months from first date of production for all disturbed areas affected by construction operations which are no longer in use or needed for production. Interim reclaimed areas will be returned to their original | |

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| | | <p>condition as practicable, or their final land use as designated by the surface owner.</p> <ul style="list-style-type: none"> • Seed and mulch are utilized in disturbed areas to establish stabilization through vegetative cover. • Seeding will take place once surface disturbing activities are complete. Topsoil stockpiles will be stabilized with seed and mulch no longer than 14-days after completion of stockpiling efforts unless weather or ground conditions are not suitable to properly create a seedbed and promote successful germination. • Seed & mulch will be installed on all disturbed areas no longer utilized for construction, and on all topsoil stockpiles which will remain on Berry Farms 8-8HZ Well Pad for use during final reclamation. Anticipated topsoil stockpiles will be situated along the northwestern perimeter for the well pad. • Seeding will remain in place until re-disturbed during final reclamation efforts. • In areas to be returned to crop, the seed bed will be prepared and left for surface owner to plant during next agricultural season. • Cropland Per rule 1003.b., "All segregated soil horizons removed from crop lands shall be replaced to their original relative positions and contour and shall be tilled adequately to re-establish a proper seedbed. Any perennial forage crops that were present before disturbance shall be re-established". All cropland locations will be reclaimed within three months from completion final ground disturbing activities. | |
| 18 | Final Reclamation | <ul style="list-style-type: none"> • 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. • 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: 18 comment(s)

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|--|
| 2201002 | COMMUNITY CONSULTATION PLAN |
| 2479505 | OTHER |
| 4232312 | CDPHE CONSULTATION |
| 4232313 | RELATED LOCATION AND FLOWLINE MAP |
| 4232317 | ACCESS ROAD MAP |
| 4232318 | WELD COUNTY PERMIT |
| 4232325 | DEMOCRAT OGDG COMMUNITY CONSULTATION PLAN, AUGUST 16, 2022 |
| 24799506 | OTHER |
| 402958629 | FORM 2A SUBMITTED |
| 403015914 | LESSER IMPACT AREA EXEMPTION REQUEST |
| 403015915 | SURFACE AGRMT/SURETY |
| 403015919 | FACILITY LAYOUT DRAWING |
| 403015921 | ACCESS ROAD MAP |
| 403015924 | DIRECTIONAL WELL PLAT |
| 403015926 | LOCATION DRAWING |
| 403015935 | LOCATION PICTURES |
| 403015938 | NRCS MAP UNIT DESC |
| 403015940 | PRELIMINARY PROCESS FLOW DIAGRAMS |
| 403015942 | CULTURAL FEATURES MAP |
| 403015948 | CPW WAIVER |
| 403015966 | OIL AND GAS LOCATION GIS SHP |
| 403016009 | WILDLIFE HABITAT DRAWING |
| 403016048 | CONSULTATION SUMMARY |
| 403018640 | ALA NARRATIVE SUMMARY |
| 403018706 | ALA DATASHEET |
| 403025122 | HYDROLOGY MAP |
| 403062406 | GEOLOGIC HAZARD MAP |
| 403062407 | CPW CONSULTATION |
| 403062408 | LAYOUT DRAWING |

Total Attach: 29 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
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| OGLA | The Director has determined that the OGD application that this Form is a component of meets all requirements of Rule 306.a. The Director's Recommendation has been attached to the Form 2A. | 09/02/2022 |
| OGLA | The operator provided a synopsis of the Democrat OGD. It has been attached and named OTHER. | 09/02/2022 |
| OGLA | The attached Wildlife Mitigation Plan incorrectly states that this Location is within 1/2 mile of a bald eagle winter night roost. Staff confirmed that the Location is approximately 800 feet west of the roost buffer edge; the Location is not within 1/2 mile of a roost. However, the operator has indicated that because a portion of the Access Road is within the 1/2 mile of a bald eagle winter night roost buffer with direct line of sight into the roost, they will be observing the Nov. 15 to March 15 timing stipulation window. An attachment from the operator demonstrating the Access Road and bald eagle winter night roost buffer has been attached. | 09/02/2022 |
| OGLA | Some attachments and plans have been replaced and a few data fields revised due to revisions requested by Weld County. | 08/23/2022 |
| LGD | <p>The Weld County Oil and Gas Energy Department (OGED) submits the following comments:</p> <ol style="list-style-type: none"> 1.The Kerr-McGee (KMG) Camenisch 10-33HZ location was reviewed and processed under Weld County Code, ORD2021-17. 2.Case number 1041WOGLA21-0026 has been assigned to this location. All files associated with the processing and review of this permit are accessible through the Weld County E-Permit center. If there are questions relating to the ability to access these files, please call the OGED office at 970-400-3580. 3.On October 11, 2021 a pre-application meeting with KMG, OGED, COGCC, CPW, and Weld County Planning Department was held. 4.KMG submitted their 1041 WOGLA Application to OGED on April 20, 2022. 5.The application was found to be complete and compliant with Weld County Code, ORD2021-17. 6.OGED did not receive any public comments or any Applications for Intervention. 7.A 1041 WOGLA hearing is scheduled to be held on June 30, 2022. 8.If the OGED Hearing Officer subsequently approves 1041WOGLA21-0026, the final order will be recorded with the Weld County Clerk and Recorder and will be noticed in the Greeley Tribune creating a vested property right pursuant of Article 68 of Title 24, C.R.S. 9.OGED Staff have recommended approval to the OGED Hearing Officer for 1041WOGLA21-0026. 10.KMG has committed to best management practices outlined in the application, that protect the health, safety, security and general welfare of the present and future residents of Weld County, while also protecting both the environment and wildlife. | 06/28/2022 |
| OGLA | The Director has determined this OGD application is complete. Form pushed to IN PROCESS. | 05/31/2022 |

Total: 6 comment(s)

Public Comments

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