

FORM  
2A

Rev  
08/19

State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

401810307

Date Received:

11/08/2018

Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: \_\_\_\_\_

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

Location ID:

**470407**

Expiration Date:

**12/30/2022**

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

CONSULTATION

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

Operator

Operator Number: 47120

Name: KERR MCGEE OIL & GAS ONSHORE LP

Address: P O BOX 173779

City: DENVER    State: CO    Zip: 80217-3779

Contact Information

Name: JOHN PIEKARA

Phone: (720) 929-3094

Fax: ( )

email: JOHN.PIEKARA@ANADARKO.COM

FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20010124     Gas Facility Surety ID (Rule 711): \_\_\_\_\_
- Waste Management Surety ID (Rule 704): \_\_\_\_\_

LOCATION IDENTIFICATION

Name: PROWANT    Number: 4-18HZ PAD

County: WELD

Quarter: NWNW    Section: 18    Township: 5N    Range: 67W    Meridian: 6    Ground Elevation: 4939

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 687 feet FNL from North or South section line

744 feet FWL from East or West section line

Latitude: 40.405074    Longitude: -104.941943

PDOP Reading: 2.2    Date of Measurement: 09/07/2018

Instrument Operator's Name: PRESTON KNUITSEN

LOCAL GOVERNMENT INFORMATION

County: WELD    Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition below.  Yes  No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The local government siting permit type is: WOGLA

The local government siting permit was filed on: 11/06/2018

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

Additional explanation of local process:

WOGLA 18-0177 - approved 1/29/19

## RELATED REMOTE LOCATIONS

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

<b>This proposed Oil and Gas Location is:</b>	<b>LOCATION ID #</b>	<b>FORM 2A DOC #</b>
Well Site is served by Production Facilities	<u>470396</u>	

## FACILITIES

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

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

## OTHER FACILITIES\*

<u>Other Facility Type</u>	<u>Number</u>
<u>    </u>	<u>    </u>

\*Those facilities indicated by an asterisk (\*) shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

11 Compressed air supply lines  
11 Flow lines  
11 Gas Lift lines

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

Flowlines, compressed air supply lines and gas lift lines are also described in the 2A for the facility (Doc ID 401801129), per COGCC instruction. Please see comments section for additional facility description.

## CONSTRUCTION

Date planned to commence construction: 01/15/2020 Size of disturbed area during construction in acres: 8.48  
Estimated date that interim reclamation will begin: 04/01/2021 Size of location after interim reclamation in acres: 1.10  
Estimated post-construction ground elevation: 4939

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? Yes

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

PLEASE SEE COMMENTS SECTION. DISPOSAL DESCRIPTION WILL NOT FIT IN SPACE PROVIDED.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: ANADARKO E&P ONSHORE LLC Phone: 303-929-6000

Address: PO BOX 173779 Fax: \_\_\_\_\_

Address: \_\_\_\_\_ Email: \_\_\_\_\_

City: DENVER State: CO Zip: 80217-3779

Surface Owner:  Fee  State  Federal  Indian

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

is committed to an oil and Gas Lease

has signed the Oil and Gas Lease

is the applicant

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

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

The right to construct this Oil and Gas Location is granted by: applicant is owner

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

Date of Rule 306 surface owner consultation 10/24/2018

If this Form 2A is associated with Drilling and Spacing Unit applications, list docket number(s): \_\_\_\_\_

## CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land:  Irrigated  Dry land  Improved Pasture  Hay Meadow  CRP

Non-Crop Land:  Rangeland  Timber  Recreational  Other (describe): \_\_\_\_\_

Subdivided:  Industrial  Commercial  Residential

Future Land Use (Check all that apply):

Crop Land:  Irrigated  Dry land  Improved Pasture  Hay Meadow  CRP

Non-Crop Land:  Rangeland  Timber  Recreational  Other (describe): \_\_\_\_\_

Subdivided:  Industrial  Commercial  Residential

## CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	592 Feet	_____ Feet
Building Unit:	592 Feet	_____ Feet
High Occupancy Building Unit:	5280 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	545 Feet	_____ Feet
Above Ground Utility:	334 Feet	_____ Feet
Railroad:	376 Feet	_____ Feet
Property Line:	335 Feet	_____ Feet
School Facility::	5280 Feet	_____ Feet
School Property Line:	5280 Feet	_____ Feet
Child Care Center:	5280 Feet	_____ Feet

### INSTRUCTIONS:

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

## SCHOOL SETBACK INFORMATION

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

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:

- Buffer Zone  
 Exception Zone  
 Urban Mitigation Area

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

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

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

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 10/12/2018

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

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

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

In order to consolidate long term impacts, to minimize removing cropland from production, and to minimize long term impacts to adjacent building units, facilities for the Prowant 4-18HZ pad will be located in a consolidated production facility associated with the Damore 5-18HZ pad. Please review the 2A application for this location for additional detail on this facility siting rationale.

## SOIL

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

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

NRCS Map Unit Name: 41 - NUNN CLAY LOAM, 0 TO 1 PERCENT SLOPES

NRCS Map Unit Name: 82 - WILEY-COLBY COMPLEX, 1 TO 3 PERCENT SLOPES

NRCS Map Unit Name: 83 - WILEY-COLBY COMPLEX, 3 TO 5 PERCENT SLOPES

**PLANT COMMUNITY:**

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

Are noxious weeds present: Yes  No

Plant species from:  NRCS or,  field observation Date of observation: \_\_\_\_\_

List individual species:

Check all plant communities that exist in the disturbed area.

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

## WATER RESOURCES

Is this a sensitive area:  No  Yes

Distance to nearest

downgradient surface water feature: 304 Feet

water well: 1294 Feet

Estimated depth to ground water at Oil and Gas Location 20 Feet

Basis for depth to groundwater and sensitive area determination:

Ditch: 304' W Elev 4938'  
(also 44' NW Elev 4942')  
Farmer's Ditch: 545' SW Elev: 4928'  
Ditch: 85' NW Elev 4943'  
Ditch: 155' N Elev 4947'  
Loveland & Greeley Canal: 420' N Elev 4945'

Loc Elev: 4939'

Nearest water wells:

1294' WSW, Permit 108309--A, depth unknown, Static Water Level 20', Elev 4922'

2531' SSW, Permit 343-RN, depth 16', Static Water Level 8', Elev 4905'

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

Location is NOT in floodplain according to Weld County and FEMA

Is the location in a riparian area:  No  Yes

Was an Army Corps of Engineers Section 404 permit filed  No  Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No  
zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: \_\_\_\_\_

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

Federal (FEMA)

State

County

Local

Other \_\_\_\_\_

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

## WILDLIFE

This location is included in a Wildlife Mitigation Plan

This location was subject to a pre-consultation meeting with CPW held on \_\_\_\_\_

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area

Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)

Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)

- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

**RULE 502.b VARIANCE REQUEST**

- Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

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

**OPERATOR COMMENTS AND SUBMITTAL**

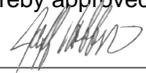
Comments	<p>PLEASE ENSURE ALL CORRESPONDENCE ASSOCIATED WITH THIS PERMIT GOES TO ANALYST AND DJREGULATORY EMAIL ADDRESSES AS LISTED ON THIS PERMIT</p> <p>The nearest building unit is currently vacant and remain vacant until development is finished.</p> <p>The Town of Johnstown was contacted on 11/5/2018 via a "Notice of Intent to Submit Weld County Oil and Gas Location Assessment (WOGLA)." No comments received from the Town of Johnstown</p> <p>The Town of Windsor was contacted on 11/5/2018 via a "Notice of Intent to Submit Weld County Oil and Gas Location Assessment (WOGLA)." No comments received from the Town of Windsor</p> <p>As of the current date and corresponding schedules, pad construction to commence following the approval of the Form 2A but no later than 1/15/2020. This will be followed by Production Drilling to commence approximately late March 2020. The approximate completions start date is mid December 2020 followed by an early February 2021 completions finished date. Interim reclamation to commence within three months post-completion operations due to this location being sited on irrigated crop land.</p> <p>Drilling fluids disposal: KMG will reuse water-based drilling fluids to the maximum extent possible, at which point they will either be land applied or taken to a licensed, commercial disposal site; the decision will be based upon laboratory analysis of fluids. KMG will reuse oil-based drilling fluids to the maximum extent possible, at which point they will be returned to the fluids manufacturer for reconditioning or disposal at a licensed, commercial disposal site.</p> <p>Cuttings disposal: If it is feasible for this location at the time of drilling, water-based cuttings will be disposed of onsite using bioremediation/solidification product. If it is not feasible for this location at the time of drilling, water-based cuttings will be disposed of using a Centralized E&amp;P Waste Management facility or a private spread field. Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.</p> <p>Flow Lines: 11 flow lines will flow to the production facility location. During production, flow direction in the flow lines is from the well head to the production facility. The size of flow lines is typically 2". Flow lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the production facility (located on the adjacent Damore pad, ID #401801129)</p> <p>11 compressed air supply lines will also be installed from the well head to the production facility. During operation flow direction in the supply lines will be from the production facility to the well head. The size of the supply lines is typically 1". Supply lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the production facility, (located on the adjacent Damore pad, ID #401801129).</p> <p>Gas lift lines are also occasionally installed (one per well) from the well head to the production facility. During operation flow direction in the gas lift lines will be from the production facility to the well head. The size of the gas lift lines is typically 2". Gas lift lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the production facility, (located on the adjacent Damore pad, ID #401801129).</p> <p>CUSTODY TRANSFER: Gas custody transfer occurs at the custody transfer meter located on the proposed production facility location. Oil custody transfer occurs at the LACT Unit located on the proposed production facility location. Oil is transferred from the LACT Unit into a pipeline owned by Anadarko Wattenberg Oil Complex LLC. See Damore 2A, ID #401801129 for detail on the LACT and pipeline</p>
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: \_\_\_\_\_ Date: 11/08/2018 Email: DJREGULATORY@ANADARKO.COM

Print Name: JOHN PIEKARA Title: SR REGULATORY ANALYST

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

COGCC Approved:  Director of COGCC Date: 12/31/2019

### **Conditions Of Approval**

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

<b><u>COA Type</u></b>	<b><u>Description</u></b>
Emissions mitigation	Operator shall not begin well drilling operations on the location until an Air Monitoring Plan has been submitted to the COGCC and approved by the Director.
Construction	Operator must implement site-specific best management practices in accordance with good engineering practices, including, but not limited to, construction of a berm or diversion dike, site grading, or other comparable measures, sufficient to protect the irrigation ditches located 85 feet northwest, 155 feet north, and 304 feet west of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products.
Planning	Operator shall post a copy of the approved Form 2A on location during all construction, drilling, and well completion activities.

### **Best Management Practices**

<b><u>No</u></b>	<b><u>BMP/COA Type</u></b>	<b><u>Description</u></b>
1	Planning	604c.(2).E. Multi-Well Pads: In order to reduce surface impact, this application is for an 11-well pad.
2	Planning	604c.(2).Q. Guy Line Anchors: Guy line anchors will not be used. Base Beams will be used to stabilize the rig and removed after drilling.
3	Planning	604c.(2).S. Access Roads: KMG will utilize an existing lease access road from Weld CR 13 / Larimer CR 1 for drilling, completions, and production operations, including maintenance equipment. The road will be properly constructed and maintained to accommodate for local emergency vehicle access.
4	Planning	604.c.(2)V - Development from existing pads - Drilling from an existing well pad was not feasible for the development of the wells on this proposed oil and gas location; however, this well pad will be considered for future well locations.
5	Community Outreach and Notification	305.a.(2) A Notice of Intent to Conduct Operations was sent to each building unit owner within the Exception Zone or Buffer Zone Setback. Recipients did not contact KMG. As a part of planning this proposed location, Kerr-McGee held multi-disciplinary Surface Impact Planning Meetings regarding the impacts and mitigations associated with this proposed location. The toll-free hotline number and email for the Anadarko Colorado Response Line will be posted at the entrance to the lease access road for stakeholders during drilling and completion operations at this proposed location. Courtesy Notifications will be sent to impacted stakeholders prior to drilling operations and again prior to completions operations, providing contact information for the Anadarko Colorado Response Line and online resources.
6	Traffic control	604c.(2).D. Traffic Plan: Prior to the commencement of operations, the operator will obtain access and ROW permits per Weld County Code and implement COAs or traffic control plans as required.
7	General Housekeeping	604c.(2).P. Removal of Surface Trash: A commercial size trash bin for removing debris will be located on site. This bin will be for use by all parties affiliated with the operation. Upon completion of operations, the commercial trash bin will be removed from the location and disposed of in an appropriate manner

8	Storm Water/Erosion Control	604c.(2).W. Site-Specific Measures: KMG maintains a Storm Water Management Plan that assesses erosion control for every KMG operated location. This location will be added to this plan once construction begins. This site will be inspected every fourteen (14) days during construction activities, every twenty-eight (28) days after construction is completed, and after any major weather event.
9	Material Handling and Spill Prevention	604c.(2).N. Control of Fire Hazards: KMG and its contractors will employ best management practices during the drilling and production of its wells and facilities and will comply with appropriate COGCC rules concerning safety and fire. KMG will ensure that any material that might be deemed a fire hazard will remain no less than twenty-five (25) feet from the wellhead(s), tanks and separator(s).
10	Material Handling and Spill Prevention	606.A.d. Fire Prevention and Protection: KMG and its contractors will employ best management practices during the drilling and production of its wells and and will comply with appropriate COGCC rules concerning fire prevention. Flammable liquids will not be stored within (fifty) 50' of the proposed wellheads. If storage of flammable liquid is to be conducted within (fifty) 50' of the wellhead, sufficient safety measures will be implemented.
11	Material Handling and Spill Prevention	During the construction phase, operator will ensure that on-pad compaction is adequate as to serve as a secondary barrier to protect shallow groundwater and prevent the migration of spills or leaks to shallow groundwater. In order to prevent incidental spills from impacting groundwater a liner will be placed beneath the rig during drilling. During completions secondary containment (liners) will be in place for heavy equipment, transfer manifolds and tanks (excluding fresh water tanks).
12	Material Handling and Spill Prevention	Leak Detection Plan: Automation technology will be utilized at this facility. This technology includes the use of fluid level monitoring for the tanks and produced water sumps, high-level shut offs, and electronic sensors to monitor the interstitial space of double-walled produced water sumps. All automation is monitored by Kerr-McGee's Integrated Operations Center (IOC), which is manned 24 hours per day, 7 days per week.
13	Dust control	805.c. Dust: Water will be placed on dirt access roads to mitigate dust as needed. Magnesium chloride will also be used as needed on access roads to further abate dust.
14	Construction	604c.(2).M. Fencing Requirements: The completed wellsites will be surrounded with a fence and gate with adequate lock to restrict access to authorized personnel only. KMG personnel will monitor the wellsites regularly upon completion of the wells. Authorized representatives and/or KMG personnel shall be on-site during drilling and completion operations.
15	Construction	604.c.(2)U - Identification of plugged & abandoned wells - Pursuant to rule 319.a.(5)., once the well has been plugged and abandoned, KMG will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging.
16	Construction	803. Lighting: Site lighting shall be shielded and directed downward and inward toward operations to avoid glare on public roads and nearby Building Units.
17	Noise mitigation	604.c.(2)A Sound surveys have been conducted on each rig type and are utilized to anticipate any additional effective noise mitigation once a drilling rig is determined. At a minimum, and pending a safety review after construction of the location, sound mitigation barriers (sound walls) will be placed around the well pad with the exception of the very southwestern portion of pad location to dampen noise and minimize impact to the nearby residences and to Weld County Road 13 / Larimer County Road 1 and Highway 34 during drilling and completions. Should technological advancements allow for better noise mitigation at the time of drilling and completion operations on this location, Kerr-McGee will re-evaluate the most effective method at that time.
18	Emissions mitigation	604.c.(2)C - Green completions - Test separators and associated flow lines, sand traps and emission control systems shall be installed on-site to accommodate green completions techniques. When commercial quantities of salable quality gas are achieved at each well, the gas shall be immediately directed to a sales line or shut in and conserved. If a sales line is unavailable or other conditions prevent placing the gas into a sales line, the operator shall not produce the wells without an approved variance per Rule 805.b. (3)C.

19	Odor mitigation	805b. Odors: KMG will comply with the provisions of 805.b. Additional BMPs for the Prowant 4-18HZ location are: 1) the storage of excess drilling fluid (e.g., fluid not being used in the active mud system) in closed, upright tanks; and 2) the use of an odor neutralizer in the active mud system.
20	Drilling/Completion Operations	604.c.(2)B - Closed loop systems - KMG will use a closed loop or "pitless" system for drilling and fluid management and will not construct a reserve pit.
21	Drilling/Completion Operations	604.c.(2)K - Pit level indicators - All storage tanks used for active drilling operations (used in lieu of pits) contain pit level monitors with Electronic Drilling Recorders (EDR). KMG uses EDRs with pit level monitor(s) and alarm(s) for production rigs. Basic level gauges are used on tanks utilized for the surface rig.

Total: 21 comment(s)

### **Attachment Check List**

<b>Att Doc Num</b>	<b>Name</b>
2478957	RULE 306.E. CERTIFICATION
2478958	CORRESPONDENCE
2479041	MULTI-WELL PLAN
2479045	WASTE MANAGEMENT PLAN
2479072	CORRESPONDENCE
2479073	ACCESS ROAD MAP
2479330	CORRESPONDENCE
2479337	OBJECTIVE CRITERIA REVIEW MEMO
401810307	FORM 2A SUBMITTED
401820307	HYDROLOGY MAP
401820313	LOCATION DRAWING
401820321	LOCATION PICTURES
401820341	WELL LOCATION PLAT
401823247	OTHER
401823251	PRE-APPLICATION NOTIFICATION CERTIFICATION
401823262	FACILITY LAYOUT DRAWING
401823281	NRCS MAP UNIT DESC

Total Attach: 17 Files

### **General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Final Review	Revised depth to groundwater from 42' to 20' based on static water levels of three nearest water wells with available DWR data. Final review task passed.	12/30/2019
Final Review	Removed original Form 2 doc #s from Related Forms tab as those forms have been deleted/withdrawn. New Form 2s have been created by operator but are still in draft status.	12/30/2019
Permit	Updated contact with current employee. Updated Local Government Information with the WOGLA permit number provided by the operator.	12/23/2019
OGLA	The Objective Criteria Review Memo (Doc #2479337) is attached to this Form 2A. Following additional analysis arising out of the Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.	12/20/2019
OGLA	Operator provided a BMP that is protects groundwater from spills/releases during drilling, a BMP for remote monitoring/remote shut-in, updated the date planned to commence construction and begin interim reclamation, revised the Dust mitigation BMP, revised the Odor mitigation BMP, revised the Noise mitigation BMP, confirmed the nearest Building Unit is unoccupied and will remain so during drilling and completion operations, & confirmed Windsor and Johnstown have been contacted about the planned location.	12/18/2019

OGLA	Requested operator provide a BMP that is protects groundwater from spills/releases during drilling, a BMP for remote monitoring/remote shut-in, update the date planned to commence construction and begin interim reclamation, revise the Dust mitigation BMP, revise the Odor mitigation BMP, revise the Noise mitigation BMP, confirm if the nearest Building Unit is unoccupied and if it will remain so during drilling and completion operations, & confirm whether Windsor and Johnstown have been contacted about the planned location.	12/16/2019
OGLA	Operator provided the Local Government Information and the cultural distances to the nearest School Facility, School Property Line, & Child Care Center.	11/21/2019
OGLA	ON HOLD - Waiting on operator to send notice letters to all Building Unit residents within 2,000 feet of the location.	11/19/2019
Permit	Multi-well plan has been reviewed and is consistent with the draft APDs and the approved DSU. Docket #190100006 was heard at Commission hearing in March 2019; DSU Order 407-2796 was approved effective March 2019. Permitting task has been passed.	10/25/2019
OGLA	This location triggers the following Director's Objective Criteria: 1) Oil & Gas Location within 1,500 feet of a Building Unit - This is a well pad only location. Operator has provided the required 604.c.(2) BMPs to address potential impacts to public health, safety, welfare, environment & wildlife. 3) Oil & Gas Location within 1,500 feet of a municipal boundary and county - Location is in Weld County but is proximate to Larimer County and Windsor. Operator has indicated they have an approved WOGLA, they have notified Larimer County and received no comments from them, and they have an approved Emergency Action Plan (EAP) from both Weld County OEM and Windsor Fire District. No action was required by Larimer County on the EAP. 5.c.) Oil and Gas Location within a Sensitive Area for water resources - Proximity to irrigation ditches.	05/24/2019
OGLA	Operator provided revised Multi-Well Plan and Waste Management Plan attachments.	04/04/2019
OGLA	IN PROCESS - Operator provided the required Siting Rationale for the related remote production facilities, concurred with removing several BMPs that deal with storage tanks as no storage tanks are proposed, revised the Access Roads BMP, provided several missing 604.c.(2) mitigation measure BMPs and nuisance mitigation BMPs, & provided the 306.e. Certification letter.  No Public Comments. OGLA review completed and task passed.	12/28/2018
OGLA	ON HOLD - Requested operator provide the required Siting Rationale for the related remote production facilities, concur with removing several BMPs that deal with storage tanks as no storage tanks are proposed, revise the Access Roads BMP, provide several missing 604.c.(2) mitigation measure BMPs and nuisance mitigation BMPs, & provide the 306.e. Certification letter. Due by 1/18/19.	12/18/2018
Permit	Passed completeness.	11/27/2018
OGLA	Passed Buffer Zone completeness review.	11/26/2018
Permit	Referred to OGLA supervisor for buffer zone review. Due Nov 22	11/09/2018

Total: 16 comment(s)