

FORM  
2  
Rev  
12/20

State of Colorado  
Oil and Gas Conservation Commission  
1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:  
402496871  
Date Received:  
09/15/2021

APPLICATION FOR PERMIT TO:

Drill       Deepen       Re-enter       Recomplete and Operate

Amend

TYPE OF WELL OIL  GAS  COALBED  OTHER: \_\_\_\_\_

Refile

ZONE TYPE SINGLE ZONE  MULTIPLE ZONES  COMMINGLE ZONES

Sidetrack

Well Name: SBJ Well Number: 13-3HZ  
Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP COGCC Operator Number: 47120  
Address: P O BOX 173779  
City: DENVER State: CO Zip: 80217-3779  
Contact Name: SAMANTHA PETITE Phone: (720)929-3167 Fax: ( )  
Email: SAMANTHA\_PETITE@OXY.COM

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20010124

WELL LOCATION INFORMATION

Surface Location

QtrQtr: SWNW Sec: 13 Twp: 4N Rng: 68W Meridian: 6  
Footage at Surface: 2173 Feet FNL/FSL 1071 Feet FEL/FWL  
Latitude: 40.315087 Longitude: -104.956883  
GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP Date of Measurement: 02/25/2020  
Ground Elevation: 4860  
Field Name: WATTENBERG Field Number: 90750

Well Plan: is  Directional  Horizontal (highly deviated)  Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 13 Twp: 4N Rng: 68W Footage at TPZ: 362 FNL 2305 FEL  
Measured Depth of TPZ: 8048 True Vertical Depth of TPZ: 6703 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 15 Twp: 4N Rng: 68W Footage at BPZ: 359 FNL 185 FWL  
Measured Depth of BPZ: 21470 True Vertical Depth of BPZ: 6458 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 15 Twp: 4N Rng: 68W Footage at BHL: 359 FNL 185 FWL  
FNL/FSL FEL/FWL

## LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELD Municipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of § 24-65.1-108 C.R.S.? Yes

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location?  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 disposition of the application filed with the Relevant Local Government is: Approved Date of Final Disposition: 10/22/2020

Comments: 1041 WOGLA has been submitted to Weld County and was approved on 10/22/2020. 1041 WOGLA 20-0010.

## SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION

Surface Owner of the land at this Well's Oil and Gas Location:  Fee  State  Federal  Indian

Mineral Owner beneath this Well's Oil and Gas Location:  Fee  State  Federal  Indian

Surface Owner Protection Financial Assurance (if applicable): \_\_\_\_\_ Surety ID Number (if applicable): \_\_\_\_\_

### MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

- Fee  
 State  
 Federal  
 Indian  
 N/A

### LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

\* If this Well is within a unit, describe a lease that will be developed by the Well.

\* If this Well is not subject to a unit, describe the lease that will be produced by the Well.

(Attach a Lease Map or Lease Description or Lease if necessary.)

See attached mineral lease map.

Total Acres in Described Lease: 203 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # \_\_\_\_\_

### SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 651 Feet  
Building Unit: 651 Feet  
Public Road: 2162 Feet  
Above Ground Utility: 2151 Feet

#### INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- 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 – as defined in 100 Series Rules.

Railroad: 4826 Feet

Property Line: 317 Feet

### OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	407-3230	1640	4N68W: SEC 13 NW, W2NE4, N2SW4, SWSW, SEC 14 ALL, SEC 15 ALL

Federal or State Unit Name (if appl): \_\_\_\_\_

Unit Number: \_\_\_\_\_

### SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 185 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 481 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: \_\_\_\_\_ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: \_\_\_\_\_ Feet

### Exception Location

If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. \_\_\_\_\_

### SPACING & FORMATIONS COMMENTS

**DRILLING PROGRAM**Proposed Total Measured Depth: 21470 Feet TVD at Proposed Total Measured Depth 6458 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: 299 Feet  No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H<sub>2</sub>S Drilling Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? NoWill salt sections be encountered during drilling? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP Equipment Type:  Annular Preventor  Double Ram  Rotating Head  NoneBeneficial reuse or land application plan submitted? Yes

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

**CASING PROGRAM**

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Grade</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	26	16	ASTM A53 B	36.94	0	80	64	80	0
SURF	13+1/2	9+5/8	L80	40	0	1500	590	1523	0
1ST	7+5/8	5+1/2	HCP110	17	0	21460	2447	21460	

 Conductor Casing is NOT planned**POTENTIAL FLOW AND CONFINING FORMATIONS**

<u>Zone Type</u>	<u>Formation /Hazard</u>	<u>Top M.D.</u>	<u>Top T.V.D.</u>	<u>Bottom M.D.</u>	<u>Bottom T.V.D.</u>	<u>TDS (mg/L)</u>	<u>Data Source</u>	<u>Comment</u>
Groundwater	Fox Hills & Shallower	17	17	575	575	0-500	USGS	
Groundwater	Upper Pierre (Pawnee)	576	576	1085	1078	1001-10000	Electric Log Calculation	
Confining Layer	Pierre Shale	1086	1079	3475	3355			
Hydrocarbon	Parkman	3476	3356	3912	3771			
Confining Layer	Pierre Shale	3913	3772	3968	3824			
Hydrocarbon	Sussex	3969	3825	4234	4077			
Confining Layer	Pierre Shale	4235	4078	4537	4365			
Hydrocarbon	Shannon	4538	4366	4661	4483			
Confining Layer	Pierre Shale	4662	4484	6964	6651			
Hydrocarbon	Niobrara	6965	6652	8786	7004			
Hydrocarbon	Codell	8814	7005	9423	7027			

**OPERATOR COMMENTS AND SUBMITTAL**

Comments



## Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

### Condition of Approval

<u>COA Type</u>	<u>Description</u>
	Note Engineering Changes: Corrected bottom of primary cement to 21460' - typo showed 20460'.
Drilling/Completion Operations	Operator acknowledges the proximity of the listed wells. Operator agrees to: provide mitigation option 1 or 2 (per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.  123-09853 LITTLE THOMPSON GAS UNIT *1 123-10699 CRESSWELL *1 123-11588 BEIN * #1 123-12423 Dunklee 2
Drilling/Completion Operations	Operator acknowledges the proximity of the listed wells. Operator agrees to: provide mitigation option 4 (per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document). Operator will submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating that appropriate mitigation will be completed, during the hydraulic stimulation of this well. This Form 42 shall be filed 48 hours prior to stimulation. A Bradenhead test will be performed on the offset wells listed below within 30 days prior to the beginning of stimulation of this well. Surface and production casing pressures of this offset well list will be actively monitored during stimulation of this well. Records shall be retained and provided to COGCC engineering upon request. If there is indication of communication between the stimulation treatment and an offset well, treatment will be stopped and COGCC Engineering notified.  123-26143 STARCK *31-18 123-34984 Lamb *41-15 123-40780 SRC Cannon *14-16NHZ 123-40785 SRC Cannon *S-16NHZ 123-44810 MLD *9
Drilling/Completion Operations	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 48 hour spud notice via Form 42 for all subsequent wells drilled on the pad.  2) Comply with Rule 408.j. and provide cement coverage from TD to a minimum of 500' above Niobrara. Verify coverage with a cement bond log.  3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered.
4 COAs	

## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Drilling/Completion Operations	Kerr-McGee acknowledges and will comply with the COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.
2	Drilling/Completion Operations	Anti-Collision: Kerr-McGee will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within one hundred fifty (150) feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators within one hundred fifty (150) feet prior to drilling.
3	Drilling/Completion Operations	Open Hole Logging Exception: One of the first wells drilled on the pad will be logged with cased-hole neutron log with gamma-ray log from the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run in that well and have those logs attached. The Form 5 for each well shall state "Open Hole Logging Exception - No open-hole logs were run" and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run.

Total: 3 comment(s)

## Attachment List

<b>Att Doc Num</b>	<b>Name</b>
402496871	FORM 2 SUBMITTED
402757513	WELL LOCATION PLAT
402758852	OTHER
402780121	DEVIATED DRILLING PLAN
402783210	DIRECTIONAL DATA
402783329	MINERAL LEASE MAP
402784645	OPEN HOLE LOGGING EXCEPTION
402784650	OffsetWellEvaluations Data
402815036	OFFSET WELL EVALUATION

Total Attach: 9 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Permitting review complete. Final review complete.	09/15/2021
Engineer	Returned to draft for updates to PFZ table.	09/14/2021
Permit	Final Review Completed.	09/08/2021
OGLA	The Location and its associated Form 2A materials were fully reviewed during the review of this APD. The Form 2A (doc# 402376823) for this location was approved with COAs to provide air, dust, light, odor, and noise plans for this location (Loc ID: 479198) prior to construction. The COA for air monitoring was satisfied via Sundry doc# 402718071 and the COAs for dust, light, odor, and noise plans was satisfied via Sundry doc# 402781450. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. OGLA task passed.	08/30/2021
Permit	With operators concurrence changed: Mineral lease description to "See attached mineral lease map." Permitting Review Complete.	08/30/2021
Permit	Location ID missing. Return to draft.	12/18/2020

Total: 6 comment(s)