

FORM  
2

Rev  
05/22

State of Colorado

Energy & Carbon Management Commission

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



Document Number:

403506427

Date Received:

09/21/2023

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: Kelton Well Number: WGV 11-27-697  
Name of Operator: TEP ROCKY MOUNTAIN LLC COGCC Operator Number: 96850  
Address: 1058 COUNTY ROAD 215  
City: PARACHUTE State: CO Zip: 81635  
Contact Name: Melissa Luke Phone: (970)263-2721 Fax: ( )  
Email: mluke@terraep.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

COGCC Financial Assurance

The Operator has provided or will provide Financial Assurance to the COGCC for this Well.

Surety ID Number (if applicable): 20160057

Federal Financial Assurance

In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)

Amount of Federal Financial Assurance \$ \_\_\_\_\_

WELL LOCATION INFORMATION

Surface Location

QtrQtr: NESW Sec: 27 Twp: 6S Rng: 97W Meridian: 6

Footage at Surface: 2105 Feet FSL 2173 Feet FWL

Latitude: 39.492557 Longitude: -108.207725

GPS Data: GPS Quality Value: 2.8 Type of GPS Quality Value: PDOP Date of Measurement: 07/06/2022

Ground Elevation: 8387

Field Name: GRAND VALLEY Field Number: 31290

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: 27 Twp: 6S Rng: 97W Footage at TPZ: 150 FNL 800 FWL

Measured Depth of TPZ: 7787 True Vertical Depth of TPZ: 6887 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 27 Twp: 6S Rng: 97W Footage at BPZ: 150 FNL 800 FWL
Measured Depth of BPZ: 9662 True Vertical Depth of BPZ: 8762 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 27 Twp: 6S Rng: 97W Footage at BHL: 150 FNL 800 FWL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: GARFIELD 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.? No

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: Date of Final Disposition:

Comments:

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 Bond (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.)

Lease Description - T6S R97W Sec. 27: ALL (640 Acres)  
Please see attached lease map

Total Acres in Described Lease: 640 Described Mineral Lease is:  Fee  State  Federal  Indian

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

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet  
Building Unit: 5280 Feet  
Public Road: 5280 Feet  
Above Ground Utility: 5280 Feet  
Railroad: 5280 Feet  
Property Line: 2058 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.

## OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
WILLIAMS FORK	WMFK	1-229		

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? No

If YES:

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

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: 800 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: 301 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: 9662 Feet TVD at Proposed Total Measured Depth 8762 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: \_\_\_\_\_ 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? NoBOP Equipment Type:  Annular Preventor  Double Ram  Rotating Head  NoneBeneficial reuse or land application plan submitted? No

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	30	20	X65	78.67	0	80	200	80	0
SURF	13+1/2	9+5/8	J55	36.00	0	2000	474	2000	0
1ST	8+3/4	4+1/2	P110	11.60	0	9662	807	9662	4463

 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	GRRV MGNV	872	855	1318	1247	501-1000	Produced Water Sample	
Hydrocarbon	ANVIL POINTS	1318	1247	1760	1616			
Confining Layer	GARDEN GULCH	1760	1616	2203	1985			
Hydrocarbon	DOUGLAS CREEK	2203	1985	2621	2334			
Subsurface Hazard	ORANGE MARKER	2621	2334	2942	2601			
Confining Layer	WASATCH	2942	2601	5084	4387			
Hydrocarbon	G SAND	5084	4387	5324	4587			
Hydrocarbon	FORT UNION	5324	4587	5913	5087			
Confining Layer	L WASATCH	5913	5087	6750	5862			
Hydrocarbon	OHIO CREEK	6750	5862	7210	6312			
Hydrocarbon	U MESAVERDE	7210	6312	7787	6887			
Hydrocarbon	KMV GAS	7787	6887	8907	8007			
Hydrocarbon	CAMEO	8907	8007	9462	8562			
Hydrocarbon	ROLLINS	9462	8562	9662	8762			

**OPERATOR COMMENTS AND SUBMITTAL**

Comments

Nearest offset well producing from the same lease and permitted or completed in the same formation: Kelton WGV 311-27-697 (Doc # 403510748).

OGDP application (Docket# 220900247) was approved on 08/23/2023. Form 2A (Doc# 403135970) approved on 09/11/2023.

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_

Oil and Gas Development Plan Name Arco Deep 1-27 OGDP ID#: 483885

Location ID: 322539

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

Signed: \_\_\_\_\_ Print Name: Melissa Luke

Title: Regulatory Specialist Date: 9/21/2023 Email: mluke@terraep.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  \_\_\_\_\_ Director of COGCC Date: 10/31/2023

Expiration Date: 08/22/2026

**API NUMBER**

05 045 24575 00

## 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.

<u>COA Type</u>	<u>Description</u>
Drilling/Completion Operations	<p>1.Operator shall comply with the most current revision of the Northwest Notification Policy.</p> <p>2.Operator shall comply with the most current revision of the Garfield County Rulison Field Notice to Operators, with the following exception: All field notice requirements specified in that Notice to Operators are superseded by the requirements of the most current revision of the Northwest Colorado Notification Policy (see Condition of Approval #1).</p> <p>3.Comply with all provisions of the June 12, 2008 Notice to Operators Drilling Wells within 3/4 Mile of the Rim of the Roan Plateau in Garfield County - Pit Design, Construction and Monitoring Requirements.</p> <p>4.The nearby hillside(s) must be monitored for any daylighting drilling fluids throughout the drilling of the surface casing interval. COGCC engineering staff must be notified as soon as practicable if daylighting is observed.</p> <p>5.Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above all Mesaverde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify production casing cement coverage with a cement bond log.</p>
Interim Reclamation	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
Construction	If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016).
Drilling/Completion Operations	Operator will log two (2) wells with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for the two stratigraphically deepest wells on each side of the pad
4 COAs	

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	One of the first wells drilled on this pad will be logged with an open-hole resistivity log with gamma-ray, from TD into the 9 5/8" casing shoe. All wells on the pad will have a cement bond log (CBL) with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs will state "Alternative Logging Program - No open-hole logs were run" and will clearly identify the type of log and the well (by API#) in which open-hole logs were run.

Total: 1 comment(s)

## Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403506427	FORM 2 SUBMITTED
403510729	DIRECTIONAL DATA
403510730	WELL LOCATION PLAT
403510731	DEVIATED DRILLING PLAN
403515615	LEASE MAP
403572710	OffsetWellEvaluations Data
403579060	OFFSET WELL EVALUATION

Total Attach: 7 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	10/27/2023
Engineer	<p>Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. The one offset well has been temporarily abandoned and pressure tested DOC 403513021 &amp; 403523493 for drilling operations</p> <p>Offset water well check: There are no permitted water wells within one mile of this proposed surface hole location. In the offset well review the operator reports the depth of a observation/monitoring well issued under permit 271289</p> <p>Changed setting depth in casing table from TVD to MD</p> <p>Added 0 psi bradenhead pressure for offset well details</p>	10/25/2023
Permit	Passed Permitting review.	10/17/2023
OGLA	The Commission approved OGDG #483885 on August 23, 2023 for the Oil and Gas Location related to this Form 2. OGLA task passed.	09/21/2023
OGLA	Corrected distance to nearest property line.	09/21/2023

Total: 5 comment(s)