

FORM
2

Rev
08/13

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:

400434356

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:

06/19/2014

TYPE OF WELL OIL GAS COALBED OTHER _____

Refilling

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: Greeley-Rothe Well Number: #1-2H
Name of Operator: K P KAUFFMAN COMPANY INC COGCC Operator Number: 46290
Address: 1675 BROADWAY, STE 2800
City: DENVER State: CO Zip: 80202
Contact Name: Susana Lara-Mesa Phone: (303)825-4822 Fax: (303)825-4825
Email: slaramesa@kpk.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20010023

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 1 Twp: 5N Rng: 67W Meridian: 6

Latitude: 40.423670 Longitude: -104.833790

Footage at Surface: 775 feet ^{FNL/FSL} FSL 377 feet ^{FEL/FWL} FEL

Field Name: Wattenberg Field Number: 90750

Ground Elevation: 4875 County: WELD

GPS Data:

Date of Measurement: 04/08/2014 PDOP Reading: 1.9 Instrument Operator's Name: Charlie Gamet

If well is Directional Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: ^{FNL/FSL} 2352 ^{FSL} FSL 500 ^{FEL} FEL ^{FNL/FSL} 2365 ^{FEL/FWL} FSL 462 ^{FEL/FWL} FWL
Sec: 1 Twp: 5N Rng: 67W Sec: 1 Twp: 5N Rng: 67W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: Fee State Federal Indian

The Surface Owner is: is the mineral owner beneath the location.
(check all that apply) 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 by this Well: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

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

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

SE/4 of Sec 1-T5N-R67W

Total Acres in Described Lease: 160 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1019 Feet
 Building Unit: 1187 Feet
 High Occupancy Building Unit: 5280 Feet
 Designated Outside Activity Area: 5280 Feet
 Public Road: 354 Feet
 Above Ground Utility: 728 Feet
 Railroad: 5280 Feet
 Property Line: 345 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
 - 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, and Designated Outside Activity Area - as defined in 100-Series Rules.

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.

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: _____

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 273 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 462 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

N/2S/2 + S/2N/2 Sec 1-T5N-R67W Approx. 320 acres

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		320	GWA

DRILLING PROGRAM

Proposed Total Measured Depth: 11922 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 273 Feet (Including plugged wells)

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 an 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? No

BOP Equipment Type: Annular Preventor Double Ram Rotating Head None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Fluids will be disposed at Conservation Services on 41800 E 88th Avenue. Bennet, CO 80108

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	13+3/4	9+5/8	36	0	780	320	780	0
1ST	8+3/4	7	26	0	7917	650	7917	0
1ST LINER	6+1/8	4+1/2	11.6	7717	11922			

Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- 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)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

- Rule 318.c. Exception Location from Rule or Spacing Order Number _____
- Rule 603.a.(2) Exception Location (Property Line Setback).

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 No conductor casing will be used.
Operator requests approval of Rule 318Aa and Rule 318Ac exception locatuon: Wellhead is to be located outside the GWA drilling window and will be located more than 50 feet from existing location.
SUA was signed before August 1, 2013, therefore, operator requests approval of exception location per Rule 604.b.(2). Requests are attached and waivers are highlighted on SUA.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Susana Lara-Mesa

Title: VP Engineering Date: 6/19/2014 Email: slaramesa@kpk.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 and applicable orders and is hereby approved.

COGCC Approved: *Matthew Lee* Director of COGCC Date: 9/18/2014

Expiration Date: 09/17/2016

API NUMBER
05 123 40242 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.

COA Type

Description

	<p>1) Note surface casing setting depth change from 700' to 780'. Increase cement coverage accordingly and cement to surface.</p> <p>2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.</p> <p>3) Comply with Rule 317.i and provide cement coverage from TD to a minimum of 200' above Niobrara and from 200' below Shannon to 200' above Sussex. Verify coverage with cement bond log.</p> <p>4) Run and submit Directional Survey from TD to base of surface casing. The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.</p>
	<p>Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.</p>
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Best Management Practices

No	BMP/COA Type	Description
1	General Housekeeping	Housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite suitable facilities according to WMP. If spills occur prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal at a certified facility. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each workday. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, any contaminated soil, and dust control on location. Materials will be disposed of properly.
2	Storm Water/Erosion Control	Storm water Management Plan (SWMP) will be in place to address construction, drilling and operations associated with oil and gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) General Permit rules. BMP's used will vary according to location, and will remain in place until the pad reached final reclamation.
3	Material Handling and Spill Prevention	Spill Prevention Control and countermeasure plan (SPCC) is in place to address construction, drilling and operations associated with oil and gas development throughout the state of Colorado in accordance with CFR 112.
4	Drilling/Completion Operations	<p>Pre-Spud Anti-collision Prior to drilling operations, operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, operator may have gyro surveys conducted to verify bottomhole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, an as-constructed gyro survey will be submitted to the COGCC with the Form 5.</p> <p>During and Post Stimulation K.P. Kauffman, Inc. will comply with the COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.</p> <p>At least 90 days prior to fracture stimulation, the Operator shall notify all operators of non-operated wells within 1500' of the wellbore to be fracture stimulated of the anticipated stimulation date and the recommended best management practice to shut-in all wells within 1500' of the stimulated wellbore completed in the same formation. The Operator will monitor bradenhead pressure of all wells under Operator's control within 300 feet of the well which is to be treated, provided such other wells penetrate the productive zone which is to be treated.</p>

Total: 4 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.

Attachment Check List

Att Doc Num	Name
400434356	FORM 2 SUBMITTED
400609312	SURFACE AGRMT/SURETY
400609594	LEASE MAP
400623771	DEVIATED DRILLING PLAN
400623772	DIRECTIONAL DATA
400627250	WELL LOCATION PLAT
400628085	EXCEPTION LOC REQUEST
400628217	OffsetWellEvaluations Data
400628264	EXCEPTION LOC REQUEST
400629609	PROPOSED SPACING UNIT

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	cuttings disposal changed to commercial disposal per operator request	9/18/2014 5:03:50 PM
Permit	Form 2A is ready for approval. Corrected missing footage (FEL) of TOPZ as per opr. Corrected Surface/Minerals Tab to reflect SUA as right to construct as per opr. Corrected Disposal method as per opr. Final review complete.	9/16/2014 10:12:02 AM
LGD	<p>The City of Greeley has received an application for local land use approval from the applicants for this proposed oil and gas facility (Planning File No. USR 4:14), but the review is on-going and has not been completed nor approved. The City respectfully requests that the State withhold approval of any State permit until the operator successfully receives local land use approval, in this instance a Use by Special Review permit. At this time, detailed review comments have been provided to the operator. Until a response is provided and all issues addressed, it is difficult to anticipate a date for City approval; one possibility would be by December, 2014, if all criteria are met.</p> <p>If the COGCC does not withhold approval, the City then requests that the State application be approved with the condition that the Form 2 Permit be subsequently formally amended to incorporate any site and/or operational standards that get finalized through the local Use by Special Review permit. The City believes this deference is consistent with, and in the spirit of, the standing Memorandum of Understanding between the City of Greeley and the COGCC, and at the same time the City acknowledges the State's right to determine areas of operational conflict that would otherwise prohibit the incorporation of such standards into an Form 2 Permit.</p> <p>A number of review comments have been provided to the operator, and discussions are on-going. To briefly summarize, these address issues of consolidating planned improvements; coordinating documentation; potential impacts and possible mitigation in the areas of visual, noise, traffic, stormwater, etc.; setbacks relative to roads and future structures; and overall intensity of use of the site (which relates to all other issues listed above). Please contact City staff for a copy of the review comments and current working design under review as part of processing the Use by Special Review Permit. Staff also requests that all State agencies (including, but not limited to the COGCC and the CDPHE) consult with the City on matter of design and off-site impacts relative to the Form 2 Permit currently under State consideration.</p>	7/23/2014 2:21:18 PM
Permit	On hold for amended Form 2A.	7/14/2014 2:24:36 PM
Engineer	Offset Wells Evaluated.	6/25/2014 9:57:18 AM
Permit	Public comment period has been extended at the request of the LGD from 7/13/14 to 7/23/14.	6/23/2014 3:29:11 PM
Permit	Passed completeness.	6/23/2014 10:12:14 AM

Total: 7 comment(s)