



DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES  
 Minerals & Mining Program  
 2050 West Main, Suite #1, Rapid City, SD 57702-2493  
 Telephone: 605-773-4201, FAX: 605-394-5317

FORM 2  
 RECEIVED  
 DEC 4 2015

State of South Dakota  
 Department of Environment  
 and Natural Resources

APPLICATION FOR PERMIT TO DRILL

DEPT OF ENVIRONMENT & NATURAL RESOURCES - RAPID CITY

Type of work:	Type of well:
<input checked="" type="checkbox"/> Drill New Well <input type="checkbox"/> Reenter Well <input type="checkbox"/> Drill Directional Well	<input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Injection
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____

Name and Address of Operator:	Telephone:
Peter K. Roosevelt 621 17th Street Suite 710, Denver, CO 80293	303-825-8606

Name and Address of Surface Owner:  
 Kenneth & Verna Barker P.O. Box 55, Edgemont, SD 57735

Name and Address of Drilling Contractor and Rig Number:  
 To Be Determined

Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available):  
 NWSE Sec. 25, T9S, R2E, Fall River 1825'FEL, 1858'FSL Lat:43.236671\* Lon:-103.825315\*

If Directional, top of pay and bottom hole location from nearest lines of section:  
 N/A

Acres in Spacing (Drilling) Unit:	Description of Spacing Unit:
40ac.	NWSE Sec.25

Well Name and Number:	Elevation:	Field and Pool, or Wildcat:	Proposed Depth and Formation:
10-25 Barker Federal	3773'	Hills View Field	3250' Leo

Size of Hole:	Size of Casing:	Weight per Foot:	Depth:	Cementing Program (amount, type, yield, additives)	Top of Cement:
1) 12 1/4"	8 5/8"	24#	160'	125 sks class g	surface
2) 7 7/8"	5 1/2"	14#	3250'	sufficient to cover Fall River@1050'	1000'
3)					
4)					

Describe Proposed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). Use additional page(s) if appropriate.

- drill 12 1/4" surface hole to 180'
- set 160' of surface casing
- cement to surface w/good returns
- drill 7 7/8" hole to 3250'
- log and evaluate Leo formation
- run 5 1/2 " production casing if warranted
- Proposed work to begin Spring 2016

Pit Liner Specifications: 12ml. liner

I hereby certify that the foregoing as to any work or operation performed is a true and correct report of such work or operation.

	Peter K. Roosevelt	Operator	Dec. 1, 2015
Signature	Name (Print)	Title	Date

FOR OFFICE USE ONLY

Approved By:	Title: Administrator Minerals Mining Program	
Permit No.: 2067	API No.: 40 047 20341	Date Issued: 12/14/2015
Conditions, if any, on attached page.		



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

**PERMIT CONDITIONS**

PKR: 10-25 Barker Federal  
9S-2E-25 NWSE, Fall River County

Permit: # 2067  
API: 40 047 20341

Approval has been granted to drill this location as detailed on the attached Application for Permit to Drill (Form #2) with the following additional conditions:

1. This permit is conditioned on compliance with all applicable requirements of South Dakota Codified Laws 45-9 and Administrative Rules of South Dakota 74-12.
2. The operator shall provide the department with the name of the drilling contractor before drilling commences.
3. A 12-mil woven, reinforced high-density polyethylene liner must be used on all pits.
4. Surface runoff must be diverted around the drill site.
5. The surface hole must be drilled with fresh water.
6. Cement must be circulated to the ground surface on the surface casing.
7. If production casing (long string) is set:
  - A. Cement must be circulated on the long string from TD to the top of the Inyan Kara Formation plus 50 feet (estimate 341 sacks).
  - B. A cement bond log must be run and filed with the department within 60 days of completion of the well.
8. Please notify this office prior to plugging so a witness can be on location. If plugging will occur after regular business hours, call Jeff Klenner at 605-929-1414.
9. If abandoned: Either a plugging plan must be submitted at least 7 days prior to plugging for the department's review and approval or the following plan must be followed:
  - A. If the entire production casing is left in the wellbore:
    1. A mechanical integrity test must be conducted to verify the integrity of the casing as required by rule 74:12:03:02(4)(b)(ii).
      - a. If the test is unsuccessful, the well must be plugged as though no production casing is present or the leak must be located and isolated by squeeze cementing.
    2. All perforations must be isolated, either by squeeze cementing or placing a cast iron bridge plug, with a minimum of 20 feet of cement, above the perforations.
    3. A 100-foot plug, half in and half out of the base of the surface casing must be installed.
    4. A 25-foot cement plug at the top of the surface casing must be installed.
    5. Heavy, mud-laden fluid must be placed between all plugs.
  - B. If a portion of the production casing is removed:
    1. All perforations must be isolated, either by squeeze cementing or placing a cast iron bridge plug, with a minimum of 20 feet of cement, above the perforations.
    2. A 100-foot cement plug, half in and half out of the top of the casing stub must be installed after the retrievable part of the production casing has been removed.
    3. A 100-foot cement plug, half in and half out of the top of any fluid bearing formations or salt zone encountered between the top of the casing stub and the base of the surface casing must be installed. Fluid bearing formations at this site include: Minnelusa, Minnekahta, Canyon Springs, and Inyan Kara.
    4. A 100-foot plug, half in and half out of the base of the surface casing must be installed.
    5. A 25-foot cement plug at the top of the surface casing must be installed.
    6. Heavy, mud-laden fluid must be placed between all plugs.



- C. Without production casing:
  - 1. 100-foot cement plugs, half in and half out of the top of any salt zones encountered and the following formations must be installed: Minnelusa, Minnekahta, Canyon Springs, and Inyan Kara.
  - 2. A 100-foot cement plug, half in and half out of the base of the surface casing must be installed.
  - 3. A 25-foot cement plug at the top of the surface casing must be installed.
  - 4. Heavy, mud-laden fluid must be placed between all plugs.
- D. The casing string must be cut off at least three feet below the final ground surface contour. A plate with the name of the operator, well name and number, and legal location by quarter-quarter section, township and range must be welded to the casing stub. The location of the abandoned well must be surveyed with high resolution global positioning system equipment or other appropriate survey methods sufficient to accurately locate the well. Survey coordinates must be included in the final abandonment report.
- 10. Surface reclamation of the site must be completed within one year of plugging and abandoning the well.
- 11. Interim reclamation must be conducted on all areas disturbed by a well drilling operation and not needed for production operations within 12 months after the well is completed in accordance with Administrative Rules of South Dakota 74:12:03:07.
- 12. A washed set of sample cuttings (or cores, if cut) must be shipped, free of charge, to:

Derric Iles  
Geological Survey Program  
Akeley-Lawrence Science Center  
University of South Dakota  
414 E. Clark Street  
Vermillion, SD 57069-2390