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

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JUN 18 2018
DEPT OF ENVIRONMENT & NATURAL RESOURCES - RAPID CITY

State of South Dakota
Department of Environment
and Natural Resources

APPLICATION FOR PERMIT TO DRILL

Type of work:
☑ Drill New Well ☐ Reenter Well ☐ Drill Directional Well
☐ Other: _____

Type of well:
☑ Oil Well ☐ Gas Well ☐ Injection
☐ Other: _____

Name and Address of Operator: Telephone:
GULF EXPLORATION, LLC 9701 North Broadway Extension; Oklahoma City, Oklahoma 73114 405-840-3381

Name and Address of Surface Owner:
Thomas V. Simons; P.O. Box 256; Edgemont, South Dakota 57735

Name and Address of Drilling Contractor and Rig Number:
Not Yet Determined

Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available):
2017' FNL, 2416' FWL (SE¼NW¼) of Section 5, T10S, R1E, B.H.M.; Lat: 43.211851, Long: -104.026038 (NAD 83)

If Directional, top of pay and bottom hole location from nearest lines of section:
Not Applicable

Acres in Spacing (Drilling) Unit: 40 Acres

Description of Spacing Unit: SE¼NW¼ of Section 5, T10S, R1E, B.H.M.

Well Name and Number:	Elevation:	Field and Pool, or Wildcat:	Proposed Depth and Formation:
Stonewall #1-5	3813.1'	Wildcat	3500' 2nd Leo Formation

	Size of Hole:	Size of Casing:	Weight per Foot:	Depth:	Cementing Program (amount, type, yield, additives)	Top of Cement:
1)	12.250"	8.625"	24.0#	400'	145 sx, circulated to surface w/100% excess	Surface
2)	7.875"	5.500"	17.0#	3500'	310 sx , circulated to 2500' w/20% excess	2500'
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.

PLEASE REFER TO THE ATTACHED DRILLING PROGNOSIS FOR ADDITIONAL INFORMATION

Pit Liner Specifications: 12 mil plastic/vinyl 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.

Signature	Name (Print)	Title	Date
	Al W. Salomone	Co-Manager	5/2/18

FOR OFFICE USE ONLY

Approved By: _____ Title: ADMINISTRATOR, MINERALS & MINIG PROGRAM

Permit No.: 2082 API No.: 40 047 20343 Date Issued: 9-9-18

Conditions, if any, on attached page.

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

PERMIT CONDITIONS

Gulf: Stonewall 1-5
10S-1E-5 SENW, Fall River County

Permit: # 2082
API: 40 047 20343

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. If any oil based mud is used for drilling you must have a pit reclamation plan approved by the department.
7. Cement must be circulated to the ground surface on the surface casing.
8. 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.
   B. A cement bond log must be run and filed with the department within 60 days of completion of the well.
9. 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.
10. 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.

11. Surface reclamation of the site must be completed within one year of plugging and abandoning the well.
12. 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.
13. A washed and dried set of sample cuttings (and cores, if cut) must be shipped, free of charge, to:

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