



JAN 16 2014

DEPT OF ENVIRONMENT & NATURAL RESOURCES - RAPID CITY

APPLICATION FOR PERMIT TO DRILL



Type of work:
 Drill New Well Re-enter Well Drill Directional Well
 Other _____

Type of well:
 Oil Well Gas Well Injection
 Other _____

Name and Address of Operator: **Zenergy Operating Company LLC** 6100 South Yale Avenue, Suite 1700 Tulsa, OK 74136 Telephone (918) 488-6574

Name and Address of Surface Owner: **Harding County/ Roger Gunderson** PO Box 26 Buffalo, SD 57720/ 11909 SD Hwy 20 Buffalo, SD 57720

Name and Address of Drilling Contractor and Rig Number: **Cyclone Drilling** PO Box 908 Gillette, WY 82717 Rig TBD

Surface Location of well: Qtr-Qtr, Sec, Twp, Rge, County, feet from nearest lines of section, and latitude and longitude (if available):

SESE, Sec. 32, T23N-R3E, Harding County, 660' FSL and 1100' FEL

If Directional, top of pay and bottom hole location from nearest lines of section:
 SESE, Sec. 32, 1181' FSL and 1100' FEL (7"), Lot 1, Sec. 20, 660' FNL and 1100' FEL (Btm Hole)

Acres in Spacing (Drilling) Unit: **1700 acres** Description of Spacing Unit: **All of Sections 20, 29, and 32, T23N-R3E**

Well Name and Number	Elevation	Field and Pool, or Wildcat	Proposed Depth and Formation
Pronghorn #32P-29-20H	3139'	Border	21214' MD/8824' TVD, Red River B

Size of Hole	Size of Casing	Weight per Foot	Depth	Cementing Program (amount, type, additives)	Depth
1) 20"	16"	65#	60'		60'
2) 13-1/2"	9-5/8"	36#	2000'	See attached Drilling Plan	2000'
3) 8-3/4"	7"	32#	9071	See attached Drilling Plan	4510
4) 6"	Open Hole		21214	See attached Drilling Plan	

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.

Zenergy proposes to drill the subject well to a TD of 21,214' to test the Red River B formation. See drilling procedure attached. Zenergy agrees to use a 12 mil liner. Zenergy proposes to spud this well immediately upon approval of the Application for Permit to Drill, and approval of the Harding County Auditor's office.

* KOP 8253' MD/TVD, End of Curve 9071' MD/ 8774' TVD. Total Measured Depth 21,214' MD, 8824' TVD. (Revised 1/14/2014)

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

Lisa Smith Signature Lisa Smith Name (Print) Agent for Zenergy Title 01/09/2014 Date

FOR OFFICE USE ONLY

Approved By: *Paul Townsend* Title: *Administrator Minerals & Mining Div.*

Permit No. 2046 API No. 40 063 20760 Date Issued: 1/24/2014

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

Zenergy: Pronghorn 32P-29-20H
23N-3E-32 SESE, Harding County

Permit: #2046
API: 40 063 20760

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. A 12-mil woven, reinforced high-density polyethylene liner must be used on all pits.
3. Surface runoff must be diverted around the drill site.
4. The surface hole must be drilled with fresh water.
5. Cement must be circulated to the ground surface on the surface casing.
6. If horizontally drilled:
 - A. The coordinates of the production casing shoe and the well terminus must be filed with the department.
 - B. The azimuth of the horizontal segment of the well must be filed with the department along with the results of periodic down hole surveys.
7. If production casing (long string) is set:
 - A. The cement program as submitted with the application shall be followed.
 - B. A cement bond log must be run and filed with the department within 60 days after completion of the well as required by Administrative Rules of South Dakota 74:12:02:12.
8. If abandoned, a plugging plan must be submitted to the department for review and approval. The plugging plan should address all requirements found in Administrative Rules of South Dakota 74:12:03.
 - A. If production casing is left in the wellbore, 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).
 - B. 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.
9. Surface reclamation of the site must be completed within one year of plugging and abandoning the well.
10. 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.

11. 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

12. Please notify this office prior to plugging or MIT so a witness can be on location. If plugging or MIT will occur after regular business hours, call Jeff Klenner at (605) 929-1414.