

**MONTANA BOARD OF OIL AND GAS CONSERVATION**  
2535 ST. JOHNS AVENUE, BILLINGS, MONTANA 59102

Lease Name:

Butch Cassidy

Lease Type (Private/State/Federal)

Private

Well Number:

3H

Field Name or Wildcat

Elm Coulee Northeast

Unit Name (if applicable):

N/A

Objective Formation(s):

Bakken

Township, Range, and Section:

T25N R59E Section 18

County:

Richland

Elevation (indicate GL or KB):

2001' GL

Application for Permit To:

Drill  Deepen  Re-enter   
Oil  Gas  Other

Operator: Prima Exploration, Inc.  
Address: 250 Filmore St, Suite 500  
City: Denver State: CO Zip: 80206  
Telephone Number:

Surface Location of Well (quarter-quarter and footage measurements):  
NW 1/4 NE 1/4 Sec. 18 T25N R59E 325' FNL 1910' FEL

Proposed Total Depth and Bottom-hole Location(s) if directional or horizontal well:  
TD - 20,453' MD.  
BHL - SW 1/4 SE 1/4 Sec. 19 T25N R59E 200' FSL 1920' FEL

Size and description of drilling/spacing unit and applicable order, if any:	Formation at total depth:	Anticipated Spud Date:
1280 Acre Section 18/19, MT Docket 118-2019	Bakken	5/20/2020

Hole Size	Casing Size	Weight / Foot	Grade (API)	Depth	Sacks of Cement	Type of Cement
13 1/2"	9 5/8"	36#	J-55 LTC	2,200'	605	See Attached
8 3/4"	7"	29#/32#	P110 BTC	10,529'	650	See Attached
6"	4 1/2"	11.6#/13.5#	P110 BTC	20,347'	545	See Attached

Describe Proposed Operations:  
Describe or attach labeled diagram of blowout preventer equipment. Indicate if air drilled or describe mud program.  
Please see attached programs.  
Prima Exploration, Inc. requests variance to NOT run Open hole logs on the subject well. Offset logs can be found for the Empire North Dakota LLC. , Vanderhoof C-1, Sec. 18 T25N R59E, Richland County, MT.

**BOARD USE ONLY** *By CMU Consulting, Inc.*

Approved (date) FEB 14 2020 Permit Fee \$150.00  
By [Signature] Check Number 5169  
Title Petroleum Engineer Permit Expires AUG 14 2020  
Permit Number 32504  
API Number: 25 - 083 - 23389

The undersigned hereby certifies that the information contained on this application is true and correct:  
Signed (Agent) [Signature] Title Ren Gardner - Agent/Petroleum Engineer  
Date 1/27/2020  
Telephone Number 406-259-4878

Samples Required: NONE  ALL \_\_\_\_\_ FROM \_\_\_\_\_ feet to \_\_\_\_\_ feet  
Core chips to address below, full cores to USGS, Core Laboratory, Arvada, CO. Required samples must be washed, dried and delivered prepaid to:

Montana Board of Oil and Gas Conservation  
2535 St. Johns Avenue  
Billings, MT 59102

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**SUPPLEMENTAL INFORMATION**

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

Note: Additional information or attachments may be required by Rule or by special request.

1. Attach a survey plat certified by a registered surveyor. The survey plat must show the location of the well with reference to the nearest lines of an established public survey.
2. Attach an 8 1/2 x 11" photocopy of that portion of a topographic map showing the well location, the access route from county or other established roads, residences, and water wells within a 1/2 mile radius of the well.
3. Attach a sketch of the well site showing the dimensions and orientation of the site, the size and location of pits, topsoil stockpile, and the estimated cut/fill at the corners and centerstake. (Note: the diagram need not be done by an engineer or surveyor). Attach a sketch of a top view and two side views of the reserve pit(s), if utilized. The reserve pit sketch must show the length, width, depth, cut and fill, amount of freeboard, area of topsoil stockpile, and the height and width of berms.
4. Describe the type and amount of material or liner, if any, to be used to seal the reserve pit. If a synthetic liner is used, indicate the liner thickness (mils), bursting strength, tensile strength, tear strength, puncture resistance, hydrostatic resistance, or attach the manufacturer's specifications.
5. Describe the proposed plan for the treatment and/or the disposal of reserve pit fluids and solids after the well is drilled. If the operator intends to dispose of or treat the reserve pit contents off-site, specify the location and the method of waste treatment and disposal. (Note: The operator must comply with all applicable federal, state, county, and local laws and regulations with regard to the handling, transportation, treatment, and disposal of solid wastes.)
6. Does construction of the access road or location, or some other aspect of the drilling operation require additional federal, state, or local permits or authorizations? If yes, indicate the type of permit or authorization required:

- No additional permits needed
- 310 Permit (apply through county conservation district)
- Air quality permit (apply through Montana Department of Environmental Quality)
- Water discharge permit (apply through Montana Department of Environmental Quality)
- Water use permit (apply through Montana Department of Natural Resources and Conservation)
- Solid waste disposal permit (apply through Montana Department of Environmental Quality)
- State lands drilling authorization (apply through Montana Department of Natural Resources and Conservation)
- Federal drilling permit (specify agency)
- Other federal, state, county, or local permit or authorization: (specify type) \_\_\_\_\_

**NOTICES:**

1. Date and time of spudding must be reported to the Board verbally or in writing within 72 hours after the commencement of drilling operations.
2. The operator must give notice of drilling operations to the surface owner as required by Section 82-10-503, MCA, before the commencement of any surface activity.

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**CONDITIONS OF APPROVAL**

The operator must comply with the following condition(s) of approval:

**WARNING: Failure to comply with conditions of approval may void this permit.**

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\*\*CELLS WITH BLUE BACKGROUND ARE THE ONLY CELLS TO BE EDITED\*\*

Table with well information: Fracture Start Date/Time, Fracture End Date/Time, State, County, API Number, Operator Number, Well Name, Federal Well, Infill Well, Longitude, Latitude, Long/Lat Projection, True Vertical Depth (TVD), Total Clean Fluid Volume\* (gal): 8,344,602



REG-2019-00000-0000



America's Natural Gas Alliance

Table with columns: Additive, Specific Gravity, Additive Quantity, Mass (lb). Includes items like Water, DVA-75, FRP-18, HCL-15, Liberty Clean Out Fluid, Biocear 5000, Surf-Flo 430, Crystalline Silica Quartz - US Silica, DF-36S, ACT-300, WA-100, IC-50S.

Total Slurry Mass (Lbs) 80,049,954



Prima Exploration, Inc 250 Fillmore Street, Suite 500 Denver, CO 80206

Butch Cassidy 3H Lat 47°53'29.075" N Long 104°0'48.196" W Richland County, MT

Ingredients Section:

Main ingredients table with columns: Trade Name, Supplier, Purpose, Ingredients, Chemical Abstract Service Number (CAS #), Maximum Ingredient Concentration in Additive (% by mass)\*\*, Mass per Component (LBS), Maximum Ingredient Concentration in HF Fluid (% by mass)\*\*.

\*Total Water Volume sources may include fresh water, produced water, and/or recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(f) and Appendix D.