

Submit In Quadruplicate To:
MONTANA BOARD OF OIL AND GAS CONSERVATION
2535 ST. JOHNS AVENUE
BILLINGS, MONTANA 59102

RECEIVED

MAY 05 2023

SUNDRY NOTICES AND REPORT OF WELLS

MONTANA BOARD OF OIL &
GAS CONSERVATION - BILLINGS

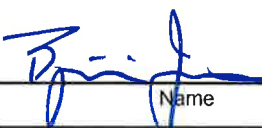
Operator White Rock Oil & Gas, LLC		Lease Name: BR
Address 5810 Tennyson Parkway, Suite 500		Type (Private/State/Federal/Tribal/Allotted): Private
City Plano	State TX	Zip Code 75024
Telephone 214-981-1400	Fax	
Well Number: 34-13H 54		Unit Agreement Name:
Location of well (1/4-1/4 section and footage measurements): 400 FSL 2400 FEL SWSE		Field Name or Wildcat: Elm Coulee
Township, Range, and Section: 25N-54E-13		County: Richland
API Number: 25 083 22346 State County Well	Well Type (oil, gas, injection, other): Oil	

Indicate below with an X the nature of this notice, report, or other data:


Notice of Intention to Change Plans	<input type="checkbox"/>	Subsequent Report of Mechanical Integrity Test	<input type="checkbox"/>
Notice of Intention to Run Mechanical Integrity Test	<input type="checkbox"/>	Subsequent Report of Stimulation or Treatment	<input type="checkbox"/>
Notice of Intention to Stimulate or to Chemically Treat	<input type="checkbox"/>	Subsequent Report of Perforation or Cementing	<input type="checkbox"/>
Notice of Intention to Perforate or to Cement	<input type="checkbox"/>	Subsequent Report of Well Abandonment	<input type="checkbox"/>
Notice of Intention to Abandon Well	<input type="checkbox"/>	Subsequent Report of Pulled or Altered Casing	<input type="checkbox"/>
Notice of Intention to Pull or Alter Casing	<input type="checkbox"/>	Subsequent Report of Drilling Waste Disposal	<input type="checkbox"/>
Notice of Intention to Change Well Status	<input type="checkbox"/>	Subsequent Report of Production Waste Disposal	<input type="checkbox"/>
Supplemental Well History	<input type="checkbox"/>	Subsequent Report of Change in Well Status	<input type="checkbox"/>
Other (specify) <u>Chemical disclosure</u>	<input checked="" type="checkbox"/>	Subsequent Report of Gas Analysis (ARM 36.22.1222)	<input type="checkbox"/>

Describe Proposed or Completed Operations:
Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as necessary. Indicate the intended starting date for proposed operations or the completion date for completed operations.
White Rock is submitting this chemical disclosure for frac approval.

**SEE ATTACHED
CONDITIONS OF
APPROVAL**

BOARD USE ONLY	
Approved	JUN 07 2023 Date
	Admin/Pl. Engineer Title

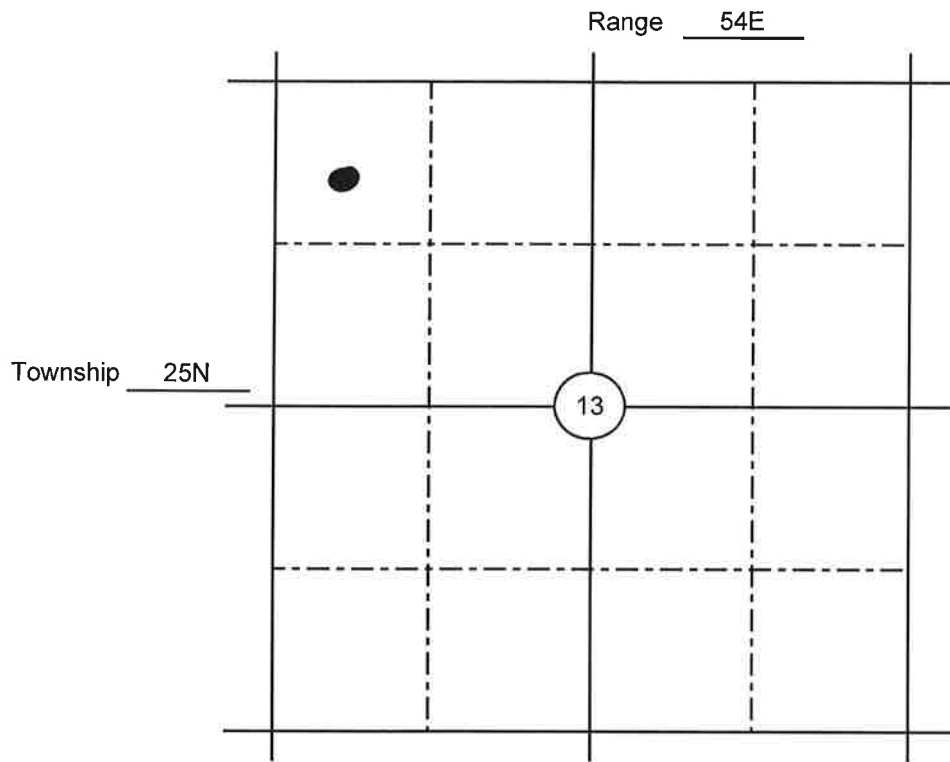
The undersigned hereby certifies that the information contained on this application is true and correct:

05/03/2023	
Date	Signed (Agent)
Eric Linthicum, Regulatory Manager	
Print Name and Title	
Telephone: _____	214-666-4826

SUPPLEMENTAL INFORMATION

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

Plot the location of the well or site that is the subject of this notice or report.



BOARD USE ONLY

CONDITIONS OF APPROVAL

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

Failure to comply with the conditions of approval may void this permit.

08322346

Fracture Start Date/Time	
Fracture End Date/Time	
State	Montana
County	Richland County
Operator Name	
Well Name	IS Stage
Federal Well No	No
Tribal Well No	No
Longitude	
Latitude	
Longitude Projection	
Frac Vertical Depth (TVDF) [ft]	8,500'
Total Clean Fluid Volume* (gal)	2,442,600

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)**	
Water	Operator	Carrier/Bare Fluid	Water	77321855	100.00%	20,385,597	31.5812%	
Sand (100 Mesh Proppant)	ProFrac	Proppant	Crystalline Silica (quartz)	14808-60-7	100.00%	498,000	0.76603%	
Sand (40/70 White Proppant)	ProFrac	Proppant	Crystalline Silica (quartz)	14808-60-7	100.00%	4,657,886	67.76603%	
22 DEGREE BAUME Hydrochloric Acid (36%)	DuraChem	Acidizer	Hydrochloric Acid	7647010	30.00%	11,539	0.17834%	
Acid Pack Pro LT	Copper Natural	Acid Inhibitor	Acetaminophen ethoxylated Alcohol, C12-14 zirconium ethoxylated Methyl 9-Dodecenoate Methyl 9-Dodecenoate Sodium xylene sulfonate Citric acid	9045-9055 84130-5046 25500-41-8 39202-12-0 1901-72-7 779299	1.75% 8.00% 1.00% 1.00% 0.25%	5 24 3 7	0.00014% 0.00042% 0.00004% 0.00004% 0.00004%	
ProSlick 974	ProFrac	Ferrous Reducer	Water	1075210	5.00%	15	0.00024%	
ProSurf 170	ProFrac	Surfactant	2-Propenyl 2-phenyl Methanol	675-651 10455-21	2.00% 4.00%	6 12	0.00014% 0.00024%	
BioSlick GO 123x	ProFrac	Bioside	Petroleum distillates hydrorefined light Ethoxylated Alcohol Isopropyl alcohol Methyl alcohol	64746-47-8 68551-12-3 67-60-0 62-86-1	30.00% 1.50% 7.00% 11.00%	8,606 80 1,409 2,029	0.13248% 0.00668% 0.00173% 0.00310%	
ProCheck 170	ProFrac	Scale Inhibitor	Ethoxylated Nonylphenol Glutaraldehyde AISI dimethylbenzyl ammonium chloride (Cl216) Methanol	127087474 64317-5 11-50-8 64444451 675261	18.00% 7.00% 3.00% 5.00%	1,499 49 186 104	0.00173% 0.00072% 0.00245% 0.00165%	
Total Store Mass (Lbs)								68,008.26

Ingredients Section:

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MONTANA BOARD OF OIL AND GAS ATTACHMENT TO FORM 2 "CONDITIONS OF APPROVAL"

A. Field Inspector must be notified at least **24 hours** in advance of the start of fracture stimulation operation.

B. 36.22.1106 SAFETY AND WELL CONTROL REQUIREMENTS – HYDRAULIC FRACTURING

(1) New and existing wells which will be stimulated by hydraulic fracturing must demonstrate suitable and safe mechanical configuration for the stimulation treatment proposed.

(2) Prior to initiation of fracture stimulation, the operator must evaluate the well. If the operator proposes hydraulic fracturing through production casing or through intermediate casing, **the casing must be tested to the maximum anticipated treating pressure**. If the casing fails the pressure test it must be repaired or the operator must use a temporary casing string (fracturing string).

(a) If the operator proposes hydraulic fracturing through a fracturing string, it must be stung into a liner or run on a packer set not less than 100 feet below the cement top of the production or intermediate casing and must be tested to not less than maximum anticipated treating pressure minus the annulus pressure applied between the fracturing string and the production or immediate casing.

(3) A casing pressure test will be considered successful if the pressure applied has been held for 30 minutes with no more than ten percent pressure loss.

(4) A **pressure relief valve(s)** must be installed on the treating lines between pumps and wellhead to limit the line pressure to the test pressure determined above; **the well must be equipped with a remotely controlled shut-in device** unless waived by the board administrator should the factual situation warrant.

(5) **The surface casing valve must remain open** while hydraulic fracturing operations are in progress; the annular space between the fracturing string and the intermediate or production casing must be monitored and may be pressurized to a pressure not to exceed the pressure rating of the lowest rated component that would be exposed to pressure should the fracturing string fail.

History: 82-11-111, MCA; IMP, 82-11-111, MCA; NEW, 2011 MAR p. 1686, Eff. 8/26/11.

C. 36.22.1010 WORK-OVER, RECOMPLETION, WELL STIMULATION – NOTICE AND APPROVAL

(1) Within 30 days following completion of the well work, a subsequent report of the actual work performed must be submitted on Form No. 2.