

Submit In Quadruplicate To:

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

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OCT 04 2023

MONTANA BOARD OF OIL &
GAS CONSERVATION • BILLINGS

SUNDRY NOTICES AND REPORT OF WELLS

Operator White Rock Oil & Gas, LLC
Address 5810 Tennyson Parkway, Suite 500
City Plano State TX Zip Code 75024
Telephone 214-981-1400 Fax

Lease Name: Roberts
Type (Private/State/Federal/Tribal/Allotted): Federal
Well Number: 21X-30
Unit Agreement Name:
Field Name or Wildcat: Elm Coulee
Township, Range, and Section: 24N-55E-30
County: Richland

Location of well (1/4-1/4 section and footage measurements):
500 FNL 2140 FWL NENW -

API Number:
25 | 083 | 21967
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
- Notice of Intention to Run Mechanical Integrity Test
- Notice of Intention to Stimulate or to Chemically Treat
- Notice of Intention to Perforate or to Cement
- Notice of Intention to Abandon Well
- Notice of Intention to Pull or Alter Casing
- Notice of Intention to Change Well Status
- Supplemental Well History
- Other (specify) Chemical disclosure

- Subsequent Report of Mechanical Integrity Test
- Subsequent Report of Stimulation or Treatment
- Subsequent Report of Perforation or Cementing
- Subsequent Report of Well Abandonment
- Subsequent Report of Pulled or Altered Casing
- Subsequent Report of Drilling Waste Disposal
- Subsequent Report of Production Waste Disposal
- Subsequent Report of Change in Well Status
- Subsequent Report of Gas Analysis (ARM 36.22.1222)

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.
This is a planned plug and perf reentry. A 4.5" 13.5# P-110 BTC liner with associated float equipment and hanger/packer and a 3.5" 9.2# P-110 FJ liner with associated float equipment were both run. The lower main lateral was frac'd on 09/16/2023. After the 2nd lateral frac the full details of the frac job will be submitted.

**SEE ATTACHED
CONDITIONS OF
APPROVAL**

BOARD USE ONLY
Approved OCT 06 2023
Date

Name
Admin/Pet. Engineer
Title

The undersigned hereby certifies that the information contained on this application is true and correct:
9/29/2023 Eric Linthicum
Date Signed (Agent)
Eric Linthicum, Regulatory Manager
Print Name and Title
Telephone: 214-666-4826

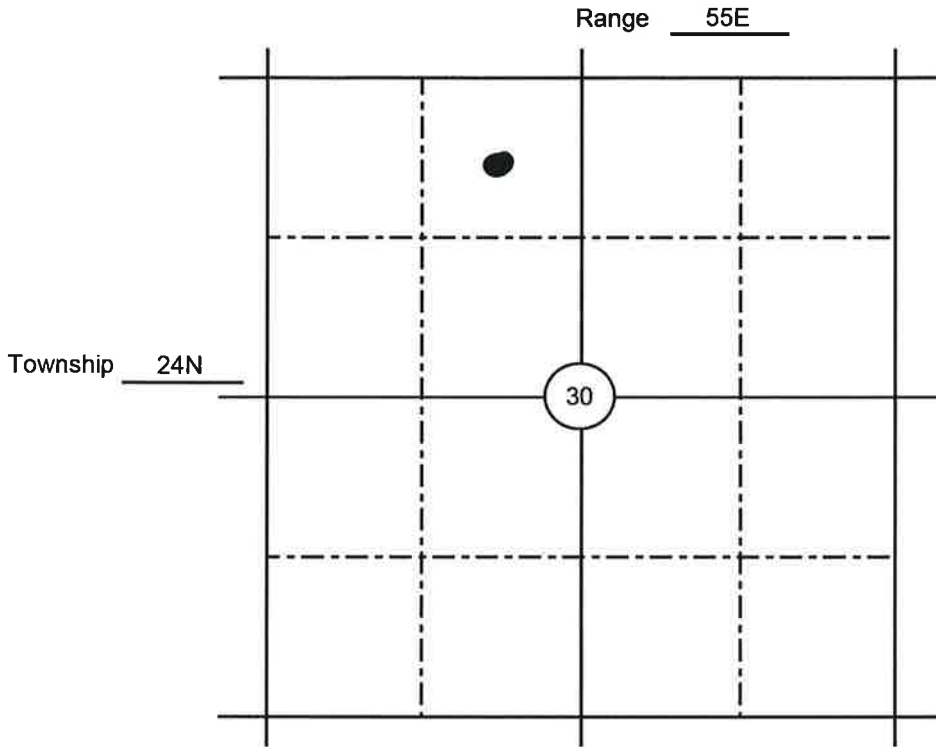
SUPPLEMENTAL INFORMATION

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.

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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.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	9/14/2023
Job End Date:	9/16/2023
State:	Montana
County:	Richland
API Number:	25-083-21967-00-00
Operator Name:	White Rock Oil & Gas, LLC
Well Name and Number:	Roberts 21X-30 LML
Latitude:	47.81774800
Longitude:	-104.71284300
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	10,118
Total Base Water Volume (gal):	2,649,612
Total Base Non Water Volume:	0

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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Service Abstract Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	White Rock	Carrier/Base Fluid	Water	7732-18-5	100.00000	88.17194	None
Sand (40/70 Mesh Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	9.02319	None
Sand (100 Mesh Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	2.25041	None
Hydrochloric Acid (7.5%)	CNR	Acidizing	Water	7732-18-5	85.00000	0.27489	None
			Hydrochloric Acid (Hydrogen Chloride)	7647-01-0	37.00000	0.11966	None
ProSurf 171	ProFrac	Surfactant	Ethyl alcohol	7847-14-5	40.00000	0.03658	None
			Methyl alcohol	67-56-1	40.00000	0.03658	None
			Nonionic Surfactant	68603-42-9	10.00000	0.00914	None
ProSlick 978	ProFrac	Friction Reducer	Petroleum distillates, hydrotreated light	64742-47-8	40.00000	0.04303	None

08321967

BioSuite GQ123x	BioSuite			2-Propenoic acid, polymer with 25987-30-8 propenamide, sodium salt		35.00000	0.03765	None
				Glutaral	111-30-8	15.00000	0.00270	None
				Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	88424-85-1	5.00000	0.00090	None
Acid Pack Pro HT	ProFrac			Hydrochloric Acid Additive / Corrosion Inhibitor				
				Ethylene glycol	107-21-1	42.00000	0.00052	None
				Pyridinium, 1-(phenylmethyl)-, Et Me derivs, chloride	168909-18-2	25.00000	0.00031	None
				Circic Acid	77-92-9	10.00000	0.00012	None
				Alcohols, C12 - 14 secondary, ethoxylated	84133-50-6	8.00000	0.00010	None
				Water	7732-18-5	5.00000	0.00006	None
				2-Propenal, 3-phenyl	104-55-2	4.00000	0.00005	None
				Methanol	67-56-1	2.00000	0.00002	None
				Isotridecano, ethoxylated	89011-36-5	1.80000	0.00002	None
				Methyl 9-decenoate	39202-17-0	1.00000	0.00001	None
				Methyl 9-decenoate	25601-41-6	1.00000	0.00001	None
				Sodium xylene sulfonate	1300-72-7	0.30000	0.00000	None
ProChek 170	ProFrac			Scale Inhibitor				
				Methyl alcohol	67-56-1	5.00000	0.00064	None
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.								
Other Chemical(s)	Listed Above	See Trade Name(s) List						
				Water	7732-18-5	85.00000	0.27489	
				2-Propenoic acid, polymer with 25987-30-8 propenamide, sodium salt	88424-85-1	35.00000	0.03765	
				Ethyl alcohol	647-14-5	40.00000	0.03658	
				Nonionic Surfactant	8603-42-9	10.00000	0.00914	
				Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	88424-85-1	5.00000	0.00090	
				Ethylene glycol	107-21-1	42.00000	0.00052	
				Pyridinium, 1-(phenylmethyl)-, Et Me derivs, chloride	168909-18-2	25.00000	0.00031	
				Circic Acid	77-92-9	10.00000	0.00012	
				Alcohols, C12 - 14 secondary, ethoxylated	84133-50-6	8.00000	0.00010	
				Water	7732-18-5	5.00000	0.00006	
				2-Propenal, 3-phenyl	104-55-2	4.00000	0.00005	
				Methanol	67-56-1	2.00000	0.00002	
				Methyl 9-decenoate	25601-41-6	1.00000	0.00001	
				Methyl 9-decenoate	39202-17-0	1.00000	0.00001	
				Sodium xylene sulfonate	1300-72-7	0.30000	0.00000	

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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.