FORM NO. 2 R 10/09

RECEIVED

OCT 13 2026

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

ARM 36.22.307, 601, 605, 1003, 1004, 1011, 1013, 1103, 1222, 1240, 1301, 1306, 1309, and 1417

Submit In Quadruplicate To:

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

SUNDRY NOTICES AND REPORT OF WELLS

Operator NorthWestern Corporation

Address 11 E. Park

City Butte State MT Zip Code 59701

Telephone 406 497-3521 Fax

Lease Name: Lightning

Type (Private/State/Federal/Tribal/Allotted): Private

Well Number: 2-3

Location of well (1/4-1/4 section and footage measurements): NW/4 NE/4 Sec 3; 363' FNL & 2397' FEL

Unit Agreement Name: Dry Creek Storage

Field Name or Wildcat: Dry Creek Storgae

Township, Range, and Section: T7S R21E Sec. 3

API Number: 25 | 009 | 21307 (State | County | Well)

Well Type (oil, gas, injection, other): Natural Gas Storage

County: Carbon

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

Notice of Intention to Change Plans	☐	Subsequent Report of Mechanical Integrity Test	☐
Notice of Intention to Run Mechanical Integrity Test	☐	Subsequent Report of Stimulation or Treatment	☐
Notice of Intention to Stimulate or to Chemically Treat	☑	Subsequent Report of Perforation or Cementing	☐
Notice of Intention to Perforate or to Cement	☐	Subsequent Report of Well Abandonment	☐
Notice of Intention to Abandon Well	☐	Subsequent Report of Pulled or Altered Casing	☐
Notice of Intention to Pull or Alter Casing	☐	Subsequent Report of Drilling Waste Disposal	☐
Notice of Intention to Change Well Status	☐	Subsequent Report of Production Waste Disposal	☐
Supplemental Well History	☐	Subsequent Report of Change in Well Status	☐
Other (specify) _____	☐	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.

Hydraulically stimulate the well. See attached. Plan to do work November 2, 2026.

BOARD USE ONLY

Approved OCT 21 2026
Date

Benjamin Davis
Name

Technical Program Coordinator
Title

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

10/1/2026
Date

Signed (Agent)

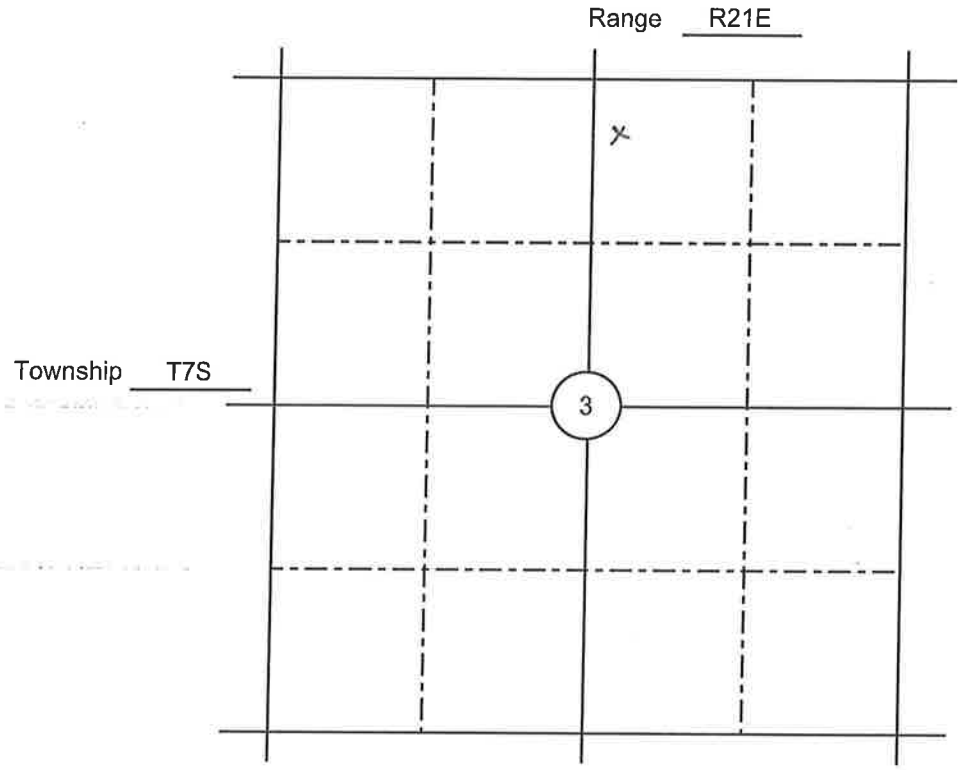
Aaron Olson - Manager Gas Growth and Storage
Print Name and Title

Telephone: 4064973521

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:

SEE ATTACHED
CONDITIONS OF APPROVAL

SEE SAGE GROUSE STIPULATIONS

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

JOB DESIGN SUMMARY

Northwestern - Merkel Engineering
Stages 1-38 - Xlink
October 8, 2026

Lightning 2-3
Carbon, MT
Sec. - Twn. - Rng.
API/UWI: 25-009-21307

Lightning 2-3 - Frontier formation

Max Pressure: 8000 psi

Treatment Via: Tubing - Packer monitor Backside

Tubular Description		Top MD	Bot. MD	Burst	80% Burst	Cap. Gal/ft	Capacity Gal
Casing	5.5", L-80, 20#		9100	9190	7352	0.931	8472.1
						Total Capacity:	8472.1

Pressure Profile & HHP Summary

BH Treating Pres.:	2925 psi+	HHP Based on Ant. STP:	1178 HHP
Total Friction:	1467 psi+	HHP Required for Fluid:	3 Pumps
Hydrostatic Pres.:	1988 psi -	Excess Fluid HHP:	1 Pumps
Ant. STP:	2404 psi	Min Fluid HHP on Loc:	4 Pumps

Perforation information

Perforated Interval Name	Top MD (ft)	Bot. MD (ft)	Top TVD (ft)	Bot TVD (ft)	spf	size (in)	Deg Phase	Charge Type
Stage 1-38	4500	9070	4500	4500	3	0.3	120 deg	

Treatment Summary - per stage

Percent Pad	32%
Acid/Chem. Vol	Gal
Pad + SLF (Clean Fluid Vol.)	39000 Gal
Flush (Clean Fluid Vol.)	6300 Gal
Total Inj. (Clean Fluid Vol.)	45300 Gal

Proppant Summary - per stage

20/40 White	75,000 lbs
Grand Total	75,000 lbs

Company: Northwestern - Merkel Engineering

Lease:	Lightning 2-3	**Formation:**	Frontier
API/UWI:	25-009-21307	Temp Grad:	1.40 °F/100'
Legals:		Press Grad:	0.433 psi/ft
County,State:	Carbon - MT	Frac Grad:	0.65 psi/ft
Field:		Top Perf:	4500 ft - MD
Basin:		Btm Perf:	9070 ft - MD
Group:		Mid Perf:	4500 ft - TVD

BHST:	123 °F	**Description:**	Xlink
Rsvr Pres:	1,949 psi	Treatment:	Stages 1-38
Est. BHTP:	2,925 psi	Base Fluid:	Treated Water
Gross Int.:	4570 ft	Density (lb/gal):	8.5 lb/gal
Net Perf Int.:	4570 ft	Treating Pres:	2404 psi
		MIN HHP:	4 HHP
		MAX PRES:	8000 psi

ID	Stg #	Rate	Treatment Vol	Stage Slurry Vol	Stage Time	Stage Type	Fluid Description	Proppant Type	Prop Conc	Ramp End	Proppant	Cum Fluid Vol	Cum Slry Vol.	Total Time	TGEL-1102	TXL-1111	TBREAK-1104	TSURF-1106	TCLAY-1106	TSCALE-1104	AquaProtec 12-3Cl
		(bpm)	Gal	Bbls	(h:min)				(ppa)	(ppa)	(lbs)	Gal	Gal	(h:min)	gpt	gpt	ppt	gpt	gpt	gpt	gpt
Stage 1-38	1	5	2000	48	0:09	Load/Break	Xlink					2,000	2,000	1:05	5.00	1.50	2.00	1.00	1.00	0.25	0.50
	2	20	10500	250	0:12	Pad	Xlink					12,500	12,500	0:55	5.00	1.50	2.00	1.00	1.00	0.25	0.50
	3	20	6000	149	0:07	SLF	Xlink	20/40 White	1		6,000	18,500	18,774	0:43	5.00	1.50	2.00	1.00	1.00	0.25	0.50
	4	20	6000	156	0:07	SLF	Xlink	20/40 White	2		12,000	24,500	25,321	0:35	5.00	1.50	2.00	1.00	1.00	0.25	0.50
	5	20	5500	149	0:07	SLF	Xlink	20/40 White	3		16,500	30,000	31,573	0:27	5.00	1.50	2.00	1.00	1.00	0.25	0.50
	6	20	4500	127	0:06	SLF	Xlink	20/40 White	4		18,000	34,500	36,894	0:20	5.00	1.50	2.00	1.00	1.00	0.25	0.50
	7	20	4500	132	0:06	SLF	Xlink	20/40 White	5		22,500	39,000	42,420	0:14	5.00	1.50	2.00	1.00	1.00	0.25	0.50
	8	20	6300	150	0:07	Flush	Slickwater					45,300	48,720	0:07	5.00		2.00	1.00	1.00	0.25	0.50
												Chem Rate (gal-lb)/min@ 20 bpm			4.20	1.26	1.68	0.84	0.84	0.21	0.42
												Chem Rate (gal-lb)/min@ 5 bpm			1.05	0.32	0.42	0.21	0.21	0.05	0.11
												Minimum Materials on Location:			227	59	91	45	45	11	23

Acid/Chem. Vol	Gal
Pad + SLF	39,000 Gal
Flush	6,300 Gal
Total Inj. Vol.	45,300 Gal
Percent Pad	32%

Proppant Type	Proppant
20/40 White	75,000
Grand Total	75,000
	-
	-

12 Calc. Eff. Perfs Open @ 100%
0.8 Discharge Coefficient

Interval Name	Top MD (ft)		Bot. MD (ft)	Perf Detail	Tubular Description	Top MD	Bot. MD	Burst	80% Burst	Cap. Gal/ft	Pressure Summary
Stage 1-38	4500		9070	3-spf 0.3 in - 120 deg - 12 Shots	5.5", L-80, 20#		9100	9190	7352	0.931	Pipe Friction: 97 psi