

FORM NO. 2-R 10/99
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JUL 17 2026

**MONTANA BOARD OF OIL &
GAS CONSERVATION • BILLINGS**

Submit In Quadruplicate To:

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

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

SUNDRY NOTICES AND REPORT OF WELLS

Operator PHOENIX OPERATING LLC		Lease Name: ORIGAMI	
Address 4643 SOUTH ULSTER STREET, SUITE 1510		Type (Private/State/Federal/Tribal/Allotted): Private	
City DENVER	State CO Zip Code 80237	Well Number: 32-29-20-17 4H	
Telephone 303-548-1953 Fax		Unit Agreement Name:	
Location of well (1/4-1/4 section and footage measurements): SHL: Lot 1, Section 3, T28N, R57E, 516' FNL & 680' FEL BHL: NWNW, Section 17, T29N, R57E, 240' FNL & 550' FWL		Field Name or Wildcat: Wildcat	
		Township, Range, and Section: Section 3, T28N, R57E	
		County: Roosevelt	
API Number: 25 085 22134 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	☒	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) <u>Update to chemical disclosure</u>	☒	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.
Phoenix respectfully requests to update the pre-job chemical disclosures for the ORIGAMI Pad. Attached chemical disclosures will reflect the change for all subsequent wells on the ORIGAMI Pad.

BOARD USE ONLY	
Approved <u>JUL 23 2026</u> Date	Technical Program Coordinator
<u>Benjamin J. Davis</u> Name	
	Title

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

7/17/2026 Date	<u>Megan Griffith</u> Signed (Agent)
Megan Griffith, Regulatory Specialist Print Name and Title	
Telephone: 720-250-8737	

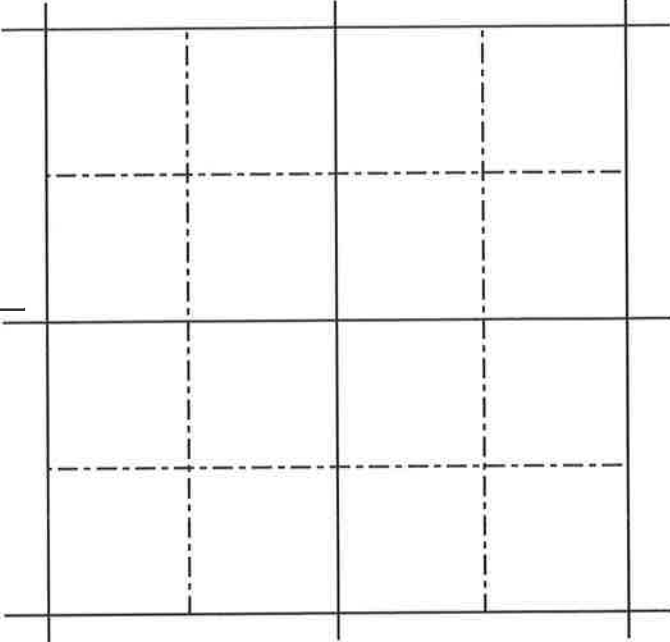
SUPPLEMENTAL INFORMATION

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.

Range _____

Township _____



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.

10/1/2011
10/1/2011
10/1/2011

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**MONTANA BOARD OF OIL &
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[illegible]

<i>Additive</i>	<i>Specific Gravity</i>	<i>Additive Quantity</i>	<i>Mass (lbs)</i>
ACI-410	8.88	100.00	888
BEZ-58	8.92	100.00	892
Crystalline Silica Quartz	(already reported in lbs)	18,482,750.00	18,482,750
C-SI 144SF	8.31	5,762.00	47,894
C-SI 148	9.45	100.00	945
C-SI 148SF	9.05	100.00	905
C-STIM 1010C	8.34	100.00	834
C-STIM 1010S	8.49	100.00	849
C-STIM 101SF	8.05	9,603.00	77,271
DF-36S	8.76	100.00	876
DFR-2S	(already reported in lbs)	100.00	100
Enviro-Syn HCR-7000FRAC-WL	9.34	100.00	934
Enviro-Syn HCR-7000-WL	9.22	100.00	922
Enviro-Syn HCR-7000-WL+	9.05	333.00	3,015
FRP-10S	9.60	100.00	960
FRP-1S	9.17	100.00	917
FRS-HV8100	12.51	28,810.00	360,413
FRS-HV8200	8.50	756.00	6,426
HCL-15	8.95	100.00	895
HCL-28	9.50	100.00	950
HCL-36	9.84	100.00	984
IC-50S	10.33	100.00	1,033
K-BAC 50510	8.84	1,921.00	16,982
K-BAC 50510W	8.43	100.00	843
Liberty Clean Out Fluid	8.16	100.00	816
Produced Brine Water	9.40	100.00	940
Soda Ash	(already reported in lbs)	100.00	100
WA-100	8.92	100.00	892
Water	8.34	19,206,953.52	160,185,992
			Total Slurry Mass (Lbs)
			179,198,218

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MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

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)***
Produced Brine Water	Operator	Carrier	Produced Brine Water	7732-18-5	100.00000%	9.40	0.00052%
Water	Operator	Carrier	Water	7732-18-5	100.00000%	160,183,992	89.39039%
WA-100	Italmatch Chemicals	Wetting Agent	MSDS and Non-MSDS Ingredients Listed Below				
FRS-HV8200	Liberty Energy	Friction Reducer	MSDS and Non-MSDS Ingredients Listed Below				
IC-50S	Italmatch Chemicals	Iron Control	MSDS and Non-MSDS Ingredients Listed Below				
Liberty Clean Out Fluid	Liberty Energy	Cleanup Solution	MSDS and Non-MSDS Ingredients Listed Below				
C-STIM 101SF	Creedence Energy Services	Biosurfactant	MSDS and Non-MSDS Ingredients Listed Below				
C-SI 144SF	Creedence Energy Services	Scale Inhibitor	MSDS and Non-MSDS Ingredients Listed Below				
FRP-1S	Liberty Energy	Friction Reducer	MSDS and Non-MSDS Ingredients Listed Below				
K-BAC 50510	Italmatch Chemicals	Biocide	MSDS and Non-MSDS Ingredients Listed Below				
DFR-2S	Liberty Energy	Friction Reducer	MSDS and Non-MSDS Ingredients Listed Below				
HCL-28	Liberty Energy	Acid	MSDS and Non-MSDS Ingredients Listed Below				
Enviro-Syn HCR-7000-WL	Fluid Energy Group	Solvent	MSDS and Non-MSDS Ingredients Listed Below				
K-BAC 50510W	Italmatch Chemicals	Biocide	MSDS and Non-MSDS Ingredients Listed Below				
Soda Ash	Liberty Energy	Buffer	MSDS and Non-MSDS Ingredients Listed Below				
HCL-15	Liberty Energy	Acid	MSDS and Non-MSDS Ingredients Listed Below				
FRP-10S	Liberty Energy	Friction Reducer	MSDS and Non-MSDS Ingredients Listed Below				
C-SI 148	Creedence Energy Services	Surfactant	MSDS and Non-MSDS Ingredients Listed Below				
BEZ-58	Liberty Energy	Breaker	MSDS and Non-MSDS Ingredients Listed Below				
HCL-36	Liberty Energy	Acid	MSDS and Non-MSDS Ingredients Listed Below				
C-SI 148SF	Creedence Energy Services	Biosurfactant	MSDS and Non-MSDS Ingredients Listed Below				
C-STIM 1010C	Creedence Energy Services	Biosurfactant	MSDS and Non-MSDS Ingredients Listed Below				
Enviro-Syn HCR-7000-FRAC	Fluid Energy Group	Solvent	MSDS and Non-MSDS Ingredients Listed Below				
FRS-HV 8100	Liberty Energy	Friction Reducer	MSDS and Non-MSDS Ingredients Listed Below				
CysalLine Silica Quartz	Liberty Energy	Proppant	MSDS and Non-MSDS Ingredients Listed Below				
Enviro-Syn HCR-7000-WL	Fluid Energy Group	Solvent	MSDS and Non-MSDS Ingredients Listed Below				
DF-36S	Italmatch Chemicals	Defoamer	MSDS and Non-MSDS Ingredients Listed Below				
C-STIM 1010S	Creedence Energy Services	Biosurfactant	MSDS and Non-MSDS Ingredients Listed Below				
ACI-410	Italmatch Chemicals	Corrosion Inhibitor	MSDS and Non-MSDS Ingredients Listed Below				

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass) ^{a,w}	Mass per Component (LBS)	Maximum Ingredient Concentration in HF Fluid (% by mass) ^{a,w}
The trade name(s) of the additive(s) used, supplier(s), and the purpose(s) of the additive(s) are listed above. The ingredient(s) for the above additive(s) are listed below.							
			Crystalline Silica in the form of Quartz	14808-60-7	97.2199%	18,482,750	10.31414%
			polyacrylamide	9003-05-8	1.0427%	198,227	0.11002%
			hydro-treated distillate, light	64742-47-8	0.8531%	162,186	0.09051%
			Water	7732-18-5	0.3049%	57,957	0.02334%
			Water	7732-18-5	0.1763%	33,326	0.01871%
			Methanol	67-56-1	0.0813%	15,455	0.00862%
			Alcohols	68551-12-2	0.0813%	15,455	0.00862%
			Methanol	67-56-1	0.0736%	14,368	0.00802%
			Water	7732-18-5	0.0715%	13,585	0.00758%
			Acrylamide	68584-22-5	0.0203%	3,864	0.00216%
			Glycolipid	2768394-42-7	0.0203%	3,864	0.00216%
			Polyacrylamide	9003-05-8	0.0169%	3,213	0.00179%
			Hydro-treated distillate, light	64742-47-8	0.0135%	2,563	0.00143%
			Water	7732-18-5	0.0126%	2,395	0.00134%
			Aminoethyl Ethanolamine Tri(methylene phosphonic acid)	129828-36-0	0.0126%	2,395	0.00134%
			Polyamino polyether methylene phosphonate	130668-24-5	0.0126%	2,395	0.00134%
			Quaternary ammonium compounds, benzyl-C12-16-alkyl dimethyl chlorides	68424-85-1	0.0094%	1,783	0.00100%
			Nitrogenous base	Proprietary	0.0049%	934	0.00052%
			Hydrochloric Acid	7647-01-0	0.0048%	905	0.00050%
			Glutaraldehyde	111-50-8	0.0047%	892	0.00050%
			Water	7732-18-5	0.0043%	850	0.00047%
			Water	7732-18-5	0.0040%	761	0.00042%
			Reduced ingredients	Proprietary	0.0040%	754	0.00042%
			Propylene glycol	57-55-6	0.0040%	754	0.00042%
			Tall oil fatty acid	61790-12-3	0.0040%	754	0.00042%
			Poly(oxo-1,2-ethanediy), alpha-hexyl-omega-hydroxy-	31726-34-8	0.0040%	754	0.00042%
			Formic Acid	64-18-6	0.0040%	754	0.00042%
			Sodium chloride	7647-14-5	0.0040%	754	0.00042%
			Sodium benzoate	532-32-1	0.0036%	754	0.00042%
			Water	7732-18-5	0.0036%	684	0.00038%
			Oxygenate and paraffinic stream	876065-86-0	0.0035%	674	0.00038%
			2-Hydroxypropane-1,2,3-tricarboxylic acid	77-92-9	0.0034%	650	0.00036%
			Water	7732-18-5	0.0033%	634	0.00035%
			Water	7732-18-5	0.0033%	629	0.00035%
			Methanol	67-56-1	0.0031%	584	0.00033%
			Water	7732-18-5	0.0031%	584	0.00033%
			Water	7732-18-5	0.0028%	533	0.00030%
			Ethyl alcohol	64-17-5	0.0027%	509	0.00028%
			Water	7732-18-5	0.0027%	506	0.00028%
			Water	7732-18-5	0.0023%	432	0.00024%
			Water	7732-18-5	0.0019%	367	0.00020%
			Ethoxylated Decyl Alcohol	78330-20-8	0.0019%	357	0.00020%
			Hydrochloric Acid	7647-01-0	0.0019%	354	0.00020%

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			Water	7732-18-5	0.0018%	334	0.00019%
			2-Propenoic acid, polymer with 2-propenamide, sodium salt	25987-30-8	0.0016%	298	0.00017%
			2-Propenoic acid, polymer with 2-propenamide, sodium salt	25987-30-8	0.0015%	284	0.00016%
			Hydrochloric Acid	7647-01-0	0.0015%	276	0.00015%
			Distillates (petroleum), hydrotreated light	64742-47-8	0.0014%	275	0.00015%
			Ethylene Glycol	107-21-1	0.0014%	272	0.00015%
			Propylene Glycol	57-55-6	0.0014%	268	0.00015%
			Pyridinium, 1-(phenylmethyl)-, ethyl methyl derivs., chlorides	68909-18-2	0.0014%	266	0.00015%
			Hydrochloric Acid	7647-01-0	0.0014%	266	0.00015%
			Methanol	67-56-1	0.0013%	250	0.00014%
			Ethylene Glycol	107-21-1	0.0013%	241	0.00013%
			Distillates (petroleum), hydrotreated light	64742-47-8	0.0013%	240	0.00013%
			Water	7732-18-5	0.0012%	223	0.00012%
			Methanol	67-56-1	0.0012%	219	0.00012%
			Styrene-Ethylene/Propylene-(Styrene) (SEPS)	68648-89-5	0.0010%	193	0.00011%
			Hydrochloric acid	7647-01-0	0.0010%	187	0.00010%
			Hemicellulase	9023-56-3	0.0008%	161	0.00009%
			Cellulase Enzyme	9012-54-8	0.0008%	161	0.00009%
			Hydrochloric Acid	7647-01-0	0.0007%	134	0.00007%
			Nonylphenol ethoxylated	127087-87-0	0.0007%	133	0.00007%
			Sucrose	57-50-1	0.0006%	107	0.00006%
			Sodium Carbonate	497-19-8	0.0005%	99	0.00006%
			Phosphonic acid, [[2-[(2-hydroxyethyl)(phosphonomethyl)amino]ethyl]imino]bis(methylene)]bis-, compd with 2-aminoethanol	129828-36-0	0.0005%	94	0.00005%
			Polyamino Polyether Methylene Phosphonate	130668-24-5	0.0005%	94	0.00005%
			Proprietary Ingredient	Proprietary	0.0005%	92	0.00005%
			Phosphonic acid, [[[(2-(2-hydroxyethyl)(phosphonomethyl)amino]ethyl]imino]bis(methylene)]bis-, compd with 2-aminoethanol	129828-36-0	0.0005%	91	0.00005%
			Polyamino Polyether Methylene Phosphonate	130668-24-5	0.0005%	91	0.00005%
			Methanol	67-56-1	0.0005%	89	0.00005%
			Quaternary ammonium compounds, benzyl-C12-16-alkyl/dimethyl, chlorides	68424-85-1	0.0005%	89	0.00005%
			2-Propenoic acid polymer with acrylamide, sodium salt	25987-30-8	0.0005%	88	0.00005%
			Polypropylene Glycol	25322-69-4	0.0005%	88	0.00005%
			Polydimethylsiloxane	63148-63-9	0.0003%	53	0.00003%
			Alcohols, C12-16, ethoxylated	68551-12-2	0.0002%	46	0.00003%
			Glutaraldehyde	111-30-8	0.0002%	44	0.00002%
			Alcohols	68551-12-2	0.0002%	42	0.00002%
			Arylsulfonic Acid	68584-22-5	0.0002%	42	0.00002%
			Glycolipid	2768304-42-7	0.0002%	42	0.00002%
			Alcohols	68551-12-2	0.0002%	42	0.00002%
			Arylsulfonic Acid	68584-22-5	0.0002%	42	0.00002%
			Glycolipid	2768304-42-7	0.0002%	42	0.00002%
			Sorbitan monooleate	1338-43-8	0.0001%	28	0.00002%
			Ethyl alcohol	64-17-5	0.0001%	25	0.00001%

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass) ^{a,b}	Mass per Component (LBS)	Maximum Ingredient Concentration in HF Fluid (% by mass) ^{a,b}
			Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	0.0001%	24	0.00001%
			Urea	57-13-6	0.0001%	24	0.00001%
			Sodium Sulfate	7757-82-6	0.0001%	19	0.00001%
			Amides, tall-oil fatty, N,N-bis(hydroxyethyl)	68155-20-4	0.0001%	19	0.00001%
			Water	7732-18-5	0.0001%	12	0.00001%
			Sorbitan Monooleate	1338-43-8	0.0001%	10	0.00001%
			Urea	57-13-6	0.0000%	9	0.00001%
			Acrylamide	79-06-1	0.0000%	1	0.00000%
			C.I. Solvent Yellow 33	8003-22-3	0.0000%	0	0.00000%