

Submit In Quadruplicate To:

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

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MAR 29 2023

SUNDRY NOTICES AND REPORT OF WELLS

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

Operator Denbury Onshore, LLC		Lease Name: Unit
Address 5851 Legacy Circle, Suite 1200		Type (Private/State/Federal/Tribal/Allotted): Federal
City Plano State TX Zip Code 75024	Well Number: 812	
Telephone 972-673-0000 Fax	Unit Agreement Name: BCCMU	
Location of well (1/4-1/4 section and footage measurements): NW-SW Sec. 8, T9S - R54E . 1980' FSL & 660' FWL .		Field Name or Wildcat: Bell Creek
API Number: 25 075 21521	Well Type (oil, gas, injection, other): Oil	Township, Range, and Section: T9S-R54E, Sec. 8 .
State 25 County 075 Well 21521	County: Powder River .	

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 checked="" 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>Fracture Stimulate</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.

Denbury requests approval to fracture stimulate the subject well. Please see attached procedure, wellbore schematics, treatment plan and CAS numbers for additional information.

BOARD USE ONLY	
Approved _____	Date _____
Accepted for record purposes only	
APR 19 2023	
Name _____	Title _____

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

03/28/2023 

Date Signed (Agent)

Naomi Johnson - Regulatory Compliance Specialist

Print Name and Title

Telephone: 972-673-2552



FLUID DESCRIPTION

Fluid 1: 20# XLink
 Fluid 2: 20# Linear

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MATERIAL'S	U.O.M.	LOADING PER/1000 GALLONS									Totals
		Fluid 1 11.000	Fluid 2 5.750	Fluid 3 0	Fluid 4 0	Fluid 5 0	Fluid 6 0	Fluid 7 0	Fluid 8 0	Fluid 9 0	
WG-1SLR, Stirred Guar Gel	gal	5.00	5.00								435
BIO-2L Liquid Brocide (THPS)	gal	0.30	0.30								27
Surf Plus (Surfactant/NE/Remediation)	gal	2.00	2.00								174
XLB-1 Self Buffered Borate Crosslinker	gal	1.50									122
B-1, Oxidizer Breaker (AP)	lb	2.00	2.00								174
B-4LE, High pH/Low Temp < 140°F Enzyme Breaker	gal	0.15	0.15								14
KCL-2Sub, KCl Substitute (anionic tolerant)	gal	2.00	2.00								174
											0
											0
											0
											0
											0
											0
											0
											0
											0

Stage 1

Pump Schedule

Maximum Pressure (psi): 5,000
 Est. Treating Pressure (psi): 4,500

Perforations: _____

STG No.	Preppant Lbs/Gal	Stage Gallons	Fluid Type or Comment	Preppant Type or Stage Description	Stage Lbs. Preppant	Clean Rate (bpm)	Clean Blks.	Slurry Rate (bpm)	Slurry Blks.	Stage Time	Lbs. Prep per minute
1		3,500	20# Linear	Pre-Pad		10.0	83	10.0	83	8.33	
2		25,000	20# Xlink	Pad		25.0	595	25.0	595	23.81	
3	1.00	6,000	20# Xlink	SLF, 20/40 White	6,000	23.9	143	25.0	149	5.97	1,034
4	2.00	9,000	20# Xlink	SLF, 20/40 White	18,000	22.9	214	25.0	234	9.35	1,924
5	3.00	11,000	20# Xlink	SLF, 20/40 White	33,000	22.0	262	25.0	298	11.91	2,773
6	4.00	13,000	20# Xlink	SLF, 20/40 White	52,000	21.2	310	25.0	366	14.64	3,552
7	5.00	12,200	20# Xlink	SLF, 20/40 White	61,000	20.4	290	25.0	357	14.27	4,275
8	6.00	5,000	20# Xlink	SLF, 20/40 White	30,000	19.7	119	25.0	152	6.06	4,947
9		2,293	20# Linear	Flush Eat		25.0	55	25.0	55	2.18	

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PRODUCT DESCRIPTION

WG-1SLR, Slurried Guar Gel

Q5451	
General Information	WG-1SLR, Slurried Guar Gel is a preslurried form of a high-yield guar gum for preparing fracturing fluids. It provides exceptionally fast, "fisheye"-free hydration even in cold water.
Uses & Applications	WG-1SLR, Slurried Guar Gel can be used wherever conventional guar is used. The slurry is 4 pounds of guar per gallon of slurry. The rapid hydration allows "on the fly" mixing with fairly low-volume hydration tank in line to the blender.
Density In Sp.Gr.	1.019
Specs	Tan/yellowish slurry liquid-Water soluble

BIO-2L, Liquid Biocide (THPS)

Q5281	
General Information	BIO-2L, Liquid is a liquid biocide based on Tetrakis (Hydroxymethyl) Phosphonium Sulfate (THPS), for use in oilfield water applications such as fracturing fluids. Used as directed, it is a highly effective and economical in controlling most sulfate-reducing and acid-producing bacteria as well as algae and fungi. Biocide, Liquid penetrates biofilms and works synergistically with chlorine- and bromine-based biocides.
Uses & Applications	BIO-2L, Liquid is best added to frac or flush water as water is transferred. Loadings as low as .1 gpt have been shown to be effective in relatively clean water. Dosages as high as 1 gpt may be required in badly contaminated waters.
Density In Sp.Gr.	0.95
Specs	Clear colorless liquid-Water soluble

Surf Plus (Surfactant/N.E./Remediation)

Q5701	
General Information	Surf Plus is a nonionic biodegradable stable complex nanofluid (CnF)—a mixture of solvent, co-solvent and surfactants for use as a stimulation additive and especially in CO2 water floods and CO2 assisted fracturing.
Uses & Applications	Surf Plus is typically loaded at .5 to 2 gpt in acid or frac fluid.
Density In Sp.Gr.	0.935
Specs	Light yellow liquid-Water soluble

XLB-1, Self Buffered Borate Crosslinker

Q5500	
General Information	XLB-1 is a self buffering, highly concentrated borate crosslinker for fracturing fluids. It requires no pH control additive.
Uses & Applications	Normal loadings for XLB-1 range from .6 to 1.4 gpt when used in 30 to 35 ppt guar based gel. Higher loadings may be needed in cold weather or with "on the fly" liquid gelling agents where incomplete hydration of the guar may be occurring. It can be broken with oxidizing breakers or high pH enzyme breakers.
Density In Sp.Gr.	1.303
Specs	Clear colorless liquid-Water soluble

B-1, Oxidizer Breaker (AP)

Q5475	
General Information	B-1, APS is an oxidative breaker for fracturing fluids at low to moderate temperatures.
Uses & Applications	B-1, APS is typically used in fracturing treatments at loadings of .2 to 2 ppt of fluid. Fluid temperatures most appropriate for Ammonium persulfate are from around 80° F to 190° F.
Density In Sp.Gr.	1.98
Specs	White granules-Water soluble

B-4LE, High pH/Low Temp. <140°F Enzyme Breaker

Q5478	
General Information	B-4LE is a liquid enzyme breaker designed specifically for borate crosslinked fluid with pH of up to 10.
Uses & Applications	B-4LE is typically loaded at .2 to 2 gpt. B-4LE has a shelf life of 90 days.
Density In Sp.Gr.	1.12
Specs	Light brown liquid-Water soluble

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PRODUCT DESCRIPTION	
KCL-2Sub, KCl Substitute (anionic tolerant)	
Q5301	
General Information	KCL-2Sub is a slightly cationic highly concentrated liquid potassium chloride substitute for oilfield use. Unlike many other KCl substitutes, KCL Substitute is very low in toxicity and contains no surfactants. KCL-2Sub is a 70% Choline Chloride base clay protection product. KCL-2Sub can be used with an Anionic Friction Reducer with little to no effect on the efficiency of the anionic friction reducer.
Uses & Applications	KCL-2Sub can be used in any application where the stabilization of formation clays are required. KCL Substitute typical loadings of .5 to 1 gpt will give the base fluid the equivalent clay stabilization of 2% dry potassium chloride in most formations.
Density in Sp.Gr.	1.13
Specs	Clear liquid-Water soluble
General Information	
Uses & Applications	
Density in Sp.Gr.	
Specs	
General Information	
Uses & Applications	
Density in Sp.Gr.	
Specs	
General Information	
Uses & Applications	
Density in Sp.Gr.	
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General Information	
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Specs	

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3/22/23 CAS INFORMATION: Denbury Bell Creek Muddy

Additive	Max Loadings/ 1000 Gall	Specific Gravity	Additive Quantity	Mass (lbs)
Water (Customer Supplied)	1,000.00	1.00	86,993	725,957
WG-ISLR, GUAR SLURRY	5.00	1.04	435	3,783
BIO-2L, BIOCID	0.30	1.00	27	225
SURF PLUS, CNF	2.00	0.94	174	878
KCI-2SUB, KCI SUBSTITUTE	2.00	1.08	174	878
B-1, BREAKER	2.00	2.55	174	174
B-4LE, ENZYME BREAKER	0.15	1.03	14	120.3
XLB-1, CROSSLINKER	1.50	1.35	122	1,374
NORTHERN WHITE SAND	6,000.00	2.65	200,000	200,000
				Total Slurry Mass (Lbs)
				933,389

Name	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Total Component Mass in HF Fluid (lbs)	Maximum Ingredient Concentration in HF Fluid (% by mass)**
Water (Customer Supplied)	Water	7732-18-5	100.00%	725,957	77.77641%
NORTHERN WHITE SAND	Silica Quartz	14808-60-7	100.00%	200,000	21.42729%
WG-ISLR, GUAR SLURRY	Solvent Naptha (pet.) heavy aliphatic	64742-47-8	60.00%	2,270	0.24315%
	Guar Gum	9000-30-0	50.00%	1,891	0.20262%
SURF PLUS, CNF	Dipentene; Limonene	138-86-3	30.00%	263.4	0.02822%
	Ethoxylated Alcohol	68439-46-3	30.00%	263.4	0.02822%
	Nonyl Phenol Ethoxylated	127087-87-0	30.00%	263.4	0.02822%
	Isopropanol	67-63-0	15.00%	131.7	0.01411%
KCI-2SUB, KCI SUBSTITUTE	Choline Chloride	67-48-1	70.00%	614.6	0.06585%
	Water	7732-18-5	30.00%	263.4	0.02822%
XLB-1, CROSSLINKER	Water	7732-18-5	60.00%	824.7	0.08835%
	Potassium Hydroxide	1310-58-3	30.00%	412.3	0.04418%
	Boric Acid	10043-35-3	30.00%	412.3	0.04418%
B-1, BREAKER	Ammonium persulfate	7727-54-0	100.00%	174.0	0.01864%
B-4LE, ENZYME BREAKER	Water	7732-18-5	90.00%	108.3	0.01160%
	Sodium Chloride	7647-14-5	15.00%	18.1	0.00193%
	Mannanase Enzymes	37288-54-3	2.00%	2.4	0.00026%
BIO-2L, BIOCID	Tetrakis(hydroxymethyl) Phosphonium Sulfate	55566-30-8	20.00%	45.1	0.00483%
	Water	7732-18-5	80.00%	180.3	0.01931%

100.00%