FORM NO. 2 R 10/09

ARM 36,22,307, 601, 605, 1003, 1004, 1011, 1013, 1103, 1222, 1240, 1301,

RECEIVED

Submit In Quadruplicate To:

MONTANA BOARD OF OIL AND GAS CONSERVATION

Location of well (1/4-1/4 section and footage measurements): NE NW 210' FNL & 2136' FWL (Sec. 5-T23N-R57E) · Lot 3 Field Name or Wildcat: Wildc		2535 ST. BILLINGS				APR 07	2025		
Frostbite-Harriet Type (Pirvate/State/Federal/Tribal/Allotted): Pirvate Type (Pirvate/State/Federal/Tribal/Allotted): Pirvate Well Number: 5-3-HID3 Unit Agreement Name: NE NW 210' FNL & 2136' FWL (Sec. 5-T23N-R57E) · Lot 3 Well Type (oil, gas, injection, other): Oil Well Type (oil, gas, injection, other): Oil API Number: 25	S	SUNDRY NOTICES	AND	REPO	RT OF WELLS	GAS CONSERVATION	D OF OIL N • BILLIN		
Address 400 W. 7th Street City Fort Worth State TX Zip Code 76102 Telephone 817-334-8096 Fax Well Number: 53-HiD3 · Unit Agreement Name: NE NW 210' FNL & 2136' FWL (Sec. 5-T23N-R57E) · Lot 3 Unit Agreement Name: NE NW 210' FNL & 2136' FWL (Sec. 5-T23N-R57E) · Lot 3 Unit Agreement Name: NE NW 210' FNL & 2136' FWL (Sec. 5-T23N-R57E) · Lot 3 Unit Agreement Name: Notice of Intention to Change Plans Notice of Intention to Change Plans Notice of Intention to Change Plans Notice of Intention to Run Mechanical Integrity Test Notice of Intention to Run Mechanical Integrity Test Notice of Intention to Abandon Well Notice of Intention to Abandon Well Notice of Intention to Change Well Status Subsequent Report of Production Waste Disposal Notice of Intention to Change Well Status Subsequent Report of Change in Well Status Subsequent Report of Change in Well Status Subsequent Report of Gas Analysis (ARM 36 22.1222) Subsequent Report of Refrac Operations: Describe Proposed or Completed Operations: Describe Proposed operations or the completion date for completed operations. Describe Proposed or Completed Operations: Describe Proposed Operations: Describe Proposed or Completed Operations: Describe Proposed or Complet	Operator MorningStar Operating LLC				Lease Name:				
City Fort Worth State TX Zip Code 76102 Telephone 817-334-8096 Fax									
Well Number: State X Zp Code 76 102	Address 400 VV. / [[] Street								
Telephone 817-334-8096 Fax Location of well (1/4-1/4 section and footage measurements): NE NW 210 FNL & 2136 FWL (Sec. 5-T23N-R57E) · Lot 3 Vell Type (oil, gas, injection, other): Field Name or Wildcat: Wildcat · Wildcat · Wildcat · Wildcat · Wildcat · Wildcat · Township, Range, and Section: Section 5 T23N-R57E · County · Richland County R	City Fort Worth State TX Zip Code 76102								
NE NW 210 FNL & 2136 FWL (Sec. 5-T23N-R57E) · Lot 3 API Number:	Telephone 817-334-8096 Fax				66 (0.000) 10.00000000				
Field Name or Wildcat: Wildcat - Township, Range, and Section: Section 5: T23N-R57E - Section 5: T23N-R57E - County: Richland County Well) :		Unit Agreement Nam	e:			
Wildcat - Township, Range, and Section: Section 5: T23N-R57E - County: Richland County Well 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 Subsequent Report of Mechanical Integrity Test Subsequent Report of Perforation or Treatment Subsequent Report of Perforation or Treatment Subsequent Report of Perforation or Change Plans Notice of Intention to Stimulate or to Chemically Treat Subsequent Report of Perforation or Change Intention to Perforate or to Cement Subsequent Report of Pulled or Altered Casing Notice of Intention to Abandon Well Subsequent Report of Production Waste Disposal Subsequent Report of Production Waste Disposal Subsequent Report of Change in Well Status Subsequent Report of Change in Well Status Subsequent Report of Gas Analysis (ARM 36.22.1222) Describe Proposed or Completed Operations: Describe Proposed Operations or the completed Operations: Describe Proposed Operations or the completed Operations: Describe Proposed Operations or the compl	NE NW 210' FNL & 2136' FWL (Sec. 5-1	123N-R57E) · Lot 3							
API Number: 25 083 22655					Field Name or Wildca	nt:			
API Number: Veil Type (oil, gas, injection, other): Section 5: T23N-R57E					Wildcat				
County: Richland County County: Richland County Richland Cou					Township, Range, and Section:				
Size County Well Richard County 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 Run Mechanical Integrity Test Notice of Intention to Stimulate or to Chemically Treat 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 Pull or Alter Casing Notice of Intention to Pull or Alter Casing Notice of Intention to Change Well Status Subsequent Report of Production 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 Proposed or Completed Operations Describe Proposed or Completed O	API Number:	API Number: Well Type (oil, gas, injection, oth			Section 5: T23N-R5	7E ::			
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 Stimulate or to Chemically Treat Notice of Intention to Perforate or to Cernent Notice of Intention to Abandon Well Notice of Intention to Pull or Alter Casing Notice of Intention to Pull or Alter Casing Notice of Intention to Change Well Status Subsequent Report of Pulled or Altered Casing Notice of Intention to Change Well Status Subsequent Report of Production Waste Disposal Subsequent Report of Change in Well Status Subsequent Report of Change in Well Status Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Refrac Operations: Describe Proposed or Completed Operations: Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as secessary. Indicate the intended starting date for proposed operations or the completion date for completed operations. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date BOARD USE ONLY APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date Print Name and Title	25 083 22655	Oil		Ī	County:				
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 Stimulate or to Chemically Treat Notice of Intention to Stimulate or to Cement Notice of Intention to Perforate or to Cement Notice of Intention to Abandon Well Notice of Intention to Abandon Well Notice of Intention to Pull or Alter Casing Notice of Intention to Pull or Alter Casing Notice of Intention to Change Well Status Subsequent Report of Pulled or Altered Casing Notice of Intention to Change Well Status Subsequent Report of Production Waste Disposal Subsequent Report of Change in Well Status Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Refrac Operations Describe Proposed or Completed Operations: Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as accessary. Indicate the intended starting date for proposed operations or the completion date for completed operations. Idease find attached (1) MSO's Recompletion Procedure for the Frostbite-Harriet 5-3HID3, and (2) the Fracturing Fluid Disclosure. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date BOARD USE ONLY APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date Signed (Agent) Holly Wood, Regulatory Analyst Print Name and Title	State County Well				Richland County				
Notice of Intention to Run Mechanical Integrity Test Notice of Intention to Stimulate or to Chemically Treat Notice of Intention to Stimulate or to Chemically Treat Notice of Intention to Perforate or to Cement Notice of Intention to Perforate or to Cement Notice of Intention to Abandon Well Notice of Intention to Abandon Well Notice of Intention to Pull or Alter Casing Notice of Intention to Change Well Status Notice of Intention to Change Well Status Subsequent Report of Drilling Waste Disposal Subsequent Report of Production Waste Disposal Subsequent Report of Change in Well Status Subsequent Report of Change in Well Status Subsequent Report of Refrac Describe Proposed or Completed Operations Describe Proposed or Completed Proposed or Completed Operations Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as recessary. Indicate the intended starting date for proposed operations or the completion date for completed operations. Describe Proposed or Intention to Deform a refrac. Describe Proposed or Intention to Pull or Alter Casing Subsequent Report of Production Waste Disposal Subsequent Report of Change in Well Status Subsequent Report of Refrac Operations Describe Proposed or Completed Operations Describe Proposed Operations Describe Proposed Operations	Indicate below with an X the nature	of this notice, report, or o	ther data	i					
Notice of Intention to Stimulate or to Chemically Treat Notice of Intention to Perforate or to Cement Notice of Intention to Perforate or to Cement Notice of Intention to Abandon Well Notice of Intention to Abandon Well Notice of Intention to Pull or Alter Casing Notice of Intention to Pull or Alter Casing Notice of Intention to Change Well Status Subsequent Report of Pulled or Altered Casing Subsequent Report of Pulled or Notice Disposal Subsequent Report of Production Waste Disposal Subsequent Report of Change in Well Status Subsequent Report of Change in Well Status Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Refrac Operations Describe Proposed or Completed Operations: Describe Propos	Notice of Intention to Change Plans	1	Su	ubsequer	nt Report of Mechanica	al Integrity Test			
Notice of Intention to Perforate or to Cement Notice of Intention to Abandon Well Notice of Intention to Abandon Well Notice of Intention to Pull or Alter Casing Notice of Intention to Pull or Alter Casing Notice of Intention to Pull or Alter 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) Subsequent Report of Refrac Operations Pescribe Proposed or Completed Operations: Describe Proposed Operations		_ ,	Su	Subsequent Report of Stimulation or Treatment					
Notice of Intention to Abandon Well Notice of Intention to Pulled or Altered Casing Notice of Intention to Pull or Alter Casing Notice of Intention to Pull or Alter Casing Notice of Intention to Change Well Status Subsequent Report of Production Waste Disposal Subsequent Report of Production Waste Disposal Subsequent Report of Change in Well Status Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Refrac Operations Describe Proposed or Completed Operations: Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as recessary. Indicate the Intended starting date for proposed operations or the completion date for completed operations. Horning Star Operating ("MSO") respectfully submits this Notice of Intent to perform a refrac. Hease find attached (1) MSO's Recompletion Procedure for the Frostbite-Harriet 5-3HID3, and (2) the Fracturing Fluid Disclosure. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date BOARD USE ONLY APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date Print Name and Title									
Notice of Intention to Pull or Alter Casing Notice of Intention to Change Well Status Subsequent Report of Drilling Waste Disposal Subsequent Report of Production Waste Disposal Subsequent Report of Change in Well Status Subsequent Report of Change in Well Status Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Refrac Operations Describe Proposed or Completed Operations Describe Propo									
Notice of Intention to Change Well Status Subsequent Report of Production Waste Disposal Subsequent Report of Change in Well Status Subsequent Report of Change in Well Status Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Refrac Operations Describe Proposed or Completed Operations: Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as recessary. Indicate the intended starting date for proposed operations or the completion date for completed operations. Horning Star Operating ("MSO") respectfully submits this Notice of Intent to perform a refrac. Rease find attached (1) MSO's Recompletion Procedure for the Frostbite-Harriet 5-3HID3, and (2) the Fracturing Fluid Disclosure. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date Date Signed (Agent) Holly Wood, Regulatory Analyst Print Name and Title									
Subsequent Report of Change in Well Status Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Refrac Operations Describe Proposed or Completed Operations: Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as recessary. Indicate the intended starting date for proposed operations or the completed operations. Horning Star Operating ("MSO") respectfully submits this Notice of Intent to perform a refrac. Hease find attached (1) MSO's Recompletion Procedure for the Frostbite-Harriet 5-3HID3, and (2) the Fracturing Fluid Disclosure. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date Signed (Agent) Holly Wood, Regulatory Analyst Print Name and Title	Notice of Intention to Pull or Alter Casing			Subsequent Report of Drilling Waste Disposal					
Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Refrac Operations Describe Proposed or Completed Operations: Describe planned or completed work in detail. Attach maps, well-bore configuration diagrams, analyses, or other information as lecessary. Indicate the intended starting date for proposed operations or the completion date for completed operations. Horning Star Operating ("MSO") respectfully submits this Notice of Intent to perform a refrac. Hease find attached (1) MSO's Recompletion Procedure for the Frostbite-Harriet 5-3HID3, and (2) the Fracturing Fluid Disclosure. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: 104/04/2025 Date Date Admir/fel. Engineer Subsequent Report of Gas Analysis (ARM 36.22.1222) Subsequent Report of Refrac Operations Date Subsequent Report of Refrac Operations Subsequent Report of Refrac Operations Date Subsequent Report of Refrac Operations Subsequent Report of Refrac Operations The undersigned hereby certifies that the information contained on this application is true and correct: 04/04/2025 Date Subsequent Report of Refrac Operations Provided The Admirector of Refrac Operations Subsequent Report of Refrac Operations Subsequent Report of Refrac Operations 104/04/2025 Date Subsequent Report of Refrac Operations Subsequent Report of Refrac Operations 105/04/04/202									
Describe Proposed or Completed Operations: 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 completed operations. Identify the proposed operation of the proposed operation of the completed operations. Identify the proposed operation of the completed operations. Identify the proposed operation of the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Identify the proposed operation of the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations or the completed operations. Indicate the intended starting date for proposed operations. Indicate the intended starting date for propos				· · · · · · · · · · · · · · · · · · ·					
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. Norning Star Operating ("MSO") respectfully submits this Notice of Intent to perform a refrac. Idease find attached (1) MSO's Recompletion Procedure for the Frostbite-Harriet 5-3HID3, and (2) the Fracturing Fluid Disclosure. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date O4/04/2025 Date O4/04/2025 Date Signed (Agent) Holly Wood, Regulatory Analyst Print Name and Title	Other (specify) Refrac								
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. Forning Star Operating ("MSO") respectfully submits this Notice of Intent to perform a refrac. Ilease find attached (1) MSO's Recompletion Procedure for the Frostbite-Harriet 5-3HID3, and (2) the Fracturing Fluid Disclosure. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date Date Admirfed. Emphare Print Name and Titte									
Indicate the intended starting date for proposed operations or the completion date for completed operations. Identify Star Operating ("MSO") respectfully submits this Notice of Intent to perform a refrac. Idease find attached (1) MSO's Recompletion Procedure for the Frostbite-Harriet 5-3HID3, and (2) the Fracturing Fluid Disclosure. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date Admi/fel. Emilian Holly Wood, Regulatory Analyst Print Name and Title	Describe planned or completed work in	Describe Proposed	or Com	pleted O	perations:				
Idease find attached (1) MSO's Recompletion Procedure for the Frostbite-Harriet 5-3HID3, and (2) the Fracturing Fluid Disclosure. SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date Date Admir/fet. Figure: Date Date Date Date Admir/fet. Figure: Date Date Date Date Date Date Date Admir/fet. Figure: Date Date Date Date Date Date Print Name and Title	necessary. Indicate the intended starting	g date for proposed operatio	ns or the o	ration diag completion	grams, analyses, or other o date for completed one	information as			
BOARD USE ONLY APR 11 2025 Date Admi/fet. Emiles Admi/fet. Emiles SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: 04/04/2025 Date Admi/fet. Emiles Print Name and Title	·	, , , , , , , , , , , , , , , , , , , ,		product	radio for completed ope	rations.			
SEE ATTACHED CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date O4/04/2025 Date O4/04/2025 Date Signed (Agent) Holly Wood, Regulatory Analyst Print Name and Title	Morning Star Operating ("MSO") respectf	ully submits this Notice of In	tent to per	form a ref	тас.				
Date CONDITIONS OF APPROVAL The undersigned hereby certifies that the information contained on this application is true and correct: 04/04/2025 Date O4/04/2025 Date O4/04/2025 Date Admix/Cd. Engineer Print Name and Title	Please find attached (1) MSO's Recomple	etion Procedure for the Frost	tbite-Harrie	et 5-3HID3	3, and (2) the Fracturing I	Fluid Disclosure.			
The undersigned hereby certifies that the information contained on this application is true and correct: O4/04/2025 Date O4/04/2025 Date O4/04/2025 Admir/Cd. Engineer Print Name and Title					SEE ATTACHE	D			
BOARD USE ONLY APR 1 1 2025 Date Date Date This application is true and correct: 04/04/2025 Date Date Date Holly Wood, Regulatory Analyst Print Name and Title									
Date O4/04/2025 Date O4/04/2025 Date O4/04/2025 Date O4/04/2025 Print Name and Title			The this	e undersig	ned hereby certifies that	the information contained	ed on		
Date Date Date Signed (Agent) Holly Wood, Regulatory Analyst Print Name and Title		ONLY	"""	- applicati	on is true and conect.				
Holly Wood, Regulatory Analyst Print Name and Title	Approved APR 1 1 2025			04/04/20	25 Aa	Ch 1 2 ml			
Holly Wood, Regulatory Analyst Print Name and Title				Date	9	Signed (Agent)			
Print Name and Title					Holly Wood, Real				
Marin 14. Bulling	Name Admin (Pot. Engineer								
Market Control of the				lephone:	817	'-334-8088			

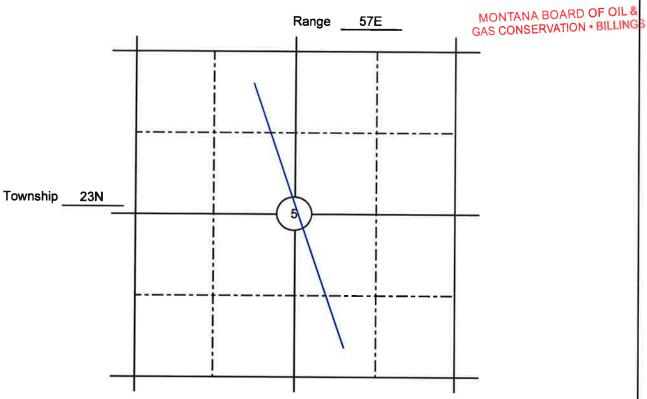
SUPPLEMENTAL INFORMATION

RECEIVED

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.

APR 07 2025

Range 57E



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.

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date	6/1/2025
State:	Montana
County:	RICHLAND
API Number:	25-083-22655-00-00
Operator Name:	Morningstar Operating
Well Name and Number:	Frostbite-Harriet 5-3-HID3
Longitude:	-104.435061
Latitude:	47.790894
Long/Lat Projection:	NAD83
Indian/Federal:	none
Production Type:	OH
True Vertical Depth (TVD):	10,430
Total Water Volume (gal)*:	3,380,370

RECEIVED

APR 07 2025

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum ingredient Cencentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Ingredient Mass ibs	Comments
Fresh Water	Operator	Base Fluid						Density = 8,34
BE-7	Halliburton	Biocide						12.4
DCA-17008	Cladilla caban	A sid Committee Internation						
DCA-23003	Halliburton Halliburton	Acid Corrosion Inhibitor Friction Reducer						
DCA-23010	Halliburton	Friction Reducer						
DCA-26001	Halliburton	Iron Reducing Agent		1				
OCA-30008	Halliburton	Scale Inhibitor		-				
CA-32003		Surfactant						
OCA-32018M TYDROCHLORI		Completion/Stimulation						
Sand-Common	Helliburton	Solvent						
White-100 Mesh, SSA-2		Proppant						
Sand-CRC-40/70 Sand-Premium	Halliburton	Proppant						
White-40/70	Halliburton	Proppant						
ngredients	THE REAL PROPERTY.		Water	7732-18-5			00.45	
			Crystalline silica, quartz	14808-60-7	100.00%	91.24630%	28,192,286	
			Water	7732-18-5	100,00%	8.50678% 0.19843%	2,628,331 61,309	
			Phenol / formaldehyde resin	9003-35-4	5.00%	0.08507%	26,283	
			Ammonium acrylate-acrylamide polymer	26100-47-0	60.00%	0.058091	17,949	
			Hexamethylenetetramine	100-97-0	2.00%	0.03403%	10,513	
			Hydrotreated light petroleum distillate	64742-47-8	30.00%	0.02906%	8,977	
			Hydrochloric acid	7647-01-0	30.00%	0.016433	5,078	
			Methanol	67-56-1	100.00%	0.01215%	3,754	
			Sodium hypochlorite	7681-52-9	30.00%	0.00994%	3,070	
j			Amides, tail-oil fatty, N,N-bis(hydroxyethyl)	68155-20-4	30.00%	0.006761	2,089	
			Oxirane, methyl-, polymer with oxirane, ether with D-gluctol	56449-05-9	30.00%	0.00676%	2,089	
			Sobitan, mono-9-octadecenoste, (Z)	1338-43-8	5.00%	0.00484%	1,496	
-			Oleic aicd, ethoxylated	9004-96-0	5.00%	0.00484%	1,496	
			Sodium chloride	7647-14-5	5.00%	0.00233%	721	
			Amines, polyethylenepoly-, ethoxylated, phosphonomethylated, sodium salts	70900-16-2	5.00%	0.00000	721	
			Sodium hydroxide	1310-73-2	5.00%	0.00233%	512	
			Poly(oxy-1,2-ethanediyl), a-hydro-w-hydroxy-, ether with D-glucitol, tetra-		3.001	0.00100%	312	
			(9Z)-9-octadecenoate	61723-83-9	1.00%	0.00097%	299	
			Alcohols, C12-14-secondary, ethoxylated	84133-50-6	1.00%	0.00097%	299	
			Amines, tallow alkyl, ethoxylated	61791-26-2	1-00%	0.00097%	299	
			Alcohols, C12-16, ethoxylated	68551-12-2	1.00%	0.00097%	299	
			Diethanolamine	111-42-2	1.00%	0.00023%	70	
			Thloures, polymer with formaldehyde and 1-phenylethanone Mixture of dimer and trimer fatty acids of indefinite composition derived	68527-49-1	30,00%	0.000211	65	
			from tall cil	61790-12-3	30.00%	0.00021%	65	
			Giycine, n,n-{{bie{2-bis{carboxymethyl}amino}ethyl}-, pentasodium salt	140-01-2	0.10%	0.00021%	30	
			Sodium bisulfite	7631-90-5	0.10%	0.00010%	30	
			Formaldehyde	50-00-0	0.10%	0.000051	14	
			Propargyl alcohol	107-19-7	5+00%	0.00003%	11	
			Hexadecene	629-73-2	5.00%	0.00003%	11	
			Alcohols, C14-C15, ethoxylated	68951-67-7	5.001	0.000031	11	
			Hydroxylamine hydrochloride	5470-11-1	60.00%	0.00001%	4	
			Citric acid Acrylamide	77-92-9	60.00%	0-00001%	4	
			2-Propenoic acid, ammonium salt (1:1)	79-06-1 10604-69-0	0.01%	0.00001%	3	
			Ethylene oxide	75-21-8	0.01%	0.00001%	3	
			Acrylamide, sodium acrylate polymer	25987-30-8	0.01% 30.00%	0.00001%	3	
			Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine	68584-25-8	10.00%	0.00000%	3	
			Benzenesulfonic acid, C10-16-alkyl derivs, compds. with 2-propanamine	68584-24-7	10-00%	0.00000%	1	
			Ethoxylated branched C13 alcohol	78330-21-9	5.001	0.000004	1	
			Sodium diacetate	126-96-5	5.00%	0.00000%	1	
			Sorbitan monocleate polyoxyethylene derivative	9005-65-6	5.00%	0.00000%	1	
			Silica, amorphous - fumed	7631-86-9	5.00%	0.00000%	1	
			Benzene, C10-16 alkyl derivatives	68648-87-3	1.00%	0.00000%	1	
			Bis(tris(hydroxyethyl)ammonium) sulphate	7376-31-0	1.00%	0.00000%	1	
			Copper dichloride	7447-39-4	1 00%	0.00000%	1	

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. <u>36.22.1106</u> 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 though 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: <u>82-11-111</u>, MCA; <u>IMP</u>, <u>82-11-111</u>, MCA; <u>NEW</u>, 2011 MAR p. 1686, Eff. 8/26/11.

C. <u>36.22.1010</u> 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 From No. 2.