RECEIVED

JUN 1 4 2019

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

2014 1 4 5018

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

1.	Classification  Operator	n of Requesting Party  ☑ Service Company	☐ Other – Specify			,
2.	Full name o	f the Owner, Operator, o	r Service Company	Calfrac Well S	ervices Corp.	
3.	Address	717 17 <sup>th</sup> St., Suite 1445	Denver	СО	80202	303.293.2931
		(Address)	(City)	(State)	(Zip Code)	(Telephone Number)
4.	fracturing flu registry num as defined in of the compe	MCA requires that an own uid. This must include the liber of the ingredients, in 50-78-102, MCA, the property onents of the fracturing for 14-402, MCA.	e chemical compound r ncluding any hazardous oduct name, and the ty	ame and the ch components lis ope of additive u	nemical abstract sted on a materi used. In limited :	s service (CAS) al safety data sheet situation the identity
	I am request	ing that the identity of a	fracturing fluid compo			as a trade secret.
	In order to c understand t Trade Secret	mily associated with the of laim that the identity of the that I must provide specifications. I have attached the Guidelines.	the fracturing fluid com	ng each of the q	led to protection	th in the MBOGC
			CERTIFICA	ATE		
		are under penalties of y me and to the best o	f my knowledge are to Signature	h Rumler PE, E	nd complete.	
	APPROVED	: ☑ Yes ☐ No	Sonature	Petaleun Titl	Enginer	6/17/19
			Signature V	HŲ	E	Date

TO

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



JUN 1 4 2019

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

1.	Classificatio	on of Requesting Party r ⊠ Service Company	☐ Other – Specify					
2.	Full name o	of the Owner, Operator, or	Service Company	Calfrac Well S	ervices Corp.			
3.	Address	717 17 <sup>th</sup> St., Suite 1445	Denver	СО	80202	303.293.2931		
		(Address)	(City)	(State)	(Zip Code)	(Telephone Number)		
1.	82-10-603, MCA requires that an owner, operator, or service company provide the complete disclosure of fracturing fluid. This must include the chemical compound name and the chemical abstracts service (CAS) registry number of the ingredients, including any hazardous components listed on a material safety data sheet as defined in 50-78-102, MCA, the product name, and the type of additive used. In limited situation the identity of the components of the fracturing fluid may be exempt from public disclosure as a "trade secret" under the criteria in 30-14-402, MCA.							
	I am reques	ting that the identity of a f	racturing fluid compo	nent qualify for	non-disclosure	as a trade secret.		
	Chemical Fa	mily associated with the C	hemical Constituent	Borate Salt #	†2	a de la composição de l		
	understand Trade Secre	claim that the identity of th that I must provide specifi t Guidelines. I have attache the Guidelines.	c information regardin	ng each of the q	uestions set for	th in the MBOGC		
			CERTIFICA	ATE				
		clare under penalties of poy me and to the best of	my knowledge are to Signature	rue, correct a	_			
	FOR STAFF APPROVED	1000	Signature	le and title    Fet role   Titl		6/17/15 Date		

RECEIVED

TO

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

JUN 1 4 2019

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

#### REQUEST FOR TRADE SECRET EXEMPTION

1. Classification of Requesting Party

☐ Operato	or 🗵 Service Company 🗆	Other – Specify			
Full name	of the Owner, Operator, or Ser	vice Company	Calfrac Well S	Services Corp.	
Address	717 17 <sup>th</sup> St., Suite 1445	Denver	СО	80202	303.293.2931
	(Address)	(City)	(State)	(Zip Code)	(Telephone Number)
fracturing f registry nur as defined i of the comp	MCA requires that an owner, of luid. This must include the chermber of the ingredients, including 50-78-102, MCA, the production of the fracturing fluid in 10-14-402, MCA.	mical compound n ing any hazardous t name, and the ty	ame and the ch components lis pe of additive u	nemical abstract sted on a materi used. In limited s	s service (CAS) al safety data sheet situation the identit
	sting that the identity of a fract		nent qualify for Complex Mi		as a trade secret.
Trade Secre	I that I must provide specific infect of the set Guidelines. I have attached set the Guidelines.	_	_	•	
		CERTIFICA	TE		
	clare under penalties of perjoint of my by me and to the best of my	knowledge are t	rue, correct a	_	
FOR STAFF APPROVEI	E <b>USE ONLY:</b> D: ☑ Yes □ No ☐ Sig	Print nam	e and title	e Engineer	bate

TO

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



JUN 1 4 2019

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

Full name	of the Owner, Operator, or Se	ervice Company _	Calfrac Well S	ervices Corp.	
Address	717 17 <sup>th</sup> St., Suite 1445	Denver	СО	80202	303.293.2931
	(Address)	(City)	(State)	(Zip Code)	(Telephone Number)
fracturing f registry num as defined of the com	MCA requires that an owner, fluid. This must include the chember of the ingredients, incluing 50-78-102, MCA, the produponents of the fracturing fluid 50-14-402, MCA.	emical compound nad ding any hazardous co act name, and the typ	me and the che components list e of additive t	nemical abstract sted on a materi used. In limited	ts service (CAS) ial safety data sheet situation the identity
I am reques	sting that the identity of a fra	cturing fluid compone	ent qualify for	non-disclosure	as a trade secret.
Cham:! F					
	amily associated with the Che		Glycol		
In order to understand Trade Secre	amily associated with the Che claim that the identity of the I that I must provide specific i et Guidelines. I have attached the Guidelines.	fracturing fluid comp nformation regarding	onent is entit	uestions set for	rth in the MBOGC
In order to understand Trade Secre	claim that the identity of the I that I must provide specific i et Guidelines. I have attached	fracturing fluid comp nformation regarding	onent is entit each of the c ng forth inforn	uestions set for	rth in the MBOGC
In order to understand Trade Secre set forth in	claim that the identity of the I that I must provide specific i et Guidelines. I have attached	fracturing fluid comp nformation regarding separate pages settir CERTIFICAT	onent is entit each of the c ng forth inforr	uestions set for	rth in the MBOGC nse to the questions
In order to understand Trade Secre set forth in	claim that the identity of the I that I must provide specific i et Guidelines. I have attached the Guidelines.	fracturing fluid comp nformation regarding separate pages settir CERTIFICAT rjury that this reque	onent is entit each of the c ng forth inform <b>'E</b> est and supp	uestions set for nation in respor	rth in the MBOGC nse to the questions
In order to understand Trade Secre set forth in	claim that the identity of the I that I must provide specific i et Guidelines. I have attached the Guidelines.	fracturing fluid comp nformation regarding separate pages settir  CERTIFICAT  rjury that this reque y knowledge are tro  Signature Joseph	onent is entite each of the congress of the co	uestions set for nation in respor	rth in the MBOGC nse to the questions tion have been
In order to understand Trade Secre set forth in I de examined	claim that the identity of the I that I must provide specific i et Guidelines. I have attached the Guidelines.	fracturing fluid composition regarding separate pages setting CERTIFICAT rjury that this requesty knowledge are truesty knowledge are truesty signature	onent is entite each of the congress of the co	puestions set for mation in respondence orting information and complete.	rth in the MBOGC nse to the questions tion have been

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



JUN 1 4 2019

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

1.	Classificatio	on of Requesting Party				
	☐ Operator	r 🗵 Service Compan	y □ Other – Specify	0=		
2.	Full name o	of the Owner, Operator,	or Service Company	Calfrac Well S	ervices Corp.	
3.	Address	717 17 <sup>th</sup> St., Suite 144	5 Denver	СО	80202	303.293.2931
		(Address)	(City)	(State)	(Zip Code)	(Telephone Number)
4.	fracturing fl registry num as defined in of the comp criteria in 30	MCA requires that an ovuid. This must include the of the ingredients, no 50-78-102, MCA, the pronents of the fracturing 0-14-402, MCA.	ne chemical compound including any hazardous product name, and the together the following fluid may be exempt from the control of the control	name and the characteristics components listype of additive to the compublic disclo	emical abstract ted on a materi used. In limited s sure as a "trade	s service (CAS) al safety data sheet situation the identity secret" under the
		ting that the identity of mily associated with the		nent qualify for  Hydrated Cla		as a trade secret.
	understand Trade Secre	claim that the identity of that I must provide spec t Guidelines. I have atta the Guidelines.	cific information regardi	ng each of the q	uestions set for	th in the MBOGC
			CERTIFIC	ATE		
	examined b	clare under penalties on the best on the best under penalties on the best use of the best use	of my knowledge are Signatur Josep	true, correct a	nd complete.	
	APPROVED		Signature	Petrolene Titl	e Engineer	6/17/19 Date

TO

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



JUN 1 4 2019

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

1.	Classificatio  Operator	n of Requesting Party r ⊠ Service Company	☐ Other – Specify			
2.	Full name c	of the Owner, Operator, or	Service Company	Calfrac Well S	Services Corp.	
3.	Address	717 17 <sup>th</sup> St., Suite 1445	Denver	СО	80202	303.293.2931
		(Address)	(City)	(State)	(Zip Code)	(Telephone Number)
4.	fracturing fl registry num as defined in of the comp criteria in 30	MCA requires that an own uid. This must include the ober of the ingredients, incomes 50-78-102, MCA, the proposed that the fracturing flucturing flucturing flucturing flucturing flucturing flucturing flucturing that the identity of a f	chemical compound n cluding any hazardous duct name, and the ty uid may be exempt fro	ame and the checomponents list ge of additive to m public disclo	nemical abstract sted on a materi used. In limited osure as a "trade	is service (CAS) ial safety data sheet situation the identity e secret" under the
		mily associated with the C		Organic Acid		
	understand Trade Secre	claim that the identity of the that I must provide specifi t Guidelines. I have attache the Guidelines.	c information regardir	g each of the o	questions set for	th in the MBOGC
			CERTIFICA	TE.		
	examined b	lare under penalties of poy me and to the best of	my knowledge are t	rue, correct a	_	
	FOR STAFF APPROVED		Signature	Petro Tit	leum Engineer	6/7/19 Date

TO

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



JUN 1 4 2019

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

Classificatio	n of Requesting Party				
☐ Operator	✓ Service Company	☐ Other – Specify	7		
Full name o	of the Owner, Operator, or	Service Company	Calfrac Well S	ervices Corp.	
Address	717 17 <sup>th</sup> St., Suite 1445	Denver	СО	80202	303.293.2931
	(Address)	(City)	(State)	(Zip Code)	(Telephone Number)
fracturing flu registry num as defined ir of the comp criteria in 30	MCA requires that an own uid. This must include the ober of the ingredients, incomes 50-78-102, MCA, the proposed on the fracturing floor-14-402, MCA.	chemical compound n cluding any hazardous duct name, and the ty uid may be exempt fro	ame and the checomponents listype of additive to a public disclo	nemical abstract ited on a materi used. In limited i usure as a "trade	is service (CAS) ial safety data sheet situation the identity e secret" under the
	mily associated with the C		Organic Acid		
understand Trade Secret	claim that the identity of the that I must provide specifi t Guidelines. I have attach the Guidelines.	ic information regardin	ng each of the q	uestions set for	th in the MBOGC
		CERTIFICA	ATE		
	lare under penalties of poy me and to the best of	my knowledge are to Signature  Josep	rue, correct a	_	
FOR STAFF APPROVED		Signature Signature	0.1	um Engineer	6/17/19 Date

TO

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



JUN 1 4 2019

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

Full name	of the Owner, Operator, or Sei	rvice Company	Calfrac Well S	Services Corp.	
Address	717 17 <sup>th</sup> St., Suite 1445	Denver	со	80202	303.293.2931
	(Address)	(City)	(State)	(Zip Code)	(Telephone Number)
fracturing registry nu as defined of the com	, MCA requires that an owner, of fluid. This must include the che imber of the ingredients, including 50-78-102, MCA, the production of the fracturing fluid 30-14-402, MCA.	mical compound n ling any hazardous tt name, and the ty	ame and the ch components list pe of additive	nemical abstract sted on a materi used. In limited	ts service (CAS) ial safety data sheet situation the identity
I am reque	esting that the identity of a frac	turing fluid compo	nent qualify for	non-disclosure	as a trade secret.
0			Petroleum D	)istillates	
	amily associated with the Cher		4	led to protection	n as a trade secret 1
In order to understand Trade Secr	claim that the identity of the f d that I must provide specific in et Guidelines. I have attached s n the Guidelines.	racturing fluid com formation regardir	ponent is entit	questions set for	rth in the MBOGC
In order to understand Trade Secr	claim that the identity of the f d that I must provide specific in et Guidelines. I have attached s	racturing fluid com formation regardir	ponent is entiting each of the c	questions set for	rth in the MBOGC
In order to understand Trade Secr set forth in	claim that the identity of the f d that I must provide specific in et Guidelines. I have attached s n the Guidelines.	racturing fluid com formation regardin separate pages sett CERTIFICA	ponent is entiting each of the cing forth inform	questions set for mation in respor	rth in the MBOGC nse to the questions
In order to understand Trade Secri set forth in	claim that the identity of the f d that I must provide specific in et Guidelines. I have attached s	racturing fluid com formation regardin separate pages sett CERTIFICA jury that this requ	ponent is entiting each of the cing forth information.  TE  uest and supp	questions set for mation in respor orting informa	rth in the MBOGC nse to the questions
In order to understand Trade Secri set forth in	claim that the identity of the food that I must provide specific in let Guidelines. I have attached so the Guidelines.	racturing fluid com formation regarding separate pages sets CERTIFICA jury that this requ y knowledge are t	ponent is entiting each of the carrier in the carri	questions set for mation in respor orting informa	rth in the MBOGC nse to the questions
In order to understand Trade Secri set forth in	claim that the identity of the food that I must provide specific in let Guidelines. I have attached so the Guidelines.	racturing fluid com formation regardir separate pages set  CERTIFICA  jury that this requ knowledge are t  Signatur Josep	ponent is entiting each of the cring forth information of the	questions set for mation in respor orting informa	rth in the MBOGC nse to the questions tion have been
In order to understand Trade Secri set forth in I de examined	claim that the identity of the food that I must provide specific in let Guidelines. I have attached so the Guidelines.	racturing fluid com formation regardir separate pages set  CERTIFICA  jury that this requ knowledge are t  Signatur Josep	ponent is entiting each of the cing forth information.  ATE  Lest and support	orting informand complete.	rth in the MBOGC nse to the questions tion have been

TO

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



JUN 1 4 2019

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

•	☐ Operato	n of Requesting Party  r   Service Company	☐ Other – Specify	3		
	Full name o	of the Owner, Operator, o	or Service Company	_Calfrac Well	Services Corp.	
	Address	717 17 <sup>th</sup> St., Suite 1445	. Denver	СО	- 80202	303.293.2931
		(Address)	(City)	(State)	(Zip Code)	(Telephone Number)
•	fracturing fl registry nun as defined in of the comp	MCA requires that an ow uid. This must include the nber of the ingredients, in 50-78-102, MCA, the properties of the fracturing 0-14-402, MCA.	e chemical compound r ncluding any hazardous roduct name, and the t	name and the c components li ype of additive	hemical abstract sted on a materi used. In limited	s service (CAS) al safety data sheet situation the identity
	I am reques	ting that the identity of a	fracturing fluid compo	nent qualify fo	r non-disclosure	as a trade secret.
	Chemical Fa	mily associated with the	Chemical Constituent	Proprietary	Amide	
	understand Trade Secre	claim that the identity of that I must provide spec t Guidelines. I have attac the Guidelines.	ific information regardi	ng each of the	questions set for	th in the MBOGC
			CERTIFICA	ATE		
		lare under penalties of by me and to the best of		• •	•	tion have been
		•	Signatur	MIL		Engineer
				ne and title	Environmental	crigineer
	FOR STAFF APPROVED		Signature	Vetrole Tit	42 Enginal	6/17/19 Date

TO

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



JUN 1 4 2019

#### REQUEST FOR TRADE SECRET EXEMPTION

Classificat	cion of Requesting Party tor ⊠ Service Company	☐ Other – Specify	£		
Full name	e of the Owner, Operator, or S	ervice Company	Calfrac Well S	ervices Corp.	
Address	717 17 <sup>th</sup> St., Suite 1445	Denver	СО	80202	303.293.2931
	(Address)	(City)	(State)	(Zip Code)	(Telephone Number)
fracturing registry no as defined of the cor	B, MCA requires that an owner fluid. This must include the chumber of the ingredients, including 50-78-102, MCA, the produponents of the fracturing flui 30-14-402, MCA.	nemical compound na uding any hazardous o uct name, and the typ	ime and the ch components lis	emical abstract ted on a materi used. In limited	s service (CAS) al safety data sheet situation the identity
l am requ	esting that the identity of a fra	ecturing fluid compon	ent qualify for	non-disclosure	as a trade secret.
Chemical	Family associated with the Ch	emical Constituent	Proprietary \$	Surfactant	
understar Trade Sec	o claim that the identity of the nd that I must provide specific ret Guidelines. I have attached n the Guidelines.	information regarding	g each of the q	uestions set for	th in the MBOGC
		CERTIFICA	TE		
	eclare under penalties of pe d by me and to the best of n			_	tion have been
		Signature	ML		
		•		Invironmental	Engineer
FOR STAI	FF USE ONLY: ED: ☑Yes ☐No	Signature Print name		h Ergner	6/17/19 Date

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



JUN 1 4 2019

MONTANA BOARD OF OIL &

# GAS CONSERVATION . BILLINGS REQUEST FOR TRADE SECRET EXEMPTION 1. Classification of Requesting Party ☐ Operator ☐ Other – Specify Calfrac Well Services Corp. Full name of the Owner, Operator, or Service Company 717 17th St., Suite 1445 CO Denver 80202 303.293.2931 3. Address (Address) (City) (State) (Zip Code) (Telephone Number) 4. 82-10-603, MCA requires that an owner, operator, or service company provide the complete disclosure of fracturing fluid. This must include the chemical compound name and the chemical abstracts service (CAS) registry number of the ingredients, including any hazardous components listed on a material safety data sheet as defined in 50-78-102, MCA, the product name, and the type of additive used. In limited situation the identity of the components of the fracturing fluid may be exempt from public disclosure as a "trade secret" under the criteria in 30-14-402, MCA. I am requesting that the identity of a fracturing fluid component qualify for non-disclosure as a trade secret. **Urea Derivative** Chemical Family associated with the Chemical Constituent In order to claim that the identity of the fracturing fluid component is entitled to protection as a trade secret, I understand that I must provide specific information regarding each of the questions set forth in the MBOGC Trade Secret Guidelines. I have attached separate pages setting forth information in response to the questions set forth in the Guidelines. **CERTIFICATE** I declare under penalties of perjury that this request and supporting information have been examined by me and to the best of my knowledge are true, correct and complete. Joseph Rumler PE, Environmental Engineer Print name and title

FOR STAFF USE ONLY:

X Yes

□No

APPROVED:



RECEIVED

June 11, 2019

JUN 1 4 2019

Montana Board of Oil & Gas Conservation 2535 St. Johns Avenue Billings, MT 59102

MONTANA BOARD OF OIL & GAS CONSERVATION • BILLINGS

RE: Request for trade secret and confidential commercial information (CCI) protection for Calfrac Well Services Corp.'s products DWP-124, DWP-126, & DWP-621

To Whom It May Concern:

Calfrac Well Services (Calfrac) is submitting the enclosed request for trade secret using "MBOGC Trade Secret/CCI Guidelines" regarding the chemical compound name and Chemical Abstract Services (CAS) numbers (collectively, "Chemical Identity") of certain ingredients in the crosslinkers and friction reducer (aka DWP-124, DWP-126, & DWP-621) that Calfrac intends to use in fracturing operations in Montana.

Calfrac believes that the Chemical Identities for its DWP-124, DWP-126, & DWP-621 are entitled to protection as trade secret and CCI as the disclosure of CAS numbers and chemical compound names of certain ingredients in Calfrac's proprietary products would allow competitors to determine the ingredients of Calfrac products that would result in a loss of economic value and competitive harm to Calfrac.

Accordingly, this letter and its enclosures are submitted to request that Chemical Identity information of DWP-124, DWP-126, & DWP-621 be exempt from disclosure by the MBOGC on the basis that the information is a trade secret as defined under 30-14-402 MCA.

Attachment I hereto provides the information required to be submitted in accordance with the requirements of the MBOGC Trade Secret Guidelines, and provides the justification for the exemption from disclosure as trade secret pursuant to 82-10-603 MCA.

Attachment II hereto provides public disclosure containing the information for which we request trade secret and CCI protection.

We appreciate your consideration for this request and should you require additional information or have any questions, please do not hesitate to contact me at (303) 685-7950 or by email at jrumler@calfrac.com.

Respectfully,

**Calfrac Well Services Corporation** 

On behalf of Caltree

Joseph Rumler, PE Environmental Engineer







#### Attachment I - Justification for Trade Secret

- 1. To your knowledge, has the identity of the ingredient, its concentration, or both, as appropriate, been publicly disclosed:
  - i. Pursuant to any federal, state, or local law or regulation? The identity of the ingredients, their combinations, and their use in crosslinker and friction reducer products has not been publicly disclosed by Calfrac or, to Calfrac's knowledge, anyone else, pursuant to any federal, state, or local law or regulation.
  - ii. In professional trade publications? The identity of the ingredients and their collective use in crosslinker and friction reducer products has not been publicly disclosed by Calfrac or, to Calfrac's knowledge, anyone else, in professional trade publications.
    - Through any other media or publications available to the public or your competitors? In order to make the above determinations, Calfrac used the CAS numbers of the substances in this product to search the FracFocus database, and reviewed multiple entries per page of results. As previously mentioned, Calfrac found all of the CAS numbers associated with various product usages. Calfrac reviewed compositions of other known crosslinker and friction reducer products, and found that the products contain the hazardous components for which trade secret protection is sought. However, their use in DWP-124, DWP-126, & DWP-621 or with this combination of ingredients has not been identified. Calfrac then performed a combined literature search using the CAS numbers and the terms "crosslinker" and "friction reducer." Even though documents existed with the combination search terms for the hazardous trade secret components, there was no public document that identified "crosslinker" and "friction reducer" with the CAS numbers for which confidentiality is sought. Calfrac was not able to locate any documentation that mentions all ingredients together for any purpose.



iii.

JUN 1 4 2019

- To what extent is the identity of the ingredient (including its use in the additive) known within the company and what steps have you taken to safeguard the information? Please describe in detail how this information is housed in your company and what steps your employees, officers, agents, and directors take to prevent disclosure of the information to parties outside of your company.
  - Calfrac has in place numerous safeguards and controls to protect the confidentiality of its product formulations including, but not limited to, safe storage locations for information on proprietary products; marking all hard copies of records containing proprietary Chemical Identity information as confidential and trade secret; limiting access to proprietary Chemical Identity information internally on a need-to-know basis only; and requiring confidentiality agreements when disclosing the proprietary Chemical Identity information or product samples to third-parties. Electronic copies of records containing proprietary Chemical Identity information are protected and maintained on a secure internal network. Employees provided with access to proprietary Chemical Identity information are informed of the value and







importance of protecting it. In addition to the Confidential Information and Inventions Agreement signed by all employees, employees with access or exposure to proprietary Chemical Identity information are required to sign an acknowledgement of confidentiality.

- Has any other regulatory body (federal, state, tribal, or local) determined the ingredient identity (including its use in the additive) is not entitled to protection from public disclosure as a trade secret or confidential commercial information? If so, provide a copy of the agency's determination, along with any explanation as to why the Commission should not make a similar determination. Provide any other information concerning prior requests for confidentiality and/or regulatory body determinations you believe is relevant to the Commission's determination.
  - No regulatory body (federal, state, tribal, or local) has determined that Calfrac's trade secret or
    confidential information is not protected from public disclosure. These products have been used
    throughout Calfrac's United States operations and have been provided protection from
    disclosure throughout those jurisdictions.
- 4. How is the identity of the ingredient commercially valuable to the company? In answering this question, please describe why the use of the ingredient in the type of additive is not common knowledge in the industry, including any novel or unusual aspects of the chemical or the use of the chemical in this application.
  - Calfrac has expended a significant amount of effort and money to develop the proprietary product and it is the result of years of extensive research, development testing and oilfield application to customers' wells. Developing products requires an understanding of the geology, the physics of temperatures and pressures and the chemistry of the stimulation fluids. Calfrac devotes significant research and development resources to understand geology, physics of temperatures and pressures, fluid systems for unique geological formations and to develop new and innovative products to more effectively stimulate reservoirs to increase production of oil and gas.
  - For example, DWP-124, DWP-126, & DWP-621 contain components that would not normally be considered or expected as part of a commercial crosslinker or friction reducer formulation. However, the product has proven to be highly successful over many years of commercial use, providing Calfrac with superior operations and technical differentiation. Hence Calfrac feels that dissemination of this commercially valuable knowhow would be highly detrimental to its interest, therefore an application for trade secret protection is requested.
  - If the Chemical Identities of this product were to be available to our competitors or customers, then they could replicate our products and Calfrac would lose its competitive advantage in Montana and throughout the world gained through considerable expense and research.
- 5. Describe the ease or difficulty with which the formula for the additive product could be determined from public disclosure of the ingredient identity. Specifically, explain why the use of the "systems approach" format would not adequately protect your proprietary interest.





- If the proprietary Chemical Identity information were disclosed, then it would not be difficult for Calfrac's competitors to "reverse engineer" and determine the proprietary formula of the product.
- There are a limited number of active ingredients and the revealing proprietary Chemical Identity information, even when presented in a systems approach format, would provide others with the active ingredients in the products allowing others to engineer our product for sale and/or use, and thereby, undermining Calfrac competitive advantage. Further, a systems approach may undermine our ability to patent such formulas.



JUN 1 4 2019







#### **Attachment II**

REDACTED Chemical Information for DWP-124, DWP-126, & DWP-621

DWP-124						
COMPONENT NAME	CAS#	CONCENTRATION (%)				
Water	7732-18-5	42				
Complex Mineral	PROPRIETARY	PROPRIETARY				
Organic Acid Salt 3	PROPRIETARY	PROPRIETARY				
Calcium Carbonate	131-65-3	3				
Hydrated Clay	PROPRIETARY	PROPRIETARY				
Polyanionic Cellulose	9004-32-4	1				
Magnesium	16389-88-1	1				

DWP-126						
COMPONENT NAME	CONCENTRATION (%)					
Borate Salt #1	PROPRIETARY	PROPRIETARY				
Borate Salt #2	PROPRIETARY	PROPRIETARY				
Water	7732-18-5	100				

DWP-621		
COMPONENT NAME	CAS#	CONCENTRATION (%)
Water	7732-18-5	37
Organic Acid Salt	PROPRIETARY	PROPRIETARY
Petroleum Distillates	PROPRIETARY	PROPRIETARY
Glycol	PROPRIETARY	PROPRIETARY
Proprietary Surfactant	PROPRIETARY	PROPRIETARY
Urea Derivative	PROPRIETARY	PROPRIETARY
Proprietary Amide	PROPRIETARY	PROPRIETARY



JUN 1 4 2019



