Submit within 45 days of wen t	completion	Stat	e of New Mexic	0		1. WELL API NO		Revised No	ovember 6, 201
		Energy, Minerals and Natural Resources				1. WELL API NO. 30-015-39891 2. Well Name: IRWIN 23 14 FEDERAL #001			
					rces				
			nservation Divi	=	Ī	3. Well Number: 001			
		1220	) S. St Francis [	Or.		301			
		Sar	nta Fe, NM 8750	5					
HYDRAULIC FF	PACTI IDIN	NG FI LIID	•			4. Surface Hole I	ocation:		
DISCLOSURE	VAC I UIXII	4G I LUID				Unit:A Lot:A Feet from:1300		ownship:19S 'S Line:N	Range:30E
						Feet from:695 E/W Line:E  5. Bottom Hole Location:			
⊠ Original						Unit:A Lot:A		ownship:19S	Range:30E
□ Amendment						Feet from:1300 Feet from:695		'S Line:N 'W Line:E	
					Ī	6. latitude:		ngitude:	364395
					ŀ	7. County:	490241	-103.9	504595
						Eddy			
Operator Name and Address: CIMAREX ENERG	Y CO. OF COL	ORADO		9.	OGRID:	162683	10. Phone Numb	er: 91	8-295-1763
202 S. Cheyenne / Tulsa 74103	Ave, Ste 1000								
	2017 Frac Per	rformed by: Halliburton		12	2. Production O	Type:			
13. Pool Code(s):					Gross Fractured Interval:				
5200 15. True Vertical Depth (TVD):					7,636 ft to 8,196 ft 16. Total Volume of Fluid Pumped:				
8,196 ft 7. Total Volume of Re-Use Wa	ter Pumned:			18		,716 gals Re-Use Water in I	Fluid Pumped:		
N/A						Disclosed	iaia i ampoa.		
9. HYDRAULIC FLUID rade Name	COMPOSIT Supplier	TION AND CONCENTR  Purpose	ATION: Ingredients	(CAS #) Chem	ical Abstract	Maximum Ingi	redient	Maximum Ingr	redient
		·	· ·	Service #			in Additive (% by		in HF Fluid (%
resh Water 3C-140 X2	Operator Halliburton	Base Fluid Initiator	Water Listed Below	7732-18-5 Listed Below			100% 0%		81.17096 0
E-2A	Halliburton	Additive	Listed Below	Listed Below	1		0%		0
HAI-OS ACID INHIBITOR HYDROCHLORIC ACID	Halliburton Halliburton	Corrosion Inhibitor Solvent	Listed Below Listed Below	Listed Below			0% 0%		0
ИС B-8614	Halliburton	Biocide	Listed Below	Listed Below	1		0%		0
OPTIFLO-III DELAYED RELEASE BREAKER	Halliburton	Breaker	Listed Below	Listed Below			0%		0
OptiKleen-WF(TM) Sand	Halliburton Halliburton	Concentrate Proppant	Listed Below Listed Below	Listed Below			0% 0%		0
SAND-CRC	Halliburton	Proppant	Listed Below	Listed Below	Listed Below		0%		0
SP BREAKER WG-36 GELLING AGENT	Halliburton Halliburton	Breaker Gelling Agent	Listed Below Listed Below	Listed Below			0% 0%		0
DP-S1176-15	Halliburton	Friction Reducer	Listed Below	Listed Below	Listed Below		0%		0
FDP-S1226-15 Pro-Hib 322	Halliburton Performance	Surfactant Scale Inhibitor	Listed Below Listed Below	Listed Below			0% 0%		0
OC-229	Chemical Performance	Scale Inhibitor	Listed Below	Listed Below	,		0%		0
	Chemical	Coale IIIIIbitoi	Elotod Bolow	Lioted Bolov					
MSDS and Non-MSDS ngredients are listed							0%		0
ngredients	Listed Above	Listed Above	2,7-Naphthalenedisulfonic	915-67-3			0.1%		3E-05
ngredients	LISICU ADOVC	Listed Above	acid, 3-hydroxy-4-[(4-				0.170		0L-00
			sulfor-1-naphthalenyl) azo] -, trisodium salt						
			2-propenoic acid, homopolymer, sodium sali	9003-04-7			25%		0.00189
			Alcohols, C12-13,	66455-14-9			30%		0.01896
			ethoxylated Alcohols, C12-16,	68551-12-2			5%		0.00316
			ethoxylated Ammonium persulfate	7727-54-0			100%		0.00204
			Bishexamethylenetriamine				72%		0.00232
			penta Citric acid	77-92-9			60%		0.00333
			Crystalline silica, quartz	14808-60-7			100%		17.49123 0.00061
			Cured acrylic resin Ethanol	Proprietary 64-17-5			30% 1%		0.00017
			Ethoxylated alcohols Ethylene glycol	Proprietary 107-21-1			30% 30%		0.00048
			Fatty acids, tall oil	Proprietary			30%		0.00048
			Glutaraldehyde Guar gum	111-30-8 9000-30-0			30% 100%		0.00503 0.08294
			Hexamethylenetetramine Hydrochloric acid	100-97-0 7647-01-0	_		2% 15%		0.09421 0.15816
			Hydrotreated light	64742-47-8			30%		0.02022
			petroleum distillate Methanol	67-56-1			60%		0.00098
			Monoethanolamine borate	26038-87-9			100%		0.03
			Olefins Phenol / formaldehyde	Proprietary 9003-35-4		1	5% 5%		0.00019 0.23552
			resin phosphonic acid tris-	6419-19-8			5%		0.00038
			Phosphoric acid	7664-38-2			0.1%		2E-05
			Polyacrylate Propargyl alcohol	Proprietary 107-19-7			30% 10%		0.02022
			Quaternary ammonium	68424-85-1			5%		0.00084
			compounds, benzyl-C12- 16-alkyldimethyl chlorides						
			Reaction product of acetophenone,	68527-49-1			30%		0.00048
			formaldehyde, thiourea						
			and oleic acid in dimethyl formamide						
			silica, amorphous precipitated and gel	112926-00-8	-		32%		0.00103
			Sodium perborate	10486-00-7			100%		0.00268
			tetrahydrate Sodium persulfate	7775-27-1			100%		0.00107
			Sodium sulfate Water	7757-82-6 7732-18-5			0.1% 100%		1.08063
			rm is true and complete to the bes		ge and belief.			ı	
Signature: Signed E	lectronically	Printed Name: Skipper	Herring			Manager Title: Operation	Stimulation ns		
Date: 7/26/201	7	<u></u>							
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