

Submit within 45 days of well completion	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505		Revised February 15, 2012 1. WELL API NO: 30-025-41069 2. Well Name: HALLERTAU 4 FEDERAL #001H 3. Well Number: 001H			
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment			4. Surface Hole Location: Unit:D Lot:D Section:4 Township:26S Range:32E Feet from:330 N/S Line:N Feet from:560 E/W Line:W 5. Bottom Hole Location: Unit:D Lot:D Section:4 Township:26S Range:32E Feet from:330 N/S Line:N Feet from:560 E/W Line:W 6. Latitude: longitude: 32.0787651954102 - 103.686825581862 7. County: Lea			
8. Operator Name and Address: CIMAREX ENERGY CO. OF COLORADO 600 N. Mariefeld St Suite 600 Midland 79701			9. OGRID: 162683	10. Phone Number: 918-295-1763		
11. Last Fracture Date: 5/6/2013 Frac Performed by: Weatherford			12. Production Type: O			
13. Pool Code(s): 97838			14. Gross Fractured Interval: 9,037 ft to 9,068 ft			
15. True Vertical Depth (TVD): 9,068 ft			16. Total Volume of Fluid Pumped: 65,976 bbls			
17. HYDRAULIC FLUID COMPOSITION AND CONCENTRATION:						
Trade Name	Supplier	Purpose	Ingredients	(CAS #) Chemical Abstract Service #	Maximum Ingredient Concentration in Additive (% by mass)	Maximum Ingredient Concentration in HF Fluid (% by mass)
Water	Cimarex Energy	Carrier / Base Fluid	Carrier / Base Fluid - Water		100%	89.17963%
Premium Sand 20/40 (2.63 sg)	WFT	Proppant	Crystalline Silica in the form of Quartz	14808-60-7	100%	8.07226%
100 Mesh Sand	WFT	Proppant	Crystalline Silica in the form of Quartz	14808-60-7	100%	1.9964%
WBK-133	WFT	Breaker	Ammonium Persulfate	7727-54-0	100%	0.00403%
WBK-134	WFT	Breaker	Ammonium Persulfate	7727-54-0	75%	0.00242%
WXL-100L	WFT	Crosslink Control	Ethylene Glycol	107-21-1	40%	0.02534%
WGA-15L	WFT	Gelling Agents	Petroleum Distillates	64742-47-8	60%	0.2287%
WLE-363L	WFT	Surfactant	2-Ethylhexanol	104-76-7	7%	0.00378%
			DB-964	9003-11-6	30%	0.01621%
			Dodecylbenzenesulfonic acid, monoethanolamine salt	26836-07-7	15%	0.00811%
			Poly(oxy-1,2-ethanediyl), a-isotridecyl-w-hydroxy-	9043-30-5	5%	0.0027%
HCL 15%	Petroplex	Acid	Hydrochloric Acid	7647-01-0	15%	0.02361%
Cronox AK-50	Petroplex	Corrosion Inhibitor	Oxyalkylated Alkylphenol	CBI	30%	8E-05%
			Heavy Aromatic Naptha	64742-94-5	30%	8E-05%
			Isopropanol	67-63-0	30%	8E-05%
			Fatty Acids	CBI	10%	3E-05%
			Complex Alkylaryl Poly-Ester	CBI	10%	3E-05%
			Tar Bases, Quinoline Derivatives, Benzyl Chloride-Quaternized	72480-70-7	10%	3E-05%
			Formaldehyde	50-00-0	10%	3E-05%
			Acetylenic Alcohol	CBI	5%	1E-05%
			Propargyl Alcohol	107-19-7	5%	1E-05%
			Napthalene	91-20-3	5%	1E-05%
Citric Acid	Petroplex	Iron Control	Citric Acid	77-92-9	100%	0.00788%
EC9546A	Petroplex	Surfactant	Heavy Aromatic Naptha	64742-94-5	10%	3E-05%
			Isopropanol	67-63-0	60%	0.00016%
			Polyethylene Glycol	25322-68-3	5%	1E-05%
			Napthalene	91-20-3	1%	0%
			Phosphoric Acid Ester	CBI	10%	3E-05%
			Oxyalkylated Alcohol	CBI	10%	3E-05%
			Oxyalkylated Alkyl Alcohol	CBI	10%	3E-05%
CIO2	Bosque	Biocide	Chlorine Dioxide	10049-04-4	100%	0.00016%
Ingredients shown above are subject to 29 CFR 1910			2-Butoxyethanol	111-76-2	0%	0.00381%
			Alcohol Ethoxylate	Mixture	0%	0.00381%
			Alcohols, C12-16, Ethoxylated	68551-12-2	0%	0.00381%
			Anionic water soluble polymer	Mixture	0%	0.01102%
			Arlacel 83	8007-43-0	0%	0.00381%
			Crystalline Silica in the form of Quartz	14808-60-7	0%	0.00381%
			Ethanolamine Borate	68425-67-2	0%	0.02534%
			Guar gum	9000-30-0	0%	0.19058%
			Proprietary Ingredient	Proprietary	0%	0.04845%
18. I, as Operator, hereby certify that the information shown on this disclosure form is true and complete to the best of my knowledge and belief.						
Signature: <u>Signed Electronically</u>		Printed Name: <u>Skipper Herring</u>				
Date: <u>5/22/2013</u>		Manager Stimulation Title: <u>Operations</u>				
E-mail Address: <u>sherring@cimarex.com</u>						