Submit within 45 days of well co	bmit within 45 days of well completion State of New Mexico						Revised November 6, 2013			
	Energy, Minerals and Natural Resources Oil Conservation Division					1. WELL API NO. 30-025-37399 2. Well Name: COLE STATE #017				
1220 S. St Francis Dr. Santa Fe, NM 87505						3. Well Number: 017				
HYDRAULIC FRACTURING FLUID DISCLOSURE						Surface Hole Location: Unit:F Lot:F Section:16				
⊠ Original						Feet from:2310 5. Bottom Hole Loc	E	/W Line:W		
□ Amendment						Unit:F Lot:F Section:16 Township:22S Range:37E Feet from:1650 N/S Line:N Feet from:2310 E/W Line:W 6. latitude: longitude:				
						32.39	45662929436		.168963529869	
						7. County: Lea				
8. Operator Name and Address: VANGUARD PERM 5847 San Felipe, St Houston 77057					9. OGRID:	258350	10. Phone Numb	per: 83	32-327-2252	
11. Last Fracture Date: 6/13/2014 Frac Performed by: CUDD					12. Productio	0				
50350						oss Fractured Interval: 3,492 ft to 3,808 ft				
15. True Vertical Depth (TVD): 4,265 ft					9	Volume of Fluid Pumped: 97,579 gals				
17. Total Volume of Re-Use Water Pumped: N/A						nt of Re-Use Water in Fluid Pumped: Not Disclosed				
19. HYDRAULIC FLUID			the state of the s	e and shakes a meson of the	in the state of th		20030	perioteco en		
Trade Name	Supplier	Purpose	Ingredients	(CAS #) Chemic Service #	eal Abstract	Maximum Ingredi Concentration in mass)		Maximum Ingr Concentration mass)	edient in HF Fluid (% by	
Water		Carrier / Base Fluid		7732-18-5		100%			83.68607%	
B-24	Weatherfork	Proppant Biocide	Silicon Dioxide 2,2 Dibromo-3- Nitrilopropionamide	14808-60-7 10222-01-2		100% 100%			11.35609% 0.00051%	
CS-14	Chemplex, L.C.	Clay Control	Non-hazardous salts (Choline)	Proprietary		66%			0.05746%	
SG-15G	PfP Technology	Polymer	Water Guar Gum	7732-18-5 9000-30-0		45% 50%			0.03918% 0.23389%	
30-130	FIF Technology	Polyfilei	Petroleum Distillate (Mineral Oil)	64742-47-8			55%		0.25728%	
			Bentonite Clay	14808-60-7			2%	1	0.00936%	
VI 205	101/	0	Surfactant	68439-51-0			2%		0.00936%	
XL-335	ASK	Crosslinker	Ethylene Glycol Potassium Hydroxide	107-21-1		<u> </u>	25% 25%		0.02424% 0.02424%	
			Proprietary	Proprietary		1	25%		0.02424%	
			Proprietary	Proprietary			15%		0.01454%	
100	M. Control	131113101711	Proprietary	Proprietary			10%		0.0097%	
BC-1	Benchmark	Breaker Catalyst	Triethanolamine Diethanolamine	102-71-6 111-42-2			100% 30%		0.0538% 0.01614%	
GB-2	Fritz Industries, Inc.	Breaker	Ammonium Persulfate	7727-54-0		99.9%			0.00566%	
NE-227	CESI	Non-emulsifier	Isopropanol	67-63-0			15%		0.01176%	
			Methanol Ethoxylated	67-56-1 9016-45-9		15% 20%		4	0.01176% 0.01568%	
Garnett.Pearl RCS	Preferred Sands	RCS Proppants	Nonylphenol Quartz(SiO2)	14808-60-7			98%	1	4.08432%	
Same Sun Hoo		or roppunto	Polyurethane Resin				5%		0.20838%	
water comments was			Colorant	Proprietary			1%		0.04168%	
Date: 9/23/2014 E-mail Address: rhicks@vr	ectronically Prin	nted Name: Randall Hich	5.131	101	1111111	Title: Sr Operati				