

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 November 6, 2013				
		1. WELL API NO: 30-041-20969				
		2. Well Name: ANNAPURNA 20 #001H				
		3. Well Number: 001H				
HYDRAULIC FRACTURING FLUID DISCLOSURE <input checked="" type="checkbox"/> Original <input type="checkbox"/> Amendment		4. Surface Hole Location: Unit:P Lot:P Section:17 Township:08S Range:34E Feet from:170 N/S Line:S Feet from:355 E/W Line:E				
		5. Bottom Hole Location: Unit:P Lot:P Section:17 Township:08S Range:34E Feet from:170 N/S Line:S Feet from:355 E/W Line:E				
		6. latitude: longitude: 33.614217 -103.479567				
		7. County: Roosevelt				
8. Operator Name and Address: ROCKCLIFF OPERATING NEW MEXICO LLC 1301 McKinney Suite 1300 Houston 77010		9. OGRID: 371115	10. Phone Number: 713-351-0549			
11. Last Fracture Date: 12/8/2016 Frac Performed by: ProFrac Services		12. Production Type: O				
13. Pool Code(s): 46950		14. Gross Fractured Interval: Confidential				
15. True Vertical Depth (TVD): 4,594 ft		16. Total Volume of Fluid Pumped: 7,437,822 gals				
17. Total Volume of Re-Use Water Pumped: N/A		18. Percent of Re-Use Water in Fluid Pumped: Not Disclosed				
19. 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	Operator	Base Fluid	Water	7732-18-5	100%	89.1%
Proppant	ProFrac Services	Proppant	Crystalline Silica	14808-60-7	100%	10.56351%
HCL > 10%, ProHib 100, ProSurf 100, ProFE 105	ProFrac Services	Solvent, Corrosion Inhibitor, Iron Chelator, Non- Emulsifier	Hydrogen chloride	7647-01-0	36%	0.32984%
			Methanol	67-56-1	100%	0.00209%
			Fatty Acids, Tall-Oil, Ethoxylated	Proprietary	10%	0.00021%
			Fatty Acids, Tall-Oil	Proprietary	10%	0.00021%
			Thiourea, P/W formaldehyde and 1-phenylethanone	68527-49-1	4.99%	0.0001%
			Hydrochloric Acid	7647-01-0	5%	0.0001%
			Potassium Acetate	127-08-2	5%	0.0001%
			Formaldehyde	50-00-0	1%	2E-05%
			Sodium Hydroxide	1310-73-2	1%	1E-05%
			Benzenesulfonic Acid	Proprietary	10%	8E-05%
			Glacial Acetic	64-19-7	1%	1E-05%
			Sulfuric Acid	7664-93-9	0.1%	0%
			Benzene, alkyl Derivs	Proprietary	0.1%	0%
			Sulphur Dioxide	7446-09-5	0.1%	0%
			Acetic Acid	64-19-7	50%	0.00041%
APGel Break 100	Apex Resources	Breaker	Ammonium Persulphate	727-54-0	100%	0.15703%
APFR 60A	Apex Resources	Friction Reducer	Distillates, Hydro Treated Light	64742-47-8	28%	8.38216%
			Alcohols, C12-16, Ethoxylated	68551-12-2	3%	0.89809%
			Alcohols, C10-16, Ethoxylated	68002-97-1	3%	0.89809%
			Alkyl (C12-C14) alcohol, Ethoxylated >2-10 EO	68439-50-9	3%	0.89809%
20. 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: Signed Electronically Printed Name: Brian Wood		Title: Regulatory Consultant				
Date: 1/2/2017						
E-mail Address: brian@permitswest.com						

NMOCD does not require the reporting of information beyond MSDS data as described in 29 CFR 1910.1200. NMOCD does not require the reporting or disclosure of proprietary, trade secret or confidential business information.