

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: 30-015-40130							
		2. Well Name: POLAR BEAR STATE COM #004H							
		3. Well Number: 004H							
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:H Lot:H Section:1 Township:17S Range:28E Feet from:2260 N/S Line:N Feet from:150 E/W Line:E							
		5. Bottom Hole Location: Unit:F Lot:F Section:1 Township:17S Range:28E Feet from:2263 N/S Line:N Feet from:2168 E/W Line:W							
		6. latitude: longitude: 32.86621890202 - 104.121822294533							
		7. County: Eddy							
8. Operator Name and Address: MURCHISON OIL & GAS INC 1100 Mira Vista Blvd. Plano 75093		9. OGRID: 15363		10. Phone Number: 972-931-0700					
11. Last Fracture Date: 7/31/2012 Frac Performed by: Baker Hughes		12. Production Type: O							
13. Pool Code(s): 96210		14. Gross Fractured Interval: 4,019 ft to 6,572 ft							
15. True Vertical Depth (TVD): 3,937 ft		16. Total Volume of Fluid Pumped: 35,623 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	Operator	Carrier	Water	7732-18-5	100%	52.75433%			
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	15%	1.6124%			
			Water	7732-18-5	85%	9.13694%			
Activator, 330 gal tote	Baker Hughes	Activator	Alcohols, C12-14-Secondary, Ethoxylated	84133-50-6	70%	0.06007%			
			Methanol	67-56-1	50%	0.04291%			
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30%	0.02463%			
Enzyme G-I	Baker Hughes	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3%	0.00854%			
			Water	7732-18-5	97%	0.27616%			
High Perm CRB-LT	Baker Hughes	Breaker	Ammonium Persulphate	7727-54-0	80%	0.02583%			
			Crystalline Silica	7631-86-9	20%	0.00646%			
ClayCare, tote	Baker Hughes	Clay Control	Choline Chloride	67-48-1	75%	0.24911%			
			Water	7732-18-5	30%	0.09964%			
CI-31	Baker Hughes	Corrosion Inhibitor	Aromatic Aldehyde	Trade Secret	30%	0.00293%			
			Benzyl Chloride	100-44-7	1%	0.0001%			
			Cyclic Alkanes	Trade Secret	5%	0.00049%			
			Formic Acid	64-18-6	60%	0.00587%			
			Isopropanol	67-63-0	10%	0.00098%			
			Methanol	67-56-1	5%	0.00049%			
			Organic Sulfur Compound	Trade Secret	5%	0.00049%			
			Oxyalkylated Fatty Acid	Trade Secret	30%	0.00293%			
			Quaternary Ammonium Compound	Trade Secret	30%	0.00293%			
			XLW-10A	Baker Hughes	Crosslinker	Ethylene Glycol	107-21-1	30%	0.13091%
			Sodium Hydroxide			1310-73-2	10%	0.04364%	
Sodium Tetraborate	1330-43-4	30%	0.13091%						
FRW-20	Baker Hughes	Friction Reducer	Petroleum Distillates	64742-47-8	30%	0.01446%			
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60%	0.9029%			
			Paraffinic Petroleum Distillate	64742-55-8	60%	0.9029%			
			Petroleum Distillate	64742-47-8	60%	0.9029%			
Ferrotrol 280L	Baker Hughes	Iron Control	2-Mercaptoethanol	60-24-2	100%	0.05488%			
			Ammonium Hydroxide	1336-21-6	5%	0.00274%			
			Cupric Chloride	7447-39-4	5%	0.00274%			
NE-35, 330 gl tote	Baker Hughes	Non-emulsifier	Mixture of Surfactants	Trade Secret	50%	0.14698%			
			Propylene Glycol	57-55-6	30%	0.08819%			
Sand, White, 20/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	25.45629%			
Sand, White, 100 mesh	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100%	0.01467%			
SB Excel 20/40	Baker Hughes	Proppant	Quartz (SiO2)	14808-60-7	100%	6.32713%			
InFlo 250G, 330 gl tote	Baker Hughes	Surfactant	Methanol	67-56-1	30%	0.09594%			
			Mixture of Surfactants	Trade Secret	50%	0.1599%			
			Water	7732-18-5	30%	0.09594%			
Ingredients shown above are subject to 29 CFR 1910			2-Mercaptoethyl Alcohol	60-24-2	0%	0.0003423%			
			Aliphatic Hydrocarbon	Trade Secret	0%	0.011227%			
			Alkylene Oxide Block Polymer	Trade Secret	0%	0.0003912%			
			Cured Acrylic Resin	Trade Secret	0%	0.0064563%			
			Diethylene Glycol	111-46-6	0%	9.8E-06%			
			Methanol	67-56-1	0%	0.0002053%			
			Oxyalkylated Alcohol	Trade Secret	0%	0.0009637%			
			Polyglycol Ester	Trade Secret	0%	0.0004337%			
			Polyol Ester	Trade Secret	0%	0.00053%			
			Quaternary Ammonium Compound	Trade Secret	0%	0.0004401%			
			Sodium Chloride	7647-14-5	0%	0.0019274%			
			Vinyl Copolymer	Trade Secret	0%	0.0134917%			
			Water	7732-18-5	0%	0.1753403%			
			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: Signed Electronically		Printed Name: Cindy Cottrell		Title: Regulatory Coordinator		
Date: 9/6/2012									
E-mail Address: ccottrell@jdmii.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.