



16-30-027-03W5M			PetroBakken Resources			7-Nov-12			
Trade Name	Supplier	Purpose	Fluid Comment	Cas #	Ingredient Name	Volume [m3 or scm]	Max Additive Concentration (%)	Max Fluid Concentration (%)	Ingredient Comment
Water	PetroBakken	Carrier / Base Fluid		7732-18-5	Water	2294.3	100	80.02	
Nitrogen	Calfrac	Nitrogen		7727-37-9	Nitrogen	40,905	99	1.96	
Sand (Proppant)	Calfrac	Propping Agent		14808-60-7	Crystalline Silica (Quartz)		99.9	17.77	
DWP-913, DWP-621, DWP-949, Tolcide PS75LT	Calfrac	Clay Control, Friction Reducer, Non-Emulsifier, Biocide							
					Non-Hazardous Additives		100	0.15	
				Proprietary	Organic Acid Salts		63	0.04	HMIRC #8300
				Proprietary	Ethoxylated Alcohols		40	0.02	HMIRC #8300
				Proprietary	Isobutyl Ketone		30	0.02	HMIRC #8300
				Proprietary	Ethoxylated phenolic resin		10	0.01	HMIRC #8300
				55566-30-8	Phosphonium, tetrakis(hydroxymethyl)-, sulfate (2:1) (THPS)		60	0.01	

