

Table 1.2

Contaminants	* WQCC Human Health Standards	** Pollutant Concentrations in Treatment & Completion Fluids
(1) Arsenic (As)	0.1 mg/l	166.0 mg/l
(2) Barium (Ba)	1.0 mg/l	498.1 mg/l
(3) Cadmium (Cd)	.001 mg/l	26.1 mg/l
(4) Chromium (Cr)	0.05 mg/l	616.8 mg/l
(5) Cyanide (CN)	0.2 mg/l	52.0 mg/l
(6) Fluoride (F)	1.6 mg/l	62.0 mg/l
(7) Lead (Pb)	0.05 mg/l	1376.0 mg/l
(8) Total Mercury (Hg)	0.002 mg/l	
(9) Nitrate (NO ₃ as N)	10.0 mg/l	
(10) Selenium (Se)	0.05 mg/l	42.9 mg/l
(11) Silver (Ag)	0.05 mg/l	1.6 mg/l
(12) Uranium (U)	0.03 mg/l	
(13) Radioactivity: Combined Radium-226 & Radium-228	30 pCi/l	
(14) Benzene	0.01 mg/l	1341.0 mg/l
(15) Polychlorinated biphenyls (PCB's)	0.001 mg/l	
(16) Toluene	0.75 mg/l	891.0 mg/l
(17) Carbon Tetrachloride	0.01 mg/l	
(18) 1,2-dichloroethane (EDC)	0.01 mg/l	
(19) 1,1-dichloroethylene (1,1-DCE)	0.005 mg/l	
(20) 1,1,2,2-tetrachloroethylene (PCE)	0.02 mg/l	
(21) 1,1,2-trichloroethylene (TCE)	0.10 mg/l	
(22) ethylbenzene	0.75 mg/l	1149.0 mg/l
(23) total xylenes	0.62 mg/l	2675.0 mg/l
(24) methylene chloride	0.1 mg/l	29.0 mg/l
(25) chloroform...	0.1 mg/l	
(26) 1,1-dichloroethane	0.025 mg/l	
(27) ethylene dibromide (EDB)	0.0001 mg/l	
(28) 1,1,1-trichloroethane	0.06 mg/l	
(29) 1,1,2-trichloroethane	0.01 mg/l	
(30) 1,1,2,2-tetrachloroethane	0.01 mg/l	
(31) vinyl chloride	0.001 mg/l	
(32) PAHs: total naphthalene plus monomethylnaphthalenes	0.03 mg/l	
(33) benzo-a-pyrene	0.0007 mg/l	
(1) Chloride (Cl)	250.0 mg/l	
(2) Copper (Cu)	1.0 mg/l	277.2 mg/l
(3) Iron (Fe)	1.0 mg/l	384,412.0 mg/l
(4) Manganese (Mn)	0.2 mg/l	5146.0 mg/l
(6) Phenols	0.005 mg/l	263.0 mg/l
(7) Sulfate (SO ₄)	600.0 mg/l	
(8) Total Dissolved Solids (TDS)	1000.0 mg/l	520,375.0 mg/l
(9) Zinc (Zn)	10.0 mg/l	362.9 mg/l

Sources:

* NMAC 20.6.2.1 – Ground and Surface Water Protection

** EPA – Profile of the Oil and Gas Extraction Industry

