

Oxidant Comparison

	H_2O_2	MnO_4	O_3	S_2O_8
Injectate	Liquid	Liquid	Gas	Liquid
Common Practice	Fe^{+2} , Chelate	K, Na	-	Na (K, AL)
Oxidation Potential	2.80 V (OH*)	1.68 V	2.07	2.6 V (SO4 ^{-*})
Reaction	Very Fast	Slow	Fast	Fast f (Temp)
By-Products	Fe^{+3} CO_2 O_2 H_2O	MnO_2 CO_2 Metals ?	O_2	SO_4^{2-} O_2
Chemical Cost	\$0.70/lb nominal	\$2/lb nominal	\$10+/lb nominal	\$1.3/lb nominal