O_2 level	Acceptor	Reaction	Process	Products
Oxic	O_2	$1380_2 + (CH_2O)_{106}(NH_3)_{16}(H_3PO_4)$ $\rightarrow 106CO_2 + 16HNO_3 + H_3PO_4 + 122H_2O$	Aerobic respiration	CO_2, H_2O
Hypoxic	NO_3	$94.4HNO_3 + (CH_2O)_{106}(NH_3)_{16}(H_3PO_4)$ $\rightarrow 106CO_2 + 55.2N_2 + H_3PO_4 + 177.2H_2O$	Denitrification	N_2
Hypoxic	Mn (IV)	$236MnO_2 + (CH_2O)_{106}(NH_3)_{16}(H_3PO_4) + 472H^+$ $\rightarrow 106CO_2 + 8N_2 + 236Mn^{2+} + H_3PO_4 + 336H_2O$	Mn reduction	Mn (II)
Hypoxic	Fe (III)	$212Fe_2O_3 + (CH_2O)_{106}(NH_3)_{16}(H_3PO_4) + 848H^+$ $\rightarrow 106CO_2 + 424Fe^{2+} + 16NH_3 + H_3PO_4 + 530H_2O$	Fe reduction	Fe (II)
Anoxic	SO_4^{2-}	$53SO_4^{2-} + (CH_2O)_{106}(NH_3)_{16}(H_3PO_4)$ $\rightarrow 106CO_2 + 53S^{2-} + 16NH_3 + H_3PO_4 + 106H_2O$	Sulfate reduction	H_2S
Anoxic	-	$(CH_2O)_{106}(NH_3)_{16}(H_3PO_4)$ $\rightarrow 53CO_2 + 53CH_4 + 16NH_3 + H_3PO_4$	Methanogenesis	CH_4