ATCC medium: 2260 Freshwater medium for *Geobacter*

NH_4Cl.....0.25 g
NaH_2PO_4 .....0.06 g
KCl.....0.1 g
Wolfe's Vitamin Solution (see below)....10.0 ml
Wolfe's Mineral Solution (see below)....10.0 ml
$NaHCO_3$ .....2.5 g
Distilled water.....980.0 mL

Degas under 80% N_2, 20% CO_2. Autoclave at 121C for 15 minutes.

To the autoclaved medium, add the following compounds to achieve the final concentration noted:

FeNTA (Electron Acceptor) (see below), 10 mM
Sodium acetate (Electron Donor) (see below), 10 mM

Wolfe's Vitamin Solution:
Available from ATCC as a sterile ready-to-use liquid (Vitamin Supplement, catalog no. MD-VS).
Biotin.....2.0 mg
Folic acid.....2.0 mg
Pyridoxine hydrochloride....10.0 mg
Thiamine . HCl.....5.0 mg
Riboflavin.....5.0 mg
Nicotinic acid.....5.0 mg
Calcium D-(+)-pantothenate...5.0 mg
Vitamin B12.....0.1 mg
p-Aminobenzoic acid.....5.0 mg
Thioctic acid.....5.0 mg
Distilled water.....1.0 L

Wolfe's Mineral Solution:
Available from ATCC as a sterile ready-to-use liquid (Trace Mineral Supplement, catalog no. MD-TMS.)
Nitrilotriacetic acid.....1.5 g
$MgSO_4$. $7H_2O$ .....3.0 g
$MnSO_4$. H_2O .....0.5 g
NaCl.....1.0 g
$FeSO_4$. $7H_2O$ .....0.1 g
$CoCl_2$. $6H_2O$ .....0.1 g
$CaCl_2$ .....0.1 g
$ZnSO_4$. $7H_2O$ .....0.1 g
$CuSO_4$. $5H_2O$ .....0.01 g
$AlK(SO_4)_2$. $12H_2O$.....0.01 g
H_3BO_3 .....0.01 g
Na_2MoO_4 . $2H_2O$.....0.01 g
Distilled water.....1.0 L

Add nitrilotriacetic acid to approximately 500 ml of water and adjust to pH 6.5 with KOH to dissolve the compound. Bring volume to 1.0 L with remaining water and add remaining compounds one at a time.

FeNTA Solution:
$NaHCO_3$ .....1.64 g
Trisodium nitrilotriacetic acid....2.56 g
$FeCl_3$. $6H_2O$ .....2.7 g
Distilled water to.....100.0 ml

Dissolve $NaHCO_3$ in 80 ml of distilled water in a 100-ml flask. Add trisodium nitriacetic acid; add $FeCl_3$; bring volume to 100 ml; filter-sterilize using a prefilter. Do not autoclave. This is a 100 mM solution. Add approximately 1 ml of solution to 9 ml of medium to achieve 10 mM.

Sodium Acetate Solution:
Use a 100-200 mM solution of sodium acetate as electron donor. Add enough to achieve a final concentration of 10 mM.