medium from Karas et al.

Combine: 1 L Aquil salts, 2 mL NP stock, 1 mL L1 trace metals stock, 0.5 mL F/2 vitamin solution — filter sterilize (0.2 μm filter)

- Plates: 1 part sterilized L1, 1 part 2% agar

1. **Aquil salts** — 2 separate solutions — anhydrous and hydrous salts — are made at

   - **anhydrous salts (500 mL HR)**
     - NaCl: 24.3 g
     - Na₂SO₄: 4.09 g
     - KCl: 0.79 g
     - NaHCO₃: 0.29 g
     - KBr: 0.19 g
   
   - H₂BO₃: 0.03 g (3 mL 10⁻³ M stock) 0.006 g
   
   - NaF: 0.003 g (300 μL 10⁻³ M stock) 0.0006 g

   **Karas et al. didn’t add it at all → why?**

   - 10x more than NCMH
   - Is this a typo?

2. **NP stock** (2 mL/L)

   - NaNO₃: 37.5 g/100 mL → 37.5 g/L (5x more than NCMH)
   
   - NaH₂PO₄ × H₂O: 25.8 g/100 mL → 25.8 g/L (5x more than NCMH)

3. **L1 trace metals** — mix-up the following for all 1000x stock (1 mL/L)

   - CuCl₂ × 6H₂O: 3.15 g
   - Na₂EDTA × 2H₂O: 4.36 g
   - CuSO₄: 7H₂O: 9.86 g/L 0.25 mL
   - Na₂MoO₄ × 2H₂O: 6.35 g/L 3.5 mL
   - ZnSO₄: 7H₂O: 22 g/L 1.0 mL
   - CoCl₂ × 6H₂O (10.3 g/L) 1.0 mL
   - H₂SeO₃: 1.3 g/L 1.0 mL
   - N₂SO₄ × 6H₂O: 2.7 g/L 1.0 mL
   - Na₂VO₄ (1.84 g/L) 1.0 mL
   - K₂Cr₂O₇ (1.94 g/L) 1.0 mL

   Same as NCMH recipe

*Some stocks different than NCMH, but overall almost the same composition.*
4. 1/2 vitamin solution (0.5 mL/L) → decided to keep 1 mL/L vitamins

- thiamine - HCl 200mg/L
- biotin (0.1 g/L) 10 mL/L
- cyanocobalamin (1 g/L) 1 mL/L

nuclear if our recipe 2x less since we're adding 1 mL/L instead of 0.5 mL/L which is what NEMPA recipes require.