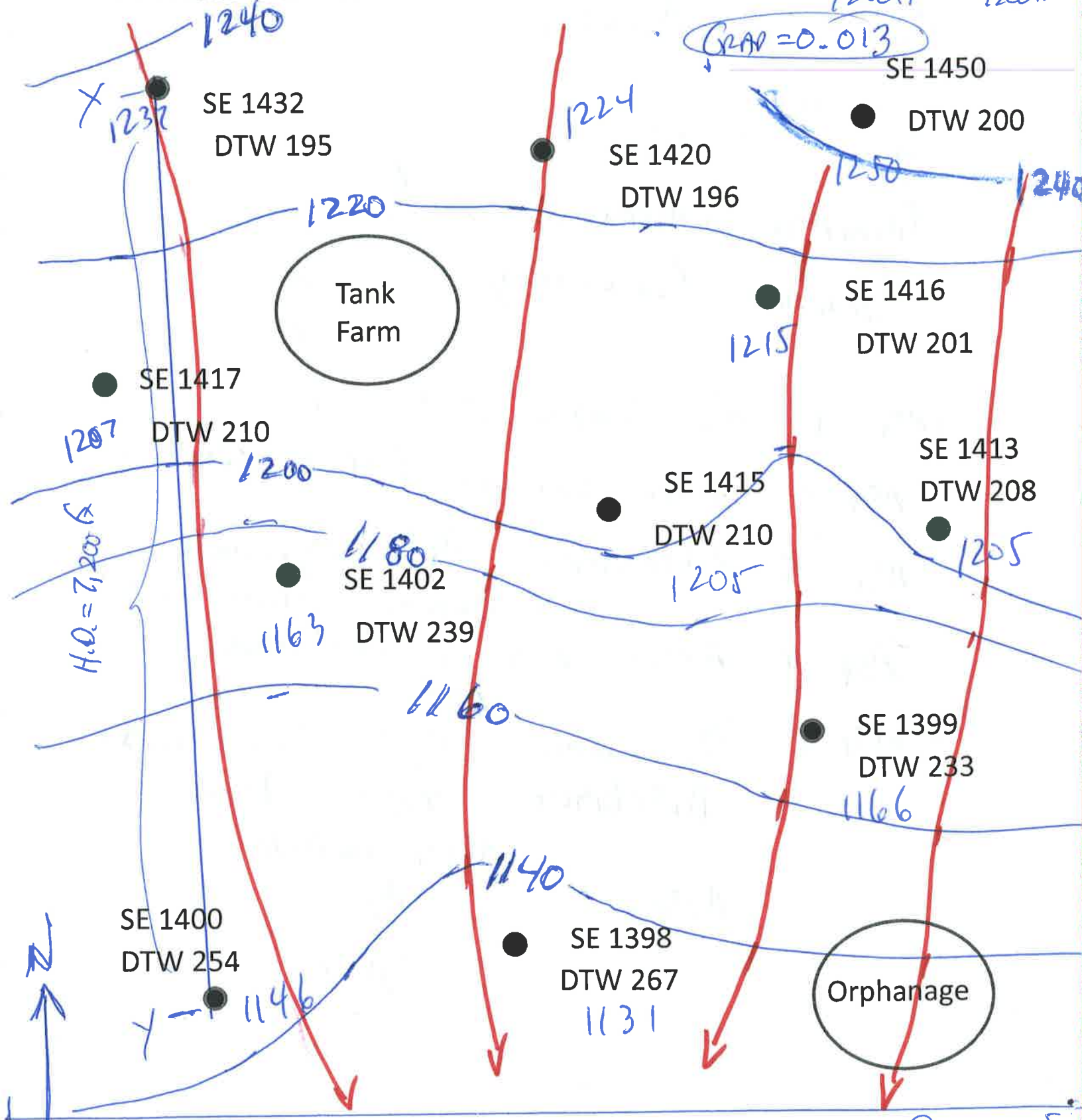


Monsanto Chemical Plant – Well Field

AVG. GRADIENT = $\frac{1237 - 1146 \text{ ft}}{7200 \text{ ft}} = \frac{91 \text{ ft}}{7200 \text{ ft}} = 0.0126$

GRAD = 0.013



SE = surface elevation in ft AMSL
DTW = depth to water (ft)

0 1000 ft

$Q = 4.7 \times 10^5 \frac{\text{GAL}}{\text{DAY}}$

$Q = K \cdot I \cdot A = (10^{-2} \frac{\text{cm}}{\text{sec}}) \left(\frac{60 \text{ sec}}{\text{min}} \right) \left(\frac{60 \text{ min}}{\text{hr}} \right) \left(\frac{24 \text{ hr}}{\text{day}} \right) \left(\frac{1 \text{ m}}{100 \text{ cm}} \right) (0.013) \left[20 \text{ ft} \left(\frac{1 \text{ m}}{3.28 \text{ ft}} \right) \right] 8500 \text{ ft} \left(\frac{1 \text{ m}}{3.28 \text{ ft}} \right) \left(\frac{2.64 \text{ GPD}}{\text{m}^3} \right)$

- Heterogeneous Aquifer

- UNCONFINED

- SAND & GRAVEL

- SATURATION THICKNESS = 20 ft

- Hydraulic Conductivity = $10^{-2} \frac{\text{cm}}{\text{sec}}$

TASK 1 GW CONCENT 20 ft CI.

TASK 2 Flow VECTORS (4 LINES)

TASK 3 CALCULATE AVG. Hydraulic
GRADIENT ACROSS SITE

TASK 4 ASSESS RISK TO DRIP HAZARD

TASK 5 DETERMINE TOTAL GRADIENT
DISCHARGE ACROSS FULL

MAP WIDTH
ANSWER IN GPD

DAY