

Zone Developer

We have a new service to offer on a trial basis this fall. We are using Electro Magnetic Inductance (EM 38 quad phase (conductivity) device. This unit is pulled behind an ATV equipped with RTK GPS, mapping software, pulling the EM 38 on a sled. It senses the surface foot and next 3 feet below, makes two separate maps .

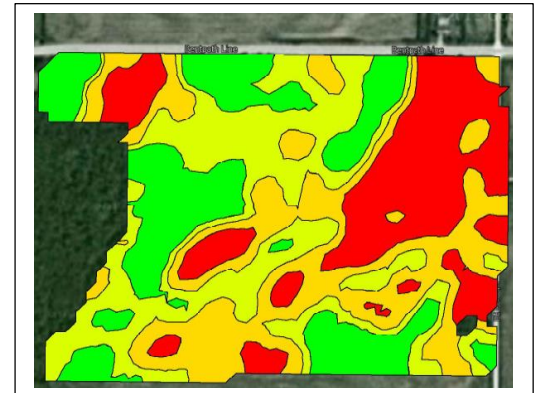
It is measuring electrical conductivity or EC.

From the captured EC readings we can infer differences in soil textures. EC is affected by both soil moisture and nutrient content. This relationship influences EC readings. Sandy soil will have lower readings due to lower moisture content and nutrient profile. Conversely clay will hold more water and nutrients and have a higher EC reading. These differences can be mapped.

From the resulting map, management zones can be produced that reflect the physical nature of differences in soil texture.

These differences can be used to:

1. Create management zones- better represent physical soil properties - only do EM38 pass once
2. Guide soil sampling- better representation of crop growth / soil patterns
3. Guide VR plant populations for both corn and soybeans
4. Guide VR nitrogen applications
5. Guide hybrid and variety placements – develop optimum seed populations for soybeans
6. 3D topo map can be produced from RTK- for drainage evaluations



Resulting map – red areas sandy soil green areas heavier soil

Introductory service \$10.00 per acre for EC map and topography map – onetime cost- use layer in successive years

Soil sampling and drainage evaluations extra charge

Refer to zone soil sampling fees