

SOIL MAPPING

AG-RECON SOILMAP™ Vs. EC and EM SENSORS

SOILMAP™ PRO's

- Aerial imagery is \$5.50/acre vs. \$15.00 or more per acre for EC mapping
- Aerial imagery is about 1/3 the cost per acre of EC mapping
- Aerial imagery has over 1,200 measurements/acre vs. less than 100/acre for EC Sensors
- Aerial imagery data is 100% measured vs. EC Sensor maps are approximately 95% interpolated values
- As a result of the direct measured vs. interpolated data, aerial imagery can detect and map small feature and linear soil differences (roads, drain tile, loading areas, etc.) that EC Sensors would generalize over
- EC Sensors identify soil variability in texture, salinity, moisture, shallow soils (less than 3 feet deep) and organic matter. Aerial imagery not only detects changes in all of those variables, but also maps differences in soil color, weeds, bulk density, compaction*, plow and hard pans*, shallow soils deeper than 3 feet*, and perched and high water tables*, (* depending on conditions)
- EC Sensors currently map only 3 feet deep vs. Aerial Imagery can map deeper (* depending on conditions) e.g. map a 3 inch pipe buried 6 feet deep
- Aerial Imagery does not add to the soil compaction of your field vs. EC Sensors require additional traffic on your fields
- Aerial Imagery can be acquired any time there is no significant cloud cover vs. EC Sensors need a bare field with the soil moisture to be in a "workable" condition
- EC Sensors are limited in their ability to work on steep slopes and around field obstacles vs. Aerial Imagery has neither of these limitations

EC Sensor PRO's

- EC Sensors are *less* effected by ground cover than Aerial Imagery
- EC Sensors are not effected by canopy cover (except potential GPS reception problems) making them more effective for mapping soils in mature orchards