ELECTRICAL CONDUCTIVITY MAPPING

Correlates the electrical conductivity values and properties that impact yield.

Electrical conductivity (EC) is the ability of a substance to conduct an electrical current.

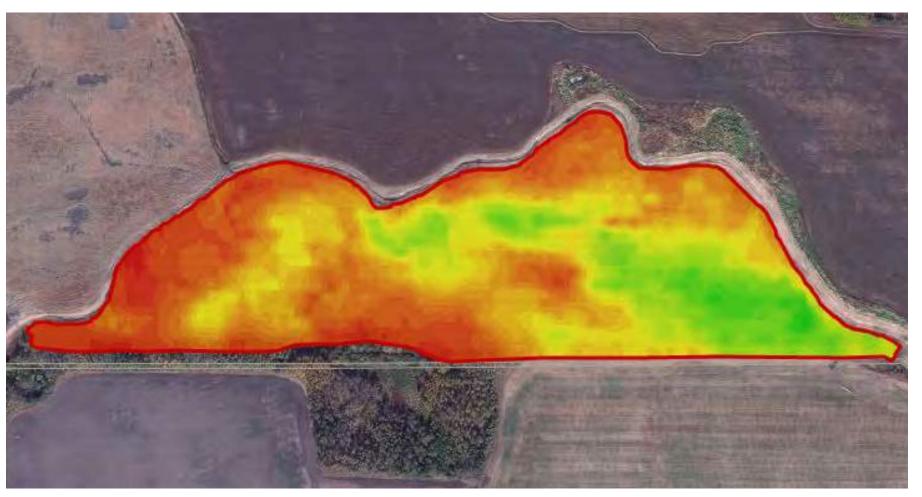
Combined with precision soil sampling, it provides a comprehensive field variability analysis.

Soil properties correlating to EC value:

- Soil texture
- Salinity
- Cation exchange capacity (CEC)
- Soil organic matter (SOM)
- Water holding capacity
- Drainage conditions
- Topsoil depth

EC map to create management zones:

- Directed soil sampling
- Variable rate seeding, fertilizer
- Yield map interpretation
- Better placement of field trials
- Soil salinity management



EC Map



Geonics EM 38



Electrical Conductivity / Elevation Mapping





SMART ZONES

Understanding the carrying characteristics of your soil enables you to maximize your land's potential.

Nitrogen				
Zone	0 - 6 "	6 - 24"	Total	
1	15 lbs	33 lbs	48 lbs	
2	17 lbs	24 lbs	41lbs	
3	16 lbs	27 lbs	43 lbs	



Potassium			
Zone	0-24"		
1	148 ppm		
2	158 ppm		
3	193 ppm		

	Phosphorus
Zone	0-6"
1	10 ppm
2	10 ppm
3	21 ppm

Sulfur			
Zone			
1	480 lb/ac		
2	480 lb/ac		
3	480 lb/ac		

Soluble Salts			Soil pH	SOM	CEC	
Zone	0-6"	6-24"	0-6"	6-24"		
1	1.02 mmho/cm	1.35 mmho/cm	8.1	8.1	4.2%	32.1
2	1.87 mmho/cm	2.13 mmho/cm	8.2	8.4	4.2%	37.3
3	2.28 mmho/cm	3.06 mmho/cm	8.3	8.5	3.6%	40.1





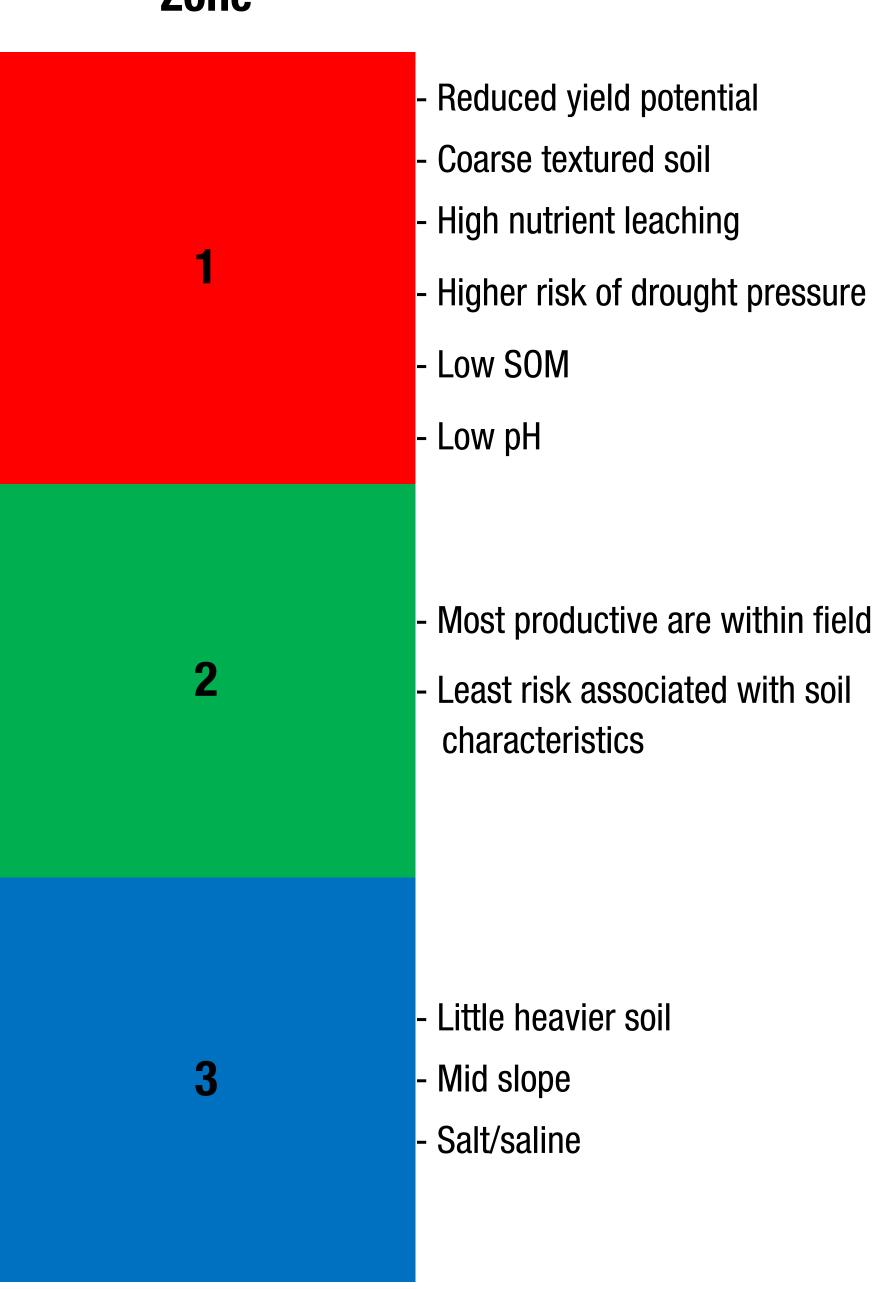
SMART RX

The diagnosis and treatment designed to maximize zone specific yield potential.

Rx

Zone	Yield Goal	Nitrogen	Phosphorus	Potassium
1	70 bu/ac	105lb/ac	45lb/ac	25lb/ac
2	90 bu/ac	145lb/ac	55lb/ac	35lb/ac
3	70 bu/ac	105lb/ac	45lb/ac	25lb/ac

Zone





2015 Fall Applied Map



2016 Fall Applied Map

Zone Management Factors

- Crop selection, crop history, and water management
- -Soil texture, topography, fertility, and organic matter
- Maximize each zone's potential while mitigating risk
- -Use all information available to develop variable rate nutrient plans using the 4R principals





JOHN DEERE 2510L & 2510H

Liquid and dry in-season nutrient side dress application solution.

Split applications of nitrogen:

- Boost yields, protein and harvest ability by matching nitrogen demands throughout the growing season
- Side dressing cereals can capture a positive response without sacrificing nitrogen use efficiency by laying it on the surface and counting on rain that may never come
- Side dressing nitrogen uses coulters to inject nitrogen (UAN or NH3) beside each corn row
- Applying nitrogen closer to peak demand reduces the risk of loss, increases yield and ensures nitrogen is available just prior to peak demand and without the rain requirement

4Rs with 2510L & 2510H:

- Right source: Ensure your soil has a balanced supply of essential plant nutrients.
- Right rate: Site specific soil tests and applying nutrients to meet crop requirements
- Right time: Ensure nutrient uptake when the demand is high
- Right place: Minimize the risk of loss while increasing the availability of nutrients to the crop



John Deere 2510L fall rye application



Side dressed fall rye application; RTK guidance; 20 inch row spacing



John Deere 2510H dry nutrient application







HARVEST MOBILE

Technology that helps you harvest with confidence.

Overview

- Harvest Mobile works directly with your iPad to deliver in-cab visuals of mapping layers such as ground speed, wet yield, dry yield and moisture
- Harvest Mobile simplifies the Interactive Combine Adjustment (ICA) capabilities of your combine to see exactly what's going on in the field and view machine settings at a glance
- As the machine harvests, the operator has the ability to go into ICA and select which area they are having an issue such as:
 - Grain damage dirty grain tank sample, broken kernels
 - Grain loss separator loss or shoe loss
 - Grain cleanliness
 - Straw condition straw quality

Key Features:

- Remotely monitor harvest within the John Deere Operations Center
- Integrates easily with existing John Deere technology
- Use Field Review to learn insights about the harvest job
- Monitor harvest performance in the cab



Monitor performance as you harvest, in the cab or wherever you are.



Harvest Mobile App

