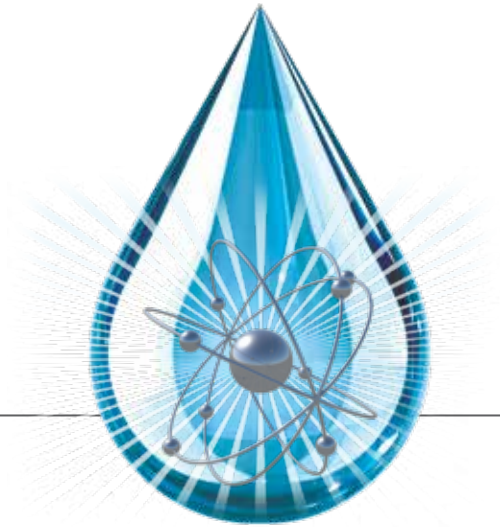


CASE STUDY

SOIL SALINITY pH 8.3 TO pH 7.3 WITH ZERO CHEMICALS



BACKSTORY

Lee Fintel owns and farms 6,200 acres of corn and soy spanning three counties between Nebraska and Kansas. The Fintel farm includes 23 pivots and one subsurface drip irrigation system over 49 fields. Fintel Farms produces approximately 600,000 bushels of corn and 200,000 bushels of soybeans annually.

As a board member of the Bostwick Irrigation District in the Lower Republican Natural Resources District (NRD) bordering Nebraska and Kansas, Lee Fintel is a prime example of resource stewardship, advocating a lower impact on the environment while yielding higher and smarter. With engineer-minded data sets for almost a decade after installing Magnation, this cutting-edge Pro Farmer understands the critical choices made in Agriculture to assure a profitable season, year after year.

Fintel's primary focus is to transform problematic high salt water into hydrating, productive water and improve the soil pH to insure a better harvest each season. Saline soils due to high saline water and continual buildup is a global issue. This is no exception in Nebraska, where water is drawn from both surface and groundwater.



CASE STUDY OVERVIEW

In 2013, Lee Fintel installed a Magnation Turbulator in the irrigation system on one of their farms to help with water infiltration capacity and soil health. This particular farm has always had a challenging soil pH level in the mid 8's. Water was from a surface source. Soil tests are conducted on all Fintel farms annually. After the first year of irrigating with the Magnation treated water, pH levels improved. Due to the corrective influence on the water from the Turbulator, during the period from 2013 to 2021, the soil pH level has improved from 8.3 to 7.3 on that farm.



METHODOLOGY

Each fall a professional agronomist takes a soil sample (4' probe) from the same spot in the field using GPS to pinpoint the spot. The sample of dirt is then sent to a lab for analysis of content of nutrients, trace minerals, pH, etc.

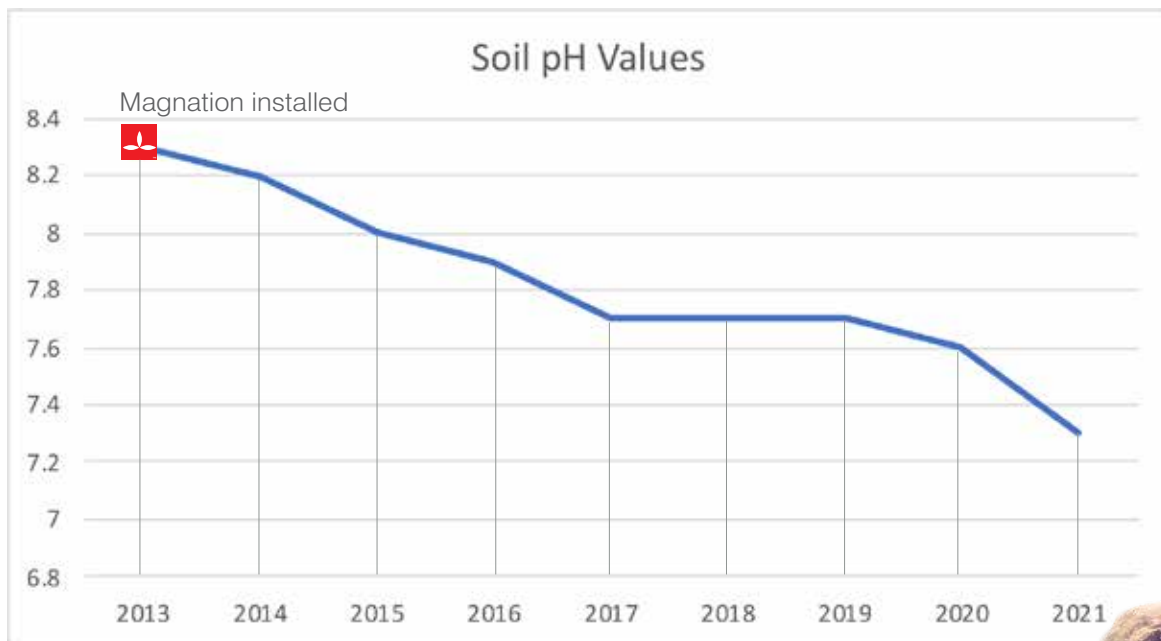


DATA RESULTS

Starting at pH 8.3, Magnation has brought this down to 7.3 by 2021. The simple compounding impact has generated healthy soil with zero chemicals, zero extra labor, and zero maintenance.

MAGNATION REDUCES SOIL SALINITY

SOIL ANALYSIS CONDUCTED BY WARD LABS IN KEARNEY, NEBRASKA. 2013-2021



CONCLUSION

The simple installation of the Magnation Turbulator as a passive inline unit in the irrigation pipes, post-pump, reduced soil pH from 8.3 to 7.3. As result of a more neutral pH, water penetrates the soil more easily and both plant and root health are enhanced.

