

**Farm Description: 1,500 acres of alfalfa, corn,
soybeans and wheat complement cow-calf,
feedlot operations**

GROWER:

Joel Erickson (*right*)

LOCATION:

Langford, South Dakota

RETAIL FACILITY:

South Dakota
Wheat Growers

CROP ADVISOR:

Andrew Kappes (*left*)

RETAILER LOCATION:

Langford, South Dakota



WHAT JOEL SAYS ABOUT THE 4Rs:

“Closely following the 4R practices has helped us farm better than before. We’ve seen a lot of yield increases. The 4Rs, advanced genetics and improved farming practices are all parts of the plan to continually improve. Combined, they make for a better running, more sustainable farm.”

WHAT ANDREW SAYS ABOUT THE 4Rs:

“The 4R program is essentially mandatory for us. You have to bury anhydrous ammonia, fertilize the right amount for yield goals and do it at the right time. If our customers were applying fertilizer at the wrong time, we wouldn’t be in business very long.”

ECONOMIC MEASURE OF SAVINGS:

By taking nitrogen in from lower-producing zones and strategically placing it in higher-producing zones, average yields have increased.

BEST MANAGEMENT PRACTICES IMPLEMENTED ON THE FARM:

- No-till and strip-till across the farm
- South Dakota Wheat Growers MZB precision farming system divides fields into zones based on soil texture, organic matter, salts, elevation and yield potential
- Soil samples are taken from each zone
- Fertilizer prescriptions are established for each zone to achieve yield goals, avoid fertilizer waste and ensure plants have the right amount of nutrients available
- Tissue analyses guide foliar nutrient application
- Cover crops capture nutrients and provide grazing for cattle
- Incorporates lessons learned from the Conservation Cropping Systems Project, which demonstrates and promotes farming methods that promote soil and water conservation

FORMS OF NUTRIENTS APPLIED:

Anhydrous ammonia, urea, MESZ (12-40-0-10-01), Potash, 10-34-00

NUTRIENT USE EFFICIENCY:

During the growing season, tissue samples are pulled to ensure that proper nutrient levels are present. If they aren't, a foliar fertilizer source or side dress is used. Once crops are removed, zone/grid samples are examined and a fertilizer prescription is developed for an exact yield goal.

AVERAGE YIELD FOR EACH CROP:

- 4Rs, advanced genetics and improved farming practices continue to improve the overall crop. Yield increases of 20 bu/ac have been observed.