

Our Farm's GPS Experience

**Controlled Traffic
Drainage
Input Management**



Farm Background

- Family farm
- Corn and soybeans



Farming Area



History of Using GPS

- Yield monitor with GPS since 1996
- Lightbars for steering in 2000
- RTK based autosteer since 2004
- Grade control – 2010
- Drones and Implement steering – 2015



Equipment Used



- Challenger tractors
- CaseIH and Horsch tillage and planting equipment
- Ag Leader and Trimble GPS
- Lexion combines

Precision Ag Practices through the Season



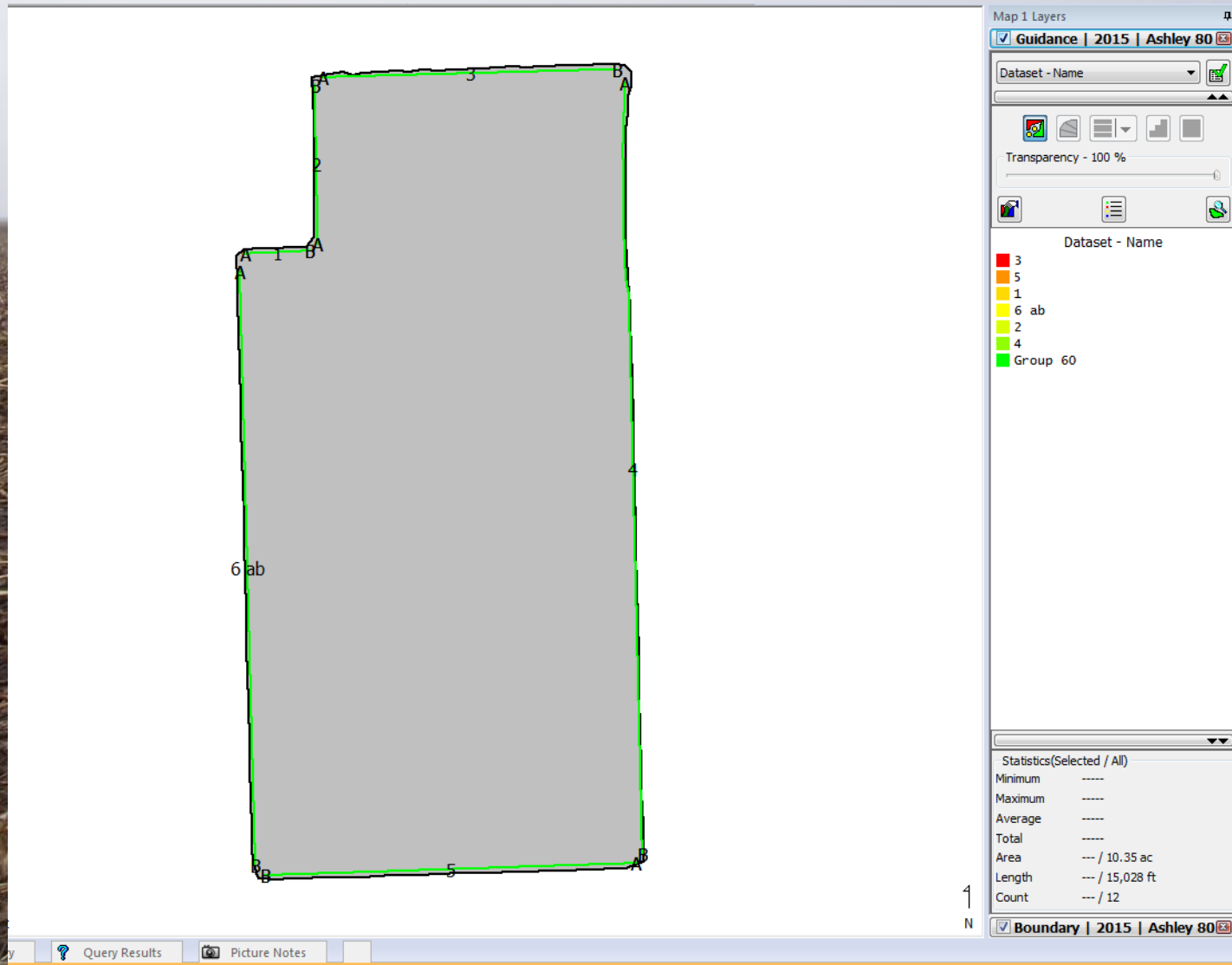
Soil Testing



- Falcon automated sampling machine
- Fast field coverage
- More uniform sample

Pre-Field Work

Set Field Boundaries and A-B Lines



Preplant Spraying



- 120 foot swath – running on 60 foot planter path
- Autosteer
- Autoswath
- Rate control and logging
- Direct injector

Spring Tillage



- 2 - 60 foot field cultivators on 60 foot pass
- RTK autosteer
- Same track line as planters to follow

Planting



- 60 foot planter
- RTK autosteer
- 120" wheel pattern
- Variety tracking / Autoswath
- Variable rate planting
- Starter fertilizer

Nitrogen Side-dressing



- 60 foot swath
- Autosteer
- Rate control and logging



Side Dressing with Hagie



Post Spraying



- 120 foot swath
- Autosteer
- Autoswath
- Rate control and logging
- Direct injector

Fungicide and Fertilizer Application

- 120 foot swath
- Autosteer
- Autoswath
- Rate control and logging



Harvesting Corn



- RTK autosteer
- Yield monitor
- 16 row, 40 foot swath

Harvesting Soybeans

- Cut at angle
- RTK autosteer
- Yield monitor
- 45 foot swath



Grain Carts

- RTK autsteer
- Offset right on 40 foot swath



Fall Tillage



- Autosteer
- With row vs. diagonal pattern

Fertilizer and Lime Applications



- Grid based soil sampling
- Grid based applications

Veris Soil Testing



Got Drainage?



Drainage Work

- Subsurface and surface drainage work
- GPS/RTK controlled grade



Future Opportunities

- Higher operating speeds
- Better utilization of the equipment we have
- Drainage
- More controlled traffic
- Determining the controlled traffic yield and efficiency difference
- Implement steering
- Share information between displays in field



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Questions?