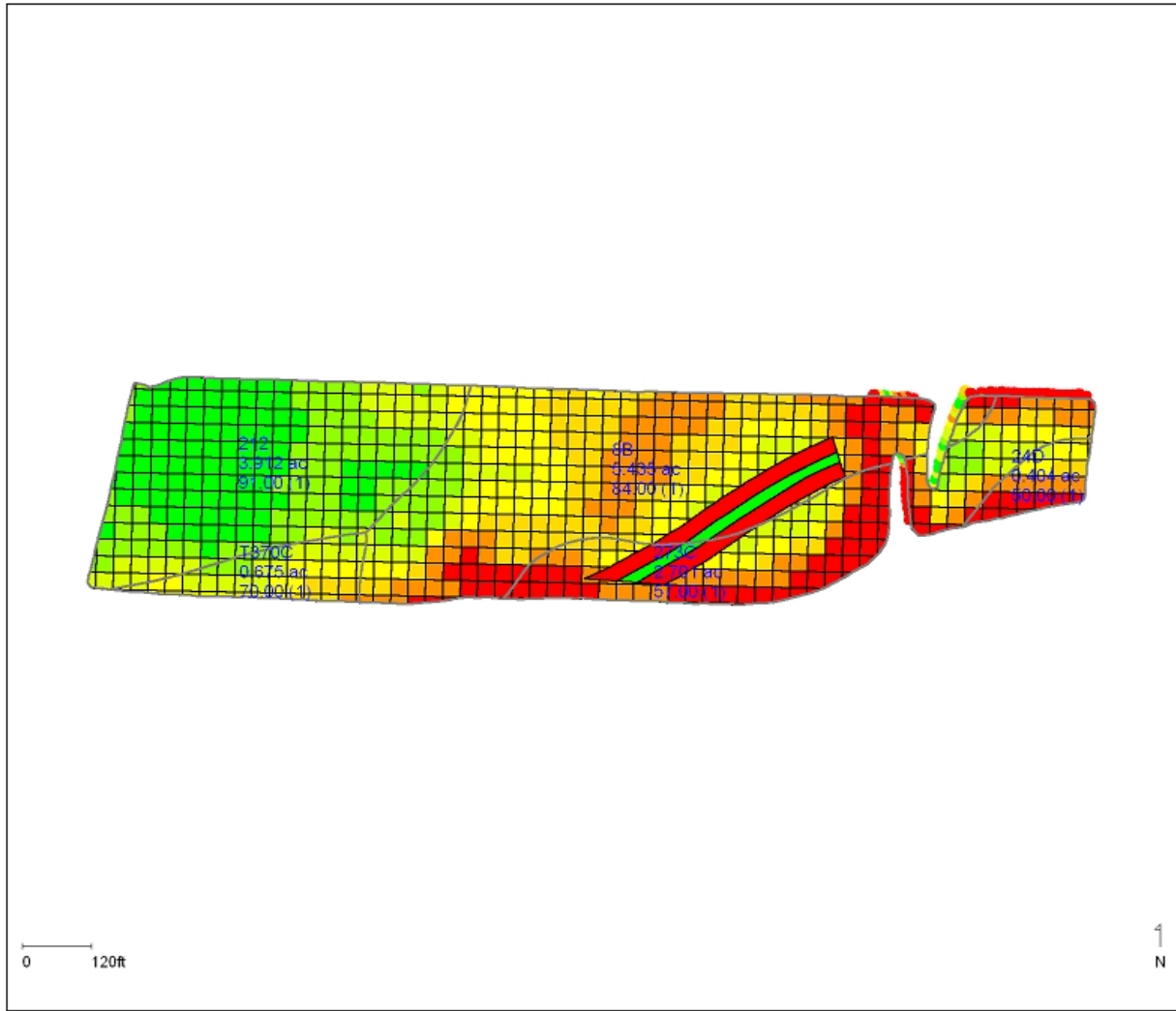


# Vertical Tillage Study

## Grain Harvest and Soil Type 2006 - Tahoe Highway 71 Corn



Grower : Marty Mattes  
 Farm : 4M Farm  
 Field : Tahoe Highway 71  
 Year : 2006  
 Operation : Grain Harvest  
 Op. Instance : Harvest - 1  
 "As-harvested" Area : 12.74 ac  
 Avg. Yield (Raw - Monitor) : 145.30 bu/ac  
 Avg. Moisture (Raw - Monitor) : 16.11 %  
 Average Speed : 3.247 mph  
 Average Estimated Volume (Dry) : 150.21 bu/ac  
 Average Moisture : 16.15 %

Grower : Marty Mattes  
 Farm : 4M Farm  
 Field : Tahoe Highway 71  
 Year : NOYEAR  
 Operation : SSURGO  
 Crop / Product : NO PRODUCT  
 Op. Instance : Instance - 1  
 Area : 13.09 ac  
 Count : 5  
 Average CSR : 78.76 (1)  
 Average CEC (Midpoint) : 28.31 meq/100g  
 Average Organic Matter (Midpoint) : 3.947 %  
 Average Yield Goal (Corn) : 150.45 bu/ac  
 Average Yield Goal (Soybeans) : 50.26 bu/ac

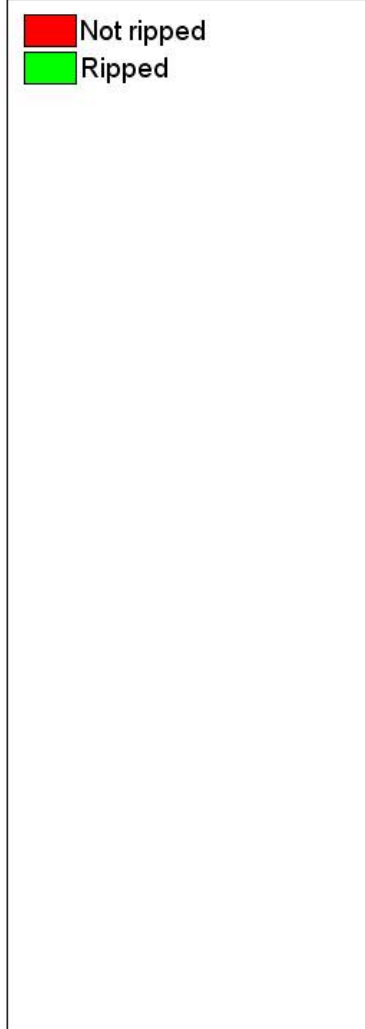
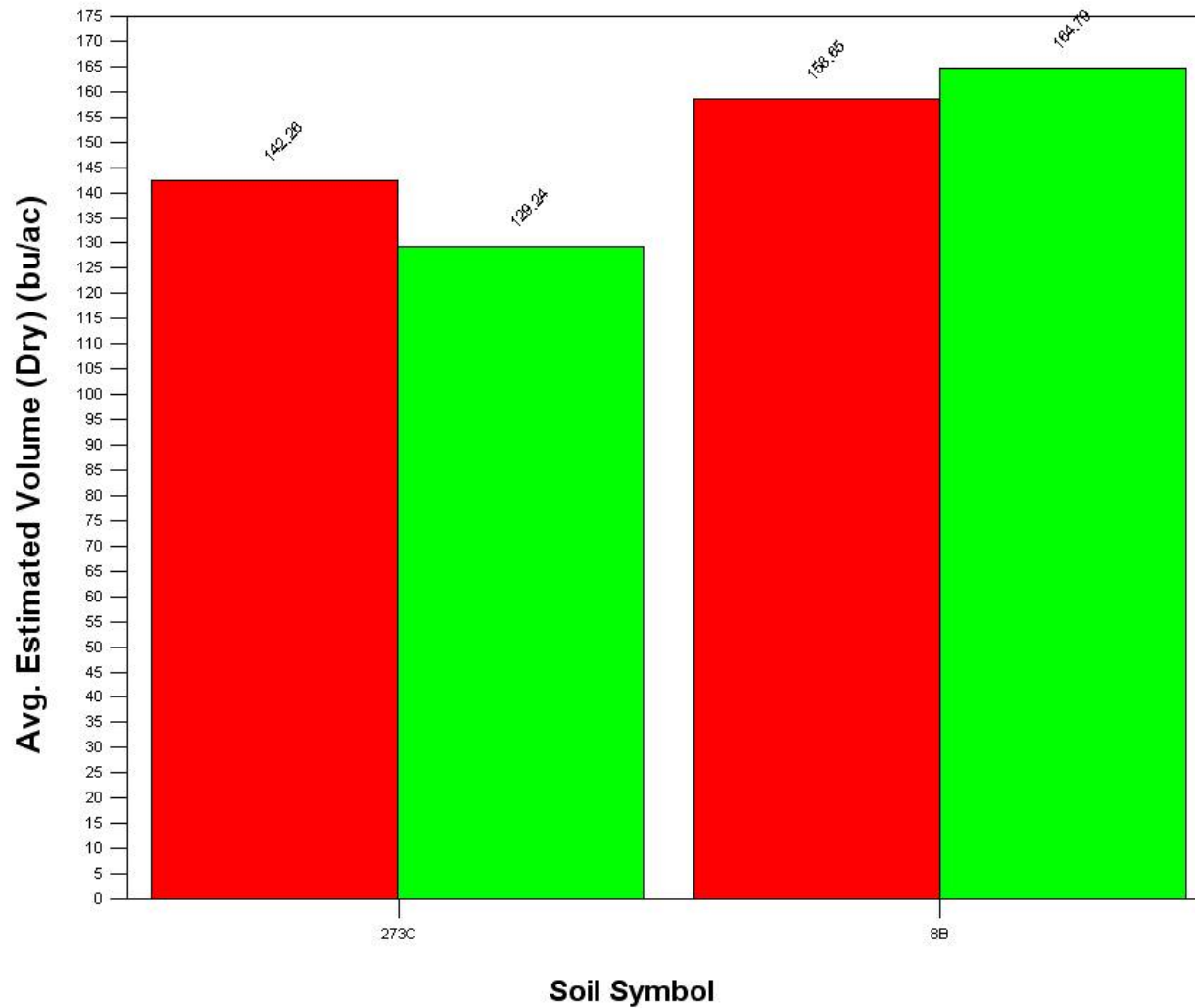
**Estimated Volume (Dry)**  
(bu/ac)

181.49 - 390.77	(1.697 ac)
169.67 - 181.49	(1.794 ac)
160.42 - 169.67	(1.837 ac)
150.70 - 160.42	(1.883 ac)
139.42 - 150.70	(1.893 ac)
122.81 - 139.42	(1.924 ac)
0.00 - 122.81	(1.712 ac)

**Marks**

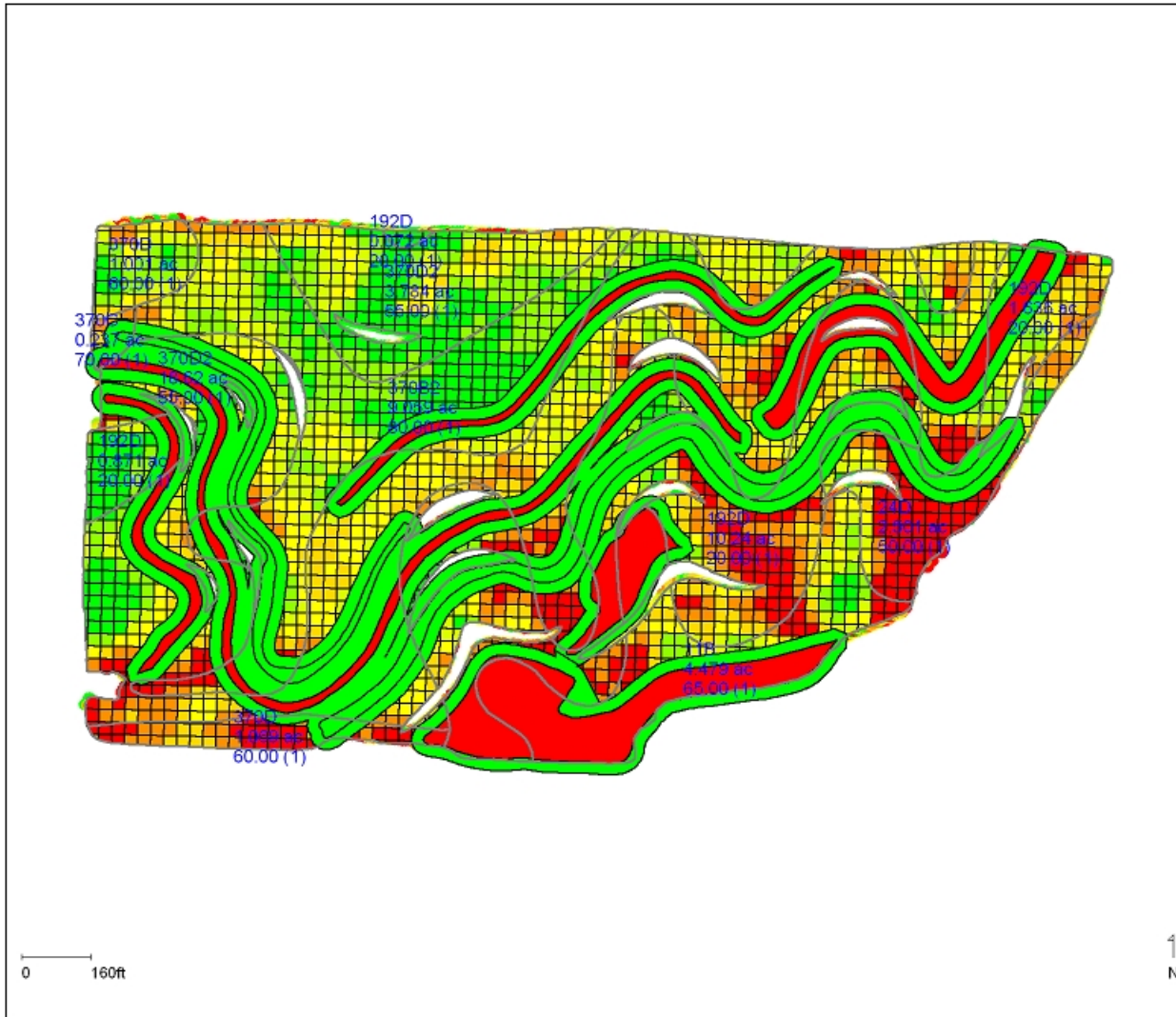
- ✕ Rock (1)
- ◇ Stand (2)
- ⊕ Weed (3)

## Compare Attributes/Properties - Vertical Tillage Study



Iowa Land Service - Precision Ag - 2/26/2007 8:33:26 PM  
Data Altered/Created through Analysis

## Grain Harvest and Soil Type 2006 - West of Ditch Crop Soybeans

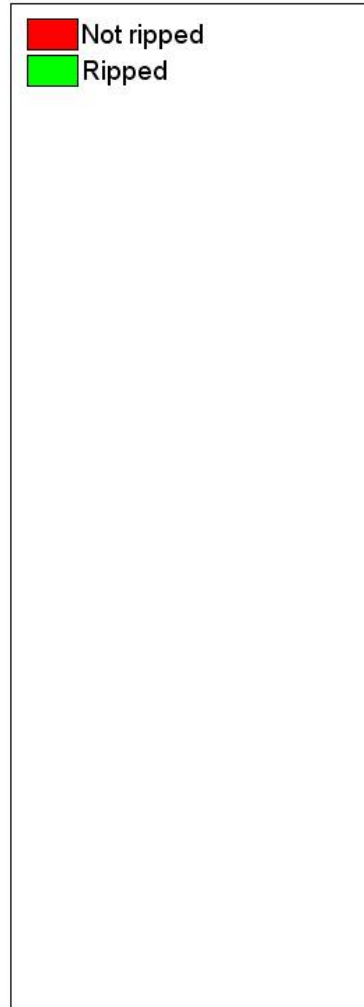
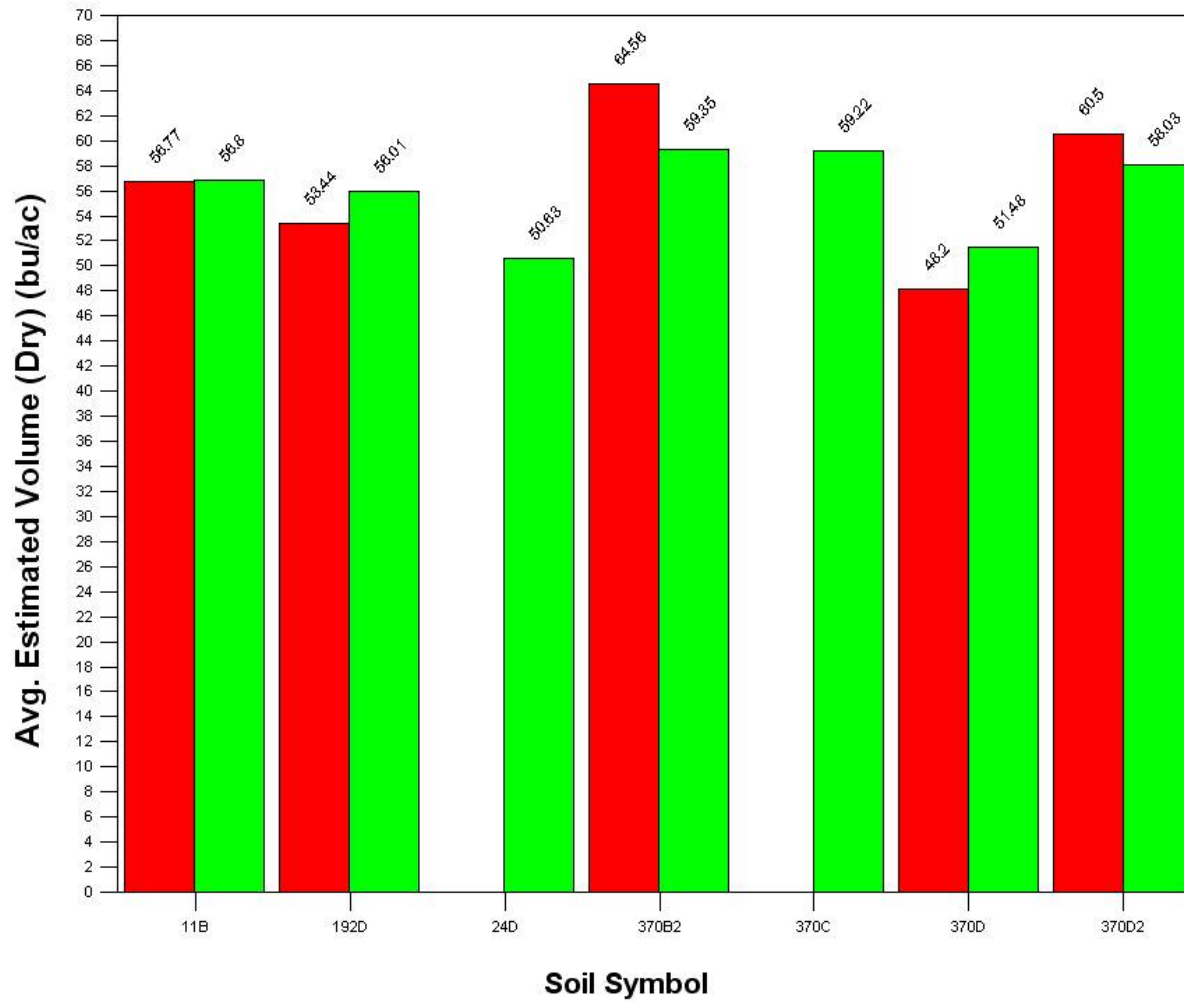


Grower : Marty Mattes  
 Farm : South Farm  
 Field : West of Ditch Crop  
 Year : 2006  
 Operation : Grain Harvest  
 Op. Instance : Harvest - 1  
 "As-harvested" Area : 47.79 ac  
 Avg. Yield (Raw - Monitor) : 55.05 bu/ac  
 Avg. Moisture (Raw - Monitor) : 10.42 %  
 Average Speed : 3.439 mph  
 Average Estimated Volume (Dry) : 56.41 bu/ac  
 Average Moisture : 10.41 %

Grower : Marty Mattes  
 Farm : South Farm  
 Field : West of Ditch Crop  
 Year : NOYEAR  
 Operation : SSURGO  
 Crop / Product : NO PRODUCT  
 Op. Instance : Instance - 1  
 Area : 53.45 ac  
 Count : 12  
 Average CSR : 51.71 (1)  
 Average CEC (Midpoint) : 28.44 meq/100g  
 Average Organic Matter (Midpoint) : 3.533 %  
 Average Yield Goal (Corn) : 122.91 bu/ac  
 Average Yield Goal (Soybeans) : 41.18 bu/ac

Estimated Volume (Dry)		
(bu/ac)		
■	66.98 - 198.25	(5.324 ac)
■	62.39 - 66.98	(6.837 ac)
■	59.09 - 62.39	(7.079 ac)
■	55.83 - 59.09	(7.164 ac)
■	52.04 - 55.83	(7.126 ac)
■	46.50 - 52.04	(7.188 ac)
■	5.18 - 46.50	(7.076 ac)

## Compare Attributes/Properties - Vertical Tillage Study



Iowa Land Service - Precision Ag - 2/26/2007 8:44:01 PM  
Data Altered/Created through Analysis

Legend : Tillage Type

# Summary – Vertical Tillage Study

- Vertical tillage should be based on soil type (site-specific)—not “whole-field”

Yield Summary

Crop	Avg Test Yield	Rx-Goal, lb/a (N-corn, P-beans)	Tillage Type	CSR	Profit/ac
Corn	161.84	129.5	<b>Ripped</b>	75.5	\$ 551.34
	157.41	129.05	Not ripped	74.9	\$ 535.84
Beans	62.28	81.44	Ripped	65.5	\$ 442.66
	63.37	82.11	<b>Not ripped</b>	65.5	\$ 450.67
	53.65	83.77	<b>Ripped</b>	39.3	\$ 379.23
	52.13	81.98	Not ripped	47.9	\$ 368.06
	57.78	85.43	Ripped	50.4	\$ 409.58
	58.48	86.43	<b>Not ripped</b>	49.5	\$ 414.73