**Releasing Soil Resources** 

# by Balancing your Soils

Jamestown, IN Boone County

August 26, 2008



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**5 years Gypsoil System vs. long- term Conventional Program.** Note: We used current input pricing for both fields and actual tonnages applied to the Gypsoil System field. We assumed customary products and use-rates for the long-term conventional program field.

W 320 Field 316.62 Acres

Gypsoil

Conventional

2008 Broadcast Totals

2008 Broadcast Totals (estimated)

 Phosphate:
 11-52-0
 3944# tot.
 \$7.47/acre

 Potassium:
 0-0-60
 6829# tot.
 \$10.78/acre

 Lime:
 Hi Cal
 424 tons tot.
 \$25.44/acre

 Gypsum
 1ton/acre
 \$23.00/acre

 Total
 \$67.00/acre

Phosphate: 11-52-0 150#/a \$91/acre Potassium: 0-0-60 200#/a \$100/acre Lime: (Any type 2-tons/acre) \$38/acre

Total \$229/acre

Gypsoil System Benefit \$162/acre

5 years Gypsoil System

**Conventional Program** 



#### **Yield Estimates**

## W 320 Field 316.62 Acres

August 26 2008

Gypsoil System \



**Conventional System** 

## Financial Analysis W 320 Field 316.62 Acres

	<u>Gypsoil System</u>	Conventional System
Yield Check	150bu/a	123 bu/a
Yield Difference	27 bu/a	
Bushel Value	@ \$3.00/bu	
Yield Difference Value	\$81/acre	
Input Savings	<u>\$162/acre</u>	
Total Gypsoil System Benefit	\$243/acre	

What are the Soil Types?

W 320 Field 316.62 Acres

Soils: Miami, Crosby, Fincastle, Brookston (Silt Loam to Silty Clay Loam)



#### How has nutrient availability been affected?

#### W 320 Field 316.62 Acres

The pH is nearly balanced.

Balanced pH range is 6.2-6.8

### Total applied Hi-Cal Lime for 2008 Crop: 424 tons



Pink indicates needs balanced

#### How has Phosphorus availability been affected?

#### W 320 Field 316.62 Acres

The Phosphorus is nearly balanced.

P1 Balance is 12-48 ppm. P2 Balance is 30+ ppm.

Total Applied Phosphate for 2008 Crop: 18-46-0 3944 Lbs VRT. The rest comes from Soil Release.



#### How has Potassium availability been affected?

W 320 Field 316.62 Acres

The Potassium is nearly balanced.

Balanced Potassium is 2.2-4.8% Base Saturation

Total applied Potassium for the 2008 crop: 0-0-60 6829 Lbs VRT The rest comes from Soil Release.



5 Year Gypsoil System

Mellow soil throughout the entire upper rooting zone



5 Year Gypsoil System

Earthworms moving deep into the subsoil



5 Year Gypsoil System

Earthworm deposits deep into the subsoil



5 Year Gypsoil System

Earthworms depositing nutrient rich-organic material deep into the subsoil



5 Year Gypsoil System

Roots feeding on nutrient rich organic material deposited by earthworms deep into the subsoil



