

## 2008 Inputs/Outputs for WICST (Fld 440)

| Corn Phase                           |                                                                                                                                                                 |                                                                                                                                                                                            |                                                              |                                                                                                                            |                                                                         |
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| CROP-2008<br>Rotation<br>Treatment # | CORN<br>CS1<br>1                                                                                                                                                | CORN<br>CS2<br>2                                                                                                                                                                           | CORN<br>CS3<br>6                                             | CORN<br>CS4<br>10                                                                                                          | CORN<br>CS5<br>12                                                       |
| Previous crop                        | Corn                                                                                                                                                            | Soybeans                                                                                                                                                                                   | Wheat then<br>berseem+oat cover<br>crop                      | Alfalfa II                                                                                                                 | Alfalfa I                                                               |
| Plot #'s                             | 109,204,306,412                                                                                                                                                 | 108,206,310,408                                                                                                                                                                            | 102,212,313,407                                              | 107,205,309,404                                                                                                            | 103,213,314,410                                                         |
| Primary Tillage                      | Chisel plow 11-7-07                                                                                                                                             | None                                                                                                                                                                                       | Disk-chisel 11-9-07                                          | Chisel plow 11-7-07                                                                                                        | Chisel plow 11-9-07                                                     |
| Secondary Tillage                    | Field cultivator 2x<br>5-6-08                                                                                                                                   | Strip tilled 4-24-08<br>(DW's 4-row unit)                                                                                                                                                  | Field cultivator 1x<br>4-24-08<br>5-6-08<br>5-12-08, 5-16-08 | Field cultivator 2x<br>5-6-08                                                                                              | Field cultivator 1x<br>4-24-08<br>5-12-08, 5-16-08                      |
| Variety<br>Planting Date<br>Rate     | Pioneer 35A34<br>(RR/LL)<br>May 6<br>34,000 sd/a                                                                                                                | Pioneer 35A34<br>(RR/LL)<br>May 6<br>34,000 sd/a                                                                                                                                           | Viking 5305 (NII)<br>May 16<br>38,000 sd/a                   | Pioneer 35A34<br>(RR/LL)<br>May 6<br>34,000 sd/a                                                                           | Viking 5305 (NII)<br>May 16<br>38,000 sd/a                              |
| Starter Fertilizer                   | 100 lb/a 5-14-42                                                                                                                                                | 100 lb/a 5-14-42                                                                                                                                                                           | None                                                         | 100 lb/a 5-14-42                                                                                                           | None                                                                    |
| Fertilizer<br>(per soil test)        | 160 lb N/a<br>(46-0-0 per PPNT)<br>5-13-08                                                                                                                      | 160 lb N/a<br>(46-0-0 per PPNT)<br>5-13-08                                                                                                                                                 | 1.25 ton/a pelletized<br>poultry manure<br>4-29-08           | None                                                                                                                       | None                                                                    |
| Manure Credit                        | None                                                                                                                                                            | None                                                                                                                                                                                       | None                                                         | 4,000 gpa (10-30-07)                                                                                                       | 4,000 gpa (10-29-07)                                                    |
| Pesticides                           | <b>Pre-emrg:</b> 5-10-08<br>Dual II Magnum<br>@ 16oz/a;<br><b>Post-emrg:</b> 6-17-08<br>Harness @ 2 pt/a<br>(412 only); Honcho+<br>@ 24 oz/a; AMS @<br>3.4 lb/a | <b>Pre-emrg:</b> 5-9-08<br>Honcho+ @ 18 oz/a;<br>Dual II Magnum<br>@ 16 oz/a; Speedway<br>3.2 oz/a<br><b>Post-emrg:</b> 6-7-08<br>Honcho+ @ 24 oz/a;<br>Resource @ 4 oz/a;<br>AMS @ 2 lb/a | None                                                         | <b>Pre-emrg:</b> 5-10-08<br>Dual II Magnum @<br>16oz/a;<br><b>Post-emrg:</b> 6-17-08<br>Honcho+ @ 24 oz/a;<br>AMS 3.4 lb/a | None                                                                    |
| Rotary hoe<br>(RH)/tine weed<br>(TW) | None                                                                                                                                                            | None                                                                                                                                                                                       | RH: 5-23, 6-2, 6-17<br>TW: 5-28 (spiking)                    | None                                                                                                                       | RH: 5-23, 5-28, 6-2,<br>6-17<br>TW: 0 (too much<br>residue clogs tines) |
| Cultivation                          | None                                                                                                                                                            | None                                                                                                                                                                                       | 'Wilrich' 6-25-08<br>'Yetter' 7-3-08                         | None                                                                                                                       | 'Wilrich' 6-25-08<br>'Yetter' 7-3-08                                    |
| Hand weed                            | None                                                                                                                                                            | None                                                                                                                                                                                       | None                                                         | None                                                                                                                       | None                                                                    |
| Harvest & Yield                      | 10-28-08<br>141.8 bu/a <sup>1</sup>                                                                                                                             | 10-28-08<br>175.3 bu/a                                                                                                                                                                     | 10-28-08<br>173.5 bu/a                                       | 10-28-08<br>208.6 bu/a                                                                                                     | 10-28-08<br>205.7 bu/a                                                  |
| Fall Practices                       | Chop stalks 10-29-08<br>Disk-chisel 11-10-08                                                                                                                    | None                                                                                                                                                                                       | Chop stalks 10-29-08<br>Disk-chisel 11-10-08                 | Chop stalks 10-29-08<br>Manure 16,000 gpa;<br>Disk-chisel 11-10-08                                                         | Chop stalks 10-29-08<br>Manure 16,000 gpa;<br>Disk-chisel 11-10-08      |
| Crop 2009                            | Corn                                                                                                                                                            | Soybean                                                                                                                                                                                    | Soybean                                                      | D.S. Alfalfa                                                                                                               | Oats/Alfalfa                                                            |

Bait ground squirrels burrows with 'Revenge' on and around no-till corn and pasture plots in April and May

Alleys: Spray when cs2, cs4 and CL corn plots are sprayed; till throughout summer

<sup>1</sup> Great Flood of 2008 started June 7-8<sup>th</sup>. Most of Rep 2 was flooded for 6 weeks; plot 204 omitted from yield average

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| Soybean and Wheat Phases             |                                                                                                                                                  |                                                                                                          |                                                                     |
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| CROP-2008<br>Rotation<br>Treatment # | No-till Soybean<br>CS2<br>3                                                                                                                      | WR Soybean/Winter Wheat<br>CS3<br>5                                                                      | Wheat/Berseem Clover+oats<br>CS3<br>4                               |
| Plot #'s                             | 101,214,303,401                                                                                                                                  | 106,202,307,411                                                                                          | 104,201,301,402                                                     |
| Previous crop                        | Corn                                                                                                                                             | Corn                                                                                                     | Soybeans                                                            |
| Primary Tillage                      | None                                                                                                                                             | Fall MB plowed 11-9-07                                                                                   | Fall disked 1x after soybean harvest to prep seedbed 10-6-07        |
| Secondary Tillage                    | None                                                                                                                                             | Field cultivator 1x<br>4-24-08<br>5-6-08<br>5-12-08<br>5-21-08                                           | None                                                                |
| Planting Date                        | May 13, 2008                                                                                                                                     | SB: 5-21-08<br>WW: 10-13-08                                                                              | WW: 10-6-07<br>Berseem clover/oats:<br>8-13-08                      |
| Variety<br>Rate                      | Renk RS223RR (3000 sd/lb)<br>225,000 seed/a, cell tech inoculant                                                                                 | Sb: Viking 1832<br>(2600 sd/lb; 92% germ)<br>190,000 seeds/a, cell tech inocul<br>WW: untrd'd Pion 25R47 | WW: 1.6 mill seeds/a<br>Berseem/oats: 10 and 32 lb/a                |
| Fertilizer<br>(per soil test)        | None                                                                                                                                             | 200 lb/a 0-0-50 (in starter box);<br>all but plot 307                                                    | None                                                                |
| Pesticides                           | <b>Burndown:</b> 6-7-08<br>Honcho+ @ 24 oz/a; Resource @ 4<br>oz/a; AMS @ 2 lb/a<br><b>Post-emrg:</b> 7-10-08 Honcho+ @<br>24 oz/a; AMS @ 2 lb/a | None                                                                                                     | None                                                                |
| Rotary Hoe (RH)<br>/tine weed (TW)   | None                                                                                                                                             | RH: 0<br>TW: 5-28, 6-2, 6-16 (2x on 6-16)                                                                | TW 1x 4-24-08                                                       |
| Cultivation                          | None                                                                                                                                             | 'Wilrich' c-shank<br>6-24-08, 7-2-08, 7-15-08                                                            | None                                                                |
| Hand weed                            | None                                                                                                                                             | Border rows 7-21-08 and 7-25-08                                                                          | None                                                                |
| Harvest & Yield                      | 10-13-08<br>45.8 bu/a                                                                                                                            | 10-10-08<br>63.0 bu/a                                                                                    | Wheat: 7-30-08 63.8 bu/a<br>Straw: 8-8-08 0.62 T DM/a               |
| Fall Practices                       | Strip tilled 11-10-08                                                                                                                            | Flatten ridges w/ disk 10-10-08;<br>No-till drill untrt'd Pioneer 25R47<br>wheat 10-13-08 @ 150 lb/a     | Disk 1x and field cultivator 1x<br>8-13-08;<br>Disk-chisel 11-11-08 |
| Crop 2009                            | Corn                                                                                                                                             | Wheat / Clover                                                                                           | Corn                                                                |

## 2008 Inputs/Outputs for WICST (Fld 440)

| Forage Phases                        |                                                                                                                                                    |                                                                                                                           |                                                                                                                                                                     |                                                                       |                                                                                                                           |                                                                                                         |
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| CROP-2008<br>Rotation<br>Treatment # | Dir. Sd. Alfalfa<br>CS4<br>9                                                                                                                       | Estab.<br>Alfalfa I<br>CS4<br>8                                                                                           | Estab.<br>Alfalfa II<br>CS4<br>7                                                                                                                                    | Oats/Alfalfa<br>CS5<br>11                                             | Estab.<br>Alfalfa I<br>CS5<br>13                                                                                          | Pasture<br>CS6<br>14                                                                                    |
| Previous crop                        | Corn                                                                                                                                               | D.S. Alfalfa                                                                                                              | Alfalfa I                                                                                                                                                           | Corn                                                                  | Oat/Alfalfa                                                                                                               | Pasture                                                                                                 |
| Plot #'s                             | 105, 203*,<br>308, 406                                                                                                                             | 113, 210,<br>311, 414                                                                                                     | 111, 209,<br>305, 409                                                                                                                                               | 110, 208,<br>304, 413                                                 | 114, 211,<br>312, 403                                                                                                     | 112, 207,<br>302, 405                                                                                   |
| Primary<br>Tillage                   | chisel plow<br>11-8-07                                                                                                                             | None                                                                                                                      | None                                                                                                                                                                | chisel plow<br>11-9-07                                                | None                                                                                                                      | None                                                                                                    |
| Secondary<br>Tillage                 | Field cultivator<br>4-24-08;<br>cultimulcher<br>4-30-08                                                                                            | None                                                                                                                      | None                                                                                                                                                                | Field cultivator<br>4-24-08 and<br>cultimulcher<br>4-30-08            | None                                                                                                                      | None                                                                                                    |
| Variety<br>Planting Date             | 'Golden Harv<br>707' (Brillion)<br>4-30-08                                                                                                         | Golden Harv<br>707 4-21-07                                                                                                | Magnum V<br>4-6-06                                                                                                                                                  | 'Esker' oats &<br>untreated 'Pion.<br>54H91' (NT<br>drill) 4-30-08    | 'Forage+' oats<br>and untreated<br>'Pion. 54H91'<br>4-21-07                                                               | Kopu II<br>White clover<br>4-16-08                                                                      |
| Rate                                 | 12 lb/a                                                                                                                                            | 12 lb/a                                                                                                                   | 12 lb/a                                                                                                                                                             | 40 and 12 lb/a                                                        | 50 and 12 lb/a                                                                                                            | 3 lb/a                                                                                                  |
| Fertilizer<br>(per soil test)        | None                                                                                                                                               | 300 lb/a 0-0-60<br>6-2-08 &<br>8-11-08                                                                                    | 300 lb/a 0-0-60<br>6-2-08 &<br>8-11-08                                                                                                                              | None                                                                  | 300 lb/a 0-0-50<br>6-2-08 &<br>8-11-08                                                                                    | 50 lb N/a (urea)<br>on each plot,<br>mid-May and<br>Aug                                                 |
| Manure<br>credit                     | 12,000 gpa<br>10-29-07                                                                                                                             | None                                                                                                                      | None                                                                                                                                                                | 8,000 gpa<br>10-29-07                                                 | None                                                                                                                      | Graze May 4-<br>Oct 27 <sup>th</sup>                                                                    |
| Pesticides<br>(as needed)            | <b>Herbicide</b><br><b>Post-emrg:</b><br>6-25-08<br>Raptor @ 4<br>oz/a; NIS @ 6.4<br>oz/a<br>28%N 2 qt/a<br><b>Insecticide</b><br>Warrior 2.4 oz/a | None                                                                                                                      | <b>Insecticide:</b><br>None<br><b>Herbicide</b><br><b>(fall kill):</b><br>Honcho+ @<br>48oz/a; 2,4-D<br>low vol ester @<br>16 oz/a; NIS 3.2<br>oz/a; AMS 10<br>lb/a | None                                                                  | None                                                                                                                      | Spot sprayed<br>thistles with<br>Stinger in May<br>and September                                        |
| Harvest &<br>Yield                   | 1 <sup>st</sup> 7-17-08<br>2 <sup>nd</sup> 8-19-08<br>sum=2.55 T dm/a                                                                              | 1 <sup>st</sup> 5-29-08<br>2 <sup>nd</sup> 7-1-08<br>3 <sup>rd</sup> 8-7-08<br>4 <sup>th</sup> 9-10-08<br>sum=5.86 T dm/a | 1 <sup>st</sup> 5-29-08<br>2 <sup>nd</sup> 7-1-08<br>3 <sup>rd</sup> 8-7-08<br>4 <sup>th</sup> 9-10-08<br>sum=5.53 T dm/a                                           | 1 <sup>st</sup> 7-10-08<br>2 <sup>nd</sup> 8-19-08<br>sum=2.88 T dm/a | 1 <sup>st</sup> 5-29-08<br>2 <sup>nd</sup> 7-1-08<br>3 <sup>rd</sup> 8-7-08<br>4 <sup>th</sup> 9-10-08<br>sum=5.34 T dm/a | Take Hay on plot<br>405 5-29;<br>Clip 1 <sup>st</sup> cycle<br>post-graze<br>112 on 6-2, 302<br>on 6-18 |
| Fall Practices                       | None                                                                                                                                               | None                                                                                                                      | Manure 16K gpa<br>11-5-08<br>Disk-chisel<br>11-10-08                                                                                                                | None                                                                  | Manure 8K gpa<br>11-4-08;<br>chisel plow<br>w/sweep 11-10-08                                                              | Reseeded south<br>half of 207<br>8-15-08                                                                |
| Crop 2009                            | Alf I                                                                                                                                              | Alf II                                                                                                                    | Corn                                                                                                                                                                | Alf I                                                                 | Corn                                                                                                                      | Pasture                                                                                                 |

\*plot 203 was flooded on North half so only half the plot got planted with other plots; N end was seeded later but flooding of June 7-8-08 killed it; reseeded again 8-15-08

## 2008 Inputs/Outputs for WICST (Fld 440)

| Satellites        |                                                                                                                      |                                                                                           |                                                                              |                                                                                                                          |
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|                   | Flex-till 3-phase system**                                                                                           |                                                                                           |                                                                              | Biofuel                                                                                                                  |
| CROP-2008         | Corn                                                                                                                 | No-till Soybean/Winter Wheat                                                              | No-till Wheat/Red Clover                                                     | Switchgrass                                                                                                              |
| Previous crop     | Wheat/red clover                                                                                                     | Corn                                                                                      | Soybeans                                                                     | corn                                                                                                                     |
| Plot #'s          | B, F**                                                                                                               | A, E**                                                                                    | C, D                                                                         | 501, 504, 508                                                                                                            |
| Primary Tillage   | Disk-chiseled<br>11-9-07                                                                                             | Chisel plowed<br>11-8-07                                                                  | None                                                                         | None                                                                                                                     |
| Secondary Tillage | Field cultivator<br>5-6-08 2x                                                                                        | Field cultivator 2x<br>5-12-08                                                            | None                                                                         | None                                                                                                                     |
| Planting Date     | 5-6-08                                                                                                               | 5-13-08;                                                                                  | No-till drilled wheat<br>11-6-07<br>No-till drill clover<br>4-16-08          | Planted August 2007                                                                                                      |
| Variety Rate      | Pioneer 35A34<br>(RR/LL)<br>34,000 sd/a                                                                              | Kaltenberg KB196RR<br>225,000 sd/a<br>cell tech inoculant                                 | WW: Pion 25R47<br>(150 lb/a)<br>RC: 'Arlington'<br>12 lb/a                   | 'Forestberg'<br>10 lb PLS/a                                                                                              |
| Fertilizer        | 100 lb/a 5-14-42, and<br>75 lb N/a as urea<br>5-13-08                                                                | None                                                                                      | 30 lb N/a and 130 lb K2O<br>applied 10-6-07;<br>50 lbs N/a (urea)<br>4-24-08 | 30 lbs N/a at greenup<br>6-2-08                                                                                          |
| Pesticides        | <u>Pre-plant:</u> none<br><u>Post emrg:</u> 6-7-08<br>Honcho + @ 32 oz/a;<br>Resource at 5.3 oz/a;<br>AMS @ 2.3 lb/a | <u>Pre-plant:</u> none<br><u>Post emrg:</u> 7-10-08<br>Honcho+ @ 24 oz/a;<br>AMS @ 2 lb/a | None                                                                         | 5-6-08<br>Banvel @16 oz/a,<br>Harness @ 30oz/a, Pursuit<br>@ 1.44 oz/a<br>Clipped weeds 6-17-08;<br>7-10-08 2-4,D 3 pt/a |
| Rotary Hoe/Tine   | None                                                                                                                 | None                                                                                      | None                                                                         | None                                                                                                                     |
| Cultivation       | Yetter 7-3-08                                                                                                        | None                                                                                      | None                                                                         | None                                                                                                                     |
| Harvest & Yield   | 10-28-08<br>180.9 bu/a                                                                                               | 10-10-08<br>58.2 bu/a                                                                     | Grain: 7-30-08 84.3 bu/a<br>Straw: 8-8-08 0.94 T DM/a                        | 10-31-08;<br>southern ¼ of plot<br>0.43 tons DM/a                                                                        |
| Fall Practices    | Chop stalks 10-29-08                                                                                                 | Disk 1x; drilled trt'd<br>Pioneer 25R47 wheat @<br>160 lb/a 10-13-08                      | Disk-chisel 11-10-08                                                         | None                                                                                                                     |
| Crop 2009         | NT Soybeans                                                                                                          | Wheat / Red Clover                                                                        | Corn                                                                         | Switchgrass                                                                                                              |

\*\* North 100' of plot F was flooded most of season – area was kept fallow with tillage.