### SOLIDS WORKSHEET 2 - NUTRIENT BALANCE

<table>
<thead>
<tr>
<th>Tract</th>
<th>Field No.</th>
<th>Acres</th>
<th>Soil Test P Value (Mehlich 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2</td>
<td>32</td>
<td></td>
<td>120</td>
</tr>
</tbody>
</table>

1. Crop or Crop Sequence Rotation

2. Realistic Yield (Average from 5-10 Years on a per acre basis)

3. Plant Nutrients Needed or Allowed (lb/ac)

4. Adjusted P, K Application Rate According to Threshold

5. Fertilizer Credits (lb/ac)

6. Plant Nutrients Needed Minus Credits (lb/ac)

7. Nutrients in Manure (lb/ac)

8. Percent Nutrients Retained in System

9. Net Retained Nutrients in Manure (lb/ac)

10. Percent of Available Nutrients

11. Net Available Nutrients (lb/ac)

12. Application Rate (lb/ac)

13. Net Application Amount for All Nutrients (lb/ac)

14. Nutrient Needs [-] or Surpluses [+](lb/ac)

| Tons Available | 184 | Tons Applied in Field | 128 | Balance | 56 |

*Enter Lab Results Here to Override Calculations From Worksheet 1 on Step 7*

- N
- P2O5
- K2O

*Go to Worksheet 3 Solids*
### SOLIDS WORKSHEET 2 - NUTRIENT BALANCE

<table>
<thead>
<tr>
<th>Tract</th>
<th>Field No.</th>
<th>Acres</th>
<th>Soil Test P Value (Mehlich 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>450</td>
</tr>
</tbody>
</table>

1. Crop or Crop Sequence

2. Realistic Yield (Average from 5-10 Years on a per acre basis)

3. Plant Nutrients Needed or Allowed (lb/acre)

4. Adjusted P₂O₅ Application Rate According to Threshold

5. Fertilizer Credits (lb/acre)

6. Plant Nutrients Needed Minus Credits (lb/acre)

7. Nutrients in Manure (lb/ton)

8. Percent Nutrients Retained in System

9. Net Nutrients Retained in Manure (lb/ton)

10. Percent of Available Nutrients

11. Net Available Nutrients (lb/ton)

12. Application Rate (ton/acre)

13. Net Application Amount for All Nutrients (lb/ton)

14. Nutrient Needs (-) or Surpluses (+) (lb/ton)

---

Note: Phosphorus applications at rates not to exceed the estimated removal of phosphorus in the harvested plant biomass.

Step 7

<table>
<thead>
<tr>
<th>N</th>
<th>P₂O₅</th>
<th>K₂O</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Choose Application Rate MUST ENTER

2

Tons Available: 56

Tons Applied in Field: 64

Balance - Applied more than Available

Go to Worksheet 3, Solids
In the notes, the farmer said fields H2 & H7 receive solid manure when in wheat silage, the rest of the fields receive liquid. The reason I put 4 T/ac for field H2 is because in the notes it indicates that both fields just receive solid manure, so I put more manure on the field with the lower soil test phosphorus. With field H2 & H7, the soil test phosphorus is above 45 lbs/ac so it is not the best utilization of the manure, but if the farmer only has these two fields to apply solid manure then they will have to suffice.
### Liquids Worksheet 2 - Nutrient Balance

<table>
<thead>
<tr>
<th>Tract</th>
<th>Field No.</th>
<th>Acres</th>
<th>Soil Test P Value (Maury 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI</td>
<td></td>
<td>20</td>
<td>75</td>
</tr>
</tbody>
</table>

1. Crop or Crop Sequence/Rotation  
   Alfalfa Hay (Tor) (legume)

2. Realistic Yield (Average from 5-10 Years on a per acre basis)  
   5.0

3. Plant Nutrients Needed or Allowed (lbs/acre)
   
<table>
<thead>
<tr>
<th>N</th>
<th>P₂O₅</th>
<th>K₂O</th>
</tr>
</thead>
<tbody>
<tr>
<td>255</td>
<td>70</td>
<td>275</td>
</tr>
</tbody>
</table>

4. Adjusted P₂O₅ Application Rate According to Threshold  
   0

5. Fertilizer Credits (lbs/acre)  
   
<table>
<thead>
<tr>
<th>N</th>
<th>P₂O₅</th>
<th>K₂O</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Plant Nutrients Needed Minus Credits (lbs/acre)
   255  

7. Nutrients in Manure (lbs/1,000 gallons)
   Enter lab results in box on right to override Worksheet 1 values
   
<table>
<thead>
<tr>
<th>N</th>
<th>P₂O₅</th>
<th>K₂O</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

8. Percent Nutrients Retained in System
   Enter Table 1 values or Enter zero if lab results are used in Step 7
   
<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>35%</td>
</tr>
</tbody>
</table>

9. Not Retained Nutrients in Manure (lbs/1,000 gallons)
   2.0  

10. Percent of Available Nutrients
    Enter Table 2 value for N
    
    | Table 2 |
    |---------|
    | 80%     |

11. Net Available Nutrients (lbs/1,000 gallons)
    15  

12. Application Rate (1,000 gallons/acre)
    Application limitations may apply.
    Enter chosen Application Rate in box on right
    
    | 5     |

13. Not Application Amount for All Nutrients (lbs/acre)
    0  

14. Nutrient Needs (-) or Surpluses (+) (lbs/acre)
    
    | -247  |

Gallons Available: 356,664  
Gallons Applied in Field: 100,000  
Balance: 256,664

Enter Lab Results Here to Override Calculations From Worksheet 1 on Step 7

<table>
<thead>
<tr>
<th>N</th>
<th>P₂O₅</th>
<th>K₂O</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Chosen Application Rate**  
**MUST ENTER**

5

Go to Worksheet 3 Liquids
## LIQUIDS WORKSHEET 2 - NUTRIENT BALANCE

<table>
<thead>
<tr>
<th>Tract</th>
<th>Field No.</th>
<th>Acres</th>
<th>Soil Test P Value (Mg/l 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

1. Crop or Crop Sequence/Rotation

2. Realistic Yield (Average from 5-10 Years on a per acre basis)

3. Plant Nutrients Needed or Allowed (lb/acre)

4. Adjusted P<sub>2</sub>O<sub>5</sub> Application Rate According to Threshold

5. Fertilizer Credits (lb/acre)

6. Plant Nutrients Needed Minus Credits (lb/acre)

7. Nutrients in Manure (lb/1,000 gallons)

8. Percent Nutrients Retained in System

9. Net Retained Nutrients in Manure (lb/1,000 gallons)

10. Percent of Available Nutrients

11. Net Available Nutrients (lb/1,000 gallons)

12. Application Rate (1,000 gallons/acre)

13. Net Application Amount for All Nutrients (1,000 gallons/acre)

14. Nutrient Needs (-) or Surpluses (+) (lb/acre)


Enter Lab Results Here to Override Calculations From Worksheet 1 on Step 7

<table>
<thead>
<tr>
<th>N</th>
<th>P&lt;sub&gt;2&lt;/sub&gt;O&lt;sub&gt;5&lt;/sub&gt;</th>
<th>K&lt;sub&gt;2&lt;/sub&gt;O</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Chosen Application Rate MUST ENTER

Go to Worksheet 3 Liquids
**LIQUIDS WORKSHEET 2 - NUTRIENT BALANCE**

<table>
<thead>
<tr>
<th>Tract</th>
<th>Field No.</th>
<th>Acres</th>
<th>Soil Test P Value (Mehlich 3)</th>
<th>79</th>
</tr>
</thead>
</table>

1. Crop or Crop Sequence/Rotation: Barley Grain (Bushel)

2. Realistic Yield (Average from 5-10 Years on a per acre basis): 700

3. Plant Nutrients Needed or Allowed (lbs/acre):
   - N: 69
   - P₂O₅: 29
   - K₂O: 22

4. Adjusted P₂O₅ Application Rate According to Threshold: 0

5. Fertilizer Credits (lbs/acre): 0

6. Plant Nutrients Needed Minus Credits (lbs/acre):
   - N: 69
   - P₂O₅: 29
   - K₂O: 22

7. Nutrients in Manure (lbs/1,000 gallons):
   - Enter lab results in box on right to override Worksheet 1 values
   - N: 2.0
   - P₂O₅: 1.0
   - K₂O: 2.0

8. Percent Nutrients Retained in System:
   - N: 0%
   - P₂O₅: 0%
   - K₂O: 0%

9. Net Retained Nutrients in Manure (lbs/1,000 gallons): 2.0

10. Percent of Available Nutrients
    - Enter Table 2 value for N
    - Table 2
    - N: 50%
    - P₂O₅: 90%
    - K₂O: 100%

11. Net Available Nutrients (lbs/1,000 gallons):
    - N: 1.0
    - P₂O₅: 0.8
    - K₂O: 2.0

12. Application Rate (1,000 gallons/acre):
    - Application limitations may apply.
    - Enter Chosen Application Rate in box on right
    - N: 5
    - P₂O₅: 5
    - K₂O: 5

13. Net Application Amount for All Nutrients (1,000 gallons/acre):
    - N: 5
    - P₂O₅: 4
    - K₂O: 10

14. Nutrient Needs [-] or Surpluses [+] (lbs/acre):
    - N: -64
    - P₂O₅: -25
    - K₂O: -12

Gallons Available: 47,664  -  Gallons Applied in Field: 55,000  = Balance more than Available.
As indicated in the notes, Alfalfa & Barley are to receive 5000 G/ac, so the rest of the liquid manure has to go on H5.