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September 16, 2008

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SEP 18 2008

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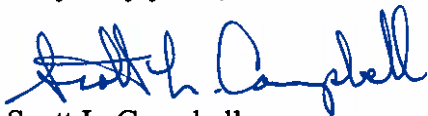
**Re: Subcase Nos. 63-04641A and 63-04641B**  
**in the Name of Tree Top Ranches / Soils Analysis**  
MTBR&F File No. 22567.0000

Dear Andrea and Jan:

Pursuant to the discussions at our meeting held on August 8, 2008, my client, Tree Top Ranches, L.P., hired a consultant to undertake a soils analysis of the real property to which water rights 63-4641A and 63-4641B are appurtenant. I have enclosed a copy of the soils analysis, dated September 15, 2008 and prepared by Terry Scanlan, P.E., P.G. ("Scanlan Soils Analysis"). As you will note, Mr. Scanlan concluded that the surface "soils within the Haas Ditch Company service area and the place of use for Tree Top Ranches' water right 63-4641A and 63-4641B have similar characteristics for purposes of irrigation." Scanlan Soils Analysis, page 2.

Please feel free to contact me with any questions.

Very truly yours,



Scott L. Campbell

SLC/tmh  
Enclosures

cc: Larry Williams (w/encls.)  
Dana L. Hofstetter (w/encls.)



September 15, 2008

Scott Campbell  
Moffatt Thomas  
101 S. Capitol Blvd., 10th Floor  
P.O. Box 829  
Boise, ID 83701-0829

**Subject:** Soil Analysis for Water Rights 63-4641A and 63-4641B

**Dear Scott:**

As authorized by email dated August 29, 2008, SPF Water Engineering has reviewed soil information related to the places of use for water rights 63-4641A and 63-4641B claimed in the SRBA by Tree Top Ranches LP. This soil information has been compared to the soils data available for the Haas Ditch Company service area. The analysis found that soil types within the Haas Ditch Company service area and at the place of use for the 63-4641A and 63-4641B water rights are similar, and will have similar irrigation characteristics. Details of the analysis are provided below.

#### **Method**

The analysis has utilized soil mapping data available from the USDA Soil Conservation Service Soil Survey of the Canyon Area, Idaho (1972).

Soil survey mapping data were superimposed over the places of use for the Tree Top Ranches water right place of use and the Haas Ditch Company water right place of use. Water right places of use were available as GIS shape files from the Idaho Department of Water Resources. Figure 1 presents soil mapping for the 63-4641 water right places of use and Figure 2 presents soil mapping for the Haas Ditch Company water right place of use.

The total acres of each soil type within the places of use were determined using ESRI ArcMap version 9.2 Geographic Information System (GIS) software. The percentages of each soil types were then tabulated and are presented in Table 1 (63-4641 soils) and Table 2 (Haas Ditch Company soils), along with physical characteristics of each soil type listed in the Soil Survey.

The weighted averages for the upper 30 inches of soil in each area are also provided for selected characteristics in Tables 1 and 2. The upper 30 inches was selected for analysis due to the high seasonal water table (generally 1 to 3 feet) and the coarse-grained nature of soils below 30 inches.

## Results

The mapping found that the surface soils at both locations are similar, consisting primarily of fine sandy loams and loams in the upper 30 inches, and sand and gravel below approximately 30 inches. Approximately 57 percent of the Haas soils are classified as saline, while approximately 15 percent of the 63-4641 soils are classified as saline-alkali. All of the soils units have surface slopes of 0 to 1 percent.

Permeability in both areas is generally moderate to moderately rapid in the upper 30 inches, and rapid below 30 inches. Calculated average upper soil permeability of the Haas soils is 8.1 inches per hour, compared to 5.7 inches per hour for the 63-4641 soils. Both values are skewed by the presence of high permeability Notus soils within each area. Neglecting the Notus soils, upper soil permeability averages approximately 2 inches per hour within the Haas service area and 4 inches per hour within the 63-4641A place of use. Permeability within the 63-4641B place of use is lower, averaging 1.3 inches per hour.

Upper soil water holding capacities are also similar within the 63-4641A and 63-4641B place of use and Haas Ditch Company service area, averaging 0.14, 0.11, and 0.12 inches per inch, respectively.

Based on soil texture, the intake families for flood and furrow irrigation average 1.9 and 0.54, respectively, for the 63-4641A place of use, 1.5 and 0.50, respectively, for the 63-4641B place of use, and 2.6 and 0.65, respectively, for the Haas Ditch Company place of use. These values are in the same general range, but reflect the slightly higher average permeability and slightly lower average water holding capacity of the Haas soils in comparison to the 63-4641 soils.

In summary, the soils within the Haas Ditch Company service area and the place of use for Tree Top Ranches' water right 63-4641A and 63-4641B have similar characteristics for purposes of irrigation. As a result, average irrigation diversion requirements for both areas will be similar, with difference influenced more by field configuration and irrigation method than by average soil characteristics.

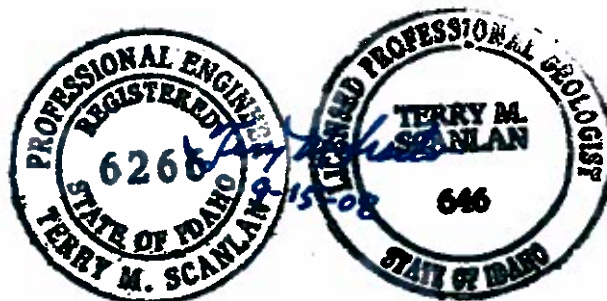
Please contact me with any questions.

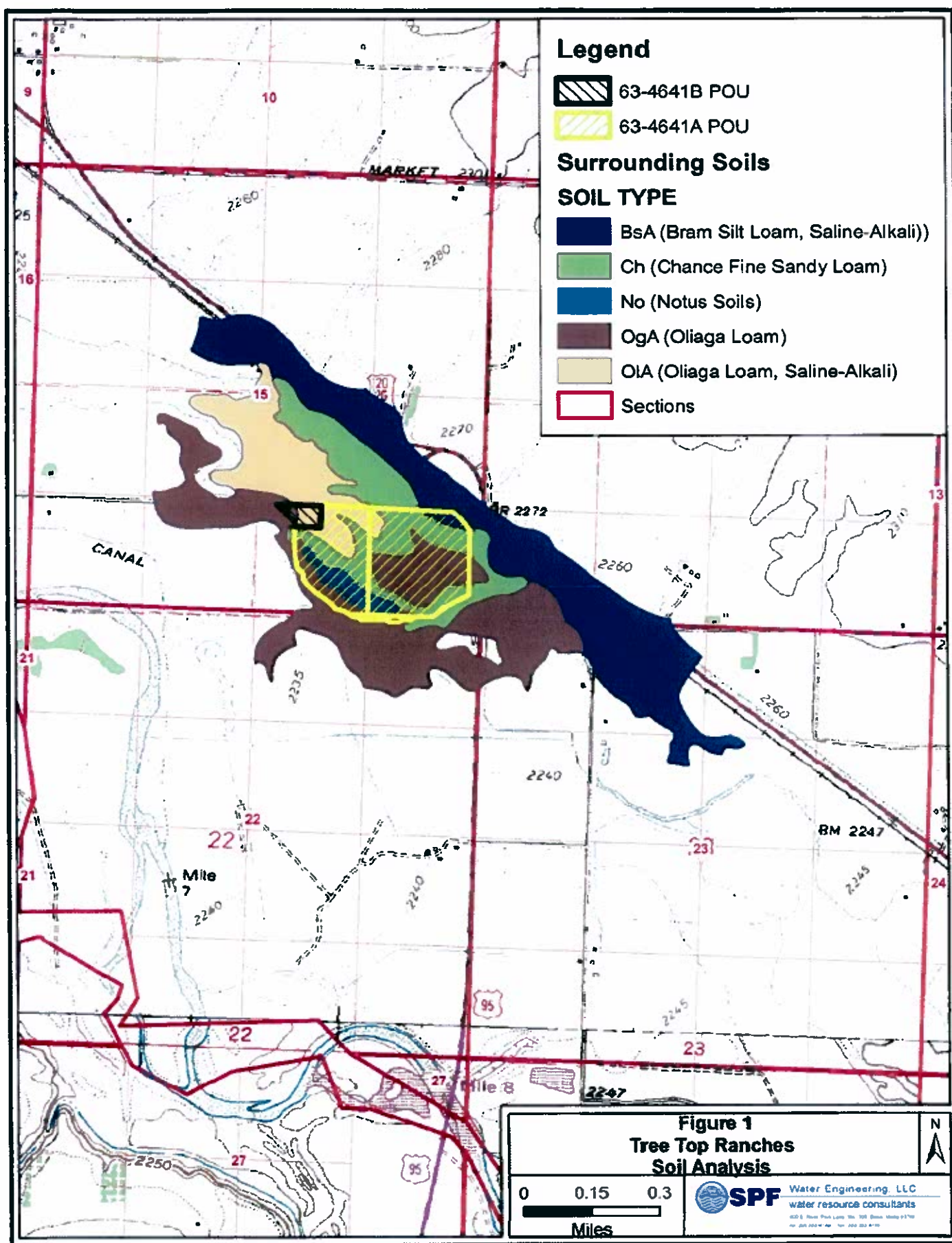
Sincerely,

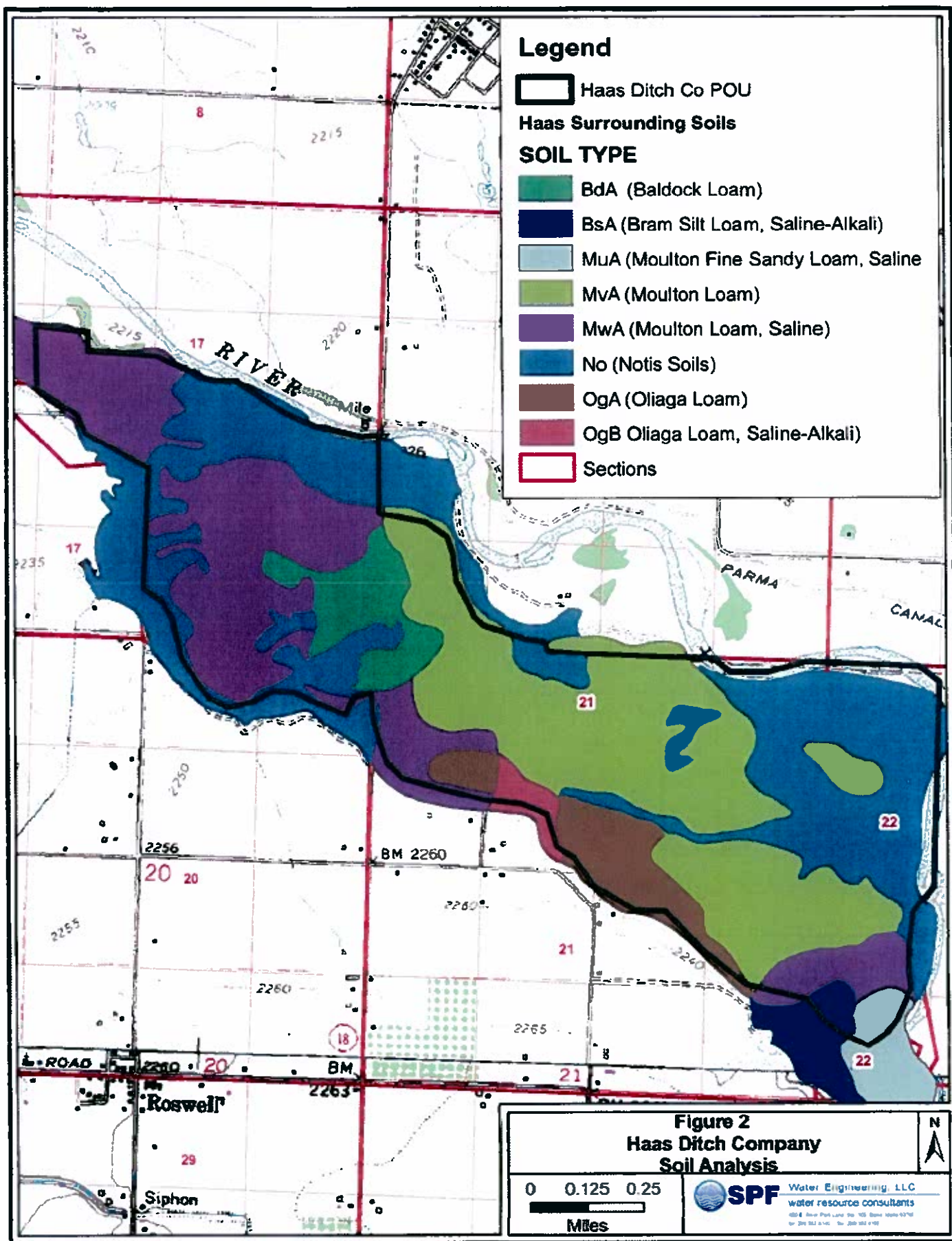


Terry M. Scanlan, P.E., P.G.

Cc: Bill Mulder – Tree Top Ranches







**Table 1 - Soil Summary for Water Rights 63-4641A and 63-4641B**

| Map Symbol | Soil Type                    | Drainage                | Amount (Acres) Within 63-4641A POU | % 63-4641A POU | Amount (Acres) Within 63-4641B POU | %63-4641B POU | Slope (%) | Seasonal High Water Table (feet) | Depth from Surface (inches) | texture                                | Permeability (Inches per hour) | Available Water Capacity (inches per inch of soil) | Soil pH | Soil Texture Intake Family (flood) | Soil Texture Intake Family (furrow) |
|------------|------------------------------|-------------------------|------------------------------------|----------------|------------------------------------|---------------|-----------|----------------------------------|-----------------------------|----------------------------------------|--------------------------------|----------------------------------------------------|---------|------------------------------------|-------------------------------------|
| B&A        | Bram Silt Loam, Saline-Alkal | Somewhat poorly drained | 1.3                                | 2.0%           |                                    |               | 0 to 1    | 3 to 6                           | 0 to 52                     | silt loam, loam                        | 0.06 - 0.20                    | 0.10 - 0.18                                        | 7.9-9.6 | 1.5                                | 0.5                                 |
| Ch         | Chance Fine Sandy Loam       | Very poorly drained     | 22                                 | 41.0%          |                                    |               | 0 to 1    | 0 to 1                           | 0 to 23                     | fine sandy loam and sandy loam         | 2.00 - 6.30                    | 0.13 - 0.15                                        | 6.1-7.3 | 2                                  | 0.55                                |
|            |                              |                         |                                    |                |                                    |               | 0 to 1    |                                  | 23 to 60                    | gravel and sand                        | >20.0                          | 0.03 - 0.05                                        | 6.1-7.3 | 4                                  | 0.85                                |
| No         | Notus Solis                  | Somewhat poorly drained | 4.7                                | 9.0%           |                                    |               | 0 to 1    | 1 to 3                           | 0 14                        | fine sandy loam to gravelly loamy sand | 2.00 - 20.00                   | 0.08 - 0.14                                        | 6.6-7.8 | 2.5                                | 0.63                                |
|            |                              |                         |                                    |                |                                    |               |           |                                  | 14 - 60                     | sand and gravel                        | >20.00                         | 0.03 - 0.05                                        | 6.6-7.3 | 4                                  | 0.85                                |
| OgA        | Ollaga Loam                  | Somewhat poorly drained | 19                                 | 35.0%          | 0.6                                | 26%           | 0 to 1    | 2 to 3                           | 0 - 35                      | loam and fine sandy loam               | 0.83 - 2.00                    | 0.16 - 0.18                                        | 7.4-8.4 | 1.5                                | 0.5                                 |
|            |                              |                         |                                    |                |                                    |               |           |                                  | 35 - 60                     | sand and gravel                        | >20.00                         | 0.03 - 0.05                                        |         | 4                                  | 0.85                                |
| OIA        | Ollaga Loam, Saline Alkal    | Somewhat poorly drained | 7                                  | 13.0%          | 1.7                                | 74%           | 0 to 1    | 1 to 3                           | 0 - 35                      | loam and fine sandy loam               | 0.63 - 2.00                    | 0.10 - 0.12                                        | 7.9-9.4 | 1.5                                | 0.5                                 |
|            |                              |                         |                                    |                |                                    |               |           |                                  | 35 - 60                     | sand and gravel                        | >20.00                         | 0.03 - 0.05                                        |         | 4                                  | 0.85                                |
| Total      |                              |                         | 54                                 | 100%           | 2.3                                | 100%          |           |                                  |                             |                                        |                                |                                                    |         |                                    |                                     |

Weighted Average for upper 30 inches - 63-4641A

Weighted Average for upper 30 inches - 63-4641B

5.7

1.3

0.14

0.11

1.9

1.5

0.54

0.50

**Table 2 - Soil Summary for Haas Ditch Company Service Area**

| Map<br>Symbol | Soil Type                              | Drainage                      | Amount:<br>(Acres)<br>Within<br>Haas<br>POU | % Haas<br>POU | Seasonal<br>High<br>Water<br>Table<br>(feet) | Depth<br>from<br>Surface<br>(inches) | Permeability<br>(inches per<br>hour) | Available Water<br>Capacity<br>(inches per inch<br>of soil)                 | Intake<br>Family<br>(flood)    | Intake<br>Family<br>(furrow)   |                        |              |                  |
|---------------|----------------------------------------|-------------------------------|---------------------------------------------|---------------|----------------------------------------------|--------------------------------------|--------------------------------------|-----------------------------------------------------------------------------|--------------------------------|--------------------------------|------------------------|--------------|------------------|
| BdA           | Baldock Loam                           | Somewhat<br>poorly<br>drained | 38.5                                        | 5.0%          | 0 to 1                                       | 3 to 4                               | 0 to 56<br><br>58 to 65              | loam<br><br>fine sandy loam                                                 | 0.63 - 2.00<br><br>2.00 - 8.30 | 0.16 - 0.18<br><br>0.13 - 0.15 | 7.4-9.0<br><br>7.9-8.4 | 1.5<br><br>2 | 0.5<br><br>0.55  |
| BsA           | Bram Silt Loam,<br>Saline-Alkal        | Somewhat<br>poorly<br>drained | 5.5                                         | 1.0%          | 0 to 1                                       | 3 to 6                               | 0 to 52                              | silt loam, loam                                                             | 0.06 - 0.20                    | 0.10 - 0.16                    | 7.9-9.6                | 1.5          | 0.5              |
| MuA           | Maoulton Fine<br>Sandy Loam,<br>Saline | Poorly<br>drained             | 8.7                                         | 1.0%          | 0 to 1                                       | 2 to 3                               | 0 to 30<br><br>30                    | fine sandy<br>loam, loam and<br>loamy sand<br><br>gravel and<br>coarse sand | 0.63 - 6.30<br><br>>20.0       | 0.13 - 0.15<br><br>0.03 - 0.05 | 6.6-7.6<br><br>        | 2.5<br><br>4 | 0.83<br><br>0.85 |
| MvA           | Maoulton Loam,<br>Saline               | Poorly<br>drained             | 221.5                                       | 31.0%         | 0 to 1                                       | 2 to 3                               | 0 to 30<br><br>30                    | fine sandy<br>loam, loam and<br>loamy sand<br><br>gravel and<br>coarse sand | 0.63 - 6.30<br><br>>20.0       | 0.13 - 0.15<br><br>0.03 - 0.05 | 6.6-7.6<br><br>        | 2.5<br><br>4 | 0.63<br><br>0.85 |
| MwA           | Maoulton Loam,<br>Saline               | Poorly<br>drained             | 180.2                                       | 25.0%         | 0 to 1                                       | 2 to 3                               | 0 to 30<br><br>30                    | fine sandy<br>loam, loam and<br>loamy sand<br><br>gravel and<br>coarse sand | 0.63 - 6.30<br><br>>20.0       | 0.13 - 0.15<br><br>0.03 - 0.05 | 6.6-7.6<br><br>        | 2.5<br><br>4 | 0.63<br><br>0.85 |
| No            | Notus Sols                             | Somewhat<br>poorly<br>drained | 213.1                                       | 30.0%         | 0 to 1                                       | 1 to 3                               | 0 to 14<br><br>14 - 60               | fine sandy loam<br>to gravelly<br>loamy sand<br><br>sand and<br>gravel      | 2.30 - 20.00<br><br>>20.00     | 0.08 - 0.14<br><br>0.03 - 0.05 | 6.6-7.6<br><br>6.6-7.3 | 2.5<br><br>4 | 0.63<br><br>0.85 |
| OpA           | Osage Loam                             | Somewhat<br>poorly<br>drained | 41.1                                        | 6.0%          | 0 to 1                                       | 2 to 3                               | 0 - 35<br><br>35 - 60                | loam and fine<br>sandy loam<br><br>sand and<br>gravel                       | 0.63 - 2.00<br><br>>20.00      | 0.16 - 0.16<br><br>0.03 - 0.05 | 7.4-8.4<br><br>        | 1.5<br><br>4 | 0.5<br><br>0.85  |
| OvA           | Osage Loam,<br>Saline Alkal            | Somewhat<br>poorly<br>drained | 7                                           | 1.0%          | 0 to 1                                       | 1 to 3                               | 0 - 35<br><br>35 - 60                | loam and fine<br>sandy loam<br><br>sand and<br>gravel                       | 0.63 - 2.00<br><br>>20.00      | 0.10 - 0.12<br><br>0.03 - 0.05 | 7.9-9.4<br><br>        | 1.5<br><br>4 | 0.5<br><br>0.85  |

713.6" 100%

\*Limited to 581 acres irrigation within the Haas Ditch Co. service area

Weighted Average for upper 20 inches

9.1 0.12 2.6 0.65