

**TABLE C-2**  
**HYDRAULIC GRADIENT AND GROUNDWATER VELOCITY IN SHALLOW SURFICIAL AQUIFER**  
**HERCULES LLC AND PINOVA, INC.**  
**BRUNSWICK, GA**

**Horizontal Hydraulic Gradient Calculation**  
**Surficial Aquifer - Shallow Zone of Upper Unit**

| Well Set                                      | Horizontal Distance Between Wells | Hydraulic Head Difference |      | Horizontal Hydraulic Gradient |
|---|-----------------------------------|---------------------------|------|-------------------------------|
|   | Feet                              | Feet                      |      | Feet / Feet                   |
| Upper Unit - Shallow Wells<br>MW-19S / MW-20S | 4,404                             | 12/12/16                  | 6.35 | 0.0014                        |

**Groundwater Flow Velocity Calculations**  
**Shallow Zone - Upper Unit of Surficial Aquifer**

|                                 |                  | Date     |         |                     |
|---------------------------------|------------------|----------|---------|---------------------|
| Groundwater Elevations          |                  | 12/12/16 |         |                     |
|                                 | MW-19S           | 10.11    | ft.     |                     |
|                                 | MW-20S           | 3.76     | ft.     |                     |
|                                 |                  | 6.35     | ft.     | =dh                 |
| Distance between wells:         |                  | 4,404    | ft.     | = dl                |
| Horiz. Hydraulic gradient (i) = |                  | 0.0014   |         | = dh/dl             |
|                                 | <sup>1</sup> K = | 9.8      | ft/day  |                     |
|                                 | n <sub>e</sub> = | 0.25     |         |                     |
| Avg. Linear Flow Velocity (V) = |                  | 0.057    | ft/ day | = iK/n <sub>e</sub> |

Notes:

<sup>1</sup> Hydraulic conductivity value is an average of all aquifer tests conducted to date in the applicable aquifer zone.