



## GWI Hydraulic Connectivity Determination Form Analysis of Water Quality Monitoring Data

Date of Analysis: \_\_\_\_\_

System Name: \_\_\_\_\_ ID # \_\_\_\_\_

Source No. \_\_\_\_\_ Source Name/Type: \_\_\_\_\_

WQ Data Filename: \_\_\_\_\_

### Max Percent Variation - Standardized Range (max-min/min)

<p><b>Well or Spring:</b></p> <p>Temperature (°C): _____</p> <p>Conductivity: _____</p> <p>pH: _____</p> <p>Max Absolute Variation (Well or Spring):</p> <p>Temperature (°C): _____</p> <p>Conductivity: _____</p> <p>pH: _____</p>	<p><b>Surface Water:</b></p> <p>Temperature (°C): _____</p> <p>Conductivity: _____</p> <p>pH: _____</p> <p>Max Absolute Variation (Surface Water):</p> <p>Temperature (°C): _____</p> <p>Conductivity: _____</p> <p>pH: _____</p>
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### Seasonality Confidence Level (K-W)

<p><b>Well or Spring:</b></p> <p>Temperature (°C): _____</p> <p>Conductivity: _____</p> <p>pH: _____</p>	<p><b>Surface Water:</b></p> <p>Temperature (°C): _____</p> <p>Conductivity: _____</p> <p>pH: _____</p>
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### Cross Correlation Between Well or Spring and Surface Water

<p>Temperature (°C):</p> <p style="padding-left: 20px;">Maximum Cross Correlation</p> <p>Coefficient: _____</p> <p>Lag time: _____</p> <p>Conductivity:</p> <p style="padding-left: 20px;">Maximum Cross Correlation</p> <p>Coefficient: _____</p> <p>Lag time: _____</p>	<p>Correlation Hypothesis Test - Significance</p> <p>Kendall Tau corr: _____</p> <p>Spearman Rho corr: _____</p> <p>Normal Scores PP-M corr: _____</p> <p>Correlation Hypothesis Test - Significance</p> <p>Kendall Tau corr: _____</p> <p>Spearman Rho corr: _____</p> <p>Normal Scores PP-M corr: _____</p>
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Hydraulic Connection Determination (Connected?) \_\_\_\_\_

**Additional Cross Correlation Analyses**

Parameter(s): \_\_\_\_\_  
Maximum Cross Correlation \_\_\_\_\_ Correlation Hypothesis Test - Significance  
Coefficient: \_\_\_\_\_ Kendall Tau corr: \_\_\_\_\_  
Lag time: \_\_\_\_\_ Spearman Rho corr: \_\_\_\_\_  
Normal Scores PP-M corr: \_\_\_\_\_

Parameter(s): \_\_\_\_\_  
Maximum Cross Correlation \_\_\_\_\_ Correlation Hypothesis Test - Significance  
Coefficient: \_\_\_\_\_ Kendall Tau corr: \_\_\_\_\_  
Lag time: \_\_\_\_\_ Spearman Rho corr: \_\_\_\_\_  
Normal Scores PP-M corr: \_\_\_\_\_

Parameter(s): \_\_\_\_\_  
Maximum Cross Correlation \_\_\_\_\_ Correlation Hypothesis Test - Significance  
Coefficient: \_\_\_\_\_ Kendall Tau corr: \_\_\_\_\_  
Lag time: \_\_\_\_\_ Spearman Rho corr: \_\_\_\_\_  
Normal Scores PP-M corr: \_\_\_\_\_

Parameter(s): \_\_\_\_\_  
Maximum Cross Correlation \_\_\_\_\_ Correlation Hypothesis Test - Significance  
Coefficient: \_\_\_\_\_ Kendall Tau corr: \_\_\_\_\_  
Lag time: \_\_\_\_\_ Spearman Rho corr: \_\_\_\_\_  
Normal Scores PP-M corr: \_\_\_\_\_

Completed by (print): \_\_\_\_\_  
Signature: \_\_\_\_\_  
Affiliation: \_\_\_\_\_  
Date: \_\_\_\_\_

Return completed form to: GWI Program Lead  
Department of Health  
Office of Drinking Water  
P.O. Box 47822  
Olympia, WA 98504-7822

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