

Date of Request: 16-AUG-2018  
 Created By: KING\_M On: 16-AUG-2018  
 Modified By: SWANSON\_C On: 04-SEP-2018  
 Customer: NW-DIST  
 Project: SMP  
 Division: Division of Environmental Assessment and Restoration  
 District: Northwest District  
 Sampling Event: Holmes RUN

**Send Coolers To:**

Phone: 850-595-0605  
 160 Government Center  
 Suite 208  
 Pensacola, FL 32502-5794  
 Attn: Michael King

Program Module Number:  
 Priority: 3  
 Event Status: R  
 Criminal Investigation: NO  
 Chemistry Request Reviewed By: WATTS\_J On: 29-AUG-2018  
 Biology Request Reviewed By: SWANSON\_C On: 04-SEP-2018  
 Sampling Kit Required: YES Ship on: 07-SEP-2018  
 Sampling Kit Shipped: YES On: 05-SEP-2018  
 Sampling Kit Packed By: REAVES\_S  
 Preservatives Needed: NO  
 Date to Receive Samples: 19-SEP-2018  
 Received By: REYNOLDS\_T On: 21-SEP-2018

**Send Final Report To:**

160 Government Center  
 Suite 208  
 Pensacola, FL 32502-5794  
 Attn: Cheryl Bunch

Report Type: Final Only  
 FTP Data: NO  
 QC Report: YES  
 Date Log: NO  
 Authorization Log: NO

Comments: Group A: (WBID 55) Freshwater Kit With Metals, Pesticides, Contract Lab Bacteria  
 Group B: (WBID 94) Freshwater Kit with Metals, Contract Lab Bacteria  
 Group C: (WBID 142, 61A) Freshwater Kit, Contract Lab Bacteria  
 Please send FEDEX AND UPS Shipping Labels

**Bottle Group A (Water) With 1 Samples:**

|                   |                      |                                                                                                      |
|-------------------|----------------------|------------------------------------------------------------------------------------------------------|
| Bottle Type: P-1L | Number of Bottles: 1 | Preserved With: ICE                                                                                  |
| ALKALINITY        | Template: DEFAULT    | (SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L                                          |
| Total Alkalinity  |                      |                                                                                                      |
| TURBIDITY         | Template: DEFAULT    | (EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices                                                   |
| Turbidity         |                      |                                                                                                      |
| W-CL-IC           | Template: DEFAULT    | (EPA 300.0 Rev. 2.1) Chloride in aqueous matrices                                                    |
| Chloride          |                      |                                                                                                      |
| W-COLOR           | Template: DEFAULT    | (SM 2120 B) True Color measured at 450 nm                                                            |
| Color (true)      |                      |                                                                                                      |
| W-F               | Template: DEFAULT    | (SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring) |
| Fluoride          |                      |                                                                                                      |
| W-SO4-IC          | Template: DEFAULT    | (EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices                                                     |
| Sulfate           |                      |                                                                                                      |
| W-TDS             | Template: DEFAULT    | (SM 2540 C-97) Total Dissolved Solids in aqueous matrices                                            |
| TDS               |                      |                                                                                                      |
| W-TSS             | Template: DEFAULT    | (SM 2540 D-97) Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample        |
| TSS               |                      |                                                                                                      |

|                    |                      |                                                                                    |
|--------------------|----------------------|------------------------------------------------------------------------------------|
| Bottle Type: BG-1L | Number of Bottles: 4 | Preserved With: ICE                                                                |
| W-PSNP-TQ          | Template:            | (EPA 8270D) Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS |
| Acetochlor         |                      |                                                                                    |
| Alachlor           |                      |                                                                                    |
| Ametryn            |                      |                                                                                    |

**Bottle Group A (Water) With 1 Samples:**

Bottle Type: BG-1L      Number of Bottles: 4      Preserved With: ICE  
 W-PSNP-TQ      Template: (EPA 8270D) Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS

Atrazine  
 Atrazine Desethyl  
 Azinphos Methyl  
 Bromacil  
 Butylate  
 Chlorpyrifos Ethyl  
 Chlorpyrifos Methyl  
 Cyanazine  
 Demeton  
 Diazinon  
 Disulfoton  
 EPTC  
 Ethion  
 Ethoprop  
 Fenamiphos  
 Fipronil  
 Fipronil Sulfide  
 Fipronil Sulfone  
 Fonofos  
 Hexazinone  
 Malathion  
 Metalaxyl  
 Metolachlor  
 Metribuzin  
 Mevinphos  
 Molinate  
 Norflurazon  
 Parathion Ethyl  
 Parathion Methyl  
 Pendimethalin  
 Phorate  
 Prometon  
 Prometryn  
 Simazine  
 Terbufos  
 Terbutylazine

Bottle Type: BP-1L      Number of Bottles: 1      Preserved With: ICE  
 CHLSUITE-W      Template: DEFAULT      (SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Chlorophyll-a, Corrected  
 Chlorophyll-a, Uncorrected  
 Phaeophytin-a

Bottle Type: TEST HAS NO      Number of Bottles: 1      Preserved With: ICE  
 NW-UWF-ECQ      Template: DEFAULT      (SM 9223 B Quanti-Tray) Escherichia coli by Colilert 18 Quanti-Tray method by UWF Laboratory in Pensacola

Escherichia Coli-Quanti-Tray

Bottle Type: BG-500ML      Number of Bottles: 1      Preserved With: CH<sub>2</sub>ClCOOH Pre-Preserved  
 W-CARB-AA      Template: DEFAULT      (EPA 8321B) Carbamates in water matrices by HPLC/MS/MS

3-Hydroxycarbofuran  
 Aldicarb  
 Aldicarb Sulfone  
 Aldicarb Sulfoxide  
 Carbaryl  
 Carbofuran  
 Methiocarb  
 Methomyl  
 Oxamyl  
 Propoxur

Bottle Type: BG-500ML      Number of Bottles: 4      Preserved With: ICE

**Bottle Group A (Water) With 1 Samples:**

|                                                                                                                                                                                                                                                                                                                                                                                                                |                      |                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------|
| Bottle Type: BG-500ML                                                                                                                                                                                                                                                                                                                                                                                          | Number of Bottles: 4 | Preserved With: ICE                                                                               |
| W-CT-CI-R                                                                                                                                                                                                                                                                                                                                                                                                      | Template: DEFAULT    | (EPA 8276) Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization |
| Chlordane<br>Toxaphene                                                                                                                                                                                                                                                                                                                                                                                         |                      |                                                                                                   |
| W-PCL-SQ-R                                                                                                                                                                                                                                                                                                                                                                                                     | Template: DEFAULT    | (EPA 8270D) Organochlorine pesticides in water matrices by GC/MS-SIM                              |
| Aldrin<br>Alpha-BHC<br>Alpha-Chlordane<br>Beta-BHC<br>Carbophenothion<br>Chlorothalonil<br>Cypermethrin<br>DDD-p,p'<br>DDE-p,p'<br>DDT-p,p'<br>Delta-BHC<br>Dicofol<br>Dieldrin<br>Endosulfan I<br>Endosulfan II<br>Endosulfan Sulfate<br>Endrin<br>Endrin Aldehyde<br>Endrin Ketone<br>Gamma-BHC<br>Gamma-Chlordane<br>Heptachlor<br>Heptachlor Epoxide<br>Methoxychlor<br>Mirex<br>Permethrin<br>Trifluralin |                      |                                                                                                   |
| Bottle Type: BG-500ML                                                                                                                                                                                                                                                                                                                                                                                          | Number of Bottles: 1 | Preserved With: ICE                                                                               |
| W-E8321-DI                                                                                                                                                                                                                                                                                                                                                                                                     | Template: DEFAULT    | (EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS           |
| *Acesulfame K<br>*AMPA<br>*Endothall<br>*Glufosinate<br>*Glyphosate<br>*Sucralose                                                                                                                                                                                                                                                                                                                              |                      |                                                                                                   |
| W-E8321-MS                                                                                                                                                                                                                                                                                                                                                                                                     | Template: DEFAULT    | (EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS           |
| *Acetaminophen<br>*Carbamazepine<br>*Fluridone<br>*Hydrocodone<br>*Ibuprofen<br>*Imazapyr<br>*Naproxen<br>*Primidone<br>*Pyraclostrobin<br>*Triclopyr<br>2,4-D<br>Bentazon<br>Diuron<br>Fenuron<br>Imidacloprid<br>Linuron<br>MCP                                                                                                                                                                              |                      |                                                                                                   |
| Bottle Type: P-500ML                                                                                                                                                                                                                                                                                                                                                                                           | Number of Bottles: 1 | Preserved With: HNO3                                                                              |

**Bottle Group A (Water) With 1 Samples:**

|                      |                      |                                                                                                                                                |
|----------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Bottle Type: P-500ML | Number of Bottles: 1 | Preserved With: HNO3                                                                                                                           |
| W-ICP                | Template:            | (EPA 200.7 Rev. 4.4) Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects |
| Calcium              |                      |                                                                                                                                                |
| Chromium             |                      |                                                                                                                                                |
| Iron                 |                      |                                                                                                                                                |
| Magnesium            |                      |                                                                                                                                                |
| Nickel               |                      |                                                                                                                                                |
| Potassium            |                      |                                                                                                                                                |
| Sodium               |                      |                                                                                                                                                |
| Zinc                 |                      |                                                                                                                                                |
| W-ICPMS              | Template:            | (EPA 200.8 Rev. 5.4) Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects                    |
| Arsenic              |                      |                                                                                                                                                |
| Cadmium              |                      |                                                                                                                                                |
| Copper               |                      |                                                                                                                                                |
| Lead                 |                      |                                                                                                                                                |
| Silver               |                      |                                                                                                                                                |
| Bottle Type: P-500ML | Number of Bottles: 1 | Preserved With: ICE And H2SO4                                                                                                                  |
| W-NH3                | Template: DEFAULT    | (EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L                                                                                     |
| Ammonia-N            |                      |                                                                                                                                                |
| W-NO2NO3             | Template: DEFAULT    | (EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L                                                                             |
| NO2NO3-N             |                      |                                                                                                                                                |
| W-S-A-TP             | Template: DEFAULT    | (EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L                                                                            |
| Total-P              |                      |                                                                                                                                                |
| W-TKN                | Template: DEFAULT    | (EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices                                                                               |
| Kjeldahl Nitrogen    |                      |                                                                                                                                                |
| W-TOC                | Template: DEFAULT    | (SM 5310 B-00) Nonpurgeable Organic Carbon in aqueous matrices                                                                                 |
| Organic Carbon       |                      |                                                                                                                                                |
| Bottle Type: P-125ML | Number of Bottles: 1 | Preserved With: FILTER-ICE                                                                                                                     |
| W-PO4-F              | Template: DEFAULT    | (EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L                                                       |
| O-Phosphate-P        |                      |                                                                                                                                                |

**Bottle Group B (Water) With 1 Samples:**

|                            |                      |                                                                                                              |
|----------------------------|----------------------|--------------------------------------------------------------------------------------------------------------|
| Bottle Type: P-1L          | Number of Bottles: 1 | Preserved With: ICE                                                                                          |
| ALKALINITY                 | Template: DEFAULT    | (SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L                                                  |
| Total Alkalinity           |                      |                                                                                                              |
| TURBIDITY                  | Template: DEFAULT    | (EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices                                                           |
| Turbidity                  |                      |                                                                                                              |
| W-CL-IC                    | Template: DEFAULT    | (EPA 300.0 Rev. 2.1) Chloride in aqueous matrices                                                            |
| Chloride                   |                      |                                                                                                              |
| W-COLOR                    | Template: DEFAULT    | (SM 2120 B) True Color measured at 450 nm                                                                    |
| Color (true)               |                      |                                                                                                              |
| W-F                        | Template: DEFAULT    | (SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)         |
| Fluoride                   |                      |                                                                                                              |
| W-SO4-IC                   | Template: DEFAULT    | (EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices                                                             |
| Sulfate                    |                      |                                                                                                              |
| W-TDS                      | Template: DEFAULT    | (SM 2540 C-97) Total Dissolved Solids in aqueous matrices                                                    |
| TDS                        |                      |                                                                                                              |
| W-TSS                      | Template: DEFAULT    | (SM 2540 D-97) Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample                |
| TSS                        |                      |                                                                                                              |
| Bottle Type: BP-1L         | Number of Bottles: 1 | Preserved With: ICE                                                                                          |
| CHLSUITE-W                 | Template: DEFAULT    | (SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry |
| Chlorophyll-a, Corrected   |                      |                                                                                                              |
| Chlorophyll-a, Uncorrected |                      |                                                                                                              |
| Phaeophytin-a              |                      |                                                                                                              |
| Bottle Type: TEST HAS NO   | Number of Bottles: 1 | Preserved With: ICE                                                                                          |
| NW-UWF-ECQ                 | Template: DEFAULT    | (SM 9223 B Quanti-Tray) Escherichia coli by Colilert 18 Quanti-Tray method by UWF Laboratory in Pensacola    |

**Bottle Group B (Water) With 1 Samples:**

Bottle Type: TEST HAS NO      Number of Bottles: 1      Preserved With: ICE  
 NW-UWF-ECQ      Template: DEFAULT      (SM 9223 B Quanti-Tray) Escherichia coli by Colilert 18 Quanti-Tray method by UWF Laboratory in Pensacola

Escherichia Coli-Quanti-Tray

Bottle Type: P-500ML      Number of Bottles: 1      Preserved With: HNO3  
 W-ICP      Template:      (EPA 200.7 Rev. 4.4) Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects

Calcium  
 Chromium  
 Iron  
 Magnesium  
 Nickel  
 Potassium  
 Sodium  
 Zinc

W-ICPMS      Template:      (EPA 200.8 Rev. 5.4) Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects

Arsenic  
 Cadmium  
 Copper  
 Lead  
 Silver

Bottle Type: P-500ML      Number of Bottles: 1      Preserved With: ICE And H2SO4  
 W-NH3      Template: DEFAULT      (EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L  
 Ammonia-N  
 W-NO2NO3      Template: DEFAULT      (EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L  
 NO2NO3-N  
 W-S-A-TP      Template: DEFAULT      (EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L  
 Total-P  
 W-TKN      Template: DEFAULT      (EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices  
 Kjeldahl Nitrogen  
 W-TOC      Template: DEFAULT      (SM 5310 B-00) Nonpurgeable Organic Carbon in aqueous matrices  
 Organic Carbon

Bottle Type: P-125ML      Number of Bottles: 1      Preserved With: FILTER-ICE  
 W-PO4-F      Template: DEFAULT      (EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L  
 O-Phosphate-P

**Bottle Group C (Water) With 2 Samples:**

Bottle Type: P-1L      Number of Bottles: 2      Preserved With: ICE  
 ALKALINITY      Template: DEFAULT      (SM 2320 B-97) Alkalinity in aqueous matrices as mg CaCO3/L  
 Total Alkalinity  
 TURBIDITY      Template: DEFAULT      (EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices  
 Turbidity  
 W-CL-IC      Template: DEFAULT      (EPA 300.0 Rev. 2.1) Chloride in aqueous matrices  
 Chloride  
 W-COLOR      Template: DEFAULT      (SM 2120 B) True Color measured at 450 nm  
 Color (true)  
 W-F      Template: DEFAULT      (SM 4500 F-C-97) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)  
 Fluoride  
 W-SO4-IC      Template: DEFAULT      (EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices  
 Sulfate  
 W-TDS      Template: DEFAULT      (SM 2540 C-97) Total Dissolved Solids in aqueous matrices  
 TDS  
 W-TSS      Template: DEFAULT      (SM 2540 D-97) Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

TSS

Bottle Type: BP-1L      Number of Bottles: 2      Preserved With: ICE  
 CHLSUITE-W      Template: DEFAULT      (SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Chlorophyll-a, Corrected  
 Chlorophyll-a, Uncorrected

**Bottle Group C (Water) With 2 Samples:**

|                              |                      |                                                                                                              |
|------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------|
| Bottle Type: BP-1L           | Number of Bottles: 2 | Preserved With: ICE                                                                                          |
| CHLSUITE-W                   | Template: DEFAULT    | (SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry |
| Phaeophytin-a                |                      |                                                                                                              |
| Bottle Type: TEST HAS NO     | Number of Bottles: 2 | Preserved With: ICE                                                                                          |
| NW-UWF-ECQ                   | Template: DEFAULT    | (SM 9223 B Quanti-Tray) Escherichia coli by Colilert 18 Quanti-Tray method by UWF Laboratory in Pensacola    |
| Escherichia Coli-Quanti-Tray |                      |                                                                                                              |
| Bottle Type: P-500ML         | Number of Bottles: 2 | Preserved With: ICE And H2SO4                                                                                |
| W-NH3                        | Template: DEFAULT    | (EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L                                                   |
| Ammonia-N                    |                      |                                                                                                              |
| W-NO2NO3                     | Template: DEFAULT    | (EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L                                           |
| NO2NO3-N                     |                      |                                                                                                              |
| W-S-A-TP                     | Template: DEFAULT    | (EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L                                          |
| Total-P                      |                      |                                                                                                              |
| W-TKN                        | Template: DEFAULT    | (EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices                                             |
| Kjeldahl Nitrogen            |                      |                                                                                                              |
| W-TOC                        | Template: DEFAULT    | (SM 5310 B-00) Nonpurgeable Organic Carbon in aqueous matrices                                               |
| Organic Carbon               |                      |                                                                                                              |
| Bottle Type: P-125ML         | Number of Bottles: 2 | Preserved With: FILTER-ICE                                                                                   |
| W-PO4-F                      | Template: DEFAULT    | (EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L                     |
| O-Phosphate-P                |                      |                                                                                                              |

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\* - The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.