

|                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Organization Contacts/Samplers:                                                                                                                                                                                                               |
| DEP Auditors:                                                                                                                                                                                                                                 |
| Sites Visited:<br>1.<br>2.<br>3.<br>4.                                                                                                                                                                                                        |
| Analytes Collected:                                                                                                                                                                                                                           |
| Field Measurements:<br><input type="checkbox"/> pH <input type="checkbox"/> Specific Conductance <input type="checkbox"/> DO <input type="checkbox"/> Temperature <input type="checkbox"/> Turbidity<br><input type="checkbox"/> Other: _____ |

| FS 1000 General Sampling Procedures<br>FS 2000 General Aqueous Sampling |   |   |   |   |   |                                                                                                                                                                                     |
|-------------------------------------------------------------------------|---|---|---|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site #                                                                  | 1 | 2 | 3 | 4 | 5 |                                                                                                                                                                                     |
| <b>Preliminary Activities</b>                                           |   |   |   |   |   |                                                                                                                                                                                     |
|                                                                         |   |   |   |   |   | Equipment construction was appropriate for the analytes of interest.<br><i>FS 1001, section 2.2 and Tables FS 1000-1, FS 1000-2, &amp; FS 1000-3</i>                                |
|                                                                         |   |   |   |   |   | Equipment was brought precleaned to the field.<br><i>FS 1001, section 2.3</i>                                                                                                       |
|                                                                         |   |   |   |   |   | Dedicated equipment was decontaminated prior to use.<br><i>FS 1001, section 3.4</i>                                                                                                 |
|                                                                         |   |   |   |   |   | Sample container construction and materials were appropriate for the analytes collected.<br><i>FS 1001, section 4.1 and Table FS 1000-2, and Tables 1000-4</i>                      |
|                                                                         |   |   |   |   |   | All containers and container caps were free of cracks, chips, discoloration and other features that might affect the integrity of collected samples.<br><i>FS 1001, section 4.2</i> |
| <b>Contamination Prevention</b>                                         |   |   |   |   |   |                                                                                                                                                                                     |
|                                                                         |   |   |   |   |   | Every effort was made to prevent cross-contamination of samples and contamination of environment.<br><i>FS 1002 section 1.1</i>                                                     |
|                                                                         |   |   |   |   |   | Samples were segregated during storage, transport and shipping where cross-contamination potential was suspected.<br><i>FS 1002, sections 1.1.2.1, 1.1.4 and 1.1.4.1</i>            |
|                                                                         |   |   |   |   |   | When collecting water samples, intermediate collection devices were rinsed with ample amounts of site water prior to collecting the sample.<br><i>FS 1004</i>                       |
|                                                                         |   |   |   |   |   | Rinse water from intermediate devices was discarded away from and downstream of the sampling location.<br><i>FS 2110, section 1.1.2.1</i>                                           |
|                                                                         |   |   |   |   |   | Sample containers containing premeasured preservatives were not rinsed with sample prior to collection.<br><i>FS 1004</i>                                                           |

| FS 1000 General Sampling Procedures<br>FS 2000 General Aqueous Sampling      |   |   |   |   |                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------|---|---|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site #                                                                       |   |   |   |   |                                                                                                                                                                                                                                                                                   |
| 1                                                                            | 2 | 3 | 4 | 5 |                                                                                                                                                                                                                                                                                   |
|                                                                              |   |   |   |   | Samples for different analyte groups were collected in an appropriate order, unless field conditions or the sampling plan required an alternative collection sequence. <i>FS 1002, section 2.1</i>                                                                                |
|                                                                              |   |   |   |   | Care was taken to avoid contact with samples and sample container interiors. <i>FS 1003, section 3</i>                                                                                                                                                                            |
|                                                                              |   |   |   |   | Sample container tags or labels were attached so as to prevent contact between the sample and the label or tag when pouring or dispensing from the container. <i>FD 5000 section 1.2</i>                                                                                          |
| <b><u>Composite Samples</u></b>                                              |   |   |   |   |                                                                                                                                                                                                                                                                                   |
|                                                                              |   |   |   |   | Composite samples were collected according to the sampling plan, permit or other DEP program requirements. <i>FS 1002, section 3.1</i>                                                                                                                                            |
|                                                                              |   |   |   |   | Composite subsamples or aliquots were collected from each designated sampling point (source, location or depth). <i>FS 1002, section 3.2</i>                                                                                                                                      |
|                                                                              |   |   |   |   | Equal amounts of each subsample or aliquot were collected in appropriately cleaned sample containers. <i>FS 1002, section 3.2.2</i>                                                                                                                                               |
|                                                                              |   |   |   |   | Approximate or measured amounts of each aliquot or subsample collected were recorded in the field documentation, if applicable to the sampling plan. <i>FS 1002, section 3.2.3</i>                                                                                                |
| <b><u>Use of Protective Gloves</u></b>                                       |   |   |   |   |                                                                                                                                                                                                                                                                                   |
|                                                                              |   |   |   |   | When required, new, clean, unpowdered gloves were worn and changed as needed by all samplers handling purging equipment, sampling equipment, measurement equipment and sample containers. <i>FS 1003, sections 2, 3, 4 and 5</i>                                                  |
| <b><u>Use of Fuel-Powered Equipment and Vehicles</u></b>                     |   |   |   |   |                                                                                                                                                                                                                                                                                   |
|                                                                              |   |   |   |   | All fuel-powered equipment was placed and vehicles were parked downwind of or well away from sampling locations where fuel contamination of samples, purging equipment or sampling equipment may have interfered with representative sample collection. <i>FS 1005, section 1</i> |
|                                                                              |   |   |   |   | Samplers wore disposable gloves while handling fuel powered equipment and disposed of fuel contaminated gloves downwind or well away from the sampling location. <i>FS 1005, section 2</i>                                                                                        |
|                                                                              |   |   |   |   | Sampling activities were interrupted while fueling of vehicles or storage tanks occurred near the sampling location. <i>FS 1005, section 3</i>                                                                                                                                    |
| <b><u>Preventive Maintenance and Repair of Equipment and Instruments</u></b> |   |   |   |   |                                                                                                                                                                                                                                                                                   |
|                                                                              |   |   |   |   | Manufacturers' suggested maintenance activities and any repairs are performed and documented for all applicable equipment and instruments. <i>FS 1007 sections 1 &amp; 3</i>                                                                                                      |
|                                                                              |   |   |   |   | Each equipment or instrument unit requiring documented maintenance or repair is assigned a unique identification code or designation. <i>FS 1007 section 2</i>                                                                                                                    |
| <b><u>Sample Preservation and Preservation Verification</u></b>              |   |   |   |   |                                                                                                                                                                                                                                                                                   |
|                                                                              |   |   |   |   | All sample preservation conformed to DEP SOP requirements. <i>FS 1006, sections 1 – 1.2 and Tables 1000-</i>                                                                                                                                                                      |
|                                                                              |   |   |   |   | All grab samples were preserved within 15 minutes of collection. <i>FS 1006, section 2</i>                                                                                                                                                                                        |
|                                                                              |   |   |   |   | If required, composite sampling equipment was maintained as 4°C. <i>FS 1006, section 3.1</i>                                                                                                                                                                                      |
|                                                                              |   |   |   |   | When composite samples are collected, chemical preservation begins within 15 minutes of the last collected subsample. <i>FS 1006, section 3.2</i>                                                                                                                                 |
|                                                                              |   |   |   |   | Samples requiring pH adjustment were tested for proper pH preservation <i>FS 2000, section 1.4</i>                                                                                                                                                                                |

| FS 1000 General Sampling Procedures<br>FS 2000 General Aqueous Sampling |   |   |   |                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------|---|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site #                                                                  |   |   |   |                                                                                                                                                                                                                                                                                                                             |
| 1                                                                       | 2 | 3 | 4 | 5                                                                                                                                                                                                                                                                                                                           |
|                                                                         |   |   |   | pH paper was not inserted into sample containers <i>FS 2001, section 3.6.2</i>                                                                                                                                                                                                                                              |
|                                                                         |   |   |   | When required samples are placed on wet ice.<br><i>FS 2003, section 3.2, FS 2004, section 5.4, FS 2005, section 5.2, FS 2006, section 4.6, FS 2007, section 4.6</i>                                                                                                                                                         |
| <b>Sample Filtration</b>                                                |   |   |   |                                                                                                                                                                                                                                                                                                                             |
|                                                                         |   |   |   | Applicable samples were filtered within 15 minutes of collection, before addition of chemical preservatives. <i>FS 2000, section 1.3.4 &amp; FS 2001, section 2.1</i>                                                                                                                                                       |
|                                                                         |   |   |   | Unless otherwise specified by the sampling plan, applicable samples were filtered using a 0.45 um pore size for the filter. <i>FS 2000, section 1.3.5</i>                                                                                                                                                                   |
| <b>Collection of Microbiological Samples</b>                            |   |   |   |                                                                                                                                                                                                                                                                                                                             |
|                                                                         |   |   |   | Unless specified otherwise in the sampling plan, all samples were collected as grab samples. <i>FS 2005 section 2.1</i>                                                                                                                                                                                                     |
|                                                                         |   |   |   | All samples were collected in properly sterilized containers. <i>FS 2005 sections 1.1 – 1.1.2</i>                                                                                                                                                                                                                           |
|                                                                         |   |   |   | Sterilized caps were used with all bottles and vials used to contain samples. <i>FS 2005 section 1.1.3</i>                                                                                                                                                                                                                  |
|                                                                         |   |   |   | All sterilized containers remained sealed until just prior to filling with sample and remained sealed after filling with sample. <i>FS 2005 section 2.2</i>                                                                                                                                                                 |
|                                                                         |   |   |   | Sample containers were not prerinsed with sample. <i>FS 2005 section 2.3</i>                                                                                                                                                                                                                                                |
|                                                                         |   |   |   | At least 125 ml of volume was collected for each sample. <i>FS 2005 section 1.1.2</i>                                                                                                                                                                                                                                       |
|                                                                         |   |   |   | Intermediate devices were thoroughly rinsed with the sample water before collecting the sample. <i>FS 2005, section 2.4.1</i>                                                                                                                                                                                               |
|                                                                         |   |   |   | Caution was taken to avoid contacting the opening (mouth) of sample containers or cap interiors. <i>FS 2005, section 2.4.2</i>                                                                                                                                                                                              |
|                                                                         |   |   |   | Where applicable, samples were collected with rigid containers using standard surface water grab-sample techniques. <i>FS 2005 section 2.7.1</i>                                                                                                                                                                            |
|                                                                         |   |   |   | Where applicable, samples were collected with Whirlpak bags from surface water by immersing the closed Whirlpak and opening the bag underwater into (facing) the current. <i>FS 2005 section 2.7.2.2</i>                                                                                                                    |
|                                                                         |   |   |   | Where applicable, samples were collected with Whirlpak bags from surface water by opening the Whirlpak before attaching it to an extension pole, plunging the bag opening downward below the surface (and towards the current) in a continuous sweeping arc before returning to the surface. <i>FS 2005 section 2.7.2.1</i> |
|                                                                         |   |   |   | Where applicable, samples were collected with an intermediate device without interruption of flow as the sample was poured or drained from the device. <i>FS 2005, section 2.8.1</i>                                                                                                                                        |
|                                                                         |   |   |   | Bacteriological samples were collected as the last analyte group in the collection sequence in order to maximize available holding time. <i>FS 2005, section 4.1 – 4.3</i>                                                                                                                                                  |
|                                                                         |   |   |   | Headspace was left in each sample container after sample collection. <i>FS 2005 sections 2.7.1 and 2.7.2</i>                                                                                                                                                                                                                |

## FS 2100 Surface Water Sampling

Site #

1 2 3 4 5

### **Contamination Prevention, Selection of Sampling Locations & General Cautions**

|                                                                       |  |  |  |  |                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------|--|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                       |  |  |  |  | Sampling originated from the least contaminated or background location (source or site) first and progressed to the most contaminated location. <i>FS 1002, section 1.1.2</i>                                                           |
|                                                                       |  |  |  |  | Samples were collected starting at the downstream location and progressed to the upstream location, where applicable. <i>FS 1002, section 1.1.3 &amp; FS 2100, section 2.6</i>                                                          |
|                                                                       |  |  |  |  | When wading, samples were collected upstream and away from the body. <i>FS 2100, section 2.2</i>                                                                                                                                        |
|                                                                       |  |  |  |  | Care was exercised to not disturb bottom sediments during sample collection. <i>FS 2100, section 2.3</i>                                                                                                                                |
|                                                                       |  |  |  |  | Water samples were collected prior to sediment sampling at the same location or sample source. <i>FS 2100, section 2.4</i>                                                                                                              |
|                                                                       |  |  |  |  | The bow of the motorized watercraft was pointed upstream, where applicable. <i>FS 2100, section 2.1</i>                                                                                                                                 |
|                                                                       |  |  |  |  | Samples were collected at or near the bow of the watercraft, away and upwind from the watercraft engine and any other fuel or oil sources. <i>FS 2100, section 2.1</i>                                                                  |
|                                                                       |  |  |  |  | Representative sampling locations and depths were selected to account for homogeneous and heterogeneous conditions in the water body. <i>FS 2110, section 2.5</i>                                                                       |
|                                                                       |  |  |  |  | Unless directed by permit or other regulation, samples were collected away from artificial structures such as bridges, docks, weirs, dams, etc. <i>FS 2100, section 2.6</i>                                                             |
| <b>Manual Sampling Using Sampling Containers as Collection Device</b> |  |  |  |  |                                                                                                                                                                                                                                         |
|                                                                       |  |  |  |  | Sample containers were submerged neck first, inverted into the oncoming direction of flow where applicable, slowly filled leaving headspace and returned to the surface for preservation, if appropriate. <i>FS 2110, section 1.1.1</i> |
|                                                                       |  |  |  |  | Pole samplers were used in a fashion similar to that described above, as practical. <i>FS 2110, Section 1.1</i>                                                                                                                         |
|                                                                       |  |  |  |  | Samples are collected within the top 12 inches of the water column. <i>FS 2110, section 1.1</i>                                                                                                                                         |
| <b>Use of Intermediate Vessels as the Collection Device</b>           |  |  |  |  |                                                                                                                                                                                                                                         |
|                                                                       |  |  |  |  | Intermediate collection devices were constructed of material appropriate for the analytes to be measured. <i>FS 2110, section 1.1.2, FS 1001, section 2.2 and Tables FS 1000-1 through FS 1000-3</i>                                    |
|                                                                       |  |  |  |  | Intermediate collection devices were rinsed with ample amounts of site water prior to collecting the sample. <i>FS 2110, section 1.1.2.1</i>                                                                                            |
|                                                                       |  |  |  |  | Rinse water from intermediate devices was discarded away from and downstream of the sampling location. <i>FS 2110, section 1.1.2.1</i>                                                                                                  |
|                                                                       |  |  |  |  | For depth sampling, the following procedures were performed: <i>FS 2110, sections 1.2.1, 1.2.2 &amp; 1.2.3</i>                                                                                                                          |
|                                                                       |  |  |  |  | ▶ The water column was measured for maximum depth or was otherwise determined from reference information.                                                                                                                               |
|                                                                       |  |  |  |  | ▶ The sampling point depth was accurately determined and recorded.                                                                                                                                                                      |
|                                                                       |  |  |  |  | ▶ Care was exercised to keep bottom sediments undisturbed during the depth-sampling procedure.                                                                                                                                          |
|                                                                       |  |  |  |  | If double-valve bailers were used, care was taken to determine the appropriateness of use for the sampling application and discrete depth samples were not required <i>FS 2110, section 1.2.2</i>                                       |
|                                                                       |  |  |  |  | Bailers were slowly lowered through the water column to allow maximum flushing of the bailer during descent. <i>FS 2110, section 1.2.2</i>                                                                                              |

| FS 2100 Surface Water Sampling                    |   |   |   |   |                                                                                                                                                                                                                                          |
|---------------------------------------------------|---|---|---|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site #                                            |   |   |   |   |                                                                                                                                                                                                                                          |
| 1                                                 | 2 | 3 | 4 | 5 |                                                                                                                                                                                                                                          |
| <b>Use of Pumps as Sample Collection Devices</b>  |   |   |   |   |                                                                                                                                                                                                                                          |
|                                                   |   |   |   |   | The pump and tubing assembly was flushed with site water to allow at least 3 volumes of the pump and tubing to pass through the system prior to collecting the sample.<br><i>FS 2110, sections 1.1.3.2 and 1.2.3.3</i>                   |
|                                                   |   |   |   |   | For surface collection, the pump tubing intake was placed 6-12 inches below the water surface.<br><i>FS 2110, section 1.1.3.1</i>                                                                                                        |
|                                                   |   |   |   |   | For depth sampling, the following procedures were performed: <i>FS 2110, section 1.2.3.1 &amp; 1.2.3.2</i>                                                                                                                               |
|                                                   |   |   |   |   | ▶ The water column depth was measured or determined from reference sources.                                                                                                                                                              |
|                                                   |   |   |   |   | ▶ The sample collection depth was determined and recorded.                                                                                                                                                                               |
|                                                   |   |   |   |   | ▶ The pump or tubing intake placement at the required depth was accomplished by appropriate weighting or anchoring with non-contaminating materials to ensure unobstructed flow at the intake.                                           |
| <b>FQ 1000 Field Quality Control Requirements</b> |   |   |   |   |                                                                                                                                                                                                                                          |
|                                                   |   |   |   |   | Equipment blanks or field blanks were collected at a rate of 5% of the number of field samples collected over the life of the project for each reported test result and matrix combination.<br><i>FQ 1230 section 1</i>                  |
|                                                   |   |   |   |   | Field-cleaned equipment blanks were collected if equipment was decontaminated in the field.<br><i>FQ 1230 section 2.1.1</i>                                                                                                              |
|                                                   |   |   |   |   | Precleaned equipment blanks were collected if equipment was cleaned by the sampling organization or if equipment vendors did not certify cleanliness of equipment for the specific uses for the project.<br><i>FQ 1230 section 2.1.2</i> |
|                                                   |   |   |   |   | Field blanks were collected when the sample containers were used as the sampling device.<br><i>FQ 1230 section 2.2.1</i>                                                                                                                 |
|                                                   |   |   |   |   | Field blanks were collected if no equipment was cleaned by the sampling organization.<br><i>FQ 1230 section 2.2.1</i>                                                                                                                    |
| <b>FS 1000 Documentation</b>                      |   |   |   |   |                                                                                                                                                                                                                                          |
| Site #                                            |   |   |   |   |                                                                                                                                                                                                                                          |
| 1                                                 | 2 | 3 | 4 | 5 |                                                                                                                                                                                                                                          |
| <b>Universal Documentation Requirements</b>       |   |   |   |   |                                                                                                                                                                                                                                          |
|                                                   |   |   |   |   | Waterproof ink was used for all paper documentation.<br><i>FD 1100 section 2.5.</i>                                                                                                                                                      |
|                                                   |   |   |   |   | Records are legible.<br><i>FD 1100</i>                                                                                                                                                                                                   |
|                                                   |   |   |   |   | Errors in documentation were corrected without obliteration.<br><i>FD 1100 section 2.6</i>                                                                                                                                               |
|                                                   |   |   |   |   | Names of all sampling personnel were recorded.<br><i>FD 5000 section 2.1</i>                                                                                                                                                             |
|                                                   |   |   |   |   | The type(s) of sampling equipment used to collect all samples was recorded in the field record.<br><i>FD 5000 section 2.12</i>                                                                                                           |
|                                                   |   |   |   |   | Where applicable to the analyte groups collected, the location and use of fuel-powered vehicles or equipment during the sampling project was recorded.<br><i>FD 5000 section 2.14</i>                                                    |
|                                                   |   |   |   |   | Date of sample collection was recorded for all samples.<br><i>FD 5000 section 2.2</i>                                                                                                                                                    |
|                                                   |   |   |   |   | Time of sample collection was recorded for all samples having maximum holding times of <48 hours.<br><i>FD 5000, section 2.2.2</i>                                                                                                       |

| FS 1000 Documentation                                                               |   |   |   |   |                                                                                                                                                                                                                                     |  |  |  |                              |
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| Site #                                                                              |   |   |   |   |                                                                                                                                                                                                                                     |  |  |  |                              |
| 1                                                                                   | 2 | 3 | 4 | 5 |                                                                                                                                                                                                                                     |  |  |  |                              |
|                                                                                     |   |   |   |   | Ambient field conditions were recorded for all samples.                                                                                                                                                                             |  |  |  | FD 5000 section 2.3          |
|                                                                                     |   |   |   |   | A specific description of all sampling locations (sources) was recorded.                                                                                                                                                            |  |  |  | FD 5000 section 2.5          |
|                                                                                     |   |   |   |   | The matrix collected was recorded for all samples.                                                                                                                                                                                  |  |  |  | FD 5000 section 2.8          |
|                                                                                     |   |   |   |   | For composite samples, the number of subsamples, the amount collected for each subsample was recorded.                                                                                                                              |  |  |  | FD 5000 section 2.15         |
|                                                                                     |   |   |   |   | The types, number, collection location and collection sequence of all field quality control samples was recorded in the field record.                                                                                               |  |  |  | FD 5000 section 2.13         |
|                                                                                     |   |   |   |   | Preservation information and verification was recorded for each sample, as applicable.                                                                                                                                              |  |  |  | FD 5100 section 1 – 1.4      |
|                                                                                     |   |   |   |   | Each sample container or group of containers was tagged or labeled with a unique field identification code that distinguishes the sample from all other samples.                                                                    |  |  |  | FD 5000 section 1.1          |
|                                                                                     |   |   |   |   | The unique identification codes for samples were recorded in a manner that linked the codes to all other field records associated with the samples.                                                                                 |  |  |  | FD 5000 sections 1.1.1 & 1.3 |
| <b>Surface Water Sampling</b>                                                       |   |   |   |   |                                                                                                                                                                                                                                     |  |  |  |                              |
|                                                                                     |   |   |   |   | Information about the following topics was recorded for each sample, as applicable                                                                                                                                                  |  |  |  | (FD 5100, section 4):        |
|                                                                                     |   |   |   |   | ▶ Depth of all samples and subsamples                                                                                                                                                                                               |  |  |  |                              |
|                                                                                     |   |   |   |   | ▶ Beginning and ending times for all timed composites                                                                                                                                                                               |  |  |  |                              |
|                                                                                     |   |   |   |   | ▶ Type of composite sample                                                                                                                                                                                                          |  |  |  |                              |
|                                                                                     |   |   |   |   | ▶ Water flow measurement with flow units                                                                                                                                                                                            |  |  |  |                              |
| <b>Transmittal of Samples and Sample Information to a Laboratory or Other Party</b> |   |   |   |   |                                                                                                                                                                                                                                     |  |  |  |                              |
|                                                                                     |   |   |   |   | For all samples, the following information was transmitted to the analyzing lab or other party.                                                                                                                                     |  |  |  | FD 5000 sections 3 – 3.9     |
|                                                                                     |   |   |   |   | Site name and address                                                                                                                                                                                                               |  |  |  |                              |
|                                                                                     |   |   |   |   | Client code substituted for but linked to site name and address, where applicable                                                                                                                                                   |  |  |  |                              |
|                                                                                     |   |   |   |   | Date and time of sample collection                                                                                                                                                                                                  |  |  |  |                              |
|                                                                                     |   |   |   |   | Name of sampler responsible for sample transmittal                                                                                                                                                                                  |  |  |  |                              |
|                                                                                     |   |   |   |   | Unique field identification code for each sample container or group of containers                                                                                                                                                   |  |  |  |                              |
|                                                                                     |   |   |   |   | Total number of samples transmitted                                                                                                                                                                                                 |  |  |  |                              |
|                                                                                     |   |   |   |   | Required analyses for each sample container or group of containers                                                                                                                                                                  |  |  |  |                              |
|                                                                                     |   |   |   |   | Sample preservation used for each container or group of containers                                                                                                                                                                  |  |  |  |                              |
|                                                                                     |   |   |   |   | Comments about samples, sample sources or other relevant field conditions                                                                                                                                                           |  |  |  |                              |
|                                                                                     |   |   |   |   | Identification of common carrier used to transport the samples, when applicable                                                                                                                                                     |  |  |  |                              |
|                                                                                     |   |   |   |   | Shipping invoices and related records from common carriers were archived with the field records, when applicable.                                                                                                                   |  |  |  | FD 5000 section 4.2.1        |
| <b>Decontamination of equipment and sample containers</b>                           |   |   |   |   |                                                                                                                                                                                                                                     |  |  |  |                              |
|                                                                                     |   |   |   |   | Cleaning steps in all procedures used for decontamination were documented either by description or reference to an SOP (DEP SOP or internal SOP).                                                                                   |  |  |  | FD 2000 section 1.1          |
|                                                                                     |   |   |   |   | Certificates of cleanliness provided by vendors supplying cleaned equipment or sample containers were archived and linked to the date of the sampling project and the types of equipment or sample containers used for the project. |  |  |  | FD 2000 section 1.2          |
|                                                                                     |   |   |   |   | For equipment decontaminated on-site in the field, the date and time of the cleaning procedure associated with the affected equipment was recorded in the field records.                                                            |  |  |  | FD 2000 section 1.3          |

| FS 1000 Documentation                                                         |      |      |    |   |                                                                                                                                                                                                           |
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| Site #                                                                        |      |      |    |   |                                                                                                                                                                                                           |
| 1                                                                             | 2    | 3    | 4  | 5 |                                                                                                                                                                                                           |
|                                                                               |      |      |    |   | If sampling kits (sample containers, sampling equipment and ancillary supplies) were provided to another party, the following information was recorded for the kit: <i>FD 2000 section 2</i>              |
|                                                                               |      |      |    |   | Quantity, description and material composition of all containers, container closures or closure liners                                                                                                    |
|                                                                               |      |      |    |   | Intended application for each sample container type indicated by approved analytical method or analyte group(s)                                                                                           |
|                                                                               |      |      |    |   | Type and concentration of preservative added to clean sample containers and/or shipped as additional preservative                                                                                         |
|                                                                               |      |      |    |   | Intended use of any additional preservatives or reagents                                                                                                                                                  |
|                                                                               |      |      |    |   | Description of any analyte-free water (i.e., deionized, organic-free, etc.)                                                                                                                               |
|                                                                               |      |      |    |   | Date of analyte-free water containerization                                                                                                                                                               |
|                                                                               |      |      |    |   | Date of sampling kit preparation                                                                                                                                                                          |
|                                                                               |      |      |    |   | Description and material composition of all reagent transfer implements (e.g., pipets) shipped in the sampling kit                                                                                        |
|                                                                               |      |      |    |   | Intended use of all implements                                                                                                                                                                            |
|                                                                               |      |      |    |   | Quantity, description and material composition of all sampling equipment                                                                                                                                  |
| <b>Reagents and other chemicals used for cleaning and sample preservation</b> |      |      |    |   |                                                                                                                                                                                                           |
|                                                                               |      |      |    |   | The lot numbers and inclusive dates of use were recorded for all reagents, detergents, solvents and other chemicals used for decontamination and preservation of samples. <i>FD 2000 section 3.1</i>      |
| FS 1000 Documentation                                                         |      |      |    |   |                                                                                                                                                                                                           |
| pH                                                                            | Sp C | Temp | DO |   |                                                                                                                                                                                                           |
| <b>Documentation of equipment and instrument maintenance</b>                  |      |      |    |   |                                                                                                                                                                                                           |
|                                                                               |      |      |    |   | Each applicable instrument or equipment unit (inventory item) was identified with a unique designation or identification code that distinguishes the unit from all others. <i>FD 3000 section 1.3</i>     |
|                                                                               |      |      |    |   | The following information was recorded for all equipment associated with the sampling project: <i>FD 3000 sections 1, 1.1 – 1.2.1</i>                                                                     |
|                                                                               |      |      |    |   | Maintenance and repair procedures for equipment or instrument unit                                                                                                                                        |
|                                                                               |      |      |    |   | Routine cleaning procedures for each unit                                                                                                                                                                 |
|                                                                               |      |      |    |   | Filling solution replacement for probes                                                                                                                                                                   |
|                                                                               |      |      |    |   | Parts replacement for instruments or probes                                                                                                                                                               |
|                                                                               |      |      |    |   | Calendar date for each procedure performed on each unit                                                                                                                                                   |
|                                                                               |      |      |    |   | Names of personnel performing maintenance and repair tasks for each unit                                                                                                                                  |
|                                                                               |      |      |    |   | Description of malfunctions associated with any maintenance and repair for each unit                                                                                                                      |
|                                                                               |      |      |    |   | Vendor service records were retained for all affected equipment or instruments associated with the sampling project. <i>FD 3000 section 2</i>                                                             |
|                                                                               |      |      |    |   | The inclusive rental dates, types and unique descriptions of rental equipment associated with the sampling project were recorded. <i>FD 3000 section 3</i>                                                |
|                                                                               |      |      |    |   | Manufacturers' operation & maintenance manuals and instructions were retained for all equipment and instruments associated with the sampling project. <i>FD 3000 section 4</i>                            |
| <b>Field Testing Instrument Calibration</b>                                   |      |      |    |   |                                                                                                                                                                                                           |
|                                                                               |      |      |    |   | Information about all calibration standards and reagents used for field testing were linked to the calibration information associated with the field testing measurements for the project. <i>FD 4000</i> |
|                                                                               |      |      |    |   | The date of receipt, expiration date and date of first use for all calibration standards and reagents used on the sampling project were recorded. <i>FD 4100 section 1.1</i>                              |

| FS 1000 Documentation |   |   |   |   |                                                                                                                                                                                                                                                                           |
|-----------------------|---|---|---|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site #                |   |   |   |   |                                                                                                                                                                                                                                                                           |
| 1                     | 2 | 3 | 4 | 5 |                                                                                                                                                                                                                                                                           |
|                       |   |   |   |   | The concentration or other assay value, the vendor catalog number and the description of the standard or reagent were recorded for all preformulated solutions, neat liquids and powders. <i>FD 4100 sections 1.2</i>                                                     |
|                       |   |   |   |   | Certificates of assay, grade and other vendor specifications for all standards and reagents were retained and recorded. <i>FD 4100 sections 1.2.1</i>                                                                                                                     |
|                       |   |   |   |   | For standards formulated in-house for use on the sampling project, the dates of preparation and all calculations used to prepare calibration standards and reagents were recorded. <i>FD 4100 sections 1.2 &amp; 1.2.1</i>                                                |
|                       |   |   |   |   | For standards formulated in-house for use on the sampling project, the records of preparation for all related calibration standards and reagents were linked to indicate the source of parent standards or reagents and any dilutions performed. <i>FD 4100 section 1</i> |
|                       |   |   |   |   | Preparation steps in all procedures used for preparation of standards or reagents in-house were documented either by description or reference to an SOP (DEP SOP or internal SOP). <i>FD 4100 section 1.4</i>                                                             |
|                       |   |   |   |   | Verified analyses (calibration acceptance) were recorded for all expired standards and reagents used on the sampling project. <i>FD 4100 section 1.3.1</i>                                                                                                                |
|                       |   |   |   |   | Manufacturer-certified calibration specifications were retained for all factory-calibrated instruments used for the sampling project. <i>FD 4100 section 2</i>                                                                                                            |
|                       |   |   |   |   | All acceptable initial calibrations and calibration verifications were documented and linked to the field measurements for the sampling project. <i>FD 4100 section 2</i>                                                                                                 |
|                       |   |   |   |   | For each instrument unit used for the sampling project, the following information was recorded for all calibrations: <i>FD 4100 sections 2.1 - 2.11</i>                                                                                                                   |
|                       |   |   |   |   | ▶ Unique identification (designation code) for the instrument calibrated                                                                                                                                                                                                  |
|                       |   |   |   |   | ▶ Manufacturer name, model number and identifying number                                                                                                                                                                                                                  |
|                       |   |   |   |   | ▶ Date and time of each initial calibration and calibration verifications                                                                                                                                                                                                 |
|                       |   |   |   |   | ▶ Instrument reading or result (display value) for all calibration verifications, with appropriate measurement units                                                                                                                                                      |
|                       |   |   |   |   | ▶ Names of analysts performing each calibration for the instrument                                                                                                                                                                                                        |
|                       |   |   |   |   | ▶ Description of each calibration standard used to calibrate or verify the instrument, linked to the associated records for the calibration standard                                                                                                                      |
|                       |   |   |   |   | ▶ Type and value of all calibration standards                                                                                                                                                                                                                             |
|                       |   |   |   |   | ▶ The acceptance criteria for each calibration and verification used to accept the instrument calibration or verification                                                                                                                                                 |
|                       |   |   |   |   | ▶ The assay specifications or acceptance criteria for any QC standard or sample used to independently verify the calibration of the instrument                                                                                                                            |
|                       |   |   |   |   | ▶ Positive indication in the record of acceptable (successful) initial calibration and acceptable initial and continuing calibration verifications                                                                                                                        |
|                       |   |   |   |   | ▶ Positive indication of all failed calibrations or verifications                                                                                                                                                                                                         |
|                       |   |   |   |   | ▶ Date and time of all corrective actions performed on the instrument prior to attempting re-verification or recalibration of the instrument are linked to the records required for preventive maintenance                                                                |
|                       |   |   |   |   | ▶ Any instances of discontinuation of use of the instrument due to calibration or verification failures                                                                                                                                                                   |
|                       |   |   |   |   | ▶ A description or citation of the specific calibration and verification procedures used for the instrument (DEP SOP or internal SOP)                                                                                                                                     |

# FS 1000 Documentation

Site #

1 2 3 4 5

## Field Testing Measurements (Field Analysis)

|  |  |  |  |  |                                                                                                                                                            |                    |
|--|--|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|  |  |  |  |  | All field measurement tests and related data were recorded and linked to the project, the date and the sample source.                                      | FD 4100 section 3  |
|  |  |  |  |  | Information about all field measurements were recorded and included:                                                                                       | FD 4100, section 3 |
|  |  |  |  |  | ▶ Date and time of measurement or test (including time zone, if applicable)                                                                                |                    |
|  |  |  |  |  | ▶ Source and location of the measurement or test sample (e.g., monitoring well identification number, outfall number, station number or other description) |                    |
|  |  |  |  |  | ▶ Latitude and longitude of sampling source location (if required)                                                                                         |                    |
|  |  |  |  |  | ▶ Analyte or parameter measured                                                                                                                            |                    |
|  |  |  |  |  | ▶ Measurement or test sample value                                                                                                                         |                    |
|  |  |  |  |  | ▶ Reporting units for the measurement                                                                                                                      |                    |
|  |  |  |  |  | ▶ Initials or name of analyst performing the measurement                                                                                                   |                    |
|  |  |  |  |  | ▶ Unique identification of the specific instrument unit used for the test                                                                                  |                    |

## FT Series

pH  
Sp C  
Temp  
DO

## General Requirements for Calibration Activities (FT 1000)

|  |  |  |  |  |                                                                                                                                                                                                             |                                 |
|--|--|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
|  |  |  |  |  | All field-testing equipment and instruments brought to the field appeared to function properly.                                                                                                             | FT 1000, section 1.3.4          |
|  |  |  |  |  | All sample measurements were chronologically bracketed between acceptable calibration verifications.                                                                                                        | FT 1000, sections 2.1.4 & 2.2.1 |
|  |  |  |  |  | All sample measurements were quantitatively bracketed with an appropriate choice of calibration standards for calibrations or verifications.                                                                | FT 1000, sections 2.1.5 & 2.2.2 |
|  |  |  |  |  | An initial calibration verification was performed immediately after an initial calibration was completed.                                                                                                   | FT 1000, section 2.2.4          |
|  |  |  |  |  | If the initial calibration verification failed to meet the acceptance criteria, the instrument was immediately recalibrated or removed from service.                                                        | FT 1000, section 2.2.4.1        |
|  |  |  |  |  | If an instrument failed to meet continuing calibration verification acceptance criteria, either additional attempts were made to obtain an acceptable verification or an initial calibration was performed. | FT 1000, section 2.2.5.4        |
|  |  |  |  |  | Sample measurements were qualified as estimated ("J" data qualifier code) when the instrument calibration could not be verified.                                                                            | FT 1000, section 2.2.5.4        |
|  |  |  |  |  | An explanatory narrative was provided in the field record for all sample "J" values.                                                                                                                        | FT 1000, section 2.2.5.4        |

## pH (FT 1100)

|  |                                                                                                                         |                                  |
|--|-------------------------------------------------------------------------------------------------------------------------|----------------------------------|
|  | The pH meter and electrode system met DEP SOP specifications for accuracy, reproducibility and design.                  | FT 1100 section 1.1              |
|  | All measurements were corrected for temperature (manual or automatic).                                                  | FT 1100 sections 1.1.1 and 2.2.3 |
|  | The temperature sensor calibration was verified according to FT 1400.                                                   | FT 1400 section 2.2.2.1          |
|  | A pH 7 buffer was used as the first calibration standard for the initial calibration.                                   | FT 1100, section 2.3.2.3         |
|  | The pH electrode was rinsed with deionized or distilled water between buffer solutions and between sample measurements. | FT 1100 sections 2.3.1 & 2.6.4   |
|  | The instrument pH readings stabilized before pH values were recorded.                                                   | FT 1100 section 2.6.3            |

| <b>Conductivity (FT 1200)</b>                                                                                                                                                                                                                                                                                                                                                   |                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| The specific conductance meter and electrode system met DEP SOP specifications for accuracy, reproducibility and design.                                                                                                                                                                                                                                                        | FT 1200 section 2.1                                           |
| Unless the concentration range of the samples is less than 100 µmhos/cm, all sample measurements were quantitatively bracketed with an appropriate choice of calibration standards for calibrations and verifications.                                                                                                                                                          | FT 1000, Section 2.2.2                                        |
| All measurements were corrected for temperature (manual or automatic).                                                                                                                                                                                                                                                                                                          | FT 1200 sections 1.2, 3.1.2, 3.1.3, 3.2.4, 3.3.4, 3.3.5 & 3.4 |
| The temperature sensor calibration was verified according to FT 1400.                                                                                                                                                                                                                                                                                                           | FT 1400, section 2.2                                          |
| The conductivity electrode was rinsed with deionized or distilled water between standard solutions and between sample measurements.                                                                                                                                                                                                                                             | FT 1200 section 3.3.8                                         |
| The instrument conductivity readings stabilized before measurement values were recorded.                                                                                                                                                                                                                                                                                        | FT 1200 section 3.3.3                                         |
| <b>Temperature (FT 1400)</b>                                                                                                                                                                                                                                                                                                                                                    |                                                               |
| The temperature measurement device met DEP SOP specifications for design and measurement resolution.                                                                                                                                                                                                                                                                            | FT 1400 section 1.1                                           |
| All sample measurements were quantitatively bracketed with calibration verifications of the temperature measurement device at several temperatures using the NIST-traceable thermometer.<br><b>NOTE:</b> <i>quantitative brackets are not required for all daily calibration checks however, the organization must have records of having performed the quantitative check.</i> | FT 1400 section 2.2.2                                         |
| Historical, device-specific data justified calibration verification intervals of greater than one month (extended chronological calibration bracket).                                                                                                                                                                                                                           | FT 1400 section 2.2.3.1                                       |
| The temperature device readings stabilized before measurement values were recorded.                                                                                                                                                                                                                                                                                             | FT 1400 section 2.2.3.2                                       |
| Temperature was recorded to the nearest 0.1°C and remains constant.                                                                                                                                                                                                                                                                                                             |                                                               |
| <b>Dissolved Oxygen (FT 1500)</b>                                                                                                                                                                                                                                                                                                                                               |                                                               |
| The dissolved oxygen meter and electrode system met DEP SOP specifications for accuracy, reproducibility and design.                                                                                                                                                                                                                                                            | FT 1500 section 1.1                                           |
| All measurements were corrected for temperature (manual or automatic).                                                                                                                                                                                                                                                                                                          | FT 1500 sections 1.1                                          |
| The temperature sensor calibration was verified according to FT 1400.                                                                                                                                                                                                                                                                                                           | FT 1500 section 1.1                                           |
| All measurements were corrected for salinity, where applicable (manual or automatic).                                                                                                                                                                                                                                                                                           | FT 1500 sections 2.1.4 & 2.6.4                                |
| The salinity (conductivity) sensor calibration was verified according to FT 1200.                                                                                                                                                                                                                                                                                               | FT 1500 section 2.1.4                                         |
| The dissolved oxygen electrode was rinsed with deionized or distilled water between sample measurements.                                                                                                                                                                                                                                                                        | FT 1500 section 2.6.2                                         |
| The dissolved oxygen electrode was stored in a water-saturated air environment when not in use.                                                                                                                                                                                                                                                                                 | FT 1500 sections 2.1.2 & 2.6.2                                |
| The instrument dissolved oxygen readings stabilized before measurement values were recorded.                                                                                                                                                                                                                                                                                    | FT 1500 sections 2.3.1.3 & 2.6.2                              |
| <b>Turbidity (FT 1600)</b>                                                                                                                                                                                                                                                                                                                                                      |                                                               |
| The turbidimeter met DEP SOP design specifications.                                                                                                                                                                                                                                                                                                                             | FT 1600 section 2.1                                           |

|  |                                                                                                                                                                                                               |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Alternative design turbidimeters used for groundwater stabilization measurements met DEP performance criteria.<br><i>FT 1600, section 1</i>                                                                   |
|  | The sample cells (optical cuvettes) were inspected for scratches and discarded or coated with a silicone oil mask, as necessary.<br><i>FT 1600 section 2.2.2</i>                                              |
|  | The sample cells (optical cuvettes) were optically matched for calibrations and sample measurements.<br><i>FT 1600 section 2.2.3</i>                                                                          |
|  | The sample cells (optical cuvettes) were cleaned with detergent and deionized or distilled water between standard solutions and between sample measurements, as applicable.<br><i>FT 1600 section 2.2.1.2</i> |
|  | The sample cells (optical cuvettes) were double rinsed with deionized or distilled water between standard solutions and between sample measurements, as applicable.<br><i>FT 1600, section 3.5.6</i>          |
|  | The sample cells (optical cuvettes) were double rinsed with sample prior to filling with sample for measurement.<br><i>FT 1600 section 3.5.2</i>                                                              |
|  | The exterior of the sample cell (optical cuvette) was kept free of fingerprints and dried with a lint-free wipe prior to insertion in the turbidimeter.<br><i>FT 1600 sections 2.2.1.1 &amp; 3.5.3</i>        |

## Field Calibration Worksheet

### pH

All sample measurements were chronologically bracketed with acceptable calibration verifications.  
*FT 1000, sections 2.1.4 & 2.2.1*

Beginning Date/Time

Ending Date/Time

All sample measurements were quantitatively bracketed with an appropriate choice of at least two calibration buffers for calibrations or verifications.  
*FT 1000, sections 2.1.5 & 2.2.2, FT 1100 sections 2.3.2.2*

| pH Buffer                                     | 4 | 7 | 10 | Other | Met Acceptance?<br>± 0.2 pH Units |
|-----------------------------------------------|---|---|----|-------|-----------------------------------|
| ICAL (identify standards)                     |   |   |    |       |                                   |
| ICV (enter reading under applicable standard) |   |   |    |       |                                   |
| CCV (enter reading under applicable standard) |   |   |    |       |                                   |

Sample Measurement Values (enter measurements observed during audit):

### Specific Conductance

All sample measurements were chronologically bracketed with acceptable calibration verifications.  
*FT 1000, sections 2.1*

Beginning Date/Time

Ending Date/Time

Unless the concentration range of the samples is less than 100 µmhos/cm, all sample measurements were quantitatively bracketed with an appropriate choice of calibration standards for calibrations and verifications.  
*FT 1000, sections 2.1.5 & 2.2.2, FT 1200 sections 3.2.2.1 & 3.2.2.4*

| Concentration<br>umhos mmhos                  |  |  |  |  | Met Acceptance?<br>± 5% Standard Value |
|-----------------------------------------------|--|--|--|--|----------------------------------------|
| ICAL (identify standards)                     |  |  |  |  |                                        |
| ICV (enter reading under applicable standard) |  |  |  |  |                                        |
| CCV (enter reading under applicable standard) |  |  |  |  |                                        |

Sample Measurement Values (enter measurements observed during audit):

### DO

All sample measurements were chronologically bracketed with acceptable calibration verifications.  
*FT 1500 section 2.3.1*

Beginning Date/Time

Ending Date/Time

All calibration verifications met the acceptance criteria of ± 0.3 mg/L dissolved oxygen when compared to the table of theoretical values for water-saturated air.  
*FT 1500 sections 2.3.1.4,*

|                    |                                                                     |
|--------------------|---------------------------------------------------------------------|
| Instrument Reading | <input type="checkbox"/> % saturation <input type="checkbox"/> mg/L |
| Temperature        |                                                                     |
| Table Reading      |                                                                     |

### Turbidity

Initial calibration of the turbidimeter was performed using formazin or styrene divinylbenzene primary standards, whichever was required by the manufacturer of the instrument.  
*FT 1600 section 2.3*

Secondary standards were verified at least quarterly, immediately after an initial calibration.  
*FT 1600, section 3.3*

Secondary standards are used only for continuing verification.  
*FT 2010, Section 2.4.2*

| Field Calibration Worksheet                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |       |       |       |       |                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------------------------------------------|
| All sample measurements were chronologically bracketed with acceptable calibration verifications.<br><i>FT 1000, section 2.2.1</i>                                                                                                                                                                                                                                                                                                                                           |       |       |       |       |       |                                           |
| Beginning Date/Time                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       |       |       |       |                                           |
| Ending Date/Time                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |       |       |       |       |                                           |
| All sample measurements were quantitatively bracketed with an appropriate choice of calibration standards for calibrations and verifications.<br><i>FT 1000, Section 2.2.2</i>                                                                                                                                                                                                                                                                                               |       |       |       |       |       |                                           |
| Concentration (NTUs)                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |       | Met Acceptance? (see below)               |
| ICAL (identify standards)                                                                                                                                                                                                                                                                                                                                                                                                                                                    |       |       |       |       |       |                                           |
| ICV (enter reading under applicable standard)                                                                                                                                                                                                                                                                                                                                                                                                                                | 1° 2° | 1° 2° | 1° 2° | 1° 2° | 1° 2° |                                           |
| CCV (enter reading under applicable standard)                                                                                                                                                                                                                                                                                                                                                                                                                                | 1° 2° | 1° 2° | 1° 2° | 1° 2° | 1° 2° |                                           |
| Sample Measurement Values (enter measurements observed during audit):                                                                                                                                                                                                                                                                                                                                                                                                        |       |       |       |       |       |                                           |
| All calibration verifications met the DEP SOP acceptance criteria applicable to the NTU ranges associated with the verification standard values.<br><div style="text-align: right;"><i>FT 1600 section 3.2.3</i></div> <div style="text-align: center;">             0.1 - 10 NTU: <math>\pm 10\%</math><br/>             11 - 40 NTU: <math>\pm 8\%</math><br/>             41 - 100 NTU: <math>\pm 6.5\%</math><br/>             &gt; 100 NTU: <math>\pm 5\%</math> </div> |       |       |       |       |       |                                           |
| <b>Residual Chlorine</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       |       |       |       |       |                                           |
| The initial calibration was performed with potassium permanganate or chlorine standards using a minimum of a blank and two standards.<br><i>FT 2010, sections 3.4.1 and 3.2.2</i>                                                                                                                                                                                                                                                                                            |       |       |       |       |       |                                           |
| Secondary standards were verified at least quarterly, immediately after an initial calibration.<br><i>FT 2010, section 3.2.4</i>                                                                                                                                                                                                                                                                                                                                             |       |       |       |       |       |                                           |
| Secondary standards are used only for continuing verification.<br><i>FT 2010, Section 2.4.2</i>                                                                                                                                                                                                                                                                                                                                                                              |       |       |       |       |       |                                           |
| The results of secondary standard readings were within the manufacturer's stated tolerance range <b>and</b> +/- 10% of the stated standard value.                                                                                                                                                                                                                                                                                                                            |       |       |       |       |       |                                           |
| If the verification results were not within +/- 10% of the standard value, but were within the manufacturer's state tolerance, the assigned value was the instrument reading.<br><i>FT 2010, section 3.2.4.1</i>                                                                                                                                                                                                                                                             |       |       |       |       |       |                                           |
| All sample measurements were chronologically bracketed with acceptable calibration verifications (not required for titrimetric methods).<br><i>FT 1000, section 2.2.1</i>                                                                                                                                                                                                                                                                                                    |       |       |       |       |       |                                           |
| Beginning Date/Time                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       |       |       |       |                                           |
| Ending Date/Time                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |       |       |       |       |                                           |
| All sample measurements were quantitatively bracketed with an appropriate choice of calibration standards for calibrations and verifications (not required for titrimetric methods).<br><i>FT 1000, Section 2.2.2</i>                                                                                                                                                                                                                                                        |       |       |       |       |       |                                           |
| Concentration (mg/L)                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |       |       |       | Met Acceptance? $\pm 10\%$ Standard Value |
| ICAL (identify standards)                                                                                                                                                                                                                                                                                                                                                                                                                                                    |       |       |       |       |       |                                           |
| ICV (enter reading under applicable standard)                                                                                                                                                                                                                                                                                                                                                                                                                                | 1° 2° | 1° 2° | 1° 2° | 1° 2° | 1° 2° |                                           |
| CCV (enter reading under applicable standard)                                                                                                                                                                                                                                                                                                                                                                                                                                | 1° 2° | 1° 2° | 1° 2° | 1° 2° | 1° 2° |                                           |
| Sample Measurement Values (enter measurements observed during audit):                                                                                                                                                                                                                                                                                                                                                                                                        |       |       |       |       |       |                                           |