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FORMER SPERRY REMINGTON SITE (NYSDEC SITE I.D. #808043)

REMEDIAL INVESTIGATION PHASE 2 DATA REPORT

CITY OF ELMIRA, CHEMUNG COUNTY, NY

Prepared for

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Division of Environmental Remediation, Region 8

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1. INTRODUCTION

1.1 Background

On behalf of Unisys Corporation (Unisys), Geosyntec Consultants, Inc. (Geosyntec) and EA Engineering, P.C. and Its Affiliate, EA Science and Technology (EA) are submitting this Remedial Investigation (RI) Phase 2 Data Report for the Former Sperry Remington Site (Site #808043) (Site) in Elmira, New York. The RI is being conducted by Unisys at the Site in accordance with the Order on Consent and Administrative Settlement (AOC) (Index #B8-0815-09-10) with the New York State Department of Environmental Conservation (NYSDEC) approved by NYSDEC on 30 March 2010.

The Site is located at 1051 South Main Street in Elmira, Chemung County, New York (see **Figure 1**). The Site is a 185' x 65' rectangular area (0.28 acres) as shown on **Figure 2**. The Site includes an 8 to 12-foot diameter covered concrete culvert (Site Culvert) which extends from a former holding pond (immediately to the east and adjacent to the Site) to a discharge point to the east northeast and off-site. The culvert is approximately 275 feet long and extends beneath a railroad line owned by Norfolk Southern. The Site Culvert discharges into a 580 feet long Drainage Swale, which subsequently drains into a 3.5 acre Wetlands Area and Coldbrook Creek at two outfall locations (Off-Site Areas). The Site and Off-Site Areas consist of a number of parcels owned by multiple parties. Samples collected in 2006 by NYSDEC indicated that there were polychlorinated biphenyls (PCBs) and inorganic constituents present in sediments in the Drainage Swale, Wetlands Area and Coldbrook Creek.

In accordance with the AOC, Advanced GeoServices Engineering P.C. (Advanced GeoServices) prepared a Remedial Investigation/Feasibility Study (RI/FS) Work Plan dated 7 July 2010 and revised 11 November 2010. The overall purpose and objective of the RI is to determine the nature and extent of constituents of concern (COCs) that may have been potentially discharged from the Site, determining if residual sources of COCs still exist, and identifying both current and potential routes of human exposure, if any, to COCs. Data collected in accordance with the RI/FS Work Plan and Work Plan Addenda #1 and #2 have been presented previously in the Remedial Investigation Phase 1 Data Report (Phase 1 Data Report) dated 18 November 2011, prepared by Advanced GeoServices. The Phase 1 Data Report also presented Step I of the Fish and Wildlife Impact Analysis (FWIA)

At Unisys request, Geosyntec reviewed the Phase 1 Data Report in order to identify COCs in soil, sediment and surface water and evaluate the need for additional data in determining the nature and extent of COCs. Plans for additional data collection were presented to NYSDEC in the RI/FS Work Plan Addendum #3 (Work Plan) dated 12 July 2012.

1.2 Purpose

This Phase 2 Data Report presents activities conducted in accordance with the Work Plan and a discussion of data collected to date. Data will be discussed for the purpose of:

1. Bounding the horizontal and vertical extent of PCBs as an indicator of COC concentrations in soil, sediment and surface water;
2. Determining COC concentrations along Coldbrook Creek upstream of the discharge from the Site; and
3. Determining the potential for off-Site COC contributions.

The results of Step IIA (Pathway Analysis) and Step IIB (Criteria-specific Analysis) of the FWIA are also presented.

2. FIELD ACTIVITIES

Field activities took place between 23 July and 1 August 2012. The following sections describe those field activities performed. Sediment sampling was conducted between 24 and 31 July 2012. Soil sampling was conducted between 25 and 31 July 2012. Surface water samples were collected on 30 and 31 July 2012. It should be noted that a tornado touched down in the vicinity of the Site on 26 July 2012 but no impacts to the Site were observed. Field notes are provided in **Appendix A**.

2.1 Pre-Sampling Field Survey

Prior to initiating field sampling activities a field reconnaissance was completed on 23 July 2012 to locate the proposed sediment and soil sample locations. A handheld Trimble GeoXT 5000 global positioning system (GPS) unit was pre-loaded with the sample locations to aid in identifying field sampling locations. Each proposed soil, sediment, and surface water sample was located and flagged during the reconnaissance. Sediment and surface water sample locations located within Coldbrook Creek were marked along the western stream bank so as not to disturb sediments within the channel.

2.2 Sediment Sampling

Table 1A presents a summary of sediment samples collected as part of RI Phase 2 data collection. RI Phase 2 sediment sample locations are shown on **Figure 3**. Fifty-two (52) sediment samples were collected in the Drainage Swale, the Wetland Areas and Coldbrook Creek to bound the horizontal and vertical extent of PCBs as an indicator of COC concentrations. Twelve (12) sediment samples were collected in Coldbrook Creek north of the northern outfall to assess upstream conditions. Those samples were analyzed for PCBs, target analyte list (TAL) metals, hexavalent chromium, semi-volatile organic compounds (SVOCs), pesticides and cyanide. Sediment samples were collected using two (2) different methodologies dependent on sampling location and sediment characteristics within each area of the Site.

Sediment samples within the Wetlands Area and Drainage Swale were collected utilizing a stainless steel hand auger in discrete depth intervals to three (3) feet below ground surface (bgs). A boring log of each sediment sample location is included in **Appendix B**. Sample intervals were 0-6 inches (A), 6-12 inches (B), 12-24 inches (C), and 24-36 inches (D). Upon retrieval of the sediment sample from each depth interval, sediment material was transferred to a stainless steel bowl lined with a dedicated low-density polyethylene [LDPE] pail liner. Each sample interval was screened with a photoionization detector (PID) for the presence of volatile organic compounds (VOCs), photographed, and characterized on a field boring log form (**Appendix B**). In accordance with the Quality Assurance Project Plan (QAPP) and the Work Plan, each sample was homogenized, transferred to a properly labeled, laboratory-supplied sample container, and immediately placed on ice for shipment to the off-Site laboratory for analysis. The B-level

samples were held for PCB analyses pending the results of the analysis of the A-level which were submitted for expedited PCB analyses. If PID screening or field observations indicated the presence of VOCs, a sample was collected using a Terracore® kit and submitted to the off-site laboratory for VOC analysis.

A hand-driven acetate macro-core sleeve was used to collect sediment within the Coldbrook Creek stream channel. Sediment sampling within Coldbrook Creek began at the farthest downstream location and proceeded to each additional upstream sample location until reaching the outfall of Miller Pond. Each sleeve was driven three (3) feet into the stream channel sediment and retrieved by slowly pulling the filled sleeve out at an angle. Upon retrieval of the sleeve, sediment samples were collected from discrete depth intervals and each sediment sample was processed as indicated above. A boring log of each sediment sample location is included in **Appendix B**.

Laboratory analytical methods specified in the Work Plan were performed on sediment samples by TestAmerica. In addition, the laboratory followed QA/QC, holding time, and reporting requirements as defined in the NYSDEC Analytical Services Protocol of June 2000. Laboratory analytical data were reported using Category B deliverables and the standard electronic data deliverable. Laboratory analytical data and Form I's are provided in **Appendix C**.

Upon completion of sediment collection at each sampling location, a survey pin flag labeled with sample ID was left at the location for future reference and GPS field surveying.

2.3 Soil Sampling

Table 1B presents a summary of the soil samples collected as part of RI Phase 2 data collection. RI Phase 2 soil sample locations are shown on **Figure 3**. Thirty (30) soil samples were collected in vicinity of the Drainage Swale and Coldbrook Creek to provide information on the horizontal and vertical extent of PCBs, as an indicator of COC concentrations. RI Phase 2 sample locations are shown on **Figure 3**. Six (6) samples were collected to the east of Coldbrook Creek to provide information on the horizontal and vertical extent of TAL metals.

Twelve (12) soil samples were collected on the STCC property adjacent to the rail right-of-way. Those samples were analyzed for PCBs, TAL metals, hexavalent chromium, SVOCs, pesticides and cyanide. Prior to initiating surface soil sampling activities, leaves, grass and debris were cleared from the surface area. The top 0 to 2 inch soil horizon was then collected and placed into a stainless steel bowl lined with a dedicated LDPE pail liner. Loose soil directly beneath the root mat was included in the surface soil sample, while coarse gravel and organic root material was removed from the mixing container.

Subsurface soil samples were collected utilizing manually-operated (slide hammer) direct push technology (macro-core) to a depth of three (3) feet bgs. The slide hammer macro-core equipment was set-up to collect two (2) foot long soil column within a dedicated disposable 2 in.

acetate sleeve as the slide hammer was advanced into the ground. Upon retrieval, the sampling barrel was unscrewed from the drive shoe and opened. The acetate sleeve inside the sampling barrel was carefully removed and cut along its length to allow the core to be screened with a PID for VOCs and visually inspected. Once collection of the first two (2) foot soil sample core was completed, a new dedicated disposable acetate sleeve was placed into the sampling barrel and advanced to the termination depth of three (3) feet bgs. The lithology of each core was documented on a field soil boring log (**Appendix B**).

Dependent on the soil sampling location, and if PID screening indicated the presence of VOCs, a sample for VOCs was collected using a Terracore® kit. Following the screening for VOCs and lithological logging, subsurface soil samples were collected from intervals of 12-24 inches and 24-36 inches. The slide hammer and core barrel were decontaminated following sample collection at each soil sampling location.

The discrete surface and subsurface soil depth intervals were field homogenized in stainless steel mixing bowls lined with LDPE pail liners. Homogenization included a thorough mixing (at least two (2) minutes) of the materials from each interval. Samples for VOCs, where collected, were taken prior to homogenization directly from the acetate sleeve. In accordance with the QAPP and the Work Plan, each sample was transferred to a properly labeled laboratory supplied sample container, and immediately placed on ice for shipment to the off-site laboratory for analysis.

Laboratory analytical methods specified in the Work Plan were performed on soil samples by TestAmerica. In addition, the laboratory followed the QA/QC, holding time, and reporting requirements as defined in the NYSDEC Analytical Services Protocol of June 2000. Laboratory analytical data were reported using Category B deliverables and the standard electronic data deliverable. Laboratory analytical data and Form I's are provided in **Appendix C**.

Upon completion of sediment collection at each sampling location, a survey pin flag labeled with sample ID was left at the location for future reference and GPS field surveying. For sample locations in Coldbrook Creek, the survey pin flag was placed along the stream bank.

2.4 Surface Water Sampling

Table 1C presents a summary of the surface water samples collected as part of RI Phase 2 data collection. RI Phase 2 surface water sample locations are shown on **Figure 3**. Surface water samples were collected in Coldbrook Creek from three (3) locations downstream of the Phase 1 study area in order to assess the potential downstream extent of COCs and from three (3) locations north of the northern outfall to assess upstream conditions. Twelve (12) locations in Coldbrook Creek and within the Wetland Areas that were sampled during RI Phase 1 data collection were resampled for comparison to the Phase 1 data and to upstream and downstream conditions. Upstream samples were analyzed for PCBs, total and dissolved TAL metals, hexavalent chromium, VOCs, SVOCs, pesticides, cyanide and hardness. Downstream samples

and those from Phase 1 locations were analyzed only for PCBs. Surface water samples were collected after the collection of sediment samples within Coldbrook Creek. To limit the potential of suspended sediment to affect the surface water data, approximately forty-eight (48) hours were allowed to pass following sediment sample collection before surface water sampling was conducted within Coldbrook Creek.

A telescopic dipper equipped with a swivel adapter and dedicated 600 milliliter (mL) polypropylene ladle was used to collect surface water samples and transfer sample liquid to laboratory-supplied sample containers. The dipper was inverted as it was placed into the water to prevent accidental collection of anything floating on the surface. The dipper was then turned upward to begin collection of water throughout the upper half of the water column, being careful not to disturb sediment in the lower portion of the water column. All surface water samples were collected in a downstream to upstream order.

In accordance with the QAPP and the Work Plan, each sample was transferred to a properly labeled, laboratory-supplied sample container, and immediately placed on ice for shipment to the off-Site laboratory for analysis. All dissolved metals samples were filtered at the off-Site laboratory subsequent to sample collection. A sampling log is provided in **Appendix D**.

Laboratory analytical methods were performed by TestAmerica. In addition, the laboratory followed the QA/QC, holding time, and reporting requirements as defined in the NYSDEC Analytical Services Protocol of June 2000. Laboratory analytical data were reported using Category B deliverables and the standard electronic data deliverable. Laboratory analytical data and Form I's are provided in **Appendix C**.

Upon completion of surface water collection at each sampling location, a survey pin flag labeled with sample ID was left at a location along the stream bank corresponding to the location in Coldbrook Creek for future reference and GPS field surveying.

2.5 Post-Sampling Field Survey

Following the completion of field sampling activities, actual sample locations were surveyed on 1 August 2012. A handheld Trimble GeoXT 5000 global GPS unit was used to collect horizontal coordinates of the marked sample locations. The actual locations of each sample are presented on **Figure 3**. Survey markers and flagging were removed from the Site upon completion of the survey.

2.6 Decontamination and Post-Sampling Procedures

All non-disposable equipment (hand augers, core barrel, etc.) were decontaminated according to the procedures summarized below:

- Remove particulate matter and surface film with tap water;

- Manual scrub with non-phosphate soap solution (Alconox);
- Tap water rinse;
- 10% nitric acid rinse
- Distilled/De-ionized water rinse;
- Pesticide grade hexane rinse; and
- Air dry.

All derived decontamination wastes from each sampling media were returned to the ground in the immediate vicinity of the each sample collection point in accordance with the approved RI/FS Work Plan.

3. EXPLANATION OF SIGNIFICANT DEVIATIONS FROM RI/FS WORK PLAN

3.1 Surface Water Sampling

Surface water samples collected for dissolved metals analyses were filtered at the off-Site laboratory subsequent to sample collection instead of being filtered in the field. Unpreserved dissolved metal samples were sent to the off-Site laboratory and were filtered and preserved at the laboratory upon receipt.

4. DATA USABILITY

Analytical data packages generated by TestAmerica during Phase 2 of the RI were validated by Geosyntec. Analytical data packages were reviewed for completeness, field and laboratory QC sample results were evaluated, significant laboratory control problems were assessed, and data qualifiers were assigned. Stage 4 validation was performed on all analytical data generated for the RI to verify and validate the usability of those data. Verification and validation were based on completeness and compliance checks of sample receipt conditions, both sample-related and instrument-related QC results, recalculation checks, and review of actual instrument outputs. Data validation reports are included in **Appendix E** and indicate qualification of data based on sample-related QC results. All data were found to be usable, except as noted.

5. RESULTS AND DISCUSSION

5.1 Lithology

Sediment and soil lithology were recorded during Phase 1 and Phase 2 of the RI. Logs of the Phase 2 soil and sediment borings are presented in **Appendix B**. As discussed in the 16 May 2012 comments from NYSDEC, locations within the wetland boundary and within the stream, below the mean high water mark are sediment borings and those outside these areas are soil borings. A gravel and cobble horizon was encountered in Coldbrook Creek in the Phase 1 sediment borings at or near thirty-six (36) inches deep. In the Wetlands Area, a soil horizon was encountered beneath the sediment in the Phase 1 sediment borings as noted by a significant increase in density/stiffness with increasing depth during sampling. No soil horizon was encountered in the Drainage Swale. The following sections present those sediment and soil lithologies encountered during Phase 2 of the RI.

5.1.1 Sediment

Sediments encountered during the RI Phase 2 were generally consistent with those encountered during the RI Phase 1. Coldbrook Creek sediments upstream of the northernmost Site outfall consisted of dark brown to black silts. At the most upstream location (CBC-U0550-SED) near the discharge from Miller Pond, a very dense clay layer was encountered at 1 ft bgs. Downstream of the Phase 1 sample locations, creek sediments are dark brown silt with some organics in the top 1.5 feet.

In the Wetland Area, sediments on the eastern edge adjacent to Coldbrook Creek consisted of brown, black and gray silt with some clay. On the western edge near the railroad tracks, sediments consisted of dark brown to black fine silt and dark brown-black clay with some small gravel at 0.5 to 1.5 ft bgs. In the Drainage Swale, sediments consisted of dark brown silt and medium sand with organics.

5.1.2 Soil

Soils encountered during the RI Phase 2 were generally consistent with those encountered during the RI Phase 1. To the east of Coldbrook Creek, soils consisted of light brown, brown and dark brown silt. To the west of Coldbrook Creek, soils consisted of brown to dark brown silt with some clay and some gravel.

Soils to the north and west of the Drainage Swale consisted of dark brown and black silt, sand and some clay. Fill material was encountered to the north of the Drainage Swale. To the south of the Drainage Swale, soils consisted of brown silt with some gravel.

Soils to the west of the railroad tracks consisted of black and gray fine to coarse sand with some fill material and some gravel.

5.2 Nature and Extent of Constituents of Concern

5.2.1 COC Delineation in Sediment, Soil and Surface Water

A review of RI Phase 1 data indicates that PCBs are the primary COC and indicative of COCs detected in off-Site areas. Phase 1 data also indicate a great majority of PCB criteria exceedance also encompass the extent of other COCs. **Tables 2A, 2B, and 2C** present the RI Phase 2 results of PCB analyses in sediment, soil and surface water respectively. Total PCB concentrations are compared to appropriate investigative screening criteria in accordance with the NYSDEC *DER-10 Technical Guidance for Site Investigation and Remediation* (DER-10) dated May 3, 2010 with the understanding that these criteria may not be applicable if remedial actions are necessary. Sediment concentrations are compared to screening values in the *NYSDEC Technical Guidance for Screening Contaminated Sediments*. For sediment criteria for non-polar organic constituents presented in that guidance per unit mass of organic carbon, the lower ninety-five percent (95%) confidence limit of total organic carbon (TOC) concentrations in sediment reported in Phase 1 Data Report were used to convert screening criteria to a per unit mass of sediment basis. TOC data and the derivation of sediment criteria for non-polar organic constituents have been presented previously in the Work Plan. Soil concentrations are compared to unrestricted use soil cleanup objectives (SCOs) presented in the New York Code of Rules and Regulations (NYCRR) Subpart 375-6.8a in accordance with NYSDEC *CP-51 Soil Cleanup Guidance* (CP-51). In addition, total PCB concentrations in soil are also compared to restricted use SCOs presented in NYCRR Subpart 375-6.8b and CP-51. Coldbrook Creek is listed in NYCRR Subpart 811 as Class “C” fresh surface water. Surface water concentrations are compared to the New York State Ambient Water Quality Standards (AWQS) for Class “C” fresh surface waters presented in Division of Water *Technical Operational Guidance Series (1.1.1)*.

5.2.1.1 Sediment

PCB concentrations in RI Phase 2 sediment samples are presented in **Table 2A**. Sediment samples from depths of 0-6 inches (A), 12- 24 inches (C), and 24- 36 inches (D) were analyzed for all locations. Samples from a depth 6-12 inches (B) were analyzed for all locations upstream of the Site outfall and for other locations when PCBs were not detected in the A-level samples submitted for expedited analyses. Aroclor 1254 was the PCB that was most frequently detected in sediment with less frequent detections of Aroclor 1248. Total PCB concentrations exceeded site-specific sediment criteria for human health bioaccumulation in thirty-five (35) samples, for wildlife bioaccumulation in thirteen (13) samples and for benthic aquatic life chronic toxicity in nine (9) samples as shown in **Table 2A**. One sediment sample, CBC-1470-SED-D, was collected for VOC analysis based on field observations. VOCs were not detected in this sample (see laboratory analytical reports in **Appendix C**).

The site-specific sediment criterion for human health bioaccumulation is 0.047 µg/kg. **Figure 4A** provides a visual summary of sediment sample analyses in comparison with this criterion.

Sediments that exceed the human health bioaccumulation criterion have been detected at depths to thirty-six (36) inches in the Drainage Swale, the Wetland Area and Coldbrook Creek. The depth of sediments that exceed the human health bioaccumulation criterion is shallower (less than twelve (12) inches) at the southern and western ends of the Wetland Area.

The site-specific sediment criterion for wildlife bioaccumulation is 79 µg/kg. **Figure 4B** provides a visual summary of sediment sample analyses in comparison with this criterion. Sediments that exceed the wildlife bioaccumulation criterion were detected from all depths in the Drainage Swale and in Coldbrook Creek downstream of the northernmost Site outfall. Sediments exceeding this criterion are limited to shallower depths (less than twelve (12) inches) in Coldbrook Creek upstream of the Site outfall and outside of the main drainage channel in the Wetland Area. No exceedance of the wildlife bioaccumulation criterion were observed at the southern and western ends of the Wetland Area.

The site-specific criterion for benthic aquatic life chronic toxicity is 1,102 µg/kg. **Figure 4C** provides a visual summary of sediment sample analyses in comparison with this criterion. Total PCB concentrations for sediment samples collected upstream of the Site outfall are all below the benthic aquatic life chronic toxicity criterion. In the Drainage Swale and in Coldbrook Creek downstream of the Site outfall, all sediment samples at shallower depths (less than twelve (12) inches) and most samples from deeper depths (twenty-four (24) and thirty-six (36) inches) exceed this criterion. Exceedances in the Wetland Area are again bounded to the south and west and bounded vertically by total PCB concentrations below the criterion.

Vertical delineation of sediments in Coldbrook Creek is bounded by the presence of a gravel and cobble horizon at approximately thirty-six (36) inches in depth. In the Wetlands Area, vertical delineation is indicated by detections below site-specific screening criteria for PCBs and/or the presence of a soil horizon. No soil horizon has been identified below thirty-six (36) inches beneath the Drainage Swale sediments based on the depths of samples collected.

5.2.1.2 Soil

PCB concentrations in RI Phase 2 soil samples are presented in **Table 2B**. Soil samples from depths of 0-2 inches (A), 12- 24 inches (C), and 24- 36 inches (D) were analyzed for all locations. Aroclor 1260 was most frequently detected in soil in the vicinity of Coldbrook Creek and the Drainage Swale with less frequent detections of Aroclor 1242, Aroclor 1248, and Aroclor 1254. PCBs were also detected in soil samples collected to the southwest of the railroad right-of-way. Aroclor 1254 was the most frequently detected PCB in these samples with less frequent detection of Aroclor 1260. Total PCB concentrations exceeded the unrestricted use SCO in ten (10) samples as shown in **Table 2B**.

Soil samples were collected to the southwest of the railroad right-of-way to evaluate the western margin of the Wetland and upland areas for COCs. As shown in **Table 2B**, PCBs were detected

in these samples. Concentrations of Aroclor 1254 in shallow soils adjacent to the railroad right-of-way are comparable to those at the base of the slope to the northeast (DS-000-LL and DS-004-L) but concentrations of Aroclor 1260 are higher. Total PCB concentrations exceeded the unrestricted use SCO.

Figure 5A presents the horizontal and vertical extent of total PCB concentrations in soil with respect to the unrestricted use SCO of 100 micrograms per kilogram ($\mu\text{g/kg}$). Exceedances of the unrestricted use SCO in the vicinity of the Drainage Swale, the Wetland Area and Coldbrook Creek occurred primarily in the surface samples at a depth of 0-2 inches. Exceedances in the vicinity of the Drainage Swale extend to the south and east up to the railroad right of way and are bounded to the north and west toward Coldbrook Creek by the RI Phase 2 samples. Exceedances in vicinity of Coldbrook Creek are observed in the vicinity of outfalls from the Drainage Swale and the Wetland Areas. These exceedances are bounded to the northwest on the far side of Coldbrook Creek and to the southeast of the southern outfall.

Figure 5B presents the horizontal and vertical extent of total PCB concentrations in soil with respect to the restricted use SCOs in accordance with CP-51. The residential restricted use SCOs are applied in Off-Site Areas with values of 1 mg/kg of total PCBs to depths of twenty-four (24) inches bgs and 10 mg/kg of total PCBs at depths greater than twenty-four (24) inches bgs. Exceedance of the residential restricted use SCO are limited to two (2) shallow (0 -2 inches bgs) samples to the east of the Drainage Swale and one shallow sample to the east of Coldbrook Creek. Commercial restricted use SCOs are applied to those soil samples collected to the southwest of the railroad right-of-way with values of 1 mg/kg of total PCBs to depths of twelve (12) inches bgs and 10 mg/kg of total PCBs at depths greater than twelve (12) inches bgs. No exceedances of commercial restricted use SCOs were detected.

Two (2) soil samples (CBC-1270-W and CBC-1440-W) were collected downstream of Site outfalls and west of Coldbrook Creek for TAL metal analyses as noted in **Table 1B** and shown on **Figure 3**. Analytical results are shown in **Table 3** and compared to analytical results for adjacent Phase 1 RI sample location (CBC-10+70-W) and unrestricted use SCOs. Unrestricted use SCOs are exceeded for cadmium, copper, lead, nickel, and zinc in the surface and subsurface samples. Concentrations of these metal COCs increase with distance downstream in the surface samples and in the deeper subsurface (24 - 36 inches bgs) samples.

Vertical delineation of soils with respect to PCBs is indicated by non-detects or detections below the unrestricted use SCO in deeper samples with the exception of soils in the vicinity of outfalls to Coldbrook Creek.

5.2.1.3 Surface Water

The PCB concentrations in surface water collected during Phase 2 of the RI are presented in **Table 2C**. Aroclor 1248 was the only PCB detected in surface water. PCBs were detected at the

RI Phase 1 sample locations, as well as at the first upstream Phase 2 location (CBC-U0200-SW) and the first two (2) downstream Phase 2 locations (CBC-1270-SW and CBC-1470-SW). PCBs were not detected in surface water at the two (2) most upstream locations (CBC-U0400-SW and CBC-U0550-SW) and the most downstream location (CBC-1670-SW).

Total PCB concentrations in surface water are compared to the AWQS for health (fish consumption) of 10^{-6} micrograms per liter ($\mu\text{g/L}$) in **Figure 6**. Seeps in the Wetland Area were sampled in spring 2011 during Phase 1 of the RI and PCBs were not detected. Resampling of surface water in the Drainage Swale and the Wetland Area during Phase 2 showed exceedance of the AWQS for total PCBs near the outfall from the Drainage Swale and in the Wetland Area. Exceedances are observed in Coldbrook Creek between approximately 200 feet upstream of the Site outfall to approximately 1,470 feet downstream. No exceedance of the AWQS for total PCBs is observed in most downstream surface water sample location (CBC-1670-SW).

5.2.2 Conditions Upstream of Site Discharge to Coldbrook Creek

Sediment and surface water samples collected upstream of the northernmost Site outfall to Coldbrook Creek were analyzed for COCs in addition to PCB analyses in order to characterize upstream conditions. **Tables 4A** through **4C** present results of analyses of upstream sediment samples for SVOCs, pesticides, and TAL metals and other inorganic constituents, respectively. Results from three (3) RI Phase 2 upstream sediment sample locations are compared to results from the RI Phase 1 sediment sample locations near the northernmost outfall to Coldbrook Creek. As shown in **Table 4A**, detections of SVOCs consist primarily of polynuclear aromatic hydrocarbons (PAHs) with some exceedances of the site-specific sediment criteria for human health bioaccumulation. SVOC concentrations in the upstream shallow (0-6 inches) and deepest (24-36 inches) samples were generally lower than those closer to the Site outfall but were higher for samples collected at a depth of 12-24 inches bgs. **Table 4B** presents the upstream sediment results for pesticides. Pesticide concentrations were generally higher closer to the Site outfall. Exceedances of site-specific sediment criteria for human health and wildlife bioaccumulation are observed. Estimated concentrations of four (4) pesticide COCs exceeded the criterion for human health bioaccumulation but the criterion for wildlife bioaccumulation was exceeded for only one (1) pesticide COC, heptachlor epoxide. **Table 4C** presents the upstream sediment results for TAL metals, cyanide and hexavalent chromium. TAL metals were detected in all upstream sediment samples. Of those detections, concentrations of arsenic, cadmium, chromium, copper, iron, lead, mercury, nickel and zinc exceeded the lowest effect level sediment screening criteria. The severe effect level screening criteria were exceeded for copper, lead, nickel and zinc. Metal COC concentrations were lower upstream in the shallower (0-6 inches) in comparison to those closer to the Site outfall but were higher for some COC metals (e.g. lead, zinc) in the deeper samples (12-24 and 24-36 inches). Cyanide was detected in all but the most upstream samples which had the only detection of hexavalent chromium.

Tables 5A through 5D present results of analyses of upstream surface water samples for volatile organic constituents (VOCs), SVOCs, pesticides, and TAL metals and other inorganic constituents, respectively. Results from the three RI Phase 2 upstream surface water sample locations are compared to results from the RI Phase 1 surface sample location near the northernmost outfall to Coldbrook Creek. The results of those VOC analyses are presented in **Table 5A**. The only detections were of 1,1,2-trichloroethane, 1,2-dichloroethane and 4-methyl-2-pentanone at surface water sample location CBC-U0400-SW, located approximately 400 feet upstream of the outfall to Coldbrook Creek. There are no AWQS for these constituents as Coldbrook Creek is classified as Class “C” fresh surface waters. No other VOCs were detected upstream or near the Site outfall. The results of SVOC analyses are presented in **Table 5B**. Fluoranthene was detected at two (2) upstream locations, CBC-U0200-SW and CBC-U0550-SW, located approximately 200 and 550 feet upstream, respectively. Phenanthrene was also detected at CBC-U0550-SW. The estimated concentration is below the AWQS. There were no detections of pesticides in the upstream surface water samples, as shown in **Table 5C**. **Table 5D** presents the upstream surface water results for total and dissolved TAL metals, cyanide and hexavalent chromium. The detected TAL metals were similar to those detected in upstream sediment samples. Hexavalent chromium was not detected in surface water and cyanide was not detected in the upstream samples. Dissolved metal and cyanide concentrations are compared to the AWQS in **Table 5D** with no exceedances.

5.2.3 Other Sample Locations

Soil samples were collected to the southwest of the railroad right-of-way to evaluate the western margin of the Wetland and upland areas for COCs. **Tables 6A through 6C** present the results of soil analyses for SVOCs, pesticides, and TAL metals in the samples collected adjacent to the railroad right-of-way, respectively. Maximum concentrations from the Phase 1 of the RI and the unrestricted use SCOs are presented for comparison. Detected concentrations of COCs did not exceed those concentrations found in Phase 1. Concentrations of arsenic, copper, lead, mercury, zinc, and hexavalent chromium exceeded unrestricted use SCOs. No exceedances were found for soil concentrations of SVOCs or pesticides.

5.3 Fish and Wildlife Impact Analysis

Step I of the FWIA for Inactive Hazardous Waste Sites was conducted by Advanced Geosciences and the results of Steps IA through ID were presented in the Phase 1 Data Report. The results of Step IIA (Pathway Analysis) and Step IIB (Criteria-specific Analysis) are presented in Appendix F. The results of these steps indicate that a complete exposure pathway exists between potential on-Site COC sources and off-Site ecological receptors and that detected concentrations in off-Site media exceed appropriate numerical criteria.

6. CONCLUSIONS

Phase 2 of the RI has continued the delineation of COCs in off-Site media. PCBs have been used as an indicator of COC extent in soil, sediment and surface water. Horizontal delineation of PCBs in sediment is complete in the Drainage Swale and the Wetlands Area within the limits of the wetland boundary. Total PCB concentrations in the more downstream sediment samples in Coldbrook Creek exceeded investigative screening criteria. Vertical delineation of sediments has shown exceedances at the vertical limit of sampling but is limited by the soil horizon present beneath sediments in Coldbrook Creek and the Wetland Area at depths of thirty-six (36) inches bgs. The vertical extent of sediments in the Drainage Swale has not been completed. Comparisons of other COC concentrations in upstream sediments to previous results closer to the upstream outfall to Coldbrook Creek showed lower concentrations of pesticides upstream. Upstream concentrations of SVOC and metal COCs were lower in shallow sediments but higher in deeper samples.

Horizontal delineation of PCBs in soil is complete in the vicinity of the Drainage Swale, the Wetlands Area and Coldbrook Creek. Exceedances of unrestricted use SCO were detected to the west of the railroad right-of way. Vertical delineation of PCBs in soil is complete with the exception of soils adjacent to the outfalls to Coldbrook Creek. Delineation of TAL metals in soils adjacent to Coldbrook Creek beyond the downstream extent of PCB delineation is not complete with exceedances not yet bounded west of Coldbrook Creek.

Delineation of PCBs in surface water is complete in Coldbrook Creek with exceedances bounded between approximately 400 feet upstream and 1,670 feet downstream. Exceedances of the AWQS for PCBs were detected in surface water in the Wetland Area and the Drainage Swale. Comparisons of other COC concentrations in upstream surface water to previous results closer to the upstream outfall to Coldbrook Creek showed no exceedances of AWQS for VOCs, SVOCs, dissolved metals or cyanide.

The results of pathway analysis and criteria analysis steps of the FWIA indicate a complete exposure pathway between the Site and off-Site ecological receptors and exceedances of the appropriate numerical criteria in off-Site media.

TABLES

**TABLE 1A
SEDIMENT SAMPLING SUMMARY**

**Former Sperry Remington Site
Elmira, New York**

AREA	LOCATION	SAMPLES	DETAILS	DEPTH (inches)	ANALYZED FOR							RATIONALE
					VOCs	SVOCs	Pest	PCB	Metals	Cr VI	CN	
Coldbrook Creek	CBC-U0200-SED	CBC-U0200-SED-A	center of creek 200 ft upstream of the northern dishcharge culvert	0-6"	NA	X	NA	X	X	X	X	Upstream Sample
	CBC-U0200-SED	CBC-U0200-SED-B		6-12"	NA	X	NA	X	X	X	X	Upstream Sample
	CBC-U0200-SED	CBC-U0200-SED-C		12-24"	NA	X	X	X	X	X	X	Upstream Sample
	CBC-U0200-SED	CBC-U0200-SED-D		24-36"	NA	X	X	X	X	X	X	Upstream Sample
	CBC-U0400-SED	CBC-U0400-SED-A	center of creek 400 ft upstream of the northern dishcharge culvert	0-6"	NA	X	NA	X	X	X	X	Upstream Sample
	CBC-U0400-SED	CBC-U0400-SED-B		6-12"	NA	X	NA	X	X	X	X	Upstream Sample
	CBC-U0400-SED	CBC-U0400-SED-C		12-24"	NA	X	X	X	X	X	X	Upstream Sample
	CBC-U0400-SED	CBC-U0400-SED-D		24-36"	NA	X	X	X	X	X	X	Upstream Sample
	CBC-U0550-SED	CBC-U0550-SED-A	center of creek 550 ft upstream of the northern dishcharge culvert	0-6"	NA	X	NA	X	X	X	X	Upstream Sample
	CBC-U0550-SED	CBC-U0550-SED-B		6-12"	NA	X	NA	X	X	X	X	Upstream Sample
	CBC-U0550-SED	CBC-U0550-SED-C		12-24"	Not sampled due to refusal at 12'							Upstream Sample
	CBC-U0550-SED	CBC-U0550-SED-D		24-36"	Not sampled due to refusal at 12'							Upstream Sample
	CBC-1270-SED	CBC-1270-SED-A	center of creek 1270 ft downstream of the northern dishcharge culvert	0-6"	NA	NA	NA	X	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1270-SED	CBC-1270-SED-B		6-12"	H							Downgradient Extent of COCs in Coldbrook Creek
	CBC-1270-SED	CBC-1270-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1270-SED	CBC-1270-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1470-SED	CBC-1470-SED-A	center of creek 1470 ft downstream of the northern dishcharge culvert	0-6"	NA	NA	NA	X	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1470-SED	CBC-1470-SED-B		6-12"	H							Downgradient Extent of COCs in Coldbrook Creek
	CBC-1470-SED	CBC-1470-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1470-SED	CBC-1470-SED-D		24-36"	X	NA	NA	X	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1670-SED	CBC-1670-SED-A	center of creek 1670 ft downstream of the northern dishcharge culvert	0-6"	NA	NA	NA	X	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1670-SED	CBC-1670-SED-B		6-12"	H							Downgradient Extent of COCs in Coldbrook Creek
	CBC-1670-SED	CBC-1670-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1670-SED	CBC-1670-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
Drainage Swale	DS-006-L	DS-006-L-SED-A	left of DS-006	0-6"	NA	NA	NA	X	NA	NA	NA	Step out from DS-006 and DS-4+30-L
	DS-006-L	DS-006-L-SED-B		6-12"	NA	NA	NA	X	NA	NA	NA	Step out from DS-006 and DS-4+30-L
	DS-006-L	DS-006-L-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from DS-006 and DS-4+30-L
	DS-006-L	DS-006-L-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from DS-006 and DS-4+30-L

**TABLE 1A
SEDIMENT SAMPLING SUMMARY**

**Former Sperry Remington Site
Elmira, New York**

AREA	LOCATION	SAMPLES	DETAILS	DEPTH (inches)	ANALYZED FOR							RATIONALE
					VOCs	SVOCs	Pest	PCB	Metals	Cr VI	CN	
Wetland Area	WA-002-RR	WA-002-RR-SED-A	right of WA-002-R	0-6"	NA	NA	NA	X	NA	NA	NA	Step out from WA-002-R
	WA-002-RR	WA-002-RR-SED-B		6-12"	H							Step out from WA-002-R
	WA-002-RR	WA-002-RR-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from WA-002-R
	WA-002-RR	WA-002-RR-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from WA-002-R
	WA-005-LL	WA-005-LL-SED-A	left of WA-005-L	0-6"	NA	NA	NA	X	NA	NA	NA	Step out from WA-004-L and WA-005-L
	WA-005-LL	WA-005-LL-SED-B		6-12"	NA	NA	NA	X	NA	NA	NA	Step out from WA-004-L and WA-005-L
	WA-005-LL	WA-005-LL-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from WA-004-L and WA-005-L
	WA-005-LL	WA-005-LL-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from WA-004-L and WA-005-L
	WA-006-LL	WA-006-LL-SED-A	left of WA-006-L	0-6"	NA	NA	NA	X	NA	NA	NA	Step out from WA-006-L
	WA-006-LL	WA-006-LL-SED-B		6-12"	NA	NA	NA	X	NA	NA	NA	Step out from WA-006-L
	WA-006-LL	WA-006-LL-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from WA-006-L
	WA-006-LL	WA-006-LL-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from WA-006-L
	WA-006-RR	WA-006-RR-SED-A	right of WA-006-R	0-6"	NA	NA	NA	X	NA	NA	NA	Step out from WA-006-R
	WA-006-RR	WA-006-RR-SED-B		6-12"	NA	NA	NA	X	NA	NA	NA	Step out from WA-006-R
	WA-006-RR	WA-006-RR-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from WA-006-R
	WA-006-RR	WA-006-RR-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from WA-006-R
	WA-007-LL	WA-007-LL-SED-A	left of WA-007-L	0-6"	NA	NA	NA	X	NA	NA	NA	Step out from WA-007-L
	WA-007-LL	WA-007-LL-SED-B		6-12"	NA	NA	NA	X	NA	NA	NA	Step out from WA-007-L
	WA-007-LL	WA-007-LL-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from WA-007-L
	WA-007-LL	WA-007-LL-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from WA-007-L
	WA-010-R	WA-010-R-SED-A	right of WA-010	0-6"	NA	NA	NA	X	NA	NA	NA	Step out from WA-010
	WA-010-R	WA-010-R-SED-B		6-12"	H							Step out from WA-010
	WA-010-R	WA-010-R-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from WA-010
	WA-010-R	WA-010-R-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from WA-010
	WA-013-L	WA-013-L-SED-A	left of WA-013	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from WA-013
	WA-013-L	WA-013-L-SED-B		6-12"	NA	NA	NA	X	NA	NA	NA	Step out from WA-013
	WA-013-L	WA-013-L-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from WA-013
	WA-013-L	WA-013-L-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from WA-013

**TABLE 1A
SEDIMENT SAMPLING SUMMARY**

**Former Sperry Remington Site
Elmira, New York**

AREA	LOCATION	SAMPLES	DETAILS	DEPTH (inches)	ANALYZED FOR						RATIONALE	
					VOCs	SVOCs	Pest	PCB	Metals	Cr VI		CN
Wetland Area (continued)	WA-014-L	WA-014-L-SED-A	left of WA-014	0-6"	NA	NA	NA	X	NA	NA	NA	Step out from WA-014
	WA-014-L	WA-014-L-SED-B		6-12"	NA	NA	NA	X	NA	NA	NA	Step out from WA-014
	WA-014-L	WA-014-L-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from WA-014
	WA-014-L	WA-014-L-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from WA-014
	WA-015	WA-015-SED-A	south of WA-014	0-6"	NA	NA	NA	X	NA	NA	NA	Step out from WA-014
	WA-015	WA-015-SED-B		6-12"	NA	NA	NA	X	NA	NA	NA	Step out from WA-014
	WA-015	WA-015-SED-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from WA-014
	WA-015	WA-015-SED-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from WA-014

Notes:

CBC - Coldbrook Creek
SED - Sediment
ft - feet

VOC - Volatile organic compound
SVOC - Semivolatile organic compound
Cr VI - Hexavalent Chromium

Pest - Pesticide
PCB - Polychlorinated biphenyls
CN - Cyanide

X - Analyze
TBD - to be determined
NA - No Analysis

COC - Constituent of Concern
H - Held for Analysis

**TABLE 1B
SOIL SAMPLING SUMMARY**

**Former Sperry Remington Site
Elmira, New York**

AREA	LOCATION	SAMPLES	DETAILS	DEPTH (inches)	ANALYZED FOR							RATIONALE
					VOCs	SVOCs	Pest	PCB	Metals	Cr VI	CN	
Coldbrook Creek	CBC-0200-EE	CBC-0200-EE-SS-A	East of CBC-02+00-E	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from CBC-02+00-E
	CBC-0200-EE	CBC-0200-EE-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from CBC-02+00-E
	CBC-0200-EE	CBC-0200-EE-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from CBC-02+00-E
	CBC-0550-EE	CBC-0550-EE-SS-A	East of CBC-05+50-E	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from CBC-05+50-E
	CBC-0550-EE	CBC-0550-EE-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from CBC-05+50-E
	CBC-0550-EE	CBC-0550-EE-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from CBC-05+50-E
	CBC-0720-W	CBC-0720-W-SS-A	East of CBC-05+90-E	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from CBC-05+90-W
	CBC-0720-W	CBC-0720-W-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from CBC-05+90-W
	CBC-0720-W	CBC-0720-W-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from CBC-05+90-W
	CBC-1270-W	CBC-1270-W-SS-A	west of creek 1270 ft downstream of the northern discharge culvert	0-2"	NA	NA	NA	NA	X	NA	NA	Step out from CBC-10+70-W (Metals)
	CBC-1270-W	CBC-1270-W-SUB-C		12-24"	NA	NA	NA	NA	X	NA	NA	Step out from CBC-10+70-W (Metals)
	CBC-1270-W	CBC-1270-W-SUB-D		24-36"	NA	NA	NA	NA	X	NA	NA	Step out from CBC-10+70-W (Metals)
	CBC-1440-W	CBC-1440-W-SS-A	west of creek 1470 ft downstream of the northern discharge culvert	0-2"	NA	NA	NA	NA	X	NA	NA	Step out from CBC-10+70-W (Metals)
	CBC-1440-W	CBC-1440-W-SUB-C		12-24"	NA	NA	NA	NA	X	NA	NA	Step out from CBC-10+70-W (Metals)
	CBC-1440-W	CBC-1440-W-SUB-D		24-36"	NA	NA	NA	NA	X	NA	NA	Step out from CBC-10+70-W (Metals)
Drainage Swale	DS-000-LL	DS-000-LL-SS-A	left of DS-0+00-L	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from DS-0+00-L, WA-004-L and WA-005-L
	DS-000-LL	DS-000-LL-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from DS-0+00-L, WA-004-L and WA-005-L
	DS-000-LL	DS-000-LL-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from DS-0+00-L, WA-004-L and WA-005-L
	DS-000-RR	DS-000-RR-SS-A	right of DS-0+00-R	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from DS-0+00-R
	DS-000-RR	DS-000-RR-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from DS-0+00-R
	DS-000-RR	DS-000-RR-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from DS-0+00-R
	DS-004-L	DS-004-L-SS-A	left of DS-004	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from DS-004 and DS-02+90-L
	DS-004-L	DS-004-L-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from DS-004 and DS-02+90-L
	DS-004-L	DS-004-L-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from DS-004 and DS-02+90-L
	DS-050-R	DS-050-R-SS-A	right of drainage swale 50 ft from the culvert	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from DS-001
	DS-050-R	DS-050-R-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from DS-001
	DS-050-R	DS-050-R-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from DS-001
	DS-100-RR	DS-100-RR-SS-A	right of DS-1+00-R	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from DS-001 and DS-1+00-R
	DS-100-RR	DS-100-RR-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from DS-001 and DS-1+00-R
	DS-100-RR	DS-100-RR-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from DS-001 and DS-1+00-R
	DS-190-RR	DS-190-RR-SS-A	right of DS-1+90-R	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from DS-1+90-R
	DS-190-RR	DS-190-RR-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from DS-1+90-R
	DS-190-RR	DS-190-RR-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from DS-1+90-R
	DS-290-RR	DS-290-RR-SS-A	right of DS-2+90-R	0-2"	NA	NA	NA	X	NA	NA	NA	Step out from DS-2+90-R
	DS-290-RR	DS-290-RR-SUB-C		12-24"	NA	NA	NA	X	NA	NA	NA	Step out from DS-2+90-R
	DS-290-RR	DS-290-RR-SUB-D		24-36"	NA	NA	NA	X	NA	NA	NA	Step out from DS-2+90-R

**TABLE 1B
SOIL SAMPLING SUMMARY**

**Former Sperry Remington Site
Elmira, New York**

AREA	LOCATION	SAMPLES	DETAILS	DEPTH (inches)	ANALYZED FOR							RATIONALE
					VOCs	SVOCs	Pest	PCB	Metals	Cr VI	CN	
Railroad	RR-U0100	RR-U0100-SS-A	STCC property adjacent to Norfolk-Southern rail right-of- way 100 ft north of culvert	0-2"	NA	NA	NA	X	X	X	X	Source Evaluation
	RR-U0100	RR-U0100-SUB-C		12-24"	NA	X	X	X	X	X	X	Source Evaluation
	RR-U0100	RR-U0100-SUB-D		24-36"	NA	X	X	X	X	X	X	Source Evaluation
	RR-050	RR-050-SS-A	STCC property adjacent to Norfolk-Southern rail right-of- way 50 ft south of culvert	0-2"	NA	NA	NA	X	X	X	X	Source Evaluation
	RR-050	RR-050-SUB-C		12-24"	NA	X	X	X	X	X	X	Source Evaluation
	RR-050	RR-050-SUB-D		24-36"	NA	X	X	X	X	X	X	Source Evaluation
	RR-350	RR-350-SS-A	STCC property adjacent to Norfolk-Southern rail right-of- way 350 ft south of culvert	0-2"	NA	NA	NA	X	X	X	X	Source Evaluation
	RR-350	RR-350-SUB-C		12-24"	NA	X	X	X	X	X	X	Source Evaluation
	RR-350	RR-350-SUB-D		24-36"	NA	X	X	X	X	X	X	Source Evaluation
	RR-650	RR-650-SS-A	STCC property adjacent to Norfolk-Southern rail right-of- way 650 ft south of culvert	0-2"	NA	NA	NA	X	X	X	X	Source Evaluation
	RR-650	RR-650-SUB-C		12-24"	NA	X	X	X	X	X	X	Source Evaluation
	RR-650	RR-650-SUB-D		24-36"	NA	X	X	X	X	X	X	Source Evaluation

Notes:

DS - Drainage swale
CBC - Coldbrook Creek
WA - Wetland area
STCC - Southern Tier Commerical Center

VOC - Volatile organic compound
SVOC - Semivolatile organic compound
Cr VI - Hexavalent Chromium

Pest - Pesticide
PCB - Polychlorinated biphenyls
CN - Cyanide

X - Analyze
H - Laboratory Initial Hold
TBD - to be determined
NA - No Analysis

SS - Surface Soil
SUB - Subsurface Soil
E - East
W - West

R - Right, based on facing in the downstream direction
L - Left, based on facing in the downstream direction
ft - feet

**TABLE 1C
SURFACE WATER SAMPLING SUMMARY**

**Former Sperry Remington Site
Elmira, New York**

AREA	LOCATION	DETAILS	ANALYZED FOR								RATIONALE
			VOCs	SVOCs	Pest	PCB	Metals	Cr VI	CN	Hardness	
Coldbrook Creek	CBC-U0200-SW	center of creek 200 ft upstream of the northern discharge culvert	X	X	X	X	X	X	X	X	Upstream Sample
	CBC-U0400-SW	center of creek 400 ft upstream of the northern discharge culvert	X	X	X	X	X	X	X	X	Upstream Sample
	CBC-U0550-SW	center of creek 550 ft upstream of the northern discharge culvert	X	X	X	X	X	X	X	X	Upstream Sample
	CBC-00+20-SW	Immediately adjacent to the culvert	NA	NA	NA	X	NA	NA	NA	NA	Resampling for comparison to Phase 1 data and upstream and downstream samples
	CBC-00-20-SW	Immediately adjacent to the northern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Resampling for comparison to Phase 1 data and upstream and downstream samples
	CBC-05+90-SW	20 ft upstream of the northern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Resampling for comparison to Phase 1 data and upstream and downstream samples
	CBC-10+70-SW	20 ft downstream of the northern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Resampling for comparison to Phase 1 data and upstream and downstream samples
	CBC-1270-SW	center of creek 1270 ft downstream of the northern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1470-SW	center of creek 1470 ft downstream of the northern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek
	CBC-1670-SW	center of creek 1670 ft downstream of the northern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Downgradient Extent of COCs in Coldbrook Creek

**TABLE 1C
SURFACE WATER SAMPLING SUMMARY**

**Former Sperry Remington Site
Elmira, New York**

AREA	LOCATION	DETAILS	ANALYZED FOR								RATIONALE
			VOCs	SVOCs	Pest	PCB	Metals	Cr VI	CN	Hardness	
Drainage Swale	DS-0+00-SW	20 ft downstream of the southern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Resampling for comparison to Phase 1 data and upstream and downstream samples
	DS-5+60-SW	500 ft downstream of the southern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Resampling for comparison to Phase 1 data and upstream and downstream samples
Wetland Area	WA-003-SW	Halfway between the northern and southern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Resampling for comparison to Phase 1 data and upstream and downstream samples
	WA-007-SW	Immediately adjacent to the southern discharge culvert	NA	NA	NA	X	NA	NA	NA	NA	Resampling for comparison to Phase 1 data and upstream and downstream samples

Notes:

- Coldbrook Creek
SW - Surface Water
U - upstream
ft - feet

VOC - Volatile organic compound
SVOC - Semivolatile organic compound
Cr VI - Hexavalent Chromium

Pest - Pesticide
PCB - Polychlorinated biphenyls
CN - Cyanide

X - Analyze
NA - No Analysis
COC - Constituent of Concern

TABLE 2A
RI PHASE 2 SEDIMENT PCB DELINEATION

Former Sperry Remington Site
Elmira, New York

Area	Sample ID	Depth	Sample Date	Aroclor-1016		Aroclor-1221		Aroclor-1232		Aroclor-1242		Aroclor-1248		Aroclor-1254		Aroclor-1260		Aroclor-1262		Aroclor-1268		Total PCBs	Sediment Screening Criteria ¹			
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		Human Health	Wildlife	Benthic Aquatic Life Chronic Toxicity	Benthic Aquatic Life Acute Toxicity
Coldbrook Creek	CBC-U0200-SED-A	0-6"	7/25/2012	600 UJ	600	600 UJ	600	600 UJ	600	600 UJ	600	600 UJ	600	600 UJ	600	600 UJ	600	600 UJ	600	600 UJ	600	ND	0.047	78.7	1,102	157,420
	CBC-U0200-SED-B	6-12"	7/25/2012	5.0 UJ	5	5.0 UJ	5	5.0 UJ	5	5.0 UJ	5	5.0 UJ	5	85.0 J	5	5.0 UJ	5	5.0 UJ	5	5.0 UJ	5	85 J	0.047	78.7	1,102	157,420
	CBC-U0200-SED-C	12-24"	7/25/2012	3.8 U	3.8	3.8 U	3.8	3.8 U	3.8	3.8 U	3.8	3.8 U	3.8	43	3.8	3.8 U	3.8	3.8 U	3.8	3.8 U	3.8	43	0.047	78.7	1,102	157,420
	CBC-U0200-SED-D	24-36"	7/25/2012	4.9 UJ	4.9	4.9 UJ	4.9	4.9 UJ	4.9	4.9 UJ	4.9	4.9 UJ	4.9	41.0 J	4.9	4.9 UJ	4.9	4.9 UJ	4.9	4.9 UJ	4.9	41 J	0.047	78.7	1,102	157,420
	CBC-U0400-SED-A	0-6"	7/25/2012	590 UJ	590	590 UJ	590	590 UJ	590	590 UJ	590	590 UJ	590	590 UJ	590	590 UJ	590	590 UJ	590	590 UJ	590	ND	0.047	78.7	1,102	157,420
	CBC-U0400-SED-B	6-12"	7/25/2012	6.5 UJ	6.5	6.5 UJ	6.5	6.5 UJ	6.5	6.5 UJ	6.5	6.5 UJ	6.5	32.0 J	6.5	6.5 UJ	6.5	6.5 UJ	6.5	6.5 UJ	6.5	32 J	0.047	78.7	1,102	157,420
	CBC-U0400-SED-C	12-24"	7/25/2012	5.3 UJ	5.3	5.3 UJ	5.3	5.3 UJ	5.3	5.3 UJ	5.3	5.3 UJ	5.3	42.0 J	5.3	5.3 UJ	5.3	5.3 UJ	5.3	5.3 UJ	5.3	42 J	0.047	78.7	1,102	157,420
	CBC-U0400-SED-D	24-36"	7/25/2012	4.6 UJ	4.6	4.6 UJ	4.6	4.6 UJ	4.6	4.6 UJ	4.6	4.6 UJ	4.6	54.0 J	4.6	4.6 UJ	4.6	4.6 UJ	4.6	4.6 UJ	4.6	54 J	0.047	78.7	1,102	157,420
	CBC-U0550-SED-A	0-6"	7/31/2012	520 UJ	520	520 UJ	520	520 UJ	520	520 UJ	520	520 UJ	520	520 UJ	520	520 UJ	520	520 UJ	520	520 UJ	520	ND	0.047	78.7	1,102	157,420
	CBC-U0550-SED-B	6-12"	7/31/2012	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	21.0 J	3.2	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	21 J	0.047	78.7	1,102	157,420
	CBC-1270-SED-A	0-6"	7/25/2012	790 UJ	790	790 UJ	790	790 UJ	790	790 UJ	790	790 UJ	790	1200 J	790	790 UJ	790	790 UJ	790	790 UJ	790	1790 J	0.047	78.7	1,102	157,420
	CBC-1270-SED-C	12-24"	7/25/2012	44.0 UJ	44	44.0 UJ	44	44.0 UJ	44	44.0 UJ	44	44.0 UJ	44	1900 J	44	44.0 UJ	44	44.0 UJ	44	44.0 UJ	44	1900 J	0.047	78.7	1,102	157,420
	CBC-1270-SED-D	24-36"	7/25/2012	34.0 U	34	34.0 U	34	34.0 U	34	34.0 U	34	34.0 U	34	2100	34	34.0 U	34	34.0 U	34	34.0 U	34	2100	0.047	78.7	1,102	157,420
	CBC-1470-SED-A	0-6"	7/25/2012	850 UJ	850	850 UJ	850	850 UJ	850	850 UJ	850	850 UJ	850	1100 J	850	850 UJ	850	850 UJ	850	850 UJ	850	1620 J	0.047	78.7	1,102	157,420
	CBC-1470-SED-C	12-24"	7/25/2012	40.0 U	40	40.0 U	40	40.0 U	40	40.0 U	40	40.0 U	40	2600	40	40.0 U	40	40.0 U	40	40.0 U	40	2600	0.047	78.7	1,102	157,420
	CBC-1470-SED-D	24-36"	7/25/2012	38.0 U	38	38.0 U	38	38.0 U	38	38.0 U	38	38.0 U	38	2200	38	38.0 U	38	38.0 U	38	38.0 U	38	2200	0.047	78.7	1,102	157,420
	CBC-1670-SED-A	0-6"	7/25/2012	620 UJ	620	620 UJ	620	620 UJ	620	620 UJ	620	620 UJ	620	510 J	620	620 UJ	620	620 UJ	620	620 UJ	620	510 J	0.047	78.7	1,102	157,420
	CBC-1670-SED-C	12-24"	7/25/2012	35.0 U	35	35.0 U	35	35.0 U	35	35.0 U	35	35.0 U	35	2700	35	35.0 U	35	35.0 U	35	35.0 U	35	2700	0.047	78.7	1,102	157,420
	CBC-1670-SED-D	24-36"	7/25/2012	46.0 UJ	46	46.0 UJ	46	46.0 UJ	46	46.0 UJ	46	46.0 UJ	46	2900 J	46	46.0 UJ	46	46.0 UJ	46	46.0 UJ	46	2900 J	0.047	78.7	1,102	157,420
Drainage Swale	DS-006-L-SED-A	0-6"	7/25/2012	760 UJ	760	760 UJ	760	760 UJ	760	760 UJ	760	760 UJ	760	760 UJ	760	760 UJ	760	760 UJ	760	760 UJ	760	ND	0.047	78.7	1,102	157,420
	DS-006-L-SED-B	6-12"	7/25/2012	8.7 UJ	8.7	8.7 UJ	8.7	8.7 UJ	8.7	8.7 UJ	8.7	8.7 UJ	8.7	110 J	8.7	8.7 UJ	8.7	8.7 UJ	8.7	8.7 UJ	8.7	110 J	0.047	78.7	1,102	157,420
	DS-006-L-SED-C	12-24"	7/25/2012	4.4 UJ	4.4	4.4 UJ	4.4	4.4 UJ	4.4	4.4 UJ	4.4	4.4 UJ	4.4	4.4 UJ	4.4	4.4 UJ	4.4	4.4 UJ	4.4	4.4 UJ	4.4	ND	0.047	78.7	1,102	157,420
	DS-006-L-SED-D	24-36"	7/25/2012	6.2 UJ	6.2	6.2 UJ	6.2	6.2 UJ	6.2	6.2 UJ	6.2	6.2 UJ	6.2	12.0 J	6.2	6.2 UJ	6.2	6.2 UJ	6.2	6.2 UJ	6.2	12 J	0.047	78.7	1,102	157,420
Wetlands Area	WA-002-RR-SED-A	0-6"	7/25/2012	1000 UJ	1000	1000 UJ	1000	1000 UJ	1000	1000 UJ	1000	920 J	1000	690 J	1000	1000 UJ	1000	1000 UJ	1000	1000 UJ	1000	1610 J	0.047	78.7	1,102	157,420
	WA-002-RR-SED-C	12-24"	7/25/2012	3.5 U	3.5	3.5 U	3.5	3.5 U	3.5	3.5 U	3.5	3.5 U	3.5	9.5	3.5	3.5 U	3.5	3.5 U	3.5	3.5 U	3.5	9.5	0.047	78.7	1,102	157,420
	WA-002-RR-SED-D	24-36"	7/25/2012	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	20	3.6	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	20	0.047	78.7	1,102	157,420
	WA-005-LL-SED-A	0-6"	7/24/2012	740 UJ	740	740 UJ	740	740 UJ	740	740 UJ	740	740 UJ	740	740 UJ	740	740 UJ	740	740 UJ	740	740 UJ	740	ND	0.047	78.7	1,102	157,420
	WA-005-LL-SED-B	6-12"	7/24/2012	5.3 UJ	5.3	5.3 UJ	5.3	5.3 UJ	5.3	5.3 UJ	5.3	5.3 UJ	5.3	8.8 J	5.3	5.3 UJ	5.3	5.3 UJ	5.3	5.3 UJ	5.3	8.8 J	0.047	78.7	1,102	157,420
	WA-005-LL-SED-C	12-24"	7/24/2012	5.0 UJ	5	5.0 UJ	5	5.0 UJ	5	5.0 UJ	5	5.0 UJ	5	9.6 J	5	5.0 UJ	5	5.0 UJ	5	5.0 UJ	5	9.6 J	0.047	78.7	1,102	157,420
	WA-005-LL-SED-D	24-36"	7/24/2012	4.7 UJ	4.7	4.7 UJ	4.7	4.7 UJ	4.7	4.7 UJ	4.7	4.7 UJ	4.7	4.7 UJ	4.7	4.7 UJ	4.7	4.7 UJ	4.7	4.7 UJ	4.7	ND	0.047	78.7	1,102	157,420
	WA-006-LL-SED-A	0-6"	7/24/2012	370 U	370	370 U	370	370 U	370	370 U	370	370 U	370	370 U	370	370 U	370	370 U	370	370 U	370	ND	0.047	78.7	1,102	157,420
	WA-006-LL-SED-B	6-12"	7/24/2012	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	7.4	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	7.4	0.047	78.7	1,102	157,420
	WA-006-LL-SED-C	12-24"	7/24/2012	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	ND	0.047	78.7	1,102	157,420
	WA-006-LL-SED-D	24-36"	7/24/2012	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	ND	0.047	78.7	1,102	157,420
	WA-006-RR-SED-A	0-6"	7/27/2012	0.70 U	0.7	0.70 U	0.7	0.70 U	0.7	0.70 U	0.7	22	0.7	0.70 U	0.7	20	0.7	0.70 U	0.7	0.70 U	0.7	42	0.047	78.7	1,102	157,420
	WA-006-RR-SED-B	6-12"	7/27/2012	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	17	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	17	0.047	78.7	1,102	157,420
	WA-006-RR-SED-C	12-24"	7/27/2012	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.5 J	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.5 J	0.047	78.7	1,102	157,420
	WA-006-RR-SED-D	24-36"	7/27/2012	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	3.2	3	3.0 U	3	3.0 U	3	3.0 U	3	3.2	0.047	78.7	1,102	157,420

TABLE 2A
RI PHASE 2 SEDIMENT PCB DELINEATION

Former Sperry Remington Site
Elmira, New York

Area	Sample ID	Depth	Sample Date	Aroclor-1016		Aroclor-1221		Aroclor-1232		Aroclor-1242		Aroclor-1248		Aroclor-1254		Aroclor-1260		Aroclor-1262		Aroclor-1268		Total PCBs	Sediment Screening Criteria ¹			
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	Human Health	Wildlife	Benthic Aquatic Life Chronic Toxicity	Benthic Aquatic Life Acute Toxicity
Wetlands Area	WA-007-LL-SED-A	0-6"	7/24/2012	220 U	220	220 U	220	220 U	220	220 U	220	220 U	220	220 U	220	220 U	220	220 U	220	220 U	220	ND	0.047	78.7	1,102	157,420
	WA-007-LL-SED-B	6-12"	7/24/2012	2.7 U	2.7	2.7 U	2.7	2.7 U	2.7	2.7 U	2.7	2.7 U	2.7	5	2.7	2.7 U	2.7	2.7 U	2.7	2.7 U	2.7	5	0.047	78.7	1,102	157,420
	WA-007-LL-SED-C	12-24"	7/24/2012	2.6 U	2.6	2.6 U	2.6	2.6 U	2.6	2.6 U	2.6	2.6 U	2.6	2.6 U	2.6	2.6 U	2.6	2.6 U	2.6	2.6 U	2.6	ND	0.047	78.7	1,102	157,420
	WA-007-LL-SED-D	24-36"	7/24/2012	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	ND	0.047	78.7	1,102	157,420
	WA-010-R-SED-A	0-6"	7/25/2012	630 UJ	630	630 UJ	630	630 UJ	630	630 UJ	630	630 UJ	630	460 J	630	630 UJ	630	630 UJ	630	630 UJ	630	460 J	0.047	78.7	1,102	157,420
	WA-010-R-SED-C	12-24"	7/25/2012	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	8.3	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	8.3	0.047	78.7	1,102	157,420
	WA-010-R-SED-D	24-36"	7/25/2012	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	6.3	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	6.3	0.047	78.7	1,102	157,420
	WA-013-L-SED-A	0-2"	7/24/2012	800 UJ	800	800 UJ	800	800 UJ	800	800 UJ	800	800 UJ	800	800 UJ	800	800 UJ	800	800 UJ	800	800 UJ	800	ND	0.047	78.7	1,102	157,420
	WA-013-L-SED-B	6-12"	7/24/2012	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	3.6 U	3.6	ND	0.047	78.7	1,102	157,420
	WA-013-L-SED-C	12-24"	7/24/2012	3.3 U	3.3	3.3 U	3.3	3.3 U	3.3	3.3 U	3.3	3.3 U	3.3	3.3 UJ	3.3	3.3 U	3.3	3.3 U	3.3	3.3 U	3.3	ND	0.047	78.7	1,102	157,420
	WA-013-L-SED-D	24-36"	7/24/2012	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	ND	0.047	78.7	1,102	157,420
	WA-014-L-SED-A	0-6"	7/24/2012	380 UJ	380	380 UJ	380	380 UJ	380	380 UJ	380	380 UJ	380	380 UJ	380	380 UJ	380	380 UJ	380	380 UJ	380	ND	0.047	78.7	1,102	157,420
	WA-014-L-SED-B	6-12"	7/24/2012	3.5 U	3.5	3.5 U	3.5	3.5 U	3.5	3.5 U	3.5	3.5 U	3.5	15.0 J	3.5	3.5 U	3.5	3.5 U	3.5	3.5 U	3.5	15 J	0.047	78.7	1,102	157,420
	WA-014-L-SED-C	12-24"	7/24/2012	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.7 J	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.7 J	0.047	78.7	1,102	157,420
	WA-014-L-SED-D	24-36"	7/24/2012	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	3.2 U	3.2	ND	0.047	78.7	1,102	157,420
	WA-015-SED-A	0-6"	7/24/2012	330 U	330	330 U	330	330 U	330	330 U	330	330 U	330	330 U	330	330 U	330	330 U	330	330 U	330	ND	0.047	78.7	1,102	157,420
	WA-015-SED-B	6-12"	7/24/2012	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	13	3	3.0 U	3	3.0 U	3	3.0 U	3	13	0.047	78.7	1,102	157,420
	WA-015-SED-C	12-24"	7/24/2012	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	ND	0.047	78.7	1,102	157,420
	WA-015-SED-D	24-36"	7/24/2012	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	3.0 U	3	ND	0.047	78.7	1,102	157,420

Notes:

1

Sediment screening criteria are taken from Table 1 the *Technical Guidance for Screening Contaminated Sediments* (NYSDEC, 1999). Criteria are presented in the guidance per unit mass of organic carbon. The lower 95% confidence limit of total organic carbon concentrations in sediment reported in Phase 1 Data Report were used to convert the screening criteria to a per unit mass of sediment basis.

Sediment screening criteria that are exceeded are shaded.

2

All result are reported in units of micrograms per kilogram.

RL

Reporting Limit

ND

Not Detected

Data Qualifiers

J

Estimated

U

The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ

The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 2B
RI PHASE 2 SOIL PCB DELINEATION

Former Sperry Remington Site
Elmira, New York

Area	Sample ID	Depth	Sample Date	Aroclor-1016		Aroclor-1221		Aroclor-1232		Aroclor-1242		Aroclor-1248		Aroclor-1254		Aroclor-1260		Aroclor-1262		Aroclor-1268		Total PCBs	Unrestricted Use Soil Cleanup Objectives ¹	Restricted Use Soil Cleanup Objectives ^{2,3}
				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result		
Coldbrook Creek	CBC-0200-EE-SS-A	0-2"	7/26/2012	21.0 U	21	21.0 U	21	21.0 U	21	21.0 U	21	21.0 U	21	21.0 U	21	33.0 J	21	21.0 U	21	21.0 U	21	33 J	100	1,000
	CBC-0200-EE-SUB-C	12-24"	7/26/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	1,000
	CBC-0200-EE-SUB-D	24-36"	7/26/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	10,000
	CBC-0550-EE-SS-A	0-2"	7/26/2012	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	ND	100	1,000
	CBC-0550-EE-SUB-C	12-24"	7/26/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	1,000
	CBC-0550-EE-SUB-D	24-36"	7/26/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	10,000
	CBC-0720-W-SS-A	0-2"	7/26/2012	22.0 U	22	22.0 U	22	22.0 U	22	22.0 U	22	22.0 U	22	22.0 U	22	23.0 J	22	22.0 U	22	22.0 U	22	23 J	100	1,000
	CBC-0720-W-SUB-C	12-24"	7/26/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	1,000
Drainage Swale	CBC-0720-W-SUB-D	24-36"	7/26/2012	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	ND	100	10,000
	DS-000-LL-SS-A	0-2"	7/30/2012	260 U	260	260 U	260	260 U	260	260 U	260	100 J	260	160 J	260	260 U	260	260 U	260	260 U	260	260 J	100	1,000
	DS-000-LL-SUB-C	12-24"	7/30/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	1,000
	DS-000-LL-SUB-D	24-36"	7/30/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	10,000
	DS-000-RR-SS-A	0-2"	7/27/2012	19.0 U	19	19.0 U	19	19.0 U	19	36	19	19.0 U	19	19.0 U	19	26	19	19.0 U	19	19.0 U	19	62	100	1,000
	DS-000-RR-SUB-C	12-24"	7/27/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	1,000
	DS-000-RR-SUB-D	24-36"	7/27/2012	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	ND	100	10,000
	DS-004-L-SS-A	0-2"	7/30/2012	300 U	300	300 U	300	300 U	300	300 U	300	150 J	300	270 J	300	300 U	300	300 U	300	300 U	300	420 J	100	1,000
	DS-004-L-SUB-C	12-24"	7/30/2012	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	ND	100	1,000
	DS-004-L-SUB-D	24-36"	7/30/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	10,000
	DS-050-R-SS-A	0-2"	7/27/2012	21.0 U	21	21.0 U	21	21.0 U	21	23	21	21.0 U	21	21.0 U	21	24.0 J	21	21.0 U	21	21.0 U	21	47 J	100	1,000
	DS-050-R-SUB-C	12-24"	7/27/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	1,000
	DS-050-R-SUB-D	24-36"	7/27/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	10,000
	DS-100-RR-SS-A	0-2"	7/27/2012	22.0 U	22	22.0 U	22	22.0 U	22	22.0 U	22	22.0 U	22	22.0 U	22	22.0 U	22	22.0 U	22	22.0 U	22	ND	100	1,000
	DS-100-RR-SUB-C	12-24"	7/27/2012	19.0 U	19	19.0 U	19	19.0 U	19	44	19	19.0 U	19	19.0 U	19	32	19	19.0 U	19	19.0 U	19	76	100	1,000
	DS-100-RR-SUB-D	24-36"	7/27/2012	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	28	19	19.0 U	19	19.0 U	19	28	100	10,000
	DS-190-RR-SS-A	0-2"	7/27/2012	24.0 U	24	24.0 U	24	24.0 U	24	24.0 U	24	24.0 U	24	24.0 U	24	24.0 U	24	24.0 U	24	24.0 U	24	ND	100	1,000
	DS-190-RR-SUB-C	12-24"	7/27/2012	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	ND	100	1,000
	DS-190-RR-SUB-D	24-36"	7/27/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	10,000
	DS-290-RR-SS-A	0-2"	7/27/2012	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	20.0 U	20	28	20	20.0 U	20	20.0 U	20	28	100	1,000
	DS-290-RR-SUB-C	12-24"	7/27/2012	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	ND	100	1,000
	DS-290-RR-SUB-D	24-36"	7/27/2012	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	ND	100	10,000
Railroad	RR-U0100-SS-A	0-2"	7/31/2012	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	19.0 U	19	350	19	19.0 U	19	19.0 U	19	19.0 U	19	350	100	1,000
	RR-U0100-SUB-C	12-24"	7/31/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	ND	100	10,000
	RR-U0100-SUB-D	24-36"	7/31/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	47	18	18.0 U	18	18.0 U	18	18.0 U	18	47	100	10,000
	RR-050-SS-A	0-2"	7/31/2012	21.0 U	21	21.0 U	21	21.0 U	21	21.0 U	21	21.0 U	21	830	21	21.0 U	21	21.0 U	21	21.0 U	21	830	100	1,000
	RR-050-SUB-C	12-24"	7/31/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	140	18	18.0 U	18	18.0 U	18	18.0 U	18	140	100	10,000
	RR-050-SUB-D	24-36"	7/31/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	45	18	18.0 U	18	18.0 U	18	18.0 U	18	45	100	10,000
	RR-350-SS-A	0-2"	7/31/2012	21.0 U	21	21.0 U	21	21.0 U	21	21.0 U	21	21.0 U	21	290	21	21.0 U	21	21.0 U	21	21.0 U	21	290	100	1,000
	RR-350-SUB-C	12-24"	7/31/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	100	18	18.0 U	18	18.0 U	18	18.0 U	18	100	100	10,000
	RR-350-SUB-D	24-36"	7/31/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	73	18	18.0 U	18	18.0 U	18	18.0 U	18	73	100	10,000
	RR-650-SS-A	0-2"	7/31/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	460	18	18.0 U	18	18.0 U	18	18.0 U	18	460	100	1,000
Railroad	RR-650-SUB-C	12-24"	7/31/2012	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	18.0 U	18	220	18	18.0 U	18	18.0 U	18	18.0 U	18	220	100	10,000
	RR-650-SUB-D	24-36"	7/31/2012	17.0 U	17	17.0 U	17	17.0 U	17	17.0 U	17	17.0 U	17	170	17	17.0 U	17	17.0 U	17	17.0 U	17	170	100	10,000

Notes:

- Soil screening criteria are the Unrestricted Use Soil Cleanup Objectives presented in NYCRR Subpart 375-6.8a.
- Soil screening criteria are the Restricted Use Soil Cleanup Objectives presented in NYCRR Subpart 375-6.8b and CP-51 Soil Cleanup Guidance.
- Residential Restricted Soil Cleanup Objectives are applied to Coldbrook Creek and Drainage Swale soils. Commercial Restricted Use Soil Cleanup Objectives are applied to the Railroad soils. See text for details.

Soil screening criteria that are exceeded are shaded.

All result are reported in units of micrograms per kilogram.

RL Reporting Limit

ND Not Detected

Data Qualifiers:

J Estimated

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 2C
RI PHASE 2 SURFACE WATER PCB DELINEATION

Former Sperry Remington Site
Elmira, New York

Area	Sample ID	Sample Date	Aroclor-1016		Aroclor-1221		Aroclor-1232		Aroclor-1242		Aroclor-1248		Aroclor-1254		Aroclor-1260		Aroclor-1262		Aroclor-1268		Total PCBs	Surface Water Screening Criteria ¹	
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		Health (Fish Consumption)	Wildlife
Coldbrook Creek	CBC-U0550-SW	7/30/2012	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	ND	1.0E-06	1.2E-04
	CBC-U0400-SW	7/30/2012	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	ND	1.0E-06	1.2E-04
	CBC-U0200-SW	7/30/2012	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.016	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.016	1.0E-06	1.2E-04
	CBC-00-20-SW	7/31/2012	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.02	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.02	1.0E-06	1.2E-04
	CBC-00+20-SW	7/31/2012	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.17	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.17	1.0E-06	1.2E-04
	CBC-05+90-SW	7/30/2012	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.015	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.015	1.0E-06	1.2E-04
	CBC-10+70-SW	7/30/2012	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.011	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.011	1.0E-06	1.2E-04
	CBC-1270-SW	7/30/2012	0.0098 U	0.01	0.0098 U	0.01	0.0098 U	0.01	0.0098 U	0.01	0.014	0.01	0.0098 U	0.01	0.0098 U	0.01	0.0098 U	0.01	0.0098 U	0.01	0.014	1.0E-06	1.2E-04
	CBC-1470-SW	7/30/2012	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.013	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.013	1.0E-06	1.2E-04
	CBC-1670-SW	7/30/2012	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	0.0094 U	0.009	ND	1.0E-06	1.2E-04
Drainage Swale	DS-0+00-SW	7/31/2012	0.0096 U	0.01	0.0096 U	0.01	0.0096 U	0.01	0.0096 U	0.01	0.0096 U	0.01	0.0096 U	0.01	0.0096 U	0.01	0.0096 U	0.01	0.0096 U	0.01	ND	1.0E-06	1.2E-04
	DS-5+60-SW	7/31/2012	0.010 U	0.01	0.010 U	0.01	0.010 U	0.01	0.010 U	0.01	0.018	0.01	0.010 U	0.01	0.010 U	0.01	0.010 U	0.01	0.010 U	0.01	0.018	1.0E-06	1.2E-04
Wetland Area	WA-003-SW	7/31/2012	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.097	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.097	1.0E-06	1.2E-04
	WA-007-SW	7/31/2012	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	0.0095 U	0.01	ND	1.0E-06	1.2E-04

Notes:

- 1 Surface water screening criteria are the Ambient Water Quality Standards for Class “C” fresh surface waters presented in Division of Water Technical Operational Guidance Series (1.1.1).
Surface water screening criteria that are exceeded are shaded.
- 2 All result are reported in units of micrograms per liter
- RL Reporting Limit
- ND Not Detected

Data Qualifieres:

- J Estimated
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 3
RI PHASE 2 SOIL TAL METALS DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-10+70-W-SS-A		CBC-1270-W-SS-A		CBC-1440-W-SS-A		CBC-10+70-W-SUB-C		CBC-1270-W-SUB-C		CBC-1440-W-SUB-C		CBC-1270-W-SUB-D		CBC-1440-W-SUB-D		Unrestricted Use Soil Cleanup Objectives ¹
	Depth	0-2"		0-2"		0-2"		12-24"		12-24"		12-24"		24-36"		24-36"		
	Sample Date	3/10/2011		7/26/2012		7/26/2012		3/10/2011		7/26/2012		7/26/2012		7/26/2012		7/26/2012		
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	
Aluminum		11200	13.3	8500	25	8300	22	12200 J	12.7	9300	19	9100	21	10000	22	11000	25	--
Antimony		0.66 U	0.66	0.34 J	1.2	1.6	1.1	0.64 UJ	0.64	0.77 J	0.95	1.1 U	1.1	0.61 J	1.1	1.5	1.3	--
Arsenic		7.1	0.66	6.7	1.2	8.5	1.1	7.1	0.64	8.7	0.95	6.1	1.1	5.9	1.1	9.6	1.3	13
Barium		116	13.3	82	25	130	22	145 J	12.7	120	19	89	21	110	22	140	25	350
Beryllium		0.5	0.27	0.47 J	0.5	0.5	0.44	0.69	0.25	0.55	0.38	0.46	0.43	0.6	0.43	0.58	0.51	7.2
Cadmium		0.42 J	0.33	2.5 J	0.62	12	0.55	0.19 J	0.32	3.5	0.48	0.63	0.53	5.6	0.54	22	0.63	2.5
Calcium		1430 J	332	10000 B	620	7000 B	550	1430 J	319	17000 B	480	4200 B	530	4500 B	540	3700 B	630	--
Chromium		20.1 J	0.33	87.0 J	0.62	400	0.55	15.2 J	0.32	170	0.48	56	0.53	170	0.54	480	0.63	--
Cobalt		9.7	3.3	7.8	6.2	7.6	5.5	8.4 J	3.2	9.4	4.8	7.4	5.3	9.3	5.4	10	6.3	--
Copper		18.0 J	1.7	43	3.1	120	2.7	16.4 J	1.6	97	2.4	29	2.7	88	2.7	180	3.2	50
Iron		18200 J	6.6	15000 B	12	17000 B	11	21100 J	6.4	17000 B	9.5	16000 B	11	16000 B	11	21000 B	13	--
Lead		23.1	0.2	33	0.37	70	0.33	16.3 J	0.19	51	0.29	19	0.32	50	0.32	69	0.38	63
Magnesium		2510 J	332	3300 B	620	2700 B	550	2700 J	319	3500 B	480	3000 B	530	3100 B	540	2900 B	630	--
Manganese		410 J	0.99	260	1.9	260	1.6	439 J	0.96	280	1.4	200	1.6	130	1.6	220	1.9	1,600
Mercury		0.048	0.022	0.065	0.046	0.074	0.039	0.045	0.021	0.041	0.036	0.033 J	0.036	0.044	0.039	0.076	0.048	0.18
Nickel		34.5	2.7	190	5	490	4.4	19.6 J	2.5	400	3.8	110	4.3	360	4.3	750	5.1	30
Potassium		679	332	1300	620	740	550	623	319	730	480	690	530	830	540	730	630	--
Selenium		0.49	0.33	0.61 J	0.62	0.51 J	0.55	0.32 U	0.32	0.31 J	0.48	0.53 U	0.53	0.23 J	0.54	0.37 J	0.63	3.9
Silver		0.33 U	0.33	0.62 U	0.62	0.73	0.55	0.11 J	0.32	0.27 J	0.48	0.53 U	0.53	0.59	0.54	0.86	0.63	2
Sodium		332 U	332	620 U	620	550 U	550	30.3 J	319	480 U	480	530 U	530	540 U	540	630 U	630	--
Thallium		0.66 U	0.66	1.2 U	1.2	1.1 U	1.1	0.64 U	0.64	0.95 U	0.95	1.1 U	1.1	1.1 U	1.1	1.3 U	1.3	--
Vanadium		15.4 J	3.3	12	6.2	13	5.5	17.4 J	3.2	13	4.8	12	5.3	14	5.4	16	6.3	--
Zinc		62.7 J	1.3	170 B	2.5	610 B	2.2	65.4 J	1.3	250 B	1.9	110 B	2.1	300 B	2.2	1300 B	2.5	109

- Notes:
- 1

Soil screening criteria are the Unrestricted Use Soil Cleanup Objectives presented in NYCRR Subpart 375-6.8a.
Soil concentrations that exceed the soil screening criteria are shaded.
- 2

All result are reported in units of micrograms per kilogram.
- RL

Reporting Limit
- Data Qualifiers:
- J

Estimated
- U

The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ

The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- B

The analyte was detected in the method blank.

TABLE 4A
RI PHASE 2 UPSTREAM SEDIMENT SVOC DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-00+20-SED-A		CBC-00+00-SED-A		CBC-U0200-SED-A		CBC-U0400-SED-A		CBC-U0550-SED-A		CBC-U0200-SED-B		CBC-U0400-SED-B		CBC-U0550-SUB-B		Sediment Screening Criteria ¹		
	Depth	0-6"		0-6"		0-6"		0-6"		24-36"		6-12"		6-12"		6-12"		Human Health Bioaccumulation	Benthic Aquatic Life Chronic Toxicity	Benthic Aquatic Life Acute Toxicity
	Sample Date	3/19/2011		3/19/2011		7/25/2012		7/25/2012		7/31/2012		7/25/2012		7/25/2012		7/31/2012				
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL			
1,2,4,5-Tetrachlorobenzene		2900 U	2900	5500 U	5500	--	--	--	--	--	--	600 UJ	600	770 UJ	770	250 U	250	--	--	--
2,3,4,6-Tetrachlorophenol		2900 U	2900	5500 U	5500	--	--	--	--	--	--	600 UJ	600	770 UJ	770	250 U	250	--	--	--
2,4,5-Trichlorophenol		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
2,4,6-Trichlorophenol		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
2,4-Dichlorophenol		580 U	580	1100 U	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	120 UJ	120	160 UJ	160	51.0 U	51	--	--	--
2,4-Dimethylphenol		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
2,4-Dinitrophenol		15000 U	15000	29000 U	29000	10000 UJ	10000	11000 UJ	11000	770 UJ	770	3100 UJ	3100	3900 UJ	3900	1300 U	1300	--	--	--
2,4-Dinitrotoluene		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
2,6-Dinitrotoluene		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
2-Chloronaphthalene		580 U	580	1100 U	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	120 UJ	120	160 UJ	160	51.0 U	51	--	--	--
2-Chlorophenol		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
2-Methylnaphthalene		200 J	580	450 J	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	67.0 J	120	47.0 J	160	35.0 J	51	--	--	--
2-Methylphenol		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	1941	17349
2-Nitroaniline		15000 U	15000	29000 U	29000	10000 UJ	10000	11000 UJ	11000	770 UJ	770	3100 UJ	3100	3900 UJ	3900	1300 U	1300	--	--	--
2-Nitrophenol		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
3,3'-Dichlorobenzidine		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
3-Nitroaniline		15000 U	15000	29000 U	29000	10000 UJ	10000	11000 UJ	11000	770 UJ	770	3100 UJ	3100	3900 UJ	3900	1300 U	1300	--	--	--
4,6-Dinitro-2-methylphenol		15000 U	15000	29000 U	29000	10000 UJ	10000	11000 UJ	11000	770 UJ	770	3100 UJ	3100	3900 UJ	3900	1300 U	1300	--	--	--
4-Bromophenyl-phenylether		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
4-Chloro-3-methylphenol		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
4-Chloroaniline		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
4-Chlorophenyl-phenylether		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
4-Methylphenol						10000 UJ	10000	11000 UJ	11000	770 UJ	770	--	--	--	--	--	--	--	--	--
4-Nitroaniline		15000 U	15000	29000 U	29000	10000 UJ	10000	11000 UJ	11000	770 UJ	770	3100 UJ	3100	3900 UJ	3900	1300 U	1300	--	--	--
4-Nitrophenol		15000 U	15000	29000 U	29000	10000 UJ	10000	11000 UJ	11000	770 UJ	770	3100 UJ	3100	3900 UJ	3900	1300 U	1300	--	--	--
Acenaphthene		220 J	580	330 J	1100	5100 UJ	5100	5400 UJ	5400	13.0 J	400	120 UJ	120	28.0 J	160	26.0 J	51	--	7983	--
Acenaphthylene		330 J	580	410 J	1100	5100 UJ	5100	5400 UJ	5400	42.0 J	400	41.0 J	120	78.0 J	160	180	51	--	--	--
Acetophenone		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Anthracene		730	580	770 J	1100	5100 UJ	5100	5400 UJ	5400	55.0 J	400	55.0 J	120	86.0 J	160	150	51	--	6107	56247
Atrazine		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Benzaldehyde		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	800 J	600	1100 J	770	330	250	--	--	--

TABLE 4A
RI PHASE 2 UPSTREAM SEDIMENT SVOC DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-00+20-SED-A		CBC-00+00-SED-A		CBC-U0200-SED-A		CBC-U0400-SED-A		CBC-U0550-SED-A		CBC-U0200-SED-B		CBC-U0400-SED-B		CBC-U0550-SUB-B		Sediment Screening Criteria ¹		
	Depth	0-6"		0-6"		0-6"		0-6"		24-36"		6-12"		6-12"		6-12"		Human Health Bioaccumulation	Benthic Aquatic Life Chronic Toxicity	Benthic Aquatic Life Acute Toxicity
	Sample Date	3/19/2011		3/19/2011		7/25/2012		7/25/2012		7/31/2012		7/25/2012		7/25/2012		7/31/2012				
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL			
Benzo(a)anthracene		3500	580	2800	1100	5100 UJ	5100	5400 UJ	5400	260 J	400	290 J	120	280 J	160	410	51	75	697	5343
Benzo(a)pyrene		2600	580	2200	1100	610 J	5100	470 J	5400	300 J	400	450 J	120	340 J	160	590	51	75	--	--
Benzo(b)fluoranthene		3100	580	2500	1100	770 J	5100	580 J	5400	470 J	400	650 J	120	370 J	160	560	51	75	--	--
Benzo(g,h,i)perylene		1300	580	1500	1100	490 J	5100	350 J	5400	110 J	400	470 J	120	350 J	160	520	51	--	--	--
Benzo(k)fluoranthene		1800	580	1500	1100	450 J	5100	400 J	5400	160 J	400	120 UJ	120	180 J	160	210	51	75	--	--
Biphenyl		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
bis(2-Chloroethoxy) methane		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
bis(2-Chloroethyl) ether		580 U	580	1100 U	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	120 UJ	120	160 UJ	160	51.0 U	51	--	--	--
bis(2-chloroisopropyl) ether		580 U	580	1100 U	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	120 UJ	120	160 UJ	160	51.0 U	51	--	--	--
bis(2-Ethylhexyl) phthalate		5800 U	5800	3100 J	11000	5100 UJ	5100	5400 UJ	5400	400 UJ	400	1200 UJ	1200	150 J	1500	510 U	510	--	6826	--
Butylbenzylphthalate		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	93.0 J	600	770 UJ	770	250 U	250	--	--	--
Caprolactam		15000 U	15000	29000 U	29000	5100 UJ	5100	5400 UJ	5400	400 UJ	400	3100 UJ	3100	3900 UJ	3900	1300 U	1300	--	--	--
Carbazole		260 J	580	440 J	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	28.0 J	120	28.0 J	160	42.0 J	51	--	--	--
Chrysene		3700	580	3500	1100	5100 UJ	5100	5400 UJ	5400	290 J	400	390 J	120	350 J	160	460	51	75	--	--
Dibenzo(a,h)anthracene		1000	580	390 J	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	89.0 J	120	86.0 J	160	98	51	--	--	--
Dibenzofuran		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Diethylphthalate		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Dimethylphthalate		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Di-n-butylphthalate		370 J	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Di-n-octylphthalate		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Fluoranthene		4400	580	3900	1100	730 J	5100	610 J	5400	470 J	400	490 J	120	510 J	160	640	51	--	58161	--
Fluorene		290 J	580	490 J	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	37.0 J	120	43.0 J	160	51.0 U	51	--	466	4143
Hexachlorobenzene		580 U	580	1100 U	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	120 UJ	120	160 UJ	160	51.0 U	51	--	--	--
Hexachlorobutadiene		580 U	580	1100 U	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	120 UJ	120	160 UJ	160	51.0 U	51	--	--	--
Hexachlorocyclopentadiene		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Hexachloroethane		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Indeno(1,2,3-cd)pyrene		2000	580	1200	1100	420 J	5100	320 J	5400	100 J	400	390 J	120	290 J	160	410	51	75	--	--
Isophorone		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
m-Cresol & p-Cresol		2900 U	2900	5500 U	5500	--	--	--	--	--	--	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Naphthalene		180 J	580	390 J	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	60.0 J	120	59.0 J	160	46.0 J	51	--	1738	14704
Nitrobenzene		5800 U	5800	11000 U	11000	5100 UJ	5100	5400 UJ	5400	400 UJ	400	1200 UJ	1200	1500 UJ	1500	510 U	510	--	--	--
N-Nitroso-di-n-propylamine		580 U	580	1100 U	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	120 UJ	120	160 UJ	160	51.0 U	51	--	--	--
N-Nitrosodiphenylamine/Diphen		2900 U	2900	5500 U	5500	5100 UJ	5100	5400 UJ	5400	400 UJ	400	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Pentachlorophenol		2900 U	2900	5500 U	5500	10000 UJ	10000	11000 UJ	11000	770 UJ	770	600 UJ	600	770 UJ	770	250 U	250	--	--	--
Phenanthrene		1300	580	2400	1100	280 J	5100	5400 UJ	5400	200 J	400	220 J	120	250 J	160	340	51	--	6842	--
Phenol		580 U	580	1100 U	1100	5100 UJ	5100	5400 UJ	5400	400 UJ	400	120 UJ	120	160 UJ	160	51.0 U	51	--	--	--
Pyrene		5500	580	3500	1100	670 J	5100	610 J	5400	410 J	400	390 J	120	360 J	160	500	51	--	54801	500356

TABLE 4A
RI PHASE 2 UPSTREAM SEDIMENT SVOC DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-00+00-SUB-C		CBC-U0200-SED-C		CBC-U0400-SED-C		CBC-00-20-SED-D		CBC-U0200-SED-D		CBC-U0400-SED-D		Sediment Screening Criteria ¹		
	Depth	12-24"		12-24"		12-24"		24-36"		24-36"		24-36"		Human Health Bioaccumulation	Benthic Aquatic Life Chronic Toxicity	Benthic Aquatic Life Acute Toxicity
	Sample Date	3/19/2011		7/25/2012		7/25/2012		3/19/2011		7/25/2012		7/25/2012				
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL			
1,2,4,5-Tetrachlorobenzene		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
2,3,4,6-Tetrachlorophenol		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
2,4,5-Trichlorophenol		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
2,4,6-Trichlorophenol		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
2,4-Dichlorophenol		40.0 UJ	40	92.0 U	92	130 UJ	130	50.0 R	50	120 UJ	120	110 UJ	110	--	--	--
2,4-Dimethylphenol		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
2,4-Dinitrophenol		1000 UJ	1000	2300 R	2300	3200 UJ	3200	1300 R	1300	3000 UJ	3000	2800 UJ	2800	--	--	--
2,4-Dinitrotoluene		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
2,6-Dinitrotoluene		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
2-Chloronaphthalene		40.0 UJ	40	92.0 U	92	130 UJ	130	50.0 R	50	120 UJ	120	110 UJ	110	--	--	--
2-Chlorophenol		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
2-Methylnaphthalene		23.0 J	40	38.0 J	92	54.0 J	130	120 J	50	67.0 J	120	49.0 J	110	--	--	--
2-Methylphenol		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	1941	17349
2-Nitroaniline		1000 UJ	1000	2300 U	2300	3200 UJ	3200	1300 R	1300	3000 UJ	3000	2800 UJ	2800	--	--	--
2-Nitrophenol		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
3,3'-Dichlorobenzidine		200 UJ	200	450 UJ	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
3-Nitroaniline		1000 UJ	1000	2300 U	2300	3200 UJ	3200	1300 R	1300	3000 UJ	3000	2800 UJ	2800	--	--	--
4,6-Dinitro-2-methylphenol		1000 UJ	1000	2300 U	2300	3200 UJ	3200	1300 R	1300	3000 UJ	3000	2800 UJ	2800	--	--	--
4-Bromophenyl-phenylether		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
4-Chloro-3-methylphenol		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
4-Chloroaniline		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
4-Chlorophenyl-phenylether		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
4-Methylphenol				--	--	--	--			--	--	--	--	--	--	--
4-Nitroaniline		1000 UJ	1000	2300 U	2300	3200 UJ	3200	1300 R	1300	3000 UJ	3000	2800 UJ	2800	--	--	--
4-Nitrophenol		1000 UJ	1000	2300 U	2300	3200 UJ	3200	1300 R	1300	3000 UJ	3000	2800 UJ	2800	--	--	--
Acenaphthene		38.0 J	40	42.0 J	92	46.0 J	130	310 J	50	35.0 J	120	110 UJ	110	--	7983	--
Acenaphthylene		14.0 J	40	22.0 J	92	97.0 J	130	62.0 J	50	46.0 J	120	64.0 J	110	--	--	--
Acetophenone		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Anthracene		64.0 J	40	38.0 J	92	100 J	130	160 J	50	56.0 J	120	72.0 J	110	--	6107	56247
Atrazine		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Benzaldehyde		200 UJ	200	600 J	450	860 J	620	250 R	250	770 J	580	740 J	540	--	--	--

TABLE 4A
RI PHASE 2 UPSTREAM SEDIMENT SVOC DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-00+00-SUB-C		CBC-U0200-SED-C		CBC-U0400-SED-C		CBC-00-20-SED-D		CBC-U0200-SED-D		CBC-U0400-SED-D		Sediment Screening Criteria ¹		
	Depth	12-24"		12-24"		12-24"		24-36"		24-36"		24-36"		Human Health Bioaccumulation	Benthic Aquatic Life Chronic Toxicity	Benthic Aquatic Life Acute Toxicity
	Sample Date	3/19/2011		7/25/2012		7/25/2012		3/19/2011		7/25/2012		7/25/2012				
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL			
Benzo(a)anthracene		160 J	40	170	92	360 J	130	830 J	50	280 J	120	210 J	110	75	697	5343
Benzo(a)pyrene		230 J	40	290 J	92	390 J	130	1500 J	50	410 J	120	240 J	110	75	--	--
Benzo(b)fluoranthene		310 J	40	290 J	92	570 J	130	1900 J	50	600 J	120	350 J	110	75	--	--
Benzo(g,h,i)perylene		200 J	40	350 J	92	450 J	130	1500 J	50	480 J	120	260 J	110	--	--	--
Benzo(k)fluoranthene		40.0 UJ	40	130	92	130 UJ	130	50.0 R	50	120 UJ	120	110 UJ	110	75	--	--
Biphenyl		200 UJ	200	450 U	450	620 UJ	620	40.0 J	250	580 UJ	580	540 UJ	540	--	--	--
bis(2-Chloroethoxy) methane		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
bis(2-Chloroethyl) ether		40.0 UJ	40	92.0 U	92	130 UJ	130	50.0 R	50	120 UJ	120	110 UJ	110	--	--	--
bis(2-chloroisopropyl) ether		40.0 UJ	40	92.0 U	92	130 UJ	130	50.0 R	50	120 UJ	120	110 UJ	110	--	--	--
bis(2-Ethylhexyl) phthalate		61.0 J	400	910 U	910	1300 UJ	1300	550 J	500	170 J	1200	1100 UJ	1100	--	6826	--
Butylbenzylphthalate		200 UJ	200	450 U	450	620 UJ	620	250 R	250	89.0 J	580	540 UJ	540	--	--	--
Caprolactam		1000 UJ	1000	2300 U	2300	3200 UJ	3200	1300 R	1300	3000 UJ	3000	2800 UJ	2800	--	--	--
Carbazole		24.0 J	40	23.0 J	92	37.0 J	130	76.0 J	50	26.0 J	120	110 UJ	110	--	--	--
Chrysene		180 J	40	230 J	92	390 J	130	950 J	50	370 J	120	300 J	110	75	--	--
Dibenzo(a,h)anthracene		43.0 J	40	92	92	110 J	130	300 J	50	100 J	120	65.0 J	110	--	--	--
Dibenzofuran		36.0 J	200	450 U	450	620 UJ	620	77.0 J	250	580 UJ	580	540 UJ	540	--	--	--
Diethylphthalate		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Dimethylphthalate		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Di-n-butylphthalate		26.0 J	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Di-n-octylphthalate		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Fluoranthene		270 J	40	260	92	560 J	130	1400 J	50	450 J	120	380 J	110	--	58161	--
Fluorene		34.0 J	40	23.0 J	92	41.0 J	130	80.0 J	50	29.0 J	120	46.0 J	110	--	466	4143
Hexachlorobenzene		40.0 UJ	40	92.0 U	92	130 UJ	130	50.0 R	50	120 UJ	120	110 UJ	110	--	--	--
Hexachlorobutadiene		40.0 UJ	40	92.0 U	92	130 UJ	130	50.0 R	50	120 UJ	120	110 UJ	110	--	--	--
Hexachlorocyclopentadiene		200 UJ	200	450 R	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Hexachloroethane		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Indeno(1,2,3-cd)pyrene		160 J	40	240 J	92	340 J	130	1200 J	50	360 J	120	200 J	110	75	--	--
Isophorone		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
m-Cresol & p-Cresol		200 UJ	200	450 U	450	620 UJ	620	57.0 J	250	580 UJ	580	57.0 J	540	--	--	--
Naphthalene		28.0 J	40	35.0 J	92	81.0 J	130	120 J	50	74.0 J	120	62.0 J	110	--	1738	14704
Nitrobenzene		400 UJ	400	910 U	910	1300 UJ	1300	500 R	500	1200 UJ	1200	1100 UJ	1100	--	--	--
N-Nitroso-di-n-propylamine		40.0 UJ	40	92.0 U	92	130 UJ	130	50.0 R	50	120 UJ	120	110 UJ	110	--	--	--
N-Nitrosodiphenylamine/Diphenyl		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Pentachlorophenol		200 UJ	200	450 U	450	620 UJ	620	250 R	250	580 UJ	580	540 UJ	540	--	--	--
Phenanthrene		210 J	40	140	92	320 J	130	620 J	50	190 J	120	200 J	110	--	6842	--
Phenol		40.0 UJ	40	92.0 U	92	130 UJ	130	50.0 R	50	120 UJ	120	110 UJ	110	--	--	--
Pyrene		200 J	40	240	92	460 J	130	900 J	50	350 J	120	280 J	110	--	54801	500356

Notes:

1 Sediment screening criteria are taken from Table 1 the *Technical Guidance for Screening Contaminated Sediments* (NYSDEC, 1999). Criteria are presented in the guidance per unit mass of organic carbon. The lower 95% confidence limit of total organic carbon concentrations in sediment reported in Phase 1 Data Report were used to convert the screening criteria to a per unit mass of sediment based on the sediment organic carbon content.

2 All result are reported in units of micrograms per kilogram.

RL Reporting Limit

ND Not Detected

Data Qualifiers:

J Estimated

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 4B
RI PHASE 2 UPSTREAM SEDIMENT PESTICIDE DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-00+00-SUB-C		CBC-U0200-SED-C		CBC-U0400-SED-C		CBC-00-20-SED-D		CBC-U0200-SED-D		CBC-U0400-SED-D		Sediment Screening Criteria ¹			
	Depth	12-24"		12-24"		12-24"		24-36"		24-36"		24-36"		Human Health Bioaccumulation	Wildlife Bioaccumulation	Benthic Aquatic Life Chronic Toxicity	Benthic Aquatic Life Acute Toxicity
	Sample Date	3/19/2011		7/25/2012		7/25/2012		3/19/2011		7/25/2012		7/25/2012					
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL				
4,4'-DDD		4.9 J	10	1.7 J	1.5	2.3 J	2.1	6.2 R	6.2	2.6 J	2	1.8 U	1.8	0.57	57.02	--	--
4,4'-DDE		10.0 UJ	10	2.1 J	1.5	8.2 J	2.1	25.0 J	6.2	3.1 J	2	4.4 J	1.8	0.57	57.02	--	--
4,4'-DDT		10.0 UJ	10	0.29 J	1.5	2.1 UJ	2.1	6.2 R	6.2	1.1 J	2	1.8 UJ	1.8	0.57	57.02	57.02	62,722
Aldrin		10.0 UJ	10	1.5 UJ	1.5	2.1 UJ	2.1	6.2 R	6.2	0.52 J	2	1.8 UJ	1.8	5.70	43.91	--	--
alpha-BHC		10.0 UJ	10	1.5 UJ	1.5	2.1 UJ	2.1	6.2 R	6.2	2.0 UJ	2	1.8 UJ	1.8	3.24	82.75	3.60	719.55
alpha-Chlordane		10.0 UJ	10	1.5 UJ	1.5	0.84 J	2.1	6.2 R	6.2	0.40 J	2	1.8 UJ	1.8	--	--	--	--
beta-BHC		4.4 J	10	1.5 UJ	1.5	2.1 UJ	2.1	6.2 R	6.2	2.0 UJ	2	1.5 J	1.8	--	--	--	--
Chlordane		100 UJ	100	15.0 U	15	21.0 UJ	21	62.0 R	62	20.0 UJ	20	18.0 UJ	18	0.07	0.34	1.48	82.46
delta-BHC		6.5 J	10	1.5 UJ	1.5	2.1 UJ	2.1	41.0 J	6.2	0.37 J	2	1.8 UJ	1.8	3.24	82.75	3.60	719.55
Dieldrin		10.0 UJ	10	1.5 UJ	1.5	0.40 J	2.1	6.2 R	6.2	2.0 UJ	2	1.8 UJ	1.8	5.70	43.91	513.18	--
Endosulfan I		10.0 UJ	10	1.5 UJ	1.5	2.1 UJ	2.1	30.0 J	6.2	2.0 UJ	2	1.8 UJ	1.8	--	--	1.82	44.51
Endosulfan II		10.0 UJ	10	1.5 UJ	1.5	2.1 UJ	2.1	10.0 J	6.2	2.0 UJ	2	1.8 UJ	1.8	--	--	1.82	44.51
Endosulfan sulfate		1.6 J	10	1.5 UJ	1.5	2.1 UJ	2.1	6.2 R	6.2	2.0 UJ	2	1.8 UJ	1.8	--	--	--	--
Endrin		10.0 UJ	10	0.37 J	1.5	0.72 J	2.1	25.0 J	6.2	0.86 J	2	0.52 J	1.8	45.40	43.13	228.08	--
Endrin aldehyde		10.0 UJ	10	1.5 R	1.5	2.1 UJ	2.1	6.2 R	6.2	2.0 UJ	2	1.8 UJ	1.8	--	--	--	--
Endrin ketone		10.0 UJ	10	1.5 UJ	1.5	0.34 J	2.1	7.5 J	6.2	0.37 J	2	1.8 UJ	1.8	--	--	--	--
gamma-BHC (Lindane)		3.5 J	10	1.5 UJ	1.5	2.1 UJ	2.1	7.5 J	6.2	2.0 UJ	2	1.8 UJ	1.8	3.24	82.75	3.60	719.55
gamma-Chlordane		15.0 J	10	0.73 J	1.5	2.1 UJ	2.1	6.2 R	6.2	1.2 J	2	1.1 J	1.8	--	--	--	--
Heptachlor		7.9 J	10	1.5 UJ	1.5	2.1 UJ	2.1	39.0 J	6.2	2.0 UJ	2	1.8 UJ	1.8	0.04	1.43	5.44	744.79
Heptachlor epoxide		5.8 J	10	1.5 UJ	1.5	2.1 NJ	2.1	130 J	6.2	2.3 J	2	0.65 J	1.8	0.04	1.43	5.44	744.79
Methoxychlor		9.8 J	19	0.82 J	3	4.2 UJ	4.2	12.0 R	12	0.61 J	3.9	0.55 J	3.6	--	--	34.13	--
Toxaphene		400 UJ	400	61.0 U	61	84.0 UJ	84	250 R	250	78.0 UJ	78	73.0 UJ	73	--	--	--	--

Notes:

1 Sediment screening criteria are taken from Table 1 the *Technical Guidance for Screening Contaminated Sediments* (NYSDEC, 1999). Criteria are presented in the guidance per unit mass of organic carbon. The lower 95% confidence limit of total organic carbon concentrations in sediment reported in Phase 1 Data Report were used to convert the screening criteria to a per unit mass of sediment basis.

2 All result are reported in units of micrograms per kilogram.

RL Reporting Limit

ND Not Detected

Data Qualifiers:

J Estimated

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 4C
RI PHASE 2 UPSTREAM SEDIMENT DELINEATION OF METALS AND OTHERS

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-00+20-SED-A		CBC-00+00-SED-A		CBC-00-20-SED-A		CBC-U0200-SED-A		CBC-U0400-SED-A		CBC-U0550-SED-A		CBC-U0200-SED-B		CBC-U0400-SED-B		CBC-U0550-SUB-B		Sediment Screening Criteria ¹	
	Depth	0-6"		0-6"		0-6"		0-6"		0-6"		0-6"		6-12"		6-12"		6-12"		Lowest Effect Level	Severe Effect Level
	Sample Date	3/19/2011		3/19/2011		3/19/2011		7/25/2012		7/25/2012		7/31/2012		7/25/2012		7/25/2012		7/31/2012			
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		
Metals	Aluminum	3810	16.7	8820	32.4	7040	33.5	7900	29	6900	33	7300 J	22	6500 J	23	7000 J	30	8500	14	--	--
	Antimony	0.97	0.83	4	1.6	0.62 J	1.7	43.0 U	43	50.0 U	50	33.0 UJ	33	0.31 J	1.1	0.90 J	1.5	0.64 J	0.68	2	25
	Arsenic	5.8	0.83	14.7	1.6	5.7	1.7	7	5.8	6.4 J	6.7	5.3 J	4.4	4.6 J	1.1	3.8 J	1.5	6.5	0.68	6	33
	Barium	158	16.7	481	32.4	149	33.5	120	1.4	130	1.7	130 J	1.1	110 J	23	140 J	30	95	14	--	--
	Beryllium	0.33	0.33	0.91	0.65	0.38 J	0.67	0.49 J	0.58	0.40 J	0.67	0.40 J	0.44	0.45 U	0.45	0.60 U	0.6	0.46	0.27	--	--
	Cadmium	6.7 J	0.42	25.7 J	0.81	3.8 J	0.84	1.2	0.58	1.1	0.67	0.71 J	0.44	0.71 J	0.57	0.78 J	0.75	0.31 J	0.34	0.6	9
	Calcium	2810 J	417	7010 J	811	18900 J	837	30000 B	140	52000 B	170	63000 J	110	21000 J	570	53000 J	750	11000 B	340	--	--
	Chromium	290 J	0.42	995 J	0.81	133 J	0.84	28	1.4	18	1.7	15.0 J	1.1	23.0 J	0.57	16.0 J	0.75	13	0.34	26	110
	Cobalt	5.5	4.2	15	8.1	7.9 J	8.4	7.4	1.4	5.6	1.7	6.6 J	1.1	6.9 J	5.7	6.0 J	7.5	7.9	3.4	--	--
	Copper	199 J	2.1	652 J	4.1	124 J	4.2	120	2.9	98	3.3	110 J	2.2	94.0 J	2.8	87.0 J	3.7	350 B	1.7	16	110
	Iron	21800 J	8.3	20100 J	16.2	16500 J	16.7	20000 B	29	17000 B	33	15000 J	22	16000 J	11	17000 J	15	16000 B	6.8	20000	40,000
	Lead	125	0.25	407	0.49	106	0.5	120	2.9	120	3.3	91.0 J	2.2	93.0 J	0.34	120 J	0.45	110	0.21	31	110
	Magnesium	1150	417	2350	811	2170	837	2500	58	2500	67	2800 J	44	1900 J	570	2400 J	750	2600 B	340	--	--
	Manganese	107	1.3	174	2.4	408	2.5	400	0.58	330	0.67	350 J	0.44	310 J	1.7	370 J	2.2	310	1	460	1,100
	Mercury	0.10 J	0.029	0.33 J	0.056	0.14 J	0.06	0.16	0.055	0.14	0.053	0.069 J	0.048	0.11 J	0.038	0.18 J	0.051	0.13	0.025	0.15	1.3
	Nickel	487 J	3.3	2350 J	13	287 J	6.7	100	14	35	17	27.0 J	11	93.0 J	4.5	33.0 J	6	26	2.7	16	50
	Potassium	336 J	417	699 J	811	796 J	837	930	87	850	100	850 J	67	770 J	570	850 J	750	800 B	340	--	--
	Selenium	0.72	0.42	2	0.81	1.4	0.84	2.8 J	12	1.9 J	13	8.9 UJ	8.9	2.0 J	0.57	1.5 J	0.75	0.59	0.34	--	--
	Silver	1.2	0.42	4.7	0.81	0.51 J	0.84	1.4 U	1.4	1.7 U	1.7	1.1 UJ	1.1	0.39 J	0.57	0.17 J	0.75	0.34 U	0.34	1	2.2
	Sodium	145 J	417	327 J	811	291 J	837	280 J	410	250 J	470	210 J	310	570 U	570	750 U	750	340 U	340	--	--
	Thallium	0.31 J	0.83	0.77 J	1.6	1.7 U	1.7	17.0 U	17	20.0 U	20	13.0 UJ	13	0.41 J	1.1	0.61 J	1.5	0.37 J	0.68	--	--
	Vanadium	9.1	4.2	20.3	8.1	13.2	8.4	15	1.4	12	1.7	12.0 J	1.1	12.0 J	5.7	12.0 J	7.5	14	3.4	--	--
	Zinc	323 J	1.7	1400 J	3.2	389 J	3.3	470	5.8	470	6.7	370 J	4.4	320 J	2.3	420 J	3	170 B	1.4	120	270
Cr VI	Chromium, hexavalent			5400 J	1400			5.9 U	5.9	6.3 U	6.3	1.2 UJ	1.2	0.96 UJ	0.96	1.2 UJ	1.2	0.19 J	0.62	--	--
CN	Cyanide	9800	430	38000	840	9500	910	1.7 J	2.8	1.1 J	2.3	2.0 UJ	2	1.3 J	0.61	0.93 J	0.78	0.38 U	0.38	--	--

Notes:

1 Sediment screening criteria are taken from Table 1 the *Technical Guidance for Screening Contaminated Sediments* (NYSDEC, 1999).

2 All result are reported in units of micrograms per kilogram.

RL Reporting Limit

ND Not Detected

Data Qualifiers:

J Estimated

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B The analyte was detected in the method blank.

TABLE 4C
RI PHASE 2 UPSTREAM SEDIMENT DELINEATION OF METALS AND OTHERS

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-00+20-SUB-C		CBC-00+00-SUB-C		CBC-00-20-SED-C		CBC-U0200-SED-C		CBC-U0400-SED-C		CBC-00+20-SUB-D		CBC-00-20-SED-D		CBC-U0200-SED-D		CBC-U0400-SED-D		Sediment Screening Criteria ¹	
	Depth	12-24"		12-24"		12-24"		12-24"		12-24"		24-36"		24-36"		24-36"		24-36"		Lowest Effect Level	Severe Effect Level
	Sample Date	3/19/2011		3/19/2011		3/19/2011		7/25/2012		7/25/2012		3/19/2011		3/19/2011		7/25/2012		7/25/2012			
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		
Metals	Aluminum	4820	24.4	4880	20.9	8890	17	6200	18	10000 J	23	4440	21.8	7370 J	13.7	6600 J	23	8500 J	20	--	--
	Antimony	0.38 J	1.2	0.64 J	1	0.52 J	0.85	0.25 J	0.89	0.71 J	1.1	1.1 U	1.1	0.39 J	0.68	0.46 J	1.1	0.48 J	1	2	25
	Arsenic	4.1	1.2	3.3	1	5.2 J	0.85	3.1	0.89	6.9 J	1.1	5.3	1.1	3.9	0.68	4.0 J	1.1	7.0 J	1	6	33
	Barium	37.5	24.4	29.8	20.9	104	17	80	18	180 J	23	34.3	21.8	93.4 J	13.7	94.0 J	23	170 J	20	--	--
	Beryllium	0.23 J	0.49	0.22 J	0.42	0.5	0.34	0.38	0.36	0.57 J	0.45	0.44 U	0.44	0.58 J	0.27	0.45 U	0.45	0.51 J	0.4	--	--
	Cadmium	2	0.61	0.46 J	0.52	0.91	0.43	0.5	0.45	0.88 J	0.57	0.9	0.55	1.9	0.34	0.69 J	0.57	0.92 J	0.5	0.6	9
	Calcium	8530 J	610	36700 J	524	12900 J	426	14000 J	450	35000 J	570	3670	545	3310 J	342	19000 J	570	17000 J	500	--	--
	Chromium	62	0.61	32.7	0.52	43.8	0.43	18	0.45	24.0 J	0.57	33.1	0.55	88.8	0.34	22.0 J	0.57	24.0 J	0.5	26	110
	Cobalt	6.0 J	6.1	4.4 J	5.2	8.1	4.3	5.5	4.5	8.5 J	5.7	4.2 J	5.5	6.4	3.4	6.3 J	5.7	7.2 J	5	--	--
	Copper	75.7	3	132	2.6	81.7 J	2.1	67.0 J	2.2	110 J	2.8	68.0 J	2.7	87.3	1.7	86.0 J	2.8	96.0 J	2.5	16	110
	Iron	17900 J	12.2	14400 J	10.5	19100 J	8.5	13000 J	8.9	21000 J	11	21300	10.9	14900	6.8	16000 J	11	18000 J	10	20000	40,000
	Lead	34	0.37	27.8	0.31	83.8	0.26	78.0 J	0.27	170 J	0.34	22.5	0.33	62.3	0.2	91.0 J	0.34	150 J	0.3	31	110
	Magnesium	1840 J	610	20200 J	524	2480	426	1700 B	450	2900 J	570	1940	545	2170	342	1900 J	570	2300 J	500	--	--
	Manganese	178	1.8	342	1.6	510	1.3	260	1.3	440 J	1.7	286	1.6	168	1	370 J	1.7	320 J	1.5	460	1,100
	Mercury	0.034 J	0.045	0.023 J	0.038	0.11	0.029	0.1	0.03	0.29 J	0.041	0.039 U	0.039	0.090 J	0.025	0.15 J	0.038	0.19 J	0.036	0.15	1.3
	Nickel	89.7	4.9	84.3	4.2	86.5	3.4	53	3.6	62.0 J	4.5	45.9	4.4	189	2.7	72.0 J	4.5	58.0 J	4	16	50
	Potassium	373 J	610	300 J	524	723	426	650 B	450	1000 J	570	379 J	545	503	342	760 J	570	820 J	500	--	--
	Selenium	0.61 J	0.61	0.52 U	0.52	0.7	0.43	1.1	0.45	1.3 J	0.57	0.31 J	0.55	0.34 U	0.34	1.4 J	0.57	1.1 J	0.5	--	--
	Silver	0.16 J	0.61	0.11 J	0.52	0.21 J	0.43	0.18 J	0.45	0.44 J	0.57	0.55 U	0.55	0.35	0.34	0.25 J	0.57	0.36 J	0.5	1	2.2
	Sodium	81.5 J	610	99.6 J	524	153 J	426	450 U	450	570 U	570	81.9 J	545	95.2 J	342	570 U	570	500 U	500	--	--
	Thallium	1.2 U	1.2	0.26 J	1	0.85 U	0.85	0.45 J	0.89	0.58 J	1.1	1.1 U	1.1	0.68 U	0.68	0.44 J	1.1	0.50 J	1	--	--
	Vanadium	9.2	6.1	7.5	5.2	14.8	4.3	12	4.5	16.0 J	5.7	9	5.5	12.4	3.4	13.0 J	5.7	14.0 J	5	--	--
	Zinc	112	2.4	79.9	2.1	175 J	1.7	180 J	1.8	320 J	2.3	93.7 J	2.2	177	1.4	280 J	2.3	280 J	2	120	270
Cr VI	Chromium, hexavalent			2200 J	460			0.72 UJ	0.72	1.0 UJ	1					0.95 UJ	0.95	0.89 UJ	0.89	--	--
CN	Cyanide	210 J	680	5700 J	570	450 J	440	0.45 J	0.46	0.86 J	0.63	390 J	590	300 J	370	0.60 J	0.58	0.89 J	0.55	--	--

Notes:

1 Sediment screening criteria are taken from Table 1 the *Technical Guidance for Screening Contaminated Sediments* (NYSDEC, 1999).

2 All result are reported in units of micrograms per kilogram.

RL Reporting Limit

ND Not Detected

Data Qualifiers:

J Estimated

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B The analyte was detected in the method blank.

TABLE 5A
RI PHASE 2 SURFACE WATER VOC DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-U0200-SW		CBC-U0400-SW		CBC-U0550-SW		CBC-00+20-SW-Spr		CBC-00-20-SW-Spr	
	Sample Date	7/30/2012		7/30/2012		7/30/2012		3/8/2011		3/8/2011	
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
1,1,1-Trichloroethane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,1,2,2-Tetrachloroethane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,1,2-Trichloroethane		5.0 U	5	4.0 J	5	5.0 U	5	5.0 U	5	5.0 U	5
1,1-Dichloroethane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,1-Dichloroethene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,2,3-Trichlorobenzene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,2,4-Trichlorobenzene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,2-Dibromo-3-chloropropane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 UJ	5	5.0 UJ	5
1,2-Dibromoethane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,2-Dichlorobenzene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,2-Dichloroethane		5.0 U	5	1.9 J	5	5.0 U	5	5.0 U	5	5.0 U	5
1,2-Dichloropropane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,3-Dichlorobenzene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,4-Dichlorobenzene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
1,4-Dioxane		1000 R	1000	1000 R	1000	1000 R	1000	1000 R	1000	1000 R	1000
2-Butanone (MEK)		5.0 U	5	5.0 U	5	5.0 U	5	5.0 UJ	5	5.0 UJ	5
2-Hexanone		5.0 U	5	5.0 U	5	5.0 U	5	5.0 UJ	5	5.0 UJ	5
4-Methyl-2-pentanone		5.0 U	5	1.2 J	5	5.0 U	5	5.0 UJ	5	5.0 UJ	5
Acetone		20.0 U	20	20.0 U	20	20.0 U	20	20.0 UJ	20	20.0 UJ	20
Benzene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Bromoform		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Bromomethane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Carbon disulfide		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Carbon tetrachloride		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Chlorobenzene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Chloroethane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 R	5	5.0 R	5
Chloroform		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Chloromethane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
cis-1,2-Dichloroethene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
cis-1,3-Dichloropropene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Cyclohexane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Dibromochloromethane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Dichlorobromomethane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Dichloromethane (Methylene chloride)		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Ethyl benzene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Freon-11		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Freon-113		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Freon-12		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Isopropylbenzene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Methyl Acetate		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Methyl tertbutyl ether (MTBE)		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Methylcyclohexane		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Styrene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Tetrachloroethene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Toluene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
trans-1,2-Dichloroethene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
trans-1,3-Dichloropropene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Trichloroethene		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Vinyl chloride		5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5
Xylenes (unspecified)		15.0 U	15	15.0 U	15	15.0 U	15	15.0 U	15	15.0 U	15

Notes:

- Surface water screening criteria are the Ambient Water Quality Standards for Class "C" fresh surface waters presented in Division of Water Technical Operational Guidance Series (1.1.1).
 - All results are reported in units of micrograms per liter
- RL Reporting Limit
ND Not Detected

Data Qualifiers:

- J Estimated
U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
UJ detected above the
R Rejected

TABLE 5B
RI PHASE 2 SURFACE WATER SVOC DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-U0200-SW		CBC-U0400-SW		CBC-U0550-SW		CBC-00+20-SW-Spr		CBC-00-20-SW-Spr		Surface Water Screening Criteria ¹		
	Sample Date	7/30/2012		7/30/2012		7/30/2012		3/8/2011		3/8/2011		Health (FC)	Aquatic (Acute)	Aquatic (Chronic)
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL			
1,2,4,5-Tetrachlorobenzene		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
2,3,4,6-Tetrachlorophenol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
2,4,5-Trichlorophenol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
2,4,6-Trichlorophenol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
2,4-Dichlorophenol		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
2,4-Dimethylphenol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
2,4-Dinitrophenol		5.0 U	5	4.8 U	4.8	4.8 U	4.8	5.4 U	5.4	5.2 U	5.2	--	--	--
2,4-Dinitrotoluene		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
2,6-Dinitrotoluene		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
2-Chloronaphthalene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
2-Chlorophenol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
2-Methylnaphthalene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	42.000	4.700
2-Methylphenol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
2-Nitroaniline		5.0 U	5	4.8 U	4.8	4.8 U	4.8	5.4 U	5.4	5.2 U	5.2	--	--	--
2-Nitrophenol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
3,3'-Dichlorobenzidine		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
3-Nitroaniline		5.0 U	5	4.8 U	4.8	4.8 U	4.8	5.4 U	5.4	5.2 U	5.2	--	--	--
4,6-Dinitro-2-methylphenol		5.0 U	5	4.8 U	4.8	4.8 U	4.8	5.4 U	5.4	5.2 U	5.2	--	--	--
4-Bromophenyl-phenylether		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
4-Chloro-3-methylphenol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
4-Chloroaniline		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
4-Chlorophenyl-phenylether		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
4-Methylphenol		--	--	--	--	--	--	1.1 U	1.1	1.0 U	1	--	--	--
4-Nitroaniline		5.0 U	5	4.8 U	4.8	4.8 U	4.8	5.4 U	5.4	5.2 U	5.2	--	--	--
4-Nitrophenol		5.0 U	5	4.8 U	4.8	4.8 U	4.8	5.4 U	5.4	5.2 U	5.2	--	--	--
Acenaphthene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Acenaphthylene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Acetophenone		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Anthracene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Atrazine		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Benzaldehyde		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Benzo(a)anthracene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	0.230	0.030
Benzo(a)pyrene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	0.001	--	--
Benzo(b)fluoranthene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Benzo(g,h,i)perylene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Benzo(k)fluoranthene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Biphenyl		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
bis(2-Chloroethoxy) methane		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
bis(2-Chloroethyl) ether		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--

TABLE 5B
RI PHASE 2 SURFACE WATER SVOC DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-U0200-SW		CBC-U0400-SW		CBC-U0550-SW		CBC-00+20-SW-Spr		CBC-00-20-SW-Spr		Surface Water Screening Criteria ¹		
	Sample Date	7/30/2012		7/30/2012		7/30/2012		3/8/2011		3/8/2011		Health (FC)	Aquatic (Acute)	Aquatic (Chronic)
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL			
bis(2-chloroisopropyl) ether		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
bis(2-Ethylhexyl) phthalate		2.0 U	2	1.9 U	1.9	1.9 U	1.9	2.2 U	2.2	2.1 U	2.1	--	--	0.600
Butylbenzylphthalate		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Caprolactam		5.0 U	5	4.8 U	4.8	4.8 U	4.8	5.4 U	5.4	5.2 U	5.2	--	--	--
Carbazole		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Chrysene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Dibenzo(a,h)anthracene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Dibenzofuran		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Diethylphthalate		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Dimethylphthalate		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Di-n-butylphthalate		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Di-n-octylphthalate		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Fluoranthene		0.019 J	0.2	0.19 U	0.19	0.016 J	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Fluorene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Hexachlorobenzene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Hexachlorobutadiene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Hexachlorocyclopentadiene		1.0 U	1	0.96 UJ	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Hexachloroethane		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Indeno(1,2,3-cd)pyrene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Isophorone		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
m-Cresol & p-Cresol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	--	--	--	--	--	--	--
Naphthalene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	110.000	13.000
Nitrobenzene		2.0 U	2	1.9 U	1.9	1.9 U	1.9	2.2 U	2.2	2.1 U	2.1	--	--	--
N-Nitroso-di-n-propylamine		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
N-Nitrosodiphenylamine/Diphenylamine		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Pentachlorophenol		1.0 U	1	0.96 U	0.96	0.96 U	0.96	1.1 U	1.1	1.0 U	1	--	--	--
Phenanthrene		0.20 U	0.2	0.19 U	0.19	0.043 J	0.19	0.22 U	0.22	0.21 U	0.21	--	45.000	5.000
Phenol		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	--	--
Pyrene		0.20 U	0.2	0.19 U	0.19	0.19 U	0.19	0.22 U	0.22	0.21 U	0.21	--	42.000	4.600

Notes:

- 1

Surface water screening criteria are the Ambient Water Quality Standards for Class “C” fresh surface waters presented in Division of Water Technical Operational Guidance Series (1.1.1).
- 2

All result are reported in units of micrograms per liter
- RL

Reporting Limit
- ND

Not Detected
- FC

Fish Consumpition

Data Qualifiers:

- J

Estimated
- U

The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ

The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 5C
RI PHASE 2 SURFACE WATER PESTICIDE DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-U0200-SW		CBC-U0400-SW		CBC-U0550-SW		Surface Water Screening Criteria ¹		
	Depth	NA		NA		NA		Health (Fish Consumption)	Aquatic (Chronic)	Aquatic (Acute)
	Sample Date	7/30/2012		7/30/2012		7/30/2012				
		Result	RL	Result	RL	Result	RL			
4,4'-DDD		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	0.0001	--	--
4,4'-DDE		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	0.0000	--	--
4,4'-DDT		0.0013 UJ	0.0013	0.0012 UJ	0.0012	0.0061 UJ	0.0061	--	--	--
Aldrin		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	--	--	--
alpha-BHC		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	0.0020	--	--
alpha-Chlordane		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	--	--	--
beta-BHC		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	0.0070	--	--
Chlordane		0.012 U	0.012	0.012 U	0.012	0.059 U	0.059	0.00002	--	--
delta-BHC		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	0.0080	--	--
Dieldrin		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	6.0E-07	0.0560	0.2400
Endosulfan I		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	--	--	--
Endosulfan II		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	--	--	--
Endosulfan sulfate		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	--	--	--
Endrin		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	0.0020	0.0360	0.0860
Endrin aldehyde		0.0013 U	0.0013	0.0012 R	0.0012	0.0061 U	0.0061	--	--	--
Endrin ketone		0.0013 U	0.0013	0.0012 UJ	0.0012	0.0061 U	0.0061	--	--	--
gamma-BHC (Lindane)		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	0.0080	--	0.9500
gamma-Chlordane		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	--	--	--
Heptachlor		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	0.0002	--	--
Heptachlor epoxide		0.0013 U	0.0013	0.0012 U	0.0012	0.0061 U	0.0061	0.0003	--	--
Methoxychlor		0.0024 UJ	0.0024	0.0024 UJ	0.0024	0.012 UJ	0.012	--	0.0300	--
Toxaphene		0.096 U	0.096	0.094 U	0.094	0.47 U	0.47	--	--	--

Notes:

- Surface water screening criteria are the Ambient Water Quality Standards for Class "C" fresh surface waters presented in Division of Water Technical Operational Guidance Series (1.1.1).
 - All results are reported in units of micrograms per liter
- RL Reporting Limit
ND Not Detected

Data Qualifiers:

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 5D
RI PHASE 2 SURFACE WATER DELINEATION OF METALS AND OTHERS

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	CBC-00+20-SW-Spr		CBC-U0200-SW		CBC-U0400-SW		CBC-U0550-SW		Surface Water Screening Criteria ¹		
	Sample Date	3/8/2011		7/30/2012		7/30/2012		7/30/2012		Health (Fish Consumption)	Aquatic (Chronic)	Aquatic (Acute)
		Result	RL	Result	RL	Result	RL	Result	RL			
Metals	Aluminum	46.5	30	30.0 U	30	30.0 U	30	30.0 U	30	--	--	--
	Antimony	2.0 U	2	2.0 U	2	2.0 U	2	2.0 UJ	2	--	--	--
	Arsenic	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	--	--
	Barium	78.2	10	71	10	100	10	120	10	--	--	--
	Beryllium	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	--	--
	Cadmium	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	--	--
	Calcium	65700	100	50000 B	100	52000 B	100	52000 B	100	--	--	--
	Chromium	1.8 J	2	6.2	2	5.2	2	5.2	2	--	--	--
	Cobalt	0.12 J	0.5	0.50 U	0.5	0.50 U	0.5	0.50 U	0.5	--	--	--
	Copper	2.5	2	4.5 B	2	3.2 B	2	2.2 B	2	--	--	--
	Iron	156	50	95	50	140	50	160	50	--	--	--
	Lead	1	1	1.0 U	1	1.0 U	1	1.0 U	1	--	--	--
	Magnesium	10600	100	9100 B	100	13000 B	100	15000 B	100	--	--	--
	Manganese	51.2	0.5	25.0 B	5	46.0 B	5	79.0 B	5	--	--	--
	Mercury	0.00005 U	0.00005	0.20 U	0.2	0.20 U	0.2	0.20 U	0.2	--	--	--
	Nickel	5.4	1	3.8	1	1.5	1	0.80 J	1	--	--	--
	Potassium	2720	100	2400 B	100	3400 B	100	3600 B	100	--	--	--
	Selenium	0.84 J	5	2.2 J	5	5.0 U	5	5.0 U	5	--	--	--
	Silver	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	--	--
	Sodium	64700	100	49000 B	100	52000 B	100	54000 B	100	--	--	--
	Thallium	1.0 U	1	0.086 J	1	0.024 J	1	0.14 J	1	--	--	--
	Vanadium	1.0 U	1	3.6 B	1	4.6 J	1	3.0 B	1	--	--	--
	Zinc	13	5	7.1 J	5	11	5	5.2 J	5	--	--	--
Dissolved Metals	Aluminum, dissolved	30.0 U	30	30.0 U	30	30.0 U	30	30.0 U	30	--	100	--
	Antimony, dissolved	2.0 U	2	1.8 J	2	0.87 J	2	2.6 J	2	--	--	--
	Arsenic, dissolved	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	150	340
	Barium, dissolved	79.6	10	64	10	82	10	110	10	--	--	--
	Beryllium, dissolved	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	1100	--
	Cadmium, dissolved	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	4	8
	Calcium, dissolved	66300	100	47000	100	51000	100	51000	100	--	--	--
	Chromium, dissolved	1.5 J	2	1.2 J	2	0.74 J	2	2.0 U	2	--	128	980
	Cobalt, dissolved	0.11 J	0.5	0.50 U	0.5	0.50 U	0.5	0.50 U	0.5	--	5	110
	Copper, dissolved	0.82 J	2	1.2 J	2	1.2 J	2	1.2 J	2	--	16	25
	Iron, dissolved	50.0 U	50	44.0 J	50	35.0 J	50	22.0 J	50	--	300	--
	Lead, dissolved	0.087 J	1	1.0 U	1	1.0 U	1	1.0 U	1	--	8	198
	Magnesium, dissolved	10300	100	7800	100	9400	100	13000	100	--	--	--
	Manganese, dissolved	67.1 J	0.5	5.0 U	5	5.0 U	5	5.0 U	5	--	--	--
	Mercury, dissolved			0.20 U	0.2	0.20 U	0.2	0.20 U	0.2	0.001	0.770	1.400
	Nickel, dissolved	2.7	1	3.1	1	1.6	1	0.38 J	1	--	91	820
	Potassium, dissolved	2730	100	2300 B	100	2800 B	100	3600 B	100	--	--	--
	Selenium, dissolved	5.0 U	5	5.0 U	5	5.0 U	5	5.0 U	5	--	--	--
	Silver, dissolved	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	--	--
	Sodium, dissolved	63000	100	49000	100	53000	100	57000	100	--	--	--
	Thallium, dissolved	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	8	--
	Vanadium, dissolved	1.0 U	1	1.0 U	1	1.0 U	1	1.0 U	1	--	14	--
	Zinc, dissolved	9	5	8.4 J	5	7	5	6.9 J	5	--	145	205
Cr VI	Chromium, hexavalent	10.0 U	10	0.010 U	0.01	0.010 U	0.01	0.010 U	0.01	--	11	16
Others	Cyanide	2.0 J	10	10.0 U	10	10.0 U	10	10.0 U	10	9000	5	22
	Hardness	220000	5000	160000	5000	190000	5000	190000	5000	--	--	--

Notes:

1

Surface water screening criteria are the Ambient Water Quality Standards (AWQS) for Class “C” fresh surface waters presented in Division of Water Technical Operational Guidance Series (TOGS) (1.1.1).

2

The average hardness value from the Phase 1 surface water data to calculate site-specific AWQS in accordance with TOGS (1.1.1).

2

All result are reported in units of micrograms per liter

RL

Reporting Limit

ND

Not Detected

Data Qualifiers:

J

Estimated

U

The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ

The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B

Analyte was detected in the method blank.

TABLE 6A
RI PHASE 2 RAILROAD SOIL SVOC DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	RR-U0100-SUB-C		RR-U0100-SUB-D		RR-050-SUB-C		RR-050-SUB-D		RR-350-SUB-C		RR-350-SUB-D		RR-650-SUB-C		RR-650-SUB-D		Unrestricted Use Soil Cleanup Objectives ¹	Maximum Concentration in Phase 1 Soil Samples
	Depth	12-24"		24-36"		12-24"		24-36"		12-24"		24-36"		12-24"		24-36"			
	Sample Date	7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012			
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		
1,2,4,5-Tetrachlorobenzene		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
2,3,4,6-Tetrachlorophenol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
2,4,5-Trichlorophenol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
2,4,6-Trichlorophenol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
2,4-Dichlorophenol		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	710 U	710	350 U	350	--	160
2,4-Dimethylphenol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
2,4-Dinitrophenol		19000 U	19000	19000 U	19000	18000 U	18000	3600 U	3600	18000 U	18000	18000 U	18000	18000 R	18000	8900 U	8900	--	ND
2,4-Dinitrotoluene		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
2,6-Dinitrotoluene		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
2-Chloronaphthalene		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	710 U	710	350 U	350	--	140
2-Chlorophenol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
2-Methylnaphthalene		740	730	320 J	730	1000	730	130 J	140	400 J	720	350 J	730	830 J	710	340 J	350	--	510
2-Methylphenol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	170
2-Nitroaniline		19000 U	19000	19000 U	19000	18000 U	18000	3600 U	3600	18000 U	18000	18000 U	18000	18000 U	18000	8900 U	8900	--	ND
2-Nitrophenol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
3,3'-Dichlorobenzidine		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
3-Nitroaniline		19000 U	19000	19000 U	19000	18000 U	18000	3600 U	3600	18000 U	18000	18000 U	18000	18000 U	18000	8900 U	8900	--	ND
4,6-Dinitro-2-methylphenol		19000 U	19000	19000 U	19000	18000 U	18000	3600 U	3600	18000 U	18000	18000 U	18000	18000 U	18000	8900 U	8900	--	ND
4-Bromophenyl-phenylether		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
4-Chloro-3-methylphenol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
4-Chloroaniline		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	140
4-Chlorophenyl-phenylether		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
4-Nitroaniline		19000 U	19000	19000 U	19000	18000 U	18000	3600 U	3600	18000 U	18000	18000 U	18000	18000 U	18000	8900 U	8900	--	ND
4-Nitrophenol		19000 U	19000	19000 U	19000	18000 U	18000	3600 U	3600	18000 U	18000	18000 U	18000	18000 U	18000	8900 U	8900	--	ND
Acenaphthene		730 U	730	730 U	730	80.0 J	730	140 U	140	720 U	720	730 U	730	120 J	710	350 U	350	20000	350
Acenaphthylene		730 U	730	150 J	730	410 J	730	49.0 J	140	95.0 J	720	730 U	730	350 J	710	240 J	350	100000	490
Acetophenone		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
Anthracene		730 U	730	150 J	730	370 J	730	55.0 J	140	91.0 J	720	100 J	730	480 J	710	270 J	350	100000	990
Atrazine		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
Benzaldehyde		1900 J	3600	1900 J	3600	3600 U	3600	390 J	700	2000 J	3600	1900 J	3600	3500 UJ	3500	920 J	1700	--	210
Benzo(a)anthracene		340 J	730	860	730	2200	730	270	140	510 J	720	430 J	730	1800	710	1700	350	1000	1700
Benzo(a)pyrene		250 J	730	760	730	2000	730	230	140	420 J	720	410 J	730	1500	710	1300	350	1000	2600
Benzo(b)fluoranthene		480 J	730	1600	730	4400	730	560	140	1100	720	920	730	2600	710	2900	350	1000	3500
Benzo(g,h,i)perylene		170 J	730	460 J	730	1200	730	170	140	370 J	720	360 J	730	1100	710	830	350	100000	3000
Benzo(k)fluoranthene		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	1100 J	710	350 U	350	800	1500
Biphenyl		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	100
bis(2-Chloroethoxy) methane		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND

TABLE 6A
RI PHASE 2 RAILROAD SOIL SVOC DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	RR-U0100-SUB-C		RR-U0100-SUB-D		RR-050-SUB-C		RR-050-SUB-D		RR-350-SUB-C		RR-350-SUB-D		RR-650-SUB-C		RR-650-SUB-D		Unrestricted Use Soil Cleanup Objectives ¹	Maximum Concentration in Phase 1 Soil Samples
	Depth	12-24"		24-36"		12-24"		24-36"		12-24"		24-36"		12-24"		24-36"			
	Sample Date	7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012			
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		
bis(2-Chloroethyl) ether		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	710 U	710	350 U	350	--	ND
bis(2-chloroisopropyl) ether		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	710 U	710	350 U	350	--	ND
bis(2-Ethylhexyl) phthalate		7300 U	7300	7300 U	7300	7300 U	7300	1400 U	1400	7200 U	7200	7300 U	7300	7100 U	7100	3500 U	3500	--	1600
Butylbenzylphthalate		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
Caprolactam		19000 U	19000	19000 U	19000	18000 U	18000	3600 U	3600	18000 U	18000	18000 U	18000	18000 U	18000	8900 U	8900	--	ND
Carbazole		730 U	730	730 U	730	160 J	730	22.0 J	140	720 U	720	730 U	730	160 J	710	130 J	350	--	170
Chrysene		700 J	730	1200	730	2600	730	430	140	850	720	810	730	2400 J	710	2000	350	1000	3800
Dibenzo(a,h)anthracene		730 U	730	140 J	730	380 J	730	57.0 J	140	110 J	720	130 J	730	380 J	710	300 J	350	330	510
Dibenzofuran		3600 U	3600	3600 U	3600	410 J	3600	700 U	700	3600 U	3600	3600 U	3600	480 J	3500	180 J	1700	7000	380
Diethylphthalate		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	540
Dimethylphthalate		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	320
Di-n-butylphthalate		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
Di-n-octylphthalate		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	160
Fluoranthene		490 J	730	910	730	2800	730	320	140	870	720	740	730	2600 J	710	2000	350	100000	3500
Fluorene		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	110 J	710	48.0 J	350	30000	410
Hexachlorobenzene		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	710 U	710	350 U	350	330	ND
Hexachlorobutadiene		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	710 U	710	350 U	350	--	ND
Hexachlorocyclopentadiene		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
Hexachloroethane		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
Indeno(1,2,3-cd)pyrene		120 J	730	440 J	730	1200	730	140	140	350 J	720	300 J	730	1100	710	780	350	500	2300
Isophorone		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
m-Cresol & p-Cresol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
Naphthalene		420 J	730	180 J	730	780	730	100 J	140	240 J	720	210 J	730	860 J	710	320 J	350	12000	310
Nitrobenzene		7300 U	7300	7300 U	7300	7300 U	7300	1400 U	1400	7200 U	7200	7300 U	7300	7100 U	7100	3500 U	3500	--	ND
N-Nitroso-di-n-propylamine		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	710 U	710	350 U	350	--	ND
N-Nitrosodiphenylamine/Diphenylamine		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	--	ND
Pentachlorophenol		3600 U	3600	3600 U	3600	3600 U	3600	700 U	700	3600 U	3600	3600 U	3600	3500 U	3500	1700 U	1700	800	ND
Phenanthrene		1000	730	680 J	730	1500	730	330	140	660 J	720	630 J	730	1800	710	840	350	100000	3500
Phenol		730 U	730	730 U	730	730 U	730	140 U	140	720 U	720	730 U	730	710 U	710	350 U	350	330	200
Pyrene		420 J	730	910	730	2700	730	320	140	840	720	670 J	730	2500	710	2000	350	100000	2800

Notes:

Unrestricted soil cleanup objectives are taken from New York Code of Rules and Regulations (NYCRR) Subpart 375-6.8a in accordance with NYSDEC CP-51 Soil Cleanup Guidance.

All result are reported in units of micrograms per kilogram.

Data Qualifieres:

J Estimated

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

B The analytte was detected in the method blank.

TABLE 6B
RI PHASE 2 RAILROAD SOIL PESTICIDE DELINEATION

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	RR-050-SUB-C		RR-050-SUB-D		RR-350-SUB-C		RR-350-SUB-D		RR-650-SUB-C		RR-650-SUB-D		RR-U0100-SUB-C		RR-U0100-SUB-D		Unrestricted Use Soil Cleanup Objectives ¹	Maximum Concentration in Phase 1 Soil Samples
	Depth	12-24"		24-36"		12-24"		24-36"		12-24"		24-36"		12-24"		24-36"			
	Sample Date	7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012			
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		
4,4'-DDD		9.1 UJ	9.1	1.8 UJ	1.8	2.0 J	9	9.0 UJ	9	1.9 J	9	1.1 J	8.7	1.7 J	1.9	0.59 J	1.8	3.30	42
4,4'-DDE		2.0 J	9.1	0.34 J	1.8	1.8 J	9	9.0 U	9	9.0 UJ	9	8.7 U	8.7	1.9 U	1.9	1.8 U	1.8	3.30	240
4,4'-DDT		4.1 J	9.1	0.46 J	1.8	1.4 J	9	9.0 UJ	9	3.1 J	9	2.7 J	8.7	1.9 UJ	1.9	0.32 J	1.8	3.30	190
Aldrin		9.1 U	9.1	1.8 U	1.8	9.0 U	9	9.0 U	9	9.0 UJ	9	8.7 U	8.7	1.9 U	1.9	1.8 U	1.8	5.00	360
alpha-BHC		9.1 U	9.1	0.37 J	1.8	9.0 U	9	9.0 U	9	9.0 U	9	8.7 U	8.7	1.9 U	1.9	1.8 U	1.8	20.00	2
alpha-Chlordane		9.1 U	9.1	1.8 U	1.8	9.0 U	9	9.0 U	9	9.0 UJ	9	8.7 U	8.7	2.1	1.9	3.2 J	1.8	94.00	19
beta-BHC		9.1 U	9.1	1.8 U	1.8	9.0 U	9	9.0 U	9	9.0 UJ	9	8.7 U	8.7	1.9 U	1.9	1.8 U	1.8	36.00	35
Chlordane		91.0 U	91	18.0 U	18	90.0 U	90	90.0 U	90	90.0 U	90	87.0 U	87	19.0 U	19	18.0 U	18	--	13
delta-BHC		9.1 U	9.1	1.8 U	1.8	9.0 U	9	9.0 U	9	9.0 U	9	8.7 U	8.7	1.9 U	1.9	1.8 UJ	1.8	40.00	130
Dieldrin		1.9 J	9.1	0.50 J	1.8	1.6 J	9	9.0 U	9	3.2 J	9	3.0 J	8.7	0.55 J	1.9	0.43 J	1.8	5.00	23
Endosulfan I		9.1 UJ	9.1	1.8 UJ	1.8	9.0 UJ	9	9.0 UJ	9	9.0 UJ	9	8.7 UJ	8.7	1.9 U	1.9	1.8 UJ	1.8	2,400	57
Endosulfan II		9.1 UJ	9.1	1.8 UJ	1.8	9.0 U	9	9.0 UJ	9	9.0 UJ	9	8.7 UJ	8.7	0.65 J	1.9	1.8 UJ	1.8	2,400	11
Endosulfan sulfate		9.1 UJ	9.1	1.8 UJ	1.8	1.3 J	9	9.0 UJ	9	5.3 J	9	2.0 J	8.7	1.9 UJ	1.9	0.19 J	1.8	2,400	26
Endrin		3.7 J	9.1	0.48 J	1.8	9.0 U	9	9.0 U	9	9.0 UJ	9	8.7 U	8.7	1.9 U	1.9	0.97 J	1.8	14.00	170
Endrin aldehyde		9.1 U	9.1	1.8 U	1.8	9.0 U	9	9.0 U	9	9.0 R	9	8.7 U	8.7	0.74 J	1.9	0.38 J	1.8	--	12
Endrin ketone		9.1 U	9.1	1.8 U	1.8	9.0 U	9	9.0 U	9	2.7 J	9	13	8.7	0.67 J	1.9	1.8 U	1.8	--	110
gamma-BHC (Lindane)		9.1 U	9.1	1.8 U	1.8	9.0 U	9	9.0 U	9	9.0 UJ	9	8.7 U	8.7	1.9 U	1.9	1.8 U	1.8	100.00	15
gamma-Chlordane		9.1 U	9.1	1.8 UJ	1.8	9.0 U	9	9.0 U	9	9.0 UJ	9	8.7 U	8.7	1.9 U	1.9	1.8 U	1.8	--	280
Heptachlor		9.1 U	9.1	1.8 U	1.8	9.0 U	9	9.0 U	9	9.0 UJ	9	8.7 U	8.7	1.9 U	1.9	1.8 U	1.8	42.00	110
Heptachlor epoxide		9.1 U	9.1	1.8 U	1.8	9.0 U	9	9.0 U	9	9.0 UJ	9	8.7 U	8.7	1.9 U	1.9	1.8 U	1.8	--	510
Methoxychlor		12.0 J	18	0.95 J	3.5	4.8 J	17	4.9 J	18	8.4 J	17	9.9 J	17	1.4 J	3.6	3.2 J	3.6	--	130
Toxaphene		360 U	360	71.0 U	71	350 U	350	360 U	360	350 U	350	340 U	340	73.0 U	73	73.0 U	73	--	ND

Notes:

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- All result are reported in units of micrograms per kilogram.
- ND - Not Detected

Data Qualifieres:

- J Estimated
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- B The analytte was detected in the method blank.

TABLE 6C
RI PHASE 2 RAILROAD SOIL DELINEATION OF METALS AND OTHERS

Former Sperry Remington Site
Elmira, New York

Analyte	Sample ID	RR-U0100-SS-A		RR-U0100-SUB-C		RR-U0100-SUB-D		RR-050-SS-A		RR-050-SUB-C		RR-050-SUB-D		RR-350-SS-A		RR-350-SUB-C		RR-350-SUB-D		RR-650-SS-A		RR-650-SUB-C		RR-650-SUB-D		Unrestricted Use Soil Cleanup Objectives ¹	Maximum Concentration in Phase 1 Soil Samples
	Depth	0-2"		12-24"		24-36"		0-2"		12-24"		24-36"		0-2"		12-24"		24-36"		0-2"		12-24"		24-36"			
	Sample Date	7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012		7/31/2012			
		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		
Metals	Aluminum	2200 B	21	3100 B	20	4300 B	20	2800 B	24	3000 B	20	3400 B	18	3700 B	24	3000 B	22	3400 B	18	2800 B	21	4000 B	21	4500 B	20	--	15,900
	Antimony	7.1	1.1	11	1	1.8	0.99	7.2	1.2	7.1	0.99	4	0.92	15	1.2	6.1	1.1	4.4	0.89	8.5	1	34	1	16	0.99	--	5
	Arsenic	220	1.1	25	1	21	0.99	320	1.2	160	0.99	37	0.92	290	1.2	95	1.1	76	0.89	96	1	150 JH	1	91	0.99	13	330
	Barium	66	21	82	20	46	20	85	24	77	20	57	18	99	24	64	22	59	18	110	21	76.0 JH	21	55	20	350	831
	Beryllium	0.41 J	0.42	0.66	0.4	0.93	0.39	0.59	0.47	0.81	0.4	0.47	0.37	0.69	0.48	0.62	0.43	0.54	0.36	0.5	0.42	0.77	0.41	0.55	0.4	7.2	1.0
	Cadmium	2.7 U	2.7	2.5 U	2.5	0.99 U	0.99	3.0 U	3	2.5 U	2.5	0.92 U	0.92	1.2 U	1.2	2.7 U	2.7	2.2 U	2.2	2.6 U	2.6	2.6 UJ	2.6	2.5 U	2.5	2.5	41.5
	Calcium	3200 B	530	690 B	500	13000 B	490	8100 B	590	3600 B	500	76000 B	920	11000 B	600	4200 B	540	8100 B	450	13000 B	520	18000 J	520	10000 B	500	--	67,600
	Chromium	14	0.53	9.8	0.5	9.9	0.49	17	0.59	12	0.5	9.2	0.46	15	0.6	10	0.54	9.7	0.45	12	0.52	14	0.52	11	0.5	--	1,110
	Cobalt	4.8 J	5.3	8	5	9.6	4.9	5.3 J	5.9	9	5	9.8	4.6	6.6	6	7.6	5.4	7.3	4.5	7.4	5.2	8.6	5.2	8.8	5	--	13
	Copper	69.0 B	2.7	160 B	2.5	140 B	2.5	100 B	3	110 B	2.5	89.0 B	2.3	82.0 B	3	110 B	2.7	78.0 B	2.2	69.0 B	2.6	130 B	2.6	95.0 B	2.5	50	6,760
	Iron	34000	11	35000	10	19000	9.9	34000	12	28000	9.9	19000	9.2	26000	12	30000	11	20000	8.9	30000	10	42000 J	10	34000	9.9	--	85,000
	Lead	120	0.32	330	0.3	130	0.3	120	0.35	150	0.3	160	0.28	300	0.36	190	0.32	140	0.27	130	0.31	550	0.31	290	0.3	63	468
	Magnesium	530 U	530	500 U	500	2400 B	490	640 B	590	680 B	500	6200 B	460	1000 B	600	730 B	540	1400 B	450	1200 B	520	1400 J	520	2100 B	500	--	10,400
	Manganese	170	1.6	200	1.5	250	1.5	170	1.8	160	1.5	240	1.4	170	1.8	160	1.6	160	1.3	200	1.6	240 J	1.6	230	1.5	1,600	1,700
	Mercury	0.098	0.037	0.15	0.034	0.065	0.036	0.43	0.041	0.97	0.035	0.34	0.035	0.16	0.041	0.13	0.036	0.066	0.035	0.12	0.036	0.17	0.035	0.12	0.034	0.18	1.70
	Nickel	15	4.2	15	4	27	3.9	17	4.7	22	4	17	3.7	17	4.8	16	4.3	15	3.6	18	4.2	21	4.1	20	4	30	2,050
	Potassium	510 J	530	420 J	500	520	490	620	590	560	500	700	460	890	600	490 J	540	660	450	710	520	820	520	640	500	--	1,500
	Selenium	2	0.53	2.6	0.5	1.4	0.49	2.1	0.59	1.9	0.5	1.5	0.46	1.9	0.6	1.4	0.54	1.4	0.45	1.8	0.52	2	0.52	1.3	0.5	4	6
	Silver	0.53 U	0.53	0.50 U	0.5	0.49 U	0.49	0.59 U	0.59	0.50 U	0.5	0.46 U	0.46	0.60 U	0.6	0.54 U	0.54	0.45 U	0.45	0.52 U	0.52	0.52 U	0.52	0.50 U	0.5	2	5
	Sodium	530 U	530	500 U	500	490 U	490	590 U	590	500 U	500	460 U	460	600 U	600	540 U	540	450 U	450	520 U	520	520 U	520	500 U	500	--	1,200
	Thallium	1.1 U	1.1	5.0 U	5	0.99 U	0.99	5.9 U	5.9	5.0 U	5	0.92 U	0.92	1.2 U	1.2	5.4 U	5.4	0.89 U	0.89	5.2 U	5.2	5.2 U	5.2	5.0 U	5	--	1
	Vanadium	12	5.3	13	5	12	4.9	17	5.9	13	5	15	4.6	14	6	15	5.4	14	4.5	16	5.2	17	5.2	14	5	--	45
	Zinc	64.0 B	2.1	30.0 B	2	72.0 B	2	100 B	2.4	74.0 B	2	55.0 B	1.8	120 B	2.4	68.0 B	2.2	47.0 B	1.8	64.0 B	2.1	100 J	2.1	120 B	2	109	1,690
Cr VI	Chromium, hexavalent	0.45 U	0.45	0.44 U	0.44	0.44 U	0.44	15	0.51	0.28 J	0.44	0.43 U	0.43	0.24 J	0.51	1.1	0.44	0.43 U	0.43	0.49	0.44	0.41 J	0.43	0.42 U	0.42	1	
CN	Cyanide	0.53 J	0.57	0.54 U	0.54	0.11 J	0.55	0.48 J	0.63	0.22 J	0.55	0.53 U	0.53	0.71	0.65	0.23 J	0.54	1.5	0.53	0.35 J	0.55	0.32 J	0.53	0.52 U	0.52	27	

Notes:
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Data Qualifiers:
J Estimated
U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
B The analyte was detected in the method blank.

FIGURES

APPENDIX A

Field Notes

APPENDIX B

Boring Logs

APPENDIX C

Laboratory Analytical Reports

APPENDIX D

Sampling Logs

APPENDIX E

Data Usability Report (DUSR)

APPENDIX F
Fish and Wildlife Impact Analysis