

March 27, 2018

Mr. Maurice Moore
NYSDEC Region 9
270 Michigan Avenue
Buffalo, New York 14203-2915

**Re: Investigation Report
Tributary of Crooked Brook
Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York
NYSDEC Site Number 907022**

Dear Mr. Moore:

Groundwater & Environmental Services, Inc. (GES) has prepared the enclosed *Investigation Report* for the investigation conducted in and on the banks of the tributary to Crooked Brook, near the former Al Tech Specialty Steel site (New York State Department of Environmental Conservation [NYSDEC] Site Number 907022), in Dunkirk, New York. The work, reported in the attached document, was completed in accordance with the call-out issued on November 9, 2016 by NYSDEC.

If you have any questions or comments, please do not hesitate to contact GES at your convenience.

Sincerely,

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

Nicole A. Lindner
Staff Geologist

Eric D. Popken
Senior Project Manager

Enclosure



INVESTIGATION REPORT

Tributary of Crooked Brook
Willowbrook Avenue
Dunkirk, New York
NYSDEC Spill Number 907022

Prepared for

New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203

Report Date

March 27, 2018

Prepared By:

Reviewed By:

Nicole A. Lindner
Staff Geologist

Eric D. Popken
Senior Project Manager

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

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1.0 INTRODUCTION

This report, prepared by Groundwater & Environmental Services, Inc. (GES) of Cheektowaga, New York, documents the field activities conducted to characterize sediment conditions along the bank of and in the unnamed tributary to Crooked Brook (the tributary) located downstream of the former Al Tech Specialty Steel (the Site) site (New York State Department of Environmental Conservation [NYSDEC] Site Number 907022), in Dunkirk, New York. The work was conducted based on previously established impacts of polychlorinated biphenyls (PCBs) and metals such as chromium and nickel from former production activities at the Site. A Fish and Wildlife Resource Impact Assessment (FWRIA) has determined that the consensus probable effect concentration (PEC) for PCBs for this resource is 0.68 parts per million (ppm), as described in the standby remediation assignment documentation provided by NYSDEC. Based on the FWRIA, it was suspected that the length of impact of PCBs that exceed the PEC extend to approximately 4,750 feet (ft) from the point on Willowbrook Avenue where the tributary exits a culvert onto the former Al Tech property (currently owned by Dunkirk Specialty Steel) to just south of the culvert under the New York Central Railroad. A site map is included, which illustrates the tributary with respect to the Site and other nearby features and landmarks (**Figure 1**).

1.1 Site History and Location

The Site is an approximately 90 acre industrial site in the City of Dunkirk, Chautauqua County, New York, located west of Brigham Road and north of Willowbrook Avenue, and is currently operating as Dunkirk Specialty Steel.

The tributary is an approximately 2¼ mile long first order stream flowing from the southeast to north-northwest, beginning at the northwest corner of the Chautauqua County Fairgrounds. This tributary drains an area from Central Avenue to Brigham Road from the Crooked Brook and Canadaway Creek drainage divides, eventually joining Crooked Brook approximately 1,500 ft from where it empties into Lake Erie.

1.2 Site Health and Safety

A site specific Health and Safety Plan (HASP) was completed for use on the site during the completion of the subsurface investigation activities. The HASP included a listing of all site tasks, potential hazards, and procedures to be followed during site activities.

2.0 SUBSURFACE INVESTIGATION

From April 6 through April 20, 2017, GES personnel advanced five (5) soil borings each along thirty (30) transects (CS-1 through CS-30) for a total of one-hundred and fifty (150) soil boring locations via hand tools (ie: hand auger and shovel). Soil borings were advanced to depths of up to approximately 1-2 ft below ground surface (bgs).



Sediment samples were collected in approximate 2-inch (in) to 1-ft intervals. Samples were collected at each transect as follows, unless otherwise noted on **Table 1A** through **Table 1DD**:

- Samples of sediment from the approximate center of the stream at 0-1 ft (1A) and 1-2 ft (1B) where possible.
- Samples at 0-2 in (2A, 3A) and 0-1 ft (2B, 3B) from approximately 2 ft from the top of each bank (on the east and west sides of the tributary).
- Samples at 0-2 in (4A, 5A) and 0-1 ft (4B, 5B) from approximately 20 ft from the center of the tributary (on the east and west sides of the tributary).

Sediment samples were logged by GES personnel for color, moisture content, grain size, and visual evidence of impacts, as presented on the sediment sampling logs in **Appendix A**. In addition to sediment sample logging, GES recorded stream details such as stream flow, substrate, maximum and average depth, vegetation density, mature vegetation identification and bank heights. In general, the stream dominantly varied between a pool and riffle, with slow movement during the described sampling event. The substrate was dominantly clay and silt with varying degrees of sand and gravel. Vegetation was dominantly very dense with some to no mature vegetation recorded. The maximum depth averaged 2.28 ft, and the stream averaged 19.55 ft wide. Specific details at each transect are provided on the transect data forms provided in **Appendix A**.

At each transect, samples were collected at all ten (10) locations (1A through 5A and 1B through 5B at each transect) for analysis of PCBs via United States Environmental Protection Agency (USEPA) Method 8082A, metals via USEPA Method 6020A, and mercury via USEPA Method 7471B. Additionally, the sediment samples collected within the stream (1A and 1B at each transect) were analyzed for total organic carbon (TOC) via the Lloyd Kahn Method. The sediment samples were placed on ice and submitted to TestAmerica Laboratories, Inc. (TestAmerica) in Amherst, New York. It should be noted that at the transect CS-1, refusal was encountered at the sample within the stream at 2 in, and as such a CS-1-1B sample was not able to be collected. Additionally, TOC was not analyzed for CS-2-1B. Upon completion of each boring, soil cuttings were returned down the borehole, per NYSDEC. Sample locations were then marked with rebar stakes and survey tape for Global Positioning System (GPS) surveying.

2.1 Decontamination Method

During the site investigation activities, all hand augers and any hand tools utilized for sediment sampling were decontaminated per USEPA “Sampling Equipment Decontamination” standard operation procedures to prevent cross-contamination. The decontamination method consisted of the following:

- Rinsing and washing the sampling equipment with Liquinox® and tap water until cleaned of visual debris.



- Rinse with tap water until sampling equipment was clear of visual decontamination solution.
- Rinse with deionized (DI) water.
- Rinse with 10 percent (%) nitric acid.
- Rinse with DI water.
- Rinse with hexane solvent.
- Final rinse with DI water.

The sampling equipment was then allowed to dry and wrapped in aluminum foil to protect from possible external contamination while transporting to the next transect location.

It should be noted that approximately half way through the scope of work, the NYSDEC onsite representative requested the steps of washing with the nitric acid and hexane be removed from the decontamination procedures. The change in procedures was justified by the probability of persistence of PCBs on equipment is low.

Five (5) hand augers were utilized at each transect both to prevent cross contamination and reduce the amount of time spent between sampling each location (thereby consolidating each transect sampling time period). Poly-sheeting was laid out at the decontamination area to prevent contamination to virgin ground. Lids were placed on buckets in between decontamination activities. The perimeter of the decontamination area was delineated using cones and barricades and/or caution tape, and signs were posted to prevent unauthorized entry. At the end of each day decontamination fluids and water were drummed in a secure location, and labeled for identification and future disposal purposes.

One drum of decontamination water and nitric acid mix was sampled and removed from the Site on June 28, 2017. The disposal documentation is included as **Appendix B**. The hexane was also taken by the disposal company via the original sealed container.

3.0 SUBSURFACE INVESTIGATION RESULTS

Sediment analytical data is tabulated in **Table 1A** through **Table 1DD**. The soil boring locations, with respect to the site layout, as well as select soil analytical data are illustrated on **Figure 2** through **Figure 12**. The sediment laboratory analytical reports are included in **Appendix C**. All sediment analytical results were compared to 6 New York Codes, Rules and Regulations (NYCRR) Part 375 standards. The samples collected within the stream were compared to Part 375 Class A sediment standards, and the samples collected on the banks were compared to Part 375-6.8 (b) ecological resources standards. A summary of results is as follows:



- One or more metals constituents were observed in excess of the respective 6 NYCRR Part 375 standards (as described above) in various samples collected from all transects.
- TOC did not have a standard to compare concentrations in 6 NYCRR Part 375. TOC values ranged from 1,840 milligrams per kilogram (mg/kg) in samples collected from CS-12-1A to 72,000 mg/kg in samples collected from CS-6-1A.
- One or more total PCB constituents were observed in excess of the respective 6 NYCRR Part 375 standards (as described above) in various samples collected from all transects, with the exception of CS-3, CS-4, CS-13 and CS-15.

FIGURES

M:\Graphics\0900-Buffalo\NYSDEC\Dunkirk-altec\Dunkirk-altec SM.dwg, B-500, WShea



LEGEND

- MONITORING WELL
- UNDERGROUND GAS LINE
- SOIL SEDIMENT SAMPLE

DRAFTED BY: W.G.S.	SOIL SEDIMENT SAMPLING OVERVIEW		
CHECKED BY: E.P.	NYSDEC FORMER AL TECH SPECIALTY STEEL CORP WILLOWBROOK POND OPERABLE UNIT DUNKIRK, NEW YORK		
REVIEWED BY: N.A.L.	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225		
NORTH 	SCALE IN FEET 0 APPROXIMATE 500	DATE 9-14-17	FIGURE 1

M:\Graphics\0900-Buffalo\NY SDEC\Dunkirk-altec\SM.dwg, B-40(1-3), WShea



LEGEND

- MONITORING WELL
- UNDERGROUND GAS LINE
- SOIL SEDIMENT SAMPLE

CS1-1A	SAMPLE IDENTIFICATION
4-3-17	SAMPLE DATE
0-2'	SAMPLE DEPTH (feet)
U	PCB-1016 CONCENTRATION (ug/kg)
U	PCB-1221 CONCENTRATION (ug/kg)
U	PCB-1232 CONCENTRATION (ug/kg)
U	PCB-1242 CONCENTRATION (ug/kg)
93	PCB-1248 CONCENTRATION (ug/kg)
25	PCB-1254 CONCENTRATION (ug/kg)
6.5	PCB-1260 CONCENTRATION (ug/kg)
U	PCB-1262 CONCENTRATION (ug/kg)
U	PCB-1268 CONCENTRATION (ug/kg)
125	TOTAL PCBs CONCENTRATION (ug/kg)

ug/kg MICROGRAMS PER KILOGRAM
U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

CS1-5A	CS1-5B
4-3-17	4-3-17
0-2"	0-8"
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	5.7
U	U
U	5.7

CS1-3A	CS1-3B
4-3-17	4-3-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
U	U
4.1	U
8.0	U
U	U
U	U
12.1	U

CS1-1A	CS1-1B
4-3-17	4-3-17
0-2"	REFUSAL
U	NS
U	NS
U	NS
U	NS
93	NS
25	NS
6.5	NS
U	NS
U	NS
125	U

CS1-2A	CS1-2B
4-3-17	4-3-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	4.9
3.6	2.9
U	U
U	U
U	U
3.6	7.8

CS1-4A	CS1-4B
4-3-17	4-3-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
6.2	U
U	U
6.2	U

CS2-5A	CS2-5B
4-3-17	4-3-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U

CS2-3A	CS2-3B
4-3-17	4-3-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
3.2	U
U	U
3.2	U

CS2-1A	CS2-1B
4-3-17	4-3-17
0-1'	1-2'
U	U
U	U
U	U
U	U
150	38
70	6.8
14	U
U	U
U	U
234	44.8

CS2-2A	CS2-2B
4-3-17	4-3-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
5.0	U

CS2-4A	CS2-4B
4-3-17	4-3-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U
U	U

CS3-5A	CS3-5B
4-4-17	4-4-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
U	3.1
4.4	5.7
U	U
U	1.5
4.4	10.3

CS3-3A	CS3-3B
4-4-17	4-4-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	2.5
2.9	6.6
6.4	1.5
2.0	U
U	U
U	U
11.3	10.6

CS3-1A	CS3-1B
4-4-17	4-4-17
0-1'	1-2'
U	U
U	U
U	U
U	U
U	U
5.6	38
U	7.2
U	U
U	U
U	U
5.6	45.2

CS3-2A	CS3-2B
4-4-17	4-4-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
7.8	7.1
7.2	6.3
7.4	8.1
U	U
U	U
22.4	21.5

CS3-4A	CS3-4B
4-4-17	4-4-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
9.7	8.6
9.4	8.6
10.0	11.0
U	U
U	1.9
29.1	30.1

DRAFTED BY:
W.G.S.

CHECKED BY:

REVIEWED BY:

SEDIMENT SAMPLING MAP
GROUPS 1-3

NYSDEC
FORMER AL TECH SPECIALTY STEEL CORP
WILLOWBROOK POND OPERABLE UNIT
DUNKIRK, NEW YORK

Groundwater & Environmental Services, Inc.
495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225

NORTH

SCALE IN FEET
0 APPROXIMATE 40

DATE
3-9-18

FIGURE
2

M:\Graphics\0900-Buffalo\NY SDEC\Dunkirk-altec\Dunkirk-altec SM.dwg, B-40(4-6), WShea



LEGEND

-  MONITORING WELL
-  UNDERGROUND GAS LINE
-  SOIL SEDIMENT SAMPLE
- | CS1-1A | SAMPLE IDENTIFICATION |
|--------|----------------------------------|
| 4-3-17 | SAMPLE DATE |
| 0-2' | SAMPLE DEPTH (feet) |
| U | PCB-1016 CONCENTRATION (ug/kg) |
| U | PCB-1221 CONCENTRATION (ug/kg) |
| U | PCB-1232 CONCENTRATION (ug/kg) |
| U | PCB-1242 CONCENTRATION (ug/kg) |
| 93 | PCB-1248 CONCENTRATION (ug/kg) |
| 25 | PCB-1254 CONCENTRATION (ug/kg) |
| 6.5 | PCB-1260 CONCENTRATION (ug/kg) |
| U | PCB-1262 CONCENTRATION (ug/kg) |
| U | PCB-1268 CONCENTRATION (ug/kg) |
| 125 | TOTAL PCBs CONCENTRATION (ug/kg) |

ug/kg MICROGRAMS PER KILOGRAM

U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

SEDIMENT CTITERIA 100 ug/kg.

UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO)
1,000 ug/kg.

DRAFTED BY:
W.G.S.

CHECKED BY:

REVIEWED BY:



SEDIMENT SAMPLING MAP GROUPS 4-6		
NYSDEC FORMER AL TECH SPECIALTY STEEL CORP WILLOWBROOK POND OPERABLE UNIT DUNKIRK, NEW YORK		
Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225		
SCALE IN FEET 0 APPROXIMATE 40	DATE 3-27-18	FIGURE 3

M:\Graphics\0900-Buffalo\NY SDEC\Dunkirk-alttec\Dunkirk-alttec SM.dwg, B-40(7-8), WShea



LEGEND

MONITORING WELL

UNDERGROUND GAS LINE

SOIL SEDIMENT SAMPLE

CS1-1A	SAMPLE IDENTIFICATION
4-3-17	SAMPLE DATE
0-2'	SAMPLE DEPTH (feet)
U	PCB-1016 CONCENTRATION (ug/kg)
U	PCB-1221 CONCENTRATION (ug/kg)
U	PCB-1232 CONCENTRATION (ug/kg)
U	PCB-1242 CONCENTRATION (ug/kg)
93	PCB-1248 CONCENTRATION (ug/kg)
25	PCB-1254 CONCENTRATION (ug/kg)
6.5	PCB-1260 CONCENTRATION (ug/kg)
U	PCB-1262 CONCENTRATION (ug/kg)
U	PCB-1268 CONCENTRATION (ug/kg)
125	TOTAL PCBs CONCENTRATION (ug/kg)

ug/kg MICROGRAMS PER KILOGRAM

U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

SEDIMENT CTITERIA 100 ug/kg.

UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO)
1,000 ug/kg.

CS8-5A	CS8-5B	CS8-3A	CS8-3B	CS8-1A	CS8-1B	CS8-2A	CS8-2B	CS8-4A	CS8-4B
4-6-17	4-6-17	4-6-17	4-6-17	4-6-17	4-6-17	4-6-17	4-6-17	4-6-17	4-6-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	200	23	U	32	U	U	U	U
U	U	97	10	1,200	11	30	41	20	20
U	U	28	U	150	U	22	27	25	23
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	325	33	1,350	43	52	68	45	43

DRAFTED BY:
W.G.S.

CHECKED BY:

REVIEWED BY:

SEDIMENT SAMPLING MAP
GROUPS 7-8

NYSDEC
FORMER AL TECH SPECIALTY STEEL CORP
WILLOWBROOK POND OPERABLE UNIT
DUNKIRK, NEW YORK

Groundwater & Environmental Services, Inc.
495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225

NORTH

SCALE IN FEET
0 APPROXIMATE 40

DATE
3-27-18

FIGURE
4



LEGEND

- MONITORING WELL
- UNDERGROUND GAS LINE
- SOIL SEDIMENT SAMPLE
- | CS1-1A | SAMPLE IDENTIFICATION |
|--------|----------------------------------|
| 4-3-17 | SAMPLE DATE |
| 0-2' | SAMPLE DEPTH (feet) |
| U | PCB-1016 CONCENTRATION (ug/kg) |
| U | PCB-1221 CONCENTRATION (ug/kg) |
| U | PCB-1232 CONCENTRATION (ug/kg) |
| U | PCB-1242 CONCENTRATION (ug/kg) |
| 93 | PCB-1248 CONCENTRATION (ug/kg) |
| 25 | PCB-1254 CONCENTRATION (ug/kg) |
| 6.5 | PCB-1260 CONCENTRATION (ug/kg) |
| U | PCB-1262 CONCENTRATION (ug/kg) |
| U | PCB-1268 CONCENTRATION (ug/kg) |
| 125 | TOTAL PCBs CONCENTRATION (ug/kg) |
- ug/kg MICROGRAMS PER KILOGRAM
- U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

SEDIMENT CTITERIA 100 ug/kg.

UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO)
1,000 ug/kg.

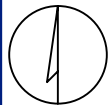
DRAFTED BY:

W.G.S.

CHECKED BY:

REVIEWED BY:

NORTH



SEDIMENT SAMPLING MAP
GROUPS 9-11

NYSDEC
FORMER AL TECH SPECIALTY STEEL CORP
WILLOWBROOK POND OPERABLE UNIT
DUNKIRK, NEW YORK

Groundwater & Environmental Services, Inc.
495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225

SCALE IN FEET
0 APPROXIMATE 40

DATE
3-27-18

FIGURE
5

M:\Graphics\0900-Buffalo\NY SDEC\Dunkirk-allec\S\1.dwg, B-40(12-13), WShea



LEGEND

- MONITORING WELL
- UNDERGROUND GAS LINE
- SOIL SEDIMENT SAMPLE

CS1-1A	SAMPLE IDENTIFICATION
4-3-17	SAMPLE DATE
0-2'	SAMPLE DEPTH (feet)
U	PCB-1016 CONCENTRATION (ug/kg)
U	PCB-1221 CONCENTRATION (ug/kg)
U	PCB-1232 CONCENTRATION (ug/kg)
U	PCB-1242 CONCENTRATION (ug/kg)
93	PCB-1248 CONCENTRATION (ug/kg)
25	PCB-1254 CONCENTRATION (ug/kg)
6.5	PCB-1260 CONCENTRATION (ug/kg)
U	PCB-1262 CONCENTRATION (ug/kg)
U	PCB-1268 CONCENTRATION (ug/kg)
125	TOTAL PCBs CONCENTRATION (ug/kg)

ug/kg MICROGRAMS PER KILOGRAM
U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

SEDIMENT CTITERIA 100 ug/kg.

UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO)
1,000 ug/kg.

CS12-5A	CS12-5B	CS12-3A	CS12-3B	CS12-1A	CS12-1B	CS12-2A	CS12-2B	CS12-4A	CS12-4B
4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	590	780	70	240	800	U	U	U
240	160	530	830	26	87	800	440	420	210
54	30	95	160	U	5.6	140	85	65	50
U	U	U	U	U	U	U	U	U	U
U	U	9.5	19	U	U	13	11	7.5	4.4
294	190	1,225	1,789	96	333	1,753	536	493	264

CS13-5A	CS13-5B	CS13-3A	CS13-3B	CS13-1A	CS13-1B	CS13-2A	CS13-2B	CS13-4A	CS13-4B
4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	13	18	U	U	U	U
U	U	U	U	U	U	U	U	U	U
43	17	140	2.4	U	U	350	71	290	120
16	6.6	36	U	U	U	78	16	61	26
U	U	U	U	U	U	U	U	U	U
U	U	2.7	U	U	U	4.5	U	U	U
59	23.6	179	2.4	13	18	433	87	351	146

DRAFTED BY:	SEDIMENT SAMPLING MAP		
W.G.S.	GROUPS 12-13		
CHECKED BY:	NYSDEC		
	FORMER AL TECH SPECIALTY STEEL CORP		
	WILLOWBROOK POND OPERABLE UNIT		
REVIEWED BY:	DUNKIRK, NEW YORK		
	Groundwater & Environmental Services, Inc.		
	495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225		
NORTH	SCALE IN FEET	DATE	FIGURE
	0 APPROXIMATE 40	3-27-18	6

LEGEND

- MONITORING WELL
- UNDERGROUND GAS LINE
- SOIL SEDIMENT SAMPLE

CS1-1A	SAMPLE IDENTIFICATION
4-3-17	SAMPLE DATE
0-2'	SAMPLE DEPTH (feet)
U	PCB-1016 CONCENTRATION (ug/kg)
U	PCB-1221 CONCENTRATION (ug/kg)
U	PCB-1232 CONCENTRATION (ug/kg)
U	PCB-1242 CONCENTRATION (ug/kg)
93	PCB-1248 CONCENTRATION (ug/kg)
25	PCB-1254 CONCENTRATION (ug/kg)
6.5	PCB-1260 CONCENTRATION (ug/kg)
U	PCB-1262 CONCENTRATION (ug/kg)
U	PCB-1268 CONCENTRATION (ug/kg)
125	TOTAL PCBs CONCENTRATION (ug/kg)

ug/kg MICROGRAMS PER KILOGRAM

U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

- SEDIMENT CTITERIA 100 ug/kg.
- UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO) 1,000 ug/kg.

DRAFTED BY: W.G.S.	SEDIMENT SAMPLING MAP GROUPS 14-15		
CHECKED BY:	NYSDEC FORMER AL TECH SPECIALTY STEEL CORP WILLOWBROOK POND OPERABLE UNIT DUNKIRK, NEW YORK		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225		
NORTH 	SCALE IN FEET  0 APPROXIMATE 40	DATE 3-27-18	FIGURE 7

CS14-5A	CS14-5B	CS14-3A	CS14-3B	CS14-1A	CS14-1B	CS14-2A	CS14-2B	CS14-4A	CS14-4B
4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17	4-11-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	2,900	3,700	2,200	U	U	U
370	430	510	470	440	700	690	210	610	220
70	77	110	94	47	100	130	35	110	28
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	9.5	3.8	U	U
440	507	620	564	3,387	4,500	3,030	249	720	248

CS15-5A	CS15-5B	CS15-3A	CS15-3B	CS15-1A	CS15-1B	CS15-2A	CS15-2B	CS15-4A	CS15-4B
4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	24	3.5	U	U	U	U
770	220	520	830	U	U	400	620	280	790
140	36	130	120	U	U	73	120	48	120
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
910	256	650	950	24	3.5	473	740	328	910

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LEGEND

-  MONITORING WELL
-  UNDERGROUND GAS LINE
-  SOIL SEDIMENT SAMPLE
- | CS1-1A | SAMPLE IDENTIFICATION |
|--------|----------------------------------|
| 4-3-17 | SAMPLE DATE |
| 0-2' | SAMPLE DEPTH (feet) |
| U | PCB-1016 CONCENTRATION (ug/kg) |
| U | PCB-1221 CONCENTRATION (ug/kg) |
| U | PCB-1232 CONCENTRATION (ug/kg) |
| U | PCB-1242 CONCENTRATION (ug/kg) |
| 93 | PCB-1248 CONCENTRATION (ug/kg) |
| 25 | PCB-1254 CONCENTRATION (ug/kg) |
| 6.5 | PCB-1260 CONCENTRATION (ug/kg) |
| U | PCB-1262 CONCENTRATION (ug/kg) |
| U | PCB-1268 CONCENTRATION (ug/kg) |
| 125 | TOTAL PCBs CONCENTRATION (ug/kg) |

ug/kg MICROGRAMS PER KILOGRAM

U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

SEDIMENT CTITERIA 100 ug/kg.

UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO)
1,000 ug/kg.

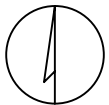
DRAFTED BY:

W.G.S.

CHECKED BY:

REVIEWED BY:

NORTH



SEDIMENT SAMPLING MAP
GROUPS 16-19

NYSDEC
FORMER AL TECH SPECIALTY STEEL CORP
WILLOWBROOK POND OPERABLE UNIT
DUNKIRK, NEW YORK

Groundwater & Environmental Services, Inc.
495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225

SCALE IN FEET
0 APPROXIMATE 40

DATE
3-27-18

FIGURE
8

CS16-5A	CS16-5B	CS16-3A	CS16-3B	CS16-1A	CS16-1B	CS16-2A	CS16-2B	CS16-4A	CS16-4B
4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
160	260	300	320	4.1	12	1,400	U	U	U
35	59	53	61	U	U	79	150	66	100
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
195	319	353	381	4	12	2,009	870	456	650

CS17-5A	CS17-5B	CS17-3A	CS17-3B	CS17-1A	CS17-1B	CS17-2A	CS17-2B	CS17-4A	CS17-4B
4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17	4-12-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
410	350	U	1,500	1,700	1,400	U	U	160	30
250	330	310	440	300	260	280	13	150	20
34	45	48	41	45	41	59	6	21	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
694	725	358	1,981	2,045	1,701	339	19	331	50

CS18-5A	CS18-5B	CS18-3A	CS18-3B	CS18-1A	CS18-1B	CS18-2A	CS18-2B	CS18-4A	CS18-4B
4-13-17	4-13-17	4-13-17	4-13-17	4-13-17	4-13-17	4-13-17	4-13-17	4-13-17	4-13-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
320	310	400	520	650	110	940	1,100	4,700	5,400
210	240	250	340	140	24	330	400	2,000	2,500
39	50	32	42	7.9	U	35	46	150	150
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
569	600	682	902	798	134	1,305	1,546	6,850	8,050

CS19-5A	CS19-5B
4-13-17	4-13-17
0-2"	0-1'
U	U
U	U
U	U
850	330
370	210
70	69
U	U
4.2	4.7
1,294	614

CS19-3A	CS19-3B
4-13-17	4-13-17
0-2"	0-1'
U	U
U	U
U	U
U	U
1,800	7,100
660	1,900
110	U
U	U
U	U
2,570	9,000

CS19-1A	CS19-1B
4-13-17	4-13-17
0-1'	1-2'
U	U
U	U
U	U
25	6.2
7.5	U
U	U
U	U
U	U
32.5	6.2

CS19-2A	CS19-2B
4-13-17	4-13-17
0-2"	0-1'
U	U
U	U
U	U
U	U
350	980
150	370
22	42
U	U
U	U
522	1,392

CS19-4A	CS19-4B
4-13-17	4-13-17
0-2"	0-1'
U	U
U	U
U	U
U	U
82	84
60	71
12	14
U	U
U	U
154	169

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LEGEND

-  MONITORING WELL
-  UNDERGROUND GAS LINE
-  SOIL SEDIMENT SAMPLE
- | CS1-1A | |
|-----------------------|----------------------------------|
| SAMPLE IDENTIFICATION | |
| SAMPLE DATE | |
| SAMPLE DEPTH (feet) | |
| 4-3-17 | |
| 0-2' | |
| U | PCB-1016 CONCENTRATION (ug/kg) |
| U | PCB-1221 CONCENTRATION (ug/kg) |
| U | PCB-1232 CONCENTRATION (ug/kg) |
| U | PCB-1242 CONCENTRATION (ug/kg) |
| 93 | PCB-1248 CONCENTRATION (ug/kg) |
| 25 | PCB-1254 CONCENTRATION (ug/kg) |
| 6.5 | PCB-1260 CONCENTRATION (ug/kg) |
| U | PCB-1262 CONCENTRATION (ug/kg) |
| U | PCB-1268 CONCENTRATION (ug/kg) |
| 125 | TOTAL PCBs CONCENTRATION (ug/kg) |
- ug/kg

MICROGRAMS PER KILOGRAM
- U

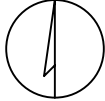
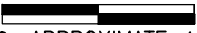
BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

SEDIMENT CTITERIA 100 ug/kg.

UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO)
1,000 ug/kg.

DRAFTED BY: W.G.S.	SEDIMENT SAMPLING MAP GROUPS 20-22		
CHECKED BY:	NYSDEC FORMER AL TECH SPECIALTY STEEL CORP WILLOWBROOK POND OPERABLE UNIT DUNKIRK, NEW YORK		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225		
NORTH 	SCALE IN FEET	DATE	FIGURE
	 0 APPROXIMATE 40	3-27-18	9



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LEGEND

- MONITORING WELL
- UNDERGROUND GAS LINE
- SOIL SEDIMENT SAMPLE

CS1-1A	SAMPLE IDENTIFICATION
4-3-17	SAMPLE DATE
0-2'	SAMPLE DEPTH (feet)
U	PCB-1016 CONCENTRATION (ug/kg)
U	PCB-1221 CONCENTRATION (ug/kg)
U	PCB-1232 CONCENTRATION (ug/kg)
U	PCB-1242 CONCENTRATION (ug/kg)
93	PCB-1248 CONCENTRATION (ug/kg)
25	PCB-1254 CONCENTRATION (ug/kg)
6.5	PCB-1260 CONCENTRATION (ug/kg)
U	PCB-1262 CONCENTRATION (ug/kg)
U	PCB-1268 CONCENTRATION (ug/kg)
125	TOTAL PCBs CONCENTRATION (ug/kg)

ug/kg MICROGRAMS PER KILOGRAM
U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

SEDIMENT CTITERIA 100 ug/kg.
UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO)
1,000 ug/kg.

CS23-5A	CS23-5B	CS23-3A	CS23-3B	CS23-1A	CS23-1B	CS23-2A	CS23-2B	CS23-4A	CS23-4B
4-18-17	4-18-17	4-18-17	4-18-17	4-18-17	4-18-17	4-18-17	4-18-17	4-18-17	4-18-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
56	3.4	390	680	U	U	45	3.3	14	U
36	U	160	230	54	140	30	U	16	U
13	U	37	43	U	3.5	17	U	24	U
U	U	U	3	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
105	3.4	587	953	54	144	92	3.3	54	U

CS24-5A	CS24-5B	CS24-3A	CS24-3B	CS24-1A	CS24-1B	CS24-4A	CS24-4B	CS24-2A	CS24-2B
4-19-17	4-19-17	4-19-17	4-19-17	4-19-17	4-19-17	4-19-17	4-19-17	4-19-17	4-19-17
0-2"	0-1'	0-2"	0-1'	0-1'	1-2'	0-2"	0-1'	0-2"	0-1'
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	U	U	U	U
U	U	930	U	2,500	5,200	U	34,000	3,400	1,600
U	U	360	350	1,000	1,300	U	21,000	780	690
1,100	1,700	110	67	260	300	35,000	8,300	480	190
U	U	U	U	U	U	U	U	U	U
U	U	U	U	U	U	11,000	1,900	U	U
1,100	1,700	1,400	417	3,760	6,800	46,000	65,200	4,660	2,480

DRAFTED BY: W.G.S.	SEDIMENT SAMPLING MAP GROUPS 23-24		
CHECKED BY:	NYSDEC FORMER AL TECH SPECIALTY STEEL CORP WILLOWBROOK POND OPERABLE UNIT DUNKIRK, NEW YORK		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225		
	SCALE IN FEET 0 APPROXIMATE 40	DATE 3-27-18	FIGURE 10

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LEGEND

- MONITORING WELL
- UNDERGROUND GAS LINE
- SOIL SEDIMENT SAMPLE

CS1-1A	SAMPLE IDENTIFICATION
4-3-17	SAMPLE DATE
0-2'	SAMPLE DEPTH (feet)
U	PCB-1016 CONCENTRATION (ug/kg)
U	PCB-1221 CONCENTRATION (ug/kg)
U	PCB-1232 CONCENTRATION (ug/kg)
U	PCB-1242 CONCENTRATION (ug/kg)
93	PCB-1248 CONCENTRATION (ug/kg)
25	PCB-1254 CONCENTRATION (ug/kg)
6.5	PCB-1260 CONCENTRATION (ug/kg)
U	PCB-1262 CONCENTRATION (ug/kg)
U	PCB-1268 CONCENTRATION (ug/kg)
125	TOTAL PCBs CONCENTRATION (ug/kg)

ug/kg MICROGRAMS PER KILOGRAM
U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

SEDIMENT CTITERIA 100 ug/kg.
UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO)
1,000 ug/kg.

DRAFTED BY:	SEDIMENT SAMPLING MAP		
W.G.S.	GROUPS 25-27		
CHECKED BY:	NYSDEC		
REVIEWED BY:	FORMER AL TECH SPECIALTY STEEL CORP		
	WILLOWBROOK POND OPERABLE UNIT		
NORTH	DUNKIRK, NEW YORK		
	Groundwater & Environmental Services, Inc.		
	495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225		FIGURE
SCALE IN FEET		DATE	11
		3-27-18	
0 APPROXIMATE 40			



CS25-3A	CS25-3B
4-18-17	4-18-17
0-2"	0-1'
U	U
U	U
U	U
U	U
1,100	U
340	130
59	29
U	U
U	U
1,499	159

CS25-4A	CS25-4B
4-18-17	4-18-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
1,400	130
U	U
1,400	130

CS25-1A	CS25-1B
4-18-17	4-18-17
0-1'	1-2'
U	U
U	U
U	U
U	U
2,100	1,400
650	290
120	57
U	U
U	U
2,870	1,747

CS25-5A	CS25-5B
4-18-17	4-18-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
59	18
150	24
U	U
U	U
209	42

CS25-2A	CS25-2B
4-18-17	4-18-17
0-2"	0-1'
U	U
U	U
U	U
U	U
1,700	U
800	2,900
300	610
U	U
U	U
2,800	3,510

CS26-2A	CS26-2B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	13,000
1,100	3,000
190	U
U	U
1,290	16,000

CS26-4A	CS26-4B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
77	4
65	U
U	U
U	U
142	4

CS26-1A	CS26-1B
4-19-17	4-19-17
0-1'	1-2'
U	U
U	U
U	U
240	9.7
U	U
U	U
U	U
U	U
240	10

CS26-5A	CS26-5B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
660	550
80	81
U	U
U	U
740	631

CS26-3A	CS26-3B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
1,000	1,100
220	120
U	U
U	U
1,220	1,220

CS27-4A	CS27-4B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
76	U
77	150
U	U
U	U
153	150

CS27-1A	CS27-1B
4-19-17	4-19-17
0-1'	1-2'
U	U
U	U
U	U
430	U
U	510
64	110
U	11
U	U
U	U
494	631

CS27-3A	CS27-3B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
1,800	48
190	6.7
U	U
U	U
1,990	55

CS27-5A	CS27-5B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
U	U
28	23
14	14
U	U
U	U
42	37

CS27-2A	CS27-2B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
1,400	1,200
590	270
55	27
U	U
U	U
2,045	1,497

M:\Graphics\0900-Buffalo\NY SDEC\Dunkirk-altec\Dunkirk-altec SM.dwg, B-40(28-30), WShea



LEGEND

- MONITORING WELL
- UNDERGROUND GAS LINE
- SOIL SEDIMENT SAMPLE

CS1-1A	SAMPLE IDENTIFICATION
4-3-17	SAMPLE DATE
0-2'	SAMPLE DEPTH (feet)
U	PCB-1016 CONCENTRATION (ug/kg)
U	PCB-1221 CONCENTRATION (ug/kg)
U	PCB-1232 CONCENTRATION (ug/kg)
U	PCB-1242 CONCENTRATION (ug/kg)
93	PCB-1248 CONCENTRATION (ug/kg)
25	PCB-1254 CONCENTRATION (ug/kg)
6.5	PCB-1260 CONCENTRATION (ug/kg)
U	PCB-1262 CONCENTRATION (ug/kg)
U	PCB-1268 CONCENTRATION (ug/kg)
125	TOTAL PCBs CONCENTRATION (ug/kg)

ug/kg MICROGRAMS PER KILOGRAM
U BELOW DETECTION LIMITS

DATA SHADED RED DEFINES AN EXCEEDENCE OF CONSTITUENT.

NOTES:

SEDIMENT CTITERIA 100 ug/kg.

UNRESTRICTED SOIL CLEANUP OBJECTIVE (SCO)
1,000 ug/kg.

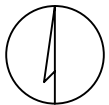
DRAFTED BY:

W.G.S.

CHECKED BY:

REVIEWED BY:

NORTH



SEDIMENT SAMPLING MAP
GROUPS 28-30

NYSDEC
FORMER AL TECH SPECIALTY STEEL CORP
WILLOWBROOK POND OPERABLE UNIT
DUNKIRK, NEW YORK

Groundwater & Environmental Services, Inc.
495 AERO DRIVE, SUITE 3, CHEEKTOWAGA, NEW YORK 14225

SCALE IN FEET
0 APPROXIMATE 40

DATE
3-27-18

FIGURE
12

CS28-5A	CS28-5B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
570	240
75	U
U	U
U	U
645	240

CS28-4
CS28-2
CS28-1
CS28-3
CS28-5

CS28-3A	CS28-3B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
920	60
72	8.4
U	U
U	U
992	68

CS28-2A	CS28-2B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	58
U	U
970	U
270	U
42	U
U	U
U	U
1,282	58

CS28-4A	CS28-4B
4-19-17	4-19-17
0-2"	0-1'
U	U
U	U
U	U
U	U
26	5,600
4.9	480
U	U
U	U
31	6,080

CS28-1A	CS28-1B
4-19-17	4-19-17
0-1'	1-2'
U	U
U	U
250	180
U	U
U	U
U	U
250	180

CS29-4A	CS29-4B
4-20-17	4-20-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	7.8
61	5.5
55	U
U	U
U	U
116	13

CS29-5
CS29-4
CS29-2
CS29-1
CS29-3

CS29-2A	CS29-2B
4-20-17	4-20-17
0-2"	0-1'
U	U
U	U
U	U
420	720
110	200
25	35
U	U
U	U
555	955

CS29-5A	CS29-5B
4-20-17	4-20-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
120	30
26	3.7
U	U
U	U
146	34

CS29-3A	CS29-3B
4-20-17	4-20-17
0-2"	0-1'
U	U
U	U
U	U
U	U
U	U
830	1,800
150	260
U	U
U	U
980	2,060

CS29-1A	CS29-1B
4-20-17	4-20-17
0-1'	1-2'
U	U
U	U
U	U
U	U
420	4,500
75	1,100
11	160
U	U
U	U
506	5,760

CS30-4
CS30-2
CS30-1
CS30-3
CS30-5

CS30-3A	CS30-3B
4-20-17	4-20-17
0-2"	0-1'
U	U
U	U
U	U
U	480
730	53
120	U
U	U
U	U
850	533

CS30-5A	CS30-5B
4-20-17	4-20-17
0-2"	0-1'
U	U
U	U
U	U
U	U
150	77
49	22
U	U
U	U
199	99

CS30-1A	CS30-1B
4-20-17	4-20-17
0-1'	1-2'
U	U
U	U
U	U
430	180
130	69
40	14
U	U
U	U
600	263

CS30-2A	CS30-2B
4-20-17	4-20-17
0-2"	0-1'
U	U
U	U
U	U
180	52
87	38
35	15
U	U
U	U
302	105

CS30-4A	CS30-4B
4-20-17	4-20-17
0-2"	0-1'
U	U
U	U
U	U
U	U
160	470
42	81
U	U
U	U
202	551

BRIGHAM ROAD (ROUTE 98B)

98B

TABLES

Table 1A

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-1**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
Depth (ftbg)			0-2"	refusal - no sample		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-8"
Sample Date			4/3/2017			4/3/2017	4/3/2017	4/3/2017	4/3/2017	4/3/2017	4/3/2017	4/3/2017	4/3/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	6,550		NS	8,810	9,050	9,350	8,590	9,390	9,190	9,910	9,710
7440-36-0	ANTIMONY	NS	0.40		NS	0.35	0.31	0.99	0.26	0.34	0.38	0.29	0.44
7440-38-2	ARSENIC	<10	18.4		13	8.2	9.8	9.5	10.2	9.9	9.0	9.8	10.3
7440-39-3	BARIUM	NS	109		433	91.8	100	80.9	67.5	107	93.5	80.8	81.6
7440-41-7	BERYLLIUM	NS	0.73		10	0.7	0.7	0.67	0.61	0.75	0.8	0.67	0.67
7440-43-9	CADMIUM	<1	0.21		4	0.3	0.37	0.34	0.27	0.35	0.26	0.27	0.32
7440-70-2	CALCIUM	NS	14,200		NS	5,230	24,200	3,200	6,510	4,570	7,990	3,580	3,470
7440-47-3	CHROMIUM, TOTAL	<43	100		NS	17.5	23.1	27.4	17.1	19.2	16.0	29.3	34.8
7440-48-4	COBALT	NS	9		NS	7.5	9.5	8.9	8.7	9.8	8.1	9.1	9.8
7440-50-8	COPPER	<32	31.9		50	31.5	35.2	27.5	24.0	33.8	36.5	26	25.5
7439-89-6	IRON	NS	30,300		NS	18,100	21,100	20,900	22,500	22,800	20,800	21,700	23,300
7439-92-1	LEAD	<36	33.2		63	52.1	36.3	55.9	32.4	59.5	55.2	41.6	40.2
7439-95-4	MAGNESIUM	NS	3,870		NS	2,850	10,100	2,740	2,900	2,980	2,920	2,870	2,880
7439-96-5	MANGANESE	NS	797		1600	317	289	307	259	311	303	410	463
7440-02-0	NICKEL	<23	104		30	21.8	31.8	26.7	22.7	25.5	22.3	24.8	26.7
7440-09-7	POTASSIUM	NS	626		NS	1,100	1,000	1,160	758	1,090	749	1,160	980
7782-49-2	SELENIUM	NS	1.5		3.9	1.4	1.2	1.3	1.1	1.6	1.1	1.3	1.3
7440-22-4	SILVER	<1	0.029		2	0.048	0.063	0.054	0.039	0.053	0.053	0.052	0.045
7440-23-5	SODIUM	NS	147		NS	46.8	65.9	45.4	48.1	63.1	49.6	50.8	60.9
7440-28-0	THALLIUM	NS	0.14		NS	0.21	0.4	0.24	0.23	0.22	0.22	0.24	0.24
7440-62-2	VANADIUM	NS	17.0		NS	15.2	16.8	18.3	16.7	17.8	17.1	23.8	25.5
7440-66-6	ZINC	<120	94.6		109	97	83.2	102	75.6	99.4	87.4	96.4	92
7439-97-6	MERCURY	NS	0.0089		NS	0.09	0.042	0.063	0.046	0.068	0.38	0.066	0.062

CAS #	TOC (mg/Kg)	
TOC	TOTAL ORGANIC CARBON	28,100

CAS #	PCB's (ug/Kg)													
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U		NS	U	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U		NS	U	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U		NS	U	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U		NS	U	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	93		NS	U	4.9	U	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOR 1254)	NS	25		NS	3.6	2.9	4.1	U	U	U	U	U	U
11096-82-5	PCB-1260 (AROCOR 1260)	NS	6.5		NS	U	U	8.0	U	6.2	U	U	5.7	
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U		NS	U	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U		NS	U	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	125		1,000	3.6	7.8	12.1	U	6.2	U	U	5.7	

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1B

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-2**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg) Sample Date	Sample Date	**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
			4/3/2017	4/3/2017		4/3/2017	4/3/2017	4/3/2017	4/3/2017	4/3/2017	4/3/2017	4/3/2017	4/3/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	4,680	12,200	NS	10,200	8,080	8,510	10,300	10,000	12,100	8,880	7,020
7440-36-0	ANTIMONY	NS	0.25	0.073	NS	0.46	0.69	0.33	0.18	0.4	0.26	0.44	0.57
7440-38-2	ARSENIC	<10	5.9	2.4	13	11.9	10.4	10.1	12.5	12	10.5	11.3	8.8
7440-39-3	BARIUM	NS	94	248	433	80.3	73	83.8	115	85.1	101	122	82.9
7440-41-7	BERYLLIUM	NS	0.34	0.99	10	0.87	0.81	0.57	0.77	0.81	0.94	0.6	0.46
7440-43-9	CADMIUM	<1	0.4	0.27	4	0.34	0.22	0.38	0.21	0.33	0.22	0.46	0.3
7440-70-2	CALCIUM	NS	2,780	1,460	NS	3,640	17,200	3,080	20,700	3,580	5,720	14,300	8,630
7440-47-3	CHROMIUM, TOTAL	<43	376	28.9	NS	26.3	13.3	22.7	18.0	18.0	16.9	17.3	19.0
7440-48-4	COBALT	NS	11.4	10.2	NS	10.6	8.2	9.5	12.5	9.9	10.0	11.1	7.6
7440-50-8	COPPER	<32	59.2	23.7	50	38.6	70.4	29.0	30.4	33.4	22.6	38.7	26.0
7439-89-6	IRON	NS	15,300	22,300	NS	25,400	24,100	21,900	28,500	25,100	26,200	24,600	18,400
7439-92-1	LEAD	<36	43.2	15.3	63	67.7	62.0	37.8	22.2	53.6	34.5	195	97.3
7439-95-4	MAGNESIUM	NS	1,620	3,720	NS	2,690	2,830	3,090	8,020	2,710	3,250	6,100	3,320
7439-96-5	MANGANESE	NS	167	130	1600	386	347	289	372	358	368	333	250
7440-02-0	NICKEL	<23	163	33.2	30	28.6	21.7	27.4	34.5	26.6	23.3	33.7	23.0
7440-09-7	POTASSIUM	NS	444	890	NS	1,110	735	1,080	1,310	1,210	897	1,250	824
7782-49-2	SELENIUM	NS	0.91	1.9	3.9	1.6	1.1	1.2	1.2	1.6	1.6	1.4	0.97
7440-22-4	SILVER	<1	0.081	0.052	2	0.087	0.057	0.045	0.053	0.062	0.046	0.085	0.057
7440-23-5	SODIUM	NS	109	135	NS	43.3	52.0	29.9	67.2	40.1	41.1	53.8	62.1
7440-28-0	THALLIUM	NS	0.11	0.26	NS	0.26	0.21	0.31	0.35	0.25	0.29	0.46	0.23
7440-62-2	VANADIUM	NS	17.1	18.3	NS	20.0	15.9	16.9	19.3	19.7	20.8	18.3	15.7
7440-66-6	ZINC	<120	114	112	109	97.0	81.9	102	79.9	97.5	94.7	162	152
7439-97-6	MERCURY	NS	0.062	0.045	NS	0.13	0.1	0.052	0.029	0.084	0.071	0.048	0.079

CAS #	TOC (mg/Kg)		
TOC	TOTAL ORGANIC CARBON		18,900

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	150	38	NS	U	U	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOR 1254)	NS	70	6.8	NS	5.0	U	U	U	U	U	U	U
11096-82-5	PCB-1260 (AROCOR 1260)	NS	14	U	NS	U	U	3.2	U	U	U	U	U
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	234	44.8	1,000	5.0	U	3.2	U	U	U	U	U

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1C

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-3**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
Depth (ftbg)	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'			
Sample Date	4/4/2017		4/4/2017	4/4/2017		4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017		
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	6,580	6,400	NS	8,380	9,500	8,680	7,670	2.8	8,340	9,890	9,090
7440-36-0	ANTIMONY	NS	0.062	0.093	NS	0.49	0.5	0.24	0.27	0.32	0.4	0.087	0.097
7440-38-2	ARSENIC	<10	3.6	2.9	13	6.7	6.6	5.8	7.7	5.6	6.1	2.9	3.7
7440-39-3	BARIUM	NS	121	98.1	433	89.3	124	78.1	70.6	72.2	97.5	89.7	91.8
7440-41-7	BERYLLIUM	NS	0.48	0.4	10	0.56	0.85	0.9	0.68	U	0.56	1.8	1.3
7440-43-9	CADMIUM	<1	0.33	0.28	4	0.94	1.1	0.52	0.25	0.75	0.84	0.22	0.21
7440-70-2	CALCIUM	NS	2,200	2,020	NS	2,700	10,500	14,500	9,340	82.6	6,170	44,200	29,600
7440-47-3	CHROMIUM, TOTAL	<43	19.6	49.7	NS	436	454	12.3	12	280	270	7.6	11.7
7440-48-4	COBALT	NS	7.5	6.3	NS	9.1	8.9	5.6	6.7	7.6	8.0	2.8	3.5
7440-50-8	COPPER	<32	14.6	18.1	50	82.9	88.2	22.2	27.2	57.9	57.6	12.0	12.9
7439-89-6	IRON	NS	11,900	10,200	NS	18,200	18,100	13,800	16,100	15,300	15,800	9,420	9,890
7439-92-1	LEAD	<36	9.7	14.1	63	81.6	82.8	43.6	41.3	49.5	64.2	23.7	23.9
7439-95-4	MAGNESIUM	NS	2,160	2,070	NS	2,420	3,680	4,770	3,360	22.8	2,630	9,490	6,610
7439-96-5	MANGANESE	NS	124	126	1600	323	584	649	476	0.18	360	993	835
7440-02-0	NICKEL	<23	20.6	29.4	30	106	114	16.6	18.6	78.2	77.5	8.3	12.5
7440-09-7	POTASSIUM	NS	476	476	NS	1,030	1,200	1,290	909	5.9	937	670	895
7782-49-2	SELENIUM	NS	1.0	0.42	3.9	0.72	0.75	0.73	0.58	0.81	0.94	0.59	0.62
7440-22-4	SILVER	<1	0.035	0.035	2	0.093	0.1	0.047	0.056	0.071	0.078	0.019	0.017
7440-23-5	SODIUM	NS	126	141	NS	55	120	107	65.7	130	60.2	251	204
7440-28-0	THALLIUM	NS	0.14	0.17	NS	0.25	0.23	0.21	0.25	0.17	0.23	0.083	0.078
7440-62-2	VANADIUM	NS	11.7	7.6	NS	103	2.7	10.7	11.1	3.4	5.0	7.3	7.5
7440-66-6	ZINC	<120	61.2	50.6	109	U	96.0	78.6	83.7	88.9	89.5	44.1	45.6
7439-97-6	MERCURY	NS	0.033	0.035	NS	0.11	0.11	0.057	0.054	0.11	0.09	0.014	0.014

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		19,600	13,400

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	5.6	38	NS	7.8	7.1	2.9	2.5	9.7	8.6	U	U
11097-69-1	PCB-1254 (AROCOR 1254)	NS	U	7.2	NS	7.2	6.3	6.4	6.6	9.4	8.6	U	3.1
11096-82-5	PCB-1260 (AROCOR 1260)	NS	U	U	NS	7.4	8.1	2.0	1.5	10.0	11.0	4.4	5.7
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	U	U	U	U	1.9	U	1.5
1336-36-3	Total PCBs	100	5.6	45.2	1,000	22.4	21.5	11.3	10.6	29.1	30.1	4.4	10.3

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1D

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-4**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg) Sample Date	CAS #	Metals (mg/kg)	**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
				0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
				4/4/2017	4/4/2017		4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017
7429-90-5	ALUMINUM	NS		9,240	8,270	NS	10,900	11,100	8,330	11,600	10,900	12,100	9,280	8,590
7440-36-0	ANTIMONY	NS		0.11	0.082	NS	0.22	0.17	0.59	0.14	0.25	0.13	0.42	0.37
7440-38-2	ARSENIC	<10		2.4	3.0	13	4.4	3.8	7.5	5.3	4.6	3.0	8.4	8.1
7440-39-3	BARIUM	NS		94.9	122	433	129	136	105	134	128	150	116	144
7440-41-7	BERYLLIUM	NS		0.58	0.57	10	0.64	0.69	0.57	0.82	0.67	0.76	0.81	0.78
7440-43-9	CADMIUM	<1		0.14	0.14	4	0.51	0.49	0.87	0.16	0.65	0.22	0.28	0.32
7440-70-2	CALCIUM	NS		1,140	1,100	NS	2,840	2,050	8,290	17,400	2,400	1,290	5,430	10,300
7440-47-3	CHROMIUM, TOTAL	<43		11.6	9.7	NS	92.3	58.8	17.8	14.0	168	39.3	20	16.5
7440-48-4	COBALT	NS		5.9	4.5	NS	8.9	8.7	7.4	10.3	9.6	8.2	8.1	8.6
7440-50-8	COPPER	<32		12.6	15.7	50	31.1	22.8	38.1	20.9	34.6	17.2	28.9	30.7
7439-89-6	IRON	NS		11,100	8,050	NS	15,000	14,000	18,200	18,700	14,400	13,800	19,000	16,000
7439-92-1	LEAD	<36		13.4	13.0	63	37.9	29.8	181	19.1	44	21.3	101	61.3
7439-95-4	MAGNESIUM	NS		2,810	2,480	NS	3,260	3,290	4,110	7,030	3,060	3,370	3,430	3,730
7439-96-5	MANGANESE	NS		109	79.1	1600	383	254	396	293	339	172	373	482
7440-02-0	NICKEL	<23		15.2	13.7	30	59.9	42.5	21.6	24.1	106	33.9	25.7	20.8
7440-09-7	POTASSIUM	NS		687	623	NS	924	741	1,330	1,710	852	685	1,290	1,060
7782-49-2	SELENIUM	NS		0.41	0.4	3.9	0.78	0.66	0.73	0.4	0.63	0.57	0.66	0.52
7440-22-4	SILVER	<1		0.024	0.03	2	0.071	0.048	0.18	0.035	0.073	0.036	0.082	0.076
7440-23-5	SODIUM	NS		124	118	NS	120	107	70.7	83.7	103	107	65.2	70.1
7440-28-0	THALLIUM	NS		0.24	0.23	NS	0.27	0.26	0.3	0.32	0.26	0.29	0.31	0.3
7440-62-2	VANADIUM	NS		12.3	10.7	NS	12.5	13.1	15.1	15.2	9.9	13.7	13.1	13.1
7440-66-6	ZINC	<120		49.1	43.6	109	99.5	81.7	240	54.5	94.5	66.8	83.8	65.3
7439-97-6	MERCURY	NS		0.037	0.046	NS	0.081	0.082	0.19	0.026	0.099	0.053	0.11	0.11

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		2,020	1,970

CAS #	PCB's (ug/Kg)													
12674-11-2	PCB-1016 (AROCLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCLOR 1248)	NS	11	U	NS	270	220	18	U	270	110	U	U	U
11097-69-1	PCB-1254 (AROCLOR 1254)	NS	4.1	U	NS	130	110	15	U	130	55	U	U	U
11096-82-5	PCB-1260 (AROCLOR 1260)	NS	U	U	NS	42.0	35.0	18.0	U	38.0	17.0	2.9	4.5	
37324-23-5	PCB-1262 (AROCLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCLOR 1268)	NS	U	U	NS	4.9	4.1	20.0	U	4.3	1.9	U	U	U
1336-36-3	Total PCBs	100	15.1	U	1,000	447	369	71	U	442	184	2.9	4.5	

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1E

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-5**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg) Sample Date	CAS #	Metals (mg/kg)	**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
				0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
				4/4/2017	4/4/2017		4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017	4/4/2017
7429-90-5	ALUMINUM	NS		14,700	13,900	NS	12,200	13,700	12,900	13,200	12,800	14,500	9,230	10,900
7440-36-0	ANTIMONY	NS		0.41	0.31	NS	0.22	0.15	0.17	0.068	0.28	0.14	0.091	0.14
7440-38-2	ARSENIC	<10		7.0	6.1	13	5.0	4.2	3.9	3.0	4.7	4.0	5.1	6.1
7440-39-3	BARIUM	NS		193	167	433	143	155	91.9	89.6	148	155	55	65.7
7440-41-7	BERYLLIUM	NS		1.0	0.76	10	0.6	0.67	0.5	0.49	0.58	0.64	0.38	0.46
7440-43-9	CADMIUM	<1		0.78	0.76	4	0.46	0.31	0.24	0.19	0.5	0.27	0.26	0.15
7440-70-2	CALCIUM	NS		2,660	2,270	NS	2,600	1,350	1,530	832	2,390	1,230	1,050	841
7440-47-3	CHROMIUM, TOTAL	<43		208	198	NS	89.1	46.3	20.1	16.2	85.7	37.3	11.7	13.4
7440-48-4	COBALT	NS		11.2	11.9	NS	9.9	8.9	7.4	7.4	9.7	8.8	6.2	8.4
7440-50-8	COPPER	<32		63.2	50.4	50	32.4	20.6	10.5	7.1	33.7	17.7	10.8	11
7439-89-6	IRON	NS		17,400	21,300	NS	18,200	17,700	16,200	16,200	17,700	18,700	14,600	18,700
7439-92-1	LEAD	<36		109	72	63	41.0	30.7	31.3	18.6	41.2	28.4	19.1	16.1
7439-95-4	MAGNESIUM	NS		3,820	3,600	NS	3,370	3,510	3,340	3,470	3,370	3,630	2,580	3,160
7439-96-5	MANGANESE	NS		213	247	1600	353	199	185	134	414	227	168	201
7440-02-0	NICKEL	<23		102	91.7	30	57	32.4	21.1	17.7	53.6	29.8	15.0	17.3
7440-09-7	POTASSIUM	NS		1,250	1,010	NS	785	756	822	794	826	749	952	923
7782-49-2	SELENIUM	NS		1.2	0.85	3.9	0.91	0.84	0.52	0.59	0.9	0.88	0.32	0.4
7440-22-4	SILVER	<1		0.15	0.12	2	0.071	0.059	0.042	0.04	0.085	0.05	0.032	0.019
7440-23-5	SODIUM	NS		256	229	NS	178	188	74.0	53.8	142	131	54.6	52.9
7440-28-0	THALLIUM	NS		0.41	0.37	NS	0.31	0.35	0.27	0.27	0.33	0.38	0.19	0.21
7440-62-2	VANADIUM	NS		15.7	19.4	NS	16.4	17.3	16.8	17.7	16.7	17.5	13.8	16.1
7440-66-6	ZINC	<120		160	167	109	117	97.8	80.3	70.5	113	92.6	47.7	50
7439-97-6	MERCURY	NS		0.22	0.14	NS	0.089	0.068	0.065	0.051	0.087	0.071	0.038	0.029

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		29,000	22,600

CAS #	PCB's (ug/Kg)													
12674-11-2	PCB-1016 (AROCLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCLOR 1248)	NS	2,200	340	NS	59	8	20	7	18	8.3	U	U	U
11097-69-1	PCB-1254 (AROCLOR 1254)	NS	650	130	NS	70	8.5	16	7.4	16	7	U	U	U
11096-82-5	PCB-1260 (AROCLOR 1260)	NS	96	29	NS	42	4.6	7.8	3.7	9.4	3.2	U	U	U
37324-23-5	PCB-1262 (AROCLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCLOR 1268)	NS	12	U	NS	U	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	2,958	499	1,000	171	21.1	43.8	18.1	43.4	18.5	U	U	U

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1F

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-6**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg) Sample Date	CAS #	Metals (mg/kg)	**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
				0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
				4/5/2017	4/5/2017		4/5/2017	4/5/2017	4/5/2017	4/5/2017	4/5/2017	4/5/2017	4/5/2017	4/5/2017
7429-90-5	ALUMINUM	NS		11,400	13,900	NS	10,400	11,500	10,400	10,600	15,700	15,500	10,900	14,500
7440-36-0	ANTIMONY	NS		0.31	0.43	NS	0.37	0.23	0.15	0.16	0.33	0.076	0.26	0.19
7440-38-2	ARSENIC	<10		7.8	5.0	13	6.0	5.2	5.2	5.2	6.7	2.7	7.3	7.8
7440-39-3	BARIUM	NS		158	153	433	132	129	64.4	66.8	191	191	74.6	102
7440-41-7	BERYLLIUM	NS		0.64	0.75	10	0.55	0.6	0.48	0.49	0.79	0.73	0.61	0.85
7440-43-9	CADMIUM	<1		0.8	0.64	4	0.71	0.44	0.18	0.15	0.65	0.28	0.21	0.14
7440-70-2	CALCIUM	NS		3,820	1,960	NS	3,240	2,030	1,880	1,130	3,170	732	2,700	7,310
7440-47-3	CHROMIUM, TOTAL	<43		278	105	NS	179	151	12.8	12.2	133	15.6	14.5	16.3
7440-48-4	COBALT	NS		16.8	10	NS	12.2	9.8	7.1	6.3	12.8	8.2	8.6	9.8
7440-50-8	COPPER	<32		70.1	33	50	52.1	42.4	11.9	11.4	43.4	12.8	19.3	25.3
7439-89-6	IRON	NS		23,400	19,700	NS	18,400	16,600	14,800	15,800	21,300	18,400	19,300	24,800
7439-92-1	LEAD	<36		76	49.8	63	52.3	46.7	20.1	20.4	55.7	16.9	23.8	16.7
7439-95-4	MAGNESIUM	NS		3,220	3,540	NS	3,190	3,230	3,050	2,990	4,190	4,060	3,980	6,870
7439-96-5	MANGANESE	NS		468	237	1600	686	213	210	145	487	157	307	294
7440-02-0	NICKEL	<23		174	64.9	30	115	87.1	17.4	16.7	86.7	22.5	24.2	28.3
7440-09-7	POTASSIUM	NS		957	945	NS	918	667	1,140	887	1,090	734	1,560	1,350
7782-49-2	SELENIUM	NS		0.97	0.76	3.9	0.76	1.0	0.54	0.5	1.4	0.6	0.61	0.42
7440-22-4	SILVER	<1		0.11	0.093	2	0.095	0.075	0.036	0.028	0.087	0.025	0.04	0.056
7440-23-5	SODIUM	NS		320	193	NS	215	216	49.4	52.6	125	88.4	61.8	93.7
7440-28-0	THALLIUM	NS		0.29	0.33	NS	0.28	0.29	0.19	0.2	0.38	0.33	0.25	0.33
7440-62-2	VANADIUM	NS		13.7	17.3	NS	12.2	12.4	13.6	13.8	18.2	15.8	14.5	17.4
7440-66-6	ZINC	<120		195	144	109	130	100	61.8	49.3	129	78.5	67.4	59.6
7439-97-6	MERCURY	NS		0.15	0.12	NS	0.12	0.088	0.053	0.048	0.12	0.05	0.057	0.024

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		72,000	26,800

CAS #	PCB's (ug/Kg)													
12674-11-2	PCB-1016 (AROCLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCLOR 1248)	NS	230	180	NS	74.0	70.0	U	U	16.0	8.7	U	U	U
11097-69-1	PCB-1254 (AROCLOR 1254)	NS	140	110	NS	40.0	48	3.4	3.9	17.0	6.2	U	U	U
11096-82-5	PCB-1260 (AROCLOR 1260)	NS	69.0	23.0	NS	20.0	19.0	U	3.1	7.3	4.5	U	U	U
37324-23-5	PCB-1262 (AROCLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCLOR 1268)	NS	8.7	2.7	NS	2	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	448	316	1,000	136	137	3.4	7	40.3	19.4	U	U	U

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1G

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-7**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg) Sample Date	CAS #	Metals (mg/kg)	**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
				0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
				4/5/2017	4/5/2017		4/5/2017	4/5/2017	4/5/2017	4/5/2017	4/5/2017	4/5/2017	4/5/2017	4/5/2017
7429-90-5	ALUMINUM	NS		12,400	12,700	NS	12,800	13,300	12,600	12,800	12,300	12,800	11,500	12,800
7440-36-0	ANTIMONY	NS		0.26	0.15	NS	0.22	0.17	0.22	0.13	0.24	0.17	0.18	0.16
7440-38-2	ARSENIC	<10		6.4	5.4	13	6.4	3.7	3.9	3	4.6	2.7	5.3	5.9
7440-39-3	BARIUM	NS		136	134	433	142	151	83	85.6	149	149	62.6	68.7
7440-41-7	BERYLLIUM	NS		0.69	0.68	10	0.61	0.69	0.49	0.53	0.63	0.71	0.47	0.76
7440-43-9	CADMIUM	<1		1.2	0.37	4	0.63	0.48	0.28	0.28	0.63	0.4	0.56	0.13
7440-70-2	CALCIUM	NS		2,900	1,910	NS	3,430	1,920	1,900	1,180	2,700	1,200	956	845
7440-47-3	CHROMIUM, TOTAL	<43		79.7	32.4	NS	93.3	46.1	19.4	14.2	88	28.5	12.8	13.2
7440-48-4	COBALT	NS		9.7	7.8	NS	10.3	8.1	6.4	5.8	9.2	6.8	5.8	13.9
7440-50-8	COPPER	<32		31	15.7	50	35.6	17.4	11.8	8.6	27.2	11.7	10.1	13.1
7439-89-6	IRON	NS		17,800	18,100	NS	19,000	17,100	15,400	14,500	17,200	14,700	16,100	22,400
7439-92-1	LEAD	<36		52.2	28.5	63	44.5	31.8	26	28	46.7	49.5	19.5	15
7439-95-4	MAGNESIUM	NS		3,390	3,360	NS	3,710	3,550	3,230	3,260	3,330	3,200	2,790	3,290
7439-96-5	MANGANESE	NS		359	284	1600	621	304	182	121	567	203	164	241
7440-02-0	NICKEL	<23		59.6	29.9	30	72.6	35.2	19.8	15.3	58.5	22.6	14.9	17
7440-09-7	POTASSIUM	NS		852	704	NS	998	805	1,070	957	913	737	1,140	893
7782-49-2	SELENIUM	NS		1.1	0.75	3.9	0.87	1.1	0.81	0.68	0.96	0.96	0.78	0.64
7440-22-4	SILVER	<1		0.082	0.063	2	0.08	0.067	0.043	0.038	0.084	0.056	0.042	0.016
7440-23-5	SODIUM	NS		253	187	NS	245	173	107	65.9	198	162	56.9	42.5
7440-28-0	THALLIUM	NS		0.3	0.25	NS	0.3	0.32	0.26	0.25	0.3	0.31	0.22	0.22
7440-62-2	VANADIUM	NS		15.3	14.7	NS	14.3	14	16.7	16.7	9.7	14	16.5	18.6
7440-66-6	ZINC	<120		126	84.2	109	126	83	77.6	60.2	102	63.7	55.8	47.7
7439-97-6	MERCURY	NS		0.14	0.088	NS	0.095	0.085	0.061	0.047	0.1	0.068	0.041	0.024

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		39,300	20,300

CAS #	PCB's (ug/Kg)													
12674-11-2	PCB-1016 (AROCLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCLOR 1248)	NS	300	120	NS	140	87	20	4.1	160	60	U	U	U
11097-69-1	PCB-1254 (AROCLOR 1254)	NS	220	78	NS	110	62	20	4.5	100	56	U	U	U
11096-82-5	PCB-1260 (AROCLOR 1260)	NS	51	18	NS	38	20	11	U	39	16	U	U	U
37324-23-5	PCB-1262 (AROCLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCLOR 1268)	NS	3.8	U	NS	3.8	U	U	U	4.6	U	U	U	U
1336-36-3	Total PCBs	100	575	216	1,000	292	169	51	8.6	304	132	U	U	U

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1H

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-8**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg)	Sample Date	**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
			4/6/2017	4/6/2017		4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	13,300	10,800	NS	5,150	7,680	12,500	14,100	7,750	8,720	12,400	15,900
7440-36-0	ANTIMONY	NS	0.36	0.083	NS	0.42	0.47	0.25	0.12	0.51	0.52	0.17	0.12
7440-38-2	ARSENIC	<10	12.1	4.7	13	9.4	12.1	7.9	6	10.5	10.7	6.9	9.8
7440-39-3	BARIUM	NS	156	125	433	108	159	128	104	153	151	87.3	136
7440-41-7	BERYLLIUM	NS	0.93	0.73	10	0.44	0.6	0.57	0.61	0.55	0.65	0.5	0.69
7440-43-9	CADMIUM	<1	0.55	0.25	4	0.54	0.68	1.1	0.15	0.96	0.59	0.41	0.18
7440-70-2	CALCIUM	NS	2,170	1,110	NS	7,370	7,580	5,620	1,850	7,590	5,170	1,930	1,160
7440-47-3	CHROMIUM, TOTAL	<43	306	16.5	NS	382	452	57.5	24.6	390	468	20.1	22.1
7440-48-4	COBALT	NS	20.3	9.9	NS	16	20.8	11.5	9.3	19.3	26.1	7.3	10.9
7440-50-8	COPPER	<32	56.2	16.6	50	100	110	28.9	11.5	94.3	105	9.8	7
7439-89-6	IRON	NS	30,700	21,000	NS	23,100	28,200	24,000	23,600	25,500	27,400	21,600	35,500
7439-92-1	LEAD	<36	67	11.3	63	110	79.8	40.1	21.7	75.2	79	31	17.2
7439-95-4	MAGNESIUM	NS	3,290	2,830	NS	2,700	3,520	3,680	3,920	3,290	2,910	2,920	3,850
7439-96-5	MANGANESE	NS	286	135	1600	398	628	448	141	713	851	145	135
7440-02-0	NICKEL	<23	177	22.1	30	210	262	53.1	26.6	239	297	20.6	22
7440-09-7	POTASSIUM	NS	771	584	NS	533	684	945	907	883	695	951	890
7782-49-2	SELENIUM	NS	1.9	1.4	3.9	1.3	1.5	1.6	1.1	1.7	1.9	1.2	1
7440-22-4	SILVER	<1	0.11	0.034	2	0.092	0.13	0.063	0.051	0.12	0.13	0.052	0.025
7440-23-5	SODIUM	NS	168	107	NS	161	258	100	190	80	254	35.3	50.1
7440-28-0	THALLIUM	NS	0.29	0.2	NS	0.18	0.19	0.26	0.26	0.19	0.2	0.22	0.24
7440-62-2	VANADIUM	NS	37.2	18.9	NS	23.6	31.6	25.5	24.3	29.2	33.8	23.7	29.7
7440-66-6	ZINC	<120	179	72.7	109	188	239	173	94.5	244	240	91.5	70.8
7439-97-6	MERCURY	NS	0.12	0.042	NS	0.087	0.12	0.11	0.055	0.14	0.12	0.062	0.035

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		22,800	3,580

CAS #	PCB's (ug/Kg)													
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	U	32	NS	U	U	200	23	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOR 1254)	NS	1,200	11	NS	30	41	97	10	20	20	U	U	U
11096-82-5	PCB-1260 (AROCOR 1260)	NS	150	U	NS	22	27	28	U	25	23	U	U	U
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	1,350	43	1,000	52	68	325	33	45	43	U	U	U

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 11

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-9**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg) Sample Date	CAS #	Metals (mg/kg)	**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
				0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
				4/6/2017	4/6/2017		4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017
7429-90-5	ALUMINUM	NS		9,120	13,700	NS	11,300	13,400	12,800	9,840	11,700	17,000	12,900	11,600
7440-36-0	ANTIMONY	NS		0.18	0.17	NS	0.51	0.52	0.55	0.41	2.7	0.22	0.56	0.49
7440-38-2	ARSENIC	<10		9.7	5.8	13	13.5	14.2	14.4	12.4	22.9	12.4	14.6	17.2
7440-39-3	BARIUM	NS		100	247	433	143	159	152	123	1820	229	154	142
7440-41-7	BERYLLIUM	NS		0.63	0.87	10	0.79	0.99	0.82	0.7	0.77	1.8	0.92	0.86
7440-43-9	CADMIUM	<1		0.48	0.52	4	1.1	1.1	1.1	0.98	2	0.55	1.2	1.2
7440-70-2	CALCIUM	NS		1,810	2,510	NS	4,400	3,260	3,880	2,600	2,460	1,550	4,170	3,080
7440-47-3	CHROMIUM, TOTAL	<43		19.3	19.7	NS	265	444	265	389	81.5	26.2	238	486
7440-48-4	COBALT	NS		12.0	13.5	NS	19.6	22.6	20.8	19.3	15	19.9	20.4	22.2
7440-50-8	COPPER	<32		20.2	25.4	50	68.9	76.2	75.2	65.2	180	20.6	82	70.3
7439-89-6	IRON	NS		22,900	26,700	NS	31,100	33,900	33,700	29,100	88,400	42,400	35,400	34,800
7439-92-1	LEAD	<36		18.6	21.2	63	67.4	97.4	75.6	79.5	739	36.4	72.6	88.9
7439-95-4	MAGNESIUM	NS		2,670	3,850	NS	3,290	3,410	3,640	2,580	3,050	4,730	3,680	2,900
7439-96-5	MANGANESE	NS		150	191	1600	806	590	659	589	386	199	623	558
7440-02-0	NICKEL	<23		21.5	28.2	30	213	259	206	231	71	33.5	195	272
7440-09-7	POTASSIUM	NS		778	1,200	NS	948	856	1,050	648	1,060	1,100	1,060	681
7782-49-2	SELENIUM	NS		1.3	2.0	3.9	1.9	2.5	2.4	1.9	1.9	2.9	2.4	2
7440-22-4	SILVER	<1		0.041	0.058	2	0.11	0.13	0.14	0.11	0.24	0.04	0.15	0.12
7440-23-5	SODIUM	NS		80.5	132	NS	132	149	156	85.1	177	166	101	101
7440-28-0	THALLIUM	NS		0.2	0.28	NS	0.25	0.3	0.27	0.23	0.24	0.27	0.26	0.28
7440-62-2	VANADIUM	NS		19.3	26.5	NS	31.6	38.8	35.3	32.8	38.3	39.2	35.9	39.7
7440-66-6	ZINC	<120		76.5	101	109	274	279	324	252	768	117	335	275
7439-97-6	MERCURY	NS		0.042	0.072	NS	0.14	0.14	0.17	0.12	0.22	0.069	0.16	0.13

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		9,950	30,500

CAS #	PCB's (ug/Kg)													
12674-11-2	PCB-1016 (AROCLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCLOR 1242)	NS	58	8.9	NS	U	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCLOR 1248)	NS	U	U	NS	670	1,500	1,200	U	220	29	730	1,900	
11097-69-1	PCB-1254 (AROCLOR 1254)	NS	U	U	NS	380	630	480	1,800	160	18	410	1,200	
11096-82-5	PCB-1260 (AROCLOR 1260)	NS	U	U	NS	120	200	150	320	69	5.9	120	280	
37324-23-5	PCB-1262 (AROCLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U	
11100-14-4	PCB-1268 (AROCLOR 1268)	NS	U	U	NS	27	17	15	24	10	U	12	19	
1336-36-3	Total PCBs	100	58	8.9	1,000	1,197	2,347	1,845	2,144	459	52.9	1,272	3,399	

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1J

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-10**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg) Sample Date	CAS #	Metals (mg/kg)	**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
				0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
				4/6/2017	4/6/2017		4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017	4/6/2017
7429-90-5	ALUMINUM	NS		7,560	10,900	NS	11,000	13,200	6,800	10,300	14,100	14,700	12,300	12,100
7440-36-0	ANTIMONY	NS		0.19	0.14	NS	0.51	0.26	0.31	0.48	3.7	U	0.54	0.45
7440-38-2	ARSENIC	<10		2.2	1	13	9.3	5.3	7.1	8.6	10.3	3.8	9.9	10.6
7440-39-3	BARIUM	NS		241	372	433	159	163	97.7	139	164	181	162	149
7440-41-7	BERYLLIUM	NS		0.48	0.49	10	0.61	0.69	0.42	0.62	0.77	0.81	0.66	0.7
7440-43-9	CADMIUM	<1		0.17	0.4	4	0.74	0.48	0.6	1.1	0.79	0.59	0.84	0.94
7440-70-2	CALCIUM	NS		1,180	1,630	NS	5,990	2,280	4,090	4,910	3,650	1,990	5,630	3,770
7440-47-3	CHROMIUM, TOTAL	<43		17.8	14.8	NS	209	36.4	173	237	70.4	16.2	201	265
7440-48-4	COBALT	NS		5.4	6.9	NS	17.4	8.3	11	14.1	11.5	9.2	17.3	14.9
7440-50-8	COPPER	<32		9.5	15.2	50	53.3	19	32.8	54.5	49.7	11.7	58.1	75.5
7439-89-6	IRON	NS		11,300	11,700	NS	24,800	19,700	16,800	21,300	29,200	17,700	26,700	25,100
7439-92-1	LEAD	<36		12.1	11.6	63	50.7	22	35.4	60.1	737	18.9	58.8	61.5
7439-95-4	MAGNESIUM	NS		2,450	3,530	NS	3,710	3,350	2,220	3,120	3,210	3,490	4,110	3,140
7439-96-5	MANGANESE	NS		89.4	113	1600	1160	268	593	301	413	192	1050	752
7440-02-0	NICKEL	<23		15	17.8	30	194	33.9	123	152	59.6	18.4	172	164
7440-09-7	POTASSIUM	NS		790	931	NS	965	880	663	944	1,090	797	1,260	853
7782-49-2	SELENIUM	NS		U	0.57	3.9	1.2	0.84	0.61	1.7	1.3	1.1	1.4	1
7440-22-4	SILVER	<1		U	U	2	0.083	U	0.057	0.078	0.1	U	0.11	0.083
7440-23-5	SODIUM	NS		109	99.9	NS	130	95.6	U	U	108	134	114	89.2
7440-28-0	THALLIUM	NS		0.17	0.24	NS	0.24	0.25	0.14	0.23	0.33	0.27	0.25	0.26
7440-62-2	VANADIUM	NS		14	15	NS	46	22	34.5	48.2	31.7	20.7	45.5	51.7
7440-66-6	ZINC	<120		39.8	61.6	109	178	82.3	114	191	176	73.5	215	177
7439-97-6	MERCURY	NS		0.028	0.042	NS	0.13	0.065	0.06	0.14	0.15	0.066	0.15	0.14

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		4,490	5,160

CAS #	PCB's (ug/Kg)													
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	68	38	NS	U	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	U	U	NS	1,900	310	1,000	1,500	240	U	840	1,400	
11097-69-1	PCB-1254 (AROCOR 1254)	NS	U	U	NS	810	160	420	790	180	15	450	940	
11096-82-5	PCB-1260 (AROCOR 1260)	NS	U	U	NS	150	27	67	130	53	U	84	140	
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U	
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	19	3.6	7.9	28	U	U	U	19	
1336-36-3	Total PCBs	100	68	38	1,000	2,879	501	1,495	2,448	473	15	1,374	2,499	

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1K

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-11**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B	
Sample Point	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'	0-2"			
Depth (ftbg)														
Sample Date	4/10/2017		4/10/2017	4/10/2017		4/10/2017	4/10/2017	4/10/2017	4/10/2017	4/10/2017	4/10/2017	4/10/2017		
CAS #	Metals (mg/kg)													
7429-90-5	ALUMINUM	NS	8,100	5,890	NS	10,800	13,500	8,930	8,030	14,300	15,900	15,300	13,600	
7440-36-0	ANTIMONY	NS	0.19	0.14	NS	0.52	0.53	0.48	0.35	0.62	0.67	0.51	0.44	
7440-38-2	ARSENIC	<10	21.4	2	13	10	11.2	9.2	8.9	12.5	19.4	10.8	9.7	
7440-39-3	BARIUM	NS	311	330	433	155	186	130	117	185	203	171	155	
7440-41-7	BERYLLIUM	NS	0.5	0.38	10	0.63	0.76	0.54	0.47	0.77	0.92	0.72	0.7	
7440-43-9	CADMIUM	<1	0.28	0.22	4	0.83	1.1	0.74	0.61	1	1.4	0.82	0.57	
7440-70-2	CALCIUM	NS	1,470	1,470	NS	4,960	4,030	3,710	2,440	4,860	4,210	2,870	1,970	
7440-47-3	CHROMIUM, TOTAL	<43	21	11	NS	240	303	222	208	257	502	147	91.4	
7440-48-4	COBALT	NS	9.7	5.8	NS	17.3	18.6	13.8	11.5	18.4	21.7	13.5	10.4	
7440-50-8	COPPER	<32	13.6	16.6	50	52.3	60.2	42.6	36.5	62.1	73.7	44.1	27.1	
7439-89-6	IRON	NS	27,900	11,000	NS	24,300	27,000	21,300	18,200	28,700	35,100	25,900	23,500	
7439-92-1	LEAD	<36	13.1	13.1	63	55.9	75.8	48.5	46.1	75	105	60.4	40.5	
7439-95-4	MAGNESIUM	NS	2,650	2,220	NS	3,590	3,720	2,640	2,190	4,010	4,010	3,610	3,020	
7439-96-5	MANGANESE	NS	257	88.4	1600	1,080	850	783	566	1,170	1,020	587	374	
7440-02-0	NICKEL	<23	24.4	15.7	30	191	191	161	130	187	281	96.1	61.9	
7440-09-7	POTASSIUM	NS	741	897	NS	960	883	761	568	1,270	990	1,110	726	
7782-49-2	SELENIUM	NS	0.49	0.63	3.9	1.2	1.3	0.93	0.73	1.4	2	1.3	1.2	
7440-22-4	SILVER	<1	U	U	2	0.089	0.098	0.067	0.053	0.097	0.13	0.071	0.055	
7440-23-5	SODIUM	NS	99.8	107	NS	136	167	93.7	95.7	113	120	U	77.8	
7440-28-0	THALLIUM	NS	0.15	0.13	NS	0.22	0.27	0.18	0.16	0.28	0.35	0.3	0.28	
7440-62-2	VANADIUM	NS	15.8	14.6	NS	49.5	61.4	41.7	39.6	57.2	95	41.6	31	
7440-66-6	ZINC	<120	48.2	35.2	109	189	216	154	133	236	240	160	105	
7439-97-6	MERCURY	NS	0.021	0.018	NS	0.13	0.16	0.12	0.086	0.18	0.16	0.12	0.084	

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		1,990	3,170

CAS #	PCB's (ug/Kg)													
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	160	37	NS	U	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	U	U	NS	880	1,900	1,600	1,300	850	1,200	U	U	U
11097-69-1	PCB-1254 (AROCOR 1254)	NS	U	U	NS	550	1,100	910	510	520	660	420	290	
11096-82-5	PCB-1260 (AROCOR 1260)	NS	U	U	NS	91	200	160	93	110	120	82	38	
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U	
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	38	37	19	10	15	U	U	
1336-36-3	Total PCBs	100	160	37	1,000	1,521	3,238	2,707	1,922	1,490	1,995	502	328	

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1L

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-12**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ft/bg) Sample Date		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	
			4/11/2017	4/11/2017			4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	7,180	4,750	NS	10,400	11,800	9,210	10,100	14,100	13,900	14,700	15,400
7440-36-0	ANTIMONY	NS	0.15	U	NS	0.51	0.42	0.41	0.39	0.46	0.25	0.34	0.29
7440-38-2	ARSENIC	<10	3	4.3	13	9.9	10.7	8.5	9.8	11	9	9.4	11.5
7440-39-3	BARIUM	NS	293	126	433	143	167	131	143	160	153	160	165
7440-41-7	BERYLLIUM	NS	0.41	0.31	10	0.59	0.65	0.51	0.53	0.72	0.64	0.66	0.73
7440-43-9	CADMIUM	<1	0.11	0.15	4	1	1.1	0.92	1	1.1	0.7	0.79	0.52
7440-70-2	CALCIUM	NS	1,330	1,400	NS	4,590	3,590	4,840	4,690	3,550	2,280	2,620	2,090
7440-47-3	CHROMIUM, TOTAL	<43	26.6	35.4	NS	320	446	257	288	223	140	92.7	71.7
7440-48-4	COBALT	NS	6.9	5.8	NS	16.6	14.3	15.3	16.1	14.5	10.7	14.2	15.6
7440-50-8	COPPER	<32	13.4	12	50	51.6	46.1	46.9	51.3	49.6	28	32	24.5
7439-89-6	IRON	NS	13,800	11,400	NS	23,500	24,700	20,900	23,300	26,000	23,400	26,200	31,400
7439-92-1	LEAD	<36	12.8	10.4	63	59	52.6	51.1	61.1	73.3	40.3	61.1	48.6
7439-95-4	MAGNESIUM	NS	2,360	1,680	NS	3,170	3,080	2,960	3,060	3,560	3,360	3,310	3,340
7439-96-5	MANGANESE	NS	110	121	1600	848	583	829	959	737	324	683	787
7440-02-0	NICKEL	<23	27.2	35.2	30	217	255	190	190	137	87.6	63.3	49.4
7440-09-7	POTASSIUM	NS	687	546	NS	953	805	908	850	1,100	734	1,040	893
7782-49-2	SELENIUM	NS		0.42	3.9	0.99	1.3	0.9	1.2	1.2	1	1.7	0.91
7440-22-4	SILVER	<1	U	U	2	0.078	0.065	0.058	0.073	0.077	0.046	U	0.056
7440-23-5	SODIUM	NS	85.4	86	NS	124	160	U	84.4	156	94.2	U	U
7440-28-0	THALLIUM	NS	0.14	0.093	NS	0.2	0.22	0.19	0.21	0.28	0.27	0.27	0.29
7440-62-2	VANADIUM	NS	14.2	14.1	NS	56	68.7	48.7	55.8	49.9	36.5	33.5	33.8
7440-66-6	ZINC	<120	63.7	42.2	109	183	131	168	191	183	104	140	118
7439-97-6	MERCURY	NS	0.045	0.025	NS	0.14	0.1	0.12	0.14	0.15	0.085	0.12	0.083

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		1,840	2,930

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	70	240	NS	800	U	590	780	U	U	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	26	87	NS	800	440	530	830	420	210	240	160
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	U	5.6	NS	140	85	95	160	65	50	54	30
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	13	11	9.5	19	7.5	4.4	5	2.6
1336-36-3	Total PCBs	100	96	333	1,000	1,753	536	1,225	1,789	493	264	299	193

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

fbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1M

Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-13

Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York

Sample Point		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'		
Sample Date			4/11/2017	4/11/2017		4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	8,040	7,520	NS	10,600	8,430	13,600	15,900	14,900	11,900	13,800	16,800
7440-36-0	ANTIMONY	NS	U	U	NS	0.42	0.15	0.2	0.12	0.56	0.26	0.54	0.16
7440-38-2	ARSENIC	<10	1.2	1	13	9.2	6.3	7.3	6	12.2	9.1	7.7	8
7440-39-3	BARIUM	NS	273	266	433	144	115	118	248	188	143	120	119
7440-41-7	BERYLLIUM	NS	0.38	0.34	10	0.56	0.45	0.66	0.83	0.73	0.61	0.58	0.75
7440-43-9	CADMIUM	<1	0.098	0.087	4	0.82	0.25	0.44	0.35	1.1	0.5	0.41	0.12
7440-70-2	CALCIUM	NS	44,700	58,000	NS	3,990	1,720	2,510	2,150	4,950	2,500	2,280	856
7440-47-3	CHROMIUM, TOTAL	<43	16.3	14.7	NS	213	32.3	74.4	19.1	222	98.7	49.4	17.9
7440-48-4	COBALT	NS	6.1	5.4	NS	14.5	7.6	10.2	10.6	17	10.7	9.1	7.1
7440-50-8	COPPER	<32	10.5	10.1	50	46.8	16.4	22	15.5	61.7	26.4	24.7	10.5
7439-89-6	IRON	NS	17,100	14,400	NS	22,600	15,000	22,300	25,600	28,700	21,300	21,300	25,800
7439-92-1	LEAD	<36	4.7	4.2	63	53	19.9	27	13.8	81.8	48.8	48	17.8
7439-95-4	MAGNESIUM	NS	10,600	12,500	NS	3,130	2,210	3,280	4,660	3,990	3,080	2,930	3,250
7439-96-5	MANGANESE	NS	463	367	1600	782	182	355	331	993	399	321	130
7440-02-0	NICKEL	<23	14	12.4	30	161	29.9	59.4	24.5	149	64.1	39.2	19.3
7440-09-7	POTASSIUM	NS	1,510	1,440	NS	880	537	856	859	1,390	813	932	781
7782-49-2	SELENIUM	NS	U	0.4	3.9	1.4	0.64	1.4	0.67	1.1	1.4	1.9	1.6
7440-22-4	SILVER	<1	U	U	2	0.081	U	U	U	0.1	U	0.099	0.046
7440-23-5	SODIUM	NS	243	237	NS	114	87.3	96.2	88.7	U	119	98.3	U
7440-28-0	THALLIUM	NS	0.15	0.16	NS	0.21	0.15	0.23	0.22	0.3	0.23	0.39	0.34
7440-62-2	VANADIUM	NS	21.4	21.3	NS	45	17.2	28.6	22.8	53.6	30.7	23.2	21.6
7440-66-6	ZINC	<120	26.1	28.6	109	166	56.8	91.9	70.5	247	94.6	108	73.8
7439-97-6	MERCURY	NS	0.0071	0.0069	NS	0.13	0.071	0.074	0.066	0.19	0.061	0.099	0.058

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		2,250	2,510

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	13	18	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	U	U	NS	U	U	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	U	U	NS	350	71	140	2.4	290	120	43	17
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	U	U	NS	78	16	36	U	61	26	16	6.6
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	4.5	U	2.7	U	U	U	U	U
1336-36-3	Total PCBs	100	13	18	1,000	433	87	179	2.4	351	146	59	23.6

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1N

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-14**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B	
Sample Point			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	
Depth (ftbg)														
Sample Date			4/11/2017	4/11/2017		4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017
CAS #	Metals (mg/kg)													
7429-90-5	ALUMINUM	NS	6,790	7,810	NS	9,860	6,770	9,270	8,760	10,800	9,000	8,740	12,800	
7440-36-0	ANTIMONY	NS	0.31	0.41	NS	0.44	0.13	0.53	0.44	0.47	0.24	0.36	0.36	
7440-38-2	ARSENIC	<10	8.9	13.7	13	10	4	8.9	8.8	9.3	7.2	7.1	10	
7440-39-3	BARIUM	NS	61.1	91.5	433	127	74.7	122	114	125	101	100	144	
7440-41-7	BERYLLIUM	NS	0.41	0.48	10	0.52	0.36	0.49	0.48	0.53	0.49	0.47	0.63	
7440-43-9	CADMIUM	<1	0.52	0.72	4	0.97	0.26	1.2	1	0.7	0.46	0.85	0.63	
7440-70-2	CALCIUM	NS	3,140	3,610	NS	5,680	1,620	4,880	4,090	4,360	2,220	3,030	2,840	
7440-47-3	CHROMIUM, TOTAL	<43	416	624	NS	294	47.5	247	259	185	69.8	130	152	
7440-48-4	COBALT	NS	12.8	16.7	NS	18.5	5.9	16.5	15.2	13.3	8.7	11	13.6	
7440-50-8	COPPER	<32	39	56.1	50	60.2	14.3	55.2	51.4	43.8	21.6	37.7	39.2	
7439-89-6	IRON	NS	21,900	34,600	NS	24,500	12,300	22,300	21,200	21,900	18,400	17,600	24,300	
7439-92-1	LEAD	<36	40.1	61.8	63	70.1	19.6	66.4	66.8	69.2	32.4	52.1	58.4	
7439-95-4	MAGNESIUM	NS	2,430	2,310	NS	3,410	1,820	3,000	2,720	2,870	2,310	2,310	3,240	
7439-96-5	MANGANESE	NS	365	551	1600	1,120	318	1,070	944	989	594	679	673	
7440-02-0	NICKEL	<23	252	409	30	248	32.1	203	202	134	54.8	104	111	
7440-09-7	POTASSIUM	NS	633	695	NS	855	490	860	669	725	594	748	875	
7782-49-2	SELENIUM	NS	1.3	1.6	3.9	1.7	0.95	1.7	1.5	1.6	1.4	1.2	1.8	
7440-22-4	SILVER	<1	0.056	0.079	2	0.097	U	0.11	0.11	0.11	0.047	0.081	0.084	
7440-23-5	SODIUM	NS	105	129	NS	225	80.5	106	91.3	117	110	71.5	93.3	
7440-28-0	THALLIUM	NS	0.18	0.19	NS	0.25	0.16	0.24	0.23	0.28	0.22	0.22	0.32	
7440-62-2	VANADIUM	NS	32.4	44.8	NS	33.8	12.6	31.5	31.3	29.5	18.1	22.3	27.5	
7440-66-6	ZINC	<120	115	140	109	204	52.7	212	197	159	76.9	149	143	
7439-97-6	MERCURY	NS	0.034	0.21	NS	0.14	0.052	0.1	0.083	0.079	0.037	0.081	0.1	

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		14,200	15,100

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	2,900	3,700	NS	2,200	U	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOR 1254)	NS	440	700	NS	690	210	510	470	610	220	370	430
11096-82-5	PCB-1260 (AROCOR 1260)	NS	47	100	NS	130	35	110	94	110	28	70	77
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	9.5	3.8	U	U	U	U	U	U
1336-36-3	Total PCBs	100	3,387	4,500	1,000	3,030	249	620	564	720	248	440	507

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 10

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-15**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg)	Sample Date	**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
			4/12/2017	4/12/2017		4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	8,400	7,600	NS	8,230	9,160	9,540	11,700	12,300	14,200	15,000	12,700
7440-36-0	ANTIMONY	NS	0.23	0.19	NS	0.45	0.52	0.51	0.53	0.57	0.67	0.75	0.53
7440-38-2	ARSENIC	<10	4.8	3.4	13	8.1	9.5	8.9	10.7	10.9	11.8	13.3	12.2
7440-39-3	BARIUM	NS	105	113	433	107	126	124	137	147	159	170	136
7440-41-7	BERYLLIUM	NS	0.41	0.47	10	0.39	0.53	0.53	0.61	0.65	0.69	0.73	0.58
7440-43-9	CADMIUM	<1	0.35	0.43	4	0.82	0.95	0.86	1.2	1.2	1.3	1.5	1.5
7440-70-2	CALCIUM	NS	1,630	1,760	NS	5,010	5,370	5,040	4,030	4,640	4,190	4,180	2,310
7440-47-3	CHROMIUM, TOTAL	<43	11.3	10	NS	244	253	236	306	176	216	236	345
7440-48-4	COBALT	NS	5.5	9.8	NS	16.3	17.1	18.1	18.6	17.7	18.3	21.6	16.3
7440-50-8	COPPER	<32	18	15	50	51.1	57.5	56.4	65.3	66	71	80.3	58.4
7439-89-6	IRON	NS	13,500	11,000	NS	20,900	22,900	23,300	26,000	26,700	28,900	32,100	26,500
7439-92-1	LEAD	<36	29.3	15.1	63	53.9	66.2	65.3	94	83.6	99.7	106	94
7439-95-4	MAGNESIUM	NS	2,090	2,350	NS	3,070	3,340	3,410	3,310	3,770	3,930	4,150	3,140
7439-96-5	MANGANESE	NS	142	114	1600	877	1,100	1,070	863	1,090	905	1,060	469
7440-02-0	NICKEL	<23	14.5	18.6	30	228	217	215	220	166	172	198	220
7440-09-7	POTASSIUM	NS	683	679	NS	823	704	835	770	1,280	1,130	1,220	829
7782-49-2	SELENIUM	NS	1.5	1.5	3.9	1.9	1.7	1.5	2.2	2.3	2	2.4	1.6
7440-22-4	SILVER	<1	U	U	2	0.09	0.11	0.098	0.14	0.15	0.16	0.15	0.11
7440-23-5	SODIUM	NS	117	96.4	NS	135	168	155	187	102	197	171	93.3
7440-28-0	THALLIUM	NS	0.21	0.26	NS	0.21	0.25	0.23	0.32	0.3	0.35	0.37	0.37
7440-62-2	VANADIUM	NS	13.9	13.5	NS	29.1	31.5	29.1	38.7	32.3	39.6	39.8	44
7440-66-6	ZINC	<120	77.3	54.8	109	170	198	199	219	252	266	303	179
7439-97-6	MERCURY	NS	0.075	0.016	NS	0.089	0.11	0.11	0.15	0.11	0.21	0.21	0.11

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		19,700	8,800

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	24	3.5	NS	U	U	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOR 1254)	NS	U	U	NS	400	620	520	830	280	790	770	220
11096-82-5	PCB-1260 (AROCOR 1260)	NS	U	U	NS	73	120	130	120	48	120	140	36
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	24	3.5	1,000	473	740	650	950	328	910	910	256

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1P

Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-16

Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York

		**6 NYCRR Part 375 Class A Sediment Standards			**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards										
Sample Point			1A	1B		2A	2B	3A	3B	4A	4B	5A	5B		
Depth (ftbg)			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'		
Sample Date			4/12/2017	4/12/2017		4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017		
CAS #	Metals (mg/kg)														
7429-90-5	ALUMINUM	NS	7,820	9,030	NS	10,600	11,000	11,200	11,000	12,900	11,500	12,000	11,900		
7440-36-0	ANTIMONY	NS	0.14	0.15	NS	0.49	0.63	0.49	0.45	0.54	0.37	0.42	0.34		
7440-38-2	ARSENIC	<10	0.93	1.4	13	9.2	10.5	9.1	8.4	10.9	8.5	8.5	7.9		
7440-39-3	BARIUM	NS	70.6	73.9	433	138	142	130	125	150	133	129	121		
7440-41-7	BERYLLIUM	NS	0.4	0.42	10	0.5	0.64	0.54	0.55	0.67	0.53	0.53	0.53		
7440-43-9	CADMIUM	<1	0.28	0.12	4	1	1.3	1	0.93	1.1	0.82	0.71	0.6		
7440-70-2	CALCIUM	NS	1,390	1,440	NS	7,360	4,230	5,320	4,410	4,980	2,980	3,720	2,580		
7440-47-3	CHROMIUM, TOTAL	<43	10.2	12.5	NS	229	321	168	162	243	162	112	86.2		
7440-48-4	COBALT	NS	7.5	9.6	NS	19.7	18.4	15.4	13.9	18.3	12.8	12.7	10.6		
7440-50-8	COPPER	<32	20.3	28	50	62	65.5	52.2	47.5	64.1	39.6	42.6	30.2		
7439-89-6	IRON	NS	11,200	14,500	NS	25,100	27,000	23,500	21,600	27,700	21,900	22,300	20,600		
7439-92-1	LEAD	<36	13.1	17.7	63	65.1	82.9	63.9	61.4	86.8	59.2	58.9	46.7		
7439-95-4	MAGNESIUM	NS	3,530	3,790	NS	4,230	3,480	3,430	3,190	3,630	2,950	3,120	2,870		
7439-96-5	MANGANESE	NS	97.4	125	1600	1,300	1,210	881	743	1,060	652	712	562		
7440-02-0	NICKEL	<23	22.4	27.7	30	245	235	151	136	189	123	93.9	65.6		
7440-09-7	POTASSIUM	NS	870	1,200	NS	967	869	1,060	805	1,110	754	982	749		
7782-49-2	SELENIUM	NS	1.5	1.5	3.9	1.5	2.2	1.6	1.7	2.4	1.8	1.7	1.6		
7440-22-4	SILVER	<1	U	0.06	2	0.14	0.12	0.11	0.1	0.14	0.097	0.084	0.068		
7440-23-5	SODIUM	NS	84.4	98.6	NS	163	155	150	123	106	105	122	103		
7440-28-0	THALLIUM	NS	0.24	0.29	NS	0.27	0.28	0.26	0.27	0.32	0.3	0.3	0.29		
7440-62-2	VANADIUM	NS	12.4	14.6	NS	32.5	36.2	27.9	28.2	36.6	27.5	26.2	22.8		
7440-66-6	ZINC	<120	55.2	68.5	109	212	239	202	177	242	143	165	116		
7439-97-6	MERCURY	NS	0.03	0.027	NS	0.15	0.15	0.14	0.14	0.17	0.13	0.13	0.11		

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		3,130	8,620

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	4.1	12	NS	1,400	U	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	U	U	NS	530	720	300	320	390	550	160	260
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	U	U	NS	79	150	53	61	66	100	35	59
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	4	12	1,000	2,009	870	353	381	456	650	195	319

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1Q

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-17**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
Sample Point			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'
Depth (ftbg)			4/12/2017	4/12/2017		4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017	4/12/2017
Sample Date													
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	8,660	6,310	NS	11,000	12,900	6,230	5,890	12,300	11,900	9,100	9,930
7440-36-0	ANTIMONY	NS	0.37	0.26	NS	0.37	0.13	0.33	0.52	0.32	0.15	0.33	0.33
7440-38-2	ARSENIC	<10	11.3	6.8	13	8.3	4.8	7.8	7.8	8.1	5.2	7	7.2
7440-39-3	BARIUM	NS	97.3	74.1	433	122	145	100	98.3	123	122	101	104
7440-41-7	BERYLLIUM	NS	0.66	0.47	10	0.5	0.56	0.38	0.37	0.49	0.51	0.41	0.49
7440-43-9	CADMIUM	<1	0.52	0.42	4	1	0.38	0.57	0.75	0.65	0.25	0.66	0.56
7440-70-2	CALCIUM	NS	8,520	7,780	NS	3,590	1,630	4,500	4,110	2,980	1,560	3,530	2,880
7440-47-3	CHROMIUM, TOTAL	<43	178	97.5	NS	132	15.2	206	223	72	14.2	106	100
7440-48-4	COBALT	NS	12.1	10	NS	13.6	8.9	12	12.1	11.4	8.4	11	10.9
7440-50-8	COPPER	<32	37.5	25.1	50	40	13.9	45.6	37.6	31.1	12.9	35.2	33.5
7439-89-6	IRON	NS	21,900	16,600	NS	21,000	18,600	18,000	18,000	20,800	17,700	18,000	18,300
7439-92-1	LEAD	<36	39.9	33.5	63	58.9	15.7	46	41.8	54	20.1	47.2	51.1
7439-95-4	MAGNESIUM	NS	3,110	2,340	NS	2,930	3,150	2,170	2,060	3,040	2,840	2,540	2,580
7439-96-5	MANGANESE	NS	411	284	1600	817	330	724	733	617	341	581	523
7440-02-0	NICKEL	<23	145	87.2	30	118	19.2	178	190	64.9	18.1	97.6	83.4
7440-09-7	POTASSIUM	NS	724	611	NS	881	729	671	578	1,010	627	883	839
7782-49-2	SELENIUM	NS	1.2	1.2	3.9	1.4	1.2	1.1	1.4	1.6	1.3	1.1	1.7
7440-22-4	SILVER	<1	0.062	U	2	0.093	U	0.071	0.078	0.072	0.046	0.058	0.062
7440-23-5	SODIUM	NS	388	339	NS	149	104	136	152	90.5	80.3	111	88
7440-28-0	THALLIUM	NS	0.15	0.14	NS	0.25	0.27	0.15	0.15	0.28	0.24	0.23	0.22
7440-62-2	VANADIUM	NS	23.6	15.5	NS	25.2	17.1	22.7	32.9	23.4	16.4	20.9	21.6
7440-66-6	ZINC	<120	147	136	109	157	67	154	144	126	62.5	125	118
7439-97-6	MERCURY	NS	0.042	0.03	NS	0.12	0.057	0.085	0.064	0.094	0.051	0.094	0.084

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		36,400	6,780

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	1,700	1,400	NS	U	U	U	1,500	160	30	410	350
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	300	260	NS	280	13	310	440	150	20	250	330
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	45	41	NS	59	6.0	48	41	21	U	34	45
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	2,045	1,701	1,000	339	19	358	1,981	331	50	694	725

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1R

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-18**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards								
Sample Point	2A		2B	3A		3B	4A	4B	5A	5B			
Depth (ftbg)	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'	0-2"		
Sample Date	4/13/2017		4/13/2017	4/13/2017		4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017		
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	3,060	6,410	NS	9,870	10,200	10,100	11,700	10,800	9,600	19,400	20,400
7440-36-0	ANTIMONY	NS	0.19	0.13	NS	0.54	0.47	0.47	0.29	0.81	0.89	0.71	0.68
7440-38-2	ARSENIC	<10	5.7	5	13	9.4	9.4	7	6.6	9.8	9.4	13.8	15.4
7440-39-3	BARIUM	NS	50.8	88.1	433	124	140	117	121	127	117	253	249
7440-41-7	BERYLLIUM	NS	0.16	0.32	10	0.49	0.53	0.46	0.53	0.52	0.45	0.79	0.89
7440-43-9	CADMIUM	<1	0.75	0.86	4	1	1.1	1.3	0.74	1.2	0.79	2.5	2.4
7440-70-2	CALCIUM	NS	3,280	1,320	NS	7,590	5,820	5,990	3,190	3,920	3,080	5,780	5,100
7440-47-3	CHROMIUM, TOTAL	<43	189	107	NS	287	275	73.5	73.7	279	272	116	173
7440-48-4	COBALT	NS	5.6	6.8	NS	20.6	18.3	10.8	11.4	16.4	14.9	21.3	23
7440-50-8	COPPER	<32	14.3	16.9	50	65.9	63.7	55.8	32.2	61	54.5	63.4	70.9
7439-89-6	IRON	NS	10,200	12,800	NS	24,400	25,100	18,000	20,100	23,200	21,200	33,100	36,500
7439-92-1	LEAD	<36	16.9	19.1	63	64	71.7	92.5	41.9	87.4	80.6	77	97.1
7439-95-4	MAGNESIUM	NS	1,780	1,820	NS	3,940	3,680	2,850	3,090	2,910	2,530	4,480	4,760
7439-96-5	MANGANESE	NS	189	126	1600	934	838	683	736	848	697	4,180	3,100
7440-02-0	NICKEL	<23	86.4	63.7	30	307	242	74.9	69.5	216	202	161	173
7440-09-7	POTASSIUM	NS	367	575	NS	956	822	945	763	863	696	1,730	1,610
7782-49-2	SELENIUM	NS	0.9	0.88	3.9	1.5	1.6	1.9	1.7	1.9	1.5	2.9	2.6
7440-22-4	SILVER	<1	U	U	2	0.1	0.14	0.084	0.066	0.11	0.11	0.18	0.18
7440-23-5	SODIUM	NS	96.5	262	NS	182	162	136	136	106	84.2	147	134
7440-28-0	THALLIUM	NS	0.084	0.15	NS	0.24	0.27	0.25	0.26	0.27	0.23	0.53	0.52
7440-62-2	VANADIUM	NS	14	14.9	NS	35.5	33	20.1	21.4	35.4	33.1	38	42.7
7440-66-6	ZINC	<120	62.4	73.1	109	208	223	160	118	190	163	309	327
7439-97-6	MERCURY	NS	U	0.04	NS	0.12	0.13	0.1	0.1	0.16	0.12	0.2	0.23

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		14,800	7,030

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	650	110	NS	940	1,100	400	520	4,700	5,400	320	310
11097-69-1	PCB-1254 (AROCOR 1254)	NS	140	24	NS	330	400	250	340	2,000	2,500	210	240
11096-82-5	PCB-1260 (AROCOR 1260)	NS	7.9	U	NS	35	46	32	42	150	150	39	50
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	798	134	1,000	1,305	1,546	682	902	6,850	8,050	569	600

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1S

Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-19

Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York

Sample Point		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
Depth (ftbg)	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	
Sample Date	4/13/2017		4/13/2017	4/13/2017		4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	9,510	10,800	NS	11,000	11,100	8,090	7,770	12,100	13,700	9,640	10,200
7440-36-0	ANTIMONY	NS	0.25	0.2	NS	0.31	0.49	0.45	0.5	0.21	0.26	0.42	0.37
7440-38-2	ARSENIC	<10	1.5	14.3	13	8.7	8.2	8.6	7.5	8.1	10.8	7.8	8.3
7440-39-3	BARIUM	NS	172	67.6	433	113	123	107	98.5	114	153	109	116
7440-41-7	BERYLLIUM	NS	0.58	0.42	10	0.52	0.55	0.39	0.46	0.59	0.69	0.53	0.58
7440-43-9	CADMIUM	<1	0.24	0.26	4	0.76	0.9	0.81	0.65	0.5	0.42	0.77	0.44
7440-70-2	CALCIUM	NS	1,920	27,000	NS	3,750	3,880	6,830	4,250	5,260	3,790	7,290	3,200
7440-47-3	CHROMIUM, TOTAL	<43	13.2	14.5	NS	120	189	322	418	49.1	45.9	280	241
7440-48-4	COBALT	NS	8.2	11.2	NS	15.5	17.4	18.7	16.7	11.7	12.4	17.3	10.9
7440-50-8	COPPER	<32	26.4	30.2	50	38.5	49.5	59.5	48.1	36	32.2	51.2	32.2
7439-89-6	IRON	NS	15,500	26,100	NS	20,900	21,800	22,100	22,500	20,600	21,800	22,300	21,600
7439-92-1	LEAD	<36	24.5	16.6	63	44.1	60.4	59.5	60	37.3	42.1	62.9	53.1
7439-95-4	MAGNESIUM	NS	3,530	11,400	NS	3,000	3,390	3,260	2,620	3,920	3,690	3,650	2,630
7439-96-5	MANGANESE	NS	148	447	1600	760	863	1030	919	546	486	1150	656
7440-02-0	NICKEL	<23	24.2	30.3	30	129	184	314	329	49.8	46.6	278	187
7440-09-7	POTASSIUM	NS	1,180	1,530	NS	848	879	846	639	1,130	953	943	666
7782-49-2	SELENIUM	NS	1.5	1.3	3.9	1.9	1.7	1.5	0.75	0.77	0.86	0.83	0.75
7440-22-4	SILVER	<1	0.073	0.051	2	0.086	0.093	0.082	0.078	0.063	0.081	0.081	0.071
7440-23-5	SODIUM	NS	139	176	NS	299	130	181	201	78.9	76.2	129	120
7440-28-0	THALLIUM	NS	0.26	0.5	NS	0.25	0.27	0.22	0.18	0.29	0.3	0.21	0.23
7440-62-2	VANADIUM	NS	17.8	15.4	NS	24.8	28.9	32.3	4.6	18.2	18.9	10.6	9.3
7440-66-6	ZINC	<120	94.3	63.5	109	155	191	190	155	105	94.3	164	89.5
7439-97-6	MERCURY	NS	0.028	U	NS	0.074	0.15	0.13	0.13	0.075	0.076	0.16	0.11

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		12,400	3,740

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	25	6.2	NS	350	980	1,800	7,100	82	84	850	330
11097-69-1	PCB-1254 (AROCOR 1254)	NS	7.5	U	NS	150	370	660	1,900	60	71	370	210
11096-82-5	PCB-1260 (AROCOR 1260)	NS	U	U	NS	22	42	110	U	12	14	70	69
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	U	U	U	U	U	4.2	4.7
1336-36-3	Total PCBs	100	32.5	6.2	1,000	522	1,392	2,570	9,000	154	169	1,294	614

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1T

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-20**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

		**6 NYCRR Part 375 Class A Sediment Standards			**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards										
Sample Point			1A	1B		2A	2B	3A	3B	4A	4B	5A	5B		
Depth (ftbg)			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'		
Sample Date			4/13/2017	4/13/2017		4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017	4/13/2017		
CAS #	Metals (mg/kg)														
7429-90-5	ALUMINUM	NS	5,330	6,710	NS	8,630	8,630	7,010	7,160	9,550	9,430	6,790	9,070		
7440-36-0	ANTIMONY	NS	0.55	0.21	NS	0.34	0.31	0.57	0.52	0.33	0.27	1.7	0.64		
7440-38-2	ARSENIC	<10	11.5	4.3	13	7.9	7.5	10	12.6	7.5	7.3	10.5	12.7		
7440-39-3	BARIUM	NS	101	73.7	433	79.1	81	106	129	91.2	85.1	106	139		
7440-41-7	BERYLLIUM	NS	0.47	0.47	10	0.55	0.56	0.53	0.61	0.64	0.59	0.52	0.72		
7440-43-9	CADMIUM	<1	0.86	0.36	4	0.43	0.39	0.89	0.88	0.63	0.51	1.2	1.2		
7440-70-2	CALCIUM	NS	9,080	2,360	NS	2,460	1,960	5,590	4,370	3,360	2,550	3,710	4,220		
7440-47-3	CHROMIUM, TOTAL	<43	1,330	23.2	NS	45.9	36.9	521	474	70.8	45.3	535	558		
7440-48-4	COBALT	NS	19.8	7.6	NS	9.5	9.6	23.4	22.1	11.5	10.4	20.1	26.4		
7440-50-8	COPPER	<32	54.9	17	50	26.6	24.4	62.2	64	33.9	28.3	78.7	83.4		
7439-89-6	IRON	NS	33,300	15,900	NS	20,600	20,600	28,100	29,900	22,200	21,800	27,300	33,800		
7439-92-1	LEAD	<36	45	28.4	63	37.9	37.3	67.5	82.3	40.4	31.8	80	100		
7439-95-4	MAGNESIUM	NS	2,130	2,040	NS	2,400	2,280	3,030	2,830	2,800	2,770	2,280	3,200		
7439-96-5	MANGANESE	NS	460	249	1600	327	336	1,100	1,000	381	302	821	1210		
7440-02-0	NICKEL	<23	804	23.8	30	45.8	38.7	466	403	71.3	48.8	395	468		
7440-09-7	POTASSIUM	NS	596	591	NS	816	634	778	763	957	739	896	875		
7782-49-2	SELENIUM	NS	1.6	1.4	3.9	1.6	1.6	1.7	1.8	1.7	1.5	1.7	2.1		
7440-22-4	SILVER	<1	0.047	0.056	2	0.07	0.066	0.12	0.1	0.078	0.068	0.11	0.13		
7440-23-5	SODIUM	NS	133	144	NS	62.1	50.7	122	121	70.4	64.1	117	92.3		
7440-28-0	THALLIUM	NS	0.15	0.19	NS	0.25	0.26	0.19	0.21	0.28	0.29	0.19	0.26		
7440-62-2	VANADIUM	NS	26.5	15.7	NS	19.6	18.9	28.3	31.1	22.1	20.4	35.7	36.2		
7440-66-6	ZINC	<120	133	87.4	109	123	109	244	326	301	224	300	351		
7439-97-6	MERCURY	NS	0.035	0.072	NS	0.09	0.086	0.13	0.17	0.092	0.073	0.15	0.19		

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		5,530	22,900

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	570	81	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	U	U	NS	130	43	1,300	1,500	160	57	1,600	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	88	14	NS	70	34	490	590	100	40	800	1,900
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	11	U	NS	12	6.6	85	100	25	8.7	140	300
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	U	U	7.9	U
1336-36-3	Total PCBs	100	669	95	1,000	212	83.6	1,875	2,190	285	106	2,548	2,200

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1U

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-21**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
Depth (ftbg)	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	
Sample Date	4/18/2017		4/18/2017	4/18/2017		4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	6,940	7,780	NS	5,470	7,070	8,030	8,760	9,180	8,100	9,760	9,950
7440-36-0	ANTIMONY	NS	0.43	0.15	NS	0.41	0.53	0.47	0.52	0.54	0.41	0.47	0.29
7440-38-2	ARSENIC	<10	5.4	2	13	5.5	6.8	6.6	6.8	6.3	9.6	11	5.3
7440-39-3	BARIUM	NS	74.3	145	433	79.8	109	112	138	97.6	87.3	127	101
7440-41-7	BERYLLIUM	NS	0.47	0.54	10	0.36	0.48	0.58	0.63	0.6	0.52	0.68	0.65
7440-43-9	CADMIUM	<1	0.58	0.14	4	0.51	0.84	0.82	1	0.67	0.61	0.93	0.45
7440-70-2	CALCIUM	NS	2,370	1,280	NS	3,950	4,770	5,370	5,180	3,540	2,670	3,850	2,170
7440-47-3	CHROMIUM, TOTAL	<43	262	27.7	NS	427	434	389	489	85.3	104	395	93.3
7440-48-4	COBALT	NS	12.1	6.6	NS	14.7	15.9	16.9	18.5	8.8	11	21.3	9.3
7440-50-8	COPPER	<32	29.7	18.9	50	36.9	47.4	47.1	54.8	31.6	37.6	67.7	20.6
7439-89-6	IRON	NS	16,700	10,100	NS	18,700	20,600	21,600	23,600	25,100	24,000	27,600	18,400
7439-92-1	LEAD	<36	52.2	17.9	63	50.8	93.3	71.3	90.3	71.1	79.6	81.9	37.1
7439-95-4	MAGNESIUM	NS	2,400	2,640	NS	2,330	2,860	3,350	3,380	2,690	2,410	2,920	2,590
7439-96-5	MANGANESE	NS	251	101	1600	685	916	1,000	975	517	457	913	387
7440-02-0	NICKEL	<23	190	28.8	30	314	323	294	343	74.7	99.5	329	77.3
7440-09-7	POTASSIUM	NS	653	859	NS	540	614	687	630	962	758	683	604
7782-49-2	SELENIUM	NS	0.5	0.57	3.9	0.39	0.52	0.55	0.59	0.63	1.4	1.4	0.46
7440-22-4	SILVER	<1	0.07	0.047	2	0.057	0.083	0.09	0.11	0.079	0.064	0.1	0.061
7440-23-5	SODIUM	NS	101	76.5	NS	46.7	59.8	50.3	70.1	21.9	19.7	35.3	44.4
7440-28-0	THALLIUM	NS	0.15	0.24	NS	0.099	0.13	0.15	0.2	0.22	0.27	0.2	0.22
7440-62-2	VANADIUM	NS	20.6	12.9	NS	21.1	22.9	24.8	30.1	18.2	19.1	31.3	18.4
7440-66-6	ZINC	<120	79.4	42.4	109	130	178	160	181	229	207	229	70.9
7439-97-6	MERCURY	NS	0.073	0.036	NS	0.1	0.14	0.14	0.15	0.1	0.075	0.15	0.07

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		17,000	8,340

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	960	1,400	NS	1,600	1,800	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	130	170	NS	520	620	590	730	96	78	910	160
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	12	15	NS	93	96	81	120	39	24	140	30
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	1,102	1,585	1,000	2,213	2,516	671	850	135	102	1,050	190

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table IV

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-22**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

		**6 NYCRR Part 375 Class A Sediment Standards			**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards										
Sample Point			1A	1B		2A	2B	3A	3B	4A	4B	5A	5B		
Depth (ftbg)			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'		
Sample Date			4/18/2017	4/18/2017		4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017		
CAS #	Metals (mg/kg)														
7429-90-5	ALUMINUM	NS	5,860	8,760	NS	7,060	9,150	7,870	9,010	9,190	9,610	10,000	11,400		
7440-36-0	ANTIMONY	NS	0.38	1	NS	0.53	0.5	0.5	0.49	0.45	0.12	0.39	0.21		
7440-38-2	ARSENIC	<10	9.8	11	13	6.6	6.6	6.3	6.7	5.8	4.3	6.4	5.1		
7440-39-3	BARIUM	NS	91.6	146	433	114	130	111	122	112	95.6	111	104		
7440-41-7	BERYLLIUM	NS	0.49	0.66	10	0.52	0.65	0.5	0.61	0.58	0.63	0.58	0.6		
7440-43-9	CADMIUM	<1	0.41	0.46	4	0.91	1.1	0.9	0.76	0.73	0.21	0.67	0.31		
7440-70-2	CALCIUM	NS	4,300	4,070	NS	4,710	3,340	5,500	2,530	3,700	1,120	3,680	1,880		
7440-47-3	CHROMIUM, TOTAL	<43	307	157	NS	598	475	471	379	237	14.2	169	18.4		
7440-48-4	COBALT	NS	14.7	17.6	NS	18.9	18.5	18.2	15.5	13.9	6.8	11.7	7.2		
7440-50-8	COPPER	<32	23.4	57.2	50	54.3	49.6	50.1	40.2	38.9	13.9	33.1	11		
7439-89-6	IRON	NS	26,600	31,300	NS	23,500	23,500	21,400	22,700	19,600	17,800	19,400	18,300		
7439-92-1	LEAD	<36	50.4	56.5	63	81.2	90.1	74.6	77.3	62.2	13.6	54.9	27		
7439-95-4	MAGNESIUM	NS	2,530	3,810	NS	2,770	2,780	3,150	2,400	2,830	2,540	2,770	2,620		
7439-96-5	MANGANESE	NS	891	1,010	1600	841	1,150	840	509	817	124	696	504		
7440-02-0	NICKEL	<23	210	142	30	424	327	350	274	180	18.7	131	17.7		
7440-09-7	POTASSIUM	NS	594	953	NS	612	646	670	590	829	553	792	677		
7782-49-2	SELENIUM	NS	0.41	1.2	3.9	0.61	0.68	0.7	0.61	0.7	0.9	0.7	0.57		
7440-22-4	SILVER	<1	0.031	0.068	2	0.09	0.19	0.096	0.093	0.097	0.018	0.073	0.048		
7440-23-5	SODIUM	NS	80.3	69.9	NS	82.4	59.1	39.6	39	28.7	27.6	32.7	36.3		
7440-28-0	THALLIUM	NS	0.093	0.24	NS	0.12	0.19	0.12	0.17	0.17	0.15	0.15	0.23		
7440-62-2	VANADIUM	NS	18.1	19.2	NS	27.1	30.1	25.7	26.9	23.3	15.8	22	17.4		
7440-66-6	ZINC	<120	121	146	109	186	174	163	128	131	59.3	124	53.2		
7439-97-6	MERCURY	NS	0.041	0.093	NS	0.32	0.15	0.15	0.098	0.13	0.04	0.11	0.063		

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		10,000	24,200

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	1,400	1,900	NS	U	U	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	310	690	NS	1,000	1,100	1,100	1,500	890	17	420	22
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	39	130	NS	160	170	150	200	130	U	69	4.7
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	1,749	2,720	1,000	1,160	1,270	1,250	1,700	1,020	17	489	27

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1W

Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-23

Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York

		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
Sample Point	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	
Depth (ftbg)	Sample Date		4/18/2017	4/18/2017		4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	7,230	6,740	NS	10,500	11,900	8,670	7,140	11,400	12,300	11,700	13,200
7440-36-0	ANTIMONY	NS	0.26	0.43	NS	0.2	0.077	0.37	0.51	0.2	0.12	0.33	0.1
7440-38-2	ARSENIC	<10	11.3	16	13	6	5	9.3	9.2	6.6	5.6	8.1	5.8
7440-39-3	BARIUM	NS	76.1	140	433	78.3	83	90.7	90.5	75.8	84	105	101
7440-41-7	BERYLLIUM	NS	0.52	4.7	10	0.51	0.53	0.5	0.48	0.56	0.74	0.65	0.67
7440-43-9	CADMIUM	<1	0.38	0.29	4	0.33	0.2	0.6	0.75	0.3	0.22	0.46	0.17
7440-70-2	CALCIUM	NS	1,650	17,400	NS	796	296	5,260	3,710	544	236	2,160	1,220
7440-47-3	CHROMIUM, TOTAL	<43	20.1	151	NS	31.7	15.4	160	440	25.1	14	46.4	16.8
7440-48-4	COBALT	NS	10.3	10.1	NS	6.9	6.7	14.4	16.4	7.4	9.1	9	7.7
7440-50-8	COPPER	<32	35.5	35.7	50	17.4	10.8	42.9	44	18.1	15.9	24.6	9.8
7439-89-6	IRON	NS	23,100	29,800	NS	16,800	18,800	20,700	24,700	19,500	22,600	21,200	21,300
7439-92-1	LEAD	<36	17.1	20.5	63	27.4	12.7	46.7	48.2	30.1	13.5	34.1	13.5
7439-95-4	MAGNESIUM	NS	3,560	5,070	NS	2,220	2,630	3,030	2,520	2,510	2,900	2,770	3,010
7439-96-5	MANGANESE	NS	386	398	1600	194	149	752	589	194	230	372	353
7440-02-0	NICKEL	<23	37.1	102	30	25.4	16.6	162	348	22.1	16.6	42.1	18.6
7440-09-7	POTASSIUM	NS	918	909	NS	530	412	685	593	664	512	925	726
7782-49-2	SELENIUM	NS	0.71	0.74	3.9	1	0.72	1.1	0.94	1.3	1.1	1.1	1.1
7440-22-4	SILVER	<1	0.051	0.042	2	0.057	0.021	0.069	0.048	0.076	0.031	0.064	0.054
7440-23-5	SODIUM	NS	84.4	73.1	NS	U	U	39.8	60.4	U	U	U	14.4
7440-28-0	THALLIUM	NS	0.43	0.3	NS	0.19	0.22	0.19	0.17	0.24	0.22	0.24	0.24
7440-62-2	VANADIUM	NS	13.1	16.6	NS	16.5	16.8	20.1	20.5	18.4	16.9	21	19.2
7440-66-6	ZINC	<120	118	108	109	76.3	63.7	136	189	81.2	78.3	128	83.4
7439-97-6	MERCURY	NS	0.017	0.012	NS	0.12	0.036	0.11	0.13	0.082	0.036	0.097	0.059

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		6,930	4,080

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	54	140	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	U	U	NS	45	3.3	390	680	14	U	56	3.4
11097-69-1	PCB-1254 (AROCOR 1254)	NS	U	U	NS	30	U	160	230	16	U	36	U
11096-82-5	PCB-1260 (AROCOR 1260)	NS	U	3.5	NS	17	U	37	43	24	U	13	U
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	54	144	1,000	92	3.3	587	953	54	U	105	3.4

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1X

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-24**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point Depth (ftbg) Sample Date		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'		
			4/19/2017	4/19/2017		4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017		
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	8,780	10,400	NS	7,290	7,040	9,180	10,500	6,840	5,330	9,780	9,870
7440-36-0	ANTIMONY	NS	1.1	1.7	NS	0.8	0.72	0.62	0.46	209	14.2	5.3	2.7
7440-38-2	ARSENIC	<10	12.5	15.2	13	9.6	8.1	8.4	5.4	36.8	50.1	16.8	13.1
7440-39-3	BARIUM	NS	132	144	433	114	171	141	122	789	615	170	128
7440-41-7	BERYLLIUM	NS	0.71	0.98	10	0.48	0.46	0.6	0.7	0.34	0.17	0.69	0.46
7440-43-9	CADMIUM	<1	1.7	1.5	4	0.91	0.74	0.88	1.1	21.6	34.1	5	2.9
7440-70-2	CALCIUM	NS	16,200	42,300	NS	11,100	4,700	9,510	2,820	8,430	13,000	19,100	16,300
7440-47-3	CHROMIUM, TOTAL	<43	1,890	1,410	NS	727	732	422	101	2,170	14,900	902	389
7440-48-4	COBALT	NS	34.3	27.6	NS	30.8	21.5	20.8	12.1	92.5	352	35.5	21
7440-50-8	COPPER	<32	113	123	50	99.1	61.5	60.5	27.8	1,140	2,240	425	212
7439-89-6	IRON	NS	34,300	42,200	NS	28,300	24,700	25,000	20,100	162,000	267,000	49,300	38,700
7439-92-1	LEAD	<36	212	261	63	97.9	93.6	68.6	67.6	9,030	3,660	682	395
7439-95-4	MAGNESIUM	NS	4,540	4,370	NS	4,580	2,730	4,590	2,820	2,590	1,980	5,480	6,910
7439-96-5	MANGANESE	NS	669	1,650	1600	1,010	566	1,610	453	1,570	3,090	1,020	791
7440-02-0	NICKEL	<23	1,020	811	30	694	521	373	74.2	1420	335	614	275
7440-09-7	POTASSIUM	NS	830	786	NS	610	577	831	702	450	19.6	968	895
7782-49-2	SELENIUM	NS	1.2	1.5	3.9	1	0.75	1.1	0.89	3.2	2.1	1.7	1.2
7440-22-4	SILVER	<1	0.11	0.1	2	0.16	0.12	0.096	0.071	2.5	85.3	0.7	0.38
7440-23-5	SODIUM	NS	229	284	NS	187	225	196	145	149	U	139	U
7440-28-0	THALLIUM	NS	0.18	0.13	NS	0.13	0.1	0.16	0.24	0.1	117	0.036	U
7440-62-2	VANADIUM	NS	37.8	57.5	NS	30.6	26	27.7	20.9	83.0	2,860	65.6	44.1
7440-66-6	ZINC	<120	427	508	109	289	200	187	109	3,410	61,600	753	501
7439-97-6	MERCURY	NS	0.35	0.8	NS	0.2	0.17	0.16	0.12	4.4	3.1	4.2	2.2

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		34,300	12,800

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	2,500	5,200	NS	3,400	1,600	930	U	U	34,000	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	1,000	1,300	NS	780	690	360	350	U	21,000	U	U
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	260	300	NS	480	190	110	67	35,000	8,300	1,100	1,700
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	11,000	1,900	U	U
1336-36-3	Total PCBs	100	3,760	6,800	1,000	4,660	2,480	1,400	417	46,000	65,200	1,100	1,700

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1Y

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-25**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
Depth (ftbg)	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	
Sample Date	4/18/2017		4/18/2017	4/18/2017		4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017	4/18/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	6,780	7,700	NS	8,060	9,270	8,180	12,400	8,630	7,080	7,760	8,660
7440-36-0	ANTIMONY	NS	0.43	0.34	NS	0.8	0.79	0.62	0.31	1.9	0.36	1	0.47
7440-38-2	ARSENIC	<10	12.6	10.3	13	10.6	12.9	10.8	8.6	9.4	8	10	9
7440-39-3	BARIUM	NS	74.1	65.5	433	91.4	103	113	101	98.4	50.4	105	158
7440-41-7	BERYLLIUM	NS	0.51	0.43	10	0.53	0.64	0.53	0.54	0.73	0.45	0.46	0.47
7440-43-9	CADMIUM	<1	0.64	0.4	4	0.89	0.95	0.51	0.39	1.6	0.36	0.85	0.42
7440-70-2	CALCIUM	NS	15,200	8,190	NS	10,200	6,670	13,000	3,050	20,200	4,900	9,170	14,700
7440-47-3	CHROMIUM, TOTAL	<43	406	418	NS	669	796	403	82.5	619	48.7	81.6	17.1
7440-48-4	COBALT	NS	15.3	17.1	NS	24.2	25.6	20.5	8.6	14.8	7.6	10.7	9.7
7440-50-8	COPPER	<32	56.8	52.1	50	86.1	118	76.8	31.1	106	32.8	59.7	38.9
7439-89-6	IRON	NS	21,000	23,000	NS	25,000	28,300	23,400	20,700	24,700	19,200	20,700	28,600
7439-92-1	LEAD	<36	57.9	50	63	125	148	158	69	227	54.8	135	93.9
7439-95-4	MAGNESIUM	NS	3,340	3,730	NS	4,000	3,700	3,920	2,490	4,940	3,050	3,350	5,360
7439-96-5	MANGANESE	NS	565	566	1600	1,030	1,110	868	307	1,070	521	374	372
7440-02-0	NICKEL	<23	349	377	30	564	628	363	72.8	317	34.6	72.9	31
7440-09-7	POTASSIUM	NS	675	681	NS	772	807	891	633	972	710	1,390	1,040
7782-49-2	SELENIUM	NS	1.1	1	3.9	1.2	1.4	1.3	1.6	1.2	0.92	1.3	0.95
7440-22-4	SILVER	<1	0.074	0.047	2	0.095	0.11	0.13	0.11	0.11	0.03	0.11	0.073
7440-23-5	SODIUM	NS	220	162	NS	111	137	157	183	88.2	42.4	43.1	78
7440-28-0	THALLIUM	NS	0.31	0.29	NS	0.26	0.27	0.31	0.31	0.22	0.21	0.34	0.4
7440-62-2	VANADIUM	NS	20.4	20.4	NS	27.2	33.7	24.2	19.8	24.9	17.1	16.5	15.8
7440-66-6	ZINC	<120	162	135	109	238	268	207	122	277	98.2	182	119
7439-97-6	MERCURY	NS	0.011	0.05	NS	0.14	0.14	0.13	0.12	0.36	0.038	0.44	0.28

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		53,900	9,540

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	2,100	1,400	NS	1,700	U	1,100	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	650	290	NS	800	2,900	340	130	U	U	59	18
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	120	57	NS	300	610	59	29	1,400	130	150	24
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	2,870	1,747	1,000	2,800	3,510	1,499	159	1,400	130	209	42

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1Z

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-26**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

Sample Point		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
Depth (ftbg)	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	
Sample Date	4/19/2017		4/19/2017	4/19/2017		4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	10,200	8,580	NS	8,740	9,270	9,480	11,900	9,300	10,600	10,900	8,610
7440-36-0	ANTIMONY	NS	0.098	0.096	NS	0.5	0.56	0.49	0.57	0.56	0.29	0.71	0.74
7440-38-2	ARSENIC	<10	3.9	3.2	13	10.8	11.4	12.3	9.5	9	9	13.4	14.7
7440-39-3	BARIUM	NS	110	121	433	101	117	108	121	147	126	119	92
7440-41-7	BERYLLIUM	NS	0.5	0.54	10	0.61	0.7	0.64	0.89	0.68	0.81	0.68	0.46
7440-43-9	CADMIUM	<1	0.18	0.37	4	0.62	0.65	0.74	0.88	0.66	0.26	0.93	0.35
7440-70-2	CALCIUM	NS	1,400	2,280	NS	11,300	16,000	11,500	9,460	30,800	21,500	9,300	11,700
7440-47-3	CHROMIUM, TOTAL	<43	12.3	10.8	NS	629	942	516	790	89	14.2	1050	849
7440-48-4	COBALT	NS	8.9	5.2	NS	26	30.1	24.4	28.6	9.1	8.9	33.8	18.1
7440-50-8	COPPER	<32	12.8	15.6	50	81.9	96.4	92.3	112	33.2	29.8	98.8	85.9
7439-89-6	IRON	NS	16,600	11,300	NS	26,000	29,800	26,500	31,300	20,300	22,200	36,200	42,500
7439-92-1	LEAD	<36	12.2	10.5	63	68	86.3	66.1	99.3	150	24.9	111	29.7
7439-95-4	MAGNESIUM	NS	2,600	2,380	NS	4,090	3,830	4,120	4,690	10,600	6,310	4,060	4,120
7439-96-5	MANGANESE	NS	149	115	1600	1,230	1,260	1,340	502	556	536	1,250	1,250
7440-02-0	NICKEL	<23	17.2	15	30	581	791	479	647	52.4	23.8	956	791
7440-09-7	POTASSIUM	NS	582	726	NS	788	637	837	874	1,270	1,050	908	600
7782-49-2	SELENIUM	NS	0.72	0.92	3.9	1.1	1.3	1.4	1.4	1	1	1.6	0.88
7440-22-4	SILVER	<1	0.026	0.033	2	0.084	0.11	0.1	0.12	0.071	0.048	0.13	0.058
7440-23-5	SODIUM	NS	131	78.2	NS	118	136	171	102	109	88.7	87.5	75.5
7440-28-0	THALLIUM	NS	0.19	0.2	NS	0.22	0.25	0.25	0.34	0.45	0.37	0.37	0.31
7440-62-2	VANADIUM	NS	13.6	13.1	NS	27.8	37.3	29	41.3	16.2	15.7	41.1	40.4
7440-66-6	ZINC	<120	54.8	53.9	109	198	190	239	246	154	71	196	72.1
7439-97-6	MERCURY	NS	0.04	0.041	NS	0.085	0.11	0.093	0.12	0.068	0.032	0.13	0.052

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		4,210	9,040

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	U	9.7	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	240	U	NS	U	13,000	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	U	U	NS	1,100	3,000	1,000	1,100	77	4	660	550
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	U	U	NS	190	U	220	120	65	U	80	81
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	240	10	1,000	1,290	16,000	1,220	1,220	142	4	740	631

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1AA

Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-27

Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York

		**6 NYCRR Part 375 Class A Sediment Standards			**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards										
Sample Point			1A	1B		2A	2B	3A	3B	4A	4B	5A	5B		
Depth (ftbg)			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'		
Sample Date			4/19/2017	4/19/2017		4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017		
CAS #	Metals (mg/kg)														
7429-90-5	ALUMINUM	NS	12,300	10,600	NS	9,780	11,200	11,400	14,500	13,600	13,700	4,730	9,560		
7440-36-0	ANTIMONY	NS	0.11	0.19	NS	0.41	0.19	0.61	0.15	0.69	0.42	0.23	1.3		
7440-38-2	ARSENIC	<10	4.6	7	13	11.6	6.8	11.7	8.1	10.9	9.7	5.8	11.6		
7440-39-3	BARIUM	NS	106	486	433	115	97.1	133	118	155	93.9	30.2	106		
7440-41-7	BERYLLIUM	NS	0.66	0.72	10	0.65	0.63	0.76	0.79	0.63	0.72	0.22	0.72		
7440-43-9	CADMIUM	<1	0.35	1.3	4	0.57	0.37	0.82	0.29	1.2	0.51	0.24	0.54		
7440-70-2	CALCIUM	NS	4,550	13,800	NS	17,300	9,100	8,820	2,230	7,210	7,530	3,780	14,800		
7440-47-3	CHROMIUM, TOTAL	<43	40.7	189	NS	479	272	707	32.6	933	181	94.8	822		
7440-48-4	COBALT	NS	9.3	10.3	NS	26.6	12.7	31.9	9.9	29	10.4	6.2	21.9		
7440-50-8	COPPER	<32	18.2	21.2	50	79.2	31	90.7	17.5	60.5	37	24.7	70.9		
7439-89-6	IRON	NS	20,500	22,900	NS	27,500	21,800	29,400	25,300	26,900	24,400	12,700	30,500		
7439-92-1	LEAD	<36	17.1	345	63	50.6	27.1	114	18.8	154	57	62	734		
7439-95-4	MAGNESIUM	NS	3,600	4,250	NS	5,000	3,260	4,130	3,130	3,700	4,190	2,200	3,770		
7439-96-5	MANGANESE	NS	238	488	1600	1,460	336	1,110	335	592	465	254	801		
7440-02-0	NICKEL	<23	43.8	138	30	532	211	602	37	503	96.6	66.3	435		
7440-09-7	POTASSIUM	NS	865	752	NS	894	737	936	789	1,430	1,200	612	907		
7782-49-2	SELENIUM	NS	0.94	0.86	3.9	1.2	0.89	1.3	1.1	1.1	1	0.59	1.4		
7440-22-4	SILVER	<1	0.047	0.095	2	0.082	0.049	0.11	0.053	0.11	0.083	0.024	0.084		
7440-23-5	SODIUM	NS	131	131	NS	187	114	97.6	77.1	36.3	43.3	19.2	74.9		
7440-28-0	THALLIUM	NS	0.29	0.32	NS	0.45	0.37	0.42	0.44	0.33	0.33	0.15	0.22		
7440-62-2	VANADIUM	NS	17	21.1	NS	26.4	21.1	37	21.1	24.6	22.2	13.8	52.7		
7440-66-6	ZINC	<120	79.4	264	109	210	97.2	317	129	235	150	57.5	114		
7439-97-6	MERCURY	NS	0.072	0.043	NS	0.071	0.054	0.087	0.051	0.11	0.084	0.035	0.045		

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		10,200	9,420

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	430	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	U	510	NS	1,400	1,200	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	64	110	NS	590	270	1,800	48	76	U	28	23
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	U	11	NS	55	27	190	6.7	77	150	14	14
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	494	631	1,000	2,045	1,497	1,990	55	153	150	42	37

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table BB

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-28**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards	2A	2B	3A	3B	4A	4B	5A	5B
Sample Point	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	
Depth (ft/bg)	4/19/2017		4/19/2017	4/19/2017		4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017	4/19/2017
Sample Date													
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	8,490	10,700	NS	12,100	12,900	11,600	12,400	7,620	11,500	11,000	11,900
7440-36-0	ANTIMONY	NS	0.14	0.085	NS	0.63	0.15	0.68	0.24	0.18	0.87	0.82	0.5
7440-38-2	ARSENIC	<10	3.4	3	13	28	4.2	14.3	7.8	5.5	41.6	12	12.9
7440-39-3	BARIUM	NS	72.8	115	433	129	125	128	98	45.8	132	168	132
7440-41-7	BERYLLIUM	NS	0.52	0.59	10	0.74	0.57	0.68	0.57	0.74	0.67	0.57	0.64
7440-43-9	CADMIUM	<1	0.14	0.19	4	0.77	0.23	1	0.3	0.31	1.2	1.1	0.5
7440-70-2	CALCIUM	NS	27,900	3,710	NS	15,900	2,870	14,100	3,590	92,000	9,150	9,860	19,900
7440-47-3	CHROMIUM, TOTAL	<43	16.6	64.5	NS	504	12.8	1060	92.1	31.6	1260	799	546
7440-48-4	COBALT	NS	4.9	6.3	NS	31.6	8.4	39.1	9.4	15.7	48.7	39.9	25.5
7440-50-8	COPPER	<32	10.8	12.4	50	210	17.8	128	26.2	23.1	191	108	69.3
7439-89-6	IRON	NS	14,700	14,400	NS	32,500	18,000	31,600	18,300	8,550	36,000	27,900	26,900
7439-92-1	LEAD	<36	9.2	10.9	63	92.1	14.7	137	34	10.7	166	203	74.7
7439-95-4	MAGNESIUM	NS	3,220	3,180	NS	5,550	3,680	5,160	3,740	9,840	4,930	4,600	6,980
7439-96-5	MANGANESE	NS	309	179	1600	1,520	513	1,180	292	868	1,320	814	715
7440-02-0	NICKEL	<23	19.8	52.5	30	578	21.2	926	143	71.1	1,090	596	364
7440-09-7	POTASSIUM	NS	741	962	NS	1,200	934	1,080	1,020	821	1,100	1,530	1,340
7782-49-2	SELENIUM	NS	0.64	0.79	3.9	1.5	0.92	1.6	1.9	0.74	1.4	2	1.7
7440-22-4	SILVER	<1	0.023	0.031	2	0.16	0.033	0.15	0.035	0.014	0.18	0.16	0.09
7440-23-5	SODIUM	NS	117	168	NS	117	106	224	167	190	145	150	125
7440-28-0	THALLIUM	NS	0.19	0.26	NS	0.34	0.25	0.29	0.25	0.13	0.3	0.29	0.36
7440-62-2	VANADIUM	NS	12.8	13.6	NS	33.4	13.7	50.3	16.2	7.6	55.4	47.7	42.6
7440-66-6	ZINC	<120	49.5	64.4	109	408	74.1	234	104	88.7	321	243	121
7439-97-6	MERCURY	NS	0.038	0.021	NS	0.08	0.052	0.12	0.081	0.024	0.11	0.12	0.054

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		3,290	4,920

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOLOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOLOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOLOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOLOR 1242)	NS	250	180	NS	U	58	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOLOR 1248)	NS	U	U	NS	970	U	U	U	U	U	U	U
11097-69-1	PCB-1254 (AROCOLOR 1254)	NS	U	U	NS	270	U	920	60	26	5,600	570	240
11096-82-5	PCB-1260 (AROCOLOR 1260)	NS	U	U	NS	42	U	72	8.4	4.9	480	75	U
37324-23-5	PCB-1262 (AROCOLOR 1262)	NS	U	U	NS	33.4	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOLOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	250	180	1,000	1,282	58	992	68	31	6,080	645	240

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1CC

**Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-29**

**Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York**

		**6 NYCRR Part 375 Class A Sediment Standards	1A	1B	**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards								
Sample Point	2A		2B	3A		3B	4A	4B	5A	5B			
Depth (ftbg)	0-1'		1-2'	0-2"		0-1'	0-2"	0-1'	0-2"	0-1'			
Sample Date	4/20/2017		4/20/2017	4/20/2017		4/20/2017	4/20/2017	4/20/2017	4/20/2017	4/20/2017			
CAS #	Metals (mg/kg)												
7429-90-5	ALUMINUM	NS	8,830	8,100	NS	7,630	10,100	8,630	11,000	9,840	16,400	10,800	14,900
7440-36-0	ANTIMONY	NS	0.43	0.38	NS	0.44	0.58	0.52	0.37	0.65	0.27	0.34	0.17
7440-38-2	ARSENIC	<10	10.0	8.2	13	7.7	10.6	9.7	8.2	16.4	12.9	8.8	9.2
7440-39-3	BARIUM	NS	72.3	76.1	433	84.3	114	91.5	105	156	81.4	93.7	56.3
7440-41-7	BERYLLIUM	NS	0.75	0.69	10	0.45	0.73	0.53	0.62	0.58	0.72	0.54	0.73
7440-43-9	CADMIUM	<1	0.29	0.34	4	0.57	0.84	0.45	0.24	1.1	0.22	0.5	0.18
7440-70-2	CALCIUM	NS	33,000	43,500	NS	15,300	11,900	13,800	3,680	24,100	2,820	6,580	1,310
7440-47-3	CHROMIUM, TOTAL	<43	2,780	834	NS	251	449	741	324	72	17.3	166	17.8
7440-48-4	COBALT	NS	33.9	20	NS	17.4	21.2	29.5	19	9.2	7.7	16.7	10.7
7440-50-8	COPPER	<32	56.3	52.7	50	56.5	66.5	76.4	49.8	86.7	27.2	46.7	22.2
7439-89-6	IRON	NS	31,400	23,800	NS	18,500	25,800	25,400	22,900	20,300	25,600	20,600	22,700
7439-92-1	LEAD	<36	23.1	42.5	63	57.3	68.6	60.9	66.4	183	35.5	44.5	18.1
7439-95-4	MAGNESIUM	NS	6,250	5,930	NS	4,880	4,370	4,530	3,210	6,310	4,270	3,740	3,310
7439-96-5	MANGANESE	NS	2,260	961	1600	833	1,110	1,220	578	569	216	738	223
7440-02-0	NICKEL	<23	1,690	589	30	288	345	652	300	64.9	23.9	193	21.7
7440-09-7	POTASSIUM	NS	700	745	NS	849	1,050	766	727	1,300	1,120	935	663
7782-49-2	SELENIUM	NS	1.3	1.2	3.9	1.1	1.6	1.1	1.1	1.3	0.86	1.3	1.1
7440-22-4	SILVER	<1	0.033	0.053	2	0.065	0.13	0.086	0.075	0.13	0.031	0.078	0.021
7440-23-5	SODIUM	NS	187	233	NS	174	239	248	211	155	96.9	293	317
7440-28-0	THALLIUM	NS	0.14	0.12	NS	0.16	0.24	0.18	0.23	0.27	0.36	0.22	0.25
7440-62-2	VANADIUM	NS	91.1	25.7	NS	18.1	29.9	29.7	25.6	17.6	21.9	22	17.1
7440-66-6	ZINC	<120	123	125	109	181	219	155	89.4	329	91	153	68.3
7439-97-6	MERCURY	NS	0.0051	0.034	NS	0.085	0.11	0.066	0.075	0.1	0.077	0.082	0.07

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		8,160	20,600

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	420	4,500	NS	420	720	U	U	U	7.8	U	U
11097-69-1	PCB-1254 (AROCOR 1254)	NS	75	1,100	NS	110	200	830	1,800	61	5.5	120	30
11096-82-5	PCB-1260 (AROCOR 1260)	NS	11	160	NS	25	35	150	260	55	U	26	3.7
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	506	5,760	1,000	555	955	980	2,060	116	13	146	34

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

Table 1DD

Sediment Analytical Data
Tributary of Crooked Brook
Transect CS-30

Former Al Tech Specialty Steel Corporation
Willowbrook Avenue
Dunkirk, New York

		**6 NYCRR Part 375 Class A Sediment Standards			**6 NYCRR Part 375-6.8 (b) Ecological Resources Standards										
Sample Point			1A	1B		2A	2B	3A	3B	4A	4B	5A	5B		
Depth (ftbg)			0-1'	1-2'		0-2"	0-1'	0-2"	0-1'	0-2"	0-1'	0-2"	0-1'		
Sample Date			4/20/2017	4/20/2017		4/20/2017	4/20/2017	4/20/2017	4/20/2017	4/20/2017	4/20/2017	4/20/2017	4/20/2017		
CAS #	Metals (mg/kg)														
7429-90-5	ALUMINUM	NS	7,650	8,890	NS	9,800	8,790	9,050	9,860	7,430	8,210	11,100	8,330		
7440-36-0	ANTIMONY	NS	0.48	0.32	NS	0.52	0.45	0.85	0.31	0.76	1.1	0.56	0.32		
7440-38-2	ARSENIC	<10	9	4.7	13	10.9	11.1	11.7	8.6	12.1	13.3	14.2	10.4		
7440-39-3	BARIUM	NS	93.9	106	433	110	92	98.1	81.4	76.5	84.6	132	140		
7440-41-7	BERYLLIUM	NS	0.63	0.56	10	0.68	0.8	0.55	0.6	0.69	0.83	0.75	0.53		
7440-43-9	CADMIUM	<1	0.4	0.15	4	0.63	0.43	0.7	0.39	0.5	0.69	0.52	0.27		
7440-70-2	CALCIUM	NS	24,300	8,360	NS	16,100	22,200	18,800	4,550	19,400	23,800	6,100	7,990		
7440-47-3	CHROMIUM, TOTAL	<43	1,090	1,280	NS	753	1,160	1,280	30.7	4,350	7,200	739	202		
7440-48-4	COBALT	NS	30.6	21.1	NS	30.4	26.9	42.7	13	45.5	76.3	29.4	14		
7440-50-8	COPPER	<32	68.2	42.4	50	71.3	64.5	102	25.5	86.6	106	65.8	41.2		
7439-89-6	IRON	NS	25,200	43,100	NS	27,100	27,900	51,800	21,100	42,100	52,300	34,200	22,800		
7439-92-1	LEAD	<36	45.6	14	63	47.5	50.1	60.2	31.5	65.6	119	65.8	47.2		
7439-95-4	MAGNESIUM	NS	5,420	5,180	NS	5,340	5,600	8,210	4,030	5,520	20,800	4,940	4,140		
7439-96-5	MANGANESE	NS	1,080	553	1600	1,420	1,260	1,650	203	1,330	1,490	607	404		
7440-02-0	NICKEL	<23	777	716	30	684	784	1,120	40.8	885	3970	532	147		
7440-09-7	POTASSIUM	NS	714	1,300	NS	884	697	949	858	1.4	687	1,540	1,020		
7782-49-2	SELENIUM	NS	1.2	0.83	3.9	1.5	1.2	1.4	1	0.063	1.8	1.6	1.1		
7440-22-4	SILVER	<1	0.055	0.034	2	0.092	0.056	0.11	0.034	140	0.094	0.079	0.069		
7440-23-5	SODIUM	NS	222	270	NS	192	213	172	139	0.16	202	157	92.2		
7440-28-0	THALLIUM	NS	0.14	0.19	NS	0.2	0.15	0.21	0.24	61	0.14	0.4	0.28		
7440-62-2	VANADIUM	NS	38	67.4	NS	28.1	35.9	47.7	19.9	153	184	47.4	20.8		
7440-66-6	ZINC	<120	138	59.8	109	190	158	181	91.5	2760	174	132	86.4		
7439-97-6	MERCURY	NS	0.034	0.028	NS	0.056	0.025	0.073	0.028	0.022	0.032	0.13	0.077		

CAS #	TOC (mg/Kg)			
TOC	TOTAL ORGANIC CARBON		63,800	11,100

CAS #	PCB's (ug/Kg)												
12674-11-2	PCB-1016 (AROCOR 1016)	NS	U	U	NS	U	U	U	U	U	U	U	U
11104-28-2	PCB-1221 (AROCOR 1221)	NS	U	U	NS	U	U	U	U	U	U	U	U
11141-16-5	PCB-1232 (AROCOR 1232)	NS	U	U	NS	U	U	U	U	U	U	U	U
53469-21-9	PCB-1242 (AROCOR 1242)	NS	U	U	NS	U	U	U	U	U	U	U	U
12672-29-6	PCB-1248 (AROCOR 1248)	NS	430	180	NS	180	52	U	480	U	U	U	U
11097-69-1	PCB-1254 (AROCOR 1254)	NS	130	69	NS	87	38	730	53	160	470	150	77
11096-82-5	PCB-1260 (AROCOR 1260)	NS	40	14	NS	35	15	120	U	42	81	49	22
37324-23-5	PCB-1262 (AROCOR 1262)	NS	U	U	NS	U	U	U	U	U	U	U	U
11100-14-4	PCB-1268 (AROCOR 1268)	NS	U	U	NS	U	U	U	U	U	U	U	U
1336-36-3	Total PCBs	100	600	263	1,000	302	105	850	533	202	551	199	99

Notes:

U= Below detection limits

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

NS= no standard

ftbg= feet below grade

Transects 1A and 1B were compared to 6 NYCRR Part 375 Class A Sediment Standards

Transects 2-5 were compared to 6 NYCRR Part 375-6.8 (b) Ecological Resources Standards

Results above comparable standard are highlighted in red

CAS= Chemical Abstract Services

APPENDIX A

Sediment Sampling Forms and Transect Data Logs

SEDIMENT SAMPLING FORM



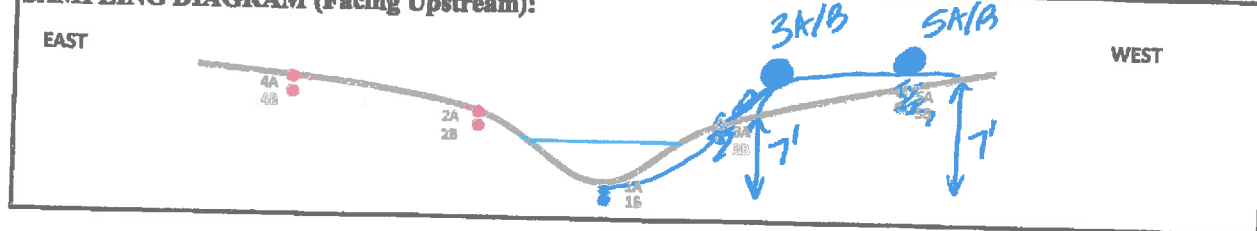
PROJECT: Former Al Tech Dunkirk

DATE: 4/3/17

CROSS-SECTION ID: CS-1

WEATHER: 55°F, sunny slightly overcast

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

13:00

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-2"

NOTES: Grab sample due to refusal @ >2"

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

—

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: —

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: —

NOTES: Refusal @ >2"

SAMPLE ID: LOCATION (Check):

3A

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

13:40

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: Black/dark

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-2"

NOTES: hand grab below grass level

SAMPLE ID: LOCATION (Check):

3B

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

13:49

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: Black/dark

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-1"

NOTES: auger to 1' and collect

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-1

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1400

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-2"

NOTES: hand grab below grass

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1415

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-1"

NOTES: auger to 1' below and collect

SAMPLE ID: LOCATION (Check):

4A

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1430

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-2"

NOTES: hand grab below grass

SAMPLE ID: LOCATION (Check):

4B

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1445

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-1"

NOTES: auger to 1' below and collect

ADDITIONAL OBSERVATIONS:

Large boulders in stream and along bank.
Steep decline of bank

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-1

SAMPLE ID: 5A **LOCATION (Check):**
☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):
☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay
COLOR: dark brown

MOISTURE (Check):
☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated
DEPTH: 0-2"

TIME: 1500 ☐ Duplicate **ID:** _____
☐ MS/MSD

NOTES: hand grab below grass

SAMPLE ID: 5B **LOCATION (Check):**
☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):
☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay
COLOR: dark brown

MOISTURE (Check):
☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated
DEPTH: 0-8"

TIME: 1510 ☐ Duplicate **ID:** _____
☐ MS/MSD

NOTES: Hit refusal @ 8" collected sample

SAMPLE ID: _____ **LOCATION (Check):**
☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):
☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay
COLOR: _____

MOISTURE (Check):
☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated
DEPTH: _____

TIME: _____ ☐ Duplicate **ID:** _____
☐ MS/MSD

NOTES: _____

SAMPLE ID: _____ **LOCATION (Check):**
☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):
☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay
COLOR: _____

MOISTURE (Check):
☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated
DEPTH: _____

TIME: _____ ☐ Duplicate **ID:** _____
☐ MS/MSD

NOTES: _____

ADDITIONAL OBSERVATIONS:

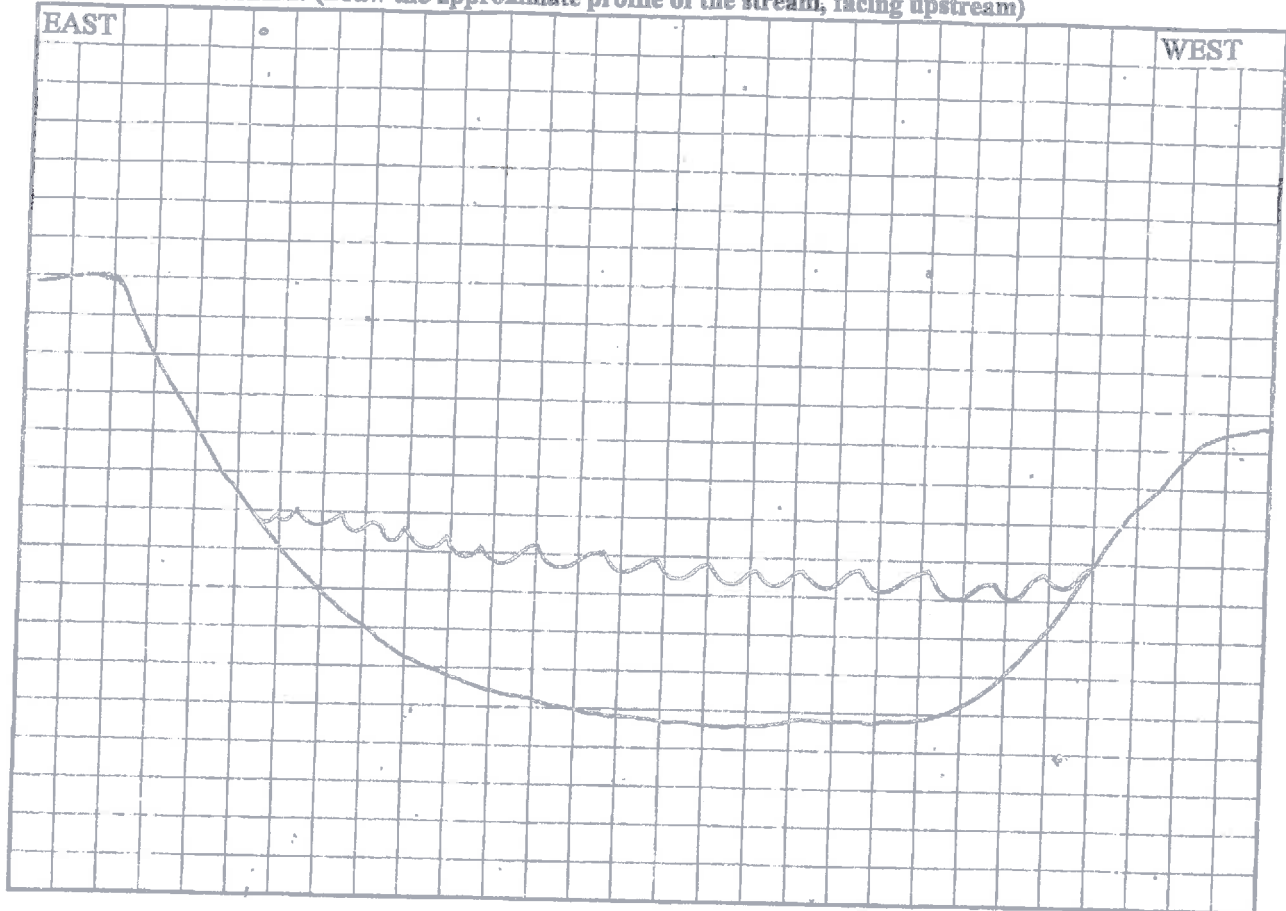
PROJECT:

DATE: 4/3/17

CROSS-SECTION ID: CS-1

WEATHER: 55°F, sunny

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE:

- ☐ Pool
☐ Riffle
☒ Run

MOVEMENT (Circle):

- ☒ Moving laminar/turbulent
☐ Slow

SUBSTRATE: (Overall %)

- | | | |
|-------------------------------------|----------|-------|
| ☐ | Clay | |
| ☐ | Silt | |
| ☒ | Sand | f/m/c |
| ☒ | Gravel | f/m/c |
| ☒ | Cobbles | |
| ☒ | Boulders | |
| ☐ | Bedrock | |

STREAM DEPTH:

- ft MAX.
 ft AVG.

DENSITY OF VEGETATION:

- ☐ Very dense
☐ Dense
☒ Somewhat dense *stems + reeds*
☐ Sparse

STREAM WIDTH:

- ft

BANK HEIGHTS:

- ft EAST BANK
 ft WEST BANK

MATURE VEGETATION (Large Trees):

- ☐ Many
☐ Some
☒ Few
☐ None

TREE DIAM. AT CHEST HEIGHT:

- ft MAX
 ft AVG.

Info on x-sections
- general R?
- describe each pt?

SEDIMENT SAMPLING FORM



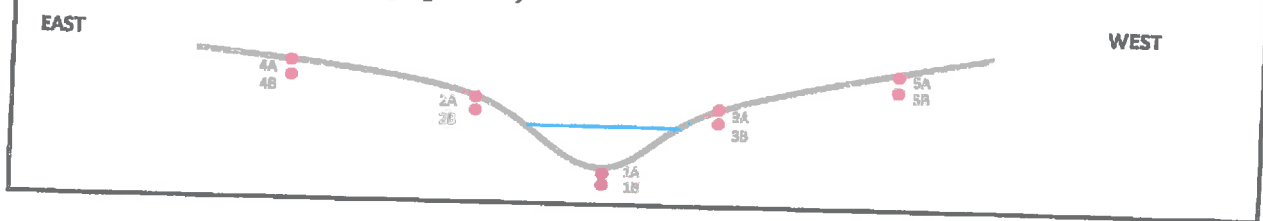
PROJECT: Fernan At Tech Dunkirk

DATE: 4/9/17

CROSS-SECTION ID: C5-2

WEATHER: 55°F, overcast

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1710

NOTES: angel

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-1 ft comp

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1745

NOTES: angel

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: grey

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 1-2 ft

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1925

NOTES: hard grab below grass

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-2 inches

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1950

NOTES: angel

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-1 ft

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-2 (cont)

SAMPLE ID: LOCATION (Check):

3A

- ☐ River
- ☐ Top of East Bank
- ☒ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1800

NOTES:

hand grab below grass

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID:

☒ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

3B

- ☐ River
- ☐ Top of East Bank
- ☒ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1800

NOTES:

angel

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-1 ft

SAMPLE ID: LOCATION (Check):

4A

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☒ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1910

NOTES:

hand grab below grass

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

4A-Dup

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☒ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1910

NOTES:

hand grab below grass

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☒ Duplicate ID:

☐ MS/MSD

DEPTH: ~~0-2"~~ 0-2"

ADDITIONAL OBSERVATIONS:

Stream was deep ~ 4'. Sediment was soft in stream (Feet were sinking). No rocks in stream just along bank. Could not collect sample along steep bank due to rocks. Collected at edge of higher ground.

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-2 (cont)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1930	NOTES: <u>angel</u>			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
1855	NOTES: <u>hand grab below gross</u>			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1835	NOTES: <u>angel</u>			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
	NOTES:			

ADDITIONAL OBSERVATIONS:

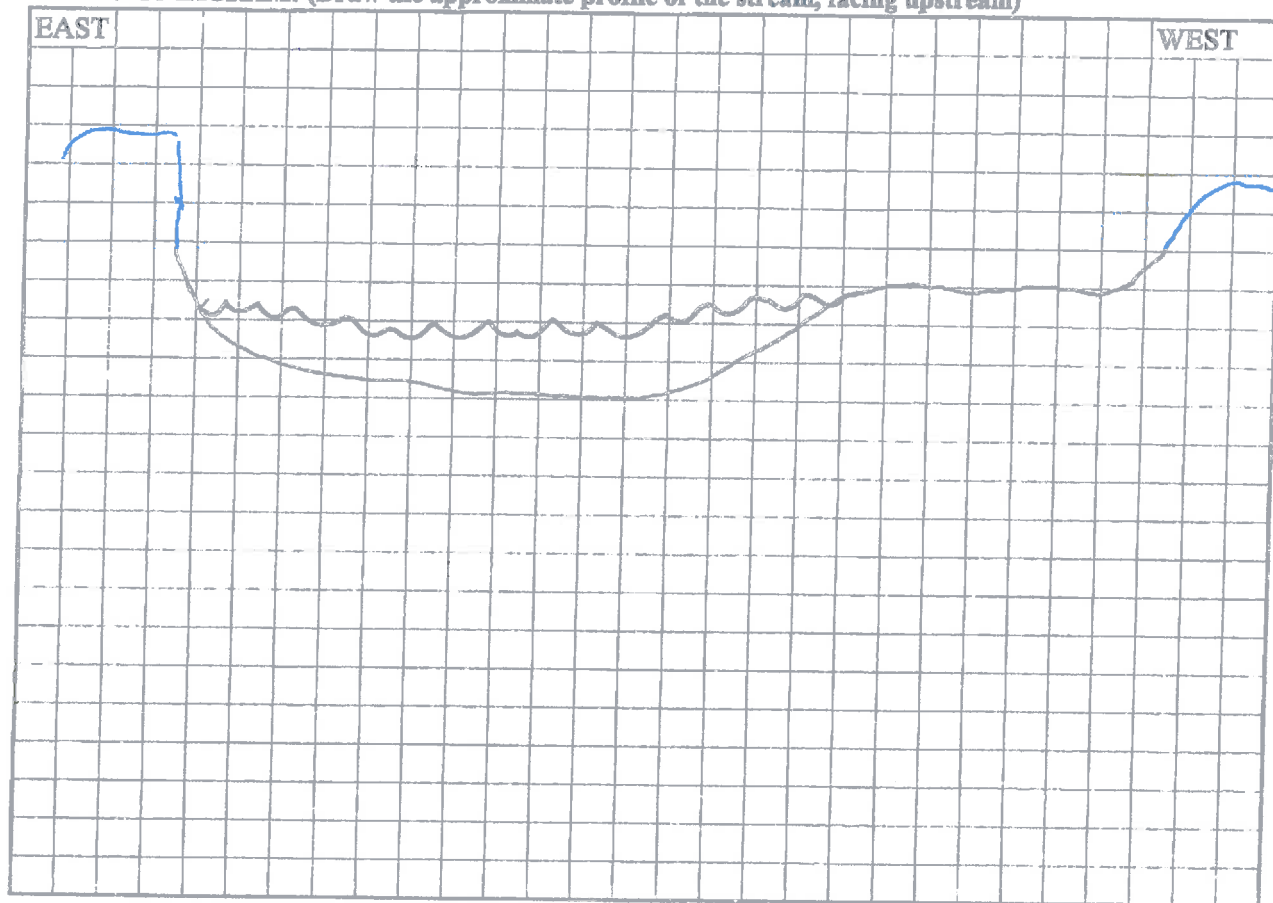
PROJECT:

DATE: 4/3/17

CROSS-SECTION ID: CS-2

WEATHER: 55°, overcast

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- | | | |
|--|---------------------------------|-------------------|
| ☒ Pool | ☐ Moving | laminar/turbulent |
| ☐ Riffle | ☐ Slow | |
| ☐ Run | | |

SUBSTRATE: (Overall %)

- | | |
|--|-------|
| ☒ Clay | |
| ☒ Silt | |
| ☐ Sand | f/m/c |
| ☐ Gravel | f/m/c |
| ☐ Cobbles | |
| ☐ Boulders | |
| ☐ Bedrock | |

STREAM DEPTH:

ft MAX
 ft AVG.

DENSITY OF VEGETATION:

- | |
|--|
| ☐ Very dense |
| ☐ Dense |
| ☒ Somewhat dense <i>poles & some small trees</i> |
| ☐ Sparse |

STREAM WIDTH:

ft

BANK HEIGHTS:

ft EAST BANK
 ft WEST BANK

MATURE VEGETATION (Large Trees):

- | |
|--|
| ☐ Many |
| ☐ Some |
| ☐ Few |
| ☒ None |

TREE DIAM. AT CHEST HEIGHT:

ft MAX
 ft AVG.

SEDIMENT SAMPLING FORM



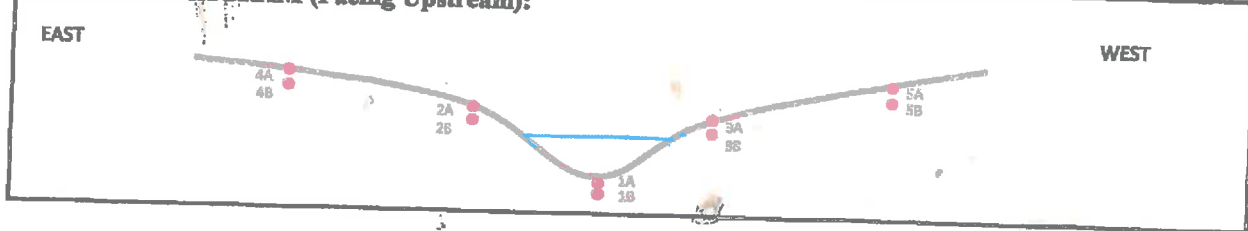
PROJECT: Former AlTech Dunkirk

DATE: 4/4/17

CROSS-SECTION ID: CS-3

WEATHER: 55°F, rainy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

940

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: Dark (Black)

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1'

NOTES: lot of concrete in this area of stream

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

9:55

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: Dark (black/grey)

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☒ Duplicate

ID: CS-3-1B Dup

☐ MS/MSD

DEPTH: 1-2'

NOTES:

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1300

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2'

NOTES:

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1315

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1'

NOTES: sample taken ~ 8" due to high water

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-3

SAMPLE ID: LOCATION (Check):

3A

TIME:

1015

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID: _____

☐ MS/MSD

DEPTH: 0-2'

NOTES: Lots of gravel, medium sized rocks

SAMPLE ID: LOCATION (Check):

3B

TIME:

1030

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID: _____

☐ MS/MSD

DEPTH: 0-1'

NOTES: lots of gravel, medium sized rocks

SAMPLE ID: LOCATION (Check):

4A

TIME:

1335

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID: _____

☐ MS/MSD

DEPTH: 0-2'

NOTES: _____

SAMPLE ID: LOCATION (Check):

4B

TIME:

1350

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate ID: _____

☐ MS/MSD

DEPTH: 0-1'

NOTES: _____

ADDITIONAL OBSERVATIONS:

Seems to be a spot where concrete/bricks and general debris were dumped. Lots of rocks and roots along bank. Not as steep as CS-1 and CS-2 on the bank but still a significant drop. Large trees in this area along the bank.

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-3

SAMPLE ID: LOCATION (Check):

SA

TIME:

1100

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☒ 20' from Top of WB
- ☐ Other:

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
- ☒ Sand f/m/c
- ☐ Silt
- ☐ Clay

COLOR: Brown/gray

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-24

Mostly gravel

SAMPLE ID: LOCATION (Check):

SB

TIME:

1110

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☒ 20' from Top of WB
- ☐ Other:

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
- ☒ Sand f/m/c
- ☐ Silt
- ☐ Clay

COLOR: Brown/gray

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH: 0-1'

Mostly gravel

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☐ Clay

COLOR:

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH:

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☐ Clay

COLOR:

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID:

☐ MS/MSD

DEPTH:

ADDITIONAL OBSERVATIONS:

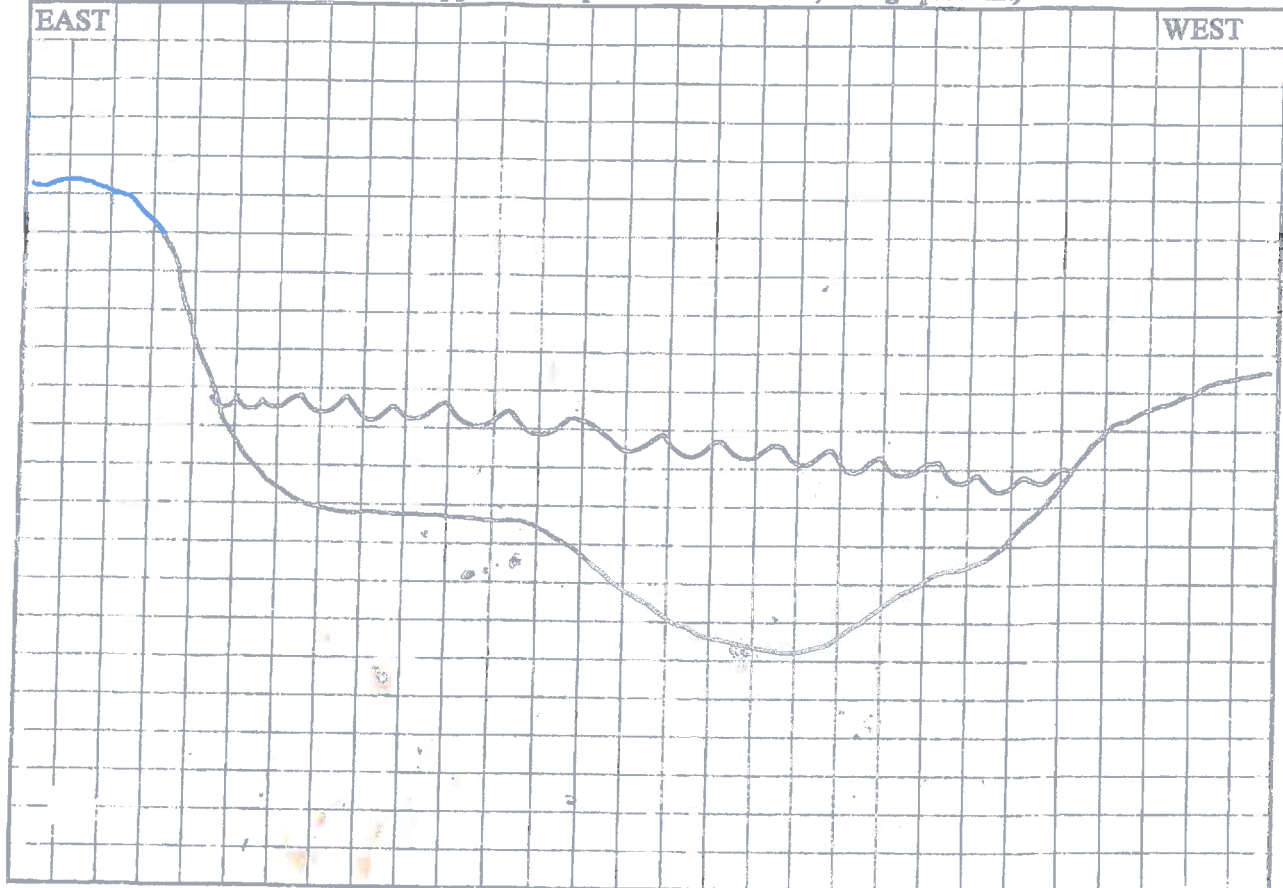
PROJECT:

DATE: 4/4/17

CROSS-SECTION ID: CS-3

WEATHER: 55°F, cloudy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- | | |
|---|---|
| ☐ Pool | ☐ Moving laminar/turbulent |
| ☐ Riffle | ☒ Slow |
| ☒ Run | |

DENSITY OF VEGETATION:

- | |
|--|
| ☐ Very dense |
| ☐ Dense |
| ☐ Somewhat dense |
| ☒ Sparse |

BANK HEIGHTS:

☐ 8	ft EAST BANK
☐ 8	ft WEST BANK

SUBSTRATE: (Overall %)

- | | |
|-------------------------------------|--------------|
| ☒ | Clay |
| ☒ | Silt |
| ☐ | Sand f/m/c |
| ☐ | Gravel f/m/c |
| ☐ | Cobbles |
| ☐ | Boulders |
| ☐ | Bedrock |

STREAM DEPTH:

☐ 4	ft MAX
☐	ft AVG.

STREAM WIDTH:

☐ 10	ft
-----------------------------	----

MATURE VEGETATION (Large Trees):

- | |
|--|
| ☐ Many |
| ☒ Some |
| ☐ Few |
| ☐ None |

TREE DIAM. AT CHEST HEIGHT:

☐ 1-2	ft MAX
☐ 1	ft AVG.

SEDIMENT SAMPLING FORM



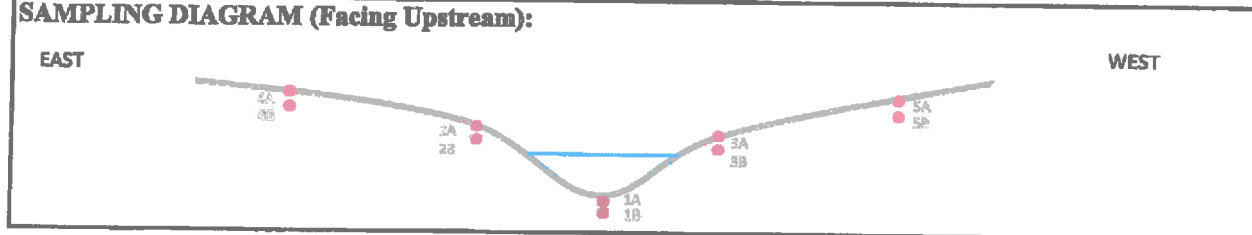
PROJECT: Former Al Tech Dunkirk

DATE: 4/4/17

CROSS-SECTION ID: CS-4

WEATHER: 55°F, cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

945

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: light brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1'

SAMPLE ID: LOCATION (Check):

1B

TIME:

1000

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: gray/brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1-2'

SAMPLE ID: LOCATION (Check):

2A

TIME:

1400

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2'

SAMPLE ID: LOCATION (Check):

2B

TIME:

1410

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1'

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-4

SAMPLE ID: LOCATION (Check):

3A

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

10:25

NOTES:

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

3B

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

1035

NOTES:

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☒ Sand f/m/c
☐ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

DEPTH: 0-1'

SAMPLE ID: LOCATION (Check):

4A

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

1430

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

4B

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

1445

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☒ Wet
☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

DEPTH: 0-1'

ADDITIONAL OBSERVATIONS:

Stream is slightly narrower. Fallen trees in stream.
 (2A/3A)
 Samples were collected on higher ground rather than
 along the bank due to steep incline and roots of trees.
 (5A/5B)
 This area had a lot of debris from the motel
 (glass, garbage).

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-4

SAMPLE ID: LOCATION (Check):

5A

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☒ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

COLOR: Brown

DEPTH: 0-2"

TIME:

11:25

NOTES:

SAMPLE ID: LOCATION (Check):

5B

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☒ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

COLOR: dark brown

DEPTH: 0-1'

TIME:

1200

NOTES:

SAMPLE ID: LOCATION (Check):

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☐ Clay

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

COLOR: _____

DEPTH: _____

TIME:

NOTES:

SAMPLE ID: LOCATION (Check):

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☐ Clay

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

COLOR: _____

DEPTH: _____

TIME:

NOTES:

ADDITIONAL OBSERVATIONS:

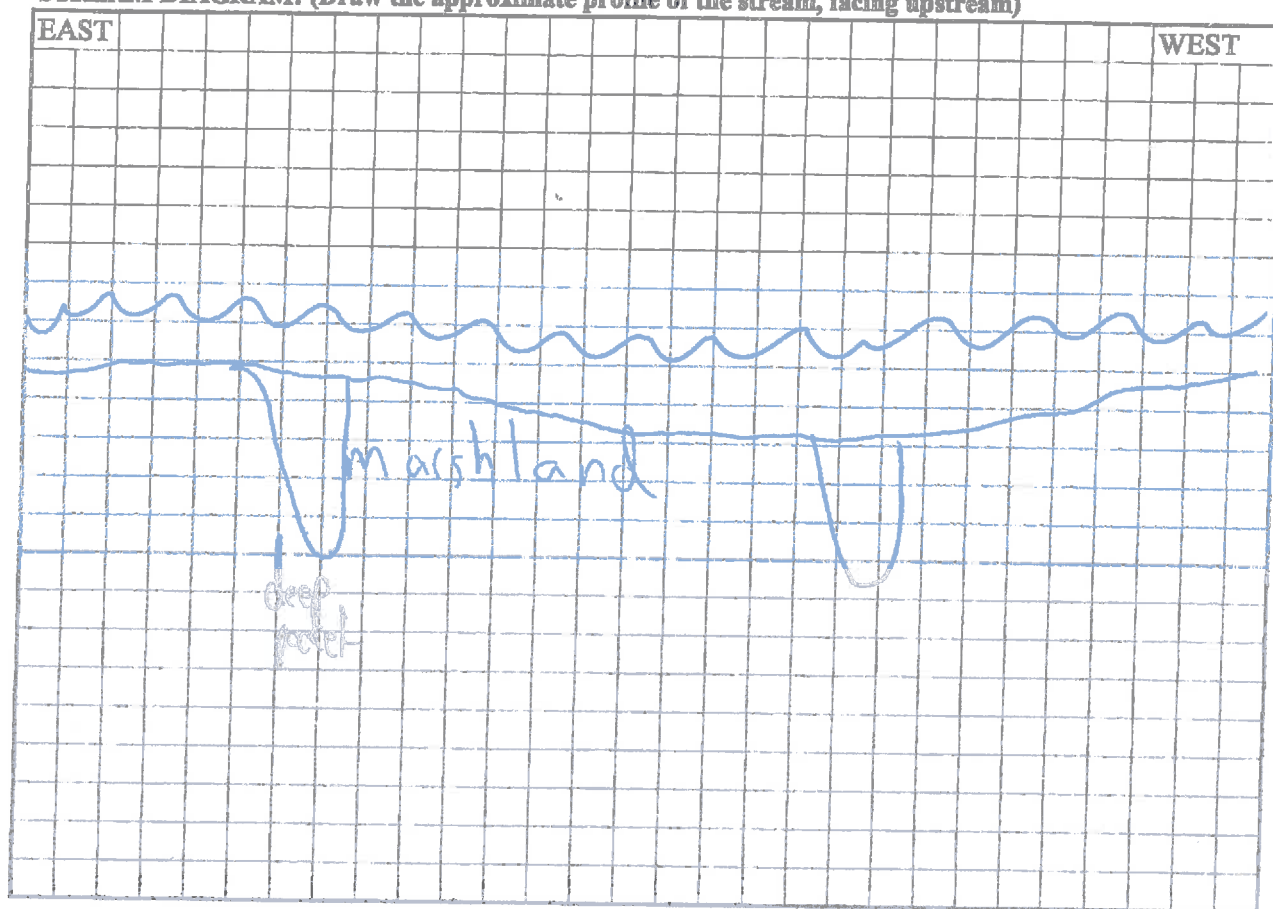
PROJECT:

DATE: 4/4/17

CROSS-SECTION ID: CS-4

WEATHER: 55°F, rainy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: **MOVEMENT (Circle):**

- | | | |
|--|--|-------------------|
| ☐ Pool | ☒ Moving | laminar/turbulent |
| ☒ Riffle | ☐ Slow | |
| ☐ Run | | |

DENSITY OF VEGETATION:

- | |
|---|
| ☐ Very dense |
| ☒ Dense |
| ☐ Somewhat dense |
| ☐ Sparse |

BANK HEIGHTS:

5	ft	EAST BANK
10	ft	WEST BANK

SUBSTRATE: (Overall %)

- | | |
|-------------------------------------|--------------|
| ☒ | Clay |
| ☒ | Silt |
| ☐ | Sand f/m/c |
| ☐ | Gravel f/m/c |
| ☐ | Cobbles |
| ☐ | Boulders |
| ☐ | Bedrock |

STREAM DEPTH:

3.5	ft	MAX
2.5	ft	AVG.

STREAM WIDTH:

10	ft
----	----

MATURE VEGETATION (Large Trees):

- | | |
|-------------------------------------|------|
| ☐ | Many |
| ☒ | Some |
| ☒ | Few |
| ☐ | None |

TREE DIAM. AT CHEST HEIGHT:

2	ft	MAX
1	ft	AVG.

SEDIMENT SAMPLING FORM



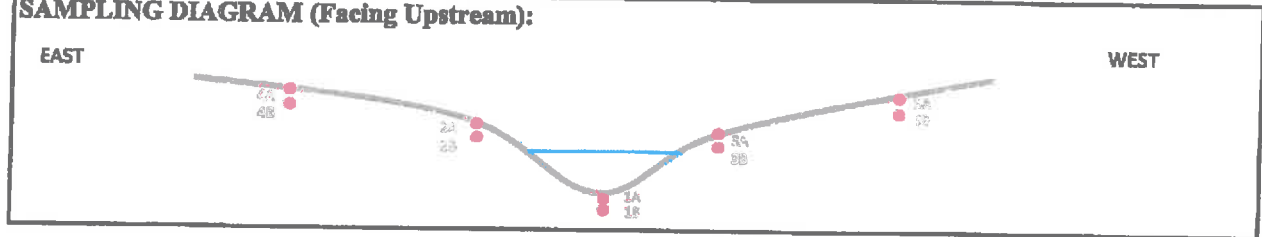
PROJECT: Former Al Tech Dunkirk

DATE: 4/14/17

CROSS-SECTION ID: CS-5

WEATHER: 55°F, cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

TIME:

1500

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: Dark gray/brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

DEPTH: **0-1'**

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

TIME:

1515

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: Dark gray/brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

DEPTH: **1-2'**

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

TIME:

1530

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

DEPTH: **0-2"**

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

TIME:

1550

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

DEPTH: **0-1'**

☐ Duplicate ID: _____

☐ MS/MSD

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-5

SAMPLE ID: LOCATION (Check):

3A

TIME:

1610

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☒ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: brown/grey

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

3B

TIME:

1630

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☒ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1'

SAMPLE ID: LOCATION (Check):

4A

TIME:

1645

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☒ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

4B

TIME:

1705

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☒ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1"

ADDITIONAL OBSERVATIONS:

very close to another section of creek that branches off ~40' downstream. Hard to determine edge of bank. (on East side)

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-5

SAMPLE ID: LOCATION (Check):

SA

TIME:

1720

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☒ Duplicate

ID: CS-SA-0p

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

5B

TIME:

1755

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1'

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

ADDITIONAL OBSERVATIONS:

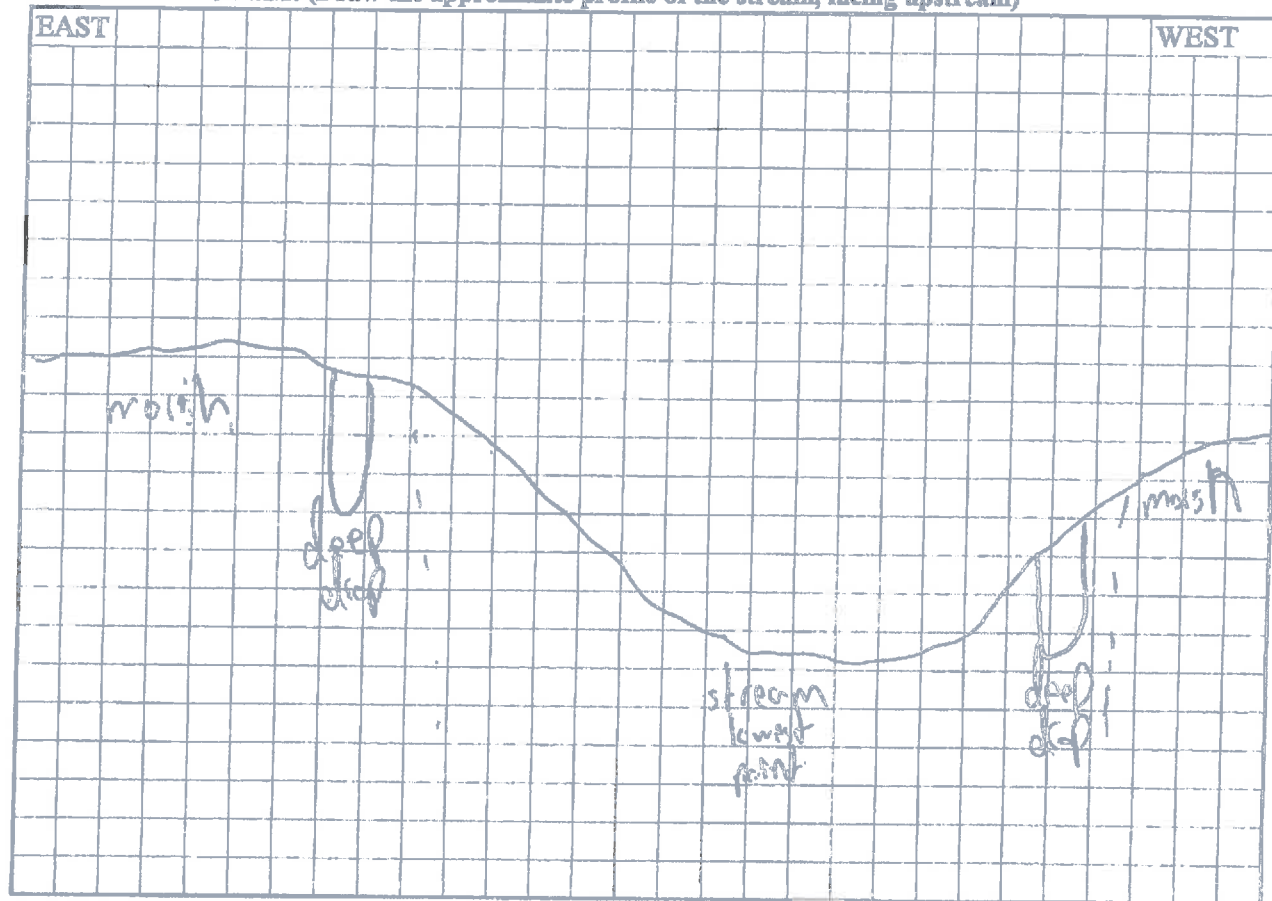
PROJECT:

DATE: 4/4/17

CROSS-SECTION ID: C9-5

WEATHER: 55°F, rainy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: **MOVEMENT (Circle):**

- | | | | |
|---|--|----------------------------------|---|
| ☐ Pool | ☒ Moving | ☐ laminar | ☒ turbulent |
| ☐ Riffle | ☐ Slow | | |
| ☒ Run | | | |

SUBSTRATE: (Overall %)

- | | | |
|-------------------------------------|----------|-------|
| ☒ | Clay | |
| ☒ | Silt | |
| ☐ | Sand | f/m/c |
| ☐ | Gravel | f/m/c |
| ☐ | Cobbles | |
| ☐ | Boulders | |
| ☐ | Bedrock | |

STREAM DEPTH:

ft MAX
 ft AVG.

DENSITY OF VEGETATION:

- | | |
|-------------------------------------|----------------|
| ☒ | Very dense |
| ☐ | Dense |
| ☐ | Somewhat dense |
| ☐ | Sparsce |

STREAM WIDTH:

ft

very wide marsh area

BANK HEIGHTS:

ft EAST BANK
 ft WEST BANK

MATURE VEGETATION (Large Trees):

- | | |
|-------------------------------------|------|
| ☒ | Many |
| ☐ | Some |
| ☐ | Few |
| ☐ | None |

TREE DIAM. AT CHEST HEIGHT:

2 ft MAX
 .5 ft AVG.

Mostly bushes,

SEDIMENT SAMPLING FORM



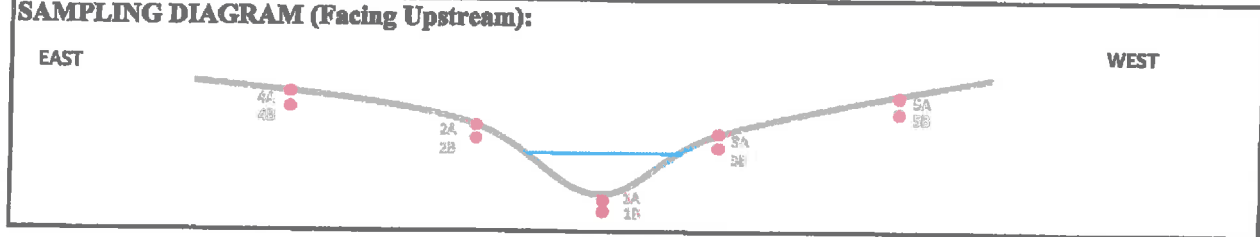
PROJECT: Former Al Tech Dunkirk

DATE: 4/5/17

CROSS-SECTION ID: CS-6

WEATHER: 50° sunny, partly cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

1200

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate ID: _____

☒ MS/MSD

DEPTH: 0-1'

SAMPLE ID: LOCATION (Check):

1B

TIME:

1220

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate ID: _____

☐ MS/MSD

DEPTH: 1-2'

SAMPLE ID: LOCATION (Check):

2A

TIME:

1530

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID: _____

☐ MS/MSD

DEPTH: 0-2'

SAMPLE ID: LOCATION (Check):

2B

TIME:

1555

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate ID: _____

☐ MS/MSD

DEPTH: 0-1'

tree roots encountered ~8"

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS 6

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1'</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>Brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>light gray</u> <u>light brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1'</u>		
NOTES: <u>Roots encountered. Sample collected slightly short of 1'</u>				

ADDITIONAL OBSERVATIONS:

Much wider area. Stream pools out and not much flow was observed. Areas of sand (like islands) forming around several areas of stream. Determined top of bank based on where we believed the edge of the flood plain was.

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS6

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
1740		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1'</u>		
1800		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
		NOTES:		

ADDITIONAL OBSERVATIONS:

PROJECT:

DATE:

4/5/17

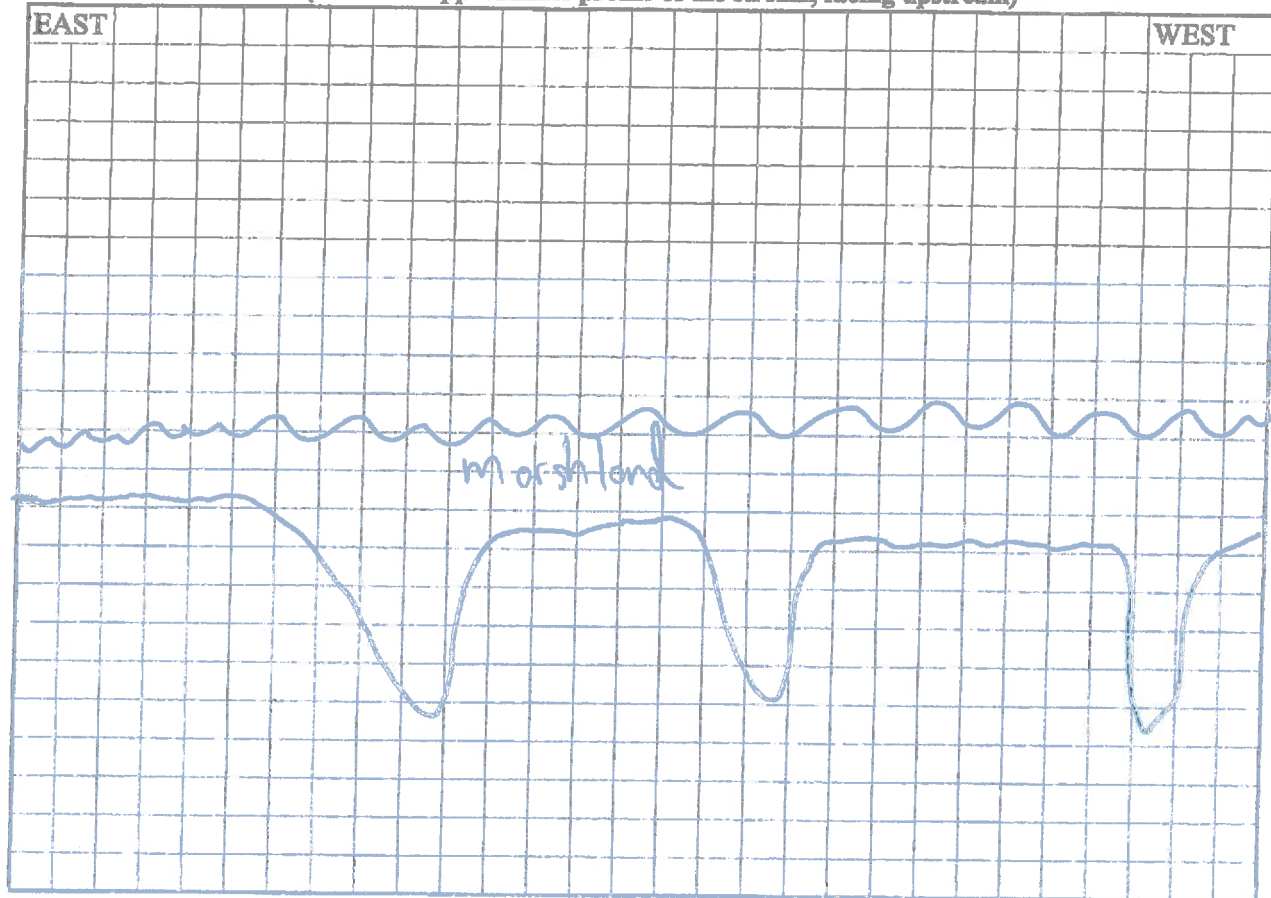
CROSS-SECTION ID:

CS-6

WEATHER:

50° sunny, partly cloudy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE:

MOVEMENT (Circle):



Pool



Moving

laminar/turbulent



Riffle



Slow



Run

DENSITY OF VEGETATION:



Very dense



Dense



Somewhat dense



Spars

BANK HEIGHTS:

ft EAST BANK

ft WEST BANK

SUBSTRATE: (Overall %)



Clay



Silt



Sand

f/m/c



Gravel

f/m/c



Cobbles



Boulders



Bedrock

STREAM DEPTH:

4.5 ft MAX

2-3 ft AVG.

STREAM WIDTH:

7100 ft

MATURE VEGETATION (Large Trees):



Many on banks



Some



Few



None

TREE DIAM. AT CHEST HEIGHT:

ft MAX

ft AVG.

beaver dam upstream of CS-7

SEDIMENT SAMPLING FORM



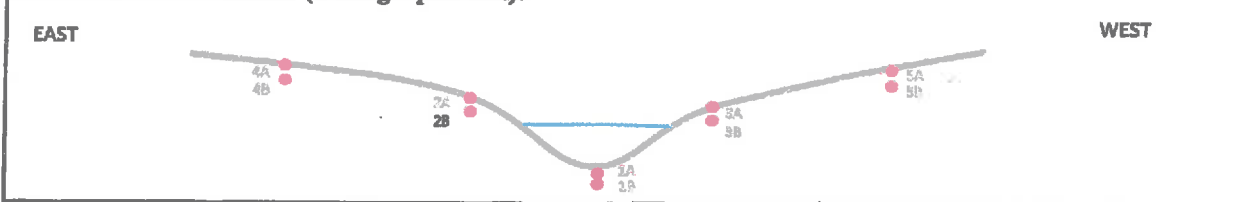
PROJECT: Former Al Tech Dinkirk

DATE: 4/5/17

CROSS-SECTION ID: C5-7

WEATHER: 50° sunny, partly cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

1135

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1'

SAMPLE ID: LOCATION (Check):

1B

TIME:

1150

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: dark gray

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1-2'

SAMPLE ID: LOCATION (Check):

2A

TIME:

1300

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

2B

TIME:

1325

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☒ MS/MSD

DEPTH: 0-1'

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS7

SAMPLE ID: LOCATION (Check):

3A

TIME:

1230

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☒ Duplicate

ID: CS-7-3A DUP

☐ MS/MSD

DEPTH: 0-2'

SAMPLE ID: LOCATION (Check):

3B

TIME:

1245

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: Brown/Gray

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1'

SAMPLE ID: LOCATION (Check):

4A

TIME:

1350

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

Selected area on other side of main stream. Did not go all the way to the trees / across and stream due to fence rest.

SAMPLE ID: LOCATION (Check):

4B

TIME:

1405

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: dark gray

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1'

ADDITIONAL OBSERVATIONS:

Very wide area. Pools of water forming around land. To the west there was a ridge that separates main stream from a stream off shoot.

Lots of Pools / thorn bushes at 20' from bank samples.

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS7

SAMPLE ID: LOCATION (Check):

SA

TIME:

1200

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: light brown / brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

DEPTH: 0-2"

☐ Duplicate

ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

SB

TIME:

1215

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: light brown / brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

DEPTH: 0-1'

☐ Duplicate

ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

DEPTH: _____

☐ Duplicate

ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

DEPTH: _____

☐ Duplicate

ID: _____

☐ MS/MSD

ADDITIONAL OBSERVATIONS:

PROJECT:

DATE:

4/5/17

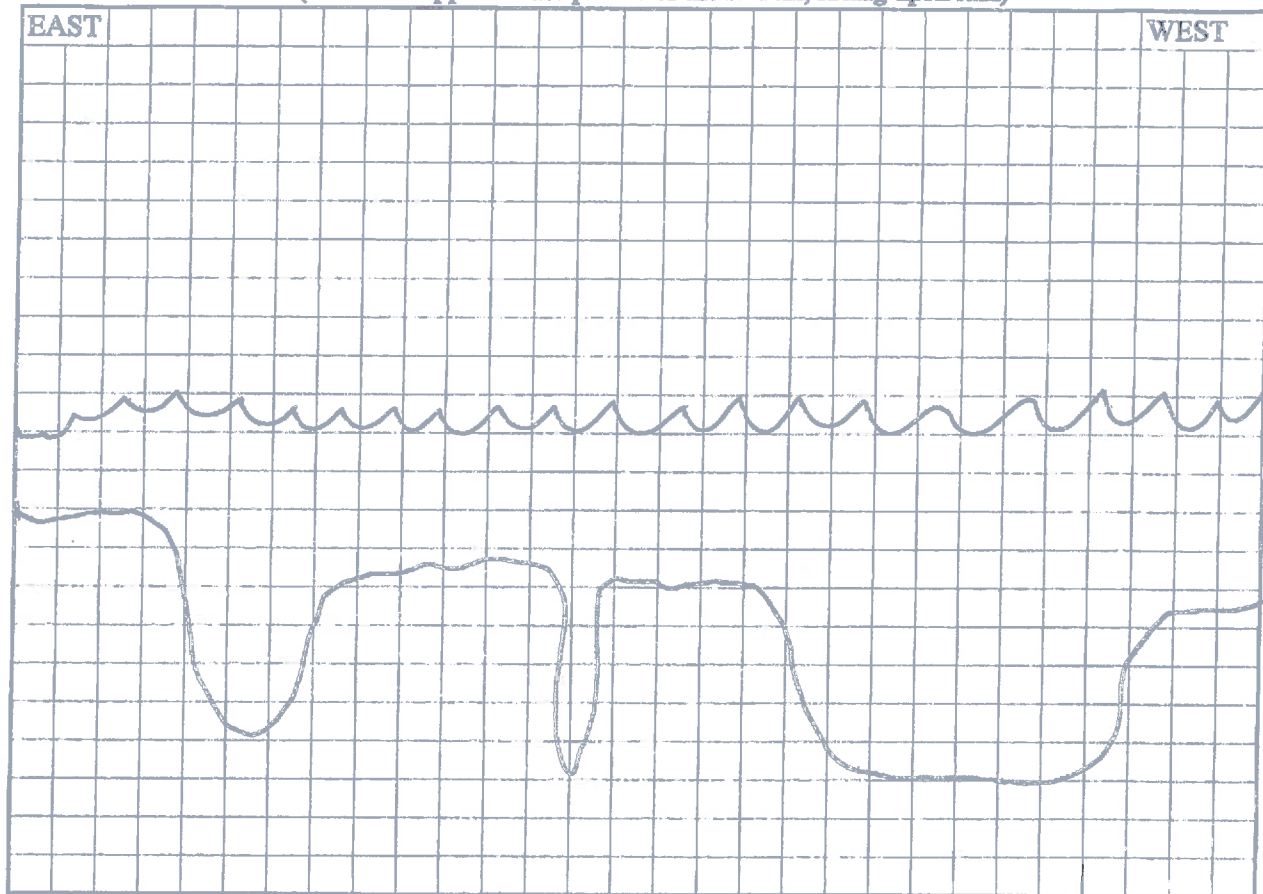
CROSS-SECTION ID:

CS-7

WEATHER:

50° Sunny, partly cloudy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE:

MOVEMENT (Circle):

☒ Pool
☐ Riffle
☐ Run

☐ Moving laminar/turbulent
☐ Slow

SUBSTRATE: (Overall %)

☒ Clay
☒ Silt
☐ Sand
☐ Gravel
☐ Cobbles
☐ Boulders
☐ Bedrock

f/m/c

f/m/c

STREAM DEPTH:

ft MAX
 ft AVG.

DENSITY OF VEGETATION:

☐ Very dense
☐ Dense
☒ Somewhat dense
☐ Sparse

STREAM WIDTH:

ft

BANK HEIGHTS:

ft EAST BANK
 ft WEST BANK

MATURE VEGETATION (Large Trees):

☐ Many
☐ Some
☐ Few
☐ None

TREE DIAM. AT CHEST HEIGHT:

ft MAX
 ft AVG.

beaver dam adjacent
upstream

SEDIMENT SAMPLING FORM



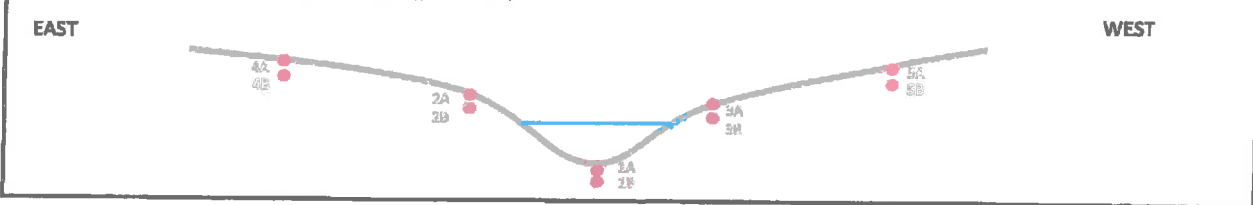
PROJECT: Former AI Tech Dunkirk

DATE: 4/6/17

CROSS-SECTION ID: CS-8

WEATHER: 50° rainy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

1000

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: dark gray/brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1'

SAMPLE ID: LOCATION (Check):

1B

TIME:

1030

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay

COLOR: gray

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1-2'

SAMPLE ID: LOCATION (Check):

2A

TIME:

1250

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

2B

TIME:

1215

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1'

Water encountered @ ~10"

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS 8

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
	☐ Other: _____	DEPTH: <u>0-2"</u>		
TIME:				
1316				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3b	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark gray brown</u>	☐ Saturated	
	☐ Other: _____	DEPTH: <u>0-11</u>		
TIME:				
1320				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
	☐ Other: _____	DEPTH: <u>0-2"</u>		
TIME:				
1235				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
	☐ Other: _____	DEPTH: <u>0-1'</u>		
TIME:				
1250				
NOTES: <u>Roots, water surrounding bank on all sides sample collected from highest point</u>				

ADDITIONAL OBSERVATIONS:

Large marsh area. Some areas along east ~~end~~ of stream had more turbulent flow due to beaver dam/dropped trees. Stream offshoot also observed to far ~~west~~ west, that was separated by high ridge of grass/trees.

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS 8

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
	☐ Other: _____	DEPTH: <u>0-2"</u>		
TIME:				
1350				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☒ Wet	
	☒ 20' from Top of WB	COLOR: <u>gray/brown</u>	☐ Saturated	
	☐ Other: _____	DEPTH: <u>0-1'</u>		
TIME:				
1405				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
	☐ Other: _____	DEPTH: _____		
TIME:				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
	☐ Other: _____	DEPTH: _____		
TIME:				
NOTES:				

ADDITIONAL OBSERVATIONS:

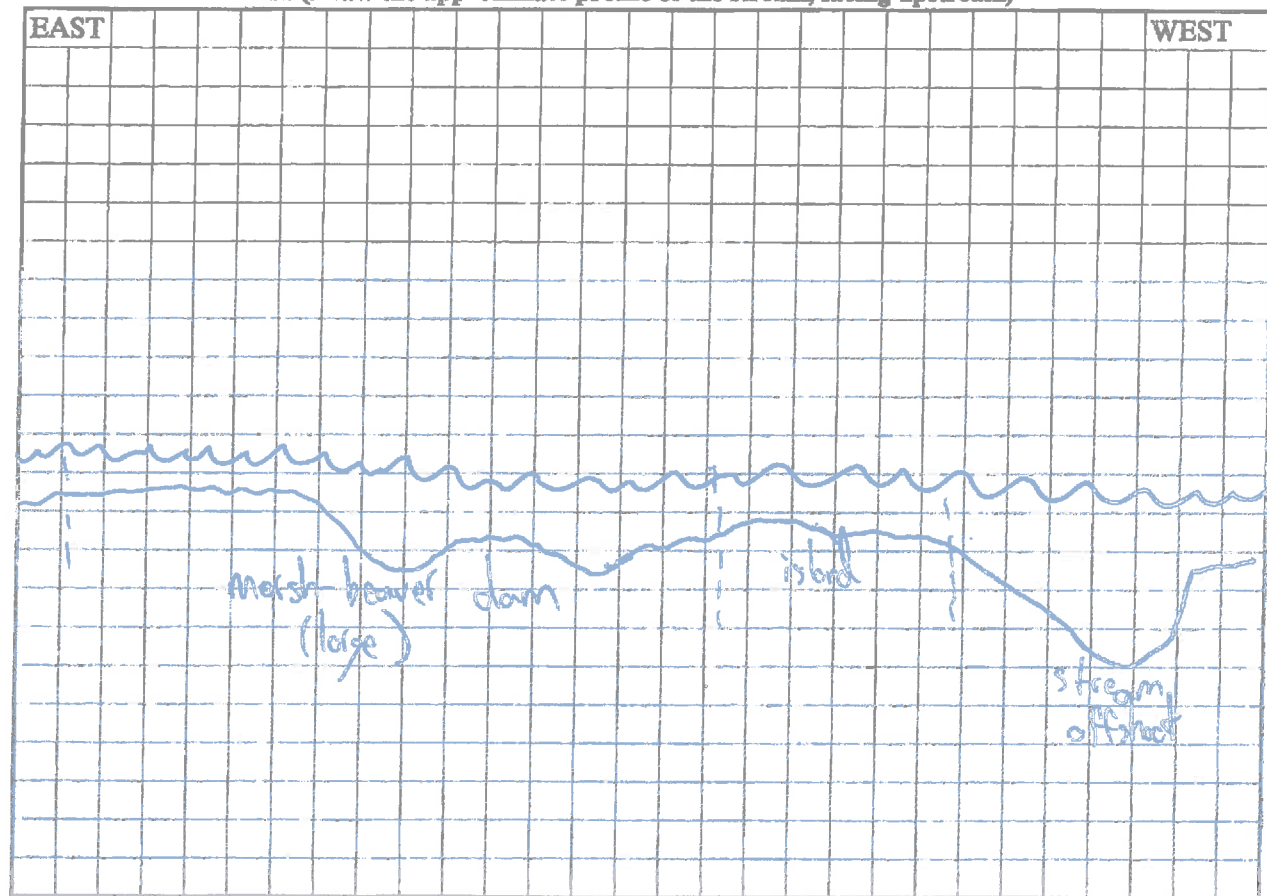
PROJECT:

DATE: 4/6/17

CROSS-SECTION ID: CS-8

WEATHER: 50°F, cloudy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- | | | |
|--|--|-------------------|
| ☒ Pool | ☐ Moving | laminar/turbulent |
| ☐ Riffle | ☒ Slow | |
| ☐ Run | | |

DENSITY OF VEGETATION:

- | |
|--|
| ☒ Very dense |
| ☐ Dense |
| ☐ Somewhat dense |
| ☐ Sparse |

BANK HEIGHTS:

ft EAST BANK
ft WEST BANK

SUBSTRATE: (Overall %)

- | | | |
|----|----------|------------------|
| 50 | Clay | ≈ 100 below 1 ft |
| 50 | Silt | ≈ 100 0-1 ft |
| | Sand | f/m/c |
| | Gravel | f/m/c |
| | Cobbles | |
| | Boulders | |
| | Bedrock | |

STREAM DEPTH:

4 ft MAX
1-2 ft AVG.

STREAM WIDTH:

100 ft

MATURE VEGETATION (Large Trees):

- | |
|--|
| ☒ Many |
| ☐ Some |
| ☐ Few |
| ☐ None |

TREE DIAM. AT CHEST HEIGHT:

3 ft MAX
1-2 ft AVG.

sprawling marsh with dense vegetation at all stages
on surrounding sides
small mature trees in marsh bottom

SEDIMENT SAMPLING FORM



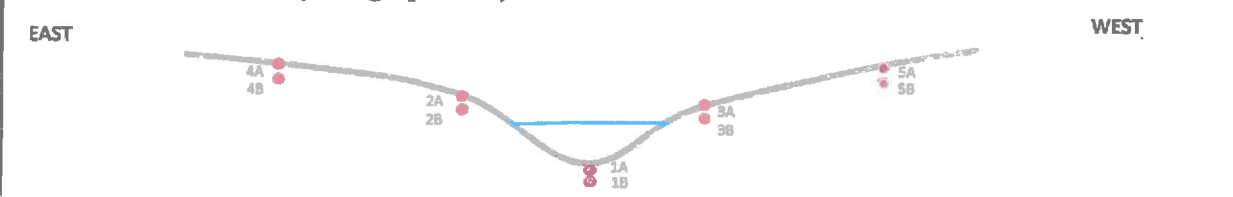
PROJECT: Former Altech Dunkirk

DATE: 4/6/17

CROSS-SECTION ID: CS-9

WEATHER: 50° rainy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

SAMPLE ID: 1A

TIME: 1100

NOTES:

☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay
COLOR: Dark gray

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated
DEPTH: 0-1'

☐ Duplicate
ID: _____
☐ MS/MSD

SAMPLE ID: LOCATION (Check):

SAMPLE ID: 1B

TIME: 1125

NOTES:

☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay
COLOR: Dark gray

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated
DEPTH: 1-2'

☐ Duplicate
ID: _____
☐ MS/MSD

SAMPLE ID: LOCATION (Check):

SAMPLE ID: 2A

TIME: 1500

NOTES:

☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay
COLOR: Brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated
DEPTH: 0-2"

☐ Duplicate
ID: _____
☒ MS/MSD

NOTES: Water encountered just below grass ~ 2" deep.

SAMPLE ID: LOCATION (Check):

SAMPLE ID: 2B

TIME: 1515

NOTES:

☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay
COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated
DEPTH: 0-1'

☐ Duplicate
ID: _____
☐ MS/MSD

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS 9

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
1605	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1'</u>		
1620	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☒ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
1530	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☒ Duplicate ID: <u>CS-9-4B Dup</u> ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☒ 20' from Top of EB	☒ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>light brown / gray</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1'</u>		
1545	NOTES:			

ADDITIONAL OBSERVATIONS:

Large swamp area, w/ high grass. Entire area was flooded ~ 2". Steep drop from bank to creek (~ 4' deep in middle).

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS9

SAMPLE ID: LOCATION (Check):

SA

TIME:

1635

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☒ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

SB

TIME:

1700

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1'

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

ADDITIONAL OBSERVATIONS:

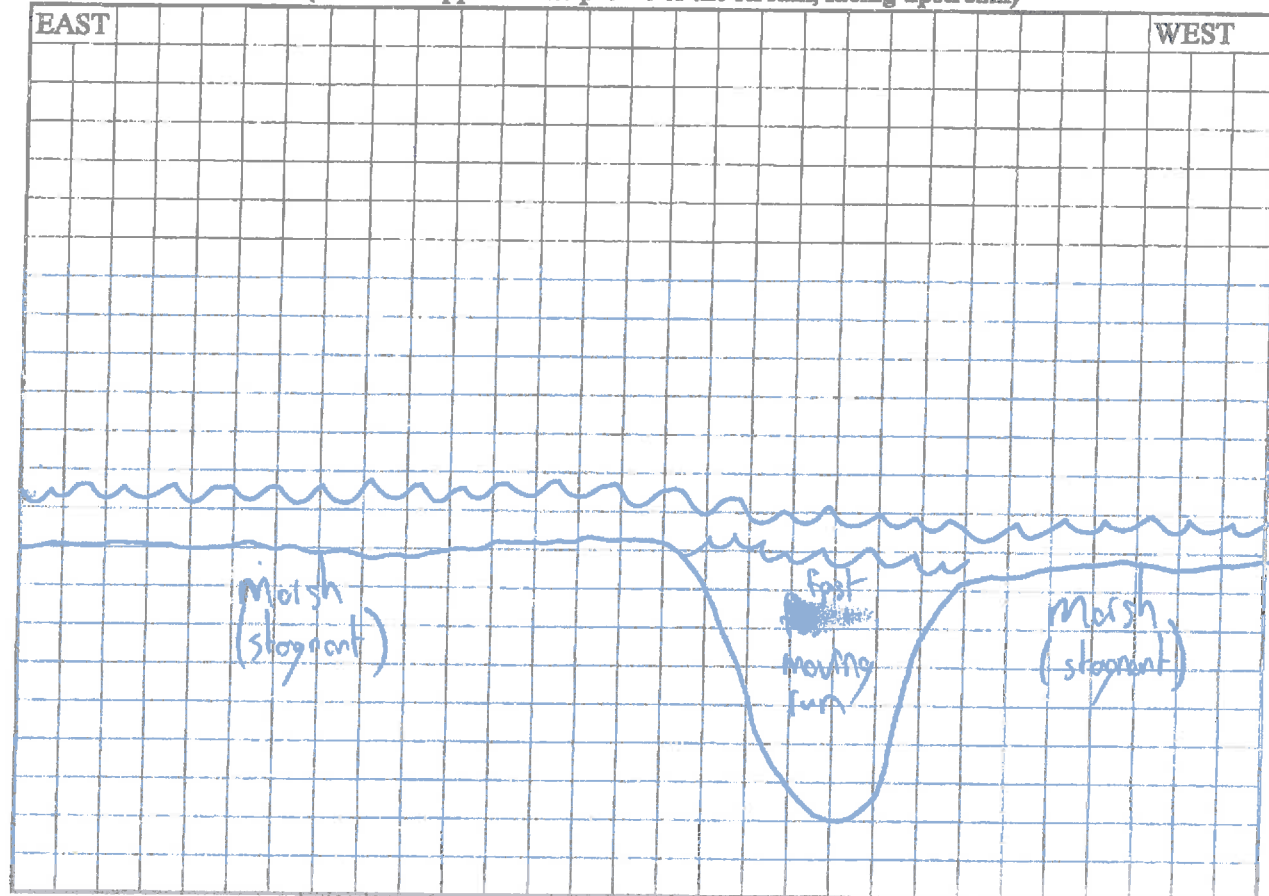
PROJECT:

DATE: 4/6/17

CROSS-SECTION ID: CS-9

WEATHER: 50°F, rainy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- ☒ Pool ☒ Moving laminar ☒ turbulent
☐ Riffle ☒ Slow
☒ Run

DENSITY OF VEGETATION:

- ☒ Very dense (reeds)
☐ Dense
☐ Somewhat dense
☐ Sparse

BANK HEIGHTS:

ft EAST BANK
 ft WEST BANK

SUBSTRATE: (Overall %)

50	Clay	50% below 1 ft
50	Silt	50% 0-1 ft
	Sand	f/m/c
	Gravel	f/m/c
	Cobbles	
	Boulders	
	Bedrock	

STREAM DEPTH:

4.5 ft MAX
1-2 ft AVG.

STREAM WIDTH:

10 ft

MATURE VEGETATION (Large Trees):

- ☐ Many
☐ Some
☐ Few
☒ None

TREE DIAM. AT CHEST HEIGHT:

ft MAX
 ft AVG.

SEDIMENT SAMPLING FORM



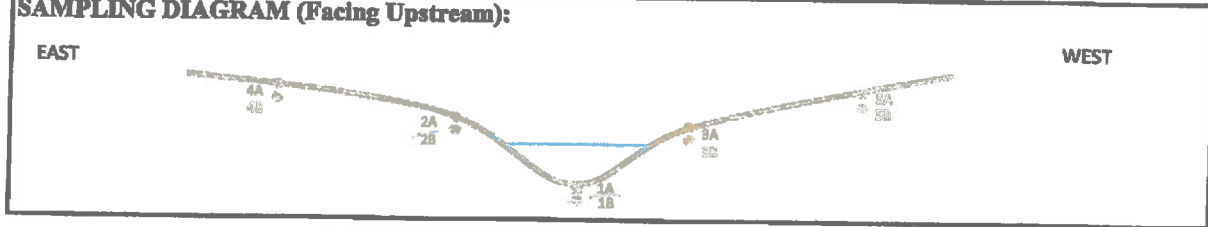
PROJECT: NYSDEC Dunkirk

DATE: 4/10/14

CROSS-SECTION ID: CS-10

WEATHER: 60°F

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

TIME:

0950

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

DEPTH: **1'**

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

TIME:

1000

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

DEPTH: **2'**

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

TIME:

1005

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

DEPTH: _____

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

TIME:

1015

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

DEPTH: _____

☐ Duplicate ID: _____

☐ MS/MSD

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-10

SAMPLE ID: LOCATION (Check):

✓ 4A

TIME:

10:20

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☒ 20' from Top of EB
- ☒ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

DEPTH: 0-2"

☐ Duplicate

ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

✓ 4B

TIME:

10:30

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☒ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

DEPTH: 1"

☒ Duplicate

ID: CS-10-4B-DUP

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

✓ 3A

TIME:

10:35

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☒ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

DEPTH: 0-2"

☐ Duplicate

ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

✓ 3B

TIME:

10:45

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☒ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

DEPTH: 1"

☐ Duplicate

ID: _____

☐ MS/MSD

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID:

CS-10

SAMPLE ID: LOCATION (Check):

5A

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

TIME:

1050

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☒ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

NOTES:

SAMPLE ID: LOCATION (Check):

5B

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

TIME:

1100

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

NOTES:

SAMPLE ID: LOCATION (Check):

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

NOTES:

SAMPLE ID: LOCATION (Check):

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

NOTES:

ADDITIONAL OBSERVATIONS:

PROJECT:

DATE: 4/10/17

CROSS-SECTION ID: CS-10

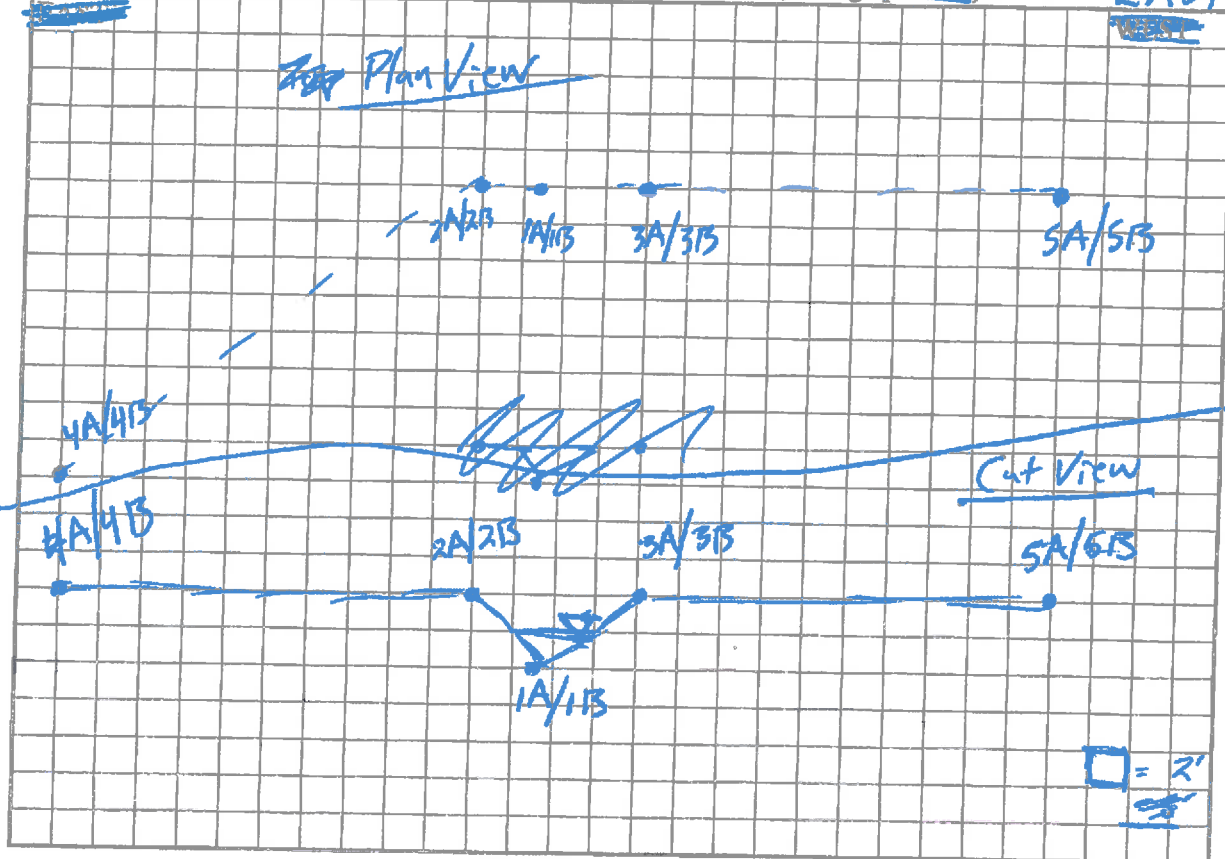
WEATHER: 60° OC Humid

WEST

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)

Downstream

EAST



FLOW:

TYPE:

- ☒ Pool
☐ Riffle
☐ Run

MOVEMENT (Circle):

- ☐ Moving
☒ Slow laminar/turbulent

SUBSTRATE: (Overall %)

40	Clay
40	Silt
10	Sand f/m/c
10	Gravel f/m/c
	Cobbles
	Boulders
	Bedrock

STREAM DEPTH:

1.5 ft MAX
1 ft AVG.

DENSITY OF VEGETATION:

- ☐ Very dense
☒ Dense
☐ Somewhat dense
☐ Sparse

STREAM WIDTH:

4 ft

BANK HEIGHTS:

1.5 ft EAST BANK
1.5 ft WEST BANK

MATURE VEGETATION (Large Trees):

- ☐ Many
☐ Some
☐ Few
☒ None

TREE DIAM. AT CHEST HEIGHT:

ft MAX
ft AVG. N/A

9.5

SEDIMENT SAMPLING FORM



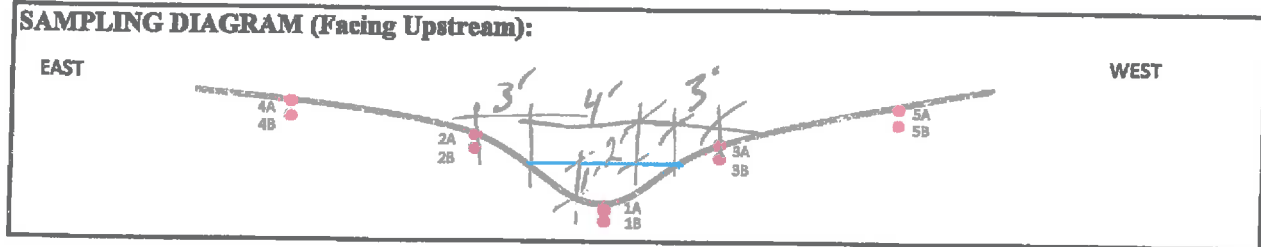
PROJECT: USDEC Dunkirk

DATE: 4/10/17

CROSS-SECTION ID: C5-11

WEATHER: 60°F

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

1325

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet

☒ Saturated

DEPTH:

1'

☐ Duplicate ID: _____

☒ MS/MSD

SAMPLE ID: LOCATION (Check):

1B

TIME:

1336

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet

☒ Saturated

DEPTH:

1-2'

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2A

TIME:

1330

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet

☐ Saturated

DEPTH:

0-2"

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2B

TIME:

1335

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet

☐ Saturated

DEPTH:

1"

☐ Duplicate ID: _____

☐ MS/MSD

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-11

SAMPLE ID: LOCATION (Check):

✓ 3A

TIME:

1350

NOTES:

☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate
 ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

✓ 3B

TIME:

1400

NOTES:

☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☒ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate
 ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

✓ 4A

TIME:

1345

NOTES:

☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate
 ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

✓ 4B

TIME:

1350

NOTES:

☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate
 ID: _____

☐ MS/MSD

DEPTH: 1'

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: C3-11

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____		DEPTH: <u>0-2"</u>	
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____		DEPTH: <u>1'</u>	
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____		DEPTH: _____	
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____		DEPTH: _____	
NOTES:				

ADDITIONAL OBSERVATIONS:

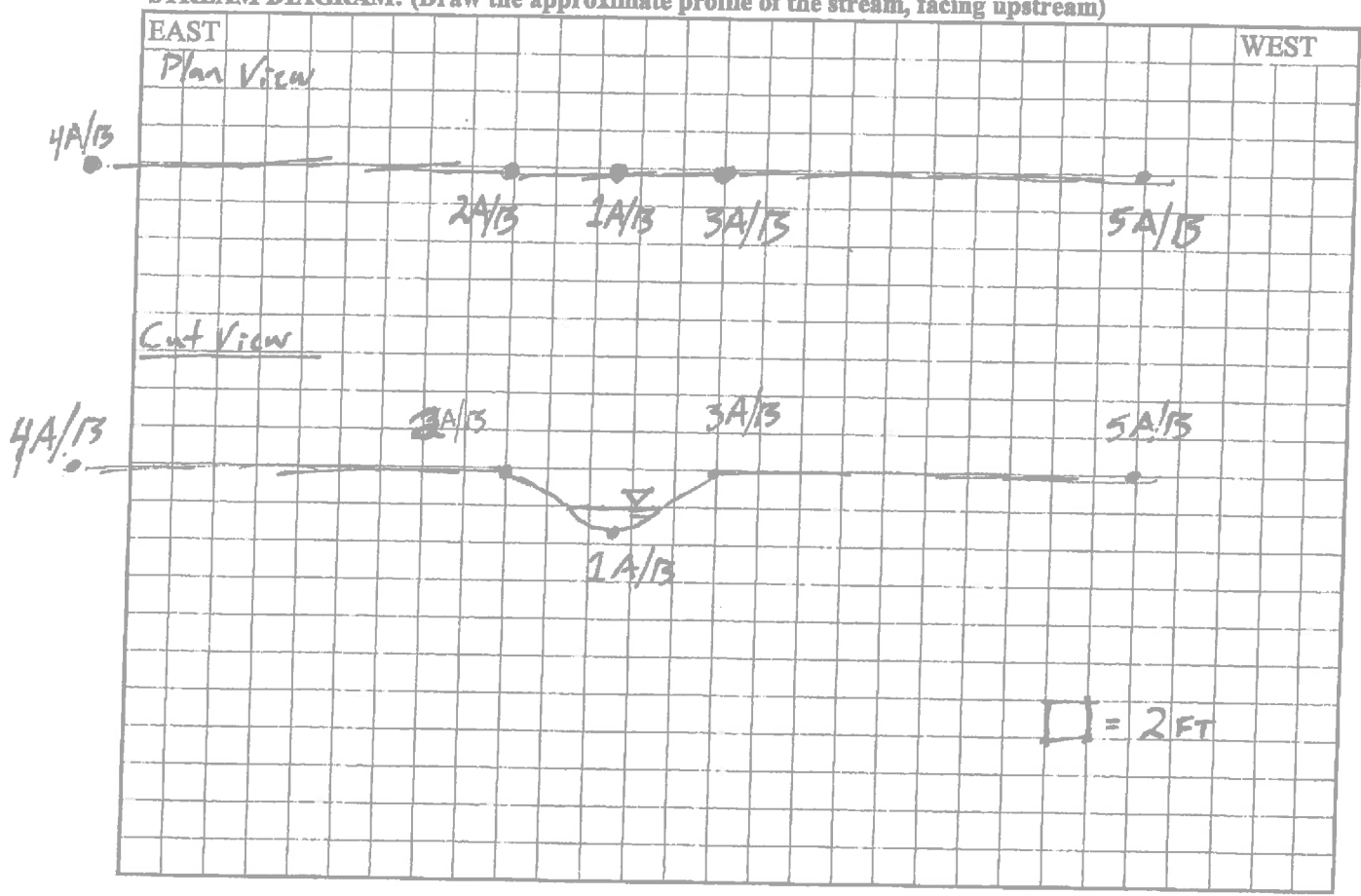
PROJECT: NYSDC Dunkirk

DATE: 4/10/17

CROSS-SECTION ID: CS-11

WEATHER: 60° OC Muggy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: ☐ Pool ☒ Riffle ☐ Run
MOVEMENT (Circle): ☐ Moving ☒ Slow laminar/turbulent

SUBSTRATE: (Overall %)
60 Clay
30 Silt
10 Sand f/m/c
Gravel f/m/c
Cobbles
Boulders
Bedrock

STREAM DEPTH:
1 ft MAX
0.75 ft AVG.

DENSITY OF VEGETATION:

☐ Very dense
☒ Dense
☐ Somewhat dense
☐ Sparse

STREAM WIDTH:
4 ft

BANK HEIGHTS:
2 ft EAST BANK
2 ft WEST BANK

MATURE VEGETATION (Large Trees):

☐ Many
☐ Some
☐ Few
☒ None

TREE DIAM. AT CHEST HEIGHT:
NA ft MAX
NA ft AVG.

SEDIMENT SAMPLING FORM



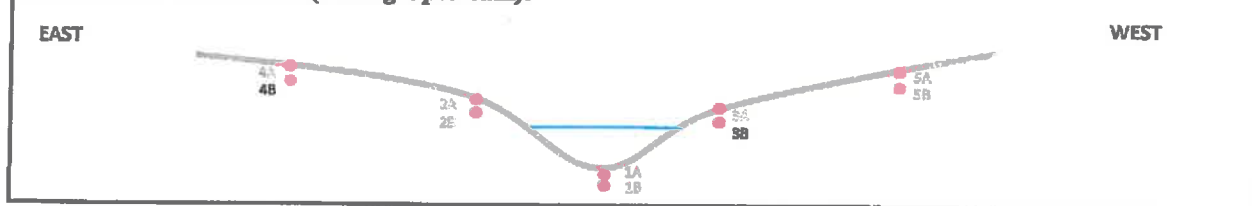
PROJECT: NYSDEC Dunkirk

DATE: 4-11-17

CROSS-SECTION ID: C5-12-12

WEATHER: 70° OC

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

0830

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: D. Brn.

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☒ Duplicate

ID: C5-12-1A

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

0835

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: D. Brn

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☒ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 2'

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

0830

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

0840

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-12

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>1. Brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
0945		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>1. Brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>1"</u>		
0950		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>4. Brn</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
0950		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☒ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>Tan/grey</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
0900		NOTES:		

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID:

CS-12

SAMPLE ID: LOCATION (Check):

SA

TIME:

0900

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: **Brown**

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate
 ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

SB

TIME:

0905

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: **Brown**

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate
 ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate
 ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate
 ID: _____

☐ MS/MSD

DEPTH: _____

ADDITIONAL OBSERVATIONS:

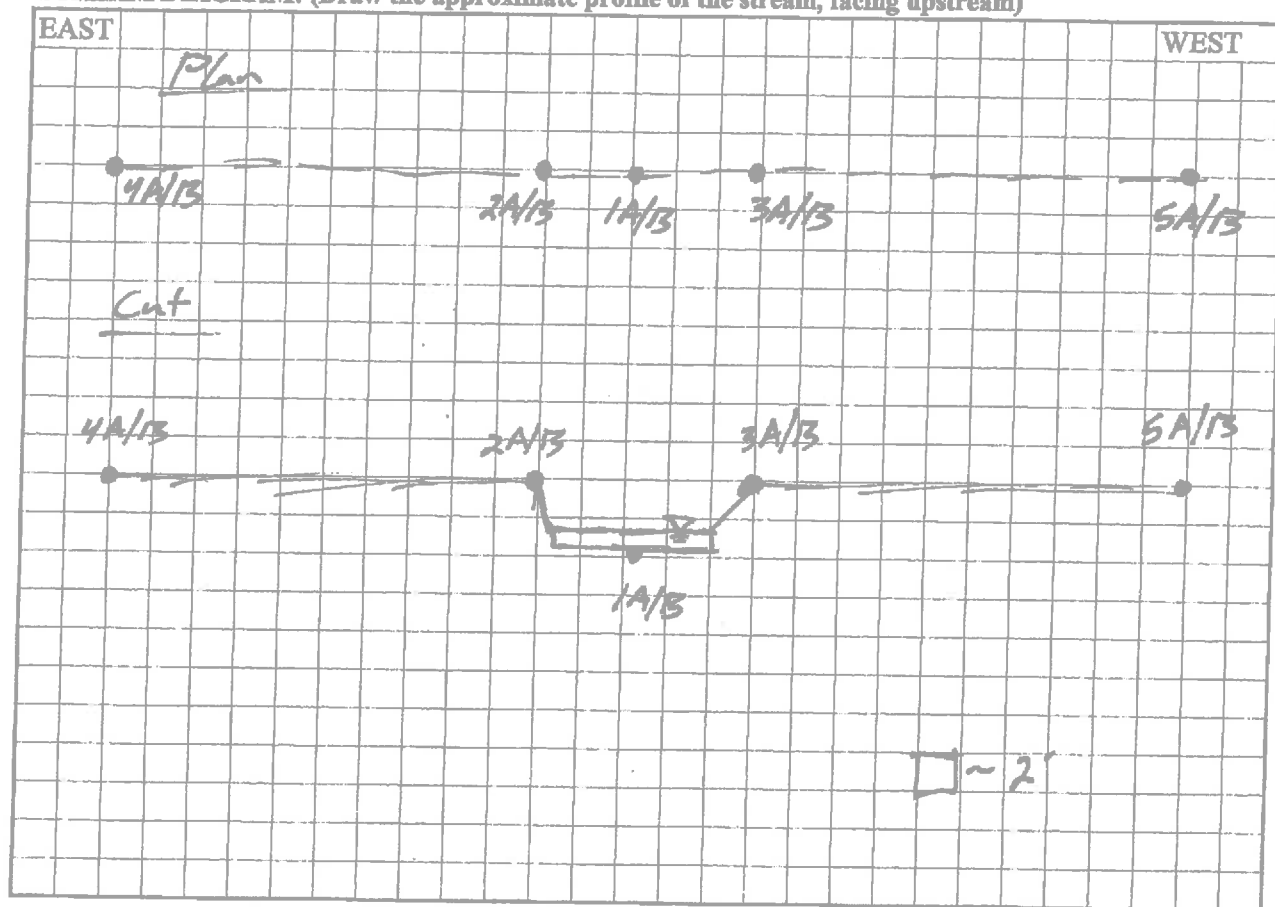
PROJECT: NYSDEC Dun Kirk

DATE: 4-11-17

CROSS-SECTION ID: CS-12

WEATHER: 70° OC

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: **MOVEMENT (Circle):**

- ☒ Pool ☐ Moving laminar/turbulent
☐ Riffle ☒ Slow
☐ Run

DENSITY OF VEGETATION:

- ☐ Very dense
☒ Dense
☐ Somewhat dense
☐ Sparse

BANK HEIGHTS:

3 ft EAST BANK
3 ft WEST BANK

SUBSTRATE: (Overall %)

- 70 Clay
30 Silt
Sand f/m/c
Gravel 10%
Cobbles
Boulders
Bedrock

STREAM DEPTH:

0.5 ft MAX
0.5 ft AVG.

STREAM WIDTH:

8 ft

MATURE VEGETATION (Large Trees):

- ☐ Many
☒ Some
☒ Few
☐ None

TREE DIAM. AT CHEST HEIGHT:

NA ft MAX
NA ft AVG.

SEDIMENT SAMPLING FORM



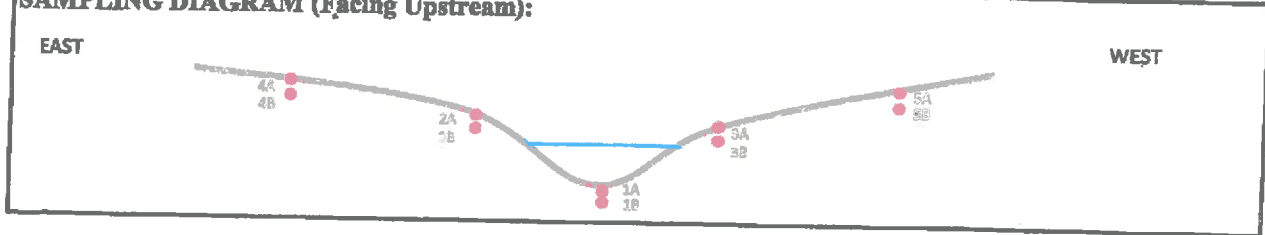
PROJECT: NYSDEC Dunkirk

DATE: 4/11/19

CROSS-SECTION ID: CS-13

WEATHER: 50°F, Rain

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

1:00

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

1B

TIME:

1:20

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate

ID: _____

☒ MS/MSD

DEPTH: 2'

SAMPLE ID: LOCATION (Check):

2A

TIME:

1:10

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

2B

TIME:

1:20

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-13

SAMPLE ID: LOCATION (Check):

3A

TIME:

1120

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

3B

TIME:

1130

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

4A

TIME:

1125

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

4B

TIME:

1130

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS13

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2'</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>1'</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
NOTES:				

ADDITIONAL OBSERVATIONS:

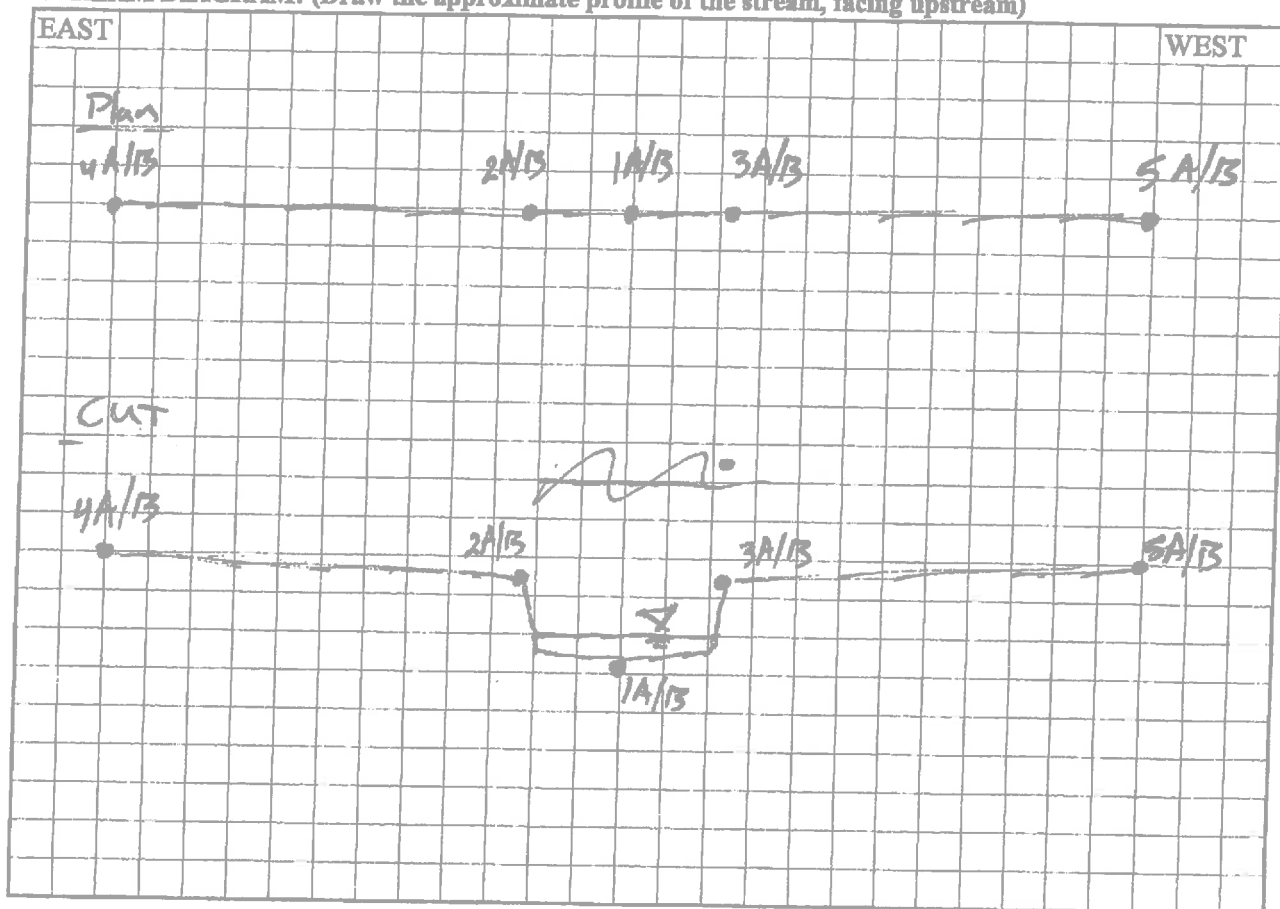
PROJECT: CB NYSDEC DUNKIRK

DATE: 4/11/17

CROSS-SECTION ID: C3-13

WEATHER: 60° Rain

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

☐ Pool ☐ Moving laminar/turbulent
☒ Riffle ☒ Slow
☐ Run

SUBSTRATE: (Overall %)

70	Clay
30	Silt
	Sand f/m/c
	Gravel f/m/c
	Cobbles
	Boulders
	Bedrock

STREAM DEPTH:

1	ft MAX
0.5	ft AVG.

DENSITY OF VEGETATION:

☒ Very dense
☐ Dense
☐ Somewhat dense
☐ Sparse

STREAM WIDTH:

8	ft
---	----

BANK HEIGHTS:

3	ft EAST BANK
3	ft WEST BANK

MATURE VEGETATION (Large Trees):

☐ Many
☐ Some
☐ Few
☒ None

TREE DIAM. AT CHEST HEIGHT:

	ft MAX
	ft AVG.

SEDIMENT SAMPLING FORM



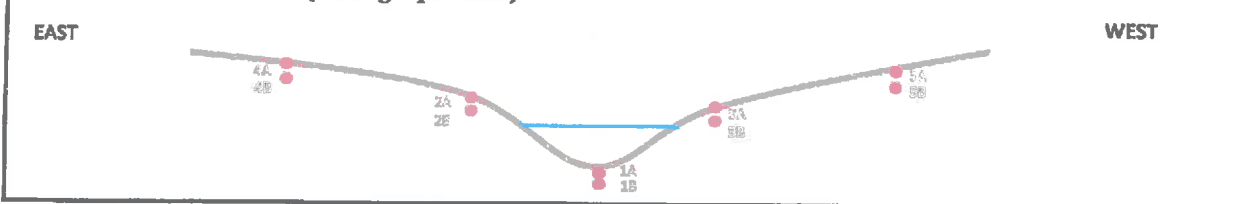
PROJECT: NYSDEC Dunkirk

DATE: 4/11/17

CROSS-SECTION ID: CS-14

WEATHER: 60° OC

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

1355

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☒ Sand f/m/c
☐ Silt
☐ Clay

COLOR: Black

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

DEPTH: 1'

☐ Duplicate
ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

1B

TIME:

1400

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☒ Sand f/m/c
☐ Silt
☐ Clay

COLOR: Black

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

DEPTH: 2'

☐ Duplicate
ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2A

TIME:

1410

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: Dr. Brn

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

DEPTH: 0-2"

☐ Duplicate
ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2B

TIME:

1420

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: lt. Brn

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

DEPTH: 1'

☒ Duplicate
ID: _____

☐ MS/MSD

SEDIMENT SAMPLING FORM



CROSS SECTION ID:

CS-14

SAMPLE ID: LOCATION (Check):

3A

TIME:

1430

NOTES:

☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

3B

TIME:

1440

NOTES:

☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1"

SAMPLE ID: LOCATION (Check):

4A

TIME:

1450

NOTES:

☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay

COLOR: Brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

4B

TIME:

1500

NOTES:

☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay

COLOR: Lt. Brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1"

ADDITIONAL OBSERVATIONS:

4A/B 5'aked ~ 4' Further from
 sample location. (Middle of trail)
 sampled

Bank
 2A/B
 4A/B
 Marker
 Trail

SEDIMENT SAMPLING FORM



CROSS SECTION ID:

CS-14

SAMPLE ID: LOCATION (Check):

5A

TIME:

1510

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

5B

TIME:

1520

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

ADDITIONAL OBSERVATIONS:

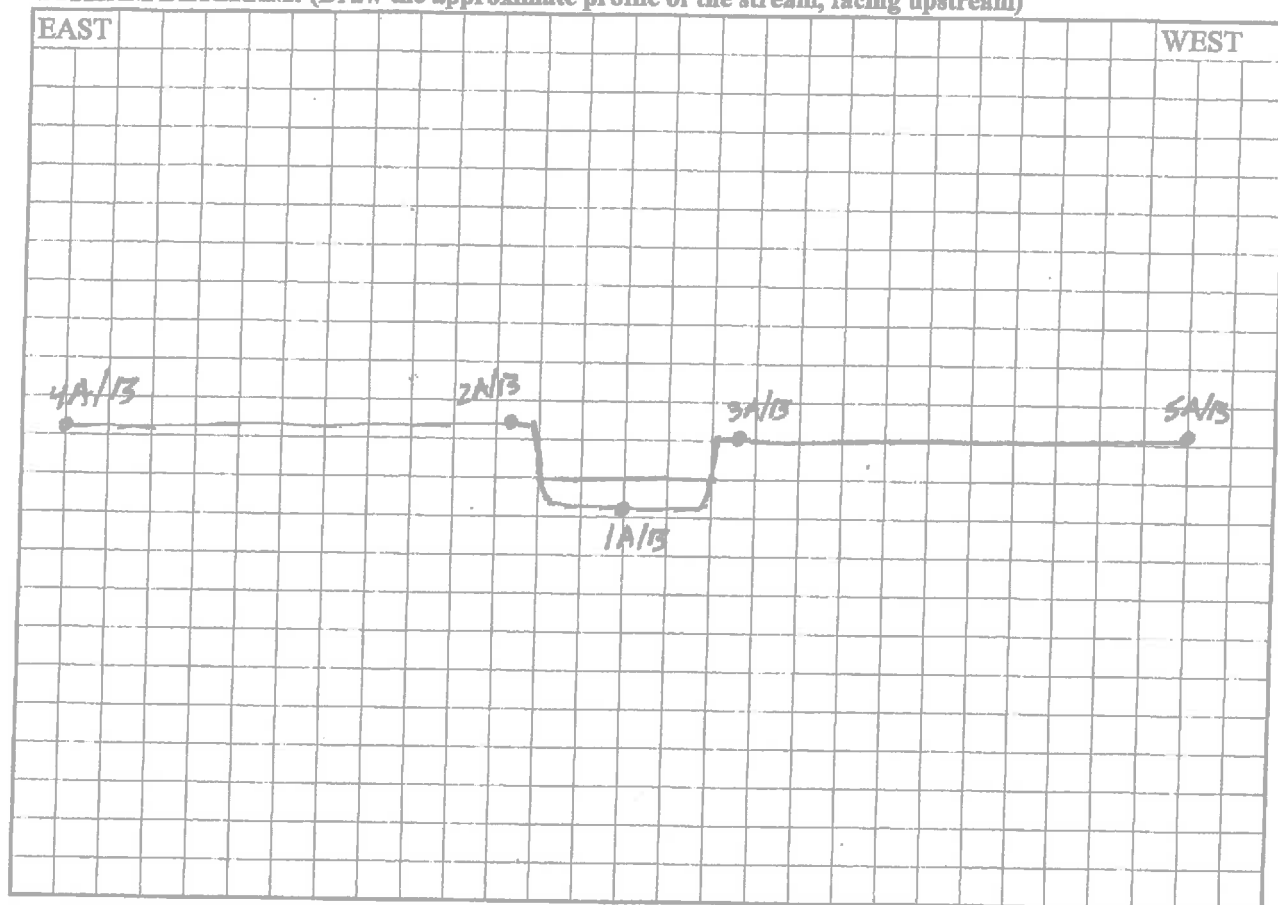
PROJECT: NYSDEC ES&H Dunkirk

DATE: 4/11/17

CROSS-SECTION ID: CS-14

WEATHER: 55° Rain

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE:

- ☐ Pool
☒ Riffle
☐ Run

MOVEMENT (Circle):

- ☐ Moving laminar/turbulent
☒ Slow

SUBSTRATE: (Overall %)

- | | |
|-------|--------------|
| 70 | Clay |
| 30/20 | Silt |
| | Sand f/m/c |
| 10 | Gravel f/m/c |
| | Cobbles |
| | Boulders |
| | Bedrock |

STREAM DEPTH:

- | | |
|-----|---------|
| 1.5 | ft MAX |
| 1 | ft AVG. |

DENSITY OF VEGETATION:

- ☒ Very dense
☐ Dense
☐ Somewhat dense
☐ Sparse

STREAM WIDTH:

- | | |
|---|----|
| 8 | ft |
|---|----|

BANK HEIGHTS:

- | | |
|-----|--------------|
| 2.5 | ft EAST BANK |
| 2 | ft WEST BANK |

MATURE VEGETATION (Large Trees):

- ☐ Many
☐ Some
☐ Few
☒ None

TREE DIAM. AT CHEST HEIGHT:

- | | |
|--|---------|
| | ft MAX |
| | ft AVG. |

SEDIMENT SAMPLING FORM



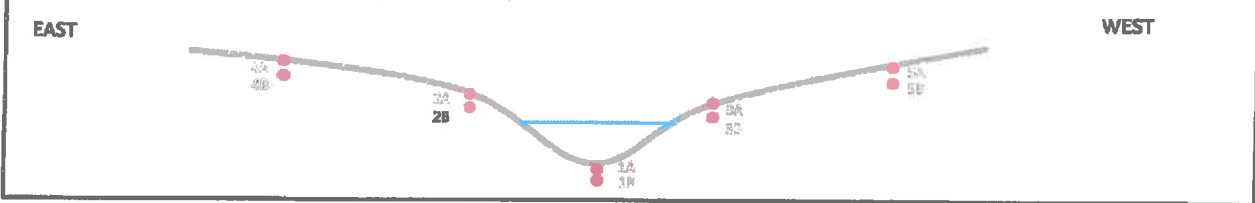
PROJECT: NYS DEC Dunkirk

DATE: 4/12/15

CROSS-SECTION ID: CS-15

WEATHER: 40°F, cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

SAMPLE ID: 1A

TIME: 0830

NOTES:

☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

SAMPLE ID: 1B

TIME: 0835

NOTES:

☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

DEPTH: 2'

SAMPLE ID: LOCATION (Check):

SAMPLE ID: 2A

TIME: 0835

NOTES:

☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

SAMPLE ID: 2B

TIME: 0840

NOTES:

☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

DEPTH: 1'

SEDIMENT SAMPLING FORM



CROSS SECTION ID:

C3 -15

SAMPLE ID: LOCATION (Check):

31A

TIME:

0845

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

3B

TIME:

0850

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

4A

TIME:

0850

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

4B

TIME:

0855

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: C5 -15

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):
5A	☐ River	☐ Gravel f/m/c	☐ Dry
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist
	☐ Top of West Bank	☒ Silt	☐ Moist
	☐ 20' from Top of EB	☐ Clay	☐ Wet
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated
TIME:	☐ Other: _____	DEPTH: <u>0-2'</u>	☐ Duplicate ID: _____ ☐ MS/MSD
0900			NOTES:

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):
5B	☐ River	☐ Gravel f/m/c	☐ Dry
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist
	☐ Top of West Bank	☒ Silt	☐ Moist
	☐ 20' from Top of EB	☐ Clay	☐ Wet
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated
TIME:	☐ Other: _____	DEPTH: <u>1'</u>	☐ Duplicate ID: _____ ☐ MS/MSD
0910			NOTES:

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):
	☐ River	☐ Gravel f/m/c	☐ Dry
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist
	☐ Top of West Bank	☐ Silt	☐ Moist
	☐ 20' from Top of EB	☐ Clay	☐ Wet
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated
TIME:	☐ Other: _____	DEPTH: _____	☐ Duplicate ID: _____ ☐ MS/MSD
			NOTES:

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):
	☐ River	☐ Gravel f/m/c	☐ Dry
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist
	☐ Top of West Bank	☐ Silt	☐ Moist
	☐ 20' from Top of EB	☐ Clay	☐ Wet
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated
TIME:	☐ Other: _____	DEPTH: _____	☐ Duplicate ID: _____ ☐ MS/MSD
			NOTES:

ADDITIONAL OBSERVATIONS:

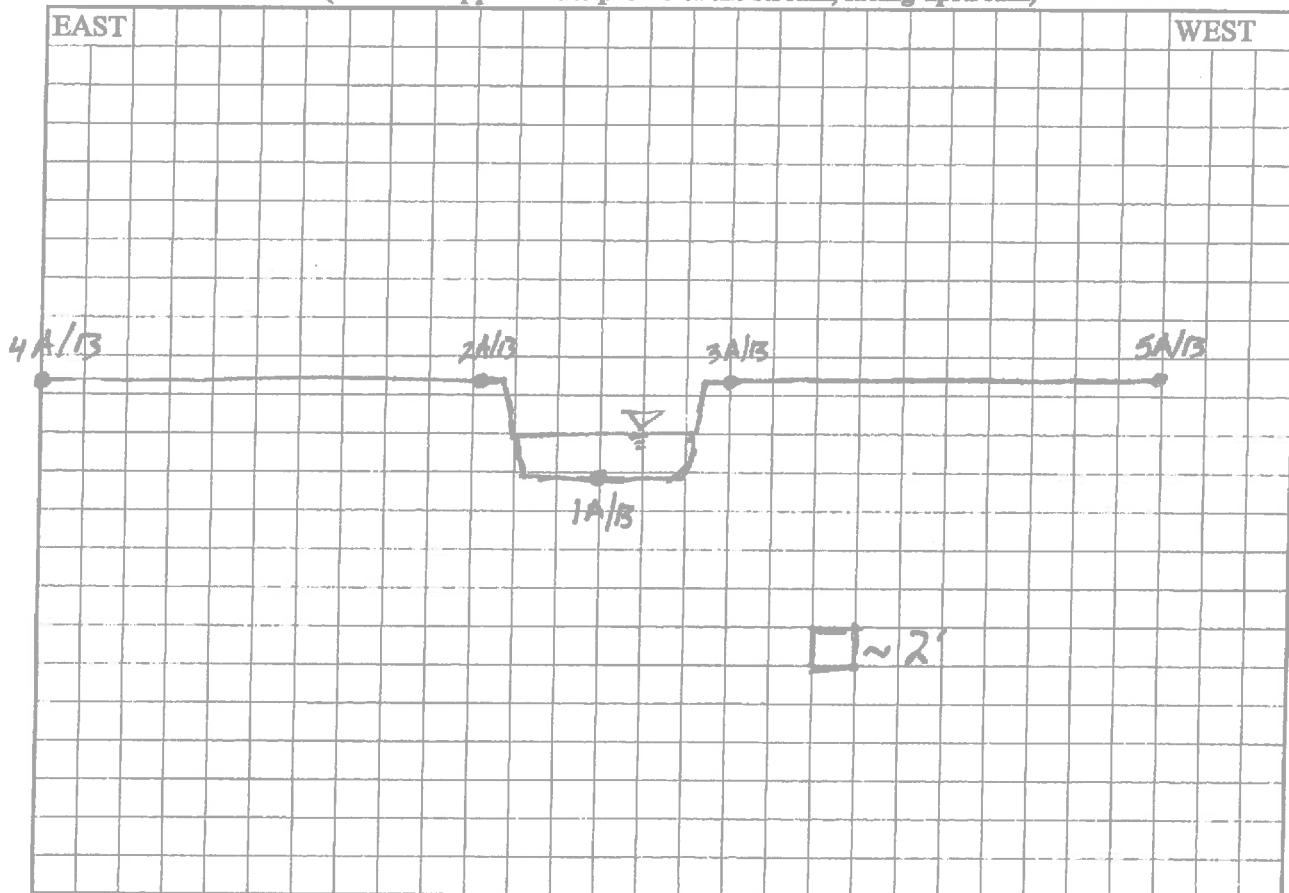
PROJECT: NYSDEC Dunkirk

DATE: 4/12/17

CROSS-SECTION ID: C5-15

WEATHER: 45° OC

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- ☒ Pool ☐ Moving laminar/turbulent
☐ Riffle ☒ Slow
☐ Run

DENSITY OF VEGETATION:

- ☒ Very dense Grass
☐ Dense
☐ Somewhat dense
☐ Sparse

BANK HEIGHTS:

3 ft EAST BANK
3 ft WEST BANK

SUBSTRATE: (Overall %)

<u>70</u>	Clay
<u>20</u>	Silt
	Sand f/m/c
<u>10</u>	Gravel f/m/c
	Cobbles
	Boulders
	Bedrock

STREAM DEPTH:

2 ft MAX
1.5 ft AVG.

STREAM WIDTH:

8 ft

MATURE VEGETATION (Large Trees):

- ☐ Many
☐ Some
☐ Few
☒ None

TREE DIAM. AT CHEST HEIGHT:

 ft MAX
 ft AVG.

SEDIMENT SAMPLING FORM



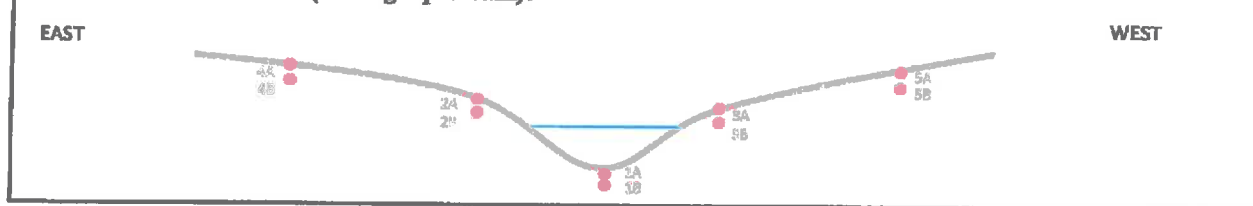
PROJECT: NYSDEC Dunkirk

DATE: 4/12/17

CROSS-SECTION ID: CS-16

WEATHER: 45°F, cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

1030

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

DEPTH: 1'

☒ Duplicate
ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

1B

TIME:

1040

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

DEPTH: 2'

☐ Duplicate
ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

7A

TIME:

1050

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

DEPTH: 0-2"

☐ Duplicate
ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2B

TIME:

1100

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

DEPTH: 1'

☐ Duplicate
ID: _____

☐ MS/MSD

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-1816

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
1110	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>1'</u>		
1120	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
1130	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>1'</u>		
1140	NOTES:			

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID:

CS - 1816

SAMPLE ID: LOCATION (Check):

5A

TIME:

1150

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

5B

TIME:

1200

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: description

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

ADDITIONAL OBSERVATIONS:

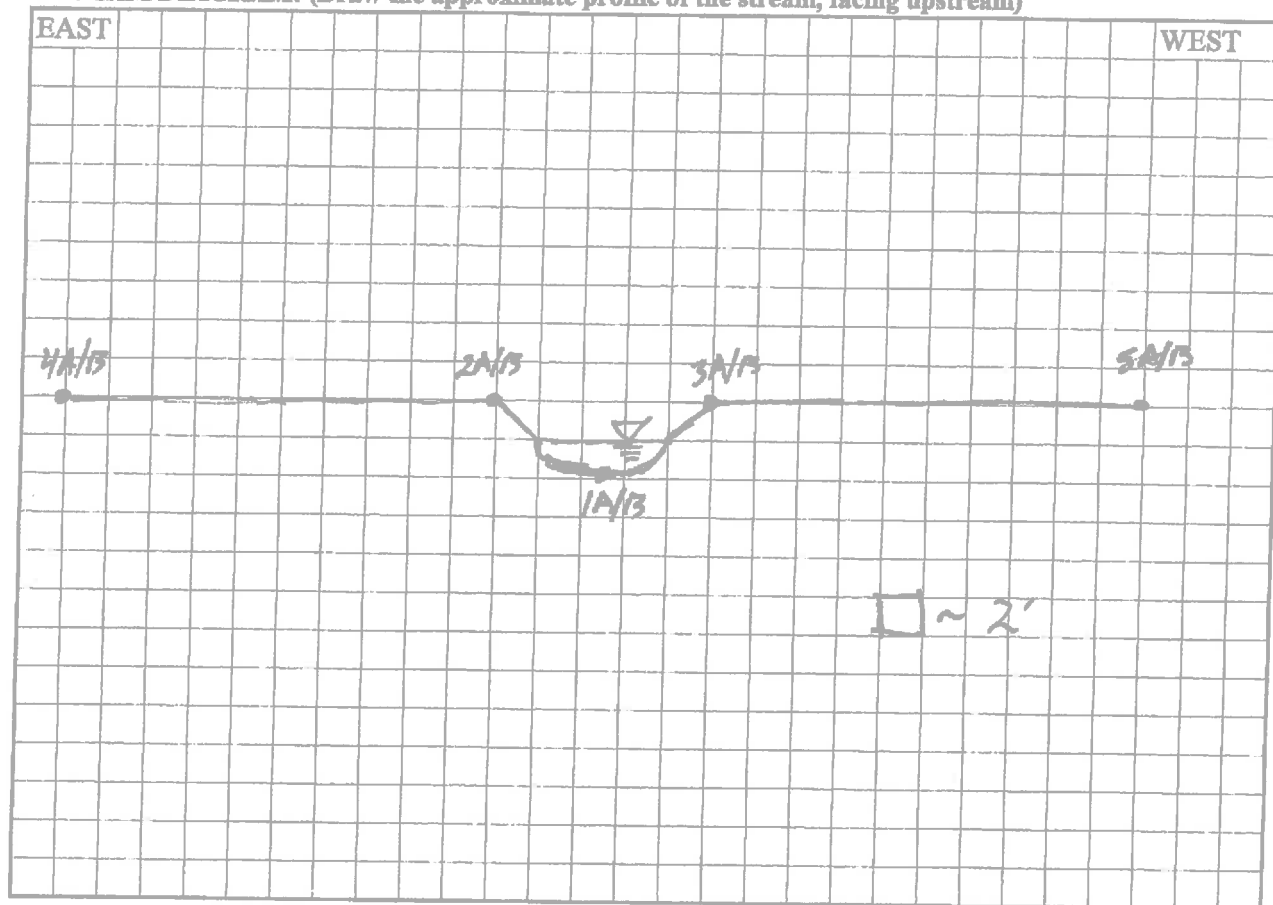
PROJECT: NYSDEC Dunkirk

DATE: 4/12/17

CROSS-SECTION ID: CS-16

WEATHER: 50° OC

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: **MOVEMENT (Circle):**

- ☒ Pool ☐ Moving laminar/turbulent
☐ Riffle ☒ Slow
☐ Run

DENSITY OF VEGETATION:

- ☒ Very dense Grasses
☐ Dense
☐ Somewhat dense
☐ Sparse

BANK HEIGHTS:

2 ft EAST BANK
2 ft WEST BANK

SUBSTRATE: (Overall %)

30 Clay
60 Silt
Sand f/m/c
10 Gravel f/m/c
Cobbles
Boulders
Bedrock

STREAM DEPTH:

1.5 ft MAX
1 ft AVG.

STREAM WIDTH:

6 ft

MATURE VEGETATION (Large Trees):

- ☐ Many
☐ Some
☐ Few
☒ None

TREE DIAM. AT CHEST HEIGHT:

 ft MAX
 ft AVG.

SEDIMENT SAMPLING FORM



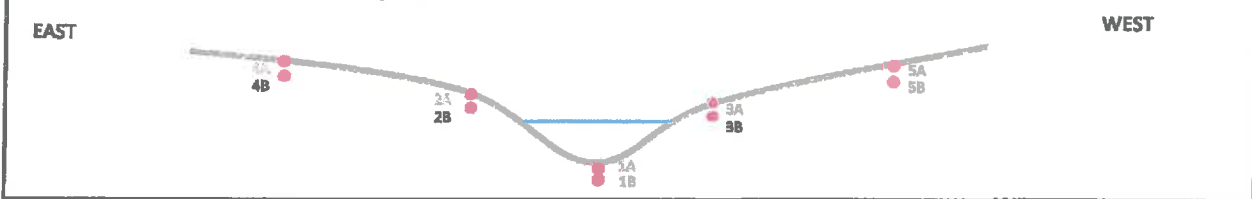
PROJECT: NYSDEC Dunkirk

DATE: 4/12/17

CROSS-SECTION ID: C5-17

WEATHER: 45°F, cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

1315

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☒ Gravel f/f/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

1B

TIME:

1720

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☒ Gravel f/f/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

☐ Duplicate
ID: _____

☒ MS/MSD

DEPTH: 2'

SAMPLE ID: LOCATION (Check):

2A

TIME:

1335

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

2B

TIME:

1345

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate
ID: _____

☐ MS/MSD

DEPTH: 1'

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-17

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>1'</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2"</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>1'</u>		
NOTES:				

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID:

CS-17

SAMPLE ID: LOCATION (Check):

5A

TIME:

1345

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0.2"

SAMPLE ID: LOCATION (Check):

5D

TIME:

1350

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR:

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH:

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR:

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH:

ADDITIONAL OBSERVATIONS:

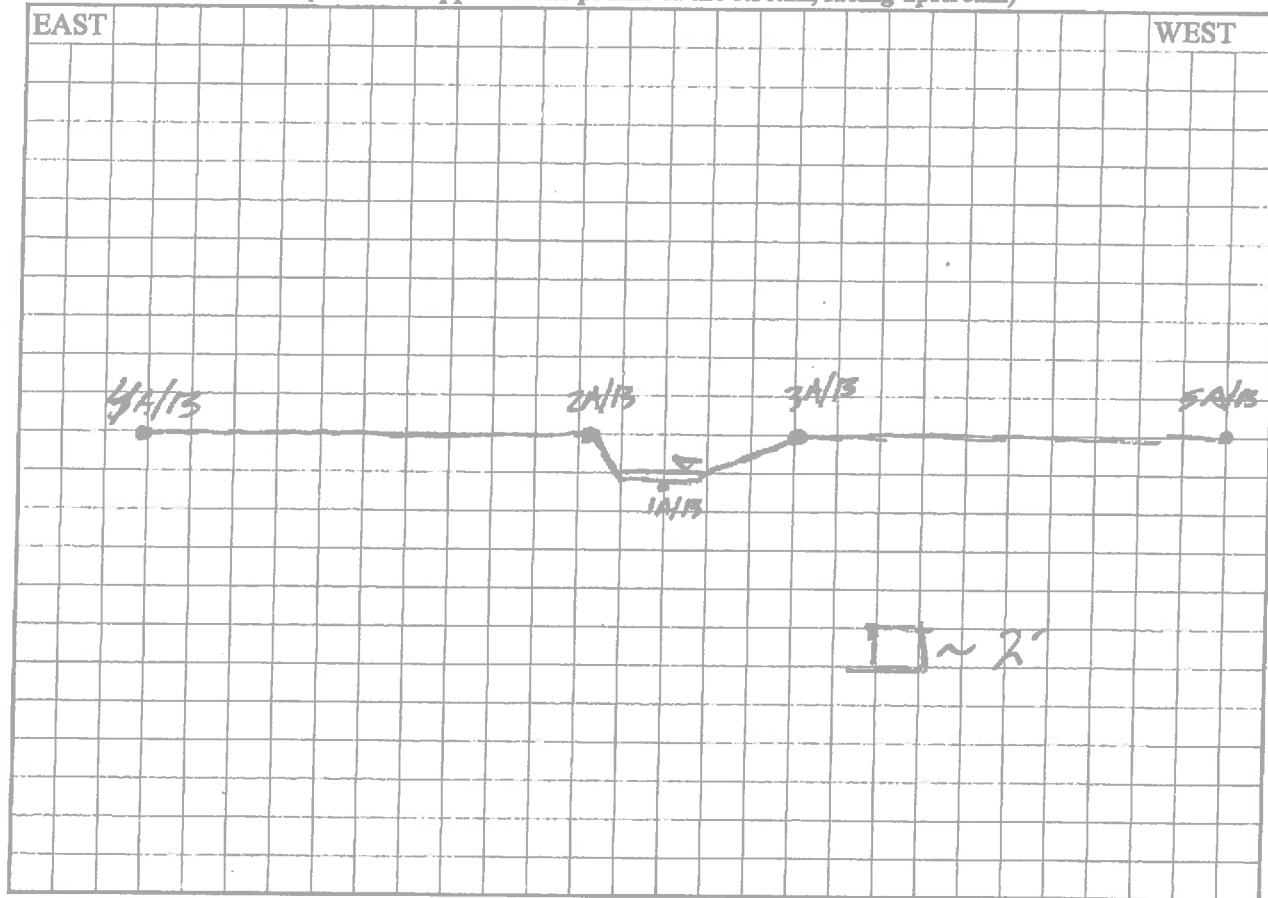
PROJECT: NYSDEC Dunkirk

DATE: 4/12/17

CROSS-SECTION ID: CS-17

WEATHER: 50° OC

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

☐ Pool ☒ Moving laminar/turbulent
☒ Riffle ☐ Slow
☐ Run

DENSITY OF VEGETATION:

☒ Very dense grasses / Bushes
☐ Dense
☐ Somewhat dense
☐ Sparse

BANK HEIGHTS:

1.5 ft EAST BANK
1.5 ft WEST BANK

SUBSTRATE: (Overall %)

20	Clay
60	Silt
10	Sand <u>f/m/c</u>
10	Gravel <u>f/m/c</u>
	Cobbles
	Boulders
	Bedrock

STREAM DEPTH:

0.5 ft MAX
0.25 ft AVG.

STREAM WIDTH:

4' ft

MATURE VEGETATION (Large Trees):

☐ Many
☐ Some
☐ Few
☒ None

TREE DIAM. AT CHEST HEIGHT:

ft MAX
 ft AVG.

SEDIMENT SAMPLING FORM



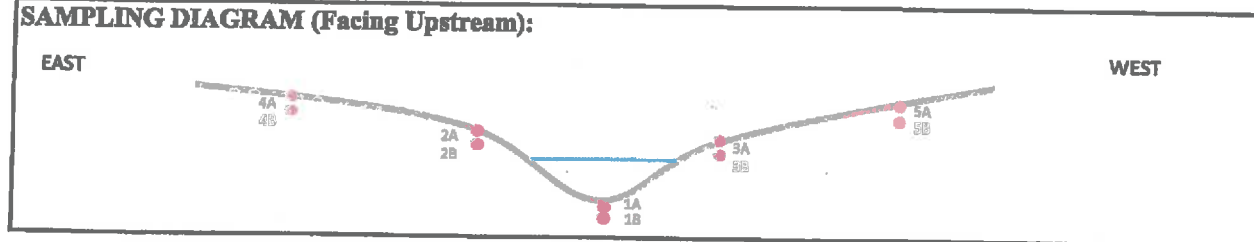
PROJECT: NYSDEC Dunkirk

DATE: 4/13/17

CROSS-SECTION ID: CS-18

WEATHER: 50°F Sunny

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

0815

NOTES:

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

0820

NOTES:

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 2'

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

0820

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

TIME:

0830

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS - 18

SAMPLE ID: LOCATION (Check):

3A

TIME:

0835

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2'

SAMPLE ID: LOCATION (Check):

3B

TIME:

0845

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

4A

TIME:

0840

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2'

SAMPLE ID: LOCATION (Check):

4B

TIME:

0850

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☒ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-18

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☒ Saturated	
TIME:	Other: _____		DEPTH: <u>0-2"</u>	
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☒ Saturated	
TIME:	Other: _____		DEPTH: <u>1'</u>	
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____		DEPTH: _____	
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____		DEPTH: _____	
NOTES:				

ADDITIONAL OBSERVATIONS:

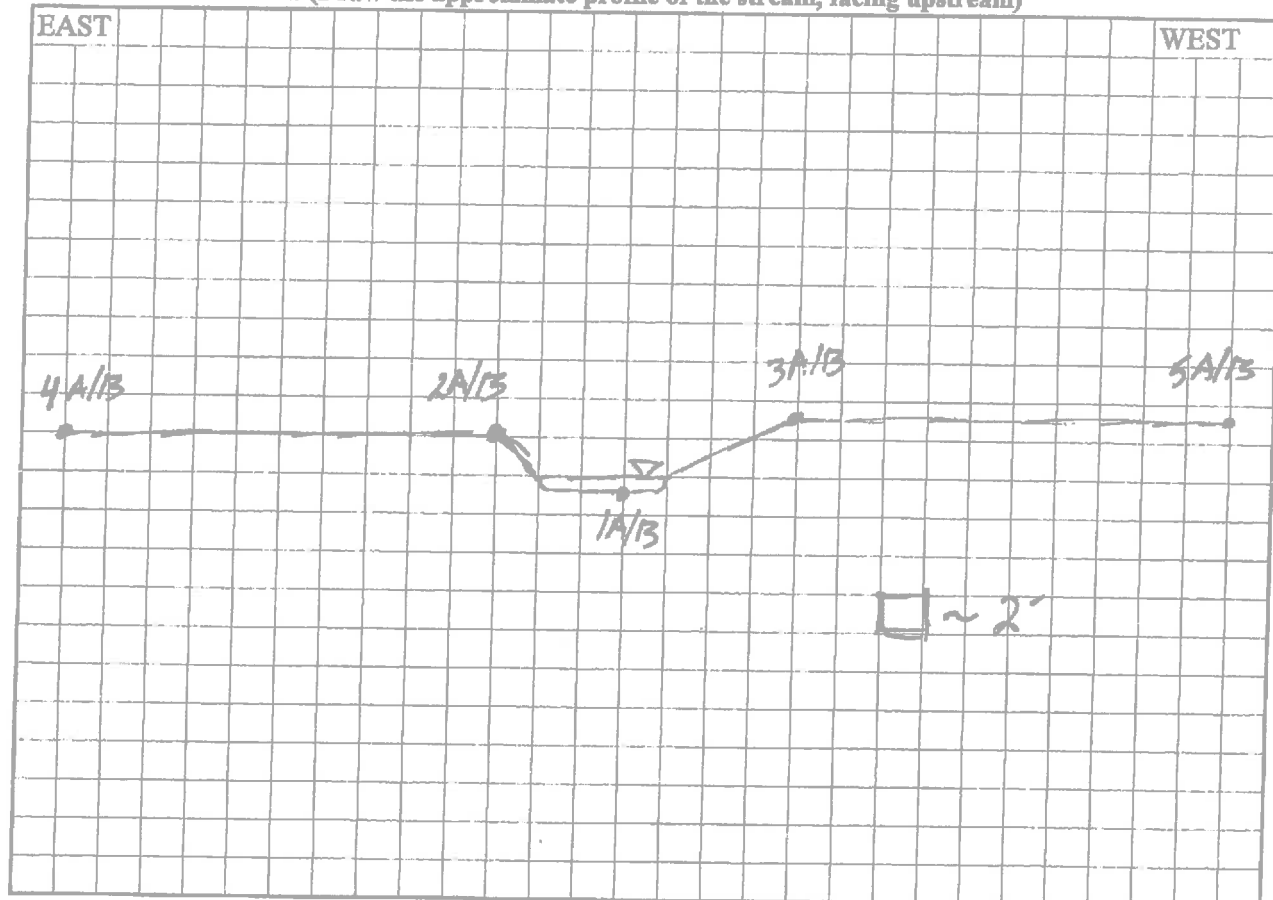
PROJECT: NYS DEC Dunkirk

DATE: 4/13/17

CROSS-SECTION ID: CS-18

WEATHER: 70° OC

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- ☐ Pool ☒ Moving laminar/turbulent
☒ Riffle ☐ Slow
☐ Run

DENSITY OF VEGETATION:

- ☒ Very dense grasses/Bushes
☐ Dense
☐ Somewhat dense
☐ Sparse

BANK HEIGHTS:

2 ft EAST BANK
3 ft WEST BANK

MATURE VEGETATION (Large Trees):

- ☐ Many
☐ Some
☐ Few
☒ None

SUBSTRATE: (Overall %)

- 30 Clay
30 Silt
20 Sand f/m/c
20 Gravel f/m/c
☐ Cobbles
☐ Boulders
☐ Bedrock

STREAM DEPTH:

0.5 ft MAX
0.5 ft AVG.

STREAM WIDTH:

6 ft

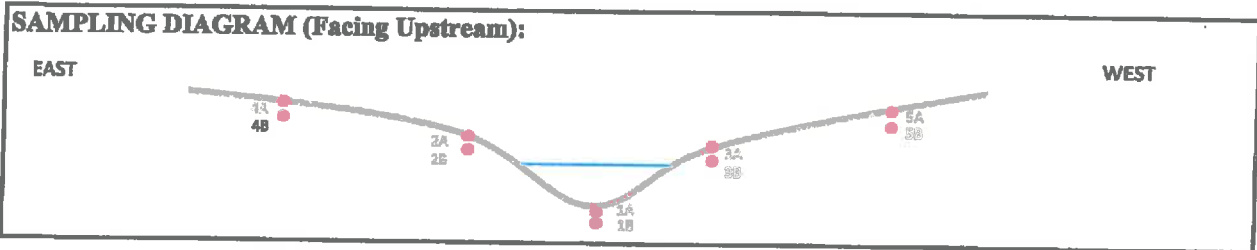
TREE DIAM. AT CHEST HEIGHT:

☐ ft MAX
☐ ft AVG.

SEDIMENT SAMPLING FORM



PROJECT: NYSDEC Dunkirk
DATE: 4/13/17
CROSS-SECTION ID: C3-19
WEATHER: 70° OC



SAMPLE ID: 1A **LOCATION (Check):**
☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):
☒ Gravel f/m/c
☒ Sand f/m/c
☐ Silt
☐ Clay
COLOR: Brown

MOISTURE (Check):
☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated
☐ Duplicate
☐ MS/MSD
DEPTH: 1'

TIME: 1120
NOTES:

SAMPLE ID: 1B **LOCATION (Check):**
☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):
☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay
COLOR: Grey

MOISTURE (Check):
☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated
☐ Duplicate
☐ MS/MSD
DEPTH: 2'

TIME: 1130
NOTES:

SAMPLE ID: 2A **LOCATION (Check):**
☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):
☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay
COLOR: Brown

MOISTURE (Check):
☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated
☒ Duplicate
☒ MS/MSD
DEPTH: 0-2"

TIME: 1100
NOTES:

SAMPLE ID: 2B **LOCATION (Check):**
☒ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):
☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay
COLOR: Brown

MOISTURE (Check):
☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated
☐ Duplicate
☐ MS/MSD
DEPTH: _____

TIME: 1110
NOTES:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: C519

SAMPLE ID: LOCATION (Check):

3A

TIME:

1130

NOTES:

☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR:

Brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

3B

TIME:

1140

NOTES:

☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR:

Brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

SAMPLE ID: LOCATION (Check):

4A

TIME:

1115

NOTES:

☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR:

Brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

SAMPLE ID: LOCATION (Check):

4B

TIME:

1125

NOTES:

☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR:

Brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-19

SAMPLE ID: LOCATION (Check):

5A

TIME:

1150

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☒ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

5B

TIME:

1200

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☒ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: Brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

ADDITIONAL OBSERVATIONS:

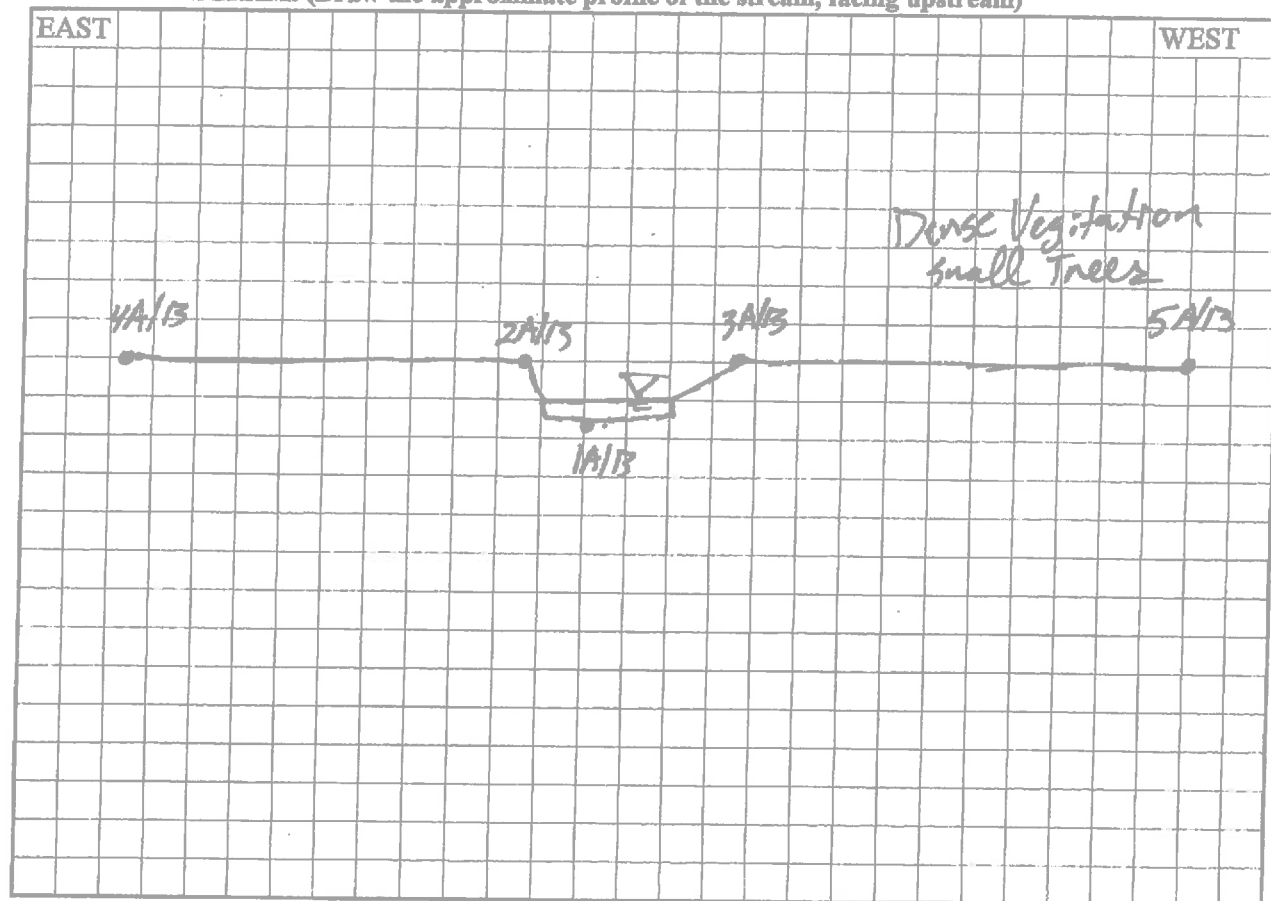
PROJECT: NYSDEC Dunkirk

DATE: 4/13/17

CROSS-SECTION ID: CS-19

WEATHER: 70° OC

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: **MOVEMENT (Circle):**

- ☒ Pool ☐ Moving laminar/turbulent
☐ Riffle ☒ Slow
☐ Run

DENSITY OF VEGETATION:

- ☒ Very dense
☐ Dense
☐ Somewhat dense
☐ Sparse

BANK HEIGHTS:

2' ft EAST BANK
2' ft WEST BANK

SUBSTRATE: (Overall %)

<u>40</u>	Clay
<u>40</u>	Silt
<u>10</u>	Sand <u>f/m/c</u>
<u>10</u>	Gravel <u>f/m/c</u>
	Cobbles
	Boulders
	Bedrock

STREAM DEPTH:

1' ft MAX
1' ft AVG.

STREAM WIDTH:

6 ft

MATURE VEGETATION (Large Trees):

- ☐ Many
☒ Some
☐ Few
☐ None

TREE DIAM. AT CHEST HEIGHT:

18" MAX
ft AVG.

SEDIMENT SAMPLING FORM



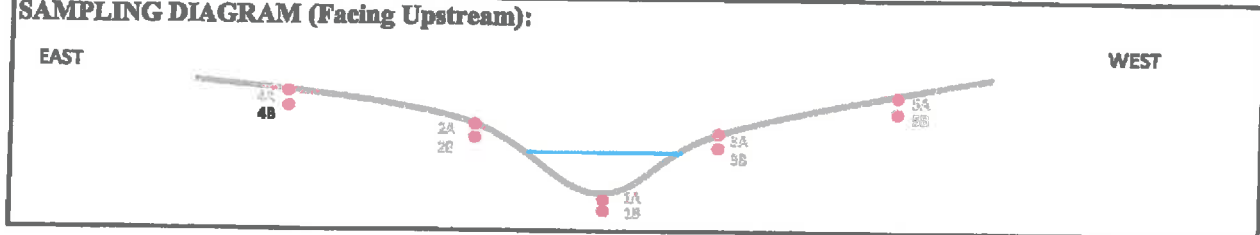
PROJECT: NYSDEC Dunkirk

DATE: 4/13/17

CROSS-SECTION ID: CS-20

WEATHER: cloudy 50°F

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

SAMPLE ID: 1A

TIME: 1350

NOTES:

☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

DEPTH: 4'

☐ Duplicate

ID:

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

SAMPLE ID: 1B

TIME: 1400

NOTES:

☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: BLACK

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

DEPTH: 2'

☒ Duplicate

ID:

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

SAMPLE ID: 2A

TIME: 1400

NOTES:

☐ River
☒ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

DEPTH: 0-2"

☐ Duplicate

ID:

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

SAMPLE ID: 2B

TIME: 1410

NOTES:

☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

DEPTH: 1'

☐ Duplicate

ID:

☐ MS/MSD

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS - 1820

SAMPLE ID: LOCATION (Check):

3A

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1410

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: green

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2"

NOTES:

SAMPLE ID: LOCATION (Check):

3B

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1420

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR:

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1'

NOTES:

SAMPLE ID: LOCATION (Check):

4A

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1420

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2"

NOTES:

SAMPLE ID: LOCATION (Check):

4B

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1430

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1'

NOTES:

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS - 1870

SAMPLE ID: LOCATION (Check):

SA

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☒ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2"

NOTES:

SAMPLE ID: LOCATION (Check):

SB

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☒ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 1'

NOTES:

SAMPLE ID: LOCATION (Check):

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

NOTES:

SAMPLE ID: LOCATION (Check):

- ☐ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

NOTES:

ADDITIONAL OBSERVATIONS:

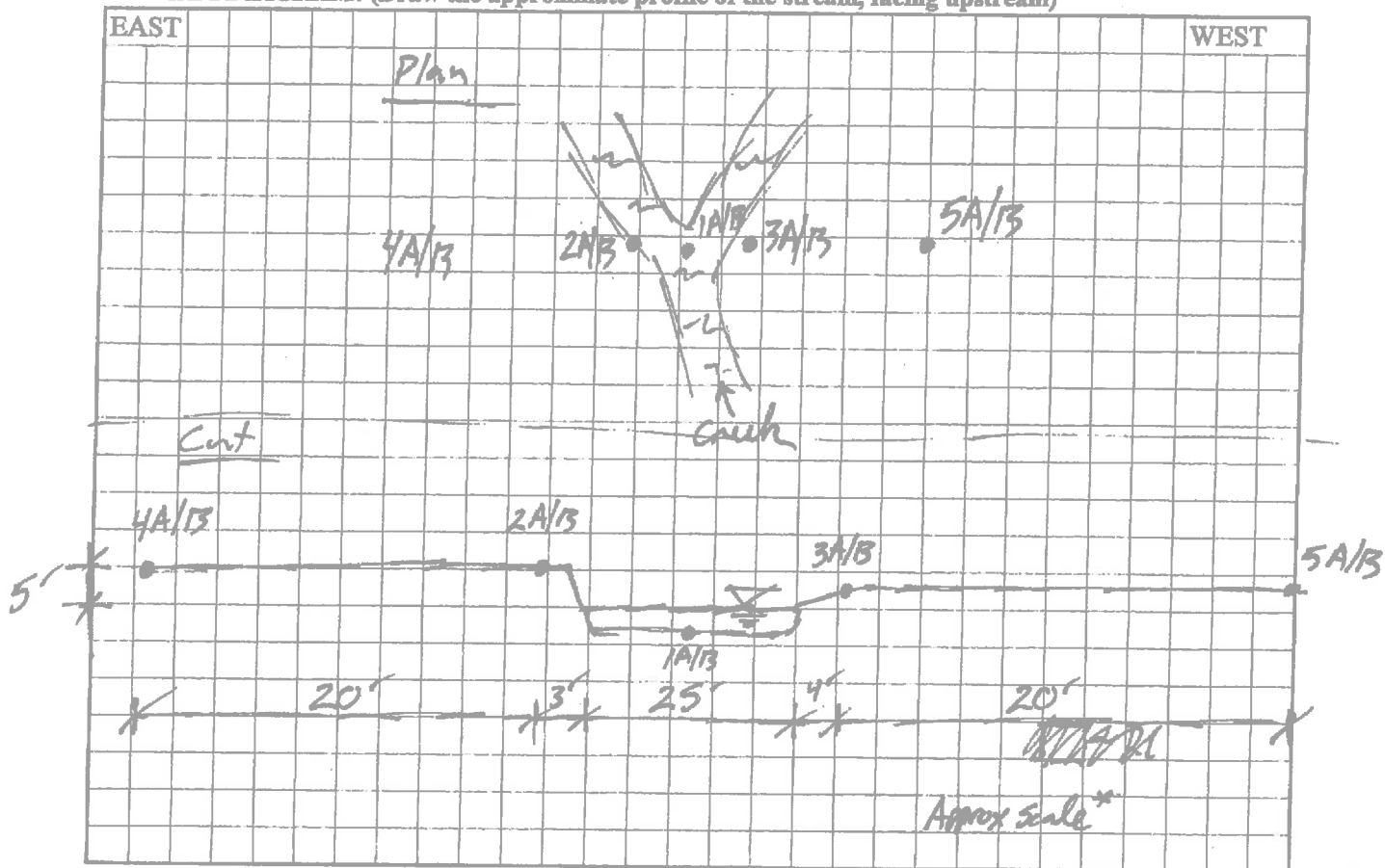
PROJECT: NYSDEC Dunkirk

DATE: 4/13/17

CROSS-SECTION ID: C5-20

WEATHER: 50° OC

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: **MOVEMENT (Circle):**

- | | | |
|---|--|---------------------------|
| ☐ Pool | ☒ Moving | laminar/ <u>turbulent</u> |
| ☐ Riffle | ☐ Slow | |
| ☒ Run | | |

DENSITY OF VEGETATION:

- | |
|--|
| ☒ Very dense |
| ☐ Dense |
| ☐ Somewhat dense |
| ☐ Sparse |

BANK HEIGHTS:

5	ft EAST BANK
2	ft WEST BANK

SUBSTRATE: (Overall %)

40	Clay
40	Silt
10	Sand f/c
10	Gravel f/c
	Cobbles
	Boulders
	Bedrock

STREAM DEPTH:

1.5	ft MAX
0.5	ft AVG.

STREAM WIDTH:

~25	ft
-----	----

MATURE VEGETATION (Large Trees):

- | |
|--|
| ☐ Many |
| ☒ Some |
| ☐ Few |
| ☐ None |

TREE DIAM. AT CHEST HEIGHT:

18	ft MAX
12	ft AVG.

SEDIMENT SAMPLING FORM



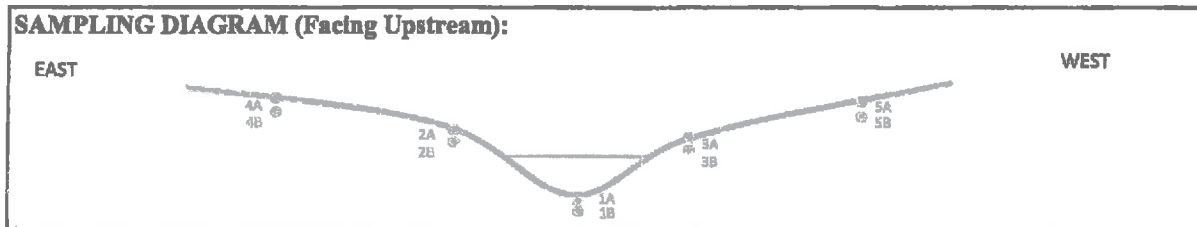
PROJECT:

DATE: 4/18/17

CROSS-SECTION ID: C.S-21

WEATHER: Sunny 60°F

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
1A	☒ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	ID: _____
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☒ Wet	☐ MS/MSD
	☐ 20' from Top of WB	COLOR: dark brown	☐ Saturated	DEPTH: 0-1 ft
TIME:	☐ Other: _____			
930				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
1B	☒ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	ID: _____
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	☐ MS/MSD
	☐ 20' from Top of WB	COLOR: gray	☒ Saturated	DEPTH: 1-2 ft
TIME:	☐ Other: _____			
955				
NOTES: sample taken less than 2 ft deep due to rocks + cobbles				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
2A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate
	☒ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	ID: _____
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	☐ MS/MSD
	☐ 20' from Top of WB	COLOR: brown	☐ Saturated	DEPTH: 2 in
TIME:	☐ Other: _____			
1010				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
2B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate
	☒ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	ID: _____
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	☐ MS/MSD
	☐ 20' from Top of WB	COLOR: brown	☐ Saturated	DEPTH: 1 ft
TIME:	☐ Other: _____			
1020				
NOTES:				

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-21 (cont)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
1035	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>1 ft</u>		
1045	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>blown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>C-2 in</u>		
1100	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>1 ft</u>		
1105	NOTES:			

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-21 (cont)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☐ Gravel f/m/c	☐ Dry	☒ Duplicate ID: <u>5A-Dup</u> ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>1 ft</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
NOTES:				

ADDITIONAL OBSERVATIONS:

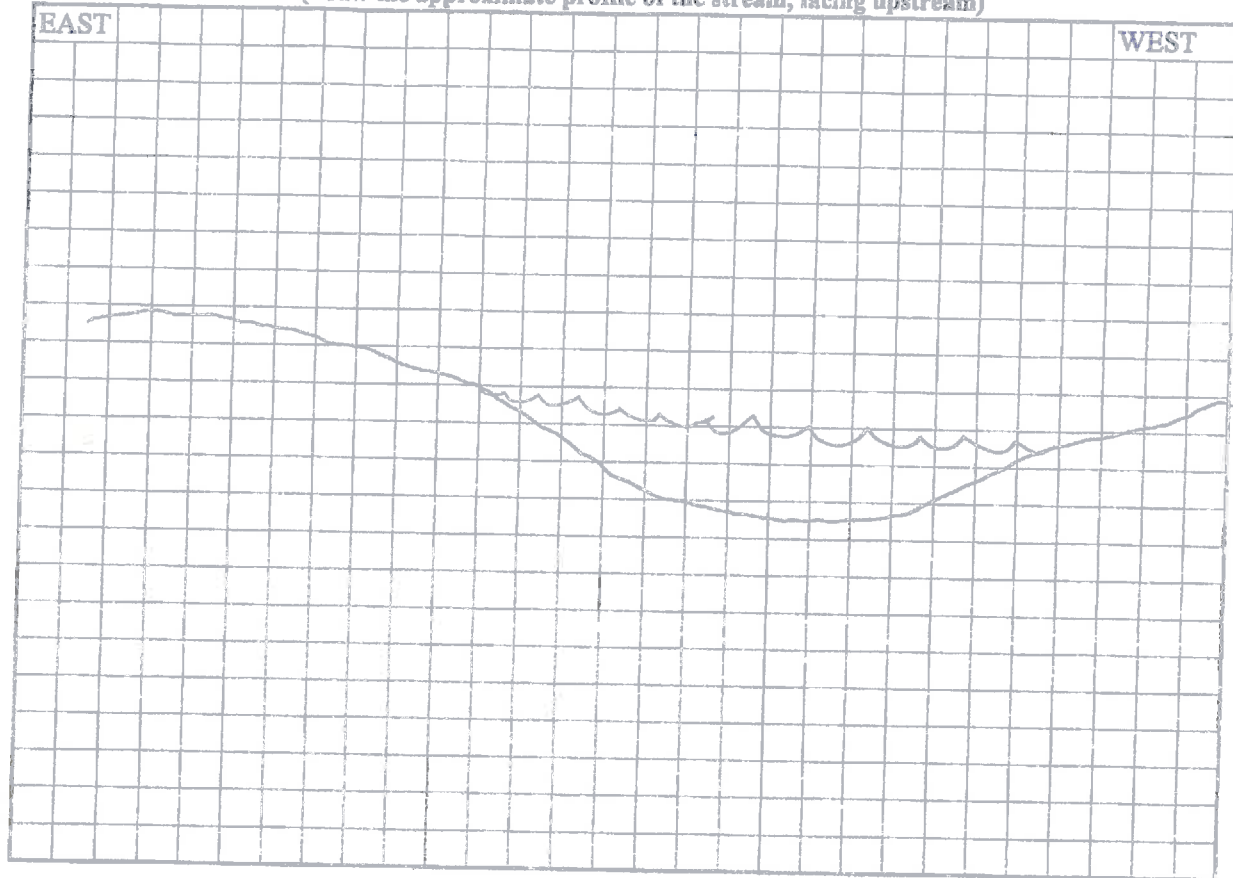
PROJECT:

DATE: 4/18/17

CROSS-SECTION ID: CS-21

WEATHER: sunny 60°F

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE:

- ☐ Pool
☒ Riffle
☐ Run

MOVEMENT (Circle):

- ☐ Moving laminar/turbulent
☒ Slow *very meandering*

SUBSTRATE: (Overall %)

- | | |
|----|---------------------|
| | Clay |
| | Silt |
| 30 | Sand <i>f/m/c</i> |
| 30 | Gravel <i>f/m/c</i> |
| 40 | Cobbles |
| | Boulders |
| | Bedrock |

STREAM DEPTH:

- | | |
|---|---------|
| 1 | ft MAX |
| 1 | ft AVG. |

DENSITY OF VEGETATION:

- ☒ Very dense *thick brush*
☐ Dense
☐ Somewhat dense
☐ Sparse

STREAM WIDTH:

- | | |
|------|----|
| 5-10 | ft |
|------|----|

BANK HEIGHTS:

- | | |
|---|--------------|
| 1 | ft EAST BANK |
| 1 | ft WEST BANK |

MATURE VEGETATION (Large Trees):

- ☐ Many
☐ Some
☒ Few
☐ None

TREE DIAM. AT CHEST HEIGHT:

- | | |
|---|---------|
| — | ft MAX |
| — | ft AVG. |

SEDIMENT SAMPLING FORM



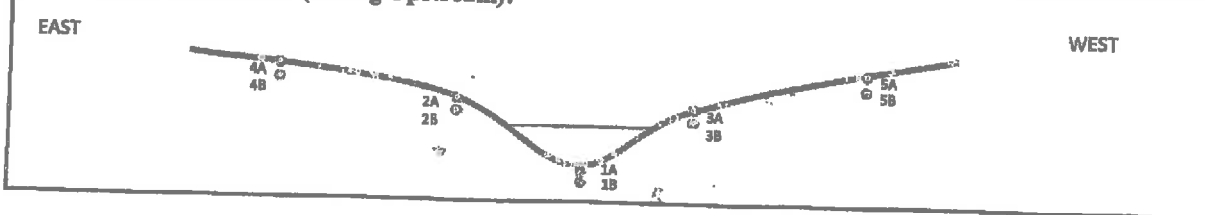
PROJECT:

DATE: 4/18/17

CROSS-SECTION ID: C-22

WEATHER: Sunny 60°F

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1230

NOTES:

LITHOLOGY (Circle):

☒ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate
ID:

☐ MS/MSD

DEPTH: 0-1 ft

SAMPLE ID: LOCATION (Check):

1B

☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1245

NOTES:

LITHOLOGY (Circle):

☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate
ID:

☐ MS/MSD

DEPTH: 1-2 ft

SAMPLE ID: LOCATION (Check):

2A

☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1255

NOTES:

LITHOLOGY (Circle):

☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate
ID:

☐ MS/MSD

DEPTH: 0-2 ft

SAMPLE ID: LOCATION (Check):

2B

☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1300

NOTES:

LITHOLOGY (Circle):

☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate
ID:

☐ MS/MSD

DEPTH: 1 ft

SEDIMENT SAMPLING FORM



CROSS SECTION ID: C-22 (cont)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>light brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>light brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B-MS	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☒ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B-MSD	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☒ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES:				

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-22 (cm)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown, grey, tan</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES:				

ADDITIONAL OBSERVATIONS:

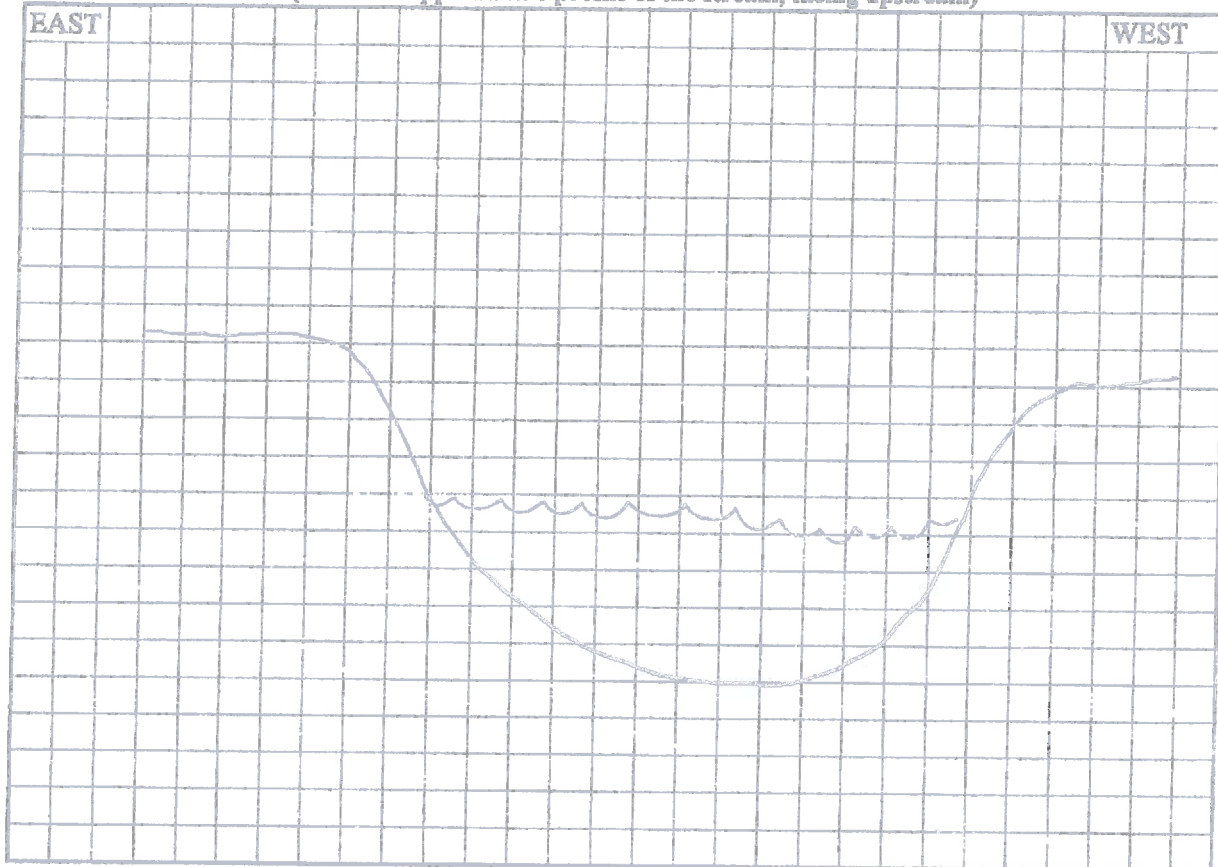
PROJECT:

DATE: 4/18/87

CROSS-SECTION ID: CS-22

WEATHER: Sunny 60°F

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)

**FLOW:**

TYPE: MOVEMENT (Circle):

- | | | |
|--|--|--------------------------|
| ☐ Pool | ☒ Moving | <u>laminar/turbulent</u> |
| ☒ Riffle | ☐ Slow | |
| ☐ Run | | |

SUBSTRATE: (Overall %)

- | | |
|--|---------------------|
| ☐ | Clay |
| ☐ | Silt |
| ☒ 30 | Sand <u>f/m/c</u> |
| ☒ 30 | Gravel <u>f/m/c</u> |
| ☒ 40 | Cobbles |
| ☐ | Boulders |
| ☐ | Bedrock |

STREAM DEPTH:

- | | |
|---------------------------------------|---------|
| ☐ 2 | ft MAX |
| ☒ 2 | ft AVG. |

DENSITY OF VEGETATION:

- | | |
|--|--------------------------------|
| ☒ Very dense | <u>thick brush + few trees</u> |
| ☐ Dense | |
| ☐ Somewhat dense | |
| ☐ Sparse | |

STREAM WIDTH:

- | | |
|-----------------------------|----|
| ☐ 10 | ft |
|-----------------------------|----|

BANK HEIGHTS:

- | | |
|---------------------------------------|--------------|
| ☐ 2 | ft EAST BANK |
| ☒ 3 | ft WEST BANK |

MATURE VEGETATION (Large Trees):

- | |
|---|
| ☐ Many |
| ☐ Some |
| ☒ Few |
| ☐ None |

TREE DIAM. AT CHEST HEIGHT:

- | | |
|---------------------------------------|---------|
| ☐ 2 | ft MAX |
| ☒ 1 | ft AVG. |

SEDIMENT SAMPLING FORM



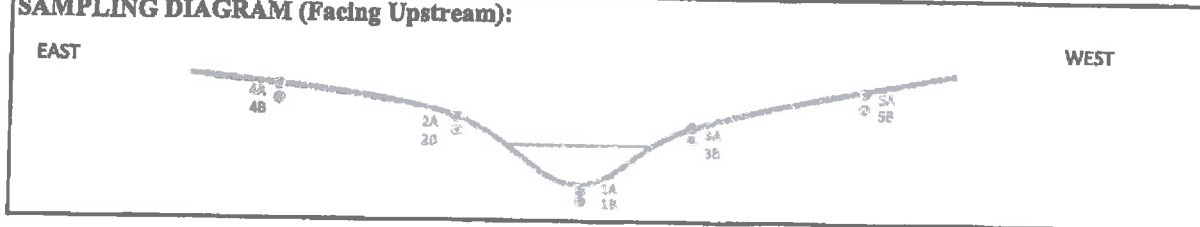
PROJECT: AAAB

DATE: 4/18/17

CROSS-SECTION ID: C3-23

WEATHER: sunny 60°F

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

TIME:

1415

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: light brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

DEPTH: 0-1 ft

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

1B

TIME:

1430

NOTES:

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: light brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

DEPTH: 1-2 ft

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2A

TIME:

1440

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☒ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

DEPTH: 0-2 in

☐ Duplicate ID: _____

☐ MS/MSD

SAMPLE ID: LOCATION (Check):

2B

TIME:

1445

NOTES:

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: light brown/tan

MOISTURE (Check):

- ☒ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

DEPTH: 0-1 ft

☐ Duplicate ID: _____

☐ MS/MSD

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-23 (cont)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
1450	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1455	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☒ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☒ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
1505	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☒ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☒ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>tan</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1510	NOTES:			

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: C5-23 (cont)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
SA	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
1520		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
SB	☐ River	☐ Gravel f/m/c	☒ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>light brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1525		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4Adp	☐ River	☐ Gravel f/m/c	☒ Dry	☒ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
1505		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B-MS 4B-MSD	☐ River	☐ Gravel f/m/c	☒ Dry	☐ Duplicate ID: _____ ☒ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>tan</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1510		NOTES:		

ADDITIONAL OBSERVATIONS:

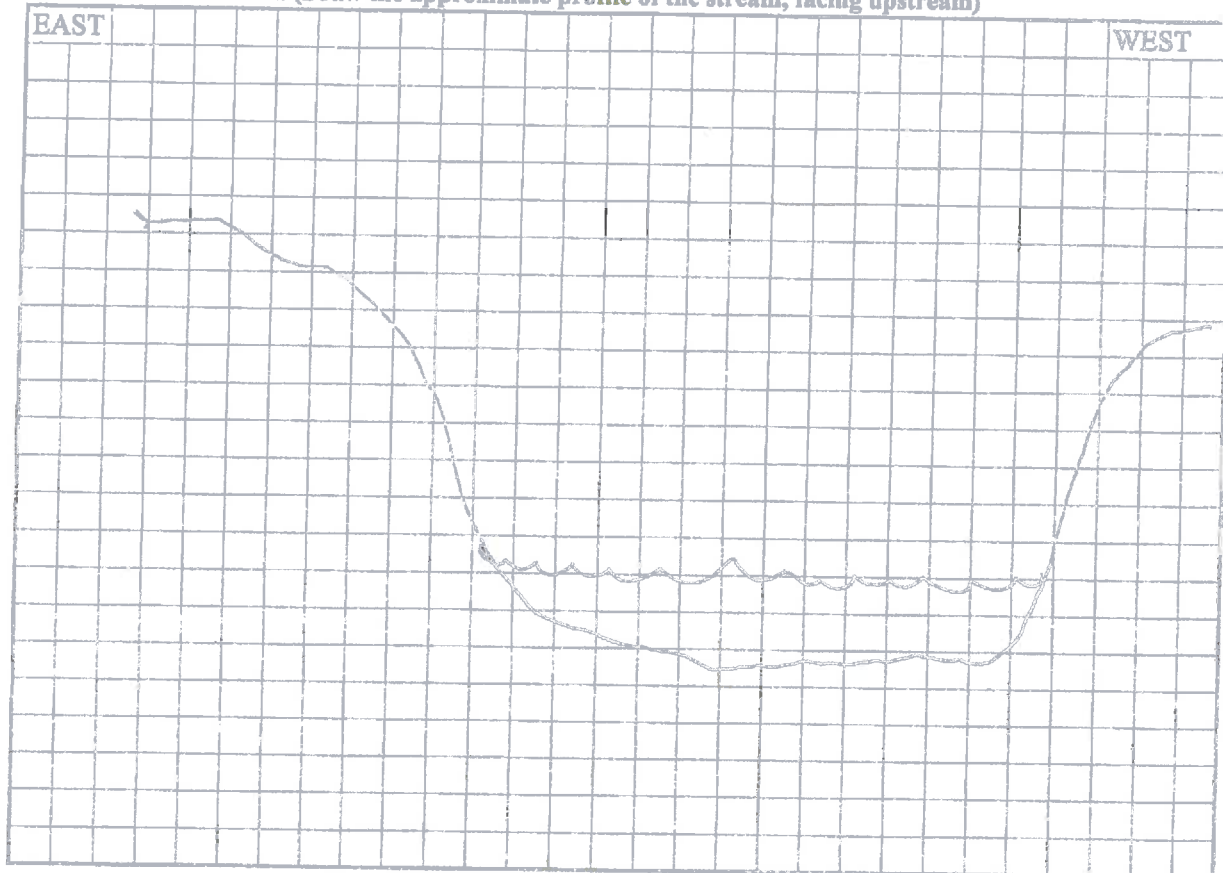
PROJECT:

DATE: 4/18/17

CROSS-SECTION ID: CS-23

WEATHER: sunny 60°F

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- | | |
|--|---|
| ☐ Pool | ☐ Moving laminar/turbulent |
| ☒ Riffle | ☒ Slow |
| ☐ Run | |

DENSITY OF VEGETATION:

- | | |
|--|-------------------------|
| ☒ Very dense | thick brush + few trees |
| ☐ Dense | |
| ☐ Somewhat dense | |
| ☐ Sparse | |

BANK HEIGHTS:

5 ft EAST BANK
3 ft WEST BANK

SUBSTRATE: (Overall %)

- | | |
|----|--------------|
| | Clay |
| | Silt |
| 30 | Sand f/m/c |
| 30 | Gravel f/m/c |
| 40 | Cobbles |
| | Boulders |
| | Bedrock |

STREAM DEPTH:

2 ft MAX
1 ft AVG.

STREAM WIDTH:

10 ft

MATURE VEGETATION (Large Trees):

- | |
|---|
| ☐ Many |
| ☐ Some |
| ☒ Few |
| ☐ None |

TREE DIAM. AT CHEST HEIGHT:

2 ft MAX
1 ft AVG.

SEDIMENT SAMPLING FORM



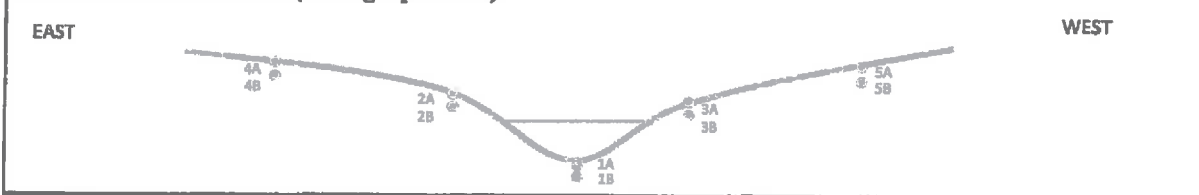
PROJECT:

DATE: 4/19/17

CROSS-SECTION ID: CS-24

WEATHER: 60°F rainy/cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: black

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

NOTES:

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: sample taken less than 2 ft due to concrete below water

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: black

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1-2 ft

NOTES:

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: brown/black

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2 in

NOTES:

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☒ Clay

COLOR: brown/black

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

NOTES:

SEDIMENT SAMPLING FORM



CROSS SECTION ID:

CS-24

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: brown	☐ Saturated	
TIME:	Other: _____	DEPTH: 0-2in		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: brown	☐ Saturated	
TIME:	Other: _____	DEPTH: 0-1 ft		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☒ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: dark brown	☐ Saturated	
TIME:	Other: _____	DEPTH: 0-2in		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☒ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: dark brown	☐ Saturated	
TIME:	Other: _____	DEPTH: 0-1 ft		
NOTES:				

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-24

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5A	☐ River	☒ Gravel <u>f/m/c</u>	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand <u>f/m/c</u>	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
1020		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☒ Gravel <u>f/m/c</u>	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand <u>f/m/c</u>	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1025		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel <u>f/m/c</u>	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand <u>f/m/c</u>	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel <u>f/m/c</u>	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand <u>f/m/c</u>	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
		NOTES:		

ADDITIONAL OBSERVATIONS:

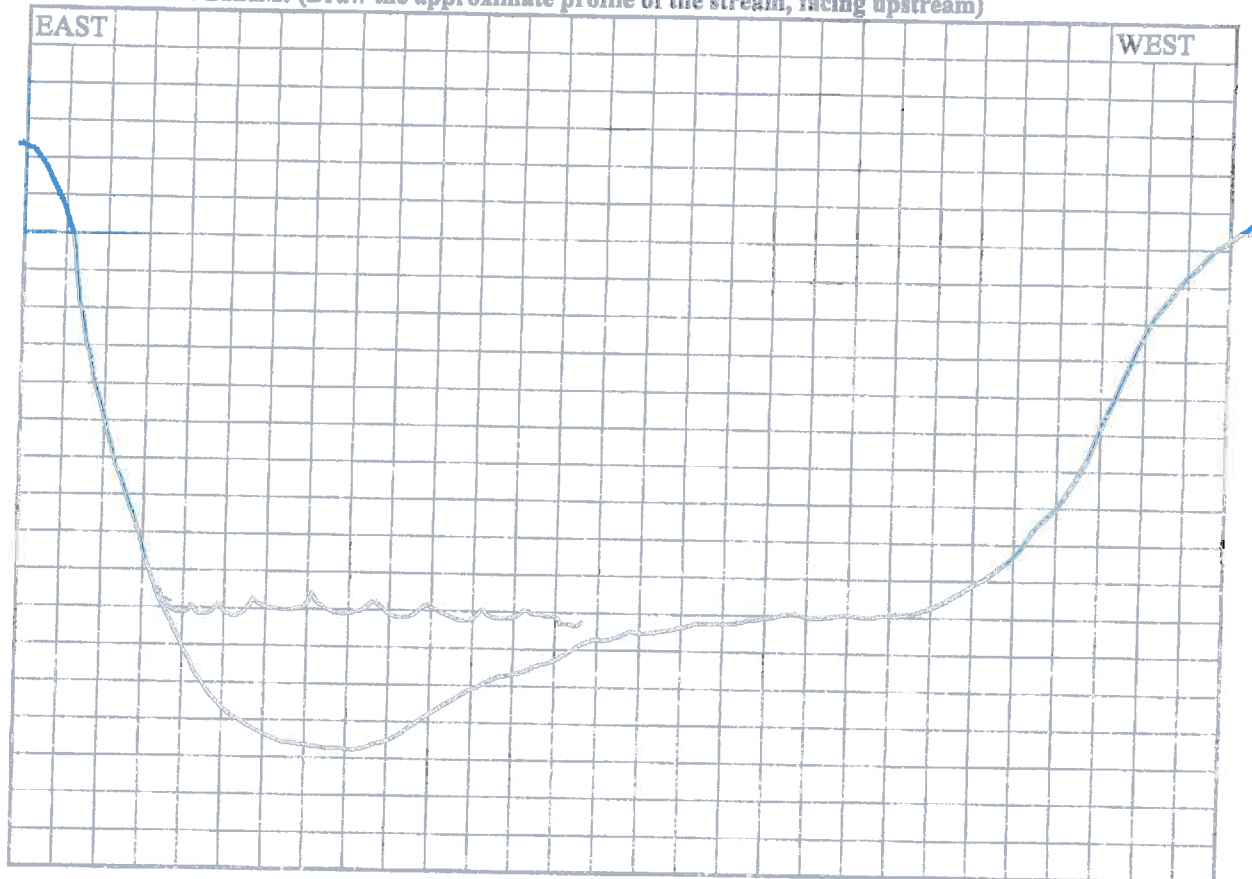
PROJECT:

DATE: 4/19/17

CROSS-SECTION ID: CS-24

WEATHER: 60°C rainy / cloudy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- | | | |
|--|---------------------------------|-------------------|
| ☒ Pool | ☐ Moving | laminar/turbulent |
| ☐ Riffle | ☐ Slow | |
| ☐ Run | | |

DENSITY OF VEGETATION:

- | |
|--|
| ☒ Very dense |
| ☐ Dense |
| ☐ Somewhat dense |
| ☐ Sparse |

BANK HEIGHTS:

15	ft	EAST BANK
10	ft	WEST BANK

SUBSTRATE: (Overall %)

- | | | |
|-------------------------------------|----------|-------|
| ☐ | Clay | |
| ☒ | Silt | |
| ☒ | Sand | f/m/c |
| ☒ | Gravel | f/m/c |
| ☐ | Cobbles | |
| ☐ | Boulders | |
| ☐ | Bedrock | |

STREAM DEPTH:

3	ft	MAX
1	ft	AVG.

STREAM WIDTH:

20	ft
----	----

MATURE VEGETATION (Large Trees):

- | |
|--|
| ☒ Many |
| ☐ Some |
| ☐ Few |
| ☐ None |

TREE DIAM. AT CHEST HEIGHT:

3	ft	MAX
1	ft	AVG.

SEDIMENT SAMPLING FORM



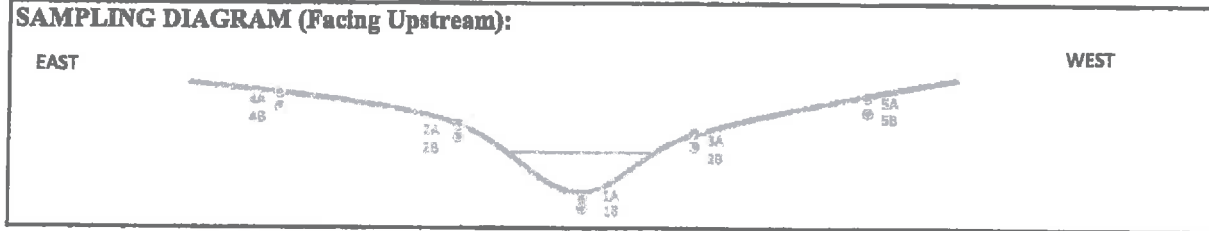
PROJECT:

DATE: 4/18/17

CROSS-SECTION ID: CS-25

WEATHER: sunny 60°F

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: 1A TIME: 1600 NOTES:	LOCATION (Check): ☒ River ☐ Top of East Bank ☐ Top of West Bank ☐ 20' from Top of EB ☐ 20' from Top of WB ☐ Other:	LITHOLOGY (Circle): ☒ Gravel f/m/c ☒ Sand f/m/c ☒ Silt ☐ Clay COLOR: black	MOISTURE (Check): ☐ Dry ☐ Slightly Moist ☐ Moist ☐ Wet ☒ Saturated DEPTH: 0-1 ft	☐ Duplicate ID: ☐ MS/MSD
--	--	--	--	---

SAMPLE ID: 1B TIME: 1615 NOTES:	LOCATION (Check): ☒ River ☐ Top of East Bank ☐ Top of West Bank ☐ 20' from Top of EB ☐ 20' from Top of WB ☐ Other:	LITHOLOGY (Circle): ☒ Gravel f/m/c ☒ Sand f/m/c ☒ Silt ☐ Clay COLOR: black	MOISTURE (Check): ☐ Dry ☐ Slightly Moist ☐ Moist ☐ Wet ☐ Saturated DEPTH: 0-2 ft	☐ Duplicate ID: ☐ MS/MSD
--	--	--	---	---

sample taken less than 2 ft due to concrete below water

SAMPLE ID: 2A TIME: 1625 NOTES:	LOCATION (Check): ☐ River ☒ Top of East Bank ☐ Top of West Bank ☐ 20' from Top of EB ☐ 20' from Top of WB ☐ Other:	LITHOLOGY (Circle): ☐ Gravel f/m/c ☒ Sand f/m/c ☒ Silt ☐ Clay COLOR: light brown	MOISTURE (Check): ☐ Dry ☒ Slightly Moist ☐ Moist ☐ Wet ☐ Saturated DEPTH: 0-2 m	☐ Duplicate ID: ☐ MS/MSD
--	--	---	---	---

SAMPLE ID: 2B TIME: 1630 NOTES:	LOCATION (Check): ☐ River ☒ Top of East Bank ☐ Top of West Bank ☐ 20' from Top of EB ☐ 20' from Top of WB ☐ Other:	LITHOLOGY (Circle): ☐ Gravel f/m/c ☒ Sand f/m/c ☒ Silt ☒ Clay COLOR: brown	MOISTURE (Check): ☐ Dry ☒ Slightly Moist ☐ Moist ☐ Wet ☐ Saturated DEPTH: 0-1 ft	☐ Duplicate ID: ☐ MS/MSD
--	--	--	--	---

SEDIMENT SAMPLING FORM



CROSS SECTION ID: C5-25 (cont)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
1635		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown/tan</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1640		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☒ Gravel <u>f/m/c</u>	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand <u>f/m/c</u>	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
1650		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☒ Gravel <u>f/m/c</u>	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand <u>f/m/c</u>	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1655		NOTES:		

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-25 (cont)

SAMPLE ID: LOCATION (Check):

SA

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other:

TIME:

1705

NOTES:

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2 in

SAMPLE ID: LOCATION (Check):

SB

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other:

TIME:

1715

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☒ Clay

COLOR: brown/tan

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

SAMPLE ID: LOCATION (Check):

3B-Dup

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1640

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: brown/tan

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☒ Duplicate

ID: 3B-Dup

☐ MS/MSD

DEPTH: 0-1 ft

SAMPLE ID: LOCATION (Check):

4A-MS
4A-MSD

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1650

NOTES:

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: 4A-MS

4A-MSD

☒ MS/MSD

DEPTH: 0-2 in

ADDITIONAL OBSERVATIONS:

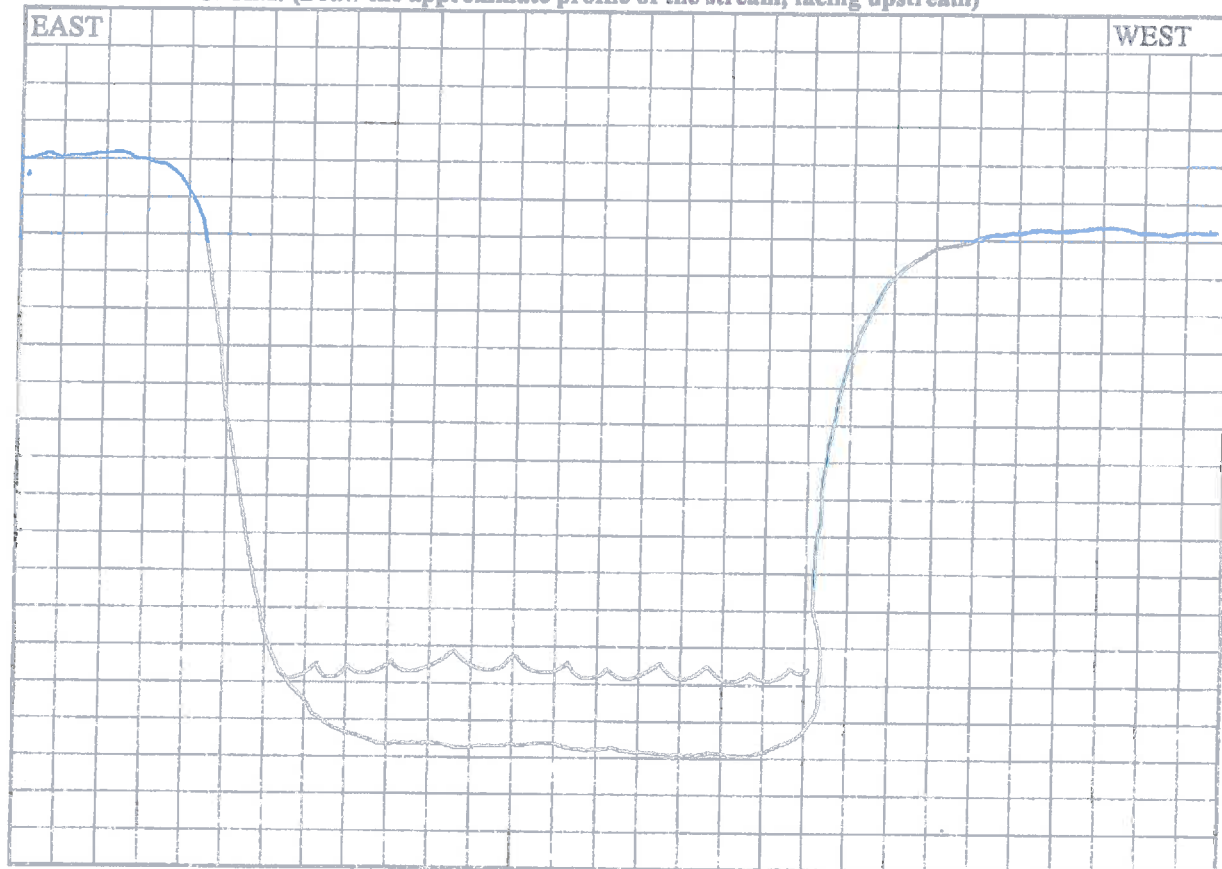
PROJECT:

DATE: 4/18/17

CROSS-SECTION ID: CS-25

WEATHER: sunny 60°F

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- ☒ Pool ☐ Moving laminar/turbulent
☐ Riffle ☐ Slow
☐ Run

DENSITY OF VEGETATION:

- ☒ Very dense *very thick brush*
☐ Dense *few trees*
☐ Somewhat dense
☐ Sparse

BANK HEIGHTS:

15 ft EAST BANK
15 ft WEST BANK

SUBSTRATE: (Overall %)

- 50 Clay
50 Silt
50 Sand *f/m/c*
Gravel *f/m/c*
Cobbles
Boulders
Bedrock

STREAM DEPTH:

33 ft MAX
12 ft AVG.

STREAM WIDTH:

15 ft

MATURE VEGETATION (Large Trees):

- ☐ Many
☒ Some
☐ Few
☐ None

TREE DIAM. AT CHEST HEIGHT:

3 ft MAX
1 ft AVG.

SEDIMENT SAMPLING FORM



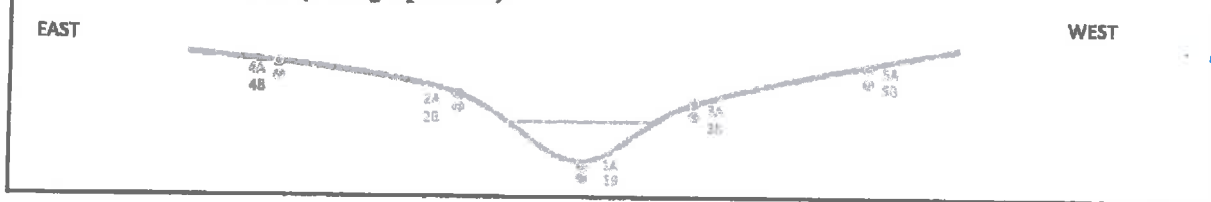
PROJECT:

DATE: 4/18/17

CROSS-SECTION ID: CS-26

WEATHER: Sunny 60°F

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1735

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay

COLOR: grey

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1745

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: grey

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☒ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1-2 ft

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1755

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2 in

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

TIME:

1800

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-26(cont)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____		DEPTH: <u>0-2m</u>	
1820				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____		DEPTH: <u>0-1ft</u>	
1825				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☒ Gravel f/m/c	☒ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____		DEPTH: <u>0-2m</u>	
1840				
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown/tan</u>	☐ Saturated	
TIME:	Other: _____		DEPTH: <u>0-1ft</u>	
1850				
NOTES:				

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS 26 (cont)

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
SA	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-24</u>		
1900	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
SB	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☒ Wet	
	☒ 20' from Top of WB	COLOR: <u>light brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1ft</u>		
1905	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
	NOTES:			

ADDITIONAL OBSERVATIONS:

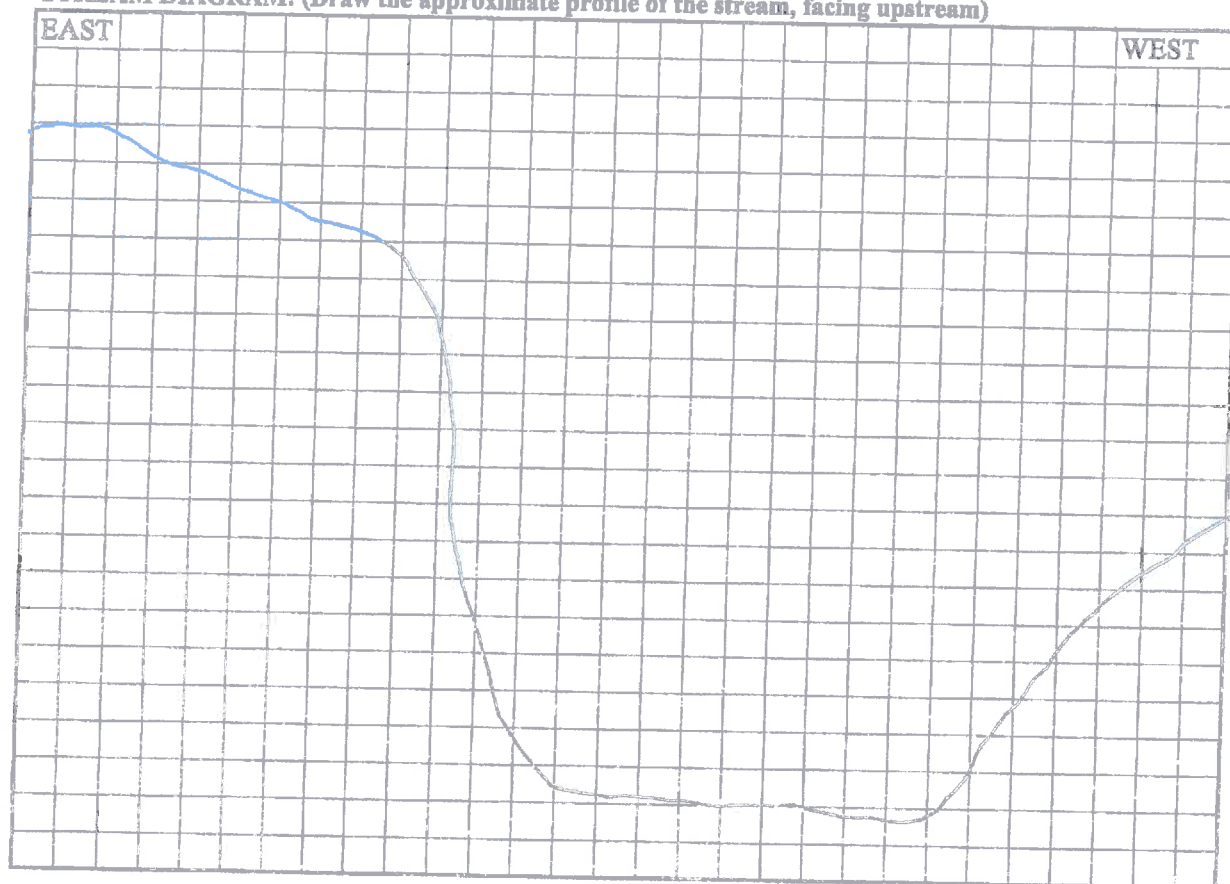
PROJECT:

DATE: 4/18/17

CROSS-SECTION ID: C9-26

WEATHER: sunny 60°F

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- | | | |
|--|--|-------------------|
| ☐ Pool | ☐ Moving | laminar/turbulent |
| ☒ Riffle | ☒ Slow | |
| ☐ Run | | |

SUBSTRATE: (Overall %)

- | | |
|-----------------------------|----------|
| ☐ | Clay |
| ☐ 50 | Silt |
| ☐ 50 | Sand |
| ☐ | Gravel |
| ☐ | Cobbles |
| ☐ | Boulders |
| ☐ | Bedrock |

STREAM DEPTH:

- | | |
|----------------------------|---------|
| ☐ 2 | ft MAX |
| ☐ 1 | ft AVG. |

DENSITY OF VEGETATION:

- | |
|--|
| ☒ Very dense |
| ☐ Dense |
| ☐ Somewhat dense |
| ☐ Sparse |

STREAM WIDTH:

- | | |
|-----------------------------|----|
| ☐ 30 | ft |
|-----------------------------|----|

BANK HEIGHTS:

- | | |
|-------------------------------|--------------|
| ☐ 15 | ft EAST BANK |
| ☐ 5-10 | ft WEST BANK |

MATURE VEGETATION (Large Trees):

- | |
|--|
| ☐ Many |
| ☒ Some |
| ☐ Few |
| ☐ None |

TREE DIAM. AT CHEST HEIGHT:

- | | |
|--------------------------|---------|
| ☐ | ft MAX |
| ☐ | ft AVG. |

SEDIMENT SAMPLING FORM



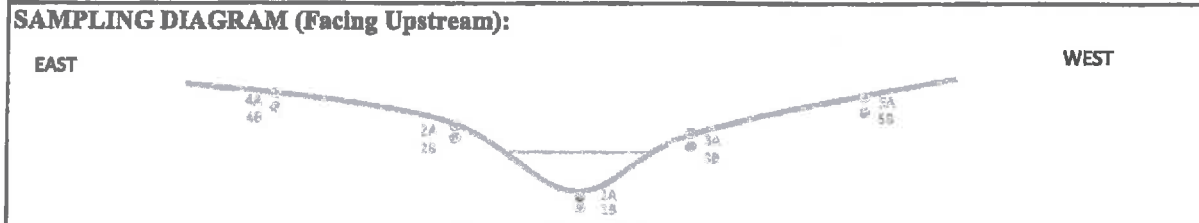
PROJECT:

DATE: 4/19/17

CROSS-SECTION ID: CS-27

WEATHER: 60°F rainy / cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: **LOCATION (Check):**

1A

TIME:

1130

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: gray

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

SAMPLE ID: **LOCATION (Check):**

1B

TIME:

1145

NOTES:

- ☒ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: gray

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1-2 ft

SAMPLE ID: **LOCATION (Check):**

2A

TIME:

1155

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2 in

SAMPLE ID: **LOCATION (Check):**

2B

TIME:

1200

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown/gray

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☒ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1-2 ft

SEDIMENT SAMPLING FORM



CROSS SECTION ID:

CS-27

SAMPLE ID: LOCATION (Check):

3A

TIME:

1210

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☒ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2 in

SAMPLE ID: LOCATION (Check):

3B

TIME:

1215

NOTES:

- ☐ River
☐ Top of East Bank
☒ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☒ Clay

COLOR: brown/tan

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☒ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1 ft

SAMPLE ID: LOCATION (Check):

4A

TIME:

1230

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☒ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2 in

SAMPLE ID: LOCATION (Check):

4B

TIME:

1235

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☒ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown/tan

MOISTURE (Check):

- ☒ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1 ft

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-27

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
SA	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>light brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2in</u>		
1250	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B	☐ River	☒ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>light brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1255	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B-MS	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: <u>3B-MS</u> ☒ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown/tan</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1215	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B-MSD	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: <u>3B-MSD</u> ☒ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown/tan</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
1215	NOTES:			

ADDITIONAL OBSERVATIONS:

large ^(fluctuation) change in stream depth due to rain

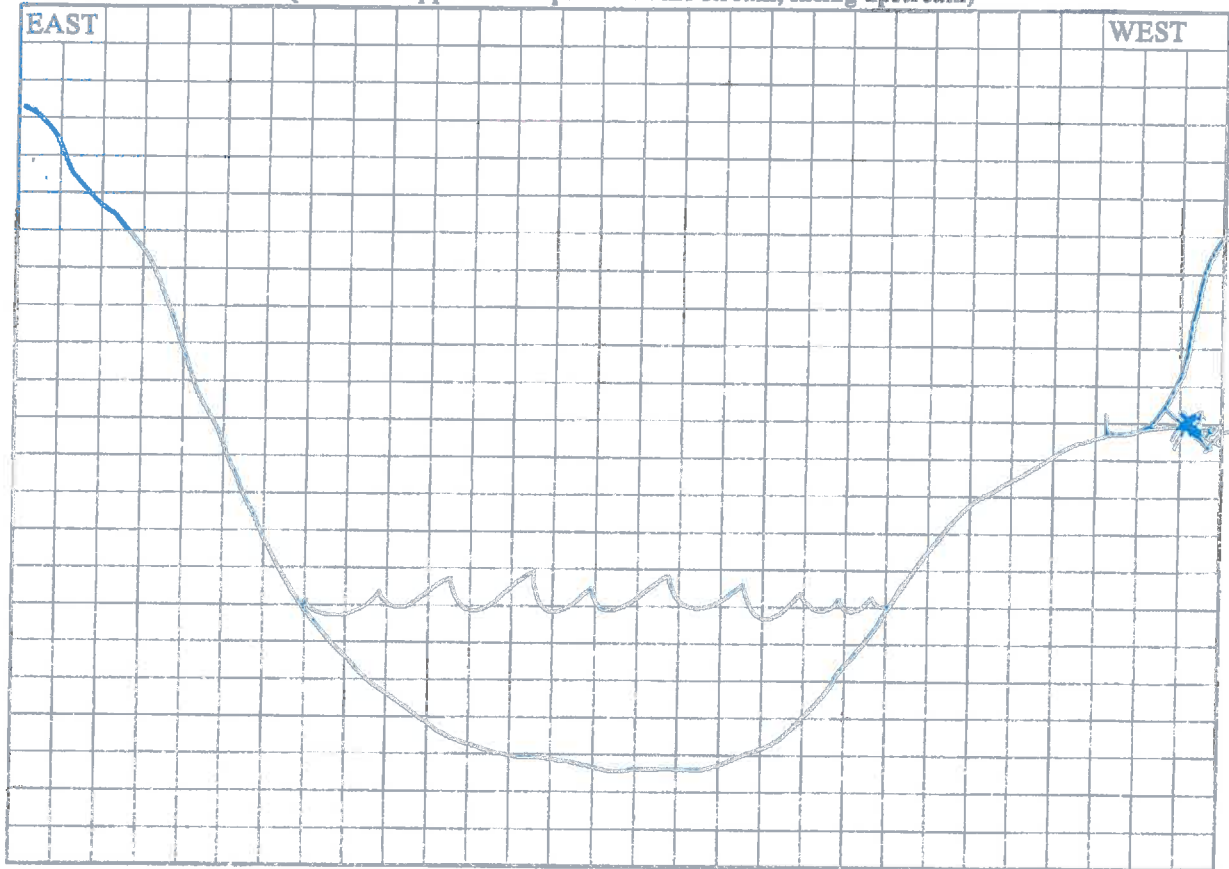
PROJECT:

DATE: CS 27 5

CROSS-SECTION ID: 4/19/17

WEATHER: 60°F raining/cloudy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)

**FLOW:**

TYPE: MOVEMENT (Circle):

- | | | |
|---|--|-------------------|
| ☐ Pool | ☒ Moving | laminar/turbulent |
| ☐ Riffle | ☒ Slow | |
| ☒ Run | | |

SUBSTRATE: (Overall %)

- | | |
|-------------------------------------|----------|
| ☐ | Clay |
| ☒ | Silt |
| ☒ | Sand |
| | Gravel |
| | Cobbles |
| | Boulders |
| | Bedrock |

STREAM DEPTH:

- | | |
|--------------------------------|---------|
| <input type="text" value="3"/> | ft MAX |
| <input type="text" value="1"/> | ft AVG. |

DENSITY OF VEGETATION:

- | | |
|-------------------------------------|----------------|
| ☒ | Very dense |
| ☐ | Dense |
| ☐ | Somewhat dense |
| ☐ | Sparsely |

STREAM WIDTH:

- | | |
|---------------------------------|----|
| <input type="text" value="10"/> | ft |
|---------------------------------|----|

BANK HEIGHTS:

- | | |
|---------------------------------|--------------|
| <input type="text" value="10"/> | ft EAST BANK |
| <input type="text" value="5"/> | ft WEST BANK |

MATURE VEGETATION (Large Trees):

- | | |
|-------------------------------------|------|
| ☒ | Many |
| ☐ | Some |
| ☐ | Few |
| ☐ | None |

TREE DIAM. AT CHEST HEIGHT:

- | | |
|--------------------------------|---------|
| <input type="text" value="3"/> | ft MAX |
| <input type="text" value="1"/> | ft AVG. |

SEDIMENT SAMPLING FORM



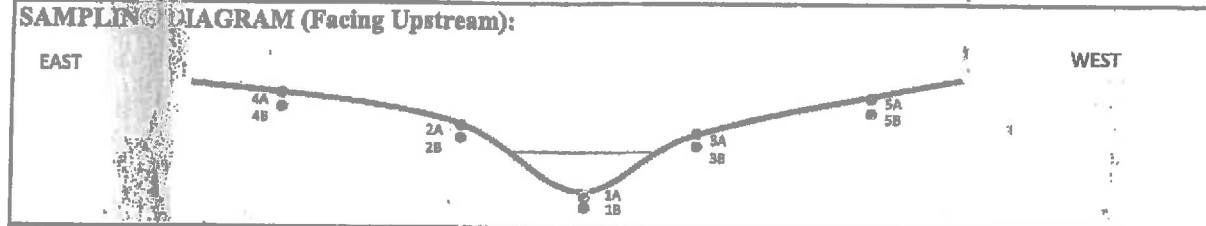
PROJECT:

DATE: 4/19/17

CROSS SECTION ID: CS-28

WEATHER: 60°F rainy / cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1515

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☐ Silt
- ☒ Clay

COLOR: grey

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1530

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: grey

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1-2 ft

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1545

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2 in

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1550

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: grey

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☒ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-28

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown/tan</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES:				

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-28

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
SA	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2m</u>		
1645	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
SB	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1ft</u>		
1655	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
1A-Dup	☒ River	☐ Gravel f/m/c	☐ Dry	☒ Duplicate ID: <u>1A-Dup</u> ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>grey</u>	☒ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1ft</u>		
1515	NOTES:			

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☐ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: _____	☐ Saturated	
TIME:	Other: _____	DEPTH: _____		
	NOTES:			

ADDITIONAL OBSERVATIONS:

• Construction debris along east bank
 • large fluctuations in stream depth due to rain

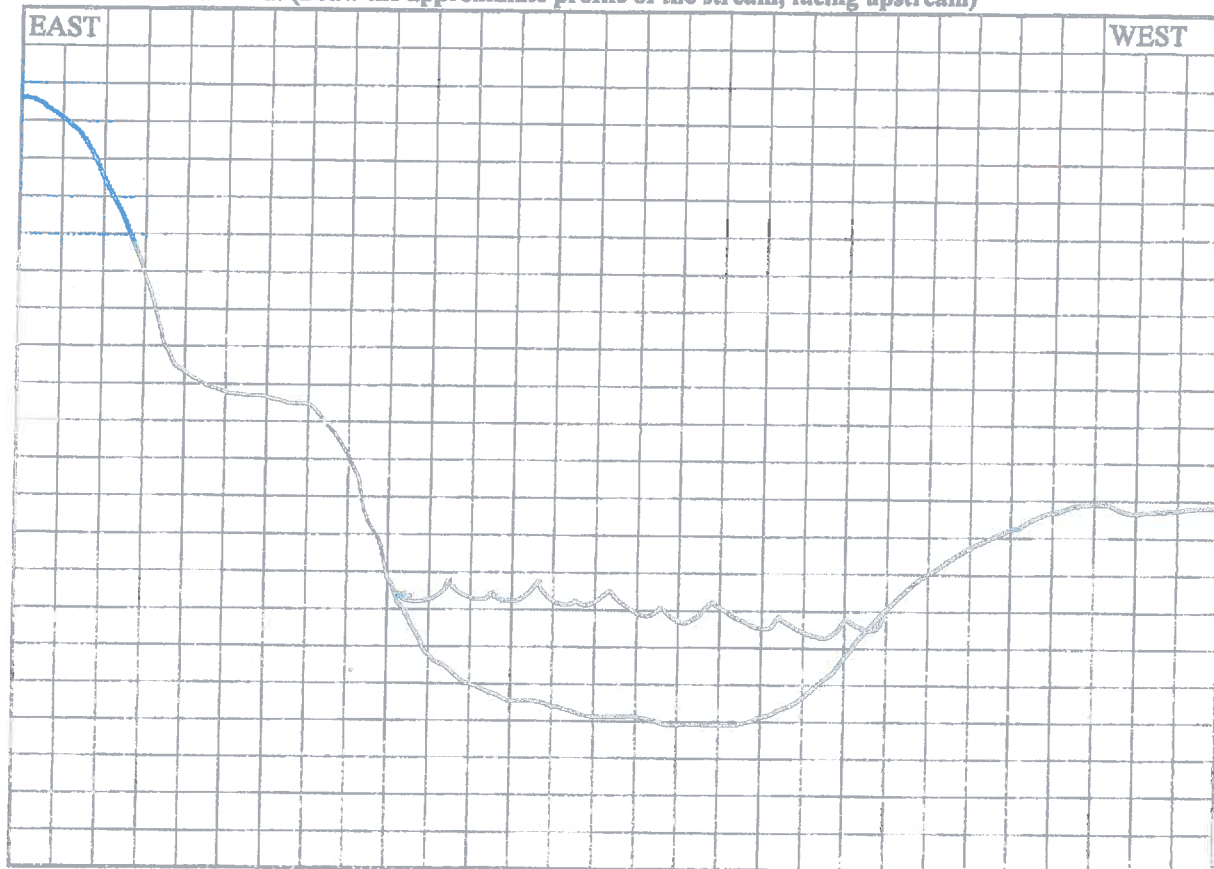
PROJECT:

DATE: 4/19/17

CROSS-SECTION ID: CS-28

WEATHER: 60°F rainy / cloudy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- | | |
|--|---|
| ☐ Pool | ☐ Moving laminar/turbulent |
| ☒ Riffle | ☒ Slow |
| ☐ Run | |

DENSITY OF VEGETATION:

- | |
|--|
| ☒ Very dense |
| ☐ Dense |
| ☐ Somewhat dense |
| ☐ Sparse |

BANK HEIGHTS:

10	ft EAST BANK
2	ft WEST BANK

SUBSTRATE: (Overall %)

- | | |
|-------------------------------------|--------------|
| ☒ | Clay |
| ☒ | Silt |
| ☒ | Sand f/m/c |
| ☒ | Gravel f/m/c |
| ☒ | Cobbles |
| ☐ | Boulders |
| ☐ | Bedrock |

STREAM DEPTH:

2	ft MAX
1	ft AVG.

STREAM WIDTH:

10	ft
----	----

MATURE VEGETATION (Large Trees):

- | |
|--|
| ☐ Many |
| ☒ Some |
| ☐ Few |
| ☐ None |

TREE DIAM. AT CHEST HEIGHT:

3	ft MAX
1	ft AVG.

SEDIMENT SAMPLING FORM



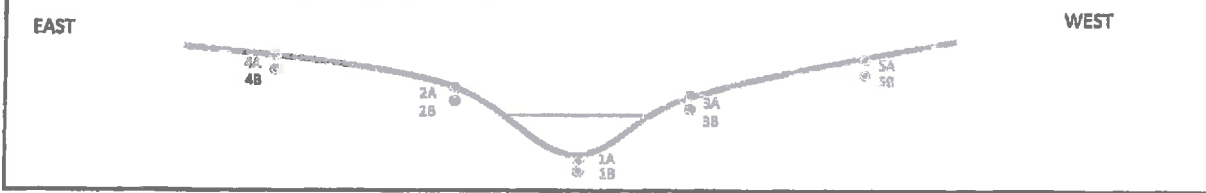
PROJECT:

DATE: 4/20/17

CROSS-SECTION ID: CS-29

WEATHER: 50°F cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

935

LITHOLOGY (Circle):

- ☒ Gravel f/m/c
- ☒ Sand f/m/c
- ☐ Silt
- ☐ Clay

COLOR: brown/gray

MOISTURE (Check):

- ☐ Dry ☐ Duplicate
- ☐ Slightly Moist **ID:**
- ☐ Moist
- ☐ Wet ☐ MS/MSD
- ☒ Saturated
- DEPTH:** 0-1 ft

NOTES:

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

950

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry ☐ Duplicate
- ☐ Slightly Moist **ID:**
- ☐ Moist
- ☐ Wet ☐ MS/MSD
- ☒ Saturated
- DEPTH:** 1-2 ft

NOTES:

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1000

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry ☐ Duplicate
- ☐ Slightly Moist **ID:**
- ☐ Moist
- ☒ Wet ☐ MS/MSD
- ☐ Saturated
- DEPTH:** 0-2 in

NOTES: sample taken

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1005

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☐ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry ☐ Duplicate
- ☐ Slightly Moist **ID:**
- ☒ Moist
- ☐ Wet ☐ MS/MSD
- ☐ Saturated
- DEPTH:** 0-1 ft

NOTES: sample taken less than 1 ft deep due to concrete & boulder debris

SEDIMENT SAMPLING FORM



CROSS SECTION ID: 5529

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown/grey</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☒ Gravel <u>f/m/c</u>	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand <u>f/m/c</u>	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>dark brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES: <u>sample taken 5-10 ft from bank due to wood obstruction</u>				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown/tan</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES: <u>sample taken 5-10 ft from bank due to wood obstruction</u>				

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-29

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
SA	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☒ Moist	
	☐ 20' from Top of EB	☐ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2m</u>		
1055		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
SB	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown/lon</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1ft</u>		
1100		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B-MS	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: <u>5B-MS</u> ☒ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown/lon</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1ft</u>		
		NOTES:		

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
5B-MSD	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: <u>5B-MSD</u> ☒ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☒ Clay	☐ Wet	
	☒ 20' from Top of WB	COLOR: <u>brown/lon</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1ft</u>		
		NOTES:		

ADDITIONAL OBSERVATIONS:

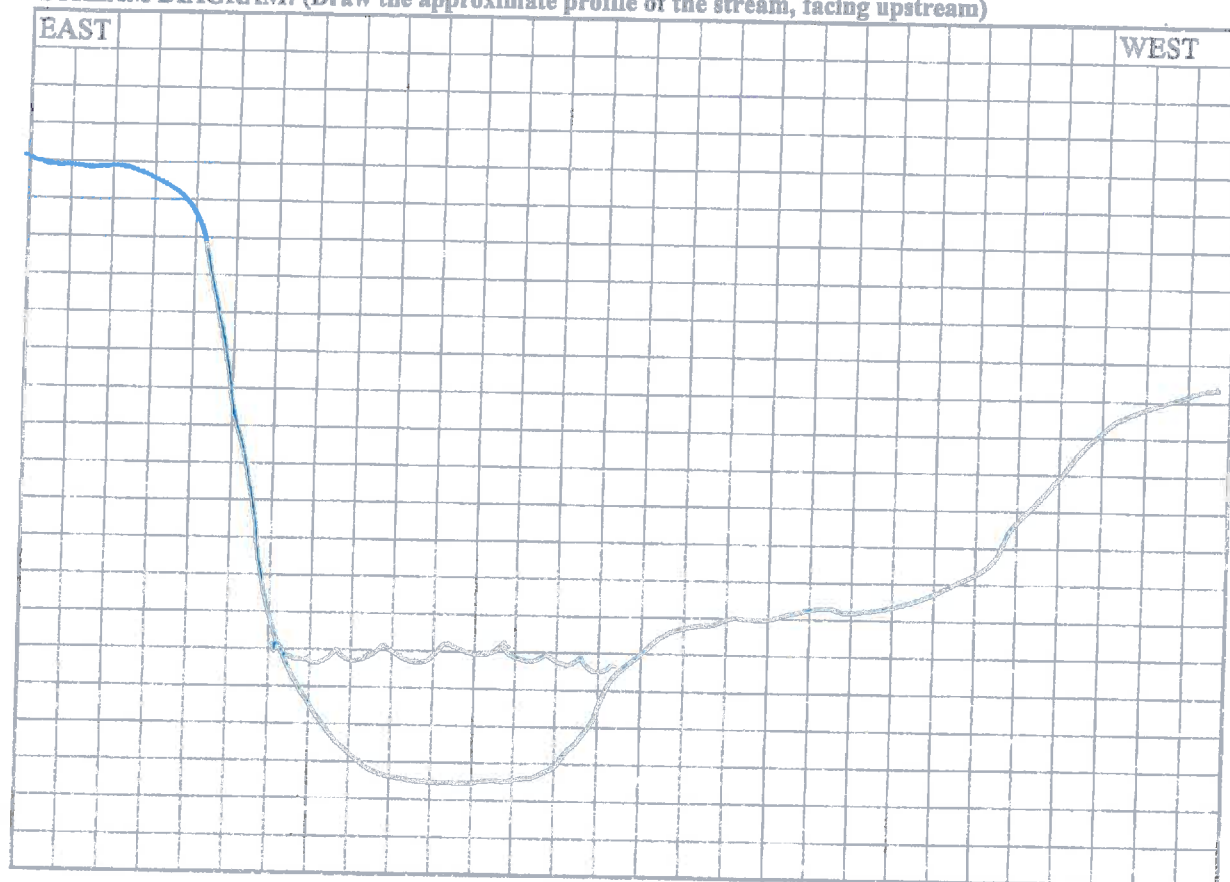
PROJECT:

DATE: 4/20/17

CROSS-SECTION ID: CS-29

WEATHER: 50°F cloudy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE:

- ☐ Pool
☐ Riffle
☒ Run

MOVEMENT (Circle):

- ☒ Moving
☐ Slow

laminar/turbulent

SUBSTRATE: (Overall %)

- ☒ Clay
☒ Silt
☒ Sand
☒ Gravel
☐ Cobbles
☐ Boulders
☐ Bedrock

f/m/c
f/m/c

STREAM DEPTH:

ft MAX
 ft AVG.

DENSITY OF VEGETATION:

- ☒ Very dense
☐ Dense
☐ Somewhat dense
☐ Sparse

STREAM WIDTH:

ft

BANK HEIGHTS:

ft EAST BANK
 ft WEST BANK

MATURE VEGETATION (Large Trees):

- ☒ Many
☐ Some
☐ Few
☐ None

TREE DIAM. AT CHEST HEIGHT:

ft MAX
 ft AVG.

SEDIMENT SAMPLING FORM



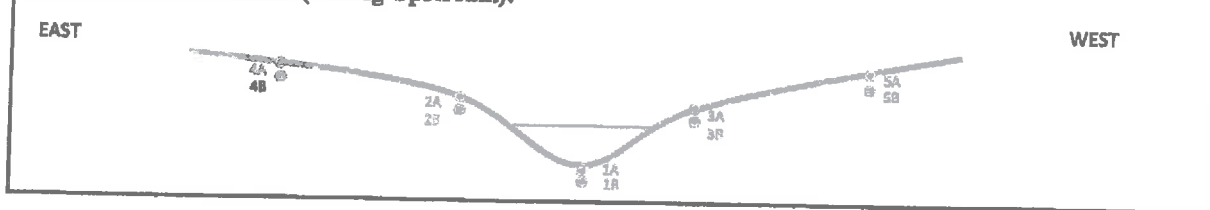
PROJECT:

DATE: 4/20/17

CROSS-SECTION ID: CS-30

WEATHER: 50°F cloudy

SAMPLING DIAGRAM (Facing Upstream):



SAMPLE ID: LOCATION (Check):

1A

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1305

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: dark brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

SAMPLE ID: LOCATION (Check):

1B

- ☒ River
- ☐ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1320

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☒ Clay

COLOR: gray

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☒ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 1-2 ft

SAMPLE ID: LOCATION (Check):

2A

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1335

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☒ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☐ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-2 in

SAMPLE ID: LOCATION (Check):

2B

- ☐ River
- ☒ Top of East Bank
- ☐ Top of West Bank
- ☐ 20' from Top of EB
- ☐ 20' from Top of WB
- ☐ Other:

TIME:

1340

NOTES:

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
- ☒ Sand f/m/c
- ☒ Silt
- ☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
- ☐ Slightly Moist
- ☐ Moist
- ☒ Wet
- ☐ Saturated

☐ Duplicate

ID:

☐ MS/MSD

DEPTH: 0-1 ft

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-30

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☐ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
3B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☐ Slightly Moist	
	☒ Top of West Bank	☒ Silt	☐ Moist	
	☐ 20' from Top of EB	☐ Clay	☒ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4A	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-2 in</u>		
NOTES:				

SAMPLE ID:	LOCATION (Check):	LITHOLOGY (Circle):	MOISTURE (Check):	
4B	☐ River	☐ Gravel f/m/c	☐ Dry	☐ Duplicate ID: _____ ☐ MS/MSD
	☐ Top of East Bank	☒ Sand f/m/c	☒ Slightly Moist	
	☐ Top of West Bank	☒ Silt	☐ Moist	
	☒ 20' from Top of EB	☐ Clay	☐ Wet	
	☐ 20' from Top of WB	COLOR: <u>brown</u>	☐ Saturated	
TIME:	Other: _____	DEPTH: <u>0-1 ft</u>		
NOTES: <u>sample taken less than 1 ft deep due to rocks (refusal)</u>				

ADDITIONAL OBSERVATIONS:

SEDIMENT SAMPLING FORM



CROSS SECTION ID: CS-30

SAMPLE ID: LOCATION (Check):

SA

TIME:

145

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☐ Dry
☒ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-2m

SAMPLE ID: LOCATION (Check):

SB

TIME:

1500

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☒ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☒ Clay

COLOR: light brown

MOISTURE (Check):

- ☒ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: 0-1ft

SAMPLE ID: LOCATION (Check):

ZA-dp

TIME:

1335

NOTES:

- ☐ River
☒ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☒ Sand f/m/c
☒ Silt
☐ Clay

COLOR: brown

MOISTURE (Check):

- ☒ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☒ Duplicate

ID: ZA-Dup

☐ MS/MSD

DEPTH: 0-2m

SAMPLE ID: LOCATION (Check):

TIME:

NOTES:

- ☐ River
☐ Top of East Bank
☐ Top of West Bank
☐ 20' from Top of EB
☐ 20' from Top of WB
☐ Other: _____

LITHOLOGY (Circle):

- ☐ Gravel f/m/c
☐ Sand f/m/c
☐ Silt
☐ Clay

COLOR: _____

MOISTURE (Check):

- ☐ Dry
☐ Slightly Moist
☐ Moist
☐ Wet
☐ Saturated

☐ Duplicate

ID: _____

☐ MS/MSD

DEPTH: _____

ADDITIONAL OBSERVATIONS:

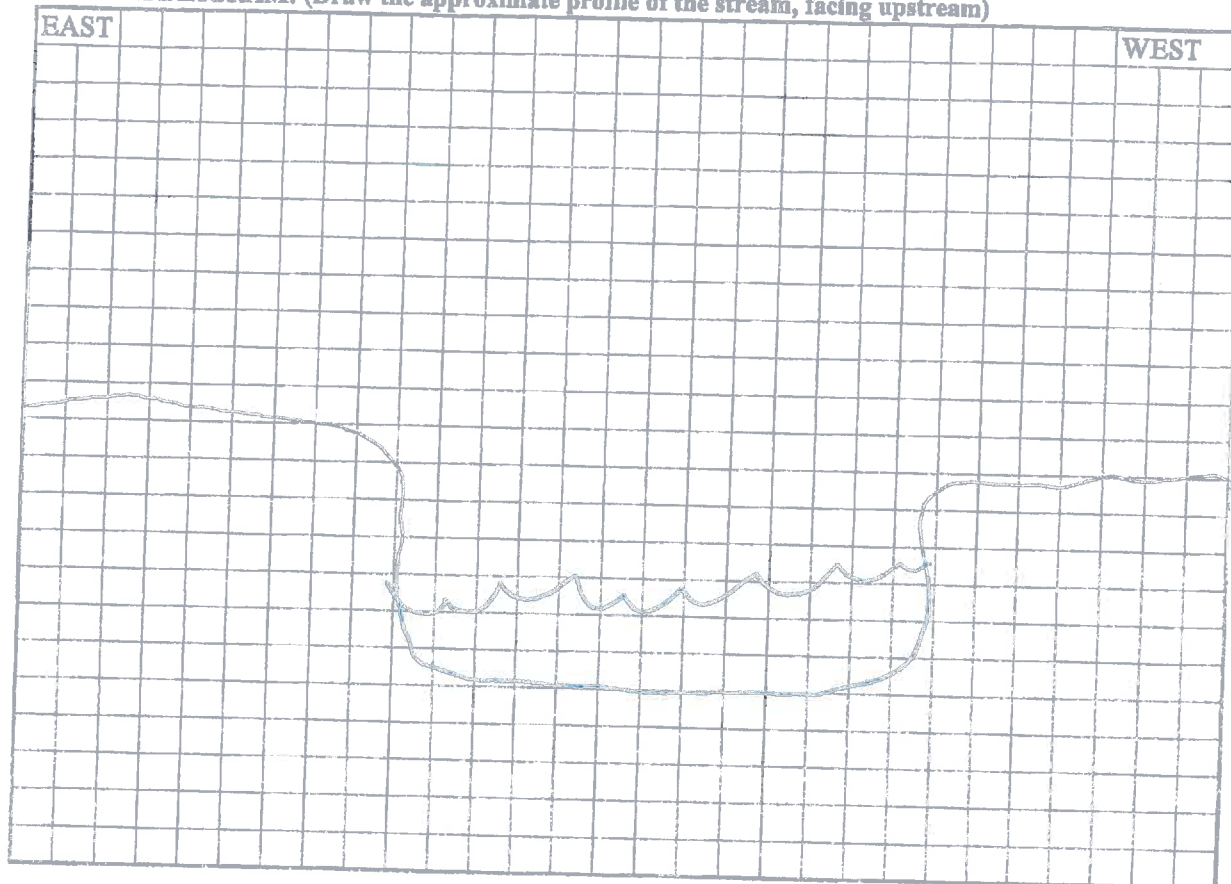
PROJECT:

DATE: 4/20/17

CROSS-SECTION ID: CS-30

WEATHER: 50°F cloudy

STREAM DIAGRAM: (Draw the approximate profile of the stream, facing upstream)



FLOW:

TYPE: MOVEMENT (Circle):

- | | |
|---|---|
| ☐ Pool | ☐ Moving laminar/turbulent |
| ☐ Riffle | ☒ Slow |
| ☒ Run | |

DENSITY OF VEGETATION:

- | |
|--|
| ☐ Very dense |
| ☐ Dense |
| ☐ Somewhat dense |
| ☒ Sparse |

BANK HEIGHTS:

- | | |
|----------------------------|--------------|
| ☐ 2 | ft EAST BANK |
| ☐ 2 | ft WEST BANK |

SUBSTRATE: (Overall %)

- | | |
|-------------------------------------|----------|
| ☒ | Clay |
| ☒ | Silt |
| ☒ | Sand |
| ☒ | Gravel |
| ☐ | Cobbles |
| ☐ | Boulders |
| ☐ | Bedrock |

f/m/c
f/m/c

STREAM DEPTH:

- | | |
|----------------------------|---------|
| ☐ 2 | ft MAX |
| ☐ 1 | ft AVG. |

STREAM WIDTH:

- | | |
|----------------------------|----|
| ☐ 5 | ft |
|----------------------------|----|

MATURE VEGETATION (Large Trees):

- | |
|--|
| ☐ Many |
| ☐ Some |
| ☐ Few |
| ☒ None |

TREE DIAM. AT CHEST HEIGHT:

- | | |
|----------------------------|---------|
| ☐ 0 | ft MAX |
| ☐ 0 | ft AVG. |

APPENDIX B

Disposal Manifest

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000085803	2. Page 1 of 1	3. Emergency Response Phone 800-535-5053	4. Manifest Tracking Number 008907670 FLE				
5. Generator's Name and Mailing Address Former Al Tech Specialty Steel Corp. Oper Unit 2 665 Brighton Road Dunkirk, NY 14048		Generator's Site Address (if different than mailing address)							
Generator's Phone: 800-287-7857									
6. Transporter 1 Company Name Environmental Service Group, Inc. (NY)		710.695.6720		U.S. EPA ID Number NYB006903901					
7. Transporter 2 Company Name		U.S. EPA ID Number							
8. Designated Facility Name and Site Address Chemical Solvents Inc 1010 Dawson Avenue Cleveland, OH 44108		U.S. EPA ID Number							
Facility's Phone: 800-382-0883		CHD080897656							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes	
				No.	Type				
	1. UN1203, Waste Hexanes, 3, II			001	DM	005	G	0001	
	2.								
	3.								
4.									
14. Special Handling Instructions and Additional Information 1-42228 ERG: 1-4228 24 Hour Emergency Contact: INFOTRAC (Call or Mail ID ESO)									
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator's/Offeror's Printed/Typed Name Michael J. NYSDCC Lamin T. Reiss				Signature 		Month Day Year 06 27 17			
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:									
17. Transporter Acknowledgment of Receipt of Materials									
Transporter 1 Printed/Typed Name Sean P Winter				Signature 		Month Day Year 06 28 17			
Transporter 2 Printed/Typed Name				Signature		Month Day Year			
18. Discrepancy									
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection									
Manifest Reference Number:									
18b. Alternate Facility (or Generator) U.S. EPA ID Number									
Facility's Phone:									
18c. Signature of Alternate Facility (or Generator) Month Day Year									
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									
1.		2.		3.		4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a									
Printed/Typed Name Michael S. TAYLOR				Signature 		Month Day Year 12 12 17			

APPENDIX C

Laboratory Analytical Reports