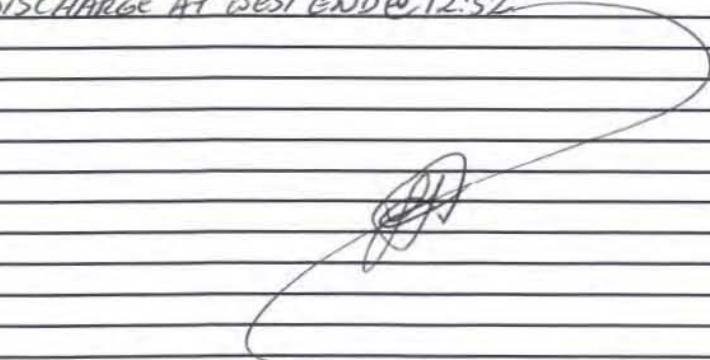


**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>LISA LA FORTUNE /CH2M</u>	Station ID:	<u>SW 301</u>					
Subcontractor/Crew:	<u>MATT MARTIN</u> <u>BENJAMIN WOODS</u>	Time:	<u>12:30</u>					
		Water Depth:	<u>5.92</u>					
		Tide:	<u>HIGH TIDE @ ~2 PM</u>					
		Weather:	<u>HIGH 70's, SUNNY & CLEAR</u>					
Surface Water Sample ID:	<u>GC-SW 301-0.5-DL</u>	Sample Depth (below surface)	<u>0.5 ft</u>					
Wet or Dry Weather Event:	<u>DRY EVENT</u>							
Number of Sampling Attempts:	<u>ONE</u>							
Problems During Collection:	<u>NONE</u>							
QC SAMPLE DATA								
QA/QC Sample IDs:	NONE DUP <u>NO</u> , MS/MSD <u>NO</u>							
SURFACE WATER DATA & CONDITIONS								
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments	
3.33	7.90	20.65	2.24	36.9	2.0	14		
Floating Debris (describe):	<u>ORGANIC MATTER</u>							
Water Color:	<u>CLEAR</u>							
Clarity:	<u>YES</u>							
Turbidity:	<u>NONE OBSERVED</u>							
Sheen:	<u>SLIGHT</u>							
Sample Analytical Parameters:	Bottles/Preservation:							
TCL VOCs	<input checked="" type="checkbox"/>	<u>5x 40 mL VOA vials, no headspace; 4°C</u> <u>2 x 1 L amber glass; 4°C</u> <u>2 x 1 L amber glass; 4°C</u> <u>2 x 1 L amber glass; 4°C</u> <u>2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45 μm</u> <u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u> <u>1 x 1 L HDPE; 4°C</u> <u>500 mL</u>						
TCL SVOCs	<input checked="" type="checkbox"/>							
TCL Pesticides	<input checked="" type="checkbox"/>							
TCL PCBs	<input checked="" type="checkbox"/>							
TAL Metals + Hg	<input checked="" type="checkbox"/>							
Cyanide	<input checked="" type="checkbox"/>							
TSS	<input checked="" type="checkbox"/>							
COMMENTS/OBSERVATIONS								
<u>OBSERVED DISCHARGE AT WEST END @ 12:52</u>								
 Sampler Signature/Date <u>Lisa La Fortune</u> / <u>06/19/2010</u>								

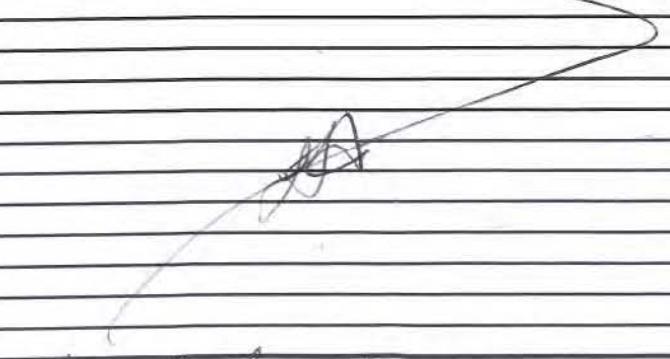
Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>LISA LA FORTUNE /CH2M</u>	Station ID:	<u>SW 302</u>				
Subcontractor/Crew:	<u>MATT MARTIN</u> <u>BENJAMIN WOODS</u>	Time:	<u>12:02</u>				
		Water Depth:	<u>5.02 FT</u>				
		Tide:	<u>CLOSE TO HIGH TOE E ~2 PM</u>				
		Weather:	<u>HIGH 70's, SUNNY, CLOUDY</u>				
Surface Water Sample ID:	<u>GC-SW 302-0.5-DW</u>	Sample Depth (below surface)	<u>0.5 ft</u>				
Wet or Dry Weather Event:	<u>DRY EVENT</u>						
Number of Sampling Attempts:	<u>ONE</u>						
Problems During Collection:	<u>NONE</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE DUP <u>NO</u> , MS/MSD <u>NO</u>						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
1.54	7.87	21.31	2.25	37.1	3.2	79	
Floating Debris (describe):	<u>NONE</u>						
Water Color:	<u>CLEAR</u>						
Clarity:	<u>YES</u>						
Turbidity:	<u>NONE OBSERVED</u>						
Sheen:	<u>NO</u>						
Sample Analytical Parameters:	Bottleware/Preservation: <u>15 BOTTLES TOTAL</u>						
TCL VOCs	<u>3x 40 mL VOA vials, no headspace; 4°C</u>						
TCL SVOCs	<u>2 x 1 L amber glass; 4°C</u>						
TCL Pesticides	<u>2 x 1 L amber glass; 4°C</u>						
TCL PCBs	<u>2 x 1 L amber glass; 4°C</u>						
TAL Metals + Hg	<u>2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45 um</u>						
Cyanide	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>						
TSS	<u>1 x 1 L HDPE; 4°C 500mL</u>						
COMMENTS/OBSERVATIONS							
<p style="text-align: center;"><i>[Handwritten notes and signatures follow]</i></p>							
Sampler Signature/Date	<u>Lisa La Fortune 06/19/2010</u>						

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>LISA LA FORTUNE / CH2M</u>		Station ID:	1562303	
Subcontractor/Crew:	<u>MATT MARTIN</u> <u>BENJAMIN WOODS</u>		Time:	11:38	
			Water Depth:	4.1 FT	
			Tide:	LOW TIDE GETTING HIGHER	
			Weather:	HIGH 70'S, SUNNY, CLOUDY	
Surface Water Sample ID:	GC-SW303 - 0.5-DW		Sample Depth (below surface)	0.5 ft	Sample Time: 11:40
Wet or Dry Weather Event:	DRY EVENT				
Number of Sampling Attempts:	ONE				
Problems During Collection:	NONE				
QC SAMPLE DATA					
QA/QC Sample IDs:					
NONE	DUP	<u>NO</u>	, MS/MSD	<u>NO</u>	
SURFACE WATER DATA & CONDITIONS					
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)
4.31	7.84	20.44	2.24	37.0	2.6
					38
Floating Debris (describe): <u>NONE</u>					
Water Color: <u>CLEAR</u>					
Clarity: <u>CLEAR</u>					
Turbidity: <u>NONE OBSERVED</u>					
Sheen: <u>NO</u>					
Sample Analytical Parameters:			Bottleware/Preservation:		
TCL VOCs	<input checked="" type="checkbox"/>		3x 40 mL VOA vials, no headspace; 4°C		
TCL SVOCs	<input checked="" type="checkbox"/>		2 x 1 L amber glass; 4°C		
TCL Pesticides	<input checked="" type="checkbox"/>		2 x 1 L amber glass; 4°C		
TCL PCBs	<input checked="" type="checkbox"/>		2 x 1 L amber glass; 4°C		
TAL Metals + Hg	<input checked="" type="checkbox"/>		2 x 1 L HDPE; HNO ₃ to pH < 2, 4°C + Filtered 0.45 μm		
Cyanide	<input checked="" type="checkbox"/>		1 x 1 L HDPE; NaOH to pH > 12, 4°C		
TSS	<input checked="" type="checkbox"/>		1 x 1 L HDPE; 4°C 500 mL		
COMMENTS/OBSERVATIONS					
					
Sampler Signature/Date <u>Lisa La Fortune 06/19/2010</u>					

Reviewed by Andy Judd Date 6-28-10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	LISA LA FORTUNE	Station ID:	GC-SW304-0.5-DW
Subcontractor/Crew:	MATT MARTIN BENJAMIN WOODS	Time:	9:10
		Water Depth:	5.01 FT
		Tide:	HIGH
		Weather:	LOW 70's, SUNNY, CLEAR
Surface Water Sample ID:	GC-SW304-0.5-DW	Sample Depth (below surface)	0.5 ft
Wet or Dry Weather Event:	DRY EVENT	Sample Time:	9:10

Number of Sampling Attempts: ONE

Problems During Collection: NONE

QC SAMPLE DATA

QA/QC Sample IDs:

NONE DUP NO, MS/MSD NO

SURFACE WATER DATA & CONDITIONS

DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
4.19	6.59	19.95	22.16	36.8	4.1	3	

Floating Debris (describe): ~~ORGANIC MATTER~~

Water Color: CLEAR

Clarity: YES

Turbidity: CLEAR

Sheen: YES

Sample Analytical Parameters:

Bottles/Preservation:

TCL VOCs	<input checked="" type="checkbox"/>
TCL SVOCs	<input checked="" type="checkbox"/>
TCL Pesticides	<input checked="" type="checkbox"/>
TCL PCBs	<input checked="" type="checkbox"/>
TAL Metals + Hg	<input checked="" type="checkbox"/>
Cyanide	<input checked="" type="checkbox"/>
TSS	<input checked="" type="checkbox"/>

5x 40 mL VOA vials, no headspace; 4°C

2 x 1 L amber glass; 4°C

2 x 1 L amber glass; 4°C

2 x 1 L amber glass; 4°C

2 x 1 L HDPE; HNO3 to pH < 2, 4°C

1 x 1 L HDPE; NaOH to pH > 12, 4°C

1 x 1 L HDPE; 4°C

500 mL

15 BOTTLES TOTAL

+ Filtered 0.45 µm

COMMENTS/OBSERVATIONS

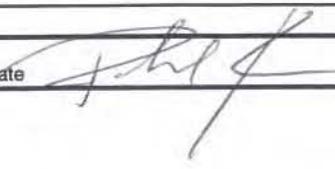
OUTFALL ON EAST END OF CANAL

Sampler Signature/Date

Lisa La Fortune 06/19/2010

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>Rachel Kuper /CHamHII</u>		Station ID:	305		
Subcontractor/Crew:	<u>Kathy /HDR matt /HDR</u>		Time:	0908		
			Water Depth:	2' 31"		
			Tide:	LOW		
			Weather:	Sunny, little clouds		
Surface Water Sample ID:	GC-SW-305-0.5-DW		Sample Depth (below surface)	0.5	ft	
Wet or Dry Weather Event:	Dry		Sample Time:	0912		
Number of Sampling Attempts:	31					
Problems During Collection:	None					
QC SAMPLE DATA						
QA/QC Sample IDs:	<input checked="" type="checkbox"/> NONE DUP _____ , MS/MSD _____					
SURFACE WATER DATA & CONDITIONS						
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	
8.02	6.47	21.13	23.6	77.3	9.5	
					51	
Floating Debris (describe):	Same					
Water Color:	Clear					
Clarity:	Clear					
Turbidity:	Slight					
Sheen:	Moderate					
Sample Analytical Parameters:	Bottleware/Preservation:					
TCL VOCs	<input checked="" type="checkbox"/>	5 3x 40 mL VOA vials, no headspace; 4°C				
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C				
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C				
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C				
TAL Metals + Hg	<input checked="" type="checkbox"/>	2.1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C + Filtered 0.45 μm				
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C				
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C 500 mL				
COMMENTS/OBSERVATIONS						
Sampler Signature/Date	 6/19/10					

Reviewed by Andy Todd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>LISA LA FORTUNE</u>	Station ID:	<u>SW 306</u>
Subcontractor/Crew:	<u>MATT MARTIN</u> <u>BENJAMIN WOODS</u>	Time:	<u>9:38</u>
		Water Depth:	<u>6.63 FT</u>
		Tide:	<u>LOW TIDE</u>
		Weather:	<u>MID 70'S, SUNNY, CLEAR</u>
Surface Water Sample ID:	<u>GC-SW306-0.5-DW</u>	Sample Depth (below surface)	<u>0.5 ft</u>
		Sample Time:	<u>9:40</u>

Wet or Dry Weather Event: DRY EVENT

Number of Sampling Attempts: ONE

Problems During Collection: NONE

QC SAMPLE DATA

QA/QC Sample IDs:

NONE DUP NO, MS/MSD NO

SURFACE WATER DATA & CONDITIONS

DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
3.49	6.87	20.56	2.29	38.2	3.6	6	

Floating Debris (describe): ORGANIC MATTER

Water Color: CLEAR

Clarity: YES

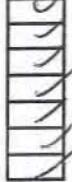
Turbidity: LOW

Sheen: YES

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs
TCL SVOCs
TCL Pesticides
TCL PCBs
TAL Metals + Hg
Cyanide
TSS



5x 40 mL VOA vials, no headspace; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45μm
1 x 1 L HDPE; NaOH to pH > 12, 4°C
1 x 1 L HDPE; 4°C
500 mL

15 BOTTLES TOTAL

COMMENTS/OBSERVATIONS

Sampler Signature/Date

Lisa La Fortune / 06/19/2010

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>Rachel Kogar / CH2MHII</u>	Station ID:	<u>307B</u>				
Subcontractor/Crew:	<u>Kathy / HDR</u> <u>McH / HDR</u>	Time:	<u>1031</u>				
		Water Depth:	<u>6.1' 35"</u>				
		Tide:	<u>Low</u>				
		Weather:	<u>Sunny, some clouds</u>				
Surface Water Sample ID:	<u>GC-SW-307B-0.5-Dw</u>	Sample Depth (below surface)	<u>0.5</u> ft				
Wet or Dry Weather Event:	<u>Dry</u>	Sample Time:	<u>1037</u>				
Number of Sampling Attempts:	<u>31</u>						
Problems During Collection:	<u>None</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	<u>NONE</u>						
DUP	MS/MSD						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
<u>5.31</u>	<u>6.89</u>	<u>20.76</u>	<u>23.0</u>	<u>36.5</u>	<u>88</u>	<u>52</u>	
Floating Debris (describe):	<u>yes, crassie, dead fly,</u>						
Water Color:	<u>clear</u>						
Clarity:	<u>clear</u>						
Turbidity:	<u>sight</u>						
Sheen:	<u>yes moderate</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>	<u>5x 40 mL VOA vials, no headspace; 4°C</u>					
TCL SVOCs	<input checked="" type="checkbox"/>	<u>2 x 1 L amber glass; 4°C</u>					
TCL Pesticides	<input checked="" type="checkbox"/>	<u>2 x 1 L amber glass; 4°C</u>					
TCL PCBs	<input checked="" type="checkbox"/>	<u>2 x 1 L amber glass; 4°C</u>					
TAL Metals + Hg	<input checked="" type="checkbox"/>	<u>2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45 μm</u>					
Cyanide	<input checked="" type="checkbox"/>	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>					
TSS	<input checked="" type="checkbox"/>	<u>1 x 1 L HDPE; 4°C 500 mL</u>					
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<u>E. Judd 6/19/10</u>						

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>Rachel Kope /CHam blu</u>		Station ID:	<u>308A</u>			
Subcontractor/Crew:	<u>Kathy /HDR</u> <u>mcR /HDR</u>		Time:	<u>1057</u>			
		Water Depth:	<u>8' 1"</u>				
		Tide:	<u>Low</u>				
		Weather:	<u>Sunny, no clouds.</u>				
Surface Water Sample ID:	<u>GC-SW-308A-0.5-DW</u>		Sample Depth (below surface)	<u>0.5</u>	ft		
Wet or Dry Weather Event:	<u>Dry</u>		Sample Time:	<u>1106</u>			
Number of Sampling Attempts:	<u>29</u>						
Problems During Collection:	<u>None</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	<u>NONE</u>						
	DUP						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
<u>4.93</u>	<u>6.93</u>	<u>21.73</u>	<u>4.93</u>	<u>37.5</u>	<u>6.7</u>	<u>94</u>	
			<u>23.7</u>				
Floating Debris (describe):	<u>None.</u>						
Water Color:	<u>Clear</u>						
Clarity:	<u>clear</u>						
Turbidity:	<u>Very trace cloudy</u>						
Sheen:	<u>None</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<u>5</u> 3x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	<u>2</u> x 1 L amber glass; 4°C						
TCL Pesticides	<u>2</u> x 1 L amber glass; 4°C						
TCL PCBs	<u>2</u> x 1 L amber glass; 4°C						
TAL Metals + Hg	<u>2</u> x 1 L HDPE; HNO ₃ to pH < 2, 4°C + Filtered 0.45um						
Cyanide	<u>1</u> x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	<u>1</u> x 1 L HDPE; 4°C						
	<u>soil</u>						
COMMENTS/OBSERVATIONS							
<u>directly out from stairs between steps and old Rustic fence</u>							
Sampler Signature/Date	<u>J. Judd</u> <u>6/19/10</u>						

Reviewed by Andy Judd Date 6-28-10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>Rachel Kopecky / CH2M HILL</u>		Station ID:	<u>308B</u>			
Subcontractor/Crew:	<u>Kathy / HDR</u>		Time:	<u>11:27</u>			
			Water Depth:	<u>7' 25"</u>			
			Tide:	<u>Low to MF</u>			
			Weather:	<u>Sunny, No clouds</u>			
Surface Water Sample ID:	<u>GC-SW-308B-0.5-DW</u>		Sample Depth (below surface)	<u>0.5</u>	ft Sample Time: <u>11:34</u>		
Wet or Dry Weather Event:	<u>Dry</u>						
Number of Sampling Attempts:	<u>1/2</u>						
Problems During Collection:	<u>None</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	<u>NONE</u>						
	DUP	, MS/MSD					
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
<u>8.72</u>	<u>7.18</u>	<u>23.09</u>	<u>22.1</u>	<u>35.3</u>	<u>5.0</u>	<u>139</u>	
Floating Debris (describe):	<u>None</u>						
Water Color:	<u>Clear</u>						
Clarity:	<u>Clear</u>						
Turbidity:	<u>Very trace</u>						
Sheen:	<u>None</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<u>/</u>	<u>5x 40 mL VOA vials, no headspace; 4°C</u>					
TCL SVOCs	<u>/</u>	<u>2 x 1 L amber glass; 4°C</u>					
TCL Pesticides	<u>/</u>	<u>2 x 1 L amber glass; 4°C</u>					
TCL PCBs	<u>/</u>	<u>2 x 1 L amber glass; 4°C</u>					
TAL Metals + Hg	<u>/</u>	<u>2.1 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45μm</u>					
Cyanide	<u>/</u>	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>					
TSS	<u>/</u>	<u>1 x 1 L HDPE; 4°C 500 mL</u>					
COMMENTS/OBSERVATIONS							
<u>Location between South end of canoe launch and bulkhead.</u>							
Sampler Signature/Date	<u>BK</u>						<u>6/19/10</u>

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	LISA LA FORTUNE /CH2M	Station ID:	SW309
Subcontractor/Crew:	MATT MARTIN BENJAMIN WOODS	Time:	10:30
		Water Depth:	11.52 ft
		Tide:	LOW TIDE
		Weather:	Mid 70's SUNNY BREEZY
Surface Water Sample ID:	GC-SW309-0.5-DJ	Sample Depth (below surface)	0.5 ft
Wet or Dry Weather Event:	DRY EVENT	Sample Time:	10:35

Number of Sampling Attempts: ONE

Problems During Collection: NONE

QC SAMPLE DATA

QA/QC Sample IDs:

NONE DUP No , MS/MSD NO

SURFACE WATER DATA & CONDITIONS

DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
4.75	7.29	20.66	2.32	38.1	2.5	62	

Floating Debris (describe): NONE

Water Color: CLEAR

Clarity: YES

Turbidity: NONE DISPERSED

Sheen: NONE

Sample Analytical Parameters:

TCL VOCs
TCL SVOCs
TCL Pesticides
TCL PCBs
TAL Metals + Hg
Cyanide
TSS



Bottleware/Preservation:

6 x 40 mL VOA vials, no headspace; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45μm
1 x 1 L HDPE; NaOH to pH > 12, 4°C
1 x 1 L HDPE; 4°C
500 mL

15 BOTTLES TOTAL

COMMENTS/OBSERVATIONS

Sampler Signature/Date

Lisa La Fortune / 06/19/2010

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>LISA LA FORTUNE /CH2M</u>	Station ID:	<u>SL310</u>				
Subcontractor/Crew:	<u>MATT MARTIN</u> <u>BENJAMIN WOODS</u>	Time:	<u>11:00</u>				
		Water Depth:	<u>5.56</u>				
		Tide:	<u>HIGH TIDE</u>				
		Weather:	<u>HIGH 70'S SUNNY, CLEAR</u>				
Surface Water Sample ID:	<u>GC-SW310-0.5-DW</u>	Sample Depth (below surface)	<u>0.5 ft</u>				
Wet or Dry Weather Event:	<u>DRY EVENT</u>						
Number of Sampling Attempts:	<u>ONE</u>						
Problems During Collection:	<u>NONE</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:							
NONE	DUP	<u>NO</u>	, MS/MSD <u>NO</u>				
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
5.57	7.76	21.35	2.25	37.1	3.6	126	
Floating Debris (describe):	<u>NONE</u>						
Water Color:	<u>CLEAR</u>						
Clarity:	<u>YES</u>						
Turbidity:	<u>NONE OBSERVED</u>						
Sheen:	<u>NONE</u>						
Sample Analytical Parameters:	Bottles/Preservation:						
TCL VOCs	<u>5x 40 mL VOA vials, no headspace; 4°C</u>						
TCL SVOCs	<u>2 x 1 L amber glass; 4°C</u>						
TCL Pesticides	<u>2 x 1 L amber glass; 4°C</u>						
TCL PCBs	<u>2 x 1 L amber glass; 4°C</u>						
TAL Metals + Hg	<u>1 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um</u>						
Cyanide	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>						
TSS	<u>1 x 1 L HDPE; 4°C</u>						
COMMENTS/OBSERVATIONS							
<p style="text-align: center;">A large handwritten mark is present across the bottom of the comments section.</p>							
Sampler Signature/Date	<u>Lisa La Forte 06/19/2010</u>						

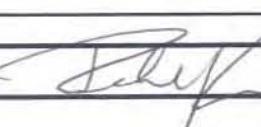
Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>Rachel Kupa / CH2m NY</u>	Station ID:	<u>311</u>					
Subcontractor/Crew:	<u>Kathy / HDR</u>	Time:	<u>1156</u>					
	<u>matP / IHDIC</u>	Water Depth:	<u>7' 35"</u>					
		Tide:	<u>Mid.</u>					
		Weather:						
Surface Water Sample ID:	<u>GC-Sw-311-0.5-Dw</u>	Sample Depth (below surface)	<u>0.5</u> ft					
Wet or Dry Weather Event:	<u>Dry</u>	Sample Time:	<u>1206</u>					
Number of Sampling Attempts:	<u>30</u>							
Problems During Collection:	<u>None</u>							
QC SAMPLE DATA								
QA/QC Sample IDs:	<u>(None)</u>							
	DUP	, MS/MSD						
SURFACE WATER DATA & CONDITIONS								
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments	
4.71	7.84	24.62	23.2	36.6	5-3	832		
Floating Debris (describe):	<u>organics, plastic wrappes, colo cen.</u>							
Water Color:	<u>clear</u>							
Clarity:	<u>clear</u>							
Turbidity:	<u>Very trace</u>							
Sheen:	<u>Moderate Sheen.</u>							
Sample Analytical Parameters:	Bottleware/Preservation:							
TCL VOCs	<input checked="" type="checkbox"/>	<u>5x 40 mL VOA vials, no headspace; 4°C</u>						
TCL SVOCs	<input checked="" type="checkbox"/>	<u>2 x 1 L amber glass; 4°C</u>						
TCL Pesticides	<input checked="" type="checkbox"/>	<u>2 x 1 L amber glass; 4°C</u>						
TCL PCBs	<input checked="" type="checkbox"/>	<u>2 x 1 L amber glass; 4°C</u>						
TAL Metals + Hg	<input checked="" type="checkbox"/>	<u>2x 1 L HDPE; HNO3 to pH < 2, 4°C</u>						
Cyanide	<input checked="" type="checkbox"/>	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>						
TSS	<input checked="" type="checkbox"/>	<u>1 x 1 L HDPE; 4°C</u>						
		<u>+ Filtered 0.45um</u>						
		<u>500 mL</u>						
COMMENTS/OBSERVATIONS								
Sampler Signature/Date	<u>Judd</u> <u>6/19/10</u>							

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>Rachel Kuper /CHam HV</u>		Station ID:	312		
Subcontractor/Crew:	<u>Kathy /HDR</u> <u>Matt /HDR</u>		Time:	1308		
		Water Depth:	10' 1"			
		Tide:	MID Tide			
		Weather:	Sunny, little clouds			
Surface Water Sample ID:	GC-Sw-312-0.5-DW		Sample Depth (below surface)	0.5	ft	
Wet or Dry Weather Event:	Dry		Sample Time:	1314		
Number of Sampling Attempts:	C3					
Problems During Collection:						
QC SAMPLE DATA						
QA/QC Sample IDs:	D-0619-010, MS/MSD 1316					
NONE	DUP					
SURFACE WATER DATA & CONDITIONS						
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	Comments
4.47	7.34	23.21	23.5	27.2	3.5	236
Floating Debris (describe):	None					
Water Color:	Clear					
Clarity:	Clear					
Turbidity:	Very trace					
Sheen:	None					
Sample Analytical Parameters:	Bottleware/Preservation:					
TCL VOCs	5 x 40 mL VOA vials, no headspace; 4°C					
TCL SVOCs	2 x 1 L amber glass; 4°C					
TCL Pesticides	2 x 1 L amber glass; 4°C					
TCL PCBs	2 x 1 L amber glass; 4°C					
TAL Metals + Hg	2 x 1 L HDPE; HNO ₃ to pH < 2, 4°C + Filtered 0.45 μm					
Cyanide	1 x 1 L HDPE; NaOH to pH > 12, 4°C					
TSS	1 x 1 L HDPE; 4°C 500 mL					
COMMENTS/OBSERVATIONS						
Sampler Signature/Date	 6/19/10					

Reviewed by Andy Judd Date 6-28-10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>LISA LA FORTUNE / CHAM</u>		Station ID:	<u>SW 313</u>			
Subcontractor/Crew:	<u>NATT MARTIN</u> <u>BENJAMIN WOODS</u>		Time:	<u>1343</u>			
			Water Depth:	<u>15.45 ft</u>			
			Tide:	<u>HIGH TIDE</u>			
			Weather:	<u>HIGH 80's SUNNY, HOT</u>			
Surface Water Sample ID:	<u>BC-SW313-05-DW</u>		Sample Depth (below surface)	<u>0.5</u>	Sample Time: <u>1345</u>		
Wet or Dry Weather Event:	<u>DRY WEATHER</u>						
Number of Sampling Attempts:	<u>ONE ; MENISCUS DIFFICULT TO FORM ON VDAS.</u>						
Problems During Collection:	<u>NONE . GAS LINE NOTED NEAR BY. DO NOT ANCHOR SIGN . TIED OFF BOAT TO CONCRETE WALL STAKE .</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	<u>NONE</u>						
	DUP	<u>NONE</u>	MS/MSD	<u>NONE</u>			
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
3.81	7.99	24.75	2.24	36.8	1.6	169	<u>SMALL LIVE FISH</u>
Floating Debris (describe):	<u>ALGAE , PAPER , DEAD FISH</u>						
Water Color:	<u>CLEAR . BUBBLES</u>						
Clarity:	<u>YES</u>						
Turbidity:	<u>NONE OBSERVED</u>						
Sheen:	<u>YES</u>						
Sample Analytical Parameters:	Bottleware/Preservation:					<u>15 BOTTLES TOTAL</u>	
TCL VOCs	<u>5x 40 mL VOA vials, no headspace; 4°C</u>						
TCL SVOCs	<u>2 x 1 L amber glass; 4°C</u>						
TCL Pesticides	<u>2 x 1 L amber glass; 4°C</u>						
TCL PCBs	<u>2 x 1 L amber glass; 4°C</u>						
TAL Metals + Hg	<u>2 x 1 L HDPE; HNO3 to pH < 2, 4°C</u>					<u>+ Filtered 0.45μm</u>	
Cyanide	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>						
TSS	<u>1 x 1 L HDPE; 4°C</u>					<u>500 mL</u>	
COMMENTS/OBSERVATIONS							
<p><i>[Handwritten notes and signatures follow]</i></p> <p><i>[Handwritten signature over the comments section]</i></p> <p><i>[Handwritten date over the comments section]</i></p>							
Sampler Signature/Date	<u>Lisa La Fortune / 06/19/2010</u>						

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>NSA LA FORTUNE/CH2M</u>	Station ID:	<u>SW 314</u>				
Subcontractor/Crew:	<u>MATT MARTIN</u> <u>BENJAMIN WOODS</u>	Time:	<u>12:58</u>				
		Water Depth:	<u>6.39 ft</u>				
		Tide:	<u>HIGH TIDE</u>				
		Weather:	<u>LOW 80'S SUNNY HOT</u>				
Surface Water Sample ID:	<u>GC-SW314-0.5-DW</u>	Sample Depth (below surface)	<u>0.5 ft</u>				
Wet or Dry Weather Event:	<u>DRY WEATHER</u>						
Number of Sampling Attempts:	<u>ONE</u>						
Problems During Collection:	<u>NONE</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE DUP <u>NONE</u> , MS/MSD <u>NONE</u>						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
3.07	7.92	21.84	2.23	37.1	2.0	156	
Floating Debris (describe):	<u>WEBBED FILM</u>						
Water Color:	<u>CLEAR</u>						
Clarity:	<u>YES</u>						
Turbidity:	<u>NONE OBSERVED</u>						
Sheen:	<u>YES</u>						
Sample Analytical Parameters:	Bottles/Preservation:						
TCL VOCs	<u>✓</u>						
TCL SVOCs	<u>✓</u>						
TCL Pesticides	<u>✓</u>						
TCL PCBs	<u>✓</u>						
TAL Metals + Hg	<u>✓</u>						
Cyanide	<u>✓</u>						
TSS	<u>✓</u>						
	<u>5x 40 mL VOA vials, no headspace; 4°C</u>						
	<u>2 x 1 L amber glass; 4°C</u>						
	<u>2 x 1 L amber glass; 4°C</u>						
	<u>2 x 1 L amber glass; 4°C</u>						
	<u>2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um</u>						
	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>						
	<u>1 x 1 L HDPE; 4°C</u>						
	<u>500 mL</u>						
COMMENTS/OBSERVATIONS							
<u>SMALL FISH NEMOBY SAMPLING LOCATION</u>							
<u>Handwritten notes and sketches</u>							
Sampler Signature/Date	<u>Lisa La Forte 106/19/2010</u>						

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>LISA LA FORTUNE ICH2M</u>		Station ID:	<u>SW 315</u>			
Subcontractor/Crew:	<u>MATT MARTIN</u> <u>BENJAMIN WOODS</u>		Time:	<u>15:07</u>			
			Water Depth:	<u>15.88 ft.</u>			
			Tide:	<u>HIGH</u>			
			Weather:	<u>HIGH 80's SUNNY & CLEAR</u>			
Surface Water Sample ID:	<u>G-C-SW 315-0.5-DW</u>		Sample Depth (below surface)	<u>0.5</u>	ft		
Wet or Dry Weather Event:	<u>DRY WEATHER</u>		Sample Time:	<u>15:10</u>			
Number of Sampling Attempts:	<u>ONE</u>						
Problems During Collection:	<u>NONE</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	None DUP <u>YES (CLP)</u> , MS/MSD <u>YES</u>						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
3.80	7.88	22.34	2.23	36.8	1.3	183	<u>MENISUS HARD TO FORM.</u>
Floating Debris (describe):	<u>BOTTLES (PLASTIC), STYROFOAM CUPS, SHEE, BASKETBALL</u>						
Water Color:	<u>CLEAR</u>						
Clarity:	<u>YES</u>						
Turbidity:	<u>LOW</u>						
Sheen:	<u>YES</u>						
Sample Analytical Parameters:	Bottles/Preservation:						
TCL VOCs	<u>5x 40 mL VOA vials, no headspace; 4°C</u>						
TCL SVOCs	<u>2 x 1 L amber glass; 4°C</u>						
TCL Pesticides	<u>2 x 1 L amber glass; 4°C</u>						
TCL PCBs	<u>2 x 1 L amber glass; 4°C</u>						
TAL Metals + Hg	<u>2 x 1 L HDPE; HNO3 to pH < 2, 4°C</u>						
Cyanide	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>						
TSS	<u>1 x 1 L HDPE; 4°C 500 mL</u>						
	<u>15 BOTTLES TOTAL 11 BOTTLED MS 14 BOTTLES MSD TSS WAS NOT COLLECTED FOR SW 315 + Filtered 0.45um</u>						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<u>Andy Judd 106/19/2010</u>						

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:

Rachel Kopac / CHam Hill

Station ID:

316

Subcontractor/Crew:

Bathy / HDR
MCH / HDR

Time:

1345

Water Depth:

6' 10"

Tide:

mid

Weather:

Sunny, little clouds

Sample Depth

(below
surface)

0.5

Sample

Time:

1354

Surface Water Sample ID:

GC-SW-316-0.5-DW

Wet or Dry Weather Event:

Dry
64

Number of Sampling Attempts:

Problems During Collection:

QC SAMPLE DATA

QA/QC Sample IDs:

NONE

DUP D-06192010-03, MS/MSD

13156

SURFACE WATER DATA & CONDITIONS

DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
4.20	7.27	22.87	23.4	37.0	4.6	233	

Floating Debris (describe): organic matter, plastic bottle, algae floating

Water Color: Clear

Clarity: Clear

Turbidity: Very trace

Sheen: Moderate

Sample Analytical Parameters:

TCL VOCs	<input checked="" type="checkbox"/>
TCL SVOCs	<input checked="" type="checkbox"/>
TCL Pesticides	<input checked="" type="checkbox"/>
TCL PCBs	<input checked="" type="checkbox"/>
TAL Metals + Hg	<input checked="" type="checkbox"/>
Cyanide	<input checked="" type="checkbox"/>
TSS	<input checked="" type="checkbox"/>

Bottleware/Preservation:

- 3 x 40 mL VOA vials, no headspace; 4°C
 2 x 1 L amber glass; 4°C
 2 x 1 L amber glass; 4°C
 2 x 1 L amber glass; 4°C
 2 x 1 L HDPE; HNO₃ to pH < 2, 4°C + Filtered 0.45 μm
 1 x 1 L HDPE; NaOH to pH > 12, 4°C
 1 x 1 L HDPE; 4°C
300 mL

COMMENTS/OBSERVATIONS

Sampler Signature/Date:

Judd 6/19/10

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>LISA LA FORTUNE /CH2M</u>	Station ID:	<u>SW317</u>				
Subcontractor/Crew:	<u>MATT MARTIN</u> <u>BENJAMIN WOODS</u>	Time:	<u>1630</u>				
		Water Depth:	<u>8.4 ft</u>				
		Tide:	<u>HIGH TIDE</u>				
		Weather:	<u>HIGH 80's, SUNNY & CLEAR</u>				
Surface Water Sample ID:	<u>GC-SW317-0.5-DL</u>	Sample Depth (below surface)	<u>0.5 ft</u>				
Wet or Dry Weather Event:	<u>DRY WEATHER</u>						
Number of Sampling Attempts:	<u>ONE</u>						
Problems During Collection:	<u>NONE</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE DUP <u>NO</u> , MS/MSD <u>NO</u>						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
3.72	7.95	22.87	2.28	37.5	2.0	<u>225</u> 191 (LLF)	
Floating Debris (describe):	<u>PLASTIC BOTTLES</u>						
Water Color:	<u>CLEAR</u>						
Clarity:	<u>YES</u>						
Turbidity:	<u>NONE OBSERVED</u>						
Sheen:	<u>YES</u>						
Sample Analytical Parameters:	Bottleware/Preservation: <u>5x 40 mL VOA vials, no headspace; 4°C</u> <u>2x 1 L amber glass; 4°C</u> <u>2x 1 L amber glass; 4°C</u> <u>2x 1 L amber glass; 4°C</u> <u>1x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45 μm</u> <u>1x 1 L HDPE; NaOH to pH > 12, 4°C</u> <u>1x 1 L HDPE; 4°C 500 ml</u> COMMENTS/OBSERVATIONS						
TCL VOCs	<input checked="" type="checkbox"/>						
TCL SVOCs	<input checked="" type="checkbox"/>						
TCL Pesticides	<input checked="" type="checkbox"/>						
TCL PCBs	<input checked="" type="checkbox"/>						
TAL Metals + Hg	<input checked="" type="checkbox"/>						
Cyanide	<input checked="" type="checkbox"/>						
TSS	<input checked="" type="checkbox"/>						
Sampler Signature/Date	<u>Lisa La Forte /06/19/2010</u>						

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors: Rachel Hooper / Chem 101

Station ID: 318

Subcontractor/Crew: Kathy / HDR
Matt / HPR

Water Depth: 4' 8"

Time: 1500

Water Depth: 4' 8"

Tide: High

Weather: Sunny, no clouds.

Surface Water Sample ID: GC-SW-318-OJ-DW

Sample Depth (below) **Sample** (below)

Wet or Dry Weather Event: Dry

surface) 6.5 ft Time: 1507

Number of Sampling Attempts: 10

Digitized by srujanika@gmail.com

00 SAMPLE DATA

QA/QC Sample IDs:

DUP 5-06192010-04, MS/MSD
15-09

SUBSURFACE WATER DATA & CONDITIONS

Floating Debris (describe): Little floating algae, aluminum cans, plastic bags.

Water Color: *Clear*

Clarity: *clear*

Turbidity: Very trace

Sheen: None

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs
TCL SVOCs
TCL Pesticides
TCL PCBs
TAL Metals + Hg
Cyanide
TSS

- ✓ ✓ ✓ ✓ ✓ ✓ ✓

5 3 x 40 mL VOA vials, no headspace; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
2 1 x 1 L HDPE; HNO₃ to pH < 2, 4°C + Filtered 0.45 μm
1 x 1 L HDPE; NaOH to pH > 12, 4°C
1 x 1 L HDPE; 4°C

COMMENTS/OBSERVATIONS

Sampler Signature/Date

Dhlf 6/19/10

Reviewed by Andy Tudd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>Rachel Korec/CL2m 1611</u>	Station ID:	<u>319</u>				
Subcontractor/Crew:	<u>Kathy HDR</u>	Time:	<u>1842</u>				
	<u>Matt HDR</u>	Water Depth:	<u>16' 45"</u>				
		Tide:	<u>High</u>				
		Weather:	<u>Cloudy</u>				
Surface Water Sample ID:	<u>GC-SW-319-0.5-Dw</u>	Sample Depth (below surface)	<u>0.5 ft</u>				
Wet or Dry Weather Event:	<u>Dry</u>	Sample Time:	<u>1848</u>				
Number of Sampling Attempts:	<u>J29</u>						
Problems During Collection:	<u>None</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	<input checked="" type="radio"/> NONE DUP _____, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
<u>4.50</u>	<u>7.30</u>	<u>22.11</u>	<u>23.3</u>	<u>36.9</u>	<u>5.3</u>	<u>231</u>	
Floating Debris (describe):	<u>organics,</u>						
Water Color:	<u>clear</u>						
Clarity:	<u>clear</u>						
Turbidity:	<u>very trace</u>						
Sheen:	<u>Slight Sheen</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>						
TCL SVOCs	<input checked="" type="checkbox"/>						
TCL Pesticides	<input checked="" type="checkbox"/>						
TCL PCBs	<input checked="" type="checkbox"/>						
TAL Metals + Hg	<input checked="" type="checkbox"/>						
Cyanide	<input checked="" type="checkbox"/>						
TSS	<input checked="" type="checkbox"/>						
5x 40 mL VOA vials, no headspace; 4°C 2 x 1 L amber glass; 4°C 2 x 1 L amber glass; 4°C 2 x 1 L amber glass; 4°C 2-1 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45 μm 1 x 1 L HDPE; NaOH to pH > 12, 4°C 1 x 1 L HDPE; 4°C <u>500 ml</u>							
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<u>Rachel 6/19/10</u>						

Reviewed by Andy Judd Date 6/28/10

6/28/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<i>Rachel Kepes / CTH 2m 11:11</i>	Station ID:	<i>320</i>				
Subcontractor/Crew:	<i>Kathy / HDR Matt / HDR</i>	Time:	<i>1931</i>				
		Water Depth:	<i>11' 3"</i>				
		Tide:	<i>mid</i>				
		Weather:	<i>Sunny, no clouds</i>				
Surface Water Sample ID:	<i>GC-SCW-320-0.5-DW</i>	Sample Depth (below surface)	<i>0.5 ft</i>				
Wet or Dry Weather Event:	<i>Dry</i>						
Number of Sampling Attempts:	<i>29</i>						
Problems During Collection:	<i>None</i>						
QC SAMPLE DATA							
QA/QC Sample IDs:	<i>NONE</i>						
DUP	MS/MSD						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
4.22	7.29	22.03	23.0	36.4	5.4	206	
Floating Debris (describe):	<i>None</i>						
Water Color:	<i>Clear</i>						
Clarity:	<i>Clear</i>						
Turbidity:	<i>Very trace</i>						
Sheen:	<i>None</i>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>	<i>5 x 40 mL VOA vials, no headspace; 4°C</i>					
TCL SVOCs	<input checked="" type="checkbox"/>	<i>2 x 1 L amber glass; 4°C</i>					
TCL Pesticides	<input checked="" type="checkbox"/>	<i>2 x 1 L amber glass; 4°C</i>					
TCL PCBs	<input checked="" type="checkbox"/>	<i>2 x 1 L amber glass; 4°C</i>					
TAL Metals + Hg	<input checked="" type="checkbox"/>	<i>2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45µm</i>					
Cyanide	<input checked="" type="checkbox"/>	<i>1 x 1 L HDPE; NaOH to pH > 12, 4°C</i>					
TSS	<input checked="" type="checkbox"/>	<i>1 x 1 L HDPE; 4°C <i>500mL</i></i>					
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<i>Ruth 6/19/20</i>						

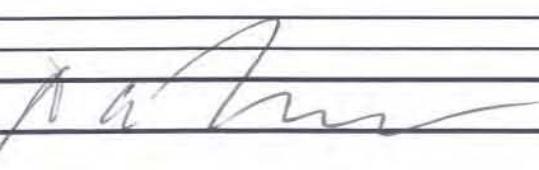
Reviewed by *Andy Judd* Date *6/28/10*

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	DAVE NEWTON CH2M HILL	Station ID:	321				
Subcontractor/Crew:	HDR Steve Niemi Nick Wood	Time:	10/0				
		Water Depth:	26.0				
		Tide:	High				
		Weather:	P. Sinking / 85°F				
Surface Water Sample ID:	GC-SW321-0.5-DW	Sample Depth (below surface)	0.5 ft				
Wet or Dry Weather Event:	DRY Weather	Sample Time:	1620				
Number of Sampling Attempts:	20						
Problems During Collection:	NONE						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE						
DUP	MS/MSD						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (°C)	Salinity (ppt) (mS/cm ³)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
4.42	7.31	20.88	2.36	37.4	2.6	173	
Floating Debris (describe):	NONE						
Water Color:	Clear						
Clarity:	Clear						
Turbidity:	2.6						
Sheen:	None Observed						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/> 5 x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	<input checked="" type="checkbox"/> 2 x 1 L amber glass; 4°C						
TCL Pesticides	<input checked="" type="checkbox"/> 2 x 1 L amber glass; 4°C						
TCL PCBs	<input checked="" type="checkbox"/> 2 x 1 L amber glass; 4°C						
TAL Metals + Hg	<input checked="" type="checkbox"/> 1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C + Filtered 0.45μm						
Cyanide	<input checked="" type="checkbox"/> 1 x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	<input checked="" type="checkbox"/> 1 x 1 L HDPE; 4°C 500 mL (DW)						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	D. R. Brown 6/19/10						

Reviewed by Andy Judd Date 6/28/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	DAVID NEWMAN		Station ID:	322				
Subcontractor/Crew:	HDR - Steve Nero (Capt.) - Nizlewood		Time:	15:55				
			Water Depth:	28.5 feet				
			Tide:	HIGH				
			Weather:	P-Cloudy / 85°F				
Surface Water Sample ID:	G-C-SW(322-05-PW)		Sample Depth (below surface)	0.5 ft				
Wet or Dry Weather Event:	DRY		Sample Time:	14:05				
Number of Sampling Attempts:	20							
Problems During Collection:	NONE							
QC SAMPLE DATA								
QA/QC Sample IDs:	NONE DUP _____, MS/MSD _____							
SURFACE WATER DATA & CONDITIONS								
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt) %	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments	
4.84	7.37	21.24	23.9	37.4	3.1	178		
Floating Debris (describe):	NONE							
Water Color:	Clear							
Clarity:	Clear							
Turbidity:	3.1							
Sheen:	No detected							
Sample Analytical Parameters:	Bottleware/Preservation:							
TCL VOCs	<input checked="" type="checkbox"/>	S 3x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TAL Metals + Hg	<input checked="" type="checkbox"/>	21 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um						
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C 500ml						
COMMENTS/OBSERVATIONS								
Sampler Signature/Date	 6/19/10							

Reviewed by Andy Judd Date 6/28/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	DAVID NEWMAN CH2MHILL		Station ID:	323	
Subcontractor/Crew:	GC-SW323-01 Steve Niemi/Nick Wood		Time:	1515	
			Water Depth:	30.2	
			Tide:	High	
			Weather:	P-Cloudy / 85°F	
Surface Water Sample ID:	GC-SW323-015-DW		Sample Depth (below surface)	0.5 ft	Sample Time:
Wet or Dry Weather Event:	Dry Weather Event				
Number of Sampling Attempts:	20				
Problems During Collection:	None				
QC SAMPLE DATA					
QA/QC Sample IDs:	NONE DUP _____, MS/MSD _____				
SURFACE WATER DATA & CONDITIONS					
DO (mg/L)	pH (SU)	Temp (°C)	Salinity (ppt) <i>✓</i>	Sp Cond (mS/cm ³)	Turbidity (NTU)
4.57	7.37	21.52	2.38	37.4	2.5 168
Floating Debris (describe):	None				
Water Color:	Clear				
Clarity:	Clear				
Turbidity:	2.5				
Sheen:	No Observed				
Sample Analytical Parameters:	Bottleware/Preservation: <i>(initials)</i>				
TCL VOCs	5 x 40 mL VOA vials, no headspace; 4°C				
TCL SVOCs	2 x 1 L amber glass; 4°C				
TCL Pesticides	2 x 1 L amber glass; 4°C				
TCL PCBs	2 x 1 L amber glass; 4°C				
TAL Metals + Hg	2 x 1 L HDPE; HNO3 to pH < 2, 4°C				
Cyanide	1 x 1 L HDPE; NaOH to pH > 12, 4°C				
TSS	1 x 1 L HDPE; 4°C <i>500ml</i> <i>500ml</i>				
COMMENTS/OBSERVATIONS					
Sampler Signature/Date	<i>A. n. Judd</i> / 6/19/10				

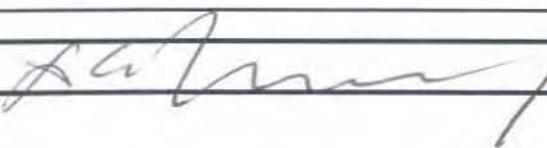
Reviewed by Andy Judd Date 6/28/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	DAVID NEWMAN CTI2M HILL		Station ID:	324		
Subcontractor/Crew:	HDR ~ Steve Niemi ~ NICK Wood		Time:	15:32		
			Water Depth:	19.6		
			Tide:	High		
			Weather:	P-Sunny / 85°F		
Surface Water Sample ID:	GC-SW324-0.5-DW		Sample Depth (below surface)	0.5 ft	Sample Time: 1545	
Wet or Dry Weather Event:	DRY WEATHER					
Number of Sampling Attempts:	20					
Problems During Collection:	NONE					
QC SAMPLE DATA						
QA/QC Sample IDs:	None					
DUP	MS/MSD					
SURFACE WATER DATA & CONDITIONS						
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)%	Sp Cond (mS/cm ³)	Turbidity (NTU)	
5.51	7.43	22.34	2.38	37.6	2.3	
					174	
Floating Debris (describe):	NONE					
Water Color:	(Clear)					
Clarity:	(Clear)					
Turbidity:	Clear (2.3)					
Sheen:	NONE DETECTED					
Sample Analytical Parameters:	Bottleware/Preservation:					
TCL VOCs	<input checked="" type="checkbox"/>	1 x 40 mL VOA vials, no headspace; 4°C				
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C				
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C				
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C				
TAL Metals + Hg	<input checked="" type="checkbox"/>	2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um				
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C				
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C				
COMMENTS/OBSERVATIONS						
Sampler Signature/Date	P.C. Brown / 6/19/10					

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	DAVID NEWMAN (Chmura)	Station ID:	325				
Subcontractor/Crew:	HDR - Steve Niero (Capt) - NICK WOOD	Time:	1500				
		Water Depth:	20.3 feet				
		Tide:	High				
		Weather:	P. Cloudy / 82°F				
Surface Water Sample ID:	GC-SW 325-0.5-DW	Sample Depth (below surface)	0.5 ft				
Wet or Dry Weather Event:	DRY WEATHER						
Number of Sampling Attempts:	20						
Problems During Collection:	NONE						
QC SAMPLE DATA							
QA/QC Sample IDs:	<input checked="" type="checkbox"/> NONE DUP _____, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt) %	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
5.60	7.49	22.14	2.33	36.7	0.1	168	
Floating Debris (describe):	Seaweed						
Water Color:	Clear						
Clarity:	Clear						
Turbidity:	0.10						
Sheen:	No Observed						
Sample Analytical Parameters:	Bottles/Preservation: ✓ 5x 40 mL VOA vials, no headspace; 4°C ✓ 2 x 1 L amber glass; 4°C ✓ 2 x 1 L amber glass; 4°C ✓ 2 x 1 L amber glass; 4°C ✓ 2 x 1 L HDPE; HNO3 to pH < 2, 4°C + F: Filtered 0.45μm ✓ 1 x 1 L HDPE; NaOH to pH > 12, 4°C ✓ 1 x 1 L HDPE; 4°C						
TCL VOCs	<input checked="" type="checkbox"/>						
TCL SVOCs	<input checked="" type="checkbox"/>						
TCL Pesticides	<input checked="" type="checkbox"/>						
TCL PCBs	<input checked="" type="checkbox"/>						
TAL Metals + Hg	<input checked="" type="checkbox"/>						
Cyanide	<input checked="" type="checkbox"/>						
TSS	<input checked="" type="checkbox"/>						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	 David Newman / 6/19/10						

Reviewed by Andy Judd Date 6-28-10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>DAVID NEWMAN CIR2MILL</u>		Station ID:	<u>326</u>			
Subcontractor/Crew:	<u>HDR - Steve Mero (capt)</u> <u>- NICK Wood</u>		Time:	<u>1255</u>			
			Water Depth:	<u>36.1</u>			
			Tide:	<u>High</u>			
			Weather:	<u>P. Cloudy</u> 80°F			
Surface Water Sample ID:	<u>GC-SW326-0.5-BW</u>		Sample Depth (below surface)	<u>0.5 ft</u>			
Wet or Dry Weather Event:	<u>Dry Weather</u>		Sample Time:	<u>1300</u>			
Number of Sampling Attempts:	<u>20-40-60</u>						
Problems During Collection:	<u>None</u>						
QC SAMPLE DATA							
QA/QC SampleIDs:	<u>NONE</u> <u>DUP</u> <u>MS/MSD</u> <u>GC-SW326-0.5-SW</u>						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt) ¹	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
<u>5.94</u>	<u>7.46</u>	<u>21.58</u>	<u>2.36</u>	<u>37.3</u>	<u>1.2</u>	<u>165</u>	
Floating Debris (describe):	<u>None</u>						
Water Color:	<u>Clear</u>						
Clarity:	<u>Clear</u>						
Turbidity:	<u>1.2</u>						
Sheen:	<u>No observed</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<u>✓</u> 15 x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	<u>✓</u> 6 x 1 L amber glass; 4°C						
TCL Pesticides	<u>✓</u> 6 x 1 L amber glass; 4°C						
TCL PCBs	<u>✓</u> 6 x 1 L amber glass; 4°C						
TAL Metals + Hg	<u>✓</u> 1 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45μm						
Cyanide	<u>✓</u> 1 x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	<u>✓</u> 1 x 1 L HDPE; 4°C <u>500 ml</u>						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<u>A. A. Judd / 6/19/10</u>						

Reviewed by Andy Judd Date 6/28/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	DAVID NEWMAN (CZ2mhi) (cont)		Station ID:	327			
Subcontractor/Crew:	HDR - Steve Niemi - NICK WOOD		Time:	1325			
			Water Depth:	32.6			
			Tide:	High			
			Weather:	P. Cloudy / 50°F			
Surface Water Sample ID:	GC-SW 327-05	PW (below surface)	Sample Depth	6.5 ft			
Wet or Dry Weather Event:	Dry Event						
Number of Sampling Attempts:	29		Sample Time:	1335			
Problems During Collection:	None						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE DUP _____, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt) %	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
7.45	7.55	20.44	2.33	36.9	6.7	170	
Floating Debris (describe):	Seaweed, Wood debris						
Water Color:	Clear						
Clarity:	Clear						
Turbidity:	6 FT						
Sheen:	None observed						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	5 x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	2 x 1 L amber glass; 4°C						
TCL Pesticides	2 x 1 L amber glass; 4°C						
TCL PCBs	2 x 1 L amber glass; 4°C						
TAL Metals + Hg	1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C + Filtered 0.45μm						
Cyanide	1 x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	1 x 1 L HDPE, 4°C 500 mL (16 P)						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	X a. Brown / 6/19/10						

Reviewed by Andy Judd Date 6/28/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	DAVID NEWMAN 0122mHLL		Station ID:	GC-SW328-0.S-DW			
Subcontractor/Crew:	HDR - Steven Nieto (capt.) Nick Wood		Time:	1000			
			Water Depth:	29.8 ft.			
			Tide:	Low			
			Weather:	P- Cloudy / 75° / Low Wind			
Surface Water Sample ID:	GC-SW328-0.S-DW		Sample Depth (below surface)	0.5 ft	Sample Time: 1015		
Wet or Dry Weather Event:	Dry Weather						
Number of Sampling Attempts:	2/2						
Problems During Collection:	None						
QC SAMPLE DATA							
QA/QC Sample IDs:	<input checked="" type="checkbox"/> NONE DUP _____ , MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt) %	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
5.62	7.41	20.23	2.39	37.8	3.0	174	
Floating Debris (describe):	Seaweed						
Water Color:	Clear						
Clarity:	Clear						
Turbidity:	3.0						
Sheen:	None					Deflected	
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	5 x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	2 x 1 L amber glass; 4°C						
TCL Pesticides	2 x 1 L amber glass; 4°C						
TCL PCBs	2 x 1 L amber glass; 4°C						
TAL Metals + Hg	2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um						
Cyanide	1 x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	1 x 1 L HDPE; 4°C Seaweed						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	A. Judd / 6/19/10						

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	DAVID NEWMAN citizen Station ID: 329						
Subcontractor/Crew:	HDR - Steve Niem (capt) Time: 1135						
	Water Depth: 35.0						
	Tide: Low						
	Weather: P-Cloudy/ 50°F						
Surface Water Sample ID:	Sample Depth (below surface)	Sample Time: 1145					
Wet or Dry Weather Event:	Dry Weather						
Number of Sampling Attempts:	26						
Problems During Collection:	None						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE DUP ID-06192010-01, MS/MSD						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)%	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
5.73	7.46	20.46	2.37	37.5	6.6	170	
Floating Debris (describe):	None						
Water Color:	Clear						
Clarity:	Clean						
Turbidity:	6.6						
Sheen:	None detected						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>						
TCL SVOCs	<input checked="" type="checkbox"/>						
TCL Pesticides	<input checked="" type="checkbox"/>						
TCL PCBs	<input checked="" type="checkbox"/>						
TAL Metals + Hg	<input checked="" type="checkbox"/>						
Cyanide	<input checked="" type="checkbox"/>						
TSS	<input checked="" type="checkbox"/>						
<p><i>5 x 40 mL VOA vials, no headspace; 4°C</i></p> <p><i>2 x 1 L amber glass; 4°C</i></p> <p><i>2 x 1 L amber glass; 4°C</i></p> <p><i>2 x 1 L amber glass; 4°C</i></p> <p><i>2. 1x1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um</i></p> <p><i>1 x 1 L HDPE; NaOH to pH > 12, 4°C</i></p> <p><i>1 x 1 L HDPE; 4°C</i></p> <p><i>500 mL</i></p>							
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	Xathur / 6/19/2010						

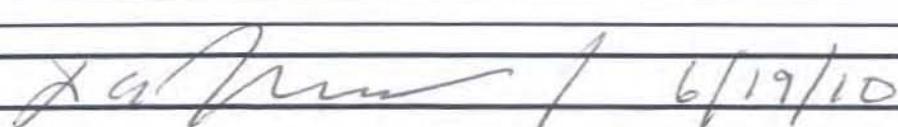
Reviewed by Andy Judd Date 6/28/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	DAVID NEWMAN CH24(HH)		Station ID:	330	
Subcontractor/Crew:	HDR - Steve Niven (Cap.) - NICK WOOD		Time:	1205	
			Water Depth:	27.6	
			Tide:	Low	
			Weather:	P. Cloudy / 80°F	
Surface Water Sample ID:	GC-SW330-0.5-DW		Sample Depth (below surface)	0.5	ft
Wet or Dry Weather Event:	DRY Weather		Sample Time:	1215	
Number of Sampling Attempts:	20				
Problems During Collection:	None				
QC SAMPLE DATA					
QA/QC SampleIDs:	<input checked="" type="checkbox"/> NONE <input type="checkbox"/> DUP _____, MS/MSD _____				
SURFACE WATER DATA & CONDITIONS					
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)
5.90	7.48	21.09	27.37	31.6	7.3
					168
Floating Debris (describe):	None				
Water Color:	Clear				
Clarity:	Cloudy				
Turbidity:	7.3				
Sheen:	None detected				
Sample Analytical Parameters:	Bottleware/Preservation:				
TCL VOCs	<input checked="" type="checkbox"/> 5 x 40 mL VOA vials, no headspace; 4°C				
TCL SVOCs	<input checked="" type="checkbox"/> 2 x 1 L amber glass; 4°C				
TCL Pesticides	<input checked="" type="checkbox"/> 2 x 1 L amber glass; 4°C				
TCL PCBs	<input checked="" type="checkbox"/> 2 x 1 L amber glass; 4°C				
TAL Metals + Hg	<input checked="" type="checkbox"/> 2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45 um				
Cyanide	<input checked="" type="checkbox"/> 1 x 1 L HDPE; NaOH to pH > 12, 4°C				
TSS	<input checked="" type="checkbox"/> 1 x 1 L HDPE; 4°C 500 mL (DW)				
COMMENTS/OBSERVATIONS					
Sampler Signature/Date	D. Newman / 6/19/10				

Reviewed by Andy Judd Date 6-28-10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	DAVID NEWMAN CH2MHILL		Station ID:	GC-SW331-0.5-DW			
Subcontractor/Crew:	HDR Steven Newell (Cap.) Nick Wood		Time:	0940 38 feet Low P. Sunny / 78°F			
Surface Water Sample ID:	GC-SW331-0.5-DW		Water Depth:	(below surface)	Sample Depth	Sample Time:	
Wet or Dry Weather Event:	Dry Weather		Tide:	0.5 ft	0940		
Number of Sampling Attempts:	26 attempts to collect volume						
Problems During Collection:							
QC SAMPLE DATA							
QA/QC-SampleIDs:	<input checked="" type="radio"/> NONE DUP _____, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
5.68	7.37	19.85	24.0%	38.0	7.6	172	
Floating Debris (describe):	some seaweed + wood pieces						
Water Color:	clear						
Clarity:	clear						
Turbidity:	7.6						
Sheen:	None detected						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>	5x 40 mL VOA vials, no headspace; 4°C					
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TAL Metals + Hg	<input checked="" type="checkbox"/>	2x1L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um					
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C					
TSS	<input checked="" type="checkbox"/>	1 x 1L HDPE; 4°C 300um					
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	 6/19/10						

Reviewed by Andy Judd Date 6/28/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	DAVID NEWMAN CH2mHill	Station ID:	GC-SW332-0.5-BW	(MM)
Subcontractor/Crew:	1st - Steven Niero (capt.) - Nick Wood	Time:	1035	
		Water Depth:	22.0	
		Tide:	Low	
		Weather:	P-Cloudy / 77°F	
Surface Water Sample ID:	GC-SW332-0.5-BW	Sample Depth (below surface)	0.5 ft	
Wet or Dry Weather Event:	Dry Weather	Sample Time:	1045	
Number of Sampling Attempts:	20			
Problems During Collection:	None - 1 VOA vial was broken			
QC SAMPLE DATA				
QA/QC Sample IDs:				
NONE	DUP	MS/MSD		

SURFACE WATER DATA & CONDITIONS

DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
5.37	7.39	20.23	2.33	36.9	10.6	174	

Floating Debris (describe):	Seaweed
Water Color:	Clear
Clarity:	Clear
Turbidity:	0.6
Sheen:	None

Sample Analytical Parameters:	Bottleware/Preservation:
TCL VOCs	4x 40 mL VOA vials, no headspace; 4°C
TCL SVOCs	2 x 1 L amber glass; 4°C
TCL Pesticides	2 x 1 L amber glass; 4°C
TCL PCBs	2 x 1 L amber glass; 4°C
TAL Metals + Hg	2 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45 um
Cyanide	1 x 1 L HDPE; NaOH to pH > 12, 4°C
TSS	1 x 1 L HDPE; 4°C 500 mL 0.45 um

COMMENTS/OBSERVATIONS

1 VOA VIAL WAS BROKEN PRIOR TO SAMPLING ONLY COLLECTED (4) VIALS

Sampler Signature/Date

Andy Judd / 6/19/10

Reviewed by Andy Judd Date 6/28/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

-DW

(mm)

Samplers/Inspectors: DAVID NEWMAN C12MHL Station ID: GC-SW 333-0.5-SW
 Subcontractor/Crew: HDR - Steven Nier (art) Time: 1015
- Nick Wood Water Depth: 24.0
 Tide: Low
 Weather: P-Cloudy, 77°F
 Sample Depth
 (below surface) 0.5 ft Sample Time: 1025

Surface Water Sample ID: GC-SW 333-0.5-DW

Wet or Dry Weather Event: Dry Weather

Number of Sampling Attempts: 20

Problems During Collection: None

QC SAMPLE DATA

QA/QC Sample IDs:

NONE

DUP _____, MS/MSD _____

SURFACE WATER DATA & CONDITIONS

DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt) ¹	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
5.40	7.36	19.79	23.5	37.2	10.4	175	

Floating Debris (describe): Seaweed, some wood

Water Color: Clear

Clarity: Clear

Turbidity: 10.4

Sheen: None detected

Sample Analytical Parameters:

<input checked="" type="checkbox"/>	TCL VOCs
<input checked="" type="checkbox"/>	TCL SVOCs
<input checked="" type="checkbox"/>	TCL Pesticides
<input checked="" type="checkbox"/>	TCL PCBs
<input checked="" type="checkbox"/>	TAL Metals + Hg
<input checked="" type="checkbox"/>	Cyanide
<input checked="" type="checkbox"/>	TSS

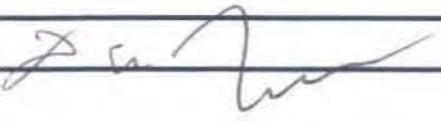
Bottleware/Preservation:
 1 5 x 40 mL VOA vials, no headspace; 4°C
 2 x 1 L amber glass; 4°C
 2 x 1 L amber glass; 4°C
 2 x 1 L amber glass; 4°C
 2 1 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um
 1 x 1 L HDPE; NaOH to pH > 12, 4°C
 1 x 1 L HDPE; 4°C
 500 mL on

COMMENTS/OBSERVATIONS

Sampler Signature/Date A.J. Judd / 6/19/10

Reviewed by Andy Judd Date 6/28/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	DAVID NEWMAN (H2MILL)		Station ID:	GC-SW334-0.5-DW		Time:	11:15	(MM)
Subcontractor/Crew:	HDR - Steve Niero (part) - Nick Wood		Water Depth:	4 ft. 0		Tide:	Low	
Surface Water Sample ID:	GC-SW334-0.5-DW		Weather:	P-Cloudy / 80°F		Sample Depth (below surface):	0.5 ft	Sample Time: 1/25
Wet or Dry Weather Event:	DRY Weather							
Number of Sampling Attempts:	1							
Problems During Collection:	None							
QC SAMPLE DATA								
QA/QC Sample IDs:	<input checked="" type="checkbox"/> NONE DUP _____, MS/MSD _____							
SURFACE WATER DATA & CONDITIONS								
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt) ¹⁶	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments	
5.84	7.40	20.55	2.16	34.4	9.5	166		
Floating Debris (describe):	None							
Water Color:	Clear							
Clarity:	Clear							
Turbidity:	9.5							
Sheen:	None Detected							
Sample Analytical Parameters:	Bottles/ware/Preservation: 1. 3x 40 mL VOA vials, no headspace; 4°C 2 x 1 L amber glass; 4°C 2 x 1 L amber glass; 4°C 2 x 1 L amber glass; 4°C 2. 1x1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um 1x1 L HDPE; NaOH to pH > 12, 4°C 1x1 L HDPE; 4°C 500ml 60°							
COMMENTS/OBSERVATIONS								
Sampler Signature/Date	 6/19/10							

Reviewed by Andy Tudd Date 6/28/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>DAVID NEWMAN</u>		Station ID:	<u>GC-SW335-0.5-DW</u>			
	<u>CH2M HILL</u>		Time:	<u>0910</u>			
Subcontractor/Crew:	<u>HDR - Steven Nierod (Capt)</u>		Water Depth:	<u>15 feet</u>			
	<u>NICK WOOD</u>		Tide:	<u>Low</u>			
			Weather:	<u>P. Cloudy / 75°F / Low Wind</u>			
Surface Water Sample ID:	<u>GC-SW335-0.5-DW</u>		Sample Depth (below surface)	<u>0.5</u>	ft	Sample Time:	<u>920</u>
Wet or Dry Weather Event:	<u>Dry Weather Event 0.5 ft.</u>						
Number of Sampling Attempts:	<u>20 drops of bomb Sampler</u>						
Problems During Collection:	<u>None</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	<input checked="" type="radio"/> <u>NONE</u> DUP _____, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt) %	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
<u>5.89</u>	<u>7.32</u>	<u>19.79</u>	<u>2.41%</u>	<u>37.7</u>	<u>7.2</u>	<u>213</u>	
Floating Debris (describe):	<u>None detected except small pieces floating wood</u>						
Water Color:	<u>Clear</u>						
Clarity:	<u>Clear</u>						
Turbidity:	<u>7.2 NTU</u>						
Sheen:	<u>None detected</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/> <u>5 x 40 mL VOA vials, no headspace; 4°C</u>						
TCL SVOCs	<input checked="" type="checkbox"/> <u>2 x 1 L amber glass; 4°C</u>						
TCL Pesticides	<input checked="" type="checkbox"/> <u>2 x 1 L amber glass; 4°C</u>						
TCL PCBs	<input checked="" type="checkbox"/> <u>2 x 1 L amber glass; 4°C</u>						
TAL Metals + Hg	<input checked="" type="checkbox"/> <u>2 x 1 L HDPE; HNO3 to pH < 2, 4°C</u> + Filtered 0.45um						
Cyanide	<input checked="" type="checkbox"/> <u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>						
TSS	<input checked="" type="checkbox"/> <u>1 x 1 L HDPE; 4°C</u> <u>50ml</u>						
COMMENTS/OBSERVATIONS							
<u>best we could</u> Slight drift but stayed on point as							
Sampler Signature/Date	<u>A - A. Newman</u> <u>6/19/10</u>						

Reviewed by Andy Judd Date 6/28/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	DAVID NEWMAN CH2MHILL		Station ID:	336			
Subcontractor/Crew:	HDR - Steve Njoto (Capt) - Nick Wood		Time:	1348			
			Water Depth:	24.5			
			Tide:	High			
			Weather:	P. Cloudy / 80°F			
Surface Water Sample ID:	GC-SW 336-0.5	DW (DW)	Sample Depth (below surface)	0.5 ft			
Wet or Dry Weather Event:	DRY Weather						
Number of Sampling Attempts:	20						
Problems During Collection:	None						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE						
	DUP	, MS/MSD _____					
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)%	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
5.78	7.5	20.01	2.40	37.9	10.8	171	
Floating Debris (describe):	None						
Water Color:	Clear						
Clarity:	Clear						
Turbidity:	0.8						
Sheen:	None Observed						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	5 x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	2 x 1 L amber glass; 4°C						
TCL Pesticides	2 x 1 L amber glass; 4°C						
TCL PCBs	2 x 1 L amber glass; 4°C						
TAL Metals + Hg	1 x 1 L HDPE; HNO3 to pH < 2, 4°C + Filtered 0.45um						
Cyanide	1 x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	1 x 1 L HDPE; 4°C 500 mL (1000)						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	Andy Judd / 6/19/10						

Reviewed by Andy Judd Date 10/28/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:

MB SA SN

Station ID:

GC-301

Subcontractor/Crew:

HDR GRB

Time:

15:58

mb - Mike Briseire, SA - Sean Quanz
SN - Steve Nitro

Water Depth:

2.5 ft

Tide:

Low tide
Cloudy drizzle

Sample Depth

(below
surface) 0.5

ft Sample Time: 16:11

Surface Water Sample ID:

GCSWBD-0.5WW

Wet or Dry Weather Event:

Wet weather

Number of Sampling Attempts:

46

Problems During Collection:

QC SAMPLE DATA

QA/QC Sample IDs:

NONE

DUP _____, MS/MSD _____

SURFACE WATER DATA & CONDITIONS

DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm)	Turbidity (NTU)	ORP (mV)	Comments
4.52	7.49	22.85	2.27	36.0	8.3	73	

Floating Debris (describe): Leaves, occasional garbage.

Water Color: From surface dark olive, clear in bottles.

Clarity: Water is very shallow, the bottom is visible.

Turbidity: 8.3

Sheen: Present, rainbow colored

Sample Analytical Parameters:

<input checked="" type="checkbox"/>	TCL VOCs
<input checked="" type="checkbox"/>	TCL SVOCs
<input checked="" type="checkbox"/>	TCL Pesticides
<input checked="" type="checkbox"/>	TCL PCBs
<input checked="" type="checkbox"/>	TAL Metals + Hg
<input checked="" type="checkbox"/>	Cyanide
<input checked="" type="checkbox"/>	TSS

Bottleware/Preservation:

5X
3x 40 mL VOA vials, no headspace; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
1 x 1 L HDPE; HNO3 to pH < 2, 4°C, plus 1 x 1 L unpreserved to be off-site
1 x 1 L HDPE; NaOH to pH > 12, 4°C
1 x 1 L HDPE; 4°C
500 mL

HDPE

V

COMMENTS/OBSERVATIONS

Low tide, strong NW flowing current, may small
waves

Sampler Signature/Date

Michael S.

Reviewed by

R.W. M.

Date

7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	SJN MB SQ	Station ID:	GC-303				
Subcontractor/Crew:	MNR GRG	Time:	1654				
RJN - Steve Niles, MB - Mike Briscoe, SQ - Sean Quarry)		Water Depth:	3.16				
Surface Water Sample ID: GC-SW303-0.5-HH		Tide:	Low tide				
		Weather:	Cloudy & Some Sun				
		Sample Depth (below surface)	0.5 ft				
		Sample Time:	1700				
Wet weather							
Number of Sampling Attempts: 92							
Problems During Collection: -							
QC SAMPLE DATA							
QA/QC Sample IDs:	Sampled DUP 7/13/10 Lab-1, MS/MSD 1730						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm)	Turbidity (NTU)	ORP (mV)	Comments
4.05	7.53	22.96	2.23	35.4	8.1	44	Duplicate Sample
Floating Debris (describe): Leaves, floating sticks							
Water Color: from Surface rich olive, below clear							
Clarity: cannot see bottom, Murky							
Turbidity: 8.1							
Sheen: rainbow				White/yellow sheen			
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	<input checked="" type="checkbox"/>	DUP	SX	3x 40 mL VOA vials, no headspace; 4°C			
TCL SVOCs	<input checked="" type="checkbox"/>			2 x 1 L amber glass; 4°C			
TCL Pesticides	<input checked="" type="checkbox"/>			2 x 1 L amber glass; 4°C			
TCL PCBs	<input checked="" type="checkbox"/>			2 x 1 L amber glass; 4°C			
TAL Metals + Hg	<input checked="" type="checkbox"/>			1 x 1 L HDPE; HNO3 to pH < 2, 4°C, + 1x1L Unpreserved to be offsite filtered			
Cyanide	<input checked="" type="checkbox"/>			1 x 1 L HDPE; NaOH to pH > 12, 4°C to 1 L HNO3 preserved poly			
TSS	<input checked="" type="checkbox"/>			1x1L HDPE; 4°C 500 mL			
COMMENTS/OBSERVATIONS							
Current, strong outgoing current, Sheen particles rainbow							
Dup-1 as Sample; lab ID for duplicate Sample: D-07132010-01							
Samper Signature/Date: Sean Quarry 7/13/10							

Reviewed by RLL Date 7/19/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	SJN SQ MB		Station ID:	GC-304			
Subcontractor/Crew:	HOR GRB		Time:	1756			
(SJN - Steve Nitro ; SQ - Sean Quamyte HDR) MB - Mike Biscione (GRB))			Water Depth:	5.51			
Surface Water Sample ID:	GC-SW304-0.5-WW		Tide:	Rising			
Wet or Dry Weather Event:	Wet (R)		Weather:	Cloudy, Sun 80			
Number of Sampling Attempts:	143		Sample Depth (below surface)	0.5 ft	Sample Time: 1800		
Problems During Collection:	-						
QC SAMPLE DATA							
QA/QC Sample IDs:	RC 1815 1830 304 MS / 304 MSD					Sampled 7/13/10	
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (^o ohm)	Turbidity (NTU)	ORP (mV)	Comments
4.15	7.39	24.23	1.86	76.8	14.8	10	ms/msd 7/13/10
Floating Debris (describe):	Leaves						
Water Color:	rich olive						
Clarity:	Amber						
Turbidity:	14.8						
Sheen:	Slight rainbow						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5x 40 mL VOA vials, no headspace; 4°C			
TCL SVOCs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C			
TCL Pesticides	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C			
TCL PCBs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C			
TAL Metals + Hg	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO3 to pH < 2, 4°C, + 1 x 1 L unpreserved to be offsite. Hereto to			
Cyanide	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C 1L HNO3 poly			
TSS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C			
	(RC) 500 mL						
COMMENTS/OBSERVATIONS							
calm, moving current, sheer particles (concrete)							
Note: Sample times and ID for ms/msd Samples same as the parent sample! GC-SW304-0.5-WW / 1800							
Sampler Signature/Date	SQ 7/13/10						

Reviewed by RH Date 7/19/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	SIN SQ SB	Station ID:	SGC-306				
Subcontractor/Crew:	Hore GRB	Time:	1908				
	MB - Mike Briscoe - GRB	Water Depth:	10.71				
	(SN - Steve Nielo; SQ - Sean Quang (HDR))	Tide:	Rising				
		Weather:	Clouds / sun				
Surface Water Sample ID:	GC-SW306-0.5 NW	Sample Depth (below surface)	0.5 ft				
Wet or Dry Weather Event:	Sample Time: 1915						
Number of Sampling Attempts:	53						
Problems During Collection:							
QC SAMPLE DATA							
QA/QC Sample IDs:							
NONE	DUP	MS/MSD					
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
9.73	7.28	24.42	1.17	20.4	41.4	102	7/13/10
Floating Debris (describe):				Trace level			
Water Color:				Olive			
Clarity:				Murky			
Turbidity:				41.4			
Sheen:				trace organic			
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	<input checked="" type="checkbox"/>	5x					
TCL SVOCs	<input checked="" type="checkbox"/>	8x 40 mL VOA vials, no headspace; 4°C					
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TAL Metals + Hg	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C; plus 1 x 1L unpreserved HDPE to be offsite					
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C filtered to 1 L HNO ₃ preserved HDPE					
		1 x 1 L HDPE; 4°C					
		<i>(at 500 mL)</i>					
COMMENTS/OBSERVATIONS							
calm, slight current, trace sheen visible							
SO 7/13/10							

Reviewed by

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	SJN 34 m3	Station ID:	3073	(NO)				
Subcontractor/Crew:	MTR GRB	Time:	2006	(GTP)				
(SJN - Steve Nien, SQ - Sean Querry (HBR)) MB - Mike Briscione (GRB))		Water Depth:	9.03					
		Tide:	Rising					
		Weather:	Cloudy					
Surface Water Sample ID:	(SW-3073-05-WW)	Sample Depth (below surface)	0.5 ft	Sample Time: 2010				
Wet or Dry Weather Event:	Wet							
Number of Sampling Attempts:	48							
Problems During Collection:	-							
QC SAMPLE DATA								
QA/QC Sample IDs:	None							
DUP	MS/MSD							
SURFACE WATER DATA & CONDITIONS								
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond. (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments	
4.5	7.15	26.07	0.50	15.4	51.3	129	7/13/10	
Floating Debris (describe):								
Water Color:	blue							
Clarity:	hazy							
Turbidity:	51.3							
Sheen:	n/a							
Sample Analytical Parameters:	Bottleware/Preservation:							
TCL VOCs	<input checked="" type="checkbox"/>	3x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TAL Metals + Hg	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO3 to pH < 2, 4°C						
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C						
		500 mL 1K/L unpreserved HDPE to be field filtered off to 1L HNO3/preserved HDPE						
COMMENTS/OBSERVATIONS								
calm, rising tide, slight current								
NO GPS 3073 off outfall								
Sampler Signature/Date	SW	7/13/10						

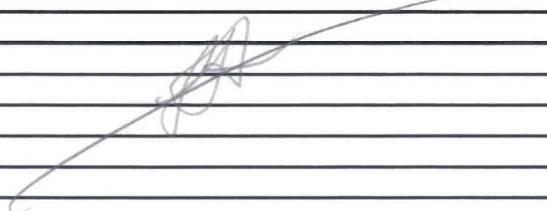
Reviewed by _____ Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	SJN SA MB	Station ID:	308 B				
Subcontractor/Crew:	HDR GRB	Time:	2045				
HDR: SJN - Steve Nierod; SG - Sean Quinny GRB - MB - Mike Briscoe		Water Depth:	9.0				
Surface Water Sample ID:	GC-SW#308 B-0.5	Tide:	slack				
Sample Depth (below surface)	0.5 ft	Weather:	clouds				
Sample Time:	2050						
Wet or Dry Weather Event:	Wet						
Number of Sampling Attempts:	37						
Problems During Collection:	✓						
QC SAMPLE DATA							
QA/QC Sample IDs:							
NONE	DUP	MS/MSD					
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
3.54	7.17	24.78	1.0	7.1	54.8	126	7/13/10
Floating Debris (describe):	n/a						
Water Color:	Olive						
Clarity:	murky						
Turbidity:	4.8						
Sheen:	n/a						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	5x 3x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	2 x 1 L amber glass; 4°C						
TCL Pesticides	2 x 1 L amber glass; 4°C						
TCL PCBs	2 x 1 L amber glass; 4°C						
TAL Metals + Hg	1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C; 1 x 1 L Unpres. HDPE to be off-line filtered						
Cyanide	1 x 1 L HDPE; NaOH to pH > 12, 4°C to 1 L HNO ₃ pres. HDPE						
TSS	1 x 1 L HDPE; 4°C 50 mL						
COMMENTS/OBSERVATIONS							
Calm, slack; no movement							
Note: No GPS used to locate; visually located off canoe launch							
Sampler Signature/Date	ST	7/13/10					

R. Nierod
Reviewed by _____ Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	LISA LA FORTUNE - CH2m Hill	Station ID: GC-SWF 309 -0.5-WW					
Subcontractor/Crew:	ED BRANDT - HDR TOM KOWLEY - HDR	Time: 20:42					
		Water Depth: 14.6					
		Tide: Low Time @ 4:30					
		Weather: mostly cloudy; high 80s					
Surface Water Sample ID:	GC-SWF 309-0.5-WW	Sample Depth (below surface) 0.5 ft Sample Time: 20:45					
Wet or Dry Weather Event:	WET						
Number of Sampling Attempts:	20						
Problems During Collection:	NONE						
QC SAMPLE DATA							
QA/QC Sample IDs:	None DUP _____, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond. (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
3.46	7.09	24.53	11.6	19.6	11.5	105	
Floating Debris (describe):	Leaves, trash,						
Water Color:	clear						
Clarity:	yes						
Turbidity:	low						
Sheen:	Present						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs TCL SVOCs TCL Pesticides TCL PCBs TAL Metals + Hg Cyanide TSS	5 x 40 mL VOA vials, no headspace; 4°C 2 x 1 L amber glass; 4°C 2 x 1 L amber glass; 4°C 2 x 1 L amber glass; 4°C 1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C 1 x 1 L HDPE; NaOH to pH > 12, 4°C 1 x 1 L HDPE; 4°C 500 mL						
COMMENTS/OBSERVATIONS							
Noted a crab swimming on surface							
 Sampler Signature/Date Lisa La Forte 107/19/10							

Reviewed by RLL Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	LISA LA FORTUNE - CHM HII	Station ID:	GC-SW#310 -0.5-WW				
Subcontractor/Crew:	ED BRANDT - HDR	Time:	20:20				
	TOM FOWLEY - HDR	Water Depth:	8.6 ft				
		Tide:	LOW TIDE @ 4:30				
		Weather:	mostly cloudy, 80s				
Surface Water Sample ID:	GC-SW#310-0.5-WW	Sample Depth (below surface)	0.5 ft				
Wet or Dry Weather Event:	WET	Sample Time:	2020				
Number of Sampling Attempts:	20						
Problems During Collection:	NONE						
QC SAMPLE DATA							
QA/QC Sample IDs:	DUP-2						
NONE	DUP	DUP-2 yes	MS/MSD				
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
4.31	7.17	24.91	10.4	17.4	12.7	40	
Floating Debris (describe):	leaves, trash						
Water Color:	clear						
Clarity:	yes						
Turbidity:	low						
Sheen:	Present						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>	DUP	5 10x 40 mL VOA vials, no headspace; 4°C				
TCL SVOCs	<input checked="" type="checkbox"/>		2 x 1 L amber glass; 4°C				
TCL Pesticides	<input checked="" type="checkbox"/>		2 x 1 L amber glass; 4°C				
TCL PCBs	<input checked="" type="checkbox"/>		2 x 1 L amber glass; 4°C				
TAL Metals + Hg	<input checked="" type="checkbox"/>		1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C				
Cyanide	<input checked="" type="checkbox"/>		1 x 1 L HDPE; NaOH to pH > 12, 4°C				
TSS	<input checked="" type="checkbox"/>		1 x 1 L HDPE; 4°C				
			soil				
COMMENTS/OBSERVATIONS							
Dupe collected → Dup-2							
Note: Dup-2 Sample ID as Sampled; Laboratory Forms#ite 10 D-07132010-02							
Sampler Signature/Date	Lisa La Forte / 07/18/10						

Reviewed by R. C. Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	LISA LA FORTUNE-CH2M Hill	Station ID: GC-SWF311 - 0.5-WW
Subcontractor/Crew:	ED BRANDT - HDR TOM FOUCET - HDR	Time: 1955
		Water Depth: 9.6 ft
		Tide: LOW TIDE @ 4:30
		Weather: Cloudy, high 80s
	Sample Depth (below surface)	Sample Time: 20:00
Surface Water Sample ID:	GC-SWF311-0.5-WW	0.5 ft

Wet or Dry Weather Event: WET
Number of Sampling Attempts: 20
Problems During Collection: NONE

OC SAMPLE DATA

QA/QC Sample IDs: **NONE** **DUP** _____, **MS/MSD** _____

SURFACE WATER DATA & CONDITIONS

SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
3.96	7.14	24.90	9.5	16.2	14.5	111	

Floating Debris (describe): Leaves, sticks, plastic bags, bottles.

Water Color: Clear

Clarity: yes

Turbidity: Low

Sheen: Present

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs

TCL SVOCs

TCL Pesticides

TCL PC

TAL Metals + Hg

Cyan

5
1x 40 mL VOA vials, no headspace; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
2 x 1 L amber glass; 4°C
1 x 1 L HDPE; HNO₃ to pH < 2, 4°C 1 x 1 L was presumed to be off-the-shelf filtered
1 x 1 L HDPE; NaOH to pH > 12, 4°C to 1 L HNO₃ preserved HDPE
1 x 1 L HDPE; 4°C

COMMENTS/OBSERVATIONS

Sampler Signature/Date

~~Pisa for Test 107/10/10~~

Reviewed by

Rui An

Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	LISA LA FORTUNE - CH2m Nle		Station ID:	GC-SW-312 -0.5-WW		
Subcontractor/Crew:	ED BRANDT - HDR		Time:	1930		
	TOM FOWLEY - HDR		Water Depth:	11.3 ft		
			Tide:	LOW TIDE @ 14:30		
			Weather:	cloudy, high 80s		
Surface Water Sample ID:	GC-SW-f312-0.5-WW		Sample Depth (below surface)	0.5	ft	
Wet or Dry Weather Event:	WET		Sample Time:	1935		
Number of Sampling Attempts:	20					
Problems During Collection:	None					
QC SAMPLE DATA						
QA/QC Sample IDs:	DUP _____, MS/MSD _____					
SURFACE WATER DATA & CONDITIONS						
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	
4.32	7.15	25.02	9.8	16.7	14.2	
Floating Debris (describe):	Leaves, Trash, Plastic Bags					
Water Color:	Clear					
Clarity:	Yes					
Turbidity:	Low					
Sheen:	Present, Slight					
Sample Analytical Parameters:	Bottleware/Preservation:					
TCL VOCs	<input checked="" type="checkbox"/>	5 x 40 mL VOA vials, no headspace; 4°C				
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C				
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C				
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C				
TAL Metals + Hg	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO3 to pH < 2, 4°C				
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C				
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C 500 mL				
COMMENTS/OBSERVATIONS						
<p style="text-align: center;">07/13/10</p> 						
Sampler Signature/Date	Lisa La Forte / 07/13/10					

Reviewed by _____

RJL Jr

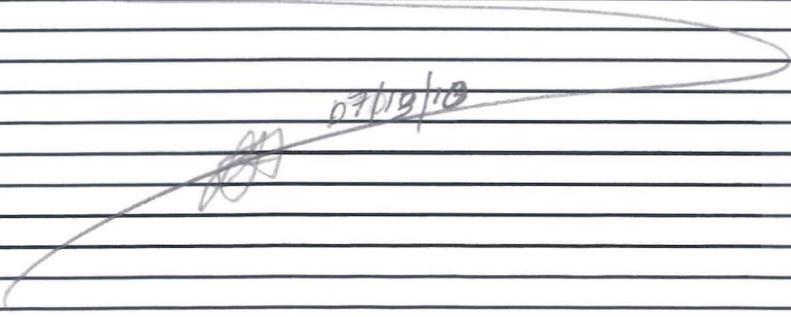
Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	LISA LA FOLLINE - (H2M H1) Station ID: GC-SWP313 -0.5-WW						
Subcontractor/Crew:	ED BRANDT - HDR TOM FOWLEY - HDR						
	Time: 18:00	Water Depth: 14 ft					
	Tide: LOW TIDE @ 4:30	Weather: cloudy, high 80s, lt breeze					
Surface Water Sample ID:	Sample Depth (below surface) 0.5 ft	Sample Time: 18:05					
Wet or Dry Weather Event:	WET						
Number of Sampling Attempts:	20						
Problems During Collection:	ONE VOA NEEDED TO BE CAPPED SEVERAL TIMES SINCE IT FORMED BUBBLES DURING SAMPLE COLLECTION						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE DUP _____, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
5.81	7.18	25.21	7.8	134	17.2	111	
Floating Debris (describe):	LEAVES, PLASTIC BOTTLES, TRASH						
Water Color:	CLEAR						
Clarity:	YES						
Turbidity:	LITTLE						
Sheen:	YES						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	5 x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	2 x 1 L amber glass; 4°C						
TCL Pesticides	2 x 1 L amber glass; 4°C						
TCL PCBs	2 x 1 L amber glass; 4°C						
TAL Metals + Hg	1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C						
Cyanide	1 x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	1 x 1 L HDPE; 4°C						
	500 mL unpreserved to be office filtered to 1 L HNO ₃ preserved HDPE						
COMMENTS/OBSERVATIONS							
17ft from waypoint; could not get closer							
07/13/10							
Sampler Signature/Date	Lisa La Follette / 07/13/10						

Reviewed by DLL Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	LISA LA FORTUNE -CH2m TL/11	Station ID:	GC-SWR314	-0.5-WW			
Subcontractor/Crew:	ED BRANDT - HDR	Time:	1903				
	TOM FOWLEY - HDR	Water Depth:	11.6 ft				
		Tide:	LOW TIDE @ 1430				
		Weather:	mostly cloudy, high 80's				
Surface Water Sample ID:	GC-SWR314 -0.5-WW	Sample Depth (below surface)	0.5 ft	Sample Time: 1905			
Wet or Dry Weather Event:	WET						
Number of Sampling Attempts:	20						
Problems During Collection:	NONE						
QC SAMPLE DATA							
QA/QC Sample IDs:	<input checked="" type="checkbox"/> NONE DUP _____, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
3.98	7.05	24.14	10.4	17.7	16.1	8'3	
Floating Debris (describe):	CONDOM, LEAVES						
Water Color:	CLEAR						
Clarity:	YES						
Turbidity:	LOW						
Sheen:	YES						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>	5x 40 mL VOA vials, no headspace; 4°C					
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TAL Metals + Hg	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C					
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C					
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C					
		1 x 1 L unpreserved to office filtered					
		1 x 1 L HDPE; HNO ₃ preserved					
		1 x 1 L HDPE; 4°C					
COMMENTS/OBSERVATIONS							
 <p>07/19/10</p>							
Sampler Signature/Date	Lisa La Forte 07/19/10						

Reviewed by RFL Cr Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	LISA LA FORTUNE - CH2M HILL		Station ID: <u>GC-SW315 - 0.5-WW</u>				
Subcontractor/Crew:	<u>ED BRANDT - HDR</u> <u>TOM FOWLEY - HDR</u>		Time: <u>17:30</u>				
		Water Depth: <u>13.1 FT</u>	Tide: <u>LOW TIDE 01830</u>				
		Weather: <u>mostl cloudy; high 80s</u>					
Surface Water Sample ID:	<u>GC-SW315-0.5-WW</u>	Sample Depth (below surface) <u>0.5</u> ft	Sample Time: <u>17:35</u>				
Wet or Dry Weather Event:	<u>WET</u>						
Number of Sampling Attempts:	<u>20</u>						
Problems During Collection:	<u>NONE</u>						
QC SAMPLE DATA							
QA/QC SampleIDs:	<u>NONE</u>	DUP _____	, MS/MSD _____				
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
<u>5.36</u>	<u>7.18</u>	<u>25.20</u>	<u>7.5</u>	<u>13.0</u>	<u>18.4</u>	<u>+94</u>	
Floating Debris (describe):	<u>LEAVES, PLASTIC BOTTLES</u>						
Water Color:	<u>LT BROWN</u>						
Clarity:	<u>YES</u>						
Turbidity:	<u>LITTLE</u>						
Sheen:	<u>YES</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>	5 <u>8x 40 mL VOA vials, no headspace; 4°C</u>					
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TAL Metals + Hg	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C ; 1 x 1 L unpreserved to be office filtered.					
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C to 1L HNO ₃ preserved HDPE					
TSS	<input checked="" type="checkbox"/>	1 x 1L HDPE; 4°C <u>500 ml</u>					
COMMENTS/OBSERVATIONS							
<u>07/13/10</u>							
Sampler Signature/Date	<u>Lisa La Forte / 07/13/10</u>						

Reviewed by R. Lee L. Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	LISA CA FONTONE - CH2m H(1)	Station ID:	GC-SWR316 -0.5-WW					
Subcontractor/Crew:	ED BRANDT - HDR	Time:	16:50					
	JON EDWELL - HDR	Water Depth:	9.0 ft					
		Tide:	LOW TIDE @ 1430					
		Weather:	mostly cloudy, mid 80's					
Surface Water Sample ID:	GC-SWR316 - 0.5-WW	Sample Depth (below surface)	0.5 ft					
Wet or Dry Weather Event:	WET	Sample Time:	16:55					
Number of Sampling Attempts:	20							
Problems During Collection:	NONE							
QC SAMPLE DATA								
QA/QC Sample IDs:	None							
DUP	, MS/MSD							
SURFACE WATER DATA & CONDITIONS								
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments	
5.15	7.02	25.28	7.8	13.6	16.5	+13.7		
Floating Debris (describe):	LEAVES & BROWNISH GREY SOLIDS							
Water Color:	LT BROWN							
Clarity:	YES							
Turbidity:	LITTLE							
Sheen:	YES							
Sample Analytical Parameters:	Bottleware/Preservation:							
TCL VOCs	<input checked="" type="checkbox"/>	5 18x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TAL Metals + Hg	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO3 to pH < 2, 4°C ; 1 x 1 L unpreserved to be office filtered						
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C to 1 L HNO ₃ preserved HDPE						
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C						
COMMENTS/OBSERVATIONS								
07/13/10								
Sampler Signature/Date	Lisa Fontone - 07/10/10 07/13/10 (CLP)							

Reviewed by RDL Date 7/19/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>LISA LA FORTUNE - CHLM HIC</u>		Station ID: <u>GC-SWP 317 -0.5-WW</u>				
Subcontractor/Crew:	<u>ED BRAND T-HDR</u> <u>JON POWLEY - HDR</u>		Time: <u>1549</u>				
			Water Depth: <u>17.2 ft</u>				
			Tide: <u>LOW TIDE @ 1430</u>				
			Weather: <u>mostly cloudy; mid 80s</u>				
Surface Water Sample ID:	<u>GC-SWP317-0.5-WW</u>	Sample Depth (below surface)	0.5 ft				
Wet or Dry Weather Event:	WET						
Number of Sampling Attempts:	60						
Problems During Collection:	NONE						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE DUP _____, MS/MSD <u>X</u>						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
5.45	7.12	24.51	66	11.6	24.4	67	
Floating Debris (describe):	<u>LEAVES & PLASTIC BOTTLES</u>						
Water Color:	<u>LIGHT BROWN</u>						
Clarity:	<u>YES</u>						
Turbidity:	<u>LOW</u>						
Sheen:	<u>YES</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<u>5 x 40 mL VOA vials, no headspace; 4°C</u>						
TCL SVOCs	<u>2 x 1 L amber glass; 4°C</u>						
TCL Pesticides	<u>2 x 1 L amber glass; 4°C</u>						
TCL PCBs	<u>2 x 1 L amber glass; 4°C</u>						
TAL Metals + Hg	<u>1 x 1 L HDPE; HNO3 to pH < 2, 4°C</u>						
Cyanide	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>						
TSS	<u>1 x 1 L HDPE; 4°C</u>						
	<u>1 x 1 L unpreserved to be offsite filtered to 1 L HNO3 preserved HDPE</u>						
	<u>SOV</u>						
COMMENTS/OBSERVATIONS							
<u>07/13/10</u>							
Note: ms/msd Not submitted to laboratory analysis; extra							
Sampler Signature/Date	<u>Lisa La Fortune</u>	<u>07/13/10</u>	<u>ms/msd collected</u>				

Reviewed by RDL Date 7/19/10

Surface Water Sampling Form Gowanus Canal Remedial Investigation Brooklyn, Kings County, New York								
Samplers/Inspectors:	R. Clemmons / C# 2m w/ CL				Station ID:	GGB19		
Subcontractor/Crew:	HDR- Erin Pepper Mike Pantano				Time:	1600		
Surface Water Sample ID:	GC-SW319-0.5-WW GC-SW319-0.5-005				Water Depth:	9.4' ft		
Wet or Dry Weather Event:	Wet (RE)				Tide:	low - dropping; low tide 1430		
Number of Sampling Attempts:					Weather:	cloudy, light rain		
Problems During Collection:	(RE) None				Sample Depth (below surface)	0.5	ft	Sample Time: 1600
QC SAMPLE DATA								
QA/QC Sample IDs:	D-0713 2010-03, MS/MSD							
SURFACE WATER DATA & CONDITIONS								
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments	
6.85 (RE)	7.58	24.4	1.75	15.1	27.2	7.61		
Floating Debris (describe): Leaves and few organics, some plastic and foil, styrofoam during Sampling								
Water Color:	clear to light gray tint							
Clarity:	clear							
Turbidity:	moderate							
Sheen:	none observed; sheen observed midway through sampling							
Sample Analytical Parameters:	Bottleware/Preservation: Dup. Sample (NO TSS) 5x 40 mL VOA vials, no headspace; 4°C 2x 1 L amber glass; 4°C 2 x 1 L amber glass; 4°C 2 x 1 L amber glass; 4°C 1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C, 1 x 1 L HDPE unpreserved to be office filtered 1 x 1 L HDPE; NaOH to pH > 12, 4°C to 1 L HNO ₃ preserved HDPE. 1 x 1 L HDPE; 4°C (RE) 500 mL							
COMMENTS/OBSERVATIONS								
<p><i>R. Clemmons / 7/13/10</i></p>								

Reviewed by Beth Date 7/14/11

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>R. Clennan - H2m Hill</u>		Station ID: <u>GC-SW320</u>				
Subcontractor/Crew:	<u>Eryn Deppa - HDR</u> <u>Mike Partian - HDR</u>		Time: <u>1625</u>				
Surface Water Sample ID:	<u>GC-SW320-0.5-WW</u> <u>(RC)</u> <u>GC-SW320-0.0-0.5</u>		Water Depth: <u>6.3'</u>				
Wet or Dry Weather Event:	<u>WET</u>		Tide: <u>Low - dropping</u>				
Number of Sampling Attempts:	n75 deployments to get sample volume for parent and						
Problems During Collection:	<u>None</u> ms/ms n						
QC SAMPLE DATA							
QA/QC SampleIDs:	NONE	DUP	MS/MSD <u>'Yes - collected'</u>				
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
5.18 (RC)	7.81	24.12	0.91	18.3	22.8	71.0	
4.74							
Floating Debris (describe):	<u>few organics (leaves)</u>						
Water Color:	<u>light yellow/tan tint</u>						
Clarity:	<u>clear</u>						
Turbidity:	<u>low</u>						
Sheen:	<u>None observed</u>						
Sample Analytical Parameters:	Bottleware/Preservation: <u>ms/ms to 5x</u> ✓ 8x 40 mL VOA vials, no headspace; 4°C ✓ 2 x 1 L amber glass; 4°C ✓ 2 x 1 L amber glass; 4°C ✓ 2 x 1 L amber glass; 4°C ✓ 1 x 1 L HDPE; HNO3 to pH < 2, 4°C; 1 x 1L HDPE Unpreserved to be off-line filtered ✓ 1 x 1 L HDPE; NaOH to pH > 12, 4°C to 1L HNO3 preserved HDPE ✓ 1 x 1 L HDPE; 4°C <u>(3500 mL)</u>						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<u>RBL</u> 17/13/10						

Reviewed by RBL

Date 7/19/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>R. Glennon - CH2m Hill</u>		Station ID:	<u>GC-SW321</u>			
Subcontractor/Crew:	<u>Shawn Deppe - HDR</u> <u>Mike Pantano - HDR</u>		Time:	<u>1710</u>			
Surface Water Sample ID:	<u>GC-SW321-0.5-WWW</u> <u>GC-SW321-0.0-0.5 (R)</u>		Water Depth:	<u>16.3</u>			
Wet or Dry Weather Event:	Wet		Tide:	<u>low - rising; low @ 1430</u>			
Problems During Collection:	None		Weather:	<u>Cloudy, mid 80's</u>			
QA/QC Sample IDs:			Sample Depth (below surface)	0.0-0.5 ft	Sample Time: <u>+52 1720 (R)</u>		
QC SAMPLE DATA							
NONE	DUP						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm) <small>(R)</small>	Turbidity (NTU)	ORP (mV)	Comments
2.79	7.83	24.64	1.35 <small>(R)</small>	23.5 <small>(R)</small>	12.7	104	
Floating Debris (describe): <u>few organics (leaves), plastic, paper</u>							
Water Color: <u>clear /none</u>							
Clarity: <u>clear</u>							
Turbidity: <u>low</u>							
Sheen: <u>None observed</u>							
Sample Analytical Parameters:							
TCL VOCs	<input checked="" type="checkbox"/>	Bottleware/Preservation: <u>5x</u> <u>5x 40 mL VOA vials, no headspace; 4°C</u>					
TCL SVOCs	<input checked="" type="checkbox"/>	<u>2 x 1 L amber glass; 4°C</u>					
TCL Pesticides	<input checked="" type="checkbox"/>	<u>2 x 1 L amber glass; 4°C</u>					
TCL PCBs	<input checked="" type="checkbox"/>	<u>2 x 1 L amber glass; 4°C</u>					
TAL Metals + Hg	<input checked="" type="checkbox"/>	<u>1 x 1 L HDPE; HNO3 to pH < 2, 4°C ; 1 x 1L Unpreserved HDPE to be offsite filtered</u>					
Cyanide	<input checked="" type="checkbox"/>	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C to 1L HNO3-preserved HDPE</u>					
TSS	<input checked="" type="checkbox"/>	<u>1 x 1 L HDPE; 4°C</u> <u>500 mL</u>					
COMMENTS/OBSERVATIONS							
<p style="font-size: 2em; margin-left: 10px;">RDL A / 7/13/10</p>							
Sampler Signature/Date							

Reviewed by RDL A Date 7/19/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>R. Clennon - CH2m H/De</u>		Station ID:	<u>GC-SW322</u>																																									
Subcontractor/Crew:	<u>Ehrn Deppert-HDR</u> <u>Mike Pantano-HDR</u>		Time:	<u>17:30</u>																																									
Surface Water Sample ID:	<u>GC-SW322-0.5-WW</u> <u>GC-SW322-0.0-05</u>		Water Depth:	<u>24.7'</u>																																									
Wet or Dry Weather Event:	<u>Wet (R)</u>		Tide:	<u>low-n-sing (low @ 14:30)</u>																																									
Problems During Collection:	<u>None</u>		Weather:	<u>mostly cloudy, breezy</u>																																									
QA/QC Sample IDs:			Sample Depth (below surface)	<u>0.0-0.5'</u>	mid 80's																																								
NONE	DUP				Sample Time: <u>1740</u>																																								
QC SAMPLE DATA																																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="8">SURFACE WATER DATA & CONDITIONS</th> </tr> <tr> <th>DO (mg/L)</th> <th>pH (SU)</th> <th>Temp (C)</th> <th>Salinity (ppt)</th> <th>Sp Cond (mS/cm²⁵)</th> <th>Turbidity (NTU)</th> <th>ORP (mV)</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>3.19</td> <td>7.83</td> <td>24.07</td> <td>1.81</td> <td>25.6</td> <td>12.9</td> <td>93</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						SURFACE WATER DATA & CONDITIONS								DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments	3.19	7.83	24.07	1.81	25.6	12.9	93																	
SURFACE WATER DATA & CONDITIONS																																													
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments																																						
3.19	7.83	24.07	1.81	25.6	12.9	93																																							
Floating Debris (describe):	<u>None observed</u>																																												
Water Color:	<u>light tint (yellow/tan)</u>																																												
Clarity:	<u>clear</u>																																												
Turbidity:	<u>low</u>																																												
Sheen:	<u>None observed</u>																																												
Sample Analytical Parameters:	Bottleware/Preservation:																																												
TCL VOCs	<input checked="" type="checkbox"/> 40 mL VOA vials, no headspace; 4°C																																												
TCL SVOCs	<input checked="" type="checkbox"/> 2 x 1 L amber glass; 4°C																																												
TCL Pesticides	<input checked="" type="checkbox"/> 2 x 1 L amber glass; 4°C																																												
TCL PCBs	<input checked="" type="checkbox"/> 2 x 1 L amber glass; 4°C																																												
TAL Metals + Hg	<input checked="" type="checkbox"/> 1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C																																												
Cyanide	<input checked="" type="checkbox"/> 1 x 1 L HDPE; NaOH to pH > 12, 4°C																																												
TSS	<input checked="" type="checkbox"/> 1 x 1 L HDPE; 4°C <u>500 ml</u>																																												
COMMENTS/OBSERVATIONS																																													
<u>800 ft / 7/13/10</u>																																													
Sampler Signature/Date	Reviewed by <u>RDL</u>																																												
	Date <u>7/19/10</u>																																												

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	R. Clennon - CH2m Hill		Station ID: <u>GGSW-B23</u>				
Subcontractor/Crew:	<u>Ehrin Deppert - HDR</u> <u>Mike - Pant and - HDR</u>		Time: <u>1818</u>				
Surface Water Sample ID:	<u>GC-SW323-0.5-WW</u> <u>GC-SW323-0.0-0F</u>		Water Depth: <u>26.0 ft</u> Tide: <u>low-rising (low @ 1430)</u> Weather: <u>mostly cloudy, breezy, low 80s</u>				
Sample Depth (below surface)	<u>0.0-0.5 ft</u>		Sample Time: <u>1830</u>				
Wet or Dry Weather Event:	<u>Wet</u>						
Number of Sampling Attempts:	<u>Approx. 25 deployments to get full sample volume</u>						
Problems During Collection:	<u>None</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:							
NONE	DUP	MS/MSD					
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm) ^(C)	Turbidity (NTU)	ORP (mV)	Comments
2.85	7.88	24.05	1.74	29.7	8.6	104	
Floating Debris (describe): <u>few organics (leaves)</u>							
Water Color: <u>Clear/none</u>							
Clarity: <u>clear</u>							
Turbidity: <u>low</u>							
Sheen: <u>None observed</u>							
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	✓	5x <u>3x 40 mL VOA vials, no headspace; 4°C</u>					
TCL SVOCs	✓	<u>(RC) 2 x 1 L amber glass; 4°C</u>					
TCL Pesticides	✓	<u>2 x 1 L amber glass; 4°C</u>					
TCL PCBs	✓	<u>2 x 1 L amber glass; 4°C</u>					
TAL Metals + Hg	✓	<u>1 x 1 L HDPE; HNO3 to pH < 2, 4°C; 1 x 1 L Unpreserved HDPE to be offsite filtered to a 1L HNO3 preserved HDPE</u>					
Cyanide	✓	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>					
TSS	✓	<u>1 x 1 L HDPE; 4°C</u>					
COMMENTS/OBSERVATIONS							
<u>RJL Ch 17/13/10</u>							
Sampler Signature/Date							

Reviewed by RJL A Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>R. Glennon - CH2m Hill</u>		Station ID:	<u>GE-SW324</u>	
Subcontractor/Crew:	<u>Eevin Deppen - HDR</u> <u>Mike Pantano - HDR</u>		Time:	<u>1751</u>	
Surface Water Sample ID:	<u>GC-SW324-0.5-WW</u> <u>GE-SW324-0.0-0.5</u>		Water Depth:	<u>13.8 ft</u>	
Wet or Dry Weather Event:	<u>Wet</u>		Tide:	<u>Low - static rising (low @ 1430)</u>	
Number of Sampling Attempts:	<u>n 50 deployments for required volume</u>		Weather:	<u>breezy, cloudy, mid 80's</u>	
Problems During Collection:	<u>None</u>		Sample Depth (below surface)	<u>0.0-0.5 ft</u>	Sample Time: <u>1755</u>
QC SAMPLE DATA					
QA/QC Sample IDs: <u>NONE</u> DUP <u>D-07132010-024</u> , MS/MSD _____					
SURFACE WATER DATA & CONDITIONS					
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm)	Turbidity (NTU)
3.12	7.86	23.79	1.78	30.5	7.10
Floating Debris (describe): <u>None observed; plastic/trash seen n 30 feet towards land</u>					
Water Color: <u>clear/none</u> plastic bags					
Clarity: <u>clear</u>					
Turbidity: <u>low</u>					
Sheen: <u>none observed</u>					
Sample Analytical Parameters:			Bottleware/Preservation:		
TCL VOCs	✓	Dup	5x 3x 40 mL VOA vials, no headspace; 4°C		
TCL SVOCs	✓		2 x 1 L amber glass; 4°C		
TCL Pesticides	✓		2 x 1 L amber glass; 4°C		
TCL PCBs	✓		2 x 1 L amber glass; 4°C		
TAL Metals + Hg	✓		1 x 1 L HDPE; HNO3 to pH < 2, 4°C		
Cyanide	✓		1 x 1 L HDPE; NaOH to pH > 12, 4°C		
TSS	✓		1 x 1 L HDPE; 4°C <u>500 ml</u>		
COMMENTS/OBSERVATIONS					
Sampler Signature/Date	<u>R. Glennon / 7/13/10</u>				

Reviewed by M. A. Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	R. Cleennon - CH2m Hill	Station ID:	GC-SW326
Subcontractor/Crew:	Echni Deppa - HDR Mike Pantano - HDR	Time:	1843
Surface Water Sample ID:	GC-SW326-0.5-WW GC-SW326-00-05 (R)	Water Depth:	36.2 ft
Sample Depth	(below surface) 0.0-0.5 ft	Tide:	low-(rising)-low @ 1430
Weather:	cloudy, breeze, temp 80s	Sample Time:	1850

Wet or Dry Weather Event: Wet

Number of Sampling Attempts: Approx 25 deployments needed to get sample volume

Problems During Collection: None

QC SAMPLE DATA

QA/QC Sample IDs:

NONE

DUP _____

, MS/MSD _____

SURFACE WATER DATA & CONDITIONS

DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
3.56	8.02	23.60	2.14	35.4	3.2	101	

Floating Debris (describe): few organics (leaves), few small pieces plastic,

Water Color: clear/noise

Clarity: clear

Turbidity: low

Sheen: none observed

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs	✓
TCL SVOCs	✓
TCL Pesticides	✓
TCL PCBs	✓
TAL Metals + Hg	✓
Cyanide	✓
TSS	✓

5x 40 mL VOA vials, no headspace; 4°C
 2 x 1 L amber glass; 4°C
 2 x 1 L amber glass; 4°C
 2 x 1 L amber glass; 4°C
 1 x 1 L HDPE; HNO₃ to pH < 2, 4°C, 1 x 1 L unpreserved HDPE to be offsite
 1 x 1 L HDPE; NaOH to pH > 12, 4°C f: tend to 2 L HNO₃-preserved HDPE
 1 x 1 L HDPE; 4°C
 1 x 500 mL

COMMENTS/OBSERVATIONS

Sampler Signature/Date

R. Cleennon / 7/13/10

Reviewed by

R. Cleennon

Date

7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	R. Cienanon - CH2mHill Sethin Dupper - HDR Mike Piantano - HDR	Station ID: GCSW327 Time: 1900 Water Depth: 30.2 ft Tide: Low Weather: mostly cloudy, breeze, low 80s						
Subcontractor/Crew:		Sample Depth (below surface) 0.0-0.5 ft Sample Time: 1915						
Surface Water Sample ID:	GC-SW327-0.5-WW GC-SW327-0.0-0.5 (RC)							
Wet or Dry Weather Event:	Wet deployment							
Number of Sampling Attempts:	n25 for full sample volume							
Problems During Collection:	None							
QC SAMPLE DATA								
QA/QC Sample IDs:								
NONE	DUP _____	, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS								
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments	
3.78	8.10	22.84	234	3813	1.0	101		
Floating Debris (describe):	None observed							
Water Color:	clear /none							
Clarity:	clear							
Turbidity:	low							
Sheen:	none observed							
Sample Analytical Parameters:	Bottleware/Preservation:							
TCL VOCs	<input checked="" type="checkbox"/>	3x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C						
TAL Metals + Hg	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO3 to pH < 2, 4°C ; 1x1L unpres. HDPE to be office filtered						
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C to 1L HNO3-preserved HDPE						
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C <i>at 500 ml</i>						
COMMENTS/OBSERVATIONS								
Sampler Signature/Date	RLL Ch / 7/13/10							

Reviewed by RLL Ch Date 7/14/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>R. Clevon, J. Balas -</u> <u>CH2M Hill</u>	Station ID: <u>GC-SW328</u>					
Subcontractor/Crew:	<u>Zehrin Depert, Mike</u> <u>Pantano-HDR</u>	Time: <u>2145</u>					
Surface Water Sample ID:	<u>GC-SW328-0.0-0.5</u>	Water Depth: <u>41.8 ft (low @ 1430)</u>					
		Tide: <u>high-dropping</u>					
		Weather: <u>mostly cloudy, mid 70s, lt breeze</u>					
		Sample Depth (below surface) <u>0.0-0.5 ft</u>					
		Sample Time: <u>2150</u>					
Wet or Dry Weather Event:	<u>Wet</u>						
Number of Sampling Attempts:							
Problems During Collection:	<u>None</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:							
NONE	DUP	MS/MSD					
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
5.3	8.17	22.99	2.38	38.9	0.6	129	
Floating Debris (describe):	<u>None observed</u>						
Water Color:	<u>clear /none</u>						
Clarity:	<u>clear</u>						
Turbidity:	<u>low</u>						
Sheen:	<u>none observed</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<u>✓</u>						
TCL SVOCs	<u>✓</u>						
TCL Pesticides	<u>✓</u>						
TCL PCBs	<u>✓</u>						
TAL Metals + Hg	<u>✓</u>						
Cyanide	<u>✓</u>						
TSS	<u>✓</u>						
	<u>5x (Rc) 3x 40 mL VOA vials, no headspace; 4°C</u>						
	<u>2 x 1 L amber glass; 4°C</u>						
	<u>2 x 1 L amber glass; 4°C</u>						
	<u>2 x 1 L amber glass; 4°C</u>						
	<u>1 x 1 L HDPE; HNO3 to pH < 2, 4°C, 1 x 1 L unpreserved HDPE to be Hg free</u>						
	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C filter to a 1 L HNO3-preserved</u>						
	<u>1 L HDPE; 4°C</u>						
	<u>500 mL</u>						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<u>All Ch /7/13/10</u>						

Reviewed by

Date

7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>R.Clemon, J.Balas-CH2M</u>						
Subcontractor/Crew:	<u>Ehrin Deppert, mike fantino</u> <u>HDR</u>						
Surface Water Sample ID:	QC-SW329-0.5 NW QC-SW329-0.0-0.0						
Wet or Dry Weather Event:	Wet						
Number of Sampling Attempts:	~20 deployments to collect volume						
Problems During Collection:	None						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE DUP _____, MS/MSD _____						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm)	Turbidity (NTU)	ORP (mV)	Comments
3.74	8.16	23.02	2.34	38.3	1.6	123	
Floating Debris (describe): None observed							
Water Color: clear/no re							
Clarity: clear							
Turbidity: low							
Sheen: none observed							
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	<input checked="" type="checkbox"/>	5x 40 mL VOA vials, no headspace; 4°C					
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TAL Metals + Hg	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO3 to pH < 2, 4°C					
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C					
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C 500 mL					
COMMENTS/OBSERVATIONS							
AC 1x 1L Unpres. HDPE to be offsite filtered to 1L HNO3-preserved HDPE							
200 Cu / 7/13/10							
Sampler Signature/Date							

Reviewed by RL Cu

Date 7/19/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>R. Clemmons, J. Balas - H2M</u>		Station ID: <u>SWB 30</u>				
Subcontractor/Crew:	<u>Zehrin Deppert, Mike</u> <u>Pantano - HDPE</u>		Time: <u>2/16</u>				
			Water Depth: <u>22.2 ft</u> , 30.2				
			Tide: <u>high</u> dropping				
			Weather: <u>cloudy, mid 70s, light breeze</u>				
Surface Water Sample ID:	<u>GC-SW330-0.5-NW</u> <u>GC-SW330-0.0-0.5</u> (RC)		Sample Depth (below surface) <u>0.0-0.5</u> ft				
Wet or Dry Weather Event:	<u>Wet</u>						
Number of Sampling Attempts:	<u>120 deployments</u>						
Problems During Collection:	<u>None</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:	—						
NONE	DUP	MS/MSD	—				
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
4.07	8.17	22.98	2.37	38.7	0-0	122	
Floating Debris (describe):	<u>None observed</u>						
Water Color:	<u>none/clear</u>						
Clarity:	<u>clear</u>						
Turbidity:	<u>low</u>						
Sheen:	<u>None observed</u>						
Sample Analytical Parameters:	Bottles/ware/Preservation:						
TCL VOCs	<input checked="" type="checkbox"/>	5x RC 3x 40 mL VOA vials, no headspace; 4°C					
TCL SVOCs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL Pesticides	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TCL PCBs	<input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C					
TAL Metals + Hg	<input checked="" type="checkbox"/>	1 x 1 L HDPE; HNO3 to pH < 2, 4°C ; 1 x 1 L Unpres. HDPE to be field filtered to 1 L HNO3 pres. HDPE					
Cyanide	<input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C					
TSS	<input checked="" type="checkbox"/>	1 x 1 L HDPE; 4°C					
		<u>500 mL</u>					
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<u>Rll C / 7/13/10</u>						

Reviewed by _____

Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>R. Ciennan, J. Balas - CH2M Hill</u>		Station ID:	<u>GC-SW331</u>	
Subcontractor/Crew:	<u>E. Deppert, M. Pantano-HDR</u>		Time:	<u>2155</u>	
Surface Water Sample ID:	<u>GC-SW331-0.5-WN GC-SW331-0.0-0.5 (RC)</u>		Water Depth:	<u>44.3 ft</u>	
Wet or Dry Weather Event:	<u>Wet deployment</u>		Tide:	<u>dropping flooding</u>	
Number of Sampling Attempts:	<u>1</u>		Weather:	<u>partly mostly cloudy, no 70's</u>	
Problems During Collection:	<u>None</u>		Sample Depth (below surface):	<u>0.0-0.5</u>	Sample Time: <u>2201</u>
QC SAMPLE DATA					
QA/QC Sample IDs:					
NONE	DUP			MS/MSD	
SURFACE WATER DATA & CONDITIONS					
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)
4.28	8.16	22.9	2.37	38.7	0.5
Floating Debris (describe): <u>None observed plastic debris, organic (leaves), condoms</u>					
Water Color: <u>clear / none (P)</u>					
Clarity: <u>clear</u>					
Turbidity: <u>low</u>					
Sheen: <u>None observed</u>					
Sample Analytical Parameters:			Bottleware/Preservation:		
TCL VOCs	<input checked="" type="checkbox"/>		<u>5x 40 mL VOA vials, no headspace; 4°C</u>		
TCL SVOCs	<input checked="" type="checkbox"/>		<u>2 x 1 L amber glass; 4°C</u>		
TCL Pesticides	<input checked="" type="checkbox"/>		<u>2 x 1 L amber glass; 4°C</u>		
TCL PCBs	<input checked="" type="checkbox"/>		<u>2 x 1 L amber glass; 4°C</u>		
TAL Metals + Hg	<input checked="" type="checkbox"/>		<u>1 x 1 L HDPE; HNO3 to pH < 2, 4°C ; 1 x 1L unpres. HDPE to be offsite -</u>		
Cyanide	<input checked="" type="checkbox"/>		<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C filtered to 1 L HNO3 - preserved HDPE</u>		
TSS	<input checked="" type="checkbox"/>		<u>1 x 1 L HDPE; 4°C</u>		
COMMENTS/OBSERVATIONS					
Sampler Signature/Date <u>R. Deppert / 7/13/10</u>					

Reviewed by R. Deppert Date 7/19/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>R. Clevner - CH2M</u>		Station ID:	<u>GSW332</u>			
Subcontractor/Crew:	<u>J. Balas - CH2M</u>		Time:	<u>2047</u>			
	<u>Ehrin Deppa - HDR</u>		Water Depth:	<u>20.0 ft</u>			
	<u>Mike Pantina - HDR</u>		Tide:	<u>low-rising</u>			
			Weather:	<u>cloudy, (P)brus, low 20°</u>			
Surface Water Sample ID:	<u>GC-SW332-0.5-WW</u> <u>GC-SW332-0.0-0A</u>		Sample Depth (below surface)	<u>0.0-0.5</u>	Sample Time: <u>2045</u>		
Wet or Dry Weather Event:	<u>(C) WPA</u>						
Number of Sampling Attempts:	<u>2</u> deployments made to achieve sample volume						
Problems During Collection:	<u>No (P)</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:							
NONE	DUP			MS/MSD			
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
4.08	8.19	22.93	2.40	39.0	0.3	121	
Floating Debris (describe):	<u>None observed</u>						
Water Color:	<u>clear/noire</u>						
Clarity:	<u>clear</u>						
Turbidity:	<u>low</u>						
Sheen:	<u>none observed</u>						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	<u>5x 40 mL VOA vials, no headspace; 4°C</u>						
TCL SVOCs	<u>2 x 1 L amber glass; 4°C</u>						
TCL Pesticides	<u>2 x 1 L amber glass; 4°C</u>						
TCL PCBs	<u>2 x 1 L amber glass; 4°C</u>						
TAL Metals + Hg	<u>1 x 1 L HDPE; HNO3 to pH < 2, 4°C</u>						
Cyanide	<u>1 x 1 L HDPE; NaOH to pH > 12, 4°C</u>						
TSS	<u>1 x 1 L HDPE; 4°C</u> <u>(2500 mL)</u> f. Heated to a 1 L HNO ₃ Pres. HDPE						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<u>BLL D / 1/13/10</u>						

Reviewed by BLL Date 7/19/10

**Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York**

Samplers/Inspectors:	<u>R. Clemons, Jr. Balas - CH2m H. M.</u>		Station ID:	<u>GC-SW333</u>	
Subcontractor/Crew:	<u>Ehrin Deppert, Mike Pantianno - HDR</u>		Time:	<u>21.7</u>	
Surface Water Sample ID:	<u>GC-SW333-0.5-WW</u> <u>GC-SW333-0.0-0.5</u>		Water Depth:	<u>(P) 30 ft</u>	N/A
			Tide:	<u>high dropping</u>	
			Weather:	<u>mid 70s, cloudy,</u>	
			Sample Depth (below surface)	<u>0.0-0.5</u> ft	Sample Time: <u>2135</u>
Wet or Dry Weather Event:	<u>Wet</u>				
Number of Sampling Attempts:	<u>~20 deployments</u>				
Problems During Collection:	<u>None</u>				
QC SAMPLE DATA					
QA/QC SampleIDs:	NONE DUP _____, MS/MSD _____				
SURFACE WATER DATA & CONDITIONS					
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond ($\mu\text{S}/\text{cm}^{-1}$)	Turbidity (NTU)
4.56	8.23	22.97	24.3	39.6	1.0
Floating Debris (describe):	<u>None observed</u>				
Water Color:	<u>clear / none</u>				
Clarity:	<u>clear</u>				
Turbidity:	<u>low</u>				
Sheen:	<u>None observed</u>				
Sample Analytical Parameters:	Bottles/ware/Preservation:				
TCL VOCs	<u>✓ 5x 40 mL VOA vials, no headspace; 4°C</u>				
TCL SVOCs	<u>✓ 2 x 1 L amber glass; 4°C</u>				
TCL Pesticides	<u>✓ 2 x 1 L amber glass; 4°C</u>				
TCL PCBs	<u>✓ 2 x 1 L amber glass; 4°C</u>				
TAL Metals + Hg	<u>✓ 1 x 1 L HDPE; HNO3 to pH < 2, 4°C; 1 x 1 L uppers. HDPE to be office filtered</u>				
Cyanide	<u>✓ 1 x 1 L HDPE; NaOH to pH > 12, 4°C to a 1L HNO3 pres HDPE</u>				
TSS	<u>✓ 1 x 1 L HDPE; 4°C</u>				
	<u>(P) 30 m2</u>				
COMMENTS/OBSERVATIONS					
Sampler Signature/Date	<u>Rll Cn / 7/13/10</u>				

Reviewed by Rll C Date 7/19/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	<u>R. Cienno - CH2m H. L.</u>		Station ID: <u>GC-SW334</u>				
Subcontractor/Crew:	<u>J. Balas - CH2m H. L.</u>		Time: <u>2034</u>				
	<u>Fehn Doppert - HDR</u>		Water Depth: <u>37.9 ft</u>				
	<u>Mike Pantano - HDR</u>		Tide: <u>low - rising</u>				
			Weather: <u>Cloudy, light breeze, 70s</u>				
Surface Water Sample ID:	<u>GC-SW334-0.S-WW</u> <u>GC-SW334-0.0-0.5</u>		Sample Depth (below surface) <u>0-0.5 ft</u>				
Wet or Dry Weather Event:	<u>Wet</u>						
Number of Sampling Attempts:	<u>~20 attempts to get full sample volume</u>						
Problems During Collection:	<u>None deployment</u>						
QC SAMPLE DATA							
QA/QC Sample IDs:							
NONE	DUP	MS/MSD					
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ²⁵)	Turbidity (NTU)	ORP (mV)	Comments
3.97	8.17	23.03	2.34	382.6	0.2	106	
Floating Debris (describe): <u>None observed</u>							
Water Color: <u>Clear/none</u>							
Clarity: <u>clear</u>							
Turbidity: <u>low</u>							
Sheen: <u>None observed</u>							
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	<u>✓</u> 5x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	<u>✓</u> 2 x 1 L amber glass; 4°C						
TCL Pesticides	<u>✓</u> 2 x 1 L amber glass; 4°C						
TCL PCBs	<u>✓</u> 2 x 1 L amber glass; 4°C						
TAL Metals + Hg	<u>✓</u> 1 x 1 L HDPE; HNO3 to pH < 2, 4°C						
Cyanide	<u>✓</u> 1 x 1 L HDPE; NaOH to pH > 12, 4°C						
TSS	<u>✓</u> 1 x 1 L HDPE; 4°C						
	<u>✓</u> 500 mL						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	<u>RLL A / 7/13/10</u>						

Reviewed by RLL A Date 7/19/10

Surface Water Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors:	R. Clennon, J. Balas CH2M HILL	Station ID: GESB335					
Subcontractor/Crew:	Schrin Deppert, Mike Pontiano-HDR	Time: 2207					
Surface Water Sample ID:	GC-SW335-0.S-WW GC-SW335-0.0-0.5 (R)	Water Depth: 20.4 ft					
Wet or Dry Weather Event:	Wet	Tide: flooding					
Number of Sampling Attempts:	n20 deployments made during collection						
Problems During Collection:	None						
QC SAMPLE DATA							
QA/QC Sample IDs:	NONE DUP — MS/MSD —						
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm ³)	Turbidity (NTU)	ORP (mV)	Comments
4.08	8.14	22.94	2.35	38.3	0.8	120	
Floating Debris (describe):	None observed (R) few organics (leaves, twigs)						
Water Color:	clear (R)						
Clarity:	clear						
Turbidity:	low						
Sheen:	none observed						
Sample Analytical Parameters:	Bottleware/Preservation:						
TCL VOCs	✓ 3x 40 mL VOA vials, no headspace; 4°C						
TCL SVOCs	✓ 2 x 1 L amber glass; 4°C						
TCL Pesticides	✓ 2 x 1 L amber glass; 4°C						
TCL PCBs	✓ 2 x 1 L amber glass; 4°C						
TAL Metals + Hg	✓ 1 x 1 L HDPE; HNO ₃ to pH < 2, 4°C ; 1 x 1 L unpres. HDPE to be fed office						
Cyanide	✓ 1 x 1 L HDPE; NaOH to pH > 12, 4°C filtered to a 1L HNO ₃ preserved HDPE						
TSS	✓ 1 x 1 L HDPE; 4°C (500 ml)						
COMMENTS/OBSERVATIONS							
Sampler Signature/Date	RLL CR / 7/13/10						

Reviewed by _____

Date _____

RLL CR

7/13/10

