

Appendix D

Field Documentation

D-07 – CSO Sampling Field Forms

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CSO Sediment Sampling Form Gowanus Canal Remedial Investigation Brooklyn, Kings County, New York							
Samplers/Inspectors:		<u>Michael Murphy, Graham Shaker</u>		Station ID:		<u>04-005</u>	
		<u>Casey Stokes (HDR)</u>		Time:		<u>1310</u>	
Subcontractor/Crew:		<u>Traffic Safety</u>		Water Depth:		<u>12.3 - 12.85</u>	
				Tide:		<u>not recorded</u>	
				Weather:		<u>Sunny - 80° - low humid</u>	
CSO Sediment Sample ID:		<u>GC-SD04005</u>		Grab Penetration		<u>0.5 ft</u>	
Number of Sampling Attempts:		<u>>10</u>		Sample		<u>H₂O - 1330</u>	
Problems During Collection:		<u>None</u>		Time:		<u>Sev - 1415</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>3.76</u>	<u>6.09</u>	<u>24.77</u>	<u>0.3</u>	<u>0.661</u>	<u>Over Range</u>	<u>-96</u>	<u>dark brown / gray</u>
Floating Debris (describe): <u>Floating solids - brown color</u>							
Water Color: <u>brown - very turbid</u>							
Clarity: <u>Very turbid - brown</u>							
Turbidity: <u>Very turbid - brown</u>							
Sheen: <u>none detected</u>							
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	<input checked="" type="checkbox"/>	<u>5</u> x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C 8 oz Amber, wide mouth glass; protect from light, 4°C 8 oz wide mouth glass; 4°C 8 oz wide mouth glass; 4°C 8 oz wide mouth glass; 4°C + <u>filtered</u> 8 oz wide mouth glass; 4°C 4 oz wide mouth glass; 4°C 4 oz wide mouth glass; no headspace; 4°C 3 x 1-gallon HDPE buckets; 4°C		<u>CSO wastewater ID</u> <u>GC-SD04005-DW-1</u> - wastewater samples collected from the 0-0.5 interval using laboratory cleaned certified HDPE bottleware - VOC sample collected + paired at a slow rate to prevent volatilization			
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"/>						
TOC	<input checked="" type="checkbox"/>						
Grainsize	<input type="checkbox"/>						
AVS/SEM	<input type="checkbox"/>						
Toxicity	<input type="checkbox"/>						
SED SAMPLE DESCRIPTION							
Color:		<u>Black (10YR 2/1)</u>		Moisture:		Dry <input type="checkbox"/> SI <input type="checkbox"/> Moist <input type="checkbox"/> Moist <input type="checkbox"/> V.Moist <input checked="" type="checkbox"/> (Wet)	
Major Description:		Clay <input type="checkbox"/> Silty Clay <input type="checkbox"/> Silt <input type="checkbox"/> Clayey Sand <input type="checkbox"/> Sandy Clay <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Gravelly Sand <input type="checkbox"/> Gravel <input type="checkbox"/> Grvly Clay <input type="checkbox"/>					
Minor Description:		<u>Organic</u> <input type="checkbox"/> Mottled <input type="checkbox"/> Plastic <input type="checkbox"/> M.Plastic <input type="checkbox"/> Nodules <input type="checkbox"/> v f coarse grained <input type="checkbox"/> Ang / SA / SR / Rounded <input type="checkbox"/>					
Other Descriptors:		Well / poorly <input checked="" type="checkbox"/> mod - sorted <input type="checkbox"/> well / poorly <input type="checkbox"/> mod - cemented <input type="checkbox"/> Loose <input checked="" type="checkbox"/>					
<u>Worms noted</u>							
PID - 0.0 ; CO - 0.0 ; H ₂ S - 0.0 ; LEL - 0.0 ; O ₂ - 20.9							
COMMENTS/OBSERVATIONS							
<u>Frank Bisceglia (NYCDEP) + Melissa (GET) performing oversight</u>							
Sampler Signature/Date		<u>6/30/10</u>					

On Carroll St
- in between 3rd + 4th Aves

Reviewed by

Date _____

CSO Sediment Sampling Form Gowanus Canal Remedial Investigation Brooklyn, Kings County, New York							
Samplers/Inspectors: <u>M. Murphy G. Sharkey</u>		Station ID: <u>011-006</u>		Time: <u>1800</u>			
Subcontractor/Crew: <u>C. Stokes (HDR)</u>		Water Depth: <u>18.7 - 19.1' blos</u>		Tide: _____			
Weather: <u>Sunny - 80° - low humid</u>		Grab Penetration: <u>0.0</u> ft		Sample H ₂ O - 1815 Time: sed - NA			
CSO Sediment Sample ID: <u>Not Sampled</u>							
Number of Sampling Attempts: <u>>10</u>							
Problems During Collection: <u>no sediment collected - unable to collect sediment sample</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
3.98	7.03	22.53	0.6	1.22	177	-42	brown - suspended solids
Floating Debris (describe): <u>brown floating solids in water</u>							
Water Color: <u>clear water - floating solids</u>							
Clarity: <u>clear water - floating solids</u>							
Turbidity: <u>floating solids</u>							
Sheen: <u>none observed</u>							
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	<input checked="" type="checkbox"/>	<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 100px; border: 1px solid black; position: relative;"> <div 10px;"="" margin-left:="" style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);</div> </div> <div style="> <u>Not Sampled</u> </div> </div> </div>		3x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C		<u>CSO Wastewater ID</u> <u>GC-SW0H006-DW-1</u> - wastewater samples collected from the 0-0.5 interval using certified laboratory cleaned HDPE bottleware - VOC sample collected + purged at a slow rate to prevent volatiles	
TCL SVOCs	<input checked="" type="checkbox"/>			8 oz Amber, wide mouth glass; protect from light, 4°C			
TCL Pesticides	<input checked="" type="checkbox"/>			8 oz wide mouth glass; 4°C			
TCL PCBs	<input checked="" type="checkbox"/>			8 oz wide mouth glass; 4°C			
TAL Metals + Hg	<input checked="" type="checkbox"/>			8 oz wide mouth glass; 4°C			
Cyanide	<input checked="" type="checkbox"/>			8 oz wide mouth glass; 4°C			
TOC	<input checked="" type="checkbox"/>			4 oz wide mouth glass; 4°C			
Grain size	<input checked="" type="checkbox"/>			4 oz wide mouth glass; 4°C			
AVS/SEM	<input checked="" type="checkbox"/>			4 oz wide mouth glass; 4°C			
Toxicity	<input checked="" type="checkbox"/>			8 x 1-gallon HDPE buckets; 4°C			
SED SAMPLE DESCRIPTION							
Color: _____		Moisture: Dry SI Moist Moist V. Moist Wet					
Major Description: <u>NO</u>		Clay Silty Clay Silt Clay Sand Sandy Clay Sand Gravelly Sand Gravel Grvly Clay					
Minor Description: _____		Organic Monbed Plastic M. Plastic Nodules v. coarse-grained Ang SA / SR / Rounded					
Other Descriptors: _____		Well / poorly / mod - sorted, well / poorly / mod - cemented Loose					
COMMENTS/OBSERVATIONS							
<u>No sediment sample collected - no measurable sediment in CSO chamber</u>							
<u>PID - 0.0 ; H₂ - 0.0 ; CO - 0.0 ; LEL - 0 ; O₂ - 20.9</u>							
<u>Frank Biscardi (NYCDEP) + Melissa (GRI) performing oversight</u>							
Sampler Signature/Date: <u>[Signature]</u>		<u>6/30/10</u>					

On 3rd Ave
- in between 18th + 19th st

Reviewed by [Signature] Date 7/14/10

CSO Sediment Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: M. Murphy, J. Byles Station ID: 04-007
G. Sharkey Time: 0800
 Subcontractor/Crew: None Water Depth: 11.9 - No bottom measurement - pump & bottom
 Tide: Not Recorded
 Weather: Sunny - 80° - low humid

CSO Sediment Sample ID: GC-SW04007 Grab Penetration 0.5 ft Sample H₂O - 1020 Sed - 1025
 Number of Sampling Attempts: Sediment >10 ; Wastewater >10
 Problems During Collection: - Sediment sample collected from interceptor chamber
- wastewater sample collected from pumping station

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)
0.99	8.00	23.36	0.15	3.95	64.2	-85

Floating Debris (describe): garbage + sewage
 Water Color: brown / clear
 Clarity: cloudy
 Turbidity: cloudy
 Sheen: none observed

Sample Analytical Parameters: **Bottleware/Preservation:** CSO Wastewater
GC-SW04007-DW-1
- wet chem parameters collected
- wastewater samples collected from the 0-0.5' interval using certified laboratory clean HDPE bottleware
- VOC sample collected + poured & sealed

Parameter	Container/Preservation
TCL VOCs	3x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
TCL SVOCs	8 oz Amber, wide mouth glass; protect from light, 4°C
TCL Pesticides	8 oz wide mouth glass; 4°C
TCL PCBs	8 oz wide mouth glass; 4°C
TAL Metals + Hg	8 oz wide mouth glass; 4°C + F. H ₂ O ₂ (0.45mM)
Cyanide	8 oz wide mouth glass; 4°C
TOC	4 oz wide mouth glass; 4°C
Grainsize	4 oz wide mouth glass; no headspace; 4°C
AVS/SEM	3 x 1-gallon HDPE buckets; 4°C
Toxicity	
PCB Cong	

SED SAMPLE DESCRIPTION Slow rate to prevent volatilization

Color: 10 YR 2/1 - Black Moisture: Dry SI. Moist Moist V. Moist Wet
 Major Description: Clay Silty Clay Silt Clayey Sand Sandy Clay Sand Gravelly Sand Gravel Grvly Clay Gravelly silt
 Minor Description: Organic Mottled Plastic M. Plastic Nodules 1 coarse-grained Ang / SA / SB / Rounded
Well / poorly / mod - sorted well / poorly / mod - cemented Loose

Other Descriptors: Strong septic like odor
Worms noted in sediment
PID 2.5; CO-0.0; H₂S-0.0; LEL-0.0; 66

COMMENTS/OBSERVATIONS

- pumps turned on @ 1020 while collecting H₂O sample
- Wastewater sample not collected from 2nd Ave interceptor chamber
- wastewater sample collected from pumping station adjacent to tide gate (OK as per Bill McMillen)
- sediment sample collected from interceptor chamber
- no sediment in pumping stations

Frank Bisconti (NYCDEP) + Melissa (G&E) provide oversight

Sampler Signature/Date: [Signature] 3/1/2010

Bottom
- Approx 56" below top of water

On 2nd Ave
- in between 5th + 6th sts

Fellows Iron resalts 0.55mg/l

Reviewed by [Signature] Date 7/19/10

CSO Sediment Sampling Form Gowanus Canal Remedial Investigation Brooklyn, Kings County, New York							
Samplers/Inspectors: <u>M. Murphy, J. Boles</u> <u>C. Stokes</u>				Station ID: <u>RH-033</u>			
Subcontractor/Crew: <u>Traffic Management</u>				Time: <u>0830 6/30/10</u>			
				Water Depth: <u>Not Recorded - Approx 8'</u>			
				Tide: <u>Not Recorded</u>			
				Weather: <u>Sunny - 80° - low humid</u>			
CSO Sediment Sample ID: <u>GC-SDRH033</u>				Grab Penetration: <u>0.5</u> ft		Sample H ₂ O - 840 Time: <u>Sed - 915</u>	
Number of Sampling Attempts: <u>>10</u>							
Problems During Collection: <u>None</u>							
QC SAMPLE DATA							
QA/QC Sample IDs:							
<div style="display: flex; justify-content: space-between;"> <u>NONE</u> DUP _____ MS/MSD _____ </div>							
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm^3)	Turbidity (NTU)	ORP (mV)	Comments
<u>8.62</u>	<u>6.20</u>	<u>22.58</u>	<u>0.7</u>	<u>1.40</u>	<u>514</u>	<u>6</u>	<u>Cloudy</u>
Floating Debris (describe): <u>Floating solids</u>							
Water Color: <u>brown - cloudy</u>							
Clarity: <u>brown - cloudy</u>							
Turbidity: <u>brown - cloudy - Floating solids</u>							
Sheen: <u>none observed</u>							
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	<input checked="" type="checkbox"/>	3x 40 mL vials/TerraCore with stir bar, 1-40 mL vial/full; 4°C					
TCL SVOCs	<input checked="" type="checkbox"/>	8 oz Amber, wide mouth glass; protect from light, 4°C					
TCL Pesticides	<input checked="" type="checkbox"/>	8 oz wide mouth glass; 4°C					
TCL PCBs	<input checked="" type="checkbox"/>	8 oz wide mouth glass; 4°C					
TAL Metals + Hg	<input checked="" type="checkbox"/>	8 oz wide mouth glass; 4°C + Filtered (0.45um)					
Cyanide	<input checked="" type="checkbox"/>	8 oz wide mouth glass; 4°C					
TOC	<input checked="" type="checkbox"/>	4 oz wide mouth glass; 4°C					
Grainsize	<input type="checkbox"/>	4 oz wide mouth glass; no headspace; 4°C					
AVS/SEM	<input type="checkbox"/>	3 x 1-gallon HDPE buckets; 4°C					
Toxicity	<input type="checkbox"/>						
SED SAMPLE DESCRIPTION							
Color:		Moisture: <u>Dry</u> Sl. Moist Moist V. Moist <u>Wet</u>					
Major Description:		Clay Silty Clay Silt Clayey Sand Sandy Clay Sand <u>Gravelly Sand</u> Gravel Grvly Clay					
Minor Description:		<u>Organic</u> Mottled Plastic M. Plastic Nodules v f coarse-grained Ang / <u>SA / SR</u> / Rounded Well / <u>poorly</u> mod - sorted well / <u>poorly</u> / mod - cemented <u>Loose</u>					
Other Descriptors:							
<u>Strong organic like odor</u> PID - 0.0 ; H ₂ S - 0.0 ; CO - 0.0 ; LEL - 0 ; O ₂ - 20.9 <div style="text-align: center;">COMMENTS/OBSERVATIONS</div>							
<u>Frank Boscon (NYCDEP) + Melissa (G&E) perform oversight</u> <u>6/30/10</u>							

Reviewed by T. A. K. Date 7/19/10

CSO Sediment Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: Dave Rauer Station ID: RH-034
Graham Sharkey Time: 0950 (surface water)
 Subcontractor/Crew: none Water Depth: NA
 Tide: mid tide
 Weather: 66-78° Sunny, low-moist humidity

CSO Sediment Sample ID: - no sample collected Grab Penetration 0 ft Sample Time: —
 Number of Sampling Attempts: - no sediment in CSO sampling location
 Problems During Collection: - no sediment in CSO sampling location

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
<u>10.5</u> <u>4.85</u>	<u>6.75</u>	<u>12.05</u>	<u>0.7</u>	<u>1.49</u>	<u>82.0</u>	<u>104</u>	

Floating Debris (describe): present - paper and feces

Water Color: brown

Clarity: none

Turbidity: high

Sheen: none

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs ☒
 TCL SVOCs ☒
 TCL Pesticides ☒
 TCL PCBs ☒
 TAL Metals + Hg ☒
 Cyanide ☒
 TOC ☐
 Grain size ☐ no
 AVS/SEM ☐ no
 Toxicity ☐ no

3x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 8 oz Amber, wide mouth glass; protect from light, 4°C
 8 oz wide mouth glass; 4°C
 8 oz wide mouth glass; 4°C
 8 oz wide mouth glass; 4°C
 8 oz wide mouth glass; 4°C
 8 oz wide mouth glass; 4°C
 4 oz wide mouth glass; 4°C
 4 oz wide mouth glass; no headspace; 4°C
 3 x 1-gallon HDPE buckets; 4°C

+ Geochem samples

CSO waste water ID:
GC-SWRH034-DW-1

SED SAMPLE DESCRIPTION

Color: NA Moisture: NA Dry Sl. Moist Moist V. Moist Wet
 Major Description: Clay Silty Clay Silt Clayey Sand Sandy Clay Sand Gravelly Sand Gravel Grvly Clay
 Minor Description: Organic Mottled Plastic M. Plastic Nodules v f coarse-grained Ang / SA / SR / Rounded
 Well / poorly / mod - sorted well / poorly / mod - cemented Loose

Other Descriptors:

COMMENTS/OBSERVATIONS

- used 24 hour discrete sampler (ISCO 6700) to collect composite sample.

Ferrous iron result = 0.00 mg/L

Sampler Signature/Date [Signature] 7/1/10

Reviewed by [Signature] Date 7/19/10

CSO Sediment Sampling Form Gowanus Canal Remedial Investigation Brooklyn, Kings County, New York							
Samplers/Inspectors: <u>M. Murphy, G. Sherkey</u> <u>C. Stokes</u>				Station ID: <u>RH-035</u> Time: <u>1445</u>			
Subcontractor/Crew: <u>Traffic Control</u>				Water Depth: <u>6.40 - 7.50</u> Tide: <u>Not Recorded</u> Weather: <u>Sunny - 80° - low humid</u>			
CSO Sediment Sample ID: <u>GC-SDRH035</u>				Grab Penetration: <u>0.5</u> ft Sample <u>H₂O - 1515</u> Time: <u>Sed - 1545</u>			
Number of Sampling Attempts: <u>>10</u>							
Problems During Collection: <u>None</u>							
QC SAMPLE DATA							
QA/QC Sample IDs: NONE <u>(DUP) D-06302010-02, MS/MSD</u> <u>SEDIMENT</u>							
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm^3)	Turbidity (NTU)	ORP (mV)	Comments
<u>2.59</u>	<u>7.15</u>	<u>26.52</u>	<u>0.4</u>	<u>0.778</u>	<u>286</u>	<u>-24</u>	<u>cloudy</u>
Floating Debris (describe): <u>none observed</u> Water Color: <u>brown / cloudy</u> Clarity: <u>cloudy</u> Turbidity: <u>cloudy</u> Sheen: <u>none observed</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"/> TOC <input checked="" type="checkbox"/> Grainsize <input type="checkbox"/> AVS/SEM <input type="checkbox"/> Toxicity <input type="checkbox"/>				3x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C 8 oz wide mouth glass; 4°C 8 oz wide mouth glass; 4°C 8 oz wide mouth glass; 4°C 8 oz wide mouth glass; 4°C + Filtered (0.45um) 8 oz wide mouth glass; 4°C 4 oz wide mouth glass; 4°C 4 oz wide mouth glass; no headspace; 4°C 3 x 1-gallon HDPE buckets; 4°C			
				<u>CSO wastewater ID</u> <u>GC-SWRH035-DW-1</u> - wastewater samples collected from the 0.0-0.5' interval using certified laboratory cleaned HDPE bottleware - VOC sample collected + poured at a slow rate to prevent volatilization			
SED SAMPLE DESCRIPTION							
Color: <u>Black (10YR 2/1)</u>				Moisture: Dry SI. Moist Moist V. Moist <u>(Wet)</u>			
Major Description: Clay Silty Clay Silt Clayey Sand Sandy Clay Sand <u>Gravelly Sand</u> Gravel Grvly Clay							
Minor Description: <u>Organic</u> Mottled Plastic M. Plastic Nodules v f coarse-grained Ang / <u>SA / SP</u> / Rounded							
Well / <u>poorly</u> / mod - sorted well / <u>poorly</u> / mod - cemented <u>Loose</u>							
Other Descriptors: <u>Strong septic like odor</u>							
<u>PID - 0.0 ; H₂S - 0.0 ; CO - 0.0 ; LEL - 0 ; O₂ - 20.9</u>							
COMMENTS/OBSERVATIONS							
<u>Frank Bascendi (NYDEP) + Melissa (GCI) perform oversight</u> <u>6/30/10</u>							
Sampler Signature/Date: <u>[Signature]</u> <u>6/30/10</u>							

On Bond street

- noted as secondary (B) location
- up stream from tide gate
- round manhole
- near corner of 4th St

Reviewed by [Signature] Date 7/19/10

CSO Sediment Sampling Form Gowanus Canal Remedial Investigation Brooklyn, Kings County, New York							
Samplers/Inspectors: <u>M. Murphy, G. Stokes</u> <u>C. Stokes (HDR)</u>				Station ID: <u>RH-036</u>			
Subcontractor/Crew: <u>Traffic Control</u>				Time: <u>1130</u>			
				Water Depth: <u>7.55 - 7.85</u>			
				Tide: <u>Not Measured</u>			
				Weather: <u>Sunny - 80° - low wind</u>			
CSO Sediment Sample ID: <u>GC-SDRH036</u>				Grab Penetration: <u>0.5</u> ft		Sample Time: <u>H2O - 1145</u> <u>Sed - 1235</u>	
Number of Sampling Attempts: <u>>10</u>							
Problems During Collection: <u>None</u>							
QC SAMPLE DATA							
QA/QC Sample IDs:							
NONE		DUP		MS/MSD <u>MSD collected for H2O + sed</u>			
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm^3)	Turbidity (NTU)	ORP (mV)	Comments
<u>4.55</u>	<u>6.97</u>	<u>23.29</u>	<u>0.4</u>	<u>0.851</u>	<u>118</u>	<u>145</u>	<u>clear - floating solids</u>
Floating Debris (describe): <u>Sanitary waste</u>							
Water Color: <u>clear - floating solids</u>							
Clarity: <u>clear - floating solids</u>							
Turbidity: <u>clear - floating solids</u>							
Sheen: <u>none observed</u>							
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	<input checked="" type="checkbox"/>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div> <div> 3x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C 8 oz Amber, wide mouth glass; protect from light, 4°C 8 oz wide mouth glass; 4°C 8 oz wide mouth glass; 4°C 8 oz wide mouth glass; 4°C + Filled (0.45) 8 oz wide mouth glass; 4°C 4 oz wide mouth glass; 4°C 4 oz wide mouth glass; no headspace; 4°C 3 x 1-gallon HDPE buckets; 4°C </div> </div>		<u>CSO Wastewater ID</u> <u>GC-SWRH036-DW-1</u> - wastewater samples collected from the 0.0-0.5' interval using certified laboratory cleaned HDPE bottleware - VOC sample collected & poured at a slow rate to prevent volatilization			
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"/>						
TOC	<input checked="" type="checkbox"/>						
Grainsize	<input type="checkbox"/>						
AVS/SEM	<input type="checkbox"/>						
Toxicity	<input type="checkbox"/>						
SED SAMPLE DESCRIPTION							
Color: <u>Black (10YR 2/1)</u>		Moisture: Dry <input type="checkbox"/> St. Moist <input type="checkbox"/> Moist <input type="checkbox"/> V. Moist <input checked="" type="checkbox"/> <u>Wet</u>					
Major Description:		Clay Silty Clay Silt Clayey Sand Sandy Clay Sand Gravelly Sand Gravel Grvly Clay <u>Silty sand</u>					
Minor Description:		Organic Mottled Plastic M. Plastic Nodules w/ coarse-grained Ang / SA / SR / Rounded					
Other Descriptors:		Well / poorly / mod - sorted well / poorly / mod - cemented Loose					
		- Few gravel (angular - subangular)					
		- organic - septic - like odor					
		- worms noted @ approx 1/4" long in sediment					
PFD - 0.0 ; CO - 0.0 ; H2S - 0.0 ; LEL - 0							
COMMENTS/OBSERVATIONS							
<u>Floating debris noted - garbage + toilet paper</u>							
<u>Frank Bascardi (NYC DEP) + Melissa (G&E) performing oversight</u>							
Sampler Signature/Date: <u>[Signature]</u> <u>6/30/10</u>							

Reviewed by [Signature] Date 7/19/10

CSO Sediment Sampling Form Gowanus Canal Remedial Investigation Brooklyn, Kings County, New York							
Samplers/Inspectors: <u>M. Murphy, G. Sherkey</u> <u>C. Stokes</u>		Station ID: <u>RH-037</u>		Time: <u>1005</u>			
Subcontractor/Crew: <u>Treffe Control</u>		Water Depth: <u>9.0-9.1' btrc</u>		Tide: <u>not recorded</u>			
		Weather: <u>Sunny - 80° - low humid</u>					
CSO Sediment Sample ID: <u>GC-SDRH037</u>		Grab Penetration: <u>0.5</u> ft		Sample H2O-1030 Time: <u>sed - 1100</u>			
Number of Sampling Attempts: <u>>10</u>							
Problems During Collection: <u>unable to collect sediment sample from main channel in CSO - collected from side</u>							
QC SAMPLE DATA							
QA/QC Sample IDs: NONE <u>DUP D-06302010-01, MS/MSD</u> <u>WASTEWATER</u>							
SURFACE WATER DATA & CONDITIONS							
DO (mg/L)	pH (SU)	Temp (C)	Salinity (ppt)	Sp Cond (mS/cm^3)	Turbidity (NTU)	ORP (mV)	Comments
<u>7.90</u>	<u>7.62</u>	<u>21.29</u>	<u>0.3</u>	<u>0.677</u>	<u>72.2</u>	<u>49</u>	<u>brown solids - clear H2O</u>
Floating Debris (describe): <u>Floating brown solids in water</u>							
Water Color: <u>clear - brown floating solids in water</u>							
Clarity: <u>clear - floating solids</u>							
Turbidity: <u>Floating solids</u>							
Sheen: <u>clear "oil"-like substance floating on water surface</u>							
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs	<input checked="" type="checkbox"/>	3x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C		<u>CSO Wastewater ID</u> <u>GC-SDRH037-DW-1</u> - wastewater samples collected from the 0.0-0.5' interval using certified laboratory cleaned HDPE bottleware - VOC sample collected + poured at a slow rate to prevent volatilization			
TCL SVOCs	<input checked="" type="checkbox"/>	8 oz Amber, wide mouth glass; protect from light, 4°C					
TCL Pesticides	<input checked="" type="checkbox"/>	8 oz wide mouth glass; 4°C					
TCL PCBs	<input checked="" type="checkbox"/>	8 oz wide mouth glass; 4°C					
TAL Metals + Hg	<input checked="" type="checkbox"/>	8 oz wide mouth glass; 4°C + Filtered (0.45)					
Cyanide	<input checked="" type="checkbox"/>	8 oz wide mouth glass; 4°C					
TOC	<input checked="" type="checkbox"/>	4 oz wide mouth glass; 4°C					
Grainsize	<input type="checkbox"/>	4 oz wide mouth glass; no headspace; 4°C					
AVS/SEM	<input type="checkbox"/>	3 x 1-gallon HDPE buckets; 4°C					
Toxicity	<input type="checkbox"/>						
SED SAMPLE DESCRIPTION							
Color: <u>Black (10YR 2/1) / D. Brown (10YR 4/2)</u>		Moisture: Dry SI. Moist Moist V. Moist <u>Wet</u>					
Major Description: <u>Clay Silty Clay Silt Clayey Sand Sandy Clay Sand Gravelly Sand Gravel Grvly Clay</u>		<u>Sandy S.H.</u>					
Minor Description: <u>Organic Mottled Plastic M. Plastic Nodules w/ coarse-grained Ang SA/SB/Rounded</u>							
Well (poorly) mod - sorted well (poorly) mod - cemented <u>Loose</u>							
Other Descriptors: <u>Worms noted in sediment</u>							
<u>PID-0.7 ; CO-0.0 ; H2S-0.0 ; LEL ; 20.9</u>							
COMMENTS/OBSERVATIONS							
<u>- sediment sample not collected from the main channel of CSO chamber - sediment sample collected from platform area below stairs + under sides</u> <u>- "Oil"-like residue noted on water surface while collecting sample - Oil-like substance is non-water soluble, slick, clear, not sticky/tacky, floats on water</u> <u>Frank Bescor (NYDEC) + Melissa (GSD), performing oversight</u>							
Sampler Signature/Date: <u>[Signature]</u> <u>6/30/10</u>							

on Nevins at the
end of Seckett St.
- in front of private
driveway/entrance

Reviewed by [Signature]

Date 7/14/10

CSO Sediment Sampling Form Gowanus Canal Remedial Investigation Brooklyn, Kings County, New York							
Samplers/Inspectors: <u>M. Murphy</u> <u>J. Balas</u>		Station ID: <u>RH-038</u>					
<u>G. Shockey</u>		Time: <u>0800</u>					
Subcontractor/Crew: <u>None</u>		Water Depth: <u>15.1 - 15.35 ft</u>					
		Tide: <u>not measured</u>					
		Weather: <u>Sunny - 75° - low wind</u>					
CSO Sediment Sample ID: <u>Sediment Sample NOT COLLECTED</u>		Grab Penetration: <u>0.0 n</u>	Sample Time: <u>H₂O - 825</u> <u>sed - NA</u>				
Number of Sampling Attempts: <u>>10</u>							
Problems During Collection: <u>no sediment noted in chamber -</u> <u>unable to collect sediment sample</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>4.95</u>	<u>10.35</u>	<u>23.80</u>	<u>0.17</u>	<u>4.46</u>	<u>106</u>	<u>-48</u>	<u>cloudy - white - floating solids</u>
Floating Debris (describe): <u>white floating solids</u>							
Water Color: <u>white - cloudy</u>							
Clarity: <u>cloudy</u>							
Turbidity: <u>cloudy</u>							
Sheen: <u>not observed</u>							
Sample Analytical Parameters:				Bottleware/Preservation:			
TCL VOCs				3x 40 mL vials/TerraCore with stir bar, 1-40 mL vial/full; 4°C	<u>CSO wastewater ID</u> <u>GC-SWRH038-DW-1</u> - wastewater samples collected from the D-0.5 Intersect using certified laboratory cleaned HDPE bottleware - VOC sample collected & poured at a slow rate to prevent volatilization		
TCL SVOCs				8 oz Amber, wide mouth glass; protect from light, 4°C			
TCL Pesticides				8 oz wide mouth glass; 4°C			
TCL PCBs				8 oz wide mouth glass; 4°C			
TAL Metals + Hg				8 oz wide mouth glass; 4°C			
Cyanide				8 oz wide mouth glass; 4°C			
TOC				4 oz wide mouth glass; 4°C			
Grainsize				4 oz wide mouth glass; no headspace; 4°C			
AVS/SEM				3 x 1-gallon HDPE buckets; 4°C			
Toxicity							
SEDIMENT DESCRIPTION							
Color:				Moisture:			
Major Description:				Dry SI. Moist Moist V. Moist Wet			
Minor Description:				Clay Silty Clay Silt Clayey Sand Sandy Clay Sand Gravelly Sand Gravel Grvly Clay			
Other Descriptors:				Organic Mottled Plastic M. Plastic Nodules w/ coarse-grained Ang / SA / SR / Rounded			
				Well / poorly / mod - sorted well / poorly / mod - cemented Loose			
<u>No sediment in</u> <u>interceptor chamber</u> <u>no sample collected</u>							
COMMENTS/OBSERVATIONS							
<u>PID - 0.0 ; CO - 0.0 ; H₂S - 0.0 ; LEL - 0.0 ; O₂ - 20.9</u>							
<u>Frank Buscardi (NYCDEP) + Melissa (G&I) perform oversight</u>							
Sampler Signature/Date: <u>[Signature]</u> <u>7/1/10</u>							

On Degrow St (sidewalk)
- corner of Degrow &
Newtons

Reviewed by [Signature] Date 7/19/10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: Michael Murphy Station ID: OH-005
 Mary Velasquez James Beles Time: 1800
 Subcontractor/Crew: Traffic Management Water Depth: 12.3 - 13.0'
 Tide: _____ Not Recorded

Weather: Partly Sunny - 70° - Humid
 Sample Depth (below top surface) 0.5' Sample Time: 1815

Wet or Dry Weather Event: Wet

Number of Sampling Attempts: 3/0

Problems During Collection:
NO sediment sample collected

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
<u>3.47</u>	<u>7.18</u>	<u>27.01</u>	<u>0.2</u>	<u>0.426</u>	<u>0.426</u> <u>(m)</u>	<u>157</u>	<u>brown / cloudy</u>
					<u>103</u>		

Floating Debris (describe): Fluffy brown solids

Water Color: Brown / turbid

Clarity: cloudy

Turbidity: brown fluffy solids

Sheen: Not observed

Sample Analytical Parameters:	Bottleware/Preservation:	
TCL VOCs <input checked="" type="checkbox"/>	5x 40 mL VOA vials, no headspace; HCL to pH <2; 4°C	PID = <u>Not</u>
TCL SVOCs <input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C	CO = <u>Recorded</u>
TCL Pesticides <input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C	H ₂ S = _____
TCL PCBs <input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C	LEL = _____
TAL Metals + Hg (& filtered) <input checked="" type="checkbox"/>	2 x 1 L HDPE; HNO ₃ to pH < 2, 4°C	O ₂ = _____
Cyanide <input checked="" type="checkbox"/>	1 x 1 L HDPE; NaOH to pH > 12, 4°C	
TSS <input checked="" type="checkbox"/>	1 x 1 500 ml HDPE; 4°C	
Wet Chemistry	2 x 250 ml HDPE; HNO ₃ ; 1 x 250 ml HDPE H ₂ SO ₄ ; 4 x 250 ml HDPE, 1 x 250 ml amber H ₂ SO ₄	

COMMENTS/OBSERVATIONS

- Wastewater samples collected from 0.0 - 0.5' interval using certified laboratory cleared HDPE bottle ware (disposable)
 - VOC sample collected & poured at slow rate to prevent volatilization
 - Close off traffic access to street
 - Andy Judd / John Hess onsite during sample collection
 Biscardi
 Frank ~~Southern~~ (NYCDEP) Maliska Felter + Brett Still (G&E) provide oversight
 Sampler Signature/Date [Signature] 7/13/10

- On Carroll St. in between 3rd & 4th Ave

Reviewed by [Signature] Date 7/19/10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: Michael Murphy Station ID: RH - 033
Mary Velasquez (m) James Belas Time: ~1420
 Subcontractor/Crew: Traffic Management Water Depth: 5.3 - 7.05
 Tide: _____ Not Recorded

Weather: slight Rain / Drizzle

CSO Wastewater Sample ID: GC-SWRH033-WW-1 Sample Depth (below top surface): 0.5 ft Sample Time: 1435

Wet or Dry Weather Event: Wet

Number of Sampling Attempts: > 10

Problems During Collection: GEI collects additional 21 liters of sample volume
NO sediment sample collected

QC SAMPLE DATA

QA/QC Sample IDs: NONE DUP D-07132010-01, 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
<u>5.04</u>	<u>6.15</u>	<u>26.23</u>	<u>0.2</u>	<u>0.320</u>	<u>123</u>	<u>244</u>	<u>cloudy / white</u>

Floating Debris (describe): Floating solids - brown

Water Color: Clear - floating solids

Clarity: cloudy - white

Turbidity: 10.50

Sheen: not observed

Sample Analytical Parameters:	Bottleware/Preservation:	PID =
TCL VOCs <input checked="" type="checkbox"/>	5x 40 mL VOA vials, no headspace; HCL to pH < 2; 4°C	CO = <u>not</u>
TCL SVOCs <input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C	H ₂ S = <u>collected</u>
TCL Pesticides <input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C	LEL = <u>- Rain</u>
TCL PCBs <input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C	O ₂ = _____
TAL Metals + Hg (& filtered) <input checked="" type="checkbox"/>	2 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 1500 ml HDPE; 4°C	
Wet Chemistry <input checked="" type="checkbox"/>	2 x 250 ml HDPE; HNO ₃ ; 1 x 250 ml HDPE H ₂ SO ₄ ; 4 x 250 ml HDPE, 1 x 250 ml amber H ₂ SO ₄	

COMMENTS/OBSERVATIONS

- Wastewater samples collected from 0.0 ft to 0.5 ft interval using certified laboratory cleaned HDPE bottleware (disposable)
 - VOC sample collected & poured at slow rate to prevent volatilization

- After VOC collection chamber "empties" water level drops to approx 0.5' gss

Biscardi (mm)
Frank Sotero (NYCDEP) + Brett Smith (GEI) provide oversight

Sampler Signature/Date: [Signature] 7/13/10

- On Dayglass st, corner of Newins

Reviewed by [Signature] Date 7/17/10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: Michael Murphy Station ID: RH-034
Mary Velasquez Mike Broscoe (GRB) Time: 1430
 Subcontractor/Crew: Traffic Management Water Depth: NR
 Tide: NR Not Recorded
 Weather: Rein storms - 70-80°

CSO Wastewater Sample ID: GC-SWRH034-WW-1 Sample Depth (below top surface): 1.0 ft Sample Time: 1430

Wet or Dry Weather Event: Wet
 Number of Sampling Attempts: 1 - 24 hour composite
 Problems During Collection: 24 hour samplers shut off before
Full volumes could be collected - collect only 2 Amber jars + 1 water

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
							<u>Not recorded</u>

Floating Debris (describe): Floating garbage - refuse - bottles
 Water Color: brown - Floating solids
 Clarity: cloudy
 Turbidity: cloudy
 Sheen: none observed

Sample Analytical Parameters:	Bottleware/Preservation:
TCL VOCs	5x 40 mL VOA vials, no headspace; HCL to pH <2; 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 (& filtered)	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 1 500 ml HDPE; 4°C
Wet Chemistry	2 x 250 ml HDPE; HNO3; 1 x 250 ml HDPE H2SO4; 4 x 250 ml HDPE, 1 x 250 ml amber H2SO4

COMMENTS/OBSERVATIONS
 - sample collected using 24-hour ISCO composite sampler
 - sample was collected via ISCO pump into a 10-L tote and then poured into sample bottleware
 - VOC sample collected + poured at a slow enough rate to prevent volatilization
 - low volume sample submitted for SVOC, total metal + dissolved metals & TSS NR

Sampler Signature/Date: [Signature] 7/14/10

Gowanus pumping station on
 Butler St.

Reviewed by: [Signature] Date: 7/19/10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: Michael Murphy Station ID: RH-036
Mary Velasquez Jones Balus Time: 1635
 Subcontractor/Crew: Traffic Management Water Depth: 7.7-7.9
 Tide: Low Tide Not Recorded
 Weather: Overcast - 70° - 60°

CSO Wastewater Sample ID: GC-SW RH036-WW-1 Sample Depth (below top surface): 0.2 ft Sample Time: 1705

Wet or Dry Weather Event: Wet

Number of Sampling Attempts: 710

Problems During Collection:
NO sediment sample collected

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
<u>8.04</u>	<u>7.07</u>	<u>23.03</u>	<u>0.4</u>	<u>0.801</u>	<u>47.2</u>	<u>122</u>	<u>Brown / cloudy</u>

Floating Debris (describe): Flots, solids - toilet paper

Water Color: brown

Clarity: cloudy

Turbidity: cloudy / Brown

Sheen: Not observed

Sample Analytical Parameters:		Bottleware/Preservation:
TCL VOCs	<input checked="" type="checkbox"/>	5x 40 mL VOA vials, no headspace; HCL to pH <2; 4°C
TCL SVOCs	<input checked="" type="checkbox"/>	2x 1 L amber glass; 4°C
TCL Pesticides	<input checked="" type="checkbox"/>	2x 1 L amber glass; 4°C
TCL PCBs	<input checked="" type="checkbox"/>	2x 1 L amber glass; 4°C
TAL Metals + Hg (& filtered)	<input checked="" type="checkbox"/>	2x 1 L HDPE; HNO3 to pH <2; 4°C
Cyanide	<input checked="" type="checkbox"/>	1x 1 L HDPE; NaOH to pH >12; 4°C
TSS	<input checked="" type="checkbox"/>	1x 1 500 ml HDPE; 4°C
Wet Chemistry	<input checked="" type="checkbox"/>	2x 250 ml HDPE; HNO3; 1x 250 ml HDPE H2SO4; 4x 250 ml HDPE, 1x 250 ml amber H2SO4

PID = Not
 CO = Recorded
 H2S =
 LEL =
 O2 =

COMMENTS/OBSERVATIONS

- Wastewater samples collected from 0.0' - 0.5' interval using certified laboratory cleared HDPE bottleware (disposable)
 - VOC sample collected & poured at slow rate to prevent volatilization

Sampler Signature/Date: Frank [Signature] (NYCDEP) 7/13/10
Melissa Falter + Brett Still (GEI) poured only

- On Nevins St. (curb) at the end of President St.

Reviewed by [Signature] Date 7/19/10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: Michael Murphy Station ID: RH-037
 Mary Velasquez (mm) Jones Beles Time: 1610
 Subcontractor/Crew: Traffic Management Water Depth: 8.8 - 9.0
 Tide: low Not Recorded

Weather: Overcast 70°-60°
 Sample Depth (below top surface): 0.2 ft Sample Time: 1615

Wet or Dry Weather Event: Wet
 Number of Sampling Attempts: 710

Problems During Collection:
 NO Sediment Sample collected

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
5.14	6.83	25.23	0.3	0.664	486	78	white / cloudy

Floating Debris (describe): Observed - Floating solids

Water Color: White - Cloudy

Clarity: White / Cloudy

Turbidity: White / Cloudy

Sheen: None observed

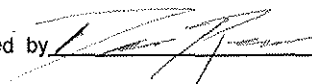
Sample Analytical Parameters:	Bottleware/Preservation:	PID=
TCL VOCs <input checked="" type="checkbox"/>	5x 40 mL VOA vials, no headspace; HCL to pH <2; 4°C	CO= Not
TCL SVOCs <input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C	H ₂ S= Retarded
TCL Pesticides <input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C	Leak=
TCL PCBs <input checked="" type="checkbox"/>	2 x 1 L amber glass; 4°C	O ₂ =
TAL Metals + Hg (& filtered) <input checked="" type="checkbox"/>	2 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 1 500 ml HDPE; 4°C	
Wet Chemistry	2 x 250 ml HDPE; HNO ₃ ; 1 x 250 ml HDPE H ₂ SO ₄ ; 4 x 250 ml HDPE, 1 x 250 ml amber H ₂ SO ₄	

COMMENTS/OBSERVATIONS

- Wastewater samples collected from 0.0' - 0.5' interval using certified laboratory cleaned HDPE bottleware (disposable)
 - VOC sample collected & poured at slow rate to prevent volatilization

Frank Bisland (mm) Malaga Keller + Brett Still (G&J) provide oversight
 Sampler Signature/Date 2-g 7/13/10

- On Nevins at the end of Sackett St. (in front of private entrance)

Reviewed by  Date 7/14/10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: James Bakas / CH2M Hill Station ID: RH031
Mike Pantalone / HDR Time: 1215 9/28/10
 Subcontractor/Crew: Matt Papulce / HDR Water Depth: 11.6 - 15.3
Traffic management Tide: High
 Weather: cloudy humid 70's

CSO Sample ID: G-6 SWRH031-ww-2 Grab Penetration: 1 ft Sample Time: 1230
 Wet or Dry Event: wet
 Number of Sampling Attempts: 5
 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
<u>2.34</u>	<u>6.89</u>	<u>23.85</u>	<u>0.7</u>	<u>1.35</u>	<u>449</u>	<u>41</u>	<u>none</u>

Floating Debris (describe): floatables, leaf/organic matter, white specs
 Water Color: cloudy brown
 Clarity: low
 Turbidity: high
 Sheen: none

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs ☒
 TCL SVOCs ☒
 TCL Pesticides ☒
 TCL PCBs ☒
 TAL Metals + Hg (Filtered) ☒
 Cyanide ☒
 TSS ☒
 Wet Chemistry ☐

5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HN03 to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

level
water not dropping, GFI collecting split samples
but higher than dry weather cond. forms

Sampler Signature/Date: [Signature] 9/28/10

Reviewed by: [Signature]

Date: 10/24/10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: James Balas / CDM Station ID: RH035
Mike Pantlano / Matt Popelar / HDA Time: 145 9/28/10
 Subcontractor/Crew: Traffic Management Water Depth: 4.75
 Tide: high
 Weather: Rain - heavy - windy 70's

CSO Sample ID: GC-SW RH035-WW-2 Grab Penetration: 1 ft Sample Time: 1155
 Wet or Dry Event: wet
 Number of Sampling Attempts: 5 - using 3 liter container
 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
<u>6.15</u>	<u>7.15</u>	<u>23.6</u>	<u>.1</u>	<u>244</u>	<u>209</u>	<u>81</u>	<u>none</u>

Floating Debris (describe): leaves, raw sewage, garbage, floatables,

Water Color: cloudy brown

Clarity: poor

Turbidity: high

Sheen: None

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs
 TCL SVOCs
 TCL Pesticides
 TCL PCBs
 TAL Metals + Hg (Filtered)
 Cyanide
 TSS
 Wet Chemistry

<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>

5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HN03 to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

water flowing at high rate -

Sampler Signature/Date

[Signature] 9/28/10

Reviewed by

[Signature]

Date

10/2/10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: James Balas
Matt P. / HDR
 Subcontractor/Crew: Mike P. / HDR
Traffic management

Station ID: PH006
 Time: 0720 9/30/10
 Water Depth: 18.0 - current too high to
 Tide: high bottom
 Weather: drizzling / overcast

CSO Sample ID: GC-SWRPH006-NW-3

Grab Penetration 0-1 ft Sample Time: 0725

Wet or Dry Event: wet

Number of Sampling Attempts: 4

Problems During Collection: Traffic management tickets breaking
due to fast current

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
<u>8.72</u>	<u>5.60</u>	<u>21.26</u>	<u>232</u>	<u>354</u>	<u>275</u>	<u>333</u>	

Floating Debris (describe): none floatables, white particles, leaf litter

Water Color: brownish gray

Clarity: low

Turbidity: high

Sheen: none

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs
 TCL SVOCs
 TCL Pesticides
 TCL PCBs
 TAL Metals + Hg (Filtered)
 Cyanide
 TSS
 Wet Chemistry

<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>

5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HNO₃ to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

current at high rate - breaking sq
GET split sampling

Sampler Signature/Date

[Signature] 9/30/10

Reviewed by [Signature] Date 10/21/10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: James Palas
mike P
 Subcontractor/Crew: Matt P
Traffic management

Station ID: 04007
 Time: 0805 9/30/10
 Water Depth: 5.43
 Tide: Low
 Weather: drizzling 70's

CSO Sample ID: GC-GW04007-ww3
 Wet or Dry Event: wet
 Number of Sampling Attempts: 5
 Problems During Collection: -

Grab Penetration 0-1 ft Sample Time: 0810

QC SAMPLE DATA

QA/QC Sample IDs:

NONE

DUP dup-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
<u>9.22</u>	<u>6.93</u>	<u>22.45</u>	<u>2.35</u>	<u>362</u>	<u>116</u>	<u>152</u>	<u>5.6 pid reading</u>

Floating Debris (describe): clear brown tint floatables

Water Color: clear - beige tint

Clarity: clear

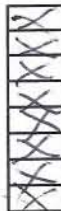
Turbidity: low

Sheen: present

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs
 TCL SVOCs
 TCL Pesticides
 TCL PCBs
 TAL Metals + Hg (Filtered)
 Cyanide
 TSS
 Wet Chemistry



5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HN03 to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

Chemical odor present

Ferrous Iron - 0.0 mg/L

Sampler Signature/Date

James Palas [Signature] 9/30/10

Reviewed by [Signature] Date 10-21-10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: D. Brann Station ID: RH-031
J. Balas Time: 0616
 Subcontractor/Crew: Traffic Management Inc. Water Depth: 10.0'
 Tide: -
 Weather: Moderate rain

CSO Sample ID: 6C-SWRH-031-ww-3 Grab Penetration 0.5 ft Sample Time: 0616
 Wet or Dry Event: wet
 Number of Sampling Attempts: ~5
 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
<u>9.87</u>	<u>7.33</u>	<u>20.17</u>	<u>0.0</u>	<u>0.058</u>	<u>148</u>	<u>189</u>	

Floating Debris (describe): Brown floatables, white debris

Water Color: light brown

Clarity: moderate

Turbidity: 148

Sheen: none

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs ☒
 TCL SVOCs ☒
 TCL Pesticides ☒
 TCL PCBs ☒
 TAL Metals + Hg (Filtered) ☒
 Cyanide ☒
 TSS ☒
 Wet Chemistry ☐

5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HN03 to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

Sampler Signature/Date

[Signature]

10/1/10

Reviewed by _____ Date _____

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: Dave Ream > CH2M Station ID: RH-033
James Balas Time: 0710 10/1/10
 Subcontractor/Crew: Traffic Management Inc. Water Depth: 5.6'
 Tide: -
 Weather: Moderate rain

CSO Sample ID: 6C-SWRH-033-W-3 Grab Penetration 0.5 ft Sample Time: 0710
 Wet or Dry Event: Wet
 Number of Sampling Attempts: ~5
 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
<u>8.68</u>	<u>11.12</u>	<u>26.65</u>	<u>0.9</u>	<u>1.79</u>	<u>295</u>	<u>-37</u>	

Floating Debris (describe): some floatables + paper

Water Color: v. light brown

Clarity: - moderate

Turbidity: high

Sheen: none

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs
 TCL SVOCs
 TCL Pesticides
 TCL PCBs
 TAL Metals + Hg (Filtered)
 Cyanide
 TSS
 Wet Chemistry

<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>

5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HN03 to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

- Moderate / heavy rain still occurring, water level in sewer is high.

Sampler Signature/Date

Dave Ream 10/1/10

Reviewed by _____ Date _____

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: D. Reamer
J. Bales
 Subcontractor/Crew: Traxx Management Inc

Station ID: RH-034
 Time: 0900
 Water Depth: ~20'
 Tide: _____
 Weather: _____

CSO Sample ID: GC-SW RH-034-WW-3
 Wet or Dry Event: wet
 Number of Sampling Attempts: 5
 Problems During Collection: none

Grab Penetration Composite
20' BGS
 Sample Time: 0900

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

Floating Debris (describe): Brown floatables + leaves
 Water Color: m. brown
 Clarity: poor
 Turbidity: -
 Sheen: -

Sample Analytical Parameters:	Bottleware/Preservation:
TCL VOCs <input checked="" type="checkbox"/>	5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
TCL SVOCs <input checked="" type="checkbox"/>	2 X 1L amber glass 4°C
TCL Pesticides <input checked="" type="checkbox"/>	2 X 1L amber glass 4°C
TCL PCBs <input checked="" type="checkbox"/>	2 X 1L amber glass 4°C
TAL Metals + Hg (Filtered) <input checked="" type="checkbox"/>	2X1L HDPE, HN03 to PH < 2, 4°C
Cyanide <input checked="" type="checkbox"/>	2 x 1L HDPE, NaOH to PH > 12, 4°C
TSS <input checked="" type="checkbox"/>	1X 1 500ml HDPE, 4°C
Wet Chemistry <input type="checkbox"/>	Various

COMMENTS/OBSERVATIONS

-ISCO Sampler #2 stopped working over night. Sample collected from Isco Sampler #1 which was collected over 24 hours
- water quality readings not collected due to limited sample volume

Sampler Signature/Date [Signature] 10-11-10

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: D. Ream Station ID: RH-035
J. Bais Time: 0540
 Subcontractor/Crew: Traffic Management Inc. Water Depth: 0 (water flowing from manhole)
 Tide: -
 Weather: Heavy! Rain

CSO Sample ID: GC-SWRH-035-WW-03 Grab Penetration 0.5 ft Sample Time: 0540
 Wet or Dry Event: wet
 Number of Sampling Attempts: 25
 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
<u>8.13</u>	<u>6.92</u>	<u>21.17</u>	<u>0.1</u>	<u>0.123</u>	<u>107</u>	<u>199</u>	

Floating Debris (describe): Brown floatables w/ paper

Water Color: light brown

Clarity: moderate

Turbidity: low

Sheen: none

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs	<input checked="" type="checkbox"/>	5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
TCL SVOCs	<input checked="" type="checkbox"/>	2 X 1L amber glass 4°C
TCL Pesticides	<input checked="" type="checkbox"/>	2 X 1L amber glass 4°C
TCL PCBs	<input checked="" type="checkbox"/>	2 X 1L amber glass 4°C
TAL Metals + Hg (Filtered)	<input checked="" type="checkbox"/>	2X1L HDPE, HN03 to PH < 2, 4°C
Cyanide	<input checked="" type="checkbox"/>	2 x 1L HDPE, NaOH to PH > 12, 4°C
TSS	<input checked="" type="checkbox"/>	1X 1 500ml HDPE, 4°C
Wet Chemistry	<input type="checkbox"/>	Various

COMMENTS/OBSERVATIONS

- water flow was flowing out of man hole cover -

Sampler Signature/Date

[Signature] 10-1-10

Reviewed by _____ Date _____

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: P. Reamer > CH2M Hill Station ID: RH-036
J. Balas Time: 0820
 Subcontractor/Crew: Traffic Management Inc. Water Depth: 4.5'
 Tide: _____
 Weather: Moderate rain

CSO Sample ID: 6C-SWRH-036-WW-3 Grab Penetration 0.5 ft Sample Time: 0820
 Wet or Dry Event: Wet
 Number of Sampling Attempts: 1
 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
<u>16.20</u>	<u>7.69</u>	<u>19.53</u>	<u>0.1</u>	<u>0.143</u>	<u>101</u>	<u>255</u>	

Floating Debris (describe): some sediment observed

Water Color: v. light brown

Clarity: moderate

Turbidity: low

Sheen: not observed

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs ☒
 TCL SVOCs ☒
 TCL Pesticides ☒
 TCL PCBs ☒
 TAL Metals + Hg (Filtered) ☒
 Cyanide ☒
 TSS ☒
 Wet Chemistry ☐

5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HN03 to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

Sampler Signature/Date

[Signature]

10/1/10

Reviewed by _____ Date _____

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: D. Ream CH2M Station ID: RH-037
J. Balas Time: 0750
 Subcontractor/Crew: Traffic Management Inc. Water Depth: 8.4'
 Tide: _____
 Weather: Moderate to heavy rain

CSO Sample ID: GC-RH-037-WW-3 Grab Penetration 0.5 ft Sample Time: 0750
 Wet or Dry Event: Wet
 Number of Sampling Attempts: 5
 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
<u>10.88</u>	<u>7.98</u>	<u>19.86</u>	<u>0.1</u>	<u>0.170</u>	<u>217</u>	<u>143</u>	

Floating Debris (describe): none noticed

Water Color: cloudy, light brown

Clarity: cloudy, poor

Turbidity: moderate

Sheen: - none

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs ☒
 TCL SVOCs ☒
 TCL Pesticides ☒
 TCL PCBs ☒
 TAL Metals + Hg (Filtered) ☒
 Cyanide ☒
 TSS ☒
 Wet Chemistry ☐

5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HN03 to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

- Rain increasing while sampling. Original water depth = 8.4'
but rain caused water level to rise 2' steadily while
sampling

Sampler Signature/Date

[Signature] 10/1/10

Reviewed by _____ Date _____

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: P. Reamer > CH2M Station ID: RH-038
S. Bales Time: 0730
 Subcontractor/Crew: Traffic Management Inc. Water Depth: 9.01
 Tide: -
 Weather: Moderate to light rain

CSO Sample ID: 6C-SWRH-038-WW-3 Grab Penetration 0.5 ft Sample Time: 0730
 Wet or Dry Event: Wet
 Number of Sampling Attempts: ~5
 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
<u>7.31</u>	<u>9.05</u>	<u>20.51</u>	<u>0.2</u>	<u>0.338</u>	<u>86.1</u>	<u>73</u>	

Floating Debris (describe): Brown floatables, white objects

Water Color: light brown

Clarity: Moderate

Turbidity: low

Sheen: slight "film" present

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs
 TCL SVOCs
 TCL Pesticides
 TCL PCBs
 TAL Metals + Hg (Filtered)
 Cyanide
 TSS
 Wet Chemistry

<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>

5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HN03 to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

Rain stopped at 0737, resumed rain at 0745
- water level in sewers is still high

Sampler Signature/Date

[Signature]

10/1/10

Reviewed by _____ Date _____

CSO Wastewater Sampling Form
Gowanus Canal Remedial Investigation
Brooklyn, Kings County, New York

Samplers/Inspectors: D. Reamer & CH2M Station ID: 04-005
J. Balas Time: 0840
 Subcontractor/Crew: Traffic Management Inc. Water Depth: 11.8'
 Tide: _____
 Weather: light rain

CSO Sample ID: 6C-SW04-005-ww-3 Grab Penetration 0.5 ft Sample Time: 0840
 Wet or Dry Event: wet
 Number of Sampling Attempts: ~5
 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
<u>14.63</u>	<u>7.44</u>	<u>19.76</u>	<u>0.1</u>	<u>0.155</u>	<u>85.6</u>	<u>271</u>	

Floating Debris (describe): cloudy no floatables observed

Water Color: cloudy

Clarity: too good

Turbidity: low

Sheen: none observed

Sample Analytical Parameters:

Bottleware/Preservation:

TCL VOCs ☒
 TCL SVOCs ☒
 TCL Pesticides ☒
 TCL PCBs ☒
 TAL Metals + Hg (Filtered) ☒
 Cyanide ☒
 TSS ☒
 Wet Chemistry ☐

5x 40 mL vials/TerraCore with stir bar, 1-40 mL vial, full; 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2 X 1L amber glass 4°C
 2X1L HDPE, HN03 to PH < 2, 4°C
 2 x 1L HDPE, NaOH to PH > 12, 4°C
 1X 1 500ml HDPE, 4°C
 Various

COMMENTS/OBSERVATIONS

Sampler Signature/Date [Signature] 10-1-10

Reviewed by _____ Date _____