

One General Motors Drive Syracuse, New York 13206 tel: 315 434-3200 fax: 315 463-5100

August 7, 2009

Mr. Steven P. Stucker, P.G. Lead Engineer National Grid 300 Erie Boulevard West Syracuse, New York 13202-4250

Subject: Annual (2009) Groundwater Monitoring Report Hudson (Water Street) Site, Hudson, New York

Dear Mr. Stucker:

CDM is pleased to submit this Annual (2009) *Groundwater Monitoring Report* for the Hudson (Water Street) Site, Hudson, New York. This report includes the requirements associated with the operation, maintenance, and monitoring of the Remedial Action Plan (RA) at Operable Unit (OU) 1 of the Hudson (Water Street) Former Manufactured Gas Plant (MGP) Site located in Hudson, New York. Please refer to the Operation, Maintenance, and Monitoring Plan (OM&M Plan), January 2007 and the CDM memorandum dated July 30, 2007 for quarterly well monitoring, annual sampling, quarterly site inspection requirements, and associated detailed site conditions and groundwater flow pattern documentation.

Background

The Hudson (Water Street) Former Manufactured Gas Plant Site located in Hudson, New York is comprised of approximately two acres of land and is owned by National Grid (refer to Attachment A for Figure 1 - Location Map and Figure 2 – Post Remediation Site Conditions). The remedial action plan in place at the site was substantially completed in December 2006 and the OM&M Plan was finalized in January 2007 to provide a method for monitoring its effectiveness.

The objective of the post-construction groundwater monitoring task within the OM&M plan is to characterize post-remedy groundwater flow patterns and assess the quality of shallow groundwater as it leaves the site. Groundwater samples are analyzed for the presence and/or extent of benzene, toluene, ethylbenzene and total xylenes (BTEX) and naphthalene.

Site Inspections and General Maintenance

Site inspections were conducted on December 3, 2008, March 4, 2009 and June 2, 2009. Quarterly site inspections will continue for a five year period and will include inspection of the existing

Mr. Steven P. Stucker, P.G. August 7, 2009 Page 2

groundwater monitoring wells (MW-02, MW-03, MW-05, MW-06, MW-07, MW-08A, MW-09A, MW-10, MW-11, OW-2, OW-4), the three existing DNAPL monitoring wells (RW-1, RW-2, CW-01A), security fencing, and other site features. To date, there have been no public complaints or comments noted by National Grid. The site inspection reports are included in Attachment B.

The site in general, including the surface cover areas, erosion controls, steel sheet pile retaining wall and trees, shrubs and other planting materials are in good condition. In November 2008, additional riprap was installed along the Hudson River bank (near RW-1) due to minor settlement and erosion. National Grid's OM&M contractor will continue to note additional settlement and/or erosion and it will be maintained to protect the integrity of the site.

DNAPL Monitoring and Collection

Quarterly DNAPL monitoring took place over the last year on the following dates; December 3, 2008, March 4, 2009 and June 1, 2009. No DNAPL was recovered from any of the wells during any of these events. However, during all three quarters a slight odor was noted at monitoring well CW-01A. The DNAPL monitoring and collection reports are included in Attachment B.

As stated in the OM&M Plan, quarterly DNAPL monitoring was required for a period of at least one year for RW-1, RW-2, and CW-01A. If DNAPL was present, then the depth to the DNAPL surface from the top of the well casing was to be measured and recorded. DNAPL would be collected and disposed of off-site as necessary. If DNAPL does not accumulate in any of the wells at a thickness more than 0.1 foot within the first year or the rate of DNAPL production for each well does not exceed two gallons per year, with the rate measured over the period of one year, then the program will be completed.

After the initial one year monitoring period the DNAPL program was evaluated. Due to no recovery of DNAPL over the last four monitoring periods the DNAPL monitoring program will be terminated.

Site Monitoring Wells

The site monitoring wells include: MW-02, MW-03, MW-05, MW-06, MW-07, MW-08A, MW-09A, MW-10, MW-11, OW-2, OW-4, CW-01A, RW-1 and RW-2. Only monitoring wells MW-03, MW-05, MW-06 and MW-11 were sampled for site constituents. Well locations are shown on the Site Plan in Attachment A.

Well Gauging

All wells listed in the section above, as well as the level of the Hudson River, were gauged prior to groundwater sampling on June 1, 2009. The water level elevation (feet above mean sea level (amsl) ranged from 1.03 feet amsl at the Hudson River, to 7.67 feet amsl at CW-01A. The groundwater direction continues appears to remain in a south/southeast direction as shown on previous groundwater contour figures. A summary of all static water level measurements collected at the site is included in Attachment B.

Groundwater Sampling

Groundwater samples were collected from monitoring wells MW-03, MW-05, MW-06 and MW-11. The wells were purged using a peristaltic pump. Field Measurements of pH, conductivity, turbidity, dissolved oxygen, temperature, total dissolved solids and oxidation-reduction potential were recorded using a Horiba water quality meter during sample collection. Samples were collected once field parameters had been stabilized. Well purging data is included in Attachment B.

1

Four aqueous samples and a field duplicate were processed for BTEX, and naphthalene by the USEPA SW486 method 8260B, with additional QC requirements of the NYSDEC ASP. A trip blank was also analyzed. The samples were sent to Test America (formerly Severn Trent Laboratories, Inc.) of Buffalo, New York in accordance with the NYSDEC Analytical Services Protocol. The chain-of-custody record is included in Attachment B.

After the initial five year monitoring period has been completed, in 2012, the collected data will be evaluated to determine whether the program should be continued and/or if any modifications are necessary. According to the OM&M Plan, the program will be complete if it is demonstrated that chemicals of potential concern (COPC's) are not migrating offsite through the groundwater at concentrations higher than the New York State Ambient Water Quality Standards (NYSAWQS). The program may be discontinued if the concentrations of COPC's in samples collected are below the NYSAWQS for two consecutive years starting with the fourth year of the five year program. If the standards are not met at this time, then the program will be continued until concentrations of COPC are below the standards for two consecutive years.

Groundwater Analytical Results

There was no BTEX or naphthalene detected in the samples from monitoring wells MW-03, MW-05 and MW-06. However, benzene and ethylbenzene were detected in MW-11. Both benzene and ethybenzene were detected above the NYSAWQS in monitoring well MW-11. Summarized laboratory results are included in Attachment C.

Data Validation

The analytical data report provided by Test America was sent to Data Validation Services of North Creek, New York for third party data validation. The primary objective of the data validation was to identify any questionable or invalid laboratory processes or data. The data validation company generated the Data Usability Summary Report (DUSR) from review of the summary form information, with review of sample raw data and limited review of the associated QC raw data, as required for the DUSR validation package.

The review completed by Data Validation Services stated that the field sample analyte values/reporting limits are usable as reported. The data validation report (with qualified laboratory report forms) is included in Attachment D.

Mr. Steven P. Stucker, P.G. August 7, 2009 Page 4

Conclusions and Recommendations

The data collected from the June 2009 sampling event indicate that there are two contaminants of concern (benzene and ethylbenzene) at well MW-11 with benzene and ethylbenzene above the NYSAWQS. In addition, o-xylene detected at this well during the previous sampling event of June 2008 was not detected during the June 2009 event. Additionally, from the August 2007 to the June 2009 sampling event, benzene levels were reduced from 12 ug/L to 4.6 ug/L and ethylbenzene levels were reduced from 16 ug/L to 4.9 ug/L. MW-11 is located to the west of the brick warehouse, sampling and monitoring will continue at this location.

Since inception of the well monitoring, no DNAPL has been noted in any site well. Therefore, CDM recommends discontinuing the DNAPL quarterly monitoring at the site. The remaining groundwater monitoring program and maintenance activities, as described in the OM&M Plan dated January 2007 will be continued.

If you have any questions relating to these sampling events or our recommendations, please do not hesitate to contact me at 315-434-3256.

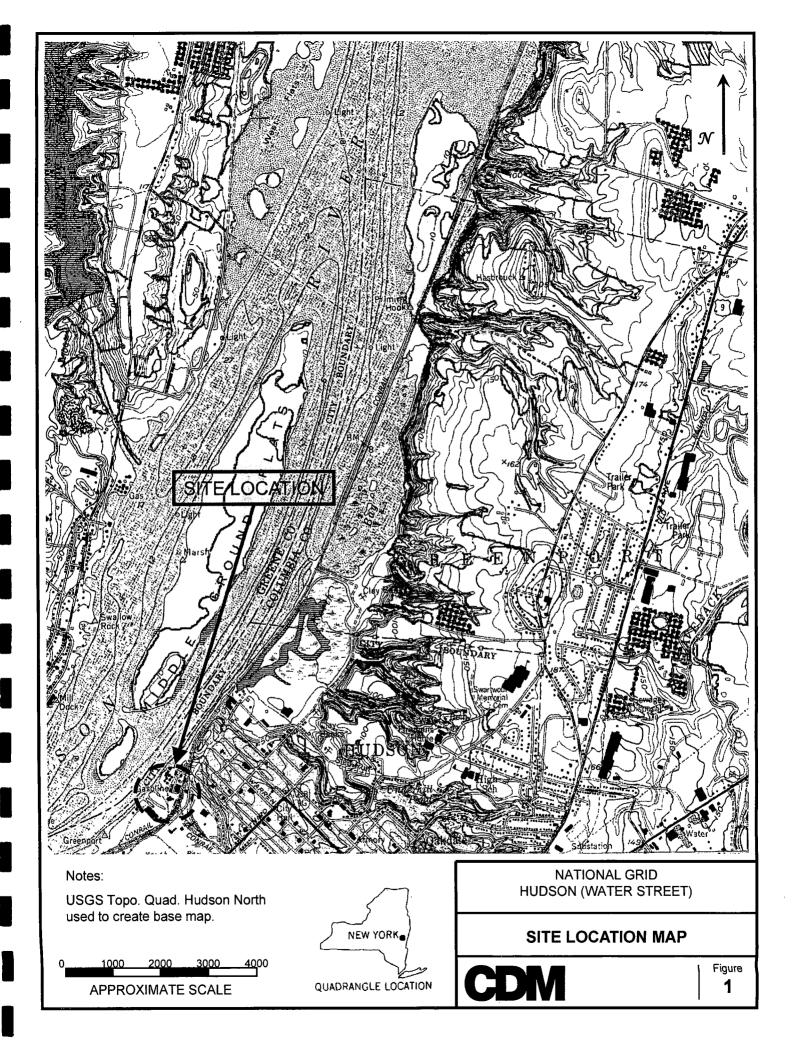
Very truly yours,

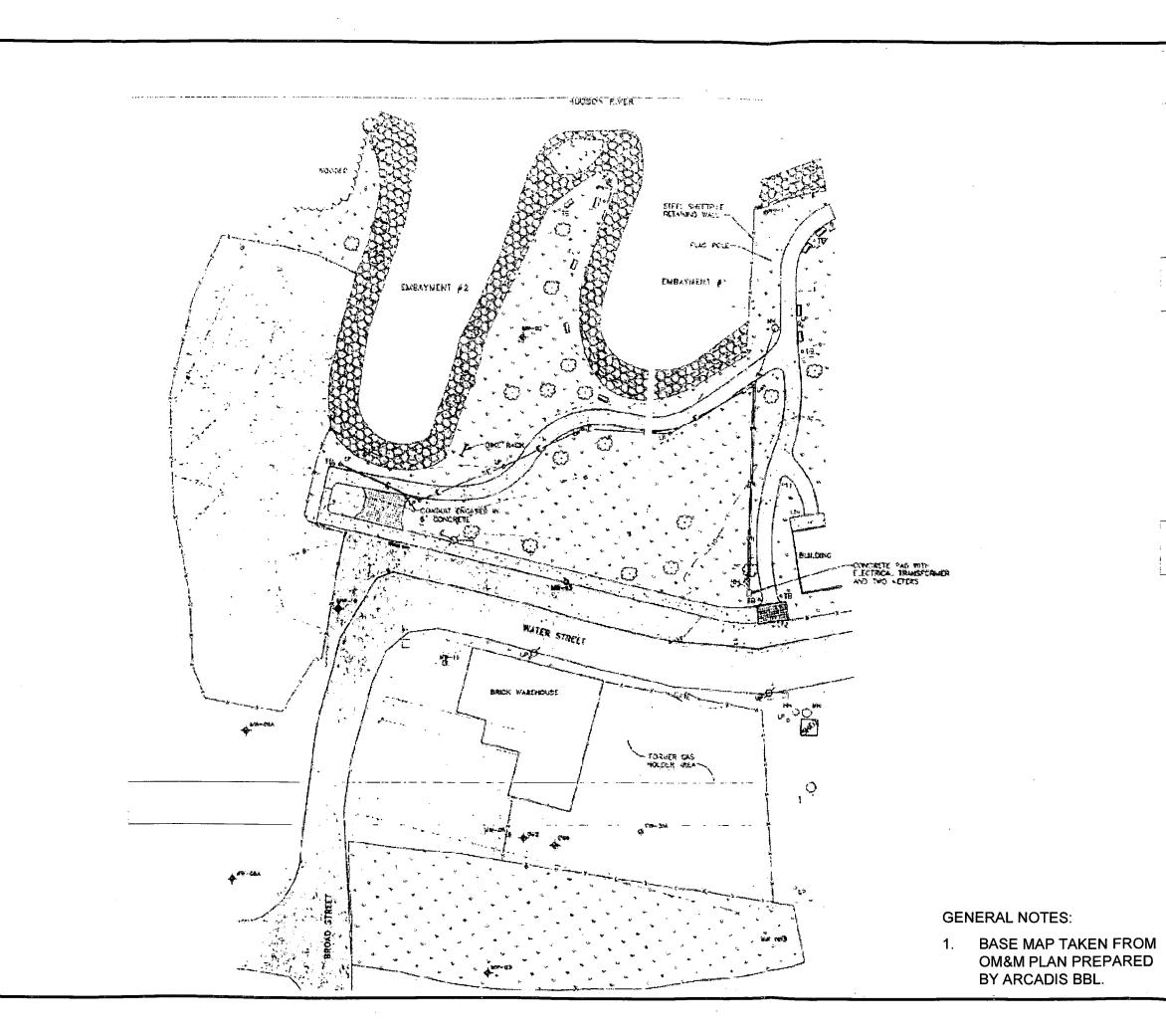
Matthew D. Millias

Matthew D. Millias, P.E. Senior Project Manager Camp Dresser & McKee

Cc: Tim Beaumont - CDM

Attachment A Site Maps





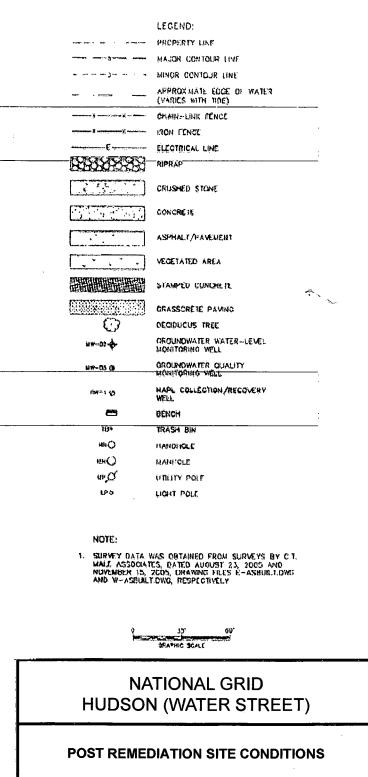




Figure **2**

Attachment B Inspection and Monitoring Forms

National Grid Water Street, Hudson, New York

•				1999 - 1997 - 1997 - 1998 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -			///.0		
	Sampling Per		n Beaumont			Date:	6/109		
	Job Number:	36380.70089				Weath		1650	
_	Weil Id.	M W-0 3				Time Ir		Time Out	1340
							····		
	Well Infe	ormation							
				TOC	Other	Well T	/pe: Flus	nmount 🔀 🔅	Stick-Up
	Depth to Wat	er:	(feet)	2.20		Well Lo	ocked:	Yes	No
	Depth to Proc		(feet)				ing Point Marked:	_Yes	No
	Depth to Bott		(feet)	25.50		Well M			her:
	Length of Wa		(feet)	23.30			iameter: 1"	2"\/Ot	he r :
	Volume of Wa		(gal)	3.73		Comm	ents:		
	Three Well Vo	olumes:	(gal)	1619		·			
_ I r					<u> </u>				
	Purging Ir	nformation							
1				·				Conversion I	
	Purging Meth		Baile			os Pump	gal/ft.	<u>1" ID 2" ID</u>	4" ID 6" ID
	Tubing/Bailer		Teflor			ethylene	of	004 040	
	Sampling Met		Baile		Grundfo	os Pump	water	0.04 0.16	
	Average Pum			200			1 gallo	n=3.785L=3785r	nL=1337cu. feet
	Duration of P		(min)	30					
Ţ	Total Volume	Removed:	(gal)		d well go dry?	Yes	No		
┛	Horiba U-22 V	Nater Quality I	Meter Used?	Yes	No				
			<u> </u>						
T	Time	DTW	pН	Conductivity	Turbidity	DO	Temp	TDS	ORP
┛		(feet)		(mS/cm)	(NTU)	(mg/L)	(°C)	(g/L)	(mV)
	1305	2.90	650	(990)	96.2	502	15.15	,63	-153
	01 []	3.30	6.41	,989	76.1	0	14.83	,63	-160
đ	1315	4.85	6.40	.985	50.6	0	14.90	.63	-162
	1320	6.20	6.41	, 983	35.2	0	14.94	.63	-163
	1325	8.25	6.41	.980	25.4	0	14.88	.62	-163
ľ	350	10.00	6.4	.980	23.2	0	14.85	.63	-/64
	1335	11.75	6.41	.978	24.6	0	14.79	.62	-164
			_ <u></u>	ļ					
Ë									
Ţ				· · · · · · · · · · · · · · · · · · ·					
				ļ					
				l					L
ŗ									
┛	Sampling Inf	ormation:							
	USEPA SW-84	6 Method 8260	VOC's	BTEX Includin	ig Naphthalene		3 - 40 mL vials	Yes	
		Al	•		وسيع البيا	L			,
	Sample ID:	MW-03-0		•	Yes No		Shipped: Drop-off		
٦	Sample Time:	1335	M	S/MSD?	Yes No X		· Fe	ed-Ex	UPS
	Comments/No	otes:	na a nl				Laboratory:	Test An	nerica.
		NU O	on no sh					Amherst, N	

National Grid Water Street, Hudson, New York

	rsonnel: Tir	m Beaumont			Date:	6/1/09	7	
	36380.70089			·····	Weather		650	
·····				······	÷	1715		12
Well Id.	MW-05				Time In:	1265	Time Ou	: 1255
	ormation							
		-	тос	Other	Well Typ	o: Ehu	shmount	Stick-Up
Depth to Wate	or:	(feet)	5.92	Ouner	Well Loc		Yes	No
Depth to Proc		(feet)	5,16			g Point Marked:	Yes	No
Depth to Bott		(feet)	28.10		Well Mat	-		ther:
Length of Wa			22.18		Well Dia		2"X0t	
Volume of Wa		(gal)	3.55		Commer			
Three Well Vo		(gal)	10.65					
Purging Ir	nformation							
		-				[Conversion	Factors
Purging Meth	od:	Baile	r Peristaltic	Grundf	os Pump	gal/ft.	1" ID 2" ID	
Tubing/Bailer	Material:	Teflor	Stainless St.			of		1
Sampling Met	and the second se	Baile	r Peristaltic	· · · · ·	os Pump	water	0.04 0.16	0.66 1.47
Average Pum	ping Rate:	(ml/min)				1 gall		mL=1337cu. feet
Duration of P		(min)	30			<u> </u>		
Total Volume	Removed:	(gal)	- 1.5 Die	d well go dry?	Yes	₀X		
Horiba U-22 V	Nater Quality	Meter Used?	Vec		ليجيبها			
			les					
Time	DTW	DH	Conductivity	Turbidity	DO	Temp	TDS	
Time	DTW (feet)	рН	Conductivity (mS/cm)		DO (mg/L)	Temp	TDS (g/l.)	ORP (m\/)
	(feet)		(mS/cm)	(NTU)	(mg/L)	(°C)	(g/L)	(mV)
1220	(feet)	6.57	(mS/cm)	(NTU) 92.6	(mg/L) Y.32	(°C) / 2.93	(g/L) •47	(mV) -/79
1220	(feet) 6.60 7.40	6.57	(mS/cm) .731 .714	(NTU) 92.6 70.2	(mg/L) 4.32 0	(°C) 12.93 12.62	(g/L) •47 • 46	(mV) -179 -183
1220 1225 1230	(feet) 6.60 7.40 7.80	6.57	(mS/cm) .731 .714 .709	(NTU) 92.6 70.2 \$7.4	(mg/L) 9.32 0	(°C) /2.93 /2.62 /2.98	(g/L) .47 .46 .41	(mV) -179 -183 -180
1220 1225 1230 1235	(feet) 6.60 7.40 7.80 8.65	6.57 6.50 6.45 6.43	(mS/cm) .731 .714 .709 .709	(NTU) 92.6 70.2 \$7.4 25.6	(mg/L) 9.32 0 0 0	(°C) /2.93 /2.62 /2.98 /2.62	(g/L) .47 .47 .47 .47	(mV) -/79 -/83 -/80 -/77
1220 1225 1230 1237 1237 1240	(feet) 6.60 7.40 7.80 8.65 9.20	6.57 6.50 6.45 6.43 6.43	(mS/cm) .731 .714 .709 .709 .709 .707	(NTU) 92.6 70.2 \$7.4 25.6 /5.2	(mg/L) 9.32 0 0 0	(°C) /2.93 /2.62 /2.98 /2.62 /2.60	(g/L) .47 .47 .41 .41 .41	(mV) -/79 -/83 -/80 -/77 -/75
1220 1225 1230 1230 1237 1240 1245	(feet) 6.60 7.40 7.80 8.65 9.20 /0.55	6.57 6.50 6.45 6.43 6.43 6.42 6.42	(mS/cm) .731 .714 .709 .709 .707 .707 .704	(NTU) 92.6 70.2 \$7.4 25.6 /5.2 /2.4	(mg/L) 9.32 0 0 0 0	(°C) 12.93 12.62 12.62 12.62 12.60 12.62	(g/L) .47 .47 .47 .47 .47 .47 .45	(mV) -179 -183 -180 -177 -177 -175 -174
1220 1225 1230 1237 1237 1240	(feet) 6.60 7.40 7.80 8.65 9.20	6.57 6.50 6.45 6.43 6.43	(mS/cm) .731 .714 .709 .709 .709 .707	(NTU) 92.6 70.2 \$7.4 25.6 /5.2	(mg/L) 9.32 0 0 0	(°C) /2.93 /2.62 /2.98 /2.62 /2.60	(g/L) .47 .47 .41 .41 .41	(mV) -/79 -/83 -/80 -/77 -/75
1220 1225 1230 1230 1237 1240 1245	(feet) 6.60 7.40 7.80 8.65 9.20 /0.55	6.57 6.50 6.45 6.43 6.43 6.42 6.42	(mS/cm) .731 .714 .709 .709 .707 .707 .704	(NTU) 92.6 70.2 \$7.4 25.6 /5.2 /2.4	(mg/L) 9.32 0 0 0 0	(°C) 12.93 12.62 12.62 12.62 12.60 12.62	(g/L) .47 .47 .47 .47 .47 .47 .45	(mV) -179 -183 -180 -177 -177 -175 -174
1220 1225 1230 1230 1237 1240 1245	(feet) 6.60 7.40 7.80 8.65 9.20 /0.55	6.57 6.50 6.45 6.43 6.43 6.42 6.42	(mS/cm) .731 .714 .709 .709 .707 .707 .704	(NTU) 92.6 70.2 \$7.4 25.6 /5.2 /2.4	(mg/L) 9.32 0 0 0 0	(°C) 12.93 12.62 12.62 12.62 12.60 12.62	(g/L) .47 .47 .47 .47 .47 .47 .45	(mV) -179 -183 -180 -177 -177 -175 -174
1220 1225 1230 1230 1237 1240 1245	(feet) 6.60 7.40 7.80 8.65 9.20 /0.55	6.57 6.50 6.45 6.43 6.43 6.42 6.42	(mS/cm) .731 .714 .709 .709 .707 .707 .704	(NTU) 92.6 70.2 \$7.4 25.6 /5.2 /2.4	(mg/L) 9.32 0 0 0 0	(°C) 12.93 12.62 12.62 12.62 12.60 12.62	(g/L) .47 .47 .47 .47 .47 .47 .45	(mV) -179 -183 -180 -177 -177 -175 -174
1220 1225 1230 1230 1237 1240 1245	(feet) 6.60 7.40 7.80 8.65 9.20 /0.55	6.57 6.50 6.45 6.43 6.43 6.42 6.42	(mS/cm) .731 .714 .709 .709 .707 .707 .704	(NTU) 92.6 70.2 \$7.4 25.6 /5.2 /2.4	(mg/L) 9.32 0 0 0 0	(°C) 12.93 12.62 12.62 12.62 12.60 12.62	(g/L) .47 .47 .47 .47 .47 .47 .45	(mV) -179 -183 -180 -177 -177 -175 -174
1220 1225 1230 1230 1237 1240 1245	(feet) 6.60 7.40 7.80 8.65 9.20 /0.55	6.57 6.50 6.45 6.43 6.43 6.42 6.42	(mS/cm) .731 .714 .709 .709 .707 .707 .704	(NTU) 92.6 70.2 \$7.4 25.6 /5.2 /2.4	(mg/L) 9.32 0 0 0 0	(°C) 12.93 12.62 12.62 12.62 12.60 12.62	(g/L) .47 .47 .47 .47 .47 .47 .45	(mV) -179 -183 -180 -177 -177 -175 -174
1220 1225 1230 1230 1237 1240 1245	(feet) 6.60 7.40 7.80 8.65 9.20 /0.55 /1.20	6.57 6.50 6.45 6.43 6.43 6.42 6.42	(mS/cm) .731 .714 .709 .709 .707 .707 .704	(NTU) 92.6 70.2 \$7.4 25.6 /5.2 /2.4	(mg/L) 9.32 0 0 0 0	(°C) 12.93 12.62 12.62 12.62 12.60 12.62	(g/L) .47 .47 .47 .47 .47 .47 .45	(mV) -179 -183 -180 -177 -177 -175 -174
1220 1225 1230 1237 1245 1245 1250	(feet) 6.60 7.40 7.80 8.65 9.20 /0.55 /1.20	6.57 6.50 6.45 6.43 6.43 6.42 6.42	(mS/cm) .731 .714 .709 .709 .707 .707 .704	(NTU) 92.6 70.2 \$7.4 25.6 /5.2 /2.4	(mg/L) 9.32 0 0 0 0	(°C) 12.93 12.62 12.62 12.62 12.60 12.62	(g/L) .47 .47 .47 .47 .47 .47 .45	(mV) -179 -183 -180 -177 -177 -175 -174
1220 1225 1230 1237 1245 1245 1250	(feet) 6.60 7.40 7.80 8.65 9.20 70.55 71.20	6.57 6.45 6.45 6.43 6.42 6.41 6.41 6.42	(mS/cm) .731 .714 .709 .709 .709 .707 .704 .705	(NTU) 92.6 70.2 \$7.4 25.6 15.2 72.4 12.4 12.4	(mg/L) 9.32 0 0 0 0	(°C) /2.93 /2.62 /2.98 /2.60 /2.62 /2.62 /2.62	(g/L) .47 .47 .47 .47 .47 .45	(mV) -/79 -/83 -/80 -/77 -/77 -/77 -/77 -/77
/22 0 1225 1230 1237 1240 1245 1250 Sampling Inf	(feet) 6.60 7.40 7.60 8.65 9.20 7.20 7.55 11.20 0.55 11.20 0.6 Method 8260	6.57 6.50 6.45 6.43 6.42 6.41 6.41 6.41	(mS/cm) .731 .714 .709 .709 .709 .707 .704 .705	(NTU) 92.6 70.2 \$7.4 25.6 /5.2 /2.4	(mg/L) 9.32 0 0 0 0	(°C) 12.93 12.62 12.62 12.62 12.60 12.62	(g/L) .47 .47 .47 .47 .47 .45	(mV) -179 -183 -180 -177 -177 -175 -174
/22 0 1225 1230 1237 1240 1245 1250 Sampling Inf	(feet) 6.60 7.40 7.80 8.65 9.20 70.55 71.20	6.57 6.50 6.45 6.43 6.43 6.42 6.41 6.41 6.42	(mS/cm) .731 .714 .709 .709 .709 .707 .704 .705 .705 .705	(NTU) 92.6 70.2 \$7.4 25.6 15.2 72.4 12.4 12.4	(mg/L) 9.32 0 0 0 0	(°C) /2.93 /2.62 /2.97 /2.62 /2.62 /2.62 /2.62 /2.62 /2.62	(g/L) . 47 . 47 . 47 . 47 . 47 . 45 . 45 . 45 . 45	(mV) -/79 -/83 -/80 -/77 -/77 -/77 -/77 -/77 -/77 -/79 -/77
/22 0 1225 1230 1237 1240 1245 1245 1250 Sampling Inf	(feet) 6.60 7.40 7.80 8.65 9.20 70.55 71.20 0.55 71.20 0.55 71.20 0.65 0.55 0.65	6.57 6.50 6.45 6.43 6.42 6.41 6.41 6.42 6.41 6.42	(mS/cm) ,731 ,714 ,709 ,709 ,709 ,707 ,704 ,705 BTEX Includin uplicate?	(NTU) 92.6 70.2 37.4 25.6 /[.2 /2.4 /0.2 g Naphthalene	(mg/L) 9.32 0 0 0 0	(°C) /2.93 /2.62 /2.97 /2.60 /2.62 /2.62 /2.62 /2.62 6 - 40 mL vials	(g/L) . 47 . 47 . 47 . 47 . 47 . 45 . 45 . 45 . 45	(mV) -/79 -/83 -/80 -/77 -/77 -/77 -/77 -/77 -/77 -/79 -/77
/22 0 1225 1230 1237 1240 1245 1245 1250 Sampling Inf USEPA SW-84 Sample ID: Sample Time:	(feet) 6.60 7.40 7.80 8.65 9.20 70.55 71.20 6 Method 8260 MW-05-0 12.50	6.57 6.50 6.45 6.43 6.42 6.42 6.41 6.41 6.42 6.41 6.42 6.41 6.42 6.42 6.41 6.42 6.43 6.43 6.43 6.43 6.43 6.43 6.43 6.43	(mS/cm) ,731 ,714 ,709 ,709 ,709 ,707 ,707 ,707 ,707 ,707 ,707 ,707 ,707 ,707 ,709 ,707 ,705 ,707 ,705 ,707 ,707 ,707 ,705 ,707 ,707 ,707 ,707 ,707 ,705 ,707 ,707 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,70	(NTU) 92.6 70.2 \$7.4 25.6 /[.2 /2.4 /2.4 /0.2 /2.4 /0.2 /2.4 /0.2 /2.4 /0.2 /2.4 /0.2 /2.4 /0.2 /2.4 /1.6 /1.6 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /2.5 /1.2 /2.4 /2.5 /1.2 /2.4 /2.5 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.5 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.	(mg/L) 9.32 0 0 0 0	(°C) /2.93 /2.97 /2.62 /2.60 /2.62 /2.62 /2.62 /2.62 fill of the second secon	(g/L) ,47 ,47 ,47 ,47 ,47 ,47 ,47 ,47	(mV) -/79 -/83 -/80 -/77 -/75 -/77 -/75 -/77 -/75 -/77 -/75 -/77 -/75 -/77 -/75 -/77 -/75 -/77 -/75 -/77 -/75 -/77 -/75 -/77 -/75 -/77 -/75
/22 0 1225 1230 1237 1240 1245 1245 1250 Sampling Inf USEPA SW-84 Sample ID:	(feet) 6.60 7.40 7.80 8.65 9.20 70.55 71.20 6 Method 8260 MW-05-0 12.50	6.57 6.50 6.45 6.43 6.42 6.41 6.41 6.42 6.41 6.42	(mS/cm) ,731 ,714 ,709 ,709 ,709 ,707 ,707 ,707 ,707 ,707 ,707 ,707 ,707 ,707 ,709 ,707 ,705 ,707 ,705 ,707 ,707 ,707 ,705 ,707 ,707 ,707 ,707 ,707 ,705 ,707 ,707 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,707 ,705 ,70	(NTU) 92.6 70.2 \$7.4 25.6 /[.2 /2.4 /2.4 /0.2 /2.4 /0.2 /2.4 /0.2 /2.4 /0.2 /2.4 /0.2 /2.4 /0.2 /2.4 /1.6 /1.6 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /2.5 /1.2 /2.4 /2.5 /1.2 /2.4 /2.5 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /2.4 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.5 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.2 /1.	(mg/L) 9.32 0 0 0 0	(°C) /2.93 /2.62 /2.97 /2.60 /2.62 /2.62 /2.62 /2.62 6 - 40 mL vials	(g/L) . 47 . 47 . 47 . 47 . 47 . 47 . 45 . 45	(mV) -/79 -/83 -/80 -/77 -/77 -/77 -/77 -/77 -/79 -/77 -/79 -/79 -/79 -/79 -/79 -/79 -/79 -/79 -/79 -/77 -/79 -/77 -/79 -/77 -/79 -/77 -/77 -/79 -/77 -/79 -/77 -/79 -/77 -/79 -/77 -/79 -/77 -/79 -/77 -/79 -/79 -/77 -/79

- Compling Do		- Decument			Deter	(1.1.0		
Sampling Pe		n Beaumont			Date:	6/1/09		
Job Number:	36380.70089				Weather:	Junnu	1620	
Well id.	M W-06				Time In:	1125 '	Time Out	: 12/0
								<u></u>
Well Int	formation	•	TOO	Other			–––	
Depth to Wat			TOC	Other	Well Type			Stick-Up
		(feet)	5.48		Well Loci		Yes	No
Depth to Pro		(feet)			Weasuring Well Mate	Point Marked:	Yes X Xss Ot	No
Depth to Both		(feet)	26.10		Well Diar			her:
Length of Wa			20.62				2" 🔀 Ot	ner:
Volume of W	· · · · · · · · · · · · · · · · · · ·	(gal)	3.30		Commen	IS.		
Three Well V		(gal)	9.90					·
Purging I	nformation							
							Conversion I	
Purging Meth	iod:	Baile	Peristaltic	Grundfo	os Pump	gal/ft.	1" ID 2" ID	4" ID 6" ID
Tubing/Bailer	Material:	Teflo	n Stainless St.	Poly	ethylene	of		
Sampling Me	thod:	Baile	r Peristaltic	Grundfo	os Pump	water	0.04 0.16	0.66 1.47
Average Pur	ping Rate:	(ml/min)	150			1 gall	on=3.785L=3785r	nL=1337cu. feet
Duration of P	umping:	(min)	30					
Total Volume	Removed:	(gal)	· 1.5 Di	d well go dry?	Yes			
Horiba 11-22 \	Water Quality I	Meter Llsed2	 Voc					
Time	DTW	рН	Conductivity	Turbidity	DO	Temp	TDS	ORP
	(feet)		(mS/cm)	(NTU)	(mg/L)	(°C)	(g/L)	(mV)
1(30	6.40	6.01	6.16	67.4	1.24	13.32	.7	-142
1195	6.86	5.84	1.13	62.1	0	13.21	.7	-140
140	1.12	5.88	1.08	59.6	0	13.20	.7	-134
แนร	8.06	5.85	1.07	54.2	0	13.25	.7	-131
1150	1.15	5.86	1.05	52.6	0	13.24	.7	-130
1155	10.06	5.87	1.07	57.2	0	13.25	.7	-128
1200	11.11	5.88	1.06	49.6	0	13.27	.7	-127
	<u>l</u>							<u>L</u>
Sampling In	formation:							
USEPA SW-84	46 Method 8260	VOC's	BTEX Includin	g Naphthalene		9 - 40 mL vials	Ves	
	04 Method 0200		a a a moladin	a unaburuatorio			100	
Sample (D:	MU-06-00		uplicate?	/es No 🗙	S	nipped: Drop-of	f Syracuse Servic	
Sample Time:	1200		•			• •	· · · ·	UPS
					<u></u>]			
Comments/N	iotes: no	opr no s	sheen			Laboratory:	Test Am	
			-				Amherst, N	lew York

National Grid Water Street, Hudson, New York

.

Sampling Personnel:	Tim Beaumont			Date:	6/1/09				
Job Number: 36380.700	89			Weather: Sunny 650					
				Time In:	1345	Time Out	1430		
Well Id. MW-11					1213				
Well Information									
		TOC	Other	Well Typ	e Elua	hmount	Stick-Up		
Depth to Water:	(feet)	2.77		Well Loc		Yes	No		
Depth to Product:	(feet)				g Point Marked:	Yes	No		
Depth to Bottom:	(feet)	8.10		Well Mat		K	ther:		
Length of Water Column		C.33	1	Well Dia		2"\(\) 01			
Volume of Water in Well:		.86		Commer	nts:		·		
Three Well Volumes:	(gal)	2.55							
Purging Information		<u>, , , , , , , , , , , , , , , , , </u>							
					[Conversion	Factors		
Purging Method:	Baile	r Peristaltic	Grundfo	os Pump	gal/ft.	1" ID 2" ID	4" ID 6" ID		
Tubing/Bailer Material:	Teflor		<u> </u>		of				
Sampling Method:	Baile	r Peristaltic		os Pump	water	0.04 0.16	0.66 1.47		
Average Pumping Rate:	(ml/min)	350			1 gallo	on=3.785L=3785	mL=1337cu. feet		
Duration of Pumping:	(min)	30							
Total Volume Removed:	(gal)	- 3.0 Di	d well go dry?	Yes	• X		:		
Horiba U-22 Water Quali	ty Meter Lised?								
		103							
			Tushidita		1 T				
Time DTW	рН		Turbidity	DO	Temp	TDS	ORP		
(feet)	· .	(mS/cm)	(NTU)	(mg/L)	(°C)	TDS (g/L)	(mV)		
(feet) 1350 2.80	6.27	(mS/cm) /.3 9	(NTU)	(mg/L) <i>O</i>	(°C) (4.56	(g/L) . 9	(mV) ~%		
(feet) 1350 2.80 1355 2.80	6.27 6.20	(mS/cm) (•39 (•30	(NTU) 62.4 54.6	(mg/L) 0 0	(°C) (4.56	(g/L) .9 .7	(mV) -96 -106		
(feet) 1350 2.80 1355 2.80 1355 2.80 1400 2.80	6.27 6.20 6.17	(mS/cm) 1.39 1.30 1.23	(NTU) 62.4 54.6 49.7	(mg/L) 0 0 0	(°C) (4.56 (4.72 (4.89	(g/L) .9 .9	(mV) -96 -106 -110		
(feet) 1350 2.80 1357 2.80 1400 7.80 1405 2.80	6.27 6.20 6.17 6.24	(mS/cm) 1.39 1.50 1.23 1.17	(NTU) 62.4 54.6 49.7 32.6	(mg/L) 0 0 0	(°C) (4.56 14.72 (4.89 (4.89 (4.90	(g/L) .9 .1 .1 .7	(mV) -96 -106 -110 -121		
(feet) 1350 2.80 1355 2.80 1400 7.80 1405 2.80 1410 2.80	6.27 6.20 6.17 6.24 6.24 6.24	(mS/cm) (•39 (•50 (•50 (•50 (•50 (•50 (•50)	(NTU) 62.4 54.6 49.7 32.6 28.2	(mg/L) 0 0 0 0	(°C) (4.56 14.72 (4.89 (4.89 (4.90 14.99	(g/L) • 9 • 1 • 1 • 7 • 7 • 7	(mV) -96 -106 -110 -121 -127		
(feet) 1350 2.80 1357 2.80 1400 7.80 1410 2.80 1415 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.24	(mS/cm) 1.39 1.23 1.23 1.17 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 28.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) 14.56 14.72 14.89 14.89 14.90 14.99 14.99	(g/L) .9 .1 .1 .7	(mV) - 96 - 106 - 106 - 121 - 127 - 134		
(feet) 1350 2.80 1355 2.80 1400 2.80 1405 2.80 1410 2.80	6.27 6.20 6.17 6.24 6.24 6.24	(mS/cm) (•39 (•50 (•50 (•50 (•50 (•50 (•50)	(NTU) 62.4 54.6 49.7 32.6 28.2	(mg/L) 0 0 0 0	(°C) (4.56 14.72 (4.89 (4.89 (4.90 14.99	(g/L) • 9 • 1 • 1 • 7 • 7 • 7	(mV) -96 -106 -110 -121 -127		
(feet) 1350 2.80 1357 2.80 1400 7.80 1410 2.80 1415 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.24	(mS/cm) 1.39 1.23 1.23 1.17 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 28.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) 14.56 14.72 14.89 14.89 14.90 14.99 14.99	(g/L) • 9 • 1 • 1 • 7 • 7 • 7	(mV) - 96 - 106 - 106 - 121 - 127 - 134		
(feet) 1350 2.80 1357 2.80 1400 7.80 1410 2.80 1415 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.24	(mS/cm) 1.39 1.23 1.23 1.17 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 28.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) 14.56 14.72 14.89 14.89 14.90 14.99 14.99	(g/L) • 9 • 1 • 1 • 7 • 7 • 7	(mV) - 96 - 106 - 106 - 121 - 127 - 134		
(feet) 1350 2.80 1357 2.80 1400 7.80 1410 2.80 1415 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.24	(mS/cm) 1.39 1.23 1.23 1.17 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 28.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) 14.56 14.72 14.89 14.89 14.90 14.99 14.99	(g/L) • 9 • 1 • 1 • 7 • 7 • 7	(mV) - 96 - 106 - 106 - 121 - 127 - 134		
(feet) 1350 2.80 1357 2.80 1400 7.80 1410 2.80 1415 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.24	(mS/cm) 1.39 1.23 1.23 1.17 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 28.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) 14.56 14.72 14.89 14.89 14.90 14.99 14.99	(g/L) • 9 • 1 • 1 • 7 • 7 • 7	(mV) - 96 - 106 - 106 - 121 - 127 - 134		
(feet) 1350 2.80 1357 2.80 1400 7.80 1410 2.80 1415 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.24	(mS/cm) 1.39 1.23 1.23 1.17 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 28.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) 14.56 14.72 14.89 14.89 14.90 14.99 14.99	(g/L) • 9 • 1 • 1 • 7 • 7 • 7	(mV) - 96 - 106 - 106 - 121 - 127 - 134		
(feet) 1350 2.80 1351 2.80 1400 7.80 1405 2.80 1410 2.80 1415 2.80 1420 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.24	(mS/cm) 1.39 1.23 1.23 1.17 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 28.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) 14.56 14.72 14.89 14.89 14.90 14.99 14.99	(g/L) • 9 • 1 • 1 • 7 • 7 • 7	(mV) - 96 - 106 - 106 - 121 - 127 - 134		
(feet) 1350 2.80 1357 2.80 1400 7.80 1410 2.80 1415 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.24	(mS/cm) 1.39 1.23 1.23 1.17 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 28.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) 14.56 14.72 14.89 14.89 14.90 14.99 14.99	(g/L) • 9 • 1 • 1 • 7 • 7 • 7	(mV) - 96 - 106 - 106 - 121 - 127 - 134		
(feet) 1350 2.80 1357 2.80 1400 7.80 1405 2.80 1415 2.80 1415 2.80 1420 2.80 1420 2.80 1420 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.28 6.27	(mS/cm) 1.39 1.23 1.23 1.17 1.15 1.15 1.15	(NTU) 62.4 54.6 49.7 32.6 29.2 25.9 21.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) (4.56 (4.89 (4.89 (4.89 (4.99 (4.99 (5.00 (5.00	(g/L) .9 .7 .7 .7 .7	(mV) - 96 - 106 - 106 - 121 - 127 - 137 - 139		
(feet) 1350 2.80 1351 2.80 1400 7.80 1405 2.80 1410 2.80 1415 2.80 1420 2.80	6.27 6.20 6.17 6.24 6.24 6.24 6.28 6.27	(mS/cm) 1.39 1.23 1.23 1.17 1.15 1.15 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 28.2	(mg/L) 0 0 0 0 , \$0 .62	(°C) 14.56 14.72 14.89 14.89 14.90 14.99 14.99	(g/L) .9 .7 .7 .7 .7	(mV) - 96 - 106 - 106 - 121 - 127 - 134		
(feet) 1350 2.80 1357 2.80 1400 2.80 1410 2.80 1410 2.80 1415 2.80 1420 2.80 1420 2.80 1420 2.80 1420 2.80 1420 2.80 1420 2.80 1420 2.80	6.27 6.10 6.17 6.24 6.24 6.24 6.28 6.27	(mS/cm) 1.39 1.23 1.17 1.15 1.15 1.15 1.15 1.15 1.15 1.15 1.15	(NTU) 62.4 54.6 49.7 32.6 28.2 25.7 21.2 9 9 9 9 9 9 9 9 9 9 9 9 9	(mg/L) 0 0 0 .50 .62 0	(°C) (Y•56 (Y•72 (Y•87 (Y•90 (Y•90 (Y•97 (J•00 (J•00 (J•00 (J•00 (J•00 (J•00 (J•00 (J•00) (J•00 (J•00) (J·00)	(g/L) .9 .7 .7 .7 .7 .7 .7 .7 .7	(mV) -96 -106 -121 -121 -127 -139 -139		
(feet) 1350 2.80 1351 2.40 1400 7.80 1410 2.80 1415 2.80 1415 2.80 1415 2.80 1420 2.80 1520 3.80 1420 3.80 1420 3.80 1420 3.80 1420 3.80 1420 3.80 1420 3.80 <td>6.27 6.17 6.17 6.24 6.24 6.24 6.28 6.27</td> <td>(mS/cm) 1.39 1.23 1.17 1.15 1.1</td> <td>(NTU) 62. 92. 54. 29. 29. 29. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 2</td> <td>(mg/L) 0 0 0 .50 .62 0</td> <td>(°C) (4.56 (4.89 (4.89 (4.97) (4.97) (5.00 (5.00) (5.00) 3 - 40 mL vials</td> <td>(g/L) .9 .7 .7 .7 .7 .7 Yes</td> <td>(mV) - 96 - 106 - 106 - 121 - 127 - 137 - 139</td>	6.27 6.17 6.17 6.24 6.24 6.24 6.28 6.27	(mS/cm) 1.39 1.23 1.17 1.15 1.1	(NTU) 62. 92. 54. 29. 29. 29. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 2	(mg/L) 0 0 0 .50 .62 0	(°C) (4.56 (4.89 (4.89 (4.97) (4.97) (5.00 (5.00) (5.00) 3 - 40 mL vials	(g/L) .9 .7 .7 .7 .7 .7 Yes	(mV) - 96 - 106 - 106 - 121 - 127 - 137 - 139		
(feet) 1350 2.80 1351 2.40 1400 7.80 1410 2.80 1415 2.80 1415 2.80 1415 2.80 1415 2.80 1415 2.80 1415 2.80 1415 2.80 1420 2.80 <td>6.27 6.17 6.17 6.24 6.24 6.24 6.28 6.27</td> <td>(mS/cm) 1.39 1.23 1.17 1.15 1.1</td> <td>(NTU) 62.4 54.6 49.7 32.6 28.2 25.7 21.2 9 9 9 9 9 9 9 9 9 9 9 9 9</td> <td>(mg/L) 0 0 0 .50 .62 0</td> <td>(°C) (4.56 (4.89 (4.89 (4.97) (4.97) (1.00 (5.00 (5.00) 3 - 40 mL vials chipped: Drop-off</td> <td>(g/L) .9 .7 .7 .7 .7 .7 Yes Syracuse Servic ed-Ex</td> <td>(mV) - 96 - 106 - 106 - 121 - 127 - 137 - 139</td>	6.27 6.17 6.17 6.24 6.24 6.24 6.28 6.27	(mS/cm) 1.39 1.23 1.17 1.15 1.1	(NTU) 62.4 54.6 49.7 32.6 28.2 25.7 21.2 9 9 9 9 9 9 9 9 9 9 9 9 9	(mg/L) 0 0 0 .50 .62 0	(°C) (4.56 (4.89 (4.89 (4.97) (4.97) (1.00 (5.00 (5.00) 3 - 40 mL vials chipped: Drop-off	(g/L) .9 .7 .7 .7 .7 .7 Yes Syracuse Servic ed-Ex	(mV) - 96 - 106 - 106 - 121 - 127 - 137 - 139		
(feet) 1350 2.80 1351 2.40 1400 7.80 1410 2.80 1415 2.80 1415 2.80 1415 2.80 1415 2.80 1415 2.80 1415 2.80 1415 2.80 1420 2.80 <td>6.27 6.17 6.17 6.24 6.24 6.24 6.28 6.27</td> <td>(mS/cm) 1.39 1.23 1.17 1.15 1.1</td> <td>(NTU) 62. 92. 54. 29. 29. 29. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 2</td> <td>(mg/L) 0 0 0 .50 .62 0</td> <td>(°C) (4.56 (4.89 (4.89 (4.97) (4.97) (5.00 (5.00) (5.00) 3 - 40 mL vials</td> <td>(g/L) .9 .7 .7 .7 .7 .7 Yes</td> <td>(mV) -96 -106 -121 -127 -137 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -106 -107 -139</td>	6.27 6.17 6.17 6.24 6.24 6.24 6.28 6.27	(mS/cm) 1.39 1.23 1.17 1.15 1.1	(NTU) 62. 92. 54. 29. 29. 29. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 21. 2	(mg/L) 0 0 0 .50 .62 0	(°C) (4.56 (4.89 (4.89 (4.97) (4.97) (5.00 (5.00) (5.00) 3 - 40 mL vials	(g/L) .9 .7 .7 .7 .7 .7 Yes	(mV) -96 -106 -121 -127 -137 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -139 -106 -107 -139		

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)																								
Client CDM		Project	161	1	Mi	11,	ς ι									Dat	e 6	1,10	o 9			Chain of Custody N 3880	^{lumber} 37	
Address Genul Motas Price	A	3	15	43	Area Co S-1	32:	56								10		Num					Page	_ of _/	
Address Genul Motas Price City S-146 Lunc Motas 12	Code 3206	Site Col	ntact	UM	int	Lat	Cont	tact						<u>भ</u> े		alysis e spa								
NG Hudson Water ST Hudson	n Mc4.	Carrier/ ClvU	Waybill YU	Numb	116 116	u	25	u.	Ce -	CAN	te		A RAY	11111									Instructions/	
Contract/Purchase Order/Quote No.			 	Matri	ix		F	Conta Prese	aine ervat	rs & ives			1 4									Conditio	ns of Receipt	
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air		Sail	Unpres.	H2SO4			NaOH ZnAc/	NaOH	8960	2 - 2 5 - 2	6 × 11 / 1										_
<u>MW-03-0609</u>	6/109	1335		×					3			X												
MW-05-0609	6/104 1	250	>	_					3			4												
MW-06-0609 NS/NSA	61,109	1200	X						9			×												
MW-11-0609	61,105 1	420	/	_					3			X												
P10-0609	61,109		/						3			X	:									MW-05-	-0609	
TTIP blank	4/50/09			<		<u> </u>			1			X												
r																_						_		
						_													ļ					
						-													ļ					
								\square	_				_											
						<u> </u>		-																
					ŀ																			
Possible Hazard Identification		7	[sposal		 - (***)-				-	-										essed if samples are	retained	
Image: Non-Hazard Flammable Skin Irritant Turn Around Time Required Image: Skin Irritant Image: Skin Irritant Image: Skin Irritant	Poison B	Unknown			To Clie	nt		ispos Requi	irem	ents (hive	For _		M	onths		nger ti	han 1	mont	h)		
24 Hours 48 Hours 7 Days 14 Da	ays 🗋 21 Days	Dom	er	m				- (A.I	r,	1													
1. Relinquished By		Date (43	109	1	ne 120		1. Ri	eceivi	ed B	NI	Tues		Ĺ									Date 6/3/09	Time 1420	
2. Relinquished By	·····	Date			me		2. Ri	eceiv														Date	Time	
3. Relinquished By		Date		Til	ne		3. R	eceivi	ed B	y												Date	Time	
Comments							I														<u> </u>		4	

Site Inspection Hudson-Water Street Operable Unit 1 Hudson, New York

Date: 6/2/2009 Technician: Beaumont

Weather:

Time:

1100

Sunny 65°

Surface Cover Areas							
Excessive Settlement Observed	YES	NO SECOMMENTS:					
Cracks or Potholes Observed	YES	NO					
Depressions and/or Rutting Observed	YES	NO					
Exposed subbase materials Observed	YES	NO					

Erosion Controls (Rip-Rap or Sod)									
Exposed or damaged Geotextile layer(s) Observed	YES								
Excessive Settlement Observed	YES	NO some rip rap settling along grassline.							
Stressed Vegetation Observed	YES	NO. TEST							

Steel Sheetpile Retaining Wall									
Settlement of Wall	YES								
Subsidence or Cracking of Soils Behind the Wall	YES	NO 2							
Cracking or Separation of Wall Joints	YES	NO							

	Trees, Shrubs and other Planting	Materials	······································	
Strong Growth Observed	A STATES TO THE STATES TO THE STATES	NO	COMMENTS:	

		Surface Water	Quality		
Sheens Observed On:	Rip-Rap	NONE	MINOR	SIGNIFICANT	COMMENTS:
	Sheetpile Wall	NONE	MINOR	SIGNIFICANT	
	Other Water Surfaces	NONE .	MINOR	SIGNIFICANT	

General Comments:

Steve Stucker on site for safety inspection.

Met with Asplundh at the site to discuss rip-rap repair options.

Arcadis has a labeled 55 gallon drum stored in the fenced in area.

Site Inspection Hudson-Water Street Operable Unit 1 Hudson, New York

Date: 3/4/2009 Technician: Beaumont Time: Weather: 800 Sunny 20°

Surface Cover Areas						
Excessive Settlement Observed	YES					
Cracks or Potholes Observed	YES	NO				
Depressions and/or Rutting Observed	YES	NO				
Exposed subbase materials Observed	YES	NO.				

Erosion Controls (Rip-Rap or Sod)									
Exposed or damaged Geotextile layer(s) Observed	YES	COMMENTS:							
Excessive Settlement Observed	YES	NO some rip rap settling along grassline.							
Stressed Vegetation Observed	YES	NO							

Stee	l Sheetpile Retai	ining Wall
Settlement of Wall	YES	
Subsidence or Cracking of Soils Behind the Wall	YES	Alexand NO PERSON
Cracking or Separation of Wall Joints	YES	NO

	Trees, Shrubs and other Planting	Materials												
Strong Growth Observed Model COMMENTS:														

		Surface Water	Quality	, ,	
Sheens Observed On:	 Rip-Rap	NONE	MINOR	SIGNIFICANT	COMMENTS:
	Sheetpile Wall		MINOR	SIGNIFICANT	
	Other Water Surfaces	NONE	MINOR	SIGNIFICANT	

General Comments:

NG has stated they will maintain the rip-rap to protect the integrity of the site. Arcadis has a labeled 55 gallon drum stored in the fenced in area.

Site Inspection Hudson-Water Street Operable Unit 1 Hudson, New York

Date: 12/3/2008 Technician: Beaumont Time: Weather: 1000

Partly Sunny 35°

	Surface Cover	Areas
Excessive Settlement Observed	YES	
Cracks or Potholes Observed	YES	Stat SENO
Depressions and/or Rutting Observed	YES	NO
Exposed subbase materials Observed	YES	NOT

Erosio	n Controls (Rip-l	Rap or Sod)
Exposed or damaged Geotextile layer(s) Observed	YES	COMMENTS:
Excessive Settlement Observed	YES	NO some rip rap settling along grassline.
Stressed Vegetation Observed	YES	242 Salvo Zarata

Stee	l Sheetpile Retai	ning Wall
Settlement of Wall	YES	COMMENTS:
Subsidence or Cracking of Soils Behind the Wall	YES	
Cracking or Separation of Wall Joints	YES	INO

Trees, Shrubs and other Planting Materials												
Strong Growth Observed	YES	NO	COMMENTS:									

		Surface Water	Quality		
Sheens Observed On:	Rip-Rap	NONE	MINOR	SIGNIFICANT	COMMENTS:
	Sheetpile Wall	NÔNE	MINOR	SIGNIFICANT	
	Other Water Surfaces	NONE -	MINOR	SIGNIFICANT	

General Comments:

Had Asplundh install more small rip-rap stone in the area near RW-1 on November 11, 2008 . Arcadis has a labeled 55 gallon drum stored in the fenced in area.

Quarterly Groundwater Levels June 1, 2009

National Grid Water Street-Operable Unit 1 Hudson, New York

Well ID.	Sample?	Well Size	Well Material	Stickup- Flush	DTP	DTW	DTP	DTB	Sump ?	Comments
MW-02	No	2"	PVC	Flush		4.20		20.50	No	
MW-0 3	Yes	2"	PVC	Flush		2.20		25.50	No	
MW-05	Yes	2"	PVC	Stickup		5.92	·	28.10	No	
<u>MW-06</u>	Yes	2"	PVC_	Stickup		5.48		26.10	Yes	
MW-07	No	2"	PVC	Stickup		4.89		24.55	Yes	
MW-08A	No	2"	PVC	Flush		3.61		25.85	No	
MW-09A	No	2"	PVC	Stickup	· · · ·	5.50		25.07	Yes	
MW-10	No	2"	PVC	Flush		2.97		28.70	Yes	
MW-11	Yes	2"	PVC	Flush		2.77		8.10	Yes	
OW- 2	No	2"	PVC	Stickup		6.04		27.55	Yes	
OW-4	No	2"	PVC	Stickup		5.60		28.05	Yes	
Hudson River	No					4.26				Chiseled square adjacent to the 8th railing post on top of the sheetpile wall.
CW-01A	No	4"	Steel	Flush		2.00		30.90	Yes	slight odor
RW-1	No	4"	PVC	Flush		3.58		26.50	Yes	
RW- 2	No	4 ".	PVC	Flush		3.77		22.35	Yes	

Purge water is stored in 2 labeled 5 gallon pails located inside the fenced in area.

National Grid Water Street-Operable Unit 1 Hudson, New York

Well ID.	Sample?	Well Size	Well Material	Stickup- Flush	DTP	DTW	DTP	DTB	Sump ?	Comments
MW-02	No	2"	PVC	Flush		5.56		20.50	No	
MW-03	No	2"	PVC	Flush		2.90		25.50	No	
MW-05	No	2"	PVC	Stickup		6.10		28.10	No	
MW-06	No	2"	PVC	Stickup		6.45		26.10	Yes	
MW-07	No	2"	PVC	Stickup		4.67		24.55	Yes	
MW-08A	No	2"	PVC	Flush		4.00		25.85	No	
MW-09A	No	2"	PVC	Stickup		6.18		25.07	Yes	
MW-10	No	2"	PVC	Flush		3.33		28.70	Yes	
MW-11	No	2"	PVC	Flush		2.40		8.1 0	Yes	1
OW-2	No	2"	PVC	Stickup		6.25		27.55	Yes	
OW-4	No	2"	PVC	Stickup		5.90		28.05	Yes	
Hudson River	No					3.50				Chiseled square adjacent to the 8th railing post on top of the sheetpile wall.
CW-01A	No	4"	Steel	Flush		1.80		30.90	Yes	slight odor
RW-1	No	4"	PVC	Flush		3.98		26.50	Yes	
RW-2	No	4"	PVC	Flush		3.19		22.35	Yes	

National Grid

2

	No 2" No 2"									
Well ID.	Sample?	Well Size	Well Material	Stickup- Flush	DTP	DTW	DTP	DTB	Sump ?	Comments
MW-02	No	2"	· PVC	Flush		4.74		20.50	No	
MW-0 3	No	2"	PVC	Flush		2.14		25.50	No	
MW-05	No	<u>2"</u>	PVC	Stickup		5.18		28.10	No	
MW-06	No	2"	PVC	Stickup		5.60		26.10	Yes	
MW-07	No	2"	PVC	Stickup		4.02		24.55	Yes	
MW-08A	No	2"	PVC	Flush		3.45		25.85	No	
MW-09A	No	2"	PVC	Stickup		5.60		25.07	Yes	
MW-10	No	2"	PVC	Flush		2.38		28.70	Yes	
MW-11	No	2"	PVC	Flush		1.82		8.10	Yes	
OW-2	No	2"	PVC	Stickup		5.37		27.55	Yes	
OW-4	No		PVC	Stickup		5.14		28.05	Yes	
Hudson River	No					6.16				Chiseled square adjacent to the 8th railing post on top of the sheetpile wall.
CW-01A	No	4"	Steel	Flush		1.41		30. 9 0	Yes	slight odor
RW-1	No	4"	PVC	Flush		4.85		26.50	Yes	
RW-2	No	4"	PVC	Flush		5.62		22.35	Yes	

Hudson (Water Street) Static Water Level Measu

	Top of Inner							Depth to y	Valer (feet)												Water	Level Elev	tion (feet a	unsi)					
Well ID.	Casing (feel amsi)	6/11/2007	6/20/2007	6/26/2007	7/24/2007	8/14/2007	8/19/2007	8/13/2007	12/1/2007	3/10/2008	6/10/2008	8/16/2008	12/3/2008	3/4/2009	6/1/2009	6/11/2007	6/20/2007	6/26/2007	7/24/2007	8/14/2007	8/19/2007	9/13/2007	12/1/2007	3/10/2008	6/10/2008	9/16/2008	12/3/2008	3/4/2009	6/1/2009
MW-02	6.10	4.37	4.15	5.15	4.31	4.14	4.33	4.38	4.87	4.78	4.33	4.40	4.74	5.56	4.20	1.73	1.95	0.95	1.79	1.96	1.77	1.72	1.23	1.32	1.77	1,70	1.36	0.54	1.90
MW-03	8.97	2.31	2.25	3.69	2.10	1.87	2.01	2.37	2.38	2.06	2.26	1.96	2.14	2.90	2.20	6.66	6.72	5.28	6.87	7.10	6.96	6.60	6.59	6.91	6.71	7.01	6.83	6.07	6.77
MW-06	12.57	5.90	5.60	6.87	5.75	5.55	5.70	5.67	5.45	5.58	5.69	5.09	5.18	6.10	5.92	6.67	6.97	5,70	6.82	7.02	6.87	6.90	7.12	6.99	6.88	7.48	7.39	6.47	6.65
MW-06	11.84	5.55	5.20	5.52	5.49	5.37	5.54	5.60	5.68	6.03	5.55	5,27	5.60	6,45	5.48	6.29	6.64	6.32	6.35	6.47	6,30	6.24	6.16	5.81	6.29	6.57	6.24	5.39	6.36
MW-07	8.94	5.10	4.65	5.08	5.40	5.38	5.55	5.29	4.18	2.85	5.10	4.53	4.02	4.67	4.89	3.84	4.09	3.86	3.54	3,56	3.39	3.65	4.76	6.09	3.84	4.41	4.92	4.27	4.05
MW-08A	6.36	3.47	2.90	3.85	3.74	3.62	3.84	3.75	3,48	2.84	3.56	3.42	3.45	4.00	3.61	2.89	3.46	2.51	2.62	2.74	2.52	2.61	2.88	3.52	2.80	2.94	2.91	2.36	2.75
MW-09A	8.40	5.48	5.25	5.56	5.29	5.15	5.15	5.27	5.55	5.54	5.45	5.23	5.60	6.18	5.50	2.92	3.15	2.84	3.11	3.25	3.25	3.13	2.85	2.86	2.95	3.17	2.80	2.22	2.90
MW-10	8 69	1.70	1.61	2.17	1.12	2.20	2.38	1.52	2.10	0.75	2.27	1.75	2.38	3.33	2.97	6.99	7.08	6.52	7.57	6.49	6.31	7.17	6.59	7.94	6.42	6.94	6.31	5.36	5.72
MW-11	9.57	2.60	2,81	3.12	2.94	3.36	3.53	2.77	2.42	0.86	2.75	2.35	1.62	2.40	2.77	6.77	6.76	6.45	6.63	6.21	6.04	6.80	7.15	8.71	6.62	7.22	7.75	7.17	6.60
OW-2	12.62	5.89	5.72	6.94	5.85	5.70	5.83	5.57	5 60	5 72	5 82	5.20	5.37	6.25	6.04	6.93	7.10	5.88	6.97	7.12	6.99	7.25	7.22	7,10	7.00	7.62	7.45	6.57	6.78
OW-4	12.66	5.52	5.33	6.00	5.48	5.34	5.50	5.42	5.28	5.35	5.45	4.96	5.14	5.90	5.60	7.14	7.33	6.66	7.18	7.32	7.16	7.24	7.38	7.31	7.21	7.70	7.52	6.76	7.06
Hudson River	5.29	4.45	3.10	4.75	4.80	6.15	4.00	5.50	6.03	5.60	2.90	3.72	6.16	3.50	4.26	0.84	2.19	0.54	0.49	-0.86	1.29	-0.21	-0.74	-0.51	2.39	1.57	-0.87	1.79	1.03
CW-01A	9.67	2.12	r/a	n/a	n/a	n/a	n/a	1.65	2.00	0.76	1.70	1.65	1.41	1.80	2.00	7.55	n/a	n/a	n/a	n/a	n/a	8.02	7.67	8.89	7.97	8.02	6.26	7.87	7.67
RW-1	5.09	3.60	n/a	rı/a	n/a	n/a	n/a	4.04	4.92	4.10	2.82	4.32	4.85	3.98	3.58	1.49	n/a	n/a	n/a	n/a	n/a	1.05	0.17	0.99	2.27	0.77	0.24	1,11	1.51
RW-2	4.96	4.00	n/a	n/a	n/a	n/a	n/a	4.11	5.50	5.10	2.56	4.18	5.62	3.19	3.77	0.96	n/a	n/a	n/a	n/a	n/a	0.85	-0.54	-0.14	2.40	0.78	-0.66	1.77	1.19

Notes: Estimated elevator; wel pavedover during surveying but uncovered presently and can be monitored. ambl Above Moan Sea Level

Attachment C Laboratory Data Summary

National Grid Hudson (Water Street) Hudson, New York

Analytical Data Summary

Compound	NYSAWQS	a sa j	ine 2009 E	vent (ug/l).
compound.		-MW-03-	_MW-05	MW-06	, M₩-11-
Benzene	1	ND	ND	ND	4.6
Toluene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	4.9
o-Xylene	-	ND	ND	ND	ND
m/p-Xylenes	-	ND	ND	ND	ND
Xylene (total)	5	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND

ND - Not Detected

NYSAWQS - New York State Aqueous Water Quality Standards Bolded numbers exceed the NYSAWQS

National Grid Hudson (Water Street) Hudson, New York

Analytical Data Summary

	* NYSAWOS -	Jacob Ji	une 2008 E	venit (ug/il)
Compound	(ug/L)	MW-03	MW-05	MW-06	- MW-11
Benzene	1	ND	ND	ND	3.8
Toluene	5	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	8
o-Xylene	-	ND	ND	ND	2.4
m/p-Xylenes	-	ND	ND	ND	ND
Xylene (total)	5	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	ND

ND - Not Detected

NYSAWQS - New York State Aqueous Water Quality Standards Bolded numbers exceed the NYSAWQS

National Grid Hudson (Water Street) Hudson, New York

Analytical Data Summary

		August 2007 Event (ug/L)									
Compound	JMW-03	_MW=05÷	- MW-06	MW-07	MW-11						
Benzene	ND	ND	ND	ND	12						
Toluene	ND	ND	ND	ND	ND						
Ethylbenzene	ND	ND	ND	ND	16						
o-Xylene	ND	ND	ND	ND	6.8						
m/p-Xylenes	ND	ND	ND	ND	ND						
Xylene (total)	ND	ND	ND	ND	7.5						
Naphthalene	ND	ND	ND	ND	5.1						

Attachment D Data Validation Report

Data Validation Services

120 Cobble Creek Road RO. Box 208 North Creek, NY 12853

> Phone 518-251-4429 Facsimile 518-251-4428

July 17, 2009

Karen Whalen CDM One General Motors Dr. Suite 2 Syracuse, NY 13206

RE: Data Usability Summary Report for NMPC-Hudson-Water St site TAL-Buffalo Job No. RSF0161

Dear Ms. Whalen:

Review has been completed for the data package generated by TestAmerica Laboratories, Inc. that pertains to samples collected June 1, 2009 at the NMPC Hudson Water St. site. Four aqueous samples and a field duplicate were processed for BTEX, and naphthalene by the USEPA SW846 method 8260B, with additional QC requirements of the NYSDEC ASP. A trip blank was also analyzed.

The data packages submitted contain full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, using guidance from the NMPC generic QAPP, USEPA Region 2 validation SOPs, the USEPA National Functional Guidelines for Data Review, and professional judgment, as affects the usability of the data. The following items were reviewed:

- * Laboratory Narrative Discussion
- * Custody Documentation
- * Holding Times
- * Surrogate and Internal Standard Recoveries
- * Matrix Spike Recoveries/Duplicate Correlations
- * Field Duplicate Correlations
- * Preparation/Calibration Blanks
- * Control Spike/Laboratory Control Samples
- * CalibrationStandard Responses
- * Instrumental Tunes
- * Instrument IDLs
- * Sample Quantitation and Identification

The items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

In summary, field sample analyte values/reporting limits are usable as reported.

Copies of the laboratory case narratives and the sample identification summary forms are attached to this text, and should be reviewed in conjunction with this report. Also included with this narrative are laboratory sample results forms.

BTEX by EPA 8260B/NYSDEC ASP

Field sample holding times were met and instrumental tunes are within acceptance ranges. Surrogate and internal standard recoveries are within required limits. Calibrations standards show acceptable responses.

The matrix spikes of MW-06-0609 show acceptable accuracy and precision. Blind field duplicate correlations of MW-05-0609 were also with within guidance limits.

Blanks show no contamination, although the results of the trip blank are not usable due to the fact it was filled more than a month before sample collection. Only one project sample shows target analyte detections. It should be noted that full evaluation for external contamination has not been made.

Data Package Completeness

Although required of the laboratory deliverables, raw data are not identified with the client ID.

The laboratory case narrative is generic, and does not specifically address the project particulars.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

VALIDATION QUALIFIER DEFINITIONS

.

I

, ,

DATA QUALIFIER DEFINITIONS

.: . :

The following definitions provide brief explanations of the national qualifiers assigned to results in the data review process. If the Regions choose to use additional qualifiers, a complete explanation of those qualifiers should accompany the data review.

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

- and the second species. The analyte was positively identified; the associated numerical value is the J approximate concentration of the analyte in the sample.
- Ν The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

CLIENT and LABORATORY SAMPLE IDs and CASE NARRATIVES



~



THE LEADER IN ENVIRONMENTAL TESTING

Camp Dresser & McKee - Syracuse, NY One General Motors Dr. STE 2 Syracuse, NY 13206 Work Order: RSF0161

Project: Water Street Project Number: CMP-DRSR Received: 06/04/09 Reported: 06/22/09 14:10

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
MW-03-0609	RSF0161-01	Water	06/01/09 13:35	06/04/09 09:00	
MW-05-0609	RSF0161-02	Water	06/01/09 12:50	06/04/09 09:00	
MW-06-0609	RSF0161-03	Water	06/01/09 12:00	06/04/09 09:00	
MW-11-0609	RSF0161-06	Water	06/01/09 14:20	06/04/09 09:00	
FD-0609	RSF0161-07	Water	06/01/09	06/04/09 09:00	
TRIP BLANK	RSF0161-08	Water	06/01/09	06/04/09 09:00	



Camp Dresser & McKee - Syracuse, NY One General Motors Dr. STE 2 Syracuse, NY 13206 Work Order: RSF0161

Project: Water Street Project Number: CMP-DRSR Received: 06/04/09 Reported: 06/22/09 14:10

Case Narrative

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report. Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

QUALIFIED SAMPLE RESULTS FORMS

9



Camp Dresser & McKee - Syracuse, NY One General Motors Dr. STE 2 Syracuse, NY 13206

Work Order: RSF0161

Project: Water Street Project Number: CMP-DRSR

6/127

.

Received: 06/04/09 Reported: 06/22/09 14:10

Sample Summary

Sample identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
MW-03-0609	RSF0161-01	Water	06/01/09 13:35	06/04/09 09:00	
MW-05-0609	RSF0161-02	Water	06/01/09 12:50	06/04/09 09:00	
MW-06-0609	RSF0161-03	Water	06/01/09 12:00	06/04/09 09:00	
MW-11-0609	RSF0161-06	Water	06/01/09 14:20	06/04/09 09:00	
FD-0609	RSF0161-07	Water	06/01/09	06/04/09 09:00	
TRIP BLANK	RSF0161-08	Water	06/01/09	06/04/09 09:00	



Camp Dresser & McKee - Syracuse, NY One General Motors Dr. STE 2 Syracuse, NY 13206 Work Order: RSF0161

Project: Water Street Project Number: CMP-DRSR Received: 06/04/09

7/127

Reported: 06/22/09 14:10

		Floject Nullibel. CMF-						
		Analytical R	eport		'n			
Analyte		Data alifiers RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSF0161-0)1 (MW-03-0609	9 - Water)	Sam	pled: (06/01/09 13:35 i	Recvd	: 06/04	/09 09:00
Volatile Organic Com	pounds by EP/	A 8260B						
Benzene	ND	1.0	ug/L	1.00	06/08/09 11:28	TRB 9	F08021	8260B
Ethylbenzene	ND	1.0	ug/L	1.00	06/08/09 11:28	TRB 9	F08021	8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	1.00	06/08/09 11:28	TRB 9	F08021	8260B
Naphthalene	ND	1.0	ug/L	1.00	06/08/09 11:28	TRB 9	F08021	82 6 0B
o-Xylene	ND	1.0	ug/L	1.00	06/08/09 11:28	TRB 9	F08021	8260B
Toluene	NO	1.0	ug/L	1.00	06/08/09 11:28	TRB 9	F08021	8260B
Xylenes, total	ND	2.0	ug/L	1.00	06/08/09 11:28	TRB 9	F08021	8260B
1,2-Dichloroethane-d4	117 %	Surr Limits: (66-137%)			06/08/09 11:28	TRB 9	F08021	8260B
4-Bromofluorobenzene	108 %	Surr Limits: (73-120%)			06/08/09 11:28	TRB 9)F08021	8260B
Toluene-d8	114 %	Surr Limits: (71-126%)			06/08/09 11:28	TRB S)F08021	8260B



Toluene-d8

8/127

06/08/09 11:51 TRB 9F08021

Camp Dresser & McKee - Syracuse, NY One General Motors Dr. STE 2 Syracuse, NY 13206

118 %

Work Order: RSF0161

Project: Water Street Project Number: CMP-DRSR Received: 06/04/09 Reported: 06/22/09 14:10

8260B

Analytical Report Date Oil Sample Lab Data **Result Qualifiers** Analyte Units Fac Analyzed Tech Batch Method RL Sample ID: RSF0161-02 (MW-05-0609 - Water) Sampled: 06/01/09 12:50Recvd : 06/04/09 09:00 Volatile Organic Compounds by EPA 8260B Benzene ND 1.00 06/08/09 11:51 TRB 9F08021 8260B 1.0 ug/L ND 06/08/09 11:51 TRB 9F08021 8260B Ethylbenzene 1.0 ug/L 1.00 8260B m-Xylene & p-Xylene ND 1.00 06/08/09 11:51 TRB 9F08021 2.0 ug/L ug/L 1.00 06/08/09 11:51 TRB 9F08021 8260B Naphthalene ND 1.0 06/08/09 11:51 TRB 9F08021 8260B o-Xylene 1.00 ND ug/L 1.0 06/08/09 11:51 TRB 9F08021 8260B Toluene 1.00 ND 1.0 ug/L Xylenes, total ND 2.0 ug/L 1.00 06/08/09 11:51 TRB 9F08021 8260B 1,2-Dichloroethane-d4 9F08021 8260B 120 % Surr Limits: (66-137%) 06/08/09 11:51 TRB 06/08/09 11:51 TRB 9F08021 8260B 4-Bromofluorobenzene 110 % Surr Limits: (73-120%)

Surr Limits: (71-126%)



9/127

Received: 06/04/09 Reported: 06/22/09 14:10

Camp Dresser & McKee - Syracuse, NY One General Motors Dr. STE 2 Syracuse, NY 13206

Work Order: RSF0161

Project: W Project Nu

Water Sti Number:	reet CMP-DRSR		
Analyt	ical Report	· · · · · · · · · · · · · · · · · · ·	

Analyte	Sample Result	Data Qualifiers	RL	-	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSF0161-0	3 (MW-06-	0 60 9 - Water)			Sam	pled: 0	6/01/ 09 12:00	Recvd	: 06/04	09 09:00
<u>Volatile Organic Com</u>	pounds by	EPA 8260B								
Benzene	ND		1.0		ug/L	1.00	06/08/09 12:1	5 TRB	9F08021	8260B
Ethylbenzene	ND		1.0		ug/L	1.00	06/08/09 12:1	5 TRB	9F08021	8260B
m-Xylene & p-Xylene	ND		2.0		uġ/L	1.00	06/08/09 12:1	5 TRB	9F08021	8260B
Naphthalene	ND		1.0		ug/L	1.00	06/08/09 12:1	5 TRB	9F08021	8260B
o-Xylene	ND		1.0		ug/L	1.00	06/08/09 12:1	5 TRB	9F08021	8260B
Toluene	ND		1.0		ug/L	1.00	06/08/09 12:1	5 TRB	9F08021	8260B
Xylenes, total	ND		2.0		ug/L	1.00	06/08/09 12:1	5 TRB	9F08021	8260B
1,2-Dichloroethane-d4	118 %	Si	uπ Limits:	(66-137%)			06/08/09 12:1		9F08021	8260B
4-Bromofluorobenzene	108 %	Ś	urr Limits:	(73-120%)			06/08/09 12:1		9F08021	8260B
Toluene-d8	113 %	St	uπ Limits: ((71-126%)			06/08/09 12:1	5 TRB	9F08021	8260B



10/127

Camp Dresser & McKee One General Motors Dr.		Y Work Order: RSF0161						5/04/09 5/22/09 14:10
Syracuse, NY 13206		Project: Water Street Project Number: CM	P-DRSR			-		
		Analytical	Report					
Analyte	Sample Result Q	Data Jualifiers RL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSF0161-0)6 (MW-11-06	09 - Water)	Sam	pled: 0	6/01/09 14:20	Recvd	: 06/04	4/09 0 9:00
-	•	-	Sam	pled: 0	6/01/09 14:20	Recvo	: 06/04	4/09 09:00
Volatile Organic Com	•	-	Sam ug/L	1.00	06/01/09 14:20		9F08021	4/09 0 9:00 82 6 0B
Volatile Organic Com Benzene	pounds by El	PA 8260B		-		5 TRB		
Volatile Organic Com Benzene Ethylbenzene	pounds by El 4.6	PA 8260B 1.0	ug/L	1.00	06/08/09 13:2	5 TRB 5 TRB	9F08021	82 6 0B
Volatile Organic Com Benzene Ethylbenzene m-Xylene & p-Xylene	pounds by El 4.6 4.9	PA 8260B 1.0 1.0	ug/L ug/L	1.00 1.00	06/08/09 13:2 06/08/09 13:2	5 TRB 5 TRB 5 TRB	9F08021 9F08021	82 6 0B 8260B
Volatile Organic Com Benzene Ethylbenzene m-Xylene & p-Xylene Naphthalene	pounds by El 4.6 4.9 ND	PA 8260B 1.0 1.0 2.0	ug/L ug/L ug/L	1.00 1.00 1.00	06/08/09 13:2 06/08/09 13:2 06/08/09 13:2	5 TRB 5 TRB 5 TRB 5 TRB 5 TRB	9F08021 9F08021 9F08021	82 6 0B 8260B 8260B
Volatile Organic Com Benzene Ethylbenzene m-Xylene & p-Xylene Naphthalene p-Xylene	pounds by El 4.6 4.9 ND ND ND	PA 8260B 1.0 1.0 2.0 1.0	ug/L ug/L ug/L ug/L	1.00 1.00 1.00 1.00	06/08/09 13:2 06/08/09 13:2 06/08/09 13:2 06/08/09 13:2	5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB	9F08021 9F08021 9F08021 9F08021	82 6 0B 8260B 8260B 8260B
Volatile Organic Com Benzene Ethylbenzene m-Xylene & p-Xylene Naphthalene p-Xylene Foluene	pounds by El 4.6 4.9 ND ND ND ND	PA 8260B 1.0 1.0 2.0 1.0 1.0	ug/L ug/L ug/L ug/L ug/L	1.00 1.00 1.00 1.00 1.00	06/08/09 13:2 06/08/09 13:2 06/08/09 13:2 06/08/09 13:2 06/08/09 13:2	5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB	9F08021 9F08021 9F08021 9F08021 9F08021	82 6 0B 8260B 8260B 8260B 8260B
Volatile Organic Com Benzene Ethylbenzene m-Xylene & p-Xylene Naphthalene o-Xylene Toluene Xylenes, total	pounds by El 4.6 4.9 ND ND ND ND ND	PA 8260B 1.0 1.0 2.0 1.0 1.0 1.0	ug/L ug/L ug/L ug/L ug/L ug/L	1.00 1.00 1.00 1.00 1.00 1.00	06/08/09 13:2 06/08/09 13:2 06/08/09 13:2 06/08/09 13:2 06/08/09 13:2 06/08/09 13:2	5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB	9F08021 9F08021 9F08021 9F08021 9F08021 9F08021	8260B 8260B 8260B 8260B 8260B 8260B 8260B
Sample ID: RSF0161-0 <u>Volatile Organic Com</u> Benzene Ethylbenzene m-Xylene & p-Xylene Naphthalene o-Xylene Toluene Xylenes, total 1,2-Dichloroethane-d4 4-Bromofluorobenzene Toluene-d8	pounds by E 4.6 4.9 ND ND ND ND ND ND	PA 8260B 1.0 1.0 2.0 1.0 1.0 1.0 2.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	1.00 1.00 1.00 1.00 1.00 1.00	06/08/09 13:29 06/08/09 13:29 06/08/09 13:29 06/08/09 13:29 06/08/09 13:29 06/08/09 13:29 06/08/09 13:29	5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB 5 TRB	9F08021 9F08021 9F08021 9F08021 9F08021 9F08021 9F08021	8260B 8260B 8260B 8260B 8260B 8260B 8260B 8260B



Camp Dresser & McKee - Syracuse, NY One General Motors Dr. STE 2 Syracuse, NY 13206

Work Order: RSF0161

Project: Water Street Project Number: CMP-DRSR Received: 06/04/09

Reported: 06/22/09 14:10

.

1 50

13/127

			SAMPLE	EXTR	ACTION	DAT	A		
Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
Volatile Organic Con	npounds by EPA 826	SOB					•		
8260B	9F08021	RSF0161-01	5.00	mL	5.00	mL	06/08/09 10:43	TWS	5030B MS
8260B	9F08021	RSF0161-02	5.00	mL	5.00	mL	06/08/09 10:43	TWS	5030B MS
8260B	9F08021	RSF0161-03	5.00	mL	5.00	mL	06/08/09 10:43	TWS	5030B MS
8260B	9F08021	RSF0161-06	5.00	mL	5.00	mL	06/08/09 10:43	TWS	5030B MS
8260B	9F08021	RSF0161-07	5.00	mL	5.00	mL	06/08/09 10:43	TWS	5030B MS
8260B	9F08021	RSF0161-08	5.00	mL	5.00	mL	06/08/09 10:43	TWS	5030B MS



Camp Dresser & McKee - Syracuse, NYWork Order: RSF0161One General Motors Dr. STE 2Syracuse, NY 13206Project: Water Street

Received: 06/04/09 Reported: 06/22/09 14:10

Project: Water Street Project Number: CMP-DRSR

			An	alytical R	eport					••
Analyte	Sample Result	Data Qualifiers	RL		Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSF0161-0)7 (FD-0609	- Water)			Sam	pled: 0	6/01/09	Rec	vd: 06/04	/09 0 9:0 0
Volatile Organic Com	pounds by	EPA 8260B								
Benzene	ND		1.0		ug/L	1.00	06/08/09 13:48	TRB	9F08021	8260B
Ethylbenzene	ND		1.0		ug/L	1.00	06/08/09 13:48	TRB	9F08021	8260B
m-Xylene & p-Xylene	ND		2.0		ug/L	1.00	06/08/09 13:48	TRB	9F08021	8260B
Naphthalene	ND		1.0		ug/L	1.00	06/08/09 13:48	TRB	9F08021	8260B
o-Xylene	ND		1.0		ug/L	1.00	06/08/09 13:48	TRB	9F08021	8260B
Toluene	ND		1.0		ug/Ł	1.00	06/08/09 13:48	TRB	9F08021	8260B
Xylenes, total	ND		2.0		ug/L	1.00	06/08/09 13:48	TRB	9F08021	8260B
1,2-Dichloroethane-d4	116 %	s	urr Limits:	(66-137%)			06/08/09 13:48	TRB	9F08021	8260B
4-Bromofluorobenzene	107 %	S	urr Limits:	(73-120%)			06/08/09 13:48	TRB	9F08021	8260B
Toluene-d8	114 %	S	urr Limits:	(71-126%)			06/08/09 13:48	TRB	9F08021	8260B



12/127

Received: 06/04/09 Reported: 06/22/09 14:10

Camp Dresser & McKee - Syracuse, NY One General Motors Dr. STE 2 Syracuse, NY 13206 Work Order: RSF0161

Project: Water Street Project Number: CMP-DRSR

			Analy	tical Report					
Analyte	Sample Result	Data Qualifiers	RL	Units	DII Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSF0161-0	8 (TRIP BL	ANK - Water		Sam	pled: 0	6/01/09	Rec	vd: 06/04	/09 09:00
Volatile Organic Com	pounds by	EPA 8260B							
Benzene	-ND-7	R	1.0	ug/L	1.00	06/08/09 14:11	TRB	9F08021	8260B
Ethylbenzene	ND /	ſ ^w	1.0	ug/L	1.00	06/08/09 14:11	TRB	9F08021	8260B
m-Xylene & p-Xylene	ND/		2.0	ug/L	1.00	06/08/09 14:11	TRB	9F08021	8260B
Naphthalene	NØ		1.0	ug/L	1.00	06/08/09 14:11	TRB	9F08021	8260B
o-Xylene	ND		1.0	ug/L	1.00	06/08/09 14:11	TRB	9F08021	8260B
Toluene	ND		1.0	ug/L	1.00	06/08/09 14:11	TRB	9F08021	8260B
Xylenes, total	AND.	V	2.0	ug/L	1.00	06/08/09 14:11	TRB	9F08021	8260B
1,2-Dichloroethane-d4	116 %	Si	rr Limits: (66-	-137%)		06/08/09 14:11	TRB	9F08021	8260B
4-Bromofluorobenzene	107 %		rr Limits: (73-			06/08/09 14:11		9F08021	8260B
Toluene-d8	113 %	Su	r Limits: (71-	-126%)		06/08/09 14:11	TRB	9F08021	8260B