

**OPERATION, MAINTENANCE  
AND MONITORING REPORT  
MAY 2009 SEMIANNUAL  
GOUNDWATER SAMPLING**

**118 – 130 SWALM STREET SITE  
SITE # 1-30-043P**

**WORK ASSIGNMENT NO. D004444-20**

**Prepared for:**

**New York State Department of Environmental Conservation  
Albany, New York**

**Prepared by:**

**MACTEC Engineering and Consulting, P.C.  
Portland, Maine**

**MACTEC Project No. 3612072097**

**JULY 2009**



engineering and constructing a better tomorrow

July 13, 2009

Mr. Joseph Jones  
New York State Department of Environmental Conservation  
625 Broadway, 12<sup>th</sup> Floor  
Albany, NY 12233-7016

Subject: **118-130 Swalm Street (Site 1-30-043P)**  
**Interim Operation, Maintenance and Monitoring Report – May 2009**  
**Semiannual Groundwater Sampling**

Dear Mr. Jones:

On behalf of the New York State Department of Conservation and Work Assignment D004444-20, MACTEC Engineering and Consulting, P.C. (MACTEC) is submitting this Interim Operation, Maintenance and Monitoring Report (OM&M) report for the May 2009 semiannual groundwater sampling conducted at the 118-130 Swalm Street site (Site) (Site 1-30-043P) in North Hempstead, Nassau County, New York. This report summarizes the groundwater sampling activities undertaken at the Site on May 20, 2009 and provides tabulated results compared to New York State (NYS) Class GA groundwater standards.

### **Sampling and Analysis**

MACTEC completed the second of four scheduled semiannual sampling events on May 20, 2009. A synoptic round of water levels and groundwater samples were collected from each of the three-Site monitoring wells. Groundwater samples were collected using low flow sampling procedures described in the Final Site Management Work Plan (MACTEC, 2008). Field data records used to document the groundwater sampling activities are provided in Attachment 1.

Samples were submitted to Columbia Analytical Services for volatile organic compound (VOC) analysis using Method 8260B. Groundwater sample results are provided in Attachment 2 and the Data Usability Summary Report is included in Attachment 3.

## **Findings**

Groundwater elevation data from the May 2009 event is summarized on Table 1. Interpreted groundwater flow direction (see Figure 1) using the elevations obtained in May 2009 is consistent with previous findings; groundwater flow at the Site is to the southwest.

Groundwater analytical results from the initial round of groundwater sampling were compared to the NYS Class GA Groundwater Quality Standards, 6 New York Codes, Rules, and Regulations Part 703, (NYS, 1999). Reported concentrations of individual analytes indicating a contravention of standards are presented in Table 2. As shown in this table and on Figure 1, chlorinated VOCs were detected in groundwater from wells recently installed at the Site. Tetrachloroethene (PCE) detected in groundwater from location MW-3 (downgradient well) was observed at 17 micrograms per liter ( $\mu\text{g/L}$ ). This concentration exceeds the Class GA standard of 5  $\mu\text{g/L}$ . These results are consistent with results from samples collected after the installation of the wells (November 2008), PCE was detected above the downgradient well (MW-3) at 14  $\mu\text{g/L}$ .

## **Summary**

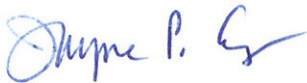
The second of four groundwater sampling events was completed at the 118-130 Swalm Street site in May 2009. Groundwater flow direction and concentrations of VOCs detected were comparable to findings noted for the November 2008 sampling event.

Two additional groundwater sampling events are scheduled (November 2009 and April 2010). A final comprehensive report will be generated at the completion of the OM&M implementation phase.

Please let us know if you have any questions on the material provided within.

Sincerely,

**MACTEC Engineering and Consulting, P.C.**



Jayme P. Connolly  
Project Manager



John W. Peterson  
Principal Professional

Enclosures (3)

## **REFERENCES**

MACTEC Engineering and Consulting, P.C. (MACTEC), 2008. “Final Site Management Work Plan - 118-130 Swalm Street”. Prepared for New York State Department of Environmental Conservation, Albany, New York. June, 2008.

New York State (NYS), 1999. New York Codes, Rules, and Regulations, Title 6, Part 700-705 Water Quality Regulations Surface Water and Groundwater Classifications and Standards. Amended August 1999.

**Table 1 Groundwater Elevation Data - May 2009**

<b>Exploration ID</b>	<b>Ground Elevation</b>	<b>Casing Elevation</b>	<b>Riser Elevation</b>	<b>Depth to Water 10/10/08 (ft TOR)</b>	<b>Groundwater Surface Elevation 10/10/08</b>	<b>Depth to Water 11/11/08 (ft TOR)</b>	<b>Groundwater Surface Elevation 11/11/08</b>	<b>Depth to Water 5/20/09 (ft TOR)</b>	<b>Groundwater Surface Elevation 5/20/09</b>
MW-1	124.93	124.93	124.74	51.56	73.18	51.74	73.00	51.67	73.26
MW-2	123.81	123.81	123.56	50.67	72.89	50.81	72.75	50.71	73.10
MW-3	121.96	121.96	121.56	48.91	72.65	51.74	69.82	48.99	72.97

**Notes:**

TOR = Top of Riser

Elevations in feet above mean sea level.

MW = monitoring well

Horizontal Datum: NAD83(CORS)- NYSPCS, Long Island

Vertical Datum: NAVD88

Units: U.S. Survey feet

**Table 2 - Summary of Volatile Organic Compounds Detected in Groundwater Samples - May 2009**

	Location	MW-1		MW-2		MW-2		MW-3	
	Sample Date	5/20/2009		5/20/2009		5/20/2009		5/20/2009	
	Sample ID	130043P-MW1-GWXX2		130043P-MW2-GWXX2		30043P-MW2-GWDUP		130043P-MW3-GWXX2	
	Media	GW		GW		GW		GW	
	QC Code	FS		FS		FD		FS	
Parameter Name	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Tetrachloroethene	5	<b>0.53</b>	J	<b>2.3</b>		<b>2.3</b>		<b>17</b>	
Trichloroethene	5	1	U	1	U	1	U	<b>3.7</b>	

**Notes:**

Results in microgram per liter (µg/L)

Samples analyzed for VOCs by USEPA Method 8260B

Media:

GW = Groundwater

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected above the reporting limit

J = Estimated value

Criteria = Values from Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance values and Groundwater Effluent Limitations (NYSDEC, 1998).


Detections are indicated in **BOLD**

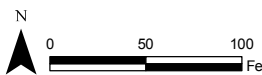
**Highlighted results exceed criteria**





**Legend**

-  Monitoring Well
- (73.26) Groundwater Surface Elevation (ft above msl) on 5/20/2009
- TCE=Trichloroethene
- PCE=Tetrachloroethene
- = not detected
- J = estimated value



Nassau County color digital orthoimagery (2000)  
 obtained from New York State GIS Clearinghouse  
 at: <http://www.nysgis.state.ny.us>

Prepared/Date: MJW 07/13/09  
 Checked/Date: JPC 07/13/09

**ATTACHMENT 1**

**FIELD DATA RECORDS**



**FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

JOB NUMBER 3612072097-03.1

PROJECT NYSDEC Swalm Street FIELD SAMPLE NUMBER 130043P-MW1-GW1x2  
 SITE ID MW-1 SITE TYPE WELL DATE 5/20/09  
 ACTIVITY START 1030 END 1200 SAMPLE TIME 1155

**WATER LEVEL / PUMP SETTINGS**

MEASUREMENT POINT  
 TOP OF WELL RISER  
 TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER 51.66 FT  
 FINAL DEPTH TO WATER 51.67 FT  
 DRAWDOWN VOLUME .002 GAL  
 (initial - final x 0.16 (2-inch) or x 0.65 (4-inch))  
 TOTAL VOL. PURGED ≈ 4 Gal. GAL  
 (purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

PROTECTIVE CASING STICKUP (FROM GROUND) 0 FT  
 CASING / WELL DIFFER. 0.2 FT  
 WELL DIAM. 2 IN  
 PID AMBIENT AIR — PPM  
 PID WELL MOUTH — PPM  
 PRESSURE TO PUMP 35 PSI  
 REFILL SETTING 11.5

RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED .0004

WELL INTERGRITY:  
 YES NO N/A  
 CAP     
 CASING     
 LOCKED     
 COLLAR     
 DISCHARGE SETTING 3.5

**PURGE DATA**

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1038	51.66	Start pump and set rate							
1046	51.68	—	15.7	1.95	12.6	6.5	200	57	
1050	51.67	200	14.8	1.95	12.8	6.3	180	43	
1055	51.68	—	14.5	1.94	12.8	5.9	160	37	
1100	51.67	200	14.5	1.92	12.8	5.7	150	33	
1105	51.67	↓	14.5	1.92	12.8	5.7	110	29	
1115	51.68	↓	14.5	1.91	12.8	5.6	53	21	
1125	51.67	200	14.5	1.93	12.8	5.6	26	15	
1132	51.67	↓	14.4	1.93	12.8	5.6	22	13	
1135	51.68	↓	14.4	1.92	12.8	5.6	21	11	
1145	51.67	200	14.5	1.92	12.8	5.6	19	7	
1150	51.67	↓	14.5	1.91	12.8	5.6	26	6	
			14	1.91	12.8	5.6	26	10	

*5/20/09*

**EQUIPMENT DOCUMENTATION**

TYPE OF PUMP  
 GEOPUMP (peristaltic)  
 QED BLADDER

TYPE OF TUBING  
 HIGH DENSITY POLYETHYLENE  
 OTHER

TYPE OF PUMP MATERIAL  
 STAINLESS STEEL  
 OTHER

TYPE OF BLADDER MATERIAL  
 TEFLON  
 OTHER

**ANALYTICAL PARAMETERS**

VOC

METHOD NUMBER USEPA-8260B

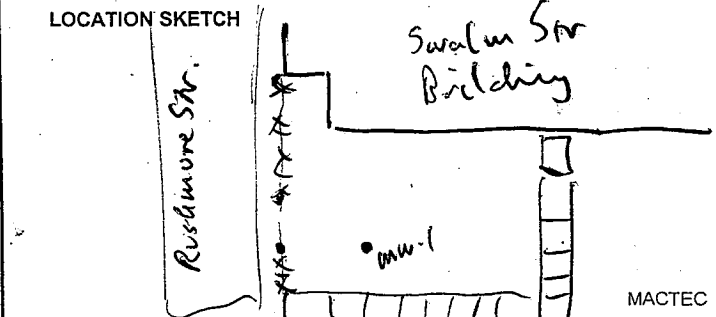
PRESERVATION METHOD HCL / 4 DEG. C

VOLUME REQUIRED 3 X 40 ML

SAMPLE COLLECTED

NOTES: All parameters stable - turbidity slightly elevated but relatively stable.  
 ✓ BAS 06/11/2009

SIGNATURE: *[Signature]*



**FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

JOB NUMBER 3612072097-03.1

PROJECT NYSDEC Swalm Street FIELD SAMPLE NUMBER 130043P-MW2-GWXX 2/ DUP 2/MS 2/MD 2  
 SITE ID MW-2 SITE TYPE WELL DATE 5/20/09  
 ACTIVITY START 0750 END 1030 SAMPLE TIME 1010

**WATER LEVEL / PUMP SETTINGS**

MEASUREMENT POINT  
 TOP OF WELL RISER  
 TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER 50.71 FT  
 FINAL DEPTH TO WATER 50.73 FT  
 DRAWDOWN VOLUME 1003 GAL  
 (initial - final x 0.16 (2-inch) or x 0.65 (4-inch))  
 TOTAL VOL. PURGED ~8 gal GAL  
 (purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

PROTECTIVE CASING STICKUP (FROM GROUND) Flush or 0.27 FT  
 CASING / WELL DIFFER. 0.27 FT  
 WELL DIAM. 2" IN  
 PID AMBIENT AIR - PPM  
 PID WELL MOUTH - PPM  
 PRESSURE TO PUMP 35 PSI  
 REFILL SETTING 11.5

WELL DEPTH (TOR) 63.2 FT  
 SCREEN LENGTH ~10 FT  
 RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED 0.0003

WELL INTERGRITY:  
 YES NO N/A  
 CAP Δ - -  
 CASING Δ - -  
 LOCKED Δ - -  
 COLLAR Δ - -

DISCHARGE SETTING 3.5

**PURGE DATA**

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
0800	<del>50.71</del>	<del>Start pump and set valve</del>							
0805	50.72	300	14.0	0.450	6.6	8.2	71000	329	Very turbid - yellow
0831	50.72	225	14.0	0.452	6.6	8.0	310	310	broken gear to left pipe
0845	50.72	225	14.0	0.485	6.7	7.7	240	306	white / get Vitabond
0855	50.73	170	14.1	0.499	6.7	7.5	240	301	
0900	50.73	170	14.1	0.500	6.8	7.4	280	301	
0905	50.74	200	14.4	0.525	9.7	5.0	71000	223	
0910	50.74	210	14.2	0.509	8.1	6.3	71000	256	
0915	50.74	225	14.3	0.492	6.9	7.5	950	269	
0920	50.74	↓	14.3	0.495	6.6	7.7	430	273	
0925	50.73	225	14.3	0.508	6.6	7.7	370	275	
0930	50.74	↓	14.3	0.527	6.6	7.6	390	275	
0935	50.73	210	14.5	0.529	6.6	7.5	330	276	
0940	50.73	↓	14.4	0.533	6.6	7.4	310	277	
0945	50.73	200	14.4	0.536	6.6	7.4	280	277	
0950	50.73	↓	14.4	0.536	6.7	7.4	360	276	
0955	50.73	200	14.4	0.542	6.7	7.3	430	276	
1000	50.73	210	14.4	0.551	6.7	7.3	440	275	
			14	0.551	6.7	7.3		270	

*AR 5/20/09*

**EQUIPMENT DOCUMENTATION**

TYPE OF PUMP  
 GEOPUMP (peristaltic)  
 QED BLADDER

TYPE OF TUBING  
 HIGH DENSITY POLYETHYLENE  
 OTHER

TYPE OF PUMP MATERIAL  
 STAINLESS STEEL  
 OTHER

TYPE OF BLADDER MATERIAL  
 TEFLON  
 OTHER

**ANALYTICAL PARAMETERS**

VOC

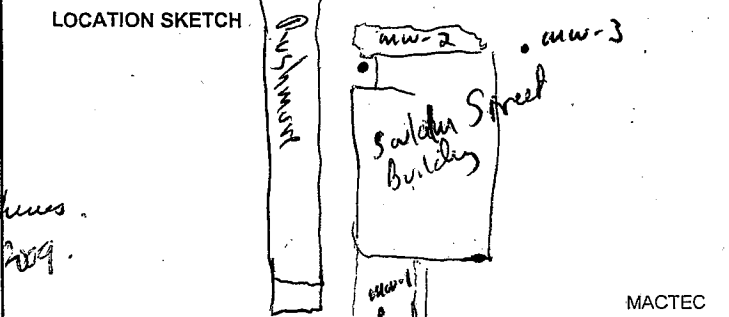
METHOD NUMBER USEPA-8260B

PRESERVATION METHOD HCL / 4 DEG. C

VOLUME REQUIRED 3 X 40 ML

SAMPLE COLLECTED

NOTES: Turbidity will not come down.  
 All parameters stable except turbidity.  
 Because sampling for VOCs only going to collect sample despite high turbidity.  
 Also collected duplicate and ms/MSD sample volumes.  
 ✓ BAS 06/11/2009



SIGNATURE: *Jerry Rafferty*

MACTEC

**FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING**

JOB NUMBER 3612072097-03.1

PROJECT NYSDEC Swalm Street FIELD SAMPLE NUMBER 130043P-MW3-GWXL2  
 SITE ID MW-3 SITE TYPE WELL DATE 5/20/09  
 ACTIVITY START 1205 END 1350 SAMPLE TIME 1320

**WATER LEVEL / PUMP SETTINGS**

MEASUREMENT POINT  
 TOP OF WELL RISER  
 TOP OF PROTECTIVE CASING

INITIAL DEPTH TO WATER 48.98 FT  
 FINAL DEPTH TO WATER 48.99 FT  
 DRAWDOWN VOLUME — GAL  
 TOTAL VOL. PURGED 3.1 GAL

WELL DEPTH (TOR) 62.6 FT  
 SCREEN LENGTH ~10 FT  
 RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED —

PROTECTIVE CASING STICKUP (FROM GROUND) 0 FT  
 PID AMBIENT AIR — PPM  
 PID WELL MOUTH — PPM  
 PRESSURE TO PUMP 35 PSI  
 REFILL SETTING 11.5

CASING / WELL DIFFER. 0.4 FT  
 WELL DIAM. 2 IN  
 WELL INTERGRITY: YES NO N/A  
 CAP  — —  
 CASING LOCKED  — —  
 COLLAR  — —  
 DISCHARGE SETTING 3.5

**PURGE DATA**

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/m)	TEMP. (deg. c)	SPECIFIC CONDUCTANCE (mS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1214	48.98	120	17.9	0.255	6.9	9.0	115	200	Start pump and set rate
1220	48.99	180	17.2	0.264	6.7	8.6	190	200	
1225	48.99	—	16.5	0.253	6.6	8.4	—	191	
1230	48.99	180	16.3	0.244	6.6	8.3	120	163	
1235	48.99	↓	16.4	0.241	6.6	8.2	84	151	
1240	48.99	180	16.2	0.238	6.6	8.3	54	144	
1245	48.99	↓	16.1	0.235	6.6	8.3	52	139	
1300	48.99	180	16.0	0.233	6.6	8.2	40	136	
1305	48.99	↓	16.3	0.232	6.6	8.3	25	134	
1310	48.99	180	16.4	0.231	6.6	8.2	19	132	
1315	48.99	↓	16.4	0.229	6.6	8.2	20	132	
1320	48.99	180	16.3	0.229	6.6	8.1	18	132	
			16	0.229	6.6	8.1	18	130	

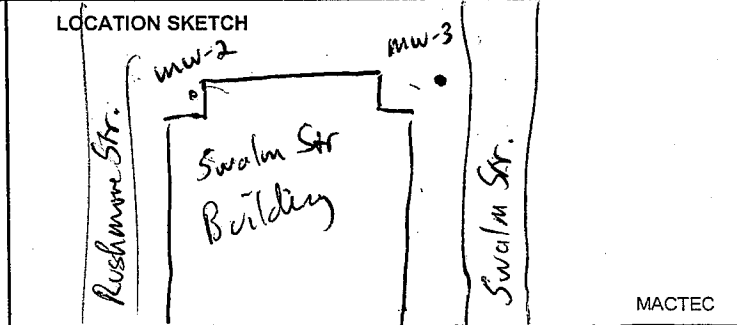
**EQUIPMENT DOCUMENTATION**

TYPE OF PUMP:  GEOPUMP (peristaltic)  QED BLADDER  
 TYPE OF TUBING:  HIGH DENSITY POLYETHYLENE  OTHER  
 TYPE OF PUMP MATERIAL:  STAINLESS STEEL  OTHER  
 TYPE OF BLADDER MATERIAL:  TEFLON  OTHER

**ANALYTICAL PARAMETERS**

VOC  
 METHOD NUMBER USEPA-8260B  
 PRESERVATION METHOD HCL / 4 DEG. C  
 VOLUME REQUIRED 3 X 40 ML  
 SAMPLE COLLECTED

NOTES: All parameters stable - turbidity slightly elevated but stable.  
 ✓ BAS 06/11/2009.  
 SIGNATURE: *Jerry Rauloff*



## **ATTACHMENT 2**

### **GROUNDWATER SAMPLE RESULTS**

Attachment 2: Groundwater Sample Results - May 2009

Sample Delivery Group	R0902884		R0902884		R0902884		R0902884		R0902884		
	Location		MW-1		MW-2		MW-1		MW-3		
	Sample Date		5/20/2009		5/20/2009		5/20/2009		5/20/2009		
	Sample ID		130043P-MW2-GWXX2		130043P-MW2-GWDUP2		130043P-MW1-GWXX2		130043P-MW3-GWXX2		130043P-TB1-52009
Analysis Parameter	Units	FS		FD		FS		FS		TB	
		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,2-Dibromo-3-chloropropane	ug/l	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SW8260	1,2-Dibromoethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,2-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	2-Butanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	4.4 J	4.4 J
SW8260	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260	Acetic acid, methyl ester	ug/l	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
SW8260	Acetone	ug/l	10 U	10 U	10 U	10 U	10 U	10 U	10 U	42	42
SW8260	Benzene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Bromomethane	ug/l	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SW8260	Carbon disulfide	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Carbon tetrachloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Chlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Chlorodibromomethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Chloroethane	ug/l	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SW8260	Chloroform	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Chloromethane	ug/l	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SW8260	Cis-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Cyclohexane	ug/l	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SW8260	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Ethyl benzene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Isopropylbenzene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Methyl cyclohexane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Methyl Tertbutyl Ether	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Methylene chloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.86 J	0.86 J
SW8260	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Tetrachloroethene	ug/l	2.3	2.3	0.53 J	17	17	17	17	1 U	1 U
SW8260	Toluene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Trichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U	3.7	3.7	1 U	1 U
SW8260	Trichlorofluoromethane	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Vinyl chloride	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	Xylene, m/p	ug/l	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SW8260	Xylene, o	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Notes:  
 ug/l = micrograms per liter  
 FS = field sample  
 FD = field duplicate sample  
 U = not detected; value represents the sample quantitation limit (SQL)  
 J = estimated value  
 QC = quality control sample  
 TB = trip blank

## **ATTACHMENT 3**

### **DATA USABILITY SUMMARY REPORT**

**DATA USABILITY SUMMARY REPORT  
118-130 SWALM STREET SITE  
OM&M IMPLEMENTATION MONITORING RESULTS  
NORTH HEMPSTEAD, NEW YORK**

**1.0 Introduction:**

Three groundwater samples were collected at the 118-130 Swalm Street Site in North Hempstead, New York in May 2009 and submitted for off-site laboratory analyses. Groundwater samples were analyzed by Columbia Analytical Services of Rochester, New York. A listing of samples included in this investigation is presented in Table 1. A summary of the analytical results is presented in Table 2. Groundwater samples were analyzed for volatile organic compounds (VOCs) by USEPA Method SW-846 8260B.

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005).

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002). Laboratory QC limits were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, surrogate recovery, and spike recovery), data transcription, electronic data reporting, calculations, and data qualification. With the exception of the items discussed below, results are interpreted to be usable as reported by the laboratory. The following laboratory or data validation qualifiers are used in the final data presentation.

U = target analyte is not detected at the reported detection limit  
J = concentration is estimated

Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

**2.0 Groundwater Samples**

Detections of 2-butanone (4.4 J), acetone (42), and dichloromethane (0.86 J) were found in the trip blank associated with all samples in the SDG. Acetone and 2-butanone are considered common volatile laboratory contaminants, so an action limit was calculated at ten times the detection reported in the blank for these compounds. An action limit was calculated at five times the detection for dichloromethane reported in the blank.

2-Butanone and dichloromethane were non-detect in the three samples and therefore required no qualifications. Acetone was detected (2.6 J) in one sample (130043P-MW1-GWXX2) below the calculated action level; therefore results were qualified as non-detect (10 U).



**TABLE 1  
SUMMARY OF SAMPLES**

SDG	Field Sample ID	Lab Sample ID	Collection Date	Analysis Method	Parameter	Type
R0902884	130043P-MW1-GWXX2	R0902884-005	05/20/2009	SW8260	VOC	FS
R0902884	130043P-MW2-GWDUP2	R0902884-002	05/20/2009	SW8260	VOC	FD
R0902884	130043P-MW2-GWMS2	R0902884-003	05/20/2009	SW8260	VOC	MS
R0902884	130043P-MW2-GWMD2	R0902884-004	05/20/2009	SW8260	VOC	MSD
R0902884	130043P-MW2-GWXX2	R0902884-001	05/20/2009	SW8260	VOC	FS
R0902884	130043P-MW3-GWXX2	R0902884-006	05/20/2009	SW8260	VOC	FS
R0902884	130043P-TB1-52009	R0902884-007	05/20/2009	SW8260	VOC	TB

**Notes:** FS = Field Sample; TB = Trip Blank; FD = Field Duplicate; MS = Matrix Spike; MSD = Matrix Spike Duplicate

**Reference:**

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Data Validator: Brandon Shaw

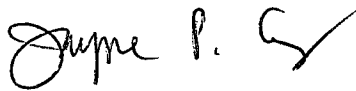
Signature: 

Date June 17, 2009

Reviewed by: Jayme Connolly

Signature:

Date:



6/17/09