DATA USABILITY SUMMARY REPORT

NOVEMBER 2006 SAMPLING EVENT

FORMER EMCA SITE
SITE NO. 360025
MAMARONECK, NEW YORK

Analyses Performed by:

SEVERN TRENT LABORATORIES, INC.
777 NEW DURHAM ROAD
EDISON, NEW JERSEY 08817

Prepared for:

ROHM & HAAS COMPANY
3100 STATE ROAD
CROYDON, PA 19021

Prepared by:

URS CORPORATION
77 GOODELL STREET
BUFFALO, NY 14203

JANUARY 2007

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TABLES
(Following Text)

ATTACHMENTS

I. INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. This DUSR discusses the results for the groundwater samples collected from the Former EMCA Site located in Mamaroneck, New York.

II. ANALYTICAL METHODOLOGIES

The data being evaluated are for two groundwater samples, one field duplicate, and one trip blank collected on November 17, 2006. Table 1 summarizes the samples collected and the requested analytical parameters. The analytical laboratory that performed the analyses is Severn Trent Laboratories, Inc., located in Edison, New Jersey. The samples were analyzed for the following parameters:

Parameter	Method No.	References
Volatile Organic Compounds (VOCs)*	OLM04.2	1
Methane, Ethane, Ethene	RSK-175	2
Sulfate	375.4	1

References:

1 NYSDEC Analytical Services Protocol, June 2000.

2 USEPA, R.S. Kerr Environmental Research Laboratory, March 15, 1989.

Notes:

* - VOCs include 1,1,2-trichloro-1,2,2-trifluoroethane (Freon-113), 1,2-dichloro-1,1,2-trifluoroethane (Freon-123a), and chlorotrifluoroethene (Freon-1113).

III. DATA VALIDATION

A limited data validation was performed following the guidelines in USEPA Region II *Contract Laboratory Program Organics Data Review and Preliminary Review for Statement of Work OLM04.2*, SOP No. HW-6, Revision 12, March 2001 and USEPA Region II *Evaluation of Metals Data for the Contract Laboratory Program, based on SOW – ILM05.3*, Revision 13, September 2005. The validated analytical results are presented in Tables 2 and 3. Copies of the validated laboratory results (i.e., Form 1's) are presented in Attachment A. Copies of the case narratives, chain-of-custodies, and

documentation supporting the qualification of data are presented in Attachment B. Only problems affecting data usability are discussed in this report.

IV. DATA DELIVERABLE COMPLETENESS

The laboratory deliverable data packages were in accordance with NYSDEC Analytical Services Protocol (ASP) Category B requirements.

V. PRESERVATION/ SAMPLE RECEIPT/HOLDING TIMES

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC). All sample analyses were performed within required holding times.

VI. NONCONFORMANCES

There were no method or data validation nonconformances noted during the data review.

VII. SUMMARY

All sample analyses were found to be compliant with the method criteria and are usable as reported. URS does not recommend the re-collection of any samples at this time.

TABLE 1
SAMPLE AND ANALYSIS SUMMARY
FORMER EMCA SITE - PILOT STUDY

SDG Nos.	Sample ID	Matrix	Date of Collection	VOCs*	Methane, Ethane, Ethene	Sulfate	Comments
Z789 / Z7891	20061117MW-02VISN	GW	11/17/06	X	X	X	---
	20061117GZ-0608	GW		X	X	X	---
	20061117GZ-0608FD	GW		X	X	X	Field Duplicate of GZ-0608
	20061117MTNTB	Water		X	X	---	Trip Blank

Notes:
* - Volatile Organic Compounds (VOCs) include 1,1,2-trichloro-1,2,2-trifluoroethane (Freon-113); 1,2-dichloro-1,1,2-trifluoroethane (Freon-123a); and chlorotrifluoroethene (Freon-1113).

X - Parameter requested.
--- - Parameter not requested/analyzed or no comment.
GW - Groundwater

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE

Location ID			GZ-06	GZ-06	MW-02	
Sample ID			20061117GZ-0608	20061117GZ0608FD	20061117MW02VISN	
Matrix			Groundwater	Groundwater	Groundwater	
Depth Interval (ft)			-	-	-	
Date Sampled			11/17/06	11/17/06	11/17/06	
Parameter	Units	Criteria*		Field Duplicate (1-1)		
Volatiles						
Chlorotrifluoroethene (Freon-1113)	UG/L	5	2.0 J	2.0 J 3	21	340
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	5	2.0 J	2.0 J 74	100	340
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	5	2.0 J	2.0 J 23	10	110
Dissolved Gases						
Methane	UG/L	-	180	210 180	4,300	5500
Miscellaneous Parameters						
Sulfate	MG/L	250	25.1	25.4 23.2	5 U	27.1

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Class GA, Revised April 2000.

Flags assigned during chemistry validation are shown.

(oval) Concentration Exceeds Criteria

MADE BY: PF 1/8/07

CHECKED BY: [illegible] 1/9/07

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
FIELD QC ANALYTICAL RESULTS
FORMER EMCA SITE

Location ID			FIELDQC
Sample ID			20061117MTNTB
Matrix			Water
Depth Interval (ft)			-
Date Sampled			11/17/06
Parameter	**Units**	**Criteria***	Trip Blank (1-1)
Volatiles			
Chlorotrifluoroethene (Freon-1113)	UG/L	5	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	5	10 U
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	5	10 U
Dissolved Gases			
Methane	UG/L	-	5.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Class GA, Revised April 2000.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

MADE BY: PE 1/8/07

CHECKED BY: DJK 1/9/07

Detection Limits shown are PQL

ATTACHMENT A

VALIDATED FORM 1's

DEFINITIONS OF USEPA REGION II DATA QUALIFIERS

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

J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

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.

D – The sample results are reported from a separate secondary dilution analysis.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

20061117
MW02VISN

Lab Name: STL EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Z7891

Matrix: (soil/water) WATER Lab Sample ID: 786172

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: F21318

Level: (low/med) LOW Date Received: 11/18/06

% Moisture: not dec. _____ Date Analyzed: 11/26/06

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	100	
79-38-9	Chlorotrifluoroethene	21	
354-23-4	1,2-Dichlorotrifluoroethane	10	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

20061117GZ-0608

Lab Name: STL EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Z7891

Matrix: (soil/water) WATER Lab Sample ID: 786173

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: F21319

Level: (low/med) LOW Date Received: 11/18/06

% Moisture: not dec. _____ Date Analyzed: 11/26/06

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	2	J
79-38-9	Chlorotrifluoroethene	2	J
354-23-4	1,2-Dichlorotrifluoroethane	2	J

FORM I VOA-1 OLM04.2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

20061117
GZ0608FD

Lab Name: STL EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Z7891

Matrix: (soil/water) WATER Lab Sample ID: 786174

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: F21320

Level: (low/med) LOW Date Received: 11/18/06

% Moisture: not dec. _____ Date Analyzed: 11/26/06

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	2	J
79-38-9	Chlorotrifluoroethene	2	J
354-23-4	1,2-Dichlorotrifluoroethane	2	J

FORM I VOA-1 OLM04.2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

20061117MTNTB

Lab Name: STL EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Z7891

Matrix: (soil/water) WATER Lab Sample ID: 786175

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: F21321

Level: (low/med) LOW Date Received: 11/18/06

% Moisture: not dec. _____ Date Analyzed: 11/26/06

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	10	U
79-38-9	Chlorotrifluoroethene	10	U
354-23-4	1,2-Dichlorotrifluoroethane	10	U

FORM I VOA-1 OLM04.2

Client ID: **20061117MW02VISN**
Site: Former EMCA Site

Lab Sample No: **786172**
Lab Job No: Z789

Date Sampled: 11/17/06
Date Received: 11/18/06
Date Analyzed: 11/29/06
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc1501.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 100.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	4300	500

Client ID: **20061117GZ-0608**
Site: Former EMCA Site

Lab Sample No: **786173**
Lab Job No: Z789

Date Sampled: 11/17/06
Date Received: 11/18/06
Date Analyzed: 11/29/06
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc1499.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 5.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	180	25

Client ID: **20061117GZ0608FD**
Site: Former EMCA Site

Lab Sample No: **786174**
Lab Job No: Z789

Date Sampled: 11/17/06
Date Received: 11/18/06
Date Analyzed: 11/29/06
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc1498.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 5.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	210	25

Client ID: **20061117MTNTB**
Site: Former EMCA Site

Lab Sample No: **786175**
Lab Job No: Z789

Date Sampled: 11/17/06
Date Received: 11/18/06
Date Analyzed: 11/29/06
GC Column: GS-Q
Instrument ID: VSCREEN3.i
Lab File ID: scrc1487.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	ND	5.0

Site: Former EMCA Site
Lab Job No: Z789
Matrix: WATER
QA Batch: 2410

Sulfate

STL Edison Sample #	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Analytical Result Units: mg/l
786172	20061117MW02VISN	11/17/06	11/21/06	1.0	ND
786173	20061117GZ-0608	11/17/06	11/21/06	1.0	25.1
786174	20061117GZ0608FD	11/17/06	11/21/06	1.0	25.4

Quantitation Limit for Sulfate is 5.0 mg/l.

ATTACHMENT B

SUPPORT DOCUMENTATION

Z 789

Z789

STL Edison

8

CHAIN OF CUSTODY RECORD

URS

PROJECT NO. 117405 3-00000

SITE NAME Former EMCA Site

SAMPLERS (PRINT/SIGNATURE) Kevin S. Kearney / Kevin S. Kearney

DELIVERY SERVICE: FedEx AIRBILL NO.: 8595 2685 4065

LAB STL Labs

COOLER 1 of 1

PAGE 1 of 1

TESTS

BOTTLE TYPE AND PRESERVATIVE

LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO.# OF CONTAINERS	From 113113,123A	Methane RSK-175	Soil Fate 375-4					REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (ERPIMS)
							40 ml Vial HCl	40 ml Vial HCl	250 ml Plst Unpres.									
MW-02	11/17/06	1050	Grab	20061117MW02VISN	WG	7	3	3	1			786172			N1	—	—	—
GZ-06	11/17/06	1215	Grab	20061117GZ-0608	WG	7	3	3	1				173		N1	—	—	—
GZ-06	11/17/06	1215	Grab	20061117GZ-0608FD	WG	7	3	3	1				174	Duplicate	FR1	—	—	—
Trip Blank	11/17/06	—	Grab	20061117MTNTB	WQ	4	2	2	—				175		TB1	—	—	—

MATRIX CODES	AA - AMBIENT AIR SE - SEDIMENT SH - HAZARDOUS SOLID WASTE	SL - SLUDGE WP - DRINKING WATER WW - WASTE WATER	WG - GROUND WATER SO - SOIL DC - DRILL CUTTINGS	WL - LEACHATE GS - SOIL GAS WC - DRILLING WATER	WO - OCEAN WATER WS - SURFACE WATER WQ - WATER FIELD QC	LH - HAZARDOUS LIQUID WASTE LF - FLOATING/FREE PRODUCT ON GW TABLE	
SAMPLE TYPE CODES	TB# - TRIP BLANK SD# - MATRIX SPIKE DUPLICATE	RB# - RINSE BLANK FR# - FIELD REPLICATE	N# - NORMAL ENVIRONMENTAL SAMPLE MS# - MATRIX SPIKE	(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)			

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
Kevin Kearney	11/17/06	1900			

SPECIAL INSTRUCTIONS Questions: Call Pete Fairbanks @ 716-856-5636

Distribution: Original accompanies shipment, copy to coordinator field files

URSF-075C/1 OF 1/CofCR/GCM

Received from fed ex 11/18/06 Conveyors 1:00

10

SEVERN TRENT STL

Nonconformance Summary

STL Edison Job Number: Z789

Client: URS Greiner-NY

Date: 12/12/2006

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC):

All data conforms with method requirements.

Wet Chemistry:

All data conforms with method requirements.

I certify that the test results contained in this data package meet all requirements of NELAC both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Director or their designee, as verified by the following signature.

Sarah Chin
Project Manager

SDG NARRATIVE

STL EDISON

SDG No. Z7891

STL Edison Sample	Client ID
786172	20061117MW02VISN
786173	20061117GZ-0608
786174	20061117GZ0608FD
786175	20061117MTNTB

Fraction	Problems Encountered	Corrective Action Taken
Volatiles	MS/MSD RPD for 1,1-Dichloroethene is biased high.	None Required

I certify that this data package is in compliance with the terms of the contract (OLM04.2) both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package has been authorized by the laboratory manager or his designee.

1/4/07

Michael J. Urban
Laboratory Manager