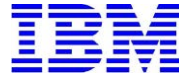


SEMIANNUAL DATA REPORT
SOIL VAPOR MONITORING THROUGH FEBRUARY 2015
Comprehensive Operations, Maintenance, and Monitoring Program
Endicott, New York

Prepared for IBM Corporate Environmental Affairs
File No. 2755.07
April 30, 2015



8976 Wellington Road
Manassas, VA 20109

April 30, 2015

Alex Czuhanich
Engineering Geologist
New York State Department of Environmental Conservation
Division of Environmental Remediation Bureau E
625 Broadway, 12th Floor
Albany, NY 12233-7017

Re: Transmittal of Semiannual Data Report – Soil Vapor Monitoring Through February 2015
Comprehensive Operations, Maintenance and Monitoring Program
Order on Consent Index # A7-0502-0104, Site # 704014

Dear Mr. Czuhanich:

Enclosed with this transmittal letter please find our Semiannual Soil Vapor Monitoring Data Report, that has been prepared in accordance with the requirements set forth in the referenced Order on Consent.

Should you have any questions concerning this submittal, please contact me at (703) 257-2587.

Sincerely,

A handwritten signature in black ink that reads "M. E. Meyers".

Mitchell E. Meyers
Program Manager

cc: K. Lynch, NYSDEC Region 7
D. Tuohy, NYSDEC – Albany (transmittal only)
B. Boyd, NYSDOH – Troy
C. Edwards, Broome County Health Department
C. Pelto, EIT

Mr. Kevin Whalen
IBM Corporate Environmental Affairs
8976 Wellington Road
Manassas, VA 20109

April 30, 2015
File No. 2755.07

Re: Semiannual Data Report
Soil Vapor Monitoring Through February 2015
Comprehensive Operations, Maintenance, and Monitoring Program
Endicott, New York

Dear Mr. Whalen:

This letter is intended to transmit data recorded during completion of the routine soil vapor monitoring program through February 2015 under IBM's Comprehensive Operations, Maintenance, and Monitoring Plan (COM&M Plan). This report is intended to be a data transmittal/analytical summary report for the limited sampling conducted on an annual basis in February.

Sanborn Head & Associates, Inc. (Sanborn Head) prepared this letter for IBM's submittal to the New York Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), collectively known as the "Agencies". Since the submittal of the last Report in November 2014¹, a limited sampling has been conducted in February 2015 in accordance with the monitoring program approved through a February 2012 letter from NYSDEC. The February sampling includes five locations² central to the largest ventilation area and proximate to injection points. In addition, IBM voluntarily conducted monitoring of:

- EN04-2: a monitoring location centrally located in the largest ventilation area in the vicinity of increased groundwater extraction and injection activities; and
- EN10-41: a monitoring location within OU#4, the Ideal Cleaners Remediation Area.

Sampling was also attempted at monitoring locations EN10-11D and EN10-17D, but water was found to be present at the monitoring depth in both locations. A location plan and time series plots depicting the history of groundwater and soil vapor observations for TCE are included on the enclosed CD along with the analytical laboratory reports for samples collected in February. The data indicate continued progress in reduction of TCE groundwater concentrations.

The next scheduled sampling event is to be conducted in August. The next reporting of this monitoring program will be submitted to the Agencies in November 2015.

¹ Sanborn Head, November 14, 2014, Annual Report – Soil Vapor Monitoring Through August 2014, Comprehensive Operations, Maintenance, and Monitoring Program, Endicott, New York.

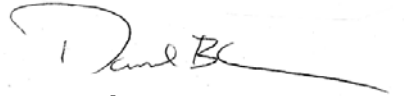
² EN04-11, EN04-12, EN04-29, EN04-30, and EN04-32

Thank you for the opportunity to provide service to you on this project. Please contact us if you have questions.

Very truly yours,
SANBORN, HEAD & ASSOCIATES, INC.



Erica M. Bosse, P.G.
Project Manager



Daniel B. Carr, P.E., P.G.
Principal

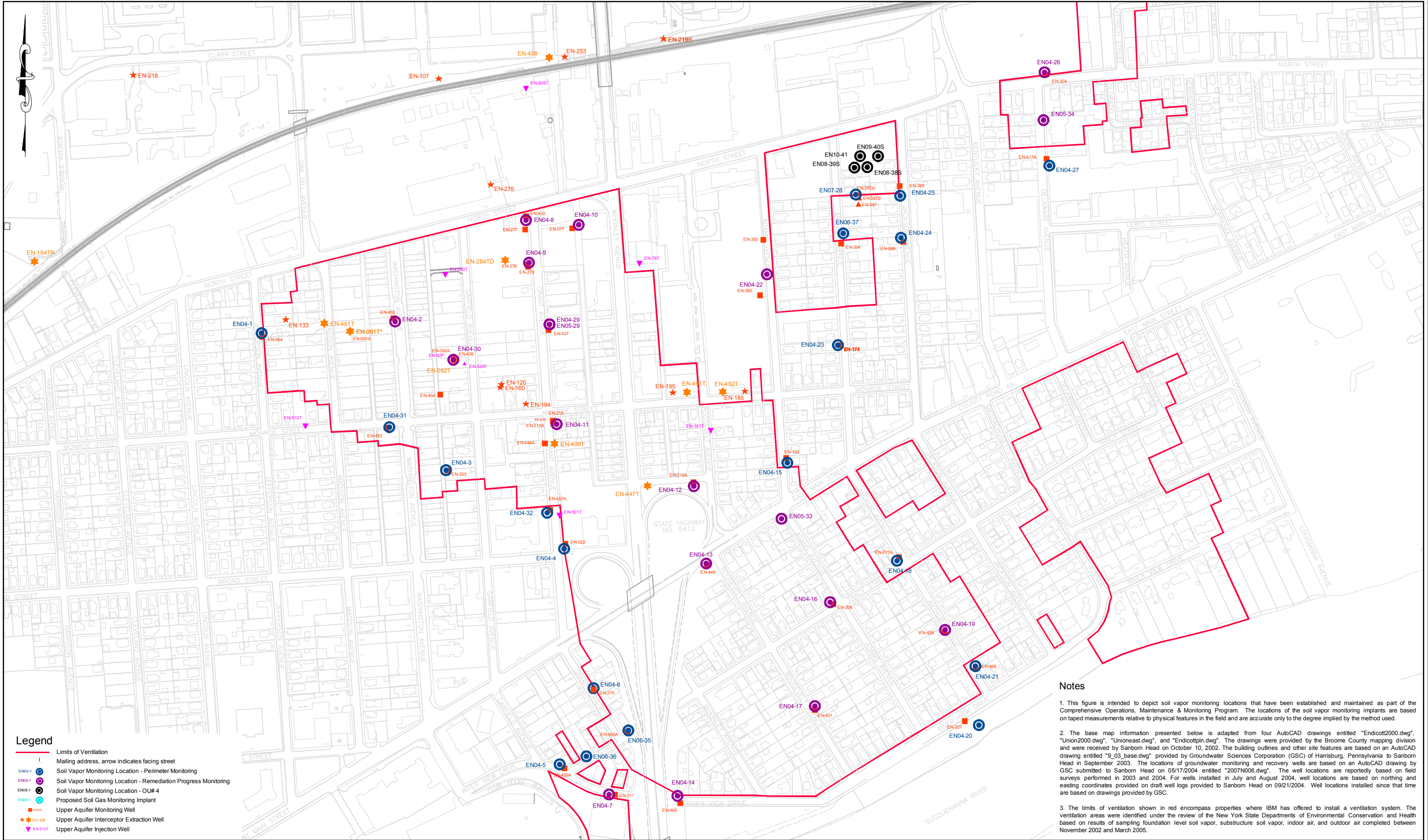
EMB/DBC: emb

Encl. Attachment A – Exploration Location Plan
Attachment B – Time Series Plots
Attachment C – Analytical Laboratory Reports

S:\CONDATA\2700s\2755.07\Source Files\April 2015 Semi Rpt\20150430_Semi Rpt Ltr.docx

ATTACHMENT A

Exploration Location Plan



Legend

- Limits of Ventilation
- Mailing address, arrow indicates facing street
- Soil Vapor Monitoring Location - Perimeter Monitoring
- Soil Vapor Monitoring Location - Remediation Progress Monitoring
- Soil Vapor Monitoring Location - OU# 4
- Proposed Soil Gas Monitoring Implant
- Upper Aquifer Monitoring Well
- ★ EN-428 Upper Aquifer Interceptor Extraction Well
- ▼ EN-510T Upper Aquifer Injection Well

Notes

- This figure is intended to depict soil vapor monitoring locations that have been established and maintained as part of the Comprehensive Operations, Maintenance & Monitoring Program. The locations of the soil vapor monitoring implants are based on taped measurements relative to physical features in the field and are accurate only to the degree implied by the method used.
- The base map information presented below is adapted from four AutoCAD drawings entitled "Endicott2000.dwg", "Union2000.dwg", "Unioneast.dwg", and "Endicottph.dwg". The drawings were provided by the Broome County mapping division and were received by Sanborn Head on October 10, 2002. The building outlines and other site features are based on an AutoCAD drawing entitled "9_03_base.dwg" provided by Groundwater Sciences Corporation (GSC) of Harrisburg, Pennsylvania to Sanborn Head in September 2003. The locations of groundwater monitoring and recovery wells are based on an AutoCAD drawing by GSC submitted to Sanborn Head on 05/17/2004 entitled "2007N006.dwg". The well locations are reportedly based on field surveys performed in 2003 and 2004. For wells installed in July and August 2004, well locations are based on northing and easting coordinates provided on draft well logs provided to Sanborn Head on 09/21/2004. Well locations installed since that time are based on drawings provided by GSC.
- The limits of ventilation shown in red encompass properties where IBM has offered to install a ventilation system. The ventilation areas were identified under the review of the New York State Departments of Environmental Conservation and Health based on results of sampling foundation level soil vapor, substructure soil vapor, indoor air, and outdoor air completed between November 2002 and March 2005.

GRAPHICAL SCALE

200' 100' 0 200' 400'

NO.	DATE	DESCRIPTION	BY

DRAWN BY: E. Wright

DESIGNED BY: E. Bosse

REVIEWED BY: D. Carr

PROJECT MGR: E. Bosse

PIC: D. Carr

DATE: April 2015

Semiannual Report - Soil Vapor Monitoring through February 2015

Comprehensive Operations, Maintenance & Monitoring Program

Endicott, New York

PROJECT NUMBER:

2755.07

FIGURE NUMBER:

1

Exploration Location Plan

ATTACHMENT B

Time Series Plots

Figure B.1
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

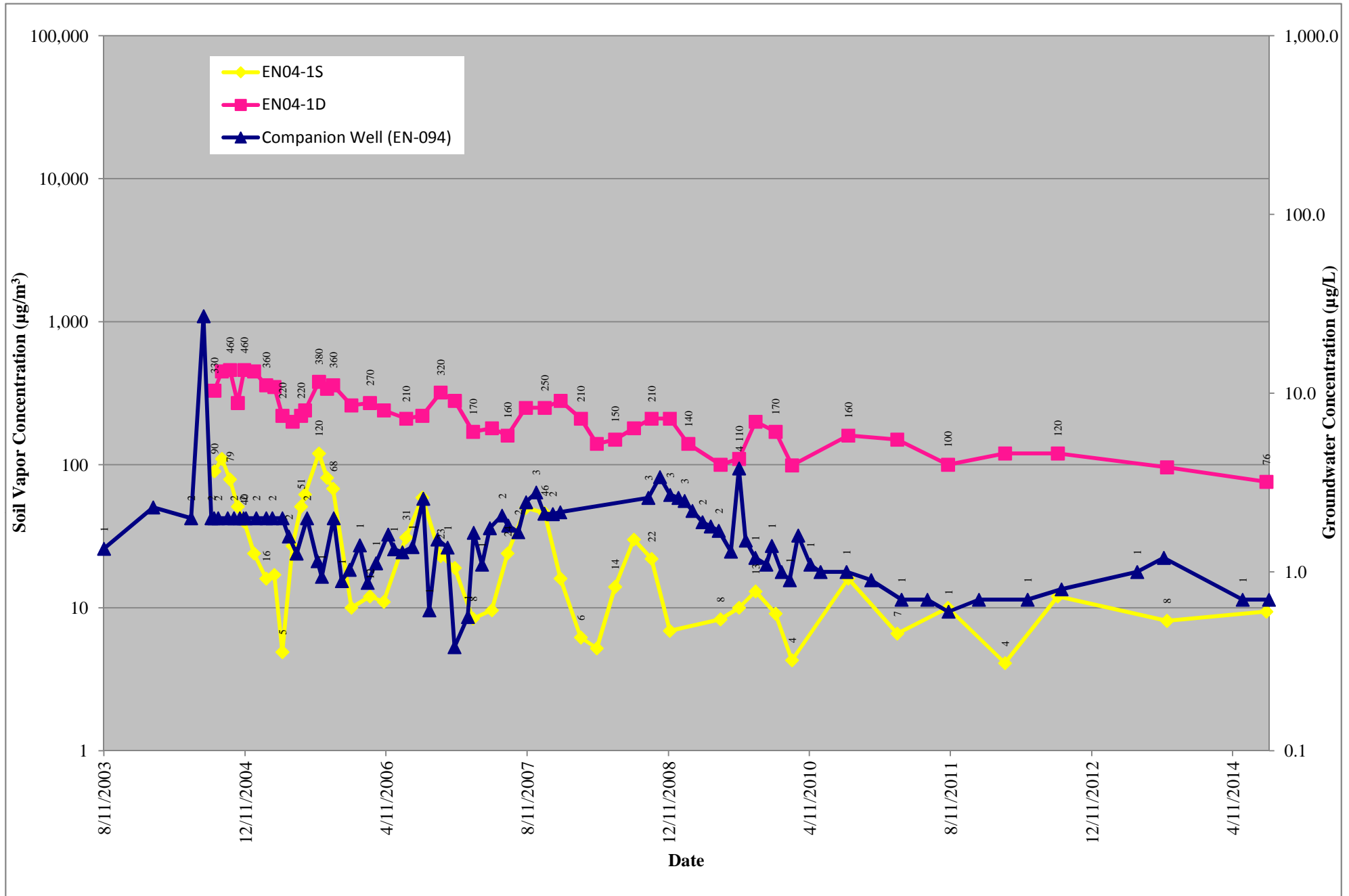


Figure B.2
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

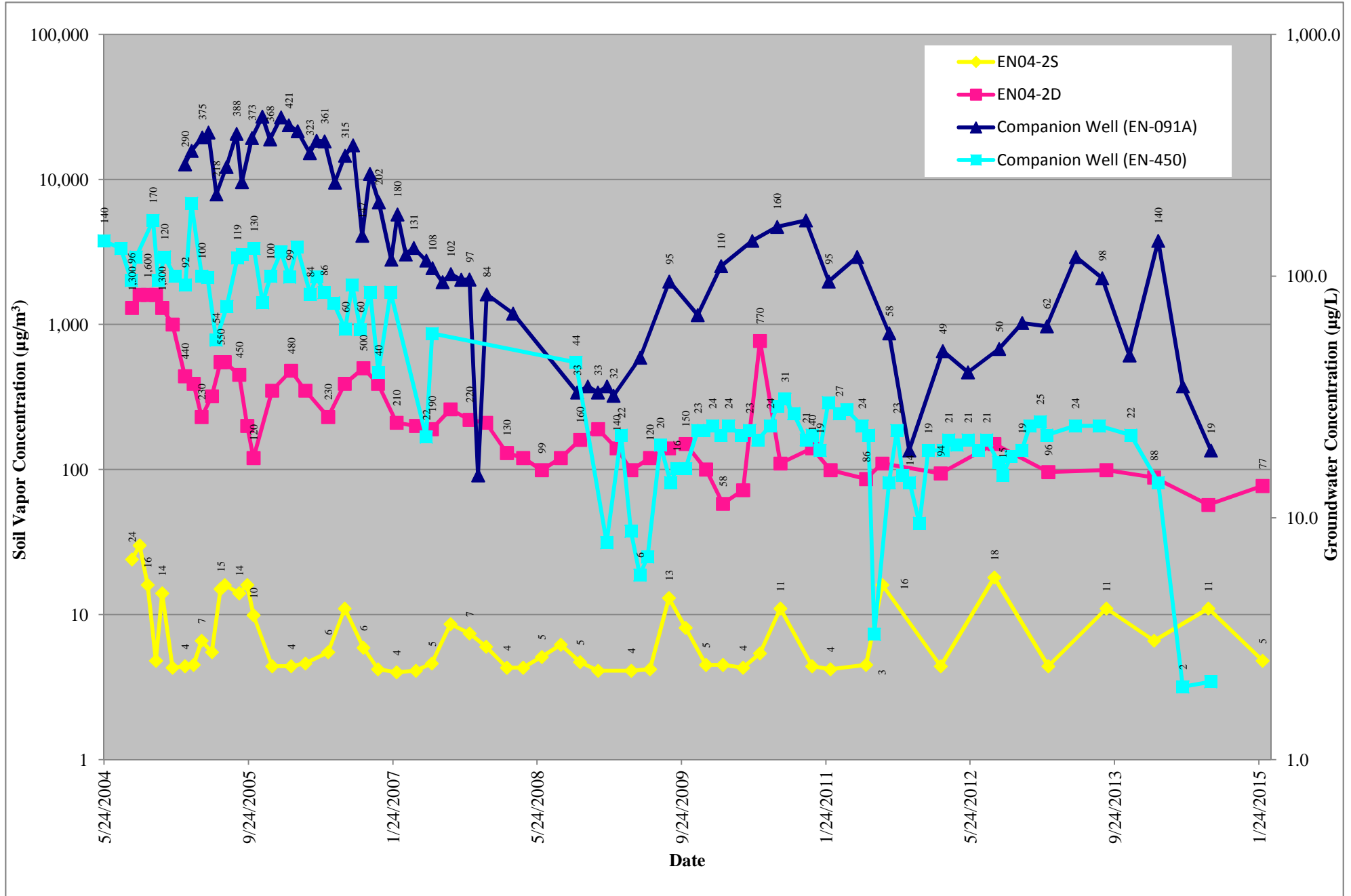


Figure B.3
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

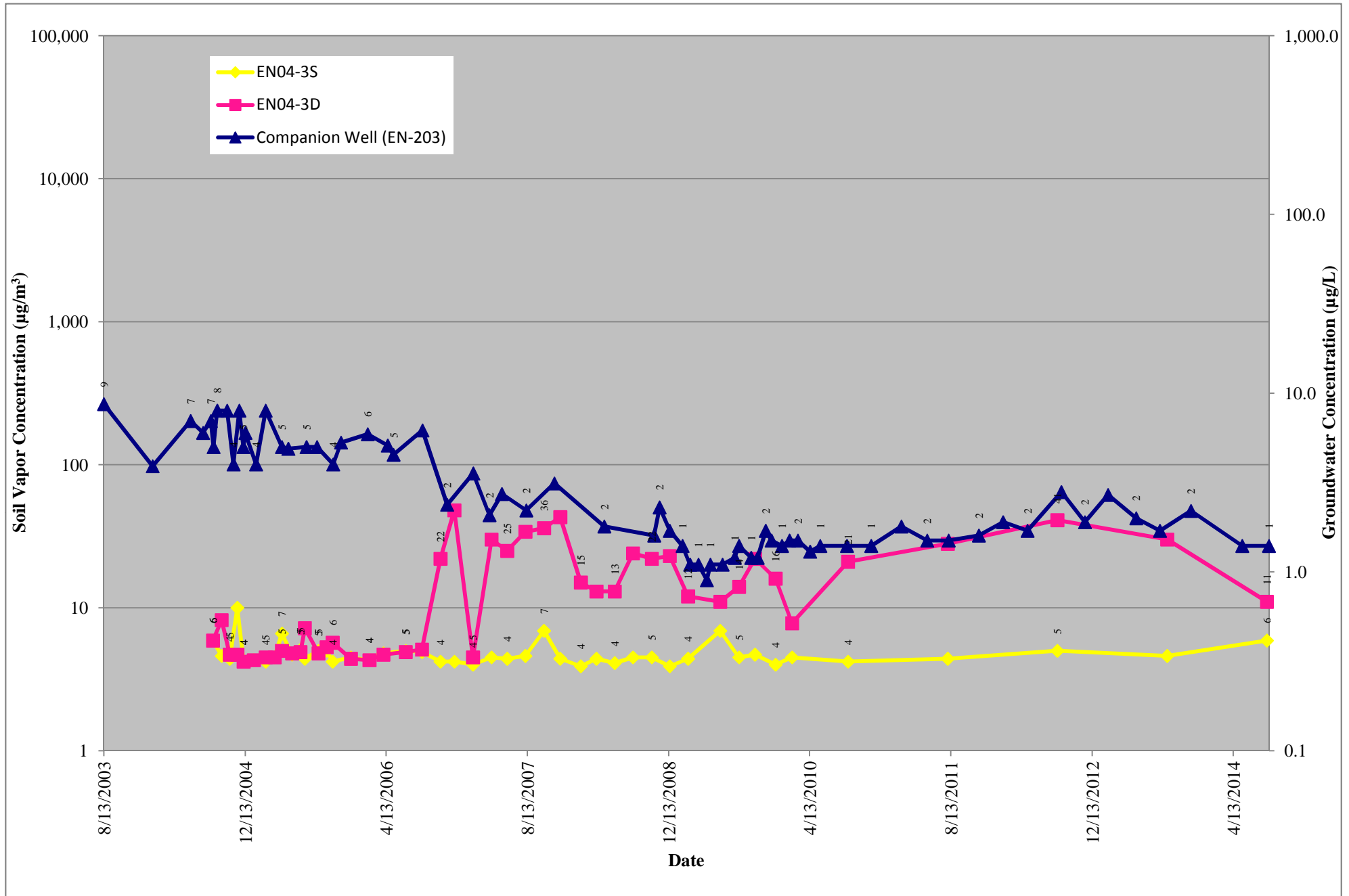


Figure B.4
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

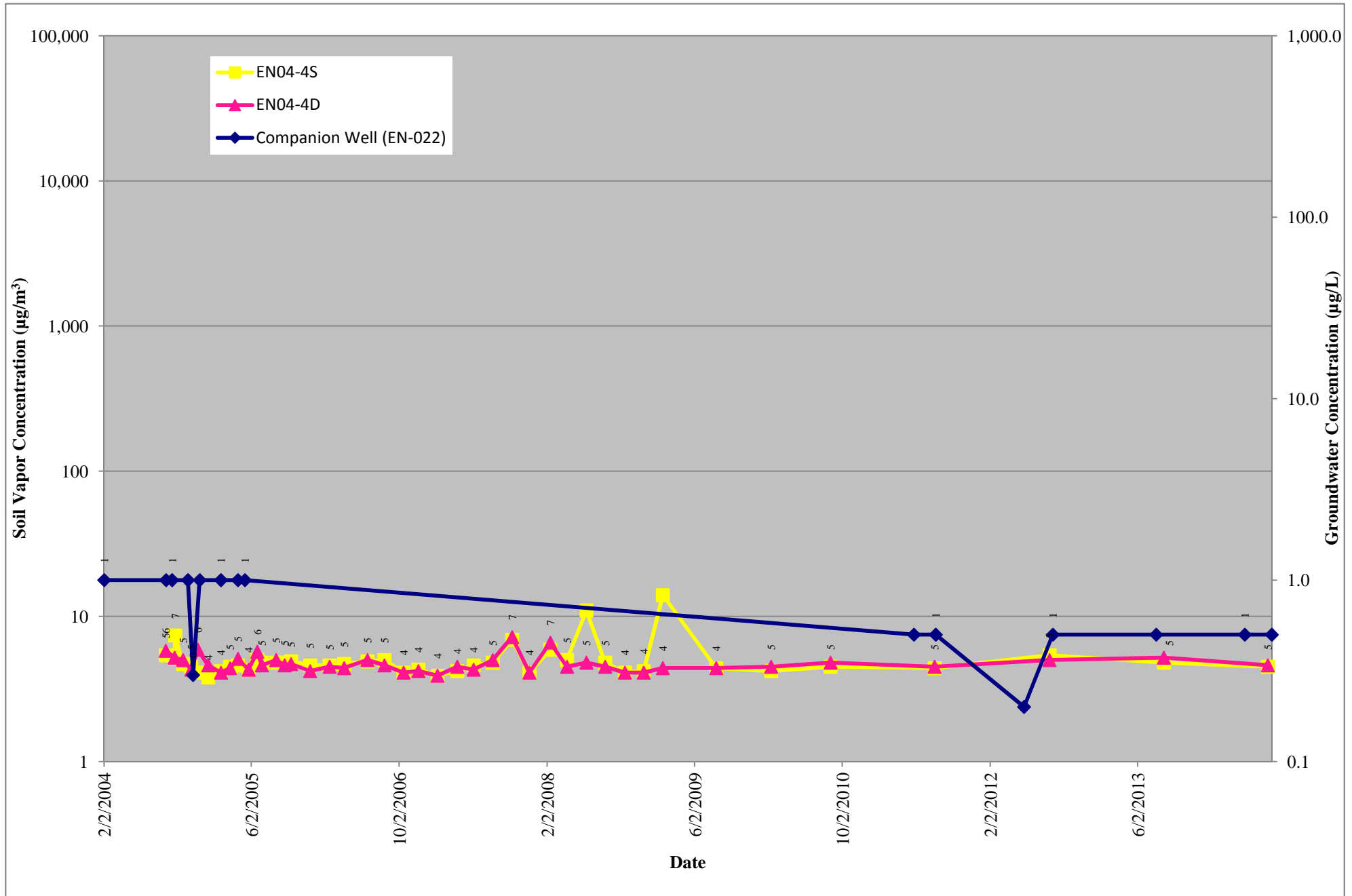


Figure B.5
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

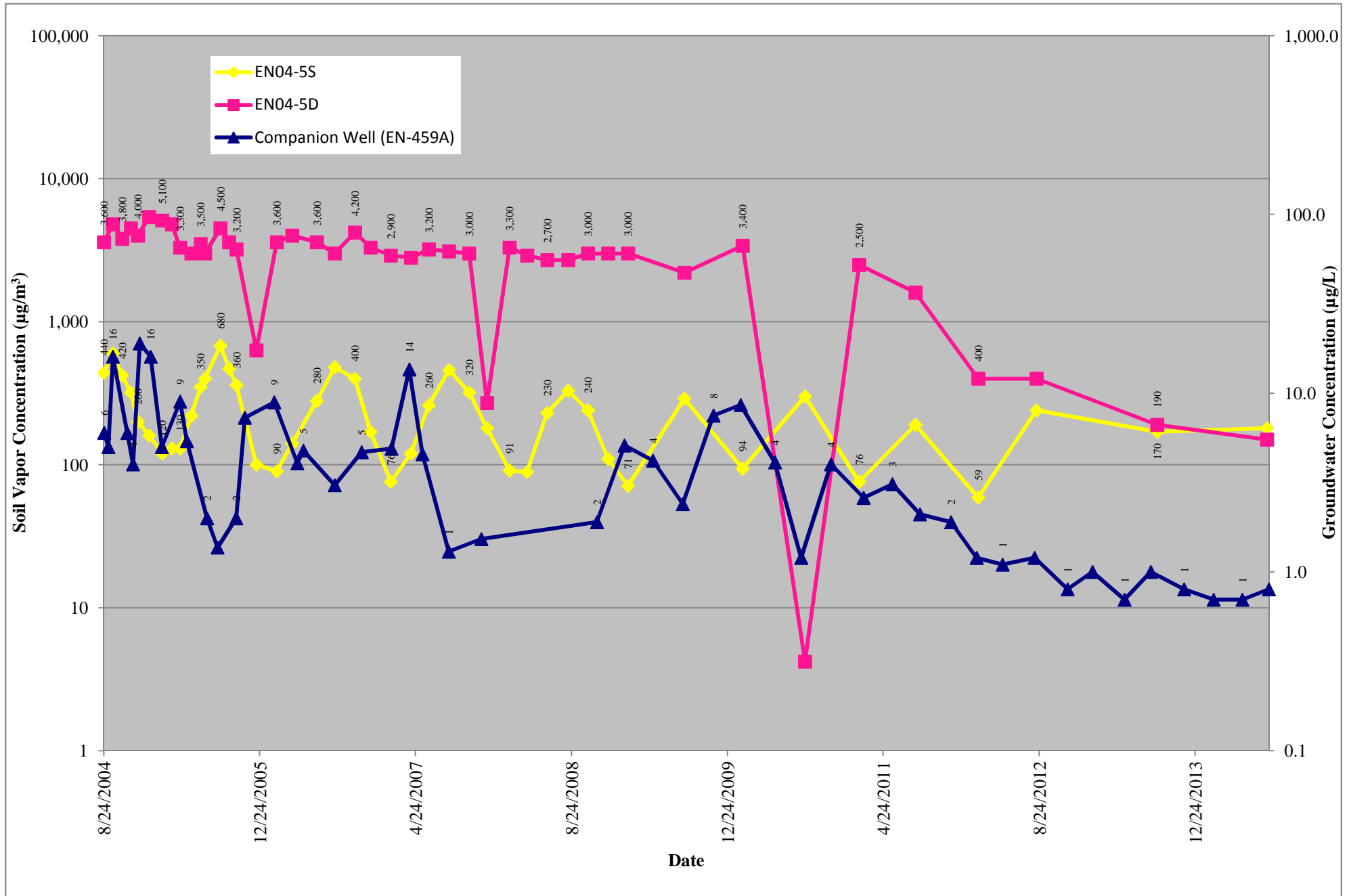


Figure B.6
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

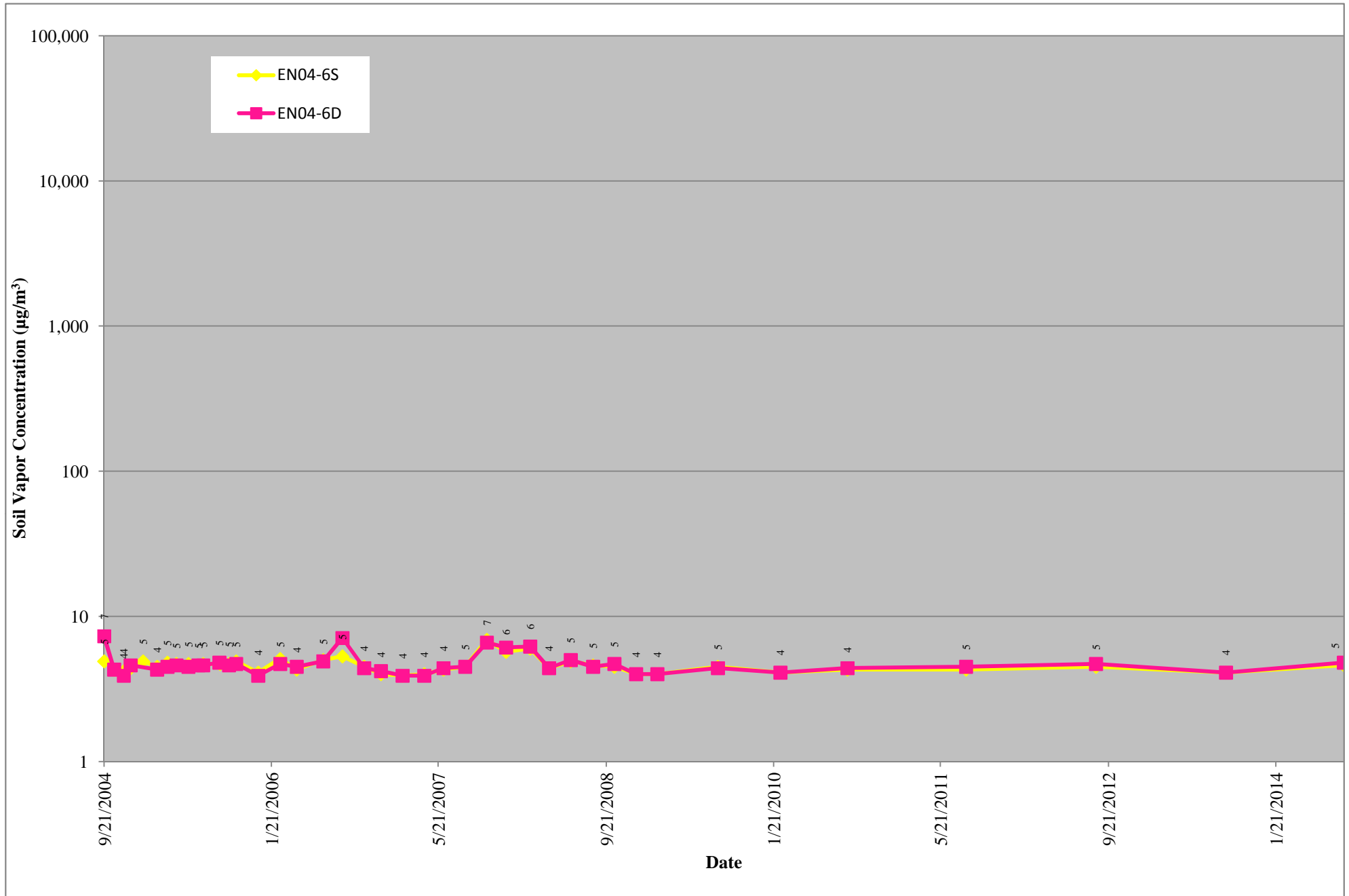


Figure B.7
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

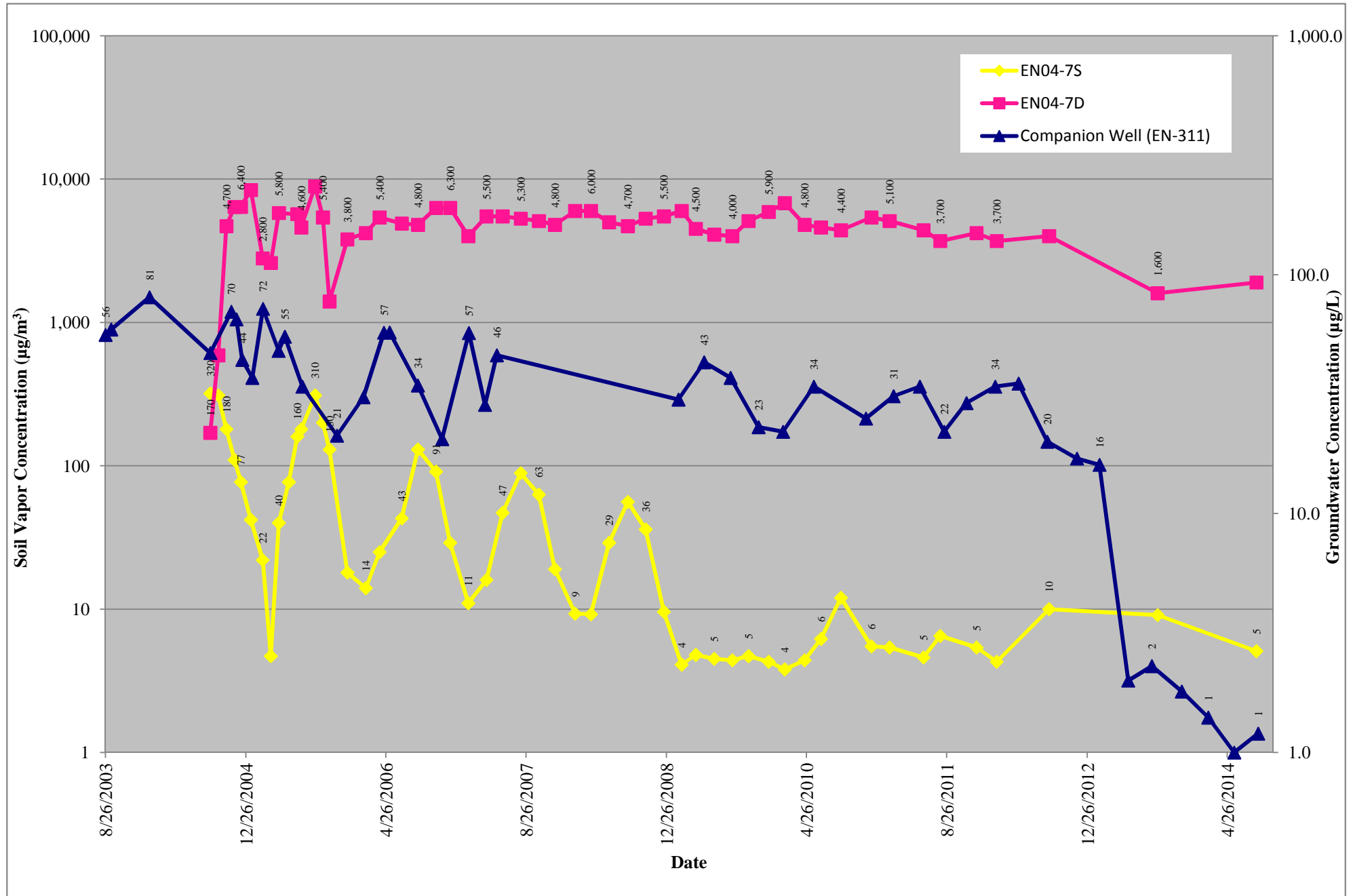


Figure B.8
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

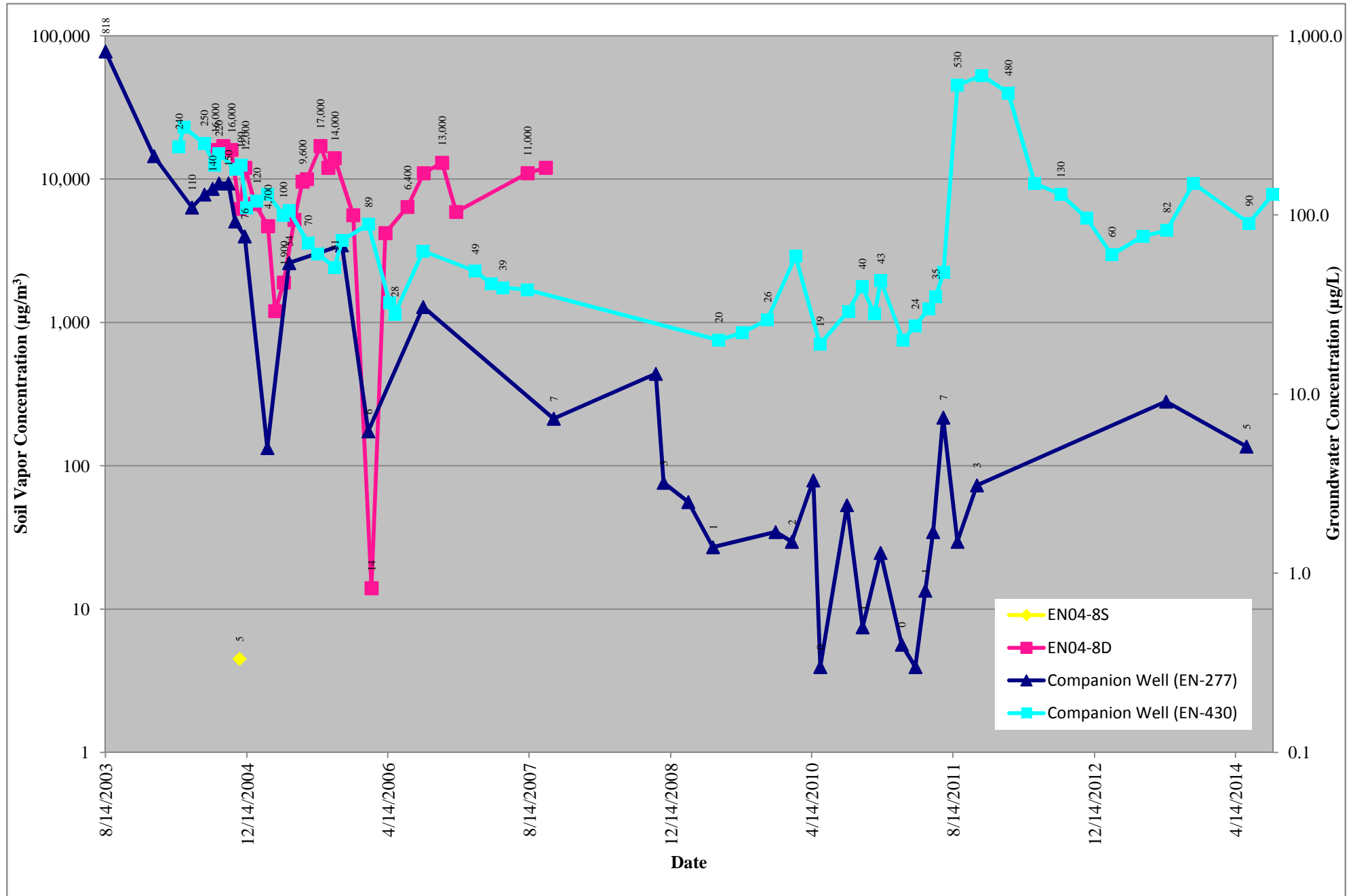


Figure B.9
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

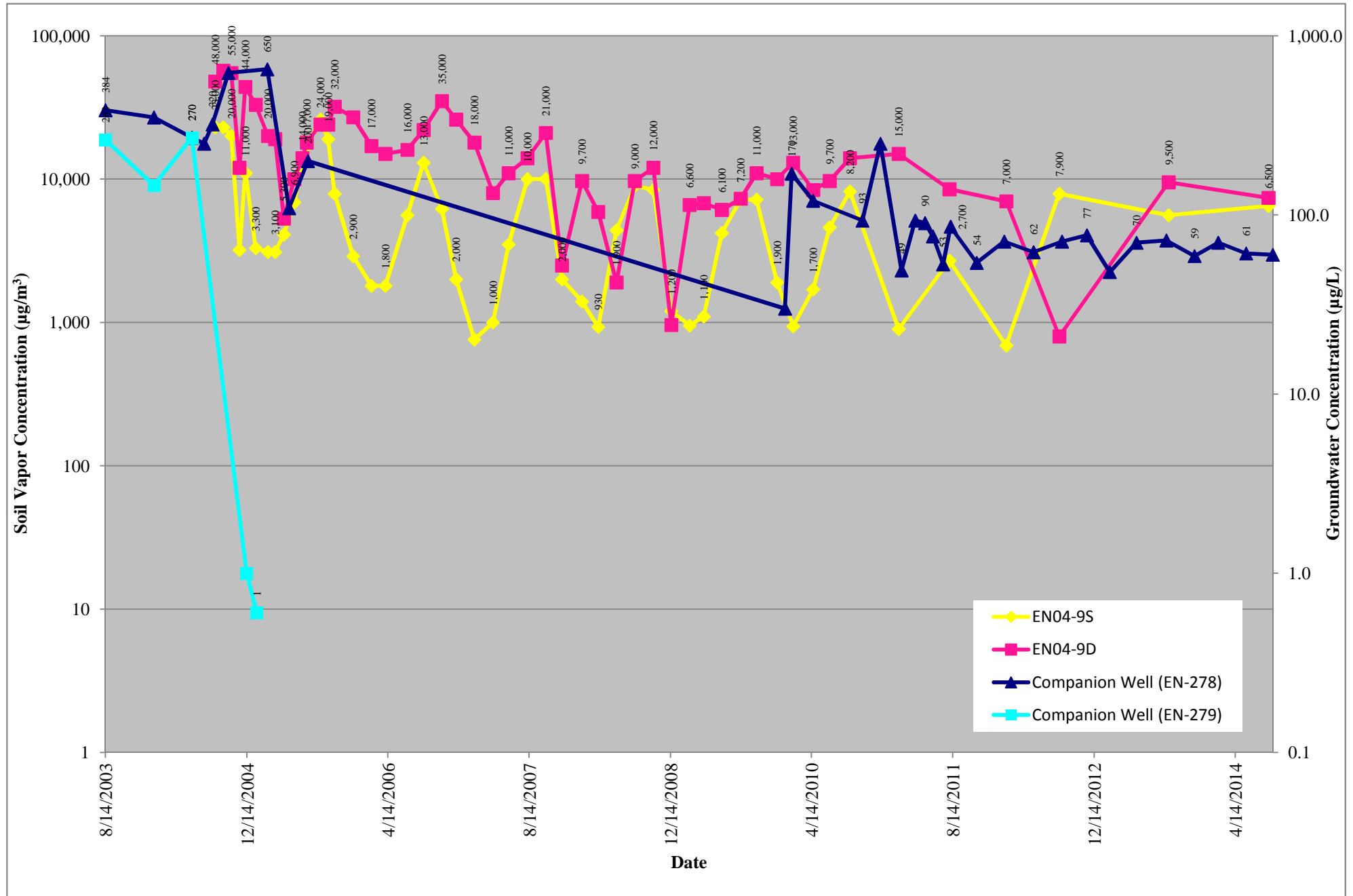
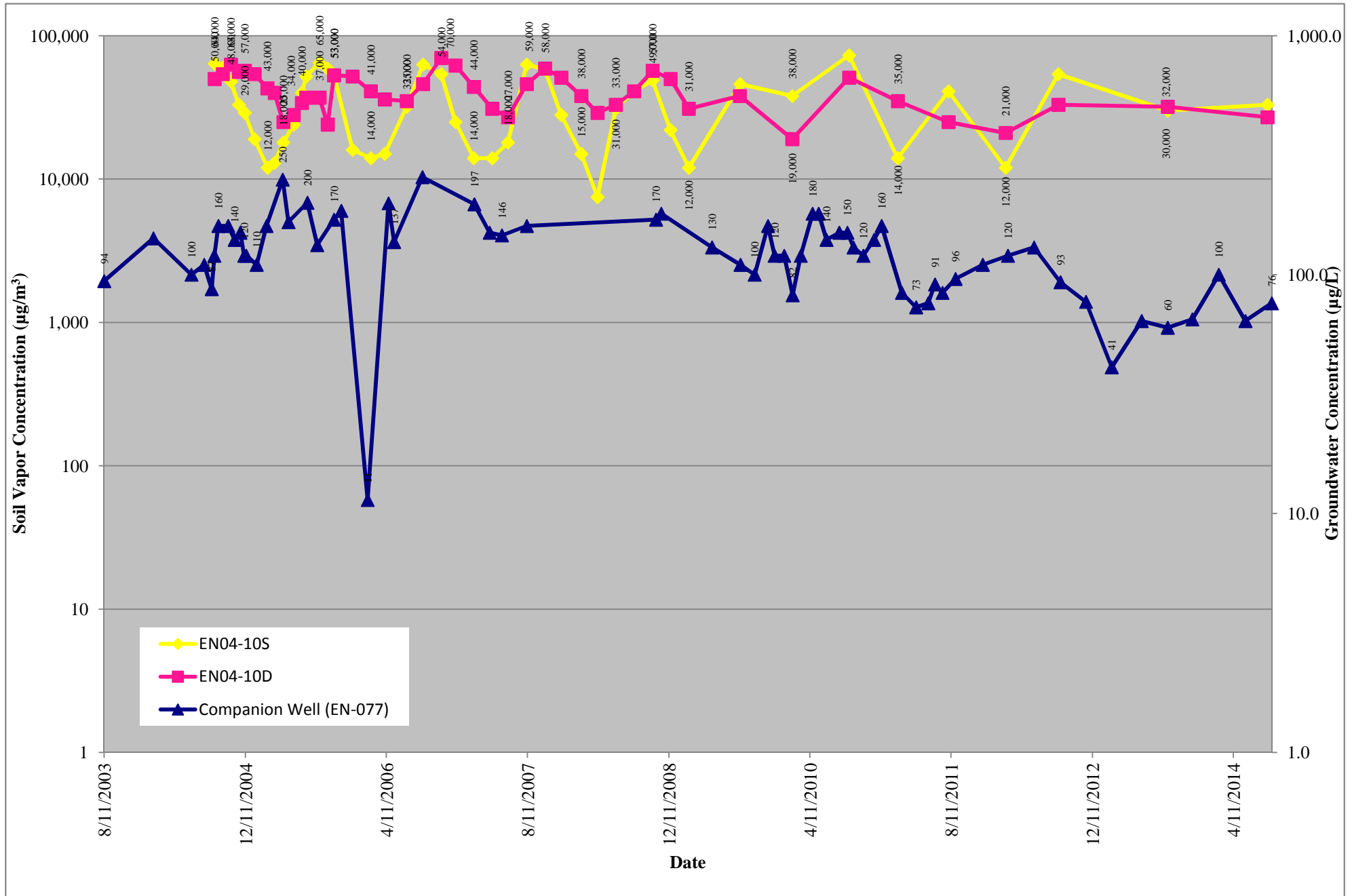


Figure B.10
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York



TCE in Soil Vapor and Groundwater
Semiannual Report - Soil Vapor Monitoring through February 2015
Comprehensive Operations, Maintenance, Monitoring Program
Endicott, New York

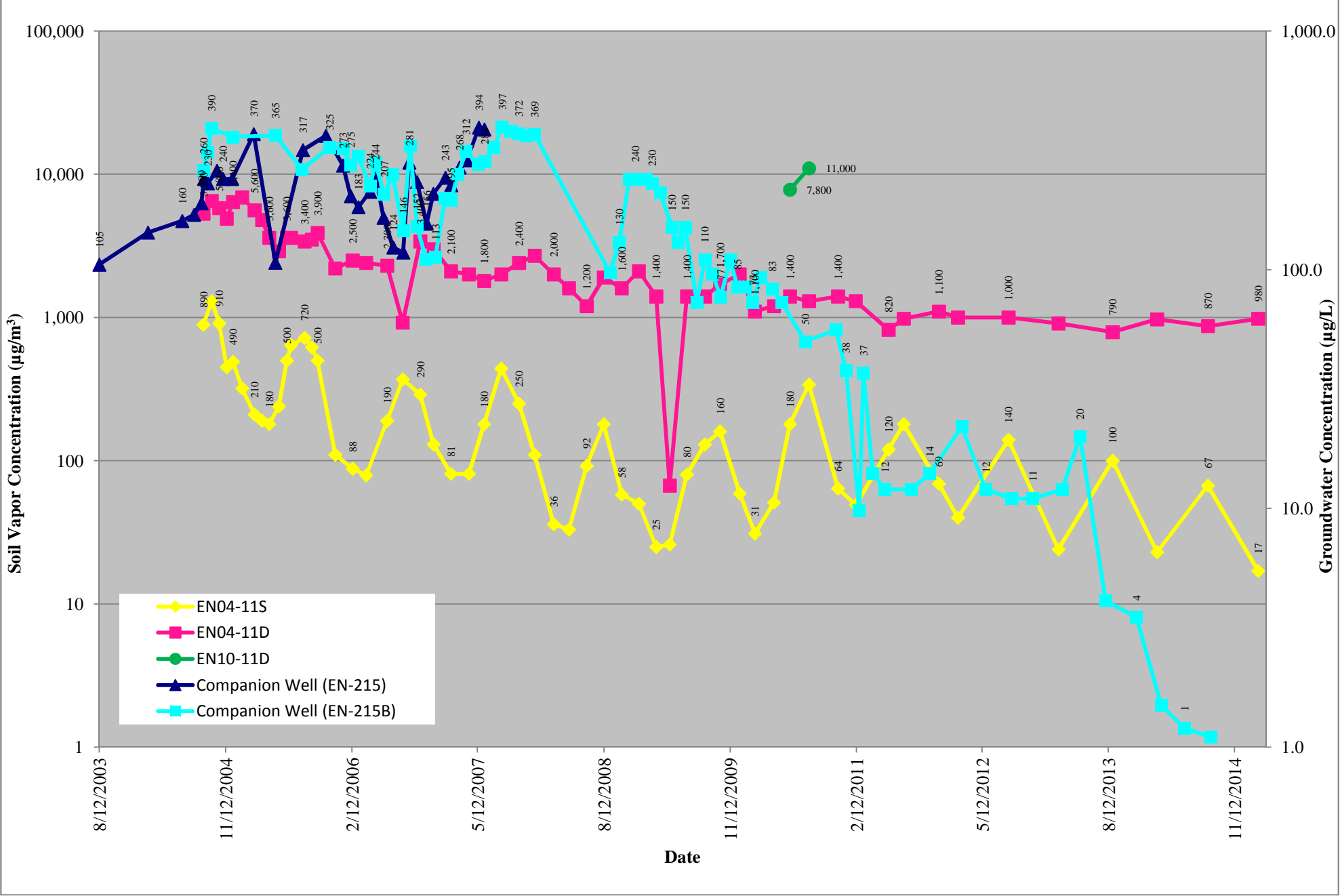


Figure B.12
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

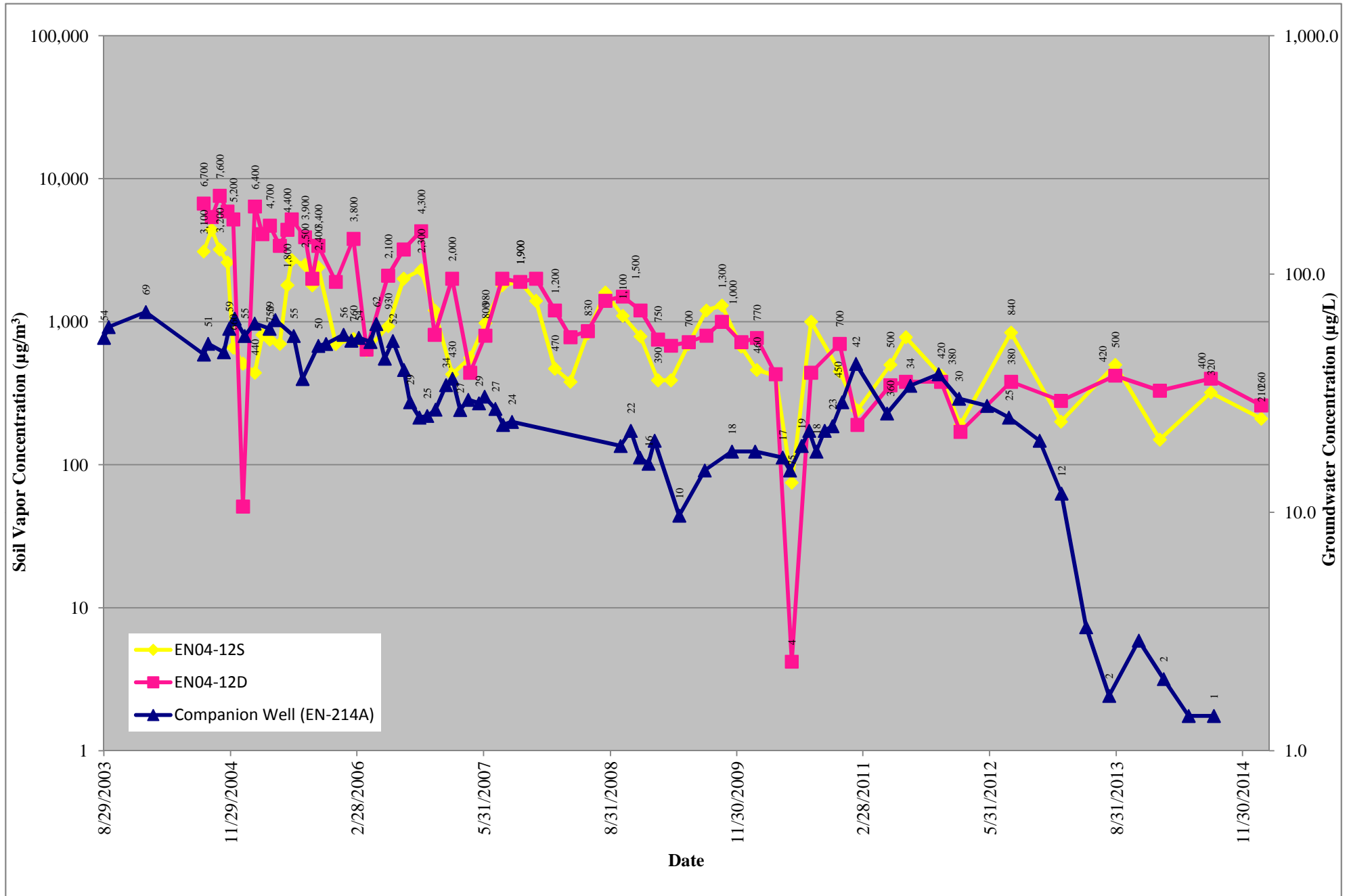


Figure B.13
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

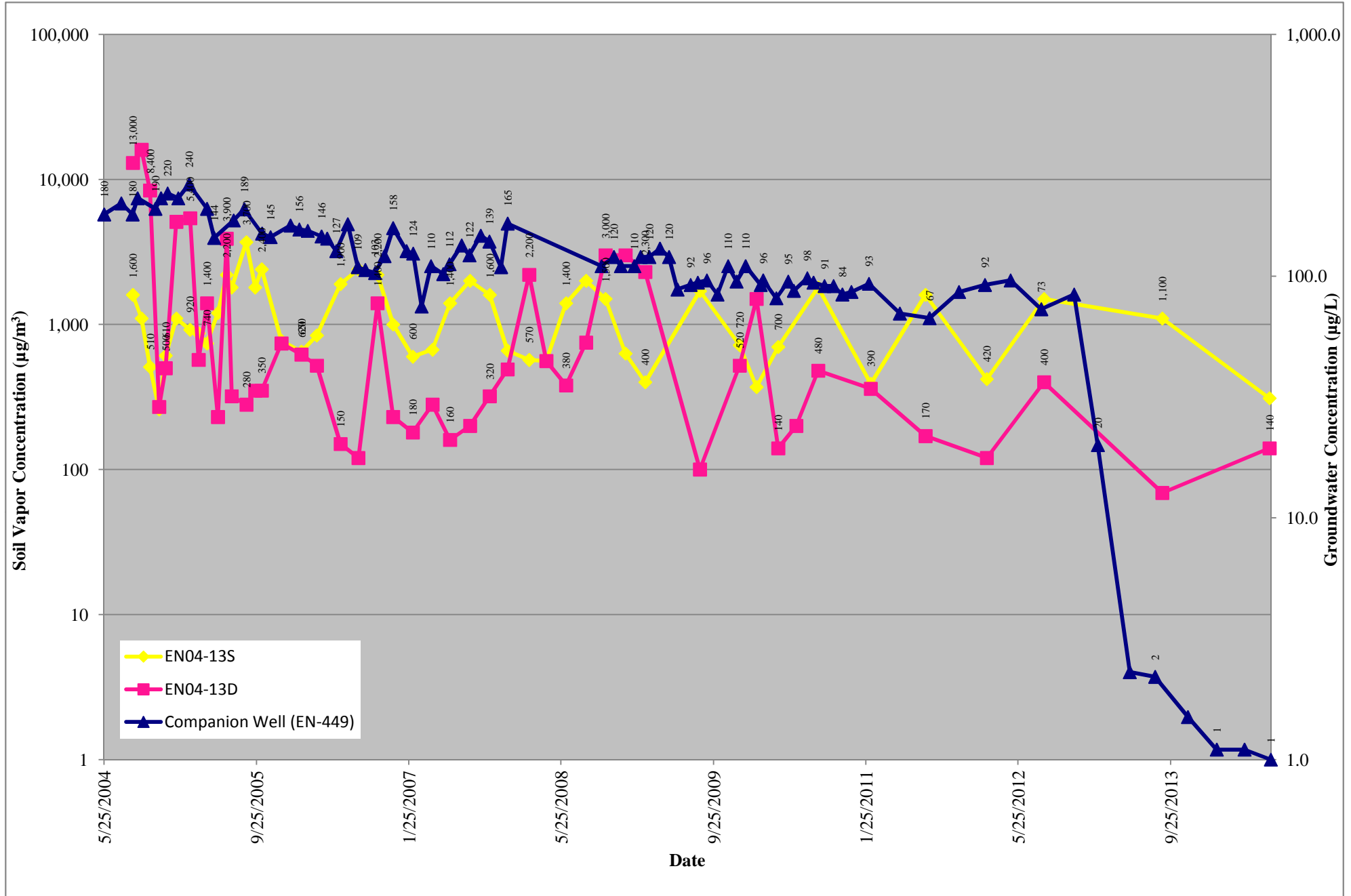


Figure B.14
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

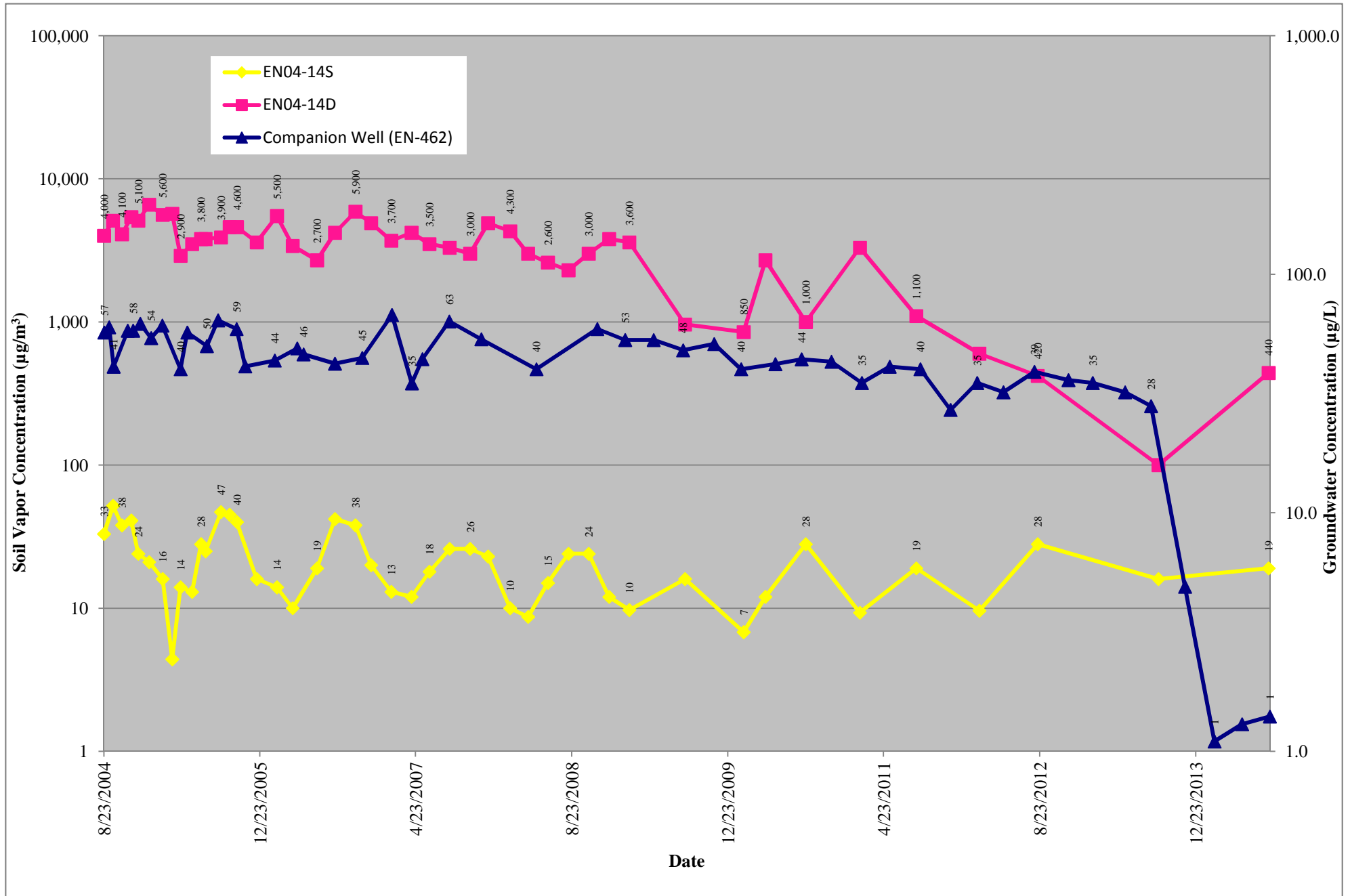


Figure B.15
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

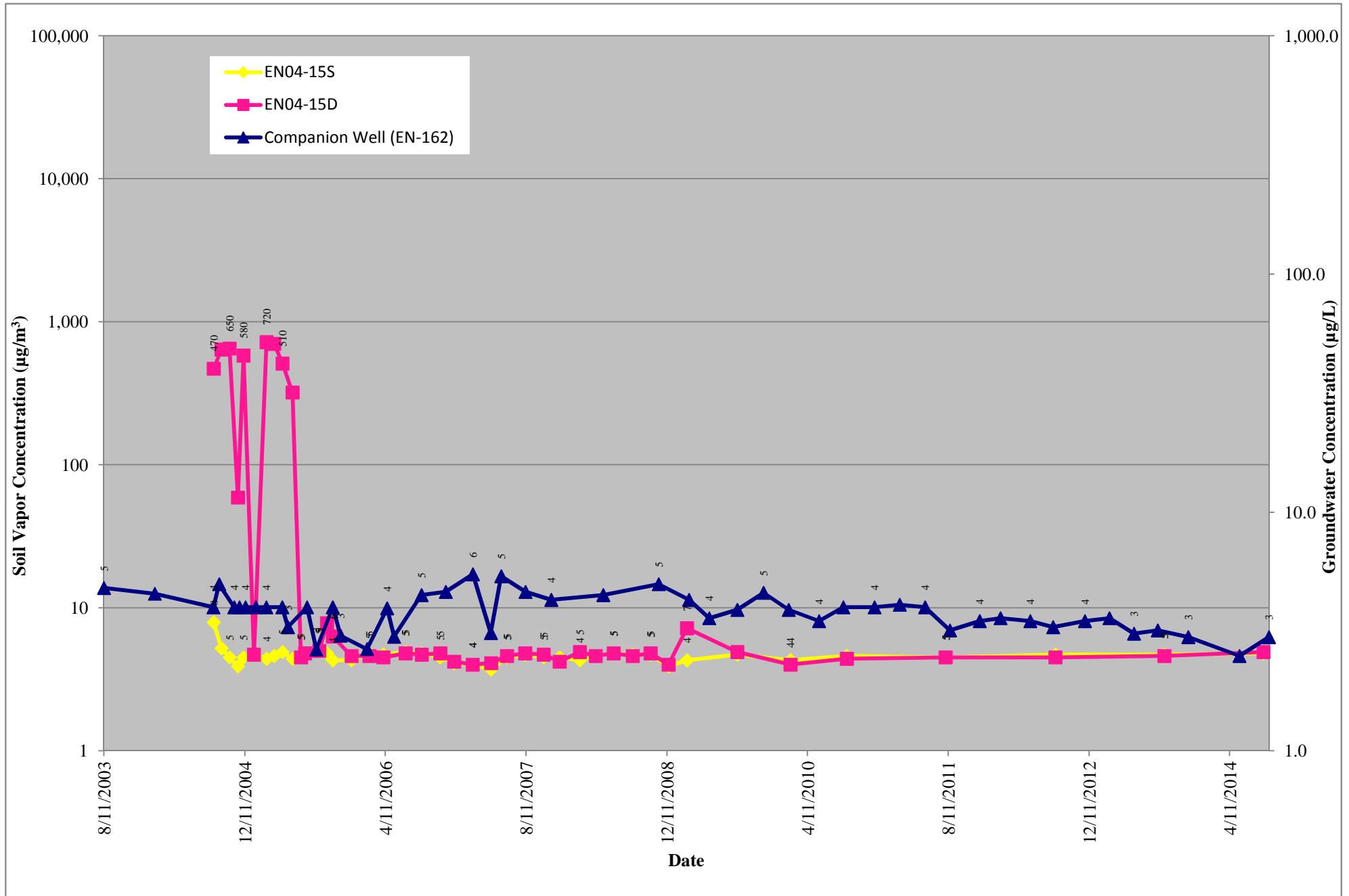


Figure B.16
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

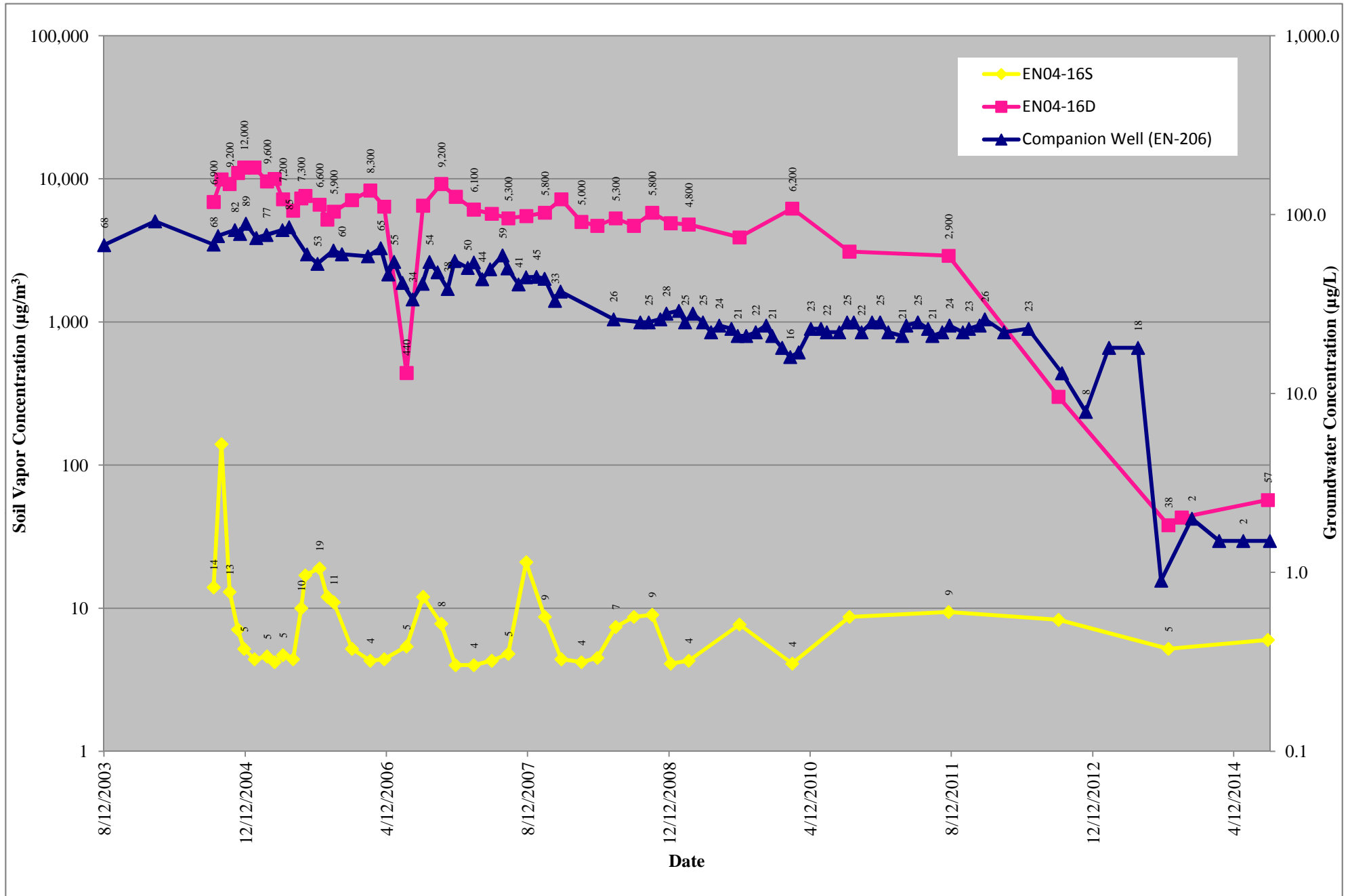


Figure B.17
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

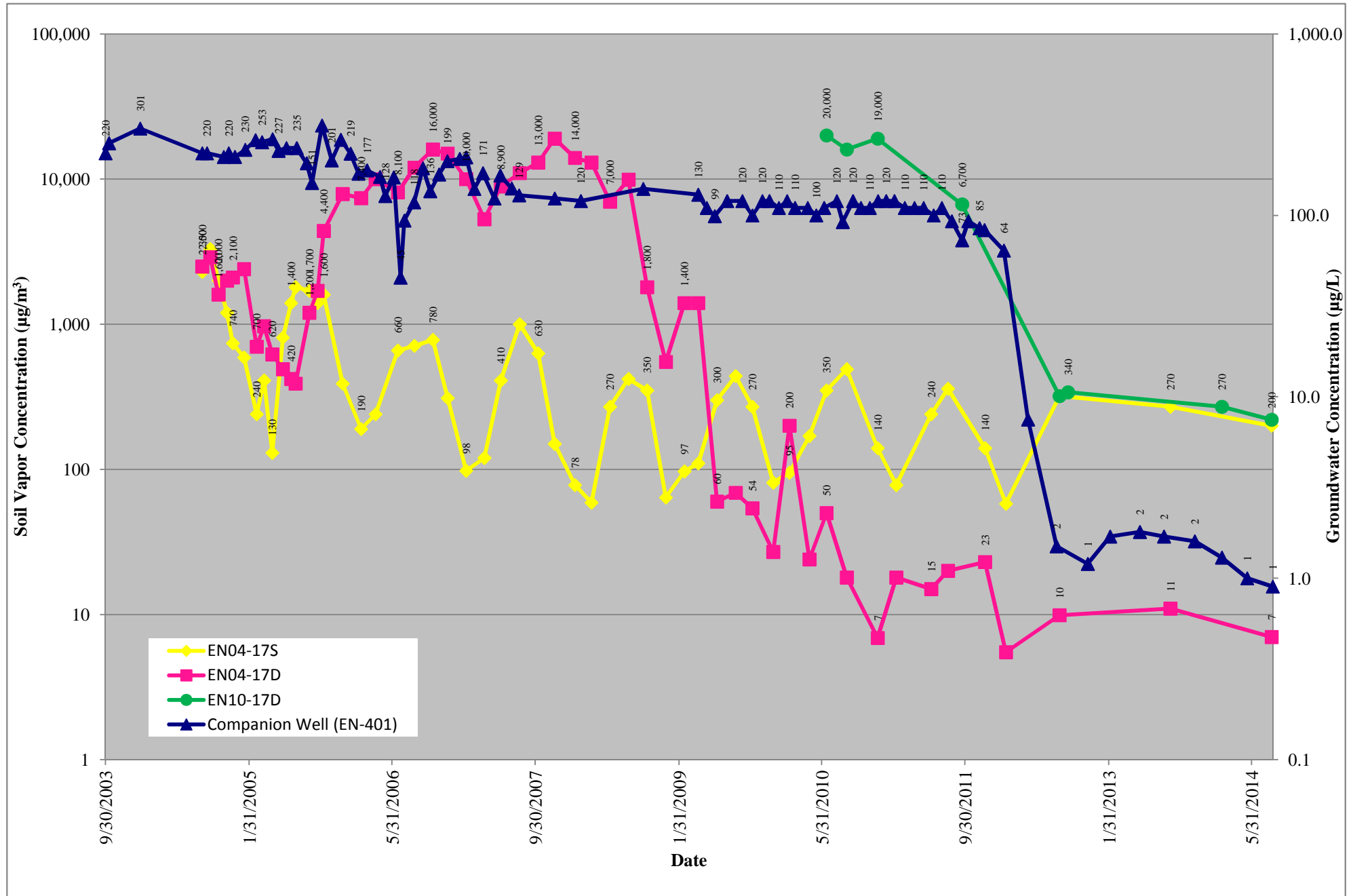


Figure B.18
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 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

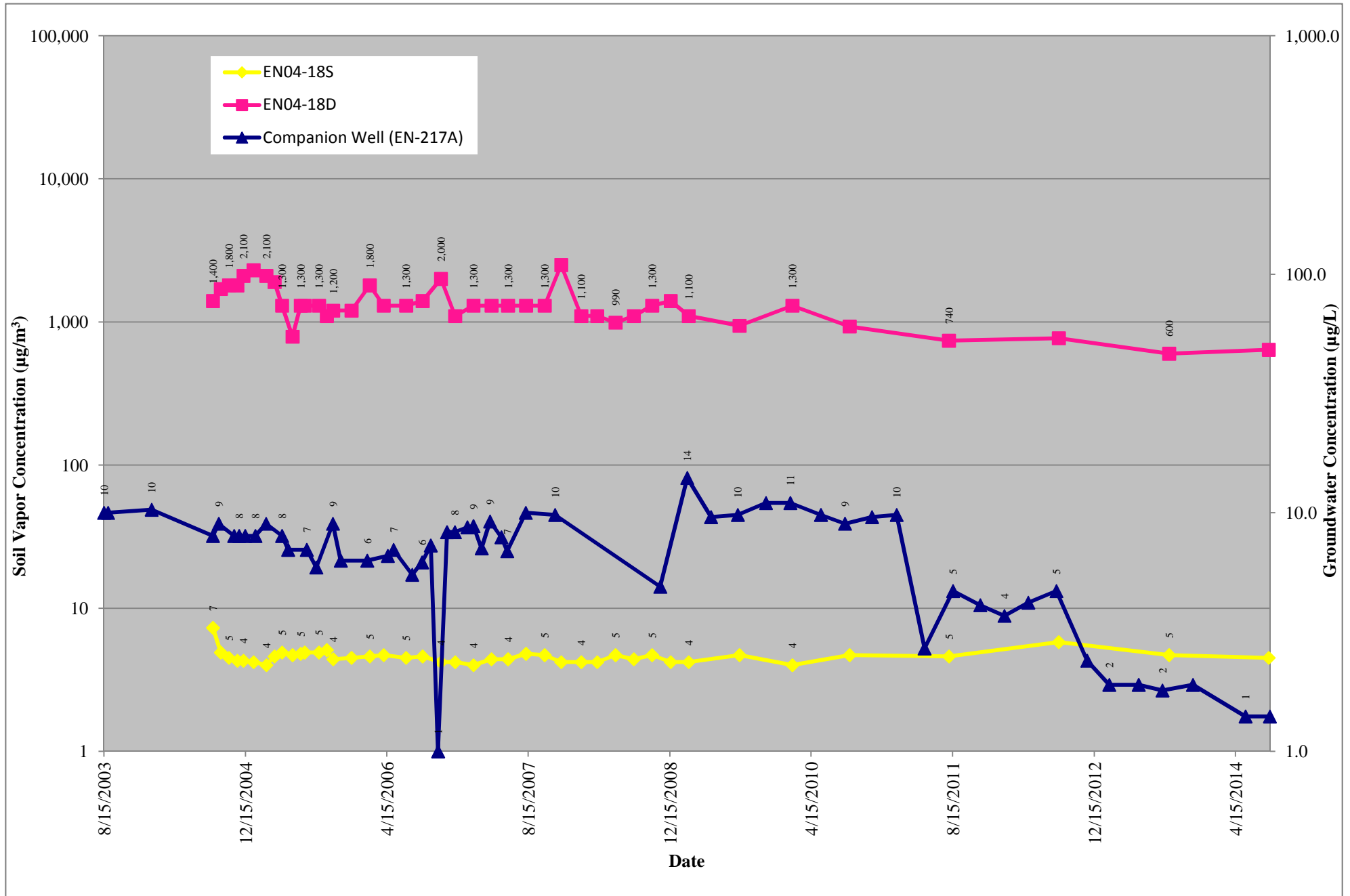


Figure B.19
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 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

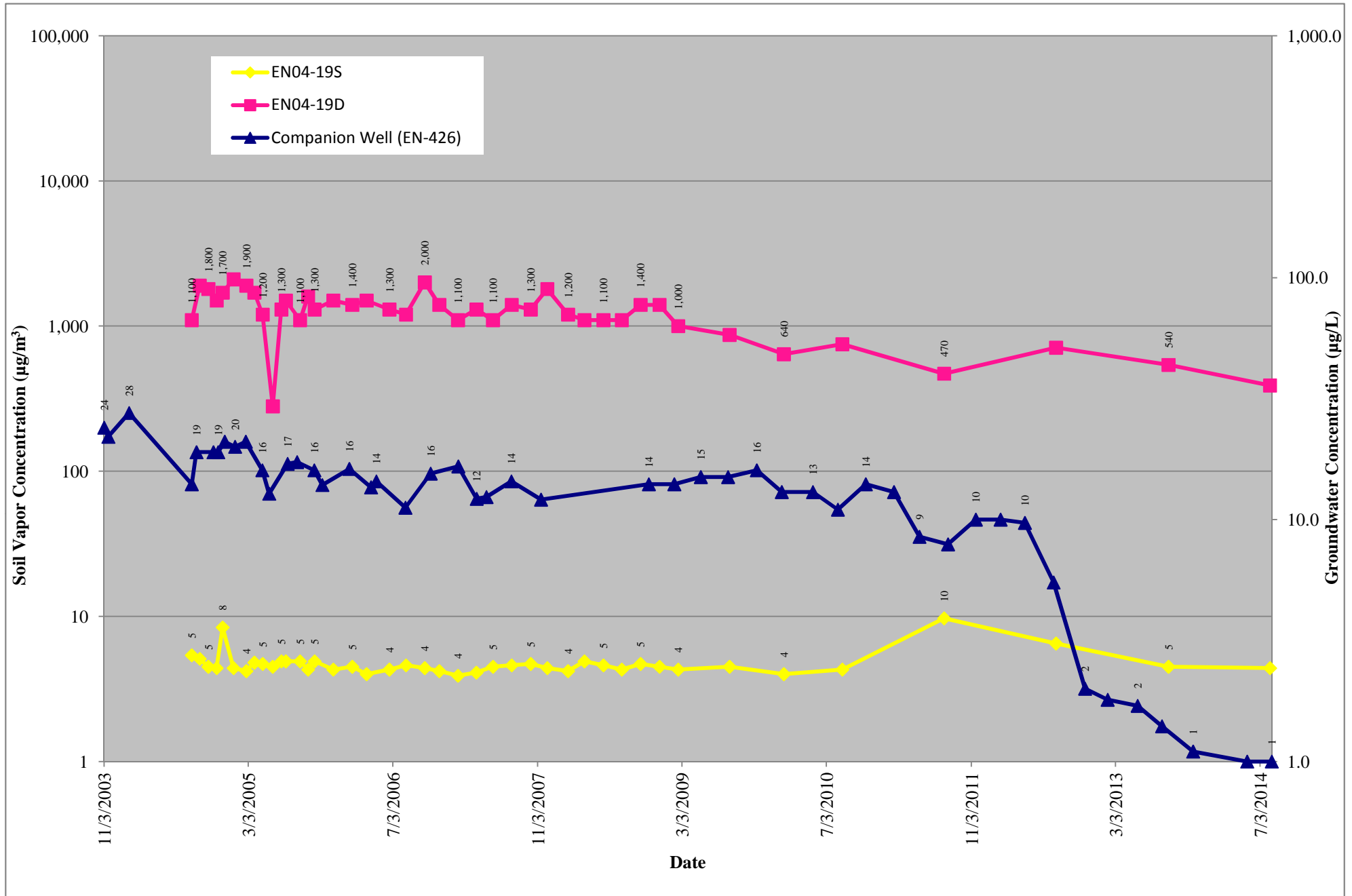


Figure B.20
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

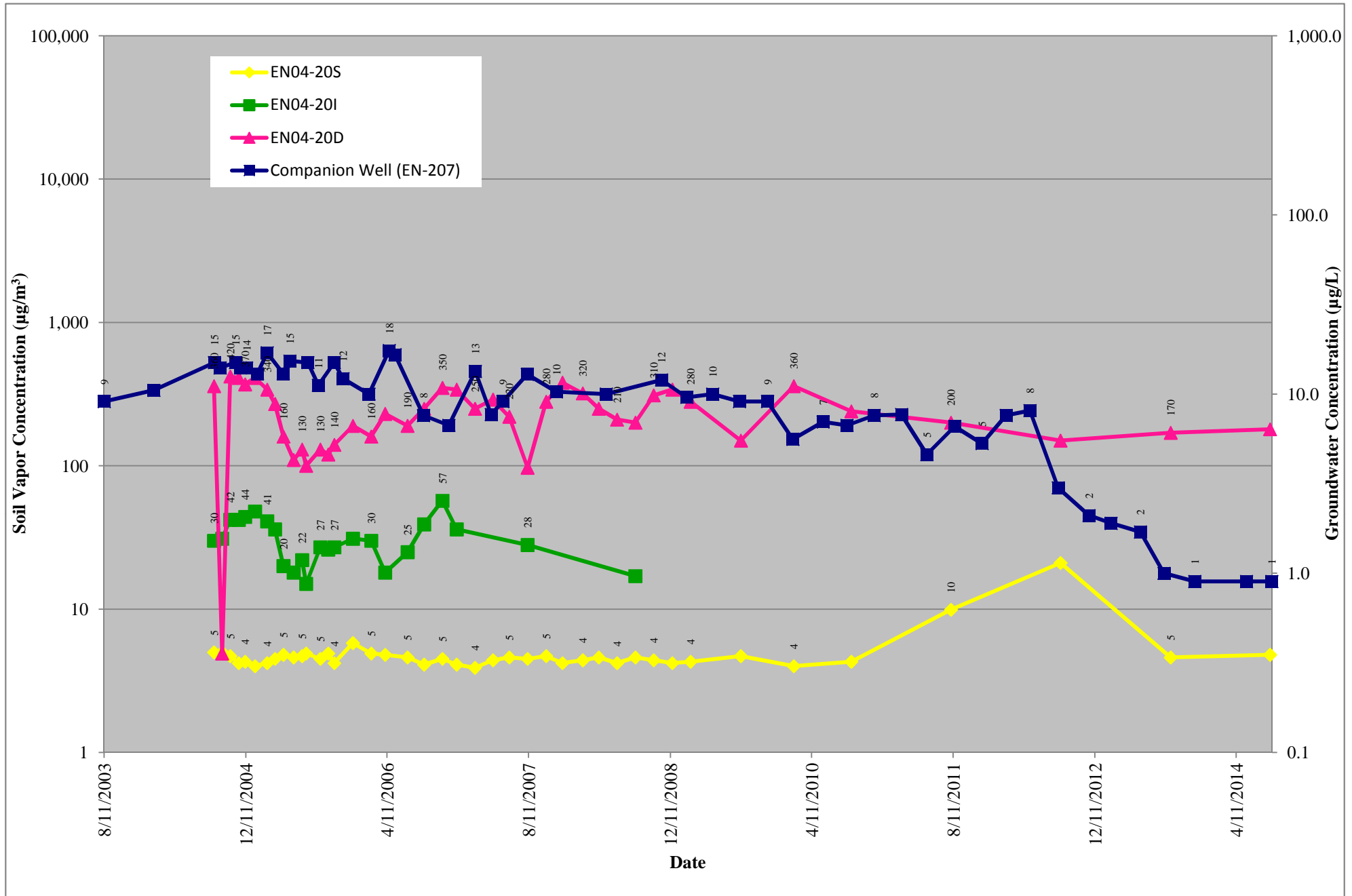


Figure B.21
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
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 Endicott, New York

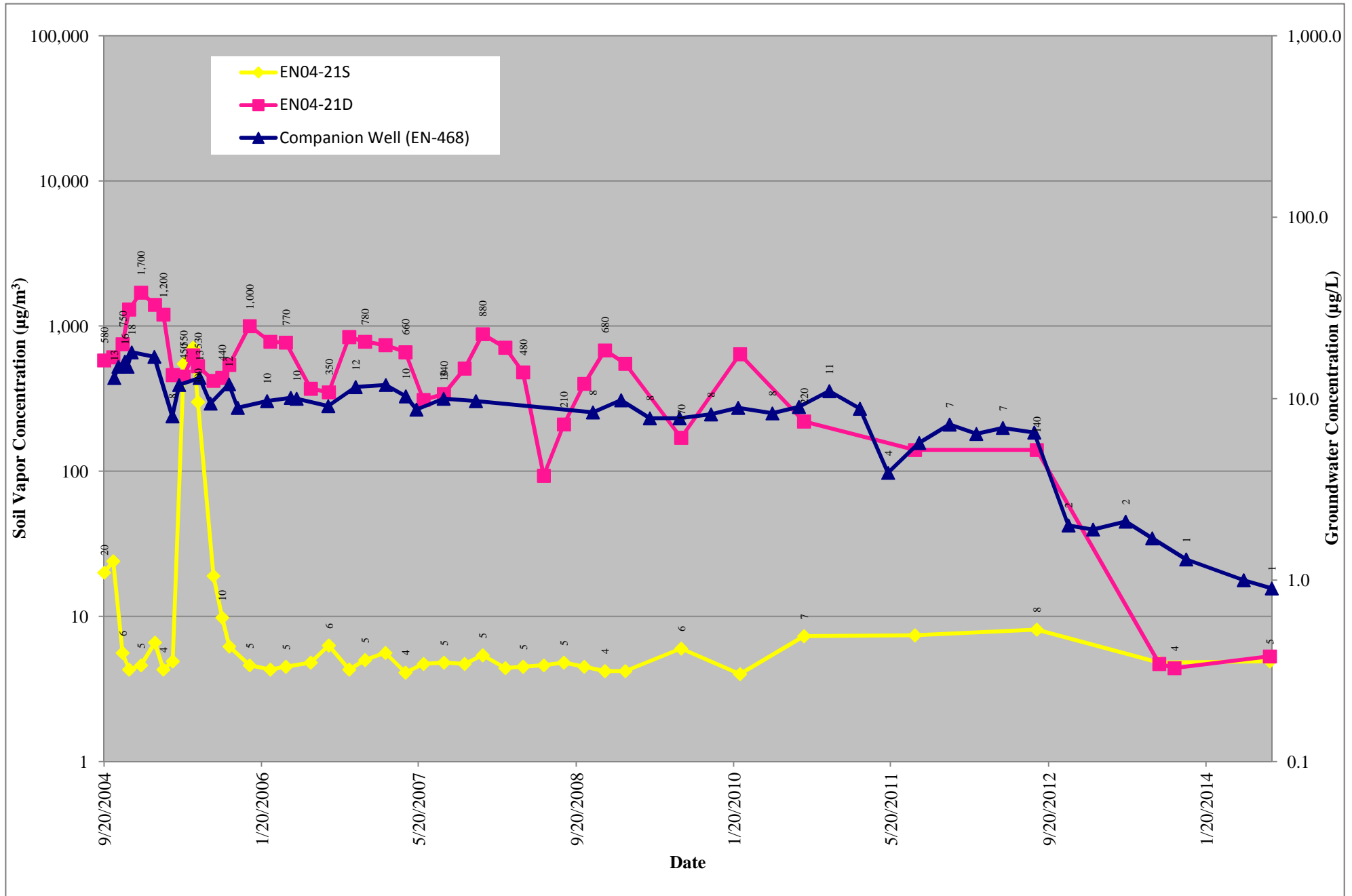


Figure B.22
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 Semiannual Report - Soil Vapor Monitoring through February 2015
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 Endicott, New York

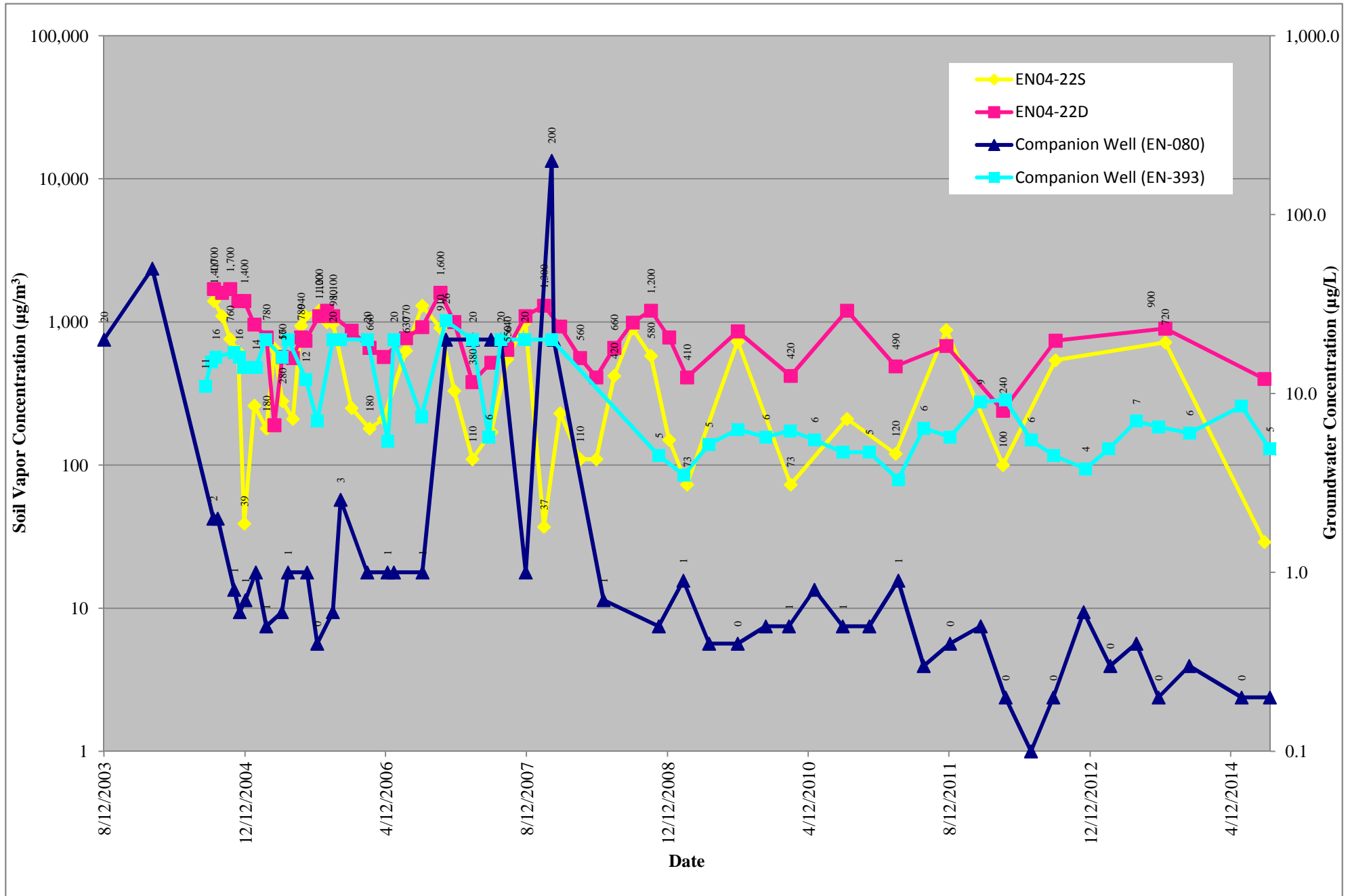


Figure B.23
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

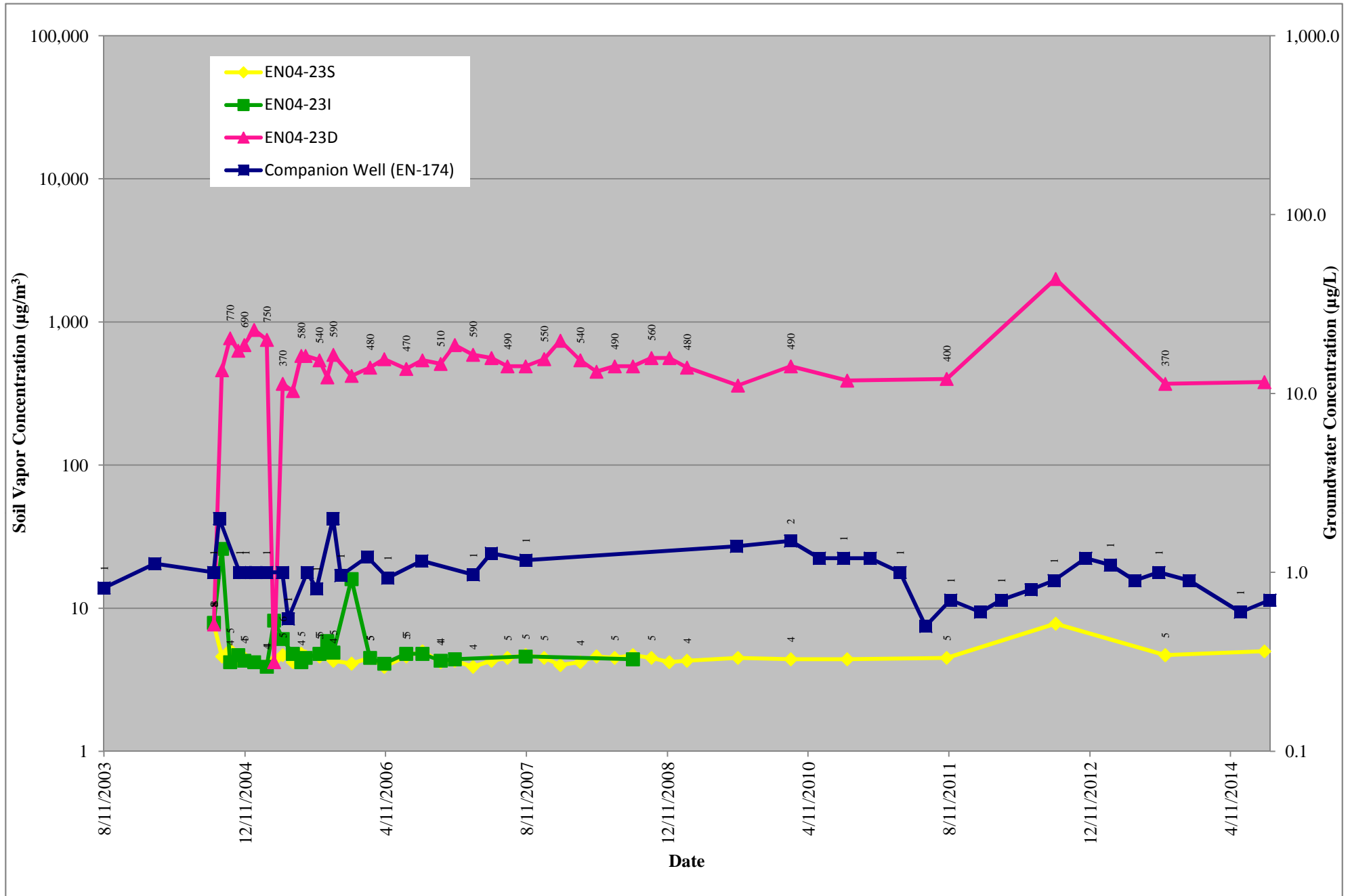


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 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

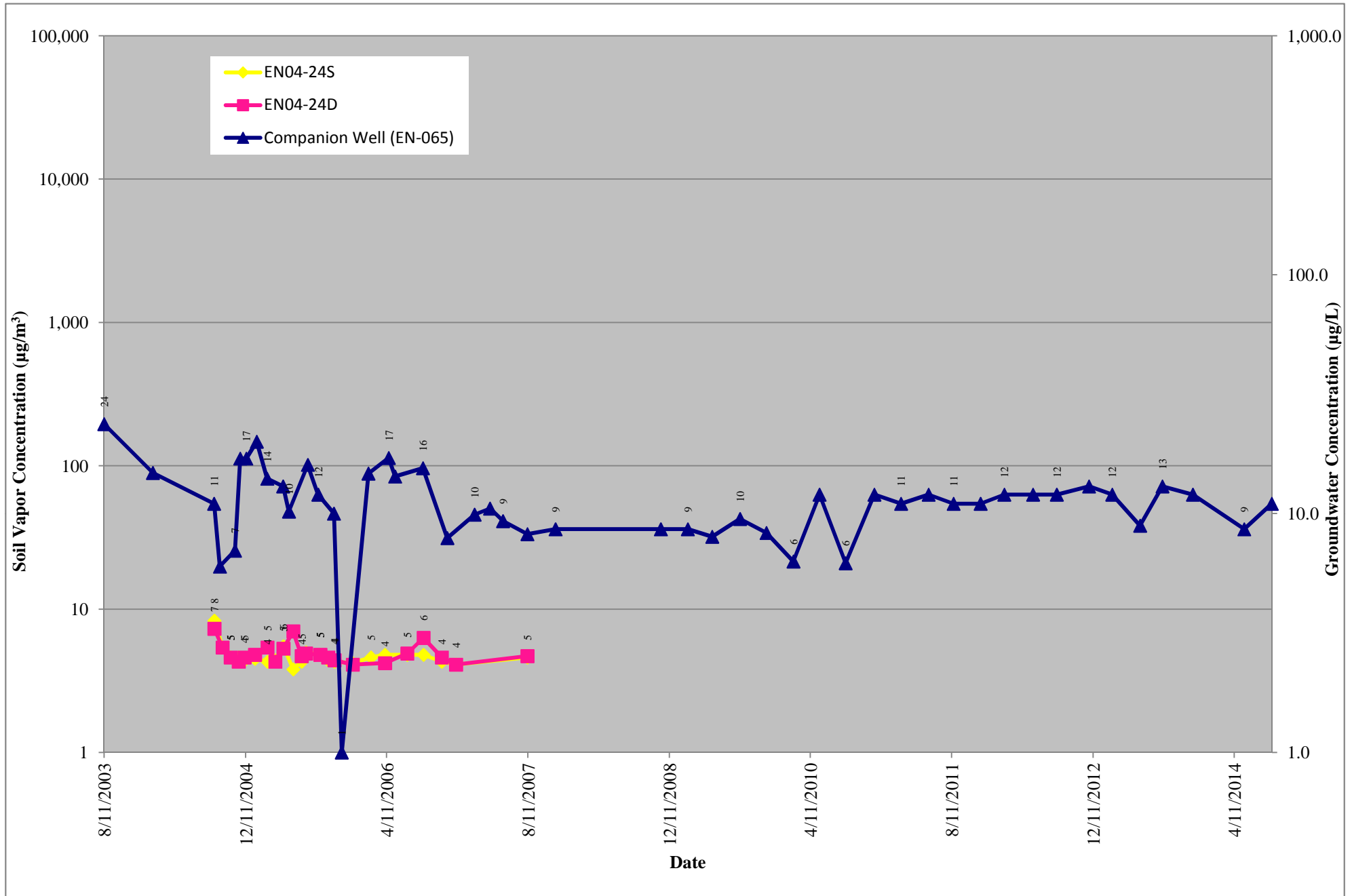


Figure B.25
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

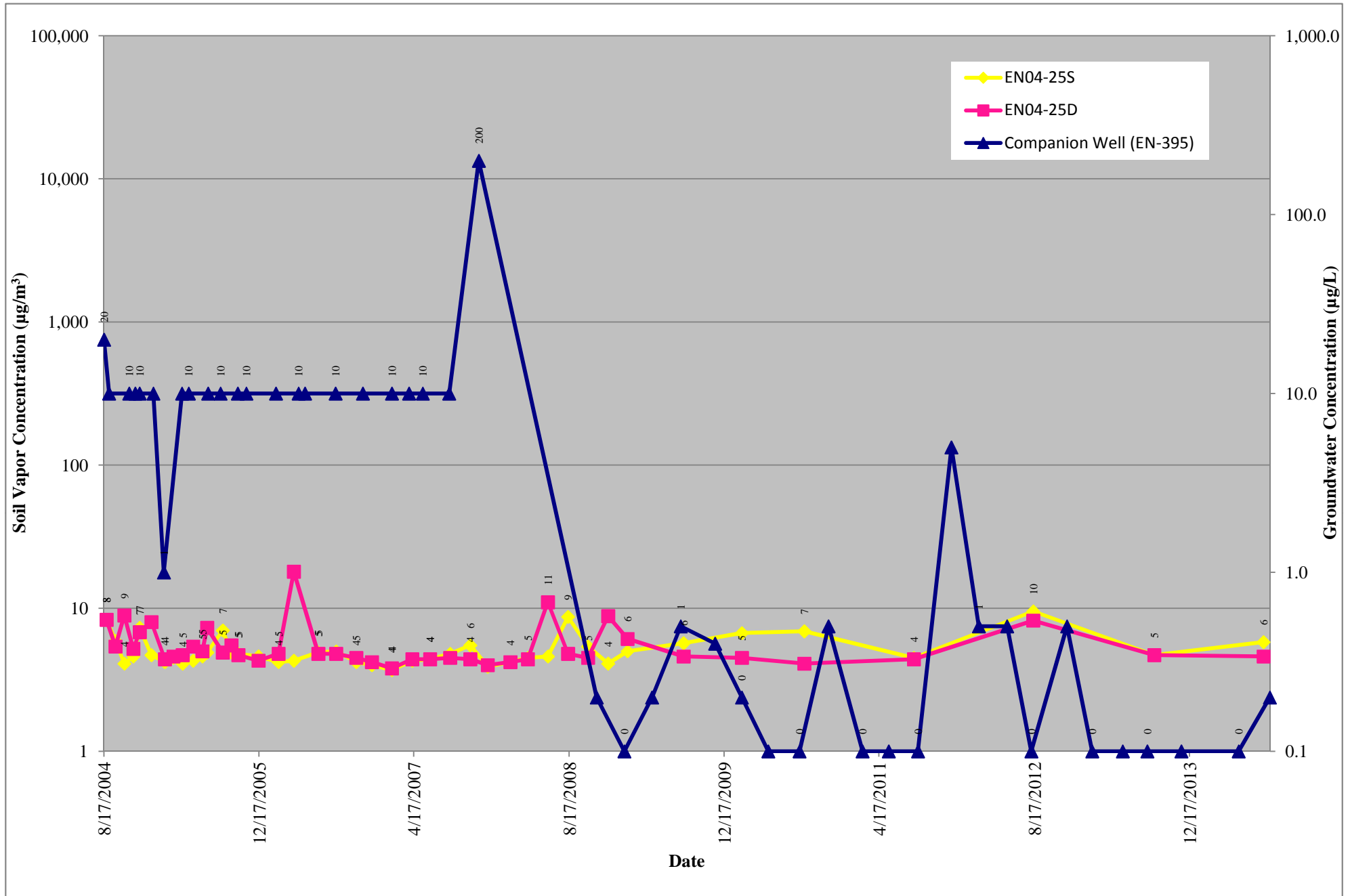


Figure B.26
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

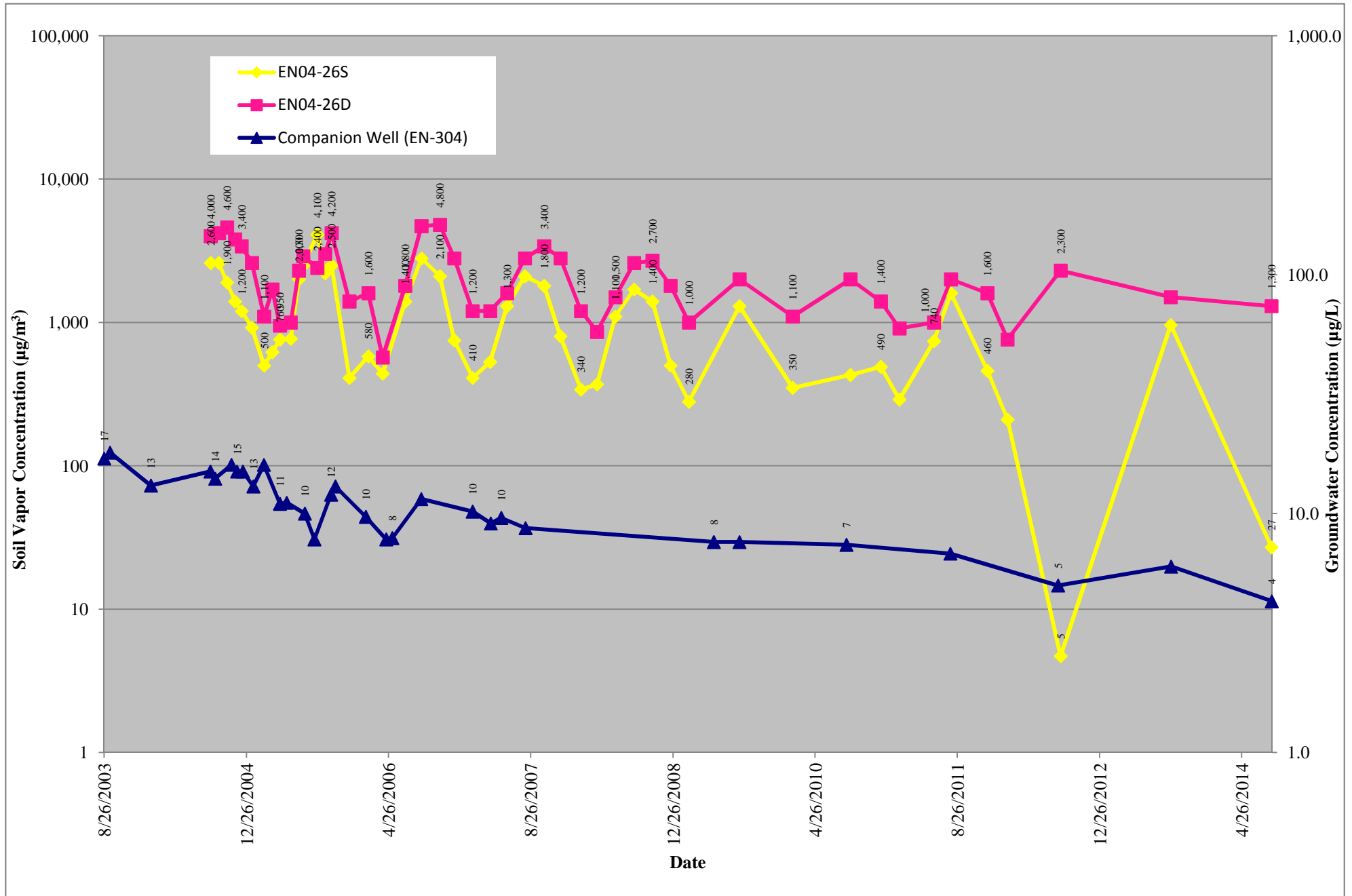


Figure B.27
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

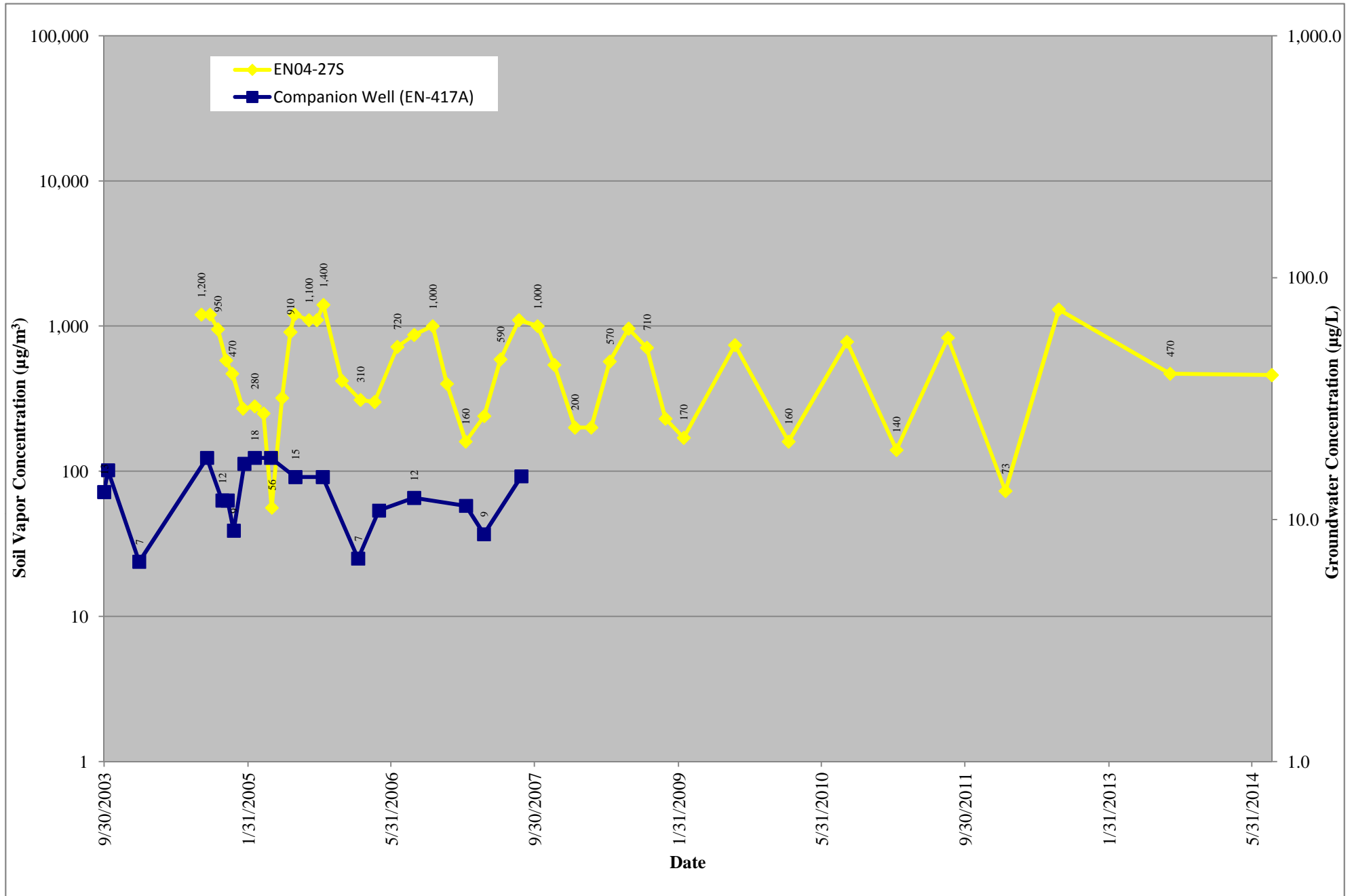


Figure B.28
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 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

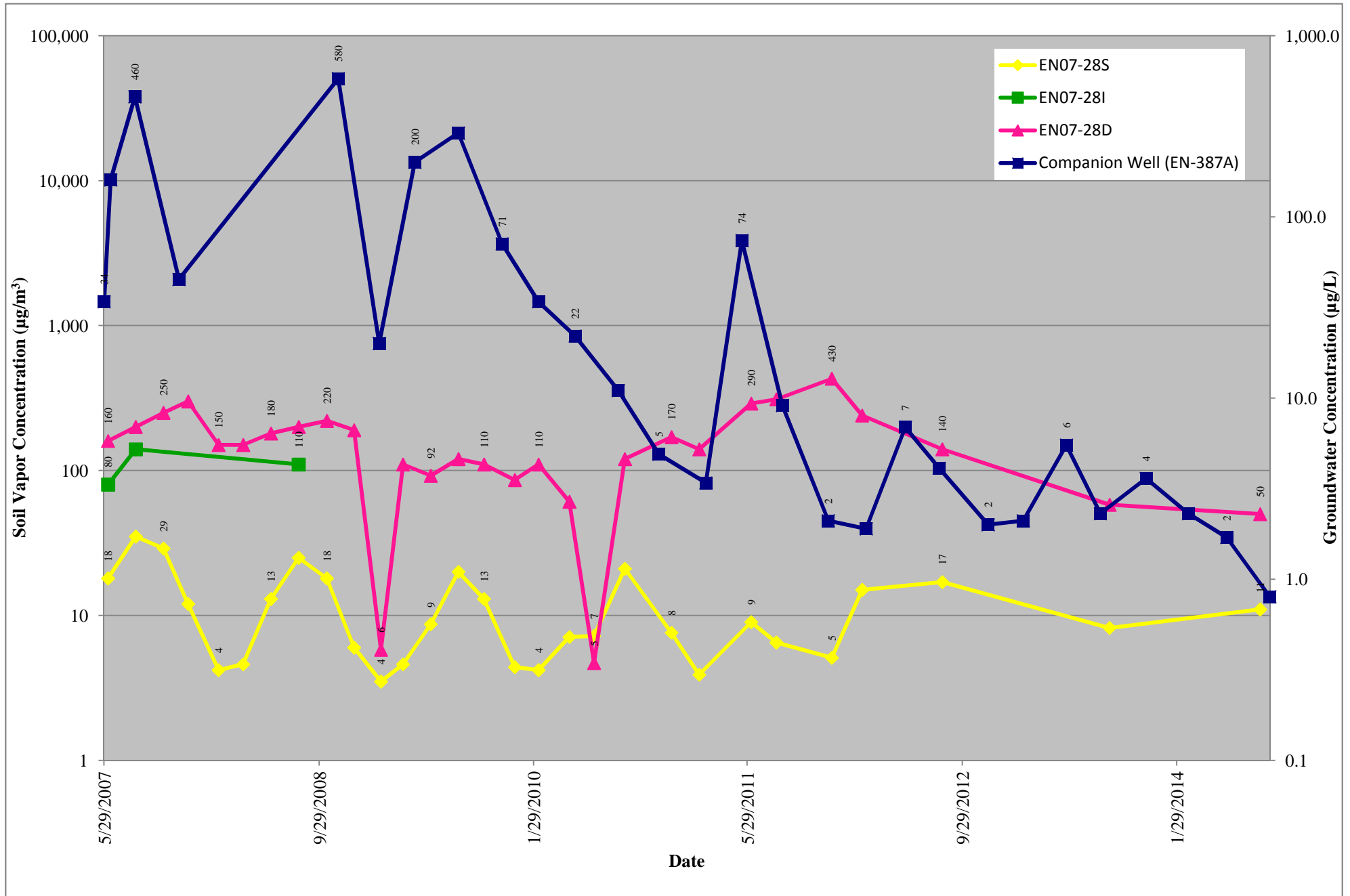


Figure B.29
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

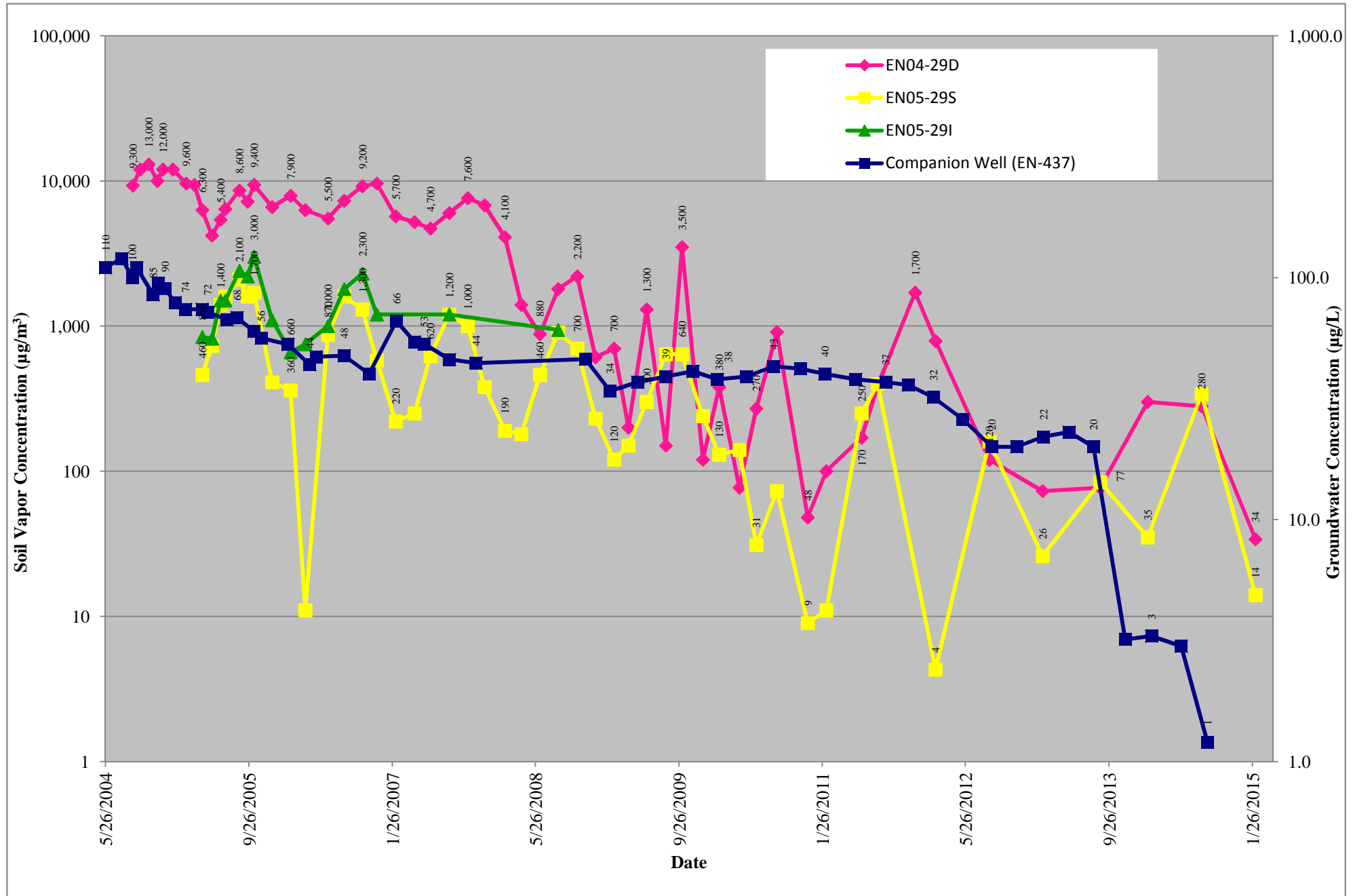


Figure B.30
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

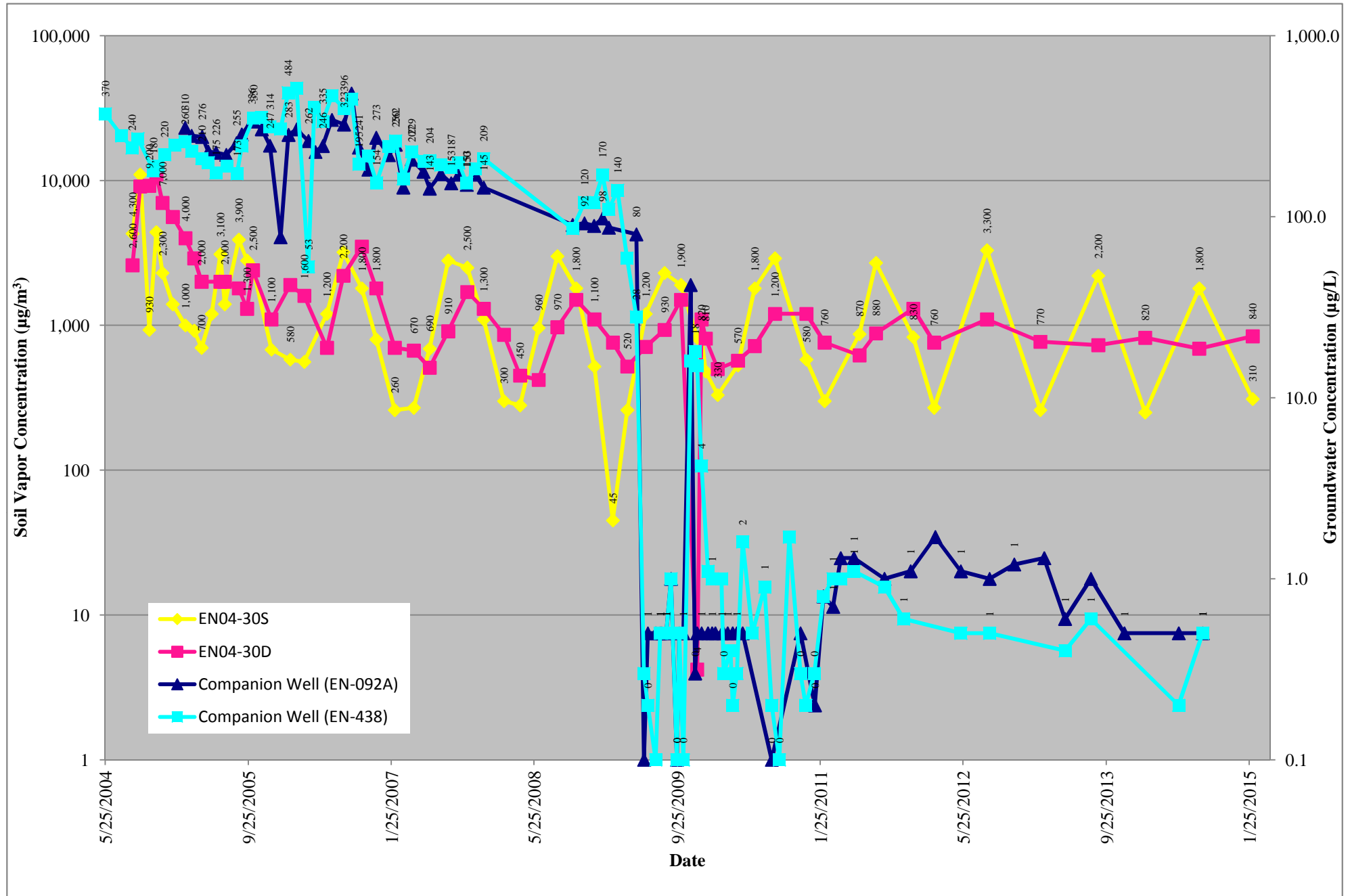


Figure B.31
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

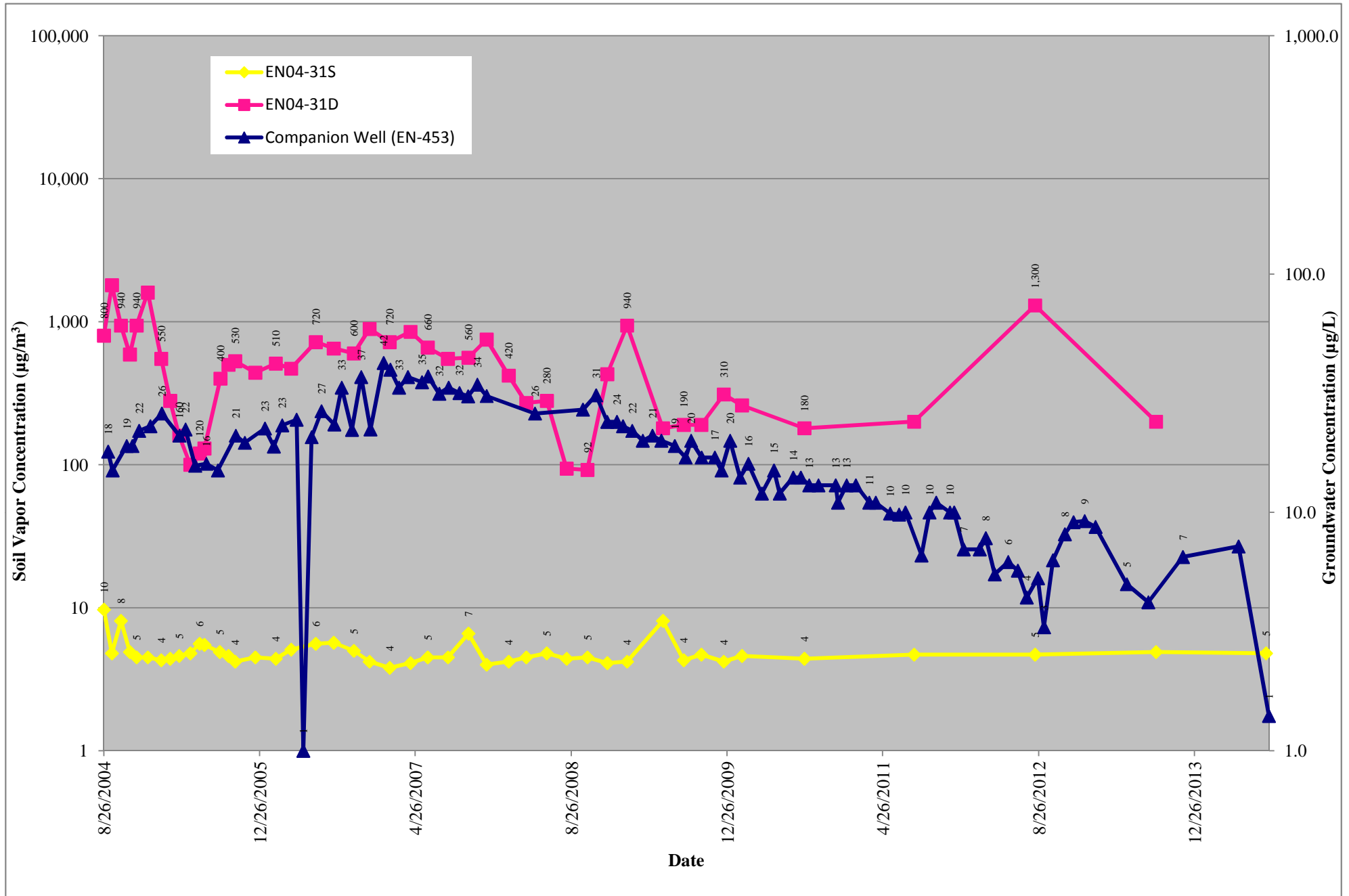


Figure B.32
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

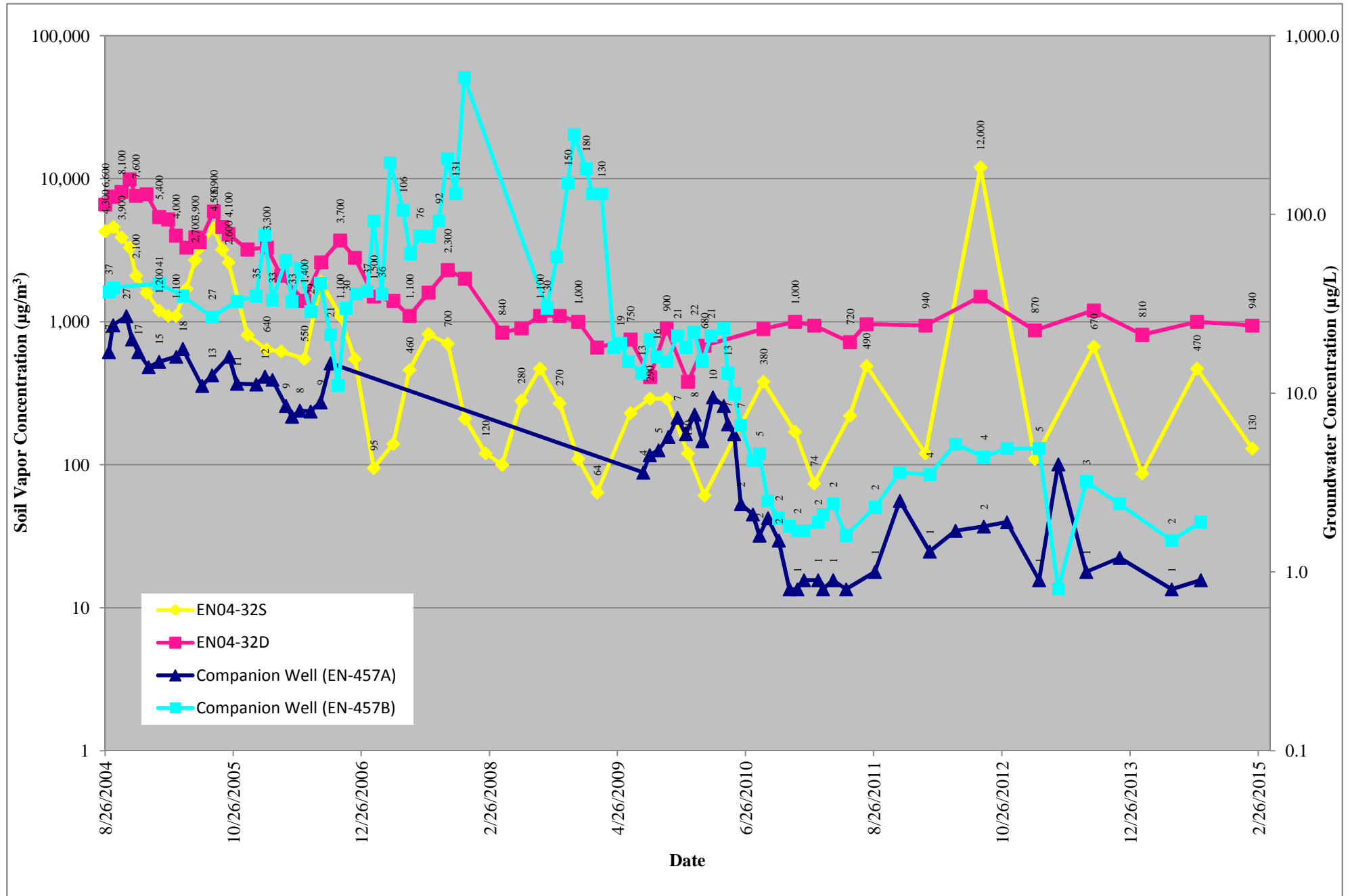


Figure B.33
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
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 Endicott, New York

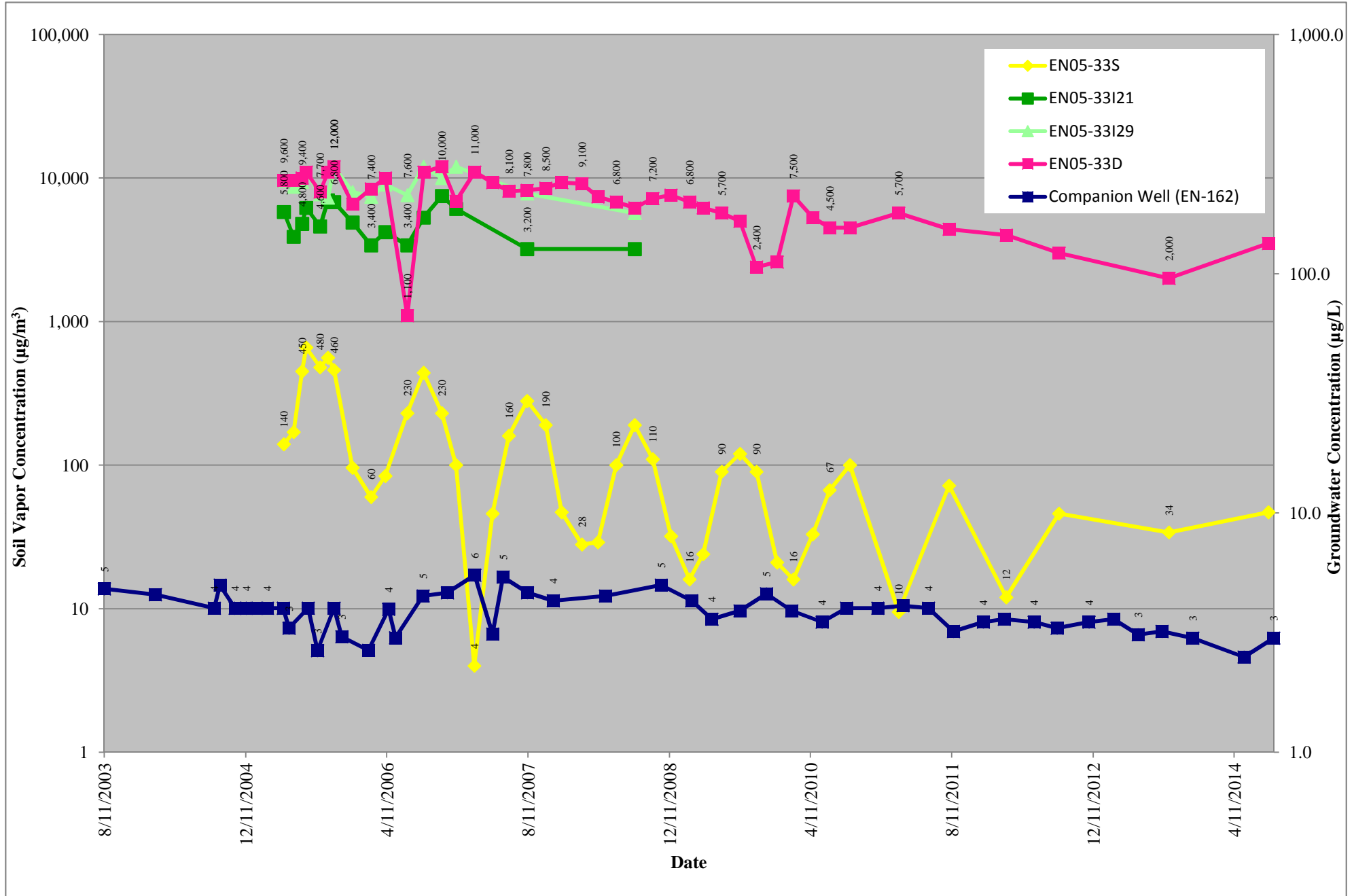


Figure B.34
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

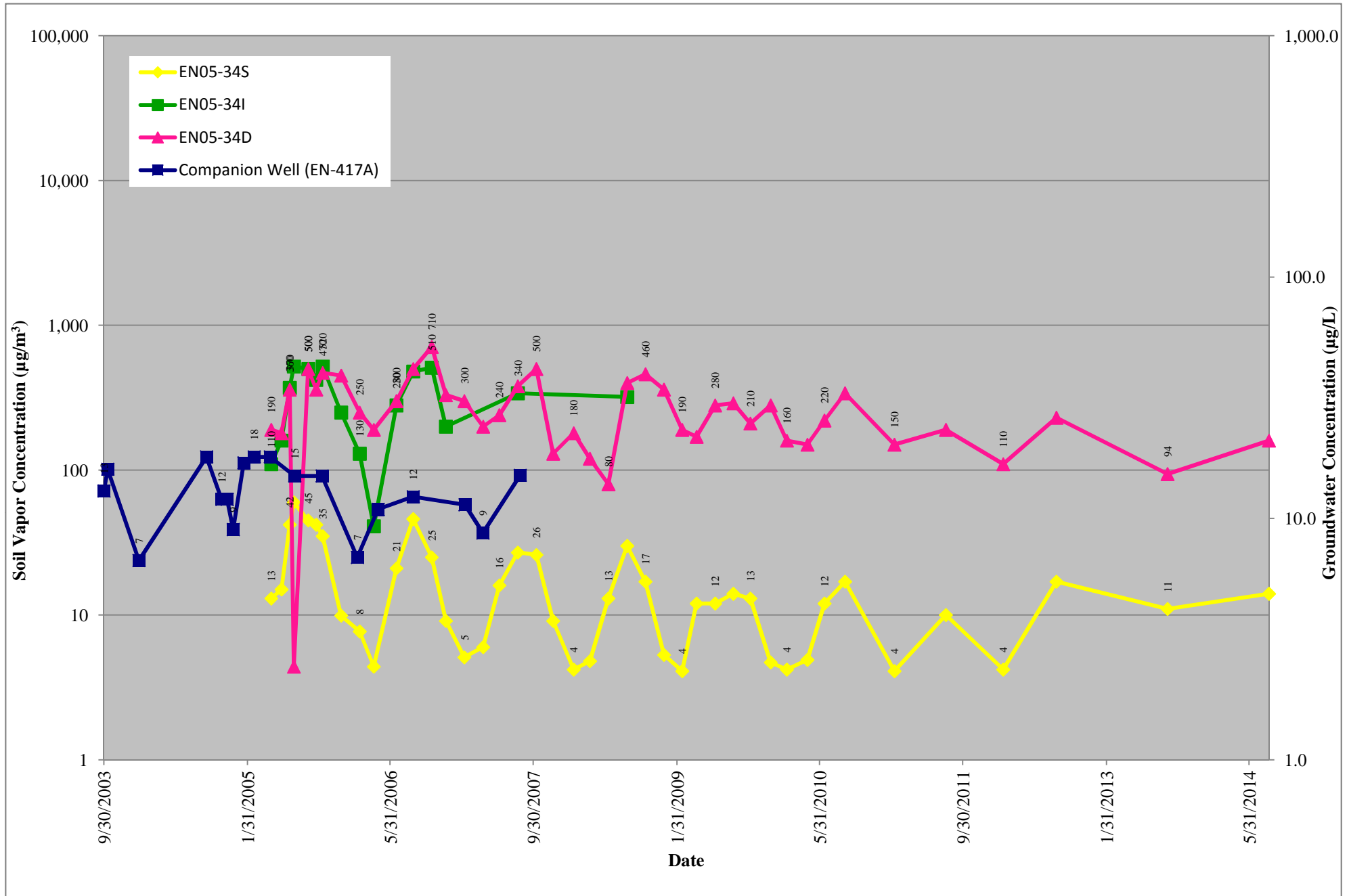


Figure B.35
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

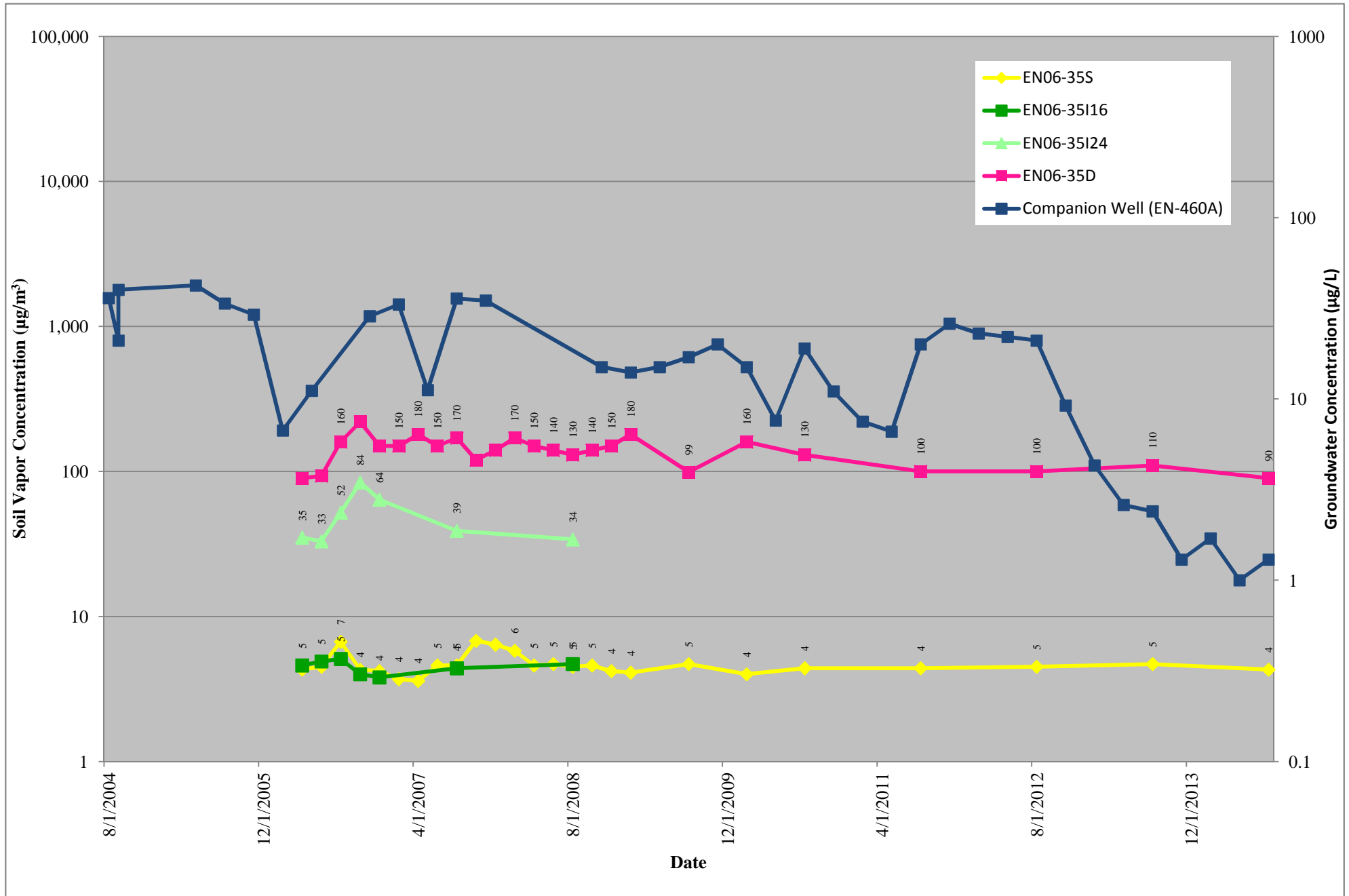


Figure B.36
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

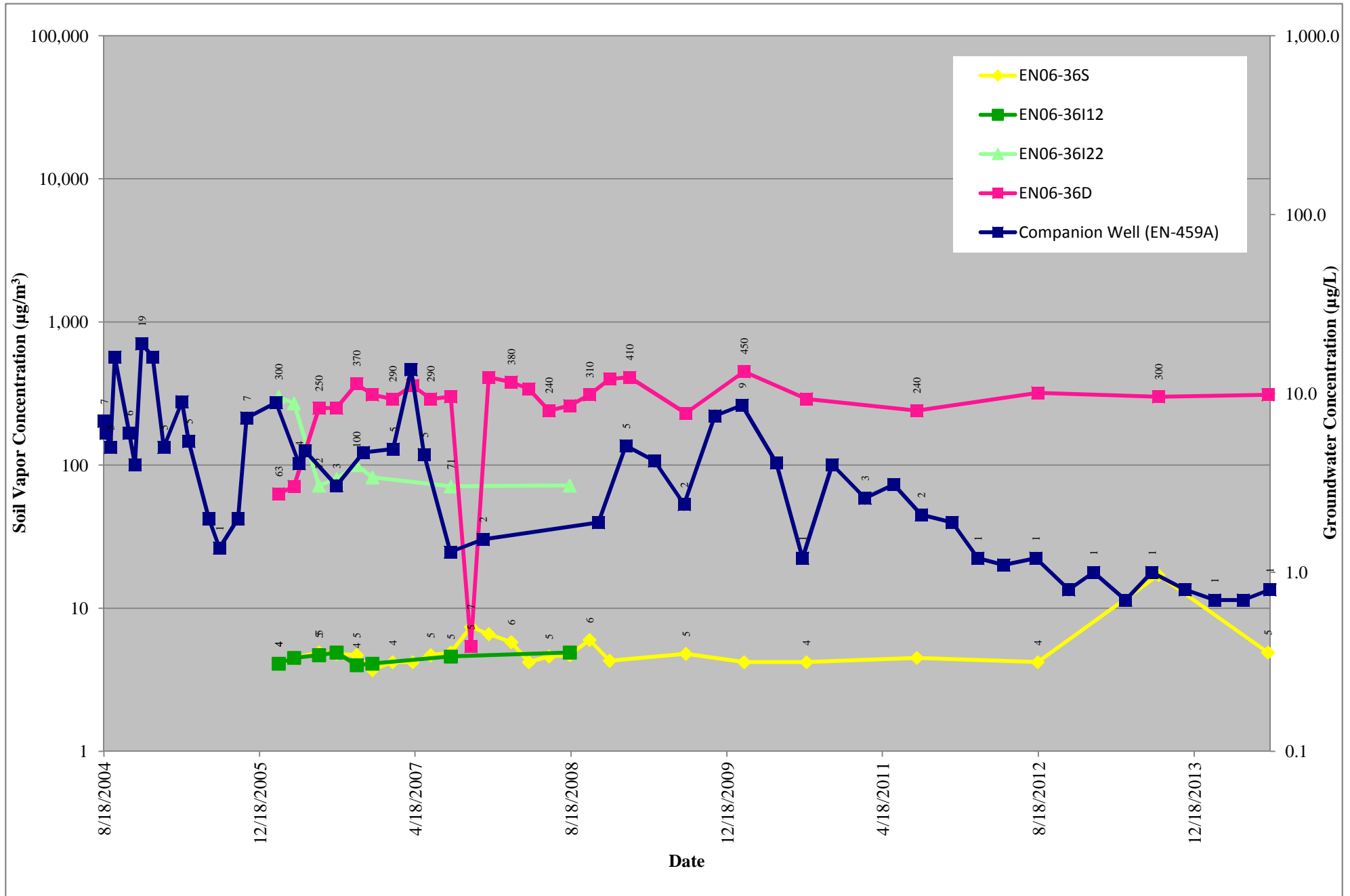


Figure B.37
TCE in Soil Vapor and Groundwater
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York

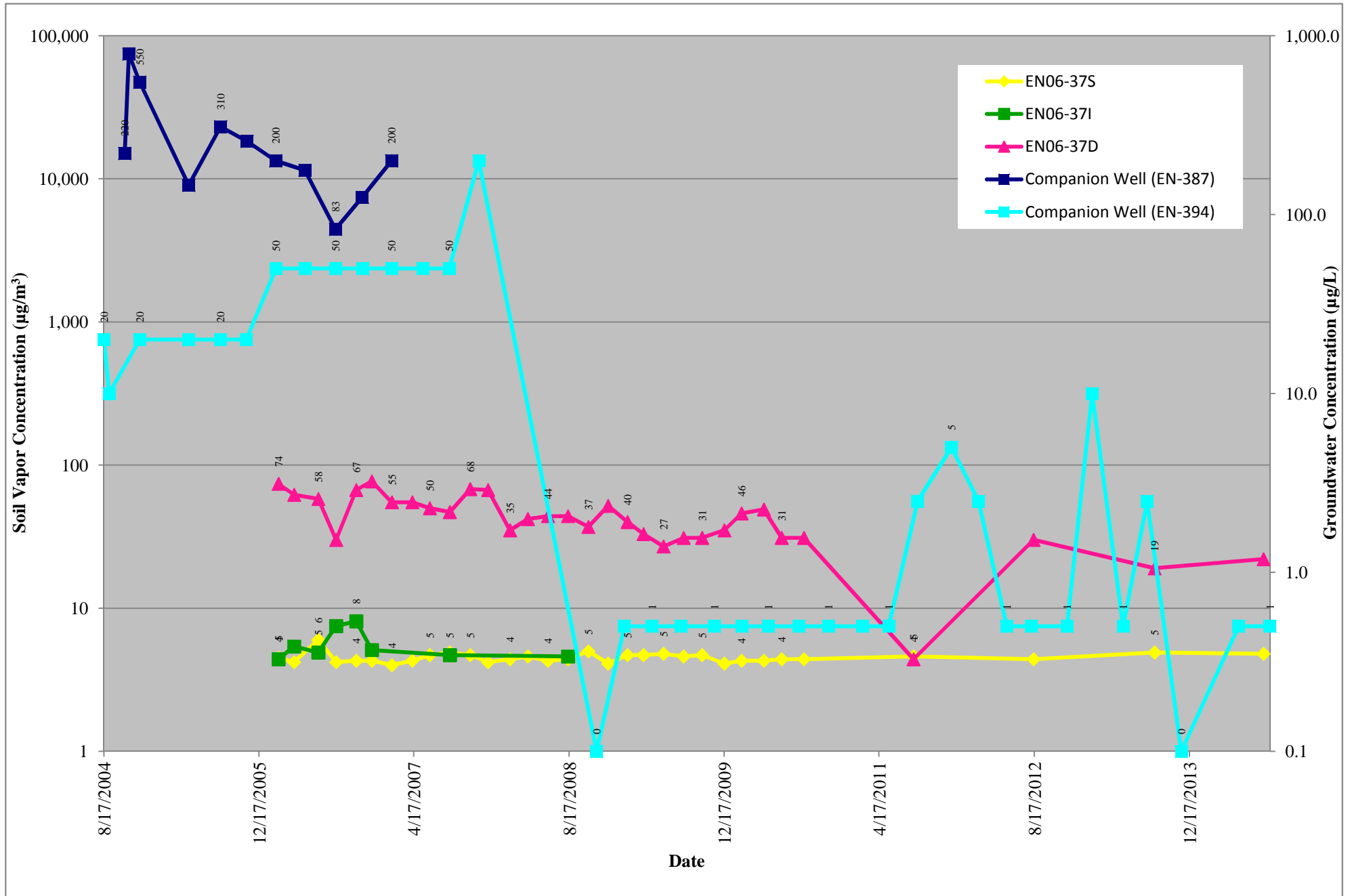
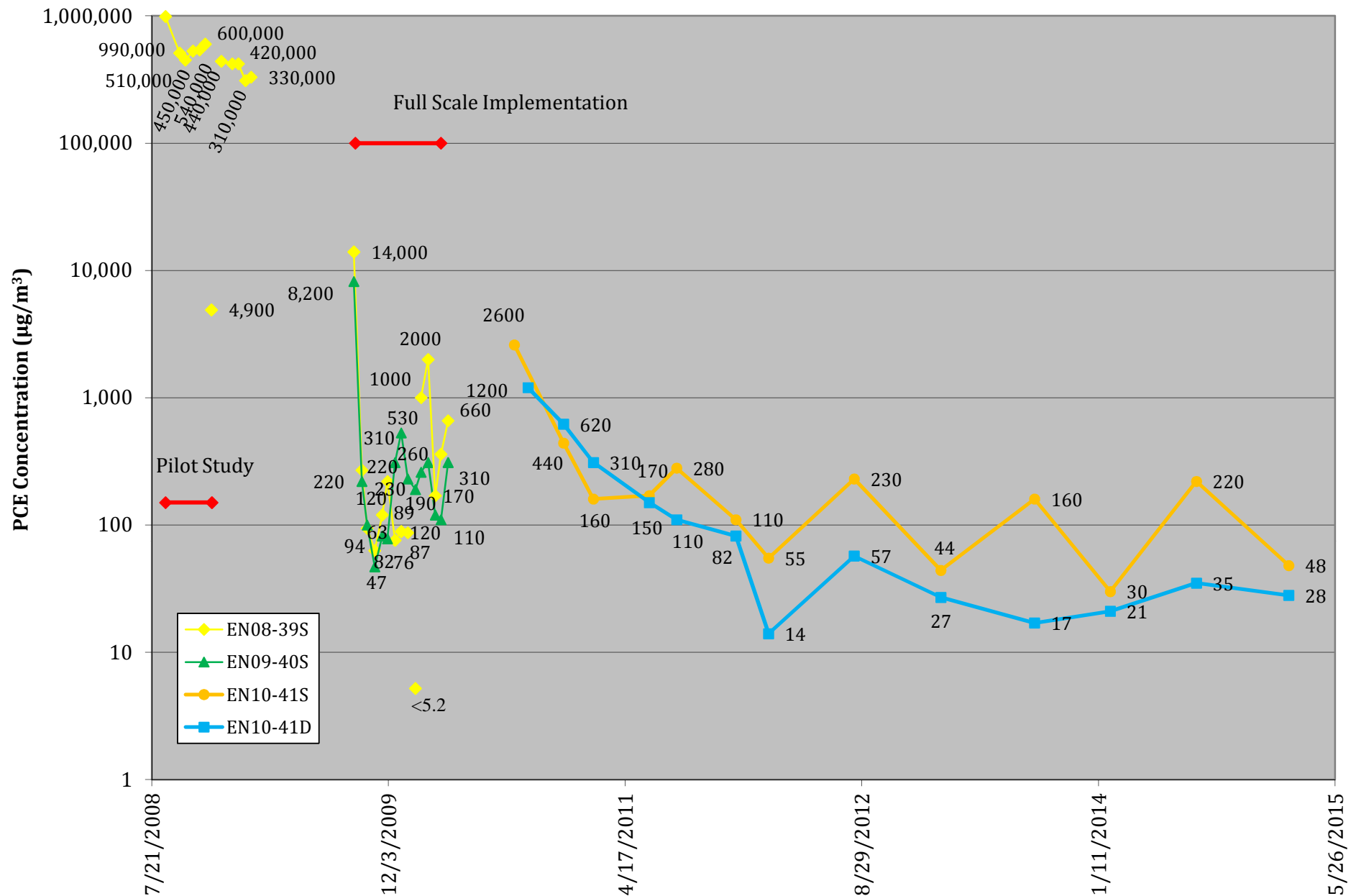


Figure B.38
PCE in Soil Vapor
 Semiannual Report - Soil Vapor Monitoring through February 2015
 Comprehensive Operations, Maintenance, Monitoring Program
 Endicott, New York



ATTACHMENT C

Analytical Laboratory Report

2/24/2015

Ms. Erica Bradstreet
Sanborn, Head & Associates
1715 W 13th Street

Houston TX 77008

Project Name: IBM Endicott GVP
Project #: 2755.07
Workorder #: 1502194

Dear Ms. Erica Bradstreet

The following report includes the data for the above referenced project for sample(s) received on 2/11/2015 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott
Project Manager

WORK ORDER #: 1502194

Work Order Summary

CLIENT:	Ms. Erica Bradstreet Sanborn, Head & Associates 1715 W 13th Street Houston, TX 77008	BILL TO:	Accounts Payable Sanborn, Head & Associates 20 Foundry Street Concord, NH 03301
PHONE:	713-869-2259	P.O. #	3304.00
FAX:		PROJECT #	2755.07 IBM Endicott GVP
DATE RECEIVED:	02/11/2015	CONTACT:	Ausha Scott
DATE COMPLETED:	02/24/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	DU3372020515	TO-15	5.5 "Hg	4.9 psi
01AA	DU3372020515 Lab Duplicate	TO-15	5.5 "Hg	4.9 psi
02A	EB3330020515	TO-15	5.7 "Hg	5.1 psi
03A	EB3333020415	TO-15	4.1 "Hg	4.6 psi
04A	EN0411D020515	TO-15	2.8 "Hg	5.1 psi
05A	EN0411S020515	TO-15	1.4 "Hg	4.8 psi
06A	EN0412D020515	TO-15	4.5 "Hg	4.6 psi
07A	EN0412S020515	TO-15	3.7 "Hg	4.8 psi
08A	EN0429D020515	TO-15	5.1 "Hg	4.9 psi
09A	EN0429S020515	TO-15	3.5 "Hg	5.2 psi
10A	EN042D020515	TO-15	2.6 "Hg	4.9 psi
11A	EN042S020515	TO-15	5.1 "Hg	5.1 psi
12A	EN0430D020515	TO-15	2 "Hg	5.2 psi
13A	EN0430S020515	TO-15	5.7 "Hg	5.1 psi
14A	EN0432D020515	TO-15	4.5 "Hg	5 psi
15A	EN0432S020515	TO-15	3.5 "Hg	4.7 psi
16A	EN1041D020415	TO-15	5.5 "Hg	4.9 psi
17A	EN1041S020415	TO-15	4.9 "Hg	4.8 psi
18A	Lab Blank	TO-15	NA	NA
18B	Lab Blank	TO-15	NA	NA
19A	CCV	TO-15	NA	NA
19B	CCV	TO-15	NA	NA
20A	LCS	TO-15	NA	NA

Continued on next page

WORK ORDER #: 1502194

Work Order Summary

CLIENT:	Ms. Erica Bradstreet Sanborn, Head & Associates 1715 W 13th Street Houston, TX 77008	BILL TO:	Accounts Payable Sanborn, Head & Associates 20 Foundry Street Concord, NH 03301
PHONE:	713-869-2259	P.O. #	3304.00
FAX:		PROJECT #	2755.07 IBM Endicott GVP
DATE RECEIVED:	02/11/2015	CONTACT:	Ausha Scott
DATE COMPLETED:	02/24/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
20AA	LCSD	TO-15	NA	NA
20B	LCS	TO-15	NA	NA
20BB	LCSD	TO-15	NA	NA

CERTIFIED BY:



Technical Director

DATE: 02/24/15

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

Eurofins Air Toxics Inc., certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
EPA Method TO-15
Sanborn, Head & Associates
Workorder# 1502194

Seventeen 1 Liter Summa Canister (100% Certified) samples were received on February 11, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: DU3372020515

Lab ID#: 1502194-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.82	56	4.4	300

Client Sample ID: DU3372020515 Lab Duplicate

Lab ID#: 1502194-01AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.5	55	8.2	300

Client Sample ID: EB3330020515

Lab ID#: 1502194-02A

No Detections Were Found.

Client Sample ID: EB3333020415

Lab ID#: 1502194-03A

No Detections Were Found.

Client Sample ID: EN0411D020515

Lab ID#: 1502194-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.74	0.76	2.9	3.0
1,1,1-Trichloroethane	0.74	7.4	4.0	40
Trichloroethene	0.74	180	4.0	980
Tetrachloroethene	0.74	4.4	5.0	30

Client Sample ID: EN0411S020515

Lab ID#: 1502194-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.70	3.2	3.7	17

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: EN0412D020515

Lab ID#: 1502194-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.77	1.4	4.2	7.6
Trichloroethene	0.77	49	4.1	260

Client Sample ID: EN0412S020515

Lab ID#: 1502194-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.78	1.0	4.2	5.5
Trichloroethene	0.78	39	4.2	210

Client Sample ID: EN0429D020515

Lab ID#: 1502194-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.82	6.3	4.4	34

Client Sample ID: EN0429S020515

Lab ID#: 1502194-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.76	2.6	4.1	14

Client Sample ID: EN042D020515

Lab ID#: 1502194-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.74	1.8	4.0	9.6
Trichloroethene	0.74	14	4.0	77
Tetrachloroethene	0.74	2.3	5.0	16

Client Sample ID: EN042S020515

Lab ID#: 1502194-11A

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: EN042S020515

Lab ID#: 1502194-11A

No Detections Were Found.

Client Sample ID: EN0430D020515

Lab ID#: 1502194-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethane	0.72	4.5	2.9	18
cis-1,2-Dichloroethene	0.72	0.77	2.9	3.0
1,1,1-Trichloroethane	0.72	6.8	4.0	37
Trichloroethene	0.72	160	3.9	840
Tetrachloroethene	0.72	4.2	4.9	28

Client Sample ID: EN0430S020515

Lab ID#: 1502194-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.83	58	4.5	310

Client Sample ID: EN0432D020515

Lab ID#: 1502194-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.79	8.2	4.3	44
Trichloroethene	0.79	180	4.2	940

Client Sample ID: EN0432S020515

Lab ID#: 1502194-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	0.82	1.3	4.5	7.4
Trichloroethene	0.82	24	4.4	130

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: EN1041D020415

Lab ID#: 1502194-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.4	1.9	7.5	10
Tetrachloroethene	1.4	4.2	9.5	28

Client Sample ID: EN1041S020415

Lab ID#: 1502194-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.84	7.0	5.7	48

Client Sample ID: DU3372020515

Lab ID#: 1502194-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021606	Date of Collection:	2/5/15 11:48:00 AM
Dil. Factor:	1.63	Date of Analysis:	2/16/15 11:25 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.82	Not Detected	2.1	Not Detected
Chloroethane	3.3	Not Detected	8.6	Not Detected
1,1-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Freon 113	0.82	Not Detected	6.2	Not Detected
Methylene Chloride	8.2	Not Detected	28	Not Detected
1,1-Dichloroethane	0.82	Not Detected	3.3	Not Detected
cis-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
1,1,1-Trichloroethane	0.82	Not Detected	4.4	Not Detected
Trichloroethene	0.82	56	4.4	300
Tetrachloroethene	0.82	Not Detected	5.5	Not Detected
trans-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: DU3372020515 Lab Duplicate

Lab ID#: 1502194-01AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021707	Date of Collection:	2/5/15 11:48:00 AM
Dil. Factor:	3.07	Date of Analysis:	2/17/15 11:47 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.5	Not Detected	3.9	Not Detected
Chloroethane	6.1	Not Detected	16	Not Detected
1,1-Dichloroethene	1.5	Not Detected	6.1	Not Detected
Freon 113	1.5	Not Detected	12	Not Detected
Methylene Chloride	15	Not Detected	53	Not Detected
1,1-Dichloroethane	1.5	Not Detected	6.2	Not Detected
cis-1,2-Dichloroethene	1.5	Not Detected	6.1	Not Detected
1,1,1-Trichloroethane	1.5	Not Detected	8.4	Not Detected
Trichloroethene	1.5	55	8.2	300
Tetrachloroethene	1.5	Not Detected	10	Not Detected
trans-1,2-Dichloroethene	1.5	Not Detected	6.1	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: EB3330020515

Lab ID#: 1502194-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021608	Date of Collection:	2/5/15 5:22:00 PM
Dil. Factor:	1.66	Date of Analysis:	2/16/15 12:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.83	Not Detected	2.1	Not Detected
Chloroethane	3.3	Not Detected	8.8	Not Detected
1,1-Dichloroethene	0.83	Not Detected	3.3	Not Detected
Freon 113	0.83	Not Detected	6.4	Not Detected
Methylene Chloride	8.3	Not Detected	29	Not Detected
1,1-Dichloroethane	0.83	Not Detected	3.4	Not Detected
cis-1,2-Dichloroethene	0.83	Not Detected	3.3	Not Detected
1,1,1-Trichloroethane	0.83	Not Detected	4.5	Not Detected
Trichloroethene	0.83	Not Detected	4.5	Not Detected
Tetrachloroethene	0.83	Not Detected	5.6	Not Detected
trans-1,2-Dichloroethene	0.83	Not Detected	3.3	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	90	70-130

Client Sample ID: EB3333020415

Lab ID#: 1502194-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021708	Date of Collection:	2/4/15 2:34:00 PM
Dil. Factor:	2.38	Date of Analysis:	2/17/15 12:57 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Chloroethane	4.8	Not Detected	12	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Freon 113	1.2	Not Detected	9.1	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: EN0411D020515

Lab ID#: 1502194-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021610	Date of Collection:	2/5/15 2:29:00 PM
Dil. Factor:	1.48	Date of Analysis:	2/16/15 02:26 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.74	Not Detected	1.9	Not Detected
Chloroethane	3.0	Not Detected	7.8	Not Detected
1,1-Dichloroethene	0.74	Not Detected	2.9	Not Detected
Freon 113	0.74	Not Detected	5.7	Not Detected
Methylene Chloride	7.4	Not Detected	26	Not Detected
1,1-Dichloroethane	0.74	Not Detected	3.0	Not Detected
cis-1,2-Dichloroethene	0.74	0.76	2.9	3.0
1,1,1-Trichloroethane	0.74	7.4	4.0	40
Trichloroethene	0.74	180	4.0	980
Tetrachloroethene	0.74	4.4	5.0	30
trans-1,2-Dichloroethene	0.74	Not Detected	2.9	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: EN0411S020515

Lab ID#: 1502194-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021611	Date of Collection:	2/5/15 2:29:00 PM
Dil. Factor:	1.39	Date of Analysis:	2/16/15 02:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.70	Not Detected	1.8	Not Detected
Chloroethane	2.8	Not Detected	7.3	Not Detected
1,1-Dichloroethene	0.70	Not Detected	2.8	Not Detected
Freon 113	0.70	Not Detected	5.3	Not Detected
Methylene Chloride	7.0	Not Detected	24	Not Detected
1,1-Dichloroethane	0.70	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.70	Not Detected	2.8	Not Detected
1,1,1-Trichloroethane	0.70	Not Detected	3.8	Not Detected
Trichloroethene	0.70	3.2	3.7	17
Tetrachloroethene	0.70	Not Detected	4.7	Not Detected
trans-1,2-Dichloroethene	0.70	Not Detected	2.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	90	70-130

Client Sample ID: EN0412D020515

Lab ID#: 1502194-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021612	Date of Collection:	2/5/15 4:26:00 PM
Dil. Factor:	1.54	Date of Analysis:	2/16/15 03:24 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.77	Not Detected	2.0	Not Detected
Chloroethane	3.1	Not Detected	8.1	Not Detected
1,1-Dichloroethene	0.77	Not Detected	3.0	Not Detected
Freon 113	0.77	Not Detected	5.9	Not Detected
Methylene Chloride	7.7	Not Detected	27	Not Detected
1,1-Dichloroethane	0.77	Not Detected	3.1	Not Detected
cis-1,2-Dichloroethene	0.77	Not Detected	3.0	Not Detected
1,1,1-Trichloroethane	0.77	1.4	4.2	7.6
Trichloroethene	0.77	49	4.1	260
Tetrachloroethene	0.77	Not Detected	5.2	Not Detected
trans-1,2-Dichloroethene	0.77	Not Detected	3.0	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	88	70-130



Air Toxics

Client Sample ID: EN0412S020515

Lab ID#: 1502194-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021613	Date of Collection:	2/5/15 4:28:00 PM
Dil. Factor:	1.56	Date of Analysis:	2/16/15 04:03 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.78	Not Detected	2.0	Not Detected
Chloroethane	3.1	Not Detected	8.2	Not Detected
1,1-Dichloroethene	0.78	Not Detected	3.1	Not Detected
Freon 113	0.78	Not Detected	6.0	Not Detected
Methylene Chloride	7.8	Not Detected	27	Not Detected
1,1-Dichloroethane	0.78	Not Detected	3.2	Not Detected
cis-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
1,1,1-Trichloroethane	0.78	1.0	4.2	5.5
Trichloroethene	0.78	39	4.2	210
Tetrachloroethene	0.78	Not Detected	5.3	Not Detected
trans-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130

Client Sample ID: EN0429D020515

Lab ID#: 1502194-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021614	Date of Collection:	2/5/15 11:20:00 AM
Dil. Factor:	1.63	Date of Analysis:	2/16/15 04:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.82	Not Detected	2.1	Not Detected
Chloroethane	3.3	Not Detected	8.6	Not Detected
1,1-Dichloroethene	0.82	Not Detected	3.2	Not Detected
Freon 113	0.82	Not Detected	6.2	Not Detected
Methylene Chloride	8.2	Not Detected	28	Not Detected
1,1-Dichloroethane	0.82	Not Detected	3.3	Not Detected
cis-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected
1,1,1-Trichloroethane	0.82	Not Detected	4.4	Not Detected
Trichloroethene	0.82	6.3	4.4	34
Tetrachloroethene	0.82	Not Detected	5.5	Not Detected
trans-1,2-Dichloroethene	0.82	Not Detected	3.2	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	90	70-130



Air Toxics

Client Sample ID: EN0429S020515

Lab ID#: 1502194-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021615	Date of Collection:	2/5/15 12:12:00 PM
Dil. Factor:	1.53	Date of Analysis:	2/16/15 05:22 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.76	Not Detected	2.0	Not Detected
Chloroethane	3.1	Not Detected	8.1	Not Detected
1,1-Dichloroethene	0.76	Not Detected	3.0	Not Detected
Freon 113	0.76	Not Detected	5.9	Not Detected
Methylene Chloride	7.6	Not Detected	26	Not Detected
1,1-Dichloroethane	0.76	Not Detected	3.1	Not Detected
cis-1,2-Dichloroethene	0.76	Not Detected	3.0	Not Detected
1,1,1-Trichloroethane	0.76	Not Detected	4.2	Not Detected
Trichloroethene	0.76	2.6	4.1	14
Tetrachloroethene	0.76	Not Detected	5.2	Not Detected
trans-1,2-Dichloroethene	0.76	Not Detected	3.0	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: EN042D020515

Lab ID#: 1502194-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021616	Date of Collection:	2/5/15 9:03:00 AM
Dil. Factor:	1.47	Date of Analysis:	2/16/15 06:14 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.74	Not Detected	1.9	Not Detected
Chloroethane	2.9	Not Detected	7.8	Not Detected
1,1-Dichloroethene	0.74	Not Detected	2.9	Not Detected
Freon 113	0.74	Not Detected	5.6	Not Detected
Methylene Chloride	7.4	Not Detected	26	Not Detected
1,1-Dichloroethane	0.74	Not Detected	3.0	Not Detected
cis-1,2-Dichloroethene	0.74	Not Detected	2.9	Not Detected
1,1,1-Trichloroethane	0.74	1.8	4.0	9.6
Trichloroethene	0.74	14	4.0	77
Tetrachloroethene	0.74	2.3	5.0	16
trans-1,2-Dichloroethene	0.74	Not Detected	2.9	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	89	70-130

Client Sample ID: EN042S020515

Lab ID#: 1502194-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021617	Date of Collection:	2/5/15 9:00:00 AM
Dil. Factor:	1.79	Date of Analysis:	2/16/15 06:52 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.90	Not Detected	2.3	Not Detected
Chloroethane	3.6	Not Detected	9.4	Not Detected
1,1-Dichloroethene	0.90	Not Detected	3.5	Not Detected
Freon 113	0.90	Not Detected	6.8	Not Detected
Methylene Chloride	9.0	Not Detected	31	Not Detected
1,1-Dichloroethane	0.90	Not Detected	3.6	Not Detected
cis-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected
1,1,1-Trichloroethane	0.90	Not Detected	4.9	Not Detected
Trichloroethene	0.90	Not Detected	4.8	Not Detected
Tetrachloroethene	0.90	Not Detected	6.1	Not Detected
trans-1,2-Dichloroethene	0.90	Not Detected	3.5	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	88	70-130



Air Toxics

Client Sample ID: EN0430D020515

Lab ID#: 1502194-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021709	Date of Collection:	2/5/15 10:43:00 AM
Dil. Factor:	1.45	Date of Analysis:	2/17/15 01:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected	1.8	Not Detected
Chloroethane	2.9	Not Detected	7.6	Not Detected
1,1-Dichloroethene	0.72	Not Detected	2.9	Not Detected
Freon 113	0.72	Not Detected	5.6	Not Detected
Methylene Chloride	7.2	Not Detected	25	Not Detected
1,1-Dichloroethane	0.72	4.5	2.9	18
cis-1,2-Dichloroethene	0.72	0.77	2.9	3.0
1,1,1-Trichloroethane	0.72	6.8	4.0	37
Trichloroethene	0.72	160	3.9	840
Tetrachloroethene	0.72	4.2	4.9	28
trans-1,2-Dichloroethene	0.72	Not Detected	2.9	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	90	70-130



Air Toxics

Client Sample ID: EN0430S020515

Lab ID#: 1502194-13A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021710	Date of Collection:	2/5/15 11:48:00 AM
Dil. Factor:	1.66	Date of Analysis:	2/17/15 02:06 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.83	Not Detected	2.1	Not Detected
Chloroethane	3.3	Not Detected	8.8	Not Detected
1,1-Dichloroethene	0.83	Not Detected	3.3	Not Detected
Freon 113	0.83	Not Detected	6.4	Not Detected
Methylene Chloride	8.3	Not Detected	29	Not Detected
1,1-Dichloroethane	0.83	Not Detected	3.4	Not Detected
cis-1,2-Dichloroethene	0.83	Not Detected	3.3	Not Detected
1,1,1-Trichloroethane	0.83	Not Detected	4.5	Not Detected
Trichloroethene	0.83	58	4.5	310
Tetrachloroethene	0.83	Not Detected	5.6	Not Detected
trans-1,2-Dichloroethene	0.83	Not Detected	3.3	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	107	70-130



Air Toxics

Client Sample ID: EN0432D020515

Lab ID#: 1502194-14A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021711	Date of Collection:	2/5/15 2:45:00 PM
Dil. Factor:	1.58	Date of Analysis:	2/17/15 02:35 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.79	Not Detected	2.0	Not Detected
Chloroethane	3.2	Not Detected	8.3	Not Detected
1,1-Dichloroethene	0.79	Not Detected	3.1	Not Detected
Freon 113	0.79	Not Detected	6.0	Not Detected
Methylene Chloride	7.9	Not Detected	27	Not Detected
1,1-Dichloroethane	0.79	Not Detected	3.2	Not Detected
cis-1,2-Dichloroethene	0.79	Not Detected	3.1	Not Detected
1,1,1-Trichloroethane	0.79	8.2	4.3	44
Trichloroethene	0.79	180	4.2	940
Tetrachloroethene	0.79	Not Detected	5.4	Not Detected
trans-1,2-Dichloroethene	0.79	Not Detected	3.1	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	91	70-130



Air Toxics

Client Sample ID: EN0432S020515

Lab ID#: 1502194-15A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021712	Date of Collection:	2/5/15 2:45:00 PM
Dil. Factor:	1.65	Date of Analysis:	2/17/15 03:24 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.82	Not Detected	2.1	Not Detected
Chloroethane	3.3	Not Detected	8.7	Not Detected
1,1-Dichloroethene	0.82	Not Detected	3.3	Not Detected
Freon 113	0.82	Not Detected	6.3	Not Detected
Methylene Chloride	8.2	Not Detected	29	Not Detected
1,1-Dichloroethane	0.82	Not Detected	3.3	Not Detected
cis-1,2-Dichloroethene	0.82	Not Detected	3.3	Not Detected
1,1,1-Trichloroethane	0.82	1.3	4.5	7.4
Trichloroethene	0.82	24	4.4	130
Tetrachloroethene	0.82	Not Detected	5.6	Not Detected
trans-1,2-Dichloroethene	0.82	Not Detected	3.3	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	87	70-130

Client Sample ID: EN1041D020415

Lab ID#: 1502194-16A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021713	Date of Collection:	2/4/15 3:54:00 PM
Dil. Factor:	2.79	Date of Analysis:	2/17/15 04:01 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.4	Not Detected	3.6	Not Detected
Chloroethane	5.6	Not Detected	15	Not Detected
1,1-Dichloroethene	1.4	Not Detected	5.5	Not Detected
Freon 113	1.4	Not Detected	11	Not Detected
Methylene Chloride	14	Not Detected	48	Not Detected
1,1-Dichloroethane	1.4	Not Detected	5.6	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.5	Not Detected
1,1,1-Trichloroethane	1.4	Not Detected	7.6	Not Detected
Trichloroethene	1.4	1.9	7.5	10
Tetrachloroethene	1.4	4.2	9.5	28
trans-1,2-Dichloroethene	1.4	Not Detected	5.5	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: EN1041S020415

Lab ID#: 1502194-17A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021714	Date of Collection:	2/4/15 4:15:00 PM
Dil. Factor:	1.69	Date of Analysis:	2/17/15 04:40 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.84	Not Detected	2.2	Not Detected
Chloroethane	3.4	Not Detected	8.9	Not Detected
1,1-Dichloroethene	0.84	Not Detected	3.4	Not Detected
Freon 113	0.84	Not Detected	6.5	Not Detected
Methylene Chloride	8.4	Not Detected	29	Not Detected
1,1-Dichloroethane	0.84	Not Detected	3.4	Not Detected
cis-1,2-Dichloroethene	0.84	Not Detected	3.4	Not Detected
1,1,1-Trichloroethane	0.84	Not Detected	4.6	Not Detected
Trichloroethene	0.84	Not Detected	4.5	Not Detected
Tetrachloroethene	0.84	7.0	5.7	48
trans-1,2-Dichloroethene	0.84	Not Detected	3.4	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	92	70-130

Client Sample ID: Lab Blank

Lab ID#: 1502194-18A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021605	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/16/15 10:33 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: Lab Blank

Lab ID#: 1502194-18B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021705	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/17/15 10:26 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	89	70-130

Client Sample ID: CCV

Lab ID#: 1502194-19A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021602	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/16/15 08:52 AM

Compound	%Recovery
Vinyl Chloride	90
Chloroethane	92
1,1-Dichloroethene	82
Freon 113	93
Methylene Chloride	93
1,1-Dichloroethane	93
cis-1,2-Dichloroethene	87
1,1,1-Trichloroethane	96
Trichloroethene	98
Tetrachloroethene	105
trans-1,2-Dichloroethene	91

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	105	70-130

Client Sample ID: CCV

Lab ID#: 1502194-19B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021702	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/17/15 08:49 AM

Compound	%Recovery
Vinyl Chloride	90
Chloroethane	92
1,1-Dichloroethene	84
Freon 113	95
Methylene Chloride	94
1,1-Dichloroethane	94
cis-1,2-Dichloroethene	87
1,1,1-Trichloroethane	97
Trichloroethene	101
Tetrachloroethene	102
trans-1,2-Dichloroethene	94

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	101	70-130

Client Sample ID: LCS

Lab ID#: 1502194-20A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021603	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/16/15 09:27 AM

Compound	%Recovery	Method Limits
Vinyl Chloride	100	70-130
Chloroethane	103	70-130
1,1-Dichloroethene	95	70-130
Freon 113	101	70-130
Methylene Chloride	96	70-130
1,1-Dichloroethane	98	70-130
cis-1,2-Dichloroethene	104	70-130
1,1,1-Trichloroethane	101	70-130
Trichloroethene	105	70-130
Tetrachloroethene	106	70-130
trans-1,2-Dichloroethene	83	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	103	70-130

Client Sample ID: LCSD

Lab ID#: 1502194-20AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021604	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/16/15 09:50 AM

Compound	%Recovery	Method Limits
Vinyl Chloride	100	70-130
Chloroethane	104	70-130
1,1-Dichloroethene	97	70-130
Freon 113	102	70-130
Methylene Chloride	98	70-130
1,1-Dichloroethane	98	70-130
cis-1,2-Dichloroethene	105	70-130
1,1,1-Trichloroethane	103	70-130
Trichloroethene	107	70-130
Tetrachloroethene	107	70-130
trans-1,2-Dichloroethene	86	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	102	70-130

Client Sample ID: LCS

Lab ID#: 1502194-20B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021703	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/17/15 09:19 AM

Compound	%Recovery	Method Limits
Vinyl Chloride	101	70-130
Chloroethane	103	70-130
1,1-Dichloroethene	94	70-130
Freon 113	102	70-130
Methylene Chloride	100	70-130
1,1-Dichloroethane	98	70-130
cis-1,2-Dichloroethene	100	70-130
1,1,1-Trichloroethane	103	70-130
Trichloroethene	111	70-130
Tetrachloroethene	111	70-130
trans-1,2-Dichloroethene	86	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: LCSD

Lab ID#: 1502194-20BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17021704	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 2/17/15 09:47 AM

Compound	%Recovery	Method Limits
Vinyl Chloride	106	70-130
Chloroethane	107	70-130
1,1-Dichloroethene	99	70-130
Freon 113	105	70-130
Methylene Chloride	102	70-130
1,1-Dichloroethane	103	70-130
cis-1,2-Dichloroethene	108	70-130
1,1,1-Trichloroethane	106	70-130
Trichloroethene	111	70-130
Tetrachloroethene	111	70-130
trans-1,2-Dichloroethene	91	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	102	70-130