



430 East Genesee Street
Suite 401
Syracuse NY 13202

tel. (315) 422-4949
fax.(315) 422-2124
web. www.swredev.com

January 21, 2011

Todd Caffoe, P.E.
NYSDEC Region 8
6274 East Avon-Lima Road
Avon, NY 14414

Re: Periodic Review
Former Griffin Technology Site
BCP Site No.C835008

Dear Mr. Caffoe:

Enclosed as required is the Revised Site Management Periodic Review Report for the above referenced BCP site.

If you have any questions please call me at (315) 422-4949.

Very truly yours,
S&W Redevelopment of North America, LLC

A handwritten signature in dark ink, appearing to read 'D. Stoner', with a long horizontal flourish extending to the right.

David W. Stoner
President

**PERIODIC REVIEW REPORT
FORMER GRIFFIN TECHNOLOGY SITE
BCP SITE # C835008
JANUARY 2011**

SECTION I - INTRODUCTION

The Former Griffin Technology property is located at 6132 Victor-Manchester Road, Ontario County, Farmington, New York. Griffin Technologies released small quantities of trichloroethene (TCE) on the ground surface near the west side of their manufacturing facility. Over time these releases impacted groundwater.

Prior to site's admission into the Brownfield Cleanup Program (BCP), a groundwater remediation system (pump-and-treat) was implemented at the site in 1997 and operated for approximately 10 years. The extent of groundwater contamination was reduced by the pump-and-treat system, however concentrations of the TCE still exceeded Class GA groundwater quality standards. To address the remaining groundwater contamination, the site was admitted into the BCP, and In-Situ Chemical Oxidation (ISCO) was applied in 2008.

Post-ISCO groundwater sampling has been conducted quarterly since ISCO injection was completed, in accordance with the Site Management Plan (SMP). The most recent quarterly sampling event, completed in June 2010, was the seventh post-ISCO quarterly event. The majority of the observation well analytical data indicates a decreasing or static trend in TCE concentrations. In addition, off-site groundwater analytical data reported by URS indicates that contaminant levels in off site monitoring wells reflect reduced concentrations of chlorinated VOCs nearest the site (MW-06S, -06D, -07S, -07D, -10D) that may be attributable to the application of ISCO on site (URS, March 2010).

In addition to the ISCO injection and monitoring program to address groundwater contamination, the site remedy includes the following institutional controls:

- Filing of an Environmental Easement pursuant to ECL 71-3605.
- Prohibition on the use of groundwater without the prior approval by the NYSDEC and NYSDOH.
- The future use of the site is limited to restricted commercial uses as defined in 6 NYCRR Part 375.

SECTION II – SITE OVERVIEW

The Former Griffin Technology BCP site consists of 3.64 acres and included two (2) abandoned buildings consisting of a former manufacturing building encompassing a footprint of approximately 12,000 sq. ft. and a separate approximate 2,400 ft² storage building. The 2,400 square foot storage building has been demolished and only the concrete slab on grade remains. The Brownfield Cleanup Agreement (BCA) describes the site as consisting of Tax Parcel 29.00-1-12 and the southern quarter of parcel 29.00-1-76-1. The site is immediately bordered by wooded areas (north), Victor-Manchester Road (south), wooded areas (east) and an auto repair facility (west) (Figure 1). Griffin Technology operated on the site from 1975 until the mid-1990s performing photocoating (laminating) operations.

Trichloroethene (TCE) was believed to be present in liquid waste that was released onto the ground outside the western door of the site building from approximately 1975 until 1986. It is estimated that it is possible that approximately 490 gallons of waste was released in 5 gallon increments or less over that time (BB&L, July 1991).

The contaminated wastewater evidently migrated downward through the soil in the release area and into the groundwater, where it subsequently migrated away from the release area, towards the southwest, in the direction of groundwater flow.

Prior to remediation, a network of seventeen (17) groundwater monitoring wells had horizontally and vertically delineated a groundwater TCE plume that extends southwest of the site, affecting both overburden and bedrock.

A groundwater recovery system was implemented at the site in 1997, in accordance with a 1996 IRM Work Plan (Woodward-Clyde, 1996). Three (3) recovery wells screened in bedrock across the overburden/bedrock interface began operating in 1997, and a fourth recovery well went into operation in 1999.

The recovery system operated for ten years. Although groundwater analytical results indicated the extent of groundwater contamination had diminished, concentrations of the contaminants of concern still exceeded Class GA groundwater quality standards, indicating that the recovery system may have reached its performance limits.

The site was admitted in the BCP in 2007, the groundwater recovery system was deactivated, and ISCO was applied in accordance with an NYSDEC-approved Remedial Design Document (SWRNA July 2008). An aqueous solution containing approximately 13,530 pounds of potassium permanganate was injected into fifteen injection wells at the site between July and September 2008. On-site observation wells indicated that the potassium permanganate solution had dispersed across the majority of the site. Quarterly groundwater monitoring was implemented at the site following ISCO implementation, in accordance with an NYSDEC-approved Site Management Plan (SMP). Seven (7) quarterly rounds of groundwater samples have been collected to date.

SECTION III – PERFORMANCE EVALUATION

Table 1 includes groundwater analytical results for volatile organic compounds (VOCs) for site observation wells (OW-1 through OW-9), including pre-ISCO and post-ISCO results. Figure 2 shows TCE concentrations detected in the site observation wells, including pre-ISCO groundwater data (June 2008) and analytical results for post-ISCO sampling events through June 2010.

Figure 3 shows groundwater TCE concentrations for the nine observation wells from June 2008 (just prior to the ISCO injection) through June 2010. The figure indicates how TCE concentrations fluctuate along with seasonal groundwater elevations. In specific wells (notably OW-1 and OW-2) TCE concentrations decline as groundwater elevations rise in March, and TCE concentrations increase as groundwater elevations fall through the spring and summer. However, the majority of the observation well analytical data is indicating a decreasing or static trend in TCE concentrations. Based on the December 2009 data from the core of the TCE plume there was a dramatic decrease from several thousand ppb to tens of ppb in TCE concentrations.

In addition to on-site groundwater monitoring conducted under the SMP, off-site monitoring had been conducted by URS. Figure 4 shows the locations for off-site monitoring wells. Off-site groundwater analytical data reported by URS indicates that contaminant levels in off site monitoring wells nearest the site (MW-06S, -06D, -07S, -07D, -10D) reflect reduced concentrations of VOCs that may be attributable to application of ISCO on site (URS, March 2010).

SECTION IV – INSTITUTIONAL CONTROL/ENGINEERING CONTROL (IC/EC) COMPLIANCE

Institutional Controls including an Environmental Easement remain in place, in accordance with the approved SMP, to prohibit the use of groundwater at the site without proper treatment and approval by the NYSDEC/NYSDOH, and restrictions on the end use for commercial development unless approved by the NYSDEC.

The remedial action for the site did not require implementation of any engineering controls (ECs). However, the approved SMP specifies that ECs may be implemented in the future if it is determined necessary to mitigate potential soil vapor intrusion (SVI) in new buildings constructed in the future, or before the existing building is re-occupied. The existing building remains vacant at this time. ECs of this type may include SVI mitigation systems installed in future site buildings to depressurize the soil below the buildings (sub-slab depressurization) or systems to create positive pressure inside the buildings. Such systems would be required unless it is determined that the potential for SVI is insignificant, with NYSDEC and NYSDOH concurrence.

SECTION V - MONITORING PLAN COMPLIANCE

The Site Management Plan (SMP) requires that groundwater samples be collected each quarter from nine (9) observation wells (OW-1 through OW-9), to monitor ISCO effectiveness. Post-ISCO monitoring began in September 2008, three months following ISCO implementation, in accordance with the SMP. The September 2008 event included only one observation well (OW-4), because the other observation wells contained pink/purple water indicative of permanganate solution. (Per the SMP, observation wells containing visible permanganate solution are not subject to laboratory analysis).

The nine ISCO observation wells are sampled for target compound list (TCL) volatile organic compounds (VOCs), pH, Eh, total organic carbon (TOC), and chemical oxygen demand (COD). In addition to the above parameters, observation wells OW-4, -5, -6, -7, -8, and -9 were also analyzed for metals (arsenic, cadmium, chromium, lead, selenium, silver, barium), at the request of NYSDEC. Following the December 2009 sampling event, NYSDEC concurred that there had been no evidence of mobilized metals in the 5 rounds of groundwater samples collected through that date, and consequently agreed that metals analysis was no longer necessary for subsequent sampling events.

As was noted in Section III, TCE concentrations on site still remain above groundwater quality standards (see Table 1 and Figure 2). In addition, the seasonal fluctuation in groundwater elevations seems to correlate with fluctuations in TCE concentrations. However, the majority of the observation well analytical data suggests a decreasing or static trend in TCE concentrations, and off-site analytical data indicate TCE concentrations have declined.

SECTION VI - OPERATION & MAINTENANCE (O&M) PLAN COMPLIANCE

There are no O&M requirements related to the approved site remedy.

SECTION VII - CONCLUSIONS AND RECOMMENDATIONS

Requirements relating to groundwater monitoring and ICs were met during the reporting period. The on-site building remains vacant at this time.

Groundwater analytical data for seven (7) quarterly post-ISCO groundwater monitoring events indicates either static or declining contaminant levels on site near the downgradient site boundary and also in off-site groundwater monitoring wells. As requested by the NYSDEC, four additional quarterly monitoring events will be completed. Nine ISCO observation wells will be sampled for VOCs, pH, Eh, total organic carbon (TOC), and chemical oxygen demand.



Enclosure 1
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



	Site Details	Box 1
Site No. C835008		
Site Name Former Griffin Technology Site		
Site Address: 6132 Victor Manchester Road Zip Code: 14425		
City/Town: Farmington		
County: Ontario		
Allowable Use(s) (if applicable, does not address local zoning): Commercial and Industrial		
Site Acreage: 3.6		
Owner: SW Victor Manchester, LLC 430 East Genesee Street, Suite 401, Syracuse, NY 13202		
Reporting Period: April 30, 2009 to September 15, 2010		

	Box 2	
Verification of Site Details	YES	NO
1. Is the information in Box 1 correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, are changes handwritten above or included on a separate sheet?	<input type="checkbox"/>	
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is documentation or evidence that documentation has been previously submitted included with this certification?	<input type="checkbox"/>	
3. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is documentation (or evidence that documentation has been previously submitted) included with this certification?	<input type="checkbox"/>	
4. If use of the site is restricted, is the current use of the site consistent with those restrictions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, is an explanation included with this certification?	<input type="checkbox"/>	
5. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is the new information or evidence that new information has been previously submitted included with this Certification?	<input type="checkbox"/>	
6. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), are the assumptions in the Qualitative Exposure Assessment still valid (must be certified every five years)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, are changes in the assessment included with this certification?	<input type="checkbox"/>	

Description of Institutional Controls

<u>Parcel</u>	<u>Institutional Control</u>
S_B_L Image: 29.00-1-12.00	Building Use Restriction Ground Water Use Restriction Landuse Restriction Site Management Plan Soil Management Plan
S_B_L Image: 29.00-1-76.1	Building Use Restriction Ground Water Use Restriction Landuse Restriction Site Management Plan Soil Management Plan

Description of Engineering Controls

<u>Parcel</u>	<u>Engineering Control</u>
S_B_L Image: 29.00-1-76.1	Vapor Mitigation

Attach documentation if IC/ECs cannot be certified or why IC/ECs are no longer applicable.
(See instructions)

Control Description for Site No. C835008**Parcel: 29.00-1-12.00**

The potential for vapor intrusion for the existing building and/or any building(s) on the site must be evaluated, and mitigation implemented, if necessary, prior to occupancy of the structure(s).

Public water is supplied to the site.

Site is restricted to commercial use only.

Groundwater use is restricted without approval from NYSDEC and NYSDOH.

Soils beneath the building footprint require evaluation if the building is demolished or excavation of those soils is initiated. Excavated soils intended to be removed from the site must be managed and characterized, and properly disposed of in accordance with NYSDEC regulations.

Parcel: 29.00-1-76.1

The potential for vapor intrusion for the existing building and/or any building(s) on the site must be evaluated, and mitigation implemented, if necessary, prior to occupancy of the structure(s).

Public water is supplied to the site.

Site is restricted to commercial use only.

Groundwater use is restricted without approval from NYSDEC and NYSDOH.

Soils beneath the building footprint require evaluation if the building is demolished or excavation of those soils is initiated. Excavated soils intended to be removed from the site must be managed and characterized, and properly disposed of in accordance with NYSDEC regulations.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

3. If this site has an Operation and Maintenance (O&M) Plan (or equivalent as required in the Decision Document);

I certify by checking "YES" below that the O&M Plan Requirements (or equivalent as required in the Decision Document) are being met.

YES NO

☒ ☐

4. If this site has a Monitoring Plan (or equivalent as required in the remedy selection document);

I certify by checking "YES" below that the requirements of the Monitoring Plan (or equivalent as required in the Decision Document) is being met.

YES NO

☒ ☐

IC CERTIFICATIONS
SITE NO. C835008

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 2 and/or 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I _____ at _____
print name print business address

am certifying as _____ (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner or Remedial Party Rendering Certification

Date

IC/EC CERTIFICATIONS

Box 7

QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) SIGNATURE

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I David W. Stoner at 430 E Genesee Street, Syracuse NY
print name print business address

am certifying as a Qualified Environmental Professional for the OWNER

(Owner or Remedial Party) for the Site named in the Site Details Section of this form.


Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification

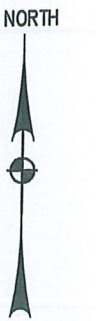
Stamp (if Required)

1/27/11
Date

X-REF: NAMES?
2008/june/sy/jik
J:\PROJECTS\B-xxxx\B6000\B6003 - Griffin-Diebold\70 FER\FER\Figures\1-2SitePlan.dwg



BCP Site Boundary



SCALE in FEET



Figure based on Survey by Labella Associates, P.C. June 2008.
Aerial Photo From: <http://www1.nysgis.state.ny.us/MainMap.cfm>

S&W Redevelopment
of North America, LLC.

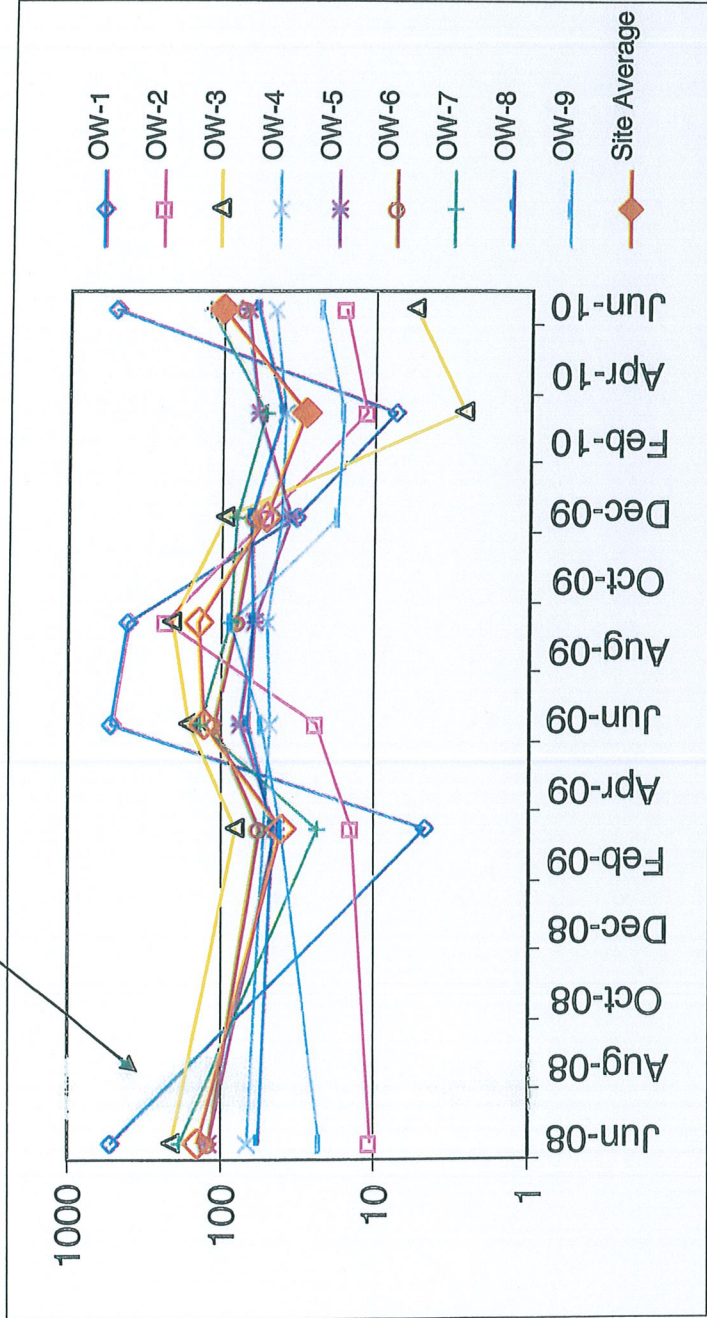
Syracuse, New York

DATE:11/2008 JOB No: B6003.70

Periodic Review Report
Former Griffin Technology Site, BCP # C835008
6132 Victor Manchester Road
Farmington (T), Ontario (C), New York

Figure 1
Site Plan

Injection period
(July 23 – Sept 6, 2008)

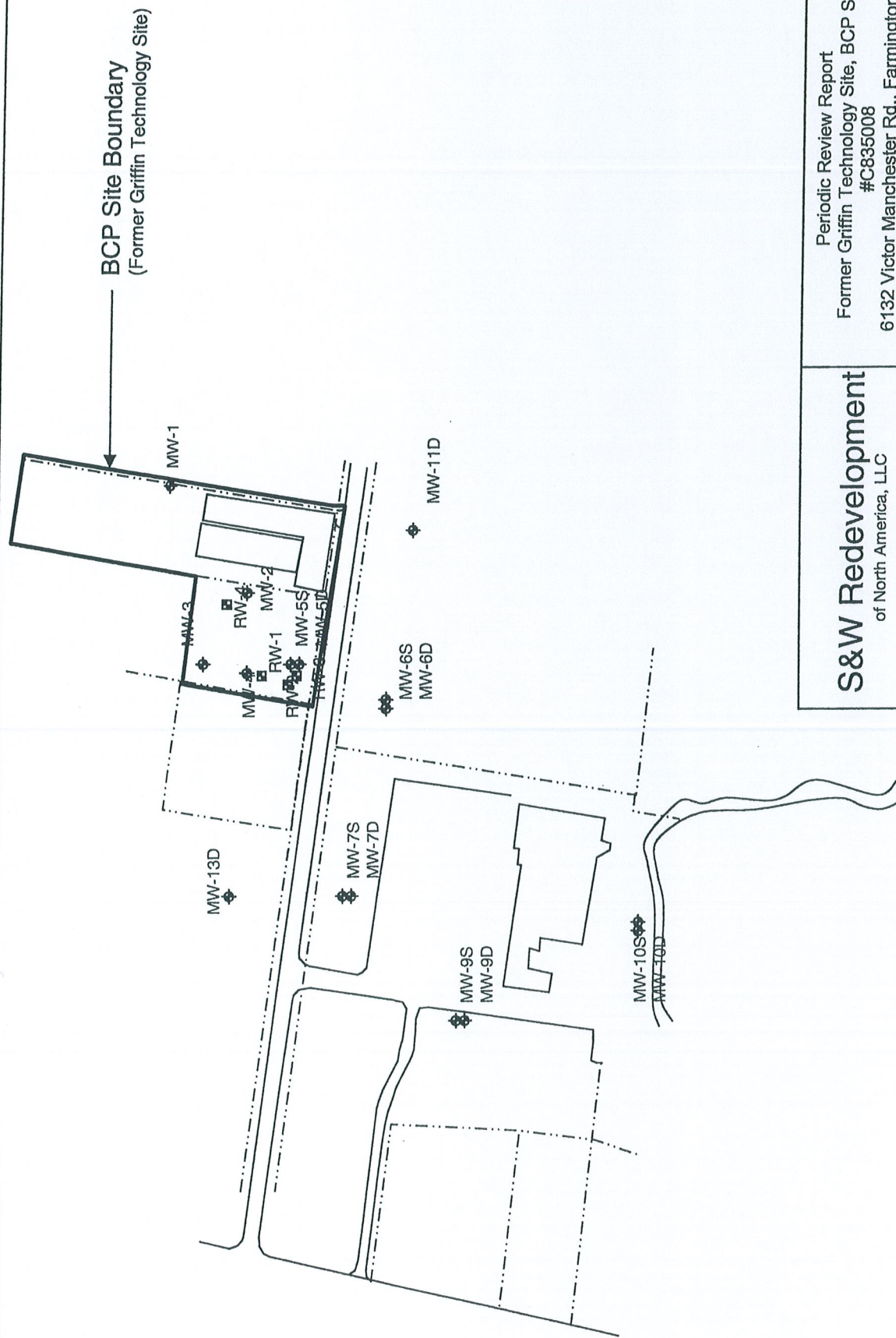


S&W Redevelopment
of North America, LLC
Syracuse, New York

DATE: 08-10 JOB No. B6003

Periodic Review Report
Former Griffin Technology Site, BCP Site
#C835008
6132 Victor Manchester Rd., Farmington(T),
Ontario(C), New York

Figure 3
Pre- and Post-ISCO TCE Concentrations (ppb)



S&W Redevelopment
of North America, LLC
Syracuse, New York

DATE: 09-10 JOB No. B6003

Periodic Review Report
Former Griffin Technology Site, BCP Site
#C835008
6132 Victor Manchester Rd., Farmington(T),
Ontario(C), New York

Figure 4
Off Site Monitoring Well Locations

[illegible]

Groundwater Standards from Technical and Operational Guidance Series (TOGS) Class GA ambient water quality standards - New York State Department of Environmental Conservation
(G) Signifies a NYSDEC guidance value where a standard has not been established.
U - Not Detected
J - Estimated value, Result greater than MDL but below CRDL
Bold and boxed results indicate detection above NYS standards
June 2008 data represent pre-ISCO conditions (baseline sampling event).
In September 2008, QW-4 was the only observation well that produced groundwater samples that were not purple. In accordance with the SMP, this was the only sample collected for analysis.
March 2009 and onward data represent post-ISCO conditions.
* duplicate RPD exceeds control limits, LCS or LCSQ exceeds the control limit, MS or MSD exceeds the control limits