2008 ANNUAL REPORT

Prepared For:
Jamestown Allenco Facility
65 Dow Street
Falconer, New York
(Former Dowcraft South Dow Street Site)
NYSDEC Site #907020

FEBRUARY 2009
REF. NO. 005020 (14)
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1.0 INTRODUCTION

The former Dowcraft Corporation facility in Falconer, New York has been demolished and the property sold to Jamestown Container Corporation. Jamestown Allenco, Inc, (a successor of the Dowcraft Corporation) has retained the responsibility of completing the remedial work at the Site. The remedial work consists of efforts to minimize the impact of trichloroethylene (TCE) which was released on the Site as a result of a degreaser unit. Some of the TCE has degraded into TCE breakdown components including cis-1,2-dichloroethene (cis-DCE) and vinyl chloride. The groundwater beneath the Site has been impacted by the TCE (and the breakdown components) at concentrations that exceed the New York State Department of Environmental Conservation (NYSDEC) criteria.

Interim Remedial Measures were initiated in the 1990s using pump and treat technologies to address the impacted groundwater. These measures were later replaced with an in-situ chemical oxidation remedy that was also initially implemented as an Interim Remedial Measure and subsequently accepted in the March 2003 Record of Decision as the Final Remedial Measure.

In February 2008, a recommendation was made by Conestoga-Rovers & Associates (in the 2007 Annual Report) to switch from potassium permanganate to soy lactate as the injection medium to attempt to eliminate the remaining TCE. The soy lactate creates anaerobic conditions within the groundwater formation, thereby accelerating the rate of TCE degradation. Approval of this approach was provided by the NYSDEC on March 3, 2008.

This document presents the third annual report presenting the 2008 results of the operation of the approved Final Remedial Measure as specified in the "Remedial Design/Remedial Action Work Plan and Operation, Maintenance, and Monitoring Work Plan" developed by CRA in November 2005, and as amended.

2.0 SITE BACKGROUND

The former Dowcraft property, now owned by Jamestown Container Corporation, is located at 65 South Dow Street, Falconer, New York. The location of the Site is shown on Figure 2.1. The former Dowcraft property covered approximately 2.2 acres.

The property is bounded to the north and east by the Jamestown Container Corporation property and to the south by property owned by Norfolk Southern Railroad. South Dow Street is directly west of the property. The Site's monitoring program includes the Chadakoin River which borders the Jamestown Container Corporation property on the north. A Site plan is shown on Figure 2.2.

The release of TCE from the former vapor degreaser is the source of the chemicals found in the groundwater beneath the Site. Groundwater is found at a depth of approximately 10 feet below the ground level and flows in a northerly direction and discharges into the Chadakoin River. The soil through which the groundwater flows beneath the Site is primarily a sand and gravel unit that contains some silt.

The Chemicals of Concern that have been identified for the Site are:

Trichloroethylene
Cis-1,2-Dichloroethene
Vinyl Chloride

The remediation goals selected for this Site are:

- Treat the source area of groundwater contamination by oxidation of the contaminants, in place. This goal was modified in 2008 to allow for the use of soy lactate injections to create an anaerobic treatment zone in the groundwater to treat the source area of groundwater contamination;
- Prevent exposure of human receptors to contaminated groundwater in the sand and gravel unit under the Site; and
- Prevent or mitigate, to the maximum extent practicable, Chemicals of Concern migration via groundwater so that releases from the underlying sand and gravel unit to the Chadakoin River, do not exceed applicable Standards, Criteria, and Guidance Values.

3.0 2008 OPERATION, MAINTENANCE, AND MONITORING WORK

The work performed for the Site in 2008 consisted of the following:

- In February 2008, the second annual report detailing the site activities that were conducted in 2007 was submitted to the NYSDEC. The activities were performed in accordance with the plan specified in the document entitled "Remedial Design/Remedial Action Work Plan and Operation, Maintenance, and Monitoring Work Plan" – November 2005.
- In May 2008, soy lactate was injected into four wells to create an anaerobic treatment zone in the groundwater flow regime.
- In September 2008, a round of groundwater samples was collected from select wells.
- In December 2008, a second round of groundwater samples was collected from select wells.

The following sections of this report provide further information on these activities.

3.1 INJECTIONS

There have been four rounds of potassium permanganate injections at the Site. The injections occurred as follows:

May 2000	5,300 lbs.
November 2000	6,600 lbs.
June 2001	6,600 lbs.
November 2005 – July 2006	3,000 lbs
	21,500 lbs.

Thus, to date, 21,500 pounds of potassium permanganate has been injected into the groundwater at the Site.

In 2008, soy lactate was injected as an alternate method to attempt to eliminate the TCE source in the groundwater. The initial injection of 840 pounds of soy lactate was performed on May 19 through 22, 2008. The soy lactate was diluted at a 10:1 ratio (by weight) with potable water prior to injection. A vitamin B-12 supplement was added into the diluted mixture prior to application. The locations into which the soy lactate was injected are as follows:

- PW-2 170 pounds
- PW-3R 590 pounds
- ESI-2 42 pounds
- ESI-6 42 pounds

The solution was injected into wells ESI-2, ESI-6, and PW-2 using a small submersible pump at rates of approximately 5 gallons per minute. Well PW-3R would only accept the solution at 0.5 gallons per minute so a sanitary well seal cap was installed and gravity was used to inject the solution into this well.

All mixing was done in a new polyethylene tank. After injecting the last batch of soy lactate, approximately 50 to 70 gallons of potable water was used to clean out the tanks and hoses. This water was added to PW-3R. Approximately 25 gallons of clean chase water was added to the remaining three wells after the soy lactate injections to push the soy lactate solution into the groundwater and to flush the well casing.

3.2 GROUNDWATER CHEMICAL MONITORING

Two rounds of groundwater samples were collected during this reporting period. Each sampling round included the collection of samples from 11 groundwater monitoring wells and a surface water sample from the Chadakoin River. The first round was conducted in September 2008 and the second round in December 2008. The results from these two sampling rounds are to be used to provide information on:

- The progress of the remedial efforts; and
- Whether there is a need for any additional injections of materials to promote elimination of the TCE source.

Each water sample collected was analyzed for the complete set of Volatile Organic Compounds using USEPA method number 8260B at the H2M Laboratories in Melville, New York (a NYSDOH approved facility). The analytical data from each set of samples were validated as per the Quality Assurance Project Plan. The validation reports are presented in Appendix A and a summary of the analytical data is presented in Table 1. The validation reports show that the data collected were acceptable for their intended purpose.

In addition to the analyses performed in the laboratory, measurements of certain water quality parameters were taken in the field at the time the samples were collected. These parameters include pH, specific conductance, temperature, turbidity, dissolved oxygen, oxidation reduction potential, total iron, and ferrous iron. The results of these field measurements are presented in Table 2.

Both of the 2008 sample collection rounds were conducted after the injection of soy lactate in May 2008. The data from both rounds of samples show that there has been significant improvement in the water quality in the central core area where the chemical source has historically resided. This central core area encompasses the area in the vicinity of wells PW-2 and PW-3R. Figures 3.1, 3.2, and 3.3 provide an areal depiction of the concentrations of the three main Chemicals of Concern; TCE, cis-DCE, and vinyl chloride. Concentrations from the 2005 through 2008 sampling rounds have been included on these figures to provide comparative results.

For TCE, significant reductions (by an order of magnitude) in the concentrations were noted at wells PW-2, PW-3R and ESI-2. The reductions were most prominent in the September 2008 sampling round with some rebound exhibited at PW-2 and PW-3R in the December 2008 samples; although the concentrations are still well below the 2007 concentrations. Some rebound in well ESI-10 also occurred in the December 2008 sample after a considerable drop in September 2008. Although well ESI-10 is near the river, the concentrations of all parameters remained at non-detect in the river samples, as expected. As discussed at the October 14, 2005 meeting with the NYSDEC, the chemical loading associated with the groundwater discharge into the Chadakoin River is on the order of 0.1 pounds per year. Given the dilution that occurs in the Chadakoin River due to the average flow of 361 cubic feet/second, the concentration of any chemical discharge from the groundwater entering the Chadakoin River will be less than 1 ppt. Adding to this the short half-life of these volatile compounds in flowing surface water and it is obvious that the concentrations quickly approach zero. Consequently, there has never been nor will there ever be an adverse impact as a result of the discharge of Site chemicals into the Chadakoin River.

While TCE concentrations in the central core area decreased following the soy lactate injections, the concentrations of cis-DCE actually increased in three of the wells. These wells were PW-2, PW-3R, and ESI-2. Given that so much TCE appears to have been degraded, it would be expected that degradation compounds of TCE, such as cis-DCE, would increase. This is exactly what happened at these three wells. These results provide documentation that biodegradation via the creation of an anaerobic treatment zone is actually occurring. This is the desired result of the soy lactate injections.

The cis-DCE concentrations also rose in two of the wells located closest to the Chadakoin River. Again, due to the low chemical presence in the groundwater and the slow rate of groundwater flow, there never has been and there never will be an adverse impact on the Chadakoin River as a result of any groundwater discharge from the Site.

Similar to the cis-DCE concentration swings, the concentrations of vinyl chloride, another TCE degradation compound, were also expected to increase. This is exactly what occurred at wells PW-2, PW-3R, and ESI-2, thus confirming that biodegradation of TCE to its degradation products under anaerobic conditions is readily and rapidly occurring.

The 2008 results demonstrate that degradation of the TCE is continuing to occur and is occurring at a significant rate. Thus, natural attenuation is a significant and valuable part of the remedy of the Site groundwater.

3.3 GROUNDWATER HYDRAULIC MONITORING

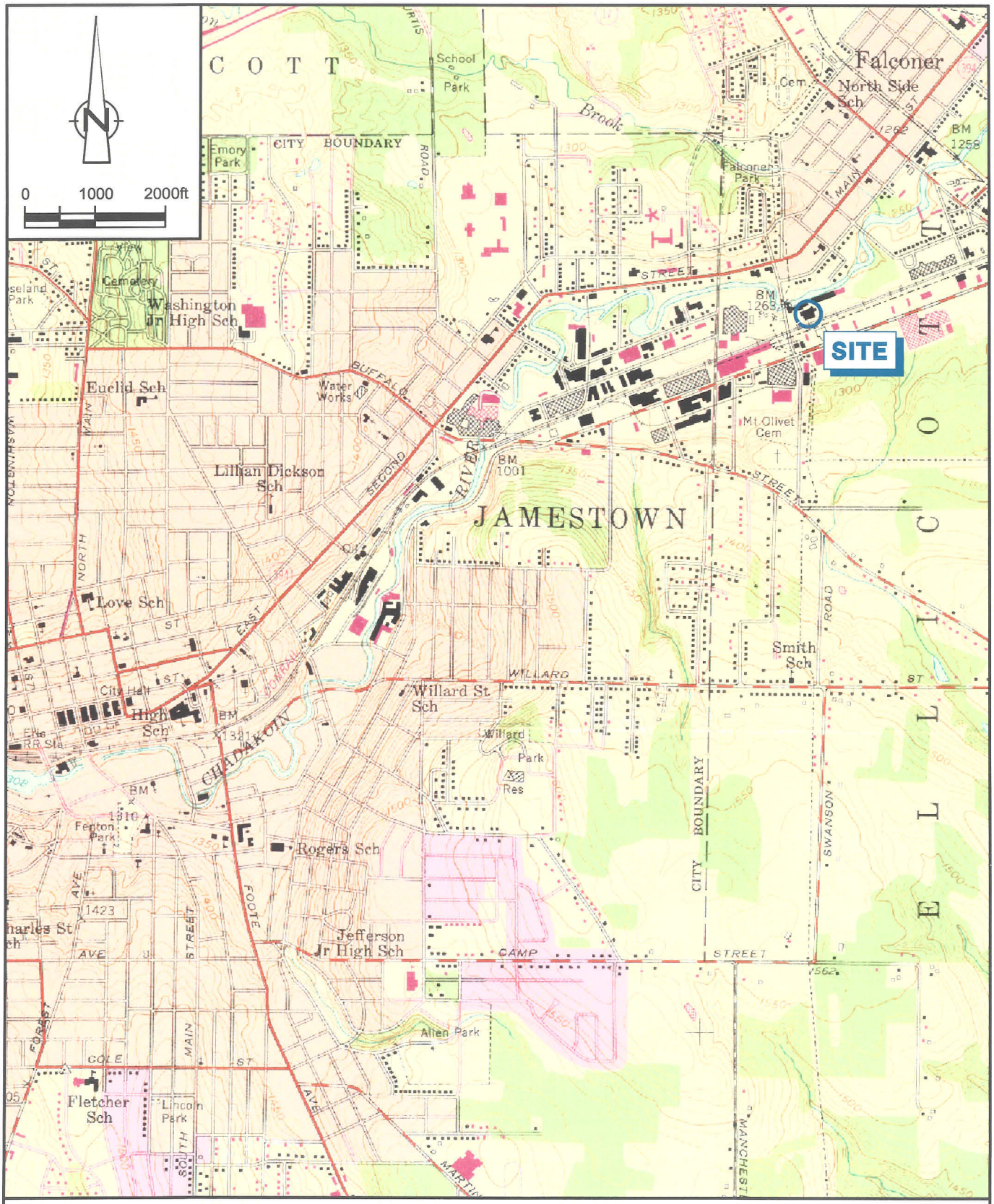
In conjunction with each sampling round, a complete set of groundwater elevations were taken from all available wells. The groundwater elevation information from these sampling events is presented in Table 3 and illustrated in Figure 3.4. The groundwater elevation data show that the gradient is still to the north toward the Chadakoin River. This flow pattern is consistent with all previous rounds of groundwater level measurements.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the sampling performed during this reporting period, the following conclusions have been formulated:

- The sampling of the Chadakoin River continues to demonstrate that there is no impact of the Site groundwater conditions on the surface water quality in the River.
- The groundwater flow configuration beneath the Site is stable and remains consistent with historically identified trends. The groundwater flow is to the north and discharges into the Chadakoin River.
- The injections of potassium permanganate have successfully destroyed a considerable amount of TCE and its breakdown compounds, particularly in the immediate vicinity of the former TCE degreaser unit.
- The 2008 injection of soy lactate has resulted in a significant reduction in the concentrations of TCE in the central core area. As expected the reduction in TCE concentrations is matched with increases in the concentrations of TCE degradation products (cis-DCE and vinyl chloride). These data demonstrate that the soy lactate injections have created an anaerobic treatment zone that is effectively remediating the groundwater plume.
- TCE concentrations that exceed 1,000 ppb are now only present at one well (PW-3R).

Based upon these conclusions, it is recommended that the two sample rounds in 2009 be completed before any additional remedial actions be taken.



SOURCE:

USGS JAMESTOWN, NEW YORK
QUADRANGLE, PHOTOREVISED 1979.

figure 2.1

SITE LOCATION MAP
FORMER DOWCRAFT CORPORATION
Falconer, New York

05020-00(014)GN-WA001 FEB 11/2009

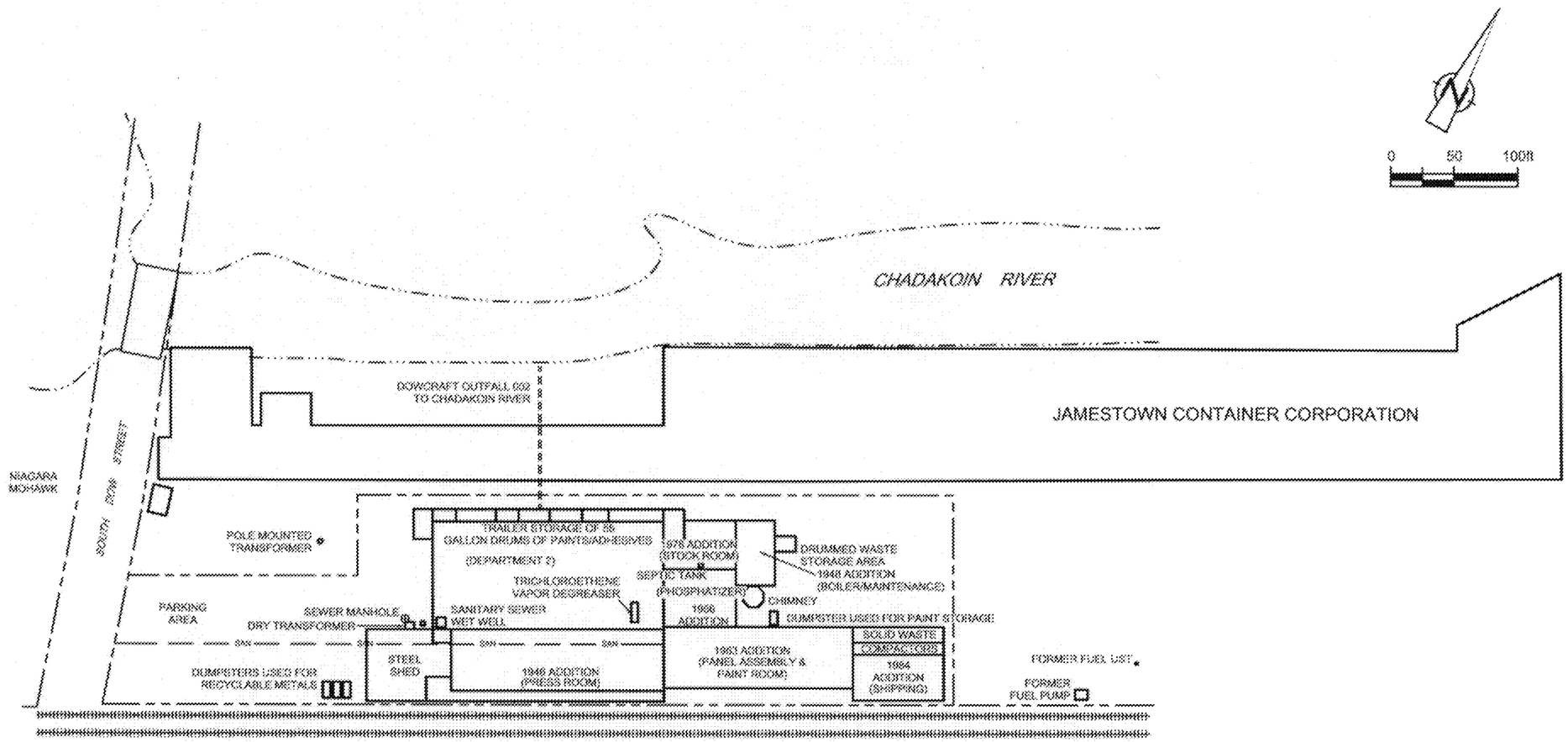


figure 2.2

SITE PLAN AND HISTORIC OPERATIONS
FORMER DOWCRAFT CORPORATION
Falconer, New York

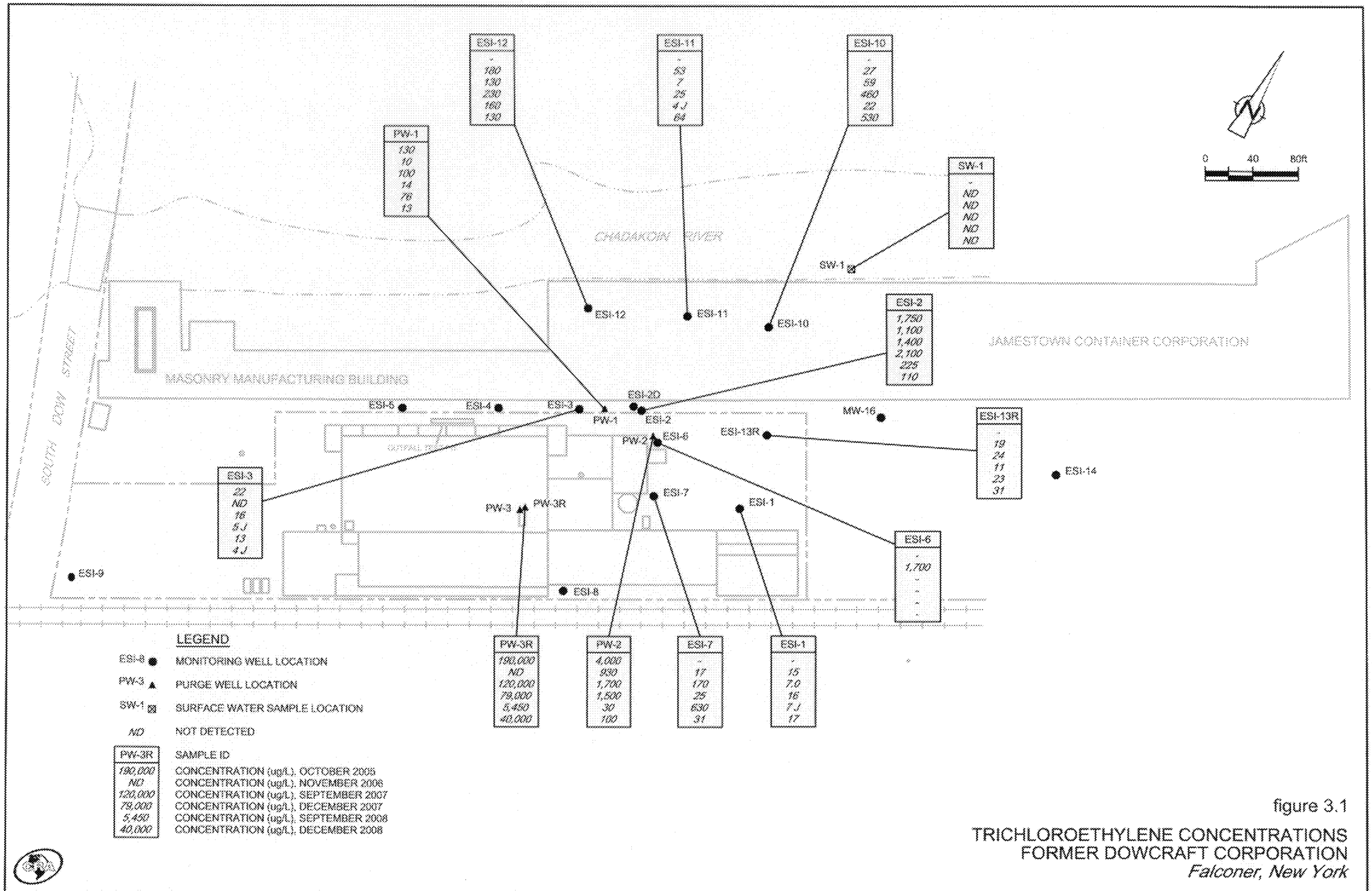
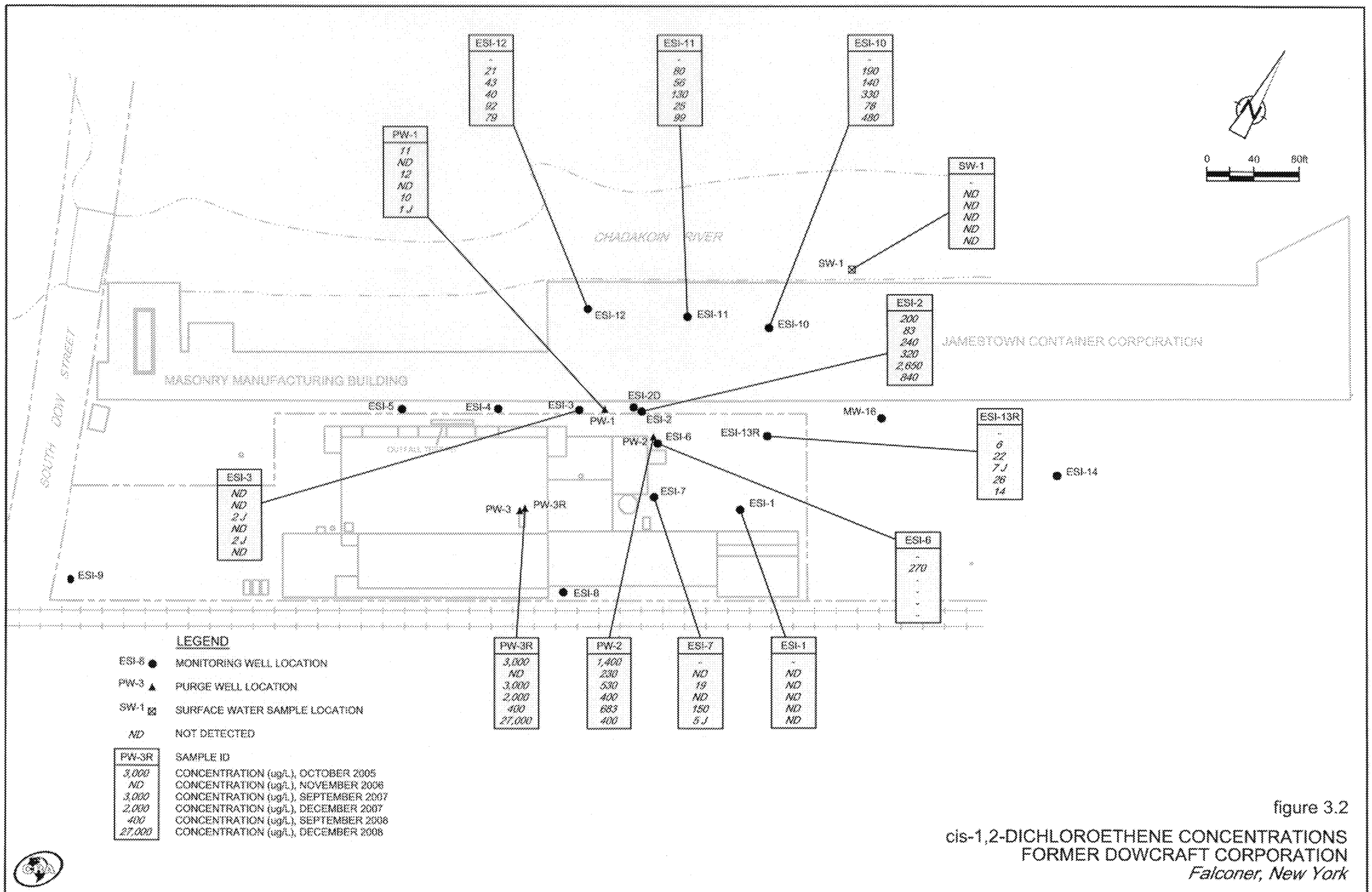


figure 3.1

TRICHLOROETHYLENE CONCENTRATIONS
FORMER DOWCRAFT CORPORATION
Falconer, New York

05020-30(014)GN-WA003 FEB 11/2009



LEGEND

ESI-8 ●	MONITORING WELL LOCATION
PW-3 ▲	PURGE WELL LOCATION
SW-1 ⊠	SURFACE WATER SAMPLE LOCATION
ND	NOT DETECTED

PW-3R	SAMPLE ID
3,000	CONCENTRATION (ug/L), OCTOBER 2005
ND	CONCENTRATION (ug/L), NOVEMBER 2006
3,000	CONCENTRATION (ug/L), SEPTEMBER 2007
2,000	CONCENTRATION (ug/L), DECEMBER 2007
400	CONCENTRATION (ug/L), SEPTEMBER 2008
27,000	CONCENTRATION (ug/L), DECEMBER 2008

figure 3.2

cis-1,2-DICHLOROETHENE CONCENTRATIONS
FORMER DOWCRAFT CORPORATION
Falconer, New York

05020-30(014)GN-WA004 FEB 11/2009

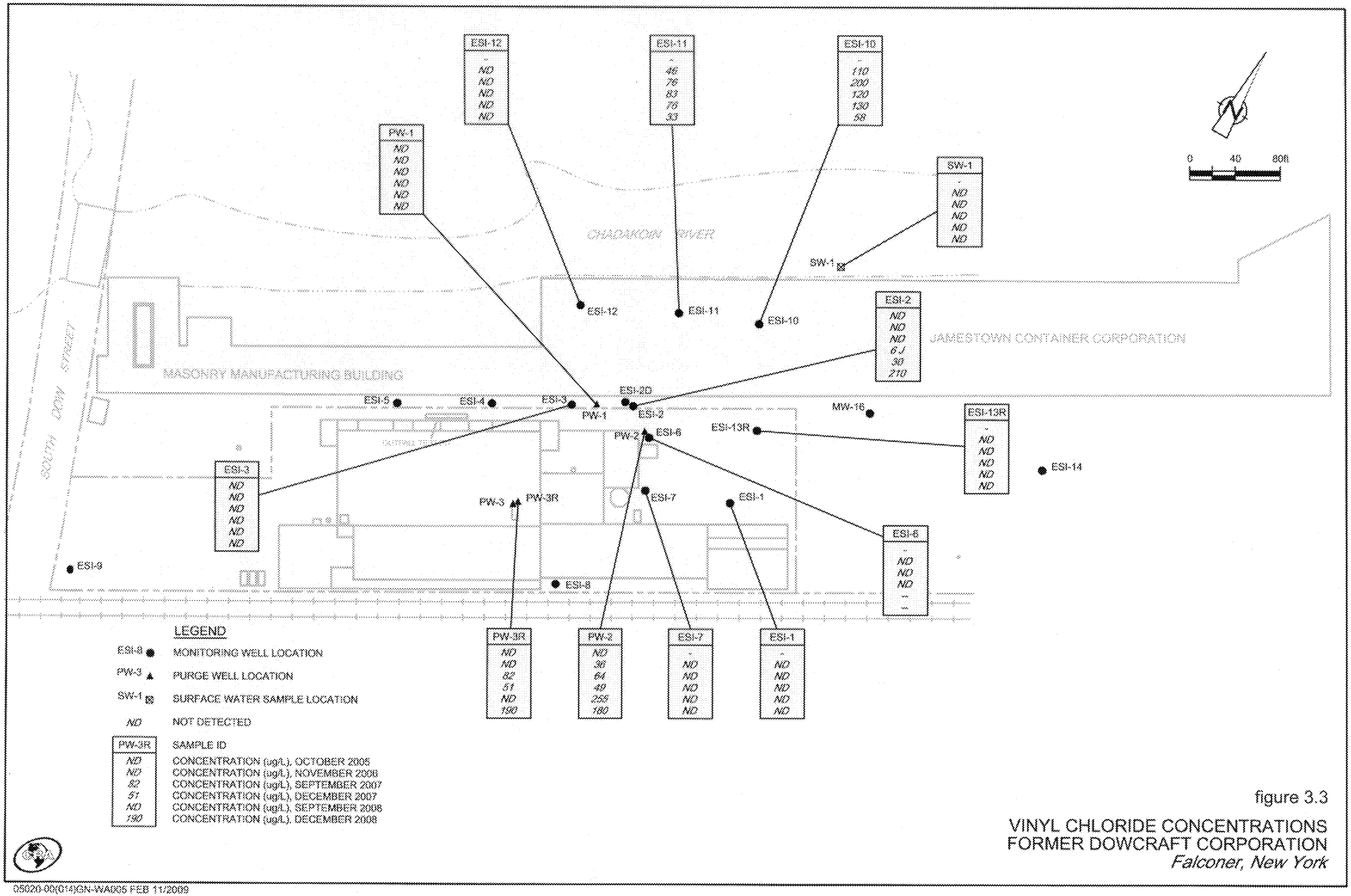
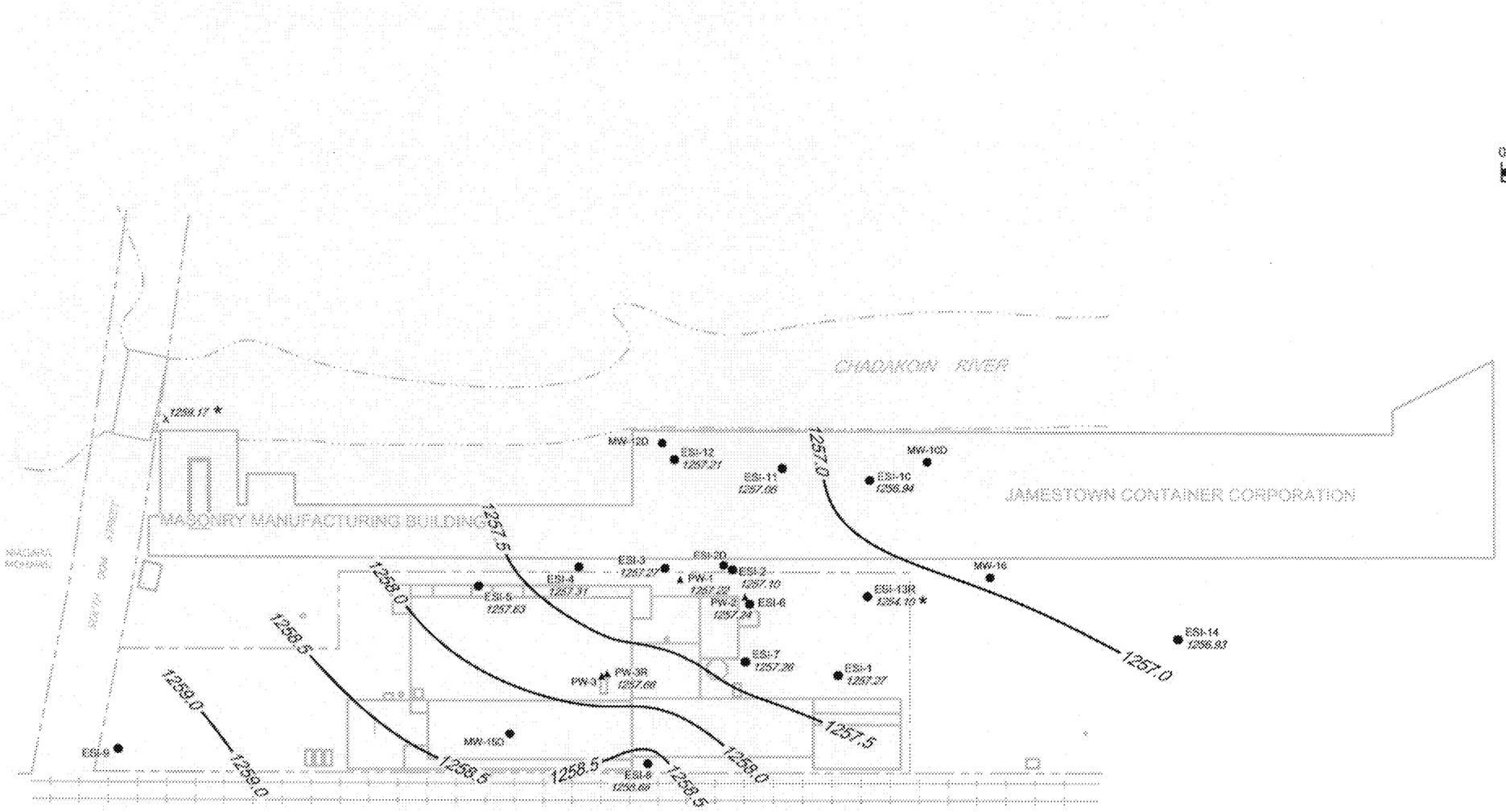


figure 3.3

VINYL CHLORIDE CONCENTRATIONS
FORMER DOWCRAFT CORPORATION
Falconer, New York

05020-00(014)GN-WA005 FEB 11/2009



LEGEND

- ESI-4 ● MONITORING WELL
- PW-3 ▲ PURGE WELL
- 1258.66 WATER LEVEL ELEVATION (ft AMSL) DECEMBER 2008
- 1258.5 —— POTENTIOMETRIC SURFACE CONTOUR DECEMBER 2008
- * NOT USED TO GENERATE CONTOURS

figure 3.4

GROUNDWATER ELEVATION 2008
DOWCRAFT CORPORATION
Falconer, New York

05020-00(014)GN-WA006 FEB 11/2009

TABLE 1

ANALYTICAL RESULTS SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Sample Location	*ESI-1*	*ESI-1*	*ESI-2*	*ESI-2*	*ESI-3*	*ESI-3*	*ESI-3*
Sample Identification	*W-5020-0908-KL-011*	*WG-5020-1208-KL-007*	*W-5020-0908-KL-003*	*WG-5020-1208-KL-011*	*W-5020-0908-KL-002*	*WG-5020-1208-KL-009*	*WG-5020-1208-KL-010*
Sample Date	*9/5/2008*	*12/16/2008*	*9/4/2008*	*12/16/2008*	*9/4/2008*	*12/16/2008*	*12/16/2008*
Sample Type							*(Duplicate)*
Units							
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	µg/L	10 U	10 U	2 J	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U	8 J	10 U	10 U	10 U
Benzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane (Methyl Bromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	10 U	10 U	10 U	2 J	10 U	10 U	10 U
Chloromethane (Methyl Chloride)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	10 U	10 U	3700	840	2 J	10 U	10 U
cis-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

TABLE 1

ANALYTICAL RESULTS SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Sample Location	*ESI-1*	*ESI-1*	*ESI-2*	*ESI-2*	*ESI-3*	*ESI-3*	*ESI-3*
Sample Identification	*W-5020-0908-KL-011*	*WG-5020-1208-KL-007*	*W-5020-0908-KL-003*	*WG-5020-1208-KL-011*	*W-5020-0908-KL-002*	*WG-5020-1208-KL-009*	*WG-5020-1208-KL-010*
Sample Date	*9/5/2008*	*12/16/2008*	*9/4/2008*	*12/16/2008*	*9/4/2008*	*12/16/2008*	*12/16/2008*
Sample Type							*(Duplicate)*
Units							
Volatile Organic Compounds							
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Tert Butyl Ether	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	µg/L	10 U	10 U	29	5 J	10 U	10 U	10 U
trans-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	µg/L	7 J	17	200 J	110	13	4 J	3 J
Trichlorofluoromethane (CFC-11)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	µg/L	10 U	10 U	30	210	10 U	10 U	10 U
Xylene (total)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Notes:
J - Estimated.
U - Not detected.
UJ - Not detected, estimated reporting limit.

TABLE 1

ANALYTICAL RESULTS SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Sample Location		*ESI-7*	*ESI-7*	*ESI-10*	*ESI-10*	*ESI-11*	*ESI-11*	*ESI-12*
Sample Identification		*W-5020-0908-KL-005*	*WG-5020-1208-KL-008*	*W-5020-0908-KL-008*	*WG-5020-1208-KL-006*	*W-5020-0908-KL-007*	*WG-5020-1208-KL-005*	*W-5020-0908-KL-006*
Sample Date		*9/4/2008*	*12/16/2008*	*9/4/2008*	*12/15/2008*	*9/4/2008*	*12/15/2008*	*9/4/2008*
Sample Type								
	Units							
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane (Methyl Bromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane (Methyl Chloride)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	160	5 J	78	480	25	99	92
cis-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

TABLE 1

ANALYTICAL RESULTS SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Sample Location	*ESI-7*	*ESI-7*	*ESI-10*	*ESI-10*	*ESI-11*	*ESI-11*	*ESI-12*
Sample Identification	*W-5020-0908-KL-005*	*WG-5020-1208-KL-008*	*W-5020-0908-KL-008*	*WG-5020-1208-KL-006*	*W-5020-0908-KL-007*	*WG-5020-1208-KL-005*	*W-5020-0908-KL-006*
Sample Date	*9/4/2008*	*12/16/2008*	*9/4/2008*	*12/15/2008*	*9/4/2008*	*12/15/2008*	*9/4/2008*
Sample Type							
Units							
Volatile Organic Compounds							
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Tert Butyl Ether	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	µg/L	2 J	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	µg/L	3 J	10 U	10 U	2 J	10 U	10 U	10 U
trans-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	µg/L	680	31	22	530	4 J	64	160
Trichlorofluoromethane (CFC-11)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	µg/L	10 U	10 U	130	58	76	33	10 U
Xylene (total)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Notes:
J - Estimated.
U - Not detected.
UJ - Not detected, estimated reporting limit.

TABLE 1

ANALYTICAL RESULTS SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Sample Location	*ESI-12*	*ESI-13R*	*ESI-13R*	*PW-1*	*PW-1*	*PW-2*	*PW-2*
Sample Identification	*WG-5020-1208-KL-004*	*W-5020-0908-KL-004*	*WG-5020-1208-KL-003*	*W-5020-0908-KL-001*	*WG-5020-1208-KL-001*	*W-5020-0908-KL-009*	*W-5020-0908-KL-010*
Sample Date	*12/15/2008*	*9/4/2008*	*12/15/2008*	*9/4/2008*	*12/15/2008*	*9/5/2008*	*9/5/2008*
Sample Type							*(Duplicate)*
Units							
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	2 J
Benzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane (Methyl Bromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane (Methyl Chloride)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	79	26	14	10	1 J	750	740
cis-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

TABLE 1

ANALYTICAL RESULTS SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Sample Location	*ESI-12*	*ESI-13R*	*ESI-13R*	*PW-1*	*PW-1*	*PW-2*	*PW-2*
Sample Identification	*WG-5020-1208-KL-004*	*W-5020-0908-KL-004*	*WG-5020-1208-KL-003*	*W-5020-0908-KL-001*	*WG-5020-1208-KL-001*	*W-5020-0908-KL-009*	*W-5020-0908-KL-010*
Sample Date	*12/15/2008*	*9/4/2008*	*12/15/2008*	*9/4/2008*	*12/15/2008*	*9/5/2008*	*9/5/2008*
Sample Type							*(Duplicate)*
Units							
Volatile Organic Compounds							
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Tert Butyl Ether	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	µg/L	10 U	10 U	10 U	1 J	10 U	8 J	8 J
trans-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	µg/L	130	23	31	76	13	32	31
Trichlorofluoromethane (CFC-11)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	µg/L	10 U	10 U	10 U	10 U	10 U	250	250
Xylene (total)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Notes:
J - Estimated.
U - Not detected.
UJ - Not detected, estimated reporting limit.

TABLE 1

ANALYTICAL RESULTS SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Sample Location		*PW-2*	*PW-3R*	*PW-3R*	*River*	*River*
Sample Identification		*WG-5020-1208-KL-002*	*W-5020-0908-KL-012*	*WG-5020-1208-KL-013*	*W-5020-0908-KL-013*	*WG-5020-1208-KL-012*
Sample Date		*12/15/2008*	*9/5/2008*	*12/16/2008*	*9/5/2008*	*12/16/2008*
Sample Type						
	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	10 U	500 UJ	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	500 UJ	10 U	10 U	10 U
1,1,2-Trichloroethane	µg/L	10 U	500 UJ	5 J	10 U	10 U
1,1-Dichloroethane	µg/L	10 U	500 UJ	9 J	10 U	10 U
1,1-Dichloroethene	µg/L	10 U	500 UJ	16	10 U	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	500 UJ	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	500 UJ	10 U	10 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	10 U	500 UJ	10 U	10 U	10 U
1,2-Dichlorobenzene	µg/L	10 U	500 UJ	10 U	10 U	10 U
1,2-Dichloroethane	µg/L	10 U	500 UJ	3 J	10 U	10 U
1,2-Dichloropropane	µg/L	10 U	500 UJ	2 J	10 U	10 U
1,3-Dichlorobenzene	µg/L	10 U	500 UJ	10 U	10 U	10 U
1,4-Dichlorobenzene	µg/L	10 U	500 UJ	10 U	10 U	10 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	10 U	650 J	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	500 UJ	3 J	10 U	10 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	10 U	500 UJ	5 J	10 U	10 U
Acetone	µg/L	6 J	500 UJ	90	10 U	10 U
Benzene	µg/L	10 U	500 UJ	10 U	10 U	10 U
Bromodichloromethane	µg/L	10 U	500 UJ	10 U	10 U	10 U
Bromoform	µg/L	10 U	500 UJ	10 U	10 U	10 U
Bromomethane (Methyl Bromide)	µg/L	10 U	500 UJ	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	500 UJ	9 J	10 U	10 U
Carbon tetrachloride	µg/L	10 U	500 UJ	10 U	10 U	10 U
Chlorobenzene	µg/L	10 U	500 UJ	10 U	10 U	10 U
Chloroethane	µg/L	10 U	500 UJ	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	10 U	500 UJ	2 J	10 U	10 U
Chloromethane (Methyl Chloride)	µg/L	10 U	500 UJ	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	400	400 J	27000	10 U	10 U
cis-1,3-Dichloropropene	µg/L	10 U	500 UJ	10 U	10 U	10 U
Cyclohexane	µg/L	10 U	500 UJ	10 U	10 U	10 U
Dibromochloromethane	µg/L	10 U	500 UJ	10 U	10 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	500 UJ	10 U	10 U	10 U
Ethylbenzene	µg/L	10 U	500 UJ	10 U	10 U	10 U
Isopropylbenzene	µg/L	10 U	500 UJ	10 U	10 U	10 U

TABLE 1

ANALYTICAL RESULTS SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

	Sample Location	*PW-2*	*PW-3R*	*PW-3R*	*River*	*River*
	Sample Identification	*WG-5020-1208-KL-002*	*W-5020-0908-KL-012*	*WG-5020-1208-KL-013*	*W-5020-0908-KL-013*	*WG-5020-1208-KL-012*
	Sample Date	*12/15/2008*	*9/5/2008*	*12/16/2008*	*9/5/2008*	*12/16/2008*
	Sample Type					
	Units					
Volatile Organic Compounds						
Methyl acetate	µg/L	10 U	500 UJ	10 U	10 U	10 U
Methyl cyclohexane	µg/L	10 U	500 UJ	10 U	10 U	10 U
Methyl Tert Butyl Ether	µg/L	10 U	500 UJ	10 U	10 U	10 U
Methylene chloride	µg/L	10 U	50 J	4 J	10 U	10 U
Styrene	µg/L	10 U	500 UJ	10 U	10 U	10 U
Tetrachloroethene	µg/L	10 U	500 UJ	4 J	10 U	10 U
Toluene	µg/L	10 U	500 UJ	3 J	10 U	10 U
trans-1,2-Dichloroethene	µg/L	6 J	500 UJ	4000 U	10 U	10 U
trans-1,3-Dichloropropene	µg/L	10 U	500 UJ	10 U	10 U	10 U
Trichloroethene	µg/L	100	5100 J	40000	10 U	10 U
Trichlorofluoromethane (CFC-11)	µg/L	10 U	500 UJ	10 U	10 U	10 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	500 UJ	10 U	10 U	10 U
Vinyl chloride	µg/L	180	500 UJ	190	10 U	10 U
Xylene (total)	µg/L	10 U	500 UJ	10 U	10 U	10 U

Notes:
J - Estimated.
U - Not detected.
UJ - Not detected, estimated reporting limit.

TABLE 2

FIELD PARAMETER SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Well ID	*Date*	*Gallons*	*pH (s.u.)*	*Specific Conductance (mS/cm)*	*Temp. (°C)*	*Turbidity (NTU)*	*Dissolved Oxygen (mg/L)*	*Dissolved Oxygen (mg/L)*	*Oxidation Reduction Potential (mV)*	*Total Iron (mg/L)*	*Ferrous Iron (mg/L)*	*Comments*
ESI-1	09/04/08	0-0.75	Pre-purge to clear sediment						4-Sep			cloudy, dk. Brown, well went dry
Volume = 1.04 gal.		0.6	2.25	purged dry - 0.5 gal		no readings			4-Sep			cloudy, dk. Brown
		1.2				no readings			5-Sep			cloudy, brown-gray
Purge: peristaltic pump		1.8				no readings			5-Sep			clear, colorless
existing tubing		2.4	7.13	1.660	16.6	40		6.22	87	grab sample		clear, colorless
Sample: new teflon bailer			Samples collected		9/5/08					0.19	0.15	clear, colorless
ESI-2	09/04/08	0-2	Pre-purge to clear sediment									cloudy, brown
Volume = 0.6 gal.		0.6	7.52	0.635	15.1	23	1.54	0.92	-138			clear, colorless
		1.2	7.50	0.631	15.1	16		0.86	-143			
Purge: peristaltic pump		1.8	7.47	0.630	15.1	17		0.79	-145			
existing tubing		01/02/00	7.45	0.628	15.1	12		0.73	-147			clear, colorless
Sample: existing bailer			Samples collected		MS/MSD at this location					1.23	0.8	clear, colorless
ESI-3	09/04/08	0-1	Pre-purge to clear sediment									very cloudy, gray
Volume = 0.5 gal.		0.5	7.33	0.634	15.3	980	1.54	4.41	126			cloudy
		1	7.27	0.637	14.7	230		4.48	130			clearing
Purge: peristaltic pump		1.5	7.14	0.646	14.7	65		4.13	136			sl. cloudy, lt. Brown
existing tubing		2.0	7.10	0.652	14.7	78		4.01	140			sl. cloudy, lt. Brown
Sample: existing bailer			Samples collected							2.98	1.69	sl. cloudy, lt. Brown
ESI-7	09/04/08	0.5	6.96	0.776	16.5	367		6	108			sl. cloudy, brown
Volume = 0.5 gal.		1	6.94	0.780	16.3	79		4.93	113			clear to sl. Cloudy, lt. Brown
Purge: peristaltic pump		1.5	6.83	0.781	16.4	63		4.38	123			
Sample: existing bailer		2	6.78	0.784	16.5	50		4.02	135			clear to sl. Cloudy, lt. Brown
Sample: existing small diameter bailer				Samples collected						0.62	0.32	clear, colorless

TABLE 2

FIELD PARAMETER SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Well ID	Date	Gallons	pH (s.u.)	Specific Conductance (mS/cm)	Temp. (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Total Iron (mg/L)	Ferrous Iron (mg/L)	Comments
ESI-10	09/04/08	0-1	Pre-purge to clear sediment									cloudy, gray
Volume = 0.90 gal.		0.5	6.96	0.480	16.3	20	1.54	1.42	-4			clear, colorless
Purge: peristaltic pump		1	6.91	0.490	16.1	12		0.91	-4			
existing tubing		1.5	6.89	0.492	16.1	11		0.79	-5			clear, colorless
		2.0	6.89	0.495	16.1	8		0.75	-5			
Sample: existing bailer			Samples collected							1.15	0.91	clear, colorless
ESI-11	09/04/08	0.65	7.20	0.417	15.1	68	1.54	1.21	-57			clear, colorless
Volume = 1.06 gal.		1.3	7.11	0.446	15.1	40		0.91	-59			
Purge: peristaltic pump		1.9	7.07	0.427	15.2	40		0.79	-65			
existing tubing		2.6	7.04	0.432	15.1	32		0.7	-67			clear, colorless
		3.5	7.05	0.443	15.2	20		0.68	-66			
Sample: existing bailer			Samples collected							4.26	1.87	clear, colorless
ESI-12	09/05/08	0.6	7.54	0.469	14.9	89	1.54	2.27	124			sl. Cloudy. Lt. Brown
Volume = 0.6 gal.		1.2	7.58	0.472	14.7	78		1.56	124			clearing
Purge: peristaltic pump		1.8	7.55	0.471	14.6	106		1.25	123			
existing tubing		2.4	7.47	0.468	14.6	72		1.18	121			clear, colorless
		3.0	7.44	0.462	14.6	28		1.12	119			
Sample: existing bailer			Samples collected							0.92	0.32	clear, colorless
ESI-13R	09/04/08	0-1	Pre-purge to clear sediment									cloudy, brown-gray
Volume = 0.84 gal.		1	7.07	0.772	14.6	281	1.54	3.56	79			sl. Cloudy, lt. Brown
Purge: peristaltic pump		2	6.80	0.753	14.5	88		2.14	91			clearing
existing tubing		3	6.70	0.791	14.5	8		2.17	98			
		4	6.68	0.797	14.5	14		2.23	102			clear, colorless
Sample: existing bailer			Samples collected							0.58	0.29	clear, colorless

TABLE 2

FIELD PARAMETER SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Well ID	*Date*	*Gallons*	*pH (s.u.)*	*Specific Conductance (mS/cm)*	*Temp. (°C)*	*Turbidity (NTU)*	*Dissolved Oxygen (mg/L)*	*Dissolved Oxygen (mg/L)*	*Oxidation Reduction Potential (mV)*	*Total Iron (mg/L)*	*Ferrous Iron (mg/L)*	*Comments*
PW-1	09/04/08	0-5	Pre-purge to clear sediment									cloudy, brown
Volume = 18 gal.		15	6.76	0.649	14.5	65	1.54	2.79	88			sl. Cloudy, lt. Brown
Purge: whale pump		30	6.62	0.644	14.4	28		2.34	85			clearing
low rate		45	6.59	0.643	14.4	12		2.28	86			
existing tubing		60	6.56	0.642	14.4	6		2.14	83			clear
												note: 50 gal. Soy lactate injected 05/08
Sample: existing bailer			Samples collected							2.06	0.79	clear, lt. brown color, no odor
PW-2	09/05/08	17	8.39	0.544	13.7	60	1.54	0.67	-194			sl. cloudy, gray, sour odor
Volume = 18 gal.		35	8.47	0.550	13.7	45	1.54	0.56	-206			clearing, sour odor
Purge: whale pump		53	8.52	0.553	13.6	73		0.49	-213			sl. cloudy, gray, sour odor
existing tubing												
Sample: existing bailer			Sample and blind duplicate sample collected							3.23	2.66	sl. cloudy, lt. Brown
PW-3R	09/05/08	10	6.65	2.030	15.0	999		0.54	-59			slight milky white color, sour odor
volume = 39 gal.		20	5.90	2.100	13.8	999		0.44	-17			milky white, septic odor, oily blebs on water
Purge: Whale pump		30	5.95	2.030	14.1	999		0.41	-13			same
low rate		40	6.09	1.950	14.5	999		0.41	-80			slightly milky, sour odor
existing tubing												
Sample:mple: bailer-existing			samples collected							---	---	too opaque for valid iron readings
Chadakoin Creek	12/12/07		8.68	0.185	23.0	6		7.97	70	0.36	0.21	clear, colorless
		collected directly into sample containers										Water depth +/- 1.0 feet where collected
												Creek low
ESI-1	12/16/08	0-1	Pre-purge to clear sediment									sl. cloudy, gray
Volume = 1.14 gal.		1	5.91	1.450	10.1	93		5.74	141			sl. cloudy, gray
		2	6.16	1.370	10.2	34		5.59	130			clearing
Purge: peristaltic pump		3	6.31	1.340	10.1	8		5.82	135			clear, colorless
existing tubing		4	6.34	1.310	10.1	4		5.91	138			clear, colorless
Sample: existing teflon bailer			Samples collected							0.19	0.09	clear, colorless

TABLE 2

FIELD PARAMETER SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Well ID	*Date*	*Gallons*	*pH (s.u.)*	*Specific Conductance (mS/cm)*	*Temp. (°C)*	*Turbidity (NTU)*	*Dissolved Oxygen (mg/L)*	*Dissolved Oxygen (mg/L)*	*Oxidation Reduction Potential (mV)*	*Total Iron (mg/L)*	*Ferrous Iron (mg/L)*	*Comments*
ESI-2	12/16/08	0-1	Pre-purge to clear sediment									cloudy, black, sulfide odor
Volume = 1.05 gal.		1	6.68	1.320	11.5	210	1.54	0.97	-130			sl. Cloudy, dark color, septic odor
		2	6.73	1.390	11.5	149		0.86	-125			clearing
Purge: peristaltic pump		3	6.74	1.400	11.5	12		0.85	-123			clear, colorless
existing tubing		4	6.76	1.410	11.5	0		0.83	-120			clear, colorless, septic odor
Sample: existing bailer			Samples collected							2.5	1.61	clear, colorless, septic odor
ESI-3	12/16/08	0-3	Pre-purge to clear sediment									very cloudy, brown-gray
Volume = 0.9 gal.		1	6.68	0.920	11.2	280	1.54	6.54	91			cloudy, brown
		2	6.62	0.981	11.2	31		6.22	87			clearing
Purge: peristaltic pump		3	6.61	1.260	11.3	0		6.15	86			clear, colorless
existing tubing		4	6.63	1.270	11.3	0		6.30	85			clear, colorless
		5	6.63	1.280	11.3	0		6.48	86			
Sample: new teflon bailer			Samples collected		Blind Duplicate sample collected					0.82	0.49	clear, colorless
ESI-7	12/16/08	0-1	Pre-purge to clear sediment									cloudy, brown
Volume = 0.95 gal.		1	6.61	1.530	12.1	140		7.6	130			sl. Cloudy, lt. Brown
Purge: peristaltic pump		2	6.52	1.450	12.0	27		7.89	147			clear, colorless
existing tubing		3	6.51	1.350	12.0	0		8.47	151			clear, colorless
		4	6.49	1.320	12.0	0		8.49	153			clear, colorless
Sample: existing small diameter bailer			Samples collected							0.13	0.05	clear, colorless
ESI-10	12/15/08	0-0.5	Pre-purge to clear sediment									cloudy, gray
Volume = 0.96 gal.		1	6.60	0.940	14.5	20	1.54	1.47	13			clear, colorless
Purge: peristaltic pump		2	6.45	0.922	14.5	0		0.53	12			
existing tubing		3	6.32	0.934	14.5	0		0.15	11			clear, colorless
		4	6.30	0.932	14.5	0		0.09	11			clear, colorless
Sample: existing bailer			Samples collected		MS/MSD at this location					1.29	0.55	clear, colorless

TABLE 2

FIELD PARAMETER SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Well ID	Date	Gallons	pH (s.u.)	Specific Conductance (mS/cm)	Temp. (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Total Iron (mg/L)	Ferrous Iron (mg/L)	Comments
ESI-11	12/15/08	0-0.5	Pre-purge to clear sediment									cloudy, brown
Volume = 1.12 gal.		1	6.58	0.858	14.7	71		0.91	-57			sl. cloudy, brown
Purge: peristaltic pump		2	6.53	0.853	14.7	31		0.5	-61			sl. cloudy, brown
existing tubing		3	6.50	0.842	14.7	9		0.34	-64			clear, colorless
		4	6.49	0.851	14.7	2		0.13	-68			clear, colorless
Sample: existing bailer			Samples collected							4.24	1.84	clear, colorless
ESI-12	12/15/08	0-1	Pre-purge to clear sediment									cloudy, brown
Volume = 1.05 gal.		1	6.81	0.608	14.9	70		na	90			clearing
Purge: peristaltic pump		2	6.70	0.774	15.0	20		na	102			
existing tubing		3	6.67	0.786	15.0	8		na	107			clear, colorless
		4	6.62	0.793	15.0	8		na	111			clear, colorless
								air bubbles in flow stream				
Sample: existing bailer			Samples collected							0.32	0.06	clear, colorless
ESI-13R	12/15/08	0-1	Pre-purge to clear sediment									cloudy, brown-gray
Volume = 1.3 gal.		1.3	6.84	1.430	12.8	70	1.54	3.99	50			sl. cloudy, lt. brown
Purge: peristaltic pump		2.6	6.74	1.420	12.8	0		3.73	56			clearing
existing tubing		3.9	6.65	1.420	12.8	0		3.63	63			
		5.2	6.57	1.420	12.8	0		3.57	70			clear, colorless
Sample: existing bailer			Samples collected							0.36	0.18	clear, colorless
PW-1	12/15/08	25	6.19	1.290	11.6	31.0	1.54	6.12	76			cloudy, brown
Volume = 25 gal.		50	6.47	1.300	11.7	0.0		5.51	74			sl. cloudy, lt. brown, clearing
Purge: whale pump		80	6.53	1.300	11.7	0.0		5.2	75			clear, colorless
existing tubing												
Sample: existing bailer			Samples collected							0.51	0.15	clear, colorless

TABLE 2

FIELD PARAMETER SUMMARY 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Well ID	*Date*	*Gallons*	*pH (s.u.)*	*Specific Conductance (mS/cm)*	*Temp. (°C)*	*Turbidity (NTU)*	*Dissolved Oxygen (mg/L)*	*Dissolved Oxygen (mg/L)*	*Oxidation Reduction Potential (mV)*	*Total Iron (mg/L)*	*Ferrous Iron (mg/L)*	*Comments*
PW-2	12/15/08	20	6.86	0.909	12.1	171	1.54	0.72	-139			cloudy, gray-brown, sour odor
Volume = 21 gal.		40	6.92	0.980	12.3	75	1.54	0.59	-144			clearing, sour odor
Purge: whale pump		65	6.96	1.021	12.3	69		0.54	-151			sl. cloudy, lt. gray, sour odor
existing tubing												
Sample: existing bailer			Samples collected							4.64	3.11	sl. cloudy, lt. Brown-gray, few sediments
PW-3R	12/16/08	25	5.40	2.250	9.9	999		2.99	-2			slight milky white color, sour odor
volume = 43.5 gal.		50	5.46	2.070	9.4	999		1.73	-25			milky white, septic odor, oily blebs on water
Purge: Whale pump		75	5.49	2.260	9.6	999		2.02	-37			milky white, septic odor, oily blebs on water
low rate, existing tubing												
												removed congealed "crisco" layer on water surface prior to pumping
Sample: new teflon bailer			samples collected							---	---	too opaque for valid iron readings
Chadakoin Creek	12/16/08		7.40	0.297	0.4	11		16.88	58	0.3	0.14	clear, colorless
		collected directly into sample containers										creek very high and fast

Notes:

mV	Millivolts
mS/cm.	Milliseimens per centimeter
s.u.	Standard Unit.
mg/L	Milligrams/Liter.
999	Reading exceeds maximum range of meter

TABLE 3

GROUNDWATER ELEVATIONS 2008
FORMER DOWCRAFT SITE
JAMESTOWN, NEW YORK

Well	Top of Casing Elevation (Ft. AMSL)	Depth to Water October 25, 2005 (Ft. BTOC)	Water Elevation October 25, 2005 (Ft. AMSL)	Depth to Water 28-Nov-06 (Ft. BTOC)	Water Elevation 28-Nov-06 (Ft. AMSL)	Depth to Water 13-Sep-07 (Ft. BTOC)	Water Elevation 13-Sep-07 (Ft. AMSL)	Depth to Water 11-Dec-07 (Ft. BTOC)	Water Elevation 11-Dec-07 (Ft. AMSL)	Depth to Water 4-Sep-08 (Ft. BTOC)	Water Elevation 4-Sep-08 (Ft. AMSL)	Depth to Water 15-Dec-08 (Ft. BTOC)	Water Elevation 15-Dec-08 (Ft. AMSL)
ESI-1	1264.17	8.93	1255.24	7.71	1256.46	9.65	1254.52	7.30	1256.87	9.88	1254.29	6.90	1257.27
ESI-2	1264.60	9.15	1255.45	8.04	1256.56	9.98	1254.62	7.72	1256.88	10.25	1254.35	7.50	1257.1
ESI-2D	1264.53	9.10	1255.43	NM		NM							
ESI-3	1264.89	9.42	1255.47	8.17	1256.72	9.95	1254.94	7.86	1257.03	10.04	1254.85	7.62	1257.27
ESI-4	1265.06	9.61	1255.45	8.29	1256.77	10.15	1254.91	8.02	1257.04	10.43	1254.63	7.75	1257.31
ESI-5	1264.80	8.84	1255.96	7.7	1257.1	9.34	1255.46	7.46	1257.34	9.58	1255.22	7.17	1257.63
ESI-6	1264.66	9.37	1255.29	8.12	1256.54	9.93	1254.73	7.82	1256.84	10.22	1254.44	NA	
ESI-7	1264.93	CNL		8.31	1256.62	10.13	1254.8	8.01	1256.92	10.46	1254.47	7.67	1257.26
ESI-8	1268.25	12.32	1255.93	11.25	1257	12.88	1255.37	10.92	1257.33	13.44	1254.81	9.57	1258.68
ESI-9	1265.99	8.01	1257.98	7.13	1258.86	8.06	1257.93	6.95	1259.04	8.44	1257.55	NA	
ESI-10	1265.08	10.07	1255.01	8.82	1256.26	10.86	1254.22	8.56	1256.52	10.98	1254.1	8.14	1256.94
MW/ESI-10D	1265.17	10.12	1255.05	NM		NM							
ESI-11	1265.09	9.98	1255.11	8.75	1256.34	10.74	1254.35	8.37	1256.72	10.93	1254.16	8.03	1257.06
ESI-12	1264.95	9.70	1255.25	8.45	1256.5	10.48	1254.47	8.16	1256.79	10.63	1254.32	7.74	1257.21
MW/ESI-12D	1264.67	9.40	1255.27	NM		NM							
ESI-13				NM		NM							
ESI-13R	1263.31	8.32	1254.99	6.99	1256.32	8.98	1254.33	6.71	1256.6	9.21	1254.1	9.21	1254.1
ESI-14	1262.58	7.60	1254.98	6.48	1256.1	8.21	1254.37	6.20	1256.38	8.53	1254.05	5.65	1256.93
MW/ESI-15	1265.31	CNL		NM		NM							
MW/ESI-16	1263.40	8.51	1254.89	NM		NM							
PW-1	1264.60	9.31	1255.29	8.02	1256.58	9.9	1254.7	7.73	1256.87	10.15	1254.45	7.38	1257.22
PW-2	1264.70	9.41	1255.29	8.13	1256.57	9.98	1254.72	7.8	1256.9	10.26	1254.44	7.46	1257.24
PW-3R	1265.04	9.00	1256.04	8.08	1256.96	9.9	1255.14	7.88	1257.16	10.42	1254.62	7.38	1257.66
IBH-1	1264.98	CNL		NM		NM							
IBH-2	1265.00	9.43	1255.57	NM		NM							
IBH-3	1265.14	CNL		NM		NM							
IBH-4	1265.07	CNL		NM		NM							
IBH-5	1265.13	CNL		NM		NM							
RIVER BM	1264.92	7.18	1257.74	6.25	1258.67	7.85	1257.07	6.1	1258.82	7.85	1257.07	5.95	1258.97
River - USGS	1256.41			2.42	1258.83	0.63	1257.04	2.61	1259.02	0.61	1257.02	2.76	1259.17
River below dam		Estimatetop of dam at 1257 +/-				1.1	1255.94	0.66	1258.26	2.20	1254.85	(water surface is above dam)	

Notes:

Ft. AMSL	Feet Above Mean Sea Level.	
Ft. BTOC	Feet Below Top of Casing.	
NA	Not Applicable.	
NM	Not Measured.	
CNL	Cannot Locate Well	
Bridge benchmark -	385.446 meter = 1,264.59 feet	
USGS River Staff Gage Datum	1256.41	NAD29
Bridge benchmark by USGS	1264.92	NAD29
Link to USGS	http://waterdata.usgs.gov/nwis/uv?03014500	

APPENDIX A

QA/QC REVIEWS 2008

CONESTOGA-ROVERS & ASSOCIATES

2055 Niagara Falls Blvd., Suite #3
Niagara Falls, New York 14304
Telephone: (716) 297-6150 Fax: (716) 297-2265
www.CRAworld.com

MEMORANDUM

TO: Jim Kay

REF. NO.: 005020

FROM: Kathleen Willy/bjw/18

DATE: October 16, 2008

E-Mail and Hard Copy if Requested

RE: Analytical Results and QA/QC Review
Groundwater Monitoring Program
Dowcraft Corporation
Jamestown, New York
September 2008

INTRODUCTION

Thirteen (13) water samples, including one field duplicate, were collected at the Dowcraft Site (Site) in Jamestown, New York, in September 2008. Samples were submitted to H2M Laboratories, Inc. (H2M) in Melville, New York. A sample key is presented in Table 1 and the analytical parameter list, methodologies, and holding time criteria are presented in Table 2. The analytical results are summarized in Table 3. A copy of the Chain of Custody forms is attached.

The final results and supporting quality assurance/quality control (QA/QC) data were reviewed. Evaluation of the data was based on information obtained from the Chain of Custody forms, finished report forms, blank data, and recovery data from matrix, blank and surrogate spikes. The QA/QC criteria by which the data have been assessed are outlined in the analytical method and the document "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99/008, October 1999.

QA/QC REVIEW

All samples were prepared and analyzed within the method-required holding times. All samples were properly preserved and maintained at 4°C (±2°C).

Method blanks were analyzed with the investigative samples for all parameters. All method blanks were non-detect for the compounds of interest.

All samples, blanks, and QC samples were spiked with surrogate compounds prior to sample analysis in accordance with the organic method. All surrogate spike recoveries met the associated method criteria with the exception of one slightly low VOC surrogate recovery. Sample results have been qualified as estimated (see Table 4).

Trip blanks were collected and transported with the investigative samples for analysis as shown in Table 1. All trip blank results were non-detect indicating that compounds of interest were not introduced to the samples during collection, transportation, storage and/or analysis.

Blank spikes (BS) were prepared and analyzed for all parameters. All recoveries were within the laboratory control limits indicating good analytical accuracy.

A matrix spike/matrix spike duplicate (MS/MSD) was performed on sample WG-5020-0908-KL-003. All recoveries were within laboratory control limits, indicating good analytical accuracy and precision.

A field duplicate sample was collected and analyzed as shown in Table 1. All results showed good field and analytical precision.

CONCLUSION

Based on the preceding data assessment, the data presented in Table 3 were judged to be acceptable with the qualifications noted.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
SEPTEMBER 2008

Sample ID	*Location ID*	*Collection Date (mm/dd/yy)*	*Collection Time (hr:min)*	*Analysis/Parameters VOCs*	*Comments*
WG-5020-0908-KL-001	PW-1	09/04/08	14:45	x	
WG-5020-0908-KL-002	ESI-3	09/04/08	15:40	x	
WG-5020-0908-KL-003	ESI-2	09/04/08	16:00	x	MS/MSD
WG-5020-0908-KL-004	ESI-13R	09/04/08	17:00	x	
WG-5020-0908-KL-005	ESI-7	09/04/08	18:00	x	
WG-5020-0908-KL-006	ESI-12	09/04/08	18:45	x	
WG-5020-0908-KL-007	ESI-11	09/04/08	19:15	x	
WG-5020-0908-KL-008	ESI-10	09/04/08	20:00	x	
WG-5020-0908-KL-009	PW-2	09/05/08	-	x	
WG-5020-0908-KL-010	PW-2	09/05/08	-	x	Field duplicate of sample WG-5020-0908-KL-009
WG-5020-0908-KL-011	ESI-1	09/05/08	12:00	x	
WG-5020-0908-KL-012	PW-3R	09/05/08	13:00	x	
WG-5020-0908-KL-013	River	09/05/08	13:30	x	
Trip blank 5020-1207	Trip Blank	09/04/08	-	x	Trip blank

Notes:
- Not applicable.
MS Matrix Spike.
MSD Matrix Spike Duplicate.
VOCs Volatile Organic Compounds.

TABLE 2

ANALYTE PARAMETER LIST
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
SEPTEMBER 2008

Analytical Parameter	*Method Number*	*Holding Time Criteria*
Volatiles	USEPA 8260B [1]	14 days from collection to analysis (preserved with HCl)

Notes:

(1) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 3rd Edition, November, 1986 (with all subsequent revisions).

USEPA United States Environmental Protection Agency.

TABLE 3

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
SEPTEMBER 2008

Sample Location		*ESI-1*	*ESI-10*	*ESI-11*	*ESI-12*	*ESI-13R*	*ESI-2*	*ESI-3*
Sample Identification		*W-5020-0908-KL-011*	*W-5020-0908-KL-008*	*W-5020-0908-KL-007*	*W-5020-0908-KL-006*	*W-5020-0908-KL-004*	*W-5020-0908-KL-003*	*W-5020-0908-KL-002*
Sample Date		*9/5/2008*	*9/4/2008*	*9/4/2008*	*9/4/2008*	*9/4/2008*	*9/4/2008*	*9/4/2008*
Sample Type								
	Units							
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	µg/L	10 U	10 U	10 U	10 U	10 U	2 J	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane (Methyl Bromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane (Methyl Chloride)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	10 U	78	25	92	26	3700	2 J
cis-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Tert Butyl Ether	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
SEPTEMBER 2008

Sample Location		*ESI-1*	*ESI-10*	*ESI-11*	*ESI-12*	*ESI-13R*	*ESI-2*	*ESI-3*
Sample Identification		*W-5020-0908-KL-011*	*W-5020-0908-KL-008*	*W-5020-0908-KL-007*	*W-5020-0908-KL-006*	*W-5020-0908-KL-004*	*W-5020-0908-KL-003*	*W-5020-0908-KL-002*
Sample Date		*9/5/2008*	*9/4/2008*	*9/4/2008*	*9/4/2008*	*9/4/2008*	*9/4/2008*	*9/4/2008*
Sample Type								
	Units							
Volatile Organic Compounds								
Toluene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	µg/L	10 U	10 U	10 U	10 U	10 U	29	10 U
trans-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	µg/L	7 J	22	4 J	160	23	200 J	13
Trichlorofluoromethane (CFC-11)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	µg/L	10 U	130	76	10 U	10 U	30	10 U
Xylene (total)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Notes:

J Estimated.

U Not detected.

UJ Not detected, estimated reporting limit.

TABLE 3

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
SEPTEMBER 2008

Sample Location		*ESI-7*	*PW-1*	*PW-2*	*PW-2*	*PW-3R*	*River*
Sample Identification		*W-5020-0908-KL-005*	*W-5020-0908-KL-001*	*W-5020-0908-KL-009*	*W-5020-0908-KL-010*	*W-5020-0908-KL-012*	*W-5020-0908-KL-013*
Sample Date		*9/4/2008*	*9/4/2008*	*9/5/2008*	*9/5/2008*	*9/5/2008*	*9/5/2008*
Sample Type					*(Duplicate)*		
	Units						
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,1,2-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,1-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,1-Dichloroethene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,2-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,2-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,2-Dichloropropane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,3-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
1,4-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	10 U	10 U	10 U	10 U	650 J	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Acetone	µg/L	10 U	10 U	10 U	2 J	500 UJ	10 U
Benzene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Bromodichloromethane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Bromoform	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Bromomethane (Methyl Bromide)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Carbon tetrachloride	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Chlorobenzene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Chloroform (Trichloromethane)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Chloromethane (Methyl Chloride)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
cis-1,2-Dichloroethene	µg/L	160	10	750	740	400 J	10 U
cis-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Cyclohexane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Dibromochloromethane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Ethylbenzene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Isopropylbenzene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Methyl cyclohexane	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Methyl Tert Butyl Ether	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Methylene chloride	µg/L	10 U	10 U	10 U	10 U	50 J	10 U
Styrene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Tetrachloroethene	µg/L	2 J	10 U	10 U	10 U	500 UJ	10 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
SEPTEMBER 2008

Sample Location		*ESI-7*	*PW-1*	*PW-2*	*PW-2*	*PW-3R*	*River*
Sample Identification		*W-5020-0908-KL-005*	*W-5020-0908-KL-001*	*W-5020-0908-KL-009*	*W-5020-0908-KL-010*	*W-5020-0908-KL-012*	*W-5020-0908-KL-013*
Sample Date		*9/4/2008*	*9/4/2008*	*9/5/2008*	*9/5/2008*	*9/5/2008*	*9/5/2008*
Sample Type					*(Duplicate)*		
	Units						
Volatile Organic Compounds							
Toluene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
trans-1,2-Dichloroethene	µg/L	3 J	1 J	8 J	8 J	500 UJ	10 U
trans-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Trichloroethene	µg/L	680	76	32	31	5100 J	10 U
Trichlorofluoromethane (CFC-11)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U
Vinyl chloride	µg/L	10 U	10 U	250	250	500 UJ	10 U
Xylene (total)	µg/L	10 U	10 U	10 U	10 U	500 UJ	10 U

Notes:

J	Estimated.
U	Not detected.
UJ	Not detected, estimated reporting limit.

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING SURROGATE RECOVERIES
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
SEPTEMBER 2008

Parameter	*Surrogate*	*Surrogate Recovery (percent)*	*Control Limits (percent)*	*Sample ID*	*Analytes*	*Qualified Sample Results*	*Units*
VOCs	4-Bromofluorobenzene	62	63 - 140	W-5020-0908-KL-012	cis-1,2-Dichloroethene	400 *	µg/L
					Methylene chloride	50 *	µg/L
					2-Butanone	650 J	µg/L
					Trichloroethene	5100 J	µg/L
					all non-detect VOCs	500 UJ	µg/L

Notes
* Value previously qualified as estimated by the laboratory.
VOCs Volatile Organic Compounds.

CONESTOGA-ROVERS & ASSOCIATES

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MEMORANDUM

TO: Jim Kay

REF. NO.: 005020

FROM: Sheri Finn/bjw/19

DATE: February 4, 2009

E-Mail and Hard Copy if Requested

RE: **Analytical Results and QA/QC Review**
Groundwater Monitoring Program
Dowcraft Corporation
Jamestown, New York
December 2008

INTRODUCTION

Thirteen (13) water samples, including one field duplicate, were collected at the Dowcraft Site (Site) in Jamestown, New York, in December 2008. Samples were submitted to H2M Laboratories, Inc. (H2M) in Melville, New York. A sample key is presented in Table 1 and the analytical parameter list, methodologies, and holding time criteria are presented in Table 2. The analytical results are summarized in Table 3. A copy of the Chain of Custody forms is attached.

The final results and supporting quality assurance/quality control (QA/QC) data were reviewed. Evaluation of the data was based on information obtained from the Chain of Custody forms, finished report forms, blank data, and recovery data from matrix, blank and surrogate spikes. The QA/QC criteria by which the data have been assessed are outlined in the analytical method and the document "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99/008, October 1999.

QA/QC REVIEW

All samples were prepared and analyzed within the method-required holding times. All samples were properly preserved and maintained at 4°C (±2°C).

Method blanks were analyzed with the investigative samples for all parameters. All method blanks were non-detect for the compounds of interest.

All samples, blanks, and QC samples were spiked with surrogate compounds prior to sample analysis in accordance with the organic method. All surrogate spike recoveries met the associated method criteria .

Trip blanks were collected and transported with the investigative samples for analysis as shown in Table 1. All trip blank results were non-detect indicating that compounds of interest were not introduced to the samples during collection, transportation, storage and/or analysis.

Blank spikes (BS) were prepared and analyzed for all parameters. All recoveries were within the laboratory control limits indicating good analytical accuracy with the exception of a high bromoform recovery. The associated sample results were non-detect and would not have been impacted by the implied high bias.

A matrix spike/matrix spike duplicate (MS/MSD) was performed on sample WG-5020-1208-KL-006. All recoveries were within laboratory control limits, indicating good analytical accuracy and precision.

A field duplicate sample was collected and analyzed as shown in Table 1. All results showed good field and analytical precision.

CONCLUSION

Based on the preceding data assessment, the data presented in Table 3 were judged to be acceptable with out qualification.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
DECEMBER 2008

Sample ID	*Location ID*	*Collection Date (mm/dd/yy)*	*Collection Time (hr:min)*	*Analysis/Parameters VOCs*	*Comments*
WG-5020-1208-KL-001	PW-1	12/15/08	15:15	x	
WG-5020-1208-KL-002	PW-2	12/15/08	16:15	x	
WG-5020-1208-KL-003	ESI-13R	12/15/08	17:30	x	
WG-5020-1208-KL-004	ESI-12	12/15/08	18:20	x	
WG-5020-1208-KL-005	ESI-11	12/15/08	19:00	x	
WG-5020-1208-KL-006	ESI-10	12/15/08	19:40	x	MS/MSD
WG-5020-1208-KL-007	ESI-1	12/16/08	9:40	x	
WG-5020-1208-KL-008	ESI-7	12/16/08	10:20	x	
WG-5020-1208-KL-009	ESI-3	12/16/08	11:10	x	
WG-5020-1208-KL-010	ESI-3	12/16/08	13:00	x	Field Duplicate of 009
WG-5020-1208-KL-011	ESI-2	12/16/08	12:00	x	
WG-5020-1208-KL-012	Creek	12/16/08	12:30	x	
WG-5020-1208-KL-013	PW-3R	12/16/08	14:30	x	
TB 5020-1208-001	Trip Blank	12/15/08	--	x	

Notes:
- Not applicable.
MS Matrix Spike.
MSD Matrix Spike Duplicate.
VOCs Volatile Organic Compounds.

TABLE 2

ANALYTE PARAMETER LIST
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
DECEMBER 2008

Analytical Parameter	*Method Number*	*Holding Time Criteria*
Volatiles	USEPA 8260B [1]	14 days from collection to analysis (preserved with HCl)

Notes:

(1) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 3rd Edition, November, 1986 (with all subsequent revisions).

USEPA United States Environmental Protection Agency.

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
DECEMBER 2008

Parameters	*Units*	*Sample Location:* *ESI-10* *Sample Id:* *WG-5020-1208-KL-006* *Sample Date:* *12/15/2008*	*ESI-11* *WG-5020-1208-KL-005* *12/15/2008*	*ESI-12* *WG-5020-1208-KL-004* *12/15/2008*	*ESI-13R* *WG-5020-1208-KL-003* *12/15/2008*	*PW-1* *WG-5020-1208-KL-001* *12/15/2008*	*PW-2* *WG-5020-1208-KL-002* *12/15/2008*	*ESI-3* *WG-5020-1208-KL-010* *12/16/2008* *(Duplicate)*
Volatiles								
1,1,1-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U	10 U	10 U	6 J	10 U
Benzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane (Methyl Bromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane (Methyl Chloride)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	480	99	79	14	1 J	400	10 U
cis-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Tert Butyl Ether	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	µg/L	2 J	10 U	10 U	10 U	10 U	6 J	10 U

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
DECEMBER 2008

	Sample Location:	*ESI-10*	*ESI-11*	*ESI-12*	*ESI-13R*	*PW-1*	*PW-2*	*ESI-3*
	Sample Id:	*WG-5020-1208-KL-006*	*WG-5020-1208-KL-005*	*WG-5020-1208-KL-004*	*WG-5020-1208-KL-003*	*WG-5020-1208-KL-001*	*WG-5020-1208-KL-002*	*WG-5020-1208-KL-010*
	Sample Date:	*12/15/2008*	*12/15/2008*	*12/15/2008*	*12/15/2008*	*12/15/2008*	*12/15/2008*	*12/16/2008 (Duplicate)*
Parameters	*Units*							
trans-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Volatiles (Cont'd.)								
Trichloroethene	µg/L	530	64	130	31	13	100	3 J
Trichlorofluoromethane (CFC-11)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	µg/L	58	33	10 U	10 U	10 U	180	10 U
Xylene (total)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
DECEMBER 2008

	Sample Location:	ESI-1	ESI-2	ESI-3	ESI-7	PW-3R	River
	Sample Id:	WG-5020-1208-KL-007	WG-5020-1208-KL-011	WG-5020-1208-KL-009	WG-5020-1208-KL-008	WG-5020-1208-KL-013	WG-5020-1208-KL-012
	Sample Date:	12/16/2008	12/16/2008	12/16/2008	12/16/2008	12/16/2008	12/16/2008
Parameters	*Units*						
Volatiles							
1,1,1-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	µg/L	10 U	10 U	10 U	10 U	5 J	10 U
1,1-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	9 J	10 U
1,1-Dichloroethene	µg/L	10 U	10 U	10 U	10 U	16	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	µg/L	10 U	10 U	10 U	10 U	3 J	10 U
1,2-Dichloropropane	µg/L	10 U	10 U	10 U	10 U	2 J	10 U
1,3-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (Methyl Ethyl Ketone)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	3 J	10 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	10 U	10 U	10 U	10 U	5 J	10 U
Acetone	µg/L	10 U	8 J	10 U	10 U	90	10 U
Benzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane (Methyl Bromide)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	9 J	10 U
Carbon tetrachloride	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform (Trichloromethane)	µg/L	10 U	2 J	10 U	10 U	2 J	10 U
Chloromethane (Methyl Chloride)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	µg/L	10 U	840	10 U	5 J	27000	10 U
cis-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane (CFC-12)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl Tert Butyl Ether	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	µg/L	10 U	10 U	10 U	10 U	4 J	10 U
Styrene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	µg/L	10 U	10 U	10 U	10 U	4 J	10 U
Toluene	µg/L	10 U	10 U	10 U	10 U	3 J	10 U
trans-1,2-Dichloroethene	µg/L	10 U	5 J	10 U	10 U	4000 U	10 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING PROGRAM
DOWCRAFT CORPORATION
JAMESTOWN, NEW YORK
DECEMBER 2008

	Sample Location:	*ESI-1*	*ESI-2*	*ESI-3*	*ESI-7*	*PW-3R*	*River*
	Sample Id:	*WG-5020-1208-KL-007*	*WG-5020-1208-KL-011*	*WG-5020-1208-KL-009*	*WG-5020-1208-KL-008*	*WG-5020-1208-KL-013*	*WG-5020-1208-KL-012*
	Sample Date:	*12/16/2008*	*12/16/2008*	*12/16/2008*	*12/16/2008*	*12/16/2008*	*12/16/2008*
Parameters	*Units*						
trans-1,3-Dichloropropene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Volatiles (Cont'd.)							
Trichloroethene	µg/L	17	110	4 J	31	40000	10 U
Trichlorofluoromethane (CFC-11)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Trifluorotrichloroethane (Freon 113)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	µg/L	10 U	210	10 U	10 U	190	10 U
Xylene (total)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U