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NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

New York State Department of Environmental Conservation – Division of Environmental Remediation

PERIODIC REVIEW REPORT

Gladding Cordage Site

Site Number 7-09-0097

June 2017

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Site Number 7-09-009

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ACRONYMS AND ABBREVIATIONS

EC	Engineering Control
GPM	Gallons per minute
IC	Institutional Control
IRM	Interim Remedial Measure
µg/L	Micrograms per liter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operation and Maintenance
PDB	Passive Diffusion Bag
PLC	Program Logic Controller
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
1,1,1-TCA	1,1,1-trichlorethane
USEPA	United States Environmental Protection Agency
UPS	Uninterrupted Power Supply
SMP	Site Management Plan
SVI	Soil Vapor Intrusion
VOC	Volatile Organic Compound
WA	Work Assignment

1 EXECUTIVE SUMMARY

The New York State Department of Environmental Conservation (NYSDEC) has issued a Work Assignment (WA) (# D007618-9) to Arcadis CE, Inc. (Arcadis) for Operation, Maintenance, and Monitoring at the Gladding Cordage Site (NYSDEC site number 7-09-009) in New York State. This Periodic Review Report (PRR) documents the findings and observations associated with the monitoring program for the Site. The Gladding Cordage Site is the location of a rope and braided products manufacturing facility that was historically the location of unlawful storage and disposal of hazardous wastes. Various investigations beginning in 1984 determined that previous practices at the site resulted in contamination of groundwater, including the Town's municipal water supply well. Responsibility for investigation and cleanup activities became complicated by bankruptcy proceedings for the former owner and sale of the property to a new company. Once the bankruptcy and property transactions were negotiated, remediation activities and removal of waste from the site commenced. Remedial investigations, concluding in 1989, found that groundwater contamination extended off-site and that soil contamination was limited to the site and was a result of previous disposal practices. A Record of Decision (ROD) was issued in 1993 following completion of the Remedial Investigation/Feasibility Study (RI/FS). The objectives of the ROD were to minimize the potential for human exposure to the site-related contaminants; minimize the potential for off-site migration of site-related contaminants; and permanently contain, treat and/or dispose of contaminated media. A groundwater extraction and treatment system was installed in 1997 and operated until 2001. In 2004, NYSDEC resumed operations of the treatment system. Since 2007, the treatment system has operated continuously, with only limited interruptions for routine maintenance and power outages. Influent and post-treatment effluent samples from the treatment plant indicate that the system is effective at treating groundwater extracted from the recovery wells and that the concentrations of volatile organic compounds (VOCs) in the extraction wells has decreased over time. Groundwater sampling data from shallow, intermediate, and deep groundwater monitoring zones indicate that the primary VOC in the groundwater is 1,1,1-trichloroethane (1,1,1-TCA) and that the concentrations of 1,1,1-TCA have generally decreased over time. Currently, there are no recommended changes to the remediation strategy. The Institutional Controls and Engineering Controls (ICs/ECs) are effective in preventing human contact with residual contamination. No changes to the PRR submittal frequency are recommended.

2 SITE OVERVIEW

2.1 Location and Features

The Gladding Cordage Site is located at 110 County Road 13A, South Otselic, in Chenango County (Figure 2-1). The Site is approximately 7.5 acres and includes an active manufacturing facility, a groundwater treatment system (Figure 2-2), and a monitoring well network (Figure 2-3). The Site is currently classified as a Class 4 inactive hazardous waste site.

2.2 Site History and Remediation

The Site, while operating under the Gladding Cordage Company, manufactured braided line and rope using a variety of chemical solvents in the process. In May 1984, NYSDEC determined that Gladding Cordage Company was unlawfully storing and discharging hazardous wastes at the Site. Between 1984 and 1987, Gladding Cordage Company conducted a field investigation and identified that groundwater at the site was contaminated with 1,1,1-TCA; however, the Company did not adequately define the nature and extent of the contamination or agree to implement a State-approved remedial program. The contamination was also detected in the nearby municipal water supply wells. In 1987, Gladding Cordage Company installed a six-inch diameter purge well with an air stripper to treat groundwater extracted from the Site. These actions were taken without NYSDEC approval and were found to be not effective. In April 1987, Gladding Cordage Company filed Chapter 11 petitions in the United States Bankruptcy Court and in July 1987, curtailed operations at the facility (NYSDEC 2013).

Due to the bankruptcy, a responsible party cleanup option became complex. Ownership of the Site following the bankruptcy was also complicated by the contamination issue. While Gladding Cordage Company (previous owner/responsible party) was under Chapter 11 Bankruptcy litigation, Continental Cordage Company (Continental), an affiliate of Gladding Braided Products, was interested in purchasing the property, but did not want to assume the liability for Gladding Cordage Company's environmental practices. The major elements of the purchase agreement included the following (NYSDEC 1987):

- Continental would purchase the property for $160,000, and approximately $80,000 would be payable to the State of New York when the title was transferred.
- Continental would apply for a SPDES permit to discharge sanitary waste only from the new disposal system. No process wastewater would be generated.
- Continental would excavate and properly dispose of the existing septic tanks and leach fields (suspected sources of contamination).
- All existing floor drains and discharge piping would be permanently plugged.

Future resale terms included New York State receiving a percentage of all proceeds after Continental receives its original $160,000 (NYSDEC 1987).

These initial conditions represent the IC/ECs that were initially placed on Site prior to use under the new ownership. Under the State Superfund Standby Program (Work Assignment (WA) No. D002520-20.0), NYSDEC implemented an IRM to remove and dispose of 115 drums of waste.

Since the responsible party was Gladding Cordage Company, rather than Continental/Gladding Braided Products, the remediation needed to be conducted under the New York State Inactive Hazardous Waste Site (Superfund) Program. A RI/FS was conducted between 1988 and 1989. The results indicated that a contaminated groundwater plume extended approximately 2,000 feet down valley from the site and was up to 500 feet wide. Soil contamination was limited to the Site and associated with past disposal practices. There were ingestion risks identified as part of the RI/FS, particularly associated with the groundwater, but installation of a new municipal water supply and the remedial actions (described below) eliminated most risk associated with ingestion (NYSDEC 1993).

The ROD (NYSDEC 1993) was approved shortly after the RI/FS was completed. The remedial actions were guided by the goals of the ROD and are described in Section 3. The remedial action objectives that were identified for the Site according to the ROD (NYSDEC 1993) are:

- Minimize the potential for human exposure to the site-related contaminants
- Minimize the potential for off-site migration of site-related contaminants
- Permanently contain, treat and/or dispose of contaminated media in a manner consistent with State and Federal regulations.

In 2003, Gladding Braided Products was purchased by a new owner. The 2017 Town of Otselic Tax Roll lists Gladding Braided Products, LLC. as the current property owner.

3 REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

The remediation goals in the ROD are as follows:

- Extraction of contaminated groundwater using a groundwater recovery well system with treatment of the contaminated groundwater by an air stripper. The treated water would be discharged to the Otselic River.
    - This method is also in place to aid in controlling the migration of contaminants off-site.
    - The performance of this groundwater treatment system will be evaluated yearly with the goal of removing a significant portion of the contaminant mass.
- Long-term monitoring will be carried out to gauge the effectiveness of the selected alternative and monitor groundwater quality.

The groundwater treatment system for the Site was installed and began operations in the summer of 1995. The system ran until approximately 1997, but was not in continuous operation during this interval due to problems with various aspects of the system. In 1997, the system was shut down completely and remained idle until discussions began in the 2001-2002 timeframe to repair and restart the system (NYSDEC 2001, 2002). The system was repaired and restarted and operated by NYSDEC in 2004 (NYSDEC 2004).

From April 2007 to present, site operations have been performed by Arcadis on behalf of the NYSDEC. The quarterly O&M Reports indicate that the system has operated continuously from April 2007 until present except for minor shutdowns for routine maintenance, power outages, and/or system upgrades.

In December 2012, a soil vapor intrusion (SVI) evaluation was performed at the site, including two off-site buildings. Results of the investigation were presented to NYSDEC and New York State Department of Health (NYSDOH). Based on the results of the investigation, no further action for vapor intrusion was requested by NYSDEC or NYSDOH.

Based on the current Site Management Plan, including inspections and groundwater monitoring, it appears that the Selected Remedies specified in the ROD have been performing as they were intended. In addition, the IC/ECs are functioning properly to mitigate exposure pathways that may have been present. In accordance with the ROD, groundwater is being extracted and treated, with extraction wells controlling the down-gradient migration of contaminants. Since the last PRR in 2014, the system has steadily removed contaminant mass at a rate between six and seven pounds of VOCs per year. Groundwater samples have been collected on a five-quarter basis since 2007. Based on groundwater data (discussed further in Section 5), the concentrations of VOCs have generally decreased across the site.

4 OPERATION AND MAINTENANCE

On August 23, 2007, NYSDEC provided a training session to Arcadis personnel on the operation and maintenance (O&M) of the groundwater treatment plant at the Gladding Cordage Site. Since then, Arcadis has maintained operation of the groundwater treatment plant. This includes the operation, maintenance, and influent/effluent sampling in accordance with the SMP (Site Management Plan) and NYSDEC O&M manual (Operation and Maintenance Manual, Volume I, Gladding Cordage Site, Site 7-09-009, TAMS Consultants, Inc., 1996) (O&M Manual).

O&M inspections were conducted monthly from January 2014 through March 2017and include the following inspections:

- Treatment system operation
- System components and parameters, including recovery well flow and pressure, air stripper pressures and air stripper blower motor operating frequency, General building/Site conditions

The O&M checklists for the 2014 through first quarter 2017 inspections are presented in Appendix A. Photos of each well and site features are presented in Appendix B.

4.1 Treatment System Operations

Treatment system operations were evaluated to verify that the overall system was functioning properly and that alarms that were triggered did not indicate a more significant issue. As an example, a power failure is a common trigger of an alarm that requires a system restart when power returns.

The most recent inspection during 2017 indicated systems were operating as they should and no alarms were noted. Appendix A presents the completed O&M checklists from January 2014 through March 2017. As shown in Appendix A, the only alarms generated from 2014- first quarter 2017 were related to power interruptions. Following indication of the alarm condition, the system was restarted and normal operation resumed.

From 2014 through the first quarter 2017, system downtime was directly related to power outages that caused the system to shut off for varying amounts of time. In 2014, the system ran for approximately 72% of the year. The lower percentage of on-time was related to a defective uninterrupted power supply (UPS) that was replaced following the first quarter 2014 operating period. The faulty UPS caused communications difficulties with the PLC. After the UPS was replaced, the system operated for approximately 80% of the remainder of the year, with system down-time directly related to power outages. In 2015, the system ran approximately 95% of the year, and in 2016, the system ran approximately 88% of the year. So far in 2017, the system has run 99% of the time.

A summary of the flow rates and volumes for the treatment system is presented in Table 4-1. Based on the monthly recovery well data, the average flow rate from RW-1 and RW-2 since 2014 has been approximately 23 gallons per minute (GPM).

4.2 System Component Inspections

As part of the O&M inspections, the various components of the treatment system (recovery wells, air stripper, air stripper blower, and groundwater source heat pump) are individually inspected to assess changes in operation.

Results from the 2014 through first quarter 2017 inspections are presented in Appendix A. As shown in Appendix A, only routine maintenance and repairs were performed on system components. A summary of the maintenance and repairs is provided below:

- During the March 17th, 2014 inspection, Arcadis personnel installed a new motor contactor/starter for the heat pump compressor and heat pump operation was restored.
- On April 23rd, 2014, a new UPS was installed to replace the previous UPS, which contained a faulty battery and caused frequent loss of communications with the PLC.
- During the January 2015 inspection, a defective pressure sensor for the heat pump was replaced and later tested with no faults reported.
- During the March 2015 inspection, the system was shut down to evaluate a noise in the air stripper blower motor. The grease passages in the motor were cleaned and new grease was applied, the system restarted with no issues.
- On September 23rd, 2015, the system was shutdown to clean the air stripper to eliminate low-level detections of VOCs in effluent samples from the treatment system. The system was restarted the same day.
- All other inspections performed between 2014 and the first quarter 2017 indicated that no major issues were identified with the performance and/or operation of the treatment system.

4.3 General Building/Site Inspection

The Site area, including the state of the facility buildings, is inspected on a monthly basis for general maintenance and up-keep of the grounds around the treatment system.

Results from the 2014 through first quarter 2017 inspections are presented in Appendix A. The Site was observed to be well-kept and the grounds appeared to have been maintained during all inspections.

5 GROUNDWATER MONITORING PROGRAM

Groundwater sampling was conducted to provide information on groundwater quality, monitor potential contaminant migration in the groundwater at the site, and assess hydrogeologic site conditions, including groundwater flow direction. Groundwater monitoring well locations are shown on Figure 2-3. Groundwater sampling is completed on a five-quarter basis. The most recent sampling event was performed on September 30th, 2016. The recovery wells (influent to the treatment plant) and post-treatment effluent are sampled monthly.

5.1 Groundwater Monitoring Well Inspection

The integrity of each well is inspected to evaluate the integrity and suitability for groundwater monitoring and water levels. Each well was identified as being in acceptable condition during the 2014 through first quarter 2017 visits and no repairs were required.

5.2 Water Level Survey

Water levels were measured to the nearest hundredth of a foot during each groundwater monitoring event. Table 5-1 summarizes the groundwater elevations measured during the September 2016 sampling event for the monitoring wells. Table 5-2 summarizes the groundwater elevations measured at the recovery wells during the September 2016 visit. The groundwater elevations were compiled and a potentiometric surface map was created for the shallow (Figure 5-1), intermediate (Figure 5-2), and deep (Figure 5-3) groundwater monitoring intervals.

5.3 Groundwater Sampling

Groundwater samples were collected from 21 groundwater monitoring wells (TW-3S, TW-3I, TW-3D, TW-4I, TW-5S, TW-5I, TW-5D, TW-6S, TW-6I, TW-6D, TW-7S, TW-7I, TW-7D, TW-9I, TW-9D, TW-12I, TW-12D, TW-14S, TW-14I, TW-14D, and TW-15) using passive diffusion bags (PDBs). During the most recent sampling event, PDBs were deployed on September 12, 2016 and samples collected on September 30, 2016.

Groundwater samples were sent to Con-test Analytical Laboratory in East Longmeadow, Massachusetts by chain-of-custody procedures and analyzed for Volatile Organic Compounds (VOCs) by USEPA Method 624.

5.3.1 Groundwater Sampling Results

Groundwater sample results from the 2016 Site visit are summarized in Table 5-3 with available historical analytical results. The following subsections present a summary of the third quarter 2016 analytical results by sample interval.

5.3.1.1 Shallow Groundwater Monitoring Zone

As shown in Table 5-3, VOCs were detected at concentrations greater than the corresponding NYSDEC Class GA Standards in three of the five groundwater samples collected from the shallow groundwater monitoring network. The 1,1,1-TCA results from groundwater samples collected at TW-5S (7.1 µg/L), TW-

7S (6.6 µg/L) and TW-14S (50 µg/L) exceeded the NYSDEC Class GA Standard of 5 µg/L. VOCs were not detected at concentrations greater than the corresponding NYSDEC Class GA Standards in any other groundwater samples collected from the shallow monitoring zone.

Overall, the shallow concentrations of 1,1,1-TCA have been relatively consistent since the earliest results in 2007. Wells with 1,1,1-TCA concentrations historically greater than the NYSDEC Class GA Standard still show concentrations above the NYSDEC Standard in the most recent sampling event.

5.3.1.2 Intermediate Groundwater Monitoring Zone

Table 5-3 shows that the concentrations of 1,1,1-TCA in groundwater samples collected from intermediate groundwater monitoring wells TW-14I (65 µg/L), TW-4I (20 µg/L), and TW-15 (14 µg/L) were greater than the applicable NYSDEC Class GA Standard of 5 µg/L. Also, the concentration of benzene from TW-5I (1.2 µg/L), TW-6I (2.5 µg/L), and TW-15 (1.3 µg/L) exceeded the NYSDEC Class GA Standard of 1 µg/L.

The sample TW-X was collected from monitoring well TW-15 and submitted as a field duplicate in the 2016 sampling event. As shown in Table 5-3, the concentrations of 1,1,1-TCA are the same in the TW-15 (14 µg/L) sample as the duplicate (14 µg/L).

No other VOCs were detected in groundwater samples from intermediate monitoring wells at concentrations greater than the applicable NYSDEC Class GA Standards

Monitoring well results with 1,1,1-TCA concentrations greater than 50 µg/L in 2007 have shown a decline since 2009. This may indicate that control over the source contamination at the facility and that the treatment system is resulting in decreasing concentrations for 1,1,1-TCA in the intermediate zone near the TW-15, TW-5I, and TW-14I locations. Though there may be occasional increases in VOC detections in samples collected from these wells, the overall general trend for concentrations of 1,1,1-TCA is decreasing compared to past results. These intermediate wells are located near RW-2, indicating that this well is proving effective at controlling contaminant distribution in areas adjacent to the well.

5.3.1.3 Deep Groundwater Monitoring Zone

As shown in Table 5-3, the concentration of 1,1,1-TCA exceeded the corresponding NYSDEC Class GA Standard of 5 µg/L in the groundwater samples collected from deep monitoring well TW-14D (6.5 µg/L). However, the result of the September 2016 sampling event (6.5 µg/L) is the lowest detection in TW-14D since June 2009 and second lowest detection overall.

No other VOCs were detected in groundwater samples collected from the deep monitoring wells at concentrations greater than the applicable NYSDEC Class GA Standards

The deep monitoring zone has had fluctuating concentrations since 2007, typically less than 50 µg/L, except for the October 2013 sample from TW-14D (56 µg/L).

5.3.1.4 Recovery Wells and Effluent

Tables 5-4 and 5-5 present the 2016 VOC results for RW-1 and RW-2, respectively. The most commonly detected VOC was 1,1,1-TCA. In 2016, the average concentrations of 1,1,1-TCA were 36 µg/L and 31 µg/L for RW-1 and RW-2, respectively.

Table 5-6 presents the effluent 2016 VOC results. All VOC constituents, including 1,1,1-TCA did not exceed the NYSDEC Class GA Standards for these samples.

6 OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Based on inspections completed in 2014 through first quarter 2017, the groundwater recovery wells and treatment system are performing as designed. Groundwater monitoring wells are in acceptable condition and allow for the sampling and characterization of groundwater quality.

Treatment system analytical results from 2016 indicate that the recovery wells are extracting groundwater with a concentration of 1,1,1-TCA of approximately 34 µg/L (on average). The treatment system consistently discharges effluent that is either non-detect for VOCs or at concentrations less than the applicable NYSDEC Standards. The monitoring well results indicate that the 1,1,1-TCA concentrations are at concentrations consistent with past results, with some areas showing indications of decreasing concentrations.

6.2 Recommendations

No changes to the monitoring plan are recommended at this time. ICs/ECs are effective in preventing human contact with residual contamination. No changes to the PRR submittal frequency are recommended.

A Site Management Plan (SMP) is in development to document the required inspections and requirements for this Site to provide to current and future owners of the property.

7 SUMMARY AND CERTIFICATION

O&M activities were conducted monthly from 2014 through March 2017, with groundwater monitoring samples collected during the May 8, 2015 and September 30, 2016 site visits. The treatment system is functioning as designed and the overall facility condition, along with the state of monitoring and recovery wells, is acceptable. Contaminant concentrations fluctuate, but in general are either consistent with past results or have decreased slightly over time.

Based on the remediation objectives specified in the ROD, the treatment system is performing as intended and minimizing the potential for off-site migration of, and exposure to, contaminated groundwater.

The completed NYSDEC IC/EC certification is provided as Appendix C.

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TABLES

TABLE 4-1
TREATMENT SYSTEM STATUS AND FLOW SUMMARY
GLADDING CORDAGE SITE
SOUTH OTSELIC, NEW YORK
NYSDEC SITE NO. 7-04-009A

Date	System Operation (days)	System On-time (% of possible days)	Well On-time RW-1 (% possible)	Well On-time RW-2 (% possible)	Flow Rates RW-1 (gpm)	Flow Rates RW-2 (gpm)	Totalizer RW-1 (gallons)	Totalizer RW-2 (gallons)	Recovery Well Total Flows RW-1 (gallons)	Recovery Well Total Flows RW-2 (gallons)	Total System Flow (gallons)	Quarterly Totals (gallons)
January-14	12	39%	100%	100%	22.2	22.9	18,507,983	16,012,662	375,802	387,909	763,711	
February-14	14	50%	100%	100%	21.8	22.7	18,881,664	16,397,973	373,681	385,311	758,992	2,680,630
March-14	17	55%	100%	100%	22.2	23.2	19,447,410	16,990,154	565,746	592,181	1,157,927	
April-14	15	50%	100%	100%	21.7	23.2	19,914,906	17,482,200	467,496	492,046	959,542	
May-14	31	99%	100%	100%	21.8	22.5	20,883,319	18,490,607	968,413	1,008,407	1,976,820	4,810,632
June-14	29	97%	100%	100%	21.4	21.6	21,800,646	19,447,550	917,327	956,943	1,874,270	
July-14	24	77%	100%	100%	22.5	22.6	22,568,327	20,221,473	767,681	773,923	1,541,604	
August-14	17	55%	100%	100%	22.2	22.5	23,152,553	20,797,422	584,226	575,949	1,160,175	4,053,935
September-14	21	70%	100%	100%	22.5	22.8	23,822,623	21,479,508	670,070	682,086	1,352,156	
October-14	31	100%	100%	100%	22.4	23.0	24,817,777	22,505,592	995,154	1,026,084	2,021,238	
November-14	27	90%	100%	100%	21.9	22.6	25,671,847	23,393,737	854,070	888,145	1,742,215	5,312,917
December-14	24	77%	100%	100%	24.4	22.9	26,465,671	24,149,377	793,824	755,640	1,549,464	
January-15	30	97%	100%	100%	23.8	22.3	27,482,764	25,089,994	1,017,093	940,617	1,957,710	
February-15	27	96%	100%	100%	21.3	24.1	28,457,483	25,964,709	974,719	874,715	1,849,434	5,839,875
March-15	31	100%	100%	100%	21.7	23.9	29,512,439	26,942,484	1,054,956	977,775	2,032,731	
April-15	30	100%	100%	100%	23.9	21.6	30,572,172	27,868,651	1,059,733	926,167	1,985,900	
May-15	26	84%	100%	100%	23.6	21.1	31,474,040	28,682,253	901,868	813,602	1,715,470	5,125,831
June-15	20	67%	100%	100%	25.3	21.8	32,221,714	29,359,040	747,674	676,787	1,424,461	
July-15	31	100%	100%	100%	25.3	22.3	33,390,538	30,373,435	1,168,824	1,014,395	2,183,219	
August-15	31	100%	100%	100%	24.8	22.0	34,478,269	31,320,491	1,087,731	947,056	2,034,787	6,202,519
September-15	30	100%	100%	100%	25.0	21.5	35,532,694	32,250,579	1,054,425	930,088	1,984,513	
October-15	31	100%	100%	100%	21.5	21.1	36,367,830	33,094,600	835,136	844,021	1,679,157	
November-15	30	100%	100%	100%	21.6	22.0	37,244,398	33,967,175	876,568	872,575	1,749,143	5,374,028
December-15	31	100%	100%	100%	21.9	22.0	38,220,025	34,937,276	975,627	970,101	1,945,728	
Total Flow 2014									**8,333,490**	**8,524,624**	**16,858,114**	
Total Flow 2015									**11,754,354**	**10,787,899**	**22,542,253**	

Notes:
gpm - Gallons per minute

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January-16	29	94%	100%	100%	20.7	22.1	39,095,592	35,850,122	875,567	912,846	1,788,413	
February-16	29	100%	100%	100%	21.9	22.2	39,988,542	36,759,764	892,950	909,642	1,802,592	5,501,623
March-16	31	100%	100%	100%	20.6	21.4	40,931,049	37,727,875	942,507	968,111	1,910,618	
April-16	29	97%	100%	100%	21.1	21.2	41,816,850	38,633,091	885,801	905,216	1,791,017	
May-16	29	94%	100%	100%	21.9	21.1	42,727,616	39,534,066	910,766	900,975	1,811,741	5,088,795
June-16	23	77%	100%	100%	24.9	21.6	43,515,441	40,232,278	787,825	698,212	1,486,037	
July-16	26	84%	100%	100%	25.1	22.6	44,489,448	41,120,013	974,007	887,735	1,861,742	
August-16	25	81%	100%	100%	25.8	23.2	45,398,795	41,958,714	909,347	838,701	1,748,048	5,592,798
September-16	28	93%	100%	100%	25.6	23.7	46,429,587	42,910,930	1,030,792	952,216	1,983,008	
October-16	28	90%	100%	100%	25.2	23.8	47,490,153	43,894,225	1,060,566	983,295	2,043,861	
November-16	19	63%	100%	100%	25.8	23.6	48,297,839	44,642,649	807,686	748,424	1,556,110	5,348,351
December-16	26	84%	100%	100%	25.7	24.0	49,198,978	45,489,890	901,139	847,241	1,748,380	
January-17	31	100%	100%	100%	25.7	23.7	50,412,604	46,629,621	1,213,626	1,139,731	2,353,357	
February-17	28	100%	100%	100%	25.5	23.6	51,438,294	47,591,095	1,025,690	961,474	1,987,164	6,229,301
March-17	30	97%	100%	100%	25.4	23.7	52,415,109	48,503,060	976,815	911,965	1,888,780	
Total Flow 2016									**10,978,953**	**10,552,614**	**21,531,567**	
Total Flow 2017									**3,216,131**	**3,013,170**	**6,229,301**	

Notes:
gpm - Gallons per minute

Table 5-1
GROUNDWATER MONITORING WELL WATER LEVEL DATA
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC SITE No. 7-09-009

Well ID	Monitored Interval	Measuring Point Elevation [1] (feet)	10/15/2013		4/21/2015		9/12/2016	
			DTW (feet)	Elevation (feet amsl)	DTW (feet)	Elevation (feet amsl)	DTW (feet)	Elevation (feet amsl)
TW-1	Shallow	1212.71 [4]	7.29	1205.42	5.47	1207.24	7.84	1204.87
TW-2S	Shallow	1212.57 [4]	8.22	1204.35	6.31	1206.26	8.70	1203.87
TW-2I	Intermediate	1212.16 [4]	7.84	1204.32	6.03	1206.13	8.41	1203.75
TW-2D	Deep	1212.26 [4]	7.93	1204.33	6.08	1206.18	8.52	1203.74
TW-3S	Shallow	1213.60	9.40	1204.2	7.83	1205.77	10.11	1203.49
TW-3I	Intermediate	1213.19	8.75	1204.44	8.59	1204.60	9.40	1203.79
TW-3D	Deep	1213.47	9.05	1204.42	7.33	1206.14	9.67	1203.80
TW-4I	Intermediate	1209.96 [2]	5.65	1204.31	5.01	1204.95	7.29	1202.67
TW-5S	Shallow	1211.78	7.60	1204.18	6.04	1205.74	8.37	1203.41
TW-5I	Intermediate	1211.89	8.90	1202.99	6.36	1205.53	8.78	1203.11
TW-5D	Deep	1212.55	8.75	1203.8	7.26	1205.29	9.65	1202.90
TW-6S	Shallow	1210.08 [5]	6.02	1204.06	4.55	1205.53	7.13	1202.95
TW-6I	Intermediate	1210.61 [5]	6.94	1203.67	5.40	1205.21	7.80	1202.81
TW-6D	Deep	1210.36 [5]	6.70	1203.66	5.13	1205.23	7.50	1202.86
TW-7S	Shallow	1213.48	8.70	1204.78	6.88	1206.60	9.35	1204.13
TW-7I	Intermediate	1213.60	9.02	1204.58	7.30	1206.30	9.80	1203.80
TW-7D	Deep	1213.25	8.85	1204.4	7.09	1206.16	9.50	1203.75
TW-9I	Intermediate	1213.75 [4]	9.54	1204.21	7.97	1205.78	10.45	1203.30
TW-9D	Deep	1213.84 [4]	9.93	1203.91	8.30	1205.54	10.79	1203.05
TW-10D	Deep	1209.58 [5]	6.21	1203.37	4.70	1204.88	6.89	1202.69
TW-12I	Intermediate	-	7.10	-	6.09	-	7.66	-
TW-12D	Deep	-	7.13	-	6.03	-	7.68	-
TW-14S	Shallow	1210.05 [2]	6.04	1204.01	4.58	1205.47	6.88	1203.17
TW-14I	Intermediate	1210.17 [2]	6.25	1203.92	5.08	1205.09	7.36	1202.81
TW-14D	Deep	1209.98 [2]	6.26	1203.72	4.70	1205.28	7.13	1202.85
TW-15	Intermediate	1212.94 [2]	9.11	1203.83	4.52	1208.42	9.86	1203.08

Notes:
1 - Measuring point elevations from: Operation and
2 - Based on December 2007 survey referenced from TW-5D.
3 - Elevation calculated from water level pressure transducer reading.
4 - Based on June 2009 survey referenced from TW-3S, 5D, and 6D.
5 - Based on September 2010 survey referenced from TW-4I.

Table 5-2
RECOVERY WELL WATER LEVEL DATA
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC SITE No. 7-09-009

Recovery Well ID	Top of Casing Elevation (ft amsl)	Transducer Cable Length (ft)	Transducer Elevation (ft amsl)	10/29/2013		4/21/2015		9/12/2016	
				Pumping Level (ft above transducer)	Elevation (ft amsl)	Pumping Level (ft above transducer)	Elevation (ft amsl)	Pumping Level (ft above transducer)	Elevation (ft amsl)
RW-1	1209.30	40	1169.30	33.04	1202.34	35.49	1204.79	31.37	1200.67
RW-2	1212.20	65	1147.20	54.94	1202.14	57.46	1204.66	55.36	1202.56

Notes:
Top of casing elevation from: Operation and Maintenance Manual, Volume I, Gladding Cordage Site, TAMS Consulting, Inc., 1996.
ft amsl - feet above mean sea level
Pumping level from instrument control panel reading

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-1 6/25/2009 WATER ug/L	TW-2S 6/25/2009 WATER ug/L	TW-2I 6/25/2009 WATER ug/L	TW-2D 6/25/2009 WATER ug/L	TW-3S 9/6/2007 WATER ug/L	TW-3S 10/17/2008 WATER ug/L	TW-3S 6/25/2009 WATER ug/L	TW-3S 3/23/2010 WATER ug/L	TW-3S 6/21/2011 WATER ug/L	TW-3S 7/24/2012 WATER ug/L	TW-3S 10/29/2013 WATER ug/L	TW-3S 5/6/2015 WATER ug/L	TW-3S 9/30/2016 WATER ug/L	TW-3I 9/6/2007 WATER ug/L	TW-3I 10/17/2008 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	0.4 U	0.4 U	1.4	0.4 U	0.32 U	3.4	0.4 U	**6.2**	4	2	2.9	2	2.1	**9.1**	**6.7**
1,1-Dichloroethane	*	0.36 U	0.36 U	0.36 U	0.36 U	0.38 U	1 U	0.36 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.38 U	1 U
1,1-Dichloroethene	5	0.47 U	0.47 U	0.47 U	0.47 U	0.42 U	1 U	0.47 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.42 U	1 U
2-Butanone	50	1.3 U	1.3 U	1.3 U	1.3 U	1.1 U	5 U	1.3 U	5 U	5 U	1.4 J			20 U	1.1 U	5 U
Acetone	50	10	11	9.5	19	2.3 U	5 U	13	14	**64**	12			50 U	2.3 U	5 U
Benzene	1	0.32 U	0.32 U	0.32 U	0.32 U	0.39 U	1 U	0.32 U	**1.1**	1 U	0.5 U	1 U	1 U	1 U	0.39 U	1 U
Carbon Tetrachloride	5	0.62 U	0.62 U	0.62 U	0.62 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	1 U
Chloroethane	5	0.66 U	0.66 U	0.66 U	0.66 U	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U	1 U
Chloroform	7	0.34 U	0.34 U	0.34 U	0.34 U	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	1 U
Chloromethane		0.54 U	0.54 U	0.54 U	0.54 U	0.34 U	1 U	0.54 U	1 U	1 U	0.41 J	2 U	2 U	2 U	0.34 U	1 U
cis-1,2-Dichloroethene	5	0.35 U	0.35 U	0.35 U	0.35 U	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U	1 U
Tetrachloroethene	5	0.27 U	0.27 U	0.27 U	0.27 U	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	1 U
Toluene	5	0.37 U	0.37 U	0.37 U	0.37 U	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U	0.10 J	1 U	0.36 U	1 U
Trichloroethene	5	0.28 U	0.28 U	0.28 U	0.28 U	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	1 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15

Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-3I 6/25/2009 WATER ug/L	TW-3I 3/23/2010 WATER ug/L	TW-3I 6/21/2011 WATER ug/L	TW-3I 7/24/2012 WATER ug/L	TW-3I 10/29/2013 WATER ug/L	TW-3I 5/6/2015 WATER ug/L	TW-3I 9/30/2016 WATER ug/L	TW-3D 9/6/2007 WATER ug/L	TW-3D 10/17/2008 WATER ug/L	TW-3D 6/25/2009 WATER ug/L	TW-3D 3/23/2010 WATER ug/L	TW-3D 6/21/2011 WATER ug/L	TW-3D 7/24/2012 WATER ug/L	TW-3D 10/29/2013 WATER ug/L	TW-3D 5/6/2015 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	0.4 U	1 U	1 U	**5**	**6.1**	**3.6**	**4.7**	0.32 U	1.3	1.4	1 U	1 U	1.2	2 U	0.96 J
1,1-Dichloroethane	*	0.36 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.38 U	1 U	0.36 U	1 U	1 U	0.5 U	2 U	2 U
1,1-Dichloroethene	5	0.47 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.42 U	1 U	0.47 U	1 U	1 U	0.5 U	2 U	2 U
2-Butanone	50	1.3 U	5 U	5 U	2.6 J			20 U	1.1 U	5 U	1.3 U	5 U	5 U	2.7 J		
Acetone	50	16	13	6	14			50 U	2.3 U	5 U	11	13	9.5	17		
Benzene	1	0.32 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.39 U	1 U	0.32 U	0.76 J	1.9	0.67 J	1 U	1.9
Carbon Tetrachloride	5	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U
Chloroethane	5	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U
Chloroform	7	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U
Chloromethane		0.54 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U	1 U	0.54 U	1 U	1 U	0.5 U	2 U	2 U
cis-1,2-Dichloroethene	5	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U		
Tetrachloroethene	5	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U
Toluene	5	0.37 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U	0.11 J
Trichloroethene	5	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15

Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-3D 9/30/2016 WATER ug/L	TW-4I 9/6/2007 WATER ug/L	TW-4I 10/17/2008 WATER ug/L	TW-4I 6/25/2009 WATER ug/L	TW-4I 3/23/2010 WATER ug/L	TW-4I 6/21/2011 WATER ug/L	TW-4I 7/24/2012 WATER ug/L	TW-4I 10/29/2013 WATER ug/L	TW-4I 5/6/2015 WATER ug/L	TW-4I 9/30/2016 WATER ug/L	TW-5S 9/6/2007 WATER ug/L	TW-5S 10/17/2008 WATER ug/L	TW-5S 6/25/2009 WATER ug/L	TW-5S 3/23/2010 WATER ug/L	TW-5S 6/21/2011 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	1 U	**6.6**	1.1	0.4 U	**23**	**33**	**28**	**23**	**20**	**20**	0.32 U	**11**	**13**	**7.4**	**7.9**
1,1-Dichloroethane	*	1 U	0.38 U	3.8	3.8	2.5	**5.3**	4.4	4.4	4.1	4.6	0.38 U	1 U	0.48 J	1 U	1 U
1,1-Dichloroethene	5	1 U	0.42 U	1 U	0.47 U	1 U	1.6	0.5 U	2 U	0.3 J	1 U	0.42 U	1 U	0.47 U	1 U	1 U
2-Butanone	50	20 U	1.1 U	5 U	1.3 U	5 U	5 U	2.2 J			20 U	1.1 U	5 U	1.3 U	5 U	5 U
Acetone	50	50 U	2.3 U	5 U	16	18	20	15			50 U	2.3 U	5 U	9.2	18	5 U
Benzene	1	1 U	0.39 U	1 U	0.32 U	1 U	1 U	0.5 U	1 U	0.15 J	1 U	0.39 U	1 U	0.32 U	1 U	1 U
Carbon Tetrachloride	5	5 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	1 U	0.62 U	1 U	1 U
Chloroethane	5	2 U	0.83 U	1 U	0.66 U	1 U	2.5	2.8	2.3	1.7 J	2 U	0.83 U	1 U	0.66 U	1 U	1 U
Chloroform	7	2 U	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	1 U	0.34 U	1 U	1 U
Chloromethane		2 U	0.34 U	1 U	0.54 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U	1 U	0.54 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U	1 U	0.35 U	1 U	1 U
Tetrachloroethene	5	1 U	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	1 U	0.27 U	1 U	1 U
Toluene	5	1 U	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U	0.11 J	1 U	0.36 U	1 U	0.37 U	1 U	1 U
Trichloroethene	5	1 U	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	1 U	0.28 U	1 U	1 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15

Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-5S 7/24/2012 WATER ug/L	TW-5S 10/29/2013 WATER ug/L	TW-5S 5/8/2015 WATER ug/L	TW-5S 9/30/2016 WATER ug/L	TW-5I 9/6/2007 WATER ug/L	TW-5I 10/17/2008 WATER ug/L	TW-5I 6/25/2009 WATER ug/L	TW-5I 3/23/2010 WATER ug/L	TW-5I 6/21/2011 WATER ug/L	TW-5I 7/24/2012 WATER ug/L	TW-5I 10/29/2013 WATER ug/L	TW-5I 5/6/2015 WATER ug/L	TW-5I 9/30/2016 WATER ug/L	TW-5D 9/6/2007 WATER ug/L	TW-5D 10/17/2008 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	**11**	**7.9**	2 J	**7.1**	4.8 J	**8.8**	**90**	**8.6**	**5.5**	4.3	4.1	**9.6**	3.2	**41**	**28**
1,1-Dichloroethane	*	0.5 U	2 U	2 U	1 U	0.38 U	1	3.5	2.3	1.7	0.5 U	2 U	0.47 J	1 U	0.38 U	1 U
1,1-Dichloroethene	5	0.5 U	2 U	2 U	1 U	0.42 U	1 U	0.47 U	1 U	1 U	0.5 U	2 U	0.22 J	1 U	0.42 U	1 U
2-Butanone	50	2.7 J			20 U	1.1 U	5 U	1.3 U	5 U	5 U	2.3 J			20 U	1.1 U	5 U
Acetone	50	14			50 U	2.3 U	5 U	13	15	18	14			50 U	2.3 U	5 U
Benzene	1	0.5 U	1 U	1 U	1 U	**6.2**	**3.5**	0.32 U	**32**	1 U	**4.8**	**1.9**	**4.7**	**1.2**	0.39 U	1 U
Carbon Tetrachloride	5	0.5 U	2 U	2 U	5 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	1 U
Chloroethane	5	0.5 U	2 U	2 U	2 U	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U	1 U
Chloroform	7	0.5 U	2 U	2 U	2 U	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	1 U
Chloromethane		0.5 U	2 U	2 U	2 U	0.34 U	1 U	0.54 U	1 U	1 U	0.43 J	2 U	2 U	2 U	0.34 U	1 U
cis-1,2-Dichloroethene	5	0.5 U			1 U	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U	1 U
Tetrachloroethene	5	0.5 U	2 U	2 U	1 U	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	1 U
Toluene	5	0.5 U	1 U	0.16 J	1 U	0.36 U	1 U	0.37 U	0.63 J	1 U	0.44 J	1 U	0.17 J	1 U	0.36 U	1 U
Trichloroethene	5	0.5 U	2 U	2 U	1 U	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	1 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15

Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-5D 6/25/2009 WATER ug/L	TW-5D 3/23/2010 WATER ug/L	TW-5D 6/21/2011 WATER ug/L	TW-5D 7/24/2012 WATER ug/L	TW-5D 10/29/2013 WATER ug/L	TW-5D 5/6/2015 WATER ug/L	TW-5D 9/30/2016 WATER ug/L	TW-6S 9/6/2007 WATER ug/L	TW-6S 10/17/2008 WATER ug/L	TW-6S 6/25/2009 WATER ug/L	TW-6S 3/23/2010 WATER ug/L	TW-6S 6/21/2011 WATER ug/L	TW-6S 7/24/2012 WATER ug/L	TW-6S 10/29/2013 WATER ug/L	TW-6S 5/6/2015 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	**32**	**28**	**25**	**28**	**39**	**18**	3.2	0.32 U	0.53 J	0.4 U	1 U	1 U	0.5 U	2 U	2 U
1,1-Dichloroethane	*	0.36 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.38 U	1 U	0.36 U	1 U	1 U	0.5 U	2 U	2 U
1,1-Dichloroethene	5	0.47 U	1 U	1.3	0.5 U	2 U	0.29 J	1 U	0.42 U	1 U	0.47 U	1 U	1 U	0.5 U	2 U	2 U
2-Butanone	50	1.3 U	5 U	5 U	2.1 J			20 U	1.1 U	5 U	1.3 U	5 U	5 U	2.3 J		
Acetone	50	20	17	41	14			50 U	2.3 U	5 U	11	15	17	12		
Benzene	1	0.32 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.39 U	1 U	0.32 U	1 U	1 U	0.5 U	1 U	1 U
Carbon Tetrachloride	5	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U
Chloroethane	5	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U
Chloroform	7	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	1.6	1	1.1	1.2	4.7	8.6	1.4 J
Chloromethane		0.54 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U	1 U	0.54 U	1 U	1 U	0.5 U	2 U	2 U
cis-1,2-Dichloroethene	5	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U		
Tetrachloroethene	5	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U
Toluene	5	0.37 U	1 U	1 U	0.5 U	1 U	0.12 J	1 U	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U	1 U
Trichloroethene	5	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15

Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-6S 9/30/2016 WATER ug/L	TW-6I 9/6/2007 WATER ug/L	TW-6I 10/17/2008 WATER ug/L	TW-6I 6/25/2009 WATER ug/L	TW-6I 3/23/2010 WATER ug/L	TW-6I 6/21/2011 WATER ug/L	TW-6I 7/24/2012 WATER ug/L	TW-6I 10/29/2013 WATER ug/L	TW-6I 5/6/2015 WATER ug/L	TW-6I 9/30/2016 WATER ug/L	TW-6D 9/6/2007 WATER ug/L	TW-6D 10/17/2008 WATER ug/L	TW-6D 6/25/2009 WATER ug/L	TW-6D 3/23/2010 WATER ug/L	TW-6D 6/21/2011 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	1 U	0.32 U	1.3	0.4 U	1 U	1 U	3.2	2.2	2.4	1 U	0.32 U	1 U	0.4 U	1 U	1 U
1,1-Dichloroethane	*	1 U	0.38 U	1 U	0.36 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.38 U	1 U	0.36 U	1 U	1 U
1,1-Dichloroethene	5	1 U	0.42 U	1 U	0.47 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.42 U	1 U	0.47 U	1 U	1 U
2-Butanone	50	20 U	1.1 U	5 U	1.3 U	5 U	5 U	2.1 J			20 U	1.1 U	5 U	1.3 U	5 U	5 U
Acetone	50	50 U	2.3 U	4.4 J	11	18	14	16			50 U	2.3 U	5 U	21	9.5	16
Benzene	1	1 U	0.39 U	1 U	0.32 U	0.99 J	1.1	0.5 U	1 U	**1.5**	**2.5**	0.39 U	1 U	1	1 U	1 U
Carbon Tetrachloride	5	5 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	1 U	0.62 U	1 U	1 U
Chloroethane	5	2 U	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U	1 U	0.66 U	1 U	1 U
Chloroform	7	3.0	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	1 U	0.34 U	1 U	1 U
Chloromethane		2 U	0.34 U	1 U	0.54 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U	1 U	0.54 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	0.29 U	4.1	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U	1 U	0.35 U	1 U	1 U
Tetrachloroethene	5	1 U	0.48 U	2.4	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	1 U	0.27 U	1 U	1 U
Toluene	5	1 U	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U	0.15 J	1 U	0.36 U	1 U	0.37 U	1 U	1 U
Trichloroethene	5	1 U	0.46 U	1.2	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	1 U	0.28 U	1 U	1 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15

Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-6D 7/24/2012 WATER ug/L	TW-6D 10/29/2013 WATER ug/L	TW-6D 5/6/2015 WATER ug/L	TW-6D 9/30/2016 WATER ug/L
VOCs					
1,1,1-Trichloroethane	5	0.5 U	2 U	2 U	1 U
1,1-Dichloroethane	*	0.5 U	2 U	2 U	1 U
1,1-Dichloroethene	5	0.5 U	2 U	2 U	1 U
2-Butanone	50	1.9 J			20 U
Acetone	50	13			50 U
Benzene	1	0.5 U	1 U	1 U	1 U
Carbon Tetrachloride	5	0.5 U	2 U	2 U	5 U
Chloroethane	5	0.5 U	2 U	2 U	2 U
Chloroform	7	0.5 U	2 U	2 U	2 U
Chloromethane		0.5 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	5	0.5 U			1 U
Tetrachloroethene	5	0.5 U	2 U	2 U	1 U
Toluene	5	0.5 U	1 U	0.11 J	1 U
Trichloroethene	5	0.5 U	2 U	2 U	1 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
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U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15

Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-7S 9/6/2007 WATER ug/L	TW-7S 10/17/2008 WATER ug/L	TW-7S 6/25/2009 WATER ug/L	TW-7S 3/23/2010 WATER ug/L	TW-7S 6/21/2011 WATER ug/L	TW-7S 7/24/2012 WATER ug/L	TW-7S 10/29/2013 WATER ug/L	TW-7S 5/6/2015 WATER ug/L	TW-7S 9/30/2016 WATER ug/L	TW-7I 9/6/2007 WATER ug/L	TW-7I 10/17/2008 WATER ug/L	TW-7I 6/25/2009 WATER ug/L	TW-7I 3/23/2010 WATER ug/L	TW-7I 6/21/2011 WATER ug/L	TW-7I 7/24/2012 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	**8.2**	**18**	**7.8**	**6.8**	5	**11**	**12**	**5.1**	**6.6**	0.32 U	1.5	0.4 U	2.2	0.69 J	1.6
1,1-Dichloroethane	*	0.38 U	1 U	0.36 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.38 U	1 U	0.36 U	1 U	1 U	0.5 U
1,1-Dichloroethene	5	0.42 U	1 U	0.47 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.42 U	1 U	0.47 U	1 U	1 U	0.5 U
2-Butanone	50	1.1 U	5 U	1.3 U	5 U	5 U	2.9 J			20 U	1.1 U	5 U	1.3 U	5 U	5 U	1.8 J
Acetone	50	2.3 U	3.3 J	22	12	19	15			50 U	2.3 U	5 U	15	17	21	11
Benzene	1	0.39 U	1 U	0.32 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.39 U	1 U	0.32 U	1 U	1 U	0.5 U
Carbon Tetrachloride	5	1.1 U	2.6	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U
Chloroethane	5	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U
Chloroform	7	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U
Chloromethane		0.34 U	1 U	0.54 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U	1 U	0.54 U	1 U	1 U	0.5 U
cis-1,2-Dichloroethene	5	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U
Tetrachloroethene	5	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U
Toluene	5	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U
Trichloroethene	5	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
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TW-X is a duplicate sample collected at TW-15
Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-7I 10/29/2013 WATER ug/L	TW-7I 5/6/2015 WATER ug/L	TW-7I 9/30/2016 WATER ug/L	TW-7D 9/6/2007 WATER ug/L	TW-7D 10/17/2008 WATER ug/L	TW-7D 6/25/2009 WATER ug/L	TW-7D 3/23/2010 WATER ug/L	TW-7D 6/21/2011 WATER ug/L	TW-7D 7/24/2012 WATER ug/L	TW-7D 10/29/2013 WATER ug/L	TW-7D 5/6/2015 WATER ug/L	TW-7D 9/30/2016 WATER ug/L	TW-9I 6/25/2009 WATER ug/L	TW-9I 3/23/2010 WATER ug/L	TW-9I 6/21/2011 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	2 U	1.1 J	1.1	**21**	3.8	**9.1**	**5.2**	4.5	4.4	**5.9**	**10**	1.1	**5.5**	4.3	4.2
1,1-Dichloroethane	*	2 U	2 U	1 U	0.38 U	1 U	0.36 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.36 U	1 U	1 U
1,1-Dichloroethene	5	2 U	2 U	1 U	4.8 J	1 U	0.47 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.47 U	1 U	1 U
2-Butanone	50			20 U	1.1 U	5 U	1.3 U	5 U	5 U	2.4 J			20 U	1.3 U	5 U	5 U
Acetone	50			50 U	2.3 U	5 U	17	18	14	13			50 U	17	14	19
Benzene	1	1 U	1 U	1 U	0.39 U	1 U	0.32 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.32 U	1 U	1 U
Carbon Tetrachloride	5	2 U	2 U	5 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	0.62 U	1 U	1 U
Chloroethane	5	2 U	2 U	2 U	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.66 U	1 U	1 U
Chloroform	7	2 U	2 U	2 U	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U	1 U	1 U
Chloromethane		2 U	2 U	2 U	0.34 U	1 U	0.54 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.54 U	1 U	1 U
cis-1,2-Dichloroethene	5			1 U	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U			1 U	0.35 U	1 U	1 U
Tetrachloroethene	5	2 U	2 U	1 U	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.27 U	1 U	1 U
Toluene	5	1 U	0.11 J	1 U	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.37 U	1 U	1 U
Trichloroethene	5	2 U	2 U	1 U	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.28 U	1 U	1 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
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D - Sample dilluted
TW-X is a duplicate sample collected at TW-15
Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-9I 7/24/2012 WATER ug/L	TW-9I 10/29/2013 WATER ug/L	TW-9I 5/6/2015 WATER ug/L	TW-9I 9/30/2016 WATER ug/L	TW-9D 6/25/2009 WATER ug/L	TW-9D 3/23/2010 WATER ug/L	TW-9D 6/21/2011 WATER ug/L	TW-9D 7/24/2012 WATER ug/L	TW-9D 10/29/2013 WATER ug/L	TW-9D 5/6/2015 WATER ug/L	TW-9D 9/30/2016 WATER ug/L	TW-10D 6/25/2009 WATER ug/L	TW-12I 9/6/2007 WATER ug/L	TW-12I 10/17/2008 WATER ug/L	TW-12I 6/25/2009 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	4.2	4	3	1 U	0.4 U	1 U	1 U	0.5 U	2 U	2 U	3.3	0.53 J	0.32 U	1 U	0.4 U
1,1-Dichloroethane	*	0.5 U	2 U	2 U	1 U	0.36 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.36 U	0.38 U	1 U	0.36 U
1,1-Dichloroethene	5	0.5 U	2 U	2 U	1 U	0.47 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.47 U	0.42 U	1 U	0.47 U
2-Butanone	50	2.6 J			20 U	1.3 U	5 U	5 U	1.9 J			20 U	1.3 U	1.1 U	5 U	1.3 U
Acetone	50	16			50 U	9.1	13	3.6 J	14			50 U	19	2.3 U	5 U	10
Benzene	1	0.5 U	1 U	1 U	1 U	0.32 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.32 U	0.39 U	1 U	0.32 U
Carbon Tetrachloride	5	0.5 U	2 U	2 U	5 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	0.62 U	1.1 U	1 U	0.62 U
Chloroethane	5	0.5 U	2 U	2 U	2 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.66 U	0.83 U	1 U	0.66 U
Chloroform	7	0.5 U	2 U	2 U	2 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U	0.33 U	1 U	0.34 U
Chloromethane		0.41 J	2 U	2 U	2 U	0.54 U	1 U	1 U	0.4 J	2 U	2 U	2 U	0.54 U	0.34 U	1 U	0.54 U
cis-1,2-Dichloroethene	5	0.5 U			1 U	0.35 U	1 U	1 U	0.5 U			1 U	0.35 U	0.29 U	1 U	0.35 U
Tetrachloroethene	5	0.5 U	2 U	2 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.27 U	0.48 U	1 U	0.27 U
Toluene	5	0.5 U	1 U	1 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.37 U	0.36 U	1 U	0.37 U
Trichloroethene	5	0.5 U	2 U	2 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.28 U	0.46 U	1 U	0.28 U

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.

U - The compound was not detected at the indicated concentration.

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D - Sample dilluted

TW-X is a duplicate sample collected at TW-15

Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-12I 3/23/2010 WATER ug/L	TW-12I 6/21/2011 WATER ug/L	TW-12I 7/24/2012 WATER ug/L	TW-12I 10/29/2013 WATER ug/L	TW-12I 5/6/2015 WATER ug/L	TW-12I 9/30/2016 WATER ug/L	TW-12D 9/6/2007 WATER ug/L	TW-12D 6/25/2009 WATER ug/L	TW-12D 3/23/2010 WATER ug/L	TW-12D 6/21/2011 WATER ug/L	TW-12D 7/24/2012 WATER ug/L	TW-12D 10/29/2013 WATER ug/L	TW-12D 5/6/2015 WATER ug/L	TW-12D 9/30/2016 WATER ug/L	TW-14S 9/6/2007 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	1 U	1 U	0.5 U	2 U	2 U	1 U	0.32 U	0.4 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.32 U
1,1-Dichloroethane	*	1 U	1 U	0.5 U	2 U	2 U	1 U	0.38 U	0.36 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.38 U
1,1-Dichloroethene	5	1 U	1 U	0.5 U	2 U	2 U	1 U	0.42 U	0.47 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.42 U
2-Butanone	50	5 U	5 U	1.8 J			20 U	1.1 U	1.3 U	5 U	5 U	2.8 J			20 U	1.1 U
Acetone	50	21	13	12			50 U	2.3 U	14	13	11	18			50 U	2.3 U
Benzene	1	1 U	1 U	0.5 U	1 U	1 U	1 U	0.39 U	0.32 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.39 U
Carbon Tetrachloride	5	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U
Chloroethane	5	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U
Chloroform	7	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U
Chloromethane		1 U	1 U	0.43 J	2 U	2 U	2 U	0.34 U	0.54 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U
cis-1,2-Dichloroethene	5	1 U	1 U	0.5 U			1 U	0.29 U	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U
Tetrachloroethene	5	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U
Toluene	5	1 U	1 U	0.5 U	1 U	1 U	1 U	0.36 U	0.37 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.36 U
Trichloroethene	5	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

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U - The compound was not detected at the indicated concentration.

J - Compound detected below the reporting limit or Concentration is estimated for TICS.

D - Sample dilluted

TW-X is a duplicate sample collected at TW-15

Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-14S 10/17/2008 WATER ug/L	TW-14S 6/25/2009 WATER ug/L	TW-14S 3/23/2010 WATER ug/L	TW-14S 6/21/2011 WATER ug/L	TW-14S 7/24/2012 WATER ug/L	TW-14S 10/29/2013 WATER ug/L	TW-14S 5/6/2015 WATER ug/L	TW-14S 9/30/2016 WATER ug/L	TW-14I 9/6/2007 WATER ug/L	TW-14I 10/17/2008 WATER ug/L	TW-14I 6/25/2009 WATER ug/L	TW-14I 3/23/2010 WATER ug/L	TW-14I 6/21/2011 WATER ug/L	TW-14I 7/24/2012 WATER ug/L	TW-14I 10/29/2013 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	**68**	0.4 U	**16**	**12**	**21**	**10**	4.5	**50**	**39**	**95**	**83**	**82**	**87**	**76**	**59**
1,1-Dichloroethane	*	**5.8**	1.2	0.64 J	0.55 J	0.95 J	2 U	2 U	5.3	0.38 U	2.8	3.2	3.2	3.5	2.6	2.1
1,1-Dichloroethene	5	1 U	0.47 U	1 U	0.67 J	0.5 U	2 U	2 U	1 U	3.7 J	1.5	0.47 U	2.1	4.4	1.4	2 U
2-Butanone	50	5 U	1.3 U	5 U	5 U	2 J			20 U	1.1 U	5 U	1.3 U	5 U	5 U	2.2 J	
Acetone	50	5 U	14	16	18	14			50 U	2.3 U	5 U	13	17	20	16	
Benzene	1	1 U	0.32 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.39 U	1 U	0.32 U	1 U	1 U	0.5 U	1 U
Carbon Tetrachloride	5	1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U	2 U
Chloroethane	5	1 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U	2 U
Chloroform	7	1 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U	2 U
Chloromethane		1 U	0.54 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U	1 U	0.54 U	1 U	1 U	0.5 U	2 U
cis-1,2-Dichloroethene	5	1 U	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U	
Tetrachloroethene	5	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U
Toluene	5	1 U	0.37 U	1 U	1 U	0.5 U	1 U	0.15 J	1 U	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U
Trichloroethene	5	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15
Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-14I 5/6/2015 WATER ug/L	TW-14I 9/30/2016 WATER ug/L	TW-14D 9/6/2007 WATER ug/L	TW-14D 10/17/2008 WATER ug/L	TW-14D 6/25/2009 WATER ug/L	TW-14D 3/23/2010 WATER ug/L	TW-14D 6/21/2011 WATER ug/L	TW-14D 7/24/2012 WATER ug/L	TW-14D 10/29/2013 WATER ug/L	TW-14D 5/6/2015 WATER ug/L	TW-14D 9/30/2016 WATER ug/L	TW-15 9/6/2007 WATER ug/L	TW-15 10/17/2008 WATER ug/L	TW-15 6/25/2009 WATER ug/L	TW-15 3/23/2010 WATER ug/L
VOCs																
1,1,1-Trichloroethane	5	**57**	**65**	**42**	**18**	0.4 U	**9.1**	**12**	**11**	**56**	**10**	**6.5**	**17**	**84 D**	**95**	**97**
1,1-Dichloroethane	*	2 J	2.4	0.38 U	1 U	0.36 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.38 U	3.3	3.4	4.1
1,1-Dichloroethene	5	1.1 J	1.3	**7.2**	1 U	0.47 U	1 U	0.67 J	0.5 U	2 U	2 U	1 U	4.6 J	2	1.8	2.7
2-Butanone	50		20 U	1.1 U	5 U	1.3 U	5 U	5 U	2.2 J			20 U	1.1 U	5 U	1.3 U	5 U
Acetone	50		50 U	2.3 U	5 U	15	18	25	17			50 U	2.3 U	5 U	9.7	15
Benzene	1	1 U	1 U	0.39 U	1 U	0.32 U	1 U	1 U	0.5 U	1 U	**5.7**	1 U	0.39 U	1 U	0.32 U	1 U
Carbon Tetrachloride	5	2 U	5 U	1.1 U	1 U	0.62 U	1 U	1 U	0.5 U	2 U	2 U	5 U	1.1 U	1 U	0.62 U	1 U
Chloroethane	5	2 U	2 U	0.83 U	1 U	0.66 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.83 U	1 U	0.66 U	1 U
Chloroform	7	2 U	2 U	0.33 U	1 U	0.34 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.33 U	1 U	0.34 U	1 U
Chloromethane		2 U	2 U	0.34 U	1 U	0.54 U	1 U	1 U	0.5 U	2 U	2 U	2 U	0.34 U	1 U	0.54 U	1 U
cis-1,2-Dichloroethene	5		1 U	0.29 U	1 U	0.35 U	1 U	1 U	0.5 U			1 U	0.29 U	1 U	0.35 U	1 U
Tetrachloroethene	5	2 U	1 U	0.48 U	1 U	0.27 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.48 U	1 U	0.27 U	1 U
Toluene	5	1 U	1 U	0.36 U	1 U	0.37 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.36 U	1 U	0.37 U	1 U
Trichloroethene	5	2 U	1 U	0.46 U	1 U	0.28 U	1 U	1 U	0.5 U	2 U	2 U	1 U	0.46 U	1 U	0.28 U	1 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15
Blank space indicates sample not analyzed for that compound

TABLE 5-3
SUMMARY OF GROUNDWATER DETECTIONS (VOCS)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	TW-15 6/21/2011 WATER ug/L	TW-15 7/24/2012 WATER ug/L	TW-15 10/29/2013 WATER ug/L	TW-15 5/6/2015 WATER ug/L	TW-15 9/30/2016 WATER ug/L	DUP-X 9/30/2016 WATER ug/L
VOCs							
1,1,1-Trichloroethane	5	**89**	**85**	**9.4**	**32**	**14**	**14**
1,1-Dichloroethane	*	3.8	3.4	2 U	1.6	1 U	1 U
1,1-Dichloroethene	5	**5.9**	2	2 U	0.93	1 U	1 U
2-Butanone	50	5 U	2.9 J			20 U	20 U
Acetone	50	35	17			50 U	50 U
Benzene	1	1 U	0.5 U	1 U	**13**	**1.3**	**1.3**
Carbon Tetrachloride	5	1 U	0.5 U	2 U	2 U	5 U	5 U
Chloroethane	5	1 U	0.5 U	2 U	2 U	2 U	2 U
Chloroform	7	1 U	0.5 U	2 U	2 U	2 U	2 U
Chloromethane		1 U	0.48 J	2 U	2 U	2 U	2 U
cis-1,2-Dichloroethene	5	1 U	0.5 U			1 U	1 U
Tetrachloroethene	5	1 U	0.5 U	2 U	2 U	1 U	1 U
Toluene	5	1 U	0.5 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	0.5 U	2 U	2 U	1 U	1 U

Notes
- Concentration exceeds corresponding NYSDEC Class GA Standard.
* - NYSDEC Principal Organic Contaminant Standard of 5 ug/l applies to this compound.
U - The compound was not detected at the indicated concentration.
J - Compound detected below the reporting limit or Concentration is estimated for TICS.
D - Sample dilluted
TW-X is a duplicate sample collected at TW-15
Blank space indicates sample not analyzed for that compound

TABLE 5-4
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT - RW-1)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	RW-1 1/30/2014 WATER ug/L	RW-1 2/21/2014 WATER ug/L	RW-1 3/17/2014 WATER ug/L	RW-1 4/10/2014 WATER ug/L	RW-1 5/22/2014 WATER ug/L	RW-1 6/25/2014 WATER ug/L	RW-1 7/30/2014 WATER ug/L	RW-1 8/21/2014 WATER ug/L	RW-1 9/30/2014 WATER ug/L	RW-1 10/21/2014 WATER ug/L	RW-1 11/19/2014 WATER ug/L	RW-1 12/18/2014 WATER ug/L
VOCs													
1,1,1-Trichloroethane	5	**47**	**45**	**50**	**42**	**31**	**43**	**42**	**42**	**36**	**43**	**51**	**44**
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.16**	2.0 U
1,1-Dichloroethane	5	**2.0**	**1.4**	**2.0**	**1.9**	**1.2**	**1.6**	**1.6**	**1.6**	**1.5**	**1.6**	**1.8**	**1.5**
1,1-Dichloroethene	5	**1.2**	**1.1**	**0.92**	**1.0**	**0.71**	**0.63**	**0.85**	**0.83**	**0.87**	**1.2**	**2.4**	2.0 U
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		50.2	47.5	52.9	44.9	32.9	45.2	44.5	44.4	38.4	45.8	55.4	45.5

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 5-4
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT - RW-1)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	RW-1 1/20/2015 WATER ug/L	RW-1 2/25/2015 WATER ug/L	RW-1 3/19/2015 WATER ug/L	RW-1 5/6/2015 WATER ug/L	RW-1 6/22/2015 WATER ug/L	RW-1 7/31/2015 WATER ug/L	RW-1 8/28/2015 WATER ug/L	RW-1 9/23/2015 WATER ug/L	RW-1 10/26/2015 WATER ug/L	RW-1 11/20/2015 WATER ug/L	RW-1 12/21/2015 WATER ug/L
VOCs												
1,1,1-Trichloroethane	5	**43**	**40**	**36**	**38**	**41**	**40**	**42**	**32**	**38**	**41**	**32**
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	**1.8 J**	**1.6 J**	**1.5 J**	2.0 U	**1.8 J**	**1.6 J**	**1.8 J**	**1.5 J**	**1.8 J**	**2.1**	**1.5 J**
1,1-Dichloroethene	5	**1.3 J**	**0.93 J**	**0.89 J**	**0.92 J**	**0.99 J**	**0.96 J**	**0.97 J**	**0.8 J**	**0.85 J**	**1.0 J**	**0.8 J**
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10.0 U	10.0 U	10.0 U	10 U	10 U	10.0 U	10 U	10 U	10.0 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.19 J**	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	**0.13 J**	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	2.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	5.0 U	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		46.1	44.5	38.4	39.1	43.8	42.6	45.0	34.3	40.7	44.1	34.3

- Concentration exceeds corresponding NYSDEC Class GA Standard.
U - Not detected at the indicated concentration
J - Estimated concentration.

TABLE 5-4
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT - RW-1)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	RW-1 1/25/2016 WATER ug/L	RW-1 2/26/2016 WATER ug/L	RW-1 3/18/2016 WATER ug/L	RW-1 4/22/2016 WATER ug/L	RW-1 5/23/2016 WATER ug/L	RW-1 6/24/2016 WATER ug/L	RW-1 7/25/2016 WATER ug/L	RW-1 8/18/2016 WATER ug/L	RW-1 9/16/2016 WATER ug/L	RW-1 10/31/2016 WATER ug/L	RW-1 11/28/2016 WATER ug/L	RW-1 12/4/2016 WATER ug/L
VOCs													
1,1,1-Trichloroethane	5	**38**	**36**	**36**	**31**	**34**	**32**	**35**	**34**	**36**	**39**	**42**	**41**
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.25 J**
1,1-Dichloroethane	5	**1.8 J**	**1.5 J**	**1.4 J**	**1.2 J**	**1.3 J**	**1.1 J**	**1.5 J**	**1.6 J**	**1.6 J**	**1.7 J**	**2.1**	**2 J**
1,1-Dichloroethene	5	**0.84 J**	**0.79 J**	**0.86 J**	**0.84 J**	**0.77 J**	**0.69 J**	**0.68 J**	**0.89 J**	**0.75 J**	**0.91 J**	**1.0 J**	**1.2 J**
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10.0 U	10 U	10 U	10.0 U	10 U	10 U	10 U	10 U	10 U	10.0 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.77 J**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		40.6	38.3	38.3	33.0	36.1	33.8	38.0	36.5	38.4	41.6	45.1	44.5

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 5-4
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT - RW-1)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	RW-1 1/30/2017 WATER ug/L	RW-1 2/27/2017 WATER ug/L	RW-1 3/23/2017 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**35**	**34**	**40**
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	**1.5 J**	**1.5 J**	**1.7 J**
1,1-Dichloroethene	5	**0.86 J**	**1.7 J**	**0.99 J**
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10 U	10 U	10.0 U
Benzene	1	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U
Chloromethane	5	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U
Total VOCs		37.36	37.2	42.69

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 5-5
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT - RW-2)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	RW-2 1/30/2014 WATER ug/L	RW-2 2/21/2014 WATER ug/L	RW-2 3/17/2014 WATER ug/L	RW-2 4/10/2014 WATER ug/L	RW-2 5/22/2014 WATER ug/L	RW-2 6/25/2014 WATER ug/L	RW-2 7/30/2014 WATER ug/L	RW-2 8/21/2014 WATER ug/L	RW-2 9/29/2014 WATER ug/L	RW-2 10/21/2014 WATER ug/L	RW-2 11/19/2014 WATER ug/L	RW-2 12/18/2014 WATER ug/L
VOCs													
1,1,1-Trichloroethane	5	**46**	**51**	**57**	**44**	**27**	**38**	**37**	**37**	**32**	**37**	**45**	**37**
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	**1.0**	**0.89**	**1.3**	**1.2**	**0.57**	**0.81**	**0.73**	**0.80**	**0.66 J**	**0.82 J**	**0.99 J**	**0.72 J**
1,1-Dichloroethene	5	**0.97**	**0.83**	**1.0**	**0.88**	**0.63**	**0.62**	**0.63**	**0.62**	**0.76 J**	**1.3 J**	**1.4 J**	**0.93 J**
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		48.0	52.7	59.3	46.1	28.2	39.4	38.4	38.4	33.4	39.1	47.4	38.7

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 5-5
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT - RW-2)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	RW-2 1/20/2015 WATER ug/L	RW-2 2/25/2015 WATER ug/L	RW-2 3/19/2015 WATER ug/L	RW-2 5/6/2015 WATER ug/L	RW-2 6/23/2015 WATER ug/L	RW-2 7/31/2015 WATER ug/L	RW-2 8/28/2015 WATER ug/L	RW-2 9/23/2015 WATER ug/L	RW-2 10/26/2015 WATER ug/L	RW-2 11/20/2015 WATER ug/L	RW-2 12/21/2015 WATER ug/L
VOCs												
1,1,1-Trichloroethane	5	**15**	**34**	**31**	**33**	**48**	**34**	**36**	**26**	**32**	**34**	**26**
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	2.0 U	**0.76 J**	**0.69 J**	2.0 U	**1.1 J**	**0.74 J**	**0.77 J**	**0.61 J**	**0.75 J**	**0.85 J**	**0.61 J**
1,1-Dichloroethene	5	**0.38 J**	**0.7 J**	**0.68 J**	**0.72 J**	**1 J**	**0.72 J**	**0.62 J**	**0.58 J**	**0.63 J**	**0.92 J**	**0.58 J**
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10.0 U	10.0 U	10.0 U	10 U	10 U	10.0 U	10 U	10 U	10 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.15 J**	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	**0.13 J**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	5.0 U	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		15.4	35.4	32.4	33.9	50.1	35.5	37.5	27.2	33.4	35.8	27.2

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 5-5
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT - RW-2)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	RW-2 1/25/2016 WATER ug/L	RW-2 2/26/2016 WATER ug/L	RW-2 3/18/2016 WATER ug/L	RW-2 4/22/2016 WATER ug/L	RW-2 5/23/2016 WATER ug/L	RW-2 6/24/2016 WATER ug/L	RW-2 7/25/2016 WATER ug/L	RW-2 8/18/2016 WATER ug/L	RW-2 9/16/2016 WATER ug/L	RW-2 10/31/2016 WATER ug/L	RW-2 11/28/2016 WATER ug/L	RW-2 12/4/2016 WATER ug/L
VOCs													
1,1,1-Trichloroethane	5	**32**	**29**	**29**	**25**	**28**	**33**	**28**	**29**	**35**	**33**	**35**	**32**
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	**0.86 J**	**0.62 J**	**0.62 J**	**0.53 J**	**0.56 J**	**0.58 J**	**0.66 J**	**0.70 J**	**0.77 J**	**0.78 J**	**0.89 J**	**0.82 J**
1,1-Dichloroethene	5	**0.64 J**	**0.56 J**	**0.66 J**	**0.60 J**	**0.62 J**	**0.58 J**	**0.48 J**	**0.72 J**	**0.82 J**	**0.78 J**	**0.87 J**	**0.86 J**
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.59 J**	2.0 U	2.0 U	2.0 U	**2.4**	**0.57 J**
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total VOCs		33.5	30.2	30.3	26.1	29.2	34.2	29.7	30.4	36.6	34.6	39.2	34.3

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 5-5
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (INFLUENT - RW-2)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC Class GA Standard ug/L	RW-2 1/30/2017 WATER ug/L	RW-2 2/27/2017 WATER ug/L	RW-2 3/23/2017 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	**30**	**29**	**33**
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	**0.63 J**	**0.66 J**	**0.76 J**
1,1-Dichloroethene	5	**0.65 J**	**1.1 J**	**0.71 J**
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10 U	10 U	10.0 U
Benzene	1	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U
Chloromethane		2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U
Total VOCs		31.28	30.76	34.47

- Concentration exceeds corresponding NYSDEC Class GA Standard.

U - Not detected at the indicated concentration

J - Estimated concentration.

TABLE 5-6
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	EFF(46HZ) 1/30/2014 WATER ug/L	EFF(46HZ) 2/21/2014 WATER ug/L	EFF(46HZ) 3/17/2014 WATER ug/L	EFF(46HZ) 4/10/2014 WATER ug/L	EFF(46HZ) 5/22/2014 WATER ug/L	EFF(46HZ) 6/25/2014 WATER ug/L	EFF(46HZ) 7/30/2014 WATER ug/L	EFF(46HZ) 8/21/2014 WATER ug/L	EFF(46HZ) 9/30/2014 WATER ug/L	EFF(46HZ) 10/21/2014 WATER ug/L	EFF(44HZ) 11/19/2014 WATER ug/L	EFF(46HZ) 12/18/2014 WATER ug/L	EFF(46HZ) 1/20/2015 WATER ug/L
VOCs														
1,1,1-Trichloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.16 J**	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.19 J**	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	2.0 U	5.0 U	5.0 U	2.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.

TABLE 5-6
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	EFF(46HZ) 2/25/2015 WATER ug/L	EFF(46HZ) 3/19/2015 WATER ug/L	EFF(46HZ) 5/6/2015 WATER ug/L	EFF(46HZ) 6/23/2015 WATER ug/L	EFF(46HZ) 7/31/2015 WATER ug/L	EFF(46HZ) 8/28/2015 WATER ug/L	EFF(46HZ) 9/23/2015 WATER ug/L	EFF(46HZ) 10/26/2015 WATER ug/L	EFF(46HZ) 11/20/2015 WATER ug/L	EFF(46HZ) 12/21/2015 WATER ug/L
VOCs											
1,1,1-Trichloroethane	5	2.0 U	2.0 U	1.0 U	**0.22 J**	**0.22 J**	**0.17 J**	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.2 J**	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	**0.12 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.

TABLE 5-6
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	EFF(46HZ) 1/25/2016 WATER ug/L	EFF(46HZ) 2/26/2016 WATER ug/L	EFF(46HZ) 3/18/2016 WATER ug/L	EFF(46HZ) 4/22/2016 WATER ug/L	EFF(46HZ) 5/23/2016 WATER ug/L	EFF(46HZ) 6/24/2016 WATER ug/L	EFF(46HZ) 7/25/2016 WATER ug/L	EFF(46HZ) 8/18/2016 WATER ug/L	EFF(46HZ) 9/16/2016 WATER ug/L	EFF(46HZ) 10/31/2016 WATER ug/L	EFF(46HZ) 11/28/2016 WATER ug/L	EFF(46HZ) 12/4/2016 WATER ug/L
VOCs													
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.15 J**
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**1.0 J**	2.0 U	2.0 U	2.0 U	**2.3**	**0.73 J**
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	5.0 U	2.0 U	2.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

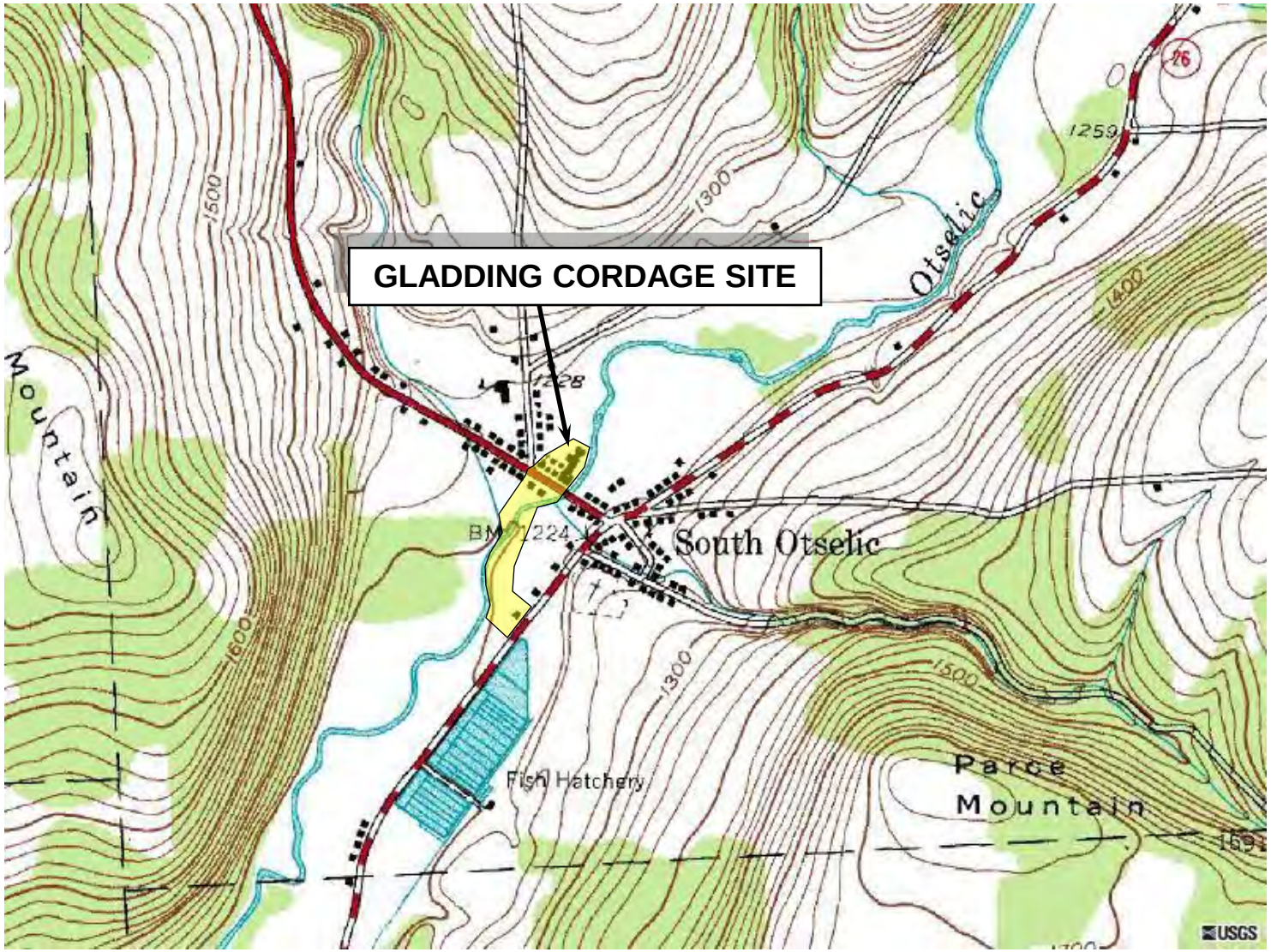
Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.

TABLE 5-6
SUMMARY OF GROUNDWATER TREATMENT SYSTEM VOCS (EFFLUENT)
GLADDING CORDAGE
SOUTH OTSELIC, NEW YORK
NYSDEC Site No. 7-09-009

Sample ID Sampling Date Matrix Units	NYSDEC GA Standard ug/L	EFF(46HZ) 1/30/2017 WATER ug/L	EFF(46HZ) 2/27/2017 WATER ug/L	EFF(46HZ) 3/23/2017 WATER ug/L
VOCs				
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	1	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	5	2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	5	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	0.6	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	1	2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	3	2.0 U	2.0 U	2.0 U
2-Chloroethyl Vinyl Ether		10 U	10 U	10 U
Benzene	1	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	2.0 U	2.0 U	2.0 U
Bromoform	50	2.0 U	2.0 U	2.0 U
Bromomethane	5	2.0 U	2.0 U	2.0 U
Carbon Tetrachloride	5	2.0 U	2.0 U	2.0 U
Chlorobenzene	5	2.0 U	2.0 U	2.0 U
Chloroethane	5	2.0 U	2.0 U	2.0 U
Chloroform	7	2.0 U	2.0 U	2.0 U
Chloromethane		2.0 U	2.0 U	**0.66 J**
cis-1,3-Dichloropropene	0.4	2.0 U	2.0 U	2.0 U
Dibromochloromethane	50	2.0 U	2.0 U	2.0 U
Ethyl Benzene	5	2.0 U	2.0 U	2.0 U
m/p-Xylenes	5	2.0 U	2.0 U	2.0 U
Methyl tert-butyl Ether		2.0 U	2.0 U	2.0 U
Methylene Chloride	5	5.0 U	5.0 U	5.0 U
o-Xylene		2.0 U	2.0 U	2.0 U
Tetrachloroethene	5	2.0 U	2.0 U	2.0 U
Toluene	5	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	0.4	5.0 U	5.0 U	5.0 U
Trichloroethene	5	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane	5	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2	2.0 U	2.0 U	2.0 U

Notes
U - Not detected at the indicated concentration.
J - Estimated concentration.

FIGURES



SCALE IN FEET

0 500 1000 2000

SOURCE: U.S.G.S 7.5 MIN. SOUTH OTSELIC QUAD, 1988

ARCADIS

NYSDEC STANDBY CONTRACT NO. D004443-5
GLADDING CORDAGE – SITE NUMBER 7-09-009
SOUTH OTSELIC, NEW YORK

GLADDING CORDAGE SITE LOCATION

FIGURE 2-1

G:\PROJECT\00266406.0000\SMP\Figure 1.ppt

ARCADIS

NYSDEC STANDBY CONTRACT NO. D004443-5
GLADDING CORDAGE – SITE NUMBER 7-09-009
SOUTH OTSELIC, NEW YORK

SITE FEATURES AND TREATMENT SYSTEM LAYOUT

FIGURE 2-2

G:\PROJECT\00266406.0000\SMP\Figure 2.ppt

0 150 300 600 900 1,200 Feet

N

Legend

- Monitoring Well
- Recovery Well
- Approximate Site Boundary

NYSDEC STANDBY CONTRACT NO. D004443-5
GLADDING CORDAGE SITE 7-09-009
SOUTH OTSELIC, NEW YORK

SITE MANAGEMENT PLAN

MONITORING WELL LOCATIONS

ARCADIS

FIGURE
2-3

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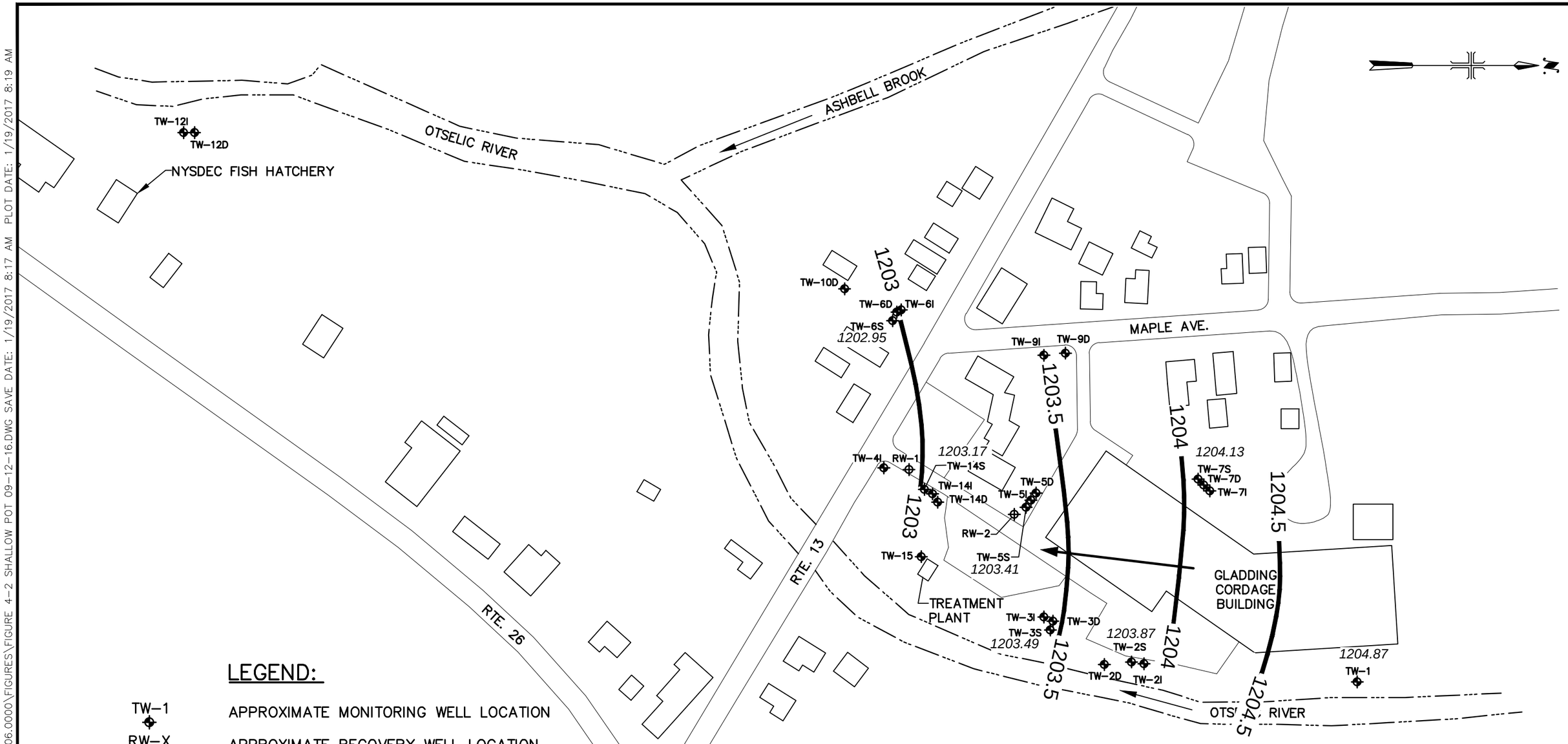


LEGEND:

TW–1	APPROXIMATE MONITORING WELL LOCATION
RW–X	APPROXIMATE RECOVERY WELL LOCATION
	ROADWAY/DRIVEWAY
	BUILDING
	EDGE OF RIVER
1204	POTENTIOMETRIC CONTOUR
1204.13	GROUNDWATER ELEVATION (FT. A.M.S.L.)
	GROUNDWATER FLOW DIRECTION

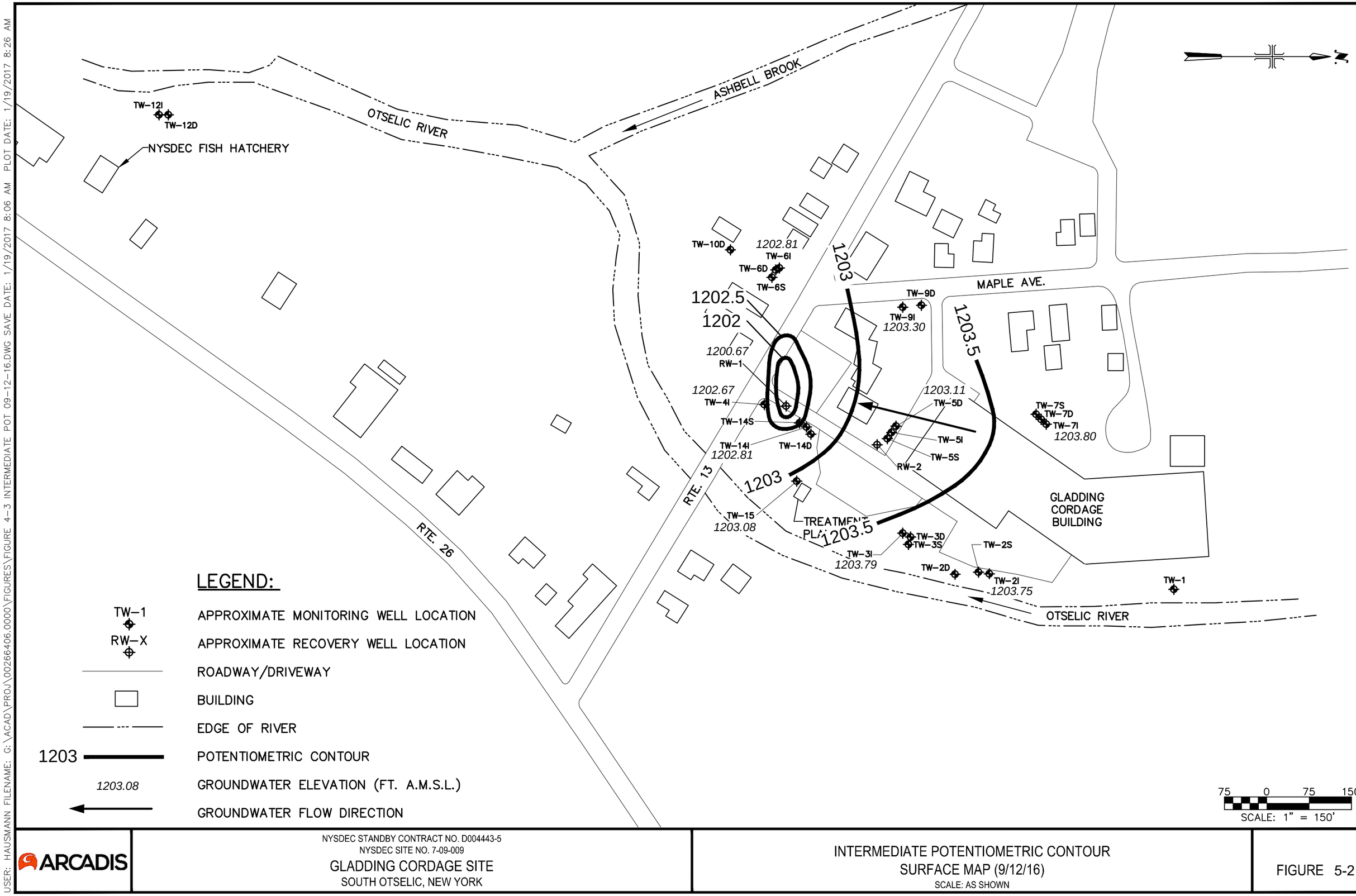
75 0 75 150
SCALE: 1" = 150'

ARCADIS

NYSDEC STANDBY CONTRACT NO. D004443-5
NYSDEC SITE NO. 7-09-009
GLADDING CORDAGE SITE
SOUTH OTSELIC, NEW YORK

SHALLOW POTENTIOMETRIC CONTOUR SURFACE MAP (9/12/16)
SCALE: AS SHOWN

FIGURE 5-1



LEGEND:

TW–1	APPROXIMATE MONITORING WELL LOCATION
RW–X	APPROXIMATE RECOVERY WELL LOCATION
	ROADWAY/DRIVEWAY
	BUILDING
	EDGE OF RIVER
1203	POTENTIOMETRIC CONTOUR
1203.08	GROUNDWATER ELEVATION (FT. A.M.S.L.)
	GROUNDWATER FLOW DIRECTION

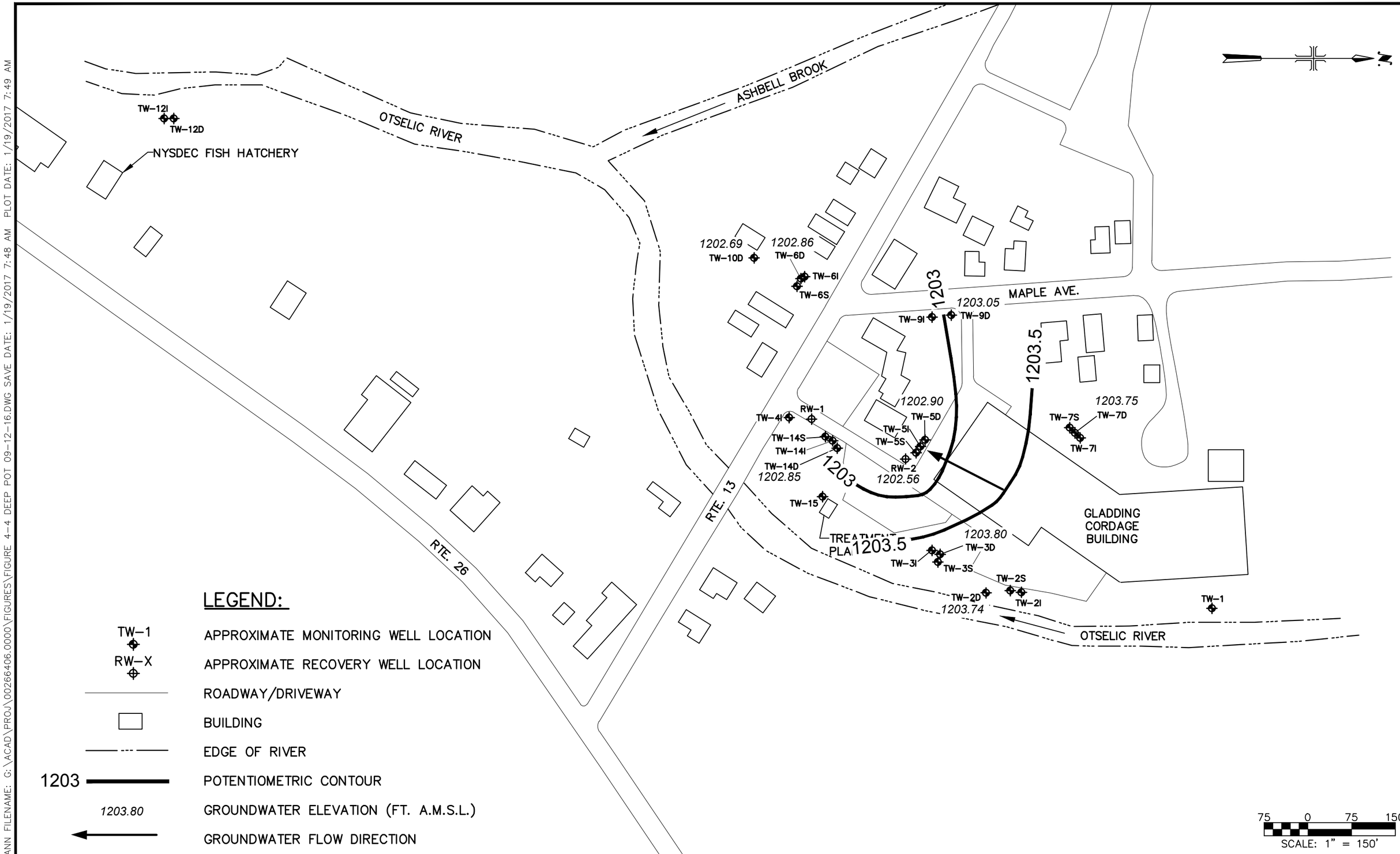
75 0 75 150
SCALE: 1" = 150'

ARCADIS

NYSDEC STANDBY CONTRACT NO. D004443-5
NYSDEC SITE NO. 7-09-009
GLADDING CORDAGE SITE
SOUTH OTSELIC, NEW YORK

INTERMEDIATE POTENTIOMETRIC CONTOUR
SURFACE MAP (9/12/16)
SCALE: AS SHOWN

FIGURE 5-2



LEGEND:

TW–1	APPROXIMATE MONITORING WELL LOCATION
RW–X	APPROXIMATE RECOVERY WELL LOCATION
	ROADWAY/DRIVEWAY
	BUILDING
	EDGE OF RIVER
1203	POTENTIOMETRIC CONTOUR
1203.80	GROUNDWATER ELEVATION (FT. A.M.S.L.)
	GROUNDWATER FLOW DIRECTION

75 0 75 150
SCALE: 1" = 150'

ARCADIS

NYSDEC STANDBY CONTRACT NO. D004443-5
NYSDEC SITE NO. 7-09-009
GLADDING CORDAGE SITE
SOUTH OTSELIC, NEW YORK

DEEP POTENTIOMETRIC CONTOUR SURFACE MAP (9/12/16)
SCALE: AS SHOWN

FIGURE 5-3

APPENDIX A

O&M Checklists

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	1/30/2014
Inspector	J.Wyckoff
Time	12:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	22.2	22.9
Total Flow (Gallons)		
Water Level (Feet Above Probe)	34.51	55.51
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.7	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	off	Building Temperature (°F)	59
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.6

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	NA	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	NA	Samples Collected (Y/N)	Y

Notes:

System was off - no power from UPS. Restart system at 12:00. No alarms were sent.

Electric heat was on.

Aprox 6" snow cover.

Heat pump not working. No groundwater flow through heat exchanger - may be plugged. Contacted AZTECH and spoke with Geoff Hoffer. Advised that exchanger may be frozen and to run in cooling mode to force heat through exchanger. Performed diagnostic and heat exchanger thawed. Placed back in heat mode and exhanger froze again - no flow through heat exchanger. Could not reach AZTECH - will continue diagnostics with AZTECH at later date.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	2/21/2014
Inspector	J.Wyckoff
Time	17:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.8	22.7
Total Flow (Gallons)		
Water Level (Feet Above Probe)	34.41	55.24
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.6	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	off	Building Temperature (°F)	64
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.5

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	NA	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	NA	Samples Collected (Y/N)	Y

Notes:

System was off - no power from UPS. Restart system at 15:30.

Electric heat was on.

Aprox 1.5 feet snow cover.

Continue heat pump diagnostics:
Found refridgerant compressor does not shut off. Causes heat exchanger to freeze when cicrculator pump stops pumping water. When circulator is restarted, heat exchanger is frozen and no water can flow through heat exchanger. Found motor contactor for refridgerant pump stuck on.
Discussed findings with AZTECH and confirmed contactor is defective.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	3/17/2014
Inspector	J.Wyckoff
Time	11:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	22.2	23.2
Total Flow (Gallons)		
Water Level (Feet Above Probe)	34.7	55.53
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.7	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	off	Building Temperature (°F)	59
Heat Exchanger Flow (GPM)	2.8	Heat Exchanger Pressure (PSI)	8.8

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	NA	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	NA	Samples Collected (Y/N)	Y

Notes:

System was off - no power from UPS. Restart system at 12:10

Electric heat was on.

Install new motor contactor for heat pump compressor. Confirm heater operation - all OK.

Check UPS operation. Found battery not able to hold charge. Need new UPS.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	4/10/2014
Inspector	J.Wyckoff
Time	10:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.7	23.2
Total Flow (Gallons)	-	-
Water Level (Feet Above Probe)	35.97	56.59
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.3	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	off	Building Temperature (°F)	64
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.8

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	NA	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

System was off - no power from UPS. No alarms set.
UPS overload light on. Confirm UPS defective.
Get part numbers from UPS to order new part.
Restart system at 13:10. Values above after restart.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	4/23/2014
Inspector	J.Wyckoff
Time	10:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	22.1	23.0
Total Flow (Gallons)	-	-
Water Level (Feet Above Probe)	34.96	56.08
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.3	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	59
Heat Exchanger Flow (GPM)	2.3	Heat Exchanger Pressure (PSI)	9.3

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	Y	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

System was off. No alarms set.
Replace UPS with in-kind part.
Confirm UPS operation - maintains power to PLC when panel power disconnected.
Restart system at 10:05. Values above after restart.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	5/22/2014
Inspector	J.Wyckoff
Time	14:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.8	22.5
Total Flow (Gallons)	20602297	18199737
Water Level (Feet Above Probe)	34.38	55.89
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.0	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	69
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.8

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	Y	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

Trim grass.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	6/25/2014
Inspector	J.Wyckoff
Time	10:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.4	21.6
Total Flow (Gallons)	21646132	19287083
Water Level (Feet Above Probe)	33.76	55.41
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.0	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	68
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.5

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	Y	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

Trim grass.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	7/30/2014
Inspector	J.Wyckoff
Time	11:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	22.5	22.6
Total Flow (Gallons)	22568327	20221473
Water Level (Feet Above Probe)	33.80	55.49
Probe Depth (Feet BTOC)	40.0	65.0

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.2	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	65
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.7

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	Y	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

Trim grass.
Spoke with Rick from Gladding Cordage about former water supply well near TW-5 cluster.
Well is no longer used by has above-grade piping that is causing a traffic hazard in parking area.
Gladding would like to remove above-grade piping. Well is not associated with remedial efforts.
Informed Rick it was Okay to remove above-grade piping causing hazard. Took photographs of well.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	8/21/2014
Inspector	J.Wyckoff
Time	8:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	22.2	22.5
Total Flow (Gallons)	23152553	20797422
Water Level (Feet Above Probe)	33.97	55.83
Probe Depth (Feet BTOC)	40.0	65.0

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.0	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	67
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	Y	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

Trim grass.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	9/29/2014
Inspector	J.Wyckoff
Time	7:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	22.5	22.8
Total Flow (Gallons)	23822623	21479508
Water Level (Feet Above Probe)	33.27	55.26
Probe Depth (Feet BTOC)	40.0	65.0

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.3	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	60
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	Y	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

Trim grass.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	10/21/2014
Inspector	J.Wyckoff
Time	12:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	22.4	23.0
Total Flow (Gallons)	24531228	22207890
Water Level (Feet Above Probe)	33.94	55.89
Probe Depth (Feet BTOC)	40.0	65.0

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.3	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	60
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.7

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	Y	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	11/19/2014
Inspector	J.Wyckoff
Time	10:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.9	22.6
Total Flow (Gallons)	25450194	23163792
Water Level (Feet Above Probe)	34.41	56.02
Probe Depth (Feet BTOC)	40.0	65.0

Air Stripper			
Blower VFD Setting (Hertz)	44	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.1	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	48

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	60
Heat Exchanger Flow (GPM)	2.4	Heat Exchanger Pressure (PSI)	9.0

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	Y	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

Approximately 1" snow.

Reduced blower VFD from 46 HZ to 44 HZ per discussions with NYSDEC.

Collected samples from air stripper after blower reduced to 44 HZ.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	12/18/2014
Inspector	J.Wyckoff
Time	11:45

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	24.4	22.9
Total Flow (Gallons)	26017112	23722819
Water Level (Feet Above Probe)	35.10	56.50
Probe Depth (Feet BTOC)	40.0	65.0

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.8	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	48

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	52
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	Inop

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	Y	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

Approximately 4" snow.

Increased VFD speed from 44HZ to 46 HZ due to low-level detections of VOCs in Nov 2014 effluent.

Collected samples from air stripper after increasing blower speed to 46 HZ.

Pressure sensor for heat exchanger not working - sensor defective.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	1/20/2015
Inspector	J.Wyckoff
Time	7:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	23.8	22.3
Total Flow (Gallons)	27139844	24778256
Water Level (Feet Above Probe)	34.6	56.34
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	11.0	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	40
Heat Exchanger Flow (GPM)	2.4	Heat Exchanger Pressure (PSI)	8.8

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	NA	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	Y	Samples Collected (Y/N)	Y

Notes:

Replace defective pressure sensor for heat pump.

Check for heat pump codes: Code 8 = normal operation

Aprox 6" snow cover.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	2/25/2015
Inspector	J.Wyckoff
Time	11:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.3	24.1
Total Flow (Gallons)	28353707	25872041
Water Level (Feet Above Probe)	34.33	55.53
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	10.8	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	45

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	58
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	NA	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	NA	Samples Collected (Y/N)	Y

Notes:

Aproximately 3ft snow. Monitoring wells not inspected.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	3/19/2015
Inspector	J.Wyckoff
Time	9:20

Treatment System Operation		**Alarms**	
System On (Y/N)	Y	A/C Fail (Y/N)	N
RW-1 On (Y/N)	Y	RW-1 (Y/N)	N
RW-2 On (Y/N)	Y	RW-2 (Y/N)	N
Blower On (Y/N)	Y	Blower Pressure (Y/N)	N
Sump Pump On (Y/N)	N	Sump Level (Y/N)	N

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.7	23.9
Total Flow (Gallons)	29114011	26551528
Water Level (Feet Above Probe)	35.40	56.36
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Y
System Pressure (inches water)	11.2	Water Leaks (Y/N)	N
Influent/Effluent Piping OK? (Y/N)	Y	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	53
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Y	Circuit Breakers Checked (Y/N)	Y
Grass Mowed (Y/N)	NA	Outfall Condition OK? (Y/N)	Y
Monitoring Wells OK? (Y/N)	NA	Samples Collected (Y/N)	Y

Notes:

Aproximately 1ft snow/ice.

Blower motor bearing making noise. Attempt to grease bearing but did not readily take grease.
Shut down blower. Clean grease passages in motor. Grease blower - noise gone.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	4/1/2015
Inspector	J.Wyckoff
Time	7:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	NR	NR
Total Flow (Gallons)	NR	NR
Water Level (Feet Above Probe)	NR	NR
Probe Depth (Feet BTOC)	NR	NR

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	NR	Water Leaks (Y/N)	Yes
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	NR

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	NR
Heat Exchanger Flow (GPM)	NR	Heat Exchanger Pressure (PSI)	NR

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	NR
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	NR	Samples Collected (Y/N)	No

Notes:

System operating but not sending fax notifications. Reboot PLC to restore fax reports.

No additional O&M performed today

NR - Not recorded

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	4/21/2015
Inspector	A. Goodrich
Time	NR

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	23.9	21.6
Total Flow (Gallons)	30260887	27588370
Water Level (Feet Above Probe)	35.49	57.46
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.5	Water Leaks (Y/N)	Yes
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	64
Heat Exchanger Flow (GPM)	2.4	Heat Exchanger Pressure (PSI)	8.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	NR
Grass Mowed (Y/N)	NA	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Annual groundwater sampling today - place PDBs

NR - Not recorded

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	5/8/2015
Inspector	A. Goodrich
Time	NR

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	23.6	21.2
Total Flow (Gallons)	30847546	28115252
Water Level (Feet Above Probe)	34.47	55.87
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.1	Water Leaks (Y/N)	Yes
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	63
Heat Exchanger Flow (GPM)	2.3	Heat Exchanger Pressure (PSI)	8.2

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	NR
Grass Mowed (Y/N)	NA	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Collect PDB samples today

NR - Not recorded

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	6/22/2015
Inspector	J. Wyckoff
Time	NR

Treatment System Operation		**Alarms**		
System On (Y/N)	Yes	A/C Fail (Y/N)	Yes	(see below)
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No	
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No	
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No	
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No	

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.3	21.8
Total Flow (Gallons)	NR	NR
Water Level (Feet Above Probe)	34.33	56.34
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.1	Water Leaks (Y/N)	Yes
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	74
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

System off due to AC failure.
Restarted system at 11:45.
Trim grass.
NR - Not recorded

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	7/31/2015
Inspector	J. Wyckoff
Time	19:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.3	22.3
Total Flow (Gallons)	NR	NR
Water Level (Feet Above Probe)	32.86	55.53
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.1	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	76
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	No	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Reboot PLC due to no fax alerts since 7/26/15.

NR - Not recorded

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	8/28/2015
Inspector	J. Wyckoff
Time	9:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	24.8	22.0
Total Flow (Gallons)	34369620	31226012
Water Level (Feet Above Probe)	33.05	55.01
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.3	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	60
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	No	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Trim grass

Perform routine O&M

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	9/23/2015
Inspector	JRW / L. Whalen
Time	7:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25	21.5
Total Flow (Gallons)	35308715	32036213
Water Level (Feet Above Probe)	32.95	54.98
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.7	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	54
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

08:00 - Shut system down to clean air stripper.
12:50 - Restart system and collect system samples.

Trim grass.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	10/26/2015
Inspector	JRW
Time	12:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.5	21.5
Total Flow (Gallons)	36337283	33063342
Water Level (Feet Above Probe)	33.98	55.30
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.4	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	Off	Building Temperature (°F)	58
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.2

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	11/20/2015
Inspector	JRW
Time	12:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.6	22.0
Total Flow (Gallons)	36931037	33654472
Water Level (Feet Above Probe)	33.88	55.55
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.3	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	57
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.2

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	12/21/2015
Inspector	L. Whalen
Time	11:52

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.9	22.0
Total Flow (Gallons)	37903974	34623044
Water Level (Feet Above Probe)	34.04	55.87
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.6	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	55

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	67
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	1/25/2016
Inspector	L. Whalen
Time	13:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	20.7	22.1
Total Flow (Gallons)	38917282	35660351
Water Level (Feet Above Probe)	34.21	55.93
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.8	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	64
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	2/26/2016
Inspector	L. Whalen
Time	7:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.9	22.2
Total Flow (Gallons)	39895355	36664748
Water Level (Feet Above Probe)	35.91	58.30
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.8	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	61
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	3/18/2016
Inspector	L. Whalen
Time	7:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	20.6	21.4
Total Flow (Gallons)	40538376	37322526
Water Level (Feet Above Probe)	38.82	56.23
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.6	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	50

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	64
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Turned down temp on unit heater for spring

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	4/22/2016
Inspector	L. Whalen
Time	7:45

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.1	21.2
Total Flow (Gallons)	41572548	38385903
Water Level (Feet Above Probe)	32.93	55.98
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.3	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	52

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	69
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	No	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	5/23/2016
Inspector	L. Whalen
Time	7:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	21.9	21.1
Total Flow (Gallons)	42478952	39289074
Water Level (Feet Above Probe)	32.36	55.53
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.4	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	51

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	67
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.2

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	No	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	6/6/2016
Inspector	L. Whalen
Time	7:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	24.6	21.0
Total Flow (Gallons)	-	-
Water Level (Feet Above Probe)	32.26	56.29
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.2	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	51

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	67
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	No

Notes:

System shut down on 6/5/16 @ 02:16. Could not be restarted remotely.
Re-boot PLC and restarted system at 07:00. Values above after restart.
Mowed grass.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	6/24/2016
Inspector	L. Whalen
Time	6:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	24.9	21.6
Total Flow (Gallons)	43515441	40232278
Water Level (Feet Above Probe)	31.47	55.34
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.5	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	52

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	67
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	No

Notes:

System restarted upon arrival. System shut down on 6/21/16 @ 01:16.
Restarted system at 06:30. Values above after restart.
Mowed grass.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	7/25/2016
Inspector	L. Whalen
Time	7:10

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.1	22.6
Total Flow (Gallons)	44274666	40923547
Water Level (Feet Above Probe)	30.81	54.96
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.2	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	52

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	72
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	8/18/2016
Inspector	L. Whalen
Time	7:10

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.8	23.2
Total Flow (Gallons)	44924222	41522859
Water Level (Feet Above Probe)	31.51	55.77
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.3	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	52

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	71
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	9/16/2016
Inspector	L. Whalen
Time	8:00

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.6	23.7
Total Flow (Gallons)	Not reported	Not reported
Water Level (Feet Above Probe)	31.33	55.24
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.7	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	51

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	69
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

System down on arrival due to ASB VFD Alarm - likely caused by power interruption.
System restarted at 6:52.

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	10/31/2016
Inspector	L. Whalen
Time	7:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.2	23.8
Total Flow (Gallons)	47490153	43894225
Water Level (Feet Above Probe)	32.67	56.48
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.7	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	53

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	70
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Yes	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Sampled:	RW-1	705
	RW-2	710
	EFF 46 HZ	715

System Chec 745

Trimmed gra 800
(last time for the season)

Turned ceiling heater on Low

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	11/28/2016
Inspector	L. Whalen
Time	6:20

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.8	23.6
Total Flow (Gallons)	48297839	44642649
Water Level (Feet Above Probe)	32.82	56.42
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.7	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	52

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	67
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	Snow	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Sampled:	RW-1	605
	RW-2	610
	EFF 46 HZ	615
System Check:		620

(Turned ceiling heater up to Med.) 28 ° out today

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	12/4/2016
Inspector	LDW/DSW
Time	11:25

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.7	24.0
Total Flow (Gallons)	Not reported	Not reported
Water Level (Feet Above Probe)	33.60	57.08
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.8	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	74
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	N/A	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	No

Notes:

System down on arrival.

System restarted at 11:19AM (12-4-16)

System check: 11:30

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	12/29/2016
Inspector	L. Whalen
Time	7:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.5	23.7
Total Flow (Gallons)	NR	NR
Water Level (Feet Above Probe)	33.02	56.65
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.8	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	54.2

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	67
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.4

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	N/A	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	Yes	Samples Collected (Y/N)	Yes

Notes:

Sampled:	RW-1	6:05
	RW-2	6:10
	EFF 46 HZ	6:15

Shut down and and restart system to reset PLC

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	1/30/2017
Inspector	L. Whalen
Time	6:45

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	Yes	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.7	23.7
Total Flow (Gallons)		
Water Level (Feet Above Probe)	32.61	56.65
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.1	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	59

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	67
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.6

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	N/A	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	N/A	Samples Collected (Y/N)	Yes

Notes:

Sampled:	RW-1	-	630
	RW-2	-	635
	EFF 46 Hz	-	640

System shut down and restart

Faxed out copy of Treatment System Info

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	2/27/2017
Inspector	L. Whalen
Time	7:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	Yes	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.5	23.6
Total Flow (Gallons)		
Water Level (Feet Above Probe)	34.38	58.05
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	10.6	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	51.2

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	67.1
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	N/A	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	N/A	Samples Collected (Y/N)	Yes

Notes:

Samples:	RW-1	-	700
	RW-2	-	705
	EFF 46 Hz	-	710

System Check	730
Building Check	740
Grounds & Outfall Check	740

Gladding Cordage
South Otselic, New York
NYSDEC Site #709009

Date	3/23/2017
Inspector	L. Whalen
Time	7:30

Treatment System Operation		**Alarms**	
System On (Y/N)	Yes	A/C Fail (Y/N)	No
RW-1 On (Y/N)	Yes	RW-1 (Y/N)	No
RW-2 On (Y/N)	Yes	RW-2 (Y/N)	No
Blower On (Y/N)	Yes	Blower Pressure (Y/N)	No
Sump Pump On (Y/N)	No	Sump Level (Y/N)	No

Recovery Wells	**RW-1**	**RW-2**
Flow Rate (GPM)	25.4	23.7
Total Flow (Gallons)		
Water Level (Feet Above Probe)	31.78	56.27
Probe Depth (Feet BTOC)	40.00	65.00

Air Stripper			
Blower VFD Setting (Hertz)	46	Intake/Exhaust Piping OK? (Y/N)	Yes
System Pressure (inches water)	11.5	Water Leaks (Y/N)	No
Influent/Effluent Piping OK? (Y/N)	Yes	Water Temperature (°F)	49.8

Heat Exchanger			
Heat (On/Off)	On	Building Temperature (°F)	67
Heat Exchanger Flow (GPM)	0.0	Heat Exchanger Pressure (PSI)	1.3

General Building/Site			
Building Condition OK? (Y/N)	Yes	Circuit Breakers Checked (Y/N)	Yes
Grass Mowed (Y/N)	-	Outfall Condition OK? (Y/N)	Yes
Monitoring Wells OK? (Y/N)	-	Samples Collected (Y/N)	Yes

Notes:

Sampled:	RW-1	-	630
	RW-2	-	635
	EFF 46 Hz	-	640

APPENDIX B

Site Photolog

ARCADIS

Appendix B
Site and Well Photographs

Gladding Cordage Site
NYSDEC Site #7-09-009
Otselic, New York

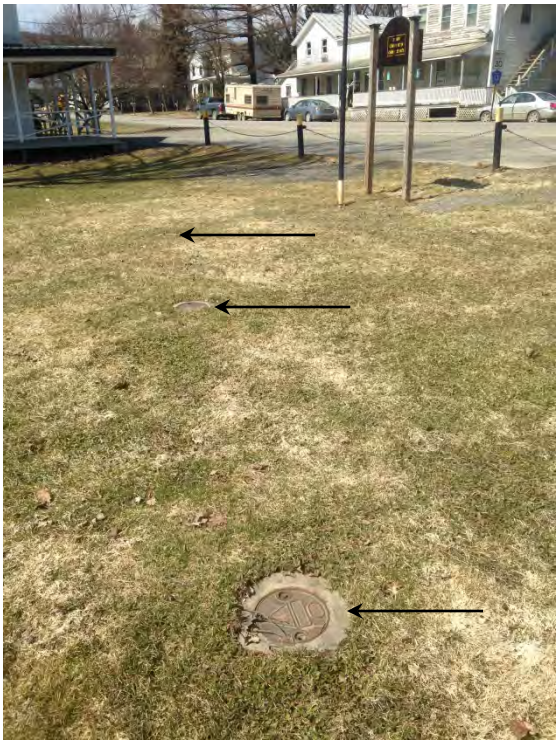
TW-1

TW-2 (Shallow, Intermediate, Deep)

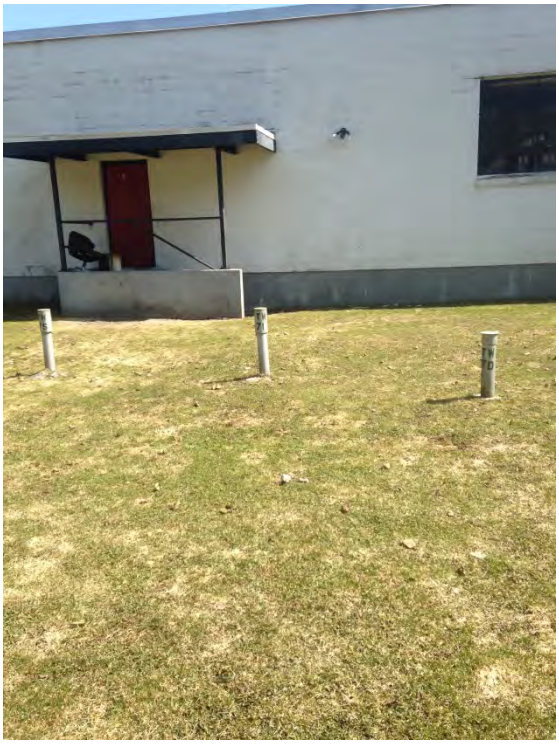
TW-3 (Shallow, Intermediate, Deep)

TW-4 Intermediate

TW-5 (Shallow, Intermediate, Deep)



TW-6 (Shallow, Intermediate, Deep)



TW-7 (Shallow, Intermediate, Deep)

TW-9 (Intermediate)

TW-9 (Deep)

TW-10 (Deep)

TW-12 (Intermediate, Deep)

TW-14 (Shallow, Intermediate, Deep)

Treatment Building

Effluent Outfall to Otselic River

APPENDIX C

IC/EC Certification Form

Enclosure 1
Engineering Controls - Standby Consultant/Contractor Certification Form

Site Details **Box 1**

Site No. 709009

Site Name Gladding Corporation

Site Address: P.O. Box 164 Zip Code: 13155
City/Town: South Otselic
County: Chenango
Site Acreage: 7.0

Reporting Period: April 15, 2014 to April 15, 2017

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. To your knowledge is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

Signature of Standby Consultant/Contractor Date

SITE NO. 709009

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
65.-1-16.1	D.H. Christakos	Site Management Plan Monitoring Plan O&M Plan

ICs at the site include Site management plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
65.-1-16.1	Groundwater Treatment System

Engineering controls include a groundwater extraction and treatment system and monitoring well network.

Box 5

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, including data and material prepared by previous contractors for the current certifying period, if any;

   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 compete.

YES	NO
X	☐

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) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.

_____ _____

Signature of Standby Consultant/Contractor Date

Box 6

IC/EC CERTIFICATIONS

Professional Engineer Signature

I certify that all information in Boxes 2 through 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 DANIEL J LOEWENSTEIN at ARCADIS
print name

855 ROUTE 146

CLIFTON PARK, NY 12065
(print business address)

am certifying as a Professional Engineer.

Signature of Professional Engineer

Stamp
(Required for PE)

6/9/17
Date

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