



# **2011 SITE MANAGEMENT PERIODIC REVIEW REPORT LOVE CANAL SITE**

**GLENN SPRINGS HOLDINGS, INC.  
NIAGARA FALLS, NEW YORK**

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## 1.0 INTRODUCTION

Operation of the Love Canal Site (Site) was transferred from the New York State Department of Environmental Conservation (NYSDEC) to Occidental Chemical Corporation (OCC) in April 1995. Effective July 1, 1998, Site responsibility was assigned by OCC to Glenn Springs Holdings, Inc. (GSH), an affiliate of OCC. Beginning October 1, 2008, GSH contracted Conestoga-Rovers & Associates (CRA) to perform operation, maintenance, monitoring, and reporting activities for the Site under direct management of GSH.

This report is the seventeenth annual report prepared by or on behalf of OCC and covers operating, maintenance, and monitoring activities for 2011. The completed NYSDEC Institutional and Engineering Controls Certification Form is included as Appendix A.

## **2.0 REMEDIAL SYSTEMS**

Operation of remedial systems to prevent the off-Site migration of chemical contaminants from the Site began in October 1978 with the installation of a barrier drain along the east and west sides of the south section of the Canal. The barrier drain was later extended to completely encompass the Canal. The barrier drain, designed to intercept the shallow lateral groundwater flow, consists of a trench 15 to 25 feet deep and 4 feet wide. Installed within the trench is an 8-inch diameter perforated clay tile drain centered in 2 feet of uniformly sized gravel, which is overlain to the surface with sand. Lateral trenches filled with sand were excavated perpendicular to the barrier drain in the direction of the canal. The tile drain is graded toward a series of manholes and wet wells (PC-1A/PC-2A in the North/Central Sector and PC-1/PC-2 in the South Sector) where the leachate is collected. The leachate is pumped from the wet wells to two underground holding tanks (PC-3A in the North/Central Sector and PC-3 in the South Sector) where it is held prior to being treated at the Love Canal Treatment Facility (LCTF) and discharged to the Niagara Falls Water Board (NFWB) sanitary sewer system under the Site's Significant Industrial User Permit (SIU) #44. The locations of the remedial system components are illustrated on the Site Plan presented as Figure 2.1.

In March 1999, the adjacent 102<sup>nd</sup> Street Landfill Site leachate collection system was connected to the Love Canal Site to facilitate the transfer of leachate from the 102<sup>nd</sup> Street landfill into Love Canal's PC-3 storage tank for treatment at the LCTF. The 102<sup>nd</sup> Street Landfill Site leachate collection system operates continuously. During 2011, the four-well system at 102<sup>nd</sup> Street pumped 309,391 gallons of leachate to the LCTF. The leachates from the two sites were then treated and discharged to the permitted NFWB sanitary sewer system.

### **2.1 OPERATIONS OF THE BARRIER DRAIN AND WELL COLLECTION SYSTEM**

#### **2.1.1 BARRIER DRAIN SYSTEM**

The Barrier Drain (BD) system functioned as designed in 2011, with no major maintenance required. Visual inspections of the collection system were conducted on April 12 and September 12, 2011; visual inspections of the Barrier Drain Manholes were conducted on April 12 and September 14, 2011. The visual inspections were conducted through the BD system manholes and showed the flumes of the manholes were flowing freely and required no further maintenance. The visual inspections were documented on the Semiannual Inspection Forms which are presented as Appendix B.

### **2.1.2 WET WELL COLLECTION SYSTEM**

The wet well collection system consists of two sectors, the Northern/Central and the Southern Collection System. Leachate from the Northern/Central Sector is pumped from wet wells PC-1A and PC-2A to storage tank PC-3A, while leachate from the Southern Sector is pumped from wet wells PC-1 and PC-2 to storage tank PC-3. The collection systems were operational and functioned properly throughout 2011.

### **2.1.3 102<sup>ND</sup> STREET LANDFILL FORCEMAIN**

The leachate forcemain construction was completed in March 1999 and is used for the transfer of leachate from the 102<sup>nd</sup> Street Landfill to the LCTF. The forcemain begins at the northwest corner of the 102<sup>nd</sup> Street Landfill and extends northward beneath River Road, LaSalle Expressway, and Frontier Avenue to the LCTF PC-3 storage tank where it is held for treatment.

### **3.0 GROUNDWATER TREATMENT AND MONITORING**

#### **3.1 GROUNDWATER TREATMENT**

##### **3.1.1 TREATMENT SYSTEM**

The treatment system consists of clarification, bag filtration, and carbon treatment prior to discharge to the NFWB sanitary sewer system. A process schematic depicting the layout of the treatment system is presented as Figure 3.1.

Treated water from the Site is discharged to the NFWB sanitary sewer system as authorized by the Facility's SIU Permit #44. In 2010, the NFWB reissued Permit #44 to OCC for an additional 5 years. The permit is valid from January 8, 2010 through January 8, 2015. A copy of the permit is included as Appendix C.

Routine maintenance activities are discussed in Section 4.

##### **3.1.2 EFFLUENT DISCHARGE**

The LCTF discharged to the NFWB sanitary sewer system on 171 days in 2011.

Periodically, unusually heavy rainfall or snow melt at the Love Canal and surrounding area can result in surcharged sewers. These surcharges lead to overflows at the combined sanitary and storm sewer overflow points. Consequently, to minimize the potential for LCTF treated effluent discharges from contributing to the surcharge conditions, the NFWB requires the LCTF to cease discharging during these surcharge events. NFWB requested LCTF shut down due to surcharging six times during 2011 (January 27, February 3, February 4, April 4, April 12, and May 18).

In 2011, the LCTF processed a total of 5,859,600 gallons of leachate. This total was comprised of 5,550,209 gallons of leachate from the Love Canal Landfill and 309,391 gallons of leachate from the 102<sup>nd</sup> Street Landfill.

Table 3.1 shows the monthly total and average treated groundwater quantities from 2000 through 2011.

### **3.1.3 EFFLUENT SAMPLING**

Sampling of the effluent discharged to the NFWB sanitary sewer system occurred quarterly as required under the Site's SIU Discharge Permit #44. The quarterly effluent sampling for 2011 was performed on January 6, May 17, August 4, and October 4, 2011. The sample results were submitted to the NFWB quarterly as required by the permit. The results for each event were in compliance with the requirements of the Site's SIU permit.

### **3.1.4 PRECIPITATION**

In 2011, precipitation in the Niagara Falls region totaled 36.19 inches (Niagara Falls National Weather Service data). Table 3.1 provides historic regional precipitation data from 2000 through 2011.

## **3.2 GROUNDWATER MONITORING**

### **3.2.1 GROUNDWATER QUALITY**

Sampling and analytical protocols for the Site's groundwater sampling program have been established and are set forth in the "Sampling Manual, Love Canal Site, Long-Term Groundwater Monitoring Program" (LTGMP) dated January 1996.

In a letter dated April 5, 2011 (Appendix D), the NYSDEC requested additional monitoring wells 1181, 7160, 7155, 3251 be added to the LTGMP during 2011. Overburden monitoring well 7155 and bedrock monitoring well 3251 could not be located and are presumed paved over or buried. These two wells are not part of the Site's current LTGMP or part of the hydraulic monitoring. On July 6, 2011, at the Colvin Boulevard sewer repair location, Mr. Brian Sadowski of the NYSDEC was verbally notified by CRA of the inability to locate these two wells and agreed that no further efforts were necessary, and no additional wells should be sampled to replace these two wells.

### **3.2.2 GROUNDWATER MONITORING**

The annual groundwater monitoring event was performed between July 5 and July 19, 2011. As part of the annual groundwater monitoring efforts in 2011, 39 discrete

wells were sampled. On March 25, 2009, the NYSDEC indicated to GSH that they would no longer be providing an annual well sampling list and directed GSH to use the wells sampled in 2007 and 2008 for all future sampling events. This decision has been documented in a memo titled "Love Canal Groundwater Sampling," August 5, 2010, presented in Appendix E. As part of the LTGMP, the NYSDEC has the option of collecting split samples during the annual event and having the samples analyzed independently to verify data. In 2011, NYSDEC did not collect any split samples.

In July 2011, 21 overburden and 18 bedrock groundwater samples were collected in support of the LTGMP. The samples were submitted to TestAmerica Laboratories, Inc., located in Pittsburgh, Pennsylvania, and analyzed for Site-specific volatiles, semi-volatiles, and pesticides/polychlorinated biphenyls (PCBs). A qualified CRA chemist performed the analytical Quality Assurance/Quality Control (QA/QC) review and data validation. The QA/QC report for this event is presented in Appendix F.

Figure 3.2 identifies the wells sampled and their locations. The Annual Groundwater Sampling Schedule is presented in Appendix E. Tables 3.2 and 3.3 provide a summary of the wells that were sampled, the laboratory data, and a summation of the number of compounds found at or above the detection limits in each well.

### **3.2.2.1 OVERBURDEN MONITORING WELLS**

Table 3.2 presents the analytical results from the annual monitoring and the analytes that were detected from the overburden wells.

The 2011 groundwater analytical results for the overburden monitoring wells are consistent with previous long-term monitoring analytical results. The analytical results were non-detect or were detected at low levels (except groundwater from well 10135, which is installed in an area of known Site impacts).

Historically, well 10135 has had the most detected compounds and with the highest concentrations. As stated in the LTGMP, well 10135 is located in an area of known contamination and is sampled to present a "worst case" well. In 2011, well 10135 had 23 discrete compounds detected. Well 10135 is located outside the barrier drain but within the boundaries of the remedial Site in the southwestern zone. Table 3.4 presents a summary of detected compounds.

### **3.2.2.2 BEDROCK MONITORING WELLS**

Table 3.3 presents the analytical results from the annual monitoring and the analytes that were detected from the bedrock wells.

The 2011 groundwater analytical results for the bedrock monitoring wells are consistent with previous long-term monitoring analytical results. The analytical results were non-detect or were detected at low levels. Table 3.4 presents a summary of detected compounds.

### **3.2.2.3 HISTORIC COMPOUND DETECTIONS**

Table 3.5 presents a summary of detected compounds of four long-term monitoring wells, including three bedrock wells and one overburden well (bedrock wells 10210A, 10210B, and 10210C, and overburden well 10135) from 1990 to 2011. The data from these four wells are presented since they have the most consistent historical record of compound detections compared to the other overburden and bedrock wells. The data from the additional Site wells not presented in Table 3.5 are typically non-detect with the occasional low level detection and, therefore, do not present any useful data in regards to a discussion of historical analytical trends at the Site. An evaluation of the 2011 sampling data for these four wells shows that the compounds detected in 2011 were present at concentrations consistent with historical trends.

### **3.2.3 HYDRAULIC CONTAINMENT**

Water levels were measured at six nested piezometer strings (1140, 1150, 1160, 1170, 1180, and 1190) in March, June, September, and December 2011. The water level data are presented in Tables 3.6A to 3.6F. The wells on the tables are ordered from the well furthest from the outside of the barrier drain, to the barrier drain, and to the well inside the area enclosed by the barrier drain. Figures 3.3 to 3.8 show the overburden groundwater flow conditions for June 2011 along the six piezometer strings. A review of the piezometer string groundwater elevation data from the remaining three quarters (March, September, and December) is consistent with the June 2011 data and, therefore, figures depicting the overburden groundwater flow conditions from those quarters have not been created.

In addition to the above-mentioned information, a groundwater contour figure was prepared using the June 2011 water levels from the six nested piezometer strings. The June 2011 groundwater contour figure is presented as Figure 3.9.

The groundwater contour figure and Tables 3.6A to 3.6F illustrate that there is at least 5 feet of inward gradient on the outside of the barrier drain at each of the six nested piezometer strings, demonstrating that the barrier drain and lateral trenches are effectively capturing leachate from the Site and preventing off-Site migration of chemicals. Based on the water level data from the six nested piezometer strings, an inward gradient can be inferred to exist around the collection drain system demonstrating that the horizontal groundwater flow outside of the barrier drain is primarily towards the barrier drain. A review of Figure 3.9 shows that groundwater flow inside of the barrier drain is towards the barrier drain. Monitoring will continue during 2012 as per the approved monitoring program.

#### **3.2.4 WELL MAINTENANCE**

No monitoring well maintenance was required during 2011.

#### **3.2.5 SUMMARY OF TREATMENT AND MONITORING RESULTS**

Effluent discharge increased from 2010 to 2011, but is consistent with volumes from previous years with similar precipitation levels. Quarterly sampling and analysis found that all chemistry detected within effluent samples for each event was less than the limits established in the Site's SIU permit.

An inward hydraulic gradient at each of the six nested piezometer strings at the barrier drain demonstrates that the barrier drain is effectively capturing leachate from the Site and preventing off-Site migration of chemicals. Any chemistry detected within the monitoring wells was present at low levels (with the exception of groundwater from well 10135, discussed in Section 3.2.2), further illustrating containment.

An overall inward hydraulic gradient towards the barrier drain and a review of groundwater quality for the groundwater monitoring wells demonstrates overall Site containment.

## 4.0 ACTIVITIES

Summaries of normal activities and repairs performed in 2011 are presented below.

### 4.1 PROCESS ACTIVITIES

Process activities that occurred during the year included the following:

- Cleaning of all process building tanks and clarifier
- Removal and disposal of hazardous waste
- Replacement of PC2 pump
- Upgrade of select switches and routers throughout the network

### 4.2 NON-PROCESS ACTIVITIES

Non-process activities that occurred during the year included the following:

- Scheduled preventative maintenance
- Installation of two overburden groundwater monitoring wells at Colvin Boulevard
- Disposal of Colvin Sewer project wastes
- Routine repairs to Site lighting and system components, as needed
- Reorganized and cleaned drum barn, Love Canal office building, and Love Canal process building
- Replaced process building roof drains and added heat trace
- Replaced lighting on office building flag with higher efficiency lighting fixtures
- Painted internal area of process building including process piping, ceiling, and floors
- Replaced all Ventsorb vapor phase carbon drums and connection piping
- Replaced exit lights
- Preventative maintenance and filter changes on heating and cooling systems
- Landscaping maintenance including grass cutting and tree and flower bed maintenance

### **4.3 COMMUNITY OUTREACH**

Community Outreach programs have included such activities as beautification of the area surrounding the Landfill and tours of the facility.

#### **4.3.1 BEAUTIFICATION**

The following beautification activities were conducted at Love Canal in 2011:

- Maintenance and landscaping of the Site and surrounding areas
- Maintenance of flower beds and shrubs along Colvin Boulevard, 95<sup>th</sup> Street, and Frontier Avenue
- Cleanup of discarded debris along fence line and within adjacent lots

#### **4.3.2 TOURS**

Tours of the facility have been given throughout the years to representatives of various environmental agencies (domestic and foreign) and educational groups. The tours include an informational orientation, accompanied with visual aids, followed by a guided tour of the treatment facility and landfill.

On May 26, 2011, a tour of the Love Canal Site was given to the New York and New Jersey Education and Research Center.

#### **4.3.3 COMMUNICATIONS**

All required reporting was compiled and submitted to various agencies throughout the year. Reports included the 2010 Annual Hazardous Waste Reports to NYSDEC, the 2010 Periodic Review Report (formerly titled the Annual Operations and Monitoring Report) to various agencies, quarterly SIU analytical reports to the NFWB, and monthly SIU reports to the NFWB.

The Love Canal Annual Newsletter for 2010 was issued to surrounding citizens and agencies in April 2011. The report summarizes items such as the amount of groundwater treated on Site and then discharged to NFWB's sanitary sewer system, maintenance activities, and other non-operational activities for the year.

The NFWB performed an annual inspection of the LCTF in 2011. Additionally, an annual verification sampling of the effluent discharge was performed by the NFWB. The inspections and the annual effluent verification sampling concluded that the Site is being maintained and operated in accordance with the Site's SIU discharge permit and other local, State, and Federal requirements.

#### **4.4 WASTE GENERATION**

Throughout 2011, both hazardous and nonhazardous waste was generated from various activities on and related to the Site, and disposed of off Site in accordance with all applicable laws and regulations.

The tracking of hazardous waste is performed by regulated hazardous waste manifests. A summary of the Site's annual hazardous waste generation is reported to the NYSDEC in the Annual Hazardous Waste Report. The Annual Hazardous Waste Report summarizes the quantities, transporters, and disposal methods.

A total of 207,685 pounds of hazardous waste were generated from various activities on and related to the Site. The waste materials were then sent off Site for proper disposal in accordance with all applicable laws and regulations. Wastes generated in 2011 were transported and disposed of through incineration or landfill impoundment by Clean Harbors, LLC and Clean Harbors Canada, Inc. Of the total amount of hazardous waste generated, approximately 111,620 pounds were impacted soils from the Colvin Boulevard sewer repair project (for details, refer to the "Colvin Boulevard Sewer Repair Supplemental Subsurface Investigation Report" [CRA, 2011]).

The remaining 96,065 pounds of hazardous waste disposed of in 2011 consisted of spent carbon, non-aqueous phase liquid (NAPL), debris, soil, waste liquids, solid wastes, and personal protective equipment (PPE).

In addition to the waste generated above, solid waste from the installation of monitoring wells during the Colvin Boulevard sewer repair activities was also generated and disposed of as nonhazardous material at the Niagara Falls Allied Waste facility.

#### 4.5 ROUTINE OPERATIONS, INSPECTIONS, AND MONITORING

A daily inspection of the system operations was performed for each day in 2011 in accordance with the Operation and Maintenance Manual (O&M) for the Love Canal Site dated May 17, 2011. Inspection records are available upon request.

Monthly inspections of the fire extinguishers and monthly checks of the carbon vapor phase vent for breakthrough were also completed in accordance with the O&M Manual. Inspection records are available upon request.

The backflow preventer system was inspected and tested by Camtech on March 21, 2011. All backflow prevention devices were found to be operational with no maintenance required. A copy of the Test and Maintenance of Backflow Prevention Device Report for each device is presented in Appendix G.

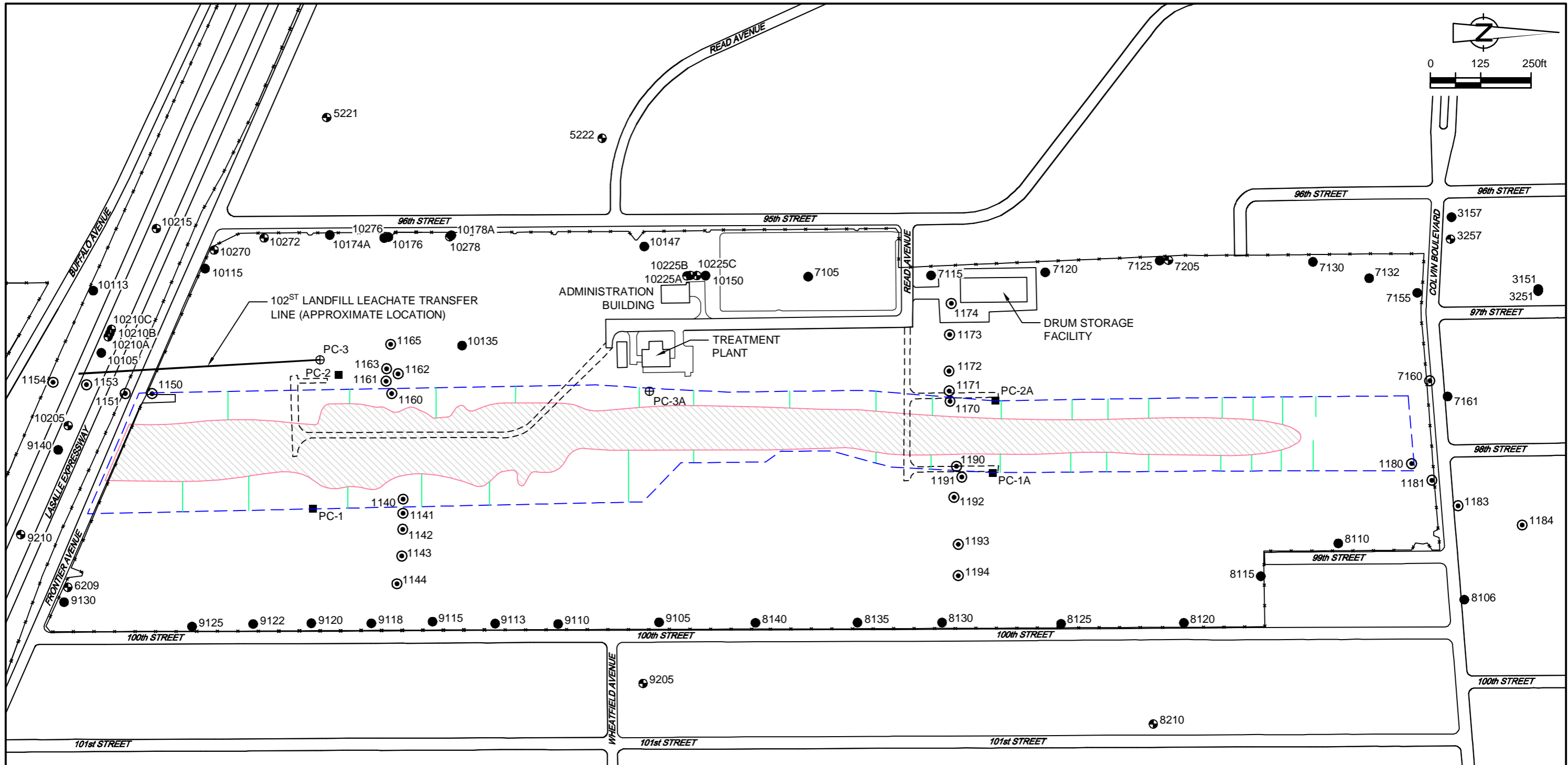
On January 24, 2011, the NFWB and Site personnel completed the annual Site inspection. NFWB personnel found the facility to be operating in accordance with the SIU permit and NFWB regulations. Therefore, no recommendations were made as a result of this inspection. The NFWB completed inspection forms are included as Appendix H.

The NYSDEC Annual Hazardous Waste Inspection was carried out on September 23, 2011. No issues were identified. A copy of the inspection report completed by the NYSDEC is included as Appendix I.

## 5.0 CONCLUSION

The 2011 data indicates that the chemical and hydrogeological conditions at the Site remain consistent. The barrier drain is successfully capturing leachate from the Site and preventing off-Site migration of chemicals as evidenced by the groundwater gradients depicted on Figures 3.3 to 3.9. The remediation system is functioning as designed based on third party inspections by the NYSDEC and the NFWB and effluent compliance with the Site's SIU discharge permit. There were 5,859,600 gallons of leachate treated and discharged from the Site, of which 5,550,209 gallons of leachate were collected on Site and the remaining 309,391 gallons were collected from the 102<sup>nd</sup> Street Site and pumped to the LCTF for treatment.

## FIGURES



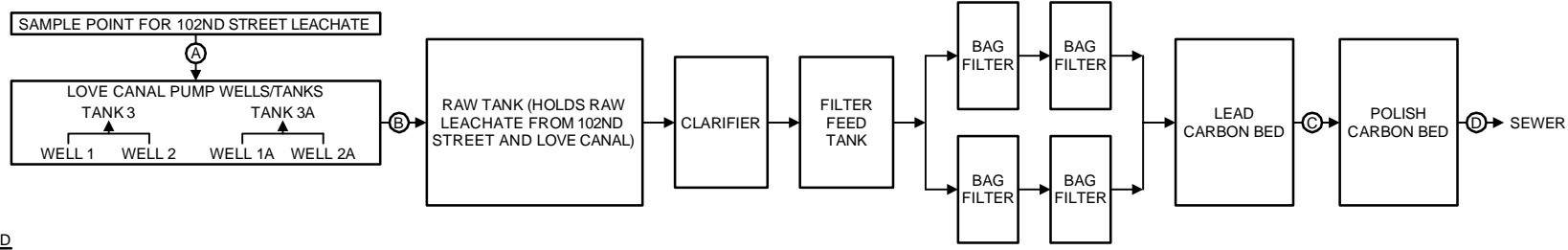
**LEGEND**

- x-x- FENCE LINE
  - - - - - APPROXIMATE BARRIER DRAIN
  - APPROXIMATE LATERAL LOCATION
  - ⊙ 7105 PIEZOMETER WELL
  - 9120 OVERBURDEN OBSERVATION WELL

- 10270 BEDROCK OBSERVATION WELL
  - PC-1 WET WELL FOR LEACHATE COLLECTION
  - ⊕ PC-3 UNDERGROUND LEACHATE STORAGE TANK
  - ▨ APPROXIMATE LIMITS OF DISPOSED WASTE

figure 2.1  
**SITE PLAN**  
 LOVE CANAL SITE  
 GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*





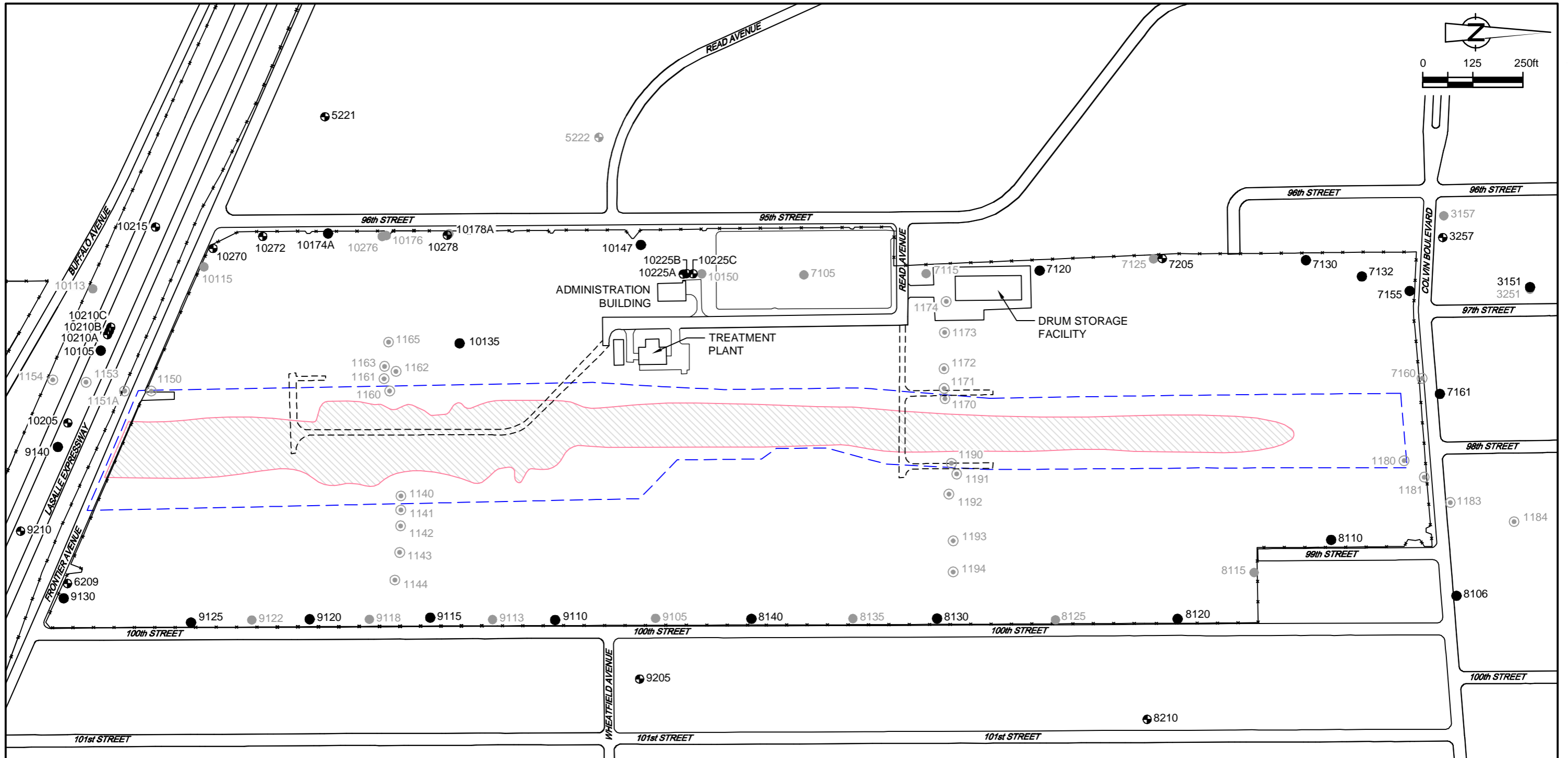
LEGEND

(A) SAMPLE LOCATION POINT

figure 3.1

PROCESS SCHEMATIC  
 LOVE CANAL SITE  
 GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*





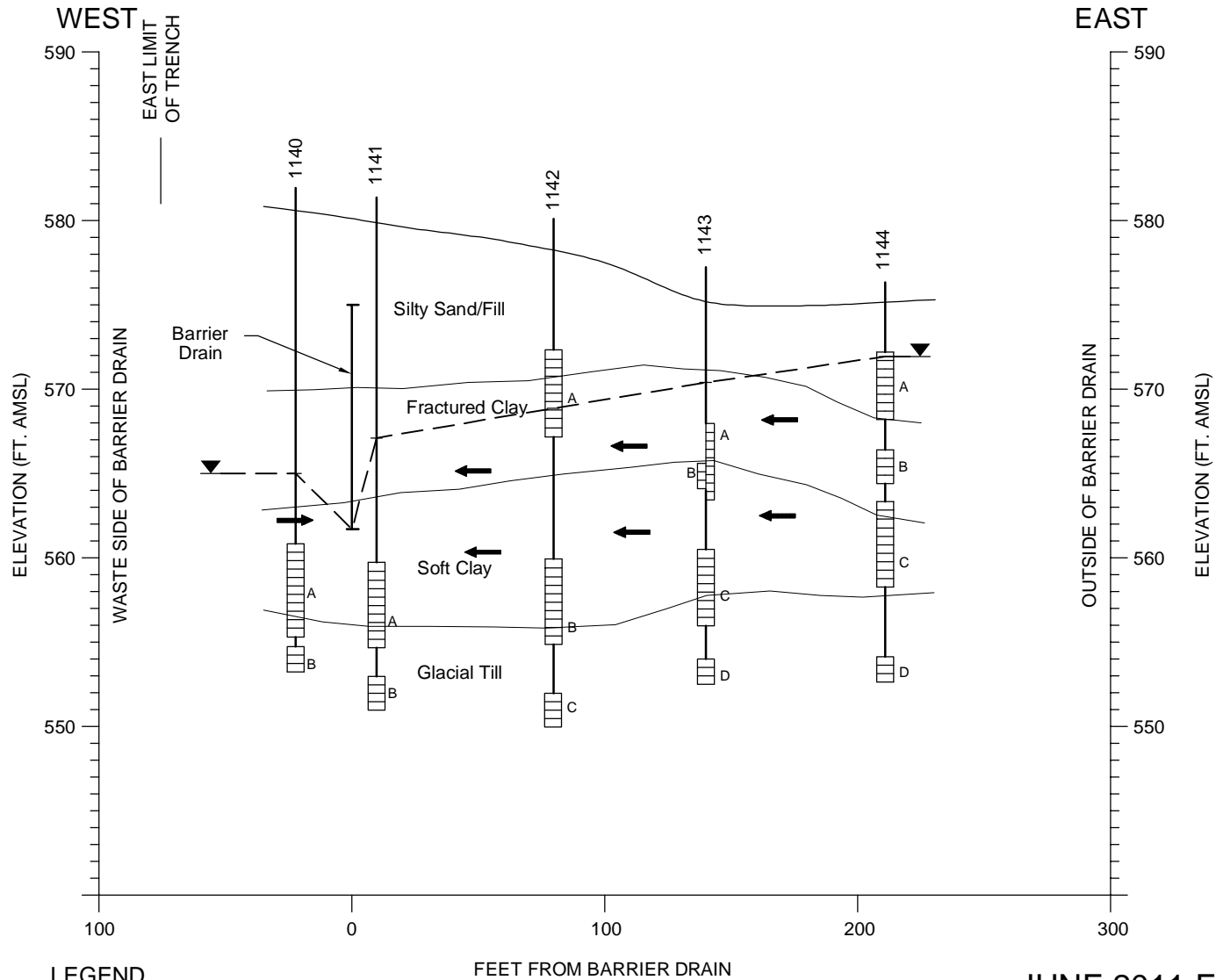
**LEGEND**

- |           |                             |         |                                      |
|-----------|-----------------------------|---------|--------------------------------------|
| - x - x - | FENCE LINE                  | ● 5222  | BEDROCK OBSERVATION WELLS            |
| - - - - - | APPROXIMATE BARRIER DRAIN   | ● 9205  | OVERBURDEN WELLS SAMPLED IN 2011     |
| ○ 7105    | PIEZOMETER WELL             | ● 10270 | BEDROCK WELLS SAMPLED 2011           |
| ● 9120    | OVERBURDEN OBSERVATION WELL | ▨       | APPROXIMATE LIMITS OF DISPOSED WASTE |

NOTE:  
WELLS 3151 AND 3251 ARE UNABLE TO BE LOCATED  
(ASSUMED TO BE PAVED OVER)

figure 3.2  
2011 GROUNDWATER MONITORING LOCATIONS  
LOVE CANAL SITE  
GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*





**LEGEND**

- A     PIEZOMETER DESIGNATION
- — — GROUNDWATER LEVEL
- ➔     FLOW DIRECTION
- ▤     SCREENED INTERVAL

- NOTE: (1) GROUNDWATER LEVEL SHOWN IS FOR LOWERMOST MONITORED INTERVAL WITHIN SOFT CLAY MEDIUM
- (2) PIEZOMETERS WERE INSTALLED IN SEPARATE BOREHOLES.

figure 3.3

JUNE 2011 FLOW DIAGRAM  
 1140 SERIES PIEZOMETERS  
 LOVE CANAL SITE  
 GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*



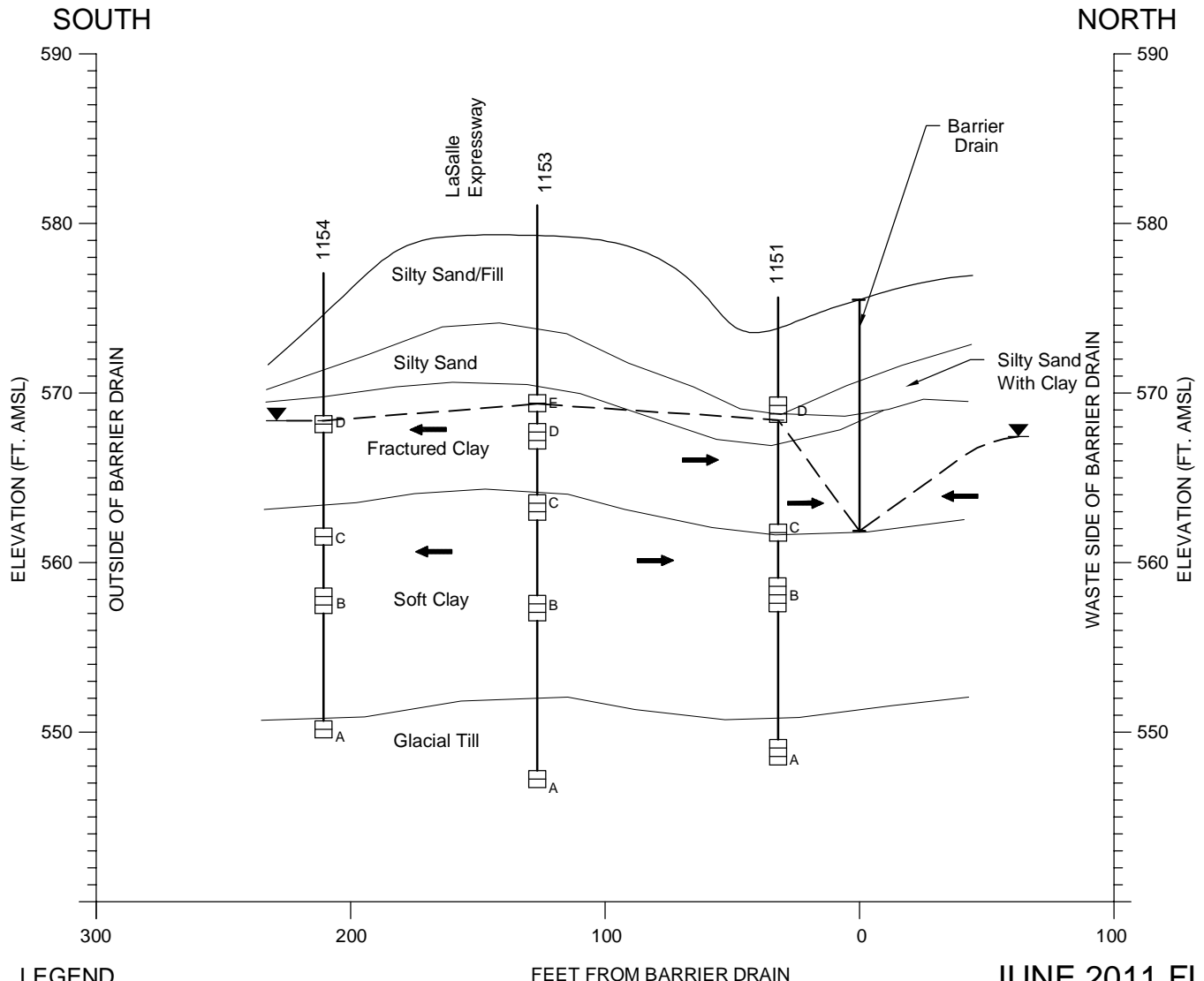


figure 3.4

**LEGEND**

- A     PIEZOMETER DESIGNATION
- GROUNDWATER LEVEL
- FLOW DIRECTION
- ▣     SCREENED INTERVAL

- NOTE: (1) GROUNDWATER LEVEL SHOWN IS FOR LOWERMOST MONITORED INTERVAL WITHIN SOFT CLAY MEDIUM
- (2) PIEZOMETERS WERE INSTALLED IN SEPARATE BOREHOLES.

**JUNE 2011 FLOW DIAGRAM  
 1150 SERIES PIEZOMETERS  
 LOVE CANAL SITE  
 GLENN SPRINGS HOLDINGS, INC.  
 Niagara Falls, New York**



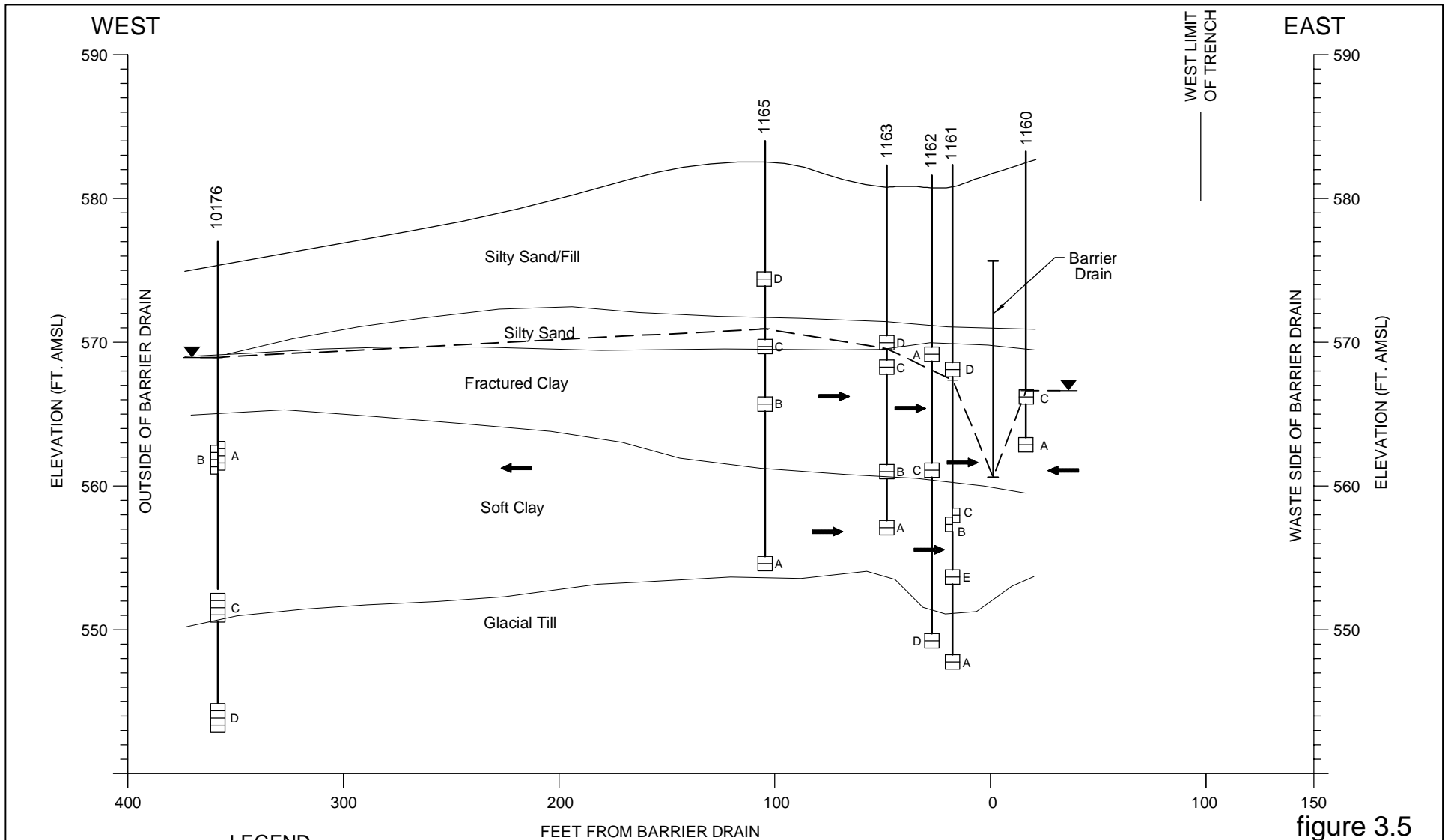


figure 3.5

**LEGEND**

- A PIEZOMETER DESIGNATION
- GROUNDWATER LEVEL
- ➔ FLOW DIRECTION
- ▭ SCREENED INTERVAL

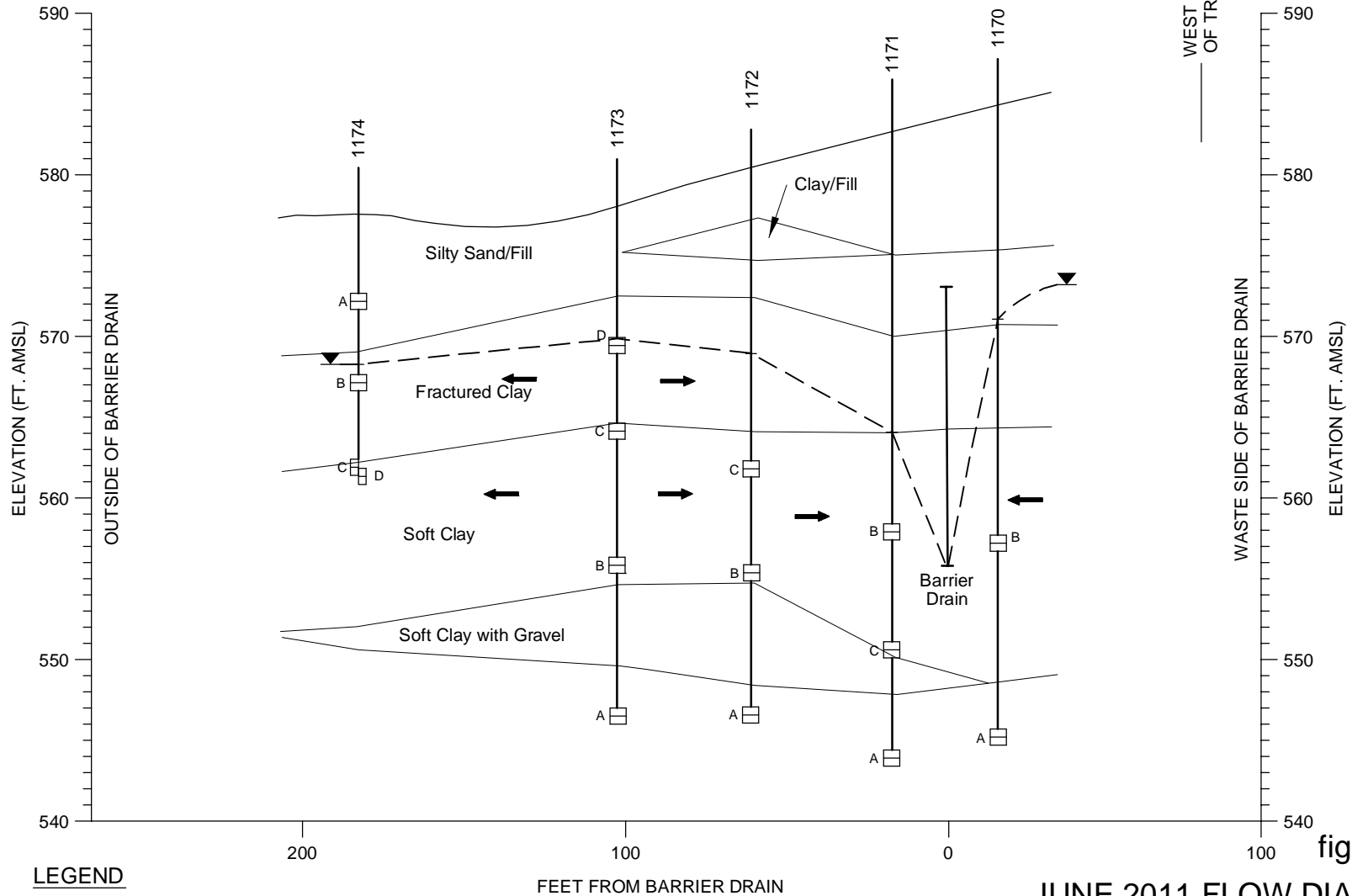
- NOTE: (1) GROUNDWATER LEVEL SHOWN IS FOR LOWERMOST MONITORED INTERVAL WITHIN SOFT CLAY MEDIUM
- (2) PIEZOMETERS WERE INSTALLED IN SEPARATE BOREHOLES.
- (3) WELL SCREEN 1163 D MOVED UP TO MATCH FIELD MEASUREMENTS.

**JUNE 2011 FLOW DIAGRAM**  
**1160 SERIES PIEZOMETERS**  
**LOVE CANAL SITE**  
**GLENN SPRINGS HOLDINGS, INC.**  
*Niagara Falls, New York*



WEST

EAST



**LEGEND**

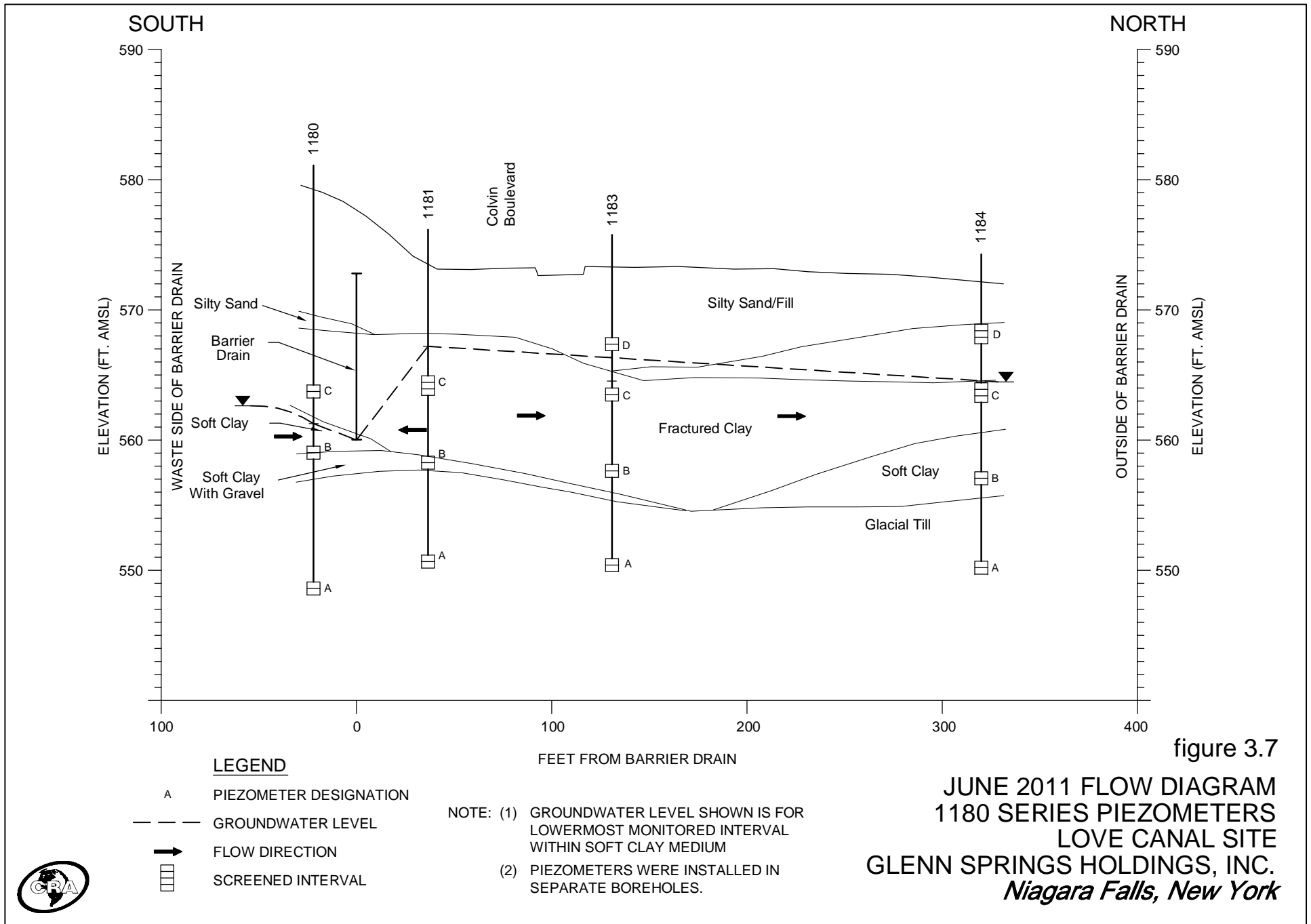
- A      PIEZOMETER DESIGNATION
- GROUNDWATER LEVEL
- FLOW DIRECTION
- SCREENED INTERVAL

NOTE: (1) GROUNDWATER LEVEL SHOWN IS FOR LOWERMOST MONITORED INTERVAL WITHIN SOFT CLAY MEDIUM  
 (2) PIEZOMETERS WERE INSTALLED IN SEPARATE BOREHOLES.

figure 3.6

**JUNE 2011 FLOW DIAGRAM  
 1170 SERIES PIEZOMETERS  
 LOVE CANAL SITE  
 GLENN SPRINGS HOLDINGS, INC.  
 Niagara Falls, New York**





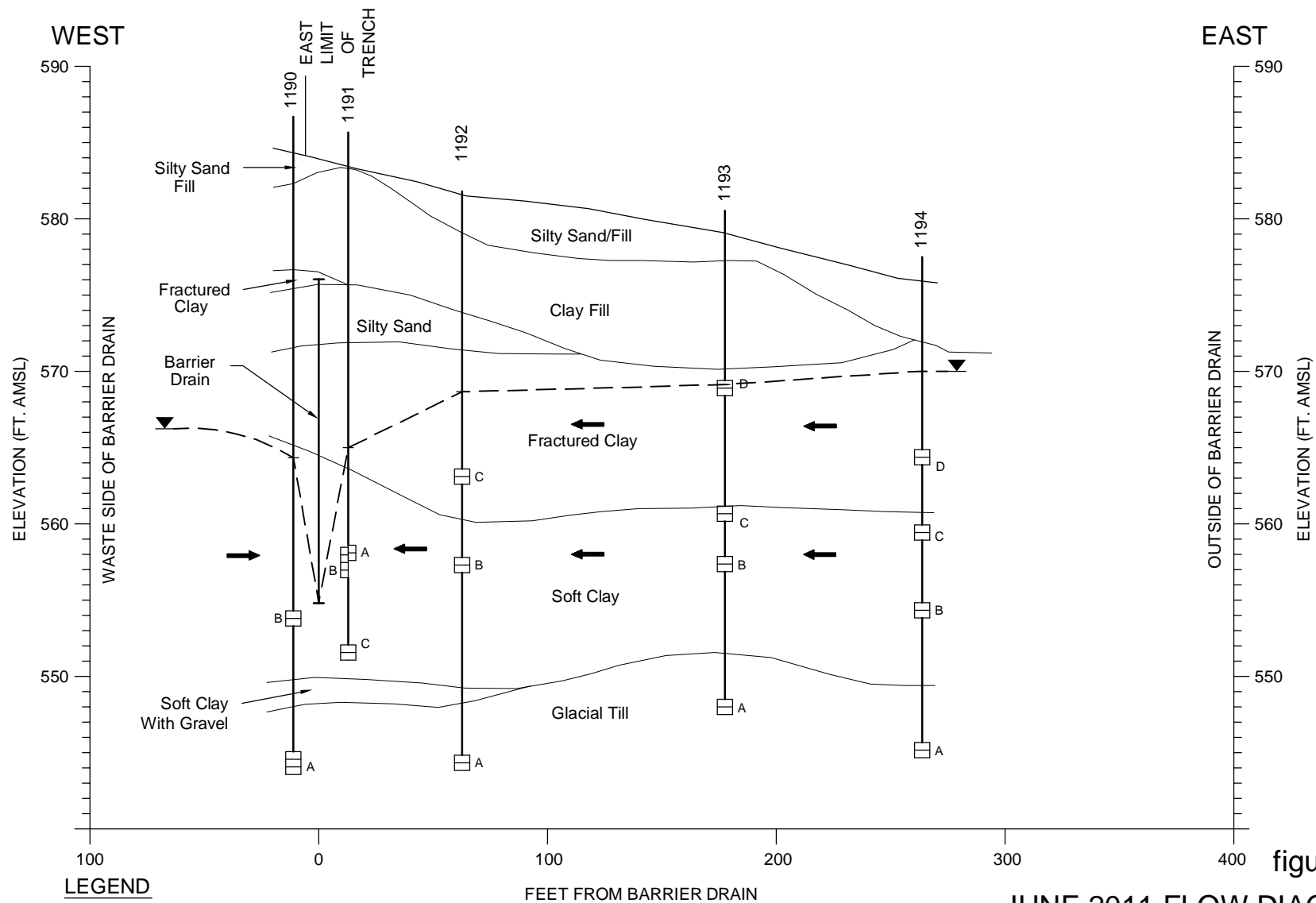
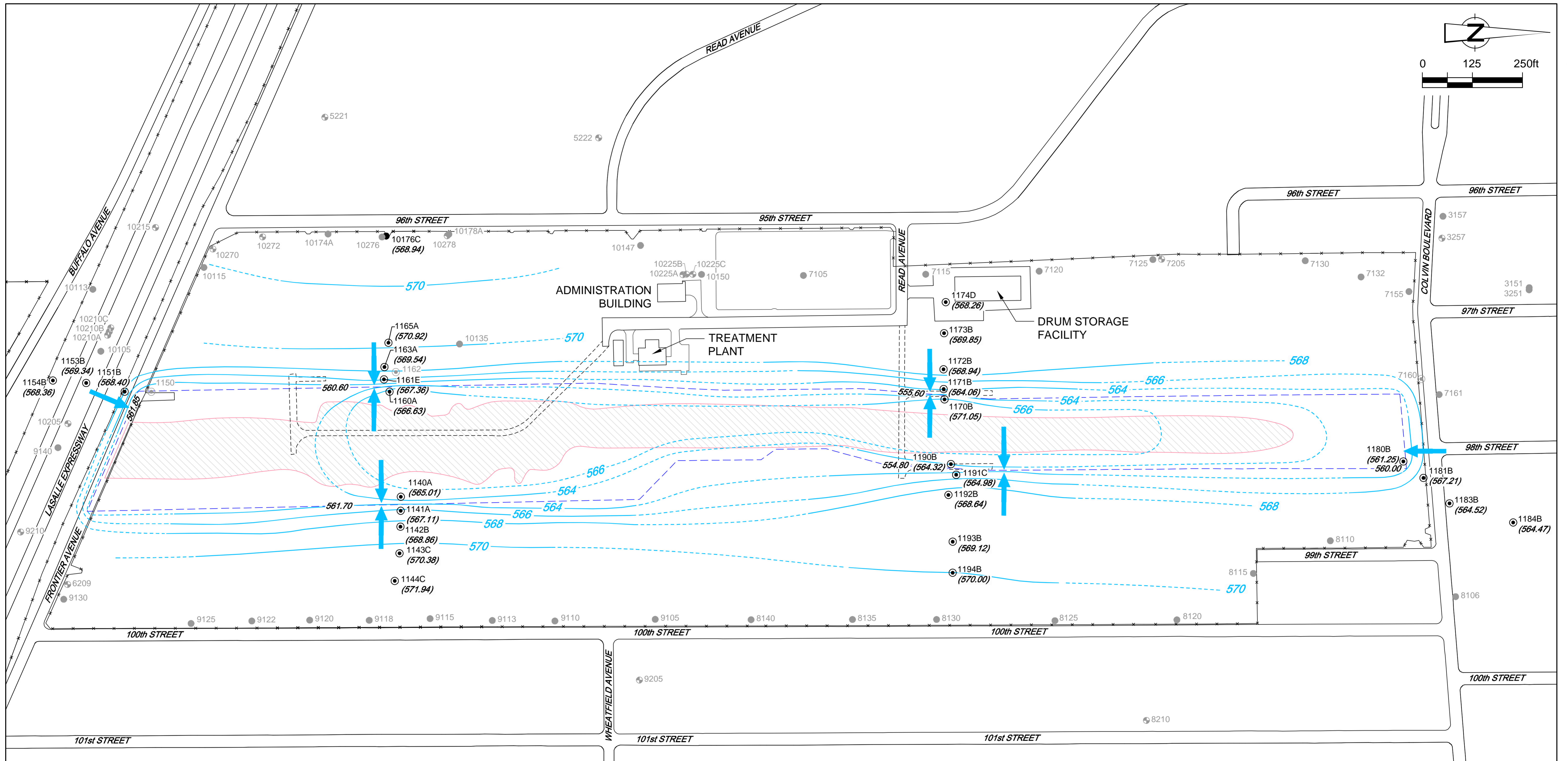


figure 3.8

JUNE 2011 FLOW DIAGRAM  
 1190 SERIES PIEZOMETERS  
 LOVE CANAL SITE  
 GLENN SPRINGS HOLDINGS, INC.  
 Niagara Falls, New York





**LEGEND**

- FENCE LINE
- APPROXIMATE BARRIER DRAIN
- 7105 PIEZOMETER WELL
- 9120 OVERBURDEN OBSERVATION WELL
- 7105 PIEZOMETER WELL (NOT SAMPLED)
- 9120 OVERBURDEN OBSERVATION WELL (NOT SAMPLED)
- 5222 BEDROCK OBSERVATION WELL (NOT SAMPLED)
- APPROXIMATE LIMITS OF DISPOSED WASTE
- (569.67) GROUNDWATER ELEVATION (JUNE 2011)
- 565 GROUNDWATER CONTOUR (JUNE 2011)
- INFERRED GROUNDWATER CONTOUR (JUNE 2011)
- GROUNDWATER FLOW DIRECTION

figure 3.9

**JUNE 2011 GROUNDWATER CONTOURS  
LOVE CANAL SITE  
GLENN SPRINGS HOLDINGS, INC.  
Niagara Falls, New York**



## TABLES

TABLE 3.1

**MONTHLY VOLUMES OF GROUNDWATER TREATED  
LOVE CANAL LEACHATE TREATMENT FACILITY  
GLENN SPRINGS HOLDINGS, INC.**

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>January</b>	Gross (1)	495,800	396,900	488,900	419,400	309,200	841,400	855,900	993,400	674,000	523,500	534,400	346,900
	Net (2)	280,364	282,480	422,682	374,123	260,171	796,518	817,305	970,918	649,777	495,713	471,805	322,994
	Days (3)	21	20	21	14	10	17	16	20	18	16	17	18
<b>February</b>	Gross	480,400	560,000	663,700	266,300	330,000	440,200	437,300	216,600	570,000	506,700	314,300	375,800
	Net	368,492	468,863	608,116	231,049	291,082	401,137	405,124	174,776	539,772	485,869	276,643	349,712
	Days	21	19	20	13	9	11	9	7	16	13	10	19
<b>March</b>	Gross	505,500	616,400	364,900	721,500	1,038,400	698,900	436,800	582,500	570,500	606,900	550,100	1,003,700
	Net	290,501	493,476	316,696	667,337	986,332	667,105	402,047	560,237	550,518	582,109	526,021	978,000
	Days	23	21	21	17	21	13	13	16	12	18	17	21
<b>April</b>	Gross	675,600	352,300	689,700	432,800	800,400	805,300	184,800	447,200	602,000	414,900	498,200	676,400
	Net	547,926	262,946	629,683	380,745	767,982	769,514	155,028	420,133	574,359	377,080	466,778	652,656
	Days	20	20	20	16	17	14	6	14	12	16	15	11
<b>May</b>	Gross	473,300	311,200	589,500	425,400	326,500	183,400	121,800	323,200	172,900	306,200	379,400	942,700
	Net	335,331	207,580	532,251	379,299	294,612	156,846	93,394	297,471	147,715	267,700	348,837	917,206
	Days	20	17	20	14	10	5	4	12	11	14	18	17
<b>June</b>	Gross	632,200	202,200	395,100	367,900	253,200	160,800	130,700	173,300	128,700	110,000	205,200	473,100
	Net	486,721	132,132	347,485	303,576	208,659	118,979	104,449	148,638	107,411	79,200	174,305	449,046
	Days	16	16	14	13	9	6	5	4	6	7	13	16
<b>July</b>	Gross	333,900	182,200	194,500	187,700	137,700	92,600	195,500	129,100	164,760	187,900	85,600	79,700
	Net	184,955	111,941	145,344	142,849	111,217	78,234	183,084	99,026	141,442	153,170	55,670	53,632
	Days	20	16	16	11	7	3	5	6	6	7	4	5
<b>August</b>	Gross	437,100	267,200	151,300	158,600	301,900	98,800	322,440	120,800	197,340	369,400	184,300	193,900
	Net	286,925	194,821	107,928	114,497	269,934	55,055	293,900	106,040	191,068	347,425	162,562	166,652
	Days	23	18	17	8	10	5	10	5	6	18	8	13
<b>September</b>	Gross	209,600	144,900	148,600	105,800	484,800	317,900	249,160	68,400	152,200	101,500	88,100	47,800
	Net	82,263	81,619	94,401	60,350	435,482	284,315	213,343	49,041	122,101	76,057	56,678	21,679
	Days	20	16	12	7	12	8	7	4	9	7	2	6
<b>October</b>	Gross	264,300	438,500	154,600	211,000	135,700	486,300	919,200	173,000	296,100	199,200	120,200	417,500
	Net	134,248	348,153	108,226	211,000	94,476	445,560	892,734	141,650	274,068	129,035	88,537	389,696
	Days	20	18	13	9	4	10	18	8	13	8	5	14
<b>November</b>	Gross	250,900	250,400	360,800	356,800	211,400	524,600	691,800	90,100	449,700	210,100	263,400	350,100
	Net	132,728	194,481	306,258	310,650	186,999	494,443	658,765	77,506	414,149	152,302	233,159	322,735
	Days	17	16	14	12	5	14	14	3	14	12	15	12
<b>December</b>	Gross	522,600	555,300	549,600	692,300	674,400	502,000	510,400	345,700	757,500	506,200	510,900	952,000
	Net	421,149	475,856	496,556	643,735	622,403	476,165	492,900	317,790	733,582	467,578	483,221	926,201
	Days	17	18	15	14	14	12	12	8	20	17	17	19
<b>Total</b>	Gross	5,281,200	4,277,500	4,751,200	4,345,500	5,003,600	5,152,200	5,055,800	3,663,300	4,735,700	4,042,500	3,734,100	5,859,600
	Net	3,551,603	3,254,348	4,115,626	3,819,210	4,529,349	4,743,871	4,712,073	3,363,226	4,445,962	3,613,238	3,344,216	5,550,209
	Days	242	215	203	148	128	118	119	107	143	153	141	171
<b>Monthly Average</b>	Gross	440,100	356,458	395,933	362,125	416,967	429,350	421,317	305,275	394,642	336,875	311,175	488,300
	Net	295,967	271,196	342,969	318,268	377,446	395,323	392,673	280,269	370,497	301,103	278,685	462,517
	Days	20	18	17	12	11	10	10	9	12	13	12	14
<b>Precipitation Inches</b>		42.2	35.18	39.74	37.15	41.73	39.07	44.41	35.12	47.23	42.37	36.71	36.19

## Notes:

- (1) Gross: Total volume of leachate treated in gallons; as of March 1999, treatment at LCTF included leachate collected from 102nd Street Landfill Site.  
(2) Net: Love Canal leachate treated in gallons; net is equal to the total (gross) leachate treated less leachate received from 102nd Street.  
(3) Days: Number of days treatment facility discharged to the sanitary sewer.

TABLE 3.2

2011 ANALYTICAL RESULTS SUMMARY-OVERBURDEN  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:	7120	7130	7132	7155	7161	8106	8110
Sample ID:	LC-7120-0711	LC-7130-0711	LC-7132-0711	LC-7155-0711	LC-7161-0711	LC-8106-0711	LC-8110-0711
Sample Date:	7/7/2011	7/13/2011	7/7/2011	7/7/2011	7/13/2011	7/6/2011	7/13/2011
Parameters	Units						
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
2-Hexanone	µg/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	20 UJ	20 UJ	20 UJ	20 UJ	20 U	20 UJ
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 UJ
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	1.2 J	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl acetate	µg/L	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
<b>Discrete Compounds</b>		0	1	0	0	0	0
<b>Semi-volatile Organic Compounds</b>							
1,2,4-Trichlorobenzene	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
1,2-Dichlorobenzene	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
1,3-Dichlorobenzene	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
1,4-Dichlorobenzene	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4,5-Trichlorophenol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
2,4,6-Trichlorophenol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
2,4-Dinitrophenol	µg/L	47 U	48 U	49 U	48 U	48 U	48 U
2,4-Dinitrotoluene	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
2,6-Dinitrotoluene	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.5 U
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

TABLE 3.2

2011 ANALYTICAL RESULTS SUMMARY-OVERBURDEN  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:	7120	7130	7132	7155	7161	8106	8110	
Sample ID:	LC-7120-0711	LC-7130-0711	LC-7132-0711	LC-7155-0711	LC-7161-0711	LC-8106-0711	LC-8110-0711	
Sample Date:	7/7/2011	7/13/2011	7/7/2011	7/7/2011	7/13/2011	7/6/2011	7/13/2011	
Parameters	Units							
<i>Semi-volatile Organic Compounds - Continued</i>								
2-Methylphenol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
2-Nitroaniline	µg/L	47 U	48 U	49 U	48 U	48 U	47 U	48 U
2-Nitrophenol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
3,3'-Dichlorobenzidine	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
3-Nitroaniline	µg/L	47 U	48 U	49 U	48 U	48 U	47 U	48 U
4,6-Dinitro-2-methylphenol	µg/L	47 U	48 U	49 U	48 U	48 U	47 U	48 U
4-Bromophenyl phenyl ether	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
4-Chloro-3-methylphenol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
4-Chloroaniline	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
4-Chlorophenyl phenyl ether	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
4-Methylphenol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
4-Nitroaniline	µg/L	47 U	48 U	49 U	48 U	48 U	47 U	48 U
4-Nitrophenol	µg/L	47 U	48 U	49 U	48 U	48 U	47 U	48 U
Acenaphthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(g,h,i)perylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzoic acid	µg/L	47 U	48 U	49 U	48 U	48 U	47 U	48 U
Benzyl alcohol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
bis(2-Chloroethoxy)methane	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
bis(2-Chloroethyl)ether	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Chrysene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Diethyl phthalate	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Dimethyl phthalate	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Di-n-butylphthalate (DBP)	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Di-n-octyl phthalate (DnOP)	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Hexachloroethane	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Isophorone	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Naphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U
N-Nitrosodi-n-propylamine	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U
N-Nitrosodiphenylamine	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Pentachlorophenol	µg/L	9.4 U	9.5 U	9.7 U	9.5 U	9.5 U	9.4 U	9.5 U
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
<b>Discrete Compounds</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

TABLE 3.2

2011 ANALYTICAL RESULTS SUMMARY-OVERBURDEN  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Sample Location:		7120	7130	7132	7155	7161	8106	8110
Sample ID:		LC-7120-0711	LC-7130-0711	LC-7132-0711	LC-7155-0711	LC-7161-0711	LC-8106-0711	LC-8110-0711
Sample Date:		7/7/2011	7/13/2011	7/7/2011	7/7/2011	7/13/2011	7/6/2011	7/13/2011
Parameters	Units							
<b>PCBs</b>								
Aroclor-1016 (PCB-1016)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1248 (PCB-1248)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
<b>Discrete Compounds</b>		0	0	0	0	0	0	0
<b>Pesticides</b>								
4,4'-DDD	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
4,4'-DDE	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
4,4'-DDT	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
Aldrin	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
alpha-BHC	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
alpha-Chlordane	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
beta-BHC	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
delta-BHC	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
Dieldrin	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
Endosulfan I	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
Endosulfan II	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
Endosulfan sulfate	µg/L	0.047 U	0.047 U	0.047 UJ	0.047 U	0.048 U	0.047 U	0.048 U
Endrin	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
Endrin ketone	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
gamma-BHC (lindane)	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
gamma-Chlordane	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
Heptachlor	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
Heptachlor epoxide	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U
Methoxychlor	µg/L	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.094 U	0.095 U
Toxaphene	µg/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
<b>Discrete Compounds</b>		0	0	0	0	0	0	0

Notes:  
 J - Estimated concentration.  
 U - Not present at or above the associated value.  
 UJ - Estimated reporting limit.

TABLE 3.2

2011 ANALYTICAL RESULTS SUMMARY-OVERBURDEN  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:		8120	8130	8140	9110	9115	9115	9120
Sample ID:		LC-S120-0711	LC-S130-0711	LC-S140-0711	LC-9110-0711	LC-9115-0711	LC-S205-0711	LC-9120-0711
Sample Date:		7/19/2011	7/6/2011	7/6/2011	7/6/2011	7/6/2011	7/6/2011 (Duplicate)	7/6/2011
Parameters	Units							
<b>Volatile Organic Compounds</b>								
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl acetate	µg/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L	15 U	15 U	15 U	15 U	15 U	15 U	15 U
<b>Discrete Compounds</b>		0	0	0	0	0	0	0
<b>Semi-volatile Organic Compounds</b>								
1,2,4-Trichlorobenzene	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
1,2-Dichlorobenzene	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
1,3-Dichlorobenzene	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
1,4-Dichlorobenzene	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4,5-Trichlorophenol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
2,4,6-Trichlorophenol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
2,4-Dinitrophenol	µg/L	47 U	48 U	47 U	47 U	48 U	48 U	47 U
2,4-Dinitrotoluene	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
2,6-Dinitrotoluene	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

TABLE 3.2

2011 ANALYTICAL RESULTS SUMMARY-OVERBURDEN  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Sample Location:		8120	8130	8140	9110	9115	9115	9120
Sample ID:		LC-S120-0711	LC-S130-0711	LC-S140-0711	LC-9110-0711	LC-9115-0711	LC-S205-0711	LC-9120-0711
Sample Date:		7/19/2011	7/6/2011	7/6/2011	7/6/2011	7/6/2011	7/6/2011 (Duplicate)	7/6/2011
Parameters	Units							
<i>Semi-volatile Organic Compounds - Continued</i>								
2-Methylphenol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
2-Nitroaniline	µg/L	47 U	48 U	47 U	47 U	48 U	48 U	47 U
2-Nitrophenol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
3,3'-Dichlorobenzidine	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
3-Nitroaniline	µg/L	47 U	48 U	47 U	47 U	48 U	48 U	47 U
4,6-Dinitro-2-methylphenol	µg/L	47 U	48 U	47 U	47 U	48 U	48 U	47 U
4-Bromophenyl phenyl ether	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
4-Chloro-3-methylphenol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
4-Chloroaniline	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
4-Chlorophenyl phenyl ether	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
4-Methylphenol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
4-Nitroaniline	µg/L	47 U	48 U	47 U	47 U	48 U	48 U	47 U
4-Nitrophenol	µg/L	47 U	48 U	47 U	47 U	48 U	48 U	47 U
Acenaphthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(g,h,i)perylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzoic acid	µg/L	47 U	48 U	47 U	47 U	48 U	48 U	47 U
Benzyl alcohol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
bis(2-Chloroethyl)ether	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Chrysene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Diethyl phthalate	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Dimethyl phthalate	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Hexachloroethane	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Isophorone	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Naphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Pentachlorophenol	µg/L	9.4 U	9.6 U	9.4 U	9.4 U	9.5 U	9.5 U	9.4 U
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
<b>Discrete Compounds</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

TABLE 3.2

2011 ANALYTICAL RESULTS SUMMARY-OVERBURDEN  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Sample Location:		8120	8130	8140	9110	9115	9115	9120
Sample ID:		LC-S120-0711	LC-S130-0711	LC-S140-0711	LC-9110-0711	LC-9115-0711	LC-S205-0711	LC-9120-0711
Sample Date:		7/19/2011	7/6/2011	7/6/2011	7/6/2011	7/6/2011	7/6/2011 (Duplicate)	7/6/2011
Parameters	Units							
<b>PCBs</b>								
Aroclor-1016 (PCB-1016)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1248 (PCB-1248)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
<b>Discrete Compounds</b>		0	0	0	0	0	0	0
<b>Pesticides</b>								
4,4'-DDD	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
4,4'-DDE	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
4,4'-DDT	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Aldrin	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
alpha-BHC	µg/L	0.047 U	0.048 U	0.54	0.047 U	0.047 U	0.048 U	0.047 U
alpha-Chlordane	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
beta-BHC	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
delta-BHC	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Dieldrin	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endosulfan I	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endosulfan II	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endosulfan sulfate	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endrin	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endrin ketone	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
gamma-BHC (lindane)	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
gamma-Chlordane	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Heptachlor	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Heptachlor epoxide	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Methoxychlor	µg/L	0.094 U	0.095 U	0.094 U	0.094 U	0.094 U	0.095 U	0.094 U
Toxaphene	µg/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
<b>Discrete Compounds</b>		0	0	1	0	0	0	0

Notes:  
 J - Estimated concentration.  
 U - Not present at or above the associated value.  
 UJ - Estimated reporting limit.

TABLE 3.2

2011 ANALYTICAL RESULTS SUMMARY-OVERBURDEN  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Sample Location:	9125	9130	9140	10105	10135	10147	10174A	1181A
Sample ID:	LC-9125-0711	LC-9130-0711	LC-9140-0711	LC-10105-0711	LC-10135-0711	LC-10147-0711	LC-10174A-0711	LC-1181A-0711
Sample Date:	7/7/2011	7/7/2011	7/7/2011	7/6/2011	7/13/2011	7/7/2011	7/13/2011	7/15/2011
Parameters	Units							
<b>Volatile Organic Compounds</b>								
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	20 UJ	20 UJ	20 UJ	20 U	200 UJ	20 UJ	20 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	2200	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	1100	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	67	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	38 J	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	16 J	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	9.5 J	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	3100	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	17 J	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	52	5.0 U	5.0 U
Vinyl acetate	µg/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L	15 U	15 U	15 U	15 U	150 U	15 U	15 U
<b>Discrete Compounds</b>		0	0	0	0	9	0	0
<b>Semi-volatile Organic Compounds</b>								
1,2,4-Trichlorobenzene	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	76 J	9.5 U	9.5 U
1,2-Dichlorobenzene	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	45 J	9.5 U	9.5 U
1,3-Dichlorobenzene	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U
1,4-Dichlorobenzene	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	130 J	9.5 U	9.5 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 UJ
2,4,5-Trichlorophenol	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U
2,4,6-Trichlorophenol	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	590	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U
2,4-Dinitrophenol	µg/L	47 U	48 U	48 U	49 U	950 U	48 U	47 UJ
2,4-Dinitrotoluene	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U
2,6-Dinitrotoluene	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U
2-Chlorophenol	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U

TABLE 3.2

2011 ANALYTICAL RESULTS SUMMARY-OVERBURDEN  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:	9125	9130	9140	10105	10135	10147	10174A	1181A	
Sample ID:	LC-9125-0711	LC-9130-0711	LC-9140-0711	LC-10105-0711	LC-10135-0711	LC-10147-0711	LC-10174A-0711	LC-1181A-0711	
Sample Date:	7/7/2011	7/7/2011	7/7/2011	7/6/2011	7/13/2011	7/7/2011	7/13/2011	7/15/2011	
Parameters	Units								
<i>Semi-volatile Organic Compounds - Continued</i>									
2-Methylphenol	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	30 J	9.5 U	9.5 U	9.4 U
2-Nitroaniline	µg/L	47 U	48 U	48 U	49 U	950 U	48 U	48 U	47 U
2-Nitrophenol	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
3,3'-Dichlorobenzidine	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
3-Nitroaniline	µg/L	47 U	48 U	48 U	49 U	950 U	48 U	48 U	47 U
4,6-Dinitro-2-methylphenol	µg/L	47 U	48 U	48 U	49 U	950 U	48 U	48 U	47 UJ
4-Bromophenyl phenyl ether	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
4-Chloro-3-methylphenol	µg/L	9.4 U	9.5 U	9.5 U	4.8 J	190 U	9.5 U	9.5 U	9.4 U
4-Chloroaniline	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
4-Chlorophenyl phenyl ether	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
4-Methylphenol	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	83 J	9.5 U	9.5 U	9.4 U
4-Nitroaniline	µg/L	47 U	48 U	48 U	49 U	950 U	48 U	48 U	47 U
4-Nitrophenol	µg/L	47 U	48 U	48 U	49 U	950 U	48 U	48 U	47 U
Acenaphthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 UJ
Benzo(g,h,i)perylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Benzoic acid	µg/L	47 U	48 U	48 U	49 U	11000	48 U	48 U	47 U
Benzyl alcohol	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	450	9.5 U	9.5 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
bis(2-Chloroethyl)ether	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	28 J	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	19 U	19 U	19 U	380 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
Chrysene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 UJ
Dibenzofuran	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
Diethyl phthalate	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
Dimethyl phthalate	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
Fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 UJ
Hexachloroethane	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 UJ
Isophorone	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
Naphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L	19 U	19 U	19 U	19 U	380 U	19 U	19 U	19 U
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 U
Pentachlorophenol	µg/L	9.4 U	9.5 U	9.5 U	9.7 U	190 U	9.5 U	9.5 U	9.4 UJ
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	82	1.9 U	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U
<b>Discrete Compounds</b>		0	0	0	1	10	0	0	0

TABLE 3.2

2011 ANALYTICAL RESULTS SUMMARY-OVERBURDEN  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Sample Location:		9125	9130	9140	10105	10135	10147	10174A	1181A
Sample ID:		LC-9125-0711	LC-9130-0711	LC-9140-0711	LC-10105-0711	LC-10135-0711	LC-10147-0711	LC-10174A-0711	LC-1181A-0711
Sample Date:		7/7/2011	7/7/2011	7/7/2011	7/6/2011	7/13/2011	7/7/2011	7/13/2011	7/15/2011
Parameters	Units								
<b>PCBs</b>									
Aroclor-1016 (PCB-1016)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.13 J	0.38 U
Aroclor-1248 (PCB-1248)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
<b>Discrete Compounds</b>		0	0	0	0	0	0	1	0
<b>Pesticides</b>									
4,4'-DDD	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
4,4'-DDE	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
4,4'-DDT	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
Aldrin	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
alpha-BHC	µg/L	0.047 U	0.048 U	0.047 U	1.1	21	0.047 U	0.048 U	0.047 U
alpha-Chlordane	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
beta-BHC	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	7.1	0.047 U	0.048 U	0.047 U
delta-BHC	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	7.3	0.047 U	0.048 U	0.019 J
Dieldrin	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
Endosulfan I	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
Endosulfan II	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
Endosulfan sulfate	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
Endrin	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
Endrin ketone	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
gamma-BHC (lindane)	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	4.1	0.047 U	0.048 U	0.077
gamma-Chlordane	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
Heptachlor	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
Heptachlor epoxide	µg/L	0.047 U	0.048 U	0.047 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U
Methoxychlor	µg/L	0.094 U	0.095 U	0.094 U	0.094 U	0.95 U	0.094 U	0.095 U	0.094 U
Toxaphene	µg/L	3.8 U	3.8 U	3.8 U	3.8 U	38 U	3.8 U	3.8 U	3.8 U
<b>Discrete Compounds</b>		0	0	0	1	4	0	0	2

Notes:  
 J - Estimated concentration.  
 U - Not present at or above the associated value.  
 UJ - Estimated reporting limit.

TABLE 3.3

2011 ANALYTICAL RESULTS SUMMARY-BEDROCK  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:	3257	5221	5221	6209	7205	8210	8210	9205	9210	10205
Sample ID:	LC-3257-0711	LC-5221-0711	LC-8225-0711	LC-6209-0711	LC-7205-0711	LC-8210-0711	LC-8215-0711	LC-9205-0711	LC-9210-0711	LC-10205-0711
Sample Date:	7/6/2011	7/13/2011	7/13/2011 (Duplicate)	7/14/2011	7/14/2011	7/13/2011	7/13/2011 (Duplicate)	7/13/2011	7/13/2011	7/14/2011
Parameters	Units									
<b>Volatile Organic Compounds</b>										
1,1,1-Trichloroethane	µg/L	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
1,1,2,2-Tetrachloroethane	µg/L	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
1,1,2-Trichloroethane	µg/L	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
1,1-Dichloroethane	µg/L	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
1,1-Dichloroethene	µg/L	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
1,2-Dichloroethane	µg/L	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
1,2-Dichloropropane	µg/L	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
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	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
Acetone	µg/L	20 U	20 UJ	20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 UJ	20 U
Benzene	µg/L	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
Bromodichloromethane	µg/L	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
Bromoform	µg/L	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
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Carbon disulfide	µg/L	7.2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	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
Chlorobenzene	µg/L	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
Chloroethane	µg/L	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
Chloroform (Trichloromethane)	µg/L	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
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	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
cis-1,3-Dichloropropene	µg/L	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
Dibromochloromethane	µg/L	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
Ethylbenzene	µg/L	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
Methylene chloride	µg/L	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
Styrene	µg/L	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
Tetrachloroethene	µg/L	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
Toluene	µg/L	5.0 U	3.4 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	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
trans-1,3-Dichloropropene	µg/L	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	µg/L	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
Vinyl acetate	µg/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Vinyl chloride	µg/L	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
Xylenes (total)	µg/L	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
<b>Discrete Compounds</b>		1	1	0	0	0	0	0	0	0
<b>Semi-volatile Organic Compounds</b>										
1,2,4-Trichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
1,2-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
1,3-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
1,4-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4,5-Trichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
2,4,6-Trichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
2,4-Dinitrophenol	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U	49 U
2,4-Dinitrotoluene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
2,6-Dinitrotoluene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U

TABLE 3.3

2011 ANALYTICAL RESULTS SUMMARY-BEDROCK  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:	3257	5221	5221	6209	7205	8210	8210	9205	9210	10205	
Sample ID:	LC-3257-0711	LC-5221-0711	LC-8225-0711	LC-6209-0711	LC-7205-0711	LC-8210-0711	LC-8215-0711	LC-9205-0711	LC-9210-0711	LC-10205-0711	
Sample Date:	7/6/2011	7/13/2011	7/13/2011 (Duplicate)	7/14/2011	7/14/2011	7/13/2011	7/13/2011 (Duplicate)	7/13/2011	7/13/2011	7/14/2011	
Parameters	Units										
<i>Semi-volatile Organic Compounds - Continued</i>											
2-Nitroaniline	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U	47 U	49 U
2-Nitrophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
3,3'-Dichlorobenzidine	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
3-Nitroaniline	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U	47 U	49 U
4,6-Dinitro-2-methylphenol	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U	47 U	49 U
4-Bromophenyl phenyl ether	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
4-Chloro-3-methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
4-Chloroaniline	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
4-Chlorophenyl phenyl ether	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
4-Methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
4-Nitroaniline	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U	47 U	49 U
4-Nitrophenol	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U	47 U	49 U
Acenaphthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(g,h,i)perylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzoic acid	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U	47 U	49 U
Benzyl alcohol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
bis(2-Chloroethoxy)methane	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
bis(2-Chloroethyl)ether	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Chrysene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Diethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Dimethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Di-n-butylphthalate (DBP)	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Di-n-octyl phthalate (DnOP)	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Hexachloroethane	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Isophorone	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Naphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Pentachlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.4 U	9.5 U	9.4 U	9.7 U
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
<b>Discrete Compounds</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

TABLE 3.3

2011 ANALYTICAL RESULTS SUMMARY-BEDROCK  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:		3257	5221	5221	6209	7205	8210	8210	9205	9210	10205
Sample ID:		LC-3257-0711	LC-5221-0711	LC-8225-0711	LC-6209-0711	LC-7205-0711	LC-8210-0711	LC-8215-0711	LC-9205-0711	LC-9210-0711	LC-10205-0711
Sample Date:		7/6/2011	7/13/2011	7/13/2011 (Duplicate)	7/14/2011	7/14/2011	7/13/2011	7/13/2011 (Duplicate)	7/13/2011	7/13/2011	7/14/2011
Parameters	Units										
<b>PCBs</b>											
Aroclor-1016 (PCB-1016)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U
<b>PCBs - Continued</b>											
Aroclor-1248 (PCB-1248)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U
<b>Discrete Compounds</b>		0	0	0	0	0	0	0	0	0	0
<b>Pesticides</b>											
4,4'-DDD	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
4,4'-DDE	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
4,4'-DDT	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Aldrin	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
alpha-BHC	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.037 J	0.047 U
alpha-Chlordane	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
beta-BHC	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
delta-BHC	µg/L	0.093 UJ	0.047 U	0.049 U	0.047 UJ	0.047 U	0.047 U	0.017 J	0.053	0.082	0.047 U
Dieldrin	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endosulfan I	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endosulfan II	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endosulfan sulfate	µg/L	0.047 U	0.047 U	0.049 U	0.047 UJ	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endrin	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Endrin ketone	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
gamma-BHC (lindane)	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.046 J	0.066	0.047 U
gamma-Chlordane	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Heptachlor	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Heptachlor epoxide	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.048 U	0.047 U
Methoxychlor	µg/L	0.094 U	0.094 U	0.097 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.094 U
Toxaphene	µg/L	3.8 U	3.8 U	3.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
<b>Discrete Compounds</b>		0	0	0	0	0	0	1	2	3	0

## Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

TABLE 3.3

2011 ANALYTICAL RESULTS SUMMARY-BEDROCK  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:	10210A	10210B	10210C	10215	10225A	10225B	10225C	10270	
Sample ID:	LC-10210A-0711	LC-10210B-0711	LC-10210C-0711	LC-10215-0711	LC-10225A-0711	LC-10225B-0711	LC-10225C-0711	LC-10270-0711	
Sample Date:	7/19/2011	7/14/2011	7/14/2011	7/14/2011	7/19/2011	7/19/2011	7/14/2011	7/14/2011	
Parameters	Units								
<b>Volatile Organic Compounds</b>									
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Acetone	µg/L	20 U	20 U	20 U	20 U	20 U	20 U	20 U	
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Bromomethane (Methyl bromide)	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	
Carbon disulfide	µg/L	5.0 U	4.6 J	5.0 U	5.0 U	5.0 U	1.9 J	5.0 U	
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.99 J	5.0 U	
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.4 J	5.0 U	
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.4	5.0 U	
Vinyl acetate	µg/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Xylenes (total)	µg/L	15 U	15 U	15 U	15 U	15 U	15 U	15 U	
<b>Discrete Compounds</b>		0	1	0	0	0	1	3	0
<b>Semi-volatile Organic Compounds</b>									
1,2,4-Trichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	4.5 J	9.4 U	
1,2-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	
1,3-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	
1,4-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
2,4,5-Trichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	
2,4,6-Trichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
2,4-Dimethylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	
2,4-Dinitrophenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U	
2,4-Dinitrotoluene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	
2,6-Dinitrotoluene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
2-Chlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
2-Methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	

TABLE 3.3

2011 ANALYTICAL RESULTS SUMMARY-BEDROCK  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:	10210A	10210B	10210C	10215	10225A	10225B	10225C	10270
Sample ID:	LC-10210A-0711	LC-10210B-0711	LC-10210C-0711	LC-10215-0711	LC-10225A-0711	LC-10225B-0711	LC-10225C-0711	LC-10270-0711
Sample Date:	7/19/2011	7/14/2011	7/14/2011	7/14/2011	7/19/2011	7/19/2011	7/14/2011	7/14/2011
Parameters	Units							
<i>Semi-volatile Organic Compounds - Continued</i>								
2-Nitroaniline	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
2-Nitrophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
3,3'-Dichlorobenzidine	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
3-Nitroaniline	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
4,6-Dinitro-2-methylphenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
4-Bromophenyl phenyl ether	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Chloro-3-methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Chloroaniline	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Chlorophenyl phenyl ether	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitroaniline	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
4-Nitrophenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.51 J
Benzo(a)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.40 J
Benzo(b)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.0
Benzo(g,h,i)perylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.51 J
Benzo(k)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.55 J
Benzoic acid	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
Benzyl alcohol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethyl)ether	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.63 J
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	4.8
Dibenzofuran	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L	9.4 UJ	9.4 U	9.4 U	9.4 UJ	9.4 UJ	9.4 U	9.4 U
Hexachloroethane	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8
Isophorone	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pentachlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
<b>Discrete Compounds</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>8</b>

TABLE 3.3

2011 ANALYTICAL RESULTS SUMMARY-BEDROCK  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:	10210A	10210B	10210C	10215	10225A	10225B	10225C	10270	
Sample ID:	LC-10210A-0711	LC-10210B-0711	LC-10210C-0711	LC-10215-0711	LC-10225A-0711	LC-10225B-0711	LC-10225C-0711	LC-10270-0711	
Sample Date:	7/19/2011	7/14/2011	7/14/2011	7/14/2011	7/19/2011	7/19/2011	7/14/2011	7/14/2011	
Parameters	Units								
<b>PCBs</b>									
Aroclor-1016 (PCB-1016)	µg/L	R	0.38 U	0.38 U	0.38 U	R	R	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	R	0.38 U	0.38 U	0.38 U	R	R	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	R	0.38 U	0.38 U	0.38 U	R	0.38 UJ	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	R	0.38 U	0.38 U	0.38 U	R	0.38 UJ	0.38 U	0.38 U
<b>PCBs - Continued</b>									
Aroclor-1248 (PCB-1248)	µg/L	R	0.38 U	0.38 U	0.38 U	R	0.38 UJ	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U	0.38 U
<b>Discrete Compounds</b>		0	0	0	0	0	0	0	0
<b>Pesticides</b>									
4,4'-DDD	µg/L	0.048 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
4,4'-DDE	µg/L	R	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
4,4'-DDT	µg/L	0.048 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Aldrin	µg/L	R	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
alpha-BHC	µg/L	R	0.048 J	0.047 U	0.047 U	R	0.047 U	0.047 U	0.079
alpha-Chlordane	µg/L	R	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
beta-BHC	µg/L	R	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
delta-BHC	µg/L	R	0.042 J	0.047 U	0.047 U	R	0.056	0.047 U	0.047 U
Dieldrin	µg/L	0.048 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan I	µg/L	R	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
Endosulfan II	µg/L	0.048 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan sulfate	µg/L	0.048 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endrin	µg/L	0.048 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endrin ketone	µg/L	0.048 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
gamma-BHC (lindane)	µg/L	R	0.061 J	0.047 U	0.047 U	R	0.047 U	0.047 U	0.097
gamma-Chlordane	µg/L	R	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
Heptachlor	µg/L	R	0.053 J	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
Heptachlor epoxide	µg/L	R	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
Methoxychlor	µg/L	0.095 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U
Toxaphene	µg/L	R	3.8 U	3.8 U	3.8 U	R	3.8 U	3.8 U	3.8 U
<b>Discrete Compounds</b>		0	4	0	0	0	1	0	2

## Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

TABLE 3.3

2011 ANALYTICAL RESULTS SUMMARY-BEDROCK  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Sample Location:	10272	10272	10278	
Sample ID:	LC-10272-0711	LC-8235-0711	LC-10278-0711	
Sample Date:	7/14/2011	7/14/2011 (Duplicate)	7/14/2011	
Parameters	Units			
<b>Volatile Organic Compounds</b>				
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U
Acetone	µg/L	20 U	20 U	20 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U
Vinyl acetate	µg/L	5.0 U	5.0 U	5.0 U
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L	15 U	15 U	15 U
<b>Discrete Compounds</b>		0	0	0
<b>Semi-volatile Organic Compounds</b>				
1,2,4-Trichlorobenzene	µg/L	9.5 U	9.4 U	9.4 U
1,2-Dichlorobenzene	µg/L	9.5 U	9.4 U	9.4 U
1,3-Dichlorobenzene	µg/L	9.5 U	9.4 U	9.4 U
1,4-Dichlorobenzene	µg/L	9.5 U	9.4 U	9.4 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U
2,4,5-Trichlorophenol	µg/L	9.5 U	9.4 U	9.4 U
2,4,6-Trichlorophenol	µg/L	9.5 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	9.5 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	48 U	47 U	47 U
2,4-Dinitrotoluene	µg/L	9.5 U	9.4 U	9.4 U
2,6-Dinitrotoluene	µg/L	9.5 U	9.4 U	9.4 U
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L	9.5 U	9.4 U	9.4 U
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U
2-Methylphenol	µg/L	9.5 U	9.4 U	9.4 U

TABLE 3.3

2011 ANALYTICAL RESULTS SUMMARY-BEDROCK  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Sample Location:	10272	10272	10278
Sample ID:	LC-10272-0711	LC-8235-0711	LC-10278-0711
Sample Date:	7/14/2011	7/14/2011 (Duplicate)	7/14/2011
Parameters	Units		
<i>Semi-volatile Organic Compounds - Continued</i>			
2-Nitroaniline	µg/L	48 U	47 U
2-Nitrophenol	µg/L	9.5 U	9.4 U
3,3'-Dichlorobenzidine	µg/L	9.5 U	9.4 U
3-Nitroaniline	µg/L	48 U	47 U
4,6-Dinitro-2-methylphenol	µg/L	48 U	47 U
4-Bromophenyl phenyl ether	µg/L	9.5 U	9.4 U
4-Chloro-3-methylphenol	µg/L	9.5 U	9.4 U
4-Chloroaniline	µg/L	9.5 U	9.4 U
4-Chlorophenyl phenyl ether	µg/L	9.5 U	9.4 U
4-Methylphenol	µg/L	9.5 U	9.4 U
4-Nitroaniline	µg/L	48 U	47 U
4-Nitrophenol	µg/L	48 U	47 U
Acenaphthene	µg/L	1.9 U	1.9 U
Acenaphthylene	µg/L	1.9 U	1.9 U
Anthracene	µg/L	1.9 U	1.9 U
Benzo(a)anthracene	µg/L	1.9 U	1.9 U
Benzo(a)pyrene	µg/L	1.9 U	1.9 U
Benzo(b)fluoranthene	µg/L	1.9 U	1.9 U
Benzo(g,h,i)perylene	µg/L	1.9 U	1.9 U
Benzo(k)fluoranthene	µg/L	1.9 U	1.9 U
Benzoic acid	µg/L	48 U	47 U
Benzyl alcohol	µg/L	9.5 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	9.5 U	9.4 U
bis(2-Chloroethyl)ether	µg/L	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	9.5 U	9.4 U
Chrysene	µg/L	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U
Dibenzofuran	µg/L	9.5 U	9.4 U
Diethyl phthalate	µg/L	9.5 U	9.4 U
Dimethyl phthalate	µg/L	9.5 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	9.5 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	9.5 U	9.4 U
Fluoranthene	µg/L	1.9 U	1.9 U
Fluorene	µg/L	1.9 U	1.9 U
Hexachlorobenzene	µg/L	1.9 U	1.9 U
Hexachlorobutadiene	µg/L	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L	9.5 U	9.4 U
Hexachloroethane	µg/L	9.5 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U
Isophorone	µg/L	9.5 U	9.4 U
Naphthalene	µg/L	1.9 U	1.9 U
Nitrobenzene	µg/L	19 U	19 U
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L	9.5 U	9.4 U
Pentachlorophenol	µg/L	9.5 U	9.4 U
Phenanthrene	µg/L	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U
Discrete Compounds		0	0

TABLE 3.3

2011 ANALYTICAL RESULTS SUMMARY-BEDROCK  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

<i>Sample Location:</i>		10272	10272	10278
<i>Sample ID:</i>		LC-10272-0711	LC-8235-0711	LC-10278-0711
<i>Sample Date:</i>		7/14/2011	7/14/2011 (Duplicate)	7/14/2011
<i>Parameters</i>	<i>Units</i>			
<b>PCBs</b>				
Aroclor-1016 (PCB-1016)	µg/L	0.38 U	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.38 U	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.38 U	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.38 U	0.38 U	0.38 U
<b>PCBs - Continued</b>				
Aroclor-1248 (PCB-1248)	µg/L	0.38 U	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 U	0.38 U
<b>Discrete Compounds</b>		0	0	0
<b>Pesticides</b>				
4,4'-DDD	µg/L	0.047 U	0.047 U	0.047 U
4,4'-DDE	µg/L	0.047 U	0.047 U	0.047 U
4,4'-DDT	µg/L	0.047 U	0.047 U	0.047 U
Aldrin	µg/L	0.047 U	0.047 U	0.047 U
alpha-BHC	µg/L	0.047 U	0.047 U	0.044 J
alpha-Chlordane	µg/L	0.047 U	0.047 U	0.047 U
beta-BHC	µg/L	0.047 U	0.047 U	0.047 U
delta-BHC	µg/L	0.047 U	0.047 U	0.047 U
Dieldrin	µg/L	0.047 U	0.047 U	0.047 U
Endosulfan I	µg/L	0.047 U	0.047 U	0.047 U
Endosulfan II	µg/L	0.047 U	0.047 U	0.047 U
Endosulfan sulfate	µg/L	0.047 U	0.047 U	0.047 U
Endrin	µg/L	0.047 U	0.047 U	0.047 U
Endrin ketone	µg/L	0.047 U	0.047 U	0.047 U
gamma-BHC (lindane)	µg/L	0.047 U	0.047 U	0.073
gamma-Chlordane	µg/L	0.047 U	0.047 U	0.047 U
Heptachlor	µg/L	0.047 U	0.047 U	0.047 U
Heptachlor epoxide	µg/L	0.047 U	0.047 U	0.047 U
Methoxychlor	µg/L	0.094 U	0.094 U	0.094 U
Toxaphene	µg/L	3.8 U	3.8 U	3.8 U
<b>Discrete Compounds</b>		0	0	2

## Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

TABLE 3.4

**SUMMARY OF DETECTED COMPOUNDS - 2011**  
**LOVE CANAL LONG-TERM GROUNDWATER MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**

<i>Overburden Wells</i>	<i>Well Group</i>	<i>VOCs</i>	<i>SVOCs</i>	<i>Pesticides/PCBs</i>
7120	B-I	U	U	U
7130	A	1	U	U
7132	A	U	U	U
7155	B-I	U	U	U
7161	B-I	U	U	U
8106	X	U	U	U
8110	B-I	U	U	U
8120	B-I	U	U	U
8130	B-I	U	U	U
8140	B-I	U	U	1
9110	B-I	U	U	U
9115	B-I	U	U	U
9120	B-I	U	U	U
9125	B-I	U	U	U
9130	B-II	U	U	U
9140	B-I	U	U	U
10105	B-II	U	1	1
10135	A	9	10	4
10147	B-I	U	U	U
10174A	B-I	U	U	1
1181A	X	U	U	2
Subtotal Overburden Wells		10	11	9
<i>Bedrock Wells</i>		<i>VOCs</i>	<i>SVOCs</i>	<i>Pesticides/PCBs</i>
3257	A	1	U	U
5221	X	1	U	U
6209	X	U	U	U
7205	A	U	U	U
8210	A	U	U	1
9205	A	U	U	2
9210	A	U	U	3
10205	A	U	U	U
10210A	A	U	U	U
10210B	A	1	U	4
10210C	A	U	U	U
10215	X	U	U	U
10225A	A	U	U	U
10225B	A	1	U	1
10225C	A	3	1	U
10270	X	U	8	2
10272	A	U	U	U
10278	A	U	U	2
Subtotal Bedrock Wells		7	9	15
<b>Total # of Detections</b>		<b>17</b>	<b>20</b>	<b>24</b>

## Notes:

U	No parameters detected at or above detection limits.
A	Annual Well.
B-I	Biannual Well Group I.
B-II	Biannual Well Group II.
X	Additional Well.
PCBs	Polychlorinated biphenyls.
SVOCs	Semi-volatile organic compounds.
VOCs	Volatile organic compounds.

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A
SampleDate:	07/24/90	08/22/91	08/26/92	08/11/93	05/25/95	07/01/96	07/10/97	06/26/98	06/23/99	06/21/00	05/18/01
<i>Volatiles (µg/L)</i>											
1,1,2,2-Tetrachloroethane											
1,1,2-Trichloroethane											
1,1-Dichloroethane											
1,2-Dichloroethene (total)											
2-Butanone									2J		
2-Hexanone									3J		
Acetone	14C			13B				120J			10J
Benzene											
Carbon Disulfide					20	310					6J
Chlorobenzene											
Chloroform											
Ethylbenzene											
Methylene Chloride											
Tetrachloroethene											
Toluene									2J		
Trichloroethene											
Vinyl Acetate											
Vinyl Chloride											
Xylene (total)											
<i>Semi-volatiles (µg/L)</i>											
1,2,4-Trichlorobenzene											
1,2-Dichlorobenzene											
1,3-Dichlorobenzene											
1,4-Dichlorobenzene											
2-Butanone (Methyl Ethyl Ketone)											
2,4,5-Trichlorophenol											
2,4,6-Trichlorophenol											
2,4-Dichlorophenol											
2,4-Dimethylphenol											
2-Chloronaphthalene											
2-Chlorophenol											
2-Methylphenol											
2-Nitrophenol											
4-Chloro-3-methylphenol											
4-Methylphenol											
Benzoic Acid							12J				
Benzyl Alcohol											
Bis(2-Chloroethyl)Ether											
bis(2-Ethylhexyl)Phthalate		12	21	31	51						
Diethyl phthalate											
Dimethyl Phthalate	16										
Di-n-Octyl Phthalate	3B										
Hexachlorobenzene											
Naphthalene											
Pentachlorophenol											
Phenol									1J		

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A
SampleDate:	07/24/90	08/22/91	08/26/92	08/11/93	05/25/95	07/01/96	07/10/97	06/26/98	06/23/99	06/21/00	05/18/01

<i>Pesticides/PCBs (µg/L)</i>											
4,4'-DDD											
Aldrin											
Alpha-BHC									0.28		
Alpha-Chlordane											
Beta-BHC									0.035J		
Delta-BHC											
Dieldrin											
Endosulfan I									0.046J		
Endosulfan II											
Endosulfan Sulfate											
Endrin											
Gamma-BHC (Lindane)									0.10J		
Gamma-Chlordane											
Heptachlor											
Heptachlor epoxide											

Notes:  
 J - Estimated.

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A
Sample Date:	06/13/02	05/27/03	06/03/04	06/28/05	07/06/06	07/26/07	07/17/08	07/15/09	06/24/10	07/19/11
<i>Volatiles (µg/L)</i>										
1,1,2,2-Tetrachloroethane										
1,1,2-Trichloroethane										
1,1-Dichloroethane										
1,2-Dichloroethene (total)										
2-Butanone			4J							
2-Hexanone										
Acetone								5.2 J		
Benzene										
Carbon Disulfide			6J	1.6 J	1 J	8J	24			
Chlorobenzene										
Chloroform										
Ethylbenzene										
Methylene Chloride										
Tetrachloroethene										
Toluene				2.3 J						
Trichloroethene								6.3		
Vinyl Acetate										
Vinyl Chloride										
Xylene (total)										
<i>Semi-volatiles (µg/L)</i>										
1,2,4-Trichlorobenzene										
1,2-Dichlorobenzene										
1,3-Dichlorobenzene										
1,4-Dichlorobenzene										
2-Butanone (Methyl Ethyl Ketone)	3J									
2,4,5-Trichlorophenol										
2,4,6-Trichlorophenol										
2,4-Dichlorophenol										
2,4-Dimethylphenol										
2-Chloronaphthalene										
2-Chlorophenol										
2-Methylphenol										
2-Nitrophenol										
4-Chloro-3-methylphenol										
4-Methylphenol										
Benzoic Acid			3J	2.7 J				5.8 J		
Benzyl Alcohol										
Bis(2-Chloroethyl)Ether										
bis(2-Ethylhexyl)Phthalate			1J	1.7 J	8 J			2.5 J		
Diethyl phthalate										
Dimethyl Phthalate										
Di-n-Octyl Phthalate										
Hexachlorobenzene										
Naphthalene										
Pentachlorophenol										
Phenol			1J	1.7 J						

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A	10210A
Sample Date:	06/13/02	05/27/03	06/03/04	06/28/05	07/06/06	07/26/07	07/17/08	07/15/09	06/24/10	07/19/11
<i>Pesticides/PCBs (µg/L)</i>										
4,4'-DDD										
Aldrin										
Alpha-BHC									0.14 J	
Alpha-Chlordane										
Beta-BHC			0.011J					0.015 J	0.12 J	
Delta-BHC			0.043J						0.12 J	
Dieldrin										
Endosulfan I										
Endosulfan II										
Endosulfan Sulfate										
Endrin										
Gamma-BHC (Lindane)									0.12 J	
Gamma-Chlordane										
Heptachlor										
Heptachlor epoxide										

Notes:  
 J - Estimated.

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B
SampleDate:	07/24/90	08/22/91	08/26/92	08/11/93	06/15/94	06/01/95	07/05/96	07/01/97	06/18/98	06/24/99	06/15/00
<i>Volatiles (µg/L)</i>											
1,1,2,2-Tetrachloroethane											
1,1,2-Trichloroethane											
1,1-Dichloroethane											
1,2-Dichloroethene (total)											
2-Butanone											
2-Hexanone											
Acetone			31		12B	23					
Benzene											
Carbon Disulfide									8J	2J	
Chlorobenzene											
Chloroform											
Ethylbenzene											
Methylene Chloride											
Tetrachloroethene											
Toluene										2J	1J
Trichloroethene											
Vinyl Acetate											
Vinyl Chloride											
Xylene (total)											
<i>Semi-volatiles (µg/L)</i>											
1,2,4-Trichlorobenzene											
1,2-Dichlorobenzene											
1,3-Dichlorobenzene											
1,4-Dichlorobenzene											
2-Butanone (Methyl Ethyl Ketone)											
2,4,5-Trichlorophenol											
2,4,6-Trichlorophenol											
2,4-Dichlorophenol											
2,4-Dimethylphenol											
2-Chloronaphthalene											
2-Chlorophenol											
2-Methylphenol											
2-Nitrophenol											
4-Chloro-3-methylphenol											
4-Methylphenol											
Benzoic Acid											
Benzyl Alcohol											
Bis(2-Chloroethyl)Ether											
bis(2-Ethylhexyl)Phthalate	7B	13		11				55	6J		
Diethyl phthalate											
Dimethyl Phthalate											
Di-n-Octyl Phthalate											
Hexachlorobenzene											
Naphthalene											
Pentachlorophenol											
Phenol		3									

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B
SampleDate:	07/24/90	08/22/91	08/26/92	08/11/93	06/15/94	06/01/95	07/05/96	07/01/97	06/18/98	06/24/99	06/15/00
<i>Pesticides/PCBs (µg/L)</i>											
4,4'-DDD											
Aldrin											
Alpha-BHC											
Alpha-Chlordane											
Beta-BHC											
Delta-BHC											
Dieldrin											
Endosulfan I											
Endosulfan II											
Endosulfan Sulfate											
Endrin											
Gamma-BHC (Lindane)											
Gamma-Chlordane											
Heptachlor											
Heptachlor epoxide											

Notes:

J - Estimated.

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B
Sample Date:	05/17/01	06/10/02	05/23/03	06/07/04	06/24/05	06/28/06	07/26/07	07/17/08	07/15/09	6/15/10	7/14/11
<b>Volatiles (µg/L)</b>											
1,1,2,2-Tetrachloroethane											
1,1,2-Trichloroethane											
1,1-Dichloroethane											
1,2-Dichloroethene (total)											
2-Butanone			23								
2-Hexanone											
Acetone	12J										
Benzene											
Carbon Disulfide	14	3J	2 J		1.4 J	1 J	6J			4.0 J	4.6 J
Chlorobenzene				1J							
Chloroform											
Ethylbenzene											
Methylene Chloride											
Tetrachloroethene				9J							
Toluene					1.1 J						
Trichloroethene											
Vinyl Acetate											
Vinyl Chloride											
Xylene (total)											
<b>Semi-volatiles (µg/L)</b>											
1,2,4-Trichlorobenzene			3 J								
1,2-Dichlorobenzene											
1,3-Dichlorobenzene											
1,4-Dichlorobenzene											
2-Butanone (Methyl Ethyl Ketone)											
2,4,5-Trichlorophenol											
2,4,6-Trichlorophenol											
2,4-Dichlorophenol											
2,4-Dimethylphenol											
2-Chloronaphthalene											
2-Chlorophenol											
2-Methylphenol											
2-Nitrophenol											
4-Chloro-3-methylphenol											
4-Methylphenol											
Benzoic Acid						2 J					
Benzyl Alcohol											
Bis(2-Chloroethyl)Ether											
bis(2-Ethylhexyl)Phthalate				4J	4.5 J	3 J					
Diethyl phthalate											
Dimethyl Phthalate											
Di-n-Octyl Phthalate	3J										
Hexachlorobenzene			1 J								
Naphthalene											
Pentachlorophenol											
Phenol											

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B	10210B
Sample Date:	05/17/01	06/10/02	05/23/03	06/07/04	06/24/05	06/28/06	07/26/07	07/17/08	07/15/09	6/15/10	7/14/11
<i>Pesticides/PCBs (µg/L)</i>											
4,4'-DDD				0.011J							
Aldrin						0.0089J					
Alpha-BHC			19		0.37	0.58	0.016J		0.064/0.050		0.048 J
Alpha-Chlordane											
Beta-BHC			1.9	0.53	0.082 p	0.082					
Delta-BHC			0.56 J	0.15		0.047 J			0.032 J/0.028 J	0.050 J	0.042 J
Dieldrin			0.13 J								
Endosulfan I			0.11 J								
Endosulfan II											
Endosulfan Sulfate											
Endrin											
Gamma-BHC (Lindane)			2.1	0.39	0.046 J	0.099			0.038 J/0.033 J		0.061 J
Gamma-Chlordane			0.15 J								
Heptachlor			0.35 J								0.053 J
Heptachlor epoxide											

Notes:  
 J - Estimated.

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C
SampleDate:	07/25/90	08/22/91	08/26/92	08/11/93	06/08/94	06/01/95	07/01/96	07/01/97	06/22/98	06/24/99	06/15/00
<i>Volatiles (µg/L)</i>											
1,1,2,2-Tetrachloroethane											
1,1,2-Trichloroethane											
1,1-Dichloroethane											
1,2-Dichloroethane (total)											
2-Butanone											
2-Hexanone											
Acetone			10B	23B	19B					2100	8J
Benzene											
Carbon Disulfide											3J
Chlorobenzene											
Chloroform											
Ethylbenzene											
Methylene Chloride											
Tetrachloroethane											
Toluene											
Trichloroethane											
Vinyl Acetate											
Vinyl Chloride											
Xylene (total)											
<i>Semi-volatiles (µg/L)</i>											
1,2,4-Trichlorobenzene											
1,2-Dichlorobenzene											
1,3-Dichlorobenzene											
1,4-Dichlorobenzene											
2-Butanone (Methyl Ethyl Ketone)											
2,4,5-Trichlorophenol											
2,4,6-Trichlorophenol											
2,4-Dichlorophenol											
2,4-Dimethylphenol											
2-Chloronaphthalene											
2-Chlorophenol											
2-Methylphenol											
2-Nitrophenol											
4-Chloro-3-methylphenol											
4-Methylphenol						29	110	62	0.6J		
Benzoic Acid											
Benzyl Alcohol											
Bis(2-Chloroethyl)Ether											
bis(2-Ethylhexyl)Phthalate	7B	13		38							
Diethyl phthalate											
Dimethyl Phthalate											
Di-n-Octyl Phthalate											
Hexachlorobenzene											
Naphthalene											
Pentachlorophenol											
Phenol		6				22		22			

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C
SampleDate:	07/25/90	08/22/91	08/26/92	08/11/93	06/08/94	06/01/95	07/01/96	07/01/97	06/22/98	06/24/99	06/15/00
<i>Pesticides/PCBs (µg/L)</i>											
4,4'-DDD											
Aldrin											
Alpha-BHC											
Alpha-Chlordane											
Beta-BHC											
Delta-BHC											
Dieldrin											
Endosulfan I											
Endosulfan II											
Endosulfan Sulfate											
Endrin											
Gamma-BHC (Lindane)											
Gamma-Chlordane											
Heptachlor											
Heptachlor epoxide											

Notes:

J - Estimated.

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C
SampleDate:	05/17/01	06/10/02	05/23/03	06/07/04	06/23/05	06/28/06	07/26/07	07/16/08	07/15/09	06/15/10	07/14/11
<b>Volatiles (µg/L)</b>											
1,1,2,2-Tetrachloroethane											
1,1,2-Trichloroethane											
1,1-Dichloroethane											
1,2-Dichloroethene (total)											
2-Butanone											
2-Hexanone											
Acetone	9J				1.9 J						
Benzene											
Carbon Disulfide								2 J			
Chlorobenzene						2 J					
Chloroform											
Ethylbenzene											
Methylene Chloride											
Tetrachloroethene						6 J					
Toluene				29							
Trichloroethene											
Vinyl Acetate											
Vinyl Chloride											
Xylene (total)											
<b>Semi-volatiles (µg/L)</b>											
1,2,4-Trichlorobenzene						6 J					
1,2-Dichlorobenzene											
1,3-Dichlorobenzene											
1,4-Dichlorobenzene											
2-Butanone (Methyl Ethyl Ketone)											
2,4,5-Trichlorophenol											
2,4,6-Trichlorophenol											
2,4-Dichlorophenol											
2,4-Dimethylphenol											
2-Chloronaphthalene											
2-Chlorophenol											
2-Methylphenol											
2-Nitrophenol											
4-Chloro-3-methylphenol											
4-Methylphenol											
Benzoic Acid											
Benzyl Alcohol											
Bis(2-Chloroethyl)Ether											
bis(2-Ethylhexyl)Phthalate				5J		5 J					
Diethyl phthalate										4.4 J	
Dimethyl Phthalate										0.87 J	
Di-n-Octyl Phthalate											
Hexachlorobenzene											
Naphthalene											
Pentachlorophenol											
Phenol											

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C	10210C
SampleDate:	05/17/01	06/10/02	05/23/03	06/07/04	06/23/05	06/28/06	07/26/07	07/16/08	07/15/09	06/15/10	07/14/11
<i>Pesticides/PCBs (µg/L)</i>											
4,4'-DDD											
Aldrin						0.061 J					
Alpha-BHC					0.083	0.45 J					
Alpha-Chlordane											
Beta-BHC				0.017J		0.048 J					
Delta-BHC						0.052 J			0.048 J		
Dieldrin											
Endosulfan I											
Endosulfan II											
Endosulfan Sulfate											
Endrin						0.14 J					
Gamma-BHC (Lindane)						0.11 J					
Gamma-Chlordane						0.018 J					
Heptachlor											
Heptachlor epoxide											

Notes:  
 J - Estimated.

TABLE 3.5

**SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.**

Well Number:	10135	10135	10135	10135	10135	10135	10135	10135	10135	10135
Sample Date:	08/26/92	08/19/93	06/22/94	06/01/95	06/27/96	07/07/97	06/17/98	06/16/99	06/22/00	05/11/01
<i>Volatiles (µg/L)</i>										
1,1,2,2-Tetrachloroethane		12			26		94J	32/29	27J/26J	100J/120J
1,1,2-Trichloroethane					14		29J	15/12	14J/16J	29J/34J
1,1-Dichloroethane		15						4J/3J	4J/4J	4J/4J
1,2-Dichloroethene (total)	700	840			560		58J	67/70	67J/70J	60J/59J
2-Butanone		5200							10UJ/10J	12J/11J
2-Hexanone										
Acetone		270	100B		60		110J		28J/46J	
Benzene			6000E	4900D	4800	5600/5000	5300J	5600/5700	6400/6900J	7600/8500J
Carbon Disulfide								ND/2J		
Chlorobenzene	2600	1700		2000D	1500	2300/ND	1900J	1800/1900	2300J/2300J	2700J/3000J
Chloroform		100			110		150J	120/110	100J/130J	150J/160J
Ethylbenzene		13					12	10J/9J	12J/12J	22J/24J
Methylene Chloride		41			11				24J/24J	
Tetrachloroethene							40J	13/12	16J/14J	50J/61J
Toluene	2700	1700E	21500BE	18000D	14000	19000/17000	16000J	16000/17000	21000J/21000J	22000/24000
Trichloroethene		24			36		170J	70/58	60J/72J	140J/180J
Vinyl Acetate	6800		12B							
Vinyl Chloride					50		48J	62/61	110J/85J	75J/66J
Xylene (total)		47	10B		28		55J	43/44	42J/44J	
<i>Semi-volatiles (µg/L)</i>										
1,2,4-Trichlorobenzene		74	87B				78J	65J/45J	45J/36J	42J/65J
1,2-Dichlorobenzene		35						30J/24J	22J/18J	ND/48J
1,3-Dichlorobenzene										
1,4-Dichlorobenzene	110	94	91					74J/61J	59J/52J	69J/110J
2-Butanone (Methyl Ethyl Ketone)										
2,4,5-Trichlorophenol		70					38J		0.9J/ND	
2,4,6-Trichlorophenol									1J/ND	
2,4-Dichlorophenol	1200B	420	610	150		2100/2100	2000	610/690	1400J/470J	620J/1200J
2,4-Dimethylphenol									ND/2J	
2-Chloronaphthalene				150						370J/550J
2-Chlorophenol							28J	25J/ND		
2-Methylphenol		51					55J	35J/42J	160J/ND	ND/41J
2-Nitrophenol									ND/1J	
4-Chloro-3-methylphenol								33J/25J		
4-Methylphenol		80					130J	120/95J	99J/300J	86J/130J
Benzoic Acid				6400D	4000	30000J/27000J	23000J	5000/4300	19000J/4700J	4400J/6200J
Benzyl Alcohol			380			1900/1600	2700	540/680	14000/3200J	330J/630J
Bis(2-Chloroethyl)Ether		23					24J	26J/25J		
bis(2-Ethylhexyl)Phthalate		50							41J/24/J	
Diethyl phthalate										
Dimethyl Phthalate										
Di-n-Octyl Phthalate										
Hexachlorobenzene										
Naphthalene								2000J/1400J	4000J/1800J	1100/1400
Pentachlorophenol		52								
Phenol		96	91	140				120/96J		ND/51J

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
 LOVE CANAL LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.

Well Number:	10135	10135	10135	10135	10135	10135	10135	10135	10135	10135
SampleDate:	08/26/92	08/19/93	06/22/94	06/01/95	06/27/96	07/07/97	06/17/98	06/16/99	06/22/00	05/11/01
<i>Pesticides/PCBs (µg/L)</i>										
4,4'-DDD								0.020J/0.21	0.071J/0.13J	
Aldrin	0.53	0.24P						0.21J/0.74JN		0.95JN/1.5JN
Alpha-BHC	84	42C	24CEP	28D	29	39/39	59	37J/40	50/50	43J/50J
Alpha-Chlordane										
Beta-BHC				10D	11	8.1/8.6	12	11J/12	15/16	16J/16J
Delta-BHC	15	9.8P	7.5CE	4.7	5.2	ND/5.1	8.9	9.6J/11	14/13	10J/12J
Dieldrin										
Endosulfan I								0.43J/0.34		1.5JN/1.6JN
Endosulfan II									0.52J/0.69J	
Endosulfan Sulfate		0.43P						0.17J/0.18	0.17J/0.10UJ	
Endrin			0.15P							
Gamma-BHC (Lindane)	33	19.5	20.4CE			13.2/14.8	6.5J	4.1J/5.5	8.0/6.4	5J/7.3
Gamma-Chlordane									0.16J/0.18J	
Heptachlor								0.68JN/0.63		
Heptachlor epoxide								0.058J/0.043J	0.029J/0.031J	

Notes:  
 J - Estimated.

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Well Number:	10135	10135	10135	10135	10135	10135	10135	10135	10135	10135
Sample Date:	06/12/02	05/19/03	05/28/04	06/17/05	06/26/06	07/18/07	07/23/08	07/15/09	06/16/10	07/13/11
<b>Volatiles (µg/L)</b>										
1,1,2,2-Tetrachloroethane	500U/56	38				16J		24/25		
1,1,2-Trichloroethane	500U/27					15J		8.7 J/9.1 J		
1,1-Dichloroethane	500U/4J	3 J				2J				
1,2-Dichloroethene (total)		490 J			682 J	50J	111 J	106/109	158	55 J
2-Butanone								5.8 J/6.1 J		
2-Hexanone										
Acetone	500U/72	74			200 J	53J		42/37	39	
Benzene	5900/6400	5500			6800	7100	5300	7600/7500	3400	2200
Carbon Disulfide						2J				
Chlorobenzene	2200/2400	1900		2000	2400	2100	1400	2900 J/3000 J	1300	1100
Chloroform	500U/160	110			110 J	140J	99 J	96/97	160	67
Ethylbenzene	500U/15	10			10J	10J		10/10	13	
Methylene Chloride	500U/39	26			44 J	32J		25/24	38	16 J
Tetrachloroethene	500U/38	18				13J		14/14	19	9.5 J
Toluene	20000J/19000	15000		16000	21000	23000	13000	24000/24000	11000	3100
Trichloroethene	130J/160	91			46 J	89J	27 J	89/91	140	52
Vinyl Acetate										
Vinyl Chloride	500U/48	51						27/17	31	
Xylene (total)	500U/51	29				37J		44/53	51	
<b>Semi-volatiles (µg/L)</b>										
1,2,4-Trichlorobenzene		97 J		4.5 J	63	47J	28	110/110	78 J	76 J
1,2-Dichlorobenzene		59 J		36 J	37	31J	10 J	52/68	57 J	45 J
1,3-Dichlorobenzene					3 J	87J		4.1 J/5.5 J		
1,4-Dichlorobenzene		160 J		100 J	100	84J	24	100 J/150 J	150 J	130 J
2-Butanone (Methyl Ethyl Ketone)								5.8 J/6.1 J		
2,4,5-Trichlorophenol					8 J					
2,4,6-Trichlorophenol							6 J	23/28		
2,4-Dichlorophenol	1500J/1800J	1700		420	250	490	150	1100/1200	780	590
2,4-Dimethylphenol										
2-Chloronaphthalene										
2-Chlorophenol					18		17 J	26/31		
2-Methylphenol		50 J		25 J	33	34J	140	50 J/66 J	42 J	30 J
2-Nitrophenol										
4-Chloro-3-methylphenol		41 J					26	97/95	31 J	
4-Methylphenol		210 J		49 J		120J	110	140 J/170 J	130 J	83 J
Benzoic Acid	25000/31000	26000		1400 J	14000 J	14000	7600 J	54000 J/39000 J	9500	11000
Benzyl Alcohol	1700J/2000	640		23 J	48	580	38	1200/1300	610	450
Bis(2-Chloroethyl)Ether				24 J	24	30J	16 J	28/29	34 J	28 J
bis(2-Ethylhexyl)Phthalate					53			4.4 J/4.2 J		
Diethyl phthalate										
Dimethyl Phthalate										
Di-n-Octyl Phthalate										
Hexachlorobenzene										
Naphthalene				1800 J						
Pentachlorophenol										
Phenol		180 J			140	130J	96	140 J/160 J	100	82

TABLE 3.5

SUMMARY OF DETECTED COMPOUNDS IN SELECT WELLS  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.

Well Number:	10135	10135	10135	10135	10135	10135	10135	10135	10135	10135
Sample Date:	06/12/02	05/19/03	05/28/04	06/17/05	06/26/06	07/18/07	07/23/08	07/15/09	06/16/10	07/13/11
<i>Pesticides/PCBs (µg/L)</i>										
4,4'-DDD				0.19 J		0.081J	0.13 J		0.048 J	
Aldrin	0.12]/0.12]					0.073J	0.052 J	0.55 J/0.55 J	0.063 J	
Alpha-BHC	39/43	49		15		12	17	27 J/32 J	4.0	21
Alpha-Chlordane	0.031]/0.017]					0.011J				
Beta-BHC	13]/14]	15 J		3.4	7.1	3.2	4.4	9.1 J/11 J	4.1	7.1
Delta-BHC	9.0]/11]	12		9.1	13	4.7	6.3	11 J/12	0.28	7.3
Dieldrin										
Endosulfan I										
Endosulfan II				0.15 J				1.6 J/2.3		
Endosulfan Sulfate		1.3 J				0.34J	0.37 J	1.5 J		
Endrin						0.034J		1.3 J/1.9		
Gamma-BHC (Lindane)	6.1]/7.1]	7.1			4.8	2.1	2	6.2 J/7.4 J	0.92	4.1
Gamma-Chlordane	0.34]/0.29]				.33 J	0.017J				
Heptachlor		0.61 J		0.053		0.092J	0.19 J			
Heptachlor epoxide	0.016]/0.025]	2.2 J				0.29	0.13 J	1.6 J/1.7 J	0.10 J	

Notes:

J - Estimated.

TABLE 3.6A

**1140 SERIES PIEZOMETERS WATER LEVELS-2011  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.**

**A WELLS**

<i>Well (1) Date</i>	<i>1144 (ft. AMSL)</i>	<i>1143 (ft. AMSL)</i>	<i>1142 (ft. AMSL)</i>	<i>1141 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1140 (ft. AMSL)</i>
March-11	573.24	571.87	571.12	566.65	561.70	565.50
June-11	572.06	571.64	571.20	567.11	561.70	565.01
September-11	569.87	569.78	569.72	566.28	561.70	564.20
December-11	572.66	570.79	570.18	566.52	561.70	565.09

**B WELLS**

<i>Well (1) Date</i>	<i>1144 (ft. AMSL)</i>	<i>1143 (ft. AMSL)</i>	<i>1142 (ft. AMSL)</i>	<i>1141 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1140 (ft. AMSL)</i>
March-11	573.00	571.44	567.93	567.23	561.70	565.01
June-11	572.03	571.81	568.86	567.66	561.70	565.44
September-11	569.78	569.92	568.01	566.79	561.70	564.56
December-11	572.91	570.30	567.94	566.88	561.70	564.98

**C WELLS**

<i>Well (1) Date</i>	<i>1144 (ft. AMSL)</i>	<i>1143 (ft. AMSL)</i>	<i>1142 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	572.63	569.58	566.05	561.70
June-11	571.94	570.38	566.89	561.70
September-11	569.74	569.18	566.56	561.70
December-11	571.72	569.16	566.40	561.70

**D WELLS**

<i>Well (1) Date</i>	<i>1144 (ft. AMSL)</i>	<i>1143 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	569.51	567.86	561.70
June-11	570.78	569.08	561.70
September-11	569.50	568.48	561.70
December-11	569.47	568.26	561.70

## Notes:

(1) = Wells listed in order from most distant outside of tile drain, to tile drain, then inside of tile drain.  
ft. AMSL - Feet above mean sea level.

TABLE 3.6B

**1150 SERIES PIEZOMETERS WATER LEVELS-2011  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.**

**A WELLS**

<i>Well (1) Date</i>	<i>1154 (ft. AMSL)</i>	<i>1153 (ft. AMSL)</i>	<i>1151 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	570.44	570.26	567.06	561.85
June-11	571.34	569.29	567.23	561.85
September-11	569.86	568.68	567.20	561.85
December-11	571.52	569.17	567.37	561.85

**B WELLS**

<i>Well (1) Date</i>	<i>1154 (ft. AMSL)</i>	<i>1153 (ft. AMSL)</i>	<i>1151 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	569.67	576.64	567.74	561.85
June-11	568.36	569.34	568.40	561.85
September-11	568.12	569.25	567.57	561.85
December-11	568.48	576.64	568.08	561.85

**C WELLS**

<i>Well (1) Date</i>	<i>1154 (ft. AMSL)</i>	<i>1153 (ft. AMSL)</i>	<i>1151 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	571.58	576.93	569.26	561.85
June-11	569.03	570.95	569.65	561.85
September-11	568.21	569.98	567.73	561.85
December-11	568.37	577.36	568.26	561.85

**D WELLS**

<i>Well (1) Date</i>	<i>1154 (ft. AMSL)</i>	<i>1153 (ft. AMSL)</i>	<i>1151 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	569.46	573.75	571.92	561.85
June-11	568.66	571.16	569.15	561.85
September-11	568.41	570.30	568.07	561.85
December-11	569.34	576.66	573.18	561.85

**E WELLS**

<i>Well (1) Date</i>	<i>1153 (ft. AMSL)</i>
March-11	575.59
June-11	569.25
September-11	569.05
December-11	570.45

## Note:

(1) = Wells listed in order from most distant outside of tile drains, to tile drain, then inside of tile drain.

ft. AMSL - Feet above mean sea level.

TABLE 3.6C

**1160 SERIES PIEZOMETERS WATER LEVELS-2011  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.**

**A WELLS**

<i>Well (1) Date</i>	<i>10176 (ft. AMSL)</i>	<i>1165 (ft. AMSL)</i>	<i>1163 (ft. AMSL)</i>	<i>1162 (ft. AMSL)</i>	<i>1161 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1160 (ft. AMSL)</i>
March-11	572.15	-6.18	568.20	570.05	565.53	560.60	565.38
June-11	569.55	570.92	569.54	570.77	567.08	560.60	566.63
September-11	568.48	570.84	568.82	569.52	565.15	560.60	564.82
December-11	572.40	570.84	568.98	569.47	565.95	560.60	565.78

**B WELLS**

<i>Well (1) Date</i>	<i>10176 (ft. AMSL)</i>	<i>1165 (ft. AMSL)</i>	<i>1163 (ft. AMSL)</i>	<i>1161 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	572.14	571.21	569.48	567.33	560.60
June-11	569.71	571.97	570.91	568.59	560.60
September-11	568.67	570.99	569.70	566.93	560.60
December-11	572.03	571.41	569.49	567.59	560.60

**C WELLS**

<i>Well (1) Date</i>	<i>10176 (ft. AMSL)</i>	<i>1165 (ft. AMSL)</i>	<i>1163 (ft. AMSL)</i>	<i>1162 (ft. AMSL)</i>	<i>1161 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1160 (ft. AMSL)</i>
March-11	568.73	571.51	569.77	569.86	569.12	560.60	DRY
June-11	568.94	573.09	571.17	571.18	570.61	560.60	566.85
September-11	568.75	571.92	570.07	569.73	569.22	560.60	566.86
December-11	569.51	571.77	569.67	569.74	569.18	560.60	566.71

**D WELLS**

<i>Well (1) Date</i>	<i>10176 (ft. AMSL)</i>	<i>1165 (ft. AMSL)</i>	<i>1163 (ft. AMSL)</i>	<i>1162 (ft. AMSL)</i>	<i>1161 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	567.26	572.50	DRY	567.34	569.52	560.60
June-11	567.65	573.20	DRY	568.74	571.17	560.60
September-11	567.77	571.63	DRY	567.53	569.92	560.60
December-11	568.09	572.17	DRY	568.02	569.68	560.60

**E WELLS**

<i>Well (1) Date</i>	<i>1161 (ft. AMSL)</i>
March-11	566.11
June-11	567.36
September-11	565.31
December-11	566.36

## Notes:

(1) = Wells listed in order from most distant outside of tile drain, to tile drain, then inside of tile drain.

ft. AMSL - Feet above mean sea level.

TABLE 3.6D

**1170 SERIES PIEZOMETERS WATER LEVELS-2011  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.**

<b>A WELLS</b>						
<i>Well (1) Date</i>	<i>1174 (ft. AMSL)</i>	<i>1173 (ft. AMSL)</i>	<i>1172 (ft. AMSL)</i>	<i>1171 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1170 (ft. AMSL)</i>
March-11	570.95	569.00	566.47	563.91	555.60	563.02
June-11	570.44	568.74	566.59	565.19	555.60	563.47
September-11	570.43	568.51	566.50	564.24	555.60	562.43
December-11	571.72	569.04	566.58	564.14	555.60	562.98
<b>B WELLS</b>						
<i>Well (1) Date</i>	<i>1174 (ft. AMSL)</i>	<i>1173 (ft. AMSL)</i>	<i>1172 (ft. AMSL)</i>	<i>1171 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1170 (ft. AMSL)</i>
March-11	570.34	569.53	568.34	563.06	555.60	574.65
June-11	570.73	569.85	568.94	564.06	555.60	571.05
September-11	570.80	569.82	568.37	563.30	555.60	562.36
December-11	570.53	570.16	568.70	563.33	555.60	576.07
<b>C WELLS</b>						
<i>Well (1) Date</i>	<i>1174 (ft. AMSL)</i>	<i>1173 (ft. AMSL)</i>	<i>1172 (ft. AMSL)</i>	<i>1171 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	
March-11	570.14	571.49	569.01	562.47	555.60	
June-11	570.01	572.27	569.99	562.94	555.60	
September-11	570.36	571.19	569.47	561.85	555.60	
December-11	570.43	571.22	569.30	562.46	555.60	
<b>D WELLS</b>						
<i>Well (1) Date</i>	<i>1174 (ft. AMSL)</i>	<i>1173 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>			
March-11	568.31	572.96	555.60			
June-11	568.26	572.15	555.60			
September-11	568.23	570.77	555.60			
December-11	568.72	572.25	555.60			

## Notes:

(1) = Wells listed in order from most distant outside of tile drain, to tile drain, then inside of tile drain.  
ft. AMSL - Feet above mean sea level.

TABLE 3.6E

**1180 SERIES PIEZOMETERS WATER LEVELS-2011  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.**

<b>A WELLS</b>					
<i>Well (1) Date</i>	<i>1184 (ft. AMSL)</i>	<i>1183 (ft. AMSL)</i>	<i>1181 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1180 (ft. AMSL)</i>
March-11	564.33	564.45	566.90	560.00	563.05
June-11	564.21	564.52	567.21	560.00	563.64
September-11	563.60	564.07	567.54	560.00	562.75
December-11	564.32	564.35	571.60	560.00	562.99
<b>B WELLS</b>					
<i>Well (1) Date</i>	<i>1184 (ft. AMSL)</i>	<i>1183 (ft. AMSL)</i>	<i>1181 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1180 (ft. AMSL)</i>
March-11	564.95	565.46	567.90	560.00	562.58
June-11	564.47	564.52	567.21	560.00	561.25
September-11	563.37	564.07	567.54	560.00	561.08
December-11	564.54	564.35	571.60	560.00	561.31
<b>C WELLS</b>					
<i>Well (1) Date</i>	<i>1184 (ft. AMSL)</i>	<i>1183 (ft. AMSL)</i>	<i>1181 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1180 (ft. AMSL)</i>
March-11	569.89	568.29	570.47	560.00	DRY
June-11	567.72	567.73	568.41	560.00	562.75
September-11	565.27	566.74	567.73	560.00	DRY
December-11	569.48	567.13	570.95	560.00	DRY
<b>D WELLS</b>					
<i>Well (1) Date</i>	<i>1184 (ft. AMSL)</i>	<i>1183 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>		
March-11	569.25	566.79	560.00		
June-11	567.88	566.76	560.00		
September-11	DRY	566.78	560.00		
December-11	569.82	566.83	560.00		

## Notes:

(1) = Wells listed in order from most distant outside of tile drain, to tile drain, then inside of tile drain.

ft. AMSL - Feet above mean sea level.

TABLE 3.6F

**1190 SERIES PIEZOMETERS WATER LEVELS-2011  
LOVE CANAL LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.**

**A WELLS**

<i>Well (1) Date</i>	<i>1194 (ft. AMSL)</i>	<i>1193 (ft. AMSL)</i>	<i>1192 (ft. AMSL)</i>	<i>1191 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1190 (ft. AMSL)</i>
March-11	564.43	565.56	564.48	565.02	554.80	567.11
June-11	564.35	565.74	564.36	565.33	554.80	565.83
September-11	563.71	565.21	563.72	565.20	554.80	563.58
December-11	564.58	565.56	564.51	565.24	554.80	565.23

**B WELLS**

<i>Well (1) Date</i>	<i>1194 (ft. AMSL)</i>	<i>1193 (ft. AMSL)</i>	<i>1192 (ft. AMSL)</i>	<i>1191 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>	<i>1190 (ft. AMSL)</i>
March-11	569.68	568.05	567.93	565.21	554.80	564.28
June-11	570.00	569.12	568.64	566.17	554.80	564.32
September-11	568.19	568.82	568.56	566.00	554.80	562.47
December-11	569.54	568.73	568.49	565.88	554.80	563.79

**C WELLS**

<i>Well (1) Date</i>	<i>1194 (ft. AMSL)</i>	<i>1193 (ft. AMSL)</i>	<i>1192 (ft. AMSL)</i>	<i>1191 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	574.38	570.31	569.23	564.19	554.80
June-11	571.97	572.58	570.06	564.98	554.80
September-11	569.52	570.76	570.05	564.03	554.80
December-11	574.73	570.53	569.80	564.41	554.80

**D WELLS**

<i>Well (1) Date</i>	<i>1194 (ft. AMSL)</i>	<i>1193 (ft. AMSL)</i>	<i>Tile Drain (ft. AMSL)</i>
March-11	573.90	571.63	554.80
June-11	573.66	572.17	554.80
September-11	570.27	570.98	554.80
December-11	573.43	571.18	554.80

## Notes:

(1) = Wells listed in order from most distant outside of tile drain, to tile drain, then inside of tile drain.  
ft. AMSL - Feet above mean sea level.

APPENDIX A

INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM

**New York State Department of Environmental Conservation  
Division of Environmental Remediation, 11th Floor**

625 Broadway, Albany, New York 12233

**Phone:** (518) 402-9553 **Fax:** (518) 402-9577

**Website:** www.dec.ny.gov



Joe Martens  
Commissioner

February 01, 2012

Joseph Branch  
Project Coordinator  
OCC/Glenn Springs Holdings, Inc.  
7601 Old Channel Trail  
Montaque, MI 49437

**RE: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal**

**Site Name:** Love Canal

**Site No.:** 932020

**Site Address:** 805 97th Street

Niagara Falls, NY 14304

Dear Joseph Branch:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of and compliance with, site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at <http://www.dec.ny.gov/regulations/67386.html>) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **March 30, 2012**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls (“IC/EC Plan”); a plan for monitoring the performance and effectiveness of the selected remedy (“Monitoring Plan”); and/or a plan for the operation and maintenance of the selected remedy (“O&M Plan”). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Qualified Environmental Professional (QEP). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, are to be submitted in electronic format to the Department of Environmental Conservation. The Department will not approve the PRR unless all documents and data generated in support of that report have been submitted in accordance with the electronic submissions protocol. In addition, the certification forms are required to be submitted in both paper and electronic formats.

Information on the format of the data submissions can be found at:

<http://www.dec.ny.gov/regulations/2586.html>

The signed certification forms should be sent to Brian Sadowski, Project Manager, at the following address:

New York State Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, NY 14203-2915

Phone number: 716-851-7220 E-mail: [bpsadows@gw.dec.state.ny.us](mailto:bpsadows@gw.dec.state.ny.us)

The contact information above is also provided so that you may notify the project manager about upcoming inspections, or for any other questions or concerns that may arise in regard to the site.

Enclosures

PRR General Guidance  
Certification Form Instructions  
Certification Forms

ec: w/enclosures

Brian Sadowski, Project Manager  
Greg Sutton, Hazardous Waste Remediation Engineer, Region 9  
Steven Bates, DOH  
Jane Polovich, Conestoga Rovers and Associates, Inc.

## Enclosure 1

### Certification Instructions

#### I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

#### II. Certification of Institutional / Engineering Controls (Boxes 3, 4, and 5)

Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

#### III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- Where the only control is an Institutional Control on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner.
- Where the site has Institutional and Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	Site Details	Box 1	
<b>Site No.</b> 932020			
<b>Site Name</b> Love Canal			
Site Address: 805 97th Street	Zip Code: 14304		
City/Town: Niagara Falls			
County: Niagara			
Site Acreage: 80.0			
Reporting Period: February 28, 2011 to February 28, 2012			
		YES	NO
1. Is the information above correct?		<input type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.			
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		<input type="checkbox"/>	<input type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		<input type="checkbox"/>	<input type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<input type="checkbox"/>	<input type="checkbox"/>
<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>			
5. Is the site currently undergoing development?		<input type="checkbox"/>	<input type="checkbox"/>
		<b>Box 2</b>	
		YES	NO
6. Is the current site use consistent with the use(s) listed below?		<input type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?		<input type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>			
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

**SITE NO. 932020**

**Description of Engineering and Institutional Controls**

**Boxes 3 and 4**

Parcel

Engineering Control

Institutional Control

232 Parcels

Cover System  
Fencing/Access Control  
Groundwater Containment  
Leachate Collection  
Pump & Treat

Building Use Restriction  
Ground Water Use Restriction  
Landuse Restriction  
Monitoring Plan  
O&M Plan

- 161.19-1-1
- 161.57-1-1
- 161.65-1-1
- 161.73-1-1
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161.14-3-41  
161.14-3-42  
161.14-3-43  
161.14-3-5  
161.14-3-11

161.18-1-18

Periodic Review Report (PRR) Certification Statements

Box 5

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

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

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

YES NO

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

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

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

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

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

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

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date


**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1, 2 and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Joe Branch at 7601 Old Channel Trail, Montague MI  
print name print business address 49437

am certifying as Owner (Owner or Remedial Party)

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

  
Signature of Owner or Remedial Party Rendering Certification

3/20/2012  
Date

IC/EC CERTIFICATIONS

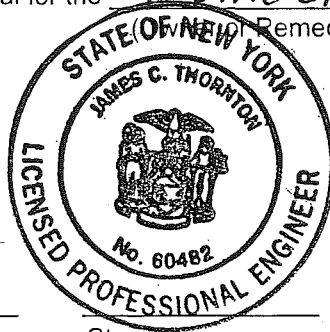
Box 7

Qualified Environmental Professional Signature

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

I James Thornton at 285 Delaware Ave Buffalo, NY  
print name print business address

am certifying as a Qualified Environmental Professional for the Remedial Party  
(Remedial Party)



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

Stamp  
(Required for PE)

3/16/12  
Date

**Enclosure 3**  
**Periodic Review Report (PRR) General Guidance**

- I. Executive Summary: (1/2-page or less)
  - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
  - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
    1. progress made during the reporting period toward meeting the remedial objectives for the site
    2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
  - C. Compliance
    1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
    2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
  - D. Recommendations
    1. recommend whether any changes to the SMP are needed
    2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
    3. recommend whether the requirements for discontinuing site management have been met.
  
- II. Site Overview (one page or less)
  - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
  - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
  
- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness  
Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.
  
- IV. IC/EC Plan Compliance Report (if applicable)
  - A. IC/EC Requirements and Compliance
    1. Describe each control, its objective, and how performance of the control is evaluated.
    2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
    3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
    4. Conclusions and recommendations for changes.
  - B. IC/EC Certification
    1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
  
- V. Monitoring Plan Compliance Report (if applicable)
  - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
  - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
  - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
  - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
  - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.
  
- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
  - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
  - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
  - C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluate the ability of each component of the remedy subject to O&M requirements to perform as

designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

#### VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;

1. whether all requirements of each plan were met during the reporting period
2. any requirements not met
3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals

1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to

discontinue site management.

#### VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

APPENDIX B

BARRIER DRAIN INSPECTION FORM

# Love Canal Barrier Drain Manhole Inspection

Date 09/14/11

Sector	MH No.	Location	Water Y/N	Level Feet	Debris Y/N	Structure OK	Cleaning Y/N	Comments	
North	MH-2A	NW	Y	0.3	N	Y	N		
	MH-4A	NW	Y	0.40	N	Y	N		
	PC-2A	NW	Y	0.3	N	Y	N		
	MH-6A	NW	Y	0.6	N	Y	N		
	MH-6B	NW	Y	0.5	N	Y	N		
	MH-6C	NW	N	0	N	Y	N		
	MH-8A	NW	N	0	N	Y	N		
	MH-10A	NW	N	0	N	Y	N		
	MH-1A	NE	N	0	N	Y	N		
	MH-3A	NE	N	0	N	Y	N		
	MH-5A	NE	N	0	N	Y	N		
	MH-7A	NE	N	0	N	Y	N		
	MH-9A	NE	N	0	N	Y	N		
	MH-11A	NE	N	0	N	Y	N		
	PC-1A	NE	Y		N	Y	N		
	MH-13A	NE	N	0	N	Y	N		
MH-15A	NE	N	0	N	Y	N			
MH-17A	NE	N	0	N	Y	N			
South	MH-2	SW	N	0	N	Y	N		
	MH-4	SW	N	0	N	Y	N		
	MH-6	SW	N	0	N	Y	N		
	MH-8/PC2	SW	N		N	Y	N		
	MH-10	SW	N	0	N	Y	N		
	MH-12	SW	N	0	N	Y	N		
	MH-14	SW	N	0	N	Y	N		
	MH-1	SE	N	0	N	Y	N		
	MH-3	SE	N	0	N	Y	N		
	MH-5	SE	N	0	N	Y	N		
	MH-7/PC1	SE	N	0	N	Y	N		
	MH-9	SE	N	0	N	Y	N		
MH-11	SE	N	0	N	Y	N			
MH-13	SE	N	0	N	Y	N			

# Love Canal Barrier Drain Manhole Inspection

Date 04/12/11

Sector	MH No.	Location	Water Y/N	Level Feet	Debris Y/N	Structure OK	Cleaning Y/N	Comments	
North	MH-2A	NW	Y	0.5	N	Y	N		
	MH-4A	NW	Y	0.00	Y	Y	N		
	PC-2A	NW	Y		N	Y	N		
	MH-6A	NW	Y	0.6	N	Y	N		
	MH-6B	NW	Y	0.5	Y	Y	N		
	MH-6C	NW	Y	0.5	Y	Y	N		
	MH-8A	NW	N	0	N	Y	N		
	MH-10A	NW	N	0	N	Y	N		
	MH-1A	NE	N	0	N	Y	N		
	MH-3A	NE	N	0	N	Y	N		
	MH-5A	NE	N	0	N	Y	N		
	MH-7A	NE	N	0	N	Y	N		
	MH-9A	NE	N	0	N	Y	N		
	MH-11A	NE	N	0	N	Y	N		
	PC-1A	NE	Y		N	Y	N		
	MH-13A	NE	N	0	N	Y	N		
	MH-15A	NE	N	0	N	Y	N		
	MH-17A	NE	N	0	N	Y	N		
South	MH-2	SW	N	0	N	Y	N		
	MH-4	SW	N	0	N	Y	N		
	MH-6	SW	N	0	N	Y	N		
	MH-8/PC2	SW	N		N	Y	N		
	MH-10	SW	N	0	N	Y	N		
	MH-12	SW	N	0	N	Y	N		
	MH-14	SW	N	0	N	Y	N		
	MH-1	SE	N	0	N	Y	N		
	MH-3	SE	N	0	N	Y	N		
	MH-5	SE	N	0	N	Y	N		
	MH-7/PC1	SE	N	0	N	Y	N		
	MH-9	SE	N	0	N	Y	N		
MH-11	SE	N	0	N	Y	N			
MH-13	SE	N	0	N	Y	N			

Love Canal

Semi-annual Inspection  
Barrier System/Pump Chamber Inspections  
(O&M requirement 6.1.3.1)

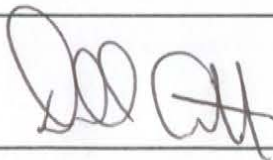
Check the following as appropriate:

- Visual Inspection of chamber piping.
- Verification of level probe performance.
- Inspection of pump chamber integrity.
- Inspection of pump chamber security.

Wells	Satisfactory	Needs work
PC-3	✓	
PC-2	✓	
PC-1	✓	
PC-3A	✓	
PC-2A	✓	
PC-1A	✓	

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature 

Date 9/12/2011



APPENDIX C

NIAGARA FALLS WATER BOARD WASTEWATER DISCHARGE PERMIT



**DISCHARGE IDENTIFICATION**

OUTFALL	DESCRIPTION	LOCATION	RECEIVING
#1	97th Street Discharge	97th Street	Carbon Treated Leachate from Love Canal Leachate Treatment Facility and the 102nd Street landfill

**WASTEWATER DISCHARGE PERMIT  
 REQUIREMENTS FOR:**

**ACTION  
 REQUIRED**

**REQUIRED DATE  
 OF SUBMISSION**

**A. Discharges to the Niagara Falls Water Board (NFWB) Sewer**

- |    |  |      |                           |
|----|--|------|---------------------------|
| 1. | Identification of all discharges to the NFWB Sewer System on a current plant sewer map certified by a New York State licensed professional engineer.   | None | Submitted<br>12/16/09     |
| 2. | Identification of each contributing waste stream to each discharge to the NFWB Sewer System clearly marked on, or referenced to, a current plant sewer map certified by a New York State licensed professional engineer. | None | Submitted<br>12/16/09     |
| 3. | Elimination of all uncontaminated discharges to the NFWB Sewer System. All uncontaminated flows should be clearly identified on a current sewer map certified by a New York State licensed professional engineer.        | N/A  |                           |
| 4. | Establishment of a control manhole that is continuously and immediately accessible for each discharge to the NFWB Sewer System.  | None | Previously<br>Established |

**B. Wastewater Discharge Management Practices**

- |    |  |      |                              |
|----|--|------|------------------------------|
| 1. | Identification of a responsible person(s) (day to day and in emergencies). | None | <b>Performed by<br/>NFWB</b> |
|----|--|------|------------------------------|

**C. Slug Control Plan\*\***

Pursuant to Section 40 CFR 403.12 (v) of the Federal Pretreatment Standards the Niagara Falls Water Board will evaluate the permittee, a minimum of once every two years for the need for a "Slug Control Plan." If a plan is required by the Niagara Falls Water Board, then the plan will contain, at a minimum, the following elements:

- a) Description of discharge practices, including non-routine batch discharges;
- b) Description of stored chemicals;
- c) Procedures for immediately notifying the POTW of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5 (b), with procedures for follow-up written notification within five days;
- d) If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment necessary for emergency response.

\*\*This section applies to all pollutants limited by the Niagara Falls Water Board SPDES Permit and all prohibited wastewater discharges (See Section 1960.5 of the Niagara Falls Water Board Wastewater Regulations).

D. General Wastewater Discharge Permit Conditions

1. Flow monitoring should be performed concurrently with any Wastewater Discharge Permit sampling and should be reported at the same time as analytical results. If it is not feasible to perform flow monitoring, an estimate of flow (method of estimated flow preapproved by the Niagara Falls Water Board) should be submitted with the analytical results.
2. All sampling for billing and pretreatment compliance purposes will be coordinated through the Niagara Falls Water Board Industrial Monitoring Coordinator.
3. All analysis must be performed by a State certified laboratory using analytical methods consistent with 40 CFR 136 and quality control provisions as required by the Niagara Falls Water Board Laboratory Technical Director. The permittee will report the results as directed in Section G of this permit. Results should be reported using the Method Detection Limit (MDL). Reporting results less than MDL will be indicated in the report by a less than sign (<) followed by the numeric MDL concentration reported by the laboratory. In these cases the pollutant load will be calculated and reported as zero (0). The MDL will be defined as the level at which the analytical procedure referenced is capable of determining with a 99% probability that the substance is present. The value is determined in reagent water. The precision at this level is +/- 100%.
4. An estimate of relative production levels for wastewater contributing processes at the time of any pretreatment compliance sampling will be submitted upon request of the Director of Niagara Falls Water Board - Wastewater Facilities.
5. All samples will be handled in accordance with EPA approved methods. Chain of Custody records will be submitted with all sampling results.
6. All conditions, standards and numeric limitations of Niagara Falls Water Board Wastewater Regulations are hereby incorporated into this permit by reference. These conditions, standards and numeric limitations must be complied with. Failure to comply with any part of said Regulations constitutes a violation and is subject to enforcement actions(s) described in Section 1960.9 of said Regulations, and in the Niagara Falls Water Board Pretreatment Administrative Procedure Number Five (5) - "Enforcement Response Guide." In the event of a violation, including slug discharges or spills, the Niagara Falls Water Board must be notified immediately by phone and confirmed by letter within five (5) working days.

Any person adjudicated of violating any provision in the Niagara Falls Water Board Wastewater Regulations shall be assessed a fine in the amount of up to \$10,000. This amount is available for each violation, and each day of a violation is a separate incident for which penalties may be sought.

6. The person violating any of the provisions of the Niagara Falls Water Board Wastewater Regulations will be liable for any expense, loss, or damage occasioned by reason of such violation. The expense, loss or damage will be taken to be the extent determined by the Director.

In addition, any person who knowingly makes any false statements, representation or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to the Niagara Falls Water Board Wastewater Regulations, or Wastewater Discharge Permit, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under the Niagara Falls Water Board Wastewater Regulations will, upon conviction be punished by a fine up to \$5,000. Furthermore, the Niagara Falls Water Board may recover reasonable attorney's fees, court costs, court reporting fees, and other expenses of litigation by appropriate suit at law against the person found to have violated applicable laws, orders, rules and permits required by the Niagara Falls Water Board Wastewater Regulations.

7. In accordance with Federal Regulation CFR 40, Part 403.12(g), any exceedance of a numeric limitation noted by the SIU must be re-sampled, analyzed and resubmitted to the Niagara Falls Water Board - Wastewater Facilities within 30 days.

Specifically, if any limit that is listed in Section F of this permit is exceeded, then the permittee will undertake a short term monitoring program for that pollutant. Samples will be collected identical to those required for routine monitoring purposes and will be collected on each of at least two (2) operating days and analyzed. Results will be reported in both concentration and mass, and will be submitted within 30 days of becoming aware of the exceedance.

8. Sampling frequency for any permitted compounds may be increased beyond the requirements set forth in Section F and G of this permit. If the permittee monitors (sample and analysis) more frequent than required under this permit, **all** results of this monitoring must be reported.
9. As noted in Section 1960.5g of the Niagara Falls Water Board Wastewater Regulations, "Personnel as designated by the Director will be permitted at any time for reasonable cause to enter upon all properties served by the Niagara Falls Water Board for the purpose of, and to carry out, inspection of the premises, observation, measurement, sampling and testing, in accordance with provisions of the Regulations."
10. As noted in Section 1960.5c of the Niagara Falls Water Board Wastewater Regulations, significant changes in discharge characteristics or volume must be reported immediately to the Niagara Falls Water Board - Wastewater Facilities.
11. As noted in Section 1960.6b of the Niagara Falls Water Board Wastewater Regulations, samples required to be collected via a 24-hour composite sampler must be retained refrigerated for an additional 24 hour plus un-refrigerated an additional 48 hours (total 72 hours).

12. As noted in Section 1960.5d of the Niagara Falls Water Board Wastewater Regulations, all "SIU's will keep on file for a minimum of three years, all records, flow charts, laboratory calculations or any other pertinent data on their discharge to the Niagara Falls Water Board - Wastewater Facilities."
13. As noted in Section 1960.6g of the Niagara Falls Water Board Wastewater Regulations, "Permits are issued to a specific user for a specific monitoring station. A permit will not be reassigned or transferred without the approval of the Director which approval will not be unreasonably withheld. Any succeeding owner or user to which a permit has been transferred and approved will also comply with all the terms and conditions of the existing permit."
14. The Annual Average Limitation is equivalent to the specific SIU allocation, and will be defined as the permissible long term average discharge of a particular pollutant. These limitations are listed in Section F of this permit. The computation of the Annual Average will be as follows; for each compound listed in Section G of this permit, the Annual Average will be the average of the present monitoring quarter and three previous quarters data.
15. The Daily Maximum Limitation will be defined as the maximum allowable discharge on anyone day. The Daily Maximum Limitation will allow for periodic short term discharge fluctuations. These specific limitations are listed in Section F of this permit.
16. Enforcement of the Annual Average Limitation will be based on the reported average of the last four quarters data vs. the Annual Average Limited listed in Section F of this permit. Enforcement of the Daily Maximum Limitation will be based on individual analysis results vs. the Daily Maximum Limit listed in Section F of this permit. These results may be obtained from self monitoring (Section G), City of Niagara Falls Verification, incident investigation or billing samples.
17. The Niagara Falls Water Board Administrative Procedure Number 6 "Procedure for Determination and Use of Local Limits" lists all pollutants noted in the Niagara Falls Water Board – Wastewater Facilities SPDES Permit. The limits defined in the procedure are values which are based on the quantity of substances discharged which can be easily related to the Treatment Plant's removal capacity.

The pollutants listed in this procedure that are not specifically listed in Section F and G of this permit may be present in the permittee's wastewater discharge, but at levels which do not require specific permit limitations. Consequently, if any of the limits listed in this procedure, for pollutants not identified in Section F and G of this permit, are exceeded then the permittee will undertake a short-term, high intensity monitoring program for that pollutant. Samples identical to those required for routine monitoring purposes will be collected on each of at least three operating days and analyzed. Results will be expressed in terms of both concentration and mass, and will be submitted no later than the end of the third month following the month when the limit was first exceeded.

If levels higher than the limit are confirmed, the permit may be reopened by the Niagara Falls Water Board for consideration of revised permit limits.

E. Specific Wastewater Discharge Permit Conditions

1. Billing Agreement:

- a) Flow quantities will be derived from the Wastewater Treatment Facility flow meter.
- b) Charges for TSS, SOC and Substances of Concern shall be developed based on Quarterly Self Monitoring data.

2. Love Canal Leachate Treatment Facility (LCLTF)

The Niagara Falls Water Board agrees to accept wastewater processed from the Glenn Springs Holdings (GSH) LCLTF. These waters in addition to Love Canal wastewater shall include wastewater from the 102nd Street remedial site. This approval is subject to the following conditions:

- a) The LCLTF shall be properly operated and maintained at all times.
- b) To ensure proper operation GSH shall ensure sufficient feed, inter-stage (breakthrough), and effluent analysis to ensure timely carbon changes. Treatment levels of 10 ug/l shall be achieved and verified with quarterly composite sample analysis for the following compounds: trichloroethylene, tetrachloroethylene, monochlorotoluene, monochlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, hexachlorocyclohexanes and hexachlorobenzene.

E. Specific Wastewater Discharge Permit Conditions

2. Love Canal Leachate Treatment Facility (LCLTF)

Continued

- c) The issuance of this approval is based on GSH's previous assertions that there is no reason to anticipate the presence of tetrachlorodibenzo-p-dioxins in the discharge from the treatment facility. The Niagara Falls Water Board hereby reserves the right to collect samples from the treatment facility effluent and analyze such wastewaters for their chemical constituents, including tetrachlorodibenzo-p-dioxins. If such analysis indicates the presence of tetrachlorodibenzo-p-dioxins, this approval may be withdrawn. If at anytime, the Niagara Falls Water Board determines on any basis that the discharge of these wastewater to the POTW is interfering with the operation of that facility, the Niagara Falls Water Board will direct GSH to discontinue the discharge.
- d) These pretreated wastewaters shall be discharged to the POTW via Outfall MS # 1.
- e) Periodically wet weather flow in the area around LCLTF results in surcharged sewers. The resultant surcharge requires overflow at combined sewer and storm sewer overflow points. Other points in the sewer shed require manual bypass pumping. Consequently, to minimize this overflow, the Niagara Falls Water Board will require the permittee to cease discharge from the LCLTF during these surcharge events.

A notification procedure has been established by the Niagara Falls Water Board to formalize the communication between the Niagara Falls Water Board and the permittee to halt and resume the LCLTF discharge. This procedure by reference is hereby incorporated as a condition of this permit.

F. Discharge Limitations & Monitoring Requirements

During the Period beginning the effective date of this Permit and lasting until the expiration date, discharge from the permitted facility outfall(s) will be limited and monitored by the permittee as specified below.

OUTFALL NUMBER/ EFFLUENT PARAMETER	DISCHARGE LIMITATIONS		UNITS	MINIMUM MONITORING REQUIREMENTS	
	ANNUAL AVERAGE	DAILY MAXIMUM		MEASUREMENT FREQUENCY	SAMPLE TYPE
#1 Flow	0.3	0.3	MGD	Continuous	4
#1 Total Suspended Suspended	25	50	lbs/d	1/Qtr.	1
#1 Soluble Organic Carbon	50	75	lbs/d	1/Qtr.	1
#1 Volatile - Priority Pollutants (See Attached list Section G)	MONITOR	ONLY	lbs/d	1/Qtr.	1
#1 Acid Extractable - Priority Pollutants (See attached list Section G)	MONITOR	ONLY	lbs/d	1/Qtr.	1
#1 Base/Neutral - Priority Pollutants (See attached list Section G)	MONITOR	ONLY	lbs/d	1/Qtr.	1
# 1 Pesticides - Hexachlorocyclohexanes	MONITOR	ONLY	lbs/d	1/Qtr.	1
#1 Total Phenols	MONITOR	ONLY	lbs/d	1/Qtr.	1

F. DISCHARGE LIMITATIONS & MONITORING REQUIREMENTS CONTINUED

SAMPLE TYPE FOOTNOTES

- (1) Each sample will consist of four (4) grabs collected spaced throughout the **batch** discharge, such that they are representative of the effluent being discharged pursuant to 40CFR 403.12.b5iii. The four (4) grabs will be **composited in the laboratory** and analyzed as one sample.
- (2) Each sample will consist of four (4) grabs collected spaced over the 24-hour period, such that they are representative of the effluent being discharged pursuant to 40CFR 403.12.b5iii. The four (4) grabs will be **composited in the laboratory** and analyzed as one sample.
- (3) Each sample will consist of a 24-hour, **flow proportioned** composite sample collected from the monitoring point.
- (4) Flow will be monitored continuously with the use of a water meter or another acceptable flow metering device.
- (5) Each sample will consist of a 24-hour, **time proportioned** composite sample collected from the monitoring point.
- (6) Reserved
- (7) Same as (3), however, five (5) samples will be collected per quarter from the monitoring point and analyzed by and at the Niagara Falls Water Board's expense.
- (8) Four (4) grab samples will be collected spaced over the 24-hour period, such that they are representative of the effluent being discharged pursuant to 40CFR 403.12.b5iii. Each grab will be **analyzed and reported separately**.
- (9) A grab sample is defined as an aliquot collected over a period of not more than 15 minutes.



Discharge Monitoring Compounds

Volatile	Base/Neutrals Extractables
Benzene	Dimethyl Phthalate
Carbon Tetrachloride	Butyl Benz Phthalate
Chlorodibromomethane	Di-N-Butyl Phthalate
Monochlorobenzene	Di-N-Octyl Phthalate
Dichlorobromomethane	Diethyl Phthalate
Chloroform	Nitrosodiphenylamine
Dichloroethylenes	Dichlorobenzenes
Bromoform	Dichlorotoluene
Dichloropropylenes	Acenaphthlene
Ethylbenzene	Fluoranthene
Tetrachloroethanes	Chrysene
Tetrachloroethylene	Napthalene
Toluene	Benzo (a) Anthracene
Trichloroethanes	Pyrene
Trichloroethylene	Trichlorobenzene
Methylene Chloride	Trichlorotoluene
Vinyl Chloride	Hexachlorobutadiene
Monochlorotoluenes	Tetrachlorobenzene
Monochlorobenzotrifluoride	Hexachlorocyclopentadiene
	Hexachlorobenzene
	Dichlorobenzotrifluoride

### Discharge Monitoring Compounds

Acids	Pesticides
Monochlorophenol	Alpha, beta, delta, gama – hexachlorocyclohexane
Dichlorophenol	
Monochlorocresol	
Trichlorophenol	
Pentachlorophenol	

Conventionals	
Total Phenols	
Total Suspended Solids	
Soluble Organic Carbon	

H. Comments/Revisions

I:\ADMIN\WINWORD\ZAEPFEL\SIU\PERMITS\LOVCAN44

APPENDIX D

ADDITIONAL WELLS REQUESTED BY  
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Joe Martens  
Commissioner

April 5, 2011

Mr. Joseph Branch  
OCC/Glenn Springs Holdings, Inc.  
7601 Old Channel Trail  
Montaque, MI 49437

Dear Mr. Branch:

**Site Management (SM) Periodic Review  
Report (PRR) Response Letter  
Love Canal, Niagara Falls  
Niagara County, Site No.: 932020**

The Department has reviewed the Periodic Review Report (PRR) and IC/EC Certification for the period: 02/28/2010 to 02/28/2011 and finds it acceptable with the below noted comments. These comments are a result of the January-February 2011 Colvin Boulevard and 96<sup>th</sup> St. Sewer repair incident and questions that were raised concerning off-site contaminant migration from the site.

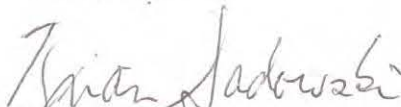
1. The June 2010 Flow Diagram, figure 3.7, for the 1180 Series Piezometers, indicates that the groundwater direction is to the north towards the Colvin Boulevard sewer. The Department requests that GSH conduct a onetime groundwater quality "snapshot" in this area by sampling additional monitoring wells and piezometers located along the north boundary of the Canal's remedial system. Specifically, piezometer 1181 and wells 7160 and 7155 should be included in the 2011 long term monitoring program (LTMP).
2. In conjunction with the above and as discussed during the Colvin Boulevard sewer repair project, it is requested that an attempt be made to locate well 3251 and if found, include well 3251 in the 2011 LTMP.

The frequency of Periodic Reviews for this site is 1 year. Your next PRR is due on February 28, 2012. You will receive a reminder letter and updated certification form 45-days prior to the due date.

Mr. Joseph Branch  
April 5, 2011  
Page 2

If you have any questions, or need additional forms, please contact me at 716-851-7220  
or e-mail: [bpsadows@gw.dec.state.ny.us](mailto:bpsadows@gw.dec.state.ny.us)

Sincerely,



Brian Sadowski  
Project Manager

BS:dcg  
sadowski\branch-apr1.ltr

cc: Mr. Matthew Forcucci DOH Project Manager  
Mr. Gregory Sutton, Regional Haz Waste Remediation Engineer

APPENDIX E

LOVE CANAL ANNUAL GROUNDWATER SAMPLING SCHEDULE



**CONESTOGA-ROVERS  
& ASSOCIATES**

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

## MEMORANDUM

TO: Clint Babcock, Ralph Schupp  
FROM: Jane Pietraszek-Polovich/adh/8 *JPP*  
C.C.: Darrell Crockett, Dennis Hoyt, John Pentilchuk,  
Dave Tyran, Filing  
RE: Love Canal Annual Groundwater Sampling Schedule

REF. NO.: 009954  
DATE: August 5, 2010

At the request of Glenn Springs Holdings, Inc. (GSH), Conestoga-Rovers & Associates (CRA) has prepared the following memo to document the Annual Groundwater Sampling schedule for the Love Canal Facility in Niagara Falls, New York (Site).

Correspondence from Mr. Brian Sadowski of the New York State Department of Environmental Conservation (NYSDEC) sent to CRA and GSH on March 25, 2009 (email attached) states that it is no longer necessary for the NYSDEC to specifically list the wells to be sampled each year at the Site, since the annual and alternating (Group I and Group II) wells have remained the same throughout the years. From 1994 through 2008, the NYSDEC provided GSH with a list of wells to be sampled each year. The March 25, 2009 email from Mr. Sadowski stated that the NYSDEC will no longer provide such a list. Therefore, Mr. Sadowski suggested that the wells sampled during the 2007 annual groundwater monitoring event be used for the 2009 annual groundwater monitoring event, to remain consistent with the Long-Term Monitoring Program. The 2007 (and therefore 2009) monitoring wells represent the Group I wells (Table 1). The 2008 (and therefore 2010) monitoring wells represent the Group II wells. In addition, there are select overburden and bedrock wells that are to be sampled annually (Table 1).

Mr. Sadowski went on to further state that GSH must "ensure that the monitoring network and well selection provide adequate overburden and bedrock coverage that returns the data necessary for the evaluation of the remediation, and that the NYSDEC feels that the selection of the 2007 wells will meet those objectives." Mr. Sadowski indicated that GSH can enhance upon the objective by choosing other wells if they wish. Once the well selection is made for the annual event, GSH is to provide the NYSDEC with the monitoring well numbers. Any changes in the well selection must be accompanied with reasons for the addition/deletion. Based on a review of the data for the wells suggested by NYSDEC, GSH agreed to sample the wells in Table 1 for future sampling events. This was communicated to the NYSDEC through a phone call to Mr. Sadowski on June 7, 2010, and documented in the attached email dated June 8, 2010. The NYSDEC is to be notified when the annual monitoring will take place for oversight purposes and to split samples if desired. A 2-week notice of the annual groundwater monitoring event is preferred by the NYSDEC.

**TABLE 1**  
**SAMPLE SCHEDULE**  
**LOVE CANAL FACILITY**  
**LONG-TERM MONITORING PROGRAM**  
**NIAGARA FALLS, NEW YORK**

<u>Annual Wells</u>	<u>Biannual Wells</u>	
<i>Bedrock Wells</i>	<i>Overburden Wells Group I (2009)</i>	<i>Overburden Wells Group II (2010)</i>
3257	3151	7115
5221	7120	7125
6209	7155	8115
7205	7161	8125
8210	8110	9105
9205	8120	9113
9210	8130	9118
10205	8140	10178A
10210A	9110	
10210B	9115	
10210C	9120	
10215	9125	
10225A	9130	
10225B	9140	
10225C	10105	
10270	10147	
10272	10174A	
10278		
 <i>Overburden Wells</i>		
	7130	
	7132	
	8106	
	10135	

**From:** Crockett, Darrell  
**Sent:** Wednesday, March 25, 2009 12:06 PM  
**To:** Pentilchuk, John  
**Subject:** 9954 FW: Love Canal Annual 2009 Sampling  
John,

Please let me know how you'd like for me to proceed. I have the 2007 sampling event data.

Thanks  
Darrell

---

**From:** Brian Sadowski [mailto:bpsadows@gw.dec.state.ny.us]  
**Sent:** Wed 3/25/2009 11:56 AM  
**To:** Crockett, Darrell  
**Cc:** Hoyt, Dennis; Clint\_Babcock ext  
**Subject:** Re: Love Canal Annual 2009 Sampling

Darrell,

Your contact and this response will be considered as our pre-sampling conference as stated on p.6. in Section 2.0 Monitoring Requirements of the February 19, 2001 Sampling Manual. Over the last fourteen years the Department has specifically listed the wells to sample and believe that is no longer necessary as the annual and alternating wells have stayed the same. GSHI and/or MSRM has clearly demonstrated their ability to operate, maintain and monitor the site. With the addition of CRA; there is an added layer of technological security and professional environmental judgement. With that said, the Department will not provide a specific list of wells to monitor. However, the suggested wells are the wells that were sampled in 2007 to remain consistent with the LTM program schedule listed on Table 2.2 of the Sampling Manual. The monitoring schedule is flexible. OXY and CRA is to ensure that the monitoring network and well selection provides adequate overburden and bedrock coverage that returns the data necessary for the evaluation of the remediation. The Department feels that the selection of the 2007 wells will meet those objectives. OXY and CRA can enhance upon the objectives by choosing other wells if they wish. When a decision is made by CRA on the well selection, please provide the Department with the well numbers. A simple return "as same as 2007 or 2007 with the addition, deletion or substitution of well #" will suffice. If changes are made, please provide reasoning. Finally, the Department will not be splitting this year. But, will need to be given notice when monitoring will take place for oversight purposes. Thank you.

>>> "Crockett, Darrell" <dcrockett@craworld.com> 3/18/2009 8:05 AM >>>  
Hello Brian,

At your convenience would you please provide me with a 2009 Annual sampling well list including the split samples.

Thank You  
Darrell Crockett  
716/998-5804

**From:** Polovich, Jane

**Sent:** Tuesday, June 08, 2010 9:49 AM

**To:** Filing

**Subject:** 9954: Love Canal Annual Sampling - Conversation with Brian Sadowski NYSDEC

I spoke with Brian Sadowski on Monday June 7, 2010 to confirm the annual groundwater sampling locations at Love Canal. As per Brians email of March 25 2009 to Darrell Crockett, the 2007 wells selected by the DEC were to be the ones sampled in 2009 (these represent the Group I wells). I confirmed with Mr. Sadowski that the 2008 wells selected by the DEC would be teh wells sampled in 2010 (representing the Group II wells). These Group I and Group II wells will from this point forward be the wells sampled for the alternating annual groundwater sampling events at Love Canal. Mr Sadowski went further to say that GSH may add or delete wells from the sampling but must provide a reason to the DEC prior to sampling for the additions / deletions. CRA documented this change in the sampling program in a internal memo.

---

Jane Polovich

**Conestoga-Rovers & Associates (CRA)**


2055 Niagara Falls Blvd., Suite 3  
Niagara Falls, New York 14304

Phone: 716.297.6150

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[www.CRAworld.com](http://www.CRAworld.com)

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APPENDIX F

ANALYTICAL RESULTS AND QA/QC REVIEW  
LONG-TERM MONITORING PROGRAM  
LOVE CANAL  
JULY 2011



**CONESTOGA-ROVERS  
& ASSOCIATES**

E-Mail Date: January 24, 2012  
E-Mail To: Clint Babcock [clint\_babcock@oxy.com]  
c.c.: Dennis Hoyt; Jane Polovich; Darrell Crockett  
E-Mail and Hard Copy if Requested

ANALYTICAL RESULTS AND QA/QC REVIEW  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
JULY 2011

PREPARED BY:  
CONESTOGA-ROVERS & ASSOCIATES  
2055 Niagara Falls Blvd., Suite #3  
Niagara Falls, New York 14304  
Telephone: 716-297-6150 Fax: 716-297-2265  
Contact: Deborah Andrasko  
Date: December 12, 2011  
Revised: January 24, 2012  
www.CRAworld.com

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TABLE 6	QUALIFIED SAMPLE RESULTS DUE TO DUAL COLUMN RESULTS
TABLE 7	QUALIFIED SAMPLE RESULTS DUE TO MATRIX INTERFERENCES

## LIST OF ATTACHMENTS

ATTACHMENT A	TENTATIVE IDENTIFIED COMPOUNDS
ATTACHMENT B	CHAIN OF CUSTODY DOCUMENT(S)

## 1.0 INTRODUCTION

Forty-three groundwater samples (including four field duplicates), two rinse blanks, and four trip blanks were collected in support of the Long-Term Monitoring Program (LTMP) Love Canal Site in Niagara Falls, New York (Site), in July 2011. The samples were submitted to TestAmerica Laboratories, Inc., located in Pittsburgh, Pennsylvania, and analyzed for Site-specific volatiles, semi-volatiles, and pesticides/polychlorinated biphenyls (PCBs). A sample collection and analysis summary is presented in Table 1.

The analytical results are presented in Table 2. Tentatively Identified Compounds (TICs) were reviewed and a summary is presented in Attachment A. Copies of the Chains of Custody are included in Attachment B. The quality assurance/quality control (QA/QC) criteria by which these data have been assessed are outlined in Methods 95-1, 95-2, and 95-3, referenced from the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) (10/95 Rev.) and the "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," United States Environmental Protection Agency (USEPA) 540/R-99/008, October 1999.

All raw data including calibration, spike, and duplicate and blank results were assessed.

## 2.0 QA/QC REVIEW

### 2.1 HOLDING TIMES

Based upon criteria outlined in the NYSDEC ASP, the following holding time requirements were used:

Volatile Organic Compounds (VOCs)	10 days from Verified Time of Sample Receipt (VTSR) to analysis (preserved pH<2; HCl)
Semi-Volatile Organic Compounds (SVOCs)	5 days from VTSR to extraction; 40 days from extraction to analysis
Pesticides/PCBs	5 days from VTSR to extraction; 40 days from extraction to analysis

All holding time criteria were met for all sample preparation and analysis. All samples were properly preserved and received at the laboratory at 4°C (±2°C).

## **2.2 INSTRUMENT CALIBRATION**

### **Gas Chromatograph/Mass Spectrometer (GC/MS) – VOCs and SVOCs**

The GC/MS instrumentation was properly tuned prior to sample analysis. Initial calibration data showed adequate instrument sensitivity and calibration curves showed acceptable linearity for all compounds of interest.

All continuing calibration standards showed adequate instrument sensitivity. Various VOC and SVOC continuing calibration standard results indicated variability in instrument response. All associated sample results were qualified as estimated (see Table 3).

### **Gas Chromatograph (GC) – Pesticides/PCBs**

Initial and continuing calibration data showed adequate instrument sensitivity, linearity, and resolution on primary column. All retention times fell within the established retention time windows.

## **2.3 INTERNAL STANDARD RECOVERIES – VOCs AND SVOCs**

The proper internal standard compounds were added to all samples, blanks, and blank spike samples prior to VOC and SVOC analyses. All internal standard recoveries were acceptable and properly used to calculate all positive sample results.

## **2.4 SURROGATE COMPOUND ANALYSES**

Surrogates were added to all samples, blanks, and QC samples prior to extraction and/or analysis.

All surrogate recoveries met the method acceptance criteria with the exception of some high pesticide surrogate recoveries. The associated sample results were either non-detect and would not have been impacted by the implied high bias, or did not require qualification based on the remaining acceptable surrogate recoveries.

## **2.5 METHOD BLANK ANALYSES**

Method blanks were analyzed and/or extracted at the proper frequency for all parameters. All sample results were non-detect indicating that laboratory contamination was not an issue.

## **2.6 BLANK SPIKE/BLANK SPIKE DUPLICATES**

Blank spikes/blank spike duplicates were prepared and/or analyzed using representative compounds for all parameters.

All spike recoveries showed acceptable analytical accuracy and precision with the following exceptions:

- i) Low recoveries were reported for bromomethane and chloromethane in some of the blank spikes. All associated sample results were qualified as estimated based on the implied low bias (see Table 4).
- ii) A high 4-methyl-2-pentanone recovery was reported for one of the volatile blank spikes. All associated sample results were non-detect and would not be impacted by the indicated high bias.

## **2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)**

MS/MSDs were prepared and/or analyzed with each batch of samples.

All spike recoveries showed acceptable analytical accuracy and precision with the following exceptions:

- i) A low hexachlorocyclopentadiene MS recovery was reported for sample LC-7132-0711. The sample result was not qualified based on the acceptable MSD recovery.
- ii) High recoveries for three VOCs were reported for sample LC-6209-0711. The sample results were not qualified based on the acceptable MSD recoveries.
- iii) Low MS/MSD recoveries were reported for two pesticides. The associated sample results have been qualified as estimated based on the indicated low bias (see Table 5).

## 2.8 FIELD QA/QC

### Field Duplicate Analyses

Three samples were collected in duplicate and submitted to the laboratory for analysis as summarized in Table 1. All field duplicate results showed acceptable comparability with the original sample results, indicating acceptable analytical and field precision.

### Trip Blanks

Trip blanks were collected and analyzed for Site-specific VOCs. All results were non-detect for all analytes of interest.

### Field Blanks

Rinse blanks were collected and analyzed with the samples as summarized in Table 1. All results were non-detect for the analytes of interest with the exception of a low concentration of toluene in one of the blanks. All associated sample results were non-detect and would not have been impacted.

## 2.9 GENERAL COMMENTS

Pesticide analyses were performed using dual column analyses. In general, the pesticide results showed good correlation between the two columns. Variability was observed between some of the results (see Table 6). The associated data were qualified as estimated to reflect the implied variability.

Some pesticide and PCB samples had large peak interferences that masked the presence or absence of target pesticide and PCB analytes. The samples should have been diluted and/or taken through additional cleanup procedures, which may have mitigated the impact of the matrix interference, but this was not done. Based on the severity of the interference, the affected results were qualified as either estimated or rejected. The qualified results are as shown in Table 7.

## 2.10 TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

TICs were evaluated for all samples submitted for volatile and semi-volatile analyses. A summary of the TICs reported and the estimated concentrations is presented in Attachment A. TICs which were present in the blanks or which were identified as aldol condensation products and/or siloxanes have been eliminated.

## 3.0 CONCLUSION

Based on this QA/QC review, these data were judged acceptable with the qualifications and exceptions noted.

## TABLES

**TABLE 1**  
**SAMPLE COLLECTION AND ANALYSIS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Sample I.D.</i>	<i>Location I.D.</i>	<i>Collection Date (mm/dd/yy)</i>	<i>Collection Time (hr:min)</i>	<i>Analysis/Parameters</i>			<i>Comments</i>
				<i>VOCs</i>	<i>SVOCs</i>	<i>Pesticides/PCBs</i>	
LC-10105-0711	10105	07/06/11	10:25:00 AM	X	X	X	
LCTRIP-0711	-	07/06/11	-	X			Trip Blank
LC-3257-0711	3257	07/06/11	8:50:00 AM	X	X	X	
LC-8106-0711	8106	07/06/11	9:35:00 AM	X	X	X	
LC-8130-0711	8130	07/06/11	11:30:00 AM	X	X	X	
LC-8140-0711	8140	07/06/11	11:50:00 AM	X	X	X	
LC-9110-0711	9110	07/06/11	12:45:00 PM	X	X	X	
LC-9115-0711	9115	07/06/11	1:30:00 PM	X	X	X	
LC-8205-0711	9115	07/06/11	2:00:00 PM	X	X	X	Field duplicate of sample LC-9115-0711
LC-9120-0711	9120	07/06/11	2:10:00 PM	X	X	X	
LC-10147-0711	10147	07/07/11	3:00:00 PM	X	X	X	
LC-7120-0711	7120	07/07/11	10:50:00 AM	X	X	X	
LC-7132-0711	7132	07/07/11	8:30:00 AM	X	X	X	MS/MSD
LC-7155-0711	7155	07/07/11	9:45:00 AM	X	X	X	
LC-9125-0711	9125	07/07/11	11:35:00 AM	X	X	X	
LC-9130-0711	9130	07/07/11	12:20:00 PM	X	X	X	
LC-9140-0711	9140	07/07/11	2:45:00 PM	X	X	X	
RINSE-0711	-	07/07/11	2:10:00 PM	X	X	X	Rinse Blank
LCTRIP-070711	-	07/07/11	-	X			Trip Blank
LC-10135-0711	10135	07/13/11	12:00:00 PM	X	X	X	
LC-RINSE2-0711	-	07/13/11	3:00:00 PM	X	X	X	Rinse Blank
LC-5221-0711	5221	07/13/11	4:15:00 PM	X	X	X	
LC-8225-0711	5221	07/13/11	4:30:00 PM	X	X	X	Field duplicate of sample LC-5221-0711

**TABLE 1**  
**SAMPLE COLLECTION AND ANALYSIS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Sample I.D.</i>	<i>Location I.D.</i>	<i>Collection Date</i> <i>(mm/dd/yy)</i>	<i>Collection Time</i> <i>(hr:min)</i>	<i>Analysis/Parameters</i>			<i>Comments</i>
				<i>VOCs</i>	<i>SVOCs</i>	<i>Pesticides/PCBs</i>	
LC-7130-0711	7130	07/13/11	9:50:00 AM	X	X	X	
LC-7161-0711	7161	07/13/11	1:15:00 PM	X	X	X	
LC-8110-0711	8110	07/13/11	11:05:00 AM	X	X	X	
LC-8210-0711	8210	07/13/11	2:50:00 PM	X	X	X	
LC-8215-0711	8210	07/13/11	3:10:00 PM	X	X	X	Field duplicate of sample LC-8210-0711
LC-9205-0711	9205	07/13/11	3:30:00 PM	X	X	X	
LC-9210-0711	9210	07/13/11	4:00:00 PM	X	X	X	
LC-10174A-0711	10174A	07/13/11	12:45:00 PM	X	X	X	
LC-6209-0711	6209	07/14/11	11:00:00 AM	X	X	X	MS/MSD
LC-7205-0711	7205	07/14/11	10:00:00 AM	X	X	X	
LCTRIP-071411	-	07/14/11	-	X			Trip Blank
LC-10205-0711	10205	07/14/11	1:00:00 PM	X	X	X	
LC-10210B-0711	10210B	07/14/11	2:00:00 PM	X	X	X	
LC-10210C-0711	10210C	07/14/11	2:20:00 PM	X	X	X	
LC-10215-0711	10215	07/14/11	1:30:00 PM	X	X	X	
LC-10225C-0711	10225C	07/14/11	3:15:00 PM	X	X	X	
LC-10270-0711	10270	07/14/11	10:30:00 AM	X	X	X	
LC-10272-0711	10272	07/14/11	11:45:00 AM	X	X	X	
LC-8235-0711	10272	07/14/11	12:00:00 PM	X	X	X	Field duplicate of sample LC-10272-0711
LC-10278-0711	10278	07/14/11	3:00:00 PM	X	X	X	
LC-10210A-0711	10210A	07/19/11	9:00:00 AM	X	X	X	
LC-10225A-0711	10225A	07/19/11	10:10:00 AM	X	X	X	
LC-10225B-0711	10225B	07/19/11	10:40:00 AM	X	X	X	

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
JULY 2011

<i>Sample I.D.</i>	<i>Location I.D.</i>	<i>Collection Date (mm/dd/yy)</i>	<i>Collection Time (hr:min)</i>	<i>Analysis/Parameters</i>			<i>Comments</i>
				<i>VOCs</i>	<i>SVOCs</i>	<i>Pesticides/PCBs</i>	
LC-1181A-0711	1181A	07/15/11	9:45:00 AM	X	X	X	
LC-8120-0711	8120	07/19/11	9:40:00 AM	X	X	X	
LCTRIP-071511	-	07/15/11	-	X			Trip Blank

## Notes:

- Not applicable.  
VOCs Volatile Organic Compounds.  
SVOCs Semi-Volatile Organic Compounds.  
PCBs Polychlorinated Biphenyls.  
MS/MSD Matrix Spike/Matrix Spike Duplicate.

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	3257	5221	5221	6209	7120	7130	7132	7155
	<i>Sample ID:</i>	LC-3257-0711	LC-5221-0711	LC-8225-0711	LC-6209-0711	LC-7120-0711	LC-7130-0711	LC-7132-0711	LC-7155-0711
	<i>Sample Date:</i>	7/6/2011	7/13/2011	7/13/2011	7/14/2011	7/7/2011	7/13/2011	7/7/2011	7/7/2011
				(Duplicate)					
<i>Parameters</i>	<i>Units</i>								
<i>Volatile Organic Compounds</i>									
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	20 U	20 UJ	20 UJ	20 U	20 UJ	20 UJ	20 UJ	20 UJ
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
Carbon disulfide	µg/L	7.2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	3.4 J	5.0 U	5.0 U	5.0 U	1.2 J	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	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	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	3257	5221	5221	6209	7120	7130	7132	7155
	<i>Sample ID:</i>	LC-3257-0711	LC-5221-0711	LC-8225-0711	LC-6209-0711	LC-7120-0711	LC-7130-0711	LC-7132-0711	LC-7155-0711
	<i>Sample Date:</i>	7/6/2011	7/13/2011	7/13/2011	7/14/2011	7/7/2011	7/13/2011	7/7/2011	7/7/2011
				(Duplicate)					
<i>Parameters</i>	<i>Units</i>								
<i>Volatile Organic Compounds (Cont'd.)</i>									
Vinyl acetate	µg/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
<i>Semi-volatile Organic Compounds</i>									
1,2,4-Trichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
1,2-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
1,3-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
1,4-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4,5-Trichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
2,4,6-Trichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
2,4-Dinitrophenol	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	49 U	48 U
2,4-Dinitrotoluene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
2,6-Dinitrotoluene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
2-Nitroaniline	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	49 U	48 U
2-Nitrophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
3,3'-Dichlorobenzidine	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
3-Nitroaniline	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	49 U	48 U
4,6-Dinitro-2-methylphenol	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	49 U	48 U
4-Bromophenyl phenyl ether	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
4-Chloro-3-methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
4-Chloroaniline	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
4-Chlorophenyl phenyl ether	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
4-Methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
4-Nitroaniline	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	49 U	48 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	3257	5221	5221	6209	7120	7130	7132	7155
	<i>Sample ID:</i>	LC-3257-0711	LC-5221-0711	LC-8225-0711	LC-6209-0711	LC-7120-0711	LC-7130-0711	LC-7132-0711	LC-7155-0711
	<i>Sample Date:</i>	7/6/2011	7/13/2011	7/13/2011	7/14/2011	7/7/2011	7/13/2011	7/7/2011	7/7/2011
				(Duplicate)					
<i>Parameters</i>	<i>Units</i>								
<i>Semi-volatile Organic Compounds (Cont'd.)</i>									
4-Nitrophenol	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	49 U	48 U
Acenaphthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(g,h,i)perylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzoic acid	µg/L	47 U	47 U	47 U	48 U	47 U	48 U	49 U	48 U
Benzyl alcohol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
bis(2-Chloroethoxy)methane	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
bis(2-Chloroethyl)ether	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Chrysene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Diethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Dimethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Di-n-butylphthalate (DBP)	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Di-n-octyl phthalate (DnOP)	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Hexachloroethane	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Isophorone	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Naphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	3257	5221	5221	6209	7120	7130	7132	7155
	<i>Sample ID:</i>	LC-3257-0711	LC-5221-0711	LC-8225-0711	LC-6209-0711	LC-7120-0711	LC-7130-0711	LC-7132-0711	LC-7155-0711
	<i>Sample Date:</i>	7/6/2011	7/13/2011	7/13/2011	7/14/2011	7/7/2011	7/13/2011	7/7/2011	7/7/2011
				(Duplicate)					
<i>Parameters</i>	<i>Units</i>								
<i>Semi-volatile Organic Compounds (Cont'd.)</i>									
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Pentachlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.6 U	9.4 U	9.5 U	9.7 U	9.5 U
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
<i>PCBs</i>									
Aroclor-1016 (PCB-1016)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1248 (PCB-1248)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 U	0.39 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
<i>Pesticides</i>									
4,4'-DDD	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
4,4'-DDE	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
4,4'-DDT	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Aldrin	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
alpha-BHC	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
alpha-Chlordane	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
beta-BHC	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
delta-BHC	µg/L	0.093 UJ	0.047 U	0.049 U	0.047 UJ	0.047 U	0.047 U	0.047 U	0.047 U
Dieldrin	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan I	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan II	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan sulfate	µg/L	0.047 U	0.047 U	0.049 U	0.047 UJ	0.047 U	0.047 U	0.047 UJ	0.047 U
Endrin	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endrin ketone	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
gamma-BHC (lindane)	µg/L	0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	3257	5221	5221	6209	7120	7130	7132	7155
		<i>Sample ID:</i>	LC-3257-0711	LC-5221-0711	LC-8225-0711	LC-6209-0711	LC-7120-0711	LC-7130-0711	LC-7132-0711	LC-7155-0711
		<i>Sample Date:</i>	7/6/2011	7/13/2011	7/13/2011 (Duplicate)	7/14/2011	7/7/2011	7/13/2011	7/7/2011	7/7/2011
<i>Pesticides (Cont'd.)</i>										
gamma-Chlordane	µg/L		0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Heptachlor	µg/L		0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Heptachlor epoxide	µg/L		0.047 U	0.047 U	0.049 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Methoxychlor	µg/L		0.094 U	0.094 U	0.097 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U
Toxaphene	µg/L		3.8 U	3.8 U	3.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	7161	7205	8106	8110	8120	8130	8140	8210
	<i>Sample ID:</i>	LC-7161-0711	LC-7205-0711	LC-8106-0711	LC-8110-0711	LC-8120-0711	LC-8130-0711	LC-8140-0711	LC-8210-0711
	<i>Sample Date:</i>	7/13/2011	7/14/2011	7/6/2011	7/13/2011	7/19/2011	7/6/2011	7/6/2011	7/13/2011
<i>Parameters</i>	<i>Units</i>								
<i>Volatile Organic Compounds</i>									
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ
2-Hexanone	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	20 UJ	20 UJ	20 U	20 UJ	20 U	20 U	20 U	20 UJ
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 UJ
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	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	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	7161	7205	8106	8110	8120	8130	8140	8210
	<i>Sample ID:</i>	LC-7161-0711	LC-7205-0711	LC-8106-0711	LC-8110-0711	LC-8120-0711	LC-8130-0711	LC-8140-0711	LC-8210-0711
	<i>Sample Date:</i>	7/13/2011	7/14/2011	7/6/2011	7/13/2011	7/19/2011	7/6/2011	7/6/2011	7/13/2011
<i>Parameters</i>	<i>Units</i>								
<i>Volatile Organic Compounds (Cont'd.)</i>									
Vinyl acetate	µg/L	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
<i>Semi-volatile Organic Compounds</i>									
1,2,4-Trichlorobenzene	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
1,2-Dichlorobenzene	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
1,3-Dichlorobenzene	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
1,4-Dichlorobenzene	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4,5-Trichlorophenol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
2,4,6-Trichlorophenol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
2,4-Dinitrophenol	µg/L	48 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U
2,4-Dinitrotoluene	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
2,6-Dinitrotoluene	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
2-Nitroaniline	µg/L	48 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U
2-Nitrophenol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
3,3'-Dichlorobenzidine	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
3-Nitroaniline	µg/L	48 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U
4,6-Dinitro-2-methylphenol	µg/L	48 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U
4-Bromophenyl phenyl ether	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
4-Chloro-3-methylphenol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
4-Chloroaniline	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
4-Chlorophenyl phenyl ether	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
4-Methylphenol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
4-Nitroaniline	µg/L	48 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	<i>7161</i>	<i>7205</i>	<i>8106</i>	<i>8110</i>	<i>8120</i>	<i>8130</i>	<i>8140</i>	<i>8210</i>
		<i>Sample ID:</i>	LC-7161-0711	LC-7205-0711	LC-8106-0711	LC-8110-0711	LC-8120-0711	LC-8130-0711	LC-8140-0711	LC-8210-0711
		<i>Sample Date:</i>	7/13/2011	7/14/2011	7/6/2011	7/13/2011	7/19/2011	7/6/2011	7/6/2011	7/13/2011
<i>Semi-volatile Organic Compounds (Cont'd.)</i>										
4-Nitrophenol	µg/L	48 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U	
Acenaphthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Acenaphthylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Benzo(a)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Benzo(a)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Benzo(b)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Benzo(g,h,i)perylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Benzo(k)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Benzoic acid	µg/L	48 U	47 U	47 U	48 U	47 U	48 U	47 U	48 U	
Benzyl alcohol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
bis(2-Chloroethoxy)methane	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
bis(2-Chloroethyl)ether	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	
Butyl benzylphthalate (BBP)	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
Chrysene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Dibenzofuran	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
Diethyl phthalate	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
Dimethyl phthalate	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
Di-n-butylphthalate (DBP)	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
Di-n-octyl phthalate (DnOP)	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
Fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Fluorene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Hexachlorobenzene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Hexachlorobutadiene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Hexachlorocyclopentadiene	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
Hexachloroethane	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Isophorone	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U	
Naphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	
Nitrobenzene	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	7161	7205	8106	8110	8120	8130	8140	8210
	<i>Sample ID:</i>	LC-7161-0711	LC-7205-0711	LC-8106-0711	LC-8110-0711	LC-8120-0711	LC-8130-0711	LC-8140-0711	LC-8210-0711
	<i>Sample Date:</i>	7/13/2011	7/14/2011	7/6/2011	7/13/2011	7/19/2011	7/6/2011	7/6/2011	7/13/2011
<i>Parameters</i>	<i>Units</i>								
<i>Semi-volatile Organic Compounds (Cont'd.)</i>									
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
Pentachlorophenol	µg/L	9.5 U	9.4 U	9.4 U	9.5 U	9.4 U	9.6 U	9.4 U	9.5 U
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
<i>PCBs</i>									
Aroclor-1016 (PCB-1016)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1248 (PCB-1248)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
<i>Pesticides</i>									
4,4'-DDD	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
4,4'-DDE	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
4,4'-DDT	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Aldrin	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
alpha-BHC	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.54	0.047 U
alpha-Chlordane	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
beta-BHC	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
delta-BHC	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Dieldrin	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Endosulfan I	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Endosulfan II	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Endosulfan sulfate	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Endrin	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Endrin ketone	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
gamma-BHC (lindane)	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	7161	7205	8106	8110	8120	8130	8140	8210
	<i>Sample ID:</i>	LC-7161-0711	LC-7205-0711	LC-8106-0711	LC-8110-0711	LC-8120-0711	LC-8130-0711	LC-8140-0711	LC-8210-0711
	<i>Sample Date:</i>	7/13/2011	7/14/2011	7/6/2011	7/13/2011	7/19/2011	7/6/2011	7/6/2011	7/13/2011
<i>Parameters</i>	<i>Units</i>								
<i>Pesticides (Cont'd.)</i>									
gamma-Chlordane	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Heptachlor	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Heptachlor epoxide	µg/L	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U	0.048 U	0.047 U	0.047 U
Methoxychlor	µg/L	0.095 U	0.094 U	0.094 U	0.095 U	0.094 U	0.095 U	0.094 U	0.094 U
Toxaphene	µg/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	8210	9110	9115	9115	9120	9125	9130	9140
		<i>Sample ID:</i>	LC-8215-0711	LC-9110-0711	LC-9115-0711	LC-8205-0711	LC-9120-0711	LC-9125-0711	LC-9130-0711	LC-9140-0711
		<i>Sample Date:</i>	7/13/2011 (Duplicate)	7/6/2011	7/6/2011	7/6/2011 (Duplicate)	7/6/2011	7/7/2011	7/7/2011	7/7/2011
<i>Volatile Organic Compounds</i>										
1,1,1-Trichloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1,2-Tetrachloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L		20 UJ	20 U	20 U	20 U	20 U	20 UJ	20 UJ	20 UJ
Benzene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L		5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
Carbon disulfide	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L		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	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

Parameters	Units	Sample Location:	8210	9110	9115	9115	9120	9125	9130	9140
		Sample ID:	LC-8215-0711	LC-9110-0711	LC-9115-0711	LC-8205-0711	LC-9120-0711	LC-9125-0711	LC-9130-0711	LC-9140-0711
		Sample Date:	7/13/2011 (Duplicate)	7/6/2011	7/6/2011	7/6/2011 (Duplicate)	7/6/2011	7/7/2011	7/7/2011	7/7/2011
<b>Volatile Organic Compounds (Cont'd.)</b>										
Vinyl acetate	µg/L		5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Vinyl chloride	µg/L		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L		15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
<b>Semi-volatile Organic Compounds</b>										
1,2,4-Trichlorobenzene	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
1,2-Dichlorobenzene	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
1,3-Dichlorobenzene	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
1,4-Dichlorobenzene	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4,5-Trichlorophenol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
2,4,6-Trichlorophenol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
2,4-Dichlorophenol	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
2,4-Dinitrophenol	µg/L		47 U	47 U	48 U	48 U	47 U	47 U	48 U	48 U
2,4-Dinitrotoluene	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
2,6-Dinitrotoluene	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
2-Chloronaphthalene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
2-Methylnaphthalene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
2-Nitroaniline	µg/L		47 U	47 U	48 U	48 U	47 U	47 U	48 U	48 U
2-Nitrophenol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
3,3'-Dichlorobenzidine	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
3-Nitroaniline	µg/L		47 U	47 U	48 U	48 U	47 U	47 U	48 U	48 U
4,6-Dinitro-2-methylphenol	µg/L		47 U	47 U	48 U	48 U	47 U	47 U	48 U	48 U
4-Bromophenyl phenyl ether	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
4-Chloro-3-methylphenol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
4-Chloroaniline	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
4-Chlorophenyl phenyl ether	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
4-Methylphenol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
4-Nitroaniline	µg/L		47 U	47 U	48 U	48 U	47 U	47 U	48 U	48 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

Parameters	Units	Sample Location:	8210	9110	9115	9115	9120	9125	9130	9140
		Sample ID:	LC-8215-0711	LC-9110-0711	LC-9115-0711	LC-8205-0711	LC-9120-0711	LC-9125-0711	LC-9130-0711	LC-9140-0711
		Sample Date:	7/13/2011 (Duplicate)	7/6/2011	7/6/2011	7/6/2011 (Duplicate)	7/6/2011	7/7/2011	7/7/2011	7/7/2011
<i>Semi-volatile Organic Compounds (Cont'd.)</i>										
4-Nitrophenol	µg/L		47 U	47 U	48 U	48 U	47 U	47 U	48 U	48 U
Acenaphthene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(g,h,i)perylene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzoic acid	µg/L		47 U	47 U	48 U	48 U	47 U	47 U	48 U	48 U
Benzyl alcohol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
bis(2-Chloroethoxy)methane	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
bis(2-Chloroethyl)ether	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L		19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Chrysene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Diethyl phthalate	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Dimethyl phthalate	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Di-n-butylphthalate (DBP)	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Di-n-octyl phthalate (DnOP)	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Fluoranthene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Hexachloroethane	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Indeno(1,2,3-cd)pyrene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Isophorone	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Naphthalene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L		19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

Parameters	Units	Sample Location:	8210	9110	9115	9115	9120	9125	9130	9140
		Sample ID:	LC-8215-0711	LC-9110-0711	LC-9115-0711	LC-8205-0711	LC-9120-0711	LC-9125-0711	LC-9130-0711	LC-9140-0711
		Sample Date:	7/13/2011 (Duplicate)	7/6/2011	7/6/2011	7/6/2011 (Duplicate)	7/6/2011	7/7/2011	7/7/2011	7/7/2011
<i>Semi-volatile Organic Compounds (Cont'd.)</i>										
N-Nitrosodi-n-propylamine	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Pentachlorophenol	µg/L		9.4 U	9.4 U	9.5 U	9.5 U	9.4 U	9.4 U	9.5 U	9.5 U
Phenanthrene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
<i>PCBs</i>										
Aroclor-1016 (PCB-1016)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1248 (PCB-1248)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
<i>Pesticides</i>										
4,4'-DDD	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
4,4'-DDE	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
4,4'-DDT	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Aldrin	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
alpha-BHC	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
alpha-Chlordane	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
beta-BHC	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
delta-BHC	µg/L		0.017 J	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Dieldrin	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Endosulfan I	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Endosulfan II	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Endosulfan sulfate	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Endrin	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Endrin ketone	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
gamma-BHC (lindane)	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	8210	9110	9115	9115	9120	9125	9130	9140
		<i>Sample ID:</i>	LC-8215-0711	LC-9110-0711	LC-9115-0711	LC-8205-0711	LC-9120-0711	LC-9125-0711	LC-9130-0711	LC-9140-0711
		<i>Sample Date:</i>	7/13/2011 (Duplicate)	7/6/2011	7/6/2011	7/6/2011 (Duplicate)	7/6/2011	7/7/2011	7/7/2011	7/7/2011
<i>Pesticides (Cont'd.)</i>										
gamma-Chlordane	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Heptachlor	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Heptachlor epoxide	µg/L		0.047 U	0.047 U	0.047 U	0.048 U	0.047 U	0.047 U	0.048 U	0.047 U
Methoxychlor	µg/L		0.094 U	0.094 U	0.094 U	0.095 U	0.094 U	0.094 U	0.095 U	0.094 U
Toxaphene	µg/L		3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	9205	9210	10105	10135	10147	10174A	10205	10210A
	<i>Sample ID:</i>	LC-9205-0711	LC-9210-0711	LC-10105-0711	LC-10135-0711	LC-10147-0711	LC-10174A-0711	LC-10205-0711	LC-10210A-0711
	<i>Sample Date:</i>	7/13/2011	7/13/2011	7/6/2011	7/13/2011	7/7/2011	7/13/2011	7/14/2011	7/19/2011
<i>Parameters</i>	<i>Units</i>								
<i>Volatile Organic Compounds</i>									
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U	50 UJ	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	50 UJ	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	20 UJ	20 UJ	20 U	200 UJ	20 UJ	20 UJ	20 U	20 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	2200	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 UJ	5.0 UJ	5.0 U	50 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	50 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	1100	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	67	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 UJ	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	38 J	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	16 J	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	9.5 J	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U	3100	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	17 J	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	52	5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	9205	9210	10105	10135	10147	10174A	10205	10210A
	<i>Sample ID:</i>	LC-9205-0711	LC-9210-0711	LC-10105-0711	LC-10135-0711	LC-10147-0711	LC-10174A-0711	LC-10205-0711	LC-10210A-0711
	<i>Sample Date:</i>	7/13/2011	7/13/2011	7/6/2011	7/13/2011	7/7/2011	7/13/2011	7/14/2011	7/19/2011
<i>Parameters</i>	<i>Units</i>								
<i>Volatile Organic Compounds (Cont'd.)</i>									
Vinyl acetate	µg/L	5.0 UJ	5.0 UJ	5.0 UJ	50 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L	15 U	15 U	15 U	150 U	15 U	15 U	15 U	15 U
<i>Semi-volatile Organic Compounds</i>									
1,2,4-Trichlorobenzene	µg/L	9.5 U	9.4 U	9.7 U	76 J	9.5 U	9.5 U	9.7 U	9.4 U
1,2-Dichlorobenzene	µg/L	9.5 U	9.4 U	9.7 U	45 J	9.5 U	9.5 U	9.7 U	9.4 U
1,3-Dichlorobenzene	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
1,4-Dichlorobenzene	µg/L	9.5 U	9.4 U	9.7 U	130 J	9.5 U	9.5 U	9.7 U	9.4 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4,5-Trichlorophenol	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
2,4,6-Trichlorophenol	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U	590	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
2,4-Dinitrophenol	µg/L	48 U	47 U	49 U	950 U	48 U	48 U	49 U	47 U
2,4-Dinitrotoluene	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
2,6-Dinitrotoluene	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	µg/L	9.5 U	9.4 U	9.7 U	30 J	9.5 U	9.5 U	9.7 U	9.4 U
2-Nitroaniline	µg/L	48 U	47 U	49 U	950 U	48 U	48 U	49 U	47 U
2-Nitrophenol	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
3,3'-Dichlorobenzidine	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
3-Nitroaniline	µg/L	48 U	47 U	49 U	950 U	48 U	48 U	49 U	47 U
4,6-Dinitro-2-methylphenol	µg/L	48 U	47 U	49 U	950 U	48 U	48 U	49 U	47 U
4-Bromophenyl phenyl ether	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
4-Chloro-3-methylphenol	µg/L	9.5 U	9.4 U	4.8 J	190 U	9.5 U	9.5 U	9.7 U	9.4 U
4-Chloroaniline	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
4-Chlorophenyl phenyl ether	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
4-Methylphenol	µg/L	9.5 U	9.4 U	9.7 U	83 J	9.5 U	9.5 U	9.7 U	9.4 U
4-Nitroaniline	µg/L	48 U	47 U	49 U	950 U	48 U	48 U	49 U	47 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	9205	9210	10105	10135	10147	10174A	10205	10210A
		<i>Sample ID:</i>	LC-9205-0711	LC-9210-0711	LC-10105-0711	LC-10135-0711	LC-10147-0711	LC-10174A-0711	LC-10205-0711	LC-10210A-0711
		<i>Sample Date:</i>	7/13/2011	7/13/2011	7/6/2011	7/13/2011	7/7/2011	7/13/2011	7/14/2011	7/19/2011
<i>Semi-volatile Organic Compounds (Cont'd.)</i>										
4-Nitrophenol	µg/L		48 U	47 U	49 U	950 U	48 U	48 U	49 U	47 U
Acenaphthene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(g,h,i)perylene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzoic acid	µg/L		48 U	47 U	49 U	11000	48 U	48 U	49 U	47 U
Benzyl alcohol	µg/L		9.5 U	9.4 U	9.7 U	450	9.5 U	9.5 U	9.7 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
bis(2-Chloroethyl)ether	µg/L		1.9 U	1.9 U	1.9 U	28 J	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L		19 U	19 U	19 U	380 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Chrysene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Diethyl phthalate	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Dimethyl phthalate	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Fluoranthene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Hexachloroethane	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Isophorone	µg/L		9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Naphthalene	µg/L		1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L		19 U	19 U	19 U	380 U	19 U	19 U	19 U	19 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	9205	9210	10105	10135	10147	10174A	10205	10210A
	<i>Sample ID:</i>	LC-9205-0711	LC-9210-0711	LC-10105-0711	LC-10135-0711	LC-10147-0711	LC-10174A-0711	LC-10205-0711	LC-10210A-0711
	<i>Sample Date:</i>	7/13/2011	7/13/2011	7/6/2011	7/13/2011	7/7/2011	7/13/2011	7/14/2011	7/19/2011
<i>Parameters</i>	<i>Units</i>								
<i>Semi-volatile Organic Compounds (Cont'd.)</i>									
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Pentachlorophenol	µg/L	9.5 U	9.4 U	9.7 U	190 U	9.5 U	9.5 U	9.7 U	9.4 U
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U	1.9 U	82	1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U	1.9 U	38 U	1.9 U	1.9 U	1.9 U	1.9 U
<i>PCBs</i>									
Aroclor-1016 (PCB-1016)	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	R
Aroclor-1221 (PCB-1221)	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	R
Aroclor-1232 (PCB-1232)	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	R
Aroclor-1242 (PCB-1242)	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.13 J	0.38 U	R
Aroclor-1248 (PCB-1248)	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	R
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
<i>Pesticides</i>									
4,4'-DDD	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	0.048 U
4,4'-DDE	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	R
4,4'-DDT	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	0.048 U
Aldrin	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	R
alpha-BHC	µg/L	0.047 U	0.037 J	1.1	21	0.047 U	0.048 U	0.047 U	R
alpha-Chlordane	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	R
beta-BHC	µg/L	0.047 U	0.048 U	0.047 U	7.1	0.047 U	0.048 U	0.047 U	R
delta-BHC	µg/L	0.053	0.082	0.047 U	7.3	0.047 U	0.048 U	0.047 U	R
Dieldrin	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	0.048 U
Endosulfan I	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	R
Endosulfan II	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	0.048 U
Endosulfan sulfate	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	0.048 U
Endrin	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	0.048 U
Endrin ketone	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U	0.048 U
gamma-BHC (lindane)	µg/L	0.046 J	0.066	0.047 U	4.1	0.047 U	0.048 U	0.047 U	R

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	9205	9210	10105	10135	10147	10174A	10205	10210A
		<i>Sample ID:</i>	LC-9205-0711	LC-9210-0711	LC-10105-0711	LC-10135-0711	LC-10147-0711	LC-10174A-0711	LC-10205-0711	LC-10210A-0711
		<i>Sample Date:</i>	7/13/2011	7/13/2011	7/6/2011	7/13/2011	7/7/2011	7/13/2011	7/14/2011	7/19/2011
<i>Pesticides (Cont'd.)</i>										
gamma-Chlordane	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U		R
Heptachlor	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U		R
Heptachlor epoxide	µg/L	0.047 U	0.048 U	0.047 U	0.48 U	0.047 U	0.048 U	0.047 U		R
Methoxychlor	µg/L	0.094 U	0.095 U	0.094 U	0.95 U	0.094 U	0.095 U	0.094 U	0.095 U	0.095 U
Toxaphene	µg/L	3.8 U	3.8 U	3.8 U	38 U	3.8 U	3.8 U	3.8 U	3.8 U	R

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	<b>10210B</b>	<b>10210C</b>	<b>10215</b>	<b>10225A</b>	<b>10225B</b>	<b>10225C</b>	<b>10270</b>
	<i>Sample ID:</i>	LC-10210B-0711	LC-10210C-0711	LC-10215-0711	LC-10225A-0711	LC-10225B-0711	LC-10225C-0711	LC-10270-0711
	<i>Sample Date:</i>	7/14/2011	7/14/2011	7/14/2011	7/19/2011	7/19/2011	7/14/2011	7/14/2011
<i>Parameters</i>	<i>Units</i>							
<i>Volatile Organic Compounds</i>								
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U
Carbon disulfide	µg/L	4.6 J	5.0 U	5.0 U	5.0 U	1.9 J	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.99 J	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.4 J	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.4	5.0 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	<b>10210B</b>	<b>10210C</b>	<b>10215</b>	<b>10225A</b>	<b>10225B</b>	<b>10225C</b>	<b>10270</b>
	<i>Sample ID:</i>	LC-10210B-0711	LC-10210C-0711	LC-10215-0711	LC-10225A-0711	LC-10225B-0711	LC-10225C-0711	LC-10270-0711
	<i>Sample Date:</i>	7/14/2011	7/14/2011	7/14/2011	7/19/2011	7/19/2011	7/14/2011	7/14/2011
<i>Parameters</i>	<i>Units</i>							
<i>Volatile Organic Compounds (Cont'd.)</i>								
Vinyl acetate	µg/L	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L	15 U	15 U	15 U	15 U	15 U	15 U	15 U
<i>Semi-volatile Organic Compounds</i>								
1,2,4-Trichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	4.5 J	9.4 U
1,2-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
1,3-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
1,4-Dichlorobenzene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4,5-Trichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4,6-Trichlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
2,4-Dinitrotoluene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2,6-Dinitrotoluene	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Chloronaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Methylnaphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
2-Nitroaniline	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
2-Nitrophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
3,3'-Dichlorobenzidine	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
3-Nitroaniline	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
4,6-Dinitro-2-methylphenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
4-Bromophenyl phenyl ether	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Chloro-3-methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Chloroaniline	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Chlorophenyl phenyl ether	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Methylphenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
4-Nitroaniline	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	<b>10210B</b>	<b>10210C</b>	<b>10215</b>	<b>10225A</b>	<b>10225B</b>	<b>10225C</b>	<b>10270</b>
	<i>Sample ID:</i>	LC-10210B-0711	LC-10210C-0711	LC-10215-0711	LC-10225A-0711	LC-10225B-0711	LC-10225C-0711	LC-10270-0711
	<i>Sample Date:</i>	7/14/2011	7/14/2011	7/14/2011	7/19/2011	7/19/2011	7/14/2011	7/14/2011
<i>Parameters</i>	<i>Units</i>							
<i>Semi-volatile Organic Compounds (Cont'd.)</i>								
4-Nitrophenol	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
Acenaphthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.51 J
Benzo(a)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.40 J
Benzo(b)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.0
Benzo(g,h,i)perylene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.51 J
Benzo(k)fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.55 J
Benzoic acid	µg/L	47 U	47 U	47 U	47 U	47 U	47 U	47 U
Benzyl alcohol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethyl)ether	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.63 J
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	4.8
Dibenzofuran	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Fluoranthene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L	9.4 U	9.4 U	9.4 U	9.4 UJ	9.4 UJ	9.4 U	9.4 U
Hexachloroethane	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8
Isophorone	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L	19 U	19 U	19 U	19 U	19 U	19 U	19 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

	<i>Sample Location:</i>	<b>10210B</b>	<b>10210C</b>	<b>10215</b>	<b>10225A</b>	<b>10225B</b>	<b>10225C</b>	<b>10270</b>
	<i>Sample ID:</i>	LC-10210B-0711	LC-10210C-0711	LC-10215-0711	LC-10225A-0711	LC-10225B-0711	LC-10225C-0711	LC-10270-0711
	<i>Sample Date:</i>	7/14/2011	7/14/2011	7/14/2011	7/19/2011	7/19/2011	7/14/2011	7/14/2011
<i>Parameters</i>	<i>Units</i>							
<i>Semi-volatile Organic Compounds (Cont'd.)</i>								
N-Nitrosodi-n-propylamine	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Pentachlorophenol	µg/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
<i>PCBs</i>								
Aroclor-1016 (PCB-1016)	µg/L	0.38 U	0.38 U	0.38 U	R	R	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.38 U	0.38 U	0.38 U	R	R	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.38 U	0.38 U	0.38 U	R	0.38 UJ	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.38 U	0.38 U	0.38 U	R	0.38 UJ	0.38 U	0.38 U
Aroclor-1248 (PCB-1248)	µg/L	0.38 U	0.38 U	0.38 U	R	0.38 UJ	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 UJ	0.38 U	0.38 U
<i>Pesticides</i>								
4,4'-DDD	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
4,4'-DDE	µg/L	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
4,4'-DDT	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Aldrin	µg/L	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
alpha-BHC	µg/L	0.048 J	0.047 U	0.047 U	R	0.047 U	0.047 U	0.079
alpha-Chlordane	µg/L	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
beta-BHC	µg/L	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
delta-BHC	µg/L	0.042 J	0.047 U	0.047 U	R	0.056	0.047 U	0.047 U
Dieldrin	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan I	µg/L	0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
Endosulfan II	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan sulfate	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endrin	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
Endrin ketone	µg/L	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
gamma-BHC (lindane)	µg/L	0.061 J	0.047 U	0.047 U	R	0.047 U	0.047 U	0.097

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	<i>10210B</i>	<i>10210C</i>	<i>10215</i>	<i>10225A</i>	<i>10225B</i>	<i>10225C</i>	<i>10270</i>
		<i>Sample ID:</i>	LC-10210B-0711	LC-10210C-0711	LC-10215-0711	LC-10225A-0711	LC-10225B-0711	LC-10225C-0711	LC-10270-0711
		<i>Sample Date:</i>	7/14/2011	7/14/2011	7/14/2011	7/19/2011	7/19/2011	7/14/2011	7/14/2011
<i>Pesticides (Cont'd.)</i>									
gamma-Chlordane	µg/L		0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
Heptachlor	µg/L		0.053 J	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
Heptachlor epoxide	µg/L		0.047 U	0.047 U	0.047 U	R	0.047 U	0.047 U	0.047 U
Methoxychlor	µg/L		0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U
Toxaphene	µg/L		3.8 U	3.8 U	3.8 U	R	3.8 U	3.8 U	3.8 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	<i>10272</i>	<i>10272</i>	<i>10278</i>	<i>1181A</i>
		<i>Sample ID:</i>	<i>LC-10272-0711</i>	<i>LC-8235-0711</i>	<i>LC-10278-0711</i>	<i>LC-1181A-0711</i>
		<i>Sample Date:</i>	<i>7/14/2011</i>	<i>7/14/2011</i> <i>(Duplicate)</i>	<i>7/14/2011</i>	<i>7/15/2011</i>
<i>Volatile Organic Compounds</i>						
1,1,1-Trichloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L		20 U	20 UJ	20 U	20 U
Benzene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L		5.0 U	5.0 UJ	5.0 U	5.0 UJ
Carbon disulfide	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L		5.0 U	5.0 UJ	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L		5.0 U	5.0 U	5.0 U	5.0 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	<i>10272</i>	<i>10272</i>	<i>10278</i>	<i>1181A</i>
		<i>Sample ID:</i>	<i>LC-10272-0711</i>	<i>LC-8235-0711</i>	<i>LC-10278-0711</i>	<i>LC-1181A-0711</i>
		<i>Sample Date:</i>	<i>7/14/2011</i>	<i>7/14/2011</i> <i>(Duplicate)</i>	<i>7/14/2011</i>	<i>7/15/2011</i>
<i>Volatile Organic Compounds (Cont'd.)</i>						
Vinyl acetate	µg/L		5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Vinyl chloride	µg/L		5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	µg/L		15 U	15 U	15 U	15 U
<i>Semi-volatile Organic Compounds</i>						
1,2,4-Trichlorobenzene	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
1,2-Dichlorobenzene	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
1,3-Dichlorobenzene	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
1,4-Dichlorobenzene	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L		1.9 U	1.9 U	1.9 U	1.9 UJ
2,4,5-Trichlorophenol	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
2,4,6-Trichlorophenol	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
2,4-Dichlorophenol	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
2,4-Dinitrophenol	µg/L		48 U	47 U	47 U	47 UJ
2,4-Dinitrotoluene	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
2,6-Dinitrotoluene	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
2-Chloronaphthalene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
2-Methylnaphthalene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
2-Methylphenol	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
2-Nitroaniline	µg/L		48 U	47 U	47 U	47 U
2-Nitrophenol	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
3,3'-Dichlorobenzidine	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
3-Nitroaniline	µg/L		48 U	47 U	47 U	47 U
4,6-Dinitro-2-methylphenol	µg/L		48 U	47 U	47 U	47 UJ
4-Bromophenyl phenyl ether	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
4-Chloro-3-methylphenol	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
4-Chloroaniline	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
4-Chlorophenyl phenyl ether	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
4-Methylphenol	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
4-Nitroaniline	µg/L		48 U	47 U	47 U	47 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	<i>10272</i>	<i>10272</i>	<i>10278</i>	<i>1181A</i>
		<i>Sample ID:</i>	<i>LC-10272-0711</i>	<i>LC-8235-0711</i>	<i>LC-10278-0711</i>	<i>LC-1181A-0711</i>
		<i>Sample Date:</i>	<i>7/14/2011</i>	<i>7/14/2011</i> <i>(Duplicate)</i>	<i>7/14/2011</i>	<i>7/15/2011</i>
<i>Semi-volatile Organic Compounds (Cont'd.)</i>						
4-Nitrophenol	µg/L		48 U	47 U	47 U	47 U
Acenaphthene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)anthracene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	µg/L		1.9 U	1.9 U	1.9 U	1.9 UJ
Benzo(g,h,i)perylene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Benzo(k)fluoranthene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Benzoic acid	µg/L		48 U	47 U	47 U	47 U
Benzyl alcohol	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethoxy)methane	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
bis(2-Chloroethyl)ether	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L		19 U	19 U	19 U	19 U
Butyl benzylphthalate (BBP)	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
Chrysene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L		1.9 U	1.9 U	1.9 U	1.9 UJ
Dibenzofuran	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
Diethyl phthalate	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
Dimethyl phthalate	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
Di-n-butylphthalate (DBP)	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
Di-n-octyl phthalate (DnOP)	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
Fluoranthene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobenzene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorobutadiene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Hexachlorocyclopentadiene	µg/L		9.5 U	9.4 U	9.4 U	9.4 UJ
Hexachloroethane	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
Indeno(1,2,3-cd)pyrene	µg/L		1.9 U	1.9 U	1.9 U	1.9 UJ
Isophorone	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
Naphthalene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	µg/L		19 U	19 U	19 U	19 U

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	<i>10272</i>	<i>10272</i>	<i>10278</i>	<i>1181A</i>
		<i>Sample ID:</i>	<i>LC-10272-0711</i>	<i>LC-8235-0711</i>	<i>LC-10278-0711</i>	<i>LC-1181A-0711</i>
		<i>Sample Date:</i>	<i>7/14/2011</i>	<i>7/14/2011</i> <i>(Duplicate)</i>	<i>7/14/2011</i>	<i>7/15/2011</i>
<i>Semi-volatile Organic Compounds (Cont'd.)</i>						
N-Nitrosodi-n-propylamine	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodiphenylamine	µg/L		9.5 U	9.4 U	9.4 U	9.4 U
Pentachlorophenol	µg/L		9.5 U	9.4 U	9.4 U	9.4 UJ
Phenanthrene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
Pyrene	µg/L		1.9 U	1.9 U	1.9 U	1.9 U
<i>PCBs</i>						
Aroclor-1016 (PCB-1016)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1248 (PCB-1248)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L		0.38 U	0.38 U	0.38 U	0.38 U
<i>Pesticides</i>						
4,4'-DDD	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
4,4'-DDE	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
4,4'-DDT	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
Aldrin	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
alpha-BHC	µg/L		0.047 U	0.047 U	0.044 J	0.047 U
alpha-Chlordane	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
beta-BHC	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
delta-BHC	µg/L		0.047 U	0.047 U	0.047 U	0.019 J
Dieldrin	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan I	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan II	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
Endosulfan sulfate	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
Endrin	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
Endrin ketone	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
gamma-BHC (lindane)	µg/L		0.047 U	0.047 U	0.073	0.077

**TABLE 2**  
**ANALYTICAL RESULTS SUMMARY**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameters</i>	<i>Units</i>	<i>Sample Location:</i>	<i>10272</i>	<i>10272</i>	<i>10278</i>	<i>1181A</i>
		<i>Sample ID:</i>	<i>LC-10272-0711</i>	<i>LC-8235-0711</i>	<i>LC-10278-0711</i>	<i>LC-1181A-0711</i>
		<i>Sample Date:</i>	<i>7/14/2011</i>	<i>7/14/2011</i> <i>(Duplicate)</i>	<i>7/14/2011</i>	<i>7/15/2011</i>
<i>Pesticides (Cont'd.)</i>						
gamma-Chlordane	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
Heptachlor	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
Heptachlor epoxide	µg/L		0.047 U	0.047 U	0.047 U	0.047 U
Methoxychlor	µg/L		0.094 U	0.094 U	0.094 U	0.094 U
Toxaphene	µg/L		3.8 U	3.8 U	3.8 U	3.8 U

## Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

TABLE 3

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
JULY 2011**

<i>Parameter</i>	<i>Calibration Date</i>	<i>Compound</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Qualified Sample Results</i>	<i>Units</i>
VOCs	07/14/11	Vinyl acetate	37	LC-10105-0711	5.0 UJ	µg/L
				LC-3257-0711	5.0 UJ	µg/L
				LC-8106-0711	5.0 UJ	µg/L
				LC-8130-0711	5.0 UJ	µg/L
				LC-8140-0711	5.0 UJ	µg/L
				LC-8205-0711	5.0 UJ	µg/L
				LC-9110-0711	5.0 UJ	µg/L
				LC-9115-0711	5.0 UJ	µg/L
				LC-9120-0711	5.0 UJ	µg/L
VOCs	07/18/11	Bromomethane	29	LC-10147-0711	5.0 UJ	µg/L
				LC-7120-0711	5.0 UJ	µg/L
				LC-7132-0711	5.0 UJ	µg/L
				LC-7155-0711	5.0 UJ	µg/L
				LC-9125-0711	5.0 UJ	µg/L
				LC-9130-0711	5.0 UJ	µg/L
				LC-9140-0711	5.0 UJ	µg/L
VOCs	07/18/11	Acetone	42	LC-10147-0711	20 UJ	µg/L
				LC-7120-0711	20 UJ	µg/L
				LC-7132-0711	20 UJ	µg/L
				LC-7155-0711	20 UJ	µg/L
				LC-9125-0711	20 UJ	µg/L
				LC-9130-0711	20 UJ	µg/L
VOCs	07/18/11	Vinyl acetate	56	LC-10147-0711	5.0 UJ	µg/L
				LC-7120-0711	5.0 UJ	µg/L
				LC-7132-0711	5.0 UJ	µg/L
				LC-7155-0711	5.0 UJ	µg/L

TABLE 3

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
JULY 2011**

<i>Parameter</i>	<i>Calibration Date</i>	<i>Compound</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Qualified Sample Results</i>	<i>Units</i>
VOCs	07/18/11	Vinyl acetate	56	LC-9125-0711	5.0 UJ	µg/L
				LC-9130-0711	5.0 UJ	µg/L
				LC-9140-0711	5.0 UJ	µg/L
VOCs	07/19/11	Acetone	42	LC-10135-0711	200 UJ	µg/L
				LC-7130-0711	20 UJ	µg/L
				LC-7161-0711	20 UJ	µg/L
				LC-8110-0711	20 UJ	µg/L
				LC-8210-0711	20 UJ	µg/L
VOCs	07/19/11	Carbon disulfide	31	LC-10135-0711	50 UJ	µg/L
				LC-7130-0711	5.0 UJ	µg/L
				LC-7161-0711	5.0 UJ	µg/L
				LC-8110-0711	5.0 UJ	µg/L
				LC-8210-0711	5.0 UJ	µg/L
VOCs	07/19/11	2-Butanone	34	LC-10135-0711	50 UJ	µg/L
				LC-7130-0711	5.0 UJ	µg/L
				LC-7161-0711	5.0 UJ	µg/L
				LC-8110-0711	5.0 UJ	µg/L
				LC-8210-0711	5.0 UJ	µg/L
VOCs	07/19/11	2-Hexanone	36	LC-10135-0711	50 UJ	µg/L
				LC-7130-0711	5.0 UJ	µg/L
				LC-7161-0711	5.0 UJ	µg/L
				LC-8110-0711	5.0 UJ	µg/L
				LC-8210-0711	5.0 UJ	µg/L
VOCs	07/20/11	Bromomethane	30	LC-5221-0711	5.0 UJ	µg/L
				LC-8215-0711	5.0 UJ	µg/L

TABLE 3

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
JULY 2011**

<i>Parameter</i>	<i>Calibration Date</i>	<i>Compound</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Qualified Sample Results</i>	<i>Units</i>
VOCs	07/20/11	Bromomethane	30	LC-8225-0711	5.0 UJ	µg/L
				LC-9205-0711	5.0 UJ	µg/L
				LC-9210-0711	5.0 UJ	µg/L
				LC-10174A-0711	5.0 UJ	µg/L
				LC-7205-0711	5.0 UJ	µg/L
				LC-8235-0711	5.0 UJ	µg/L
VOCs	07/20/11	Acetone	33	LC-5221-0711	20 UJ	µg/L
				LC-8215-0711	20 UJ	µg/L
				LC-8225-0711	20 UJ	µg/L
				LC-9205-0711	20 UJ	µg/L
				LC-9210-0711	20 UJ	µg/L
				LC-10174A-0711	20 UJ	µg/L
				LC-7205-0711	20 UJ	µg/L
				LC-8235-0711	20 UJ	µg/L
VOCs	07/20/11	Vinyl acetate	32	LC-5221-0711	5.0 UJ	µg/L
				LC-8215-0711	5.0 UJ	µg/L
				LC-8225-0711	5.0 UJ	µg/L
				LC-9205-0711	5.0 UJ	µg/L
				LC-9210-0711	5.0 UJ	µg/L
				LC-10174A-0711	5.0 UJ	µg/L
				LC-7205-0711	5.0 UJ	µg/L
				LC-8235-0711	5.0 UJ	µg/L
VOCs	07/21/11	Bromomethane	34	LC-10210B-0711	5.0 UJ	µg/L
				LC-10210C-0711	5.0 UJ	µg/L
				LC-10215-0711	5.0 UJ	µg/L
				LC-10225C-0711	5.0 UJ	µg/L
				LC-10270-0711	5.0 UJ	µg/L

TABLE 3

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
JULY 2011**

<i>Parameter</i>	<i>Calibration Date</i>	<i>Compound</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Qualified Sample Results</i>	<i>Units</i>
VOCs	07/21/11	Bromomethane	34	LC-10272-0711	5.0 UJ	µg/L
				LC-10278-0711	5.0 UJ	µg/L
VOCs	07/21/11	Vinyl acetate	36	LC-10210B-0711	5.0 UJ	µg/L
				LC-10210C-0711	5.0 UJ	µg/L
				LC-10215-0711	5.0 UJ	µg/L
				LC-10225C-0711	5.0 UJ	µg/L
				LC-10270-0711	5.0 UJ	µg/L
				LC-10272-0711	5.0 UJ	µg/L
VOCs	07/22/11	Bromomethane	29	LC-10205-0711	5.0 UJ	µg/L
				LC-6209-0711	5.0 UJ	µg/L
				LC-10210A-0711	5.0 UJ	µg/L
				LC-10225A-0711	5.0 UJ	µg/L
				LC-10225B-0711	5.0 UJ	µg/L
				LC-1181A-0711	5.0 UJ	µg/L
				LC-8120-0711	5.0 UJ	µg/L
VOCs	07/21/11	Vinyl acetate	51	LC-10205-0711	5.0 UJ	µg/L
				LC-6209-0711	5.0 UJ	µg/L
				LC-10210A-0711	5.0 UJ	µg/L
				LC-10225A-0711	5.0 UJ	µg/L
				LC-10225B-0711	5.0 UJ	µg/L
				LC-1181A-0711	5.0 UJ	µg/L
SVOCs	07/25/11	Hexachlorocyclopentadiene	26	LC-10210A-0711	9.4 UJ	µg/L
				LC-10225A-0711	9.4 UJ	µg/L
				LC-10225B-0711	9.4 UJ	µg/L

TABLE 3

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
JULY 2011**

<i>Parameter</i>	<i>Calibration Date</i>	<i>Compound</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Qualified Sample Results</i>	<i>Units</i>
SVOCs	07/25/11	Hexachlorocyclopentadiene	26	LC-8120-0711	9.4 UJ	µg/L
SVOCs	07/26/11	2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	26	LC-1181A-0711	1.9 UJ	µg/L
SVOCs	07/26/11	Hexachlorocyclopentadiene	28	LC-1181A-0711	9.4 UJ	µg/L
SVOCs	07/26/11	2,4-Dinitrophenol	98	LC-1181A-0711	47 UJ	µg/L
SVOCs	07/26/11	4,6-Dinitro-2-methylphenol	98	LC-1181A-0711	47 UJ	µg/L
SVOCs	07/26/11	Pentachlorophenol	87	LC-1181A-0711	9.4 UJ	µg/L
SVOCs	07/26/11	Benzo(b)fluoranthene	120	LC-1181A-0711	1.9 UJ	µg/L
SVOCs	07/26/11	Indeno(1,2,3-cd)pyrene	96	LC-1181A-0711	1.9 UJ	µg/L
SVOCs	07/26/11	Dibenz(a,h)anthracene	107	LC-1181A-0711	1.9 UJ	µg/L

## Notes:

SVOCs Semi-Volatile Organic Compounds.  
%D Percent Difference.  
UJ Not detected, estimated reporting limit.  
VOCs Volatile Organic Compounds.

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS  
 LONG-TERM MONITORING PROGRAM  
 GLENN SPRINGS HOLDINGS, INC.  
 LOVE CANAL  
 JULY 2011

Parameter	Compound	LCS Date	Associated Sample ID	LCS %Rec	LCSD %Rec	RPD (percent)	Control Limits		Qualified Sample Results	Units
							%Rec	%RPD		
VOCs	Bromomethane	07/20/11	LC-5221-0711	40	44	9	45 - 150	23	5.0 UJ	µg/L
			LC-8215-0711						5.0 UJ	µg/L
			LC-8225-0711						5.0 UJ	µg/L
			LC-9205-0711						5.0 UJ	µg/L
			LC-9210-0711						5.0 UJ	µg/L
			LC-10174A-0711						5.0 UJ	µg/L
			LC-7205-0711						5.0 UJ	µg/L
			LC-8235-0711						5.0 UJ	µg/L
VOCs	Chloromethane	07/20/11	LC-5221-0711	45	41	8	49 - 133	20	5.0 UJ	µg/L
			LC-8215-0711						5.0 UJ	µg/L
			LC-8225-0711						5.0 UJ	µg/L
			LC-9205-0711						5.0 UJ	µg/L
			LC-9210-0711						5.0 UJ	µg/L
			LC-10174A-0711						5.0 UJ	µg/L
			LC-7205-0711						5.0 UJ	µg/L
			LC-8235-0711						5.0 UJ	µg/L

Notes:

- LCS Laboratory Control Sample.
- LCSD Laboratory Control Sample Duplicate.
- RPD Relative Percent Difference.
- UJ Not detected, estimated reporting limit.
- VOCs Volatile Organic Compounds.

TABLE 5

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameter</i>	<i>Associated Sample ID</i>	<i>Analyte</i>	<i>MS Recovery (percent)</i>	<i>MSD Recovery (percent)</i>	<i>RPD</i>	<i>Control Limits</i>		<i>Qualified Sample Result</i>	<i>Units</i>
						<i>Recovery (percent)</i>	<i>RPD (percent)</i>		
Pesticides	LC-7132-0711	Endosulfan sulfate	51	45	12	58-129	21	0.047 UJ	µg/L
	LC-6209-0711	Endosulfan sulfate	31	34	10	58-129	21	0.047 UJ	µg/L
	LC-6209-0711	delta-BHC	14	16	11	30-137	26	0.047 UJ	µg/L

## Notes:

MS Matrix Spike.

MSD Matrix Spike Duplicate.

RPD Relative Percent Difference.

UJ Not detected, estimated reporting limit.

TABLE 6

**QUALIFIED SAMPLE RESULTS DUE TO DIFFERENCES IN DUAL COLUMN RESULTS  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
JULY 2011**

<i>Parameter</i>	<i>Compound</i>	<i>Associated Sample ID</i>	<i>%D</i>	<i>Qualified Sample Results</i>	<i>Units</i>
Pesticides	delta-BHC	LC-1181A-0711	> 40 %	0.019 J *	µg/L
	Heptachlor	LC-10210B-0711	> 40 %	0.053 J	µg/L
	alpha-BHC	LC-10210B-0711	> 40 %	0.048 J	µg/L
	delta-BHC	LC-10210B-0711	> 40 %	0.042 J *	µg/L
	gamma-BHC (lindane)	LC-10210B-0711	> 40 %	0.061 J	µg/L
	delta-BHC	LC-8215-0711	> 40 %	0.017 J *	µg/L
	alpha-BHC	LC-9210-0711	> 40 %	0.037 J *	µg/L

## Notes:

- \* Previously qualified as estimated by the laboratory.
- %D Percent difference.
- J Estimated.

TABLE 7

**QUALIFIED SAMPLE RESULTS DUE TO MATRIX INTERFERENCES  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
JULY 2011**

<i>Parameter</i>	<i>Associated Sample ID</i>	<i>Compound</i>	<i>Qualified Sample Results</i>	<i>Units</i>
PCBs	LC-10210A-0711	Aroclor-1221 (PCB-1221)	R	µg/L
		Aroclor-1232 (PCB-1232)	R	µg/L
		Aroclor-1248 (PCB-1248)	R	µg/L
		Aroclor-1016 (PCB-1016)	R	µg/L
		Aroclor-1242 (PCB-1242)	R	µg/L
PCBs	LC-10225A-0711	Aroclor-1221 (PCB-1221)	R	µg/L
		Aroclor-1232 (PCB-1232)	R	µg/L
		Aroclor-1248 (PCB-1248)	R	µg/L
		Aroclor-1016 (PCB-1016)	R	µg/L
		Aroclor-1242 (PCB-1242)	R	µg/L
PCBs	LC-10225B-0711	Aroclor-1221 (PCB-1221)	R	µg/L
		Aroclor-1016 (PCB-1016)	R	µg/L
		Aroclor-1260 (PCB-1260)	0.38 UJ	µg/L
		Aroclor-1254 (PCB-1254)	0.38 UJ	µg/L
		Aroclor-1232 (PCB-1232)	0.38 UJ	µg/L
		Aroclor-1248 (PCB-1248)	0.38 UJ	µg/L
		Aroclor-1242 (PCB-1242)	0.38 UJ	µg/L
PCBs	LC-8225-0711	Aroclor-1260 (PCB-1260)	0.39 UJ	µg/L
		Aroclor-1254 (PCB-1254)	0.39 UJ	µg/L
		Aroclor-1221 (PCB-1221)	0.39 UJ	µg/L
		Aroclor-1232 (PCB-1232)	0.39 UJ	µg/L
		Aroclor-1248 (PCB-1248)	0.39 UJ	µg/L
		Aroclor-1016 (PCB-1016)	0.39 UJ	µg/L
		Aroclor-1242 (PCB-1242)	0.39 UJ	µg/L

TABLE 7

**QUALIFIED SAMPLE RESULTS DUE TO MATRIX INTERFERENCES**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameter</i>	<i>Associated Sample ID</i>	<i>Compound</i>	<i>Qualified Sample Results</i>	<i>Units</i>
PCBs	LC-9210-0711	Aroclor-1260 (PCB-1260)	0.38 UJ	µg/L
		Aroclor-1254 (PCB-1254)	0.38 UJ	µg/L
		Aroclor-1221 (PCB-1221)	0.38 UJ	µg/L
		Aroclor-1232 (PCB-1232)	0.38 UJ	µg/L
		Aroclor-1248 (PCB-1248)	0.38 UJ	µg/L
		Aroclor-1016 (PCB-1016)	0.38 UJ	µg/L
		Aroclor-1242 (PCB-1242)	0.38 UJ	µg/L
Pesticides	LC-10210A-0711	Heptachlor epoxide	R	µg/L
		Aldrin	R	µg/L
		alpha-BHC	R	µg/L
		beta-BHC	R	µg/L
		delta-BHC	R	µg/L
		alpha-Chlordane	R	µg/L
		gamma-Chlordane	R	µg/L
		gamma-BHC (lindane)	R	µg/L
		4,4'-DDE	R	µg/L
		Heptachlor	R	µg/L
		Toxaphene	R	µg/L
		Endosulfan I	R	µg/L
Pesticides	LC-10225A-0711	Heptachlor epoxide	R	µg/L
		Aldrin	R	µg/L
		alpha-BHC	R	µg/L
		beta-BHC	R	µg/L
		delta-BHC	R	µg/L
		alpha-Chlordane	R	µg/L
		gamma-Chlordane	R	µg/L

TABLE 7

**QUALIFIED SAMPLE RESULTS DUE TO MATRIX INTERFERENCES**  
**LONG-TERM MONITORING PROGRAM**  
**GLENN SPRINGS HOLDINGS, INC.**  
**LOVE CANAL**  
**JULY 2011**

<i>Parameter</i>	<i>Associated Sample ID</i>	<i>Compound</i>	<i>Qualified Sample Results</i>	<i>Units</i>
Pesticides	LC-10225A-0711	gamma-BHC (lindane)	R	µg/L
		4,4'-DDE	R	µg/L
		Heptachlor	R	µg/L
		Toxaphene	R	µg/L
		Endosulfan I	R	µg/L
Pesticides	LC-3257-0711	delta-BHC	0.093 UJ	µg/L

## Notes:

PCBs Polychlorinated Biphenyls.

R Rejected.

UJ Not detected, estimated reporting limit.

ATTACHMENT A  
TENTATIVE IDENTIFIED COMPOUNDS

## ATTACHMENT A

TENTATIVELY IDENTIFIED COMPOUNDS SUMMARY  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
NIAGARA FALLS, NEW YORK  
JULY 2011

<i>Sample ID</i>	<i>Volatiles</i>		<i>Semi-Volatiles</i>	
	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>
LC-10105-0711	-	-	Caprolactam	430J
LC-3257-0711	-	-	Caprolactam	270J
	-	-	Unknown	4.7J
LC-8106-0711	-	-	Caprolactam	130J
LC-8130-0711	-	-	Caprolactam	1000J
LC-8140-0711	-	-	Caprolactam	320J
LC-9110-0711	-	-	Caprolactam	480J
LC-9115-0711	-	-	Caprolactam	450J
	-	-	Unknown	6.5J
LC-9120-0711	-	-	Caprolactam	99J
LC-8205-0711	-	-	Caprolactam	140J
LC-10135-0711	Carbon dioxide	1800J	1,4-Dioxane	1700J
	1,4-Dioxane	2200J	Unknown Organic Acid	6100J
	2-Chlorotoluene	3600J	Unknown Substituted Benzene	9000J
	4-Chlorotoluene	2400J	Unknown Substituted Phenol	570J
	1,4-Dichlorobenzene	110J	Unknown	880J
	1,2-Dichlorobenzene	41J	-	-
	Benzene, 1,3-dichloro-2-methyl-	390J	-	-

## ATTACHMENT A

TENTATIVELY IDENTIFIED COMPOUNDS SUMMARY  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
NIAGARA FALLS, NEW YORK  
JULY 2011

<i>Sample ID</i>	<i>Volatiles</i>		<i>Semi-Volatiles</i>	
	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>
LC-10135-0711	Benzene, 1,2-dichloro-3-methyl-	87J	-	-
	1,2,4-Trichlorobenzene	49J	-	-
	1,2,3-Trichlorobenzene	15J	-	-
LC-7161-0711	2-Chlorotoluene	1.3J	-	-
LC-8210-0711	2-Chlorotoluene	0.85J	Caprolactam	71J
LC-5221-0711	-	-	Caprolactam	46J
	-	-	Unknown	5.6J
LC-7130-0711	-	-	Unknown	66J
LC-8110-0711	-	-	Caprolactam	96J
LC-9205-0711	-	-	Unknown	29J
LC-9210-0711	-	-	Caprolactam	87J
	-	-	Unknown	6.1J
LC-8225-0711	-	-	Caprolactam	47J
	-	-	2-Hydroxy-4-hydroxyaminopyrimidine	32J
LC-8215-0711	-	-	Caprolactam	56J
	-	-	Unknown	67J

## ATTACHMENT A

TENTATIVELY IDENTIFIED COMPOUNDS SUMMARY  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
NIAGARA FALLS, NEW YORK  
JULY 2011

<i>Sample ID</i>	<i>Volatiles</i>		<i>Semi-Volatiles</i>	
	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>
LC-10225C-0711	2-Chlorotoluene	3.5J	Caprolactam	20J
	4-Chlorotoluene	1.5J	Unknown	11J
	1,4-Dichlorobenzene	0.66J	-	-
	1,2,4-Trichlorobenzene	2.9J	-	-
LC-1017A-0711	-	-	Caprolactam	190J
LC-10205-0711	-	-	Caprolactam	380J
	-	-	Unknown	180J
LC-10210B-0711	-	-	Caprolactam	98J
	-	-	Unknown	150J
LC-10210C-0711	-	-	Caprolactam	94J
	-	-	Unknown	40J
LC-10215-0711	-	-	Caprolactam	81J
	-	-	Unknown	25J
LC-10270-0711	-	-	Caprolactam	130J
	-	-	Unknown	6.8J
LC-10272-0711	-	-	Caprolactam	39J
	-	-	Unknown	102J
LC-10278-0711	-	-	Caprolactam	32J
	-	-	Unknown	7.0J

## ATTACHMENT A

TENTATIVELY IDENTIFIED COMPOUNDS SUMMARY  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
NIAGARA FALLS, NEW YORK  
JULY 2011

<i>Sample ID</i>	<i>Volatiles</i>		<i>Semi-Volatiles</i>	
	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>
LC-6209-0711	-	-	Caprolactam	79J
	-	-	Unknown	20J
LC-7205-0711	-	-	Caprolactam	99J
	-	-	Unknown	19J
LC-8235-0711	-	-	Caprolactam	74J
	-	-	Unknown	77J
LC-10210A-0711	Methanethiol	390J	Disulfide, dimethyl	7.6J
	Dimethyl sulfide	310JU	Dimethyl trisulfide	20J
	Ethane, (methylthio) -	36J	Dimethyl tetrasulphide	38J
	Cyclohexane	0.77J	Caprolactam	65J
	Naphthalene	0.71J	Unknown Biphenyl	84J
	-	-	Unknown	202J
LC-10225A-0711	Methanethiol	450J	Disulfide, dimethyl	13J
	Dimethyl sulfide	380J	Dimethyl trisulfide	37
	Ethane, (methylthio) -	45J	Dimethyl tetrasulphide	64J
	Cyclohexane	1.5J	Caprolactam	110J
	Propane, 2 - (methylthio) -	5.5J	Unknown	330J
	Methylcyclohexane	0.68J	-	-
	Naphthalene	0.74J	-	-
LC-1181A-0711	Ethylene oxide	450J	Unknown	5.2J
	Nonanal	6.1J	-	-

## ATTACHMENT A

TENTATIVELY IDENTIFIED COMPOUNDS SUMMARY  
LONG-TERM MONITORING PROGRAM  
GLENN SPRINGS HOLDINGS, INC.  
LOVE CANAL  
NIAGARA FALLS, NEW YORK  
JULY 2011

<i>Sample ID</i>	<i>Volatiles</i>		<i>Semi-Volatiles</i>	
	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>	<i>Compound</i>	<i>Estimated Concentration (µg/L)</i>
LC-8120-0711	1-Hexanol, 2-ethyl - -	9.6J -	Caprolactam Unknown	490J 50J
LC-10225B-0711	- -	- -	Caprolactam Unknown	110J 45J
LC-9140-0711	Furan, tetrahydro-2-methyl- -	32J -	Caprolactam Unknown	580J 19J
LC-10147-0711	-	-	Caprolactam	330J
LC-7120-0711	-	-	Caprolactam	160J
LC-7132-0711	-	-	Caprolactam	120J
LC-7132-0711	- -	- -	Caprolactam Diethyltoluamide	380J 4.7J
LC-9125-0711	-	-	Caprolactam	160J
LC-9130-0711	-	-	Caprolactam	400J

## Notes:

- Not analyzed.  
J Estimated.

ATTACHMENT B

CHAIN OF CUSTODY DOCUMENT(S)

Quote # 64814

1727  
1-1.0  
2-.8  
3-1.2

**CHAIN-OF-CUSTODY/Analytical Request Document**  
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Client Information	
Glenn Springs Inc.	Report To: Susan Scrocchi
Love Canal	Copy To:
805 97th Street	
Niagara Falls, New York 14304	Invoice To:
Phone: 716/283-0111	PO:
Fax: 716/283-2856	Project Name: Love Canal Annual
Email: darrell_crockett@oxy.com	Project Number: 9954

Lab Information	
Laboratory: Test America	
Laboratory Location: Pittsburgh	
Laboratory Contact: Dave Dunlap	
Requested Due Date:	TAT: Standard
QA/QC Requirements:	

Event Information	
ID#: 060711-1	
SSOW Ref#: 292-402-999-3100	
Sampler Name: David Tyrone	

Sample Identification	Valid Matrix Code WG Groundwater WB Borehole Water WS Surface Water SO Soil SE Sediment	Matrix Code	Date Collected	Time Collected	PestPCBs(None)	SVOC(none)	VDA(HCI)	Remarks	Sample Condition	
									Temp in C	
LC-10105-0711		WG	07/06/2011	10:25	2	2	3			
LC-3257-0711		WG	07/06/2011	08:50	2	2	3			
LC-8106-0711		WG	07/06/2011	09:35	2	2	3			
LC-8130-0711		WG	07/06/2011	11:30	2	2	3			
LC-8140-0711		WG	07/06/2011	11:50	2	2	3			
LC-9110-0711		WG	07/06/2011	12:45	2	2	3			
LC-9115-0711		WG	07/06/2011	13:30	2	2	3			
LC-9120-0711		WG	07/06/2011	14:10	2	2	3			
LC-8205-0711		WG	07/06/2011	14:00	2	2	3			
LCTRIIP-0711		WG	07/06/2011	00:00	-	-	2			
Total Bottles					18	18	29	Grand Total:65		

Temp in C	
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
FedEx	3	David Tyrone	7-6-11	1615	[Signature]	7-7-11	1000
AIRBILL#:							

Quote # 64814

**CHAIN-OF-CUSTODY/Analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Client Information	
Glenn Springs Inc.	Report To: Susan Scrocchi
Love Canal	Copy To:
805 97th Street	
Niagara Falls, New York 14304	Invoice To:
Phone: 716/283-0111	PO:
Fax: 716/283-2856	Project Name: Love Canal Annual
Email: darrell_crockett@oxy.com	Project Number: 9954

Lab Information	
Laboratory: Test America	
Laboratory Location: Pittsburgh	
Laboratory Contact: Dave Dunlap	
Requested Due Date:	TAT: Standard
QA/QC Requirements:	

Event Information	
ID#:	070711-1
SSOW Ref#: 292-402-999-3100	
Sampler Name: David Tyrone	

Valid Matrix Code	Matrix Code	Date Collected	Time Collected	Pest/PCBs(None)	SVOC(none)	VOC(HCl)
WG Groundwater						
WB Borehole Water						
WS Surface Water						
SO Soil						
SE Sediment						

Sample Condition	
Temp in C	
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

Sample Identification	Matrix Code	Date Collected	Time Collected	Pest/PCBs(None)	SVOC(none)	VOC(HCl)	Remarks
LC-10147-0711	WG	07/07/2011	15:00	2	2	3	
LC-7120-0711	WG	07/07/2011	10:50	2	2	3	
LC-7132-0711	WG	07/07/2011	08:30	10	6	9	MS/MSD
LC-7155-0711	WG	07/07/2011	09:45	2	2	3	
LC-9125-0711	WG	07/07/2011	11:35	2	2	3	
LC-9130-0711	WG	07/07/2011	12:20	2	2	3	
LC-9140-0711	WG	07/07/2011	14:45	2	2	3	
RINSE1-0711	WG Q	07/07/2011	14:10	2	2	3	
LCTRIP-070711	WG Q	07/07/2011	13:31	0	0	2	
<b>Total Bottles</b>				24	20	32	<b>Grand Total:76</b>

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY:	DATE	TIME	RECIEVED BY:	DATE	TIME
FedEx	4	David Tyrone	7-7-11	1615	[Signature]	7/8/11	1000
AIRBILL#:							

19, 1.0, 2.8, 1.4  
#4

Quote # 64814

**CHAIN-OF-CUSTODY/Analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Client Information	
Glenn Springs Inc.	Report To: Susan Scrocchi
Love Canal	Copy To:
805 97th Street	
Niagara Falls, New York 14304	Invoice To:
Phone: 716/283-0111	PO:
Fax: 716/283-2856	Project Name: Love Canal Annual
Email: darrell_crockett@oxy.com	Project Number: 9954

Lab Information	
Laboratory: TEST AMERICA PITTSBURGH	
Laboratory Location: 301 ALPHA DRIVE PITTSBURGH, PA 15238	
Laboratory Contact: DAVID DUNLAP	
Requested Due Date:	TAT: 10
QA/QC Requirements:	

Event Information	
ID#: 071311-1	
SSOW Ref#: 292-402-999-3100	
Sampler Name:	

Valid Matrix Code	Matrix Code	Date Collected	Time Collected	Pes(PCBs)(None)	SVOC(none)	VDA(HCl)	Remarks
WG Groundwater							
WB Borehole Water							
WS Surface Water							
SO Soil							
SE Sediment							

Sample Condition	
Temp in C	
Received on ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

Sample Identification

Sample Identification	Matrix Code	Date Collected	Time Collected	Pes(PCBs)(None)	SVOC(none)	VDA(HCl)	Remarks
LC-10135-0711	WG	07/13/2011	12:00	2	2	3	
LC-5221-0711	WG	07/13/2011	16:16	2	2	3	
LC-7130-0711	WG	07/13/2011	09:50	2	2	3	
LC-7161-0711	WG	07/13/2011	13:15	2	2	3	
LC-8110-0711	WG	07/13/2011	11:05	2	2	3	
LC-8210-0711	WG	07/13/2011	14:50	2	2	3	
LC-9205-0711	WG	07/13/2011	15:30	2	2	3	
LC-9210-0711	WG	07/13/2011	16:00	2	2	3	
LC-8225-0711	WG	07/13/2011	16:30	2	2	3	
LC-8215-0711	WG	07/13/2011	15:10	2	2	3	
LCTRIP-071311	WG Q	07/13/2011	00:00	0	0	2	← not received by 7/14/11
LC-RINSE2-0711	WG Q	07/13/2011	15:00	2	2	3	
<b>Total Bottles</b>				<b>22</b>	<b>22</b>	<b>35</b>	<b>Grand Total:79</b>

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
FedEx	4	<i>David Dunlap</i>	7-13-11	1730	<i>[Signature]</i>	7/14/11	1000
AIRBILL#:							

QUOTE # 64814

**CHAIN-OF-CUSTODY/A analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Client Information	
Glenn Springs Inc.	Report To: Susan Scrocchi
Love Canal	Copy To:
805 97th Street	
Niagara Falls, New York 14304	Invoice To:
Phone: 716/283-0111	PO:
Fax: 716/283-2856	Project Name: Love Canal Annual
Email: darrell_crockett@oxy.com	Project Number: 9954

Lab Information	
Laboratory: TEST AMERICA PITTSBURGH	
Laboratory Location:	301 ALPHA DRIVE PITTSBURGH, PA 15238
Laboratory Contact:	DAVID DUNLAP
Requested Due Date:	TAT: 10
QA/QC Requirements:	

Event Information	
ID#: 071411-1	
SSOW Ref#: 292-402-999-3100	
Sampler Name:	<i>Sam Plaudner</i>

Sample Identification	Valid Matrix Code WG Groundwater WB Borehole Water WS Surface Water SO Soil SE Sediment	Matrix Code	Date Collected	Time Collected	PestPCBs(None)	SVOC(none)	VOA(HCI)	Remarks	Sample Condition	
									Tamp in C	
LC-10174A-0711		WG	07/13/2011	12:45	2	2	3			
LC-10205-0711		WG	07/14/2011	13:00	2	2	3			
LC-10210B-0711		WG	07/14/2011	14:00	2	2	3			
LC-10210C-0711		WG	07/14/2011	14:20	2	2	3			
LC-10215-0711		WG	07/14/2011	13:30	2	2	3			
LC-10225C-0711		WG	07/14/2011	15:15	2	2	3			
LC-10270-0711		WG	07/14/2011	10:30	2	2	3			
LC-10272-0711		WG	07/14/2011	11:45	2	2	3			
LC-10278-0711		WG	07/14/2011	15:00	2	2	3			
LC-6209-0711		WG	07/14/2011	11:00	10	6	9	MS/MSD		
LC-7205-0711		WG	07/14/2011	10:00	2	2	3			
LC-8235-0711		WG	07/14/2011	12:00	2	2	3			
LCTRIIP-071411		WG	07/14/2011	00:00	0	0	2			
Total Bottles					32	28	44	Grand Total:104		

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY:	DATE	TIME	RECIEVED BY:	DATE	TIME
FedEx	5	<i>Sam Plaudner</i>	7/14/11	1645	<i>[Signature]</i>	7/15/11	1030
AIRBILL#:							

180-2130  
(0.2, 0.3)

QUOTE # 64814

# EVENT COMPLETE

## CHAIN-OF-CUSTODY/Alytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Client Information	
Glenn Springs Inc.	Report To: Susan Scrocchi
Love Canal	Copy To:
805 97th Street	
Niagara Falls, New York 14304	Invoice To:
Phone: 716/283-0111	PO:
Fax: 716/283-2856	Project Name: Love Canal Annual
Email: darrell_crockett@oxy.com	Project Number: 9954

Lab Information	
Laboratory: TEST AMERICA PITTSBURGH	
Laboratory Location: 301 ALPHA DRIVE PITTSBURGH, PA 15238	
Laboratory Contact: DAVID DUNLAP	
Requested Due Date:	TAT: 10
QA/QC Requirements:	

Event Information	
ID#:	071911-1
SSOW Ref#:	292-402-999-3100
Sampler Name:	<i>Shawn Gardner</i>

Sample Identification	Valid Matrix Code WG Groundwater WB Borehole Water WS Surface Water SO Soil SE Sediment	Matrix Code	Date Collected	Time Collected	Pest/PCBs (None)	SVOC (none)	VOA (HCl)	Remarks	Sample Condition	
									Temp In C	
LC-10210A-0711		WG	07/19/2011	09:00	2	2	3			
LC-10225A-0711		WG	07/19/2011	10:10	2	2	3			
LC-10225B-0711		WG	07/19/2011	10:40	2	2	3			
LC-1181A-0711		WG	07/15/2011	09:45	2	2	3			
LC-8120-0711		WG	07/19/2011	08:40	2	2	3			
LCTRIIP-071511		WG	07/15/2011	00:00	0	0	2			
<b>Total Bottles</b>					10	10	17	<b>Grand Total:37</b>		

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY:	DATE	TIME	RECIEVED BY:	DATE	TIME
FedEx	2	<i>Shawn Gardner</i>	7/19/11	1530	<i>DL</i>	7-20-11	
AIRBILL#:						1015	

APPENDIX G

TEST AND MAINTENANCE OF BACKFLOW PREVENTION DEVICE REPORTS



# Glenn Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

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Joe Branch  
Project Manager  
Direct Dial (231) 670-6809

7601 Old Channel Trail  
Montague, MI 49437  
Facsimile (231)-894-4033

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March 31, 2011

Reference No. 009954

Mr. Jim Corulli  
Cross Connection Enforcement  
Niagara Falls Water Board  
5815 Buffalo Avenue  
Niagara Falls, NY 14304

Mr. Paul R. Dicky  
Niagara County Health Department  
5467 Upper Mountain Road  
Suite 100  
Lockport, NY 14094-1894

Dear Messrs. Corulli and Dicky:

Re: 2011 Annual Backflow Protection Device Test  
Love Canal Landfill Facility

On behalf of Occidental Chemical Corporation, Conestoga-Rovers & Associates (CRA) is submitting the DOH 1013 forms, which contain the results of the annual inspection of the backflow prevention devices at the Love Canal Landfill Facility. The inspection was conducted on March 21, 2011 by CamTech Plumbing and Mechanical.

All five backflow prevention devices at the Love Canal Landfill Facility were found to be in satisfactory condition.

If you have any questions or comments, please contact me at 231-670-6809 or by email at joseph\_branch@oxy.com.

Very truly yours,

GLENN SPRINGS HOLDINGS, INC.

for  
Joseph Branch  
Project Manager

JB/JP/adh/3  
Encl.

c.c.: J. Pentilchuk, CRA  
J. Polovich, CRA

# Report on Test and Maintenance of Backflow Prevention Device

**PART A**

Please use a separate form for each device.

For the year 2011  
 Initial test - Complete entire form  
 Annual test - Complete Part A only

Public Water Supply: CITY OF NIAGARA FALLS Account No. \_\_\_\_\_ County: NIAGARA Block \_\_\_\_\_ Lot \_\_\_\_\_

Facility Name: GLEN SPRINGS REMEDIATION Location of Device: LOCKER ROOM  
 Address: 805 97<sup>TH</sup> ST NIAGARA FALLS 14304  
Street City Zip

Device Information: Manufacturer: WATTS Type:  RPZ  PCV Model: 909 Size (in inches): 1/2" Serial Number: 364807

	Check Valve No. 1	Check Valve No. 2	Differential Pressure Relief Valve	Line Pressure <u>80</u> psi
Test before repair	Leaked <input type="checkbox"/> Closed tight <input checked="" type="checkbox"/>	Leaked <input type="checkbox"/> Closed tight <input checked="" type="checkbox"/>	Opened at <u>2.4</u> psi	Date: <u>03 21 11</u> M D Y
	Pressure drop across first check valve <u>7.1</u> psi			

Describe repairs and materials used: \_\_\_\_\_

Repaired by Name: \_\_\_\_\_ Lic #: \_\_\_\_\_

Date repaired: \_\_\_\_\_  
M D Y

Final test	Closed tight <input type="checkbox"/>	Closed tight <input type="checkbox"/>	Opened at _____ psi	Date: _____ <small>M D Y</small>
	Pressure drop across first check valve _____ psi			

Water Meter Number: 3167117 Meter Reading: 010173 Type of Service: (check one)  Domestic  Fire  Other \_\_\_\_\_

Remarks (Describe deficiencies: bypasses, outlets before the device, connections between the device and point of entry, missing or inadequate signage, etc.)

Certification: This device  meets,  does NOT meet, the requirements of an acceptable containment device at the time of testing. I hereby certify the foregoing data to be correct.

Print Name: John A. Gola Certified Tester No.: 5808 Signature: [Signature] Expiration Date: 04, 30, 14

Property owner (or owner's agent) certification that test was performed:

Print Name: Daniel Gola Title: Teach Signature: [Signature] Telephone: \_\_\_\_\_

**PART B** Certification that installation is in accordance with the approved plans. (To be completed by the design engineer or architect or water supplier.)

I hereby certify that this installation is in accordance with the approved plans.

Name	Title	Date	NYS DOH Log #
License Number	Phone ( )	<small>m d y</small>	
Representing	Describe minor installation changes		
Address			
City	State	Zip	
Signature			

# Report on Test and Maintenance of Backflow Prevention Device

**PART A**

Please use a separate form for each device.

For the year 2011  
 Initial test - Complete entire form  
 Annual test - Complete Part A only

Public Water Supply <b>CITY OF NIAGARA FALLS</b>	Account No.	County <b>NIAGARA</b>	Block	Lot
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Facility Name <b>GLENSPRINGS REMEDIATION</b>	Location of Device <b>MAINTENANCE BLDG.</b>
Address <b>805 97TH ST NIAGARA FALLS 14304</b>	
Street City Zip	

Device Information	Manufacturer <b>WATTS</b>	Type <input checked="" type="checkbox"/> RPZ <input type="checkbox"/> DCV	Model <b>909</b>	Size (in inches) <b>1"</b>	Serial Number <b>408420</b>
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	Check Valve No. 1	Check Valve No. 2	Differential Pressure Relief Valve	Line Pressure <b>60</b> psi
Test before repair	Leaked <input type="checkbox"/> Closed tight <input checked="" type="checkbox"/> Pressure drop across first check valve <b>7.9</b> psi	Leaked <input type="checkbox"/> Closed tight <input checked="" type="checkbox"/>	Opened at <b>2.2</b> psi	Date <b>03 21 11</b> M D Y

Describe repairs and materials used	Repaired by Name _____ Lic # _____ Date repaired: M D Y		
	Name _____ Lic # _____ Date repaired: M D Y		

Final test	Closed tight <input type="checkbox"/> Pressure drop across first check valve _____ psi	Closed tight <input type="checkbox"/>	Opened at _____ psi	Date M D Y
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Water Meter Number <b>345 92315</b>	Meter Reading	Type of Service: (check one) <input checked="" type="checkbox"/> Domestic * Fire * Other _____
--	---------------	---

Remarks (Describe deficiencies: bypasses, outlets before the device, connections between the device and point of entry, missing or inadequate signs, etc.)

Certification: This device  meets, \*  does NOT meet, the requirements of an acceptable containment device at the time of testing  
 I hereby certify the foregoing data to be correct.

**JOHN A. GELISA** **5808** **John Gelisa** **04/30/14**  
 Print Name Certified Tester No. Signature Expiration Date

Property owner (or owner's agent) certification that test was performed:

**Daniel Gelisa** **Tech** **Daniel Gelisa** \_\_\_\_\_  
 Print Name Title Signature Telephone

**PART B** Certification that installation is in accordance with the approved plans. (To be completed by the design engineer or architect or water supplier.)

I hereby certify that this installation is in accordance with the approved plans.

Name	Title	Date	NYS DOH Log #
License Number	Phone ( )	m d y	
Representing	Describe minor installation changes		
Address			
City	State	Zip	
Signature			

# Report on Test and Maintenance of Backflow Prevention Device

**PART A**

Please use a separate form for each device.

For the year 2011  
 Initial test - Complete entire form  
 Annual test - Complete Part A only

Public Water Supply <u>CITY OF NIAGARA FALLS</u>		Account No.	County <u>NIAGARA</u>	Block	Lot
Facility Name <u>GLENSPRINGS REMEDIATION</u>			Location of Device <u>TREATMENT BDG. (MECH. ROOM)</u>		
Address <u>805 97th St. NIAGARA FALLS 14304</u>					
Device Information	Manufacturer <u>WATTS</u>	Type <input checked="" type="checkbox"/> RPZ <input type="checkbox"/> PCV	Model <u>909</u>	Size (in inches) <u>3"</u>	Serial Number <u>192775</u>
	Check Valve No. 1	Check Valve No. 2	Differential Pressure Rating Valve	Line Pressure <u>65</u> psid	
Test before repair	Leaked <input type="checkbox"/> Closed tight <input checked="" type="checkbox"/>	Leaked <input type="checkbox"/> Closed tight <input checked="" type="checkbox"/>	Opened at <u>2.4</u> psid	Date <u>03 28 11</u> M D Y	
	Pressure drop across first check valve <u>6.7</u> psid				
Describe repairs and materials used				Name _____ Lic # _____ Date repaired: _____ M D Y	
Final test	Closed tight <input type="checkbox"/>	Closed tight <input type="checkbox"/>	Opened at _____ psid	Date _____ M D Y	
	Pressure drop across first check valve _____ psid				
Water Meter Number <u>31923329</u>		Meter Reading <u>4936150</u> <u>0162918</u>	Type of Service: (check one) <input checked="" type="checkbox"/> Domestic • Fire • Other _____		

13690

Remarks (Describe deficiencies: bypasses, outlets before the device, connections between the device and point of entry, missing or inadequate airgaps, etc.)

Certification: This device  meets,  does NOT meet, the requirements of an acceptable containment device at the time of testing  
 I hereby certify the foregoing data to be correct.

Print Name FRANK CARAGLIN Certified Tester No. 8809 Signature Frank Caraglin Expiration Date 9/13/2015

Property owners (or owners agent) certification that test was performed:  
 Darrell Cavallett Title Tech Signature [Signature] Telephone \_\_\_\_\_

**PART B** Certification that installation is in accordance with the approved plans. (To be completed by the design engineer or architect or water supplier.)

I hereby certify that this installation is in accordance with the approved plans.

Name	Title	Date	NYS DOH Log #
License Number	Phone ( )	m d y	
Representing	Describe minor installation changes		
Address			
City	State	Zip	
Signature			

# Report on Test and Maintenance of Backflow Prevention Device

**PART A**

Please use a separate form for each device.

For the year 2011  
 Initial test - Complete entire form  
 Annual test - Complete Part A only

Public Water Supply <u>CITY OF NIAGARA FALLS</u>		Account No.	County <u>NIAGARA</u>	Block	Lot
Facility Name <u>GLENSPRINGS REMEDIATION</u>			Location of Device <u>TREATMENT BLDG. (WASHDOWN)</u>		
Address <u>805 97th St. NIAGARA FALLS 14304</u> Street City Zip					
Device Information	Manufacturer <u>WATTS</u>	Type <input checked="" type="checkbox"/> RPZ <input type="checkbox"/> DCV	Model <u>009</u>	Size (in inches) <u>3/4"</u>	Serial Number <u>82766</u>
	Check Valve No. 1	Check Valve No. 2	Differential Pressure Relief Valve	Line Pressure <u>62</u> psi	
Test before repair	Leaked <input type="checkbox"/> Closed tight <input checked="" type="checkbox"/> Pressure drop across first check valve <u>6.8</u> psi	Leaked <input type="checkbox"/> Closed tight <input checked="" type="checkbox"/>	Opened at <u>2.0</u> psi	Date <u>03 28 11</u> M D Y	
Describe repairs and materials used				Repaired by Name _____ Lic # _____ Date repaired: M D Y	
Final test	Closed tight <input type="checkbox"/> Pressure drop across first check valve _____ psi	Closed tight <input type="checkbox"/>	Opened at _____ psi	Date M D Y	
Water Meter Number <u>N/A</u>	Meter Reading <u>N/A</u>	Type of Service: (check one) <input type="checkbox"/> Domestic <input type="checkbox"/> Fire <input checked="" type="checkbox"/> <u>PROCESS</u>			

Remarks (Describe deficiencies: bypasses, outlets before the device, connections between the device and point of entry, missing or inadequate airgaps, etc.)

Certification: This device  meets,  does NOT meet, the requirements of an acceptable containment device at the time of testing (hereby certify the foregoing data to be correct.)  
FRANK CARAGIN Certified Tester No. 8809 Signature Frank Caragin Expiration Date 9/15/2015

Property owners (or owners agent) certification that test was performed:  
David G. Goff Title Tech Signature [Signature] Telephone \_\_\_\_\_

**PART B** Certification that installation is in accordance with the approved plans. (To be completed by the design engineer or architect or water supplier.)

I hereby certify that this installation is in accordance with the approved plans.

Name	Title	Date	NYS DOH Log #
License Number	Phone ( )	m d y	
Representing	Describe minor installation changes		
Address			
City	State	Zip	
Signature			

NOTE: Send one completed copy to the designated health department representative and one copy to the water supplier within 30 days of the testing date.

# Report on Test and Maintenance of Backflow Prevention Device

Please use a separate form for each device.

For the year 2011  
 Initial test - Complete entire form  
 Annual test - Complete Part A only

Public Water Supply <u>CITY OF NIAGARA FALLS</u>		Account No.	County <u>NIAGARA</u>	Block	Lot	
Facility Name <u>GLENSPRINGS REMEDIATION</u>			Location of Device <u>TREATMENT BLDG. (CARBON BEDS)</u>			
Address <u>805 97TH ST. NIAGARA FALLS 14304</u> Street City Zip						
Device Information	Manufacturer <u>WATTS</u>	Type <input checked="" type="checkbox"/> RPZ <input type="checkbox"/> DCV	Model <u>009</u>	Size (in inches) <u>2"</u>	Serial Number <u>179645</u>	
Check Valve No. 1		Check Valve No. 2	Differential Pressure Alarm Valve	Line Pressure <u>65</u> psi		
Test before repair	Leaked <input checked="" type="checkbox"/> Closed tight <input checked="" type="checkbox"/>	Leaked <input type="checkbox"/> Closed tight <input checked="" type="checkbox"/>	Opened at <u>2.4</u> psi	Date <u>03 28 11</u> M D Y		
	Pressure drop across first check valve <u>60</u> psi					
Describe repairs and materials used					Repaired by Name _____ Lic # _____ Date repaired: _____ M D Y	
Final test	Closed tight <input type="checkbox"/>	Closed tight <input type="checkbox"/>	Opened at _____ psi	Date _____ M D Y		
	Pressure drop across first check valve _____ psi					
Water Meter Number <u>N/A</u>		Meter Reading <u>N/A</u>	Type of Service: (check one) <input type="checkbox"/> Domestic <input type="checkbox"/> Fire <input checked="" type="checkbox"/> Other <u>PROCESS</u>			
Remarks (Describe deficiencies; bypasses, outlets before the device, connections between the device and point of entry, missing or inadequate airgaps, etc.)						
Certification: This device <input checked="" type="checkbox"/> meets, <input type="checkbox"/> does NOT meet, the requirements of an acceptable containment device at the time of testing. I hereby certify the foregoing data to be correct.						
Print Name <u>FRANK CARBONIN</u>		Certified Tester No. <u>8809</u>	Signature <u>Frank Carbonin</u>	Expiration Date <u>9/13/2015</u>		
Property owners (or owners agent) certification that test was performed:			Signature <u>[Signature]</u>			
Print Name <u>Daniel Coda</u>		Title <u>Tech</u>	Signature <u>[Signature]</u>		Telephone _____	
PART B Certification that installation is in accordance with the approved plans.			(To be completed by the design engineer or architect or water supplier.)			
I hereby certify that this installation is in accordance with the approved plans.						
Name		Title	Date	NYS DOH Log #		
License Number		Phone ( )	m d y			
Representing		Describe minor installation changes				
Address						
City	State					Zip
Signature						

APPENDIX H

NIAGARA FALLS WATER BOARD INSPECTION LETTER

#9954  
Correspondence

-JPP



January 6, 2011

Mr. Darrell Crockett – Facility Manager  
Occidental Chemical Corporation  
Love Canal  
805 – 97<sup>th</sup> Street  
Niagara Falls, New York 14304

Dear Mr. Crockett:

Enclosed please find the results of the Plant Inspection that was conducted at your facility on Thursday January 6, 2011 @ 10:00AM.

If you have any questions, I can be reached at 283-9770 ext 261.

Sincerely,

NIAGARA FALLS WATER BOARD  
WASTEWATER FACILITIES

*Joel R. Paradise*

Joel R. Paradise  
Senior Industrial Waste Inspector

JRP: mc

Enc.

Cc: A. Zaepfel → J. Paradise → **File: 44- I**



**NIAGARA FALLS WATER BOARD**  
**SEMIANNUAL PLANT INSPECTION**  
**INDUSTRIAL PRETREATMENT PROGRAM**

PAGE 1 OF 6

**Name and Address of SIU**

Occidental Chemical Corporation  
 Love Canal Treatment Facility  
 805 – 97<sup>th</sup> Street  
 Niagara Falls, NY 14304

**Permit Number** 44  
**SIC Codes** 4951  
**Date of Last Inspection** 01-07-10  
**CATEGORICAL IU?** NO  
**Day/Date and Time of Inspection**  
 Thursday, January 6, 2011 @ 10:00AM

**SIU Representative(s)**

Darrell Crockett

**Inspectors Name(s)**

Joel Paradise

**Contact Phone No.:** 998-5804

**PART I FLOW RECORDING AND SAMPLING INSTRUMENTATION**

a) Flow measurement instrument meets permit requirements?

YES  NO

b) Primary flow measurement device properly installed?

YES  NO

c) Type of flow measurement device -

Weir []	Flume(s) []	Water meter []	Mag meter [X]
---------	-------------	----------------	---------------

d) Does device measure flow adequately?

YES  NO

e) Is primary measuring device properly operated and maintained? [1960.6]

YES  NO

f) Are secondary instruments (recorders, integrators) properly operated and maintained? [1960.6]

YES  NO  N/A

g) Calibration frequency adequate? (date of last calibration): *Quarterly – December 21, 2010*

YES  NO  N/A

**PART II SAMPLE COLLECTION**

- a) Does permit require SIU to submit Periodic Self Monitoring Reports? [40 CFR403.12h]  YES  NO
- b) If "yes", does the sample collection frequency and pollutant type conform with permit requirements?  YES  NO
- c) Are the sample collection locations as described in the permit adequate for representative sample collection? [1960.6 (a)]  YES  NO
- d) Does the method of sample collection conform with permit requirements, **Sewer Use Ordinance** and **Federal Standards**?  YES  NO  N/A
  - i) Sample **refrigerated throughout collection and storage**?  YES  NO  N/A
  - ii) Are samples properly preserved?  YES  NO  N/A
  - iii) Are samples collected using **flow proportion composite** or **grab sampling** where appropriate? [40 CFR12(b)(5)(iii)].  YES  NO  N/A
  - iv) Sample holding times appropriate? [40 CFR136.3]  YES  NO  N/A

**PART III LABORATORY FACILITIES**

- a) Is a commercial laboratory used?  YES  NO
  - i) Name of laboratory: **TestAmerica Pittsburg**
  - ii) Address: **301 Alpha Drive Pittsburg, PA 15238**
  - iii) Is laboratory State certified?  YES  NO
- b) Does SIU perform its own analysis?  YES  NO
  - i) Is the SIU's laboratory State certified?  YES  NO  N/A
  - ii) Are your laboratory wastes properly disposed of?  YES  NO  N/A
- c) Are EPA approved testing methods used?  YES  NO

**PART IV RECORDS AND REPORTS**

- a) Are monitoring records and reports retained in SIU files for **at least three years**? [1960.5 (d)(3)]  YES NO
- b) Are **all** records of sludge volume and disposal practices maintained in files? [1960.5 (d)(2)]  YES NO N/A
- c) Have all hazardous waste discharges been reported to POTW? [40 CFR403.12(p)].  YES NO  N/A
- d) If hazardous waste is discharged, is a waste minimization plan developed and implemented?  YES NO N/A
- e) Does the SIU have a valid wastewater discharge permit retained on file? [40 CFR403.8(f)(l)(iii)(A)-(E)]  YES NO
- f) Have **all** required reports been submitted on time?  YES NO
- g) Do Self Monitoring reports contain necessary information (samplers name, date & time, sample type, flow, preservation, chain of custody, results) ? [40 CFR403.8(f)(3)(vi)].  YES NO

**PART V PLANT OPERATION AND MAINTENANCE**

- a) Have there been any accidental discharge(s) that entered the sewer system? YES  NO
- Have they been reported to the POTW as well as other appropriate agencies? [1960.6 (d)] YES NO  N/A
- b) Is a spill notification procedure conspicuously posted in process areas of the plant?  YES NO N/A
- c) Is there any evidence of spills? YES  NO N/A
- d) Are **all** hazardous sludges and solids properly disposed of?  YES NO N/A

- e) Has this facility been evaluated **OR** re-evaluated for its' potential to experience a slug discharge?  YES  NO
- 1) Is a **Slug Control Plan** required for this facility [40 CFR403.8(f)(2)(vi)] ?  YES  NO
- A. Has the facility **Developed** and **Implemented** a **Slug Control Plan**?  YES  NO  N/A
- a. The date of the plan's last update: **N/A**
- b. Is the latest update on file at the NFWB?  YES  NO  N/A
- c. Does it contain the correct Water Board phone numbers and extensions.  YES  NO  N/A
- 2) Has the facility experienced a slug discharge since The last inspection?  YES  NO  N/A
- f) Have there been any significant **manufacturing** or **process** changes? [1960.5 (c)]  YES  NO  N/A  
List: **None**
- Who was contacted **prior** to implementation of these changes? **N/A** Date: **N/A**
- g) Describe your hazardous waste storage area(s). **Double contained in the decontamination/storage facility.**
- Do they meet DEC & EPA containment requirements?  YES  NO  N/A
- Are all containers correctly labeled and time limits adhered to?  YES  NO  N/A
- Describe your method of disposal:  
**Incineration as needed through Clean Harbors Inc. at their Deer Park Texas Facility, approximately once per quarter.**
- h) Regarding the blueprints that you submitted with your last permit application, **have there been any significant changes made to your process or sewer lines?**  YES  NO
- Have revised blueprints been sent to the WWTP?  YES  NO  N/A

PART VI PRETREATMENT

a) Briefly describe all required pretreatment.  
*Clarifier → Bag filter → Carbon treatment → WWTP*

b) Are all pretreatment facilities properly maintained?

**YES**

NO N/A

c) How many pH probes does your pH monitoring system contain? *0*

List the frequency for calibration.

*N/A*

d) To your knowledge, has **anyone** discharged any un-permitted waste or waste not properly pretreated into the sewer system? [40 CFR 403.179]

YES

**NO**

e) Were WWTP personal notified?

YES

NO **N/A**

-- Prior to discharge to sewer?

YES

NO **N/A**

-- During or after discharge?

YES

NO **N/A**

Who? *N/A* Date: *N/A* Time: *N/A*

SIU personal who contacted WWTP: *N/A*

Was written notification given to the WWTP **within five (5) working days** of the start of the event? [40 CFR 403.17a]

YES

NO **N/A**

Sent to: *N/A* From: *N/A* Date: *N/A*

f) List any pretreatment changes that were made in the past 12 months.

**None**

Who was contacted **prior** to implementation of these pretreatment changes?

*N/A*

**PART VII COMPLIANCE AND ENFORCEMENT**

- a) Has the SIU had any violations since the last inspection? List: **None** YES  NO
- b) If numeric violations were noted by SIU, was a repeat sample collection and analysis performed within 30 days and the results submitted to the POTW [40 CFR403.12(g)] ? YES NO  N/A
- c) Is SIU currently on an administrative order and/or compliance schedule? YES  NO
- d) If yes, have milestone dates on schedule been met? YES NO  N/A
- e) Was escalating enforcement action required to achieve compliance? Describe: **None Required** YES  NO

**PART VIII RECOMMENDATIONS, REQUIREMENTS AND COMMENTS:**

APPENDIX I

NYSDEC ANNUAL HAZARDOUS WASTE INSPECTION REPORT

New York State Department of Environmental Conservation  
Division of Environmental Remediation, Region 9  
270 Michigan Avenue, Buffalo, New York 14203-2915  
Phone: (716) 851-7220 • FAX: (716) 851-7226  
Website: [www.dec.ny.gov](http://www.dec.ny.gov)

NS/File



Joe Martens  
Commissioner

September 27, 2011

Mr. Darrell Crockett  
Facility Coordinator  
Glenn Springs Holding, Inc.  
805 – 97<sup>th</sup> Street  
Niagara Falls, New York 14304

Dear Mr. Crockett:

Hazardous Waste Compliance Inspection Date: September 23, 2011  
Location of Handler: Same as Above  
EPA Identification Number: NYD000767657

In order to determine compliance with the New York State Hazardous Waste Regulations, the New York State Department of Environmental Conservation conducted an inspection of your facility on the above referenced date.

As a result of that inspection, we believe that your facility is operating as a generator of hazardous waste.

No violations of the New York State Hazardous Waste Regulations were observed by the inspector on the inspection date referenced above. A copy of this report can be obtained for your records upon written request.

Please note that this letter in no way addresses any liability you may have for any regulatory fees and hazardous waste special assessment fees.

Thank you for your cooperation.

Sincerely,

Nelson F. Schnabel  
Environmental Engineer I

NFS:dcg

ecc: Mr. Thomas Robinson, Inspector, Region 9  
Mr. Michael Rich, Reviewer, Central Office