

**PERIODIC REVIEW REPORT  
JANUARY 1, 2009 THROUGH JANUARY 31, 2010**

**STRIPPIT, INC.  
AKRON, NEW YORK  
NYSDEC SITE NUMBER: 9-15-053**

<b>Prepared by:</b>	Day Environmental, Inc. 40 Commercial Street Rochester, New York 14614-1008
<b>Prepared for:</b>	Strippit, Inc. 12975 Clarence Center Road Akron, New York 14001
<b>Date:</b>	February 2010
<b>Project No.:</b>	1863R-99

## TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	ENGINEERING CONTROL EVALUATION .....	3
3.0	GROUNDWATER MONITORING DURING REPORTING PERIOD.....	4
4.0	INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM.....	8
5.0	CONCLUSIONS AND RECOMMENDATIONS .....	9

### **Figures:**

Figure 1	Locus Plan
Figure 2	Site Plan
Figure 3	Seasonal Low Groundwater Contour Map
Figure 4	Seasonal High Groundwater Contour Map
Figure 5	Total Barium in Groundwater Samples April 1995 through January 2010
Figure 6	Total Iron in Groundwater Samples April 1995 through January 2010
Figure 7	Total Magnesium in Groundwater Samples April 1995 through January 2010
Figure 8	Total Manganese in Groundwater Samples April 1995 through January 2010
Figure 9	Total Phenols in Groundwater Samples April 1996 through January 2010

### **Appendices:**

Appendix A	Record of Decision Houdaille Industrial – Strippit Division Site, Town of Newstead, Erie County, Site Number 9-15-053
Appendix B	Post-Closure Monitoring and Maintenance Plan; Interim Remedial Measure; Strippit, Inc.; Akron, New York
Appendix C	Site Inspection Reports: March 6, 2009; June 2, 2009; September 10, 2009; and January 12, 2010
Appendix D	Monitoring Well Sample Logs, Paradigm Environmental Services, Inc. Report and Chain-of-Custody Documentation: June 2, 2009 and January 12, 2010 Sampling Events
Appendix E	Summary of Detected Parameters
Appendix F	Institutional Control and Engineering Control Certification Form

## 1.0 INTRODUCTION

Strippit, Inc., (Strippit) is located at 12975 Clarence Center Road in Akron, New York. A Locus Plan is included as Figure 1. An approximate 2-acre area located behind (south) of the Strippit facility was historically used as a disposal facility for various materials including suspected hazardous waste until 1979, when this area was covered. This former disposal area is defined herein as (the Site).

Beginning in 1981, several studies were completed by various parties to evaluate the nature and extent of contamination at the Site. In accordance with an Interim Remedial Measure (IRM) work plan dated October 1993 prepared by Day Engineering, P. C. (DAY), a IRM that generally consisted of the consolidation of waste materials at the Site and the covering of these materials with a composite soil and geomembrane liner was conducted in the summer of 1994. The results of the previous studies, including the history of the Site, and the IRM implemented to address impacts at the Site are included in the document titled *Record of Decision, Houdaille Industrial – Strippit Division Site, Town of Newstead, Erie County, Site Number 9-15-053* dated March 1995 prepared by the NYSDEC (the ROD). A copy of the ROD is included in Appendix A.

As documented in the ROD, the Site received a No Further Action designation, however, post-closure monitoring and maintenance was required to evaluate the effectiveness of the IRM. Specific post-closure monitoring and maintenance requirements are described in a document prepared by DAY titled *Post-Closure Monitoring and Maintenance Plan; Interim Remedial Measure; Strippit, Inc.; Akron, New York* dated February 1995 (the Post-Closure Plan). A copy of this document is included in Appendix B. The Post-Closure Plan was reviewed and approved by the NYSDEC prior to implementation.

In accordance with a June 24, 1998 letter by the NYSDEC, the frequency of groundwater sampling outlined in the Post-Closure Plan was reduced from quarterly to bi-annually. During the remaining two quarters, a limited monitoring event that included the measurement of groundwater levels and field parameters (e.g., pH, specific conductivity, etc.) and completion of a site inspection was conducted.

In accordance with an August 21, 2002 letter by the NYSDEC, the testing program outlined in the Post-Closure Plan was further modified to include testing for the following parameters:

- Indicator Parameters: pH, specific conductance, turbidity and temperature
- Total barium, iron, magnesium and manganese
- Total Phenols

In accordance with a March 24, 2009 letter by the NYSDEC, the reporting frequency for monitoring activities at the Site was reduced from a quarterly period to an annual period. Henceforth, all monitoring events will be reported in a Periodic Review Report describing work completed during the preceding calendar year. This Periodic Review Report will be submitted each year on or by February 15.

The Periodic Review Report includes the following items:

- Identification of the Engineering Controls required by the remedy for the Site, and the results of observations completed to assess the effectiveness of these controls;
- Inspection forms generated for the Site during the reporting period;
- A summary of monitoring data generated during the reporting period;
- Historic data summary tables and graphical representations of contaminants of concern by media (i.e., groundwater); and
- Copies of the required laboratory data deliverables for samples collected during the reporting period.

The Periodic Review Report also includes an evaluation consisting of the following:

- The compliance of the remedy with the requirements of the ROD;
- Conclusions regarding Site contamination based on inspections and/or data generated by the Monitoring Plan for the media being monitored;
- Recommendations regarding necessary changes to the remedy and/or Monitoring Plan; and
- The overall performance and effectiveness of the remedy.

## 2.0 ENGINEERING CONTROL EVALUATION

The Engineering Control at the Site consists of a cover system (i.e., landfill cap) over the former disposal area and a groundwater monitoring well network to evaluate the effectiveness of the landfill cap. The approximate boundary of the former disposal area and the locations of the groundwater monitoring wells installed at the Site are depicted on Figure 2. As shown on Figure 4 in Appendix A, the landfill cap consists of multiple layers of soil and a geomembrane liner.

The integrity of the engineering control and monitoring well network were evaluated during each quarterly monitoring event completed during the reporting period (i.e., conducted on March 6, 2009; June 2, 2009; September 10, 2009; and January 12, 2010). Copies of the observation reports completed during each quarterly monitoring event are included in Appendix C.

As indicated in the site inspection reports:

- The landfill cap was observed to be in generally good condition.
- Evidence of slight erosion and sloughing was consistently noted in one area on the northeastern slope of the landfill cap, upslope of monitoring well GW-4. Multiple small holes, assumed to be of animal creation, were also observed in the area.
- Slight water seepage was observed during the June 2, 2009 monitoring event at the northern base of the landfill cap, at the edge of the paved parking area approximately mid-way between GW-3 and GW-4. The seepage was described as a pool of water about 0.1 feet deep and measuring approximately 5 feet by 8 feet.
- No evidence of settlement was observed on or at the perimeter of the landfill cap.
- Vegetation on and around the landfill cap was observed to be present and apparently healthy.
- Groundwater monitoring wells and gas wells were observed to be in good, functioning condition. Several groundwater monitoring well casing caps and bailers were replaced during the reporting period.
- Drainage ways located to the north and northwest of the landfill cap were observed to be functioning (i.e., not blocked). Vegetation within the drainage ways was present and appeared healthy.
- The grass cover and vegetation on the landfill cap was cut down in October, 2009.
- Observations during the January 12, 2010 were limited due to snow cover.

### 3.0 GROUNDWATER MONITORING DURING REPORTING PERIOD

During each quarterly monitoring event (i.e., March 6, 2009; June 2, 2009; September 10, 2009; and January 12, 2010) the depth to groundwater was measured from a monitoring point elevation established on the top of each monitoring well casing using an electronic tape water level indicator. In addition, the pH of the groundwater was also measured at each well during the quarterly monitoring events. The groundwater depths, elevations, and pH measured during the quarterly monitoring events completed during this report period are presented in the following table.

WELL	TOP OF CASING ELEVATION (ft.)	GROUNDWATER ELEVATION (ft.) /pH (su) March 6, 2009		GROUNDWATER ELEVATION (ft.) /pH (su) June 2, 2009		GROUNDWATER ELEVATION (ft.) /pH (su) September 10, 2009		GROUNDWATER ELEVATION (ft.) /pH (su) January 12, 2010		Groundwater Elevation variation during reporting period (ft.)
GW-1	754.32	714.92	<b>10.64</b>	714.12	<b>9.07</b>	712.64	<b>10.1</b>	716.03	<b>7.85</b>	3.39
GW-2	770.62	721.35	<b>11.23</b>	719.36	<b>10.40</b>	717.99	<b>10.6</b>	721.56	<b>9.52</b>	3.57
GW-3	742.59	711.04	<b>8.13</b>	709.95	<b>7.90</b>	708.38	<b>8.2</b>	711.49	<b>7.08</b>	3.11
GW-4	752.24	716.81	<b>10.92</b>	715.02	<b>6.84</b>	713.62	<b>9.9</b>	716.77	<b>7.77</b>	3.19
GW-5	771.26	721.43	<b>11.05</b>	719.29	<b>10.90</b>	717.94	<b>10.4</b>	721.53	<b>10.67</b>	3.59

Seasonal low and seasonal high groundwater contour maps, developed based upon the groundwater elevations calculated using the measurements obtained during the September 10, 2009 and the January 12, 2010 (respectively) monitoring events, are included as Figure 3 and Figure 4. As shown, groundwater flow during seasonal low and seasonal high conditions is generally to the north-northwest.

#### Groundwater Sampling

Groundwater samples were collected and submitted for analytical laboratory testing on June 2, 2009 and January 12, 2010. The samples were collected in general accordance with the procedures outlined in the approved post-closure monitoring and maintenance plan. A Site Plan, showing the location of the monitoring wells is included as Figure 2. Groundwater sampling initially included the measurement of static water levels in each of the monitoring wells installed at the Site (designated GW-1 through GW-5) followed by the purging of the wells to remove approximately 3 well volumes (or until wells were dry). The monitoring wells were then allowed to recover so that "fresh" water was retained for testing. Groundwater samples were collected for testing using a dedicated bailer, which is permanently stored above the water within each well casing.

A portion of the groundwater collected from each location was tested in the field for the

following parameters using the equipment listed below.

- Specific conductance, temperature, pH, ORP and turbidity: Horiba U-22 Multi-Parameter Water Quality Monitoring System.

In addition to the field-testing, samples were also collected for analytical laboratory testing. These samples were placed in sample containers provided by Paradigm Environmental Services, Inc. (Paradigm), the analytical laboratory. Paradigm also added the necessary preservatives to the sample containers that were provided for the sampling event.

The sample containers were filled by placing approximately equal amounts of sample from the bailer into each container until the container was filled. When the containers were filled they were placed in a plastic cooler containing ice and stored in a locked field vehicle until they were delivered to Paradigm for analytical laboratory testing. Chain-of-custody documentation was maintained throughout the sample collection process.

Copies of the monitoring well sample logs prepared for the June 2, 2009 and January 12, 2010 sampling events are included in Appendix D. These logs summarize in-situ measurements, groundwater depths, purging information and other relative data.

### **Analytical Laboratory Results**

The samples collected during the June 2, 2009 and January 12, 2010 monitoring events were analyzed by Paradigm for the following parameters.

- Barium, Iron, Magnesium and Manganese via USEPA method 6010 and Total Phenolics via USPEA method 420.1

Copies of the analytical laboratory reports for these sample events prepared by Paradigm and executed chain-of-custody documentation are included in Appendix D. A summary of the parameters historically detected within the groundwater samples collected from the monitoring wells at the Site is presented in Appendix E.

The majority of the parameters detected in the samples collected during the June 2, 2009 and January 12, 2010 sample events were measured at concentrations below Class GA standards (or within the acceptable range) established in NYSDEC TOGS 1.1.1 [data source 1998 and amended by NYSDEC Table 1, dated August 1, 2001 (TOGS)] potable groundwater supplies. Specifically:

- Concentrations of total barium in samples collected from monitoring wells GW-1 through GW-5 during the June 2, 2009 and January 12, 2010 sample events were below the TOGS standard of 1,000 ug/l.
- Concentrations of total magnesium in samples collected from monitoring wells GW-2 through GW-5 during the June 2, 2009 and January 12, 2010 sample events were below the TOGS standard of 35,000 ug/l.

- Concentrations of total magnesium collected from monitoring well GW-1 during the June 2, 2009 and January 12, 2010 sample events exceeded the TOGS standard of 35,000 ug/l.
- Concentrations of total manganese in samples collected from monitoring wells GW-1 through GW-5 during the June 2, 2009 and January 12, 2010 were below the TOGS standard of 300 ug/l.
- Concentrations of total iron in samples collected from GW-4 during the June 2, 2009 event and from GW-2 during the January 12, 2010 sampling event were below the TOGS standard of 300 ug/l.
- Concentrations of total iron in samples collected from monitoring wells GW-1 through GW-5 during the June 2, 2009 and January 12, 2010 exceeded the TOGS standard of 300 ug/l.
- Concentrations of total phenols in samples collected from monitoring wells GW-1 and GW-2 during the June 2, 2009 sampling event exceeded the TOGS standard of 1 ug/l. However, the concentration of GW-1 was equal to the laboratory detection limit of 2 ug/l.
- Concentrations of total phenols in samples collected from monitoring wells GW-3 through GW-5 on June 2, 2009 and from GW-1 through GW-5 on January 12, 2010 were below the laboratory detection limit of 2 ug/l.

Graphic representations of historic variations in concentrations of total barium, total iron, total magnesium, total manganese, and total phenols are included as Figure 5 through Figure 9 (respectively). The concentrations represent analytical laboratory results for groundwater samples collected from monitoring wells GW-1 through GW-5 between April 1995 (or May 1996 for total phenols) to January 2010.

As indicated by Figure 5, concentrations of total barium detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period were comparable to those measured during previous monitoring events. Further, total barium concentrations measured in samples from monitoring wells GW-1 through GW-5 appear to be stabilized or decreasing over time. Concentrations of total barium have historically been below the TOGS standard of 1,000 ug/l (or 1 ppm).

As indicated by Figure 6, concentrations of total iron detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period are generally consistent with historic concentrations. Historically, the concentrations of total iron measured in samples from groundwater monitoring wells GW-1 through GW-5 fluctuate with no apparent trend evident. Further, the historic concentrations of total iron measured in samples from groundwater monitoring wells GW-1 through GW-5 often exceed the TOGS standard of 300 ug/l or (0.3 ppm)

As indicated by Figure 7, concentrations of total magnesium detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period are generally consistent with historic concentrations. The concentrations of total magnesium measured in samples collected from monitoring wells GW-1 through GW-5 during this reporting period



appear to have increased in comparison to concentration measured during recent sampling events. With the exception of samples from monitoring well GW-1, concentrations of total magnesium in groundwater samples collected since January 2006 have been below the TOGS standard of 35,000 ug/l or (35 ppm). The concentrations of magnesium measured in GW-1 through GW-5 fluctuate historically, but despite the apparent increase during this reporting period, a general downward trend is evident.

As indicated by Figure 8, concentrations of total manganese detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period are generally consistent with historic concentrations. Historically the concentrations of total manganese measured in samples from groundwater monitoring wells GW-1 through GW-5 fluctuate with no apparent trend evident. Concentrations of total manganese in groundwater samples collected from GW-1 through GW-5 since January 1998 have been below the TOGS standard of 300 ug/l or (0.3 ppm).

As indicated by Figure 9, concentrations of total phenol detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period are generally consistent with historic concentrations. Further, total phenol concentrations in samples from monitoring wells GW-1 through GW-5 are generally decreasing over time and now appear to have stabilized. Historically, concentrations of total phenols in samples from monitoring wells GW-1 through GW-5 have generally been below the laboratory detection limit of 0.002 ppm.

#### **4.0 INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM**

A completed and signed copy of the Institutional and Engineering Controls Certification Form for the reporting period of January 1, 2009 through January 31, 2010 is included in Appendix F.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are based upon the findings of the work completed during this reporting period.

- The engineering control (i.e., landfill cap) was observed to be intact and functioning as designed. However, signs of slight erosion and sloughing were observed in one area on the northeastern slope of the landfill cap, upslope of monitoring well GW-4.
- Monitoring wells GW-1 through GW-5 were observed to be in good working condition.
- Groundwater elevations varied seasonally (i.e., varying between about 3.1 and 3.6 feet). However, groundwater flow directions remained consistent throughout the reporting period (i.e., flowing generally from south-southeast to north-northwest).
- The pH concentrations generally decreased over the reporting period. However, with the exception of the samples collected from GW-3, the pH concentrations measured in each monitoring well were outside the acceptable Class GA range of 6.5 to 8.5 s.u. during at least three monitoring events.
- The concentrations of total barium detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period were comparable to those measured during previous monitoring events. Further, total barium concentrations measured in samples from monitoring wells GW-1 through GW-5 appear to be stabilized or decreasing over time.
- The concentrations of total iron detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period are generally consistent with historic concentrations. The concentrations of total iron measured in samples from groundwater monitoring wells GW-1 through GW-5 fluctuate with no apparent trend evident.
- The concentrations of total magnesium detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period are generally consistent with historic concentrations. The concentrations of total magnesium measured in samples collected from monitoring wells GW-1 through GW-5 fluctuate historically and despite the apparent increase during the reporting period, magnesium concentrations exhibit a general downward trend.
- The concentrations of total manganese detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period are generally consistent with historic concentrations. Historically the concentrations of total manganese measured in samples from groundwater monitoring wells GW-1 through GW-5 fluctuate with no apparent trend evident.

- The concentrations of total phenol detected in samples collected from monitoring wells GW-1 through GW-5 during the reporting period are generally consistent with historic concentrations. Further, total phenol concentrations in samples from monitoring wells GW-1 through GW-5 are generally decreasing over time and now appear to have stabilized.

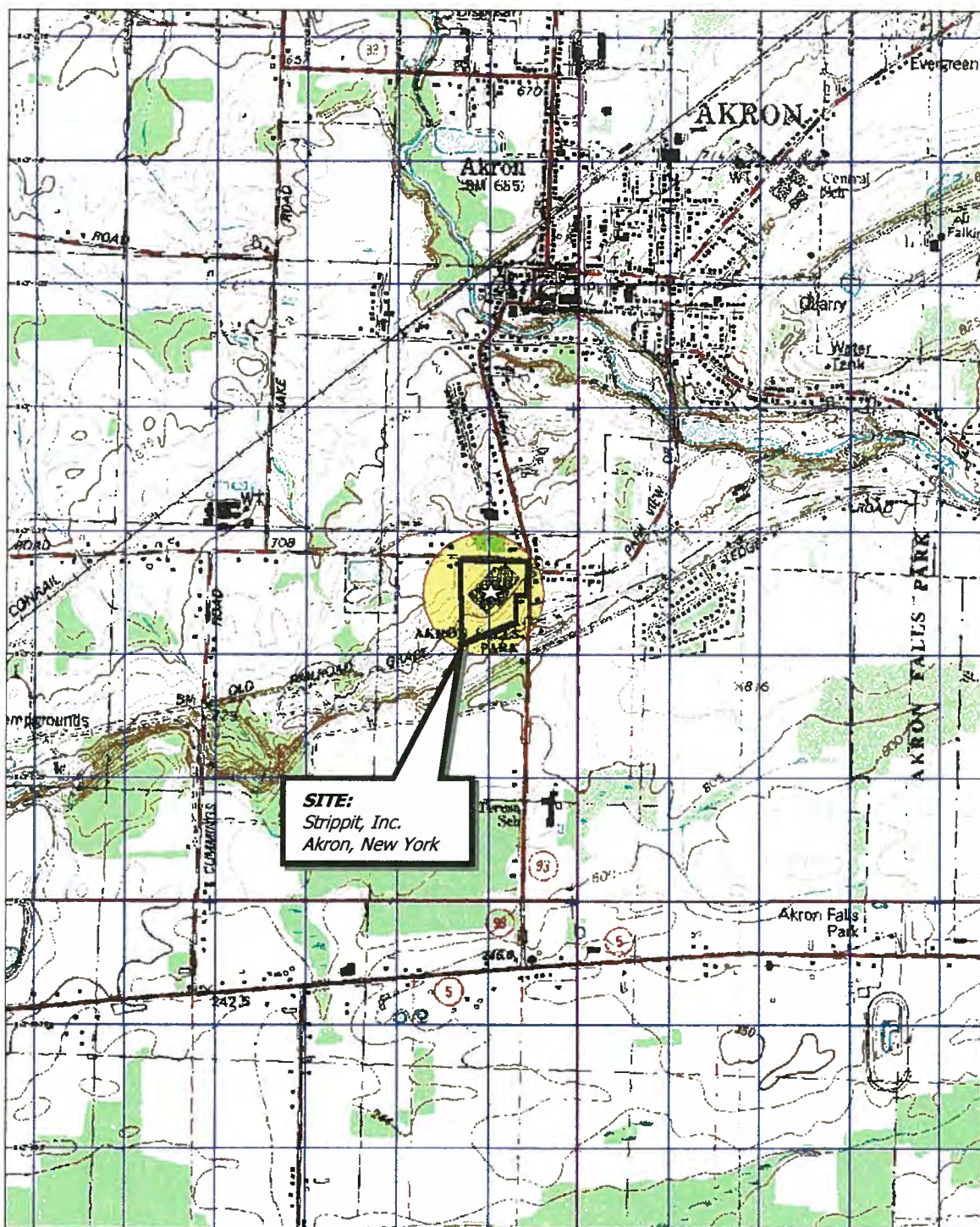
In order to ameliorate the sloughing/erosion of the portion of the landfill cap located on the north-facing slope, in the vicinity of GW-4, the animal holes should be filled with a low permeability soil, covered with topsoil, and re-seeded in accordance with the Maintenance Plan (Appendix B, Section 3.0).

Since at least January 2003, the concentrations of total phenols, reported in samples collected from monitoring wells GW-1 through GW-5 have been consistently low (i.e., typically less than 2 ug/l). As such, testing of samples for total phenols does not appear to be warranted during future monitoring events.

Based on observations made during the reporting period, and historic trends in laboratory data, the monitoring program would be equally effective if the monitoring events were reduced from quarterly to triannual (i.e., conducted at four month intervals in March, July, and November each year) and sampling events were reduced from biannual to annual (i.e., one time per year). Monitoring and sampling protocol would be unchanged, however, samples would only be analyzed for total barium, total iron, total manganese, and total magnesium.

The next monitoring event would occur on or around March 1, 2010. The next sampling event would occur on or around July 1, 2010.

## FIGURES



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 550 ft Scale: 1 : 19,200 Detail: 14-0 Datum: NAD27

Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad maps Wolcottsville (NY) 1995; Akron (NY) 1995; Lancaster (NY) 1982; & Corfu (NY) 1984. Site Lat/Long: N43d-0.6' - W78d-30.25'

DATE  
1-28-2010

DRAWN BY  
Tww

SCALE  
1" = 2000'



DAY ENVIRONMENTAL, INC.  
ENVIRONMENTAL CONSULTANTS  
ROCHESTER, NEW YORK 14614-1008

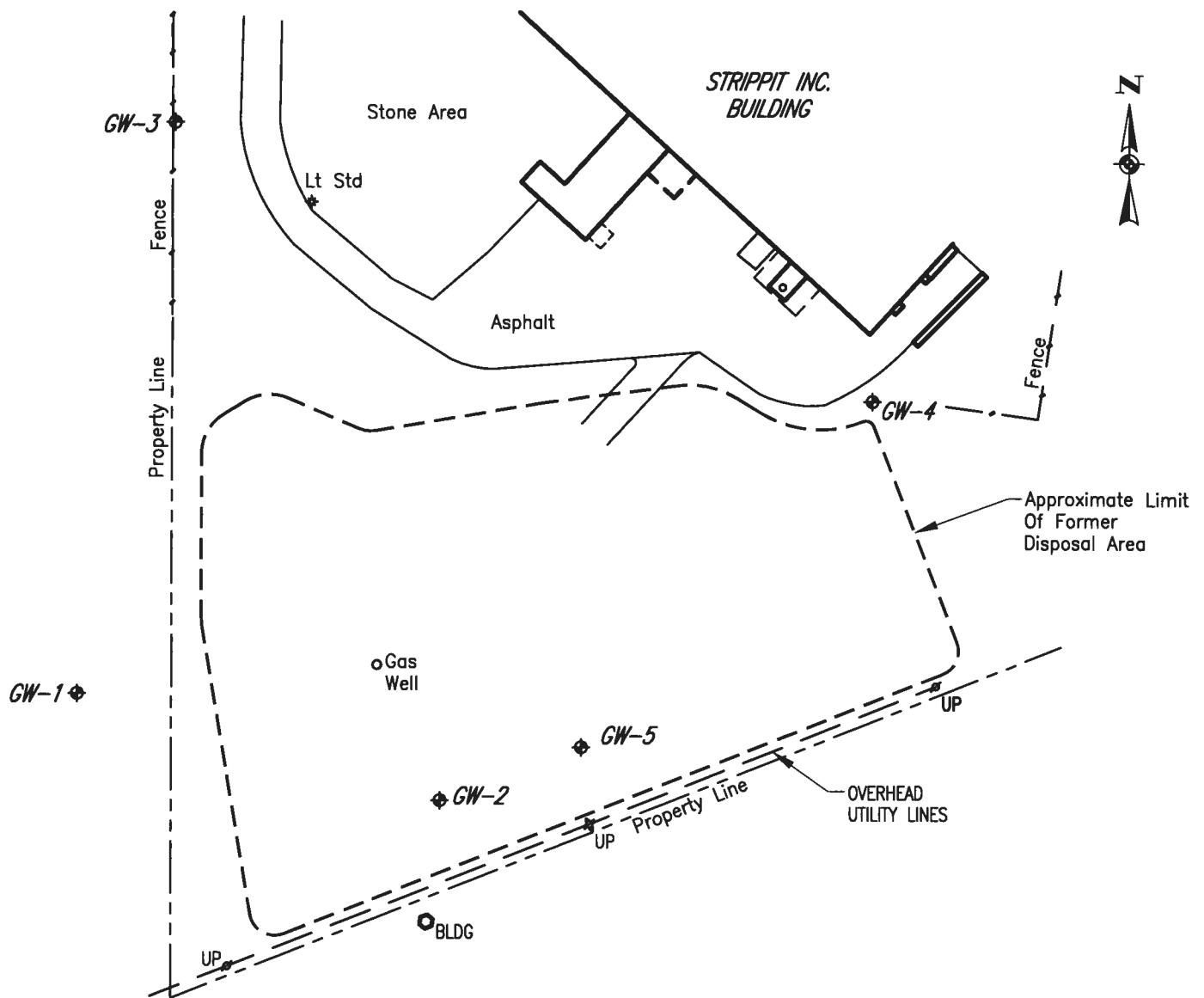
PROJECT TITLE  
**STRIPPIT, INC.  
AKRON, NEW YORK**

**GROUNDWATER MONITORING**

DRAWING TITLE  
**PROJECT LOCUS MAP**

PROJECT NO.  
**1863R-99**

**FIGURE 1**



**NOTES:**

1. This drawing produced from a drawing provided by Deborah A. Naybor, PLS, PC. entitled "Topographic Map Of Part Of Lot 5, TWP. 12, Range 5, Section 6, Town Of Newstead, County Of Erie, New York" dated 3/4/93 & revised 3/26/93.
2. No boundary survey was performed by Deborah A. Naybor, PLS, PC.

**LEGEND:**

- GW-1 ♦ Monitoring Well Designation  
 ○ Existing Gas Well  
 - - - - - Approximate Limits Of Former Disposal Area

DATE  
2-1-2010

DRAWN BY  
RJM

SCALE  
1" = 100'

**day**

DAY ENVIRONMENTAL, INC.  
 ENVIRONMENTAL CONSULTANTS  
 ROCHESTER, NEW YORK 14614-1008  
 NEW YORK, NEW YORK 10016-0710

PROJECT TITLE  
 STRIPPIT, INC.  
 AKRON, NEW YORK

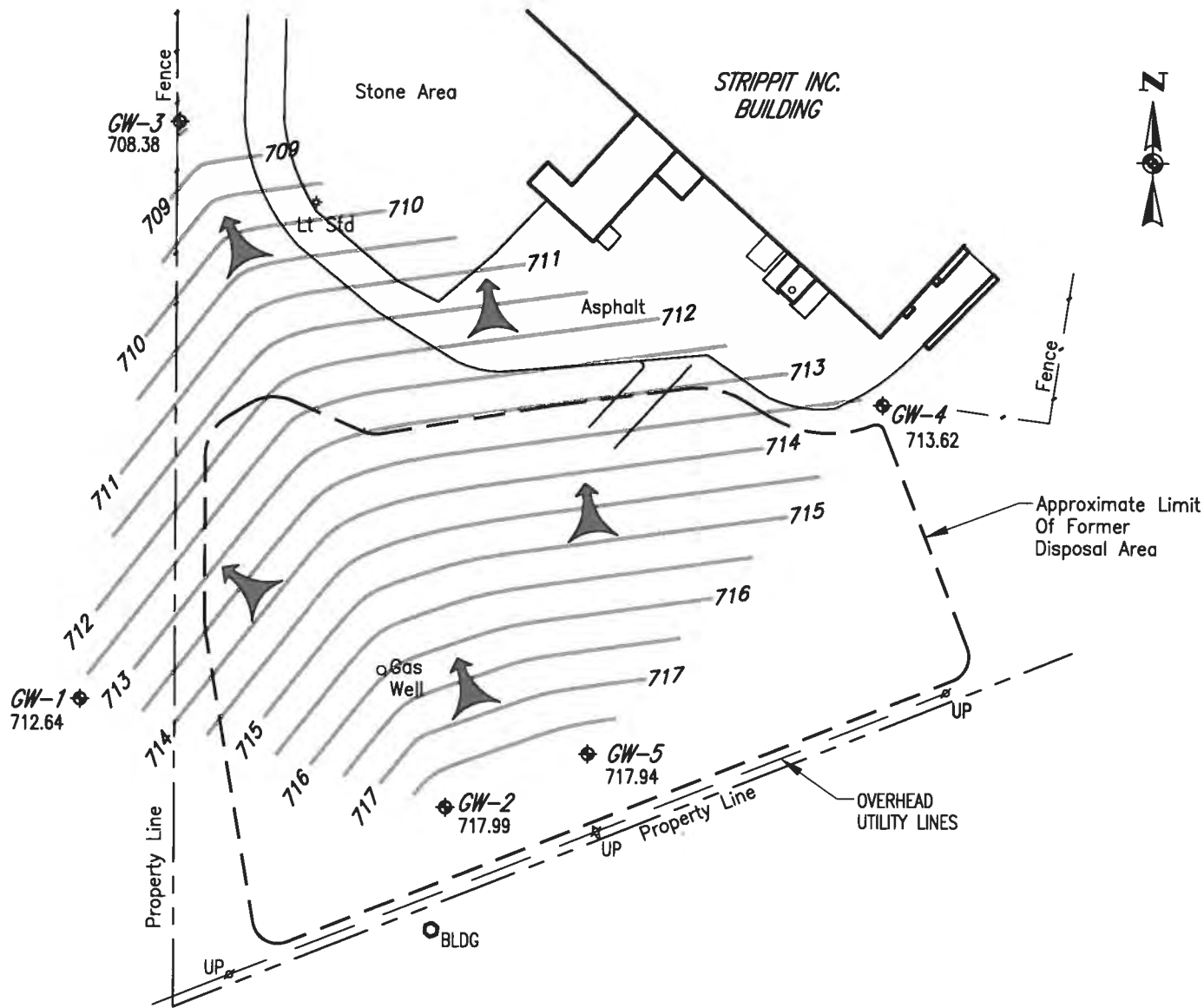
GROUNDWATER MONITORING

DRAWING TITLE

Site Location Map

PROJECT NO.  
 1863R-99

**FIGURE 2**



#### NOTES:

1. This drawing produced from a drawing provided by Deborah A. Naybor, PLS, PC. entitled "Topographic Map Of Part Of Lot 5, TWP. 12, Range 5, Section 6, Town Of Newstead, County Of Erie, New York" dated 3/4/93 & revised 3/26/93.
2. No boundary survey was performed by Deborah A. Naybor, PLS, PC.

#### LEGEND

GW-1 712.64

Groundwater Monitoring Well With Groundwater Elevation Obtained On September 10, 2009.

— Potentiometric Contour Line For September 10, 2009 Created By Golden Software Inc., Surfer8 Program



Apparent Direction Of Groundwater Flow

DATE  
2-1-2010

DRAWN BY  
RJM

SCALE  
1" = 100'

**day**

DAY ENVIRONMENTAL, INC.  
ENVIRONMENTAL CONSULTANTS  
ROCHESTER, NEW YORK 14614-1008  
NEW YORK, NEW YORK 10165-1617

PROJECT TITLE  
STRIPPIT, INC.  
AKRON, NEW YORK

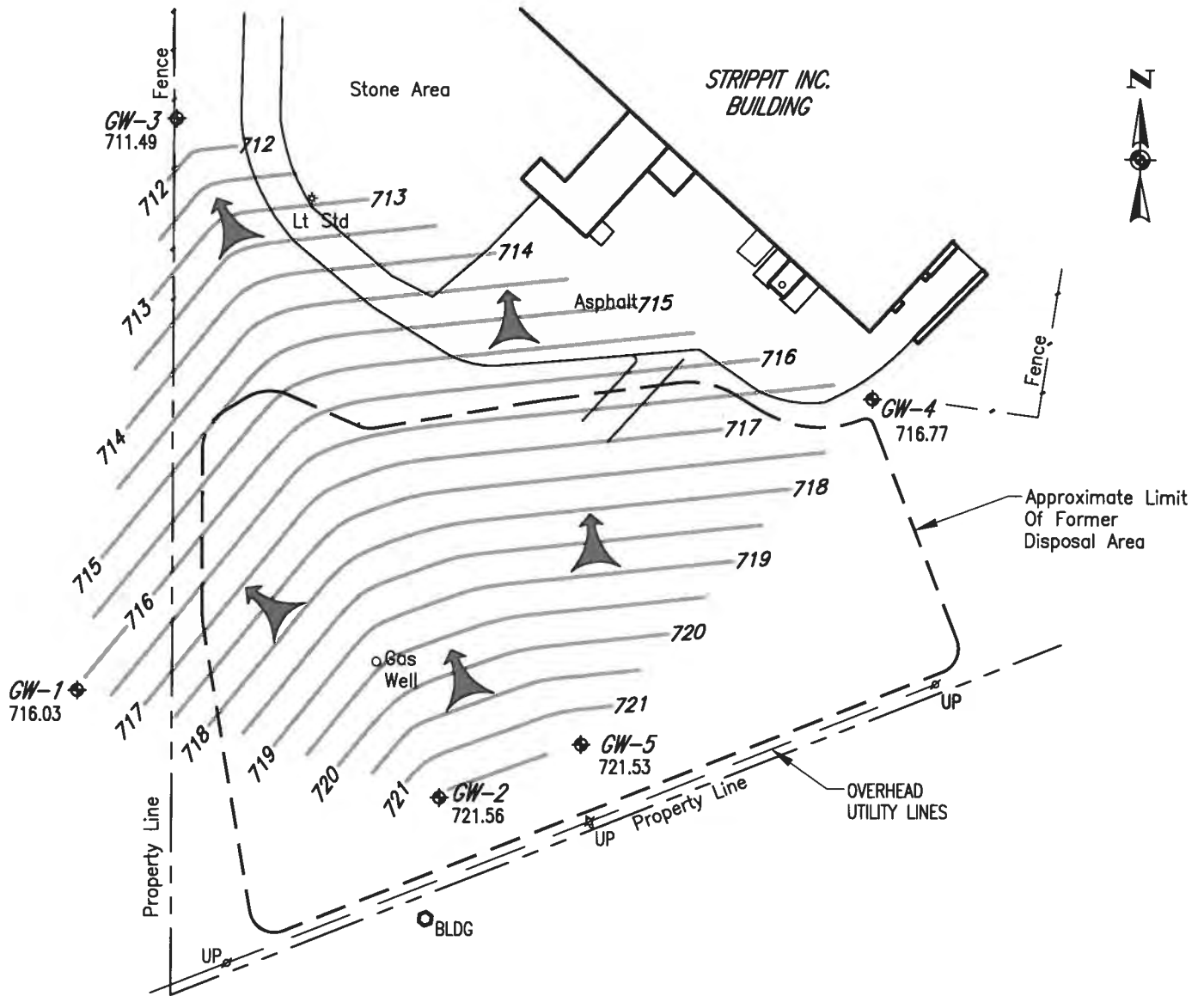
GROUNDWATER MONITORING

DRAWING TITLE  
Groundwater Potentiometric Contour Map For  
September 10, 2009 (Seasonal Low)

PROJECT NO.  
1863R-99

**FIGURE 3**





#### NOTES:

1. This drawing produced from a drawing provided by Deborah A. Naybor, PLS, PC. entitled "Topographic Map Of Part Of Lot 5, TWP. 12, Range 5, Section 6, Town Of Newstead, County Of Erie, New York" dated 3/4/93 & revised 3/26/93.
2. No boundary survey was performed by Deborah A. Naybor, PLS, PC.

#### LEGEND

GW-1  
 716.03

Groundwater Monitoring Well With Groundwater Elevation Obtained On January 12, 2010.

Potentiometric Contour Line For January 12, 2010  
 Created By Golden Software Inc., Surfer8 Program



Apparent Direction Of Groundwater Flow

DATE  
 2-1-2010

DRAWN BY  
 RJM

SCALE  
 1" = 100'

**day**

DAY ENVIRONMENTAL, INC.  
 ENVIRONMENTAL CONSULTANTS  
 ROCHESTER, NEW YORK 14614-1008  
 NEW YORK, NEW YORK 10165-1617

PROJECT TITLE  
 STRIPPIT, INC.  
 AKRON, NEW YORK

GROUNDWATER MONITORING

DRAWING TITLE  
 Groundwater Potentiometric Contour Map For  
 January 12, 2010 (Seasonal High)

PROJECT NO.  
 1863R-99

**FIGURE 4**

Figure 5

Total Barium in Groundwater Samples in mg/l or parts per million (ppm)

April 1995 through January 2010

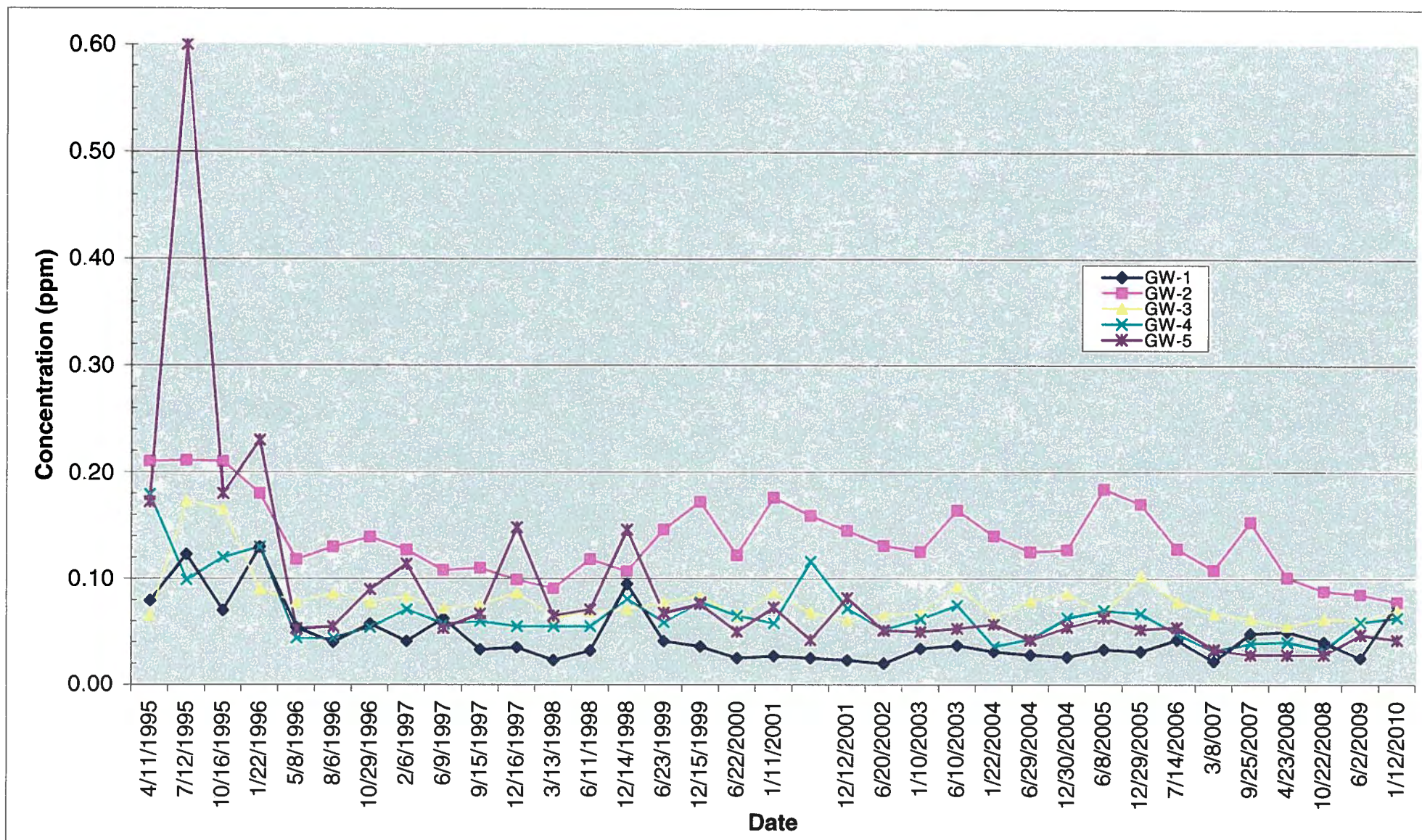




Figure 6

Total Iron in Groundwater Samples in mg/l or parts per million (ppm)

April 1995 through January 2010

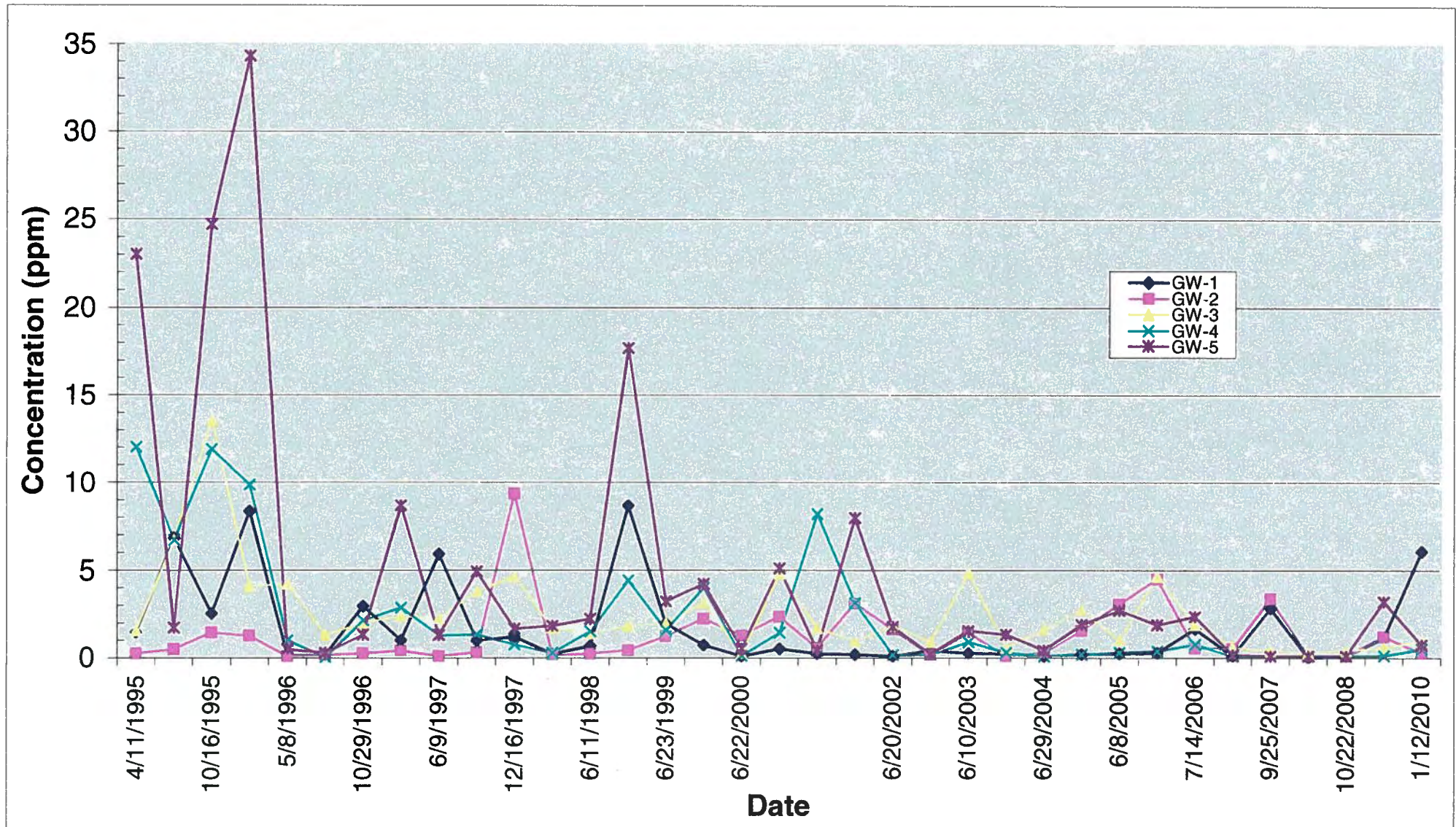




Figure 7

Total Magnesium in Groundwater Samples in mg/l or parts per million (ppm)

April 1995 through January 2010

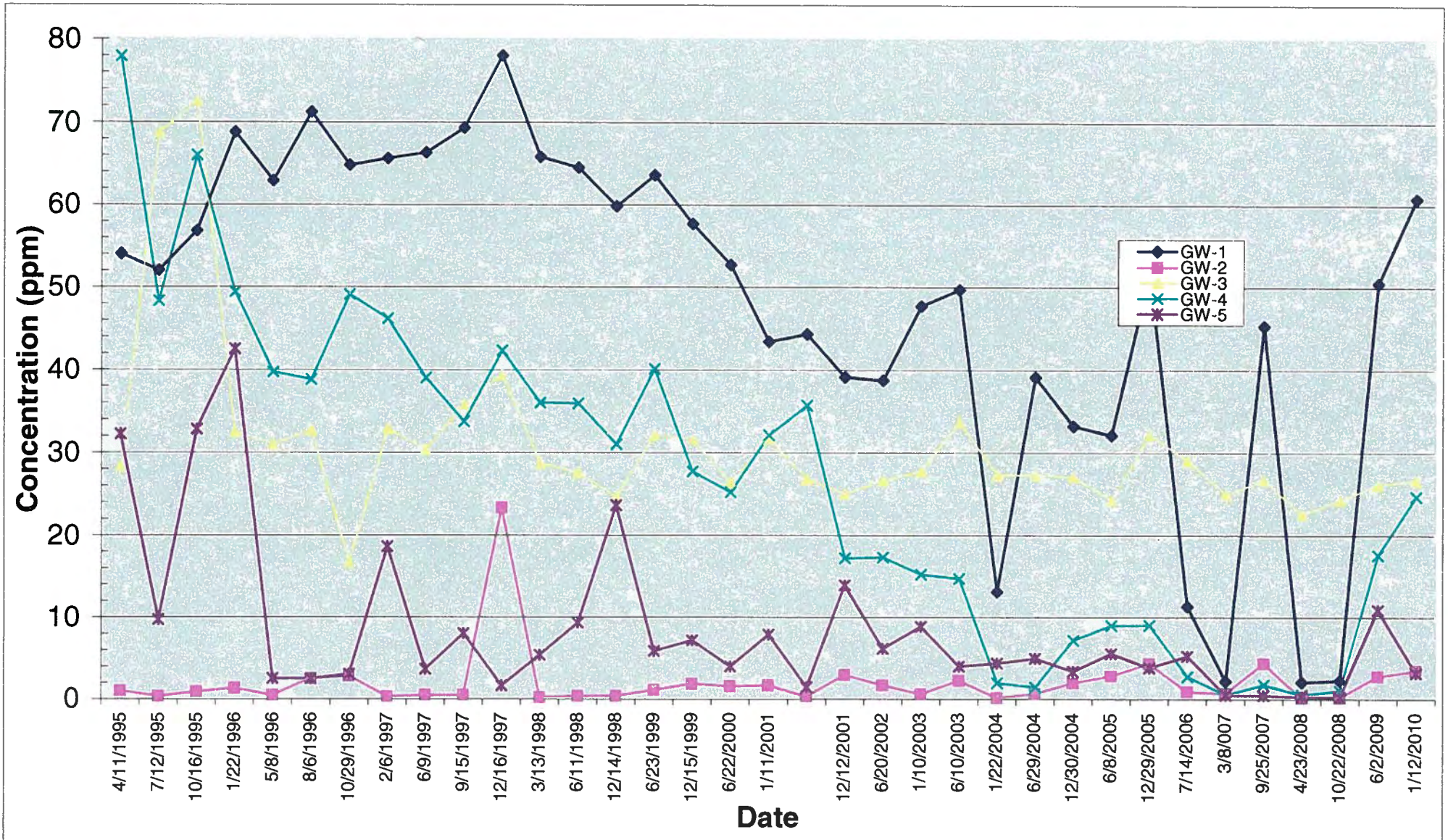




Figure 8

Total Manganese in Groundwater Samples in mg/l or parts per million (ppm)

April 1995 through January 2010

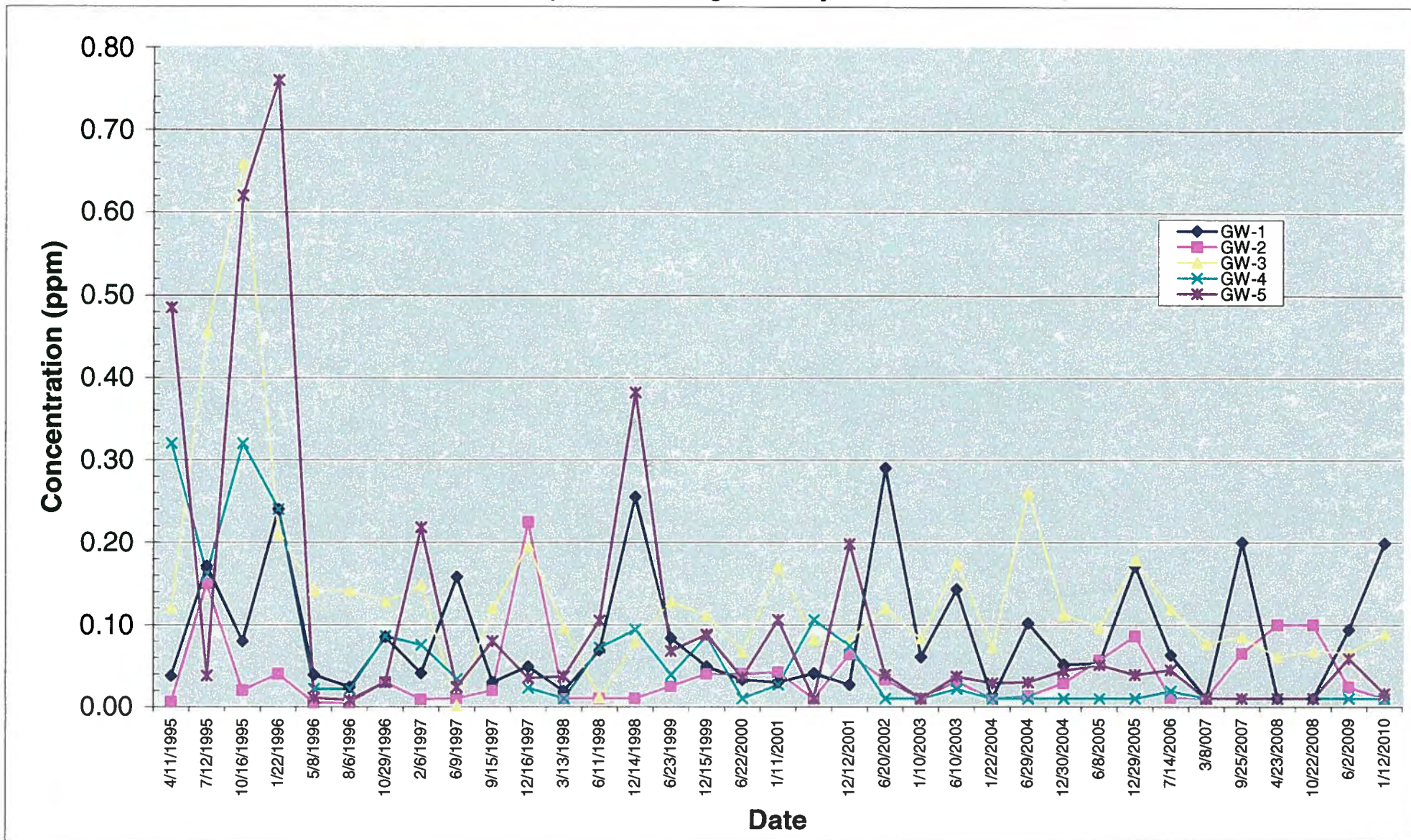
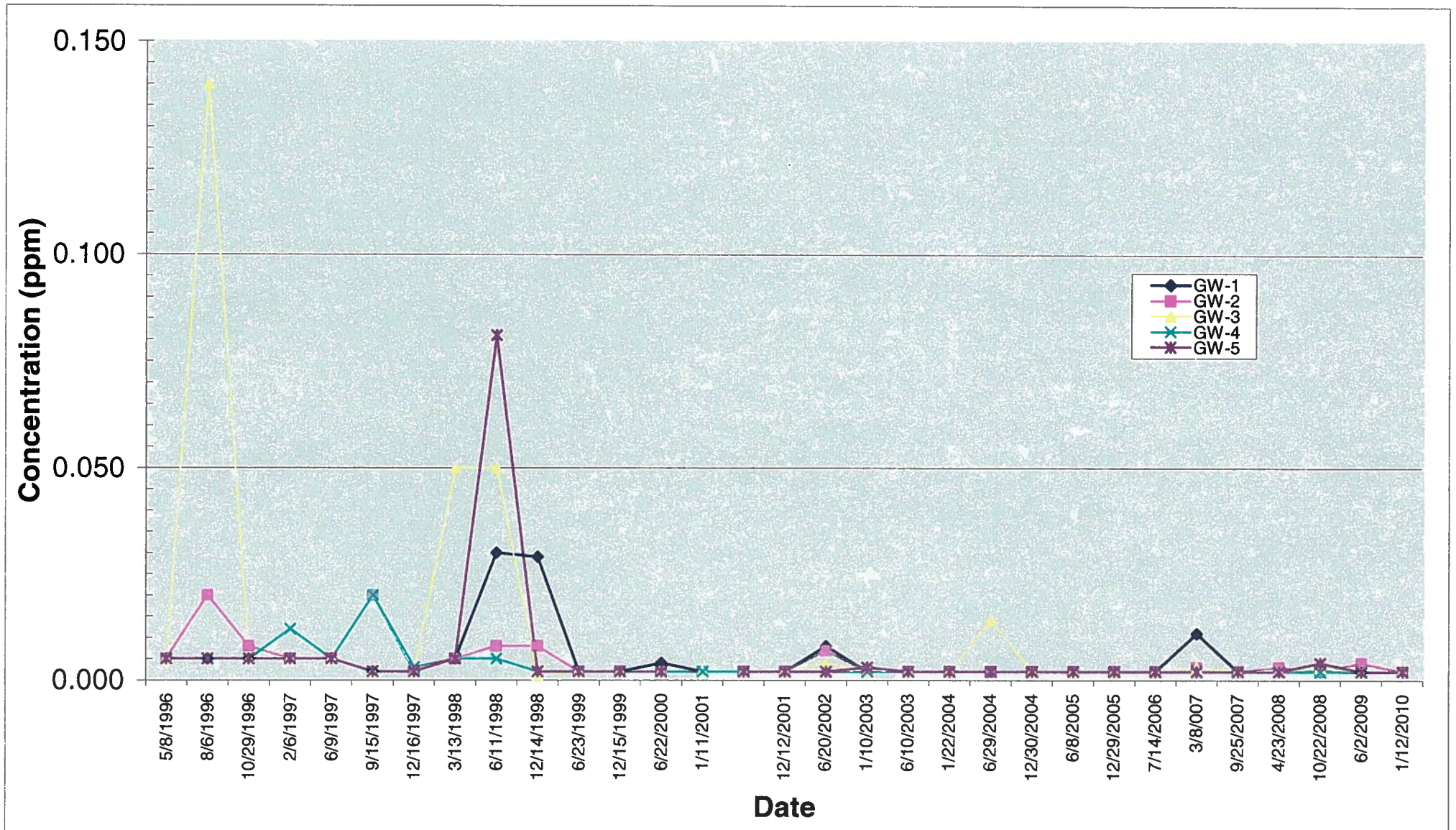




Figure 9

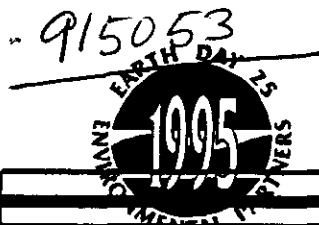
Total Phenols in Groundwater Samples in mg/l or parts per million (ppm)

May 1996 through January 2010



**APPENDIX A**

**RECORD OF DECISION  
HOUDAILLE INDUSTRIAL – STRIPPIT DIVISION SITE,  
TOWN OF NEWSTEAD, ERIE COUNTY,  
SITE NUMBER 9-15-053**



## Department of Environmental Conservation

Division of Hazardous Waste Remediation

---

# Record of Decision

**Houdaille Industrial - Strippit Division Site  
Town of Newstead, Erie County  
Site Number 9-15-053**

---

**March 1995**

New York State Department of Environmental Conservation  
GEORGE PATAKI, *Governor* MICHAEL ZAGATA, *Commissioner*



## **DECLARATION STATEMENT - RECORD OF DECISION**

---

### **HOUDAILLE INDUSTRIAL - STRIPPIT DIVISION**

#### **Inactive Hazardous Waste Site**

**Town of Newstead, Erie County, New York**

**Site No. 915053**

#### **Statement of Purpose and Basis**

The Record of Decision (ROD) presents the selected remedial action for the Houdaille Industrial-Strippit Division inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law (ECL). The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40 CFR Part 300).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Houdaille Industrial Strippit Division Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

#### **Assessment of the Site**

Actual or threatened release of hazardous wastes and other chemical contaminants were addressed through the implementation of an Interim Remedial Measure (IRM). During the IRM, the landfill was properly capped. This will significantly reduce the mobility of contaminants through groundwater. With the cap in place, the direct contact exposure to humans and animals with the contaminants has been eliminated.

#### **Description of Selected Action**

The investigations conducted at this site clearly showed that the contamination due to the disposal of hazardous and other industrial chemical wastes was limited to the landfill and the drainage ditches area. The drainage ditches were remediated and the landfill area was capped as an Interim Remedial Measure. The groundwater contamination was found to be limited to the site area and had not moved off-site. A long term Operation & Maintenance Plan will be instituted to maintain the integrity of the landfill cap and monitor the groundwater conditions. Since no other uncontrolled environmental problems remain on site, the No Further Action Alternative has been selected for this site.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that employ treatment that reduce toxicity, mobility, or volume as a principal element.

3/20/95  
Date

  
\_\_\_\_\_

Michael J. O' Toole, Jr., P.E.  
Director  
Division of Hazardous Waste Remediation

# TABLE OF CONTENTS

SECTION	PAGE
1: Site Location and Description . . . . .	1
2: Site History . . . . .	1
2.1 Operational/Disposal History . . . . .	1
2.2 Remedial History . . . . .	1
3: Current Status . . . . .	2
3.1 Summary of Site Investigations . . . . .	2
3.2 Site Geology/Hydrology . . . . .	3
3.3 Nature and Extent of Contamination . . . . .	3
3.4 Summary of Human Exposure Pathways . . . . .	5
3.5 Summary of Environmental Exposure Pathways . . . . .	5
4: Enforcement Status . . . . .	5
5: Summary and Evaluation of the IRM . . . . .	6
5.1 Cleaning Drainage Ditches . . . . .	6
5.2 Landfill Capping . . . . .	6
5.3 Runoff Controls/Drainage . . . . .	7
5.4 Post Closure Monitoring and Maintenance . . . . .	7
5.5 Health and Safety Plan . . . . .	7
6: Remedial Goals . . . . .	7
7: Summary of the Preferred Remedy . . . . .	8
8: Citizen Participation . . . . .	8

## Figures

Site Location Map . . . . .	Figure 1
Phase II Sampling Locations . . . . .	Figure 2
Test Pit Locations . . . . .	Figure 3
General View of Cap . . . . .	Figure 4
Liner Keyway and Drainage Channel . . . . .	Figure 5

## Appendices

Appendix A :	Responsiveness Summary
Appendix B:	Administrative Record

# RECORD OF DECISION

## HOUDAILLE INDUSTRIAL - STRIPPIT DIVISION

Newstead, Erie County, New York

Site No. 9-15-053

MARCH 1995

---

### SECTION 1: SITE LOCATION AND DESCRIPTION

This two acre landfill site is behind the plant building of Strippit, Inc., a manufacturer of tools and dies located at 12975 Clarence Center Road. The site is in an industrial-residential area in the Town of Newstead, Village of Akron, New York. The plant property is bounded by Clarence Center Road on the north, NYS Route 93 on the east, railroad tracks on the south and a residential property on the west (Figure 1).

Surface water from the plant flows through a drainage ditch, along the western boundary of the site northward and eventually discharges into Murder Creek located about 3/4 of a mile from the site.

### SECTION 2: SITE HISTORY

#### 2.1: Operational/Disposal History

The Buffalo Arms Corporation, a manufacturer of machine guns, owned and used this property for firing of machine guns and disposal of scrap metals from approximately 1940 to 1950. Houdaille Industries - Strippit Division (now known as Strippit, Inc.) has occupied this property since 1956. Houdaille Industries used the back portion of the property (landfill area) for disposal of about 20,000 gallons of water based coolant per year and 3 tons/year of heat treat sludge (a hazardous waste as defined in 6NYCRR Part 371 as FOII Waste) from metal fabrication operations. Approximately 270 gallons/year of waste solvents were also generated. There are conflicting reports whether or not the waste solvents were used to open burn the solid waste in the landfill. The ash from burning was also disposed of on site. About 216 drums containing heat treat sludge were also reported to be buried in the landfill. During 1979, the landfill area was covered with clean fill from an on-site plant expansion project.

#### 2.2: Remedial History

Originally the site was listed as a Class "2a" which is a temporary classification assigned to sites that have inadequate and/or insufficient data for inclusion in any of the other classifications. A State funded Phase I Investigation was completed during January 1986 and a Phase II Investigation was completed in March 1991. Based upon the Phase II, the site was reclassified to Class 3 in March 1992. The Class "3" means that the site does not present a significant threat to the public health or the environment - action may be deferred.

During July 1991, Strippit contacted Region 9 of NYSDEC to address the environmental problems at the site. The company agreed to perform a Supplemental Investigation and remediate the site by closing the landfill. The Consent Order was signed during December 1992. The field work for the site investigation was completed in February 1993. The final Supplemental Investigation report was submitted to NYSDEC in July 1993. After review of the previous investigations and Supplemental Investigation Report, it was concluded that contamination was not leaving the landfill area and the proper closure of the landfill to prevent the percolation

of rainwater through the waste material would be protective of the environment. The IRM work plan was submitted in October 1993 and was approved by NYSDEC.

### **SECTION 3: CURRENT STATUS**

#### **3.1: Summary of Site Investigations**

In order to determine if any environmental problems were present at this site, the following investigations were performed at the Strippit site:

##### December 19 - 1981, NYSDEC Investigation

During this investigation 2 soil, 3 sediment and 3 surface water samples were collected from the site. The Samples were tested for metals and halogenated hydrocarbons.

##### January 1986 - Phase I Investigation (NYSDEC)

In addition to evaluating the information obtained during 1981 Investigation, the report also included information on the site hydrogeology, geology and wetlands in the area. No field work was done during this investigation.

##### January 1989 - EPA (NUS) Investigation

During May 1987, NUS on a contract with USEPA, collected two groundwater (from private wells), one surface water, one sediment, and five soil samples as part of their investigation on this site. The report was completed in January 1989.

##### March 1991 - Phase II Investigation (NYSDEC)

The purpose of this investigation was to provide a comprehensive site contamination assessment. During this investigation, four groundwater monitoring wells were installed. Groundwater, surface water, leachate and sediments samples were collected and tested for Target Compound List (TCL) organics and Target List Analytes (TAL) inorganics. The sampling locations are shown in Figure 2.

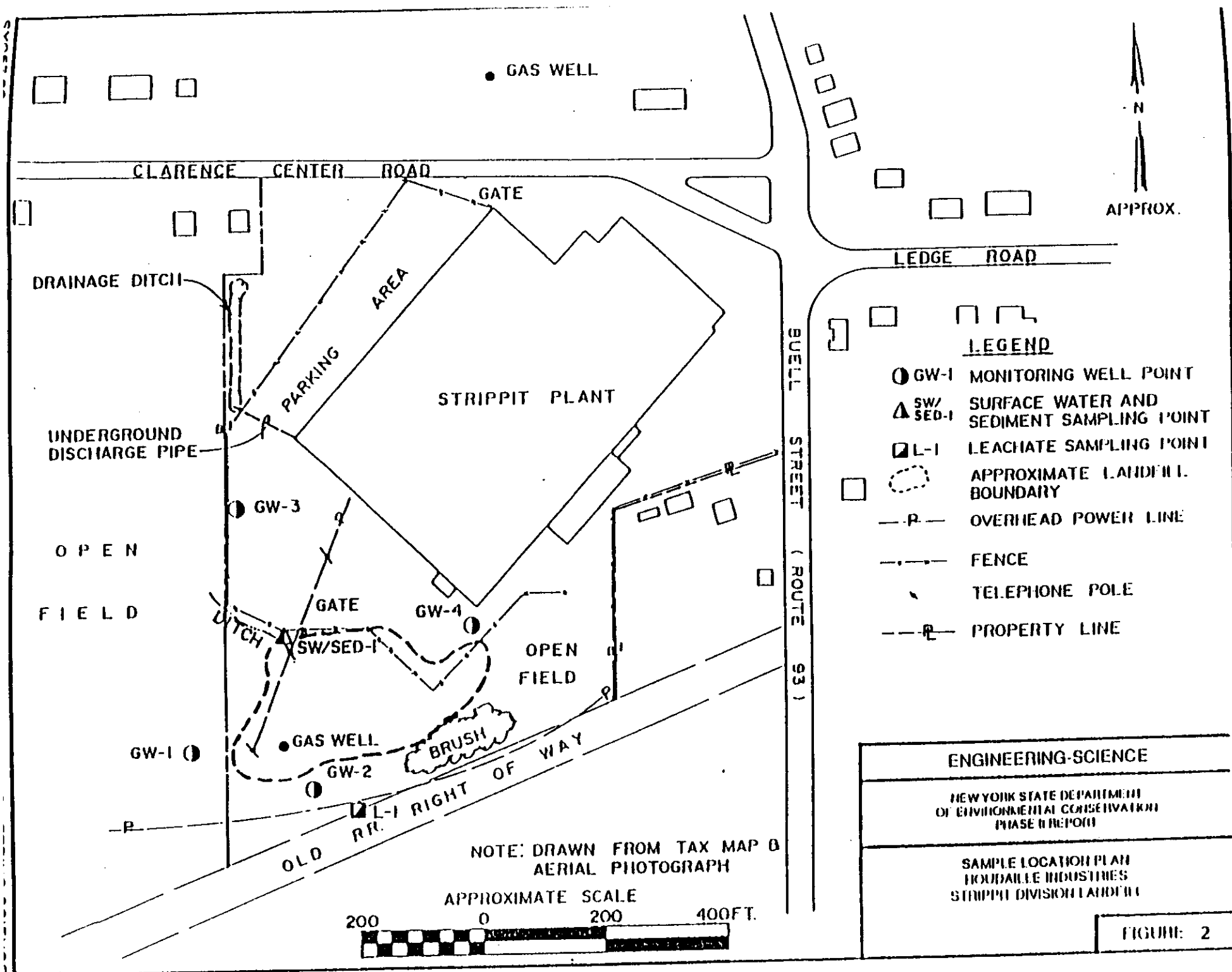
##### July 1993 - Field Investigation (Strippit, Inc.)

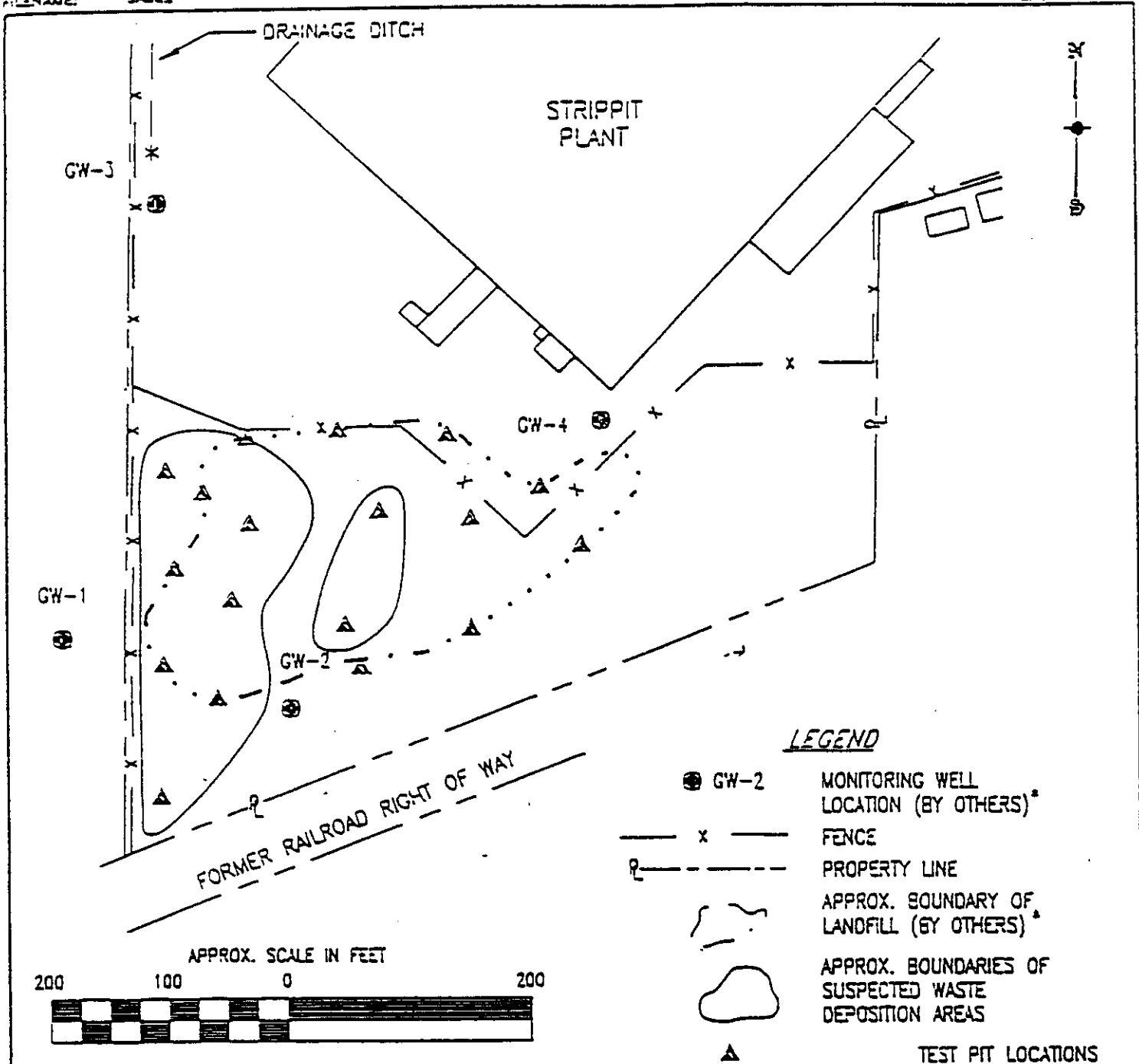
Strippit, Inc. contracted Day Engineering and performed an investigation during February 1993. The report was completed in July 1993.

During this investigation, 33 test pits were excavated in and around the disposal area. The test pit locations are shown in Figure 3. Some test pits were excavated in the property west of the landfill. The purpose of the test pit investigations was to find out if buried drums or wastes existed at the site and test their contents to determine whether or not they contained any hazardous wastes as defined in 6 NYCRR Part 371. No intact drums were encountered during this investigation. A composite soil sample from two test pits which were stained with similar materials was tested for TCL (organics) and TAL (inorganics) parameters and cyanides. An additional upgradient groundwater monitoring well installed during this investigation was also tested for the above listed parameters. The four wells installed during the State Superfund Phase II Investigation were also resampled and tested.

In addition a record search and interview with the plant personnel was conducted during this investigation to







\* GROUNDWATER & LANDFILL INFORMATION SHOWN WAS TAKEN FROM FIGURE IV-5 IN REPORT ENTITLED: "PHASE II INVESTIGATIONS, HOUDAILE INDUSTRIES, STRIPPIT DIVISION." REPORT PREPARED FOR NYSDEC BY ENGINEERING-SCIENCE, INC., DATED MARCH 1991

PROJECT NO.  
 91-1350S  
 DRAWING NO.  
**FIG. 3**

PROJECT TITLE  
 STRIPPIT, INC.  
 12975 Clarence Center Road  
 Akron, New York 14001  
 DRAWING TITLE PROPOSED  
 TEST PIT LOCATION MAP

**DAY ENGINEERING, P.C.**  
 ENVIRONMENTAL ENGINEERING CONSULTANTS  
 ROCHESTER, NEW YORK

DATE  
 01/31/92  
 DRAWN BY  
 JJD  
 SCALE  
 SHOWN



determine company's disposal practices prior to closing the landfill. Aerial photographs (1927 to 1985) were reviewed to obtain information pertaining to the disposal practices.

### 3.2 Site Geology/Hydrology:

The subsurface soil is characterized as up to 12 feet of fill which consists of brown, medium-size sand and gravel and some dark black silt. The fill is underlain by 40-50 feet of coarse sandy glacial till, with a silty till underlying it. A water bearing glaciolacustrine sandy silt underlies the confining till at 40 to 60 feet below the surface. Onondaga limestone bedrock underlies the site at a depth of 110 to 120 feet with a gentle dip of 30-40 feet/mile to the south.

The seasonal groundwater in the overburden flows north from the landfill towards Murder Creek. Shallow groundwater in the landfill area may be temporarily perched above the confining till at a depth of 4-6 feet below ground surface. There may be a radial flow of groundwater from the landfill due to mounding effects.

### 3.3 Nature and Extent of Contamination

The evaluation of the different environmental media is as follows:

#### Soil

During the 1981 NYSDEC sampling one surface sample was collected. The surface soil sample showed 9.5 ppm of halogenated hydrocarbons, which is above typical background levels.

Subsurface soil samples were also tested during the 1981 NYSDEC Sampling, the 1989 NUS Study and the 1993 Field Investigation by Strippit. Low levels of contaminants such as arsenic (<8 ppm), barium (<59 ppm), lead (<19 ppm) and traces of organics such as Polycyclic Aromatic Hydrocarbons (PAHs) and Polychlorinated Biphenyls (PCBs) were found in soil samples during these investigations. With respect to metals, their levels are within the published background soil concentrations for the area. Test pits excavated during 1993 Field Investigation also did not show any evidence of widespread burial of drums.

In addition, the levels of contamination found in soils during 1981, 1989 and 1993 site investigations were compared against the Standards, Criteria and Guidance (SCGs). The Contaminant Concentrations were below the clean up levels set forth in the NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) HWR-92-4046.

#### Groundwater

The Phase II Investigation and Strippit's 1993 Field Investigation evaluated the groundwater conditions within the monitoring wells located in proximity to the site. As shown in the Following table, the concentrations of some contaminants found in the groundwater were above the NYS Groundwater Standards. Acetone was also detected in some samples, however, it is considered a common laboratory contaminant. Cyanides were not detected in any of the soil or groundwater samples.

Contaminant	Frequency of Detection Out of 9	Concentration Range (ppb)	Average* Concentration (ppb)	New York State Groundwater Standard (ppb)
Aluminum	9	234-8260	2698	
✓ Barium	9	71-1120	317	1000
Manganese	9	2-326	108	300
Magnesium	9	129-66700	21982	35000
✓ 2- Butanone	1	ND-11	5.9	50
✓ Phenol	1	ND-10	4.8	1
* Average concentration with upper 95% Confidence Level				
ND Not Detected				

#### Surface Water

Three surface water samples tested during the 1981 DEC Investigation did not show any exceedances for the NYS Surface Water Standards. Only one surface water sample was collected from the drainage ditch during the 1991 Phase II Investigation. As shown in the following table, Class C surface water standards were exceeded for some metals for this sample. [Note: Murder Creek is classified as Class C.]

Contaminant	Maximum Concentration (ppb)	New York State Surface Water Standards (ppb)
Aluminum	20,700	
✓ Barium	2,920	
Iron	38,300	300
Magnesium	73,700	
Manganese	3,310	
✓ Zinc	393	
✓ Arsenic	42	190
✓ Selenium	10	1
✓ Dichloroethanes	24	

#### Leachate

During the Phase II investigation a leachate seep south of the landfill was observed. A leachate sample was collected and the contents were analyzed. The analysis showed 30,200 ppb iron (Fe) 194 ppb zinc (Zn).

These levels are above the surface water standards which are 300 and 30 ppb for Fe, and Zn respectively. Low levels of acetone and 4-methylphenol were also detected in the leachate sample.

#### Sediment Samples

The 1981 NYSDEC Sampling Data for sediments from the drainage ditch showed arsenic (2.4-190 ppm), lead (19-140 ppm) zinc (21-1000 ppm) and Halogenated Organics (ND-26 ppm). Testing of drainage ditch sediment for TCL organics and TAL metals during the Phase II Investigation also showed the presence of barium (1140 ppm), cadmium (16 ppm), PAHs (20 ppm) and traces of phthalates (7 ppb). The concentration of barium and cadmium exceeded typical background/naturally occurring levels, which are 10-500 ppm for barium and 0.01-7 ppm for cadmium.

#### **3.4 Summary of Human Exposure Pathways:**

This section describes the types of human exposure that may present added health risks to persons at or around the site.

An exposure pathway is the process by which an individual comes into contact with a contaminant. The five elements of an exposure pathway are (1) the source of contamination (2) the environmental media and transport mechanism (3) the point of exposure (4) the route of exposure and (5) the receptor population. These elements of an exposure pathway may be based on past present or future events.

Human exposure pathways which are known to or may exist at the site include:

- o Dermal adsorption and ingestion of chemicals in soil.
- o Dermal absorption and ingestion of contaminated sediments and surface water.
- o Drinking water from contaminated wells.

#### **3.5 Summary of Environmental Exposure Pathways**

This section summarizes the types of environmental exposures which may be presented by the site. The following pathways for environmental exposure have been identified.

- o Direct contact with surface water, sediment and surface soil.

The contaminants detected in sediment samples were above typical background levels for the parameters of concern. During the IRM, sediments from the drainage ditches were excavated and placed into the landfill, thus environmental exposure through sediments in the ditches were eliminated.

During the IRM, the landfill was capped, minimizing any infiltration of rain water into the landfill. This prevented environmental exposure to the contaminants at the site through direct contact and substantially reduced groundwater contamination from the waste source.

### **SECTION 4: ENFORCEMENT STATUS**

Strippit, Inc., the current owner and a Potential Responsible Party (PRP), entered into an order on Consent in December 1992 to perform Site Assessment and Interim Remedial Measures (IRM).

The Consent Order is referenced as follows:

Date	Index No.	Subject
1992	B9-398-92-03	IRM & Site Investigation

## **SECTION 5: SUMMARY AND EVALUATION OF THE IRM:**

The Work Plan to implement the IRM is detailed in the document entitled "Interim Remedial Measure Work Plan, Strippit, Inc., Akron, NY", prepared by Day Engineering, P.C. dated October 1993. The IRM consisted of cleaning of drainage ditches and capping of the landfill. The Work Plan and the design were approved by NYSDEC.

### **5.1 Cleaning Drainage Ditches**

The sediments from the western and southern ditches were excavated and disposed of in the site landfill. Post excavation tests were conducted to verify the clean up.

### **5.2 Landfill Capping**

During the IRM, the landfill area was capped. The cap was designed to meet the standards set forth in 6 NYCRR Part 360. Gas venting system was eliminated from the design because the explosive gas survey showed readings of 0.2% and 2% of the Lower Explosive Limit (LEL) at two locations and no readings at the remainder of the 16 locations. The leachate collection system was also eliminated because the groundwater impact was considered insignificant.

The capping of the landfill consisted of the following tasks:

#### **(1) Clearing and Grubbing:**

All trees and brush were removed from the site prior to commencing any excavation or grading work. Roots, boulders and other objects which interfered with construction were also removed from the site.

#### **(2) Retrofitting of the Existing Natural Gas Well and Monitoring Wells:**

The well head of a natural gas well (not landfill gas well) located in the middle of the landfill was raised above the proposed final grade and put back into service for the production of gas. In addition, monitoring wells GW-2 and GW-5 were also retrofitted so that they could be used for post closure monitoring. Figure 2 shows locations of gas well and monitoring wells.

#### **(3) Soil excavation and segregation:**

The fill material along the western and northern boundaries of the landfill was pushed back by bulldozers to the top of the landfill and used to fill the low lying area. The ditches along the westerly and northerly boundaries which showed some contamination were also cleaned and the excavated soil/ sediment were placed onto the landfill. The waste containing drums and contaminated soil excavated while establishing the slopes were disposed off site. The upper surface of the subbase was sloped at 4% minimum while slopes had a maximum grade of 25%. Figure 4 shows typical layers of the landfill cap.

#### **(4) Placement of the liner:**

# HOUDAILLE INDUSTRIAL-STRIPPIT, INC.

## TYPICAL CAP SECTION

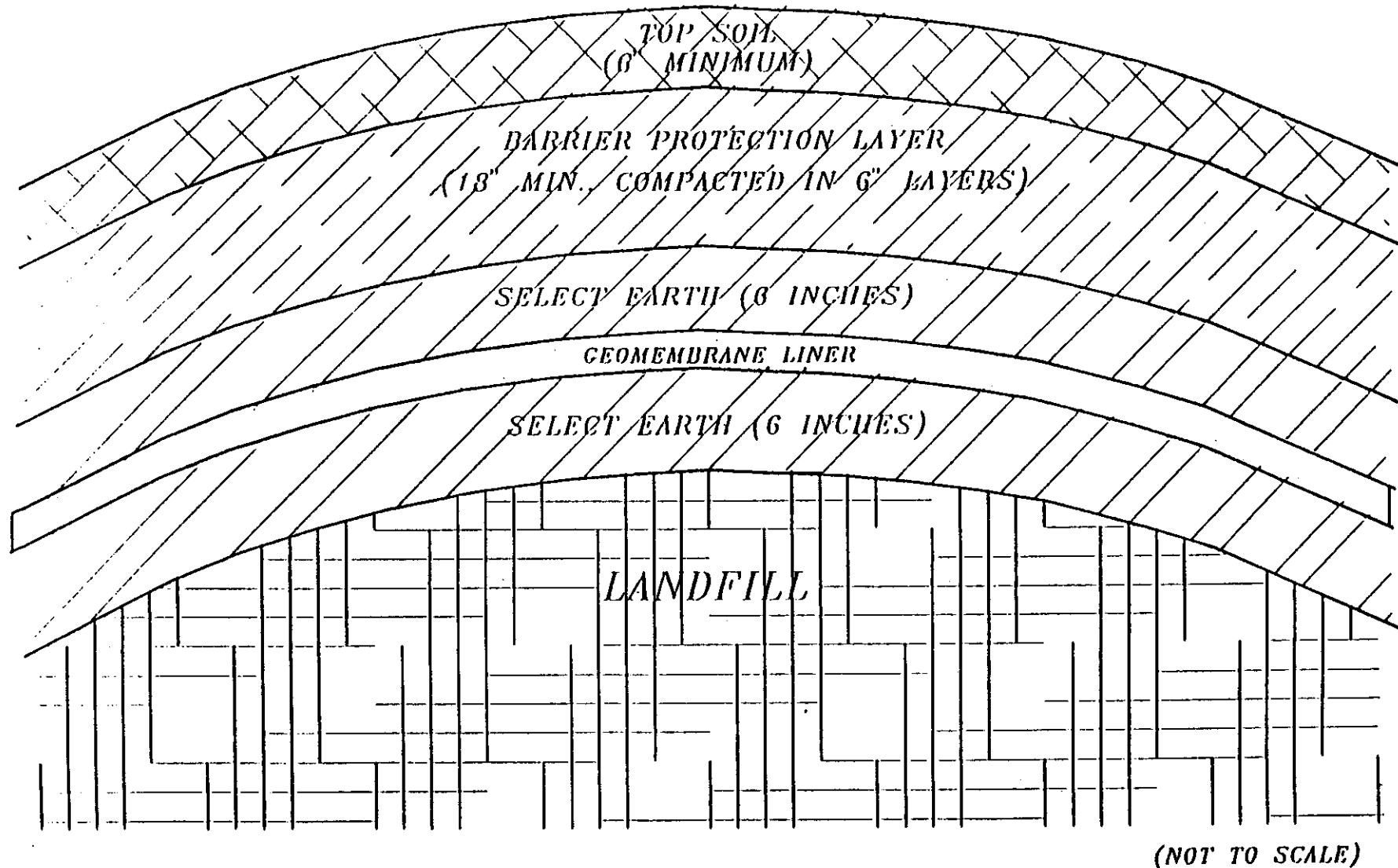


FIGURE 4

- o Mitigate threat to groundwater and surface water contamination from rain water or snow by significantly reducing mobility of the landfill contaminants. Reduction of mobility of contaminants will prevent the spread of groundwater contamination from the landfill.
- o Eliminate the potential for direct exposure to the wastes in the landfill and contaminated sediment to humans and animals.

## **SECTION 7: SUMMARY OF THE SELECTED REMEDY**

The selected remedy for the Houdaille Industrial-Strippit Division is **No Further Action**. The selection of this remedial alternative is based upon the IRM conducted at this site. During the IRM contaminated soil/sediments from the drainage ditches were removed, thereby, eliminating any potential for direct contact to humans and animals.

Some of the on site groundwater monitoring wells showed contamination for parameters such as aluminum, barium, iron, magnesium, and phenols. With the landfill cap in place, the infiltration into the landfill will be greatly reduced, thus eliminating the "perched" water conditions and hence reducing the possibility of leachate releases and groundwater contamination. The long term groundwater monitoring plan will determine the effectiveness of the selected remedy by determining if capping has in fact adequately controlled the groundwater contaminants. At present, no other uncontrolled sources of contamination are known at this site. Therefore, the No Further Action alternative is selected for the Houdaille Industrial-Strippit site.

## **SECTION 8. CITIZEN PARTICIPATION**

As part of the implementation of the IRM and the Proposed Remedial Action Plan, the following Citizen Participation activities were conducted:

- o All important documents pertaining to the Site Investigations and IRM were made available for public review and comment at the document repository.
- o A mailing list was developed and a fact sheet was mailed to the public before the start of the IRM.
- o An informal mailing was sent to interested individuals/groups announcing the public meeting scheduled for the Proposed Remedial Action Plan (PRAP).
- o The public comment period on the PRAP lasted from December 15, 1994 to January 20, 1995.
- o A public meeting was held in Akron on January 17, 1995 to discuss the PRAP and obtain public comments on it. A Responsiveness Summary that addresses questions and comments raised during the public meeting and comment period is provided as Appendix A.

# LINER KEYWAY AND DRAINAGE CHANNEL

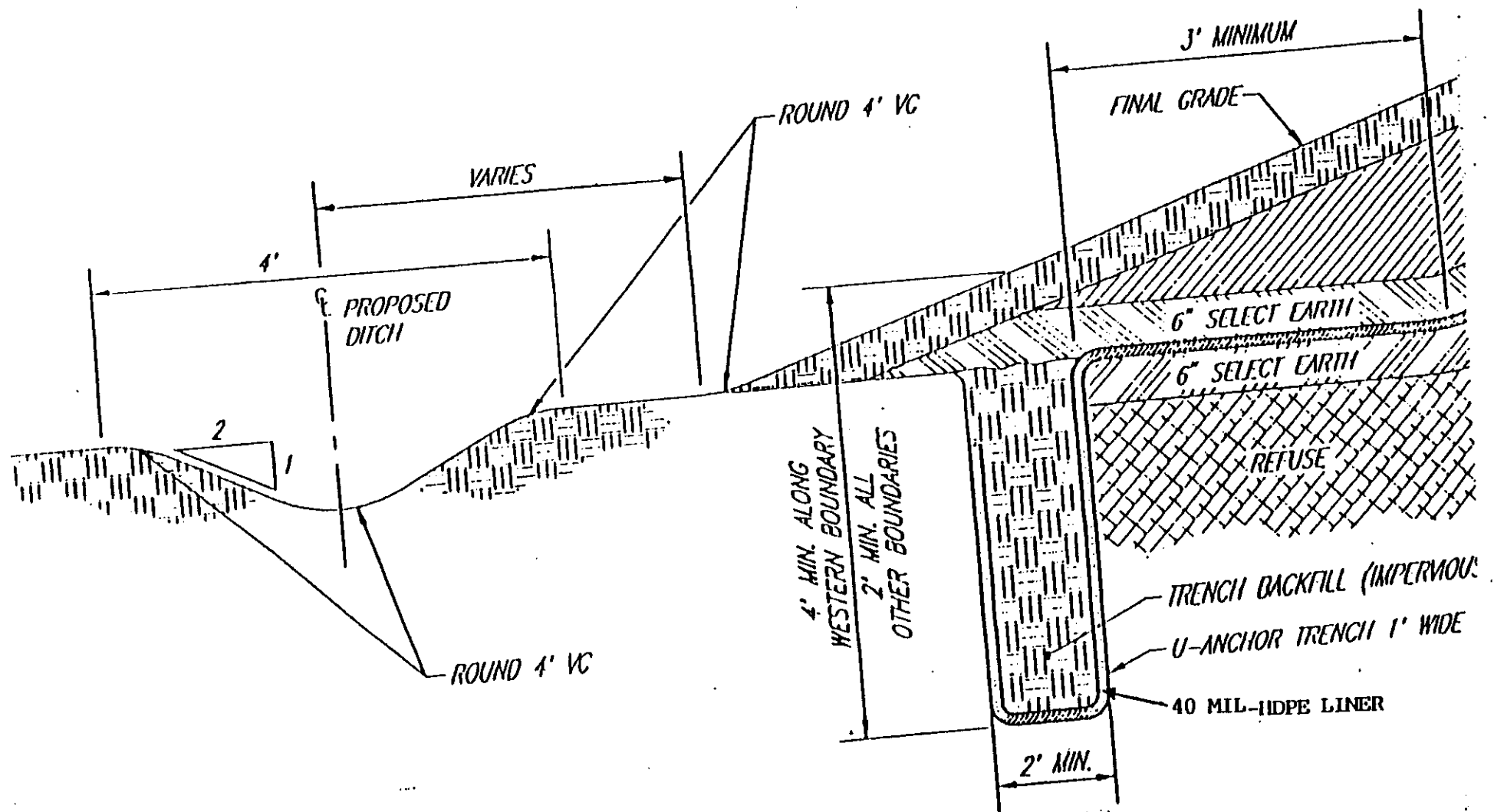


FIGURE 5

**APPENDIX A**  
**RESPONSIVENESS SUMMARY**  
**for the**  
**PROPOSED REMEDIAL ACTION PLAN**  
**HOUDAILLE INDUSTRIAL - STRIPPIT DIVISION**  
**Newstead, Erie County, New York**  
**Site No. 9-15-053**

---

The Proposed Remedial Action Plan (PRAP) was prepared by the New York State Department of Environmental Conservation (NYSDEC) and issued to the local document repository in December, 1994.

The PRAP described the site investigations and the Interim Remedial Measure (IRM). The IRM consisted of (a) cleaning of drainage ditches and (b) capping of the landfill. The PRAP also described the long term maintenance of the landfill cap and monitoring of groundwater.

The proposed remedy in the PRAP for this site was - **No Further Action**. The selected remedy is the same as was proposed.

The PRAP was presented to the public on January 17, 1995 during a public meeting in the Village of Akron Library. The questions and concerns raised during that public meeting and other questions by the public during the comment period which ended on January 20, 1995, and the State's response is as follows:

1. Q. Is there any evidence of migration of contaminants off site?  
  
A. There is no evidence that the contaminants have moved off site. The groundwater monitoring wells were sampled twice during the site investigations. None of the contaminants of concern were found in the off site monitoring well. The cap installed on the landfill will greatly reduce the potential for contaminants from entering groundwater and off site migration.
2. Q. Is there contaminated water flowing into the ditches now?  
  
A. The cap installed on the landfill has eliminated direct contact of the waste in the landfill with rain water. Therefore, the run off water from the landfill cannot dissolve any contaminants. Thus, runoff from the landfill area which flows through the ditches around the landfill is free of contaminants.
3. Q. With respect to the drainage ditch, it is currently plugged with hay, etc. and water does not flow freely. Snow is placed in the ditch when they plow their parking lot, which also hampers water flow. Can something be done to solve this problem?  
  
A. Currently, Strippit places bales of hay in the ditch to remove any residual oil and grease from the discharge of the plant operations cooling water. As far as water



from the ditch getting into neighbors backyards is concerned, Strippit has assured NYSDEC that they will look into the problem and take appropriate actions.

4. Q. Are the ditches being monitored for pollutants now?
  - A. During the IRM, the contaminated soil/sediment from the ditches were excavated thereby removing any concerns about contaminated sediment being present. Presently, Strippit is discharging non-contact cooling water into the ditch flowing along the western boundary of Strippit under a State Pollution Discharge Elimination System (SPDES) permit. The permit requires Strippit to test the discharge water for oil and grease and pH. Questions regarding the SPDES permit should be directed to the NYSDEC Regional Water Engineer; Tel. No.(716)-851-7070
5. Q. How many pollutants were tested for when the sampling was done.
  - A. During the various site investigations, groundwater, soil, leachate, surface water and sediment samples were tested for Target Compound List (TCL) Parameters (i.e. 125-volatiles and semivolatiles, 24 metals and total cyanides).

**APPENDIX B**  
**ADMINISTRATIVE RECORD**  
**HOUDAILLE INDUSTRIAL - STRIPPIT DIVISION**  
**Newstead, Erie County, New York**  
**Site No. 9-15-053**

Date	Document
December, 1981	NYSDEC Sampling Results
January, 1986	Phase I Investigation Report (NYSDEC)
January, 1989	Site Inspection Report - EPA (NUS)
March, 1991	Phase II Investigation Report (NYSDEC)
September, 1991	Rick Kennedy to Martin Doster proposal for additional investigation
May, 1992	Field Investigation Plan prepared by Day Engineering
August 3, 1992	Mark Kowalski to Cameron O'Connor - Drinking water wells in the area.
December, 1992	Consent Order (Index #B9-398-92-03)
July, 1993	Field Investigation Report (Strippit, Inc.)
October, 1993	Interim Remedial Work Plan
October 28, 1993	Jaspal S. Walia to Richard Crouch approval of IRM Work Plan
June, 1994	Fact Sheet
July, 1994	Site Specific Health & Safety Plan by Haseley Trucking Company
October 3, 1994	Dr. Frances Yang to Jaspal Walia - Test results of the ditches cleanup.
December, 1994	Construction Documentation Report - Interim Remedial Measure (Strippit, Inc.)
December, 1994	Proposed Remedial Action Plan (PRAP) - (NYSDEC)
February, 1995	Post-Closure Monitoring and Maintenance Plan (Strippit, Inc.)
March, 1995	Record Of Decision (ROD) - (NYSDEC)

## **APPENDIX B**

**POST-CLOSURE MONITORING AND MAINTENANCE PLAN;  
INTERIM REMEDIAL MEASURE;  
STRIPPIT, INC.; AKRON, NEW YORK**

**POST-CLOSURE MONITORING AND  
MAINTENANCE PLAN  
INTERIM REMEDIAL MEASURE**

**STRIPPIT, INC.  
AKRON, NEW YORK**

**Prepared By:** Day Engineering, P.C.  
2144 Brighton-Henrietta Town Line Road  
Rochester, New York 14623

**Date:** February, 1995

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	Site History	1
1.2	Previous Studies	1
<b>2.0</b>	<b>GROUNDWATER MONITORING</b>	<b>2</b>
2.1	Previous Testing	2
2.2	Post-Closure Test Parameters	2
2.3	Sampling Frequency	4
2.4	Sampling Procedures	4
2.5	QA/QC Samples	5
2.6	Reporting	6
<b>3.0</b>	<b>MAINTENANCE PLAN</b>	<b>8</b>
3.1	Site Inspection and Maintenance	8
3.1.1	Sloughing	8
3.1.2	Cracks	8
3.1.3	Erosion	9
3.1.4	Settlement	9
3.1.5	Stressed Vegetation	9
3.1.6	Seepage	9
3.2	Monitoring Wells	9
3.3.	Inspections Following a Significant Earthquake	10
<b>4.0</b>	<b>NOTIFICATIONS AND EMERGENCY RESPONSE</b>	<b>11</b>
<b>5.0</b>	<b>REPORTING TO THE COMMUNITY</b>	<b>12</b>
<b>6.0</b>	<b>REFERENCES</b>	<b>13</b>

## **1.0 INTRODUCTION**

Strippit, Inc., a Unit of IDEX Corporation (Strippit), has implemented an Interim Remedial Measure (IRM) approved by the New York State Department of Environmental Conservation (NYSDEC) at a former disposal area (Site) located south of their 12975 Clarence Center Road, Akron, New York facility (see Locus Plan, Figure 1). This IRM included the construction of a final cover system consisting of a 40-mil HPDE geomembrane and associated soil/topsoil cover over the disposal area. The cover system is graded such that precipitation flows to a surrounding drainage trench which transmits surface water away from the Site.

This document presents the post-closure monitoring and maintenance plan for the Site. The intent of this plan is to outline procedures to monitor groundwater quality in the vicinity of the Site during the post-closure period. Additionally, procedures to monitor and maintain the integrity of the cover system, monitoring well network and the associated surface water drainage system are presented herein.

### **1.1 Site History**

The approximately 2.3-acre former disposal area is located in the southwest corner of the Strippit property (see Figure 2, Site Plan). Available historic information indicates that this disposal area was used from approximately 1940 to 1975 to dispose of waste materials generated at the Strippit facility or its predecessors.

To date, various studies have been completed to characterize conditions at and around the former disposal area. These studies determined that the fill within the disposal area consists of a heterogeneous mixture of clayey silts, sand, gravel, cobbles, isolated pockets of grinding fines, metal pieces, slag, wood debris, brick fragments, concrete fragments, rusted and broken 55-gallon drums and electrical wiring. Underlying the fill material, the native soils consist of lacustrine silts and sands with varying amounts of gravel and clay. The uppermost water bearing zone was encountered at a depth of 50 to 55 feet beneath the fill. Based upon measurements made in monitoring wells sealed within this zone, groundwater flow is from the south to the northwest.

### **1.2 Previous Studies**

Reports discussing conditions at the Site and the remedial activities completed to date are summarized in Section 6.00 of this submittal.

## **2.0 GROUNDWATER MONITORING**

Five (5) existing monitoring wells are located in the vicinity of the former disposal area (see Site Plan, Figure 2). Two (2) of these wells, GW-2 and GW-5, are located upgradient of the Site and the remaining wells, GW-1, GW-3 and GW-4, are located downgradient of the Site. Copies of the boring logs and well installation diagrams for each of these wells are included in Appendix A of this submittal. Post-closure monitoring will include the sampling and testing of these wells for a period of thirty (30) years or less if deemed appropriate. Specific aspects of this monitoring are discussed in subsequent sections of this document.

### **2.1 Previous Testing**

Two (2) groundwater sampling rounds (June 1990 and February 1993) have been completed for monitoring wells GW-1, GW-2, GW-3 and GW-4. One (1) groundwater sampling round (February 1993) has been completed for GW-5. The June, 1990 sampling round included testing for Target Compound List (TCL) organic compounds (volatile, semi-volatile pesticides and PCBs), and Target Analyte List (TAL) metals and cyanide. The February, 1993 sample round included testing for TCL volatile organics, TCL semi-volatile organics, cyanide and selected total and soluble metals (i.e., aluminum, barium, cobalt, iron, magnesium, manganese, vanadium and zinc).

Parameters for which detectable concentrations were measured during the June 1990 and February 1993 sample rounds are summarized on the tables included on the following pages. Table I-3 is a reprint of a table included in the Phase II Investigation Report prepared by Engineering-Science ("Engineering Investigations at Inactive Hazardous Waste Sites, Phase II Investigations, Houdaille-Industries-Strippit Division, Village of Akron, Site No. 915053, Erie County; March 1991). [Note: GW-5 was not installed until February 1991, and thus it is not included on Table I-3.] Table 2 is a reprint from a July 1993 report by Day Engineering, P.C. entitled "Field Investigation Report, Strippit, Inc., Akron, New York, DEC Site No. 915053".

### **2.2 Post-Closure Test Parameters**

Based upon the results of the previous testing and the nature of the materials within the disposal area (i.e., predominately soil fill with intermixed construction and demolition debris with lesser amounts of industrial waste), site specific test parameters will be monitored. These parameters, which were presented in an October 1993 document prepared by Day Engineering, P.C. entitled "Interim Remedial Measure Work Plan, Strippit, Inc., Akron, New York, DEC Site No. 915053" and approved by the NYSDEC, include:

JUNE 1990  
SAMPLING ROUND

TABLE I-3  
HOUDAILLE - STRIPPIT  
GROUNDWATER RESULTS  
TCL ORGANIC COMPOUNDS (UG/L) / TAL METALS (UG/L)

(3) NYS STANDARD GROUNDWATER						
ANALYTE	(UG/L)	GW-1	GW-2	GW-3	GW-4	GW-5
METHYLENE CHLORIDE	5 b	3 BJR	6 BR	6 BR	-	-
ACETONE	50 b	11	35	-	-	-
CHLOROFORM	100 be	-	3 J	-	-	-
2-BUTANONE	50 b	-	11	-	-	-
TOLUENE	5 b	3 J	3 J	-	-	-
ALUMINUM	NS	513	838	1,770	5,680	5,370
ANTIMONY	3 e	44.3 B	48.0 B	40.9 B	35.7 B	25.7 B
ARSENIC	25 a	-	-	-	3.0 SN	-
BARIUM	1,000 a	191 B	1,120	121 B	221	206
CALCIUM	NS	93,500	268,000	55,000	265,000	239,000
CHROMIUM (total)	50 b	-	-	-	10.7	9.3 B
COPPER	<200 c	-	5.4 B	-	4.8 B	4.1 B
IRON	300 b*	465	462	3,360	14,000	12,900
LEAD	25 a	9.1	1.9 B	4.3 B	12.6	13.7
MAGNESIUM	35,000 e	8,760	789 B	30,000	47,100	40,500
MANGANESE	300 b*	34.3	12.0 B	153	326	281
NICKEL	700 f	12.4 B	-	10.9 B	-	8.2 B
POTASSIUM	NS	303,000	96,800	3,300 B	59,800	59,500
SODIUM	<20,000 c	161,000	229,000	38,000	40,100	37,900
VANADIUM	NS	13.2 B	6.7 B	6.0 B	15.6 B	14.7 B
ZINC	<300 c	-	-	19.8 B	42.0	36.9

Note: GW-5 is a duplicate of GW-4.

Footnote and qualifier list on Table I-7.

Note: CRDL for Antimony is 60 ug/l.



**TABLE I-1**  
**FOOTNOTE / QUALIFIER LIST**

**FOOTNOTES:**

- (1) USGS, 1984, Professional Paper 1270: New York State Soils.
- (2) Booz, Allen & Hamilton, Inc. (1983): Range in U.S. Soils.
- (3) New York State quality standard for class GA (source of potable water supply) groundwaters are the most stringent of applicable standards, criteria, or guidelines listed below:
- a - NYSDEC Groundwater Quality Regulations, 6 NYCRR, Part 703, dated September 1990.
  - b - NYSDOH Maximum Contaminant Levels, Public Water Supplies, 10 NYCRR, Subpart 5-1, dated January 1989.
  - c - NYSDOH Standards, Sources of Water Supply, 10 NYCRR, Part 170.
  - d - USEPA Maximum Contaminant Levels, 40 CFR 141.
  - e - NYS Ambient Water Quality Guidance Values, TOGS 1.1.1 dated September 1990.
  - f - USEPA Health-based Criteria for Systemic Toxicants, dated May 1989.
  - \* - If iron and manganese are present, total concentration of both should not exceed 500 ug/l.
- (4) NYSDEC Surface Water Quality Standards, 6 NYCRR, part 701 and 702.
- NS: No standard or guidance value established.
- ND: The standard for this compound is below detection limit.

**DATA QUALIFIERS (ORGANIC COMPOUNDS):**

- B: This flag is used when the analyte is found in the blank as well as the sample. It indicates possible or probable blank contamination and warns the data user to take appropriate action.
- J: Indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.
- : Indicates compound was analyzed for but not detected. Refer to Appendix D for detection limit.
- X or T: Mass spectrum does not meet CLP criteria for confirmation, but compound presence is strongly suspected.
- E: This flag is used to indicate that the quantitation of the analyte is outside the curve and that dilution was required to properly quantitate.
- D: Flag is used to indicate the value for the target analyte was calculated from a dilution (see E flag above).
- Y: Flag used when a matrix spike compound is also confirmed present in the unspiked sample.
- R: Data Validation recommends that this value be rejected due to blank contamination.
- @: This value, due to spreadsheet characteristics, appears as boxed. The value DOES NOT exceed quoted standards.
- NS: No standard or guidance value established.
- F: Surrogate recovery values were outside the CLP criteria windows. Value is considered an estimated concentration.
- NA: Not analyzed.
- Values bolded and/or boxed exceed quoted standards.

**DATA QUALIFIERS (METALS):**

- B: Reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U or —: Reported value is less than IDL.
- N: Spiked sample recovery not within control limits.
- \*: Duplicate analysis (Relative Percent Difference) not within control limits.
- W: Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- S: The reported value was determined by the Method of Standard Additions (MSA).
- ±: Correlation coefficient for the MSA is less than 0.995.
- E: Reported value is estimated because of the presence of interference.
- M: Duplicate injection precision not met.
- @: This value, due to spreadsheet characteristics, appears as boxed. The value DOES NOT exceed quoted standards.
- NS: No standard or guidance value established.
- NA: Not analyzed.
- Values bolded and/or boxed exceed quoted standards.

February 1993  
Sampling Round

TABLE 2  
DETECTABLE ANALYTICAL RESULTS  
GROUND WATER SAMPLES

STRIPPIT, INC.  
AKRON, NEW YORK

COMPOUND	UNITS	MONITORING WELL SAMPLE NUMBER				
		GW-1	GW-2	GW-3	GW-4	GW-5
acetone	µg/l	10 U	17	10 U	10 U	30
phenol	µg/l	10 U	12	10 U	10 U	10 U
phenanthrene	µg/l	10 U	10 U	10 U	10 U	1 J
Total aluminum	µg/l	247	389	1090	8260	1550
Soluble aluminum	µg/l	48.9 U	327	48.9 U	48.9 U	51.6 B
Total barium	µg/l	116 B	466	77.8 B	124 B	114 B
Soluble barium	µg/l	102 B	409	1.1 U	36.8 B	107 B
Total iron	µg/l	181	89.6 B	1460	11,300	1680
Soluble iron	µg/l	5.3 B	21.8 B	5.3 U	5.3 U	26.5 B
Total magnesium	µg/l	9720	129 U	30,000	66,700	3560 B
Soluble magnesium	µg/l	8520	129 U	129 U	65,000	153 B
Total manganese	µg/l	3.3 B	1.6 B	127	224	37.8
Soluble manganese	µg/l	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total vanadium	µg/l	13.6 U	13.6 U	13.6 U	15.9 B	13.6 U
Soluble vanadium	µg/l	13.6 U	13.6 U	13.6 U	13.6 U	15.6 B
Total zinc	µg/l	5.1 B	10.2 B	12.0 B	31.6	32.2
Soluble zinc	µg/l	16.8 B	47.9	2.8 U	3.2 B	4.0 B

NOTE:

U - compound analyzed but not detected

J - estimated concentration of organic compound which is less than the sample quantitation limit but greater than zero

B - concentration of inorganic compound that is less than the contract required detection limit, but greater than the instrument detection limit

### Field Parameters

- Water level
- pH
- Specific conductance
- Turbidity
- Temperature

### Analytical Laboratory Parameters

- Volatile organic compounds (USEPA Method 8240)
- Semi-volatile organic compounds (USEPA Method 8270: acid extractable only)
- Total barium
- Soluble barium
- Total iron
- Soluble iron
- Total magnesium
- Soluble magnesium

At the request of the NYSDEC, the following parameters will also be included.

- Total manganese
- Soluble manganese
- Total cyanides
- Soluble cyanides

Analytical laboratory testing will be done by a laboratory approved by the New York State Department of Health (NYSDOH) to test for the above parameters. The specific laboratory proposed will be identified prior to the sample event. Laboratory deliverables will be in accordance with NYSDEC Analytical Service Protocols (ASP), September 1989 (Revised 12/91). An ASP Category A data package will be submitted for each of the quarterly sampling rounds. During the fourth sampling round, Category B QA/QC procedures will be implemented. However, a Category B data package will only be submitted if the QA/QC results indicate a potential problem with the test data. If discrepancies are noted, the data package will include information for the impacted group of parameters (e.g., if metals are determined to be a problem the Category B data package for metals will be submitted and the Category A data package will be provided for the other fractions).

## **2.3 Sampling Frequency**

Initially, samples will be collected quarterly, beginning within thirty (30) days of the NYSDEC's acceptance/approval of this post-closure monitoring and maintenance plan. Test parameters and sample frequency will be reviewed annually by Strippit and NYSDEC. If appropriate, the test parameter list and/or sample frequency will be adjusted at this time. It is expected that the post-closure groundwater monitoring will continue for a period of thirty (30) years or a shorter period mutually agreed to by Strippit and NYSDEC.

## **2.4 Sampling Procedures**

Groundwater samples will be collected utilizing the following procedures:

1. Initially, pertinent information will be completed on the monitoring well sampling logs (see example log on the next page) for each of the wells to be sampled.
2. The condition of the well casing and surrounding surface seal will be observed and any deficiencies noted on the sampling log.
3. An electronic tape water level indicator will be used to measure the depth of the top of the water within the well casing and to the bottom of the well. These measurements will be noted on the sampling log. The affected portion of the electronic tape will be wiped clean and rinsed with distilled water prior to measurements in other monitoring wells.
4. A centrifugal pump equipped with disposable polyethylene tubing, or other suitable method, will be used to purge a minimum of three well volumes (as determined based on the measurements made in Step 3) from each well. To reduce turbulence and to assure that the entire water column is pumped, the HPDE tubing will only be placed several feet into the top of the water table and the pump rate will be adjusted to preclude draw down beneath the tubing. Purge water collected will be initially placed in a calibrated 5-gallon bucket and discharged on the ground surface in proximity to the well head when full.
5. The amount of water purged and the corresponding water volume removed from the well will be recorded on the sampling log.
6. Following purging and recovery of water within the well to within 10% of its static level, samples will be collected for analytical testing. These samples will be collected utilizing a separate disposable HPDE bailer attached to a monofilament cord for each well. The initial sample retrieved by the bailer will be used to fill 40 ml containers designated for volatile organic compound testing. Subsequent bailers will be used to randomly fill containers for other parameters.

**DAY ENGINEERING  
MONITORING WELL SAMPLING LOG**

MW - ID#: \_\_\_\_\_

**SECTION 1**

**SITE LOCATION:** \_\_\_\_\_ **JOB #:** \_\_\_\_\_  
**PROJECT NAME:** \_\_\_\_\_ **DATE :** \_\_\_\_\_  
**SAMPLE COLLECTOR(S):** \_\_\_\_\_  
**WEATHER CONDITIONS:** \_\_\_\_\_

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** \_\_\_\_\_ (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** \_\_\_\_\_ (MEASURED FROM T.O.C.)  
**HEIGHT OF WATER COLUMN [FT]:** \_\_\_\_\_ (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** \_\_\_\_\_ ; **CASING DIA.** \_\_\_\_\_

**CALCULATIONS:**

CASING DIA.(FI)	WELL CONSTANT(GAL/FI)
2" (0.1667)	0.1632
4" (0.3333)	0.6528
6" (0.5000)	1.4688

**CALCULATIONS**

VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN  
x WELL CONSTANT

**CALCULATED PURGE VOLUME [GAL]:** \_\_\_\_\_ (3 - 5 TIMES CASING VOLUME - SPECIFY)  
**ACTUAL VOLUME PURGED [GAL]:** \_\_\_\_\_  
**PURGE METHOD:** \_\_\_\_\_ **PURGE START:** \_\_\_\_\_ **END:** \_\_\_\_\_

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uMHOS/CM)	TURBIDITY (NTU)	VISUAL	PID/FID READING

**COMMENTS:**

FILE:W15M1

7. During the sample collection, a field sample will be collected for the in-situ testing of pH, specific conductance, temperature and turbidity. These parameters will be tested utilizing the following equipment (or similar) which will be calibrated according to manufacturers requirements before use.
- Ph: Cole-Parmer Model 05985-80 Digi-Sensepit Ph Meter
  - Specific conductance and temperature: Cole-Parmer Model 1481-5 Conductivity/Temperature Meter
  - Turbidity: LaMotte Model 2008 Turbidity Meter
8. Samples collected for analytical testing will be placed in containers provided by the analytical laboratory. A label will be completed for each container including a unique sample identification code. A typical code to be used is presented below:
- 2430-09014-GW1
- Where:
- 2430 = job designation  
09014 = sample date  
GW1 = sample location
9. Following collection and labeling of the sample containers, they will be placed in a plastic cooler containing ice. At the completion of the sample round, these coolers will be transported to the analytical laboratory following chain-of-custody protocols to document a continuous chain of possession. A typical chain-of-custody form to be completed is included on the following page.
10. The analytical laboratory will be contacted the day following the sampling event to assure that the containers were received and that they are adequate for testing (i.e., no broken containers, sufficient labeling, etc.)

## **2.5 QA/QC Samples**

In addition to the samples collected from the monitoring wells, the following samples will also be analyzed during each sample round.

### Field Samples

- One (1) duplicate sample
- One (1) trip blank sample

Note: Since disposable equipment will be used to collect samples, no field rinse blank samples will be required.

[illegible]

### Laboratory Samples

- **Category A**  
The daily method blank sample results for each fraction tested (i.e., volatiles, semi-volatiles and metals) will be reported.
- **Category B** (These samples will be tested during the fourth sampling round. If discrepancies are detected, a Category B data package will be submitted.)
  - One (1) method blank
  - One (1) matrix spike
  - One (1) matrix spike duplicate

The field duplicate sample will be collected from one of the monitoring wells and labeled such that the analytical laboratory is unaware of the sample's origin. This sample will be analyzed for the same list of parameters as the monitoring well samples.

The trip blank sample will consist of a 40 ml vial filled with deionized water. This sample will be prepared by the analytical laboratory and delivered with the complete set of sample containers. The trip blank sample will be carried throughout the sample round and handled similar to other analytical samples. The trip blank sample will be analyzed for the volatile organic fraction only.

### **2.6 Reporting**

Following receipt of the analytical results for each quarterly sample round, a report will be prepared and submitted to NYSDEC. This report will include the following:

- a narrative section describing the sampling event and discussing the results, particularly with respect to variations and potential trends when compared to previous results;
- tables summarizing groundwater elevation measurements and in-situ test results;
- copies of field sampling logs prepared for each well; and
- a copy of the complete report submitted by the analytical laboratory (including required ASP deliverables).

An annual summary report will be submitted that summarizes the results of the quarterly sampling rounds. The annual report will be submitted following receipt of the test results from the fourth quarter sampling event. This report will include a table presenting the quarterly analytical test results and groundwater level measurements. Additionally, as an



adequate data base is developed a statistical evaluation comparing upgradient and downgradient test results will be presented in this report. The statistical evaluation will utilize a Student's T-test at the 0.05 level of significance (or other appropriate method) to determine statistically significant increases. For purpose of comparison, the measure of the mean and variance at each downgradient point will be determined and these values will be compared to background conditions. Background conditions will be based upon an average of existing parameter concentrations plus measurements made during the preceding year.

In the event a statistically significant change is determined, the NYSDEC will be notified. Strippit and NYSDEC will meet to assess the significance of the change and to determine whether, and to what extent, the groundwater program should be modified.

### **3.0 MAINTENANCE PLAN**

The integrity of the cover system and monitoring well network will be evaluated each time groundwater samples are collected. This evaluation will include an observation of the cap, particularly side slope areas, for evidence of sloughing, cracking, erosion, settlement, stressed vegetation, and the presence of seeps. Additionally the vegetative cover will be observed to assure adequate growth and the drainage trench inspected for evidence of blockage or other potential problems. Since a crown vetch cover is planned for the Site, it is not expected that cutting or other maintenance of the vegetative cover will be required.

The results of the quarterly monitoring and the resolution of problems noted (if any) will be submitted to NYSDEC in conjunction with the groundwater sampling report. A example of typical quarterly monitoring report to be completed and submitted is included on the next page. Depending upon the results of this inspection process, the inspection frequency may be altered after one (1) year. The NYSDEC will be consulted if a modified schedule is deemed appropriate.

#### **3.1 Site Inspection and Maintenance**

Site inspections and maintenance/repairs to be undertaken to assure proper function of the cover system are discussed in the following sections.

##### **3.1.1 Sloughing**

Areas of sloughing can occur in topsoil and barrier soil layers. If areas requiring remediation are observed, they will be repaired in accordance with the requirements of the IRM.

##### **3.1.2 Cracks**

The location and size (width, length, and depth) of cracks (if encountered) will be documented on the inspection log. A site sketch, showing the approximate location and orientation of cracks will also be prepared and submitted. Inspection for cracks is particularly important after extended dry periods.

The appropriate maintenance procedure depends on the size and depth of the crack. Small shallow cracks in the topsoil will be repaired via minor regrading of the cracked area and reseeding. Larger cracks that appear to extend into the compacted barrier soil will be filled with low permeability soil, covered with topsoil and reseeded.

**LONG-TERM QUARTERLY MONITORING REPORT  
INTERIM REMEDIAL MEASURE  
STRIPPIT, INC.  
AKRON, NEW YORK**

Date of Inspection: \_\_\_\_\_

Inspected By: \_\_\_\_\_

Summary of Observation:

General Condition of Cover: \_\_\_\_\_

\_\_\_\_\_

Evidence of Erosion, sloughing or other degradation: ☐ Yes ☐ No

Explain: \_\_\_\_\_

\_\_\_\_\_

Evidence of cracking: ☐ Yes ☐ No

Explain (include measurements and site sketch): \_\_\_\_\_

\_\_\_\_\_

Evidence of water seepage: ☐ Yes ☐ No

Explain: \_\_\_\_\_

\_\_\_\_\_

Evidence of Settlement: ☐ Yes ☐ No

Explain: \_\_\_\_\_

\_\_\_\_\_

Condition of monitoring wells and gas wells: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Condition of Vegetative Cover: \_\_\_\_\_  
\_\_\_\_\_

Condition of drainage ways (discuss amount of water/sediments present, vegetative growth, unusual staining, blockage, etc.) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Additional Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Action Item(s) Required: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Action Item(s) completed since last inspection: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signatures: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### **3.1.3 Erosion**

Erosion features such as gullies can be a problem on portions of cover systems where the slope exceeds five percent. The cover system is especially susceptible to gulling when it has no vegetation, so gully erosion processes have an advantage in the time before vegetation is mature. Shallow gullies will be repaired by backfilling to the original grade with topsoil and reseeding. Deeper gullies require topsoil removal, cap reconstruction, topsoil replacement and reseeding. If gullies continue to develop in a particular area then an alternative method of repair will be required. This may include placing coarse stone in the gully to limit future erosion.

### **3.1.4 Settlement**

Settlement features such as depressions and puddles will be regraded by placing additional cover soil such that surface water drains to the appropriate direction. Areas of settlement may be regraded using topsoil. Vegetative cover will be established over each area repaired.

### **3.1.5 Stressed Vegetation**

Chronically weak and vulnerable vegetation sometimes signals a need for a revitalization of a vegetative soil layer. The characteristics of possible concern are:

- a. Texture
- b. Water-holding properties and drainage
- c. Nutrient content
- d. Accumulations of gases
- e. Accumulations of toxic salts

If deemed necessary, samples of the topsoil will be taken and tested for pH and organic content. The soil will then be reconditioned as appropriate, mulched and seeded. If this procedure does not result in establishment of a suitable cover, then further evaluation of the cause for the stress will be made and an appropriate solution proposed to NYSDEC.

### **3.1.6 Seepage**

If conditions indicative of seepage such as wet spots, precipitate, or surface sloughing are observed during the inspection, then further investigation is warranted to evaluate the condition the determine the appropriate remedial measure(s).

## **3.2 Monitoring Wells**

All monitoring wells will be inspected at the time of sampling for signs of damage and tampering. The following is a list of items to check during monitoring well inspections.

- Positive identification of well;
- Protective casing intact and perpendicular to ground surface;
- Concrete surface seal intact;
- Lock present; and
- Riser cap present;
- Condition of paint.

The condition of the wells will be noted on the inspection form. Well repair/maintenance will be done as necessary to maintain the integrity of the wells. In the event wells are found to be unsuitable for the collection of samples, they will be repaired/replaced, as necessary. Should such determinations be made, the NYSDEC will be consulted.

### **3.3. Inspections Following a Significant Earthquake**

Should a significant earthquake occur that could potentially impact the Site, an inspection following the format outlined herein will be done as soon as practical. Depending upon conditions encountered, emergency response actions will be implemented as necessary (e.g., construction of temporary berms to reduce exfiltration/drainage). Thereafter, long-term corrective actions will be undertaken to restore the Site to its condition prior to the earthquake.

#### **4.0 NOTIFICATIONS AND EMERGENCY RESPONSE**

In the event of an emergency at the Site and/or a condition that warrants immediate attention, the following individual shall be notified:

Mr. Robert Johnson  
Strippit, Inc.  
A Unit of IDEX Corporation  
12975 Clarence Center Road  
Akron, New York 14001  
Telephone #: (716) 542-4511

If Mr. Johnson is not available, Mr. Greg Selip should be contacted. Mr. Selip can be contacted at the address and telephone number listed above.

Problems encountered during sampling events and/or Site inspections shall be reported to the NYSDEC as soon as practical. The NYSDEC contact person is listed below.

Jaspal S. Walia  
Environmental Engineering II  
New York State Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, New York 14203  
Telephone #: (716) 851-7220

Copies of quarterly and annual reports generated shall also be transmitted to the above individual, as soon as they are available.

## **5.0 REPORTING TO THE COMMUNITY**

The IRM is complete and will perform its remedial functions passively over time. Moreover, there was little community interest in the development of the IRM and its construction. Consequently, Strippit will not report to the community on any systematic or regular periodic basis concerning the performance of the IRM. Instead, Strippit will rely on the NYSDEC to provide whatever reports or communications to the community it determines are appropriate under the circumstances. However, Strippit will provide appropriate reports to the community concerning any significant developments concerning the performance of the IRM.



## 6.0 REFERENCES

The following documents were referenced in the development of this "Post-Closure Monitoring and Maintenance Plan; Interim Remedial/Measure; Strippit, Inc.; Akron, New York".

- "Engineering Investigations at Inactive Hazardous Waste Sites, Phase II Investigations, Houdaille-Industries-Strippit Division, Village of Akron, Site No. 915053, Erie County' March 1991" prepared by Engineering-Science.
- "Field Investigation Report, Strippit, Inc., Akron, New York, DEC Site No. 915053; July 1993" prepared by Day Engineering, P.C.
- "Interim Remedial Measure Work Plan, Strippit, Inc., Akron, New York, DEC Site No. 915053; October 1993" prepared by Day Engineering, P.C.
- "Site Specific Health & Safety Plan; Strippit, Inc.; Akron, New York; DEC Site No. 91503" July 1994; prepared by Haseley Trucking Co., Inc.
- "Quality Assurance/Quality Control; Interim Remedial Measure; Strippit, Inc.; Akron, New York" August 1994; prepared by Day Engineering, P.C.
- "Construction Documentation Report Interim Remedial Measure, Strippit, Inc.; Akron, New York" December 1994; prepared by Day Engineering, P.C.

**APPENDIX A**

**BORING LOGS/WELL INSTALLATION DIAGRAMS**

Contractor: KDC  
 Driller: Steve Kahn  
 Inspector: D. Nickerson  
 Rig Type: Mobile B-61  
 Drilling Method: 6 5/8" HSA

# ENGINEERING-SCIENCE DRILLING RECORD

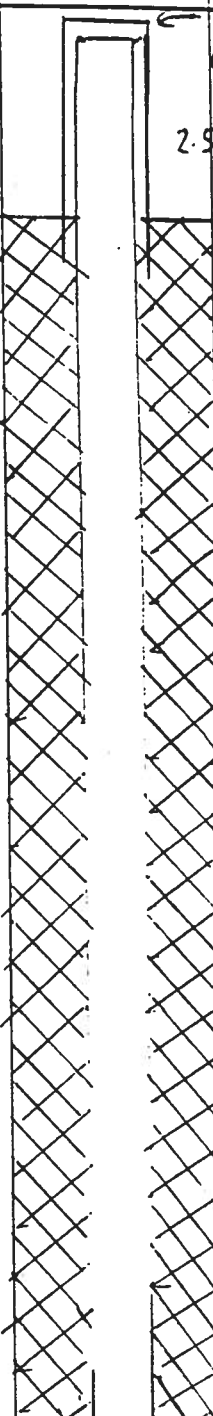
BORING NO. GW-1  
 Sheet 1 of 3  
 Location approx 200' W. of  
geophysics reference hole in open  
field to the west of the landfill area

PROJECT NAME Houmaille  
 PROJECT NO. SYD 53.09 00

GROUNDWATER OBSERVATIONS  
 Water Level 38.1' T.O.C. 38.14'  
 Time 8:10 8:44  
 Date 5/22 6/7

Weather: Sunny 50°  
 Date/Time Start 5/17/90 3:45 pm  
 Date/Time Finish 5/21/90 4:30 pm

Plot Plan  
SEE sample location  
map FIGURE III-1

Photo Number	Sample ID	Sample Depth	% Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				55			
0		0-2'	30	5	dark silty soil with organic debris, wet		Protective casing with lock 2.5' stick-up 0'
				8			
				5			
				6			
0		5-7'	65	20	brown fine-med sand with a trace of silt and a little fine to coarse gravel, moist to dry  (upper sandy till)		
				34			
				51			
				74			
0		10-11.5'	60	40			
				61			
				100			
0		15-16.5'	65	15			
				25			
				28			

STANDARD PENETRATION TEST SUMMARY 0-3' ⇒ Soil  
3-14' ⇒ Sandy till  
 SS = SPLIT SPOON A = AUGER CUTTINGS C = CORED

**SUMMARY** 18-30'  $\Rightarrow$  Sandy fill  
30-39'  $\Rightarrow$  Silty fill

Penetration Reading	Sample ID	Sample Depth	% Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
0		40-42'	90	13	(lower silty till)		Cement bentonite mix ↓
				23			
				27			
				35			
0		45-47'	75	18	↓		46.5' Bentonite Seal
				31			
				45			
				50			
0		48-50	2	19	50'		48.5' Sand pack
				17			
				80			
				105			
0		50-52'	60	31	fine brown sand and silt Saturated		50' 5' prepack Screen
				33			
				47			
				51			
0		52-54'	95	15	55'		55' 55' well bottom
				32			
				39			
				100			

## SUMMARY

$39 - 50' \Rightarrow 5,174 \text{ ft}$

50 - 55'  $\Rightarrow$  fine brown sand and silt

WELL INSTALLATION CHECKLIST  
PHASE II INVESTIGATIONS

g1

Site Name: Houdaille Stripit  
Job Number: 59053.09 00  
Boring Number: GW-1

Date: 5-21-90  
By: D. Nickerson

\*\*\*\*\*

Depth of Hole: 55' Comments  
Diameter of Hole: 11"

ALL MATERIALS INSPECTED PRIOR TO INSTALLATION?  
Yes X No       

SCREEN

Material: prepacked PVC 2" ID inside 4" ID Sch. 40  
Slot Size: 0.01"  
Length: 5'  
Threaded: Yes X No       

RISER PIPE

Material: PVC 2" ID Sch. 40  
Total Length of Well - Screen Length = 53' (includes 3' stick-up)  
Threaded: Yes X No       

END CAP

Material: PVC  
Threaded: Yes X No       

ALL JOINTS TEFLON TAPED: Yes        No X

TOTAL LENGTH OF WELL CASING (Includes screen and stick-up.)  
58'

SAND PACK

Type/Size: #4 G ROK Around prepacked screen  
Amount (Calculated): 200 lb  
Amount (Actual): 200 lb  
Installed with Tremie: Yes        No X

BENTONITE SEAL(S):

Type/Size: pellets 3/4"  
Amount (Calculated): 100 lb  
Amount (Actual): 100 lb

Installed with Tremie: Yes        No X

Secondary Seal(s) Used: Yes        No X

Explain:

WELL INSTALLATION CHECKLIST  
PHASE II INVESTIGATIONS

192

94 lbs cement / 31 lbs bentonite

GROUT/CEMENT

Mixture (#Cement/#Bentonite): \_\_\_\_\_

Mixture (Gal. water/#dry mix): 7 gal. water / 97 lb dry mix

Amount (calculated): 130 gal.

Amount (actual): 130 gal

Installed with TREMIE: Yes \_\_\_\_\_ No X

LOCKING PROTECTIVE CASING INSTALLED:

Yes X No \_\_\_\_\_

Locked immediately after installation: Yes X No \_\_\_\_\_

Grout sloped at surface to allow run-off: Yes X No \_\_\_\_\_

Drain hole drilled prior to development: Yes X No \_\_\_\_\_

Stick-up: 2.63'

ANY FOREIGN OBJECTS LOST IN THE WELL:

Yes \_\_\_\_\_ No X

If yes:

(1) What was lost:

(2) Depth:

(3) Stage of well installation:

(4) Was object retrieved: Yes \_\_\_\_\_ No \_\_\_\_\_

(All or part/how):

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

WELL CAPPED: Yes X No \_\_\_\_\_

WELL IDENTIFIED: Yes X No \_\_\_\_\_

DISPOSAL OF CUTTINGS:

Left in pile: \_\_\_\_\_

Spread out: \_\_\_\_\_ (Hnu reading: \_\_\_\_\_ ppm)

Containerized: \_\_\_\_\_

Other: Containerized and moved to landfill

DISPOSAL OF FLUIDS:

Run off on ground surface: X

Containerized: \_\_\_\_\_

Other: \_\_\_\_\_

D. Hickman

Engineering-Science  
Representative

5-16-90



STANDARD PENETRATION TEST	SUMMARY	0-6' => Soil / fill
SS = SPLIT SPOON A = AUGER CUTTINGS C = CORED		9-18' => Sandy fill

SS = SPLIT SPOON A = AUGER CUTTINGS C = CORED

Contractor: <u>KDC</u>		ENGINEERING-SCIENCE DRILLING RECORD		BORING NO. <u>6W-2</u>	
Driller: <u>Steve Kuhn</u>				Sheet <u>3</u> of <u>4</u>	
Inspector: <u>D. Nickerson</u>		PROJECT NAME <u>Houdaille</u>		Location _____	
Rig Type: <u>Mohawk B-61</u>		PROJECT NO. <u>54053.09.00</u>			
Drilling Method: <u>6 5/8" HSA</u>					
GROUNDWATER OBSERVATIONS		Weather: <u>Cloudy 52°</u>		Plot Plan	
Water Level		Date/Time Start <u>5/25/90 8:45 am</u>			
Time		Date/Time Finish <u>5/25/90 10:45 am</u>			
Date					

Photo Reading	Sample ID	Sample Depth	% Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
					↓		
0		40-41'	70	6	Brown silt and fine gravel with a little v. fine sand and trace of clay, moist (lower till)		Cement/ bentonite mix
				29			
				14			
				71			
0		45-46'	0	8			
				13			
				14			
				32			
0		50-52'	90	47	↓		56.0'  bentonite seal
				22			
				25			
				29			
0		53-55'	50	14			
				11			
				17			
				21			
0		55-57'	65	6			
				13			
				18			
				22			
0		58-60'	65	9			
				16			
				18			
				22			
					↓		
					60'		59.5'

STANDARD PENETRATION TEST	SUMMARY <u>40-60' ⇒ silty till</u>
SS = SPLIT SPOON A = AUGER CUTTINGS C = CORED	

Cor.-actor: <u>RDC</u> Driller: <u>Steve Kahn</u> Inspector: <u>C. Nickerson</u>				<b>ENGINEERING-SCIENCE DRILLING RECORD</b>				BORING NO. <u>GW-2</u> Sheet <u>4</u> of <u>4</u>			
Rig Type: <u>Mobile B-61</u> Drilling Method: <u>6 5/8" USA</u>				PROJECT NAME <u>Houdaille</u> PROJECT NO. <u>SY053.09.00</u>				Location _____			
<b>GROUNDWATER OBSERVATIONS</b>				Weather: <u>Cloudy 52°</u>				Plot Plan			
Water Level _____				Date/Time Start <u>5/23/90 8:45 am</u>							
Time _____				Date Time Finish <u>5/25/90 10:40 am</u>							
Date _____											

## STANDARD PENETRATION TEST

SS = SPLIT SPOON A = AUGER CUTTINGS C = CORED

WELL INSTALLATION CHECKLIST  
PHASE II INVESTIGATIONS

61

Site Name: Houdaille Str. pp. IT  
Job Number: SYOS3 09 00  
Boring Number: GW - 2

Date: 5/28/90  
By: WD L. Hwy

\*\*\*\*\*

Comments

Depth of Hole: 70'

Diameter of Hole: 11"

ALL MATERIALS INSPECTED PRIOR TO INSTALLATION?

Yes X No       

SCREEN

Material: 2" ID SCH 40 PVC

Slot Size: 0.01"

Length: 10

Threaded: Yes X No       

RISER PIPE

Material: 2 1/2" PVC SCH 40

Total Length of Well - Screen Length = 60

Threaded: Yes X No       

END CAP

Material: 2" PVC

Threaded: Yes X No       

ALL JOINTS TEFLON TAPED: Yes        No X

TOTAL LENGTH OF WELL CASING (Includes screen and stick-up.)

SAND PACK

Type/Size: #40 Rm

Amount (Calculated): 500 #

Amount (Actual): 300 #

Installed with Tremie: Yes        No X

BENTONITE SEAL(S):

Type/Size: Bentonite

Amount (Calculated): 50 #

Amount (Actual): 50 #

Installed with Tremie: Yes X No       

Secondary Seal(s) Used: Yes        No X

Explain:

192

WELL INSTALLATION CHECKLIST  
PHASE II INVESTIGATIONS

GROUT/CEMENT

Mixture (#Cement/#Bentonite): 94 # cement / 3 # bentonite  
Mixture (Gal. water/#dry mix): 7 gal H<sub>2</sub>O / 97 # dry mix  
Amount (calculated): 120 gal  
Amount (actual): 120 gal  
Installed with TREMIE: Yes X No     

LOCKING PROTECTIVE CASING INSTALLED:

Yes X No       
Locked immediately after installation: Yes X No       
Grout sloped at surface to allow run-off: Yes X No       
Drain hole drilled prior to development: Yes X No       
Stick-up: 2'

ANY FOREIGN OBJECTS LOST IN THE WELL:

Yes      No X

If yes:

(1) What was lost:

(2) Depth:

(3) Stage of well installation:

(4) Was object retrieved: Yes      No     

(All or part/how):  
\_\_\_\_\_  
\_\_\_\_\_

WELL CAPPED: Yes X No     

WELL IDENTIFIED: Yes X No     

DISPOSAL OF CUTTINGS:

Left in pile: X  
Spread out:                      (Hnu reading:          ppm)  
Containerized:                       
Other:                     

DISPOSAL OF FLUIDS:

Run off on ground surface: X  
Containerized:                       
Other:                     

                      
Engineering-Science  
Representative

5/25/90

Contractor: <u>Reckster Drilling</u>		<b>ENGINEERING-SCIENCE DRILLING RECORD</b>		BORING NO. <u>GW-3</u>	
Driller: <u>Steve Kahn</u>				Sheet <u>1</u> of <u>3</u>	
Inspector: <u>D. Nickerson</u>		PROJECT NAME <u>Houdaille Stripit</u>		Location <u>approx 175' NW</u>	
Rig Type: <u>Mobile B-61</u>		PROJECT NO. <u>5253.09.00</u>		of NW corner of building	
Drilling Method: <u>6 5/8" ID HSA</u>				(see trace)	
GROUNDWATER OBSERVATIONS		Weather: <u>cool, windy, 50°, cloudy</u>		Plot Plan	
Water Level	<u>30.9' from</u> <u>T.O.C.</u>	<u>31' T.O.C.</u>	Date/Time Start	<u>5-11-90 0830</u>	
Time	<u>830</u>	<u>1115</u>	Date/Time Finish	<u>5-14-90 1500</u>	
Date	<u>5-15</u>	<u>5-22</u>			

[illegible]

## STANDARD PENETRATION TEST

SS = SPLIT SPOON A = AUGER CUTTINGS C = CORED

SUMMARY 0-4' Soil / parking lot fill  
4-12' Silty fill, moist





[illegible]

SUMMARY 19-40'  $\Rightarrow$  silt & fill (drv)  
40-50'  $\Rightarrow$  brown fine sand, trace silt

WELL INSTALLATION CHECKLIST  
PHASE II INVESTIGATIONS

192

GROUT/CEMENT

Mixture (#Cement/#Bentonite): 94 lb cement / 31 lb bentonite  
Mixture (Gal. water/#dry mix): 7 gal. H<sub>2</sub>O / 97 lb. dry mix  
Amount (calculated): 30 gal  
Amount (actual): 30 gal  
Installed with TREMIE: Yes X No     

LOCKING PROTECTIVE CASING INSTALLED:

Yes X No       
Locked immediately after installation: Yes X No       
Grout sloped at surface to allow run-off: Yes X No       
Drain hole drilled prior to development: Yes X No       
Stick-up: 2.1'

ANY FOREIGN OBJECTS LOST IN THE WELL:

Yes      No X

If yes:

- (1) What was lost:
- (2) Depth:
- (3) Stage of well installation:
- (4) Was object retrieved:

Yes      No     

(All or part/how):

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

WELL CAPPED: Yes X No     

WELL IDENTIFIED: Yes X No     

DISPOSAL OF CUTTINGS:

Left in pile: \_\_\_\_\_  
Spread out: \_\_\_\_\_ (Hnu reading: \_\_\_\_\_ ppm)  
Containerized: \_\_\_\_\_  
Other: Moved to landfill area

DISPOSAL OF FLUIDS:

Run off on ground surface: ✓  
Containerized: \_\_\_\_\_  
Other: \_\_\_\_\_

David C. Nickerson  
Engineering-Science  
Representative

5-14-90

WELL INSTALLATION CHECKLIST  
PHASE II INVESTIGATIONS

g1

Site Name: Houdaille Stripit  
Job Number: SY053.09.00  
Boring Number: GW-3

Date: 5-14-90  
By: D. Nickerson

\*\*\*\*\*

Depth of Hole: 50'

Comments

Diameter of Hole: 11"

ALL MATERIALS INSPECTED PRIOR TO INSTALLATION?

Yes X No     

SCREEN

Material: Pvc sch 40 2" ID

Slot Size: 0.01"

Length: 10'

Threaded: Yes X No     

RISER PIPE

Material: PVC sch 40 2" ID

Total Length of Well - Screen Length = 42' (includes 2' stick up)

Threaded: Yes X No     

END CAP

Material: PVC

Threaded: Yes X No     

ALL JOINTS TEFLON TAPED: Yes      No X

TOTAL LENGTH OF WELL CASING (Includes screen and stick-up.)

52'

SAND PACK

Type/Size: #4 G ROK

Amount (Calculated): 400 lb

Amount (Actual): 400 lb

Installed with Tremie: Yes      No X

BENTONITE SEAL(S):

Type/Size: pellets 3/4 Size

Amount (Calculated): 100 lbs

Amount (Actual): 100 lbs

Installed with Tremie: Yes      No X

Secondary Seal(s) Used: Yes      No X

Explain:

Contractor: <u>KDC</u>	<b>ENGINEERING-SCIENCE DRILLING RECORD</b>	BORING NO. <u>GW-4</u>
Driller: <u>Steve Kahn</u>		Sheet <u>1</u> of <u>3</u>
Inspector: <u>D. Nickerson</u>	PROJECT NAME <u>Houdaille</u>	Location <u>approx 60' SE of</u>
Rig Type: <u>Mobile R-61</u>	PROJECT NO. <u>54053.04.00</u>	<u>SE corner of Stripat building</u>
Drilling Method: <u>6 3/8" HSA</u>		
GROUNDWATER OBSERVATIONS		Plot Plan
Water Level <u>35.65' T.O.C (pvc) 35.15'</u>	Weather: <u>Rain 65°</u>	<u>See sample</u>
Time <u>11:15</u>	Date/Time Start <u>5/15/90 9:15 am</u>	<u>location map</u>
Date <u>5-22</u>	Date Time Finish <u>5/16/90 1:00 pm</u>	<u>FIGURE III-1</u>

Photores Reading	Sample ID	Sample Depth	% Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				55			
0	SS-1	0-2'			Auger Cuttings brown sandy and silty soil with organic debris and some medium gravel, moist		protective casing with lock 2' stick up
20.8	SS-1	5-7'	60	20 33 44 51	brown fine - v. fine sand, little silt, some fine gravel (moist)		
8.2	SS-1	10-12'	35	20 30 46 56	(upper till)		
12	SS-1	15-17'	70	10 14 16 20			

STANDARD PENETRATION TEST

SS = SPLIT SPOON A = AUGER CUTTINGS C = CORED

SUMMARY 0-3' soil3-18' → Sandy fill



[illegible]

layers of fine to  
wet sand & silt and t

WELL INSTALLATION CHECKLIST  
PHASE II INVESTIGATIONS

61

Site Name: Houdaille Stripit  
Job Number: SY053.09.00  
Boring Number: GW-4

Date: 5-16-90  
By: D. Nickerson

\*\*\*\*\*

Depth of Hole: 50'

Comments

Diameter of Hole: 11"

ALL MATERIALS INSPECTED PRIOR TO INSTALLATION?

Yes X No       

SCREEN

Material: 2" 10 SCH 40 PVC

Slot Size: 0.01"

Length: 10'

Threaded: Yes X No       

RISER PIPE

Material: PVC sch 40

Total Length of Well - Screen Length = 42' (includes 2' stick up)

Threaded: Yes X No       

END CAP

Material: PVC

Threaded: Yes X No       

ALL JOINTS TEFLON TAPED: Yes        No X

TOTAL LENGTH OF WELL CASING (Includes screen and stick-up.)

52'

SAND PACK

Type/Size: # 40 ROK

Amount (Calculated): 500 lbs

Amount (Actual): 500 lbs

Installed with Tremie: Yes        No X

BENTONITE SEAL(S):

Type/Size: pellets 3/8"

Amount (Calculated): 50 lbs

Amount (Actual): 50 lbs

Installed with Tremie: Yes        No X

Secondary Seal(s) Used: Yes        No X

Explain:

WELL INSTALLATION CHECKLIST  
PHASE II INVESTIGATIONS

192

GROUT/CEMENT

Mixture (#Cement/#Bentonite): 941b Cement / 31b bentonite  
Mixture (Gal. water/#dry mix): 7 gal. water / 97 lb dry mix  
Amount (calculated): 130 gal.  
Amount (actual): 130 gal  
Installed with TREMIE: Yes      No X

LOCKING PROTECTIVE CASING INSTALLED:

Locked immediately after installation: Yes X No       
Grout sloped at surface to allow run-off: Yes X No       
Drain hole drilled prior to development: Yes X No       
Stick-up: 1.92'

ANY FOREIGN OBJECTS LOST IN THE WELL:

Yes      No X

If yes:

- (1) What was lost:
- (2) Depth:
- (3) Stage of well installation:
- (4) Was object retrieved: Yes      No

(All or part/how):  
\_\_\_\_\_  
\_\_\_\_\_

WELL CAPPED: Yes X No     

WELL IDENTIFIED: Yes X No     

DISPOSAL OF CUTTINGS:

Left in pile: \_\_\_\_\_  
Spread out: ✓ (Hnu reading: 0 ppm)  
Containerized: \_\_\_\_\_  
Other: \_\_\_\_\_

DISPOSAL OF FLUIDS:

Run off on ground surface: ✓  
Containerized: \_\_\_\_\_  
Other: \_\_\_\_\_

D. Dickerson

Engineering-Science  
Representative

5-21-90



Soil Boring No.: GW-5  
Monitoring Well No.: GW-5  
Geologist: Andrew J. Kueserik  
Date: Feb. 3, 4, 5, 1993  
Project No.: 92-1652S

Drill Rig Type: CME-55  
Drilling Method: HSA  
Weather: Sunny 35°-40° F

DEPTH	SAMPLE NUMBER	BLOW COUNTS PER 6 INCHES		PID	WELL DETAILS	SOIL / BEDROCK DESCRIPTION	NOTES / REMARKS
1	1	4	14	0.0	CEMENT / BENTONITE GROUT 2" & I.D. P/C WELL	Brown Clayey SILT, some fine-coarse Sand, little Gravel (moist, FILL)	PID = Photoionization Detector Reading (in HNu units, parts per million, ppm)
2		10					
3							
4							
5							
6	2	3	7	0.0			
7		16	13				
8							
9							
10							
11	3	16	29	0.0			
12		33	27				
13							
14							
15	4	37	45	0.0			
16		70					
3.3'							FSW = Free Standing Water Level
Brown SILT, some fine-coarse Gravel, some Sand (moist)							
8.5'							
Brown fine SAND and Silt (wet)							
13.5'							Soil/Bedrock Description via Visual-Manual Identification methods and ASTM 1586D.
Red-brown SILT and fine-coarse Sand, some Gravel, trace clay (moist)							

**DAY ENGINEERING, P.C.  
DAY ENVIRONMENTAL, INC.**

Soil Boring No.: GW-5 (CONT.)  
Monitoring Well No.: GW-5 (CONT.)  
Geologist: \_\_\_\_\_  
Date: \_\_\_\_\_  
Project No.: \_\_\_\_\_

Project: \_\_\_\_\_  
Project Location: \_\_\_\_\_

Drilling Firm: \_\_\_\_\_  
Driller: \_\_\_\_\_  
Helper: \_\_\_\_\_

Drill Rig Type: \_\_\_\_\_  
Drilling Method: \_\_\_\_\_  
Weather: \_\_\_\_\_

DEPTH	SAMPLE NUMBER	BLOW COUNTS PER 6 INCHES		PID	WELL DETAILS		SOIL / BEDROCK DESCRIPTION	NOTES / REMARKS
-17				0.0			<i>Becomes gray-brown</i>	PID = Photoion- izationDetector Reading (in HNu units, parts per million,ppm)  FSW = Free Stand- ing Water Level
-18								
-19								
-20								
-21	5	37	31	0.0				
-22		35	33					
-23				0.0				
-24								
-25								
-26								
-27	6	25	37	0.0				
-28		41	45					
-29				0.0				
-30								
-31								
-32								
-33	7	30	27	0.0				Soil/Bedrock Description via Visual-Manual identification methods and ASTM 1586D.
-34		33	38					
-35								

**DAY ENGINEERING, P.C.  
DAY ENVIRONMENTAL, INC.**

Soil Boring No.: GW-5 (CONT.)  
Monitoring Well No.: GW-5 (CONT.)  
Geologist: \_\_\_\_\_  
Date: Feb. 4, 1993  
Project No.: \_\_\_\_\_

Project: \_\_\_\_\_  
Project Location: \_\_\_\_\_

Drilling Firm: \_\_\_\_\_  
Driller: \_\_\_\_\_  
Helper: \_\_\_\_\_

Drill Rig Type: \_\_\_\_\_  
Drilling Method: \_\_\_\_\_  
Weather: \_\_\_\_\_

DEPTH	SAMPLE NUMBER	BLOW COUNTS PER 6 INCHES		PID	WELL DETAILS			SOIL / BEDROCK DESCRIPTION	NOTES / REMARKS
33									PID = Photoion- ization Detector Reading (in HNu units, parts per million, ppm)
34									
35	8								FSW = Free Stand- ing Water Level
36		26	21	0.0					
37		30	30						
38									
39									
40	9								
41		7	14	0.0					
42		16	21						
43									
44									
45	10								
46		15	21	0.0					
47		14	19						
48									

38.5'

Gray-brown Clayey Silt and  
fine-coarse Sand (moist)

Soil/Bedrock  
Description via  
Visual-Manual  
identification  
methods and ASTM  
1586D.

**DAY ENGINEERING, P.C.**  
**DAY ENVIRONMENTAL, INC.**

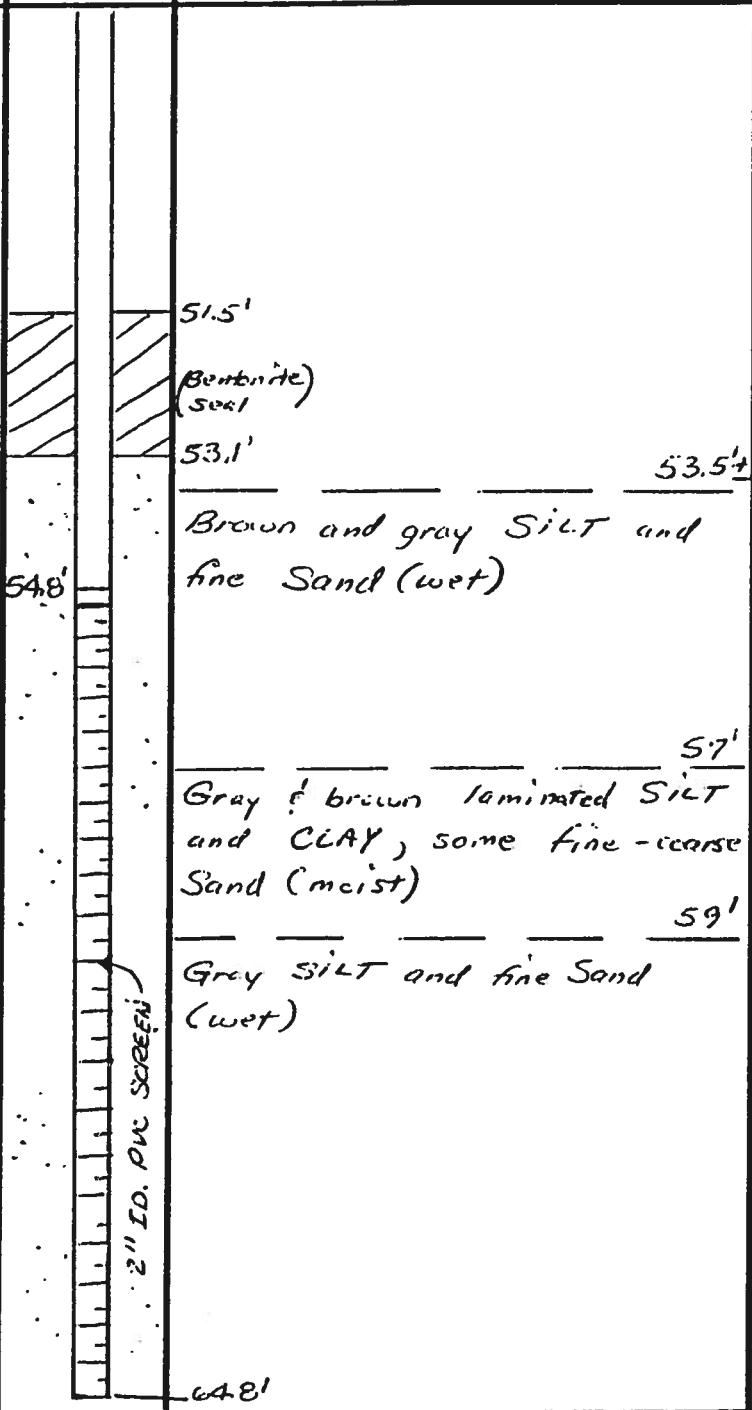
Soil Boring No.: GW-5 (CONT.)  
 Monitoring Well No.: GW-5 (CONT.)  
 Geologist: \_\_\_\_\_  
 Date: Feb. 4, 1993  
 Project No.: \_\_\_\_\_

Project: \_\_\_\_\_  
 Project Location: \_\_\_\_\_

Drilling Firm: \_\_\_\_\_  
 Driller: \_\_\_\_\_  
 Helper: \_\_\_\_\_

Drill Rig Type: \_\_\_\_\_  
 Drilling Method: \_\_\_\_\_  
 Weather: \_\_\_\_\_

DEPTH	SAMPLE NUMBER	BLOW COUNTS PER 6 INCHES		PID	WELL DETAILS	SOIL / BEDROCK DESCRIPTION	NOTES / REMARKS
49							PID = Photoionization Detector Reading (in HNu units, parts per million, ppm)
50							
51	11	10	14	0.0			FSW = Free Standing Water Level
52		15	15				
53							
54							
55							
56	12	21	52	0.0			
57		45	68				
58	13	11	12	0.0			
59		19	24				
60	14	12	15	0.0			
61		15	15				
62	15	21	31	0.0			
63		35	21				
64	16	15	17	0.0			
		17	18				



DAY ENGINEERING, P.C.  
DAY ENVIRONMENTAL, INC.

Soil Boring No.: GW - 5 (CONT.)  
Monitoring Well No.: GW - 5 (CONT.)  
Geologist: \_\_\_\_\_  
Date: Feb. 5, 1993  
Project No.: \_\_\_\_\_

Project: \_\_\_\_\_  
Project Location: \_\_\_\_\_

Drilling Firm: \_\_\_\_\_  
Driller: \_\_\_\_\_  
Helper: \_\_\_\_\_

Drill Rig Type: \_\_\_\_\_  
Drilling Method: \_\_\_\_\_  
Weather: \_\_\_\_\_

DEPTH	SAMPLE NUMBER	BLOW COUNTS PER 6 INCHES	PID	WELL DETAILS	SOIL / BEDROCK DESCRIPTION	NOTES / REMARKS
63						PID = Photolon- izationDetector Reading (in HNu units, parts per million,ppm)
66					Boring complete @ 66.0' Augered to 66.0'	FSW = Free Stand- ing Water Level
						Soil/Bedrock Description via Visual-Manual identification methods and ASTM 1586D.

## **APPENDIX C**

### **SITE INSPECTION REPORTS:**

**MARCH 6, 2009; JUNE 2, 2009; SEPTEMBER 10, 2009; JANUARY 12, 2010**

**LONG-TERM QUARTERLY MONITORING REPORT  
INTERIM REMEDIAL MEASURE  
STRIPPIT, INC.  
AKRON, NEW YORK**

Date of Inspection: March 6, 2009

Inspected By: R. Kampff

Summary of Observation:

General Condition of Cover: Cover is in generally good condition with some evidence of frequent deer traffic (i.e., hoof prints and worn vegetation paths)

Evidence of Erosion, sloughing or other degradation: ☒ Yes ☐ No

Explain (include measurement & site sketch): Areas of slight erosion and sloughing noted on the northern face of closure area (near monitoring well GW-4)

Evidence of cracking: ☒ Yes ☐ No

Explain (include measurements and site sketch): An approximate 6-inch diameter hole about 8 inches deep observed in cover slope (i.e., located about 25 feet southwest of monitoring well GW-4)

Evidence of water seepage: ☐ Yes ☒ No

Explain: \_\_\_\_\_

Evidence of Settlement: ☐ Yes ☒ No

Explain: \_\_\_\_\_

Condition of monitoring wells and gas wells: Wells are in good condition; gas well operating; monitoring wells GW-1 and GW-2 missing T-plug; Cord needs to be replaced in monitoring well GW-4.

Condition of Vegetative Cover: Vegetative cover is thick, but not growing due to season; no future problems anticipated

Condition of drainage ways (discuss amount of water/sediments present, vegetative growth unusual staining, blockage, etc.): Vegetation (including seedlings 1 to 2 inches in diameter) observed within the retention basin and some points on drainage way; no blockages noted; drainage system appears functional



Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Action Item(s) Required: AS noted above, replace  
T-plugs and cord for bailers in selected  
monitoring wells; observe condition of  
slope for future cracking and erosion  
(i.e. in proximity of monitoring well GW-4).

Action Item(s) completed since last inspection: Replaced bailers  
in monitoring wells GW-4 and GW-5

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signatures:



**LONG-TERM QUARTERLY MONITORING REPORT  
INTERIM REMEDIAL MEASURE  
STRIPPIT, INC.  
AKRON, NEW YORK**

Date of Inspection: June 2, 2009

Inspected By: C. Hampton

Summary of Observation:

General Condition of Cover: Cover is in good condition (i.e. no breaks observed - continuous & even knee-length grass observed over site)

Evidence of Erosion, sloughing or other degradation: ☒ Yes ☐ No

Explain (include measurement & site sketch):

area of slight erosion and sloughing noted on the northern face of closure area to south-west of monitoring well GW-4; though no recent activity observed

Evidence of cracking: ☐ Yes ☒ No

Explain (include measurements and site sketch):

Not visible through cover; though an animal burrow was observed on the north face of the closure area approximately 60 feet to the south-west of GW-4

Evidence of water seepage: ☒ Yes ☐ No

Explain:

Pool of water observed at the base of the north face of the closure area approximately 0.1 ft. deep, mid-way between ~~GW-3~~ and GW-4 - pool dimensions are approximately 5' x 8' - slight clumpy sheen observed around perimeter of pool

Evidence of Settlement: ☐ Yes ☒ No

Explain: \_\_\_\_\_  
\_\_\_\_\_

Condition of monitoring wells and gas wells: Wells are in good condition  
gas wells are operational; Replaced bailer cord in  
monitoring wells GW-3 and GW-4. Replaced caps in  
monitoring wells GW-1 and GW-2

Condition of Vegetative Cover: Good - No dead patches observed  
No discoloration observed

Condition of drainage ways (discuss amount of water/sediments present, vegetative growth unusual staining, blockage, etc.). Drainage system appears functional.  
Cattails and standing water observed in the retention basin  
no blockages noted in the drainage ditches

Additional Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Action Item(s) Required: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Action Item(s) completed since last inspection: Replaced bailer cord in  
monitoring wells GW-3 and GW-4. Replaced caps  
in monitoring wells GW-1 and GW-2

Signature: 

**LONG-TERM QUARTERLY MONITORING REPORT  
INTERIM REMEDIAL MEASURE  
STRIPPIT, INC.  
AKRON, NEW YORK**

Date of Inspection: September 10, 2007

Inspected By: C. Hampton

Summary of Observation:

General Condition of Cover: Same

Evidence of Erosion, sloughing or other degradation: ☒ Yes ☐ No

Explain (include measurement & site sketch):

No recent activity (i.e. fissures, slump, exposed soil)

Evidence of cracking: ☐ Yes ☒ No

Explain (include measurements and site sketch):

Evidence of water seepage: ☐ Yes ☒ No

Explain:

Evidence of Settlement: ☐ Yes ☒ No

Explain:

Condition of monitoring wells and gas wells: Good - No replacements

Condition of Vegetative Cover: Good - Same

Condition of drainage ways (discuss amount of water/sediments present, vegetative growth unusual staining, blockage, etc.). Functional - Dry Swale  
standing water in retention basin - no blockages noted

Additional Comments: \_\_\_\_\_

Action Item(s) Required: None

Action Item(s) completed since last inspection: None

Signatures: \_\_\_\_\_

**LONG-TERM QUARTERLY MONITORING REPORT  
INTERIM REMEDIAL MEASURE  
STRIPPIT, INC.  
AKRON, NEW YORK**

Date of Inspection: January 12, 2010

Inspected By: Charles Hampton

Summary of Observation:

General Condition of Cover: Unknown - Covered w/ snow (~1-2 ft thick)

Evidence of Erosion, sloughing or other degradation: ☐ Yes ☐ No N/A

Explain (include measurement & site sketch):

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

Evidence of cracking: ☐ Yes ☐ No N/A

Explain (include measurements and site sketch):

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

Evidence of water seepage: ☐ Yes ☒ No

Explain: No ice seams observed at surface of slope  
or pooling at slope base in parking area

Evidence of Settlement: ☐ Yes ☐ No N/A

Explain: \_\_\_\_\_  
\_\_\_\_\_

Condition of monitoring wells and gas wells: \_\_\_\_\_

Monitoring Wells - good condition - functioning  
gas wells - good condition - Pressure noted on gauges

Condition of Vegetative Cover: N/A \_\_\_\_\_

Condition of drainage ways (discuss amount of water/sediments present, vegetative growth unusual staining, blockage, etc.). N/A \_\_\_\_\_

Additional Comments: \_\_\_\_\_

Action Item(s) Required: \_\_\_\_\_

Action Item(s) completed since last inspection: \_\_\_\_\_

Signatures: \_\_\_\_\_

CL H/L 1-12-10

## **APPENDIX D**

**MONITORING WELL SAMPLE LOGS, PARADIGM ENVIRONMENTAL SERVICES, INC. REPORT AND  
CHAIN-OF-CUSTODY DOCUMENTATION: JUNE 2, 2009 AND JANUARY 12, 2010  
SAMPLING EVENTS**



**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-1**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 6-2-09  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 62° F, overcast **PID IN WELL (PPM):** N/C **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 58.38 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 40.20 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 18.18 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 2.97 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<b><u>CASING DIA. (FT)</u></b>	<b><u>WELL CONSTANT(GAL/FT)</u></b>	<b><u>CALCULATIONS</u></b>
¾" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1¼" (0.1041)	0.063	
2" (0.1667)	<u>0.1632</u>	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4½" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 8.90 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 7.80  
**PURGE METHOD:** Bailer **PURGE START:** 10:10 **END:** 10:45

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-1	6-2-09 / 14:50	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
51.41	12.4	9.07	0.14	75	0.0	-31	Slightly Cloudy

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-2**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 6-2-09  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 60° F, overcast **PID IN WELL (PPM):** N/C **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 79.07 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 51.26 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 27.83 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 4.54 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT(GAL/FT)</b>	<b>CALCULATIONS</b>
¾" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1¼" (0.1041)	0.063	
2" (0.1667)	<u>0.1632</u>	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4½" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 13.63 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 4.4  
**PURGE METHOD:** Bailer **PURGE START:** 09:25 **END:** 10:00

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-2	6-2-09 / 14:35	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
68.46	13.7	10.40	47	32	0.0	13	Clear

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-3**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 6-2-09  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 65° F, overcast **PID IN WELL (PPM):** N/C **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 51.84 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 32.64 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 14.20 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 3.13 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT(GAL/FT)</b>	<b>CALCULATIONS</b>
¾" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1¼" (0.1041)	0.063	
2" (0.1667)	<u>0.1632</u>	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4½" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 9.40 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 9.40  
**PURGE METHOD:** Bailer **PURGE START:** 11:00 **END:** 11:30

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-3	6-2-09 / 12:55	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
32.64	12.9	7.90	58	37	0.0	-94	Clear

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-4**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 6-2-09  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 60° F, overcast **PID IN WELL (PPM):** N/C **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 46.05 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 37.22 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 8.83 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 1.44 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<u>CASING DIA. (FT)</u>	<u>WELL CONSTANT(GAL/FT)</u>	<u>CALCULATIONS</u>
¾" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1¼" (0.1041)	0.063	
2" (0.1667)	0.1632	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4½" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 4.32 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 4.50  
**PURGE METHOD:** Bailer **PURGE START:** 08:14 **END:** 08:51

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-4	6-2-09 / 12:00	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
37.57	13.4	6.84	86	60	0.0	18	Clear

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-5**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 6-2-09  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 60° F, overcast **PID IN WELL (PPM):** N/C **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 75.05 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 51.97 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 23.08 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 3.77 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT(GAL/FT)</b>	<b>CALCULATIONS</b>
¾" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1¼" (0.1041)	0.063	
2" (0.1667)	<u>0.1632</u>	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4½" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 11.30 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 5.0  
**PURGE METHOD:** Bailer **PURGE START:** 08:58 **END:** 09:20

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-5	6-2-09 / 14:05	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
65.47	12.7	10.90	85	86	0.0	2	Slightly Cloudy

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-1**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 1-12-10  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 23° F, overcast **PID IN WELL (PPM):** 0.0 **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 58.64 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 38.29 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 20.35 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 3.321 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT(GAL/FT)</b>	<b>CALCULATIONS</b>
¾" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1¼" (0.1041)	0.063	
2" (0.1667)	<u>0.1632</u>	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4½" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 9.96 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 8.3 (purged to Dry)  
**PURGE METHOD:** Bailer **PURGE START:** 10:40 **END:** 11:25

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-1	1-12-10 / 14:15	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
53.45	8.5	7.85	0.123	454	0.0	-18	Slightly Cloudy, Slight Septic Odor

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-2**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 1-12-10  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 23° F, overcast **PID IN WELL (PPM):** 0.0 **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 79.24 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 49.06 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 30.18 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 4.925 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT(GAL/FT)</b>	<b>CALCULATIONS</b>
3/4" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1 1/4" (0.1041)	0.063	
2" (0.1667)	0.1632	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4 1/2" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 14.78 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 4.8 (purged to Dry)  
**PURGE METHOD:** Bailer **PURGE START:** 11:25 **END:** 12:00

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-2	1-12-10 / 14:40	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
71.98	6.9	9.52	45.3	100	0.0	1	Clear

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-3**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 1-12-10  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 23° F, overcast **PID IN WELL (PPM):** 0.0 **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 51.84 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 31.10 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 20.74 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 3.384 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT(GAL/FT)</b>	<b>CALCULATIONS</b>
¾" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1¼" (0.1041)	0.063	
2" (0.1667)	<u>0.1632</u>	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4½" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 10.15 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 10.5  
**PURGE METHOD:** Bailer **PURGE START:** 10:00 **END:** 10:35

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-3	1-12-10 / 12:45	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
31.10	8.0	7.08	-49.8	81.7	--	-139	Clear, Slight Septic Odor



**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-4**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 1-12-10  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 23° F, overcast **PID IN WELL (PPM):** 0.0 **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 46.34 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 35.47 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 10.87 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 1.77 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT(GAL/FT)</b>	<b>CALCULATIONS</b>
¾" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1¼" (0.1041)	0.063	
2" (0.1667)	<u>0.1632</u>	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4½" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 5.32 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 5.4  
**PURGE METHOD:** Bailer **PURGE START:** 09:25 **END:** 09:55

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-4	1-12-10 / 13:00	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
36.09	6.9	7.77	78.9	113	--	-73	Clear

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

**WELL GW-5**

**SECTION 1 - SITE INFORMATION**

**SITE LOCATION:** 12975 Clarence Center Road **JOB #:** 1863R-99  
Akron, NY **DATE :** 1-12-10  
**SAMPLE COLLECTOR(S):** C. Hampton  
**WEATHER CONDITIONS:** 23° F, overcast **PID IN WELL (PPM):** 0.0 **LNAPL** N/O **DNAPL** N/O

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 75.35 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 49.73 (MEASURED FROM T.O.C.)  
**THICKNESS OF WATER COLUMN [FT]:** 25.62 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 4.181 **CASING DIA.:** 2"  
**CALCULATIONS:**  

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT(GAL/FT)</b>	<b>CALCULATIONS</b>
¾" (0.0625)	0.023	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1" (0.0833)	0.041	
1¼" (0.1041)	0.063	
2" (0.1667)	<u>0.1632</u>	
3" (0.250)	0.380	
4" (0.3333)	0.6528	
4½" (0.375)	0.826	
6" (0.5000)	1.4688	
8" (0.666)	2.611	

**CALCULATED PURGE VOLUME [GAL]:** 12.54 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 5.1 (purged to Dry)  
**PURGE METHOD:** Bailer **PURGE START:** 12:05 **END:** 12:25

**SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS**

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
GW-5	1-12-10 / 15:00	Bailer	Phenols, Ba, Fe, Mg, Mn

**SECTION 4 - WATER QUALITY DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (mS/M)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
65.90	7.1	10.67	76.1	133	0.0	-36	Clear

## Analytical Report Cover Page

### Day Environmental

For Lab Project # 09-1952

Issued June 11, 2009

This report contains a total of 4 pages

The reported results relate only to the samples as they have been received by the laboratory.

Any noncompliant QC parameters having impact on the data are flagged or documented on the final report.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of frequently used data flags and their meaning:

**"ND" = analyzed for but not detected.**

**"E" = Result has been estimated, calibration limit exceeded.**

**"D" = Duplicate results outside QC limits. May indicate a non-homogenous matrix.**

**"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.**

**"B" = Method blank contained trace levels of analyte. Refer to included method blank report.**

**PARADIGM****ENVIRONMENTAL SERVICES, INC.**

179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

**Client:** Day Environmental**Lab Project No.:** 09-1952**Client Job Site:** Strippit Akron, NY**Sample Type:** Water**Client Job No.:** 1863R-99**Date Sampled:** 6/2/2009**Analytical Method:** EPA 420.1**Date Received:** 6/2/2009**Date Analyzed:** 6/11/2009**Laboratory Report for Total Phenolics**

Lab Sample ID.	Sample Location/Field ID	Results (mg/L)
6470	GW-1	0.002
6471	GW-2	0.004
6472	GW-3	ND<0.002
6473	GW-4	ND<0.002
6474	GW-5	ND<0.002

ELAP ID No. 10709

**Comments:** ND denotes Non Detect.**Approved By Technical Director:** \_\_\_\_\_

Bruce Hoogesteger

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

File ID: Day 09-1952



179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-2531

Client: Day Environmental Lab Project No.: 09-1952  
Client Job Site: Strippit Sample Type: Water  
Akron, NY Method: EPA 200.7  
Client Job No.: 1863r-99  
Date(s) Sampled: 06/02/2009  
Date Received: 06/02/2009  
Date Analyzed: 06/05/2009

Laboratory Report for Metals Analysis in Water

Lab Sample No.	Field ID No.	Field Location	Barium Result (mg/L)	Iron Result (mg/L)	Magnesium Result (mg/L)	Manganese Result (mg/L)
6470	N/A	GW-1	0.025	1.13	50.5	0.094
6471	N/A	GW-2	0.085	1.20	2.76	0.024
6472	N/A	GW-3	0.061	0.573	26.1	0.066
6473	N/A	GW-4	0.059	0.122	17.6	<0.010
6474	N/A	GW-5	0.047	3.20	10.9	0.059

ELAP ID No.: 10958

Comments:

Approved By: Bruce Hoogesteger

Bruce Hoogesteger, Technical Director



# CHAIN OF CUSTODY

<b>REPORT TO:</b>		<b>INVOICE TO:</b>	
COMPANY: <u>DAY Environmental</u>	COMPANY: <u>Same</u>	LAB PROJECT #: <u>09-1952</u>	CLIENT PROJECT #: <u>1863r-99</u>
ADDRESS: <u>40 Commercial Street</u>	ADDRESS:		
CITY: <u>Rochester</u> STATE: <u>NY</u> ZIP: <u>14614</u>	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE: <u>454-0210</u> FAX: <u>454-0825</u>	PHONE: FAX:		
PROJECT NAME/SITE NAME: <u>Stripit Akron, NY</u>	ATTN: <u>Charles Hampton</u>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 5 <input type="checkbox"/> OTHER	
COMMENTS: <u>e-mail results</u>		Quotation #	

REQUESTED ANALYSIS																							
DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER NUMBER	Total Phenols	Br, Fe, Mg, Mn										REMARKS	PARADIGM LAB SAMPLE NUMBER				
1	6-2-09 14:50		X	GW-1	H <sub>2</sub> O	2	X	X											6	4	7	0	
2	6-2-09 14:35		X	GW-2	H <sub>2</sub> O	2	X	X											6	4	7	1	
3	6-2-09 12:55		X	GW-3	H <sub>2</sub> O	2	X	X											6	4	7	2	
4	6-2-09 12:00		X	GW-4	H <sub>2</sub> O	2	X	X											6	4	7	3	
5	6-2-09 14:05		X	GW-5	H <sub>2</sub> O	2	X	X											6	4	7	4	
6																							
7																							
8																							
9																							
10																							

\*\*LAB USE ONLY BELOW THIS LINE\*\*

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance
Container Type:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments:	
Preservation:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments:	
Holding Time:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments:	
Temperature:	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Comments: <u>9°Ciced-pres begun in field</u>	

Charles Hampton 6-2-09/15:00  
 Sampled By Date/Time  
Charles Hampton 6-2-09/16:45  
 Relinquished By Date/Time  
Jane J. Ralston 6-2-09/16:45  
 Received By Date/Time  
Elizabeth A. Honch 6/2/09 1:40  
 Received @ Lab By Date/Time

Total Cost:

P.I.F.



**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

## Analytical Report Cover Page

### **Day Environmental, Inc.**

For Lab Project # 10-0264

Issued January 25, 2010

This report contains a total of 4 pages

The reported results relate only to the samples as they have been received by the laboratory.

Any noncompliant QC parameters having impact on the data are flagged or documented on the final report.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of frequently used data flags and their meaning:

**"ND" = analyzed for but not detected.**

**"E" = Result has been estimated, calibration limit exceeded.**

**"D" = Duplicate results outside QC limits. May indicate a non-homogenous matrix.**

**"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.**

**"B" = Method blank contained trace levels of analyte. Refer to included method blank report.**



**LABORATORY REPORT FOR TOTAL RECOVERABLE PHENOLICS**

**Client:** Day Environmental, Inc.

**Lab Project No.:** 10-0264

**Client Job Site:** Strippit

**Sample Type:** Water

**Client Job No.:** 1863R-99

**Date Sampled:** 1/12/2010

**Date Received:** 1/14/2010

**Analytical Method:** EPA 420.1

**Date Analyzed:** 1/20/2010

**Date Reissued:** 1/0/1900

Lab Sample ID.	Sample Location/Field ID	Total Phenolics (mg/L)
1678	GW-1	ND<0.002
1679	GW-2	ND<0.002
1680	GW-3	ND<0.002
1681	GW-4	ND<0.002
1682	GW-5	ND<0.002

ELAP ID No. 10709

**Comments:** ND denotes Non Detect.

**Approved By:**   
Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

File ID: Day 10-0264





**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3

**LAB REPORT FOR METALS ANALYSIS IN WATER**

**Client:** Day Environmental **Lab Project No.:** 10-0264  
**Client Job Site:** Strippit **Sample Type:** Water  
**Method:** EPA 6010  
**Client Job No.:** 1863R-99  
**Date(s) Sampled:** 01/12/2010  
**Date Received:** 01/14/2010  
**Date Analyzed:** 01/20/2010

Lab Sample No.	Field ID No.	Field Location	Barium Result (mg/L)	Iron Result (mg/L)	Magnesium Result (mg/L)	Manganese Result (mg/L)
1678	N/A	GW-1	0.076	6.06	60.8	0.199
1679	N/A	GW-2	0.078	0.263	3.46	<0.010
1680	N/A	GW-3	0.070	0.935	26.6	0.089
1681	N/A	GW-4	0.063	0.505	24.7	0.010
1682	N/A	GW-5	0.042	0.737	3.17	0.016

ELAP ID No.: 10958

Comments:

Approved By:   
Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional sample information, including compliance with sample condition requirements upon receipt.

File ID : 100264.xls


**PARADIGM**  
 ENVIRONMENTAL SERVICES, INC.
**CHAIN OF CUSTODY**

REPORT TO:

INVOICE TO:

COMPANY: <u>Day Environmental, Inc</u>	COMPANY: <u>Same</u>	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS: <u>40 Commercial Street</u>	ADDRESS:	<u>10-0264</u>	<u>1863R-99</u>
CITY: <u>Rochester</u> STATE: <u>NY</u> ZIP: <u>14614</u>	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE: <u>454-0210</u> FAX:	PHONE: FAX:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 10	
PROJECT NAME/SITE NAME: <u>Strippit</u>	ATTN: <u>Charles Hampton</u>	Quotation # <u>Quote</u>	
COMMENTS: <u>e-mail Results</u>			

## REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	COUNT NUMBER	Total Phenols	Bas (Metals)	Fe (Metals)	Mg (Metals)	Mn (Metals)	REMARKS	PARADIGM LAB SAMPLE NUMBER
1-12-10	14:15		X	GW-1	A <sub>g</sub>	2	X	X	X	X	X		1678
2-12-10	14:40		X	GW-2	A <sub>g</sub>	2	X	X	X	X	X		1679
3-12-10	12:45		X	GW-3	A <sub>g</sub>	2	X	X	X	X	X		1680
4-12-10	13:00		X	GW-4	A <sub>g</sub>	2	X	X	X	X	X		1681
5-12-10	15:00		X	GW-5	A <sub>g</sub>	2	X	X	X	X	X		1682
6													
7													
8													
9													
10													

\*\*LAB USE ONLY BELOW THIS LINE\*\*

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>
Comments:		
Preservation:	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>
Comments:		
Holding Time:	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>
Comments:		
Temperature:	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>
Comments: <u>7°C iced</u>		

Charles Hampton 1-12-10/15:20  
 Sampled By Date/Time  
Chad Gardner 1-14-10/07:40  
 Relinquished By Date/Time  
Ngardner 1/14/10 7:40  
 Received By Date/Time  
Elizabeth A. Honch 1/14/10 11:05  
 Received @ Lab By Date/Time

Total Cost:

P.I.F.

## **APPENDIX E**

### **SUMMARY OF DETECTED PARAMETERS**

POST CLOSURE MONITORING SUMMARY OF DETECTED GROUNDWATER PARAMETERS

GW-1

SAMPLING DATES 4/95 THROUGH 1/10

TEST PARAMETER	UNITS	SAMPLE ROUND																																			
		4/11/1995	7/12/1995	10/16/1995	1/22/1996	5/8/1996	8/6/1996	10/29/1996	2/6/1997	6/9/1997	9/15/1997	12/16/1997	3/13/1998	6/11/1998	12/14/1998	6/23/1999	12/15/1999	6/22/2000	1/11/2001	7/3/2001	12/12/2001	6/20/2002	1/10/2003	6/10/2003	1/22/2004	6/29/2004	12/30/2004	6/8/2005	12/29/2005	7/14/2006	3/8/007	9/25/2007	4/23/2008	10/22/2008	6/2/2009	1/12/2010	
pH	Standard	7.35	8.76	8.63	9.07	8.87	8.04	8.31	8.55	7.38	7.82	7.35	8.37	7.75	8.28	7.5.02	7.95	8.77	10.57	6.36	8.76	7.22	7.13	9.02	7.88	10.76	7.89	10.08	8.56	8.87	10.82	10.71	10.37	8.62	9.07	7.85	
specific conductance	uMHOS/cm	1,400	1,170	751	889	1,297	862	1,179	870	1,660	1,292		1140	1128	877	764	866	968	666	1400	1100	1200	1120	872	931	743		1,190	899	1,120	1,470	1,480	1,380	742	1.4	1.23	
turbidity	NTU	85.8	200	46.6		101.6	83.8	135.2										0		45		180	13	46	30	38	10.1	52.2	15.4	57.2	218.0	210.4	115.3	33.8	75	454	
barium, soluble	mg/L	0.058	0.059	0.06	0.12	0.054	0.03	0.04	0.033	0.027	0.02	0.024	0.027	0.028	0.022	0.02	0.02	0.027	0.021	0.023	0.020	0.020															
barium, total	mg/L	0.079	0.123	0.07	0.13	0.054	0.04	0.0575	0.041	0.0624	0.033	0.035	0.023	0.032	0.09	5.0	0.041	0.036	0.025	0.027	0.025	0.023	0.020	0.034	0.037	0.031	0.028	0.026	0.033	0.031	0.042	0.022	0.048	0.05	0.04	0.025	0.076
iron, soluble	mg/L	0.03	0.36	0.13	8.24	0.15	0.03	1.065	0.04	0.812	0.061	0.05	0.127	0.05	0.232	0.05	0.05	0.1	0.1	0.140	0.100	0.100															
iron, total	mg/L	1.46	6.82	2.53	8.34	0.15	0.17	2.96	1	5.91	0.985	1.21	0.229	0.676	8.66	1.96	0.724	0.1	0.522	0.246	0.188	0.100	0.419	0.284	0.237	0.100	0.204	0.238	0.286	1.65	0.103	2.83	0.100	0.100	1.13	6.06	
magnesium, soluble	mg/L	50.8	44.6	47.5	66.8	62.9	68.6	57.35	63	56	55.2	66.5	66.2	62.2	47.2	62.3	53.5	51	42.2	39.6	37.1	40.6															
magnesium, total	mg/L	54	52	56.8	68.8	62.9	71.2	64.8	65.6	66.3	69.3	78	65.8	64.5	59.8	63.6	57.7	52.7	43.4	44.3	39.1	38.7	47.7	49.7	13.1	39.1	33.2	32.1	51.7	11.3	2.18	45.3	2.06	2.25	50.5	60.8	
manganese, soluble	mg/L	0.005	0.026	0.01	0.23	0.039	0.021	0.04	0.015	0.0347	0.02	0.013	0.017	0.042	0.16	0.036	0.023	0.032	0.012	0.015	0.010	0.010															
manganese, total	mg/L	0.038	0.171	0.08	0.24	0.039	0.024	0.085	0.041	0.158	0.03	0.049	0.019	0.069	0.255	0.084	0.049	0.033	0.03	0.041	0.027	0.290	0.061	0.143	0.010	0.102	0.052	0.053	0.171	0.063	0.010	0.200	0.010	0.010	0.094	0.199	
total phenols	mg/L					0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.005	0.03	0.029	0.002	0.002	0.004	0.002	0.002	0.002	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.011	0.002	0.003	0.002	0.002	0.002	
dichlorodifluoromethane	ug/L	0.5	0.5	0.5	0.5	1.00	1.00	1.00	1.00																												
chloromethane	ug/L	0.5	0.5	0.5	0.5	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00															
vinyl chloride	ug/L	0.5	0.5	0.5	0.5	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00															
acetone	ug/L	26.00	5.00	34.00	6.00	71.00	5.00	5.00	5.00	20.00	5.00	5.00	5.00	241.9	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00															
carbon disulfide	ug/L	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	10.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00															
trans1,2dichloroethene	ug/L	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
1,1dichloroethane	ug/L	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
chloroform	ug/L	0.5	0.5	1.5	0.5	0.5	1.00	0.5	0.5	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
2butanone	ug/L	1.00	2.00	0.5	0.5	1.00	1.00	1.00	2.00	10.00	5.00	5.00	5.00	5.00	0.50	5.00	5.00	5.00	5.00	5.00	5.00	5.00															
1,1,1trichloroethane	ug/L	0.5	0.5	0.9	0.5	0.5	0.5	0.5	0.5	5.0	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
carbon tetrachloride	ug/L	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.0	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
benzene	ug/L	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.0	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
trichloroethene	ug/L	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.0	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
toluene	ug/L	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	5.0	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
tetrachloroethene	ug/L	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.0	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
methylene chloride	ug/L	11.00	5.00	21.00	5.00	35.00	14.00	5.00	5.00	5.0	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00															
m,p-xylenes	ug/L	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	5.0	1.00	1.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00															
o-xylenes	ug/L	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.0	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
phenol	ug/L	1.00	1.00	1.00	1.00																																
groundwater elevation	feet	713.43	711.04	710.09	712.82	715.76	714.71	714.29	715.02	715.09	712.34	713.81	715.52	715.27	711.01	713.24	710.6	714.65	713.52	712.98	711.13	714.82	711.57	713.67	716.25	714.34	713.04	714.64	712.31	712.40	715.52	710.24	715.65	711.26	714.12	716.03	

- Notes:
- values shown in **BOLD** and SHADED print indicate parameter was "not detected" at the detection limit presented on this table
  - values left blank indicate sample was either not collected or not tested
  - soluble metals and volatile organic compounds have not been tested since June 20, 2002 (as approved in a letter from the NYSDEC dated August 21, 2002).

POST CLOSURE MONITORING SUMMARY OF DETECTED GROUNDWATER PARAMETERS

GW-2

SAMPLING DATES 4/95 THROUGH 1/10

TEST PARAMETER	UNITS	SAMPLE ROUND																																		
		4/11/1995	7/12/1995	10/16/1995	1/22/1996	5/8/1996	8/6/1996	10/29/1996	2/6/1997	6/9/1997	9/15/1997	12/16/1997	3/13/1998	6/11/1998	12/14/1998	6/23/1999	12/15/1999	6/22/2000	1/11/2001	7/3/2001	12/12/2001	6/20/2002	1/10/2003	6/10/2003	1/22/2004	6/29/2004	12/30/2004	6/8/2005	12/29/2005	7/14/2006	3/8/2007	9/25/2007	4/23/2008	10/22/2008	6/2/2009	1/12/2010
pH	Standard	7.23	11.58	11.71	12.23	11.55	11.33	11.29	11.31	10.51	10.61	10.43	11.54	11.28	11.42	11.04	11.28	10.81	11.56	10.43	11.18	9.16	10.32	10.60	10.53	11.73	8.93	11.02	9.97	9.66	10.70	10.68	10.49	10.49	10.4	9.52
specific conductance	uMHOS/cm	1870	1170	695	771	1239	1050	827	244	770	904	864	80	799	676	761	592	493	564	1000	730	530	568	519	533	672		604	404	568	584	1,460	547	591	470	453
turbidity	NTU	200.00	16.50	11.90		11.60	6.91	3.92	74.00										80	560	170	12	200	38	21	120	74.3	34.8	78.2	169.0	112.8	108.5	37.2	32	100	
barium, soluble	mg/L	0.199	0.200	0.180	0.150	0.116	0.129	0.171	0.115	0.102	0.091	0.045	0.094	0.094	0.088	0.140	0.118	0.111	0.129	0.130	0.091	0.081														
barium, total	mg/L	0.210	0.211	0.210	0.180	0.118	0.130	0.139	0.127	0.108	0.110	0.099	0.091	0.118	0.107	0.146	0.172	0.122	0.176	0.159	0.145	0.131	0.125	0.164	0.14	0.125	0.127	0.184	0.17	0.128	0.108	0.153	0.101	0.088	0.085	0.078
iron, soluble	mg/L	0.030	0.150	0.007	0.430	0.090	0.030	0.100	0.340	0.100	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.180	0.143	0.148	0.100	0.100														
iron, total	mg/L	0.250	0.490	1.440	1.260	0.090	0.180	0.260	0.410	0.100	0.319	9.350	0.194	0.247	0.431	1.230	2.230	1.270	2.360	0.566	3.11	1.63	0.17	1.45	0.100	0.277	1.55	3.05	4.5	0.559	0.512	3.36	0.100	0.100	1.20	0.263
magnesium, soluble	mg/L	0.050	0.140	0.230	1.010	0.470	0.950	0.910	0.089	0.500	0.500	4.100	0.038	0.099	0.214	0.131	0.109	0.251	0.050	0.050	0.050	0.239														
magnesium, total	mg/L	1.030	0.360	0.910	1.360	0.470	2.510	2.800	0.342	0.500	0.500	23.300	0.222	0.393	0.404	1.140	1.860	1.580	1.660	0.342	2.93	1.70	0.61	2.25	0.175	0.692	1.99	2.82	4.32	0.917	0.694	4.32	0.165	0.200	2.76	3.46
manganese, soluble	mg/L	0.005	0.053	0.005	0.030	0.005	0.005	0.005	0.008	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.100	0.010	0.010	0.010	0.010	0.010														
manganese, total	mg/L	0.006	0.150	0.020	0.040	0.005	0.005	0.030	0.009	0.010	0.020	0.224	0.010	0.010	0.010	0.025	0.040	0.040	0.042	0.010	0.064	0.033	0.010	0.031	0.010	0.013	0.029	0.057	0.086	0.011	0.010	0.065	0.100	0.100	0.024	0.010
total phenols	mg/L					0.005	0.020	0.008	0.005	0.005	0.020	0.002	0.005	0.008	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.003	0.002	0.004	0.002
dichlorodifluoromethane	ug/L	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00																											
chloromethane	ug/L	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
vinyl chloride	ug/L	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
acetone	ug/L	31.00	33.00	63.00	24.00	100.00	21.00	47.00	19.00	20.00	5.00	5.00	9.60	29.60	10.80	6.90	5.00	5.00	5.00	5.00	5.00	5.00														
carbon disulfide	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	10.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
trans1,2dichloroethene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
1,1dichloroethane	ug/L	0.60	0.50	0.70	0.50	0.50	0.50	0.70	0.60	5.00	0.50	0.50	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	0.50	0.50														
chloroform	ug/L	0.50	0.50	2.00	0.60	0.50	0.80	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
2butanone	ug/L	3.00	6.00	0.50	2.00	4.00	1.00	1.00	2.00	10.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00														
1,1,1trichloroethane	ug/L	0.50	0.70	0.60	0.50	0.50	0.60	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
carbon tetrachloride	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
benzene	ug/L	0.50	0.50	0.50	0.50	0.50	0.60	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
trichloroethene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
toluene	ug/L	0.70	0.50	0.90	0.60	0.80	1.00	0.90	0.60	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
tetrachloroethene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
methylene chloride	ug/L	11.00	5.00	23.00	10.00	38.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00														
m,p-xylenes	ug/L	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
o-xylenes	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
phenol	ug/L	1.00	5.60	2.00	3.00																															
groundwater elevation	feet	719.90	717.08	715.62	718.59	721.58	720.24	719.96	721.22	720.69	717.76	719.67	721.29	720.39	715.77	717.64	716.20	720.42	721.26	718.36	716.43	720.39	717.77	719.52	720.59	719.93	719.32	720.32	718.45	718.17	718.57	715.17	718.41	717.41	719.36	721.56

- Notes:
- values shown in **BOLD** and SHADED print indicate parameter was "not detected" at the detection limit presented on this table
  - values left blank indicate sample was either not collected or not tested
  - soluble metals and volatile organic compounds have not been tested since June 20, 2002 (as approved in a letter from the NYSDEC dated August 21, 2002).

POST CLOSURE MONITORING SUMMARY OF DETECTED GROUNDWATER PARAMETERS

GW-3

SAMPLING DATES 4/95 THROUGH 1/10

TEST PARAMETER	UNITS	SAMPLE ROUND																																			
		4/11/1995	7/12/1995	10/16/1995	1/22/1996	5/8/1996	8/6/1996	10/29/1997	2/6/1997	6/9/1997	9/15/1997	12/16/1997	3/13/1998	6/11/1998	12/14/1998	6/23/1999	12/15/1999	6/22/2000	1/11/2001	7/3/2001	12/12/2001	6/20/2002	1/10/2003	6/10/2003	1/22/2004	6/29/2004	12/30/2004	6/8/2005	12/29/2005	7/14/2006	3/8/2007	9/25/2007	4/23/2008	10/22/2008	6/2/2009	1/12/2010	
pH	Standard	6.82	8.01	8.01	8.42	8.42	7.85	7.53	7.63	7.73	7.03	7.43	8.25	6.93	9.20	9.90	7.15	7.75	9.73	6.32	6.45	6.03	5.60	7.78	7.04	6.97	6.55	7.77	7.47	6.48	6.49	6.71	6.93	7.64	7.9	7.08	
specific conductance	uMHOS/cm	2010	568	502	475	614	623	585	342	570	635	567	626	445	507	620	562	441	399	750	750	690	797	636	573	680		658	598	586	685	998	645	631	580	498	
turbidity	NTU	26.00	26.80	191.00		70.70	5.12	150.30	47.40											140	51	350	53	390	90	14	109	45.1	153	40.1	2.2	10.1	13.1	106	37	81.7	
barium, soluble	mg/L	0.056	0.032	0.070	0.850	0.075	0.065	0.073	0.066	0.058	0.057	0.055	0.055	0.057	0.028	0.064	0.052	0.064	0.055	0.056	0.053	0.053															
barium, total	mg/L	0.065	0.173	0.165	0.090	0.078	0.086	0.078	0.083	0.072	0.076	0.087	0.063	0.069	0.071	0.078	0.084	0.064	0.087	0.068	0.060	0.066	0.068	0.093	0.064	0.079	0.086	0.067	0.103	0.078	0.067	0.062	0.055	0.062	0.061	0.07	
iron, soluble	mg/L	0.030	0.100	0.095	3.020	2.030	0.050	1.740	0.120	0.114	0.050	0.050	0.050	0.050	0.005	0.005	0.050	0.100	0.100	0.100	0.100	0.100															
iron, total	mg/L	1.560	6.710	13.550	4.090	4.230	1.300	2.000	2.370	2.255	3.800	4.650	1.720	1.380	1.810	1.960	3.150	0.250	4.790	1.690	0.943	1.83	0.90	4.85	0.571	1.61	2.74	0.999	4.64	1.87	0.583	0.388	0.268	0.416	0.573	0.935	
magnesium, soluble	mg/L	27.700	29.350	29.650	31.950	30.650	27.900	28.450	29.700	26.900	25.400	29.500	27.200	24.550	16.600	28.250	25.800	25.800	25.200	24.800	23.9	25.6															
magnesium, total	mg/L	28.300	68.700	72.550	32.450	30.950	32.700	16.650	32.900	30.350	35.800	39.350	28.700	27.550	24.600	32.150	31.600	26.300	31.600	26.800	25.0	26.6	27.7	33.7	27.3	27.3	27.0	24.2		32.2	29.0	24.9	26.7	22.5	24.3	26.1	26.6
manganese, soluble	mg/L	0.078	0.138	0.075	0.165	0.131	0.124	0.113	0.148	0.078	0.050	0.080	0.070	0.063	0.010	0.082	0.047	0.064	0.069	0.045	0.063	0.078															
manganese, total	mg/L	0.120	0.456	0.660	0.210	0.142	0.141	0.128	0.148	0.001	0.120	0.195	0.097	0.011	0.079	0.128	0.111	0.067	0.170	0.082	0.082	0.120	0.083	0.175	0.072	0.261	0.112	0.097	0.178	0.119	0.077	0.085	0.061	0.068	0.066	0.089	
total phenols	mg/L					0.005	0.140	0.005	0.005	0.005	0.002	0.002	0.050	0.050	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.002	0.002	0.002	0.014	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.003	0.002	0.002	
dichlorodifluoromethane	ug/L	2.40	0.50	0.50	0.50	1.00	1.00	1.00	1.00																												
chloromethane	ug/L	1.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00															
vinyl chloride	ug/L	2.30	0.50	0.50	0.50	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00															
acetone	ug/L	16.00	10.50	18.50	5.50	90.00	5.00	5.00	5.00	20.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00															
carbon disulfide	ug/L	1.80	0.50	0.50	0.50	0.50	3.00	0.50	0.50	10.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00															
trans1,2dichloroethene	ug/L	0.80	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
1,1dichloroethane	ug/L	0.80	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
chloroform	ug/L	0.70	1.50	1.50	0.50	0.95	3.00	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
2butanone	ug/L	1.00	7.50	0.75	0.55	0.75	1.00	1.00	2.00	10.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00															
1,1,1trichloroethane	ug/L	1.80	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.56	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
carbon tetrachloride	ug/L	1.70	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
benzene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.70	0.50	0.50	0.50	0.50	0.50															
trichloroethene	ug/L	0.80	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
toluene	ug/L	0.70	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
tetrachloroethene	ug/L	0.90	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
methylene chloride	ug/L	6.30	5.00	15.50	5.50	37.50	10.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00															
m,p-xylenes	ug/L	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	5.00	1.00	12.80	1.00	3.35	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00															
o-xylenes	ug/L	0.50	7.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	3.60	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50															
phenol	ug/L	1.00	1.00	1.00	1.00																																
groundwater elevation	feet	709.53	707.19	705.56	708.26	711.25	710.47	709.65	710.29	710.16	708.13	709.14	711.01	710.47	706.24	707.94	706.14	710.24	709.00	708.68	706.05	710.04	706.79	709.15	711.29	709.98	708.07	710.33	707.89	708.54	711.09	706.36	711.14	706.66	709.95	711.49	

- Notes:
- values shown in **BOLD** and SHADED print indicate parameter was "not detected" at the detection limit presented on this table
  - values left blank indicate sample was either not collected or not tested
  - soluble metals and volatile organic compounds have not been tested since June 20, 2002 (as approved in a letter from the NYSDEC dated August 21, 2002).

POST CLOSURE MONITORING SUMMARY OF DETECTED GROUNDWATER PARAMETERS

GW-4

SAMPLING DATES 4/95 THROUGH 1/10

TEST PARAMETER	UNITS	SAMPLE ROUND																																			
		4/11/1995	7/12/1995	10/16/1995	1/22/1996	5/8/1996	8/6/1996	10/29/1996	2/6/1997	6/9/1997	9/15/1997	12/16/1997	3/13/1998	6/11/1998	12/14/1998	6/23/1999	12/15/1999	6/22/2000	1/11/2001	7/3/2001	12/12/2001	6/20/2002	1/10/2003	6/10/2003	1/22/2004	6/29/2004	12/30/2004	6/8/2005	12/29/2005	7/14/2006	3/8/2007	9/25/2007	4/23/2008	10/22/2008	6/2/2009	1/12/2010	
pH	Standard	7.06	8.31	8.34	9.07	8.03	8.01	7.47	8.21	7.62	7.92	8.06	9.11	8.27	9.10	9.49	9.77	10.57	9.37	6.36	9.68	8.90	10.28	9.56	8.87	8.97	8.46	10.6	9.91	7.81	10.02	10.19	9.87	9.7600	6.84	7.77	
specific conductance	uMHOS/cm	1990	935	628	626	1118	1141	1094	743	1220	1237	989	985	918	745	997	806	784	595	110	790	740	698	6	543	54.1		628	579	494	575	1,080	563	591.0000	860	789	
turbidity	NTU	200	200	107		43	105	47	116											500	270	240	51	43	81	76	46		67.2	1.4	42.2	132.0	113.7	128.2	39.4000	60	113
barium, soluble	mg/L	0.045	0.058	0.070	0.110	0.044	0.041	0.050	0.050	0.046	0.051	0.052	0.054	0.038	0.029	0.060	0.043	0.059	0.044	0.041/0.041	0.043/0.043	0.046															
barium, total	mg/L	0.179	0.099	0.120	0.130	0.044	0.044	0.054	0.071	0.058	0.060	0.055	0.055	0.055	0.081	0.059	0.078	0.065	0.058	0.079/0.116	0.072/0.060	0.052	0.062	0.075	0.036	0.043	0.063	0.070	0.067	0.048	0.032	0.039	0.040	0.033	0.059	0.063	
iron, soluble	mg/L	0.030	1.000	0.370	8.320	1.000	0.030	1.940	0.225	0.100	0.620	0.060	0.050	0.050	0.050	0.050	0.050	0.100	0.100	0.100/0.100	0.100/0.100	0.100															
iron, total	mg/L	12.020	6.720	11.900	9.850	1.000	0.043	2.140	2.870	1.290	1.320	0.766	0.286	1.510	4.420	1.580	4.000	0.110	1.430	4.91/8.19	3.13/1.78	0.155	0.182	0.919	0.302	0.078	0.183	0.300	0.373	0.757	0.100	0.100	0.100	0.1000	0.122	0.505	
magnesium, soluble	mg/L	50.020	36.700	30.200	47.900	39.700	37.500	44.300	39.650	40.300	29.550	39.900	34.800	32.700	12.500	28.800	18.400	29.400	29.500	17.600/20.0	9.860/11.2	17.0															
magnesium, total	mg/L	77.900	48.300	66.000	49.400	39.700	38.800	49.100	46.150	39.000	33.750	42.300	36.000	35.900	31.000	40.100	27.700	25.200	32.100	30.7/35.7	17.2/14.9	17.3	15.2	14.7	1.97	1.46	7.17	9.00	9.01	2.74	0.564	1.750	0.577	1.04	17.6	24.7	
manganese, soluble	mg/L	0.005	0.029	0.150	0.200	0.022	0.065	0.062	0.031	0.011	0.020	0.010	0.010	0.014	0.030	0.010	0.010	0.010	0.010	0.010/0.010	0.010/0.010	0.010															
manganese, total	mg/L	0.320	0.162	0.320	0.240	0.022	0.022	0.086	0.076	0.034		0.023	0.010	0.072	0.094	0.039	0.086	0.010	0.027	0.106/0.201	0.074/0.037	0.010	0.010	0.022	0.010	0.010	0.010	0.010	0.010	0.019	0.010	0.010	0.0100	0.010	0.010		
total phenols	mg/L					0.005	0.005	0.005	0.012	0.005	0.020	0.003	0.005	0.005	0.002	0.002	0.002	0.002	0.002	0.002/0.002	0.002/0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.0020	0.002	0.002		
dichlorodifluoromethane	ug/L	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00																												
chloromethane	ug/L	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00/1.00	1.00/1.00	1.00															
vinyl chloride	ug/L	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00/1.00	1.00/1.00	1.00															
acetone	ug/L	12.00	5.00	29.00	14.00	38.00	5.00	5.00	5.00	20.00	5.00	7.70	0.50	16.40	5.00	5.00	5.00	5.00	5.00	5.00/5.00	5.00/5.00	5.00															
carbon disulfide	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	10.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00/1.00	1.00/1.00	1.00															
trans1,2dichloroethene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
1,1dichloroethane	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
chloroform	ug/L	0.50	1.60	1.00	0.80	0.50	0.55	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
2butanone	ug/L	1.00	1.00	0.50	1.00	1.00	1.00	1.00	2.00	10.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00/5.00	5.00/5.00	5.00															
1,1,1trichloroethane	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
carbon tetrachloride	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
benzene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
trichloroethene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
toluene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	2.10	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
tetrachloroethene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
methylene chloride	ug/L	2.60	5.00	18.00	10.00	36.00	6.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00/5.00	5.00/5.00	5.00															
m,p-xylenes	ug/L	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	5.00	1.00	8.60	1.00	5.90	1.00	1.00	1.00	1.00	1.00	1.00/1.00	1.00/1.00	1.00															
o-xylenes	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	2.30	0.50	1.60	0.50	0.50	0.50	0.50	0.50	0.50/0.50	0.50/0.50	0.50															
phenol	ug/L	1.00	1.00	1.00	1.00																																
groundwater elevation	feet	715.06	712.56	711.13	713.69	716.70	715.75	715.36	716.14	715.92	713.37	714.69	716.43	715.74	711.34	711.09	711.60	715.68	714.36	713.90	712.05	715.39	712.64	714.76	717.21	715.34	714.56	715.59	713.99	714.49	714.51	711.22	714.57	712.38	715.02	716.77	

- Notes:
- values shown in **BOLD** and SHADED print indicate parameter was "not detected" at the detection limit presented on this table
  - values left blank indicate sample was either not collected or not tested
  - soluble metals and volatile organic compounds have not been tested since June 20, 2002 (as approved in a letter from the NYSDEC dated August 21, 2002).

POST CLOSURE MONITORING SUMMARY OF DETECTED GROUNDWATER PARAMETERS

GW-5

SAMPLING DATES 4/95 THROUGH 1/10

TEST PARAMETER	UNITS	SAMPLE ROUND																																		
		4/11/1995	7/12/1995	10/16/1995	1/22/1996	5/8/1996	8/6/1996	10/29/1996	2/6/1997	6/9/1997	9/15/1997	12/16/1997	3/13/1998	6/11/1998	12/14/1998	6/23/1999	12/15/1999	6/22/2000	1/11/2001	7/3/2001	12/12/2001	6/20/2002	1/10/2003	6/10/2003	1/22/2004	6/29/2004	12/30/2004	6/8/2005	12/29/2005	7/14/2006	3/8/2007	9/25/2007	4/23/2008	10/22/2008	6/2/2009	1/12/2010
pH	Standard	6.99	10.88	10.97	11.54	10.93	10.87	10.39	10.90	10.35	10.14	10.76	11.32	10.84	11.31	10.51	11.18	12.27	9.58	9.76	10.93	9.73	11.06	10.60	10.04	11.18	8.86	10.77	10.55	9.24	9.41	9.43	9.38	10.42	10.9	10.67
specific conductance	uMHOS/cm	2090	735	506	641	831	816	737	286	820	903	665	820	590	567	770	663	634	648	810	690	860	935	630	740	739		739	569	604	590	961	584	512	850	760
turbidity	NTU	200	168	113		163	181	38	50											44	360	300	14	360	80	74	145	119	40.3	145	194.0	109.2	123.0	61.7	86	133
barium, soluble	mg/L	0.078	0.484	0.060	0.180	0.050	0.051	0.049	0.056	0.046	0.043	0.101	0.051	0.049	0.034	0.042	0.040	0.050	0.041	0.040	0.033	0.034														
barium, total	mg/L	0.172	0.600	0.180	0.230	0.053	0.055	0.090	0.114	0.053	0.067	0.148	0.065	0.071	0.146	0.068	0.076	0.050	0.073	0.042	0.082	0.051	0.050	0.053	0.057	0.042	0.054	0.063	0.052	0.054	0.033	0.028	0.028	0.028	0.047	0.042
iron, soluble	mg/L	0.030	0.090	0.340	24.800	0.480	0.030	0.990	0.640	0.100	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.100	0.100	0.100	0.100	0.100														
iron, total	mg/L	23.000	1.730	24.700	34.300	0.510	0.280	1.330	8.670	1.300	4.930	1.660	1.820	2.220	17.700	3.230	4.210	0.527	5.100	0.443	7.97	1.77	0.21	1.54	1.32	0.43	1.89	2.71	1.87	2.34	0.157	0.100	0.100	0.100	3.20	0.737
magnesium, soluble	mg/L	16.500	4.320	3.680	33.500	2.400	1.330	1.960	5.420	1.540	1.300	0.140	2.070	1.990	0.440	1.590	1.310	0.829	0.778	0.274	0.275	1.180														
magnesium, total	mg/L	32.200	9.710	32.800	42.500	2.530	2.490	3.050	18.600	3.650	8.000	1.640	5.380	9.300	23.600	5.850	7.150	3.970	7.850	1.450	13.9	6.1	8.9	4.0	4.35	4.95	3.36	5.54	3.83	5.23	0.498	0.471	0.311	0.267	10.9	3.17
manganese, soluble	mg/L	0.005	0.005	0.010	0.570	0.011	0.005	0.014	0.016	0.010	0.002	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010														
manganese, total	mg/L	0.485	0.038	0.620	0.760	0.011	0.008	0.030	0.218	0.024	0.080	0.035	0.037	0.105	0.382	0.068	0.088	0.036	0.106	0.010	0.198	0.039	0.010	0.037	0.029	0.030	0.044	0.051	0.039	0.045	0.010	0.010	0.010	0.010	0.059	0.016
total phenols	mg/L					0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.005	0.081	0.002	0.002	0.002	0.002		0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.002	0.002
dichlorodifluoromethane	ug/L	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00																											
chloromethane	ug/L	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
vinyl chloride	ug/L	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
acetone	ug/L	33.00	29.00	43.00	8.00	57.00	7.00	9.00	5.00	20.00	5.00	18.80	5.00	19.70	5.00	8.00	5.00	5.00	5.00	5.00	5.00	5.00														
carbon disulfide	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	10.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
trans1,2dichloroethene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
1,1dichloroethane	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
chloroform	ug/L	0.50	1.00	1.00	0.50	0.50	2.00	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
2butanone	ug/L	1.00	1.00	1.00	0.50	1.00	1.00	1.00	2.00	10.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00														
1,1,1trichloroethane	ug/L	0.50	0.50	1.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
carbon tetrachloride	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
benzene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
trichloroethene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
toluene	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
tetrachloroethene	ug/L	0.50	0.50	0.60	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
methylene chloride	ug/L	2.40	5.00	24.00	12.00	23.00	10.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00														
m,p-xylenes	ug/L	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	6.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
o-xylenes	ug/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	5.00	0.50	0.50	0.50	2.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
phenol	ug/L	1.00	1.40	1.40	1.00																															
groundwater elevation	feet	719.54	716.72	715.29	718.53	721.37	719.99	719.94	721.01	720.14	717.55	719.42	721.08	719.96	715.57	717.30	716.09	720.26	719.05	717.98	716.67	720.16	717.76	719.21	721.09	719.79	719.36	719.84	718.62	718.29	721.07	714.18	718.29	716.05	719.29	721.53

- Notes:
- values shown in **BOLD** and SHADED print indicate parameter was "not detected" at the detection limit presented on this table
  - values left blank indicate sample was either not collected or not tested
  - soluble metals and volatile organic compounds have not been tested since June 20, 2002 (as approved in a letter from the NYSDEC dated August 21, 2002).



## **APPENDIX F**

### **INSTITUTIONAL CONTROL AND ENGINEERING CONTROL CERTIFICATION FORM**



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



Site Details		Box 1
Site No.	915053	
Site Name Houdaille Industries; Strippl Division		
Site Address: 12975 Clarence Center Road Zip Code: 14001		
City/Town: Newstead		
County: Erie		
Allowable Use(s) (if applicable, does not address local zoning):		
Site Acreage: 2.5		
Owner: STRIPPIT LVD		
12975 Clarence Center Rd., Akron, NY 14001		
Reporting Period: <del>September 12, 2008 to September 16, 2009</del> January 1, 2009 January 31, 2010		

Verification of Site Details	Box 2	
	YES	NO
1. Is the information in Box 1 correct?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If NO, are changes handwritten above or included on a separate sheet?	<input checked="" type="checkbox"/>	
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, is documentation or evidence that documentation has been previously submitted included with this certification?	<input type="checkbox"/>	
3. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SPDES Permit No. NYR008074		
If YES, is documentation (or evidence that documentation has been previously submitted) included with this certification?	<input checked="" type="checkbox"/>	
Annual Certification Report included with this Form		
4. If use of the site is restricted, is the current use of the site consistent with those restrictions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, is an explanation included with this certification?	<input type="checkbox"/>	
5. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
N/A		
If YES, is the new information or evidence that new information has been previously submitted included with this Certification?	<input type="checkbox"/>	
6. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), are the assumptions in the Qualitative Exposure Assessment still valid (must be certified every five years)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, are changes in the assessment included with this certification?	<input type="checkbox"/>	

No offsite contamination identified in the ROD (Appendix A)

**SITE NO. 915053**

**Box 3**

**Description of Institutional Controls**

Parcel

S\_B\_L Image: 47.18-1-33./A

Institutional Control

Monitoring Plan  
O&M Plan

**Box 4**

**Description of Engineering Controls**

Parcel

S\_B\_L Image: 47.18-1-33./A

Engineering Control

Cover System  
Fencing/Access Control

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

---

**Control Description for Site No. 915053**

**Parcel: 47.18-1-33./A**

A No Further Action Record of Decision (ROD) was issued in March 1995. A Deed Restriction was not required. Post-closure maintenance and groundwater monitoring are required to ensure long term effectiveness of the remedy and to provide early detection should failure occur. The site is fenced.

**Periodic Review Report (PRR) Certification Statements**

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

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

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

YES NO

☒ ☐

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

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

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

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

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

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

YES NO

☒ ☐

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

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

YES NO

☒ ☐

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

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

YES NO

☒ ☐

IC CERTIFICATIONS  
SITE NO. 915053

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

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

I Brian Carlisle at Akron, NY 14001  
print name print business address

am certifying as Owner (Owner or Remedial Party)

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

Brian Carlisle  
Signature of Owner or Remedial Party Rendering Certification

2/5/10  
Date

IC/EC CERTIFICATIONS

Box 7

**QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) SIGNATURE**

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

I Raymond L. Komptz at Day Environmental, Inc.  
print name print business address  
40 Lamm Cir, Ste 100  
Rochester, NY 14614

am certifying as a Qualified Environmental Professional for the Owner

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

Raymond L. Komptz  
Signature of Qualified Environmental Professional, for  
the Owner or Remedial Party, Rendering Certification

Stamp (if Required)

2/01/2010  
Date

**Annual Certification Report  
SPDES Multi-Sector General Permit for Stormwater  
Discharges Associated with Industrial Activity (GP-0-06-002)**

The permittee shall complete this Annual Certification Report form by answering the following questions, describing improvements to the facility's Stormwater Pollution Prevention Plan (SWPPP), provide copies of monitoring results on appropriate Monitoring Reports Forms and signing the certification at the end of this form. This completed report is to be submitted each calendar year by March 31st of the following year to: Industrial Stormwater General Permit Coordinator, NYSDEC, Bureau of Water Permits, 625 Broadway, Albany, NY, 12233-3505

**SECTION I: FACILITY INFORMATION**Permit I.D. No.: NYR00 **8074**Report for Calendar Year: **2009**

Owner Name

**Strippit Inc.**

Facility Name

**Strippit Inc.****SECTION II: GENERAL INFORMATION:**

1. List the number of stormwater outfalls at the facility that are from areas of industrial activity. .... **002**
2. Is the facility claiming any monitoring waivers? ..... ☐ Yes ☒ No  
[describe and certify in your cover letter]
  - ☐ Representative Outfall
  - ☐ Inactive or Unstaffed Site
  - ☐ Adverse Climatic Conditions
  - ☐ Alternate Certification of "Not Present" or "No Exposure"
3. Is the information provided in your original Notice of Intent or Termination (NOIT) submission still accurate and up to date? If not, please submit an updated NOIT indicating the correct facility information. .... ☒ Yes ☐ No
4. Has a comprehensive site compliance evaluation been conducted at the facility in the past year? .... ☒ Yes ☐ No
5. Is the facility's Stormwater Pollution Prevention Plan (SWPPP) kept up to date and modified when necessary? .... ☒ Yes ☐ No

**SECTION III: QUARTERLY VISUAL EXAMINATIONS AND DRY WEATHER FLOW INSPECTIONS:**

6. Have the required quarterly visual examinations of stormwater at the facility been performed during this reporting period? .... ☒ Yes ☐ No
7. Did any of the quarterly visual examinations result in observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other indicators of stormwater pollution and contamination? .... ☐ Yes ☒ No
8. Was the annual dry weather flow inspection performed during this reporting period? .... ☒ Yes ☐ No
9. Were any indicators of stormwater pollution or unauthorized discharges identified? .... ☐ Yes ☒ No
10. Did any of these findings result in modification of the SWPPP? .... ☐ Yes ☒ No ☐ NA

**SECTION IV: STORMWATER MONITORING - BENCHMARK PARAMETERS:**

11. Is the permittee required to monitor stormwater at the facility for benchmark parameters? (If no, skip to Section V) ..... ☐ Yes ☒ No
12. Were there any of the sampling results from this year higher than the cut-off values listed in the permit? ..... ☐ Yes ☐ No
13. Were there any monitoring problems? (Answer "Yes" if storm event criteria was not met or if the laboratory indicated quality assurance/quality control problems) ..... ☐ Yes ☐ No
14. If any of the sampling results were higher than the benchmark values listed in the permit, was the facility inspected to identify the source? ..... ☐ Yes ☐ No ☐ NA
15. Did this result in modification of the SWPPP? ..... ☐ Yes ☐ No ☐ NA

**SECTION V: STORMWATER MONITORING - COMPLIANCE MONITORING**

16. Is the permittee required to conduct compliance monitoring for storm water discharges subject to Point Source Category Effluent Limitation? ..... ☐ Yes ☒ No
17. Is the permittee required to conduct compliance monitoring for storm water discharges from coal piles? (If no to questions 16 & 17, go to Section VI) ..... ☐ Yes ☒ No
18. Were there any monitoring problems? (Answer "Yes" if storm event criteria was not met or if the laboratory indicated quality assurance/quality control problems) ..... ☐ Yes ☒ No
19. Were any of the sampling results from this year higher than the effluent limitation listed in the permit? ..... ☐ Yes ☒ No
20. If any of the sampling results were higher than the effluent limitations listed in the permit, was the facility inspected to identify the source? ..... ☐ Yes ☐ No ☐ NA
21. Did this result in modification of the SWPPP? ..... ☐ Yes ☐ No ☐ NA

**SECTION VI: SUMMARY**

Provide a brief description of any facility changes; problems identified during comprehensive compliance evaluations, quarterly visual observations or monitoring results; and action taken to improve the quality of the stormwater discharge.

*None Found.*

**CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direct supervision and/or the supervision of another person designated to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my knowledge or the knowledge of the person who manages the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

*Brian*  
Owner/Operator First Name (please print or type)

*01/14/2010*  
Date

*Carlsruhe*  
Owner/Operator Last Name (please print or type)

*Brian P. Carlsruhe*  
Owner/Operator Signature