



# REPORT

## SNPE-VANDEMARK CHEMICAL CREEK BANK CORRECTIVE MEASURES IMPLEMENTATION

### Construction Closeout Report

**Submitted To:** New York State Department of Environmental Conservation  
Division of Solid and Hazardous Materials, Region 9  
270 Michigan Avenue  
Buffalo, New York 14203

**Submitted By:** Golder Associates Inc.  
2430 N. Forest Road, Suite 100  
Getzville, NY 14068 USA

**Distribution:**  
2 copies - New York State Department of Environmental Conservation  
1 copy - SNPE, Inc.  
1 copy - VanDeMark Chemical Inc.  
1 copy - Golder Associates Inc.

**February 2013**

**Project No. 093-89168**

A world of  
capabilities  
delivered locally





## EXECUTIVE SUMMARY

Golder Associates Inc. (Golder) under contract to SNPE Inc. (SNPE) and in close cooperation with VanDeMark Chemical Inc. (VDM), the Site owner, has prepared this Corrective Measures Implementation (CMI) construction closeout report. The report summarizes the remediation activities that were conducted from September 6 to November 15, 2012 to address the cleanup and containment of coal tar residuals located in soil and bedrock along a portion of VDM's property adjacent to the north bank of Eighteen Mile Creek Bank (hereafter referred to as the "Creek Bank Area") and located to the south of VDM's manufacturing facility in Lockport, New York. The facility is located in the north central sector of the City of Lockport city limits, as shown on Figure 1-1.

The Creek Bank Area CMI remedial activities were performed in accordance with the CMI Work Plan dated March 2012 and approved by the New York State Department of Environmental Conservation (NYSDEC) in May 2012.

The purpose of the corrective measures was twofold: create a barrier to restrict and contain the migration of dense non-aqueous phase liquid (DNAPL) consisting of coal tar residuals that have been exiting the fractured bedrock formation at, or near, the toe of the Creek Bank area slope; and promote the collection of the DNAPL in a defined permeable trench for subsequent mechanical removal, if required. These objectives were achieved through the installation of a continuous overburden and bedrock grout wall and curtain system and construction of a passive upgradient permeable collection trench installed parallel to the grout barrier system.

This CMI construction closeout report presents the detailed construction methods and techniques utilized during the installation and construction of the approved corrective measures in the Creek Bank Area. Information documenting the construction techniques employed, construction quality assurance measures, health and safety requirements, and schedule associated with implementation of the project is presented.



## Table of Contents

EXECUTIVE SUMMARY .....	ES-1
1.0 INTRODUCTION.....	1
1.1 Background .....	1
2.0 PURPOSE AND SCOPE .....	3
3.0 SUMMARY OF CMI ACTIVITIES .....	4
3.1 Site Preparation Activities .....	4
3.2 DNAPL Residuals Excavation & Removal .....	5
3.3 Grout Cutoff Wall Installation .....	6
3.3.1 Overburden Grout Cutoff Wall Installation .....	6
3.3.2 Bedrock Grout Installation.....	8
3.4 DNAPL Collection Trench and Water Treatment System Installation.....	10
3.5 Piezometer and DNAPL Monitoring Well Installation .....	11
3.6 Quality Assurance and Performance Assessment.....	11
3.7 Site Restoration.....	11
4.0 MONITORING AND MAINTENANCE .....	13
5.0 HEALTH AND SAFETY .....	14
6.0 CLOSING .....	15
7.0 REFERENCES.....	16

## List of Tables

Table 1	Summary of Grout Curtain Boring Installation
Table 2	Performance Monitoring Piezometer Construction Summary

## List of Figures

Figure 1-1	Site Location Map
Figure 3-1	Post CMI Construction Creek Bank Area Site Plan
Figure 3-2	Creek Bank Area – Depth of Bedrock Grouting, Geologic Cross Section

## List of Appendices

Appendix A	Corrective Measures Order R9-20080205-5 (November 30, 2011)
Appendix B	May 24, 2012 Correspondence from NYSDEC - CMI Approval Letter
Appendix C	Corrective Measures Design Drawings (Figures 1 through 3)
Appendix D	Golder Daily Field Observation Notes
	Appendix D-1 Field Monitoring Summary Forms
	Appendix D-2 Erosion Control Inspection Forms
Appendix E	CMI Construction Photo Log
Appendix F	Waste Profile Documentation
Appendix G	Modern Landfill Disposal Receipt Documentation
Appendix H	Flowable Fill Laboratory Testing Results
	Appendix H-1 Flowable Fill Test Cylinder Results
	Appendix H-2 In-Situ Flowable Fill Test Core Results



## 1.0 INTRODUCTION

Golder Associates Inc. (Golder) under contract to SNPE Inc. (SNPE) and in close cooperation with VanDeMark Chemical Inc. (VDM), the Site owner, has prepared this Corrective Measures Implementation (CMI) Construction Closeout Report (CCR) to summarize the remedial activities that were conducted to address the cleanup and containment of coal tar residuals comprised of semi-volatile organic compounds in soil and bedrock along the north bank of Eighteen Mile Creek on a portion of the VDM property (Creek Bank Area) located to the south of VDM's manufacturing facility located in Lockport, New York. The facility is located in the north central sector of the City of Lockport city limits, as shown on Figure 1-1. The cleanup activities were performed from September 6 to November 15, 2012 under the supervision of Golder personnel.

### 1.1 Background

Subsequent to the investigation activities and interim corrective measures performed at the VanDeMark facility from 2006 through 2011, a Corrective Measures Study (CMS) was performed and summarized in the "Focused Corrective Measures Study" report (VanDeMark Chemical, Golder Associates, April 2011).

The Focused CMS presented a detailed summary of the previous investigations and remedial activities performed at the VanDeMark Facility associated with coal tar impacts in the Creek Bank area and also provided historical site background information and context (refer to Sections 1.1 and 2.0 of the Focused CMS).

The primary objective of the Focused CMS was the identification, justification, and recommendation of the appropriate corrective measure(s) for the coal tar impacted Creek Bank area based on technical, human health and environmental screening criteria. Three alternatives were selected and evaluated using these criteria. Alternative 1 included a comprehensive DNAPL collection and removal system keyed into the bedrock at the toe of the slope and removal of coal tar residuals to bedrock. This alternative included provisions for groundwater pumping and shoring of the slope if needed. Alternative 2 was proposed as a less intrusive DNAPL containment and passive collection system that would consist of a grout curtain installation for DNAPL containment combined with installation of a shallow permeable collection trench and removal of shallow overburden coal tar accumulations. Alternative 3 was proposed as the least intrusive remedial approach and consisted of removal of shallow and exposed coal tar accumulations and routine visual monitoring of the Creek Bank area for evidence of new coal tar seeps.

The Focused CMS recommended Alternative 2 to meet the corrective action objectives of DNAPL capture/containment and provide a passive and reliable method for collection and removal of DNAPL. This alternative was selected as the most viable to meet remedial objectives while reducing the concerns associated with disturbance of the riparian area, adversely impacting adjacent slope stability and long





term impacts to the Creek Bank area relative to the construction and operation in this physically constrained location.

In correspondence to Golder dated May 5, 2011, the NYSDEC accepted the recommendations of the Focused CMS for implementation of Alternative 2 with several modifications requested to the final design. These modifications included:

- Modifying the design of the stone collection trench to extend to the top of rock or a maximum of 5 feet below grade surface (bgs) if bedrock is greater than 5 feet bgs along the proposed trench alignment; and
- Inclusion of a passive gravity flow water treatment system for water exiting the collection trench that will reduce the turbidity and remove low levels of organic constituents.

The New York State Department of Environmental Conservation (NYSDEC) subsequently negotiated a Corrective Measures Order (executed November 30, 2011) with both VDM (as Site owner) and SNPE (as a responsible party) under the Resource Conservation and Recovery (RCRA) program that included the requirements for implementation of remediation efforts which are summarized in this document. The Order on Consent document is included as Appendix A.



## 2.0 PURPOSE AND SCOPE

The Creek Bank Area CMI remedial activities were performed in accordance with the NYSDEC approved CMI Work Plan dated March 2012 and the provisions of the May 24, 2012 NYSDEC CMI Work Plan approval letter (refer to Appendix B approval letter). This closeout report summarizes and documents the remediation construction, disposal, and restoration activities that were conducted in accordance with the CMI Work Plan to remove coal tar residuals along the Creek Bank area located to the south of the VDM Lockport, NY facility. The location of the remedial construction activities occurred along a portion of Eighteen Mile Creek south of the VDM facility.

This CMI CCR presents the detailed construction techniques and sequence utilized during the installation and construction of the approved CMI Work Plan design in the Creek Bank Area. Information documenting the construction techniques employed, construction quality assurance measures, health and safety requirements, and schedule associated with implementation of the project is presented in the following sections of the CCR.



### 3.0 SUMMARY OF CMI ACTIVITIES

In July, 2012 bids were solicited for the performance of the “Creek Bank Corrective Measures for SNPE-VanDeMark Chemical Site No. 932149”. The bid documents consisted of one set of design drawings, (refer to Appendix C) technical specifications and contractual documents for the execution of the proposed work. The design documents were based on the NYSDEC approved CMI Work Plan for the Site. Following solicitation of qualified bidders, Severson Environmental Services (Severson) was selected and retained as the remedial contractor to SNPE for completion of all CMI activities. Work activities under the Contract were initiated on September 6, 2012 and substantially completed on November 15, 2012. Golder was retained by SNPE to provide project management and full time field inspection services and documentation of the work performed to verify that the remedial activities were being performed in accordance with the design specifications. NYSDEC representatives also conducted periodic site visits to observe field activities and check on work progress. A copy of Golder's daily field observation notes are presented in Appendix D (D-1) and a photographic log illustrating the project progress is presented in Appendix E.

#### 3.1 Site Preparation Activities

Prior to site remediation activities commencing, Severson cleared and grubbed vegetation that was present in close proximity to the Site access road and the proposed alignment of the grout wall/curtain and associated DNAPL Collection trench. At a minimum, vegetation within approximately ten feet of the trench alignment was removed using a chain saw and a steel track excavator to allow for safe access and equipment operation that was necessary for the proposed remedial activities. Additional selective tree removal was needed where tree branches were overhanging the work area and might be a safety hazard for rotating mechanical equipment during the course of the work. Tree or tree limb removal was minimized to the extent feasible and only performed where they potentially impacted safe implementation of the work. Limited brush vegetation trimming and removal along the upper access path (to the east of the remedial area and extending to the former North Transit Road) was also performed to provide clear, unobstructed access for equipment and materials transport.

In addition to clearing and grubbing efforts, stabilization and reinforcement of the entire access path that extends from the former North Transit Road extension to the western terminus of the Creek Bank Area was performed by Severson. These improvements generally consisted of regrading the subgrade soils to reduce uneven areas and localized depressions followed by placement of a layer of reinforced geotextile stabilization fabric and approximately six inches of No. 2 run of crusher stone. The transition area from the upper to lower Creek Bank Area required more stabilization as this section of the access path had been significantly compromised by erosion and required additional stabilization and rebuilding improvements to handle equipment traffic necessary to complete the remedial activities. All imported select backfill stone was specified from local virgin gravel pit sources.



In conjunction with vegetation clearing and access path stabilization activities, erosion control measures including silt fencing, straw bales, and sand bags (refer to Figure 3-1 for location of the installed erosion control measures) were installed along the south side of the proposed grout wall/curtain alignment and access path to intercept any potential sediment containing runoff from planned excavation or associated ground disturbance along the entire length of the work area. Erosion control measures extended a minimum of 15 feet beyond the planned disturbance. The erosion controls were inspected weekly during active construction in conjunction with the "New York State Standards and Specifications for Erosion and Sediment Control", August 2005 (Appendix H), by a Golder qualified professional. The completed erosion control inspection forms are also provided in Appendix D (D-2).

### 3.2 DNAPL Residuals Excavation & Removal

The Focused CMS recommended the excavation and removal of accumulated shallow DNAPL (coal tar) residuals and impacted overburden material to the extent feasible in the Creek Bank Area as part of the overall remedial strategy and in conjunction with the installation of the remedial measures.

In lieu of the overburden in-situ grout injection or soil mixing specified, Severson proposed an alternate overburden grout strategy which involved excavation of a two to three foot wide trench along the entire grouting alignment. This approach enhanced the ability to excavate and remove DNAPL residuals in conjunction with the installation of the grout wall. Visible deposits or seams of solidified DNAPL were removed to the north and south of the grout wall excavation alignment when they were encountered during the excavation process. The only limitations to expanding the excavation area for removal DNAPL solids was due to either the grout trench wall or slope stability concerns. The majority of additional coal tar residuals removal was focused in the areas downgradient (south) of the proposed grout curtain or shallower (i.e less than 3.5 to 4 feet below grade surface) in the vicinity of the toe of the slope. The areal extent of coal tar removal was based on visual observations, impacts to Eighteen Mile Creek Bank stability and safety concerns relative to the slope stability. NYSDEC representatives also periodically observed the excavation and removal of coal tar and were consulted with respect to the proposed extent of excavations performed and the limits achieved.

Severson began excavation of coal tar residuals using a track excavator beginning at the western-most terminus of the proposed overburden grout cutoff wall alignment and progressed eastward with this activity in conjunction with the excavation of the overburden grout wall trench.

Solidified coal tar residual deposits of various sizes were observed and removed at several locations during the overburden grout cutoff wall and the DNAPL collection trench excavation activities as noted in the daily field logs. The largest, and most uniform deposit was observed adjacent to the below grade stone structure (located approximately 180-feet to 230-feet from the western terminus of the grout wall alignment).



The excavated spoils from both the grout wall trench and associated DNAPL solids removal excavations were loaded onto a dump truck and transported to a temporary open staging area adjacent to the site construction entrance located off Gooding and West Jackson Streets (south of the CMI construction area). Plastic sheeting was placed on the ground prior to spoils stockpiling and one (1) composite sample was collected from individual stockpiles by Severson for waste profile characterization and approval. This sample was analyzed for TCLP RCRA metals, Target Compound List (TCL) volatiles, and TCL semi-volatiles, ignitability, reactivity, and pH. The analysis of the composite sample indicated that the coal tar impacted soils could be categorized as a non-hazardous industrial waste and suitable for disposal at a New York State Part 360 permitted solid waste landfill. The analytical results were submitted, along with the required waste profile application forms, for disposal approval of coal tar residuals mixed with inorganic debris to Modern Corporation (Modern) in Model City, New York. Subsequently Modern received approval from the NYSDEC for the disposal of the mixed soil and coal tar residuals waste generated from the CMI activities. The laboratory report summarizing the results of the analysis performed is provided in Appendix F, along with a copy of the approved overburden waste stream profile. Subsequent to receipt of disposal approval, the stockpiled spoils from the overburden cutoff wall excavation were transported and disposed of at Modern on October 11 and 12, 2012. Additional soil waste spoils generated and stockpiled from the excavation of the DNAPL collection trench and treatment sump (discussed in detail in Section 3.4) were transported and disposed of on November 9, 2012. Documentation of the weight of waste spoils disposed of at the landfill based on scale tickets from each day that material was trucked are provided in Appendix G.

### 3.3 Grout Cutoff Wall Installation

#### 3.3.1 Overburden Grout Cutoff Wall Installation

Installation of the overburden grout cutoff wall was performed in the impacted Creek Bank Area spanning approximately 300 linear feet as proposed in the CMI design drawing alignment for the grout curtain illustrated on Figure 1 (Appendix C). The overburden grout cutoff wall refers to the flowable fill that was placed in the overburden trench, subsequent to coal tar residuals removal activities and prior to bedrock pressure grouting and installation of the DNAPL Collection Trench.

Trench excavation began at the western end of the proposed overburden grout cutoff wall as described in Section 3.2. The depth of the excavation varied depending on the observed presence of bedrock, but was generally from 5 to 11 feet below ground surface (bgs) elevation at the western end of the alignment (i.e., lower Creek Bank Area) and gradually deepened further east as the trench advanced up the slope towards the Upper Creek Bank Area with excavation in this area reaching depths of 14 feet bgs elevation near the eastern terminus of the trench.



During the trench excavation activities, three large stone obstructions at the bottom of the trench were encountered and could not be removed due to their size and configuration extending well beyond the footprint of the trench toward the toe of the slope. The obstructions were located approximately 30-feet, 80-feet, and 170-feet from the western terminus of the trench. These obstructions were left in place and their locations were noted for coordination of bedrock drilling and pressure grouting activities. Due to the large rock at the 80-foot mark, the alignment of the overburden grout curtain trench was shifted approximately 8-feet south towards Eighteen Mile Creek to avoid this obstruction in an effort to reach the top of bedrock in accordance with the design intent for the overburden grouting system. The obstruction at the 170-foot mark appeared to be a portion of the wall foundation for the buried stone block structure (outlined on Figure 3-1) that was a relic of the areas' historic mill works potentially dating from the early 20<sup>th</sup> century. An abandoned below grade concrete creek water pump station was encountered on the north side of the trench excavation alignment but did not hinder excavation activities. This pump station was supplied through a small upstream concrete valve chamber which was connected to a gravity fed water intake from Eighteen Mile Creek. To stem the flow of water into the pump station (confirmed by VDM personnel to be long abandoned and inoperable), the valve chamber was sealed off with flowable fill to prevent creek water from entering the excavation.

Upon completion of trench excavation, the trench was progressively backfilled with a strengthened mixture of flowable fill consisting of Class "F" flyash, Type I Portland cement and water, no other admixtures were used in the formulation. The flowable fill was delivered to the site in standard concrete supply trucks and off-loaded into the trench beginning at the western terminus of the trench alignment and progressing eastward. As trench backfill activities progressed to the east and up the slope (i.e. increasing elevation), it became necessary to install temporary earthen berms or wood forms (approximately 1 to 2-feet high) spanning north to south across the width of the previously poured overburden cutoff wall. This was necessary in preventing the flowable fill pour from migrating downslope across the previously cured flowable fill material (refer to photographs in Appendix E).

Permeability of the overburden grout flowable fill material was initially confirmed to meet the specified minimum (i.e.,  $1.0 \times 10^{-5}$  cm/sec) by collection and analysis of an ex-situ test cylinder during the initial cutoff wall installation. Confirmation quality control samples were subsequently collected after completion of the grout wall installation by coring a minimum of 12-inches into the top of the cured grout wall after a minimum of three weeks of cure time had transpired. The test cylinder and cores were shipped to JLT Laboratories in Canonsburg, Pennsylvania, and subsequently tested for permeability according to ASTM D-5084, Method A. The flowable fill material laboratory test results are provided in Appendix H. Test results show that the flowable fill material (based on both the ex-situ cylinder sample [H-1] and the in-situ core samples [H-2]) installed for the overburden grout cutoff wall construction met the minimum permeability project specification requirement of  $1.0 \times 10^{-5}$  cm/sec. All sample results demonstrated



permeability of  $1 \times 10^{-6}$  cm/sec or less. Refer to Figure 3-1 for the location of in-situ flowable fill cutoff wall sample cores.

### 3.3.2 *Bedrock Grout Installation*

Sevenson contracted Geo-Science Group, Inc., a specialized geotechnical grouting contractor, to perform the bedrock grout curtain installation as part of the Creek Bank area CMI activities. Drilling through the overburden grout wall and into the bedrock was undertaken by Geo-Science drillers utilizing a TEI Rock Drills HEM-RDS 550 drill mounted on a JLG Model 8080 mini-excavator. The drill string consisted of a 2<sup>3/8</sup>-inch diameter API output flange followed by 2<sup>3/8</sup>-inch diameter API regular drill rods five-feet long, followed by a Numa Patriot 35 down-the-hole hammer fitted with a four-inch diameter, flat faced, ballistic button bit. Drilling and grouting activities were performed between October 2 and November 1, 2012.

In accordance with the project specifications, the primary grout curtain boreholes were initially spaced at 10 foot intervals along the approximately 300 foot long grout curtain alignment. These were drilled from west to east along the alignment of the previously installed overburden grout wall resulting in boreholes P-1 through P-30. As drilling proceeded, lateral air and hydraulic communication between adjacent boreholes was observed frequently and found to be excessive at some locations. Due to the observed hydraulic communication between the initial boreholes, it was determined during consultation between Golder, Geo-Science, and NYSDEC personnel that drilling and grouting of secondary and potentially tertiary boreholes would be necessary as the grouting proceeded to address a higher degree of rock fractures and void spaces in certain areas of the formations than was anticipated. The contract design documents stipulated that, if required, secondary grouting locations would be located halfway between the primary grouting holes to achieve an approximate spacing between grouting locations of 5 feet.

Installation of tertiary boreholes were not contemplated or specified in the design documents, however as noted, due to the extremely heterogeneous bedrock conditions encountered during the drilling of the in the lower Creek Bank Area between primary borehole locations P-1 and P-9, it was agreed that tertiary grout injection points would be warranted based on the results and observations of the secondary grouting locations.

Following completion of all boring and pressure grouting of the primary boreholes, secondary boreholes (S-1 through S-29) were installed halfway between primary boreholes (five-feet) in order to achieve more continuity in the grout coverage of the more highly fractured portions of the bedrock formations encountered and a factor of safety in grout overlap. In addition, as previously noted several tertiary holes (T-1, T-5, T-9, T-13 and T-17) were drilled at the western end of the alignment. Tertiary spacing, where utilized, further reduced the grout borehole spacing to two and one-half-feet. Refer to Figure 3-1 for locations of all drilled bedrock grout boreholes.





At each grout borehole, the total installed borehole depth consisted of the thickness of the installed overburden grout wall (a minimum of 4-feet at the western end of the grout wall and maximum of sixteen (16) feet deep at the eastern end) plus a minimum of five feet into competent rock. As work progressed, it was agreed that where feasible, borehole depths would be increased beyond five feet total as necessary to achieve penetration into the more fractured Queenston Shale formation where it was found to reside beneath the Whirlpool Sandstone in several areas along the alignment. In particular, emphasis was placed on reaching the Queenston formation in the boring locations extending from P-20 through P-30 in the upper Creek Bank Area where a thicker layer of Whirlpool Shale overlaid the Queenston formation. As a result of this approach, at a number of drilling locations the penetration depth into the combined bedrock formations (Whirlpool and Queenston) resulted in total drilled depths in bedrock of up to sixteen (16) feet. Refer to Figure 3-2 for a cross section of the grouted bedrock that illustrates the approximate termination depth at each boring location.

Following primary borehole drilling activities, grout was mixed and pumped under controlled pressure through a pneumatic packer installed in the borehole until the grout consumption indicated the rock to be saturated based on grout return or pressure in the injection line. The grout injected utilized a homogenous, suspension grout mixture consisting of Portland Type 1111 cement and water, with water/cement ratios ranging between 0.40 and 1.00, depending on bedrock conditions encountered. Mixing and pumping of grout was accomplished utilizing a Chemgrout CG-500 paddle mixer fitted with a 2L6 two stage progressive cavity pump. The minimum pump return line pressure refusal criteria was 15 pounds per square inch (PSI) at the grout header for primary grout curtain boreholes, and 45 PSI at the grout header for secondary and tertiary boreholes. Compressed air for drilling and grouting operations was furnished by a Doosan Compressor supplying 900 CFM @ 175 PSI. Control of grout pressure was accomplished utilizing a circulatory return loop, pressure gauging, and pinch control valves. From the grout header, a steel standpipe was connected to an Aardvark Model 36 inflatable packer, which was lowered to just above top of rock and inflated to seat the packer within the borehole. All grout boreholes were taken to their respective refusal criteria pressures. Constant monitoring for evidence of releases of grout into Eighteen Mile Creek was undertaken during borehole grouting activities, on several occasions grout injection was suspended immediately upon observation of grout exiting the surface soils on the south side of the grout wall alignment near the creek.

Table 1 presents a detailed summary for each of the primary, secondary and tertiary bedrock grouting locations performed as part of the bedrock grout curtain installation. The table includes total drilling depths, formations encountered, drilling notes, total quantity of grout injected at each location, grout refusal pressure achieved and additional field notes with specific and detailed observations. Figure 3-2 illustrates a cross section of the bedrock formations across the entire length of the bedrock grouting area immediately below the overburden grout wall that were encountered based on drill cutting return





observations during the drilling work. Based on refusal pressures and visual observations of surface grout return achieved at each injection location, it is inferred that all significant void spaces and fractures from the bottom of the borehole to the bedrock / overburden grout wall interface were successfully grouted.

### 3.4 DNAPL Collection Trench and Water Treatment System Installation

A permeable stone DNAPL collection trench was installed parallel to, and upgradient (north) of the overburden grout cutoff wall (refer to Figures 1 and 2 in Appendix C for design information and details). The final surveyed alignment of the installed collection trench is illustrated on Figure 3-1. The trench was constructed as designed and is a minimum of 24-inches wide. It extends from grade surface to the top of rock, or a maximum of five feet bgs, where bedrock is deeper along the alignment. The trench was backfilled with clean washed coarse aggregate (washed No. 2 stone), meeting the gradation specification provided on Figure 2 of the CMI design drawings. The southern edge of the trench was installed approximately 12-inches from the overburden grout wall to protect the integrity of the wall. A layer of 6 oz. non-woven geotextile fabric was placed as a barrier between the south wall of the trench and the stone to delineate the edge of the collection trench for future maintenance purposes and was wrapped approximately 6 inches below the top of the collection trench and covered with six inches of gravel for protection. After completion of the 300-foot collection trench, a 20 foot long, 3-inch diameter perforated drain line was installed near the western terminus of the trench approximately six inches below the top of the trench to gravity drain accumulated water from the trench to a passive treatment system (see details on Figure 2, Appendix C). Upon exiting the collection trench the perforated pipe transitioned to a solid 3" drain pipe and was routed to a 4 ft. x 4 ft. x 4 ft. precast concrete sump divided into two chambers separated by a concrete internal wall. The main chamber which receives the overflow from the collection trench contains a filter bed consisting of approximately 1-foot layer of coarse sand placed on top of a 1-foot layer of granular activated carbon meeting the contract specifications (see Figure 2, Appendix C). After passing through the filtration media the water flows through three outlets located at the base of the internal divider wall into a smaller outlet chamber. Water exits this outlet chamber and the filter sump from a 3 inch overflow pipe. The precast filter sump is equipped with a 24-inch square locked aluminum man way access hatch for maintenance and observation activities.

The filtered water exits the precast filter sump via gravity through a 3-inch diameter drain pipe and terminates in a drain sump filled with washed coarse aggregate (meeting the specifications for the collection trench) adjacent to and southeast of the precast filter sump. The drain sump is lined with geotextile filter cloth and allows for recharge of the drainage water into the Creek Bank area overburden soils.



### 3.5 Piezometer and DNAPL Monitoring Well Installation

At the conclusion of the DNAPL collection trench installation, four (4) piezometer wells were installed in general accordance with the contract plans. Piezometers PZ-1 through PZ-4 (shown as Detail 3 on Figure 3, Appendix C) were installed through the overburden and terminated at the top of bedrock. The aboveground portion of the piezometers (i.e., stick-up) is protected by a locking, 4-inch steel, protective casing that is cemented around the piezometers. A construction summary of each piezometer well providing the total depth of each installation including the screen, sand pack, bentonite seal and cement is provided in Table 2.

In addition to the piezometers, four (4) DNAPL observation sumps (OS-1 through OS-4) were installed into the DNAPL collection trench. These observation sumps consist of 3-inch, schedule 40, PVC pipe that extend down to the bottom of the collection trench. The sumps extend above the top of the trench approximately 6 inches and are covered with a PVC cap. The pipe utilized for the sumps was modified in the field with manually cut slots to provide wider openings to promote inflow of DNAPL, if present within the trench.

### 3.6 Quality Assurance and Performance Assessment

Golder personnel were on-site full-time during performance of all remedial construction activities by Severson to observe and document daily field activities. NYSDEC representatives also conducted periodic site visits to observe field activities and check on work progress. A copy of Golder's daily field observation notes documenting the key remedial activities and details of grouting and related activities are presented in Appendix D and a photographic log illustrating the project progress are presented in Appendix E. Table 1 also provides a detailed summary of the pressure grouting performed and Figure 3-1 provides an as-built survey of the location of the installed remedial elements.

### 3.7 Site Restoration

As a result of the mid-November timing of the completion of CMI construction activities, Golder recommended that final top soil placement and seeding of the disturbed portions of the Creek Bank area be postponed until such time in the spring of 2013 when conditions are more conducive to seed germination and establishment of vegetative growth. This schedule was acceptable to the NYSDEC and Severson. For temporary erosion control for the winter months, Severson graded the entire construction area, including the access path, with the run of crusher that was used for access road stabilization. Golder will inspect and coordinate repairs with Severson to maintain erosion control structures (i.e., silt fencing and straw bales) installed for the remedial work until vegetation has been established to the satisfaction of Golder, the NYSDEC and VanDeMark in the spring of 2013.

Severson will perform any final re-grading of disturbed areas necessary and place imported virgin topsoil to restore and enhance the natural drainage patterns along the creek bank and promote



regeneration of native plant species in areas that were cleared of vegetation to perform the CMI activities.



#### **4.0 MONITORING AND MAINTENANCE**

The installed features of the Creek Bank Area corrective measures were intended to provide a system that will require a relatively low level of maintenance for the containment and collection of DNAPL. However, routine monitoring and maintenance procedures will be developed as necessary for continued management/operation of the collection trench water overflow filtration system. A detailed Operations and Maintenance Plan (OMP) will be prepared and submitted for NYSDEC approval.



## 5.0 HEALTH AND SAFETY

This project involved a NYSDEC mandated corrective action and also involved limited contact with hazardous substances. Therefore, it was necessary for all site personnel involved on the project (both Severson and Golder) to comply with OSHA 1910.120 (HAZWOPER) regulations. A Health and Safety Plan was submitted by Severson prior to mobilization and initiation of CMI work activities and subsequently approved by Golder and the NYSDEC.

Safety is of utmost importance to SNPE, VanDeMark, and Golder with any project undertaken. In addition to the OSHA 1910.120 requirements, any other pertinent federal, state or county requirements were followed as well as VanDeMark's own Contractor Safety Procedures.



## 6.0 CLOSING

Based on our continuous oversight and observation of the CMI construction activities performed and routine consultation with the NYSDEC during the completion of the work, Golder believes that the CMI activities performed and described in this report fully address the proposed scope of work presented in the March 2012 Work Plan and the supplemental provisions contained in the May 24, 2012 NYSDEC approval of the Work Plan. These corrective measures fulfill the intent for actions stipulated in Item I.B of the Order on Consent under "Corrective Action".

If you have any questions or comments concerning the work performed or the documentation provided, please contact us at (716) 204-5880

### GOLDER ASSOCIATES INC.

Patrick T. Martin, PE, BCEE  
Senior Consultant

Aaron M. Lange, EIT  
Staff Environmental Engineer

David C. Wehn, CPG  
Associate/Office Manager



## 7.0 REFERENCES

Golder Associates Inc., *Work Plan for Corrective Measures Implementation SNPE Inc. / VanDeMark Chemical, Inc. Lockport, New York*, prepared for SNPE Inc., March 2012.

Golder Associates Inc., *Focused Corrective Measures Study VanDeMark Chemical Lockport, New York*, prepared for SNPE Inc., April 2011 (Approved May 5, 2011).

## TABLES



**TABLE 1**  
**GROUT CURTAIN BOREHOLE SUMMARY**  
**CREEK BANK CORRECTIVE MEASURES CONSTRUCTION CLOSEOUT REPORT**  
**SNPE-VANDEMARK CHEMICAL**  
**LOCKPORT, NEW YORK**

BORING ID	BOREHOLE DRILLING SUMMARY (1)					BOREHOLE GROUTING SUMMARY			
	FLOWABLE FILL DEPTH (Ft. bgs)	QUEENSTON SHALE THICKNESS (Ft.)	WHIRLPOOL SANDSTONE THICKNESS (Ft.)	TOTAL BOREHOLE DEPTH (Ft. bgs)	REMARKS	GROUT BAGS PUMPED (2)	YIELD IN CUBIC FT. (CF)	REFUSAL PRESSURE (PSI) (3)	REMARKS
P-1	8	7	0	15	Wet cuttings returned	7	8.61	15	Hydraulic connectivity noted with overburden grout cutoff wall at surface
P-2	11	7	0	18	Wet cuttings returned	12	14.76	15	--
P-3	10	6	0	16	Wet cuttings returned	4	4.92	15	Hydraulic connectivity noted with overburden grout cutoff wall at surface
P-4	8	13	0	21	Wet cuttings returned	20	24.60	15	Hydraulic connectivity noted with P-5
P-5	7	6	8	21	Wet cuttings returned	6	7.38	15	Borehole filled with grout during P-4 grouting (10-ft. west)
P-6	7	9	0	16	Hydraulic connectivity noted with P-5; approx. 18-inch void space encountered at approx. 12-ft. bgs.	4	4.92	15	Hydraulic connectivity noted with overburden grout cutoff wall at surface
P-7	9	5	2	16	Dry cuttings returned	4	4.92	16	Hydraulic connectivity noted with P-5 and P-6 at surface
P-8	9.5	6.5	0	16	Dry cuttings returned	31	38.13	15	No observable grout return at surface
P-9	9	12	0	21	Hydraulic connectivity noted with P-8; No cuttings returned. Unknown bedrock unit at time of drilling. Approx. 2-ft. void space encountered from approx. 10-15-ft. bgs.	9	11.07	15	Minor hydraulic connectivity noted with creek during grouting
P-10	8	8	0	16	Possible large boulder at approx. 9-ft. bgs. Coal tar odor during bedrock drilling	27	33.21	15	--
P-11	5	3	3	11	Dry cuttings returned; Coal tar odor during bedrock drilling	2	2.46	15	Plugged during grouting
P-12	9	2	5	16	Dry cuttings returned	6	7.38	15	Hydraulic connectivity noted with P-11 during grouting
P-13	10	5	1	16	Dry cuttings returned	9	11.07	15	Minor hydraulic connectivity noted with creek during grouting
P-14	9	4	3	16	Dry cuttings returned; Coal tar odor during bedrock drilling	8	9.84	15	Hydraulic connectivity noted with P-13
P-15	9	0	7	16	Mostly dry cuttings returned; Coal tar odor during bedrock drilling	4	4.92	15	Observable minor grout seepage at south edge of overburden grout cutoff wall
P-16	11	0	5	16	Coal tar odor during bedrock drilling; Approx. 0.5-ft. void encountered in bedrock	23	28.29	15	Observable minor grout seepage at toe of at P-16
P-17	15	1	5	21	Coal tar noted in wet bedrock cuttings	22	27.06	15	No observable grout return at surface
P-18	10	0	6	16	Approx. 2-ft. void space encountered from approx. 12-14-ft. bgs.	24	29.52	15	No observable grout return at surface
P-19	10	0	5	15	Dry cuttings returned	13	15.99	15	Hydraulic connectivity noted with P-20 during grouting
P-20	11	0	5	16	Dry cuttings returned	3	3.69	15	Observable grout return at surface
P-21	11	0	5	16	Mostly dry cuttings returned	17	20.91	15	Observable grout return at surface
P-22	12	0	7	19	DNAPL-like odor observed approx. 2-3-ft. into Whirlpool bedrock. Sheen on wet cuttings returned at surface. Sample collected for analysis of SVOCs.	35	43.05	15	No observable grout return at surface
P-23	12	0	9	21	Dry cuttings; Hydraulic connectivity noted with P-22	7	8.61	15	No observable grout return at surface
P-24	10.5	0	5.5	16	Mostly dry cuttings; Hydraulic connectivity noted with P-23	3	3.69	15	Borehole appeared plugged at approx. 6-feet bgs. Observable grout return at surface
P-25	11	0	5	16	Dry cuttings returned	8	9.84	15	No observable grout return at surface

**TABLE 1**  
**GROUT CURTAIN BOREHOLE SUMMARY**  
**CREEK BANK CORRECTIVE MEASURES CONSTRUCTION CLOSEOUT REPORT**  
**SNPE-VANDEMARK CHEMICAL**  
**LOCKPORT, NEW YORK**

BORING ID	BOREHOLE DRILLING SUMMARY (1)					BOREHOLE GROUTING SUMMARY			
	FLOWABLE FILL DEPTH (Ft. bgs)	QUEENSTON SHALES THICKNESS (Ft.)	WHIRLPOOL SANDSTONE THICKNESS (Ft.)	TOTAL BOREHOLE DEPTH (Ft. bgs)	REMARKS	GROUT BAGS PUMPED (2)	YIELD IN CUBIC FT. (CF)	REFUSAL PRESSURE (PSI) (3)	REMARKS
P-26	14.5	0	6.5	21	Dry cuttings in upper bedrock; wet cuttings lower half of bedrock. Approx. 0.5-ft. void encountered in bedrock at approx. 16.5-ft bgs. Hydraulic connectivity noted with P-23 (30-ft. away)	20	24.60	15	No observable grout return at surface
P-27	16	0	10	26	Dry cuttings in upper bedrock; wet cuttings lower half of bedrock. Approx. 2-ft. of very silt bedrock drilling at overburden grout cutoff wall/bedrock interface. Hydraulic connectivity noted with P-26	15	18.45	15	No observable grout return at surface
P-28	16	0	10	26	Limited cutting returns; soft rock zone encountered at approx. 20-ft. bgs. Hydraulic connectivity noted with P-26 & P-27	10	12.30	15	Minor hydraulic connectivity noted with creek during grouting
P-29	16	0	5	21	Moderate coal tar odor during bedrock drilling; Hydraulic connectivity noted with P-28	7	8.61	15	Observable grout return at surface
P-30	16	0	5	21	Mostly dry cuttings; No hydraulic connectivity noted with previous boreholes	6	7.38	15	No observable grout return at surface
S-1	12	9	0	21	Hydraulic connectivity noted with P-1 and north side of overburden grout cutoff wall	4	4.92	45	Hydraulic connectivity noted with S-2 during grouting
S-2	11	10	0	21	Hydraulic connectivity noted with P-1, S-1 and overburden grout cutoff wall (at surface)	2	2.46	45	--
S-3	11	5	0	16	Hydraulic connectivity noted with overburden grout cutoff wall (at surface)	40	49.20	45	--
S-4	11.5	9.5	0	21	Hydraulic connectivity noted with overburden grout cutoff wall (at surface)	5	6.15	45	Hydraulic connectivity noted with grout wall and S-5 during grouting
S-5	10	6	0	16	--	25	30.75	45	Hydraulic connectivity noted with north edge of overburden grout cutoff wall during grouting
S-6	9	5	2	16	Grout encountered during drilling	30	36.90	45	--
S-7	9	5	1	15	Approx. 1-foot of borehole muck; Hydraulic connectivity noted with overburden grout cutoff wall (at surface) and S-6	20	24.60	50	No hydraulic connectivity noted during grouting
S-8	4	7	5	16	Approximate location of large rock slab encountered during trench excavation	30	36.90	45	Hydraulic connectivity noted with north edge of overburden grout cutoff wall during grouting
S-9	9	12	0	21	--	11	13.53	45	Minor hydraulic connectivity noted with creek during grouting
S-10	5	9	2	16	Grout encountered at overburden grout cutoff wall/Whirlpool interface and Whirlpool/Queenston interface	2	2.46	45	
S-11	4	6	6	16	Approx. 6-inches of grout at bottom of flowable fill	7	8.61	45	Minor hydraulic connectivity noted with creek during grouting
S-12	8	10	3	21	Grout encountered during Queenston shale drilling	5	6.15	45	No hydraulic connectivity noted during grouting
S-13	6	4	6	16	Grout encountered during bedrock drilling	8	9.84	45	No observable grout return at surface
S-14	9	6	6	21	--	18	22.14	45	No hydraulic connectivity noted during grouting
S-15	10	9	2	21	--	8	9.84	45	No hydraulic connectivity noted during grouting
S-16	12	5	9	26	Grout/coal tar odor encountered during Whirlpool bedrock drilling	18	22.14	45	No observable grout return at surface
S-17	10	0	6	16	Very solid Whirlpool sandstone noted	2	2.46	45	No hydraulic connectivity noted during grouting

**TABLE 1**  
**GROUT CURTAIN BOREHOLE SUMMARY**  
**CREEK BANK CORRECTIVE MEASURES CONSTRUCTION CLOSEOUT REPORT**  
**SNPE-VANDEMARK CHEMICAL**  
**LOCKPORT, NEW YORK**

BORING ID	BOREHOLE DRILLING SUMMARY (1)					BOREHOLE GROUTING SUMMARY			
	FLOWABLE FILL DEPTH (Ft. bgs)	QUEENSTON SHALE THICKNESS (Ft.)	WHIRLPOOL SANDSTONE THICKNESS (Ft.)	TOTAL BOREHOLE DEPTH (Ft. bgs)	REMARKS	GROUT BAGS PUMPED (2)	YIELD IN CUBIC FT. (CF)	REFUSAL PRESSURE (PSI) (3)	REMARKS
S-18	8	0	12	20	--	11	13.53	45	No hydraulic connectivity noted during grouting
S-19	12	3	11	26	Grout encountered during drilling	29	35.67	45	No observable grout return at surface
S-21	12	4	10	26	Coal tar/solvent-like odor encountered at approx. 17-ft. bgs. Approx. 2-ft. void space encountered from approx. 18-20-ft. bgs. Water encountered at approx. 21-ft. bgs.	34	41.82	45	No observable grout return at surface
S-22	12	2	12	26	Grout encountered during Whirlpool bedrock drilling	20	24.60	45	No observable grout return at surface
S-23	12	2	12	26	Slight coal tar/solvent-like odor encountered at approx. 17-ft. bgs. Water encountered at approx. 20-ft. bgs. Possibly drilled twice, yielding similar results.	32	39.36	45	No observable grout return at surface
S-24	12	2	12	26	Soft zone encountered in bedrock at approx. 11-12 ft. bgs; approx. 0.5-ft. void space encountered at Whirlpool/Queenston interface	38	46.74	45	No observable grout return at surface
S-25	11	0	5	16	Dry cuttings returned	21	25.83	45	Hydraulic connectivity noted with S-27 (20-ft. east) during grouting
S-26	11	0	15	26	Dry cuttings returned	38	46.74	50	No observable grout return at surface
S-27	11	0	15	26	--	--	--	--	Borehole filled with grout during S-25 grouting (20-ft. west)
S-28	14	0	12	26	--	22	27.06	50	No observable grout return at surface
S-29	14	0	12	26	Grout encountered during drilling	23	28.29	45	No observable grout return at surface
T-1	10	6	0	16	Hydraulic communication noted with overburden grout cutoff wall at surface	20	24.60	45	No observable grout return at surface
T-5	10	5	0	15	Large 2-foot thick rock slab left in-situ during trench excavation encountered at approx. 4-ft. bgs.; approx. 3-ft. of overburden grout cutoff wall encountered beneath slab. Hydraulic communication observed at surface with overburden grout cutoff wall.	9	11.07	45	No observable grout return at surface
T-9	12	4	0	16	Hydraulic connectivity noted with P-6, T-5 and overburden grout cutoff wall at surface.	7	8.61	45	No observable grout return at surface
T-13	9	5	0	14	Hydraulic connectivity noted with T-9, overburden grout cutoff wall (North) at surface and creek bank	16	19.68	45	Hydraulic connectivity noted with T-9 during grouting
T-17	4	4	3	11	Hydraulic connectivity noted with overburden grout cutoff wall (North) at surface; Grout encountered during Queenston bedrock drilling	16	19.68	45	Hydraulic connectivity noted with trench wall (North) during grouting
<b>Total Linear Feet Drilled:</b>				<b>1196</b>	<b>Total Grout Curtain Volume:</b>				<b>1152.51</b>

**NOTES:**

All depths are approximate

Ft. bgs. = Feet below ground surface

CF = Cubic Feet

PSI = Pounds per Square Inch

1 Grout Bag = 1.23 CF of grout

(1) Drilling depths are from surface of installed overburden grout cutoff wall; observations noted at time of drilling

(2) Bags of bentonite grout mixed and pumped into borehole during pressure grouting

(3) Grouting refusal pressure of pounds per square inch (psi)

Table By: RJM

Date: 11/30/2012

Checked By: DCW

Date: 1/23/2013

**TABLE 2**  
**PIEZOMETER AND DNAPL MONITORING POINT SUMMARY**  
**CREEK BANK CMI CONSTRUCTION CLOSEOUT REPORT**  
**SNPE-VANDEMARK CHEMICAL**  
**LOCKPORT, NEW YORK**

POINT ID#	INSTALL. DATE	NORTHING	EASTING	GROUND ELEV. (1)	PRO. CASING ELEV. (2)	CASING ELEV. (3)	BOREHOLE DEPTH (4)	TOP OF SCREEN (5)	BOTTOM OF SCREEN (5)	SANDPACK LENGTH (FT)	SEAL LENGTH (FT)
PZ-1	11/13/2012	5139.45	4762.79	140.50	143.58	143.14	9.0	5.00	9.00	5.0	2.0
PZ-2	11/13/2012	5159.78	4770.84	142.20	145.31	144.81	8.0	5.00	8.00	3.5	2.0
PZ-3	11/14/2012	5152.62	4585.68	122.70	125.35	124.82	10.0	7.00	10.00	4.0	2.5
PZ-4	11/14/2012	5165.71	4595.72	123.90	126.58	126.11	10.0	5.00	10.00	6.0	2.0
OS-1	11/14/2012	5174.54	4579.58	122.50	NA	NA	5.0	NA	NA	NA	NA
OS-2	11/14/2012	5146.50	4639.05	126.90	NA	NA	5.0	NA	NA	NA	NA
OS-3	11/14/2012	5154.49	4739.93	141.09	NA	NA	5.0	NA	NA	NA	NA
OS-4	11/14/2012	5165.95	4815.00	143.35	NA	NA	5.0	NA	NA	NA	NA

**NOTES:**

PZ = Performance monitoring piezometer location

OS = DNAPL Collection Trench observation well location

NA = Not Applicable

(1) Ground Elevation is to Top of Surrounding Ground Surface (Site datum)

(2) Pro. Casing Elevation is to Top of Protective Steel Casing

(3) Casing Elevation is to Top of PVC Casing

(4) Ground Surface to Bottom of Boring (feet)

(5) Below Ground Surface (feet)

(6) Piezometers Constructed of Schedule 40 PVC

Table By: RJM

Date: 12/3/2012

Checked By: AML

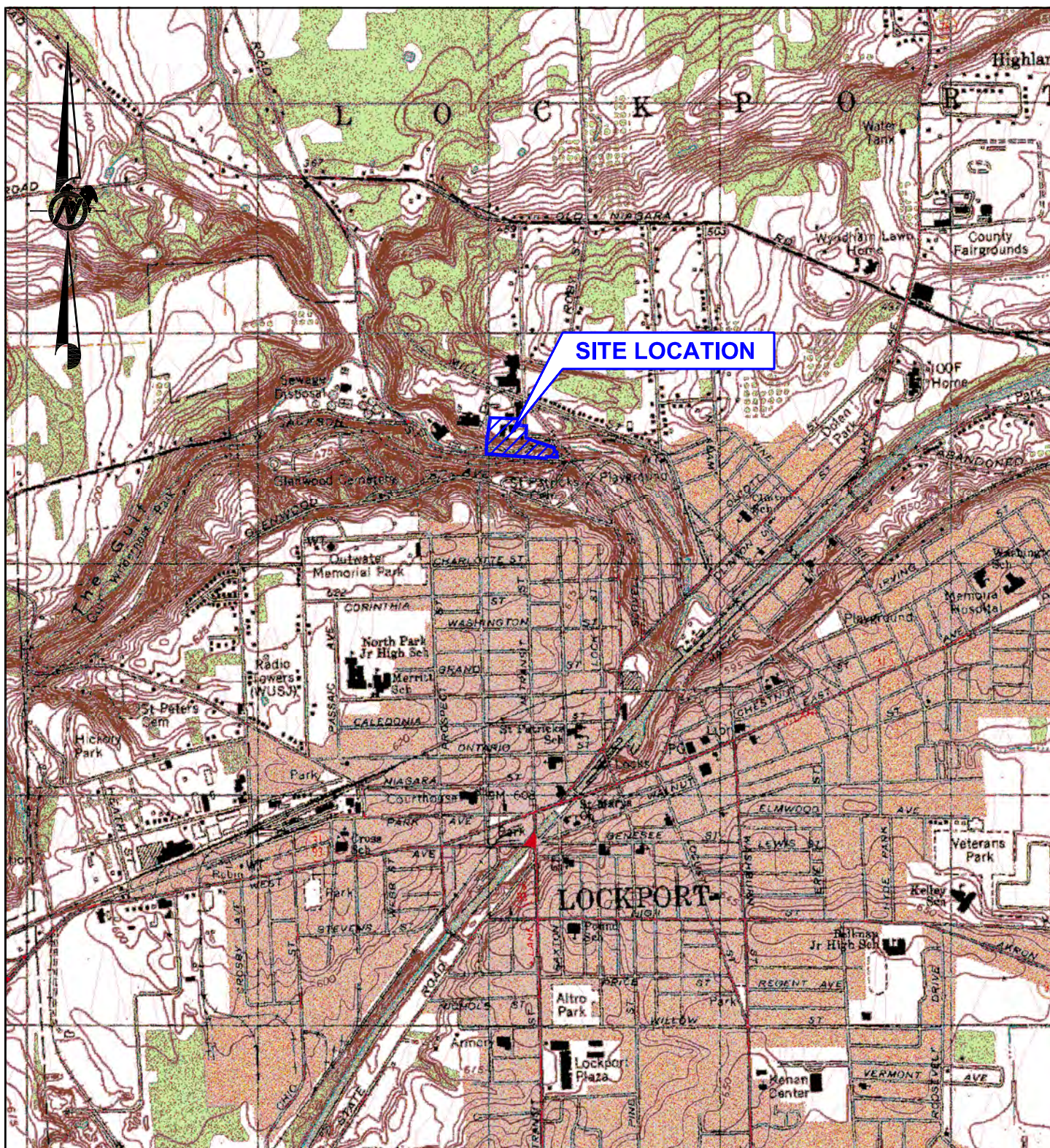
Date: 12/11/2012

Reviewed By: PTM

Date: 12/21/12

## FIGURES






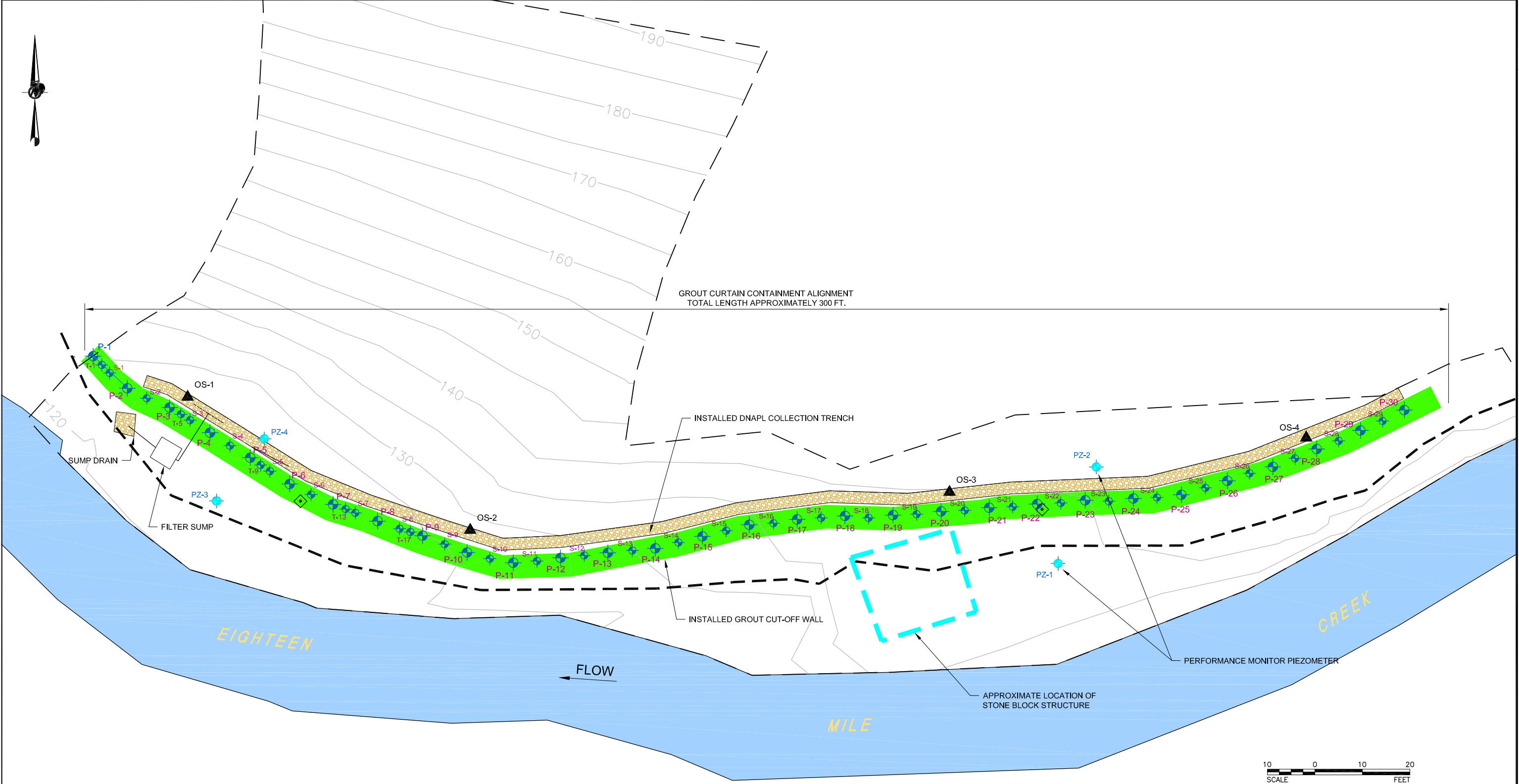
## REFERENCES

1.) BASE MAP TAKEN FROM U.S.G.S. 7.5 MINUTE QUADRANGLE OF LOCKPORT, NEW YORK DATED 1980.

2000 0 2000  
SCALE FEET

 <b>Golder Associates</b> Buffalo, New York	NJ Authorization #24GA28029100	SCALE	AS SHOWN	TITLE	<h1>SITE LOCATION MAP</h1>
		DATE	02/04/11		
		DESIGN	AML		
		CADD	GLS		
FILE No.	09389168A011	CHECK		SNPE - VANDEMARK CHEMICAL	FIGURE <b>1-1</b>
PROJECT No.	093-89168	REV.	0		
		REVIEW			





**LEGEND**

APPROXIMATE LOCATION OF EROSION CONTROL MEASURES (SILT FENCE, STRAW BALES, AND SAND BAGS). TO REMAIN IN PLACE UNTIL SPRING OF 2013

PERFORMANCE MONITORING PIEZOMETER

PRIMARY GROUT CURTAIN BOREHOLE (APPROX. 10-FT LINEAR SPACING ALONG ENTIRE GROUT WALL ALIGNMENT)

SECONDARY GROUT CURTAIN BOREHOLE (APPROX. 5-FT LINEAR SPACING BETWEEN PRIMARY BOREHOLES)

TERTIARY GROUT CURTAIN BOREHOLE (INSTALLED AT APPROX. 2.5-FT SPACING BETWEEN SELECT SECONDARY BOREHOLES)

EIGHTEEN-MILE CREEK

OBSERVATION SUMPS

IN-SITU GROUT WALL PERMEABILITY SAMPLE LOCATION

FLOWABLE FILL AND CEMENT GROUT

No. 2 WASHED STONE

- REFERENCE**
- 1.) TOPOGRAPHY SHOWN ON THIS PLAN WAS TAKEN FROM SURVEY FILE xve-vandemark base.dwg, DATED 06-21-2010.

2.) BOREHOLE AND CORE LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE.

3.) MAP DIGITIZED FROM HARD COPY OF FIGURE 1 ENTITLED "SITE PLAN," PREPARED BY BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.

4.) CONCRETE VAULT, PIEZOMETERS, GRAVEL COLLECTION TRENCH, OBSERVATION SUMPS, AND FRENCH DRAIN FROM 121205 FIELD DATA REVISED.XLSX, PREPARED BY WENDEL IN NOVEMBER 30, 2012.

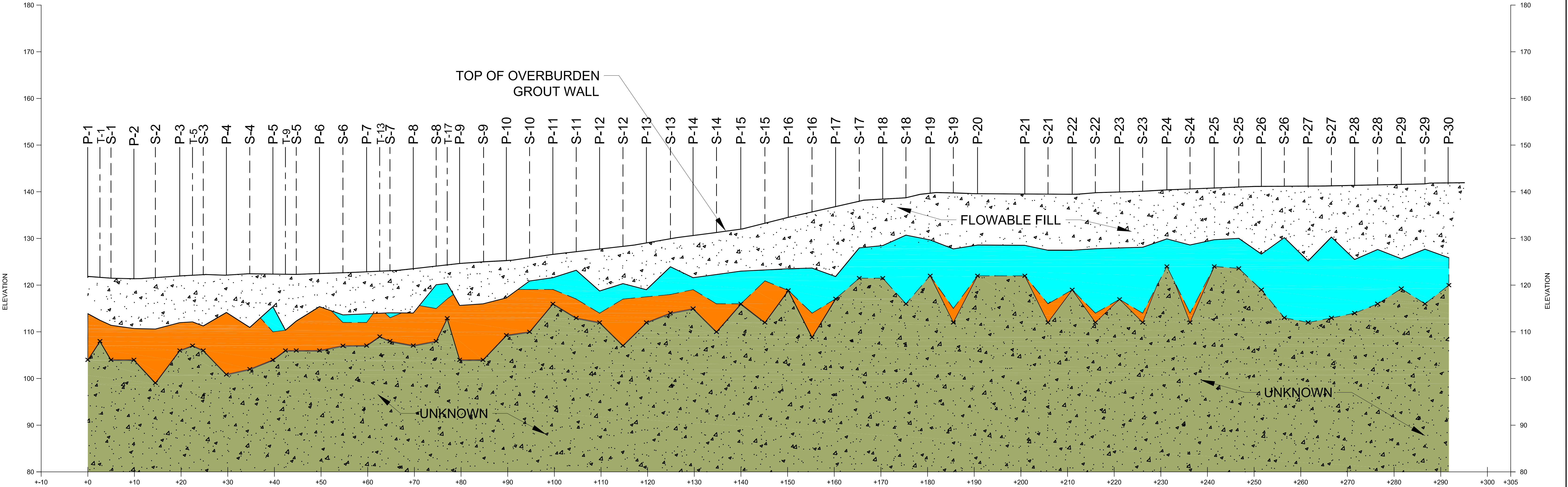
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
PROJECT						
SNPE - VANDEMARK CREEK BANK AREA CORRECTION MEASURES PROJECT LOCKPORT, NEW YORK						
TITLE						
POST CMI CONSTRUCTION CREEK BANK AREA SITE PLAN						
NJ Authorization #240A28029100						
PROJECT No.		093-89168		FILE No.		09389168A028
DESIGN	PTM	12/11/12		SCALE	AS SHOWN	REV. 0
CADD	AML	12/21/12				
CHECK	PTM					
REVIEW	DCW					

**Golder Associates**  
Mt. Laurel, New Jersey

**FIGURE 3-1**

WEST


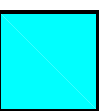



EAST

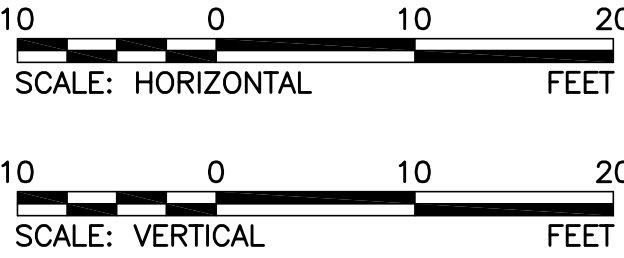


NOTES

- 1.) ALL DEPTHS ARE APPROXIMATES BASED ON VISUAL OBSERVATION OF RETURN CUTTINGS FROM AIR HAMMER DRILL.
- 2.) CEMENT PRESSURE GROUTING OF VOID SPACES AND FRACTURES WITHIN BEDROCK FORMATIONS IS ASSUMED TO EXTEND, AT A MINIMUM, FROM THE BOREHOLE TERMINATION DEPTH (AS DELINEATED ON THE CROSS-SECTION) TO THE TOP OF THE ROCK / FLOWABLE FILL INTERFACE AND ACROSS THE HORIZONTAL SPAN OF THE CROSS-SECTION FROM BOREHOLE P-1 TO P-30.

LEGEND

-  FLOWABLE FILL  
GROUT CUTOFF WALL  
(GROUND SURFACE TO TOP OF ROCK)
-  WHIRLPOOL SANDSTONE UNIT
-  QUEENSTON SHALE UNIT
-  UNKNOWN ROCK FORMATIONS
-  BOREHOLE TERMINATION DEPTH



PROJECT				SNPE - VANDEMARK FOCUSED CORRECTIVE MEASURES STUDY LOCKPORT, NEW YORK			
TITLE				CREEK BANK AREA DEPTH OF BEDROCK GROUTING GEOLOGIC CROSS SECTION			
PROJECT No. 093-89168				FILE No. 09389168A029			
DESIGN	RJM	02/05/13	SCALE	AS SHOWN	REV.	0	
CADD	AML	02/20/13					
CHECK	PTM	02/21/13					
REVIEW	DCW	02/21/13					



FIGURE 3-2



**APPENDIX A**

**CORRECTIVE MEASURES ORDER R9-20080205-5  
(November 30, 2011)**

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

---

In the Matter of the Implementation of  
Corrective Action for a Hazardous Waste  
Management Facility, Pursuant to Article 27,  
Titles 9 and 13 of the Environmental Conservation  
Law of the State of New York by:

ORDER ON CONSENT  
File No. 08-10  
R9-20080205-5

Van De Mark Chemical, Inc.  
One North Transit Road  
Lockport, New York 14094-2399

SNPE, Inc.  
103 Carnegie Center, Suite 300  
Princeton, New Jersey 08540

Respondent(s)

---

WHEREAS:

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of the Environmental Conservation Law of the State of New York ("ECL"). This Order is issued pursuant to the Department's authority under that law, including ECL 3-0301, ECL Article 27, Title 9, and ECL Article 71, Title 27.

2. Van De Mark Chemical, Inc. ("Van De Mark"); owns and operates property located at One North Transit Road, Lockport, New York 14094-2399 ("Facility"). Van De Mark was owned by SNPE, Inc. ("SNPE") from 2000 to 2007, and known as Isochem, Inc. from 2004 to 2007. Together, SNPE and Van De Mark will be referred to herein as "Respondents".

3. The Department maintains that Van De Mark conducted operations at the Facility that subject it to ECL Article 27, Title 9, and the regulations promulgated pursuant thereto. The Department further maintains that the Facility is a hazardous waste

management facility, as that term is defined at 6 NYCRR 370.2(b)(89), and is subject to the New York State laws and regulations governing hazardous waste.

4. The Department maintains that the Facility is subject to interim status and corrective action pursuant to the Federal Resource Conservation and Recovery Act ("RCRA") and the regulations promulgated thereunder. The Department received final delegation of RCRA authority from United States Environmental Protection Agency ("EPA") as of May 29, 1986.

5. On March 1, 1981, a Part A hazardous waste application under RCRA was submitted to the EPA by Van De Mark. The Facility has not received a Part B permit and is considered by the Department to be an interim status facility for purposes of 6 NYCRR 373-1.3.

6. A Draft Phase I/II Environmental Audit developed by Dames & Moore for SNPE, in 1999 revealed dense non-aqueous phase liquid (DNAPL) in monitoring well MW-2D.

7. In 2006, Van De Mark agreed to conduct a voluntary Site Assessment of the on-site monitoring wells and further inspection of the base of the escarpment/banks of Eighteen Mile Creek. As a result of the inspection activities, coal tar was discovered along Eighteen Mile Creek at the base of the Niagara Escarpment and below the plant site. The Respondents encountered coal tar in quantities and locations that the parties agreed required further investigatory and remedial efforts.

8. Pursuant to a Department-approved work plan and under Department oversight, Van De Mark began creek bank cleanup activities on August 13, 2007 and completed this phase of the work on August 27, 2007.

9. Respondents submitted a supplemental Eighteen Mile Creek bank cleanup plan on September 12, 2008 to address additional coal tar seeps and a further report on December 22, 2008 that described the second phase of cleanup work along the creek bank.

10. Respondents, in 2009 and 2010, submitted additional work plans and, with the Department's approval, continued to perform additional remediation of the previously unanticipated levels of coal tar at the Facility.

11. The Department and Respondents agree that the goal of this Order is to implement further corrective action to address the coal tar contamination associated with the Facility and Eighteen Mile Creek and to develop and execute a related operation and maintenance plan for the Facility, including the plant site.

12. Pursuant to ECL Section 71-2727(3), the Commissioner of the Department may issue orders requiring corrective action, including corrective action beyond the facility boundary where necessary to protect human health and the environment, for all releases of hazardous waste or constituents from any Area of Concern (AOC) or solid waste management unit (SWMU) at any treatment, storage or disposal facility which is either permitted or seeking a permit under Title 7 of 9 of Article 27 of the Chapter, or which has interim status according to regulations adopted thereunder, regardless of the time at which the waste was placed in the unit.

13. Pursuant to 6 NYCRR 373-1.2(e), an enforceable document, such as an Order on Consent, can be issued in lieu of a post-closure permit, subject to the requirements in 6 NYCRR 373-3.7(k).

14. Respondents consent to the issuance of this Order to fulfill their obligation under ECL Article 27, Title 9 and ECL 71-2727(3)(b) to perform corrective measures

implementation and operations and maintenance monitoring at the Facility and agree to be bound by its terms. Respondents reserve all rights and defenses they may have regarding liability or responsibility for conditions at the Facility, except that Respondents consent to and agree not to contest the authority or jurisdiction of the Department to enforce this Order, except as provided in Section V.C., and agree not to contest the validity of this Order or its terms. Respondents have consented to the issuance of this Order in good faith without trial or adjudication of any issue of fact or law.

I. Corrective Action

A. Respondents shall implement the Interim Corrective Measures (ICM) work plan, dated February 2011, and approved by the Department on May 5, 2011, within forty-five days of the effective date of this Order. Said ICM requires removal of coal tar located at the plant site portion of the Facility.

B. Respondents shall submit a Corrective Measures Implementation (CMI) work plan that provides sufficient detail of the corrective measures alternative approved by the Department, with modifications, in its letter dated May 5, 2011. This approval was in response to Respondents' Focused Corrective Measures study (CMS) which Respondents submitted in April 2011. This CMI Work Plan will address any identified coal tar impacts to Eighteen Mile Creek adjacent to the Facility. The CMI Work Plan shall be submitted within-sixty days of the effective date of this Order.

C. Respondents shall submit an Operation and Maintenance Plan (OMP) that monitors the effectiveness and maintenance of the remedial system installed at the base of the Niagara Escarpment and groundwater/DNAPL monitoring associated with the selected corrective action at the Facility. Based upon the results of the OMP, the Department may

require additional corrective action at the Plant Site and/or enhancements to the remedial system installed at the base of the Niagara Escarpment.

## II. Financial Assurances

A. Providing Financial Assurance: By sixty (60) days from Effective Date of Order , Respondents shall provide an estimate of financial assurance for (a) corrective measures implementation activities necessary to implement and successfully complete the CMI n to address coal tar contamination at the Facility and (b) activities necessary to implement the OMP at the Facility. Respondents must provide financial assurance in accordance with 6 NYCRR 373-3.8, or comply with requirements of 6 NYCRR 373.3.8. Respondents shall add the words, “and/or corrective action” wherever the words, “closure/post closure” appear in financial assurance instrument wording. Respondents shall thereafter modify the sentence stating that the wording of the financial assurance instrument is identical to the wording provided in the regulations by adding the phrase, “with the exception of including the words, and/or corrective action.”

### B. Modification of Amount of Financial Assurance:

1. On an annual basis, beginning one year after the effective date of this Order, Respondents must submit to the Department a corrective action cost estimate for (a) the Corrective Measures Implementation Work Plan; and (b) the Operation and Maintenance Plan, all of which are required by Paragraph I of this Order. The Department will review each cost estimate and notify Respondents, in writing, of the Department’s approval, rejection, or modification of the cost estimate. If the Department does not approve the cost estimate, the Department will notify the Respondents in writing of the estimate’s deficiencies and specify a due date for submittal of a revised cost estimate.

2. If the cost estimate is greater than the amount of financial assurance then in effect, the Respondents must, within sixty (60) days from the date of the submission of the new cost estimate, provide additional financial assurance in accordance with 6 NYCRR Section 373-3.8, in an amount that is the difference between the new cost estimate and the existing financial assurance then in effect.

3. If the estimated cost is less than the amount of financial assurance then in effect, Respondents may, at the same time that Respondents submit the annual cost estimate, or at any other time agreed to by the Department, submit a written proposal to the Department to reduce the amount of the financial assurance provided under this Section so that the amount of the financial assurance is equal to the estimated cost of the remaining work to be performed. The written proposal shall specify, at a minimum, the cost of the remaining work to be performed and the basis upon which such cost was calculated. In the event that the Department requires additional information concerning the remaining work to be performed, the department shall notify Respondents in writing. Respondents shall have fifteen (15) days after receiving the Department's notification that additional information is needed to submit in writing a revised proposal that addresses all of the additional information requested by the Department. If Respondents provide sufficient information to the Department concerning the cost of the remaining work to be performed, the Department shall issue a written decision within sixty (60) days regarding the amount of financial assurance required under this Order. After receiving the Department's written decision, Respondents may reduce the amount of the financial assurance only in accordance with, and to the extent permitted by, such written decision. If Respondents elect to satisfy the requirement of 6 NYCRR 373-3.8 by establishing a closure/post-closure

trust fund and the value of the fund is greater than the cost of the remaining work, the Department will instruct the trustee to release such excess funds to the Respondents.

4. In the event of a dispute, Respondents may invoke the dispute resolution mechanism provided in Section VII of this Order. Respondents shall not be required to post additional financial assurance or be entitled to reduce the amount of financial assurance, or seek a release of funds, until a final decision is rendered by the Director or his designee.

C. Liability Requirements:

Respondents must have and maintain liability coverage in accordance with 6 NYCRR 373-3.8(h).

D. Adjustment for Inflation:

While this Order remains in effect, the financial assurance, including financial assurance for corrective action, will be subject to adjustment for inflation as provided for in 6 NYCRR 373-3.8(c)(2) and Section 373-3.8(e)(2).

III. Stipulated Penalties:

1. Respondents' failure to comply with any term of this Order constitutes a violation of this Order and the ECL. If the Department determines that Respondents have failed to comply with this Order, the Department shall notify Respondents in writing. Payment of any penalty shall not in any way alter Respondents' obligation to comply with any term of this Order or to complete performance under the terms of this Order. The payment of stipulated penalties as set forth below shall not limit the Department's right to seek such other relief as may be authorized by law.



2. Respondents<sup>2</sup> shall be liable for payment to the Department of the sums set forth below as stipulated penalties for each day, or part thereof, that Respondents are in violation of the terms of this Order. All penalties begin to accrue on the first day Respondents are in violation of the terms of this Order and continue to accrue through the final day of correction of any violation, less those days the matter was subject to Dispute Resolution. Such sums shall be due and payable within fifteen (15) days after receipt of notification from the Department assessing the penalties. If such payment is not received within fifteen (15) days after Respondents receive such notification from the Department, interest shall be payable at the annual rate of nine (9) per centum on the overdue amount from the day on which it was due through, and including, date of payment. Penalties shall be paid by certified check or money order, made payable to "New York State Department of Environmental Conservation" and be delivered personally or by certified mail, return receipt requested, to the Regional Attorney, Office of General Counsel, NYSDEC, 270 Michigan Avenue, Buffalo, New York 14203-2915. Payment of the penalties shall not in any way alter Respondents' obligation to complete performance under the terms of this Order. Stipulated penalties shall be due and payable pursuant to the following schedule:

<u>Period of Non-Compliance</u>	<u>Penalty Per-Day</u>
First through 15 <sup>th</sup> day	\$ 500
16 <sup>th</sup> through 30 <sup>th</sup> day	\$1, 500
31 <sup>st</sup> day and thereafter	\$4,500

IV. Submissions

A. All reports and submissions required by this Order shall be made to the Regional Hazardous Materials Engineer at the address provided in Paragraph X.

Respondents shall be responsible for the content of any submissions made pursuant to this Order.

B. The Department shall review each of the submissions Respondents make pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submission was done, in accordance with this Order and with generally accepted technical/scientific principles. The Department shall notify Respondents in writing of its approval or disapproval of each submission. All Department approved submissions shall be incorporated into and become an enforceable part of this Order. Approval by the Department shall not be unreasonably withheld or delayed by the Department.

C. If the Department disapproves a submission, it shall so notify Respondents in writing and specify the reasons for its disapproval. Within sixty days, unless the notice specifies a different deadline, after receiving written notice that Respondents' submission has been disapproved, Respondents shall make a revised submission to the Department that addresses all the Department's stated reasons for disapproving the first submission. After receipt of the revised submission, the Department shall notify Respondents in writing of its approval or disapproval. If the Department approves the revised submission, it shall be incorporated into and become an enforceable part of this Order. If the Department disapproves the revised submission, the Department and Respondents will conduct good faith negotiations to resolve the issue between them during the course of the next twenty-one days. If the issues are not resolved to the Department's satisfaction, the Department shall so notify Respondents in writing within such twenty-one day period and Respondents shall be in violation of this Order, unless it has invoked the dispute resolution mechanism

set forth below in Paragraph VI within thirty days of receipt of the Department's written notice that issues have not been resolved.

D. The Department may request that Respondents modify and/or amplify and expand a submission upon the Department's request to do so if the Department reasonably determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary.

V. Reservation of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating or in any way affecting any of the Department's civil, criminal, or administrative rights or authorities including, but not limited to nor exemplified by, the right to recover natural resource damages against any party, including Respondents and Respondents' defenses thereto.

B. Nothing contained in this Order shall be construed to prohibit the Commissioner or the Commissioner's designee from exercising any summary abatement powers pursuant to ECL 71-0301.

C. Except as specifically set forth herein, nothing in this Order shall be construed as a waiver by Respondents of any rights, claims, defenses, or agreements it now has or may have in the future regarding the Facility.

VI. Dispute Resolution

A. The Parties shall use their reasonable best effort and negotiate in good faith to resolve any disputes regarding this Order.

B. If any dispute shall arise between Respondents and the Department regarding the implementation or interpretation of any provision of this Order or any

revised submittal, Respondents may invoke the dispute resolution procedures contained in this Section.

C. In order to invoke these procedures, within 30 days of receipt of notice of the Department's action or determination, Respondents must submit a written request to meet with the Director of the Division of Materials Management ("the Director") to discuss the Department's action or determination. The Director or the Director's designated agent must contact Respondents to schedule a meeting within 14 days thereafter. At the meeting, Respondents shall be given an opportunity to present their response to the Department's action or determination, and the Director shall have the authority to modify and/or withdraw such action or determination. The Director shall notify Respondents, in writing, of his or her specific comments as soon as reasonably practicable after the meeting.

D. Upon receipt of such notification, Respondents shall take whatever action is required under this Order as modified by the Director's comments (if any) pursuant to a schedule determined following the meeting with the Director. If Respondents fail to take the required action, Respondents shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to any provision of statutory or common law.

E. The invocation of dispute resolution procedures under this Paragraph shall not, of itself, extend, postpone, or affect in any way any obligation of Respondents under this Order, except that payment of stipulated penalties with respect to the disputed matter shall be stayed pending resolution of the dispute pursuant to this Paragraph.

Notwithstanding the stay of payment set forth above, stipulated penalties shall accrue from

the first day of noncompliance with any applicable provision of this Order. In the event Respondents do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Paragraph IV above. The Director, in his or her sole discretion, may waive stipulated penalties when Respondents do not prevail on the disputed issue if the Director determines that Respondents had a reasonable basis for believing they would prevail on the disputed issue.

F. The Director's written specific comments shall be the Department's final agency action for purposes of Article 78 of the CPLR. Nothing in this Order shall diminish or otherwise affect Respondents' statutory rights of appeal with respect to the Department's final decision.

VII. Entry Upon Facility

Respondents hereby consent to the entry upon Facility and upon areas in the vicinity of the Facility that are under the control of Respondents upon reasonable notice and at times reasonable under the circumstances by any duly designated employee, consultant, contractor, or agent of the Department or any State Agency having jurisdiction for purposes of inspection, sampling, and testing to ensure Respondents' compliance with this Order. The Department shall abide by the security, health and safety rules in effect at the Facility. The Department may be accompanied by an employee, consultant, contractor, or agent of Respondents.

VIII. Indemnification

Respondents shall indemnify and hold the Department, the State of New York, and its representatives and employees harmless for all claims, suits, actions for damages, and costs of every name and description arising out of or resulting from the fulfillment or

attempted fulfillment of this Order by Respondents' employees, servants, agents, successors, and assigns.

IX. Modification

A. The terms of this Order constitute the complete and entire Order the Department issued to Respondents covering corrective measures investigation, implementation, and monitoring at the Facility. No term, condition, understanding, or Order purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submissions shall be construed as relieving Respondents of their obligation to obtain such formal approvals as may be required by this Order.

B. If Respondents desire that any provision of this Order be changed, Respondents shall make timely written application to the Department setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed to the Regional Materials Management Engineer, and the Regional Attorney, at the respective addresses provided in paragraph X.

X. Communications

All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or by hand delivery.

1. Communication from Respondents shall be sent to:

Regional Materials Management Engineer  
New York State Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, New York 14203-2915

Regional Attorney  
270 Michigan Avenue  
Buffalo, New York 14203-2915

2. Communications to Respondents shall be sent to:

Pamela Cook  
Van De Mark, Inc.  
One North Transit Road  
Lockport, New York 14094-2399

Richard A. Martin  
Orrick, Herrington & Sutcliffe, LLP  
51 West 52<sup>nd</sup> Street  
New York, New York 10019-0142

and to

David Flynn  
Phillips Lytle, LLP  
3400 HSBC Center  
Buffalo, New York 14203

B. The Department and Respondents reserve the right to designate additional or different addresses for communication on written notice to the other given in accordance with this Section.

XI. Termination and Satisfaction

The provisions of this Order shall be deemed satisfied and the obligations of the Respondents under this Order shall terminate upon Respondents' receipt of a written statement from DEC that Respondents have completed, to DEC's satisfaction, all the terms and conditions of this Consent Order. At any time after Respondents complete all of the tasks required by this Order, including the tasks in Paragraph I, Sections A, B, and C, and coal tar is not emanating from the base of the escarpment for a period of three (3) years, Respondents may request in writing that DEC provide Respondents with a statement of completion. Within ninety (90) days after such request by Respondents, DEC will use its best efforts to provide Respondents with a statement of completion, or a written statement as to the basis for a refusal to provide Respondents with such statement of completion. At

any time after Respondents' receipt of a written statement of refusal to provide Respondents with a statement of completion, Respondents may submit a notice of dispute and trigger the dispute resolution procedures provided in Section VI of this Order. If Respondents disagree with the decision issued under the dispute resolution procedures of this Order, Respondents may then seek judicial review of the DEC determination concerning Termination and Satisfaction. DEC and Respondents agree that the determination of the dispute resolution proceeding concerning Termination and Satisfaction (i.e., whether Respondents have completed all of the tasks required by this Order) shall be deemed final agency action and subject to judicial review. The need for additional post-closure care monitoring, and post-closure financial assurance, while independently enforceable by the Department, shall not be a prerequisite to termination of this Order

XII. Notification of Proposed Transfer

A. Within thirty (30) days after the effective date of this Order, Respondents shall file a copy of this Order with the Niagara County Clerk, Lockport, New York to give notice of this Order to all parties who may acquire an interest in the Site. Respondents shall provide the Department with a certification by the Niagara County Clerk indicating that a copy of the Order has been filed with the Office of the Niagara County Clerk, in Lockport, New York.

B. Within thirty (30) days after the effective date of this Order, Respondents shall file a deed notice with the Niagara County Clerk, Lockport, New York whereby the Facility is restricted to use for commercial or industrial purposes and groundwater at the



Facility shall not be used for potable water purposes; Said notice shall further state that the site has a possibility of residual coal tar contamination.

C. If Respondents propose to convey the whole or any part of Respondents' ownership interest in the Site during the term of this Order, Respondents shall, not fewer than sixty (60) days before the date of conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance, and shall notify the transferee in writing, with a copy to the Department of the applicability to them of this Order and all attachments, and 6 NYCRR Part 373-3.

D. Respondents, through their successors and assigns, shall retain liability for fulfilling the terms of this order throughout the duration of the Order, even if during the duration of the Order, Respondents, or their successors and assigns, convey or transfer the whole or any part of their interest in the Site.

### XIII. Miscellaneous

A. Respondents hereby certify that they have fully and accurately disclosed or made available to the Department all relevant information known to Respondents and all relevant information in the possession or control of its officers, directors, employees, contractors, and agents which relates to, identifies or describes contamination at the Facility relative to coal tar and DNAPL, along Eighteen Mile Creek.

B. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondents pursuant to this Order, and the Department also shall have the right to take its own samples. Respondents shall make available to the Department the results of all sampling, tests or other data generated by Respondents with respect to implementation of this Order or conducted

independently by Respondents. Respondents shall have the right to obtain split samples, duplicate samples, or both of all substances and materials sampled by the Department, and the Department shall make available to Respondents the results of all sampling, tests or other data generated by the Department with respect to this Order.

C. Respondents shall obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform its obligations under this Order.

D. Respondents and Respondents' successors (including successors-in-title) and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondents including, but not limited to, any transfer of assets or real or personal property, shall in no way alter Respondents' responsibilities under this Order. Respondents shall require that its employees, servants, and agents comply with the relevant provision of this Order in the performance of their designated duties on behalf of Respondents.

E. Respondents shall be responsible for ensuring that its contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

F. Respondents shall notify the Department at least 10 working days in advance of the commencement of any field activities to be conducted pursuant to this Order.

G. All references to days in this Order are to calendar days unless otherwise specified. If a deadline falls on a weekend or holiday, such deadline shall automatically be extended until the next business day.

H. The Paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

I. The Effective Date of this Order shall be the date that the Commissioner or his designee signs the Order. The Department will provide Respondents (or Respondents' counsel) with a fully executed copy of this Order as soon as practicable after the Commissioner or his designee signs it.

J. In the event of an inconsistency between the provisions of any attachment or appendix of this Order and any term, condition, or provision contained in Paragraph I through XII of this Order, the term, condition, or provision contained in that Paragraph, and not that in any attachment or appendix of this Order, shall control.

K. Respondents and Respondents' corporate successors and assigns hereby affirmatively waive any right they had, have, or may have to make a claim against New York state pursuant to Article 12 of the Navigation Law with respect to the Site, and further release and hold harmless the New York State Environmental Protection and Spill Compensation Fund from any and all legal or equitable claims, suits, causes of action, or demands whatsoever that any of same has or may have with respect to the Facility.

L. The terms of any Orders on Consent Respondents have entered into with DEC pertaining to the Facility shall continue in full force and effect unless they conflict with or are otherwise addressed by the terms of this Order, in which case terms of this Order shall control.

M. Respondents shall not suffer any penalty under this Order or be subject to any proceeding or action if it cannot comply with any requirement hereof because of war,

riot, or any other event beyond the reasonable control of Respondents. Respondents shall, within 10 business days of when they obtain knowledge of any such condition, notify the Department in writing. Respondents shall include in such notice the measures taken and to be taken by Respondents to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such ten-business day period constitutes a waiver of any claim that a delay is not subject to penalties.

Dated: Nov. 30, 2011  
Buffalo, New York

Joseph J. Martens  
Commissioner  
New York State Department of  
Environmental Conservation

Abby M. Snyder  
By: Abby M. Snyder  
Regional Director

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives its right to a hearing herein as provided by law, and agrees to be bound by this Order.

By: M. A. Kucharski  
Title: President & CEO  
Date: October 20, 2011

STATE OF NEW YORK)

) ss:

COUNTY OF )

On the 20<sup>th</sup> day of October, in the year 2011, before me, the undersigned, personally appeared Michael A. Kucharski, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Ann Marie Werth  
NOTARY PUBLIC

ANN MARIE WERTH  
Notary Public, State of New York  
Qualified in Niagara County  
My Commission Expires 01/23/2014

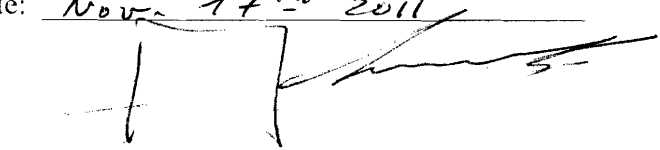
CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives its right to a hearing herein as provided by law, and agrees to be bound by this Order.

By: SCHWARTZ FRANCOIS

Title: CHAIRMAN

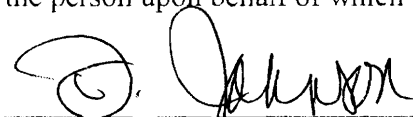
Date: Nov. 17<sup>th</sup> 2011



STATE OF NEW YORK)

COUNTY OF New York ss:

On the 17 day of NOVEMBER, in the year 2011, before me, the undersigned, personally appeared SCHWARTZ FRANCOIS, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.



NOTARY PUBLIC

DEBORAH JOHNSON  
Notary Public, State of New York  
No. 01JO6022712  
Qualified in Kings County  
Commission Expires April 5, 2015

# GROUPE SNPE

*November 2, 2011*

Le Directeur Délégué  
Financier et Juridique

*Dan Slick  
ChayseChem Inc.  
301 Oxford Valley Rd, Suite 704 B  
Yardley, PA 19067*

*N° 11 – 81 DFJ*

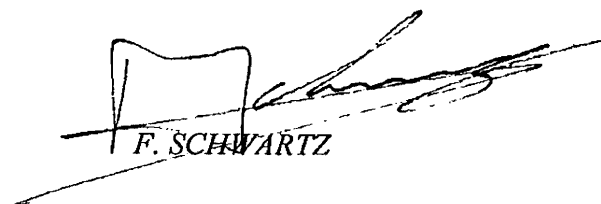
*Dear Dan,*

*You will find enclosed the Consent Decree with the State of New York signed by me as chairman of SNPE Inc.*

*I hope this signature could be validated.*

*Waiting to hear from you.*

*Yours,*



F. SCHWARTZ

*P.J.*

**APPENDIX B**  
**NYSDEC CORRESPONDENCE**



**New York State Department of Environmental Conservation**

**Division of Environmental Remediation, Region 9**

270 Michigan Ave, Buffalo, New York 14203-2915

Phone: (716) 851-7220 Fax: 716-851-7226

Website: [www.dec.ny.gov](http://www.dec.ny.gov)



Joe Martens  
Commissioner

May 24, 2012

Mr. Patrick Martin, P.E., BCEE  
Senior Consultant  
Golder Associates Inc.  
2430 North Forest Road, Suite 100  
Getzville, NY 14068

Dear Mr. Martin:

**SNPE – VanDeMark Chemical  
Revised Work Plan for Corrective  
Measures Implementation  
Town of Lockport, Niagara County NY  
Site # 932149**

The New York State Department of Environmental Conservation (the "Department") has reviewed your revised May 2012 SNPE – VanDeMark Chemical Work Plan for Corrective Measures Implementation (CMI) report. This CMI Report was submitted in accordance with the Department approved (May 5, 2011) Focused Corrective Measures Study report dated April 2011. The Department approves of the revised CMI Work Plan.

The Department appreciates your cooperation with this project. Please inform the undersigned at least one week in advance of all field work related activities. If you have any questions, please contact me (716)851-7220.

Sincerely,

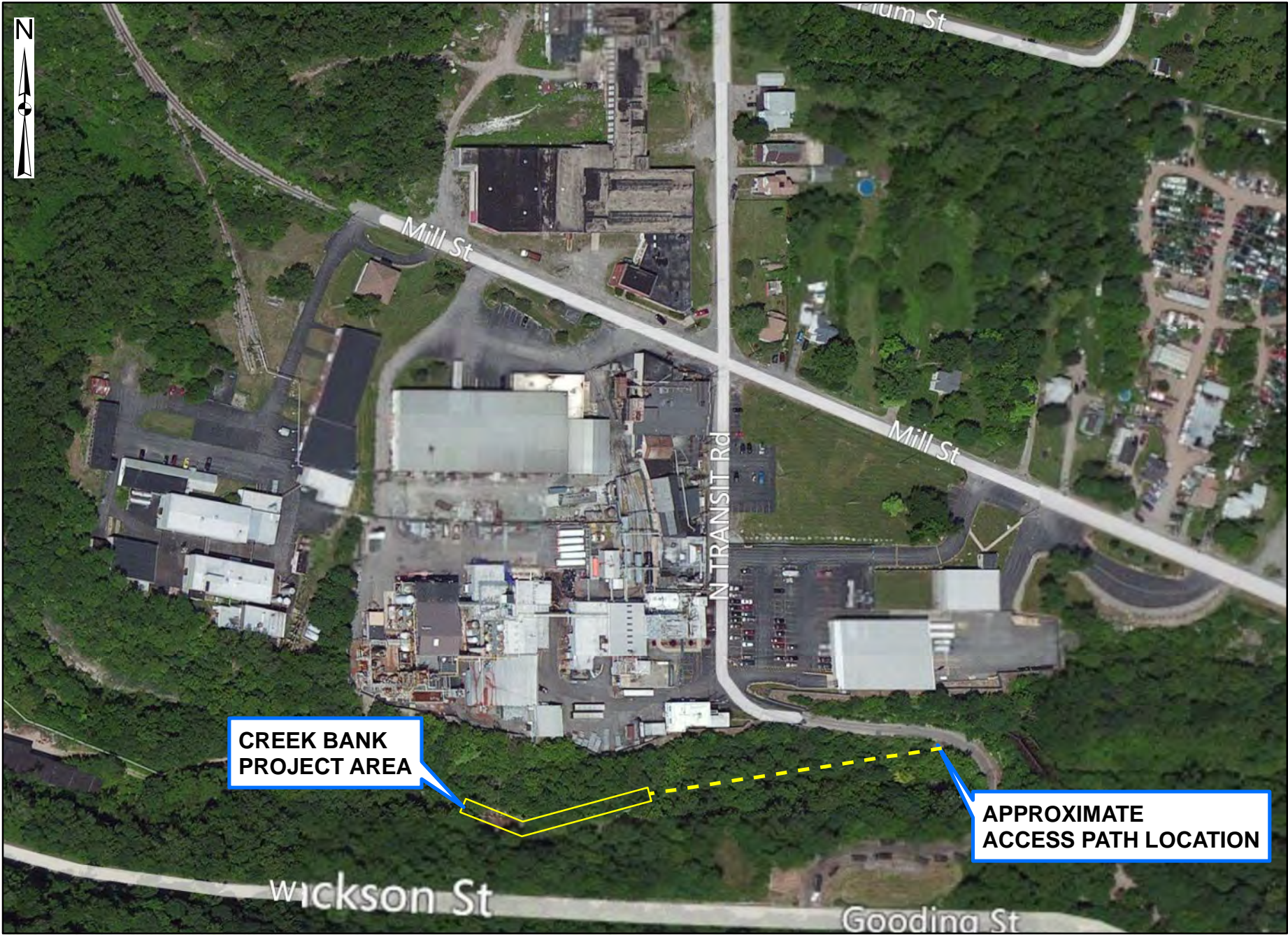
Stanley Radon, CPG  
Division of Environmental Remediation

SR:dcg  
radon\martin-may1.ltr

cc: Mr. Dennis Weiss, Regional Haz Materials Engineer  
Mr. Michael Hinton, Environmental Engineer II  
Mr. Matt Forcucci, NYS Dept of Health

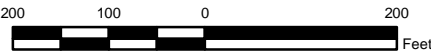
**APPENDIX C**  
**CORRECTIVE MEASURES DESIGN DRAWINGS**  
**(Figures 1 through 3)**

SNPE - VANDEMARK  
CREEK BANK AREA CORRECTIVE MEASURES PROJECT  
1 NORTH TRANSIT ROAD  
LOCKPORT, NEW YORK



REFERENCE

1.) AERIAL FROM ArcGIS ONLINE.



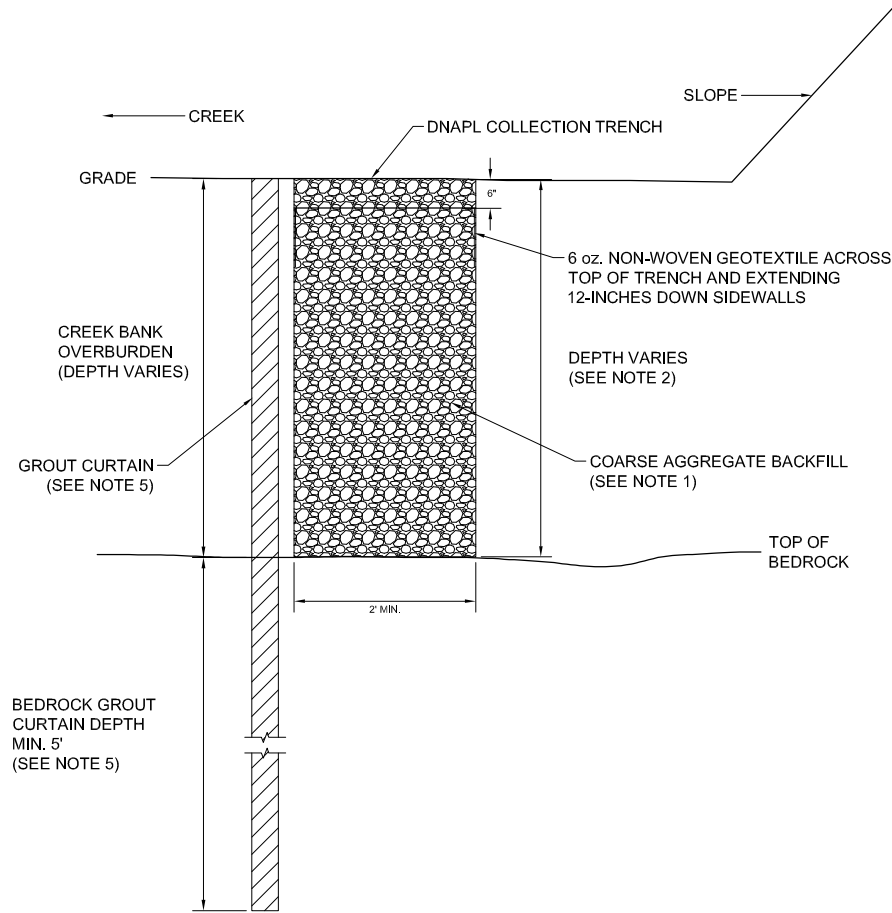
JULY 2012

FIGURE LIST

FIGURE No.	FIGURE TITLE
1	GROUT CURTAIN & DNAPL COLLECTION TRENCH ALIGNMENT
2	GROUT CUTAIN & DNAPL COLLECTION TRENCH DETAILS
3	ANCILLARY DETAILS

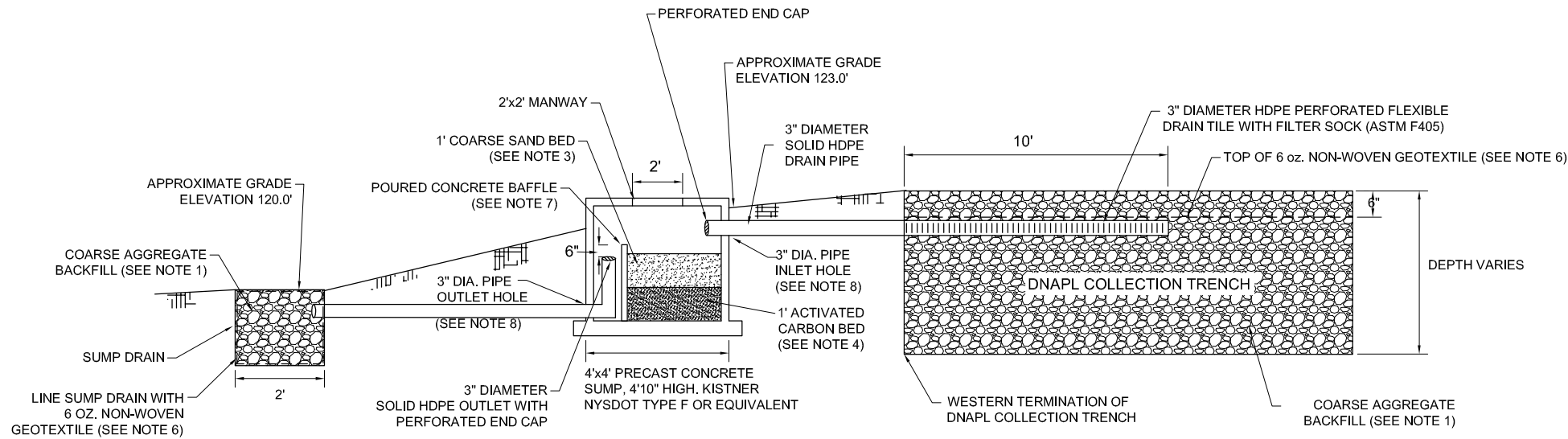






**DNAPL COLLECTION TRENCH  
DETAIL**

**1**  
**2** NOT TO SCALE



**TRENCH DRAINAGE/FILTRATION  
SYSTEM PROFILE**

**3**  
**2** NOT TO SCALE

**NOTES**

1.) COARSE AGGREGATE FOR THE DNAPL EXTRACTION TRENCH AND SUMP DRAIN BACKFILL SHALL BE CLEAN (WASHED), SUBROUNDED OR ROUNDED STONE, FREE FROM SLAG, CINDERS OR OTHER DELETERIOUS MATERIAL. COARSE AGGREGATE SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

Opening or Sieve Size	% Passing by Weight
1-1/2 Inch	100
1 Inch	90-100
200	0-10

CONTRACTOR SHALL SUBMIT CERTIFICATION OF COMPLIANCE WITH THE GRADATION AND PERMEABILITY SPECIFICATIONS.

2.) DNAPL COLLECTION TRENCH WILL EXTEND FROM GRADE TO THE TOP OF BEDROCK. IF BEDROCK IS DEEPER THAN 5 FEET, TRENCH BOTTOM WILL TERMINATE AT 5 FEET BGS.

3.) COARSE WASHED SAND MEDIA FOR THE DRAINAGE SUMP SHALL HAVE AN EFFECTIVE PARTICLE SIZE (D10) OF 0.3 TO 0.5 mm WITH A UNIFORMITY COEFFICIENT (UC) OF <4 WITH NO MORE THAN 4% PASSING A 100 MESH SIEVE.

4.) ACTIVATED CARBON FOR THE DRAINAGE SUMP SHALL BE CALGON CARBSORB 30 OR EQUIVALENT EXHIBITING A MINIMUM HARDNESS OF 90, AN IODINE NUMBER OF 900 mg/g (MIN.) WITH LESS THAN 4% BY WEIGHT PASSING THROUGH A 30 MESH SIEVE.

5.) THE OPTIMUM OVERBURDEN AND BEDROCK GROUTING METHODS WILL BE DETERMINED BASED ON THE RESULTS OF THE CONTRACTOR'S FIELD DEMONSTRATION PROGRAM AS SPECIFIED.

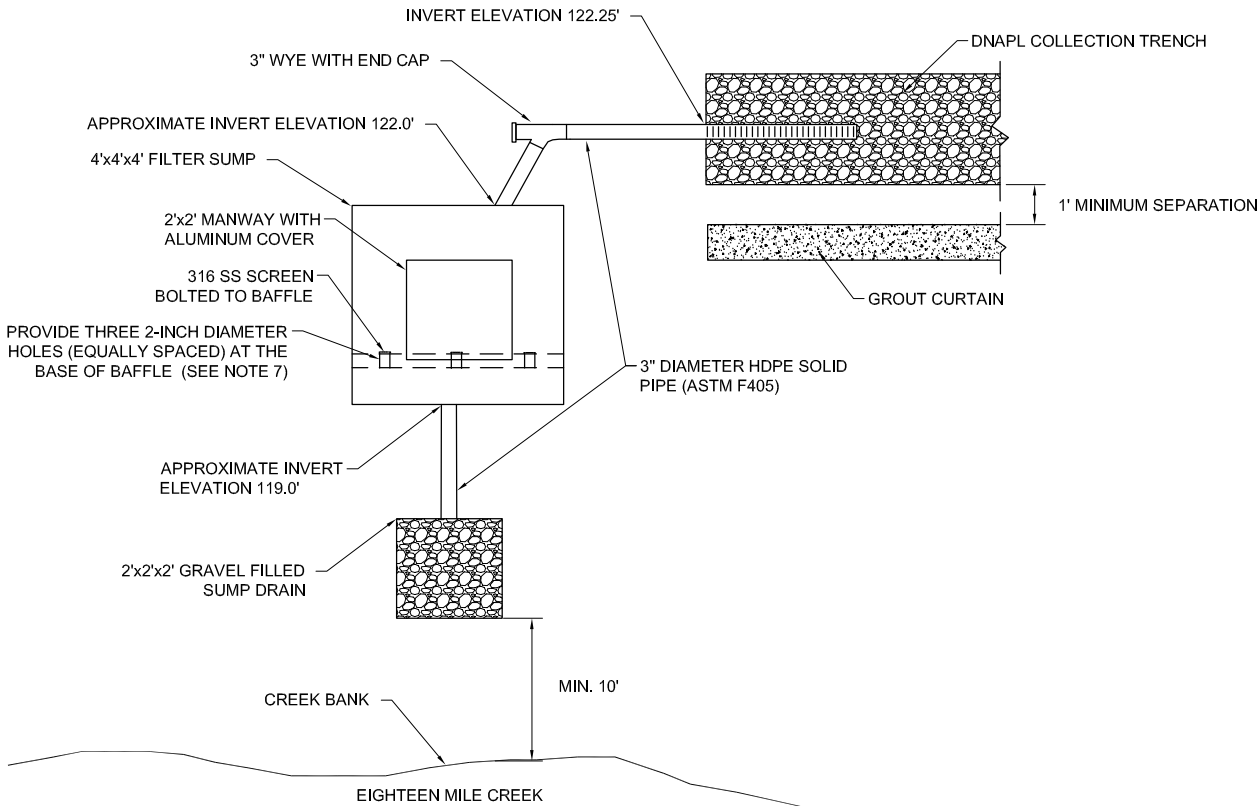
6.) 6 oz. NON-WOVEN GEOTEXTILE SHALL BE NEEDLE PUNCHED POLYPROPYLENE OR POLYESTER FABRIC AND HAVE THE FOLLOWING MINIMUM PROPERTIES:

THICKNESS: 80 mm
TENSILE STRENGTH: 170 lbs/in
PUNCTURE STRENGTH: 110 lbs
APPARENT OPENING SIZE: 70 (US SIEVE)

7.) CONTRACTOR SHALL FORM AND POUR A 4-INCH WIRE MESH ENFORCED CONCRETE BAFFLE ONCE THE SUMP IS INSTALLED. THE HEIGHT OF THE BAFFLE WILL BE DETERMINED ONCE THE INLET AND OUTLET PIPE ELEVATIONS ARE SET. THE INLET OF THE OUTLET PIPE WILL BE 6-INCHES LOWER THAN THE BAFFLE HEIGHT. THREE (3) EQUALLY SPACED 2-INCH DIAMETER HOLES WILL BE PROVIDED AT THE BASE OF THE BAFFLE. THE INLET TO THE HOLES WILL BE FITTED WITH 316 SS SCREEN AND SHALL BE US SIEVE SIZE 40.


8.) CONTRACTOR SHALL CUT THE INLET AND OUTLET HOLES ON THE SUMP IN THE FIELD ONCE FINAL PIPE AND GRADE ELEVATIONS ARE DETERMINED.

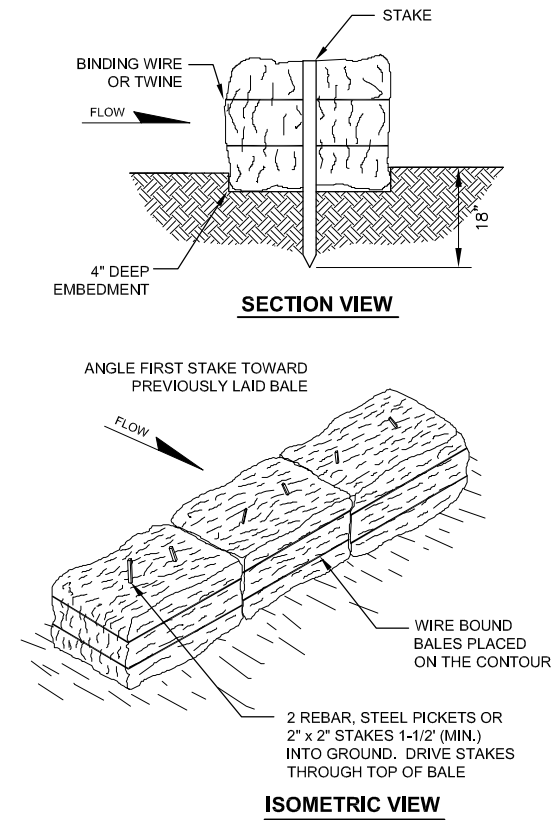
9.) ALL GENERAL FILL OR TOPSOIL IMPORTED ON THE PROJECT SITE MUST MEET THE ECOLOGICAL GUIDANCE VALUES IN APPENDIX 5 OF THE NYSDEC DER-10 (MAY 2010)



**TRENCH DRAINAGE/FILTRATION  
SYSTEM PLAN**

**2**  
**2** NOT TO SCALE

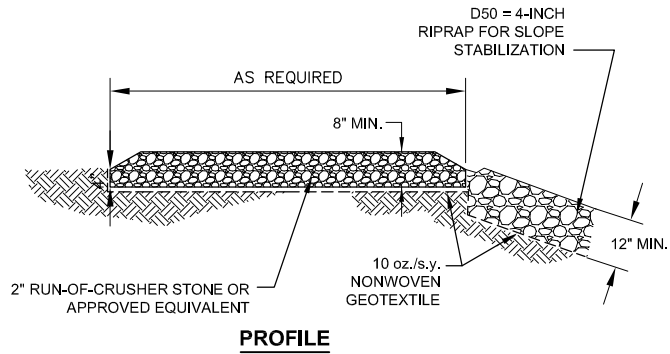
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	R/W
PROJECT						
SNPE - VANDEMARK CREEK BANK AREA CORRECTION MEASURES PROJECT LOCKPORT, NEW YORK						
TITLE						
<b>GROUT CURTAIN &amp; DNAPL COLLECTION TRENCH DETAILS</b>						
 <b>Golder Associates</b> Mt Laurel, New Jersey		PROJECT No. 093-89168		FILE No. 09389168A026		
		DESIGN	PTM	07/11/12	SCALE	AS SHOWN
		CADD	AML	07/12/12	REV.	0
		CHECK	PTM		<b>FIGURE 2</b>	
		REVIEW	DCW			



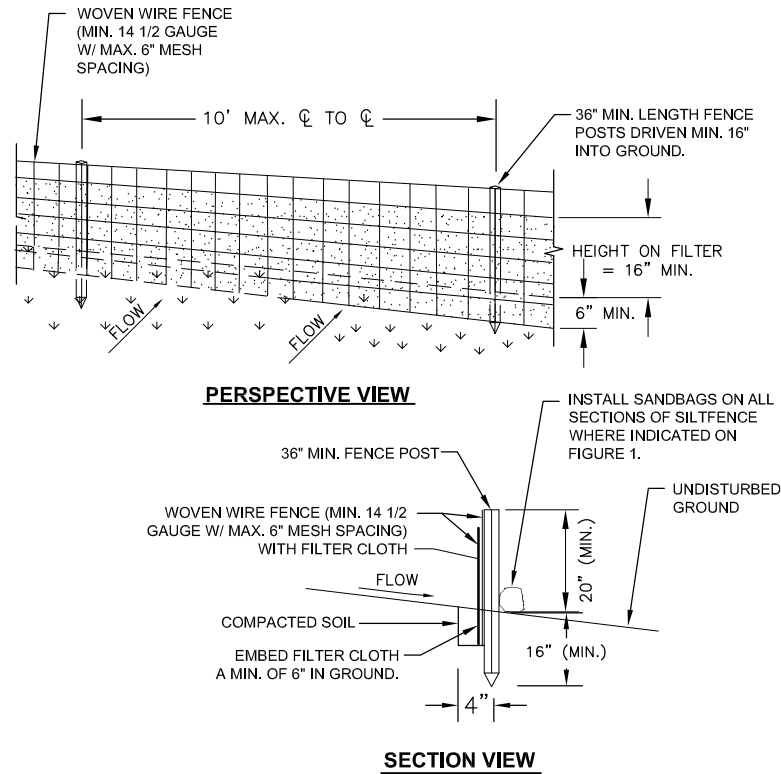
**1**  
**3** **STAKED STRAW BALE**  
NOT TO SCALE

**STRAW BALE CONSTRUCTION NOTES**

- 1.) STAKED STRAW BALE SHALL BE INSTALLED AS SHOWN AND MAINTAINED AS NEEDED TO PROVIDE TEMPORARY EROSION PROTECTION.
- 2.) STRAW BALES SHALL BE USED TO PROTECT BERM OUTSLOPES DURING STABILIZATION AND OTHER PROJECT AREAS NOT OTHERWISE DRAINING TO A SEDIMENT CONTROL FACILITY.
- 3.) BALES SHALL BE PLACED AT THE TOE OF SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- 4.) STRAW BALES SHALL NOT BE USED IN AREAS OF CONCENTRATED FLOW. ALL EFFORT SHALL BE MADE TO EVENLY AND UNIFORMLY GRADE UPSLOPE AREAS TO PROMOTE OVERLAND SHEET FLOW TO THE BALE LINE.
- 5.) STRAW BALES SHALL BE INSTALLED ON LEVEL GRADE, WITH END BALES TURNED UPSLOPE SUCH THAT BOTTOM OF BALES IS EQUAL IN ELEVATION TO TOP OF LEVEL PORTION.
- 6.) REPLACE STRAW BALES EVERY THREE (3) MONTHS, OR SOONER IF DETERIORATION PREVENTS PROPER OPERATION.
- 7.) REMOVE SEDIMENT DEPOSITS WHEN SEDIMENT ACCUMULATES TO 1/3 OF THE ABOVE- GROUND HEIGHT OF THE BALE DIKE.
- 8.) ANY STRAW BALES WHICH HAVE EITHER BEEN UNDERMINED OR OVERTOPPED MUST BE IMMEDIATELY REPLACED WITH ROCK-FILTER OUTLETS.



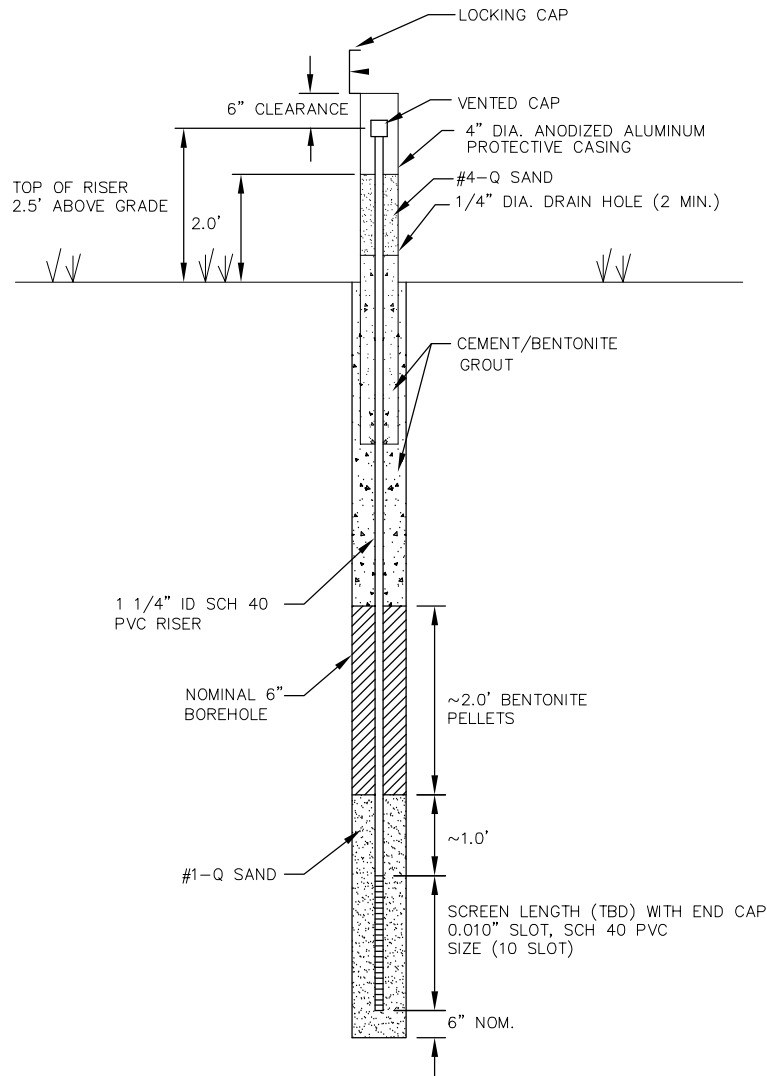
**4**  
**3** **STABILIZED ACCESS ROAD**  
NOT TO SCALE




**2**  
**3** **SILT FENCE**  
NOT TO SCALE

**CONSTRUCTION SPECIFICATIONS**

- 1.) WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL (EITHER "T" OR "U" TYPE) OR HARDWOOD.
- 2.) FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 14 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
- 3.) WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- 4.) PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
- 5.) MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. THE CONTRACTOR IS REQUIRED TO PERFORM AND DOCUMENT DAILY INSPECTIONS OF THE EROSION AND SEDIMENT CONTROLS.



**3**  
**3** **PIEZOMETER DETAIL**  
NOT TO SCALE

REV	DATE	DES	REVISION DESCRIPTION		CADD	CHK RVW		
PROJECT								
SNPE - VANDEMARK CREEK BANK AREA CORRECTION MEASURES PROJECT LOCKPORT, NEW YORK								
TITLE								
ANCILLARY DETAILS								
 <b>Golder Associates</b> Mt Laurel, New Jersey			PROJECT No. 093-89168		FILE No. 09389168A027			
			DESIGN	PTM	07/11/12	SCALE	AS SHOWN	REV. 0
			CADD	AML	07/12/12	<b>FIGURE 3</b>		
			CHECK	PTM				
			REVIEW	DCW				

## **APPENDIX D**

### **GOLDER DAILY FIELD OBSERVATION NOTES**

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149

OWNER: SNPE - VanDeMark Chemical

CONTRACTOR: Severson Environmental Services

LOCATION: Lockport, New York

SUB CONTRACTOR(S):

DATE: 9/11/12

WEATHER:

TEMPERATURE:

LOW:

55°F

@ 8:00am

HIGH

74°F

@ 1400pm

CLOUD COVER

Clear

PRECIPITATION

None

WIND

4 mph SSE

## GOLDER PERSONNEL ON SITE:

Aaron Largo, Pat Martin

## SUMMARY OF CONSTRUCTION PROGRESS:

Severson continuing to clear brush for access road. Silt fence being installed. At 1500, Severson completed silt fence installation. 1530, hay bales arrived on site. Everyone offsite at 1600.

## GOLDER ACTIVITIES AND TEST RESULTS:



SUBMITTED BY:

Aaron Largo



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE:

9/4/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

A water standpipe was discovered along the access path. Pat will contact VanDeMark and the City of Lockport to determine if this line is still active.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 9/12/12

WEATHER: TEMPERATURE: LOW: 55 @ 0800 HIGH: 82 @ 1430  
CLOUD COVER: NONE PRECIPITATION: NONE WIND: 4647

## GOLDER PERSONNEL ON SITE:

P. MARTIN (1415 - 1645)

## SUMMARY OF CONSTRUCTION PROGRESS:

- ALL VEGETATION CLEARING HAS BEEN COMPLETED
- SEVENSON COMPLETED INSTALLATION OF SILT FENCING, STORM BARRIERS AND SAND BAR EROSION CONTROL MEASURES ALONG SPECIFIED LOCATIONS
- PREPARING ACCESS PATH FOR PLACEMENT OF FILTER FABRIC & R.O.C STONE ON 12/13 & 12/14

## GOLDER ACTIVITIES AND TEST RESULTS:



SUBMITTED BY:

*Robert Martin*

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE:

9/12/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

N/A

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

NONE

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

- REVIEWED SCHEDULE WITH PAUL GALLO (PROJECT SUPERINTENDENT) NO  
DEVIATIONS FROM PLANNED SCHEDULE. THEY WILL INITIATE COAL  
TAR EXCAVATIONS IN LOWER CREEK BANK AREA EARLY NEXT WEEK.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

NONE

SUBMITTED BY:

Richard T. Wharton

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 9/13/12

WEATHER: CLOUD COVER TEMPERATURE: NONE LOW: 60 @ 0800 HIGH: 82 @ 1415  
PRECIPITATION: NONE WIND: LIGHT

## GOLDER PERSONNEL ON SITE:

P. MARTIN (1300 - 1430)

## SUMMARY OF CONSTRUCTION PROGRESS:

- SEVERSON HAS GRADED ACCESS PATH & INSTALLED GEOTEXTILE AND APPROXIMATELY 6 INCHES OF 2" RUN OF CRUSHER STONE FROM EDGE OF FORMER NORTH TRANSIT RD TO OLD WATER PUMP STATION (NEAR EASTERN TERMINUS OF PROPOSED DNAPL TRENCH)
- CONTINUING ROAD BASE INSTALLATION WEST - ANTICIPATING COMPLETION ON FRIDAY MORNING.
- SEVERSON PLANNING ON HAYING OUT AREA TO SPECIFICE EXCAVATED SOIL/LOAM TOP RESIDUES ALONG ACCESS RD. NEAR CONSTRUCTION ENTRANCE. THEY WILL LAY DOWN POLY SHEETING AND COVER AT END OF DAY.

## GOLDER ACTIVITIES AND TEST RESULTS:



SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE:

9/13/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

N/A

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

- CITY OF LOCKPORT WATER DEPARTMENT PERSONNEL WERE CALLED BY P. MARTIN ON 9/11/12 TO DISCUSS DISCOVERY OF A <sup>SUSPECTED</sup> WATER VALVE BOX NEAR OLD PUMP STATION STRUCTURE. WATER DEPARTMENT STAFF VISITED SITE ON 9/12/12 AND INDICATED IT MIGHT BE A BRANCH LINE TO PUMP STATION FROM WATER MAIN THAT CROSSES CREEK FURTHER EAST.
- DISCUSSED WITH PAUL GALLO AND HE WILL TREAT VALVE AS POTENTIALLY ACTIVE AND PROTECT DURING WORK - IT IS LOCATED AT EASTERN TERMINUS OF TRENCH AND SHOULD NOT INTERFERE WITH INSTALLATION.

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

- MET W/ STAN RADON, MIKE HANTON (NYSOEC) AND PAUL ANTEIS, CHRIS BANACH AND ANIELA MUIR (VDM) TO REVIEW PROJECT STATUS/SCHEDULE. IT WAS AGREED THAT PROJECT STATUS MEETINGS WILL BE HELD EVERY THURSDAY AT 9:30 AM AT THE SITE. FREQUENCY MAY BE DECREASED IF WORK PROGRESS WARRANTS LESS FREQUENT MEETINGS.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

NONE

SUBMITTED BY:

Robert J. Martin

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149

OWNER: SNPE - VanDeMark Chemical

CONTRACTOR: Severson Environmental Services

LOCATION: Lockport, New York

SUB CONTRACTOR(S):

DATE: 9/17/12

WEATHER:  
CLOUD COVER

TEMPERATURE: 65°F LOW: 56 @ 0800 HIGH: 73 @ 1600  
PRECIPITATION: None WIND: light

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0740-1730)

## SUMMARY OF CONSTRUCTION PROGRESS:

- 0815: Severson started digging slurry trench at western terminus. Bedrock reached  $\approx 7-9'$ . A small water seep was encountered. Severson built a small settling containment area lined with geosynthetic on upgradient side of hydraulic and silt fence. Have not needed to pump any water yet. Excavated fill is being loaded directly into dump truck and dumped on poly at the staging area.
- 0950: Coal tar layer encountered on eastern edge of large (4'x4') rock  $\approx$  from 30'-36' from western trench end,  $\approx 4-5'$  down,  $\approx 6-8"$  thick
- 1120: Mike Hinton (DEC) onsite, left shortly after.
- 1200: 2nd coal tar seam encountered  $\approx 45'$  from end of trench. ( $\approx 6"$  thick,  $\approx 2-4'$  wide,  $\approx 4'$  down).
- 1215: slurry truck starting to fill trench
- 1245: started dewatering trench west of large rock,  $\approx 100-200$  gallons.
- 1255: 2nd slurry truck filling trench
- 1400: The 5 loads of excavated fill has been covered in poly for storage.

## cont. GOLDER ACTIVITIES AND TEST RESULTS:

- 1440: 3rd slurry truck filling trench.
- 1510: 4th slurry truck
- 1530: 5th slurry truck
- 1655: 6th slurry truck



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

9/17/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

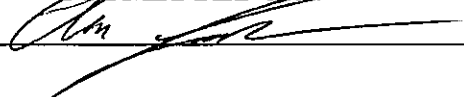
## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

met with Mike Anton of DEC. No issues noted. (A. Lange)  
A. Lange met with Chris B & Angela Phair (UDM) No issues noted. There will be a drill of emergency response on Thursday.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

Remind people to stay away from trenches as the soil is very unstable

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149

OWNER: SNPE - VanDeMark Chemical

CONTRACTOR: Severson Environmental Services

LOCATION: Lockport, New York

SUB CONTRACTOR(S):

DATE:

9/18/12

WEATHER:  
CLOUD COVER

TEMPERATURE:  
Overcast

LOW:

65°F

@ 0730

HIGH

PRECIPITATION

light rain

WIND

@ calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0715 - 1430)

## SUMMARY OF CONSTRUCTION PROGRESS:

0715: continuing slurry trench east. 9/17/12 pour is solid.  
0750: encountering many large rocks scattered throughout trench line making it difficult for a clean 2' trench.

- 48' of trench completed 9/17/12. (trench #1)

0830: coal tar vein reached at 62' → 66' east of trench end, ~ 4-8" thick.  
Seam only goes north from trench.

0945: Severson finished ~ 33' of trench, trench depth varies from ~ 5' at west end to ~ 10' at East end. more coal tar encountered at East end. ~ 10" down, 8" thick, possibly down to 2 ft bgs, ~ 31 ft from the west end of trench #2.

11:00: Stan Radon + Ken (DEC) on site

11:10: 1st slurry truck filling trench. DEC left shortly after, no issues.

11:40: 2nd slurry truck filling trench.

## GOLDER ACTIVITIES AND TEST RESULTS:

1200: 3rd truck

1220: 4th truck

1240: 5th truck

1405: 6th truck

1430: off-site



SUBMITTED BY:

A. Lange



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE:

9/18/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE:

9/19/12

WEATHER:  
CLOUD COVER

TEMPERATURE:  
None

LOW: 45°F @ 0730  
PRECIPITATION: None

HIGH: 60°F @ 1400  
WIND: calm

## GOLDER PERSONNEL ON SITE:

A. Lange (0715 - 1430)

## SUMMARY OF CONSTRUCTION PROGRESS:

- 0730: large coal tar vein continued from east end of trench #2 for another  $\approx 6'$ ,  $\approx 2$  ft down bgs,  $\approx 1.5'$  thick. Seam appears to flow around very large rocks. May not be able to remove rock for slurry trench.
- 0815: Severson is taking composite samples of the stockpiled fill for waste profiling.
- 0945: fill becoming more uniform and easier to excavate. From  $\approx 89'$  to  $130'$  bedrock varies between 5-7 ft bgs. The very large rock is from  $80'$  to  $87'$  along linear trench center. Coal tar surrounding the large rock extends  $\approx 2$  ft on each side. Coal tar extends closer to creek, unable to fully remove due to bank stability and trench depth.
- 1000: Another coal tar seam encountered from  $\approx 108'$  to  $138'$  varying in thickness from 1" to 10" in places. All tar appears to be situated directly on top of bedrock, and most appears to continue towards the creek.
- 1045: finished excavating trench #3. All 3 trenches now total  $\approx 158'$  from western terminus. Trench #3  $\approx 78'$  from end of Trench #2. Bedrock from  $130'$  to  $158'$  gets

## GOLDER ACTIVITIES AND TEST RESULTS:

- progressively deeper from  $\approx 7'$  to  $\approx 11'$  bgs.
- 1245: 1<sup>st</sup> slurry truck filling trench from east end.
- 1315: 2<sup>nd</sup> slurry truck
- 1330: Chris & Angela (VDM) and Stan & Peter Grasso (DEC) onsite.
- 1420: waiting for slurry to firm up a little before emptying 3<sup>rd</sup> truck.
- 1520: 5<sup>th</sup> truck
- 1630: 5<sup>th</sup> truck finished pouring. Pouring done in stages to allow slurry to harden thus allowing it to be stacked.



SUBMITTED BY:

A. Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

9/19/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

- Stan & Peter (DEC) onsite at 1330. No issues noted. meeting on Thursday will be at 10:00am  
- Chris & Angela onsite at 1330. No issues noted.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 9/20/12

WEATHER: CLOUD COVER: partly cloudy TEMPERATURE: LOW: 46° @ 0715 HIGH: 71°F @ 1300  
PRECIPITATION: None WIND: light

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0715 - 1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

0900: continuing trench east. Repaired some sections of the erosion control where stone had toppled over the silt fence.  
0915: The trench has reached the stone structure. Stone wall located between 170' to 180' from start of trench. Depth to bedrock  $\approx$  14' west of wall and  $\approx$  15-16' east of wall. Total length for trench #4  $\approx$  40'. Large seam of coal tar on east side of wall  $\approx$  1' thick  $\approx$  5' wide.  
1200: total trench length  $\approx$  198'.  
1210: 1st truck filling trench  
1230: 2nd truck  
1300: 3rd truck  
1355: 4th truck  
1440: 5th truck  
1500: 6th truck

## GOLDER ACTIVITIES AND TEST RESULTS:



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

9/20/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

1000: meeting with Stan, Mike, Dennis (DEC), Angela (VDM), Paul (Sevenson), and Aaron, and Pat. Discussed schedule/progress. DEC noted coal for seeping from bank south of stone structure. Requested that this material be removed from the bank. No other issues noted

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 9/21/12

WEATHER: CLOUD COVER overcast  
TEMPERATURE: 61°F  
LOW: 61°F @ 0715 HIGH  
PRECIPITATION: None WIND: light

## GOLDER PERSONNEL ON SITE:

A. Lange (0700-1400)

## SUMMARY OF CONSTRUCTION PROGRESS:

0700: Severson continuing trench east from  $\approx 198'$ .  
0800: more coal tar from  $\approx 200'$  to  $\approx 230'$   $\approx 6"$  to  $1.5'$  thick,  $\approx 8'$  down.  
0930: Trench now extends to  $\approx 230'$ , today's trench  $\approx 36'$   
1020: 1<sup>st</sup> truck filling trench  
1035: 2<sup>nd</sup> truck  
1045: 3<sup>rd</sup> truck  
1100: 4<sup>th</sup> truck  
1112: 5<sup>th</sup> truck  
1123: 6<sup>th</sup> truck  
1135: 7<sup>th</sup> truck  
1330: 8<sup>th</sup> truck

## GOLDER ACTIVITIES AND TEST RESULTS:



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE:

9/21/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

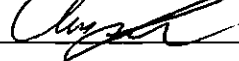
## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

A. Lange discovered a 4" PVC pipe with water flow going into creek. The apparent path of the pipe crosses the trench the west of today's trench. A. Lange contacted P. Martin and Chris B. (VDM). Chris informed us that the pipe is an overflow pipe for a former pump vault that is fed from an inlet pipe further upstream. Pat will be onsite Monday to discuss options.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 9/24/12

WEATHER: TEMPERATURE: LOW: 40°F @ 0715 HIGH 60°F @ 1330  
CLOUD COVER: None PRECIPITATION: None WIND: light

## GOLDER PERSONNEL ON SITE:

A. Lange (0700 - 1415)

## SUMMARY OF CONSTRUCTION PROGRESS:

0700: continuing trench at  $\approx 229'$   
0815: trench reaching  $\approx 246'$ , coal tar continued along the length of trench  
 $\approx 1'-2'$  thick,  $\approx 6'-7'$  bys, Depth to bedrock  $\approx 12'$ .  
0830: P. Martin, Chris B., & Angela M (UDM) onsite discussing options  
for discharge pipe from vault, uncovered both vaults, were able to  
block the water flow from the small eastern vault to the larger  
vault. The large vault was able to drain out, Severson will  
block the small vault outlet to be able to fill with concrete as a permanent  
fix.  
1045: Mike H. & Stan R. (DEC) onsite.  
1115: DEC offsite, no issues noted.  
1150: 1st truck

## GOLDER ACTIVITIES AND TEST RESULTS:

1202: 2nd truck  
1215: 3rd truck  
1235: 4th truck  
1250: Small vault plugged and filled half way with slurry, 5th truck.  
1348: Small vault filled to top with slurry. All water has stopped flowing  
out of overflow pipe.



SUBMITTED BY:

Aaron Lange



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

9/24/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE:

9/25/12

WEATHER:  
CLOUD COVER

TEMPERATURE:

Partly cloudy

LOW:

59°F

@ 0730

HIGH

68°F

@ 1315

PRECIPITATION

None

WIND

calm

## GOLDER PERSONNEL ON SITE:

A. Lange (0715 - 1615)

## SUMMARY OF CONSTRUCTION PROGRESS:

0715: Continuing trench east from  $\approx 246'$

0810: overflow pipe from large vault cut by excavator. The creek and has been capped. No coal tar present from  $\approx 260'$  going east.

1030: Stan R and Ken (DEC) onsite

1120: DEC offsite. No issues noted.

1245: Severson stopped digging trench at  $\approx 284'$ . A large rock and timber located at bottom of trench from  $\approx 248' - 255'$  will need to be grouted at bedrock  $\approx 12'$  down

1345: 1<sup>st</sup> truck of flowable fill filling trench

1357: 2<sup>nd</sup> truck

1411: 3<sup>rd</sup> truck

1419: 4<sup>th</sup> truck

## GOLDER ACTIVITIES AND TEST RESULTS:

1431: 5<sup>th</sup> truck

1440: 6<sup>th</sup> truck

1450: 7<sup>th</sup> truck

1515: 8<sup>th</sup> truck

1527: 9<sup>th</sup> truck

1540: 10<sup>th</sup> truck

1600: 11<sup>th</sup> truck

1608: 12<sup>th</sup> truck



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 9/25/10

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 4/26/12

WEATHER: CLOUD COVER TEMPERATURE: Overcast LOW: 61°F @ 0715 HIGH: 65°F @ 1200  
PRECIPITATION: light rain WIND: calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0715 - 1215)

## SUMMARY OF CONSTRUCTION PROGRESS:

0715: continuing trench at  $\approx$  281' going west.  
0845: trench now at  $\approx$  300'. No coal tar observed during today's excavation. Bedrock  $\approx$  14' bgs.  
0930: R. Marchese onsite to perform erosion control inspection.  
No issues noted  
1025: 1st truck filling trench  
1034: 2nd truck  
1057: 3rd truck  
1116: 4th truck. Mick is onsite taking samples of the slurry for permeability testing.  
1135: 5th truck

## GOLDER ACTIVITIES AND TEST RESULTS:



SUBMITTED BY:  
Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 9/26/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 9/27/12

WEATHER: CLOUD COVER TEMPERATURE: None LOW: 46°F @ 0700 HIGH: None PRECIPITATION: None WIND: calm

## GOLDER PERSONNEL ON SITE:

A. Lange (0700 - 1400)

## SUMMARY OF CONSTRUCTION PROGRESS:

0700: Severson will go back over the slurry trench and clean out all fill dams that were put in place to stop the slurry during each pour.  
1000: Pat Martin, Stan R (DEC), Chris B, Paul A. (VDM) onsite for meeting. Will likely start grouting on Monday. No issues noted  
1245: 1st truck filling trench cover.  
1322: 2nd truck  
1335: 3rd truck

## GOLDER ACTIVITIES AND TEST RESULTS:



SUBMITTED BY: Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

9/27/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

- grouting may start Monday. Friday will only be site cleanup and prep for Monday. No issues noted. Stan R. (DEC), Chris B. & Paul A. (VDM), Pat M. & Aaron L. (Golder) attended and Paul G. (Sevenson).

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Sevenson Environmental Services  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 10/1/12

WEATHER: TEMPERATURE: LOW: 50°F @ 0700 HIGH: 62°F @ 1400  
CLOUD COVER: None PRECIPITATION: None WIND: Calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0700 - 1430)

## SUMMARY OF CONSTRUCTION PROGRESS:

0700: Sevenson is evening out last berm and flowable fill pour. Attaching drill rig to mini-excavator.  
1200: Mike H. (DEC) onsite. No issues noted  
1430: Drill and excavator set up to start drilling tomorrow.

## GOLDER ACTIVITIES AND TEST RESULTS:

None



SUBMITTED BY: Aaron Lange



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

10/1/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S): Geosience

DATE: 10/2/2012

WEATHER: TEMPERATURE: LOW: 51 @ HIGH: @  
CLOUD COVER: Overcast PRECIPITATION: Lt. Rain WIND: calm

## GOLDER PERSONNEL ON SITE:

R. MacLere (0900 - 1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

Geosience  
0855 - Arrive @ Site; Severson + Mick (driller) beginning Percussive drilling on First borehole @ Far west side of trench alignment. Driller notes depth into rock is currently about 5-Ft, consistently hard drilling. Also notes significant water infiltration into the borehole. Driller believes he is in the Power Glen shale.  
0950 - Driller will try to case off borehole w/ 4" sch. 40 pvc pipe (10-Ft sections), to attempt to slow groundwater infiltration into BH. (Currently using 3.5" drill bit).  
1150 - BH-1: TD ~15 Ft. Unknown depth into Bedrock  
BH-2: TD ~18 Ft, ~7 Ft into rock (Queenston?)  
1240 - BH-3: TD ~16 Ft, ~6 Ft into Queenston Shale, per driller.  
1325 - BH-4: TD ~21 Ft, ~13 Ft into possible Queenston or Medina?  
1410 - BH-5: TD ~21 Ft, ~14 Ft into ~~comp.~~ rock (~6 Ft of comp.)  
1500 - BH-6: TD ~16 Ft, ~9 Ft into rock (Sandstone). Note: Between 11-14 Ft, seems to be a seam driller drilled through causing water in prev. borehole (BH-5) to erupt from the borehole. (Drillers note: probably an 18-inch void or v. soft seam drilled @ ~12 Ft bgs.)  
Wrap up for the day. Everyone offsite by ~~1530~~ 1600.

## GOLDER ACTIVITIES AND TEST RESULTS:

Observe borehole drilling efforts along trench alignment. Log drillhole depths.



SUBMITTED BY:

Russell MacLere

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S): Geosence

DATE:

10/2/2012

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None.

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

- GW infiltrating first borehole; attempt to install 4" sch. 40 PVC casing to slow GW infiltration as GW is slowing up the percussive drilling.
- Drilled approx. 4 ft bgs before hitting competent bedrock.
  - Sch. 40 PVC did not go down; instead Severson Supr (Paul G.) picked up thinner walled pipe (4", 100mm SDR 35) to attempt installing in 3 3/4" borehole.
  - ~~But~~ Thinner walled pipe still didn't go down BT, so Severson will cut short cut pipe pieces to insert into BT's to prevent surface muck from infiltrating BT's.

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

- Discussion w/ Mick, driller: Area of first 4" boreholes may have been a whirlpool fracture in the rock and could explain the uncertainty in the rock encountered during drilling.
- At borehole BT-5, driller becoming concerned about voids he is running into in this hole. (~3 ft void in BT-5 about 6 ft bgs). He is wondering if the area ever had any manmade structures on this side of the creek?
  - Per Paul Gallo (Severson), Mike HENSOEC stopped by site around 1545. No concerns and only enquired about depths of drilling + if we encountered any coal far during drilling.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None.

SUBMITTED BY:

*Russell M. Madsen*

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No: 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S): Geoscience

DATE: 10/3/2012

WEATHER: CLOUD COVER: 0945-1000: TEMPERATURE: Overcast LOW: 58 @ HIGH: None PRECIPITATION: None WIND: Calm

## GOLDER PERSONNEL ON SITE:

R. Marclose (0800 - 1600)

## SUMMARY OF CONSTRUCTION PROGRESS:

Mark Honick (Geoscience)

- 0805- Prep to resume trench drilling ops from BH-6 @ west end of alignment.
- 0845- BH-7: TD ~16-Ft, ~7-Ft into bedrock (~5-Ft of presumably Queenston shale). Dry cuttings.
- 0915- BH-8: TD ~16-Ft, ~6.6 Ft into comp. bedrock (Queenston). Wet cuttings towards bottom. No ~~water~~ observable hydr. connectivity to BH-7. Dry cuttings.
- 1015- BH-9: TD ~21 Ft, ~6-Ft into mod. hard (unknown) bedrock. Driller's Note: Due to no cuttings returned during most of BH-9 drilling, unable to determine rock unit. Appears to be lateral air loss due to water welling up from BH-8. Also, driller noted a ~2-Ft void or quick drill rod drop during drilling of 10-15-Ft depth. Observed air escaping from vertical crack in Flowable Fill next to BH-9.
- 1105- BH-10: TD ~16 Ft, ~8-Ft into Queenston shale. Note: white-gray dust/cuttings indicative of a large boulder @ shallow depth (~1-2 Ft below bottom of Flowable Fill). Odor of coal tar during rock drilling.
- 1130- BH-11: TD ~11-Ft, ~3-Ft in whirlpool (Top) + 3-Ft into Queenston (below). Dry cuttings + Coal tar odor.
- 1155- BH-12: TD ~16 Ft, ~5-Ft in whirlpool (Top) + 2-Ft in Queenston (below). Dry cuttings.
- 1305- BH-13: TD ~16 Ft, 1-Ft in whirlpool (Top) + 5-Ft in Queenston (below). Dry cuttings.
- 1335- BH-14: TD ~16 Ft, 3-Ft in whirlpool (Top) + 4 Ft in Queenston (Bottom). Dry cuttings + coal tar odor during drilling.
- 1410- BH-15: TD ~16 Ft, 7-Ft in whirlpool SS (top). Mostly dry cuttings, some water in last 1-2 Ft. Coal tar odor @ near top of bedrock.
- 1445- BH-16: TD ~16 Ft, ~5-Ft in whirlpool SS, w/ an ~6-inch void space halfway through drilling. Coal tar odor observed during drilling near gravel wall/top of rock interface.

## GOLDER ACTIVITIES AND TEST RESULTS:

- Observed borehole drilling efforts along alignment, Log drill hole depths, etc.
- 1535- BH-17: TD ~21 Ft, ~5-Ft into whirlpool (Top) + 1-Ft Queenston shale (bottom). Coal tar observed in wet cuttings through the whirlpool SS.



GOLDER FORM: R4-0699  
(JANUARY 2005)

GOLDER ASSOCIATES INC.

SUBMITTED BY:

R. Marclose

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S): Geoscience

DATE: 10/3/2012

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None.

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None.

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

1030- Tom Beno (Geoscience) visits site to observe drilling activities. off-site by approx 1115.  
1120- Stan Radon (NYSDEC) arrives on site to observe activities, No concerns noted.  
1415- Chris Banach (Vandemark) stops by site. OFF site by 1430. Noted that the stone structure crossing under access road was part of old hydroelectric dam. Mill structures were present on south side of creek, as well as railroad line. Vandemark had dug seeps in recent years @ west end of trench to try to determine source of the coal tar.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None.

SUBMITTED BY:

*Russell J. Michalec*

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S): GeoScience

DATE:

10/4/2012

WEATHER: TEMPERATURE: LOW: 54 @ HIGH: 72 @  
CLOUD COVER: Overcast PRECIPITATION: None WIND: Calm

## GOLDER PERSONNEL ON SITE:

R. Marchese (0800 - 1515)

## SUMMARY OF CONSTRUCTION PROGRESS:

0800 - Arrive on-site; Severson + GeoScience personnel setting up for resuming drilling ops. From BH-17, along trench alignment.  
0830 - Resume drilling ops at BH-18. (Location at top of west side of stone wall dam).  
0900 - BH-18: TD ~ 16-Ft, 10-Ft of Flowable Fill ~ 2-Ft Whirlpool (CPD) + 2-Ft drill dump (void) + 2-Ft Whirlpool SS. (Dry drill coatings, no coal tar odor observed).  
0945 - BH-19: TD ~ 15-Ft, 10-Ft Flow. Fill + 5-Ft in Whirlpool SS. Dry cuttings, no observable coal tar odor.  
1030 - BH-20: TD ~ 16-Ft, ~ 5-Ft into Whirlpool SS. Dry cuttings, no observable coal tar odor.  
1055 - BH-21: TD ~ 16-Ft, 15-Ft into Whirlpool SS. Mostly dry cuttings, no discernible coal tar odor.  
1145 - BH-22: TD ~ 19-Ft, ~ 7-Ft into Whirlpool SS. Note: Encountered odor of DNAPL (possibly), and observed rainbow sheen on surface of wet drill cuttings/water ejected from the borehole. Driller notes after 2-3 Ft into rock that the first contact w/ the possible DNAPL was encountered.  
1345 - BH-23 - TD ~ 21-Ft, 12-Ft Flow. Fill + 9-Ft. into Whirlpool SS. Dry cuttings, no noticeable DNAPL product or odor; However, hydr. connectivity w/ BH-22 ejected add'l. DNAPL water/mud.  
1415 - BH-24 - TD ~ 16-Ft, 10.5 Flow Fill + 5.5-Ft. into Whirlpool SS. Mostly dry cuttings. No observable DNAPL in BH-24; some ejected from BH-23.  
1505 - OFF-site; all personnel off-site by 1600. Severson will use dozer to clear crusher run off access road for remaining 50-60 Ft of trench on east side.

## GOLDER ACTIVITIES AND TEST RESULTS:

Observe drilling operations along ~~Access~~ trench alignment, Log borehole depths, etc.  
- Collected sample of potential DNAPL water/mud from BH-22 (14:15) for submission to Test America in Amherst, NY for testing.



SUBMITTED BY:

Russell J. [Signature]

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S): GeoScience

DATE: 10/4/2012

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None.

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

Discussion between R. Marchese + P. Martin with Mike (GeoScience) driller; plan is to complete boreholes by tomorrow morning (Friday, Oct. 5, 2012), set up hydrostatic testing equipment over the weekend and begin (tentatively) hydrost. testing of the boreholes on Monday, Oct. 6, 2012. Will probably take up to 3-days for the testing procedure before the high pressure grouting can begin.

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

1000- Mike Hinton (NYSDEC) arrives on site to observe drilling activities. OFF-SITE by 1100.  
1010- Patrick Martin (Golder) on site for weekly progress meeting. OFF-SITE by 1105 to meeting.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

~~At~~ Noted presence of possible DNAPL in BH-22. Notified P. Martin (Golder), who suggested taking a sample of the muddy water for testing and to try and wipe down drill apparatus before moving on to next borehole.

SUBMITTED BY:

Russell J. Marchese

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S): Geoscience

DATE:

10/5/2012

WEATHER: TEMPERATURE: LOW: 59 @ HIGH: @  
CLOUD COVER: CHAST PRECIPITATION: Lt. Rain WIND:

## GOLDER PERSONNEL ON SITE:

R. Marchose CO800 - 1215 )

## SUMMARY OF CONSTRUCTION PROGRESS:

0950 - Arrive @ 9:40. Severson + Geoscience prepping to resume borehole drilling ops from BH-25.  
0950 - BH-25: TD=16-Ft, 5-Ft in whirlpool SS. Dry cuttings, no odors observed, No DMTOL observed.  
0945 - BH-26: TD=21 Ft, 6.5-Ft. in whirlpool SS. Dry cuttings upper half of bedrock, Saturated cuttings in lower half of rock drilling. Note: Hydr. connectivity noted w/ BH-23 @ 30-Ft away, due to ejected GW from BH-23 during air lifting @ BH-26. No odors (Coal tar or DMTOL) observed @ BH-26. Drillers Note: ~0.5-Ft drill rod drop about 2-Ft into the SS below the Flowable Fill. This is where water was first encountered in the borehole.  
0945 - BH-27: TD=26 Ft, 8-Ft. in whirlpool SS. Dry cuttings in upper half of bedrock, Saturated cuttings in lower half of rock drilling. Note: Hydr. conn. observed w/ BH-26 during bedrock drilling. Sheen on surface water ejected from BH-26 + 27, possibly from formation. Drillers Note: 2-Ft of very soft drilling below Flow. Fill, for a total of ~10-Ft of bedrock drilling.  
1045 - BH-28: TD=26-Ft, 10-Ft into whirlpool SS. Mostly dry cuttings, no cutting returns for several feet. Hydr. connectivity noted w/ BH-27 + BH-26. Note: Soft rock layer @ about 20-Ft bgs. No DMTOL or Coal tar odors observed.  
1135 - BH-29: TD=21-Ft, 5-Ft into whirlpool SS. Hydr. conn. w/ BH-29 noted @ approx. 15-Ft Bgs. moderate odor of coal tar during bedrock drilling.  
1205 - BH-30: TD=21 Ft, 5-Ft into whirlpool SS. Mostly dry cuttings, wet in bottom 3-Ft. of rock. No hydr. connectivity noted w/ prev. boreholes. No coal tar or DMTOL odors observed.

## GOLDER ACTIVITIES AND TEST RESULTS:

- observe borehole drilling efforts along trench alignment.
- Performed site weekly SW PPD inspection. No concerns noted.



SUBMITTED BY:

*R. Marchose*



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149

OWNER: SNPE - VanDeMark Chemical

CONTRACTOR: Severson Environmental Services, INC.

LOCATION: Lockport, New York

SUB CONTRACTOR(S): Geosience

DATE:

10/5/2012

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None -

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

1015 - Stan Radon (NYSDEC) stops by site to observe drilling efforts. Noted that we will need to evaluate the total depth of last several boreholes near the DUMPL area (C&H-22) to see if the successive BH's are deep enough. Also noted that we believed we should be into Queenston but will discuss w/ Pat Martin. OFF-SITE by 1045.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None,

SUBMITTED BY:

Russell J. McKeown

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10/8/12

WEATHER: CLOUD COVER TEMPERATURE: LOW: 43°F @ 0700 HIGH: 49°F @ 1300  
PRECIPITATION: None WIND: breezy

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0645-1415)

## SUMMARY OF CONSTRUCTION PROGRESS:

0730: Severson setting up to perform water tests in western boreholes.  
1000: Informed Mick (Driller) that boreholes #20-24 need to be dug further into Queenston shale (≈ 5 into Queenston). Mick noted that he is confident that boreholes 1-5 are into Queenston shale.  
1300: Attempting to flush boreholes #1 and #2. Pack is not expanding enough.  
1400: packing up for the day. Mick will bring larger packer tomorrow.

## GOLDER ACTIVITIES AND TEST RESULTS:

None



SUBMITTED BY:  
Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE: 10/8/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

~~None~~  
Original packer not expanding enough. Mick will bring larger packer tomorrow

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

Angela (VDM) onsite, no issues noted

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149

OWNER: SNPE - VanDeMark Chemical

CONTRACTOR: Severson Environmental Services

LOCATION: Lockport, New York

SUB CONTRACTOR(S):

DATE: 10-9-12

WEATHER:

TEMPERATURE:

LOW:

35°F

@

0730

HIGH

55°F

@

1400

CLOUD COVER

None

PRECIPITATION

None

WIND

breezy

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0730-1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

1030: Flushing boreholes #1 - #3 → #8

1130: Stan R & Dennis (DEC) onsite. No issues noted

1500: Flushed up to borehole #19. Mick will begin water tests tomorrow starting at western end.

## GOLDER ACTIVITIES AND TEST RESULTS:

None



GOLDER FORM: R4-0699  
(JANUARY 2005)

GOLDER ASSOCIATES INC.

SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149

OWNER: SNPE - VanDeMark Chemical

CONTRACTOR: Severson Environmental Services, INC.

LOCATION: Lockport, New York

SUB CONTRACTOR(S):

DATE:

10-9-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE:

10/10/12

WEATHER:  
CLOUD COVER

TEMPERATURE:

LOW:

46°F

@ 0745

HIGH

@

PRECIPITATION

None / Rain

WIND

Calm

## GOLDER PERSONNEL ON SITE:

Arson Lange (0730 - 1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

0730: Severson air flushing boreholes 1-6,  
845: Boreholes found to be clogged at depth much shallower than original depths.  
1000: Severson began prep'ing to redrill bore hole #4 to original depth of 21'  
1315: borehole appears to be clogging immediately after pulling drill out. Mick is going to perform water test to see what kind of volume the formation will accept from borehole #4.

45.1

1410: 3 water tests were performed on Bit#4. The first 2 tests were done with packer in the flowable fill zone. Both tests yielded similar results @ 1/2 foot of borehole / 5 min @ 15 PSI. The 3rd test in the rock zone also yielded similar results. (Lugeon value)

## GOLDER ACTIVITIES AND TEST RESULTS:



SUBMITTED BY:

Arson Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 10/10/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10/11/12

WEATHER: TEMPERATURE: LOW: 35°F @ 0745 HIGH: 51°F @ 1500  
CLOUD COVER: partly cloudy PRECIPITATION: none WIND: calm

## GOLDER PERSONNEL ON SITE:

Arnon Lange (0730-1530) D. Wehn (0800-0845) Pat Martin (0830-1200)  
SUMMARY OF CONSTRUCTION PROGRESS:

730: Driller began preping to grout BH #4  
0800: Severson began loading Modern dumptrucks with excavated fill from slurry wall trench for disposal. Dave Wehn (Golder) onsite to perform Associate HAS audit.  
1000: Driller began grouting BH #4, Mike Hinken (DEC) onsite for Thursday meeting along with Angela M. & Chris B. (UDM).  
1145: BH #4 was able to accept 25 ft<sup>3</sup> of grout. No evidence of grout was observed in creek during entire test.  
1245: Driller now grouting BH #7. Good communication between BH #7 and BH's 6+5.

## GOLDER ACTIVITIES AND TEST RESULTS:

1330: 20 trucks have been loaded so far. The next round of 5 trucks has just arrived.  
1530: The last truck for the day has been loaded. 25 trucks total for today.



SUBMITTED BY:  
Arnon Lange



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 10/11/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

Mike H. (DEC), Aaron L. & Pat M. (Golder), Paul G. (Sevenson), Angela M. & Chris B. (VDM). Discussed the test grouting in BH#4. Must keep an eye on stream for grout leaks

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10/12/12

WEATHER: TEMPERATURE: LOW: 43°F @ 0730 HIGH: 45°F @ 1415  
CLOUD COVER: Mostly cloudy PRECIPITATION: None WIND: breezy

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0730 - 1430)

## SUMMARY OF CONSTRUCTION PROGRESS:

0730: Modern Dump truck onsite for remainder of Stockpiled R//.  
0800: Driller redrilled BH#4 to x10' bgs. Air was coming up from edges of flowable fill trench and in BH's # 5, 3, & 2. Mick will now regrout BH#4 from the flowable fill.  
0840: yesterday's Grouting was performed in the rock. Today's communication is believed to be due to the interface between the flowable fill and the rock. By moving the packer into the flowable fill zone, we should be able to seal off that boundary.  
0930: 15 ft<sup>3</sup> of grout into BH#4. grout surfaced in BH#5. started grouting BH#3.  
0945: Mike & Gray sutton (DEC) onsite. BH#3 accepted 5 ft<sup>3</sup> grout surfaced along North side of Flowable fill trench. Prepping BH#2 for grout. Modern took 4 truck loads today.

## GOLDER ACTIVITIES AND TEST RESULTS:

1020: Mike & Gray (DEC) offsite. still filling BH#2. moved to borehole #1 communication on trench edges.  
1200: BH#6 being filled. communication with trench edge.  
1315: BH#8 being filled in rock. The rock has taken 18 bgs + refusal. Moving packer up into flowable fill zone to seal seam.  
1415: 13 bgs in flowable fill zone. No communication observed.



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 7/6 - 12 - 12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10-15-12

WEATHER: TEMPERATURE: LOW: 56°F @ 0730 HIGH: WIND: Windy  
CLOUD COVER: partly cloudy PRECIPITATION: None

## GOLDER PERSONNEL ON SITE:

Aaron Lange, (0730 - 1430)

## SUMMARY OF CONSTRUCTION PROGRESS:

0815: Severson will begin grouting BH#9. BH#9 took 9 bags until communication with creek, pump was immediately stopped. Very little grout entered creek.  
0900: grouting BH#11. BH#11 was plugged. grouting BH#12.  
0915: BH#12 took 6 bags. communicated with BH#11.  
0930: BH#13 took 9 bags. communication with creek. pump speed ~~communicated~~ immediately. very little grout in creek. skipping BH#14.  
0950: grouting BH#15. took 4 bags. came up along south edge of flowable fill trench.  
1015: going back to try BH#14. took 8 bags. communicated with BH#13  
1030: grouting BH#10. 14 bags in rock. 13 bags in flowable fill.  
1045: grouting BH#16. took 23 bags  
1130: Mike H (DEC) on site.

## GOLDER ACTIVITIES AND TEST RESULTS:

1300: BH#16 surfaced on lower ground adjacent to rock structure  
1330: grouting BH#17. 12 bags into BH17.



SUBMITTED BY: Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 10-15-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10/16/12

WEATHER: TEMPERATURE: LOW: 39°F @ HIGH: 49°F @ 1400  
CLOUD COVER: PRECIPITATION: none WIND: light breeze

## GOLDER PERSONNEL ON SITE:

(R. Marchese - 1215) (P. Martin - 1330) (A. Lange 1300-1615)

## SUMMARY OF CONSTRUCTION PROGRESS:

BH#17: took 22 bags cement total. No grout returns noticed at surface or elsewhere. Severson notes grout was pumping slow toward end of grouting session. Note BH#17 on West side of stone structure.

BH#18: Total of 24 bags of cement used. No grout returns noticed at surface. Very minor seepage noticed at toe of slope near BH #16, may be from previous grouting.

BH#19: Total of 13 bags of cement used. Water in BH-20 welling up to surface during grouting of BH 19 (good indication of hydraulic communication). Grout return at surface.

BH#20: Total of 3 bags. grout return at surface (borehole)

BH#21: Total of 17 bags - grout return at surface" - R. Marchese

BH#22: took 35 bags. NO grout return observed.

## GOLDER ACTIVITIES AND TEST RESULTS:



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE: 10-16-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10-17-12

WEATHER: CLOUD COVER: TEMPERATURE: LOW: 41°F @ 0745 HIGH: 65°F @ 1415  
PRECIPITATION: None WIND: calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0730-1515)

## SUMMARY OF CONSTRUCTION PROGRESS:

BH #23: took 7 bags until refusal. No grout return observed.  
BH #24: plugged 2 6' bags. tried air pressure to break open w/no success, took  
~ 3 bags before surfacing around borehole. might redrill hole  
later on to get below plug.  
BH #25: took 8 bags until refusal. No grout return observed.  
BH #26: took 20 bags until refusal. No grout return observed.  
BH #27: took 15 bags until refusal. No grout return observed.  
BH #28: took 10 bags. had very slight communication with creek. stopped immediately.  
BH #29: took 7 bags until refusal. grout returned at top of borehole.

## GOLDER ACTIVITIES AND TEST RESULTS:

BH #30: took 6 bags to refusal. No grout return observed.



SUBMITTED BY:

Aaron Lange



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

10-17-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10-18-12

WEATHER: TEMPERATURE: LOW: 52°F @ 0800 HIGH: WIND: light breeze  
CLOUD COVER: none PRECIPITATION: none

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0730-1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

Nomenclature for second round of borings is S2, S2, S3, etc. (secondary) starting at  $\approx$  15' from West end of trench (S1)  
S1: hit Queenston at  $\approx$  12' bgs. distinct red drill cuttings. communication with P1 (primary) and North side of trench. total depth  $\approx$  21'. 9' of solid Queenston shale. No drill drops.  
S2: communication between P1, S1, and around trench. 11' bgs until Queenston. total depth 21'. 10' in Queenston.  
S3: communication with surface at trench but not other boreholes. 11' bgs until Queenston. Total depth at 16'.  
~~grouting boreholes~~  
S1: took 48 bgs. overflowed out of S2.

## GOLDER ACTIVITIES AND TEST RESULTS:

S2: took 2 bgs in rock, and  
S3: rock took 17 bgs and 23 bgs in the flowable fill.



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149

OWNER: SNPE - VanDeMark Chemical

CONTRACTOR: Severson Environmental Services, INC.

LOCATION: Lockport, New York

SUB CONTRACTOR(S):

DATE:

10-18-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

Dan Slick, Michele, Michele, Emily, Pat Martin onsite

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10-14-12

WEATHER: CLOUD COVER  
TEMPERATURE: LOW: 43°F @ 0800 HIGH: 63°F @ 1530  
PRECIPITATION: None WIND: Calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0730 - 1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

BH-S4: queenston at  $\approx$  11'-12' bgs. total depth 21' bgs. very good communication all around trench going west  $\approx$  P2.

BH-S5:

0920: chlorine smelling fog in work area. contacted Angela (VDM) and we evacuated the site to the muster location at west Jackson st.

1030: All clear given. continuing to drill BH-S5. Mike H (DEC) on site

BH-S5:  $\approx$  10' bgs to queenston. Total depth of 16' bgs. 6' of competent shale.

## GOLDER ACTIVITIES AND TEST RESULTS:

grouting BH-S5: took 25 bgs. communication with north side of trench.

BH-S4: took 5 bgs. communication on both sides of trench and BH-S5

BH-S8: 3' flowable fill, 3' sandstone, 1 ft flowable fill, 2' sandstone, 7' queenston. coincides with location of large rock that was in trench. Took 30 bgs. Surfaced north of trench.



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE:

10-19-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

Golder will retrieve radio from guard shack every morning. Back gate to facility will be left open during our working hours as secondary means of escape.

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

hydrogen chloride fog was released from Vanchlor. We evacuated to W. Jackson St. entrance. Angela M. (VOM) was contacted. Brian Law gave us a radio to be used from now on. The VOM back gate will be left open from now on as a secondary escape route.

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10-22-12

WEATHER: TEMPERATURE: LOW: 44°F @ 0800 HIGH: 63°F @ 1430  
CLOUD COVER: None PRECIPITATION: None WIND: Very light

## GOLDER PERSONNEL ON SITE:

Aaron Luzzo (0730-1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

BH# S9: 9' of flowable fill, then 12' directly into queenston shale.  
21' total

BH# S12: 8' of flowable fill, 3' of whirlpool sandstone, Queenston  
hit at 11'. at 14' bgs ≈ 6" stringer of grout. 21' total bgs

BH# S15: 10' of flowable fill, 2' whirlpool, 9' of Queenston. 21' total  
depth.

BH# S18: ≈ 8' of flowable fill, 12' of whirlpool. 20' total bgs.

grouting

BH# S9: communication with creek. pump stopped immediately. took 11 bgs.

## GOLDER ACTIVITIES AND TEST RESULTS:

BH# S12: took 5 bgs until refusal. No communication observed.

BH# S15: took 6 bgs until refusal. No communication observed.

BH# S18: took 11 bgs until refusal. No communication observed.



SUBMITTED BY:

Aaron Luzzo

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 10-22-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

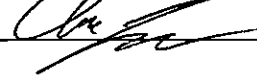
## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

Stan R. (DEC) onsite - No issues noted.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10-23-12

WEATHER: CLOUD COVER  
TEMPERATURE: 54°F @ 0800 LOW: 53°F @ 1430 HIGH: 53°F @ 1430  
PRECIPITATION: overcast WIND: calm

## GOLDER PERSONNEL ON SITE:

Arion Lange (0730 - 1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

BH# S17: 10' of flowable fill, 6' into very competent whirlpool sandstone. 16' total  
BH# S14: 9' of flowable fill, 6' of whirlpool, 6' into queenston shale. 21' total  
BH# S11: 9' of flowable fill, ~6" of grout, 6' sandstone, 6' into queenston = 16' total depth  
BH# S7: 8' flowable fill, 1' miscellaneous muck, communication with north side of trench and unfinished BH# S6.  
Grouting

## GOLDER ACTIVITIES AND TEST RESULTS:

BH# S7: took 20 bags until refusal. No communication observed. ~ 50 psi  
BH# S11: took 7 bags. communication with creek, very little grout entered creek.  
BH# S14: took 18 bags until refusal. No communication observed.  
BH# S17: took 2 bags until refusal. No communication observed



SUBMITTED BY:  
Arion Lange



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

10-23-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10-24-12

WEATHER: CLOUD COVER TEMPERATURE: overcast LOW: 52°F @ 0800 HIGH: PRECIPITATION: light rain WIND: @ calm

## GOLDER PERSONNEL ON SITE:

Arion Laze (0730 - 1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

T1: ~~East~~ west of S1. 10' flowable, 6' queenston. Air return started at 5' bgs.  
T5: West of S3. 4' flowable fill. now running into large rock that was left in place (2' sandstone). Queenston hit at 9' bgs.  $\approx$  3' of flowable fill and muck under large rock. A lot of communication on both sides of trench and a horizontal seam across the flowable fill  $\approx$  3' west of T5.  
(P1) T1 S1 T2 (P2) T3 S2 T4 (P3) T5 S3 T6 (P4) T7 S4 T8 (P5) T9 S5 T10 (P6) 12 13  
Total depth 16'. 7' into queenston.

## GOLDER ACTIVITIES AND TEST RESULTS:

T9: communication in P6, T5, all sides of trench and a horizontal seam across the trench. Seam may only be a result of "cup" of gravel that has settled in the western area from loose washing.  
12' of flowable fill, 4' into queenston. 16' total  
T13: East of P7, 9' flowable fill. 5' into queenston. 14' total bgs. communication with T9 and north side of trench. Also communication with creek.  
T17: 4' of flowable fill 3' whirlpool at 6' bgs  $\approx$  2-4" gravel, 7' bgs in queenston (4'). 11' total depth. communication with north



SUBMITTED BY:

Arion Laze

cont. →

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE:

10-24-12

## SUMMARY OF SURVEYOR'S ACTIVITIES: cont. from front

Side of trench.  
grouting.  
T17: communication with bank north of trench. refusal @ 45 psi, took 18 bags

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

T13: air bubbling up along north trench wall extending past T9.  
T9 has water flowing out. took 16 bags until refusal.  
T9: took 7 bags until refusal.  
T5: 9 bags until refusal.  
T1: took 20 bags to refusal.

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149

OWNER: SNPE - VanDeMark Chemical

CONTRACTOR: Severson Environmental Services

LOCATION: Lockport, New York

SUB CONTRACTOR(S):

DATE: 10-25-12

WEATHER:

TEMPERATURE:

LOW:

54°F @ 0800

HIGH

CLOUD COVER

None

PRECIPITATION

None

WIND

calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0730-1600)

## SUMMARY OF CONSTRUCTION PROGRESS:

S6: 9' flowable fill, 2' whirlpool, 5' queenston. grout not encountered.

S10: 5' flowable fill, 2' whirlpool, queenston 9'. 16' total

≈ 2" of grout between FF and whirlpool, and again at the whirlpool and queenston interface.

S13: 6' Flowable fill, 6' whirlpool, 4' queenston.  
grout at 7' ≈ 1", 13 ft (2")

S16: 12' flowable fill, 9' whirlpool. Grout at 24' bgs (≈ 2")  
coal tar odor only at 15' bgs. into queenston 5'.  
26' bgs total

## GOLDER ACTIVITIES AND TEST RESULTS:

S19: 12' flowable fill, ≈ 1-2" grout, 11' whirlpool, 3' into queenston. total depth = 26' bgs.

Grouting

S219: took 20 bags until refusal. No grout return encountered.

S16: took 18 bags until refusal. No grout return observed

S13: took 8 bags until refusal. No grout return observed except when packer was initially close to surface. once dropped, not grout surfaced



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

10-25-12

~~SUMMARY OF SURVEYOR'S ACTIVITIES:~~ *cont. from front*

*None*

~~SUMMARY OF PROBLEMS AND RESOLUTIONS:~~

*None*

~~SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):~~

*None*

~~SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:~~

*None*

*[Signature]*  
SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168

OWNER: SNPE - VanDeMark Chemical

LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149

CONTRACTOR: Severson Environmental Services

SUB CONTRACTOR(S):

DATE: 10-26-12

WEATHER:  
CLOUD COVER

TEMPERATURE:

LOW:

62°F

@ 0800

HIGH

71°F @ 1315

PRECIPITATION

None

WIND

Caln

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0745-1500)

## SUMMARY OF CONSTRUCTION PROGRESS:

S21: 12' flowable fill, coal tar/solvent type smell encountered at 17' bgs in whirlpool. A 2' drill drop (18-20' bgs). still in sandstone, water encountered at ~ 21' bgs. Total depth of 26'.

S23: 12' flowable fill, at around 17-18' bgs a very slight odor (same as S21) observed. water encountered at 20' bgs <sup>sandstone</sup> ~~Shale~~ at 24' bgs

grouting

S23: took 32 bags until refusal. No grout return observed.

## GOLDER ACTIVITIES AND TEST RESULTS:

S21: took 34 bags to refusal. No grout return observed.

S10:

S6: 30 Bags used. (Rem)



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 10-26-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10/29/12

WEATHER: CLOUD COVER CLOUDY TEMPERATURE: 44 LOW: @ 0800 HIGH: @ PRECIPITATION: LIGHT RAIN WIND: LIGHT

## GOLDER PERSONNEL ON SITE:

P. MARTIN ON-SITE @ 8:15 AM

## SUMMARY OF CONSTRUCTION PROGRESS:

- 0830: SEVERSON MOBILIZING EQUIP. TO CONTINUE BORING/GROUTING
- 0910: DRILLING 522 ~~22~~ LOCATION - FROM 8-12 FT ENCOUNTERED WHIRLPOOL, MIKE H NOTED THAT OUTTINGS CONTAINED PORTLAND CEMENT INDICATING THAT Voids IN THIS FORMATION HAD BEEN FILLED BY PREVIOUS GROUT IN 22P & 23P
- 0950: COMPLETED 522 BORING - TOTAL DEPTH 26' BGS: 12-24 WHIRLPOOL  
24-26 QUEENSTON
- 10:15: DRILLING BOREHOLE 235 LOCATION - INTO WHIRLPOOL @ 12'
- 11:00: P. MARTIN OFF SITE - SEVERSON WILL MAKE DETERMINATION THIS AFTERNOON ON WORK TOMORROW.  
DRILLING ON 235 CONTINUING INTO WHIRLPOOL.
- 0845: INSPECTED EROSION CONTROLS INSTALLED BY SEVERSON AT WEST END OF PROJECT SITE ON FRIDAY 10/26/12 - ADDITIONAL SITE FENCE INSTALLED AND OBSERVED THAT WATER FILTERING THROUGH TOWARD CREEK WAS CLEAR, FREE OF SEDIMENT.

## GOLDER ACTIVITIES AND TEST RESULTS:

~~ADDITIONAL~~

- 1545: CALLED PAUL GALLO - HE NOTED THAT 522 TOOK 20 BAGS OF GROUT. I INDICATED THAT WE HAD A DISCREPANCY ON 523 - (AARON'S FIELD NOTES ON 10/26/12 INDICATED THAT 523 HAD ALREADY BEEN INSTALLED). PAUL WILL CHECK BOREHOLE DESIGNATION WITH MIKE AND CONFIRM CORRECT # ON WEDS. SEVERSON WILL BE SHUT DOWN TOMORROW DUE TO STORM.



SUBMITTED BY:

*Patrick J. Martin*



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services, INC.  
SUB CONTRACTOR(S):

DATE:

10/29/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

NONE

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

NONE

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

0900: REVIEWED WEATHER CONCERNS FOR TOMORROW - DUE TO POTENTIAL SAFETY CONCERNS IT IS LIKELY THAT SEVERSON WILL CANCEL WORK ON TUES 10/30 - PAUL GALLO WILL CALL OR EMAIL W/UPDATE TO GOLDER THIS AFTERNOON. ALSO DISCUSSED STATUS OF PAY APPLICATION #2 - GOLDER HAS NOT RECEIVED REVISED APPLICATION FROM SEVERSON BASED ON CORRECTIONS SUBMITTED ON 10/26/12

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

NONE

SUBMITTED BY:

*Patricia J. Martin*

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 10/31/12

WEATHER: TEMPERATURE: LOW: 42 @ 0800 HIGH: @  
CLOUD COVER: OVERCAST PRECIPITATION: Lt. Showers WIND: calm

## GOLDER PERSONNEL ON SITE:

R. MARCHESE (0800 - 1615)

## SUMMARY OF CONSTRUCTION PROGRESS:

0805 Severson + drillers (Mick) drilling on S24; ~12-13 Ft. of Flowable Fill drilled before encountering whirlpool.

→ Creek water very turbid this morning (brown-colored) following storm system over the area.

→ @ 21 Ft bgs, driller notes presence of water - C interface between whirlpool + Queenston?

S24 - 12-Ft Flowable Fill, 12-Ft whirlpool, 2-Ft Queenston, w/ soft area 11.4'-12.0' in the Flow. Fill. Driller notes 6" drill drop near whirlpool/Queenston interface. Very wet towards bottom.

0945 - S25 - 11 -Ft. of Flowable Fill, 5-Ft whirlpool. No odors noted, mostly dry.

1010 - S26 - 12 -Ft of Flowable Fill, 5-Ft of whirlpool/SS. No odors noted, mostly dry drill cuttings. (NOTE: Completed boring to 26 - Ft after discussion w/ DEC rep). 15-Ft into rock

1120 - S27 - 11-Ft of Flowable Fill, 15 -Ft OF whirlpool. (26-Ft total)

1200 - lunch break

1300 - Resume drilling on S27; (Retriggered to complete to 26-Ft. No Queenston cuttings observed)

## GOLDER ACTIVITIES AND TEST RESULTS:

Check on borehole (secondary) numbering status w/ Mick + Paul.

→ Most likely drilled S23 twice, according to Mick + Paul.

→ Boreholes drilled today are 10-Ft spacing.

→ Performed SWPPP Inspection; no deficiencies noted.

1345 Begin grouting S24;

1500 - Took 38 bags grout to refusal (45+ psi).

1505 - Begin grouting S25; (Note: will probably redrill S25 tomorrow to deeper depth).

During grouting, noticed grout being expelled from S27, approx. 20-Ft to east. Grout expelled from S27 has rainbow sheen on surface.

1555 - S25 took 21 bags grout to refusal (45+ psi).



SUBMITTED BY:

Russell J. Marchese

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168 PROJECT TITLE: Creek Bank Corrective Measures Site No. 932149  
OWNER: SNPE - VanDeMark Chemical CONTRACTOR: Severson Environmental Services, INC.  
LOCATION: Lockport, New York SUB CONTRACTOR(S):

DATE:

10/30/12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

Note: Pat Martin will schedule wandel surveys for Friday, Nov. 2, 2012 (per Paul Gallot).

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

Mick (GeoScience) doesn't believe that we drilled into Queenston @ SZ6. Hard to fill from cuttings but @ end of hole (C6-F7), cuttings, though wet, were still tan-brown grey.  
→ Mick can bring additional drill rods tomorrow to finish off the remaining few boreholes.  
↳ will grant SZ4 + SZ5 today and complete the drilling tomorrow (11/1/12). Remaining BHS (SZ8, SZ9 + SZ7 to go deeper) will be drilled + grouted tomorrow.

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

11/01 - Stan Radon (ENVSEEC) on site; wants to make sure we are drilling secondary boreholes into Queenston shale.  
11/01 - Stan R. off-site  
Informed to Martin (Golder) of grouting/drilling status today.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

Note:  
4 - Severson personnel in Level D PPE  
1 - Golder in Level D PPE  
1 - GeoScience personnel (Mick) in Level D PPE

SUBMITTED BY:

Russell J. Martore

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 11-1-12

WEATHER: TEMPERATURE: LOW: 43°F @ 0800 HIGH: 44°F @ 1600  
CLOUD COVER: overcast PRECIPITATION: light rain WIND: light wind

## GOLDER PERSONNEL ON SITE:

Arnon Lage (0800 - 1600)

## SUMMARY OF CONSTRUCTION PROGRESS:

S28: 14' flowable fill, 12' into whirlpool, 26 ft total  
S29: 14' flowable fill, ~2-3" grout, 12' into whirlpool. 26' total  
grouting  
S28: 38 bags total, potential communication with creek but, due to creek turbidity, we were unable to verify. After thickening up grout, refusal was reached @ 50 psi.  
S28: took 22 bags until refusal, No return observed @ 50 psi

## GOLDER ACTIVITIES AND TEST RESULTS:

S29: took 23 bags until refusal @ 65 psi. No communication or return observed.



GOLDER FORM: R4-0699  
(JANUARY 2005)

GOLDER ASSOCIATES INC.

SUBMITTED BY:  
Arnon Lage

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

4-1-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 4-2-12

WEATHER: TEMPERATURE: LOW: 39°F @ 0800 HIGH: WIND: @  
CLOUD COVER: Overcast PRECIPITATION: light rain

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0800 - 1215)

## SUMMARY OF CONSTRUCTION PROGRESS:

Severson is prepping site for excavation of collection trench on Monday.  
All large rocks have been moved to the west side of old stone structure  
to help support the access road.

## GOLDER ACTIVITIES AND TEST RESULTS:



GOLDER FORM: R4-0699  
(JANUARY 2005)

SUBMITTED BY:

Aaron Lange

GOLDER ASSOCIATES INC.

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

11-2-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

0900: Wendel onsite. Wendel provided 3 benchmarks for future use. Several shots were also taken at the west end.

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 11-5-12

WEATHER: CLOUD COVER TEMPERATURE: 34°F @ 0800 LOW: HIGH 35°F @ 1400  
PRECIPITATION: None WIND: light breeze

## GOLDER PERSONNEL ON SITE:

(0730 - 1530) Aaron Lange

## SUMMARY OF CONSTRUCTION PROGRESS:

0815: Severson is beginning collection trench at western end.  
1030:  $\approx 40'$  completed. Bedrock reached at most of the length ( $\approx 4.5'$ ).  
Stone was placed, then filter fabric, then  $\approx 6"-12"$  of stone on top.  
A large coal tar seam found at  $\approx 80'-90'$  from west end.  
Severson chased it north until  $\approx 4'$ .  
The trench shallows from 70'-90'. The trench is  $\approx 2.5'$  by at 90' due to sandstone bedrock,  $\approx 3.5'$  @ 70'.  
Trench  $\approx 2.5'$  by @ 110'.

## GOLDER ACTIVITIES AND TEST RESULTS:

Trench completed up to 110' from west end.



GOLDER FORM R4-0699  
(JANUARY 2005)

SUBMITTED BY:

Aaron Lange

GOLDER ASSOCIATES INC.



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

11-5-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

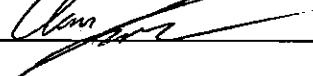
## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 11-6-12

WEATHER: CLOUD COVER  
TEMPERATURE: 30°F @ 0730 HIGH 40°F @ 1500  
PRECIPITATION: none WIND: calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0715-1515)

## SUMMARY OF CONSTRUCTION PROGRESS:

0730 Severson continuing trench east from  $\approx 115'$ .  
0830: trench dug up to 150' from west end.  
1030: trench dug up to 190' from west end.  
1120: trench backfilled up to 190'.  
1400: trench dug and backfilled up to 240' east of western end. heavy coal tar towards bottom of trench from  $\approx 180'$  (stone wall) to 230'.  
1515: trench dug up to 260'.

## GOLDER ACTIVITIES AND TEST RESULTS:



GOLDER FORM: R4-0699  
(JANUARY 2005)

GOLDER ASSOCIATES INC.

SUBMITTED BY:  
Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

11-6-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

~~S~~ Mike H. (DEC). wants coal tar on large boulders removed along creek.

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 11-7-12

WEATHER: CLOUD COVER: none  
TEMPERATURE: 27°F @ 0730 LOW: 41°F @ 1500 HIGH: none  
PRECIPITATION: none WIND: calm

## GOLDER PERSONNEL ON SITE:

Arnon Lange (0715 - 1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

- 0730: Severson is using larger excavator to dig through flowable fill along pump vault.
- 1000: the trench is completely dug to 300'. The eastern end of trench is most likely very close to the water inlet pipe for the pump vault. Future excavations should take great care to avoid that pipe.
- 1100: the collection trench is completely backfilled. Severson will begin digging hole for the treatment vault at west end. the cross pipe will cross the flowable fill wall  $\approx 27'$  from west end.

## GOLDER ACTIVITIES AND TEST RESULTS:

- 1130: ~~the~~ vault hole  $\approx 22'$  from west end to 29'. Coal tar excavated at 4.5' - 5.5' at northwest corner of hole.
- 1230: Installed vault with inlet hole to the east and outlet hole to the west. Sump drain is  $\approx 3' \times 3' \times 3'$   $\approx 8'$  west of vault.



SUBMITTED BY:

Arnon Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 11-7-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY: \_\_\_\_\_

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 11-8-12

WEATHER: CLOUD COVER: None  
TEMPERATURE: LOW: 25°F @ 0730 HIGH: 42°F @ 1500  
PRECIPITATION: None WIND: Calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0715-1515) Pat Martin (0800-930)

## SUMMARY OF CONSTRUCTION PROGRESS:

Severson attached 90° elbow and vertical pipe in vault.

1000: began building forms for the retaining wall in vault. rebar was drilled into sides and bottom for support. The 3 2" weep pipes are tying on bottom. concrete should be here around 1300.

1430: concrete wall is poured. Stan R. (DEC) was onsite, no issues noted

## GOLDER ACTIVITIES AND TEST RESULTS:



GOLDER FORM: R4-0699  
(JANUARY 2005)

GOLDER ASSOCIATES INC.

SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

11-8-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 11-9-12

WEATHER: TEMPERATURE: LOW: 37°F @ 0730 HIGH: 48°F @ 1300  
CLOUD COVER: overcast PRECIPITATION: none WIND: calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0715-1530)

## SUMMARY OF CONSTRUCTION PROGRESS:

0715: Severson has removed the forms from the retaining wall and installed the plastic coated nylon screen across the 3 weep holes.

1030: Severson has grouted the top onto the vault, after installing Re bar inlet pipe and grouting that in.

- 6 trucks so far, have been loaded for disposal at Modern
- coal tar from large rocks has been removed and severson is starting to remove coal tar from the creek embankment.

1300: 14 trucks have been loaded so far.

1430: A large amount ( $\approx 1 \text{ yd}^3$ ) of coal tar removed from stream bank on old stone structure.

## GOLDER ACTIVITIES AND TEST RESULTS:

1530: 17 trucks total went to Modern



SUBMITTED BY:

Aaron Lange



# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

11-9-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

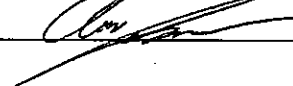
## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:



# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 11-12-12

WEATHER: CLOUD COVER mostly cloudy  
TEMPERATURE: LOW: 67°F @ 1245 HIGH: none  
PRECIPITATION: none  
WIND: windy

## GOLDER PERSONNEL ON SITE:

Aaron Lange (1245 - 1515)

## SUMMARY OF CONSTRUCTION PROGRESS:

Severson has installed the 4 monitoring points within the collection trench.  
Severson began prep'g for drilling tomorrow.

## GOLDER ACTIVITIES AND TEST RESULTS:

None



GOLDER FORM: R4-0699  
(JANUARY 2005)

GOLDER ASSOCIATES INC.

SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE: 11-12-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY: \_\_\_\_\_

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures - Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 11-13-12

WEATHER: CLOUD COVER overcast TEMPERATURE: LOW: 36°F @ 0800 HIGH PRECIPITATION light snow WIND @ breezy

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0730-1575)

## SUMMARY OF CONSTRUCTION PROGRESS:

Severson drilled PZ-1 (South east piezometer) to 9'12" bgs  
PZ-1: 4' of screen, 5' of sand, 2' bentonite, 2' bentonite/cement mix  
3" off bottom, coarse sand up to 28" from top of casing.

PZ-2: 8' total bgs. 3' of screen. 3.5' of sand  
(North east)  
2' Bentonite, cement/Bentonite mixture (2.5'), coarse sand to 28"  
from top of casing.

## GOLDER ACTIVITIES AND TEST RESULTS:

None



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Sevenson Environmental Services, INC.  
SUB CONTRACTOR(S): \_\_\_\_\_

DATE:

11-13-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

*None*

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

*None*

## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

*None*

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

*None*

SUBMITTED BY:

# FIELD MONITORING SUMMARY

SHEET 1 OF 2

PROJECT NUMBER: 093-89168  
OWNER: SNPE - VanDeMark Chemical  
LOCATION: Lockport, New York

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149  
CONTRACTOR: Severson Environmental Services  
SUB CONTRACTOR(S):

DATE: 11-15-12

WEATHER:  
CLOUD COVER

TEMPERATURE: 16.9

LOW: 30°F @ 0730 HIGH 45°F @ 1400  
PRECIPITATION none WIND calm

## GOLDER PERSONNEL ON SITE:

Aaron Lange (0715-1445)

## SUMMARY OF CONSTRUCTION PROGRESS:

On 11-14-12, Severson installed PZ-3 and PZ-4.  
PZ-3: 10' hole, 3' of screen, 4' of sand, 2' bentonite, 3' cement/bentonite mix, coarse sand.  
PZ-4: 10' hole, 5' screen, 6' sand, 2' bentonite, 2' cement/bentonite mix, coarse sand.  
11-15-12  
Severson added activated carbon (Carbisorb 30) to bottom of filter sump. Sand is coming later this morning.  
1' of carbon and 1' of pool filter sand are now in vault.  
Severson dug through slurry wall to install 4" PVC

## GOLDER ACTIVITIES AND TEST RESULTS:

Drain pipe to collection trench. The pipe (through the slurry wall) was sealed with cement to the top of the slurry wall. Severson also removed all tree debris at the top of the hill from initial grubbing.  
Severson has smoothed out the entire access road.



SUBMITTED BY:

Aaron Lange

# FIELD MONITORING SUMMARY

SHEET 2 OF 2

PROJECT NUMBER: 093-89168

PROJECT TITLE: Creek Bank Corrective Measures -Site No. 932149

OWNER: SNPE - VanDeMark Chemical

CONTRACTOR: Severson Environmental Services, INC.

LOCATION: Lockport, New York

SUB CONTRACTOR(S):

DATE:

11-15-12

## SUMMARY OF SURVEYOR'S ACTIVITIES:

None

## SUMMARY OF PROBLEMS AND RESOLUTIONS:

None

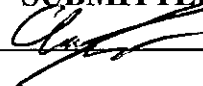
## SUMMARY OF MEETINGS AND DISCUSSIONS HELD (ATTENDEES AND ISSUES):

None

## SUMMARY OF INCIDENTS / ACCIDENTS / HEALTH AND SAFETY ISSUES:

None

SUBMITTED BY:



SEE ATTACHED FIGURE

## SITE PLAN/SKETCH

RUSSEL MARCHESE

Inspector (print name)

9/26/2012

Date of Inspection

RUSSEL MARCHESE

Qualified Professional (print name)

Russel Marchese

Qualified Professional Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.



**Maintaining Water Quality****Yes No NA**

- ☐ ☒ ☐ Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- ☐ ☒ ☐ Is there residue from oil and floating substances, visible oil film, or globules or grease?
- ☐ ☒ ☐ All disturbance is within the limits of the approved plans.
- ☐ ☒ ☐ Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

**Housekeeping****1. General Site Conditions****Yes No NA**

- ☒ ☐ ☐ Is construction site litter and debris appropriately managed?
- ☒ ☐ ☐ Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- ☐ ☒ ☐ Is construction impacting the adjacent property?
- ☒ ☐ ☐ Is dust adequately controlled? *- wet conditions during inspection*

**2. Temporary Stream Crossing****Yes No NA**

- ☐ ☒ ☐ Maximum diameter pipes necessary to span creek without dredging are installed.
- ☒ ☐ ☐ Installed non-woven geotextile fabric beneath approaches.
- ☒ ☐ ☐ Is fill composed of aggregate (no earth or soil)? -
- ☒ ☐ ☐ Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

**Runoff Control Practices****1. Excavation Dewatering****Yes No NA**

- ☐ ☐ ☒ Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
- ☐ ☐ ☒ Clean water from upstream pool is being pumped to the downstream pool.
- ☐ ☐ ☒ Sediment laden water from work area is being discharged to a silt-trapping device.
- ☐ ☐ ☒ Constructed upstream berm with one-foot minimum freeboard.

**2. Level Spreader****Yes No NA**

- ☐ ☐ ☒ Installed per plan.
- ☐ ☐ ☒ Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- ☐ ☐ ☒ Flow sheets out of level spreader without erosion on downstream edge.

**3. Interceptor Dikes and Swales****Yes No NA**

- ☐ ☐ ☒ Installed per plan with minimum side slopes 2H:1V or flatter. *- Some temp earthen dikes along trench alignment, south side of trench*
- ☐ ☐ ☒ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- ☐ ☐ ☒ Sediment-laden runoff directed to sediment trapping structure

**CONSTRUCTION DURATION INSPECTIONS**  
**Runoff Control Practices (continued)**

Page 3 of 4

**4. Stone Check Dam**

**Yes No NA**

- ☒ ☐ ☐ Is channel stable? (flow is not eroding soil underneath or around the structure).  
☐ ☐ ☒ Check is in good condition (rocks in place and no permanent pools behind the structure).  
☐ ☐ ☒ Has accumulated sediment been removed?

**5. Rock Outlet Protection**

**Yes No NA**

- ☐ ☐ ☒ Installed per plan.  
☐ ☐ ☒ Installed concurrently with pipe installation.

**Soil Stabilization**

**1. Topsoil and Spoil Stockpiles**

**Yes No NA**

- ☒ ☐ ☒ Stockpiles are stabilized with vegetation and/or mulch.  
☒ ☐ ☐ Sediment control is installed at the toe of the slope. - *Stayed on plastic sheeting during staging activities.*

**2. Revegetation**

**Yes No NA**

- ☐ ☐ ☒ Temporary seedings and mulch have been applied to idle areas.  
☐ ☐ ☒ 4 inches minimum of topsoil has been applied under permanent seedings *> Construction stage.*

**Sediment Control Practices**

**1. Stabilized Construction Entrance**

**Yes No NA**

- ☒ ☐ ☐ Stone is clean enough to effectively remove mud from vehicles.  
☒ ☐ ☐ Installed per standards and specifications?  
☒ ☐ ☐ Does all traffic use the stabilized entrance to enter and leave site?  
☒ ☐ ☐ Is adequate drainage provided to prevent ponding at entrance?

**2. Silt Fence**

**Yes No NA**

- ☒ ☐ ☐ Installed on Contour, 10 feet from toe of slope (not across conveyance channels).  
☒ ☐ ☐ Joints constructed by wrapping the two ends together for continuous support.  
☒ ☐ ☐ Fabric buried 6 inches minimum. - *Reinforced in some sections w/ sand bags/hay bales.*  
☒ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas.  
Sediment accumulation is 0 % of design capacity.

**Sediment Control Practices (continued)****3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)****Yes No NA**

- ☐ ☐ ☒ Installed concrete blocks lengthwise so open ends face outward, not upward.
- ☐ ☐ ☒ Placed wire screen between No. 3 crushed stone and concrete blocks.
- ☒ ☐ ☐ Drainage area is 1 acre or less.
- ☒ ☐ ☐ Excavated area is 900 cubic feet. > 900 F<sup>3</sup> -
- ☐ ☐ ☒ Excavated side slopes should be 2:1.
- ☐ ☐ ☒ 2" x 4" frame is constructed and structurally sound.
- ☐ ☐ ☒ Posts 3-foot maximum spacing between posts.
- ☐ ☐ ☒ Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- ☐ ☐ ☒ Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation \_\_\_% of design capacity.

**4. Temporary Sediment Trap****Yes No NA**

- ☐ ☐ ☒ Outlet structure is constructed per the approved plan or drawing.
- ☐ ☐ ☒ Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is \_\_\_% of design capacity.

**5. Temporary Sediment Basin****Yes No NA**

- ☐ ☐ ☒ Basin and outlet structure constructed per the approved plan.
- ☐ ☐ ☒ Basin side slopes are stabilized with seed/mulch.
- ☐ ☐ ☒ Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is \_\_\_% of design capacity.

**Note:** Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

## SITE PLAN/SKETCH

RUSSELL MARCHESE

Inspector (print name)

10/31/2012

Date of Inspection

RUSSELL MARCHESE

Qualified Professional (print name)

Russell J. Marchese

Qualified Professional Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

**Maintaining Water Quality****Yes No NA**

- ☐ ☒ ☐ Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- ☐ ☒ ☐ Is there residue from oil and floating substances, visible oil film, or globules or grease?
- ☒ ☐ ☐ All disturbance is within the limits of the approved plans.
- ☐ ☒ ☐ Have receiving lake/bay, stream, and/or wetland been impacted by silt from project? - Creek turbulent due to recent storm events + runoff from nearby canal.

**Housekeeping****1. General Site Conditions****Yes No NA**

- ☒ ☐ ☐ Is construction site litter and debris appropriately managed?
- ☒ ☐ ☐ Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- ☐ ☒ ☐ Is construction impacting the adjacent property?
- ☐ ☐ ☒ Is dust adequately controlled? - wet ground conditions during inspection.

**2. Temporary Stream Crossing****Yes No NA**

- ☐ ☐ ☒ Maximum diameter pipes necessary to span creek without dredging are installed.
- ☒ ☐ ☐ Installed non-woven geotextile fabric beneath approaches.
- ☒ ☐ ☐ Is fill composed of aggregate (no earth or soil)?
- ☒ ☐ ☐ Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

**Runoff Control Practices****1. Excavation Dewatering****Yes No NA**

- ☒ ☐ ☐ Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan. Extra layer of silt fence/hay bales installed.
- ☐ ☐ ☒ Clean water from upstream pool is being pumped to the downstream pool.
- ☐ ☐ ☒ Sediment laden water from work area is being discharged to a silt-trapping device.
- ☒ ☐ ☐ Constructed upstream berm with one-foot minimum freeboard. Extra layer of hay bales/silt fence installed + sand bags.

**2. Level Spreader****Yes No NA**

- ☐ ☐ ☒ Installed per plan.
- ☐ ☐ ☒ Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- ☐ ☐ ☒ Flow sheets out of level spreader without erosion on downstream edge.

**3. Interceptor Dikes and Swales****Yes No NA**

- ☐ ☐ ☒ Installed per plan with minimum side slopes 2H:1V or flatter.
- ☐ ☐ ☒ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- ☐ ☐ ☒ Sediment-laden runoff directed to sediment trapping structure

**CONSTRUCTION DURATION INSPECTIONS**  
**Runoff Control Practices (continued)**

Page 3 of 4

**4. Stone Check Dam**

**Yes No NA**

- ☒ ☐ ☐ Is channel stable? (flow is not eroding soil underneath or around the structure).  
☐ ☐ ☒ Check is in good condition (rocks in place and no permanent pools behind the structure).  
☐ ☐ ☒ Has accumulated sediment been removed?.

**5. Rock Outlet Protection**

**Yes No NA**

- ☐ ☐ ☒ Installed per plan.  
☐ ☐ ☒ Installed concurrently with pipe installation.

**Soil Stabilization**

**1. Topsoil and Spoil Stockpiles**

**Yes No NA**

- ☐ ☐ ☒ Stockpiles are stabilized with vegetation and/or mulch. *> All temp. stockpiles removed from site staging area.*  
☐ ☐ ☒ Sediment control is installed at the toe of the slope.

**2. Revegetation**

**Yes No NA**

- ☐ ☐ ☒ Temporary seedings and mulch have been applied to idle areas.  
☐ ☐ ☒ 4 inches minimum of topsoil has been applied under permanent seedings *> Constr. in progress*

**Sediment Control Practices**

**1. Stabilized Construction Entrance**

**Yes No NA**

- ☒ ☐ ☐ Stone is clean enough to effectively remove mud from vehicles.  
☒ ☐ ☐ Installed per standards and specifications?  
☒ ☐ ☐ Does all traffic use the stabilized entrance to enter and leave site?  
☒ ☐ ☐ Is adequate drainage provided to prevent ponding at entrance?

**2. Silt Fence**

**Yes No NA**

- ☒ ☐ ☐ Installed on Contour, 10 feet from toe of slope (not across conveyance channels).  
☒ ☐ ☐ Joints constructed by wrapping the two ends together for continuous support.  
☒ ☐ ☐ Fabric buried 6 inches minimum.  
☒ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas.

Sediment accumulation is 5 % of design capacity.

**Sediment Control Practices (continued)****3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)****Yes No NA**

- ☐ ☐ ☒ Installed concrete blocks lengthwise so open ends face outward, not upward.
- ☐ ☐ ☒ Placed wire screen between No. 3 crushed stone and concrete blocks.
- ☒ ☐ ☐ Drainage area is 1 acre or less.
- ☒ ☐ ☐ Excavated area is 900 cubic feet.
- ☐ ☐ ☒ Excavated side slopes should be 2:1. *No open trenches currently on site.*
- ☐ ☐ ☒ 2" x 4" frame is constructed and structurally sound.
- ☐ ☐ ☒ Posts 3-foot maximum spacing between posts.
- ☐ ☐ ☒ Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- ☐ ☐ ☒ Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation \_\_\_% of design capacity.

**4. Temporary Sediment Trap****Yes No NA**

- ☐ ☐ ☒ Outlet structure is constructed per the approved plan or drawing.
- ☐ ☐ ☒ Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is \_\_\_% of design capacity.

**5. Temporary Sediment Basin****Yes No NA**

- ☐ ☐ ☒ Basin and outlet structure constructed per the approved plan.
- ☐ ☐ ☒ Basin side slopes are stabilized with seed/mulch.
- ☐ ☐ ☒ Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is \_\_\_% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

## SITE PLAN/SKETCH

RUSSELL J. MARCHESE  
Inspector (print name)

10/5/2012  
Date of Inspection

RUSSELL J. MARCHESE  
Qualified Professional (print name)

Russell J. Marchese  
Qualified Professional Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.



**Maintaining Water Quality****Yes No NA**

- ☐ ☒ ☐ Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- ☐ ☐ ☐ Is there residue from oil and floating substances, visible oil film, or globules or grease?
- ☒ ☐ ☐ All disturbance is within the limits of the approved plans.
- ☐ ☒ ☐ Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

**Housekeeping****1. General Site Conditions****Yes No NA**

- ☒ ☐ ☐ Is construction site litter and debris appropriately managed?
- ☒ ☐ ☐ Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- ☐ ☒ ☐ Is construction impacting the adjacent property?
- ☒ ☐ ☐ Is dust adequately controlled? - *wet ground conditions during inspection.*

**2. Temporary Stream Crossing****Yes No NA**

- ☐ ☐ ☒ Maximum diameter pipes necessary to span creek without dredging are installed.
- ☒ ☐ ☒ Installed non-woven geotextile fabric beneath approaches. - *Access road into site.*
- ☒ ☐ ☐ Is fill composed of aggregate (no earth or soil)? -
- ☒ ☐ ☐ Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

**Runoff Control Practices****1. Excavation Dewatering****Yes No NA**

- ☒ ☐ ☒ Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan. - *Hay bales + Silt Fence*
- ☐ ☐ ☒ Clean water from upstream pool is being pumped to the downstream pool.
- ☒ ☐ ☒ Sediment laden water from work area is being discharged to a silt-trapping device. - *Hay bales + Silt Fence*
- ☐ ☐ ☒ Constructed upstream berm with one-foot minimum freeboard.

**2. Level Spreader****Yes No NA**

- ☐ ☐ ☒ Installed per plan.
- ☐ ☐ ☒ Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- ☐ ☐ ☒ Flow sheets out of level spreader without erosion on downstream edge.

**3. Interceptor Dikes and Swales****Yes No NA**

- ☐ ☐ ☒ Installed per plan with minimum side slopes 2H:1V or flatter.
- ☐ ☐ ☒ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- ☐ ☐ ☒ Sediment-laden runoff directed to sediment trapping structure

## CONSTRUCTION DURATION INSPECTIONS

Page 3 of 4

### Runoff Control Practices (continued)

#### 4. Stone Check Dam

Yes No NA

- ☐ ☐ ☒ Is channel stable? (flow is not eroding soil underneath or around the structure).  
☐ ☐ ☒ Check is in good condition (rocks in place and no permanent pools behind the structure).  
☐ ☐ ☒ Has accumulated sediment been removed?

#### 5. Rock Outlet Protection

Yes No NA

- ☐ ☐ ☒ Installed per plan.  
☐ ☐ ☒ Installed concurrently with pipe installation.

### Soil Stabilization

#### 1. Topsoil and Spoil Stockpiles

Yes No NA

- ☐ ☐ ☒ Stockpiles are stabilized with vegetation and/or mulch. - Covered w/ poly plastic sheeting.  
☒ ☐ ☒ Sediment control is installed at the toe of the slope. - Stockpiles temporarily staged on plastic sheeting.

#### 2. Revegetation

Yes No NA

- ☐ ☐ ☒ Temporary seedings and mulch have been applied to idle areas. - Constr. still in progress  
☐ ☐ ☒ 4 inches minimum of topsoil has been applied under permanent seedings - as above.

### Sediment Control Practices

#### 1. Stabilized Construction Entrance

Yes No NA

- ☒ ☐ ☐ Stone is clean enough to effectively remove mud from vehicles.  
☒ ☐ ☐ Installed per standards and specifications?  
☒ ☐ ☐ Does all traffic use the stabilized entrance to enter and leave site?  
☒ ☐ ☐ Is adequate drainage provided to prevent ponding at entrance?

#### 2. Silt Fence

Yes No NA

- ☒ ☐ ☐ Installed on Contour, 10 feet from toe of slope (not across conveyance channels).  
☒ ☐ ☐ Joints constructed by wrapping the two ends together for continuous support.  
☒ ☐ ☐ Fabric buried 6 inches minimum.  
☒ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas. - Reinforced w/ sand bags along steeper portions of creek bank. Hay bales placed along north side of silt fence per plan.  
Sediment accumulation is 02% of design capacity.

**Sediment Control Practices (continued)****3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)****Yes No NA**

- ☐ ☐ ☒ Installed concrete blocks lengthwise so open ends face outward, not upward.
- ☐ ☐ ☒ Placed wire screen between No. 3 crushed stone and concrete blocks.
- ☐ ☐ ☒ Drainage area is 1 acre or less.
- ☐ ☐ ☒ Excavated area is 900 cubic feet.
- ☐ ☐ ☒ Excavated side slopes should be 2:1.
- ☐ ☐ ☒ 2" x 4" frame is constructed and structurally sound.
- ☐ ☐ ☒ Posts 3-foot maximum spacing between posts.
- ☐ ☐ ☒ Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- ☐ ☐ ☒ Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation \_\_\_\_% of design capacity.

**4. Temporary Sediment Trap****Yes No NA**

- ☐ ☐ ☒ Outlet structure is constructed per the approved plan or drawing.
- ☐ ☐ ☒ Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is \_\_\_\_% of design capacity.

**5. Temporary Sediment Basin****Yes No NA**

- ☐ ☐ ☒ Basin and outlet structure constructed per the approved plan.
- ☐ ☐ ☒ Basin side slopes are stabilized with seed/mulch.
- ☐ ☐ ☒ Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is \_\_\_\_% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

## SITE PLAN/SKETCH

RUSSELL MARCHESI  
Inspector (print name)

10/12/2012  
Date of Inspection

RUSSELL J. MARCHESI  
Qualified Professional (print name)

Russell J. Marchesi  
Qualified Professional Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

## Maintaining Water Quality

## Yes No NA

- ☐ ☒ ☐ Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- ☒ ☐ ☐ Is there residue from oil and floating substances, visible oil film, or globules or grease? - Contained
- ☒ ☐ ☐ All disturbance is within the limits of the approved plans. *within site work limits.*
- ☐ ☒ ☐ Have receiving lake/bay, stream, and/or wetland been impacted by silt from project? *Small area @ West end of trench reinforced w/ geo fabric and additional hay bales.*

## Housekeeping

## 1. General Site Conditions

## Yes No NA

- ☒ ☐ ☐ Is construction site litter and debris appropriately managed? - *Great bags in refuse bags.*
- ☒ ☐ ☐ Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- ☒ ☒ ☐ Is construction impacting the adjacent property?
- ☒ ☐ ☐ Is dust adequately controlled? - *Wet conditions from recent rain events.*

## 2. Temporary Stream Crossing

## Yes No NA

- ☐ ☐ ☒ Maximum diameter pipes necessary to span creek without dredging are installed.
- ☒ ☐ ☐ Installed non-woven geotextile fabric beneath approaches. - *Access road into site.*
- ☒ ☐ ☐ Is fill composed of aggregate (no earth or soil)?
- ☒ ☐ ☐ Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

## Runoff Control Practices

## 1. Excavation Dewatering

## Yes No NA

- ☒ ☐ ☐ Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan. *Hay bales + silt fence.*
- ☐ ☐ ☒ Clean water from upstream pool is being pumped to the downstream pool.
- ☒ ☐ ☐ Sediment laden water from work area is being discharged to a silt-trapping device. - *Hay bales + silt fence*
- ☐ ☐ ☒ Constructed upstream berm with one-foot minimum freeboard.

## 2. Level Spreader

## Yes No NA

- ☐ ☐ ☒ Installed per plan.
- ☐ ☐ ☒ Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- ☐ ☐ ☒ Flow sheets out of level spreader without erosion on downstream edge.

## 3. Interceptor Dikes and Swales

## Yes No NA

- ☐ ☐ ☒ Installed per plan with minimum side slopes 2H:1V or flatter.
- ☐ ☐ ☒ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- ☐ ☐ ☒ Sediment-laden runoff directed to sediment trapping structure

**CONSTRUCTION DURATION INSPECTIONS**  
**Runoff Control Practices (continued)**

Page 3 of 4

**4. Stone Check Dam**

**Yes No NA**

- ☐ ☐ ☒ Is channel stable? (flow is not eroding soil underneath or around the structure).  
☐ ☐ ☒ Check is in good condition (rocks in place and no permanent pools behind the structure).  
☐ ☐ ☒ Has accumulated sediment been removed?.

**5. Rock Outlet Protection**

**Yes No NA**

- ☐ ☐ ☒ Installed per plan.  
☐ ☐ ☒ Installed concurrently with pipe installation.

**Soil Stabilization**

**1. Topsoil and Spoil Stockpiles**

**Yes No NA**

- ☐ ☐ ☒ Stockpiles are stabilized with vegetation and/or mulch. - *Removed From Site permanently.*  
☐ ☐ ☒ Sediment control is installed at the toe of the slope. - *Removed From Site permanently*

**2. Revegetation**

**Yes No NA**

- ☐ ☐ ☒ Temporary seedings and mulch have been applied to idle areas. - *Constr. Still in progress*  
☐ ☐ ☒ 4 inches minimum of topsoil has been applied under permanent seedings - *" " "*

**Sediment Control Practices**

**1. Stabilized Construction Entrance**

**Yes No NA**

- ☒ ☐ ☐ Stone is clean enough to effectively remove mud from vehicles.  
☒ ☐ ☐ Installed per standards and specifications?  
☒ ☐ ☐ Does all traffic use the stabilized entrance to enter and leave site?  
☒ ☐ ☐ Is adequate drainage provided to prevent ponding at entrance?

**2. Silt Fence**

**Yes No NA**

- ☒ ☐ ☐ Installed on Contour, 10 feet from toe of slope (not across conveyance channels).  
☒ ☐ ☐ Joints constructed by wrapping the two ends together for continuous support.  
☒ ☐ ☐ Fabric buried 6 inches minimum.  
☒ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas.

Sediment accumulation is 1% of design capacity.

**Sediment Control Practices (continued)****3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)****Yes No NA**

- ☐ ☐ ☒ Installed concrete blocks lengthwise so open ends face outward, not upward.
- ☐ ☐ ☒ Placed wire screen between No. 3 crushed stone and concrete blocks.
- ☐ ☐ ☒ Drainage area is 1 acre or less.
- ☐ ☐ ☒ Excavated area is 900 cubic feet.
- ☐ ☐ ☒ Excavated side slopes should be 2:1.
- ☐ ☐ ☒ 2" x 4" frame is constructed and structurally sound.
- ☐ ☐ ☒ Posts 3-foot maximum spacing between posts.
- ☐ ☐ ☒ Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- ☐ ☐ ☒ Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation \_\_\_% of design capacity.

**4. Temporary Sediment Trap****Yes No NA**

- ☐ ☐ ☒ Outlet structure is constructed per the approved plan or drawing.
- ☐ ☐ ☒ Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is \_\_\_% of design capacity.

**5. Temporary Sediment Basin****Yes No NA**

- ☐ ☐ ☒ Basin and outlet structure constructed per the approved plan.
- ☐ ☐ ☒ Basin side slopes are stabilized with seed/mulch.
- ☐ ☐ ☒ Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is \_\_\_% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

## SITE PLAN/SKETCH

RUSSELL J. MARCHESE  
Inspector (print name)

10/16/2012  
Date of Inspection

RUSSELL J. MARCHESE  
Qualified Professional (print name)

Russell J. Marchese  
Qualified Professional Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.



## Maintaining Water Quality

## Yes No NA

- ☐ ☒ ☐ Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- ☒ ☐ ☐ Is there residue from oil and floating substances, visible oil film, or globules or grease? *Limited + Contained w/in site limits*
- ☒ ☐ ☐ All disturbance is within the limits of the approved plans.
- ☐ ☒ ☐ Have receiving lake/bay, stream, and/or wetland been impacted by silt from project? *-minor sed. infiltration @ west end amended w/ additional silt fence + geofabric, extra hay bales.*

## Housekeeping

## 1. General Site Conditions

## Yes No NA

- ☒ ☐ ☐ Is construction site litter and debris appropriately managed?
- ☒ ☐ ☐ Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- ☐ ☒ ☐ Is construction impacting the adjacent property?
- ☒ ☐ ☒ Is dust adequately controlled? *-wet ground conditions during inspection.*

## 2. Temporary Stream Crossing

## Yes No NA

- ☐ ☐ ☒ Maximum diameter pipes necessary to span creek without dredging are installed.
- ☒ ☐ ☐ Installed non-woven geotextile fabric beneath approaches.
- ☒ ☐ ☐ Is fill composed of aggregate (no earth or soil)?
- ☒ ☐ ☐ Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

## Runoff Control Practices

## 1. Excavation Dewatering

## Yes No NA

- ☒ ☐ ☐ Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan. *Reinforced w/ hay bales.*
- ☐ ☐ ☒ Clean water from upstream pool is being pumped to the downstream pool.
- ☐ ☐ ☒ Sediment laden water from work area is being discharged to a silt-trapping device.
- ☒ ☐ ☐ Constructed upstream berm with one-foot minimum freeboard. *-Reinforced w/ hay bales, silt fence + sand bags.*

## 2. Level Spreader

## Yes No NA

- ☐ ☐ ☒ Installed per plan.
- ☐ ☐ ☒ Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- ☐ ☐ ☒ Flow sheets out of level spreader without erosion on downstream edge.

## 3. Interceptor Dikes and Swales

## Yes No NA

- ☐ ☐ ☒ Installed per plan with minimum side slopes 2H:1V or flatter.
- ☐ ☐ ☒ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- ☐ ☐ ☒ Sediment-laden runoff directed to sediment trapping structure

**CONSTRUCTION DURATION INSPECTIONS**  
**Runoff Control Practices (continued)**

Page 3 of 4

**4. Stone Check Dam**

**Yes No NA**

- ☐ ☐ ☒ Is channel stable? (flow is not eroding soil underneath or around the structure).  
☐ ☐ ☒ Check is in good condition (rocks in place and no permanent pools behind the structure).  
☐ ☐ ☒ Has accumulated sediment been removed?.

**5. Rock Outlet Protection**

**Yes No NA**

- ☐ ☐ ☒ Installed per plan.  
☐ ☐ ☒ Installed concurrently with pipe installation.

**Soil Stabilization**

**1. Topsoil and Spoil Stockpiles**

**Yes No NA**

- ☐ ☐ ☒ Stockpiles are stabilized with vegetation and/or mulch. - *Temp. Stockpiles removed from site*  
☐ ☐ ☒ Sediment control is installed at the toe of the slope.

**2. Revegetation**

**Yes No NA**

- ☐ ☐ ☒ Temporary seedings and mulch have been applied to idle areas. - *Constr. in progress*  
☐ ☐ ☒ 4 inches minimum of topsoil has been applied under permanent seedings - " "

**Sediment Control Practices**

**1. Stabilized Construction Entrance**

**Yes No NA**

- ☒ ☐ ☐ Stone is clean enough to effectively remove mud from vehicles.  
☒ ☐ ☐ Installed per standards and specifications?  
☒ ☐ ☐ Does all traffic use the stabilized entrance to enter and leave site?  
☒ ☐ ☐ Is adequate drainage provided to prevent ponding at entrance?

**2. Silt Fence**

**Yes No NA**

- ☒ ☐ ☐ Installed on Contour, 10 feet from toe of slope (not across conveyance channels).  
☒ ☐ ☐ Joints constructed by wrapping the two ends together for continuous support.  
☒ ☐ ☐ Fabric buried 6 inches minimum.  
☒ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas. - *Reinforced w/ hay bales + sand bags.*  
Sediment accumulation is 25% of design capacity.

**Sediment Control Practices (continued)****3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)****Yes No NA**

- ☐ ☐ ☒ Installed concrete blocks lengthwise so open ends face outward, not upward.
- ☐ ☐ ☒ Placed wire screen between No. 3 crushed stone and concrete blocks.
- ☒ ☐ ☐ Drainage area is 1 acre or less.
- ☒ ☐ ☐ Excavated area is 900 cubic feet.
- ☒ ☐ ☐ Excavated side slopes should be 2:1.
- ☐ ☐ ☒ 2" x 4" frame is constructed and structurally sound.
- ☐ ☐ ☒ Posts 3-foot maximum spacing between posts.
- ☐ ☐ ☒ Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- ☐ ☐ ☒ Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation \_\_\_% of design capacity.

**4. Temporary Sediment Trap****Yes No NA**

- ☐ ☐ ☒ Outlet structure is constructed per the approved plan or drawing.
- ☐ ☐ ☒ Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is \_\_\_% of design capacity.

**5. Temporary Sediment Basin****Yes No NA**

- ☐ ☐ ☒ Basin and outlet structure constructed per the approved plan.
- ☐ ☐ ☒ Basin side slopes are stabilized with seed/mulch.
- ☐ ☐ ☒ Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is \_\_\_% of design capacity.

**Note:** Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

**SITE PLAN/SKETCH**

Aaron Lange  
Inspector (print name)

10-25-12  
Date of Inspection

\_\_\_\_\_  
**Qualified Professional (print name)**

\_\_\_\_\_  
**Qualified Professional Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

**Maintaining Water Quality****Yes No NA**

- ☐ ☒ ☐ Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- ☐ ☒ ☐ Is there residue from oil and floating substances, visible oil film, or globules or grease?
- ☒ ☐ ☐ All disturbance is within the limits of the approved plans.
- ☐ ☒ ☐ Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

**Housekeeping****1. General Site Conditions****Yes No NA**

- ☒ ☐ ☐ Is construction site litter and debris appropriately managed?
- ☒ ☐ ☐ Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- ☐ ☒ ☐ Is construction impacting the adjacent property?
- ☒ ☐ ☐ Is dust adequately controlled?

**2. Temporary Stream Crossing****Yes No NA**

- ☐ ☐ ☒ Maximum diameter pipes necessary to span creek without dredging are installed.
- ☒ ☐ ☐ Installed non-woven geotextile fabric beneath approaches.
- ☒ ☐ ☐ Is fill composed of aggregate (no earth or soil)?
- ☒ ☐ ☐ Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

**Runoff Control Practices****1. Excavation Dewatering****Yes No NA**

- ☒ ☐ ☐ Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan. *hay bales*
- ☐ ☐ ☒ Clean water from upstream pool is being pumped to the downstream pool. *NYC of silt fence*
- ☐ ☐ ☒ Sediment laden water from work area is being discharged to a silt-trapping device. *Installed*
- ☒ ☐ ☐ Constructed upstream berm with one-foot minimum freeboard. *hay bales, silt fence (X2), sandbags*

**2. Level Spreader****Yes No NA**

- ☐ ☐ ☒ Installed per plan.
- ☐ ☐ ☒ Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- ☐ ☐ ☒ Flow sheets out of level spreader without erosion on downstream edge.

**3. Interceptor Dikes and Swales****Yes No NA**

- ☐ ☐ ☒ Installed per plan with minimum side slopes 2H:1V or flatter.
- ☐ ☐ ☒ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- ☐ ☐ ☒ Sediment-laden runoff directed to sediment trapping structure

**CONSTRUCTION DURATION INSPECTIONS**  
**Runoff Control Practices (continued)**

Page 3 of 4

**4. Stone Check Dam**

**Yes No NA**

- ☐ ☐ ☒ Is channel stable? (flow is not eroding soil underneath or around the structure).  
☐ ☐ ☒ Check is in good condition (rocks in place and no permanent pools behind the structure).  
☐ ☐ ☒ Has accumulated sediment been removed?.

**5. Rock Outlet Protection**

**Yes No NA**

- ☐ ☐ ☒ Installed per plan.  
☐ ☐ ☒ Installed concurrently with pipe installation.

**Soil Stabilization**

**1. Topsoil and Spoil Stockpiles**

**Yes No NA**

- ☐ ☐ ☒ Stockpiles are stabilized with vegetation and/or mulch.  
☐ ☐ ☒ Sediment control is installed at the toe of the slope.

**2. Revegetation**

**Yes No NA**

- ☐ ☐ ☒ Temporary seedings and mulch have been applied to idle areas. *construction still in progress*  
☐ ☐ ☒ 4 inches minimum of topsoil has been applied under permanent seedings

**Sediment Control Practices**

**1. Stabilized Construction Entrance**

**Yes No NA**

- ☒ ☐ ☐ Stone is clean enough to effectively remove mud from vehicles.  
☒ ☐ ☐ Installed per standards and specifications?  
☒ ☐ ☐ Does all traffic use the stabilized entrance to enter and leave site?  
☒ ☐ ☐ Is adequate drainage provided to prevent ponding at entrance?

**2. Silt Fence**

**Yes No NA**

- ☒ ☐ ☐ Installed on Contour, 10 feet from toe of slope (not across conveyance channels).  
☒ ☐ ☐ Joints constructed by wrapping the two ends together for continuous support.  
☒ ☐ ☐ Fabric buried 6 inches minimum.  
☒ ☐ ☐ Posts are stable, fabric is tight and without rips or frayed areas.  
Sediment accumulation is \_\_\_\_% of design capacity.

**Sediment Control Practices (continued)****3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)****Yes No NA**

- ☐ ☐ ☒ Installed concrete blocks lengthwise so open ends face outward, not upward.
- ☐ ☐ ☒ Placed wire screen between No. 3 crushed stone and concrete blocks.
- ☒ ☐ ☐ Drainage area is 1 acre or less.
- ☒ ☐ ☐ Excavated area is 900 cubic feet.
- ☐ ☐ ☒ Excavated side slopes should be 2:1. *No trenches open*
- ☐ ☐ ☒ 2" x 4" frame is constructed and structurally sound.
- ☐ ☐ ☒ Posts 3-foot maximum spacing between posts.
- ☐ ☐ ☒ Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- ☐ ☐ ☒ Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation \_\_\_% of design capacity.

**4. Temporary Sediment Trap****Yes No NA**

- ☐ ☐ ☒ Outlet structure is constructed per the approved plan or drawing.
- ☐ ☐ ☒ Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is \_\_\_% of design capacity.

**5. Temporary Sediment Basin****Yes No NA**

- ☐ ☐ ☒ Basin and outlet structure constructed per the approved plan.
- ☐ ☐ ☒ Basin side slopes are stabilized with seed/mulch.
- ☐ ☐ ☒ Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is \_\_\_% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

**APPENDIX E**  
**CMi CONSTRUCTION PHOTO LOG**



**Construction Closeout Report: VanDeMark Chemical Creek Bank Corrective Measures****PHOTO 1**

Looking west on north side of creek bank.

**PHOTO 2**

In-situ stone structure south of proposed grout cutoff wall and DNAPL collection trench alignment, looking east.





**PHOTO 3**

Clearing and grubbing of creek bank access road, looking east.

**PHOTO 4**

Erosion control measures (silt fence, hay bales, and sand bags) installed parallel to trench alignment, looking east.





**PHOTO 5**

Sevenson using excavator to remove coal tar residue from flowable fill trench, looking east.

**PHOTO 6**

Plastic sheeting covering excavated coal tar residue spoils at laydown area near construction entrance of site, looking southwest.





**PHOTO 7**

Placement of flowable fill for grout cut-off wall into excavated portion of trench alignment, looking east.

**PHOTO 8**

Temporarily blocked-off portion of grout cut-off wall flowable fill at lower elevation during flowable fill placement, looking east.





**PHOTO 9**

Trench excavation near former concrete water pumping vault along eastern portion of trench alignment, looking west.

**PHOTO 10**

Flowable fill placed in cutoff wall trench portion adjacent to former concrete creek water pumping vault, looking east.





**PHOTO 11**

Mark out of proposed grout curtain borehole drilling alignment along trench following flowable fill cutoff wall installation, looking west.

**PHOTO 12**

Initial drilling of grout curtain boreholes at western end of flowable fill cutoff wall trench alignment, looking north.



**PHOTO 13**

Groundwater expelled from nearby borehole during drilling activities at west end of trench, demonstrating subsurface lateral hydraulic communication, looking northeast.

**PHOTO 14**

Grout curtain borehole drilling along trench alignment, looking west.

(Red drill cuttings indicative of target Queenston Shale formation)





**PHOTO 15**

Grout curtain borehole drilling activities along cutoff wall trench alignment adjacent to creek side, looking west.

**PHOTO 16**

Primary boreholes (with temporary, white PVC pipe stubs) drilled along trench alignment, ready for grouting, looking west.





**PHOTO 17**

Groundwater expelled from nearby borehole during grout curtain borehole drilling activities at eastern end of trench, demonstrating subsurface hydraulic communication, looking east.

**PHOTO 18**

Performing water pressure tests on primary grout curtain borehole P4, looking northwest.



**PHOTO 19**

Drilling secondary grout curtain boreholes for grouting in between primary boreholes, looking west.

**PHOTO 20**

Cement grout mixer and pump set up.





**PHOTO 21**

Pressure grouting borehole S25. Note grout being expelled from borehole S27 (approx. 20-ft away), demonstrating lateral hydraulic communication. Looking west.

**PHOTO 22**

Large rocks from excavation of western end of flowable fill cutoff wall trench are placed along the west side of in-situ stone structure to help stabilize slope. Looking west.





**PHOTO 23**

Collection trench excavation on north side of flowable fill cut off wall, beginning at western most terminus of alignment, looking west.

**PHOTO 24**

Backfilling collection trench with clean stone using a stone slinger, looking east.





**PHOTO 25**

Permeable geosynthetic liner placed over the top of the stone and down the sides a minimum of 12-inches. A 6-inch thick top coating of stone then covered the liner. Looking west.

**PHOTO 26**

Groundwater collection trench near concrete pump vault, looking east





**PHOTO 27**

Filter sump placed on south side of flowable fill cutoff wall trench at western most end of trench alignment, with inlet hole facing east. Looking east.

**PHOTO 28**

Filter sump (foreground) and lined sump drain (background) connected by a 4-inch diameter Schedule 40 PVC pipe, looking west.





**PHOTO 29**

Final removal of additional excavated fill materials from laydown area near site construction entrance, looking east.

**PHOTO 30**

Concrete form and rebar for the baffle within the filter sump located at west end of collection trench.



**PHOTO 31**

Completed baffle with three 2-inch diameter weep holes and PVC outlet drain for filter sump, looking south.

**PHOTO 32**

Manual removal of in-situ coal tar seeps on creek bank east of the stone structure wall. Looking east.





**PHOTO 33**

Manual removal of additional in-situ coal tar seep on creek bank east of the stone structure wall. Looking south.

**PHOTO 34**

Completed removal of coal tar from creek bank.





**PHOTO 35**

Drilling performance monitoring piezometer #2 (PZ-2), looking east.

**PHOTO 36**

Installing sand pack at the bottom of PZ-2, looking north.





**PHOTO 37**

Completed performance monitoring piezometer PZ-2, looking northeast.

**PHOTO 38**

Placing the filter sand on top of the bed of activated carbon within collection vault.



**PHOTO 39**

Filter sump with 1-foot of activated carbon and 1-foot of filter sand

**PHOTO 40**

4-inch diameter PVC inlet pipe and sleeved, perforated pipe in the DNAPL collection trench, looking north.





**PHOTO 41**

Grout seal around inlet pipe, looking southeast.

**PHOTO 42**

Graded western end of project area with piezometer PZ-4 (left), PZ-3 (right), and filter sump in foreground, looking east.



**PHOTO 43**

Graded eastern end of project area with piezometer PZ-2 (far left), PZ-1 (far right), and one DNAPL monitoring well (foreground left - in collection trench), looking east.



**APPENDIX F**  
**WASTE PROFILE INFORMATION**

## GENERATOR WASTE CHARACTERIZATION REPORT

**INSTRUCTIONS:** The following form is required for disposal of nonhazardous industrial/commercial wastes at Modern Landfill. Please complete all sections of this report. Send completed report along with the analytical, chain of custody and the Application for Disposal of an Industrial Waste Stream (47-19-7) to this office. A separate form is required for each waste stream.

### GENERATOR INFORMATION:

Generator Name: VanDeMark Chemical Inc

Generating Facility Address: One North Transit Road, Lockport, NY 14094

Technical Contact: Angela Muir Phone: ( ) 716-433-6764

Alternate Contact: Ken Paisley/Sevenson Phone: ( ) 716-284-0431

### INVOICING INFORMATION:

Contracting Firm: Sevenson Environmental Services, Inc.

Contact: Ken Paisley Phone: ( ) 716-284-0431

Do you have an existing account with Modern Landfill? ☒ Yes ☐ No

Billing Address: 2749 Lockport Road  
Niagara Falls, NY 14305

### TRANSPORTER INFORMATION:

Hauler Name: Modern Disposal, Inc NYSDEC Permit No. 9A-073

Contact Person: Brian Hanaka Phone: ( ) 716-754-8226

Is Modern Landfill currently on your Transporter Permit: ☒ Yes ☐ No

If no, please enclose a Part C Application to cover this waste stream.

### WASTE INFORMATION:

Common name of waste: Soil contaminated with coal tar

Description of process generating this waste: Soil from creek bank excavation contaminated with coal tar. Soil has been excavated and stockpiled and will contain no free liquids.

Is this waste hazardous under US EPA Guidelines & 6NYCRR Part 371 (d)? ☐ Yes ☒ No

Indicate the category which best describes this waste stream:



Industrial Waste  
Household Waste  
Commercial Solid Waste



Construction & Demolition Debris



Other (Please Specify) \_\_\_\_\_



### PHYSICAL CHARACTERISTICS OF WASTE

The waste is at least 20% solid and contains no free liquid	YES <input checked="" type="radio"/>	NO <input type="radio"/>
The Flashpoint of the waste is >140°F	YES <input checked="" type="radio"/>	NO <input type="radio"/>
The pH level of the waste is between 2.0 and 12.5	YES <input checked="" type="radio"/>	NO <input type="radio"/>
Is the waste reactive (Cyanide/Sulfide)?	YES <input type="radio"/>	NO <input checked="" type="radio"/>
Is the waste free of PCBs	YES <input checked="" type="radio"/>	NO <input type="radio"/>
Color: <u>Brown/Black</u> Odor: <input type="radio"/> Strong <input type="radio"/> Mild <input checked="" type="radio"/> None		

### TCLP TESTING AND CERTIFICATION

#### Metals

Constituent	Nonhazardous Limit (mg/l)	Present	Not Present
Arsenic	5.0		x
Barium	100.0	0.620	
Cadmium	1.0	0.0083	
Chromium	5.0		x
Lead	5.0	0.120	
Mercury	0.2		x
Selenium	1.0		x
Silver	5.0		x

#### Herbicides / Pesticides

Constituent	Nonhazardous Limit (mg/l)	Present	Not Present
2,4-D	10.0		x
2,4,5-TP silvex	1.0		x
Endrin	0.02		x
Lindane	0.4		x
Methoxychlor	10.0		x
Toxaphene	0.5		x
Chlordane	0.03		x
Heptachlor	0.008		x

#### Acid Extractables

Constituent	Nonhazardous Limit (mg/l)	Present	Not Present
O-Creosol	200.0		x
M-Creosol	200.0		x
P-Creosol	200.0		x
Pentachlorophenol	100.0		x
2,4,5-Trichlorophenol	400.0		x
2,4,6-Trichlorophenol	2.0		x

#### Base Neutrals Extractables

Constituent	Nonhazardous Limit (mg/l)	Present	Not Present
1,4-Dichlorobenzene	7.5		x
2,4-Dinitrotoluen	0.13		x
Hexachlorobenzene	0.13		x
Hexachlorobutadiene	0.5		x
Hexachloroethane	3		x
Nitrobenzene	2		x
Pyridine	5		x

#### Volatile Organics

Constituent	Nonhazardous Limit (mg/l)	Present	Not Present
1,1-Dichloroethylene	0.7		x
Methyl Ethyl Ketone	200.0		x
Tetrachloroethylene	0.7		x
Vinyl Chloride	0.2		x
Benzene	0.5		x
Carbon Tetrachloride	0.5		x
Chlorobenzene	100.0		x
Chloroform	6.0		x
Trichloroethylene	0.5		x
1,2-Dichloroethane	0.5		x

### CERTIFICATION

I certify that all information contained within this Generator Waste Characterization Report, including all attached information, is complete and actual and is an accurate representation of known or suspected hazards described herein.

Signature: *[Signature]*

Printed Name: Angela J. Meier

Title: ESM/Environmental Engineer

Company: VanDerMark Chemical

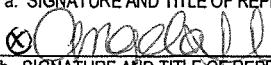
Date: 10/1/12

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID AND HAZARDOUS WASTE • BUREAU OF HAZARDOUS WASTE  
OPERATIONS  
50 WOLF ROAD, ALBANY, NEW YORK 12233-4017

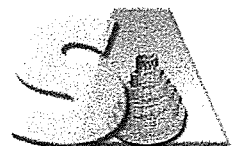
**APPLICATION FOR TREATMENT OR DISPOSAL  
OF AN INDUSTRIAL WASTE STREAM**  
SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE



FOR STATE USE ONLY		
SITE NO.	APPLICATION NO.	DATE RECEIVED
DEPARTMENT ACTION <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved		DATE

1. NAME OF PROJECT/FACILITY MODERN LANDFILL, INC.		2. COUNTY NIAGARA		3. SITE NUMBER 32N30	
4. NAME OF OWNER RICHARD WASHUTA		5. ADDRESS (Street, City, State, Zip Code) 4746 Model City Road, Model City, NY 14107		6. TELEPHONE NO. (716) 754-8226	
6. NAME OF OPERATOR RICHARD WASHUTA		8. ADDRESS (Street, City, State, Zip Code) Pletcher & Harold Road, Model City, NY 14107		9. TELEPHONE NO. (716) 754-8226	
10. METHOD OF TREATMENT OR DISPOSAL  SANITARY LANDFILL - D90					
11. COMPANY GENERATING WASTE VanDeMark Chemical, Inc.			12. ADDRESS OF FACILITY GENERATING WASTE (Street, City, State, Zip Code) One North Transit Road, Lockport, NY 14094		
13. REPRESENTATIVE OF WASTE GENERATOR Angela Muir		14. MAILING ADDRESS OF REPRESENTATIVE One North Transit Road, Lockport, NY 14094		15. TELEPHONE NO. 716-433-6764	
16. DESCRIPTION OF PROCESS PRODUCING WASTE Soil contaminated with coal tar excavated from remediation of a stream bank					
17. EXPECTED ANNUAL WASTE PRODUCTION 1000 Tons/Year One time Gallons/Year		18. WASTE HAULED IN <input type="checkbox"/> Drums <input type="checkbox"/> Bulk Tank <input type="checkbox"/> Roll-Off Container <input checked="" type="checkbox"/> Other dump trailer			
19. WASTE COMPOSITION 19A. Average Percent Solids 100		19b. Physical State <input type="checkbox"/> Liquid <input type="checkbox"/> Slurry <input type="checkbox"/> Sludge <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Contained Gas		19c. pH Range N/A to N/A	
19d. COMPONENTS					
			CONCENTRATION (Dry Weight)		UNIT (Check One)
			Upper	Lower	Typical
1) Soil			99	96	97
2) Rock (<12")			3	1	2
3) Coal Tar			3	0	1
4)					
20. IS AN ANALYSIS OF WASTE ATTACHED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		21. WAS A TCLP TEST CONDUCTED ON THE WASTE? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If "yes", attach results		22. MATERIAL IS: <input type="checkbox"/> Hazardous <input checked="" type="checkbox"/> Non-Hazardous	
23. DETAIL ALL HAZARD AND NUISANCE PROBLEMS ASSOCIATED WITH THE WASTES. List necessary safety, handling, treatment and disposal precautions.					
24. WHERE WAS MATERIAL DISPOSED OF PREVIOUSLY? N/A					
25. NAME OF WASTE TRANSPORTER Modern Disposal Inc		26. ADDRESS (Street, City, State, Zip Code) 4746 Model City Rd, Model City, NY 14107		27. NYSDEC PERMIT No. 9A-073	
				28. TELEPHONE NO. 716-754-8226	
29. CERTIFICATION I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.					
a. SIGNATURE AND TITLE OF REPRESENTATIVE OF WASTE GENERATOR  RSM/Environmental Engineer					DATE 10/11/12
b. SIGNATURE AND TITLE OF REPRESENTATIVE OF TREATMENT OR DISPOSAL FACILITY					DATE

Report Date:  
28-Sep-12 10:51



SPECTRUM ANALYTICAL, INC.  
Featuring  
HANIBAL TECHNOLOGY

- ☒ Final Report  
☐ Re-Issued Report  
☐ Revised Report

## Laboratory Report

Sevenson Environmental Services Inc.  
2749 Lockport Road  
Niagara Falls, NY 14305

Work Order: L1965  
Project : Van der Mark Chemical  
Project #:

Attn: Kenneth Paisley

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L1965-01	SOIL STOCKPILE	Soil	19-Sep-12 15:23	20-Sep-12 09:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at [www.spectrum-analytical.com](http://www.spectrum-analytical.com).

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	R1001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LA100301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Certificate # L2247 Testing

Authorized by:

Yihai Ding  
Laboratory Director

**Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division** 09/27/2012

**Client:** Severson Environmental Services Inc.  
**Client Sample ID:** SOIL STOCKPILE  
**Lab ID:** L1965-01

**Project:** Van der Mark Chemical  
**Collection Date:** 09/19/12 15:23

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 1010 -- FLASHPOINT by Pensky-Martens Closed-Cup Method</b>							<b>SW1010_S</b>
Ignitability	NO FLASH @ 140		200	°F	1	09/26/2012 18:50	R69722
<b>SW846 7.3.3.2 -- Reactive Cyanide Released from Wastes</b>							<b>SW7.3.3.2_S</b>
Reactive Cyanide	ND		1.4	mg/Kg	1	09/27/2012 12:10	68364
<b>SW846 7.3.4.2 -- Reactive Sulfide Released from Wastes</b>							<b>SW7.3.4.2_S</b>
Reactive Sulfide	1.4		1.4	mg/Kg	1	09/26/2012 9:25	68365
<b>SW846 9045C -- Soil and Waste pH</b>							<b>SW9045_S</b>
pH	8.5		1.0	S.U.	1	09/27/2012 9:52	R69720

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

**Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division**

09/27/2012

**Client:** Severson Environmental Services Inc.  
**Client Sample ID:** SOIL STOCKPILE  
**Lab ID:** L1965-01

**Project:** Van der Mark Chemical  
**Collection Date:** 09/19/12 15:23

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 8260C -- VOC by GC-MS</b>							<b>SW8260_W</b>
Vinyl chloride -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
1,1-Dichloroethene -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
2-Butanone -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
Chloroform -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
Carbon tetrachloride -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
1,2-Dichloroethane -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
Benzene -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
Trichloroethene -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
Tetrachloroethene -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
Chlorobenzene -- TCLP	ND		5.0	ug/L	1	09/26/2012 14:14	68353
Surrogate: Dibromofluoromethane -- TCLP	100		85-115	%REC	1	09/26/2012 14:14	68353
Surrogate: 1,2-Dichloroethane-d4 -- TCLP	99.1		70-120	%REC	1	09/26/2012 14:14	68353
Surrogate: Toluene-d8 -- TCLP	96.1		85-120	%REC	1	09/26/2012 14:14	68353
Surrogate: Bromofluorobenzene -- TCLP	94.0		75-120	%REC	1	09/26/2012 14:14	68353

**Qualifiers:** ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

RL - Reporting Limit

**Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division**

09/27/2012

**Client:** Severson Environmental Services Inc.  
**Client Sample ID:** SOIL STOCKPILE  
**Lab ID:** L1965-01

**Project:** Van der Mark Chemical  
**Collection Date:** 09/19/12 15:23

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 6010C -- Metals by ICP</b>							<b>SW6010_W</b>
Arsenic -- TCLP	ND		20	ug/L	1	09/27/2012 10:23	68350
Barium -- TCLP	620		200	ug/L	1	09/27/2012 10:23	68350
Cadmium -- TCLP	8.3		5.0	ug/L	1	09/27/2012 10:23	68350
Chromium -- TCLP	3.5	J	20	ug/L	1	09/27/2012 10:23	68350
Lead -- TCLP	120		10	ug/L	1	09/27/2012 10:23	68350
Selenium -- TCLP	ND		30	ug/L	1	09/27/2012 10:23	68350
Silver -- TCLP	ND		30	ug/L	1	09/27/2012 10:23	68350
<b>SW846 7470A -- Mercury by FIA</b>							<b>SW7470</b>
Mercury -- TCLP	0.15	J	0.20	µg/L	1	09/27/2012 14:18	68344

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

**Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division**

09/27/2012

**Client:** Severson Environmental Services Inc.  
**Client Sample ID:** SOIL STOCKPILE  
**Lab ID:** L1965-01

**Project:** Van der Mark Chemical  
**Collection Date:** 09/19/12 15:23

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 8270D -- SVOA by GC-MS</b>							<b>SW8270_W</b>
1,4-Dichlorobenzene -- TCLP	ND		33	ug/L	1	09/26/2012 17:22	68339
2-Methylphenol -- TCLP	ND		33	ug/L	1	09/26/2012 17:22	68339
4-Methylphenol -- TCLP	ND		33	ug/L	1	09/26/2012 17:22	68339
Hexachloroethane -- TCLP	ND		33	ug/L	1	09/26/2012 17:22	68339
Nitrobenzene -- TCLP	ND		33	ug/L	1	09/26/2012 17:22	68339
Hexachlorobutadiene -- TCLP	ND		33	ug/L	1	09/26/2012 17:22	68339
2,4,6-Trichlorophenol -- TCLP	ND		33	ug/L	1	09/26/2012 17:22	68339
2,4,5-Trichlorophenol -- TCLP	ND		67	ug/L	1	09/26/2012 17:22	68339
2,4-Dinitrotoluene -- TCLP	ND		33	ug/L	1	09/26/2012 17:22	68339
Hexachlorobenzene -- TCLP	ND		33	ug/L	1	09/26/2012 17:22	68339
Pentachlorophenol -- TCLP	ND		67	ug/L	1	09/26/2012 17:22	68339
Pyridine -- TCLP	ND		67	ug/L	1	09/26/2012 17:22	68339
Surrogate: Nitrobenzene-d5 -- TCLP	83.7		40-110	%REC	1	09/26/2012 17:22	68339
Surrogate: 2-Fluorobiphenyl -- TCLP	77.3		50-110	%REC	1	09/26/2012 17:22	68339
Surrogate: Terphenyl-d14 -- TCLP	88.4		50-135	%REC	1	09/26/2012 17:22	68339
Surrogate: Phenol-d5 -- TCLP	60.7		10-115	%REC	1	09/26/2012 17:22	68339
Surrogate: 2-Fluorophenol -- TCLP	72.7		20-110	%REC	1	09/26/2012 17:22	68339
Surrogate: 2,4,6-Tribromophenol -- TCLP	91.8		40-125	%REC	1	09/26/2012 17:22	68339

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

**Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division**

09/27/2012

**Client:** Severson Environmental Services Inc.  
**Client Sample ID:** SOIL STOCKPILE  
**Lab ID:** L1965-01

**Project:** Van der Mark Chemical  
**Collection Date:** 09/19/12 15:23

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 8081B -- Organochlorine Pesticides by GC-ECD</b>							<b>SW8081_W</b>
gamma-BHC (Lindane) -- TCLP	ND		0.17	ug/L	1	09/26/2012 14:56	68340
Heptachlor -- TCLP	ND		0.17	ug/L	1	09/26/2012 14:56	68340
Heptachlor epoxide -- TCLP	ND		0.17	ug/L	1	09/26/2012 14:56	68340
Endrin -- TCLP	ND		0.33	ug/L	1	09/26/2012 14:56	68340
Methoxychlor -- TCLP	ND		1.7	ug/L	1	09/26/2012 14:56	68340
Toxaphene -- TCLP	ND		17	ug/L	1	09/26/2012 14:56	68340
Chlordane (technical) -- TCLP	ND		8.3	ug/L	1	09/26/2012 14:56	68340
Surrogate: Tetrachloro-m-xylene -- TCLP	67.8		25-140	%REC	1	09/26/2012 14:56	68340
Surrogate: Decachlorobiphenyl -- TCLP	69.0		30-135	%REC	1	09/26/2012 14:56	68340

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit



**Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division** 09/27/2012

**Client:** Severson Environmental Services Inc.  
**Client Sample ID:** SOIL STOCKPILE  
**Lab ID:** L1965-01

**Project:** Van der Mark Chemical  
**Collection Date:** 09/19/12 15:23

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 8151A -- Chlorinated Herbicides by GC-ECD</b>							<b>SW8151_W</b>
2,4-D -- TCLP	ND		3.3	µg/L	1	09/26/2012 15:53	68341
2,4,5-TP (Silvex) -- TCLP	ND		0.33	µg/L	1	09/26/2012 15:53	68341
Surrogate: DCAA -- TCLP	72.1		23-139	%REC	1	09/26/2012 15:53	68341

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

**Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division**

09/27/2012

**Client:** Severson Environmental Services Inc.**Client Sample ID:** SOIL STOCKPILE**Lab ID:** L1965-01**Project:** Van der Mark Chemical**Collection Date:** 09/19/12 15:23

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 8082A -- PCB by GC-ECD</b>							<b>SW8082_S</b>
Aroclor-1016	ND		46	ug/Kg	1	09/25/2012 3:54	68273
Aroclor-1221	ND		46	ug/Kg	1	09/25/2012 3:54	68273
Aroclor-1232	ND		46	ug/Kg	1	09/25/2012 3:54	68273
Aroclor-1242	ND		46	ug/Kg	1	09/25/2012 3:54	68273
Aroclor-1248	ND		46	ug/Kg	1	09/25/2012 3:54	68273
Aroclor-1254	ND		46	ug/Kg	1	09/25/2012 3:54	68273
Aroclor-1260	ND		46	ug/Kg	1	09/25/2012 3:54	68273
Surrogate: Tetrachloro-m-xylene	34.3		34-147	%REC	1	09/25/2012 3:54	68273
Surrogate: Decachlorobiphenyl	86.7		60-125	%REC	1	09/25/2012 3:54	68273

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
RL - Reporting Limit

## **APPENDIX G**

### **MODERN LANDFILL DISPOSAL RECEIPT DOCUMENTATION**



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000584211	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584211

Route: PF 30

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

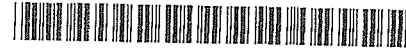
Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: ~~7:45 AM~~ 10:50 AM Depart Time: \_\_\_\_\_



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183280  
Date: 10/11/2012  
Time: 11:37:54 - 11:38:14  
Scale

Truck: PF30-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: MDS-001/MODERN DISPOSAL

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

Gross: 71780 POU In Scale INBOUND  
Tare: 26480 POU P.T.  
Net: 45300 POU

WO: 0000584211

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services
292600/Lockport	DC Industrial Waste - General

Quantity	Unit
22.65	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584213	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Walck Bros #34

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183292  
Date: 10/11/2012  
Time: 12:03:13 - 12:03:35  
Scale

Gross: 72180 POU In Scale INBOUND  
Tare: 27620 POU P.T.  
Net: 44560 POU

Truck: WALCK-34  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: WALC-001/WALCK BROS AG SE

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

WO: 0000584213

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	22.28	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584216	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

Don Reed

DRIVER SIGNATURE

Angelab

CUSTOMER SIGNATURE



Work Order: WO0000584216

Route:

PF 29

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 12:45

Depart Time: 12:30





1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183329  
Date: 10/11/2012  
Time: 12:56:08 - 12:56:33  
Scale

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Gross: 73740 POU In Scale INBOUND  
Tare: 27380 POU P.T.  
Net: 46360 POU

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

WO: 0000584216

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	23.18	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584217	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183462  
Date: 10/11/2012  
Time: 15:43:46 - 15:44:50  
Scale

Gross: 75500 POUIn Scale INBOUND  
Tare: 27380 POU P.T.  
Net: 48120 POU

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC. WO: 0000584217

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	24.06	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584218	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

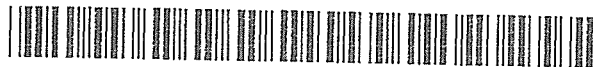
Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584218

Route:

PF 30

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 7:45AM Depart Time: \_\_\_\_\_



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183179  
Date: 10/11/2012  
Time: 08:48:56 - 08:49:29  
Scale

Gross: 71320 POU In Scale INBOUN  
Tare: 26480 POU P.T.  
Net: 44840 POU

Truck: PF30-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

WO: 0000584218

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	22.42	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584219	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

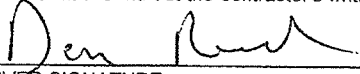
Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

  
DRIVER SIGNATURE

  
CUSTOMER SIGNATURE



Work Order: WO0000584219

Route: PF 29 Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

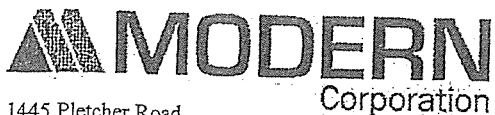
Requested By:

Bin # Dropped: \_\_\_\_\_

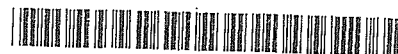
Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 745 Depart Time: 815



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183173  
Date: 10/11/2012  
Time: 08:44:23 - 08:44:50  
Scale

Gross: 65740 POU In Scale INBOUND  
Tare: 27380 POU P.T.  
Net: 38360 POU

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584219

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	19.18	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584220	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

h 56

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE





1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183284  
Date: 10/11/2012  
Time: 11:50:15 - 11:50:37  
Scale

Truck: LLOYD-56  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Gross: 71560 POU In Scale INBOUND  
Tare: 27800 POU P.T.  
Net: 43760 POU

Truck Type: PU  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584220

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	21.88	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172 PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584221	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

(800) 662-0012 TEL. (716) 754-8226 FAX. (716) 754-8964

Customer #: 015172 PO #: 10879005

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Work Order	Qty	Action	Type	Description
0000584221	1	HAULING	DUMPTRUCK	Dump Truck Services

Work Order Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)



Work Order: WO0000584221

Route: PF

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: \_\_\_\_\_ Depart Time: \_\_\_\_\_



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002183275  
Date: 10/11/2012  
Time: 11:32:08 - 11:32:54  
Scale

\*\*\*\*\* Reprinted Ticket - Edited \*\*\*\*\*

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: MDS-001/MODERN DISPOSAL

Gross: 73660 POU In Scale INBOUN  
Tare: 27380 POU Out Manual Wt M  
Net: 46280 POU

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC WO: 0000584221  
Profile: M12-2603/VANDEMARK CHEMICAL

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	23.14	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002183275  
Date: 10/11/2012  
Time: 11:32:08 - 11:32:54  
Scale

\*\*\*\*\* Reprinted Ticket - Edited \*\*\*\*\*

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: MDS-001/MODERN DISPOSAL

Gross: 73660 POU In Scale INBOUN  
Tare: 27380 POU Out Manual Wt M  
Net: 46280 POU

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC WO: 0000584221  
Profile: M12-2603/VANDEMARK CHEMIC

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	23.14	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172 PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584222	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

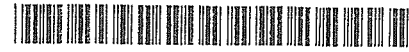
The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183335  
Date: 10/11/2012  
Time: 13:04:26 - 13:04:49

Scale

Gross: 63320 POUIn Scale INBOUN  
Tare: 26480 POU P.T.  
Net: 36840 POU

Truck: PF30-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC

WO: 0000584222

Profile: M12-2603/VANDEMARK CHEMIC.

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@

Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	18.42	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000584223	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584223

Route: PF

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: \_\_\_\_\_ Depart Time: \_\_\_\_\_

Walck Bros. #34



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183242  
Date: 10/11/2012  
Time: 10:42:20 - 10:43:21  
Scale

Gross: 70540 POU In Scale INBOUND  
Tare: 27620 POU P.T.  
Net: 42920 POU

Truck: WALCK-34  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: WALC-001/WALCK BROS AG SE

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584223

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	21.46	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000584224	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

*h-56*

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE





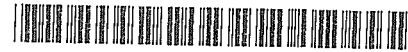
1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Truck: JO15-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: OHOL-002/OHOL ENTERPRISES

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:



Ticket: 1002183238  
Date: 10/11/2012  
Time: 10:32:25 - 10:32:48

Scale

Gross: 68360 POU In Scale INBOUND  
Tare: 28120 POU P.T.  
Net: 40240 POU

WO: 0000584224

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	20.12	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172 PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584225	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584225

Route: PF 50-15 Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

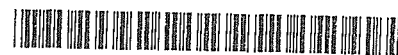
Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 9:40 Depart Time: 10:00



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183235  
Date: 10/11/2012  
Time: 10:24:01 - 10:24:17  
Scale

Gross: 74260 POU In Scale INBOUND  
Tare: 28120 POU P.T.  
Net: 46140 POU

Truck: JO15-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: OHOL-002/OHOL ENTERPRISES

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584225

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	23.07	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172 PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584226	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584226

Route:

PF 30

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

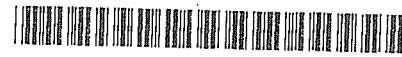
Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 9:40 AM Depart Time: \_\_\_\_\_



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183227  
Date: 10/11/2012  
Time: 10:14:35 - 10:14:53  
Scale

Truck: PF30-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA

Gross: 66140 POU In Scale INBOUND  
Tare: 26480 POU P.T.  
Net: 39660 POU

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584226

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	19.83	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584227	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584227

Route:

PF 29

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped:

Bin # Picked up:

Trip Charge Reason:

Arrival Time: 9:35

Depart Time:



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC

Profile: M12-2603/VANDEMARK CHEMICAL

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:



Ticket: 1002183222  
Date: 10/11/2012  
Time: 10:08:22 - 10:08:41

Scale

Gross: 71300 POU In Scale INBOUND  
Tare: 27380 POU P.T.  
Net: 43920 POU

WO: 0000584227

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	21.96	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584228	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584228

Route: PF

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: \_\_\_\_\_

Depart Time: \_\_\_\_\_

Walck Bros. #34





1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183195  
Date: 10/11/2012  
Time: 09:16:15 - 09:16:45  
Scale

Gross: 65920 POU In Scale INBOUND  
Tare: 27620 POU P.T.  
Net: 38300 POU

Truck: WALCK-34  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: WALC-001/WALCK BROS AG SE

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584228

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	19.15	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584229	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

L-56

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584229

Route: PF

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

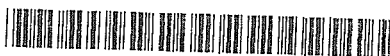
Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 8:00 Depart Time: 8:20



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183186  
Date: 10/11/2012  
Time: 09:05:15 - 09:05:58  
Scale

Gross: 60360 POU In Scale INBOUND  
Tare: 27800 POU P.T.  
Net: 32560 POU

Truck: LLOYD-56  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: PU  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584229

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	16.28	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584230	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

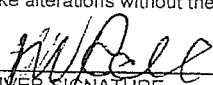
Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

  
DRIVER SIGNATURE

  
CUSTOMER SIGNATURE



Work Order: WO0000584230

Route: PF 10-15 Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

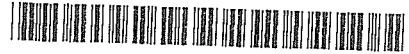
Trip Charge Reason: \_\_\_\_\_

Arrival Time: 8:00

Depart Time: 8:25



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183183  
Date: 10/11/2012  
Time: 08:55:36 - 08:56:10  
Scale

Truck: JO15-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: MDS-001/MODERN DISPOSAL

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584230

Gross: 66120 POU In Scale INBOUND  
Tare: 28120 POU P.T.  
Net: 38000 POU

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	19.00	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584231	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

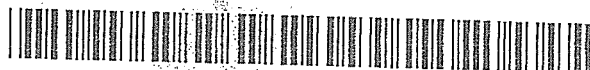
Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584231

Route: PF

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

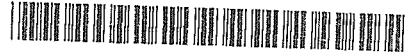
Arrival Time: \_\_\_\_\_

Depart Time: \_\_\_\_\_

Walck #34



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183350  
Date: 10/11/2012  
Time: 13:20:08 - 13:20:34

Truck: WALCK-34  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: WALC-001/WALCK BROS AG SE

Truck Type: TA

Gross: 68700 POU In Scale INBOUND  
Tare: 27620 POU P.T.  
Net: 41080 POU

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL WO: 0000584231

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	20.54	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584232	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

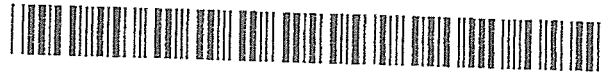
Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584232

Route: PF *3015* Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: *1:00*

Depart Time: *1:08*





1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183364  
Date: 10/11/2012  
Time: 13:35:01 - 13:35:43

Scale

Gross: 74180 POU In Scale INBOUND  
Tare: 28120 POU P.T.  
Net: 46060 POU

Truck: JO15-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: OHOL-002/OHOL ENTERPRISES

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

WO: 0000584232

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	23.03	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584233	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

Don Reel  
DRIVER SIGNATURE

Michael  
CUSTOMER SIGNATURE



Work Order: WO0000584233

Route:

PF 29

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

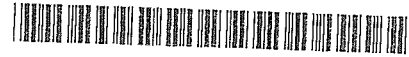
Trip Charge Reason: \_\_\_\_\_

Arrival Time: 190

Depart Time: 195



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183395  
Date: 10/11/2012  
Time: 14:13:30 - 14:13:52  
Scale

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Gross: 70580 POU In Scale INBOUND  
Tare: 27380 POU P.T.  
Net: 43200 POU

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

WO: 0000584233

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	21.60	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584234	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584234

Route: PF 30

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped:

Bin # Picked up:

Trip Charge Reason:

Arrival Time: 1:55

Depart Time:



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183405  
Date: 10/11/2012  
Time: 14:23:01 - 14:23:50  
Scale

Truck: PF30-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Gross: 73320 POU In Scale INBOUND  
Tare: 26480 POU P.T.  
Net: 46840 POU

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL WO: 0000584234

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	23.42	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002183410  
Date: 10/11/2012  
Time: 14:30:35 - 14:30:54  
Scale

Gross: 71520 POU In Scale INBOUND  
Tare: 27800 POU P.T.  
Net: 43720 POU

Truck: LLOYD-56  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: PU

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

WO: 0000584235

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	21.86	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring: 0

0

Open/Close: 0

0

Destination

Removal: 0

0

Delivery: 0

0

Work Order Qty

Action

Type

Description

0000584236

1

HAULING

DUMPTRUCK

Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

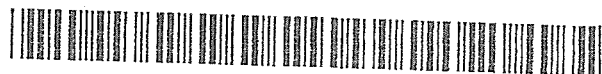
Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584236

Route: PF

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped:

Bin # Picked up:

Trip Charge Reason:

Arrival Time: 12:25

Depart Time: 12:40

h - 56



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183341  
Date: 10/11/2012  
Time: 13:11:32 - 13:11:45  
Scale

Gross: 66860 POU In Scale INBOUND  
Tare: 27800 POU P.T.  
Net: 39060 POU

Truck: LLOYD-56  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: PU

Route: BROKER/SUB OUT VARIOUS BRC

WO: 0000584236

Profile: M12-2603/VANDEMARK CHEMICAL

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	19.53	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman





Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL (716) 754-8226 (800) 662-0012 FAX (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000584237	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183311  
Date: 10/11/2012  
Time: 12:26:22 - 12:26:43  
Scale

\*\*\*\*\* Reprinted Ticket \*\*\*\*\*

Gross: 76380 POU In Scale INBOUND  
Tare: 28120 POU P.T.  
Net: 48260 POU

Truck: JO15-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: OHOL-002/OHOL ENTERPRISES

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584237

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	24.13	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584238	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the Contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584238

Route: PF

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: \_\_\_\_\_

Depart Time: \_\_\_\_\_

Walck #34



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183422  
Date: 10/11/2012  
Time: 14:41:13 - 14:41:45  
Scale

Gross: 75300 POU In Scale INBOUND  
Tare: 27620 POU P.T.  
Net: 47680 POU

Truck: WALCK-34  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: WALC-001/WALCK BROS AG SE

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC

WO: 0000584238

Profile: M12-2603/VANDEMARK CHEMICAL

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	23.84	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584239	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584239

Route: PF 50/5 Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gabe 10/10/2012 4:42pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 2:10

Depart Time: 2:20



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183428  
Date: 10/11/2012  
Time: 14:47:22 - 14:47:39  
Scale

Truck: JO15-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: OHOL-002/OHOL ENTERPRISES

Gross: 72540 POU In Scale INBOUND  
Tare: 28120 POU P.T.  
Net: 44420 POU

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL  
WO: 0000584239

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	22.21	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172 PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000584857	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

W. P. P. Amos



Work Order: WO0000584857

Route: PF 50-15 Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gziientara 10/11/2012 1:49pm

Requested By: don from PF

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 7:30 Depart Time: 3:42



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183475  
Date: 10/11/2012  
Time: 16:08:55 - 16:09:22

Scale

Gross: 74540 POUIn Scale INBOUND  
Tare: 28120 POU P.T.  
Net: 46420 POU

Truck: JO15-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: OHOL-002/OHOL ENTERPRISES

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC.

WO: 0000584857

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	23.21	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman





Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172 PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584858	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.



Work Order: WO0000584858

Route: PF

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gzientara 10/11/2012 1:49pm

Requested By: don from PF

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 3:15

Depart Time: 3:38

h - 56

*Amex B...*



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183474  
Date: 10/11/2012  
Time: 16:06:36 - 16:06:57  
Scale

Gross: 77480 POU In Scale INBOUN  
Tare: 27800 POU P.T.  
Net: 49680 POU

Truck: LLOYD-56  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: PU  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC  
WO: 0000584858

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	24.84	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL (716) 754-8226 (800) 662-0012 FAX (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584859	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

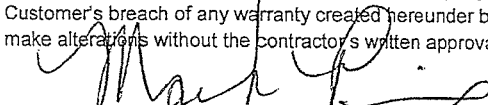
Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.







Work Order: WO0000584859

Route:

PF 30

Map Grid:

Service Date: 10/11/2012

Rep/Order Date: MODERN\gzientara 10/11/2012 1:49pm

Requested By: don from PF

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 3:45

Depart Time: \_\_\_\_\_



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183467  
Date: 10/11/2012  
Time: 15:51:28 - 15:51:59  
Scale

Gross: 72480 POUIn Scale INBOUND  
Tare: 26480 POU P.T.  
Net: 46000 POU

Truck: PF30-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC  
WO: 0000584859

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	23.00	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172 PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000584928	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584928

Route: PF 29 Map Grid:

Service Date: 10/12/2012

Rep/Order Date: MODERN\gdonovan 10/11/2012 3:15pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 9:25 Depart Time: 5:40



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

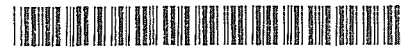
Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC

Profile: M12-2603/VANDEMARK CHEMIC.

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@

Comment:



Ticket: 1002183598

Date: 10/12/2012

Time: 10:02:13 - 10:03:14

Scale

Gross: 71540 POUIn Scale OUTBOI

Tare: 27380 POU P.T.

Net: 44160 POU

WO: 0000584928

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	22.08	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000584929	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

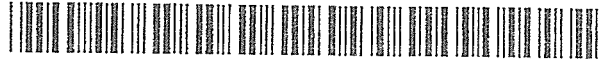
Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

  
DRIVER SIGNATURE

  
CUSTOMER SIGNATURE



Work Order: WO0000584929

Route: *PF Donovan #107* Map Grid:

Service Date: 10/12/2012

Rep/Order Date: MODERN\gdonovan 10/11/2012 3:15pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: *7:45* Depart Time: *8:15*



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Truck: DORAN-107  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: DORA-001/DORAN TRUCKING

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC

Profile: M12-2603/VANDEMARK CHEMIC.

Ticket: 1002183551

Date: 10/12/2012

Time: 08:43:04 - 08:44:24

Scale

Gross: 64540 POUIn Scale OUTBOI

Tare: 27060 POU P.T.

Net: 37480 POU

WO: 0000584929

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	18.74	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman





Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172 PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000584930	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000584930

Route: PF 5-15 Map Grid:

Service Date: 10/12/2012

Rep/Order Date: MODERN\gdonovan 10/11/2012 3:15pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason:

Arrival Time: 8:15 Depart Time: 8:30



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002183557  
Date: 10/12/2012  
Time: 08:54:51 - 08:55:20  
Scale

Gross: 65000 POUIn Scale OUTBOI  
Tare: 28120 POU P.T.  
Net: 36880 POU

Truck: JO15-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: OHOL-002/OHOL ENTERPRISES

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC. WO: 0000584930

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	18.44	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRONMENTAL@

Address: VANDEMARK, 1 NORTH TRANSIT RD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0 ~ 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000584931	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

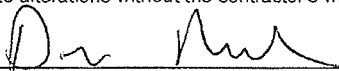
Access Notes:

Detailed Notes:

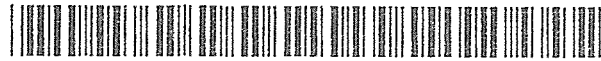
Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

  
DRIVER SIGNATURE

  
CUSTOMER SIGNATURE



Work Order: WO0000584931

Route:

PF 29

Map Grid:

Service Date: 10/12/2012

Rep/Order Date: MODERN\gdonovan 10/11/2012 3:15pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 7:45

Depart Time: 8:00



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC

Profile: M12-2603/VANDEMARK CHEMICAL

WO: 0000584931

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRONMENTAL@  
Comment:



Ticket: 1002183553  
Date: 10/12/2012  
Time: 08:44:35 - 08:46:04  
Scale

Gross: 64880 POU In Scale OUTBOI  
Tare: 27380 POU P.T.  
Net: 37500 POU

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC Industrial Waste - General	18.75	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000600377	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000600377

Route: PF Q9 Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gabe 11/8/2012 3:55pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 715 Depart Time: 730

398.92

TOTAL  
TONS



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002190979  
Date: 11/9/2012  
Time: 08:10:00 - 08:11:17  
Scale

Gross: 80700 POUIn Scale OUTBOI  
Tare: 27380 POU P.T.  
Net: 53320 POU

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC

WO: 0000600377 ✓

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK

Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	26.66	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000600378	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000600378

Route: PF

Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gabe 11/8/2012 3:55pm

Requested By:

Bin # Dropped:

Bin # Picked up:

Trip Charge Reason:

Arrival Time: 725

Depart Time: 235

GJ Lloyd 9A 717

(L60)



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002190981  
Date: 11/9/2012  
Time: 08:12:01 - 08:13:15  
Scale

Gross: 77860 POU In Scale OUTBOI  
Tare: 28820 POU P.T.  
Net: 49040 POU

Truck: LLOYD-60  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC

WO: 0000600378 ✓

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	24.52	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman





Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000600379	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE

# MODERN Corporation

1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002190982  
Date: 11/9/2012  
Time: 08:14:55 - 08:15:36  
Scale

Gross: 76040 POUIn Scale OUTBOI  
Tare: 28240 POU P.T.  
Net: 47800 POU

Truck: GAM-15  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: GAM-001/GAM TRUCKING

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC,

WO: 0000600379

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	23.90	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order: WO0000600380

Route: PF

Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gabe 11/8/2012 3:55pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 900

Depart Time: 910

Work Order	Qty	Action	Type	Description
0000600380	1	HAULING	DUMPTTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

GJ Lloyd

L60

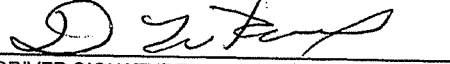
Detailed Notes:


9A717

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

  
DRIVER SIGNATURE

  
CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002191037  
Date: 11/9/2012  
Time: 09:31:34 - 09:32:38  
Scale

Gross: 77120 POU In Scale OUTBO  
Tare: 28820 POU P.T.  
Net: 48300 POU

Truck: LLOYD-60  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

WO: 0000600380

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	24.15	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination

Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000600381	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000600381

Route:

PF 29

Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gabe 11/8/2012 3:55pm

Requested By:

Bin # Dropped:

Bin # Picked up:

Trip Charge Reason:

Arrival Time: 8:50

Depart Time: 9:00



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002191034  
Date: 11/9/2012  
Time: 09:27:43 - 09:28:00  
Scale

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Gross: 69080 POU In Scale OUTBOI  
Tare: 27380 POU P.T.  
Net: 41700 POU

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMICAL

WO: 0000600381 ✓

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	20.85	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	



Work Order: WO0000600382

Route: PF 6AM 15 Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gabe 11/8/2012 3:55pm

Requested By:

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 850

Depart Time: 909

Work Order	Qty	Action	Type	Description
0000600382	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002191043  
Date: 11/9/2012  
Time: 09:40:14 - 09:40:52  
Scale

Gross: 74440 POUIn Scale OUTBOI  
Tare: 28240 POU P.T.  
Net: 46200 POU

Truck: GAM-15  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: GAM-001/GAM TRUCKING

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC.

WO: 0000600382

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	23.10	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman





Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000600834	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



Work Order: WO0000600834

Route: PF 29

Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gzientara 11/9/2012 9:15am

Requested By: Don

Bin # Dropped:

Bin # Picked up:

Trip Charge Reason:

Arrival Time: 1010

Depart Time: 1030

# MODERN Corporation

1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002191090  
Date: 11/9/2012  
Time: 10:59:00 - 10:59:33

Scale  
Gross: 69180 POUIn Scale OUTBO  
Tare: 27380 POU P.T.  
Net: 41800 POU

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC.

WO: 0000600834

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	20.90	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	



Work Order: WO0000600835

Route: PF

Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gzientara 11/9/2012 9:15am

Requested By: Don

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 1015

Depart Time: 1030

Work Order	Qty	Action	Type	Description
0000600835	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

GJ Lloyd

9A717

L60

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002191092  
Date: 11/9/2012  
Time: 11:00:41 - 11:01:50  
Scale

Gross: 70460 POUIn Scale OUTBOI  
Tare: 28820 POU P.T.  
Net: 41640 POU

Truck: LLOYD-60  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC.

WO: 0000600835

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK

Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	20.82	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination  
Removal: 0 0 Delivery: 0 0



Work Order: WO0000600836

Route: PF 6A15 Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gzientara 11/9/2012 9:15am

Requested By: Don

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 1013

Depart Time: 1037

Work Order	Qty	Action	Type	Description
0000600836	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002191094  
Date: 11/9/2012  
Time: 11:05:43 - 11:05:57  
Scale:

Gross: 75540 POUIn Scale OUTBOI  
Tare: 28240 POU P.T.  
Net: 47300 POU

Truck: GAM-15  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: GAM-001/GAM TRUCKING

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC.

WO: 0000600836

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	23.65	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL (716) 754-8226 (800) 662-0012 FAX (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination  
Removal: 0 0 Delivery: 0 0

Work Order	Qty	Action	Type	Description
0000600837	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002191133  
Date: 11/9/2012  
Time: 12:09:31 - 12:10:22  
Scale

Gross: 63100 POUIn Scale OUTBO  
Tare: 27380 POU P.T.  
Net: 35720 POU

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC

WO: 0000600837 ✓

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	17.86	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman





Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0

0

Open/Close: 0

0

Destination

Removal: 0

0

Delivery: 0

0

Work Order

Qty

Action

Type

Description

0000600838

1

HAULING

DUMPTRUCK

Dump Truck Services

Service Notes: TONS, CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

GJ Lloyd

Detailed Notes:

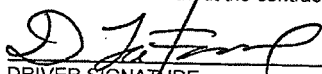
9A717

660

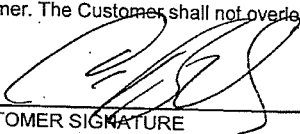
Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.



DRIVER SIGNATURE



CUSTOMER SIGNATURE

# MODERN Corporation

1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002191140  
Date: 11/9/2012  
Time: 12:18:32 - 12:19:30  
Scale

Gross: 64760 POU In Scale OUTBO  
Tare: 28820 POU P.T.  
Net: 35940 POU

Truck: LLOYD-60  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC

WO: 0000600838

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK

Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	17.97	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002191152  
Date: 11/9/2012  
Time: 12:27:59 - 12:28:22  
Scale

Gross: 77100 POUIn Scale OUTBOI  
Tare: 28240 POU P.T.  
Net: 48860 POU

Truck: GAM-15  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: GAM-001/GAM TRUCKING

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC

WO: 0000600839

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK

Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	24.43	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL (716) 754-8226 (800) 662-0012 FAX (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	



Work Order: WO0000601159

Route: PF 29

Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gzientara 11/9/2012 11:49am

Requested By: don/PF

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 12:45

Depart Time: 1:15

Work Order	Qty	Action	Type	Description
0000601159	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002191226  
Date: 11/9/2012  
Time: 13:51:48 - 13:53:00  
Scale

Gross: 67880 POUIn Scale OUTBO  
Tare: 27380 POU P.T.  
Net: 40500 POU

Truck: PF29-MDS  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: FOUR-003/FOURNIER, PAUL

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC

WO: 0000601159

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	20.25	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000601160	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

GJ Lloyd  
9A 717  
L60

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002191227  
Date: 11/9/2012  
Time: 13:54:37 - 13:55:11  
Scale

Gross: 73200 POUIn Scale OUTBOI  
Tare: 28820 POU P.T.  
Net: 44380 POU

Truck: LLOYD-60  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC

WO: 0000601160

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK

Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	22.19	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL. (716) 754-8226 (800) 662-0012 FAX. (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring: 0 0 Open/Close: 0 0 Destination  
Removal: 0 0 Delivery: 0 0



Work Order: WO0000601161 -

Route: PF GAK Map Grid:

Service Date: 11/09/2012

Rep/Order Date: MODERN\gzientara 11/9/2012 11:49am

Requested By: don/PF

Bin # Dropped: \_\_\_\_\_

Bin # Picked up: \_\_\_\_\_

Trip Charge Reason: \_\_\_\_\_

Arrival Time: 105

Depart Time: 130

Work Order	Qty	Action	Type	Description
0000601161	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE





1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226



Ticket: 1002191234  
Date: 11/9/2012  
Time: 14:01:50 - 14:03:42  
Scale

Gross: 69360 POUIn Scale OUTBOI  
Tare: 28240 POU P.T.  
Net: 41120 POU

Truck: GAM-15  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: GAM-001/GAM TRUCKING

Truck Type: TA

Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC.

WO: 0000601161 ✓

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK

Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	20.56	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL (716) 754-8226 (800) 662-0012 FAX (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

#### Time Windows

Recurring:	0	0	Open/Close:	0	0	Destination
Removal:	0	0	Delivery:	0	0	

Work Order	Qty	Action	Type	Description
0000601162	1	HAULING	DUMPTRUCK	Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

GJ Lloyd

Detailed Notes:

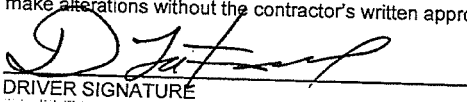
9A717

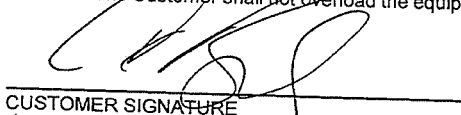
L60

Work Order Notes:

#### \*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

  
DRIVER SIGNATURE

  
CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002191305  
Date: 11/9/2012  
Time: 15:21:12 - 15:21:55  
Scale

Gross: 94980 POU In Scale OUTBOI  
Tare: 28820 POU P.T.  
Net: 66160 POU

Truck: LLOYD-60  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: LLOY-001/Lloyd Enterprises

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC

WO: 0000601162 ✓

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	33.08	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman



Modern Disposal Services, Inc.

4746 Model City Road

PO Box 209

Model City, NY 14107

TEL (716) 754-8226 (800) 662-0012 FAX (716) 754-8964

Customer #: 015172

PO #: 10879005

Site #: 0151720045

Customer Name: SEVENSON ENVIRONMENTAL

Service Location: SEVENSON ENVIRON @ VANDEMARK

Address: 1 NORTH TRANSIT ROAD

City: LOCKPORT

Contact: KEN PAISLY

Phone: (716) 284-0431

Time Windows

Recurring: 0

0

Open/Close: 0

0

Destination

Removal: 0

0

Delivery: 0

0

Work Order

Qty

Action

Type

Description

0000601163

1

HAULING

DUMPTRUCK

Dump Truck Services

Service Notes: TONS CONTAMINATED INDUSTRIAL TO MLF (M12-2603)

Access Notes:

Detailed Notes:

Work Order Notes:

\*\*\*PLEASE NOTE INDEMNIFICATION AGREEMENT\*\*\*

The Customer agrees to indemnify, defend and hold harmless the Contractor against all claims, damages, suits, judgments, penalties, fines and other liability or injury or death to persons or loss or damage to property arising out of the Customer's use, operation or possession of the equipment or arising out of the Customer's breach of any warranty created hereunder by the Customer. The Customer shall not overload the equipment nor use it for incineration purposes or make alterations without the contractor's written approval.

DRIVER SIGNATURE

CUSTOMER SIGNATURE



1445 Pletcher Road  
Model City, NY 14107  
(716) 754-8226

Corporation



Ticket: 1002191313  
Date: 11/9/2012  
Time: 15:34:23 - 15:35:06  
Scale

Gross: 96300 POUIn Scale OUTBOI  
Tare: 28240 POU P.T.  
Net: 68060 POU

Truck: GAM-15  
Customer: 0250310002/Modern Disposal Roll Off -  
Carrier: GAM-001/GAM TRUCKING

Truck Type: TA  
Route: BROKER/SUB OUT VARIOUS BRC  
Profile: M12-2603/VANDEMARK CHEMIC.

WO: 0000601163 -

Generator: 0250310002/Modern Disposal Roll Off -  
Service Site: 0151720045 SEVENSON ENVIRON @ VANDEMARK  
Comment:

Origin	Materials & Services	Quantity	Unit
292600/Lockport	DC DEC Approved Waste	34.03	TON

Driver: \_\_\_\_\_

Weighmaster: Deb Lehman

## **APPENDIX H**

### **FLOWABLE FILL LABORATORY TESTING RESULTS**

## **APPENDIX H-1**

### **FLOWABLE FILL TEST CYLINDER RESULTS**

**SUMMARY OF FLEX WALL PERMEABILITY  
TEST RESULTS**  
ASTM D-5084 (Method A)



Client	:	Romano Associates	Date	:	10/22/2012
Project Location	:	Vandemark Plant Stabilization	Job No.	:	12LS2739.01
Sample Number	:	Sample 1	Tested By	:	RL
ID	:	Cement-Flyash Stabilized Soil	Checked By	:	JB
Location	:	Lockport, NY			
			Spec. Gravity	:	2.35      Assumed Average

**Physical Property Data**

Initial Height ( in )	:	4.902	Final Height ( in )	:	4.902
Initial Diameter ( in )	:	5.94	Final Diameter ( in )	:	5.94
Initial Wet Weight ( g )	:	3541.30	Final Wet Weight ( g )	:	3701.76
Wet Density ( pcf )	:	99.22	Wet Density ( pcf )	:	103.72
Moisture Content %	:	37.99	Moisture Content %	:	44.24
Dry Density ( pcf )	:	71.91	Dry Density ( pcf )	:	71.91
Initial Void Ratio	:	1.0393	Final Void Ratio	:	1.0393
Saturation , %	:	85.9	Saturation , %	:	100.0

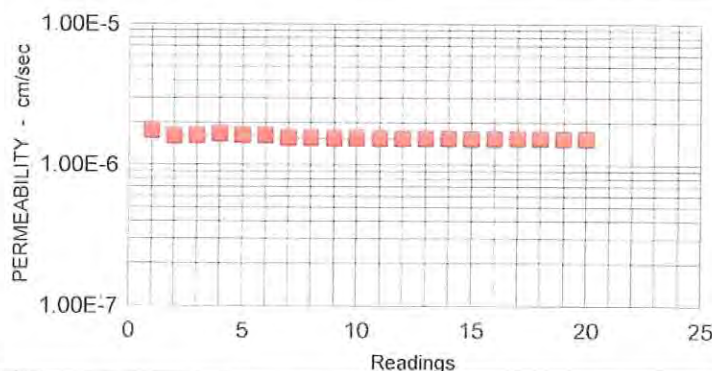
**Test Parameters**

Fluid	:	De-Aired Water	Effective		
Cell Pressure    psi )	:	65.00	Confining Pressure (psi)	:	20
Head Water        psi )	:	46.30	Gradient	:	14.64
Tail Water        psi )	:	43.70			

**Permeability Input Data**

For Last Data Point

Flow, Q        ( cc )	:	14.40
Length, L     ( in )	:	4.90
Area, A       ( sqin )	:	27.71
Head, h       ( psi )	:	2.60
Time, t        ( min )	:	60.00
Temp, T       ( Deg C )	:	19.6



**Computed Permeability**

**PERMEABILITY, K =**      **1.54E-006**      **( cm/sec ) at 20 Degrees C**



## **APPENDIX H-2**

### **IN-SITU FLOWABLE FILL TEST CORE RESULTS**

# SUMMARY OF FLEX WALL PERMEABILITY TEST RESULTS



ASTM D-5084 (Method A)

CORE # 1

Client	:	Romano Associates	Date	:	11/26/2012
Project Location	:	Vandemark Plant Stabilization	Job No.	:	12LS2758.02
Sample Number	:	Sample 3 - Long	Tested By	:	RL
ID	:	Cement-Flyash Stabilized Soil	Checked By	:	JBjr
Location	:	Lockport, NY			
			Spec. Gravity	:	2.27 Assumed Average

## Physical Property Data

Initial Height ( in )	:	3.620	Final Height ( in )	:	3.610
Initial Diameter ( in )	:	3.58	Final Diameter ( in )	:	3.56
Initial Wet Weight ( g )	:	842.80	Final Wet Weight ( g )	:	892.40
Wet Density ( pcf )	:	88.03	Wet Density ( pcf )	:	94.53
Moisture Content %	:	55.50	Moisture Content %	:	64.64
Dry Density ( pcf )	:	56.61	Dry Density ( pcf )	:	57.41
Initial Void Ratio	:	1.5020	Final Void Ratio	:	1.4671
Saturation , %	:	83.9	Saturation , %	:	100.0

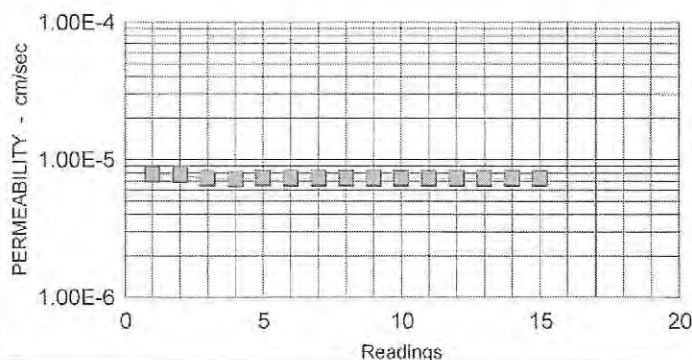
## Test Parameters

Fluid	:	De-Aired Water	Effective		
Cell Pressure ( psi )	:	65.00	Confining Pressure ( psi )	:	10
Head Water ( psi )	:	56.60	Gradient	:	24.47
Tail Water ( psi )	:	53.40			

## Permeability Input Data

For Last Data Point

Flow, Q ( cc )	:	20.60
Length, L ( in )	:	3.61
Area, A ( sqin )	:	9.95
Head, h ( psi )	:	3.20
Time, t ( min )	:	30.00
Temp, T ( Deg C )	:	19.6



## Computed Permeability

PERMEABILITY, K = 7.33E-006 ( cm/sec ) at 20 Degrees C

**SUMMARY OF FLEX WALL PERMEABILITY  
TEST RESULTS**  
ASTM D-5084 (Method A)



*CORE #2*

Client	:	Romano Associates	Date	:	11/26/2012
Project Location	:	Vandemark Plant Stabilization	Job No.	:	12LS2758.02
Sample Number	:	Sample 4 - Short	Tested By	:	RL
ID	:	Cement-Flyash Stabilized Soil	Checked By	:	JB Jr
Location	:	Lockport, NY			
			Spec. Gravity	:	2.35      Assumed Average

**Physical Property Data**

Initial Height ( in )	:	3.840	Final Height ( in )	:	3.806
Initial Diameter ( in )	:	3.65	Final Diameter ( in )	:	3.65
Initial Wet Weight ( g )	:	3.63	Final Wet Weight ( g )	:	1016.40
Wet Density ( pcf )	:	963.80	Wet Density ( pcf )	:	97.14
Moisture Content %	:	55.50	Moisture Content %	:	60.67
Dry Density ( pcf )	:	52.35	Dry Density ( pcf )	:	60.46
Initial Void Ratio	:	1.8011	Final Void Ratio	:	1.4254
Saturation , %	:	72.4	Saturation , %	:	100.0

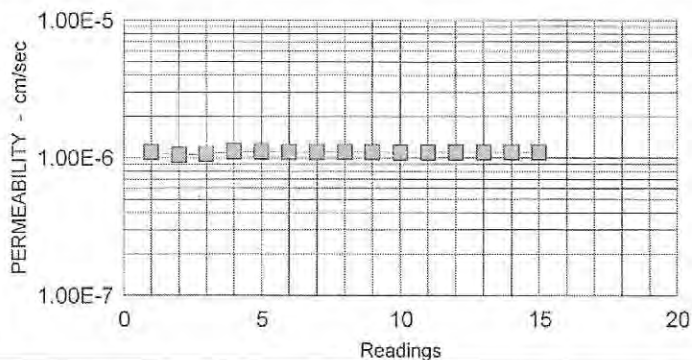
**Test Parameters**

Fluid	:	De-Aired Water	Effective		
Cell Pressure ( psi )	:	65.00	Confining Pressure ( psi )	:	10
Head Water ( psi )	:	56.70	Gradient	:	24.66
Tail Water ( psi )	:	53.30			

**Permeability Input Data**

For Last Data Point

Flow, Q ( cc )	:	19.70
Length, L ( in )	:	3.81
Area, A ( sqin )	:	10.46
Head, h ( psi )	:	3.40
Time, t ( min )	:	180.00
Temp, T ( Deg C )	:	19.6



**Computed Permeability**

**PERMEABILITY, K = 1.10E-006 ( cm/sec ) at 20 Degrees C**

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

[solutions@golder.com](mailto:solutions@golder.com)  
[www.golder.com](http://www.golder.com)

**Golder Associates Inc.**  
**2430 N. Forest Road, Suite 100**  
**Getzville, NY 14068 USA**  
**Tel: (716) 204-5880**  
**Fax: (716) 204-5878**

